City of Salinas

200 Lincoln Ave., Salinas, CA 93901
www.cityofsalinas.org

Meeting Agenda - Final

Tuesday, December 3, 2019

4:00 PM

SALINAS ROTUNDA

City Council

Mayor Joe Gunter
Councilmembers:
Scott Davis, District 1 - Tony Barrera, District 2
Steve McShane, District 3 - Gloria De La Rosa, District 4
Christie Cromeenes, District 5 - John "Tony" Villegas, District 6

Ray E. Corpuz, Jr., City Manager
Christopher A. Callihan, City Attorney
City Clerk's Office: (831) 758-7381

TELECONFERENCE NOTICE

Pursuant to California Government Code Section §54953(b)(3), this City Council regular meeting will include teleconference participation by Councilmember Tony Barrera from 10 Calle Juan Ignacio Zaragoza en la localidad de Copala, Municipio de Concordia, Sinaloa, 82650 (Mexico). The teleconference location shall be accessible to the public for the open session portion of the meeting pursuant to California Government Code Section §54954.3.

PLEDGE OF ALLEGIANCE

ROLL CALL

PUBLIC COMMENT TIME RESTRICTIONS

Public comments generally are limited to two minutes per speaker; the Mayor may further limit the time for public comments depending on the agenda schedule.

GENERAL PUBLIC COMMENTS

Receive public communications from the audience on items that are not on the agenda and that are in the City of Salinas' subject matter jurisdiction. Comments on Consent, Consideration, and Closed session items should be held until the items are reached. The public may request that the legislative body consider adding an item for consideration on a future agenda. The public may comment on scheduled agenda items, including closed session items, as they are considered. In order to be respectful of all speakers' views and to avoid disruption of the meeting, the audience shall refrain from applauding or jeering speakers who have been recognized by the Mayor.

PUBLIC HEARING

ID#19-660 **An Emergency Ordinance Enacting a Temporary Prohibition on No-Fault Evictions**

Recommendation: Adopt an emergency Ordinance enacting a temporary prohibition on no-fault evictions (four-fifths affirmative vote required).

ID#19-652 **Resolution to reduce the Conditional Use Permit - Minor Exception (Administrative) Fee by forty percent (40%) for a six-month period**

Recommendation: Approve a Resolution to reduce the current Planning Fee for the Conditional Use Permit (CUP)- Minor Exception (Administrative) by approximately 40% to $521.94 for a period of six months effective upon approval. The fee will revert to $869.91 following expiration of the six-month period.

ID#19-623 **General Plan Amendment 2017-001 and Rezone 2017-002 located at 295 Sun Way in the P-F (Parks - Flood Plain Overlay) Zoning District**

Recommendation: Affirm the findings and adopt the proposed Mitigated Negative Declaration in accordance with the California Environmental Quality Act, approve a Resolution for General Plan Amendment 2017-001, and adopt an Ordinance for Rezone 2017-002.

ID#19-624 **General Plan Amendment 2017-002; Rezone 2017-001; and Conditional Use Permit 2017-019 located at 10 Simas Street in the IGC-F (Industrial-General**

Commercial - Flood Plain Overlay) Zoning District

Recommendation: Affirm the findings and adopt the proposed Mitigated Negative Declaration in accordance with the California Environmental Quality Act, approve a Resolution for General Plan Amendment 2017-002, adopt an Ordinance for Rezone 2017-001, and approve a Resolution for Conditional Use Permit 2017-019.

ID#19-606 **Ordinance Regarding Commercial Cannabis Business License Tax Rates**

Recommendation: Adopt an Ordinance amending Salinas Municipal Code (SMC) Sec. 19A.10.070 repealing the scheduled automatic business license tax increase for Commercial Cannabis Businesses.

ID#19-613 **West Area Park Impact Fee Update**

Recommendation: Approve a Resolution to update the development impact fees related to the development of parks within the proposed West Area Specific Plan Project.

Salinas Municipal Airport Development Lease Project (1341 Mercer Way) - Misc. 2019-015 - THIS ITEM HAS BEEN CONTINUED INDEFINITELY.

CONSENT AGENDA

All matters listed under Consent Agenda may be enacted by one motion unless a member of the Council or the public requests discussion or a separate vote.

ID#19-661 **Minutes**

Recommendation: Approve minutes of November 19, 2019.

ID#19-662 **Financial Claims**

Recommendation: Approve financial claims report.

ID#19-620 **Alarm Program Administration and Collection Services Agreement**

Recommendation: Approve a Resolution authorizing execution of an agreement with PM AM Corporation for Alarm Program Administration and Collection Services.

ID#19-640 **Direct Purchase of Active Shooter Ballistic Protection Kits for Salinas Police Officers**

Recommendation: Approve a Resolution authorizing the purchase of Active Shooter ballistic vests and Helmets by the Salinas Police Department from Aardvark Inc. at a total cost of $155,811.58.

ID#19-641 **Salinas Municipal Airport Lighting Management Control System Grant Funding**

Recommendation: Approve a Resolution for the application and acceptance of a grant funding from the Federal Aviation Administration and Caltrans Division of Aeronautics for the design and installation of an Airport Lighting Management Control System at the Salinas Municipal Airport.

ID#19-643 **Agreement for FY 2019 Urban Areas Security Initiative (UASI) Grant Funds**

Recommendation: Approve a Resolution accepting FY 2019 UASI Grant Funds and authorize execution of all grant acceptance documents with the City and County of San Francisco for the creation of the Regional Monterey County Automated License Plate Recognition Program.

ID#19-650 **Measure X Funding Agreement Amendment No. 1**

Recommendation: Approve a Resolution approving Amendment No. 1 for the Measure X Master Programs Funding Agreement between the Transportation Agency for Monterey county (TAMC) and the City of Salinas.

COUNCILMEMBERS' REPORTS, APPOINTMENTS AND FUTURE AGENDA ITEMS

Receive communication from Councilmembers on reports, appointments and future agenda items. Councilmember comments are generally limited to three minutes.

ADJOURNMENT

Patricia M. Barajas, City Clerk

AGENDA MATERIAL / ADDENDUM

Any addendums will be posted within 72 hours of regular meetings or 24 hours of special meetings, unless otherwise allowed under the Brown Act. City Council reports may be viewed at the Salinas City Clerk's Office, 200 Lincoln Avenue, Salinas, and are posted on the City's website at www.cityofsalinas.org. The City Council may take action that is different than the proposed action reflected on the agenda.

Disability-related modification or accommodation, including auxiliary aids or services, may be requested by any person with a disability who requires a modification or accommodation in order to participate in the meeting. Requests should be referred to the City Clerk's Office At 200 Lincoln Avenue, Salinas, 758-7381, as soon as possible but by no later than 5 p.m. of the last business day prior to the meeting. Hearing impaired or TTY/TDD text telephone users may contact the city by dialing 711 for the California Relay Service (CRS) or by telephoning any other service providers' CRS telephone number.

PUBLIC NOTIFICATION

This agenda was posted on Wednesday, November 27, 2019 at the City Clerk's Office, in the Council Rotunda, and the City's website.

Meetings are streamed live at https://salinas.legistar.com/Calendar.aspx and televised live on Channel 25 at 4 p.m. on the date of the regularly scheduled meeting and will be broadcast throughout the day on the Wednesday, Friday, Saturday and Monday following the meeting. For the most up-to-the-minute Broadcast Schedule for The Salinas Channel on Comcast 25, please visit or subscribe to our Google Calendar located at http://tinyurl.com/salinas25. Recent City Council meetings may also be viewed on the Salinas Channel on YouTube at http://www.youtube.com/thesalinaschannel.

File #: ID#19-660, **Version:** 1

An Emergency Ordinance Enacting a Temporary Prohibition on No-Fault Evictions

Adopt an emergency Ordinance enacting a temporary prohibition on no-fault evictions (four-fifths affirmative vote required).

CITY OF SALINAS
COUNCIL STAFF REPORT

DATE: **December 3, 2019**

DEPARTMENT: **OFFICE OF THE CITY ATTORNEY**

FROM: **CHRISTOPHER A. CALLIHAN, CITY ATTORNEY**

TITLE: **EMERGENCY ORDINANCE TEMPORARILY PROHIBITING NO-FAULT EVICTIONS**

RECOMMENDED MOTION:

A motion to adopt an emergency ordinance temporarily prohibiting no-fault evictions.

RECOMMENDATION:

It is recommended that the City Council adopt the proposed emergency ordinance.

EXECUTIVE SUMMARY:

This emergency ordinance, proposed pursuant to Salinas Charter Section 11, addresses the affordable housing and homelessness crises in Salinas by temporarily prohibiting no-fault evictions until California Assembly Bill 1482 (the Tenant Protection Act of 2019) takes effect on January 1, 2020. The emergency ordinance, with certain exceptions, prohibits an owner of residential real property from terminating a tenancy without just cause, which is required to be stated in the written notice to terminate tenancy when one or more tenants have continuously and lawfully occupied the residential real property for twelve (12) months or more.

This item was recommended by Council members Davis and Barrera, with the support of Mayor Gunter. Pursuant to Salinas Charter Section 11.8(a), the proposed emergency ordinance may be passed only upon the affirmative votes of six (6) City Council members and will take effect immediately.

DISCUSSION:

On September 11, 2019, California Assembly Bill 1482 (AB 1482) passed the legislature and on October 8, 2019, the Governor signed AB 1482 into law. AB 1482 becomes effective on January 1, 2020 and will limit annual rent increases and will prohibit an owner from terminating a tenancy without just cause if the tenant has lived in a unit for twelve (12) months or more. After AB 1482

becomes effective, the prohibitions on eviction without just cause will go into effect and if rents were increased after March 15, 2019, the rent on January 1, 2020, is reduced to the rent as of March 15, 2019, plus the maximum increase allowed by AB 1482. The proposed emergency ordinance addresses only no-fault evictions and does not address rent limits.

AB1482 includes no-fault eviction protections for tenants if they have lived in a unit for twelve (12) months or more. Just cause eviction protection would require a landlord to have a valid reason for terminating a tenancy. Some examples include non-payment of rent, violation of a lease term, and the creation of a nuisance.

The proposed emergency ordinance would temporarily prohibit no-fault evictions through December 31, 2019, for residential real property that will be subject to the protections of AB 1482 beginning on January 1, 2020. The prohibition on no-fault evictions is not retroactive. The proposed emergency ordinance is substantially similar to AB 1482 and local ordinances adopted by neighboring jurisdictions, including the City of Seaside and Monterey County.

Prior to drafting the proposed emergency ordinance, the City Attorney met with community members representing tenants and community members representing property owners and landlords to listen to their concerns regarding AB 1482 and the effects on their respective constituencies. On November 20, 2019, the City Attorney met with Daniel Gonzalez, Sabino Lopez, and Armando Asencio from the Center for Community Advocacy; and Monica Gurmilan and Cesar Lara from Building Healthy Communities. On that same day, the City Attorney met with Gloria Moore, Chuck Cryder, Gail Valdez, and Carrie Appling from the Monterey County Association of Realtors. All of these community members' insights, knowledge, and experience were critical to the preparation of the proposed ordinance. All understood and acknowledged the need to protect tenants from no-fault evictions.

CEQA CONSIDERATION:

The action of adopting the proposed ordinance is categorically exempt from the California Environmental Quality Act (CEQA) pursuant to Guidelines section 15061(b)(3).

STRATEGIC PLAN INITIATIVE:

Adoption of the proposed emergency ordinance supports the City Council's goal of promoting a safe and livable community.

FISCAL AND SUSTAINABILITY IMPACT:

The City Council's adoption of the proposed emergency ordinance would not have an impact on the City's General Fund, Measure E, or Measure G.

DEPARTMENTAL COORDINATION

The City Attorney's Department did not coordinate with other City Departments on the proposed emergency ordinance.

ATTACHMENTS:

Emergency Ordinance
AB 1482

ORDINANCE NO. _____ (N.C.S.)

AN EMERGENCY ORDINANCE ENACTING A TEMPORARY PROHIBITION ON NO-FAULT EVICTIONS

City Attorney Impartial Analysis

This emergency ordinance, proposed pursuant to Salinas Charter Section 11, addresses the affordable housing and homelessness crises in Salinas by temporarily prohibiting no-fault evictions until California Assembly Bill 1482 (the Tenant Protection Act of 2019) takes effect on January 1, 2020. The emergency ordinance, with certain exceptions, prohibits an owner of residential real property from terminating a tenancy without just cause, which is required to be stated in the written notice to terminate tenancy when one or more tenants have continuously and lawfully occupied the residential real property for twelve (12) months or more.

WHEREAS, pursuant to Article XI, Section 7 of the California Constitution, the City of Salinas (City) has broad authority to maintain the public peace, health, and safety of its community and to preserve the quality of life for its residents and may make and enforce all regulations and ordinances using its police powers in order to do so; and

WHEREAS, On October 8, 2019, California's Governor signed into law the Tenant Protection Act of 2019, Assembly Bill 1482 (AB 1482), which in part addresses California's affordable housing crisis by prohibiting evictions without "just cause," otherwise known as "no-fault" evictions, and the raising of rents above a specified amount; and

WHEREAS, AB 1482 will not become effective until January 1, 2020; and

WHEREAS, the City has one of the least affordable housing markets in California and the United States: the Salinas metropolitan area is one of seven in California that ranks in the top ten least affordable in the United States according to an analysis of 2016 census data by Harvard's Joint Center for Housing Studies; and

WHEREAS, eviction creates particular hardships for individuals with households of limited means, given the shortage of housing, particularly affordable housing, within the City of Salinas and the Monterey Bay region, generally; and

WHEREAS, Salinas is experiencing an affordable housing crisis and a humanitarian crisis of homelessness; and

WHEREAS, in advance of the implementation of AB 1482, no-fault eviction notices and threats of eviction have increased; and

WHEREAS, the City is aware of specific instances where long-term tenants have received rent increase notice in excess of what will be lawful under AB 1482, have received eviction notices

based upon the premise of a need for repairs to the rental units, and in some cases tenants have received both rent increase and eviction notices; and

WHEREAS, among those affected are low and very-low income tenants who have no other viable housing options once evicted from their rental units due, for example, to a lack of resources and/or a lack of vacant and affordable units; and

WHEREAS, due to a lack of education, a lack of resources, and in some cases having an undocumented status, some residents facing either rent increases, eviction, or both have no resource against unlawful rent increases and/or no-fault evictions; and

WHEREAS, when families with children are evicted from their rental units, the children's education may be interrupted; moving during the middle of a school year may affect a child's ability to remain within the same school district and to remain at the same school site; and

WHEREAS, in light of the presence of no-fault evictions occurring prior to AB 1482's effective date, Salinas can expect that more of its residents will be subject to no-fault evictions that would otherwise violation AB 1482; and

WHEREAS, such evictions present an immediate threat to public peace, health, and safety of Salinas residents and an emergency to Salinas residents who would be subject to no-fault evictions in that they will cause a displacement of residents during the winter and close to the November and December holidays and, with a shortage of both market rate and affordable rental units, will contribute to an increase in the homeless population in the City; and

WHEREAS, the Salinas City Council declares that based on these findings no-fault evictions prior to AB 1482's effective date will create an emergency situation which may be addressed through an emergency ordinance implementing provisions of AB 1482 prior to its effective date; and

WHEREAS, Salinas Charter Section 11.8(a) allows an emergency ordinance to be passed by six (6) voted of the City Council; and

WHEREAS, Salinas Charter Section 11.8(b) allows an emergency ordinance to take effect immediately, as indicated in the emergency ordinance.

NOW, THEREFORE, BE IT ORDAINED BY THE COUNCIL OF SALINAS as follows:

SECTION 1. Recitals. The above recitals are true and correct and are by this reference incorporated herein in their entirety.

SECTION 2. Title. The title of this emergency ordinance shall be "Temporary Prohibition of No-Fault Evictions."

SECTION 3. Findings and Purpose.

A. On October 8, 2019, Assembly Bill 1482 (AB 1482), the Tenant Protections Act of 2019, was passed to address a key cause of California's affordable housing crisis by preventing rent gouging and arbitrary evictions.

B. Escalating real estate values provide an incentive to landlords to evict long-term, lower-income tenants, without cause or under the guise of a need for repairs, to raise rents and to attract wealthier tenants, before AB 1482 becomes effective. Tenants in Salinas have reported experiencing an increase of no-fault eviction notices and threats of eviction; therefore, it is imperative that the City implement temporary strategies to keep people housed.

C. This ordinance will temporarily prohibit no-fault evictions through December 31, 2019, for residential real property that will be covered by AB 1482 beginning on January 1, 2020.

SECTION 4. Definitions.

The following words and phrases, whenever used in this ordinance, shall be construed as defined in this Section:

A. Owner. The term "Owner" is any person, acting as a principal or through an agent, offering residential real property for rent, and includes a predecessor in interest to the owner.

B. Residential Real Property. The term "residential real property" is any dwelling or unit that is intended to be used for human habitation.

SECTION 5. Temporary Prohibition on No-Fault Evictions.

A. Until the effective date of AB 1482, after one or more tenants have continuously and lawfully occupied a residential real property for twelve (12) months or more, the owner of residential real property shall not terminate the tenancy without at-fault just cause, which shall be stated in the written notice of termination of tenancy. This prohibition shall also apply to an owner's action that constitutes constructive eviction under California law. An owner's failure to comply with this ordinance shall render any notice of termination of tenancy void. This section may be asserted as an affirmative defense in an unlawful detainer action. Terminations that are required to comply with an order issued by a government agency or court requiring that the residential real property be vacated, or comport with due process, federal, or state law, are exempted from this prohibition. An owner's failure to comply with this ordinance does not constitute a criminal offense.

B. At-fault just cause is the following:

1. Default in the payment of rent.

2. A breach of a material term of the lease, as described in paragraph (3) of Section 1161 of the California Code of Civil Procedure, including, but not limited to, violation of a provision of a lease after being issued a written notice to correct the violation.

3. Maintaining, committing, or permitting the maintenance of continuation of a nuisance as described in paragraph (4) of Section 1161 of the California Code of Civil Procedure.

4. Criminal activity by the tenant on the residential real property, including common areas, or any criminal activity or criminal threat, as defined in subdivision (a) of Section 422 of the California Penal Code, on or off the residential real property against the owner of residential real property.

5. Assigning or subletting the premises in violation of the tenant's lease, as described in paragraph (4) of Section 1161 of the California Code of Civil Procedure.

6. The tenant's refusal to allow the owner to enter the residential real property as authorized by Sections 1101.5 and 1954 of the California Civil Code, and Sections 13113.7 and 17926.1 of the California Health and Safety Code.

7. Using the premises for an unlawful purpose as described in paragraph (4) of Section 1161 of the California Code of Civil Procedure.

8. The employee, agent, or licensee's failure to vacate after their termination as an employee, agent, or licensee as described in paragraph (1) of Section 1161 of the California Code of Civil Procedure.

9. When the tenant fails to deliver possession of the residential real property after providing the owner written notice as provided in Section 1946 of the California Code of Civil Code of the tenant's intention to terminate the hiring of real property, or makes a written offer to surrender that is accepted in writing by the owner, but fails to deliver possession at the time specified in the written notice as described in paragraph (5) of Section 1161 of the California Code of Civil Procedure.

C. If an owner can show any of the following circumstances related to a termination of tenancy, the termination will be exempt from the provisions of this ordinance:

1. Owner will imminently demolish the residential real property or otherwise permanently remove the real property from any residential use or purpose in accordance with California Government Code Sections 7060-7060.7.

2. The owner, or one of the owner's parents, grandparents, grandchildren, children, spouse, domestic partner intent to move into and to reside in the residential real property as his, her, or their primary residence. The residential real property must be occupied as the primary residence within three months of the tenant vacating the residence and continue to occupy the residential property for at least one year.

3. The need to make substantial repairs in order for a dwelling to be habitable and to be in compliance with applicable health and safety codes, and that such repairs cannot be completed while the dwelling unit is occupied.

D. This ordinance shall not apply to and of the following residential real property or residential circumstances:

1. Transient and tourist hotel occupancy as defined in Subdivision (b) of Section 1940 of the California Civil Code.

2. Housing accommodations in a non-profit hospital, religious facility, extended care facility, licensed residential care facility for the elderly, as defined in Section 1569.2 of the California Health and Safety Code, or an adult residential facility, as defined in Chapter 6 of Division 6 of Title 22 of the Manual of Policies and Procedures published by the State Department of Social Services.

3. Dormitories owned and operated by an institution of higher education or a kindergarten and grades 1 to 12, inclusive, school.

4. Housing accommodations in which the tenant shares bathroom or kitchen facilities with the owner who maintains their principal residence at the residential real property.

5. Single-family owner-occupied residences, including a resident in which the owner-occupant rents or leases no more than two (2) units or bedrooms, including, but not limited to, an accessory dwelling unit or a junior accessory dwelling unit.

6. A duplex in which the owner occupied one (1) of the units as the owner's principal place of residence at the beginning of the tenancy, so long as the owner continues in occupancy.

7. Housing that has been issued a certificate of occupancy within the previous fifteen (15) years.

8. Residential real property that is alienable separate from the title to any other dwelling unit, provided that the owner is not any of the following:

a. A real estate investment trust, as defined in Section 856 of the Internal Revenue Code.

b. A corporation.

c. A limited liability company in which at least one member is a corporation.

9. Housing restricted by deed, regulatory restriction contained in an agreement with a governmental agency, or other recorded document as affordable housing for persons and families of very low, low, or moderate income, as defined in Section 50093 of the Health and Safety Code, or subject to an agreement that provides housing subsidies for affordable housing for persons and families of very low, low, or moderate income, as defined in Section 50093 of the Health and Safety Code or comparable federal statutes.

SECTION 6. Application.

This ordinance shall apply to tenancies where the tenant remains in possession and the eviction lawsuit has not been adjudicated.

SECTION 7. Severability.

If any section, subsection, sentence, clause, or phrase of this ordinance is for any reason held to be invalid, such decision shall not affect the validity of the remaining provisions of this ordinance. The Salinas City Council hereby declares that it would have adopted this ordinance and each provision thereof irrespective of the fact that any one or more sections, subsections, sentences, clauses, or phrases be declared invalid.

SECTION 8. Effective Date. This emergency ordinance shall be effective on December 3, 2019 and shall expire at midnight on December 31, 2019.

PASSED AND ADOPTED this 3rd day of December 2019, by the following vote:

AYES:

NOES:

ABSENT:

ABSTAIN:

APPROVED:

_____
Joe Gunter, Mayor

ATTEST:

_____
Patricia M. Barajas, City Clerk

APPROVED AS TO FORM:

_____
Christopher A. Callihan, City Attorney

STATE OF CALIFORNIA
AUTHENTICATED
ELECTRONIC LEGAL MATERIAL

Assembly Bill No. 1482

CHAPTER 597

An act to add and repeal Sections 1946.2, 1947.12, and 1947.13 of the Civil Code, relating to tenancy.

[Approved by Governor October 8, 2019. Filed with Secretary of State October 8, 2019.]

LEGISLATIVE COUNSEL'S DIGEST

AB 1482, Chiu. Tenant Protection Act of 2019: tenancy: rent caps.

Existing law specifies that a hiring of residential real property, for a term not specified by the parties, is deemed to be renewed at the end of the term implied by law unless one of the parties gives written notice to the other of that party's intention to terminate. Existing law requires an owner of a residential dwelling to give notice at least 60 days prior to the proposed date of termination, or at least 30 days prior to the proposed date of termination if any tenant or resident has resided in the dwelling for less than one year, as specified. Existing law requires any notice given by an owner to be given in a prescribed manner, to contain certain information, and to be formatted, as specified.

This bill would, with certain exceptions, prohibit an owner, as defined, of residential real property from terminating a tenancy without just cause, as defined, which the bill would require to be stated in the written notice to terminate tenancy when the tenant has continuously and lawfully occupied the residential real property for 12 months, except as provided. The bill would require, for certain just cause terminations that are curable, that the owner give a notice of violation and an opportunity to cure the violation prior to issuing the notice of termination. The bill, if the violation is not cured within the time period set forth in the notice, would authorize a 3-day notice to quit without an opportunity to cure to be served to terminate the tenancy. The bill would require, for no-fault just cause terminations, as specified, that the owner, at the owner's option, either assist certain tenants to relocate, regardless of the tenant's income, by providing a direct payment of one month's rent to the tenant, as specified, or waive in writing the payment of rent for the final month of the tenancy, prior to the rent becoming due. The bill would require the actual amount of relocation assistance or rent waiver provided to a tenant that fails to vacate after the expiration of the notice to terminate the tenancy to be recoverable as damages in an action to recover possession. The bill would provide that if the owner does not provide relocation assistance, the notice of termination is void. The bill would except certain properties and circumstances from the application of its provisions. The bill would require an owner of residential property to provide prescribed notice to a tenant of the tenant's rights under these

provisions. The bill would not apply to residential real property subject to a local ordinance requiring just cause for termination adopted on or before September 1, 2019, or to residential real property subject to a local ordinance requiring just cause for termination adopted or amended after September 1, 2019, that is more protective than these provisions, as defined. The bill would void any waiver of the rights under these provisions. The bill would repeal these provisions as of January 1, 2030.

Existing law governs the hiring of residential dwelling units and requires a landlord to provide specified notice to tenants prior to an increase in rent. Existing law, the Costa-Hawkins Rental Housing Act, prescribes statewide limits on the application of local rent control with regard to certain properties. That act, among other things, authorizes an owner of residential real property to establish the initial and all subsequent rental rates for a dwelling or unit that meets specified criteria, subject to certain limitations.

This bill would, until January 1, 2030, prohibit an owner of residential real property from, over the course of any 12-month period, increasing the gross rental rate for a dwelling or unit more than 5% plus the percentage change in the cost of living, as defined, or 10%, whichever is lower, of the lowest gross rental rate charged for the immediately preceding 12 months, subject to specified conditions. The bill would prohibit an owner of a unit of residential real property from increasing the gross rental rate for the unit in more than 2 increments over a 12-month period, after the tenant remains in occupancy of the unit over a 12-month period. The bill would exempt certain properties from these provisions. The bill would require the Legislative Analyst's Office to submit a report, on or before January 1, 2030, to the Legislature regarding the effectiveness of these provisions. The bill would provide that these provisions apply to all rent increases occurring on or after March 15, 2019. The bill would provide that in the event that an owner increased the rent by more than the amount specified above between March 15, 2019, and January 1, 2020, the applicable rent on January 1, 2020, shall be the rent as of March 15, 2019, plus the maximum permissible increase, and the owner shall not be liable to the tenant for any corresponding rent overpayment. The bill would authorize an owner who increased the rent by less than the amount specified above between March 15, 2019, and January 1, 2020, to increase the rent twice within 12 months of March 15, 2019, but not by more than the amount specified above. The bill would void any waiver of the rights under these provisions.

The Planning and Zoning Law requires the owner of an assisted housing development in which there will be an expiration of rental restrictions to, among other things, provide notice of the proposed change to each affected tenant household residing in the assisted housing development subject to specified procedures and requirements, and to also provide specified entities notice and an opportunity to submit an offer to purchase the development prior to the expiration of the rental restrictions.

This bill would authorize an owner of an assisted housing development, who demonstrates, under penalty of perjury, compliance with the provisions described above with regard to the expiration of rental restrictions, to

establish the initial unassisted rental rate for units without regard to the cap on rent increases discussed above, but would require the owner to comply with the above cap on rent increases for subsequent rent increases in the development. The bill would authorize an owner of a deed-restricted affordable housing unit or an affordable housing unit subject to a regulatory restriction contained in an agreement with a government agency limiting rental rates that is not within an assisted housing development to establish the initial rental rate for the unit upon the expiration of the restriction, but would require the owner to comply with the above cap on rent increases for subsequent rent increases for the unit. The bill would repeal these provisions on January 1, 2030. The bill would void any waiver of the rights under these provisions. By requiring an owner of an assisted housing development to demonstrate compliance with specified provisions under penalty of perjury, this bill would expand the existing crime of perjury and thus would impose a state-mandated local program.

The California Constitution requires the state to reimburse local agencies and school districts for certain costs mandated by the state. Statutory provisions establish procedures for making that reimbursement.

This bill would provide that no reimbursement is required by this act for a specified reason.

The people of the State of California do enact as follows:

SECTION 1. This act shall be known, and may be cited, as the Tenant Protection Act of 2019.

SEC. 2. Section 1946.2 is added to the Civil Code, to read:

1946.2. (a) Notwithstanding any other law, after a tenant has continuously and lawfully occupied a residential real property for 12 months, the owner of the residential real property shall not terminate the tenancy without just cause, which shall be stated in the written notice to terminate tenancy. If any additional adult tenants are added to the lease before an existing tenant has continuously and lawfully occupied the residential real property for 24 months, then this subdivision shall only apply if either of the following are satisfied:

(1) All of the tenants have continuously and lawfully occupied the residential real property for 12 months or more.

(2) One or more tenants have continuously and lawfully occupied the residential real property for 24 months or more.

(b) For purposes of this section, "just cause" includes either of the following:

(1) At-fault just cause, which is any of the following:

(A) Default in the payment of rent.

(B) A breach of a material term of the lease, as described in paragraph (3) of Section 1161 of the Code of Civil Procedure, including, but not limited to, violation of a provision of the lease after being issued a written notice to correct the violation.

(C) Maintaining, committing, or permitting the maintenance or commission of a nuisance as described in paragraph (4) of Section 1161 of the Code of Civil Procedure.

(D) Committing waste as described in paragraph (4) of Section 1161 of the Code of Civil Procedure.

(E) The tenant had a written lease that terminated on or after January 1, 2020, and after a written request or demand from the owner, the tenant has refused to execute a written extension or renewal of the lease for an additional term of similar duration with similar provisions, provided that those terms do not violate this section or any other provision of law.

(F) Criminal activity by the tenant on the residential real property, including any common areas, or any criminal activity or criminal threat, as defined in subdivision (a) of Section 422 of the Penal Code, on or off the residential real property, that is directed at any owner or agent of the owner of the residential real property.

(G) Assigning or subletting the premises in violation of the tenant's lease, as described in paragraph (4) of Section 1161 of the Code of Civil Procedure.

(H) The tenant's refusal to allow the owner to enter the residential real property as authorized by Sections 1101.5 and 1954 of this code, and Sections 13113.7 and 17926.1 of the Health and Safety Code.

(I) Using the premises for an unlawful purpose as described in paragraph (4) of Section 1161 of the Code of Civil Procedure.

(J) The employee, agent, or licensee's failure to vacate after their termination as an employee, agent, or a licensee as described in paragraph (1) of Section 1161 of the Code of Civil Procedure.

(K) When the tenant fails to deliver possession of the residential real property after providing the owner written notice as provided in Section 1946 of the tenant's intention to terminate the hiring of the real property, or makes a written offer to surrender that is accepted in writing by the landlord, but fails to deliver possession at the time specified in that written notice as described in paragraph (5) of Section 1161 of the Code of Civil Procedure.

(2) No-fault just cause, which includes any of the following:

(A) (i) Intent to occupy the residential real property by the owner or their spouse, domestic partner, children, grandchildren, parents, or grandparents.

(ii) For leases entered into on or after July 1, 2020, clause (i) shall apply only if the tenant agrees, in writing, to the termination, or if a provision of the lease allows the owner to terminate the lease if the owner, or their spouse, domestic partner, children, grandchildren, parents, or grandparents, unilaterally decides to occupy the residential real property. Addition of a provision allowing the owner to terminate the lease as described in this clause to a new or renewed rental agreement or fixed-term lease constitutes a similar provision for the purposes of subparagraph (E) of paragraph (1).

(B) Withdrawal of the residential real property from the rental market.

(C) (i) The owner complying with any of the following:

(I) An order issued by a government agency or court relating to habitability that necessitates vacating the residential real property.

(II) An order issued by a government agency or court to vacate the residential real property.

(III) A local ordinance that necessitates vacating the residential real property.

(ii) If it is determined by any government agency or court that the tenant is at fault for the condition or conditions triggering the order or need to vacate under clause (i), the tenant shall not be entitled to relocation assistance as outlined in paragraph (3) of subdivision (d).

(D) (i) Intent to demolish or to substantially remodel the residential real property.

(ii) For purposes of this subparagraph, "substantially remodel" means the replacement or substantial modification of any structural, electrical, plumbing, or mechanical system that requires a permit from a governmental agency, or the abatement of hazardous materials, including lead-based paint, mold, or asbestos, in accordance with applicable federal, state, and local laws, that cannot be reasonably accomplished in a safe manner with the tenant in place and that requires the tenant to vacate the residential real property for at least 30 days. Cosmetic improvements alone, including painting, decorating, and minor repairs, or other work that can be performed safely without having the residential real property vacated, do not qualify as substantial rehabilitation.

(c) Before an owner of residential real property issues a notice to terminate a tenancy for just cause that is a curable lease violation, the owner shall first give notice of the violation to the tenant with an opportunity to cure the violation pursuant to paragraph (3) of Section 1161 of the Code of Civil Procedure. If the violation is not cured within the time period set forth in the notice, a three-day notice to quit without an opportunity to cure may thereafter be served to terminate the tenancy.

(d) (1) For a tenancy for which just cause is required to terminate the tenancy under subdivision (a), if an owner of residential real property issues a termination notice based on a no-fault just cause described in paragraph (2) of subdivision (b), the owner shall, regardless of the tenant's income, at the owner's option, do one of the following:

(A) Assist the tenant to relocate by providing a direct payment to the tenant as described in paragraph (3).

(B) Waive in writing the payment of rent for the final month of the tenancy, prior to the rent becoming due.

(2) If an owner issues a notice to terminate a tenancy for no-fault just cause, the owner shall notify the tenant of the tenant's right to relocation assistance or rent waiver pursuant to this section. If the owner elects to waive the rent for the final month of the tenancy as provided in subparagraph (B) of paragraph (1), the notice shall state the amount of rent waived and that no rent is due for the final month of the tenancy.

(3) (A) The amount of relocation assistance or rent waiver shall be equal to one month of the tenant's rent that was in effect when the owner issued

the notice to terminate the tenancy. Any relocation assistance shall be provided within 15 calendar days of service of the notice.

(B) If a tenant fails to vacate after the expiration of the notice to terminate the tenancy, the actual amount of any relocation assistance or rent waiver provided pursuant to this subdivision shall be recoverable as damages in an action to recover possession.

(C) The relocation assistance or rent waiver required by this subdivision shall be credited against any other relocation assistance required by any other law.

(4) An owner's failure to strictly comply with this subdivision shall render the notice of termination void.

(e) This section shall not apply to the following types of residential real properties or residential circumstances:

(1) Transient and tourist hotel occupancy as defined in subdivision (b) of Section 1940.

(2) Housing accommodations in a nonprofit hospital, religious facility, extended care facility, licensed residential care facility for the elderly, as defined in Section 1569.2 of the Health and Safety Code, or an adult residential facility, as defined in Chapter 6 of Division 6 of Title 22 of the Manual of Policies and Procedures published by the State Department of Social Services.

(3) Dormitories owned and operated by an institution of higher education or a kindergarten and grades 1 to 12, inclusive, school.

(4) Housing accommodations in which the tenant shares bathroom or kitchen facilities with the owner who maintains their principal residence at the residential real property.

(5) Single-family owner-occupied residences, including a residence in which the owner-occupant rents or leases no more than two units or bedrooms, including, but not limited to, an accessory dwelling unit or a junior accessory dwelling unit.

(6) A duplex in which the owner occupied one of the units as the owner's principal place of residence at the beginning of the tenancy, so long as the owner continues in occupancy.

(7) Housing that has been issued a certificate of occupancy within the previous 15 years.

(8) Residential real property that is alienable separate from the title to any other dwelling unit, provided that both of the following apply:

(A) The owner is not any of the following:

(i) A real estate investment trust, as defined in Section 856 of the Internal Revenue Code.

(ii) A corporation.

(iii) A limited liability company in which at least one member is a corporation.

(B) (i) The tenants have been provided written notice that the residential property is exempt from this section using the following statement:

"This property is not subject to the rent limits imposed by Section 1947.12 of the Civil Code and is not subject to the just cause requirements of Section 1946.2 of the Civil Code. This property meets the requirements of Sections 1947.12 (d)(5) and 1946.2 (e)(8) of the Civil Code and the owner is not any of the following: (1) a real estate investment trust, as defined by Section 856 of the Internal Revenue Code; (2) a corporation; or (3) a limited liability company in which at least one member is a corporation."

(ii) For a tenancy existing before July 1, 2020, the notice required under clause (i) may, but is not required to, be provided in the rental agreement.

(iii) For any tenancy commenced or renewed on or after July 1, 2020, the notice required under clause (i) must be provided in the rental agreement.

(iv) Addition of a provision containing the notice required under clause (i) to any new or renewed rental agreement or fixed-term lease constitutes a similar provision for the purposes of subparagraph (E) of paragraph (1) of subdivision (b).

(9) Housing restricted by deed, regulatory restriction contained in an agreement with a government agency, or other recorded document as affordable housing for persons and families of very low, low, or moderate income, as defined in Section 50093 of the Health and Safety Code, or subject to an agreement that provides housing subsidies for affordable housing for persons and families of very low, low, or moderate income, as defined in Section 50093 of the Health and Safety Code or comparable federal statutes.

(f) An owner of residential real property subject to this section shall provide notice to the tenant as follows:

(1) For any tenancy commenced or renewed on or after July 1, 2020, as an addendum to the lease or rental agreement, or as a written notice signed by the tenant, with a copy provided to the tenant.

(2) For a tenancy existing prior to July 1, 2020, by written notice to the tenant no later than August 1, 2020, or as an addendum to the lease or rental agreement.

(3) The notification or lease provision shall be in no less than 12-point type, and shall include the following:

"California law limits the amount your rent can be increased. See Section 1947.12 of the Civil Code for more information. California law also provides that after all of the tenants have continuously and lawfully occupied the property for 12 months or more or at least one of the tenants has continuously and lawfully occupied the property for 24 months or more, a landlord must provide a statement of cause in any notice to terminate a tenancy. See Section 1946.2 of the Civil Code for more information."

The provision of the notice shall be subject to Section 1632.

(g) (1) This section does not apply to the following residential real property:

(A) Residential real property subject to a local ordinance requiring just cause for termination of a residential tenancy adopted on or before September 1, 2019, in which case the local ordinance shall apply.

(B) Residential real property subject to a local ordinance requiring just cause for termination of a residential tenancy adopted or amended after September 1, 2019, that is more protective than this section, in which case the local ordinance shall apply. For purposes of this subparagraph, an ordinance is "more protective" if it meets all of the following criteria:

(i) The just cause for termination of a residential tenancy under the local ordinance is consistent with this section.

(ii) The ordinance further limits the reasons for termination of a residential tenancy, provides for higher relocation assistance amounts, or provides additional tenant protections that are not prohibited by any other provision of law.

(iii) The local government has made a binding finding within their local ordinance that the ordinance is more protective than the provisions of this section.

(2) A residential real property shall not be subject to both a local ordinance requiring just cause for termination of a residential tenancy and this section.

(3) A local ordinance adopted after September 1, 2019, that is less protective than this section shall not be enforced unless this section is repealed.

(h) Any waiver of the rights under this section shall be void as contrary to public policy.

(i) For the purposes of this section, the following definitions shall apply:

(1) "Owner" and "residential real property" have the same meaning as those terms are defined in Section 1954.51.

(2) "Tenancy" means the lawful occupation of residential real property and includes a lease or sublease.

(j) This section shall remain in effect only until January 1, 2030, and as of that date is repealed.

SEC. 3. Section 1947.12 is added to the Civil Code, to read:

1947.12. (a) (1) Subject to subdivision (b), an owner of residential real property shall not, over the course of any 12-month period, increase the gross rental rate for a dwelling or a unit more than 5 percent plus the percentage change in the cost of living, or 10 percent, whichever is lower, of the lowest gross rental rate charged for that dwelling or unit at any time during the 12 months prior to the effective date of the increase. In determining the lowest gross rental amount pursuant to this section, any rent discounts, incentives, concessions, or credits offered by the owner of such unit of residential real property and accepted by the tenant shall be excluded. The gross per-month rental rate and any owner-offered discounts, incentives, concessions, or credits shall be separately listed and identified in the lease or rental agreement or any amendments to an existing lease or rental agreement.

(2) If the same tenant remains in occupancy of a unit of residential real property over any 12-month period, the gross rental rate for the unit of residential real property shall not be increased in more than two increments over that 12-month period, subject to the other restrictions of this subdivision governing gross rental rate increase.

(b) For a new tenancy in which no tenant from the prior tenancy remains in lawful possession of the residential real property, the owner may establish the initial rental rate not subject to subdivision (a). Subdivision (a) is only applicable to subsequent increases after that initial rental rate has been established.

(c) A tenant of residential real property subject to this section shall not enter into a sublease that results in a total rent for the premises that exceeds the allowable rental rate authorized by subdivision (a). Nothing in this subdivision authorizes a tenant to sublet or assign the tenant's interest where otherwise prohibited.

(d) This section shall not apply to the following residential real properties:

(1) Housing restricted by deed, regulatory restriction contained in an agreement with a government agency, or other recorded document as affordable housing for persons and families of very low, low, or moderate income, as defined in Section 50093 of the Health and Safety Code, or subject to an agreement that provides housing subsidies for affordable housing for persons and families of very low, low, or moderate income, as defined in Section 50093 of the Health and Safety Code or comparable federal statutes.

(2) Dormitories constructed and maintained in connection with any higher education institution within the state for use and occupancy by students in attendance at the institution.

(3) Housing subject to rent or price control through a public entity's valid exercise of its police power consistent with Chapter 2.7 (commencing with Section 1954.50) that restricts annual increases in the rental rate to an amount less than that provided in subdivision (a).

(4) Housing that has been issued a certificate of occupancy within the previous 15 years.

(5) Residential real property that is alienable separate from the title to any other dwelling unit, provided that both of the following apply:

(A) The owner is not any of the following:

(i) A real estate investment trust, as defined in Section 856 of the Internal Revenue Code.

(ii) A corporation.

(iii) A limited liability company in which at least one member is a corporation.

(B) (i) The tenants have been provided written notice that the residential real property is exempt from this section using the following statement:

"This property is not subject to the rent limits imposed by Section 1947.12 of the Civil Code and is not subject to the just cause requirements of Section 1946.2 of the Civil Code. This property meets the requirements of Sections

1947.12 (c)(5) and 1946.2 (e)(7) of the Civil Code and the owner is not any of the following: (1) a real estate investment trust, as defined by Section 856 of the Internal Revenue Code; (2) a corporation; or (3) a limited liability company in which at least one member is a corporation."

(ii) For a tenancy existing before July 1, 2020, the notice required under clause (i) may, but is not required to, be provided in the rental agreement.

(iii) For a tenancy commenced or renewed on or after July 1, 2020, the notice required under clause (i) must be provided in the rental agreement.

(iv) Addition of a provision containing the notice required under clause (i) to any new or renewed rental agreement or fixed-term lease constitutes a similar provision for the purposes of subparagraph (E) of paragraph (1) of subdivision (b) of Section 1946.2.

(6) A duplex in which the owner occupied one of the units as the owner's principal place of residence at the beginning of the tenancy, so long as the owner continues in occupancy.

(e) An owner shall provide notice of any increase in the rental rate, pursuant to subdivision (a), to each tenant in accordance with Section 827.

(f) (1) On or before January 1, 2030, the Legislative Analyst's Office shall report to the Legislature regarding the effectiveness of this section and Section 1947.13. The report shall include, but not be limited to, the impact of the rental rate cap pursuant to subdivision (a) on the housing market within the state.

(2) The report required by paragraph (1) shall be submitted in compliance with Section 9795 of the Government Code.

(g) For the purposes of this section, the following definitions shall apply:

(1) "Owner" and "residential real property" shall have the same meaning as those terms are defined in Section 1954.51.

(2) "Percentage change in the cost of living" means the percentage change from April 1 of the prior year to April 1 of the current year in the regional Consumer Price Index for the region where the residential real property is located, as published by the United States Bureau of Labor Statistics. If a regional index is not available, the California Consumer Price Index for All Urban Consumers for all items, as determined by the Department of Industrial Relations, shall apply.

(3) "Tenancy" means the lawful occupation of residential real property and includes a lease or sublease.

(h) (1) This section shall apply to all rent increases subject to subdivision (a) occurring on or after March 15, 2019. This section shall become operative January 1, 2020.

(2) In the event that an owner has increased the rent by more than the amount permissible under subdivision (a) between March 15, 2019, and January 1, 2020, both of the following shall apply:

(A) The applicable rent on January 1, 2020, shall be the rent as of March 15, 2019, plus the maximum permissible increase under subdivision (a).

(B) An owner shall not be liable to the tenant for any corresponding rent overpayment.

(3) An owner of residential real property subject to subdivision (a) who increased the rental rate on that residential real property on or after March 15, 2019, but prior to January 1, 2020, by an amount less than the rental rate increase permitted by subdivision (a) shall be allowed to increase the rental rate twice, as provided in paragraph (2) of subdivision (a), within 12 months of March 15, 2019, but in no event shall that rental rate increase exceed the maximum rental rate increase permitted by subdivision (a).

(i) Any waiver of the rights under this section shall be void as contrary to public policy.

(j) This section shall remain in effect until January 1, 2030, and as of that date is repealed.

(k) (1) The Legislature finds and declares that the unique circumstances of the current housing crisis require a statewide response to address rent gouging by establishing statewide limitations on gross rental rate increases.

(2) It is the intent of the Legislature that this section should apply only for the limited time needed to address the current statewide housing crisis, as described in paragraph (1). This section is not intended to expand or limit the authority of local governments to establish local policies regulating rents consistent with Chapter 2.7 (commencing with Section 1954.50), nor is it a statement regarding the appropriate, allowable rental rate increase when a local government adopts a policy regulating rent that is otherwise consistent with Chapter 2.7 (commencing with Section 1954.50).

(3) Nothing in this section authorizes a local government to establish limitations on any rental rate increases not otherwise permissible under Chapter 2.7 (commencing with Section 1954.50), or affects the existing authority of a local government to adopt or maintain rent controls or price controls consistent with that chapter.

SEC. 4. Section 1947.13 is added to the Civil Code, to read:

1947.13. (a) Notwithstanding Section 1947.12, upon the expiration of rental restrictions, the following shall apply:

(1) The owner of an assisted housing development who demonstrates, under penalty of perjury, compliance with all applicable provisions of Sections 65863.10, 65863.11, and 65863.13 of the Government Code and any other applicable law or regulation intended to promote the preservation of assisted housing, may establish the initial unassisted rental rate for units in the applicable housing development. Any subsequent rent increase in the development shall be subject to Section 1947.12.

(2) The owner of a deed-restricted affordable housing unit or an affordable housing unit subject to a regulatory restriction contained in an agreement with a government agency limiting rental rates that is not within an assisted housing development may establish the initial rental rate for the unit upon the expiration of the restriction. Any subsequent rent increase for the unit shall be subject to Section 1947.12.

(b) For purposes of this section:

(1) "Assisted housing development" has the same meaning as defined in paragraph (3) of subdivision (a) of Section 65863.10 of the Government Code.

(2) "Expiration of rental restrictions" has the same meaning as defined in paragraph (5) of subdivision (a) of Section 65863.10 of the Government Code.

(c) This section shall remain in effect until January 1, 2030, and as of that date is repealed.

(d) Any waiver of the rights under this section shall be void as contrary to public policy.

SEC. 5. No reimbursement is required by this act pursuant to Section 6 of Article XIII B of the California Constitution because the only costs that may be incurred by a local agency or school district will be incurred because this act creates a new crime or infraction, eliminates a crime or infraction, or changes the penalty for a crime or infraction, within the meaning of Section 17556 of the Government Code, or changes the definition of a crime within the meaning of Section 6 of Article XIII B of the California Constitution.

O

File #: ID#19-652, Version: 1

Resolution to reduce the Conditional Use Permit - Minor Exception (Administrative) Fee by forty percent (40%) for a six-month period

Approve a Resolution to reduce the current Planning Fee for the Conditional Use Permit (CUP)- Minor Exception (Administrative) by approximately 40% to $521.94 for a period of six months effective upon approval. The fee will revert to $869.91 following expiration of the six-month period.

CITY OF SALINAS
COUNCIL STAFF REPORT

DATE: **DECEMBER 3, 2019**

DEPARTMENT: **COMMUNITY DEVELOPMENT**

FROM: **MEGAN HUNTER, DIRECTOR**

TITLE: **RESOLUTION TO REDUCE THE CONDITIONAL USE PERMIT – MINOR EXCEPTION (ADMINISTRATIVE) FEE BY FORTY PERCENT (40%) FOR A SIX-MONTH PERIOD**

RECOMMENDED MOTION:

A motion approving a resolution to reduce the current Planning Fee for the Conditional Use Permit (CUP)- Minor Exception (Administrative) by approximately 40% to $521.94 for a period of six months effective upon approval. The fee will revert to $869.91 following expiration of the six-month period.

RECOMMENDATION:

Staff recommends the City Council approve a resolution reducing the current Planning Fee for the Conditional Use Permit (CUP)- Minor Exception (Administrative) by approximately 40% to $521.94 for a period of six months effective upon approval. The fee will revert to $869.91 following expiration of the six-month period.

EXECUTIVE SUMMARY:

On October 22, 2019, Zoning Code Amendment 2019-006 was introduced to City Council, which would amend various portions of the Zoning Code concerning driveway width increase, subject to approval of a Conditional Use Permit (CUP). At the time the ordinance was introduced, City Council expressed support for the amendment, but also expressed general concern about the cost of processing the CUP requesting staff to further evaluate a possible fee reduction. Based upon this review and feedback from the Finance Committee, a fee reduction of approximately 40% to $521.94 for a six-month period is recommended.

BACKGROUND:

Pursuant to Article XIII B of the California Constitution and Chapter 11B of the Salinas City Municipal Code, fees for governmental services may be charged to recover all the costs reasonably borne in providing all regulation, products, or services. Cost reasonably borne are defined in City Code Section 11B-3 as a) all applicable direct costs; b) all applicable indirect costs; c) fixed assets recovery expenses (depreciation); d) general overhead; e) departmental overhead; f) debt service

costs; and g) costs for necessary public services. In October 2015, City Council adopted an updated Fee Schedule based on a Comprehensive Fee Study prepared by Willdan Financial Services. Willdan analyzed a variety of factors, ultimately quantifying the full cost incurred by the City in providing the respective services. The recommended fee amount was then established based on achieving as close to full cost recovery as possible. The fee for a CUP – Minor Exception was set at a significantly lower rate. The average cost recovery rate for all planning related fees is 67%, which is the lowest fee cost recovery rate category in the City.

On November 5, 2019, City Council adopted Zoning Code Amendment Ordinance 2019-006 to allow for increase to driveway widths subject to an approval of a Conditional Use Permit (CUP). Prior to this meeting, staff presented a recommendation to the Finance Committee on November 4th to retain the current fee of $869.91, which is roughly 52% of direct costs. An alternative recommendation was made to align the fee with that of a CUP for Plumbing in an Accessory Structure at the cost of $616.88. The Finance Committee expressed concern about this cost and recommended a further reduction closer to $500 for a six-month period. Based on this guidance, staff recommended a percentage discount settling on 40% to reduce the fee to $521.94.

DISCUSSION:

The Zoning Code Amendment allows residential owners to legally expand their driveways through a minor exception Conditional Use Permit (CUP) process at a significantly reduced cost. The further 40% reduction to the fee would make legalization more economical and less expensive than code enforcement citations, which can go up to $500 for one citation. The CUP would remain with the property and the property owner would only have to incur a one-time expense. The property owner would not be required to obtain a building permit or pay development impact fees unlike other building related work.

Although the cost may seem expensive to increase driveway width, the actual administrative cost for this process is approximately $1670 based upon the analysis conducted by Willdan. The current fee is $869.91, representing a 48% discount. In reviewing the fee schedule, it is important to note that the least expensive planning fee is the Home Occupation Permit of $147.26. This permit is issued at the counter, and involves no review, no noticing, and is not recorded.

While even the reduced fee of $521.94 may seem expensive, the increase of driveway width could impact stormwater standards, limit fire and utility access, and affect neighboring properties and therefore requires more than just a cursory review. To ensure appropriate due process for affected properties, notices are sent out and staff responds to neighbors' inquiries. Because the CUP runs with the land, it is recorded on title to ensure the right to a wider driveway is memorialized even when the property is transferred. For these reasons, the direct staffing costs are greater than even the existing fee.

Recognizing that it is in the City's best interest to encourage compliance among the large number of property owners who have already widened their driveways in violation of current regulations,

establishing a discounted fee for a six-month term is reasonable. The goal is to promote compliance and incentivize residents with the lower fee to address violations sooner than later.

CEQA CONSIDERATION:

Not a Project. The adoption of this Ordinance is "Not a Project" under the California Environmental Quality Act (CEQA), Guidelines Section 15378 as it is a government fiscal activity which does not involve any commitment to a specific project that may result in a potentially significant physical impact on the environment.

STRATEGIC PLAN INITIATIVE:

The proposed Ordinance supports City Council's goal of Well-Planned City and Excellent Infrastructure by allowing for additional off-street parking to relieve parking congestion while preserving neighborhood character.

DEVELOPMENT COORDINATION:

The Community Development Department (CDD) coordinated this proposal with the Legal and Finance Departments. The Legal Department reviewed the City Council Staff Report and resolution modifying the fee. The City Clerk published the notice for the fee modification on November 15th and November 25th. The Finance Committee coordinated the Finance Committee to discuss the fiscal impact and appropriate reduction.

FISCAL AND SUSTAINABILITY IMPACT

The proposal would be limited to six months and therefore the potential fiscal impact is lessened. It is difficult to determine the fiscal impact because it is unclear how many applications for this CUP – Minor Exception the City will receive. The actual fee difference is $348.27 per application. If the City receives twenty-five applications during this period, the loss would be $8,706.75. After the six-month period expires, the Finance Committee recommended increasing the fee to achieve full cost recovery. This would mitigate future costs. In addition, this temporary reduction will allow the Planning Department to better assess real costs because very few Minor Exception CUPs have been processed and not for this specific purpose.

ATTACHMENTS:

- Resolution

RESOLUTION NO. _____ (N.C.S.)

A RESOLUTION REDUCING THE FEE FOR A CONDITIONAL USE PERMIT – MINOR EXCEPTION (ADMIN) FOR A PERIOD OF SIX MONTHS

WHEREAS, Article XIII B of the California Constitution and Chapter 11B of the Salinas City Municipal Code allow fees to be charged for governmental services to recover all costs reasonably borne in providing regulation, products, or service; and

WHEREAS, in October 2015, City Council adopted an updated Fee Schedule based on a Comprehensive Fee Study prepared by Willdan Financial Services, which included a fee for Conditional Use Permit (CUP) – Minor Exception (Admin); and

WHEREAS, on October 22, 2019, Zoning Code Amendment 2019-006 was introduced to City Council to amend the Zoning Code to allow driveway width increase, subject to approval of a Conditional Use Permit (CUP); and

WHEREAS, City Council expressed support of the amendment, but general concern about the cost of processing the CUP for the driveway width increase determined to be a Minor Exception (Admin) and requested staff evaluate a possible fee reduction; and

WHEREAS, on November 4th, the Finance Committee recommended a further reduction to the current fee of $869.91 to an amount closer to $500.00 for a six-month period and based upon this guidance, the forty percent reduction to $521.94 was presented to City Council at its December 3, 2019 meeting; and

WHEREAS, on December 3, 2019, the Salinas City Council held a duly noticed public hearing to consider the proposed amendment to the fee for a CUP - Minor Exception (Admin) and has considered the proposed reduction for a six-month period; and

WHEREAS, it is in the City's best interest to encourage compliance among the significant number of property owners who have already widened their driveways in violation of current regulations and establishing a discounted fee for a six-month term will incentivize conformance to the regulations.

NOW, THEREFORE BE IT RESOLVED by the Salinas City Council that the fee for a Conditional Use Permit (CUP) - Minor Exception (Admin) is hereby reduced by forty percent (40%) to $521.94 for a period of six-months and that after expiration of this six month period, the fee will automatically revert back to the current rate of $869.91 without the need for further action by the City Council.

PASSED AND APPROVED this 3rd day of December 2019 by the following vote:

AYES:

NOES:

ABSENT:

ABSTAIN:

APPROVED:

_____
Joe Gunter, Mayor

ATTEST:

_____
Patricia M. Barajas, City Clerk

File #: ID#19-623, Version: 1

General Plan Amendment 2017-001 and Rezone 2017-002 located at 295 Sun Way in the P-F (Parks - Flood Plain Overlay) Zoning District

Affirm the findings and adopt the proposed Mitigated Negative Declaration in accordance with the California Environmental Quality Act, approve a Resolution for General Plan Amendment 2017-001, and adopt an Ordinance for Rezone 2017-002.

CITY OF SALINAS
COUNCIL STAFF REPORT

DATE: **DECEMBER 3, 2019**

DEPARTMENT: **COMMUNITY DEVELOPMENT DEPARTMENT**

FROM: **MEGAN HUNTER, COMMUNITY DEVELOPMENT DIRECTOR**

THROUGH: **COURTNEY GROSSMAN, PLANNING MANAGER**

BY: **BOBBY LATINO, ASSOCIATE PLANNER**

TITLE: **GENERAL PLAN AMENDMENT 2017-001 (GPA 2017-001) AND REZONE 2017-002 (RZ 2017-002) LOCATED AT 295 SUN WAY IN THE P-F (PARKS – FLOOD PLAIN OVERLAY) ZONING DISTRICT**

RECOMMENDED MOTION:

A motion to adopt the proposed Mitigated Negative Declaration, approve a Resolution for General Plan Amendment 2017-001, and adopt an Ordinance for Rezone 2017-002.

RECOMMENDATION:

Staff recommends that the City Council affirm the findings and adopt the proposed Mitigated Negative Declaration in accordance with the California Environmental Quality Act, approve a Resolution for General Plan Amendment 2017-001, and introduce and adopt an Ordinance for Rezone 2017-002.

EXECUTIVE SUMMARY:

Simas-East Market Street LLC, Applicant and Property Owner, is requesting approval of a General Plan Amendment 2017-001 (GPA 2017-001) to change a 7.67-acre site from Park to General Commercial/Light Industrial and a Rezone 2017-002 (RZ 2017-002) to change a 7.67-acre site from Parks to Industrial - General Commercial. Following the effective date of the General Plan Amendment and Rezone, subsequent development would be subject to the City of Salinas Zoning Code.

BACKGROUND:

The General Plan identifies the site as a Park, but the grounds have been owned by a private corporation, which entered into a lease with the City of Salinas for the use as a Park in 1974 (see attached City Council Resolution No. 8514, 1974 Lease Agreement between City of Salinas and California Rodeo Association). A subsequent lease (see attached Exhibit 3 of Initial Study: City Council Resolution No. 19242) between the City of Salinas and the current property owner, Simas-

East Market Street LLC, was terminated on November 4, 2018 (see attached Exhibit 4 of Initial Study: Termination Letter for Expo Site Lease Agreement, dated January 14, 2019). Per Condition No. 6 of the lease, "upon termination of the lease agreement for any reason, Tenant agrees that it will cooperate in accomplishing a change of zoning of the leased premises to correspond with the zoning designation of other properties in the area in order to provide the Leased Premises the highest market potential possible." This General Plan Amendment and Rezone is in direct response to Condition No. 6 of the Lease; therefore, excluding this property further as a Park.

On September 12, 2019, the Traffic and Transportation Commission voted 5-1, to recommend City Council approve the General Plan Amendment (GPA 2017-001) and Rezone (RZ 2017-002) based on the Rodeo Property Traffic Impact Analysis (see attached Initial Study and Mitigated Negative Declaration).

On November 6, 2019, the Salinas Planning Commission voted 6-0, to recommended that the City Council adopt the proposed Mitigated Negative Declaration, approve General Plan Amendment 2017-001, and adopt Rezone 2017-002 (See attached Planning Commission Resolution 2019-15). Commissioner Meeks noted concerns about a lack of park space. Staff explained that the site is privately owned and that per a lease agreement between the owner and the City of Salinas, the site would be rezoned because the location is not appropriate for a park because it is surrounded by industrial uses, US 101, and PGE power lines.

DISCUSSION:

Analysis:

The proposed Amendment is consistent with Salinas General Plan Policies. Consistent with Community Design Policy CD-2.4, the requirements of the property owner and City to rezone the property in response to conditions of the lease, which encourages development of an industrial property. Consistent with Circulation Policy C-1.2 and C-2.2, the Mitigation Monitoring and Reporting Program and the proposed mitigation measures ensure traffic Level of Service (LOS) D or better for all intersections and roadways (including U.S. Highway 101). The Mitigation Monitoring and Reporting Program and the proposed mitigation measures require future development to contribute to financing of street improvements required to meet the traffic demand generated by the project consistent with Circulation Policy C-1.4. The proposed "General Commercial/Light Industrial" land use designation is not expected to result in negative impacts or conflict with surrounding properties, because future industrial uses will be compatible with neighboring uses located adjacent to the south and west. No existing residential units are located on-site, or near the site.

No specific development plan is included with this application. Future development would be subject to the City of Salinas Zoning Code including, but not limited to use classification, development standards, design standards, and performance standards.

CEQA CONSIDERATION:

The environmental impacts of the project have been analyzed in accordance with the California Environmental Quality Act (CEQA). An Initial Study was prepared to evaluate the potential impacts associated with the project. Based upon review of the Initial Study, the proposed project will not have a significant effect on the environment because the mitigation measures outlined in the proposed Mitigation Monitoring Program have been included in the project (see attached Initial Study and Mitigated Negative Declaration). The Initial Study and Mitigated Negative Declaration were routed to responsible agencies and posted at the County Clerk's Office on September 26, 2019; the deadline for comments was October 28, 2019. Action on the environmental document should precede any action on the requested permits. Monterey County Planning Department and Monterey Bay Air Resources District (MBARD) provided "No Comments" on the Mitigated Negative Declaration during the review period.

Correspondence was received from Transportation Agency for Monterey County (TAMC) (see attached). Paraphrased comments from the agencies are shown below:

1. TAMC: Consider adding a bike lane between the right turn lane and through-lane on Natividad at East Laurel Drive.

> Staff Response: The intersection of Natividad Road at East Laurel Drive is in the City's Traffic Improvement Program (Project 61). The project is responsible for payment of traffic impacts fees, which represents the project's fair-share contribution towards this improvement.

2. TAMC: Consider providing median pedestrian refuge for longer crosswalks, especially where a third lane is added.

> Staff Response: Pedestrian refuge islands will be considered where feasible at every location where project impacts require mitigation measure improvements.

STRATEGIC PLAN INITIATIVE:

The proposed General Plan Amendment and Rezone will assist the City Council's goal of Economic Diversity and Prosperity and Well Planned City and Excellent Infrastructure by facilitating an appropriate change of Land Use and Zoning designation to accommodate a privately-owned vacant lot for future development, ultimately creating jobs and business opportunities.

DEPARTMENTAL COORDINATION:

The Current Planning Division of the Community Development Department was the lead project manager for the proposed General Plan Amendment and Rezone. The Traffic and Transportation Division of the Public Works Department was instrumental in the following: review of the Traffic Impact Analysis, review of Mitigation Monitoring Program for the Mitigated Negative Declaration, and facilitation of the Traffic and Transportation Commission recommendation. The

Legal Department was instrumental in the review of the proposed Resolutions and Ordinance and provided support to the Planning Commission.

FISCAL AND SUSTAINABILITY IMPACT:

No significant impacts to the City's General Fund are anticipated with the application.

ATTACHMENTS:

Draft Ordinance for Rezone 2017-002, including the following exhibit:
- Exhibit A: Proposed Rezone 2017-002 Map for 295 Sun Way

Draft Resolution for General Plan Amendment 2017-001, including the following exhibit:
- Exhibit A: Proposed General Plan Amendment 2017-001 Map for 295 Sun Way

Traffic and Transportation Commission Minutes for September 12, 2019
Planning Commission Staff Report dated November 6, 2019 w/o Exhibits
Planning Commission Resolution 2019-015 for Rezone 2017-002 and General Plan Amendment 2017-001, including the following exhibits:
- Exhibit A: Mitigated Negative Declaration and Mitigation Monitoring and Reporting Program
- Exhibit B: Proposed General Plan Amendment 2017-001 Map for 295 Sun Way
- Exhibit C: Proposed Rezone 2017-002 Map for 295 Sun Way

Planning Commission Minutes for November 6, 2019
Initial Study for 295 Sun Way, including the following exhibits:
1. Vicinity Map
2. General Plan Amendment and Rezone – Site Plan
3. City Council Resolution No. 19242 (Expo Site Lease Agreement)
4. Termination Letter for Expo Site Lease Agreement, dated January 14, 2019
5. Air Quality Impact Analysis by First Carbon Solutions, dated September 19, 2019
6. Biological Resources Assessment by First Carbon Solutions, dated August 17, 2018
7. Phase 1 Cultural and Paleontological Resources Assessment by First Carbon Solutions, dated August 17, 2018
8. Greenhouse Gas Impact Analysis by First Carbon Solutions, dated August 17, 2018
9. Traffic Impact Analysis by Mott McDonald, dated June 12, 2019
10. Contracted Peer Review by Rincon Consultants Inc. of the Air Quality Impact Analysis, Greenhouse Gas Impact Analysis, Biological Resources Assessment, and Phase 1 Cultural and Paleontological Resources Assessment by First Carbon Solutions, dated October 23, 2018
11. Mitigation Monitoring and Reporting Program
12. Letter from Ohlone/Costanoan-Esselen Nation (OCEN), dated December 17, 2018

City Council Resolution No. 8514, 1974 Lease Agreement between City of Salinas and California Rodeo Association
TAMC Comments on IS/MND, dated October 28, 2019

ORDINANCE NO. _____ (N.C.S.)

AN ORDINANCE AMENDING THE ZONING MAP BY RECLASSIFYING A 7.67 ACRE LOT LOCATED AT 295 SUN WAY FROM "PARK" TO "INDUSTRIAL-GENERAL COMMERCIAL" (RELATED TO GPA 2017-001)

WHEREAS, on December 3, 2019, the Salinas City Council, at the request of Simas-East Market Street LLC, Applicant/Property Owner, held a duly noticed public hearing to consider Rezone 2017-002 to change the Zoning designation of an approximate 7.67-acre lot from "Park" to "Industrial-General Commercial" located at 295 Sun Way (APN: 003-212-017-000); and

WHEREAS, on September 12, 2019, the Salinas Traffic and Transportation Commission, held a duly noticed public hearing to consider Rezone 2017-002-; and

WHEREAS, at the September 12, 2019 hearing, the Salinas Traffic and Transportation Commission considered the traffic impacts of Rezone 2017-002 and made a recommendation to City Council for approval; and

WHEREAS, on November 6, 2019, the Salinas Planning Commission, held a duly noticed public hearing to consider Rezone 2017-002; and

WHEREAS, on November 6, 2019, the Planning Commission considered a Mitigated Negative Declaration prepared for this project and independently determined that all impacts were adequately addressed in accordance with the California Environmental Quality Act; and

WHEREAS, on November 6, 2019, the Salinas Planning Commission weighed the evidence presented at said public hearing, considered the staff report, determined that positive findings could be made for approval of the project, adopted Resolution No. 2019-15 recommending adoption of the related Mitigated Negative Declaration and approval of Rezone 2017-002; and

WHEREAS, the City Council weighed the evidence presented at the December 3, 2019 public hearing, including the Staff Report which is on file at the City Clerk's Office together with the record of environmental review; and

WHEREAS, at the December 3, 2019 public hearing, the City Council reviewed and considered the information contained in the Initial Study and related environmental documents including the Mitigated Negative Declaration.

NOW, THEREFORE, BE IT RESOLVED by the Salinas City Council that Rezone 2017-002 is hereby approved, and the following finding are hereby adopted as the basis for its determination, and that the foregoing recitations are true and correct, and are included herein by reference as findings:

Rezone 2017-002:

1. **The amendment is consistent with the Salinas general plan, any applicable specific plan, and other plans and policies adopted by the Salinas city council;**

The proposed Amendment is consistent with Salinas General Plan Policies. The location is not suitable for a park because the site is surrounded by industrial uses, US 101, and PGE power lines. Consistent with Community Design Policy CD-2.4, the requirements of the property owner and City to rezone the property in response to conditions of the lease encourages the rehabilitation of an industrial property. The grounds have been owned by a private corporation, which entered into a lease with the City of Salinas for the use as a park in 1974. A subsequent lease between the City of Salinas and the current property owner, Simas-East Market Street LLC, was terminated on November 4, 2018. Per Condition No. 6 of the lease, "upon termination of the lease agreement for any reason, Tenant agrees that it will cooperate in accomplishing a change of zoning of the leased premises to correspond with the zoning designation of other properties in the area in order to provide the Leased Premises the highest market potential possible." This General Plan Amendment and Rezone is in direct response to Condition No. 6 of the Lease. The proposed Rezoning of an approximate 7.67-acre lot from "Parks" to "Industrial-General Commercial" would be consistent with adjacent uses located south and west of the project site and would allow future industrial uses and creation of jobs.

2. **The amendment will not have the effect of reversing the policies of the Salinas general plan, any applicable specific plan, and other plans and policies adopted by the Salinas city council;**

There are no policies within the Salinas General Plan that would be reversed as a result of this amendment. There are no Specific Plans or Precise Plans applicable to the site.

3. **The amendment would not create an isolated district unrelated to adjacent zoning districts;**

The proposed zoning amendment will not create an unrelated zoning district because the rezoning would extend the boundary of the existing and contiguous IGC base zoning district to include the proposed lot located at 295 Sun Way.

4. **The city has the capability to provide public utilities, roads, and services to serve the uses allowed by the proposed amendment.**

Salinas is an urbanized area and public infrastructure is presently in place to serve most uses. The proposed Rezoning would not create the need for additional infrastructure.

NOW, THEREFORE, THE SALINAS CITY COUNCIL HEREBY ORDAINS AS FOLLOWS:

SECTION 1. The City of Salinas's Zoning Map, a copy of which is on file with the City Clerk of the City of Salinas and which copy constitutes the original record, is hereby amended to reflect the following:

That certain real property located in the City of Salinas, County of Monterey, State of California, and shown and designated on that certain map attached hereto as Exhibit 1 and made a part hereof, entitled "Rezone Map – Rezone 2017-002" and which real property, approximately 7.67 acre lot (APN: 003-212-017-000) located at 295 Sun Way and now classified in the Parks (P) Zoning District, is hereby reclassified as shown on the attached "Rezone Map – Rezone 2017-002" into the Industrial-General Commercial (IGC) Zoning District.

SECTION 2. The aforesaid map and all notations, references and other information shown thereon shall be as much a part of this ordinance as if the matters and information shown on said map were fully described herein.

SECTION 3. This ordinance shall take effect and be in force thirty days from and after its adoption.

SECTION 4. The Salinas City Clerk is hereby directed to cause the following summary of the ordinance to be published by one insertion in the *The Californian*, a newspaper of general circulation published and circulated in the City of Salinas and hereby designated for that general purpose by the Salinas City Council:

> "The City of Salinas's Zoning Map has been amended by reclassifying approximately 7.67-acre lot from the Parks (P) Zoning District to the Industrial-General Commercial (IGC) Zoning District on property located at 295 Sun Way. This Ordinance goes into effect 30 days after adoption. For additional detail concerning this amendment, contact Community Development Department, 65 West Alisal Street, Salinas, CA 93901."

This ordinance was introduced and read on December 3, 2019 and passed and adopted on December 17, 2019, by the following vote:

AYES:

NOES:

ABSENT:

Joe Gunter
MAYOR

ATTEST:

Patricia M. Barajas
City Clerk

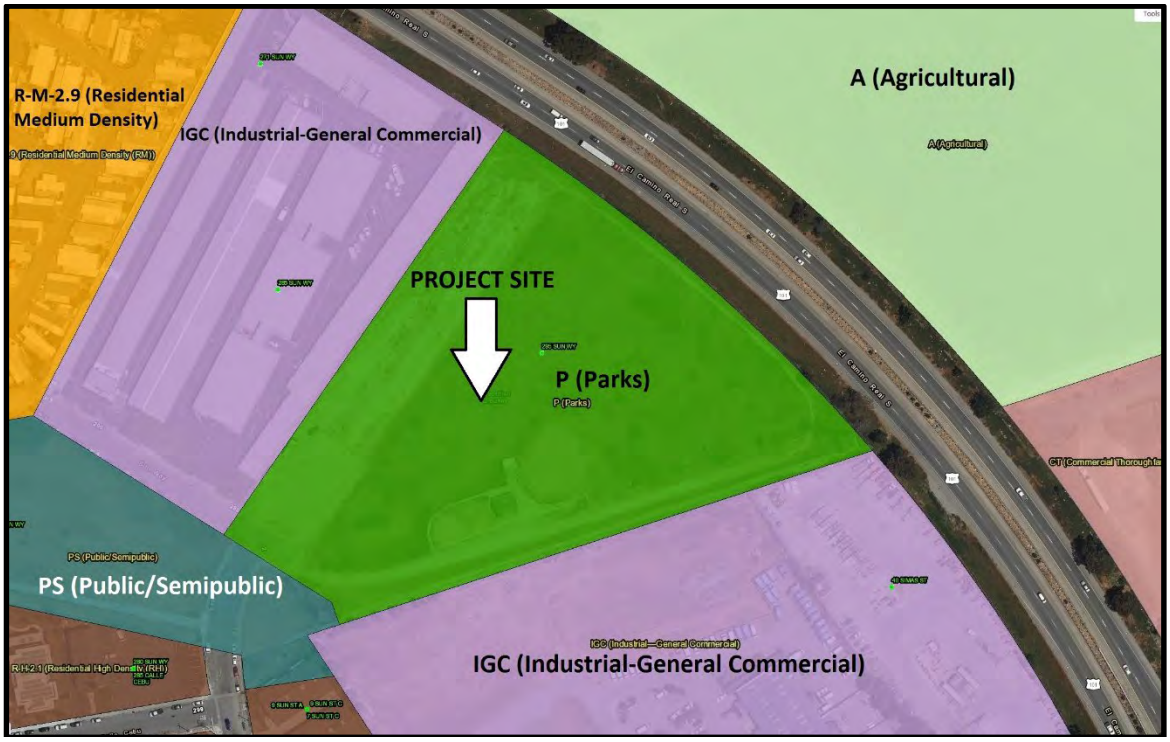
EFFECTIVE DATE: January 16, 2020

Attachment: Exhibit A: Proposed Rezone Map 2017-002 Map for 295 Sun Way

\\SalSvr44\DeptPvt\ComDev\robertl\Documents\295 Sun Way\GPA 2017-001 and RZ 2017-002\RZ 2017-002 CC Ordinance.docx

North

Rezoning Map



REZONE 2017-002

(Related to General Plan Amendment 2017-001)

Project Description: Change a 7.67-acre site from Parks to Industrial - General Commercial.

\\SalSvr44\DeptPvt\ComDev\robertl\Documents\295 Sun Way\GPA 2017-001 and RZ 2017-002\RZ 2017-002 Map Exhibit.docx

RESOLUTION NO. _____ (N.C.S.)

RESOLUTION APPROVING AN AMENDMENT TO THE SALINAS GENERAL PLAN TO CHANGE THE GENERAL PLAN DESIGNATION OF AN EXISTING 7.67 ACRE-LOT LOCATED AT 295 SUN WAY (RELATED TO RZ 2017-002)

WHEREAS, on December 3, 2019, the Salinas City Council, at the request of the City of Salinas, Applicant/Property Owner, held a duly noticed public hearing to consider General Plan Amendment 2017-001 to change the General Plan designation of an approximate 7.67-acre lot from Park to General Commercial/Light Industrial located at 295 Sun Way (APN: 003-212-017-000); and

WHEREAS, on September 12, 2019, the Salinas Traffic and Transportation Commission, held a duly noticed public hearing to consider General Plan Amendment - GPA 2017-001; and

WHEREAS, at the September 12, 2019 hearing, the Salinas Traffic and Transportation Commission considered the traffic impacts of the General Plan Amendment 2017-001 and made a recommendation to City Council for approval; and

WHEREAS, on November 6, 2019, the Salinas Planning Commission, held a duly noticed public hearing to consider General Plan Amendment 2017-001; and

WHEREAS, the Planning Commission considered a Mitigated Negative Declaration prepared for this project and independently determined that all impacts were adequately addressed in accordance with the California Environmental Quality Act; and

WHEREAS, on November 6, 2019, the Salinas Planning Commission weighed the evidence presented at said public hearing, considered the staff report, determined that positive findings could be made for approval of the project, adopted Resolution No. 2019-15 recommending adoption of the related Mitigated Negative Declaration and approval of General Plan Amendment 2017-001; and

WHEREAS, the City Council weighed the evidence presented at said public hearing, including the Staff Report which is on file at the Community Development Department together with the record of environmental review; and

WHEREAS, the City Council has reviewed and considered the information contained in the Initial Study and related environmental documents including the Mitigated Negative Declaration; and

WHEREAS, by Resolution adopted by the City Council on December 3, 2019, the City Council adopted the Mitigated Negative Declaration prepared for General Plan Amendment 2017-001.

NOW, THEREFORE, BE IT RESOLVED by the Salinas City Council that General Plan Amendment 2017-001 is hereby approved, and the following findings are hereby adopted as the basis for its determination, and that the foregoing recitations are true and correct, and are included herein by reference as findings:

General Plan Amendment 2017-001:

1. ***The proposed general plan amendment is consistent with all other goals, policies, programs, and land uses of applicable elements of the general plan;***

   The proposed Amendment is consistent with Salinas General Plan Policies. The location is not suitable for a park because the site is surrounded by industrial uses, US 101, and PGE power lines. Consistent with Community Design Policy CD-2.4, the requirements of the property owner and City to change the designation of the property in response to conditions of the lease encourages the rehabilitation of an industrial property. The Mitigation Monitoring and Reporting Program and the proposed mitigation measures ensure traffic Level of Service (LOS) D or better for all intersections and roadways (including U.S. Highway 101) consistent with Circulation Policy C-1.2 and C-2.2. Furthermore, the Mitigation Monitoring and Reporting Program and the proposed mitigation measures will require future development to contribute to financing of street improvements required to meet the demand generated by the project consistent with Circulation Policy C-1.4. The proposed "General Commercial/Light Industrial" land use designation is not expected to result in negative impacts or conflict with surrounding properties, because future industrial uses will be compatible with neighboring uses located adjacent to the south and west.

2. ***The proposed general plan amendment promotes the public necessity, convenience, and general welfare.***

   The General Plan Amendment promotes the public necessity, convenience and general welfare because the proposal will create a General Plan and Zoning designation to allow for future development creating jobs and business opportunities.

PASSED AND APPROVED this 3rd day of December 2019, by the following vote:

AYES:

NOES:

ABSENT:

ABSTAIN:

APPROVED

_____
Joe Gunter, Mayor

ATTEST

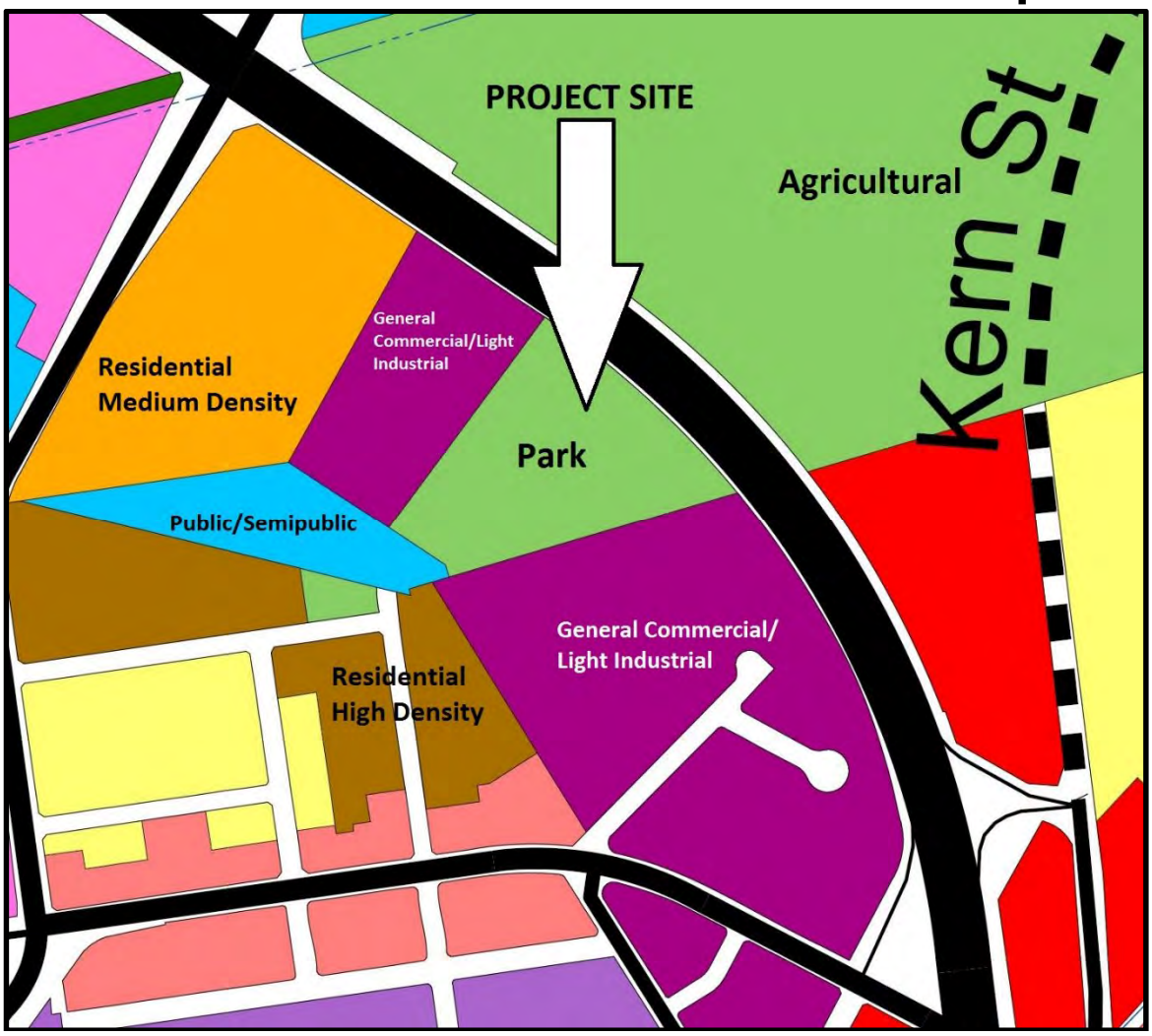
_____
Patricia M. Barajas, City Clerk

Attachment:
Exhibit A: Proposed General Plan Amendment 2017-001 Map for 295 Sun Way

\\SalSvr44\DeptPvt\ComDev\robertl\Documents\295 Sun Way\GPA 2017-001 and RZ 2017-002\GPA 2017-001 CC Ordinance.docx

North

General Plan Amendment Map



GENERAL PLAN AMENDMENT 2017-001

(Related to Rezone 2017-002)

Project Description: Change a 7.67-acre site from Park to General Commercial/Light Industrial

\\SalSvr44\DeptPvt\ComDev\robertl\Documents\295 Sun Way\GPA 2017-001 and RZ 2017-002\GPA 2017-001 Map Exhibit.docx

MEETING MINUTES
SALINAS TRAFFIC AND TRANSPORTATION COMMISSION

The Salinas Traffic and Transportation Commission met on Thursday, September 12, 2019, at 6:00 p.m. in the City Council Rotunda, 200 Lincoln Avenue, Salinas.

1. ROLL CALL: Chairperson Hill called the meeting to order at 6:01 p.m.

PRESENT: Commissioner Brandon Hill
Commissioner John Viarengo
Commissioner Chris Flescher
Commissioner Sophia Rome
Commissioner Elias Nunez
Commissioner Jeff Davis (arrived at 6:24pm)

ABSENT: Commissioner Guadalupe Guzman-Rubio (staff received notification of Commissioner Guzman-Rubio's absence on 9/12/19)

STAFF PRESENT: James Serrano, Transportation Manager
Andrew Easterling, Traffic Engineer
Crissy White, Administrative (Recording) Secretary

2. WRITTEN COMMUNICATIONS (RECEIVED BY STAFF):
Staff received a fax related to Consent Item #19-475, which has been provided to Commissioners.

3. PUBLIC COMMUNICATIONS / COMMENTS FOR ITEMS NOT ON THIS AGENDA: NONE

4. BUSINESS

A. CONSENT AGENDA:

1. ITEM ID# 19-485: Approval of Minutes
Approve minutes of August 8, 2019 Commission meeting

2. ITEM ID# 19-475: "No Parking" Red Zones at the intersection of Archer Street and West Street

COMMISSION ACTION: Recommend City Council adopt a Resolution approving the installation of a total of 55 feet of "No Parking" Red Zones to provide sufficient sight lines

Jesse Hernandez approached the Commission to request Item #19-475 be pulled from the Consent Agenda.

DRAFT

James Serrano presented his report, on file in the Public Works Department.

Mr. Hernandez has lived in this area for several years. The biggest issue they have in this area is keeping up on the removal of abandoned vehicles. Parking congestion is being caused by parking overflow from the nearby apartment complexes. Mr. Hernandez believes installing red zones at this location will only push more vehicles down further into the neighborhood. He believes the red zones are needed more at Park and West Streets, where there are a higher number of accidents.

Commissioner Nunez mentioned a letter received from Kimberly Moore who also opposes the red parking zone installation. Commissioner Nunez asked if permit parking could be considered for this area.

James Serrano provided information regarding parking demands throughout the City. The issue at this intersection is more of a sight line distance safety measure.

Commissioner Flescher asked about collision reports at this intersection compared to other intersections on West Street.

Commissioner Rome asked if there were any other communications received from residents opposing the red zones; and if nearby Hartnell College could have an affect on the parking problem. James Serrano provided information.

Commissioner Hill discussed parking demands in this residential area and the use of garages.

Commissioner Nunez mentioned we have had a similar issue before the Commission in the past, where the Commission had to weigh a safety issue against parking demands.

COMMISSIONER ROME MADE A MOTION TO APPROVE CONSENT AGENDA ITEM #19-475 , COMMISSIONER NUNEZ SECONDED THE MOTION, COMMISSIONER VIARENGO ABSTAINED, COMMISSIONERS FLESCHER AND HILL WERE IN FAVOR, MOTION CARRIED.

**(Commissioner Jeff Davis arrived after the motion was taken for Item #19-475)*

3. ITEM ID# 19-480: Little River Drive and Manchester Drive Neighborhood Traffic Calming After Study

COMMISSION ACTION: Receive informational report on the Neighborhood Traffic Calming After Study for Little River Drive and Manchester Drive

COMMISSIONER VIARENGO MADE A MOTION TO APPROVE CONSENT AGENDA ITEM #19-485 and #19-480, COMMISSIONER NUNEZ SECONDED THE MOTION, ALL IN FAVOR, NONE OPPOSED, MOTION CARRIED.

B. CONSIDERATION AGENDA:

1. ITEM ID# 19-489: General Plan Amendment and Rezone: Rodeo Property Traffic Impact Analysis

COMMISSION ACTION: Consider recommending approval of a General Plan Amendment and Rezone change at Sun Street, adjacent to US Highway 101, based on the Rodeo Property Traffic Impact Analysis

Andrew Easterling presented his report, on file in the Public Works Department.

Commissioner Nunez asked if this development is finalized. He commented he doesn't think this area can accommodate any additional traffic.

Commissioner Davis asked about the total daily trips that would be added and mitigation that would be required.

Commissioner Hill asked about the residential traffic already in the area; the history of how this location was transferred from City property to a private development; and if there is an idea of what types of businesses would be developed in the area. Andrew Easterling and James Serrano provided information.

COMMISSIONER DAVIS MADE A MOTION TO APPROVE THE CONSIDERATION AGENDA, COMMISSIONER VIARENGO SECONDED THE MOTION, COMMISSIONER NUNEZ VOTED NO, COMMISSIONERS HILL, FLESCHER, AND ROME WERE IN FAVOR, MOTION CARRIED.

5. COMMISSIONER COMMENTS / REPORTS:

A. Commissioner Flescher asked about construction happening on Sherwood Drive, James Serrano advised he will look into work being done by PG & E.

Commissioner Flescher reported two locations that seem to be having traffic signal issues: at Davis and Rossi the signal stays green for Rossi quite a long time at night when drivers are trying to go north on Davis; on Boronda and Dartmouth the signal stays green for Dartmouth for an excessive time while cars are waiting at Boronda.

DRAFT

B. Commissioner Viarengo reported there is a traffic signal on Homestead and Alisal, headed towards Blanco, blocked by a tree branch.

C. Commissioner Davis apologized for being late to tonight's meeting.

6. ATTENDANCE AT NEXT MEETING / ADJOURNMENT: October 10, 2019

All Commissioners present plan to attend.
The meeting was adjourned at 6:52 p.m.

APPROVED:

_____
Commissioner Brandon Hill, Chairperson

ATTEST:

_____
Crissy White, Administrative Secretary

/CW

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DRAFT

SALINAS PLANNING COMMISSION

Staff Report

Planning Manager Approval	Agenda Item

City of Salinas
Community Development Department
65 West Alisal Street
Salinas, CA 93901
(831) 758-7206
(831) 758-7215 *fax*

Director:
Megan Hunter

Planning Manager:
Courtney Grossman

Planning Commission:

Brad Griffin, Chair
John Meeks, Vice-Chair
George Anzo
Joel Hernandez Laguna
Matt Nohr
Matthew Ottone
Marcelino Rocamora Jr.

DATE: November 6, 2019

TO: Planning Commission

FROM: Courtney Grossman, Planning Manager

BY: Bobby Latino, Associate Planner

SUBJECT: GENERAL PLAN AMENDMENT 2017-001 (GPA 2017-001) AND REZONE 2017-002 (RZ 2017-002) LOCATED AT 295 SUN WAY IN THE P-F (PARKS – FLOOD PLAIN OVERLAY) ZONING DISTRICT

RECOMMENDATION

Staff recommends that the Planning Commission affirm the findings and approve the attached Resolution recommending that the City Council adopt the proposed Mitigated Negative Declaration, approve General Plan Amendment 2017-001, and adopt Rezone 2017-002.

BACKGROUND

Simas-East Market Street LLC is requesting approval of a General Plan Amendment 2017-001 (GPA 2017-001) to change a 7.67-acre site from Park to General Commercial/Light Industrial and a Rezone 2017-002 (RZ 2017-002) to change a 7.67-acre site from Parks to Industrial - General Commercial. Following the effective date of the General Plan Amendment and Rezone, subsequent development would be subject to the City of Salinas Zoning Code.

Although the General Plan identifies the site as a Park, the grounds have been owned by a private corporation, which entered into a lease with the City of Salinas for the use as a Park in 1974 (see attached City Council Resolution No. 8514, 1974 Lease Agreement between City of Salinas and California Rodeo Association). A subsequent lease (see attached Exhibit 3 of Initial Study: City

Council Resolution No. 19242) between the City of Salinas and the current property owner, Simas-East Market Street LLC, was terminated on November 4, 2018 (see attached Exhibit 4 of Initial Study: Termination Letter for Expo Site Lease Agreement, dated January 14, 2019). Per Condition No. 6 of the lease, "upon termination of the lease agreement for any reason, Tenant agrees that it will cooperate in accomplishing a change of zoning of the leased premises to correspond with the zoning designation of other properties in the area in order to provide the Leased Premises the highest market potential possible." This General Plan Amendment and Rezone is in direct response to Condition No. 6 of the Lease; therefore, excluding this property further as a Park.

The property is located in the P (Parks) base Zoning District and F (Flood Plain Overlay) overlay Zoning District. The following provides an overview of the land uses and zoning districts adjacent to the project site:

North: U.S. 101
South: Industrial Complex / IGC-F (Industrial-General Commercial – Flood Plan Overlay)
East: U.S. 101
West: Warehousing and Storage, Limited / IGC-F (Industrial-General Commercial – Flood Plan Overlay)

Traffic and Transportation Commission Review

On September 12, 2019, the Traffic and Transportation Commission voted 5-1, to recommend City Council approve the General Plan Amendment (GPA 2017-001) and Rezone (RZ 2017-002) based on the Rodeo Property Traffic Impact Analysis (see attached Initial Study and Mitigated Negative Declaration).

ANALYSIS

General Plan Amendment and Rezone

The proposed Amendment is consistent with Salinas General Plan Policies. Consistent with Community Design Policy CD-2.4, the requirements of the property owner and City to rezone the property in response to conditions of their lease encourages the rehabilitation of an industrial property. Consistent with Circulation Policy C-1.2 and C-2.2, the Mitigation Monitoring and Reporting Program and the proposed mitigation measures ensure traffic Level of Service (LOS) D or better for all intersections and roadways (including U.S. Highway 101). The Mitigation Monitoring and Reporting Program and the proposed mitigation measures require future development to contribute to financing of street improvements required to meet the demand generated by the project consistent with Circulation Policy C-1.4. The proposed "General Commercial/Light Industrial" land use designation is not expected to result in negative impacts or conflict with surrounding properties, because future industrial uses will be compatible with neighboring uses

located adjacent to the south and west. No existing residential units are located on-site, or near the site.

No specific development plan is included with this application. Future development would be subject to the City of Salinas Zoning Code including, but not limited to use classification, development standards, design standards, and performance standards.

ENVIRONMENTAL REVIEW

The environmental impacts of the project have been analyzed in accordance with the California Environmental Quality Act (CEQA). An Initial Study was prepared to evaluate the potential impacts associated with the project. Based upon review of the Initial Study, the proposed project will not have a significant effect on the environment because the mitigation measures outlined in the proposed Mitigation Monitoring Program have been included in the project (see attached Initial Study and Mitigated Negative Declaration). The Initial Study and Mitigated Negative Declaration were routed to responsible agencies and posted at the County Clerk's Office on September 26, 2019; the deadline for comments was October 28, 2019. Action on the environmental document should precede any action on the requested permits. Monterey County Planning Department and Monterey Bay Air Resources District (MBARD) provided "No Comments" on the Mitigated Negative Declaration during the review period.

Correspondence was received from Transportation Agency for Monterey County (TAMC) (see attached). Paraphrased comments from the agencies are shown below:

1. TAMC: Consider adding a bike lane between the right turn lane an through-lane on Natividad at East Laurel Drive.

    Staff Response: The intersection of Natividad Road at East Laurel Drive is in the City's Traffic Improvement Program (Project 61). The project is responsible for payment of traffic impacts fees, which represents the project's fair-share contribution towards this improvement.

2. TAMC: Consider providing median pedestrian refuge for longer crosswalks, especially where a third lane is added.

    Staff Response: Pedestrian refuge islands will be considered where feasible at every location where project impacts require mitigation measure improvements.

FINDINGS

Mitigated Negative Declaration:

Prior to taking action on the requested General Plan Amendment and Rezone, the

Planning Commission will need to confirm that the proposed environmental document is adequate for the proposed project by establishing the findings set forth in the attached Planning Commission Resolution.

General Plan Amendment/Rezone:

The Planning Commission may recommend approval of a General Plan Amendment and Rezone if all of the findings set forth in the attached Planning Commission Resolution are established. Per Zoning Code Section 37-60.920(d)(2), an affirmative vote of a majority (no less than four (4) votes) of the Planning Commission is required for the Commission to make a recommendation of the General Plan Amendment to the City Council.

TIME CONSIDERATION

The proposed project includes requests for a General Plan Amendment and a Rezone, which are both legislative acts and are not subject to the Permit Streamlining Act (PSA).

ALTERNATIVES AVAILABLE TO THE COMMISSION

The Planning Commission has the following alternatives:

1. Affirm the findings set forth in the attached Resolution, recommending that the City Council adopt the Mitigated Negative Declaration and approve General Plan Amendment 2017-001 and Rezone 2017-002 with modifications; or

2. Find that the proposal applications are not appropriate and establish findings at the public hearing recommending that the City Council deny General Plan Amendment 2017-001 and Rezone 2017-002.

CONCLUSION

The proposed General Plan Amendment and Rezone will be consistent with General Plan and Zoning Code policies. Approval will provide additional industrial opportunities in Salinas with no negative impacts to surrounding properties. The Initial Study and Mitigated Negative Declaration did not identify significant environmental impacts.

COURTNEY GROSSMAN
Planning Manager

BY: _____
Bobby Latino
Associate Planner

Attachments:

Proposed Planning Commission Resolution, including the following exhibits:

- Exhibit A: Mitigated Negative Declaration and Mitigation Monitoring and Reporting Program
- Exhibit B: Proposed General Plan Amendment 2017-001 Map for 295 Sun Way
- Exhibit C: Proposed Rezone 2017-002 Map for 295 Sun Way

Draft City Council Ordinance for Rezone 2017-002, including the following exhibit:

- Exhibit A: Proposed Rezone 2017-002 Map for 295 Sun Way

Initial Study for 295 Sun Way, including the following exhibits:

1. Vicinity Map
2. General Plan Amendment and Rezone – Site Plan
3. City Council Resolution No. 19242 (Expo Site Lease Agreement)
4. Termination Letter for Expo Site Lease Agreement, dated January 14, 2019
5. Air Quality Impact Analysis by First Carbon Solutions, dated September 19, 2019
6. Biological Resources Assessment by First Carbon Solutions, dated August 17, 2018
7. Phase 1 Cultural and Paleontological Resources Assessment by First Carbon Solutions, dated August 17, 2018
8. Greenhouse Gas Impact Analysis by First Carbon Solutions, dated August 17, 2018
9. Traffic Impact Analysis by Mott McDonald, dated June 12, 2019
10. Contracted Peer Review by Rincon Consultants Inc. of the Air Quality Impact Analysis, Greenhouse Gas Impact Analysis, Biological Resources Assessment, and Phase 1 Cultural and Paleontological Resources Assessment by First Carbon Solutions, dated October 23, 2018
11. Mitigation Monitoring and Reporting Program
12. Letter from Ohlone/Costanoan-Esselen Nation (OCEN), dated December 17, 2018

City Council Resolution No. 8514, 1974 Lease Agreement between City of Salinas and California Rodeo Association

TAMC Comments on IS/MND, dated October 28, 2019

SALINAS PLANNING COMMISSION
RESOLUTION NO. 2019-15

Resolution Recommending to the Salinas City Council Approval of an Amendment to the Salinas General Plan to Change the General Plan Land Use Designation and the Zoning District Boundaries Located at 295 Sun Way
(GPA 2017-001 and RZ 2017-002)

WHEREAS, on November 6, 2019, the Salinas Planning Commission, at the request of the Applicant/Property Owner, Simas-East Market Street LLC, held a duly noticed public hearing to consider General Plan Amendment 2017-001 (GPA 2017-001) to change a 7.67-acre site from Park to General Commercial/Light Industrial and a Rezone 2017-002 (RZ 2017-002) to change a 7.67-acre site from Parks to Industrial - General Commercial located at 295 Sun Way (Assessor's Parcel Number 003-212-017-000); and

WHEREAS, the Planning Commission weighed the evidence presented at said public hearing, including the Staff Report which is on file at the Community Development Department together with the record of environmental review; and

WHEREAS, the Planning Commission has reviewed and considered the information contained in the Initial Study and related environmental documents including the Mitigated Negative Declaration and Mitigation Monitoring and Reporting Program.

NOW, THEREFORE, BE IT RESOLVED by the Salinas Planning Commission that it recommends that the City Council adopt the proposed Mitigated Negative Declaration and Mitigation Monitoring and Reporting Program and approve General Plan Amendment 2017-001 and Rezone 2017-002 and adopts the following findings as the basis for its determination, and that the foregoing recitations are true and correct, and are included herein by reference as findings:

For the Mitigated Negative Declaration:

The Planning Commission hereby finds that a Mitigated Negative Declaration (MND) has been prepared with respect to the project in compliance with the California Environmental Quality Act (CEQA) of 1970, as amended, and the guidelines promulgated thereunder. Further, this Commission has independently reviewed and considered the information contained in the Initial Study and related environmental documents, together with the comments received during the public review process. On the basis of the whole record before it, ***the Commission finds that, with the conditions of approval and the proposed mitigation measures, there is no substantial evidence that the project will have a significant effect on the environment and that the MND reflects the Commission's independent judgment and analysis.*** *On this basis, the Commission adopts the Mitigated Negative Declaration and Mitigation Monitoring and Reporting Program.*

The environmental impacts of the project have been analyzed in accordance with the California Environmental Quality Act (CEQA). An Initial Study was prepared to evaluate the potential impacts associated with the project. Based upon review of the Initial Study, the proposed project will not have a significant effect on the environment because the mitigation

measures outlined in the proposed Mitigation Monitoring Program have been included in the project (see attached Initial Study and Mitigated Negative Declaration). The Initial Study and Mitigated Negative Declaration were routed to responsible agencies (including State Clearinghouse) and posted at the County Clerk's Office on September 26, 2019; the deadline for comments was October 28, 2019. Monterey County Planning Department and Monterey Bay Air Resources District (MBARD) provided "No Comments" on the Mitigated Negative Declaration during the review period.

Correspondence was received from Transportation Agency for Monterey County (TAMC). Paraphrased comments from the agencies are shown below:

1. TAMC: Consider adding a bike lane between the right turn lane an through-lane on Natividad at East Laurel Drive.

Staff Response: The intersection of Natividad Road at East Laurel Drive is in the City's Traffic Improvement Program (Project 61). The project is responsible for payment of traffic impacts fees, which represents the project's fair-share contribution towards this improvement.

2. TAMC: Consider providing median pedestrian refuge for longer crosswalks, especially where a third lane is added.

Staff Response: Pedestrian refuge islands will be considered where feasible at every location where project impacts require mitigation measure improvements.

For the General Plan Amendment:

1. ***The proposed general plan amendment is consistent with all other goals, policies, programs, and land uses of applicable elements of the general plan;***

The proposed Amendment is consistent with Salinas General Plan Policies. Consistent with Community Design Policy CD-2.4, the requirements of the property owner and City to rezone the property in response to conditions of their lease encourages the rehabilitation of an industrial property. The Mitigation Monitoring and Reporting Program and the proposed mitigation measures ensure traffic Level of Service (LOS) D or better for all intersections and roadways (including U.S. Highway 101) consistent with Circulation Policy C-1.2 and C-2.2. Furthermore, the Mitigation Monitoring and Reporting Program and the proposed mitigation measures will require future development to contribute to financing of street improvements

required to meet the demand generated by the project consistent with Circulation Policy C-1.4. The proposed "General Commercial/Light Industrial" land use designation is not expected to result in negative impacts or conflict with surrounding properties, because future industrial uses will be compatible with neighboring uses located adjacent to the south and west.

2. ***The proposed general plan amendment promotes the public necessity, convenience, and general welfare.***

   The General Plan Amendment promotes the public necessity, convenience and general welfare because the proposal will create a General Plan and Zoning designation to allow for future development creating jobs and business opportunities.

For the Rezone:

1. ***The amendment is consistent with the Salinas general plan, any applicable specific plan, and other plans and policies adopted by the Salinas city council;***

   The proposed Amendment is consistent with Salinas General Plan Policies. Consistent with Community Design Policy CD-2.4, the requirements of the property owner and City to rezone the property in response to conditions of their lease encourages the rehabilitation of an industrial property. The proposed Rezoning of an approximate 7.67-acre lot from "Parks" to "Industrial-General Commercial" would be consistent with adjacent uses located south and west of the project site and would allow future industrial uses and creation of jobs.

2. ***The amendment will not have the effect of reversing the policies of the Salinas general plan, any applicable specific plan, and other plans and policies adopted by the Salinas city council;***

   There are no policies within the Salinas General Plan that would be reversed as a result of this amendment. There are no Specific Plans or Precise Plans applicable to the site.

3. ***The amendment would not create an isolated district unrelated to adjacent zoning districts;***

   The proposed zoning amendment will not create an unrelated zoning district because the rezoning would extend the boundary of the existing and contiguous IGC base zoning district to include the proposed lot located at 295 Sun Way.

4. ***The city has the capability to provide public utilities, roads, and services to serve the uses allowed by the proposed amendment.***

   Salinas is an urbanized area and public infrastructure is presently in place to serve most uses. The proposed Rezoning would not create the need for additional infrastructure.

PASSED AND ADOPTED this 6th day of November 2019, by the following vote:

AYES: Chairperson Griffin, Vice Chairperson Meeks, Commissioners Anzo, Hernandez, Nohr, and Rocamora

NOES: None

ABSTAIN: Commissioner Ottone

ABSENT: None

THIS IS TO CERTIFY that the foregoing is a full, true, and correct copy of a Resolution of the Planning Commission of the City of Salinas, that said Resolution was passed and adopted by the affirmative and majority vote of said Planning Commission at a meeting held on November 6, 2019, and that said Resolution has not been modified, amended, or rescinded, and is now in full force and effect.

SALINAS PLANNING COMMISSION

Date: 11/15/19

Courtney Grossman
Secretary

Attach:

Exhibit A: Mitigated Negative Declaration and Mitigation Monitoring and Reporting Program
Exhibit B: Proposed General Plan Amendment 2017-001 Map for 295 Sun Way
Exhibit C: Proposed Rezone 2017-002 Map for 295 Sun Way

CITY OF SALINAS
Community Development Department
65 West Alisal Street, Salinas, CA 93901

(MITIGATED) NEGATIVE DECLARATION

The project described below has been reviewed in accordance with the California Environmental Quality Act (CEQA) and has been determined to have a less than significant impact upon the environment.

Project's Common Name: General Plan Amendment 2017-001 (GPA 2017-001) and Rezone 2017-002 (RZ 2017-002).

File Nos.: GPA 2017-001; RZ 2017-002

Project Applicant: Simas -East Market LLC

Project Location: 295 Sun Way in the P-F (Park – Flood Plain Overlay) Zoning District (APN 003-212-017-000)

Determination: The attached Initial Study has been prepared for the above project in accordance with the California Environmental Quality Act and procedures established in the *CEQA Guidelines* adopted by the City of Salinas. On the basis of the Initial Study, the City of Salinas makes the following determination:

☐ The above project will not have a significant effect on the environment, and a NEGATIVE DECLARATION is hereby approved.

☒ The above project could have a significant effect on the environment, but WILL NOT have a significant effect in this case because the attached mitigation measures have been made by or agreed to by the applicant which will avoid the effects or mitigate the effects to a point where clearly no significant effects will occur. Furthermore, there is no substantial evidence before the City of Salinas that the proposed project, as revised, may have a significant effect on the environment. A (MITIGATED) NEGATIVE DECLARATION is hereby approved.

Mitigation measures, if any, included in the project to avoid potentially significant effects:

(See attached Mitigation Monitoring Program)

Further information about this project and about its probable environmental impact will be on file in the Community Development Department, 65 West Alisal Street, Salinas, CA 93901.

COURTNEY GROSSMAN
Planning Manager

By: _____
Bobby Latino
Associate Planner

Date: 9/25/19

Attach: Mitigation Monitoring and Reporting Program
\\SalSvr44\DeptPvt\ComDev\robertl\Documents\295 Sun Way\ER 2017-002\IS & MND\295 Sun Way Mitigated Negative Declaration.docx

GENERAL PLAN AMENDMENT 2017-001 (GPA 2017-001) FROM PARK TO GENERAL COMMERCIAL/LIGHT INDUSTRIAL AND REZONE 2017-002 (RZ 2017-002) FROM PARK TO INDUSTRIAL - GENERAL COMMERCIAL
MITIGATION MONITORING AND REPORTING PROGRAM
295 SUN WAY

Mitigation Number	Nature of Mitigation	Result after Mitigation	Party Responsible for Implementing	Party Responsible for Monitoring: Method to Confirm Implementation	Timing for Implementation
CU-1	In the event that cultural materials are encountered during grading/construction, all work shall cease until the find has been evaluated and mitigation measures put in place for the disposition and protection of any find pursuant to Public Resources Code Section 21083.2	To ensure compliance with Public Resources Code Section 21083.2.	Applicant, or Successor in Interest.	Community Development Department, Current Planning	During grading/ construction activities
TRANS-1	Add a third northbound lane and third southbound lane to Natividad Road through the Natividad Road / East Laurel Drive intersection. Intersection operations would improve during the AM and PM peak hours. To ensure that the intersection at Natividad Road / East Laurel Drive will operate at acceptable level of service, the Applicant shall pay the City of Salinas Traffic Impact Fees, which would represent the project's fair-share contribution of this improvement that is included in the City of Salinas TFO (Project 61).	To minimize transportation impacts.	Applicant, or Successor in Interest.	Public Works Department	Prior to issuance of a building permit.

Mitigation Number	Nature of Mitigation	Result after Mitigation	Party Responsible for Implementing	Party Responsible for Monitoring: Method to Confirm Implementation	Timing for Implementation
TRANS-2	Convert the signal phasing on the east and west intersection of Sherwood Drive – Natividad Road / East Bernal Drive-La Posada Way approaches from concurrent phasing to split phasing. Intersection operations would improve during the AM and PM peak hour to LOS D. To ensure that the intersection of Sherwood Drive – Natividad Road / East Bernal Drive-La Posada Way will operate at acceptable levels of service, the applicant shall either: (1) Prior to the City's issuance of the first grading permit for a specific development project at project site, pay a traffic impact fee provided the City has updated its Traffic Improvement Program and Traffic Fee Ordinance to include the signal modifications at this intersection as one of the improvements that is funded by the TFO, or	To minimize transportation impacts.	Applicant, or Successor in Interest.	Public Works Department	Prior to issuance of the first grading permit for a specific development project at project site.
	(2) if the signal modifications at this intersection have not been included in the TFO, the applicant shall be responsible for either:				

Mitigation Number	Nature of Mitigation	Result after Mitigation	Party Responsible for Implementing	Party Responsible for Monitoring: Method to Confirm Implementation	Timing for Implementation
	(a) Funding the improvements and obtaining the requisite encroachment or other permits for modifying the signal phasing and ensuring that the signal modification is in operation prior to the issuance of the first Certificate of Occupancy for a specific development project at the project site, or				Prior to the issuance of the first Certificate of Occupancy for a specific development project at the project site
	(b) Concurrent with the issuance of the first grading permit for a specific development project at project site, depositing funds with the City in order for the City to obtain the requisite permits and modifying the signal phasing ensuring that the signal modification is operational prior to the issuance of the first Certificate of Occupancy for a specific development project at the project site.				Prior to the issuance of the first Certificate of Occupancy for a specific development project at the project site

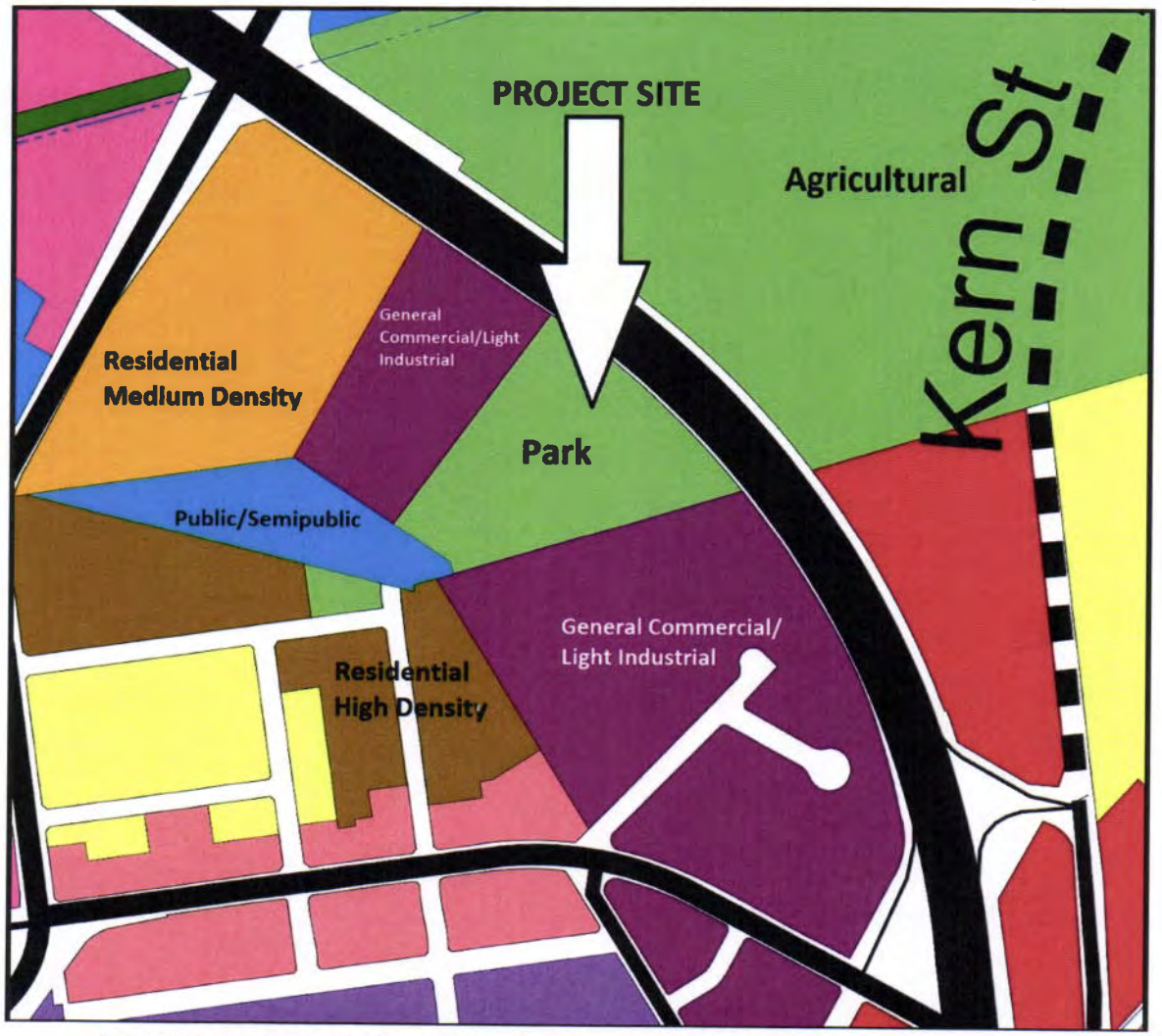
Mitigation Number	Nature of Mitigation	Result after Mitigation	Party Responsible for Implementing	Party Responsible for Monitoring: Method to Confirm Implementation	Timing for Implementation
TRANS-3	Add a third northbound lane and third southbound lane on North Main Street through the North Main Street / Rossi Street intersection. Intersection operations would improve during the PM peak hour to LOS C. To ensure that the intersection at North Main Street / Rossi Street will operate at acceptable level of service, the Applicant shall pay the City of Salinas Traffic Impact Fees, which would represent the project's fair-share contribution of this improvement that is included in the City of Salinas TFO (Project 31).	To minimize transportation impacts.	Applicant, or Successor in Interest.	Public Works Department	Prior to issuance of a building permit.
TRANS-4	Signalize the intersection of Sun Street and East Market Street. The intersection would operate at LOS A during the AM and PM peak hours with signalization. To ensure that the intersection of Sun Street and East Market Street will operate at acceptable levels of service, the applicant shall be responsible for either:	To minimize transportation impacts.	Applicant, or Successor in Interest.	Public Works Department	
	(a) Funding the improvements and obtaining the requisite encroachment or other permits for installation of a traffic signal and ensure that the signal is in operation prior to the issuance of the first Certificate of Occupancy for a specific development project at the project site, or				Prior to the issuance of the first Certificate of Occupancy for a specific development project at the project site.

Mitigation Number	Nature of Mitigation	Result after Mitigation	Party Responsible for Implementing	Party Responsible for Monitoring: Method to Confirm Implementation	Timing for Implementation
	(b) Concurrent with the issuance of the first grading permit for a specific development project at project site, depositing funds with the City in order for the City to obtaining the requisite permits for, and installation of, a traffic signal that will be operational prior to the issuance of the first Certificate of Occupancy for a specific development project at the project site.				Prior to the issuance of the first Certificate of Occupancy for a specific development project at the project site.
TRANS-5	Signalize the intersection. Intersection operations would improve during the AM and PM peak hours to LOS B. To ensure that the intersection of U.S. 101 Southbound Offramp – Merced Street/East Market Street will operate at acceptable levels of service, the applicant shall either: (1) Prior to the City's issuance of the first grading permit for a specific development project at project site, pay a traffic impact fee provided the City has updated its Traffic Improvement Program and Traffic Fee Ordinance to include a traffic signal at this intersection as one of the improvements that is funded by the TFO, or	To minimize transportation impacts.	Applicant, or Successor in Interest.	Public Works Department	Prior to the issuance of the first Certificate of Occupancy for a specific development project at the project site.
	(2) if the traffic signal at this intersection has not been included in the TFO, the applicant shall be responsible for either:				

Mitigation Number	Nature of Mitigation	Result after Mitigation	Party Responsible for Implementing	Party Responsible for Monitoring: Method to Confirm Implementation	Timing for Implementation
	(a) Funding the improvements and obtaining the requisite encroachment or other permits for installation of a traffic signal and ensure that the signal is in operation prior to the issuance of the first Certificate of Occupancy for a specific development project at the project site, or				Prior to the issuance of the first Certificate of Occupancy for a specific development project at the project site.
	(b) Concurrent with the issuance of the first grading permit for a specific development project at project site, depositing funds with the City in order for the City to obtain the requisite permits and install the traffic signal ensuring that the signal is operational prior to the issuance of the first Certificate of Occupancy for a specific development project at the project site.				Prior to the issuance of the first Certificate of Occupancy for a specific development project at the project site.
TCR-1	In the event that cultural materials are encountered during grading/construction, all work shall cease until the find has been evaluated and mitigation measures put in place for the disposition and protection of any find pursuant to Public Resources Code Section 21083.2.	To ensure compliance with Public Resources Code Section 21083.2	Applicant, or Successor in Interest	Community Development Department, Current Planning	During grading/ construction activities

North

General Plan Amendment Map



GENERAL PLAN AMENDMENT 2017-001

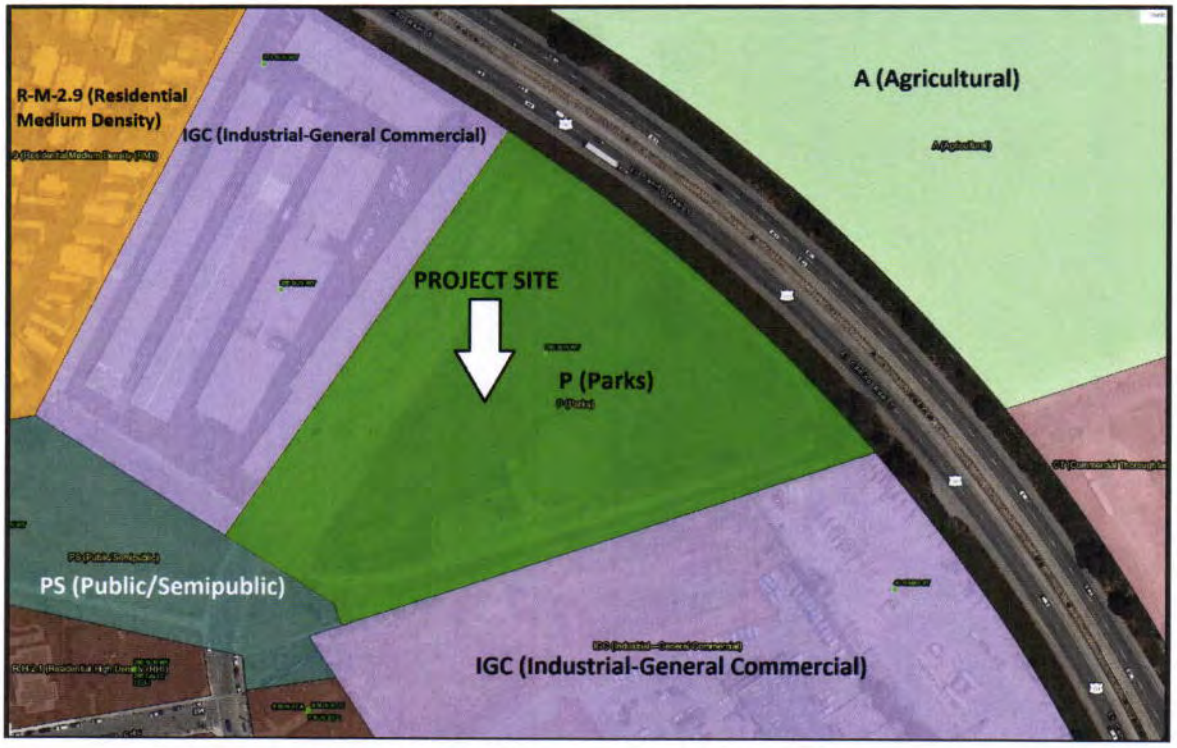
(Related to Rezone 2017-002)

Project Description: Change a 7.67-acre site from Park to General Commercial/Light Industrial

\\SalSvr44\DeptPvt\ComDev\robertl\Documents\295 Sun Way\GPA 2017-001 and RZ 2017-002\GPA 2017-001 Map Exhibit.docx

North

Rezoning Map



REZONE 2017-002

(Related to General Plan Amendment 2017-001)

Project Description: Change a 7.67-acre site from Parks to Industrial - General Commercial.

\\SalSvr44\DeptPvt\ComDev\robertl\Documents\295 Sun Way\GPA 2017-001 and RZ 2017-002\RZ 2017-002 Map Exhibit.docx

UNOFFICIAL MINUTES
OF THE
SALINAS PLANNING COMMISSION

November 6, 2019

The meeting was called to order at 3:30 p.m. in the City Council Chamber Rotunda.

PLEDGE OF ALLEGIENCE

ROLL CALL

WELCOME AND STAFF INTRODUCTIONS

PRESENT: Chairperson Griffin, Commissioners, Anzo, Hernandez, Meeks, Nohr, Ottone (Arrived at 3:55 p.m.), and Rocamora.

ABSENT: None

STAFF: Community Development Director, Megan Hunter; City Attorney, Chris A. Callihan; Planning Manager, Courtney Grossman; Senior Planner, Jill Miller; Associate Planner, Bobby Latino; and Administrative Aide, Maira Flores

COMMENTS FROM THE PUBLIC FOR ITEMS NOT ON THE AGENDA

Chairperson Griffin opened for public comment at 3:32 p.m.

No public comment received.

Chairperson Griffin closed for public comment at 3:32 p.m.

APPROVAL OF THE MINUTES: October 16, 2019

Upon motion by Commissioner Meeks, second by Commissioner Anzo, the minutes of October 16, 2019 were approved. The motion carried by the following vote:

AYES: Chairperson Griffin, Commissioners, Anzo, Meeks, and Nohr.

NOES: None

ABSTAIN: Commissioner Hernandez and Rocamora

ABSENT: Commissioner Ottone (Arrived at 3:55 p.m.)

CONSIDERATIONS

None

PUBLIC HEARINGS

Bobby Latino, Associate Planner, presented a PowerPoint Presentation regarding Variance 2019-001; a request to vary fence height at 1072 Industrial Street. This presentation is on file at the Community Development Department.

Commissioner Meeks inquired if there would be any major changes to the building structure to ensure compliance with commercial cannabis regulations. Bobby Latino indicated that compliance with regulations and building code would be secured through the Commercial Cannabis Business Permit process.

Commissioner Nohr requested clarification on the protest letter received for the project as it referenced concerns with the homeless population on the railroad right of way as opposed to the use of the site. Bobby Latino clarified that the use was previously established through a Site Plan Review and that the Variance was strictly to vary the fence height.

Chairperson Griffin opened for public comment at 3:39 p.m.

No public comment received.

Chairperson Griffin closed for public comment at 3:40 p.m.

Commissioner Meeks provided comments on the homeless camp referenced in the protest letter.

Commissioner Meeks motioned to adopt the resolution approving Variance 2019-001; A request to vary fence height at 1072 Industrial Street. Commissioner Nohr seconded this motion. The motion carried by the following vote:

AYES:	Chairperson Griffin, Commissioners Anzo, Hernandez, Meeks, Nohr, and Rocamora
NOES:	None
ABSTAIN:	None
ABSENT:	Commissioner Ottone (Arrived at 3:55 p.m.)

Bobby Latino, Associate Planner, presented a PowerPoint Presentation regarding General Plan Amendment 2017-001; a request to change a 7.67-acre site from Park to General Commercial/Light Industrial and Rezone 2017-002; a request to change a 7.67-acre site from

Parks to Industrial – General Commercial located at 295 Sun Way. This presentation is on file at the Community Development Department.

Commissioner Hernandez indicated that residents of Rancho Salinas Mobile Home Park are concerned with the rezone as they viewed this location as a recreational resource. Megan Hunter, Community Development Director, informed commissioners that the City determined not to continue to lease this privately-owned property for recreational use. Instead, the City's Master Park Plan will focus on maintenance and making capital improvements to existing parks; hence, the rezone for 295 Sun Way.

Commissioner Rocamora inquired if there was any information on the proposed use for the rezoned area since there's currently a need for housing. Ms. Hunter responded that due to the location of the site's proximity to the freeway and most of the surrounding areas being zoned as Industrial – General Commercial, this site would not be ideal for housing. Ms. Hunter also informed that as part of the Chinatown's Revitalization Plan, the City will continue to expand areas and identify opportunity sites for housing.

Robert Atkinson, Syufy Enterprises - Applicant, made a statement regarding the current use of the property and spoke in support of the project.

Chairperson Griffin opened for public comment at 3:54 p.m.

No public comment received.

Chairperson Griffin closed for public comment at 3:54 p.m.

Commissioner Hernandez motioned to approve the resolution recommending that City Council adopt the proposed Mitigated Negative Declaration, approved General Plan Amendment 2017-001, and introduce then adopt Rezone 2017-002. Commissioner Anzo seconded this motion. The motion carried by the following vote:

AYES:	Chairperson Griffin, Commissioners Anzo, Hernandez, Meeks, Nohr, and Rocamora
NOES:	None
ABSTAIN:	Commissioner Ottone (Arrived at 3:55 p.m.)
ABSENT:	None

Bobby Latino, Associate Planner, presented a PowerPoint Presentation regarding General Plan Amendment 2017-002; a request to change the General Plan designation of 94,235 square feet of a 401,197 lot from General Commercial/Light Industrial to Arterial Frontage, Rezone 2017-001; a request to change the Zoning designation of 94,235 square feet of a 401,197 lot from Industrial-General Commercial to Mixed Arterial Frontage, and Conditional Use Permit 2017-019; a request to establish and operate a religious assembly use in a an existing 18,150 square foot building located at 10 Simas Street. This presentation is on file at the Community Development Department.

Commissioner Nohr requested clarification regarding the buildings on the parcel that would be impacted by the project. Mr. Latino provided clarification.

Robert Atkinson, Syufy Enterprises - Applicant, made a statement regarding the current use of the property and spoke in support of the project.

Chairperson Griffin opened for public comment at 4:06 p.m.

David Mack, Salinas Resident, expressed a concern that the project may imply spot zoning.

Terry Green, Lead Pastor of Celebration Church, provided public comment in support of the project.

Karen Green, Lead Pastor of Celebration Church, provided public comment in support of the project.

Rosanna Guerrero, Congregation Member of Celebration Church, provided public comment in support of the project.

Jason Green, Youth Pastor of Celebration Church, provided public comment in support of the project.

John and Lily Martin, Congregation Members of Celebration Church, provided public comment in support of the project.

Shara Green Pena, Associate Pastor of Celebration Church, provided public comment in support of the project.

Luis Ortiz Jr., Local Mortician, provided public comment in support of the project.

Jesse, Congregation Member of Celebration Church, provided public comment in support of the project.

Echo Grijalva, Youth Mentor of Celebration Church, provided public comment in support of the project.

Received public comment in support of the project from two other unidentified Congregation Member of Celebration Church.

Chairperson Griffin closed for public comment at 4:32 p.m.

Commissioner Meeks inquired if there were any other areas in which spot zoning exists. Ms. Hunter informed the commissioners that this project was not considered spot zoning and it was not uncommon to have parcels with split zoning.

Commissioner Hernandez spoke in support of the project and commended the work of Celebration Church.

Commissioner Meeks motioned to approve the resolution recommending that City Council adopt the proposed Mitigated Negative Declaration, approved General Plan Amendment 2017-002, and introduce then adopt Rezone 2017-001 and approve Conditional Use Permit 2017-019. Commissioner Hernandez seconded this motion. The motion carried by the following vote:

AYES:	Chairperson Griffin, Commissioners Anzo, Hernandez, Meeks, Nohr, Ottone and Rocamora
NOES:	None
ABSTAIN:	None
ABSENT:	None

OTHER BUSINESS

Jill Miller, Senior Planner, presented a PowerPoint regarding the Study Session: West Area Specific Plan. This presentation is on file at the Community Development Department.

Commissioner Meeks inquired if it had been determined who would pay for sewage connections of Bolsa Knolls residences that could potentially result because of the project. Jill Miller informed that this would be determined by Monterey County regulations and not the City. Ms. Miller indicated she would research and present more information regarding this inquiry when the project returns to the Planning Commission for formal consideration.

Commissioner Ottone inquired when the Final Environmental Impact Report would be available for review. Courtney Grossman, Planning Manager, anticipated these documents would be available no later than Friday, November 15, 2019, (for consideration at the November 20, 2019 Planning Commission meeting), or as required by CEQA regulations.

Commissioner Ottone also inquired if action on the Development Agreement would be required from the Planning Commission. Christopher A. Callihan, City Attorney, responded

that only City Council would be required to action on the Development Agreement; however, it would be part of the package presented for consideration to the Planning Commission.

Commissioner Nohr, asked how Assembly Bill 68 and other senate bills impact the West Area Specific Plan. Jill Miller, Senior Plan, indicated that the plan currently meets municipal code; however, changes would be made as necessary to ensure compliance with the state law.

Chairperson Griffin opened for public comment at 4:53 p.m.

David Mack, resident of Salinas, stated concerns regarding potential impacts and sewer connections that could arise with the project.

Natalie Vaughn, California State University of Monterey Bay, provided public comment.

Chairperson Griffin closed for public comment at 4:58 p.m. No action is required with the study session.

Megan Hunter, Community Development Director, spoke regarding the need for an advisory Design Review Board to assist in providing applicants with review and feedback on project design. Ms. Hunter asked if the Planning Commissioners had any input or ideas for the layout and structure of such committee.

Courtney Grossman, Planning Manager, provided examples of previous advisory committees.

Commissioner Nohr agreed with the need for a Design Review Board and provided feedback.

Chairperson Griffin asked if documentation of the structure to follow of previous existing boards that assisted in similar functions could be referenced when considering the design of the committee.

Commissioner Ottone suggested consideration on expanding membership of the Ad Hoc Review Committee to subject matter experts of neighboring cities.

FOLLOW UP REPORTS

Megan Hunter, Community Development Director, apprised the Planning Commission that a second reading at City Council was held on November 5, 2019 to approve the Zoning Code Amendments that were recommended for approval by the Planning Commission on October 2, 2019 as well as the approval of the Alisal Vibrancy Plan presented on October 16, 2019. Both projects were approved.

Ms. Hunter also provided information regarding the report to City Council on November 5, 2019 by Joseph DeSante, Permit Center Manager and Building Official. As of September 30, 2019, over 1,800 Building Permits have been issued.

Additionally, Ms. Hunter informed that the City Council will be establishing a Business Development Committee which will serve as an advisory committee for building permitting improvements. Planning Commissioners should contact Ms. Hunter if interested.

FUTURE AGENDA ITEMS

The West Area Specific Plan and the Mitigated Negative Declaration for the Airport Lease Project located at 1341 Mercer Way are expected to be presented to the Planning Commission on November 20, 2019. Public works is also expected to present a Mitigated Negative Declaration for East Laurel Drive on this date.

The Chinatown Revitalization Project is expected for presentation to the Planning Commission on either December 4, 2019 or December 18, 2019.

Planning Commissioner attendance for November 20, 2019 was confirmed.

ADJOURNMENT

The meeting was adjourned at 5:20 p.m.

_____	_____
BRAD GRIFFIN	COURTNEY GROSSMAN
Chairperson	Executive Secretary

City of Salinas
COMMUNITY DEVELOPMENT DEPARTMENT
65 W. Alisal Street, 2nd Floor • Salinas, California 93901
(831) 758-7387 • (831) 775-4258 (Fax) • www.ci.salinas.ca.us

1. BACKGROUND

Project Name: General Plan Amendment 2017-001 (GPA 2017-001) and Rezone 2017-002 (RZ 2017-002).

Project Location: 295 Sun Way in the P-F (Park – Flood Plain Overlay) Zoning District

Assessor Parcel Number: 003-212-017-000

☒ **See Attached Vicinity Map**

Current Land Use: Park (Privately-owned)

Surrounding Land Uses/Zoning Districts:

North: U.S. 101
South: Industrial Complex / IGC-F (Industrial-General Commercial – Flood Plan Overlay)
East: U.S. 101
West: Warehousing and Storage, Limited / IGC-F (Industrial-General Commercial – Flood Plan Overlay)

Lead Agency Contact Person: Bobby Latino, Associate Planner

Telephone: (831) 758-7206

Location and Existing Setting: City of Salinas/ Existing privately-owned Park.

Project Description: General Plan Amendment 2017-001 (GPA 2017-001) to change a 7.67-acre site from Park to General Commercial/Light Industrial and a Rezone 2017-002 (RZ 2017-002) to change a 7.67-acre site from Park to Industrial - General Commercial. Following the effective date of the General Plan Amendment and Rezone, subsequent development would be subject to the City of Salinas Zoning Code.

Environmental Factors Potentially Affected:

- ☐ Aesthetics
- ☐ Biological Resources
- ☐ Geology/Soils
- ☐ Hydrology/Water Quality
- ☐ Noise
- ☐ Recreation
- ☐ Utilities/Service Systems
- ☐ Agricultural Resources
- ☒ Cultural Resources
- ☐ Greenhouse Gas Emissions
- ☐ Land Use/Planning
- ☐ Population/Housing
- ☒ Transportation
- ☐ Wildfire
- ☐ Air Quality
- ☐ Energy
- ☐ Hazards & Hazardous Materials
- ☐ Mineral Resources
- ☐ Public Services
- ☒ Tribal Cultural Resources
- ☐ Mandatory Findings of Significance

2. CHECKLIST

Issue	Impact				Source *(Refer to Section 3: Source List)*
	No Impact	**Less Than Significant Impact**	**Potentially Significant Unless Mitigation Incorporated**	**Potentially Significant Impact**	
1. AESTHETICS. Except as provided in Public Resources Code Section 21099, *would the proposal:*					A1, A2, N1
(a) Affect a scenic vista or scenic highway?	☒	☐	☐	☐	
(b) In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that area experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?	☒	☐	☐	☐	
(c) Substantially degrade the existing visual character or quality of the site and its surroundings?					

Issue	Impact				Source *(Refer to Section 3: Source List)*
	No Impact	**Less Than Significant Impact**	**Potentially Significant Unless Mitigation Incorporated**	**Potentially Significant Impact**	
(d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	☒	☐	☐	☐	
	☒	☐	☐	☐	

Discussion

(a-b) The site is in an urbanized area and is not adjacent to or near a scenic vista or a scenic highway.

(c) The project does not include development at this time; therefore, the project would not degrade the existing visual character or quality of the site and its surroundings. Future development would be subject to the City of Salinas Zoning Code, including the development and design standards, which will address any visual impacts.

(d) No development is proposed with this project. However, any future development would be subject to the City of Salinas Zoning Code which would ensure that impacts due to light and glare are reduced to a level of insignificance.

Mitigation

No mitigation is required.

Issue	Impact				Source *(Refer to Section 3: Source List)*
	No Impact	**Less Than Significant Impact**	**Potentially Significant Unless Mitigation Incorporated**	**Potentially Significant Impact**	
2. AGRICULTURAL RESOURCES. *Would the proposal:*					A1, A2, N1
(a) Convert Prime Farmland, Unique Farmland, or Farmland	☒	☐	☐	☐	

Issue		Impact				Source *(Refer to Section 3: Source List)*
		No Impact	Less Than Significant Impact	Potentially Significant Unless Mitigation Incorporated	Potentially Significant Impact	
	of Statewide Importance (Farmland), as shown on the maps pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?					
(b)	Conflict with existing zoning for agricultural use or a Williamson Act contract?	☒	☐	☐	☐	
(c)	Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code 12220(g)), timberland (as defined by Public Resources Code Section 4526), or timberland zoned Timberland Production (as defined by Government Code Section 51104(g))?	☒	☐	☐	☐	
(d)	Result in the loss of forest land or conversion of forest land to non-forest use?	☒	☐	☐	☐	
(e)	Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?	☒	☐	☐	☐	

Discussion

(a-e) The site is located on an in-fill property within the P-F (Park – Flood Plain Overlay) Zoning District. Farming activities and forest land are not located on the site.

Mitigation

No mitigation is required.

Issue	Impact				Source *(Refer to Section 3: Source List)*
	No Impact	Less Than Significant Impact	Potentially Significant Unless Mitigation Incorporated	Potentially Significant Impact	
3. AIR QUALITY. *Would the proposal:*					A1, A2, A3 A7, B1, F1, F2
(a) Conflict with or obstruct implementation of the applicable air quality plan?	☒	☐	☐	☐	
(b) Result in cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?	☒	☐	☐	☐	
(c) Expose sensitive receptors to substantial pollutant concentrations?	☒	☐	☐	☐	
(d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	☒	☐	☐	☐	

Discussion

(a) Considering the consistency with the 2012-2015 Monterey Bay Air Resources District (MBARD) Air Quality Management Plan (AQMP) and the project's

future construction and operational emissions, the project would not exceed MBARD's thresholds of significance and would not conflict with or obstruct implementation of the applicable air quality plan. Air quality impacts would be less than significant as assessed by Air Quality Impact Analysis by First Carbon Solutions, dated September 19, 2019 (see attached, Exhibit "5") and confirmed by the City's contracted Peer Review by Rincon Consultants, Inc., dated October 23, 2018 (see attached, Exhibit "10").

(b) The average daily and annual operational emissions from the future construction would not exceed the MBARD operational thresholds for any criteria pollutant. Therefore, the future construction operational-related emission impact would be less than significant. This was assessed by Air Quality Impact Analysis by First Carbon Solutions, dated September 19, 2019 (see attached, Exhibit "5") and confirmed by the City's contracted Peer Review by Rincon Consultants, Inc., dated October 23, 2018 (see attached, Exhibit "10").

(c) Impacts from CO emissions and construction Health Risk Assessment (HRA) on nearby sensitive receptors would be less than significant. This was assessed by Air Quality Impact Analysis by First Carbon Solutions, dated September 19, 2019 (see attached, Exhibit "5") and confirmed by the City's contracted Peer Review by Rincon Consultants, Inc., dated October 23, 2018 (see attached, Exhibit "10").

(d) Future construction and operational-related activities could involve diesel-fueled construction equipment and trucks. Furthermore, VOC emissions would be generated during architectural coating and asphalt paving phases, which could be objectionable odors to some populations. However, such odorous emissions would disperse rapidly from the site and would be intermittent during future construction activities. Thus, it is highly unlikely that these intermittent odor sources would reach an objectionable level adversely affecting a substantial number of people. Future construction related odor impacts would be less than significant. This was assessed by Air Quality Impact Analysis by First Carbon Solutions, dated September 19, 2019 (see attached, Exhibit "5") and confirmed by the City's contracted Peer Review by Rincon Consultants, Inc., dated October 23, 2018 (see attached, Exhibit "10").

Mitigation

No mitigation is required.

Issue	Impact				Source *(Refer to Section 3: Source List)*
	No Impact	**Less Than Significant Impact**	**Potentially Significant Unless Mitigation Incorporated**	**Potentially Significant Impact**	
4. BIOLOGICAL RESOURCES. *Would the proposal result in impacts to:*					A1, A2, A3, A7, B2, M1, N1
(a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	☒	☐	☐	☐	
(b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or US Fish and Wildlife Service	☒	☐	☐	☐	
(c) Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	☒	☐	☐	☐	
(d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident	☒	☐	☐	☐	

Issue	Impact				Source *(Refer to Section 3: Source List)*
	No Impact	**Less Than Significant Impact**	**Potentially Significant Unless Mitigation Incorporated**	**Potentially Significant Impact**	
or migratory wildlife corridors, or impede the use of native wildlife nursery sites?					
(e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	☒	☐	☐	☐	
(f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	☒	☐	☐	☐	

Discussion

(a-d) As a result of the recurrent mowing of the project site no special-status species were observed and are not expected to be found on site. No significant impacts to special-status plants species is expected due to high levels of disturbance. Given the location of the site, adjacent to US 101 with high traffic volumes, and between existing warehouse and industrial uses, reduces the ability for most species to use the project site as a migratory corridor. No significant impacts to wildlife movement are expected as a result of existing barriers coupled with the lack of suitable habitat due to high levels of disturbance on the project site. Project does not conflict with any local polices, Habitat Conservation Plan, Natural Community Conservation Plan or any other habitat conservation plan. Biological Resources impacts of the project were assessed by a Biological Resources Assessment by First Carbon Solutions, dated August 17, 2018 (see attached, Exhibit "6") and confirmed by the City's contracted Peer Review by Rincon Consultants, Inc., dated October 23, 2018 (see attached, Exhibit "10").

Mitigation

No mitigation is required.

Issue	Impact				Source *(Refer to Section 3: Source List)*
	No Impact	Less Than Significant Impact	Potentially Significant Unless Mitigation Incorporated	Potentially Significant Impact	
5. CULTURAL RESOURCES. *Would the proposal:*					A1, A2, A3, A5, A6, A7, B3, Q3
(a) Cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5	☒	☐	☐	☐	
(b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	☐	☐	☒	☐	
(c) Disturb any human remains, including those interred outside of formal cemeteries?	☐	☐	☒	☐	

Discussion

(a) The subject site was not included in either of the City of Salinas 1989 or 2016 City Historic and Architectural Surveys.

(b-c) Cultural Resources impacts were assessed by a Phase 1 Cultural and Paleontological Resources Assessment by First Carbon Solutions, dated August 17, 2018 (see attached, Exhibit "7") and confirmed by the City's contracted Peer Review by Rincon Consultants, Inc., dated October 23, 2018 (see attached, Exhibit "10"). However, there is always the potential to encounter subsurface materials during grading and construction. Therefore, pursuant to the Public Resources Code (Section 21083.2), in the event that cultural materials are encountered during grading/construction, all work shall cease until the find has been evaluated and mitigation measures put in place for the disposition and protection of any find. With this requirement, there is little potential for a significant impact on the environment.

On October 12, 2017, pursuant to Public Resources Code Section 21080.3.1, subd. (d), Assembly Bill 52 (AB52), and California Senate Bill 18 (SB18), City of Salinas staff sent via certified mail, a consultation request on the proposed project within 30-days of the date of the letter to all applicable California Native American Tribes whose geographic area of traditional and cultural affiliation lands boundary includes the City of Salinas as specified by the Native American Heritage Foundation.

On December 18, 2017, the Ohlone /Costanoan-Esselen Nation (OCEN) provided a response letter stating concern with the proposed project site and recommending that an OCEN Tribal Monitor be located on-site during construction (see attached. Exhibit "12"). Per Mitigation Measure CU-1 below, pursuant to Public Resources Code (Section 21083.2), in the event that cultural materials are encountered during grading/construction in connection with development, all work shall cease until the find has been evaluated and mitigation measures put in place for the disposition and protection of any find. With mitigation measures, there is little potential for a significant impact on the cultural resources.

Mitigation

CU-1 In the event that cultural materials are encountered during grading/construction, all work shall cease until the find has been evaluated and mitigation measures put in place for the disposition and protection of any find pursuant to Public Resources Code Section 21083.2.

Issue	Impact				Source *(Refer to Section 3: Source List)*
	No Impact	**Less Than Significant Impact**	**Potentially Significant Unless Mitigation Incorporated**	**Potentially Significant Impact**	
6. ENERGY. *Would the proposal:*					A1, A2, G1
(a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?	☒	☐	☐	☐	
(b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	☒	☐	☐	☐	

Discussion

(a) The proposed project does not include development at this time. Future development will be subject to the City of Salinas Zoning Code. No permanent, long-term, or substantial energy consumption would occur during or as a result of the project. Therefore, impacts related to wasteful, inefficient, or unnecessary consumption of energy resources would be less than significant.

(b) The City of Salinas is part of Monterey Bay Community Power Authority (MBCP), a regional Community Choice Energy project. MBCP was formed to provide locally-controlled, carbon-free electricity to residents and businesses in Monterey, San Benito, and Santa Cruz counties (MBCP 2019). The goals of MBCP are to increase utilization of renewable power, create local and sustainable energy sources, and create green jobs.

The proposed project does not include development at this time. Future development will be subject to the City of Salinas Zoning Code. No permanent, long-term, or substantial energy consumption would occur during or as a result of the project. Due to the limited duration and scope of energy-consuming activity, substantial use of energy would not occur. Therefore, the project would not conflict with the goals of MBCP, and impacts would be less than significant.

Mitigation

No mitigation is required.

Issue	Impact				Source *(Refer to Section 3: Source List)*
	No Impact	**Less Than Significant Impact**	**Potentially Significant Unless Mitigation Incorporated**	**Potentially Significant Impact**	
7. GEOLOGY/SOILS. *Would the proposal result in or expose people to potential impacts involving:*					A1, A2, A3, A7, B3
(a) Directly or indirectly cause potential substantial adverse effects, including	☒	☐	☐	☐	

Issue	Impact				Source *(Refer to Section 3: Source List)*
	No Impact	Less Than Significant Impact	Potentially Significant Unless Mitigation Incorporated	Potentially Significant Impact	
the risk of loss, injury, or death involving:					
(i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.	☒	☐	☐	☐	
(ii) Strong seismic ground shaking?	☒	☐	☐	☐	
(iii) Seismic-related ground failure, including liquefaction?	☒	☐	☐	☐	
(iv) Landslides?	☒	☐	☐	☐	
(b) Result in substantial soil erosion or the loss of topsoil?	☒	☐	☐	☐	
(c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on-or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	☒	☐	☐	☐	
(d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect	☒	☐	☐	☐	

Issue	Impact				Source *(Refer to Section 3: Source List)*
	No Impact	Less Than Significant Impact	Potentially Significant Unless Mitigation Incorporated	Potentially Significant Impact	
risks to life or property?					
(e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?	☒	☐	☐	☐	
(f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☐	☒	☐	☐	

Discussion

a (i-iv) All structures located in Salinas are required to be designed to at least Seismic Design Category D in accordance with Section 1613 of the 2010 California Building Code. As shown on the Seismic Hazards Map for the Greater Salinas Planning Area (Figure 5.10-1 of the Salinas General Plan Final EIR), the project site is located within the Moderately High Seismic Hazard Zone. Any future development on the site will be subject to the most recent, adopted edition of the California Building Code, and related Codes, as a part of the building permit process to ensure that adequate seismic design is provided.

(b-d) No construction will occur with this project at this time; therefore, it will not induce substantial changes to the topography or to the soil conditions with a result of excavation or grading. Any future development would be subject to the most recent version of the California Building Code, and related Codes, as a part of the building permit process to ensure adequate seismic safety. The project site is currently developed and is basically flat.

(e) The subject property is currently served by the City's sewer system. The proposed project would not involve the use of septic systems or alternative waste water disposal systems.

(f) The proposed project does not include development. Paleontological Resources were assessed by a Phase 1 Cultural and Paleontological Resources Assessment

by First Carbon Solutions, dated August 17, 2018 (see attached, Exhibit "7") and confirmed by the City's contracted Peer Review by Rincon Consultants, Inc., dated October 23, 2018 (see attached, Exhibit "10") and no paleontological resources or unique geological features are evident on the subject property. However, pursuant to Public Resources Code (Section 21083.2), in the event that paleontological materials are encountered during grading/construction, all work shall cease until the find has been evaluated and mitigation measures put in place for the disposition and protection of any find. The proposed project is subject to all local, state, and federal laws relative to discovery of cultural resources during construction. With this requirement, there is little potential for a significant impact on the environment.

Mitigation

No mitigation is required.

Issue	Impact				Source *(Refer to Section 3: Source List)*
	No Impact	Less Than Significant Impact	Potentially Significant Unless Mitigation Incorporated	Potentially Significant Impact	
8. GREENHOUSE GAS EMISSIONS. *Would the project:*					A1, A2, A3, A7, B4
(a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	☒	☐	☐	☐	
(b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	☒	☐	☐	☐	

Discussion

(a-b) The project's amortized construction and annual operational GHG emissions would not exceed the applicable threshold of significance. Thus, the project's future construction and operational GHG emissions would not result in a significant impact on climate change. The project is consistent with the applicable strategies and would not conflict with the recommendations of AB 32 in achieving a statewide

reduction in GHG emissions. The project would not conflict with Monterey County's adopted Municipal Climate Action Plan (MCAP) or the 2040 Metropolitan Transportation Plan/Sustainable Communities Strategy (MTP/SCS). Therefore, the project would not conflict with any applicable plan, policy or regulation of an agency adopted to reduce GHG emissions. Greenhouse Gas Emissions impacts were assessed a Greenhouse Gas Impact Analysis by First Carbon Solutions, dated August 17, 2018 (see attached, Exhibit "8") and confirmed by the City's contracted Peer Review by Rincon Consultants, Inc., dated October 23, 2018 (see attached, Exhibit "10").

Mitigation

No mitigation is required.

Issue	Impact				Source *(Refer to Section 3: Source List)*
	No Impact	Less Than Significant Impact	Potentially Significant Unless Mitigation Incorporated	Potentially Significant Impact	
9. HAZARDS & HAZARDOUS MATERIALS. *Would the proposal:*					A1, A2, A3, M1, N1
(a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	☒	☐	☐	☐	
(b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	☒	☐	☐	☐	
(c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	☒	☐	☐	☐	
(d) Be located on a site which is					

Issue	Impact				Source *(Refer to Section 3: Source List)*
	No Impact	Less Than Significant Impact	Potentially Significant Unless Mitigation Incorporated	Potentially Significant Impact	
included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	☒	☐	☐	☐	
(e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?	☒	☐	☐	☐	
(f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	☒	☐	☐	☐	
(g) Expose people or structures, either directly or indirectly to a significant risk of loss, injury or death involving wildland fires?	☒	☐	☐	☐	

(a-b) The proposed project will not create a significant hazard to the public or the environment through the routine transport, use, or disposal of materials. Future development will be subject to the City of Salinas Zoning Code. Compliance with local, state, and federal requirements would ensure that the hazards to the public are reduced to a level of insignificance.

(c) The site is composed of a vacant lot [(see also above discussion (a-b)].

Future development will be subject to the City of Salinas Zoning Code; therefore,

the project will not emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school. The closest school is Mt. Toro High School (10 Sherwood Dr.), which is approximately 900 feet away (measured from parcel to parcel).

(d) The site is not known to be included on a list of hazardous materials sites.

(e) The site is not located within an airport land use plan area nor located within the Airport Area of Influence per Figure LU-11 of the Salinas General Plan. The site is located approximately 9,756 feet away (over a mile and half away) miles from the end of the runway (8-26) of the Salinas Municipal Airport and would not create a hazard to persons residing or working in the project area.

(f) Future development will be subject to the City of Salinas Zoning Code. The project will not interfere with an adopted emergency response plan or emergency evacuation plan.

(g) Future development will be subject to the City of Salinas Zoning Code. The project will not expose people or structures to risk of loss, injury or death involving wildland fires, because the site is an infill property and no wildlands are located nearby.

Mitigation

No mitigation is required.

Issue	Impact				Source *(Refer to Section 3: Source List)*
	No Impact	Less Than Significant Impact	Potentially Significant Unless Mitigation Incorporated	Potentially Significant Impact	
10. HYDROLOGY AND WATER QUALITY. *Would the proposal:*					A1, A2, A6, A7, A8, A9
(a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?	☒	☐	☐	☐	
(b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such	☒	☐	☐	☐	

Issue	Impact				Source *(Refer to Section 3: Source List)*
	No Impact	Less Than Significant Impact	Potentially Significant Unless Mitigation Incorporated	Potentially Significant Impact	
that the project may impede sustainable groundwater management of the basin?					
(c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or through the addition of impervious surfaces in a manner which would:					
i. result in substantial erosion or siltation on- or off-site;	☒	☐	☐	☐	
ii. substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite:	☒	☐	☐	☐	
iii. create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or	☒	☐	☐	☐	
iv. impede or redirect floor flows?	☒	☐	☐	☐	
(d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?	☒	☐	☐	☐	
(e) Conflict with or obstruct implementation of a water quality control plan or	☒	☐	☐	☐	

Issue	Impact				Source *(Refer to Section 3: Source List)*
	No Impact	**Less Than Significant Impact**	**Potentially Significant Unless Mitigation Incorporated**	**Potentially Significant Impact**	
sustainable groundwater management plans?					
(f) With regards to NPDES compliance:					
(i) Potential impact of project construction on storm water runoff?	☒	☐	☐	☐	
(ii) Potential impact of project post-construction activity on storm water runoff?	☒	☐	☐	☐	
(iii) Potential for discharge of storm water from material storage areas, vehicle or equipment fueling, vehicle or equipment maintenance (including washing), waste handling, hazardous materials handling or storage, delivery areas or loading docks, or other outdoor work areas?	☒	☐	☐	☐	
(iv) Potential for discharge of storm water to impair the beneficial uses of the receiving waters or areas that provide water quality benefit?	☒	☐	☐	☐	
(v) Potential for the discharge of storm water to cause significant harm on the biological integrity of the waterways and water bodies?	☒	☐	☐	☐	

Issue	Impact				Source *(Refer to Section 3: Source List)*
	No Impact	**Less Than Significant Impact**	**Potentially Significant Unless Mitigation Incorporated**	**Potentially Significant Impact**	
(vi) Potential for significant changes in the flow velocity or volume of storm water runoff that can cause environmental harm?					
(vii) Potential for significant increases in erosion of the project site or surrounding areas?					
(viii) Could this proposed project result in an increase in pollutant discharges to receiving waters? Consider water quality parameters such as temperature, dissolved oxygen, turbidity, and other typical Stormwater pollutants (e.g., heavy metals, pathogens, petroleum derivatives, synthetic organics, sediment, nutrients, oxygen-demanding substances, and trash).	☒	☐	☐	☐	
(ix) Could the proposed project result in a decrease in treatment and retention capacity for the site's Stormwater run-on?	☒	☐	☐	☐	
(x) Could the proposed project result in					

Issue	Impact				Source *(Refer to Section 3: Source List)*
	No Impact	**Less Than Significant Impact**	**Potentially Significant Unless Mitigation Incorporated**	**Potentially Significant Impact**	
significant alteration of receiving water quality during or following construction?					
(xi) Could the proposed project result in increased impervious surfaces and associated increased urban runoff?	☒	☐	☐	☐	
(xii) Could the proposed project create a significant adverse environmental impact to drainage patterns due to changes in urban runoff flow rates and/or volumes?	☒	☐	☐	☐	
(xiii) Could the proposed project result in increased erosion downstream?	☒	☐	☐	☐	
(xiv) Could the proposed project alter the natural ranges of sediment supply and transport to receiving waters?	☒	☐	☐	☐	
(xv) Is the project tributary to an already impaired water body, as listed on the CWA Section 303(d) list? If so, can it result in an increase in any pollutant for which the water body is already impaired?	☒	☐	☐	☐	
(xvi) Could the proposed project have a					

Issue	Impact				Source *(Refer to Section 3: Source List)*
	No Impact	**Less Than Significant Impact**	**Potentially Significant Unless Mitigation Incorporated**	**Potentially Significant Impact**	
potentially significant environmental impact on surface water quality, to either marine, fresh, or wetland waters?	☒	☐	☐	☐	
(xvii) Could the proposed project result in decreased baseflow quantities to receiving surface waterbodies?	☒	☐	☐	☐	
(xviii) Could the proposed project cause of contribute to an exceedance of applicable surface or groundwater receiving water quality objectives or degradation of beneficial uses?	☒	☐	☐	☐	
(xix) Does the proposed project adversely impact the hydrologic or water quality function of the 100-year floodplain area?	☒	☐	☐	☐	
(xx) Does the proposed project site layout adhere to the Permittee's waterbody setback requirements?	☒	☐	☐	☐	
(xxi) Can the proposed project impact aquatic, wetland, or riparian habitat?	☒	☐	☐	☐	

Issue	Impact				Source *(Refer to Section 3: Source List)*
	No Impact	Less Than Significant Impact	Potentially Significant Unless Mitigation Incorporated	Potentially Significant Impact	
	☒	☐	☐	☐	

Discussion

(a) Future development will be subject to the City of Salinas Zoning Code.

(b) Future development will be subject to the City of Salinas Zoning Code. Thus, the project would not substantially deplete groundwater supplies and would not interfere substantially with the direction or rate of flow of groundwater.

(c) The site is basically flat. Future development will be subject to the City of Salinas Zoning Code. There are no rivers or streams on or near the site.

(d) The site is located within a 100-year flood area. Future development will be subject to the City of Salinas Zoning Code. Inundation by seiche, tsunami, or mudflow is unlikely because the site is located a considerable distance from the ocean and is relatively flat thereby negating a potential mudflow.

(e -f)(i – xxi) (see "a" above)

Mitigation

No mitigation is required.

Issue	Impact				Source *(Refer to Section 3: Source List)*
	No Impact	Less Than Significant Impact	Potentially Significant Unless Mitigation Incorporated	Potentially Significant Impact	
11. LAND USE AND PLANNING. *Would the proposal:*					A1, A2, A3, M1,

Issue	Impact				Source *(Refer to Section 3: Source List)*
	No Impact	Less Than Significant Impact	Potentially Significant Unless Mitigation Incorporated	Potentially Significant Impact	
(a) Physically divide an established community?	☒	☐	☐	☐	N1
(b) Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?	☒	☐	☐	☐	

Discussion

(a) The proposed project does not have the potential to disrupt or divide the physical arrangement of the community. Existing and planned adjacent uses will not be disrupted or divided as a result of the proposed project.

(b) The proposed project includes a General Plan Amendment to change a 7.67 acre-site from Park to General Commercial/Light Industrial and a Rezone to change a 7.67 acre-site from Park to Industrial - General Commercial. Subsequent development would be subject to the City of Salinas Zoning Code including, but not limited to the development standards. design standards, and mitigation measure made a part of the Initial Study and Mitigated Negative Declaration.

Mitigation

No mitigation is required.

Issue	Impact				Source *(Refer to Section 3: Source List)*
	No Impact	Less Than Significant Impact	Potentially Significant Unless Mitigation Incorporated	Potentially Significant Impact	
12. MINERAL RESOURCES. *Would the proposal:*					A1, A2, A3

Issue	Impact				Source *(Refer to Section 3: Source List)*
	No Impact	Less Than Significant Impact	Potentially Significant Unless Mitigation Incorporated	Potentially Significant Impact	
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	☒	☐	☐	☐	
(b) Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?	☒	☐	☐	☐	

Discussion

(a-b) The proposed project will not result in the loss of availability of a known mineral resource that would be of value to the region or the residents of the state.

Mitigation

No mitigation is required.

Issue	Impact				Source *(Refer to Section 3: Source List)*
	No Impact	Less Than Significant Impact	Potentially Significant Unless Mitigation Incorporated	Potentially Significant Impact	
13. NOISE. *Would the proposal result in:*					A1, A2, A3, M1
(a) Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in	☒	☐	☐	☐	

Issue	Impact				Source *(Refer to Section 3: Source List)*
	No Impact	Less Than Significant Impact	Potentially Significant Unless Mitigation Incorporated	Potentially Significant Impact	
the local general plan or noise ordinance, or applicable standards of other agencies?					
(b) Generation of excessive groundborne vibration or groundborne noise levels?	☒	☐	☐	☐	
(c) For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	☒	☐	☐	☐	

Discussion

(a) No substantial permanent, or temporary or periodic, increases in the ambient noise level are expected with the project. According to the General Plan Master Environmental Assessment Section 9.2, ambient noise is defined as the "all encompassing noise associated with a given environment, being a composite of sounds from many sources, near and far."

(b) The site is located within the 60 CNEL contour as shown on *Figure 5.3-1 Noise Contours (CNEL)* of the Salinas General Plan, Final Environmental Impact Report, 2002. The Future Noise Contours as shown on Figure 5.3-4 of the Salinas General Plan, Final Environmental Impact Report, 2002, shows the project site as located within the 70 CNEL contour. Traffic generates the main source of noise for the depicted 70 CNEL contour.

Groundborne vibration or groundborne noise levels generated by any future development on the project site is not expected to be excessive. The Zoning Code Standards regarding noise are expected to reduce noise impacts to a level of

insignificance.

(c) The site is located approximately 1.88 miles from the Salinas Municipal Airport and is located within the 55 CNEL contour as shown on *Figure 5.3-2: Salinas Airport Future Noise Contours)* of the Salinas General Plan, Final Environmental Impact Report, 2002. Noise impacts from airport operations will not have an adverse impact on the site.

Mitigation

No mitigation is required.

Issue	Impact				Source *(Refer to Section 3: Source List)*
	No Impact	Less Than Significant Impact	Potentially Significant Unless Mitigation Incorporated	Potentially Significant Impact	
14. POPULATION AND HOUSING. *Would the proposal:*					
(a) Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly *(for example, through extension of roads or other infrastructure)*?	☒	☐	☐	☐	A1, A2, A3, M1, N1
(b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?	☒	☐	☐	☐	

Discussion

(a-b) The proposed project does not include a residential component. It will not induce substantial growth, and it will not displace housing units or people. The subject site is composed of an existing 7.67-acre vacant lot.

Mitigation

No mitigation is required.

Issue	Impact				Source *(Refer to Section 3: Source List)*
	No Impact	**Less Than Significant Impact**	**Potentially Significant Unless Mitigation Incorporated**	**Potentially Significant Impact**	
15. PUBLIC SERVICES. *Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:*					A1, A2, A7, A8, B5
(a) Fire protection?	☒	☐	☐	☐	
(b) Police protection?	☒	☐	☐	☐	
(c) Schools?	☒	☐	☐	☐	
(d) Parks?	☐	☒	☐	☐	
(e) Other public facilities?	☒	☐	☐	☐	

Discussion

(a-c) The proposed project is located on an existing vacant lot. Police and Fire services are currently available to serve the site. No schoolchildren will be generated by the project.

(d-e) Although the General Plan identifies the site as a Park, the grounds are owned by a private corporation, which entered into a lease with the City of Salinas for the use as a Park. The lease (see attached City Council Resolution No. 19242) between the City of Salinas and the current property owner, Simas-East Market Street LLC, was terminated on November 4, 2018 (see attached Termination Letter

for Lease). Per Condition No. 6 of the lease, "upon termination of the lease agreement for any reason, Tenant agrees that it will cooperate in accomplishing a change of zoning of the leased premises to correspond with the zoning designation of other properties in the area in order to give the Leased Premises the highest market potential possible." This General Plan Amendment and Rezone is in direct response to Condition No. 6 of the Lease; therefore, excluding this property further as a Park. No other government services are expected to be impacted by the proposed project.

Mitigation

No mitigation is required.

Issue	Impact				Source *(Refer to Section 3: Source List)*
	No Impact	**Less Than Significant Impact**	**Potentially Significant Unless Mitigation Incorporated**	**Potentially Significant Impact**	
16. RECREATION. *Would the proposal:*					A1, A2, M1, N1
(a) Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	☒	☐	☐	☐	
(b) Include recreational facilities or require the construction or expansion of recreational facilities, which might have an adverse physical effect on the environment?	☒	☐	☐	☐	

Discussion

(a-b) The proposed project will not increase the use in park facilities because it does not include residential development. The proposed project includes the removal of a

recreational facilities, which will not have an adverse effect on the environment.

Mitigation

No mitigation is required.

Issue	Impact				Source *(Refer to Section 3: Source List)*
	No Impact	Less Than Significant Impact	Potentially Significant Unless Mitigation Incorporated	Potentially Significant Impact	
17. TRANSPORTATION. *Would the project:*					A1, A2, A8, B5
(a) Conflict with a program plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?	☐	☐	☒	☐	
(b) Would the project conflict or be inconsistent with CEQA Guidelines Section 15064.3, Subdivision (b)?	☐	☐	☒	☐	
(c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	☐	☐	☒	☐	
(d) Result in inadequate emergency access?	☒	☐	☐	☐	

Discussion

(a-c) Transportation impacts were assessed by a Traffic Impact Analysis by Mott McDonald, dated June 12, 2019 (see attached, Exhibit “9”) and confirmed by the City’s Traffic Engineer on June 25, 2019. Following the effective date of the proposed General Plan Amendment and Rezone, the site could be developed at a floor area ratio 0.40 maximum. For purposes of the Traffic Impact Analysis, 4 percent of the floor space (4,700 square feet) was assumed to be occupied by

support office space and this space was modeled as general office space. The remaining floor area (113,900 square feet) was modeled as light industrial space. Potentially significant impacts were identified at five different intersections.

1) Natividad Road / East Laurel Drive: This intersection would operate at a deficient LOS E during the AM and PM peak hours, unchanged from existing conditions. Specific development project at project site would add 16 AM peak hour and 17 PM peak hour trips to this intersection. The impact of a specific development project at project site to the intersection is significant because the specific development project at project site will add peak hour trips to the intersection that operates at a deficient level without the specific development project at project site as discussed below:

2) Sherwood Drive – Natividad Road / East Bernal Drive – La Posada Way: This intersection would operate at a deficient LOS E (AM) and F (PM), unchanged from existing conditions. A specific development project at project site would add 16 AM peak hour and 17 PM peak hour trips to this intersection. The impact of the specific development project at project site to the intersection is significant because the specific development project at project site will add peak hour trips to the intersection that operates at a deficient level without the specific development project at project site.

3) North Main Street (SR 183) / Rossi Street: This intersection, which is under Caltrans jurisdiction, would operate at a deficient LOS D during the PM peak hour, unchanged from existing conditions. A specific development project at project site would add 6 trips to this intersection during the PM peak hour and increase the PM peak hour delay by 0.1 seconds. The impact a specific development project at project site to the intersection is significant because the specific development project at project site will increase the average vehicle delay during the PM peak hour by at least 0.1 seconds.

4) Sun Street / East Market Street: Side-street operations at this intersection (the southbound Sun Street approach) would operate at a deficient LOS F during the PM peak hour, unchanged from existing conditions. A specific development project at project site would add 31 trips to this approach during the PM peak hour. The impact of a specific development project at project site to the intersection is significant because specific development project at project site will add peak hour trips to the intersection whose southbound approach operates at LOS F without the specific development project at project site.

5) U.S. 101 Southbound Offramp – Merced Street / East Market Street: This intersection would operate at a deficient LOS F during the PM peak hour, while side-street operations (the southbound US 101 Southbound Offramp approach) would operate at a deficient LOS F during the AM and PM peak

hours, unchanged from existing conditions. A specific development project at project site would add 30 AM peak hour and 27 PM peak hour trips to this intersection. The impact of specific development project at project site to the intersection is significant because the project will increase the average vehicle delay during the AM and PM peak hours by at least 0.1 seconds.

The mitigation measures for each intersection will mitigate the impacts to less than significant.

(d) The project will not result in inadequate emergency access.

Mitigation

TRANS-1 Add a third northbound lane and third southbound lane to Natividad Road through the Natividad Road / East Laurel Drive intersection. Intersection operations would improve during the AM and PM peak hours. To ensure that the intersection at Natividad Road / East Laurel Drive will operate at acceptable level of service, the Applicant shall pay the City of Salinas Traffic Impact Fees, which would represent the project's fair-share contribution of this improvement that is included in the City of Salinas TFO (Project 61).

TRANS-2 Convert the signal phasing on the east and west intersection of Sherwood Drive – Natividad Road / East Bernal Drive-La Posada Way approaches from concurrent phasing to split phasing. Intersection operations would improve during the AM and PM peak hour to LOS D. To ensure that the intersection of Sherwood Drive – Natividad Road / East Bernal Drive-La Posada Way will operate at acceptable levels of service, the applicant shall either:

(1) Prior to the City's issuance of the first grading permit for a specific development project at project site, pay a traffic impact fee provided the City has updated its Traffic Improvement Program and Traffic Fee Ordinance to include the signal modifications at this intersection as one of the improvements that is funded by the TFO, or

(2) if the signal modifications at this intersection have not been included in the TFO, the applicant shall be responsible for either:

(a) Funding the improvements and obtaining the requisite encroachment or other permits for modifying the signal phasing and ensuring that the signal modification is in operation prior to the issuance of the first Certificate of Occupancy for a specific development project at the project site, or

(b) Concurrent with the issuance of the first grading permit for a specific development project at project site, depositing funds with the City in order

for the City to obtain the requisite permits and modifying the signal phasing ensuring that the signal modification is operational prior to the issuance of the first Certificate of Occupancy for a specific development project at the project site.

TRANS-3 Add a third northbound lane and third southbound lane on North Main Street through the North Main Street / Rossi Street intersection. Intersection operations would improve during the PM peak hour to LOS C. To ensure that the intersection at North Main Street / Rossi Street will operate at acceptable level of service, the Applicant shall pay the City of Salinas Traffic Impact Fees, which would represent the project's fair-share contribution of this improvement that is included in the City of Salinas TFO (Project 31).

TRANS-4 Signalize the intersection of Sun Street and East Market Street. The intersection would operate at LOS A during the AM and PM peak hours with signalization. To ensure that the intersection of Sun Street and East Market Street will operate at acceptable levels of service, the applicant shall be responsible for either:

(a) Funding the improvements and obtaining the requisite encroachment or other permits for installation of a traffic signal and ensure that the signal is in operation prior to the issuance of the first Certificate of Occupancy for a specific development project at the project site, or

(b) Concurrent with the issuance of the first grading permit for a specific development project at project site, depositing funds with the City in order for the City to obtaining the requisite permits for, and installation of, a traffic signal that will be operational prior to the issuance of the first Certificate of Occupancy for a specific development project at the project site.

TRANS-5 Signalize the intersection. Intersection operations would improve during the AM and PM peak hours to LOS B. To ensure that the intersection of U.S. 101 Southbound Offramp – Merced Street/East Market Street will operate at acceptable levels of service, the applicant shall either:

(1) Prior to the City's issuance of the first grading permit for a specific development project at project site, pay a traffic impact fee provided the City has updated its Traffic Improvement Program and Traffic Fee Ordinance to include a traffic signal at this intersection as one of the improvements that is funded by the TFO, or

(2) if the traffic signal at this intersection has not been included in the TFO, the applicant shall be responsible for either:

(a) Funding the improvements and obtaining the requisite encroachment or other permits for installation of a traffic signal and ensure that the signal is in operation prior to the issuance of the first Certificate of Occupancy for a specific development project at the project site, or

(b) Concurrent with the issuance of the first grading permit for a specific development project at project site, depositing funds with the City in order for the City to obtain the requisite permits and install the traffic signal ensuring that the signal is operational prior to the issuance of the first Certificate of Occupancy for a specific development project at the project site.

Issue	Impact				Source *(Refer to Section 3: Source List)*
	No Impact	**Less Than Significant Impact**	**Potentially Significant Unless Mitigation Incorporated**	**Potentially Significant Impact**	
18. TRIBAL CULTURAL RESOURCES. *Would the project:*					A5, A6, A7, B3, Q3
(a) Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a Californian Native American tribe, and that is:					
i. Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public	☒	☐	☐	☐	

Issue	Impact				Source *(Refer to Section 3: Source List)*
	No Impact	**Less Than Significant Impact**	**Potentially Significant Unless Mitigation Incorporated**	**Potentially Significant Impact**	
Resources Code Section 5020.1(k); or ii. A resource determined by the Lead Agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1 In applying the criteria set forth in Subdivision (c) of Public Resource Code 5024.1, the Lead Agency shall consider the significance of the resource to a California Native American tribe.	☐	☐	☒	☐	

(a)(i) The subject site was not included in either of the City of Salinas 1989 or 2016 City Historic and Architectural Surveys.

(a)(ii) Cultural Resources impacts were assessed by a Phase 1 Cultural and Paleontological Resources Assessment by First Carbon Solutions, dated August 17, 2018 (see attached, Exhibit "7") and confirmed by the City's contracted Peer Review by Rincon Consultants, Inc., dated October 23, 2018 (see attached, Exhibit "10"). However, there is always the potential to encounter subsurface materials during grading and construction. Therefore, pursuant to the Public Resources Code (Section 21083.2), in the event that cultural materials are encountered during grading/construction, all work shall cease until the find has been evaluated and mitigation measures put in place for the disposition and protection of any find. With mitigation measures, there is little potential for a significant impact on the environment.

On October 12, 2017, pursuant to Public Resources Code Section 21080.3.1, subd. (d), Assembly Bill 52 (AB52), and California Senate Bill 18 (SB18), City of Salinas staff sent via certified mail, a consultation request on the proposed project within 30-days of the date of the letter to all applicable California Native American Tribes whose geographic area of traditional and cultural affiliation lands boundary includes the City of Salinas as specified by the Native American Heritage Foundation.

On December 18, 2017, the Ohlone /Costanoan-Esselen Nation (OCEN) provided a response letter stating concern with the proposed project site and recommending that an OCEN Tribal Monitor be located on-site during construction (see attached, Exhibit "12"). Per Mitigation Measure TCR-1 below, pursuant to Public Resources Code (Section 21083.2), in the event that cultural materials are encountered during grading/construction in connection with development, all work shall cease until the find has been evaluated and mitigation measures put in place for the disposition and protection of any find. With mitigation measures, there is little potential for a significant impact on cultural resources.

Mitigation

TCR-1 In the event that cultural materials are encountered during grading/construction in, all work shall cease until the find has been evaluated and mitigation measures put in place for the disposition and protection of any find pursuant to Public Resources Code Section 21083.2.

Issue	Impact				Source *(Refer to Section 3: Source List)*
	No Impact	Less Than Significant Impact	Potentially Significant Unless Mitigation Incorporated	Potentially Significant Impact	
19. UTILITIES & SERVICE SYSTEMS. *Would the project:*					A1, A2, M1, N1
(a) Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause	☒	☐	☐	☐	

Issue	Impact				Source *(Refer to Section 3: Source List)*
	No Impact	Less Than Significant Impact	Potentially Significant Unless Mitigation Incorporated	Potentially Significant Impact	
significant environmental effect?					
(b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years?	☒	☐	☐	☐	
(c) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has the adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	☒	☐	☐	☐	
(d) Generate solid waste in excess of State or Local standards, or in excess of the capacity of local infrastructure, or otherwise impact the attainment of solid waste reduction goals?	☒	☐	☐	☐	
(e) Comply with federal, state, and local management and reduction statues and regulations related to solid waste?	☒	☐	☐	☐	

Discussion

(a) Salinas is an urbanized area and utilities are available to serve the site.

(b-c) The proposed project is not expected to involve a heavy usage of water and therefore does not discharge significant quantities of water into the wastewater treatment plant (also see Hydrology and Water Quality above).

(d-e) The proposed project is not expected to generate significant solid waste. Disposal of waste generated by the project is not expected to be significant, Subsequent development will be required to comply with federal, state, and local reduction statutes related to solid waste.

Mitigation

No mitigation is required.

Issue	Impact				Source *(Refer to Section 3: Source List)*
	No Impact	Less Than Significant Impact	Potentially Significant Unless Mitigation Incorporated	Potentially Significant Impact	
20. WILDFIRE. *If located in or near State responsibility areas or lands classified as very high fire hazard severity zones, would the project:*					A1, A2, M1, N1
(a) Substantially impair an adopted emergency response plan or emergency evacuation plan?	☒	☐	☐	☐	
(b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?	☒	☐	☐	☐	
(c) Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines, or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?	☒	☐	☐	☐	
(d) Expose people or structures to significant risks, including downslope or downstream	☒	☐	☐	☐	

Issue	Impact				Source *(Refer to Section 3: Source List)*
	No Impact	**Less Than Significant Impact**	**Potentially Significant Unless Mitigation Incorporated**	**Potentially Significant Impact**	
flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?					

Discussion

(a-d) The City of Salinas is not located in or near State responsible areas or lands classified at very high fire hazard severity zones.

Mitigation

No mitigation is required.

Mandatory Findings of Significance	No Impact	Less Than Significant Impact	Potentially Significant Unless Mitigated	Potentially Significant Impact
1. Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	☒	☐	☐	☐
2. Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?	☒	☐	☐	☐
3. Does the project have environmental effects, which will cause substantial adverse effects on human beings, either directly or indirectly?	☒	☐	☐	☐

3. SOURCE LIST

Source	Source Number
City of Salinas:	
Salinas General Plan, 2002.	A1
Salinas General Plan, Final Environmental Impact Report, 2002.	A2
Salinas Zoning Code: ☒ *Entire Code Section:* _____	A3
City of Salinas Stormwater Ordinance, dated March 2013	A4
1989 City Historical and Architectural Survey	A5
2016 City Historical and Architectural Survey	A6
Contracted Peer Review by Rincon Consultants Inc. of the Air Quality Impact Analysis, Greenhouse Gas Impact Analysis, Biological Resources Assessment, and Phase 1 Cultural and Paleontological Resources Assessment by First Carbon Solutions, dated October 23, 2018	A7
City of Salinas Traffic Improvement Program, dated March 2010	A8
Applicant:	
Air Quality Impact Analysis by First Carbon Solutions, dated August 17, 2018	B1
Biological Resources Assessment by First Carbon Solutions, dated August 17, 2018	B2
Phase 1 Cultural and Paleontological Resources Assessment by First Carbon Solutions, dated August 17, 2018	B3
Greenhouse Gas Impact Analysis by First Carbon Solutions, dated August 17, 2018	B4
Traffic Impact Analysis by Mott McDonald, dated June 12, 2019	B5
Monterey Bay Air Resources District:	

Source	Source Number
CEQA Air Quality Guidelines prepared by the Monterey Bay Air Resources District, dated February 2008	F1
Monterey Bay Air Resources District. 2012-2015 Air Quality Management Plan, dated March 2017	F2
Monterey Bay Community Power Authority:	
Monterey Bay Community Power Authority Implementation Plan, August 2017	G1
Field Inspections:	
By City staff, various dates	M1
Maps/Aerial Photography:	
City's aerial photographs, 2007.	N1
Other:	
Native American Heritage Commission	Q3

4. DETERMINATION

On the basis of this Initial Study:

☐ I find that the proposed project ***COULD NOT*** have a significant effect on the environment, and a ***NEGATIVE DECLARATION*** will be prepared.

☒ I find that although the proposed project could have a significant effect on the environment, there ***WILL NOT*** be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A ***MITIGATED NEGATIVE DECLARATION*** will be prepared.

☐ I find that the proposed project ***MAY*** have a significant effect on the environment, and an ***ENVIRONMENTAL IMPACT REPORT*** is required.

☐ I find that the proposed project ***MAY*** have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect:

(a) Has been adequately analyzed in *(Reference document)* pursuant to applicable legal standards; and

(b) Has been addressed by mitigation measures based on the earlier analysis as described in *Section 2: Checklist*, if the effect is a "Potentially Significant Impact" or a Negative Declaration: “Potentially Significant Unless Mitigation Incorporated".

An ***ENVIRONMENTAL IMPACT REPORT*** is required, but it must analyze only the effects that remain to be addressed.

☐ I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects:

(a) Have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and;

(b) Have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project.

NOTHING FURTHER IS REQUIRED.

Prepared by: Bobby Latino Dated: September 25, 2019

Courtney Grossman
Planning Manager

Attachments:

1. Vicinity Map
2. General Plan Amendment and Rezone – Site Plan
3. City Council Resolution No. 19242 (Expo Site Lease Agreement)
4. Termination Letter for Expo Site Lease Agreement, dated January 14, 2019
5. Air Quality Impact Analysis by First Carbon Solutions, dated September 19, 2019
6. Biological Resources Assessment by First Carbon Solutions, dated August 17, 2018
7. Phase 1 Cultural and Paleontological Resources Assessment by First Carbon Solutions, dated August 17, 2018
8. Greenhouse Gas Impact Analysis by First Carbon Solutions, dated August 17, 2018
9. Traffic Impact Analysis by Mott McDonald, dated June 12, 2019
10. Contracted Peer Review by Rincon Consultants Inc. of the Air Quality Impact Analysis, Greenhouse Gas Impact Analysis, Biological Resources Assessment, and Phase 1 Cultural and Paleontological Resources Assessment by First Carbon Solutions, dated October 23, 2018
11. Mitigation Monitoring and Reporting Program
12. Letter from Ohlone/Costanoan-Esselen Nation (OCEN), dated December 17, 2018

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North

Vicinity Map

GPA 2017-001 and RZ 2017-002
295 Sun Way

Exhibit A

\\SalSvr44\DeptPvt\ComDev\robertl\Documents\295 Sun Way\ER 2017-002\IS & MND\GPA 2017-001 & RZ 2017-002 Vicinity Map.docx

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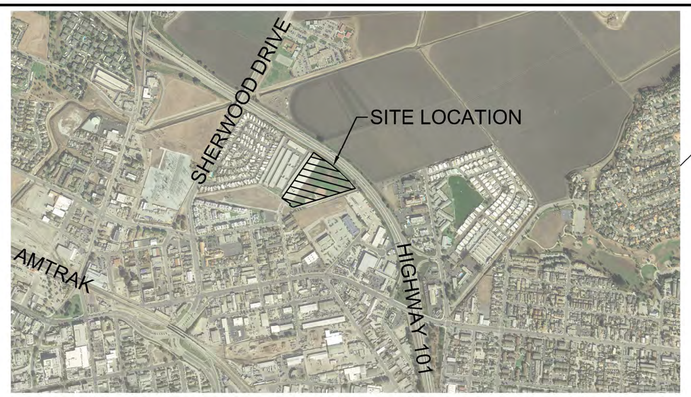

VICINITY MAP

(E) 271 SUN WAY
ZONE: IGC

(E) OPEN AREA
ZONE: PS

SUN STREET

10' PIPELINE EASEMENT

ROADWAY AND UTILITY EASEMENT (PUBLIC R.O.W.)

20' WATER LINE EASEMENT

15' SANITARY SEWER EASEMENT

10' SANITARY SEWER EASEMENT

20' SANITARY SEWER EASEMENT

PG&E R.O.W.

10' STORM SEWER EASEMENT

DENSE TREES

HIGHWAY 101

(E) 10 SIMAS ST.
ZONE: IGC

GRAPHIC SCALE

40 0 20 40 80 160

(IN FEET)
1 inch = 40 ft.

NOTES:

1. LOT SIZE: 334,105 SF OR 7.67 AC
2. FAR: 0.40 (IGC)

LEGEND

- PROPERTY LINE
- EASEMENT LINE
- EXISTING TOPOGRAPHIC CONTOUR
- AREA OF PROPOSED GENERAL PLAN AMENDMENT FROM PARK TO GENERAL COMMERCIAL/LIGHT INDUSTRIAL, AND REZONE FROM PARK TO INDUSTRIAL-GENERAL COMMERCIAL

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GENERAL PLAN AMENDMENT AND REZONE SUBMITTAL

295 SUN WAY
COUNTY OF MONTEREY STATE OF CALIFORNIA
CITY OF SALINAS

Revisions	No.

Date 04/18/2018
Scale AS SHOWN
Design AP
Drawn AP
Approved KW
Job No. 20171012

Drawing Number:

1 OF 1

DRAWING NAME: P:\2017\171012_SyWest_Salinas_Rezoning\ENG\PLANNING\SHEETS_Archive\2018-04-18\01_SSR_SITE-PLAN.dwg
PLOT DATE: 04-18-18 PLOTTED BY: phia

RESOLUTION NO. 19242 (N.C.S.)

A RESOLUTION APPROVING A LEASE AGREEMENT BETWEEN THE CITY OF SALINAS AND SIMAS-EAST MARKET LLC FOR THE USE OF THE EXPO SITE LOCATED AT 295 SUN WAY

WHEREAS, the City of Salinas operates parks and recreation programs for the residents of the City at various sites and locations throughout the City; and

WHEREAS, the City has used the vacant property located at 295 Sun Way, otherwise known as the Expo Site, pursuant to a lease agreement with the Rodeo Association for park and recreation program purposes; and

WHEREAS, Simas-East Market LLC acquired the Rodeo Association's interest in the Expo Site and has agreed to allow the City to continue its use of the Expo Site for park and recreation purposes pursuant to a new lease agreement; and

WHEREAS, the City desires to continue its use of the Expo Site upon the terms and conditions of a new lease agreement with Simas.

NOW THEREFORE, BE IT RESOLVED BY THE COUNCIL OF SALINAS, that the lease agreement between the City of Salinas and Simas-East Market LLC is hereby approved and

BE IT FURTHER RESOLVED, that the Mayor is authorized, for and on behalf of the City, and as its act and deed, to execute the lease agreement between the City of Salinas and Simas-East Market LLC on the terms and conditions presented.

PASSED AND ADOPTED this 19th day of June 2007 by the following vote:

AYES: Councilmembers Barnes, Barrera, De La Rosa, Sanchez, Villegas and Mayor Donohue

NOES: None

ABSENT: Councilmember Lutes

ABSTAIN: None

Dennis Donohue, Mayor

ATTEST:

Ann Camel, City Clerk

EXPO SITE LEASE AGREEMENT

This Lease Agreement (this "Lease Agreement") is made and entered into this 12th day of June, 2007, by and between the **CITY OF SALINAS**, a political subdivision of the State of California, hereinafter referred to as "Tenant," and **SIMAS-EAST MARKET, LLC**, a California limited liability company, hereinafter referred to as "Landlord."

RECITALS

WHEREAS, Landlord is the owner of a fee simple interest in that certain real property (the "Leased Premises"), commonly known as the Exposition Site, located at 295 Sun Way in the City of Salinas, State of California, and designated as Areas A, B, C, and D (subject to a Pacific Gas and Electric Company easement) on the site plan attached hereto as Exhibit A and incorporated herein by reference; and

WHEREAS, Tenant and Landlord's predecessor in interest, the California Rodeo Association, entered into a Lease And Agreement for Exposition Site (the "Original Lease") on June 4, 1996; and

WHEREAS, the Original Lease was terminated by action of the Salinas City Council on April 18, 2006, which termination became effective on July 24, 2006; and

WHEREAS, Landlord and Tenant now desire to enter into a new lease to re-establish the terms and conditions of the Tenant's use and occupancy of the Leased Premises.

NOW, THEREFORE, in mutual consideration of the terms, conditions, and covenants contained herein, Landlord and Tenant agree to the following.

AGREEMENTS

1. Use of Leased Premises. Tenant understands and acknowledges that Landlord and the California Rodeo Association have entered into or will enter into a license agreement pursuant to which the California Rodeo Association shall be permitted exclusive use and occupancy of the Leased Premises for an approximate three week period each year to conduct a carnival and related activities associated with the annual California Rodeo. Subject to the right of the California Rodeo Association to exclusively use and occupy the Leased Premises for a carnival and related activities for an approximate three-week period each year at a time prior to, during and immediately after the annual California Rodeo, throughout the term of this Lease Agreement, Tenant shall have the exclusive right (subject to a Pacific Gas and Electric Company easement and all other encumbrances on the title to the Leased Premises) to use the Leased Premises for all lawful purposes normally conducted by the Tenant's Parks and Recreation Department, including various park and recreational activities, such as community use of the playground facilities and apparatus, the softball and soccer fields, nighttime field rentals, and special event activities.

[redacted]

2. Acceptance of Leased Premises. Tenant agrees to take the Leased Premises in "As-Is" condition without any agreements, representations, understandings or obligations on the part of Landlord to perform any alteration, modification, repair or improvement thereto. Tenant acknowledges that the Leased Premises are in good and sanitary order, condition, and repair. Except during the approximate three-week period reserved for the use of the California Rodeo Association in section 1 of this Lease Agreement, Tenant shall, at its sole cost and expense, maintain and repair the Leased Premises and improvements thereon in a good state of condition and repair (however, Tenant shall have no obligation to make any capital repairs to the Leased Premises). Tenant, at its sole cost and expense, shall procure, maintain in effect and comply with all conditions of any and all permits, licenses and other governmental and regulatory approvals required for Tenant's use of the Leased Premises, and Tenant shall not use or occupy the Leased Premises or permit anything to be done in or about the Leased Premises in violation of a condition or restriction, if any, set forth in any encumbrance on the title to the Leased Premises, or in violation of any laws now in force or which may hereinafter be enacted or promulgated.

3. Term. The initial term of this Lease Agreement shall commence on June 1, 2007, and shall continue in full force and effect for a period of two (2) months until July 31, 2007 (the "Initial Term"). Effective August 1, 2007, and continuing thereafter until such time as this Lease Agreement may be terminated, the term of this Lease Agreement shall be extended on a month-to-month basis (the "Extended Term"), and either party shall have the right to terminate this Lease Agreement for any reason (or no reason) by giving the other party no less than thirty (30) days advance written notice of such termination. As used in this Lease Agreement, the term "Term" shall collectively mean the Initial Term and the Extended Term.

4. Rent. In consideration for Tenant's use, maintenance and repair of the Leased Premises, rent during the Initial Term of this Lease shall be one thousand four hundred dollars ($1,400.00). Concurrent with the execution of this Lease Agreement, Landlord shall provide Tenant with a written invoice for such one thousand four hundred dollar ($1,400.00) amount of rent due from Tenant, and within thirty (30) days after Tenant's receipt of such written invoice, Tenant shall pay such amount of rent to Landlord.

Rent during the Extended Term of this Lease Agreement shall be two hundred fifty dollars ($250.00) each month and shall be paid to Landlord by Tenant no later than the first day of each calendar month.

5. Alterations. During the Term, neither party shall make any alterations to the Leased Premises nor construct new buildings on the Leased Premises without the prior written consent of the other party, which written consent shall not be unreasonably withheld. Upon the expiration or termination of this Lease Agreement, Tenant shall remove any items of Tenant's fixtures, equipment and personal property from the Leased Premises. If Tenant fails to remove any such items of Tenant's fixtures, equipment or personal property from the Leased Premises designated by Landlord to be removed, then upon the expiration or termination of this Lease, and upon Tenant's vacation of the Leased Premises, all such items of Tenant's fixtures, equipment and personal property shall become the property of Landlord and Tenant shall reimburse Landlord for the cost of removal and/or storage of such items.

[redacted]

6. Zoning Designation. Upon the termination of this Lease Agreement for any reason, Tenant agrees that it will cooperate in accomplishing a change of zoning of the Leased Premises to correspond with the zoning designation of other properties in the area in order to give the Leased Premises the highest market potential possible.

7. Indemnification and Hold Harmless. Except for the approximate three-week period during which the Leased Premises are being used by the California Rodeo Association for a carnival and related activities as contemplated in Section 1 of this Lease Agreement, Tenant shall indemnify and hold Landlord harmless against any claim, loss, damage or expense, including attorney's fees and costs of defense reasonably incurred, which Landlord may suffer or incur arising out of any claim, action or proceeding that may be brought against Landlord to the extent caused by the use of the Leased Premises by Tenant or by its employees, agents or contractors.

8. Insurance. Throughout the Term of this Lease Agreement, Tenant shall keep in full force and effect a policy of commercial general liability insurance insuring Landlord and Tenant from and against all claims, demands, actions and liability for injury to or death of any persons, and for damage to property arising from or related to the use or occupancy of the Leased Premises by Tenant. Such insurance shall be written on an occurrence basis with coverage in a minimum amount of two million dollars ($2,000,000) per occurrence for bodily injury/property damage and five million dollars ($5,000,000) general aggregate limit. However, such limits shall not limit Tenant's liability or obligations under this Lease Agreement.

Tenant is a political subdivision of the State of California that is self-insuring for all forms of legal liability, and such insurance as is required under this Section 8, up to an amount of one million dollars ($1,000,000), may be met through one or more policies of self-insurance. Evidence of such self-insurance to meet the requirements of this Section 8 shall be delivered to Landlord upon both parties signing this Lease Agreement. Such policies and the coverages provided thereunder shall not change or be canceled without Tenant first giving Landlord at least thirty (30) days' prior written notice.

9. Liens. If any lien is made or filed against the Leased Premises, Tenant shall bond against or discharge the same within ten (10) days after the filing thereof. Tenant shall indemnify, defend, protect and hold Landlord and the Leased Premises free and harmless from and against any and all liability, damage, claims, demands, suits, actions or expense (including attorneys' fees) to the extent the above arise out of any work done or material supplied on or about the Leased Premises by Tenant or at Tenant's direction, including by Tenant's employees, representatives, successors, contractors, subcontractors, materialmen, subtenants or assigns.

10. Default. This Lease Agreement shall be subject to early termination by either party in the event the other party defaults in the performance of any of the covenants and conditions required herein to be kept and performed, provided such default continues for a period of thirty (30) days after receipt by the defaulting party of written notice of the existence of said default. In the event of any early termination by Tenant under this Section 10 due to a default by Landlord, Tenant shall be entitled to reimbursement of any rental amount already paid for under this Lease Agreement for any period of time occurring after the effective date of termination during which

[redacted]

Tenant shall not use and occupy the Leased Premises. Such reimbursement shall be due and payable from Landlord without the need for a formal request from Tenant.

In the event either party defaults under or breaches this Lease Agreement, both Landlord and Tenant shall be entitled to any and all such legal remedies as may be available to them under the law, including those remedies available to Landlord under California Civil Code sections 1951.2 and 1951.4.

11. Notices. Any notices under this Lease Agreement shall be sent to the parties by United States certified Mail return receipt requested, properly addressed as provided in this Section 11, postage fully prepaid, and shall be effective upon the day following such deposit in the mail.

Written notices to Tenant hereunder shall, until further notice, be addressed to:

City Manager
ATTN: Administration
200 Lincoln Avenue
Salinas, California 93901

With a copy to

City Attorney
200 Lincoln Avenue
Salinas, California 93901

Written notices to Landlord hereunder shall, until further notice, be addressed to:

Simas-East Market, LLC
c/o SyWest Development
150 Pelican Way
San Rafael, California 94901
Attn: William Vierra

12. Successors and Assigns. The terms, covenants, and conditions contained herein shall apply to and bind the heirs, successors, and assigns of all the parties hereto. However, Tenant shall have no right to sublease the Leased Premises or to assign this Lease Agreement.

13. Further Assurances. Each party agrees to do such further acts and things and to execute and deliver such additional agreements and instruments as the other party may reasonably require to consummate, evidence or confirm the agreements contained herein in the manner contemplated hereby.

14. Counterparts. This Lease Agreement may be executed in one or more counterparts, each of which shall be deemed an original, but all of which together shall constitute a single agreement.

[redacted]

15. Entire Agreement; Brokers. Except as otherwise provided herein, this Lease Agreement constitutes the entire agreement between Landlord and Tenant relating to the Leased Premises, and is the final expression of both with respect to the terms and conditions included herein. Landlord and Tenant acknowledge that any prior agreements, promises, negotiations, or representations not expressly set forth in this Lease Agreement are of no force and effect. Tenant and Landlord warrant that they have had no dealings with any broker or agent in connection with this Lease Agreement.

16. Rights and Obligations Under Lease Agreement. By entering into this Lease Agreement, the parties do not intend to create any obligations express or implied other than those set out herein; further, this Lease Agreement shall not create any rights in any party not a signatory hereto.

17. Litigation Involving Lease Agreement; Attorney's Fees. In case suit shall be brought to interpret or to enforce this Lease Agreement, or because of the breach of any other covenant or provision herein contained, the prevailing party in such action shall be entitled to recover its reasonable attorneys' fees, in addition to such costs as may be allowed by the court under Code of Civil Procedure §1033.5. Tenant's attorney's fees, if awarded, shall be calculated at the market rate.

18. Compliance With Applicable Law and Jurisdiction. This Lease Agreement shall be administered and interpreted under the laws of the State of California. Jurisdiction of litigation arising from this Lease Agreement shall be in the State of California, County of Monterey.

19. Modification. No amendments to or changes to this Lease Agreement may be made, except by a writing expressly authorized and signed by both parties.

20. **Utilities**. During the entire Term of this Lease Agreement, Tenant shall be solely responsible for and shall apply for, arrange and promptly pay directly to the utility service provider all charges for heat, hot and/or chilled water, gas, electricity, telephone, telecommunications, data, refuse and garbage removal, sewer service charges and fees, fire sprinkler, fire alarm and any other utility used, consumed or provided in, or furnished, or attributable to the Leased Premises, however supplied, at the rates charged by the supplying utility companies. All federal, state and local taxes which may from time to time be imposed upon or payable in connection with charges for utility services pursuant to this Lease Agreement shall be payable by Tenant in addition to the charges to which they relate.

21. **Landlord's Access**. During the Term of this Lease Agreement, Landlord shall have the right to access the Leased Premises for inspection, for any pre-construction activities, to show prospective tenants the Leased Premises, to post signs on the Leased Premises, to confirm Tenant's compliance with the provisions of this Lease Agreement, or for any other reasonable purpose, however, Landlord's right of access shall in no way interfere with or interrupt Tenant's use and occupancy of the Leased Premises. Tenant shall deliver to Landlord any keys necessary for such access by Landlord.

[redacted]

IN WITNESS WHEREOF, the undersigned, as authorized representatives of the City of Salinas and Simas-East Market, LLC have executed this Lease Agreement.

LANDLORD

Simas-East Market, LLC, a California Limited Liability Company

By: Syufy Enterprises, LP, a California Limited Partnership
Its: Sole Managing Member

By: Syufy Properties, Inc., a California Corporation
Its: General Partner

By: _____
William Vierra, Senior Vice President

Date: 6/18/07

TENANT

City of Salinas, a political subdivision of the State of California

_____ 6-19-07
Dennis Donohue, Mayor Date

APPROVED AS TO FORM:

_____ 19 June 2007
Vanessa W. Vallarta, City Attorney Date
By
Christopher A. Callihan, Sr. Deputy City Attorney

ATTEST:

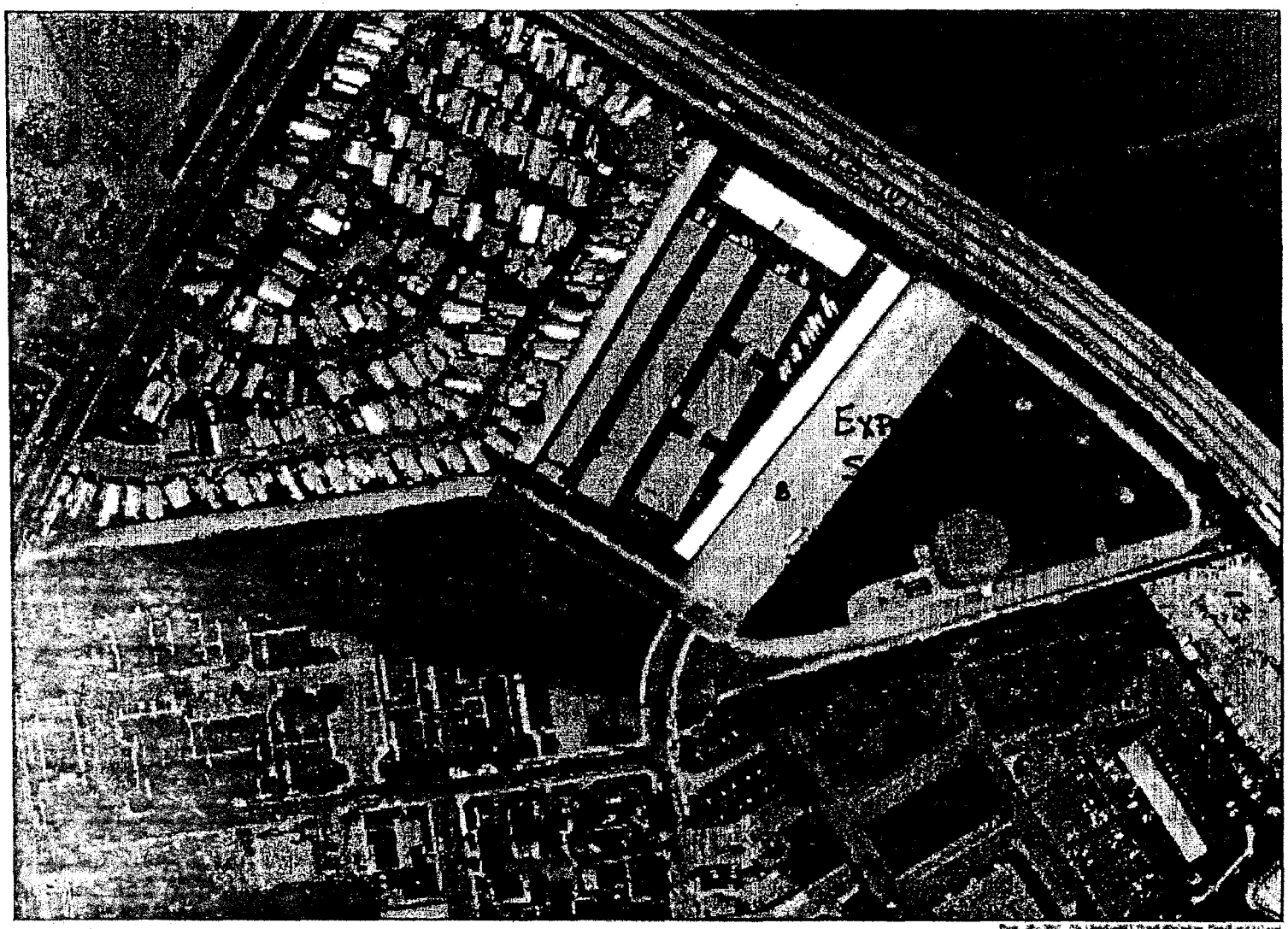
_____ 6-19-07
Ann Camel, City Clerk Date

EXHIBIT A

[SITE PLAN ATTACHED SHOWING THE LEASED PREMISES]

[redacted]

EXHIBIT A



A - Exposition Site
B - Parking Area
C - Street Area
D - PG&E Property

City of Salinas

LIBRARY & COMMUNITY SERVICES • 350 Lincoln Avenue • Salinas, California 93901 • (831) 758-7311

January 14, 2019

Simas-East Market, LLC
c/o Sy West Development
150 Pelican Way
San Rafael, CA 94901
Attn: Candice Martinez

RE: Expo Site Lease Agreement

Dear Ms. Martinez,

On October 5, 2018, the City of Salinas notified Sy West Development of its termination of the Lease Agreement for Exposition Site located at 295 Sun Way in Salinas, California effective November 4, 2018.

Following that notice, Rick Key, Parks & Urban Forestry Manager and I met with you and Lisa Beatty, Property Administrator to do a walk-thru of the site on November 8, 2018. During that walk-thru you noted the homeless encampments and a number of site concerns and repairs that needed to be addressed before Sy West would take possession of the property. A detailed listing of site concerns and necessary repairs was provided via email on November 12, 2018.

We will schedule a clean up of the homeless encampments at the Expo Site so that SyWest can secure and re-take possession of the property. We will work internally to identify potential dates and will coordinate with you on final selection and transfer of property. After the homeless encampments have been cleaned and SyWest has secured the property, we can coordinate on resolution of the remaining issues on SyWest's list, some of which may not be necessary given SyWest's plans to develop the property.

If you have any questions, please let me know.

Thank you,

Kristan Lundquist, RC
Interim Library & Community Services Director

Cc: City Manager
Assistant City Manager
City Attorney
Public Works Director

FIRSTCARBONSOLUTIONS™

Air Quality Impact Analysis
Rodeo Property Project
City of Salinas, Monterey County, California

Prepared for:
SyWest Development
150 Pelican Way
San Rafael, CA 94901

Contact: Tracy LaTray, Project Coordinator

Prepared by:
First Carbon Solutions
250 Commerce, Suite 250
Irvine, CA 92602
714.508.4100

Contact: Jason Brandman, Project Director
Phil Ault, Air Quality Services Manager

Date: September 19, 2019

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ACRONYMS AND ABBREVIATIONS

$\mu g/m^3$	micrograms per cubic meter
AB	Assembly Bill
AQI	air quality index
AQMP	Air Quality Management Plan
ARB	California Air Resources Board
BAAQMD	Bay Area Air Quality Management District
CAA	Clean Air Act
CAAQS	California Ambient Air Quality Standards
CalEEMod	California Emissions Estimator Model
CCAA	California Clean Air Act
CCR	California Code of Regulations
CEC	California Energy Commission
CEQA	California Environmental Quality Act
CO	carbon monoxide
DPM	diesel particulate matter
EPA	United States Environmental Protection Agency
ft^2	square feet
H_2S	hydrogen sulfide
HAP	hazardous air pollutant
LEV	low emission vehicle
MBARD	Monterey Bay Air Resources District
NCCAB	North Central Coast Air Basin
NO_2	nitrogen dioxide
NO_X	oxides of nitrogen
O_3	ozone
PM_{10}	particulate matter less than 10 microns in diameter
$PM_{2.5}$	particulate matter less than 2.5 microns in diameter
ppb	parts per billion
ppm	parts per million
ROG	reactive organic gases
SB	Senate Bill
SFBAAB	San Francisco Bay Area Air Basin
SIP	state implementation plan
SO_2	sulfur dioxide
SO_X	oxides of sulfur
TOG	total organic gases
VOC	volatile organic compounds

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SECTION 1: EXECUTIVE SUMMARY

1.1 - Purpose and Methods of Analysis

The following analysis was prepared to evaluate whether the Project would cause significant air quality impacts. This assessment follows the context of the California Environmental Quality Act (CEQA, California Public Resources Code Sections 21000, et seq.). The methodology follows Monterey Bay Air Resources District (MBARD) recommendations for quantification of emissions and evaluation of air quality impacts.

1.2 - Project Summary

1.2.1 - Site Location

The Rodeo Property Project is located at 295 Sun Way, south and west of US 101 in the central part of the City of Salinas, Monterey County, California (see Exhibit 1). North and south of the Project site are existing warehouse/light industrial uses. To the north of the Project site is Security Public Storage; to the south at 10 Simas Street is Celebration Church and at 34 Simas Street is a light industrial building containing an ambulance dispatch business and an electrical supply company. To the southwest of the Project at 8 Sun Street is Sun Street Centers Men's Residential Program. Adjacent to and west of the Project is open space; however, there is a mix of land uses further west of the Project, including St. James CME Church located at 285 Calle Cebu, Haciendas Place multi-family residential located at 245 Calle Cebu, and the Rancho Salinas Mobile Park located at 150 Sherwood Drive. The Project site is bounded by Sun Street and Sun Way to the west, US 101 to the east, Security Public Storage to the north, and light industrial uses to the south (see Exhibit 2).

1.2.2 - Project Description

The project is a General Plan amendment and Rezone that would allow development of industrial and commercial uses on a 6.8-acre site located on Sun Street adjacent to US 101. The proposed land use designation would allow the site to be developed at a floor area ratio of 0.4, which would allow for the development of up to 118,600 square feet (sq.ft.) of industrial floor space. For purpose of this analysis, 4 percent of the floor space (4,700 sq.ft.) was assumed to be occupied by support office space which is categorized as general office space. The remaining floor area (113,900 sq.ft.) was modeled as light industrial space. The site is designated in the General Plan as Open Space. Access to the site is provided via Sun Street and its connections to Calle Cebu and E. Market Street.

1.3 - Summary of Analysis Results

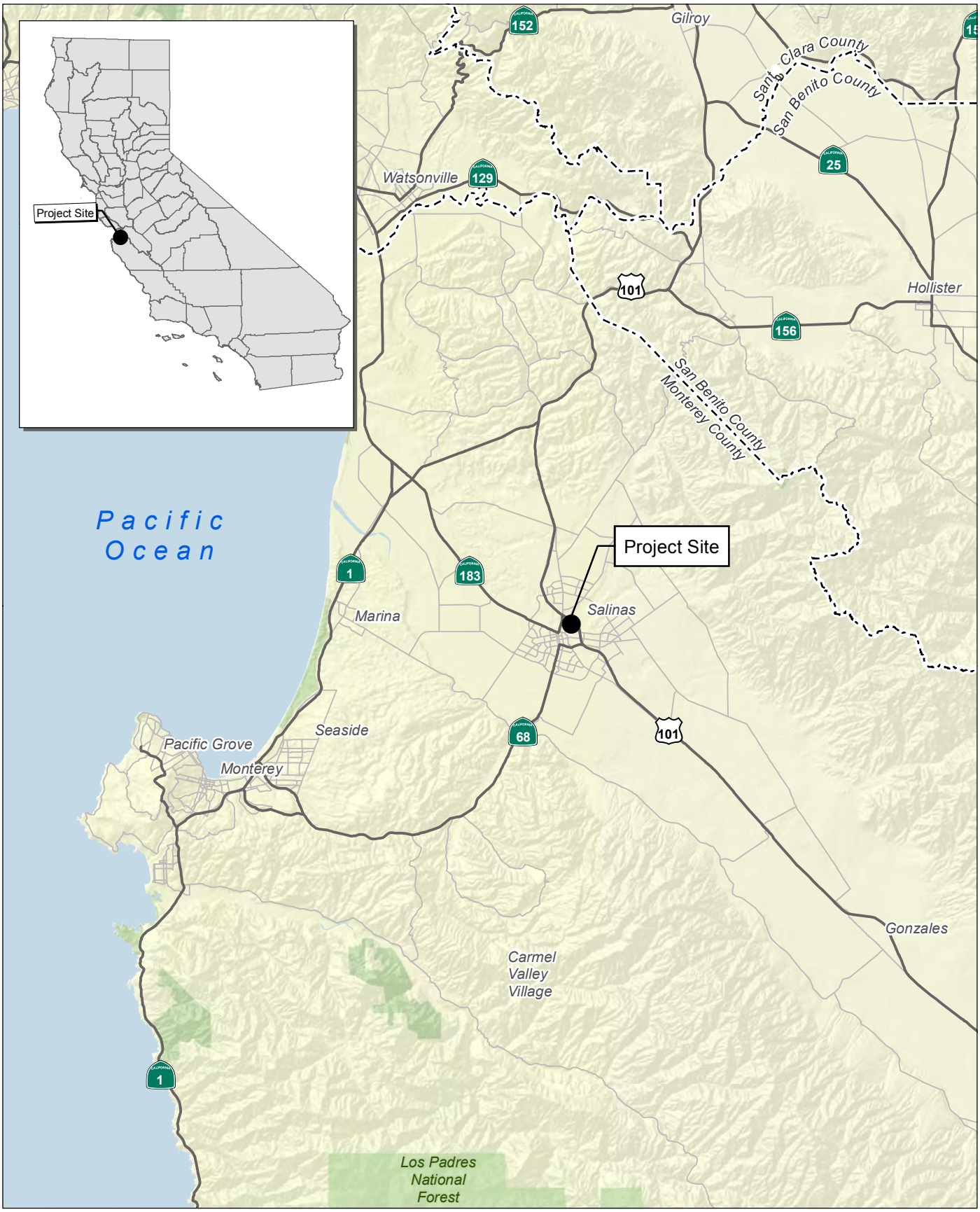
Impact AIR-1: The Project would not conflict with or obstruct implementation of the applicable air quality plan. **Less than significant impact.**

Impact AIR-2: The Project would not violate air quality standards or contribute substantially to an existing or projected air quality violation. **Less than significant impact.**

Impact AIR-3: The Project would not result in a cumulatively considerable net increase of any criteria pollutant for which the Project region is nonattainment under an applicable federal or state ambient air quality standard (including releasing emissions, which exceed quantitative thresholds for ozone precursors). **Less than significant impact.**

Impact AIR-4: The Project would not expose sensitive receptors to substantial pollutant concentrations. **Less than significant impact.**

Impact AIR-5: The Project would not create objectionable odors affecting a substantial number of people. **Less than significant impact.**



Source: Census 2000 Data, The CaSIL, FCS GIS 2016.

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5 2.5 0 5 Miles

Exhibit 1
Regional Location Map

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Source: ESRI Imagery

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1,000 500 0 1,000
Feet

Exhibit 2
Local Vicinity Map
Aerial Base

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SECTION 2: AIR QUALITY SETTING

2.1 - Air Basin

The Project site is located in the City of Salinas, Monterey County, within the North Central Coast Air Basin (NCCAB or the Air Basin), and under the jurisdiction of the MBARD. The NCCAB consists of Monterey, San Benito, and Santa Cruz counties. The NCCAB includes an area of approximately 5,159 square miles along the central coast of California. The project site is located near the coast in the northern portion of the air basin.

Air quality in the NCCAB is regulated at the federal level by the United State Environmental Protection Agency (EPA), at the state level by the California Air Resources Board (ARB), and at the regional level by MBARD. The regulatory responsibilities of these agencies are discussed in the Regulatory Framework section.

Air quality conditions within the NCCAB are primarily influenced by the NCCAB's meteorology, topography, and climate conditions. These characteristics with respect to the NCCAB are discussed below. However, the main driver of air quality conditions in any is the amount and intensity of emission sources located within the region. In some cases such as for the NCCAB, transport of air pollutants from neighboring air basins can also affect air quality conditions within the air basin.

2.2 - Attainment Status

The EPA and the ARB designate an air basin in which ambient air quality standards are exceeded as a "nonattainment" area. If standards are met, the area is designated as an "attainment" area. If there is inadequate or inconclusive data to make a definitive attainment designation, the area is considered "unclassified." National nonattainment areas are further designated as marginal, moderate, serious, severe, or extreme as a function of deviation from standards.

Each standard has a different definition, or "form," of what constitutes attainment, based on specific air quality statistics. For example, the federal 8-hour carbon monoxide (CO) standard is not to be exceeded more than once per year; therefore, an area is in attainment of the CO standard if no more than one 8-hour ambient air monitoring value exceeds the threshold per year. In contrast, the federal annual $PM_{2.5}$ standard is met if the 3-year average of the annual average $PM_{2.5}$ concentration is less than or equal to the standard.

On March 12, 2008, the EPA adopted a new 8-hour ozone standard of 0.075 ppm. In April 2012, EPA designated the NCCAB as attainment/unclassified based on 2009-2011 data. This EPA rule suspends key State Implementation Plan (SIP) requirements as long as monitoring data continues to show that the Bay Area attains the standard. The current attainment designations for the basin are summarized in Table 1. The basin is nonattainment for state ozone and PM_{10} standards.

Table 1: North Central Coast Air Basin Attainment Status

Pollutant	State Status	National Status
Ozone (O_3)	Nonattainment[2]	Attainment/Unclassified[3]
Inhalable particulates (PM_{10})	Nonattainment	Attainment
Fine particulates ($PM_{2.5}$)	Attainment	Attainment/Unclassified[4]
Carbon monoxide (CO)	Monterey Co.—Attainment San Benito Co.—Unclassified Santa Cruz Co.—Unclassified	Attainment/Unclassified
Nitrogen dioxide (NO_2)	Attainment	Attainment/Unclassified[5]
Sulfur dioxide (SO_2)	Attainment	Attainment[6]
Lead	Attainment	Attainment/Unclassified[7]

Notes:
1 State designations based on 2010 to 2012 air monitoring data.
2 Effective July 26, 2007, the ARB designated the NCCAB a nonattainment area for the State ozone standard, which was revised in 2006 to include an 8-hour standard of 0.070 ppm.
3 On March 12, 2008, EPA adopted a new 8-hour ozone standard of 0.075 ppm. In April 2012, EPA designated the NCCAB attainment/unclassified based on 2009–2011 data.
4 This includes the 2006 24-hour standard of 35 µg/m^3 and the 2012 annual standard of 12 µg/m^3.
5 In 2012, EPA designated the entire state as attainment/unclassified for the 2010 NO_2 standard.
6 In June 2011, the ARB recommended to EPA that the entire state be designated as attainment for the 2010 primary SO_2 standard. Final designations to be addressed in future EPA actions.
7 On October 15, 2008, EPA substantially strengthened the national ambient air quality standard for lead by lowering the level of the primary standard from 1.5 µg/m t0 0.15µg/m^3. Final designations were made by the EPA in November 2011.

2.3 - Local Climate

Monterey County is bounded on the west by the Pacific Ocean, on the east by the San Joaquin Valley, on the south by San Luis Obispo County and on the north by the Santa Cruz and San Mateo Counties. Most of Monterey County's population lives in the western part of the County along the coast and in sheltered valleys. These valleys act like a series of miniature air basins, trapping air pollutants within the valley and limiting dispersion.

The Salinas Valley is a steep-sloped coastal valley that opens out on Monterey Bay and extends southeastward with mountain ranges (Gabilan Range to the east and Sierra de Salinas to the west) of 2,000 to 3,000 feet elevation on either side. The broad area of the valley floor near the mouth is 25 miles wide, narrowing to about 6 miles at Soledad, which is 40 miles inland, and to 3 miles wide at King City, which is about 60 miles from the coast. At Salinas, near the northern end of the Valley, west and northwest winds occur about one-half the time during the entire year.

Winds from the San Francisco Bay Area Air Basin (SFBAAB) tend to transport pollutants into the NCCAB, where surface winds move the pollutants to the eastern portion of the NCCAB. The NCCAB pollutant levels are influenced by the transport of pollutants from SFBAAB, and assessments have indicated that 50percent of NCCAB exceedances are the result of transport of pollutants from the

SFBAAB. Regional temperatures in the area typically range from the mid-forty degrees Fahrenheit (F°) to the low 70s, and average precipitation measures approximately 19.73 inches per year. August, September, and October are typically the warmest months.

2.4 - Local Air Quality Conditions

The existing local air quality is characterized by reviewing relevant air pollution concentration data near the Project area for comparison to the NAAQS and CAAQS. Air samples are either collected continuously or periodically depending on the pollutant and the type of monitoring equipment installed. Monitoring sites are usually chosen to be representative of emissions in a community. Ozone, CO, NO_2, toxics, and PM_{10} and particulate matter of size 2.5 microns and smaller ($PM_{2.5}$) are monitored at the Salinas #3 Station, located approximately 1.3 miles northeast of the Project site. Table 2 summarizes 2014 through 2016 published air monitoring data, which is the most recent 3-year period available. The number of days each year that standards were exceeded and the amount of the exceedance provide a good indicator of severity of the air quality problems in the local area.

Table 2: Air Quality Monitoring Summary

Air Pollutant	Averaging Time	Item	2014	2015	2016
Ozone	1 Hour	Maximum 1 Hour (ppm)	0.066	0.068	0.066
		Days > State Standard (0.09 ppm)	0	0	0
	8 Hour	Maximum 8 Hour (ppm)	0.062	0.061	0.058
		Days > State Standard (0.07 ppm)	0	0	0
		Days > National Standard (0.070 ppm)	0	0	0
*Carbon monoxide	8 Hour	Maximum 8 Hour (ppm)	0.76 (2010)	0.99 (2011)	1.39 (2012)
		Days > State Standard (9.0 ppm)	0	0	0
		Days > National Standard (9 ppm)	0	0	0
Nitrogen dioxide	Annual	Annual Average (ppm)	5	5	4
	1 Hour	Maximum 1 Hour (ppm)	38.0	33.0	33.0
		Days > State Standard (0.18 ppm)	0	0	0
**PM_{10}	Annual	Annual Average ($\mu g/m^3$)	16.4 (2009)	15.3 (2010)	4.9 (2011)
	24 Hour	24 Hour ($\mu g/m^3$)	41 (2009)	39 (2010)	18 (2011)
		Days > State Standard (50 $\mu g/m^3$)	0	0	0
		Days > National Standard (150 $\mu g/m^3$)	0	0	0

Table 2 (cont.): Air Quality Monitoring Summary

Air Pollutant	Averaging Time	Item	2014	2015	2016
$PM_{2.5}$	Annual	Annual Average (µg/m^3)	4.8	4.8	5.4
	24 Hour	24 Hour (µg/m^3)	20.2	22.8	28.7
		Days > National Standard (35 µg/m^3)	0	0	0

Notes:
> = exceed ppm = parts per million µg/m^3 = micrograms per cubic meter
PM_{10} = particulate matter of size 10 microns and below; $PM_{2.5}$ = particulate matter of size 2.5 microns and below
State Standard = California Ambient Air Quality Standard
National Standard = National Ambient Air Quality Standard
All data from Salinas #3 Station
* Data from Salinas #3 Station for years 2010-2012
** Data from Salinas #3 Station for years 2009 to 2011
Sources: ARB 2016.

The health impacts of the various air pollutants of concern are presented in a number of ways. The clearest in comparison is to the state and federal ozone standards. If concentrations are below the standard, it is safe to say that no health impact would occur to anyone. When pollutant concentrations exceed the standard, health impacts will vary based on the magnitude of the exceedance. The EPA developed the Air Quality Index (AQI) as an easy to understand measure of health impact compared to concentrations in the air. Table 3 provides a description of the health impacts of ozone at different concentrations.

Table 3: Air Quality Index and Health Effects

Air Quality Index/ 8-hour Ozone Concentration	Health Effects Description
AQI-100—Moderate	**Sensitive Groups**: Children and people with asthma are the groups most at risk.
Concentration 70 ppb	**Health Effects Statements**: Unusually sensitive individuals may experience respiratory symptoms.
	Cautionary Statements: Unusually sensitive people should consider limiting prolonged outdoor exertion.
AQI-150—Unhealthy for Sensitive Groups	**Sensitive Groups**: Children and people with asthma are the groups most at risk.
Concentration 85 ppb	**Health Effects Statements**: Increasing likelihood of respiratory symptoms and breathing discomfort in active children and adults and people with respiratory disease, such as asthma.
	Cautionary Statements: Active children and adults, and people with respiratory disease, such as asthma, should limit prolonged outdoor exertion.

Table 3 (cont.): Air Quality Index and Health Effects

Air Quality Index/ 8-hour Ozone Concentration	Health Effects Description
AQI-200—Unhealthy	**Sensitive Groups**: Children and people with asthma are the groups most at risk.
Concentration 105 ppb	**Health Effects Statements**: Greater likelihood of respiratory symptoms and breathing difficulty in active children and adults and people with respiratory disease, such as asthma; possible respiratory effects in general population.
	Cautionary Statements: Active children and adults, and people with respiratory disease, such as asthma, should avoid prolonged outdoor exertion; everyone else, especially children, should limit prolonged outdoor exertion.
AQI-210—Very Unhealthy	**Sensitive Groups**: Children and people with asthma are the groups most at risk.
Concentration 115 ppb	**Health Effects Statements**: Increasingly severe symptoms and impaired breathing likely in active children and adults and people with respiratory disease, such as asthma; increasing likelihood of respiratory effects in general population.
	Cautionary Statements: Active children and adults, and people with respiratory disease, such as asthma, should avoid all outdoor exertion; everyone else, especially children, should limit outdoor exertion.
Notes: AQI = air quality index ppb = parts per billion Source: EPA 2014b.	

Based on the AQI scale for the 8-hour ozone standard, the nearest monitoring station experienced no days in the last 3 years that would be categorized as unhealthful (AQI 200), and no days that would be considered moderate (AQI 100) as measured at the Salinas #3 Station. The highest reading was 68 parts per billion (ppb) in 2015 compared with the 70-ppb cut off point for moderate (AQI 100).

The other nonattainment pollutant of concern is PM_{10}. An AQI of 100 or lower is considered moderate and would be triggered by a 24-hour average concentration of 154 $\mu g/m^3$, which is an exceedance of the federal PM_{10} standard. The Salinas #3 Station did not exceed the standard in 2014 to 2016. People with respiratory or heart disease, the elderly and children are the groups most at risk. Unusually sensitive people should consider reducing prolonged or heavy exertion.

Table 4: Air Quality Index and Health Effects

Air Quality Index/ 24-hour PM_{10} Concentration	Health Effects Description
AQI-100—Moderate Concentration 154 µg/m^3	**Sensitive Groups**: People with respiratory disease are the group most at risk.
	Health Effects Statements: Unusually sensitive people should consider reducing prolonged or heavy exertion.
	Cautionary Statements: Unusually sensitive people should consider reducing prolonged or heavy exertion.
AQI-150—Unhealthy for Sensitive Groups Concentration 254 µg/m^3	**Sensitive Groups**: People with respiratory disease are the group most at risk.
	Health Effects Statements: Increasing likelihood of respiratory symptoms and aggravation of lung disease, such as asthma
	Cautionary Statements: People with respiratory disease, such as asthma, should limit outdoor exertion
AQI-200—Unhealthy Concentration 354 µg/m^3	**Sensitive Groups**: People with respiratory disease are the group most at risk.
	Health Effects Statements: Increased respiratory symptoms and aggravation of lung disease, such as asthma; possible respiratory effects in general population.
	Cautionary Statements:—
AQI-210—Very Unhealthy Concentration 361 µg/m^3	**Sensitive Groups**: People with respiratory disease are the group most at risk.
	Health Effects Statements: Significant increase in respiratory symptoms and aggravation of lung disease, such as asthma; increasing likelihood of respiratory effects in general population.
	Cautionary Statements: People with respiratory disease, such as asthma, should avoid any outdoor activity; everyone else, especially the elderly and children, should limit outdoor exertion.

Notes:
AQI = air quality index
µg/m^3 = micrograms (one-millionth of a gram) per cubic meter
Source: EPA 2014b.

SECTION 3: REGULATORY FRAMEWORK AND RULES

Air pollutants are regulated to protect human health and for secondary effects such as visibility and building soiling. The Clean Air Act of 1970 tasks the United States Environmental Protection Agency (EPA) with setting air quality standards. The State of California also sets air quality standards that, in some cases, are more stringent than federal standards and address additional pollutants. The ARB is the State agency responsible for setting air quality standards for California. The following section describes these federal and state standards and the health effects of the regulated pollutants.

Air pollutants are regulated at the national, state, and air basin or county level; each agency has a different level of regulatory responsibility. The EPA regulates at the national level, the ARB regulates at the state level, and the Air District regulates at the air basin level.

The EPA is responsible for national and interstate air pollution issues and policies. The EPA sets national vehicle and stationary source emission standards, oversees approval of all SIPs, provides research and guidance for air pollution programs, and sets National Ambient Air Quality Standards, (also known as federal standards, described earlier).

A SIP is a document prepared by each state describing existing air quality conditions and measures followed to attain and maintain federal standards. The SIP for the State of California is administered by the ARB, which has overall responsibility for statewide air quality maintenance and air pollution prevention. California's SIP incorporates individual federal attainment plans for regional air districts—each air district prepares its federal attainment plan, which is sent to ARB to be approved and incorporated into the California SIP. Federal attainment plans include the technical foundation for understanding air quality (e.g., emission inventories and air quality monitoring), control measures and strategies, and enforcement mechanisms.

Areas designated non-attainment must develop air quality plans and regulations to achieve standards by specified dates depending on the severity of the exceedances. For much of the country, implementation of federal motor vehicle standards and compliance with federal permitting requirements for industrial sources are adequate to attain air quality standards on schedule. For many areas of California, however, additional state and local regulation is required to achieve the standards. Regulations adopted by California are summarized in the following sections.

3.1 - Clean Air Act

Congress established much of the basic structure of the Clean Air Act (CAA) in 1970, and made major revisions in 1977 and 1990. Six common air pollutants (also known as criteria pollutants) are in the CAA. These are particulate matter, ground-level ozone, CO, sulfur oxides, nitrogen oxides, and lead. EPA calls these pollutants criteria air pollutants because it regulates them by developing human health-based and/or environmentally based criteria (science-based guidelines) for setting permissible levels. The set of limits based on human health are primary standards. Another set of limits intended to prevent environmental and property damage are secondary standards (EPA 2014a). The federal standards are National Ambient Air Quality Standards (NAAQS). The air quality

standards provide benchmarks for determining whether air quality is healthy at specific locations and whether development activities will cause or contribute to a violation of the standards. The criteria pollutants are:

- Ozone (O_3)
- Nitrogen dioxide (NO_2)
- Lead (Pb)
- Particulate matter (PM_{10} and $PM_{2.5}$)
- Carbon monoxide (CO)
- Sulfur dioxide (SO_2)

The federal standards were set to protect public health, including that of sensitive individuals; thus, EPA updates these standards when more medical research is available regarding the health effects of the criteria pollutants. Primary federal standards are the levels of air quality necessary, with an adequate margin of safety, to protect the public health (ARB 2013a).

3.2 - California Clean Air Act

The California Legislature enacted the California Clean Air Act (CCAA) in 1988 to address air quality issues of concern not adequately addressed by the federal CAA at the time. California's air quality problems were and are some of the most severe in the nation and required additional actions beyond the federal mandates. The ARB administers California Ambient Air Quality Standards (CAAQS) for the 10 air pollutants designated in the CCAA. The 10 state air pollutants are the six federal standards listed above as well visibility-reducing particulates, hydrogen sulfide, sulfates, and vinyl chloride. EPA authorized California to adopt its own regulations for motor vehicles and other sources that are more stringent than similar federal regulations implementing the CAA. Generally, the planning requirements of the CCAA are less stringent than federal CAA; therefore, consistency with the CAA will also demonstrate consistency with the CCAA.

3.3 - Toxic Air Contaminants

A toxic air contaminant (TAC) is an air pollutant that may cause or contribute to an increase in mortality or serious illness, or that may pose a hazard to human health. TACs are usually present in minute quantities in the ambient air; however, their high toxicity or health risk may pose a threat to public health even at low concentrations. There are no ambient air quality standards for TAC emissions. TACs are regulated in terms of health risks to individuals and populations exposed to the pollutants. The 1990 Clean Air Act Amendments, significantly expanded EPA's authority to regulate hazardous air pollutants (HAPs). Section 112 of the CAA lists 187 hazardous air pollutants regulated by source category. Authority to regulate these pollutants was delegated to the States. ARB and local air districts regulate TACs and HAPs in California.

3.4 - Air Pollutant Description and Health Effects

The federal and state ambient air quality standards, relevant effects, properties, and sources of the pollutants are summarized in Table 5.

Ozone

Ozone is not emitted directly into the air but is formed by a photochemical reaction in the atmosphere. Ozone precursors, which include reactive organic compounds (ROC) and nitrous oxides (NO_X), react in the atmosphere in the presence of sunlight to form ozone. Because photochemical reaction rates depend on the intensity of ultraviolet light and air temperature, ozone is primarily a summer air pollution problem. Often, the effects of emitted ROC and NO_X are felt a distance downwind of the emission sources. Ozone is subsequently considered a regional pollutant. Ground-level ozone is a respiratory irritant and an oxidant that increases susceptibility to respiratory infections and can cause substantial damage to vegetation and other materials.

Ozone can irritate lung airways and cause inflammation much like a sunburn. Other symptoms include wheezing, coughing, pain when taking a deep breath, and breathing difficulties during exercise or outdoor activities. People with respiratory problems are most vulnerable, but even healthy people who are active outdoors can be affected when ozone levels are high. Chronic ozone exposure can induce morphological (tissue) changes throughout the respiratory tract, particularly at the junction of the conducting airways and the gas exchange zone in the deep lung. Anyone who spends time outdoors in the summer is at risk, particularly children and other people who are more active outdoors. Even at very low levels, ground-level ozone triggers a variety of health problems, including aggravated asthma, reduced lung capacity, and increased susceptibility to such respiratory illnesses as pneumonia and bronchitis.

Ozone also damages vegetation and ecosystems. It leads to reduced agricultural crop and commercial forest yields; reduced growth and survivability of tree seedlings; and increased susceptibility to diseases, pests, and other stresses such as harsh weather. In the United States alone, ozone is responsible for an estimated $500 million in reduced crop production each year. In addition, ozone causes damage to buildings, rubber, and some plastics.

Ozone is a regional pollutant, as the reactions forming it take place over time, and it materializes downwind from the sources of the emissions. As a photochemical pollutant, ozone is formed only during daylight hours under appropriate conditions, but is destroyed throughout the day and night. Thus, ozone concentrations vary depending upon both the time of day and the location. Even in pristine areas, some ambient ozone forms from natural emissions that are not controllable. This is termed background ozone. The average background ozone concentrations near sea level are in the range of 0.015 to 0.035 parts per million (ppm), with a maximum of about 0.04 ppm.

Reactive Organic Gases

Reactive organic gases (ROG) are defined as any compound of carbon, excluding CO, carbon dioxide, carbonic acid, metallic carbides or carbonates, and ammonium carbonate, which participate in atmospheric photochemical reactions. ROG consist of nonmethane hydrocarbons and oxygenated hydrocarbons. Hydrocarbons are organic compounds that contain only hydrogen and carbon atoms. Nonmethane hydrocarbons are hydrocarbons that do not contain the unreactive hydrocarbon methane. Oxygenated hydrocarbons are hydrocarbons with oxygenated functional groups attached.

It should be noted that there are no state or national ambient air quality standards for ROG because ROG is not classified as criteria pollutant. ROG is regulated, however, because a reduction in ROG emissions reduces certain chemical reactions that contribute to the formulation of ozone. ROG is transformed into organic aerosols in the atmosphere, which contribute to higher PM_{10} levels and lower visibility.

Nitrogen Oxides

During combustion of fossil fuels, oxygen reacts with nitrogen to produce nitrogen oxides or NO_X. This occurs primarily in motor vehicle internal combustion engines and fossil fuel-fired electric utility facilities and industrial boilers. The pollutant NO_x is a concern because it is an ozone precursor, which means that it helps form ozone. When NO_x and ROG are released in the atmosphere, they can chemically react with one another in the presence of sunlight and heat to form ozone. NO_x can also be a precursor to PM_{10} and $PM_{2.5}$.

Because NO_x and ROG are ozone precursors, the health effects associated with ozone (as discussed below in Table 5) are also indirect health effects associated with significant levels of NO_X and ROG emissions.

Particulate Matter (PM_{10} and $PM_{2.5}$)

PM is particulate matter in the air that includes a mixture of solids and liquid droplets. Some particles are emitted directly; others are formed in the atmosphere when other pollutants react. PM is so small that they can get into the lungs, potentially causing serious health problems. PM_{10} is 10 microns in diameter, smaller than the width of a human hair. $PM_{2.5}$ is 2.5 microns in diameter and consists of "fine" particles. These fine particles are so small they can be detected only with an electron microscope. Sources of fine particles include all types of combustion, including motor vehicles, power plants, residential wood burning, forest fires, agricultural burning, and some industrial processes.

These particles come in many sizes and shapes and can be made up of hundreds of different chemicals. Some particles, known as primary particles, are emitted directly from a source, such as construction sites, unpaved roads, fields, smokestacks, or fires. Others form in complicated reactions in the atmosphere from chemicals such as sulfur dioxides and nitrogen oxides that are emitted from power plants, industrial activity, and automobiles. These particles, known as secondary particles, make up most of the fine particle pollution in the United States.

Particle exposure can lead to a variety of health effects. For example, numerous studies link particle levels to increased hospital admissions and emergency room visits—and even to death from heart or lung diseases. Both long- and short-term particle exposures have been linked to health problems. Long-term exposures, such as those experienced by people living for many years in areas with high particle levels, have been associated with problems such as reduced lung function, the development of chronic bronchitis, and even premature death. Short-term exposures to particles (hours or days) can aggravate lung disease, causing asthma attacks and acute bronchitis, and may increase susceptibility to respiratory infections. In people with heart disease, short-term exposures have been linked to heart attacks and arrhythmias. Healthy children and adults have not been reported

to suffer serious effects from short-term exposures, although they may experience temporary minor irritation when particle levels are elevated.

Carbon Monoxide

Carbon monoxide (CO) is of less concern in the NCCAB because it is classified as an attainment area. CO is a colorless, odorless gas that is formed when carbon in fuel is not burned completely. It is a component of motor vehicle exhaust, which contributes about 56 percent of all CO emissions nationwide. Other non-road engines and vehicles (such as construction equipment and boats) contribute about 22 percent of all CO emissions nationwide. Higher levels of CO generally occur in areas with heavy traffic congestion. In cities, 85 to 95 percent of all CO emissions may come from motor vehicle exhaust. Other sources of CO emissions include industrial processes (such as metals processing and chemical manufacturing), residential wood burning, and natural sources such as forest fires. Woodstoves, gas stoves, cigarette smoke, and unvented gas and kerosene space heaters are sources of CO indoors.

Motor vehicles are the dominant source of CO emissions in most areas. CO is described as having only a local influence because it dissipates quickly. High CO levels develop primarily during winter, when periods of light winds combine with the formation of ground-level temperature inversions (typically from the evening through early morning). These conditions result in reduced dispersion of vehicle emissions. Because CO is a product of incomplete combustion, motor vehicles exhibit increased CO emission rates at low air temperatures. High CO concentrations occur in areas of limited geographic size, sometimes referred to as hot spots. Since CO concentrations are strongly associated with motor vehicle emissions, high CO concentrations generally occur in the immediate vicinity of roadways with high traffic volumes and traffic congestion, active parking lots, and in automobile tunnels. Areas adjacent to heavily traveled and congested intersections are particularly susceptible to high CO concentrations.

CO is a public health concern because it combines readily with hemoglobin, reducing the amount of oxygen transported in the bloodstream. The health threat from relatively low levels of CO is most serious for those who suffer from such heart-related diseases as angina, clogged arteries, or congestive heart failure. For a person with heart disease, a single exposure to CO at low levels may cause chest pain and reduce that person's ability to exercise; repeated exposures may contribute to other cardiovascular effects. High levels of CO can affect even healthy people. People who breathe high levels of CO can develop vision problems, reduced ability to work or learn, reduced manual dexterity, and difficulty performing complex tasks. At extremely high levels, CO is poisonous and can cause death.

Toxic Air Contaminants

In addition to the criteria pollutants, discussed above, toxic air contaminants (TACs), also known as hazardous air pollutants (HAPs), are another group of pollutants of concern. A TAC is defined as an air pollutant that may cause or contribute to an increase in mortality or serious illness, or that may pose a hazard to human health. TACs are usually present in minute quantities in the ambient air; however, their high toxicity or health risk may pose a threat to public health even at low concentrations. In general, for those TACs that may cause cancer, there are thresholds set by

regulatory agencies below which adverse health impacts are not expected to occur. This contrasts with the criteria pollutants for which acceptable levels of exposure can be determined and for which the state and federal governments have set ambient air quality standards.

According to the California Almanac of Emissions and Air Quality, the majority of the estimated health risk from TACs for the State of California can be attributed to relatively few compounds, the most important of which is diesel particulate matter (DPM) from diesel-fueled engines.

Diesel Particulate Matter

The ARB identified PM emissions from diesel-fueled engines as a TAC in August 1998 under California's TAC program. The State of California, after a 10-year research program, determined in 1998 that DPM from diesel-fueled engines is a human carcinogen and that chronic (long-term) inhalation exposure to DPM poses a chronic (long-term) health risk. According to ARB's 2013 Almanac, on-road diesel-fueled vehicles contribute approximately 42 percent of the statewide total inventory, with an additional 55 percent attributed to other mobile sources such as construction and mining equipment, agricultural equipment, and transport refrigeration units.[1] The remaining DPM inventory was generated by stationary point sources and aggregated stationary sources.

[1] The California Almanac of Emissions and Air Quality. 2013 Edition. Website: https://www.arb.ca.gov/aqd/almanac/almanac13/almanac2013all.pdf.

Table 5: Description of Air Pollutants

Air Pollutant	Averaging Time	California Standard	Federal Standard[a]	Most Relevant Effects from Pollutant Exposure	Properties	Sources
Ozone	1 Hour	0.09 ppm	—	Irritate respiratory system; reduce lung function; breathing pattern changes; reduction of breathing capacity; inflame and damage cells that line the lungs; make lungs more susceptible to infection; aggravate asthma; aggravate other chronic lung diseases; cause permanent lung damage; some immunological changes; increased mortality risk; vegetation and property damage.	Ozone is a photochemical pollutant not emitted directly into the atmosphere, but is formed by a complex series of chemical reactions between volatile organic compounds (VOC), oxides of nitrogen (NO_x), and sunlight. Ozone is a regional pollutant generated over a large area and is transported and spread by the wind.	Ozone is a secondary pollutant; thus, it is not emitted directly into the lower level of the atmosphere. The primary sources of ozone precursors (VOC and NO_x) are mobile sources (on-road and off-road vehicle exhaust).
	8 Hour	0.070 ppm (parts per million)	0.070 ppm[f]			
Carbon monoxide	1 Hour	20 ppm	35 ppm	Ranges depending on exposure: slight headaches; nausea; aggravation of angina pectoris (chest pain) and other aspects of coronary heart disease; decreased exercise tolerance in persons with peripheral vascular disease and lung disease; impairment of central nervous system functions; possible increased risk to fetuses; death.	Carbon monoxide is a colorless, odorless, toxic gas. Carbon monoxide is somewhat soluble in water; therefore, rainfall and fog can suppress carbon monoxide conditions. Carbon monoxide enters the body through the lungs, dissolves in the blood, replaces oxygen as an attachment to hemoglobin, and reduces available oxygen in the blood.	Carbon monoxide is produced by incomplete combustion of carbon-containing fuels (e.g., gasoline, diesel fuel, and biomass). Sources include motor vehicle exhaust, industrial processes (metals processing and chemical manufacturing), residential wood burning, and natural sources.
	8 Hour	9.0 ppm	9 ppm			
Nitrogen dioxide[b]	1 Hour	0.18 ppm	0.100 ppm	Potential to aggravate chronic respiratory disease and respiratory symptoms in sensitive groups; risk to public health implied by pulmonary and extra-pulmonary biochemical and cellular changes and pulmonary structural changes; contribution to atmospheric discoloration; increased visits to hospital for respiratory illnesses.	During combustion of fossil fuels, oxygen reacts with nitrogen to produce nitrogen oxides—NO_x (NO, NO_2, NO_3, N_2O, N_2O_3, N_2O_4, and N_2O_5). NO_x is a precursor to ozone, PM_{10}, and $PM_{2.5}$ formation. NO_x can react with compounds to form nitric acid and related small particles and result in PM related health effects.	NO_x is produced in motor vehicle internal combustion engines and fossil fuel-fired electric utility and industrial boilers. Nitrogen dioxide (NO_2) forms quickly from NO_x emissions. NO_2 concentrations near major roads can be 30 to 100 percent higher than those at monitoring stations.
	Annual	0.030 ppm	0.053 ppm			

Table 5 (cont.): Description of Air Pollutants

Air Pollutant	Averaging Time	California Standard	Federal Standard[a]	Most Relevant Effects from Pollutant Exposure	Properties	Sources
Sulfur dioxide[c]	1 Hour	0.25 ppm	0.075 ppm	Bronchoconstriction accompanied by symptoms which may include wheezing, shortness of breath and chest tightness, during exercise or physical activity in persons with asthma. Some population-based studies indicate that the mortality and morbidity effects associated with fine particles show a similar association with ambient sulfur dioxide levels. It is not clear whether the two pollutants act synergistically or one pollutant alone is the predominant factor.	Sulfur dioxide is a colorless, pungent gas. At levels greater than 0.5 ppm, the gas has a strong odor, similar to rotten eggs. Sulfur oxides (SO_x) include sulfur dioxide and sulfur trioxide. Sulfuric acid is formed from sulfur dioxide, which can lead to acid deposition and can harm natural resources and materials. Although sulfur dioxide concentrations have been reduced to levels well below state and federal standards, further reductions are desirable because sulfur dioxide is a precursor to sulfate and PM_{10}.	Human caused sources include fossil-fuel combustion, mineral ore processing, and chemical manufacturing. Volcanic emissions are a natural source of sulfur dioxide. The gas can also be produced in the air by dimethylsulfide and hydrogen sulfide. Sulfur dioxide is removed from the air by dissolution in water, chemical reactions, and transfer to soils and ice caps. The sulfur dioxide levels in the State are well below the maximum standards.
	3 Hour	—	0.5 ppm			
	24 Hour	0.04 ppm	0.14 ppm (for certain areas)			
	Annual	—	0.030 ppm (for certain areas)			
Particulate matter (PM_{10})	24 hour	50 µg/m^3 (microgram per cubic meter)	150 µg/m^3	• Short-term exposure (hours/days): irritation of the eyes, nose, throat; coughing; phlegm; chest tightness; shortness of breath; aggravate existing lung disease, causing asthma attacks and acute bronchitis; those with heart disease can suffer heart attacks and arrhythmias. • Long-term exposure: reduced lung function; chronic bronchitis; changes in lung morphology; death.	Suspended particulate matter is a mixture of small particles that consist of dry solid fragments, droplets of water, or solid cores with liquid coatings. The particles vary in shape, size, and composition. PM_{10} refers to particulate matter that is between 2.5 and 10 microns in diameter, (1 micron is one-millionth of a meter). $PM_{2.5}$ refers to particulate matter that is 2.5 microns or less in diameter, about one-thirtieth the size of the average human hair.	Stationary sources include fuel or wood combustion for electrical utilities, residential space heating, and industrial processes; construction and demolition; metals, minerals, and petrochemicals; wood products processing; mills and elevators used in agriculture; erosion from tilled lands; waste disposal, and recycling. Mobile or transportation related sources are from vehicle exhaust and road dust. Secondary particles form from reactions in the atmosphere.
	Mean	20 µg/m^3	—			
Particulate matter ($PM_{2.5}$)	24 Hour	—	35 µg/m^3			
	Annual	12 µg/m^3	12.0 µg/m^3			
Visibility-reducing particles	8 Hour	See note below[d]				

Table 5 (cont.): Description of Air Pollutants

Air Pollutant	Averaging Time	California Standard	Federal Standard[a]	Most Relevant Effects from Pollutant Exposure	Properties	Sources
Sulfates	24 Hour	25 µg/m^3	—	(a) Decrease in ventilatory function; (b) aggravation of asthmatic symptoms; (c) aggravation of cardio-pulmonary disease; (d) vegetation damage; (e) degradation of visibility; (f) property damage.	The sulfate ion is a polyatomic anion with the empirical formula SO_4^{2-}. Sulfates occur in combination with metal and/or hydrogen ions. Many sulfates are soluble in water.	Sulfates are particulates formed through the photochemical oxidation of sulfur dioxide. In California, the main source of sulfur compounds is combustion of gasoline and diesel fuel.
Lead[e]	30-day	1.5 µg/m^3	—	Lead accumulates in bones, soft tissue, and blood and can affect the kidneys, liver, and nervous system. It can cause impairment of blood formation and nerve conduction, behavior disorders, mental retardation, neurological impairment, learning deficiencies, and low IQs.	Lead is a solid heavy metal that can exist in air pollution as an aerosol particle component. Leaded gasoline was used in motor vehicles until around 1970. Lead concentrations have not exceeded state or federal standards at any monitoring station since 1982.	Lead ore crushing, lead-ore smelting, and battery manufacturing are currently the largest sources of lead in the atmosphere in the United States. Other sources include dust from soils contaminated with lead-based paint, solid waste disposal, and crustal physical weathering.
	Quarter	—	1.5 µg/m^3			
	Rolling 3-month average	—	0.15 µg/m^3			
Vinyl chloride[e]	24 Hour	0.01 ppm	—	Short-term exposure to high levels of vinyl chloride in the air causes central nervous system effects, such as dizziness, drowsiness, and headaches. Epidemiological studies of occupationally exposed workers have linked vinyl chloride exposure to development of a rare cancer, liver angiosarcoma, and have suggested a relationship between exposure and lung and brain cancers.	Vinyl chloride, or chloroethene, is a chlorinated hydrocarbon and a colorless gas with a mild, sweet odor. In 1990, the Air Resources Board identified vinyl chloride as a toxic air contaminant and estimated a cancer unit risk factor.	Most vinyl chloride is used to make polyvinyl chloride plastic and vinyl products, including pipes, wire and cable coatings, and packaging materials. It can be formed when plastics containing these substances are left to decompose in solid waste landfills. Vinyl chloride has been detected near landfills, sewage plants, and hazardous waste sites.

Table 5 (cont.): Description of Air Pollutants

Air Pollutant	Averaging Time	California Standard	Federal Standard[a]	Most Relevant Effects from Pollutant Exposure	Properties	Sources
Hydrogen sulfide	1 Hour	0.03 ppm	—	High levels of hydrogen sulfide can cause immediate respiratory arrest. It can irritate the eyes and respiratory tract and cause headache, nausea, vomiting, and cough. Long exposure can cause pulmonary edema.	Hydrogen sulfide (H2S) is a flammable, colorless, poisonous gas that smells like rotten eggs.	Manure, storage tanks, ponds, anaerobic lagoons, and land application sites are the primary sources of hydrogen sulfide. Anthropogenic sources include the combustion of sulfur containing fuels (oil and coal).
Volatile organic compounds (VOC)		There are no State or federal standards for VOCs because they are not classified as criteria pollutants.		Although health-based standards have not been established for VOCs, health effects can occur from exposures to high concentrations because of interference with oxygen uptake. In general, concentrations of VOCs are suspected to cause eye, nose, and throat irritation; headaches; loss of coordination; nausea; and damage to the liver, the kidneys, and the central nervous system. Many VOCs have been classified as toxic air contaminants.	Reactive organic gases (ROG), or VOCs, are defined as any compound of carbon—excluding carbon monoxide, carbon dioxide, carbonic acid, metallic carbides or carbonates, and ammonium carbonate—that participates in atmospheric photochemical reactions. Although there are slight differences in the definition of ROG and VOCs, the two terms are often used interchangeably.	Indoor sources of VOCs include paints, solvents, aerosol sprays, cleansers, tobacco smoke, etc. Outdoor sources of VOCs are from combustion and fuel evaporation. A reduction in VOC emissions reduces certain chemical reactions that contribute to the formulation of ozone. VOCs are transformed into organic aerosols in the atmosphere, which contribute to higher PM10 and lower visibility.
Diesel particulate matter (DPM)		There are no ambient air quality standards for DPM.		Some short-term (acute) effects of DPM exposure include eye, nose, throat, and lung irritation, coughs, headaches, light-headedness, and nausea. Studies have linked elevated particle levels in the air to increased hospital admissions, emergency room visits, asthma attacks, and premature deaths among those suffering from respiratory problems. Human studies on the carcinogenicity of	DPM is a source of PM2.5—diesel particles are typically 2.5 microns and smaller. Diesel exhaust is a complex mixture of thousands of particles and gases produced when an engine burns diesel fuel. Organic compounds account for 80 percent of the total particulate matter mass, which consists of compounds such as hydrocarbons and their derivatives, and polycyclic aromatic hydrocarbons and their derivatives.	Diesel exhaust is a major source of ambient particulate matter pollution in urban environments. Typically, the main source of DPM is from combustion of diesel fuel in diesel-powered engines. Such engines are in on-road vehicles such as diesel trucks, off-road construction vehicles, diesel electrical generators, and various pieces of stationary construction equipment.

Table 5 (cont.): Description of Air Pollutants

Air Pollutant	Averaging Time	California Standard	Federal Standard[a]	Most Relevant Effects from Pollutant Exposure	Properties	Sources
				DPM demonstrate an increased risk of lung cancer, although the increased risk cannot be clearly attributed to diesel exhaust exposure.	Fifteen polycyclic aromatic hydrocarbons are confirmed carcinogens, a number of which are in diesel exhaust.	

Notes:
ppm = parts per million (concentration) $\mu g/m^3$ = micrograms per cubic meter Annual = Annual Arithmetic Mean 30-day = 30-day average Quarter = Calendar quarter
NO_x = oxides of nitrogen VOC = volatile organic compounds NO_2 = nitrogen dioxide SO_x = oxides of sulfur DPM = diesel particulate matter ROG = reactive organic gases
PM_{10} = particulate matter of size 10 microns and below $PM_{2.5}$ = particulate matter of size 2.5 microns and below H_2S = hydrogen sulfide SO_4^{2-} = sulfate SO_2 = sulfur dioxide

[a] Federal standard refers to the primary national ambient air quality standard, or the levels of air quality necessary, with an adequate margin of safety to protect the public health. All standards listed are primary standards except for 3 Hour SO_2, which is a secondary standard. A secondary standard is the level of air quality necessary to protect the public welfare from any known or anticipated adverse effects of a pollutant.

[b] To attain the 1-hour NO_2 national standard, the 3-year average of the annual 98th percentile of the 1-hour daily maximum concentrations at each site must not exceed 100 parts per billion (0.100 ppm).

[c] On June 2, 2010, a new 1-hour SO_2 standard was established and the existing 24-hour and annual primary standards were revoked. To attain the 1-hour national standard, the 3-year average of the annual 99th percentile of the 1-hour daily maximum concentrations at each site must not exceed 75 parts per billion (ppb). The 1971 SO_2 national standards (24-hour and annual) remain in effect until one year after an area is designated for the 2010 standard, except that in areas designated nonattainment for the 1971 standards, the 1971 standards remain in effect until implementation plans to attain or maintain the 2010 standards are approved.

[d] Visibility-reducing particles: In 1989, the ARB converted both the general statewide 10-mile visibility standard and the Lake Tahoe 30-mile visibility standard to instrumental equivalents, which are "extinction of 0.23 per kilometer" and "extinction of 0.07 per kilometer" for the statewide and Lake Tahoe Air Basin standards, respectively.

[e] The ARB has identified lead and vinyl chloride as 'toxic air contaminants' with no threshold level of exposure for adverse health effects determined. These actions allow for the implementation of control measures at levels below the ambient concentrations specified for these pollutants.

[f] The EPA Administrator approved a revised 8-hour ozone standard of 0.07 ppb on October 1, 2015. The new standard went into effect 60 days after publication of the Final Rule in the Federal Register. The Final Rule was published in the Federal Register on October 26, 2015 and became effective on December 28, 2015.

Source of effects, properties, and sources: Bay Area Air Quality Management District 2011; California Environmental Protection Agency 2002; California Air Resources Board 2009a; U.S. Environmental Protection Agency 2003, 2009a, 2009b, 2010, 2011, and 2012a; National Toxicology Program 2011a and 2011b.
Source of standards: ARB 2013a.

Several pollutants listed in Table 5 are not discussed further in this analysis. Analysis of lead is not included in this report because the Project will not create any new sources of lead emissions. Particulate matter is addressed in this analysis, and therefore visibility-reducing particles are not explicitly addressed. The Project will not generate or expose residents to vinyl chloride because the proposed Project does not use the chemical processes that create this pollutant, and there are no such uses in the Project vicinity. The proposed Project will not expose people to hydrogen sulfide because it will not generate hydrogen sulfide in any substantial quantity.

Toxic Air Contaminants and their Health Effects

A TAC is an air pollutant that may cause or contribute to an increase in mortality or serious illness, or that may pose a hazard to human health. TACs are usually present in minute quantities in the ambient air; however, their high toxicity or health risk may pose a threat to public health even at low concentrations. The California Almanac of Emissions and Air Quality presents the relevant concentration and cancer risk data for the ten TACs that pose the most substantial health risk in California based on available data. The ten TACs are acetaldehyde, benzene, 1.3-butadiene, carbon tetrachloride, hexavalent chromium, para-dichlorobenzene, formaldehyde, methylene chloride, perchloroethylene, and DPM.

Some studies indicate that DPM poses the greatest health risk among the TACs listed above. A 10-year research program (ARB 1998) demonstrated that DPM from diesel-fueled engines is a human carcinogen and that chronic (long-term) inhalation exposure to DPM poses a chronic health risk. In addition to increasing the risk of lung cancer, exposure to diesel exhaust can have other health effects. Diesel exhaust can irritate the eyes, nose, throat, and lungs, and it can cause coughs, headaches, lightheadedness, and nausea. Diesel exhaust is a major source of fine particulate pollution as well, and studies have linked elevated particle levels in the air to increased hospital admissions, emergency room visits, asthma attacks, and premature deaths among those suffering from respiratory problems.

DPM differs from other TACs in that it is not a single substance but a complex mixture of hundreds of substances. Although diesel-fueled, internal combustion engines emit DPM, the composition of the emissions varies. The DPM exhaust composition depends on several items, including engine type, operating conditions, fuel composition, lubricating oil, and whether or not an emission control system is present. Unlike the other TACs, however, no ambient monitoring data are available for DPM because no routine measurement method currently exists. The ARB has made preliminary concentration estimates based on a DPM exposure method. This method uses the ARB emissions inventory's particulate matter of sizes 10 microns and smaller (PM_{10}) database, ambient PM_{10} monitoring data, and the results from several studies to estimate concentrations of DPM.

Asbestos

Asbestos is the name given to a number of naturally occurring fibrous silicate minerals mined for their useful properties such as thermal insulation, chemical and thermal stability, and high tensile strength. The three most common types of asbestos are chrysotile, amosite, and crocidolite. Chrysotile, also known as white asbestos, is the most common type of asbestos found in buildings. Chrysotile makes up approximately 90 to 95 percent of all asbestos contained in buildings in the

United States. Exposure to asbestos is a health threat; exposure to asbestos fibers may result in health issues such as lung cancer, mesothelioma (a rare cancer of the thin membranes lining the lungs, chest, and abdominal cavity), and asbestosis (a non-cancerous lung disease that causes scarring of the lungs).

3.5 - Air Quality Plans and Regulations

3.5.1 - California Regulations

California Clean Air Act

The California Legislature enacted the California Clean Air Act (CCAA) in 1988 to address air quality issues of concern not adequately addressed by the federal CAA at the time. California's air quality problems were and are some of the most severe in the nation and required additional actions beyond the federal mandates. The ARB administers California Ambient Air Quality Standards (CAAQS) for the 10 air pollutants designated in the CCAA. The 10 state air pollutants are the six federal standards listed above as well visibility-reducing particulates, hydrogen sulfide, sulfates, and vinyl chloride. EPA authorized California to adopt its own regulations for motor vehicles and other sources that are more stringent than similar federal regulations implementing the CAA. Generally, the planning requirements of the CCAA are less stringent than federal CAA; therefore, consistency with the CAA will also demonstrate consistency with the CCAA.

Low-Emission Vehicle Program

The ARB first adopted Low-Emission Vehicle (LEV) program standards in 1990. These first LEV standards ran from 1994 through 2003. LEV II regulations, running from 2004 through 2010, represent continuing progress in emission reductions. As the State's passenger vehicle fleet continues to grow and more sport utility vehicles and pickup trucks are used as passenger cars rather than work vehicles, the more stringent LEV II standards were adopted to provide reductions necessary for California to meet federally mandated clean air goals outlined in the 1994 State Implementation Plan. In 2012, ARB adopted the LEV III amendments to California's Low-Emission Vehicle (LEV) regulations. These amendments include more stringent emission standards for both criteria pollutants and GHGs for new passenger vehicles (ARB 2012a).

On-Road Heavy-Duty Vehicle Program

The ARB has adopted standards for emissions from various types of new on-road heavy-duty vehicles. Section 1956.8, Title 13, California Code of Regulations contains California's emission standards for on-road heavy-duty engines and vehicles, and test procedures. ARB has also adopted programs to reduce emissions from in-use heavy-duty vehicles including the Heavy-Duty Diesel Vehicle Idling Reduction Program, the Heavy-Duty Diesel In-Use Compliance Program, the Public Bus Fleet Rule and Engine Standards, and the School Bus Program and others (ARB 2013b).

ARB Regulation for In-Use Off-Road Diesel Vehicles

On July 26, 2007, the ARB adopted a regulation to reduce DPM and NO_X emissions from in-use (existing) off-road heavy-duty diesel vehicles in California. Such vehicles are used in construction, mining, and industrial operations. The regulation limits idling to no more than five consecutive

minutes, requires reporting and labeling, and requires disclosure of the regulation upon vehicle sale. The ARB is enforcing that part of the rule with fines up to $10,000 per day for each vehicle in violation. Performance requirements of the rule are based on a fleet's average NO_X emissions, which can be met by replacing older vehicles with newer, cleaner vehicles or by applying exhaust retrofits. The regulation was amended in 2010 to delay the original timeline of the performance requirements, making the first compliance deadline January 1, 2014 for large fleets (over 5,000 horsepower), 2017 for medium fleets (2,501-5,000 horsepower), and 2019 for small fleets (2,500 horsepower or less).

ARB Airborne Toxic Control Measure for Asbestos

In July 2001, the ARB approved an Air Toxic Control Measure for construction, grading, quarrying and surface mining operations to minimize emissions of naturally occurring asbestos. The regulation requires application of best management practices to control fugitive dust in areas known to have naturally occurring asbestos and requires notification to the local air district prior to commencement of ground-disturbing activities. The measure establishes specific testing, notification and engineering controls prior to grading, quarrying, or surface mining in construction zones where naturally occurring asbestos is located on Projects of any size. There are additional notification and engineering controls at work sites larger than one acre in size. These Projects require the submittal of a "Dust Mitigation Plan" and approval by the air district prior to the start of a Project.

Construction sometimes requires the demolition of existing buildings where construction occurs. Buildings often include materials containing asbestos. The demolition is associated with this Project would be subject to MBARD, Rule 1000 (Asbestos Demolition, Renovation, and Manufacturing). Asbestos is also found in a natural state, known as naturally occurring asbestos. Exposure and disturbance of rock and soil that naturally contain asbestos can result in the release of fibers into the air and consequent exposure to the public. Asbestos most commonly occurs in ultramafic rock that has undergone partial or complete alteration to serpentine rock (serpentinite) and often contains chrysotile asbestos. In addition, another form of asbestos, tremolite, can be found associated with ultramafic rock, particularly near faults. Sources of asbestos emissions include unpaved roads or driveways surfaced with ultramafic rock, construction activities in ultramafic rock deposits, or rock quarrying activities where ultramafic rock is present.

The ARB has an Air Toxics Control Measure for construction, grading, quarrying, and surface mining operations, requiring the implementation of mitigation measures to minimize emissions of asbestos-laden dust. The measure applies to road construction and maintenance, construction and grading operations, and quarries and surface mines when the activity occurs in an area where naturally occurring asbestos is likely to be found. Areas are subject to the regulation if they are identified on maps published by the Department of Conservation as ultramafic rock units or if the Air Pollution Control Officer or owner/operator has knowledge of the presence of ultramafic rock, serpentine, or naturally occurring asbestos on the site. The measure also applies if ultramafic rock, serpentine, or asbestos is discovered during any operation or activity. Review of the Department of Conservation maps indicates that the Project site area are not likely to contain NOA.[2]

[2] A General Location Guide for Ultramafic Rocks in California. August 2010. ftp://ftp.consrv.ca.gov/pub/dmg/pubs/ofr/ofr_2000-019.pdf.

Diesel Risk Reduction Plan

The ARB's Diesel Risk Reduction Plan has led to the adoption of new state regulatory standards for all new on-road, off-road, and stationary diesel-fueled engines and vehicles to reduce DPM emissions by about 90 percent overall from year 2000 levels. The Projected emission benefits associated with the full implementation of this plan, including federal measures, are reductions in DPM emissions and associated cancer risks of 75 percent by 2010, and 85 percent by 2020 (ARB 2000).

3.5.2 - Monterey Bay Air Resources District

The Project is located in Salinas City, Monterey County, NCCAB, and is under the jurisdiction of MBARD. Under the California CAA, the MBARD is required to develop an air quality plan for nonattainment criteria pollutants. As mentioned in Section 2.2, the NCCAB is designated nonattainment for state ozone and PM_{10} standards.

MBARD is responsible for controlling emissions primarily from stationary sources and maintains air quality monitoring stations throughout the NCCAB. MBARD's responsibilities include overseeing stationary-source emissions, approving permits, maintaining emissions inventories, maintaining air quality stations, overseeing agricultural burning permits, and reviewing air quality-related sections of environmental documents required by CEQA. The MBARD is also responsible for establishing and enforcing local air quality rules and regulations that address the requirements of federal and state air quality laws and for ensuring that NAAQS and CAAQS are met.

Through the attainment planning process, MBARD has developed rules and regulations for sources of air pollution. Specific regulations applicable to the Project may involve diesel construction equipment emissions, fugitive dust, on-road haul truck emissions, and general permit requirements. Listed below are the MBARD rules that would be applicable to the Project.

- Rule 402, Nuisances: Provide an explicit prohibition against sources creating public nuisances while operating within the District.
- Rule 403, Particulate Matter: Provide particulate matter emission limits for sources operating within the District.
- Rule 424, National Emission Standards for Hazardous Air Pollutants (NESHAPS): Provide clarity on the District's enforcement authority for the National Emissions for Hazardous Air Pollutants by incorporating those provisions of Parts 61 and 63 Chapter I, Title 40 of the Code of Federal Regulations (40 CFR Parts 61&63) into this Rule by reference.
- Rule 425, Use of Cutback Asphalt: Limit the emissions of vapors of organic compounds from the use of cutback and emulsified asphalts.
- Rule 439, Building Removals: Limit particulate emissions from the removal of buildings within the District.
- Rule 426, Architectural Coatings: Limit the emissions of Volatile Organic Compounds (VOC) from the use of architectural coatings.

- Rule 1000, Permit Guidelines and Requirements for Sources Emitting Toxic Air Contaminants:
  - prevent the emission into the atmosphere within the District of toxic air contaminants (referenced hereinafter as TACs), which may cause or contribute to an increase in mortality or an increase in serious illness, or which may pose a present or potential hazard to human health; and,
  - prevent occurrences which may endanger the health and welfare of the public within the District and to assure that no person will suffer material impairment of health or functional capacity; and,
  - comply with the federal Clean Air Act §112(g) Toxic New Source Review requirements; and,
  - protect the public's health and welfare while allowing, where permitted, the continued operation of sources which do or may emit TACs; and,
  - Not to limit in any way the provisions, extent, intent, interpretation, or enforcement of District Rule 402 (Nuisances).
- Rule 1003, Air Toxics Emissions Inventory and Risk Assessments Comply with the California Health & Safety Code Part 6, Section 44300 et seq., by establishing and implementing a program to inventory air toxics emissions, to assess the risk to public health from exposure to these emissions, to notify the public of any known significant health risk associated with toxic emissions from any facility, and to prepare Risk Reduction Audits and Plans to effect risk reductions.

The District adopted the 2012-2015 Air Quality Management Plan in March 2017, which updates the 2013 Air Quality Management Plan (AQMP) for the Monterey Bay Region and documents progress towards attaining the ozone CAAQS. MBARD has adopted CEQA Air Quality Guidelines[3] in 2008, which is the most recent applicable Guideline. The 2008 CEQA Guideline determined the regional project-level thresholds of significance for construction and operational-related emissions. Emissions that exceed the designated threshold levels are considered potentially significant impacts and further mitigation measures should be applied.

This assessment follows the 2008 MBARD CEQA Air Quality guidelines. The significance thresholds used in this analysis are based on the MBARD standards and as set forth in Table 6 below.

Current Air Quality Plans

A State Implementation Plan (SIP) is a federal requirement; each state prepares one to describe existing air quality conditions and measures that will be followed to attain and maintain the national ambient air quality standards. In addition in California, state ozone standards have planning requirements. However, state PM_{10} standards have no attainment planning requirements, but air districts must demonstrate that all measures feasible for the area have been adopted.

Ozone Plans

Because the NCCAB is nonattainment for the state ozone standards, the MBARD AQMP is a transitional plan shifting focus of their efforts to achieving the new, more stringent 8-hour

[3] MBUAPCD. February 2008. Monterey Bay Unified Air Pollution Control District 2008a.

requirement.[4] The plan includes an updated air quality trends analysis, which now reflects both the 1- and 8-hour standards, as well as an updated emission inventory, which includes the latest information on stationary, area and mobile emission sources.

The 2008 AQMP documented that the air basin continued to attain the 1-hour standard and recommended adoption of the following five control measures to make progress towards achieving the 8-hour standard:

- A1—Solvent Cleaning Operations: reduce VOC emissions by the establishment of a 25 gram/liter VOC limit on general cleaning applications, cleaning of ink application equipment, and polyester resin application equipment.
- A2—Degreasing Operations: reduce VOC emissions from degreasing operations by the establishment of a 50 gram/liter VOC limit on the cleaning solution. As an alternative, an airtight/airless cleaning system could be used in lieu of complying with the 50 gram/liter VOC limit.
- A3—Spray Booths: Miscellaneous Coatings and Cleanup Solvents: require the reduction of VOC emissions from miscellaneous coating and cleanup solvents at spray booth operations, which are not affected by other coating regulations.
- A4—Adhesives and Sealants–reduce VOC emissions from the use of adhesives/sealants and cleanup solvents by requiring low-volatile organic compounds (VOC) adhesives/sealants and clean-up solvents and improved adhesive transfer efficiency.
- A5—Natural Gas-Fired Fan-Type Central Furnaces and Residential Water Heaters: reduce NO_X emissions by establishing a limit of 40 nanograms/joule (55 ppm (@ 3% O2) for new and replacement installations.

For 2010, the combined emission reductions from these measures are estimated to be 1.65 tons per day of VOC and 0.17 tons per day of NO_X.

In March 2017, the MBARD adopted the 2012-2015 Air Quality Management Plan, which is the latest AQMP. It is an update to elements included in the 2013 AQMP and shows that the region continues to make progress toward meeting the state ozone standard. The recent changes that contributed to reducing estimated ROG emissions compared to the 2013 AQMP include lower vehicle miles traveled and aligning Rule 426 Architectural Coatings to the ARB's recommendations. In addition, Cleaner exhaust standards for mobile sources continue to be an important factor in reducing regional ROG and NO_X emissions over the lifetime of the AQMP series.

Particulate Matter Plans

MBARD planning related to attainment of the state's PM_{10} standard is addressed in the 2005 Report on the Attainment of the California Particulate Matter Standards in the Monterey Bay Region (Senate Bill 656 Implementation Plan, dated December 1, 2005).[5] This plan describes the greater

[4] MBUAPCD. August 2008. http://www.mbuapcd.org/mbuapcd/pdf/Planning/2008AirQualityManagementPlan1.pdf. Accessed June 14, 2017.

[5] MBUAPCD. 2005 Report on Attainment of the California Particulate Matter Standards in the Monterey Bay Region. December 2005. http://mbard.org/pdf/358%20(1).pdf.

vulnerability of coastal locations within the NCCAB to PM_{10} standard violations, due largely to the contribution from sea salt. It focuses primarily on controlling particles in fugitive dust and smoke related to combustion, but also addresses NO_X- and ROG-related particulate matter formation.

Rules

The following District Rules and Regulations address direct emissions for PM_{10} from area sources requiring District permits:

- Rule 400 Visible Emissions: Limits opacity for visual emissions to 20%.
- Rule 403, Particulate Matter

3.5.3 - Monterey County General Plan

The 2010 Monterey County General Plan, adopted in October 2010, applies to the inland area of Monterey County, including the Project site. The 2010 Monterey County General Plan presents goals and policies that guide the general distribution and intensity of land uses, including residential, agricultural, commercial and industrial, public facilities, and open space uses, in the County. The Conservation and Open Space Element includes the following air quality goals and policies that are relevant to the Project.

- **Goal OS-10:** Provide for the protection and enhancement of Monterey County's air quality without constraining routine and ongoing agricultural activities.
- **Policy OS-10.1:** Land use policy and development decisions shall be consistent with the natural limitations of the County's air basins.
- **Policy OS-10.6:** The Monterey Bay Unified Air Pollution Control District's air pollution control strategies, air quality monitoring, and enforcement activities shall be supported.
- **Policy OS-10.7:** Use of the best available technology for reducing air pollution emissions shall be encouraged
- **Policy OS-10.9:** The County of Monterey shall require that future development implement applicable MBARD control measures…The County will require that future construction operate and implement MBUPACD control measures to ensure that construction-related PM_{10} and NO_x emissions do not exceed the MBARD's daily thresholds.

3.6 - Thresholds of Significance

CEQA gives lead agencies discretion on how to determine if a particular environmental impact is considered significant. Ultimately, formulation of a standard or "threshold" of significance requires the lead agency to make a policy judgment about where the line should be drawn distinguishing adverse impacts it considers significant from those that are not deemed significant. This judgment must, however, be based on scientific information and other factual data to the extent possible. (CEQA Guidelines Section 15064(b)).

Pursuant to the MBARD 2008 Guidelines, implementation of the proposed Project would be considered significant if it would exceed any of the following criteria in Table 6.

Table 6: MBARD Thresholds of Significance

Pollutant	Construction-related Thresholds Emissions (pounds/day)	Operational Thresholds (pounds/day)
Criteria Air Pollutants		
ROG	NA	137
NO_X	NA	137
PM_{10}	82	82 (on-site)
SO_X	NA	137
CO	NA	550
Health Risks and Hazards for Sensitive Receptors		
Excess Cancer Risk	10 per one million	10 per one million
Chronic or Acute Hazard Index	1	1

Notes:
ROG = reactive organic gases, NO_x = nitrogen oxides, PM_{10} = course particulate matter or particulates with an aerodynamic diameter of 10 µm or less, and SO_X= sulfur oxides
NA = not applicable
Source: MBARD 2008.

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SECTION 4: MODELING PARAMETERS AND ASSUMPTIONS FOR CONSTRUCTION AND OPERATION EMISSIONS

4.1 - Model Selection and Guidance

The California Emissions Estimator Model (CalEEMod) version 2016.3.2 was used to estimate the Project's construction and operation-related air pollutant emissions. CalEEMod was developed in cooperation with air districts throughout the State. CalEEMod is designed as a uniform platform for government agencies, land use planners, and environmental professionals to quantify potential criteria pollutant emissions associated with construction and operation from a variety of land uses.

4.2 - Construction

Construction emissions can vary substantially from day to day, depending on the level of activity, the specific type of operation, and prevailing weather conditions. Construction emissions result from on-site and off-site activities. On-site emissions principally consist of exhaust emissions from heavy-duty construction equipment and motor vehicle operation, and fugitive dust (mainly PM_{10}) from disturbed soil. Additionally, paving operations and application of architectural coatings would release volatile organic compounds (VOC) emissions. Off-site emissions are from motor vehicle exhaust from delivery vehicles, worker traffic, and road dust (mainly PM_{10}).

The activity for construction equipment is based on the hours of operation, horsepower of the engine, and load factors of the equipment. The load factor is the average power of a given piece of equipment while in operation compared with its maximum rated horsepower. A load factor of 1.0 indicates that a piece of equipment continually operates at its maximum operating capacity.

The total construction area would be 6.8 acres. Up to 4 percent of the floor space (4,700 sq.ft.) was assumed to be occupied by support office space which is categorized as general office space. The remaining floor area (113,900 sq.ft.) was modeled as light industrial space. The remaining area was assumed to be non-asphalt surfaces.

The construction equipment assumed for the Project is shown in the CalEEMod output contained in Appendix A. The CalEEMod default construction duration and equipment fleet mix was used in the analysis. It should be noted that default assumptions tend to result in more conservative estimates of emissions in order to avoid underestimating emissions when project-specific information is not available.

Construction was modeled to begin as early as September 2018 to meet the 2020 operation plan. Construction activities were assumed to occur 5 days per week throughout the construction period. The CalEEMod default construction schedule used to model construction emissions is shown in Table 7 below.

Table 7: Project Construction Schedule

Construction Phase	Project Construction Schedule		Working Days
	Start Date	End Date	
Demolition	9/3/2018	9/28/2018	20
Site Preparation	9/29/2018	10/12/2018	10
Grading	10/13/2018	11/9/2018	20
Building Construction	11/10/2018	9/27/2019	230
Paving	9/28/2019	10/25/2019	20
Architectural Coating	10/26/2019	11/22/2019	20
Source: FirstCarbon Solutions and CalEEMod			

Construction Equipment Emission Factors

CalEEMod contains a default inventory of construction equipment based on the size and types of land uses to be developed. For each construction phases, CalEEMod can estimate the number of equipment, their age, their horsepower, and equipment tier from which rates of emissions are developed. Table 8 presents the CalEEMod default construction equipment used on the Project.

Table 8: Project Construction Equipment Assumptions

Phase Name	Equipment	Number	Hours per day	Horsepower	Load Factor
Demolition	Excavators	3	8.00	158	0.38
	Concrete/Industrial Saws	1	8.00	81	0.73
	Rubber Tired Dozers	2	8.00	247	0.40
Site preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
	Rubber Tired Dozers	3	8.00	247	0.40
Grading	Excavators	1	8.00	158	0.38
	Rubber Tired Dozers	1	8.00	247	0.40
	Graders	1	8.00	187	0.41
	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Building construction	Cranes	1	7.00	231	0.29
	Forklifts	3	8.00	89	0.20
	Generator Sets	1	8.00	84	0.74
	Tractors/Loaders/Backhoes	3	7.00	97	0.37
	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	130	0.42
	Rollers	2	8.00	80	0.38

Table 8 (cont.): Project Construction Equipment Assumptions

Phase Name	Equipment	Number	Hours per day	Horsepower	Load Factor
	Paving Equipment	2	8.00	132	0.36
Architectural coating	Air compressors	1	6	78	0.48
Source: CalEEMod and FirstCarbon Solutions, see Appendix A.					

Demolition and Grading

The Project includes demolition of an existing, 900-square-foot, one-story building. The Project would balance the soil on-site during grading phase. In others, no soil materials are anticipated to be imported or exported from the project site. Default trip lengths for material delivery trucks and construction workers were used in the modeling analysis.

During demolition and grading activities, fugitive dust would be generated from the movement of materials on the Project site. CalEEMod estimates dust from dozers moving dirt around, dust from graders or scrapers leveling the land, and loading or unloading construction debris and dirt into haul trucks. Each of those activities is calculated differently in CalEEMod based on the number of acres traversed by the grading equipment and amount of building to be demolished.

Construction Off-site Trips

Worker trips are accounted for during the construction phases based on 1.25 trips per piece of equipment (the CalEEMod default). The CalEEMod run used the default worker trip length of 10.8 miles and the default vehicle fleet (LD Mix) for employee trips.

The CalEEMod defaults for vendor trips, trip length, and vehicle fleet (Heavy Duty Truck Mix) were used.

Haul trips are based on the assumption that a truck can handle 20 tons (or 16 cubic yards) of material per load. Assuming one load of material, CalEEMod considers a haul truck importing material will have a return trip with an empty truck (2 trips). Similarly, the haul truck to take material away will have an arrival trip in an empty truck (2 trips). CalEEMod default haul trips for an assumed 900-square-foot building to be demolished were used.

A summary of the construction-related vehicle trips is shown in Table 9. Note that the total number of off-site construction trips would not necessarily occur on the same day since the various construction activities would vary each day.

Table 9: Construction Off-Site Trips

Activity	Construction Trips		
	Worker (per Day)	Vendor (per Day)	Haul (in total)
Demolition—Building	15	0	4
Site Preparation	18	0	0
Grading	15	0	0
Building Construction	124	49	0
Paving	15	0	0
Architectural Coating	25	0	0
Source: FirstCarbon Solutions and CalEEMod, see Appendix A.			

4.3 - Operation

Operational emissions are those emissions that occur during operation of the Project. The major sources are summarized below.

Motor Vehicles

Motor vehicle emissions refer to exhaust and road dust emissions from the automobiles that would travel to and from the Project site. Rodeo Property General Plan Amendment & Rezoning Traffic Impact Analysis prepared by Mott Macdonald (April 2018) utilized the trip rates from the Institute of Transportation Engineers (ITE) publication Trip Generation Manual, 10th Edition. The proposed Project would be served with daily truck deliveries. Trucks would consist of 2-axle, 3-axle, and 4+ axle combination units. Based on studies of truck percentages for high-cube warehouse and light industries, the assumptions for vehicle classification are summarized and shown in Table 10.[6]

Table 10: Vehicle Type Classification

Type	Passenger Vehicle	LHDT 2-Axle	MHDT 3-Axle	HHDT 4+ Axle	Total
General Light Industry	74.4%	8.4%	4.6%	12.6%	100%
Source: San Bernardino County Truck percentages for industrial and warehouse uses.					

The vehicle fleet mix is the mix of motor vehicle classes active during the operation of the Project. Emission factors are assigned to the expected vehicle mix as a function of vehicle class, speed, and fuel use (gasoline and diesel-powered vehicles). The fleet mix for the proposed Project was a combination of CalEEMod default vehicle fleet mix shown in Table 11 (for passenger vehicles) and the vehicle type classifications (for truck deliveries) shown in Table 10.

[6] San Bernardino County Truck Percentage for Industrial and Warehouse Uses. 2003.

Table 11: Vehicle Fleet Mix

Vehicle Type	CalEEMod Default Fleet Mix	Proposed Fleet Mix
LDA	0.533	0.437
LDT1	0.031	0.025
LDT2	0.203	0.166
MDV	0.141	0.116
LHDT[1]	0.025	0.068
LHDT[2]	0.006	0.016
MHD	0.018	0.046
HHDT	0.026	0.126
OBUS	0.004	0.000
UBUS	0.003	0.000
NCT	0.008	0.000
SBUS	0.001	0.000
MH	0.001	0.000

Source:
[1] Default is from CalEEMod General Light Industry Land Use Type, Monterey County
[2] San Bernardino County Truck Percentages for Industrial and Warehouse Uses, 2003.

Architectural Coatings (Painting)

Paints release VOC emissions during application and drying. The buildings in the Project would be periodically repainted as warranted for maintenance needs. Default VOC content coatings were used in the CalEEMod modeling.

Landscape Equipment

CalEEMod estimated the landscaping equipment (leaf blowers, chainsaws, and mowers) using the statewide average of 3 percent electric powered equipment in the model.

4.4 - Health Risk Assessment

A Health Risk Assessment (HRA) is a guide that helps to determine whether current or future exposures to a chemical or substance in the environment could affect the health of a population. Currently the project site does not have a specific development plan. Therefore, a quantitative project-level health risk analysis is not available. A full construction and operation HRA technical study report including methodology and assumptions would be prepared when future site-specific development plans are determined.

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SECTION 5: AIR QUALITY IMPACT ANALYSIS

This section calculates the expected emissions from construction and operation of the Project as a requisite for assessing the regulatory significance of Project emissions on a regional and localized level.

5.1 - CEQA Guidelines

The CEQA Guidelines define a significant effect on the environment as "a substantial, or potentially substantial, adverse change in the environment." To determine if a Project would have a significant impact on air quality, the type, level, and impact of emissions generated by the Project must be evaluated.

The following air quality significance thresholds are contained in Appendix G of the CEQA Guidelines. A significant impact would occur if the Project would:

a) Conflict with or obstruct implementation of the applicable air quality plan;

b) Violate any air quality standard or contribute substantially to an existing or Projected air quality violation;

c) Result in a cumulatively considerable net increase of any criteria pollutant for which the Project region is nonattainment under an applicable national or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors);

d) Expose sensitive receptors to substantial pollutant concentrations; or

e) Create objectionable odors affecting a substantial number of people.

While the final determination of whether a Project is significant is within the purview of the Lead Agency pursuant to Section 15064(b) of the CEQA Guidelines, MBARD recommends that its quantitative thresholds be used to determine the significance of Project emissions. If the Lead Agency finds that the Project has the potential to exceed these air pollution thresholds, the Project should be considered to have significant air quality impacts.

5.2 - Impact Analysis

Applicable Air Quality Plans

Impact AIR-1:	**The Project would not conflict with or obstruct implementation of the applicable Air Quality Plan.**

Impact Analysis

MBARD prepares air quality plans that include projected emissions inventories and account for emission reductions strategies in order to demonstrate how the region will achieve the ambient air quality standards by the given deadlines. MBARD recommends that Projects consider the following

criteria to determine if a Project would conflict with or obstruct implementation of an applicable air quality plan:

1) Consistent with the AQMP?

The applicable AQMP for the Project is the 2012-2015 Air Quality Management Plan (AQMP), adopted in March 2017. The AQMP uses growth projections from local general plans to project future regional emissions. Thus, if a Project is consistent with the land use designations and growth projections of the applicable general plan, it would also be considered consistent with the regional AQMP.

This City of Salinas General Plan adopted in September 2002, and updated its land use designation in January 2014. The project site is designated in the General Plan as Open Space. The project is a General Plan amendment and Rezone change that would allow development of industrial and commercial uses on site. Furthermore, MBARD considers its thresholds of significance the allowable limit for each project to generate without impeding or conflicting with the AQMP's goal to achieve ambient air quality standards. As shown in Table 12 and Table 13, the project's short-term construction and long-term operational emissions would not exceed regional thresholds. Therefore, the proposed Project would not conflict with or obstruct implementation of the applicable air quality plan. This impact would be less than significant.

2) Emit 137 or more of VOC or NO_X?

As shown in Table 12 and Table 13, the proposed Project construction and operational-related emissions would not exceed the MBARD-recommended regional significance thresholds. Therefore, the Project would not result in a significant impact.

Therefore, considering the consistency with the AQMP and that the Project's construction and operational emissions would not exceed MBARD's thresholds of significance, the Project would not conflict with or obstruct implementation of the applicable air quality plan. The impact would be less than significant.

Level of Significance Before Mitigation

Less than significant impact.

Mitigation Measures

None.

5.3 - Impact Analysis

Potential for Air Quality Standard Violation

Impact AIR-2: **The Project would not violate any air quality standard or contribute substantially to an existing or projected air quality violation.**

Impact Analysis

This impact relates to regional criteria pollutant impacts. The thresholds of significance are considered the allowable limit that each Project can generate without substantially contributing to an existing or Project air quality violation. Based on the nonattainment status of the region with respect to the State particulate matter (PM_{10}), and state and federal for ozone, ozone precursors and particulate matter are of particular concern. The analysis below evaluates the potential for construction and operational activities to generate substantial air quality emissions.

MBARD recommends that Projects consider the following criteria to determine if a Project would violate any air quality standards:

1. Emit 137 or more of VOC or NO_X?
2. Directly emit 550 lbs/day or more of CO?
3. Generate traffic that significantly affects levels of service?
4. Directly emit 82 lbs/day or more of PM_{10}on-site during construction or operation?
5. Generate traffic on unpaved roads of 82 lbs/day or more of PM_{10}?
6. Directly emit 150 lbs/day or more of SO_X?

Construction Emissions

Construction-related emissions were calculated using CalEEMod version 2016.3.2. CalEEMod outputs and assumptions are provided as Appendix A.

During building construction and grading, fugitive dust ($PM_{2.5}$ and PM_{10}) would be generated from these and other related earth-moving activities. The majority of this fugitive dust will remain localized and be deposited near the Project site. Exhaust-related construction emissions would occur from construction equipment, material delivery trucks, haul trucks, and construction worker vehicles. The Project's estimated daily construction emissions are presented in Table 12.

Table 12: Unmitigated Maximum Daily Construction Emissions

Construction Activity	Emission (lbs/day)				
	ROG	NOx	CO	SO_2	PM_{10} (total)
Demolition -2018	3.81	38.48	23.05	0.04	2.09
Site Preparation—2018	4.67	48.30	23.40	0.04	10.86
Grading—2018	2.86	30.76	17.31	0.03	4.62

Table 12 (cont.): Unmitigated Construction Emissions

Construction Activity	Emission (lbs/day)				
	ROG	NOx	CO	SO_2	PM_{10} (total)
Building Construction—2018	3.74	31.14	25.92	0.05	2.92
Building Construction—2019	3.30	28.45	24.51	0.05	2.70
Paving—2019	1.53	15.32	15.31	0.02	0.95
Architectural Coating—2019	86.56	1.96	2.92	0.01	0.34
Maximum daily Emissions (lbs/day)[1]	86.56	48.30	25.92	0.05	10.86
MBARD- 2008 Average Daily Emissions Significance of Thresholds	NA	NA	NA	NA	82
Exceeding thresholds?	NA	NA	NA	NA	**No**

Notes:
ROG = reactive organic gases; NO_X = oxides of nitrogen; CO = carbon monoxide; PM_{10} = particulate matter 10 microns in diameter; $PM_{2.5}$ = particulate matter 2.5 microns in diameter
[1] The daily emissions presented in the table are the maximum of either the summer and winter outputs for each construction phase.
Source: Monterey Bay Air Resources District, 2008

As shown in Table 12, the Project would generate PM_{10} emissions that do not exceed the 82 lbs/day threshold of significance during construction. Therefore, the construction-related emissions would result in a less-than-significant impact.

Operational Emissions

Operational emissions associated with the Project were calculated using CalEEMod. Operational emissions would be generated by area, energy, and mobile sources. Area sources would include activities such as landscape maintenance and occasional architectural coatings. Energy sources would include natural gas combustion for space and water heating. Mobile sources would include vehicle trips associated with employees, and delivery trucks. Table 13 shows the average daily operational emissions of the proposed Project.

Table 13: Average Daily Operational Emissions

Construction Activity	Emission (lbs/day)				
	ROG	NOx	CO	SO_2	PM_{10} (total) On-site
Area	3.08	0.01	0.03	0.00	0.00
Energy	0.09	0.83	0.70	0.01	0.06
Mobile	1.64	18.77	18.57	0.07	3.93
Total daily Emissions (lbs/day)	4.80	19.60	19.30	0.08	3.99

Table 13 (cont.): Daily Operational Emissions

Construction Activity	Emission (lbs/day)				
	ROG	NOx	CO	SO_2	PM_{10} (total) On-site
MBARD—2008 Average Daily Emissions Significance of Thresholds	137	137	550	150	82
Exceeding thresholds?	**No**	**No**	**No**	**No**	**No**

Notes:
ROG = reactive organic gases; NO_X = oxides of nitrogen; CO = carbon monoxide; SO_X= oxides of sulfur; PM_{10} = particulate matter 10 microns in diameter; $PM_{2.5}$ = particulate matter 2.5 microns in diameter
Source: Monterey Bay Air Resources District, 2008

As noted in Table 13, the average daily and annual operational emissions from the Project would not exceed the MBARD operational thresholds for any criteria pollutant. Therefore, the Project-level operational-related emission impact would be less than significant. Thus, criteria 1, 2, 4, and 6 listed above are met.

In addition, there are no unpaved roads anticipated on the project site, therefore, the proposed Project would not generate traffic on unpaved roads. Thus, criterion 5 is also met. Thus, long-term operational emissions would not violate or contribute substantially an existing or projected air quality violation.

Level of Significance Before Mitigation

Less than significant impact.

Mitigation Measures

None.

5.4 - Cumulative Impacts

Impact AIR-3: **The Project would not result in a cumulatively considerable net increase of any criteria pollutant for which the Project region is nonattainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors).**

Impact Analysis

The Project's construction and operational emissions are below MBARD's Project-level thresholds of significance. The thresholds of significance represent the allowable amount of emissions each Project can generate without generating a cumulatively considerable contribution to regional air quality impacts. As discussed above, the region is nonattainment for state ozone standards, and the state PM_{10} standards. MBARD recommends if the Project emissions which are not consistent with

the AQMP will have a significant cumulative impact unless offset.[7] Therefore, a Project that would not exceed the MBARD thresholds of significance on a Project-level would also not be considered to result in a cumulatively considerable contribution to these regional air quality impacts. Considering this information, the Project's construction and operational emissions would not be considered a cumulatively considerable contribution to the existing regional air quality impacts. This impact would be less than significant.

Level of Significance Before Mitigation

Less than significant impact.

Mitigation Measures

None.

Level of Significance After Mitigation

Less than significant impact.

5.5 - Sensitive Receptors

Impact AIR-4:	**The Project would not expose sensitive receptors to substantial pollutant concentrations.**

Impact Analysis

This discussion addresses whether the Project would expose sensitive receptors to substantial pollutant concentrations of CO or other toxic air contaminants of concern (including diesel particulate matter).

Two scenarios have the potential for exposing sensitive receptors to toxic air contaminants. The first is when a Project includes a new or modified source of toxic air contaminants and would be located near an existing or proposed sensitive receptor. The second scenario involves a residential or other sensitive receptor development locating near an existing or planned source of toxic air contaminants. The MBARD defines a sensitive receptor as:

> Any residence including private homes, condominiums, apartments, and living quarters; education resources such as preschools and kindergarten through grade twelve schools; daycare centers; and health care facilities such as hospitals or retirement and nursing homes.

Existing residences are located close to Project site. The nearest sensitive receptor is approximately 50 feet southwest of the Project site boundary. Therefore, this analysis examines potential exposure of off-site sensitive receptors from development of the Project site.

The health risk significance thresholds adopted for this assessment were derived from the MBARD significance thresholds shown in Table 6.

[7] 2008 MBUAPCD CEQA Guidelines.

CO Hotspot

The CO emissions from traffic generated by the Project are a concern at the local level. Congested intersections can result in high, localized concentrations of CO.

At the time of this analysis, MBARD did not provide a screening threshold to evaluate the potential for CO hot spots. However, the Bay Area Air Quality Management District (BAAQMD) recommends the following screening analysis to determine if a Project has the potential to contribute to a CO hotspot. The screening criteria identify when site-specific CO dispersion modeling is necessary. The Project would result in a less than significant impact to air quality for local CO if the following screening criteria are met:

- The Project is consistent with an applicable congestion management program established by the county congestion management agency for designated roads or highways, regional transportation plan, and local congestion management agency plans; or
- The Project traffic would not increase traffic volumes at affected intersections to more than 44,000 vehicles per hour; or
- The Project traffic would not increase traffic volumes at affected intersections to more than 24,000 vehicles per hour where vertical and/or horizontal mixing is substantially limited (e.g., tunnel, parking garage, bridge underpass, natural or urban street canyon, below-grade roadway).

According to the Traffic Impact Study for the Project, the maximum peak-hour intersection volume would occur at the Sun Street and E Market Street during the AM peak hour. The estimated traffic volume at this intersection would be 40 AM peak-hour trips. Therefore, the maximum hourly traffic volumes with implementation of the Project would be substantially less than the screening threshold. Therefore, the proposed Project would not exceed the CO screening criteria. Accordingly, the Project would have less than significant impact related to CO hot spots.

Construction-Related Health Risk Assessment

MBARD considers projects that would not exceed the regional thresholds of significance during construction to also not result in potential health impacts on sensitive receptors (David Frisbey, Planning and Air Monitoring Manager, MBARD, pers. comm.). As shown in Table 12, the estimated Project-related construction emissions prior to mitigation measures would not exceed MBARD's thresholds of significance. Therefore, the Project's construction-related DPM emissions would likely not result in a significant health risk impact.

Operational-Related Health Risk Assessment

Since a specific development project is not proposed for the site at this time, the DPM emissions from motor vehicle trips and health risk impacts during project operation would be unknown. Therefore, this analysis does not include an operational HRA. A full health risk assessment would be required when future site-specific development details for the site are determined in order to estimate the health impacts on nearby sensitive receptors and ensure Rule 1003 is met.

In addition, Rule 1000 would be applied if project installs any stationary sources.

As discussed above, impacts from CO emissions and construction HRA on nearby sensitive receptors would be less than significant. A full operation HRA would be required once specific development details are determined.

Level of Significance Before Mitigation

Less than significant impact.

Mitigation Measures

None.

5.6 - Objectionable Odors

Impact AIR-5:	**The Project would not create objectionable odors affecting a substantial number of people.**

Impact Analysis

There are two circumstances that have the potential to cause odor impacts:

1) A source of odors is proposed to be located near existing or planned receptors; or
2) A receptor land use is proposed near an existing or planned source of odor.

The MBARD does not provide any specific quantitative threshold or screening threshold to evaluate odor impacts from projects. Therefore, the screening method from nearby Lead Agency, the BAAQMD's CEQA Air Quality Guidelines is used. BAAQMD provides suggested screening distances for a variety of odor-generating land uses and operations. Projects that would site a new receptor farther than the applicable screening distances from an existing odor source would likely not result in a significant odor impact.

Project Analysis

The project is a General Plan amendment and Rezone that would allow development of industrial and commercial uses. The nearest sensitive receptor is approximately 50 feet away southwest of the Project site. Although diesel-fueled vehicles could be considered potential odor sources, it is anticipated that Project-related exhaust emissions would be dispersed along local and regional roadways. On-site diesel emissions would be limited to trucks traveling a short distance to the truck bays and all idling would be subject to ARB's Airborne Toxic Control Measure (ATCM) to Limit Diesel-Fueled Commercial Motor Vehicle Idling, which restricts diesel trucks from idling over 5 minutes when not in operational use. The project would not include any other substantial odor sources. Considering this, and the highly dispersive properties of DPM, it is not anticipated that the Project's operations would result in substantial odor emissions that would affect nearby receptors. Thus, the Project would not expose receptors or its proposed residents to substantial odor emissions during operations.

In addition to Project operations, construction activities would also involve diesel-fueled construction equipment and trucks. Furthermore, VOC emissions would be generated during architectural coating and asphalt paving phases, which could be objectionable odors to some populations. However, such odorous emissions would disperse rapidly from the Project site and would be intermittent during construction activities. Thus, it is highly unlikely that these intermittent odor sources would reach an objectionable level at nearby residences. Construction-related odor impacts would be less than significant.

Level of Significance Before Mitigation

Less than significant impact.

Mitigation Measures

None.

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SECTION 6: REFERENCES

The following references were used in the preparation of this analysis and are referenced in the text and/or were used to provide the author with background information necessary for the preparation of thresholds and content.

Bay Area Air Quality Management District. May 2017. CEQA Air Quality Guidelines. Website: http://www.baaqmd.gov/~/media/files/planning-and-research/ceqa/ceqa_guidelines_may2017-pdf.pdf?la=en

CalEEMod. California Emissions Estimator Model. Version 2016.3.2. Website: http://caleemod.com/. Accessed April 14, 2018.

California Air Resources Board (ARB). 2000. Risk Reduction Plan to Reduce Particulate Matter Emissions from Diesel-fueled Engines and Vehicles. Website: http://www.arb.ca.gov /diesel/documents/rrpfinal.pdf. Accessed May 7, 2013.

California Air Resources Board (ARB). 2009. California Air Resources Board. Vinyl Chloride. Website: www.arb.ca.gov/research/aaqs/caaqs/vc/vc.htm. Accessed December 2013. (Note: information is used in Table 1.)

California Air Resources Board (ARB). 2011. Regulation for Reducing Emissions from Consumer Products. Website: www.arb.ca.gov/consprod/regs /fro%20consumer%20products%20regulation.pdf. Accessed December 2013.

California Air Resources Board (ARB). 2012. Facility Search. Website: http://www.arb.ca.gov/app /emsinv/facinfo/faccrit.php?dd=&grp=1&sort=FacilityNameA&dbyr=2012&ab_=SCC&dis_=&co_=56&fname_=&city_=&fzip_=&fsic_=&facid_=&all_fac=C&displayit=Pollutant&showpol=&showpol2=. Accessed October 2, 2014

California Air Resources Board (ARB). 2012. Low-Emission Vehicle Program. Website: http://www.arb.ca.gov/msprog/levprog/levprog.htm. Accessed April 19, 2013.

California Air Resources Board (ARB). 2016. Area Designation Maps/State and National. 2012 State Area Designations. Website: www.arb.ca.gov/desig/adm/adm.htm. Accessed April 11, 2017.

California Air Resources Board. 1998. The Toxic Air Contaminant Identification Process: Toxic Air Contaminant Emissions from Diesel-fueled Engines. Website: www.arb.ca.gov/toxics /dieseltac/factsht1.pdf. Accessed May 7, 2013.

California Air Resources Board. 2013a. California Air Resources Board. Ambient Air Quality Standards. Updated 6/7/12. Website: www.arb.ca.gov/research/aaqs/aaqs2.pdf. Accessed April 11, 2017.

California Air Resources Board. 2014. Historical Air Quality, Top 4 Summary. Website: http://www.arb.ca.gov/adam/topfour/topfour1.php. Accessed April 15, 2017.

California Environmental Health Tracking Program (CEHTP). 2014. Traffic Linkage Service Demonstration. Website: http://www.ehib.org/traffic_tool.jsp. Accessed October 2, 2014.

California Environmental Protection Agency. 2002. Office of Environmental Health Hazard Assessment. Health Effects of Diesel Exhaust. Website: www.oehha.ca.gov/public_info /facts/pdf/diesel4-02.pdf. Accessed December 2013. (Note: information is used in Table 1.)

City of Fontana. August 2003. Truck Trip Generation Study. Website: http://www.tampabayfreight.com/pdfs/Freight%20Library/Fontana%20Truck%20Generation%20Study.pdf

Monterey Bay Unified Air Pollution Control District. 2008. CEQA Air Quality Guidelines. Website: http://mbuapcd.org/pdf/ceqa.html

Monterey Bay Unified Air Pollution Control District. 2017. 2012-2015 Air Quality Management Plan. March.

National Toxicology Program. 2011b. Report on Carcinogens, Twelfth Edition; U.S. Department of Health and Human Services, Public Health Service. Diesel Exhaust Particles. Website: http://ntp.niehs.nih.gov/ntp/roc/twelfth/profiles/DieselExhaustParticulates.pdf. Accessed December 2013. (Note: information is used in Table 1.)

U.S. Environmental Protection Agency (EPA). 2003. Particle Pollution and your Health. EPA-452/F-03-001. Website: http://epa.gov/pm/pdfs/pm-color.pdf. Accessed December 2013. (Note: information is used in Table 1)

U.S. Environmental Protection Agency (EPA). 2009a. Ozone and your Health. EPA-456/F-09-001. Website: http://www.epa.gov/airnow/ozone-c.pdf. Accessed December 2013. (Note: information is used in Table 1)

U.S. Environmental Protection Agency (EPA). 2009b. Fact Sheet, Proposed Revisions to the National Ambient Air Quality Standards for Nitrogen Dioxide. July 22, 2009. Website: www.epa.gov/air/nitrogenoxides/pdfs/20090722fs.pdf. Accessed December 2013. (Note: information is used in Table 1)

U.S. Environmental Protection Agency (EPA). 2010. Technology Transfer Network, Air Toxics Website. Page updated April 5, 2010. Health Effects Notebook for Hazardous Air Pollutants. Website: www.epa.gov/ttn/atw/hlthef/hapindex.html. Accessed December 2013. (Note: information is used in Table 1.)

U.S. Environmental Protection Agency (EPA). 2011a. Indoor Air Quality. Sources of Indoor Air Pollution—Organic Gases (Volatile Organic Compounds—ROGs) Website: www.epa.gov/iaq/ROG.html. Accessed December, 2013. (Note: data is used in Table 1.)

U.S. Environmental Protection Agency (EPA). 2012. Technology Transfer Network, Air Toxics Website. Benzene. Revised January 2012. Website: www.epa.gov/ttn/atw/hlthef /benzene.html. Accessed December 2013. (Note: information is used in Table 1.)

U.S. Environmental Protection Agency (EPA). 2014a. The Green Book Nonattainment Areas for Criteria Pollutants. Website: http://www.epa.gov/airquality/greenbook/. Accessed April 10, 2017.

U.S. Environmental Protection Agency (EPA). 2014b. AQI Calculator: AQI to Concentration. Website: http://www.gpo.gov/fdsys/pkg/FR-2013-01-15/pdf/2012-30946.pdf. Accessed August 15, 2014.

U.S. Geological Survey. 2011. Van Gosen, B.S., and Clinkenbeard, J.P. California Geological Survey Map Sheet 59. Reported Historic Asbestos Mines, Historic Asbestos Prospects, and Other Natural Occurrences of Asbestos in California. Open-File Report 2011-1188 Website: http://pubs.usgs.gov/of/2011/1188/. Accessed June 2014.

University of California, Davis. 1997. Prepared for California Department of Transportation. 1997. Transportation Project-Level Carbon Monoxide Protocol. Website: www.dot.ca.gov/hq /env/air/pages/coprot.htm. Accessed December 2013.

Western Regional Climate Center. 2014. Website: http://www.wrcc.dri.edu/cgi-bin/cliMAIN.pl?ca7723/cliMAIN.pl?cabars+sca. Accessed September 23, 2014.

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Appendix A:
CalEEMod Output

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CalEEMod Output

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Construction (2018-2019) and Project Operations (2020) Annual **A-1**

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Construction (2018-2019) and Project Operations (2020) Winter **A-65**

Rodeo GPA

Monterey County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Light Industry	113.90	1000sqft	2.61	113,900.00	0
General Office Building	4.70	1000sqft	0.11	4,700.00	0
Other Non-Asphalt Surfaces	177.60	1000sqft	4.08	177,600.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	3.6	**Precipitation Freq (Days)**	55
Climate Zone	4			**Operational Year**	2020
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	491.65	**CH4 Intensity (lb/MWhr)**	0.022	**N2O Intensity (lb/MWhr)**	0.005

1.3 User Entered Comments & Non-Default Data

Rodeo GPA - Monterey County, Annual

Project Characteristics - Utilitiy information ajusted based on Renewable Portofolio Standard

Land Use - info from Rodeo GPA TIA 041318. The project site is 6.8 acres. Therefore, the remaining area would be considered as non-asphalt surfaces.

Construction Phase - assume operation year is 2020. CalEEMod default schedule is applied.

Grading - assume balance onsite (old Rodeo project info, GPA does not specify if there would have cut and fill)

Demolition - infro from client RFI response 5/26/2017

Vehicle Trips - Rodeo GPA TIA 041318 ITE 10th edition trip rates.

Fleet Mix - fleet mix adjusted based on CalEEMod default and San Bernadino 2003 study for truck percentages for industrial and warehouse uses

Energy Use -

Construction Off-road Equipment Mitigation -

Table Name	Column Name	Default Value	New Value
tblFleetMix	HHD	0.03	0.13
tblFleetMix	LDA	0.53	0.44
tblFleetMix	LDT1	0.03	0.03
tblFleetMix	LDT2	0.20	0.17
tblFleetMix	LHD1	0.02	0.07
tblFleetMix	LHD2	6.0270e-003	0.02
tblFleetMix	MCY	7.8900e-003	0.00
tblFleetMix	MDV	0.14	0.12
tblFleetMix	MH	9.0500e-004	0.00
tblFleetMix	MHD	0.02	0.05
tblFleetMix	OBUS	4.1500e-003	0.00
tblFleetMix	SBUS	1.2530e-003	0.00
tblFleetMix	UBUS	2.9590e-003	0.00
tblProjectCharacteristics	CH4IntensityFactor	0.029	0.022
tblProjectCharacteristics	CO2IntensityFactor	641.35	491.65
tblProjectCharacteristics	N2OIntensityFactor	0.006	0.005
tblVehicleTrips	ST_TR	1.32	1.99
tblVehicleTrips	ST_TR	2.46	2.21
tblVehicleTrips	SU_TR	0.68	5.00
tblVehicleTrips	SU_TR	1.05	0.70
tblVehicleTrips	WD_TR	6.97	4.96
tblVehicleTrips	WD_TR	11.03	9.74

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2018	0.1558	1.4931	0.9789	1.8500e-003	0.1830	0.0761	0.2591	0.0906	0.0708	0.1615	0.0000	167.7018	167.7018	0.0364	0.0000	168.6118
2019	1.1943	2.9175	2.5259	5.3000e-003	0.1300	0.1406	0.2706	0.0353	0.1321	0.1674	0.0000	477.2599	477.2599	0.0734	0.0000	479.0939
Maximum	**1.1943**	**2.9175**	**2.5259**	**5.3000e-003**	**0.1830**	**0.1406**	**0.2706**	**0.0906**	**0.1321**	**0.1674**	**0.0000**	**477.2599**	**477.2599**	**0.0734**	**0.0000**	**479.0939**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2018	0.1558	1.4931	0.9789	1.8500e-003	0.0970	0.0761	0.1732	0.0448	0.0708	0.1156	0.0000	167.7017	167.7017	0.0364	0.0000	168.6117
2019	1.1943	2.9175	2.5259	5.3000e-003	0.1300	0.1406	0.2706	0.0353	0.1321	0.1674	0.0000	477.2596	477.2596	0.0734	0.0000	479.0936
Maximum	**1.1943**	**2.9175**	**2.5259**	**5.3000e-003**	**0.1300**	**0.1406**	**0.2706**	**0.0448**	**0.1321**	**0.1674**	**0.0000**	**477.2596**	**477.2596**	**0.0734**	**0.0000**	**479.0936**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**27.46**	**0.00**	**16.23**	**36.42**	**0.00**	**13.95**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	9-3-2018	12-2-2018	1.2800	1.2800
2	12-3-2018	3-2-2019	1.0507	1.0507
3	3-3-2019	6-2-2019	1.0333	1.0333
4	6-3-2019	9-2-2019	1.0303	1.0303
5	9-3-2019	9-30-2019	0.2980	0.2980
		Highest	1.2800	1.2800

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.5612	4.0000e-005	3.8000e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	7.3500e-003	7.3500e-003	2.0000e-005	0.0000	7.8400e-003
Energy	0.0166	0.1511	0.1269	9.1000e-004		0.0115	0.0115		0.0115	0.0115	0.0000	392.9451	392.9451	0.0134	5.3400e-003	394.8704
Mobile	0.2571	3.0905	2.9026	0.0117	0.6102	0.0174	0.6276	0.1651	0.0165	0.1816	0.0000	1,085.9409	1,085.9409	0.0494	0.0000	1,087.1765
Waste						0.0000	0.0000		0.0000	0.0000	29.5575	0.0000	29.5575	1.7468	0.0000	73.2275
Water						0.0000	0.0000		0.0000	0.0000	8.6213	33.1914	41.8127	0.8870	0.0213	70.3183
Total	**0.8349**	**3.2416**	**3.0333**	**0.0126**	**0.6102**	**0.0289**	**0.6390**	**0.1651**	**0.0280**	**0.1931**	**38.1788**	**1,512.0847**	**1,550.2635**	**2.6966**	**0.0266**	**1,625.6005**

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.5612	4.0000e-005	3.8000e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	7.3500e-003	7.3500e-003	2.0000e-005	0.0000	7.8400e-003
Energy	0.0166	0.1511	0.1269	9.1000e-004		0.0115	0.0115		0.0115	0.0115	0.0000	392.9451	392.9451	0.0134	5.3400e-003	394.8704
Mobile	0.2571	3.0905	2.9026	0.0117	0.6102	0.0174	0.6276	0.1651	0.0165	0.1816	0.0000	1,085.9409	1,085.9409	0.0494	0.0000	1,087.1765
Waste						0.0000	0.0000		0.0000	0.0000	29.5575	0.0000	29.5575	1.7468	0.0000	73.2275
Water						0.0000	0.0000		0.0000	0.0000	8.6213	33.1914	41.8127	0.8870	0.0213	70.3183
Total	**0.8349**	**3.2416**	**3.0333**	**0.0126**	**0.6102**	**0.0289**	**0.6390**	**0.1651**	**0.0280**	**0.1931**	**38.1788**	**1,512.0847**	**1,550.2635**	**2.6966**	**0.0266**	**1,625.6005**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	9/3/2018	9/28/2018	5	20	
2	Site Preparation	Site Preparation	9/29/2018	10/12/2018	5	10	
3	Grading	Grading	10/13/2018	11/9/2018	5	20	
4	Building Construction	Building Construction	11/10/2018	9/27/2019	5	230	
5	Paving	Paving	9/28/2019	10/25/2019	5	20	
6	Architectural Coating	Architectural Coating	10/26/2019	11/22/2019	5	20	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 10

Acres of Paving: 4.08

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 177,900; Non-Residential Outdoor: 59,300; Striped Parking Area: 10,656 (Architectural Coating – sqft)

OffRoad Equipment

Rodeo GPA - Monterey County, Annual

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	6.00	78	0.48
Demolition	Excavators	3	8.00	158	0.38
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Grading	Excavators	1	8.00	158	0.38
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Paving	Pavers	2	8.00	130	0.42
Paving	Rollers	2	8.00	80	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Grading	Graders	1	8.00	187	0.41
Grading	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Paving	Paving Equipment	2	8.00	132	0.36
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Building Construction	Welders	1	8.00	46	0.45

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	0.00	4.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	124.00	49.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	25.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

3.2 Demolition - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					4.6000e-004	0.0000	4.6000e-004	7.0000e-005	0.0000	7.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0372	0.3832	0.2230	3.9000e-004		0.0194	0.0194		0.0181	0.0181	0.0000	35.1241	35.1241	9.6800e-003	0.0000	35.3660
Total	**0.0372**	**0.3832**	**0.2230**	**3.9000e-004**	**4.6000e-004**	**0.0194**	**0.0199**	**7.0000e-005**	**0.0181**	**0.0181**	**0.0000**	**35.1241**	**35.1241**	**9.6800e-003**	**0.0000**	**35.3660**

3.2 Demolition - 2018

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	2.0000e-005	7.0000e-004	1.4000e-004	0.0000	3.0000e-005	0.0000	4.0000e-005	1.0000e-005	0.0000	1.0000e-005	0.0000	0.1587	0.1587	1.0000e-005	0.0000	0.1588
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	8.1000e-004	7.9000e-004	6.9900e-003	1.0000e-005	1.1900e-003	1.0000e-005	1.2000e-003	3.2000e-004	1.0000e-005	3.3000e-004	0.0000	1.2032	1.2032	6.0000e-005	0.0000	1.2048
Total	**8.3000e-004**	**1.4900e-003**	**7.1300e-003**	**1.0000e-005**	**1.2200e-003**	**1.0000e-005**	**1.2400e-003**	**3.3000e-004**	**1.0000e-005**	**3.4000e-004**	**0.0000**	**1.3619**	**1.3619**	**7.0000e-005**	**0.0000**	**1.3637**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					2.1000e-004	0.0000	2.1000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0372	0.3832	0.2230	3.9000e-004		0.0194	0.0194		0.0181	0.0181	0.0000	35.1240	35.1240	9.6800e-003	0.0000	35.3660
Total	**0.0372**	**0.3832**	**0.2230**	**3.9000e-004**	**2.1000e-004**	**0.0194**	**0.0196**	**3.0000e-005**	**0.0181**	**0.0181**	**0.0000**	**35.1240**	**35.1240**	**9.6800e-003**	**0.0000**	**35.3660**

3.2 Demolition - 2018

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	2.0000e-005	7.0000e-004	1.4000e-004	0.0000	3.0000e-005	0.0000	4.0000e-005	1.0000e-005	0.0000	1.0000e-005	0.0000	0.1587	0.1587	1.0000e-005	0.0000	0.1588
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	8.1000e-004	7.9000e-004	6.9900e-003	1.0000e-005	1.1900e-003	1.0000e-005	1.2000e-003	3.2000e-004	1.0000e-005	3.3000e-004	0.0000	1.2032	1.2032	6.0000e-005	0.0000	1.2048
Total	**8.3000e-004**	**1.4900e-003**	**7.1300e-003**	**1.0000e-005**	**1.2200e-003**	**1.0000e-005**	**1.2400e-003**	**3.3000e-004**	**1.0000e-005**	**3.4000e-004**	**0.0000**	**1.3619**	**1.3619**	**7.0000e-005**	**0.0000**	**1.3637**

3.3 Site Preparation - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0903	0.0000	0.0903	0.0497	0.0000	0.0497	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0228	0.2410	0.1124	1.9000e-004		0.0129	0.0129		0.0119	0.0119	0.0000	17.3800	17.3800	5.4100e-003	0.0000	17.5152
Total	**0.0228**	**0.2410**	**0.1124**	**1.9000e-004**	**0.0903**	**0.0129**	**0.1032**	**0.0497**	**0.0119**	**0.0615**	**0.0000**	**17.3800**	**17.3800**	**5.4100e-003**	**0.0000**	**17.5152**

3.3 Site Preparation - 2018

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.9000e-004	4.7000e-004	4.1900e-003	1.0000e-005	7.2000e-004	1.0000e-005	7.2000e-004	1.9000e-004	1.0000e-005	2.0000e-004	0.0000	0.7219	0.7219	4.0000e-005	0.0000	0.7229
Total	**4.9000e-004**	**4.7000e-004**	**4.1900e-003**	**1.0000e-005**	**7.2000e-004**	**1.0000e-005**	**7.2000e-004**	**1.9000e-004**	**1.0000e-005**	**2.0000e-004**	**0.0000**	**0.7219**	**0.7219**	**4.0000e-005**	**0.0000**	**0.7229**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0407	0.0000	0.0407	0.0223	0.0000	0.0223	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0228	0.2410	0.1124	1.9000e-004		0.0129	0.0129		0.0119	0.0119	0.0000	17.3799	17.3799	5.4100e-003	0.0000	17.5152
Total	**0.0228**	**0.2410**	**0.1124**	**1.9000e-004**	**0.0407**	**0.0129**	**0.0535**	**0.0223**	**0.0119**	**0.0342**	**0.0000**	**17.3799**	**17.3799**	**5.4100e-003**	**0.0000**	**17.5152**

3.3 Site Preparation - 2018

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.9000e-004	4.7000e-004	4.1900e-003	1.0000e-005	7.2000e-004	1.0000e-005	7.2000e-004	1.9000e-004	1.0000e-005	2.0000e-004	0.0000	0.7219	0.7219	4.0000e-005	0.0000	0.7229
Total	**4.9000e-004**	**4.7000e-004**	**4.1900e-003**	**1.0000e-005**	**7.2000e-004**	**1.0000e-005**	**7.2000e-004**	**1.9000e-004**	**1.0000e-005**	**2.0000e-004**	**0.0000**	**0.7219**	**0.7219**	**4.0000e-005**	**0.0000**	**0.7229**

3.4 Grading - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0655	0.0000	0.0655	0.0337	0.0000	0.0337	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0277	0.3067	0.1658	3.0000e-004		0.0155	0.0155		0.0143	0.0143	0.0000	27.1069	27.1069	8.4400e-003	0.0000	27.3178
Total	**0.0277**	**0.3067**	**0.1658**	**3.0000e-004**	**0.0655**	**0.0155**	**0.0810**	**0.0337**	**0.0143**	**0.0479**	**0.0000**	**27.1069**	**27.1069**	**8.4400e-003**	**0.0000**	**27.3178**

3.4 Grading - 2018

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	8.1000e-004	7.9000e-004	6.9900e-003	1.0000e-005	1.1900e-003	1.0000e-005	1.2000e-003	3.2000e-004	1.0000e-005	3.3000e-004	0.0000	1.2032	1.2032	6.0000e-005	0.0000	1.2048
Total	**8.1000e-004**	**7.9000e-004**	**6.9900e-003**	**1.0000e-005**	**1.1900e-003**	**1.0000e-005**	**1.2000e-003**	**3.2000e-004**	**1.0000e-005**	**3.3000e-004**	**0.0000**	**1.2032**	**1.2032**	**6.0000e-005**	**0.0000**	**1.2048**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0295	0.0000	0.0295	0.0152	0.0000	0.0152	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0277	0.3067	0.1658	3.0000e-004		0.0155	0.0155		0.0143	0.0143	0.0000	27.1068	27.1068	8.4400e-003	0.0000	27.3178
Total	**0.0277**	**0.3067**	**0.1658**	**3.0000e-004**	**0.0295**	**0.0155**	**0.0450**	**0.0152**	**0.0143**	**0.0294**	**0.0000**	**27.1068**	**27.1068**	**8.4400e-003**	**0.0000**	**27.3178**

3.4 Grading - 2018

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	8.1000e-004	7.9000e-004	6.9900e-003	1.0000e-005	1.1900e-003	1.0000e-005	1.2000e-003	3.2000e-004	1.0000e-005	3.3000e-004	0.0000	1.2032	1.2032	6.0000e-005	0.0000	1.2048
Total	**8.1000e-004**	**7.9000e-004**	**6.9900e-003**	**1.0000e-005**	**1.1900e-003**	**1.0000e-005**	**1.2000e-003**	**3.2000e-004**	**1.0000e-005**	**3.3000e-004**	**0.0000**	**1.2032**	**1.2032**	**6.0000e-005**	**0.0000**	**1.2048**

3.5 Building Construction - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0482	0.4210	0.3165	4.8000e-004		0.0270	0.0270		0.0254	0.0254	0.0000	42.7981	42.7981	0.0105	0.0000	43.0602
Total	**0.0482**	**0.4210**	**0.3165**	**4.8000e-004**		**0.0270**	**0.0270**		**0.0254**	**0.0254**	**0.0000**	**42.7981**	**42.7981**	**0.0105**	**0.0000**	**43.0602**

3.5 Building Construction - 2018

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	5.6300e-003	0.1267	0.0389	2.5000e-004	5.8000e-003	1.1500e-003	6.9500e-003	1.6800e-003	1.1000e-003	2.7800e-003	0.0000	24.1015	24.1015	1.2600e-003	0.0000	24.1331
Worker	0.0121	0.0117	0.1040	2.0000e-004	0.0177	1.7000e-004	0.0179	4.7200e-003	1.6000e-004	4.8700e-003	0.0000	17.9042	17.9042	9.5000e-004	0.0000	17.9280
Total	**0.0177**	**0.1384**	**0.1429**	**4.5000e-004**	**0.0235**	**1.3200e-003**	**0.0249**	**6.4000e-003**	**1.2600e-003**	**7.6500e-003**	**0.0000**	**42.0057**	**42.0057**	**2.2100e-003**	**0.0000**	**42.0611**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0482	0.4210	0.3165	4.8000e-004		0.0270	0.0270		0.0254	0.0254	0.0000	42.7981	42.7981	0.0105	0.0000	43.0602
Total	**0.0482**	**0.4210**	**0.3165**	**4.8000e-004**		**0.0270**	**0.0270**		**0.0254**	**0.0254**	**0.0000**	**42.7981**	**42.7981**	**0.0105**	**0.0000**	**43.0602**

3.5 Building Construction - 2018

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	5.6300e-003	0.1267	0.0389	2.5000e-004	5.8000e-003	1.1500e-003	6.9500e-003	1.6800e-003	1.1000e-003	2.7800e-003	0.0000	24.1015	24.1015	1.2600e-003	0.0000	24.1331
Worker	0.0121	0.0117	0.1040	2.0000e-004	0.0177	1.7000e-004	0.0179	4.7200e-003	1.6000e-004	4.8700e-003	0.0000	17.9042	17.9042	9.5000e-004	0.0000	17.9280
Total	**0.0177**	**0.1384**	**0.1429**	**4.5000e-004**	**0.0235**	**1.3200e-003**	**0.0249**	**6.4000e-003**	**1.2600e-003**	**7.6500e-003**	**0.0000**	**42.0057**	**42.0057**	**2.2100e-003**	**0.0000**	**42.0611**

3.5 Building Construction - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.2290	2.0446	1.6649	2.6100e-003		0.1251	0.1251		0.1176	0.1176	0.0000	228.0511	228.0511	0.0556	0.0000	229.4400
Total	**0.2290**	**2.0446**	**1.6649**	**2.6100e-003**		**0.1251**	**0.1251**		**0.1176**	**0.1176**	**0.0000**	**228.0511**	**228.0511**	**0.0556**	**0.0000**	**229.4400**

3.5 Building Construction - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0263	0.6449	0.1855	1.3600e-003	0.0313	5.0100e-003	0.0363	9.0400e-003	4.7900e-003	0.0138	0.0000	129.3235	129.3235	6.4400e-003	0.0000	129.4846
Worker	0.0582	0.0554	0.4941	1.0400e-003	0.0956	8.9000e-004	0.0965	0.0254	8.2000e-004	0.0262	0.0000	93.7395	93.7395	4.5200e-003	0.0000	93.8525
Total	**0.0845**	**0.7002**	**0.6795**	**2.4000e-003**	**0.1269**	**5.9000e-003**	**0.1328**	**0.0345**	**5.6100e-003**	**0.0401**	**0.0000**	**223.0630**	**223.0630**	**0.0110**	**0.0000**	**223.3371**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.2290	2.0446	1.6649	2.6100e-003		0.1251	0.1251		0.1176	0.1176	0.0000	228.0508	228.0508	0.0556	0.0000	229.4397
Total	**0.2290**	**2.0446**	**1.6649**	**2.6100e-003**		**0.1251**	**0.1251**		**0.1176**	**0.1176**	**0.0000**	**228.0508**	**228.0508**	**0.0556**	**0.0000**	**229.4397**

3.5 Building Construction - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0263	0.6449	0.1855	1.3600e-003	0.0313	5.0100e-003	0.0363	9.0400e-003	4.7900e-003	0.0138	0.0000	129.3235	129.3235	6.4400e-003	0.0000	129.4846
Worker	0.0582	0.0554	0.4941	1.0400e-003	0.0956	8.9000e-004	0.0965	0.0254	8.2000e-004	0.0262	0.0000	93.7395	93.7395	4.5200e-003	0.0000	93.8525
Total	**0.0845**	**0.7002**	**0.6795**	**2.4000e-003**	**0.1269**	**5.9000e-003**	**0.1328**	**0.0345**	**5.6100e-003**	**0.0401**	**0.0000**	**223.0630**	**223.0630**	**0.0110**	**0.0000**	**223.3371**

3.6 Paving - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0145	0.1524	0.1467	2.3000e-004		8.2500e-003	8.2500e-003		7.5900e-003	7.5900e-003	0.0000	20.4752	20.4752	6.4800e-003	0.0000	20.6371
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0145**	**0.1524**	**0.1467**	**2.3000e-004**		**8.2500e-003**	**8.2500e-003**		**7.5900e-003**	**7.5900e-003**	**0.0000**	**20.4752**	**20.4752**	**6.4800e-003**	**0.0000**	**20.6371**

3.6 Paving - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	7.3000e-004	6.9000e-004	6.1600e-003	1.0000e-005	1.1900e-003	1.0000e-005	1.2000e-003	3.2000e-004	1.0000e-005	3.3000e-004	0.0000	1.1690	1.1690	6.0000e-005	0.0000	1.1704
Total	**7.3000e-004**	**6.9000e-004**	**6.1600e-003**	**1.0000e-005**	**1.1900e-003**	**1.0000e-005**	**1.2000e-003**	**3.2000e-004**	**1.0000e-005**	**3.3000e-004**	**0.0000**	**1.1690**	**1.1690**	**6.0000e-005**	**0.0000**	**1.1704**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0145	0.1524	0.1467	2.3000e-004		8.2500e-003	8.2500e-003		7.5900e-003	7.5900e-003	0.0000	20.4752	20.4752	6.4800e-003	0.0000	20.6371
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0145**	**0.1524**	**0.1467**	**2.3000e-004**		**8.2500e-003**	**8.2500e-003**		**7.5900e-003**	**7.5900e-003**	**0.0000**	**20.4752**	**20.4752**	**6.4800e-003**	**0.0000**	**20.6371**

3.6 Paving - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	7.3000e-004	6.9000e-004	6.1600e-003	1.0000e-005	1.1900e-003	1.0000e-005	1.2000e-003	3.2000e-004	1.0000e-005	3.3000e-004	0.0000	1.1690	1.1690	6.0000e-005	0.0000	1.1704
Total	**7.3000e-004**	**6.9000e-004**	**6.1600e-003**	**1.0000e-005**	**1.1900e-003**	**1.0000e-005**	**1.2000e-003**	**3.2000e-004**	**1.0000e-005**	**3.3000e-004**	**0.0000**	**1.1690**	**1.1690**	**6.0000e-005**	**0.0000**	**1.1704**

3.7 Architectural Coating - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.8616					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.6600e-003	0.0184	0.0184	3.0000e-005		1.2900e-003	1.2900e-003		1.2900e-003	1.2900e-003	0.0000	2.5533	2.5533	2.2000e-004	0.0000	2.5587
Total	**0.8643**	**0.0184**	**0.0184**	**3.0000e-005**		**1.2900e-003**	**1.2900e-003**		**1.2900e-003**	**1.2900e-003**	**0.0000**	**2.5533**	**2.5533**	**2.2000e-004**	**0.0000**	**2.5587**

3.7 Architectural Coating - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.2100e-003	1.1500e-003	0.0103	2.0000e-005	1.9900e-003	2.0000e-005	2.0000e-003	5.3000e-004	2.0000e-005	5.5000e-004	0.0000	1.9484	1.9484	9.0000e-005	0.0000	1.9507
Total	**1.2100e-003**	**1.1500e-003**	**0.0103**	**2.0000e-005**	**1.9900e-003**	**2.0000e-005**	**2.0000e-003**	**5.3000e-004**	**2.0000e-005**	**5.5000e-004**	**0.0000**	**1.9484**	**1.9484**	**9.0000e-005**	**0.0000**	**1.9507**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.8616					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.6600e-003	0.0184	0.0184	3.0000e-005		1.2900e-003	1.2900e-003		1.2900e-003	1.2900e-003	0.0000	2.5533	2.5533	2.2000e-004	0.0000	2.5586
Total	**0.8643**	**0.0184**	**0.0184**	**3.0000e-005**		**1.2900e-003**	**1.2900e-003**		**1.2900e-003**	**1.2900e-003**	**0.0000**	**2.5533**	**2.5533**	**2.2000e-004**	**0.0000**	**2.5586**

3.7 Architectural Coating - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.2100e-003	1.1500e-003	0.0103	2.0000e-005	1.9900e-003	2.0000e-005	2.0000e-003	5.3000e-004	2.0000e-005	5.5000e-004	0.0000	1.9484	1.9484	9.0000e-005	0.0000	1.9507
Total	**1.2100e-003**	**1.1500e-003**	**0.0103**	**2.0000e-005**	**1.9900e-003**	**2.0000e-005**	**2.0000e-003**	**5.3000e-004**	**2.0000e-005**	**5.5000e-004**	**0.0000**	**1.9484**	**1.9484**	**9.0000e-005**	**0.0000**	**1.9507**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.2571	3.0905	2.9026	0.0117	0.6102	0.0174	0.6276	0.1651	0.0165	0.1816	0.0000	1,085.9409	1,085.9409	0.0494	0.0000	1,087.1765
Unmitigated	0.2571	3.0905	2.9026	0.0117	0.6102	0.0174	0.6276	0.1651	0.0165	0.1816	0.0000	1,085.9409	1,085.9409	0.0494	0.0000	1,087.1765

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Light Industry	564.94	226.66	569.50	1,510,172	1,510,172
General Office Building	45.78	10.39	3.29	82,811	82,811
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Total	610.72	237.05	572.79	1,592,983	1,592,983

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
General Light Industry	9.50	7.30	7.30	59.00	28.00	13.00	92	5	3
General Office Building	9.50	7.30	7.30	33.00	48.00	19.00	77	19	4
Other Non-Asphalt Surfaces	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
General Light Industry	0.436895	0.025303	0.166081	0.115721	0.067659	0.016341	0.046000	0.126000	0.000000	0.000000	0.000000	0.000000	0.000000
General Office Building	0.533135	0.030877	0.202665	0.141212	0.024955	0.006027	0.018072	0.025901	0.004150	0.002959	0.007890	0.001253	0.000905
Other Non-Asphalt Surfaces	0.533135	0.030877	0.202665	0.141212	0.024955	0.006027	0.018072	0.025901	0.004150	0.002959	0.007890	0.001253	0.000905

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	228.4981	228.4981	0.0102	2.3200e-003	229.4462
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	228.4981	228.4981	0.0102	2.3200e-003	229.4462
NaturalGas Mitigated	0.0166	0.1511	0.1269	9.1000e-004		0.0115	0.0115		0.0115	0.0115	0.0000	164.4470	164.4470	3.1500e-003	3.0100e-003	165.4243
NaturalGas Unmitigated	0.0166	0.1511	0.1269	9.1000e-004		0.0115	0.0115		0.0115	0.0115	0.0000	164.4470	164.4470	3.1500e-003	3.0100e-003	165.4243

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
General Light Industry	3.00468e+006	0.0162	0.1473	0.1237	8.8000e-004		0.0112	0.0112		0.0112	0.0112	0.0000	160.3413	160.3413	3.0700e-003	2.9400e-003	161.2941
General Office Building	76939	4.1000e-004	3.7700e-003	3.1700e-003	2.0000e-005		2.9000e-004	2.9000e-004		2.9000e-004	2.9000e-004	0.0000	4.1058	4.1058	8.0000e-005	8.0000e-005	4.1302
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0166**	**0.1511**	**0.1269**	**9.0000e-004**		**0.0115**	**0.0115**		**0.0115**	**0.0115**	**0.0000**	**164.4470**	**164.4470**	**3.1500e-003**	**3.0200e-003**	**165.4243**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
General Light Industry	3.00468e+006	0.0162	0.1473	0.1237	8.8000e-004		0.0112	0.0112		0.0112	0.0112	0.0000	160.3413	160.3413	3.0700e-003	2.9400e-003	161.2941
General Office Building	76939	4.1000e-004	3.7700e-003	3.1700e-003	2.0000e-005		2.9000e-004	2.9000e-004		2.9000e-004	2.9000e-004	0.0000	4.1058	4.1058	8.0000e-005	8.0000e-005	4.1302
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0166**	**0.1511**	**0.1269**	**9.0000e-004**		**0.0115**	**0.0115**		**0.0115**	**0.0115**	**0.0000**	**164.4470**	**164.4470**	**3.1500e-003**	**3.0200e-003**	**165.4243**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
General Light Industry	940814	209.8097	9.3900e-003	2.1300e-003	210.6803
General Office Building	83801	18.6884	8.4000e-004	1.9000e-004	18.7659
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Total		**228.4981**	**0.0102**	**2.3200e-003**	**229.4462**

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
General Light Industry	940814	209.8097	9.3900e-003	2.1300e-003	210.6803
General Office Building	83801	18.6884	8.4000e-004	1.9000e-004	18.7659
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Total		**228.4981**	**0.0102**	**2.3200e-003**	**229.4462**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.5612	4.0000e-005	3.8000e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	7.3500e-003	7.3500e-003	2.0000e-005	0.0000	7.8400e-003
Unmitigated	0.5612	4.0000e-005	3.8000e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	7.3500e-003	7.3500e-003	2.0000e-005	0.0000	7.8400e-003

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0862					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.4747					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	3.6000e-004	4.0000e-005	3.8000e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	7.3500e-003	7.3500e-003	2.0000e-005	0.0000	7.8400e-003
Total	**0.5612**	**4.0000e-005**	**3.8000e-003**	**0.0000**		**1.0000e-005**	**1.0000e-005**		**1.0000e-005**	**1.0000e-005**	**0.0000**	**7.3500e-003**	**7.3500e-003**	**2.0000e-005**	**0.0000**	**7.8400e-003**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0862					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.4747					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	3.6000e-004	4.0000e-005	3.8000e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	7.3500e-003	7.3500e-003	2.0000e-005	0.0000	7.8400e-003
Total	**0.5612**	**4.0000e-005**	**3.8000e-003**	**0.0000**		**1.0000e-005**	**1.0000e-005**		**1.0000e-005**	**1.0000e-005**	**0.0000**	**7.3500e-003**	**7.3500e-003**	**2.0000e-005**	**0.0000**	**7.8400e-003**

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	41.8127	0.8870	0.0213	70.3183
Unmitigated	41.8127	0.8870	0.0213	70.3183

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
General Light Industry	26.3394 / 0	40.1400	0.8597	0.0206	67.7677
General Office Building	0.835349 / 0.511988	1.6727	0.0273	6.6000e-004	2.5505
Other Non-Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**41.8126**	**0.8870**	**0.0213**	**70.3183**

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
General Light Industry	26.3394 / 0	40.1400	0.8597	0.0206	67.7677
General Office Building	0.835349 / 0.511988	1.6727	0.0273	6.6000e-004	2.5505
Other Non-Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**41.8126**	**0.8870**	**0.0213**	**70.3183**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	29.5575	1.7468	0.0000	73.2275
Unmitigated	29.5575	1.7468	0.0000	73.2275

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
General Light Industry	141.24	28.6704	1.6944	0.0000	71.0298
General Office Building	4.37	0.8871	0.0524	0.0000	2.1977
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Total		**29.5575**	**1.7468**	**0.0000**	**73.2275**

8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
General Light Industry	141.24	28.6704	1.6944	0.0000	71.0298
General Office Building	4.37	0.8871	0.0524	0.0000	2.1977
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Total		**29.5575**	**1.7468**	**0.0000**	**73.2275**

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

Rodeo GPA

Monterey County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Light Industry	113.90	1000sqft	2.61	113,900.00	0
General Office Building	4.70	1000sqft	0.11	4,700.00	0
Other Non-Asphalt Surfaces	177.60	1000sqft	4.08	177,600.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	3.6	**Precipitation Freq (Days)**	55
Climate Zone	4			**Operational Year**	2020
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	491.65	**CH4 Intensity (lb/MWhr)**	0.022	**N2O Intensity (lb/MWhr)**	0.005

1.3 User Entered Comments & Non-Default Data

Project Characteristics - Utilitiy information ajusted based on Renewable Portofolio Standard

Land Use - info from Rodeo GPA TIA 041318. The project site is 6.8 acres. Therefore, the remaining area would be considered as non-asphalt surfaces.

Construction Phase - assume operation year is 2020. CalEEMod default schedule is applied.

Grading - assume balance onsite (old Rodeo project info, GPA does not specify if there would have cut and fill)

Demolition - infro from client RFI response 5/26/2017

Vehicle Trips - Rodeo GPA TIA 041318 ITE 10th edition trip rates.

Fleet Mix - fleet mix adjusted based on CalEEMod default and San Bernadino 2003 study for truck percentages for industrial and warehouse uses

Energy Use -

Construction Off-road Equipment Mitigation -

Table Name	Column Name	Default Value	New Value
tblFleetMix	HHD	0.03	0.13
tblFleetMix	LDA	0.53	0.44
tblFleetMix	LDT1	0.03	0.03
tblFleetMix	LDT2	0.20	0.17
tblFleetMix	LHD1	0.02	0.07
tblFleetMix	LHD2	6.0270e-003	0.02
tblFleetMix	MCY	7.8900e-003	0.00
tblFleetMix	MDV	0.14	0.12
tblFleetMix	MH	9.0500e-004	0.00
tblFleetMix	MHD	0.02	0.05
tblFleetMix	OBUS	4.1500e-003	0.00
tblFleetMix	SBUS	1.2530e-003	0.00
tblFleetMix	UBUS	2.9590e-003	0.00
tblProjectCharacteristics	CH4IntensityFactor	0.029	0.022
tblProjectCharacteristics	CO2IntensityFactor	641.35	491.65
tblProjectCharacteristics	N2OIntensityFactor	0.006	0.005
tblVehicleTrips	ST_TR	1.32	1.99
tblVehicleTrips	ST_TR	2.46	2.21
tblVehicleTrips	SU_TR	0.68	5.00
tblVehicleTrips	SU_TR	1.05	0.70
tblVehicleTrips	WD_TR	6.97	4.96
tblVehicleTrips	WD_TR	11.03	9.74

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2018	4.6607	48.2813	25.6792	0.0528	18.2141	2.5783	20.7924	9.9699	2.3720	12.3419	0.0000	5,278.1600	5,278.1600	1.2017	0.0000	5,297.6054
2019	86.5492	28.1239	24.3236	0.0524	1.3500	1.3502	2.7002	0.3656	1.2701	1.6357	0.0000	5,209.8608	5,209.8608	0.7557	0.0000	5,228.7534
Maximum	**86.5492**	**48.2813**	**25.6792**	**0.0528**	**18.2141**	**2.5783**	**20.7924**	**9.9699**	**2.3720**	**12.3419**	**0.0000**	**5,278.1600**	**5,278.1600**	**1.2017**	**0.0000**	**5,297.6054**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2018	4.6607	48.2813	25.6792	0.0528	8.2777	2.5783	10.8560	4.5080	2.3720	6.8801	0.0000	5,278.1600	5,278.1600	1.2017	0.0000	5,297.6054
2019	86.5492	28.1239	24.3236	0.0524	1.3500	1.3502	2.7002	0.3656	1.2701	1.6357	0.0000	5,209.8608	5,209.8608	0.7557	0.0000	5,228.7534
Maximum	**86.5492**	**48.2813**	**25.6792**	**0.0528**	**8.2777**	**2.5783**	**10.8560**	**4.5080**	**2.3720**	**6.8801**	**0.0000**	**5,278.1600**	**5,278.1600**	**1.2017**	**0.0000**	**5,297.6054**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**50.79**	**0.00**	**42.30**	**52.85**	**0.00**	**39.08**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	3.0759	2.8000e-004	0.0304	0.0000		1.1000e-004	1.1000e-004		1.1000e-004	1.1000e-004		0.0648	0.0648	1.7000e-004		0.0692
Energy	0.0911	0.8277	0.6953	4.9700e-003		0.0629	0.0629		0.0629	0.0629		993.2703	993.2703	0.0190	0.0182	999.1728
Mobile	1.6408	18.2005	17.9087	0.0729	3.8210	0.1041	3.9251	1.0307	0.0988	1.1294		7,482.8603	7,482.8603	0.3290		7,491.0845
Total	**4.8077**	**19.0285**	**18.6344**	**0.0779**	**3.8210**	**0.1671**	**3.9881**	**1.0307**	**0.1618**	**1.1924**		**8,476.1953**	**8,476.1953**	**0.3482**	**0.0182**	**8,490.3264**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	3.0759	2.8000e-004	0.0304	0.0000		1.1000e-004	1.1000e-004		1.1000e-004	1.1000e-004		0.0648	0.0648	1.7000e-004		0.0692
Energy	0.0911	0.8277	0.6953	4.9700e-003		0.0629	0.0629		0.0629	0.0629		993.2703	993.2703	0.0190	0.0182	999.1728
Mobile	1.6408	18.2005	17.9087	0.0729	3.8210	0.1041	3.9251	1.0307	0.0988	1.1294		7,482.8603	7,482.8603	0.3290		7,491.0845
Total	**4.8077**	**19.0285**	**18.6344**	**0.0779**	**3.8210**	**0.1671**	**3.9881**	**1.0307**	**0.1618**	**1.1924**		**8,476.1953**	**8,476.1953**	**0.3482**	**0.0182**	**8,490.3264**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	9/3/2018	9/28/2018	5	20	
2	Site Preparation	Site Preparation	9/29/2018	10/12/2018	5	10	
3	Grading	Grading	10/13/2018	11/9/2018	5	20	
4	Building Construction	Building Construction	11/10/2018	9/27/2019	5	230	
5	Paving	Paving	9/28/2019	10/25/2019	5	20	
6	Architectural Coating	Architectural Coating	10/26/2019	11/22/2019	5	20	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 10

Acres of Paving: 4.08

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 177,900; Non-Residential Outdoor: 59,300; Striped Parking Area: 10,656 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	6.00	78	0.48
Demolition	Excavators	3	8.00	158	0.38
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Grading	Excavators	1	8.00	158	0.38
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Paving	Pavers	2	8.00	130	0.42
Paving	Rollers	2	8.00	80	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Grading	Graders	1	8.00	187	0.41
Grading	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Paving	Paving Equipment	2	8.00	132	0.36
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Building Construction	Welders	1	8.00	46	0.45

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	0.00	4.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	124.00	49.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	25.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

3.2 Demolition - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0463	0.0000	0.0463	7.0200e-003	0.0000	7.0200e-003			0.0000			0.0000
Off-Road	3.7190	38.3225	22.3040	0.0388		1.9386	1.9386		1.8048	1.8048		3,871.7665	3,871.7665	1.0667		3,898.4344
Total	**3.7190**	**38.3225**	**22.3040**	**0.0388**	**0.0463**	**1.9386**	**1.9849**	**7.0200e-003**	**1.8048**	**1.8119**		**3,871.7665**	**3,871.7665**	**1.0667**		**3,898.4344**

3.2 Demolition - 2018

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	2.1700e-003	0.0681	0.0139	1.7000e-004	3.4900e-003	4.2000e-004	3.9100e-003	9.6000e-004	4.0000e-004	1.3600e-003		17.6286	17.6286	6.8000e-004		17.6455
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0816	0.0687	0.7324	1.4200e-003	0.1232	1.1500e-003	0.1244	0.0327	1.0600e-003	0.0338		140.8075	140.8075	7.4000e-003		140.9926
Total	**0.0838**	**0.1368**	**0.7463**	**1.5900e-003**	**0.1267**	**1.5700e-003**	**0.1283**	**0.0336**	**1.4600e-003**	**0.0351**		**158.4361**	**158.4361**	**8.0800e-003**		**158.6381**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0209	0.0000	0.0209	3.1600e-003	0.0000	3.1600e-003			0.0000			0.0000
Off-Road	3.7190	38.3225	22.3040	0.0388		1.9386	1.9386		1.8048	1.8048	0.0000	3,871.7665	3,871.7665	1.0667		3,898.4344
Total	**3.7190**	**38.3225**	**22.3040**	**0.0388**	**0.0209**	**1.9386**	**1.9594**	**3.1600e-003**	**1.8048**	**1.8080**	**0.0000**	**3,871.7665**	**3,871.7665**	**1.0667**		**3,898.4344**

3.2 Demolition - 2018

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	2.1700e-003	0.0681	0.0139	1.7000e-004	3.4900e-003	4.2000e-004	3.9100e-003	9.6000e-004	4.0000e-004	1.3600e-003		17.6286	17.6286	6.8000e-004		17.6455
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0816	0.0687	0.7324	1.4200e-003	0.1232	1.1500e-003	0.1244	0.0327	1.0600e-003	0.0338		140.8075	140.8075	7.4000e-003		140.9926
Total	**0.0838**	**0.1368**	**0.7463**	**1.5900e-003**	**0.1267**	**1.5700e-003**	**0.1283**	**0.0336**	**1.4600e-003**	**0.0351**		**158.4361**	**158.4361**	**8.0800e-003**		**158.6381**

3.3 Site Preparation - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	4.5627	48.1988	22.4763	0.0380		2.5769	2.5769		2.3708	2.3708		3,831.6239	3,831.6239	1.1928		3,861.4448
Total	**4.5627**	**48.1988**	**22.4763**	**0.0380**	**18.0663**	**2.5769**	**20.6432**	**9.9307**	**2.3708**	**12.3014**		**3,831.6239**	**3,831.6239**	**1.1928**		**3,861.4448**

3.3 Site Preparation - 2018

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0979	0.0825	0.8789	1.7000e-003	0.1479	1.3800e-003	0.1493	0.0392	1.2800e-003	0.0405		168.9691	168.9691	8.8800e-003		169.1911
Total	**0.0979**	**0.0825**	**0.8789**	**1.7000e-003**	**0.1479**	**1.3800e-003**	**0.1493**	**0.0392**	**1.2800e-003**	**0.0405**		**168.9691**	**168.9691**	**8.8800e-003**		**169.1911**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					8.1298	0.0000	8.1298	4.4688	0.0000	4.4688			0.0000			0.0000
Off-Road	4.5627	48.1988	22.4763	0.0380		2.5769	2.5769		2.3708	2.3708	0.0000	3,831.6239	3,831.6239	1.1928		3,861.4448
Total	**4.5627**	**48.1988**	**22.4763**	**0.0380**	**8.1298**	**2.5769**	**10.7067**	**4.4688**	**2.3708**	**6.8396**	**0.0000**	**3,831.6239**	**3,831.6239**	**1.1928**		**3,861.4448**

3.3 Site Preparation - 2018

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0979	0.0825	0.8789	1.7000e-003	0.1479	1.3800e-003	0.1493	0.0392	1.2800e-003	0.0405		168.9691	168.9691	8.8800e-003		169.1911
Total	**0.0979**	**0.0825**	**0.8789**	**1.7000e-003**	**0.1479**	**1.3800e-003**	**0.1493**	**0.0392**	**1.2800e-003**	**0.0405**		**168.9691**	**168.9691**	**8.8800e-003**		**169.1911**

3.4 Grading - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.5523	0.0000	6.5523	3.3675	0.0000	3.3675			0.0000			0.0000
Off-Road	2.7733	30.6725	16.5770	0.0297		1.5513	1.5513		1.4272	1.4272		2,988.0216	2,988.0216	0.9302		3,011.2769
Total	**2.7733**	**30.6725**	**16.5770**	**0.0297**	**6.5523**	**1.5513**	**8.1037**	**3.3675**	**1.4272**	**4.7947**		**2,988.0216**	**2,988.0216**	**0.9302**		**3,011.2769**

3.4 Grading - 2018

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0816	0.0687	0.7324	1.4200e-003	0.1232	1.1500e-003	0.1244	0.0327	1.0600e-003	0.0338		140.8075	140.8075	7.4000e-003		140.9926
Total	**0.0816**	**0.0687**	**0.7324**	**1.4200e-003**	**0.1232**	**1.1500e-003**	**0.1244**	**0.0327**	**1.0600e-003**	**0.0338**		**140.8075**	**140.8075**	**7.4000e-003**		**140.9926**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.9486	0.0000	2.9486	1.5154	0.0000	1.5154			0.0000			0.0000
Off-Road	2.7733	30.6725	16.5770	0.0297		1.5513	1.5513		1.4272	1.4272	0.0000	2,988.0216	2,988.0216	0.9302		3,011.2769
Total	**2.7733**	**30.6725**	**16.5770**	**0.0297**	**2.9486**	**1.5513**	**4.4999**	**1.5154**	**1.4272**	**2.9426**	**0.0000**	**2,988.0216**	**2,988.0216**	**0.9302**		**3,011.2769**

3.4 Grading - 2018

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0816	0.0687	0.7324	1.4200e-003	0.1232	1.1500e-003	0.1244	0.0327	1.0600e-003	0.0338		140.8075	140.8075	7.4000e-003		140.9926
Total	**0.0816**	**0.0687**	**0.7324**	**1.4200e-003**	**0.1232**	**1.1500e-003**	**0.1244**	**0.0327**	**1.0600e-003**	**0.0338**		**140.8075**	**140.8075**	**7.4000e-003**		**140.9926**

3.5 Building Construction - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.6795	23.3900	17.5804	0.0269		1.4999	1.4999		1.4099	1.4099		2,620.9351	2,620.9351	0.6421		2,636.9883
Total	**2.6795**	**23.3900**	**17.5804**	**0.0269**		**1.4999**	**1.4999**		**1.4099**	**1.4099**		**2,620.9351**	**2,620.9351**	**0.6421**		**2,636.9883**

3.5 Building Construction - 2018

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.3069	6.9228	2.0440	0.0142	0.3314	0.0633	0.3947	0.0954	0.0606	0.1559		1,493.2158	1,493.2158	0.0745		1,495.0785
Worker	0.6747	0.5682	6.0548	0.0117	1.0186	9.5300e-003	1.0282	0.2702	8.8000e-003	0.2790		1,164.0090	1,164.0090	0.0612		1,165.5386
Total	**0.9815**	**7.4911**	**8.0988**	**0.0259**	**1.3500**	**0.0728**	**1.4229**	**0.3656**	**0.0694**	**0.4349**		**2,657.2249**	**2,657.2249**	**0.1357**		**2,660.6171**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.6795	23.3900	17.5804	0.0269		1.4999	1.4999		1.4099	1.4099	0.0000	2,620.9351	2,620.9351	0.6421		2,636.9883
Total	**2.6795**	**23.3900**	**17.5804**	**0.0269**		**1.4999**	**1.4999**		**1.4099**	**1.4099**	**0.0000**	**2,620.9351**	**2,620.9351**	**0.6421**		**2,636.9883**

3.5 Building Construction - 2018

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.3069	6.9228	2.0440	0.0142	0.3314	0.0633	0.3947	0.0954	0.0606	0.1559		1,493.2158	1,493.2158	0.0745		1,495.0785
Worker	0.6747	0.5682	6.0548	0.0117	1.0186	9.5300e-003	1.0282	0.2702	8.8000e-003	0.2790		1,164.0090	1,164.0090	0.0612		1,165.5386
Total	**0.9815**	**7.4911**	**8.0988**	**0.0259**	**1.3500**	**0.0728**	**1.4229**	**0.3656**	**0.0694**	**0.4349**		**2,657.2249**	**2,657.2249**	**0.1357**		**2,660.6171**

3.5 Building Construction - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.3612	21.0788	17.1638	0.0269		1.2899	1.2899		1.2127	1.2127		2,591.5802	2,591.5802	0.6313		2,607.3635
Total	**2.3612**	**21.0788**	**17.1638**	**0.0269**		**1.2899**	**1.2899**		**1.2127**	**1.2127**		**2,591.5802**	**2,591.5802**	**0.6313**		**2,607.3635**

3.5 Building Construction - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.2660	6.5460	1.8031	0.0141	0.3314	0.0512	0.3826	0.0954	0.0489	0.1443		1,487.2500	1,487.2500	0.0705		1,489.0126
Worker	0.6044	0.4991	5.3567	0.0114	1.0186	9.1500e-003	1.0278	0.2702	8.4500e-003	0.2786		1,131.0306	1,131.0306	0.0539		1,132.3773
Total	**0.8704**	**7.0451**	**7.1598**	**0.0255**	**1.3500**	**0.0603**	**1.4104**	**0.3656**	**0.0574**	**0.4230**		**2,618.2806**	**2,618.2806**	**0.1244**		**2,621.3899**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.3612	21.0788	17.1638	0.0269		1.2899	1.2899		1.2127	1.2127	0.0000	2,591.5802	2,591.5802	0.6313		2,607.3635
Total	**2.3612**	**21.0788**	**17.1638**	**0.0269**		**1.2899**	**1.2899**		**1.2127**	**1.2127**	**0.0000**	**2,591.5802**	**2,591.5802**	**0.6313**		**2,607.3635**

3.5 Building Construction - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.2660	6.5460	1.8031	0.0141	0.3314	0.0512	0.3826	0.0954	0.0489	0.1443		1,487.2500	1,487.2500	0.0705		1,489.0126
Worker	0.6044	0.4991	5.3567	0.0114	1.0186	9.1500e-003	1.0278	0.2702	8.4500e-003	0.2786		1,131.0306	1,131.0306	0.0539		1,132.3773
Total	**0.8704**	**7.0451**	**7.1598**	**0.0255**	**1.3500**	**0.0603**	**1.4104**	**0.3656**	**0.0574**	**0.4230**		**2,618.2806**	**2,618.2806**	**0.1244**		**2,621.3899**

3.6 Paving - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.4544	15.2441	14.6648	0.0228		0.8246	0.8246		0.7586	0.7586		2,257.0025	2,257.0025	0.7141		2,274.8548
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.4544**	**15.2441**	**14.6648**	**0.0228**		**0.8246**	**0.8246**		**0.7586**	**0.7586**		**2,257.0025**	**2,257.0025**	**0.7141**		**2,274.8548**

3.6 Paving - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0731	0.0604	0.6480	1.3800e-003	0.1232	1.1100e-003	0.1243	0.0327	1.0200e-003	0.0337		136.8182	136.8182	6.5200e-003		136.9811
Total	**0.0731**	**0.0604**	**0.6480**	**1.3800e-003**	**0.1232**	**1.1100e-003**	**0.1243**	**0.0327**	**1.0200e-003**	**0.0337**		**136.8182**	**136.8182**	**6.5200e-003**		**136.9811**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.4544	15.2441	14.6648	0.0228		0.8246	0.8246		0.7586	0.7586	0.0000	2,257.0025	2,257.0025	0.7141		2,274.8548
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.4544**	**15.2441**	**14.6648**	**0.0228**		**0.8246**	**0.8246**		**0.7586**	**0.7586**	**0.0000**	**2,257.0025**	**2,257.0025**	**0.7141**		**2,274.8548**

3.6 Paving - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0731	0.0604	0.6480	1.3800e-003	0.1232	1.1100e-003	0.1243	0.0327	1.0200e-003	0.0337		136.8182	136.8182	6.5200e-003		136.9811
Total	**0.0731**	**0.0604**	**0.6480**	**1.3800e-003**	**0.1232**	**1.1100e-003**	**0.1243**	**0.0327**	**1.0200e-003**	**0.0337**		**136.8182**	**136.8182**	**6.5200e-003**		**136.9811**

3.7 Architectural Coating - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	86.1609					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2664	1.8354	1.8413	2.9700e-003		0.1288	0.1288		0.1288	0.1288		281.4481	281.4481	0.0238		282.0423
Total	**86.4274**	**1.8354**	**1.8413**	**2.9700e-003**		**0.1288**	**0.1288**		**0.1288**	**0.1288**		**281.4481**	**281.4481**	**0.0238**		**282.0423**

3.7 Architectural Coating - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1219	0.1006	1.0800	2.2900e-003	0.2054	1.8400e-003	0.2072	0.0545	1.7000e-003	0.0562		228.0304	228.0304	0.0109		228.3019
Total	**0.1219**	**0.1006**	**1.0800**	**2.2900e-003**	**0.2054**	**1.8400e-003**	**0.2072**	**0.0545**	**1.7000e-003**	**0.0562**		**228.0304**	**228.0304**	**0.0109**		**228.3019**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	86.1609					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2664	1.8354	1.8413	2.9700e-003		0.1288	0.1288		0.1288	0.1288	0.0000	281.4481	281.4481	0.0238		282.0423
Total	**86.4274**	**1.8354**	**1.8413**	**2.9700e-003**		**0.1288**	**0.1288**		**0.1288**	**0.1288**	**0.0000**	**281.4481**	**281.4481**	**0.0238**		**282.0423**

3.7 Architectural Coating - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1219	0.1006	1.0800	2.2900e-003	0.2054	1.8400e-003	0.2072	0.0545	1.7000e-003	0.0562		228.0304	228.0304	0.0109		228.3019
Total	**0.1219**	**0.1006**	**1.0800**	**2.2900e-003**	**0.2054**	**1.8400e-003**	**0.2072**	**0.0545**	**1.7000e-003**	**0.0562**		**228.0304**	**228.0304**	**0.0109**		**228.3019**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	1.6408	18.2005	17.9087	0.0729	3.8210	0.1041	3.9251	1.0307	0.0988	1.1294		7,482.8603	7,482.8603	0.3290		7,491.0845
Unmitigated	1.6408	18.2005	17.9087	0.0729	3.8210	0.1041	3.9251	1.0307	0.0988	1.1294		7,482.8603	7,482.8603	0.3290		7,491.0845

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Light Industry	564.94	226.66	569.50	1,510,172	1,510,172
General Office Building	45.78	10.39	3.29	82,811	82,811
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Total	610.72	237.05	572.79	1,592,983	1,592,983

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
General Light Industry	9.50	7.30	7.30	59.00	28.00	13.00	92	5	3
General Office Building	9.50	7.30	7.30	33.00	48.00	19.00	77	19	4
Other Non-Asphalt Surfaces	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
General Light Industry	0.436895	0.025303	0.166081	0.115721	0.067659	0.016341	0.046000	0.126000	0.000000	0.000000	0.000000	0.000000	0.000000
General Office Building	0.533135	0.030877	0.202665	0.141212	0.024955	0.006027	0.018072	0.025901	0.004150	0.002959	0.007890	0.001253	0.000905
Other Non-Asphalt Surfaces	0.533135	0.030877	0.202665	0.141212	0.024955	0.006027	0.018072	0.025901	0.004150	0.002959	0.007890	0.001253	0.000905

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0911	0.8277	0.6953	4.9700e-003		0.0629	0.0629		0.0629	0.0629		993.2703	993.2703	0.0190	0.0182	999.1728
NaturalGas Unmitigated	0.0911	0.8277	0.6953	4.9700e-003		0.0629	0.0629		0.0629	0.0629		993.2703	993.2703	0.0190	0.0182	999.1728

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
General Light Industry	8232.01	0.0888	0.8071	0.6779	4.8400e-003		0.0613	0.0613		0.0613	0.0613		968.4712	968.4712	0.0186	0.0178	974.2264
General Office Building	210.792	2.2700e-003	0.0207	0.0174	1.2000e-004		1.5700e-003	1.5700e-003		1.5700e-003	1.5700e-003		24.7990	24.7990	4.8000e-004	4.5000e-004	24.9464
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0911**	**0.8277**	**0.6953**	**4.9600e-003**		**0.0629**	**0.0629**		**0.0629**	**0.0629**		**993.2703**	**993.2703**	**0.0190**	**0.0182**	**999.1728**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
General Light Industry	8.23201	0.0888	0.8071	0.6779	4.8400e-003		0.0613	0.0613		0.0613	0.0613		968.4712	968.4712	0.0186	0.0178	974.2264
General Office Building	0.210792	2.2700e-003	0.0207	0.0174	1.2000e-004		1.5700e-003	1.5700e-003		1.5700e-003	1.5700e-003		24.7990	24.7990	4.8000e-004	4.5000e-004	24.9464
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0911**	**0.8277**	**0.6953**	**4.9600e-003**		**0.0629**	**0.0629**		**0.0629**	**0.0629**		**993.2703**	**993.2703**	**0.0190**	**0.0182**	**999.1728**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	3.0759	2.8000e-004	0.0304	0.0000		1.1000e-004	1.1000e-004		1.1000e-004	1.1000e-004		0.0648	0.0648	1.7000e-004		0.0692
Unmitigated	3.0759	2.8000e-004	0.0304	0.0000		1.1000e-004	1.1000e-004		1.1000e-004	1.1000e-004		0.0648	0.0648	1.7000e-004		0.0692

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.4721					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	2.6010					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	2.8600e-003	2.8000e-004	0.0304	0.0000		1.1000e-004	1.1000e-004		1.1000e-004	1.1000e-004		0.0648	0.0648	1.7000e-004		0.0692
Total	**3.0759**	**2.8000e-004**	**0.0304**	**0.0000**		**1.1000e-004**	**1.1000e-004**		**1.1000e-004**	**1.1000e-004**		**0.0648**	**0.0648**	**1.7000e-004**		**0.0692**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.4721					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	2.6010					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	2.8600e-003	2.8000e-004	0.0304	0.0000		1.1000e-004	1.1000e-004		1.1000e-004	1.1000e-004		0.0648	0.0648	1.7000e-004		0.0692
Total	**3.0759**	**2.8000e-004**	**0.0304**	**0.0000**		**1.1000e-004**	**1.1000e-004**		**1.1000e-004**	**1.1000e-004**		**0.0648**	**0.0648**	**1.7000e-004**		**0.0692**

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

Rodeo GPA

Monterey County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Light Industry	113.90	1000sqft	2.61	113,900.00	0
General Office Building	4.70	1000sqft	0.11	4,700.00	0
Other Non-Asphalt Surfaces	177.60	1000sqft	4.08	177,600.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	3.6	**Precipitation Freq (Days)**	55
Climate Zone	4			**Operational Year**	2020
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	491.65	**CH4 Intensity (lb/MWhr)**	0.022	**N2O Intensity (lb/MWhr)**	0.005

1.3 User Entered Comments & Non-Default Data

Project Characteristics - Utilitiy information ajusted based on Renewable Portofolio Standard

Land Use - info from Rodeo GPA TIA 041318. The project site is 6.8 acres. Therefore, the remaining area would be considered as non-asphalt surfaces.

Construction Phase - assume operation year is 2020. CalEEMod default schedule is applied.

Grading - assume balance onsite (old Rodeo project info, GPA does not specify if there would have cut and fill)

Demolition - infro from client RFI response 5/26/2017

Vehicle Trips - Rodeo GPA TIA 041318 ITE 10th edition trip rates.

Fleet Mix - fleet mix adjusted based on CalEEMod default and San Bernadino 2003 study for truck percentages for industrial and warehouse uses

Energy Use -

Construction Off-road Equipment Mitigation -

Table Name	Column Name	Default Value	New Value
tblFleetMix	HHD	0.03	0.13
tblFleetMix	LDA	0.53	0.44
tblFleetMix	LDT1	0.03	0.03
tblFleetMix	LDT2	0.20	0.17
tblFleetMix	LHD1	0.02	0.07
tblFleetMix	LHD2	6.0270e-003	0.02
tblFleetMix	MCY	7.8900e-003	0.00
tblFleetMix	MDV	0.14	0.12
tblFleetMix	MH	9.0500e-004	0.00
tblFleetMix	MHD	0.02	0.05
tblFleetMix	OBUS	4.1500e-003	0.00
tblFleetMix	SBUS	1.2530e-003	0.00
tblFleetMix	UBUS	2.9590e-003	0.00
tblProjectCharacteristics	CH4IntensityFactor	0.029	0.022
tblProjectCharacteristics	CO2IntensityFactor	641.35	491.65
tblProjectCharacteristics	N2OIntensityFactor	0.006	0.005
tblVehicleTrips	ST_TR	1.32	1.99
tblVehicleTrips	ST_TR	2.46	2.21
tblVehicleTrips	SU_TR	0.68	5.00
tblVehicleTrips	SU_TR	1.05	0.70
tblVehicleTrips	WD_TR	6.97	4.96
tblVehicleTrips	WD_TR	11.03	9.74

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2018	4.6698	48.3026	25.9218	0.0517	18.2141	2.5783	20.7924	9.9699	2.3720	12.3419	0.0000	5,163.2112	5,163.2112	1.2014	0.0000	5,182.7565
2019	86.5602	28.3479	24.5119	0.0513	1.3500	1.3513	2.7013	0.3656	1.2712	1.6367	0.0000	5,096.0074	5,096.0074	0.7597	0.0000	5,115.0005
Maximum	**86.5602**	**48.3026**	**25.9218**	**0.0517**	**18.2141**	**2.5783**	**20.7924**	**9.9699**	**2.3720**	**12.3419**	**0.0000**	**5,163.2112**	**5,163.2112**	**1.2014**	**0.0000**	**5,182.7565**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2018	4.6698	48.3026	25.9218	0.0517	8.2777	2.5783	10.8560	4.5080	2.3720	6.8801	0.0000	5,163.2112	5,163.2112	1.2014	0.0000	5,182.7565
2019	86.5602	28.3479	24.5119	0.0513	1.3500	1.3513	2.7013	0.3656	1.2712	1.6367	0.0000	5,096.0074	5,096.0074	0.7597	0.0000	5,115.0005
Maximum	**86.5602**	**48.3026**	**25.9218**	**0.0517**	**8.2777**	**2.5783**	**10.8560**	**4.5080**	**2.3720**	**6.8801**	**0.0000**	**5,163.2112**	**5,163.2112**	**1.2014**	**0.0000**	**5,182.7565**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**50.79**	**0.00**	**42.29**	**52.85**	**0.00**	**39.07**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	3.0759	2.8000e-004	0.0304	0.0000		1.1000e-004	1.1000e-004		1.1000e-004	1.1000e-004		0.0648	0.0648	1.7000e-004		0.0692
Energy	0.0911	0.8277	0.6953	4.9700e-003		0.0629	0.0629		0.0629	0.0629		993.2703	993.2703	0.0190	0.0182	999.1728
Mobile	1.5750	18.7741	18.5671	0.0698	3.8210	0.1063	3.9273	1.0307	0.1009	1.1316		7,156.2210	7,156.2210	0.3404		7,164.7315
Total	**4.7420**	**19.6021**	**19.2929**	**0.0747**	**3.8210**	**0.1694**	**3.9903**	**1.0307**	**0.1639**	**1.1946**		**8,149.5561**	**8,149.5561**	**0.3596**	**0.0182**	**8,163.9735**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	3.0759	2.8000e-004	0.0304	0.0000		1.1000e-004	1.1000e-004		1.1000e-004	1.1000e-004		0.0648	0.0648	1.7000e-004		0.0692
Energy	0.0911	0.8277	0.6953	4.9700e-003		0.0629	0.0629		0.0629	0.0629		993.2703	993.2703	0.0190	0.0182	999.1728
Mobile	1.5750	18.7741	18.5671	0.0698	3.8210	0.1063	3.9273	1.0307	0.1009	1.1316		7,156.2210	7,156.2210	0.3404		7,164.7315
Total	**4.7420**	**19.6021**	**19.2929**	**0.0747**	**3.8210**	**0.1694**	**3.9903**	**1.0307**	**0.1639**	**1.1946**		**8,149.5561**	**8,149.5561**	**0.3596**	**0.0182**	**8,163.9735**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	9/3/2018	9/28/2018	5	20	
2	Site Preparation	Site Preparation	9/29/2018	10/12/2018	5	10	
3	Grading	Grading	10/13/2018	11/9/2018	5	20	
4	Building Construction	Building Construction	11/10/2018	9/27/2019	5	230	
5	Paving	Paving	9/28/2019	10/25/2019	5	20	
6	Architectural Coating	Architectural Coating	10/26/2019	11/22/2019	5	20	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 10

Acres of Paving: 4.08

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 177,900; Non-Residential Outdoor: 59,300; Striped Parking Area: 10,656 (Architectural Coating – sqft)

OffRoad Equipment

Rodeo GPA - Monterey County, Winter

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	6.00	78	0.48
Demolition	Excavators	3	8.00	158	0.38
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Grading	Excavators	1	8.00	158	0.38
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Paving	Pavers	2	8.00	130	0.42
Paving	Rollers	2	8.00	80	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Grading	Graders	1	8.00	187	0.41
Grading	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Paving	Paving Equipment	2	8.00	132	0.36
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Building Construction	Welders	1	8.00	46	0.45

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	0.00	4.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	124.00	49.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	25.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

3.2 Demolition - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0463	0.0000	0.0463	7.0200e-003	0.0000	7.0200e-003			0.0000			0.0000
Off-Road	3.7190	38.3225	22.3040	0.0388		1.9386	1.9386		1.8048	1.8048		3,871.7665	3,871.7665	1.0667		3,898.4344
Total	**3.7190**	**38.3225**	**22.3040**	**0.0388**	**0.0463**	**1.9386**	**1.9849**	**7.0200e-003**	**1.8048**	**1.8119**		**3,871.7665**	**3,871.7665**	**1.0667**		**3,898.4344**

3.2 Demolition - 2018

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	2.2400e-003	0.0699	0.0150	1.6000e-004	3.4900e-003	4.3000e-004	3.9200e-003	9.6000e-004	4.1000e-004	1.3600e-003		17.3034	17.3034	7.2000e-004		17.3215
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0892	0.0865	0.7294	1.3300e-003	0.1232	1.1500e-003	0.1244	0.0327	1.0600e-003	0.0338		131.8660	131.8660	7.1300e-003		132.0443
Total	**0.0915**	**0.1564**	**0.7444**	**1.4900e-003**	**0.1267**	**1.5800e-003**	**0.1283**	**0.0336**	**1.4700e-003**	**0.0351**		**149.1694**	**149.1694**	**7.8500e-003**		**149.3658**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0209	0.0000	0.0209	3.1600e-003	0.0000	3.1600e-003			0.0000			0.0000
Off-Road	3.7190	38.3225	22.3040	0.0388		1.9386	1.9386		1.8048	1.8048	0.0000	3,871.7665	3,871.7665	1.0667		3,898.4344
Total	**3.7190**	**38.3225**	**22.3040**	**0.0388**	**0.0209**	**1.9386**	**1.9594**	**3.1600e-003**	**1.8048**	**1.8080**	**0.0000**	**3,871.7665**	**3,871.7665**	**1.0667**		**3,898.4344**

3.2 Demolition - 2018

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	2.2400e-003	0.0699	0.0150	1.6000e-004	3.4900e-003	4.3000e-004	3.9200e-003	9.6000e-004	4.1000e-004	1.3600e-003		17.3034	17.3034	7.2000e-004		17.3215
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0892	0.0865	0.7294	1.3300e-003	0.1232	1.1500e-003	0.1244	0.0327	1.0600e-003	0.0338		131.8660	131.8660	7.1300e-003		132.0443
Total	**0.0915**	**0.1564**	**0.7444**	**1.4900e-003**	**0.1267**	**1.5800e-003**	**0.1283**	**0.0336**	**1.4700e-003**	**0.0351**		**149.1694**	**149.1694**	**7.8500e-003**		**149.3658**

3.3 Site Preparation - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	4.5627	48.1988	22.4763	0.0380		2.5769	2.5769		2.3708	2.3708		3,831.6239	3,831.6239	1.1928		3,861.4448
Total	**4.5627**	**48.1988**	**22.4763**	**0.0380**	**18.0663**	**2.5769**	**20.6432**	**9.9307**	**2.3708**	**12.3014**		**3,831.6239**	**3,831.6239**	**1.1928**		**3,861.4448**

3.3 Site Preparation - 2018

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1071	0.1038	0.8753	1.5900e-003	0.1479	1.3800e-003	0.1493	0.0392	1.2800e-003	0.0405		158.2392	158.2392	8.5600e-003		158.4532
Total	**0.1071**	**0.1038**	**0.8753**	**1.5900e-003**	**0.1479**	**1.3800e-003**	**0.1493**	**0.0392**	**1.2800e-003**	**0.0405**		**158.2392**	**158.2392**	**8.5600e-003**		**158.4532**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					8.1298	0.0000	8.1298	4.4688	0.0000	4.4688			0.0000			0.0000
Off-Road	4.5627	48.1988	22.4763	0.0380		2.5769	2.5769		2.3708	2.3708	0.0000	3,831.6239	3,831.6239	1.1928		3,861.4448
Total	**4.5627**	**48.1988**	**22.4763**	**0.0380**	**8.1298**	**2.5769**	**10.7067**	**4.4688**	**2.3708**	**6.8396**	**0.0000**	**3,831.6239**	**3,831.6239**	**1.1928**		**3,861.4448**

3.3 Site Preparation - 2018

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1071	0.1038	0.8753	1.5900e-003	0.1479	1.3800e-003	0.1493	0.0392	1.2800e-003	0.0405		158.2392	158.2392	8.5600e-003		158.4532
Total	**0.1071**	**0.1038**	**0.8753**	**1.5900e-003**	**0.1479**	**1.3800e-003**	**0.1493**	**0.0392**	**1.2800e-003**	**0.0405**		**158.2392**	**158.2392**	**8.5600e-003**		**158.4532**

3.4 Grading - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.5523	0.0000	6.5523	3.3675	0.0000	3.3675			0.0000			0.0000
Off-Road	2.7733	30.6725	16.5770	0.0297		1.5513	1.5513		1.4272	1.4272		2,988.0216	2,988.0216	0.9302		3,011.2769
Total	**2.7733**	**30.6725**	**16.5770**	**0.0297**	**6.5523**	**1.5513**	**8.1037**	**3.3675**	**1.4272**	**4.7947**		**2,988.0216**	**2,988.0216**	**0.9302**		**3,011.2769**

3.4 Grading - 2018

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0892	0.0865	0.7294	1.3300e-003	0.1232	1.1500e-003	0.1244	0.0327	1.0600e-003	0.0338		131.8660	131.8660	7.1300e-003		132.0443
Total	**0.0892**	**0.0865**	**0.7294**	**1.3300e-003**	**0.1232**	**1.1500e-003**	**0.1244**	**0.0327**	**1.0600e-003**	**0.0338**		**131.8660**	**131.8660**	**7.1300e-003**		**132.0443**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.9486	0.0000	2.9486	1.5154	0.0000	1.5154			0.0000			0.0000
Off-Road	2.7733	30.6725	16.5770	0.0297		1.5513	1.5513		1.4272	1.4272	0.0000	2,988.0216	2,988.0216	0.9302		3,011.2769
Total	**2.7733**	**30.6725**	**16.5770**	**0.0297**	**2.9486**	**1.5513**	**4.4999**	**1.5154**	**1.4272**	**2.9426**	**0.0000**	**2,988.0216**	**2,988.0216**	**0.9302**		**3,011.2769**

3.4 Grading - 2018

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0892	0.0865	0.7294	1.3300e-003	0.1232	1.1500e-003	0.1244	0.0327	1.0600e-003	0.0338		131.8660	131.8660	7.1300e-003		132.0443
Total	**0.0892**	**0.0865**	**0.7294**	**1.3300e-003**	**0.1232**	**1.1500e-003**	**0.1244**	**0.0327**	**1.0600e-003**	**0.0338**		**131.8660**	**131.8660**	**7.1300e-003**		**132.0443**

3.5 Building Construction - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.6795	23.3900	17.5804	0.0269		1.4999	1.4999		1.4099	1.4099		2,620.9351	2,620.9351	0.6421		2,636.9883
Total	**2.6795**	**23.3900**	**17.5804**	**0.0269**		**1.4999**	**1.4999**		**1.4099**	**1.4099**		**2,620.9351**	**2,620.9351**	**0.6421**		**2,636.9883**

3.5 Building Construction - 2018

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.3225	7.0364	2.3119	0.0138	0.3314	0.0645	0.3959	0.0954	0.0617	0.1571		1,452.1840	1,452.1840	0.0807		1,454.2019
Worker	0.7376	0.7151	6.0295	0.0110	1.0186	9.5300e-003	1.0282	0.2702	8.8000e-003	0.2790		1,090.0922	1,090.0922	0.0590		1,091.5663
Total	**1.0600**	**7.7515**	**8.3414**	**0.0248**	**1.3500**	**0.0741**	**1.4241**	**0.3656**	**0.0705**	**0.4361**		**2,542.2761**	**2,542.2761**	**0.1397**		**2,545.7683**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.6795	23.3900	17.5804	0.0269		1.4999	1.4999		1.4099	1.4099	0.0000	2,620.9351	2,620.9351	0.6421		2,636.9883
Total	**2.6795**	**23.3900**	**17.5804**	**0.0269**		**1.4999**	**1.4999**		**1.4099**	**1.4099**	**0.0000**	**2,620.9351**	**2,620.9351**	**0.6421**		**2,636.9883**

3.5 Building Construction - 2018

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.3225	7.0364	2.3119	0.0138	0.3314	0.0645	0.3959	0.0954	0.0617	0.1571		1,452.1840	1,452.1840	0.0807		1,454.2019
Worker	0.7376	0.7151	6.0295	0.0110	1.0186	9.5300e-003	1.0282	0.2702	8.8000e-003	0.2790		1,090.0922	1,090.0922	0.0590		1,091.5663
Total	**1.0600**	**7.7515**	**8.3414**	**0.0248**	**1.3500**	**0.0741**	**1.4241**	**0.3656**	**0.0705**	**0.4361**		**2,542.2761**	**2,542.2761**	**0.1397**		**2,545.7683**

3.5 Building Construction - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.3612	21.0788	17.1638	0.0269		1.2899	1.2899		1.2127	1.2127		2,591.5802	2,591.5802	0.6313		2,607.3635
Total	**2.3612**	**21.0788**	**17.1638**	**0.0269**		**1.2899**	**1.2899**		**1.2127**	**1.2127**		**2,591.5802**	**2,591.5802**	**0.6313**		**2,607.3635**

3.5 Building Construction - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.2798	6.6406	2.0477	0.0138	0.3314	0.0523	0.3837	0.0954	0.0500	0.1454		1,445.3492	1,445.3492	0.0767		1,447.2654
Worker	0.6590	0.6285	5.3004	0.0107	1.0186	9.1500e-003	1.0278	0.2702	8.4500e-003	0.2786		1,059.0780	1,059.0780	0.0517		1,060.3716
Total	**0.9387**	**7.2691**	**7.3481**	**0.0244**	**1.3500**	**0.0614**	**1.4115**	**0.3656**	**0.0585**	**0.4240**		**2,504.4273**	**2,504.4273**	**0.1284**		**2,507.6370**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.3612	21.0788	17.1638	0.0269		1.2899	1.2899		1.2127	1.2127	0.0000	2,591.5802	2,591.5802	0.6313		2,607.3635
Total	**2.3612**	**21.0788**	**17.1638**	**0.0269**		**1.2899**	**1.2899**		**1.2127**	**1.2127**	**0.0000**	**2,591.5802**	**2,591.5802**	**0.6313**		**2,607.3635**

3.5 Building Construction - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.2798	6.6406	2.0477	0.0138	0.3314	0.0523	0.3837	0.0954	0.0500	0.1454		1,445.3492	1,445.3492	0.0767		1,447.2654
Worker	0.6590	0.6285	5.3004	0.0107	1.0186	9.1500e-003	1.0278	0.2702	8.4500e-003	0.2786		1,059.0780	1,059.0780	0.0517		1,060.3716
Total	**0.9387**	**7.2691**	**7.3481**	**0.0244**	**1.3500**	**0.0614**	**1.4115**	**0.3656**	**0.0585**	**0.4240**		**2,504.4273**	**2,504.4273**	**0.1284**		**2,507.6370**

3.6 Paving - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.4544	15.2441	14.6648	0.0228		0.8246	0.8246		0.7586	0.7586		2,257.0025	2,257.0025	0.7141		2,274.8548
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.4544**	**15.2441**	**14.6648**	**0.0228**		**0.8246**	**0.8246**		**0.7586**	**0.7586**		**2,257.0025**	**2,257.0025**	**0.7141**		**2,274.8548**

3.6 Paving - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0797	0.0760	0.6412	1.2900e-003	0.1232	1.1100e-003	0.1243	0.0327	1.0200e-003	0.0337		128.1143	128.1143	6.2600e-003		128.2708
Total	**0.0797**	**0.0760**	**0.6412**	**1.2900e-003**	**0.1232**	**1.1100e-003**	**0.1243**	**0.0327**	**1.0200e-003**	**0.0337**		**128.1143**	**128.1143**	**6.2600e-003**		**128.2708**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.4544	15.2441	14.6648	0.0228		0.8246	0.8246		0.7586	0.7586	0.0000	2,257.0025	2,257.0025	0.7141		2,274.8548
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.4544**	**15.2441**	**14.6648**	**0.0228**		**0.8246**	**0.8246**		**0.7586**	**0.7586**	**0.0000**	**2,257.0025**	**2,257.0025**	**0.7141**		**2,274.8548**

3.6 Paving - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0797	0.0760	0.6412	1.2900e-003	0.1232	1.1100e-003	0.1243	0.0327	1.0200e-003	0.0337		128.1143	128.1143	6.2600e-003		128.2708
Total	**0.0797**	**0.0760**	**0.6412**	**1.2900e-003**	**0.1232**	**1.1100e-003**	**0.1243**	**0.0327**	**1.0200e-003**	**0.0337**		**128.1143**	**128.1143**	**6.2600e-003**		**128.2708**

3.7 Architectural Coating - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	86.1609					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2664	1.8354	1.8413	2.9700e-003		0.1288	0.1288		0.1288	0.1288		281.4481	281.4481	0.0238		282.0423
Total	**86.4274**	**1.8354**	**1.8413**	**2.9700e-003**		**0.1288**	**0.1288**		**0.1288**	**0.1288**		**281.4481**	**281.4481**	**0.0238**		**282.0423**

3.7 Architectural Coating - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1329	0.1267	1.0686	2.1500e-003	0.2054	1.8400e-003	0.2072	0.0545	1.7000e-003	0.0562		213.5238	213.5238	0.0104		213.7846
Total	**0.1329**	**0.1267**	**1.0686**	**2.1500e-003**	**0.2054**	**1.8400e-003**	**0.2072**	**0.0545**	**1.7000e-003**	**0.0562**		**213.5238**	**213.5238**	**0.0104**		**213.7846**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	86.1609					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2664	1.8354	1.8413	2.9700e-003		0.1288	0.1288		0.1288	0.1288	0.0000	281.4481	281.4481	0.0238		282.0423
Total	**86.4274**	**1.8354**	**1.8413**	**2.9700e-003**		**0.1288**	**0.1288**		**0.1288**	**0.1288**	**0.0000**	**281.4481**	**281.4481**	**0.0238**		**282.0423**

3.7 Architectural Coating - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1329	0.1267	1.0686	2.1500e-003	0.2054	1.8400e-003	0.2072	0.0545	1.7000e-003	0.0562		213.5238	213.5238	0.0104		213.7846
Total	**0.1329**	**0.1267**	**1.0686**	**2.1500e-003**	**0.2054**	**1.8400e-003**	**0.2072**	**0.0545**	**1.7000e-003**	**0.0562**		**213.5238**	**213.5238**	**0.0104**		**213.7846**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	1.5750	18.7741	18.5671	0.0698	3.8210	0.1063	3.9273	1.0307	0.1009	1.1316		7,156.2210	7,156.2210	0.3404		7,164.7315
Unmitigated	1.5750	18.7741	18.5671	0.0698	3.8210	0.1063	3.9273	1.0307	0.1009	1.1316		7,156.2210	7,156.2210	0.3404		7,164.7315

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Light Industry	564.94	226.66	569.50	1,510,172	1,510,172
General Office Building	45.78	10.39	3.29	82,811	82,811
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Total	610.72	237.05	572.79	1,592,983	1,592,983

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
General Light Industry	9.50	7.30	7.30	59.00	28.00	13.00	92	5	3
General Office Building	9.50	7.30	7.30	33.00	48.00	19.00	77	19	4
Other Non-Asphalt Surfaces	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
General Light Industry	0.436895	0.025303	0.166081	0.115721	0.067659	0.016341	0.046000	0.126000	0.000000	0.000000	0.000000	0.000000	0.000000
General Office Building	0.533135	0.030877	0.202665	0.141212	0.024955	0.006027	0.018072	0.025901	0.004150	0.002959	0.007890	0.001253	0.000905
Other Non-Asphalt Surfaces	0.533135	0.030877	0.202665	0.141212	0.024955	0.006027	0.018072	0.025901	0.004150	0.002959	0.007890	0.001253	0.000905

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0911	0.8277	0.6953	4.9700e-003		0.0629	0.0629		0.0629	0.0629		993.2703	993.2703	0.0190	0.0182	999.1728
NaturalGas Unmitigated	0.0911	0.8277	0.6953	4.9700e-003		0.0629	0.0629		0.0629	0.0629		993.2703	993.2703	0.0190	0.0182	999.1728

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
General Light Industry	8232.01	0.0888	0.8071	0.6779	4.8400e-003		0.0613	0.0613		0.0613	0.0613		968.4712	968.4712	0.0186	0.0178	974.2264
General Office Building	210.792	2.2700e-003	0.0207	0.0174	1.2000e-004		1.5700e-003	1.5700e-003		1.5700e-003	1.5700e-003		24.7990	24.7990	4.8000e-004	4.5000e-004	24.9464
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0911**	**0.8277**	**0.6953**	**4.9600e-003**		**0.0629**	**0.0629**		**0.0629**	**0.0629**		**993.2703**	**993.2703**	**0.0190**	**0.0182**	**999.1728**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
General Light Industry	8.23201	0.0888	0.8071	0.6779	4.8400e-003		0.0613	0.0613		0.0613	0.0613		968.4712	968.4712	0.0186	0.0178	974.2264
General Office Building	0.210792	2.2700e-003	0.0207	0.0174	1.2000e-004		1.5700e-003	1.5700e-003		1.5700e-003	1.5700e-003		24.7990	24.7990	4.8000e-004	4.5000e-004	24.9464
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0911**	**0.8277**	**0.6953**	**4.9600e-003**		**0.0629**	**0.0629**		**0.0629**	**0.0629**		**993.2703**	**993.2703**	**0.0190**	**0.0182**	**999.1728**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	3.0759	2.8000e-004	0.0304	0.0000		1.1000e-004	1.1000e-004		1.1000e-004	1.1000e-004		0.0648	0.0648	1.7000e-004		0.0692
Unmitigated	3.0759	2.8000e-004	0.0304	0.0000		1.1000e-004	1.1000e-004		1.1000e-004	1.1000e-004		0.0648	0.0648	1.7000e-004		0.0692

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.4721					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	2.6010					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	2.8600e-003	2.8000e-004	0.0304	0.0000		1.1000e-004	1.1000e-004		1.1000e-004	1.1000e-004		0.0648	0.0648	1.7000e-004		0.0692
Total	**3.0759**	**2.8000e-004**	**0.0304**	**0.0000**		**1.1000e-004**	**1.1000e-004**		**1.1000e-004**	**1.1000e-004**		**0.0648**	**0.0648**	**1.7000e-004**		**0.0692**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.4721					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	2.6010					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	2.8600e-003	2.8000e-004	0.0304	0.0000		1.1000e-004	1.1000e-004		1.1000e-004	1.1000e-004		0.0648	0.0648	1.7000e-004		0.0692
Total	**3.0759**	**2.8000e-004**	**0.0304**	**0.0000**		**1.1000e-004**	**1.1000e-004**		**1.1000e-004**	**1.1000e-004**		**0.0648**	**0.0648**	**1.7000e-004**		**0.0692**

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

FIRSTCARBONSOLUTIONS™

Biological Resources Assessment
Rodeo Property Project
City of Salinas, Monterey County, California

Prepared for:
SyWest Development
150 Pelican Way
San Rafael, CA 94901

Contact: Tracy LaTray, Project Coordinator

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Date: August 17, 2018

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SECTION 1: INTRODUCTION

At the request of the SyWest Development, FirstCarbon Solutions (FCS) conducted a biological resources assessment for the proposed industrial space in Salinas. The purpose of this biological resources assessment is to describe on-site vegetation communities, identify potentially jurisdictional waters of the U.S., and assess the potential for occurrence of special-status plant and wildlife species within the project site.

1.1 - Project Summary

1.1.1 - Site Location

The Rodeo Property Project is located at 295 Sun Way, south and west of US 101 in the central part of the City of Salinas, Monterey County, California (see Exhibit 1). North and south of the Project site are existing warehouse/light industrial uses. To the north of the Project site is Security Public Storage; to the south at 10 Simas Street is Celebration Church and at 34 Simas Street is a light industrial building containing an ambulance dispatch business and an electrical supply company. To the southwest of the Project at 8 Sun Street is Sun Street Centers Men's Residential Program. Adjacent to and west of the Project is open space; however, there is a mix of land uses further west of the Project, including St. James CME Church located at 285 Calle Cebu, Haciendas Place multi-family residential located at 245 Calle Cebu, and the Rancho Salinas Mobile Park located at 150 Sherwood Drive. The Project site is bounded by Sun Street and Sun Way to the west, US 101 to the east, Security Public Storage to the north, and light industrial uses to the south (see Exhibit 2). The project site is located on the Salinas, California United States Geological Survey 7.5-minute topographic quadrangle, Assessor's Parcel Number 003-212-017-000.

The project site comprises one parcel that consists of semi-developed land equaling a total of approximately 6 acres. The project site currently contains a soccer field, a baseball diamond with associated lighting, a gravel parking lot, gravel walking trail, playground area, and restrooms. The project site has been used recreationally activities and was actively managed (mowed) for recreational purposes.

1.1.2 - Project Description

The project is a General Plan amendment and Rezone that would allow development of industrial and commercial uses on a 6.8-acre site located on Sun Street adjacent to US 101. The proposed land use designation would allow the site to be developed at a floor area ratio of 0.4, which would allow for the development of up to 188,600 square feet of industrial floor space. The site is designated in the General Plan as Open Space. Access to the site is provided via Sun Street and its connections to Calle Cebu and E. Market Street.

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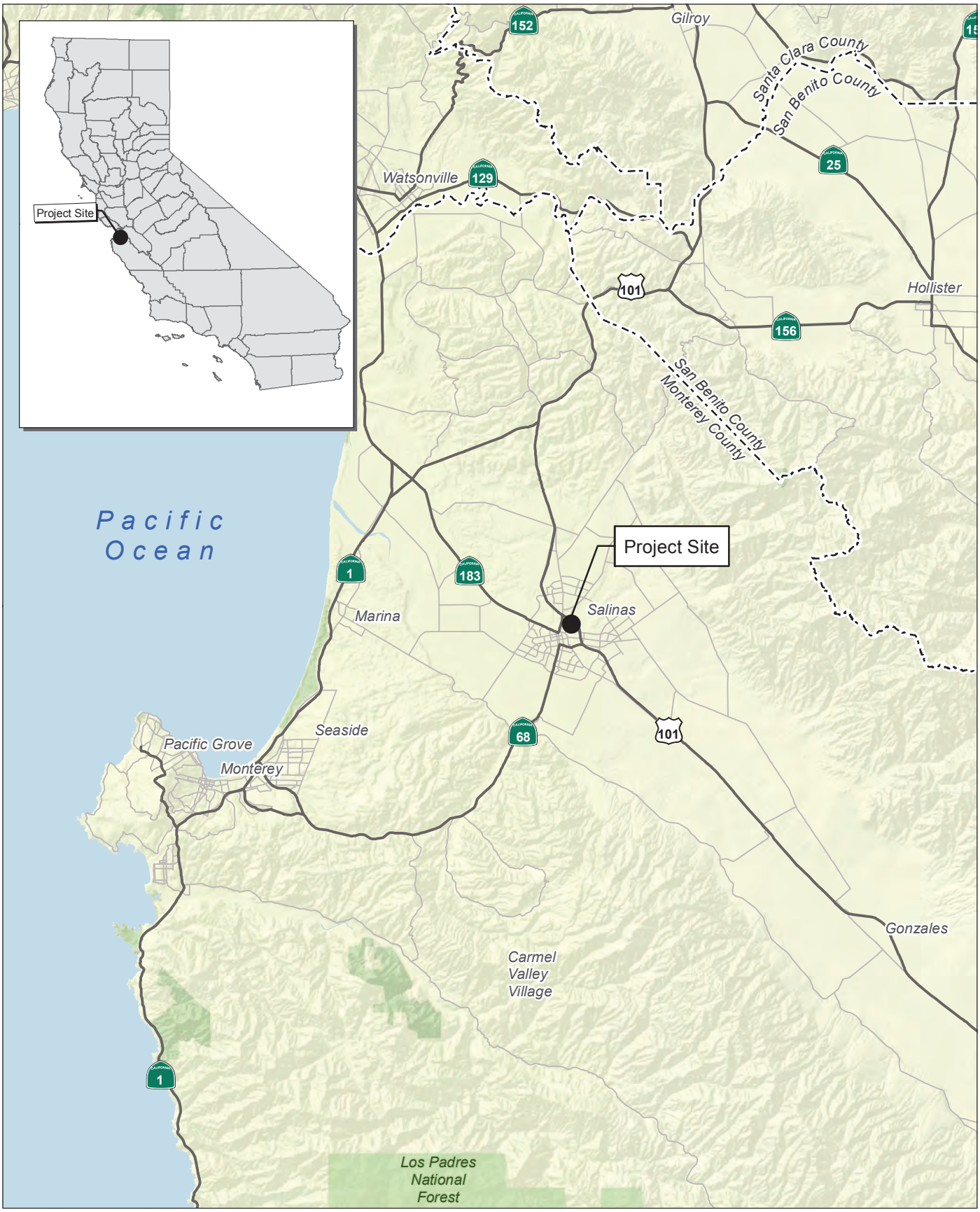

Source: Census 2000 Data, The CaSIL, FCS GIS 2016.

FIRSTCARBON SOLUTIONS™

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Exhibit 1
Regional Location Map

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Source: ESRI Imagery

FIRSTCARBON SOLUTIONS™

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Exhibit 2
Local Vicinity Map
Aerial Base

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SECTION 2: METHODOLOGY

Analysis of the biological resources associated with the project site began with a thorough review of relevant literature followed by a reconnaissance-level field survey. The survey area included the entire project site as well as the immediate vicinity.

The primary objective of the survey was to document existing site conditions and determine the potential presence of special-status biological resources.

For the purpose of this report, special-status species refers to all species formally listed as threatened and/or endangered under Federal Endangered Species Act (ESA) or the California Endangered Species Act (CESA); California Species of Special Concern; designated as Fully Protected by CDFW; given a status of 1A, 1B, or 2 by the California Native Plant Society (CNPS); or designated as special-status by city, county, or other regional planning documents. Federal and state listed threatened and/or endangered species are legally protected under ESA/CESA. The designated special-status species listed by CNPS have no direct legal protection, but they require an analysis of the significance of potential impacts under CEQA guidelines.

2.1 - Literature Review

The literature review provides a baseline from which to evaluate the biological resources potentially occurring on the project site as well as the surrounding area.

2.1.1 - Existing Environmental Documentation

As part of the literature review, an FCS biologist examined existing environmental documentation for the project site and local vicinity. This documentation included literature pertaining to habitat requirements of special-status species potentially occurring near the site; and federal register listings, protocols, and species data provided by the USFWS and CDFW. These and other documents are listed in the references section of this report.

2.1.2 - Topographic Maps and Aerial Photographs

An FCS biologist reviewed current USGS 7.5-minute topographic quadrangle map(s) and aerial photographs as a preliminary analysis of the existing conditions within the project site and immediate vicinity. Information obtained from the review of the topographic maps included elevation range, general watershed information, and potential drainage feature locations (USGS 1986). Aerial photographs provide a perspective of the most current site conditions relative to on-site and off-site land use, plant community locations, and potential locations of wildlife movement corridors.

2.1.3 - Soil Surveys

The United States Department of Agriculture (USDA) has published soil surveys that describe the soil series (a group of soils with similar profiles) occurring within a particular area (USDA 1980). These profiles include major horizons with similar thickness, arrangement, and other important characteristics. These series are further subdivided into soil mapping units that provide specific

information regarding soil characteristics. Many special-status plant species have a limited distribution based exclusively on soil type. Therefore, pertinent USDA soil survey maps were reviewed to determine the existing soil mapping units within the project site and to establish if soil conditions on-site are suitable for any special-status plant species (Soil Survey Staff 2017).

2.1.4 - Special-Status Species Database Search

An FCS biologist compiled a list of threatened, endangered, and otherwise special-status species previously recorded within the general project vicinity. The list was based on a search of the CDFW's California Natural Diversity Database (CNDDB; CDFW 2017), a special-status species and plant community account database, the CNPS's Electronic Inventory (CNPSEI) of Rare and Endangered Vascular Plants of California database (CNPS 2017), and a USFWS Information Planning and Conservation Report Search (USFWS 2017), for the Salinas California USGS 7.5-minute topographic quadrangle maps and nine surrounding topographic quadrangles (Moss Landing, Prunedale, San Juan Bautista, Marina, Natividad, Seaside, Spreckels, and Chualar). The database search results can be found in Appendix A.

The CNDDB Biogeographic Information and Observation System (BIOS 5; CDFW 2017) database was used to determine the distance between known recorded occurrences of special-status species and the project site.

2.1.5 - Trees

Prior to conducting the reconnaissance-level survey, FCS's biologists reviewed any applicable City and County ordinances pertaining to tree preservation and protective measures and their tree replacement conditions or permits required. Species listed in any applicable ordinances identified on-site were noted, and their locations were recorded using a handheld GPS unit and were identified on a topographic map. Any potential tree removal that takes place will have to abide by the regulations set in place by Monterey County and the City of Salinas. Specifically, the proposed project would have to follow:

- Monterey County Municipal Code 21.64.260 regarding the preservation of oak and other protected trees
- Monterey County Municipal Code Chapter 35 regarding the language and definitions for tree and shrub removal
- 2010 Monterey County Zoning Ordinances for tree removal polices
- During the bird nesting season (February 22 through August 1) tree consultants shall identify any nests within 300 feet of the proposed tree removal(s) in the tree assessment. If a nest is found, a County-qualified biologist must conduct a nest survey prior to the approval of the tree removal permit. The biologist's recommendations will be added as condition of approval (See condition list on the back of the Tree Removal Application form).
- If the tree removal report/evaluation indicates any sudden oak death, the proposed removal must be referred to the Ag. Commissioner's Office (Brad Oliver: 759-7332). Do not go any further until written direction is received from the Ag/ Commissioner's Office.

- Proposed tree removal located within the coastal and non-coastal sections of the Del Monte Forest require a report/letter by Pebble Beach Company (Eric Love: 625-8421).

Additionally, any trees where removal is necessary will require the client to submit a city tree permit removal application.

2.1.6 - Jurisdictional Waters and Wetlands

Prior to conducting the reconnaissance-level survey, FCS's biologists reviewed USGS topographic maps and aerial photography to identify any potential natural drainage features and water bodies. In general, all surface drainage features identified as blue-line streams on USGS maps and linear patches of vegetation are expected to exhibit evidence of flows and considered potentially subject to state and federal regulatory authority as "waters of the U.S. and/or State." A preliminary assessment was conducted to determine the location of any existing drainages and limits of project-related grading activities, to aid in determining if a formal delineation of waters of the U.S. or State is necessary.

2.1.7 - Reconnaissance-Level Field Survey

An FCS biologist conducted a field survey on June 7, 2017. The reconnaissance-level survey was conducted on foot during daylight hours. The purpose of the survey was not to extensively search for every species occurring within the project site, but to ascertain general site conditions and identify potentially suitable habitat areas for various special-status plant and wildlife species. Special-status or unusual biological resources identified during the literature review were ground-truthed during the reconnaissance-level survey for mapping accuracy. Special attention was paid to sensitive habitats and areas potentially supporting special-status floral and faunal species.

Plant Species

Common plant species observed during the reconnaissance-level survey were identified by visual characteristics and morphology in the field and recorded in a field notebook. Uncommon and less familiar plants were identified off-site with the use of taxonomical guides, such as Clarke et al. (2007), Hitchcock (1971), McAuley (1996), and Munz (1974). Taxonomic nomenclature used in this study follows Baldwin et al. (2012). Common plant names, when not available from Baldwin et al. (2012), were taken from other regionally specific references.

Wildlife Species

Wildlife species detected during the reconnaissance-level survey by sight, calls, tracks, scat, or other signs were recorded in a field notebook. Notations were made regarding suitable habitat for those special-status species determined to potentially occur within the project site (CDFW 2017). Appropriate field guides were used to assist with species identification during surveys, such as Peterson (2010), Reid (2006), and Stebbins (2003).

Wildlife Movement Corridors

Wildlife movement corridors link areas of suitable wildlife habitat that are otherwise separated by rugged terrain, changes in vegetation, or human disturbance. Urbanization and the resulting

fragmentation of open space areas create isolated “islands” of wildlife habitat, forming separated populations. Corridors act as an effective link between populations.

The project site was evaluated for evidence of a wildlife movement corridor during the reconnaissance-level survey. The focus of this study was to determine if the change of current land use of the project site may have significant impacts on the regional movement of wildlife. These conclusions are made based on the information compiled during the literature review, including aerial photographs, USGS topographic maps and resource maps for the vicinity, the field survey conducted, and professional knowledge of desired topography and resource requirements for wildlife potentially utilizing the project site and vicinity.

SECTION 3: EXISTING CONDITIONS

An FCS biologist conducted the reconnaissance-level field survey on June 7, 2017 from 12:00 p.m. to 2:00 p.m. (1200 to 1400 hours). Weather conditions during the field survey were partly cloudy with moderate wind gusts and average temperature of 65 degrees Fahrenheit (°F).

3.1 - Environmental Setting

The project site is relatively flat and does not show signs of sloping. The project site overlaps with FEMA's 100-year flood plain, which is described as a flood event that has a 1 percent probability of occurring in any given year.

3.1.1 - Soils

The United States Department of Agriculture, Natural Resources Conservation Service indicates that the vast majority of the project site contains the Clear Lake Clay soil series, with minor components of Pacheco, Mocho, Cropley, and Salinas soil series.

Clear Lake Clay

The Clear Lake series consists of deep, poorly drained soils that formed in fine textured alluvium derived from sandstone and shale. Clear Lake soils are in basins and in swales of drainageways. Slopes are 0 to 2 percent. The mean annual precipitation is about 20 inches and the mean annual air temperature is about 60°F. Used for production of row crops, irrigated, and dry farmed pasture; also used for rangeland (USDA 2017).

Pacheco Silt Loam

The Pacheco series consists of deep, somewhat poorly drained soils that formed in alluvium derived mostly from sedimentary rocks. Pacheco soils are on flood plains and have slopes of 0 to 2 percent. Mean annual precipitation is approximately 16 inches and the mean annual temperature is approximately 58°F. Used for production of small grain field crops and pasture vegetation (USDA 2017).

Mocho Loam

The Mocho series consists of deep, well-drained soils that formed in alluvium derived mostly from sandstone and shale rock sources. Mocho soils are on alluvial fans and have slopes of 0 to 9 percent. The mean annual precipitation approximately about 16 inches and the mean annual air temperature is approximately 59°F. Used for production of field and truck crops; nontilled areas have a cover of naturalized vegetation of annual grasses and forbs (USDA 2017).

Cropley Clay

The Cropley series consists of deep, well-drained soils that formed in alluvium from mixed rock sources. Cropley soils are on alluvial fans, floodplains and in small basins. Slopes range from 0 to 15 percent. The mean annual precipitation is approximately 16 inches and the mean annual

temperature is approximately 60°F. Used for production of row and truck crops and for urban development (USDA 2017).

Salinas Clay Loam

The Salinas series consists of deep, well-drained soils that formed in alluvium weathered from sandstone and shale. Salinas soils are on alluvial plains, fans, and terraces and have slopes of 0 to 9 percent. The mean annual precipitation is approximately 16 inches and the mean annual air temperature is approximately 59 °F. Used for production of truck, field, and forage crops (USDA 2017).

3.1.2 - Biological Communities

The vegetation communities on the project site consist of non-native ruderal (weedy) grass and weeds. The entirety of the project site shows evidence of disturbance. The project site does not contain any sensitive biological communities.

Non-Native Grassland

Non-native ruderal grassland is found throughout the project site with the majority of the site showing evidence of recent mowing.

Non-native grassland is found throughout California and is generally characterized by a dense to sparse cover of non-native, annual grasses often associated with numerous weedy species as well as some native annual forbs (wildflowers), especially in years of ample rain. Seed germination occurs with the onset of fall-winter rains. Some plant growth occurs in winter, but most growth and flowering occurs in the spring. Plants then die in the summer, and persist as seeds in the uppermost layers of soil until the next rainy season. The project site consists of almost entirely of non-native weeds, grasses, with some native weedy forbs. Plants included telegraph weed (*Heterotheca grandiflora*), wild oats (*Avena* spp.), and ripgut brome (*Bromus diandrus*), due to high levels of disturbance on the site and its surrounding areas.

Wildlife species likely to be found in this habitat include mammals such as Botta's pocket gopher (*Thomomys bottae*), house mouse (*Mus musculus*), and deer mouse (*Peromyscus).* Reptiles such as gopher snake (*Pituophis melanoleuces*), western fence lizard (*Scelsporus occidentalis*), and common garter snake (*Thamnophis sirtalis*) may be present. A variety of bird species including lesser goldfinch (*Carduelis psaltria*), house finch (*Carpodacus mexicanus*), house sparrow (*Passer domesticus*), American crow (*Corvus brachyrhychos*), mourning dove (*Zenaida macroura*) and Brewer's blackbird (*Spizella breweri*) are likely to occur in grassland habitats. Aerial foragers, including tree swallow (*Tachycineta bicolor*), cliff swallow (*Petrochelidon pyrrhonota*), barn swallow (*Hirundo rustica*), and whitethroated swift (*Aeronautes saxatilis*) may be present in this area, foraging within this habitat. Raptor species potentially feeding on small mammals within this habitat include red-tailed hawk (*Buteo jamaicensis*) and American kestrel (*Falco sparverius*). Because of high levels of disturbance, the only wildlife species observed on the project site was the American crow.

Disturbed

Vegetation communities characterized as disturbed habitat occur in areas of disturbances such as along roadsides, trails, parking lots, etc. These communities are subjected to ongoing or past human activity (e.g., vehicle activities, recreational activities, mowing). These areas are generally barren or exhibit sparse vegetative cover consisting mainly of ruderal species that typically appear after severe disturbance or clearing. Typical opportunistic weeds that occur in disturbed areas include Russian thistle or "tumbleweed" (*Salsola tragus*), tocalote (*Centaurea melitensis*), and some native weedy forbs such as telegraph weed (*Heterotheca grandiflora*), fascicled tarweed, and non-native annual grasses of this area. Dominant plant species observed in the disturbed areas included telegraph weed (*Heterotheca grandiflora*), wild oat (*Avena fatua*) and annual grass (*Festuca bromoides*).

The vegetation community and land cover types above provide habitat for a variety of wildlife species, briefly described under each community type. Wildlife activity was low during the field survey and consisted primarily of avian species flying over the project site. Wildlife observed during the survey included the American crow.

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SECTION 4: SENSITIVE BIOLOGICAL RESOURCES

The following section discusses existing conditions and the potential for special-status biological resources to occur within the project site.

4.1 - Special-status Plant Communities

Special-status plant communities are considered sensitive biological resources based on federal, state, or local laws regulating their development, limited distributions, and habitat requirements of special-status plant or wildlife species that occur within them. There are no sensitive plant communities recorded on or near the project site.

4.1.1 - Special-status Plant Species

The CNDDB, CNPS, and background data were reviewed for the Salinas 7.5-minute topographic quadrangle in addition to the nine surrounding topographic quadrangles to identify special-status species that are known to occur in the region, or have the potential to occur on the project site.

Congdon's tarplant (*Centromadia parryi* ssp. *congdonii*) is listed as a California Rare Plant 1B.1 and was found to occur in the surrounding areas near the proposed site. The species does reside in grassland habitats with clay loam soils but due to the highly disturbed nature of the site in addition to the absence of the species during the site survey, it is unlikely for the species to occur within the project boundaries.

A plant's potential to occur on the project site was based on the presence of suitable habitats, soil types, occurrences recorded by the USFWS, CNPS, or CNDDB in the project region. Habitat suitability was determined for 47 special-status plant species within the project site, also listed in Appendix A. Frequent mowing of the project site reduces the potential for disturbance-intolerant perennials to be present, but it is not expected to exclude the presence of some annuals. No special-status species were found during the survey.

4.1.2 - Special-status Wildlife

Wildlife's potential to occur on the project site was based on the presence of suitable habitats, recorded occurrences by CNDDB (CDFW 2017) and known to occur by the Information for Planning and Consultation (IPAC) (USFWS 2017) within Salinas topographic quadrangle (USGS 1986) and the nine surrounding topographical quadrangles. Several species were found to be present in the surrounding area, such as California tiger salamander (*Ambystoma californiense*), California red-legged frog (*Rana draytonii*), and burrowing owl (*Athene cunicularia*), and these species are listed in the special-status species table as well as discussed below.

The California tiger salamander is a federally and locally threatened species that requires seasonal water sources for breeding and nesting. It is generally found nesting in underground refuges. Due to the lack of water onsite, it unlikely for the species to occur within the project boundaries.

The California red-legged frog is a federally threatened species, as well as a California species of special concern, that requires permanent water sources for larval development and appropriate aquatic habitat for estivation. Due to the lack of water onsite, it unlikely for the species to occur within the project boundaries.

The western burrowing owl is a federal species of concern and a California species of special concern. Burrowing owls are year-round residents in the open, dry grasslands of the Central Valley. During fall and winter, local residents may move from nesting areas, and migrants may move in. Burrowing owls nest and take shelter in burrows in the ground: typically, burrows excavated by other species such as ground squirrels. They forage in grasslands and agricultural fields. While there are similar habitat qualities in the area of the proposed site, the high level of disturbance in conjunction with the absence of the species during a site survey precludes the potential presence of the species. It is unlikely for the species to occur within the project boundaries.

Table 1 summarizes the potential for occurrence and rationale for nine special-status wildlife species occurring in the vicinity of the project, based on the database search (Appendix A). The database search revealed a total of 42 special-status wildlife species. All special-status wildlife species that have been determined unlikely to occur on-site, primarily based on the absence of suitable habitat, have also been included in Table 1 to justify their exclusion from further discussion. FCS biologists did not observe special-status species during the field survey.

Table 1: Special-status Wildlife Species Potentially Occurring within the Project Site

Scientific Name Common Name	Status		Habitat Description[3]	Potential to Occur and Rationale	Included in Impact Analysis
	USFWS[1]	CDFW[2]			
Amphibians					
Ambystoma californiense California tiger salamander	FT	ST	Needs underground refuges, especially ground squirrel burrows, and vernal pools or other seasonal water sources for breeding.	Potential to Occur: **unlikely**. The site lacks suitable nesting and foraging habitat due to lack of water on site.	Yes
Rana boylii Foothill yellow-legged frog	—	SSC	Frequents rocky streams and rivers with rocky substrate and open, sunny banks, in forests, chaparral, and woodlands. Sometimes found in isolated pools, vegetated backwaters, and deep, shaded, spring-fed pools.	Potential to Occur**: unlikely**. The site lacks suitable nesting and foraging habitat due to lack of water on site.	No
Rana draytonii California red-legged frog	FT	SSC	Found mainly near ponds in humid forests, woodlands, grasslands, coastal scrub, and streamsides with plant cover. Most common in lowlands or foothills. Frequently found in woods adjacent to streams. Breeding habitat is in permanent or ephemeral water sources; lakes, ponds, reservoirs, slow streams, marshes, bogs, and swamps.	Potential to Occur**: unlikely**. The site lacks suitable nesting and foraging habitat due to lack of water on site.	Yes
Reptiles					
Anniella pulchra nigra Black legless lizard	—	SSC	Occurs in moist warm loose sand or soil with plant cover. Moisture is essential. Occurs in sparsely vegetated areas of beach dunes, chaparral, pine-oak woodlands, desert scrub, sandy washes, and stream terraces with sycamores, cottonwoods, or oaks.	Potential to Occur**: unlikely**. The site lacks suitable nesting habitat due to lack of plant cover and sand.	No
Birds					
Agelaius tricolor Tricolored blackbird	— MBTA	SSC	Highly colonial species, most numerous in Central and San Joaquin Valleys. Found in areas near water, such as freshwater marsh, grasslands, and wetlands. Requires open water, protected nesting substrate, and foraging area with insect prey in the vicinity of the colony.	Potential to Occur**: unlikely**. No nesting habitat is present due to the lack of aquatic vegetation. Furthermore, the site lacks suitable foraging habitat.	No

Table 1 (cont.): Special-status Wildlife Species Potentially Occurring within the Project Site

Scientific Name Common Name	Status		Habitat Description[3]	Potential to Occur and Rationale	Included in Impact Analysis
	USFWS[1]	CDFW[2]			
Athene cunicularia Burrowing owl	— MBTA	SSC FGC	Found in open, dry annual or perennial grasslands, deserts, and scrublands characterized by low-growing vegetation. A subterranean nester, dependent upon burrowing mammals, most notably the California ground squirrel	Potential to Occur**: low**. Marginal nesting and foraging habitat is present within the project site. However, high levels of disturbance within the project site reduce the potential of occurrence.	Yes
Eremophila alpestris actia California horned lark	— MBTA	—	Temperate species that prefers large open land devoid of large obstacles such as trees. It can generally be found in fields, prairies, and dry tundra. Also known to inhabit places with widespread lawns, such as airports. They are most often found on the ground.	Potential to Occur**: unlikely**. Marginal nesting and foraging habitat is present within the project site. However, high levels of disturbance and a lack of bare ground within the project site reduce the potential of occurrence.	No
Mammals					
Corynorhinus townsendii Townsend's big-ear bat	—	SSC	Wide ranging habitat. Most western populations live in montane forest with pine, fir, and aspen trees bounded by shrub and grasslands. Roosting sites include caves, cliffs, and rock ledges. Extremely sensitive to human disturbance.	Potential to Occur**: unlikely**. High levels of human disturbance within the project site and its immediate surroundings.	No
Reithrodontomys megalotis distichlis Salinas harvest mouse	—	—	Coastal salt marshes, freshwater wetlands and sandhill grasslands near the seacoast in the vicinity of the Salinas River mouth	Potential to Occur**: unlikely**. The site does not contain suitable habitat.	No

Table 1 (cont.): Special-status Wildlife Species Potentially Occurring within the Project Site

Scientific Name Common Name	Status		Habitat Description[3]	Potential to Occur and Rationale	Included in Impact Analysis
	USFWS[1]	CDFW[2]			
Code Designations					
[1] Federal Status: 2017 USFWS Listing				**[2] State Status: 2017 CDFW Listing**	
ESU = Evolutionary Significant Unit is a distinctive population. **FE** = Listed as endangered under the FESA. **FT** = Listed as threatened under the FESA. **FC** = Candidate for listing (threatened or endangered) under FESA. **FD** = Delisted in accordance with the FESA. **FPD** = Federally Proposed to be Delisted. **MBTA** = protected by the Migratory Bird Treaty Act **—** = Not federally listed				**SE** = Listed as endangered under the CESA. **ST** = Listed as threatened under the CESA. **SSC** = Species of Special Concern as identified by the CDFW. **FP** = Listed as fully protected under FGC. **CFG** = FGC =protected by FGC 3503.5 **CR** = Rare in California. **—** = Not state listed	
[3] **Habitat description**: Habitat description adapted from CNDDB (CDFW 2017a).					

Birds

Marginal foraging habitat is present for one special-status bird potentially occurring on or near the project site, listed below and in Table 1; however, marginal nesting habitat occurs for any of the species within the project site. The property has few shrubs and trees or rodent burrows and shows evidence of high human disturbance.

SECTION 5: CONCLUSIONS AND RECOMMENDATIONS

Complete avoidance of special-status plant and animal species and their associated habitats is the ecologically preferred method for preservation of these resources. However, to meet project goals, avoidance is not always feasible. The following discussion looks at the potential impacts and offers recommendations if needed on avoidance, minimization, and/or compensation measures in compliance with the various laws that regulate natural resources and land use. This information is offered to help the applicant design a development that meets both financial and ecological objectives to the extent possible.

5.1 - Special-status Species

As noted in the discussion above, the project has the potential to support 47 special-status plant species and 42 special-status wildlife species. It also has the potential to support birds and raptors protected under the Migratory Bird Treaty Act (MBTA) and the California Fish and Game Code (FGC).

5.1.1 - Special-status Plants

As discussed in Section 4.1.1, an FCS biologist conducted a field survey on June 7, 2017. As a result of the recurrent mowing of the project site no special-status species were observed and are not expected to be found on site. No significant impacts to special-status plants species is expected due to high levels of disturbance. No mitigation is recommended at this time.

5.1.2 - Special-status Wildlife

Assessment of the potential for each special-status species to occur within the project site was based on known occurrences of the species within the Salinas quadrangle and nine surrounding quadrangles, suitability of habitat within the project site, the field survey completed on June 7, 2017, and professional expertise. Focused surveys are recommended for sensitive wildlife species that are federally or state-listed as endangered or threatened or species of special concern and have potential to occur on the project site.

Special-status Birds and Birds Protected by the MBTA

Three special-status birds were determined to have some potential to occur on the project site. The habitats on the project site provide marginal foraging habitat for all avian species identified as having the potential to occur on the project site, and marginal nesting habitat is present for only a few of the species known to nest in grassland habitats.

Potential impacts could occur to resident and migratory species during project construction, which would render the project temporarily unsuitable for nesting birds because of the noise, vibration, and increased activity levels associated with various construction activities. These activities could potentially subject birds to risk of death or injury, and they are likely to avoid using the area until such construction activities have dissipated or ceased. Relocation, in turn, could cause hunger or stress among individual birds by displacing them into adjacent territories belonging to other

individuals. However, the project is located in a region with abundant access to agricultural fields and operations that provide equal to greater foraging quality for nesting migratory birds.

With the implementation of the following recommendations, any potential impacts on special-status wildlife species, including birds protected by the MBTA, would be avoided.

- Prior to any site-disturbing activities, including grading or woody vegetation and tree removal, the applicant will retain a qualified wildlife biologist to conduct a nesting bird survey to determine if nests are active or occupied on the project site. Any active nests observed on the project site will be avoided until after the nestlings have fledged and left the nest. If avoidance is not feasible, then a biological monitor will be present if construction activities occur during the nesting season. Construction activity within the vicinity of the active nests may only be conducted at the discretion of the biological monitor. If construction activity will likely result in nest failure, the applicant shall consult with CDFW and/or USFWS to determine what mitigation or permitting is required.

The non-native ruderal grassland provides marginal habitat for the burrowing owl. The potential for this species to occur in the project site is considered low to moderate because of regular mowing of the grassland habitat. However, the possibility that burrowing owls will not nest on the project site in the future cannot be ruled out. Therefore, the following conservation measures are recommended:

- No more than 30 days prior to the first ground-disturbing activities, the project Applicant shall retain a qualified biologist to conduct a preconstruction survey on the project site. The survey shall establish the presence or absence of western burrowing owl and/or habitat features, and evaluate use by owls in accordance with CDFW survey guidelines.
- On the parcel where the activity is proposed, the biologist shall survey the proposed disturbance footprint and a 500-foot radius from the perimeter of the proposed footprint to identify burrows and owls. Adjacent parcels under different land ownership need not be surveyed. The survey shall take place near the sunrise or sunset in accordance with CDFW guidelines. All burrows or burrowing owls shall be identified and mapped. During the breeding season (February 1–August 31), surveys shall document whether burrowing owls are nesting on or directly adjacent to disturbance areas. During the non-breeding season (September 1–January 31), surveys shall document whether burrowing owls are using habitat on or directly adjacent to any disturbance area. Survey results will be valid only for the season during which the survey is conducted.
- If burrowing owls are not discovered, further mitigation is not required. If burrowing owls are observed during the pre-construction surveys, the applicant shall perform the following measures to limit the impact on the burrowing owls:
    1. Avoidance shall include establishment of a 160-foot non-disturbance buffer zone. Construction may occur during the breeding season if a qualified biologist monitors the nest and determines that the birds have not begun egg-laying and incubation, or that the juveniles from the occupied burrows have fledged. During the non-breeding season (September 1–January 31), the project proponent shall avoid the owls and the burrows

they are using, if possible. Avoidance shall include the establishment of a 160-foot non-disturbance buffer zone.

2. If it is not possible to avoid occupied burrows, passive relocation shall be implemented. Owls shall be excluded from burrows in the immediate impact zone and within a 160-foot buffer zone by installing one-way doors in burrow entrances. These doors shall be in place for 48 hours prior to excavation. The project area shall be monitored daily for 1 week to confirm that the owl has abandoned the burrow. Whenever possible, burrows should be excavated using hand tools and refilled to prevent re-occupation. Plastic tubing or a similar structure shall be inserted in the tunnels during excavation to maintain an escape route for any owls inside the burrow.

5.2 - Wildlife Movement Corridors

The project site was evaluated for evidence of a wildlife movement corridor during the reconnaissance-level survey. As discussed in Section 2, the focus of this study was to determine if the change of current land use of the project site has adverse effects on the regional movement of wildlife. These conclusions are based on the information compiled during the literature review, including aerial photographs, USGS topographic maps and resource maps for the vicinity, the field survey conducted, and professional knowledge of desired topography and resource requirements for wildlife potentially utilizing the project site and vicinity.

Given the location of the site, adjacent to US 101 with high traffic volumes, and between existing warehouse and industrial uses, reduces the ability for most species to use the project site as a migratory corridor. No significant impacts to wildlife movement are expected as a result of existing barriers coupled with the lack of suitable habitat due to high levels of disturbance on the project site. No mitigation is recommended at this time.

5.3 - Potential Jurisdictional Features

The project was evaluated for the presence of potential wetland features under both state and federal jurisdiction. There is a cement-lined storm water drainage ditch running along the south edge of the site. The proposed development of the project will not be affected this feature, thus no mitigation measures will be required. If any changes are made to the proposed project plan and the feature will be affected in anyway, several other steps including permitting, additional site visits, and potential delineations may be required.

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SECTION 6: CERTIFICATION

I hereby certify that the statements furnished above and in the attached exhibits present data and information required for this biological evaluation, and that the facts, statements, and information presented are true and correct to the best of my knowledge and belief.

Date: August 17, 2018 Signed:

Brian Mayerle, Senior Biologist
FirstCarbon Solutions
1350 Treat Blvd., Suite 380
Walnut Creek, CA 94597

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SECTION 7: REFERENCES

Calflora. 2017. Calflora: Information on California plants for education, research, and conservation. Website: http://www.calflora.org/. Accessed June 2017.

California Department of Fish and Wildlife (CDFW). 2005. Biogeographic Information and Observation System (BIOS 5). Website: https://map.dfg.ca.gov/bios/. Accessed June 2017.

California Department of Fish and Wildlife (CDFW). 2010. Natural Communities List, Sacramento: California Department of Fish and Wildlife.

California Department of Fish and Wildlife (CDFW). 2017. CNDDB RareFind 5 California Natural Diversity Database Query for Special-Status Species. Website: https://map.dfg.ca.gov/rarefind/view/RareFind.aspx. Accessed June 2017.

California Native Plant Society (CNPS). 2014. California Native Plant Society Rare and Endangered Plant Inventory. Website: http://www.rareplants.cnps.org/. Accessed June 2017.

California Native Plant Society (CNPS). 2015. Rare Plant Program. Website: http://www.rareplants.cnps.org. Accessed June 2017.

Hitchcock, A. 1971. Manual of the Grasses of the United States in Two Volumes, Volume One. Second Edition. New York: Dover Publications, Inc.

Holland, R. 1986. Preliminary Descriptions of the Terrestrial Natural Communities of California. Sacramento: California Department of Fish and Wildlife.

Peterson, T.R. 2010. A Field Guide to Birds of Western North America, 4th Edition. Boston: Houghton Mifflin Harcourt.

Soil Survey Staff, Natural Resources Conservation Service. 2016. Official Soil Series Descriptions. Website: http://www.nrcs.usda.gov/. Accessed June 2017.

Stebbins, R.C. 2003. A Field Guide to Western Reptiles and Amphibians. Third Edition. Boston: Houghton Mifflin Harcourt.

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Appendix A:
Database Search Results

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Selected Elements by Common Name

California Department of Fish and Wildlife

California Natural Diversity Database

Query Criteria: Quad IS (Salinas (3612166) OR Moss Landing (3612177) OR Prunedale (3612176) OR San Juan Bautista (3612175) OR Marina (3612167) OR Natividad (3612165) OR Seaside (3612157) OR Spreckels (3612156) OR Chualar (3612155))

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
alkali milk-vetch *Astragalus tener var. tener*	PDFAB0F8R1	None	None	G2T2	S2	1B.2
American badger *Taxidea taxus*	AMAJF04010	None	None	G5	S3	SSC
American peregrine falcon *Falco peregrinus anatum*	ABNKD06071	Delisted	Delisted	G4T4	S3S4	FP
bank swallow *Riparia riparia*	ABPAU08010	None	Threatened	G5	S2	
burrowing owl *Athene cunicularia*	ABNSB10010	None	None	G4	S3	SSC
California horned lark *Eremophila alpestris actia*	ABPAT02011	None	None	G5T4Q	S4	WL
California linderiella *Linderiella occidentalis*	ICBRA06010	None	None	G2G3	S2S3	
California red-legged frog *Rana draytonii*	AAABH01022	Threatened	None	G2G3	S2S3	SSC
California Ridgway's rail *Rallus obsoletus obsoletus*	ABNME05016	Endangered	Endangered	G5T1	S1	FP
California tiger salamander *Ambystoma californiense*	AAAAA01180	Threatened	Threatened	G2G3	S2S3	WL
Carmel Valley bush-mallow *Malacothamnus palmeri var. involucratus*	PDMAL0Q0B1	None	None	G3T2Q	S2	1B.2
Carmel Valley malacothrix *Malacothrix saxatilis var. arachnoidea*	PDAST660C2	None	None	G5T2	S2	1B.2
Central Dune Scrub *Central Dune Scrub*	CTT21320CA	None	None	G2	S2.2	
Central Maritime Chaparral *Central Maritime Chaparral*	CTT37C20CA	None	None	G2	S2.2	
Choris' popcornflower *Plagiobothrys chorisianus var. chorisianus*	PDBOR0V061	None	None	G3T1Q	S1	1B.2
coast horned lizard *Phrynosoma blainvillii*	ARACF12100	None	None	G3G4	S3S4	SSC
Coast Range newt *Taricha torosa*	AAAAF02032	None	None	G4	S4	SSC
Coastal and Valley Freshwater Marsh *Coastal and Valley Freshwater Marsh*	CTT52410CA	None	None	G3	S2.1	

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
Coastal Brackish Marsh *Coastal Brackish Marsh*	CTT52200CA	None	None	G2	S2.1	
Congdon's tarplant *Centromadia parryi ssp. congdonii*	PDAST4R0P1	None	None	G3T2	S2	1B.1
Contra Costa goldfields *Lasthenia conjugens*	PDAST5L040	Endangered	None	G1	S1	1B.1
Cooper's hawk *Accipiter cooperii*	ABNKC12040	None	None	G5	S4	WL
Eastwood's goldenbush *Ericameria fasciculata*	PDAST3L080	None	None	G2	S2	1B.1
ferruginous hawk *Buteo regalis*	ABNKC19120	None	None	G4	S3S4	WL
foothill yellow-legged frog *Rana boylii*	AAABH01050	None	Candidate Threatened	G3	S3	SSC
Fort Ord spineflower *Chorizanthe minutiflora*	PDPGN04100	None	None	G1	S1	1B.2
fragrant fritillary *Fritillaria liliacea*	PMLIL0V0C0	None	None	G2	S2	1B.2
globose dune beetle *Coelus globosus*	IICOL4A010	None	None	G1G2	S1S2	
golden eagle *Aquila chrysaetos*	ABNKC22010	None	None	G5	S3	FP
Hickman's onion *Allium hickmanii*	PMLIL02140	None	None	G2	S2	1B.2
hoary bat *Lasiurus cinereus*	AMACC05030	None	None	G5	S4	
Hooker's manzanita *Arctostaphylos hookeri ssp. hookeri*	PDERI040J1	None	None	G3T2	S2	1B.2
Hospital Canyon larkspur *Delphinium californicum ssp. interius*	PDRAN0B0A2	None	None	G3T3	S3	1B.2
Hutchinson's larkspur *Delphinium hutchinsoniae*	PDRAN0B0V0	None	None	G2	S2	1B.2
Jolon clarkia *Clarkia jolonensis*	PDONA050L0	None	None	G2	S2	1B.2
Kellogg's horkelia *Horkelia cuneata var. sericea*	PDROS0W043	None	None	G4T1?	S1?	1B.1
least Bell's vireo *Vireo bellii pusillus*	ABPBW01114	Endangered	Endangered	G5T2	S2	
legenere *Legenere limosa*	PDCAM0C010	None	None	G2	S2	1B.1
longfin smelt *Spirinchus thaleichthys*	AFCHB03010	Candidate	Threatened	G5	S1	SSC

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
marsh microseris *Microseris paludosa*	PDAST6E0D0	None	None	G2	S2	1B.2
Menzies' wallflower *Erysimum menziesii*	PDBRA160R0	Endangered	Endangered	G1	S1	1B.1
mimic tryonia (=California brackishwater snail) *Tryonia imitator*	IMGASJ7040	None	None	G2	S2	
monarch - California overwintering population *Danaus plexippus pop. 1*	IILEPP2012	None	None	G4T2T3	S2S3	
Monterey gilia *Gilia tenuiflora ssp. arenaria*	PDPLM041P2	Endangered	Threatened	G3G4T2	S2	1B.2
Monterey pine *Pinus radiata*	PGPIN040V0	None	None	G1	S1	1B.1
Monterey Pine Forest *Monterey Pine Forest*	CTT83130CA	None	None	G1	S1.1	
Monterey spineflower *Chorizanthe pungens var. pungens*	PDPGN040M2	Threatened	None	G2T2	S2	1B.2
northern California legless lizard *Anniella pulchra*	ARACC01020	None	None	G3	S3	SSC
Northern Coastal Salt Marsh *Northern Coastal Salt Marsh*	CTT52110CA	None	None	G3	S3.2	
northern curly-leaved monardella *Monardella sinuata ssp. nigrescens*	PDLAM18162	None	None	G3T2	S2	1B.2
obscure bumble bee *Bombus caliginosus*	IIHYM24380	None	None	G4?	S1S2	
Oregon meconella *Meconella oregana*	PDPAP0G030	None	None	G2G3	S2	1B.1
Pacific Grove clover *Trifolium polyodon*	PDFAB402H0	None	Rare	G1	S1	1B.1
Pajaro manzanita *Arctostaphylos pajaroensis*	PDERI04100	None	None	G1	S1	1B.1
pallid bat *Antrozous pallidus*	AMACC10010	None	None	G5	S3	SSC
pine rose *Rosa pinetorum*	PDROS1J0W0	None	None	G2	S2	1B.2
pink Johnny-nip *Castilleja ambigua var. insalutata*	PDSCR0D403	None	None	G4T2	S2	1B.1
Pinnacles buckwheat *Eriogonum nortonii*	PDPGN08470	None	None	G2	S2	1B.3
Pinnacles optioservus riffle beetle *Optioservus canus*	IICOL5E020	None	None	G1	S1	
Point Reyes horkelia *Horkelia marinensis*	PDROS0W0B0	None	None	G2	S2	1B.2

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
prairie falcon *Falco mexicanus*	ABNKD06090	None	None	G5	S4	WL
redwood shoulderband *Helminthoglypta sequoicola consors*	IMGASC2421	None	None	G2T1	S1	
robust spineflower *Chorizanthe robusta var. robusta*	PDPGN040Q2	Endangered	None	G2T1	S1	1B.1
Salinas harvest mouse *Reithrodontomys megalotis distichlis*	AMAFF02032	None	None	G5T1	S1	
saline clover *Trifolium hydrophilum*	PDFAB400R5	None	None	G2	S2	1B.2
San Francisco collinsia *Collinsia multicolor*	PDSCR0H0B0	None	None	G2	S2	1B.2
San Francisco popcornflower *Plagiobothrys diffusus*	PDBOR0V080	None	Endangered	G1Q	S1	1B.1
sand-loving wallflower *Erysimum ammophilum*	PDBRA16010	None	None	G2	S2	1B.2
sandmat manzanita *Arctostaphylos pumila*	PDERI04180	None	None	G1	S1	1B.2
Santa Cruz clover *Trifolium buckwestiorum*	PDFAB402W0	None	None	G2	S2	1B.1
Santa Cruz long-toed salamander *Ambystoma macrodactylum croceum*	AAAAA01082	Endangered	Endangered	G5T1T2	S1S2	FP
Santa Cruz microseris *Stebbinsoseris decipiens*	PDAST6E050	None	None	G2	S2	1B.2
Santa Cruz tarplant *Holocarpha macradenia*	PDAST4X020	Threatened	Endangered	G1	S1	1B.1
seaside bird's-beak *Cordylanthus rigidus ssp. littoralis*	PDSCR0J0P2	None	Endangered	G5T2	S2	1B.1
short-eared owl *Asio flammeus*	ABNSB13040	None	None	G5	S3	SSC
Smith's blue butterfly *Euphilotes enoptes smithi*	IILEPG2026	Endangered	None	G5T1T2	S1S2	
steelhead - south-central California coast DPS *Oncorhynchus mykiss irideus pop. 9*	AFCHA0209H	Threatened	None	G5T2Q	S2	
Swainson's hawk *Buteo swainsoni*	ABNKC19070	None	Threatened	G5	S3	
tidewater goby *Eucyclogobius newberryi*	AFCQN04010	Endangered	None	G3	S3	SSC
Toro manzanita *Arctostaphylos montereyensis*	PDERI040R0	None	None	G2?	S2?	1B.2
Townsend's big-eared bat *Corynorhinus townsendii*	AMACC08010	None	None	G3G4	S2	SSC

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
tricolored blackbird *Agelaius tricolor*	ABPBXB0020	None	Candidate Endangered	G2G3	S1S2	SSC
two-striped gartersnake *Thamnophis hammondii*	ARADB36160	None	None	G4	S3S4	SSC
umbrella larkspur *Delphinium umbraculorum*	PDRAN0B1W0	None	None	G3	S3	1B.3
Valley Needlegrass Grassland *Valley Needlegrass Grassland*	CTT42110CA	None	None	G3	S3.1	
vernal pool bent grass *Agrostis lacuna-vernalis*	PMPOA041N0	None	None	G1	S1	1B.1
western bumble bee *Bombus occidentalis*	IIHYM24250	None	None	G2G3	S1	
western pond turtle *Emys marmorata*	ARAAD02030	None	None	G3G4	S3	SSC
western snowy plover *Charadrius alexandrinus nivosus*	ABNNB03031	Threatened	None	G3T3	S2S3	SSC
white-tailed kite *Elanus leucurus*	ABNKC06010	None	None	G5	S3S4	FP
woodland woollythreads *Monolopia gracilens*	PDAST6G010	None	None	G3	S3	1B.2
Yadon's rein orchid *Piperia yadonii*	PMORC1X070	Endangered	None	G1	S1	1B.1
yellow rail *Coturnicops noveboracensis*	ABNME01010	None	None	G4	S1S2	SSC

Record Count: 93

CNPS California Native Plant Society

Plant List

Inventory of Rare and Endangered Plants

4 matches found. *Click on scientific name for details*

Search Criteria

California Rare Plant Rank is one of [1B, 2B], FESA is one of [Endangered, Threatened], CESA is one of [Endangered, Threatened, Rare], Found in Quads 3612177, 3612176, 3612175, 3612167, 3612166, 3612165, 3612157 3612156 and 3612155;

Modify Search Criteria | Export to Excel | Modify Columns | Modify Sort | Display Photos

Scientific Name	Common Name	Family	Lifeform	Blooming Period	CA Rare Plant Rank	State Rank	Global Rank
Erysimum menziesii	Menzies' wallflower	Brassicaceae	perennial herb	Mar-Sep	1B.1	S1	G1
Gilia tenuiflora ssp. arenaria	Monterey gilia	Polemoniaceae	annual herb	Apr-Jun	1B.2	S2	G3G4T2
Holocarpha macradenia	Santa Cruz tarplant	Asteraceae	annual herb	Jun-Oct	1B.1	S1	G1
Lupinus tidestromii	Tidestrom's lupine	Fabaceae	perennial rhizomatous herb	Apr-Jun	1B.1	S1	G1

Suggested Citation

California Native Plant Society, Rare Plant Program. 2018. Inventory of Rare and Endangered Plants of California (online edition, v8-03 0.39). Website http://www.rareplants.cnps.org [accessed 15 August 2018].

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IPaC **U.S. Fish & Wildlife Service**

IPaC resource list

This report is an automatically generated list of species and other resources such as critical habitat (collectively referred to as *trust resources*) under the U.S. Fish and Wildlife Service's (USFWS) jurisdiction that are known or expected to be on or near the project area referenced below. The list may also include trust resources that occur outside of the project area, but that could potentially be directly or indirectly affected by activities in the project area. However, determining the likelihood and extent of effects a project may have on trust resources typically requires gathering additional site-specific (e.g., vegetation/species surveys) and project-specific (e.g., magnitude and timing of proposed activities) information.

Below is a summary of the project information you provided and contact information for the USFWS office(s) with jurisdiction in the defined project area. Please read the introduction to each section that follows (Endangered Species, Migratory Birds, USFWS Facilities, and NWI Wetlands) for additional information applicable to the trust resources addressed in that section.

Location

Monterey County, California

Not for consultation

Local office

Ventura Fish And Wildlife Office

(805) 644-1766
(805) 644-3958

2493 Portola Road, Suite B
Ventura, CA 93003-7726

Endangered species

This resource list is for informational purposes only and does not constitute an analysis of project level impacts.

The primary information used to generate this list is the known or expected range of each species. Additional areas of influence (AOI) for species are also considered. An AOI includes areas outside of the species range if the species could be indirectly affected by activities in that area (e.g., placing a dam upstream of a fish population, even if that fish does not occur at the dam site, may indirectly impact the species by reducing or eliminating water flow downstream). Because species can move, and site conditions can change, the species on this list are not guaranteed to be found on or near the project area. To fully determine any potential effects to species, additional site-specific and project-specific information is often required.

Section 7 of the Endangered Species Act **requires** Federal agencies to "request of the Secretary information whether any species which is listed or proposed to be listed may be present in the area of such proposed action" for any project that is conducted, permitted, funded, or licensed by any Federal agency. A letter from the local office and a species list which fulfills this requirement can **only** be obtained by requesting an official species list from either the Regulatory Review section in IPaC (see directions below) or from the local field office directly.

For project evaluations that require USFWS concurrence/review, please return to the IPaC website and request an official species list by doing the following:

1. Draw the project location and click CONTINUE.
2. Click DEFINE PROJECT.
3. Log in (if directed to do so).
4. Provide a name and description for your project.
5. Click REQUEST SPECIES LIST.

Listed species[1] are managed by the Ecological Services Program of the U.S. Fish and Wildlife Service.

1. Species listed under the Endangered Species Act are threatened or endangered; IPaC also shows species that are candidates, or proposed, for listing. See the listing status page for more information.

The following species are potentially affected by activities in this location:

Birds

NAME	STATUS
California Condor Gymnogyps californianus There is a **final** critical habitat designated for this species. Your location is outside the designated critical habitat. https://ecos.fws.gov/ecp/species/8193	Endangered
Least Bell's Vireo Vireo bellii pusillus There is a **final** critical habitat designated for this species. Your location is outside the designated critical habitat. https://ecos.fws.gov/ecp/species/5945	Endangered
Southwestern Willow Flycatcher Empidonax traillii extimus There is a **final** critical habitat designated for this species. Your location is outside the designated critical habitat. https://ecos.fws.gov/ecp/species/6749	Endangered

Amphibians

NAME	STATUS
California Red-legged Frog Rana draytonii There is a **final** critical habitat designated for this species. Your location is outside the designated critical habitat. https://ecos.fws.gov/ecp/species/2891	Threatened
California Tiger Salamander Ambystoma californiense There is a **final** critical habitat designated for this species. Your location is outside the designated critical habitat. https://ecos.fws.gov/ecp/species/2076	Threatened
Santa Cruz Long-toed Salamander Ambystoma macrodactylum croceum No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/7405	Endangered

Crustaceans

NAME	STATUS
Vernal Pool Fairy Shrimp Branchinecta lynchi There is a **final** critical habitat designated for this species. Your location is outside the designated critical habitat. https://ecos.fws.gov/ecp/species/498	Threatened

Flowering Plants

NAME	STATUS
Contra Costa Goldfields Lasthenia conjugens There is a **final** critical habitat designated for this species. Your location is outside the designated critical habitat. https://ecos.fws.gov/ecp/species/7058	Endangered
Marsh Sandwort Arenaria paludicola No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/2229	Endangered
Monterey Gilia Gilia tenuiflora ssp. arenaria No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/856	Endangered

Monterey Spineflower Chorizanthe pungens var. pungens There is a **final** critical habitat designated for this species. Your location is outside the designated critical habitat. https://ecos.fws.gov/ecp/species/396	Threatened
Yadon's Piperia Piperia yadonii There is a **final** critical habitat designated for this species. Your location is outside the designated critical habitat. https://ecos.fws.gov/ecp/species/4205	Endangered

Critical habitats

Potential effects to critical habitat(s) in this location must be analyzed along with the endangered species themselves.

THERE ARE NO CRITICAL HABITATS AT THIS LOCATION.

Migratory birds

Certain birds are protected under the Migratory Bird Treaty Act[1] and the Bald and Golden Eagle Protection Act[2].

Any activity that results in the take (to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct) of migratory birds or eagles is prohibited unless authorized by the U.S. Fish and Wildlife Service[3]. There are no provisions for allowing the take of migratory birds that are unintentionally killed or injured.

Any person or organization who plans or conducts activities that may result in the take of migratory birds is responsible for complying with the appropriate regulations and implementing appropriate conservation measures.

1. The Migratory Birds Treaty Act of 1918.
2. The Bald and Golden Eagle Protection Act of 1940.
3. 50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)

Additional information can be found using the following links:

- Birds of Conservation Concern http://www.fws.gov/birds/management/managed-species/birds-of-conservation-concern.php
- Conservation measures for birds http://www.fws.gov/birds/management/project-assessment-tools-and-guidance/conservation-measures.php
- Year-round bird occurrence data http://www.birdscanada.org/birdmon/default/datasummaries.jsp

The migratory birds species listed below are species of particular conservation concern (e.g. Birds of Conservation Concern) that may be potentially affected by activities in this location. It is not a list of every bird species you may find in this location, nor a guarantee that all of the bird species on this list will be found on or near this location. Although it is important to try to avoid and minimize impacts to all birds, special attention should be made to avoid and minimize impacts to birds of priority concern. To view available data on other bird species that may occur in your project area, please visit the AKN Histogram Tools and Other Bird Data Resources. To fully determine any potential effects to species, additional site-specific and project-specific information is often required.

NAME	SEASON(S)
Allen's Hummingbird Selasphorus sasin https://ecos.fws.gov/ecp/species/9637	Breeding
Bald Eagle Haliaeetus leucocephalus https://ecos.fws.gov/ecp/species/1626	Year-round
Black Oystercatcher Haematopus bachmani https://ecos.fws.gov/ecp/species/9591	Year-round
Black Swift Cypseloides niger https://ecos.fws.gov/ecp/species/8878	Breeding
Burrowing Owl Athene cunicularia https://ecos.fws.gov/ecp/species/9737	Year-round
Costa's Hummingbird Calypte costae https://ecos.fws.gov/ecp/species/9470	Year-round

Flammulated Owl Otus flammeolus https://ecos.fws.gov/ecp/species/7728	Breeding
Fox Sparrow Passerella iliaca	Wintering
Lesser Yellowlegs Tringa flavipes https://ecos.fws.gov/ecp/species/9679	Wintering
Lewis's Woodpecker Melanerpes lewis https://ecos.fws.gov/ecp/species/9408	Wintering
Long-billed Curlew Numenius americanus https://ecos.fws.gov/ecp/species/5511	Wintering
Marbled Godwit Limosa fedoa https://ecos.fws.gov/ecp/species/9481	Wintering
Nuttall's Woodpecker Picoides nuttallii https://ecos.fws.gov/ecp/species/9410	Year-round
Oak Titmouse Baeolophus inornatus https://ecos.fws.gov/ecp/species/9656	Year-round
Olive-sided Flycatcher Contopus cooperi https://ecos.fws.gov/ecp/species/3914	Breeding
Peregrine Falcon Falco peregrinus https://ecos.fws.gov/ecp/species/8831	Year-round
Rufous Hummingbird selasphorus rufus https://ecos.fws.gov/ecp/species/8002	Migrating
Rufous-crowned Sparrow Aimophila ruficeps https://ecos.fws.gov/ecp/species/9718	Year-round
Short-billed Dowitcher Limnodromus griseus https://ecos.fws.gov/ecp/species/9480	Wintering
Short-eared Owl Asio flammeus https://ecos.fws.gov/ecp/species/9295	Wintering
Snowy Plover Charadrius alexandrinus	Breeding
Tricolored Blackbird Agelaius tricolor https://ecos.fws.gov/ecp/species/3910	Year-round
Western Grebe aechmophorus occidentalis https://ecos.fws.gov/ecp/species/6743	Wintering
Yellow Warbler dendroica petechia ssp. brewsteri https://ecos.fws.gov/ecp/species/3230	Breeding

What does IPaC use to generate the list of migratory bird species potentially occurring in my specified location?

Landbirds:

Migratory birds that are displayed on the IPaC species list are based on ranges in the latest edition of the National Geographic Guide, Birds of North America (6th Edition, 2011 by Jon L. Dunn, and Jonathan Alderfer). Although these ranges are coarse in nature, a number of U.S. Fish and Wildlife Service migratory bird biologists agree that these maps are some of the best range maps to date. These ranges were clipped to a specific Bird Conservation Region (BCR) or USFWS Region/Regions, if it was indicated in the 2008 list of Birds of Conservation Concern (BCC) that a species was a BCC species only in a particular Region/Regions. Additional modifications have been made to some ranges based on more local or refined range information and/or information provided by U.S. Fish and Wildlife Service biologists with species expertise. All migratory birds that show in areas on land in IPaC are those that appear in the 2008 Birds of Conservation Concern report.

Atlantic Seabirds:

Ranges in IPaC for birds off the Atlantic coast are derived from species distribution models developed by the National Oceanic and Atmospheric Association (NOAA) National Centers for Coastal Ocean Science (NCCOS) using the best available seabird survey data for the offshore Atlantic Coastal region to date. NOAANCCOS assisted USFWS in developing seasonal species ranges from their models for specific use in IPaC. Some of these birds are not BCC species but were of interest for inclusion because they may occur in high abundance off the coast at different times throughout the year, which potentially makes them more susceptible to certain types of development and activities taking place in that area. For more refined details about the abundance and richness of bird species within your project area off the Atlantic Coast, see the Northeast Ocean Data Portal. The Portal also offers data and information about other types of taxa that may be helpful in your project review.

About the NOAANCCOS models: the models were developed as part of the NOAANCCOS project: Integrative Statistical Modeling and Predictive Mapping of Marine Bird Distributions and Abundance on the Atlantic Outer Continental Shelf. The models resulting from this project are being used in a number of decision-support/mapping products in order to help guide decision-making on activities off the Atlantic Coast with the goal of reducing impacts to migratory birds. One such product is the Northeast Ocean Data Portal, which can be used to explore details about the relative occurrence and abundance of bird species in a particular area off the Atlantic Coast.

All migratory bird range maps within IPaC are continuously being updated as new and better information becomes available.

Can I get additional information about the levels of occurrence in my project area of specific birds or groups of birds listed in IPaC?

Landbirds:

The Avian Knowledge Network (AKN) provides a tool currently called the "Histogram Tool", which draws from the data within the AKN (latest,survey, point count, citizen science datasets) to create a view of relative abundance of species within a particular location over the course of the year. The results of the tool depict the frequency of detection of a species in survey events, averaged between multiple datasets within AKN in a particular week of the year. You may access the histogram tools through the Migratory Bird Programs AKN Histogram Tools webpage.

The tool is currently available for 4 regions (California, Northeast U.S., Southeast U.S. and Midwest), which encompasses the following 32 states: Alabama, Arkansas, California, Connecticut, Delaware, Florida, Georgia, Illinois, Indiana, Iowa, Kentucky, Louisiana, Maine, Maryland, Massachusetts, Michigan, Minnesota, Mississippi, Missouri, New Hampshire, New Jersey, New York, North, Carolina, Ohio, Pennsylvania, Rhode Island, South Carolina, Tennessee, Vermont, Virginia, West Virginia, and Wisconsin.

In the near future, there are plans to expand this tool nationwide within the AKN, and allow the graphs produced to appear with the list of trust resources generated by IPaC, providing you with an additional level of detail about the level of occurrence of the species of particular concern potentially occurring in your project area throughout the course of the year.

Atlantic Seabirds:

For additional details about the relative occurrence and abundance of both individual bird species and groups of bird species within your project area off the Atlantic Coast, please visit the Northeast Ocean Data Portal. The Portal also offers data and information about other taxa besides birds that may be helpful to you in your project review. Alternately, you may download the bird model results files underlying the portal maps through the NOAANCCOS Integrative Statistical Modeling and Predictive Mapping of Marine Bird Distributions and Abundance on the Atlantic Outer Continental Shelf project webpage.

Facilities

Wildlife refuges

Any activity proposed on National Wildlife Refuge lands must undergo a 'Compatibility Determination' conducted by the Refuge. Please contact the individual Refuges to discuss any questions or concerns.

THERE ARE NO REFUGES AT THIS LOCATION.

Fish hatcheries

THERE ARE NO FISH HATCHERIES AT THIS LOCATION.

Wetlands in the National Wetlands Inventory

Impacts to NWI wetlands and other aquatic habitats may be subject to regulation under Section 404 of the Clean Water Act, or other State/Federal statutes.

For more information please contact the Regulatory Program of the local U.S. Army Corps of Engineers District.

THERE ARE NO KNOWN WETLANDS AT THIS LOCATION.

Data limitations

The Service's objective of mapping wetlands and deepwater habitats is to produce reconnaissance level information on the location, type and size of these resources. The maps are prepared from the analysis of high altitude imagery. Wetlands are identified based on vegetation, visible hydrology and geography. A margin of error is inherent in the use of imagery; thus, detailed on-the-ground inspection of any particular site may result in revision of the wetland boundaries or

classification established through image analysis.

The accuracy of image interpretation depends on the quality of the imagery, the experience of the image analysts, the amount and quality of the collateral data and the amount of ground truth verification work conducted. Metadata should be consulted to determine the date of the source imagery used and any mapping problems.

Wetlands or other mapped features may have changed since the date of the imagery or field work. There may be occasional differences in polygon boundaries or classifications between the information depicted on the map and the actual conditions on site.

Data exclusions

Certain wetland habitats are excluded from the National mapping program because of the limitations of aerial imagery as the primary data source used to detect wetlands. These habitats include seagrasses or submerged aquatic vegetation that are found in the intertidal and subtidal zones of estuaries and nearshore coastal waters. Some deepwater reef communities (coral or tuberficid worm reefs) have also been excluded from the inventory. These habitats, because of their depth, go undetected by aerial imagery.

Data precautions

Federal, state, and local regulatory agencies with jurisdiction over wetlands may define and describe wetlands in a different manner than that used in this inventory. There is no attempt, in either the design or products of this inventory, to define the limits of proprietary jurisdiction of any Federal, state, or local government or to establish the geographical scope of the regulatory programs of government agencies. Persons intending to engage in activities involving modifications within or adjacent to wetland areas should seek the advice of appropriate federal, state, or local agencies concerning specified agency regulatory programs and proprietary jurisdictions that may affect such activities.

Appendix B:
Regulatory Framework

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SENSITIVE PLANT AND WILDLIFE SPECIES

Sensitive species are native species that have been accorded special legal or management protection because of concern for their continued existence. There are several categories of protection at both federal and state levels, depending on the magnitude of threat to continued existence and existing knowledge of population levels.

Federal Endangered Species Act

The United States Fish and Wildlife Service (USFWS) administers the Federal Endangered Species Act (ESA). The ESA provides a process for listing species as either threatened or endangered, and methods of protecting listed species. The ESA defines as "endangered" any plant or animal species that is in danger of extinction throughout all or a significant portion of its known geographic range. A "threatened" species is a species that is likely to become endangered. A "proposed" species is one that has been officially proposed by the USFWS for addition to the federal threatened and endangered species list.

According to Section 9 of the ESA, "take" of threatened or endangered species is prohibited. The term "take" means to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in such conduct. Take can include disturbance to habitats used by a threatened or endangered species during any portion of its life history. The presence of any federally threatened or endangered species in a project area generally imposes severe constraints on development, particularly if development would result in "take" of the species or its habitat. Under the regulations of the ESA, the USFWS may authorize "take" when it is incidental to, but not the purpose of, an otherwise lawful act.

California Endangered Species Act

The California Department of Fish and Wildlife (CDFW) administers the California Endangered Species Act (CESA). The State of California considers an "endangered" species one whose prospects of survival and reproduction are in immediate jeopardy. A "threatened" species is one present in such small numbers throughout its range that it is likely to become an endangered species in the near future in the absence of special protection or management. A "rare" species is one present in such small numbers throughout its portion of its known geographic range that it may become endangered if its present environment worsens. The rare species designation applies to California native plants. State threatened and endangered species are fully protected against take, as defined above. The term "species of special concern" is an informal designation used by CDFW for some declining wildlife species that are not state candidates for listing. This designation does not provide legal protection, but signifies that these species are recognized as sensitive by CDFW.

California Native Plant Society

The California Native Plant Society (CNPS) is a California resource conservation organization that has developed and inventory of California's sensitive plant species. This inventory summarizes information on the distribution, rarity, and endangerment of California's vascular plants. The

inventory is divided into four lists based on the rarity of the species. In addition, the CNPS provides an inventory of plant communities that are considered sensitive by the state and federal resource agencies, academic institutions, and various conservation groups. Determination of the level of sensitivity is based on the number and size of remaining occurrences as well as recognized threats.

Migratory Bird Treaty Act

The MBTA protects all common wild birds found in the United States (U.S.) except exotic species identified in the Federal Register. Resident game birds are managed separately by each state. The MBTA makes it unlawful for anyone to kill, capture, collect, possess, buy, sell, trade, ship, import, or export any migratory bird including feathers, parts, nests, or eggs.

California Fish and Game Code—Section 3503 and Section 3511

The CDFW administers the California Fish and Game Code (CFG Code). There are particular sections of the CFG Code that are applicable to natural resource management. For example, Section 3503 of the CFG Code states it is unlawful to take, possess, or needlessly destroy the nest or eggs of any bird that is protected under the MBTA. CFG Code Section 3503.5 further protects all birds in the orders Falconiformes and Strigiformes, birds of prey such as hawks and owls, and their eggs and nests from any form of take. CFG Code Section 3511 lists fully protected bird species where the CDFW is unable to authorize the issuance of permits or licenses to take these species.

Impacts to natural drainage features and wetland areas are regulated by the United States Army Corps of Engineers (USACE), Regional Water Quality Control Board (RWQCB), and CDFW based upon the policies and regulations discussed below.

United States Army Corps of Engineers Regulations

Federal Clean Water Act—Section 404

The USACE administers Section 404 of the federal Clean Water Act (CWA). This section regulates the discharge of dredge and fill material into Waters of the U.S. USACE has established a series of nationwide permits that authorize certain activities in Waters of the U.S., if a proposed activity can demonstrate compliance with standard conditions. Normally, USACE requires an individual permit for an activity that will affect an area equal to or in excess of 0.5 acre of Waters of the U.S. Projects that result in impacts to less than 0.5 acre can normally be conducted pursuant to one of the nationwide permits, if consistent with the standard permit conditions. USACE also has discretionary authority to require an Environmental Impact Statement for projects that result in impacts to an area between 0.1 and 0.5 acre. Use of any nationwide permit is contingent on the activities having no impacts to endangered species.

Waters of the United States

Waters of the U.S., as defined in the Code of Federal Regulations (CFR) Section 328.3, include all waters or tributaries to waters such as lakes, rivers, intermittent and perennial streams, mudflats, sand-flats, natural ponds, wetlands, wet meadows, and other aquatic habitats. Frequently, Waters of the U.S., with at least intermittently flowing water or tidal influences, are demarcated by an ordinary high water mark (OHWM). The OHWM is defined in CFR Section 328.3(e) as the line on the

shore established by the fluctuations of water and indicated by physical characteristics such as a clear, natural line impressed on the bank shelving, changes in the character of soil, destruction of terrestrial vegetation, the presence of litter and debris, or other appropriate means that consider the characteristics of the surrounding areas. In this region, the OHWM is typically indicated by the presence of an incised streambed with defined bank shelving.

In June 2001, the USACE South Pacific Division has issued Guidelines for Jurisdictional Delineations for Waters of the United States in the Arid Southwest. The purpose of this document was to provide background information concerning physical characteristics of dryland drainage systems. These guidelines were reviewed and used to identify jurisdictional drainage features within the project site.

Wetlands

According to the USACE Wetlands Delineation Manual, Technical Report, three criteria must be satisfied to classify an area as a jurisdictional wetland:

1. A predominance of plant life that is adapted to life in wet conditions (hydrophytic vegetation)
2. Soils that saturate, flood, or pond long enough during the growing season to develop anaerobic conditions in the upper part (hydric soils)
3. Permanent or periodic inundation or soils saturation, at least seasonally (wetland hydrology)

Wetland vegetation is characterized by vegetation in which more than 50 percent of the composition of dominant plant species are obligate wetland, facultative wetland, and/or facultative species that occur in wetlands. As a result of the 2001 Solid Waste Agency of North Cook County (SWANCC) case, a wetland must show connectivity to a stream course in order for such a feature to be considered jurisdictional. Although wetland criteria was used to identify if areas were considered wetlands, the exact limits of jurisdiction were not measured based on the standard wetland delineation protocol as described in the 1987 USACE manual.

United States Army Corps of Engineers Regulated Activities

The USACE regulates the discharge of dredged or fill material including, but not limited to, grading, placing of rip-rap for erosion control, pouring concrete, laying sod, and stockpiling excavated material. Activities that generally do not involve a regulated discharge, if performed specifically in a manner to avoid discharges, include driving pilings, drainage channel maintenance, temporary mining and farm/forest roads, and excavating without stockpiling.

Regional Water Quality Control Board Regulations

Clean Water Act—Section 401

As stated in Section 401 of the CWA, “any applicant for a Federal permit for activities that involve a discharge to Waters of the State, shall provide the federal permitting agency a certification from the State in which the discharge is proposed that states that the discharge will comply with the applicable provisions under the Federal Clean Water Act.” Therefore, before the USACE will issue a

Section 404 permit, applicants must apply for and receive a Section 401 water quality certification from the RWQCB.

Porter-Cologne Water Quality Act

The RWQCB regulates actions that would involve "discharging waste, or proposing to discharge waste, within any region that could affect the water of the state" (water code Section 13260(a)), pursuant to provisions of the Porter-Cologne Water Quality Act. "Waters of the State" are defined as "any surface water or groundwater, including saline waters, within the boundaries of the state" (water code Section 13050 (e)).

Regional Water Quality Control Board Regulated Activities

Under Section 401 of the CWA, the RWQCB regulates all activities that are regulated by the USACE. Additionally, under the Porter-Cologne Water Quality Act, the RWQCB regulates all activities, including dredging, filling, or discharge of materials into waters of the state that are not regulated by the USACE, due to a lack of connectivity with a navigable water body and/or lack of an OHWM.

California Department of Fish and Game Regulations

California Fish and Game Code—Section 1600 to Section 1603

The CFG Code mandates that "it is unlawful for any person to substantially divert or obstruct the natural flow or substantially change the bed, channel, or bank of any river, stream, or lake designated by the department, or use any material from the streambeds, without first notifying the department of such activity." CDFW jurisdiction includes ephemeral, intermittent, and perennial watercourses, including dry washes, characterized by the presence of hydrophytic vegetation, the location of definable bed and banks, and the presence of existing fish or wildlife resources.

Furthermore, CDFW jurisdiction is often extended to habitats adjacent to watercourses, such as oak woodlands in canyon bottoms or willow woodlands that function as part of the riparian system. Historic court cases have further extended CDFW jurisdiction to include watercourses that seemingly disappear, but re-emerge elsewhere. Under the CDFW definition, a watercourse need not exhibit evidence of an OHWM to be claimed as jurisdiction. However, CDFW does not regulate isolated wetlands; that is, those that are not associated with a river, stream, or lake.

California Department of Fish and Game Regulated Activities

The CDFW regulates activities that involve diversions, obstruction, or changes to the natural flow or bed, channel, or bank of any river, stream, or lake that supports fish or wildlife resources.

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Phase I Cultural and Paleontological Resources Assessment
Rodeo Property Project
City of Salinas, Monterey County, California

Prepared for:
SyWest Development
150 Pelican Way
San Rafael, CA 94901

Contact: Tracy LaTray, Project Coordinator

Prepared by:
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Fieldwork Conducted By: Dana DePietro, PhD
Fieldwork Conducted on: June 10, 2017
Revised Report Date: July 31, 2019

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MANAGEMENT SUMMARY

At the request of the SyWest Development, FirstCarbon Solutions (FCS) conducted a Phase I Cultural and Paleontological Resources Assessment of the proposed project site located within the City of Salinas, Monterey County, California. The approximately 7.5-acre project site is roughly triangular in shape, and is located within Section 28, Township 14 south, Range 3 East of the USGS Salinas Quadrangle (1984) 7.5-series topographic map. The project is also located within the Nacional Land Grant and is bounded by US 101 (northeast), light industrial buildings (southeast), residential buildings and open space (southwest), and a large public storage facility (northwest).

The purpose of this assessment is to identify the presence or absence of potentially significant cultural resources within the project area and, if impacted by the proposed development, propose recommendations for mitigation. Completion of this investigation fulfills the requirements associated with the California Environmental Quality Act (CEQA). This report follows the California Office of Historic Preservation (OHP) procedures for cultural resource surveys and the OHP's Archaeological Resource Management Report format for archaeological reports.

On June 8, 2017, FCS staff conducted a records search for the project area and a 0.5-mile radius beyond the project boundaries at the Northwest Information Center (NWIC) located at California State University Sonoma. To identify any historic properties or resources, the current inventories of the National Register of Historic Places (NR), the California Register of Historic Resources (CR), the California Historical Landmarks list, the California Points of Historical Interest list, and the California State Historic Resources Inventory were reviewed to determine the existence of previously documented local historical resources. Results from the NWIC indicate that three known resources have been recorded within 0.5 mile of the project area. Of the three resources, none are prehistoric in nature, and none are located within the project area. In addition, 17 area-specific survey reports are on file with the NWIC for the search radius. One of the previous surveys assessed portions of the project location, suggesting the project area has not been previously surveyed for cultural resources. Additionally, an unrecorded transmission line is immediately adjacent to the south side of the project. The line appears on the 1947 U.S. Geologic Survey Salinas, California 7.5' topographic quad, which indicates the line may be eligible for listing on the CR. FCS recommends that the line is recorded and evaluated for its potential eligibility for listing on the CR.

On May 18, 2017, FCS sent a letter to the NAHC in an effort to determine whether any sacred sites are listed on its Sacred Lands File for the project area. A response was received on May 24, 2017 indicating that the Sacred Lands File failed to indicate the presence of Native American cultural resources in the immediate project area. The NAHC included a list of eight tribal representatives who may have additional information regarding cultural resources on or near the project area. A letter containing project information and requesting any additional information was sent to each tribal representative on May 24, 2017. On June 9, 2017, a response was received from Patti Dunton, Tribal Administrator for the Salinan Tribe of Monterey. The letter stated that Administrator Dunton was not aware of any resources at the project location and does not have any concerns, but

requested to be notified should any unknown resources be unearthed by the project. As of this date, no additional correspondence has been received.

On June 13, 2017, FCS Senior Archaeologist Dana DePietro, PhD surveyed the project area for additional unrecorded cultural resources. The survey began in the southwest corner of the project site and moved northeast, inspecting the entire area for cultural resources using transects at standard 15-meter intervals whenever possible. The project area has been subject to extensive development and soil disturbance, including grading, and construction associated with a recreational area built on the site during the 1980s. Soils in sections of poor visibility were intermittently inspected using a hand trowel. Observed soils were largely composed of medium brown soil interspersed with small (5- to 10-centimeter) stones primarily composed of quartz and schist. Survey conditions were documented using digital photographs and field notes. Particular attention was paid to areas of soil disturbance across the site, which were closely inspected for culturally modified soils or other indicators of potential historic or prehistoric resources. No historic or prehistoric cultural resources or raw materials commonly used in the manufacture of tools (e.g., obsidian, Franciscan chert) were found in these areas, nor were any observed elsewhere within the project site.

On May 31, 2017, consulting paleontologist Dr. Ken Finger performed a records search on the University of California Museum of Paleontology (UCMP) database for the San Mateo Central Park project in Santa Clara County. The UCMP database records 473 Rancholabrean vertebrate localities in California, nine of which are located within Monterey County. According to the part of the geologic map by Wagner et al. 2002, the surface of project site is well within an area of Quaternary basin deposits (Qb). All four units shown are Quaternary and are not differentiated as either Holocene or Pleistocene. There are no fossil localities of any kind within a 0.5 mile of the project site.

Based on the results of the records searches, Native American correspondence, and pedestrian survey, FCS considers the potential for the project to have an adverse effect on historic or prehistoric cultural resources to be low. Similarly, considering the disturbed nature of the site and the generally unpredictable occurrence of Pleistocene fossils, the paleontological potential in these areas is typically classified as uncertain or low until a discovery is made.

Neither archaeological nor paleontological monitoring is therefore recommended at this time. Procedures for inadvertent discoveries of human remains, cultural resources, and paleontological resources are provided in section 4.2.

SECTION 1: INTRODUCTION

1.1 - Project Location

The Rodeo Property Project is located at 295 Sun Way, south and west of US 101 in the central part of the City of Salinas, Monterey County, California (Exhibit 1). The approximately 7.5-acre project site is roughly triangular in shape, and is located within Section 28, Township 14 south, Range 3 East of the USGS Salinas Quadrangle (1984) 7.5-series topographic map (Exhibit 2). The project is also located within the Nacional Land Grant.

North and south of the Project site are existing warehouse/light industrial uses. To the north of the Project site is Security Public Storage; to the south at 10 Simas Street is Celebration Church and at 34 Simas Street is a light industrial building containing an ambulance dispatch business and an electrical supply company. To the southwest of the Project at 8 Sun Street is Sun Street Centers Men's Residential Program. Adjacent to and west of the Project is open space; however, there is a mix of land uses further west of the Project, including St. James CME Church located at 285 Calle Cebu, Haciendas Place multi-family residential located at 245 Calle Cebu, and the Rancho Salinas Mobile Park located at 150 Sherwood Drive. The Project site is bounded by Sun Street and Sun Way to the west, US 101 to the east, Security Public Storage to the north, and light industrial uses to the south (Exhibit 3).

1.2 - Project Description

The project is a General Plan amendment and Rezone that would allow development of industrial and commercial uses on a 6.8-acre site located on Sun Street adjacent to US 101. The proposed land use designation would allow the site to be developed at a floor area ratio of 0.4, which would allow for the development of up to 188,600 square feet of industrial floor space. The site is designated in the General Plan as Open Space. Access to the site is provided via Sun Street and its connections to Calle Cebu and E. Market Street.

1.3 - Assessment Team

FCS Senior Archaeologist Dana DePietro, PhD conducted the pedestrian survey and authored this report. Professional qualifications for Dr. DePietro can be found in Appendix C.

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Source: Census 2000 Data, The CaSIL, FCS GIS 2016.

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5 2.5 0 5 Miles

Exhibit 1
Regional Location Map

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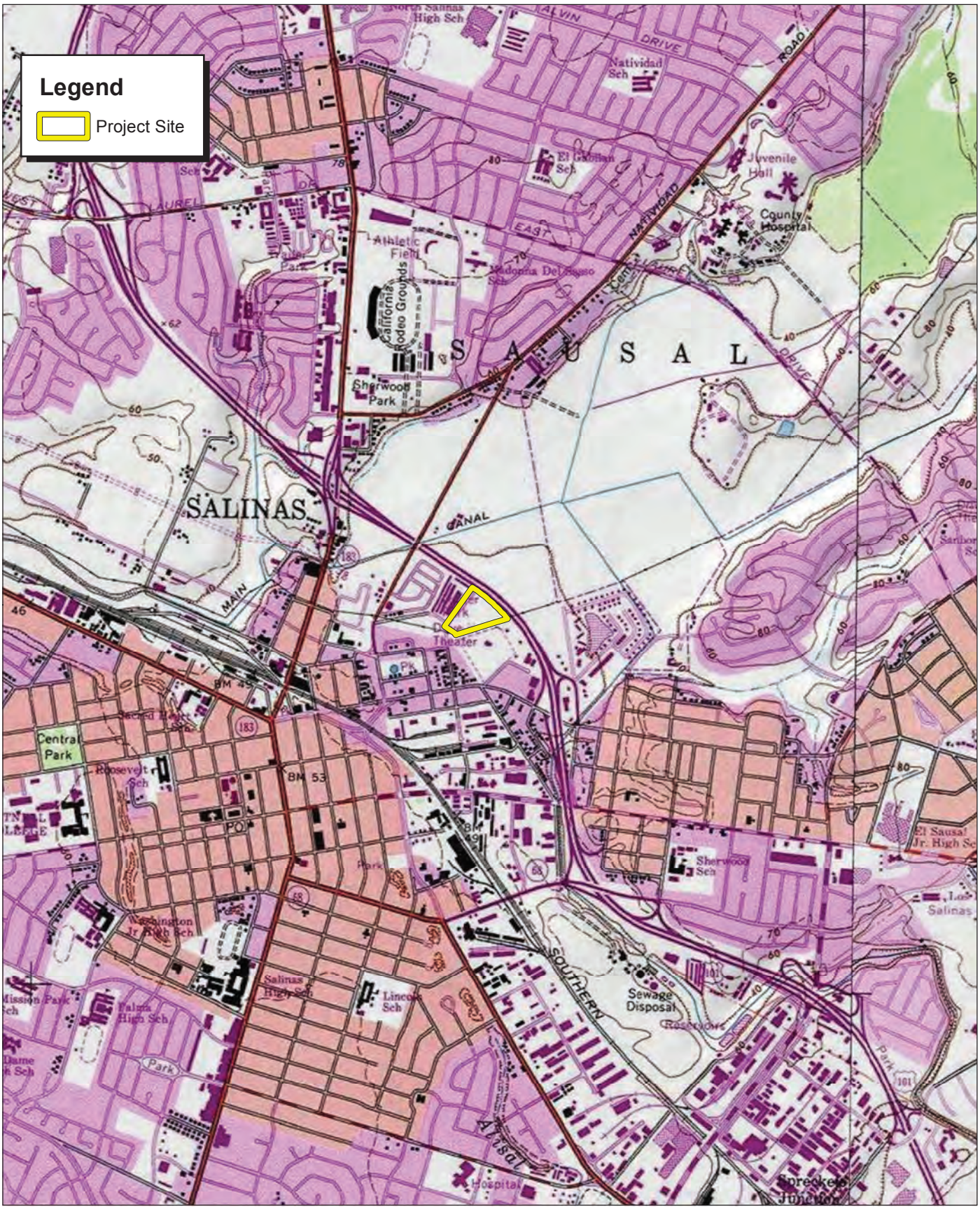

Source: USGS Salinas (1984) 7.5' Quadrangle / Nacional Land Grant

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2,000 1,000 0 2,000 Feet

Exhibit 2
Local Vicinity Map
Topographic Base

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Source: ESRI Imagery

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1,000 500 0 1,000 Feet

Exhibit 3
Local Vicinity Map
Aerial Base

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SECTION 2: CULTURAL SETTING

Following is a brief overview of the prehistory, ethnography, and historic background, providing a context in which to understand the background and relevance of sites found in the general project area. This section is not intended to be a comprehensive review of the current resources available; rather, it serves as a general overview. Further details can be found in ethnographic studies, mission records, and major published sources.

2.1 - Prehistoric Background

2.1.1 - Early Man

Spanning the period from approximately 17,000 to 9,500 Before Present (BP), archaeological assemblages attributed to the Early Man Period are characterized by large projectile points and scrapers. The limited data available suggests that prehistoric populations focused on hunting and gathering, moving about the region in small nomadic groups. Technologies associated with ocean resource gathering would have likely been utilized, but the sea level during this period was lower than today, meaning that sites on the coast are inundated and unavailable for study. Californians of this period are viewed as populations of big game hunters who were mobile enough to pursue herds. The entirety of California may have been occupied near the beginning of the Holocene epoch, about 11,750 years ago. During the Holocene, sea levels rose about 60 meters between 11,750 and 7,000 years BP, due to melting of the Pleistocene ice sheet in the higher latitudes. Although the sea level was about 120 meters lower off the coast of California roughly 22,000 years ago (Milne et al 2005), sea level stabilization began about 7,000 years ago and only a slight rise has occurred since then.

2.1.2 - Central California Chronologies

Early archaeological investigations in central California were conducted at sites located in the Sacramento-San Joaquin Delta region. The first published account documents investigations in the Lodi and Stockton area (Schenck and Dawson 1929). The initial archaeological reports typically contained descriptive narratives, with more systematic approaches sponsored by Sacramento Junior College in the 1930s. At the same time, University of California at Berkeley excavated several sites in the lower Sacramento Valley and Delta region, which resulted in recognizing archaeological site patterns based on variations of inter-site assemblages. Subsequently, research during the 1930s identified temporal periods in central California prehistory and provided an initial chronological sequence (Lillard and Purves 1936; Lillard, et al. 1939).

Fredrickson revised the chronology in 1973 developing new time periods. From this work Fredrickson defined several broad yet distinct temporal patterns—a general way of life shared within a specific geographical region and supported archaeologically. These patterns include:

- Windmiller Pattern or Early Horizon (3000 to 1000 B.C.)
- Berkeley Pattern or Middle Horizon (1000 B.C. to A.D. 500)
- Augustine Pattern or Late Horizon (A.D. 500 to historic period)

With the establishment of these patterns, or horizons, Central California research has expanded from an emphasis on defining chronological and cultural units to a more comprehensive look at settlement and subsistence systems. This shift is illustrated by the early use of burials to identify mortuary assemblages and more recent research using osteological data to determine the health of prehistoric populations (Dickel et al. 1984). Although debate continues over a single model or sequence for central California, the general framework consisting of three temporal/cultural units is generally accepted, although the identification of regional and local variation is a major goal of current archaeological research.

2.1.3 - Early Horizon

The Early Horizon of Central California emphasized hunting rather than gathering, as evidenced by the abundance of projectile points in relation to plant processing tools. Additionally, atlatl, dart, and spear technologies typically included stemmed projectile points of slate and chert but minimal obsidian. The large variety of projectile point types and faunal remains suggests exploitation of numerous types of terrestrial and aquatic species (Bennyhoff 1950; Ragir 1972). Burials occurred in cemeteries and intra-village graves. These burials typically were ventrally extended, although some dorsal extensions are known with a westerly orientation and a high number of grave goods. Trade networks focused on acquisition of ornamental and ceremonial objects in finished form rather than on raw material. The presence of artifacts made of exotic materials such as quartz, obsidian, and shell indicates an extensive trade network that may represent the arrival of Utian populations into central California. Also indicative of this period are rectangular *Haliotis* and *Olivella* shell beads, and charmstones that usually were perforated.

2.1.4 - Middle Horizon

The Middle Horizon displays considerable changes from the Early Horizon. This period exhibited a strong milling technology represented by minimally shaped cobble mortars and pestles, although metates and manos were still used. Dart and atlatl technologies during this period were characterized by non-stemmed projectile points made primarily of obsidian. Fredrickson (1973) suggests that the Berkeley Pattern marked the eastward expansion of Miwok groups from the San Francisco Bay Area. Compared with the Early Horizon, there is a higher proportion of grinding implements at this time, implying an emphasis on plant resources rather than on hunting. Typical burials occurred within the village with flexed positions, variable cardinal orientation, and some cremations. As noted by Lillard, the practice of spreading ground ochre over the burial was common at this time (Lillard, et al. 1939). Grave goods during this period are generally sparse and typically include only utilitarian items and a few ornamental objects. However, objects such as charmstones, quartz crystals, and bone whistles occasionally were present, which suggest the religious or ceremonial significance of the individual (Hughes 1994). During this period, larger populations are suggested by the number and depth of sites compared with the Windmiller Pattern. According to Fredrickson (1973), the Berkeley Pattern reflects gradual expansion or assimilation of different populations rather than sudden population replacement and a gradual shift in economic emphasis.

2.1.5 - Late Period

The Late Horizon is characterized by a shift in the general subsistence pattern. Changes include the introduction of bow and arrow technology; and most importantly, acorns became the predominant food resource. Trade systems expanded to include raw resources as well as finished products. There are more baked clay artifacts and extensive use of *Haliotis* ornaments of many elaborate shapes and forms. Burial patterns retained the use of flexed burials with variable orientation, but there was a reduction in the use of ochre and widespread evidence of cremation (Moratto 1984). Judging from the number and types of grave goods associated with the two types of burials, cremation seems to have been reserved for individuals of higher status, whereas other individuals were buried in flexed positions.

2.2 - Native American Background

2.2.1 - The Ohlone

At the time of European contact, the Salinas area and surrounding coastal region was occupied by various tribelets that were part of the Ohlone (called by the Spaniards "Coastanoans," or Coast-dwellers) tribe of California Native Americans. Evidence of this group of hunter-gatherers exists from as early as 3,600 B.C. The Ohlone group designates a language family consisting of eight branches of the Ohlone language that are considered too distinct to be dialects, with each being related to its geographically adjacent neighbors. These groups lived in approximately 50 separate and politically autonomous tribelet areas, each with one or more permanent villages, between the North San Francisco Bay and the lower Salinas River (Levy 1978).

The various Ohlone tribes subsisted as hunter-gatherers and relied on local terrestrial and marine flora and fauna for subsistence (Levy 1978). The predominant plant food source was the acorn, but they also exploited a wide range of other plants, including various seeds, buckeye, berries, and roots. Protein sources included grizzly bear, elk, sea lions, antelope, and black-tailed deer as well as smaller mammals such as raccoon, brush rabbit, ground squirrels, and wood rats. Waterfowl, including Canadian geese, mallards, green-winged teal, and American widgeon, were captured in nets using decoys to attract them. Fish also played an important role in the Ohlone diet and included steelhead, salmon, and sturgeon (Jones 2007). The Ohlone constructed watercraft from tule reeds and possessed bow and arrow technology. They fashioned blankets from sea otter pelts, fabricated basketry from twined reeds of various types, and assembled a variety of stone and bone tools in their assemblages. Ohlone villages typically consisted of domed dwelling structures, communal sweathouses, dance enclosures, and assembly houses constructed from thatched tule reeds and a combination of wild grasses, wild alfalfa, and ferns.

The Ohlone were politically organized into autonomous tribelets that had distinct cultural territories. Individual tribelets contained one or more villages with a number of seasonal camps for resource procurement within the tribelet territory. The tribelet chief could be either male or female, and the position was inherited patrilineal, but approval of the community was required. The tribelet chief and council were essentially advisors to the community and were responsible for feeding visitors, directing hunting and fishing expeditions, ceremonial activities, and warfare on neighboring tribelets.

The Gold Rush brought disease to the native inhabitants, decimating the population; by the 1850s, nearly all of the Ohlone had adapted in some way or another to economies based on cash income. Hunting and gathering activities continued to decline and were rapidly replaced with economies based on ranching and farming (Levy 1978).

2.3 - Historical Background

2.3.1 - City of Salinas

Three Spanish expeditions surveying the region for colonization either passed through or very near what is now Salinas, CA. from 1769 to 1776. Life changed profoundly for the Ohlone people with the establishment of a Spanish presidio at Monterey and the Franciscan mission at Carmel in 1770. The later missions at Soledad and Santa Cruz (1791), and San Juan Bautista (1797) brought Spanish religious and political hegemony to the region, through Franciscan missions and the enforcement of their assumed authority by the Spanish military. Disease, forced religious conversion, adoption of farming practices, and intermarriage with other groups lead to the wholesale disintegration of tribal culture (Milliken 1995).

It was not until Mexico gained independence from Spain in 1822 that outside settlers began to arrive in Salinas. Named for a nearby salt marsh, Salinas became the seat of Monterey County in 1872 and was incorporated in 1874. Salinas supported a modest Asian community beginning in the late 1800s and extending to the present day. Chinese immigrants were among its first occupants, many setting their sights on the promise of gold in the Santa Lucia Mountains, only to be driven away by the other miners. Their later efforts focused on fishing, farming, or general labor to make ends meet. Most came from Kwangtung (Guangdong) Province via San Francisco. Upon arrival, the Chinese formed district associations, or *huiguan*, which functioned as fraternal organizations providing mutual aid for members (Farkas 2008).

In the mid-1800s, Salinas's agricultural industry began to grow. In 1867, several local businessmen laid out a town plan and enticed the Southern Pacific Railroad to build its tracks through Salinas City.

Agriculture continued as the area's major industry and by the end of World War I, the "green gold" growing in the fields helped make Salinas one of the wealthiest cities (per capita) in the United States. Today, "The Salad Bowl of the World" fuels a $2 billion agriculture industry that supplies 80 percent of the country's lettuce and artichokes, along with many other crops.

In 1924, Salinas had the highest per capita income of any city in the United States. During the growing seasons of the Great Depression, the volume of telephone and telegraph transmissions originating in Salinas was greater than that of San Francisco. This activity was reflected in a burst of building construction, many employing the streamlined shapes and organic patterns of Art Deco or Art Moderne. Many examples remain, including the NR-listed Monterey County Courthouse and the Salinas Californian newspaper building. Several other notable historic structures are also present in the City, including the Victorian house where John Steinbeck was born. US 101 passes through Salinas on its northward path originate in East Los Angeles, and the scenic highway remains a popular travel route for those traversing the state by automobile (City of Salinas, 2017).

SECTION 3: RESULTS

3.1 - Records Search

3.1.1 - Northwest Information Center Search

On June 8, 2017, FCS staff conducted a records search for the project area and a 0.5-mile radius beyond the project boundaries at the NWIC located at California State University Sonoma. To identify any historic properties or resources, the current inventories of the NR, the CR, the California Historical Landmarks list, the California Points of Historical Interest list, and the California State Historic Resources Inventory were also reviewed to determine the existence of previously documented local historical resources.

Results from the NWIC indicate that three known resources have been recorded within 0.5 mile of the project area (Table 1). Of the three resources, none are prehistoric in nature, and none are located within the project area. In addition, 17 area-specific survey reports are on file with the NWIC for the search radius (Table 2). One of the previous surveys assessed portions of the project location, suggesting the project area has largely not been previously surveyed for cultural resources.

Table 1: Cultural Resources within 0.50 Mile of the Project Area

Site Number	Distance from the Project	Resource Description	CRHR Status
P-27-002322	40 feet northeast	CA-MNT-002050H: El Camino Real California Highway 101 AH07 (Roads/trails/railroad grades); HP37 (Highway/trail)	Partially evaluated: ineligible for NR.
P-27-003234	1,800 feet west	PG&E Moss Landing-Salinas Electrical HP09 (Public utility S-043489 building); HP11 (Engineering structure)	Not evaluated
P-27-003465	2,600 feet southwest	Chinese American Community HP02 (Single family S-047415 property); HP05 (Hotel/motel)—boarding houses; HP06 (1–3 story commercial building); HP16 (Religious building)	Not evaluated

Table 2: Previous Investigations within a 0.50-mile Radius of the Project Area

Report Number	Report Title/Project Focus	Author	Date
S-007317	Preliminary Cultural Resources Reconnaissance of Assessor's Parcel Numbers 002-214-31 and 33, Salinas, Monterey County, California.	R. Paul Hampson, Gary S. Breschini, Trudy Haversat, and Micki Ryan	1985
S-007317a	Secondary Archaeological Testing of Assessors Parcel Numbers 0021-214-31 and 33 in Salinas, Monterey County, California	R. Paul Hampson and Gary S. Breschini	1985
S-010634	Preliminary Cultural Resources Reconnaissance of a Parcel at West Menke and Martella Streets, Salinas, Monterey County, California	Gary S. Breschini	1988
S-019611	Preliminary Prehistoric Archaeological Reconnaissance for Assessor's Parcel Number 003-101-37 Salinas, Monterey County, California	Anna Runnings M.A. and Trudy Haversat	1997
S-020593	Cultural Resources Assessment, Pacific Bell Mobile Services Facility SF-830-05, Salinas, Monterey County, California (letter report)	Barry A. Price	1998
S-022657	Phase 1 Archaeological Survey Along Onshore Portions of the Global West Fiber Optic Cable Project	Izaak Sawyer, Laurie Pfeiffer, Karen Rasmussen, and Judy Berryman	2000
S-033061	Cultural Resources Final Report of Monitoring and Findings for the Qwest Network Construction Project, State of California	Nancy Sikes et al.	2006
S-033061a	Cultural Resources Final Report of Monitoring and Findings for the Qwest Network Construction Project, State of California	Nancy Sikes et al.	2006
S-033061b	Final Report of Monitoring and Findings for the Qwest Network Construction Project (letter report)	Nancy E. Sikes	2007
S-035062	Historic Archaeological Reconnaissance for APN 003-101-037 in Salinas, Monterey County, California	Mary Doane and Gary Breschini	2008
S-038553	Archaeological Records Search and Preliminary Impact Assessment for the Highway 101 widening Project in Salinas, Monterey County, California	Mary Doane and Gary Breschini	2011
S-043489	Collocation Submission Packet, Downtown Salinas, CNU3535	Lorna Billat and Dana E. Supernowicz	2013

Table 2 (cont.): Previous Investigations within a 0.50-mile Radius of the Project Area

Report Number	Report Title/Project Focus	Author	Date
S-043489a	Architectural Evaluation Study of the Downtown Salinas Project, AT&T Mobility Site No. CNU3535, 220 Bridge Street, Salinas, Monterey County, California 93941	Dana E. Supernowicz	2013
S-046390	Archaeological Records Search and Site Reconnaissance, Haciendas Phase III and IV Housing Project, City of Salinas, Monterey County, California	John Schlagheck	2015
S-047415	Phase 1 Archaeological Survey of APN 002-191-018, 019, 020, 021, 023, 024, 028 & 029, Salinas, Monterey County, California	Mary Doane and Gary S. Archaeological Consulting Breschini	2015
S-047415a	HUD 2015_0306_004; Housing Development Project Located at 71 Soledad Street, Salinas	Carol Roland-Nawi	2015
S-047776	Cultural Resources Review of the Former Salinas Manufactured Gas Plant Site Project, Salinas, Monterey County, California (letter report)	Allika Ruby	2015

Additionally, an unrecorded transmission line is immediately adjacent to the south side of the project. The line appears on the 1947 U.S. Geologic Survey Salinas, California 7.5' topographic quad, which indicates the line may be eligible for listing on the CR. FCS recommends that the line is recorded and evaluated for its potential eligibility for listing on the CR.

3.1.2 - Native American Heritage Commission and Tribal Correspondence

On May 18, 2017, FCS sent a letter to the NAHC in an effort to determine whether any sacred sites are listed on its Sacred Lands File for the project area. A response was received on May 24, 2017 indicating that the Sacred Lands File failed to indicate the presence of Native American cultural resources in the immediate project area. The NAHC included a list of eight tribal representatives that may have information regarding cultural resources on or near the project area. A letter containing project information and requesting any additional information was sent to each tribal representative on May 24, 2017. On June 9, 2017, a response was received from Patti Dunton, Tribal Administrator for the Salinan Tribe of Monterey. The letter stated that Administrator Dunton was not aware of any resources at the project location and does not have any concerns, but requested to be notified should any unknown resources be unearthed by the project. As of this date, no additional correspondence has been received.

3.2 - Pedestrian Survey

On June 13, 2017, FCS Senior Archaeologist Dana DePietro, PhD surveyed the project area for additional unrecorded cultural resources. The project site is located within the USGS Salinas

Quadrangle (1984) 7.5-series topographic map. The approximately 7.5-acre project site is located in the northeast of the City of Salinas, and is bounded by US 101 (northeast), light industrial buildings (southeast), residential buildings and open space (southwest), and a large public storage facility (northwest). The survey began in the southwest corner of the project site and moved northeast, inspecting the entire area for cultural resources using transects at standard 15-meter intervals whenever possible (Appendix A: Photographs 1–12).

The project area has been subject to extensive development and soil disturbance, including grading, and construction associated with a recreational area built on the site during the 1980s. Structures associated with the recreational area include a baseball diamond, bleachers, lighting, and a cinderblock bathroom facility. All structures were determined to be less than 45 years in age and do not appear to be eligible for inclusion in the NR or CR. Because of the recreational area's field, which covers the majority of the project area, soil visibility was poor across the site, ranging from 15 to 20 percent. Soils in sections of poor visibility were intermittently inspected using a hand trowel. Observed soils were largely composed of medium brown soil interspersed with small (5- to 10-centimeter) stones primarily composed of quartz and schist.

Survey conditions were documented using digital photographs and field notes. During the survey, Dr. DePietro examined all areas of the exposed ground surface for prehistoric artifacts (e.g., fire-affected rock, milling tools, flaked stone tools, tool-making debris, ceramics), soil discoloration and depressions that might indicate the presence of a cultural midden, faunal and human osteological remains, and features indicative of the former presence of structures or buildings (e.g., postholes, standing exterior walls, foundations) or historic debris (e.g., glass, metal, ceramics).

Particular attention was paid to areas of soil disturbance across the site, which were closely inspected for culturally modified soils or other indicators of potential historic or prehistoric resources. No historic or prehistoric cultural resources or raw materials commonly used in the manufacture of tools (e.g., obsidian, Franciscan chert) were found in these areas, nor were any observed elsewhere within the project site.

An unrecorded transmission line is immediately adjacent to the south side of the project. The line appears on the 1947 U.S. Geologic Survey Salinas, California 7.5' topographic quad, which indicates the line may be eligible for listing on the CR. FCS recommends that the line is recorded and evaluated for its potential eligibility for listing on the CR.

3.3 - Paleontological Overview and Records Search Results

To assess the potential for paleontological resources to exist on the project, a literature review was undertaken at the appropriate institution for the region in which the project is located.

On May 31, 2017, consulting paleontologist Dr. Ken Finger performed a records search on the University of California Museum of Paleontology (UCMP) database for the San Mateo Central Park project in Santa Clara County.

3.3.1 - Regional Geologic Setting

The rapid uplift stimulated by active faulting accelerated other physiographic processes that formed major geologic features evident today in Monterey County. Over several tens of millions of years, rapid erosion of the uplifted mountains resulting in deposition and formation of the flat alluvial terrain of the Salinas Valley. During the Pleistocene, sea level fluctuated repeatedly in response to climatic changes that formed and melted glaciers in other parts of the world. As sea level rose, marine sediments were deposited beneath what later became the floor of the Salinas Valley. Fluctuating sea level during the retreat of the sea is evident in the stratigraphic cycling of marine-nonmarine sediments. With the final regression of the sea in the Pleistocene, alluvial deposition formed the surface of the Salinas Valley and it has continued to the present day.

According to the part of the geologic map by Wagner et al. 2002, the surface of project site is well within an area of Quaternary basin deposits (Qb). The four units shown are all Quaternary and not differentiated as either Holocene or Pleistocene. Extending into the 0.5-mile search perimeter are fan deposits (Qfa) from the northwest and southeast, and flood plain deposits (Qfl) from the southwest. Both of these units extend farther in the subsurface of the search perimeter and one or both lie below the basin deposits.

There are no fossil localities of any kind within a half-mile of the project site. The only UCMP vertebrate locality in the Salinas quadrangle is V5576 (Lake Heinz), about 0.25 mile beyond the search perimeter, where a longhorn bison (*Bison latifrons*) skull was recovered from late Pleistocene alluvium. This locality is in the area mapped as flood plain deposits (Qfl). Considering that the occurrence of Pleistocene fossils is generally unpredictable because of the dynamics of the sedimentary regime in which they were transported and deposited, the paleontological potential in these areas is typically classified as uncertain or low until a discovery is made. A copy of Dr. Finger's report may be found in Appendix F.

Paleontological resources may include but are not limited to fossils from mammoths, saber-toothed cats, rodents, reptiles, and birds. In the event that fossils or fossil-bearing deposits are discovered during construction activities, excavations within a 100-foot radius of the find shall be temporarily halted or diverted. The project contractor shall notify a qualified paleontologist to examine the discovery. The Applicant shall include a standard inadvertent discovery clause in every construction contract to inform contractors of this requirement. The paleontologist shall document the discovery as needed in accordance with Society of Vertebrate Paleontology standards and assess the significance of the find under the criteria set forth in CEQA Guidelines Section 15064.5. The paleontologist shall notify the appropriate agencies to determine procedures that would be followed before construction activities are allowed to resume at the location of the find. If the Applicant determines that avoidance is not feasible, the paleontologist shall prepare an excavation plan for mitigating the effect of construction activities on the discovery. The plan shall be submitted to the City of Salinas for review and approval prior to implementation, and the Applicant shall adhere to the recommendations in the plan.

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SECTION 4: SUMMARY AND RECOMMENDATIONS

4.1 - Summary

In accordance with CEQA regulations, FCS assessed the effects of development for the proposed project site. Results from the NWIC indicate that three historic resources are on file for the search radius; however, none are located within the project area. In addition, 17 area-specific survey reports are on file with the NWIC for the search radius. One of the previous surveys assessed portions of the project location, suggesting the project area has largely not been previously surveyed for cultural resources. The results of the subsequent field survey were negative for additional cultural resources, as were the results of the NAHC Sacred Lands File search and subsequent correspondence with Native American representatives regarding potential TRCs that may be adversely affected by the proposed project.

An unrecorded transmission line is immediately adjacent to the south side of the project. The line appears on the 1947 U.S. Geologic Survey Salinas, California 7.5' topographic quad, which indicates the line may be eligible for listing on the CR. FCS recommends that the line is recorded and evaluated for its potential eligibility for listing on the CR.

The paleontological report identified the surface of project site as being well within an area of Quaternary basin deposits (Qb) that are not differentiated as either Holocene or Pleistocene. There are no fossil localities of any kind within a half-mile of the project site. The only UCMP vertebrate locality in the Salinas quadrangle is V5576 (Lake Heinz), about 0.25 mile beyond the search perimeter, where a longhorn bison skull was recovered from late Pleistocene alluvium.

4.2 - Recommendations

4.2.1 - Cultural and Paleontological Resource Recommendations

Based on the results of the records searches, Native American correspondence, and pedestrian survey, FCS considers the potential for the project to have an adverse effect on historic or prehistoric resources to be low. Similarly, considering the disturbed nature of the site and the generally unpredictable occurrence of Pleistocene fossils, the paleontological potential in these areas is typically classified as uncertain or low until a discovery is made.

Neither archaeological nor paleontological monitoring is therefore recommended at this time. Procedures for inadvertent discoveries of human remains, cultural resources, and paleontological resources are provided below.

4.2.2 - Inadvertent Discovery of Cultural Resources

It is always possible that ground-disturbing activities during construction may uncover previously unknown, buried cultural resources. In the event that buried cultural resources are discovered during construction, operations shall stop in the immediate vicinity of the find and a qualified archaeologist shall be consulted to determine whether the resource requires further study. The

qualified archeologist and shall make recommendations to the Lead Agency on the measures that shall be implemented to protect the discovered resources, including but not limited to excavation of the finds and evaluation of the finds in accordance with Section 15064.5 of the CEQA Guidelines. Potentially significant cultural resources consist of but are not limited to stone, bone, fossils, wood, or shell artifacts or features, including hearths, structural remains, or historic dumpsites. Any previously undiscovered resources found during construction within the project area should be recorded on appropriate Department of Parks and Recreation (DPR) forms and evaluated for significance in terms of CEQA criteria.

If the resources are determined to be unique historic resources as defined under Section 15064.5 of the CEQA Guidelines, mitigation measures shall be identified by the monitor and recommended to the Lead Agency. Appropriate mitigation measures for significant resources could include avoidance or capping, incorporation of the site in green space, parks, or open space, or data recovery excavations of the finds.

No further grading shall occur in the area of the discovery until the Lead Agency approves the measures to protect these resources. Any archaeological artifacts recovered as a result of mitigation shall be donated to a qualified scientific institution approved by the Lead Agency where they would be afforded long-term preservation to allow future scientific study.

4.2.3 - Accidental Discovery of Paleontological Resources

Although not anticipated, sub-surface construction activities associated with the proposed project, such as grading and trenching could result in a significant impact to paleontological resources, if encountered. Paleontological resources may include but are not limited to fossils from mammoths, saber-toothed cats, rodents, reptiles, and birds. In the event that fossils or fossil-bearing deposits are discovered during construction activities, excavations within a 100-foot radius of the find shall be temporarily halted or diverted. The project contractor shall notify a qualified paleontologist to examine the discovery. The Applicant shall include a standard inadvertent discovery clause in every construction contract to inform contractors of this requirement. The paleontologist shall document the discovery as needed in accordance with Society of Vertebrate Paleontology standards and assess the significance of the find under the criteria set forth in CEQA Guidelines Section 15064.5. The paleontologist shall notify the appropriate agencies to determine procedures that would be followed before construction activities are allowed to resume at the location of the find. If the Applicant determines that avoidance is not feasible, the paleontologist shall prepare an excavation plan for mitigating the effect of construction activities on the discovery. The plan shall be submitted to the City of Salinas for review and approval prior to implementation, and the Applicant shall adhere to the recommendations in the plan.

4.2.4 - Accidental Discovery of Human Remains

There is always the possibility that ground-disturbing activities during construction may uncover previously unknown, buried human remains. Should this occur, Section 7050.5 of the California Health and Safety Code applies, and the following procedures shall be followed.

In the event of an accidental discovery or recognition of any human remains, Public Resource Code (PRC) Section 5097.98 must be followed. In this instance, once project-related earthmoving begins and if there is accidental discovery or recognition of any human remains, the following steps shall be taken:

1. There shall be no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent human remains until the County Coroner is contacted to determine if the remains are Native American and if an investigation of the cause of death is required. If the coroner determines the remains to be Native American, the coroner shall contact the NAHC within 24 hours, and the NAHC shall identify the person or persons it believes to be the "most likely descendant" of the deceased Native American. The most likely descendant may make recommendations to the landowner or the person responsible for the excavation work, for means of treating or disposing of, with appropriate dignity, the human remains and any associated grave goods as provided in PRC Section 5097.98, or
2. Where the following conditions occur, the landowner or his/her authorized representative shall rebury the Native American human remains and associated grave goods with appropriate dignity either in accordance with the recommendations of the most likely descendent or on the project area in a location not subject to further subsurface disturbance:
   - The NAHC is unable to identify a most likely descendent or the most likely descendent failed to make a recommendation within 48 hours after being notified by the commission;
   - The descendent identified fails to make a recommendation; or
   - The landowner or his authorized representative rejects the recommendation of the descendent, and the mediation by the NAHC fails to provide measures acceptable to the landowner.

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REFERENCES

Beardsley, R.K. 1948. Cultural Sequences in Central California Archaeology. American Antiquity 14:1–28.

Beardsley, R.K. 1954. Temporal and Areal Relationships in Central California Archaeology. University of California Archaeological Survey Reports 24:1–62; 25:63–131.

Beck, W. and Y.D. Haase. 1974. Historical Atlas of California. University of Oklahoma Press. Norman, Oklahoma.

Bennyhoff, J. 1950. Californian Fish Spears and Harpoons. University of California Anthropological Records 9(4):295–338.

Bouey, P.D. and S.A. Waechter. 1992. Preliminary Report on Phase II Test Excavations at CA-SAC-133 near Sloughhouse, Sacramento County, California. Report to California Department of Transportation, District 3, Marysville, CA.

Chartkoff J.L. and K.K. Chartkoff. 1984. The Archaeology of California. Menlo Park: Stanford University Press.

City of Salinas. 2017. Website accessed May 28, 2017. Website: https://www.cityofsalinas.org /visitors/salinas-history

Cook, S.F. 1955. The Epidemic of 1830–1833 in California and Oregon. American Archaeology and Ethnology, 43(3): 303–326.

Cook, S.F. 1976. The Population of the California Indians 1769–1970. University of California Press. Berkeley, California.

Derr, E.H. 1983. Archaeological Investigations at CA-SAC-16: Interpretations of a Middle/Late Horizon Village in the Lower Sacramento Valley of California. Master's thesis.

Dickel, D.N., P. D. Schulz, and H.M. McHenry. 1984. Central California: Prehistoric Subsistence Changes and Health. In Paleopathology at the Origins of Agriculture, edited by Mark Nathan Cohen and George J. Armelagos, pp. 439–462. Academic Press, Inc., Orlando, FL.

Farkas, L.T. 1998. Bury My Bones in America: The Saga of a Chinese Family in California 1852-1996 From San Francisco to the Sierra Gold Mines. Carl Mautz Publishing: Nevada City

Fredrickson, D.A. 1973. Early Cultures of the North Coast of the North Coast Ranges, California. PhD dissertation.

Fredrickson, D.A. 1974. Cultural Diversity in Early Central California: A View from the North Coast Ranges. Journal of California Anthropology 1:41–53.

Gerow, B.A. 1954. The Problem of Cultural Sequences in Central California Archaeology. Paper presented at the Annual Meeting of the American Association for the Advancement of Sciences.

Gerow, B.A. 1974. Comments on Fredrickson's Cultural Diversity. The Journal of California Anthropology 1(2):239–246.

Gerow, B.A., with R. Force. 1968. An Analysis of the University Village Complex with a Reappraisal of Central California Archaeology. Stanford University Press. Stanford., California.

Heizer, R. F., ed. 1978. Handbook of North American Indians, Vol. 8: California. Washington, D.C. Smithsonian Institute.

Hughes, R.E. (editor). 1994. Toward a New Taxonomic Framework for Central California Archaeology: Essays by James A. Bennyhoff and David A. Fredrickson. Assembled and edited by Richard E. Hughes. Contributions of the University of California No. 52, Archaeological Research Facility, Berkeley, CA.

Jones, T. L. and Kathryn A. Klar. 2007. California Prehistory. Lanham: AltaMira Press; Rowman & Littlefield Publishers, Inc.

Kroeber, A.L. 1925. Handbook of the Indians of California. Bureau of American Ethnology Bulletin 78. Smithsonian Institution, Washington, DC.

Levy, Richard. 1978. Costanoan. Handbook of North American Indians California Volume 8. Robert F. Heizer, Editor, pp. 485-495. Smithsonian Institution, Washington, D.C.

Lillard, J.B., R.F. Heizer, and F. Fenenga. 1939. An Introduction to the Archaeology of Central California. Sacramento Junior College, Department of Anthropology, Bulletin 2.

Milliken, R.T. 1995. A Time of Little Choice: The Disintegration of Tribal Culture in the San Francisco Bay Area 1769-1810. Ballena Press, Menlo Park, CA.

Moratto, M.J. 1984. California Archaeology. San Diego: Academic Press. Northwest Information Center (NWIC). Rohnert Park. File Number 05-1169.

Office of Historic Preservation (OHP). 2005. Instructions for Recording Historical Resources. Sacramento: Office of Historic Preservation.

Ragir, S.R. 1972. The Early Horizon in Central California Prehistory. Contributions of the University of California Archaeological Research Facility 15. Berkeley, CA.

Rawls, J.J. and W. Bean. 1993. California: An Interpretive History. McGraw Hill, San Francisco.

Robinson, W.W. 1948. Land in California. University of California Press, Berkeley.

RootsWeb.com. 2006. Website: www.rootsweb.com/cascgsi/soltimeline.htm.

Rosenthal, J.S. and G. White. 1994. Archaeological Investigations at the Pheasant Run Site, CA-Sol-363. Report to Kaufman and Broad of Northern California, Inc., Roseville, CA.

Schenck, W.E. and E. J. Dawson. 1929. Archaeology of the Northern San Joaquin Valley. American Archaeology and Ethnology 25:286–413.

The Virtual Museum of San Francisco (VMSF). 2006. California Notes. Website: http://www.sfmuseum.org/hist9/turrillgold.html.

United States Geological Survey (USGS). 1984. Salinas, California 7.5-Minute Topographic Quadrangle Map. Department of the Interior. Washington D.C.: US Government Printing office.

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Appendix A:
Project Area Photographs

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Photograph 1: Overview of the proposed project area; facing north.

Photograph 2: Overview of the proposed project area; facing east.

Photograph 3: Overview of the proposed project area; facing south.

Photograph 4: Overview of the proposed project area; facing west.

Photograph 5: View from the project area; facing north.

Photograph 6: View from the project area; facing east.

Photograph 7: View from the project area; facing southeast.

Photograph 8: View from the project area; facing southwest.

Photograph 9: View of recreational area bathroom structure within project area; facing south.

Photograph 10: View of disturbed soils within the project area; facing north.

Photograph 11: View of typical recreational field soils and soil visibility within the project area.

Photograph 12: View of typical soils and soil visibility adjacent to the recreational field within the project area.

Appendix B:
Native American Heritage Commission Search Request/Results and Native American Correspondence

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Sacred Lands File & Native American Contacts List Request

Native American Heritage Commission
1550 Harbor Blvd, Suite 100
West Sacramento, CA 95691
916-373-3710
916-373-5471 – Fax
nahc@nahc.ca.gov

Information Below is Required for a Sacred Lands File Search

Project: **Rodeo Project**

County: **Monterey**

USGS Quadrangle Name: Salinas (1984)

Township: N/A **Range:** N/A **Section(s):** N/A

Nacional Land Grant

Company/Firm/Agency: **FirstCarbon Solutions**

Street Address: **1350 Treat Boulevard_(Suite 380)**

City: **Walnut Creek** **Zip:** **94597**

Phone: **925.357.2562 ext 1114**

Fax:

Email: **lbaskir@fcs-intl.com**

Project Description:

The project will consist of a rezone application that would rezone the Rodeo property on Sun Street from Parks (P) to Industrial - General Commercial (IGC), identical to the zoning of the parcels that surround this property. The project applicant is proposing to construct 85,500 square feet of industrial space in two separate buildings. Each building will be subdivided into individual tenant spaces. Direct access to the buildings will be via Sun Street and a proposed vehicle bridge connecting to Simas Street.

NATIVE AMERICAN HERITAGE COMMISSION
Environmental and Cultural Department
1550 Harbor Blvd., ROOM 100
West SACRAMENTO, CA 95691
(916) 373-3710
Fax (916) 373-5471

May 24, 2017

Liza Baskir
FirstCarbon Solutions

Email to: lbaskir@fcs-intl.com

RE: Rodeo Project, Monterey County

Dear Ms. Baskir,

A record search of the Native American Heritage Commission (NAHC) Sacred Lands File (SLF) was completed for the information you have submitted for the above referenced project. The results were negative. However, the absence of specific site information in the SLF does not preclude the presence of cultural resources in any project area. Other sources for cultural resources should also be contacted for information regarding known and/or recorded sites.

Enclosed is a list of Native Americans tribes who may have knowledge of cultural resources in the project area. I suggest you contact all of those indicated, if they cannot supply information, they might recommend others with specific knowledge. By contacting all those listed, your organization will be better able to respond to claims of failure to consult with the appropriate tribe. If a response has not been received within two weeks of notification, the Commission requests that you follow-up with a telephone call to ensure that the project information has been received.

If you receive notification of change of addresses and phone numbers from any of these tribes, please notify me. With your assistance we are able to assure that our lists contain current information. If you have any questions or need additional information, please contact me at frank.lienert@nahc.ca.gov.

Sincerely,

for Frank Lienert
Associate Governmental Program Analyst

Native American Heritage Commission
Native American Contacts
5/24/2017

Esselen Tribe of Monterey County
Tom Little Bear Nason
38655 Tassajara Road — Esselen
Carmel Valley , CA 93924 — Ohlone
(408) 659-2153

Amah MutsunTribal Band of Mission San Juan Bautista
Irenne Zwierlein, Chairperson
789 Canada Road — Ohlone/Costanoan
Woodside , CA 94062
amahmutsuntribal@gmail.com
(650) 851-7489 Cell
(650) 851-7747 Office
(650) 332-1526 Fax

Coastanoan Rumsen Carmel Tribe
Tony Cerda, Chairperson
244 E. 1st Street — Ohlone/Costanoan
Pomona , CA 91766
rumsen@aol.com
(909) 524-8041 Cell
(909) 629-6081

Xolon-Salinan Tribe
Karen White, Council Chairperson
PO Box 7045 — Salinan
Spreckels , CA 93962
blukat41@yahoo.com
831-238-1488

Salinan Tribe of Monterey, San Luis Obispo Counties
Patti Dunton, Tribal Administrator
7070 Morro Road, Suite A — Salinan
Atascadero , CA 93422
salinantribe@aol.com
(805) 464-2650
(805) 235-2730 Cell
(805) 460-9204

Indian Canyon Mutsun Band of Costanoan
Ann Marie Sayers, Chairperson
P.O. Box 28 — Ohlone/Costanoan
Hollister , CA 95024
ams@indiancanyon.org
(831) 637-4238

Ohlone/Coastanoan-Esselen Nation
Louise Miranda-Ramirez, Chairperson
P.O. Box 1301 — Esselen
Monterey , CA 93942 — Ohlone/Costanoan
ramirez.louise@yahoo.com
(408) 629-5189
408-661-2486 Cell

Amah MutsunTribal Band
Valentin Lopez, Chairperson
P.O. Box 5272 — Ohlone/Costanoan
Galt , CA 95632 — Northern Valley Yokuts
vlopez@amahmutsun.org
(916) 743-5833

This list is current only as of the date of this document and is based on the information available to the Commission on the date it was produced.

Distribution of this list does not relieve any person of statutory responsibility as defined in Section 7050.5 of the Health and Safety Code, Section 5097.94 of the Public Resource Section 5097.98 of the Public Resources Code

This list is only applicable for contacting local Native Americans with regard to cultural resources assessments for the updated contact list for Rodeo Project, Monterey County.

Coastanoan Rumsen Carmel Tribe
Tony Cerda, Chairperson
244 E. 1st Street
Pomona, CA 91766

May 24, 2017

Subject: Rodeo Property Project, Monterey County, California

Dear Chairperson Cerda,

FirstCarbon Solutions (FCS) is preparing a Cultural Resources Assessment in support of an Initial Study for the Future Development of the Rodeo Property on behalf of the City of Salinas. The project site is located at Sun Street. It is our understanding that the project site is currently vacant.

The project applicant is proposing to construct 85,500 square feet of industrial space in two separate buildings. Each building would be subdivided into individual tenant spaces. The project would include a Rezone and General Plan Amendment. The project would rezone the former Rodeo Property from Parks (P) to Industrial - General Commercial (IGC), identical to the zoning of the parcels that surround this property.

To determine the presence or absence of cultural and historical resources within the proposed project area and a ½ mile radius, FCS will conduct a record search at the Northwest Information Center (NWIC) at Sonoma State University. To identify any historic properties or resources, the current inventories of the National Register of Historic Places (NR), the California Register of Historic Resources (CR), the California Historical Landmarks list (CHL), the California Points of Historical Interest (CPHI) list, and the California State Historic Resources Inventory (HRI) for Alameda County will be reviewed to determine the existence of previously documented local historical resources. An intensive pedestrian survey will also be conducted at the project locations.

If you have any additional information regarding potential historic or cultural resources in proximity or relation to the proposed project area, we would greatly appreciate your input.

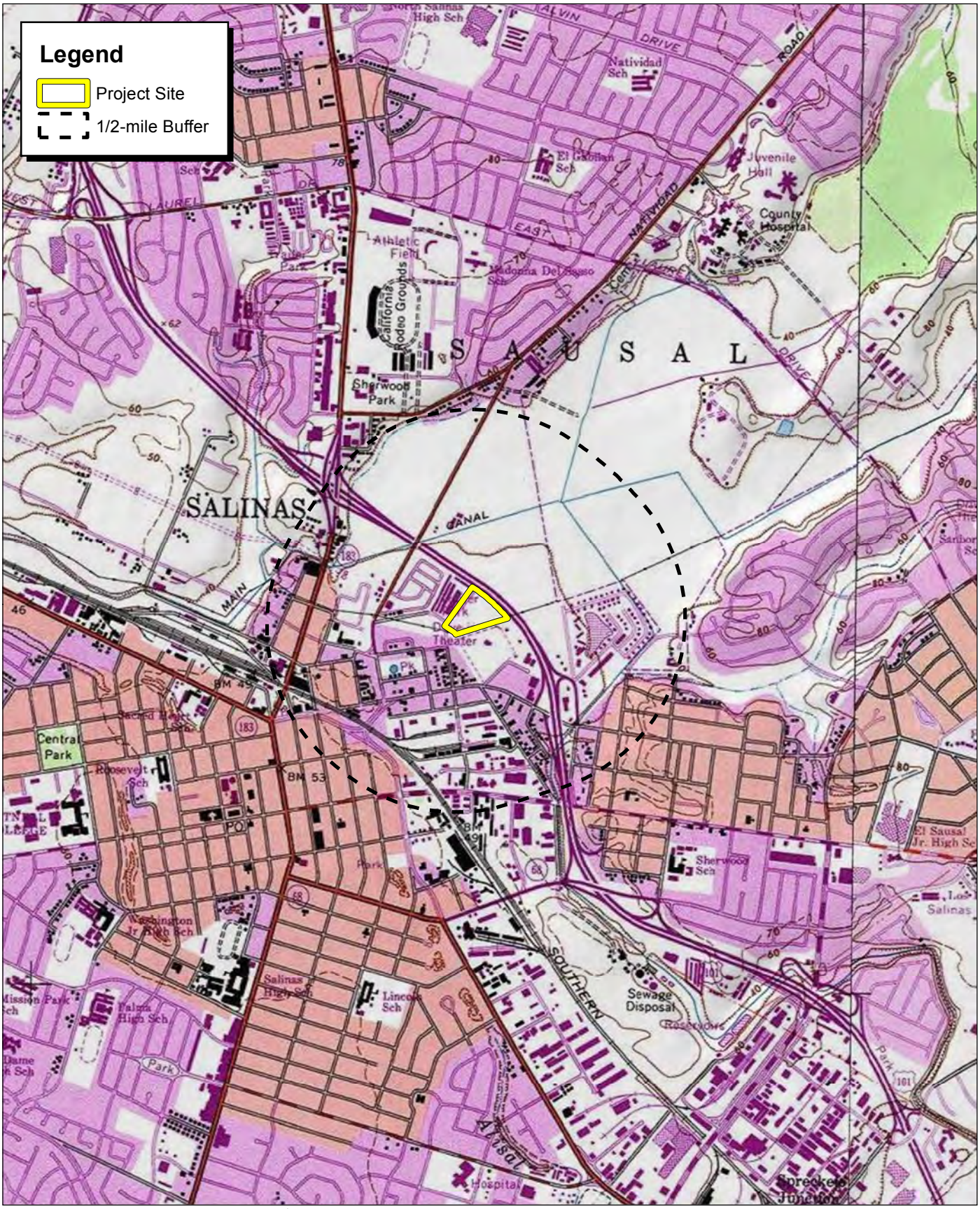
Please note that this letter is a request for information pertaining to a cultural resources assessment and is not notification of a project under Senate Bill (SB) 18, Assembly Bill (AB) 52 or Section 106 of the National Historic Preservation Act. Project notification and consultation requirements are being handled by designated lead agencies under CEQA and NEPA. Please feel free to contact me at 925.357.2562 or via email at ddepietro@fcs-intl.com and thank you for your

valuable assistance.

Sincerely,

Dana Douglas DePietro, Ph.D.
Senior Scientist, Archaeology
FirstCarbon Solutions
1350 Treat Boulevard, Ste. 380
Walnut Creek, CA 94597

Enc: Project location map for the proposed development



Source: USGS Salinas (1984) 7.5' Quadrangle / Nacional Land Grant

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Exhibit 1
Records Search Map

Salinan Tribe of Monterey
Patti Dunton, Tribal Administrator
7070 Morro Road, Suite A
Atascadero, CA 93422

May 24, 2017

Subject: Rodeo Property Project, Monterey County, California

Dear Tribal Administrator Dunton,

FirstCarbon Solutions (FCS) is preparing a Cultural Resources Assessment in support of an Initial Study for the Future Development of the Rodeo Property on behalf of the City of Salinas. The project site is located at Sun Street. It is our understanding that the project site is currently vacant.

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To determine the presence or absence of cultural and historical resources within the proposed project area and a ½ mile radius, FCS will conduct a record search at the Northwest Information Center (NWIC) at Sonoma State University. To identify any historic properties or resources, the current inventories of the National Register of Historic Places (NR), the California Register of Historic Resources (CR), the California Historical Landmarks list (CHL), the California Points of Historical Interest (CPHI) list, and the California State Historic Resources Inventory (HRI) for Alameda County will be reviewed to determine the existence of previously documented local historical resources. An intensive pedestrian survey will also be conducted at the project locations.

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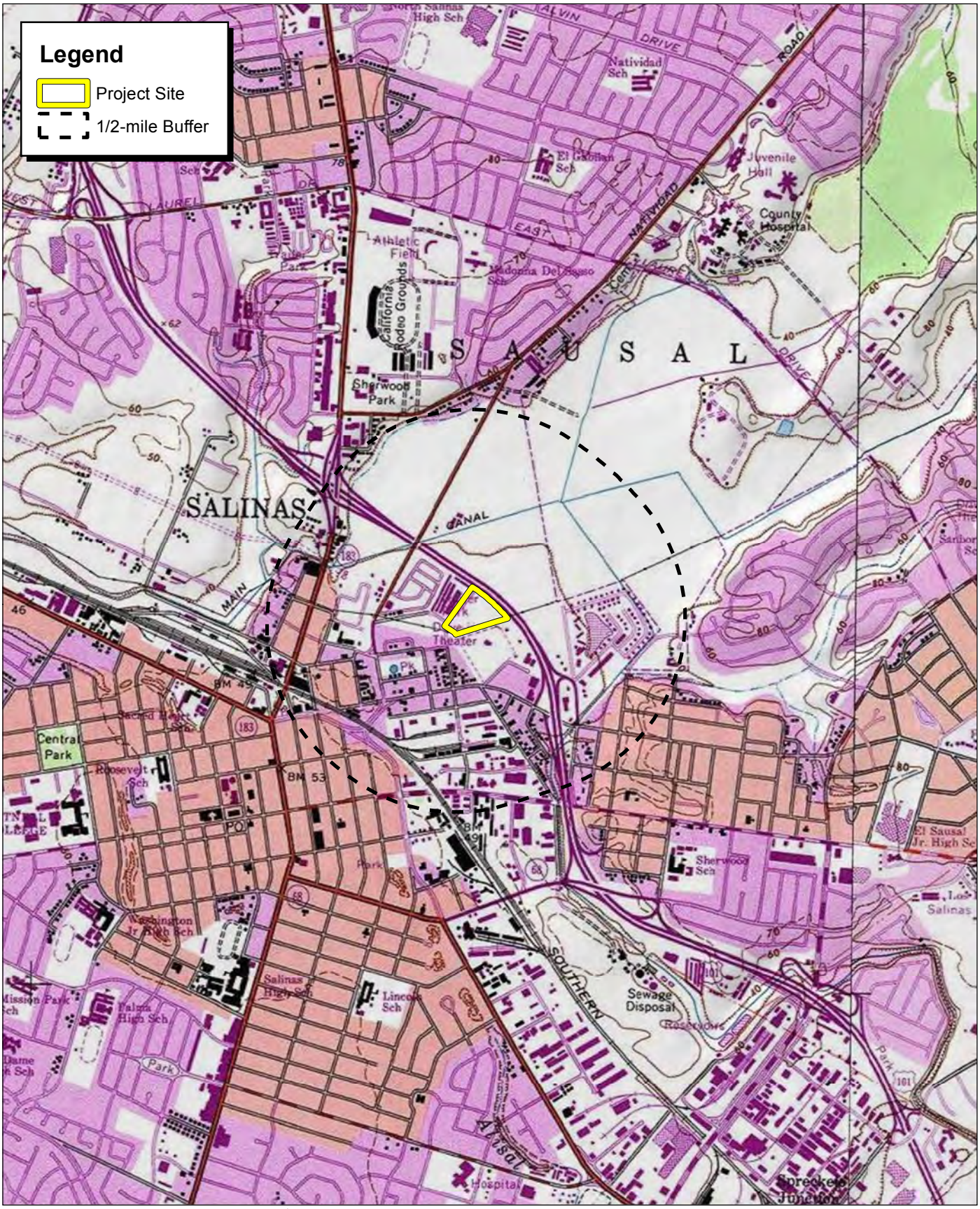
Dana Douglas DePietro, Ph.D.
Senior Scientist, Archaeology
FirstCarbon Solutions
1350 Treat Boulevard, Ste. 380
Walnut Creek, CA 94597

Enc: Project location map for the proposed development



Source: USGS Salinas (1984) 7.5' Quadrangle / Nacional Land Grant

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Amah Mutsun Tribal Band
Valentin Lopez, Chairperson
P.O. Box 5272
Galt, CA 95632

May 24, 2017

Subject: Rodeo Property Project, Monterey County, California

Dear Chairperson Lopez,

FirstCarbon Solutions (FCS) is preparing a Cultural Resources Assessment in support of an Initial Study for the Future Development of the Rodeo Property on behalf of the City of Salinas. The project site is located at Sun Street. It is our understanding that the project site is currently vacant.

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To determine the presence or absence of cultural and historical resources within the proposed project area and a ½ mile radius, FCS will conduct a record search at the Northwest Information Center (NWIC) at Sonoma State University. To identify any historic properties or resources, the current inventories of the National Register of Historic Places (NR), the California Register of Historic Resources (CR), the California Historical Landmarks list (CHL), the California Points of Historical Interest (CPHI) list, and the California State Historic Resources Inventory (HRI) for Alameda County will be reviewed to determine the existence of previously documented local historical resources. An intensive pedestrian survey will also be conducted at the project locations.

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Sincerely,

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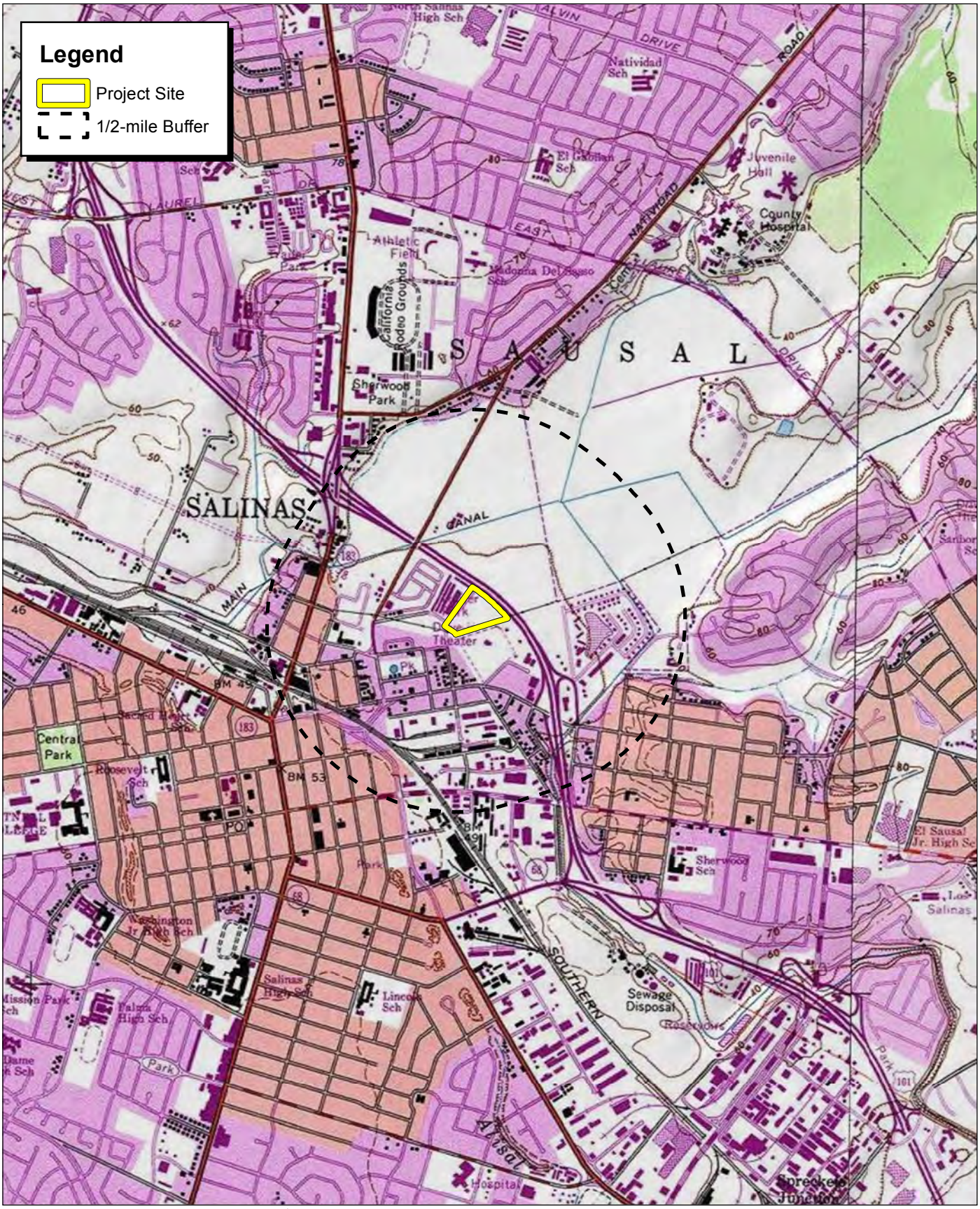
Senior Scientist, Archaeology
FirstCarbon Solutions
1350 Treat Boulevard, Ste. 380
Walnut Creek, CA 94597

Enc: Project location map for the proposed development



Source: USGS Salinas (1984) 7.5' Quadrangle / Nacional Land Grant

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Ohlone/Coastanoan-Esselen Nation
Louise Miranda-Ramirez, Chairperson
P.O. Box 1301
Monterey, CA 93942

May 24, 2017

Subject: Rodeo Property Project, Monterey County, California

Dear Chairperson Miranda-Ramirez,

FirstCarbon Solutions (FCS) is preparing a Cultural Resources Assessment in support of an Initial Study for the Future Development of the Rodeo Property on behalf of the City of Salinas. The project site is located at Sun Street. It is our understanding that the project site is currently vacant.

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Sincerely,

Dana Douglas DePietro, Ph.D.
Senior Scientist, Archaeology
FirstCarbon Solutions
1350 Treat Boulevard, Ste. 380
Walnut Creek, CA 94597

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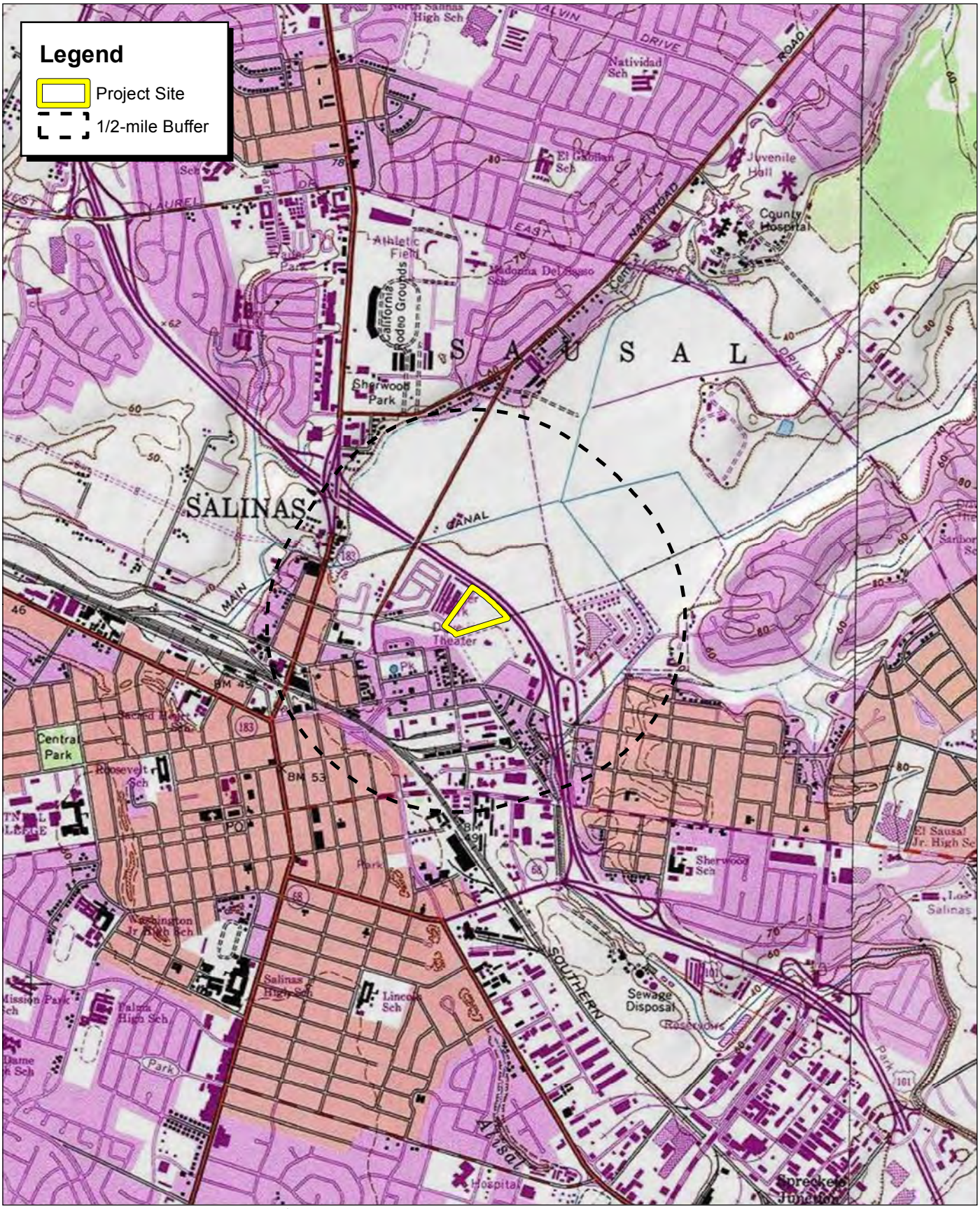

Source: USGS Salinas (1984) 7.5' Quadrangle / Nacional Land Grant

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Esselen Tribe of Monterey County
Tom Little Bear Nason
38655 Tassajara Road
Carmel Valley, CA 93924

May 24, 2017

Subject: Rodeo Property Project, Monterey County, California

Dear Tom Little Bear Nason,

FirstCarbon Solutions (FCS) is preparing a Cultural Resources Assessment in support of an Initial Study for the Future Development of the Rodeo Property on behalf of the City of Salinas. The project site is located at Sun Street. It is our understanding that the project site is currently vacant.

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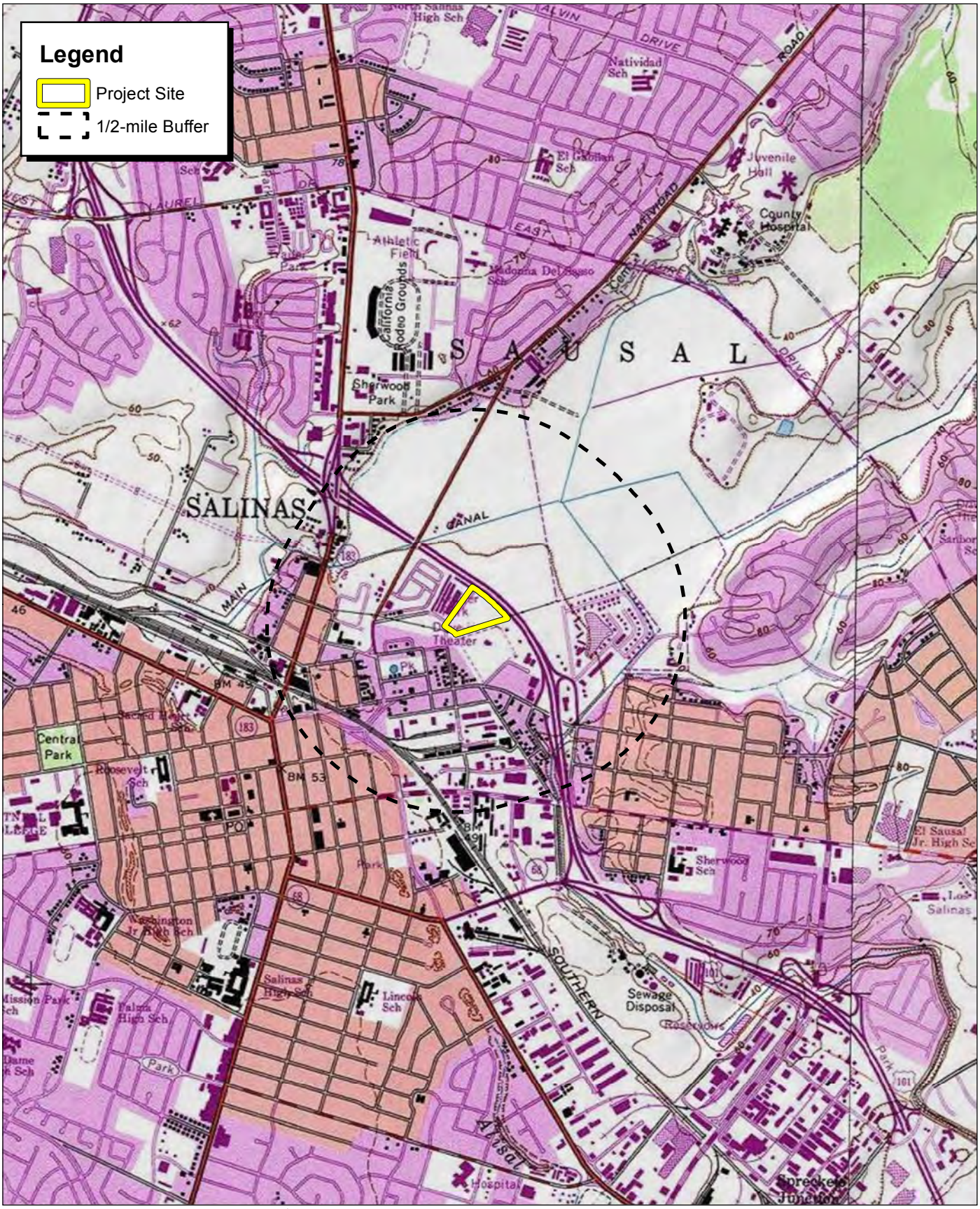
Sincerely,

Dana Douglas DePietro, Ph.D.
Senior Scientist, Archaeology
FirstCarbon Solutions
1350 Treat Boulevard, Ste. 380
Walnut Creek, CA 94597

Enc: Project location map for the proposed development



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Indian Canyon Mutsun Band of Costanoan
Ann Marie Sayers, Chairperson
P.O. Box 28
Hollister, CA 95024

May 24, 2017

Subject: Rodeo Property Project, Monterey County, California

Dear Chairperson Sayers,

FirstCarbon Solutions (FCS) is preparing a Cultural Resources Assessment in support of an Initial Study for the Future Development of the Rodeo Property on behalf of the City of Salinas. The project site is located at Sun Street. It is our understanding that the project site is currently vacant.

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Senior Scientist, Archaeology
FirstCarbon Solutions
1350 Treat Boulevard, Ste. 380
Walnut Creek, CA 94597

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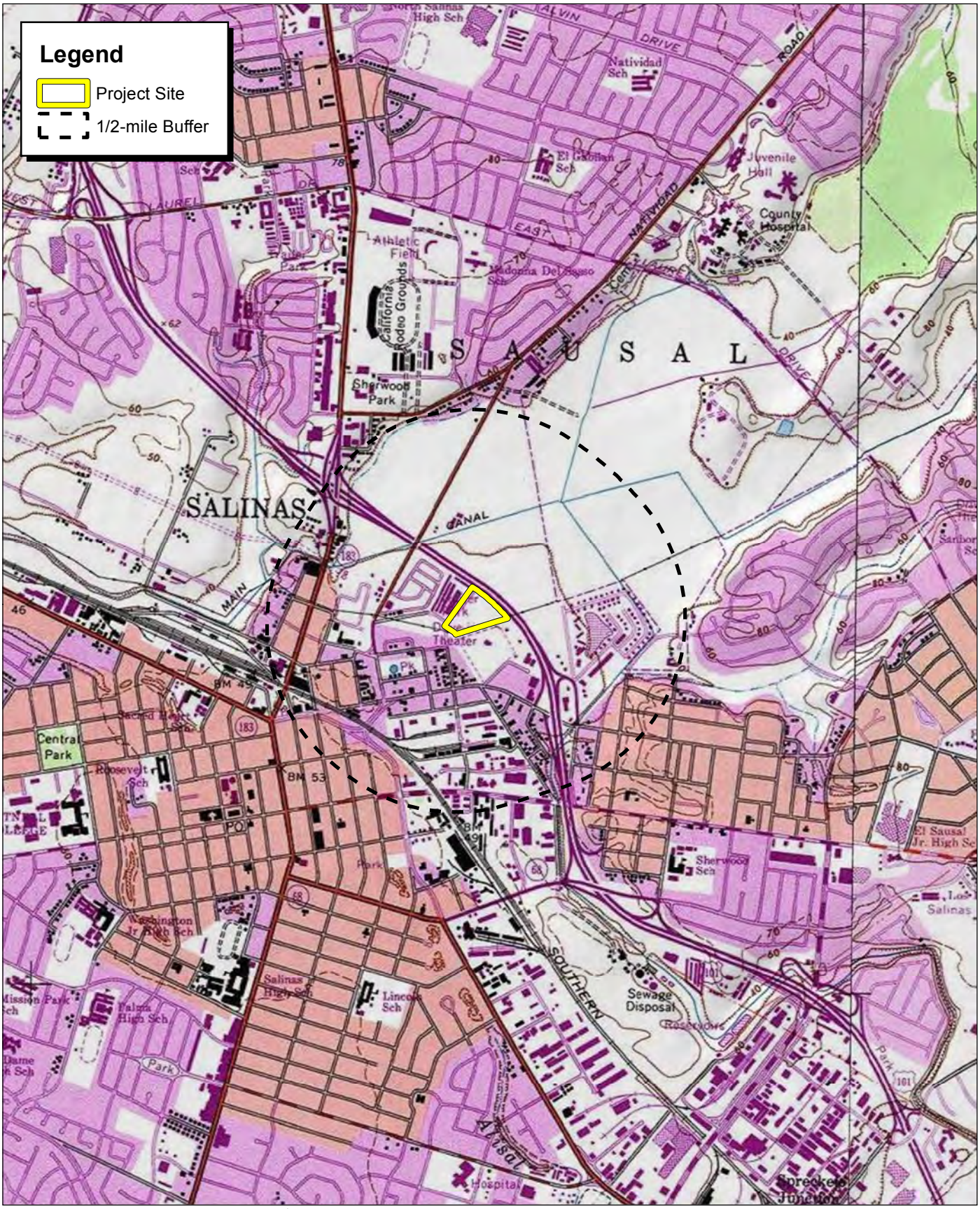

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Xolon-Salinan Tribe
Karen White, Council Chairperson
PO Box 7045
Spreckels, CA 93962

May 24, 2017

Subject: Rodeo Property Project, Monterey County, California

Dear Chairperson White,

FirstCarbon Solutions (FCS) is preparing a Cultural Resources Assessment in support of an Initial Study for the Future Development of the Rodeo Property on behalf of the City of Salinas. The project site is located at Sun Street. It is our understanding that the project site is currently vacant.

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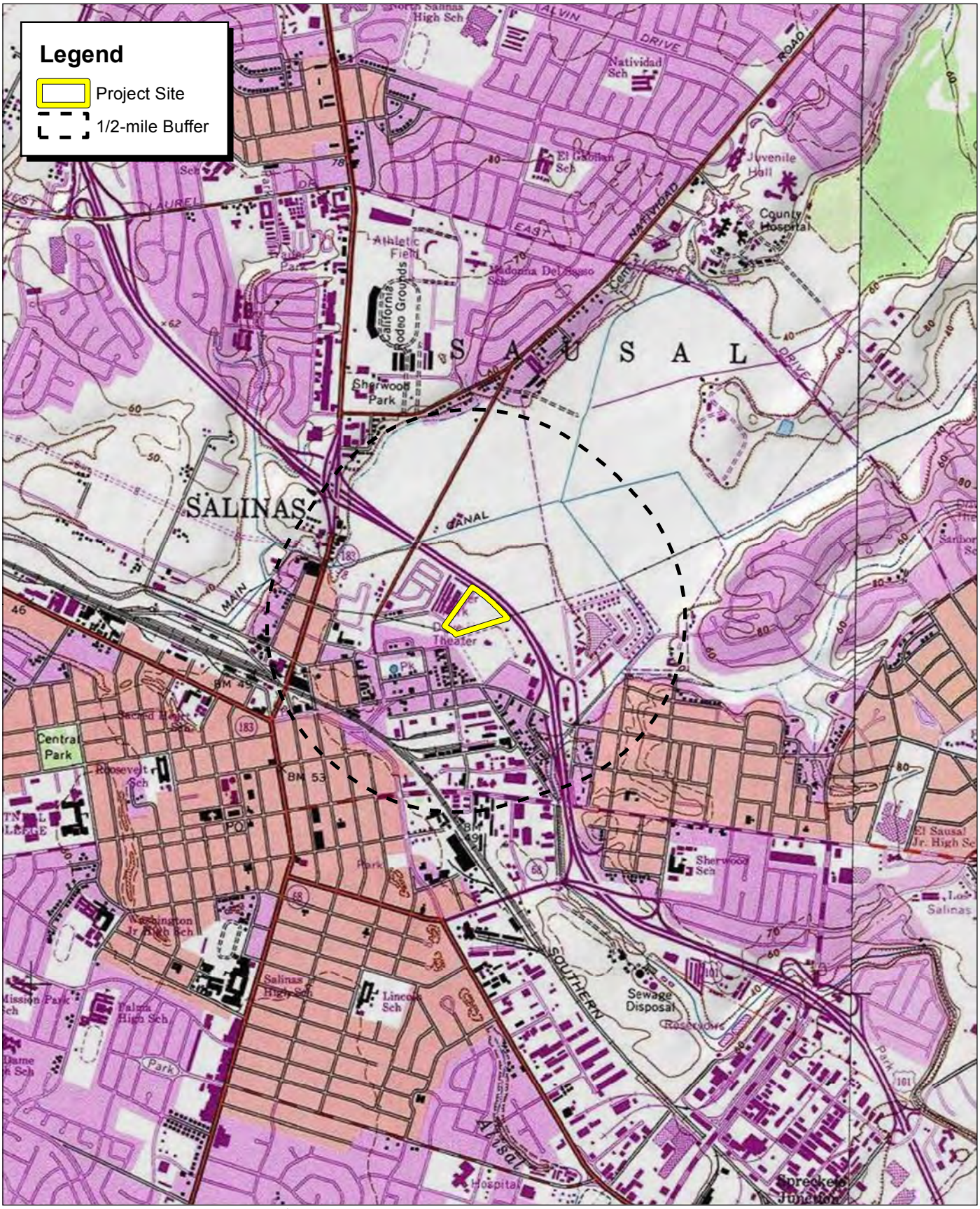
Sincerely,

Dana Douglas DePietro, Ph.D.
Senior Scientist, Archaeology
FirstCarbon Solutions
1350 Treat Boulevard, Ste. 380
Walnut Creek, CA 94597

Enc: Project location map for the proposed development



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Amah Mutsun Tribal Band of Mission San Juan Bautista
Irenne Zwierlein, Chairperson
789 Canada Road
Woodside, CA 94062

May 24, 2017

Subject: Rodeo Property Project, Monterey County, California

Dear Chairperson Zwierlein,

FirstCarbon Solutions (FCS) is preparing a Cultural Resources Assessment in support of an Initial Study for the Future Development of the Rodeo Property on behalf of the City of Salinas. The project site is located at Sun Street. It is our understanding that the project site is currently vacant.

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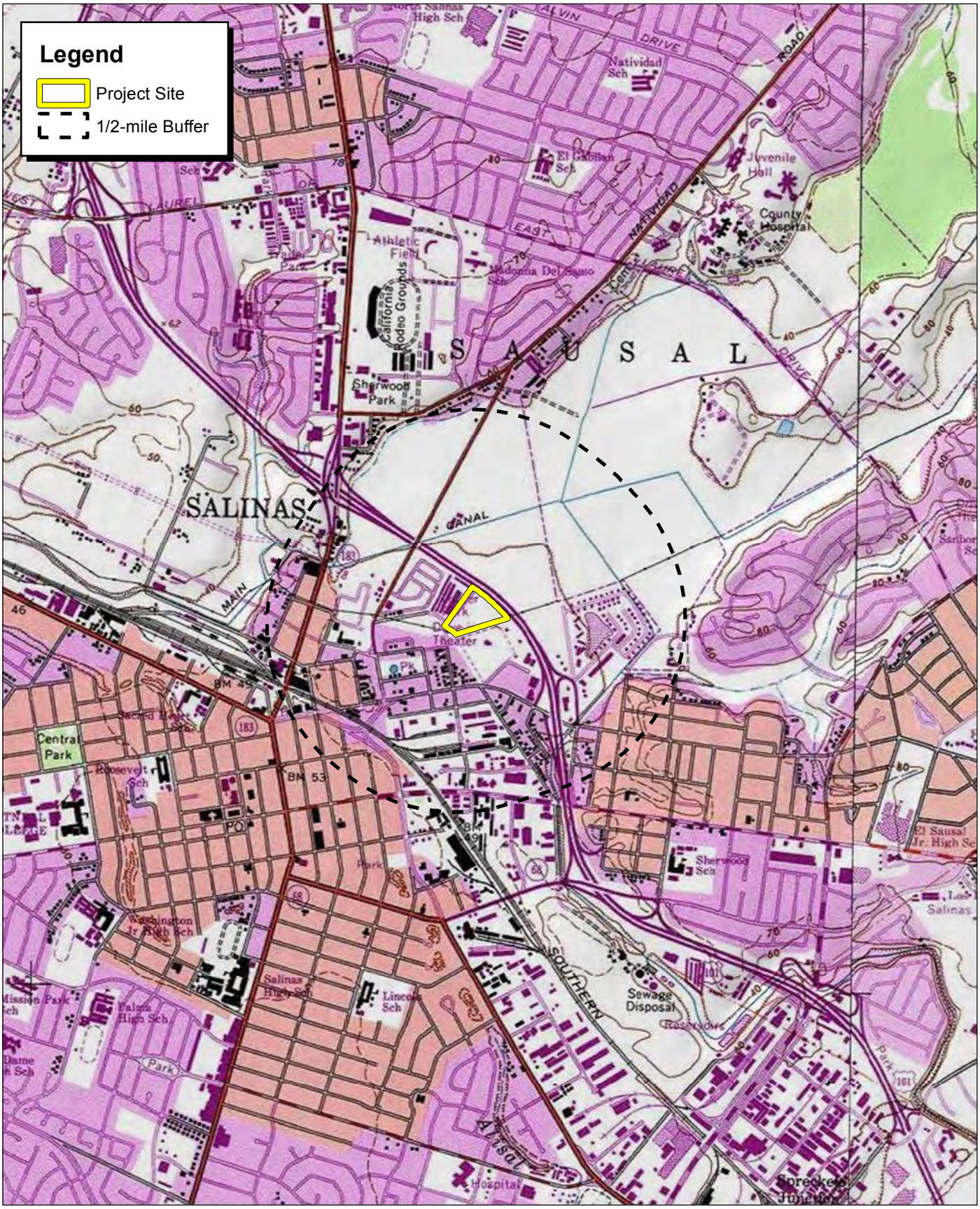
Sincerely,

Dana Douglas DePietro, Ph.D.
Senior Scientist, Archaeology
FirstCarbon Solutions
1350 Treat Boulevard, Ste. 380
Walnut Creek, CA 94597

Enc: Project location map for the proposed development



Source: USGS Salinas (1984) 7.5' Quadrangle / Nacional Land Grant

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Exhibit 1
Records Search Map

Gmail by Google

Dana DePietro <ddepietro@fcs-intl.com>

Rodeo Property Project, Monterey county, CA

1 message

info@salinantribe.com <info@salinantribe.com> Fri, Jun 9, 2017 at 1:40 PM
To: ddepietro@fcs-intl.com

Greetings Dana, I have reviewed the proposed project and I am not aware of any resources at the project location. so at this time I do not have any concerns. Please keep me informed as the project moves forward or if any unknown resources are unearthed by the project.

Xayatspanikan,

Patti Dunton, Tribal Adminisrator

Appendix C:
Personnel Qualifications

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FIRSTCARBON SOLUTIONS™

DANA DOUGLAS DE PIETRO, PH.D. – Cultural Resources Lead

OVERVIEW

- More than 15 Years Experience in Archaeology and Cultural Resource Management

Education

- Ph.D., Near Eastern Art and Archaeology, University of California at Berkeley, 2012
- M.A., Near Eastern Art and Archaeology, University of California at Berkeley, 2005
- B.A., Archaeology and History (double major), University of California at San Diego, 2002

Fellowships and Awards

- Albright Institute Educational and Cultural Affairs Fellowship (2015)
- Katherine Davis Foundation Projects for Peace Prize (2012)
- International House Gateway Fellowship (2011-2012)
- The George Franklin Dales Foundation Fellowship for Archaeological Research (2011)
- CAORC Multi-Country Dissertation Research Fellowship (2010)

Dana DePietro, Ph.D is a Registered Professional Archaeologist who meets the Secretary of Interior's standards for historic preservation programs in archaeology. Dr. DePietro has over 15 years of experience in all aspects of cultural resource management, including prehistoric and historic archaeology, paleontology, materials conservation, history of art and architecture, and community engagement. He has experience in compliance with the National Environmental Policy Act (NEPA), the California Environment Quality Act (CEQA), the National Historic Preseration Act (NHPA), and the Archaeological Resources Protection Act (ARAP). Dr. DePietro has completed cultural resource projects that have involved agency, client, Native American, and subcontractor coordination; treatment plans and research design development; archival research; field reconnaissance; site testing; data recovery excavation; construction monitoring; site recordation; site protection/preservation, mapping/cartography; spatial analysis/ GIS; laboratory analysis; materials conservation; artifact curation and exhibition; and report production. He has completed projects in California within the jurisdiction of the Bureau of Land Management (BLM) and other federal agencies requiring compliance with section 106 of the NHPA. He has also completed projects throughout California under CEQA for state and local governments and municipalities, including the California Department of Transportation (Caltrans) and has worked with clients to insure deliverables meet and exceed the standards set by the State Historic Preservation Office (SHPO).

RELATED EXPERIENCE AND CLIENT SUMMARY

FirstCarbonSolutions

As the Lead Archaeologist/Cultural Resource Specialist for FCS, Dr. DePietro conducts evaluations and performs field documentation of historic and prehistoric cultural resources; prepares environmental impact reports (EIRs), cultural resources assessments (CRAs), DPR forms and Section 106 reports; conducts mapping, GIS analysis, and state and county record searches; leads archaeological surveys and

field monitoring efforts; and coordinates with state, federal and tribal officials and institutions for a variety of FCS projects, including the following:

- Atherton Baptist Homes Master Plan/Phase II, City of Alhambra, Los Angeles County
- Biological and Cultural Resources Assistance 140-Acre Project Site Woodcrest, Riverside County, CA
- Blanchard Road Industrial EIR Project, City of San Jose, Santa Clara County, CA
- Bonadelle Tract 6120 AQ/GHG and Bio Tech Studies, City of Clovis, Fresno County, CA
- CEQA Analysis for Mayhew Way Project, City of Walnut Creek, Contra Costa County
- 2268 El Camino Real, Mountain View - II CEQA Compliance Checklist Project, City of Mountain View, Santa Clara County
- CEQA Documentation for New Science Building, City of Fairfield, Solano County
- CEQA Services for Clover Spring Open Space Preserve Project, City of Cloverdale, Sonoma County
- Chico Walmart Expansion Project, City of Chico, CA
- Cultural Resources Services for Froom Ranch/El Villagio Specific Plan, City of San Luis Obispo, CA
- Cultural Resource & Historic Evaluation for Sacramento Dome Theatre, City of Sacramento, CA
- Cultural Resources Services for Haven Berryessa Block 7 & 8 San Jose Flea Market, San Jose, CA
- Caltrans NEPA/CEQA Documentation and Permitting for the Dogtown Road Bridges Replacement Projects (San Domingo Creek, French Gulch, and Indian Creek), Calaveras County, CA
- Due Diligence for Meadowlark Project in Pleasanton, CA
- Due Diligence Services for the Montalcino Property, Napa County, CA
- Due Diligence Site Review for Parcel APN 68-241-30 located at 260 Bartlett Way Santa Cruz, CA
- Due Diligence Level IA Entitlements for the Boscell Road Osgood Project, City of Fremont, CA
- Trellis Residential Project EIR, City of Walnut Creek, CA
- El Dorado Materials Recovery Facility Remodeling Project, El Dorado County, CA
- Farmstand IS/MND, City of Healdsburg, CA
- La Paloma Winery Demo Project IS/MND, City of Clovis, CA
- Kaiser Dublin Medical Center EIR, City of Dublin, California
- Merced Gateway Master Plan Project EIR, City of Merced, CA
- Phase 1 Cultural Resource Assessment for 44 acres TTM No. 19992, Rancho Cucamonga, CA
- Bonadelle Tract 6120 Cultural Resources Study, City of Clovis, CA
- Professional Services to Support the Development of a Preferred Development Plan and Associated Regulatory Strategies for the Solano 360 Project, Solano County, CA
- Tassajara Parks EIR, Contra Costa County, California

Other Relevant Experience

The Society for Humanitarian Archaeological Research and Exploration

Dr. DePietro is the Founder and Executive Director of The Society for Humanitarian Archaeological Research and Exploration. He manages the projects, staff, and the daily operation of this not-for-profit organization. Dr. DePietro likewise establishes relationships with partner universities and institutions, writes grant proposals, supervises fundraising projects, and maintains accounts, financial records, and the organization's online presence.

University of California at Berkeley

DOUGLAS DE PIETRO, PH.D. – Cultural Resources Lead (North)

Dr. DePietro was a lecturer at the University of California, Berkeley from August 2003 to January 2015. During his tenure, he prepared University-level source and lectures in the history of the modern and ancient Middle East, performed student advising and evaluation, and university administrative duties. Dr. DePietro provided resources and opportunities that empower people to critically engage with other cultures as well as with their own communities.

Penn State University - Tel Akko Total Archaeology Project

Dr. DePietro was the Director of Community Engagement from 2013 to 2014 at the Penn State University for the Tel Akko Total Archaeology Project. He developed and executed a community engagement program, supervised staff and community participants, taught excavation and conservation techniques to groups of young people in Akko, and performed outreach, dialogue, and program developments in partnership[with community leaders.

Harvard University – Leon Levy Expedition to Ashkelon, Israel

Dr. De Pietro was the excavation supervisor during the summers of 2007-2013 for the Harvard University – Leon Levy Expedition to Ashkelon, Israel. He supervised the excavation and stratagraphic interpretation and instructed students in excavation techniques, data collection, photography, analysis, and publication.

Early Iron Age Cemetery Excavation – Dhamar, Yemen

Dr. De Pietro was the Area Supervisor during the summer of 2004 for the Early Iron Age Cemetery Excavation in Dhamar, Yemen. He supervised the excavation and stratagraphic interpretation, taught excavation techniques, strategy and implementation, field conservation, surveying techniques, dtat collection and analysis, and site management.

Journal of Associated Graduates in Near Eastern Studies (JAGNES)

Dr. DePietro was the Associate Editor from August 2003 to May 2012 for the Journal of Associated Graduates in Near Eastern Studiers (JAGNES). He solicited and proofread submissions, fundraising, and advertisements.

"Travel Today: Egypt" Magazine

Dr. De Pietro was an Archaeological Correspondent from December 2002 to February 2005. He wrote magazine articles, conducted relevant interviews and research, and procured photos and images to compliment articles.

Trish Fernandez
4836 Skyway Drive, Fair Oaks, CA 95628
530.409.8612

Curriculum Vitae

Profile

Ms. Fernandez is an environmental consultant specializing in cultural resources management. She meets the *Secretary of Interior's Professional Qualification Standards* for archaeologist, historian, and architectural historian.

Education

California State University, Sacramento, California
Master of Arts in Anthropology, emphasis in History and Archaeology
Thesis: *Mexican Miners in the California Gold Rush: A Historical and Archaeological Study*
Graduated Magna Cum Laude, GPA 3.84, 2001

California State University, Sacramento, California
Bachelor of Arts in Anthropology, emphasis in Ethnic Studies
Golden Key National Honor Society
Lambda Alpha Anthropological Honor Society
American Association of University Women Scholarship Recipient
Graduated Magna Cum Laude, GPA 3.77, 1995

Field Schools

Virginia City, Nevada, UNR, 2000. Historical archaeology: Comstock era seamstress' residence
Coloma, California, CSUS, 1997. Historical archaeology: Gold Rush era doctor's residence
Virginiatown, California, CSUS, 1995. Historical archaeology: Gold Rush era Chinese town

Registrations/Certifications/Qualifications

Archaeologist. Register of Professional Archaeologists. No. 12198
Historian. California Council for the Promotion of History. No. 583
Archaeologist, Historian, Architectural Historian. Secretary of Interior's Professional Qualifications Standards
Historical Archaeologist Principal Investigator, Caltrans Professional Qualifications Standards

Current Professional Memberships

Association of Environmental Professionals
Register of Professional Archaeologists
Society for Historical Archaeology
Society for California Archaeology

Continuing Professional Education

CEQA Mid-Year Case Law Review, AEP, 2015
Taking CEQA Forward, AEP, 2015
Caltrans Section 106 PA Workshop, Caltrans District 4, 2015
CEQA & Historic Preservation: A 360 Degree View, CPF, 2015
Federal Contracting Basics, SBA, 2015
Exploring the Government Marketplace, SBA, 2015
Business Development Skills, ICF, 2011
NEPA Overview and Refresher, UC Davis Extension, 2010
National Register Multiple Property Listings, California OHP, 2008
Section 106 Agreement Documents, National Preservation Institute, 2007
California Senate Bill 18, Governor's Office of Planning and Research, 2007
Principles of Tribal Consultation, SRI Foundation, 2006
GIS for Archaeologists, SHA, 2006
Facilitating Effective Public Meetings, UC Davis Extension, 2006
Public Works and Environmental Compliance, Lorman Education, 2006
Consulting with the California SHPO, California OHP, 2005
Integration of Environmental Permits, UC Davis Extension 2005
CEQA Streamlining Toolbox, EDAW, 2005
Successful CEQA Compliance, UC Davis Extension, 2005
Lithics Workshop, Rob Jackson, 2005
Section 106 Review for Experienced Practitioners, National Preservation Institute, 2005
Making CEQA Work, California Preservation Foundation, 2004
Conflict Resolution, UC Davis Extension, 2004
Coaching Staff, UC Davis Extension, 2004
Historical Building Surveys for Local Governments, California Preservation Foundation, 2003
NEPA and Historic Properties, UNR Extended Studies, 2002
Historic Bottle Identification, SHA, 2002
Introduction to Section 106 Review, ACHP, 2000
GIS for Resource Managers and Professionals, UC Davis Extension, 1998
Project Management Workshop, Braley Consulting, 1998
NEPA Overview, UC Davis Extension, 1997
Intro to CEQA, UC Davis Extension, 1996
Consulting with Native Americans about TCPs, ACRA, 1996

Awards

Thomas F. King Award for Excellence in Cultural Resources Management, 2008

Appointments

Society for California Archaeology Professional Standards & Ethics Committee, Chair 2015-present
California State Archaeological Resources Committee, Chair/Vice-Chair, 2006 to present
Old Sacramento Historical Foundation Board, 2008-2010
California State Historical Resources Commission, 2005-2009
El Dorado County Cultural Resources Commission, 1997-2000
Foothill Indian Education Alliance, 1996-1997

Work History

InContext: Cultural Resources Solutions – Fair Oaks, CA 2012-Present
President and Principal Investigator. Responsibilities include administration, business development, financial reporting, and performing all aspects of technical work related to inventories, evaluations, and mitigation measures.

Statistical Research, Inc. – Woodland, CA, 2012
Historical Resources Specialist. Assist regional marketing directors in WA, CA, AZ, NM, and TX with business development throughout the company and throughout the western United States.

ICF International — WA, OR, CA, 2008–2011
Cultural Resources Manager. Directed complex, controversial projects; restructured CA team by hiring, terminating, and moving staff to more suitable positions. Established job descriptions and expectations for cultural staff. Took over troubled projects throughout the company to bring them into budgetary, contractual, and regulatory compliance and mend client relations. Managed Sacramento team; created mentoring and peer review structure for quality control and staff development; developed workload management and projection system in Microsoft Excel; increased morale and productivity. Created standardized regulatory language templates, marketing materials, and presentations; developed and presented educational symposia for environmental and engineering conferences. Initiated client development in WA and OR; prepared or participated in numerous winning proposals. Trained and mentored staff throughout company informally and through formal training programs focused on compliance, writing, and project management.

Trish Fernandez Cultural Resources — Placerville, CA, 2005–2008
Sole Proprietor. Owned and operated private cultural resources consulting company on a part-time basis for three consecutive years. Responsibilities included business development, financial reporting, and performing all aspects of technical work related to inventories, evaluations, and mitigation measures. Created a niche for providing peer review of other consultants' work products and addressing controversial projects.

El Dorado Irrigation District — Placerville, CA, 2004–2008
Environmental Review Specialist. Responsible for all aspects of cultural resources review under CEQA, including research, survey, consultation, and determinations of significance and significant impacts. Responsible for developing and implementing proactive agency program for complying with all state and federal laws related to cultural resources. Responsible for management of cultural resources as part of the FERC Project 184 relicensing process.

Pacific Legacy, Inc. — Cameron Park, CA, 2002–2004
Historical and Local Government Program Director. Responsible for development and quality of historic-period resources and local government compliance program. Directly supervised archaeologists and historians in three different offices. Developed and implemented supervisory and mentoring structure to promote quality, productivity, and personal growth. Directed and conducted all phases of research, excavation, evaluation, and mitigation. Responsible for business development and assisting with management and operations of the Central Sierra office.

Jones & Stokes, Inc. — Sacramento, CA, 1995–2002
Senior Cultural Resources Specialist. Conducted and managed cultural resources studies, including architectural and archaeological inventories, oral histories, and archaeological

SONIA MELANI MILLER

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Environmental and cultural heritage consultant specializing in archaeological investigation and inventories, sustainable urbanism, historic preservation and adaptive re-use of historic structures. Experienced in the management of restoration projects, including field data collection, data management and modeling, planning and design, implementation and supervision of field activities, progress monitoring and reports, CEQA regulation and historic evaluation (DPR523 primary record). OSHA certified and LEED ND accredited. Currently seeking a position to grow in the field of historic preservation, sustainable neighborhoods planning, and in the planning and management of sustainable/historic infrastructures.

SUMMARY OF QUALIFICATIONS

- Archival processing and documentation of historic material (including architectural and photographic material)
- Implementation of programs for the conservation of energy and natural resources
- Production of promotional and educational material including leaflets, brochures, illustration boards
- Management of large pools of data, including the organization of inventories, data processing and storage
- Formulation of survey for the collection of quantitative and qualitative data for academic researches and planning studies
- Categorization of quantitative data in charts, graphs, maps (ArcGIS), and reports
- Interpretation of qualitative data, data coding, and processing
- Construction of BIM virtual models using AutoCAD, Revit Architecture and ArchiCad
- NEASI Certification (Home Energy Audit-HERS) National Energy and Sustainability Institute
- Interpretative, historical, and cultural research for the preparation of DPR523 Primary Record (Description and Statement of Significance) for the documentation and preservation of historical and cultural resources
- Ability to conduct complex literary research in multiple languages (Italian, Spanish, French, and English)
- Categorization of credits for LEED ND projects related to:
    - Historic preservation and reuse and to habitat restoration (Smart Location and Linkage (SLL)

- Restoration of habitat, wetland, and water bodies, Green Infrastructures and Buildings

- GIB-Existing Building Reuse and Historic Resources Preservation and Adaptive Use.

- LEED AP Neighborhood Development (ND) credentialed

PROFESSIONAL HISTORY

June 2015 to Present: SPACES-Saving and Preserving Arts and Cultural Environments
Project Assistant
SPACES is a nonprofit public benefit organization created with an international focus on the study, documentation, and preservation of art environments and self-taught artistic activity. Currently assisting with archival processing of photographic material on folk art sites. Includes planning archival material preservation, establishing directives (and making forms) for the collection, organization and processing of archival data. Providing assistance in the preparation of site documentation for enlisting in the local (State) and National Register of Historic Places. Includes cultural and historic research, site survey for the identification of defining features, and other services needed for the preparation of the DPR523 primary record form.

1999 to present: JM Construction
Sustainable Planning Consultant
Responsible to research and implement cost-saving strategies to reduce the environmental impact of construction projects. Position centering on the development of sustainability policies and the preparation of permit documents for residential construction, erosion control (drainage), interior architecture and landscaping projects. It also involves the fulfillment of some administrative functions and project scheduling (Microsoft Project).

2011 to 2013: City of San Jose
Municipal Green Buildings Program Graduate Intern
Participated in the implementation of the City's *Energy Star Portfolio Manager* for 116 Municipal Facilities, in cooperation with the Energy Officer; and to the development of the LEED EB&OM *Volume Certification Protocol.* Helped managing data related to Municipal Green Buildings and took part in the production of LEED's promotional and educational material for certified buildings.

2002 to 2007: Habitat Restoration International
Project Coordinator
Supported the Biologist in the management of habitat restoration and erosion control projects for federal and state agencies. These included projects for the US Army Corps of Engineers, Santa Clara Water and SMUD. The duties invested in this position included assisting in the preparation of environmental proposals (EIR), the supervision of vegetation installation and vegetation monitoring, the preparation of environmental proposals, reports and other project related documents such as: project timelines and schedules; planning and design of landscaping and erosion control construction plans and as built plans.

OTHER PROFESSIONAL EXPERIENCE

Aux Trois Pommes Language School
Language Teacher (Italian)

Taught language classes to adult at different level of proficiency. The position included the creation of programs and syllabus for specific courses, assistance to advanced-graduate exam preparation, and translation support for Graduate archival research.

SJSU Special Collection Archives
Student Assistant Archivist
Assisted library patrons in the reading room of SJSU Special Collections & Archives with their research needs, web OPAC and reading room policies and procedures. Processed backlog collections and wrote finding aids for collections.

The Harrison Studio
Researcher and Studio Assistant
Conducted environmental and social research for the 2004 "Villaggio d'arte" Environmental Art' project in Southern Italy and assisted in other projects of environmental art.

SELECTED PROJECTS

Architectural Collection (Archival)
Processed for SJSU Special Collections & Archives
This project was processed for SJSU Special Collection & Archives. The collection of architectural drawings comprises architectural plans and renderings documenting the construction of several buildings on the San Jose State College campus, including: San Jose College Central Library Building, Wahlquist Library, and the California State Library Faculty Office Building.

"Il Villaggio dell'Arte," annuale d'arte contemporanea partecipata, PIT Parco regionale del Matese, POR
An initiative promoted by PaeSEsaggio workgroup to stimulate new processes and development and to re-activate sustainable micro-economies through the involvement of the local communities in an area of southern Italy suffering from abandonment. The project followed the principles of the European Convention of Landscape (Paesaggio) of 2000 and of the Conference of State Regions of 2001, promoting the diffusion of information and inducement of participatory processes.

The Climate Clock Initiative
Assisted the Huey-Dewey-Louie finalist team in documenting their residency in occasion of "The Climate Clock Initiative" in San Jose, California- promoting the use of public art and measurement technologies to gather and display climate data.

Guadalupe River Flood Control and Habitat Mitigation Project, Phase I and II
Four "design and built" projects implemented as part a mitigation strategy of a federal flood control project in downtown San Jose, California. The projects comprised the preparation and implementation of a riparian habitat restoration plan that involved the selection, installation and maintenance of over 13,000 native riparian and wetland plants. And it included the development and implementation of a biological monitoring program to evaluate habitat establishment and wildlife use of the project area.

EPA Energy Star Portfolio Manager
Set up a portfolio of 116 municipal facilities for energy benchmarking. Entered and verified facility information (Address, Space Type, Square footage and meter SAID). Facilities were subsequently benchmarked to receive automated data from the energy provider (PG&E).

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Appendix D:
Regulatory Framework

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REGULATORY FRAMEWORK

Government agencies, including federal, state, and local agencies, have developed laws and regulations designed to protect significant cultural resources that may be affected by projects regulated, funded, or undertaken by the agency. Federal and state laws that govern the preservation of historic and archaeological resources of national, state, regional, and local significance include the National Environmental Policy Act (NEPA), the National Historic Preservation Act (NHPA), and the California Environmental Quality Act (CEQA). In addition, laws specific to work conducted on federal lands includes the Archaeological Resources Protection Act (ARPA), the American Antiquities Act, and the Native American Graves Protection and Repatriation Act (NAGPRA).

The following federal or CEQA criteria were used to evaluate the significance of potential impacts on cultural resources for the proposed project. An impact would be considered significant if it would affect a resource eligible for listing in the NR or the CR, or if it is identified as a unique archaeological resource.

Federal-Level Evaluations

Federal agencies are required to consider the effects of their actions on historic properties and afford the Advisory Council on Historic Preservation (ACHP) a reasonable opportunity to comment on such undertakings under NEPA § 106. Federal agencies are responsible for initiating NEPA § 106 review and completing the steps in the process that are outlined in the regulations. They must determine if NHPA § 106 applies to a given project and, if so, initiate review in consultation with the State Historic Preservation Officer (SHPO) and/or Tribal Historic Preservation Officer (THPO). Federal agencies are also responsible for involving the public and other interested parties. Furthermore, NHPA S106 requires that any federal or federally assisted undertaking, or any undertaking requiring federal licensing or permitting, consider the effect of the action on historic properties listed in or eligible for the NRHP. Under the Code of Federal Regulations (CFR), 36 CFR Part 800.8, federal agencies are specifically encouraged to coordinate compliance with NEPA § 106 and the NEPA process. The implementing regulations “Protection of Historic Properties” are found in 36 CFR Part 800. Resource eligibility for listing on the NRHP is detailed in 36 CFR Part 63 and the criteria for resource evaluation are found in 36 CFR Part 60.4 [a-d].

The NHPA established the NRHP as the official federal list for cultural resources that are considered important for their historical significance at the local, state, or national level. To be determined eligible for listing in the NRHP, properties must meet specific criteria for historic significance and possess certain levels of integrity of form, location, and setting. The criteria for listing on the NRHP are significance in American history, architecture, archaeology, engineering, and culture as present in districts, sites, buildings, structures and objects that possess integrity of location, design, setting, materials, workmanship, feeling, and association. In addition, a resource must meet one or all of these eligibility criteria:

a.) Is associated with events that have made a significant contribution to the broad patterns of our history.

b.) Is associated with the lives of persons significant in our past.

c.) Embodies the distinctive characteristics of a type, period, or method of construction; represent the work of a master; possess high artistic values, represent a significant and distinguishable entity whose components may lack individual distinction.

d.) That have yielded, or may be likely to yield, information important in prehistory or history.

Criterion D is usually reserved for archaeological resources. Eligible properties must meet at least one of the criteria and exhibit integrity, measured by the degree to which the resource retains its historical properties and conveys its historical character.

Criteria Considerations

Ordinarily cemeteries, birthplaces, graves of historical figures, properties owned by religious institutions or used for religious purposes, buildings that have been moved from their original locations, reconstructed historic buildings, properties primarily commemorative in nature, and properties that have achieved significance within the past 50 years shall not be considered eligible for the NRHP. However, such properties will qualify if they are integral parts of districts that do meet the criteria or if they fall within the following categories:

a.) A religious property deriving primary significance from architectural or artistic distinction or historical importance.

b.) A building or structure removed from its original location but which is primarily significant for architectural value, or which is the surviving structure most importantly associated with a historic person or event.

c.) A birthplace or grave of a historical figure of outstanding importance if there is no appropriate site or building associated with his or her productive life.

d.) A cemetery that derives its primary importance from graves of persons of transcendent importance, from age, from distinctive design features, or from association with historic events.

e.) A reconstructed building when accurately executed in a suitable environment and presented in a dignified manner as part of a restoration master plan, and when no other building or structure with the same association has survived.

f.) A property primarily commemorative in intent if design, age, tradition, or symbolic value has invested it with its own exceptional significance.

g.) A property achieving significance within the past 50 years if it is of exceptional importance.

Thresholds of Significance

In consultation with the SHPO/THPO and other entities that attach religious and cultural significance to identified historic properties, the Agency shall apply the criteria of adverse effect to historic properties within the Area of Potential Effect (APE). The Agency official shall consider the views of consulting parties and the public when considering adverse effects.

Federal Criteria of Adverse Effects

Under federal regulations, 36 CFR Part 800.5, an adverse effect is found when an undertaking alters, directly or indirectly, any of the characteristics of a historic property that qualifies the property for inclusion in the NRHP in a manner that diminishes the integrity of the property's location, design, setting, materials, workmanship, feeling, or association. Consideration will be given to all qualifying characteristics of a historic property, including those that may have been identified subsequent to the original evaluation of the property's eligibility for listing in the NRHP. Adverse effects may include reasonably foreseeable effects caused by the undertaking that may occur later in time, be farther removed in distance, or be cumulative.

According to 36 CFR Part 800.5, adverse effects on historic properties include but are not limited to those listed below:

- Physical destruction of or damage to all or part of the property.
- Alteration of a property, including restoration, rehabilitation, repair, maintenance, stabilization, hazardous material remediation, and provision of handicapped access, that is not consistent with the U.S. Secretary of the Interior's Standards for the Treatment of Historic Properties per 36 CFR Part 68 and applicable guidelines.
- Removal of the property from its historic location.
- Change of the character of the property's use or of physical features within the property's setting that contribute to its historic significance.
- Introduction of visual, atmospheric, or audible elements that diminish the integrity of the property's significant historic features.
- Neglect of a property that causes its deterioration, except where such neglect and deterioration are recognized qualities of a property of religious and cultural significance to an Indian tribe or Native Hawaiian organization.
- Transfer, lease, or sale of property out of federal ownership or control without adequate and legally enforceable restrictions or conditions to ensure long term preservation of the property's historic significance.

If Adverse Effects Are Found

If adverse effects are found, the agency official shall continue consultation as stipulated at 36 CFR Part 800.6. The agency official shall consult with the SHPO/THPO and other consulting parties to develop alternatives to the undertaking that could avoid, minimize, or mitigate adverse effects to

historic resources. According to 36 CFR Part 800.14(d), if adverse effects cannot be avoided then standard treatments established by the ACHP may be used as a basis for Memorandum of Agreement (MOA).

According to 36 CFR Part 800.11(e), the filing of an approved MOA, and appropriate documentation, concludes the § 106 process. The MOA must be signed by all consulting parties and approved by the ACHP prior to construction activities. If no adverse effects are found and the SHPO/THPO or the ACHP do not object within 30 days of receipt, the agencies' responsibilities under § 106 will be satisfied upon completion of report and documentation as stipulated in 36 CFR Part 800.11. The information must be made available for public review upon request, excluding information covered by confidentiality provisions.

State-Level Evaluation Processes

An archaeological site may be considered an historical resource if it is significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military or cultural annals of California per PRC § 5020.1(j) or if it meets the criteria for listing on the CR per California Code of Regulations (CCR) at Title 14 CCR § 4850.

The most recent amendments to the CEQA guidelines direct lead agencies to first evaluate an archaeological site to determine if it meets the criteria for listing in the CR. If an archaeological site is an historical resource, in that it is listed or eligible for listing in the CR, potential adverse impacts to it must be considered as stated in PRC §§ 21084.1 and 21083.2(l). If an archaeological site is considered not to be an historical resource, but meets the definition of a "unique archeological resource" as defined in PRC § 21083.2, then it would be treated in accordance with the provisions of that section.

With reference to PRC § 21083.2, each site found within a project area will be evaluated to determine if it is a unique archaeological resource. A unique archaeological resource is described as an archaeological artifact, object, or site about which it can be clearly demonstrated that, without merely adding to the current body of knowledge, there is a high probability that it meets one or more of the following criteria:

1. Contains information needed to answer important scientific research questions and that there is a demonstrable public interest in that information.
2. Has a special and particular quality such as being the oldest of its type or the best available example of its type.
3. Is directly associated with a scientifically recognized important prehistoric or historic event or person.

As used in this report, "non-unique archaeological resource" means an archaeological artifact, object, or site that does not meet the criteria for eligibility for listing on the CR, as noted in subdivision (g) of PRC § 21083.2. A non-unique archaeological resource requires no further consideration, other than simple recording of its components and features. Isolated artifacts are

typically considered non-unique archaeological resources. Historic structures that have had their superstructures demolished or removed can be considered historic archaeological sites and are evaluated following the processes used for prehistoric sites. Finally, OHP recognizes an age threshold of 45 years. Cultural resources built less than 45 years ago may qualify for consideration, but only under the most extraordinary circumstances.

Title 14, CCR, Chapter 3 § 15064.5 is associated with determining the significance of impacts to archaeological and historical resources. Here, the term historical resource includes the following:

1. A resource listed in, or determined eligible by the State Historical Resources Commission, for listing in the CR (PRC § 5024.1; Title 14 CCR, § 4850 et seq.).
2. A resource included in a local register of historical resources, as defined in PRC § 5020.1(k) or identified as significant in an historical resource survey meeting the PRC § 5024.1(g) requirements, shall be presumed to be historically or culturally significant. Public agencies must treat any such resource as significant unless the preponderance of evidence demonstrates that it is not historically or culturally significant.
3. Any object, building, structure, site, area, place, record, or manuscript, which a lead agency determines to be historically significant or significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California may be considered a historical resource, provided the lead agency's determination is supported by substantial evidence in light of the whole record. Generally, a resource shall be considered by the lead agency to be historically significant if the resource meets the criteria for listing on the California Register of Historical Resources (PRC § 5024.1; Title 14 CCR § 4852) including the following:
   A. Is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage.
   B. Is associated with the lives of persons important in our past.
   C. Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values.
   D. Has yielded, or may be likely to yield, information important in prehistory or history.

Typically, archaeological sites exhibiting significant features qualify for the CR under Criterion D because such features have information important to the prehistory of California. A lead agency may determine that a resource may be a historical resource as defined in PRC §§ 5020.1(j) or 5024.1 even if it is:

- Not listed in or determined to be eligible for listing in the CR.
- Not included in a local register of historical resources pursuant to PRC § 5020.1(k).
- Identified in an historical resources survey per PRC § 5024.1(g).

Threshold of Significance

If a project will have a significant impact on a cultural resource, several steps must be taken to determine if the cultural resource is a "unique archaeological resource" under CEQA. If analysis and/or testing determine that the resource is a unique archaeological resource and therefore subject to mitigation prior to development, a threshold of significance should be developed. The threshold of significance is a point where the qualities of significance are defined and the resource is determined to be unique under CEQA. A significant impact is regarded as the physical demolition, destruction, relocation, or alteration of the resource or its immediate surroundings such that the significance of the resource will be reduced to a point that it no longer meets the significance criteria. Should analysis indicate that project development will destroy the unique elements of a resource; the resource must be mitigated for under CEQA regulations. The preferred form of mitigation is to preserve the resource in-place, in an undisturbed state. However, as that is not always possible or feasible, appropriate mitigation measures may include but are not limited to:

1. Planning construction to avoid the resource.
2. Deeding conservation easements.
3. Capping the site prior to construction.

If a resource is determined to be a "non-unique archaeological resource," no further consideration of the resource by the lead agency is necessary.

Tribal Consultation

The following serves as an overview of the procedures and timeframes for the Tribal Consultation process. For the complete Tribal Consultation Guidelines, please refer to the State of California Office of Planning and Research website.

Prior to the amendment or adoption of general or specific plans, local governments must notify the appropriate tribes of the opportunity to conduct consultation for the purpose of preserving or mitigating impacts to cultural places located on land within the local government's jurisdiction that is affected by the plan adoption or amendment. The tribal contacts for this list are maintained by the NAHC and is distinct from the Most Likely Descendent (MLD) list. It is suggested that local governments send written notice by certified mail with return receipt requested. The tribes have 90 days from the date they receive notification to request consultation. In addition, prior to adoption or amendment of a general or specific plan, local government must refer the proposed action to tribes on the NAHC list that have traditional lands located within the city's or county's jurisdiction. Notice must be sent regardless of prior consultation. The referral must allow a 45-day comment period.

In brief, notices from government to the tribes should include:

- A clear statement of purpose
- A description of the proposed general or specific plan, the reason for the proposal, and the specific geographic areas affected

- Detailed maps to accompany the description
- Deadline date for the tribes to respond
- Government representative(s) contact information
- Contact information for project proponent/applicant, if applicable

The basic schedule for this process is:

- 30 days: time NAHC has to provide tribal contact information to the local government; this is recommended not mandatory.
- 90 days: time tribe has to respond indication whether or not they want to consult. Note: tribes can agree to a shorter timeframe. In addition, consultation does not begin until/unless requested by the tribe within 90 days of receiving notice of the opportunity to consult. The consultation period, if requested, is open-ended. The tribes and local governments can discuss issues for as long as necessary, or productive, and need not result in agreement.
- 45 days: time local government has to refer proposed action, such as adoption or amendment to a general plan or specific plan, to agencies, including the tribes. Referral required even if there has been prior consultation. This opens the 45-day comment period.
- 10 days: time local government has to provide tribes of notice of public hearing.

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Appendix E:
NWIC Records Search Results

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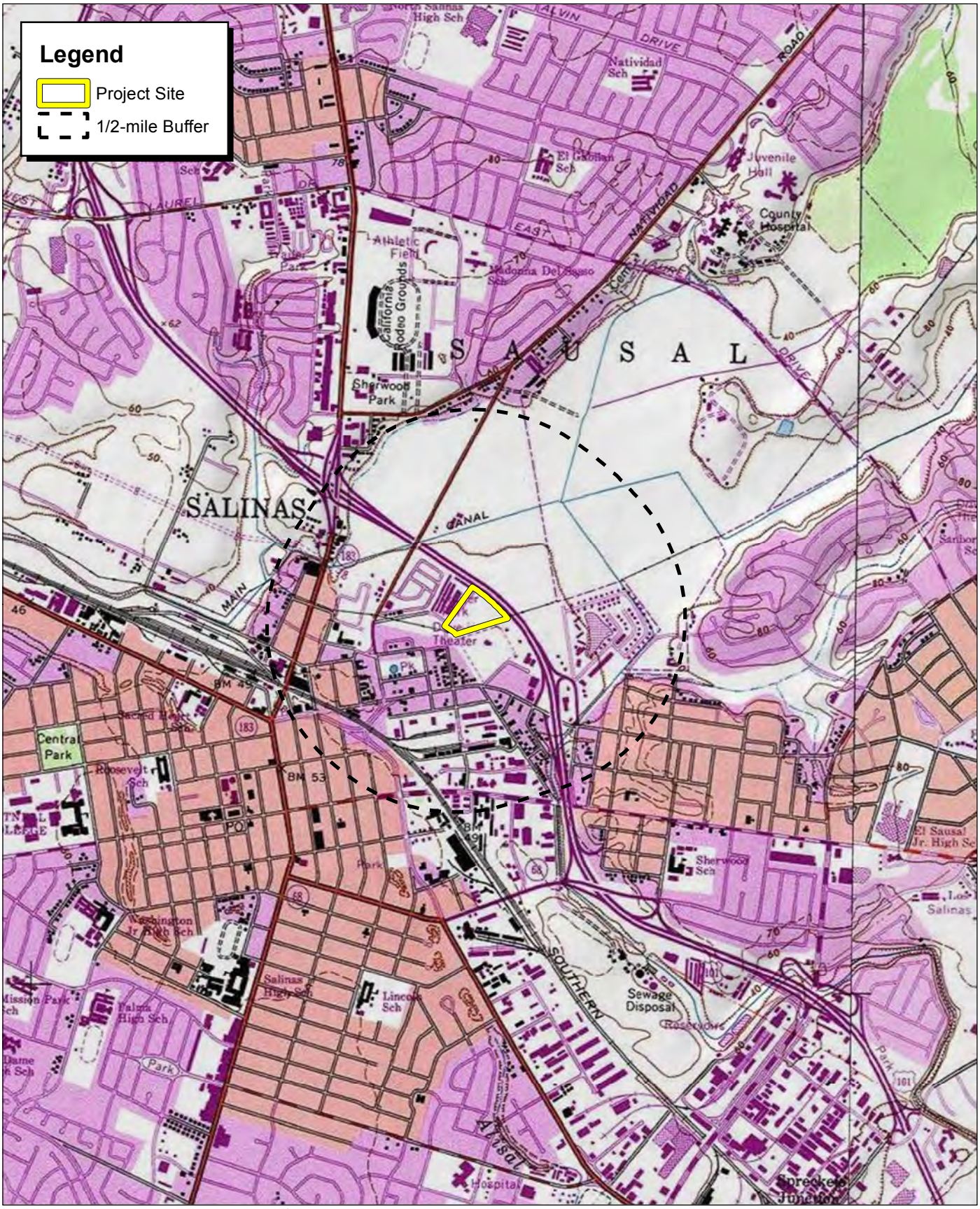

Source: USGS Salinas (1984) 7.5' Quadrangle / Nacional Land Grant

FIRSTCARBON SOLUTIONS™

2,000 1,000 0 2,000
Feet

Exhibit 1
Records Search Map

Resource Detail: P-27-002322

Identifying information

Primary No.: P-27-002322

Trinomial: CA-MNT-002050H

Name: El Camino Real (Highway 101)

Other IDs:

Type	*Name*
Resource Name	El Camino Real (Highway 101)
Other	ECR1 and ECR2
Other	Highway 101
Other	MM-101
OHP Property Numb	173439
OHP PRN	Proj.Rev. FHWA070906A (segment vic. Aromas)

Cross-refs:
Physically overlaps or intersects 27-000805
Physically overlaps or intersects 27-002938
Extends into another county as 35-000273
Extends into another county as 35-000327
Extends into another county as 38-002967
Extends into another county as 41-002192
Extends into another county as 43-002628
Extends into another county as 44-000406

Attributes

Resource type: Structure

Age: Historic

Information base: Survey, Other

Attribute codes: AH07 (Roads/trails/railroad grades); HP37 (Highway/trail)

Disclosure: Not for publication

Collections: No

Accession no(s):

Facility:

General notes

Recording events

	Date	*Recorder(s)*	*Affiliation*	*Notes*
a	9/10/1999	John Berg, Steve Mikesell	Far Western & JRP Historical Consulting Serives	
b	8/7/2002	Theresa Rogers	JRP Historical Consulting Services	

Associated reports

Report No.	*Year*	*Title*	*Affiliation*
S-022819	2000	Cultural Resources Survey for the Level (3) Communications Long Haul Fiber Optics Project, Segment WS05: San Jose to San Luis Obispo	Far Western Anthropological Research Group, Inc.; Foothill Resources, Ltd.
S-026137	2002	Cultural Resource Evaluation of 2500 Acres of Land for the Ranch San Juan Project Outside of Salinas, County of Monterey	Archaeological Resource Management
S-027827	2003	Cultural Resource Evaluation of 2581 Acres of Land for the Rancho San Juan Project Outside of Salinas, County of Monterey	Archaeological Resource Management
S-030334	2005	New Tower ("NT") Submission Packet, Veggie Growers SF-16810A, 40550 El Camino Real, Greenfield, Monterey.	EarthTouch, Inc.
S-030335	2005	Collocation ("CO") Submission Packet, FCC Form 621, Sprint Windmill San Lucas, SF-16880A.	Earth Touch, Inc
S-033131	2007	Archaeological Survey Report for the State Route 101/West Laurel Drive Interchange	LSA Associates, Inc.

		Improvement Project, Salinas, Monterey County, California	
S-035825	2007	Historic Property Survey Report, San Juan Interchange Project, 05-MON-101 PM 100.0/101.3, 05-SBT-101 PM 0.0/0.6, EA 05-31580	California Department of Transportation, District 5
S-038177	2001	Cultural Resources Inventory of Caltrans District 5 Rural Highways, Monterey County, California, Highways 1, 25, 68, 101, 146, 183, and 198, Volume 1	Far Western Anthropological Research Group, Inc.
S-038553	2011	Archaeological Records Search and Preliminary Impact Assessment for the Highway 101 Widening Project in Salinas, Monterey County, Calfornia	Archaeological Consulting

Location information

County: Monterey

USGS quad(s): Bradley, Chualar, Espinosa Canyon, Gonzales, Greenfield, Hames Valley, Natividad, Palo Escrito Peak, Paraiso Springs, Prunedale, Salinas, San Ardo, San Lucas, San Miguel, Soledad, Thompson Canyon, Wunpost

Address:

PLSS:

UTMs: Zone 10 619240mE 4073240mN NAD27
Zone 10 620460mE 4060790mN NAD27
Zone 10 649480mE 4032700mN NAD27
Zone 10 687330mE 3987190mN NAD27

Management status

Database record metadata

	Date	*User*	
Entered:	4/1/2005	icrds	
Last modified:	2/15/2016	neala	
IC actions:	*Date*	*User*	*Action taken*
	10/7/2014	neala	GISed all of MNT Co.; data review
	4/27/2002	AOLPJ	Primary number 27-002322 assigned.
	7/10/2002	AOLPJ	Trinomial MNT-002050 assigned.
	4/1/2005	jay	Appended records from discontinued ICRDS.
	7/10/2002	AOLPJ	Added Trinomial MNT-002050

Record status: Verified

Resource Detail: P-27-003234

Identifying information

Primary No.: P-27-003234
Trinomial:
Name: PG&E Moss Landing-Salinas Electrical Tower No. 011/064
Other IDs:

Type	*Name*
Resource Name	PG&E Moss Landing-Salinas Electrical Tower No. 011/064
Other	Tower No. 011/064

Cross-refs:

Attributes

Resource type: Structure
Age: Historic
Information base: Survey
Attribute codes: HP09 (Public utility building); HP11 (Engineering structure)
Disclosure: Unrestricted
Collections: No
Accession no(s):
Facility:

General notes

Recording events

Date	*Recorder(s)*	*Affiliation*	*Notes*
12/1/2013	Dana E. Supernowicz	Historic Resource Associates	Exact date of survey not provided

Associated reports

Report No.	*Year*	*Title*	*Affiliation*
S-043489	2013	Collocation Submission Packet, Downtown Salinas, CNU3535	EarthTouch, Inc.

Location information

County: Monterey
USGS quad(s): Salinas
Address:

Address	*City*	*Assessor's parcel no.*	*Zip code*
220 Bridge Street	Salinas		93941

PLSS:
UTMs:

Management status

Database record metadata

	Date	*User*
Entered:	5/7/2014	rochad
Last modified:	7/22/2015	paganob

IC actions:

Date	*User*	*Action taken*
5/7/2014	rochad	Data entry

Record status: Verified

Resource Detail: P-27-003465

Identifying information

Primary No.: P-27-003465
Trinomial:
Name: Chinese American Community
Other IDs:

Type	*Name*
Resource Name	Chinese American Community
OHP PRN	3902-0002-9999

Cross-refs:

Attributes

Resource type: District
Age: Historic
Information base: Survey
Attribute codes: HP02 (Single family property); HP05 (Hotel/motel) - boarding houses; HP06 (1-3 story commercial building); HP16 (Religious building)
Disclosure: Unrestricted
Collections: No
Accession no(s):
Facility:

General notes

apparently no elements of the district are separately recorded

Recording events

	Date	*Recorder(s)*	*Affiliation*	*Notes*
a	3/31/1980	Nancy Way	Chinese American Survey	Historic Resources Inventory form

Associated reports

Report No.	*Year*	*Title*	*Affiliation*
S-047415	2015	Phase 1 Archaeological Survey of APN 002-191-018, 019, 020, 021, 023, 024, 028 & 029, Salinas, Monterey County, California	Archaeological Consulting

Location information

County: Monterey
USGS quad(s): Salinas
Address:

Address	*City*	*Assessor's parcel no.*	*Zip code*
Soledad St, between Market & Gavilan Sts	Salinas		
Main St, between Market & Gavilan Sts	Salinas		
Monterey St, between Market & Gavilan Sts	Salinas		
Pajaro St, between Market & Gavilan Sts	Salinas		
Salinas St, between Market & Gavilan Sts	Salinas		

PLSS:
UTMs:

Management status

Database record metadata

	Date	*User*	
Entered:	3/9/2016	paganob	
Last modified:	10/24/201	neala	
IC actions:	*Date*	*User*	*Action taken*
	10/14/201	bentonb	changed resource type to district; entered general note

Report Detail: S-007317

Identifiers

Report No.: S-007317

Other IDs:	*Type*	*Name*
	Submitter	AC Project 668
	Submitter	AC Project 668B
	Voided	S-7699

Cross-refs: See also S-007699

Citation information

Author(s): R. Paul Hampson, Gary S. Breschini, Trudy Haversat, and Micki Ryan

Year: 1985 (Mar)

Title: Preliminary Cultural Resources Reconnaissance of Assessor's Parcel Numbers 002-214-31 and 33, Salinas, Monterey County, California.

Affliliation: Archaeological Consulting

No. pages:

No. maps:

Attributes: Archaeological, Field study

Inventory size: c 5 ac

Disclosure: Not for publication

Collections: No

Sub-desig.: a

Author(s): R. Paul Hampson and Gary S. Breschini

Year: 1985 (Sep)

Title: Secondary Archaeological Testing of Assessors Parcel Numbers 0021-214-31 and 33 in Salinas, Monterey County, California

Affiliation: Archaeological Consulting

Report type(s): Archaeological, Excavation

Inventory size:

No. pages: 4

Disclosure: Not for publication

Collections: No

PDF Pages: 9-16

General notes

Associated resources

No. resources: 0

Has informals: No

Location information

County(ies): Monterey

USGS quad(s): Salinas

Address:	*Address*	*City*	*Assessor's parcel no.*	*Zip code*
			002-214-31	
			002-214-33	

PLSS:

Database record metadata

	Date	*User*
Entered:	4/7/2005	nwic-main
Last modified:	6/23/2015	hagell

IC actions:	*Date*	*User*	*Action taken*
	4/7/2005	jay	Appended records from NWICmain bibliographic database.
	5/26/2015	watsonr	Populated APN. Scanned in PDF.

	6/11/2015	mikulikc	voided S-007699; added additional citation 'a'

Record status: Verified

Report Detail: S-010634

Identifiers

Report No.: S-010634

Other IDs:	*Type*	*Name*
	Submitter	AC Project 1369
	Agency Nbr	HUD # 121-EH-272-NP-CMI-L8

Cross-refs:

Citation information

Author(s): Gary S. Breschini
Year: 1988 (Dec)
Title: Preliminary Cultural Resources Reconnaissance of a Parcel at West Menke and Martella Streets, Salinas, Monterey County, California
Affliliation: Archaeological Consulting
No. pages:
No. maps:
Attributes: Archaeological, Field study
Inventory size: c 1 ac
Disclosure: Not for publication
Collections: No

General notes

Associated resources

No. resources: 0
Has informals: No

Location information

County(ies): Monterey
USGS quad(s): Salinas
Address:
PLSS:

Database record metadata

	Date	*User*
Entered:	4/7/2005	nwic-main
Last modified:	6/23/2015	hagell

IC actions:	*Date*	*User*	*Action taken*
	4/7/2005	jay	Appended records from NWICmain bibliographic database.
	5/26/2015	watsonr	Scanned in PDF.

Record status: Verified

Report Detail: S-020593

Identifiers

Report No.: S-020593
Other IDs:
Cross-refs:

Citation information

Author(s): Barry A. Price
Year: 1998 (Mar)
Title: Cultural Resources Assessment, Pacific Bell Mobile Services Facility SF-830-05, Salinas, Monterey County, California (letter report)
Affliliation: Applied EarthWorks
No. pages:
No. maps:
Attributes: Archaeological, Field study
Inventory size: c 0.25 ac
Disclosure: Not for publication
Collections: No

General notes

Associated resources

No. resources: 0
Has informals: No

Location information

County(ies): Monterey
USGS quad(s): Salinas
Address:
PLSS:

Database record metadata

	Date	*User*	
Entered:	4/7/2005	nwic-main	
Last modified:	6/23/2015	muchb	
IC actions:	*Date*	*User*	*Action taken*
	4/7/2005	jay	Appended records from NWICmain bibliographic database.

Record status: Verified

Report Detail: S-022657

Identifiers

Report No.: S-022657
Other IDs:
Cross-refs:

Citation information

Author(s): Izaak Sawyer, Laurie Pfeiffer, Karen Rasmussen, and Judy Berryman
Year: 2000 (Apr)
Title: Phase 1 Archaeological Survey Along Onshore Portions of the Global West Fiber Optic Cable Project
Affliliation: Science Applications International Corporation
No. pages:
No. maps:
Attributes: Archaeological, Field study
Inventory size:
Disclosure: Not for publication
Collections: No

General notes

NWIC mapped study locations are based on the descriptions of surveyed areas and trenching as found in the individual 'Archaeological Field Investigation' sections. The Project Route Maps do not explicitly depict the actual archaeological survey areas. - MikulikC 1/8/2015

Associated resources

Primary No.	*Trinomial*	*Name*
P-27-000334	CA-MNT-000228	Hill #2 1929
P-27-000335	CA-MNT-000229	Golomshtok #2
P-27-000706	CA-MNT-000625	[none]
P-27-000806	CA-MNT-000731/H	DOT-5-Mon-1
P-27-001207	CA-MNT-001154/H	ARS 78-28-1
P-27-001227	CA-MNT-001175	Field # ESES-1
P-27-001228	CA-MNT-001176	Field # ESES-2
P-27-001393	CA-MNT-001365	Gibson Creek South
P-27-001408	CA-MNT-001382/H	FW 1
P-27-001482	CA-MNT-001462/H	Big Snake Site
P-41-000410		CT-1
P-43-000449	CA-SCL-000448/H	Temporary No. 15-C
P-44-000047	CA-SCR-000041	[none]
P-44-000155	CA-SCR-000152	Buena Vista 80
P-44-000156	CA-SCR-000153	[none]
P-44-000157	CA-SCR-000154	[none]
P-44-000174	CA-SCR-000172	JS-SWT-2
P-44-000270	CA-SCR-000268H	Manresa State Beach #1

No. resources: 18
Has informals: No

Location information

County(ies): Monterey, Other, San Francisco, Santa Clara, Santa Cruz
USGS quad(s): Marina, Monterey, Moss Landing, Prunedale, Salinas, San Francisco North, San Jose East, San Jose West, San Juan Bautista, Seaside, Spreckels, Watsonville East, Watsonville West
Address:
PLSS:

Database record metadata

	Date	*User*
Entered:	4/7/2005	nwic-main
Last modified:	3/21/2017	rinerg

IC actions:	*Date*	*User*	*Action taken*
	4/7/2005	jay	Appended records from NWICmain bibliographic database.

	2/23/2017	simsa	NWIC mapped study locations are based on the descriptions of surveyed areas and trenching as found in the individual 'Archaeological Field Investigation' sections. The Project Route Maps do not explicitly depict the actual archaeological survey areas.
	3/9/2017	bentonb	updated locations
	3/21/2017	rinerg	Appendices D-G: Confidential Archaeological Site Record Search Maps and Updated Site Record Forms… begins on PDF p. 307
Record status:	Verified		

Report Detail: S-033061

Identifiers

Report No.: S-033061

Other IDs:

Type	*Name*
Submitter	SWCA Cultural Resources Report Database No. 06-507
Submitter	SWCA Report No. 10715-180

Cross-refs:

Citation information

Author(s): Nancy Sikes, Cindy Arrington, Bryon Bass, Chris Corey, Kevin Hunt, Steve O'Neil, Catherine Pruett, Tony Sawyer, Michael Tuma, Leslie Wagner, and Alex Wesson

Year: 2006 (Dec)

Title: Cultural Resources Final Report of Monitoring and Findings for the Qwest Network Construction Project, State of California

Affliliation: SWCA Environmental Consultants

No. pages:

No. maps:

Attributes: Archaeological, Architectural/historical, Field study, Monitoring

Inventory size: c 1431 li mi

Disclosure: Not for publication

Collections: No

Sub-desig.: a

Author(s):

Year: 2006 (Dec)

Title: Cultural Resources Final Report of Monitoring and Findings for the Qwest Network Construction Project, State of California

Affiliation: SWCA Environmental Consultants

Report type(s): Archaeological, Monitoring

Inventory size:

No. pages:

Disclosure: Not for publication

Collections: No

PDF Pages: 312-602

Sub-desig.: b

Author(s): Nancy E. Sikes

Year: 2007 (Feb)

Title: Final Report of Monitoring and Findings for the Qwest Network Construction Project (letter report)

Affiliation: SWCA Environmental Consultants

Report type(s): Other research

Inventory size:

No. pages:

Disclosure: Not for publication

Collections: No

PDF Pages: 672-673

General notes

Numerous previously identified unrecorded resources were described in the report. C-1 (reported burials) was also within the project area. This report covers investigations throughout the state of California.

Associated resources

Primary No.	*Trinomial*	*Name*
P-01-000027	CA-ALA-000006	Nelson's Survey - "Village"
P-01-000040	CA-ALA-000020	JN-6
P-01-000087	CA-ALA-000310	Nelson's 310
P-01-000088	CA-ALA-000311	Nelson's 311

Report Detail: S-033061

P-01-000089	CA-ALA-000312	Nelson's 312
P-01-000090	CA-ALA-000313	Nelson's 313
P-07-000138	CA-CCO-000258	Nelson No. 258; JN-106
P-27-000802	CA-MNT-000727	ARS 77-66
P-27-001191	CA-MNT-001138	5-6-81-A
P-27-001207	CA-MNT-001154/H	ARS 78-28-1
P-28-000467	CA-NAP-000585H	Thompson's (Suscol) Wharf
P-43-000106	CA-SCL-000092/H	Sargent Ranch; US-1
P-43-000141	CA-SCL-000128/H	Holiday Inn Site; West San Carlo
P-43-000449	CA-SCL-000448/H	Temporary No. 15-C
P-43-000573	CA-SCL-000578H	Scovel Ranch Site
P-43-000575	CA-SCL-000580	B-3
P-43-000754		San Jose Market Box
P-43-000928	CA-SCL-000898H	Southern Pacific Railroad
P-43-001071	CA-SCL-000690	CA-SCL-Lick
P-48-000208		Voided: See P-48-000549
P-48-000211	CA-SOL-000397	Voided: see P-57-000198
P-48-000214	CA-SOL-000398H	Eppinger Spur
P-48-000441	CA-SOL-000407	ARS 96-25-01
P-48-000549	CA-SOL-000499H	Southern Pacific Railroad
P-49-001583	CA-SON-002152/H	[none]
P-57-000194	CA-YOL-000178H	Southern Pacific Railroad
P-57-000198	CA-YOL-000182	JN-114
P-57-000297		210 Rice Lane
P-57-000301		City of Davis City Hall
P-57-000307		223 University

No. resources: 30

Has informals: Yes

Location information

County(ies): Alameda, Contra Costa, Marin, Monterey, Napa, Other, San Benito, San Francisco, San Mateo, Santa Clara, Santa Cruz, Solano, Sonoma, Yolo

USGS quad(s): Allendale, Benicia, Bradley, Chittenden, Chualar, Cordelia, Cotati, Cupertino, Cuttings Wharf, Davis, Dixon, Elmira, Espinosa Canyon, Fairfield North, Fairfield South, Gilroy, Gonzales, Greenfield, Hames Valley, Hayward, Mare Island, Merritt, Milpitas, Montara Mtn, Morgan Hill, Moss Landing, Mountain View, Mt Madonna, Napa, Natividad, Newark, Niles, North Chalone Peak, Novato, Oakland East, Oakland West, Palo Alto, Palo Escrito Peak, Petaluma, Petaluma Point, Petaluma River, Prunedale, Redwood Point, Richmond, Sacramento West, Salinas, San Ardo, San Francisco North, San Francisco South, San Jose East, San Jose West, San Leandro, San Lucas, San Mateo, San Miguel, Santa Teresa Hills, Sears Point, Soledad, Thompson Canyon, Vine Hill, Watsonville East, Wunpost

Address:

PLSS:

Database record metadata

	Date	*User*	
Entered:	4/27/2007	guldenj	
Last modified:	5/12/2017	raelync	
IC actions:	*Date*	*User*	*Action taken*
	10/10/201	hagell	edited database
	2/15/2016	rinerg	add note that report covers area throughout California (per report's Abstract)
	6/8/2016	hagell	added other identifier & P#
	4/11/2017	raelync	Report verified, awaiting verification of 4 resources.
	4/21/2017	moored	Resources Verified
	5/12/2017	raelync	No author provided for additional citation 'a'.

Record status: Verified

Report Detail: S-043489

Identifiers

Report No.: S-043489

Other IDs:

Type	*Name*
Agency Nbr	CNU3535

Cross-refs:

Citation information

Author(s): Lorna Billat and Dana E. Supernowicz
Year: 2013 (Dec)
Title: Collocation Submission Packet, Downtown Salinas, CNU3535
Affliliation: EarthTouch, Inc.
No. pages:
No. maps:
Attributes: Archaeological, Architectural/historical, Field study
Inventory size:
Disclosure: Not for publication
Collections: No

Sub-desig.: a
Author(s): Dana E. Supernowicz
Year: 2013 (Dec)
Title: Architectural Evaluation Study of the Downtown Salinas Project, AT&T Mobility Site No. CNU3535, 220 Bridge Street, Salinas, Monterey County, California 93941
Affiliation: Historic Resource Associates
Report type(s): Architectural/historical, Field study
Inventory size:
No. pages:
Disclosure: Unrestricted
Collections: No
PDF Pages: 51-79

General notes

Associated resources

Primary No.	*Trinomial*	*Name*
P-27-003234		PG&E Moss Landing-Salinas El

No. resources: 1
Has informals: No

Location information

County(ies): Monterey
USGS quad(s): Salinas
Address:

Address	*City*	*Assessor's parcel no.*	*Zip code*
220 Bridge Street	Salinas		93941

PLSS:

Database record metadata

	Date	*User*
Entered:	4/3/2014	intern2
Last modified:	10/24/201	hagell

IC actions:
Record status: Verified

Report Detail: S-046390

Identifiers

Report No.: S-046390
Other IDs:
Cross-refs:

Citation information

Author(s): John Schlagheck
Year: 2015 (Feb)
Title: Archaeological Records Search and Site Reconnaissance, Haciendas Phase III and IV Housing Project, City of Salinas, Monterey County, California
Affliliation: Holman & Associates Archaeological Consulting
No. pages:
No. maps:
Attributes: Archaeological, Field study
Inventory size: c 2 ac
Disclosure: Not for publication
Collections: No

General notes

Associated resources

No. resources: 0
Has informals: No

Location information

County(ies): Monterey
USGS quad(s): Salinas

Address: Address	City	Assessor's parcel no.	Zip code
		003-131-010	
		003-145-010	
		003-131-018	

PLSS: Rancho Nacional Mexican Era

Database record metadata

	Date	User
Entered:	6/4/2015	paganob
Last modified:	7/5/2016	grahams

IC actions:
Record status: Verified

Report Detail: S-047415

Identifiers

Report No.: S-047415

Other IDs:

Type	*Name*
OHP PRN	HUD 2015_0306_004
Submitter	Project 5040
Voided	S-46500

Cross-refs: See also S-046500

Citation information

Author(s): Mary Doane and Gary S. Breschini

Year: 2015 (Jan)

Title: Phase 1 Archaeological Survey of APN 002-191-018, 019, 020, 021, 023, 024, 028 & 029, Salinas, Monterey County, California

Affliliation: Archaeological Consulting

No. pages:

No. maps:

Attributes: Archaeological, Field study

Inventory size: c 0.1 ac

Disclosure: Not for publication

Collections: No

Sub-desig.: a

Author(s): Carol Roland-Nawi

Year: 2015 (Apr)

Title: HUD 2015_0306_004; Housing Development Project Located at 71 Soledad Street, Salinas

Affiliation: Office of Historic Preservation

Report type(s): OHP Correspondence

Inventory size:

No. pages:

Disclosure: Unrestricted

Collections: No

PDF Pages: 44-47

General notes

Associated resources

Primary No.	*Trinomial*	*Name*
P-27-003465		Chinese American Community

No. resources: 1

Has informals: No

Location information

County(ies): Monterey

USGS quad(s): Salinas

Address:

Address	*City*	*Assessor's parcel no.*	*Zip code*
71 Soledad Street	Salinas	002-191-018	
		002-191-019	
		002-191-020	
		002-191-021	
		002-191-023	
		002-191-024	
		002-191-028	
		002-191-029	

PLSS:

Report Detail: S-047415

Database record metadata

	Date	User	
Entered:	3/9/2016	paganob	
Last modified:	10/24/201	neala	
IC actions:	*Date*	*User*	*Action taken*
	10/14/201	bentonb	notations added for voided S-46500 (duplicate)
	5/4/2017	rinerg	Recode "Concurrence Correspondence" in additional citation title to Type=OHP Correspondence
Record status:	Verified		

Report Detail: S-047776

Identifiers

Report No.: S-047776
Other IDs:
Cross-refs:

Citation information

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Appendix F:
Paleontological Records Search Results

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May 31, 2017

Dana DePietro
FirstCarbon Solutions
1350 Treat Boulevard, Suite 380
Walnut Creek, CA 94597

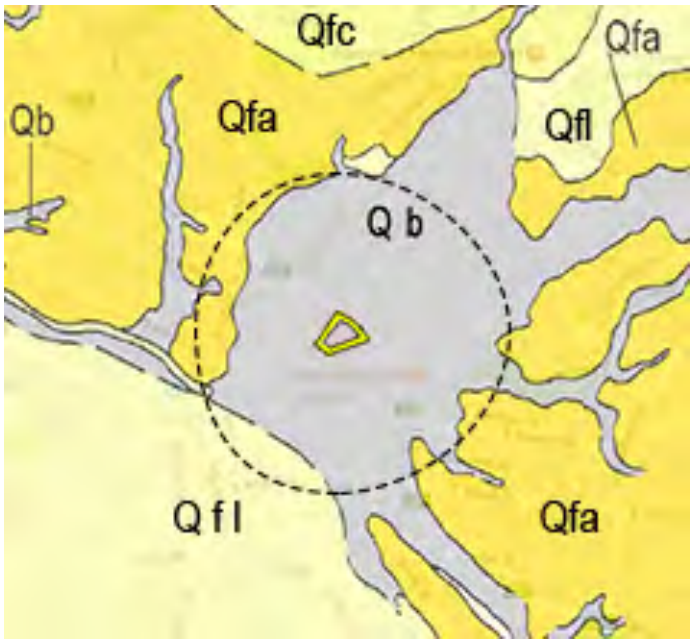
Re: Paleontological Records Search: Rodeo Project (3911.0007), Salinas, Monterey County

Dear Dr. DePietro:

As per your request, I have performed a records search on the University of California Museum of Paleontology (UCMP) database for the San Mateo Central Park project in Santa Clara County. The project site is Pepsi Park, a sports park situated on the northwest side of Sun Street and on the southwest side of Veterans Memorial Highway (Hwy 101). This flat terrain has included athletic field and is therefore heavily disturbed. It is located in SE¼, SW¼, Sec. 28, T14S, R3E, Salinas quadrangle (1947 USGS 7.5-series topographic map, photorevised 1984). The entire surface of its flat terrain has been disturbed by the development and usage of the park.

Geologic Units

According to the part of geologic map of Wagner et al. (2002) shown here, the surface of project site (at center) is well within an area of Quaternary basin deposits (Qb). The four units shown here are all Quaternary and not differentiated as either Holocene or Pleistocene. Extending into the half-mile search perimeter (dashed outline) are fan deposits (Qfa) from the northwest and southeast, and flood plain deposits (Qfl) from the southwest. Both of these units extend farther in the subsurface of the search perimeter and one or both lie below the basin deposits.



Map Legend

Qb	Basin deposits
Qfa	Fan deposits of Antioch
Qfc	Fan deposits of Chualar
Qfl	Flood plain deposits

UCMP Records Search

I performed a records search on the University of California Museum of Paleontology that was focused on the Salinas quadrangle. There are no fossil localities of any kind within a half-mile of the project site. The only UCMP vertebrate locality in the Salinas quadrangle is V5576 (Lake Heinz), about a quarter-mile beyond the search perimeter, where a *Bison latifrons* (longhorn bison) skull was recovered from late Pleistocene alluvium. This locality is in the area mapped as flood plain deposits (Qfl).

Remarks and Recommendations

A paleontological walkover survey of the site prior to construction is not warranted because the surface has been disturbed. Because the geologic units in the area are of undifferntiated Quaternary age, it prudent to treat all of them as Pleistocene and paleontologically sensitive. Monitoring of project-related excavations is recommended because Pleistocene deposits throughout California have yielded a wealth of significant fossils. Considering that the occurrence of Pleistocene fossils is generally unpredictable due to the dynamics of the sedimentary regime in which they were transported and deposited, the paleontological potential in these areas is typically classified as uncertain or low until a discovery is made.

If any bones, teeth, or unusual concentrations of other fossils are encountered during this project, all construction activities should be diverted from the find until the cultural resources monitor has inspected the find and, if deemed significant, salvaged it for deposition in an appropriate repository for the benefit of scientific education and research. At the monitor's discretion, a professional paleontologist may be brought onto the site to assist in evaluating and recovering the find. Collected fossils should be deposited in an accredited repository such as the UCMP, where they will be properly curated and made available for present and future research.

Sincerely,

Reference Cited

Wagner, D.L., E.E., Greene, H.G., Saucedo, G.J., and Pridmore, C.I., 2002, Geologic map of the Monterey 30'X60' quadrangle and adjacent areas California. California Geological Survey, Regional Geologic Map No. 1, 1:100,000 scale

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Greenhouse Gas Impact Analysis
Rodeo Property Project
City of Salinas, Monterey County, California

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ACRONYMS AND ABBREVIATIONS

AB	Assembly Bill
AMBAG	Association of Monterey Bay Area Governments
AQI	air quality index
AQMP	Air Quality Management Plan
ARB	California Air Resources Board
CAA	Clean Air Act
CalEEMod	California Emissions Estimator Model
ARB	California Air Resources Board
CCAA	California Clean Air Act
CCR	California Code of Regulations
CEC	California Energy Commission
CEQA	California Environmental Quality Act
CH_4	methane
CO_2	carbon dioxide
CO_2e	carbon dioxide equivalents
EPA	Environmental Protection Agency
ft^2	square feet
GHG	greenhouse gases
gpm	gallons per minute
IPCC	Intergovernmental Panel on Climate Change
lb/MWh	pounds per megawatt hour
LEV	low emission vehicle
MBARD	Monterey Bay Air Resources District
MCAP	Municipal Climate Action Plan
MMT CO_2e	million metric tons of carbon dioxide equivalent
MPO	Metropolitan Planning Organization
MT CO_2e	metric tons of carbon dioxide equivalent
MTP/SCS	Metropolitan Transportation Plan/Sustainable Communities Strategy
NCCAB	North Central Coast Air Basin
NHTSA	National Highway Transportation Safety Administration
ppb	parts per billion
ppm	parts per million
psi	pounds per square inch
SB	Senate Bill
SIP	state implementation plan

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SECTION 1: EXECUTIVE SUMMARY

1.1 - Purpose and Methods of Analysis

The following analysis was prepared to evaluate whether the Project would cause significant greenhouse gas impacts. This assessment follows the context of the California Environmental Quality Act (CEQA, California Public Resources Code Sections 21000, et seq.). The methodology follows Monterey Bay Air Resources District (MBARD) recommendations for quantification of emissions and evaluation of air quality impacts.

Greenhouse gas emissions are evaluated in comparison to targets for local governments suggested in the California Air Resources Board's (ARB) Assembly Bill (AB) 32 Scoping Plan (the Scoping Plan). The analysis will demonstrate consistency with AB 32 reduction targets.

1.2 - Project Summary

1.2.1 - Site Location

The Rodeo Property Project is located at 295 Sun Way, south and west of US 101 in the central part of the City of Salinas, Monterey County, California (see Exhibit 1). North and south of the Project site are existing warehouse/light industrial uses. To the north of the Project site is Security Public Storage; to the south at 10 Simas Street is Celebration Church and at 34 Simas Street is a light industrial building containing an ambulance dispatch business and an electrical supply company. To the southwest of the Project at 8 Sun Street is Sun Street Centers Men's Residential Program. Adjacent to and west of the Project is open space; however, there is a mix of land uses further west of the Project, including St. James CME Church located at 285 Calle Cebu, Haciendas Place multi-family residential located at 245 Calle Cebu, and the Rancho Salinas Mobile Park located at 150 Sherwood Drive. The Project site is bounded by Sun Street and Sun Way to the west, US 101 to the east, Security Public Storage to the north, and light industrial uses to the south (see Exhibit 2).

1.2.2 - Project Description

The project is a General Plan amendment and Rezone that would allow development of industrial and commercial uses on a 6.8-acre site located on Sun Street adjacent to US 101. The proposed land use designation would allow the site to be developed at a floor area ratio of 0.4, which would allow for the development of up to 118,600 square feet (sq.ft.) of industrial floor space. For purpose of this analysis, 4 percent of the floor space (4,700 sq.ft.) was assumed to be occupied by support office space which is categorized as general office space. The remaining floor area (113,900 sq.ft.) was modeled as light industrial space. The site is designated in the General Plan as Open Space. Access to the site is provided via Sun Street and its connections to Calle Cebu and E. Market Street.

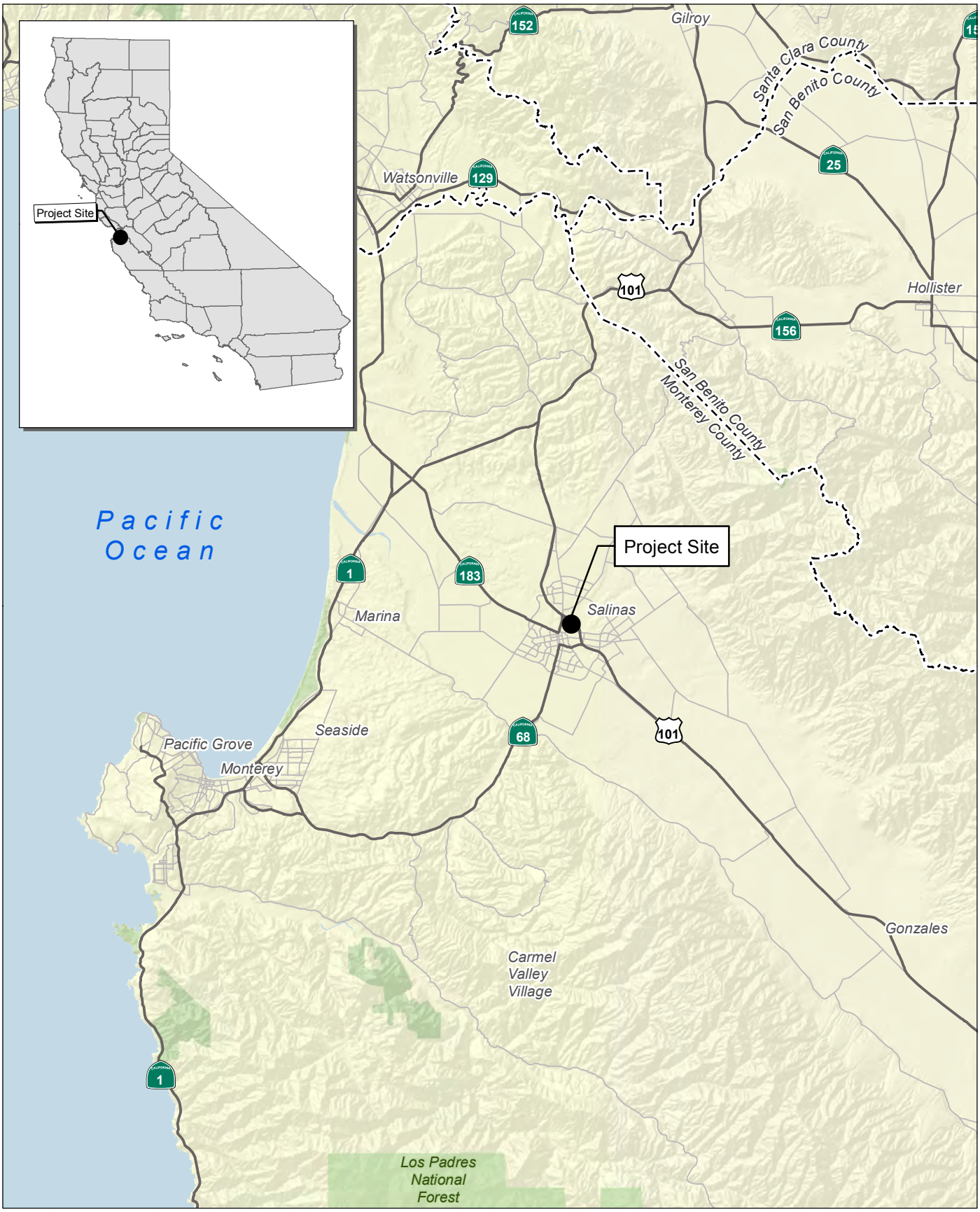
1.3 - Summary of Analysis Results

Impact GHG-1: The Project would not generate direct and indirect greenhouse gas emissions that would result in a significant impact on the environment.

Less than significant impact.

Impact GHG-2: The Project would not conflict with any applicable plan, policy or regulation of an agency adopted to reduce the emissions of greenhouse gases.

Less than significant impact.



Source: Census 2000 Data, The CaSIL, FCS GIS 2016.

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Exhibit 1
Regional Location Map

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Source: ESRI Imagery

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1,000 500 0 1,000 Feet

Exhibit 2
Local Vicinity Map
Aerial Base

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SECTION 2: CLIMATE CHANGE SETTING

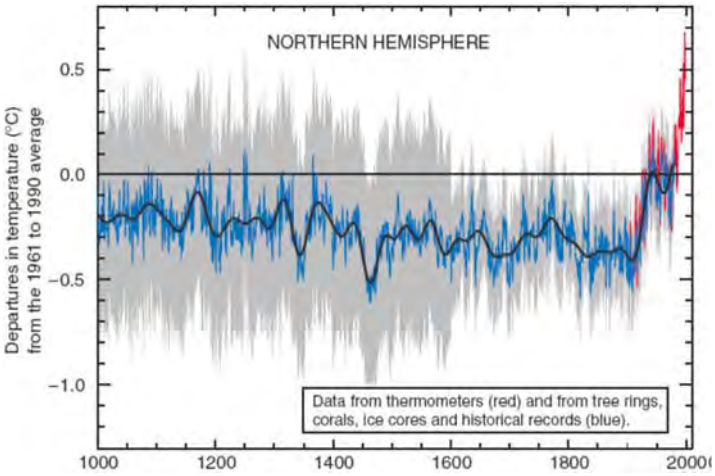
2.1 - Climate Change

Climate change is a change in the average weather of the earth that is measured by alterations in wind patterns, storms, precipitation, and temperature. These changes are assessed using historical records of temperature changes occurring in the past, such as during previous ice ages. Many of the concerns regarding climate change use this data to extrapolate a level of statistical significance specifically focusing on temperature records from the last 150 years (the Industrial Age) that differ from previous climate changes in rate and magnitude.

The United Nations Intergovernmental Panel on Climate Change (IPCC) constructed several emission trajectories of greenhouse gases (GHGs) needed to stabilize global temperatures and climate change impacts. In its Fourth Assessment Report, the IPCC predicted that the global mean temperature change from 1990 to 2100, given six scenarios, could range from 1.1 degrees Celsius (°C) to 6.4°C. Regardless of analytical methodology, global average temperatures and sea levels are expected to rise under all scenarios (IPCC 2007a). The report also concluded that "[w]arming of the climate system is unequivocal," and that "[m]ost of the observed increase in global average temperatures since the mid-20th century is very likely due to the observed increase in anthropogenic greenhouse gas concentrations."

Some question the validity of the temperature graph used by the IPCC in some form in the Third and Fourth Assessment Reports (see Figure 1). The figure shows that temperatures are relatively stable until 1900, when the temperature increases rapidly. Some scientists have had trouble duplicating the data used for the graph (McIntyre and McKitrick 2003) and indicated that if the data are correctly handled, then it "shows the 20th century climate to be unexceptional compared to earlier centuries" (McKitrick 2005). Hans von Storch, a German climate scientist, claimed that the methods used by Mann et al. probably underestimated the temperature fluctuations in the past by a factor of two or more (Von Storch et al. 2004).

Figure 1: Historical Temperature Changes



Consequences of Climate Change in California

In California, climate change may result in consequences such as the following (CCCC 2006; Moser et al. 2009):

- **A reduction in the quality and supply of water from the Sierra snowpack.** If heat-trapping emissions continue unabated, more precipitation will fall as rain instead of snow, and the snow that does fall will melt earlier, reducing the Sierra Nevada spring snowpack by as much as 70 to 90 percent. This can lead to challenges in securing adequate water supplies. It can also lead to a potential reduction in hydropower.
- **Increased risk of large wildfires.** If rain increases as temperatures rise, wildfires in the grasslands and chaparral ecosystems of southern California are estimated to increase by approximately 30 percent toward the end of the 21st century because more winter rain will stimulate the growth of more plant "fuel" available to burn in the fall. In contrast, a hotter, drier climate could promote up to 90 percent more northern California fires by the end of the century by drying out and increasing the flammability of forest vegetation.
- **Reductions in the quality and quantity of certain agricultural products.** The crops and products likely to be adversely affected include wine grapes, fruit, nuts, and milk.
- **Exacerbation of air quality problems.** If temperatures rise to the medium warming range, there could be 75 to 85 percent more days with weather conducive to ozone formation in Los Angeles and the San Joaquin Valley, relative to today's conditions. This is more than twice the increase expected if rising temperatures remain in the lower warming range. This increase in air quality problems could result in an increase in asthma and other health-related problems.
- **A rise in sea levels resulting in the displacement of coastal businesses and residences.** During the past century, sea levels along California's coast have risen about seven inches. If emissions continue unabated and temperatures rise into the higher anticipated warming range, sea level is expected to rise an additional 22 to 35 inches by the end of the century. Elevations of this magnitude would inundate coastal areas with salt water, accelerate coastal erosion, threaten vital levees and inland water systems, and disrupt wetlands and natural habitats.
- **An increase temperature and extreme weather events.** Climate change is expected to lead to increases in the frequency, intensity, and duration of extreme heat events and heat waves in California. More heat waves can exacerbate chronic disease or heat-related illness.
- **A decrease in the health and productivity of California's forests.** Climate change can cause an increase in wildfires, an enhanced insect population, and establishment of non-native species.

2.2 - Greenhouse Gases

Gases that trap heat in the atmosphere are GHGs. The effect is analogous to the way a greenhouse retains heat. Common GHGs include water vapor, carbon dioxide (CO_2), methane (CH_4), nitrous

oxides (N_2O), chlorofluorocarbons, hydrofluorocarbons, perfluorocarbons, sulfur hexafluoride, ozone, and aerosols. Natural processes and human activities emit GHGs. The presence of GHGs in the atmosphere affects the earth's temperature. Emissions from human activities, such as electricity production and vehicle use, have likely elevated the concentration of some of these gases in the atmosphere beyond the level of naturally occurring concentrations.

Climate change is driven by forcings and feedbacks. Radiative forcing is the difference between the incoming energy and outgoing energy in the climate system. Positive forcing tends to warm the surface while negative forcing tends to cool it. Radiative forcing values are typically expressed in watts per square meter. A feedback is a climate process that can strengthen or weaken a forcing. For example, when ice or snow melts, it reveals darker land underneath which absorbs more radiation and causes more warming.

The global warming potential is the potential of a gas or aerosol to trap heat in the atmosphere. Individual GHG compounds have varying global warming potential and atmospheric lifetimes. The global warming potential of a GHG is a measure of how much a given mass of a GHG contributes to global warming. Essentially, the global warming potential of a GHG is a measurement of the radiative forcing of that GHG compared with the reference gas, CO_2. Carbon dioxide has a global warming potential of one.

To describe how much global warming a given type and amount of GHG may cause, the carbon dioxide equivalent (CO_2e) is used. The calculation of the CO_2e is a consistent methodology for comparing GHG emissions since it normalizes various GHG emissions to a consistent reference gas (carbon dioxide). For example, methane's warming potential of 21 indicates that CH_4 has 21 times greater warming affect than CO_2 on a molecule per molecule basis. A CO_2e is a mass emission of an individual GHG multiplied by its global warming potential.

Greenhouse gases defined by AB 32 (see the Climate Change Regulatory Environment section for a description) include CO_2, CH_4, N_2O, hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride. They are described in Table 1.

Table 1: Description of Greenhouse Gases

Greenhouse Gas	Description and Physical Properties	Sources
Nitrous oxide (N_2O)	Nitrous oxide is a colorless GHG. It has a lifetime of 114 years. Its global warming potential is 310.	Microbial processes in soil and water, fuel combustion, and industrial processes.
Methane (CH_4)	Methane is a flammable gas and is the main component of natural gas. It has a lifetime of 12 years. Its global warming potential is 21.	Methane is extracted from geological deposits (natural gas fields). Other sources are landfills, fermentation of manure, and decay of organic matter.

Table 1 (cont.): Description of Greenhouse Gases

Greenhouse Gas	Description and Physical Properties	Sources
Carbon dioxide (CO_2)	Carbon dioxide is an odorless, colorless, natural GHG. Carbon dioxide's global warming potential is 1. The concentration in 2005 was 379 parts per million (ppm), which is an increase of about 1.4 ppm per year since 1960.	Natural sources include decomposition of dead organic matter; respiration of bacteria, plants, animals, and fungus; evaporation from oceans; and volcanic outgassing. Anthropogenic sources are from burning coal, oil, natural gas, and wood.
Chlorofluorocarbons	These are gases formed synthetically by replacing all hydrogen atoms in CH_4 or ethane with chlorine and/or fluorine atoms. They are nontoxic, nonflammable, insoluble, and chemically unreactive in the troposphere (the level of air at the earth's surface). Global warming potentials range from 3,800 to 8,100.	Chlorofluorocarbons were synthesized in 1928 for use as refrigerants, aerosol propellants, and cleaning solvents. They destroy stratospheric ozone. The 1987 Montreal Protocol on Substances that Deplete the Ozone Layer prohibited their production.
Hydrofluorocarbons	Hydrofluorocarbons are a group of GHGs containing carbon, chlorine, and at least one hydrogen atom. Global warming potentials range from 140 to 11,700.	Hydrofluorocarbons are synthetic manmade chemicals used as a substitute for chlorofluorocarbons in applications such as automobile air conditioners and refrigerants.
Perfluorocarbons	Perfluorocarbons have stable molecular structures and only break down by ultraviolet rays about 60 kilometers above Earth's surface. Because of this, they have long lifetimes, between 10,000 and 50,000 years. Global warming potentials range from 6,500 to 9,200.	Two main sources of perfluorocarbons are primary aluminum production and semiconductor manufacturing.
Sulfur hexafluoride	Sulfur hexafluoride is an inorganic, odorless, colorless, and nontoxic, nonflammable gas. It has a lifetime of 3,200 years. It has a high global warming potential, 23,900.	This gas is manmade and used for insulation in electric power transmission equipment, in the magnesium industry, in semiconductor manufacturing, and as a tracer gas.
Sources: Compiled from a variety of sources, primarily IPCC 2007a and 2007b.		

Other GHGs include water vapor, ozone, and aerosols. Water vapor is an important component of our climate system and is not regulated. Ozone and aerosols are short-lived GHGs; global warming potentials for short-lived GHGs are not defined by the IPCC. Aerosols can remain suspended in the atmosphere for about a week, and can warm the atmosphere by absorbing heat and cool the atmosphere by reflecting light.

Black carbon is formed by incomplete combustion of fossil fuels, biofuels, and biomass. Sources of black carbon within a jurisdiction may include exhaust from diesel trucks, vehicles, and equipment, as well as smoke from biogenic combustion. Biogenic combustion sources of black carbon include the burning of biofuels used for transportation, the burning of biomass for electricity generation and heating, prescribed burning of agricultural residue, and natural and unnatural wildfires. Black carbon is not a gas but an aerosol—particles or liquid droplets suspended in air. Black carbon only remains in the atmosphere for days to weeks, as opposed to other GHGs that can remain in the atmosphere for years. When black carbon deposits on snow it absorbs sunlight, reduces sunlight reflectivity, and hastens snowmelt. Direct effects include absorbing incoming and outgoing radiation; indirectly, black carbon can also affect cloud reflectivity, precipitation, and surface dimming (cooling).

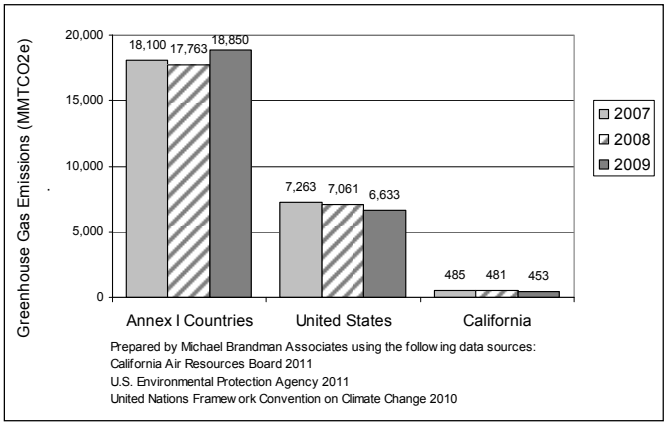
The Project would emit black carbon through emissions of diesel particulate matter (DPM) during construction. However, procedures to quantify changes due to black carbon emissions have not been widely accepted or thoroughly researched (IPCC 2007; Wilson and Walters 2012). Therefore, impacts to climate change from black carbon are speculative at this time and no further discussion is necessary.

Although there could be health effects resulting from changes in the climate and the consequences that it can bring about, inhalation of GHGs at levels currently in the atmosphere would not result in adverse health effects, with the exception of ozone and aerosols (particulate matter). The potential health effects of ozone and particulate matter are discussed in criteria pollutant analyses. At very high indoor concentrations (not at levels existing outside), CO_2, CH_4, sulfur hexafluoride, and some chlorofluorocarbons can cause suffocation as the gases can displace oxygen (Center for Disease Control 2010; Occupational Safety and Health Administration 2003).

2.3 - Emissions Inventories

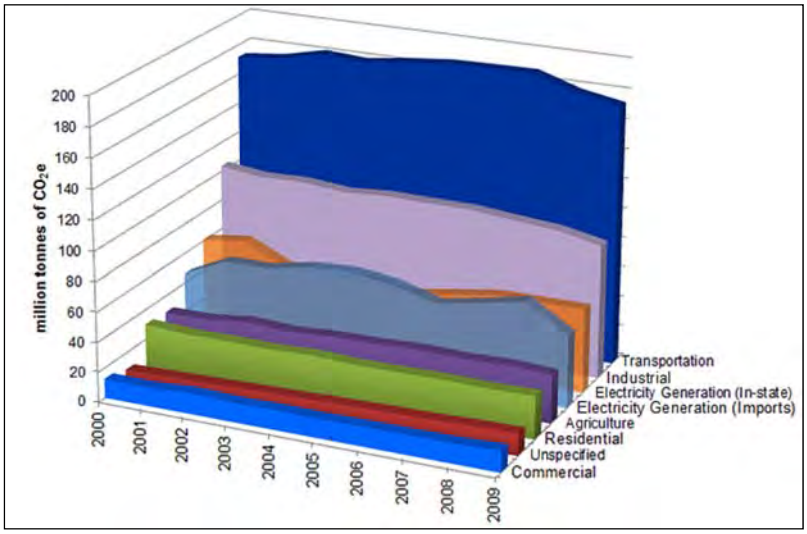
Emissions worldwide were approximately 49,000 million metric tons of carbon dioxide equivalents (MMT CO_2e) in 2004 (IPCC 2007b). Greenhouse gas emissions in 2007, 2008, and 2009 are shown in Figure 2. Annex I parties refer to countries that joined the United Nations Framework Convention on Climate Change.

Figure 2: Greenhouse Gas Emissions Trends



As shown in Figure 3, the main contribution of GHG emissions in California between the years 2000 and 2009 was transportation. The second highest sector was industrial, which includes sources from refineries, general fuel use, oil and gas extraction, cement plants, and cogeneration heat output.

Figure 3: Greenhouse Gas Emission Trends by Sector in California



Source: ARB 2011a.

2.4 - Regulatory Setting

2.4.1 - International

Climate change is a global issue involving GHG emissions from all around the world; therefore, countries such as the ones discussed below have made an effort to reduce GHGs.

Intergovernmental Panel on Climate Change. In 1988, the United Nations and the World Meteorological Organization established the IPCC to assess the scientific, technical and socio-economic information relevant to understanding the scientific basis of risk of human-induced climate change, its potential impacts, and options for adaptation and mitigation.

United Nations Framework Convention on Climate Change (Convention). On March 21, 1994, the United States joined a number of countries around the world in signing the Convention. Under the Convention, governments gather and share information on GHG emissions, national policies, and best practices; launch national strategies for addressing GHG emissions and adapting to expected impacts, including the provision of financial and technological support to developing countries; and cooperate in preparing for adaptation to the impacts of climate change.

Kyoto Protocol. The Kyoto Protocol is an international agreement linked to the United Nations Framework Convention on Climate Change. The major feature of the Kyoto Protocol is that it sets binding targets for 37 industrialized countries and the European community for reducing GHG emissions at average of 5 percent against 1990 levels over the five-year period 2008-2012. The Convention (as discussed above) encouraged industrialized countries to stabilize emissions; however, the Protocol commits them to do so. Developed countries have contributed more emissions over

the last 150 years; therefore, the Protocol places a heavier burden on developed nations under the principle of "common but differentiated responsibilities."

The United States has not entered into force of the Kyoto Protocol. However, other countries have entered, such as Australia, Canada, China, the European Union (Belgium, Denmark, Germany, the Hellenic Republic, Spain, France, Ireland, Italy, Luxembourg, Netherlands, Austria, Portugal, Finland, Sweden, Great Britain, and Northern Ireland), Japan, Mexico, and New Zealand.

In 2001, President George W. Bush indicated that he would not submit the treaty to the U.S. Senate for ratification, which effectively ended American involvement in the Kyoto Protocol. In December 2009, international leaders met in Copenhagen to address the future of international climate change commitments post-Kyoto. No binding agreement was reached in Copenhagen; however, the Committee identified the long-term goal of limiting the maximum global average temperature increase to no more than 2°C above pre-industrial levels, subject to a review in 2015. The United Nations Climate Change Committee held additional meetings in Durban, South Africa in November 2011; Doha, Qatar in November 2012; and Warsaw, Poland in November 2013. The meetings are gradually gaining consensus among participants on individual climate change issues.

2.4.2 - National

Prior to the last decade, there have been no concrete federal regulations of GHGs or major planning for climate change adaptation. The following are actions regarding the federal government, GHGs, and fuel efficiency.

Greenhouse Gas Endangerment. *Massachusetts v. EPA* (Supreme Court Case 05-1120) was argued before the United States (U.S.) Supreme Court on November 29, 2006, in which it was petitioned that the Environmental Protection Agency (EPA) regulate four GHGs, including carbon dioxide, under Section 202(a)(1) of the Clean Air Act (CAA). A decision was made on April 2, 2007, in which the Supreme Court found that GHGs are air pollutants covered by the CAA. The Court held that the Administrator must determine whether emissions of GHGs from new motor vehicles cause or contribute to air pollution, which may reasonably be anticipated to endanger public health or welfare, or whether the science is too uncertain to make a reasoned decision. On December 7, 2009, the EPA Administrator signed two distinct findings regarding GHGs under section 202(a) of the CAA:

- Endangerment Finding: The Administrator finds that the current and projected concentrations of the six key well-mixed greenhouse gases—CO_2, CH_4, N_2O, hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride—in the atmosphere threaten the public health and welfare of current and future generations; and
- Cause or Contribute Finding: The Administrator finds that the combined emissions of these well-mixed greenhouse gases from new motor vehicles and new motor vehicle engines contribute to the greenhouse gas pollution, which threatens public health and welfare.

These findings do not impose requirements on industry or other entities. However, this was a prerequisite for implementing GHG emissions standards for vehicles, as discussed in the section "Clean Vehicles" below.

The EPA denied ten petitions for Reconsideration of the Endangerment and Cause or Contribute Findings in 2010. Some of the petitioners included the Ohio Coal Association, Peabody Energy Company, and the State of Texas.

In September 2011, the EPA Office of Inspector General evaluated the EPA's compliance with established policy and procedures in the development of the endangerment finding, including processes for ensuring information quality. The evaluation concluded that the technical support document should have had more rigorous EPA peer review.

In June 2012, a federal appeals court rejected a lawsuit by thirteen states against the EPA. The suit alleged that the EPA violated the law by relying almost exclusively on data from the United Nations IPCC rather than doing its own research or testing data according to federal standards. The states include Virginia, Texas, Alabama, Florida, Hawaii, Indiana, Kentucky, Louisiana, Mississippi, Nebraska, North Dakota, Oklahoma, South Carolina, South Dakota, and Utah. Virginia intends to petition the Supreme Court to review the case.

Clean Vehicles. Congress first passed the Corporate Average Fuel Economy law in 1975 to increase the fuel economy of cars and light duty trucks. The law has become more stringent over time. On May 19, 2009, President Obama put in motion a new national policy to increase fuel economy for all new cars and trucks sold in the United States. On April 1, 2010, the EPA and the Department of Transportation's National Highway Traffic Safety Administration (NHTSA) announced a joint final rule establishing a national program that would reduce GHG emissions and improve fuel economy for new cars and trucks sold in the United States.

The first phase of the national program would apply to passenger cars, light-duty trucks, and medium-duty passenger vehicles, covering model years 2012 through 2016. They require these vehicles to meet an estimated combined average emissions level of 250 grams of carbon dioxide per mile, equivalent to 35.5 miles per gallon if the automobile industry were to meet this CO_2 level solely through fuel economy improvements. Together, these standards would cut CO_2 emissions by an estimated 960 million metric tons and 1.8 billion barrels of oil over the lifetime of the vehicles sold under the program (model years 2012-2016). On August 28, 2012, EPA and NHTSA issued a joint Final Rulemaking to extend the National Program of harmonized GHG and fuel economy standards to model year 2017 through 2025 passenger vehicles. Over the lifetime of the model years 2017-2025 standards, this program is projected to save approximately 4 billion barrels of oil and 2 billion metric tons of GHG emissions, with net benefits up to $451 billion.

On October 25, 2010, the EPA and the U.S. Department of Transportation proposed the first national standards to reduce GHG emissions and improve fuel efficiency of *heavy-duty trucks and buses*. For combination tractors, the agencies are proposing engine and vehicle standards that begin in the 2014 model year and achieve up to a 20-percent reduction in carbon dioxide emissions and fuel consumption by the 2018 model year. For heavy-duty pickup trucks and vans, the agencies are proposing separate gasoline and diesel truck standards, which phase in starting in the 2014 model year and achieve up to a 10-percent reduction for gasoline vehicles and 15-percent reduction for diesel vehicles by 2018 model year (12 and 17 percent respectively if accounting for air conditioning leakage). Lastly, for vocational vehicles, the agencies are proposing engine and vehicle standards

starting in the 2014 model year, which would achieve up to a 10-percent reduction in fuel consumption and carbon dioxide emissions by 2018 model year.

Cap and Trade. Cap and trade refers to a policy tool where emissions are limited to a certain amount and can be traded, or provides flexibility on how the emitter can comply. Successful examples in the United States include the Acid Rain Program and the NO_x (oxides of nitrogen) Budget Trading Program in the northeast. There is no federal cap and trade program currently; however, some states have joined to create initiatives to provide a mechanism for cap and trade.

The Regional Greenhouse Gas Initiative is an effort to reduce GHGs among the states of Connecticut, Delaware, Maine, Maryland, Massachusetts, New Hampshire, New York, Rhode Island, and Vermont. Each state caps CO_2 emissions from power plants, auctions CO_2 emission allowances, and invests the proceeds in strategic energy programs that further reduce emissions, save consumers money, create jobs, and build a clean energy economy. The Initiative began in 2008.

The Western Climate Initiative partner jurisdictions have developed a comprehensive initiative to reduce regional GHG emissions to 15 percent below 2005 levels by 2020. The partners are California, British Columbia, Manitoba, Ontario, and Quebec. Its cap and trade program is estimated to be fully implemented in 2015.

2.4.3 - California

Executive Order S-3-05. Former California Governor Arnold Schwarzenegger announced on June 1, 2005, through Executive Order S-3-05, the following reduction targets for GHG emissions:

- By 2010, reduce greenhouse gas emissions to 2000 levels;
- By 2020, reduce greenhouse gas emissions to 1990 levels; and
- By 2050, reduce greenhouse gas emissions to 80 percent below 1990 levels.

The 2050 reduction goal represents what scientists believe is necessary to reach levels that will stabilize the climate. The 2020 goal established an aggressive, but achievable, mid-term target. Because this is an executive order, the goals are not legally enforceable for local governments or the private sector.

AB 32. The California State Legislature enacted AB 32, the California Global Warming Solutions Act of 2006. AB 32 requires that GHGs emitted in California be reduced to 1990 levels by the year 2020. "Greenhouse gases" as defined under AB 32 include CO_2, CH_4, N_2O, hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride. ARB is the state agency charged with monitoring and regulating sources of GHGs. AB 32 states the following:

> Global warming poses a serious threat to the economic well-being, public health, natural resources, and the environment of California. The potential adverse impacts of global warming include the exacerbation of air quality problems, a reduction in the quality and supply of water to the state from the Sierra snowpack, a rise in sea levels resulting in the displacement of thousands of coastal businesses and residences, damage to marine ecosystems and the natural environment, and an

increase in the incidences of infectious diseases, asthma, and other human health-related problems.

The ARB Board approved the 1990 GHG emissions level of 427 MMT CO_2e on December 6, 2007 (ARB 2007). Therefore, emissions generated in California in 2020 are required to be equal to or less than 427 MMT CO_2e. Emissions in 2020 in a "business as usual" scenario were previously estimated to be 596 MMT CO_2e. However, the most recent estimate for year 2020 business as usual is 545 MMT CO_2e (ARB 2010). Therefore, a 21.7-percent reduction from the year 2020 business as usual forecast is required to achieve the year 1990 emissions target.

Under AB 32, the ARB published its Final Expanded List of Early Action Measures to Reduce Greenhouse Gas Emissions in California. Discrete early action measures are currently underway or are enforceable by January 1, 2010. The ARB has 44 early action measures that apply to the transportation, commercial, forestry, agriculture, cement, oil and gas, fire suppression, fuels, education, energy efficiency, electricity, and waste sectors. Of these early action measures, nine are discrete early action measures, as they are regulatory and enforceable by January 1, 2010. The ARB estimates that the 44 recommendations will result in reductions of at least 42 MMT CO_2e by 2020.

The Scoping Plan contains measures designed to reduce the State's emissions to 1990 levels by the year 2020 (ARB 2008). The Scoping Plan identifies recommended measures for multiple GHG emission sectors and the associated emission reductions needed to achieve the year 2020 emissions target.

In addition, the Scoping Plan differentiates between "capped" and "uncapped" strategies. Capped strategies are subject to the proposed cap-and-trade program. The Scoping Plan states that the inclusion of these emissions within the cap-and trade program will help ensure that the year 2020 emission targets are met despite some degree of uncertainty in the emission reduction estimates for any individual measure. Implementation of the capped strategies is calculated to achieve a sufficient amount of reductions by 2020 to achieve the emission target contained in AB 32. Uncapped strategies that will not be subject to the cap-and-trade emissions caps and requirements are provided as a margin of safety by accounting for additional GHG emission reductions.[1]

On May 22, 2014 the ARB approved the First Update to the Scoping Plan. The update builds upon the Initial Scoping Plan with new strategies and recommendations.

Pavley Regulations and Fuel Efficiency Standards. California AB 1493, enacted on July 22, 2002, required the ARB to develop and adopt regulations that reduce GHGs emitted by passenger vehicles and light duty trucks. The regulation was stalled by automaker lawsuits and by the EPA's denial of an implementation waiver. On January 21, 2009, the ARB requested that the EPA reconsider its

[1] On March 17, 2011, the San Francisco Superior Court issued a final decision in *Association of Irritated Residents v. California Air Resources Board* (Case No. CPF-09-509562). While the Court upheld the validity of the ARB Scoping Plan for the implementation of AB 32, the Court enjoined ARB from further rulemaking under AB 32 until ARB amends its CEQA environmental review of the Scoping Plan to address the flaws identified by the Court. On May 23, 2011, ARB filed an appeal. On June 24, 2011, the Court of Appeal granted ARB's petition staying the trail court's order pending consideration of the appeal. In the interest of informed decision-making, on June 13, 2011, ARB released the expanded alternatives analysis in a draft Supplement to the AB 32 Scoping Plan Functional Equivalent Document. The ARB Board approved the Scoping Plan and the CEQA document on August 24, 2011.

previous waiver denial. On January 26, 2009, President Obama directed that the EPA assess whether the denial of the waiver was appropriate. On June 30, 2009, the EPA granted the waiver request. On September 8, 2009, the U.S. Chamber of Commerce and the National Automobile Dealers Association sued EPA to challenge its granting of the waiver to California for its standards. California assisted EPA in defending the waiver decision. The U.S. District Court for the District of Columbia denied the Chamber's petition on April 29, 2011.

The Pavley I standards are phased in during the 2009 through 2016 model years. When fully phased in, the near-term (2009–2012) standards will result in about a 22-percent reduction compared with the 2002 fleet, and the mid-term (2013–2016) standards will result in about a 30-percent reduction. Several technologies stand out as providing significant reductions in emissions at favorable costs. These include discrete variable valve lift or camless valve actuation to optimize valve operation rather than relying on fixed valve timing and lift as has historically been done; turbocharging to boost power and allow for engine downsizing; improved multi-speed transmissions; and improved air conditioning systems that operate optimally, leak less, and/or use an alternative refrigerant. Pavley II was incorporated into Amendments to the Low-Emission Vehicle Program referred to as Low Emissions Vehicles (LEV) III. The amendments, effective August 7, 2012, apply to vehicles for model years 2017 through 2025. The regulation will reduce GHGs from new cars by 34 percent from 2016 levels by 2025.

Low Carbon Fuel Standard—Executive Order S-01-07. The Governor signed Executive Order S-01-07 on January 18, 2007. The order mandates a statewide goal established to reduce the carbon intensity of California's transportation fuels by at least 10 percent by 2020. In particular, the executive order established a Low Carbon Fuel Standard and directed the Secretary for Environmental Protection to coordinate the actions of the California Energy Commission (CEC), the ARB, the University of California, and other agencies to develop and propose protocols for measuring the "life-cycle carbon intensity" of transportation fuels. This analysis supporting development of the protocols was included in the State Implementation Plan (SIP) for alternative fuels (State Alternative Fuels Plan adopted by CEC on December 24, 2007) and was submitted to ARB for consideration as an "early action" item under AB 32. The ARB adopted the Low Carbon Fuel Standard on April 23, 2009. The Low Carbon Fuel Standard was challenged in the United States District Court in Fresno in 2011. The court's ruling issued on December 29, 2011 included a preliminary injunction against ARB's implementation of the rule. The Ninth Circuit Court of Appeals stayed the injunction on April 23, 2012 pending final ruling on appeal, allowing the ARB to continue to implement and enforce the regulation. The Renewable Fuels Association and Growth Energy filed a petition to the US Supreme Court on March 20, 2014 challenging the Court of Appeals decision.

SB 1368. In 2006, the State Legislature adopted Senate Bill (SB) 1368, subsequently signed into law by the Governor. SB 1368 directs the California Public Utilities Commission to adopt a performance standard for GHG emissions for the future power purchases of California utilities. SB 1368 seeks to limit carbon emissions associated with electrical energy consumed in California by forbidding procurement arrangements for energy longer than 5 years from resources that exceed the emissions of a relatively clean, combined cycle natural gas power plant. Because of the carbon content of its fuel source, a coal-fired plant cannot meet this standard because such plants emit roughly twice as much carbon as natural gas, combined-cycle plants. Accordingly, the new law will effectively prevent

California's utilities from investing in, otherwise financially supporting, or purchasing power from new coal plants located in or out of the State. Thus, SB 1368 will dramatically lower GHG emissions associated with California's energy demand, as SB 1368 will effectively prohibit California utilities from purchasing power from out-of-state producers that cannot satisfy the performance standard for GHG emissions required by SB 1368. The California Public Utilities Commission adopted the regulations required by SB 1368 on August 29, 2007.

Renewable Electricity Standards. On September 12, 2002, Governor Gray Davis signed SB 1078 requiring California to generate 20 percent of its electricity from renewable energy by 2017. SB 107 changed the due date to 2010 instead of 2017. On November 17, 2008, Governor Arnold Schwarzenegger signed Executive Order S-14-08, which established a Renewable Portfolio Standard target for California requiring that all retail sellers of electricity serve 33 percent of their load with renewable energy by 2020. Governor Schwarzenegger also directed the ARB (Executive Order S-21-09) to adopt a regulation by July 31, 2010, requiring the state's load serving entities to meet a 33 percent renewable energy target by 2020. The ARB Board approved the Renewable Electricity Standard on September 23, 2010 by Resolution 10-23.

Title 24. During operation, the project is required to comply with Title 24 of the California Code of Regulations (CCR) established by the Energy Commission regarding energy conservation standards. Although these regulations do not specifically reduce GHGs, they increase energy efficiency for new buildings, thus indirectly reducing GHG emissions. CCR Title 24 Part 6: California's Energy Efficiency Standards for Residential and Nonresidential Buildings, was first adopted in 1978 in response to a legislative mandate to reduce California's energy consumption. The standards are updated periodically to allow consideration and possible incorporation of new energy efficient technologies and methods. Energy efficient buildings require less electricity; therefore, increased energy efficiency reduces fossil fuel consumption and decreases GHG emissions.

The current version of Title 24 (2016 Title 24 Standards) became effective on January 1, 2017. Energy efficient buildings require less electricity; therefore, increased energy efficiency reduces fossil fuel consumption and decreases GHG emissions. According to the California Energy Commission, single-family homes built to the 2016 standards will use about 28 percent less energy for lighting, heating, cooling, ventilation, and water heating than those built to the 2013 standards. In 30 years, California will have saved enough energy to power 2.2 million homes, reducing the need to build 12 additional power plants.

Title 20. CCR, Title 20: Division 2, Chapter 4, Article 4, Sections 1601-1608: Appliance Efficiency Regulations regulates the sale of appliances in California. The Appliance Efficiency Regulations include standards for both federally regulated appliances and non-federally regulated appliances. Twenty-three categories of appliances are included in the scope of these regulations. The standards within these regulations apply to appliances that are sold, or offered for sale in California, except those sold wholesale in California for final retail sale outside the state and those designed and sold exclusively for use in recreational vehicles or other mobile equipment (CEC 2012).

California Green Building Standards. The Project is also required to comply with the California Green Building Standards, which is Part 11 of Title 24 of the California Code of Regulations. The

most recent 2016 Green Building Standards Code went into effect on January 1, 2017. The Code is a comprehensive and uniform regulatory code for all residential, commercial and school buildings.

The California Green Building Standards Code does not prevent a local jurisdiction from adopting a more stringent code as state law provides methods for local enhancements. The Code recognizes that many jurisdictions have developed existing construction and demolition ordinances, and defers to them as the ruling guidance provided they provide a minimum 50-percent diversion requirement. The code also provides exemptions for areas not served by construction and demolition recycling infrastructure. State building code provides the minimum standard, which buildings need to meet in order to be certified for occupancy. Enforcement is generally through the local building official.

The California Green Building Standards Code (code section in parentheses) requires:

- Construction waste. A minimum 65-percent diversion of construction and demolition waste from landfills. All (100 percent) of trees, stumps, rocks and associated vegetation and soils resulting from land clearing shall be reused or recycled;
- Water Efficiency and Conservation [Indoor Water Use (4.303.1)]. Fixtures and fixture fittings reducing the overall use of potable water within the building by at least 20 percent shall be provided. The 20-percent reduction shall be demonstrated by one of the following methods:
  1. Prescriptive Method: Showerheads (≤ 2.0 gallons per minute [gpm] @ 80 pounds per square inch [psi]); Residential Lavatory Faucets (≤ 1.2 gpm @ 60 psi); Nonresidential Lavatory Faucets (≤ 0.5 gpm @ 60 psi); Kitchen Faucets (≤ 1.8 gpm @ 60 psi); Toilets (≤ 1.28 gallons/flush); floor-mounted urinals (≤ 0.5 gallons/flush); wall-mounted urinals ≤ 0.125 gallons/flush) and
  2. Performance Method: Provide a calculation demonstrating a 20% reduction of indoor potable water using the baseline values set forth in Table 4.303.1. The calculation will be limited to the total water usage of showerheads, lavatory faucets, water closets and urinals within the dwelling.
- Water Efficiency and Conservation [Outdoor Water Use (4.304.1)]. After December 1, 2015, new residential developments with an aggregate landscape area equal to or greater than 500 square feet must either comply with a local water efficient landscape ordinance or the current California Department of Water Resources' Model Water Efficient Landscape Ordinance (MWELO), whichever is more stringent; or, projects with aggregate landscape areas of less than 2,500 square feet may comply with the MWELO's Appendix D Prescriptive Compliance Option.
- Materials pollution control. Low-pollutant emitting interior finish materials such as paints, carpet, vinyl flooring and particleboard; and
- Building commissioning. Mandatory inspections of energy systems (e.g., heat furnace, air conditioner, mechanical equipment) are required for nonresidential buildings over 10,000 square feet to ensure that all are working at their maximum capacity according to their design efficiencies.

Cap-and-Trade. California's Cap-and-Trade Regulation (Regulation) took effect on January 1, 2012, with amendments to the Regulation effective September 1, 2012. The enforceable compliance obligation began on January 1, 2013. Cap-and-trade is a market-based regulation designed to reduce GHGs from multiple sources. Cap-and-trade sets a firm limit or "cap" on GHGs and minimize the compliance costs of achieving AB 32 goals. The cap will decline approximately 3 percent each year beginning in 2013. Trading creates incentives to reduce GHGs below allowable levels through investments in clean technologies. With a carbon market, a price on carbon is established for GHGs. Market forces spur technological innovation and investments in clean energy.

SB 375. SB 375 passed the Senate on August 30, 2008 and signed by the Governor on September 30, 2008. According to SB 375, the transportation sector is the largest contributor of GHG emissions, which emits over 40 percent of the total GHG emissions in California. SB 375 states, "Without improved land use and transportation policy, California will not be able to achieve the goals of AB 32." SB 375 does the following: (1) requires metropolitan planning organizations to include sustainable community strategies in their regional transportation plans for reducing GHG emissions, (2) aligns planning for transportation and housing, and (3) creates specified incentives for the implementation of the strategies.

Concerning CEQA, SB 375, section 21159.28 states that CEQA findings determinations for certain projects are not required to reference, describe, or discuss (1) growth inducing impacts or (2) any project-specific or cumulative impacts from cars and light-duty truck trips generated by the project on global warming or the regional transportation network if the project:

- Is in an area with an approved sustainable community's strategy, or an alternative planning strategy, that the ARB accepts as achieving the GHG reduction targets;
- Is consistent with that strategy (in designation, density, building intensity, and applicable policies); and
- Incorporates the mitigation measures required by an applicable prior environmental document.

SB 97 and the CEQA Guidelines Update. Passed in August 2007, SB 97 added Section 21083.05 to the Public Resources Code. The code states "(a) On or before July 1, 2009, the Office of Planning and Research shall prepare, develop, and transmit to the Resources Agency guidelines for the mitigation of GHG emissions or the effects of GHG emissions as required by this division, including, but not limited to, effects associated with transportation or energy consumption. (b) On or before January 1, 2010, the Resources Agency shall certify and adopt guidelines prepared and developed by the Office of Planning and Research pursuant to subdivision (a)." On February 16, 2010, the Office of Administrative Law approved the Amendments, and filed them with the Secretary of State for inclusion in the California Code of Regulations. The Amendments became effective on March 18, 2010.

Executive Order S-13-08. Executive Order S-13-08 indicates that "climate change in California during the next century is expected to shift precipitation patterns, accelerate sea level rise and increase temperatures, thereby posing a serious threat to California's economy, to the health and welfare of

its population and to its natural resources." Pursuant to the requirements in the order, the 2009 California Climate Adaptation Strategy (California Natural Resources Agency 2009) was adopted, which is the " . . . first statewide, multi-sector, region-specific, and information-based climate change adaptation strategy in the United States." Objectives include analyzing risks of climate change in California, identifying and exploring strategies to adapt to climate change, and specifying a direction for future research.

Executive Order B-30-15. Executive Order B-30-15 established an interim year GHG emissions reduction target of 40 percent below 1990 levels by year 2030. The reduction target provides a mid-term goal between the original AB 32 target (achieve 1990 levels by year 2020) and the Executive Order S-03-05 target (achieve 80 percent below 1990 levels by year 2020)**.** ARB's second update of the AB 32 Scoping Plan is focused on achieving Executive Order B-30-15 through a more intensive framework of policies, regulations, planning efforts, and infrastructure investments.

SB 32. The Governor signed SB 32 in September of 2016, giving ARB the statutory responsibility to include the 2030 target previously contained in Executive Order B-30-15 in the 2017 Scoping Plan Update. SB 32 states that "In adopting rules and regulations to achieve the maximum technologically feasible and cost-effective greenhouse gas emissions reductions authorized by this division, the state [air resources] board shall ensure that statewide greenhouse gas emissions are reduced to at least 40 percent below the statewide greenhouse gas emissions limit no later than December 31, 2030." The 2017 Climate Change Scoping Plan Update addressing the SB 32 targets was adopted on December 14, 2017. The major elements of the framework proposed to achieve the 2030 target are as follows:

1. SB 350
   - Achieve 50 percent Renewables Portfolio Standard (RPS) by 2030.
   - Doubling of energy efficiency savings by 2030.
2. Low Carbon Fuel Standard (LCFS)
   - Increased stringency (reducing carbon intensity 18 percent by 2030, up from 10 percent in 2020).
3. Mobile Source Strategy (Cleaner Technology and Fuels Scenario)
   - Maintaining existing GHG standards for light- and heavy-duty vehicles.
   - Put 4.2 million zero-emission vehicles (ZEVs) on the roads.
   - Increase ZEV buses, delivery and other trucks.
4. Sustainable Freight Action Plan
   - Improve freight system efficiency.
   - Maximize use of near-zero emission vehicles and equipment powered by renewable energy.
   - Deploy over 100,000 zero-emission trucks and equipment by 2030.
5. Short-Lived Climate Pollutant (SLCP) Reduction Strategy
   - Reduce emissions of methane and hydrofluorocarbons 40 percent below 2013 levels by 2030.
   - Reduce emissions of black carbon 50 percent below 2013 levels by 2030.

6. SB 375 Sustainable Communities Strategies
   - Increased stringency of 2035 targets.
7. Post-2020 Cap-and-Trade Program
   - Declining caps, continued linkage with Québec, and linkage to Ontario, Canada.
   - ARB will look for opportunities to strengthen the program to support more air quality co-benefits, including specific program design elements. In Fall 2016, ARB staff described potential future amendments including reducing the offset usage limit, redesigning the allocation strategy to reduce free allocation to support increased technology and energy investment at covered entities and reducing allocation if the covered entity increases criteria or toxics emissions over some baseline.
8. 20 percent reduction in GHG emissions from the refinery sector.
9. By 2018, develop Integrated Natural and Working Lands Action Plan to secure California's land base as a net carbon sink.

2.4.4 - Monterey Bay Air Resources District

CEQA Greenhouse Gas Guidance

The Monterey Bay Air Resources District (MBARD) 2008 CEQA Guidelines do not define the amount of GHG emissions that would result in a significant impact on the environment. On February 6, 2014, the MBARD held a meeting to present the MBARD GHG threshold development to the MBARD Advisory Committee. This meeting is recorded as Agenda Item No. 10. During the meeting, the following thresholds were under consideration for adoption:

- Stationary Sources: 10,000 metric tons (MT) of CO_{2e} per year.
- Land-use projects apply one of the following:
  - Bright line of 2,000 MT CO_{2e} per year or
  - Incorporate mitigation measures to reduce GHG emissions by 16%, or
  - Compliance with adopted Climate Action Plan
  - A threshold of 2,000 MT CO_{2e} per year corresponds to a residential project with approximately 130 single family homes.

The MBARD's goal has been to strike a balance between (1) the unique economic viability of our area; (2) differences in land-use development between inland and coastal cities; and (3) achieving statewide goals to reduce GHG emissions.

During the discussion, it mentioned that the bright-line threshold of 2,000 metric tons of carbon dioxide equivalent (MT CO_2e) per year for small land use projects might increase additional costs to prepare an EIR or incorporate additional mitigation measures to address significance GHG emissions. Although the MBARD has not formally adopted any GHG emission related thresholds, the 2,000 MT CO_2e per year is the only standard the MBARD has proposed and is the most region-specific threshold available at the time of this analysis.

2.4.5 - The Association of Monterey Bay Area Governments

2040 Metropolitan Transportation Plan/Sustainable Communities Strategy

The Association of Monterey Bay Area Governments (AMBAG) is the federally designated Metropolitan Planning Organization (MPO) for the tri-county Monterey Bay Region, including Monterey County. AMBAG works with several organizations, including the Transportation Agency for Monterey County, Monterey Salinas Transit, the MBARD, and state and federal governments to develop transportation planning and programming for the region. The AMBAG Board of Directors adopted the Final 2040 Metropolitan Transportation Plan/Sustainable Communities Strategy (MTP/SCS) on June 13, 2018.

2.4.6 - Local

The City of Salinas has not adopted any GHG reduction plan or Climate Action Plan.

The County of Monterey drafted a Monterey County Municipal Climate Action Plan (CAP) in April 2013. The draft CAP aims to provide a description of the steps being taken by the County to reduce GHG emissions associated with its municipal operations, describe three potential paths towards the County's goal of reducing GHG emissions to a level that is 15 percent below the 2005 emissions level before 2020, and serve as one component of the County's larger, community-wide CAP, which addresses GHG emissions from the community at large. The draft CAP was prepared in response to the ARB's AB 32 Scoping Plan recommendation of establishing GHG reduction goals for both their municipal operations and the community to be consistent with those of the state. Three GHG reduction scenarios were provided in the CAP, and each scenario estimated the total GHG reduction by the year 2020. The draft CAP assumed the County will implement scenario 3 and provided an implementation plan to help achieve the GHG emission reduction goal. When estimating GHG emission reductions, several sectors were included in the CAP. The emission reduction measures that related to the proposed Project are listed below:

- Energy use—Buildings and Facilities: BM-1 Building Energy Management Systems at Major Facilities
- Vehicle fleet & Employee commute
  - S-4 Other Vehicle Fuel Efficiency Measures

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SECTION 3: MODELING PARAMETERS AND ASSUMPTIONS

3.1 - Model Selection and Guidance

The California Emissions Estimator Model (CalEEMod) version 2016.3.2 was used to estimate the project's construction and operation-related GHG emissions. CalEEMod was developed in cooperation with air districts throughout the State. CalEEMod is designed as a uniform platform for government agencies, land use planners, and environmental professionals to quantify potential GHG emissions associated with construction and operation from a variety of land uses.

3.2 - Construction

Construction-related GHG emissions can vary substantially from day to day, depending on the level of activity, and the specific type of operation. Construction emissions result from on-site and off-site activities. On-site GHG emissions principally consist of exhaust emissions from heavy-duty construction equipment. Off-site GHG emissions would occur from motor vehicle exhaust from material delivery vehicles and construction worker traffic.

The construction equipment assumed for the project is shown in the CalEEMod output contained in Appendix A. The CalEEMod default construction equipment fleet mix was used in the analysis.

3.3 - Operation

Operational emissions are those emissions that occur during operation of the project. The major sources are summarized below.

3.3.1 - Motor Vehicles

Motor vehicle emissions refer to exhaust emissions from the automobiles that would travel to and from the project site. Rodeo property general plan amendment & rezoning traffic impact analysis prepared by Mott Macdonald (April 2018) utilized the trip rates from the Institute of Transportation Engineers (ITE) publication Trip Generation Manual, 10th Edition.

The vehicle fleet mix is the mix of motor vehicle classes that are associated with the project's daily operational trip. Emission factors from ARB's EMFAC model are assigned to the expected vehicle mix that account for the vehicles' vehicle class, speed, and fuel use (gasoline and diesel-powered vehicles). The vehicle fleet mix for light industrial traffic was a combination of CalEEMod default assumption and study of Fontana trip generation rates and truck percentage for industrial and warehouse uses (Fontana 2003). The CalEEMod default vehicle fleet mix was used for trips generated by the general office operation.

3.3.2 - Landscape Equipment

The landscaping equipment (leaf blowers, chain saws, mowers) would generate GHG emissions as a result of fuel combustion assumptions in the CalEEMod model.

3.3.3 - Electricity

Pacific Gas & Electric (PG&E) provides estimates of its emission factor per megawatt hour of electricity delivered to its customers. PG&E emissions factor for 2020 for CO_2 is provided below. The rates for methane and nitrous oxide are based on compliance with the Renewable Portfolio Standard. The factors listed below were applied in estimating project emissions for the year 2020.

- Carbon dioxide: 491.65 lbs./MWh
- Methane: 0.022 lb/MWh
- Nitrous oxide: 0.005 lb/MWh

3.3.4 - Title 24

CalEEMod has three categories for electricity consumption: electricity that is impacted by Title 24 regulations; non-Title 24 electricity; and lighting. The Title 24 uses are defined as the major building envelope systems covered by California's Building Code Title 24 Part 6, such as space heating, space cooling, water heating, and ventilation. Lighting is separate since it can be both part and not part of Title 24. Since lighting is not part of the building envelope energy budget, CalEEMod does not consider lighting to have any further association with Title 24 references in the program. Non-Title 24 includes everything else such as appliances and electronics. To properly divide the total electricity consumption into the three categories, the percentage for each category is determined by using percentages derived from the CalEEMod default electricity intensity. The percentages are applied to the electricity consumption to obtain the values used in the analysis.

In addition, the 2016 Title 24 standards became effective on January 1, 2017. Default values from the 2016 version of CalEEMod were used.

3.3.5 - Natural Gas

There would be emissions from the combustion of natural gas used for the project (water heaters, heat, etc.). CalEEMod has two categories for natural gas consumption: Title 24 and non-Title 24. CalEEMod default natural gas consumption rates were used, based on the proposed land use types.

3.3.6 - Water and Wastewater

There would be GHG emissions from the use of electricity to pump potable water to the project and to treat wastewater. CalEEMod defaults were used for these sources.

3.3.7 - Solid Waste

Greenhouse gas emissions would be generated from the decomposition of solid waste generated by the project. CalEEMod was used to estimate the GHG emissions from this source. The CalEEMod default solid waste generation rates were used, based on the proposed land use types.

SECTION 4: THRESHOLDS OF SIGNIFICANCE

As described above, although the MBARD has not formally adopted any GHG emission thresholds of significance, the bright line thresholds proposed during the Agenda Item No. 10 meeting is the latest and most applicable threshold for the MBARD. Therefore, this analysis was developed by using the MBARD's project-level land use bright line operational GHG emission thresholds.

For construction-related GHG emissions, Agenda Item No. 10 does not provide any standards. Therefore, for the purposes of a conservative analysis, the Project's construction GHG emissions are amortized over an assumed project lifetime of 30 years and are included in the operational emissions to compare against the threshold.

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SECTION 5: GREENHOUSE GAS IMPACT ANALYSIS

5.1 - CEQA Guidelines

CEQA Guidelines define a significant effect on the environment as "a substantial, or potentially substantial, adverse change in the environment." To determine if a project would have a significant impact on GHGs, the type, level, and impact of emissions generated by the project must be evaluated.

The following GHG significance thresholds are contained in Appendix G of the CEQA Guidelines, which were amendments adopted into the Guidelines on March 18, 2010, pursuant to SB 97. A significant impact would occur if the project would:

(a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment; or

(b) Conflict with any applicable plan, policy or regulation of an agency adopted for the purpose of reducing the emissions of greenhouse gases.

5.2 - Impact Analysis

5.2.1 - Greenhouse Gas Inventory

Impact GHG-1:	**The project would generate direct and indirect greenhouse gas emissions; however, these emissions would not result in a significant impact on the environment.**

Impact Analysis

Construction Emissions

The Project would generate GHG emissions during construction activities resulting from emission sources such as construction equipment, haul trucks, and construction worker vehicles. Although these emissions would be temporary and short-term in nature, they could represent a substantial contribution of GHG emissions. Construction emissions were modeled using CalEEMod and the assumptions described above in Section 3 (Modeling Parameters and Assumptions). See Appendix A for detailed CalEEMod outputs and assumptions.

Table 2 presents the project's total construction emissions, which are amortized over the assumed lifetime of the project and added with annual operational emissions.

Table 2: Estimated Construction-Related Greenhouse Gas Emissions

Construction Phase	Total Emissions MT CO_2e
Demolition	37

Table 2 (cont.): Estimated Construction-Related Greenhouse Gas Emissions

Construction Phase	Total Emissions MT CO_2e
Site Preparation	18
Grading	29
Building Construction	538
Asphalt Paving	22
Architectural Coating	5
Total Construction Emissions	648
Amortized over 30 years[1]	22

Notes:
MT CO_2e = metric tons of carbon dioxide equivalent
Totals may not appear to sum exactly due to rounding.
[1] Construction GHG emissions are amortized over the 30-year lifetime of the project.
Source: CalEEMod Output (see Appendix A).

Operational Emissions

Following construction of the project, long-term operational emissions would be generated by the sources described in Section 3 (Modeling Parameters and Assumptions). Table 3 presents the estimated annual GHG emissions from the project's operational activities.

Table 3: Estimated Operational Greenhouse Gas Emissions

Source	Total Emissions MT CO_2e
Area	<1
Energy	395
Mobile	1087
Waste	73
Water	70
Amortized Construction	22
Total	1,647
Threshold of Significance	2,000
Exceed thresholds?	No

Notes:
MT CO_2e = metric tons of carbon dioxide equivalent
Source of thresholds: MBARD "Receive a Presentation on District GHG Thresholds Development." Feb. 2014.
CalEEMod output file. See Appendix.

Conclusions

As shown in Table 3, the project's amortized construction and annual operational GHG emissions would not exceed the applicable threshold of significance. Thus, the project's construction and operational GHG emissions would not result in a significant impact on climate change.

Level of Significance Before Mitigation

Less than significant impact.

Mitigation Measures

None.

Level of Significance After Mitigation

Less than significant impact.

5.2.2 - Greenhouse Gas Reduction Plans

Impact GHG-2	**The project would not conflict with any applicable plan, policy or regulation of an agency adopted to reduce the emissions of greenhouse gases.**

Impact Analysis

The Monterey County has an adopted a Municipal Climate Action Plan (MCAP) that was approved by the County Council in April 2013. Projects that are consistent with the adopted MCAP would have a less than significant impact related to GHG emissions. However, the MCAP has been developed primarily with recommended programs for the City to implement, rather than measures, strategies, and requirements for individual land use development projects. Thus, this analysis attempts to evaluate the recommended MCAP programs with which the project is consistent, but it also evaluates the project's consistency with the statewide AB 32 Scoping Plan and AMBAG's 2040 MTP/SCS.

With respect to the MCAP's recommended measures, the Project would be consistent with Energy Use-Buildings and Facilities: BM-1 Building Energy Management Systems at Major Facilities which would reduce the GHG emissions from area source and energy source. Although it is not clear if the proposed Project would install any on-site renewable energy production systems at this time, the building would be constructed to meet the most current Title 24 standards.

AB 32 Scoping Plan

The ARB's adopted AB 32 Scoping Plan (Scoping Plan) states, "The 2020 goal was established to be an aggressive, but achievable, mid-term target, and the 2050 GHG emissions reduction goal represents the level scientists believe is necessary to reach levels that would stabilize climate" (ARB 2009). The year 2020 GHG emission reduction goal of AB 32 corresponds with the mid-term target established by Executive Order S-3-05, which aims to reduce California's fair-share contribution of GHGs in 2050 to levels that would stabilize the climate.

The Scoping Plan identifies recommended measures for multiple GHG emission sectors and the associated emission reductions needed to achieve the year 2020 emissions target—each sector has a different emission reduction target. Most of the measures target the transportation and electricity sectors. The following analysis in Table 4 evaluates the AB 32 Scoping Plan emission reduction measures with the Project's design features to determine consistency with the applicable GHG reduction plan.

Table 4: Scoping Plan Measures Consistency Analysis

Scoping Plan Reduction Measure	Project Consistency
1. California Cap-and-Trade Program Linked to Western Climate Initiative. Implement a broad-based California Cap-and-Trade program to provide a firm limit on emissions. Link the California cap-and-trade program with other Western Climate Initiative Partner programs to create a regional market system to achieve greater environmental and economic benefits for California. Ensure California's program meets all applicable AB 32 requirements for market-based mechanisms.	**Not applicable.** Although the cap-and-trade system has begun, the project is not one targeted by the cap-and-trade system regulations and therefore this measure does not apply to the project.
2. California Light-Duty Vehicle Greenhouse Gas Standards. Implement adopted standards and planned second phase of the program. Align zero-emission vehicle, alternative and renewable fuel and vehicle technology programs with long-term climate change goals.	**Not applicable.** This is a statewide measure that cannot be implemented by a project applicant or lead agency. However, the standards would be applicable to the light-duty vehicles that access the project site.
3. Energy Efficiency. Maximize energy efficiency building and appliance standards; pursue additional efficiency including new technologies, policy, and implementation mechanisms. Pursue comparable investment in energy efficiency from all retail providers of electricity in California.	**Consistent.** This is a measure for the State to increase its energy efficiency standards in new buildings. The Project is required to build to the new standards and would increase its energy efficiency through compliance.
4. Renewable Portfolio Standard. Achieve 33 percent renewable energy mix statewide. Renewable energy sources include (but are not limited to) wind, solar, geothermal, small hydroelectric, biomass, anaerobic digestion, and landfill gas.	**Not applicable.** This is a statewide measure that cannot be implemented by a project applicant or lead agency. Pacific Gas & Electric is required to increase its percent of power supply from renewable sources to 33 percent by the year 2020 pursuant to various regulations. The Project would purchase power that comprises a greater amount of renewable sources and could install renewable solar power systems that will assist the utility in achieving the mandate.
5. Low Carbon Fuel Standard. Develop and adopt the Low Carbon Fuel Standard.	**Not applicable.** This is a statewide measure that cannot be implemented by a project applicant or lead agency. All fuel consumption associated with the project's construction and operational activities would use fuel that meets these standards.

Table 4 (cont.): Scoping Plan Measures Consistency Analysis

Scoping Plan Reduction Measure	Project Consistency
6. Regional Transportation-Related Greenhouse Gas Targets. Develop regional greenhouse gas emissions reduction targets for passenger vehicles. This measure refers to SB 375.	**Not applicable.** The Project is not related to developing GHG emission reduction targets.
7. Vehicle Efficiency Measures. Implement light-duty vehicle efficiency measures.	**Not applicable.** When this measure is initiated, the standards would be applicable to the light-duty vehicles that would access the project site.
8. Goods Movement. Implement adopted regulations for the use of shore power for ships at berth. Improve efficiency in goods movement activities.	**Not applicable.** The Project does not propose any changes to maritime, rail, or intermodal facilities or forms of transportation.
9. Million Solar Roofs Program. Install 3,000 MW of solar-electric capacity under California's existing solar programs.	**Consistent.** This measure is to increase solar throughout California, which is being done by various electricity providers and existing solar programs. The Project would comply with Title 24, which requires new buildings to be "solar ready." The Project would not preclude the implementation of this strategy.
10. Medium/Heavy-Duty Vehicles. Adopt medium and heavy-duty vehicle efficiency measures.	**Not applicable.** This is a statewide measure that cannot be implemented by a project applicant or lead agency.
11. Industrial Emissions. Require assessment of large industrial sources to determine whether individual sources within a facility can cost-effectively reduce greenhouse gas emissions and provide other pollution reduction co-benefits. Reduce greenhouse gas emissions from fugitive emissions from oil and gas extraction and gas transmission. Adopt and implement regulations to control fugitive CH_4 emissions and reduce flaring at refineries.	**Not applicable.** This measure would apply to the direct GHG emissions at major industrial facilities emitting more than 500,000 $MTCO_2e$ per year. The Project is a small industrial land use that would generate less than 2,000 MT CO_2e per year.
12. High Speed Rail. Support implementation of a high-speed rail system.	**Not applicable.** This is a statewide measure that cannot be implemented by a project applicant or lead agency. The proposed Project would not preclude the implementation of this strategy.
13. Green Building Strategy. Expand the use of green building practices to reduce the carbon footprint of California's new and existing inventory of buildings.	**Consistent.** The Project would comply with the California Energy Code and thus incorporate applicable energy efficiency features designed to reduce project energy consumption.
14. High Global Warming Potential Gases. Adopt measures to reduce high global warming potential gases.	**Consistent.** This measure is applicable to the high global warming potential gases that would be used by sources with large equipment (such as in air conditioning and commercial refrigerators). The Project would include refrigeration or air conditioning equipment and would be required to comply with all ARB requirements for the Stationary Equipment Refrigerant Management Program.

Greenhouse Gas Impact Analysis

Table 4 (cont.): Scoping Plan Measures Consistency Analysis

Scoping Plan Reduction Measure	Project Consistency
15. Recycling and Waste. Reduce CH_4 emissions at landfills. Increase waste diversion, composting, and commercial recycling. Move toward zero waste.	**Consistent**. The Project would utilize City of Salinas recycling services.
16. Sustainable Forests. Preserve forest sequestration and encourage the use of forest biomass for sustainable energy generation.	**Not applicable.** The Project site is not forested; therefore, no preservation is possible.
17. Water. Continue efficiency programs and use cleaner energy sources to move and treat water.	**Consistent.** The Project would comply with the California Energy Code and the California Updated Model Landscape Ordinance. With adherence to these regulations, the Project will consume energy and water in an efficient manner.
18. Agriculture. In the near-term, encourage investment in manure digesters and at the five-year Scoping Plan update determine if the program should be made mandatory by 2020.	**Not applicable.** The Project site is not designated or in use for agriculture purposes. No grazing, feedlot, or other agricultural activities that generate manure occur on-site or are proposed to be implemented by the Project.
Source of ARB Scoping Plan Reduction Measure: California Air Resources Board 2008. Source of Project Consistency or Applicability: FirstCarbon Solutions.	

2040 Metropolitan Transportation Plan/Sustainable Communities Strategy

The 2040 MTP/SCS is a planning document that contains a compilation of the projects proposed in the regional transportation plans for the tri-county Monterey Bay Region (including the regional plan prepared by the Transportation Agency for Monterey County) and a SCS, pursuant to the requirements of SB 375. SB 375 includes the following primary findings related to the MTP/SCS development process:

- ARB developed regional GHG emission reduction targets for cars and light trucks for each of the 18 MPOs in California, including AMBAG. The ARB-approved target for AMBAG is a per capita reduction in GHG emissions from passenger vehicle travel of zero percent by 2020 and five percent by 2035 relative to 2005 levels. Relative to 2005 levels, the 2040 MTP/SCS achieves a three percent per capita reduction for 2020 and a six percent per capita reduction for 2040.
- AMBAG is required to prepare an SCS that specifies how the GHG emission reduction target set by ARB will be achieved. If the target cannot be met through the SCS, then an Alternative Planning Strategy (APS) shall be prepared. Chapter 4 of the 2040 MTP/SCS includes the SCS, which demonstrates how the region will meet or exceed the GHG emission reduction targets set forth by ARB.
- Streamlines CEQA requirements for qualifying development projects that meet statutory criteria and are consistent with the 2040 MTP/SCS.

The 2040 MTP/SCS envisions an increase in development density via infill development and mixed use in existing commercial corridors. Increased density, accessible transit, and complete streets would encourage fewer and shorter trips and more trips by transit, walking, and bicycling. The GHG emission reduction targets adopted to comply with SB 375 and implemented through the 2040 MTP/SCS only consider GHG emissions from passenger cars and light-duty trucks. Furthermore, 2040 MTP/SCS was based on a Regional Growth Forecast based on data from the 2010 Census, data from the California Employment Development Department and InfoUSA, as well as updated 2015 population and household data from the California Department of Finance. As discussed in the 2040 MTP/SCS, the Regional Growth Forecast was further refined through meetings with local jurisdictions. The City of Salinas is expected to experience an eighteen percent increase in employment from 2015 to 2040 and a sixteen percent increase in population over the same time period. Therefore, the Project would provide infill development in an existing commercial corridor that is reasonably consistent with the growth projections in the 2040 MTP/SCS. The Project is not within an SCS priority area and so is not subject to requirements applicable to those areas. Considering this information, the Project would not conflict with the 2040 MTP/SCS.

Summary

As shown in Table 4, the project is consistent with the strategies, or the strategies are not applicable to the Project. Therefore, the Project is consistent with the applicable strategies and would not conflict with the recommendations of AB 32 in achieving a statewide reduction in GHG emissions. Furthermore, the Project would not conflict with the MCAP or the 2040 MTP/SCS. In addition, as shown in Table 3, the Project's construction and operational GHG emissions would not exceed the recommended thresholds of significance, which are developed as allowable limits so they do not impede the region from achieving GHG reduction goals. Therefore, the Project would not conflict with any applicable plan, policy or regulation of an agency adopted to reduce GHG emissions. The impact would be less than significant.

Level of Significance Before Mitigation

Less than significant impact.

Mitigation Measures

None.

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SECTION 6: REFERENCES

The following references were used in the preparation of this analysis and are referenced in the text and/or were used to provide the author with background information necessary for the preparation of thresholds and content.

Association of Monterey Bay Area Governments (AMBAG). 2018. 2040 Metropolitan Transportation Plan/ Sustainable Communities Strategy. Website: http://www.ambag.org/programs-services/planning/metro-transport-plan/2040-MTP-SCS. Accessed August 16, 2018.

CalEEMod. California Emissions Estimator Model. Version 2016.3.2. Website: http://caleemod.com/. Accessed April 25, 2018.

California Air Resources Board (ARB). 2010. Greenhouse Gas Inventory—2020 Forecast. Updated October 28, 2010. Website: www.arb.ca.gov/cc/inventory/data/forecast.htm. Accessed December 2013.

California Air Resources Board (ARB). 2011a. California Greenhouse Gas Emissions Inventory 2000-2009. Website: http://www.arb.ca.gov/cc/inventory/pubs/reports/ghg_inventory_00-09_report.pdf. Accessed December 2013.

California Air Resources Board (ARB). 2011b. Regulation for Reducing Emissions from Consumer Products. Website: www.arb.ca.gov/consprod/regs/fro%20consumer%20products %20regulation.pdf. Accessed December 2013.

California Air Resources Board (ARB). 2012. Low-Emission Vehicle Program. Website: http://www.arb.ca.gov/msprog/levprog/levprog.htm. Accessed April 19, 2013.

California Climate Change Center (CCCC). 2006. Our Changing Climate, Assessing the Risks to California: A Summary Report from the California Climate Change Center. July 2006. CEC-500-2006-077. Website: www.scc.ca.gov/webmaster/ftp/pdf/climate_change/assessing _risks.pdf. Accessed December 2013.

California Energy Commission. 2012. California Appliance Efficiency Regulations for Manufacturers. Website: http://www.energy.ca.gov/2012publications/CEC-400-2012-FS/CEC-400-2012-FS-004-En.pdf. Accessed July 10, 2014.

California Environmental Health Tracking Program (CEHTP). 2014. Traffic Linkage Service Demonstration. Website: http://www.ehib.org/traffic_tool.jsp. Accessed October 2, 2014.

California Natural Resources Agency. 2009. 2009 California Climate Adaptation Strategy. Website: http://www.climatechange.ca.gov/adaptation/strategy/index.html. Accessed December 2013.

Centers for Disease Control and Prevention (CDC). 2010. Department of Health and Human Services, the National Institute for Occupational Safety and Health. Carbon Dioxide. Website: www.cdc.gov/niosh/npg/npgd0103.html. Accessed December 2013.

City of Fontana. August 2003. Truck Trip Generation Study. Website: http://www.tampabayfreight.com/pdfs/Freight%20Library/Fontana%20Truck%20Generation%20Study.pdf

Intergovernmental Panel on Climate Change (IPCC). 2001. Climate Change 2001: The Scientific Basis. Website: http://www.grida.no/climate/ipcc_tar/wg1/pdf/WG1_TAR-FRONT.pdf. Accessed July 18, 2013.

Intergovernmental Panel on Climate Change (IPCC). 2007a. Climate Change 2007: The Physical Science Basis. Contribution of Working Group I to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change [Solomon, S., D. Qin, M. Manning, Z. Chen, M. Marquis, K.B. Averyt, M. Tignor and H.L. Miller (eds.)]. Cambridge University Press, Cambridge, United Kingdom and New York, NY, USA, Website: www.ipcc.ch/publications_and_data/ar4/wg1/en/contents.html. Accessed December 2013.

Intergovernmental Panel on Climate Change (IPCC). 2007b. Climate Change 2007: Synthesis Report. Contribution of Working Groups I, II and III to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change [Core Writing Team, Pachauri, R.K. and Reisinger, A. (eds.)]. IPCC, Geneva, Switzerland. Website: www.ipcc.ch/publications_and_data/ar4/syr/en/contents.html. Accessed December 2013.

McIntyre, S. and R. McKitrick. 2003. Corrections to the Mann et al. (1998) Proxy Data Base and Northern Hemisphere Average Temperature Series. Energy and Environment, Vol. 14, No. 6, Pgs. 751-772. Website: http://www.uoguelph.ca/~rmckitri/research/MM03.pdf. Accessed July 18, 2013.

McKitrick, Ross. 2005. What is the 'Hockey Stick' Debate About? APEC Study Group, Australia. Website: www.uoguelph.ca/~rmckitri/research/McKitrick-hockeystick.pdf. Accessed July 18, 2013.

Moser et al. 2009. Moser, Susie, Guido Franco, Sarah Pittiglio, Wendy Chou, Dan Cayan. 2009. The Future Is Now: An Update on Climate Change Science Impacts and Response Options for California. California Energy Commission, PIER Energy-Related Environmental Research Program. CEC-500-2008-071. Website: www.energy.ca.gov/2008publications/CEC-500-2008-071/CEC-500-2008-071.PDF. Accessed December 2013.

U.S. Environmental Protection Agency (EPA). 2011. 2011 U.S. Greenhouse Gas Inventory Report. Inventory of U.S. Greenhouse Gas Emissions and Sinks: 1990-2009. EPA 430-R-11-005. Website: https://www.epa.gov/ghgemissions/us-greenhouse-gas-inventory-report-archive. Accessed June 19, 2017.

United Nations Framework Convention on Climate Change. 2010. National Greenhouse Gas Inventory Data for the Period 1990-2008. Website: http://unfccc.int/resource/docs/2010/sbi/eng/18.pdf. Accessed December 2013. (Note: data is used in Figure 2)

University of California, Davis. 1997. Prepared for California Department of Transportation. 1997. Transportation Project-Level Carbon Monoxide Protocol. Website: www.dot.ca.gov/hq/env/air/pages/coprot.htm. Accessed December 2013.

Wilson, C. and R. Walters. 2012. Emerging Topics (Chapter 10 in the Association of Environmental Professionals (AEP) Forecasting Community-Wide Greenhouse Gas Emissions and Setting Reduction Targets. Available to AEP members only.

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Appendix A:
CalEEMod Output

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CalEEMod Output

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Construction (2018-2019) and Project Operations (2020) Winter..... **A-65**

Rodeo GPA

Monterey County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Light Industry	113.90	1000sqft	2.61	113,900.00	0
General Office Building	4.70	1000sqft	0.11	4,700.00	0
Other Non-Asphalt Surfaces	177.60	1000sqft	4.08	177,600.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	3.6	**Precipitation Freq (Days)**	55
Climate Zone	4			**Operational Year**	2020
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	491.65	**CH4 Intensity (lb/MWhr)**	0.022	**N2O Intensity (lb/MWhr)**	0.005

1.3 User Entered Comments & Non-Default Data

Project Characteristics - Utilitiy information ajusted based on Renewable Portofolio Standard

Land Use - info from Rodeo GPA TIA 041318. The project site is 6.8 acres. Therefore, the remaining area would be considered as non-asphalt surfaces.

Construction Phase - assume operation year is 2020. CalEEMod default schedule is applied.

Grading - assume balance onsite (old Rodeo project info, GPA does not specify if there would have cut and fill)

Demolition - infro from client RFI response 5/26/2017

Vehicle Trips - Rodeo GPA TIA 041318 ITE 10th edition trip rates.

Fleet Mix - fleet mix adjusted based on CalEEMod default and San Bernadino 2003 study for truck percentages for industrial and warehouse uses

Energy Use -

Construction Off-road Equipment Mitigation -

Table Name	Column Name	Default Value	New Value
tblFleetMix	HHD	0.03	0.13
tblFleetMix	LDA	0.53	0.44
tblFleetMix	LDT1	0.03	0.03
tblFleetMix	LDT2	0.20	0.17
tblFleetMix	LHD1	0.02	0.07
tblFleetMix	LHD2	6.0270e-003	0.02
tblFleetMix	MCY	7.8900e-003	0.00
tblFleetMix	MDV	0.14	0.12
tblFleetMix	MH	9.0500e-004	0.00
tblFleetMix	MHD	0.02	0.05
tblFleetMix	OBUS	4.1500e-003	0.00
tblFleetMix	SBUS	1.2530e-003	0.00
tblFleetMix	UBUS	2.9590e-003	0.00
tblProjectCharacteristics	CH4IntensityFactor	0.029	0.022
tblProjectCharacteristics	CO2IntensityFactor	641.35	491.65
tblProjectCharacteristics	N2OIntensityFactor	0.006	0.005
tblVehicleTrips	ST_TR	1.32	1.99
tblVehicleTrips	ST_TR	2.46	2.21
tblVehicleTrips	SU_TR	0.68	5.00
tblVehicleTrips	SU_TR	1.05	0.70
tblVehicleTrips	WD_TR	6.97	4.96
tblVehicleTrips	WD_TR	11.03	9.74

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2018	0.1558	1.4931	0.9789	1.8500e-003	0.1830	0.0761	0.2591	0.0906	0.0708	0.1615	0.0000	167.7018	167.7018	0.0364	0.0000	168.6118
2019	1.1943	2.9175	2.5259	5.3000e-003	0.1300	0.1406	0.2706	0.0353	0.1321	0.1674	0.0000	477.2599	477.2599	0.0734	0.0000	479.0939
Maximum	**1.1943**	**2.9175**	**2.5259**	**5.3000e-003**	**0.1830**	**0.1406**	**0.2706**	**0.0906**	**0.1321**	**0.1674**	**0.0000**	**477.2599**	**477.2599**	**0.0734**	**0.0000**	**479.0939**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2018	0.1558	1.4931	0.9789	1.8500e-003	0.0970	0.0761	0.1732	0.0448	0.0708	0.1156	0.0000	167.7017	167.7017	0.0364	0.0000	168.6117
2019	1.1943	2.9175	2.5259	5.3000e-003	0.1300	0.1406	0.2706	0.0353	0.1321	0.1674	0.0000	477.2596	477.2596	0.0734	0.0000	479.0936
Maximum	**1.1943**	**2.9175**	**2.5259**	**5.3000e-003**	**0.1300**	**0.1406**	**0.2706**	**0.0448**	**0.1321**	**0.1674**	**0.0000**	**477.2596**	**477.2596**	**0.0734**	**0.0000**	**479.0936**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**27.46**	**0.00**	**16.23**	**36.42**	**0.00**	**13.95**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	9-3-2018	12-2-2018	1.2800	1.2800
2	12-3-2018	3-2-2019	1.0507	1.0507
3	3-3-2019	6-2-2019	1.0333	1.0333
4	6-3-2019	9-2-2019	1.0303	1.0303
5	9-3-2019	9-30-2019	0.2980	0.2980
		Highest	1.2800	1.2800

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.5612	4.0000e-005	3.8000e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	7.3500e-003	7.3500e-003	2.0000e-005	0.0000	7.8400e-003
Energy	0.0166	0.1511	0.1269	9.1000e-004		0.0115	0.0115		0.0115	0.0115	0.0000	392.9451	392.9451	0.0134	5.3400e-003	394.8704
Mobile	0.2571	3.0905	2.9026	0.0117	0.6102	0.0174	0.6276	0.1651	0.0165	0.1816	0.0000	1,085.9409	1,085.9409	0.0494	0.0000	1,087.1765
Waste						0.0000	0.0000		0.0000	0.0000	29.5575	0.0000	29.5575	1.7468	0.0000	73.2275
Water						0.0000	0.0000		0.0000	0.0000	8.6213	33.1914	41.8127	0.8870	0.0213	70.3183
Total	**0.8349**	**3.2416**	**3.0333**	**0.0126**	**0.6102**	**0.0289**	**0.6390**	**0.1651**	**0.0280**	**0.1931**	**38.1788**	**1,512.0847**	**1,550.2635**	**2.6966**	**0.0266**	**1,625.6005**

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.5612	4.0000e-005	3.8000e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	7.3500e-003	7.3500e-003	2.0000e-005	0.0000	7.8400e-003
Energy	0.0166	0.1511	0.1269	9.1000e-004		0.0115	0.0115		0.0115	0.0115	0.0000	392.9451	392.9451	0.0134	5.3400e-003	394.8704
Mobile	0.2571	3.0905	2.9026	0.0117	0.6102	0.0174	0.6276	0.1651	0.0165	0.1816	0.0000	1,085.9409	1,085.9409	0.0494	0.0000	1,087.1765
Waste						0.0000	0.0000		0.0000	0.0000	29.5575	0.0000	29.5575	1.7468	0.0000	73.2275
Water						0.0000	0.0000		0.0000	0.0000	8.6213	33.1914	41.8127	0.8870	0.0213	70.3183
Total	**0.8349**	**3.2416**	**3.0333**	**0.0126**	**0.6102**	**0.0289**	**0.6390**	**0.1651**	**0.0280**	**0.1931**	**38.1788**	**1,512.0847**	**1,550.2635**	**2.6966**	**0.0266**	**1,625.6005**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	9/3/2018	9/28/2018	5	20	
2	Site Preparation	Site Preparation	9/29/2018	10/12/2018	5	10	
3	Grading	Grading	10/13/2018	11/9/2018	5	20	
4	Building Construction	Building Construction	11/10/2018	9/27/2019	5	230	
5	Paving	Paving	9/28/2019	10/25/2019	5	20	
6	Architectural Coating	Architectural Coating	10/26/2019	11/22/2019	5	20	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 10

Acres of Paving: 4.08

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 177,900; Non-Residential Outdoor: 59,300; Striped Parking Area: 10,656 (Architectural Coating – sqft)

OffRoad Equipment

Rodeo GPA - Monterey County, Annual

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	6.00	78	0.48
Demolition	Excavators	3	8.00	158	0.38
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Grading	Excavators	1	8.00	158	0.38
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Paving	Pavers	2	8.00	130	0.42
Paving	Rollers	2	8.00	80	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Grading	Graders	1	8.00	187	0.41
Grading	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Paving	Paving Equipment	2	8.00	132	0.36
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Building Construction	Welders	1	8.00	46	0.45

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	0.00	4.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	124.00	49.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	25.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

3.2 Demolition - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					4.6000e-004	0.0000	4.6000e-004	7.0000e-005	0.0000	7.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0372	0.3832	0.2230	3.9000e-004		0.0194	0.0194		0.0181	0.0181	0.0000	35.1241	35.1241	9.6800e-003	0.0000	35.3660
Total	**0.0372**	**0.3832**	**0.2230**	**3.9000e-004**	**4.6000e-004**	**0.0194**	**0.0199**	**7.0000e-005**	**0.0181**	**0.0181**	**0.0000**	**35.1241**	**35.1241**	**9.6800e-003**	**0.0000**	**35.3660**

3.2 Demolition - 2018

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	2.0000e-005	7.0000e-004	1.4000e-004	0.0000	3.0000e-005	0.0000	4.0000e-005	1.0000e-005	0.0000	1.0000e-005	0.0000	0.1587	0.1587	1.0000e-005	0.0000	0.1588
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	8.1000e-004	7.9000e-004	6.9900e-003	1.0000e-005	1.1900e-003	1.0000e-005	1.2000e-003	3.2000e-004	1.0000e-005	3.3000e-004	0.0000	1.2032	1.2032	6.0000e-005	0.0000	1.2048
Total	**8.3000e-004**	**1.4900e-003**	**7.1300e-003**	**1.0000e-005**	**1.2200e-003**	**1.0000e-005**	**1.2400e-003**	**3.3000e-004**	**1.0000e-005**	**3.4000e-004**	**0.0000**	**1.3619**	**1.3619**	**7.0000e-005**	**0.0000**	**1.3637**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					2.1000e-004	0.0000	2.1000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0372	0.3832	0.2230	3.9000e-004		0.0194	0.0194		0.0181	0.0181	0.0000	35.1240	35.1240	9.6800e-003	0.0000	35.3660
Total	**0.0372**	**0.3832**	**0.2230**	**3.9000e-004**	**2.1000e-004**	**0.0194**	**0.0196**	**3.0000e-005**	**0.0181**	**0.0181**	**0.0000**	**35.1240**	**35.1240**	**9.6800e-003**	**0.0000**	**35.3660**

3.2 Demolition - 2018

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	2.0000e-005	7.0000e-004	1.4000e-004	0.0000	3.0000e-005	0.0000	4.0000e-005	1.0000e-005	0.0000	1.0000e-005	0.0000	0.1587	0.1587	1.0000e-005	0.0000	0.1588
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	8.1000e-004	7.9000e-004	6.9900e-003	1.0000e-005	1.1900e-003	1.0000e-005	1.2000e-003	3.2000e-004	1.0000e-005	3.3000e-004	0.0000	1.2032	1.2032	6.0000e-005	0.0000	1.2048
Total	**8.3000e-004**	**1.4900e-003**	**7.1300e-003**	**1.0000e-005**	**1.2200e-003**	**1.0000e-005**	**1.2400e-003**	**3.3000e-004**	**1.0000e-005**	**3.4000e-004**	**0.0000**	**1.3619**	**1.3619**	**7.0000e-005**	**0.0000**	**1.3637**

3.3 Site Preparation - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0903	0.0000	0.0903	0.0497	0.0000	0.0497	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0228	0.2410	0.1124	1.9000e-004		0.0129	0.0129		0.0119	0.0119	0.0000	17.3800	17.3800	5.4100e-003	0.0000	17.5152
Total	**0.0228**	**0.2410**	**0.1124**	**1.9000e-004**	**0.0903**	**0.0129**	**0.1032**	**0.0497**	**0.0119**	**0.0615**	**0.0000**	**17.3800**	**17.3800**	**5.4100e-003**	**0.0000**	**17.5152**

3.3 Site Preparation - 2018

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.9000e-004	4.7000e-004	4.1900e-003	1.0000e-005	7.2000e-004	1.0000e-005	7.2000e-004	1.9000e-004	1.0000e-005	2.0000e-004	0.0000	0.7219	0.7219	4.0000e-005	0.0000	0.7229
Total	**4.9000e-004**	**4.7000e-004**	**4.1900e-003**	**1.0000e-005**	**7.2000e-004**	**1.0000e-005**	**7.2000e-004**	**1.9000e-004**	**1.0000e-005**	**2.0000e-004**	**0.0000**	**0.7219**	**0.7219**	**4.0000e-005**	**0.0000**	**0.7229**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0407	0.0000	0.0407	0.0223	0.0000	0.0223	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0228	0.2410	0.1124	1.9000e-004		0.0129	0.0129		0.0119	0.0119	0.0000	17.3799	17.3799	5.4100e-003	0.0000	17.5152
Total	**0.0228**	**0.2410**	**0.1124**	**1.9000e-004**	**0.0407**	**0.0129**	**0.0535**	**0.0223**	**0.0119**	**0.0342**	**0.0000**	**17.3799**	**17.3799**	**5.4100e-003**	**0.0000**	**17.5152**

3.3 Site Preparation - 2018

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.9000e-004	4.7000e-004	4.1900e-003	1.0000e-005	7.2000e-004	1.0000e-005	7.2000e-004	1.9000e-004	1.0000e-005	2.0000e-004	0.0000	0.7219	0.7219	4.0000e-005	0.0000	0.7229
Total	**4.9000e-004**	**4.7000e-004**	**4.1900e-003**	**1.0000e-005**	**7.2000e-004**	**1.0000e-005**	**7.2000e-004**	**1.9000e-004**	**1.0000e-005**	**2.0000e-004**	**0.0000**	**0.7219**	**0.7219**	**4.0000e-005**	**0.0000**	**0.7229**

3.4 Grading - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0655	0.0000	0.0655	0.0337	0.0000	0.0337	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0277	0.3067	0.1658	3.0000e-004		0.0155	0.0155		0.0143	0.0143	0.0000	27.1069	27.1069	8.4400e-003	0.0000	27.3178
Total	**0.0277**	**0.3067**	**0.1658**	**3.0000e-004**	**0.0655**	**0.0155**	**0.0810**	**0.0337**	**0.0143**	**0.0479**	**0.0000**	**27.1069**	**27.1069**	**8.4400e-003**	**0.0000**	**27.3178**

3.4 Grading - 2018

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	8.1000e-004	7.9000e-004	6.9900e-003	1.0000e-005	1.1900e-003	1.0000e-005	1.2000e-003	3.2000e-004	1.0000e-005	3.3000e-004	0.0000	1.2032	1.2032	6.0000e-005	0.0000	1.2048
Total	**8.1000e-004**	**7.9000e-004**	**6.9900e-003**	**1.0000e-005**	**1.1900e-003**	**1.0000e-005**	**1.2000e-003**	**3.2000e-004**	**1.0000e-005**	**3.3000e-004**	**0.0000**	**1.2032**	**1.2032**	**6.0000e-005**	**0.0000**	**1.2048**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0295	0.0000	0.0295	0.0152	0.0000	0.0152	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0277	0.3067	0.1658	3.0000e-004		0.0155	0.0155		0.0143	0.0143	0.0000	27.1068	27.1068	8.4400e-003	0.0000	27.3178
Total	**0.0277**	**0.3067**	**0.1658**	**3.0000e-004**	**0.0295**	**0.0155**	**0.0450**	**0.0152**	**0.0143**	**0.0294**	**0.0000**	**27.1068**	**27.1068**	**8.4400e-003**	**0.0000**	**27.3178**

3.4 Grading - 2018

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	8.1000e-004	7.9000e-004	6.9900e-003	1.0000e-005	1.1900e-003	1.0000e-005	1.2000e-003	3.2000e-004	1.0000e-005	3.3000e-004	0.0000	1.2032	1.2032	6.0000e-005	0.0000	1.2048
Total	**8.1000e-004**	**7.9000e-004**	**6.9900e-003**	**1.0000e-005**	**1.1900e-003**	**1.0000e-005**	**1.2000e-003**	**3.2000e-004**	**1.0000e-005**	**3.3000e-004**	**0.0000**	**1.2032**	**1.2032**	**6.0000e-005**	**0.0000**	**1.2048**

3.5 Building Construction - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0482	0.4210	0.3165	4.8000e-004		0.0270	0.0270		0.0254	0.0254	0.0000	42.7981	42.7981	0.0105	0.0000	43.0602
Total	**0.0482**	**0.4210**	**0.3165**	**4.8000e-004**		**0.0270**	**0.0270**		**0.0254**	**0.0254**	**0.0000**	**42.7981**	**42.7981**	**0.0105**	**0.0000**	**43.0602**

3.5 Building Construction - 2018

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	5.6300e-003	0.1267	0.0389	2.5000e-004	5.8000e-003	1.1500e-003	6.9500e-003	1.6800e-003	1.1000e-003	2.7800e-003	0.0000	24.1015	24.1015	1.2600e-003	0.0000	24.1331
Worker	0.0121	0.0117	0.1040	2.0000e-004	0.0177	1.7000e-004	0.0179	4.7200e-003	1.6000e-004	4.8700e-003	0.0000	17.9042	17.9042	9.5000e-004	0.0000	17.9280
Total	**0.0177**	**0.1384**	**0.1429**	**4.5000e-004**	**0.0235**	**1.3200e-003**	**0.0249**	**6.4000e-003**	**1.2600e-003**	**7.6500e-003**	**0.0000**	**42.0057**	**42.0057**	**2.2100e-003**	**0.0000**	**42.0611**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0482	0.4210	0.3165	4.8000e-004		0.0270	0.0270		0.0254	0.0254	0.0000	42.7981	42.7981	0.0105	0.0000	43.0602
Total	**0.0482**	**0.4210**	**0.3165**	**4.8000e-004**		**0.0270**	**0.0270**		**0.0254**	**0.0254**	**0.0000**	**42.7981**	**42.7981**	**0.0105**	**0.0000**	**43.0602**

3.5 Building Construction - 2018

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	5.6300e-003	0.1267	0.0389	2.5000e-004	5.8000e-003	1.1500e-003	6.9500e-003	1.6800e-003	1.1000e-003	2.7800e-003	0.0000	24.1015	24.1015	1.2600e-003	0.0000	24.1331
Worker	0.0121	0.0117	0.1040	2.0000e-004	0.0177	1.7000e-004	0.0179	4.7200e-003	1.6000e-004	4.8700e-003	0.0000	17.9042	17.9042	9.5000e-004	0.0000	17.9280
Total	**0.0177**	**0.1384**	**0.1429**	**4.5000e-004**	**0.0235**	**1.3200e-003**	**0.0249**	**6.4000e-003**	**1.2600e-003**	**7.6500e-003**	**0.0000**	**42.0057**	**42.0057**	**2.2100e-003**	**0.0000**	**42.0611**

3.5 Building Construction - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.2290	2.0446	1.6649	2.6100e-003		0.1251	0.1251		0.1176	0.1176	0.0000	228.0511	228.0511	0.0556	0.0000	229.4400
Total	**0.2290**	**2.0446**	**1.6649**	**2.6100e-003**		**0.1251**	**0.1251**		**0.1176**	**0.1176**	**0.0000**	**228.0511**	**228.0511**	**0.0556**	**0.0000**	**229.4400**

3.5 Building Construction - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0263	0.6449	0.1855	1.3600e-003	0.0313	5.0100e-003	0.0363	9.0400e-003	4.7900e-003	0.0138	0.0000	129.3235	129.3235	6.4400e-003	0.0000	129.4846
Worker	0.0582	0.0554	0.4941	1.0400e-003	0.0956	8.9000e-004	0.0965	0.0254	8.2000e-004	0.0262	0.0000	93.7395	93.7395	4.5200e-003	0.0000	93.8525
Total	**0.0845**	**0.7002**	**0.6795**	**2.4000e-003**	**0.1269**	**5.9000e-003**	**0.1328**	**0.0345**	**5.6100e-003**	**0.0401**	**0.0000**	**223.0630**	**223.0630**	**0.0110**	**0.0000**	**223.3371**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.2290	2.0446	1.6649	2.6100e-003		0.1251	0.1251		0.1176	0.1176	0.0000	228.0508	228.0508	0.0556	0.0000	229.4397
Total	**0.2290**	**2.0446**	**1.6649**	**2.6100e-003**		**0.1251**	**0.1251**		**0.1176**	**0.1176**	**0.0000**	**228.0508**	**228.0508**	**0.0556**	**0.0000**	**229.4397**

3.5 Building Construction - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0263	0.6449	0.1855	1.3600e-003	0.0313	5.0100e-003	0.0363	9.0400e-003	4.7900e-003	0.0138	0.0000	129.3235	129.3235	6.4400e-003	0.0000	129.4846
Worker	0.0582	0.0554	0.4941	1.0400e-003	0.0956	8.9000e-004	0.0965	0.0254	8.2000e-004	0.0262	0.0000	93.7395	93.7395	4.5200e-003	0.0000	93.8525
Total	**0.0845**	**0.7002**	**0.6795**	**2.4000e-003**	**0.1269**	**5.9000e-003**	**0.1328**	**0.0345**	**5.6100e-003**	**0.0401**	**0.0000**	**223.0630**	**223.0630**	**0.0110**	**0.0000**	**223.3371**

3.6 Paving - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0145	0.1524	0.1467	2.3000e-004		8.2500e-003	8.2500e-003		7.5900e-003	7.5900e-003	0.0000	20.4752	20.4752	6.4800e-003	0.0000	20.6371
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0145**	**0.1524**	**0.1467**	**2.3000e-004**		**8.2500e-003**	**8.2500e-003**		**7.5900e-003**	**7.5900e-003**	**0.0000**	**20.4752**	**20.4752**	**6.4800e-003**	**0.0000**	**20.6371**

3.6 Paving - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	7.3000e-004	6.9000e-004	6.1600e-003	1.0000e-005	1.1900e-003	1.0000e-005	1.2000e-003	3.2000e-004	1.0000e-005	3.3000e-004	0.0000	1.1690	1.1690	6.0000e-005	0.0000	1.1704
Total	**7.3000e-004**	**6.9000e-004**	**6.1600e-003**	**1.0000e-005**	**1.1900e-003**	**1.0000e-005**	**1.2000e-003**	**3.2000e-004**	**1.0000e-005**	**3.3000e-004**	**0.0000**	**1.1690**	**1.1690**	**6.0000e-005**	**0.0000**	**1.1704**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0145	0.1524	0.1467	2.3000e-004		8.2500e-003	8.2500e-003		7.5900e-003	7.5900e-003	0.0000	20.4752	20.4752	6.4800e-003	0.0000	20.6371
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0145**	**0.1524**	**0.1467**	**2.3000e-004**		**8.2500e-003**	**8.2500e-003**		**7.5900e-003**	**7.5900e-003**	**0.0000**	**20.4752**	**20.4752**	**6.4800e-003**	**0.0000**	**20.6371**

3.6 Paving - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	7.3000e-004	6.9000e-004	6.1600e-003	1.0000e-005	1.1900e-003	1.0000e-005	1.2000e-003	3.2000e-004	1.0000e-005	3.3000e-004	0.0000	1.1690	1.1690	6.0000e-005	0.0000	1.1704
Total	**7.3000e-004**	**6.9000e-004**	**6.1600e-003**	**1.0000e-005**	**1.1900e-003**	**1.0000e-005**	**1.2000e-003**	**3.2000e-004**	**1.0000e-005**	**3.3000e-004**	**0.0000**	**1.1690**	**1.1690**	**6.0000e-005**	**0.0000**	**1.1704**

3.7 Architectural Coating - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.8616					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.6600e-003	0.0184	0.0184	3.0000e-005		1.2900e-003	1.2900e-003		1.2900e-003	1.2900e-003	0.0000	2.5533	2.5533	2.2000e-004	0.0000	2.5587
Total	**0.8643**	**0.0184**	**0.0184**	**3.0000e-005**		**1.2900e-003**	**1.2900e-003**		**1.2900e-003**	**1.2900e-003**	**0.0000**	**2.5533**	**2.5533**	**2.2000e-004**	**0.0000**	**2.5587**

3.7 Architectural Coating - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.2100e-003	1.1500e-003	0.0103	2.0000e-005	1.9900e-003	2.0000e-005	2.0000e-003	5.3000e-004	2.0000e-005	5.5000e-004	0.0000	1.9484	1.9484	9.0000e-005	0.0000	1.9507
Total	**1.2100e-003**	**1.1500e-003**	**0.0103**	**2.0000e-005**	**1.9900e-003**	**2.0000e-005**	**2.0000e-003**	**5.3000e-004**	**2.0000e-005**	**5.5000e-004**	**0.0000**	**1.9484**	**1.9484**	**9.0000e-005**	**0.0000**	**1.9507**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.8616					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.6600e-003	0.0184	0.0184	3.0000e-005		1.2900e-003	1.2900e-003		1.2900e-003	1.2900e-003	0.0000	2.5533	2.5533	2.2000e-004	0.0000	2.5586
Total	**0.8643**	**0.0184**	**0.0184**	**3.0000e-005**		**1.2900e-003**	**1.2900e-003**		**1.2900e-003**	**1.2900e-003**	**0.0000**	**2.5533**	**2.5533**	**2.2000e-004**	**0.0000**	**2.5586**

3.7 Architectural Coating - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.2100e-003	1.1500e-003	0.0103	2.0000e-005	1.9900e-003	2.0000e-005	2.0000e-003	5.3000e-004	2.0000e-005	5.5000e-004	0.0000	1.9484	1.9484	9.0000e-005	0.0000	1.9507
Total	**1.2100e-003**	**1.1500e-003**	**0.0103**	**2.0000e-005**	**1.9900e-003**	**2.0000e-005**	**2.0000e-003**	**5.3000e-004**	**2.0000e-005**	**5.5000e-004**	**0.0000**	**1.9484**	**1.9484**	**9.0000e-005**	**0.0000**	**1.9507**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.2571	3.0905	2.9026	0.0117	0.6102	0.0174	0.6276	0.1651	0.0165	0.1816	0.0000	1,085.9409	1,085.9409	0.0494	0.0000	1,087.1765
Unmitigated	0.2571	3.0905	2.9026	0.0117	0.6102	0.0174	0.6276	0.1651	0.0165	0.1816	0.0000	1,085.9409	1,085.9409	0.0494	0.0000	1,087.1765

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Light Industry	564.94	226.66	569.50	1,510,172	1,510,172
General Office Building	45.78	10.39	3.29	82,811	82,811
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Total	610.72	237.05	572.79	1,592,983	1,592,983

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
General Light Industry	9.50	7.30	7.30	59.00	28.00	13.00	92	5	3
General Office Building	9.50	7.30	7.30	33.00	48.00	19.00	77	19	4
Other Non-Asphalt Surfaces	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
General Light Industry	0.436895	0.025303	0.166081	0.115721	0.067659	0.016341	0.046000	0.126000	0.000000	0.000000	0.000000	0.000000	0.000000
General Office Building	0.533135	0.030877	0.202665	0.141212	0.024955	0.006027	0.018072	0.025901	0.004150	0.002959	0.007890	0.001253	0.000905
Other Non-Asphalt Surfaces	0.533135	0.030877	0.202665	0.141212	0.024955	0.006027	0.018072	0.025901	0.004150	0.002959	0.007890	0.001253	0.000905

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	228.4981	228.4981	0.0102	2.3200e-003	229.4462
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	228.4981	228.4981	0.0102	2.3200e-003	229.4462
NaturalGas Mitigated	0.0166	0.1511	0.1269	9.1000e-004		0.0115	0.0115		0.0115	0.0115	0.0000	164.4470	164.4470	3.1500e-003	3.0100e-003	165.4243
NaturalGas Unmitigated	0.0166	0.1511	0.1269	9.1000e-004		0.0115	0.0115		0.0115	0.0115	0.0000	164.4470	164.4470	3.1500e-003	3.0100e-003	165.4243

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
General Light Industry	3.00468e+006	0.0162	0.1473	0.1237	8.8000e-004		0.0112	0.0112		0.0112	0.0112	0.0000	160.3413	160.3413	3.0700e-003	2.9400e-003	161.2941
General Office Building	76939	4.1000e-004	3.7700e-003	3.1700e-003	2.0000e-005		2.9000e-004	2.9000e-004		2.9000e-004	2.9000e-004	0.0000	4.1058	4.1058	8.0000e-005	8.0000e-005	4.1302
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0166**	**0.1511**	**0.1269**	**9.0000e-004**		**0.0115**	**0.0115**		**0.0115**	**0.0115**	**0.0000**	**164.4470**	**164.4470**	**3.1500e-003**	**3.0200e-003**	**165.4243**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
General Light Industry	3.00468e+006	0.0162	0.1473	0.1237	8.8000e-004		0.0112	0.0112		0.0112	0.0112	0.0000	160.3413	160.3413	3.0700e-003	2.9400e-003	161.2941
General Office Building	76939	4.1000e-004	3.7700e-003	3.1700e-003	2.0000e-005		2.9000e-004	2.9000e-004		2.9000e-004	2.9000e-004	0.0000	4.1058	4.1058	8.0000e-005	8.0000e-005	4.1302
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0166**	**0.1511**	**0.1269**	**9.0000e-004**		**0.0115**	**0.0115**		**0.0115**	**0.0115**	**0.0000**	**164.4470**	**164.4470**	**3.1500e-003**	**3.0200e-003**	**165.4243**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
General Light Industry	940814	209.8097	9.3900e-003	2.1300e-003	210.6803
General Office Building	83801	18.6884	8.4000e-004	1.9000e-004	18.7659
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Total		**228.4981**	**0.0102**	**2.3200e-003**	**229.4462**

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
General Light Industry	940814	209.8097	9.3900e-003	2.1300e-003	210.6803
General Office Building	83801	18.6884	8.4000e-004	1.9000e-004	18.7659
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Total		**228.4981**	**0.0102**	**2.3200e-003**	**229.4462**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.5612	4.0000e-005	3.8000e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	7.3500e-003	7.3500e-003	2.0000e-005	0.0000	7.8400e-003
Unmitigated	0.5612	4.0000e-005	3.8000e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	7.3500e-003	7.3500e-003	2.0000e-005	0.0000	7.8400e-003

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0862					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.4747					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	3.6000e-004	4.0000e-005	3.8000e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	7.3500e-003	7.3500e-003	2.0000e-005	0.0000	7.8400e-003
Total	**0.5612**	**4.0000e-005**	**3.8000e-003**	**0.0000**		**1.0000e-005**	**1.0000e-005**		**1.0000e-005**	**1.0000e-005**	**0.0000**	**7.3500e-003**	**7.3500e-003**	**2.0000e-005**	**0.0000**	**7.8400e-003**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0862					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.4747					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	3.6000e-004	4.0000e-005	3.8000e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	7.3500e-003	7.3500e-003	2.0000e-005	0.0000	7.8400e-003
Total	**0.5612**	**4.0000e-005**	**3.8000e-003**	**0.0000**		**1.0000e-005**	**1.0000e-005**		**1.0000e-005**	**1.0000e-005**	**0.0000**	**7.3500e-003**	**7.3500e-003**	**2.0000e-005**	**0.0000**	**7.8400e-003**

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	41.8127	0.8870	0.0213	70.3183
Unmitigated	41.8127	0.8870	0.0213	70.3183

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
General Light Industry	26.3394 / 0	40.1400	0.8597	0.0206	67.7677
General Office Building	0.835349 / 0.511988	1.6727	0.0273	6.6000e-004	2.5505
Other Non-Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**41.8126**	**0.8870**	**0.0213**	**70.3183**

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
General Light Industry	26.3394 / 0	40.1400	0.8597	0.0206	67.7677
General Office Building	0.835349 / 0.511988	1.6727	0.0273	6.6000e-004	2.5505
Other Non-Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**41.8126**	**0.8870**	**0.0213**	**70.3183**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	29.5575	1.7468	0.0000	73.2275
Unmitigated	29.5575	1.7468	0.0000	73.2275

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
General Light Industry	141.24	28.6704	1.6944	0.0000	71.0298
General Office Building	4.37	0.8871	0.0524	0.0000	2.1977
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Total		**29.5575**	**1.7468**	**0.0000**	**73.2275**

8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
General Light Industry	141.24	28.6704	1.6944	0.0000	71.0298
General Office Building	4.37	0.8871	0.0524	0.0000	2.1977
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Total		**29.5575**	**1.7468**	**0.0000**	**73.2275**

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

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Rodeo Property Traffic Impact Analysis

June 12, 2019

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Rodeo Property Traffic Impact Analysis

June 12, 2019

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1 Report Summary

The project is a General Plan amendment and Rezone change that would allow development of industrial and commercial uses on a 6.8-acre site located on Sun Street adjacent to US 101. The proposed land use designation would allow site to be developed at a floor area ratio 0.4, which would allow for up to 118,600 square feet of industrial floor space. For purposes of this traffic study, 4 percent of the floor space (4,700 square feet) was assumed to be occupied by support office space and this space was modeled as general office space. The remaining floor area (113,900 square feet) was modeled as light industrial space.

The site is designated in the General Plan as Open Space. Access to the site is provided via Sun Street and its connection to Calle Cebu and E. Market Street.

This report summarizes the potential traffic circulation impacts associated with the proposed Rodeo Property General Plan Amendment (GPA) and Rezoning in Salinas, California. Vehicular, pedestrian and bicycle circulation issues were evaluated at the project site and the surrounding street network in Salinas. The project site is located on Sun Street between US 101 and East Market Street. Access to the site is provided via Sun Street and its connection to Calle Cebu and E. Market Street.

This report concludes that the identified traffic impacts can be mitigated and that there are no significant and unavoidable traffic impacts with the Implementation of the proposed mitigation measures. The Applicants payment of TFO fees or the funding of required mitigation measures as described in this report shall occur after the Applicants future submittal of a project specific plan and the City Staff evaluation of the actual impacts. This report utilized the maximum allowable FAR of .40 as consistent with the proposed zoning and general plan changes, it is anticipated that the future project specific application may include a lower FAR.

Study Network

The AM and PM peak periods were analyzed at the following intersections:

1. Natividad Road / East Laurel Drive;
2. Sherwood Drive - Natividad Road / East Bernal Drive – La Posada Way;
3. North Main Street / Bernal Drive;
4. Sherwood Drive / Sherwood Place;
5. North Main Street (State Route 183) / Rossi Street;
6. Sherwood Drive / East Rossi Street – Calle Cebu;
7. Kern Street / US 101 Northbound Ramps – Mobray Way;
8. East Market Street – Front Street / East Market Street;
9. East Market Street – Sherwood Drive / Market Place – East Market Street;
10. Sun Street / East Market Street;
11. Griffin Street – Simas Street / East Market Street;
12. US 101 Southbound Offramp – Merced Street / East Market Street;
13. US 101 Southbound Onramp / East Market Street;
14. Kern Street / East Market Street;
15. Front Street / East Alisal Street; and

Traffic operations for the Existing, Existing Plus Project, Background, Background Plus Project, Cumulative (General Plan Buildout) Without Project and Cumulative (General Plan Buildout) Plus Project development scenarios were analyzed.

1.1 Existing Conditions

The intersection turning movement counts were collected during the AM (7:00 – 9:00 AM) and PM (4:00 – 6:00) peak hours on Friday, June 2 and Monday, June 5, 2017. As the intersection traffic volumes were collected on atypical days of the week and when Salinas area schools were not in session, the collected intersection traffic volumes were adjusted to be consistent with available historical volumes when schools were in session.

Although most of the study intersections currently operate at or better than their respective level of service standards under Existing conditions, the following five intersections currently operate below their standards:

1. Natividad Road / E Laurel Drive: LOS E (AM and PM)
2. Sherwood Drive – Natividad Road / E Bernal Drive – La Posada Way: LOS E (AM), LOS F (PM)
5. N Main Street (SR 183) / Rossi Street: LOS D (PM)
10. Sun Street / E Market Street: Side-street approach LOS F (PM)
12. US 101 Southbound Offramp – Merced Street / E Market Street: Overall LOS F (PM), Side-street approach LOS F (AM and PM)

A review of the traffic counts found that there is a low to moderate level of pedestrian activity near the project site. Pedestrian activity is highest near the residential and commercial areas on Sherwood Drive and E Market Street, especially during the PM peak hour (compared to the AM peak hour).

A review of the traffic counts found that there is relatively little bicycle activity in the study network, including near the project site.

1.2 Existing Plus Project Conditions

The project is a General Plan amendment and Rezone change that would allow development of industrial and commercial uses on a 6.8-acre site located on Sun Street adjacent to US 101. The proposed land use designation would allow site to be developed at a floor area ratio 0.4, which would allow for up to 118,600 square feet of industrial floor space. For purposes of this traffic study, 4 percent of the floor space (4,700 square feet) was assumed to be occupied by support office space and this space was modeled as general office space. The remaining floor area (113,900 square feet) was modeled as light industrial space. A specific development project is not proposed for the site at this time.

The site is designated in the General Plan as Open Space. Access to the site is provided via Sun Street and its connection to Calle Cebu and E. Market Street.

Project Trip Generation

The estimate was derived using trip rates from the Institute of Transportation Engineers (ITE) publication *Trip Generation Manual,* 10th Edition, 2017. Note that trip generation estimates for the industrial and office components of the project have been separately calculated.

In total, the project is estimated to generate 611 daily trips, with 85 trips (74 in, 11 out) during the AM peak hour and 77 trips (10 in, 67 out) during the PM peak hour.

Vehicle Circulation

Although most of the study intersections would continue operate at or better than their respective level of service (LOS) standards, the following five intersections that currently operate below acceptable LOS would be significantly impacted by the proposed project based upon the significance criteria utilized for this study:

1. Natividad Road / E Laurel Drive: LOS E (AM and PM)
2. Sherwood Drive – Natividad Road / E Bernal Drive – La Posada Way: LOS E (AM), LOS F (PM)
5. N Main Street (SR 183) / Rossi Street: LOS D (PM)
10. Sun Street / E Market Street: Side-street approach LOS F (PM)
12. US 101 Southbound Offramp – Merced Street / E Market Street: Overall LOS F (PM), Side-street approach LOS F (AM and PM).

Figure ES-1 shows the levels of service with and without the project at each of the significantly impacted intersections for the Existing Plus Project Condition. **Figure ES-1** also shows the contribution of the project to the intersection deficiency and project's percentage of total overall intersection delay.

See **Figure ES-4** for the recommended improvements at these intersections for the Existing Condition. Implementation of these improvements would reduce the project's impact contribution at these intersections to less-than-significant. The impact and the recommended mitigation measure at each intersection is described below.

- **Intersection #1 – Natividad Road / E Laurel Drive:**
  This intersection would operate at a deficient LOS E during the AM and PM peak hours, unchanged from Existing Conditions. The project would add 16 AM peak hour and 17 PM peak hour trips to this intersection.

  Impact: The impact of the Project to the intersection is significant because the Project will add peak hour trips to the intersection that operates at a deficient level without the project.

  Mitigation: Add a third northbound and third southbound lane to Natividad Road through this intersection. Intersection operations would improve during the AM and PM peak hour to LOS D.

  Salinas TFO Project: This improvement is included in the City of Salinas TFO (Project 61).

  Project Responsibility: Pay the Salinas traffic impact fees, which would represent the project's fair-share contribution of this improvement.

- **Intersection #2 – Sherwood Drive – Natividad Road / E Bernal Drive – La Posada Way:**
  This intersection would operate at a deficient LOS E (AM) and F (PM), unchanged from Existing Conditions. The project would add 16 AM peak hour and 17 PM peak hour trips to this intersection.

  Impact: The impact of the Project to the intersection is significant because the Project will add peak hour trips to the intersection that operates at a deficient level without the project.

  Mitigation: Convert the signal phasing on the east and west intersection approaches from concurrent phasing to split phasing. Intersection operations would improve during the AM and PM peak hour to LOS D.

Project Responsibility: To ensure that the intersection of Sherwood Drive – Natividad Road / E. Bernal Drive-La Posada Way will operate at acceptable levels of service, the applicant shall either: (1) Prior to the City's issuance of the first grading permit for a specific development project at project site, pay a traffic impact fee provided the City has updated its Traffic Fee Ordinance to include the signal modifications at this intersection as one of the improvements that is funded by the TFO, or (2) if the signal modifications at this intersection has not been included in the TFO, the applicant shall be responsible for either: (a) Fund the improvements and obtain the requisite encroachment or other permits for modifying the signal phasing and ensure that the signal modification is in operation prior to the issuance of the first Certificate of Occupancy for a specific development project at the project site, or (b) Concurrent with the issuance of the first grading permit for a specific development project at project site, deposit funds with the City in order for the City to obtain the requisite permits and modify the signal phasing ensuring that the signal modification is operational prior to the issuance of the first Certificate of Occupancy for a specific development project at the project site.

- **Intersection #5 – N Main Street (SR 183) / Rossi Street:**
  This intersection, which is under Caltrans jurisdiction, would operate at a deficient LOS D during the PM peak hour, unchanged from Existing Conditions. The project would add 6 trips to this intersection during the PM peak hour and increase the PM peak hour delay by 0.1 seconds.

  Impact: The impact of the Project to the intersection is significant because the Project will increase the average vehicle delay during the PM peak hour by at least 0.1 seconds.

  Mitigation: Add a third northbound and third southbound lane on N. Main Street through this intersection. Intersection operations would improve during the PM peak hour to LOS C.

  Salinas TFO Project: This improvement is included in the City of Salinas TFO (Project 31).

  Project Responsibility: Pay the Salinas traffic impact fees, which would represent the project's fair-share contribution of this improvement.

- **Intersection #10 – Sun Street / E Market Street:**
  Side-street operations at this intersection (the southbound Sun Street approach) would operate at a deficient LOS F during the PM peak hour, unchanged from Existing Conditions. The project would add 31 trips to this approach during the PM peak hour.

  Impact: The impact of the Project to the intersection is significant because the Project will add peak hour trips to the intersection whose southbound approach operates at LOS F without the Project.

  Mitigation: Signalize the intersection. The intersection would operate at LOS A during the AM and PM peak hours with signalization.

  Salinas TFO Project: This improvement is not included in the City of Salinas TFO.

  Project Responsibility: To ensure that the intersection of Sun Street and East Market Street will operate at acceptable levels of service, the applicant shall be responsible for either: (a) Fund the improvements and obtain the requisite encroachment or other permits for installation of a traffic signal and ensure that the signal is in operation prior to the issuance of the first Certificate of Occupancy for a specific development project at the project site, or (b) Concurrent with the issuance of the first grading permit for a specific development project at project site, deposit funds with the City in order for the City to obtain the requisite permits for,

and installation of, a traffic signal that will be operational prior to the issuance of the first Certificate of Occupancy for a specific development project at the project site.

- **Intersection #12 – US 101 Southbound Offramp – Merced Street / E Market Street:** This intersection would operate at a deficient LOS F during the PM peak hour, while side-street operations (the southbound US 101 Southbound Offramp approach) would operate at a deficient LOS F during the AM and PM peak hours, unchanged from Existing Conditions. The project would add 30 AM peak hour and 27 PM peak hour trips to this intersection.

  Impact: The impact of the Project to the intersection is significant because the Project will increase the average vehicle delay during the AM and PM peak hours by at least 0.1 seconds.

  Mitigation: Signalize the intersection. Intersection operations would improve during the AM and PM peak hours to LOS B.

  Salinas TFO Project: This improvement is not included in the City of Salinas TFO.

  Project Responsibility: To ensure that the intersection of U.S. 101 Southbound Offramp – Merced Street/East Market Street will operate at acceptable levels of service, the applicant shall either: (1) Prior to the City's issuance of the first grading permit for a specific development project at project site, pay a traffic impact fee provided the City has updated its Traffic Fee Ordinance to include a traffic signal at this intersection as one of the improvements that is funded by the TFO, or (2) if the traffic signal at this intersection has not been included in the TFO, the applicant shall be responsible for either: (a) Fund the improvements and obtain the requisite encroachment or other permits for installation of a traffic signal and ensure that the signal is in operation prior to the issuance of the first Certificate of Occupancy for a specific development project at the project site, or (b) Concurrent with the issuance of the first grading permit for a specific development project at project site, deposit funds with the City in order for the City to obtain the requisite permits and install the traffic signal ensuring that the signal is operational prior to the issuance of the first Certificate of Occupancy for a specific development project at the project site.

Pedestrian Circulation

Pedestrian traffic that is generated by development of the project site would likely be traveling from areas easily reached on foot from the project site, such as adjacent neighborhoods and bus stops. It is anticipated that the complete sidewalk and crosswalk network in the greater study area would facilitate pedestrian access from these areas. However, potential pedestrian impacts should be assessed at the time the project site is proposed to be developed by a specific project.

Bicycle Circulation

Development on the project site is anticipated to generate little bicycle traffic. As with the pedestrian traffic, the bicycle traffic that would be generated by the project would be traveling to areas easily reached on bike from the project site, such as residential areas that are more than a 10-minute bike ride from the project site. Although there are few bike facilities in the study area nearest the project site, the small level of bicycle traffic will be low enough to minimize any effects on existing vehicle traffic. Potential bicycle traffic impacts should be assessed at the time the project site is proposed to be developed by a specific project.

Transit Circulation

Development on the project site is anticipated to generate little transit usage. The transit usage that would be generated by the project would likely be walking to and from the bust stops within a 10-minute walk from the project site (as enumerated in Section 2.4). The small level of transit usage generated by the project would be low enough to minimize any effects on existing transit demand for bus routes in the area. Potential transit traffic impacts should be assessed at the time the project site is proposed to be developed by a specific project.

Impact Fees

The future development project constructed on the project site would be responsible for payment of the City of Salinas TFO and the Transportation Agency for Monterey County (TAMC) Regional Development Impact fees.

1.3 Background Conditions

Traffic volumes under Background conditions were derived by applying growth factors to the existing volumes on the study corridors in this analysis. More specifically, the corridors and their associated growth factors are the following:

1. E Laurel Drive – 2% (AM), 3% (PM)
2. Natividad Road – 2% (AM), 3% (PM)
3. Sherwood Drive – 2% (AM), 3% (PM)
4. E Rossi Street and W Rossi Street – 2% (AM), 3% (PM)
5. N Main Street:
    a. North of US 101 – 2% (AM), 3% (PM)
    b. South of US 101 – 10% (AM), 15% (PM)
6. E Market Street – 2% (AM), 3% (PM)
7. Front Street – 2% (AM), 3% (PM)
8. E Alisal Street – 2% (AM), 3% (PM)
9. Kern Street – 2% (AM), 3% (PM)
10. US 101 Onramps and Offramps – 2% (AM), 3% (PM)

The growth factors were primarily applied to the mainline traffic on each corridor. The lower of the two growth factors on intersecting streets was applied to the turning movements between those streets. The growth factors used are consistent with the net increase in traffic on these corridors attributable to approved projects in past traffic analyses in the study area.

Vehicle Circulation

Although most of the study intersections would continue to operate at or better than their respective level of service standards under Background conditions, the following six intersections would operate below their standards:

1. Natividad Road / E Laurel Drive: LOS E (AM and PM)
2. Sherwood Drive – Natividad Road / E Bernal Drive – La Posada Way: LOS E (AM), LOS F (PM)
5. N. Main Street (SR 183) / Rossi Street: LOS D (AM and PM)
7. Kern Street / US 101 Northbound Ramps – Mobray Way: Side Street approach LOS F (PM)

10. Sun Street / E Market Street: Side-street approach LOS F (PM)
12. US 101 Southbound Offramp – Merced Street / E Market Street: Overall LOS F (PM), Side-street approach LOS F (AM and PM)

1.4 Background Plus Project Conditions

Vehicle Circulation

The same five intersections significantly impacted under Existing Conditions would be significantly impacted by the project under Background Conditions:

1. Natividad Road / E Laurel Drive: LOS E (AM and PM)
2. Sherwood Drive – Natividad Road / E Bernal Drive – La Posada Way: LOS E (AM), LOS F (PM)
5. N. Main Street (SR 183) / Rossi Street: LOS D (PM)
10. Sun Street / E Market Street: Side-street approach LOS F (PM)
12. US 101 Southbound Offramp – Merced Street / E Market Street: Overall LOS F (PM), Side-street approach LOS F (AM and PM).

Figure ES-2 shows the levels of service with and without the project at each of the significantly impacted intersections for the Background Plus Project Condition. **Figure ES-2** also shows the contribution of the project to the intersection deficiency and project's percentage of total overall intersection delay.

See **Figure ES-4** for the recommended improvements at these intersections under Background Conditions. Implementation of these improvements would reduce the project's impact at these intersections to less-than-significant. The impact and the recommended mitigation measure at each intersection is described below.

- **Intersection #1 – Natividad Road / E Laurel Drive:**
  This intersection would operate at a deficient LOS E during the AM and PM peak hours, unchanged from Background Conditions. The project would add 16 AM peak hour and 17 PM peak hour trips to this intersection.

  Impact: The impact of the Project to the intersection is significant because the Project will add peak hour trips to the intersection that operates at a deficient level without the project.

  Mitigation: Add a third northbound and third southbound lane to Natividad Road through this intersection. Intersection operations would improve during the AM and PM peak hour to LOS D.

  Salinas TFO Project: This improvement is included in the City of Salinas TFO (Project 61).

  Project Responsibility: Pay the Salinas traffic impact fees, which would represent the project's fair-share contribution of this improvement.

- **Intersection #2 – Sherwood Drive – Natividad Road / E Bernal Drive – La Posada Way:**
  This intersection would operate at a deficient LOS E (AM) and F (PM), unchanged from Background Conditions. The project would add 16 AM peak hour and 17 PM peak hour trips to this intersection.

  Impact: The impact of the Project to the intersection is significant because the Project will add peak hour trips to the intersection that operates at a deficient level without the project.

Mitigation: Convert the signal phasing on the east and west intersection approaches from concurrent phasing to split phasing. Intersection operations would improve during the AM and PM peak hour to LOS D.

Project Responsibility: To ensure that the intersection of Sherwood Drive – Natividad Road / E. Bernal Drive-La Posada Way will operate at acceptable levels of service, the applicant shall either: (1) Prior to the City's issuance of the first grading permit for a specific development project at project site, pay a traffic impact fee provided the City has updated its Traffic Fee Ordinance to include the signal modifications at this intersection as one of the improvements that is funded by the TFO, or (2) if the signal modifications at this intersection has not been included in the TFO, the applicant shall be responsible for either: (a) Fund the improvements and obtain the requisite encroachment or other permits for modifying the signal phasing and ensure that the signal modification is in operation prior to the issuance of the first Certificate of Occupancy for a specific development project at the project site, or (b) Concurrent with the issuance of the first grading permit for a specific development project at project site, deposit funds with the City in order for the City to obtain the requisite permits and modify the signal phasing ensuring that the signal modification is operational prior to the issuance of the first Certificate of Occupancy for a specific development project at the project site.

- **Intersection #5 – N Main Street (SR 183) / Rossi Street:**
  This intersection, which is under Caltrans jurisdiction, would operate at a deficient LOS D during the AM and PM peak hours, unchanged from Background Conditions. The project would add 17 trips to this intersection during the AM peak hour and 15 trips to this intersection during the PM peak hour. The trips added by the Project would not increase the average vehicle delay during the AM peak hour, but would increase the PM peak hour vehicle delay by 0.1 seconds.

  Impact: The impact of the Project to the intersection is significant because the Project will increase the average vehicle delay during the PM peak hour by at least 0.1 seconds.

  Mitigation: Add a third northbound and third southbound lane on N. Main Street through this intersection. Intersection operations would improve during the PM peak hour to LOS C.

  Salinas TFO Project: This improvement is included in the City of Salinas TFO (Project 31).

  Project Responsibility: Pay the Salinas traffic impact fees, which would represent the project's fair-share contribution of this improvement.

- **Intersection #10 – Sun Street / E Market Street:**
  Side-street operations at this intersection (the southbound Sun Street approach) would operate at a deficient LOS F during the PM peak hour, unchanged from Background Conditions. The project would add 31 trips to this approach during the PM peak hour.

  Impact: The impact of the Project to the intersection is significant because the Project will add peak hour trips to the intersection whose southbound approach operates at LOS F without the Project.

  Mitigation: Signalize the intersection. The intersection would operate at LOS A during the AM and PM peak hours with signalization.

  Salinas TFO Project: This improvement is not included in the City of Salinas TFO.

Project Responsibility: To ensure that the intersection of Sun Street and East Market Street will operate at acceptable levels of service, the applicant shall be responsible for either: (a) Fund the improvements and obtain the requisite encroachment or other permits for installation of a traffic signal and ensure that the signal is in operation prior to the issuance of the first Certificate of Occupancy for a specific development project at the project site, or (b) Concurrent with the issuance of the first grading permit for a specific development project at project site, deposit funds with the City in order for the City to obtain the requisite permits for and installation of a traffic signal that will be operational prior to the issuance of the first Certificate of Occupancy for a specific development project at the project site.

- **Intersection #12 – US 101 Southbound Offramp – Merced Street / E Market Street:**
  This intersection would operate at a deficient LOS F during the PM peak hour, while side-street operations (the southbound US 101 Southbound Offramp approach) would operate at a deficient LOS F during the AM and PM peak hours, unchanged from Background Conditions. The project would add 30 AM peak hour and 27 PM peak hour trips to this intersection.

  Impact: The impact of the Project to the intersection is significant because the Project will increase the average vehicle delay on the southbound off-ramp approach during the AM and PM peak hours by at least 0.1 seconds.

  Mitigation: Signalize the intersection. Intersection operations would improve during the AM and PM peak hours to LOS B.

  Salinas TFO Project: This improvement is not included in the City of Salinas TFO.

  Project Responsibility: To ensure that the intersection of U.S. 101 Southbound Offramp – Merced Street/East Market Street will operate at acceptable levels of service, the applicant shall either: (1) Prior to the City's issuance of the first grading permit for a specific development project at project site, pay a traffic impact fee provided the City has updated its Traffic Fee Ordinance to include a traffic signal at this intersection as one of the improvements that is funded by the TFO, or (2) if the traffic signal at this intersection has not been included in the TFO, the applicant shall be responsible for either: (a) Fund the improvements and obtain the requisite encroachment or other permits for installation of a traffic signal and ensure that the signal is in operation prior to the issuance of the first Certificate of Occupancy for a specific development project at the project site, or (b) Concurrent with the issuance of the first grading permit for a specific development project at project site, deposit funds with the City in order for the City to obtain the requisite permits and install the traffic signal ensuring that the signal is operational prior to the issuance of the first Certificate of Occupancy for a specific development project at the project site.

1.5 Cumulative Without Project Conditions

The Cumulative Without Project condition traffic volumes are primarily on traffic forecasts documented in the City of Salinas General Plan Circulation Study prepared by Higgins Associates in 2002. Traffic forecasts documented in the following reports were also referenced:

1. Monterey County Jail Housing Addition Traffic Impact Analysis, Hatch Mott MacDonald, April 29, 2014.
2. Haciendas Phase III/IV Traffic Impact Analysis, Hatch Mott MacDonald, April 8, 2014.

3. Sun Street Solid Waste Transfer Station Access Plan Traffic Impact Analysis, Higgins Associates, August 27, 2007.
4. Tynan Village Mixed Use Development Traffic Impact Study Report, Higgins Associates, November 22, 2004.
5. Salinas Sphere of Influence Amendment and Annexation Supplemental TIA, Fehr & Peers, November 14, 2007.

The Cumulative Condition traffic volume forecasts reflect new road links and the level of service calculations for the Cumulative Condition include intersection improvements that are included in the City of Salinas Traffic Fee Ordinance and are planned for implementation in conjunction with buildout of the city's General Plan. These improvements include the following:

1. TFO Project No. 30: Rossi Street Widening – widen to four lanes between Main Street and Sherwood Drive.
2. TFO Project No. 31: Main Street Widening – widen from a four to six-lane arterial between Casentini Street and Market Street.
3. TFO Project No. 33A: Bernal Drive Extension – extend as a four-lane arterial from Sherwood Drive/Natividad Road intersection to Kern Street.
4. TFO Project No. 33B: Bernal Drive Widening – widen, construct sidewalk and retaining wall on north side between Main Street and Rosarita Drive.
5. TFO Project No. 34: Constitution Boulevard Extension – extend from Laurel Drive to Bernal Drive Extension.
6. TFO Project No. 45: Laurel Drive Widening – widen to six lanes between Natividad and Constitution. Add left turn channelization east of Constitution.
7. TFO Project No. 46: Main Street Widening – widen to six lanes between Market Street and Bernal by eliminating on-street parking and widening UP Structure north of Market Street.
8. TFO Project No. 61: Natividad Road/Laurel Drive Intersection – widen the Natividad Road north and south intersection legs to provide the following lane configuration on the intersection approaches:
    a. Northbound approach – 1 left turn lane, 3 through lanes, 1 right turn lane
    b. Southbound approach – 2 left turn lanes, 2 through lanes, 1 through/right turn lane.
    c. Eastbound approach – 1 left turn lane, 2 through lanes, 1 right turn lane.
    d. Westbound approach – 2 left turn lanes, 2 through lanes, 1 right turn lane.

Vehicle Circulation

Although some of the study intersections would operate at or better than their respective level of service standards under Cumulative Without Project conditions, the following intersections would operate below their standards:

#5: N Main Street (SR 183) / Rossi Street: LOS D (PM)

#7: Kern Street / US 101 Northbound Ramps – Mobray Way: Overall LOS F, Side Street approach LOS F (PM)

#10: Sun Street / E Market Street: Side-street approach LOS F (PM)

#12: US 101 Southbound Offramp – Merced Street / E Market Street: Overall LOS E (AM) and LOS F (PM), Side-street approach LOS F (AM and PM)

#14: Kern Street / E Market Street: LOS F (PM)

1.6 Cumulative Plus Project Conditions

Vehicle Circulation

Although some of the study intersections would operate at or better than their respective level of service standards under Cumulative Plus Project conditions, the following intersections would operate below their standards and the project would contribute to the cumulative impact:

#5: N Main Street (SR 183) / Rossi Street: LOS D (PM)

#7: Kern Street / US 101 Northbound Ramps – Mobray Way: Overall LOS F, Side Street approach LOS F (PM)

#10: Sun Street / E Market Street: Side-street approach LOS F (PM)

#12: US 101 Southbound Offramp – Merced Street / E Market Street: Overall LOS E (AM) and LOS F (PM), Side-street approach LOS F (AM and PM)

#14: Kern Street / E Market Street: LOS F (PM)

Figure ES-3 shows the levels of service with and without the project at each of the significantly impacted intersections for the Cumulative Plus Project Condition. **Figure ES-3** also shows the contribution of the project to the intersection deficiency and project's percentage of total overall intersection delay.

See **Figure ES-4** for the recommended improvements at these intersections under Cumulative Conditions. Implementation of these improvements would reduce the project's impact at these intersections to less-than-significant. The impact and the recommended mitigation measure at each intersection is described below.

- **Intersection #5 – N Main Street (SR 183) / Rossi Street:**
  This intersection, which is under Caltrans jurisdiction, would operate at LOS C during the AM peak hour and a deficient LOS D during the PM peak hour unchanged from Cumulative Conditions. The project would add 17 trips to this intersection during the AM peak hour and 15 trips to this intersection during the PM peak hour. The trips added by the Project would not increase the average vehicle delay during the PM peak hour vehicle delay by 0.1 seconds.

  Impact: The impact of the Project to the intersection is significant because the Project will increase the average vehicle delay during the PM peak hour by at least 0.1 seconds. The Project's impact to this intersection is significant under Existing and Background Conditions.

  Mitigation:
  1) Add a third northbound through lane and third southbound through lane to N. Main Street at this intersection. The improvement would be achieved by converting the existing right turn lanes on northbound and southbound N. Main Street to through/right turn lanes.
  2) Add a second left turn lane on the westbound Rossi Street approach. TFO Project 30 would widen Rossi Street to a four-lane divided arterial within a right of way of 106 feet.

  With the second left turn lane included in the mitigation, the PM peak hour delay would be 41.8 seconds, which would be lower than the Cumulative Condition without project PM peak hour delay of 42.5 seconds. Therefore, the Project's cumulative impact would be mitigated.

  Salinas TFO Project: Projects 30 and 31. The City would need to modify Project 30 to include the second left turn lane on the westbound Rossi Street approach to N. Main Street.

Salinas TFO Project: Salinas TFO Project 30 and Project 31.

Project Responsibility: Pay the Salinas traffic impact fees, which would represent the project's fair-share contribution of this improvement.

- **Intersection #7 – Kern Street / US 101 Northbound Ramps – Mobray Way:**
  This intersection would operate at an overall LOS F with side-street operations (the eastbound US 101 Northbound Ramps approach) of LOS F during the PM peak hour, unchanged from Cumulative Without Project Conditions. The project would add 2 trips to the eastbound off-ramp approach during the PM peak hour. The project by itself would not significantly impact the intersection, but the project would contribute to the cumulative operating deficiency at the intersection. Traffic diversions associated with the Bernal Avenue Extension and the Constitution Boulevard Extension will contribute to the deficient operations at this intersection under Cumulative Conditions.

  Impact: The impact of the Project to the intersection is significant because the Project will increase the average vehicle delay on the eastbound off-ramp approach during the PM peak hour by at least 0.1 seconds.

  Mitigation: Signalize the intersection. Intersection operations would improve during the AM peak hour to LOS B and to LOS C during the PM peak hour.

  Salinas TFO Project: This improvement is not included in the City of Salinas TFO. It is recommended that this improvement be added to Salinas TFO Project 33A (Bernal Avenue Extension) and 34 (Constitution Boulevard Extension). Traffic diversions associated with the extensions of Bernal Avenue and Constitution Boulevard will create new turning movement patterns at the Kern Avenue/Northbound US 101 ramps intersection and these new turning patterns will necessitate modification of the existing intersection traffic control. For this reason, the costs for the new intersection traffic control should be included in the TFO.

  Project Responsibility: This improvement is not currently included in the City's Capital Improvement Program nor the TFO. To mitigate the Project's cumulative impact, a mechanism would need to be in place that ensures the ultimate full funding and completion of the improvement. This could be accomplished by adding the improvement to the City TFO or Capital Improvement Program. The Project's cumulative impact would be mitigated by the following:
  Alternative 1: Add the improvement to the TFO and pay the TFO fee.
  Alternative 2: Include the improvement in the Capital Improvement Program and pay a pro-rata contribution toward implementation of the project that would be combined with future development impact fees to fully fund implementation of the improvement. The pro-rata contribution would be based upon the project's share of cumulative traffic growth, where cumulative traffic growth equals Cumulative With Project volumes minus Existing volumes. The equitable share contribution calculation is based on the average of AM and PM peak hour volumes. The project's equitable share of cumulative traffic growth is 1 percent (1%).

- **Intersection #10 – Sun Street / E Market Street:**
  Side-street operations at this intersection (the southbound Sun Street approach) would operate at a deficient LOS F during the PM peak hour, unchanged from Cumulative Conditions. The project would add 31 trips to this approach during the PM peak hour. The Project's impact to this intersection is significant under Existing and Background Conditions.

  Impact: The impact of the Project to the intersection is significant because the Project will add peak hour trips to the intersection whose southbound approach operates at LOS F without the Project.

Mitigation: Signalize the intersection. The intersection would operate at LOS A during the AM and PM peak hours with signalization.

Salinas TFO Project: This improvement is not included in the City of Salinas TFO.

Project Responsibility: The Project's impact to this intersection was identified as significant under Existing and Background Conditions. The mitigation required for Cumulative Conditions (signalization) is the same as the mitigation recommended for Existing and Background Conditions. Therefore, the Project's responsibility to mitigate cumulative impacts is the same as the responsibility identified for the Existing and Background Conditions, which is as follows: To ensure that the intersection of Sun Street and East Market Street will operate at acceptable levels of service, the applicant shall be responsible for either: (a) Fund the improvements and obtain the requisite encroachment or other permits for installation of a traffic signal and ensure that the signal is in operation prior to the issuance of the first Certificate of Occupancy for a specific development project at the project site, or (b) Concurrent with the issuance of the first grading permit for a specific development project at project site, deposit funds with the City in order for the City to obtain the requisite permits for installation of a traffic signal that will be operational prior to the issuance of the first Certificate of Occupancy for a specific development project at the project site.

- **Intersection #12 – US 101 Southbound Off-ramp – Merced Street / E Market Street:**
  This intersection would operate at a deficient LOS E during the AM peak hour and LOS F during the PM peak hour, while side-street operations (the southbound US 101 Southbound Off-ramp approach) would operate at a deficient LOS F during the AM and PM peak hours, unchanged from Cumulative Conditions. The project would add 30 AM peak hour and 27 PM peak hour trips to this intersection. The Project's impact to this intersection is significant under Existing and Background Conditions.

  Impact: The impact of the Project to the intersection is significant because the Project will increase the average vehicle delay on the southbound off-ramp approach during the AM and PM peak hours by at least 0.1 seconds.

  Mitigation: Signalize the intersection. Intersection operations would improve during the AM and PM peak hours to LOS B.

  Salinas TFO Project: This improvement is not included in the City of Salinas TFO.

  Project Responsibility: The Project's impact to this intersection was identified as significant under Existing and Background Conditions. The mitigation required for Cumulative Conditions (signalization) is the same as the mitigation recommended for Existing and Background Conditions. Therefore, the Project's responsibility to mitigate cumulative impacts is the same as the responsibility identified for the Existing and Background Conditions, which is as follows: To ensure that the intersection of U.S. 101 Southbound Off-ramp – Merced Street/East Market Street will operate at acceptable levels of service, the applicant shall either: (1) Prior to the City's issuance of the first grading permit for a specific development project at project site, pay a traffic impact fee provided the City has updated its Traffic Fee Ordinance to include a traffic signal at this intersection as one of the improvements that is funded by the TFO, or (2) if the traffic signal at this intersection has not been included in the TFO, the applicant shall be responsible for either: (a) Fund the improvements and obtain the requisite encroachment or other permits for installation of a traffic signal and ensure that the signal is in operation prior to the issuance of the first Certificate of Occupancy for a specific development project at the project site, or (b) Concurrent with the issuance of the first grading permit for a specific development project at project site, deposit funds with the City in order for the City to obtain the requisite permits

and install the traffic signal ensuring that the signal is operational prior to the issuance of the first Certificate of Occupancy for a specific development project at the project site.

- **Intersection #14 – Kern Street / E Market Street:**
  This intersection would operate at a deficient LOS F during the PM peak hour, unchanged from Cumulative without Project Conditions. The project would add 17 PM peak hour trips to this intersection. The project by itself would not significantly impact the intersection, but the project would contribute to the cumulative operating deficiency at the intersection. Traffic diversions associated with the Bernal Avenue Extension and the Constitution Boulevard Extension will contribute to the deficient operations at this intersection under Cumulative Conditions.

  Impact: The impact of the Project to the intersection is significant because the Project will add trips to the intersection that operates at a deficient level without the project.

  Mitigation: Restripe the westbound E. Market Street approach as one exclusive left turn lane, one through lane and one exclusive right turn lane. With this improvement, the intersection would operate at LOS C during the AM peak hour and LOS D during the PM peak hour.

  Salinas TFO Project: This improvement is not included in the City of Salinas TFO. It is recommended that this improvement be added to Salinas TFO Project 33A (Bernal Avenue Extension) and 34 (Constitution Boulevard Extension). Traffic diversions associated with the extensions of Bernal Avenue and Constitution Boulevard will create new turning movement patterns at the Kern Avenue/E. Market Street intersection and these new turning patterns, including an increase in the volume of traffic turning right from westbound E. Market Street to northbound Kern Avenue, will necessitate modification of the existing intersection lane configuration. For this reason, the costs for the new intersection configuration should be included in the TFO.

  Project Responsibility: This improvement is not currently included in the City's Capital Improvement Program nor the TFO. To mitigate the Project's cumulative impact, a mechanism would need to be in place that ensures the ultimate full funding and completion of the improvement. This could be accomplished by adding the improvement to the City TFO or Capital Improvement Program. The Project's cumulative impact would be mitigated by the following:

  Alternative 1: If the improvement is added to the TFO, pay the TFO fee.
  Alternative 2: Include the improvement in the Capital Improvement Program and pay a pro-rata contribution toward implementation of the project that would be combined with future development impact fees to fully fund implementation of the improvement. The pro-rata contribution would be based upon the project's share of cumulative traffic growth, where cumulative traffic growth equals Cumulative With Project volumes minus Existing volumes. The equitable share contribution calculation is based on the average of the AM and PM peak hour volumes. The project's share of cumulative traffic growth is three percent (3%).

Table ES-1: Existing Plus Project Condition Intersection Levels of Service With Project's Percentage Share of Deficiency at Significantly Impacted Intersections

	N-S Street	E-W Street	Existing Intersection Control	LOS Stnd.	Peak Hour	Existing Conditions		Existing Plus Project Conditions		Intersection - Average of All Movements					Unsignalized Intersection Side Street Approach					Project Contribution to Total Intersection Volume	
						Delay (sec)	LOS	Delay (sec)	LOS	Maximum Satisfactory Delay (sec)	Amount of Ex + Proj Delay Over Maximum Limit (sec)	Increment Attributable to Project (sec)	Percentage of Deficiency Attributable to Project	Project Percentage of Total Delay	Maximum Satisfactory Delay (sec)	Amount of Ex + Proj Delay Over Maximum Limit (sec)	Increment Attributable to Project (sec)	Percentage of Deficiency Attributable to Project	Project Percentage of Total Delay	Total Existing Plus Project Intersection Volume	Project Vehicle Trips Added to Intersection
1	Natividad Road	East Laurel Drive	Signal	D	AM	61.1	E	62.1	**E**	55.0	7.1	1.0	14.08%	1.61%	-	-	-	-	-	4,008	17
					PM	62.5	E	62.7	**E**	55.0	7.7	0.2	2.60%	0.32%	-	-	-	-	-	5,273	16
			With Improvement		*AM*			*48.2*	*D*												
					PM			*52.9*	*D*												
2	Sherwood Drive - Natividad Road	East Bernal Drive - La Posada Way	Signal	D	AM	57.8	E	**58.7**	**E**	55.0	3.7	0.9	24.32%	1.53%	-	-	-	-	-	2,961	17
					PM	92.1	F	**93.2**	**F**	55.0	38.2	1.1	2.88%	1.18%	-	-	-	-	-	3,262	16
			With Improvement		*AM*			*34.2*	*C*												
					PM			*44.0*	*D*												
5	North Main Street (SR 183)	Rossi Street	Signal	C/D (Caltrans)	AM	30.5	C	30.5	C	-	-	-	-		-	-	-	-	-	-	-
					PM	39.9	D	**40.0**	**D**	35.0	5.0	0.1	2.00%	0.25%	-	-	-	-	-	3,876	15
			With Improvement		*AM*			*26.5*	*C*												
					PM			*32.7*	*C*												
10	Sun Street	East Market Street	Two-Way Stop	D (E/E)	AM	1.7 (24.7/32.2)	A (C/D)	1.9 (25.8/34.7)	A (D/D)	-	-	-	-	-	-	-	-	-	-	-	-
					PM	3.9 (33.0/79.8)	A (D/F)	**8.4 (33.4/142.2)**	**A (D/F)**	-	-	-	-	-	50.0	92.2	62.4	0.68	0.44	1,866	36
			With Improvement		*AM*			*7.0*	*A*												
					PM			*7.0*	*A*												
12	US 101 Southbound Offramp - Merced Street	East Market Street	Two-Way Stop	C/D (E/E) (Caltrans)	AM	19.5 (18.4/78.9)	C (C/F)	**21.9 (19.2/90.8)**	**C (C/F)**	-	-	-	-	-	50.0	40.8	11.9	0.29	0.13	1,447	30
					PM	69.3 (20.9/ *)	F (C/F)	**72.5 (22.2/ *)**	**F (C/F)**	25.0	47.5	3.2	6.70%	4.41%	50.0	-	-	-	-	2,109	27
			With Improvement		*AM*			*10.3*	*B*												
					PM			*12.8*	*B*												

Notes:

1. LOS Stnd. = Level of Service Standard.
2. XX (YY) = Overall (Side Street).
3. Analysis performed using 2010 Highway Capacity Manual methodologies.
4. Overall level of service standard for the City of Salinas is LOS D.
   Maximum delay for LOS D at a signalized intersection = 55.0 sec per vehicle
   Maximum delay for LOS D at an unsignalized intersection = 35.0 sec per vehicle
5. Overall level of service standard for the Caltrans is the transition between LOS C and LOS D (LOS C/D).
   Maximum delay for LOS C at a signalized intersection = 35.0 sec per vehicle
   Maximum delay for LOS C at an unsignalized intersection = 25.0 sec per vehicle
6. Worst approach level of service standard is generally LOS E. Level of service "F" is the level of service at which improvements would normally be required.
   Maximum delay for LOS E at an unsignalized intersection approach = 50.0 sec per vehicle
7. * : Delay exceeds 300 seconds per vehicle. Percentage of delay deficiency calculation not shown for conditions when the delay is greater than 300 seconds per vehicle due to the problematic nature of the delay calculation at high levels of saturation.

Table ES-2: Background Plus Project Condition Intersection Levels of Service With Project's Percentage Share of Deficiency at Significantly Impacted Intersections

	N-S Street	E-W Street	Existing Intersection Control	LOS Stnd.	Peak Hour	Background Conditions		Background Plus Project Conditions		Intersection - Average of All Movements					Unsignalized Intersection Side Street Approach					Project Contribution to Total Intersection Volume	
						Delay (sec)	LOS	Delay (sec)	LOS	Maximum Satisfactory Delay (sec)	Amount of Back + Proj Delay Over Maximum Limit (sec)	Increment Attributable to Project (sec)	Percentage of Deficiency Attributable to Project	Project Percentage of Total Delay	Maximum Satisfactory Delay (sec)	Amount of Back + Proj Delay Over Maximum Limit (sec)	Increment Attributable to Project (sec)	Percentage of Deficiency Attributable to Project	Project Percentage of Total Delay	Total Background Plus Project Intersection Volume	Project Vehicle Trips Added to Intersection
1	Natividad Road	East Laurel Drive	Signal	D	AM	63.9	E	**65.1**	**E**	55.0	10.1	1.2	11.88%	1.84%	-	-	-	-	-	4,087	17
					PM	66.7	E	**66.9**	**E**	55.0	11.9	0.2	1.68%	0.30%	-	-	-	-	-	5,429	16
			With Improvement		*AM*			*50.0*	*D*												
					PM			*54.5*	*D*												
2	Sherwood Drive - Natividad Road	East Bernal Drive - La Posada Way	Signal	D	AM	61.3	E	**62.5**	**E**	55.0	7.5	1.2	16.00%	1.92%	-	-	-	-	-	3,019	17
					PM	98.5	F	**99.8**	**F**	55.0	44.8	1.3	2.90%	1.30%	-	-	-	-	-	3,358	16
			With Improvement		*AM*			*36.4*	*D*												
					PM			*54.5*	*D*												
5	North Main Street (SR 183)	Rossi Street	Signal	C/D (Caltrans)	AM	35.8	D	35.8	D	-	-	-	-		-	-	-	-	-	-	-
					PM	47.1	D	**47.3**	**D**	35.0	12.3	0.2	1.63%	0.42%	-	-	-	-	-	4,239	15
			With Improvement		*AM*			*29.1*	*C*												
					PM			*34.8*	*C*												
10	Sun Street	East Market Street	Two-Way Stop	D (E/E)	AM	1.7 (25.2/33.5)	A (D/D)	2.1 (26.8/39.0)	A (D/E)	-	-	-	-	-	-	-	-	-	-	-	-
					PM	4.4 (35.0/92.0)	A (E/F)	**9.5 (36.1/166.0)**	**A (E/F)**	-	-	-	-	-	50.0	116.0	74.0	63.80%	44.58%	1,915	36
			With Improvement		*AM*			*4.9*	*A*												
					PM			*6.2*	*A*												
12	US 101 Southbound Offramp - Merced Street	East Market Street	Two-Way Stop	C/D (E/E) (Caltrans)	AM	22.1 (19.1/89.8)	C (C/F)	**24.6 (19.9/102.2)**	**C (C/F)**	-	-	-	-	-	50.0	52.2	12.4	23.80%	12.13%	1,473	30
					PM	81.8 (23.0/ *)	F (C/F)	**84.7 (24.4/ *)**	**F (C/F)**	25.0	59.7	2.9	4.90%	3.42%	50.0	-	-	-	-	2,166	27
			With Improvement		*AM*			*10.4*	*B*												
					PM			*13.2*	*B*												

Notes:

1. LOS Stnd. = Level of Service Standard.
2. XX (YY) = Overall (Side Street).
3. Analysis performed using 2010 Highway Capacity Manual methodologies.
4. Overall level of service standard for the City of Salinas is LOS D.
   Maximum delay for LOS D at a signalized intersection = 55.0 sec per vehicle
   Maximum delay for LOS D at an unsignalized intersection = 35.0 sec per vehicle
5. Overall level of service standard for the Caltrans is the transition between LOS C and LOS D (LOS C/D).
   Maximum delay for LOS C at a signalized intersection = 35.0 sec per vehicle
   Maximum delay for LOS C at an unsignalized intersection = 25.0 sec per vehicle
6. Worst approach level of service standard is generally LOS E. Level of service "F" is the level of service at which improvements would normally be required.
   Maximum delay for LOS E at an unsignalized intersection approach = 50.0 sec per vehicle
7. * : Delay exceeds 300 seconds per vehicle. Percentage of delay deficiency calculation not shown for conditions when the delay is greater than 300 seconds per vehicle due to the problematic nature of the delay calculation at high levels of saturation.

Table ES-3: Cumulative Plus Project Condition Intersection Levels of Service With Project's Percentage Share of Deficiency at Significantly Impacted Intersections

	N-S Street	E-W Street	Existing Intersection Control	LOS Stnd.	Peak Hour	Cumulative Conditions		Cumulative Plus Project Conditions		Intersection - Average of All Movements					Unsignalized Intersection Side Street Approach					Project Contribution to Total Intersection Volume	
						Delay (sec)	LOS	Delay (sec)	LOS	Maximum Satisfactory Delay (sec)	Amount of C + Proj Delay Over Maximum Limit (sec)	Increment Attributable to Project (sec)	Percentage of Deficiency Attributable to Project	Project Percentage of Total Delay	Maximum Satisfactory Delay (sec)	Amount of C + Proj Delay Over Maximum Limit (sec)	Increment Attributable to Project (sec)	Percentage of Deficiency Attributable to Project	Project Percentage of Total Delay	Total Cumulative Plus Project Intersection Volume	Project Vehicle Trips Added to Intersection
5	North Main Street (SR 183)	Rossi Street	Signal	C/D (Caltrans)	AM	34.6	C	34.8	C	-	-	-	-	-	-	-	-	-	-	-	-
					PM	42.5	D	**42.6**	**D**	35.0	7.6	0.1	1.32%	0.23%	-	-	-	-	-	4,603	15
			With Improvement		*AM*			*34.7*	*C*												
					PM			*41.8*	*D*												
7	Kern Street	US 101 Northbound Ramps - Mobray Way	One-Way Stop	C/D (E) (Caltrans)	AM	8.1 (21.3)	A (C)	8.2 (21.3)	A (C)	-	-	-	-	-	-	-	-	-	-	-	-
					PM	* (*)	F (F)	*** (*)**	F (F)	-	-	-	-	-	-	-	-	-	-	2,105	2
			With Improvement		*AM*			*12.3*	*B*												
					PM			*26.4*	*C*												
10	Sun Street	East Market Street	Two-Way Stop	D (E/E)	AM	1.7 (27.9/35.5)	A (D/E)	2.1 (29.3/41.8)	A (D/E)	-	-	-	-	-	-	-	-	-	-	-	-
					PM	8.4 (48.8/180.2)	A (E/F)	**18.2 (49.8/ *)**	**C (E/F)**	-	-	-	-	-	50.0	-	-	-	-	2,107	36
			With Improvement		*AM*			*3.8*	*A*												
					PM			*4.9*	*A*												
12	US 101 Southbound Offramp - Merced Street	East Market Street	Two-Way Stop	C/D (E/E)	AM	44.1 (23.2/164.0)	E (C/F)	**48.7 (24.2/184.3)**	**E (C/F)**	25.0	23.7	4.6	19.40%	9.45%	50.0	134.3	20.3	15.10%	11.01%	1,761	30
					PM	228.0 (-/ *)	F (F/F)	**236.6 (-/ *)**	**F (F/F)**	25.0	211.6	8.6	4.10%	3.63%	50.0	-	-	-	-	2,530	27
			With Improvement		*AM*			*10.1*	*B*												
					PM			*14.9*	*B*												
14	Kern Street	East Market Street	Signal	D	AM	25.2	C	25.8	C	-	-	-	-		-	-	-	-	-	2,116	28
					PM	82.0	F	**81.9**	**F**				0.00%	0.00%	-	-	-	-	-	3,478	17
			With Improvement		*AM*			*23.3*	*C*												
					PM			*48.1*	*D*												

Notes:

1. LOS Stnd. = Level of Service Standard.
2. XX (YY) = Overall (Side Street).
3. Analysis performed using 2010 Highway Capacity Manual methodologies.
4. Overall level of service standard for the City of Salinas is LOS D.
   Maximum delay for LOS D at a signalized intersection = 55.0 sec per vehicle
   Maximum delay for LOS D at an unsignalized intersection = 35.0 sec per vehicle
5. Overall level of service standard for the Caltrans is the transition between LOS C and LOS D (LOS C/D).
   Maximum delay for LOS C at a signalized intersection = 35.0 sec per vehicle
   Maximum delay for LOS C at an unsignalized intersection = 25.0 sec per vehicle
6. Worst approach level of service standard is generally LOS E. Level of service "F" is the level of service at which improvements would normally be required.
   Maximum delay for LOS E at an unsignalized intersection approach = 50.0 sec per vehicle
7. * : Delay exceeds 300 seconds per vehicle. Percentage of delay deficiency calculation not shown for conditions when the delay is greater than 300 seconds per vehicle due to the problematic nature of the delay calculation at high levels of saturation.

Figure ES-4: Recommended Intersection Improvements

	N-S Street	E-W Street	Existing Intersection Control	Existing Plus Project Mitigation	Background Plus Project Mitigation	Cumulative Plus Project Mitigation
1	Natividad Road	East Laurel Drive	Signal	Add 3rd NB T, 3rd SB T (TFO Project No. 61)	Same as Existing Plus Project.	-
2	Sherwood Drive - Natividad Road	East Bernal Drive - La Posada Way	Signal	Change E Bernal - La Posada Signal Phasing to Split Phasing. (Not currently included in the Salinas TFO.)	Same as Existing Plus Project.	-
5	North Main Street (SR 183)	Rossi Street	Signal	Add 3rd NB T, 3rd SB T. (TFO Project 31)	Same as Existing Plus Project.	1. Add 3rd NB T & 3rd SB T: TFO Project 31 2. Provide a second left turn lane on the westbound Rossi Street approach to N. Main. (TFO Project 30, modified by the City to include a second westbound left turn lane on Rossi within the 106 foot right of way planned by TFO Project 30.)
7	Kern Street	US 101 Northbound Ramps - Mobray Way	One-Way Stop	-	-	Signalize intersection.
10	Sun Street	East Market Street	Two-Way Stop	Signalize intersection.	Same as Existing Plus Project.	Same as Existing Plus Project.
12	US 101 Southbound Offramp - Merced Street	East Market Street	Two-Way Stop	Signalize Intersection	Same as Existing Plus Project.	Same as Existing Plus Project.
14	Kern Street	East Market Street	Signal	-	-	Restripe westbound E. Market approach to provide left turn lane, 1 through lane and 1 right turn lane.

Notes:
1. LOS Stnd. = Level of Service Standard
2. L, T, R, EB, WB, NB, SB, RTO = Left, Through, Right, Eastbound, Westbound, Southbound, Northbound, Right Turn Overlap signal phase.

Source: Mott MacDonald.

2 Introduction

This report summarizes the potential traffic circulation issues associated with the proposed Rodeo Property General Plan Amendment (GPA) and Rezoning in Salinas, California Vehicular, pedestrian and bicycle circulation issues were evaluated at the project site and the surrounding street network in Salinas, along with site access and internal circulation. The project site is located on Sun Street between US 101 and East Market Street. The location of the project site with respect to the area road network is indicated on **Figure 1**. **Figure 2** shows the project parcel. Access to the site is provided via Sun Street and its connection to Calle Cebu and E. Market Street.

2.1 Scope of Work

A specific development to be constructed on the project is not proposed at this time. Developed at a 0.4 Floor Area Ratio, the GPA Amendment and Rezoning would allow for the development of up to 118,600 square feet of floor space on the project site. For this study, the transportation impacts associated with the development of 118,600 square feet of floor space were analyzed. For purposes of this traffic study, 4 percent of the floor space (4,700 square feet) was assumed to be occupied by support office space and this space was modeled as general office space. The remaining floor area (113,900 square feet) was modeled as light industrial space.

This report addresses the following:

- Existing vehicular, pedestrian, bicycle and transit circulation at the project site and the surrounding street network.
- Assessment of potential direct impacts to vehicular, pedestrian, bicycle and transit circulation due to the GPA, and recommendations to minimize or alleviate those impacts.
- Assessment of potential cumulative traffic impacts.
- Potential site access issues.

2.2 Study Network

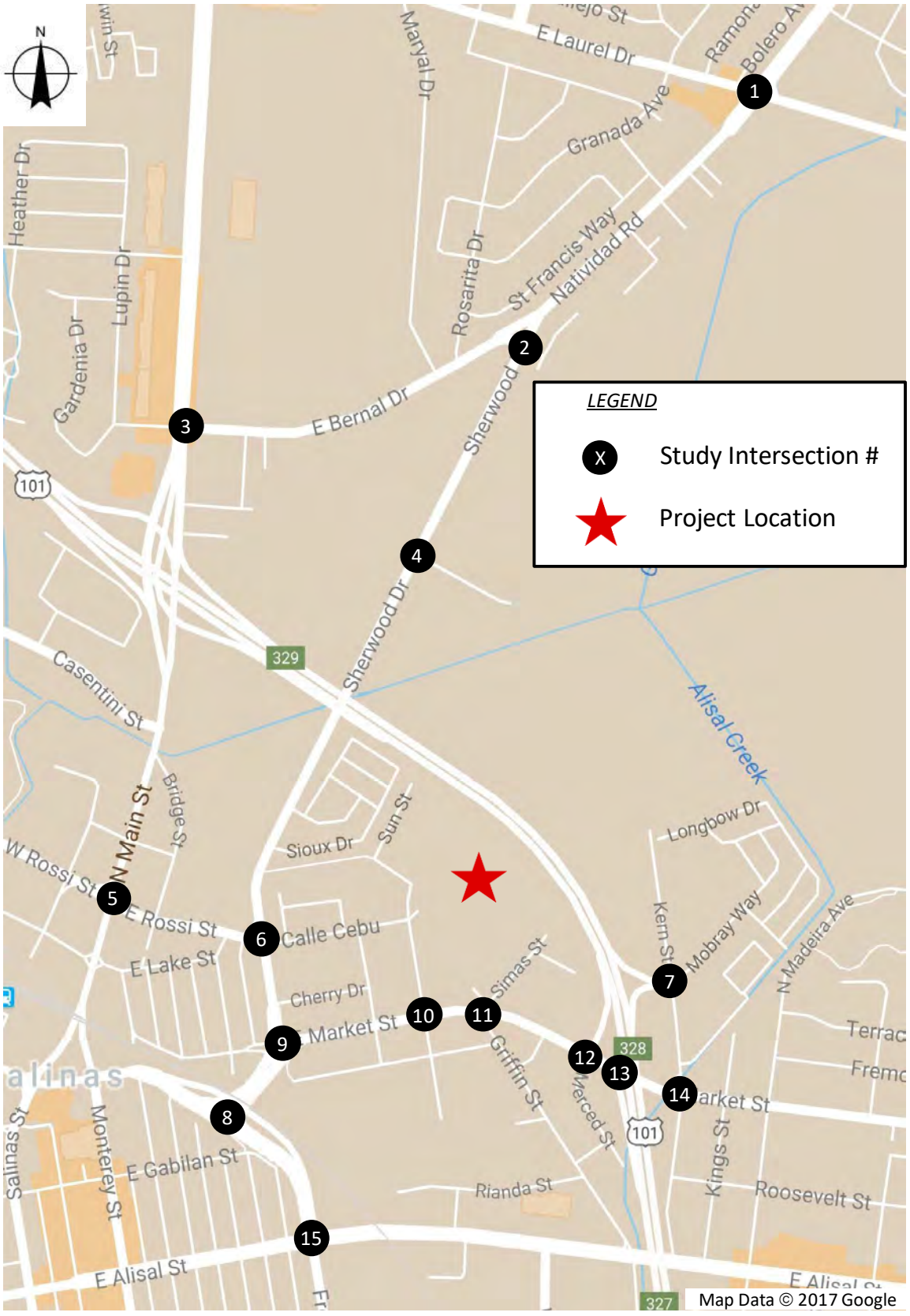
The AM and PM peak periods were analyzed at the following intersections:

1. Natividad Road / East Laurel Drive;
2. Sherwood Drive - Natividad Road / East Bernal Drive – La Posada Way;
3. North Main Street / Bernal Drive;
4. Sherwood Drive / Sherwood Place;
5. North Main Street (State Route 183) / Rossi Street;
6. Sherwood Drive / East Rossi Street – Calle Cebu;
7. Kern Street / US 101 Northbound Ramps – Mobray Way;
8. East Market Street – Front Street / East Market Street;
9. East Market Street – Sherwood Drive / Market Place – East Market Street;
10. Sun Street / East Market Street;
11. Griffin Street – Simas Street / East Market Street;
12. US 101 Southbound Offramp – Merced Street / East Market Street;
13. US 101 Southbound Onramp / East Market Street;
14. Kern Street / East Market Street; and
15. Front Street / East Alisal Street.

Figure 3 shows the existing traffic controls and lane configurations at the study intersections.

Traffic operations for the Existing, Existing Plus Project, Background, Background Plus Project, Cumulative Without Project and Cumulative Plus Project development scenarios were analyzed. Improvements recommended to address project and cumulative impacts are recommended where warranted.

Figure 1: Project Location Map



Base map Source: Google Maps, 2017.

Figure 2: Project Parcel

https://openstreetmap.org/copyright https://openstreetmap.org
Copyright OpenStreetMap and contributors, under an open license

Figure 3: Study Intersection Traffic Controls and Lane Configurations

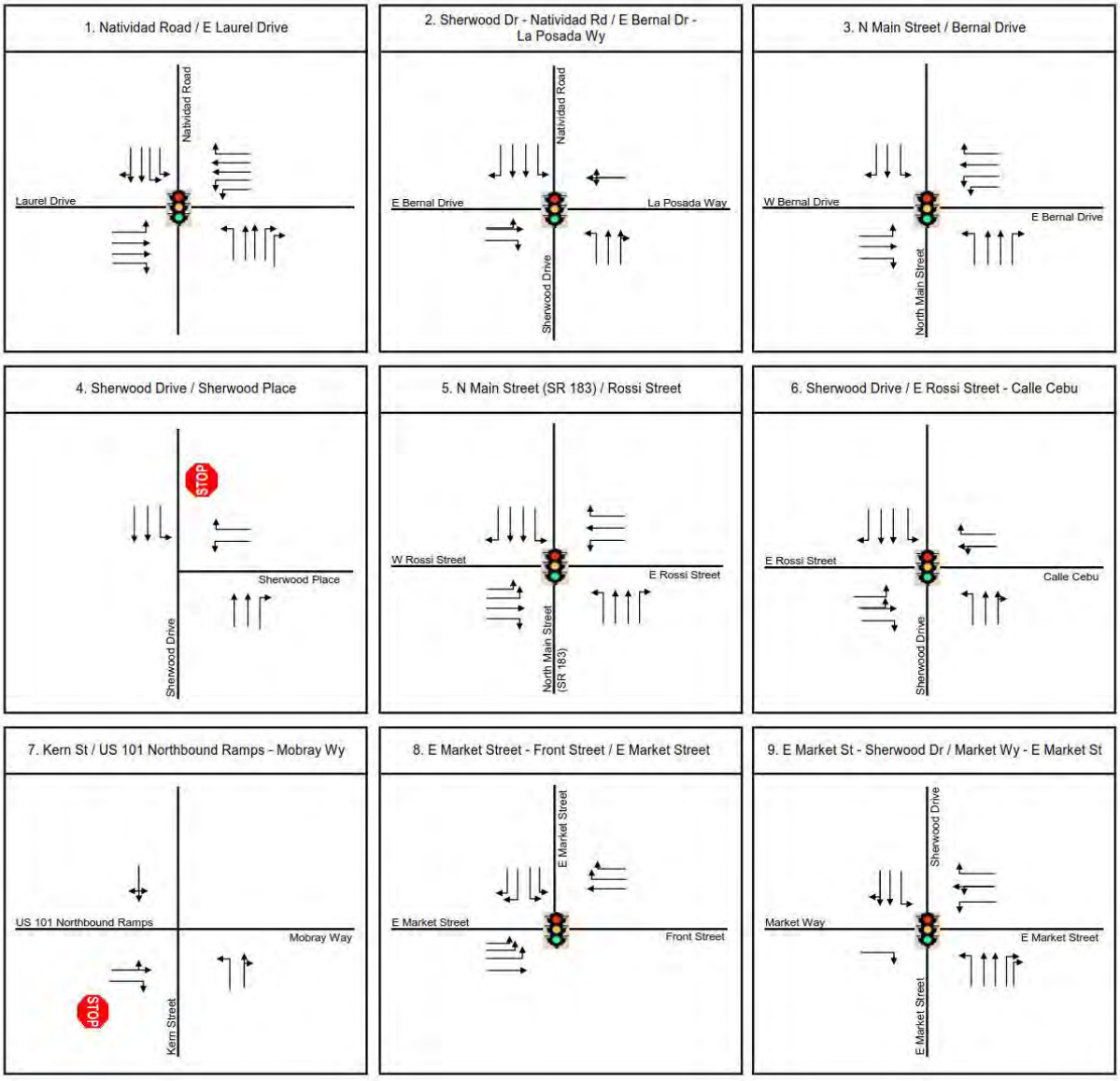
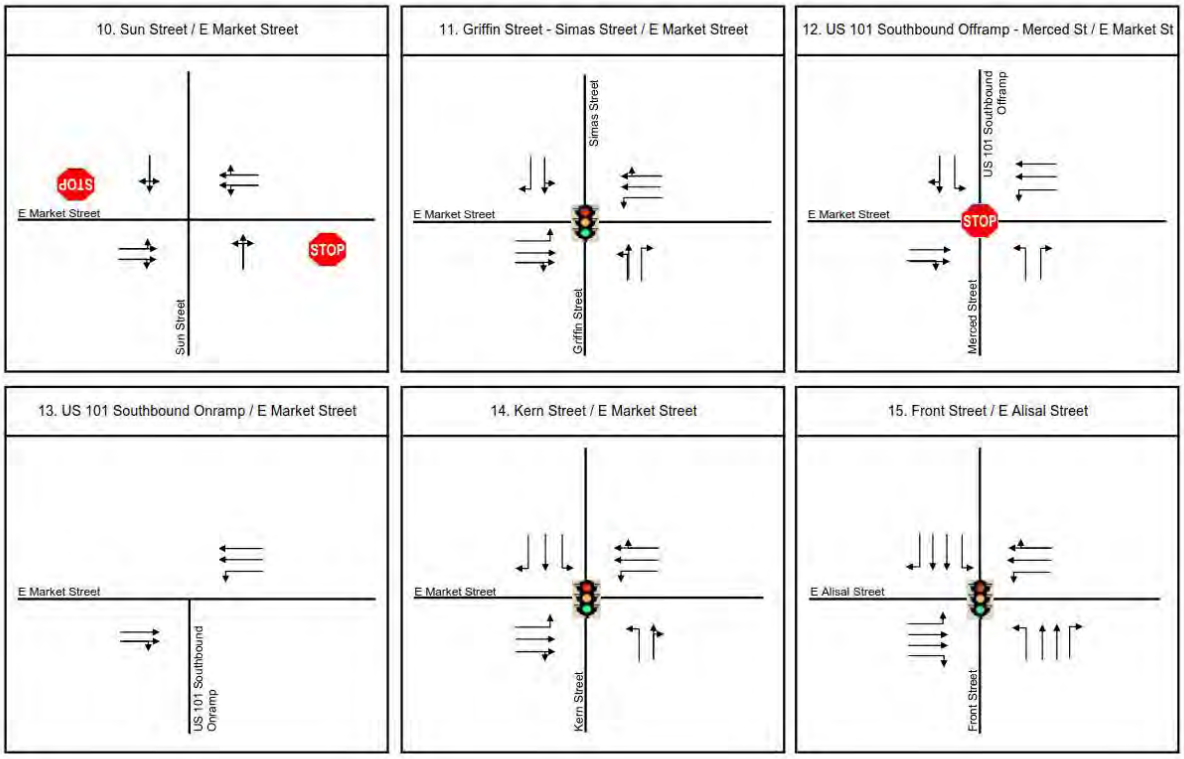
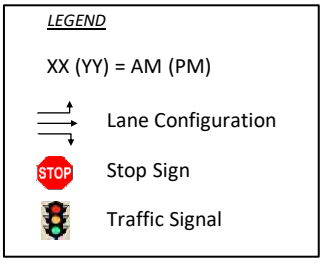


Figure 3: Study Intersection Traffic Controls and Lane Configurations (Continued)



Source: Mott MacDonald



2.3 Level of Service Standard

Intersection traffic operations were evaluated based upon the level of service (LOS) concept. LOS is a qualitative description of an intersection's operations, ranging from LOS A to LOS F. Level of Service "A" represents free flow uncongested traffic conditions. Level of Service "F" represents highly congested traffic conditions with unacceptable delay to vehicles at intersections. The intermediate levels of service represent incremental levels of congestion and delay between these two extremes. The analysis was performed using both the *2000* and *2010 Highway Capacity Manual* methodologies. A LOS description is included as **Appendix A**.

The study area includes intersections under the jurisdictions of the City of Salinas and Caltrans. The City of Salinas has an overall level of service (LOS) standard of LOS D, which applies to Intersections #1-4, 6, 8-11, and 14-15. The Caltrans' overall level of service standard is generally the transition from LOS C to LOS D (abbreviated as LOS C/D in this document), which applies to Intersections #5, 7, 12 and 13. According to the *Caltrans Guide for the Preparation of Traffic Impact Studies,* the existing measure of effectiveness should be maintained when an existing State highway facility is operating at less than the appropriate target level of service.

2.4 Analysis Methodology

The Synchro 9 software was used for analysis of intersection delays and associated levels of service.

Note: The traffic signal at Intersection #3 – N Main Street / Bernal Drive – is controlled by the InSync adaptive traffic control system, which optimizes traffic throughput through this intersection and to other corridor intersections to the north N Main Street. There is currently no analysis methodology that fully models the exact operations of an InSync system. For that reason, the analysis results for this intersection should be considered conservative.

2.5 Significance Criteria

According to the California Environmental Quality Act (CEQA) guidelines, a project may have a significant effect on the environment if it would cause an increase in traffic that is substantial in relation to the existing traffic load and capacity of the street system. The following significance criteria has been used within this study, based upon the jurisdiction of each study intersection:

2.5.1 City of Salinas

The City of Salinas impact criteria for transportation-related impacts is used in this study. It is as follows:

Signalized Intersection (Intersections #1-3, 6, 8-9, 11, and 14-15)

A significant impact at a **signalized study intersection** is defined to occur under either of the following two conditions:

- The addition of project traffic causes operations to deteriorate from an acceptable level (LOS D or better) to an unacceptable level (LOS E or LOS F); or
- The addition of project traffic adds one vehicle trip to intersections already operating at LOS E or LOS F.

One- or Two-Way Stop-Controlled Intersection (Intersections #4 and 10)

A significant impact at a **one- or two-way stop-controlled study intersection** is defined to occur under either of the following two conditions:

- The addition of project traffic causes overall operations to deteriorate from an acceptable level (LOS D or better) to an unacceptable level (LOS E or LOS F); or

- The addition of project traffic adds one vehicle trip to intersections whose side-street operations are already operating at LOS F.

2.5.2 Caltrans

The following significance criteria have been used within this study at intersections under the jurisdiction of Caltrans:

Signalized Intersection (LOS C/D Standard) (Intersection #5)

A significant impact at a **signalized study intersection** is defined to occur under either of the following two conditions:

- A significant impact would occur if an intersection operating at LOS A, B or C degrades to D, E or F; or
- For intersections already operating at unacceptable levels D, E or F, a significant impact would occur if the project would cause overall delay to increase by at least 0.1 seconds.

A significant impact is satisfactorily mitigated when mitigation measures are implemented that would restore the intersection level of service to the pre-project condition or better.

One- or Two-Way Stop-Controlled Intersection (Intersections #7, 12, 13)

A significant impact at a **one- or two-way stop-controlled study intersection** is defined to occur under either of the following two conditions:

- A significant impact would occur if any traffic movement operating at LOS A, B, C, D or E degrades to F; or
- For traffic movements already operating at unacceptable level F, a significant impact would occur if the project would cause delay for the movement operating at LOS F to increase by at least 0.1 seconds.

A significant impact is satisfactorily mitigated when mitigation measures are implemented that would restore the intersection level of service to the pre-project condition or better.

2.6 Funding for Transportation Improvements

2.6.1 City of Salinas Traffic Impact Fee

The City of Salinas adopted the first Salinas Traffic Fee Ordinance (TFO) program in August 1987. The fee program links increases in traffic generated by new development to the cost of transportation improvements that would be required to mitigate the traffic impacts caused by the new development. Projects such as schools are exempt from payment of this fee.

The City of Salinas Traffic Improvement Program, Wood Rodgers, March 2010, identifies the roadway improvements currently funded by the TFO. These improvements are cited as potential improvement methods to offset project and cumulative impacts. New development constructed on the project site would be subject to payment of traffic impact fees according to the requirements of the TFO.

2.6.2 TAMC Regional Development Impact Fee

The Transportation Agency for Monterey County (TAMC) and its member jurisdictions have adopted a county-wide, regional development impact fee to cover the costs for studies and construction of many improvements throughout Monterey County. This impact fee, which went into effect on August 27, 2008, is applied to all new development within Monterey County. As with the Salinas TFO, projects such as schools are exempt from payment of the TAMC fee.

The governing document for the fee is the *Regional Impact Fee Nexus Study Update* (March 26, 2008) prepared by Kimley-Horn Associates, Inc. *The Regional Impact Fee Nexus Study Update* was updated again in June 2013 by Wood Rodgers. New development constructed on the project site would be subject to payment of the TAMC fee.

3 Existing Conditions

This chapter of the report evaluates Existing traffic conditions and includes a description of the project setting.

3.1 Existing Road Network

The project site is located off Sun Street in the central portion of Salinas, northeast of the downtown central business district (i.e., Downtown). The site is surrounded by US 101 to the north and industrial and commercial uses to the east, south and west.

The site would be directly accessible via Sun Street and indirectly accessible from Calle Cebu (via Sun Street); see Chapter 3, Existing Plus Project Conditions, for more information about the project access points. Sun Street connects to East Market Street, while Calle Cebu connects to Sherwood Drive. Regional access to the project site is provided by US 101, East Market Street, Sherwood Drive, Natividad Road, North Main Street and Front Street. Other streets in the area include East Laurel Drive, Bernal Drive, La Posada Way, Sherwood Place, Rossi Street, Kern Street, Mobray Way, Market Way, Griffin Street, Merced Street and East Alisal Street. Each street is discussed below, in alphabetical order.

East Alisal Street is a four-lane major arterial running in an east-west direction though central Salinas. The speed limit on Alisal Street is 35 miles per hour (mph) east of Front Street and 25 mph west of Front Street.

East Bernal Drive is a three-lane (one lane eastbound and two lanes westbound) major arterial that runs between North Main Street and Sherwood Drive. The roadway continues as a two-lane roadway (West Bernal Drive) west of North Main Street. The speed limit on East Bernal Drive is 35 mph, while the speed limit on West Bernal Drive is 25 mph.

Calle Cebu is a two-lane east-west local street that runs between Sherwood Drive and Sun Street, east of Sherwood Drive. On-street parking is allowed on both sides of the street. Calle Cebu becomes Rossi Street west of Sherwood Drive. The speed limit on Calle Cebu is 25 mph.

Front Street is a four-lane north-south major arterial that runs between East Market Street and John Street. It provides access to commercial and residential land uses. Front Street has a posted speed limit of 25 mph north of East Alisal Street and 35 mph south of East Alisal Street.

Griffin Street is a minor arterial in central Salinas providing access to the commercial and industrial areas between Downtown and US 101. The speed limit on Griffin Street is 25 mph.

Kern Street is a minor arterial in eastern Salinas that connects the northbound US 101 ramps to E. Market Street. It provides access to commercial and residential uses directly east of US 101. There are no speed limit signs on Kern Street; thus, the speed limit is presumed to be 30 mph.

La Posada Way is a local street in northern Salinas that provides access to a residential neighborhood. The speed limit on La Posada Way is 25 mph.

East Laurel Drive is an east/west four-lane major arterial that extends between North Davis Road on the west and Williams Road on east, where it terminates. East Laurel Drive has a posted speed limit of 35 mph west of Natividad Road and 45 mph east of Natividad Road.

North Main Street is a four- to six-lane north-south major arterial in central and northern Salinas. It provides primary access to the Downtown from the north, as well as to northbound and southbound US 101 approximately one-half mile north of Rossi Street. Commercial and

residential land uses line North Main Street. South of US 101, North Main Street is also State Route 183, which continues south then west towards Castroville. The speed limit on North Main Street is 40 miles per hour in the vicinity of the project site.

East Market Street is a four-lane east-west major arterial in the vicinity of the project site, connecting the Downtown with eastern Salinas. It provides access primarily to commercial land uses along its frontage. It also provides direct access to and from southbound US 101 and access to and from northbound US 101 via Kern Street. The speed limit on East Market Street is 25 mph west of Sherwood Drive and 35 mph east of Sherwood Drive.

Market Way is two-lane collector street providing access to the Chinatown neighborhood north of Downtown. The speed limit on Market Way is 25 mph.

Merced Street is a two-lane local street just west of US 101, providing access to commercial and residential land uses south of East Market Street. The speed limit on Merced Street is 25 mph.

Mobray Way is a private road that provides access to the Sherwood Lake Mobile Home Park.

Natividad Road begins as a continuation of Sherwood Drive. Between East Bernal Drive and East Laurel Drive, Natividad Road is a four-lane major arterial. Natividad Road is a six-lane divided major arterial between East Laurel Drive and Boronda Road. Natividad Road is a two-lane rural roadway north of Boronda Road to Old Stage Road. Natividad Road has a posted speed limit of 45 mph.

Rossi Street is a two-lane east-west minor arterial west of Sherwood Drive. It provides access to residential and commercial land uses. The posted speed limit on Rossi Street is 40 mph west of North Main Street and 25 mph east of North Main Street.

Sherwood Drive is a four-lane north-south major arterial that runs from East Market Street to East Bernal Drive, where its name changes to Natividad Road. It provides access to commercial and residential land uses. The posted speed limit on Sherwood Drive is 45 mph between East Bernal Drive and Sherwood Place and 35 mph between Sherwood Place and East Market Street.

Sherwood Place is a two-lane local street off of Sherwood Drive, providing access to the Salinas Education Center, a collection of schools and offices operate by the Salinas Unified High School District (SUHSD). The speed limit on Sherwood Place is 25 mph.

Simas Street is a two-lane local street north of East Market Street. It provides access to both commercial and industrial land uses. The speed limit on Simas Street is 25 mph.

Sun Street is a two-lane local street in central Salinas, east of Downtown. It provides access to commercial, industrial, and residential areas. The speed limit on Sun Street is 25 mph.

US 101 is a four-lane freeway in Salinas, extending south to San Luis Obispo and Los Angeles and north to San Jose and San Francisco. The speed limit on US 101 is 65 mph.

3.2 Existing Pedestrian Network

Sidewalks are present along both sides of Sun Street and Calle Cebu, extending to the study project site at the north end of Sun Street. These sidewalks are continuous onto intersecting streets, such as East Market Street, Sherwood Drive, North Market Street and Front Street. Although the sidewalks also continue onto Natividad Road, there is a gap in the sidewalk network along southbound Natividad Road between Sorrentini Drive and East Bernal Drive.

3.3 Existing Bicycle Network

The City of Salinas has adopted a Master Bikeway Plan that designates routes along roadways that can be used by bicycling commuters and recreational riders for safe access to major employers, shopping centers and schools. Consistent with State and Federal designations, there are three basic types of bicycle facilities in Salinas. Each bike facility type is described below:

- Bike path (Class I) - A separate right-of-way designed for the exclusive use of cyclists and pedestrians, with minimal crossings for motorists.
- Bike lane (Class II) - A lane on a regular roadway, separated from the motorized vehicle right-of-way by paint striping, designated for the exclusive or semi-exclusive use of bicycles. Bike lanes allow one-way bike travel. Through travel by motor vehicles or pedestrians is prohibited, but crossing by pedestrians and motorists is permitted.
- Bike route (Class III) - Provides shared use of the roadway with motorists, designated by signs or permanent markings.

There are no dedicated bicycle facilities (Class I bicycle paths) near the project site.

Class II bike lanes are currently provided on Rossi Street and Sherwood Drive near the project site.

There are no designated bike routes (Class III) in the project vicinity.

Appendix B illustrates the City of Salinas bicycle facilities.

3.4 Existing Transit Network

Public transit service in the County of Monterey and City of Salinas is provided by Monterey-Salinas Transit (MST). MST focuses on improving operational conditions through established bus routes and schedules that efficiently meet travel demands, reduce travel times, improve service reliability, and encourage bike-and-ride initiatives. All MST buses are wheelchair accessible and equipped with bike racks. The following MST routes serve the immediate project area:

- Route 45 – Northridge – Salinas
- Route 46 – Salinas - Natividad

Appendix C illustrates the existing transit routes in the vicinity of the project site.

The nearest bus stops to the project site are located at the following locations:

- Eastbound East Market Street, east of Peach Street (Line 45);
- Eastbound East Market Street, east of Griffin Street (Line 45);
- Westbound East Market Street, west of Simas Street (Line 45);
- Northbound Sherwood Drive, north of Calle Cebu (Line 46);
- Westbound East Rossi Street, west of Sherwood Drive (Line 46).

These bus stops are located within a 10-minute walk from the project site.

Note: Although Lines 82 and 86 also travel along East Market Street, neither line stops at any of the bus stops on East Market Street near the project site.

3.5 Existing Condition Traffic Circulation

3.5.1 Vehicle Circulation

The intersection turning movement counts were collected during the AM (7:00 – 9:00 AM) and PM (4:00 – 6:00) peak hours on Friday, June 2 and Monday, June 5, 2017. Traffic data was collected for cars, trucks, buses, bicyclists, and pedestrians. From these counts, the AM and PM peak hour volumes were derived. The intersection traffic volumes were collected on atypical days of the week and when Salinas area schools were not in session. Therefore, the collected intersection traffic volumes were adjusted to be consistent with available historical volumes when schools were in session.

Appendix D contains the traffic count data at the study intersections, including a table summarizing when each intersection volume was collected. **Appendix L** provides a comparison of the traffic volumes utilized for this study and traffic counts collected for previous traffic studies and traffic counts collected by the City at selected intersections. The tables contained in Appendix L show the adjustments that were made for each study intersection. The tables in Appendix L also include existing AM and PM peak hour traffic volumes that were utilized in previously prepared traffic studies. These studies are as follows:

1. Haciendas Phase III/IV Traffic Impact Analysis, Hatch Mott MacDonald, April 8, 2014.
2. Sun Street Solid Waste Transfer Station, Hatch Mott MacDonald memorandum to Jose Gamboa, August 17, 2011.
3. Proposed New City of Salinas Police Station Traffic Impact Report, Crane Associates, September 6, 2017. Traffic counts collected July 2017.

Traffic counts collected by the City of Salinas within the last two-year period that are available on the city's website are also included in the tables for comparison.

Because Sherwood Place provides access to a school, peak hour turning movement volumes from the Haciendas Phase III/IV traffic impact study at the Sherwood Drive/Sherwood Place intersection were used for this study. The Haciendas Phase III/IV traffic volumes were collected when Salinas schools were in session.

Figure 4 depicts the peak turning movement volumes for the study intersections under Existing Conditions.

The intersection levels of service for the Exiting Condition are summarized in **Table 2**. Although most of the study intersections currently operate at or better than their respective level of service standards under Existing conditions, the following five intersections currently operate below their standards:

1. Natividad Road / E Laurel Drive: LOS E (AM and PM)
2. Sherwood Drive – Natividad Road / E Bernal Drive – La Posada Way: LOS E (AM), LOS F (PM)
5. N Main Street (SR 183) / Rossi Street: LOS D (PM)
10. Sun Street / E Market Street: Side-street approach LOS F (PM)
12. US 101 Southbound Offramp – Merced Street / E Market Street: Overall LOS F (PM), Side-street approach LOS F (AM and PM)

See **Appendix E** for the level of service calculations under Existing Conditions.

Figure 4: Existing Conditions – AM and PM Peak Hour Volumes

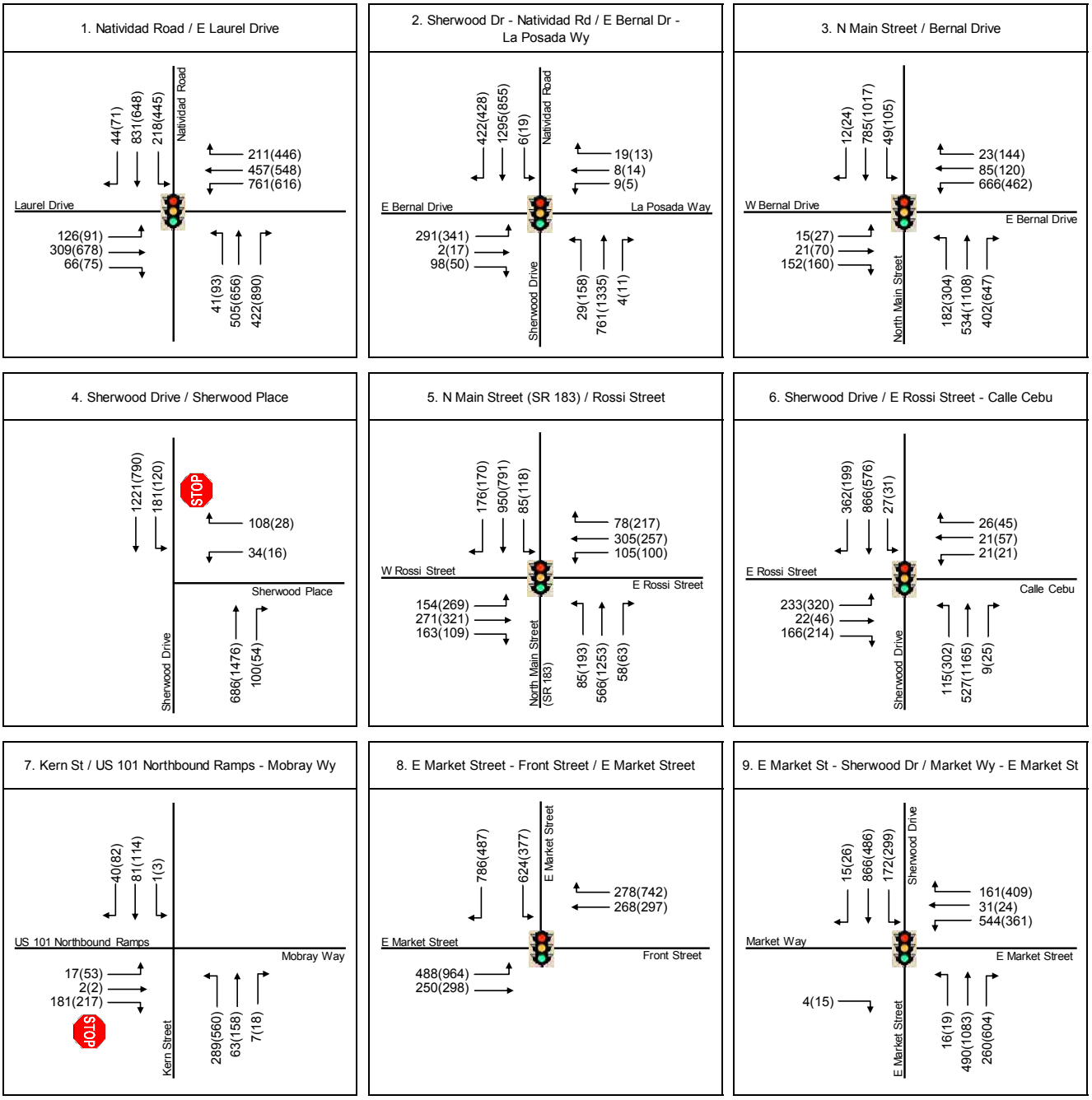
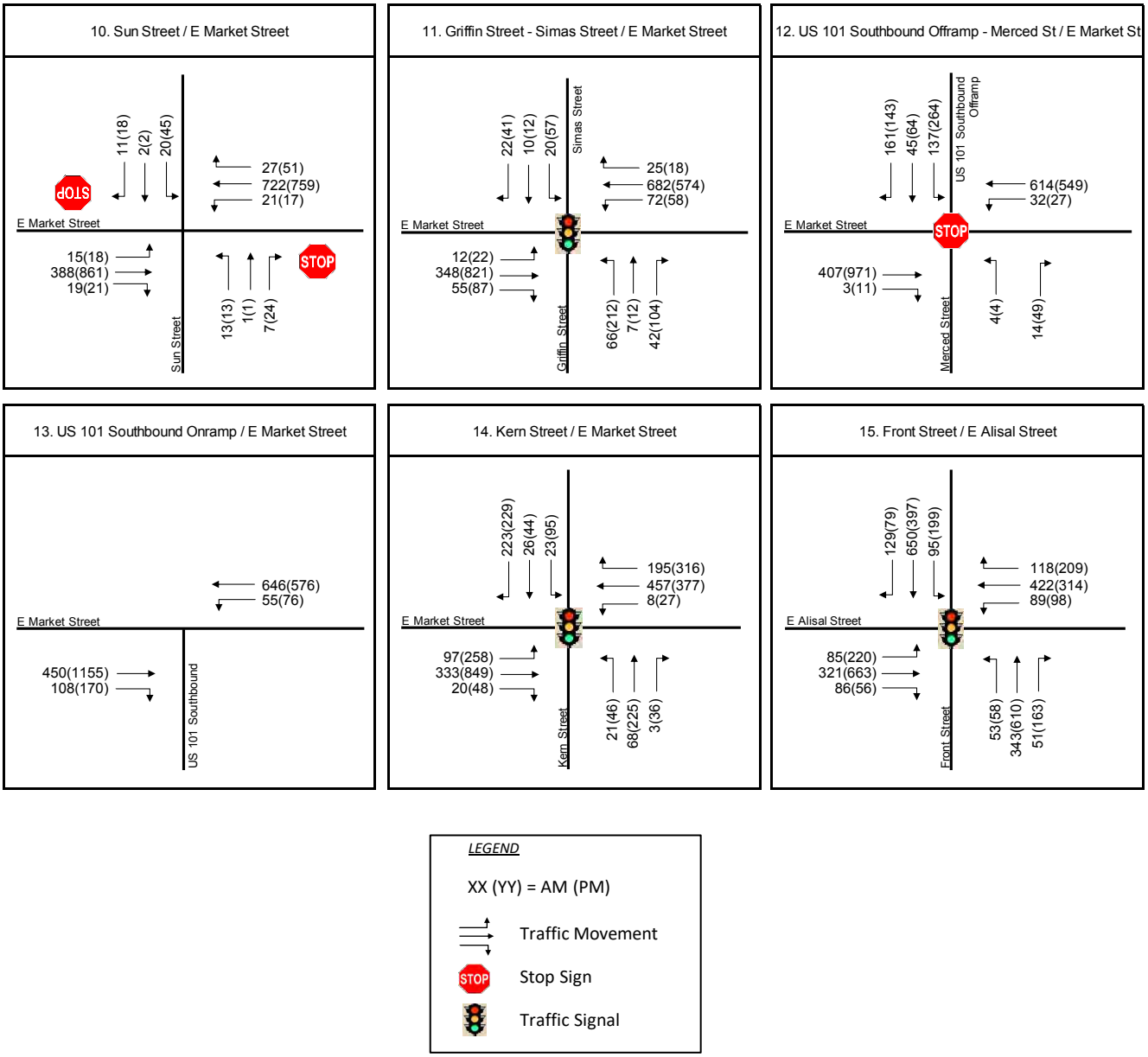


Figure 4: Existing Conditions – AM and PM Peak Hour Volumes (Continued)



Source: Mott MacDonald

3.5.2 Pedestrian Circulation

A review of the traffic counts found that there is a low to moderate level of pedestrian activity near the project site. Pedestrian activity is highest near the residential and commercial areas on Sherwood Drive and E Market Street, especially during the PM peak hour (compared to the AM peak hour).

3.5.3 Bicycle Circulation

A review of the traffic counts found that there is relatively little bicycle activity in the study network, including near the project site.

4 Existing Plus Project Conditions

This chapter describes the analysis of the transportation impacts under Existing Plus Project traffic conditions.

4.1 Project Description

The project is a General Plan amendment and Rezone change that would allow development of industrial and commercial uses on a 6.8-acre site located on Sun Street adjacent to US 101. The proposed land use designation would allow site to be developed at a floor area ratio 0.4, which would allow for up to 118,600 square feet of industrial floor space. For purposes of this traffic study, 4 percent of the floor space (4,700 square feet) was assumed to be occupied by support office space and this space was modeled as general office space. The remaining floor area (113,900 square feet) was modeled as light industrial space.

The site is designated in the General Plan as Open Space. Access to the site is provided via Sun Street and its connection to Calle Cebu and E. Market Street.

4.2 Project Trip Generation

Table 1 contains the trip generation estimate for the project. The estimate was derived using trip rates from the Institute of Transportation Engineers (ITE) publication *Trip Generation Manual,* 10th Edition, 2017. Note that trip generation estimates for the industrial and office components of the project have been separately calculated.

In total, the project is estimated to generate 611 daily trips, with 85 trips (74 in, 11 out) during the AM peak hour and 77 trips (10 in, 67 out) during the PM peak hour.

Table 1: Project Trip Generation

			AM PEAK HOUR				PM PEAK HOUR			
TRIP GENERATION RATES	ITE LAND USE CODE	DAILY TRIP RATE	PEAK HOUR RATE	% OF ADT	% IN	% OUT	PEAK HOUR RATE	% OF ADT	% IN	% OUT
General Light Industrial (per 1,000 sq. ft.)	110	4.96	0.70	14%	88%	12%	0.63	13%	13%	87%
General Office	710	9.74	1.16	12%	86%	14%	1.15	12%	16%	84%

			AM PEAK HOUR				AM PEAK HOUR			
GENERATED TRIPS	PROJECT SITE	DAILY TRIPS	PEAK HOUR TRIPS	% OF ADT	TRIPS IN	TRIPS OUT	PEAK HOUR TRIPS	% OF ADT	TRIPS IN	TRIPS OUT
Industrial	113,900 sq. ft.	565	80	14%	70	10	72	13%	9	63
Office	4,700 sq. ft.	46	5	11%	4	1	5	11%	1	4
Total:	118,600 sq. ft.	611	85		74	11	77		10	67

Notes:

1. Trip generation rates from Institute of Transportation Engineers, Trip Generation Manual, 10th Edition, 2017, unless otherwise noted.
2. "sq. ft." = square feet.

Source: Mott MacDonald

4.3 Project Trip Distribution and Assignment

Figure 5 depicts the trip distribution for the project. This distribution was derived based upon adjacent complementary uses in the greater Salinas area. Note that this distribution was previously included in *Rodeo Property Preliminary Traffic Assessment, Salinas California,* Mott MacDonald, December 15, 2016. The trip distribution was combined with the trip generation to derive the project trip assignment depicted on **Figure 6**. The trip assignment was added to the existing traffic volumes to create the Existing Plus Project volumes depicted in **Figure 7**.

4.4 Existing Plus Project Condition Traffic Circulation

4.4.1 Vehicle Circulation

Table 2 summarizes the levels of service at the study intersections under Existing and Existing Plus Project conditions. Although most of the study intersections would operate at or better than their respective level of service standards, the following five intersections that currently operate below acceptable LOS would be significantly impacted by the project based upon the significance criteria utilized for this study:

1. Natividad Road / E Laurel Drive: LOS E (AM and PM)
2. Sherwood Drive – Natividad Road / E Bernal Drive – La Posada Way: LOS E (AM), LOS F (PM)
5. N Main Street (SR 183) / Rossi Street: LOS D (PM)
10. Sun Street / E Market Street: Side-street approach LOS F (PM)
12. US 101 Southbound Offramp – Merced Street / E Market Street: Overall LOS F (PM), Side-street approach LOS F (AM and PM)

See **Appendix F** for the level of service calculations under Existing Plus Project Conditions.

Below is a discussion of deficient operations and recommended improvements at the study intersections under Existing Plus Project conditions. Recommended improvements are summarized in **Table 3**.

- **Intersection #1 – Natividad Road / E Laurel Drive:**
  This intersection would operate at a deficient LOS E during the AM and PM peak hours, unchanged from Existing Conditions. The project would add 16 AM peak hour and 17 PM peak hour trips to this intersection.

  Impact: The impact of the Project to the intersection is significant because the Project will add peak hour trips to the intersection that operates at a deficient level without the project.

  Mitigation: Add a third northbound and third southbound lane to Natividad Road through this intersection. Intersection operations would improve during the AM and PM peak hour to LOS D.

  Salinas TFO Project: This improvement is included in the City of Salinas TFO (Project 61).

  Project Responsibility: Pay the Salinas traffic impact fees, which would represent the project's fair-share contribution of this improvement.

- **Intersection #2 – Sherwood Drive – Natividad Road / E Bernal Drive – La Posada Way:**
  This intersection would operate at a deficient LOS E (AM) and F (PM), unchanged from Existing Conditions. The project would add 16 AM peak hour and 17 PM peak hour trips to this intersection.

  Impact: The impact of the Project to the intersection is significant because the Project will add peak hour trips to the intersection that operates at a deficient level without the project.

  Mitigation: Convert the signal phasing on the east and west intersection approaches from concurrent phasing to split phasing. Intersection operations would improve during the AM and PM peak hour to LOS D.

  Project Responsibility: To ensure that the intersection of Sherwood Drive – Natividad Road / E. Bernal Drive-La Posada Way will operate at acceptable levels of service, the applicant shall either: (1) Prior to the City's issuance of the first grading permit for a specific development project at project site, pay a traffic impact fee provided the City has updated its Traffic Fee Ordinance to include the signal modifications at this intersection as one of the improvements that is funded by the TFO, or (2) if the signal modifications at this intersection has not been included in the TFO, the applicant shall be responsible for either: (a) Fund the improvements and obtain the requisite encroachment or other permits for modifying the signal phasing and ensure that the signal modification is in operation prior to the issuance of the first Certificate of Occupancy for a specific development project at the project site, or (b) Concurrent with the issuance of the first grading permit for a specific development project at project site, deposit funds with the City in order for the City to obtain the requisite permits and modify the signal phasing ensuring that the signal modification is operational prior to the issuance of the first Certificate of Occupancy for a specific development project at the project site.

- **Intersection #5 – N Main Street (SR 183) / Rossi Street:**
  This intersection, which is under Caltrans jurisdiction, would operate at a deficient LOS D during the PM peak hour, unchanged from Existing Conditions. The project would add 6 trips to this intersection during the PM peak hour and increase the PM peak hour delay by 0.1 seconds.

  Impact: The impact of the Project to the intersection is significant because the Project will increase the average vehicle delay during the PM peak hour by at least 0.1 seconds.

  Mitigation: Add a third northbound and third southbound lane on N. Main Street through this intersection. Intersection operations would improve during the PM peak hour to LOS C.

  Salinas TFO Project: This improvement is included in the City of Salinas TFO (Project 31).

  Project Responsibility: Pay the Salinas traffic impact fees, which would represent the project's fair-share contribution of this improvement.

- **Intersection #10 – Sun Street / E Market Street:**
  Side-street operations at this intersection (the southbound Sun Street approach) would operate at a deficient LOS F during the PM peak hour, unchanged from Existing Conditions. The project would add 31 trips to this approach during the PM peak hour.

  Impact: The impact of the Project to the intersection is significant because the Project will add peak hour trips to the intersection whose southbound approach operates at LOS F without the Project.

Mitigation: Signalize the intersection. The intersection would operate at LOS A during the AM and PM peak hours with signalization.

Salinas TFO Project: This improvement is not included in the City of Salinas TFO.

Project Responsibility: To ensure that the intersection of Sun Street and East Market Street will operate at acceptable levels of service, the applicant shall be responsible for either: (a) Fund the improvements and obtain the requisite encroachment or other permits for installation of a traffic signal and ensure that the signal is in operation prior to the issuance of the first Certificate of Occupancy for a specific development project at the project site, or (b) Concurrent with the issuance of the first grading permit for a specific development project at project site, deposit funds with the City in order for the City to obtain the requisite permits for installation of a traffic signal that will be operational prior to the issuance of the first Certificate of Occupancy for a specific development project at the project site.

- **Intersection #12 – US 101 Southbound Offramp – Merced Street / E Market Street:**
  This intersection would operate at a deficient LOS F during the PM peak hour, while side-street operations (the southbound US 101 Southbound Offramp approach) would operate at a deficient LOS F during the AM and PM peak hours, unchanged from Existing Conditions. The project would add 30 AM peak hour and 27 PM peak hour trips to this intersection.

  Impact: The impact of the Project to the intersection is significant because the Project will increase the average vehicle delay during the AM and PM peak hours by at least 0.1 seconds.

  Mitigation: Signalize the intersection. Intersection operations would improve during the AM and PM peak hours to LOS B.

  Salinas TFO Project: This improvement is not included in the City of Salinas TFO.

  Project Responsibility: To ensure that the intersection of U.S. 101 Southbound Offramp – Merced Street/East Market Street will operate at acceptable levels of service, the applicant shall either: (1) Prior to the City's issuance of the first grading permit for a specific development project at project site, pay a traffic impact fee provided the City has updated its Traffic Fee Ordinance to include a traffic signal at this intersection as one of the improvements that is funded by the TFO, or (2) if the traffic signal at this intersection has not been included in the TFO, the applicant shall be responsible for either: (a) Fund the improvements and obtain the requisite encroachment or other permits for installation of a traffic signal and ensure that the signal is in operation prior to the issuance of the first Certificate of Occupancy for a specific development project at the project site, or (b) Concurrent with the issuance of the first grading permit for a specific development project at project site, deposit funds with the City in order for the City to obtain the requisite permits and install the traffic signal ensuring that the signal is operational prior to the issuance of the first Certificate of Occupancy for a specific development project at the project site.

4.4.2 Pedestrian Circulation

Pedestrian traffic that is generated by development of the project site would likely be traveling from areas easily reached on foot from the project site, such as adjacent neighborhoods and bus stops. It is anticipated that the complete sidewalk and crosswalk network in the greater study area would facilitate pedestrian access from these areas. However, potential pedestrian impacts should be assessed at the time the project site is proposed to be developed by a specific project.

4.4.3 Bicycle Circulation

Development on the project site is anticipated to generate little bicycle traffic. As with the pedestrian traffic, the bicycle traffic that would be generated by the project would be traveling to areas easily reached on bike from the project site, such as residential areas that are more than a 10-minute bike ride from the project site. Although there are few bike facilities in the study area nearest the project site, the small level of bicycle traffic will be low enough to minimize any effects on existing vehicle traffic. Potential bicycle traffic impacts should be assessed at the time the project site is proposed to be developed by a specific project.

4.4.4 Transit Circulation

Development on the project site is anticipated to generate little transit usage. The transit usage that would be generated by the project would likely be walking to and from the bust stops within a 10-minute walk from the project site (as enumerated in Section 2.4). The small level of transit usage generated by the project would be low enough to minimize any effects on existing transit demand for bus routes in the area. Potential transit traffic impacts should be assessed at the time the project site is proposed to be developed by a specific project.

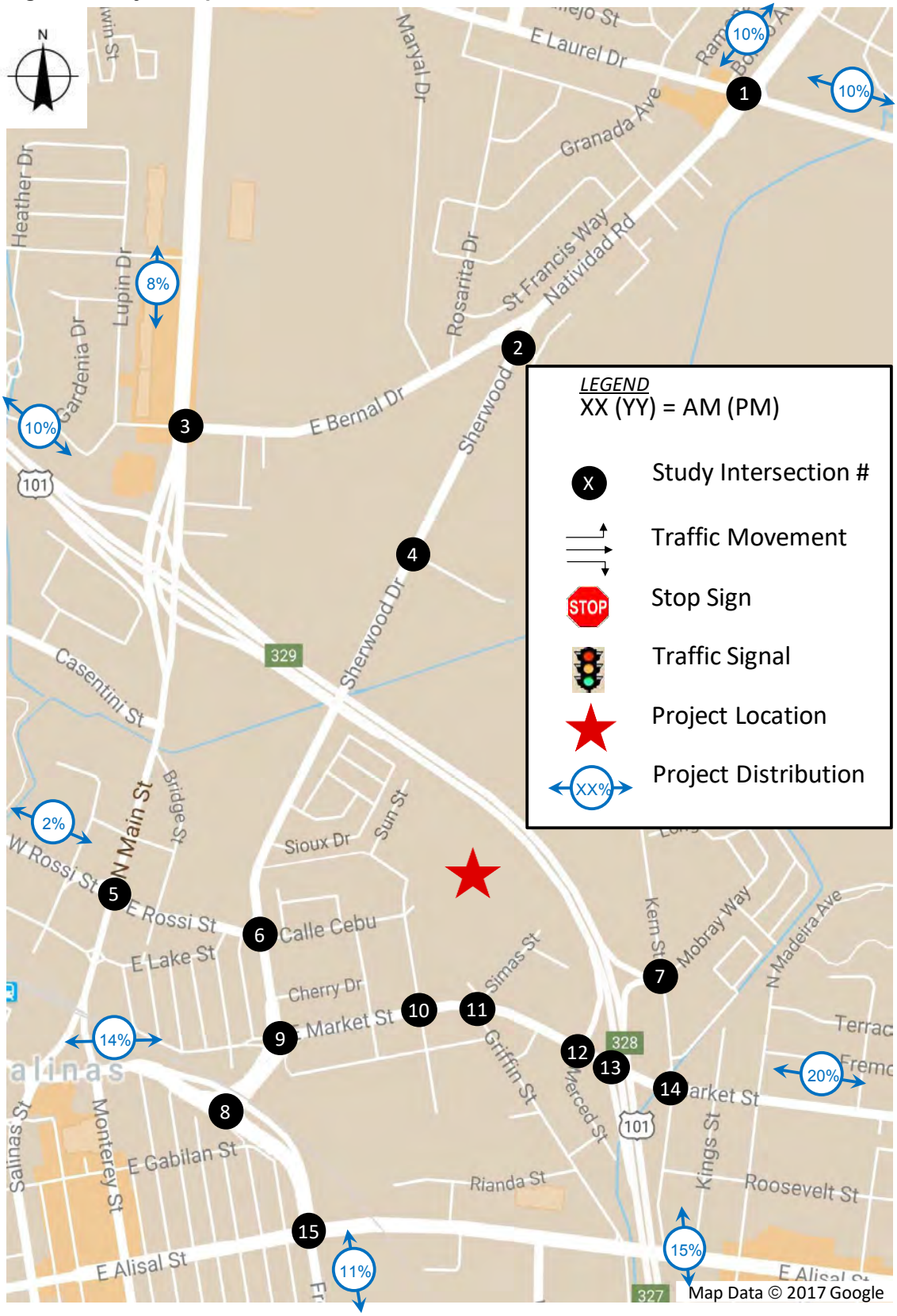
4.5 City of Salinas Traffic Fee Ordinance

A development project constructed on the project site would be responsible for payment of the City of Salinas Traffic Fee Ordinance (TFO) traffic impact fee, which would represent the development's contribution towards citywide roadway improvements funded by the fee program.

4.6 TAMC Regional Development Impact Fee

A development project constructed on the project site would be responsible for payment of the TAMC Regional Development Impact Fee, which would represent the project's contribution towards countywide roadway improvements funded by the fee program.

Figure 5: Project Trip Distribution



Base map Source: Google Maps, 2017.

Figure 6: Project Trip Assignment – AM and PM Peak Hour Volumes

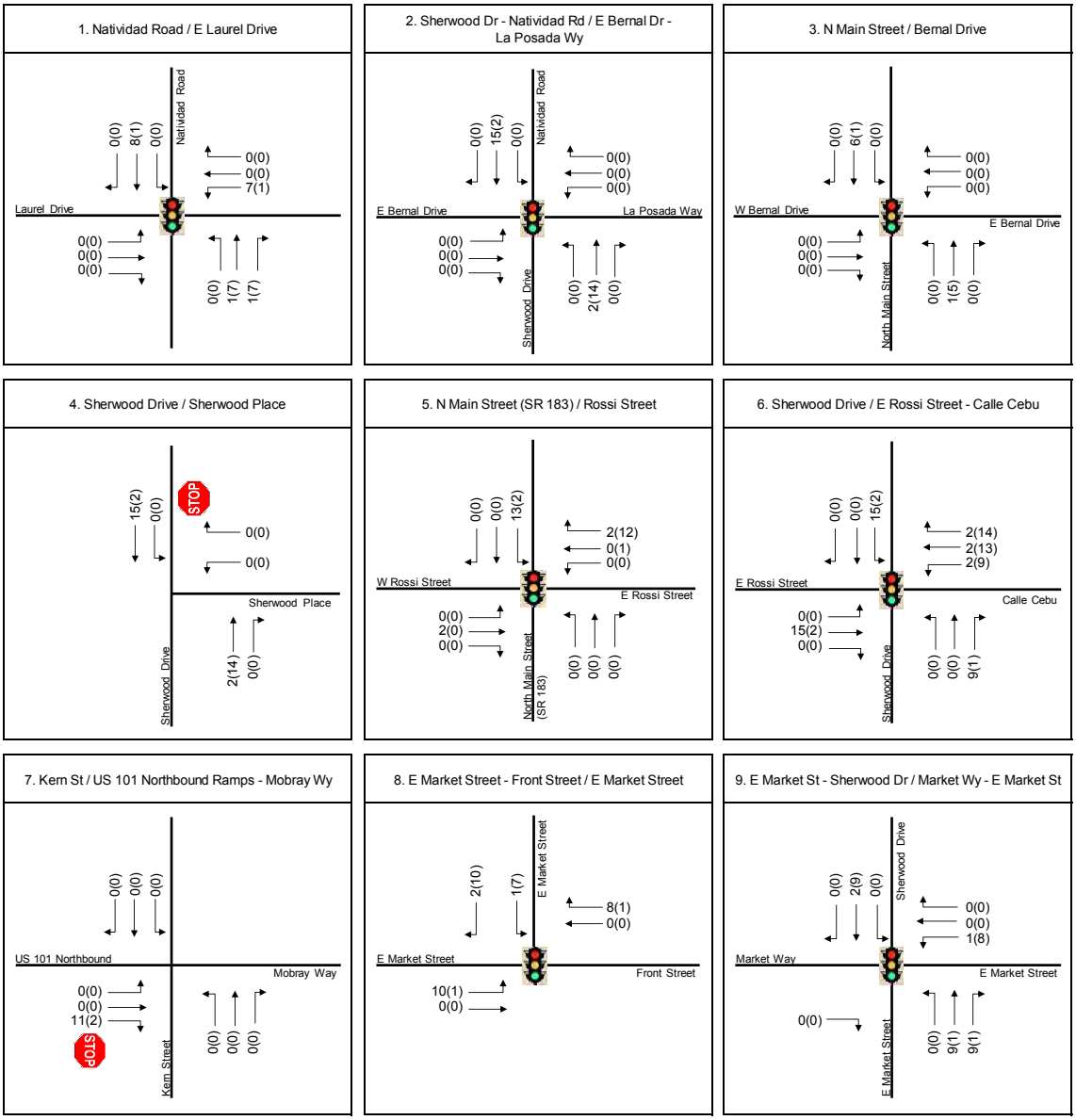
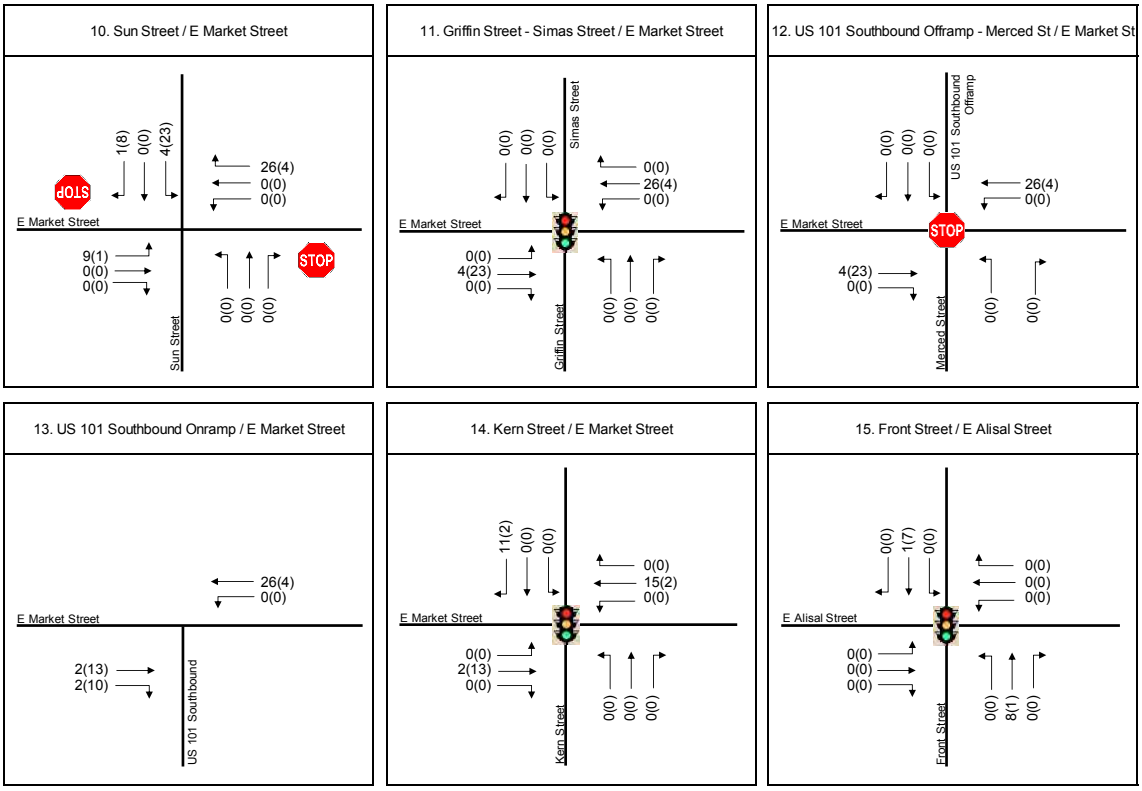


Figure 6: Project Trip Assignment – AM and PM Peak Hour Volumes (Continued)



Source: Mott MacDonald

Figure 7: Existing Plus Project Conditions – AM and PM Peak Hour Volumes

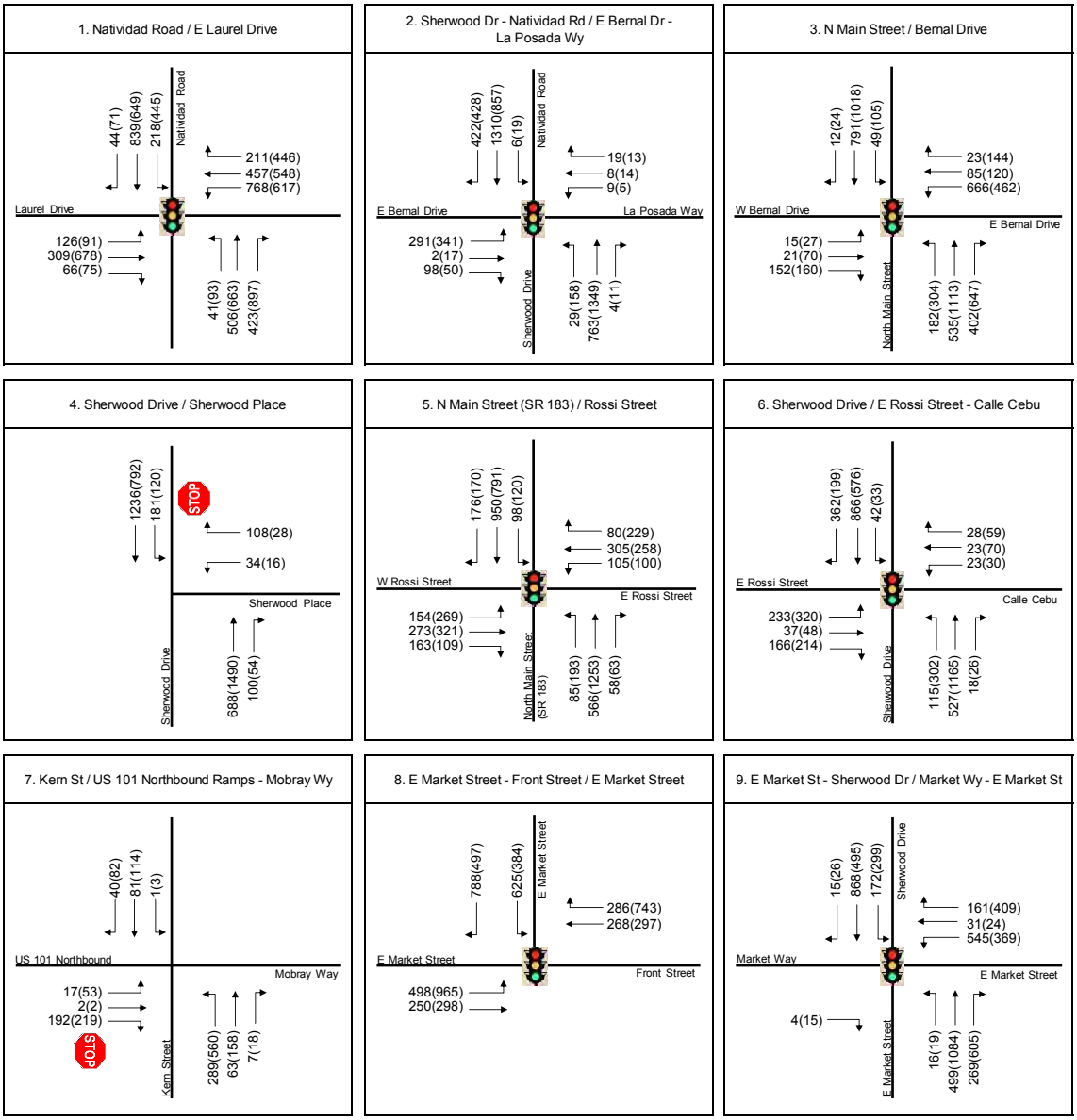
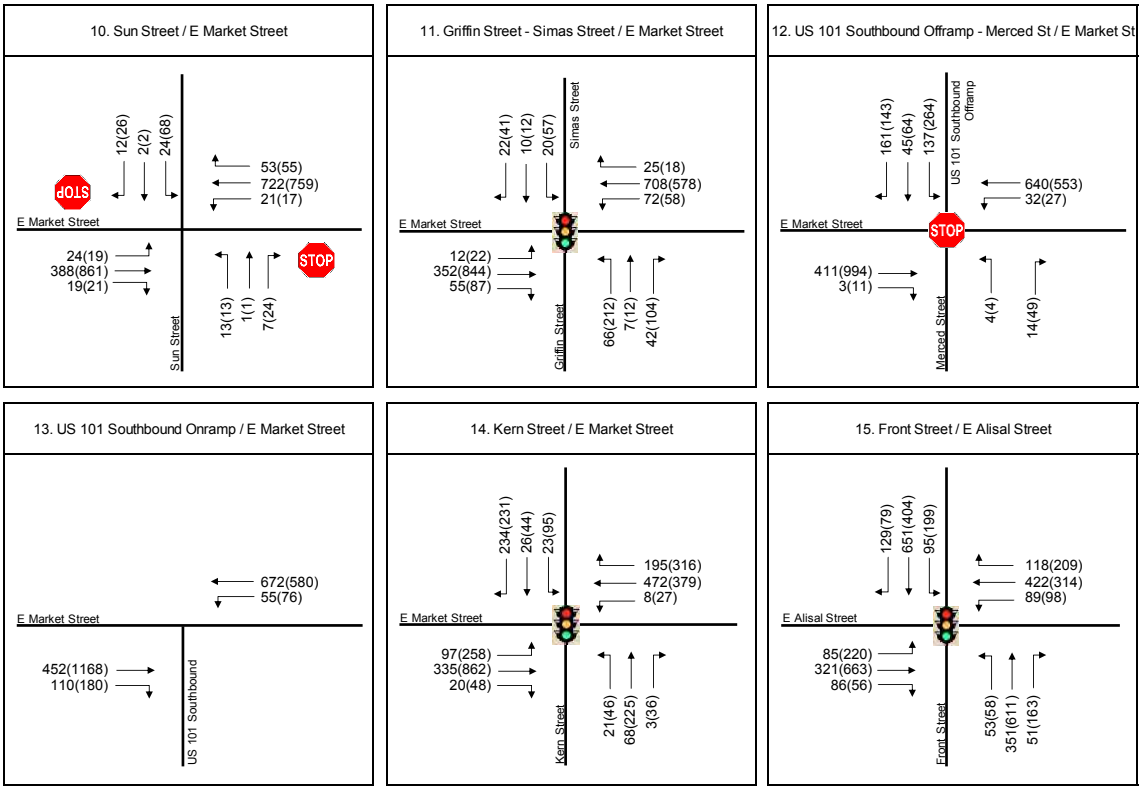


Figure 7: Existing Plus Project Conditions – AM and PM Peak Hour Volumes (Continued)



Source: Mott MacDonald

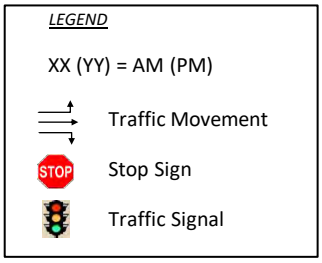


Table 2: Intersection Levels of Service – Existing and Existing Plus Project Conditions

	N-S Street	E-W Street	Existing Intersection Control	LOS Stnd.	Peak Hour	Existing Conditions		Existing Plus Project Conditions	
						Delay (sec)	LOS	Delay (sec)	LOS
1	Natividad Road	East Laurel Drive	Signal	D	AM	61.1	E	**62.1**	**E**
					PM	62.5	E	**62.7**	**E**
			With Improvement		*AM*			*48.2*	*D*
					PM			*52.9*	*D*
2	Sherwood Drive - Natividad Road	East Bernal Drive - La Posada Way	Signal	D	AM	57.8	E	**58.7**	**E**
					PM	92.1	F	**93.2**	**F**
			With Improvement		*AM*			*34.2*	*C*
					PM			*44.0*	*D*
3	North Main Street	Bernal Drive	Signal	D	AM	41.6	D	41.6	D
					PM	52.5	D	52.5	D
4	Sherwood Drive	Sherwood Place	One-Way Stop	D (E)	AM	2.0 (19.5)	A (C)	2.0 (19.6)	A (C)
					PM	1.3 (25.4)	A (D)	1.3 (25.8)	A (D)
5	North Main Street (SR 183)	Rossi Street	Signal	C/D (Caltrans)	AM	30.5	C	30.5	C
					PM	39.9	D	**40.0**	**D**
			With Improvement		*AM*			*26.5*	*C*
					PM			*32.7*	*C*
6	Sherwood Drive	East Rossi Street - Calle Cebu	Signal	D	AM	23.1	C	24.3	C
					PM	32.5	C	34.2	C
7	Kern Street	US 101 Northbound Ramps - Mobray Way	One-Way Stop	C/D (E)	AM	6.7 (10.8)	B (B)	6.7 (10.8)	B (B)
					PM	15.0 (46.3)	B (E)	14.9 (46.0)	B (E)
8	East Market Street - Front Street	East Market Street	Signal	D	AM	5.5	A	5.6	A
					PM	8.8	A	8.8	A
9	East Market Street - Sherwood Drive	Market Way - East Market Street	Signal	D	AM	18.7	B	18.8	B
					PM	23.6	C	23.6	C

Table 2: Intersection Levels of Service – Existing and Existing Plus Project Conditions (Continued)

	N-S Street	E-W Street	Existing Intersection Control	LOS Stnd.	Peak Hour	Existing Conditions		Existing Plus Project Conditions	
						Delay (sec)	LOS	Delay (sec)	LOS
10	Sun Street	East Market Street	Two-Way Stop	D (E/E)	AM	1.7 (24.7/32.2)	A (C/D)	1.9 (25.8/34.7)	A (D/D)
					PM	3.9 (33.0/79.8)	A (D/F)	**8.4 (33.4/142.2)**	**B (D/F)**
			With Improvement		*AM*			*7.0*	*A*
					PM			*7.0*	*A*
11	Griffin Street - Simas Street	East Market Street	Signal	D	AM	6.7	A	6.7	A
					PM	10.9	A	11.1	B
12	US 101 Southbound Offramp - Merced Street	East Market Street	Two-Way Stop	C/D (E/E) (Caltrans)	AM	19.5 (18.4/78.9)	C (C/F)	**21.9 (19.2/90.8)**	**C (C/F)**
					PM	69.3 (20.9/*)	F (C/F)	**72.5 (22.2/*)**	**F (C/F)**
			With Improvement		*AM*			*10.3*	*B*
					PM			*12.8*	*B*
13	US 101 Southbound Onramp	East Market Street	Uncontrolled	D (E)	AM	0.4 (0.0)	A (A)	0.4 (0.0)	A (A)
					PM	0.5 (0.0)	A (A)	0.5 (0.0)	A (A)
14	Kern Street	East Market Street	Signal	D	AM	11.8	B	11.9	B
					PM	22.8	C	22.9	C
15	Front Street	East Alisal Street	Signal	D	AM	31.3	C	31.3	C
					PM	47.4	D	47.4	D

Notes:
1. LOS Stnd. = Level of Service Standard
2. XX (YY) = Overall (Side Street).
3. Analysis performed using *2000* and *2010 Highway Capacity Manual* methodologies.
4. Overall level of service standard for the City of Salinas is LOS D. Overall level of service standard for Caltrans is the transition between LOS C and LOS D (LOS C/D).
5. Worst approach level of service standard is generally LOS E. Level of service "F" is the level of service at which improvements would normally be required.
6. Above delays and levels of service are summarized from calculations in **Appendices E through J**.
7. Items in **bold** represent significant impacts.
8. *: Delay is greater than 300 seconds per vehicle.

Source: Mott MacDonald

Table 3: Recommended Intersection Improvements

	N-S Street	E-W Street	Existing Intersection Control	Existing Plus Project Mitigation	Background Plus Project Mitigation	Cumulative Plus Project Mitigation
1	Natividad Road	East Laurel Drive	Signal	Add 3rd NB T, 3rd SB T (TFO Project No. 61)	Same as Existing Plus Project.	-
2	Sherwood Drive - Natividad Road	East Bernal Drive - La Posada Way	Signal	Change E Bernal - La Posada Signal Phasing to Split Phasing. (Not currently included in the Salinas TFO.)	Same as Existing Plus Project.	-
5	North Main Street (SR 183)	Rossi Street	Signal	Add 3rd NB T, 3rd SB T. (TFO Project 31)	Same as Existing Plus Project.	1. Add 3rd NB T & 3rd SB T: TFO Project 31 2. Provide a second left turn lane on the westbound Rossi Street approach to N. Main. (TFO Project 30, modified by the City to include a second westbound left turn lane on Rossi within the 106 foot right of way planned by TFO Project 30.)
7	Kern Street	US 101 Northbound Ramps - Mobray Way	One-Way Stop	-	-	Signalize intersection.
10	Sun Street	East Market Street	Two-Way Stop	Signalize intersection.	Same as Existing Plus Project.	Same as Existing Plus Project.
12	US 101 Southbound Offramp - Merced Street	East Market Street	Two-Way Stop	Signalize Intersection	Same as Existing Plus Project.	Same as Existing Plus Project.
14	Kern Street	East Market Street	Signal	-	-	Restripe westbound E. Market approach to provide left turn lane, 1 through lane and 1 right turn lane.

Notes:
1. LOS Stnd. = Level of Service Standard
2. L, T, R, EB, WB, NB, SB, RTO = Left, Through, Right, Eastbound, Westbound, Southbound, Northbound, Right Turn Overlap signal phase.

Source: Mott MacDonald

5 Background Conditions

This chapter describes Background Conditions, which represents traffic operations approximately five years into the future (i.e., the Year 2022). Note that this scenario does not include trips from the study project.

5.1 Background Traffic Volumes

Traffic volumes under Background conditions were derived by applying growth factors to the existing volumes on the study corridors in this analysis. More specifically, the corridors and their associated growth factors are the following:

1. E Laurel Drive – 2% (AM), 3% (PM)
2. Natividad Road – 2% (AM), 3% (PM)
3. Sherwood Drive – 2% (AM), 3% (PM)
4. E Rossi Street and W Rossi Street – 2% (AM), 3% (PM)
5. N Main Street:
    a. North of US 101 – 2% (AM), 3% (PM)
    b. South of US 101 – 10% (AM), 15% (PM)
6. E Market Street – 2% (AM), 3% (PM)
7. Front Street – 2% (AM), 3% (PM)
8. E Alisal Street – 2% (AM), 3% (PM)
9. Kern Street – 2% (AM), 3% (PM)
10. US 101 Onramps and Offramps – 2% (AM), 3% (PM)

The growth factors were primarily applied to the mainline traffic on each corridor. The lower of the two growth factors on intersecting streets was applied to the turning movements between those streets. The growth factors used are consistent with the net increase in traffic on these corridors attributable to approved projects in past traffic analyses in the study area.

The resulting traffic growth attributable to approved projects includes trips generated by the approved Police Station and the Salinas Ag Industrial Center, with the one exception the assignment of approved trips at the Front Street / Alisal Street intersection. The traffic assignment for the police station that is documented in the Police Station TIA was included in the Background Condition volumes because of the magnitude of trips that the Police Station is forecast to add at this intersection.

The Background Condition traffic volumes are depicted in **Figure 8.**

5.2 Background Condition Traffic Circulation

The intersection levels of service for the Background Condition are summarized in **Table 4**. The analysis of Background Conditions includes one modification to the road network. The westbound

Although most of the study intersections would operate at or better than their respective level of service standards under Background conditions, the following six intersections would operate below their standards:

1. Natividad Road / E Laurel Drive: LOS E (AM and PM)
2. Sherwood Drive – Natividad Road / E Bernal Drive – La Posada Way: LOS E (AM), LOS F (PM)
5. N. Main Street (SR 183) / Rossi Street: LOS D (AM and PM)
7. Kern Street / US 101 Northbound Ramps – Mobray Way: Side Street approach LOS F (PM)
10. Sun Street / E Market Street: Side-street approach LOS F (PM)
12. US 101 Southbound Offramp – Merced Street / E Market Street: Overall LOS F (PM), Side-street approach LOS F (AM and PM)

See **Appendix G** for the level of service calculations under Background Conditions.

Figure 8: Background Conditions – AM and PM Peak Hour Volumes

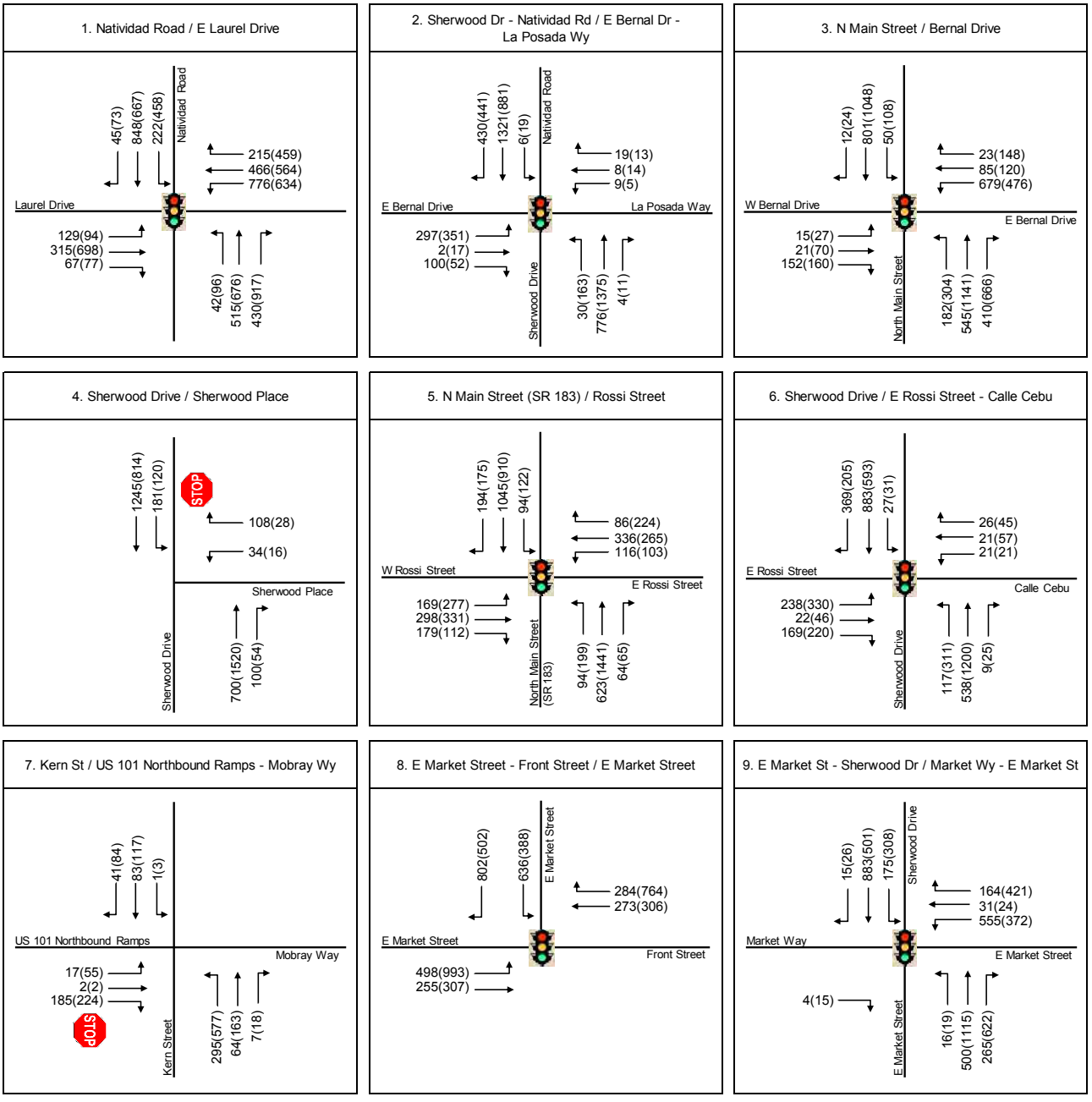
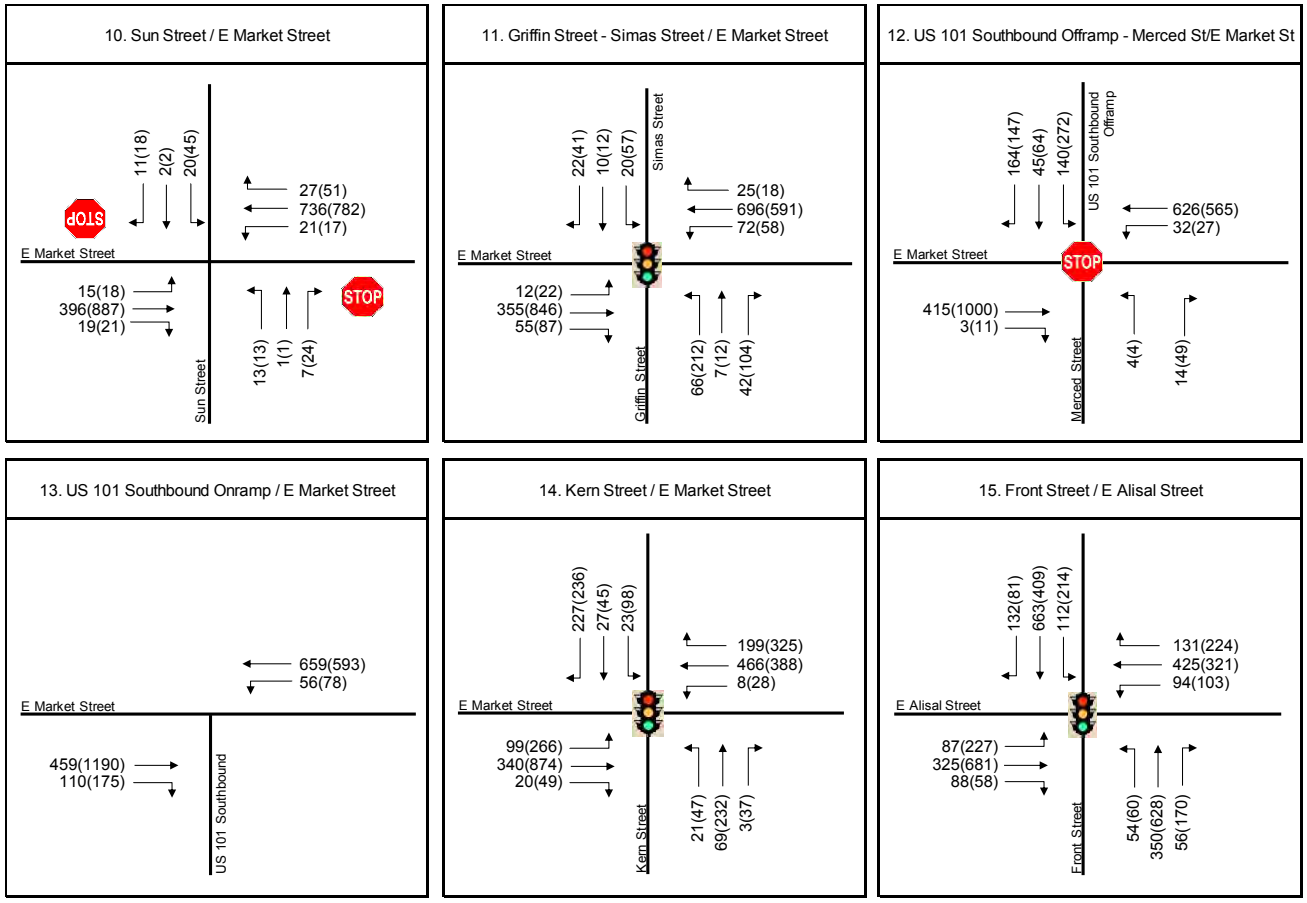


Figure 8: Background Conditions – AM and PM Peak Hour Volumes (Continued)



Source: Mott MacDonald

6 Background Plus Project Conditions

This chapter provides a description of the analysis under Background Plus Project traffic conditions, which analyzes Background Conditions plus anticipated traffic from the proposed project.

6.1 Background Plus Project Traffic Volumes

The project trip assignment (**Figure 6**) was added to the Background Condition volumes (**Figure 8)** to create the Background Plus Project Condition volumes shown in **Figure 9**.

6.2 Background Plus Project Conditions Traffic Circulation

6.2.1 Vehicle Circulation

Table 4 summarizes the levels of service at the study intersections under Background and Background Plus Project conditions. The following intersections would operate below their level of service standards and would be significantly impacted be the project based upon the significance criteria utilized for this study:

1. Natividad Road / E Laurel Drive: LOS E (AM and PM)
2. Sherwood Drive – Natividad Road / E Bernal Drive – La Posada Way: LOS E (AM), LOS F (PM)
5. N Main Street (SR 183) / Rossi Street: LOS D (PM)
10. Sun Street / E Market Street: Side-street approach LOS F (PM)
12. US 101 Southbound Offramp – Merced Street / E Market Street: Overall LOS F (PM), Side-street approach LOS F (AM and PM)

See **Appendix H** for the level of service calculations under Background Plus Project Conditions.

Below is a discussion of deficient operations and recommended improvements at the study intersections under Background Plus Project conditions. Recommended improvements are summarized in **Table 3**. The same intersections that are significantly impacted by the Project under Existing Conditions are significantly impacted under Background Conditions. No additional intersections are significantly impacted by the Project under Background Conditions and the mitigation measures recommended for Existing Conditions remain unchanged for Background Conditions.

- **Intersection #1 – Natividad Road / E Laurel Drive:**
  This intersection would operate at a deficient LOS E during the AM and PM peak hours, unchanged from Background Conditions. The project would add 16 AM peak hour and 17 PM peak hour trips to this intersection.

  Impact: The impact of the Project to the intersection is significant because the Project will add peak hour trips to the intersection that operates at a deficient level without the project.

  Mitigation: Add a third northbound and third southbound lane to Natividad Road through this intersection. Intersection operations would improve during the AM and PM peak hour to LOS D.

  Salinas TFO Project: This improvement is included in the City of Salinas TFO (Project 61).

Project Responsibility: Pay the Salinas traffic impact fees, which would represent the project's fair-share contribution of this improvement.

- **Intersection #2 – Sherwood Drive – Natividad Road / E Bernal Drive – La Posada Way:**
  This intersection would operate at a deficient LOS E (AM) and F (PM), unchanged from Background Conditions. The project would add 16 AM peak hour and 17 PM peak hour trips to this intersection.

  Impact: The impact of the Project to the intersection is significant because the Project will add peak hour trips to the intersection that operates at a deficient level without the project.

  Mitigation: Convert the signal phasing on the east and west intersection approaches from concurrent phasing to split phasing. Intersection operations would improve during the AM and PM peak hour to LOS D.

  Project Responsibility: To ensure that the intersection of Sherwood Drive – Natividad Road / E. Bernal Drive-La Posada Way will operate at acceptable levels of service, the applicant shall either: (1) Prior to the City's issuance of the first grading permit for a specific development project at project site, pay a traffic impact fee provided the City has updated its Traffic Fee Ordinance to include the signal modifications at this intersection as one of the improvements that is funded by the TFO, or (2) if the signal modifications at this intersection has not been included in the TFO, the applicant shall be responsible for either: (a) Fund the improvements and obtain the requisite encroachment or other permits for modifying the signal phasing and ensure that the signal modification is in operation prior to the issuance of the first Certificate of Occupancy for a specific development project at the project site, or (b) Concurrent with the issuance of the first grading permit for a specific development project at project site, deposit funds with the City in order for the City to obtain the requisite permits and modify the signal phasing ensuring that the signal modification is operational prior to the issuance of the first Certificate of Occupancy for a specific development project at the project site.

- **Intersection #5 – N Main Street (SR 183) / Rossi Street:**
  This intersection, which is under Caltrans jurisdiction, would operate at a deficient LOS D during the AM and PM peak hours, unchanged from Background Conditions. The project would add 17 trips to this intersection during the AM peak hour and 15 trips to this intersection during the PM peak hour. The trips added by the Project would not increase the average vehicle delay during the AM peak hour, but would increase the PM peak hour vehicle delay by 0.1 seconds.

  Impact: The impact of the Project to the intersection is significant because the Project will increase the average vehicle delay during the PM peak hour by at least 0.1 seconds.

  Mitigation: Add a third northbound and third southbound lane on N. Main Street through this intersection. Intersection operations would improve during the PM peak hour to LOS C.

  Salinas TFO Project: This improvement is included in the City of Salinas TFO (Project 31).

  Project Responsibility: Pay the Salinas traffic impact fees, which would represent the project's fair-share contribution of this improvement.

- **Intersection #10 – Sun Street / E Market Street:**
  Side-street operations at this intersection (the southbound Sun Street approach) would operate at a deficient LOS F during the PM peak hour, unchanged from Background Conditions. The project would add 31 trips to this approach during the PM peak hour.

Impact: The impact of the Project to the intersection is significant because the Project will add peak hour trips to the intersection whose southbound approach operates at LOS F without the Project.

Mitigation: Signalize the intersection. The intersection would operate at LOS A during the AM and PM peak hours with signalization.

Salinas TFO Project: This improvement is not included in the City of Salinas TFO.

Project Responsibility: To ensure that the intersection of Sun Street and East Market Street will operate at acceptable levels of service, the applicant shall be responsible for either: (a) Fund the improvements and obtain the requisite encroachment or other permits for installation of a traffic signal and ensure that the signal is in operation prior to the issuance of the first Certificate of Occupancy for a specific development project at the project site, or (b) Concurrent with the issuance of the first grading permit for a specific development project at project site, deposit funds with the City in order for the City to obtain the requisite permits for installation of a traffic signal that will be operational prior to the issuance of the first Certificate of Occupancy for a specific development project at the project site.

- **Intersection #12 – US 101 Southbound Offramp – Merced Street / E Market Street:**
  This intersection would operate at a deficient LOS F during the PM peak hour, while side-street operations (the southbound US 101 Southbound Offramp approach) would operate at a deficient LOS F during the AM and PM peak hours, unchanged from Background Conditions. The project would add 30 AM peak hour and 27 PM peak hour trips to this intersection.

  Impact: The impact of the Project to the intersection is significant because the Project will increase the average vehicle delay on the southbound off-ramp approach during the AM and PM peak hours by at least 0.1 seconds.

  Mitigation: Signalize the intersection. Intersection operations would improve during the AM and PM peak hours to LOS B.

  Salinas TFO Project: This improvement is not included in the City of Salinas TFO.

  Project Responsibility: To ensure that the intersection of U.S. 101 Southbound Offramp – Merced Street/East Market Street will operate at acceptable levels of service, the applicant shall either: (1) Prior to the City's issuance of the first grading permit for a specific development project at project site, pay a traffic impact fee provided the City has updated its Traffic Fee Ordinance to include a traffic signal at this intersection as one of the improvements that is funded by the TFO, or (2) if the traffic signal at this intersection has not been included in the TFO, the applicant shall be responsible for either: (a) Fund the improvements and obtain the requisite encroachment or other permits for installation of a traffic signal and ensure that the signal is in operation prior to the issuance of the first Certificate of Occupancy for a specific development project at the project site, or (b) Concurrent with the issuance of the first grading permit for a specific development project at project site, deposit funds with the City in order for the City to obtain the requisite permits and install the traffic signal ensuring that the signal is operational prior to the issuance of the first Certificate of Occupancy for a specific development project at the project site.

Figure 9: Background Plus Project Conditions – AM and PM Peak Hour Volumes

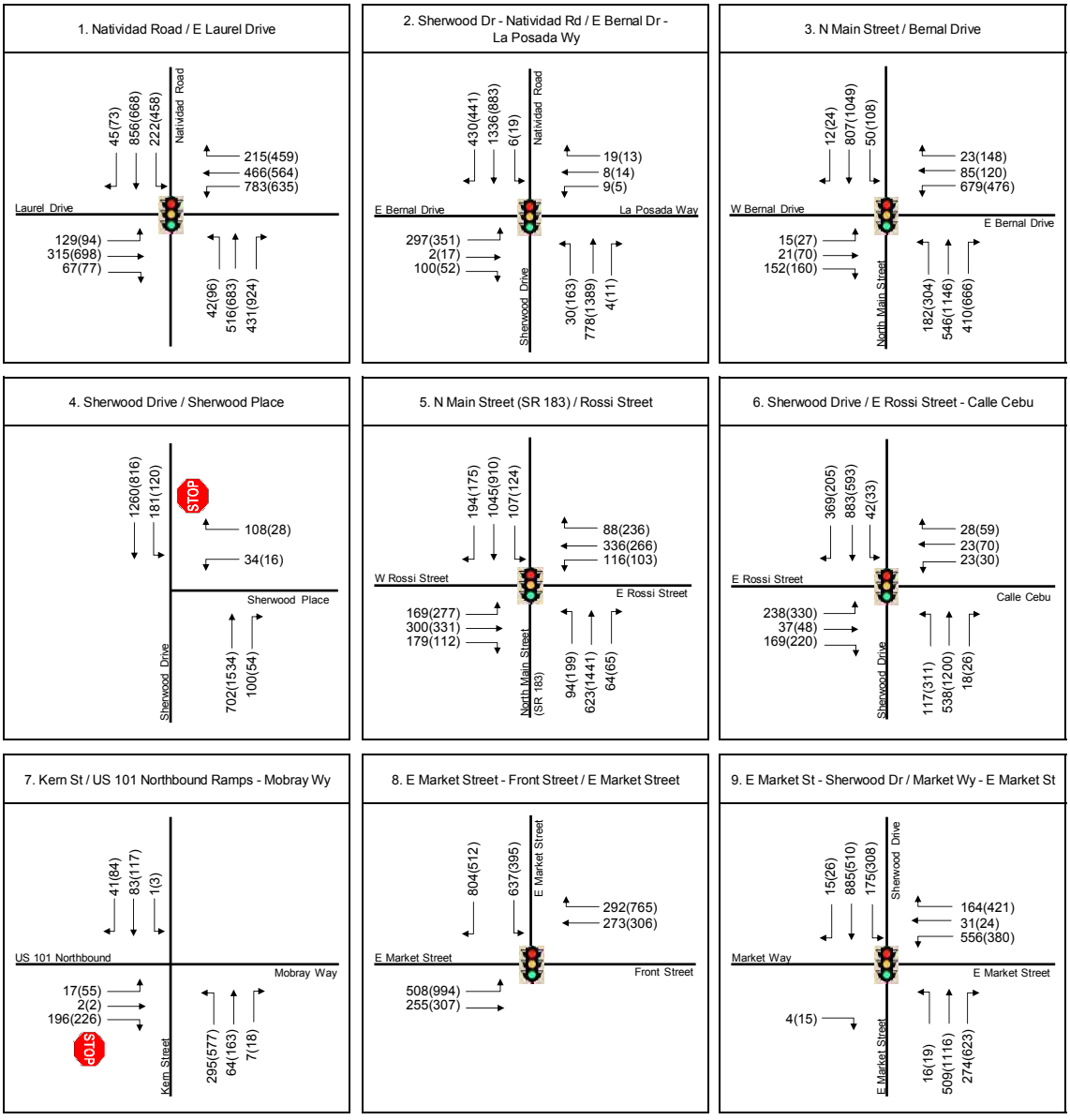
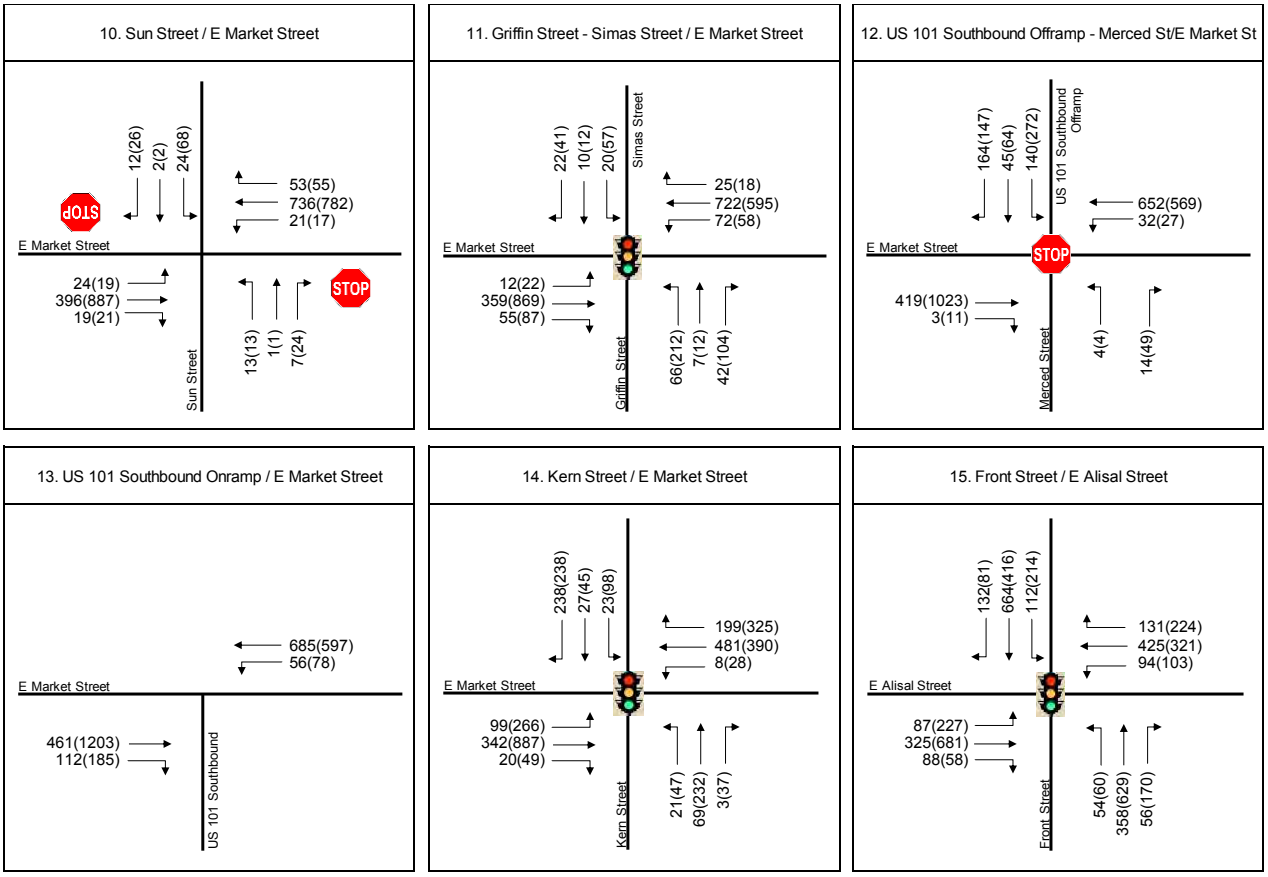


Figure 9: Background Plus Project Conditions – AM and PM Peak Hour Volumes (Continued



Source: Mott MacDonald

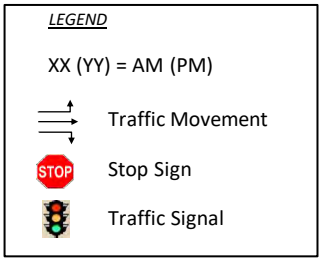


Table 4: Intersection Levels of Service – Background and Background Plus Project Conditions

	N-S Street	E-W Street	Existing Intersection Control	LOS Stnd.	Peak Hour	Background Conditions Delay (sec)	Background Conditions LOS	Background Plus Project Conditions Delay (sec)	Background Plus Project Conditions LOS
1	Natividad Road	East Laurel Drive	Signal	D	AM	63.9	E	**65.1**	**E**
					PM	66.7	E	**66.9**	**E**
			With Improvement		AM			*50.0*	*D*
					PM			*54.5*	*D*
2	Sherwood Drive - Natividad Road	East Bernal Drive - La Posada Way	Signal	D	AM	61.3	E	**62.5**	**E**
					PM	98.5	F	**99.8**	**F**
			With Improvement		*AM*			*36.4*	*D*
					PM			*54.5*	*D*
3	North Main Street	Bernal Drive	Signal	D	AM	47.4	D	47.6	D
					PM	42.3	D	42.3	D
4	Sherwood Drive	Sherwood Place	One-Way Stop	D (E)	AM	2.0 (19.9)	A (C)	2.0 (20.0)	A (C)
					PM	1.3 (26.7)	A (D)	1.3 (27.0)	A (D)
5	North Main Street (SR 183)	Rossi Street	Signal	C/D (Caltrans)	AM	35.8	D	35.8	D
					PM	47.1	D	**47.3**	**D**
			With Improvement		*AM*			*29.1*	*C*
					PM			*34.8*	*C*
6	Sherwood Drive	East Rossi Street - Calle Cebu	Signal	D	AM	23.5	C	24.6	C
					PM	32.6	C	33.6	C
7	Kern Street	US 101 Northbound Ramps - Mobray Way	One-Way Stop	C/D (E) (Caltrans)	AM	6.7 (10.9)	A (B)	6.8 (11.0)	A (B)
					PM	17.4 (56.6)	C (F)	17.4 (56.2)	C (F)
8	East Market Street - Front Street	East Market Street	Signal	D	AM	5.9	A	5.7	A
					PM	9.0	A	9.0	A
9	East Market Street - Sherwood Drive	Market Way - East Market Street	Signal	D	AM	19.2	B	19.2	B
					PM	23.3	C	23.4	C

Table 4: Intersection Levels of Service – Background and Background Plus Project Conditions (Continued)

	N-S Street	E-W Street	Existing Intersection Control	LOS Stnd.	Peak Hour	Background Conditions Delay (sec)	Background Conditions LOS	Background Plus Project Conditions Delay (sec)	Background Plus Project Conditions LOS
10	Sun Street	East Market Street	Two-Way Stop	D (E/E)	AM	1.7 (25.2/33.5)	A (D/D)	2.1 (26.8/39.0)	A (D/E)
					PM	4.4 (35.0/92.0)	A (E/F)	**9.5 (36.1/166.0)**	**A (E/F)**
			With Improvement		*AM*			*4.9*	*A*
					PM			*6.2*	*A*
11	Griffin Street - Simas Street	East Market Street	Signal	D	AM	6.7	A	5.5	A
					PM	11.1	B	11.2	B
12	US 101 Southbound Offramp - Merced Street	East Market Street	Two-Way Stop	C/D (E/E) (Caltrans)	AM	22.1 (19.1/89.8)	C (C/F)	**24.6 (19.9/102.2)**	**C (C/F)**
					PM	81.8 (23.0/*)	F (C/F)	**84.7 (24.4/*)**	**F (C/F)**
			With Improvement		*AM*			*10.4*	*B*
					PM			*13.2*	*B*
13	US 101 Southbound Onramp	East Market Street	Uncontrolled	D (E)	AM	0.4 (0.0)	A (A)	0.4 (0.0)	A (A)
					PM	0.6 (0.0)	A (A)	0.6 (0.0)	A (A)
14	Kern Street	East Market Street	Signal	D	AM	17.9	B	18.2	B
					PM	22.8	C	22.8	C
15	Front Street	East Alisal Street	Signal	D (E)	AM	39.4	D	39.4	D
					PM	51.2	D	51.2	D

Notes:
1. LOS Stnd. = Level of Service Standard
2. XX (YY) = Overall (Side Street).
3. Analysis performed using *2000* and *2010 Highway Capacity Manual* methodologies.
4. Overall level of service standard for the City of Salinas is LOS D. Overall level of service standard for Caltrans is the transition between LOS C and LOS D (LOS C/D).
5. Worst approach level of service standard is generally LOS E. Level of service "F" is the level of service at which improvements would normally be required.
6. Above delays and levels of service are summarized from calculations in **Appendices E through J**.
7. Items in **bold** represent significant impacts.

Source: Mott MacDonald

7 Cumulative Without Project Conditions

This chapter describes the analysis results under Cumulative conditions without the study project developed. The Cumulative Without Project traffic condition is defined as buildout of the current City of Salinas General Plan. Note that this analysis scenario does not include traffic from the study project.

7.1 Derivation of Cumulative Without Project Condition Volumes

The Cumulative Without Project condition volumes in **Figure 10** are primarily on traffic forecasts documented in the City of Salinas General Plan Circulation Study prepared by Higgins Associates in 2002. Traffic forecasts documented in the following reports were also referenced:

1. Monterey County Jail Housing Addition Traffic Impact Analysis, Hatch Mott MacDonald, April 29, 2014.
2. Haciendas Phase III/IV Traffic Impact Analysis, Hatch Mott MacDonald, April 8, 2014.
3. Sun Street Solid Waste Transfer Station Access Plan Traffic Impact Analysis, Higgins Associates, August 27, 2007.
4. Tynan Village Mixed Use Development Traffic Impact Study Report, Higgins Associates, November 22, 2004.
5. Salinas Sphere of Influence Amendment and Annexation Supplemental TIA, Fehr & Peers, November 14, 2007.

The traffic volume forecasts shown on **Figure 10** reflect new road links and the level of service calculations include intersection improvements that are included in the City of Salinas Traffic Fee Ordinance and are planned for implementation in conjunction with buildout of the city's General Plan. These improvements include the following:

1. TFO Project No. 30: Rossi Street Widening – widen to four lanes between Main Street and Sherwood Drive.
2. TFO Project No. 31: Main Street Widening – widen from a four to six-lane arterial between Casentini Street and Market Street.
3. TFO Project No. 33A: Bernal Drive Extension – extend as a four-lane arterial from Sherwood Drive/Natividad Road intersection to Kern Street.
4. TFO Project No. 33B: Bernal Drive Widening – widen, construct sidewalk and retaining wall on north side between Main Street and Rosarita Drive.
5. TFO Project No. 34: Constitution Boulevard Extension – extend from Laurel Drive to Bernal Drive Extension.
6. TFO Project No. 45: Laurel Drive Widening – widen to six lanes between Natividad and Constitution. Add left turn channelization east of Constitution.
7. TFO Project No. 46: Main Street Widening – widen to six lanes between Market Street and Bernal by eliminating on-street parking and widening UP Structure north of Market Street.

8. TFO Project No. 61: Natividad Road/Laurel Drive Intersection – widen the Natividad Road north and south intersection legs to provide the following lane configuration on the intersection approaches:
    a. Northbound approach – 1 left turn lane, 3 through lanes, 1 right turn lane
    b. Southbound approach – 2 left turn lanes, 2 through lanes, 1 through/right turn lane.
    c. Eastbound approach – 1 left turn lane, 2 through lanes, 1 right turn lane.
    d. Westbound approach – 2 left turn lanes, 2 through lanes, 1 right turn lane.

7.2 Cumulative Without Project Condition Traffic Circulation

7.2.1 Vehicle Circulation

The intersection levels of service for the Cumulative Condition are summarized in **Table 5**. The following intersections would operate below their level of service standards:

#5: N Main Street (SR 183) / Rossi Street: LOS D (PM)

#7: Kern Street / US 101 Northbound Ramps – Mobray Way: Overall LOS F, Side Street approach LOS F (PM)

#10: Sun Street / E Market Street: Side-street approach LOS F (PM)

#12: US 101 Southbound Offramp – Merced Street / E Market Street: Overall LOS E (AM) and LOS F (PM), Side-street approach LOS F (AM and PM)

#14: Kern Street / E Market Street: LOS F (PM)

#15: Front Street / Alisal Street: LOS E (AM and PM)

See **Appendix I** for the level of service calculations under Cumulative Without Project Conditions.

Figure 10: Cumulative Without Project Conditions – AM and PM Peak Hour Volumes

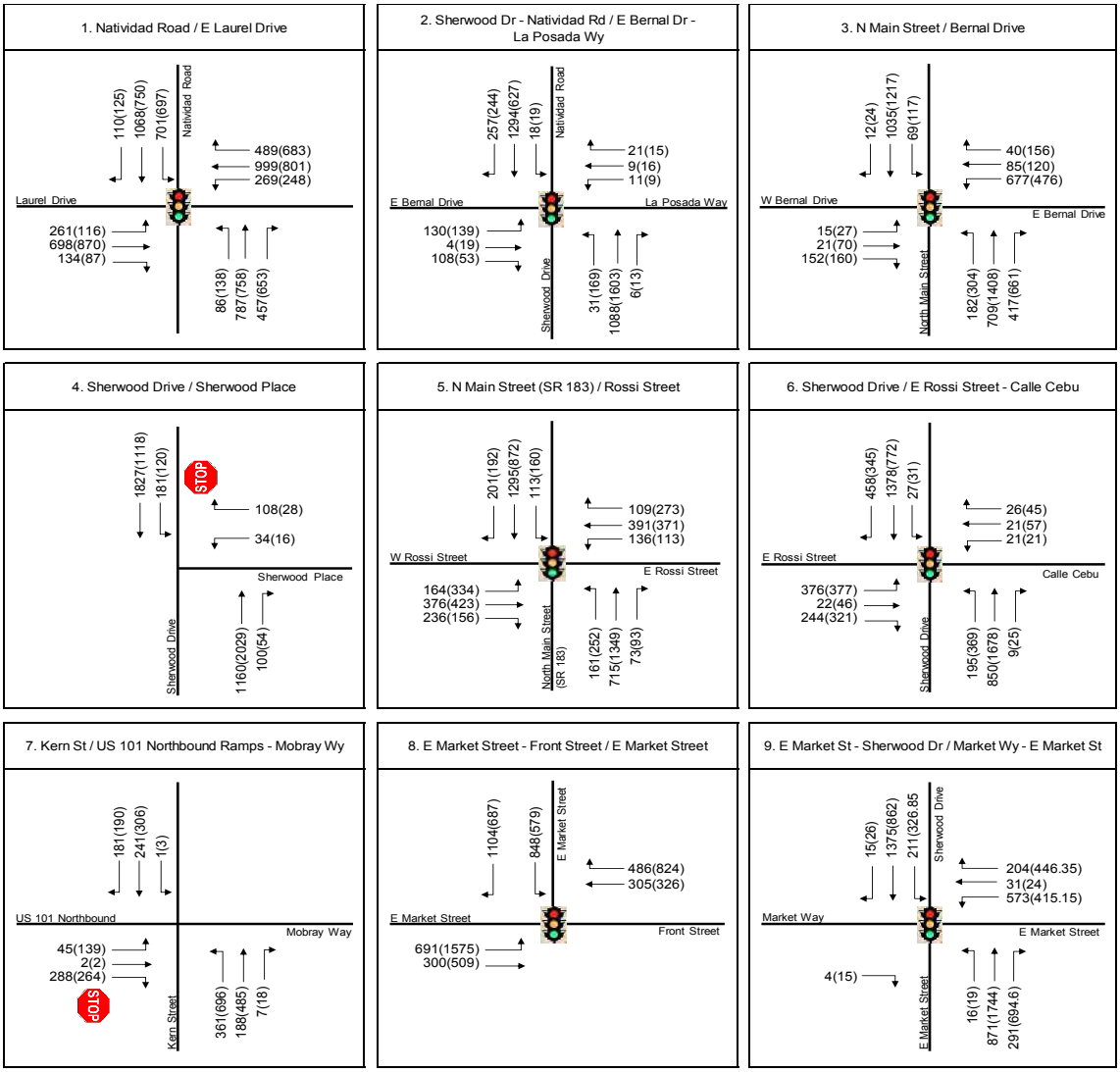
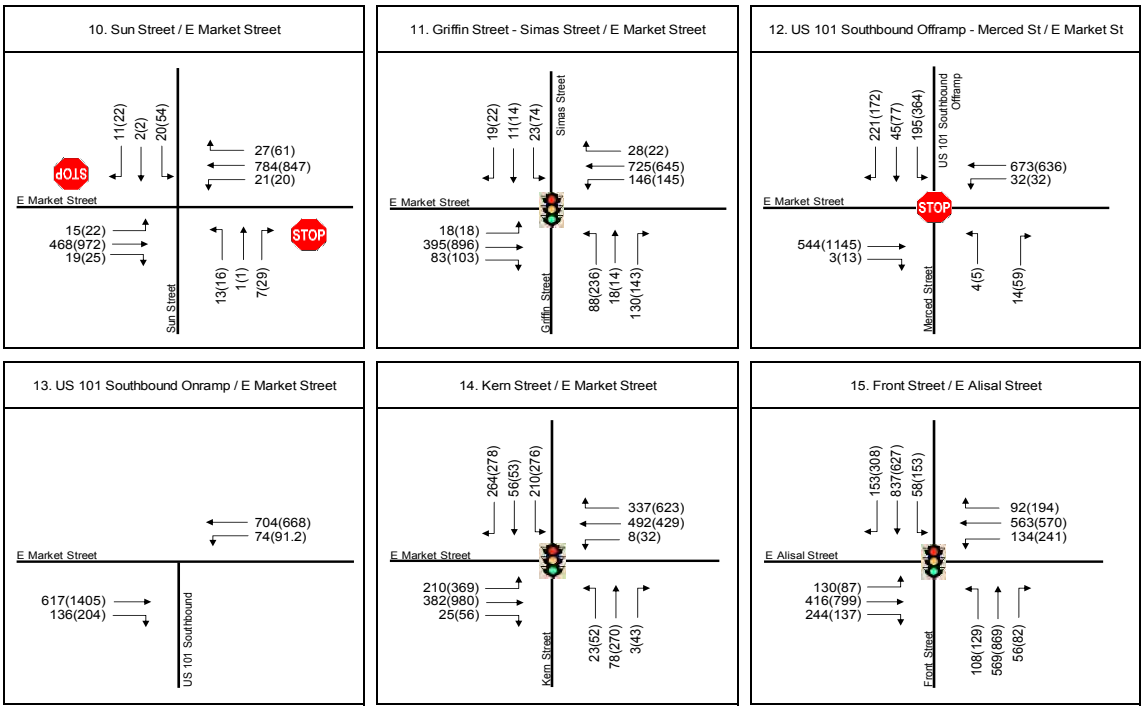
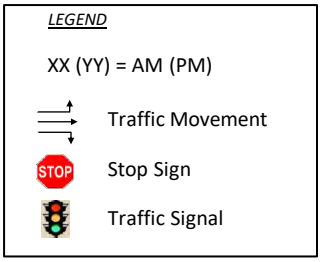


Figure 10: Cumulative Without Project Conditions – AM and PM Peak Hour Volumes (Continued)



Source: Mott MacDonald



8 Cumulative Plus Project Conditions

This chapter describes Cumulative Plus Project conditions, which represent traffic conditions with General Plan Buildout including the proposed GPA and Rezoning.

8.1 Derivation of Cumulative Plus Project Condition Volumes

The project trip assignment volumes Cumulative (**Figure 6**) were added to the Cumulative Without Project Condition volumes (**Figure 10**) to create the Cumulative Plus Project Condition volumes depicted in **Figure 11**.

8.2 Cumulative Plus Project Condition Traffic Circulation

8.2.1 Vehicle Circulation

Table 5 summarizes the levels of service at the study intersections under Cumulative Plus Project conditions. Although some of the study intersections would operate at or better than their respective level of service standards under Cumulative Plus Project conditions, the following intersections would continue to operate below their standard and the project would contribute to the cumulative impact:

#5: N Main Street (SR 183) / Rossi Street: LOS D (PM)

#7: Kern Street / US 101 Northbound Ramps – Mobray Way: Overall LOS F, Side Street approach LOS F (PM)

#10: Sun Street / E Market Street: Side-street approach LOS F (PM)

#12: US 101 Southbound Offramp – Merced Street / E Market Street: Overall LOS E (AM) and LOS F (PM), Side-street approach LOS F (AM and PM)

#14: Kern Street / E Market Street: LOS F (PM)

#15: Front Street / Alisal Street: LOS E (AM and PM)

See **Appendix J** for the level of service calculations under Cumulative Plus Project Conditions.

Below is a discussion of the deficient operations and recommended improvements at the study intersections under Cumulative Plus Project conditions. Recommended improvements are summarized in **Table 3**.

- **Intersection #5 – N Main Street (SR 183) / Rossi Street:**
  This intersection, which is under Caltrans jurisdiction, would operate at LOS C during the AM peak hour and a deficient LOS D during the PM peak hour unchanged from Cumulative Conditions. The project would add 17 trips to this intersection during the AM peak hour and 15 trips to this intersection during the PM peak hour. The trips added by the Project would not increase the average vehicle delay during the PM peak hour vehicle delay by 0.1 seconds.

  Impact: The impact of the Project to the intersection is significant because the Project will increase the average vehicle delay during the PM peak hour by at least 0.1 seconds. The Project's impact to this intersection is significant under Existing and Background Conditions.

  Mitigation:
  1) Add a third northbound through lane and third southbound through lane to N. Main Street at this intersection. The improvement would be achieved by converting the existing right turn lanes on northbound and southbound N. Main Street to through/right turn lanes.

2) Add a second left turn lane on the westbound Rossi Street approach. TFO Project 30 would widen Rossi Street to a four-lane divided arterial within a right of way of 106 feet.

With the second left turn lane included in the mitigation, the PM peak hour delay would be 41.8 seconds, which would be lower than the Cumulative Condition without project PM peak hour delay of 42.5 seconds. Therefore, the Project's cumulative impact would be mitigated.

Salinas TFO Project: Projects 30 and 31. The City would need to modify Project 30 to include the second left turn lane on the westbound Rossi Street approach to N. Main Street.

Salinas TFO Project: Salinas TFO Project 30 and Project 31.

Project Responsibility: Pay the Salinas traffic impact fees, which would represent the project's fair-share contribution of this improvement.

- **Intersection #7 – Kern Street / US 101 Northbound Ramps – Mobray Way:**
This intersection would operate at an overall LOS F with side-street operations (the eastbound US 101 Northbound Ramps approach) of LOS F during the PM peak hour, unchanged from Cumulative Without Project Conditions. The project would add 2 trips to the eastbound off-ramp approach during the PM peak hour. The project by itself would not significantly impact the intersection, but the project would contribute to the cumulative operating deficiency at the intersection. Traffic diversions associated with the Bernal Avenue Extension and the Constitution Boulevard Extension will contribute to the deficient operations at this intersection under Cumulative Conditions.

  Impact: The impact of the Project to the intersection is significant because the Project will increase the average vehicle delay on the eastbound off-ramp approach during the PM peak hour by at least 0.1 seconds.

  Mitigation: Signalize the intersection. Intersection operations would improve during the AM peak hour to LOS B and to LOS C during the PM peak hour.

  Salinas TFO Project: This improvement is not included in the City of Salinas TFO. It is recommended that this improvement be added to Salinas TFO Project 33A (Bernal Avenue Extension) and 34 (Constitution Boulevard Extension). Traffic diversions associated with the extensions of Bernal Avenue and Constitution Boulevard will create new turning movement patterns at the Kern Avenue/Northbound US 101 ramps intersection and these new turning patterns will necessitate modification of the existing intersection traffic control. For this reason, the costs for the new intersection traffic control should be included in the TFO.

  Project Responsibility: This improvement is not currently included in the City's Capital Improvement Program nor the TFO. To mitigate the Project's cumulative impact, a mechanism would need to be in place that ensures the ultimate full funding and completion of the improvement. This could be accomplished by adding the improvement to the City TFO or Capital Improvement Program. The Project's cumulative impact would be mitigated by the following:

  Alternative 1: Add the improvement to the TFO and pay the TFO fee.
  Alternative 2: Include the improvement in the Capital Improvement Program and pay a pro-rata contribution toward implementation of the project that would be combined with future development impact fees to fully fund implementation of the improvement. The pro-rata contribution would be based upon the project's share of cumulative traffic growth, where cumulative traffic growth equals Cumulative With Project volumes minus Existing volumes. The equitable share contribution calculation is based on the average of AM and PM peak hour volumes. The project's equitable share of cumulative traffic growth is 1 percent (1%).

- **Intersection #10 – Sun Street / E Market Street:**
  Side-street operations at this intersection (the southbound Sun Street approach) would operate at a deficient LOS F during the PM peak hour, unchanged from Cumulative Conditions. The project would add 31 trips to this approach during the PM peak hour. The Project's impact to this intersection is significant under Existing and Background Conditions.

  Impact: The impact of the Project to the intersection is significant because the Project will add peak hour trips to the intersection whose southbound approach operates at LOS F without the Project.

  Mitigation: Signalize the intersection. The intersection would operate at LOS A during the AM and PM peak hours with signalization.

  Salinas TFO Project: This improvement is not included in the City of Salinas TFO.

  Project Responsibility: The Project's impact to this intersection was identified as significant under Existing and Background Conditions. The mitigation required for Cumulative Conditions (signalization) is the same as the mitigation recommended for Existing and Background Conditions. Therefore, the Project's responsibility to mitigate cumulative impacts is the same as the responsibility identified for the Existing and Background Conditions, which is as follows: To ensure that the intersection of Sun Street and East Market Street will operate at acceptable levels of service, the applicant shall be responsible for either: (a) Fund the improvements and obtain the requisite encroachment or other permits for installation of a traffic signal and ensure that the signal is in operation prior to the issuance of the first Certificate of Occupancy for a specific development project at the project site, or (b) Concurrent with the issuance of the first grading permit for a specific development project at project site, deposit funds with the City in order for the City to obtain the requisite permits for installation of a traffic signal that will be operational prior to the issuance of the first Certificate of Occupancy for a specific development project at the project site.

- **Intersection #12 – US 101 Southbound Offramp – Merced Street / E Market Street:**
  This intersection would operate at a deficient LOS E during the AM peak hour and LOS F during the PM peak hour, while side-street operations (the southbound US 101 Southbound Offramp approach) would operate at a deficient LOS F during the AM and PM peak hours, unchanged from Cumulative Conditions. The project would add 30 AM peak hour and 27 PM peak hour trips to this intersection. The Project's impact to this intersection is significant under Existing and Background Conditions.

  Impact: The impact of the Project to the intersection is significant because the Project will increase the average vehicle delay on the southbound off-ramp approach during the AM and PM peak hours by at least 0.1 seconds.

  Mitigation: Signalize the intersection. Intersection operations would improve during the AM and PM peak hours to LOS B.

  Salinas TFO Project: This improvement is not included in the City of Salinas TFO.

  Project Responsibility: The Project's impact to this intersection was identified as significant under Existing and Background Conditions. The mitigation required for Cumulative Conditions (signalization) is the same as the mitigation recommended for Existing and Background Conditions. Therefore, the Project's responsibility to mitigate cumulative impacts is the same as the responsibility identified for the Existing and Background Conditions, which is as follows: To ensure that the intersection of U.S. 101 Southbound Offramp – Merced Street/East Market Street will operate at acceptable levels of service, the applicant shall either: (1) Prior to the City's issuance of the first grading permit for a specific development project at project site, pay a traffic impact fee provided the City has updated its

Traffic Fee Ordinance to include a traffic signal at this intersection as one of the improvements that is funded by the TFO, or (2) if the traffic signal at this intersection has not been included in the TFO, the applicant shall be responsible for either: (a) Fund the improvements and obtain the requisite encroachment or other permits for installation of a traffic signal and ensure that the signal is in operation prior to the issuance of the first Certificate of Occupancy for a specific development project at the project site, or (b) Concurrent with the issuance of the first grading permit for a specific development project at project site, deposit funds with the City in order for the City to obtain the requisite permits and install the traffic signal ensuring that the signal is operational prior to the issuance of the first Certificate of Occupancy for a specific development project at the project site.

- **Intersection #14 – Kern Street / E Market Street:**
  This intersection would operate at a deficient LOS F during the PM peak hour, unchanged from Cumulative without Project Conditions. The project would add 17 PM peak hour trips to this intersection. The project by itself would not significantly impact the intersection, but the project would contribute to the cumulative operating deficiency at the intersection. Traffic diversions associated with the Bernal Avenue Extension and the Constitution Boulevard Extension will contribute to the deficient operations at this intersection under Cumulative Conditions.

  Impact: The impact of the Project to the intersection is significant because the Project will add trips to the intersection that operates at a deficient level without the project.

  Mitigation: Restripe the westbound E. Market Street approach as one exclusive left turn lane, one through lane and one exclusive right turn lane. With this improvement, the intersection would operate at LOS C during the AM peak hour and LOS D during the PM peak hour.

  Salinas TFO Project: This improvement is not included in the City of Salinas TFO. It is recommended that this improvement be added to Salinas TFO Project 33A (Bernal Avenue Extension) and 34 (Constitution Boulevard Extension). Traffic diversions associated with the extensions of Bernal Avenue and Constitution Boulevard will create new turning movement patterns at the Kern Avenue/E. Market Street intersection and these new turning patterns, including an increase in the volume of traffic turning right from westbound E. Market Street to northbound Kern Avenue, will necessitate modification of the existing intersection lane configuration. For this reason, the costs for the new intersection configuration should be included in the TFO.

  Project Responsibility: This improvement is not currently included in the City's Capital Improvement Program nor the TFO. To mitigate the Project's cumulative impact, a mechanism would need to be in place that ensures the ultimate full funding and completion of the improvement. This could be accomplished by adding the improvement to the City TFO or Capital Improvement Program. The Project's cumulative impact would be mitigated by the following:

  Alternative 1: If the improvement is added to the TFO, pay the TFO fee.
  Alternative 2: Include the improvement in the Capital Improvement Program and pay a pro-rata contribution toward implementation of the project that would be combined with future development impact fees to fully fund implementation of the improvement. The pro-rata contribution would be based upon the project's share of cumulative traffic growth, where cumulative traffic growth equals Cumulative With Project volumes minus Existing volumes. The equitable share contribution calculation is based on the average of the AM and PM peak hour volumes. The project's share of cumulative traffic growth is three percent (3%).

Figure 11: Cumulative Plus Project Conditions – AM and PM Peak Hour Volumes

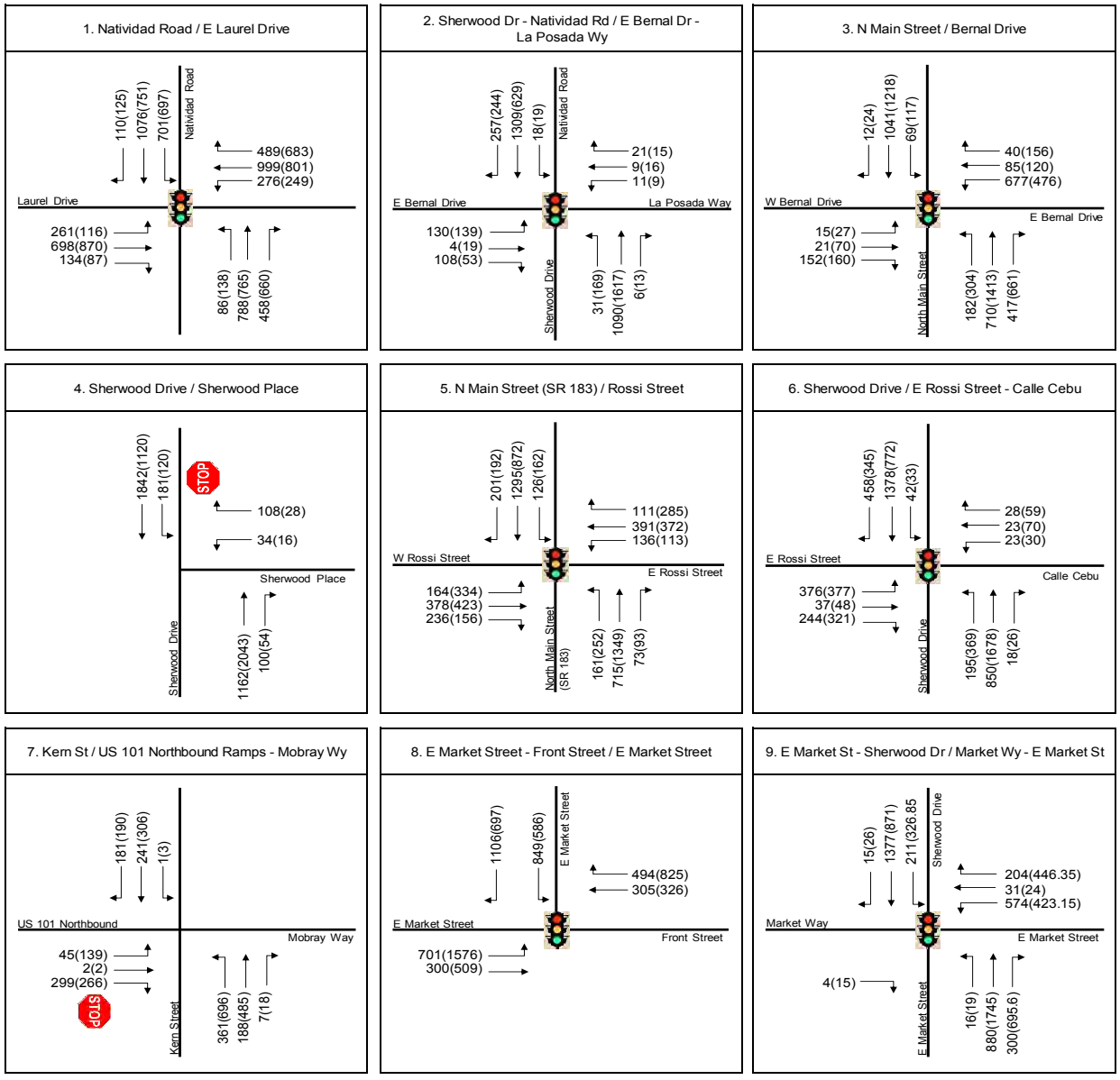
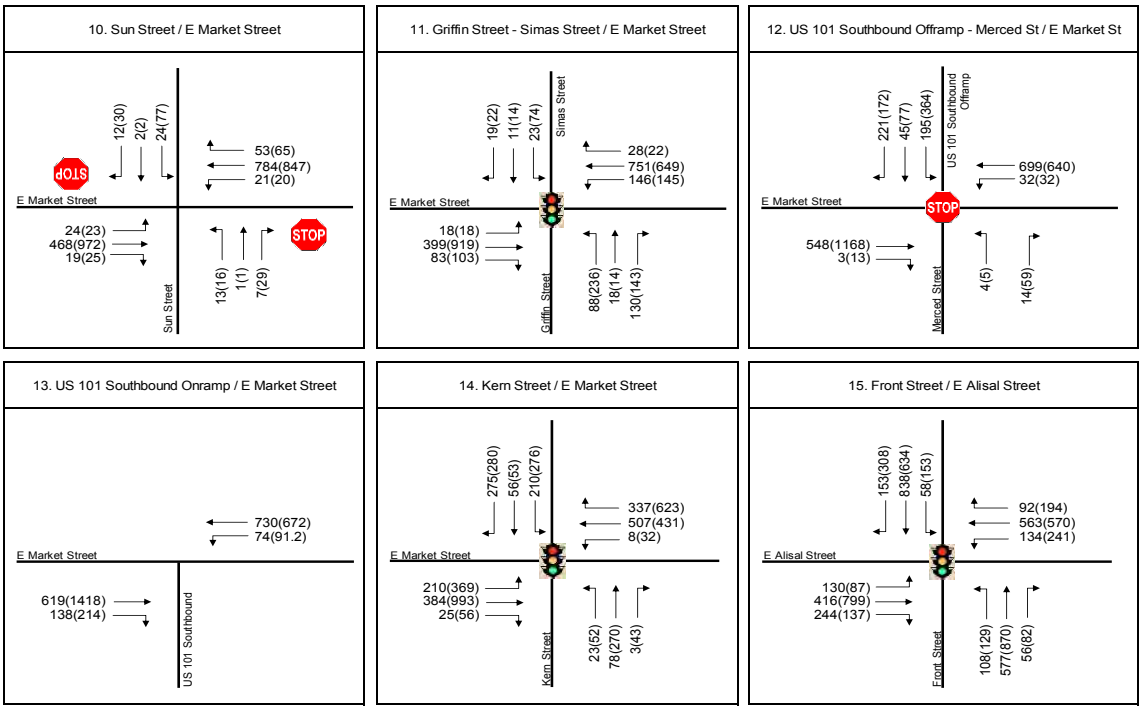


Figure 11: Cumulative Plus Project Conditions – AM and PM Peak Hour Volumes (Continued)



Source: Mott MacDonald

Table 5: Intersection Levels of Service – Cumulative Without Project and Cumulative Plus Project Conditions

	N-S Street	E-W Street	Existing Intersection Control	LOS Stnd.	Peak Hour	Cumulative Without Project Conditions Delay (sec)	Cumulative Without Project Conditions LOS	Cumulative Plus Project Conditions Delay (sec)	Cumulative Plus Project Conditions LOS
1	Natividad Road	East Laurel Drive	Signal	D	AM	53.7	D	53.8	D
					PM	52	D	52.1	D
2	Sherwood Drive - Natividad Road	East Bernal Drive - La Posada Way	Signal	D	AM	24.7	C	25.2	C
					PM	42.7	D	44.3	D
3	North Main Street	Bernal Drive	Signal	D	AM	44.2	D	44.2	D
					PM	44.8	D	44.8	D
4	Sherwood Drive	Sherwood Place	One-Way Stop	D (E)	AM	2.4 (37.6)	A (E)	2.4 (37.6)	A (E)
					PM	1.7 (48.1)	A (E)	1.7 (49.1)	A (E)
5	North Main Street (SR 183)	Rossi Street	Signal	C/D (Caltrans)	AM	34.6	C	34.8	C
					PM	42.5	D	**42.6**	**D**
			With Improvement		*AM*			*34.7*	*C*
					PM			*41.8*	*D*
6	Sherwood Drive	East Rossi Street - Calle Cebu	Signal	D	AM	44.2	D	46.0	D
					PM	45.7	D	48.3	D
7	Kern Street	US 101 Northbound Ramps - Mobray Way	One-Way Stop	C/D (E) (Caltrans)	AM	8.1 (21.3)	A (C)	8.2 (21.3)	A (C)
					PM	* (*)	F (F)	*** (*)**	F (F)
			With Improvement		*AM*			*12.3*	*B*
					PM			*26.4*	*C*
8	East Market Street - Front Street	East Market Street	Signal	D	AM	7.0	A	7.1	A
					PM	11.9	B	11.9	B
9	East Market Street - Sherwood Drive	Market Way - East Market Street	Signal	D	AM	24.6	C	24.7	C
					PM	45.0	D	43.5	D

Table 5: Intersection Levels of Service – Cumulative Without Project and Cumulative Plus Project Conditions (Continued)

	N-S Street	E-W Street	Existing Intersection Control	LOS Stnd.	Peak Hour	Cumulative Without Project Conditions Delay (sec)	Cumulative Without Project Conditions LOS	Cumulative Plus Project Conditions Delay (sec)	Cumulative Plus Project Conditions LOS
10	Sun Street	East Market Street	Two-Way Stop	D (E/E)	AM	1.7 (27.9/35.5)	A (D/E)	2.1 (29.3/41.8)	A (D/E)
					PM	8.4 (48.8/180.2)	A (E/F)	**18.2 (49.8/*)**	**C (E/F)**
			With Improvement		*AM*			*3.8*	*A*
					PM			*4.9*	*A*
11	Griffin Street - Simas Street	East Market Street	Signal	D	AM	7.0	A	7.0	A
					PM	13.1	B	13.2	B
12	US 101 Southbound Offramp - Merced Street	East Market Street	Two-Way Stop	C/D (E/E)	AM	44.1 (23.2/164.0)	E (C/F)	**48.7 (24.2/184.3)**	**E (C/F)**
					PM	228.0 (*/*)	F (F/F)	**236.6 (*/*)**	**F (F/F)**
			With Improvement		*AM*			*10.1*	*B*
					PM			*14.9*	*B*
13	US 101 Southbound Onramp	East Market Street	Uncontrolled	D (E)	AM	0.5 (0.0)	A (A)	0.5 (0.0)	A (A)
					PM	0.7 (0.0)	A (A)	0.7 (0.0)	A (A)
14	Kern Street	East Market Street	Signal	D	AM	25.2	C	25.8	C
					PM	82.0	F	**81.9**	**F**
			With Improvement		*AM*			*23.3*	*C*
					PM			*48.1*	*D*
15	Front Street	East Alisal Street	Signal	D	AM	52.6	D	52.5	D
					PM	54.9	D	54.9	D

Notes:

1. LOS Stnd. = Level of Service Standard
2. XX (YY) = Overall (Side Street).
3. Analysis performed using *2000* and *2010 Highway Capacity Manual* methodologies.
4. Overall level of service standard for the City of Salinas is LOS D. Overall level of service standard for Caltrans is the transition between LOS C and LOS D (LOS C/D).
5. Worst approach level of service standard is generally LOS E. Level of service "F" is the level of service at which improvements would normally be required.
6. Above delays and levels of service are summarized from calculations in **Appendices E through J**.
7. * = Delay exceeds ability for 2000/2010 HCM to quantify.
8. Items in **bold** represent significant impacts.

Source: Mott MacDonald

9 References

9.1 List of References

1. *2000 Highway Capacity Manual,* Transportation Research Board, 2000.
2. *2010 Highway Capacity Manual,* Transportation Research Board, 2010.
3. *City of Salinas General Plan,* Cotton/Bridges/Associates, September 2002.
4. Transportation Agency for Monterey County Bicycle and Pedestrian Master Plan, Alta Planning + Design, December 2011.
5. Monterey-Salinas Transit website, www.mst.org, Accessed May 10, 2017.
6. Haciendas Phase III/IV Traffic Impact Analysis, Hatch Mott MacDonald, April 8, 2014.
7. Sun Street Solid Waste Transfer Station Access Plan Traffic Impact Analysis, Higgins Associates, August 27, 2007.
8. Tynan Village Mixed Use Development Traffic Impact Study Report, Higgins Associates, November 22, 2004.
9. *Trip Generation Manual,* 9th Edition, Institute of Transportation Engineers, 2012.
10. Rodeo Property Preliminary Traffic Assessment, Salinas, California, Mott MacDonald, December 15, 2016.
11. *Highway Design Manual,* 6th Edition*,* California Department of Transportation (Caltrans), Updated December 30, 2015.
12. California Manual on Uniform Traffic Control Devices, California Department of Transportation (Caltrans), April 7, 2017.

9.2 List of Contacts

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MOTT MACDONALD

Rodeo Property Traffic Impact Analysis

Appendix

June 12, 2019

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Rodeo Property Traffic Impact Analysis

Appendix

June 12, 2019

Issue and revision record

Revision	Date	Originator	Checker	Approver	Description
0	06/19/17	Jeffrey Waller	Julie Oates	Leo Trujillo	Administrative Draft Report
1	07/21/17	Julie Oates	Jeffrey Waller	Leo Trujillo	Draft Report
2	12/06/17	Jeffrey Waller	Julie Oates	Leo Trujillo	Revised Draft Report
3	04/13/18	J. Daniel Takacs	Julie Oates	Leo Trujillo	Revised Draft Report
4	05/17/18	J. Daniel Takacs	Julie Oates	Leo Trujillo	Revised Draft Report
5	08/28/18	J. Daniel Takacs	Shruti Malik	Shruti Malik	Revised Draft Report
6	05/29/19	J. Daniel Takacs	Ravi Narayanan	Shruti Malik	Revised Draft Report
7	06/12/19	J. Daniel Takacs	Ravi Narayanan	Shruti Malik	Final Report

Document reference: 382731 | 1 | 3

Information class: Standard

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A. Level of Service Descriptions

APPENDIX A1

LEVEL OF SERVICE (LOS) DESCRIPTION
SIGNALIZED INTERSECTIONS

The capacity of an urban street is related primarily to the signal timing and the geometric characteristics of the facility as well as to the composition of traffic on the facility. Geometrics are a fixed characteristic of a facility. Thus, while traffic composition may vary somewhat over time, the capacity of a facility is generally a stable value that can be significantly improved only by initiating geometric improvements. A traffic signal essentially allocates time among conflicting traffic movements that seek to use the same space. The way in which time is allocated significantly affects the operation and the capacity of the intersection and its approaches.

The methodology for signalized intersection is designed to consider individual intersection approaches and individual lane groups within approaches. A lane group consists of one or more lanes on an intersection approach. The outputs from application of the method described in the HCM 2000 and 2010 are reported on the basis of each lane. For a given lane group at a signalized intersection, three indications are displayed: green, yellow and red. The red indication may include a short period during which all indications are red, referred to as an all-red interval and the yellow indication forms the change and clearance interval between two green phases.

The methodology for analyzing the capacity and level of service must consider a wide variety of prevailing conditions, including the amount and distribution of traffic movements, traffic composition, geometric characteristics, and details of intersection signalization. The methodology addresses the capacity, LOS, and other performance measures for lane groups and the intersection approaches and the LOS for the intersection as a whole.

Capacity is evaluated in terms of the ratio of demand flow rate to capacity (v/c ratio), whereas LOS is evaluated on the basis of control delay per vehicle (in seconds per vehicle). The methodology does not take into account the potential impact of downstream congestion on intersection operation, nor does the methodology detect and adjust for the impacts of turn-pocket overflows on through traffic and intersection operation.

LEVEL OF SERVICE (LOS) CRITERIA FOR SIGNALIZED INTERSECTIONS

(Reference 2000 and 2010 Highway Capacity Manuals)

Level of Service	Control Delay (seconds / vehicle)
A	**<10**
B	**>10 - 20**
C	**>20 - 35**
D	**>35 - 55**
E	**>55 - 80**
F	**>80**

APPENDIX A2

LEVEL OF SERVICE (LOS) DESCRIPTION
UNSIGNALIZED INTERSECTIONS WITH ALL-WAY STOP CONTROL (AWSC)

AWSC intersections require every vehicle to stop at the intersection before proceeding. Since each driver must stop, the judgement as to whether to proceed into the intersection is a function of traffic conditions on the other approaches. While giving priority to the driver on the right is a recognized rule in some areas, it is not a good descriptor of actual intersection operations. What happens is the development of a consensus of right-of-way that alternates between the drivers on the intersection approaches, a consensus that depends primarily on the intersection geometry and the arrival patterns at the stop line.

If no traffic is present on the other approaches, a driver can proceed immediately after the stop is made. If there is traffic on one or more of the other approaches, a driver proceeds only after determining that there are no vehicles currently in the intersection and that it is the driver's turn to proceed. Since no traffic signal controls the stream movement or allocates the right-of-way to each conflicting stream, the rate of departure is controlled by the interaction between the traffic streams themselves.

For AWSC intersections, the average control delay (in seconds per vehicle) is used as the primary measure of performance. Control delay is the increased time of travel for a vehicle approaching and passing through an AWSC intersection, compared with a free-flow vehicle if it were not required to slow down or stop at the intersection.

The criteria for AWSC intersections have different threshold values than do those for signalized intersections, primarily because drivers expect different levels of performance from different kinds of traffic control devices (i.e., traffic signals, two way stop or all way stop, etc.). The expectation is that a signalized intersection is designed to carry higher traffic volumes than an AWSC intersection and a higher level of control delay is acceptable at a signalized intersection for the same LOS.

For AWSC analysis using the HCM 2010 method, the LOS shown reflects the weighted average of the delay on each of the approaches.

LEVEL OF SERVICE (LOS) CRITERIA FOR AWSC INTERSECTIONS
(Reference 2010 Highway Capacity Manual)

Level of Service	Control Delay (seconds / vehicle)
A	**0 - 10**
B	**>10 - 15**
C	**>15 - 25**
D	**>25 - 35**
E	**>35 - 50**
F	**>50**

APPENDIX A3

LEVEL OF SERVICE (LOS) DESCRIPTION
UNSIGNALIZED INTERSECTIONS WITH TWO-WAY STOP CONTROL (TWSC)

TWSC intersections are widely used and stop signs are used to control vehicle movements at such intersections. At TWSC intersections, the stop-controlled approaches are referred to as the minor street approaches; they can be either public streets or private driveways. The intersection approaches that are not controlled by stop signs are referred to as the major street approaches. A three-leg intersection is considered to be a standard type of TWSC intersection if the single minor street approach (i.e. the stem of the T configuration) is controlled by a stop sign. Three-leg intersections where two of the three approaches are controlled by stop signs are a special form of unsignalized intersection control.

At TWSC intersections, drivers on the controlled approaches are required to select gaps in the major street flow through which to execute crossing or turning maneuvers on the basis of judgment. In the presence of a queue, each driver on the controlled approach must use some time to move into the front-of-queue position and prepare to evaluate gaps in the major street flow. Capacity analysis at TWSC intersections depends on a clear description and understanding of the interaction of drivers on the minor or stop-controlled approach with drivers on the major street. Both gap acceptance and empirical models have been developed to describe this interaction.

Thus, the capacity of the controlled legs is based on three factors:

- the distribution of gaps in the major street traffic stream;
- driver judgment in selecting gaps through which to execute the desired maneuvers; and
- the follow-up time required by each driver in a queue.

The delay experienced by a motorist is made up of a number of factors that relate to control, geometrics, traffic and incidents. Total delay is the difference between the travel time actually experienced and the reference travel time that would result during base conditions, in the absence of incident, control, traffic or geometric delay. Average control delay for any particular minor movement is a function of the capacity of the approach and the degree of saturation and referred to as level of service.

LEVEL OF SERVICE (LOS) CRITERIA FOR TWSC INTERSECTIONS

(Reference 2010 Highway Capacity Manuals)

Level of Service	Control Delay (seconds / vehicle)
A	**0 - 10**
B	**>10 - 15**
C	**>15 - 25**
D	**>25 - 35**
E	**>35 - 50**
F	**>50**

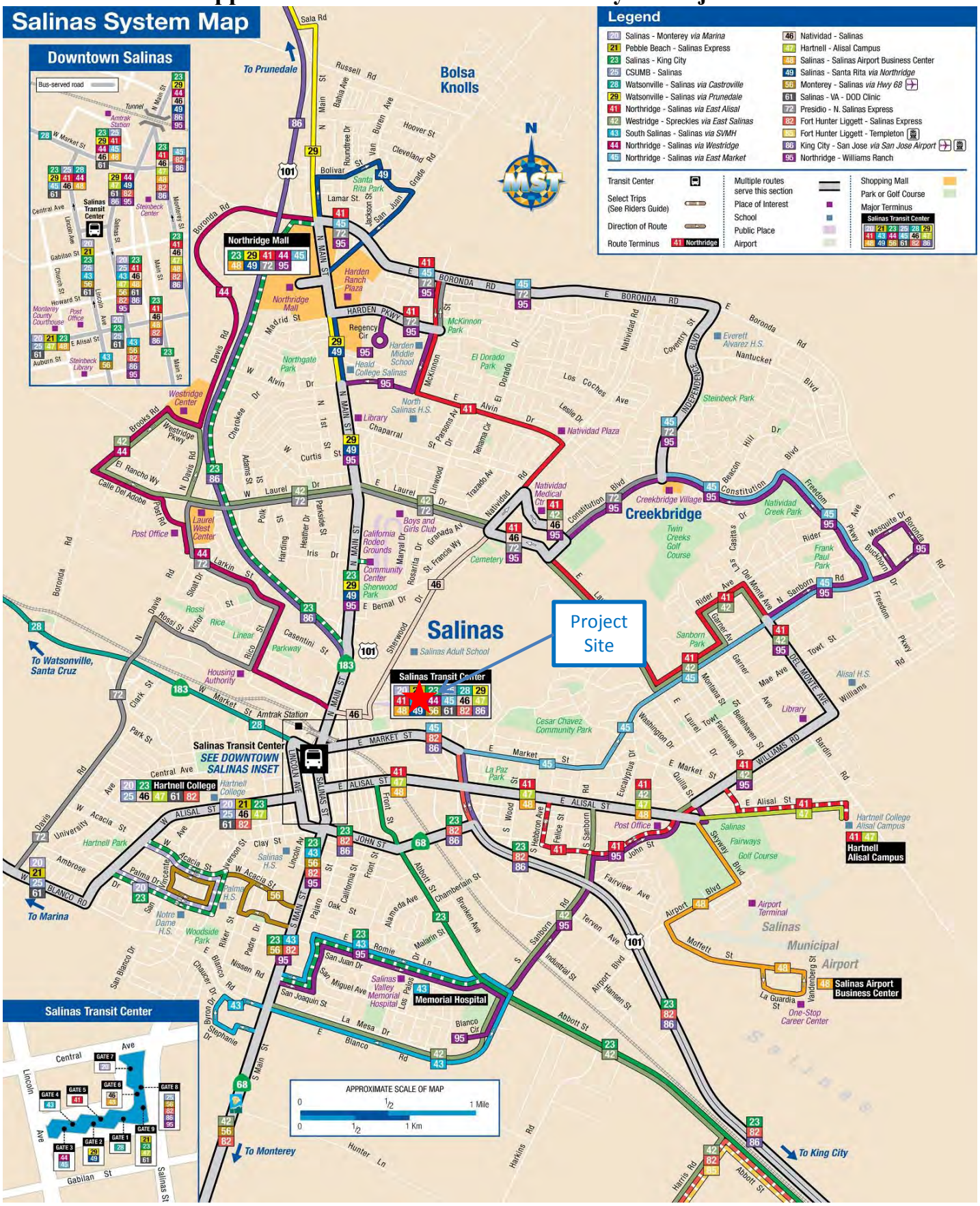
B. City of Salinas Bicycle Facilities

Appendix B - City of Salinas Bicycle Facilities

Basemap Source: *Transportation Agency for Monterey County Bicycle and Pedestrian Master Plan,* Alta Planning + Design, December 2011.

C. Transit Routes in Vicinity of Project Site

Appendix C - Transit Routes in Vicinity of Project Site



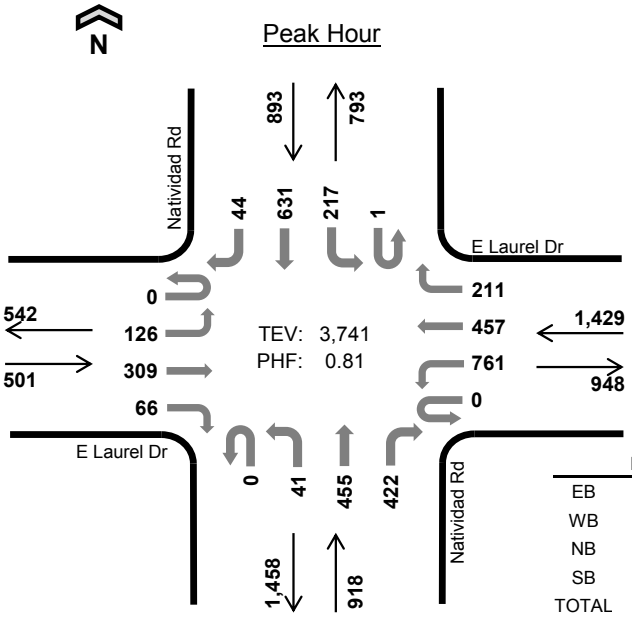
Basemap Source: Monterey-Salinas Transit, 2017.

D. Traffic Count Data

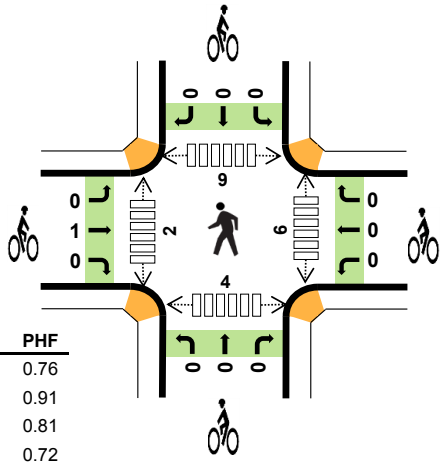
Intersection	Count Date AM	Count Date PM	Volume Adjustments
1. Nadividad Rd / E Laurel Dr	6/5/2017	6/5/2017	Yes
2. Sherwood Dr - Nativdad Rd / E Bernal Dr - La Posada Wy	6/2/2017	6/5/2017	Yes
3. N Main St / Bernal Dr	6/2/2017	6/2/2017	No
4. Sherwood Dr / Sherwood Pl	6/5/2017	6/5/2017	Yes
5. N Main Street (SR 183) / Rossi St	6/2/2017	6/2/2017	Yes
6. Sherwood Dr / E Rossi St - Calle Cebu	6/2/2017	6/5/2017	Yes
7. Kern St / US 101 Northbound Ramps - Mobray Wy	6/2/2017	6/5/2017	No
8. E Market St - Front St / E Market St	6/2/2017	6/5/2017	Yes
9. E Market St - Sherwood Dr / Market Pl - E Market St	6/2/2017	6/5/2017	Yes
10. Sun St / E Market St	6/2/2017	6/2/2017	Yes
11. Griffin St - Simas St / E Market St	6/2/2017	6/5/2017	Yes
12. US 101 Southbound Offramp - Merced St / E Market St	6/2/2017	6/5/2017	Yes
13. US 101 Southbound Onramp / E Market St	6/2/2017	6/5/2017	Yes
14. Kern St / E Market St	6/2/2017	6/5/2017	Yes
15. Front St / E Alisal St	6/2/2017	6/5/2017	Yes

Natividad Rd
E Laurel Dr

Peak Hour



Date: 06/05/2017
Count Period: 7:00 AM to 9:00 AM
Peak Hour: 7:30 AM to 8:30 AM



	HV %:	PHF
EB	0.6%	0.76
WB	0.6%	0.91
NB	1.3%	0.81
SB	0.8%	0.72
TOTAL	0.8%	0.81

Two-Hour Count Summaries

Interval Start		E Laurel Dr Eastbound				E Laurel Dr Westbound				Natividad Rd Northbound				Natividad Rd Southbound				15-min Total	Rolling One Hour
		UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM		0	14	39	6	0	132	60	22	0	2	57	43	0	34	111	8	528	0
7:15 AM		0	14	60	5	0	175	71	30	0	5	79	75	0	34	120	8	676	0
7:30 AM		**0**	**24**	**69**	**24**	**0**	**199**	**101**	**58**	**0**	**4**	**108**	**96**	**0**	**45**	**163**	**10**	**901**	0
7:45 AM		**0**	**41**	**105**	**19**	**0**	**211**	**137**	**44**	**0**	**10**	**141**	**131**	**0**	**89**	**207**	**14**	**1,149**	3,254
8:00 AM		**0**	**33**	**88**	**10**	**0**	**180**	**121**	**53**	**0**	**16**	**103**	**116**	**0**	**53**	**122**	**12**	**907**	3,633
8:15 AM		**0**	**28**	**47**	**13**	**0**	**171**	**98**	**56**	**0**	**11**	**103**	**79**	**1**	**30**	**139**	**8**	**784**	**3,741**
8:30 AM		0	16	52	19	0	141	89	46	0	6	76	78	2	31	107	9	672	3,512
8:45 AM		0	18	60	14	0	117	105	39	0	9	90	78	0	38	119	6	693	3,056
Count Total		0	188	520	110	0	1,326	782	348	0	63	757	696	3	354	1,088	75	6,310	0
Peak Hour	**All**	**0**	**126**	**309**	**66**	**0**	**761**	**457**	**211**	**0**	**41**	**455**	**422**	**1**	**217**	**631**	**44**	**3,741**	**0**
	HV	**0**	**3**	**0**	**0**	**0**	**8**	**0**	**0**	**0**	**1**	**7**	**4**	**0**	**0**	**3**	**4**	**30**	**0**
	HV%	**-**	**2%**	**0%**	**0%**	**-**	**1%**	**0%**	**0%**	**-**	**2%**	**2%**	**1%**	**0%**	**0%**	**0%**	**9%**	**1%**	**0**

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
7:00 AM	0	0	2	3	*5*	0	0	0	0	*0*	0	1	1	0	*2*
7:15 AM	2	3	0	1	*6*	0	0	0	0	*0*	0	1	1	1	*3*
7:30 AM	**1**	**1**	**5**	**3**	***10***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**1**	**0**	*1*
7:45 AM	**0**	**6**	**4**	**1**	***11***	**1**	**0**	**0**	**0**	***1***	**4**	**0**	**3**	**1**	*8*
8:00 AM	**2**	**1**	**0**	**1**	*4*	**0**	**0**	**0**	**0**	***0***	**1**	**1**	**1**	**1**	*4*
8:15 AM	**0**	**0**	**3**	**2**	***5***	**0**	**0**	**0**	**0**	***0***	**1**	**1**	**4**	**2**	***8***
8:30 AM	0	1	0	2	*3*	0	0	0	1	*1*	1	1	3	0	*5*
8:45 AM	0	0	1	0	*1*	1	0	0	0	*1*	0	2	6	0	*8*
Count Total	5	12	15	13	*45*	2	0	0	1	*3*	7	7	20	5	*39*
Peak Hour	**3**	**8**	**12**	**7**	***30***	**1**	**0**	**0**	**0**	***1***	**6**	**2**	**9**	**4**	***21***

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Two-Hour Count Summaries - Heavy Vehicles

Interval Start	E Laurel Dr				E Laurel Dr				Natividad Rd				Natividad Rd				15-min Total	Rolling One Hour
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM	0	0	0	0	0	0	0	0	0	0	2	0	0	0	3	0	5	0
7:15 AM	0	1	1	0	0	0	1	2	0	0	0	0	0	1	0	0	6	0
7:30 AM	**0**	**1**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**3**	**2**	**0**	**0**	**0**	**3**	**10**	0
7:45 AM	**0**	**0**	**0**	**0**	**0**	**6**	**0**	**0**	**0**	**0**	**2**	**2**	**0**	**0**	**1**	**0**	**11**	32
8:00 AM	**0**	**2**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**4**	31
8:15 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**2**	**0**	**0**	**0**	**1**	**1**	**5**	**30**
8:30 AM	0	0	0	0	0	1	0	0	0	0	0	0	1	0	1	0	3	23
8:45 AM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	13
Count Total	0	4	1	0	0	9	1	2	0	1	10	4	1	1	7	4	45	0
Peak Hour	**0**	**3**	**0**	**0**	**0**	**8**	**0**	**0**	**0**	**1**	**7**	**4**	**0**	**0**	**3**	**4**	**30**	**0**

Two-Hour Count Summaries - Bikes

Interval Start	E Laurel Dr			E Laurel Dr			Natividad Rd			Natividad Rd			15-min Total	Rolling One Hour
	Eastbound			Westbound			Northbound			Southbound				
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
7:45 AM	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	1
8:00 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	1
8:15 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**
8:30 AM	0	0	0	0	0	0	0	0	0	0	1	0	1	2
8:45 AM	1	0	0	0	0	0	0	0	0	0	0	0	1	2
Count Total	1	1	0	0	0	0	0	0	0	0	1	0	3	0
Peak Hour	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**

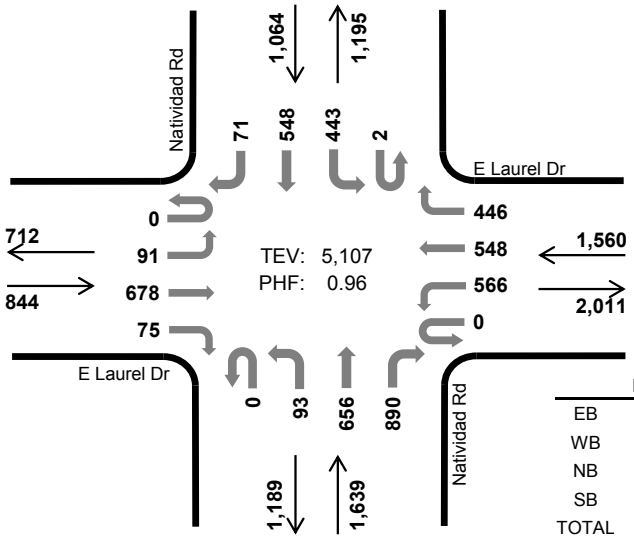
Note: U-Turn volumes for bikes are included in Left-Turn, if any.

Deon Fouche: 415 - 757 - 7714 deon.fouche@idaxdata.com

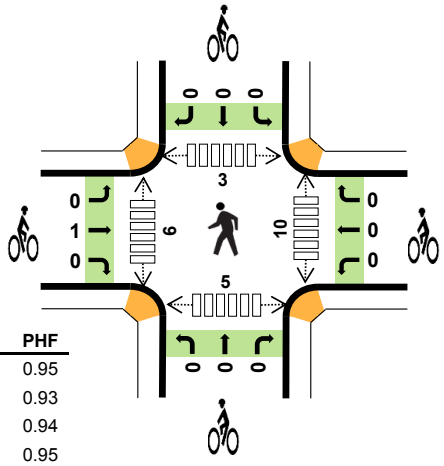
Natividad Rd
E Laurel Dr

Date: 06/05/2017
Count Period: 4:00 PM to 6:00 PM
Peak Hour: 5:00 PM to 6:00 PM

Peak Hour



	HV %:	PHF
EB	0.1%	0.95
WB	0.1%	0.93
NB	0.1%	0.94
SB	0.2%	0.95
TOTAL	0.1%	0.96



Two-Hour Count Summaries

Interval Start	E Laurel Dr Eastbound				E Laurel Dr Westbound				Natividad Rd Northbound				Natividad Rd Southbound				15-min Total	Rolling One Hour
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM	0	30	139	18	0	130	122	106	0	10	139	164	0	84	128	22	1,092	0
4:15 PM	0	21	177	18	0	153	133	108	0	25	184	178	2	60	117	14	1,190	0
4:30 PM	0	23	143	16	0	119	151	112	0	19	185	173	0	84	143	24	1,192	0
4:45 PM	0	24	164	21	0	140	130	106	0	30	201	184	0	94	121	15	1,230	4,704
5:00 PM	**0**	**22**	**180**	**20**	**0**	**151**	**136**	**133**	**0**	**25**	**166**	**187**	**0**	**102**	**159**	**18**	**1,299**	4,911
5:15 PM	**0**	**18**	**176**	**19**	**0**	**155**	**139**	**112**	**0**	**20**	**160**	**254**	**0**	**113**	**137**	**23**	**1,326**	5,047
5:30 PM	**0**	**18**	**147**	**25**	**0**	**131**	**131**	**102**	**0**	**28**	**175**	**225**	**0**	**107**	**135**	**13**	**1,237**	5,092
5:45 PM	**0**	**33**	**175**	**11**	**0**	**129**	**142**	**99**	**0**	**20**	**155**	**224**	**2**	**121**	**117**	**17**	**1,245**	**5,107**
Count Total	0	189	1,301	148	0	1,108	1,084	878	0	177	1,365	1,589	4	765	1,057	146	9,811	0
Peak Hour All	**0**	**91**	**678**	**75**	**0**	**566**	**548**	**446**	**0**	**93**	**656**	**890**	**2**	**443**	**548**	**71**	**5,107**	**0**
Peak Hour HV	**0**	**0**	**1**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**1**	**1**	**5**	**0**
Peak Hour HV%	**-**	**0%**	**0%**	**0%**	**-**	**0%**	**0%**	**0%**	**-**	**0%**	**0%**	**0%**	**0%**	**0%**	**0%**	**1%**	**0%**	**0**

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
4:00 PM	0	0	0	1	*1*	0	0	0	0	*0*	3	0	1	0	*4*
4:15 PM	0	0	3	3	*6*	0	0	0	0	*0*	1	1	3	2	*7*
4:30 PM	0	1	1	1	*3*	0	1	0	0	*1*	1	1	1	0	*3*
4:45 PM	0	1	0	0	*1*	2	0	0	0	*2*	1	2	4	0	*7*
5:00 PM	**0**	**0**	**0**	**0**	***0***	**1**	**0**	**0**	**0**	***1***	**2**	**4**	**1**	**0**	*7*
5:15 PM	**0**	**0**	**1**	**1**	***2***	**0**	**0**	**0**	**0**	***0***	**6**	**0**	**0**	**0**	*6*
5:30 PM	**0**	**1**	**0**	**1**	***2***	**0**	**0**	**0**	**0**	***0***	**1**	**1**	**1**	**2**	*5*
5:45 PM	**1**	**0**	**0**	**0**	***1***	**0**	**0**	**0**	**0**	***0***	**1**	**1**	**1**	**3**	***6***
Count Total	1	3	5	7	*16*	3	1	0	0	*4*	16	10	12	7	*45*
Peak Hour	**1**	**1**	**1**	**2**	***5***	**1**	**0**	**0**	**0**	***1***	**10**	**6**	**3**	**5**	***24***

Deon Fouche: 415 - 757 - 7714 deon.fouche@idaxdata.com

Two-Hour Count Summaries - Heavy Vehicles

Interval Start	E Laurel Dr				E Laurel Dr				Natividad Rd				Natividad Rd				15-min Total	Rolling One Hour
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	2	1	0	0	3	0	6	0
4:30 PM	0	0	0	0	0	1	0	0	0	1	0	0	0	0	1	0	3	0
4:45 PM	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	11
5:00 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	10
5:15 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**1**	**0**	**2**	6
5:30 PM	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**2**	5
5:45 PM	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**5**
Count Total	0	0	1	0	0	2	1	0	0	1	3	1	0	0	6	1	16	0
Peak Hour	**0**	**0**	**1**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**1**	**1**	**5**	**0**

Two-Hour Count Summaries - Bikes

Interval Start	E Laurel Dr			E Laurel Dr			Natividad Rd			Natividad Rd			15-min Total	Rolling One Hour
	Eastbound			Westbound			Northbound			Southbound				
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	1	0	0	0	0	0	0	1	0
4:45 PM	0	2	0	0	0	0	0	0	0	0	0	0	2	3
5:00 PM	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	4
5:15 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	4
5:30 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	3
5:45 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**
Count Total	0	3	0	0	0	1	0	0	0	0	0	0	4	0
Peak Hour	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**

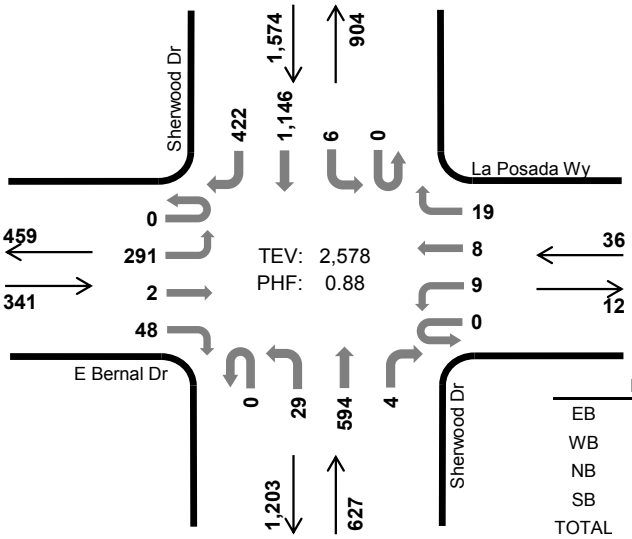
Note: U-Turn volumes for bikes are included in Left-Turn, if any.

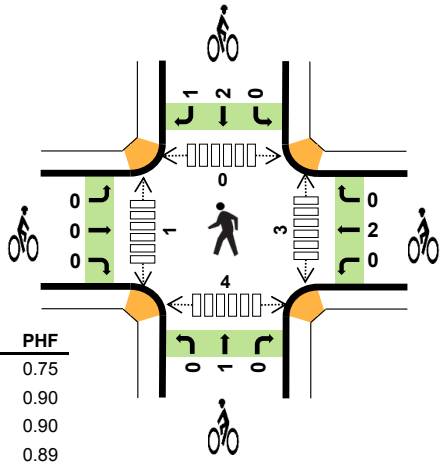
Deon Fouche: 415 - 757 - 7714 deon.fouche@idaxdata.com

Sherwood Dr
E Bernal Dr

Peak Hour

Date: 06/02/2017
Count Period: 7:00 AM to 9:00 AM
Peak Hour: 7:15 AM to 8:15 AM





	HV %:	PHF
EB	0.6%	0.75
WB	0.0%	0.90
NB	0.6%	0.90
SB	0.4%	0.89
TOTAL	0.5%	0.88

Two-Hour Count Summaries

Interval Start	E Bernal Dr Eastbound				La Posada Wy Westbound				Sherwood Dr Northbound				Sherwood Dr Southbound				15-min Total	Rolling One Hour
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM	0	44	0	7	0	2	4	0	0	3	88	0	0	0	184	68	400	0
7:15 AM	**0**	**53**	**0**	**8**	**0**	**2**	**0**	**6**	**0**	**8**	**129**	**2**	**0**	**0**	**254**	**103**	**565**	0
7:30 AM	**0**	**69**	**1**	**15**	**0**	**3**	**1**	**6**	**0**	**4**	**136**	**2**	**0**	**3**	**292**	**113**	**645**	0
7:45 AM	**0**	**100**	**0**	**14**	**0**	**0**	**3**	**7**	**0**	**9**	**163**	**0**	**0**	**2**	**325**	**113**	**736**	2,346
8:00 AM	**0**	**69**	**1**	**11**	**0**	**4**	**4**	**0**	**0**	**8**	**166**	**0**	**0**	**1**	**275**	**93**	**632**	**2,578**
8:15 AM	0	63	0	11	0	5	0	9	0	8	138	3	0	3	235	75	550	2,563
8:30 AM	0	44	2	10	0	6	1	4	0	7	118	0	0	1	216	62	471	2,389
8:45 AM	0	52	3	10	0	1	5	1	0	8	153	1	0	2	205	65	506	2,159
Count Total	0	494	7	86	0	23	18	33	0	55	1,091	8	0	12	1,986	692	4,505	0
Peak Hour All	**0**	**291**	**2**	**48**	**0**	**9**	**8**	**19**	**0**	**29**	**594**	**4**	**0**	**6**	**1,146**	**422**	**2,578**	**0**
Peak Hour HV	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**3**	**1**	**0**	**0**	**6**	**1**	**13**	**0**
Peak Hour HV%	**-**	**1%**	**0%**	**0%**	**-**	**0%**	**0%**	**0%**	**-**	**0%**	**1%**	**25%**	**-**	**0%**	**1%**	**0%**	**1%**	**0**

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
7:00 AM	1	0	0	0	*1*	0	0	0	0	*0*	1	0	0	2	*3*
7:15 AM	**1**	**0**	**3**	**0**	***4***	**0**	**1**	**0**	**2**	***3***	**1**	**0**	**0**	**2**	*3*
7:30 AM	**1**	**0**	**0**	**5**	***6***	**0**	**1**	**0**	**0**	***1***	**0**	**0**	**0**	**0**	*0*
7:45 AM	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	***0***	**0**	**1**	**0**	**1**	*2*
8:00 AM	**0**	**0**	**1**	**2**	***3***	**0**	**0**	**1**	**1**	***2***	**2**	**0**	**0**	**1**	***3***
8:15 AM	0	0	2	3	*5*	1	0	1	0	*2*	0	0	0	0	*0*
8:30 AM	0	0	0	3	*3*	1	1	0	0	*2*	2	0	0	1	*3*
8:45 AM	1	0	3	2	*6*	0	0	0	0	*0*	0	0	0	1	*1*
Count Total	4	0	9	15	*28*	2	3	2	3	*10*	6	1	0	8	*15*
Peak Hour	**2**	**0**	**4**	**7**	***13***	**0**	**2**	**1**	**3**	***6***	**3**	**1**	**0**	**4**	***8***

Deon Fouche: 415 - 757 - 7714 deon.fouche@idaxdata.com

Two-Hour Count Summaries - Heavy Vehicles

Interval Start	E Bernal Dr				La Posada Wy				Sherwood Dr				Sherwood Dr				15-min Total	Rolling One Hour
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
7:15 AM	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**1**	**0**	**0**	**0**	**0**	**4**	0
7:30 AM	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**4**	**1**	**6**	0
7:45 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	11
8:00 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**2**	**0**	**3**	**13**
8:15 AM	0	0	0	0	0	0	0	0	0	0	2	0	0	0	3	0	5	14
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	3	11
8:45 AM	0	1	0	0	0	0	0	0	0	0	3	0	0	0	0	2	6	17
Count Total	0	4	0	0	0	0	0	0	0	0	8	1	0	0	12	3	28	0
Peak Hour	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**3**	**1**	**0**	**0**	**6**	**1**	**13**	**0**

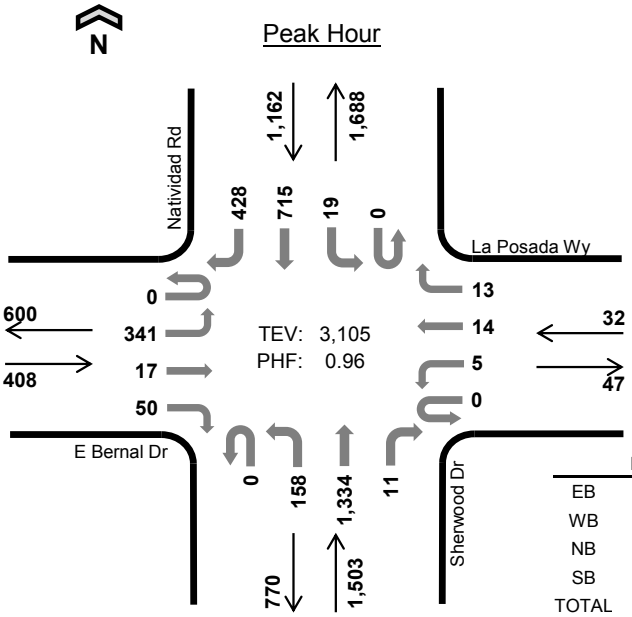
Two-Hour Count Summaries - Bikes

Interval Start	E Bernal Dr			La Posada Wy			Sherwood Dr			Sherwood Dr			15-min Total	Rolling One Hour
	Eastbound			Westbound			Northbound			Southbound				
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**1**	**1**	**3**	0
7:30 AM	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	0
7:45 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	4
8:00 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**1**	**0**	**2**	**6**
8:15 AM	1	0	0	0	0	0	0	1	0	0	0	0	2	5
8:30 AM	1	0	0	0	1	0	0	0	0	0	0	0	2	6
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	6
Count Total	2	0	0	0	3	0	0	2	0	0	2	1	10	0
Peak Hour	**0**	**0**	**0**	**0**	**2**	**0**	**0**	**1**	**0**	**0**	**2**	**1**	**6**	**0**

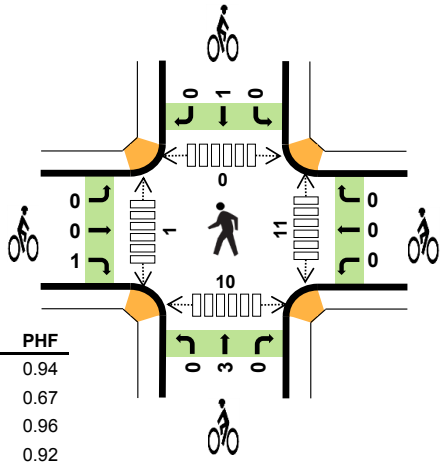
Note: U-Turn volumes for bikes are included in Left-Turn, if any.

Deon Fouche: 415 - 757 - 7714 deon.fouche@idaxdata.com

Sherwood Dr
E Bernal Dr



Date: 06/05/2017
Count Period: 4:00 PM to 6:00 PM
Peak Hour: 4:45 PM to 5:45 PM



	HV %:	PHF
EB	0.0%	0.94
WB	0.0%	0.67
NB	0.1%	0.96
SB	0.2%	0.92
TOTAL	0.1%	0.96

Two-Hour Count Summaries

Interval Start		E Bernal Dr Eastbound				La Posada Wy Westbound				Sherwood Dr Northbound				Natividad Rd Southbound				15-min Total	Rolling One Hour
		UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM		0	104	0	14	0	4	2	1	0	27	262	3	1	2	170	91	681	0
4:15 PM		0	87	0	13	0	3	1	5	0	35	311	4	0	4	182	79	724	0
4:30 PM		0	97	5	14	0	0	3	4	0	21	288	4	0	7	185	108	736	0
4:45 PM		**0**	**85**	**5**	**14**	**0**	**1**	**6**	**2**	**0**	**29**	**321**	**2**	**0**	**2**	**162**	**112**	**741**	2,882
5:00 PM		**0**	**95**	**2**	**11**	**0**	**1**	**2**	**2**	**0**	**38**	**329**	**2**	**0**	**2**	**193**	**120**	**797**	2,998
5:15 PM		**0**	**82**	**7**	**12**	**0**	**1**	**5**	**6**	**0**	**42**	**344**	**3**	**0**	**8**	**196**	**105**	**811**	3,085
5:30 PM		**0**	**79**	**3**	**13**	**0**	**2**	**1**	**3**	**0**	**49**	**340**	**4**	**0**	**7**	**164**	**91**	**756**	**3,105**
5:45 PM		0	82	4	17	0	2	5	5	0	31	289	2	0	2	166	88	693	3,057
Count Total		0	711	26	108	0	14	25	28	0	272	2,484	24	1	34	1,418	794	5,939	0
Peak Hour	**All**	**0**	**341**	**17**	**50**	**0**	**5**	**14**	**13**	**0**	**158**	**1,334**	**11**	**0**	**19**	**715**	**428**	**3,105**	**0**
	HV	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**1**	**1**	**3**	**0**
	HV%	**-**	**0%**	**0%**	**0%**	**-**	**0%**	**0%**	**0%**	**-**	**0%**	**0%**	**0%**	**-**	**0%**	**0%**	**0%**	**0%**	**0**

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals EB	WB	NB	SB	Total	Bicycles EB	WB	NB	SB	Total	Pedestrians (Crossing Leg) East	West	North	South	Total
4:00 PM	0	0	1	1	*2*	0	0	0	1	*1*	0	0	0	1	*1*
4:15 PM	1	0	1	0	*2*	0	0	0	0	*0*	0	0	0	0	*0*
4:30 PM	0	0	1	2	*3*	1	0	2	1	*4*	0	0	0	0	*0*
4:45 PM	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**1**	***1***	**0**	**0**	**0**	**0**	*0*
5:00 PM	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**1**	**0**	***1***	**0**	**0**	**0**	**3**	*3*
5:15 PM	**0**	**0**	**1**	**1**	***2***	**0**	**0**	**2**	**0**	***2***	**6**	**0**	**0**	**1**	*7*
5:30 PM	**0**	**0**	**0**	**1**	***1***	**1**	**0**	**0**	**0**	***1***	**5**	**1**	**0**	**6**	***12***
5:45 PM	0	0	0	0	*0*	0	0	1	0	*1*	1	0	0	2	*3*
Count Total	1	0	4	5	*10*	2	0	6	3	*11*	12	1	0	13	*26*
Peak Hour	**0**	**0**	**1**	**2**	***3***	**1**	**0**	**3**	**1**	***5***	**11**	**1**	**0**	**10**	***22***

Deon Fouche: 415 - 757 - 7714 deon.fouche@idaxdata.com

Two-Hour Count Summaries - Heavy Vehicles

Interval Start	E Bernal Dr				La Posada Wy				Sherwood Dr				Natividad Rd				15-min Total	Rolling One Hour
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	2	0
4:15 PM	0	1	0	0	0	0	0	0	0	0	1	0	0	0	0	0	2	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	1	3	0
4:45 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	7
5:00 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	5
5:15 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**1**	**0**	**2**	5
5:30 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**1**	**3**
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
Count Total	0	1	0	0	0	0	0	0	0	0	4	0	0	0	3	2	10	0
Peak Hour	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**1**	**1**	**3**	**0**

Two-Hour Count Summaries - Bikes

Interval Start	E Bernal Dr			La Posada Wy			Sherwood Dr			Natividad Rd			15-min Total	Rolling One Hour
	Eastbound			Westbound			Northbound			Southbound				
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
4:00 PM	0	0	0	0	0	0	0	0	0	0	1	0	1	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	1	0	0	0	0	0	0	2	0	0	1	0	4	0
4:45 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**1**	6
5:00 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**1**	6
5:15 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**2**	8
5:30 PM	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**5**
5:45 PM	0	0	0	0	0	0	0	1	0	0	0	0	1	5
Count Total	1	0	1	0	0	0	0	6	0	0	3	0	11	0
Peak Hour	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**3**	**0**	**0**	**1**	**0**	**5**	**0**

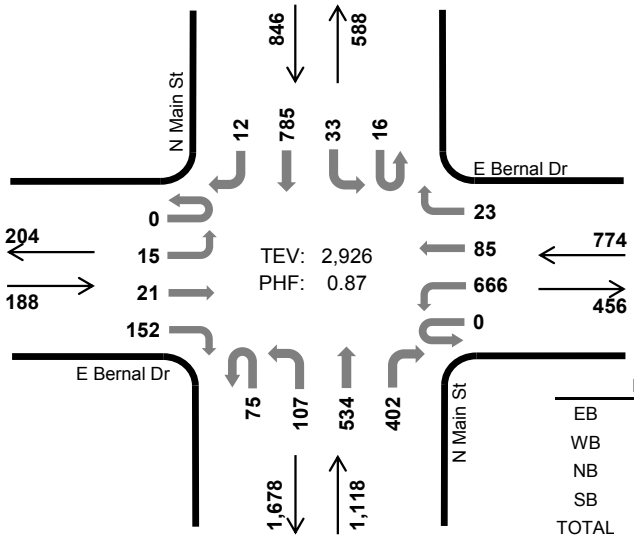
Note: U-Turn volumes for bikes are included in Left-Turn, if any.

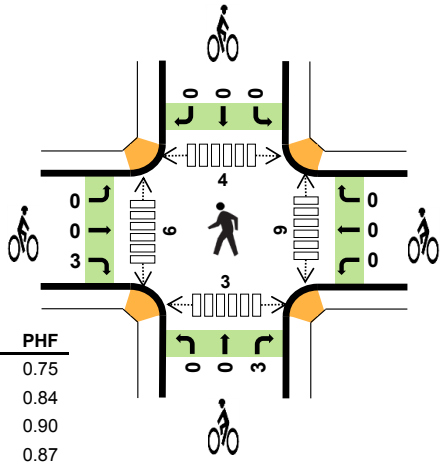
Deon Fouche: 415 - 757 - 7714 deon.fouche@idaxdata.com

N Main St
E Bernal Dr

Date: 06/02/2017
Count Period: 7:00 AM to 9:00 AM
Peak Hour: 7:30 AM to 8:30 AM

Peak Hour





	HV %:	PHF
EB	0.5%	0.75
WB	0.1%	0.84
NB	0.4%	0.90
SB	0.9%	0.87
TOTAL	0.5%	0.87

Two-Hour Count Summaries

Interval Start		E Bernal Dr Eastbound				E Bernal Dr Westbound				N Main St Northbound				N Main St Southbound				15-min Total	Rolling One Hour
		UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM		0	1	5	25	0	100	12	2	16	15	49	64	2	2	125	2	420	0
7:15 AM		0	1	4	24	0	137	18	3	19	24	76	68	3	4	171	0	552	0
7:30 AM		**0**	**3**	**6**	**38**	**0**	**178**	**20**	**4**	**18**	**26**	**98**	**95**	**0**	**9**	**196**	**2**	**693**	0
7:45 AM		**0**	**5**	**9**	**49**	**0**	**199**	**25**	**5**	**17**	**28**	**141**	**125**	**2**	**8**	**230**	**2**	**845**	2,510
8:00 AM		**0**	**2**	**3**	**30**	**0**	**168**	**15**	**9**	**22**	**28**	**136**	**105**	**10**	**7**	**177**	**4**	**716**	2,806
8:15 AM		**0**	**5**	**3**	**35**	**0**	**121**	**25**	**5**	**18**	**25**	**159**	**77**	**4**	**9**	**182**	**4**	**672**	**2,926**
8:30 AM		0	3	6	31	0	95	21	9	12	38	136	57	4	9	160	2	583	2,816
8:45 AM		0	2	2	28	0	79	25	8	19	39	125	66	1	8	143	5	550	2,521
Count Total		0	22	38	260	0	1,077	161	45	141	223	920	657	26	56	1,384	21	5,031	0
Peak Hour	**All**	**0**	**15**	**21**	**152**	**0**	**666**	**85**	**23**	**75**	**107**	**534**	**402**	**16**	**33**	**785**	**12**	**2,926**	**0**
	HV	**0**	**1**	**0**	**0**	**0**	**1**	**0**	**0**	**1**	**1**	**2**	**1**	**0**	**0**	**8**	**0**	**15**	**0**
	HV%	**-**	**7%**	**0%**	**0%**	**-**	**0%**	**0%**	**0%**	**1%**	**1%**	**0%**	**0%**	**0%**	**0%**	**1%**	**0%**	**1%**	**0**

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals EB	WB	NB	SB	Total	Bicycles EB	WB	NB	SB	Total	Pedestrians (Crossing Leg) East	West	North	South	Total
7:00 AM	0	0	2	2	*4*	1	0	3	0	*4*	0	0	2	0	*2*
7:15 AM	0	0	1	0	*1*	0	0	2	0	*2*	0	1	0	1	*2*
7:30 AM	**0**	**1**	**3**	**1**	***5***	**0**	**0**	**1**	**0**	***1***	**1**	**1**	**0**	**1**	*3*
7:45 AM	**1**	**0**	**1**	**4**	***6***	**1**	**0**	**1**	**0**	***2***	**2**	**4**	**1**	**1**	*8*
8:00 AM	**0**	**0**	**1**	**0**	***1***	**2**	**0**	**1**	**0**	***3***	**4**	**0**	**1**	**0**	*5*
8:15 AM	**0**	**0**	**0**	**3**	***3***	**0**	**0**	**0**	**0**	***0***	**2**	**1**	**2**	**1**	***6***
8:30 AM	0	1	3	0	*4*	0	1	2	0	*3*	0	4	0	0	*4*
8:45 AM	0	2	1	1	*4*	1	0	0	1	*2*	2	2	1	1	*6*
Count Total	1	4	12	11	*28*	5	1	10	1	*17*	11	13	7	5	*36*
Peak Hour	**1**	**1**	**5**	**8**	***15***	**3**	**0**	**3**	**0**	***6***	**9**	**6**	**4**	**3**	***22***

Deon Fouche: 415 - 757 - 7714 deon.fouche@idaxdata.com

Two-Hour Count Summaries - Heavy Vehicles

Interval Start	E Bernal Dr				E Bernal Dr				N Main St				N Main St				15-min Total	Rolling One Hour
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM	0	0	0	0	0	0	0	0	0	1	0	1	0	0	2	0	4	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0
7:30 AM	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**1**	**1**	**1**	**0**	**0**	**1**	**0**	**5**	0
7:45 AM	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**4**	**0**	**6**	16
8:00 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**1**	13
8:15 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**3**	**0**	**3**	**15**
8:30 AM	0	0	0	0	0	1	0	0	0	0	1	2	0	0	0	0	4	14
8:45 AM	0	0	0	0	0	2	0	0	0	0	1	0	0	0	1	0	4	12
Count Total	0	1	0	0	0	4	0	0	1	2	4	5	0	0	11	0	28	0
Peak Hour	**0**	**1**	**0**	**0**	**0**	**1**	**0**	**0**	**1**	**1**	**2**	**1**	**0**	**0**	**8**	**0**	**15**	**0**

Two-Hour Count Summaries - Bikes

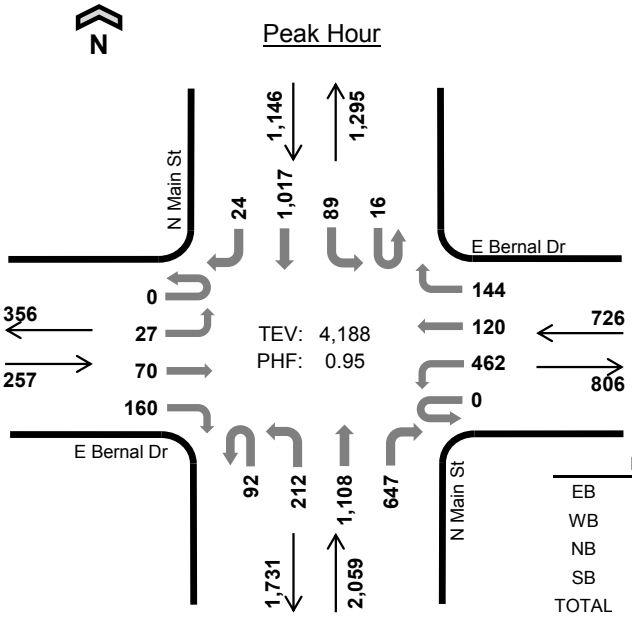
Interval Start	E Bernal Dr			E Bernal Dr			N Main St			N Main St			15-min Total	Rolling One Hour
	Eastbound			Westbound			Northbound			Southbound				
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
7:00 AM	0	1	0	0	0	0	0	2	1	0	0	0	4	0
7:15 AM	0	0	0	0	0	0	0	1	1	0	0	0	2	0
7:30 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**1**	0
7:45 AM	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**2**	9
8:00 AM	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**3**	8
8:15 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**6**
8:30 AM	0	0	0	0	1	0	0	0	2	0	0	0	3	8
8:45 AM	0	1	0	0	0	0	0	0	0	0	1	0	2	8
Count Total	0	2	3	0	1	0	0	3	7	0	1	0	17	0
Peak Hour	**0**	**0**	**3**	**0**	**0**	**0**	**0**	**0**	**3**	**0**	**0**	**0**	**6**	**0**

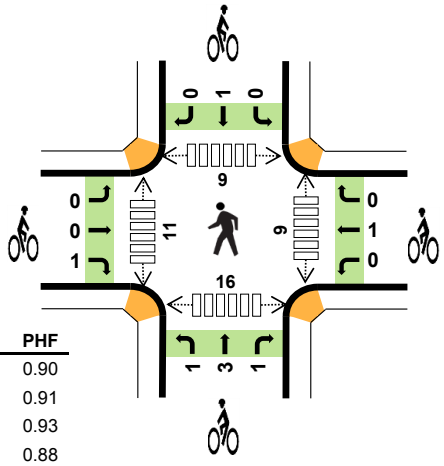
Note: U-Turn volumes for bikes are included in Left-Turn, if any.

Deon Fouche: 415 - 757 - 7714 deon.fouche@idaxdata.com

N Main St
E Bernal Dr

Date: 06/02/2017
Count Period: 4:00 PM to 6:00 PM
Peak Hour: 5:00 PM to 6:00 PM





	HV %:	PHF
EB	0.0%	0.90
WB	0.1%	0.91
NB	0.2%	0.93
SB	0.5%	0.88
TOTAL	0.3%	0.95

Two-Hour Count Summaries

Interval Start		E Bernal Dr Eastbound				E Bernal Dr Westbound				N Main St Northbound				N Main St Southbound				15-min Total	Rolling One Hour
		UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM		0	12	8	40	0	119	20	23	20	48	279	143	3	18	251	7	991	0
4:15 PM		0	4	22	39	0	97	30	24	22	46	296	149	4	25	276	5	1,039	0
4:30 PM		0	4	20	46	0	138	24	18	20	56	222	140	3	13	265	6	975	0
4:45 PM		0	7	11	35	0	119	30	26	28	58	293	157	5	34	252	7	1,062	4,067
5:00 PM		**0**	**5**	**17**	**37**	**0**	**125**	**28**	**31**	**21**	**62**	**250**	**180**	**4**	**19**	**256**	**3**	**1,038**	4,114
5:15 PM		**0**	**8**	**19**	**44**	**0**	**131**	**34**	**34**	**24**	**45**	**253**	**136**	**1**	**23**	**224**	**5**	**981**	4,056
5:30 PM		**0**	**7**	**13**	**38**	**0**	**100**	**29**	**36**	**28**	**46**	**303**	**176**	**5**	**24**	**287**	**8**	**1,100**	4,181
5:45 PM		**0**	**7**	**21**	**41**	**0**	**106**	**29**	**43**	**19**	**59**	**302**	**155**	**6**	**23**	**250**	**8**	**1,069**	**4,188**
Count Total		0	54	131	320	0	935	224	235	182	420	2,198	1,236	31	179	2,061	49	8,255	0
Peak Hour	**All**	**0**	**27**	**70**	**160**	**0**	**462**	**120**	**144**	**92**	**212**	**1,108**	**647**	**16**	**89**	**1,017**	**24**	**4,188**	**0**
	HV	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**2**	**2**	**0**	**0**	**6**	**0**	**11**	**0**
	HV%	**-**	**0%**	**0%**	**0%**	**-**	**0%**	**0%**	**1%**	**0%**	**0%**	**0%**	**0%**	**0%**	**0%**	**1%**	**0%**	**0%**	**0**

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals EB	WB	NB	SB	Total	Bicycles EB	WB	NB	SB	Total	Pedestrians (Crossing Leg) East	West	North	South	Total
4:00 PM	0	0	1	2	*3*	1	0	2	1	*4*	2	0	1	1	*4*
4:15 PM	0	0	1	0	*1*	0	1	1	3	*5*	1	2	4	3	*10*
4:30 PM	0	1	0	1	*2*	0	0	1	0	*1*	7	2	7	3	*19*
4:45 PM	0	0	2	1	*3*	0	1	0	0	*1*	0	5	6	0	*11*
5:00 PM	**0**	**0**	**1**	**2**	***3***	**1**	**0**	**2**	**1**	***4***	**4**	**0**	**0**	**1**	*5*
5:15 PM	**0**	**1**	**1**	**1**	***3***	**0**	**0**	**2**	**0**	***2***	**1**	**3**	**5**	**7**	*16*
5:30 PM	**0**	**0**	**0**	**1**	***1***	**0**	**0**	**1**	**0**	***1***	**1**	**0**	**0**	**2**	*3*
5:45 PM	**0**	**0**	**2**	**2**	***4***	**0**	**1**	**0**	**0**	***1***	**3**	**8**	**4**	**6**	***21***
Count Total	0	2	8	10	*20*	2	3	9	5	*19*	19	20	27	23	*89*
Peak Hour	**0**	**1**	**4**	**6**	***11***	**1**	**1**	**5**	**1**	***8***	**9**	**11**	**9**	**16**	***45***

Deon Fouche: 415 - 757 - 7714 deon.fouche@idaxdata.com

Two-Hour Count Summaries - Heavy Vehicles

Interval Start	E Bernal Dr				E Bernal Dr				N Main St				N Main St				15-min Total	Rolling One Hour
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	2	0	3	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0
4:30 PM	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1	0	2	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	2	0	0	0	1	0	3	9
5:00 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**2**	**0**	**3**	9
5:15 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**1**	**0**	**0**	**0**	**1**	**0**	**3**	11
5:30 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**1**	10
5:45 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**1**	**0**	**0**	**2**	**0**	**4**	**11**
Count Total	0	0	0	0	0	1	0	1	0	0	6	2	0	0	10	0	20	0
Peak Hour	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**2**	**2**	**0**	**0**	**6**	**0**	**11**	**0**

Two-Hour Count Summaries - Bikes

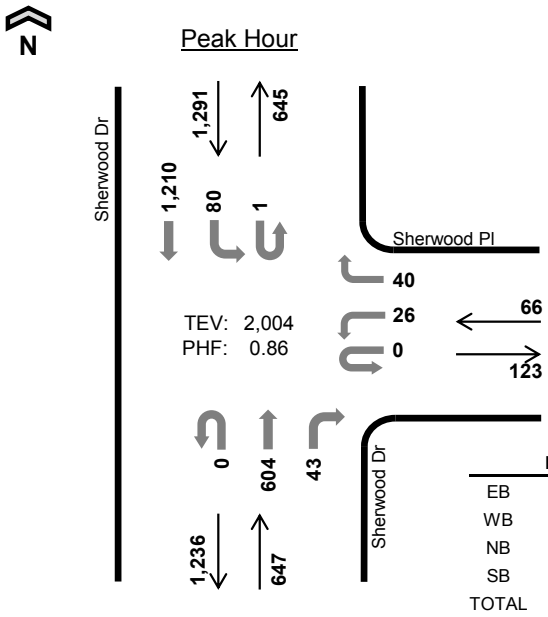
Interval Start	E Bernal Dr			E Bernal Dr			N Main St			N Main St			15-min Total	Rolling One Hour
	Eastbound			Westbound			Northbound			Southbound				
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
4:00 PM	0	1	0	0	0	0	0	2	0	0	1	0	4	0
4:15 PM	0	0	0	0	0	1	0	1	0	0	3	0	5	0
4:30 PM	0	0	0	0	0	0	0	1	0	0	0	0	1	0
4:45 PM	0	0	0	1	0	0	0	0	0	0	0	0	1	11
5:00 PM	**0**	**0**	**1**	**0**	**0**	**0**	**1**	**1**	**0**	**0**	**1**	**0**	**4**	11
5:15 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**1**	**0**	**0**	**0**	**2**	8
5:30 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**1**	8
5:45 PM	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**8**
Count Total	0	1	1	1	1	1	1	7	1	0	5	0	19	0
Peak Hour	**0**	**0**	**1**	**0**	**1**	**0**	**1**	**3**	**1**	**0**	**1**	**0**	**8**	**0**

Note: U-Turn volumes for bikes are included in Left-Turn, if any.

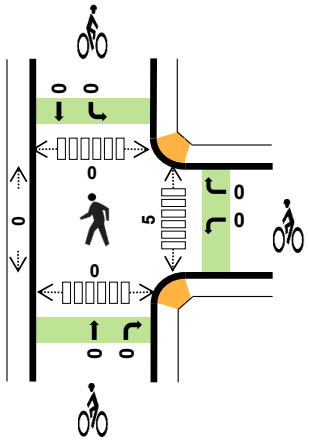
Deon Fouche: 415 - 757 - 7714 deon.fouche@idaxdata.com

Sherwood Dr
Sherwood Pl

Date: 06/05/2017
Count Period: 7:00 AM to 9:00 AM
Peak Hour: 7:30 AM to 8:30 AM



	HV %:	PHF
EB	-	-
WB	0.0%	0.61
NB	0.6%	0.88
SB	0.8%	0.83
TOTAL	0.7%	0.86



Two-Hour Count Summaries

Interval Start		0 Eastbound				Sherwood Pl Westbound				Sherwood Dr Northbound				Sherwood Dr Southbound				15-min Total	Rolling One Hour
		UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM		0	0	0	0	0	0	0	0	0	0	72	3	0	0	196	0	271	0
7:15 AM		0	0	0	0	0	1	0	1	0	0	112	8	0	5	230	0	357	0
7:30 AM		**0**	**0**	**0**	**0**	**0**	**3**	**0**	**2**	**0**	**0**	**153**	**5**	**1**	**13**	**302**	**0**	**479**	0
7:45 AM		**0**	**0**	**0**	**0**	**0**	**4**	**0**	**7**	**0**	**0**	**172**	**11**	**0**	**14**	**376**	**0**	**584**	1,691
8:00 AM		**0**	**0**	**0**	**0**	**0**	**6**	**0**	**17**	**0**	**0**	**154**	**14**	**0**	**29**	**238**	**0**	**458**	1,878
8:15 AM		**0**	**0**	**0**	**0**	**0**	**13**	**0**	**14**	**0**	**0**	**125**	**13**	**0**	**24**	**294**	**0**	**483**	**2,004**
8:30 AM		0	0	0	0	0	7	0	11	0	0	106	11	0	13	236	0	384	1,909
8:45 AM		0	0	0	0	0	8	0	6	0	0	126	14	0	14	200	0	368	1,693
Count Total		0	0	0	0	0	42	0	58	0	0	1,020	79	1	112	2,072	0	3,384	0
Peak Hour	**All**	**0**	**0**	**0**	**0**	**0**	**26**	**0**	**40**	**0**	**0**	**604**	**43**	**1**	**80**	**1,210**	**0**	**2,004**	**0**
	HV	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**4**	**0**	**0**	**0**	**10**	**0**	**14**	**0**
	HV%	**-**	**-**	**-**	**-**	**-**	**0%**	**-**	**0%**	**-**	**-**	**1%**	**0%**	**0%**	**0%**	**1%**	**-**	**1%**	**0**

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
7:00 AM	0	0	2	1	*3*	0	0	2	0	*2*	1	0	0	0	*1*
7:15 AM	0	0	0	2	*2*	0	0	0	0	*0*	0	0	0	0	*0*
7:30 AM	**0**	**0**	**1**	**0**	***1***	**0**	**0**	**0**	**0**	***0***	**1**	**0**	**0**	**0**	*1*
7:45 AM	**0**	**0**	**1**	**6**	***7***	**0**	**0**	**0**	**0**	***0***	**3**	**0**	**0**	**0**	*3*
8:00 AM	**0**	**0**	**1**	**1**	***2***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	*0*
8:15 AM	**0**	**0**	**1**	**3**	***4***	**0**	**0**	**0**	**0**	***0***	**1**	**0**	**0**	**0**	***1***
8:30 AM	0	0	0	3	*3*	0	0	0	2	*2*	1	0	0	1	*2*
8:45 AM	0	0	1	0	*1*	0	0	0	0	*0*	1	0	0	0	*1*
Count Total	0	0	7	16	*23*	0	0	2	2	*4*	8	0	0	1	*9*
Peak Hr	**0**	**0**	**4**	**10**	***14***	**0**	**0**	**0**	**0**	***0***	**5**	**0**	**0**	**0**	***5***

Deon Fouche: 415 - 757 - 7714 deon.fouche@idaxdata.com

Two-Hour Count Summaries - Heavy Vehicles

Interval Start	0				Sherwood Pl				Sherwood Dr				Sherwood Dr				15-min Total	Rolling One Hour
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM	0	0	0	0	0	0	0	0	0	0	1	1	0	0	1	0	3	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2	0
7:30 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**1**	0
7:45 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**6**	**0**	**7**	13
8:00 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**1**	**0**	**2**	12
8:15 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**3**	**0**	**4**	**14**
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	3	16
8:45 AM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	10
Count Total	0	0	0	0	0	0	0	0	0	0	6	1	0	0	16	0	23	0
Peak Hour	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**4**	**0**	**0**	**0**	**10**	**0**	**14**	**0**

Two-Hour Count Summaries - Bikes

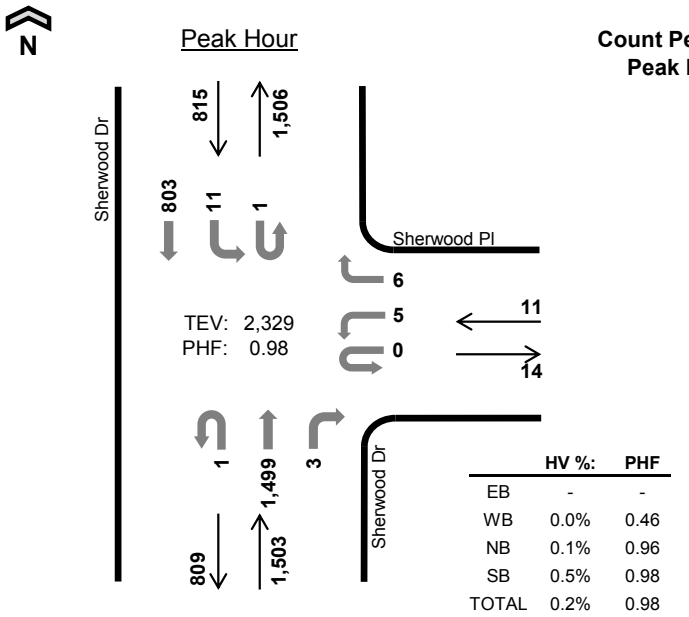
Interval Start	0			Sherwood Pl			Sherwood Dr			Sherwood Dr			15-min Total	Rolling One Hour
	Eastbound			Westbound			Northbound			Southbound				
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
7:00 AM	0	0	0	0	0	0	0	2	0	0	0	0	2	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
7:45 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	2
8:00 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
8:15 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
8:30 AM	0	0	0	0	0	0	0	0	0	1	1	0	2	2
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	2
Count Total	0	0	0	0	0	0	0	2	0	1	1	0	4	0
Peak Hour	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

Note: U-Turn volumes for bikes are included in Left-Turn, if any.

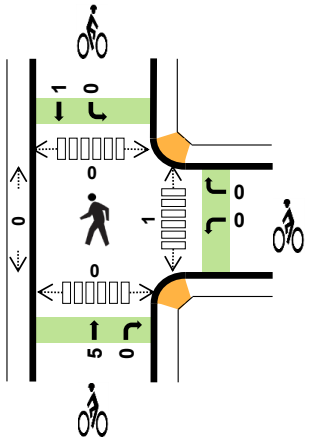
Deon Fouche: 415 - 757 - 7714 deon.fouche@idaxdata.com

Sherwood Dr
Sherwood Pl

Date: 06/05/2017
Count Period: 4:00 PM to 6:00 PM
Peak Hour: 4:45 PM to 5:45 PM



	HV %:	PHF
EB	-	-
WB	0.0%	0.46
NB	0.1%	0.96
SB	0.5%	0.98
TOTAL	0.2%	0.98



Two-Hour Count Summaries

Interval Start		0 Eastbound				Sherwood Pl Westbound				Sherwood Dr Northbound				Sherwood Dr Southbound				15-min Total	Rolling One Hour
		UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM		0	0	0	0	0	1	0	7	0	0	270	2	0	1	213	0	494	0
4:15 PM		0	0	0	0	0	2	0	5	1	0	369	7	0	3	199	0	586	0
4:30 PM		0	0	0	0	0	4	0	4	0	0	303	2	0	2	191	0	506	0
4:45 PM		**0**	**0**	**0**	**0**	**0**	**3**	**0**	**3**	**0**	**0**	**360**	**0**	**1**	**2**	**204**	**0**	**573**	2,159
5:00 PM		**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**372**	**0**	**0**	**2**	**206**	**0**	**581**	2,246
5:15 PM		**0**	**0**	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**392**	**1**	**0**	**0**	**198**	**0**	**593**	2,253
5:30 PM		**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**1**	**0**	**375**	**2**	**0**	**7**	**195**	**0**	**582**	**2,329**
5:45 PM		0	0	0	0	0	2	0	4	0	0	319	9	0	16	174	0	524	2,280
Count Total		0	0	0	0	0	14	0	26	2	0	2,760	23	1	33	1,580	0	4,439	0
Peak Hour	**All**	**0**	**0**	**0**	**0**	**0**	**5**	**0**	**6**	**1**	**0**	**1,499**	**3**	**1**	**11**	**803**	**0**	**2,329**	**0**
	HV	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**4**	**0**	**5**	**0**
	HV%	**-**	**-**	**-**	**-**	**-**	**0%**	**-**	**0%**	**0%**	**-**	**0%**	**0%**	**0%**	**0%**	**0%**	**-**	**0%**	**0**

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
4:00 PM	0	0	1	1	*2*	0	0	0	0	*0*	0	0	0	0	*0*
4:15 PM	0	0	1	1	*2*	0	0	0	0	*0*	0	0	0	0	*0*
4:30 PM	0	0	1	1	*2*	0	0	2	1	*3*	0	0	0	0	*0*
4:45 PM	**0**	**0**	**0**	**2**	***2***	**0**	**0**	**1**	**0**	***1***	**0**	**0**	**0**	**0**	*0*
5:00 PM	**0**	**0**	**0**	**1**	***1***	**0**	**0**	**0**	**0**	***0***	**1**	**0**	**0**	**0**	*1*
5:15 PM	**0**	**0**	**1**	**1**	***2***	**0**	**0**	**4**	**0**	***4***	**0**	**0**	**0**	**0**	*0*
5:30 PM	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**1**	***1***	**0**	**0**	**0**	**0**	***0***
5:45 PM	0	0	0	0	*0*	0	0	2	0	*2*	1	0	0	0	*1*
Count Total	0	0	4	7	*11*	0	0	9	2	*11*	2	0	0	0	*2*
Peak Hr	**0**	**0**	**1**	**4**	***5***	**0**	**0**	**5**	**1**	***6***	**1**	**0**	**0**	**0**	***1***

Deon Fouche: 415 - 757 - 7714 deon.fouche@idaxdata.com

Two-Hour Count Summaries - Heavy Vehicles

Interval Start	0				Sherwood Pl				Sherwood Dr				Sherwood Dr				15-min Total	Rolling One Hour
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	2	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	2	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	2	0
4:45 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**2**	8
5:00 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**1**	7
5:15 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**1**	**0**	**2**	7
5:30 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**5**
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
Count Total	0	0	0	0	0	0	0	0	0	0	4	0	0	0	7	0	11	0
Peak Hour	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**4**	**0**	**5**	**0**

Two-Hour Count Summaries - Bikes

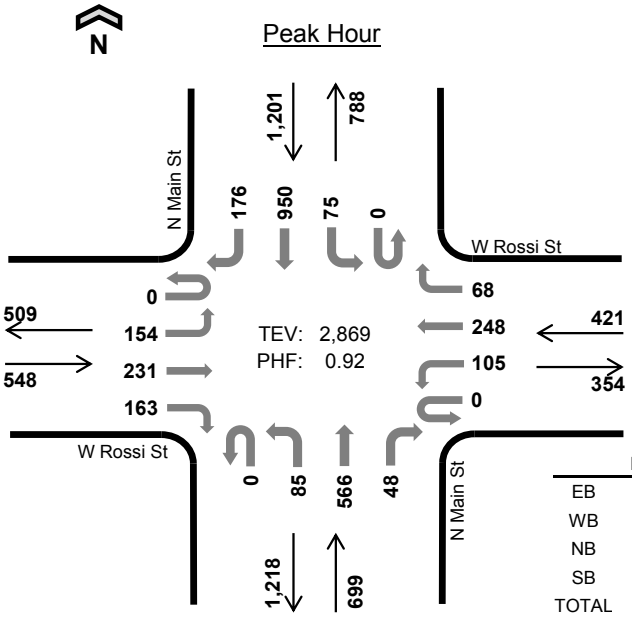
Interval Start	0			Sherwood Pl			Sherwood Dr			Sherwood Dr			15-min Total	Rolling One Hour
	Eastbound			Westbound			Northbound			Southbound				
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	2	0	0	1	0	3	0
4:45 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**1**	4
5:00 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	4
5:15 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**4**	**0**	**0**	**0**	**0**	**4**	8
5:30 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**1**	**6**
5:45 PM	0	0	0	0	0	0	0	2	0	0	0	0	2	7
Count Total	0	0	0	0	0	0	0	9	0	0	2	0	11	0
Peak Hour	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**5**	**0**	**0**	**1**	**0**	**6**	**0**

Note: U-Turn volumes for bikes are included in Left-Turn, if any.

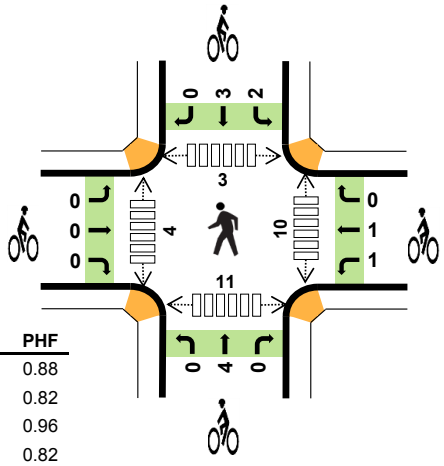
Deon Fouche: 415 - 757 - 7714 deon.fouche@idaxdata.com

N Main St
W Rossi St

Peak Hour



Date: 06/02/2017
Count Period: 7:00 AM to 9:00 AM
Peak Hour: 7:45 AM to 8:45 AM



	HV %:	PHF
EB	0.5%	0.88
WB	1.0%	0.82
NB	1.6%	0.96
SB	0.4%	0.82
TOTAL	0.8%	0.92

Two-Hour Count Summaries

Interval Start	W Rossi St Eastbound				W Rossi St Westbound				N Main St Northbound				N Main St Southbound				15-min Total	Rolling One Hour
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM	0	16	48	19	0	16	73	11	0	13	69	10	0	13	134	50	472	0
7:15 AM	0	23	50	24	0	31	52	9	0	9	70	10	0	6	179	44	507	0
7:30 AM	0	26	46	29	0	32	56	8	0	14	102	9	0	15	231	37	605	0
7:45 AM	**0**	**41**	**73**	**42**	**0**	**29**	**56**	**15**	**0**	**15**	**135**	**12**	**0**	**14**	**305**	**45**	**782**	2,366
8:00 AM	**0**	**36**	**59**	**45**	**0**	**34**	**77**	**18**	**0**	**25**	**142**	**13**	**0**	**18**	**228**	**54**	**749**	2,643
8:15 AM	**0**	**40**	**47**	**36**	**0**	**24**	**56**	**14**	**0**	**21**	**146**	**8**	**0**	**23**	**217**	**38**	**670**	2,806
8:30 AM	**0**	**37**	**52**	**40**	**0**	**18**	**59**	**21**	**0**	**24**	**143**	**15**	**0**	**20**	**200**	**39**	**668**	**2,869**
8:45 AM	0	26	55	22	0	27	53	26	0	25	158	17	0	25	162	33	629	2,716
Count Total	0	245	430	257	0	211	482	122	0	146	965	94	0	134	1,656	340	5,082	0
Peak Hour All	**0**	**154**	**231**	**163**	**0**	**105**	**248**	**68**	**0**	**85**	**566**	**48**	**0**	**75**	**950**	**176**	**2,869**	**0**
Peak Hour HV	**0**	**0**	**1**	**2**	**0**	**4**	**0**	**0**	**0**	**1**	**9**	**1**	**0**	**1**	**4**	**0**	**23**	**0**
Peak Hour HV%	**-**	**0%**	**0%**	**1%**	**-**	**4%**	**0%**	**0%**	**-**	**1%**	**2%**	**2%**	**-**	**1%**	**0%**	**0%**	**1%**	**0**

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals EB	WB	NB	SB	Total	Bicycles EB	WB	NB	SB	Total	Pedestrians (Crossing Leg) East	West	North	South	Total
7:00 AM	2	3	2	4	*11*	0	0	2	1	*3*	1	0	1	4	*6*
7:15 AM	1	2	1	2	*6*	0	0	1	0	*1*	1	1	1	3	*6*
7:30 AM	3	4	4	2	*13*	1	0	2	3	*6*	4	1	0	5	*10*
7:45 AM	**0**	**0**	**3**	**1**	***4***	**0**	**0**	**2**	**3**	***5***	**2**	**0**	**1**	**4**	*7*
8:00 AM	**3**	**0**	**2**	**1**	***6***	**0**	**1**	**0**	**1**	***2***	**3**	**0**	**0**	**4**	*7*
8:15 AM	**0**	**2**	**3**	**1**	***6***	**0**	**0**	**0**	**0**	***0***	**3**	**3**	**0**	**2**	*8*
8:30 AM	**0**	**2**	**3**	**2**	***7***	**0**	**1**	**2**	**1**	***4***	**2**	**1**	**2**	**1**	***6***
8:45 AM	3	4	4	0	*11*	0	2	0	2	*4*	8	0	0	1	*9*
Count Total	12	17	22	13	*64*	1	4	9	11	*25*	24	6	5	24	*59*
Peak Hour	**3**	**4**	**11**	**5**	***23***	**0**	**2**	**4**	**5**	***11***	**10**	**4**	**3**	**11**	***28***

Deon Fouche: 415 - 757 - 7714 deon.fouche@idaxdata.com

Two-Hour Count Summaries - Heavy Vehicles

Interval Start	W Rossi St Eastbound				W Rossi St Westbound				N Main St Northbound				N Main St Southbound				15-min Total	Rolling One Hour
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM	0	0	2	0	0	0	3	0	0	0	1	1	0	1	3	0	11	0
7:15 AM	0	0	1	0	0	0	0	2	0	0	1	0	0	0	2	0	6	0
7:30 AM	0	1	0	2	0	1	2	1	0	0	4	0	0	0	1	1	13	0
7:45 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**2**	**0**	**0**	**1**	**0**	**0**	**4**	34
8:00 AM	**0**	**0**	**1**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**1**	**0**	**6**	29
8:15 AM	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**2**	**1**	**0**	**0**	**1**	**0**	**6**	29
8:30 AM	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**3**	**0**	**0**	**0**	**2**	**0**	**7**	**23**
8:45 AM	0	1	2	0	0	1	3	0	0	1	3	0	0	0	0	0	11	30
Count Total	0	2	6	4	0	6	8	3	0	2	18	2	0	2	10	1	64	0
Peak Hour	**0**	**0**	**1**	**2**	**0**	**4**	**0**	**0**	**0**	**1**	**9**	**1**	**0**	**1**	**4**	**0**	**23**	**0**

Two-Hour Count Summaries - Bikes

Interval Start	W Rossi St Eastbound			W Rossi St Westbound			N Main St Northbound			N Main St Southbound			15-min Total	Rolling One Hour
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
7:00 AM	0	0	0	0	0	0	0	2	0	0	1	0	3	0
7:15 AM	0	0	0	0	0	0	0	1	0	0	0	0	1	0
7:30 AM	0	0	1	0	0	0	1	1	0	1	2	0	6	0
7:45 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**2**	**1**	**0**	**5**	15
8:00 AM	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**2**	14
8:15 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	13
8:30 AM	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**2**	**0**	**0**	**1**	**0**	**4**	**11**
8:45 AM	0	0	0	0	1	1	0	0	0	0	2	0	4	10
Count Total	0	0	1	1	2	1	1	8	0	3	8	0	25	0
Peak Hour	**0**	**0**	**0**	**1**	**1**	**0**	**0**	**4**	**0**	**2**	**3**	**0**	**11**	**0**

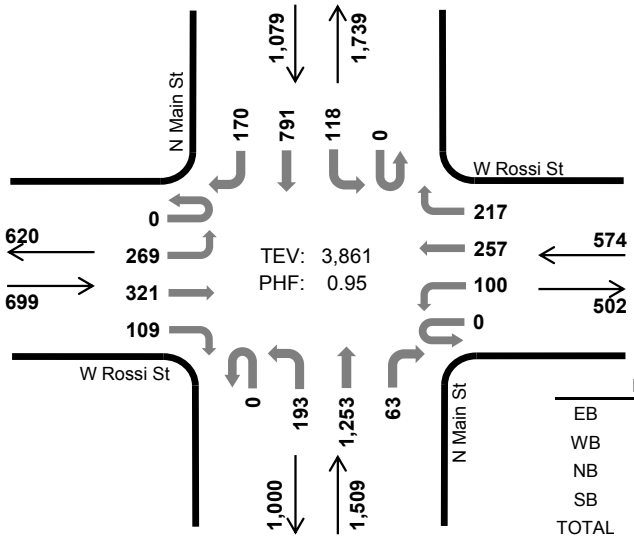
Note: U-Turn volumes for bikes are included in Left-Turn, if any.

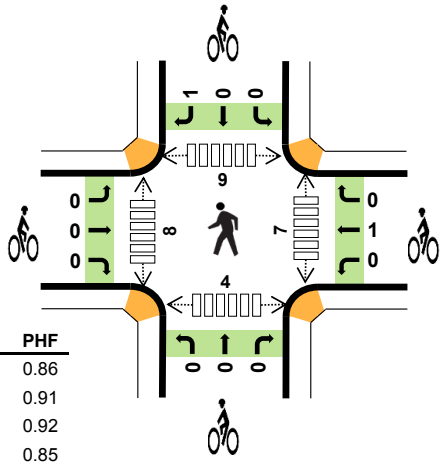
Deon Fouche: 415 - 757 - 7714 deon.fouche@idaxdata.com

N Main St
W Rossi St

Date: 06/02/2017
Count Period: 4:00 PM to 6:00 PM
Peak Hour: 4:45 PM to 5:45 PM

Peak Hour





	HV %:	PHF
EB	0.4%	0.86
WB	0.3%	0.91
NB	0.1%	0.92
SB	0.9%	0.85
TOTAL	0.4%	0.95

Two-Hour Count Summaries

Interval Start	W Rossi St Eastbound				W Rossi St Westbound				N Main St Northbound				N Main St Southbound				15-min Total	Rolling One Hour
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM	0	75	93	31	0	34	76	46	0	33	305	18	0	34	175	23	943	0
4:15 PM	0	51	58	24	0	22	48	38	0	38	357	17	0	46	224	42	965	0
4:30 PM	0	72	89	27	0	23	64	39	0	40	262	24	0	35	182	38	895	0
4:45 PM	**0**	**70**	**76**	**22**	**0**	**23**	**64**	**57**	**0**	**74**	**326**	**12**	**0**	**30**	**225**	**37**	**1,016**	3,819
5:00 PM	**0**	**79**	**97**	**27**	**0**	**31**	**74**	**52**	**0**	**41**	**285**	**17**	**0**	**27**	**161**	**48**	**939**	3,815
5:15 PM	**0**	**54**	**68**	**29**	**0**	**19**	**62**	**57**	**0**	**39**	**338**	**14**	**0**	**34**	**237**	**46**	**997**	3,847
5:30 PM	**0**	**66**	**80**	**31**	**0**	**27**	**57**	**51**	**0**	**39**	**304**	**20**	**0**	**27**	**168**	**39**	**909**	**3,861**
5:45 PM	0	70	68	22	0	20	50	42	0	50	304	12	0	32	201	33	904	3,749
Count Total	0	537	629	213	0	199	495	382	0	354	2,481	134	0	265	1,573	306	7,568	0
Peak Hour All	**0**	**269**	**321**	**109**	**0**	**100**	**257**	**217**	**0**	**193**	**1,253**	**63**	**0**	**118**	**791**	**170**	**3,861**	**0**
Peak Hour HV	**0**	**1**	**1**	**1**	**0**	**1**	**0**	**1**	**0**	**0**	**2**	**0**	**0**	**2**	**6**	**2**	**17**	**0**
Peak Hour HV%	**-**	**0%**	**0%**	**1%**	**-**	**1%**	**0%**	**0%**	**-**	**0%**	**0%**	**0%**	**-**	**2%**	**1%**	**1%**	**0%**	**0**

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
4:00 PM	3	0	2	2	*7*	0	2	0	2	*4*	5	1	2	4	*12*
4:15 PM	0	1	3	2	*6*	0	0	0	0	*0*	3	2	2	4	*11*
4:30 PM	0	2	1	2	*5*	0	1	0	2	*3*	1	3	2	0	*6*
4:45 PM	**0**	**1**	**0**	**1**	***2***	**0**	**1**	**0**	**0**	***1***	**2**	**0**	**3**	**0**	***5***
5:00 PM	**2**	**0**	**1**	**3**	***6***	**0**	**0**	**0**	**0**	***0***	**3**	**2**	**2**	**2**	*9*
5:15 PM	**1**	**1**	**1**	**4**	***7***	**0**	**0**	**0**	**0**	***0***	**0**	**3**	**2**	**2**	*7*
5:30 PM	**0**	**0**	**0**	**2**	***2***	**0**	**0**	**0**	**1**	***1***	**2**	**3**	**2**	**0**	***7***
5:45 PM	0	0	5	0	*5*	0	0	0	1	*1*	2	0	0	1	*3*
Count Total	6	5	13	16	*40*	0	4	0	6	*10*	18	14	15	13	*60*
Peak Hour	**3**	**2**	**2**	**10**	***17***	**0**	**1**	**0**	**1**	***2***	**7**	**8**	**9**	**4**	***28***

Deon Fouche: 415 - 757 - 7714 deon.fouche@idaxdata.com

Two-Hour Count Summaries - Heavy Vehicles

Interval Start	W Rossi St Eastbound				W Rossi St Westbound				N Main St Northbound				N Main St Southbound				15-min Total	Rolling One Hour
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM	0	2	1	0	0	0	0	0	0	1	1	0	0	0	2	0	7	0
4:15 PM	0	0	0	0	0	1	0	0	0	0	3	0	0	0	2	0	6	0
4:30 PM	0	0	0	0	0	2	0	0	0	0	1	0	0	0	2	0	5	0
4:45 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**2**	20
5:00 PM	**0**	**1**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**2**	**1**	**6**	19
5:15 PM	**0**	**0**	**1**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**1**	**3**	**0**	**7**	20
5:30 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**1**	**0**	**2**	**17**
5:45 PM	0	0	0	0	0	0	0	0	0	1	4	0	0	0	0	0	5	20
Count Total	0	3	2	1	0	4	0	1	0	2	11	0	0	2	12	2	40	0
Peak Hour	**0**	**1**	**1**	**1**	**0**	**1**	**0**	**1**	**0**	**0**	**2**	**0**	**0**	**2**	**6**	**2**	**17**	**0**

Two-Hour Count Summaries - Bikes

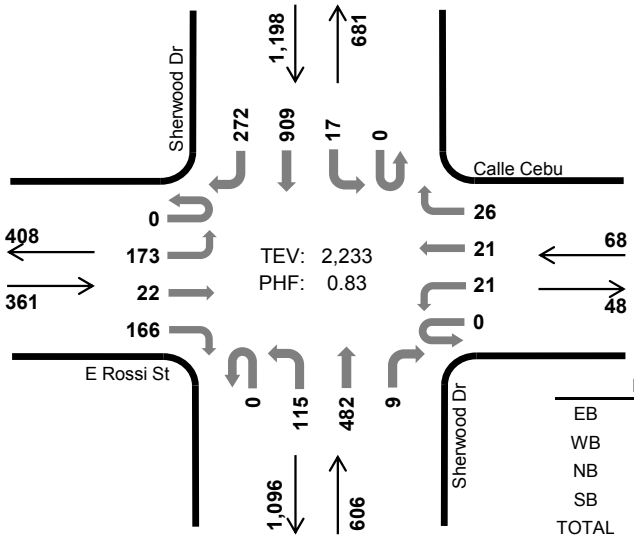
Interval Start	W Rossi St Eastbound			W Rossi St Westbound			N Main St Northbound			N Main St Southbound			15-min Total	Rolling One Hour
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
4:00 PM	0	0	0	0	2	0	0	0	0	0	2	0	4	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	1	0	0	0	0	0	2	0	3	0
4:45 PM	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	8
5:00 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	4
5:15 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	4
5:30 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**1**	**2**
5:45 PM	0	0	0	0	0	0	0	0	0	0	1	0	1	2
Count Total	0	0	0	0	4	0	0	0	0	0	5	1	10	0
Peak Hour	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**2**	**0**

Note: U-Turn volumes for bikes are included in Left-Turn, if any.

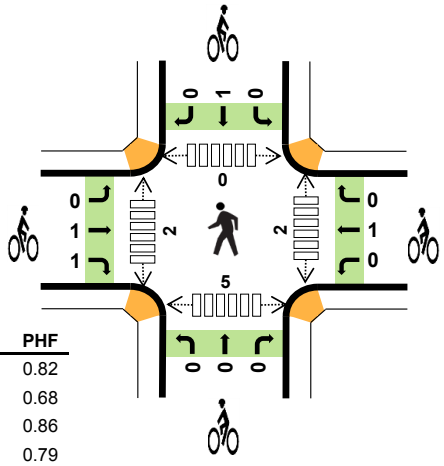
Deon Fouche: 415 - 757 - 7714 deon.fouche@idaxdata.com

Sherwood Dr
E Rossi St

Peak Hour



Date: 06/02/2017
Count Period: 7:00 AM to 9:00 AM
Peak Hour: 7:30 AM to 8:30 AM



	HV %:	PHF
EB	0.8%	0.82
WB	5.9%	0.68
NB	0.8%	0.86
SB	0.7%	0.79
TOTAL	0.9%	0.83

Two-Hour Count Summaries

Interval Start		E Rossi St Eastbound				Calle Cebu Westbound				Sherwood Dr Northbound				Sherwood Dr Southbound				15-min Total	Rolling One Hour
		UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM		0	31	1	31	0	2	0	3	0	10	63	0	0	0	114	67	322	0
7:15 AM		0	46	1	22	0	4	2	1	0	10	93	1	0	2	164	78	424	0
7:30 AM		**0**	**30**	**2**	**37**	**0**	**7**	**11**	**7**	**0**	**17**	**108**	**1**	**0**	**3**	**211**	**69**	**503**	0
7:45 AM		**0**	**56**	**0**	**54**	**0**	**6**	**4**	**14**	**0**	**39**	**119**	**3**	**0**	**2**	**311**	**64**	**672**	1,921
8:00 AM		**0**	**51**	**9**	**35**	**0**	**4**	**2**	**2**	**0**	**32**	**144**	**1**	**0**	**6**	**198**	**80**	**564**	2,163
8:15 AM		**0**	**36**	**11**	**40**	**0**	**4**	**4**	**3**	**0**	**27**	**111**	**4**	**0**	**6**	**189**	**59**	**494**	**2,233**
8:30 AM		0	34	7	46	0	5	5	5	0	26	101	6	0	8	148	73	464	2,194
8:45 AM		0	48	9	42	0	4	3	8	0	40	117	1	0	4	177	46	499	2,021
Count Total		0	332	40	307	0	36	31	43	0	201	856	17	0	31	1,512	536	3,942	0
Peak Hour	**All**	**0**	**173**	**22**	**166**	**0**	**21**	**21**	**26**	**0**	**115**	**482**	**9**	**0**	**17**	**909**	**272**	**2,233**	**0**
	HV	**0**	**2**	**0**	**1**	**0**	**3**	**1**	**0**	**0**	**0**	**5**	**0**	**0**	**1**	**5**	**2**	**20**	**0**
	HV%	**-**	**1%**	**0%**	**1%**	**-**	**14%**	**5%**	**0%**	**-**	**0%**	**1%**	**0%**	**-**	**6%**	**1%**	**1%**	**1%**	**0**

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals EB	WB	NB	SB	Total	Bicycles EB	WB	NB	SB	Total	Pedestrians (Crossing Leg) East	West	North	South	Total
7:00 AM	3	0	2	0	*5*	0	0	0	0	*0*	1	0	1	1	*3*
7:15 AM	1	0	5	0	*6*	0	1	0	0	*1*	1	0	0	0	*1*
7:30 AM	**0**	**2**	**3**	**3**	***8***	**0**	**0**	**0**	**0**	***0***	**0**	**1**	**0**	**1**	*2*
7:45 AM	**1**	**2**	**0**	**2**	***5***	**0**	**0**	**0**	**1**	***1***	**1**	**0**	**0**	**2**	*3*
8:00 AM	**1**	**0**	**1**	**1**	***3***	**2**	**1**	**0**	**0**	***3***	**1**	**1**	**0**	**1**	*3*
8:15 AM	**1**	**0**	**1**	**2**	***4***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**1**	***1***
8:30 AM	0	0	1	2	*3*	0	0	0	0	*0*	0	0	0	1	*1*
8:45 AM	2	0	9	2	*13*	0	1	0	0	*1*	1	0	1	0	*2*
Count Total	9	4	22	12	*47*	2	3	0	1	*6*	5	2	2	7	*16*
Peak Hour	**3**	**4**	**5**	**8**	***20***	**2**	**1**	**0**	**1**	***4***	**2**	**2**	**0**	**5**	***9***

Deon Fouche: 415 - 757 - 7714 deon.fouche@idaxdata.com

Two-Hour Count Summaries - Heavy Vehicles

Interval Start	E Rossi St				Calle Cebu				Sherwood Dr				Sherwood Dr				15-min Total	Rolling One Hour
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM	0	0	0	3	0	0	0	0	0	1	1	0	0	0	0	0	5	0
7:15 AM	0	0	0	1	0	0	0	0	0	2	2	1	0	0	0	0	6	0
7:30 AM	**0**	**0**	**0**	**0**	**0**	**1**	**1**	**0**	**0**	**0**	**3**	**0**	**0**	**1**	**1**	**1**	**8**	0
7:45 AM	**0**	**0**	**0**	**1**	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**5**	24
8:00 AM	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**1**	**0**	**3**	22
8:15 AM	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**1**	**1**	**4**	**20**
8:30 AM	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1	3	15
8:45 AM	0	1	0	1	0	0	0	0	0	3	6	0	0	0	2	0	13	23
Count Total	0	3	0	6	0	3	1	0	0	7	14	1	0	1	8	3	47	0
Peak Hour	**0**	**2**	**0**	**1**	**0**	**3**	**1**	**0**	**0**	**0**	**5**	**0**	**0**	**1**	**5**	**2**	**20**	**0**

Two-Hour Count Summaries - Bikes

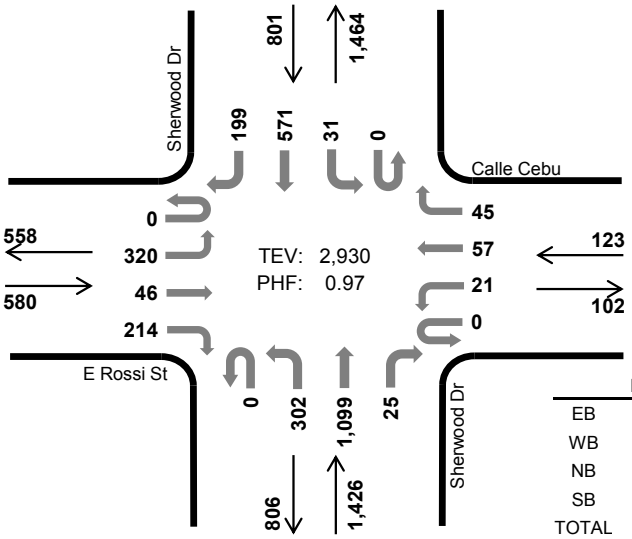
Interval Start	E Rossi St			Calle Cebu			Sherwood Dr			Sherwood Dr			15-min Total	Rolling One Hour
	Eastbound			Westbound			Northbound			Southbound				
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	1	0	0	0	0	0	0	0	1	0
7:30 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
7:45 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**1**	2
8:00 AM	**0**	**1**	**1**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**3**	5
8:15 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**4**
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	4
8:45 AM	0	0	0	0	1	0	0	0	0	0	0	0	1	4
Count Total	0	1	1	0	3	0	0	0	0	0	1	0	6	0
Peak Hour	**0**	**1**	**1**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**4**	**0**

Note: U-Turn volumes for bikes are included in Left-Turn, if any.

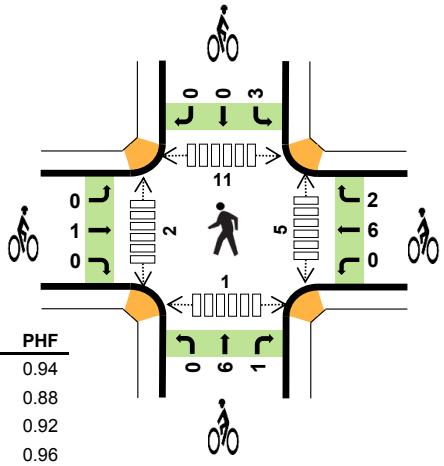
Deon Fouche: 415 - 757 - 7714 deon.fouche@idaxdata.com

Sherwood Dr
E Rossi St

Peak Hour



Date: 06/05/2017
Count Period: 4:00 PM to 6:00 PM
Peak Hour: 4:45 PM to 5:45 PM



	HV %:	PHF
EB	0.3%	0.94
WB	0.0%	0.88
NB	0.1%	0.92
SB	0.1%	0.96
TOTAL	0.2%	0.97

Two-Hour Count Summaries

Interval Start		E Rossi St Eastbound				Calle Cebu Westbound				Sherwood Dr Northbound				Sherwood Dr Southbound				15-min Total	Rolling One Hour
		UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM		0	64	11	63	0	4	9	9	0	64	226	6	0	5	149	57	667	0
4:15 PM		0	64	9	60	0	12	13	10	0	71	288	2	0	7	149	42	727	0
4:30 PM		0	61	9	69	0	9	9	6	0	84	250	3	0	9	130	65	704	0
4:45 PM		**0**	**82**	**10**	**53**	**0**	**7**	**9**	**8**	**0**	**68**	**251**	**5**	**0**	**8**	**148**	**45**	**694**	2,792
5:00 PM		**0**	**70**	**13**	**58**	**0**	**1**	**14**	**14**	**0**	**83**	**270**	**7**	**0**	**6**	**147**	**54**	**737**	2,862
5:15 PM		**0**	**89**	**14**	**52**	**0**	**6**	**14**	**15**	**0**	**62**	**287**	**5**	**0**	**10**	**145**	**54**	**753**	2,888
5:30 PM		**0**	**79**	**9**	**51**	**0**	**7**	**20**	**8**	**0**	**89**	**291**	**8**	**0**	**7**	**131**	**46**	**746**	**2,930**
5:45 PM		0	77	15	59	0	5	8	15	0	52	235	2	0	6	118	50	642	2,878
Count Total		0	586	90	465	0	51	96	85	0	573	2,098	38	0	58	1,117	413	5,670	0
Peak Hour	**All**	**0**	**320**	**46**	**214**	**0**	**21**	**57**	**45**	**0**	**302**	**1,099**	**25**	**0**	**31**	**571**	**199**	**2,930**	**0**
	HV	**0**	**0**	**1**	**1**	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**1**	**0**	**5**	**0**
	HV%	**-**	**0%**	**2%**	**0%**	**-**	**0%**	**0%**	**0%**	**-**	**1%**	**0%**	**0%**	**-**	**0%**	**0%**	**0%**	**0%**	**0**

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals EB	WB	NB	SB	Total	Bicycles EB	WB	NB	SB	Total	Pedestrians (Crossing Leg) East	West	North	South	Total
4:00 PM	3	0	2	0	*5*	2	2	0	0	*4*	0	0	1	1	*2*
4:15 PM	1	0	3	2	*6*	1	2	2	0	*5*	2	1	1	6	*10*
4:30 PM	1	0	3	2	*6*	1	3	1	1	*6*	1	0	1	2	*4*
4:45 PM	**1**	**0**	**0**	**0**	***1***	**0**	**1**	**1**	**0**	***2***	**1**	**0**	**0**	**0**	***1***
5:00 PM	**1**	**0**	**1**	**1**	***3***	**1**	**2**	**2**	**0**	***5***	**1**	**1**	**3**	**0**	***5***
5:15 PM	**0**	**0**	**0**	**0**	***0***	**0**	**3**	**2**	**3**	***8***	**2**	**1**	**5**	**1**	***9***
5:30 PM	**0**	**0**	**1**	**0**	***1***	**0**	**2**	**2**	**0**	***4***	**1**	**0**	**3**	**0**	***4***
5:45 PM	1	0	0	0	*1*	0	3	0	1	*4*	2	0	1	0	*3*
Count Total	8	0	10	5	*23*	5	18	10	5	*38*	10	3	15	10	*38*
Peak Hour	**2**	**0**	**2**	**1**	***5***	**1**	**8**	**7**	**3**	***19***	**5**	**2**	**11**	**1**	***19***

Deon Fouche: 415 - 757 - 7714 deon.fouche@idaxdata.com

Two-Hour Count Summaries - Heavy Vehicles

Interval Start	E Rossi St				Calle Cebu				Sherwood Dr				Sherwood Dr				15-min Total	Rolling One Hour
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM	0	1	1	1	0	0	0	0	0	2	0	0	0	0	0	0	5	0
4:15 PM	0	0	0	1	0	0	0	0	0	2	1	0	0	0	2	0	6	0
4:30 PM	0	0	0	1	0	0	0	0	0	1	2	0	0	0	0	2	6	0
4:45 PM	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	18
5:00 PM	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**1**	**0**	**3**	16
5:15 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	10
5:30 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**5**
5:45 PM	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	5
Count Total	0	1	2	5	0	0	0	0	0	7	3	0	0	0	3	2	23	0
Peak Hour	**0**	**0**	**1**	**1**	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**1**	**0**	**5**	**0**

Two-Hour Count Summaries - Bikes

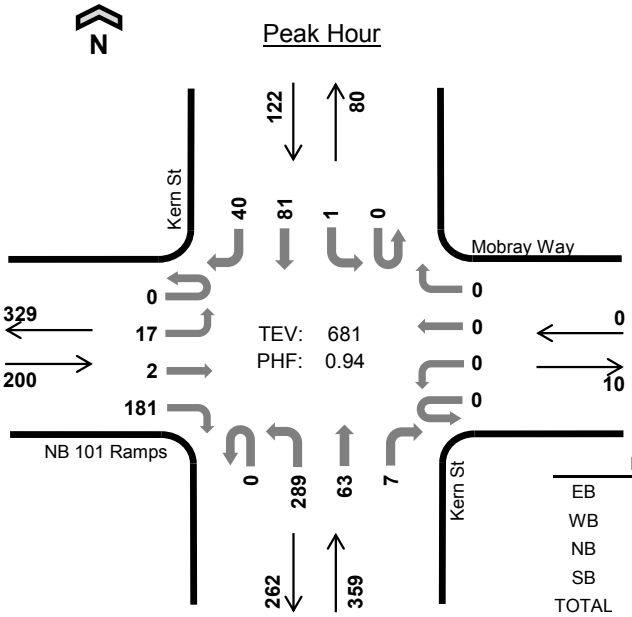
Interval Start	E Rossi St			Calle Cebu			Sherwood Dr			Sherwood Dr			15-min Total	Rolling One Hour
	Eastbound			Westbound			Northbound			Southbound				
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
4:00 PM	0	1	1	0	2	0	0	0	0	0	0	0	4	0
4:15 PM	1	0	0	0	2	0	0	2	0	0	0	0	5	0
4:30 PM	0	1	0	1	1	1	1	0	0	0	0	1	6	0
4:45 PM	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**2**	17
5:00 PM	**0**	**1**	**0**	**0**	**2**	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**5**	18
5:15 PM	**0**	**0**	**0**	**0**	**2**	**1**	**0**	**2**	**0**	**3**	**0**	**0**	**8**	21
5:30 PM	**0**	**0**	**0**	**0**	**1**	**1**	**0**	**1**	**1**	**0**	**0**	**0**	**4**	**19**
5:45 PM	0	0	0	0	2	1	0	0	0	0	1	0	4	21
Count Total	1	3	1	1	13	4	1	8	1	3	1	1	38	0
Peak Hour	**0**	**1**	**0**	**0**	**6**	**2**	**0**	**6**	**1**	**3**	**0**	**0**	**19**	**0**

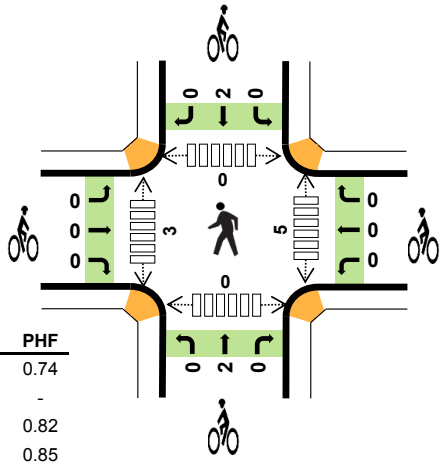
Note: U-Turn volumes for bikes are included in Left-Turn, if any.

Deon Fouche: 415 - 757 - 7714 deon.fouche@idaxdata.com

Kern St
NB 101 Ramps

Date: 06/02/2017
Count Period: 7:00 AM to 9:00 AM
Peak Hour: 7:30 AM to 8:30 AM





	HV %:	PHF
EB	6.5%	0.74
WB	-	-
NB	0.6%	0.82
SB	1.6%	0.85
TOTAL	2.5%	0.94

Two-Hour Count Summaries

Interval Start		NB 101 Ramps Eastbound				Mobray Way Westbound				Kern St Northbound				Kern St Southbound				15-min Total	Rolling One Hour
		UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM		0	3	0	34	0	0	0	0	1	46	6	1	0	0	17	12	120	0
7:15 AM		0	4	0	26	0	0	0	0	0	60	15	0	0	0	15	5	125	0
7:30 AM		**0**	**5**	**0**	**41**	**0**	**0**	**0**	**0**	**0**	**64**	**19**	**2**	**0**	**0**	**29**	**7**	**167**	0
7:45 AM		**0**	**5**	**0**	**63**	**0**	**0**	**0**	**0**	**0**	**69**	**10**	**1**	**0**	**0**	**19**	**12**	**179**	591
8:00 AM		**0**	**3**	**1**	**43**	**0**	**0**	**0**	**0**	**0**	**90**	**17**	**3**	**0**	**0**	**15**	**9**	**181**	652
8:15 AM		**0**	**4**	**1**	**34**	**0**	**0**	**0**	**0**	**0**	**66**	**17**	**1**	**0**	**1**	**18**	**12**	**154**	**681**
8:30 AM		0	6	0	32	0	0	0	0	0	52	21	0	0	0	20	9	140	654
8:45 AM		0	1	0	40	0	0	0	0	0	76	19	3	0	1	19	7	166	641
Count Total		0	31	2	313	0	0	0	0	1	523	124	11	0	2	152	73	1,232	0
Peak Hour	**All**	**0**	**17**	**2**	**181**	**0**	**0**	**0**	**0**	**0**	**289**	**63**	**7**	**0**	**1**	**81**	**40**	**681**	**0**
	HV	**0**	**0**	**0**	**13**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**1**	**1**	**17**	**0**
	HV%	**-**	**0%**	**0%**	**7%**	**-**	**-**	**-**	**-**	**-**	**0%**	**3%**	**0%**	**-**	**0%**	**1%**	**3%**	**2%**	**0**

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals EB	WB	NB	SB	Total	Bicycles EB	WB	NB	SB	Total	Pedestrians (Crossing Leg) East	West	North	South	Total
7:00 AM	2	0	2	1	*5*	0	0	1	2	*3*	0	0	0	0	*0*
7:15 AM	2	0	2	0	*4*	0	0	1	0	*1*	2	0	0	2	*4*
7:30 AM	**3**	**0**	**1**	**0**	***4***	**0**	**0**	**0**	**1**	***1***	**1**	**0**	**0**	**0**	*1*
7:45 AM	**3**	**0**	**1**	**2**	***6***	**0**	**0**	**0**	**0**	***0***	**1**	**1**	**0**	**0**	*2*
8:00 AM	**3**	**0**	**0**	**0**	***3***	**0**	**0**	**2**	**1**	***3***	**2**	**0**	**0**	**0**	*2*
8:15 AM	**4**	**0**	**0**	**0**	***4***	**0**	**0**	**0**	**0**	***0***	**1**	**2**	**0**	**0**	***3***
8:30 AM	6	0	1	0	*7*	0	0	0	0	*0*	1	1	0	0	*2*
8:45 AM	9	0	3	0	*12*	0	0	0	0	*0*	1	2	0	0	*3*
Count Total	32	0	10	3	*45*	0	0	4	4	*8*	9	6	0	2	*17*
Peak Hour	**13**	**0**	**2**	**2**	***17***	**0**	**0**	**2**	**2**	***4***	**5**	**3**	**0**	**0**	***8***

Deon Fouche: 415 - 757 - 7714 deon.fouche@idaxdata.com

Two-Hour Count Summaries - Heavy Vehicles

Interval Start	NB 101 Ramps				Mobray Way				Kern St				Kern St				15-min Total	Rolling One Hour
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM	0	0	0	2	0	0	0	0	0	2	0	0	0	0	0	1	5	0
7:15 AM	0	0	0	2	0	0	0	0	0	2	0	0	0	0	0	0	4	0
7:30 AM	**0**	**0**	**0**	**3**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**4**	0
7:45 AM	**0**	**0**	**0**	**3**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**1**	**1**	**6**	19
8:00 AM	**0**	**0**	**0**	**3**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**3**	17
8:15 AM	**0**	**0**	**0**	**4**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**4**	**17**
8:30 AM	0	0	0	6	0	0	0	0	0	1	0	0	0	0	0	0	7	20
8:45 AM	0	0	0	9	0	0	0	0	0	2	1	0	0	0	0	0	12	26
Count Total	0	0	0	32	0	0	0	0	0	7	3	0	0	0	1	2	45	0
Peak Hour	**0**	**0**	**0**	**13**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**1**	**1**	**17**	**0**

Two-Hour Count Summaries - Bikes

Interval Start	NB 101 Ramps			Mobray Way			Kern St			Kern St			15-min Total	Rolling One Hour
	Eastbound			Westbound			Northbound			Southbound				
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
7:00 AM	0	0	0	0	0	0	0	1	0	0	2	0	3	0
7:15 AM	0	0	0	0	0	0	0	1	0	0	0	0	1	0
7:30 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**1**	0
7:45 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	5
8:00 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**0**	**1**	**0**	**3**	5
8:15 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**4**
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	3
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	3
Count Total	0	0	0	0	0	0	0	4	0	0	4	0	8	0
Peak Hour	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**0**	**2**	**0**	**4**	**0**

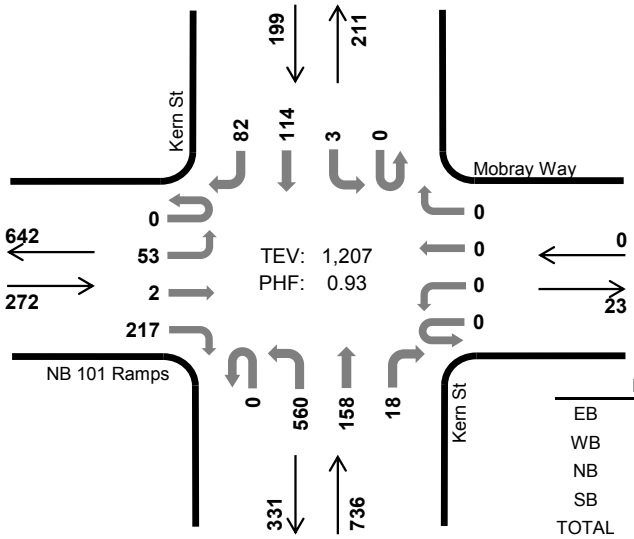
Note: U-Turn volumes for bikes are included in Left-Turn, if any.

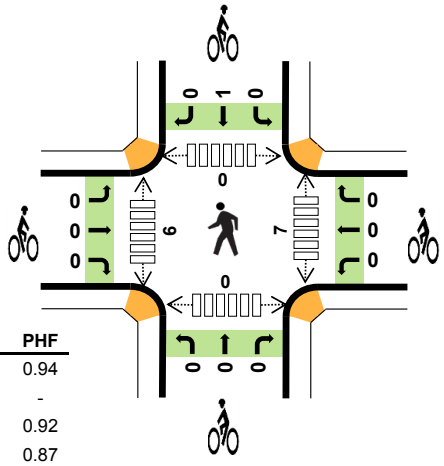
Deon Fouche: 415 - 757 - 7714 deon.fouche@idaxdata.com

Kern St
NB 101 Ramps

Date: 06/05/2017
Count Period: 4:00 PM to 6:00 PM
Peak Hour: 4:15 PM to 5:15 PM

Peak Hour





	HV %:	PHF
EB	5.5%	0.94
WB	-	-
NB	0.3%	0.92
SB	1.0%	0.87
TOTAL	1.6%	0.93

Two-Hour Count Summaries

Interval Start	NB 101 Ramps Eastbound				Mobray Way Westbound				Kern St Northbound				Kern St Southbound				15-min Total	Rolling One Hour
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM	0	6	0	46	0	0	0	0	0	121	36	6	0	1	18	17	251	0
4:15 PM	**0**	**9**	**0**	**63**	**0**	**0**	**0**	**0**	**0**	**137**	**47**	**4**	**0**	**1**	**27**	**21**	**309**	0
4:30 PM	**0**	**17**	**1**	**47**	**0**	**0**	**0**	**0**	**0**	**145**	**35**	**5**	**0**	**0**	**31**	**19**	**300**	0
4:45 PM	**0**	**13**	**0**	**57**	**0**	**0**	**0**	**0**	**0**	**126**	**30**	**6**	**0**	**0**	**27**	**16**	**275**	1,135
5:00 PM	**0**	**14**	**1**	**50**	**0**	**0**	**0**	**0**	**0**	**152**	**46**	**3**	**0**	**2**	**29**	**26**	**323**	**1,207**
5:15 PM	0	6	0	49	0	0	0	0	0	147	42	8	0	0	26	21	299	1,197
5:30 PM	0	8	1	62	0	0	0	0	0	130	35	4	0	1	27	18	286	1,183
5:45 PM	0	9	0	54	0	0	0	0	0	132	47	4	0	0	20	22	288	1,196
Count Total	0	82	3	428	0	0	0	0	0	1,090	318	40	0	5	205	160	2,331	0
Peak Hour All	**0**	**53**	**2**	**217**	**0**	**0**	**0**	**0**	**0**	**560**	**158**	**18**	**0**	**3**	**114**	**82**	**1,207**	**0**
Peak Hour HV	**0**	**1**	**0**	**14**	**0**	**0**	**0**	**0**	**0**	**1**	**1**	**0**	**0**	**0**	**1**	**1**	**19**	**0**
Peak Hour HV%	**-**	**2%**	**0%**	**6%**	**-**	**-**	**-**	**-**	**-**	**0%**	**1%**	**0%**	**-**	**0%**	**1%**	**1%**	**2%**	**0**

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals EB	WB	NB	SB	Total	Bicycles EB	WB	NB	SB	Total	Pedestrians (Crossing Leg) East	West	North	South	Total
4:00 PM	3	0	4	0	*7*	0	0	0	0	*0*	1	1	1	0	*3*
4:15 PM	**6**	**0**	**1**	**0**	***7***	**0**	**0**	**0**	**1**	***1***	**4**	**3**	**0**	**0**	*7*
4:30 PM	**1**	**0**	**1**	**0**	***2***	**0**	**0**	**0**	**0**	***0***	**3**	**1**	**0**	**0**	*4*
4:45 PM	**4**	**0**	**0**	**0**	***4***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	*0*
5:00 PM	**4**	**0**	**0**	**2**	***6***	**0**	**0**	**0**	**0**	***0***	**0**	**2**	**0**	**0**	***2***
5:15 PM	7	0	0	0	*7*	0	0	0	0	*0*	3	3	0	0	*6*
5:30 PM	4	0	0	0	*4*	0	0	0	0	*0*	2	0	0	0	*2*
5:45 PM	5	0	2	0	*7*	0	0	0	0	*0*	2	0	1	0	*3*
Count Total	34	0	8	2	*44*	0	0	0	1	*1*	15	10	2	0	*27*
Peak Hour	**15**	**0**	**2**	**2**	***19***	**0**	**0**	**0**	**1**	***1***	**7**	**6**	**0**	**0**	***13***

Deon Fouche: 415 - 757 - 7714 deon.fouche@idaxdata.com

Two-Hour Count Summaries - Heavy Vehicles

Interval Start	NB 101 Ramps				Mobray Way				Kern St				Kern St				15-min Total	Rolling One Hour
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM	0	0	0	3	0	0	0	0	0	3	1	0	0	0	0	0	7	0
4:15 PM	**0**	**0**	**0**	**6**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**7**	0
4:30 PM	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	0
4:45 PM	**0**	**1**	**0**	**3**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**4**	20
5:00 PM	**0**	**0**	**0**	**4**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**1**	**6**	**19**
5:15 PM	0	0	0	7	0	0	0	0	0	0	0	0	0	0	0	0	7	19
5:30 PM	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	4	21
5:45 PM	0	0	0	5	0	0	0	0	0	2	0	0	0	0	0	0	7	24
Count Total	0	1	0	33	0	0	0	0	0	6	2	0	0	0	1	1	44	0
Peak Hour	**0**	**1**	**0**	**14**	**0**	**0**	**0**	**0**	**0**	**1**	**1**	**0**	**0**	**0**	**1**	**1**	**19**	**0**

Two-Hour Count Summaries - Bikes

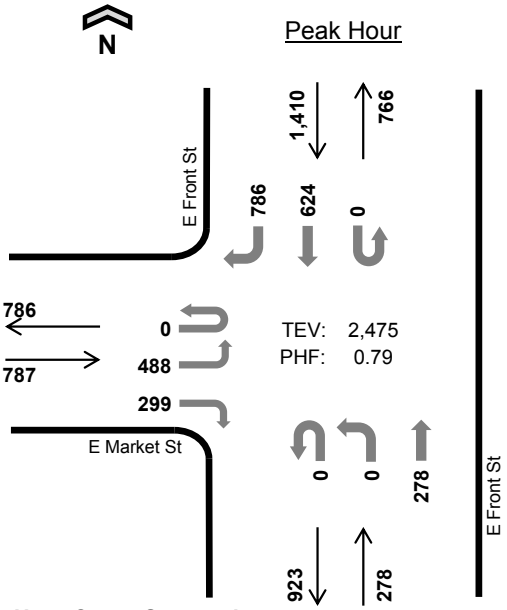
Interval Start	NB 101 Ramps			Mobray Way			Kern St			Kern St			15-min Total	Rolling One Hour
	Eastbound			Westbound			Northbound			Southbound				
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**1**	0
4:30 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
4:45 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	1
5:00 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Count Total	0	0	0	0	0	0	0	0	0	0	1	0	1	0
Peak Hour	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**1**	**0**

Note: U-Turn volumes for bikes are included in Left-Turn, if any.

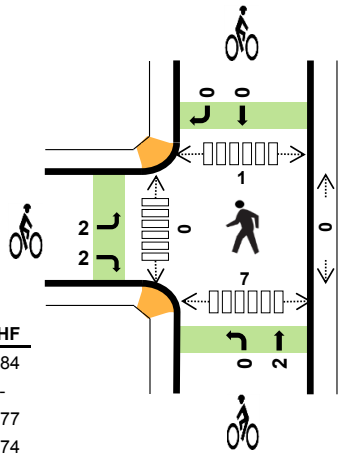
Deon Fouche: 415 - 757 - 7714 deon.fouche@idaxdata.com

E Front St
E Market St

Peak Hour



Date: 06/02/2017
Count Period: 7:00 AM to 9:00 AM
Peak Hour: 7:30 AM to 8:30 AM



	HV %:	PHF
EB	3.4%	0.84
WB	-	-
NB	0.7%	0.77
SB	2.1%	0.74
TOTAL	2.4%	0.79

Two-Hour Count Summaries

Interval Start		E Market St Eastbound				0 Westbound				E Front St Northbound				E Front St Southbound				15-min Total	Rolling One Hour
		UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM		0	81	0	40	0	0	0	0	0	0	32	0	0	0	71	123	347	0
7:15 AM		0	90	0	47	0	0	0	0	0	0	51	0	0	0	114	118	420	0
7:30 AM		**0**	**108**	**0**	**63**	**0**	**0**	**0**	**0**	**0**	**0**	**51**	**0**	**0**	**0**	**132**	**215**	**569**	0
7:45 AM		**0**	**139**	**0**	**96**	**0**	**0**	**0**	**0**	**0**	**0**	**69**	**0**	**0**	**0**	**215**	**262**	**781**	2,117
8:00 AM		**0**	**127**	**0**	**69**	**0**	**0**	**0**	**0**	**0**	**0**	**68**	**0**	**0**	**0**	**153**	**151**	**568**	2,338
8:15 AM		**0**	**114**	**0**	**71**	**0**	**0**	**0**	**0**	**0**	**0**	**90**	**0**	**0**	**0**	**124**	**158**	**557**	**2,475**
8:30 AM		0	93	0	57	0	0	0	0	0	0	70	0	0	0	113	131	464	2,370
8:45 AM		0	96	0	50	0	0	0	0	0	0	76	0	0	0	106	138	466	2,055
Count Total		0	848	0	493	0	0	0	0	0	0	507	0	0	0	1,028	1,296	4,172	0
Peak Hour	**All**	**0**	**488**	**0**	**299**	**0**	**0**	**0**	**0**	**0**	**0**	**278**	**0**	**0**	**0**	**624**	**786**	**2,475**	**0**
	HV	**0**	**24**	**0**	**3**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**5**	**25**	**59**	**0**
	HV%	**-**	**5%**	**-**	**1%**	**-**	**-**	**-**	**-**	**-**	**-**	**1%**	**-**	**-**	**-**	**1%**	**3%**	**2%**	**0**

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals EB	WB	NB	SB	Total	Bicycles EB	WB	NB	SB	Total	Pedestrians (Crossing Leg) East	West	North	South	Total
7:00 AM	10	0	3	5	*18*	0	0	0	0	*0*	0	0	0	5	*5*
7:15 AM	7	0	1	3	*11*	1	0	0	0	*1*	0	0	0	4	*4*
7:30 AM	**11**	**0**	**2**	**8**	***21***	**0**	**0**	**2**	**0**	***2***	**0**	**0**	**0**	**1**	*1*
7:45 AM	**3**	**0**	**0**	**9**	***12***	**2**	**0**	**0**	**0**	***2***	**0**	**0**	**1**	**3**	*4*
8:00 AM	**5**	**0**	**0**	**6**	***11***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**1**	*1*
8:15 AM	**8**	**0**	**0**	**7**	***15***	**2**	**0**	**0**	**0**	***2***	**0**	**0**	**0**	**2**	***2***
8:30 AM	13	0	3	9	*25*	2	0	0	0	*2*	0	1	0	3	*4*
8:45 AM	10	0	5	8	*23*	0	0	0	0	*0*	0	0	0	1	*1*
Count Total	67	0	14	55	*136*	7	0	2	0	*9*	0	1	1	20	*22*
Peak Hr	**27**	**0**	**2**	**30**	***59***	**4**	**0**	**2**	**0**	***6***	**0**	**0**	**1**	**7**	***8***

Deon Fouche: 415 - 757 - 7714 deon.fouche@idaxdata.com

Two-Hour Count Summaries - Heavy Vehicles

Interval Start	E Market St				0				E Front St				E Front St				15-min Total	Rolling One Hour
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM	0	6	0	4	0	0	0	0	0	0	3	0	0	0	0	5	18	0
7:15 AM	0	4	0	3	0	0	0	0	0	0	1	0	0	0	0	3	11	0
7:30 AM	**0**	**10**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**2**	**6**	**21**	0
7:45 AM	**0**	**3**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**7**	**12**	62
8:00 AM	**0**	**4**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**5**	**11**	55
8:15 AM	**0**	**7**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**7**	**15**	**59**
8:30 AM	0	7	0	6	0	0	0	0	0	0	3	0	0	0	1	8	25	63
8:45 AM	0	4	0	6	0	0	0	0	0	0	5	0	0	0	1	7	23	74
Count Total	0	45	0	22	0	0	0	0	0	0	14	0	0	0	7	48	136	0
Peak Hour	**0**	**24**	**0**	**3**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**5**	**25**	**59**	**0**

Two-Hour Count Summaries - Bikes

Interval Start	E Market St			0			E Front St			E Front St			15-min Total	Rolling One Hour
	Eastbound			Westbound			Northbound			Southbound				
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	1	0	0	0	0	0	0	0	0	0	1	0
7:30 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**2**	0
7:45 AM	**1**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	5
8:00 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	5
8:15 AM	**1**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**6**
8:30 AM	1	0	1	0	0	0	0	0	0	0	0	0	2	6
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	4
Count Total	3	0	4	0	0	0	0	2	0	0	0	0	9	0
Peak Hour	**2**	**0**	**2**	**0**	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**6**	**0**

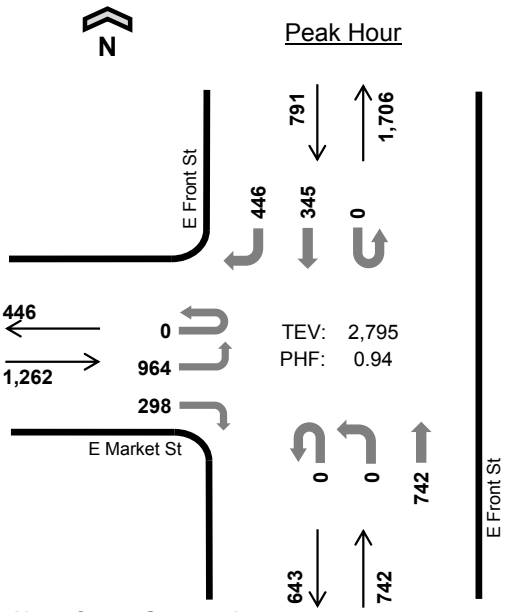
Note: U-Turn volumes for bikes are included in Left-Turn, if any.

Deon Fouche: 415 - 757 - 7714 deon.fouche@idaxdata.com

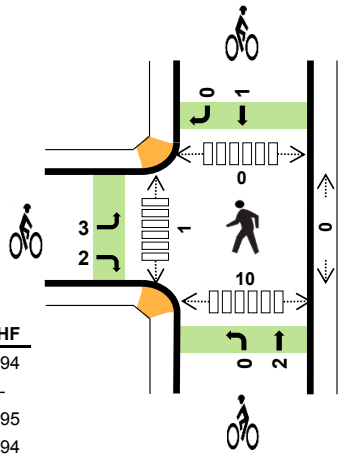
E Front St
E Market St

Peak Hour

Date: 06/05/2017
Count Period: 4:00 PM to 6:00 PM
Peak Hour: 4:45 PM to 5:45 PM



	HV %:	PHF
EB	2.9%	0.94
WB	-	-
NB	0.4%	0.95
SB	1.8%	0.94
TOTAL	1.9%	0.94



Two-Hour Count Summaries

Interval Start		E Market St Eastbound UT	LT	TH	RT	0 Westbound UT	LT	TH	RT	E Front St Northbound UT	LT	TH	RT	E Front St Southbound UT	LT	TH	RT	15-min Total	Rolling One Hour
4:00 PM		0	255	0	71	0	0	0	0	0	0	151	0	0	0	100	111	688	0
4:15 PM		0	238	0	71	0	0	0	0	0	0	154	0	0	0	119	136	718	0
4:30 PM		0	235	0	81	0	0	0	0	0	0	168	0	0	0	90	101	675	0
4:45 PM		**0**	**209**	**0**	**56**	**0**	**0**	**0**	**0**	**0**	**0**	**189**	**0**	**0**	**0**	**92**	**119**	**665**	2,746
5:00 PM		**0**	**258**	**0**	**70**	**0**	**0**	**0**	**0**	**0**	**0**	**180**	**0**	**0**	**0**	**87**	**108**	**703**	2,761
5:15 PM		**0**	**255**	**0**	**82**	**0**	**0**	**0**	**0**	**0**	**0**	**195**	**0**	**0**	**0**	**84**	**124**	**740**	2,783
5:30 PM		**0**	**242**	**0**	**90**	**0**	**0**	**0**	**0**	**0**	**0**	**178**	**0**	**0**	**0**	**82**	**95**	**687**	**2,795**
5:45 PM		0	173	0	61	0	0	0	0	0	0	106	0	0	0	78	116	534	2,664
Count Total		0	1,865	0	582	0	0	0	0	0	0	1,321	0	0	0	732	910	5,410	0
Peak Hour	**All**	**0**	**964**	**0**	**298**	**0**	**0**	**0**	**0**	**0**	**0**	**742**	**0**	**0**	**0**	**345**	**446**	**2,795**	**0**
	HV	**0**	**17**	**0**	**19**	**0**	**0**	**0**	**0**	**0**	**0**	**3**	**0**	**0**	**0**	**3**	**11**	**53**	**0**
	HV%	**-**	**2%**	**-**	**6%**	**-**	**-**	**-**	**-**	**-**	**-**	**0%**	**-**	**-**	**-**	**1%**	**2%**	**2%**	**0**

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals EB	WB	NB	SB	Total	Bicycles EB	WB	NB	SB	Total	Pedestrians (Crossing Leg) East	West	North	South	Total
4:00 PM	11	0	3	3	*17*	0	0	0	0	*0*	0	0	0	2	*2*
4:15 PM	9	0	1	9	*19*	1	0	0	0	*1*	0	3	0	3	*6*
4:30 PM	15	0	2	1	*18*	4	0	0	0	*4*	0	2	0	7	*9*
4:45 PM	**11**	**0**	**0**	**4**	***15***	**3**	**0**	**0**	**1**	***4***	**0**	**0**	**0**	**2**	*2*
5:00 PM	**11**	**0**	**1**	**1**	***13***	**0**	**0**	**1**	**0**	***1***	**0**	**0**	**0**	**1**	*1*
5:15 PM	**7**	**0**	**1**	**5**	***13***	**1**	**0**	**0**	**0**	***1***	**0**	**1**	**0**	**5**	*6*
5:30 PM	**7**	**0**	**1**	**4**	***12***	**1**	**0**	**1**	**0**	***2***	**0**	**0**	**0**	**2**	***2***
5:45 PM	9	0	0	7	*16*	0	0	0	1	*1*	0	2	0	0	*2*
Count Total	80	0	9	34	*123*	10	0	2	2	*14*	0	8	0	22	*30*
Peak Hr	**36**	**0**	**3**	**14**	***53***	**5**	**0**	**2**	**1**	***8***	**0**	**1**	**0**	**10**	***11***

Deon Fouche: 415 - 757 - 7714 deon.fouche@idaxdata.com

Two-Hour Count Summaries - Heavy Vehicles

Interval Start	E Market St				0				E Front St				E Front St				15-min Total	Rolling One Hour
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM	0	5	0	6	0	0	0	0	0	0	3	0	0	0	0	3	17	0
4:15 PM	0	8	0	1	0	0	0	0	0	0	1	0	0	0	2	7	19	0
4:30 PM	0	10	0	5	0	0	0	0	0	0	2	0	0	0	0	1	18	0
4:45 PM	**0**	**9**	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**2**	**15**	69
5:00 PM	**0**	**4**	**0**	**7**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**1**	**13**	65
5:15 PM	**0**	**2**	**0**	**5**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**5**	**13**	59
5:30 PM	**0**	**2**	**0**	**5**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**1**	**3**	**12**	**53**
5:45 PM	0	5	0	4	0	0	0	0	0	0	0	0	0	0	0	7	16	54
Count Total	0	45	0	35	0	0	0	0	0	0	9	0	0	0	5	29	123	0
Peak Hour	**0**	**17**	**0**	**19**	**0**	**0**	**0**	**0**	**0**	**0**	**3**	**0**	**0**	**0**	**3**	**11**	**53**	**0**

Two-Hour Count Summaries - Bikes

Interval Start	E Market St			0			E Front St			E Front St			15-min Total	Rolling One Hour
	Eastbound			Westbound			Northbound			Southbound				
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	1	0	0	0	0	0	0	0	0	0	0	0	1	0
4:30 PM	2	0	2	0	0	0	0	0	0	0	0	0	4	0
4:45 PM	**2**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**4**	9
5:00 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**1**	10
5:15 PM	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	10
5:30 PM	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**2**	**8**
5:45 PM	0	0	0	0	0	0	0	0	0	0	1	0	1	5
Count Total	6	0	4	0	0	0	0	2	0	0	2	0	14	0
Peak Hour	**3**	**0**	**2**	**0**	**0**	**0**	**0**	**2**	**0**	**0**	**1**	**0**	**8**	**0**

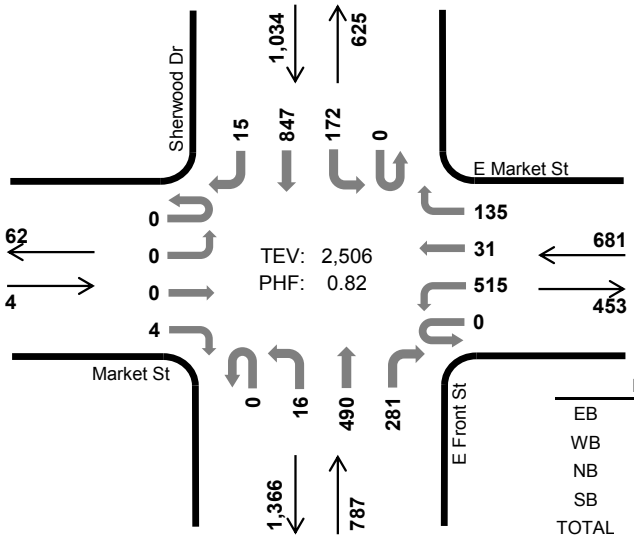
Note: U-Turn volumes for bikes are included in Left-Turn, if any.

Deon Fouche: 415 - 757 - 7714 deon.fouche@idaxdata.com

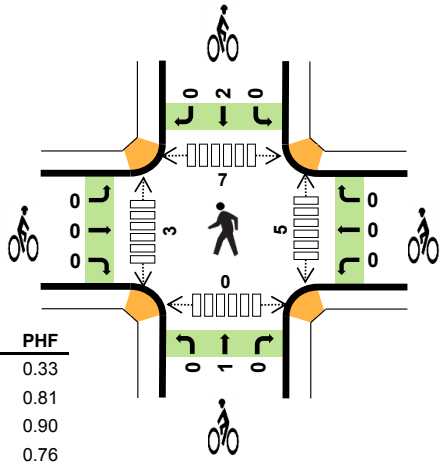
E Front St
Market St

Date: 06/02/2017
Count Period: 7:00 AM to 9:00 AM
Peak Hour: 7:30 AM to 8:30 AM

Peak Hour



	HV %:	PHF
EB	0.0%	0.33
WB	3.8%	0.81
NB	2.2%	0.90
SB	1.1%	0.76
TOTAL	2.2%	0.82



Two-Hour Count Summaries

Interval Start	Market St Eastbound				E Market St Westbound				E Front St Northbound				Sherwood Dr Southbound				15-min Total	Rolling One Hour
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM	0	0	0	4	0	73	6	16	0	4	59	42	0	34	111	3	352	0
7:15 AM	0	0	0	0	0	62	6	23	0	1	87	52	0	26	151	2	410	0
7:30 AM	**0**	**0**	**0**	**0**	**0**	**131**	**3**	**32**	**0**	**3**	**96**	**53**	**0**	**35**	**195**	**0**	**548**	0
7:45 AM	**0**	**0**	**0**	**1**	**0**	**159**	**4**	**47**	**0**	**4**	**134**	**80**	**0**	**55**	**281**	**3**	**768**	2,078
8:00 AM	**0**	**0**	**0**	**0**	**0**	**124**	**12**	**34**	**0**	**5**	**134**	**72**	**0**	**37**	**200**	**6**	**624**	2,350
8:15 AM	**0**	**0**	**0**	**3**	**0**	**101**	**12**	**22**	**0**	**4**	**126**	**76**	**0**	**45**	**171**	**6**	**566**	**2,506**
8:30 AM	0	0	0	2	0	90	3	39	0	5	109	57	0	34	150	5	494	2,452
8:45 AM	0	0	0	0	0	82	6	39	0	6	106	66	0	49	160	3	517	2,201
Count Total	0	0	0	10	0	822	52	252	0	32	851	498	0	315	1,419	28	4,279	0
Peak Hour All	**0**	**0**	**0**	**4**	**0**	**515**	**31**	**135**	**0**	**16**	**490**	**281**	**0**	**172**	**847**	**15**	**2,506**	**0**
Peak Hour HV	**0**	**0**	**0**	**0**	**0**	**23**	**1**	**2**	**0**	**0**	**3**	**14**	**0**	**5**	**6**	**0**	**54**	**0**
Peak Hour HV%	**-**	**-**	**-**	**0%**	**-**	**4%**	**3%**	**1%**	**-**	**0%**	**1%**	**5%**	**-**	**3%**	**1%**	**0%**	**2%**	**0**

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
7:00 AM	0	5	5	3	*13*	0	0	0	0	*0*	2	0	3	0	*5*
7:15 AM	0	7	5	1	*13*	0	0	0	0	*0*	1	0	0	0	*1*
7:30 AM	**0**	**7**	**9**	**4**	***20***	**0**	**0**	**0**	**0**	***0***	**1**	**2**	**2**	**0**	*5*
7:45 AM	**0**	**5**	**1**	**4**	***10***	**0**	**0**	**0**	**2**	***2***	**3**	**0**	**1**	**0**	*4*
8:00 AM	**0**	**7**	**3**	**2**	***12***	**0**	**0**	**1**	**0**	***1***	**0**	**0**	**1**	**0**	*1*
8:15 AM	**0**	**7**	**4**	**1**	***12***	**0**	**0**	**0**	**0**	***0***	**1**	**1**	**3**	**0**	***5***
8:30 AM	0	10	8	1	*19*	0	0	0	1	*1*	3	2	3	0	*8*
8:45 AM	0	9	10	3	*22*	0	0	0	1	*1*	1	1	2	0	*4*
Count Total	0	57	45	19	*121*	0	0	1	4	*5*	12	6	15	0	*33*
Peak Hour	**0**	**26**	**17**	**11**	***54***	**0**	**0**	**1**	**2**	***3***	**5**	**3**	**7**	**0**	***15***

Deon Fouche: 415 - 757 - 7714 deon.fouche@idaxdata.com

Two-Hour Count Summaries - Heavy Vehicles

Interval Start	Market St				E Market St				E Front St				Sherwood Dr				15-min Total	Rolling One Hour
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM	0	0	0	0	0	4	0	1	0	1	1	3	0	3	0	0	13	0
7:15 AM	0	0	0	0	0	4	0	3	0	0	2	3	0	1	0	0	13	0
7:30 AM	**0**	**0**	**0**	**0**	**0**	**6**	**1**	**0**	**0**	**0**	**3**	**6**	**0**	**1**	**3**	**0**	**20**	0
7:45 AM	**0**	**0**	**0**	**0**	**0**	**5**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**1**	**3**	**0**	**10**	56
8:00 AM	**0**	**0**	**0**	**0**	**0**	**6**	**0**	**1**	**0**	**0**	**0**	**3**	**0**	**2**	**0**	**0**	**12**	55
8:15 AM	**0**	**0**	**0**	**0**	**0**	**6**	**0**	**1**	**0**	**0**	**0**	**4**	**0**	**1**	**0**	**0**	**12**	**54**
8:30 AM	0	0	0	0	0	9	0	1	0	0	1	7	0	1	0	0	19	53
8:45 AM	0	0	0	0	0	7	0	2	0	0	7	3	0	2	1	0	22	65
Count Total	0	0	0	0	0	47	1	9	0	1	14	30	0	12	7	0	121	0
Peak Hour	**0**	**0**	**0**	**0**	**0**	**23**	**1**	**2**	**0**	**0**	**3**	**14**	**0**	**5**	**6**	**0**	**54**	**0**

Two-Hour Count Summaries - Bikes

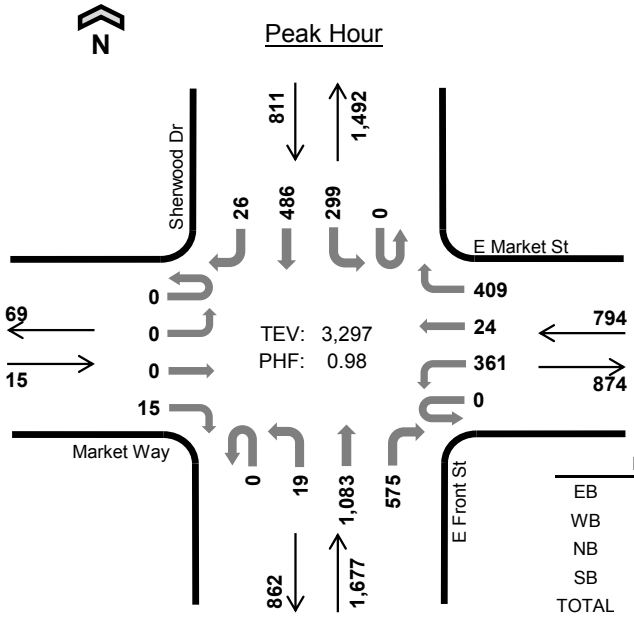
Interval Start	Market St			E Market St			E Front St			Sherwood Dr			15-min Total	Rolling One Hour
	Eastbound			Westbound			Northbound			Southbound				
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
7:45 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**2**	2
8:00 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**1**	3
8:15 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**3**
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	1	1	4
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	1	1	3
Count Total	0	0	0	0	0	0	0	1	0	0	2	2	5	0
Peak Hour	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**2**	**0**	**3**	**0**

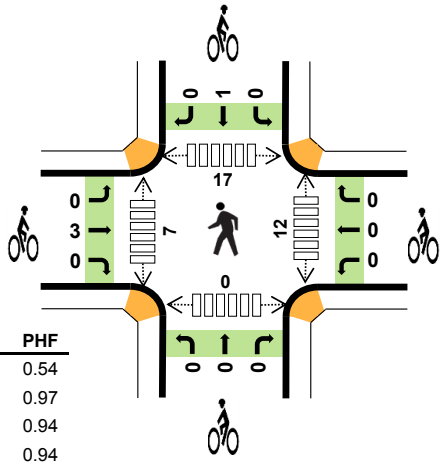
Note: U-Turn volumes for bikes are included in Left-Turn, if any.

Deon Fouche: 415 - 757 - 7714 deon.fouche@idaxdata.com

E Front St
Market Way

Date: 06/05/2017
Count Period: 4:00 PM to 6:00 PM
Peak Hour: 4:45 PM to 5:45 PM





	HV %:	PHF
EB	6.7%	0.54
WB	2.0%	0.97
NB	1.1%	0.94
SB	0.2%	0.94
TOTAL	1.2%	0.98

Two-Hour Count Summaries

Interval Start		Market Way Eastbound				E Market St Westbound				E Front St Northbound				Sherwood Dr Southbound				15-min Total	Rolling One Hour
		UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM		0	0	0	3	0	76	10	57	0	7	243	136	0	72	135	3	742	0
4:15 PM		0	0	0	7	0	105	4	85	0	5	235	154	0	84	149	7	835	0
4:30 PM		0	0	0	2	0	79	7	87	0	3	254	149	0	78	123	6	788	0
4:45 PM		**0**	**0**	**0**	**7**	**0**	**97**	**5**	**101**	**0**	**6**	**237**	**129**	**0**	**73**	**133**	**9**	**797**	3,162
5:00 PM		**0**	**0**	**0**	**1**	**0**	**92**	**8**	**94**	**0**	**6**	**297**	**129**	**0**	**83**	**114**	**7**	**831**	3,251
5:15 PM		**0**	**0**	**0**	**2**	**0**	**96**	**4**	**93**	**0**	**1**	**294**	**151**	**0**	**69**	**127**	**5**	**842**	3,258
5:30 PM		**0**	**0**	**0**	**5**	**0**	**76**	**7**	**121**	**0**	**6**	**255**	**166**	**0**	**74**	**112**	**5**	**827**	**3,297**
5:45 PM		0	0	0	3	0	95	8	72	0	2	221	98	0	62	113	3	677	3,177
Count Total		0	0	0	30	0	716	53	710	0	36	2,036	1,112	0	595	1,006	45	6,339	0
Peak Hour	**All**	**0**	**0**	**0**	**15**	**0**	**361**	**24**	**409**	**0**	**19**	**1,083**	**575**	**0**	**299**	**486**	**26**	**3,297**	**0**
	HV	**0**	**0**	**0**	**1**	**0**	**13**	**2**	**1**	**0**	**0**	**3**	**16**	**0**	**0**	**2**	**0**	**38**	**0**
	HV%	**-**	**-**	**-**	**7%**	**-**	**4%**	**8%**	**0%**	**-**	**0%**	**0%**	**3%**	**-**	**0%**	**0%**	**0%**	**1%**	**0**

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals EB	WB	NB	SB	Total	Bicycles EB	WB	NB	SB	Total	Pedestrians (Crossing Leg) East	West	North	South	Total
4:00 PM	0	5	6	0	*11*	0	0	0	2	*2*	0	1	1	0	*2*
4:15 PM	0	7	8	2	*17*	3	0	0	1	*4*	1	3	1	0	*5*
4:30 PM	0	3	14	1	*18*	0	0	0	1	*1*	3	0	4	0	*7*
4:45 PM	**0**	**3**	**5**	**1**	***9***	**1**	**0**	**0**	**1**	***2***	**1**	**3**	**5**	**0**	*9*
5:00 PM	**0**	**4**	**5**	**1**	***10***	**0**	**0**	**0**	**0**	***0***	**2**	**4**	**4**	**0**	*10*
5:15 PM	**0**	**5**	**5**	**0**	***10***	**2**	**0**	**0**	**0**	***2***	**3**	**0**	**8**	**0**	*11*
5:30 PM	**1**	**4**	**4**	**0**	***9***	**0**	**0**	**0**	**0**	***0***	**6**	**0**	**0**	**0**	***6***
5:45 PM	0	7	4	1	*12*	0	0	0	1	*1*	1	3	6	0	*10*
Count Total	1	38	51	6	*96*	6	0	0	6	*12*	17	14	29	0	*60*
Peak Hour	**1**	**16**	**19**	**2**	***38***	**3**	**0**	**0**	**1**	***4***	**12**	**7**	**17**	**0**	***36***

Deon Fouche: 415 - 757 - 7714 deon.fouche@idaxdata.com

Two-Hour Count Summaries - Heavy Vehicles

Interval Start	Market Way				E Market St				E Front St				Sherwood Dr				15-min Total	Rolling One Hour
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM	0	0	0	0	0	4	0	1	0	0	2	4	0	0	0	0	11	0
4:15 PM	0	0	0	0	0	6	0	1	0	0	1	7	0	2	0	0	17	0
4:30 PM	0	0	0	0	0	1	0	2	0	1	1	12	0	1	0	0	18	0
4:45 PM	**0**	**0**	**0**	**0**	**0**	**3**	**0**	**0**	**0**	**0**	**0**	**5**	**0**	**0**	**1**	**0**	**9**	55
5:00 PM	**0**	**0**	**0**	**0**	**0**	**2**	**1**	**1**	**0**	**0**	**0**	**5**	**0**	**0**	**1**	**0**	**10**	54
5:15 PM	**0**	**0**	**0**	**0**	**0**	**5**	**0**	**0**	**0**	**0**	**2**	**3**	**0**	**0**	**0**	**0**	**10**	47
5:30 PM	**0**	**0**	**0**	**1**	**0**	**3**	**1**	**0**	**0**	**0**	**1**	**3**	**0**	**0**	**0**	**0**	**9**	**38**
5:45 PM	0	0	0	0	0	6	0	1	0	0	0	4	0	1	0	0	12	41
Count Total	0	0	0	1	0	30	2	6	0	1	7	43	0	4	2	0	96	0
Peak Hour	**0**	**0**	**0**	**1**	**0**	**13**	**2**	**1**	**0**	**0**	**3**	**16**	**0**	**0**	**2**	**0**	**38**	**0**

Two-Hour Count Summaries - Bikes

Interval Start	Market Way			E Market St			E Front St			Sherwood Dr			15-min Total	Rolling One Hour
	Eastbound			Westbound			Northbound			Southbound				
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
4:00 PM	0	0	0	0	0	0	0	0	0	1	1	0	2	0
4:15 PM	0	3	0	0	0	0	0	0	0	0	1	0	4	0
4:30 PM	0	0	0	0	0	0	0	0	0	1	0	0	1	0
4:45 PM	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**2**	9
5:00 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	7
5:15 PM	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	5
5:30 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**4**
5:45 PM	0	0	0	0	0	0	0	0	0	0	1	0	1	3
Count Total	0	6	0	0	0	0	0	0	0	2	4	0	12	0
Peak Hour	**0**	**3**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**4**	**0**

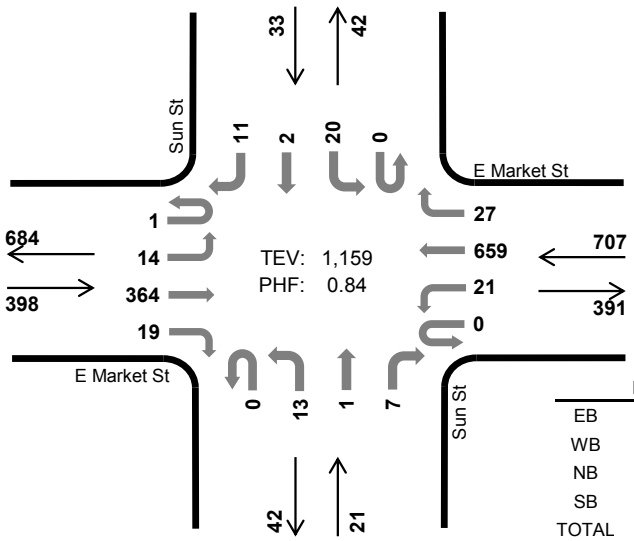
Note: U-Turn volumes for bikes are included in Left-Turn, if any.

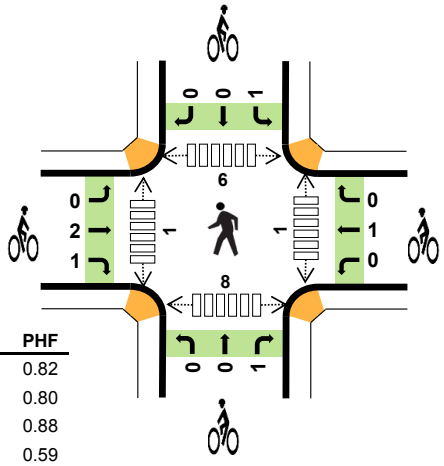
Deon Fouche: 415 - 757 - 7714 deon.fouche@idaxdata.com

Sun St
E Market St

Date: 06/02/2017
Count Period: 7:00 AM to 9:00 AM
Peak Hour: 7:30 AM to 8:30 AM

Peak Hour





	HV %:	PHF
EB	5.5%	0.82
WB	3.1%	0.80
NB	14.3%	0.88
SB	0.0%	0.59
TOTAL	4.1%	0.84

Two-Hour Count Summaries

Interval Start		E Market St Eastbound				E Market St Westbound				Sun St Northbound				Sun St Southbound				15-min Total	Rolling One Hour
		UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM		0	1	65	5	0	1	105	2	0	4	0	1	0	6	0	3	193	0
7:15 AM		0	0	66	2	0	1	84	10	0	4	0	2	0	2	0	0	171	0
7:30 AM		**1**	**1**	**70**	**4**	**0**	**4**	**168**	**5**	**0**	**2**	**0**	**2**	**0**	**3**	**0**	**1**	**261**	0
7:45 AM		**0**	**1**	**101**	**5**	**0**	**7**	**208**	**7**	**0**	**3**	**0**	**3**	**0**	**5**	**0**	**4**	**344**	969
8:00 AM		**0**	**6**	**81**	**6**	**0**	**6**	**151**	**6**	**0**	**4**	**0**	**2**	**0**	**4**	**1**	**1**	**268**	1,044
8:15 AM		**0**	**6**	**112**	**4**	**0**	**4**	**132**	**9**	**0**	**4**	**1**	**0**	**0**	**8**	**1**	**5**	**286**	**1,159**
8:30 AM		0	1	76	8	0	6	127	6	0	3	0	5	0	3	1	3	239	1,137
8:45 AM		0	2	91	6	0	7	110	5	0	4	2	6	0	4	0	3	240	1,033
Count Total		1	18	662	40	0	36	1,085	50	0	28	3	21	0	35	3	20	2,002	0
Peak Hour	**All**	**1**	**14**	**364**	**19**	**0**	**21**	**659**	**27**	**0**	**13**	**1**	**7**	**0**	**20**	**2**	**11**	**1,159**	**0**
	HV	**0**	**0**	**20**	**2**	**0**	**0**	**20**	**2**	**0**	**2**	**0**	**1**	**0**	**0**	**0**	**0**	**47**	**0**
	HV%	**0%**	**0%**	**5%**	**11%**	**-**	**0%**	**3%**	**7%**	**-**	**15%**	**0%**	**14%**	**-**	**0%**	**0%**	**0%**	**4%**	**0**

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
7:00 AM	3	2	4	0	*9*	0	1	0	0	*1*	0	0	5	0	*5*
7:15 AM	6	5	1	0	*12*	0	1	1	1	*3*	0	0	1	1	*2*
7:30 AM	**5**	**5**	**0**	**0**	***10***	**0**	**0**	**0**	**0**	***0***	**1**	**0**	**1**	**3**	*5*
7:45 AM	**5**	**4**	**0**	**0**	***9***	**1**	**1**	**1**	**0**	***3***	**0**	**0**	**1**	**1**	*2*
8:00 AM	**6**	**6**	**2**	**0**	***14***	**0**	**0**	**0**	**0**	***0***	**0**	**1**	**2**	**1**	*4*
8:15 AM	**6**	**7**	**1**	**0**	***14***	**2**	**0**	**0**	**1**	***3***	**0**	**0**	**2**	**3**	***5***
8:30 AM	6	7	1	0	*14*	1	1	0	0	*2*	0	0	4	2	*6*
8:45 AM	5	8	2	0	*15*	5	2	1	0	*8*	0	0	3	0	*3*
Count Total	42	44	11	0	*97*	9	6	3	2	*20*	1	1	19	11	*32*
Peak Hour	**22**	**22**	**3**	**0**	***47***	**3**	**1**	**1**	**1**	***6***	**1**	**1**	**6**	**8**	***16***

Deon Fouche: 415 - 757 - 7714 deon.fouche@idaxdata.com

Two-Hour Count Summaries - Heavy Vehicles

Interval Start	E Market St				E Market St				Sun St				Sun St				15-min Total	Rolling One Hour
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM	0	0	3	0	0	0	2	0	0	3	0	1	0	0	0	0	9	0
7:15 AM	0	0	6	0	0	0	4	1	0	1	0	0	0	0	0	0	12	0
7:30 AM	**0**	**0**	**5**	**0**	**0**	**0**	**4**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**10**	0
7:45 AM	**0**	**0**	**4**	**1**	**0**	**0**	**3**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**9**	40
8:00 AM	**0**	**0**	**5**	**1**	**0**	**0**	**6**	**0**	**0**	**1**	**0**	**1**	**0**	**0**	**0**	**0**	**14**	45
8:15 AM	**0**	**0**	**6**	**0**	**0**	**0**	**7**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**14**	**47**
8:30 AM	0	0	5	1	0	0	7	0	0	1	0	0	0	0	0	0	14	51
8:45 AM	0	0	5	0	0	0	8	0	0	1	0	1	0	0	0	0	15	57
Count Total	0	0	39	3	0	0	41	3	0	8	0	3	0	0	0	0	97	0
Peak Hour	**0**	**0**	**20**	**2**	**0**	**0**	**20**	**2**	**0**	**2**	**0**	**1**	**0**	**0**	**0**	**0**	**47**	**0**

Two-Hour Count Summaries - Bikes

Interval Start	E Market St			E Market St			Sun St			Sun St			15-min Total	Rolling One Hour
	Eastbound			Westbound			Northbound			Southbound				
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
7:00 AM	0	0	0	0	0	1	0	0	0	0	0	0	1	0
7:15 AM	0	0	0	0	1	0	1	0	0	0	0	1	3	0
7:30 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
7:45 AM	**0**	**0**	**1**	**0**	**1**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**3**	7
8:00 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	6
8:15 AM	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**3**	**6**
8:30 AM	0	1	0	0	1	0	0	0	0	0	0	0	2	8
8:45 AM	0	5	0	0	2	0	0	1	0	0	0	0	8	13
Count Total	0	8	1	0	5	1	1	1	1	1	0	1	20	0
Peak Hour	**0**	**2**	**1**	**0**	**1**	**0**	**0**	**0**	**1**	**1**	**0**	**0**	**6**	**0**

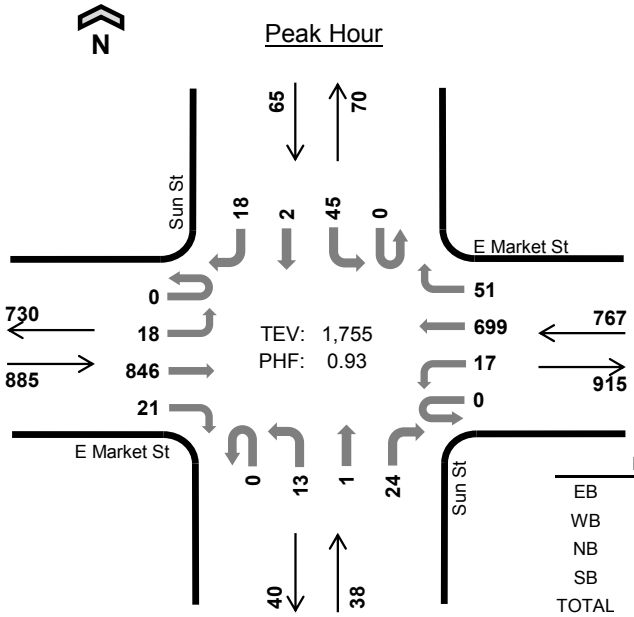
Note: U-Turn volumes for bikes are included in Left-Turn, if any.

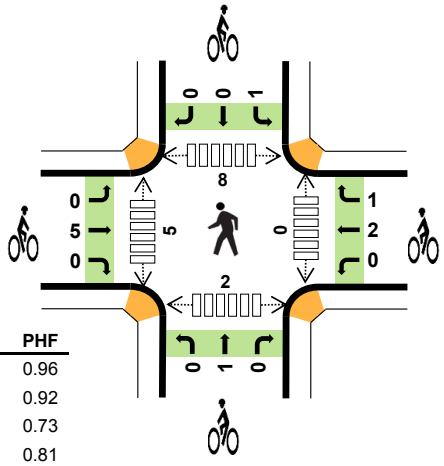
Deon Fouche: 415 - 757 - 7714 deon.fouche@idaxdata.com

Sun St
E Market St

Date: 06/02/2017
Count Period: 4:00 PM to 6:00 PM
Peak Hour: 4:15 PM to 5:15 PM

Peak Hour





	HV %:	PHF
EB	2.6%	0.96
WB	2.1%	0.92
NB	0.0%	0.73
SB	0.0%	0.81
TOTAL	2.2%	0.93

Two-Hour Count Summaries

Interval Start		E Market St Eastbound				E Market St Westbound				Sun St Northbound				Sun St Southbound				15-min Total	Rolling One Hour
		UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM		0	5	189	9	0	7	143	13	0	3	0	5	0	9	1	2	386	0
4:15 PM		**0**	**3**	**197**	**8**	**0**	**3**	**173**	**15**	**0**	**6**	**1**	**6**	**0**	**10**	**0**	**4**	**426**	0
4:30 PM		**0**	**3**	**214**	**6**	**0**	**4**	**175**	**13**	**0**	**1**	**0**	**4**	**0**	**10**	**2**	**1**	**433**	0
4:45 PM		**0**	**4**	**215**	**4**	**0**	**8**	**156**	**11**	**0**	**2**	**0**	**6**	**0**	**16**	**0**	**4**	**426**	1,671
5:00 PM		**0**	**8**	**220**	**3**	**0**	**2**	**195**	**12**	**0**	**4**	**0**	**8**	**0**	**9**	**0**	**9**	**470**	**1,755**
5:15 PM		0	5	180	1	0	3	177	13	0	0	0	1	0	19	0	2	401	1,730
5:30 PM		0	1	210	2	0	3	161	15	0	0	0	3	0	8	2	3	408	1,705
5:45 PM		0	0	238	1	0	1	169	16	0	1	1	2	0	9	0	4	442	1,721
Count Total		0	29	1,663	34	0	31	1,349	108	0	17	2	35	0	90	5	29	3,392	0
Peak Hour	**All**	**0**	**18**	**846**	**21**	**0**	**17**	**699**	**51**	**0**	**13**	**1**	**24**	**0**	**45**	**2**	**18**	**1,755**	**0**
	HV	**0**	**1**	**22**	**0**	**0**	**0**	**16**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**39**	**0**
	HV%	**-**	**6%**	**3%**	**0%**	**-**	**0%**	**2%**	**0%**	**-**	**0%**	**0%**	**0%**	**-**	**0%**	**0%**	**0%**	**2%**	**0**

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
4:00 PM	2	8	0	0	*10*	1	3	0	0	*4*	0	0	4	2	*6*
4:15 PM	**6**	**2**	**0**	**0**	***8***	**1**	**1**	**0**	**0**	***2***	**0**	**0**	**3**	**0**	*3*
4:30 PM	**6**	**9**	**0**	**0**	***15***	**2**	**1**	**1**	**0**	***4***	**0**	**4**	**1**	**0**	*5*
4:45 PM	**5**	**2**	**0**	**0**	***7***	**0**	**0**	**0**	**1**	***1***	**0**	**1**	**2**	**1**	*4*
5:00 PM	**6**	**3**	**0**	**0**	***9***	**2**	**1**	**0**	**0**	***3***	**0**	**0**	**2**	**1**	***3***
5:15 PM	9	2	0	0	*11*	1	1	0	3	*5*	0	2	2	0	*4*
5:30 PM	3	3	0	0	*6*	1	0	0	1	*2*	0	1	2	1	*4*
5:45 PM	5	3	0	0	*8*	2	1	0	0	*3*	0	1	2	0	*3*
Count Total	42	32	0	0	*74*	10	8	1	5	*24*	0	9	18	5	*32*
Peak Hour	**23**	**16**	**0**	**0**	***39***	**5**	**3**	**1**	**1**	***10***	**0**	**5**	**8**	**2**	***15***

Deon Fouche: 415 - 757 - 7714 deon.fouche@idaxdata.com

Two-Hour Count Summaries - Heavy Vehicles

Interval Start	E Market St Eastbound				E Market St Westbound				Sun St Northbound				Sun St Southbound				15-min Total	Rolling One Hour
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM	0	0	2	0	0	0	8	0	0	0	0	0	0	0	0	0	10	0
4:15 PM	**0**	**0**	**6**	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**8**	0
4:30 PM	**0**	**0**	**6**	**0**	**0**	**0**	**9**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**15**	0
4:45 PM	**0**	**1**	**4**	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**7**	40
5:00 PM	**0**	**0**	**6**	**0**	**0**	**0**	**3**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**9**	**39**
5:15 PM	0	0	9	0	0	0	2	0	0	0	0	0	0	0	0	0	11	42
5:30 PM	0	0	3	0	0	0	3	0	0	0	0	0	0	0	0	0	6	33
5:45 PM	0	0	5	0	0	0	3	0	0	0	0	0	0	0	0	0	8	34
Count Total	0	1	41	0	0	0	32	0	0	0	0	0	0	0	0	0	74	0
Peak Hour	**0**	**1**	**22**	**0**	**0**	**0**	**16**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**39**	**0**

Two-Hour Count Summaries - Bikes

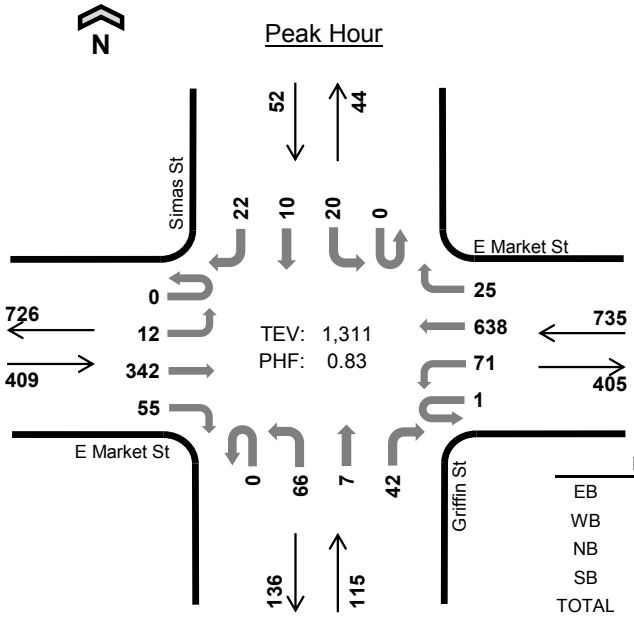
Interval Start	E Market St Eastbound			E Market St Westbound			Sun St Northbound			Sun St Southbound			15-min Total	Rolling One Hour
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
4:00 PM	0	1	0	0	2	1	0	0	0	0	0	0	4	0
4:15 PM	**0**	**1**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	0
4:30 PM	**0**	**2**	**0**	**0**	**0**	**1**	**0**	**1**	**0**	**0**	**0**	**0**	**4**	0
4:45 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**1**	11
5:00 PM	**0**	**2**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**3**	**10**
5:15 PM	0	1	0	0	1	0	0	0	0	1	0	2	5	13
5:30 PM	0	1	0	0	0	0	0	0	0	0	0	1	2	11
5:45 PM	0	1	1	0	1	0	0	0	0	0	0	0	3	13
Count Total	0	9	1	0	6	2	0	1	0	2	0	3	24	0
Peak Hour	**0**	**5**	**0**	**0**	**2**	**1**	**0**	**1**	**0**	**1**	**0**	**0**	**10**	**0**

Note: U-Turn volumes for bikes are included in Left-Turn, if any.

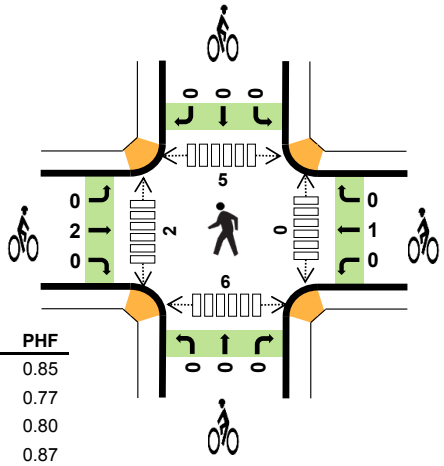
Deon Fouche: 415 - 757 - 7714 deon.fouche@idaxdata.com

Griffin St
E Market St

Peak Hour



Date: 06/02/2017
Count Period: 7:00 AM to 9:00 AM
Peak Hour: 7:30 AM to 8:30 AM



	HV %:	PHF
EB	5.6%	0.85
WB	4.1%	0.77
NB	7.0%	0.80
SB	3.8%	0.87
TOTAL	4.8%	0.83

Two-Hour Count Summaries

Interval Start		E Market St Eastbound				E Market St Westbound				Griffin St Northbound				Simas St Southbound				15-min Total	Rolling One Hour
		UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM		0	3	57	9	0	4	98	3	0	9	0	8	0	5	1	3	200	0
7:15 AM		0	4	60	11	0	12	86	7	0	12	0	5	0	5	2	3	207	0
7:30 AM		**0**	**1**	**75**	**6**	**1**	**12**	**161**	**5**	**0**	**21**	**1**	**9**	**0**	**5**	**3**	**6**	**306**	0
7:45 AM		**0**	**2**	**90**	**23**	**0**	**23**	**208**	**9**	**0**	**13**	**0**	**11**	**0**	**6**	**3**	**6**	**394**	1,107
8:00 AM		**0**	**3**	**77**	**11**	**0**	**27**	**139**	**2**	**0**	**13**	**3**	**8**	**0**	**4**	**2**	**5**	**294**	1,201
8:15 AM		**0**	**6**	**100**	**15**	**0**	**9**	**130**	**9**	**0**	**19**	**3**	**14**	**0**	**5**	**2**	**5**	**317**	**1,311**
8:30 AM		0	1	66	9	0	18	116	6	0	20	0	11	0	10	5	9	271	1,276
8:45 AM		0	10	73	17	0	23	106	6	0	14	1	20	0	9	4	11	294	1,176
Count Total		0	30	598	101	1	128	1,044	47	0	121	8	86	0	49	22	48	2,283	0
Peak Hour	**All**	**0**	**12**	**342**	**55**	**1**	**71**	**638**	**25**	**0**	**66**	**7**	**42**	**0**	**20**	**10**	**22**	**1,311**	**0**
	HV	**0**	**1**	**20**	**2**	**0**	**6**	**24**	**0**	**0**	**3**	**0**	**5**	**0**	**1**	**0**	**1**	**63**	**0**
	HV%	**-**	**8%**	**6%**	**4%**	**0%**	**8%**	**4%**	**0%**	**-**	**5%**	**0%**	**12%**	**-**	**5%**	**0%**	**5%**	**5%**	**0**

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals EB	WB	NB	SB	Total	Bicycles EB	WB	NB	SB	Total	Pedestrians (Crossing Leg) East	West	North	South	Total
7:00 AM	10	4	1	0	*15*	0	1	0	0	*1*	0	0	7	1	*8*
7:15 AM	5	4	2	1	*12*	0	2	0	0	*2*	0	0	1	0	*1*
7:30 AM	**6**	**3**	**4**	**1**	***14***	**0**	**0**	**0**	**0**	***0***	**0**	**1**	**1**	**1**	*3*
7:45 AM	**4**	**6**	**3**	**0**	***13***	**0**	**1**	**0**	**0**	***1***	**0**	**1**	**2**	**1**	*4*
8:00 AM	**7**	**11**	**0**	**1**	***19***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**1**	**1**	*2*
8:15 AM	**6**	**10**	**1**	**0**	***17***	**2**	**0**	**0**	**0**	***2***	**0**	**0**	**1**	**3**	*4*
8:30 AM	6	9	2	0	*17*	0	1	0	0	*1*	0	0	4	2	*6*
8:45 AM	6	11	4	2	*23*	4	2	0	0	*6*	0	1	2	1	*4*
Count Total	50	58	17	5	*130*	6	7	0	0	*13*	0	3	19	10	*32*
Peak Hour	**23**	**30**	**8**	**2**	***63***	**2**	**1**	**0**	**0**	***3***	**0**	**2**	**5**	**6**	***13***

Deon Fouche: 415 - 757 - 7714 deon.fouche@idaxdata.com

Two-Hour Count Summaries - Heavy Vehicles

Interval Start	E Market St Eastbound				E Market St Westbound				Griffin St Northbound				Simas St Southbound				15-min Total	Rolling One Hour
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM	0	0	10	0	0	1	2	1	0	0	0	1	0	0	0	0	15	0
7:15 AM	0	0	5	0	0	0	4	0	0	1	0	1	0	0	1	0	12	0
7:30 AM	**0**	**0**	**6**	**0**	**0**	**0**	**3**	**0**	**0**	**2**	**0**	**2**	**0**	**1**	**0**	**0**	**14**	0
7:45 AM	**0**	**0**	**4**	**0**	**0**	**1**	**5**	**0**	**0**	**1**	**0**	**2**	**0**	**0**	**0**	**0**	**13**	54
8:00 AM	**0**	**1**	**5**	**1**	**0**	**3**	**8**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**19**	58
8:15 AM	**0**	**0**	**5**	**1**	**0**	**2**	**8**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**17**	**63**
8:30 AM	0	0	5	1	0	2	6	1	0	1	0	1	0	0	0	0	17	66
8:45 AM	0	1	5	0	0	2	9	0	0	1	0	3	0	1	0	1	23	76
Count Total	0	2	45	3	0	11	45	2	0	6	0	11	0	2	1	2	130	0
Peak Hour	**0**	**1**	**20**	**2**	**0**	**6**	**24**	**0**	**0**	**3**	**0**	**5**	**0**	**1**	**0**	**1**	**63**	**0**

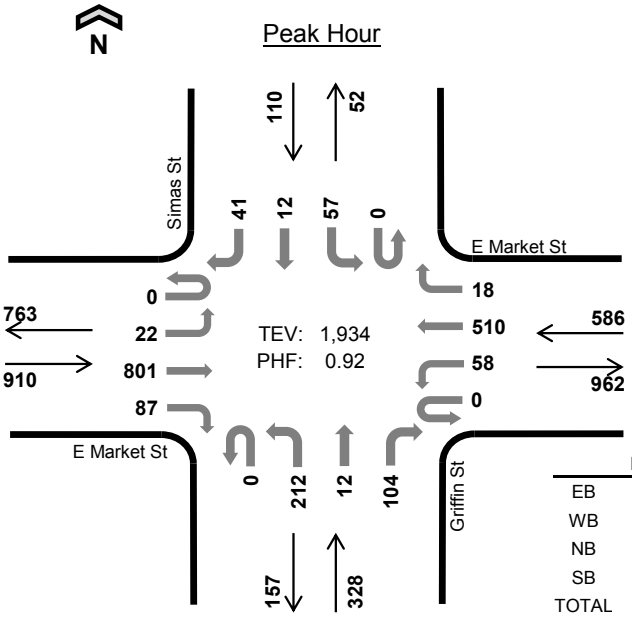
Two-Hour Count Summaries - Bikes

Interval Start	E Market St Eastbound			E Market St Westbound			Griffin St Northbound			Simas St Southbound			15-min Total	Rolling One Hour
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
7:00 AM	0	0	0	0	0	1	0	0	0	0	0	0	1	0
7:15 AM	0	0	0	1	1	0	0	0	0	0	0	0	2	0
7:30 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
7:45 AM	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	4
8:00 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	3
8:15 AM	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**3**
8:30 AM	0	0	0	0	1	0	0	0	0	0	0	0	1	4
8:45 AM	0	3	1	0	2	0	0	0	0	0	0	0	6	9
Count Total	0	5	1	1	5	1	0	0	0	0	0	0	13	0
Peak Hour	**0**	**2**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**3**	**0**

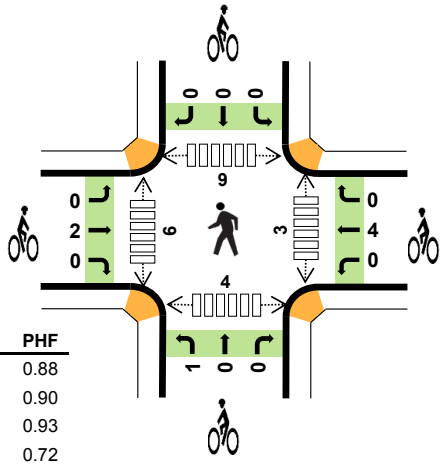
Note: U-Turn volumes for bikes are included in Left-Turn, if any.

Deon Fouche: 415 - 757 - 7714 deon.fouche@idaxdata.com

Griffin St
E Market St



Date: 06/05/2017
Count Period: 4:00 PM to 6:00 PM
Peak Hour: 4:45 PM to 5:45 PM



	HV %:	PHF
EB	2.1%	0.88
WB	3.4%	0.90
NB	0.0%	0.93
SB	1.8%	0.72
TOTAL	2.1%	0.92

Two-Hour Count Summaries

Interval Start		E Market St Eastbound				E Market St Westbound				Griffin St Northbound				Simas St Southbound				15-min Total	Rolling One Hour
		UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM		0	5	169	32	0	20	113	5	0	50	3	23	0	12	3	7	442	0
4:15 PM		0	6	183	25	0	21	139	8	0	52	0	29	0	12	7	8	490	0
4:30 PM		0	5	221	16	0	14	123	6	0	44	1	29	0	13	5	5	482	0
4:45 PM		**0**	**4**	**186**	**19**	**0**	**11**	**118**	**3**	**0**	**54**	**0**	**33**	**0**	**12**	**3**	**10**	**453**	1,867
5:00 PM		**0**	**3**	**188**	**25**	**0**	**16**	**119**	**5**	**0**	**46**	**6**	**36**	**0**	**21**	**2**	**7**	**474**	1,899
5:15 PM		**0**	**6**	**200**	**20**	**0**	**12**	**146**	**5**	**0**	**55**	**1**	**22**	**0**	**6**	**1**	**10**	**484**	1,893
5:30 PM		**0**	**9**	**227**	**23**	**0**	**19**	**127**	**5**	**0**	**57**	**5**	**13**	**0**	**18**	**6**	**14**	**523**	**1,934**
5:45 PM		0	4	159	17	0	22	138	5	1	33	2	16	0	16	1	3	417	1,898
Count Total		0	42	1,533	177	0	135	1,023	42	1	391	18	201	0	110	28	64	3,765	0
Peak Hour	**All**	**0**	**22**	**801**	**87**	**0**	**58**	**510**	**18**	**0**	**212**	**12**	**104**	**0**	**57**	**12**	**41**	**1,934**	**0**
	HV	**0**	**1**	**18**	**0**	**0**	**1**	**19**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**0**	**41**	**0**
	HV%	**-**	**5%**	**2%**	**0%**	**-**	**2%**	**4%**	**0%**	**-**	**0%**	**0%**	**0%**	**-**	**4%**	**0%**	**0%**	**2%**	**0**

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
4:00 PM	6	3	0	1	*10*	0	0	0	0	*0*	0	1	1	1	*3*
4:15 PM	8	8	0	0	*16*	1	1	0	0	*2*	0	3	4	1	*8*
4:30 PM	11	2	1	1	*15*	1	1	0	1	*3*	0	1	1	2	*4*
4:45 PM	**8**	**4**	**0**	**1**	***13***	**1**	**2**	**0**	**0**	***3***	**0**	**1**	**0**	**0**	*1*
5:00 PM	**6**	**6**	**0**	**1**	***13***	**0**	**0**	**1**	**0**	***1***	**1**	**3**	**4**	**0**	*8*
5:15 PM	**2**	**6**	**0**	**0**	***8***	**0**	**0**	**0**	**0**	***0***	**0**	**2**	**0**	**2**	*4*
5:30 PM	**3**	**4**	**0**	**0**	***7***	**1**	**2**	**0**	**0**	***3***	**2**	**0**	**5**	**2**	***9***
5:45 PM	6	8	0	0	*14*	0	0	0	0	*0*	0	3	2	0	*5*
Count Total	50	41	1	4	*96*	4	6	1	1	*12*	3	14	17	8	*42*
Peak Hour	**19**	**20**	**0**	**2**	***41***	**2**	**4**	**1**	**0**	***7***	**3**	**6**	**9**	**4**	***22***

Deon Fouche: 415 - 757 - 7714 deon.fouche@idaxdata.com

Two-Hour Count Summaries - Heavy Vehicles

Interval Start	E Market St				E Market St				Griffin St				Simas St				15-min Total	Rolling One Hour
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM	0	0	5	1	0	0	3	0	0	0	0	0	0	0	0	1	10	0
4:15 PM	0	0	7	1	0	1	7	0	0	0	0	0	0	0	0	0	16	0
4:30 PM	0	0	11	0	0	1	1	0	0	0	0	1	0	0	0	1	15	0
4:45 PM	**0**	**1**	**7**	**0**	**0**	**1**	**3**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**13**	54
5:00 PM	**0**	**0**	**6**	**0**	**0**	**0**	**6**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**13**	57
5:15 PM	**0**	**0**	**2**	**0**	**0**	**0**	**6**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**8**	49
5:30 PM	**0**	**0**	**3**	**0**	**0**	**0**	**4**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**7**	**41**
5:45 PM	0	0	6	0	0	0	8	0	0	0	0	0	0	0	0	0	14	42
Count Total	0	1	47	2	0	3	38	0	0	0	0	1	0	2	0	2	96	0
Peak Hour	**0**	**1**	**18**	**0**	**0**	**1**	**19**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**0**	**41**	**0**

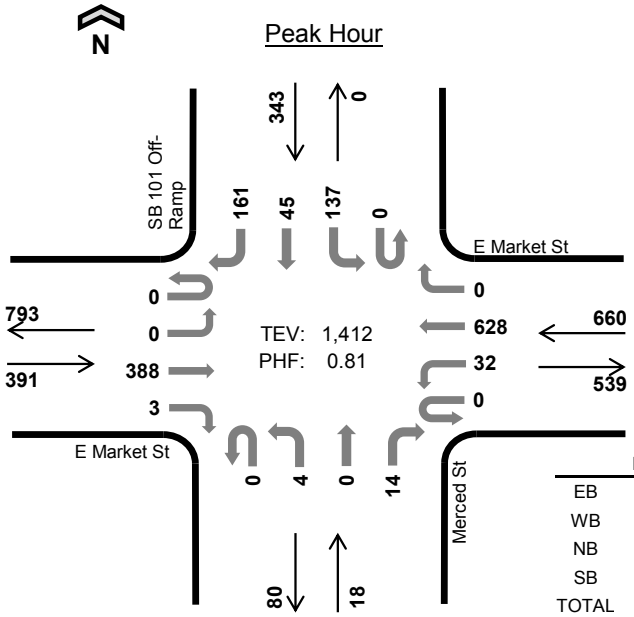
Two-Hour Count Summaries - Bikes

Interval Start	E Market St			E Market St			Griffin St			Simas St			15-min Total	Rolling One Hour
	Eastbound			Westbound			Northbound			Southbound				
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	1	0	0	1	0	0	0	0	0	0	0	2	0
4:30 PM	0	1	0	0	1	0	0	0	0	0	1	0	3	0
4:45 PM	**0**	**1**	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**3**	8
5:00 PM	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**1**	9
5:15 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	7
5:30 PM	**0**	**1**	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**3**	**7**
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	4
Count Total	0	4	0	0	6	0	1	0	0	0	1	0	12	0
Peak Hour	**0**	**2**	**0**	**0**	**4**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**7**	**0**

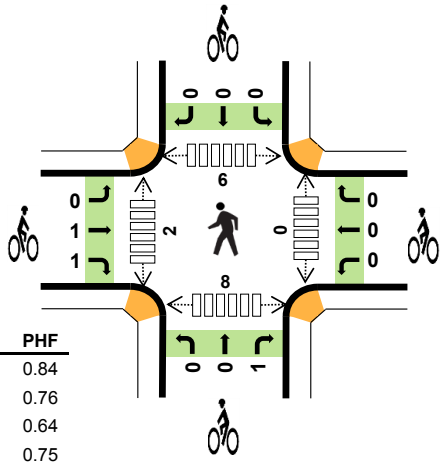
Note: U-Turn volumes for bikes are included in Left-Turn, if any.

Deon Fouche: 415 - 757 - 7714 deon.fouche@idaxdata.com

Merced St
E Market St



Date: 06/02/2017
Count Period: 7:00 AM to 9:00 AM
Peak Hour: 7:30 AM to 8:30 AM



	HV %:	PHF
EB	6.4%	0.84
WB	3.9%	0.76
NB	0.0%	0.64
SB	1.2%	0.75
TOTAL	3.9%	0.81

Two-Hour Count Summaries

Interval Start		E Market St Eastbound				E Market St Westbound				Merced St Northbound				SB 101 Off-Ramp Southbound				15-min Total	Rolling One Hour
		UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM		0	0	70	1	0	2	95	0	0	0	0	2	0	23	9	19	221	0
7:15 AM		0	0	60	0	0	4	87	0	0	1	0	2	0	20	5	22	201	0
7:30 AM		**0**	**0**	**90**	**0**	**0**	**5**	**156**	**0**	**0**	**2**	**0**	**3**	**0**	**18**	**12**	**27**	**313**	0
7:45 AM		**0**	**0**	**99**	**0**	**0**	**15**	**203**	**0**	**0**	**2**	**0**	**2**	**0**	**40**	**14**	**60**	**435**	1,170
8:00 AM		**0**	**0**	**84**	**2**	**0**	**4**	**152**	**0**	**0**	**0**	**0**	**2**	**0**	**44**	**11**	**45**	**344**	1,293
8:15 AM		**0**	**0**	**115**	**1**	**0**	**8**	**117**	**0**	**0**	**0**	**0**	**7**	**0**	**35**	**8**	**29**	**320**	**1,412**
8:30 AM		0	0	88	2	0	5	126	0	0	0	0	6	0	37	3	27	294	1,393
8:45 AM		0	0	111	0	0	4	121	0	0	2	0	2	0	31	6	24	301	1,259
Count Total		0	0	717	6	0	47	1,057	0	0	7	0	26	0	248	68	253	2,429	0
Peak Hour	**All**	**0**	**0**	**388**	**3**	**0**	**32**	**628**	**0**	**0**	**4**	**0**	**14**	**0**	**137**	**45**	**161**	**1,412**	**0**
	HV	**0**	**0**	**25**	**0**	**0**	**0**	**26**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**3**	**55**	**0**
	HV%	**-**	**-**	**6%**	**0%**	**-**	**0%**	**4%**	**-**	**-**	**0%**	**-**	**0%**	**-**	**1%**	**0%**	**2%**	**4%**	**0**

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals EB	WB	NB	SB	Total	Bicycles EB	WB	NB	SB	Total	Pedestrians (Crossing Leg) East	West	North	South	Total
7:00 AM	8	2	0	3	*13*	0	4	0	0	*4*	0	0	1	0	*1*
7:15 AM	6	4	0	1	*11*	0	1	0	0	*1*	0	0	2	1	*3*
7:30 AM	**9**	**4**	**0**	**0**	***13***	**0**	**0**	**0**	**0**	***0***	**0**	**1**	**3**	**1**	*5*
7:45 AM	**6**	**6**	**0**	**0**	***12***	**1**	**0**	**0**	**0**	***1***	**0**	**1**	**1**	**4**	*6*
8:00 AM	**3**	**8**	**0**	**3**	***14***	**0**	**0**	**1**	**0**	***1***	**0**	**0**	**2**	**1**	*3*
8:15 AM	**7**	**8**	**0**	**1**	***16***	**1**	**0**	**0**	**0**	***1***	**0**	**0**	**0**	**2**	***2***
8:30 AM	5	6	0	2	*13*	0	0	0	0	*0*	0	0	3	1	*4*
8:45 AM	8	10	0	3	*21*	3	2	0	0	*5*	0	0	6	2	*8*
Count Total	52	48	0	13	*113*	5	7	1	0	*13*	0	2	18	12	*32*
Peak Hour	**25**	**26**	**0**	**4**	***55***	**2**	**0**	**1**	**0**	***3***	**0**	**2**	**6**	**8**	***16***

Deon Fouche: 415 - 757 - 7714 deon.fouche@idaxdata.com

Two-Hour Count Summaries - Heavy Vehicles

Interval Start	E Market St				E Market St				Merced St				SB 101 Off-Ramp				15-min Total	Rolling One Hour
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM	0	0	8	0	0	0	2	0	0	0	0	0	0	1	0	2	13	0
7:15 AM	0	0	6	0	0	0	4	0	0	0	0	0	0	1	0	0	11	0
7:30 AM	**0**	**0**	**9**	**0**	**0**	**0**	**4**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**13**	0
7:45 AM	**0**	**0**	**6**	**0**	**0**	**0**	**6**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**12**	49
8:00 AM	**0**	**0**	**3**	**0**	**0**	**0**	**8**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**3**	**14**	50
8:15 AM	**0**	**0**	**7**	**0**	**0**	**0**	**8**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**16**	**55**
8:30 AM	0	0	5	0	0	0	6	0	0	0	0	0	0	1	0	1	13	55
8:45 AM	0	0	8	0	0	0	10	0	0	0	0	0	0	2	1	0	21	64
Count Total	0	0	52	0	0	0	48	0	0	0	0	0	0	6	1	6	113	0
Peak Hour	**0**	**0**	**25**	**0**	**0**	**0**	**26**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**3**	**55**	**0**

Two-Hour Count Summaries - Bikes

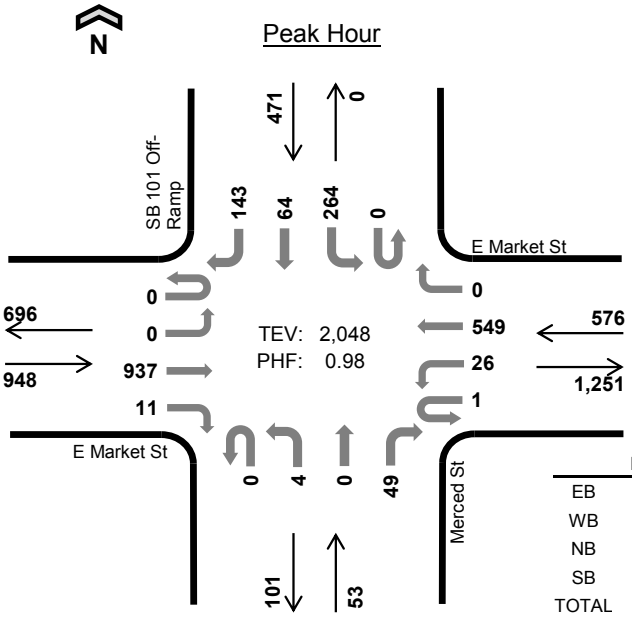
Interval Start	E Market St			E Market St			Merced St			SB 101 Off-Ramp			15-min Total	Rolling One Hour
	Eastbound			Westbound			Northbound			Southbound				
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
7:00 AM	0	0	0	0	4	0	0	0	0	0	0	0	4	0
7:15 AM	0	0	0	0	1	0	0	0	0	0	0	0	1	0
7:30 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
7:45 AM	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	6
8:00 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**1**	3
8:15 AM	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**3**
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	3
8:45 AM	0	3	0	0	2	0	0	0	0	0	0	0	5	7
Count Total	0	4	1	0	7	0	0	0	1	0	0	0	13	0
Peak Hour	**0**	**1**	**1**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**3**	**0**

Note: U-Turn volumes for bikes are included in Left-Turn, if any.

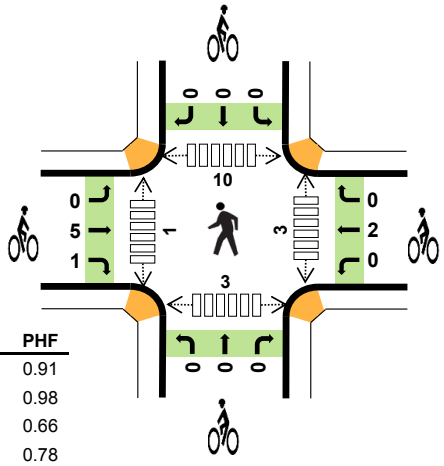
Deon Fouche: 415 - 757 - 7714 deon.fouche@idaxdata.com

Merced St
E Market St

Date: 06/05/2017
Count Period: 4:00 PM to 6:00 PM
Peak Hour: 5:00 PM to 6:00 PM



	HV %:	PHF
EB	1.7%	0.91
WB	4.0%	0.98
NB	0.0%	0.66
SB	0.4%	0.78
TOTAL	2.0%	0.98



Two-Hour Count Summaries

Interval Start		E Market St Eastbound				E Market St Westbound				Merced St Northbound				SB 101 Off-Ramp Southbound				15-min Total	Rolling One Hour
		UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM		0	0	224	5	0	11	117	0	0	2	0	13	0	62	6	44	484	0
4:15 PM		0	0	216	2	0	5	156	0	0	2	0	8	0	58	6	27	480	0
4:30 PM		0	0	261	5	0	7	119	0	0	0	0	10	0	56	10	36	504	0
4:45 PM		0	0	228	1	0	6	121	0	0	0	0	13	0	60	6	27	462	1,930
5:00 PM		**0**	**0**	**242**	**0**	**0**	**7**	**131**	**0**	**0**	**2**	**0**	**8**	**0**	**68**	**11**	**29**	**498**	1,944
5:15 PM		**0**	**0**	**229**	**5**	**0**	**5**	**142**	**0**	**0**	**1**	**0**	**19**	**0**	**59**	**14**	**31**	**505**	1,969
5:30 PM		**0**	**0**	**256**	**5**	**0**	**7**	**137**	**0**	**0**	**0**	**0**	**12**	**0**	**64**	**8**	**36**	**525**	1,990
5:45 PM		**0**	**0**	**210**	**1**	**1**	**7**	**139**	**0**	**0**	**1**	**0**	**10**	**0**	**73**	**31**	**47**	**520**	**2,048**
Count Total		0	0	1,866	24	1	55	1,062	0	0	8	0	93	0	500	92	277	3,978	0
Peak Hour	**All**	**0**	**0**	**937**	**11**	**1**	**26**	**549**	**0**	**0**	**4**	**0**	**49**	**0**	**264**	**64**	**143**	**2,048**	**0**
	HV	**0**	**0**	**16**	**0**	**0**	**0**	**23**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**41**	**0**
	HV%	**-**	**-**	**2%**	**0%**	**0%**	**0%**	**4%**	**-**	**-**	**0%**	**-**	**0%**	**-**	**0%**	**0%**	**1%**	**2%**	**0**

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
4:00 PM	5	4	0	1	*10*	0	0	0	0	*0*	0	0	3	1	*4*
4:15 PM	5	8	0	2	*15*	1	3	0	0	*4*	0	0	3	0	*3*
4:30 PM	9	2	0	3	*14*	0	3	0	0	*3*	0	0	1	1	*2*
4:45 PM	7	3	0	1	*11*	4	1	0	0	*5*	0	0	1	2	*3*
5:00 PM	**6**	**4**	**0**	**1**	***11***	**1**	**1**	**0**	**0**	***2***	**0**	**1**	**6**	**2**	*9*
5:15 PM	**2**	**6**	**0**	**1**	***9***	**1**	**0**	**0**	**0**	***1***	**3**	**0**	**2**	**1**	*6*
5:30 PM	**2**	**4**	**0**	**0**	***6***	**4**	**1**	**0**	**0**	***5***	**0**	**0**	**0**	**0**	*0*
5:45 PM	**6**	**9**	**0**	**0**	***15***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**2**	**0**	***2***
Count Total	42	40	0	9	*91*	11	9	0	0	*20*	3	1	18	7	*29*
Peak Hour	**16**	**23**	**0**	**2**	***41***	**6**	**2**	**0**	**0**	***8***	**3**	**1**	**10**	**3**	***17***

Deon Fouche: 415 - 757 - 7714 deon.fouche@idaxdata.com

Two-Hour Count Summaries - Heavy Vehicles

Interval Start	E Market St				E Market St				Merced St				SB 101 Off-Ramp				15-min Total	Rolling One Hour
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM	0	0	5	0	0	0	4	0	0	0	0	0	0	1	0	0	10	0
4:15 PM	0	0	5	0	0	0	8	0	0	0	0	0	0	1	0	1	15	0
4:30 PM	0	0	9	0	0	0	2	0	0	0	0	0	0	1	0	2	14	0
4:45 PM	0	0	7	0	0	0	3	0	0	0	0	0	0	0	0	1	11	50
5:00 PM	**0**	**0**	**6**	**0**	**0**	**0**	**4**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**11**	51
5:15 PM	**0**	**0**	**2**	**0**	**0**	**0**	**6**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**9**	45
5:30 PM	**0**	**0**	**2**	**0**	**0**	**0**	**4**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**6**	37
5:45 PM	**0**	**0**	**6**	**0**	**0**	**0**	**9**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**15**	**41**
Count Total	0	0	42	0	0	0	40	0	0	0	0	0	0	3	0	6	91	0
Peak Hour	**0**	**0**	**16**	**0**	**0**	**0**	**23**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**41**	**0**

Two-Hour Count Summaries - Bikes

Interval Start	E Market St			E Market St			Merced St			SB 101 Off-Ramp			15-min Total	Rolling One Hour
	Eastbound			Westbound			Northbound			Southbound				
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	1	0	1	2	0	0	0	0	0	0	0	4	0
4:30 PM	0	0	0	0	3	0	0	0	0	0	0	0	3	0
4:45 PM	0	4	0	0	1	0	0	0	0	0	0	0	5	12
5:00 PM	**0**	**1**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	14
5:15 PM	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	11
5:30 PM	**0**	**4**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**5**	13
5:45 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**8**
Count Total	0	10	1	1	8	0	0	0	0	0	0	0	20	0
Peak Hour	**0**	**5**	**1**	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**8**	**0**

Note: U-Turn volumes for bikes are included in Left-Turn, if any.

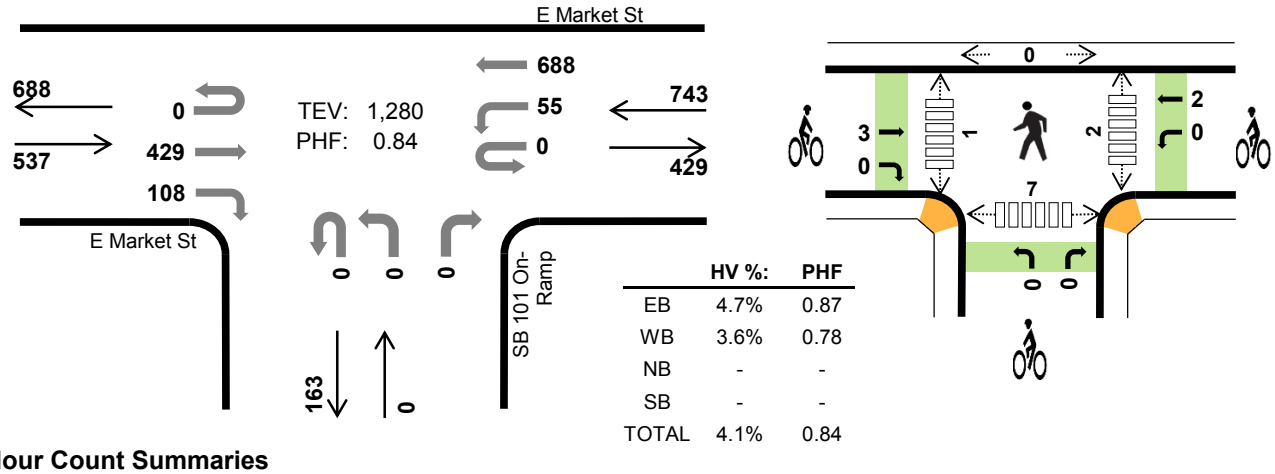
Deon Fouche: 415 - 757 - 7714 deon.fouche@idaxdata.com

SB 101 On-Ramp
E Market St

N

Peak Hour

Date: 06/02/2017
Count Period: 7:00 AM to 9:00 AM
Peak Hour: 7:30 AM to 8:30 AM



	HV %:	PHF
EB	4.7%	0.87
WB	3.6%	0.78
NB	-	-
SB	-	-
TOTAL	4.1%	0.84

Two-Hour Count Summaries

Interval Start	E Market St Eastbound				E Market St Westbound				SB 101 On-Ramp Northbound				0 Southbound				15-min Total	Rolling One Hour
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM	0	0	81	14	0	20	101	0	0	0	0	0	0	0	0	0	216	0
7:15 AM	0	0	56	29	0	13	92	0	0	0	0	0	0	0	0	0	190	0
7:30 AM	**0**	**0**	**85**	**25**	**0**	**15**	**170**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**295**	0
7:45 AM	**0**	**0**	**111**	**32**	**0**	**17**	**220**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**380**	1,081
8:00 AM	**0**	**0**	**114**	**16**	**0**	**6**	**165**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**301**	1,166
8:15 AM	**0**	**0**	**119**	**35**	**0**	**17**	**133**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**304**	**1,280**
8:30 AM	0	0	100	25	0	7	130	0	0	0	0	0	0	0	0	0	262	1,247
8:45 AM	0	0	115	37	0	11	130	0	0	0	0	0	0	0	0	0	293	1,160
Count Total	0	0	781	213	0	106	1,141	0	0	0	0	0	0	0	0	0	2,241	0
Peak Hour All	**0**	**0**	**429**	**108**	**0**	**55**	**688**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1,280**	**0**
Peak Hour HV	**0**	**0**	**12**	**13**	**0**	**1**	**26**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**52**	**0**
Peak Hour HV%	**-**	**-**	**3%**	**12%**	**-**	**2%**	**4%**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**4%**	**0**

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
7:00 AM	8	2	0	0	*10*	0	4	0	0	*4*	0	0	0	0	*0*
7:15 AM	9	4	0	0	*13*	0	1	0	0	*1*	0	0	0	1	*1*
7:30 AM	**10**	**4**	**0**	**0**	***14***	**0**	**0**	**0**	**0**	***0***	**1**	**0**	**0**	**3**	*4*
7:45 AM	**6**	**6**	**0**	**0**	***12***	**2**	**1**	**0**	**0**	***3***	**0**	**0**	**0**	**1**	*1*
8:00 AM	**4**	**8**	**0**	**0**	***12***	**0**	**1**	**0**	**0**	***1***	**0**	**0**	**0**	**1**	*1*
8:15 AM	**5**	**9**	**0**	**0**	***14***	**1**	**0**	**0**	**0**	***1***	**1**	**1**	**0**	**2**	*4*
8:30 AM	6	6	0	0	*12*	0	1	0	0	*1*	0	0	0	1	*1*
8:45 AM	13	11	0	0	*24*	2	3	0	0	*5*	0	0	0	2	*2*
Count Total	61	50	0	0	*111*	5	11	0	0	*16*	2	1	0	11	*14*
Peak Hr	**25**	**27**	**0**	**0**	***52***	**3**	**2**	**0**	**0**	***5***	**2**	**1**	**0**	**7**	***10***

Deon Fouche: 415 - 757 - 7714

deon.fouche@idaxdata.com

Two-Hour Count Summaries - Heavy Vehicles

Interval Start	E Market St				E Market St				SB 101 On-Ramp				0				15-min Total	Rolling One Hour
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM	0	0	5	3	0	0	2	0	0	0	0	0	0	0	0	0	10	0
7:15 AM	0	0	3	6	0	0	4	0	0	0	0	0	0	0	0	0	13	0
7:30 AM	**0**	**0**	**8**	**2**	**0**	**0**	**4**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**14**	0
7:45 AM	**0**	**0**	**2**	**4**	**0**	**0**	**6**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**12**	49
8:00 AM	**0**	**0**	**2**	**2**	**0**	**0**	**8**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**12**	51
8:15 AM	**0**	**0**	**0**	**5**	**0**	**1**	**8**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**14**	**52**
8:30 AM	0	0	2	4	0	0	6	0	0	0	0	0	0	0	0	0	12	50
8:45 AM	0	0	6	7	0	1	10	0	0	0	0	0	0	0	0	0	24	62
Count Total	0	0	28	33	0	2	48	0	0	0	0	0	0	0	0	0	111	0
Peak Hour	**0**	**0**	**12**	**13**	**0**	**1**	**26**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**52**	**0**

Two-Hour Count Summaries - Bikes

Interval Start	E Market St			E Market St			SB 101 On-Ramp			0			15-min Total	Rolling One Hour
	Eastbound			Westbound			Northbound			Southbound				
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
7:00 AM	0	0	0	0	4	0	0	0	0	0	0	0	4	0
7:15 AM	0	0	0	0	1	0	0	0	0	0	0	0	1	0
7:30 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
7:45 AM	**0**	**2**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**3**	8
8:00 AM	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	5
8:15 AM	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**5**
8:30 AM	0	0	0	0	1	0	0	0	0	0	0	0	1	6
8:45 AM	0	2	0	0	3	0	0	0	0	0	0	0	5	8
Count Total	0	5	0	0	11	0	0	0	0	0	0	0	16	0
Peak Hour	**0**	**3**	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**5**	**0**

Note: U-Turn volumes for bikes are included in Left-Turn, if any.

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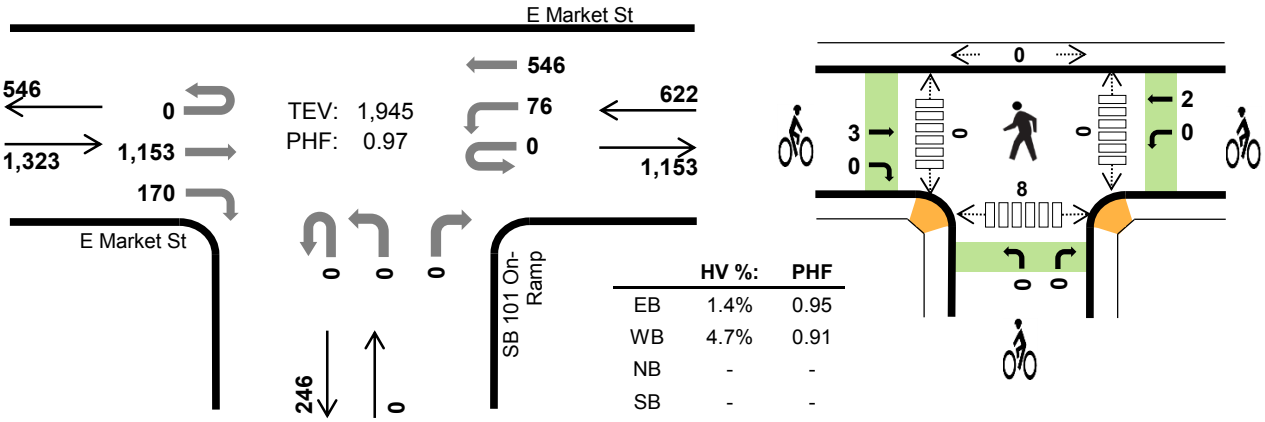
SB 101 On-Ramp
E Market St

N

Peak Hour

Date: 06/05/2017
Count Period: 4:00 PM to 6:00 PM
Peak Hour: 5:00 PM to 6:00 PM



	HV %:	PHF
EB	1.4%	0.95
WB	4.7%	0.91
NB	-	-
SB	-	-
TOTAL	2.4%	0.97

Two-Hour Count Summaries

Interval Start		E Market St Eastbound				E Market St Westbound				SB 101 On-Ramp Northbound				0 Southbound				15-min Total	Rolling One Hour
		UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM		0	0	259	52	0	18	119	0	0	0	0	0	0	0	0	0	448	0
4:15 PM		0	0	257	41	0	24	153	0	0	0	0	0	0	0	0	0	475	0
4:30 PM		0	0	302	47	0	19	117	0	0	0	0	0	0	0	0	0	485	0
4:45 PM		0	0	269	42	0	20	123	0	0	0	0	0	0	0	0	0	454	1,862
5:00 PM		**0**	**0**	**289**	**55**	**0**	**17**	**127**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**488**	1,902
5:15 PM		**0**	**0**	**271**	**50**	**0**	**23**	**148**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**492**	1,919
5:30 PM		**0**	**0**	**311**	**38**	**0**	**21**	**133**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**503**	1,937
5:45 PM		**0**	**0**	**282**	**27**	**0**	**15**	**138**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**462**	**1,945**
Count Total		0	0	2,240	352	0	157	1,058	0	0	0	0	0	0	0	0	0	3,807	0
Peak Hour	**All**	**0**	**0**	**1,153**	**170**	**0**	**76**	**546**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1,945**	**0**
	HV	**0**	**0**	**6**	**12**	**0**	**2**	**27**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**47**	**0**
	HV%	**-**	**-**	**1%**	**7%**	**-**	**3%**	**5%**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**2%**	**0**

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
4:00 PM	8	3	0	0	*11*	0	0	0	0	*0*	0	0	0	0	*0*
4:15 PM	9	9	0	0	*18*	1	2	0	0	*3*	0	0	0	0	*0*
4:30 PM	12	1	0	0	*13*	1	3	0	0	*4*	0	0	0	0	*0*
4:45 PM	6	3	0	0	*9*	0	2	0	0	*2*	0	0	0	2	*2*
5:00 PM	**7**	**5**	**0**	**0**	***12***	**2**	**0**	**0**	**0**	***2***	**0**	**0**	**0**	**5**	*5*
5:15 PM	**2**	**8**	**0**	**0**	***10***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**2**	*2*
5:30 PM	**1**	**7**	**0**	**0**	***8***	**1**	**1**	**0**	**0**	***2***	**0**	**0**	**0**	**1**	*1*
5:45 PM	**8**	**9**	**0**	**0**	***17***	**0**	**1**	**0**	**0**	***1***	**0**	**0**	**0**	**0**	***0***
Count Total	53	45	0	0	*98*	5	9	0	0	*14*	0	0	0	10	*10*
Peak Hr	**18**	**29**	**0**	**0**	***47***	**3**	**2**	**0**	**0**	***5***	**0**	**0**	**0**	**8**	***8***

Deon Fouche: 415 - 757 - 7714

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Two-Hour Count Summaries - Heavy Vehicles

Interval Start	E Market St				E Market St				SB 101 On-Ramp				0				15-min Total	Rolling One Hour
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM	0	0	5	3	0	0	3	0	0	0	0	0	0	0	0	0	11	0
4:15 PM	0	0	2	7	0	2	7	0	0	0	0	0	0	0	0	0	18	0
4:30 PM	0	0	2	10	0	0	1	0	0	0	0	0	0	0	0	0	13	0
4:45 PM	0	0	0	6	0	0	3	0	0	0	0	0	0	0	0	0	9	51
5:00 PM	**0**	**0**	**2**	**5**	**0**	**1**	**4**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**12**	52
5:15 PM	**0**	**0**	**0**	**2**	**0**	**0**	**8**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**10**	44
5:30 PM	**0**	**0**	**0**	**1**	**0**	**1**	**6**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**8**	39
5:45 PM	**0**	**0**	**4**	**4**	**0**	**0**	**9**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**17**	**47**
Count Total	0	0	15	38	0	4	41	0	0	0	0	0	0	0	0	0	98	0
Peak Hour	**0**	**0**	**6**	**12**	**0**	**2**	**27**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**47**	**0**

Two-Hour Count Summaries - Bikes

Interval Start	E Market St			E Market St			SB 101 On-Ramp			0			15-min Total	Rolling One Hour
	Eastbound			Westbound			Northbound			Southbound				
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	1	0	0	2	0	0	0	0	0	0	0	3	0
4:30 PM	0	1	0	0	3	0	0	0	0	0	0	0	4	0
4:45 PM	0	0	0	0	2	0	0	0	0	0	0	0	2	9
5:00 PM	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	11
5:15 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	8
5:30 PM	**0**	**1**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	6
5:45 PM	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**5**
Count Total	0	5	0	0	9	0	0	0	0	0	0	0	14	0
Peak Hour	**0**	**3**	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**5**	**0**

Note: U-Turn volumes for bikes are included in Left-Turn, if any.

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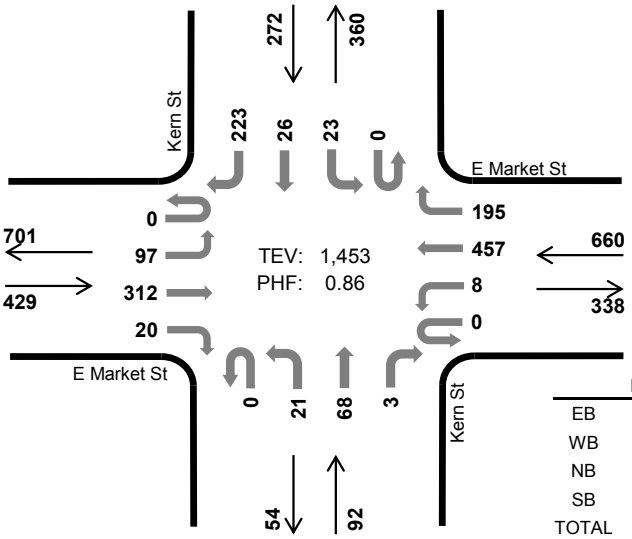
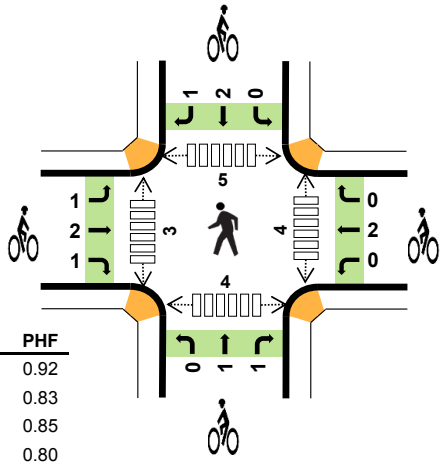
Kern St
E Market St

Date: 06/02/2017
Count Period: 7:00 AM to 9:00 AM
Peak Hour: 7:30 AM to 8:30 AM

Peak Hour



	HV %:	PHF
EB	3.0%	0.92
WB	1.4%	0.83
NB	0.0%	0.85
SB	5.5%	0.80
TOTAL	2.5%	0.86



Two-Hour Count Summaries

Interval Start	E Market St Eastbound				E Market St Westbound				Kern St Northbound				Kern St Southbound				15-min Total	Rolling One Hour
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM	0	19	62	4	0	1	58	31	0	3	9	0	0	6	2	46	241	0
7:15 AM	0	18	34	5	0	2	73	50	0	10	6	0	0	5	1	39	243	0
7:30 AM	**0**	**22**	**58**	**3**	**0**	**0**	**120**	**38**	**0**	**6**	**15**	**0**	**0**	**6**	**8**	**53**	**329**	0
7:45 AM	**0**	**20**	**92**	**5**	**0**	**1**	**147**	**51**	**0**	**6**	**15**	**2**	**0**	**9**	**8**	**68**	**424**	1,237
8:00 AM	**0**	**26**	**80**	**7**	**0**	**4**	**117**	**66**	**0**	**3**	**18**	**0**	**0**	**3**	**3**	**56**	**383**	1,379
8:15 AM	**0**	**29**	**82**	**5**	**0**	**3**	**73**	**40**	**0**	**6**	**20**	**1**	**0**	**5**	**7**	**46**	**317**	**1,453**
8:30 AM	0	31	75	5	0	3	92	34	0	7	18	2	0	8	7	46	328	1,452
8:45 AM	0	35	71	4	0	1	75	40	0	3	30	2	0	8	6	47	322	1,350
Count Total	0	200	554	38	0	15	755	350	0	44	131	7	0	50	42	401	2,587	0
Peak Hour All	**0**	**97**	**312**	**20**	**0**	**8**	**457**	**195**	**0**	**21**	**68**	**3**	**0**	**23**	**26**	**223**	**1,453**	**0**
Peak Hour HV	**0**	**1**	**12**	**0**	**0**	**0**	**9**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**15**	**37**	**0**
Peak Hour HV%	**-**	**1%**	**4%**	**0%**	**-**	**0%**	**2%**	**0%**	**-**	**0%**	**0%**	**0%**	**-**	**0%**	**0%**	**7%**	**3%**	**0**

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
7:00 AM	7	0	0	1	*8*	0	0	0	1	*1*	0	0	0	0	*0*
7:15 AM	2	4	0	2	*8*	0	1	0	0	*1*	0	0	2	1	*3*
7:30 AM	**8**	**0**	**0**	**2**	***10***	**0**	**0**	**1**	**1**	***2***	**2**	**0**	**3**	**2**	*7*
7:45 AM	**1**	**0**	**0**	**6**	***7***	**2**	**1**	**1**	**0**	***4***	**0**	**0**	**0**	**0**	*0*
8:00 AM	**2**	**5**	**0**	**2**	***9***	**0**	**1**	**0**	**1**	***2***	**1**	**0**	**1**	**2**	*4*
8:15 AM	**2**	**4**	**0**	**5**	***11***	**2**	**0**	**0**	**1**	***3***	**1**	**3**	**1**	**0**	***5***
8:30 AM	2	1	0	7	*10*	0	1	0	1	*2*	1	1	4	1	*7*
8:45 AM	5	1	0	10	*16*	1	1	1	0	*3*	0	0	2	0	*2*
Count Total	29	15	0	35	*79*	5	5	3	5	*18*	5	4	13	6	*28*
Peak Hour	**13**	**9**	**0**	**15**	***37***	**4**	**2**	**2**	**3**	***11***	**4**	**3**	**5**	**4**	***16***

Deon Fouche: 415 - 757 - 7714 deon.fouche@idaxdata.com

Two-Hour Count Summaries - Heavy Vehicles

Interval Start	E Market St				E Market St				Kern St				Kern St				15-min Total	Rolling One Hour
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM	0	2	5	0	0	0	0	0	0	0	0	0	0	0	0	1	8	0
7:15 AM	0	0	2	0	0	0	3	1	0	0	0	0	0	0	0	2	8	0
7:30 AM	**0**	**1**	**7**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**10**	0
7:45 AM	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**6**	**7**	33
8:00 AM	**0**	**0**	**2**	**0**	**0**	**0**	**5**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**9**	34
8:15 AM	**0**	**0**	**2**	**0**	**0**	**0**	**4**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**5**	**11**	**37**
8:30 AM	0	2	0	0	0	0	1	0	0	0	0	0	0	0	0	7	10	37
8:45 AM	0	3	2	0	0	0	0	1	0	0	0	0	0	0	0	10	16	46
Count Total	0	8	21	0	0	0	13	2	0	0	0	0	0	0	0	35	79	0
Peak Hour	**0**	**1**	**12**	**0**	**0**	**0**	**9**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**15**	**37**	**0**

Two-Hour Count Summaries - Bikes

Interval Start	E Market St			E Market St			Kern St			Kern St			15-min Total	Rolling One Hour
	Eastbound			Westbound			Northbound			Southbound				
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	1	1	0
7:15 AM	0	0	0	0	0	1	0	0	0	0	0	0	1	0
7:30 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**1**	**0**	**2**	0
7:45 AM	**0**	**1**	**1**	**0**	**1**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**4**	8
8:00 AM	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**2**	9
8:15 AM	**1**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**3**	**11**
8:30 AM	0	0	0	0	1	0	0	0	0	0	0	1	2	11
8:45 AM	0	1	0	0	1	0	1	0	0	0	0	0	3	10
Count Total	1	3	1	0	4	1	1	1	1	0	2	3	18	0
Peak Hour	**1**	**2**	**1**	**0**	**2**	**0**	**0**	**1**	**1**	**0**	**2**	**1**	**11**	**0**

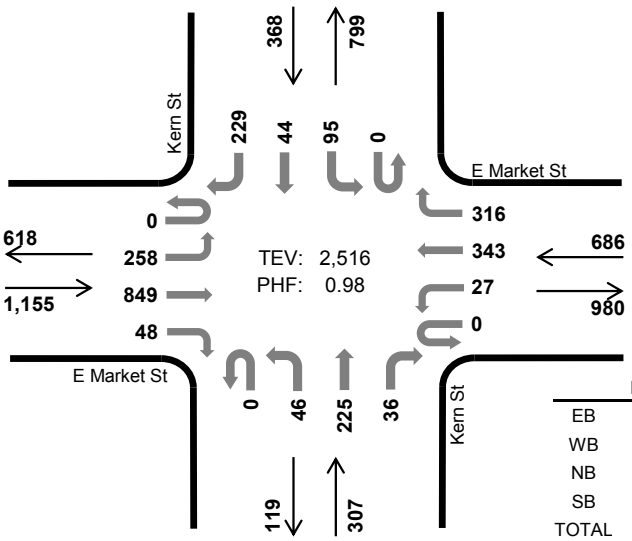
Note: U-Turn volumes for bikes are included in Left-Turn, if any.

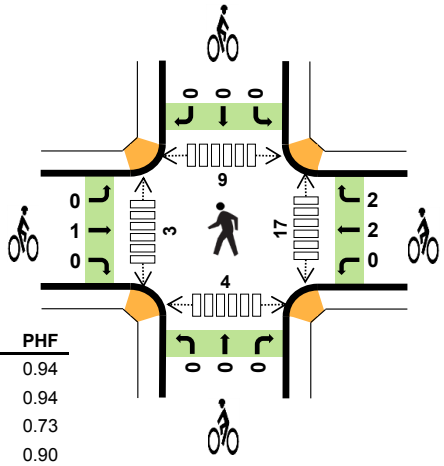
Deon Fouche: 415 - 757 - 7714 deon.fouche@idaxdata.com

Kern St
E Market St

Date: 06/05/2017
Count Period: 4:00 PM to 6:00 PM
Peak Hour: 5:00 PM to 6:00 PM

Peak Hour





	HV %:	PHF
EB	0.3%	0.94
WB	0.6%	0.94
NB	0.0%	0.73
SB	6.8%	0.90
TOTAL	1.3%	0.98

Two-Hour Count Summaries

Interval Start	E Market St Eastbound				E Market St Westbound				Kern St Northbound				Kern St Southbound				15-min Total	Rolling One Hour
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM	0	60	178	12	0	10	92	69	0	13	48	8	0	19	5	39	553	0
4:15 PM	0	65	184	12	0	3	101	79	0	6	43	11	0	18	11	56	589	0
4:30 PM	0	71	214	9	0	8	78	47	0	12	71	6	0	20	16	47	599	0
4:45 PM	0	64	185	8	0	3	81	59	0	13	48	11	0	16	8	42	538	2,279
5:00 PM	**0**	**76**	**221**	**10**	**0**	**8**	**72**	**87**	**0**	**12**	**51**	**9**	**0**	**17**	**9**	**64**	**636**	2,362
5:15 PM	**0**	**51**	**199**	**13**	**0**	**11**	**96**	**67**	**0**	**17**	**81**	**7**	**0**	**30**	**11**	**55**	**638**	2,411
5:30 PM	**0**	**63**	**222**	**14**	**0**	**4**	**91**	**87**	**0**	**4**	**47**	**11**	**0**	**28**	**13**	**61**	**645**	2,457
5:45 PM	**0**	**68**	**207**	**11**	**0**	**4**	**84**	**75**	**0**	**13**	**46**	**9**	**0**	**20**	**11**	**49**	**597**	**2,516**
Count Total	0	518	1,610	89	0	51	695	570	0	90	435	72	0	168	84	413	4,795	0
Peak Hour All	**0**	**258**	**849**	**48**	**0**	**27**	**343**	**316**	**0**	**46**	**225**	**36**	**0**	**95**	**44**	**229**	**2,516**	**0**
Peak Hour HV	**0**	**2**	**1**	**0**	**0**	**1**	**2**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**24**	**32**	**0**
Peak Hour HV%	**-**	**1%**	**0%**	**0%**	**-**	**4%**	**1%**	**0%**	**-**	**0%**	**0%**	**0%**	**-**	**0%**	**2%**	**10%**	**1%**	**0**

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
4:00 PM	2	1	0	4	*7*	0	1	1	0	*2*	0	2	2	0	*4*
4:15 PM	2	1	0	4	*7*	1	2	0	0	*3*	3	0	0	0	*3*
4:30 PM	2	0	1	1	*4*	1	2	1	0	*4*	5	1	2	1	*9*
4:45 PM	0	0	1	3	*4*	0	0	0	0	*0*	3	0	3	2	*8*
5:00 PM	**1**	**2**	**0**	**5**	***8***	**0**	**1**	**0**	**0**	***1***	**2**	**2**	**2**	**1**	*7*
5:15 PM	**0**	**0**	**0**	**6**	***6***	**0**	**1**	**0**	**0**	***1***	**8**	**1**	**1**	**3**	*13*
5:30 PM	**0**	**0**	**0**	**9**	***9***	**1**	**1**	**0**	**0**	***2***	**4**	**0**	**3**	**0**	*7*
5:45 PM	**2**	**2**	**0**	**5**	***9***	**0**	**1**	**0**	**0**	***1***	**3**	**0**	**3**	**0**	***6***
Count Total	9	6	2	37	*54*	3	9	2	0	*14*	28	6	16	7	*57*
Peak Hour	**3**	**4**	**0**	**25**	***32***	**1**	**4**	**0**	**0**	***5***	**17**	**3**	**9**	**4**	***33***

Deon Fouche: 415 - 757 - 7714 deon.fouche@idaxdata.com

Two-Hour Count Summaries - Heavy Vehicles

Interval Start	E Market St				E Market St				Kern St				Kern St				15-min Total	Rolling One Hour
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM	0	2	0	0	0	0	0	1	0	0	0	0	0	0	0	4	7	0
4:15 PM	0	1	1	0	0	0	1	0	0	0	0	0	0	0	0	4	7	0
4:30 PM	0	0	2	0	0	0	0	0	0	0	1	0	0	0	0	1	4	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	3	4	22
5:00 PM	**0**	**0**	**1**	**0**	**0**	**1**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**5**	**8**	23
5:15 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**5**	**6**	22
5:30 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**9**	**9**	27
5:45 PM	**0**	**2**	**0**	**0**	**0**	**0**	**1**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**5**	**9**	**32**
Count Total	0	5	4	0	0	1	3	2	0	0	1	1	0	0	1	36	54	0
Peak Hour	**0**	**2**	**1**	**0**	**0**	**1**	**2**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**24**	**32**	**0**

Two-Hour Count Summaries - Bikes

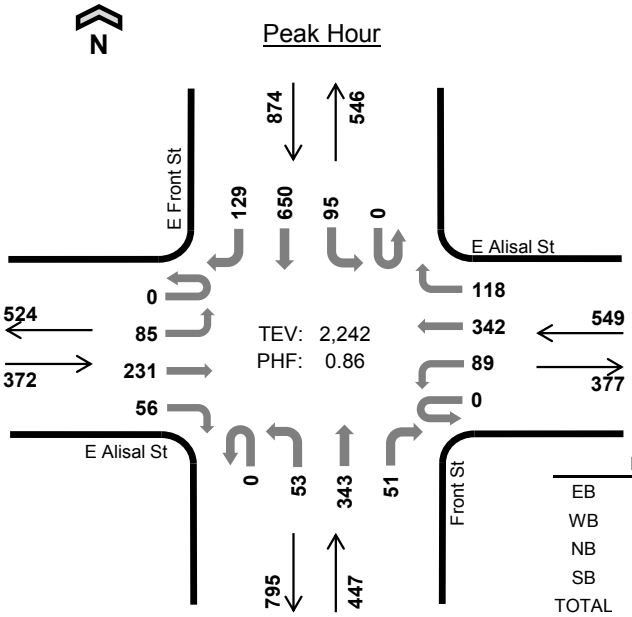
Interval Start	E Market St			E Market St			Kern St			Kern St			15-min Total	Rolling One Hour
	Eastbound			Westbound			Northbound			Southbound				
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
4:00 PM	0	0	0	0	0	1	0	1	0	0	0	0	2	0
4:15 PM	0	1	0	0	2	0	0	0	0	0	0	0	3	0
4:30 PM	0	1	0	0	2	0	1	0	0	0	0	0	4	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	9
5:00 PM	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	8
5:15 PM	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	6
5:30 PM	**0**	**1**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	4
5:45 PM	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**5**
Count Total	0	3	0	0	6	3	1	1	0	0	0	0	14	0
Peak Hour	**0**	**1**	**0**	**0**	**2**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**5**	**0**

Note: U-Turn volumes for bikes are included in Left-Turn, if any.

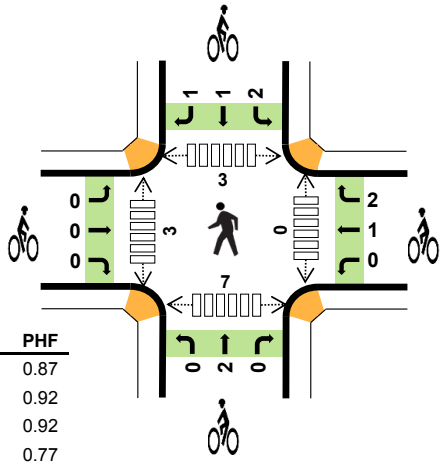
Deon Fouche: 415 - 757 - 7714 deon.fouche@idaxdata.com

Front St
E Alisal St

Peak Hour



Date: 06/02/2017
Count Period: 7:00 AM to 9:00 AM
Peak Hour: 7:45 AM to 8:45 AM



	HV %:	PHF
EB	2.2%	0.87
WB	2.9%	0.92
NB	4.5%	0.92
SB	1.9%	0.77
TOTAL	2.7%	0.86

Two-Hour Count Summaries

Interval Start		E Alisal St Eastbound				E Alisal St Westbound				Front St Northbound				E Front St Southbound				15-min Total	Rolling One Hour
		UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM		0	8	31	10	0	7	32	20	0	5	49	1	0	10	81	11	265	0
7:15 AM		0	9	33	8	0	4	31	19	0	9	67	5	0	14	127	7	333	0
7:30 AM		0	19	42	14	0	20	58	13	0	12	72	9	0	23	141	27	450	0
7:45 AM		**0**	**19**	**60**	**14**	**0**	**28**	**101**	**21**	**0**	**13**	**96**	**13**	**0**	**32**	**212**	**40**	**649**	1,697
8:00 AM		**0**	**26**	**63**	**18**	**0**	**26**	**93**	**30**	**0**	**14**	**89**	**12**	**0**	**23**	**165**	**51**	**610**	2,042
8:15 AM		**0**	**19**	**54**	**11**	**0**	**23**	**66**	**32**	**0**	**12**	**91**	**12**	**0**	**17**	**157**	**19**	**513**	2,222
8:30 AM		**0**	**21**	**54**	**13**	**0**	**12**	**82**	**35**	**0**	**14**	**67**	**14**	**0**	**23**	**116**	**19**	**470**	**2,242**
8:45 AM		0	16	51	12	0	16	60	24	0	7	93	15	0	14	128	17	453	2,046
Count Total		0	137	388	100	0	136	523	194	0	86	624	81	0	156	1,127	191	3,743	0
Peak Hour	**All**	**0**	**85**	**231**	**56**	**0**	**89**	**342**	**118**	**0**	**53**	**343**	**51**	**0**	**95**	**650**	**129**	**2,242**	**0**
	HV	**0**	**0**	**4**	**4**	**0**	**2**	**10**	**4**	**0**	**2**	**17**	**1**	**0**	**4**	**13**	**0**	**61**	**0**
	HV%	**-**	**0%**	**2%**	**7%**	**-**	**2%**	**3%**	**3%**	**-**	**4%**	**5%**	**2%**	**-**	**4%**	**2%**	**0%**	**3%**	**0**

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals EB	WB	NB	SB	Total	Bicycles EB	WB	NB	SB	Total	Pedestrians (Crossing Leg) East	West	North	South	Total
7:00 AM	3	3	2	7	*15*	0	0	0	0	*0*	0	0	0	0	*0*
7:15 AM	1	0	7	5	*13*	1	1	0	1	*3*	0	2	0	0	*2*
7:30 AM	3	2	5	6	*16*	1	2	0	0	*3*	1	0	0	1	*2*
7:45 AM	**3**	**1**	**5**	**2**	***11***	**0**	**1**	**1**	**2**	***4***	**0**	**0**	**0**	**0**	*0*
8:00 AM	**3**	**4**	**4**	**5**	***16***	**0**	**1**	**1**	**1**	***3***	**0**	**2**	**0**	**0**	*2*
8:15 AM	**2**	**4**	**7**	**3**	***16***	**0**	**1**	**0**	**0**	***1***	**0**	**0**	**0**	**2**	*2*
8:30 AM	**0**	**7**	**4**	**7**	***18***	**0**	**0**	**0**	**1**	***1***	**0**	**1**	**3**	**5**	***9***
8:45 AM	5	0	7	9	*21*	1	0	0	1	*2*	0	1	0	1	*2*
Count Total	20	21	41	44	*126*	3	6	2	6	*17*	1	6	3	9	*19*
Peak Hour	**8**	**16**	**20**	**17**	***61***	**0**	**3**	**2**	**4**	***9***	**0**	**3**	**3**	**7**	***13***

Deon Fouche: 415 - 757 - 7714 deon.fouche@idaxdata.com

Two-Hour Count Summaries - Heavy Vehicles

Interval Start	E Alisal St				E Alisal St				Front St				E Front St				15-min Total	Rolling One Hour
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM	0	1	0	2	0	0	0	3	0	0	2	0	0	2	5	0	15	0
7:15 AM	0	0	1	0	0	0	0	0	0	2	5	0	0	2	3	0	13	0
7:30 AM	0	1	2	0	0	0	1	1	0	0	4	1	0	1	5	0	16	0
7:45 AM	**0**	**0**	**2**	**1**	**0**	**0**	**1**	**0**	**0**	**0**	**4**	**1**	**0**	**0**	**2**	**0**	**11**	55
8:00 AM	**0**	**0**	**0**	**3**	**0**	**2**	**2**	**0**	**0**	**1**	**3**	**0**	**0**	**2**	**3**	**0**	**16**	56
8:15 AM	**0**	**0**	**2**	**0**	**0**	**0**	**4**	**0**	**0**	**0**	**7**	**0**	**0**	**2**	**1**	**0**	**16**	59
8:30 AM	**0**	**0**	**0**	**0**	**0**	**0**	**3**	**4**	**0**	**1**	**3**	**0**	**0**	**0**	**7**	**0**	**18**	**61**
8:45 AM	0	3	1	1	0	0	0	0	0	0	7	0	0	0	8	1	21	71
Count Total	0	5	8	7	0	2	11	8	0	4	35	2	0	9	34	1	126	0
Peak Hour	**0**	**0**	**4**	**4**	**0**	**2**	**10**	**4**	**0**	**2**	**17**	**1**	**0**	**4**	**13**	**0**	**61**	**0**

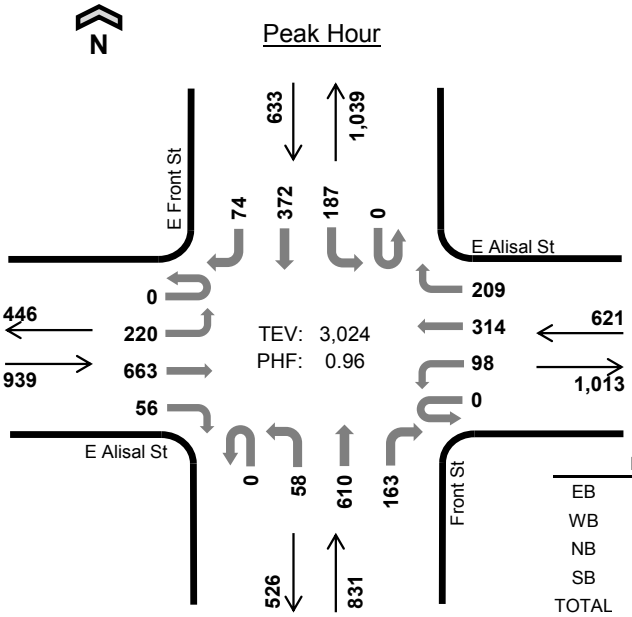
Two-Hour Count Summaries - Bikes

Interval Start	E Alisal St			E Alisal St			Front St			E Front St			15-min Total	Rolling One Hour
	Eastbound			Westbound			Northbound			Southbound				
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	1	0	0	1	0	0	0	0	0	1	0	3	0
7:30 AM	0	1	0	0	0	2	0	0	0	0	0	0	3	0
7:45 AM	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**1**	**0**	**1**	**1**	**0**	**4**	10
8:00 AM	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**1**	**0**	**1**	**0**	**0**	**3**	13
8:15 AM	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	11
8:30 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**1**	**9**
8:45 AM	0	1	0	0	0	0	0	0	0	0	1	0	2	7
Count Total	0	3	0	0	2	4	0	2	0	2	3	1	17	0
Peak Hour	**0**	**0**	**0**	**0**	**1**	**2**	**0**	**2**	**0**	**2**	**1**	**1**	**9**	**0**

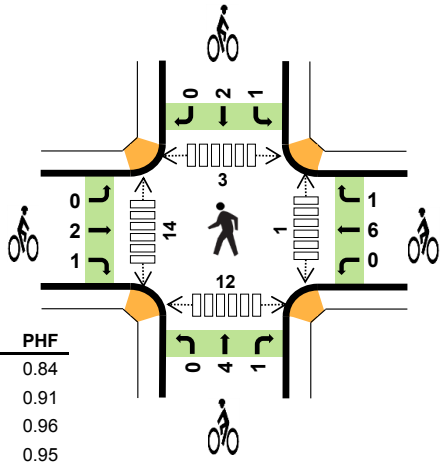
Note: U-Turn volumes for bikes are included in Left-Turn, if any.

Deon Fouche: 415 - 757 - 7714 deon.fouche@idaxdata.com

Front St
E Alisal St



Date: 06/05/2017
Count Period: 4:00 PM to 6:00 PM
Peak Hour: 4:30 PM to 5:30 PM



	HV %:	PHF
EB	0.9%	0.84
WB	0.6%	0.91
NB	2.6%	0.96
SB	4.9%	0.95
TOTAL	2.1%	0.96

Two-Hour Count Summaries

Interval Start	E Alisal St Eastbound				E Alisal St Westbound				Front St Northbound				E Front St Southbound				15-min Total	Rolling One Hour
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM	0	32	143	6	1	32	75	49	0	17	151	33	0	47	101	19	706	0
4:15 PM	0	43	146	13	0	18	68	61	0	16	143	34	0	47	97	27	713	0
4:30 PM	**0**	**52**	**150**	**14**	**0**	**33**	**86**	**51**	**0**	**22**	**148**	**47**	**0**	**54**	**81**	**25**	**763**	0
4:45 PM	**0**	**40**	**141**	**16**	**0**	**23**	**80**	**61**	**0**	**15**	**164**	**33**	**0**	**38**	**101**	**20**	**732**	2,914
5:00 PM	**0**	**65**	**173**	**10**	**0**	**22**	**72**	**46**	**0**	**10**	**150**	**45**	**0**	**45**	**89**	**13**	**740**	2,948
5:15 PM	**0**	**63**	**199**	**16**	**0**	**20**	**76**	**51**	**0**	**11**	**148**	**38**	**0**	**50**	**101**	**16**	**789**	**3,024**
5:30 PM	0	46	134	11	0	11	61	39	0	15	151	39	0	62	100	16	685	2,946
5:45 PM	0	29	105	9	0	12	59	35	0	7	108	20	0	38	75	18	515	2,729
Count Total	0	370	1,191	95	1	171	577	393	0	113	1,163	289	0	381	745	154	5,643	0
Peak Hour All	**0**	**220**	**663**	**56**	**0**	**98**	**314**	**209**	**0**	**58**	**610**	**163**	**0**	**187**	**372**	**74**	**3,024**	**0**
Peak Hour HV	**0**	**0**	**5**	**3**	**0**	**0**	**4**	**0**	**0**	**0**	**22**	**0**	**0**	**3**	**27**	**1**	**65**	**0**
Peak Hour HV%	**-**	**0%**	**1%**	**5%**	**-**	**0%**	**1%**	**0%**	**-**	**0%**	**4%**	**0%**	**-**	**2%**	**7%**	**1%**	**2%**	**0**

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals EB	WB	NB	SB	Total	Bicycles EB	WB	NB	SB	Total	Pedestrians (Crossing Leg) East	West	North	South	Total
4:00 PM	1	2	6	8	*17*	2	0	0	1	*3*	0	1	1	0	*2*
4:15 PM	1	1	4	2	*8*	0	0	1	1	*2*	0	2	1	2	*5*
4:30 PM	**1**	**1**	**6**	**11**	***19***	**2**	**1**	**0**	**0**	***3***	**0**	**11**	**0**	**4**	*15*
4:45 PM	**3**	**0**	**3**	**4**	***10***	**0**	**1**	**1**	**1**	***3***	**0**	**1**	**0**	**1**	*2*
5:00 PM	**0**	**3**	**5**	**10**	***18***	**0**	**4**	**4**	**0**	***8***	**1**	**1**	**2**	**1**	*5*
5:15 PM	**4**	**0**	**8**	**6**	***18***	**1**	**1**	**0**	**2**	***4***	**0**	**1**	**1**	**6**	***8***
5:30 PM	1	1	5	8	*15*	1	1	1	0	*3*	0	9	0	5	*14*
5:45 PM	1	1	4	5	*11*	0	0	0	0	*0*	0	5	1	4	*10*
Count Total	12	9	41	54	*116*	6	8	7	5	*26*	1	31	6	23	*61*
Peak Hour	**8**	**4**	**22**	**31**	***65***	**3**	**7**	**5**	**3**	***18***	**1**	**14**	**3**	**12**	***30***

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Two-Hour Count Summaries - Heavy Vehicles

Interval Start	E Alisal St				E Alisal St				Front St				E Front St				15-min Total	Rolling One Hour
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM	0	0	1	0	0	0	1	1	0	1	5	0	0	1	7	0	17	0
4:15 PM	0	0	1	0	0	0	0	1	0	1	3	0	0	0	2	0	8	0
4:30 PM	**0**	**0**	**0**	**1**	**0**	**0**	**1**	**0**	**0**	**0**	**6**	**0**	**0**	**2**	**9**	**0**	**19**	0
4:45 PM	**0**	**0**	**2**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**3**	**0**	**0**	**0**	**4**	**0**	**10**	54
5:00 PM	**0**	**0**	**0**	**0**	**0**	**0**	**3**	**0**	**0**	**0**	**5**	**0**	**0**	**1**	**8**	**1**	**18**	55
5:15 PM	**0**	**0**	**3**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**8**	**0**	**0**	**0**	**6**	**0**	**18**	**65**
5:30 PM	0	0	1	0	0	0	1	0	0	0	5	0	0	0	8	0	15	61
5:45 PM	0	0	1	0	0	1	0	0	0	1	2	1	0	0	5	0	11	62
Count Total	0	0	9	3	0	1	6	2	0	3	37	1	0	4	49	1	116	0
Peak Hour	**0**	**0**	**5**	**3**	**0**	**0**	**4**	**0**	**0**	**0**	**22**	**0**	**0**	**3**	**27**	**1**	**65**	**0**

Two-Hour Count Summaries - Bikes

Interval Start	E Alisal St			E Alisal St			Front St			E Front St			15-min Total	Rolling One Hour
	Eastbound			Westbound			Northbound			Southbound				
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
4:00 PM	0	2	0	0	0	0	0	0	0	1	0	0	3	0
4:15 PM	0	0	0	0	0	0	0	1	0	1	0	0	2	0
4:30 PM	**0**	**1**	**1**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**3**	0
4:45 PM	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**1**	**0**	**0**	**1**	**0**	**3**	11
5:00 PM	**0**	**0**	**0**	**0**	**3**	**1**	**0**	**3**	**1**	**0**	**0**	**0**	**8**	16
5:15 PM	**0**	**1**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**1**	**1**	**0**	**4**	**18**
5:30 PM	0	1	0	0	0	1	0	0	1	0	0	0	3	18
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	15
Count Total	0	5	1	0	6	2	0	5	2	3	2	0	26	0
Peak Hour	**0**	**2**	**1**	**0**	**6**	**1**	**0**	**4**	**1**	**1**	**2**	**0**	**18**	**0**

Note: U-Turn volumes for bikes are included in Left-Turn, if any.

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E. Intersection Level of Service Calculations – Existing Conditions

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	126	309	66	761	457	211	41	505	422	218	831	44
Future Volume (veh/h)	126	309	66	761	457	211	41	505	422	218	831	44
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1835	1835	1835	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	156	381	0	940	564	0	51	623	0	269	1026	54
Adj No. of Lanes	1	2	1	2	2	1	1	2	2	2	2	0
Peak Hour Factor	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	416	543	243	975	720	322	79	941	1542	322	1076	57
Arrive On Green	0.23	0.15	0.00	0.29	0.21	0.00	0.04	0.27	0.00	0.09	0.31	0.31
Sat Flow, veh/h	1774	3539	1583	3390	3486	1560	1774	3539	2787	3442	3420	180
Grp Volume(v), veh/h	156	381	0	940	564	0	51	623	0	269	531	549
Grp Sat Flow(s),veh/h/ln	1774	1770	1583	1695	1743	1560	1774	1770	1393	1721	1770	1831
Q Serve(g_s), s	9.8	13.6	0.0	36.3	20.3	0.0	3.8	20.8	0.0	10.2	39.0	39.0
Cycle Q Clear(g_c), s	9.8	13.6	0.0	36.3	20.3	0.0	3.8	20.8	0.0	10.2	39.0	39.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.10
Lane Grp Cap(c), veh/h	416	543	243	975	720	322	79	941	1542	322	557	576
V/C Ratio(X)	0.37	0.70	0.00	0.96	0.78	0.00	0.64	0.66	0.00	0.84	0.95	0.95
Avail Cap(c_a), veh/h	416	826	370	975	1250	559	96	941	1542	371	561	580
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	42.7	53.3	0.0	46.6	49.9	0.0	62.4	43.4	0.0	59.2	44.6	44.6
Incr Delay (d2), s/veh	0.6	1.7	0.0	20.5	1.9	0.0	10.2	1.7	0.0	13.8	26.7	26.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.9	6.7	0.0	19.8	10.0	0.0	2.1	10.4	0.0	5.5	23.1	23.9
LnGrp Delay(d),s/veh	43.2	55.0	0.0	67.2	51.8	0.0	72.5	45.2	0.0	73.0	71.2	70.7
LnGrp LOS	D	D		E	D		E	D		E	E	E
Approach Vol, veh/h		537			1504			674			1349	
Approach Delay, s/veh		51.6			61.4			47.2			71.4	
Approach LOS		D			E			D			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	19.2	42.1	45.0	26.5	12.7	48.6	37.2	34.2
Change Period (Y+Rc), s	6.8	6.8	6.8	6.1	6.8	6.8	6.1	6.8
Max Green Setting (Gmax), s	14.3	35.0	38.2	31.0	7.2	42.1	21.6	47.6
Max Q Clear Time (g_c+I1), s	12.2	22.8	38.3	15.6	5.8	41.0	11.8	22.3
Green Ext Time (p_c), s	0.2	8.3	0.0	1.9	0.0	0.8	2.1	4.0

Intersection Summary	
HCM 2010 Ctrl Delay	61.1
HCM 2010 LOS	E

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	291	2	98	9	8	19	29	761	4	6	1295	422
Future Volume (veh/h)	291	2	98	9	8	19	29	761	4	6	1295	422
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1863	1900	1863	1900	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	331	2	111	10	9	22	33	865	5	7	1472	0
Adj No. of Lanes	0	1	1	0	1	0	1	2	0	1	2	1
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	234	1	506	46	50	58	76	1670	10	22	1531	685
Arrive On Green	0.32	0.32	0.32	0.32	0.32	0.32	0.04	0.46	0.46	0.01	0.43	0.00
Sat Flow, veh/h	498	3	1577	0	155	180	1774	3608	21	1774	3539	1583
Grp Volume(v), veh/h	333	0	111	41	0	0	33	424	446	7	1472	0
Grp Sat Flow(s),veh/h/ln	501	0	1577	335	0	0	1774	1770	1859	1774	1770	1583
Q Serve(g_s), s	0.0	0.0	5.0	0.0	0.0	0.0	1.8	16.4	16.4	0.4	39.0	0.0
Cycle Q Clear(g_c), s	31.0	0.0	5.0	31.0	0.0	0.0	1.8	16.4	16.4	0.4	39.0	0.0
Prop In Lane	0.99		1.00	0.24		0.54	1.00		0.01	1.00		1.00
Lane Grp Cap(c), veh/h	235	0	506	154	0	0	76	819	860	22	1531	685
V/C Ratio(X)	1.42	0.00	0.22	0.27	0.00	0.00	0.44	0.52	0.52	0.32	0.96	0.00
Avail Cap(c_a), veh/h	235	0	506	154	0	0	129	819	860	129	1550	693
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	37.7	0.0	24.0	26.0	0.0	0.0	45.1	18.3	18.3	47.3	26.6	0.0
Incr Delay (d2), s/veh	211.0	0.0	0.2	0.9	0.0	0.0	3.9	0.6	0.5	8.0	14.6	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	20.0	0.0	2.2	0.8	0.0	0.0	0.9	8.0	8.4	0.2	22.1	0.0
LnGrp Delay(d),s/veh	248.7	0.0	24.2	26.9	0.0	0.0	49.1	18.9	18.9	55.3	41.3	0.0
LnGrp LOS	F		C	C			D	B	B	E	D	
Approach Vol, veh/h		444			41			903			1479	
Approach Delay, s/veh		192.6			26.9			20.0			41.3	
Approach LOS		F			C			C			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	8.0	51.5		37.1	10.9	48.6		37.1
Change Period (Y+Rc), s	6.8	6.8		6.1	6.8	6.8		6.1
Max Green Setting (Gmax), s	7.0	42.3		31.0	7.0	42.3		31.0
Max Q Clear Time (g_c+I1), s	2.4	18.4		33.0	3.8	41.0		33.0
Green Ext Time (p_c), s	0.0	18.2		0.0	0.0	0.8		0.0

Intersection Summary	
HCM 2010 Ctrl Delay	57.8
HCM 2010 LOS	E

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	15	21	152	666	85	23	182	534	402	49	785	12
Future Volume (veh/h)	15	21	152	666	85	23	182	534	402	49	785	12
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	17	24	0	766	98	4	209	614	146	56	902	14
Adj No. of Lanes	1	1	1	2	1	1	1	2	1	1	3	0
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	87	91	77	835	452	382	235	1666	738	84	1988	31
Arrive On Green	0.05	0.05	0.00	0.24	0.24	0.24	0.13	0.47	0.47	0.05	0.39	0.39
Sat Flow, veh/h	1774	1863	1583	3442	1863	1575	1774	3539	1568	1774	5158	80
Grp Volume(v), veh/h	17	24	0	766	98	4	209	614	146	56	593	323
Grp Sat Flow(s),veh/h/ln	1774	1863	1583	1721	1863	1575	1774	1770	1568	1774	1695	1848
Q Serve(g_s), s	1.2	1.6	0.0	27.8	5.4	0.2	14.8	14.2	7.0	4.0	16.7	16.7
Cycle Q Clear(g_c), s	1.2	1.6	0.0	27.8	5.4	0.2	14.8	14.2	7.0	4.0	16.7	16.7
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.04
Lane Grp Cap(c), veh/h	87	91	77	835	452	382	235	1666	738	84	1306	712
V/C Ratio(X)	0.20	0.26	0.00	0.92	0.22	0.01	0.89	0.37	0.20	0.67	0.45	0.45
Avail Cap(c_a), veh/h	305	320	272	890	482	407	276	1666	738	133	1306	712
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	58.5	58.7	0.0	47.2	38.8	36.8	54.6	21.7	19.8	60.0	29.3	29.3
Incr Delay (d2), s/veh	1.1	1.5	0.0	13.7	0.2	0.0	25.1	0.6	0.6	8.8	1.1	2.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.6	0.9	0.0	14.8	2.8	0.1	8.9	7.1	3.1	2.2	8.0	8.9
LnGrp Delay(d),s/veh	59.6	60.2	0.0	61.0	39.0	36.8	79.6	22.3	20.4	68.8	30.4	31.4
LnGrp LOS	E	E		E	D	D	E	C	C	E	C	C
Approach Vol, veh/h		41			868			969			972	
Approach Delay, s/veh		59.9			58.4			34.4			33.0	
Approach LOS		E			E			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	12.1	66.4		12.4	23.1	55.4		37.1
Change Period (Y+Rc), s	6.1	6.1		6.1	6.1	6.1		6.1
Max Green Setting (Gmax), s	9.6	38.9		22.0	19.9	28.6		33.1
Max Q Clear Time (g_c+I1), s	6.0	16.2		3.6	16.8	18.7		29.8
Green Ext Time (p_c), s	0.0	11.9		0.1	0.2	6.8		1.3

Intersection Summary		
HCM 2010 Ctrl Delay		41.6
HCM 2010 LOS		D

Intersection						
Int Delay, s/veh	2					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	34	108	686	100	181	1221
Future Vol, veh/h	34	108	686	100	181	1221
Conflicting Peds, #/hr	0	0	0	5	5	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	50	-	350	195	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	86	86	86	86	86	86
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	40	126	798	116	210	1420

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1934	404	0	0	803	0
Stage 1	803	-	-	-	-	-
Stage 2	1131	-	-	-	-	-
Critical Hdwy	6.84	6.94	-	-	4.14	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	-	-	2.22	-
Pot Cap-1 Maneuver	58	596	-	-	817	-
Stage 1	401	-	-	-	-	-
Stage 2	270	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	43	593	-	-	817	-
Mov Cap-2 Maneuver	139	-	-	-	-	-
Stage 1	399	-	-	-	-	-
Stage 2	201	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	19.5	0	1.4
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	139	593	817	-
HCM Lane V/C Ratio	-	-	0.284	0.212	0.258	-
HCM Control Delay (s)	-	-	40.9	12.7	10.9	-
HCM Lane LOS	-	-	E	B	B	-
HCM 95th %tile Q(veh)	-	-	1.1	0.8	1	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	154	271	163	105	305	78	85	566	58	85	950	176
Future Volume (veh/h)	154	271	163	105	305	78	85	566	58	85	950	176
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.99	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1835	1835	1835	1844	1844	1844	1881	1881	1881
Adj Flow Rate, veh/h	167	295	38	114	332	0	92	615	17	92	1033	0
Adj No. of Lanes	2	1	1	1	1	1	1	2	1	1	2	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	324	473	400	154	452	385	166	1205	533	169	1229	550
Arrive On Green	0.09	0.25	0.25	0.09	0.25	0.00	0.09	0.34	0.34	0.09	0.34	0.00
Sat Flow, veh/h	3476	1881	1592	1747	1835	1560	1756	3504	1552	1792	3575	1599
Grp Volume(v), veh/h	167	295	38	114	332	0	92	615	17	92	1033	0
Grp Sat Flow(s),veh/h/ln	1738	1881	1592	1747	1835	1560	1756	1752	1552	1792	1787	1599
Q Serve(g_s), s	3.9	11.7	1.5	5.4	14.0	0.0	4.2	11.8	0.6	4.1	22.5	0.0
Cycle Q Clear(g_c), s	3.9	11.7	1.5	5.4	14.0	0.0	4.2	11.8	0.6	4.1	22.5	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	324	473	400	154	452	385	166	1205	533	169	1229	550
V/C Ratio(X)	0.52	0.62	0.10	0.74	0.73	0.00	0.55	0.51	0.03	0.54	0.84	0.00
Avail Cap(c_a), veh/h	367	648	548	166	627	533	188	1205	533	221	1286	575
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	36.4	28.0	24.2	37.4	29.2	0.0	36.4	22.0	18.3	36.4	25.5	0.0
Incr Delay (d2), s/veh	0.9	1.6	0.1	13.9	3.2	0.0	2.1	0.4	0.0	2.0	5.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.9	6.3	0.7	3.2	7.5	0.0	2.1	5.7	0.3	2.1	11.9	0.0
LnGrp Delay(d),s/veh	37.3	29.6	24.3	51.4	32.4	0.0	38.6	22.4	18.4	38.4	30.5	0.0
LnGrp LOS	D	C	C	D	C		D	C	B	D	C	
Approach Vol, veh/h		500			446			724			1125	
Approach Delay, s/veh		31.8			37.3			24.3			31.1	
Approach LOS		C			D			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	12.2	34.4	11.6	26.1	12.2	34.4	12.0	25.7
Change Period (Y+Rc), s	* 4.2	5.4	* 4.2	4.9	* 4.2	5.4	* 4.2	* 4.9
Max Green Setting (Gmax), s	* 10	28.9	* 8	29.0	* 9	30.3	* 8.9	* 29
Max Q Clear Time (g_c+I1), s	6.1	13.8	7.4	13.7	6.2	24.5	5.9	16.0
Green Ext Time (p_c), s	0.0	9.8	0.0	4.2	0.0	4.5	0.1	3.8

Intersection Summary			
HCM 2010 Ctrl Delay		30.5	
HCM 2010 LOS		C	

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	233	22	166	21	21	26	115	527	9	27	866	362
Future Volume (veh/h)	233	22	166	21	21	26	115	527	9	27	866	362
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1900	1863	1863	1863	1863	1900	1792	1792	1792
Adj Flow Rate, veh/h	300	0	0	25	25	0	139	635	11	33	1043	0
Adj No. of Lanes	2	0	1	0	1	1	1	2	0	1	2	1
Peak Hour Factor	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	6	6	6
Cap, veh/h	467	0	209	36	36	63	174	1749	30	44	1428	639
Arrive On Green	0.13	0.00	0.00	0.04	0.04	0.00	0.10	0.49	0.49	0.03	0.42	0.00
Sat Flow, veh/h	3548	0	1583	909	909	1583	1774	3560	62	1707	3406	1524
Grp Volume(v), veh/h	300	0	0	50	0	0	139	316	330	33	1043	0
Grp Sat Flow(s),veh/h/ln	1774	0	1583	1817	0	1583	1774	1770	1852	1707	1703	1524
Q Serve(g_s), s	6.4	0.0	0.0	2.2	0.0	0.0	6.1	8.8	8.8	1.5	20.4	0.0
Cycle Q Clear(g_c), s	6.4	0.0	0.0	2.2	0.0	0.0	6.1	8.8	8.8	1.5	20.4	0.0
Prop In Lane	1.00		1.00	0.50		1.00	1.00		0.03	1.00		1.00
Lane Grp Cap(c), veh/h	467	0	209	72	0	63	174	870	910	44	1428	639
V/C Ratio(X)	0.64	0.00	0.00	0.69	0.00	0.00	0.80	0.36	0.36	0.74	0.73	0.00
Avail Cap(c_a), veh/h	1201	0	536	615	0	536	238	983	1028	148	1729	774
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	32.8	0.0	0.0	37.8	0.0	0.0	35.2	12.6	12.6	38.6	19.4	0.0
Incr Delay (d2), s/veh	1.5	0.0	0.0	11.0	0.0	0.0	12.6	0.3	0.2	21.4	1.3	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.2	0.0	0.0	1.3	0.0	0.0	3.6	4.4	4.6	1.0	9.8	0.0
LnGrp Delay(d),s/veh	34.3	0.0	0.0	48.9	0.0	0.0	47.8	12.8	12.8	60.0	20.7	0.0
LnGrp LOS	C			D			D	B	B	E	C	
Approach Vol, veh/h		300			50			785			1076	
Approach Delay, s/veh		34.3			48.9			19.0			21.9	
Approach LOS		C			D			B			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	8.9	46.0		16.1	14.6	40.3		8.8
Change Period (Y+Rc), s	6.8	6.8		5.6	6.8	6.8		5.6
Max Green Setting (Gmax), s	6.9	44.3		27.0	10.7	40.5		27.0
Max Q Clear Time (g_c+I1), s	3.5	10.8		8.4	8.1	22.4		4.2
Green Ext Time (p_c), s	0.0	15.6		1.0	0.1	11.0		0.2

Intersection Summary	
HCM 2010 Ctrl Delay	23.1
HCM 2010 LOS	C

Notes

User approved volume balancing among the lanes for turning movement.

Intersection												
Int Delay, s/veh	6.7											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	17	2	181	0	0	0	289	63	7	1	81	40
Future Vol, veh/h	17	2	181	0	0	0	289	63	7	1	81	40
Conflicting Peds, #/hr	0	0	0	0	0	0	5	0	7	7	0	5
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	50	-	-	-	75	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	-	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	94	94	94	94	94	94	94	94	94	94	94	94
Heavy Vehicles, %	7	7	7	2	2	2	2	2	2	2	2	2
Mvmt Flow	18	2	193	0	0	0	307	67	7	1	86	43

Major/Minor	Minor2						Major1			Major2		
Conflicting Flow All	801	811	112				134	0	0	81	0	0
Stage 1	115	115	-				-	-	-	-	-	-
Stage 2	686	696	-				-	-	-	-	-	-
Critical Hdwy	6.47	6.57	6.27				4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	5.47	5.57	-				-	-	-	-	-	-
Critical Hdwy Stg 2	5.47	5.57	-				-	-	-	-	-	-
Follow-up Hdwy	3.563	4.063	3.363				2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	347	308	928				1451	-	-	1517	-	-
Stage 1	898	791	-				-	-	-	-	-	-
Stage 2	491	436	-				-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	271	0	924				1451	-	-	1517	-	-
Mov Cap-2 Maneuver	271	0	-				-	-	-	-	-	-
Stage 1	893	0	-				-	-	-	-	-	-
Stage 2	385	0	-				-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	10.8	6.6	0.1
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	SBL	SBT	SBR
Capacity (veh/h)	1451	-	-	271	924	1517	-	-
HCM Lane V/C Ratio	0.212	-	-	0.075	0.208	0.001	-	-
HCM Control Delay (s)	8.1	-	-	19.4	9.9	7.4	0	-
HCM Lane LOS	A	-	-	C	A	A	A	-
HCM 95th %tile Q(veh)	0.8	-	-	0.2	0.8	0	-	-

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	488	250	624	786	0	278
Future Volume (vph)	488	250	624	786	0	278
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Grade (%)	-3%			-3%	-3%	
Total Lost time (s)	5.6	4.0	5.6	5.6		5.6
Lane Util. Factor	0.91	1.00	0.97	0.95		0.88
Frpb, ped/bikes	1.00	1.00	1.00	1.00		1.00
Flpb, ped/bikes	1.00	1.00	1.00	1.00		1.00
Frt	1.00	0.85	1.00	1.00		0.85
Flt Protected	1.00	1.00	0.95	1.00		1.00
Satd. Flow (prot)	5111	1591	3485	3592		2828
Flt Permitted	1.00	1.00	0.95	1.00		1.00
Satd. Flow (perm)	5111	1591	3485	3592		2828
Peak-hour factor, PHF	0.79	0.79	0.79	0.79	0.79	0.79
Adj. Flow (vph)	618	316	790	995	0	352
RTOR Reduction (vph)	0	0	0	0	0	158
Lane Group Flow (vph)	618	316	790	995	0	194
Confl. Peds. (#/hr)						9
Heavy Vehicles (%)	3%	3%	2%	2%	2%	2%
Turn Type	NA	Free	Prot	NA		Over
Protected Phases	6		8	2 8		8
Permitted Phases		Free				8
Actuated Green, G (s)	12.3	39.0	15.5	39.0		15.5
Effective Green, g (s)	12.3	39.0	15.5	39.0		15.5
Actuated g/C Ratio	0.32	1.00	0.40	1.00		0.40
Clearance Time (s)	5.6		5.6			5.6
Vehicle Extension (s)	3.0		3.0			3.0
Lane Grp Cap (vph)	1611	1591	1385	3592		1123
v/s Ratio Prot	0.12		c0.23	c0.28		0.07
v/s Ratio Perm		0.20				
v/c Ratio	0.38	0.20	0.57	0.28		0.17
Uniform Delay, d1	10.4	0.0	9.2	0.0		7.6
Progression Factor	1.00	1.00	1.00	1.00		1.00
Incremental Delay, d2	0.2	0.3	0.6	0.0		0.1
Delay (s)	10.6	0.3	9.7	0.0		7.7
Level of Service	B	A	A	A		A
Approach Delay (s)	7.1			4.3	7.7	
Approach LOS	A			A	A	

Intersection Summary			
HCM 2000 Control Delay	5.5	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.50		
Actuated Cycle Length (s)	39.0	Sum of lost time (s)	11.2
Intersection Capacity Utilization	45.8%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	4	544	31	161	16	490	260	172	866	15
Future Volume (veh/h)	0	0	4	544	31	161	16	490	260	172	866	15
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	1.00		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1863	1827	1827	1827	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	0	0	0	690	0	42	20	598	0	210	1056	18
Adj No. of Lanes	0	1	1	2	0	1	1	2	2	1	2	0
Peak Hour Factor	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82
Percent Heavy Veh, %	2	2	2	4	4	4	2	2	2	2	2	2
Cap, veh/h	0	3	55	916	0	406	59	1204	948	259	1613	27
Arrive On Green	0.00	0.00	0.00	0.26	0.00	0.26	0.03	0.34	0.00	0.15	0.45	0.45
Sat Flow, veh/h	0	1863	1583	3480	0	1541	1774	3539	2787	1774	3561	61
Grp Volume(v), veh/h	0	0	0	690	0	42	20	598	0	210	525	549
Grp Sat Flow(s),veh/h/ln	0	1863	1583	1740	0	1541	1774	1770	1393	1774	1770	1852
Q Serve(g_s), s	0.0	0.0	0.0	11.1	0.0	1.3	0.7	8.2	0.0	7.0	14.1	14.1
Cycle Q Clear(g_c), s	0.0	0.0	0.0	11.1	0.0	1.3	0.7	8.2	0.0	7.0	14.1	14.1
Prop In Lane	0.00		1.00	1.00		1.00	1.00		1.00	1.00		0.03
Lane Grp Cap(c), veh/h	0	3	55	916	0	406	59	1204	948	259	802	839
V/C Ratio(X)	0.00	0.00	0.00	0.75	0.00	0.10	0.34	0.50	0.00	0.81	0.65	0.65
Avail Cap(c_a), veh/h	0	61	104	1482	0	656	232	1553	1223	346	890	931
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	0.0	0.0	0.0	20.7	0.0	17.0	28.9	16.0	0.0	25.3	13.0	13.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	1.3	0.0	0.1	3.4	0.3	0.0	10.3	1.5	1.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	0.0	5.4	0.0	0.5	0.4	4.0	0.0	4.2	7.2	7.5
LnGrp Delay(d),s/veh	0.0	0.0	0.0	21.9	0.0	17.1	32.3	16.3	0.0	35.6	14.5	14.4
LnGrp LOS				C		B	C	B		D	B	B
Approach Vol, veh/h		0			732			618			1284	
Approach Delay, s/veh		0.0			21.7			16.8			17.9	
Approach LOS					C			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	14.0	25.9		0.0	7.1	32.8		21.2
Change Period (Y+Rc), s	5.1	5.1		3.0	5.1	5.1		5.1
Max Green Setting (Gmax), s	11.9	26.8		2.0	8.0	30.7		26.0
Max Q Clear Time (g_c+I1), s	9.0	10.2		0.0	2.7	16.1		13.1
Green Ext Time (p_c), s	0.2	10.2		0.0	0.0	9.3		2.4

Intersection Summary	
HCM 2010 Ctrl Delay	18.7
HCM 2010 LOS	B

Notes

User approved volume balancing among the lanes for turning movement.

Intersection												
Int Delay, s/veh	1.7											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	15	388	19	21	722	27	13	1	7	20	2	11
Future Vol, veh/h	15	388	19	21	722	27	13	1	7	20	2	11
Conflicting Peds, #/hr	7	0	11	11	0	7	2	0	0	0	0	2
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	84	84	84	84	84	84	84	84	84	84	84	84
Heavy Vehicles, %	6	6	6	3	3	3	14	14	14	2	2	2
Mvmt Flow	18	462	23	25	860	32	15	1	8	24	2	13

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	899	0	0	496	0	0	1003	1469	253	1200	1464	455
Stage 1	-	-	-	-	-	-	520	520	-	933	933	-
Stage 2	-	-	-	-	-	-	483	949	-	267	531	-
Critical Hdwy	4.22	-	-	4.16	-	-	7.78	6.78	7.18	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.78	5.78	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.78	5.78	-	6.54	5.54	-
Follow-up Hdwy	2.26	-	-	2.23	-	-	3.64	4.14	3.44	3.52	4.02	3.32
Pot Cap-1 Maneuver	727	-	-	1057	-	-	180	113	711	141	127	552
Stage 1	-	-	-	-	-	-	478	501	-	286	343	-
Stage 2	-	-	-	-	-	-	503	311	-	715	524	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	726	-	-	1057	-	-	160	102	704	129	115	547
Mov Cap-2 Maneuver	-	-	-	-	-	-	160	102	-	129	115	-
Stage 1	-	-	-	-	-	-	457	479	-	274	325	-
Stage 2	-	-	-	-	-	-	464	294	-	681	501	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.5	0.4	24.7	32.2
HCM LOS			C	D

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	208	726	-	-	1057	-	-	171
HCM Lane V/C Ratio	0.12	0.025	-	-	0.024	-	-	0.23
HCM Control Delay (s)	24.7	10.1	0.2	-	8.5	0.2	-	32.2
HCM Lane LOS	C	B	A	-	A	A	-	D
HCM 95th %tile Q(veh)	0.4	0.1	-	-	0.1	-	-	0.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	12	348	55	72	682	25	66	7	42	20	10	22
Future Volume (veh/h)	12	348	55	72	682	25	66	7	42	20	10	22
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1792	1792	1900	1827	1827	1900	1900	1776	1776	1900	1827	1827
Adj Flow Rate, veh/h	14	419	66	87	822	30	80	8	0	24	12	27
Adj No. of Lanes	1	2	0	1	2	0	0	1	1	0	1	1
Peak Hour Factor	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83
Percent Heavy Veh, %	6	6	6	4	4	4	7	7	7	4	4	4
Cap, veh/h	412	1423	223	565	1648	60	389	29	255	326	126	262
Arrive On Green	0.48	0.48	0.48	0.48	0.48	0.48	0.17	0.17	0.00	0.17	0.17	0.17
Sat Flow, veh/h	619	2948	461	886	3415	125	1088	171	1509	871	743	1548
Grp Volume(v), veh/h	14	241	244	87	418	434	88	0	0	36	0	27
Grp Sat Flow(s),veh/h/ln	619	1703	1707	886	1736	1804	1259	0	1509	1615	0	1548
Q Serve(g_s), s	0.5	2.9	2.9	2.2	5.5	5.5	1.7	0.0	0.0	0.0	0.0	0.5
Cycle Q Clear(g_c), s	6.0	2.9	2.9	5.1	5.5	5.5	2.3	0.0	0.0	0.6	0.0	0.5
Prop In Lane	1.00		0.27	1.00		0.07	0.91		1.00	0.67		1.00
Lane Grp Cap(c), veh/h	412	822	823	565	837	870	418	0	255	452	0	262
V/C Ratio(X)	0.03	0.29	0.30	0.15	0.50	0.50	0.21	0.00	0.00	0.08	0.00	0.10
Avail Cap(c_a), veh/h	524	1131	1133	739	1178	1224	1221	0	1168	1356	0	1199
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	8.0	5.2	5.2	6.8	5.9	5.9	12.6	0.0	0.0	11.8	0.0	11.8
Incr Delay (d2), s/veh	0.0	0.2	0.2	0.1	0.5	0.4	0.2	0.0	0.0	0.1	0.0	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	1.4	1.4	0.6	2.7	2.8	0.8	0.0	0.0	0.3	0.0	0.2
LnGrp Delay(d),s/veh	8.0	5.4	5.4	6.9	6.4	6.4	12.9	0.0	0.0	11.9	0.0	12.0
LnGrp LOS	A	A	A	A	A	A	B			B		B
Approach Vol, veh/h		499			939			88			63	
Approach Delay, s/veh		5.5			6.4			12.9			11.9	
Approach LOS		A			A			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		22.3		11.3		22.3		11.3
Change Period (Y+Rc), s		6.1		5.6		* 6.1		5.6
Max Green Setting (Gmax), s		22.3		26.0		* 23		26.0
Max Q Clear Time (g_c+I1), s		8.0		2.6		7.5		4.3
Green Ext Time (p_c), s		7.7		0.7		8.1		0.7

Intersection Summary	
HCM 2010 Ctrl Delay	6.7
HCM 2010 LOS	A

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Intersection												
Int Delay, s/veh	19.5											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	407	3	32	614	0	4	0	14	137	45	161
Future Vol, veh/h	0	407	3	32	614	0	4	0	14	137	45	161
Conflicting Peds, #/hr	0	0	9	6	0	0	2	0	0	0	0	2
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	240	-	-	0	-	85	120	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	81	81	81	81	81	81	81	81	81	81	81	81
Heavy Vehicles, %	6	6	6	4	4	4	2	2	2	2	2	2
Mvmt Flow	0	502	4	40	758	0	5	0	17	169	56	199

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	-	0	0	515	0	0	1001	-	262	1088	1352	381
Stage 1	-	-	-	-	-	-	513	-	-	837	837	-
Stage 2	-	-	-	-	-	-	488	-	-	251	515	-
Critical Hdwy	-	-	-	4.18	-	-	7.54	-	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	-	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	-	-	6.54	5.54	-
Follow-up Hdwy	-	-	-	2.24	-	-	3.52	-	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	0	-	-	1033	-	0	197	0	737	170	149	617
Stage 1	0	-	-	-	-	0	512	0	-	327	380	-
Stage 2	0	-	-	-	-	0	530	0	-	731	533	-
Platoon blocked, %		-	-		-							
Mov Cap-1 Maneuver	-	-	-	1033	-	-	89	-	731	~ 161	142	616
Mov Cap-2 Maneuver	-	-	-	-	-	-	89	-	-	~ 161	142	-
Stage 1	-	-	-	-	-	-	512	-	-	327	365	-
Stage 2	-	-	-	-	-	-	292	-	-	714	528	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	0.4	18.4	78.9
HCM LOS			C	F

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBL	WBT	SBLn1	SBLn2
Capacity (veh/h)	89	731	-	-	1033	-	161	356
HCM Lane V/C Ratio	0.055	0.024	-	-	0.038	-	1.051	0.714
HCM Control Delay (s)	47.8	10	-	-	8.6	-	142.2	36.8
HCM Lane LOS	E	B	-	-	A	-	F	E
HCM 95th %tile Q(veh)	0.2	0.1	-	-	0.1	-	8.5	5.3

Notes

~: Volume exceeds capacity $: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon

Intersection						
Int Delay, s/veh	0.4					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	450	108	55	646	0	0
Future Vol, veh/h	450	108	55	646	0	0
Conflicting Peds, #/hr	0	10	10	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	115	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	81	81	81	81	81	81
Heavy Vehicles, %	5	5	2	2	4	4
Mvmt Flow	556	133	68	798	0	0

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	699	0	1167	354
Stage 1	-	-	-	-	632	-
Stage 2	-	-	-	-	535	-
Critical Hdwy	-	-	4.14	-	6.88	6.98
Critical Hdwy Stg 1	-	-	-	-	5.88	-
Critical Hdwy Stg 2	-	-	-	-	5.88	-
Follow-up Hdwy	-	-	2.22	-	3.54	3.34
Pot Cap-1 Maneuver	-	-	893	-	184	637
Stage 1	-	-	-	-	486	-
Stage 2	-	-	-	-	546	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	893	-	168	631
Mov Cap-2 Maneuver	-	-	-	-	168	-
Stage 1	-	-	-	-	481	-
Stage 2	-	-	-	-	504	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.7	0
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	-	-	-	893	-
HCM Lane V/C Ratio	-	-	-	0.076	-
HCM Control Delay (s)	0	-	-	9.4	-
HCM Lane LOS	A	-	-	A	-
HCM 95th %tile Q(veh)	-	-	-	0.2	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	97	333	20	8	457	195	21	68	3	23	26	223
Future Volume (veh/h)	97	333	20	8	457	195	21	68	3	23	26	223
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	0.99		0.99	0.99		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1900	1863	1863	1900	1863	1863	1900	1792	1792	1792
Adj Flow Rate, veh/h	113	387	23	9	531	227	24	79	3	27	30	0
Adj No. of Lanes	1	2	0	1	2	0	1	1	0	1	1	1
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86
Percent Heavy Veh, %	3	3	3	2	2	2	2	2	2	6	6	6
Cap, veh/h	213	1554	92	29	862	367	385	307	12	337	309	263
Arrive On Green	0.12	0.46	0.46	0.02	0.36	0.36	0.17	0.17	0.17	0.17	0.17	0.00
Sat Flow, veh/h	1757	3361	199	1774	2412	1027	1363	1782	68	1251	1792	1524
Grp Volume(v), veh/h	113	201	209	9	389	369	24	0	82	27	30	0
Grp Sat Flow(s),veh/h/ln	1757	1752	1808	1774	1770	1670	1363	0	1850	1251	1792	1524
Q Serve(g_s), s	2.6	3.0	3.0	0.2	7.7	7.7	0.6	0.0	1.6	0.8	0.6	0.0
Cycle Q Clear(g_c), s	2.6	3.0	3.0	0.2	7.7	7.7	1.2	0.0	1.6	2.4	0.6	0.0
Prop In Lane	1.00		0.11	1.00		0.62	1.00		0.04	1.00		1.00
Lane Grp Cap(c), veh/h	213	810	836	29	633	597	385	0	319	337	309	263
V/C Ratio(X)	0.53	0.25	0.25	0.31	0.61	0.62	0.06	0.00	0.26	0.08	0.10	0.00
Avail Cap(c_a), veh/h	327	875	903	292	846	798	1017	0	1176	917	1140	969
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	17.5	6.9	6.9	20.6	11.2	11.2	15.3	0.0	15.2	16.3	14.8	0.0
Incr Delay (d2), s/veh	2.0	0.2	0.2	5.7	1.0	1.0	0.1	0.0	0.4	0.1	0.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.3	1.4	1.5	0.1	3.8	3.7	0.2	0.0	0.9	0.3	0.3	0.0
LnGrp Delay(d),s/veh	19.5	7.1	7.1	26.3	12.2	12.3	15.4	0.0	15.6	16.4	14.9	0.0
LnGrp LOS	B	A	A	C	B	B	B		B	B	B	
Approach Vol, veh/h		523			767			106			57	
Approach Delay, s/veh		9.8			12.4			15.6			15.6	
Approach LOS		A			B			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	5.8	24.7		11.9	10.3	20.3		11.9
Change Period (Y+Rc), s	5.1	5.1		4.6	5.1	5.1		4.6
Max Green Setting (Gmax), s	7.0	21.2		27.0	7.9	20.3		27.0
Max Q Clear Time (g_c+I1), s	2.2	5.0		4.4	4.6	9.7		3.6
Green Ext Time (p_c), s	0.0	6.8		0.7	0.1	5.3		0.7

Intersection Summary		
HCM 2010 Ctrl Delay		11.8
HCM 2010 LOS		B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	85	321	86	89	422	118	53	343	51	95	650	129
Future Volume (veh/h)	85	321	86	89	422	118	53	343	51	95	650	129
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	1.00		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1808	1808	1862	1810	1810	1810	1863	1863	1863
Adj Flow Rate, veh/h	99	373	12	103	491	137	62	399	11	110	756	33
Adj No. of Lanes	1	2	1	1	2	0	1	2	1	1	2	1
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86
Percent Heavy Veh, %	2	2	2	3	3	3	5	5	5	2	2	2
Cap, veh/h	133	915	406	131	689	191	110	1019	455	139	1100	489
Arrive On Green	0.08	0.26	0.26	0.08	0.26	0.26	0.06	0.30	0.30	0.08	0.31	0.31
Sat Flow, veh/h	1774	3539	1569	1722	2655	736	1723	3438	1535	1774	3539	1574
Grp Volume(v), veh/h	99	373	12	103	317	311	62	399	11	110	756	33
Grp Sat Flow(s),veh/h/ln	1774	1770	1569	1722	1717	1674	1723	1719	1535	1774	1770	1574
Q Serve(g_s), s	4.6	7.3	0.5	4.9	14.0	14.2	2.9	7.7	0.4	5.1	15.7	1.2
Cycle Q Clear(g_c), s	4.6	7.3	0.5	4.9	14.0	14.2	2.9	7.7	0.4	5.1	15.7	1.2
Prop In Lane	1.00		1.00	1.00		0.44	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	133	915	406	131	445	434	110	1019	455	139	1100	489
V/C Ratio(X)	0.74	0.41	0.03	0.79	0.71	0.72	0.56	0.39	0.02	0.79	0.69	0.07
Avail Cap(c_a), veh/h	148	1139	505	144	553	539	144	1410	629	152	1460	649
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	38.0	25.8	23.2	38.1	28.2	28.3	38.1	23.5	20.9	38.0	25.3	20.3
Incr Delay (d2), s/veh	16.4	0.3	0.0	23.0	3.2	3.5	4.5	0.2	0.0	22.5	0.9	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.9	3.6	0.2	3.2	7.1	7.0	1.5	3.7	0.2	3.4	7.8	0.5
LnGrp Delay(d),s/veh	54.4	26.1	23.3	61.1	31.4	31.7	42.6	23.7	20.9	60.5	26.2	20.4
LnGrp LOS	D	C	C	E	C	C	D	C	C	E	C	C
Approach Vol, veh/h		484			731			472			899	
Approach Delay, s/veh		31.8			35.7			26.2			30.2	
Approach LOS		C			D			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	12.7	31.0	12.5	27.8	11.4	32.2	12.4	27.9
Change Period (Y+Rc), s	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1
Max Green Setting (Gmax), s	7.2	34.4	7.0	27.0	7.0	34.6	7.0	27.0
Max Q Clear Time (g_c+I1), s	7.1	9.7	6.9	9.3	4.9	17.7	6.6	16.2
Green Ext Time (p_c), s	0.0	9.1	0.0	6.2	0.0	7.6	0.0	4.8

Intersection Summary	
HCM 2010 Ctrl Delay	31.3
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	91	678	75	616	548	446	93	656	890	445	648	71
Future Volume (veh/h)	91	678	75	616	548	446	93	656	890	445	648	71
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1835	1835	1835	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	95	706	0	642	571	0	97	683	0	464	675	74
Adj No. of Lanes	1	2	1	2	2	1	1	2	2	2	2	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	365	819	366	628	735	329	121	833	1172	437	946	104
Arrive On Green	0.21	0.23	0.00	0.19	0.21	0.00	0.07	0.24	0.00	0.13	0.29	0.29
Sat Flow, veh/h	1774	3539	1583	3390	3486	1560	1774	3539	2787	3442	3215	352
Grp Volume(v), veh/h	95	706	0	642	571	0	97	683	0	464	371	378
Grp Sat Flow(s),veh/h/ln	1774	1770	1583	1695	1743	1560	1774	1770	1393	1721	1770	1798
Q Serve(g_s), s	5.4	22.9	0.0	22.2	18.5	0.0	6.5	21.9	0.0	15.2	22.4	22.5
Cycle Q Clear(g_c), s	5.4	22.9	0.0	22.2	18.5	0.0	6.5	21.9	0.0	15.2	22.4	22.5
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.20
Lane Grp Cap(c), veh/h	365	819	366	628	735	329	121	833	1172	437	520	529
V/C Ratio(X)	0.26	0.86	0.00	1.02	0.78	0.00	0.80	0.82	0.00	1.06	0.71	0.71
Avail Cap(c_a), veh/h	365	916	410	628	1164	521	151	889	1216	437	520	529
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	39.9	44.2	0.0	48.8	44.6	0.0	55.0	43.4	0.0	52.3	37.8	37.8
Incr Delay (d2), s/veh	0.4	7.8	0.0	41.6	1.8	0.0	21.5	5.8	0.0	60.7	4.6	4.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.7	12.1	0.0	13.9	9.1	0.0	3.9	11.4	0.0	10.8	11.6	11.8
LnGrp Delay(d),s/veh	40.3	52.0	0.0	90.4	46.4	0.0	76.6	49.3	0.0	113.0	42.3	42.3
LnGrp LOS	D	D		F	D		E	D		F	D	D
Approach Vol, veh/h		801			1213			780			1213	
Approach Delay, s/veh		50.7			69.7			52.7			69.4	
Approach LOS		D			E			D			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	22.0	35.0	29.0	33.8	15.0	42.0	30.8	32.0
Change Period (Y+Rc), s	6.8	6.8	6.8	6.1	6.8	6.8	6.1	6.8
Max Green Setting (Gmax), s	15.2	30.1	22.2	31.0	10.2	35.1	13.2	40.0
Max Q Clear Time (g_c+I1), s	17.2	23.9	24.2	24.9	8.5	24.5	7.4	20.5
Green Ext Time (p_c), s	0.0	4.1	0.0	2.3	0.0	6.5	2.5	3.8

Intersection Summary	
HCM 2010 Ctrl Delay	62.5
HCM 2010 LOS	E

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	341	17	50	5	14	13	159	1335	11	19	855	428
Future Volume (veh/h)	341	17	50	5	14	13	159	1335	11	19	855	428
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		0.98	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1863	1900	1863	1900	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	355	18	52	5	15	14	166	1391	11	20	891	0
Adj No. of Lanes	0	1	1	0	1	0	1	2	0	1	2	1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	212	7	564	48	125	88	201	1372	11	55	1057	473
Arrive On Green	0.36	0.36	0.36	0.36	0.36	0.36	0.11	0.38	0.38	0.03	0.30	0.00
Sat Flow, veh/h	362	18	1570	0	348	244	1774	3598	28	1774	3539	1583
Grp Volume(v), veh/h	373	0	52	34	0	0	166	684	718	20	891	0
Grp Sat Flow(s),veh/h/ln	381	0	1570	592	0	0	1774	1770	1857	1774	1770	1583
Q Serve(g_s), s	0.0	0.0	1.9	0.0	0.0	0.0	7.9	32.9	32.9	1.0	20.4	0.0
Cycle Q Clear(g_c), s	31.0	0.0	1.9	31.0	0.0	0.0	7.9	32.9	32.9	1.0	20.4	0.0
Prop In Lane	0.95		1.00	0.15		0.41	1.00		0.02	1.00		1.00
Lane Grp Cap(c), veh/h	218	0	564	261	0	0	201	675	708	55	1057	473
V/C Ratio(X)	1.71	0.00	0.09	0.13	0.00	0.00	0.82	1.01	1.01	0.36	0.84	0.00
Avail Cap(c_a), veh/h	218	0	564	261	0	0	247	675	708	144	1120	501
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	33.4	0.0	18.3	20.5	0.0	0.0	37.4	26.7	26.7	41.0	28.3	0.0
Incr Delay (d2), s/veh	338.0	0.0	0.1	0.2	0.0	0.0	16.8	38.0	37.3	4.0	5.7	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	25.6	0.0	0.8	0.5	0.0	0.0	4.8	23.1	24.1	0.5	10.7	0.0
LnGrp Delay(d),s/veh	371.4	0.0	18.4	20.7	0.0	0.0	54.2	64.7	64.0	45.0	34.1	0.0
LnGrp LOS	F		B	C			D	F	F	D	C	
Approach Vol, veh/h		425			34			1568			911	
Approach Delay, s/veh		328.2			20.7			63.3			34.3	
Approach LOS		F			C			E			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	9.5	39.7		37.1	16.6	32.6		37.1
Change Period (Y+Rc), s	6.8	6.8		6.1	6.8	6.8		6.1
Max Green Setting (Gmax), s	7.0	32.3		31.0	12.0	27.3		31.0
Max Q Clear Time (g_c+I1), s	3.0	34.9		33.0	9.9	22.4		33.0
Green Ext Time (p_c), s	0.0	0.0		0.0	0.1	3.4		0.0

Intersection Summary		
HCM 2010 Ctrl Delay		92.1
HCM 2010 LOS		F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	27	70	160	462	120	144	304	1108	647	105	1017	24
Future Volume (veh/h)	27	70	160	462	120	144	304	1108	647	105	1017	24
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.98	1.00		0.99	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	28	74	168	486	126	152	320	1166	681	111	1071	25
Adj No. of Lanes	1	1	1	2	1	1	1	2	1	1	3	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	245	257	211	558	302	251	347	1534	676	135	1603	37
Arrive On Green	0.14	0.14	0.14	0.16	0.16	0.16	0.20	0.43	0.43	0.08	0.31	0.31
Sat Flow, veh/h	1774	1863	1528	3442	1863	1551	1774	3539	1560	1774	5110	119
Grp Volume(v), veh/h	28	74	168	486	126	152	320	1166	681	111	710	386
Grp Sat Flow(s),veh/h/ln	1774	1863	1528	1721	1863	1551	1774	1770	1560	1774	1695	1839
Q Serve(g_s), s	1.8	4.6	13.6	17.6	7.8	11.7	22.7	35.6	55.5	7.9	23.3	23.3
Cycle Q Clear(g_c), s	1.8	4.6	13.6	17.6	7.8	11.7	22.7	35.6	55.5	7.9	23.3	23.3
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.06
Lane Grp Cap(c), veh/h	245	257	211	558	302	251	347	1534	676	135	1064	577
V/C Ratio(X)	0.11	0.29	0.80	0.87	0.42	0.60	0.92	0.76	1.01	0.82	0.67	0.67
Avail Cap(c_a), veh/h	305	320	263	592	320	267	398	1534	676	159	1064	577
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	48.3	49.5	53.5	52.3	48.2	49.8	50.5	30.6	36.3	58.3	38.1	38.1
Incr Delay (d2), s/veh	0.2	0.6	12.8	12.9	0.9	3.5	24.8	3.6	36.5	24.7	3.3	6.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.9	2.4	6.5	9.4	4.1	5.2	13.5	18.1	30.7	4.8	11.3	12.8
LnGrp Delay(d),s/veh	48.5	50.2	66.3	65.2	49.1	53.3	75.4	34.2	72.8	83.0	41.5	44.2
LnGrp LOS	D	D	E	E	D	D	E	C	F	F	D	D
Approach Vol, veh/h		270			764			2167			1207	
Approach Delay, s/veh		60.0			60.2			52.4			46.1	
Approach LOS		E			E			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	15.8	61.6		23.7	31.1	46.3		26.8
Change Period (Y+Rc), s	6.1	6.1		6.1	6.1	6.1		6.1
Max Green Setting (Gmax), s	11.5	48.1		22.0	28.7	30.9		22.0
Max Q Clear Time (g_c+I1), s	9.9	57.5		15.6	24.7	25.3		19.6
Green Ext Time (p_c), s	0.0	0.0		0.5	0.4	5.2		0.8

Intersection Summary	
HCM 2010 Ctrl Delay	52.5
HCM 2010 LOS	D

Intersection						
Int Delay, s/veh	1.3					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	16	28	1476	54	120	790
Future Vol, veh/h	16	28	1476	54	120	790
Conflicting Peds, #/hr	0	0	0	6	6	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	50	-	350	195	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	98	98	98	98	98	98
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	16	29	1506	55	122	806

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	2160	759	0	0	1512	0
Stage 1	1512	-	-	-	-	-
Stage 2	648	-	-	-	-	-
Critical Hdwy	6.84	6.94	-	-	4.14	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	-	-	2.22	-
Pot Cap-1 Maneuver	41	349	-	-	438	-
Stage 1	169	-	-	-	-	-
Stage 2	483	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	29	347	-	-	438	-
Mov Cap-2 Maneuver	115	-	-	-	-	-
Stage 1	168	-	-	-	-	-
Stage 2	348	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	25.4	0	2.2
HCM LOS	D		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	115	347	438	-
HCM Lane V/C Ratio	-	-	0.142	0.082	0.28	-
HCM Control Delay (s)	-	-	41.4	16.3	16.4	-
HCM Lane LOS	-	-	E	C	C	-
HCM 95th %tile Q(veh)	-	-	0.5	0.3	1.1	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	269	321	109	100	257	217	193	1253	63	118	791	170
Future Volume (veh/h)	269	321	109	100	257	217	193	1253	63	118	791	170
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		1.00	1.00		0.98	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1835	1835	1835	1844	1844	1844	1881	1881	1881
Adj Flow Rate, veh/h	283	338	21	105	271	0	203	1319	25	124	833	0
Adj No. of Lanes	2	1	1	1	1	1	1	2	1	1	2	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	353	448	375	135	393	334	236	1410	620	160	1278	572
Arrive On Green	0.10	0.24	0.24	0.08	0.21	0.00	0.13	0.40	0.40	0.09	0.36	0.00
Sat Flow, veh/h	3476	1881	1573	1747	1835	1560	1756	3504	1540	1792	3575	1599
Grp Volume(v), veh/h	283	338	21	105	271	0	203	1319	25	124	833	0
Grp Sat Flow(s),veh/h/ln	1738	1881	1573	1747	1835	1560	1756	1752	1540	1792	1787	1599
Q Serve(g_s), s	7.7	16.2	1.0	5.7	13.2	0.0	11.0	35.0	1.0	6.6	19.0	0.0
Cycle Q Clear(g_c), s	7.7	16.2	1.0	5.7	13.2	0.0	11.0	35.0	1.0	6.6	19.0	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	353	448	375	135	393	334	236	1410	620	160	1278	572
V/C Ratio(X)	0.80	0.75	0.06	0.78	0.69	0.00	0.86	0.94	0.04	0.77	0.65	0.00
Avail Cap(c_a), veh/h	404	562	470	144	499	424	291	1453	639	166	1278	572
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	42.7	34.4	28.6	44.0	35.2	0.0	41.2	27.8	17.6	43.3	26.2	0.0
Incr Delay (d2), s/veh	9.3	4.9	0.1	20.8	3.2	0.0	17.9	11.4	0.0	18.7	1.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.1	9.1	0.4	3.6	7.1	0.0	6.5	19.1	0.4	4.1	9.6	0.0
LnGrp Delay(d),s/veh	52.0	39.2	28.6	64.8	38.4	0.0	59.1	39.2	17.7	62.0	27.3	0.0
LnGrp LOS	D	D	C	E	D		E	D	B	E	C	
Approach Vol, veh/h		642			376			1547			957	
Approach Delay, s/veh		44.5			45.8			41.4			31.8	
Approach LOS		D			D			D			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	12.9	44.5	11.7	28.0	17.3	40.1	14.1	25.7
Change Period (Y+Rc), s	* 4.2	5.4	* 4.2	4.9	* 4.2	5.4	* 4.2	* 4.9
Max Green Setting (Gmax), s	* 9	40.3	* 8	29.0	* 16	33.2	* 11	* 26
Max Q Clear Time (g_c+I1), s	8.6	37.0	7.7	18.2	13.0	21.0	9.7	15.2
Green Ext Time (p_c), s	0.0	2.1	0.0	3.3	0.1	10.1	0.1	3.4

Intersection Summary			
HCM 2010 Ctrl Delay		39.9	
HCM 2010 LOS		D	

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	320	46	214	21	57	45	302	1165	25	31	576	199
Future Volume (veh/h)	320	46	214	21	57	45	302	1165	25	31	576	199
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.95	1.00		0.99	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1900	1863	1863	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	364	0	33	22	59	5	311	1201	26	32	594	0
Adj No. of Lanes	2	0	1	0	1	1	1	2	0	1	2	1
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	522	0	231	54	144	162	349	1507	33	44	899	402
Arrive On Green	0.15	0.00	0.15	0.11	0.11	0.11	0.20	0.43	0.43	0.03	0.25	0.00
Sat Flow, veh/h	3548	0	1567	499	1339	1508	1774	3541	77	1774	3539	1583
Grp Volume(v), veh/h	364	0	33	81	0	5	311	600	627	32	594	0
Grp Sat Flow(s),veh/h/ln	1774	0	1567	1838	0	1508	1774	1770	1848	1774	1770	1583
Q Serve(g_s), s	8.2	0.0	1.5	3.5	0.0	0.2	14.4	24.8	24.8	1.5	12.7	0.0
Cycle Q Clear(g_c), s	8.2	0.0	1.5	3.5	0.0	0.2	14.4	24.8	24.8	1.5	12.7	0.0
Prop In Lane	1.00		1.00	0.27		1.00	1.00		0.04	1.00		1.00
Lane Grp Cap(c), veh/h	522	0	231	198	0	162	349	753	787	44	899	402
V/C Ratio(X)	0.70	0.00	0.14	0.41	0.00	0.03	0.89	0.80	0.80	0.72	0.66	0.00
Avail Cap(c_a), veh/h	1137	0	502	589	0	483	383	781	816	84	966	432
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	34.1	0.0	31.3	35.1	0.0	33.6	33.0	21.0	21.0	40.8	28.2	0.0
Incr Delay (d2), s/veh	1.7	0.0	0.3	1.4	0.0	0.1	20.9	5.6	5.4	19.6	1.5	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.2	0.0	0.7	1.8	0.0	0.1	9.0	13.2	13.7	1.0	6.4	0.0
LnGrp Delay(d),s/veh	35.8	0.0	31.6	36.4	0.0	33.7	53.9	26.6	26.4	60.3	29.7	0.0
LnGrp LOS	D		C	D		C	D	C	C	E	C	
Approach Vol, veh/h		397			86			1538			626	
Approach Delay, s/veh		35.5			36.3			32.1			31.3	
Approach LOS		D			D			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	8.9	42.7		18.0	23.4	28.2		14.7
Change Period (Y+Rc), s	6.8	6.8		5.6	6.8	6.8		5.6
Max Green Setting (Gmax), s	4.0	37.2		27.0	18.2	23.0		27.0
Max Q Clear Time (g_c+I1), s	3.5	26.8		10.2	16.4	14.7		5.5
Green Ext Time (p_c), s	0.0	7.7		1.3	0.2	6.4		0.4

Intersection Summary	
HCM 2010 Ctrl Delay	32.5
HCM 2010 LOS	C

Notes

User approved volume balancing among the lanes for turning movement.

Intersection												
Int Delay, s/veh	15											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	53	2	217	0	0	0	560	158	18	3	114	82
Future Vol, veh/h	53	2	217	0	0	0	560	158	18	3	114	82
Conflicting Peds, #/hr	0	0	0	0	0	0	7	0	7	7	0	7
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	50	-	-	-	75	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	-	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	93	93	93	93	93	93	93	93	93	93	93	93
Heavy Vehicles, %	6	6	6	2	2	2	2	2	2	2	2	2
Mvmt Flow	57	2	233	0	0	0	602	170	19	3	123	88

Major/Minor	Minor2						Major1			Major2		
Conflicting Flow All	1564	1581	174				218	0	0	196	0	0
Stage 1	180	180	-				-	-	-	-	-	-
Stage 2	1384	1401	-				-	-	-	-	-	-
Critical Hdwy	6.46	6.56	6.26				4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	5.46	5.56	-				-	-	-	-	-	-
Critical Hdwy Stg 2	5.46	5.56	-				-	-	-	-	-	-
Follow-up Hdwy	3.554	4.054	3.354				2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	120	107	859				1352	-	-	1377	-	-
Stage 1	841	743	-				-	-	-	-	-	-
Stage 2	228	203	-				-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	66	0	853				1352	-	-	1377	-	-
Mov Cap-2 Maneuver	66	0	-				-	-	-	-	-	-
Stage 1	834	0	-				-	-	-	-	-	-
Stage 2	126	0	-				-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	46.3	7.4	0.1
HCM LOS	E		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	SBL	SBT	SBR
Capacity (veh/h)	1352	-	-	66	853	1377	-	-
HCM Lane V/C Ratio	0.445	-	-	0.896	0.274	0.002	-	-
HCM Control Delay (s)	9.8	-	-	186.3	10.8	7.6	0	-
HCM Lane LOS	A	-	-	F	B	A	A	-
HCM 95th %tile Q(veh)	2.4	-	-	4.3	1.1	0	-	-

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	964	298	377	487	0	742
Future Volume (vph)	964	298	377	487	0	742
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Grade (%)	-3%			-3%	-3%	
Total Lost time (s)	5.6	4.0	5.6	5.6		5.6
Lane Util. Factor	0.91	1.00	0.97	0.95		0.88
Frpb, ped/bikes	1.00	1.00	1.00	1.00		1.00
Flpb, ped/bikes	1.00	1.00	1.00	1.00		1.00
Frt	1.00	0.85	1.00	1.00		0.85
Flt Protected	1.00	1.00	0.95	1.00		1.00
Satd. Flow (prot)	5111	1591	3485	3592		2828
Flt Permitted	1.00	1.00	0.95	1.00		1.00
Satd. Flow (perm)	5111	1591	3485	3592		2828
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	1026	317	401	518	0	789
RTOR Reduction (vph)	0	0	0	0	0	33
Lane Group Flow (vph)	1026	317	401	518	0	756
Confl. Peds. (#/hr)						13
Heavy Vehicles (%)	3%	3%	2%	2%	2%	2%
Turn Type	NA	Free	Prot	NA		Over
Protected Phases	6		8	2 8		8
Permitted Phases		Free				8
Actuated Green, G (s)	16.9	46.4	18.3	46.4		18.3
Effective Green, g (s)	16.9	46.4	18.3	46.4		18.3
Actuated g/C Ratio	0.36	1.00	0.39	1.00		0.39
Clearance Time (s)	5.6		5.6			5.6
Vehicle Extension (s)	3.0		3.0			3.0
Lane Grp Cap (vph)	1861	1591	1374	3592		1115
v/s Ratio Prot	c0.20		0.12	0.14		c0.27
v/s Ratio Perm		0.20				
v/c Ratio	0.55	0.20	0.29	0.14		0.68
Uniform Delay, d1	11.7	0.0	9.6	0.0		11.6
Progression Factor	1.00	1.00	1.00	1.00		1.00
Incremental Delay, d2	0.4	0.3	0.1	0.0		1.7
Delay (s)	12.1	0.3	9.7	0.0		13.3
Level of Service	B	A	A	A		B
Approach Delay (s)	9.3			4.3	13.3	
Approach LOS	A			A	B	

Intersection Summary			
HCM 2000 Control Delay	8.8	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.62		
Actuated Cycle Length (s)	46.4	Sum of lost time (s)	11.2
Intersection Capacity Utilization	55.2%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	15	361	24	409	19	1083	604	299	486	26
Future Volume (veh/h)	0	0	15	361	24	409	19	1083	604	299	486	26
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.97	1.00		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1776	1776	1863	1863	1863	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	0	0	0	385	0	176	19	1105	0	305	496	27
Adj No. of Lanes	0	1	1	2	0	1	1	2	2	1	2	0
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	7	7	7	2	2	2	2	2	2	2	2	2
Cap, veh/h	0	3	50	700	0	304	56	1324	1042	333	1809	98
Arrive On Green	0.00	0.00	0.00	0.20	0.00	0.20	0.03	0.37	0.00	0.19	0.53	0.53
Sat Flow, veh/h	0	1776	1509	3548	0	1542	1774	3539	2787	1774	3413	185
Grp Volume(v), veh/h	0	0	0	385	0	176	19	1105	0	305	257	266
Grp Sat Flow(s),veh/h/ln	0	1776	1509	1774	0	1542	1774	1770	1393	1774	1770	1828
Q Serve(g_s), s	0.0	0.0	0.0	6.2	0.0	6.6	0.7	18.0	0.0	10.7	5.1	5.1
Cycle Q Clear(g_c), s	0.0	0.0	0.0	6.2	0.0	6.6	0.7	18.0	0.0	10.7	5.1	5.1
Prop In Lane	0.00		1.00	1.00		1.00	1.00		1.00	1.00		0.10
Lane Grp Cap(c), veh/h	0	3	50	700	0	304	56	1324	1042	333	938	969
V/C Ratio(X)	0.00	0.00	0.00	0.55	0.00	0.58	0.34	0.83	0.00	0.92	0.27	0.27
Avail Cap(c_a), veh/h	0	56	95	1454	0	632	224	1495	1177	333	938	969
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	0.0	0.0	0.0	22.9	0.0	23.1	30.1	18.1	0.0	25.3	8.2	8.2
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.7	0.0	1.7	3.6	3.9	0.0	29.2	0.2	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	0.0	3.1	0.0	2.9	0.4	9.5	0.0	7.9	2.5	2.6
LnGrp Delay(d),s/veh	0.0	0.0	0.0	23.6	0.0	24.8	33.7	21.9	0.0	54.4	8.3	8.3
LnGrp LOS				C		C	C	C		D	A	A
Approach Vol, veh/h		0			561			1124			828	
Approach Delay, s/veh		0.0			24.0			22.1			25.3	
Approach LOS					C			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	17.0	28.8		0.0	7.1	38.7		17.6
Change Period (Y+Rc), s	5.1	5.1		3.0	5.1	5.1		5.1
Max Green Setting (Gmax), s	11.9	26.8		2.0	8.0	30.7		26.0
Max Q Clear Time (g_c+I1), s	12.7	20.0		0.0	2.7	7.1		8.6
Green Ext Time (p_c), s	0.0	3.7		0.0	0.0	12.7		1.9

Intersection Summary	
HCM 2010 Ctrl Delay	23.6
HCM 2010 LOS	C

Notes

User approved volume balancing among the lanes for turning movement.

Intersection												
Int Delay, s/veh	3.9											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	18	861	21	17	759	51	13	1	24	45	2	18
Future Vol, veh/h	18	861	21	17	759	51	13	1	24	45	2	18
Conflicting Peds, #/hr	10	0	8	8	0	10	6	0	1	0	0	1
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	93	93	93	93	93	93	93	93	93	93	93	93
Heavy Vehicles, %	3	3	3	2	2	2	2	2	2	2	2	2
Mvmt Flow	19	926	23	18	816	55	14	1	26	48	2	19

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	881	0	0	956	0	0	1436	1902	483	1393	1885	451
Stage 1	-	-	-	-	-	-	984	984	-	890	890	-
Stage 2	-	-	-	-	-	-	452	918	-	503	995	-
Critical Hdwy	4.16	-	-	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.23	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	757	-	-	715	-	-	94	68	530	101	70	556
Stage 1	-	-	-	-	-	-	267	325	-	304	359	-
Stage 2	-	-	-	-	-	-	557	349	-	519	321	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	753	-	-	714	-	-	80	60	525	87	62	548
Mov Cap-2 Maneuver	-	-	-	-	-	-	80	60	-	87	62	-
Stage 1	-	-	-	-	-	-	251	305	-	285	338	-
Stage 2	-	-	-	-	-	-	505	329	-	465	301	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.5	0.4	33	79.8
HCM LOS			D	F

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	169	753	-	-	714	-	-	112
HCM Lane V/C Ratio	0.242	0.026	-	-	0.026	-	-	0.624
HCM Control Delay (s)	33	9.9	0.3	-	10.2	0.2	-	79.8
HCM Lane LOS	D	A	A	-	B	A	-	F
HCM 95th %tile Q(veh)	0.9	0.1	-	-	0.1	-	-	3.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	22	821	87	58	574	18	212	12	104	57	12	41
Future Volume (veh/h)	22	821	87	58	574	18	212	12	104	57	12	41
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.98	1.00		0.98	0.99		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1845	1845	1900	1900	1863	1863	1900	1863	1863
Adj Flow Rate, veh/h	24	892	95	63	624	20	230	13	0	62	13	45
Adj No. of Lanes	1	2	0	1	2	0	0	1	1	0	1	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	3	3	3	2	2	2	2	2	2
Cap, veh/h	417	1472	157	294	1583	51	485	19	463	530	98	460
Arrive On Green	0.46	0.46	0.46	0.46	0.46	0.46	0.29	0.29	0.00	0.29	0.29	0.29
Sat Flow, veh/h	778	3222	343	561	3464	111	1146	65	1583	1331	336	1574
Grp Volume(v), veh/h	24	490	497	63	315	329	243	0	0	75	0	45
Grp Sat Flow(s),veh/h/ln	778	1770	1796	561	1752	1823	1211	0	1583	1668	0	1574
Q Serve(g_s), s	1.0	9.7	9.7	4.4	5.6	5.6	7.5	0.0	0.0	0.0	0.0	1.0
Cycle Q Clear(g_c), s	6.6	9.7	9.7	14.1	5.6	5.6	9.0	0.0	0.0	1.4	0.0	1.0
Prop In Lane	1.00		0.19	1.00		0.06	0.95		1.00	0.83		1.00
Lane Grp Cap(c), veh/h	417	808	820	294	801	833	504	0	463	629	0	460
V/C Ratio(X)	0.06	0.61	0.61	0.21	0.39	0.39	0.48	0.00	0.00	0.12	0.00	0.10
Avail Cap(c_a), veh/h	433	845	858	312	856	890	862	0	882	1013	0	876
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	10.6	9.5	9.5	14.8	8.4	8.4	15.5	0.0	0.0	12.2	0.0	12.0
Incr Delay (d2), s/veh	0.1	1.2	1.1	0.4	0.3	0.3	0.7	0.0	0.0	0.1	0.0	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	4.9	5.0	0.7	2.7	2.8	2.9	0.0	0.0	0.7	0.0	0.4
LnGrp Delay(d),s/veh	10.6	10.7	10.7	15.2	8.7	8.7	16.2	0.0	0.0	12.3	0.0	12.1
LnGrp LOS	B	B	B	B	A	A	B			B		B
Approach Vol, veh/h		1011			707			243			120	
Approach Delay, s/veh		10.7			9.3			16.2			12.2	
Approach LOS		B			A			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		27.4		19.3		27.4		19.3
Change Period (Y+Rc), s		6.1		5.6		* 6.1		5.6
Max Green Setting (Gmax), s		22.3		26.0		* 23		26.0
Max Q Clear Time (g_c+I1), s		11.7		3.4		16.1		11.0
Green Ext Time (p_c), s		7.4		2.0		5.0		1.8

Intersection Summary

HCM 2010 Ctrl Delay	10.9
HCM 2010 LOS	B

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Intersection												
Int Delay, s/veh	69.3											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	971	11	27	549	0	4	0	49	264	64	143
Future Vol, veh/h	0	971	11	27	549	0	4	0	49	264	64	143
Conflicting Peds, #/hr	0	0	8	8	0	0	1	0	3	3	0	1
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	240	-	-	0	-	85	120	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	98	98	98	98	98	98	98	98	98	98	98	98
Heavy Vehicles, %	2	2	2	4	4	4	2	2	2	2	2	2
Mvmt Flow	0	991	11	28	560	0	4	0	50	269	65	146

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	-	0	0	1010	0	0	1373	-	512	1113	1625	281
Stage 1	-	-	-	-	-	-	1004	-	-	615	615	-
Stage 2	-	-	-	-	-	-	369	-	-	498	1010	-
Critical Hdwy	-	-	-	4.18	-	-	7.54	-	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	-	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	-	-	6.54	5.54	-
Follow-up Hdwy	-	-	-	2.24	-	-	3.52	-	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	0	-	-	670	-	0	105	0	507	~ 163	101	716
Stage 1	0	-	-	-	-	0	259	0	-	445	480	-
Stage 2	0	-	-	-	-	0	623	0	-	523	316	-
Platoon blocked, %		-	-		-							
Mov Cap-1 Maneuver	-	-	-	668	-	-	36	-	502	~ 142	96	715
Mov Cap-2 Maneuver	-	-	-	-	-	-	36	-	-	~ 142	96	-
Stage 1	-	-	-	-	-	-	259	-	-	445	460	-
Stage 2	-	-	-	-	-	-	407	-	-	470	314	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	0.5	20.9	$ 303.4
HCM LOS			C	F

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBL	WBT	SBLn1	SBLn2
Capacity (veh/h)	36	502	-	-	668	-	142	239
HCM Lane V/C Ratio	0.113	0.1	-	-	0.041	-	1.897	0.884
HCM Control Delay (s)	117.4	13	-	-	10.6	-	$ 482	75.6
HCM Lane LOS	F	B	-	-	B	-	F	F
HCM 95th %tile Q(veh)	0.4	0.3	-	-	0.1	-	20.8	7.3

Notes

~: Volume exceeds capacity $: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon

Intersection						
Int Delay, s/veh	0.5					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	1155	170	76	576	0	0
Future Vol, veh/h	1155	170	76	576	0	0
Conflicting Peds, #/hr	0	11	11	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	115	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	97	97	97	97	97	97
Heavy Vehicles, %	2	2	5	5	2	2
Mvmt Flow	1191	175	78	594	0	0

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	1377	0	1743	694
Stage 1	-	-	-	-	1289	-
Stage 2	-	-	-	-	454	-
Critical Hdwy	-	-	4.2	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	-	-	2.25	-	3.52	3.32
Pot Cap-1 Maneuver	-	-	479	-	78	385
Stage 1	-	-	-	-	222	-
Stage 2	-	-	-	-	606	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	479	-	65	381
Mov Cap-2 Maneuver	-	-	-	-	65	-
Stage 1	-	-	-	-	220	-
Stage 2	-	-	-	-	507	-

Approach	EB	WB	NB
HCM Control Delay, s	0	1.6	0
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	-	-	-	479	-
HCM Lane V/C Ratio	-	-	-	0.164	-
HCM Control Delay (s)	0	-	-	14	-
HCM Lane LOS	A	-	-	B	-
HCM 95th %tile Q(veh)	-	-	-	0.6	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	258	849	48	27	377	316	46	225	36	95	44	229
Future Volume (veh/h)	258	849	48	27	377	316	46	225	36	95	44	229
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.98	1.00		0.98	0.99		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1900	1776	1776	1776
Adj Flow Rate, veh/h	263	866	49	28	385	322	47	230	37	97	45	0
Adj No. of Lanes	1	2	0	1	2	0	1	1	0	1	1	1
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	7	7	7
Cap, veh/h	306	1343	76	78	484	400	511	474	76	317	539	458
Arrive On Green	0.17	0.39	0.39	0.04	0.27	0.27	0.30	0.30	0.30	0.30	0.30	0.00
Sat Flow, veh/h	1774	3404	193	1774	1823	1506	1352	1562	251	1046	1776	1509
Grp Volume(v), veh/h	263	450	465	28	374	333	47	0	267	97	45	0
Grp Sat Flow(s),veh/h/ln	1774	1770	1827	1774	1770	1559	1352	0	1813	1046	1776	1509
Q Serve(g_s), s	8.3	11.8	11.8	0.9	11.3	11.4	1.5	0.0	6.9	4.8	1.0	0.0
Cycle Q Clear(g_c), s	8.3	11.8	11.8	0.9	11.3	11.4	2.5	0.0	6.9	11.7	1.0	0.0
Prop In Lane	1.00		0.11	1.00		0.97	1.00		0.14	1.00		1.00
Lane Grp Cap(c), veh/h	306	698	721	78	470	414	511	0	550	317	539	458
V/C Ratio(X)	0.86	0.64	0.64	0.36	0.79	0.80	0.09	0.00	0.49	0.31	0.08	0.00
Avail Cap(c_a), veh/h	306	698	721	217	565	498	738	0	854	492	836	711
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	23.0	14.1	14.1	26.6	19.6	19.7	15.2	0.0	16.3	21.1	14.3	0.0
Incr Delay (d2), s/veh	20.9	2.0	2.0	2.8	6.5	7.9	0.1	0.0	0.7	0.5	0.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.8	6.1	6.3	0.5	6.3	5.8	0.6	0.0	3.5	1.4	0.5	0.0
LnGrp Delay(d),s/veh	43.9	16.1	16.1	29.4	26.1	27.6	15.2	0.0	17.0	21.6	14.3	0.0
LnGrp LOS	D	B	B	C	C	C	B		B	C	B	
Approach Vol, veh/h		1178			735			314			142	
Approach Delay, s/veh		22.3			26.9			16.7			19.3	
Approach LOS		C			C			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	7.6	27.7		22.0	15.0	20.3		22.0
Change Period (Y+Rc), s	5.1	5.1		4.6	5.1	5.1		4.6
Max Green Setting (Gmax), s	7.0	21.2		27.0	9.9	18.3		27.0
Max Q Clear Time (g_c+I1), s	2.9	13.8		13.7	10.3	13.4		8.9
Green Ext Time (p_c), s	0.0	5.3		2.0	0.0	1.8		2.3

Intersection Summary	
HCM 2010 Ctrl Delay	22.8
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	220	663	56	98	314	209	58	610	163	199	397	79
Future Volume (veh/h)	220	663	56	98	314	209	58	610	163	199	397	79
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.99	1.00		0.99	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1825	1825	1862	1845	1845	1845	1810	1810	1810
Adj Flow Rate, veh/h	229	691	13	102	327	218	60	635	55	207	414	26
Adj No. of Lanes	1	2	1	1	2	0	1	2	1	1	2	1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	3	3	3	5	5	5
Cap, veh/h	215	1025	451	128	485	316	101	974	433	191	1139	502
Arrive On Green	0.12	0.29	0.29	0.07	0.24	0.24	0.06	0.28	0.28	0.11	0.33	0.33
Sat Flow, veh/h	1774	3539	1559	1739	2005	1307	1757	3505	1559	1723	3438	1514
Grp Volume(v), veh/h	229	691	13	102	282	263	60	635	55	207	414	26
Grp Sat Flow(s),veh/h/ln	1774	1770	1559	1739	1734	1578	1757	1752	1559	1723	1719	1514
Q Serve(g_s), s	11.9	16.9	0.6	5.7	14.5	14.9	3.3	15.7	2.6	10.9	9.0	1.1
Cycle Q Clear(g_c), s	11.9	16.9	0.6	5.7	14.5	14.9	3.3	15.7	2.6	10.9	9.0	1.1
Prop In Lane	1.00		1.00	1.00		0.83	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	215	1025	451	128	420	382	101	974	433	191	1139	502
V/C Ratio(X)	1.07	0.67	0.03	0.80	0.67	0.69	0.60	0.65	0.13	1.08	0.36	0.05
Avail Cap(c_a), veh/h	215	1055	465	170	476	433	127	1276	568	191	1385	610
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	43.2	30.8	25.0	44.8	33.7	33.9	45.2	31.3	26.6	43.7	25.0	22.4
Incr Delay (d2), s/veh	80.1	1.7	0.0	17.4	3.1	3.9	5.5	0.7	0.1	89.1	0.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	10.6	8.5	0.3	3.3	7.2	6.9	1.7	7.7	1.1	9.9	4.3	0.5
LnGrp Delay(d),s/veh	123.3	32.5	25.1	62.2	36.8	37.8	50.7	32.1	26.7	132.8	25.2	22.4
LnGrp LOS	F	C	C	E	D	D	D	C	C	F	C	C
Approach Vol, veh/h		933			647			750			647	
Approach Delay, s/veh		54.7			41.2			33.2			59.5	
Approach LOS		D			D			C			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	17.0	33.4	13.3	34.6	11.7	38.7	18.0	29.9
Change Period (Y+Rc), s	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1
Max Green Setting (Gmax), s	10.9	35.8	9.6	29.3	7.1	39.6	11.9	27.0
Max Q Clear Time (g_c+I1), s	12.9	17.7	7.7	18.9	5.3	11.0	13.9	16.9
Green Ext Time (p_c), s	0.0	7.2	0.0	5.7	0.0	8.7	0.0	5.6

Intersection Summary		
HCM 2010 Ctrl Delay		47.4
HCM 2010 LOS		D

F. Intersection Level of Service Calculations – Existing Plus Project Conditions

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	126	309	66	768	457	211	41	506	423	218	839	44
Future Volume (veh/h)	126	309	66	768	457	211	41	506	423	218	839	44
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1835	1835	1835	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	156	381	0	948	564	0	51	625	0	269	1036	54
Adj No. of Lanes	1	2	1	2	2	1	1	2	2	2	2	0
Peak Hour Factor	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	416	543	243	975	720	322	79	942	1543	321	1078	56
Arrive On Green	0.23	0.15	0.00	0.29	0.21	0.00	0.04	0.27	0.00	0.09	0.31	0.31
Sat Flow, veh/h	1774	3539	1583	3390	3486	1560	1774	3539	2787	3442	3422	178
Grp Volume(v), veh/h	156	381	0	948	564	0	51	625	0	269	536	554
Grp Sat Flow(s),veh/h/ln	1774	1770	1583	1695	1743	1560	1774	1770	1393	1721	1770	1831
Q Serve(g_s), s	9.8	13.6	0.0	36.8	20.3	0.0	3.8	20.9	0.0	10.2	39.5	39.5
Cycle Q Clear(g_c), s	9.8	13.6	0.0	36.8	20.3	0.0	3.8	20.9	0.0	10.2	39.5	39.5
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.10
Lane Grp Cap(c), veh/h	416	543	243	975	720	322	79	942	1543	321	557	577
V/C Ratio(X)	0.38	0.70	0.00	0.97	0.78	0.00	0.64	0.66	0.00	0.84	0.96	0.96
Avail Cap(c_a), veh/h	416	826	369	975	1249	559	96	942	1543	370	561	580
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	42.7	53.4	0.0	46.8	49.9	0.0	62.4	43.4	0.0	59.2	44.7	44.7
Incr Delay (d2), s/veh	0.6	1.7	0.0	22.4	1.9	0.0	10.2	1.8	0.0	13.8	28.3	27.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.9	6.7	0.0	20.3	10.0	0.0	2.1	10.5	0.0	5.5	23.7	24.5
LnGrp Delay(d),s/veh	43.3	55.0	0.0	69.2	51.8	0.0	72.6	45.2	0.0	73.0	73.0	72.5
LnGrp LOS	D	E		E	D		E	D		E	E	E
Approach Vol, veh/h		537			1512			676			1359	
Approach Delay, s/veh		51.6			62.7			47.3			72.8	
Approach LOS		D			E			D			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	19.2	42.2	45.0	26.5	12.7	48.7	37.2	34.2
Change Period (Y+Rc), s	6.8	6.8	6.8	6.1	6.8	6.8	6.1	6.8
Max Green Setting (Gmax), s	14.3	35.0	38.2	31.0	7.2	42.1	21.6	47.6
Max Q Clear Time (g_c+I1), s	12.2	22.9	38.8	15.6	5.8	41.5	11.8	22.3
Green Ext Time (p_c), s	0.2	8.3	0.0	1.9	0.0	0.3	2.1	4.0

Intersection Summary	
HCM 2010 Ctrl Delay	62.1
HCM 2010 LOS	E

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	291	2	98	9	8	19	29	763	4	6	1310	422
Future Volume (veh/h)	291	2	98	9	8	19	29	763	4	6	1310	422
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1863	1900	1863	1900	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	331	2	111	10	9	22	33	867	5	7	1489	0
Adj No. of Lanes	0	1	1	0	1	0	1	2	0	1	2	1
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	233	1	504	46	50	58	75	1676	10	22	1538	688
Arrive On Green	0.32	0.32	0.32	0.32	0.32	0.32	0.04	0.46	0.46	0.01	0.43	0.00
Sat Flow, veh/h	498	3	1577	0	155	180	1774	3608	21	1774	3539	1583
Grp Volume(v), veh/h	333	0	111	41	0	0	33	425	447	7	1489	0
Grp Sat Flow(s),veh/h/ln	501	0	1577	335	0	0	1774	1770	1859	1774	1770	1583
Q Serve(g_s), s	0.0	0.0	5.0	0.0	0.0	0.0	1.8	16.4	16.4	0.4	39.8	0.0
Cycle Q Clear(g_c), s	31.0	0.0	5.0	31.0	0.0	0.0	1.8	16.4	16.4	0.4	39.8	0.0
Prop In Lane	0.99		1.00	0.24		0.54	1.00		0.01	1.00		1.00
Lane Grp Cap(c), veh/h	234	0	504	153	0	0	75	822	864	22	1538	688
V/C Ratio(X)	1.42	0.00	0.22	0.27	0.00	0.00	0.44	0.52	0.52	0.32	0.97	0.00
Avail Cap(c_a), veh/h	234	0	504	153	0	0	128	822	864	128	1544	691
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	37.9	0.0	24.1	26.2	0.0	0.0	45.3	18.3	18.3	47.5	26.8	0.0
Incr Delay (d2), s/veh	213.1	0.0	0.2	0.9	0.0	0.0	3.9	0.6	0.5	8.0	16.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	20.1	0.0	2.2	0.8	0.0	0.0	0.9	8.2	8.6	0.2	22.8	0.0
LnGrp Delay(d),s/veh	250.9	0.0	24.3	27.1	0.0	0.0	49.2	18.9	18.8	55.5	42.7	0.0
LnGrp LOS	F		C	C			D	B	B	E	D	
Approach Vol, veh/h		444			41			905			1496	
Approach Delay, s/veh		194.3			27.1			20.0			42.8	
Approach LOS		F			C			B			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	8.0	51.8		37.1	10.9	48.9		37.1
Change Period (Y+Rc), s	6.8	6.8		6.1	6.8	6.8		6.1
Max Green Setting (Gmax), s	7.0	42.3		31.0	7.0	42.3		31.0
Max Q Clear Time (g_c+I1), s	2.4	18.4		33.0	3.8	41.8		33.0
Green Ext Time (p_c), s	0.0	18.3		0.0	0.0	0.3		0.0

Intersection Summary	
HCM 2010 Ctrl Delay	58.7
HCM 2010 LOS	E

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	15	21	152	666	85	23	182	535	402	49	791	12
Future Volume (veh/h)	15	21	152	666	85	23	182	535	402	49	791	12
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	17	24	0	766	98	4	209	615	146	56	909	14
Adj No. of Lanes	1	1	1	2	1	1	1	2	1	1	3	0
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	87	91	77	835	452	382	235	1666	738	84	1988	31
Arrive On Green	0.05	0.05	0.00	0.24	0.24	0.24	0.13	0.47	0.47	0.05	0.39	0.39
Sat Flow, veh/h	1774	1863	1583	3442	1863	1575	1774	3539	1568	1774	5159	79
Grp Volume(v), veh/h	17	24	0	766	98	4	209	615	146	56	597	326
Grp Sat Flow(s),veh/h/ln	1774	1863	1583	1721	1863	1575	1774	1770	1568	1774	1695	1848
Q Serve(g_s), s	1.2	1.6	0.0	27.8	5.4	0.2	14.8	14.2	7.0	4.0	16.8	16.8
Cycle Q Clear(g_c), s	1.2	1.6	0.0	27.8	5.4	0.2	14.8	14.2	7.0	4.0	16.8	16.8
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.04
Lane Grp Cap(c), veh/h	87	91	77	835	452	382	235	1666	738	84	1306	712
V/C Ratio(X)	0.20	0.26	0.00	0.92	0.22	0.01	0.89	0.37	0.20	0.67	0.46	0.46
Avail Cap(c_a), veh/h	305	320	272	890	482	407	276	1666	738	133	1306	712
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	58.5	58.7	0.0	47.2	38.8	36.8	54.6	21.7	19.8	60.0	29.4	29.4
Incr Delay (d2), s/veh	1.1	1.5	0.0	13.7	0.2	0.0	25.1	0.6	0.6	8.8	1.2	2.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.6	0.9	0.0	14.8	2.8	0.1	8.9	7.1	3.1	2.2	8.1	9.0
LnGrp Delay(d),s/veh	59.6	60.2	0.0	61.0	39.0	36.8	79.6	22.3	20.4	68.8	30.5	31.5
LnGrp LOS	E	E		E	D	D	E	C	C	E	C	C
Approach Vol, veh/h		41			868			970			979	
Approach Delay, s/veh		59.9			58.4			34.4			33.0	
Approach LOS		E			E			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	12.1	66.4		12.4	23.1	55.4		37.1
Change Period (Y+Rc), s	6.1	6.1		6.1	6.1	6.1		6.1
Max Green Setting (Gmax), s	9.6	38.9		22.0	19.9	28.6		33.1
Max Q Clear Time (g_c+I1), s	6.0	16.2		3.6	16.8	18.8		29.8
Green Ext Time (p_c), s	0.0	11.9		0.1	0.2	6.7		1.3

Intersection Summary	
HCM 2010 Ctrl Delay	41.6
HCM 2010 LOS	D

Intersection						
Int Delay, s/veh	2					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	34	108	688	100	181	1236
Future Vol, veh/h	34	108	688	100	181	1236
Conflicting Peds, #/hr	0	0	0	5	5	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	50	-	350	195	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	86	86	86	86	86	86
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	40	126	800	116	210	1437

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1945	405	0	0	805	0
Stage 1	805	-	-	-	-	-
Stage 2	1140	-	-	-	-	-
Critical Hdwy	6.84	6.94	-	-	4.14	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	-	-	2.22	-
Pot Cap-1 Maneuver	57	595	-	-	815	-
Stage 1	400	-	-	-	-	-
Stage 2	267	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	42	592	-	-	815	-
Mov Cap-2 Maneuver	137	-	-	-	-	-
Stage 1	398	-	-	-	-	-
Stage 2	198	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	19.6	0	1.4
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	137	592	815	-
HCM Lane V/C Ratio	-	-	0.289	0.212	0.258	-
HCM Control Delay (s)	-	-	41.6	12.7	10.9	-
HCM Lane LOS	-	-	E	B	B	-
HCM 95th %tile Q(veh)	-	-	1.1	0.8	1	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	154	273	163	105	305	80	85	566	58	85	950	176
Future Volume (veh/h)	154	273	163	105	305	80	85	566	58	85	950	176
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.99	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1835	1835	1835	1844	1844	1844	1881	1881	1881
Adj Flow Rate, veh/h	167	297	38	114	332	0	92	615	17	92	1033	0
Adj No. of Lanes	2	1	1	1	1	1	1	2	1	1	2	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	323	473	400	154	453	385	166	1205	533	169	1229	550
Arrive On Green	0.09	0.25	0.25	0.09	0.25	0.00	0.09	0.34	0.34	0.09	0.34	0.00
Sat Flow, veh/h	3476	1881	1592	1747	1835	1560	1756	3504	1552	1792	3575	1599
Grp Volume(v), veh/h	167	297	38	114	332	0	92	615	17	92	1033	0
Grp Sat Flow(s),veh/h/ln	1738	1881	1592	1747	1835	1560	1756	1752	1552	1792	1787	1599
Q Serve(g_s), s	3.9	11.8	1.5	5.4	14.0	0.0	4.2	11.8	0.6	4.1	22.5	0.0
Cycle Q Clear(g_c), s	3.9	11.8	1.5	5.4	14.0	0.0	4.2	11.8	0.6	4.1	22.5	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	323	473	400	154	453	385	166	1205	533	169	1229	550
V/C Ratio(X)	0.52	0.63	0.09	0.74	0.73	0.00	0.55	0.51	0.03	0.54	0.84	0.00
Avail Cap(c_a), veh/h	367	648	548	166	627	533	188	1205	533	221	1286	575
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	36.4	28.0	24.2	37.4	29.2	0.0	36.4	22.0	18.3	36.4	25.5	0.0
Incr Delay (d2), s/veh	0.9	1.7	0.1	13.9	3.2	0.0	2.1	0.4	0.0	2.0	5.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.9	6.3	0.7	3.2	7.5	0.0	2.1	5.7	0.3	2.1	11.9	0.0
LnGrp Delay(d),s/veh	37.3	29.7	24.3	51.4	32.4	0.0	38.6	22.4	18.4	38.4	30.5	0.0
LnGrp LOS	D	C	C	D	C		D	C	B	D	C	
Approach Vol, veh/h		502			446			724			1125	
Approach Delay, s/veh		31.8			37.3			24.3			31.1	
Approach LOS		C			D			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	12.2	34.4	11.6	26.1	12.2	34.4	12.0	25.7
Change Period (Y+Rc), s	* 4.2	5.4	* 4.2	4.9	* 4.2	5.4	* 4.2	* 4.9
Max Green Setting (Gmax), s	* 10	28.9	* 8	29.0	* 9	30.3	* 8.9	* 29
Max Q Clear Time (g_c+I1), s	6.1	13.8	7.4	13.8	6.2	24.5	5.9	16.0
Green Ext Time (p_c), s	0.0	9.8	0.0	4.2	0.0	4.5	0.1	3.8

Intersection Summary			
HCM 2010 Ctrl Delay		30.5	
HCM 2010 LOS		C	

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	233	37	166	23	23	28	115	527	9	42	866	362
Future Volume (veh/h)	233	37	166	23	23	28	115	527	9	42	866	362
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1900	1863	1863	1863	1863	1900	1792	1792	1792
Adj Flow Rate, veh/h	313	0	0	28	28	3	139	635	11	51	1043	0
Adj No. of Lanes	2	0	1	0	1	1	1	2	0	1	2	1
Peak Hour Factor	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	6	6	6
Cap, veh/h	478	0	214	42	42	72	174	1696	29	64	1416	634
Arrive On Green	0.13	0.00	0.00	0.05	0.05	0.05	0.10	0.48	0.48	0.04	0.42	0.00
Sat Flow, veh/h	3548	0	1583	909	909	1574	1774	3560	62	1707	3406	1524
Grp Volume(v), veh/h	313	0	0	56	0	3	139	316	330	51	1043	0
Grp Sat Flow(s),veh/h/ln	1774	0	1583	1817	0	1574	1774	1770	1852	1707	1703	1524
Q Serve(g_s), s	6.8	0.0	0.0	2.5	0.0	0.1	6.2	9.2	9.2	2.4	20.9	0.0
Cycle Q Clear(g_c), s	6.8	0.0	0.0	2.5	0.0	0.1	6.2	9.2	9.2	2.4	20.9	0.0
Prop In Lane	1.00		1.00	0.50		1.00	1.00		0.03	1.00		1.00
Lane Grp Cap(c), veh/h	478	0	214	83	0	72	174	843	882	64	1416	634
V/C Ratio(X)	0.65	0.00	0.00	0.67	0.00	0.04	0.80	0.37	0.37	0.80	0.74	0.00
Avail Cap(c_a), veh/h	1181	0	527	605	0	524	234	907	949	202	1700	761
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	33.3	0.0	0.0	38.1	0.0	37.0	35.8	13.5	13.5	38.7	20.0	0.0
Incr Delay (d2), s/veh	1.5	0.0	0.0	9.1	0.0	0.2	13.2	0.3	0.3	20.0	1.4	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.4	0.0	0.0	1.4	0.0	0.1	3.7	4.5	4.7	1.5	10.0	0.0
LnGrp Delay(d),s/veh	34.8	0.0	0.0	47.2	0.0	37.2	49.0	13.8	13.8	58.7	21.3	0.0
LnGrp LOS	C			D		D	D	B	B	E	C	
Approach Vol, veh/h		313			59			785			1094	
Approach Delay, s/veh		34.8			46.7			20.0			23.1	
Approach LOS		C			D			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	9.8	45.4		16.5	14.7	40.5		9.3
Change Period (Y+Rc), s	6.8	6.8		5.6	6.8	6.8		5.6
Max Green Setting (Gmax), s	9.6	41.6		27.0	10.7	40.5		27.0
Max Q Clear Time (g_c+I1), s	4.4	11.2		8.8	8.2	22.9		4.5
Green Ext Time (p_c), s	0.0	14.9		1.0	0.1	10.8		0.2

Intersection Summary

HCM 2010 Ctrl Delay	24.3	
HCM 2010 LOS	C	

Notes

User approved volume balancing among the lanes for turning movement.

Intersection												
Int Delay, s/veh	6.7											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	17	2	192	0	0	0	289	63	7	1	81	40
Future Vol, veh/h	17	2	192	0	0	0	289	63	7	1	81	40
Conflicting Peds, #/hr	0	0	0	0	0	0	5	0	7	7	0	5
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	50	-	-	-	75	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	-	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	94	94	94	94	94	94	94	94	94	94	94	94
Heavy Vehicles, %	7	7	7	2	2	2	2	2	2	2	2	2
Mvmt Flow	18	2	204	0	0	0	307	67	7	1	86	43

Major/Minor	Minor2						Major1			Major2		
Conflicting Flow All	801	811	112				134	0	0	81	0	0
Stage 1	115	115	-				-	-	-	-	-	-
Stage 2	686	696	-				-	-	-	-	-	-
Critical Hdwy	6.47	6.57	6.27				4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	5.47	5.57	-				-	-	-	-	-	-
Critical Hdwy Stg 2	5.47	5.57	-				-	-	-	-	-	-
Follow-up Hdwy	3.563	4.063	3.363				2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	347	308	928				1451	-	-	1517	-	-
Stage 1	898	791	-				-	-	-	-	-	-
Stage 2	491	436	-				-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	271	0	924				1451	-	-	1517	-	-
Mov Cap-2 Maneuver	271	0	-				-	-	-	-	-	-
Stage 1	893	0	-				-	-	-	-	-	-
Stage 2	385	0	-				-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	10.8	6.6	0.1
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	SBL	SBT	SBR
Capacity (veh/h)	1451	-	-	271	924	1517	-	-
HCM Lane V/C Ratio	0.212	-	-	0.075	0.221	0.001	-	-
HCM Control Delay (s)	8.1	-	-	19.4	10	7.4	0	-
HCM Lane LOS	A	-	-	C	B	A	A	-
HCM 95th %tile Q(veh)	0.8	-	-	0.2	0.8	0	-	-

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	498	250	625	788	0	286
Future Volume (vph)	498	250	625	788	0	286
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Grade (%)	-3%			-3%	-3%	
Total Lost time (s)	5.6	4.0	5.6	5.6		5.6
Lane Util. Factor	0.91	1.00	0.97	0.95		0.88
Frpb, ped/bikes	1.00	1.00	1.00	1.00		1.00
Flpb, ped/bikes	1.00	1.00	1.00	1.00		1.00
Frt	1.00	0.85	1.00	1.00		0.85
Flt Protected	1.00	1.00	0.95	1.00		1.00
Satd. Flow (prot)	5111	1591	3485	3592		2828
Flt Permitted	1.00	1.00	0.95	1.00		1.00
Satd. Flow (perm)	5111	1591	3485	3592		2828
Peak-hour factor, PHF	0.79	0.79	0.79	0.79	0.79	0.79
Adj. Flow (vph)	630	316	791	997	0	362
RTOR Reduction (vph)	0	0	0	0	0	152
Lane Group Flow (vph)	630	316	791	997	0	210
Confl. Peds. (#/hr)						9
Heavy Vehicles (%)	3%	3%	2%	2%	2%	2%
Turn Type	NA	Free	Prot	NA		Over
Protected Phases	6		8	2 8		8
Permitted Phases		Free				8
Actuated Green, G (s)	12.3	39.0	15.5	39.0		15.5
Effective Green, g (s)	12.3	39.0	15.5	39.0		15.5
Actuated g/C Ratio	0.32	1.00	0.40	1.00		0.40
Clearance Time (s)	5.6		5.6			5.6
Vehicle Extension (s)	3.0		3.0			3.0
Lane Grp Cap (vph)	1611	1591	1385	3592		1123
v/s Ratio Prot	0.12		c0.23	c0.28		0.07
v/s Ratio Perm		0.20				
v/c Ratio	0.39	0.20	0.57	0.28		0.19
Uniform Delay, d1	10.4	0.0	9.2	0.0		7.6
Progression Factor	1.00	1.00	1.00	1.00		1.00
Incremental Delay, d2	0.2	0.3	0.6	0.0		0.1
Delay (s)	10.6	0.3	9.7	0.0		7.7
Level of Service	B	A	A	A		A
Approach Delay (s)	7.1			4.3	7.7	
Approach LOS	A			A	A	

Intersection Summary			
HCM 2000 Control Delay	5.6	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.50		
Actuated Cycle Length (s)	39.0	Sum of lost time (s)	11.2
Intersection Capacity Utilization	46.0%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	4	545	31	161	16	499	269	172	868	15
Future Volume (veh/h)	0	0	4	545	31	161	16	499	269	172	868	15
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	1.00		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1863	1827	1827	1827	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	0	0	0	692	0	42	20	609	0	210	1059	18
Adj No. of Lanes	0	1	1	2	0	1	1	2	2	1	2	0
Peak Hour Factor	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82
Percent Heavy Veh, %	2	2	2	4	4	4	2	2	2	2	2	2
Cap, veh/h	0	3	55	917	0	406	58	1209	952	259	1618	27
Arrive On Green	0.00	0.00	0.00	0.26	0.00	0.26	0.03	0.34	0.00	0.15	0.45	0.45
Sat Flow, veh/h	0	1863	1583	3480	0	1541	1774	3539	2787	1774	3561	61
Grp Volume(v), veh/h	0	0	0	692	0	42	20	609	0	210	526	551
Grp Sat Flow(s),veh/h/ln	0	1863	1583	1740	0	1541	1774	1770	1393	1774	1770	1852
Q Serve(g_s), s	0.0	0.0	0.0	11.2	0.0	1.3	0.7	8.4	0.0	7.0	14.2	14.2
Cycle Q Clear(g_c), s	0.0	0.0	0.0	11.2	0.0	1.3	0.7	8.4	0.0	7.0	14.2	14.2
Prop In Lane	0.00		1.00	1.00		1.00	1.00		1.00	1.00		0.03
Lane Grp Cap(c), veh/h	0	3	55	917	0	406	58	1209	952	259	804	841
V/C Ratio(X)	0.00	0.00	0.00	0.75	0.00	0.10	0.34	0.50	0.00	0.81	0.65	0.65
Avail Cap(c_a), veh/h	0	61	104	1474	0	652	231	1545	1217	344	885	926
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	0.0	0.0	0.0	20.8	0.0	17.1	29.0	16.1	0.0	25.4	13.0	13.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	1.3	0.0	0.1	3.4	0.3	0.0	10.4	1.5	1.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	0.0	5.5	0.0	0.6	0.4	4.1	0.0	4.2	7.2	7.5
LnGrp Delay(d),s/veh	0.0	0.0	0.0	22.1	0.0	17.2	32.5	16.4	0.0	35.9	14.5	14.5
LnGrp LOS				C		B	C	B		D	B	B
Approach Vol, veh/h		0			734			629			1287	
Approach Delay, s/veh		0.0			21.8			16.9			18.0	
Approach LOS					C			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	14.0	26.1		0.0	7.1	33.0		21.3
Change Period (Y+Rc), s	5.1	5.1		3.0	5.1	5.1		5.1
Max Green Setting (Gmax), s	11.9	26.8		2.0	8.0	30.7		26.0
Max Q Clear Time (g_c+I1), s	9.0	10.4		0.0	2.7	16.2		13.2
Green Ext Time (p_c), s	0.2	10.2		0.0	0.0	9.3		2.4

Intersection Summary	
HCM 2010 Ctrl Delay	18.8
HCM 2010 LOS	B

Notes

User approved volume balancing among the lanes for turning movement.

Intersection												
Int Delay, s/veh	1.9											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	24	388	19	21	722	53	13	1	7	20	2	12
Future Vol, veh/h	24	388	19	21	722	53	13	1	7	20	2	12
Conflicting Peds, #/hr	7	0	11	11	0	7	2	0	0	0	0	2
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	84	84	84	84	84	84	84	84	84	84	84	84
Heavy Vehicles, %	6	6	6	3	3	3	14	14	14	2	2	2
Mvmt Flow	29	462	23	25	860	63	15	1	8	24	2	14

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	930	0	0	496	0	0	1024	1521	253	1237	1501	470
Stage 1	-	-	-	-	-	-	541	541	-	948	948	-
Stage 2	-	-	-	-	-	-	483	980	-	289	553	-
Critical Hdwy	4.22	-	-	4.16	-	-	7.78	6.78	7.18	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.78	5.78	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.78	5.78	-	6.54	5.54	-
Follow-up Hdwy	2.26	-	-	2.23	-	-	3.64	4.14	3.44	3.52	4.02	3.32
Pot Cap-1 Maneuver	707	-	-	1057	-	-	174	105	711	132	121	540
Stage 1	-	-	-	-	-	-	464	490	-	280	338	-
Stage 2	-	-	-	-	-	-	503	301	-	694	513	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	706	-	-	1057	-	-	152	93	704	118	107	535
Mov Cap-2 Maneuver	-	-	-	-	-	-	152	93	-	118	107	-
Stage 1	-	-	-	-	-	-	433	458	-	263	319	-
Stage 2	-	-	-	-	-	-	461	284	-	646	479	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.8	0.4	25.8	34.7
HCM LOS			D	D

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	198	706	-	-	1057	-	-	161
HCM Lane V/C Ratio	0.126	0.04	-	-	0.024	-	-	0.251
HCM Control Delay (s)	25.8	10.3	0.3	-	8.5	0.2	-	34.7
HCM Lane LOS	D	B	A	-	A	A	-	D
HCM 95th %tile Q(veh)	0.4	0.1	-	-	0.1	-	-	0.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	12	352	55	72	708	25	66	7	42	20	10	22
Future Volume (veh/h)	12	352	55	72	708	25	66	7	42	20	10	22
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1792	1792	1900	1827	1827	1900	1900	1776	1776	1900	1827	1827
Adj Flow Rate, veh/h	14	424	66	87	853	30	80	8	0	24	12	27
Adj No. of Lanes	1	2	0	1	2	0	0	1	1	0	1	1
Peak Hour Factor	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83
Percent Heavy Veh, %	6	6	6	4	4	4	7	7	7	4	4	4
Cap, veh/h	403	1440	223	566	1668	59	385	29	254	323	125	260
Arrive On Green	0.49	0.49	0.49	0.49	0.49	0.49	0.17	0.17	0.00	0.17	0.17	0.17
Sat Flow, veh/h	601	2954	457	882	3420	120	1087	171	1509	873	743	1548
Grp Volume(v), veh/h	14	243	247	87	433	450	88	0	0	36	0	27
Grp Sat Flow(s),veh/h/ln	601	1703	1707	882	1736	1805	1258	0	1509	1616	0	1548
Q Serve(g_s), s	0.6	2.9	2.9	2.2	5.8	5.8	1.8	0.0	0.0	0.0	0.0	0.5
Cycle Q Clear(g_c), s	6.3	2.9	2.9	5.2	5.8	5.8	2.3	0.0	0.0	0.6	0.0	0.5
Prop In Lane	1.00		0.27	1.00		0.07	0.91		1.00	0.67		1.00
Lane Grp Cap(c), veh/h	403	830	833	566	846	880	414	0	254	448	0	260
V/C Ratio(X)	0.03	0.29	0.30	0.15	0.51	0.51	0.21	0.00	0.00	0.08	0.00	0.10
Avail Cap(c_a), veh/h	504	1117	1120	727	1164	1211	1206	0	1155	1341	0	1185
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	8.1	5.2	5.2	6.8	5.9	5.9	12.8	0.0	0.0	12.0	0.0	12.0
Incr Delay (d2), s/veh	0.0	0.2	0.2	0.1	0.5	0.5	0.3	0.0	0.0	0.1	0.0	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	1.4	1.4	0.6	2.8	2.9	0.8	0.0	0.0	0.3	0.0	0.2
LnGrp Delay(d),s/veh	8.1	5.4	5.4	6.9	6.4	6.4	13.1	0.0	0.0	12.1	0.0	12.1
LnGrp LOS	A	A	A	A	A	A	B			B		B
Approach Vol, veh/h		504			970			88			63	
Approach Delay, s/veh		5.5			6.5			13.1			12.1	
Approach LOS		A			A			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		22.7		11.3		22.7		11.3
Change Period (Y+Rc), s		6.1		5.6		* 6.1		5.6
Max Green Setting (Gmax), s		22.3		26.0		* 23		26.0
Max Q Clear Time (g_c+I1), s		8.3		2.6		7.8		4.3
Green Ext Time (p_c), s		7.8		0.7		8.2		0.7

Intersection Summary

HCM 2010 Ctrl Delay	6.7
HCM 2010 LOS	A

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Intersection												
Int Delay, s/veh	21.9											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	411	3	32	640	0	4	0	14	137	45	161
Future Vol, veh/h	0	411	3	32	640	0	4	0	14	137	45	161
Conflicting Peds, #/hr	0	0	9	6	0	0	2	0	0	0	0	2
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	240	-	-	0	-	85	120	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	81	81	81	81	81	81	81	81	81	81	81	81
Heavy Vehicles, %	6	6	6	4	4	4	2	2	2	2	2	2
Mvmt Flow	0	507	4	40	790	0	5	0	17	169	56	199

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	-	0	0	520	0	0	1022	-	265	1123	1389	397
Stage 1	-	-	-	-	-	-	518	-	-	869	869	-
Stage 2	-	-	-	-	-	-	504	-	-	254	520	-
Critical Hdwy	-	-	-	4.18	-	-	7.54	-	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	-	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	-	-	6.54	5.54	-
Follow-up Hdwy	-	-	-	2.24	-	-	3.52	-	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	0	-	-	1028	-	0	190	0	733	~ 160	141	602
Stage 1	0	-	-	-	-	0	509	0	-	313	367	-
Stage 2	0	-	-	-	-	0	518	0	-	728	530	-
Platoon blocked, %		-	-		-							
Mov Cap-1 Maneuver	-	-	-	1028	-	-	83	-	727	~ 152	134	601
Mov Cap-2 Maneuver	-	-	-	-	-	-	83	-	-	~ 152	134	-
Stage 1	-	-	-	-	-	-	509	-	-	313	353	-
Stage 2	-	-	-	-	-	-	280	-	-	711	525	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	0.4	19.2	90.8
HCM LOS			C	F

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBL	WBT	SBLn1	SBLn2
Capacity (veh/h)	83	727	-	-	1028	-	152	341
HCM Lane V/C Ratio	0.059	0.024	-	-	0.038	-	1.113	0.746
HCM Control Delay (s)	51.1	10.1	-	-	8.6	-	165.9	40.9
HCM Lane LOS	F	B	-	-	A	-	F	E
HCM 95th %tile Q(veh)	0.2	0.1	-	-	0.1	-	9.1	5.8

Notes

~: Volume exceeds capacity $: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon

Intersection						
Int Delay, s/veh	0.4					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	452	110	55	672	0	0
Future Vol, veh/h	452	110	55	672	0	0
Conflicting Peds, #/hr	0	10	10	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	115	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	81	81	81	81	81	81
Heavy Vehicles, %	5	5	2	2	4	4
Mvmt Flow	558	136	68	830	0	0

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	704	0	1187	357
Stage 1	-	-	-	-	636	-
Stage 2	-	-	-	-	551	-
Critical Hdwy	-	-	4.14	-	6.88	6.98
Critical Hdwy Stg 1	-	-	-	-	5.88	-
Critical Hdwy Stg 2	-	-	-	-	5.88	-
Follow-up Hdwy	-	-	2.22	-	3.54	3.34
Pot Cap-1 Maneuver	-	-	890	-	178	634
Stage 1	-	-	-	-	484	-
Stage 2	-	-	-	-	536	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	890	-	163	628
Mov Cap-2 Maneuver	-	-	-	-	163	-
Stage 1	-	-	-	-	479	-
Stage 2	-	-	-	-	495	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.7	0
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	-	-	-	890	-
HCM Lane V/C Ratio	-	-	-	0.076	-
HCM Control Delay (s)	0	-	-	9.4	-
HCM Lane LOS	A	-	-	A	-
HCM 95th %tile Q(veh)	-	-	-	0.2	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	97	335	20	8	472	195	21	68	3	23	26	234
Future Volume (veh/h)	97	335	20	8	472	195	21	68	3	23	26	234
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	0.99		0.99	0.99		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1900	1863	1863	1900	1863	1863	1900	1792	1792	1792
Adj Flow Rate, veh/h	113	390	23	9	549	227	24	79	3	27	30	0
Adj No. of Lanes	1	2	0	1	2	0	1	1	0	1	1	1
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86
Percent Heavy Veh, %	3	3	3	2	2	2	2	2	2	6	6	6
Cap, veh/h	213	1564	92	29	879	362	384	306	12	336	308	262
Arrive On Green	0.12	0.47	0.47	0.02	0.36	0.36	0.17	0.17	0.17	0.17	0.17	0.00
Sat Flow, veh/h	1757	3363	198	1774	2438	1005	1363	1782	68	1251	1792	1524
Grp Volume(v), veh/h	113	203	210	9	398	378	24	0	82	27	30	0
Grp Sat Flow(s),veh/h/ln	1757	1752	1808	1774	1770	1674	1363	0	1850	1251	1792	1524
Q Serve(g_s), s	2.6	3.0	3.0	0.2	7.9	8.0	0.6	0.0	1.6	0.8	0.6	0.0
Cycle Q Clear(g_c), s	2.6	3.0	3.0	0.2	7.9	8.0	1.2	0.0	1.6	2.5	0.6	0.0
Prop In Lane	1.00		0.11	1.00		0.60	1.00		0.04	1.00		1.00
Lane Grp Cap(c), veh/h	213	815	841	29	638	604	384	0	318	336	308	262
V/C Ratio(X)	0.53	0.25	0.25	0.31	0.62	0.63	0.06	0.00	0.26	0.08	0.10	0.00
Avail Cap(c_a), veh/h	325	870	897	291	841	796	1011	0	1169	911	1133	963
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	17.6	6.9	6.9	20.8	11.3	11.3	15.4	0.0	15.3	16.4	14.9	0.0
Incr Delay (d2), s/veh	2.1	0.2	0.2	5.7	1.0	1.1	0.1	0.0	0.4	0.1	0.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.4	1.4	1.5	0.1	4.0	3.9	0.2	0.0	0.9	0.3	0.3	0.0
LnGrp Delay(d),s/veh	19.7	7.1	7.1	26.5	12.3	12.4	15.5	0.0	15.7	16.5	15.0	0.0
LnGrp LOS	B	A	A	C	B	B	B		B	B	B	
Approach Vol, veh/h		526			785			106			57	
Approach Delay, s/veh		9.8			12.5			15.7			15.7	
Approach LOS		A			B			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	5.8	25.0		11.9	10.3	20.5		11.9
Change Period (Y+Rc), s	5.1	5.1		4.6	5.1	5.1		4.6
Max Green Setting (Gmax), s	7.0	21.2		27.0	7.9	20.3		27.0
Max Q Clear Time (g_c+I1), s	2.2	5.0		4.5	4.6	10.0		3.6
Green Ext Time (p_c), s	0.0	7.0		0.7	0.1	5.3		0.7

Intersection Summary		
HCM 2010 Ctrl Delay		11.9
HCM 2010 LOS		B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	85	321	86	89	422	118	53	351	51	95	651	129
Future Volume (veh/h)	85	321	86	89	422	118	53	351	51	95	651	129
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	1.00		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1808	1808	1862	1810	1810	1810	1863	1863	1863
Adj Flow Rate, veh/h	99	373	12	103	491	137	62	408	11	110	757	33
Adj No. of Lanes	1	2	1	1	2	0	1	2	1	1	2	1
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86
Percent Heavy Veh, %	2	2	2	3	3	3	5	5	5	2	2	2
Cap, veh/h	133	915	406	131	688	191	110	1021	456	139	1102	490
Arrive On Green	0.08	0.26	0.26	0.08	0.26	0.26	0.06	0.30	0.30	0.08	0.31	0.31
Sat Flow, veh/h	1774	3539	1569	1722	2655	736	1723	3438	1535	1774	3539	1574
Grp Volume(v), veh/h	99	373	12	103	317	311	62	408	11	110	757	33
Grp Sat Flow(s),veh/h/ln	1774	1770	1569	1722	1717	1674	1723	1719	1535	1774	1770	1574
Q Serve(g_s), s	4.6	7.3	0.5	4.9	14.1	14.2	2.9	8.0	0.4	5.1	15.7	1.2
Cycle Q Clear(g_c), s	4.6	7.3	0.5	4.9	14.1	14.2	2.9	8.0	0.4	5.1	15.7	1.2
Prop In Lane	1.00		1.00	1.00		0.44	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	133	915	406	131	445	434	110	1021	456	139	1102	490
V/C Ratio(X)	0.74	0.41	0.03	0.79	0.71	0.72	0.56	0.40	0.02	0.79	0.69	0.07
Avail Cap(c_a), veh/h	148	1138	504	144	552	538	144	1408	629	152	1458	649
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	38.0	25.8	23.3	38.1	28.2	28.3	38.2	23.6	20.9	38.0	25.3	20.3
Incr Delay (d2), s/veh	16.5	0.3	0.0	23.1	3.2	3.5	4.5	0.3	0.0	22.6	0.9	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.9	3.6	0.2	3.2	7.1	7.0	1.5	3.8	0.2	3.4	7.8	0.5
LnGrp Delay(d),s/veh	54.6	26.1	23.3	61.3	31.5	31.8	42.7	23.8	20.9	60.6	26.2	20.4
LnGrp LOS	D	C	C	E	C	C	D	C	C	E	C	C
Approach Vol, veh/h		484			731			481			900	
Approach Delay, s/veh		31.8			35.8			26.2			30.2	
Approach LOS		C			D			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	12.7	31.0	12.5	27.8	11.5	32.3	12.4	27.9
Change Period (Y+Rc), s	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1
Max Green Setting (Gmax), s	7.2	34.4	7.0	27.0	7.0	34.6	7.0	27.0
Max Q Clear Time (g_c+I1), s	7.1	10.0	6.9	9.3	4.9	17.7	6.6	16.2
Green Ext Time (p_c), s	0.0	9.1	0.0	6.2	0.0	7.6	0.0	4.7

Intersection Summary	
HCM 2010 Ctrl Delay	31.3
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	91	678	75	617	548	446	93	663	897	445	649	71
Future Volume (veh/h)	91	678	75	617	548	446	93	663	897	445	649	71
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1835	1835	1835	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	95	706	0	643	571	0	97	691	0	464	676	74
Adj No. of Lanes	1	2	1	2	2	1	1	2	2	2	2	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	365	819	366	628	734	329	121	834	1173	436	947	104
Arrive On Green	0.21	0.23	0.00	0.19	0.21	0.00	0.07	0.24	0.00	0.13	0.29	0.29
Sat Flow, veh/h	1774	3539	1583	3390	3486	1560	1774	3539	2787	3442	3216	352
Grp Volume(v), veh/h	95	706	0	643	571	0	97	691	0	464	372	378
Grp Sat Flow(s),veh/h/ln	1774	1770	1583	1695	1743	1560	1774	1770	1393	1721	1770	1798
Q Serve(g_s), s	5.4	23.0	0.0	22.2	18.5	0.0	6.5	22.2	0.0	15.2	22.5	22.5
Cycle Q Clear(g_c), s	5.4	23.0	0.0	22.2	18.5	0.0	6.5	22.2	0.0	15.2	22.5	22.5
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.20
Lane Grp Cap(c), veh/h	365	819	366	628	734	329	121	834	1173	436	521	529
V/C Ratio(X)	0.26	0.86	0.00	1.02	0.78	0.00	0.80	0.83	0.00	1.06	0.71	0.71
Avail Cap(c_a), veh/h	365	915	409	628	1163	520	151	889	1216	436	521	529
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	39.9	44.2	0.0	48.8	44.7	0.0	55.1	43.5	0.0	52.3	37.8	37.8
Incr Delay (d2), s/veh	0.4	7.9	0.0	42.2	1.8	0.0	21.6	6.3	0.0	60.9	4.6	4.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.7	12.1	0.0	14.0	9.1	0.0	3.9	11.6	0.0	10.8	11.6	11.8
LnGrp Delay(d),s/veh	40.3	52.1	0.0	91.0	46.5	0.0	76.6	49.8	0.0	113.2	42.3	42.3
LnGrp LOS	D	D		F	D		E	D		F	D	D
Approach Vol, veh/h		801			1214			788			1214	
Approach Delay, s/veh		50.7			70.1			53.1			69.4	
Approach LOS		D			E			D			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	22.0	35.0	29.0	33.8	15.0	42.1	30.8	32.1
Change Period (Y+Rc), s	6.8	6.8	6.8	6.1	6.8	6.8	6.1	6.8
Max Green Setting (Gmax), s	15.2	30.1	22.2	31.0	10.2	35.1	13.2	40.0
Max Q Clear Time (g_c+I1), s	17.2	24.2	24.2	25.0	8.5	24.5	7.4	20.5
Green Ext Time (p_c), s	0.0	3.9	0.0	2.3	0.0	6.5	2.5	3.8

Intersection Summary	
HCM 2010 Ctrl Delay	62.7
HCM 2010 LOS	E

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	341	17	50	5	14	13	158	1349	11	19	857	428
Future Volume (veh/h)	341	17	50	5	14	13	158	1349	11	19	857	428
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		0.98	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1863	1900	1863	1900	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	355	18	52	5	15	14	165	1405	11	20	893	0
Adj No. of Lanes	0	1	1	0	1	0	1	2	0	1	2	1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	212	7	564	48	125	88	200	1374	11	55	1061	475
Arrive On Green	0.36	0.36	0.36	0.36	0.36	0.36	0.11	0.38	0.38	0.03	0.30	0.00
Sat Flow, veh/h	362	18	1570	0	348	244	1774	3599	28	1774	3539	1583
Grp Volume(v), veh/h	373	0	52	34	0	0	165	691	725	20	893	0
Grp Sat Flow(s),veh/h/ln	381	0	1570	592	0	0	1774	1770	1857	1774	1770	1583
Q Serve(g_s), s	0.0	0.0	1.9	0.0	0.0	0.0	7.9	32.9	32.9	1.0	20.4	0.0
Cycle Q Clear(g_c), s	31.0	0.0	1.9	31.0	0.0	0.0	7.9	32.9	32.9	1.0	20.4	0.0
Prop In Lane	0.95		1.00	0.15		0.41	1.00		0.02	1.00		1.00
Lane Grp Cap(c), veh/h	218	0	564	261	0	0	200	675	709	55	1061	475
V/C Ratio(X)	1.71	0.00	0.09	0.13	0.00	0.00	0.82	1.02	1.02	0.36	0.84	0.00
Avail Cap(c_a), veh/h	218	0	564	261	0	0	243	675	709	144	1128	504
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	33.4	0.0	18.3	20.5	0.0	0.0	37.4	26.7	26.7	41.0	28.3	0.0
Incr Delay (d2), s/veh	338.4	0.0	0.1	0.2	0.0	0.0	17.2	40.5	39.8	4.0	5.6	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	25.6	0.0	0.8	0.5	0.0	0.0	4.8	23.5	24.6	0.5	10.8	0.0
LnGrp Delay(d),s/veh	371.8	0.0	18.4	20.7	0.0	0.0	54.7	67.1	66.5	45.0	33.9	0.0
LnGrp LOS	F		B	C			D	F	F	D	C	
Approach Vol, veh/h		425			34			1581			913	
Approach Delay, s/veh		328.6			20.7			65.5			34.2	
Approach LOS		F			C			E			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	9.5	39.7		37.1	16.5	32.7		37.1
Change Period (Y+Rc), s	6.8	6.8		6.1	6.8	6.8		6.1
Max Green Setting (Gmax), s	7.0	32.3		31.0	11.8	27.5		31.0
Max Q Clear Time (g_c+I1), s	3.0	34.9		33.0	9.9	22.4		33.0
Green Ext Time (p_c), s	0.0	0.0		0.0	0.1	3.5		0.0

Intersection Summary	
HCM 2010 Ctrl Delay	93.2
HCM 2010 LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	27	70	160	462	120	144	304	1113	647	105	1018	24
Future Volume (veh/h)	27	70	160	462	120	144	304	1113	647	105	1018	24
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.98	1.00		0.99	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	28	74	168	486	126	152	320	1172	681	111	1072	25
Adj No. of Lanes	1	1	1	2	1	1	1	2	1	1	3	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	245	257	211	558	302	251	347	1534	676	135	1603	37
Arrive On Green	0.14	0.14	0.14	0.16	0.16	0.16	0.20	0.43	0.43	0.08	0.31	0.31
Sat Flow, veh/h	1774	1863	1528	3442	1863	1551	1774	3539	1560	1774	5110	119
Grp Volume(v), veh/h	28	74	168	486	126	152	320	1172	681	111	711	386
Grp Sat Flow(s),veh/h/ln	1774	1863	1528	1721	1863	1551	1774	1770	1560	1774	1695	1839
Q Serve(g_s), s	1.8	4.6	13.6	17.6	7.8	11.7	22.7	35.9	55.5	7.9	23.3	23.3
Cycle Q Clear(g_c), s	1.8	4.6	13.6	17.6	7.8	11.7	22.7	35.9	55.5	7.9	23.3	23.3
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.06
Lane Grp Cap(c), veh/h	245	257	211	558	302	251	347	1534	676	135	1064	577
V/C Ratio(X)	0.11	0.29	0.80	0.87	0.42	0.60	0.92	0.76	1.01	0.82	0.67	0.67
Avail Cap(c_a), veh/h	305	320	263	592	320	267	398	1534	676	159	1064	577
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	48.3	49.5	53.5	52.3	48.2	49.8	50.5	30.7	36.3	58.3	38.1	38.1
Incr Delay (d2), s/veh	0.2	0.6	12.8	12.9	0.9	3.5	24.8	3.7	36.5	24.7	3.3	6.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.9	2.4	6.5	9.4	4.1	5.2	13.5	18.4	30.7	4.8	11.4	12.8
LnGrp Delay(d),s/veh	48.5	50.2	66.3	65.2	49.1	53.3	75.4	34.4	72.8	83.0	41.5	44.2
LnGrp LOS	D	D	E	E	D	D	E	C	F	F	D	D
Approach Vol, veh/h		270			764			2173			1208	
Approach Delay, s/veh		60.0			60.2			52.5			46.2	
Approach LOS		E			E			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	15.8	61.6		23.7	31.1	46.3		26.8
Change Period (Y+Rc), s	6.1	6.1		6.1	6.1	6.1		6.1
Max Green Setting (Gmax), s	11.5	48.1		22.0	28.7	30.9		22.0
Max Q Clear Time (g_c+I1), s	9.9	57.5		15.6	24.7	25.3		19.6
Green Ext Time (p_c), s	0.0	0.0		0.5	0.4	5.2		0.8

Intersection Summary	
HCM 2010 Ctrl Delay	52.5
HCM 2010 LOS	D

Intersection						
Int Delay, s/veh	1.3					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	16	28	1490	54	120	792
Future Vol, veh/h	16	28	1490	54	120	792
Conflicting Peds, #/hr	0	0	0	6	6	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	50	-	350	195	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	98	98	98	98	98	98
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	16	29	1520	55	122	808

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	2175	766	0	0	1526	0
Stage 1	1526	-	-	-	-	-
Stage 2	649	-	-	-	-	-
Critical Hdwy	6.84	6.94	-	-	4.14	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	-	-	2.22	-
Pot Cap-1 Maneuver	40	345	-	-	433	-
Stage 1	166	-	-	-	-	-
Stage 2	482	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	29	343	-	-	433	-
Mov Cap-2 Maneuver	113	-	-	-	-	-
Stage 1	165	-	-	-	-	-
Stage 2	346	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	25.8	0	2.2
HCM LOS	D		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	113	343	433	-
HCM Lane V/C Ratio	-	-	0.144	0.083	0.283	-
HCM Control Delay (s)	-	-	42.2	16.4	16.6	-
HCM Lane LOS	-	-	E	C	C	-
HCM 95th %tile Q(veh)	-	-	0.5	0.3	1.1	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	269	321	109	100	258	229	193	1253	63	120	791	170
Future Volume (veh/h)	269	321	109	100	258	229	193	1253	63	120	791	170
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		1.00	1.00		0.98	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1835	1835	1835	1844	1844	1844	1881	1881	1881
Adj Flow Rate, veh/h	283	338	21	105	272	0	203	1319	25	126	833	0
Adj No. of Lanes	2	1	1	1	1	1	1	2	1	1	2	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	353	448	375	135	393	334	236	1410	620	160	1278	572
Arrive On Green	0.10	0.24	0.24	0.08	0.21	0.00	0.13	0.40	0.40	0.09	0.36	0.00
Sat Flow, veh/h	3476	1881	1573	1747	1835	1560	1756	3504	1540	1792	3575	1599
Grp Volume(v), veh/h	283	338	21	105	272	0	203	1319	25	126	833	0
Grp Sat Flow(s),veh/h/ln	1738	1881	1573	1747	1835	1560	1756	1752	1540	1792	1787	1599
Q Serve(g_s), s	7.7	16.2	1.0	5.7	13.3	0.0	11.0	35.1	1.0	6.7	19.0	0.0
Cycle Q Clear(g_c), s	7.7	16.2	1.0	5.7	13.3	0.0	11.0	35.1	1.0	6.7	19.0	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	353	448	375	135	393	334	236	1410	620	160	1278	572
V/C Ratio(X)	0.80	0.75	0.06	0.78	0.69	0.00	0.86	0.94	0.04	0.79	0.65	0.00
Avail Cap(c_a), veh/h	404	561	469	144	498	424	291	1453	639	166	1278	572
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	42.7	34.4	28.6	44.0	35.2	0.0	41.2	27.8	17.6	43.3	26.2	0.0
Incr Delay (d2), s/veh	9.3	4.9	0.1	20.8	3.3	0.0	17.9	11.4	0.0	20.2	1.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.2	9.1	0.4	3.6	7.1	0.0	6.5	19.1	0.4	4.2	9.6	0.0
LnGrp Delay(d),s/veh	52.0	39.2	28.7	64.8	38.5	0.0	59.1	39.2	17.7	63.6	27.3	0.0
LnGrp LOS	D	D	C	E	D		E	D	B	E	C	
Approach Vol, veh/h		642			377			1547			959	
Approach Delay, s/veh		44.5			45.8			41.5			32.1	
Approach LOS		D			D			D			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	12.9	44.5	11.7	28.1	17.3	40.1	14.1	25.7
Change Period (Y+Rc), s	* 4.2	5.4	* 4.2	4.9	* 4.2	5.4	* 4.2	* 4.9
Max Green Setting (Gmax), s	* 9	40.3	* 8	29.0	* 16	33.2	* 11	* 26
Max Q Clear Time (g_c+I1), s	8.7	37.1	7.7	18.2	13.0	21.0	9.7	15.3
Green Ext Time (p_c), s	0.0	2.0	0.0	3.3	0.1	10.1	0.1	3.4

Intersection Summary	
HCM 2010 Ctrl Delay	40.0
HCM 2010 LOS	D

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	320	48	214	30	70	69	302	1165	26	33	576	199
Future Volume (veh/h)	320	48	214	30	70	69	302	1165	26	33	576	199
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.96	1.00		0.99	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1900	1863	1863	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	365	0	33	31	72	30	311	1201	27	34	594	0
Adj No. of Lanes	2	0	1	0	1	1	1	2	0	1	2	1
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	519	0	229	68	157	186	347	1482	33	46	881	394
Arrive On Green	0.15	0.00	0.15	0.12	0.12	0.12	0.20	0.42	0.42	0.03	0.25	0.00
Sat Flow, veh/h	3548	0	1567	552	1283	1517	1774	3538	80	1774	3539	1583
Grp Volume(v), veh/h	365	0	33	103	0	30	311	601	627	34	594	0
Grp Sat Flow(s),veh/h/ln	1774	0	1567	1835	0	1517	1774	1770	1847	1774	1770	1583
Q Serve(g_s), s	8.5	0.0	1.6	4.5	0.0	1.5	14.8	25.8	25.9	1.6	13.1	0.0
Cycle Q Clear(g_c), s	8.5	0.0	1.6	4.5	0.0	1.5	14.8	25.8	25.9	1.6	13.1	0.0
Prop In Lane	1.00		1.00	0.30		1.00	1.00		0.04	1.00		1.00
Lane Grp Cap(c), veh/h	519	0	229	225	0	186	347	741	774	46	881	394
V/C Ratio(X)	0.70	0.00	0.14	0.46	0.00	0.16	0.90	0.81	0.81	0.74	0.67	0.00
Avail Cap(c_a), veh/h	1107	0	489	573	0	474	373	761	794	82	941	421
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	35.1	0.0	32.2	35.3	0.0	34.0	33.9	22.1	22.1	41.9	29.3	0.0
Incr Delay (d2), s/veh	1.8	0.0	0.3	1.5	0.0	0.4	22.3	6.5	6.2	20.8	1.8	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.3	0.0	0.7	2.4	0.0	0.7	9.4	13.8	14.4	1.1	6.6	0.0
LnGrp Delay(d),s/veh	36.9	0.0	32.5	36.8	0.0	34.4	56.2	28.6	28.4	62.6	31.1	0.0
LnGrp LOS	D		C	D		C	E	C	C	E	C	
Approach Vol, veh/h		398			133			1539			628	
Approach Delay, s/veh		36.5			36.2			34.1			32.8	
Approach LOS		D			D			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	9.0	43.0		18.3	23.7	28.3		16.2
Change Period (Y+Rc), s	6.8	6.8		5.6	6.8	6.8		5.6
Max Green Setting (Gmax), s	4.0	37.2		27.0	18.2	23.0		27.0
Max Q Clear Time (g_c+I1), s	3.6	27.9		10.5	16.8	15.1		6.5
Green Ext Time (p_c), s	0.0	7.1		1.3	0.2	6.1		0.6

Intersection Summary	
HCM 2010 Ctrl Delay	34.2
HCM 2010 LOS	C

Notes

User approved volume balancing among the lanes for turning movement.

Intersection												
Int Delay, s/veh	14.9											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	53	2	219	0	0	0	560	158	18	3	114	82
Future Vol, veh/h	53	2	219	0	0	0	560	158	18	3	114	82
Conflicting Peds, #/hr	0	0	0	0	0	0	7	0	7	7	0	7
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	50	-	-	-	75	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	-	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	93	93	93	93	93	93	93	93	93	93	93	93
Heavy Vehicles, %	6	6	6	2	2	2	2	2	2	2	2	2
Mvmt Flow	57	2	235	0	0	0	602	170	19	3	123	88

Major/Minor	Minor2						Major1			Major2		
Conflicting Flow All	1564	1581	174				218	0	0	196	0	0
Stage 1	180	180	-				-	-	-	-	-	-
Stage 2	1384	1401	-				-	-	-	-	-	-
Critical Hdwy	6.46	6.56	6.26				4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	5.46	5.56	-				-	-	-	-	-	-
Critical Hdwy Stg 2	5.46	5.56	-				-	-	-	-	-	-
Follow-up Hdwy	3.554	4.054	3.354				2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	120	107	859				1352	-	-	1377	-	-
Stage 1	841	743	-				-	-	-	-	-	-
Stage 2	228	203	-				-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	66	0	853				1352	-	-	1377	-	-
Mov Cap-2 Maneuver	66	0	-				-	-	-	-	-	-
Stage 1	834	0	-				-	-	-	-	-	-
Stage 2	126	0	-				-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	46	7.4	0.1
HCM LOS	E		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	SBL	SBT	SBR
Capacity (veh/h)	1352	-	-	66	853	1377	-	-
HCM Lane V/C Ratio	0.445	-	-	0.896	0.276	0.002	-	-
HCM Control Delay (s)	9.8	-	-	186.3	10.8	7.6	0	-
HCM Lane LOS	A	-	-	F	B	A	A	-
HCM 95th %tile Q(veh)	2.4	-	-	4.3	1.1	0	-	-

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	965	298	384	497	0	743
Future Volume (vph)	965	298	384	497	0	743
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Grade (%)	-3%			-3%	-3%	
Total Lost time (s)	5.6	4.0	5.6	5.6		5.6
Lane Util. Factor	0.91	1.00	0.97	0.95		0.88
Frpb, ped/bikes	1.00	1.00	1.00	1.00		1.00
Flpb, ped/bikes	1.00	1.00	1.00	1.00		1.00
Frt	1.00	0.85	1.00	1.00		0.85
Flt Protected	1.00	1.00	0.95	1.00		1.00
Satd. Flow (prot)	5111	1591	3485	3592		2828
Flt Permitted	1.00	1.00	0.95	1.00		1.00
Satd. Flow (perm)	5111	1591	3485	3592		2828
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	1027	317	409	529	0	790
RTOR Reduction (vph)	0	0	0	0	0	33
Lane Group Flow (vph)	1027	317	409	529	0	757
Confl. Peds. (#/hr)						13
Heavy Vehicles (%)	3%	3%	2%	2%	2%	2%
Turn Type	NA	Free	Prot	NA		Over
Protected Phases	6		8	2 8		8
Permitted Phases		Free				8
Actuated Green, G (s)	16.9	46.5	18.4	46.5		18.4
Effective Green, g (s)	16.9	46.5	18.4	46.5		18.4
Actuated g/C Ratio	0.36	1.00	0.40	1.00		0.40
Clearance Time (s)	5.6		5.6			5.6
Vehicle Extension (s)	3.0		3.0			3.0
Lane Grp Cap (vph)	1857	1591	1379	3592		1119
v/s Ratio Prot	c0.20		0.12	0.15		c0.27
v/s Ratio Perm		0.20				
v/c Ratio	0.55	0.20	0.30	0.15		0.68
Uniform Delay, d1	11.8	0.0	9.6	0.0		11.6
Progression Factor	1.00	1.00	1.00	1.00		1.00
Incremental Delay, d2	0.4	0.3	0.1	0.0		1.6
Delay (s)	12.2	0.3	9.7	0.0		13.2
Level of Service	B	A	A	A		B
Approach Delay (s)	9.4			4.3	13.2	
Approach LOS	A			A	B	

Intersection Summary			
HCM 2000 Control Delay	8.8	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.62		
Actuated Cycle Length (s)	46.5	Sum of lost time (s)	11.2
Intersection Capacity Utilization	55.3%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	15	369	24	409	19	1084	605	299	495	26
Future Volume (veh/h)	0	0	15	369	24	409	19	1084	605	299	495	26
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.97	1.00		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1776	1776	1863	1863	1863	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	0	0	0	394	0	176	19	1106	0	305	505	27
Adj No. of Lanes	0	1	1	2	0	1	1	2	2	1	2	0
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	7	7	7	2	2	2	2	2	2	2	2	2
Cap, veh/h	0	3	50	701	0	305	56	1324	1042	332	1811	97
Arrive On Green	0.00	0.00	0.00	0.20	0.00	0.20	0.03	0.37	0.00	0.19	0.53	0.53
Sat Flow, veh/h	0	1776	1509	3548	0	1542	1774	3539	2787	1774	3416	182
Grp Volume(v), veh/h	0	0	0	394	0	176	19	1106	0	305	261	271
Grp Sat Flow(s),veh/h/ln	0	1776	1509	1774	0	1542	1774	1770	1393	1774	1770	1829
Q Serve(g_s), s	0.0	0.0	0.0	6.4	0.0	6.6	0.7	18.1	0.0	10.7	5.2	5.2
Cycle Q Clear(g_c), s	0.0	0.0	0.0	6.4	0.0	6.6	0.7	18.1	0.0	10.7	5.2	5.2
Prop In Lane	0.00		1.00	1.00		1.00	1.00		1.00	1.00		0.10
Lane Grp Cap(c), veh/h	0	3	50	701	0	305	56	1324	1042	332	938	969
V/C Ratio(X)	0.00	0.00	0.00	0.56	0.00	0.58	0.34	0.84	0.00	0.92	0.28	0.28
Avail Cap(c_a), veh/h	0	56	95	1453	0	632	224	1494	1176	332	938	969
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	0.0	0.0	0.0	23.0	0.0	23.1	30.1	18.1	0.0	25.3	8.2	8.2
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.7	0.0	1.7	3.6	3.9	0.0	29.3	0.2	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	0.0	3.2	0.0	2.9	0.4	9.5	0.0	8.0	2.5	2.6
LnGrp Delay(d),s/veh	0.0	0.0	0.0	23.7	0.0	24.8	33.7	22.0	0.0	54.6	8.4	8.4
LnGrp LOS				C		C	C	C		D	A	A
Approach Vol, veh/h		0			570			1125			837	
Approach Delay, s/veh		0.0			24.0			22.2			25.2	
Approach LOS					C			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	17.0	28.8		0.0	7.1	38.8		17.7
Change Period (Y+Rc), s	5.1	5.1		3.0	5.1	5.1		5.1
Max Green Setting (Gmax), s	11.9	26.8		2.0	8.0	30.7		26.0
Max Q Clear Time (g_c+I1), s	12.7	20.1		0.0	2.7	7.2		8.6
Green Ext Time (p_c), s	0.0	3.7		0.0	0.0	12.7		1.9

Intersection Summary	
HCM 2010 Ctrl Delay	23.6
HCM 2010 LOS	C

Notes

User approved volume balancing among the lanes for turning movement.

Intersection												
Int Delay, s/veh	8.4											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	19	861	21	17	759	55	13	1	24	68	2	26
Future Vol, veh/h	19	861	21	17	759	55	13	1	24	68	2	26
Conflicting Peds, #/hr	10	0	8	8	0	10	6	0	1	0	0	1
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	93	93	93	93	93	93	93	93	93	93	93	93
Heavy Vehicles, %	3	3	3	2	2	2	2	2	2	2	2	2
Mvmt Flow	20	926	23	18	816	59	14	1	26	73	2	28

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	885	0	0	956	0	0	1438	1908	483	1397	1889	454
Stage 1	-	-	-	-	-	-	986	986	-	892	892	-
Stage 2	-	-	-	-	-	-	452	922	-	505	997	-
Critical Hdwy	4.16	-	-	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.23	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	754	-	-	715	-	-	94	68	530	101	70	553
Stage 1	-	-	-	-	-	-	266	324	-	303	358	-
Stage 2	-	-	-	-	-	-	557	347	-	518	320	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	750	-	-	714	-	-	79	60	525	86	62	545
Mov Cap-2 Maneuver	-	-	-	-	-	-	79	60	-	86	62	-
Stage 1	-	-	-	-	-	-	249	303	-	283	337	-
Stage 2	-	-	-	-	-	-	496	327	-	462	299	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.5	0.4	33.4	142.2
HCM LOS			D	F

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	167	750	-	-	714	-	-	110
HCM Lane V/C Ratio	0.245	0.027	-	-	0.026	-	-	0.938
HCM Control Delay (s)	33.4	9.9	0.3	-	10.2	0.2	-	142.2
HCM Lane LOS	D	A	A	-	B	A	-	F
HCM 95th %tile Q(veh)	0.9	0.1	-	-	0.1	-	-	5.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	22	844	87	58	578	18	212	12	104	57	12	41
Future Volume (veh/h)	22	844	87	58	578	18	212	12	104	57	12	41
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.98	1.00		0.98	0.99		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1845	1845	1900	1900	1863	1863	1900	1863	1863
Adj Flow Rate, veh/h	24	917	95	63	628	20	230	13	0	62	13	45
Adj No. of Lanes	1	2	0	1	2	0	0	1	1	0	1	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	3	3	3	2	2	2	2	2	2
Cap, veh/h	416	1482	154	287	1589	51	484	19	462	529	98	460
Arrive On Green	0.46	0.46	0.46	0.46	0.46	0.46	0.29	0.29	0.00	0.29	0.29	0.29
Sat Flow, veh/h	775	3232	335	548	3465	110	1146	65	1583	1332	336	1574
Grp Volume(v), veh/h	24	502	510	63	317	331	243	0	0	75	0	45
Grp Sat Flow(s),veh/h/ln	775	1770	1798	548	1752	1823	1211	0	1583	1668	0	1574
Q Serve(g_s), s	1.0	10.1	10.1	4.6	5.6	5.6	7.6	0.0	0.0	0.0	0.0	1.0
Cycle Q Clear(g_c), s	6.6	10.1	10.1	14.7	5.6	5.6	9.0	0.0	0.0	1.4	0.0	1.0
Prop In Lane	1.00		0.19	1.00		0.06	0.95		1.00	0.83		1.00
Lane Grp Cap(c), veh/h	416	811	824	287	804	836	503	0	462	627	0	460
V/C Ratio(X)	0.06	0.62	0.62	0.22	0.39	0.40	0.48	0.00	0.00	0.12	0.00	0.10
Avail Cap(c_a), veh/h	429	841	854	302	851	886	857	0	877	1008	0	872
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	10.6	9.6	9.6	15.1	8.4	8.4	15.6	0.0	0.0	12.3	0.0	12.1
Incr Delay (d2), s/veh	0.1	1.3	1.3	0.4	0.3	0.3	0.7	0.0	0.0	0.1	0.0	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	5.2	5.3	0.7	2.7	2.8	2.9	0.0	0.0	0.7	0.0	0.4
LnGrp Delay(d),s/veh	10.6	10.9	10.9	15.5	8.7	8.7	16.3	0.0	0.0	12.3	0.0	12.2
LnGrp LOS	B	B	B	B	A	A	B			B		B
Approach Vol, veh/h		1036			711			243			120	
Approach Delay, s/veh		10.9			9.3			16.3			12.3	
Approach LOS		B			A			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		27.6		19.3		27.6		19.3
Change Period (Y+Rc), s		6.1		5.6		* 6.1		5.6
Max Green Setting (Gmax), s		22.3		26.0		* 23		26.0
Max Q Clear Time (g_c+I1), s		12.1		3.4		16.7		11.0
Green Ext Time (p_c), s		7.3		2.0		4.7		1.8

Intersection Summary

HCM 2010 Ctrl Delay	11.1
HCM 2010 LOS	B

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Intersection												
Int Delay, s/veh	72.5											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	994	11	27	553	0	4	0	49	264	64	143
Future Vol, veh/h	0	994	11	27	553	0	4	0	49	264	64	143
Conflicting Peds, #/hr	0	0	8	8	0	0	1	0	3	3	0	1
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	240	-	-	0	-	85	120	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	98	98	98	98	98	98	98	98	98	98	98	98
Heavy Vehicles, %	2	2	2	4	4	4	2	2	2	2	2	2
Mvmt Flow	0	1014	11	28	564	0	4	0	50	269	65	146

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	-	0	0	1034	0	0	1399	-	524	1129	1653	283
Stage 1	-	-	-	-	-	-	1028	-	-	619	619	-
Stage 2	-	-	-	-	-	-	371	-	-	510	1034	-
Critical Hdwy	-	-	-	4.18	-	-	7.54	-	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	-	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	-	-	6.54	5.54	-
Follow-up Hdwy	-	-	-	2.24	-	-	3.52	-	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	0	-	-	656	-	0	100	0	498	~ 159	97	714
Stage 1	0	-	-	-	-	0	251	0	-	443	478	-
Stage 2	0	-	-	-	-	0	622	0	-	514	308	-
Platoon blocked, %		-	-		-							
Mov Cap-1 Maneuver	-	-	-	654	-	-	32	-	493	~ 138	92	713
Mov Cap-2 Maneuver	-	-	-	-	-	-	32	-	-	~ 138	92	-
Stage 1	-	-	-	-	-	-	251	-	-	443	458	-
Stage 2	-	-	-	-	-	-	406	-	-	461	306	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	0.5	22.2	$ 321.3
HCM LOS			C	F

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBL	WBT	SBLn1	SBLn2
Capacity (veh/h)	32	493	-	-	654	-	138	231
HCM Lane V/C Ratio	0.128	0.101	-	-	0.042	-	1.952	0.914
HCM Control Delay (s)	133.3	13.1	-	-	10.7	-	$ 507.6	83.7
HCM Lane LOS	F	B	-	-	B	-	F	F
HCM 95th %tile Q(veh)	0.4	0.3	-	-	0.1	-	21.2	7.7

Notes

~: Volume exceeds capacity $: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon

Intersection						
Int Delay, s/veh	0.5					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	1168	170	76	580	0	0
Future Vol, veh/h	1168	170	76	580	0	0
Conflicting Peds, #/hr	0	11	11	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	115	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	97	97	97	97	97	97
Heavy Vehicles, %	2	2	5	5	2	2
Mvmt Flow	1204	175	78	598	0	0

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	1390	0	1759	701
Stage 1	-	-	-	-	1303	-
Stage 2	-	-	-	-	456	-
Critical Hdwy	-	-	4.2	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	-	-	2.25	-	3.52	3.32
Pot Cap-1 Maneuver	-	-	473	-	76	381
Stage 1	-	-	-	-	218	-
Stage 2	-	-	-	-	605	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	473	-	63	377
Mov Cap-2 Maneuver	-	-	-	-	63	-
Stage 1	-	-	-	-	216	-
Stage 2	-	-	-	-	505	-

Approach	EB	WB	NB
HCM Control Delay, s	0	1.6	0
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	-	-	-	473	-
HCM Lane V/C Ratio	-	-	-	0.166	-
HCM Control Delay (s)	0	-	-	14.1	-
HCM Lane LOS	A	-	-	B	-
HCM 95th %tile Q(veh)	-	-	-	0.6	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	258	862	48	27	379	316	46	225	36	95	44	231
Future Volume (veh/h)	258	862	48	27	379	316	46	225	36	95	44	231
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.98	1.00		0.98	0.99		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1900	1776	1776	1776
Adj Flow Rate, veh/h	263	880	49	28	387	322	47	230	37	97	45	0
Adj No. of Lanes	1	2	0	1	2	0	1	1	0	1	1	1
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	7	7	7
Cap, veh/h	306	1344	75	78	486	399	511	474	76	317	539	458
Arrive On Green	0.17	0.39	0.39	0.04	0.27	0.27	0.30	0.30	0.30	0.30	0.30	0.00
Sat Flow, veh/h	1774	3408	190	1774	1827	1503	1352	1562	251	1046	1776	1509
Grp Volume(v), veh/h	263	457	472	28	375	334	47	0	267	97	45	0
Grp Sat Flow(s),veh/h/ln	1774	1770	1828	1774	1770	1560	1352	0	1813	1046	1776	1509
Q Serve(g_s), s	8.3	12.1	12.1	0.9	11.3	11.5	1.5	0.0	6.9	4.8	1.0	0.0
Cycle Q Clear(g_c), s	8.3	12.1	12.1	0.9	11.3	11.5	2.5	0.0	6.9	11.7	1.0	0.0
Prop In Lane	1.00		0.10	1.00		0.96	1.00		0.14	1.00		1.00
Lane Grp Cap(c), veh/h	306	698	721	78	470	415	511	0	550	317	539	458
V/C Ratio(X)	0.86	0.65	0.65	0.36	0.80	0.81	0.09	0.00	0.49	0.31	0.08	0.00
Avail Cap(c_a), veh/h	306	698	721	217	565	498	738	0	854	492	836	711
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	23.0	14.2	14.2	26.6	19.6	19.7	15.2	0.0	16.3	21.1	14.3	0.0
Incr Delay (d2), s/veh	20.9	2.2	2.1	2.8	6.6	8.0	0.1	0.0	0.7	0.5	0.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.8	6.3	6.5	0.5	6.4	5.8	0.6	0.0	3.5	1.4	0.5	0.0
LnGrp Delay(d),s/veh	44.0	16.4	16.3	29.4	26.2	27.7	15.2	0.0	17.0	21.6	14.3	0.0
LnGrp LOS	D	B	B	C	C	C	B		B	C	B	
Approach Vol, veh/h		1192			737			314			142	
Approach Delay, s/veh		22.4			27.0			16.7			19.3	
Approach LOS		C			C			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	7.6	27.7		22.0	15.0	20.3		22.0
Change Period (Y+Rc), s	5.1	5.1		4.6	5.1	5.1		4.6
Max Green Setting (Gmax), s	7.0	21.2		27.0	9.9	18.3		27.0
Max Q Clear Time (g_c+I1), s	2.9	14.1		13.7	10.3	13.5		8.9
Green Ext Time (p_c), s	0.0	5.2		2.0	0.0	1.8		2.3

Intersection Summary	
HCM 2010 Ctrl Delay	22.9
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	220	663	56	98	314	209	58	611	163	199	404	79
Future Volume (veh/h)	220	663	56	98	314	209	58	611	163	199	404	79
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.99	1.00		0.99	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1825	1825	1862	1845	1845	1845	1810	1810	1810
Adj Flow Rate, veh/h	229	691	13	102	327	218	60	636	55	207	421	26
Adj No. of Lanes	1	2	1	1	2	0	1	2	1	1	2	1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	3	3	3	5	5	5
Cap, veh/h	215	1024	451	128	485	316	101	975	434	191	1140	502
Arrive On Green	0.12	0.29	0.29	0.07	0.24	0.24	0.06	0.28	0.28	0.11	0.33	0.33
Sat Flow, veh/h	1774	3539	1559	1739	2005	1306	1757	3505	1560	1723	3438	1514
Grp Volume(v), veh/h	229	691	13	102	282	263	60	636	55	207	421	26
Grp Sat Flow(s),veh/h/ln	1774	1770	1559	1739	1734	1578	1757	1752	1560	1723	1719	1514
Q Serve(g_s), s	11.9	17.0	0.6	5.7	14.5	14.9	3.3	15.7	2.6	10.9	9.2	1.1
Cycle Q Clear(g_c), s	11.9	17.0	0.6	5.7	14.5	14.9	3.3	15.7	2.6	10.9	9.2	1.1
Prop In Lane	1.00		1.00	1.00		0.83	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	215	1024	451	128	420	382	101	975	434	191	1140	502
V/C Ratio(X)	1.07	0.67	0.03	0.80	0.67	0.69	0.60	0.65	0.13	1.08	0.37	0.05
Avail Cap(c_a), veh/h	215	1054	464	170	476	433	127	1275	567	191	1384	610
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	43.2	30.9	25.1	44.8	33.7	33.9	45.3	31.3	26.6	43.7	25.0	22.4
Incr Delay (d2), s/veh	80.4	1.7	0.0	17.4	3.1	3.9	5.5	0.7	0.1	89.3	0.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	10.6	8.5	0.3	3.3	7.2	6.9	1.8	7.7	1.1	9.9	4.4	0.5
LnGrp Delay(d),s/veh	123.6	32.5	25.1	62.2	36.8	37.9	50.8	32.0	26.7	133.1	25.2	22.4
LnGrp LOS	F	C	C	E	D	D	D	C	C	F	C	C
Approach Vol, veh/h		933			647			751			654	
Approach Delay, s/veh		54.8			41.3			33.2			59.3	
Approach LOS		D			D			C			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	17.0	33.5	13.3	34.6	11.7	38.7	18.0	29.9
Change Period (Y+Rc), s	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1
Max Green Setting (Gmax), s	10.9	35.8	9.6	29.3	7.1	39.6	11.9	27.0
Max Q Clear Time (g_c+I1), s	12.9	17.7	7.7	19.0	5.3	11.2	13.9	16.9
Green Ext Time (p_c), s	0.0	7.3	0.0	5.7	0.0	8.7	0.0	5.6

Intersection Summary	
HCM 2010 Ctrl Delay	47.4
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	126	309	66	768	457	211	41	506	423	218	839	44
Future Volume (veh/h)	126	309	66	768	457	211	41	506	423	218	839	44
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1835	1835	1835	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	156	381	0	948	564	0	51	625	0	269	1036	54
Adj No. of Lanes	1	2	1	2	2	1	1	3	0	2	3	0
Peak Hour Factor	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	433	567	254	1017	753	337	86	1117	0	323	1312	68
Arrive On Green	0.24	0.16	0.00	0.30	0.22	0.00	0.05	0.22	0.00	0.09	0.27	0.27
Sat Flow, veh/h	1774	3539	1583	3390	3486	1560	1774	5253	0	3442	4949	258
Grp Volume(v), veh/h	156	381	0	948	564	0	51	625	0	269	709	381
Grp Sat Flow(s),veh/h/ln	1774	1770	1583	1695	1743	1560	1774	1695	0	1721	1695	1817
Q Serve(g_s), s	8.5	11.9	0.0	31.8	17.7	0.0	3.3	12.8	0.0	9.0	22.8	22.8
Cycle Q Clear(g_c), s	8.5	11.9	0.0	31.8	17.7	0.0	3.3	12.8	0.0	9.0	22.8	22.8
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.00	1.00		0.14
Lane Grp Cap(c), veh/h	433	567	254	1017	753	337	86	1117	0	323	899	482
V/C Ratio(X)	0.36	0.67	0.00	0.93	0.75	0.00	0.59	0.56	0.00	0.83	0.79	0.79
Avail Cap(c_a), veh/h	433	936	419	1070	1407	629	109	1280	0	323	963	516
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	36.7	46.3	0.0	39.9	43.0	0.0	54.6	40.7	0.0	52.2	40.0	40.0
Incr Delay (d2), s/veh	0.5	1.4	0.0	13.8	1.5	0.0	6.4	0.4	0.0	16.7	4.2	7.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.3	5.9	0.0	16.8	8.7	0.0	1.8	6.1	0.0	5.0	11.2	12.4
LnGrp Delay(d),s/veh	37.2	47.7	0.0	53.6	44.5	0.0	61.0	41.1	0.0	68.9	44.2	47.7
LnGrp LOS	D	D		D	D		E	D		E	D	D
Approach Vol, veh/h		537			1512			676			1359	
Approach Delay, s/veh		44.6			50.2			42.6			50.1	
Approach LOS		D			D			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	17.8	32.5	42.0	24.9	12.5	37.9	34.7	32.1
Change Period (Y+Rc), s	6.8	6.8	6.8	6.1	6.8	6.8	6.1	6.8
Max Green Setting (Gmax), s	11.0	29.5	37.0	31.0	7.2	33.3	20.7	47.3
Max Q Clear Time (g_c+I1), s	11.0	14.8	33.8	13.9	5.3	24.8	10.5	19.7
Green Ext Time (p_c), s	0.0	9.6	1.3	1.9	0.0	6.2	2.1	4.1

Intersection Summary	
HCM 2010 Ctrl Delay	48.2
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	91	678	75	617	548	446	93	663	897	445	649	71
Future Volume (veh/h)	91	678	75	617	548	446	93	663	897	445	649	71
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1835	1835	1835	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	95	706	0	643	571	0	97	691	0	464	676	74
Adj No. of Lanes	1	2	1	2	2	1	1	3	1	2	3	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	413	807	361	735	739	330	121	1032	665	477	1272	138
Arrive On Green	0.23	0.23	0.00	0.22	0.21	0.00	0.07	0.20	0.00	0.14	0.27	0.27
Sat Flow, veh/h	1774	3539	1583	3390	3486	1560	1774	5085	1583	3442	4655	505
Grp Volume(v), veh/h	95	706	0	643	571	0	97	691	0	464	491	259
Grp Sat Flow(s),veh/h/ln	1774	1770	1583	1695	1743	1560	1774	1695	1583	1721	1695	1770
Q Serve(g_s), s	5.4	23.9	0.0	22.7	19.2	0.0	6.7	15.6	0.0	16.7	15.3	15.5
Cycle Q Clear(g_c), s	5.4	23.9	0.0	22.7	19.2	0.0	6.7	15.6	0.0	16.7	15.3	15.5
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.29
Lane Grp Cap(c), veh/h	413	807	361	735	739	330	121	1032	665	477	926	483
V/C Ratio(X)	0.23	0.87	0.00	0.87	0.77	0.00	0.80	0.67	0.00	0.97	0.53	0.54
Avail Cap(c_a), veh/h	413	884	396	1071	1542	690	220	1275	740	477	926	483
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	38.6	46.2	0.0	46.9	46.1	0.0	57.0	45.6	0.0	53.2	38.3	38.4
Incr Delay (d2), s/veh	0.3	9.2	0.0	5.8	1.8	0.0	11.4	1.0	0.0	34.1	0.6	1.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.7	12.7	0.0	11.2	9.4	0.0	3.7	7.4	0.0	10.2	7.2	7.7
LnGrp Delay(d),s/veh	38.8	55.4	0.0	52.7	47.8	0.0	68.4	46.6	0.0	87.3	38.9	39.6
LnGrp LOS	D	E		D	D		E	D		F	D	D
Approach Vol, veh/h		801			1214			788			1214	
Approach Delay, s/veh		53.4			50.4			49.3			57.5	
Approach LOS		D			D			D			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	24.0	32.0	33.7	34.4	15.3	40.7	35.0	33.1
Change Period (Y+Rc), s	6.8	6.8	6.8	6.1	6.8	6.8	6.1	6.8
Max Green Setting (Gmax), s	17.2	31.1	39.2	31.0	15.4	32.9	15.3	54.9
Max Q Clear Time (g_c+I1), s	18.7	17.6	24.7	25.9	8.7	17.5	7.4	21.2
Green Ext Time (p_c), s	0.0	6.7	2.2	2.0	0.1	8.5	3.1	4.3

Intersection Summary	
HCM 2010 Ctrl Delay	52.9
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	291	2	98	9	8	19	29	763	4	6	1310	422
Future Volume (veh/h)	291	2	98	9	8	19	29	763	4	6	1310	422
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.98	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1863	1900	1863	1900	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	331	2	111	10	9	22	33	867	5	7	1489	0
Adj No. of Lanes	0	1	1	0	1	0	1	2	0	1	2	1
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	388	2	346	19	17	41	73	1728	10	22	1593	713
Arrive On Green	0.22	0.22	0.22	0.05	0.05	0.05	0.04	0.48	0.48	0.01	0.45	0.00
Sat Flow, veh/h	1764	11	1575	406	366	894	1774	3608	21	1774	3539	1583
Grp Volume(v), veh/h	333	0	111	41	0	0	33	425	447	7	1489	0
Grp Sat Flow(s),veh/h/ln	1775	0	1575	1665	0	0	1774	1770	1859	1774	1770	1583
Q Serve(g_s), s	19.2	0.0	6.3	2.6	0.0	0.0	1.9	17.5	17.5	0.4	42.4	0.0
Cycle Q Clear(g_c), s	19.2	0.0	6.3	2.6	0.0	0.0	1.9	17.5	17.5	0.4	42.4	0.0
Prop In Lane	0.99		1.00	0.24		0.54	1.00		0.01	1.00		1.00
Lane Grp Cap(c), veh/h	390	0	346	77	0	0	73	847	890	22	1593	713
V/C Ratio(X)	0.85	0.00	0.32	0.53	0.00	0.00	0.45	0.50	0.50	0.32	0.93	0.00
Avail Cap(c_a), veh/h	518	0	459	110	0	0	117	847	890	117	1639	733
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	39.8	0.0	34.8	49.6	0.0	0.0	49.8	19.0	19.0	52.0	27.7	0.0
Incr Delay (d2), s/veh	10.3	0.0	0.5	5.6	0.0	0.0	4.4	0.5	0.4	8.2	10.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	10.5	0.0	2.8	1.3	0.0	0.0	1.0	8.6	9.0	0.3	22.9	0.0
LnGrp Delay(d),s/veh	50.1	0.0	35.3	55.2	0.0	0.0	54.2	19.5	19.4	60.2	38.0	0.0
LnGrp LOS	D		D	E			D	B	B	E	D	
Approach Vol, veh/h		444			41			905			1496	
Approach Delay, s/veh		46.4			55.2			20.7			38.1	
Approach LOS		D			E			C			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	8.1	57.7		29.5	11.2	54.6		11.0
Change Period (Y+Rc), s	6.8	6.8		6.1	6.8	6.8		6.1
Max Green Setting (Gmax), s	7.0	49.2		31.0	7.0	49.2		7.0
Max Q Clear Time (g_c+I1), s	2.4	19.5		21.2	3.9	44.4		4.6
Green Ext Time (p_c), s	0.0	21.6		1.7	0.0	3.4		0.0

Intersection Summary	
HCM 2010 Ctrl Delay	34.2
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	341	17	50	5	14	13	158	1349	11	19	857	428
Future Volume (veh/h)	341	17	50	5	14	13	158	1349	11	19	857	428
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.96	1.00		0.98	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1863	1900	1863	1900	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	355	18	52	5	15	14	165	1405	11	20	893	0
Adj No. of Lanes	0	1	1	0	1	0	1	2	0	1	2	1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	422	21	390	11	32	30	198	1469	11	53	1155	517
Arrive On Green	0.25	0.25	0.25	0.04	0.04	0.04	0.11	0.41	0.41	0.03	0.33	0.00
Sat Flow, veh/h	1692	86	1564	249	747	697	1774	3599	28	1774	3539	1583
Grp Volume(v), veh/h	373	0	52	34	0	0	165	691	725	20	893	0
Grp Sat Flow(s),veh/h/ln	1778	0	1564	1692	0	0	1774	1770	1857	1774	1770	1583
Q Serve(g_s), s	19.1	0.0	2.5	1.9	0.0	0.0	8.7	36.3	36.4	1.1	21.8	0.0
Cycle Q Clear(g_c), s	19.1	0.0	2.5	1.9	0.0	0.0	8.7	36.3	36.4	1.1	21.8	0.0
Prop In Lane	0.95		1.00	0.15		0.41	1.00		0.02	1.00		1.00
Lane Grp Cap(c), veh/h	443	0	390	74	0	0	198	722	758	53	1155	517
V/C Ratio(X)	0.84	0.00	0.13	0.46	0.00	0.00	0.83	0.96	0.96	0.37	0.77	0.00
Avail Cap(c_a), veh/h	575	0	505	123	0	0	257	723	759	129	1192	533
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	34.2	0.0	28.0	44.8	0.0	0.0	41.7	27.6	27.6	45.6	29.1	0.0
Incr Delay (d2), s/veh	8.6	0.0	0.2	4.5	0.0	0.0	16.2	23.2	22.6	4.3	3.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	10.4	0.0	1.1	1.0	0.0	0.0	5.2	22.3	23.3	0.6	11.2	0.0
LnGrp Delay(d),s/veh	42.9	0.0	28.1	49.2	0.0	0.0	57.9	50.8	50.2	49.9	32.2	0.0
LnGrp LOS	D		C	D			E	D	D	D	C	
Approach Vol, veh/h		425			34			1581			913	
Approach Delay, s/veh		41.1			49.2			51.3			32.6	
Approach LOS		D			D			D			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	9.7	46.0		30.0	17.5	38.1		10.3
Change Period (Y+Rc), s	6.8	6.8		6.1	6.8	6.8		6.1
Max Green Setting (Gmax), s	7.0	39.2		31.0	13.9	32.3		7.0
Max Q Clear Time (g_c+I1), s	3.1	38.4		21.1	10.7	23.8		3.9
Green Ext Time (p_c), s	0.0	0.8		1.8	0.1	7.4		0.0

Intersection Summary		
HCM 2010 Ctrl Delay		44.0
HCM 2010 LOS		D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	154	273	163	105	305	80	85	566	58	85	950	176
Future Volume (veh/h)	154	273	163	105	305	80	85	566	58	85	950	176
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.99	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1835	1835	1835	1844	1844	1881	1881	1881	1919
Adj Flow Rate, veh/h	167	297	45	114	332	0	92	615	63	92	1033	0
Adj No. of Lanes	2	1	1	1	1	1	1	3	0	1	3	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	341	491	415	162	469	398	173	1451	147	176	1606	0
Arrive On Green	0.10	0.26	0.26	0.09	0.26	0.00	0.10	0.31	0.31	0.10	0.31	0.00
Sat Flow, veh/h	3476	1881	1592	1747	1835	1560	1756	4641	471	1792	5305	0
Grp Volume(v), veh/h	167	297	45	114	332	0	92	443	235	92	1033	0
Grp Sat Flow(s),veh/h/ln	1738	1881	1592	1747	1835	1560	1756	1678	1755	1792	1712	0
Q Serve(g_s), s	3.6	11.0	1.7	5.0	13.1	0.0	4.0	8.3	8.4	3.9	13.7	0.0
Cycle Q Clear(g_c), s	3.6	11.0	1.7	5.0	13.1	0.0	4.0	8.3	8.4	3.9	13.7	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.27	1.00		0.00
Lane Grp Cap(c), veh/h	341	491	415	162	469	398	173	1049	549	176	1606	0
V/C Ratio(X)	0.49	0.60	0.11	0.70	0.71	0.00	0.53	0.42	0.43	0.52	0.64	0.00
Avail Cap(c_a), veh/h	389	687	581	216	707	601	199	1145	599	235	1843	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	33.9	25.8	22.3	35.0	26.9	0.0	34.1	21.6	21.7	34.0	23.5	0.0
Incr Delay (d2), s/veh	0.8	1.5	0.1	5.3	2.4	0.0	1.9	0.3	0.5	1.8	0.6	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.8	5.9	0.8	2.7	7.0	0.0	2.0	3.9	4.2	2.0	6.6	0.0
LnGrp Delay(d),s/veh	34.7	27.2	22.5	40.3	29.3	0.0	36.0	21.9	22.2	35.8	24.1	0.0
LnGrp LOS	C	C	C	D	C		D	C	C	D	C	
Approach Vol, veh/h		509			446			770			1125	
Approach Delay, s/veh		29.3			32.1			23.7			25.1	
Approach LOS		C			C			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	12.0	30.2	11.6	25.6	12.0	30.2	12.0	25.2
Change Period (Y+Rc), s	* 4.2	5.4	* 4.2	4.9	* 4.2	5.4	* 4.2	* 4.9
Max Green Setting (Gmax), s	* 10	27.1	* 9.8	29.0	* 9	28.5	* 8.9	* 31
Max Q Clear Time (g_c+I1), s	5.9	10.4	7.0	13.0	6.0	15.7	5.6	15.1
Green Ext Time (p_c), s	0.1	10.6	0.0	4.3	0.0	8.7	0.1	4.2

Intersection Summary	
HCM 2010 Ctrl Delay	26.5
HCM 2010 LOS	C

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	269	321	109	100	258	229	193	1253	63	120	791	170
Future Volume (veh/h)	269	321	109	100	258	229	193	1253	63	120	791	170
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		1.00	1.00		0.98	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1835	1835	1835	1844	1844	1881	1881	1881	1919
Adj Flow Rate, veh/h	283	338	23	105	272	0	203	1319	66	126	833	0
Adj No. of Lanes	2	1	1	1	1	1	1	3	0	1	3	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	363	474	397	151	429	365	238	1675	84	180	1574	0
Arrive On Green	0.10	0.25	0.25	0.09	0.23	0.00	0.14	0.34	0.34	0.10	0.31	0.00
Sat Flow, veh/h	3476	1881	1574	1747	1835	1560	1756	4906	245	1792	5305	0
Grp Volume(v), veh/h	283	338	23	105	272	0	203	902	483	126	833	0
Grp Sat Flow(s),veh/h/ln	1738	1881	1574	1747	1835	1560	1756	1678	1795	1792	1712	0
Q Serve(g_s), s	6.8	13.9	0.9	5.0	11.3	0.0	9.6	20.6	20.6	5.8	11.4	0.0
Cycle Q Clear(g_c), s	6.8	13.9	0.9	5.0	11.3	0.0	9.6	20.6	20.6	5.8	11.4	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.14	1.00		0.00
Lane Grp Cap(c), veh/h	363	474	397	151	429	365	238	1146	613	180	1574	0
V/C Ratio(X)	0.78	0.71	0.06	0.70	0.63	0.00	0.85	0.79	0.79	0.70	0.53	0.00
Avail Cap(c_a), veh/h	425	641	537	164	589	500	248	1187	635	194	1648	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	37.1	29.0	24.1	37.8	29.3	0.0	35.9	25.2	25.2	37.0	24.4	0.0
Incr Delay (d2), s/veh	7.2	2.8	0.1	10.1	1.9	0.0	22.7	3.5	6.4	9.0	0.3	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.6	7.6	0.4	2.8	6.0	0.0	6.2	10.1	11.3	3.3	5.4	0.0
LnGrp Delay(d),s/veh	44.3	31.8	24.2	47.9	31.2	0.0	58.6	28.7	31.6	46.1	24.7	0.0
LnGrp LOS	D	C	C	D	C		E	C	C	D	C	
Approach Vol, veh/h		644			377			1588			959	
Approach Delay, s/veh		37.0			35.8			33.4			27.5	
Approach LOS		D			D			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	12.7	34.5	11.5	26.3	15.7	31.5	13.1	24.8
Change Period (Y+Rc), s	* 4.2	5.4	* 4.2	4.9	* 4.2	5.4	* 4.2	* 4.9
Max Green Setting (Gmax), s	* 9.2	30.1	* 8	29.0	* 12	27.3	* 10	* 27
Max Q Clear Time (g_c+I1), s	7.8	22.6	7.0	15.9	11.6	13.4	8.8	13.3
Green Ext Time (p_c), s	0.0	6.5	0.0	3.7	0.0	11.1	0.1	3.8

Intersection Summary	
HCM 2010 Ctrl Delay	32.7
HCM 2010 LOS	C

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	24	388	19	21	722	53	13	1	7	20	2	12
Future Volume (veh/h)	24	388	19	21	722	53	13	1	7	20	2	12
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	0.99		0.99	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1792	1900	1900	1845	1900	1900	1667	1900	1900	1863	1900
Adj Flow Rate, veh/h	29	462	23	25	860	63	15	1	8	24	2	14
Adj No. of Lanes	0	2	0	0	2	0	0	1	0	0	1	0
Peak Hour Factor	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84
Percent Heavy Veh, %	6	6	6	3	3	3	14	14	14	2	2	2
Cap, veh/h	147	1418	69	126	1483	107	313	45	94	319	55	111
Arrive On Green	0.47	0.47	0.47	0.47	0.47	0.47	0.21	0.21	0.21	0.21	0.21	0.21
Sat Flow, veh/h	67	3039	148	35	3178	230	686	215	450	727	263	533
Grp Volume(v), veh/h	264	0	250	499	0	449	24	0	0	40	0	0
Grp Sat Flow(s),veh/h/ln	1651	0	1603	1808	0	1635	1351	0	0	1524	0	0
Q Serve(g_s), s	0.0	0.0	3.4	0.0	0.0	7.0	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	3.2	0.0	3.4	6.8	0.0	7.0	0.4	0.0	0.0	0.6	0.0	0.0
Prop In Lane	0.11		0.09	0.05		0.14	0.62		0.33	0.60		0.35
Lane Grp Cap(c), veh/h	886	0	748	953	0	763	452	0	0	485	0	0
V/C Ratio(X)	0.30	0.00	0.33	0.52	0.00	0.59	0.05	0.00	0.00	0.08	0.00	0.00
Avail Cap(c_a), veh/h	1067	0	947	1171	0	966	876	0	0	963	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	5.8	0.0	5.8	6.7	0.0	6.8	11.0	0.0	0.0	11.1	0.0	0.0
Incr Delay (d2), s/veh	0.2	0.0	0.3	0.4	0.0	0.7	0.0	0.0	0.0	0.1	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.6	0.0	1.5	3.4	0.0	3.3	0.2	0.0	0.0	0.3	0.0	0.0
LnGrp Delay(d),s/veh	5.9	0.0	6.1	7.2	0.0	7.5	11.0	0.0	0.0	11.1	0.0	0.0
LnGrp LOS	A		A	A		A	B			B		
Approach Vol, veh/h		514			948			24			40	
Approach Delay, s/veh		6.0			7.3			11.0			11.1	
Approach LOS		A			A			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		12.8		21.7		12.8		21.7
Change Period (Y+Rc), s		5.6		5.6		5.6		5.6
Max Green Setting (Gmax), s		18.4		20.4		18.4		20.4
Max Q Clear Time (g_c+I1), s		2.4		5.4		2.6		9.0
Green Ext Time (p_c), s		0.2		8.3		0.2		6.9

Intersection Summary	
HCM 2010 Ctrl Delay	7.0
HCM 2010 LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	19	861	21	17	759	55	13	1	24	68	2	26
Future Volume (veh/h)	19	861	21	17	759	55	13	1	24	68	2	26
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		0.99	0.99		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1845	1900	1900	1863	1900	1900	1863	1900	1900	1863	1900
Adj Flow Rate, veh/h	20	926	23	18	816	59	14	1	26	73	2	28
Adj No. of Lanes	0	2	0	0	2	0	0	1	0	0	1	0
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	3	3	3	2	2	2	2	2	2	2	2	2
Cap, veh/h	109	1740	43	108	1667	119	183	52	191	332	32	76
Arrive On Green	0.52	0.52	0.52	0.52	0.52	0.52	0.19	0.19	0.19	0.19	0.19	0.19
Sat Flow, veh/h	24	3355	82	22	3215	229	303	271	994	900	167	398
Grp Volume(v), veh/h	504	0	465	468	0	425	41	0	0	103	0	0
Grp Sat Flow(s),veh/h/ln	1798	0	1663	1814	0	1652	1568	0	0	1465	0	0
Q Serve(g_s), s	0.0	0.0	7.2	0.0	0.0	6.4	0.0	0.0	0.0	1.4	0.0	0.0
Cycle Q Clear(g_c), s	7.0	0.0	7.2	6.3	0.0	6.4	0.8	0.0	0.0	2.2	0.0	0.0
Prop In Lane	0.04		0.05	0.04		0.14	0.34		0.63	0.71		0.27
Lane Grp Cap(c), veh/h	1029	0	863	1038	0	857	425	0	0	440	0	0
V/C Ratio(X)	0.49	0.00	0.54	0.45	0.00	0.50	0.10	0.00	0.00	0.23	0.00	0.00
Avail Cap(c_a), veh/h	1266	0	1092	1275	0	1085	1046	0	0	1029	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	6.2	0.0	6.2	6.0	0.0	6.0	13.0	0.0	0.0	13.5	0.0	0.0
Incr Delay (d2), s/veh	0.4	0.0	0.5	0.3	0.0	0.4	0.1	0.0	0.0	0.3	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.6	0.0	3.4	3.2	0.0	2.9	0.4	0.0	0.0	1.0	0.0	0.0
LnGrp Delay(d),s/veh	6.5	0.0	6.7	6.3	0.0	6.5	13.1	0.0	0.0	13.8	0.0	0.0
LnGrp LOS	A		A	A		A	B			B		
Approach Vol, veh/h		969			893			41			103	
Approach Delay, s/veh		6.6			6.4			13.1			13.8	
Approach LOS		A			A			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		25.7		13.0		25.7		13.0
Change Period (Y+Rc), s		5.6		5.6		5.6		5.6
Max Green Setting (Gmax), s		25.4		23.4		25.4		23.4
Max Q Clear Time (g_c+I1), s		9.2		4.2		8.4		2.8
Green Ext Time (p_c), s		10.8		0.7		11.2		0.7

Intersection Summary	
HCM 2010 Ctrl Delay	7.0
HCM 2010 LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	411	3	32	640	0	4	0	14	137	45	161
Future Volume (veh/h)	0	411	3	32	640	0	4	0	14	137	45	161
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	0	1792	1900	1827	1827	0	1900	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	0	507	4	40	790	0	5	0	17	169	56	199
Adj No. of Lanes	0	2	0	1	2	0	0	1	1	1	1	0
Peak Hour Factor	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81
Percent Heavy Veh, %	0	6	6	4	4	0	2	2	2	2	2	2
Cap, veh/h	0	1369	11	433	1373	0	403	0	510	451	116	412
Arrive On Green	0.00	0.40	0.40	0.40	0.40	0.00	0.32	0.00	0.32	0.32	0.32	0.32
Sat Flow, veh/h	0	3552	27	864	3563	0	686	0	1580	1388	359	1276
Grp Volume(v), veh/h	0	249	262	40	790	0	5	0	17	169	0	255
Grp Sat Flow(s),veh/h/ln	0	1703	1787	864	1736	0	686	0	1580	1388	0	1635
Q Serve(g_s), s	0.0	4.1	4.1	1.4	7.1	0.0	0.1	0.0	0.3	4.4	0.0	5.0
Cycle Q Clear(g_c), s	0.0	4.1	4.1	5.5	7.1	0.0	5.1	0.0	0.3	9.5	0.0	5.0
Prop In Lane	0.00		0.02	1.00		0.00	1.00		1.00	1.00		0.78
Lane Grp Cap(c), veh/h	0	673	707	433	1373	0	403	0	510	451	0	528
V/C Ratio(X)	0.00	0.37	0.37	0.09	0.58	0.00	0.01	0.00	0.03	0.37	0.00	0.48
Avail Cap(c_a), veh/h	0	873	917	535	1781	0	559	0	731	645	0	756
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	8.5	8.5	10.5	9.4	0.0	12.8	0.0	9.2	14.7	0.0	10.8
Incr Delay (d2), s/veh	0.0	0.3	0.3	0.1	0.4	0.0	0.0	0.0	0.0	0.5	0.0	0.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	2.0	2.1	0.3	3.4	0.0	0.0	0.0	0.1	1.8	0.0	2.3
LnGrp Delay(d),s/veh	0.0	8.9	8.8	10.6	9.8	0.0	12.9	0.0	9.2	15.2	0.0	11.5
LnGrp LOS		A	A	B	A		B		A	B		B
Approach Vol, veh/h		511			830			22			424	
Approach Delay, s/veh		8.8			9.8			10.1			13.0	
Approach LOS		A			A			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		21.3		18.4		21.3		18.4
Change Period (Y+Rc), s		5.6		5.6		5.6		5.6
Max Green Setting (Gmax), s		20.4		18.4		20.4		18.4
Max Q Clear Time (g_c+I1), s		6.1		11.5		9.1		7.1
Green Ext Time (p_c), s		7.5		1.3		6.4		1.7

Intersection Summary	
HCM 2010 Ctrl Delay	10.3
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	994	11	27	553	0	4	0	49	264	64	143
Future Volume (veh/h)	0	994	11	27	553	0	4	0	49	264	64	143
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	0	1863	1900	1827	1827	0	1900	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	0	1014	11	28	564	0	4	0	50	269	65	146
Adj No. of Lanes	0	2	0	1	2	0	0	1	1	1	1	0
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	0	2	2	4	4	0	2	2	2	2	2	2
Cap, veh/h	0	1475	16	252	1427	0	448	0	548	491	177	398
Arrive On Green	0.00	0.41	0.41	0.41	0.41	0.00	0.35	0.00	0.35	0.35	0.35	0.35
Sat Flow, veh/h	0	3679	39	537	3563	0	844	0	1579	1347	510	1146
Grp Volume(v), veh/h	0	500	525	28	564	0	4	0	50	269	0	211
Grp Sat Flow(s),veh/h/ln	0	1770	1855	537	1736	0	844	0	1579	1347	0	1657
Q Serve(g_s), s	0.0	10.7	10.7	2.1	5.3	0.0	0.1	0.0	1.0	8.7	0.0	4.4
Cycle Q Clear(g_c), s	0.0	10.7	10.7	12.8	5.3	0.0	4.5	0.0	1.0	13.2	0.0	4.4
Prop In Lane	0.00		0.02	1.00		0.00	1.00		1.00	1.00		0.69
Lane Grp Cap(c), veh/h	0	728	763	252	1427	0	448	0	548	491	0	575
V/C Ratio(X)	0.00	0.69	0.69	0.11	0.40	0.00	0.01	0.00	0.09	0.55	0.00	0.37
Avail Cap(c_a), veh/h	0	780	818	267	1530	0	507	0	628	559	0	659
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	11.2	11.2	16.5	9.6	0.0	13.0	0.0	10.2	16.3	0.0	11.3
Incr Delay (d2), s/veh	0.0	2.3	2.2	0.2	0.2	0.0	0.0	0.0	0.1	1.0	0.0	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	5.6	5.9	0.3	2.5	0.0	0.0	0.0	0.4	3.3	0.0	2.1
LnGrp Delay(d),s/veh	0.0	13.5	13.4	16.7	9.8	0.0	13.0	0.0	10.3	17.3	0.0	11.7
LnGrp LOS		B	B	B	A		B		B	B		B
Approach Vol, veh/h		1025			592			54			480	
Approach Delay, s/veh		13.5			10.1			10.5			14.8	
Approach LOS		B			B			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		24.6		21.7		24.6		21.7
Change Period (Y+Rc), s		5.6		5.6		5.6		5.6
Max Green Setting (Gmax), s		20.4		18.4		20.4		18.4
Max Q Clear Time (g_c+I1), s		12.7		15.2		14.8		6.5
Green Ext Time (p_c), s		5.5		0.8		4.2		1.9

Intersection Summary	
HCM 2010 Ctrl Delay	12.8
HCM 2010 LOS	B

G. Intersection Level of Service Calculations – Background Conditions

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	129	315	67	776	466	215	42	515	430	222	848	45
Future Volume (veh/h)	129	315	67	776	466	215	42	515	430	222	848	45
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1835	1835	1835	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	159	389	0	958	575	0	52	636	0	274	1047	56
Adj No. of Lanes	1	2	1	2	2	1	1	2	2	2	2	0
Peak Hour Factor	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	413	549	246	973	728	326	80	937	1537	326	1075	57
Arrive On Green	0.23	0.16	0.00	0.29	0.21	0.00	0.04	0.26	0.00	0.09	0.31	0.31
Sat Flow, veh/h	1774	3539	1583	3390	3486	1560	1774	3539	2787	3442	3417	183
Grp Volume(v), veh/h	159	389	0	958	575	0	52	636	0	274	542	561
Grp Sat Flow(s),veh/h/ln	1774	1770	1583	1695	1743	1560	1774	1770	1393	1721	1770	1830
Q Serve(g_s), s	10.1	13.9	0.0	37.5	20.9	0.0	3.9	21.5	0.0	10.5	40.4	40.4
Cycle Q Clear(g_c), s	10.1	13.9	0.0	37.5	20.9	0.0	3.9	21.5	0.0	10.5	40.4	40.4
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.10
Lane Grp Cap(c), veh/h	413	549	246	973	728	326	80	937	1537	326	557	576
V/C Ratio(X)	0.38	0.71	0.00	0.98	0.79	0.00	0.65	0.68	0.00	0.84	0.97	0.97
Avail Cap(c_a), veh/h	413	822	368	973	1241	555	96	937	1537	374	557	576
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	43.1	53.5	0.0	47.3	50.0	0.0	62.7	44.0	0.0	59.4	45.2	45.2
Incr Delay (d2), s/veh	0.6	1.7	0.0	25.1	2.0	0.0	11.3	2.0	0.0	14.1	31.4	30.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.0	6.9	0.0	21.0	10.3	0.0	2.1	10.8	0.0	5.6	24.6	25.3
LnGrp Delay(d),s/veh	43.7	55.2	0.0	72.4	52.0	0.0	74.1	46.0	0.0	73.5	76.6	76.1
LnGrp LOS	D	E		E	D		E	D		E	E	E
Approach Vol, veh/h		548			1533			688			1377	
Approach Delay, s/veh		51.9			64.7			48.1			75.8	
Approach LOS		D			E			D			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	19.5	42.1	45.1	26.8	12.8	48.8	37.2	34.7
Change Period (Y+Rc), s	6.8	6.8	6.8	6.1	6.8	6.8	6.1	6.8
Max Green Setting (Gmax), s	14.5	34.7	38.3	31.0	7.2	42.0	21.8	47.5
Max Q Clear Time (g_c+I1), s	12.5	23.5	39.5	15.9	5.9	42.4	12.1	22.9
Green Ext Time (p_c), s	0.2	7.9	0.0	1.9	0.0	0.0	2.1	4.1

Intersection Summary	
HCM 2010 Ctrl Delay	63.9
HCM 2010 LOS	E

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	297	2	100	9	8	19	30	776	4	6	1321	430
Future Volume (veh/h)	297	2	100	9	8	19	30	776	4	6	1321	430
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1863	1900	1863	1900	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	338	2	114	10	9	22	34	882	5	7	1501	0
Adj No. of Lanes	0	1	1	0	1	0	1	2	0	1	2	1
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	233	1	503	46	50	57	77	1681	10	22	1540	689
Arrive On Green	0.32	0.32	0.32	0.32	0.32	0.32	0.04	0.47	0.47	0.01	0.44	0.00
Sat Flow, veh/h	498	3	1577	0	155	180	1774	3608	20	1774	3539	1583
Grp Volume(v), veh/h	340	0	114	41	0	0	34	433	454	7	1501	0
Grp Sat Flow(s),veh/h/ln	501	0	1577	335	0	0	1774	1770	1859	1774	1770	1583
Q Serve(g_s), s	0.0	0.0	5.2	0.0	0.0	0.0	1.8	16.8	16.8	0.4	40.4	0.0
Cycle Q Clear(g_c), s	31.0	0.0	5.2	31.0	0.0	0.0	1.8	16.8	16.8	0.4	40.4	0.0
Prop In Lane	0.99		1.00	0.24		0.54	1.00		0.01	1.00		1.00
Lane Grp Cap(c), veh/h	233	0	503	153	0	0	77	825	866	22	1540	689
V/C Ratio(X)	1.46	0.00	0.23	0.27	0.00	0.00	0.44	0.52	0.52	0.32	0.97	0.00
Avail Cap(c_a), veh/h	233	0	503	153	0	0	128	825	866	128	1540	689
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	38.0	0.0	24.3	26.3	0.0	0.0	45.4	18.3	18.3	47.6	26.9	0.0
Incr Delay (d2), s/veh	227.5	0.0	0.2	0.9	0.0	0.0	4.0	0.6	0.6	8.0	17.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	21.0	0.0	2.3	0.8	0.0	0.0	1.0	8.3	8.7	0.2	23.3	0.0
LnGrp Delay(d),s/veh	265.5	0.0	24.5	27.2	0.0	0.0	49.3	19.0	18.9	55.6	44.1	0.0
LnGrp LOS	F		C	C			D	B	B	E	D	
Approach Vol, veh/h		454			41			921			1508	
Approach Delay, s/veh		205.0			27.2			20.1			44.2	
Approach LOS		F			C			C			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	8.0	52.1		37.1	11.0	49.1		37.1
Change Period (Y+Rc), s	6.8	6.8		6.1	6.8	6.8		6.1
Max Green Setting (Gmax), s	7.0	42.3		31.0	7.0	42.3		31.0
Max Q Clear Time (g_c+I1), s	2.4	18.8		33.0	3.8	42.4		33.0
Green Ext Time (p_c), s	0.0	18.3		0.0	0.0	0.0		0.0

Intersection Summary		
HCM 2010 Ctrl Delay		61.3
HCM 2010 LOS		E

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	15	21	152	679	85	23	182	545	410	50	801	12
Future Volume (veh/h)	15	21	152	679	85	23	182	545	410	50	801	12
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	17	24	0	780	98	4	209	626	146	57	921	14
Adj No. of Lanes	1	1	1	2	1	1	1	2	1	1	3	0
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	87	91	77	845	457	387	517	1655	733	84	1153	18
Arrive On Green	0.05	0.05	0.00	0.25	0.25	0.25	0.29	0.47	0.47	0.05	0.22	0.22
Sat Flow, veh/h	1774	1863	1583	3442	1863	1576	1774	3539	1568	1774	5159	78
Grp Volume(v), veh/h	17	24	0	780	98	4	209	626	146	57	605	330
Grp Sat Flow(s),veh/h/ln	1774	1863	1583	1721	1863	1576	1774	1770	1568	1774	1695	1848
Q Serve(g_s), s	1.2	1.6	0.0	28.3	5.4	0.2	12.1	14.6	7.0	4.0	21.6	21.6
Cycle Q Clear(g_c), s	1.2	1.6	0.0	28.3	5.4	0.2	12.1	14.6	7.0	4.0	21.6	21.6
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.04
Lane Grp Cap(c), veh/h	87	91	77	845	457	387	517	1655	733	84	757	413
V/C Ratio(X)	0.20	0.26	0.00	0.92	0.21	0.01	0.40	0.38	0.20	0.68	0.80	0.80
Avail Cap(c_a), veh/h	305	320	272	890	482	407	517	1655	733	133	757	413
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	58.5	58.7	0.0	47.1	38.5	36.5	36.4	22.0	20.0	60.0	47.0	47.0
Incr Delay (d2), s/veh	1.1	1.5	0.0	14.5	0.2	0.0	0.5	0.7	0.6	9.1	8.6	14.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.6	0.9	0.0	15.1	2.8	0.1	6.0	7.3	3.2	2.2	11.0	12.7
LnGrp Delay(d),s/veh	59.6	60.2	0.0	61.6	38.7	36.5	36.9	22.7	20.6	69.1	55.6	61.9
LnGrp LOS	E	E		E	D	D	D	C	C	E	E	E
Approach Vol, veh/h		41			882			981			992	
Approach Delay, s/veh		59.9			59.0			25.4			58.5	
Approach LOS		E			E			C			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	12.2	65.9		12.4	43.4	34.7		37.5
Change Period (Y+Rc), s	6.1	6.1		6.1	6.1	6.1		6.1
Max Green Setting (Gmax), s	9.6	38.9		22.0	19.9	28.6		33.1
Max Q Clear Time (g_c+I1), s	6.0	16.6		3.6	14.1	23.6		30.3
Green Ext Time (p_c), s	0.0	5.6		0.1	2.4	2.6		1.1

Intersection Summary	
HCM 2010 Ctrl Delay	47.4
HCM 2010 LOS	D

Intersection						
Int Delay, s/veh	2					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	34	108	700	100	181	1245
Future Vol, veh/h	34	108	700	100	181	1245
Conflicting Peds, #/hr	0	0	0	5	5	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	50	-	350	195	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	86	86	86	86	86	86
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	40	126	814	116	210	1448

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1964	412	0	0	819	0
Stage 1	819	-	-	-	-	-
Stage 2	1145	-	-	-	-	-
Critical Hdwy	6.84	6.94	-	-	4.14	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	-	-	2.22	-
Pot Cap-1 Maneuver	55	589	-	-	805	-
Stage 1	394	-	-	-	-	-
Stage 2	265	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	40	586	-	-	805	-
Mov Cap-2 Maneuver	135	-	-	-	-	-
Stage 1	392	-	-	-	-	-
Stage 2	196	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	19.9	0	1.4
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	135	586	805	-
HCM Lane V/C Ratio	-	-	0.293	0.214	0.261	-
HCM Control Delay (s)	-	-	42.4	12.8	11	-
HCM Lane LOS	-	-	E	B	B	-
HCM 95th %tile Q(veh)	-	-	1.1	0.8	1	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	169	298	179	116	336	86	94	623	64	94	1045	194
Future Volume (veh/h)	169	298	179	116	336	86	94	623	64	94	1045	194
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.99	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1835	1835	1835	1844	1844	1844	1881	1881	1881
Adj Flow Rate, veh/h	184	324	55	126	365	0	102	677	20	102	1136	0
Adj No. of Lanes	2	1	1	1	1	1	1	2	1	1	2	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	315	492	417	156	478	406	166	1191	527	169	1215	544
Arrive On Green	0.09	0.26	0.26	0.09	0.26	0.00	0.09	0.34	0.34	0.09	0.34	0.00
Sat Flow, veh/h	3476	1881	1592	1747	1835	1560	1756	3504	1551	1792	3575	1599
Grp Volume(v), veh/h	184	324	55	126	365	0	102	677	20	102	1136	0
Grp Sat Flow(s),veh/h/ln	1738	1881	1592	1747	1835	1560	1756	1752	1551	1792	1787	1599
Q Serve(g_s), s	4.4	13.4	2.3	6.2	16.0	0.0	4.9	13.8	0.8	4.8	26.8	0.0
Cycle Q Clear(g_c), s	4.4	13.4	2.3	6.2	16.0	0.0	4.9	13.8	0.8	4.8	26.8	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	315	492	417	156	478	406	166	1191	527	169	1215	544
V/C Ratio(X)	0.58	0.66	0.13	0.81	0.76	0.00	0.61	0.57	0.04	0.60	0.93	0.00
Avail Cap(c_a), veh/h	319	626	530	160	625	531	181	1191	527	245	1243	556
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	38.0	28.7	24.6	39.0	29.8	0.0	37.9	23.5	19.2	37.9	27.8	0.0
Incr Delay (d2), s/veh	2.3	2.0	0.2	24.2	4.5	0.0	4.5	0.6	0.0	2.5	12.8	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.2	7.2	1.0	4.0	8.7	0.0	2.6	6.8	0.3	2.5	15.3	0.0
LnGrp Delay(d),s/veh	40.3	30.7	24.8	63.2	34.3	0.0	42.4	24.2	19.3	40.4	40.6	0.0
LnGrp LOS	D	C	C	E	C		D	C	B	D	D	
Approach Vol, veh/h		563			491			799			1238	
Approach Delay, s/veh		33.3			41.7			26.4			40.6	
Approach LOS		C			D			C			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	12.4	35.0	12.0	27.7	12.4	35.0	12.1	27.6
Change Period (Y+Rc), s	* 4.2	5.4	* 4.2	4.9	* 4.2	5.4	* 4.2	* 4.9
Max Green Setting (Gmax), s	* 12	27.4	* 8	29.0	* 9	30.3	* 8	* 30
Max Q Clear Time (g_c+I1), s	6.8	15.8	8.2	15.4	6.9	28.8	6.4	18.0
Green Ext Time (p_c), s	0.1	8.6	0.0	4.4	0.0	0.8	0.1	4.1

Intersection Summary			
HCM 2010 Ctrl Delay		35.8	
HCM 2010 LOS		D	

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	238	22	169	21	21	26	117	538	9	27	883	369
Future Volume (veh/h)	238	22	169	21	21	26	117	538	9	27	883	369
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1900	1863	1863	1863	1863	1900	1792	1792	1792
Adj Flow Rate, veh/h	306	0	0	25	25	0	141	648	11	33	1064	0
Adj No. of Lanes	2	0	1	0	1	1	1	2	0	1	2	1
Peak Hour Factor	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	6	6	6
Cap, veh/h	472	0	210	36	36	63	176	1762	30	44	1435	642
Arrive On Green	0.13	0.00	0.00	0.04	0.04	0.00	0.10	0.49	0.49	0.03	0.42	0.00
Sat Flow, veh/h	3548	0	1583	909	909	1583	1774	3561	60	1707	3406	1524
Grp Volume(v), veh/h	306	0	0	50	0	0	141	322	337	33	1064	0
Grp Sat Flow(s),veh/h/ln	1774	0	1583	1817	0	1583	1774	1770	1852	1707	1703	1524
Q Serve(g_s), s	6.6	0.0	0.0	2.2	0.0	0.0	6.3	9.1	9.1	1.6	21.3	0.0
Cycle Q Clear(g_c), s	6.6	0.0	0.0	2.2	0.0	0.0	6.3	9.1	9.1	1.6	21.3	0.0
Prop In Lane	1.00		1.00	0.50		1.00	1.00		0.03	1.00		1.00
Lane Grp Cap(c), veh/h	472	0	210	73	0	63	176	875	916	44	1435	642
V/C Ratio(X)	0.65	0.00	0.00	0.69	0.00	0.00	0.80	0.37	0.37	0.75	0.74	0.00
Avail Cap(c_a), veh/h	1184	0	528	606	0	528	237	969	1014	146	1701	761
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	33.3	0.0	0.0	38.3	0.0	0.0	35.7	12.6	12.6	39.1	19.7	0.0
Incr Delay (d2), s/veh	1.5	0.0	0.0	11.0	0.0	0.0	13.2	0.3	0.2	21.8	1.5	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.3	0.0	0.0	1.3	0.0	0.0	3.7	4.4	4.7	1.0	10.2	0.0
LnGrp Delay(d),s/veh	34.8	0.0	0.0	49.4	0.0	0.0	48.9	12.9	12.9	60.9	21.2	0.0
LnGrp LOS	C			D			D	B	B	E	C	
Approach Vol, veh/h		306			50			800			1097	
Approach Delay, s/veh		34.8			49.4			19.2			22.4	
Approach LOS		C			D			B			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	8.9	46.8		16.4	14.8	40.9		8.8
Change Period (Y+Rc), s	6.8	6.8		5.6	6.8	6.8		5.6
Max Green Setting (Gmax), s	6.9	44.3		27.0	10.8	40.4		27.0
Max Q Clear Time (g_c+I1), s	3.6	11.1		8.6	8.3	23.3		4.2
Green Ext Time (p_c), s	0.0	16.0		1.0	0.1	10.8		0.2

Intersection Summary	
HCM 2010 Ctrl Delay	23.5
HCM 2010 LOS	C

Notes

User approved volume balancing among the lanes for turning movement.

Intersection												
Int Delay, s/veh	6.7											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	17	2	185	0	0	0	295	64	7	1	83	41
Future Vol, veh/h	17	2	185	0	0	0	295	64	7	1	83	41
Conflicting Peds, #/hr	0	0	0	0	0	0	5	0	7	7	0	5
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	50	-	-	-	75	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	-	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	94	94	94	94	94	94	94	94	94	94	94	94
Heavy Vehicles, %	7	7	7	2	2	2	2	2	2	2	2	2
Mvmt Flow	18	2	197	0	0	0	314	68	7	1	88	44

Major/Minor	Minor2						Major1			Major2		
Conflicting Flow All	816	827	115				137	0	0	83	0	0
Stage 1	117	117	-				-	-	-	-	-	-
Stage 2	699	710	-				-	-	-	-	-	-
Critical Hdwy	6.47	6.57	6.27				4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	5.47	5.57	-				-	-	-	-	-	-
Critical Hdwy Stg 2	5.47	5.57	-				-	-	-	-	-	-
Follow-up Hdwy	3.563	4.063	3.363				2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	340	301	924				1447	-	-	1514	-	-
Stage 1	896	789	-				-	-	-	-	-	-
Stage 2	484	429	-				-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	263	0	920				1447	-	-	1514	-	-
Mov Cap-2 Maneuver	263	0	-				-	-	-	-	-	-
Stage 1	891	0	-				-	-	-	-	-	-
Stage 2	377	0	-				-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	10.9	6.6	0.1
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	SBL	SBT	SBR
Capacity (veh/h)	1447	-	-	263	920	1514	-	-
HCM Lane V/C Ratio	0.217	-	-	0.077	0.214	0.001	-	-
HCM Control Delay (s)	8.2	-	-	19.8	10	7.4	0	-
HCM Lane LOS	A	-	-	C	B	A	A	-
HCM 95th %tile Q(veh)	0.8	-	-	0.2	0.8	0	-	-

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	498	255	636	802	0	284
Future Volume (vph)	498	255	636	802	0	284
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Grade (%)	-3%			-3%	-3%	
Total Lost time (s)	5.6	4.0	5.6	5.6		5.6
Lane Util. Factor	0.91	1.00	0.97	0.95		0.88
Frpb, ped/bikes	1.00	1.00	1.00	1.00		1.00
Flpb, ped/bikes	1.00	1.00	1.00	1.00		1.00
Frt	1.00	0.85	1.00	1.00		0.85
Flt Protected	1.00	1.00	0.95	1.00		1.00
Satd. Flow (prot)	5111	1591	3485	3592		2828
Flt Permitted	1.00	1.00	0.95	1.00		1.00
Satd. Flow (perm)	5111	1591	3485	3592		2828
Peak-hour factor, PHF	0.79	0.79	0.79	0.79	0.79	0.79
Adj. Flow (vph)	630	323	805	1015	0	359
RTOR Reduction (vph)	0	0	0	0	0	101
Lane Group Flow (vph)	630	323	805	1015	0	258
Confl. Peds. (#/hr)						9
Heavy Vehicles (%)	3%	3%	2%	2%	2%	2%
Turn Type	NA	Free	Prot	NA		Over
Protected Phases	6		8	2 8		8
Permitted Phases		Free				8
Actuated Green, G (s)	12.8	49.0	25.0	49.0		25.0
Effective Green, g (s)	12.8	49.0	25.0	49.0		25.0
Actuated g/C Ratio	0.26	1.00	0.51	1.00		0.51
Clearance Time (s)	5.6		5.6			5.6
Vehicle Extension (s)	3.0		3.0			3.0
Lane Grp Cap (vph)	1335	1591	1778	3592		1442
v/s Ratio Prot	c0.12		c0.23	0.28		0.09
v/s Ratio Perm		0.20				
v/c Ratio	0.47	0.20	0.45	0.28		0.18
Uniform Delay, d1	15.3	0.0	7.6	0.0		6.5
Progression Factor	1.00	1.00	1.00	1.00		1.00
Incremental Delay, d2	0.3	0.3	0.2	0.0		0.1
Delay (s)	15.5	0.3	7.8	0.0		6.5
Level of Service	B	A	A	A		A
Approach Delay (s)	10.4			3.5	6.5	
Approach LOS	B			A	A	

Intersection Summary			
HCM 2000 Control Delay	5.9	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.46		
Actuated Cycle Length (s)	49.0	Sum of lost time (s)	11.2
Intersection Capacity Utilization	46.4%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	4	555	31	164	16	500	265	175	883	15
Future Volume (veh/h)	0	0	4	555	31	164	16	500	265	175	883	15
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	1.00		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1863	1827	1827	1827	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	0	0	0	704	0	48	20	610	0	213	1077	18
Adj No. of Lanes	0	1	1	2	0	1	1	2	2	1	2	0
Peak Hour Factor	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82
Percent Heavy Veh, %	2	2	2	4	4	4	2	2	2	2	2	2
Cap, veh/h	0	3	55	926	0	410	58	1204	948	261	1619	27
Arrive On Green	0.00	0.00	0.00	0.27	0.00	0.27	0.03	0.34	0.00	0.15	0.45	0.45
Sat Flow, veh/h	0	1863	1583	3480	0	1541	1774	3539	2787	1774	3562	60
Grp Volume(v), veh/h	0	0	0	704	0	48	20	610	0	213	535	560
Grp Sat Flow(s),veh/h/ln	0	1863	1583	1740	0	1541	1774	1770	1393	1774	1770	1852
Q Serve(g_s), s	0.0	0.0	0.0	11.6	0.0	1.5	0.7	8.5	0.0	7.2	14.7	14.7
Cycle Q Clear(g_c), s	0.0	0.0	0.0	11.6	0.0	1.5	0.7	8.5	0.0	7.2	14.7	14.7
Prop In Lane	0.00		1.00	1.00		1.00	1.00		1.00	1.00		0.03
Lane Grp Cap(c), veh/h	0	3	55	926	0	410	58	1204	948	261	804	842
V/C Ratio(X)	0.00	0.00	0.00	0.76	0.00	0.12	0.34	0.51	0.00	0.82	0.67	0.67
Avail Cap(c_a), veh/h	0	60	103	1456	0	645	228	1527	1202	340	875	915
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	0.0	0.0	0.0	21.0	0.0	17.3	29.4	16.3	0.0	25.7	13.2	13.2
Incr Delay (d2), s/veh	0.0	0.0	0.0	1.3	0.0	0.1	3.4	0.3	0.0	11.1	1.7	1.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	0.0	5.6	0.0	0.6	0.4	4.2	0.0	4.4	7.5	7.9
LnGrp Delay(d),s/veh	0.0	0.0	0.0	22.3	0.0	17.4	32.8	16.7	0.0	36.8	15.0	14.9
LnGrp LOS				C		B	C	B		D	B	B
Approach Vol, veh/h		0			752			630			1308	
Approach Delay, s/veh		0.0			22.0			17.2			18.5	
Approach LOS					C			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	14.2	26.2		0.0	7.1	33.3		21.6
Change Period (Y+Rc), s	5.1	5.1		3.0	5.1	5.1		5.1
Max Green Setting (Gmax), s	11.9	26.8		2.0	8.0	30.7		26.0
Max Q Clear Time (g_c+I1), s	9.2	10.5		0.0	2.7	16.7		13.6
Green Ext Time (p_c), s	0.2	10.2		0.0	0.0	9.2		2.4

Intersection Summary	
HCM 2010 Ctrl Delay	19.2
HCM 2010 LOS	B

Notes

User approved volume balancing among the lanes for turning movement.

Intersection												
Int Delay, s/veh	1.7											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	15	396	19	21	736	27	13	1	7	20	2	11
Future Vol, veh/h	15	396	19	21	736	27	13	1	7	20	2	11
Conflicting Peds, #/hr	7	0	11	11	0	7	2	0	0	0	0	2
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	84	84	84	84	84	84	84	84	84	84	84	84
Heavy Vehicles, %	6	6	6	3	3	3	14	14	14	2	2	2
Mvmt Flow	18	471	23	25	876	32	15	1	8	24	2	13

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	915	0	0	505	0	0	1020	1494	258	1221	1490	463
Stage 1	-	-	-	-	-	-	529	529	-	949	949	-
Stage 2	-	-	-	-	-	-	491	965	-	272	541	-
Critical Hdwy	4.22	-	-	4.16	-	-	7.78	6.78	7.18	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.78	5.78	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.78	5.78	-	6.54	5.54	-
Follow-up Hdwy	2.26	-	-	2.23	-	-	3.64	4.14	3.44	3.52	4.02	3.32
Pot Cap-1 Maneuver	716	-	-	1049	-	-	175	109	706	136	123	546
Stage 1	-	-	-	-	-	-	472	496	-	280	337	-
Stage 2	-	-	-	-	-	-	498	306	-	711	519	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	715	-	-	1049	-	-	156	98	699	124	111	541
Mov Cap-2 Maneuver	-	-	-	-	-	-	156	98	-	124	111	-
Stage 1	-	-	-	-	-	-	451	474	-	268	319	-
Stage 2	-	-	-	-	-	-	458	289	-	676	496	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.5	0.4	25.2	33.5
HCM LOS			D	D

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	203	715	-	-	1049	-	-	165
HCM Lane V/C Ratio	0.123	0.025	-	-	0.024	-	-	0.238
HCM Control Delay (s)	25.2	10.2	0.2	-	8.5	0.2	-	33.5
HCM Lane LOS	D	B	A	-	A	A	-	D
HCM 95th %tile Q(veh)	0.4	0.1	-	-	0.1	-	-	0.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	12	355	55	72	696	25	66	7	42	20	10	22
Future Volume (veh/h)	12	355	55	72	696	25	66	7	42	20	10	22
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1792	1792	1900	1827	1827	1900	1900	1776	1776	1900	1827	1827
Adj Flow Rate, veh/h	14	428	66	87	839	30	80	8	0	24	12	27
Adj No. of Lanes	1	2	0	1	2	0	0	1	1	0	1	1
Peak Hour Factor	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83
Percent Heavy Veh, %	6	6	6	4	4	4	7	7	7	4	4	4
Cap, veh/h	407	1437	220	563	1660	59	386	29	254	324	125	261
Arrive On Green	0.49	0.49	0.49	0.49	0.49	0.49	0.17	0.17	0.00	0.17	0.17	0.17
Sat Flow, veh/h	609	2958	453	879	3418	122	1087	171	1509	872	743	1548
Grp Volume(v), veh/h	14	245	249	87	426	443	88	0	0	36	0	27
Grp Sat Flow(s),veh/h/ln	609	1703	1708	879	1736	1804	1258	0	1509	1615	0	1548
Q Serve(g_s), s	0.5	2.9	3.0	2.2	5.7	5.7	1.8	0.0	0.0	0.0	0.0	0.5
Cycle Q Clear(g_c), s	6.2	2.9	3.0	5.2	5.7	5.7	2.3	0.0	0.0	0.6	0.0	0.5
Prop In Lane	1.00		0.27	1.00		0.07	0.91		1.00	0.67		1.00
Lane Grp Cap(c), veh/h	407	827	830	563	843	876	415	0	254	449	0	261
V/C Ratio(X)	0.03	0.30	0.30	0.15	0.51	0.51	0.21	0.00	0.00	0.08	0.00	0.10
Avail Cap(c_a), veh/h	512	1122	1126	728	1169	1216	1212	0	1160	1346	0	1190
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	8.0	5.2	5.2	6.8	5.9	5.9	12.8	0.0	0.0	11.9	0.0	11.9
Incr Delay (d2), s/veh	0.0	0.2	0.2	0.1	0.5	0.5	0.3	0.0	0.0	0.1	0.0	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	1.4	1.4	0.6	2.7	2.8	0.8	0.0	0.0	0.3	0.0	0.2
LnGrp Delay(d),s/veh	8.1	5.4	5.4	6.9	6.4	6.4	13.0	0.0	0.0	12.0	0.0	12.1
LnGrp LOS	A	A	A	A	A	A	B			B		B
Approach Vol, veh/h		508			956			88			63	
Approach Delay, s/veh		5.5			6.4			13.0			12.0	
Approach LOS		A			A			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		22.5		11.3		22.5		11.3
Change Period (Y+Rc), s		6.1		5.6		* 6.1		5.6
Max Green Setting (Gmax), s		22.3		26.0		* 23		26.0
Max Q Clear Time (g_c+I1), s		8.2		2.6		7.7		4.3
Green Ext Time (p_c), s		7.8		0.7		8.2		0.7

Intersection Summary	
HCM 2010 Ctrl Delay	6.7
HCM 2010 LOS	A

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Intersection												
Int Delay, s/veh	22.1											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	415	3	32	626	0	4	0	14	140	45	164
Future Vol, veh/h	0	415	3	32	626	0	4	0	14	140	45	164
Conflicting Peds, #/hr	0	0	9	6	0	0	2	0	0	0	0	2
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	240	-	-	0	-	85	120	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	81	81	81	81	81	81	81	81	81	81	81	81
Heavy Vehicles, %	6	6	6	4	4	4	2	2	2	2	2	2
Mvmt Flow	0	512	4	40	773	0	5	0	17	173	56	202

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	-	0	0	525	0	0	1018	-	267	1108	1377	388
Stage 1	-	-	-	-	-	-	523	-	-	852	852	-
Stage 2	-	-	-	-	-	-	495	-	-	256	525	-
Critical Hdwy	-	-	-	4.18	-	-	7.54	-	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	-	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	-	-	6.54	5.54	-
Follow-up Hdwy	-	-	-	2.24	-	-	3.52	-	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	0	-	-	1024	-	0	191	0	731	~ 164	144	611
Stage 1	0	-	-	-	-	0	505	0	-	321	374	-
Stage 2	0	-	-	-	-	0	525	0	-	726	528	-
Platoon blocked, %		-	-		-							
Mov Cap-1 Maneuver	-	-	-	1024	-	-	84	-	725	~ 155	137	610
Mov Cap-2 Maneuver	-	-	-	-	-	-	84	-	-	~ 155	137	-
Stage 1	-	-	-	-	-	-	505	-	-	321	359	-
Stage 2	-	-	-	-	-	-	284	-	-	709	523	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	0.4	19.1	89.8
HCM LOS			C	F

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBL	WBT	SBLn1	SBLn2
Capacity (veh/h)	84	725	-	-	1024	-	155	350
HCM Lane V/C Ratio	0.059	0.024	-	-	0.039	-	1.115	0.737
HCM Control Delay (s)	50.5	10.1	-	-	8.7	-	165.1	39.3
HCM Lane LOS	F	B	-	-	A	-	F	E
HCM 95th %tile Q(veh)	0.2	0.1	-	-	0.1	-	9.2	5.6

Notes

~: Volume exceeds capacity $: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon

Intersection						
Int Delay, s/veh	0.4					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	459	110	56	659	0	0
Future Vol, veh/h	459	110	56	659	0	0
Conflicting Peds, #/hr	0	10	10	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	115	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	81	81	81	81	81	81
Heavy Vehicles, %	5	5	2	2	4	4
Mvmt Flow	567	136	69	814	0	0

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	712	0	1190	361
Stage 1	-	-	-	-	645	-
Stage 2	-	-	-	-	545	-
Critical Hdwy	-	-	4.14	-	6.88	6.98
Critical Hdwy Stg 1	-	-	-	-	5.88	-
Critical Hdwy Stg 2	-	-	-	-	5.88	-
Follow-up Hdwy	-	-	2.22	-	3.54	3.34
Pot Cap-1 Maneuver	-	-	884	-	178	630
Stage 1	-	-	-	-	479	-
Stage 2	-	-	-	-	539	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	884	-	163	624
Mov Cap-2 Maneuver	-	-	-	-	163	-
Stage 1	-	-	-	-	474	-
Stage 2	-	-	-	-	497	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.7	0
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	-	-	-	884	-
HCM Lane V/C Ratio	-	-	-	0.078	-
HCM Control Delay (s)	0	-	-	9.4	-
HCM Lane LOS	A	-	-	A	-
HCM 95th %tile Q(veh)	-	-	-	0.3	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	99	340	20	8	466	199	21	69	3	23	27	227
Future Volume (veh/h)	99	340	20	8	466	199	21	69	3	23	27	227
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		0.99	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1900	1863	1863	1900	1863	1863	1900	1792	1792	1792
Adj Flow Rate, veh/h	115	395	23	9	542	231	24	80	3	27	31	0
Adj No. of Lanes	1	2	0	1	2	0	1	1	0	1	1	1
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86
Percent Heavy Veh, %	3	3	3	2	2	2	2	2	2	6	6	6
Cap, veh/h	193	1336	78	29	732	311	70	296	11	74	305	259
Arrive On Green	0.11	0.40	0.40	0.02	0.30	0.30	0.04	0.17	0.17	0.04	0.17	0.00
Sat Flow, veh/h	1757	3365	195	1774	2413	1025	1774	1783	67	1707	1792	1524
Grp Volume(v), veh/h	115	205	213	9	397	376	24	0	83	27	31	0
Grp Sat Flow(s),veh/h/ln	1757	1752	1808	1774	1770	1668	1774	0	1850	1707	1792	1524
Q Serve(g_s), s	3.2	4.1	4.1	0.3	10.4	10.4	0.7	0.0	2.0	0.8	0.8	0.0
Cycle Q Clear(g_c), s	3.2	4.1	4.1	0.3	10.4	10.4	0.7	0.0	2.0	0.8	0.8	0.0
Prop In Lane	1.00		0.11	1.00		0.61	1.00		0.04	1.00		1.00
Lane Grp Cap(c), veh/h	193	696	718	29	537	506	70	0	307	74	305	259
V/C Ratio(X)	0.60	0.29	0.30	0.31	0.74	0.74	0.34	0.00	0.27	0.36	0.10	0.00
Avail Cap(c_a), veh/h	242	696	718	241	654	616	241	0	971	249	958	814
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	21.8	10.6	10.6	25.0	16.1	16.1	24.1	0.0	18.7	23.9	18.0	0.0
Incr Delay (d2), s/veh	2.9	0.2	0.2	5.9	3.5	3.9	2.9	0.0	0.5	3.0	0.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.7	2.0	2.1	0.2	5.5	5.3	0.4	0.0	1.1	0.4	0.4	0.0
LnGrp Delay(d),s/veh	24.7	10.8	10.8	30.9	19.6	20.0	26.9	0.0	19.2	26.9	18.2	0.0
LnGrp LOS	C	B	B	C	B	B	C		B	C	B	
Approach Vol, veh/h		533			782			107			58	
Approach Delay, s/veh		13.8			19.9			20.9			22.2	
Approach LOS		B			B			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	5.9	25.5	6.6	13.3	10.7	20.7	6.8	13.1
Change Period (Y+Rc), s	5.1	5.1	4.6	4.6	5.1	5.1	4.6	4.6
Max Green Setting (Gmax), s	7.0	19.1	7.0	27.5	7.1	19.0	7.5	27.0
Max Q Clear Time (g_c+I1), s	2.3	6.1	2.7	2.8	5.2	12.4	2.8	4.0
Green Ext Time (p_c), s	0.0	6.1	0.0	0.6	0.0	3.1	0.0	0.5

Intersection Summary			
HCM 2010 Ctrl Delay		17.9	
HCM 2010 LOS		B	

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	87	325	88	94	425	131	54	350	56	112	663	132
Future Volume (veh/h)	87	325	88	94	425	131	54	350	56	112	663	132
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	1.00		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1808	1808	1808	1810	1810	1810	1863	1863	1863
Adj Flow Rate, veh/h	101	378	18	109	494	28	63	407	12	130	771	30
Adj No. of Lanes	1	2	1	1	1	1	1	2	1	1	2	1
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86
Percent Heavy Veh, %	2	2	2	3	3	3	5	5	5	2	2	2
Cap, veh/h	128	1022	454	133	532	450	106	966	431	149	1074	476
Arrive On Green	0.07	0.29	0.29	0.08	0.29	0.29	0.06	0.28	0.28	0.08	0.30	0.30
Sat Flow, veh/h	1774	3539	1570	1722	1808	1530	1723	3438	1535	1774	3539	1568
Grp Volume(v), veh/h	101	378	18	109	494	28	63	407	12	130	771	30
Grp Sat Flow(s),veh/h/ln	1774	1770	1570	1722	1808	1530	1723	1719	1535	1774	1770	1568
Q Serve(g_s), s	5.1	7.7	0.7	5.7	24.1	1.2	3.2	8.8	0.5	6.6	17.6	1.2
Cycle Q Clear(g_c), s	5.1	7.7	0.7	5.7	24.1	1.2	3.2	8.8	0.5	6.6	17.6	1.2
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	128	1022	454	133	532	450	106	966	431	149	1074	476
V/C Ratio(X)	0.79	0.37	0.04	0.82	0.93	0.06	0.60	0.42	0.03	0.87	0.72	0.06
Avail Cap(c_a), veh/h	137	1054	468	133	538	456	133	1289	575	149	1350	598
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	41.4	25.7	23.2	41.2	31.1	23.0	41.5	26.6	23.6	41.1	28.1	22.4
Incr Delay (d2), s/veh	24.9	0.2	0.0	31.8	22.6	0.1	5.3	0.3	0.0	39.7	1.4	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.4	3.8	0.3	3.9	15.3	0.5	1.7	4.2	0.2	4.9	8.8	0.5
LnGrp Delay(d),s/veh	66.3	25.9	23.2	73.0	53.7	23.1	46.7	26.9	23.6	80.8	29.5	22.5
LnGrp LOS	E	C	C	E	D	C	D	C	C	F	C	C
Approach Vol, veh/h		497			631			482			931	
Approach Delay, s/veh		34.0			55.7			29.4			36.4	
Approach LOS		C			E			C			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	13.7	31.6	13.1	32.3	11.7	33.6	12.6	32.8
Change Period (Y+Rc), s	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1
Max Green Setting (Gmax), s	7.6	34.0	7.0	27.0	7.0	34.6	7.0	27.0
Max Q Clear Time (g_c+I1), s	8.6	10.8	7.7	9.7	5.2	19.6	7.1	26.1
Green Ext Time (p_c), s	0.0	9.0	0.0	5.6	0.0	7.2	0.0	0.5

Intersection Summary			
HCM 2010 Ctrl Delay			39.4
HCM 2010 LOS			D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	94	698	77	634	564	459	96	676	917	458	667	73
Future Volume (veh/h)	94	698	77	634	564	459	96	676	917	458	667	73
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1835	1835	1835	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	98	727	0	660	588	0	100	704	0	477	695	76
Adj No. of Lanes	1	2	1	2	2	1	1	2	2	2	2	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	360	831	372	624	753	337	124	833	1169	434	938	102
Arrive On Green	0.20	0.23	0.00	0.18	0.22	0.00	0.07	0.24	0.00	0.13	0.29	0.29
Sat Flow, veh/h	1774	3539	1583	3390	3486	1560	1774	3539	2787	3442	3216	351
Grp Volume(v), veh/h	98	727	0	660	588	0	100	704	0	477	382	389
Grp Sat Flow(s),veh/h/ln	1774	1770	1583	1695	1743	1560	1774	1770	1393	1721	1770	1798
Q Serve(g_s), s	5.6	23.9	0.0	22.2	19.2	0.0	6.7	22.9	0.0	15.2	23.5	23.6
Cycle Q Clear(g_c), s	5.6	23.9	0.0	22.2	19.2	0.0	6.7	22.9	0.0	15.2	23.5	23.6
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.20
Lane Grp Cap(c), veh/h	360	831	372	624	753	337	124	833	1169	434	516	524
V/C Ratio(X)	0.27	0.87	0.00	1.06	0.78	0.00	0.81	0.84	0.00	1.10	0.74	0.74
Avail Cap(c_a), veh/h	360	910	407	624	1234	552	153	883	1208	434	516	524
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	40.6	44.4	0.0	49.2	44.6	0.0	55.3	44.0	0.0	52.7	38.6	38.6
Incr Delay (d2), s/veh	0.4	9.0	0.0	52.3	1.8	0.0	22.1	7.3	0.0	73.1	5.6	5.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.8	12.7	0.0	14.8	9.4	0.0	4.0	12.0	0.0	11.6	12.3	12.5
LnGrp Delay(d),s/veh	41.0	53.4	0.0	101.5	46.4	0.0	77.4	51.3	0.0	125.8	44.2	44.2
LnGrp LOS	D	D		F	D		E	D		F	D	D
Approach Vol, veh/h		825			1248			804			1248	
Approach Delay, s/veh		51.9			75.6			54.5			75.4	
Approach LOS		D			E			D			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	22.0	35.2	29.0	34.4	15.2	42.0	30.6	32.8
Change Period (Y+Rc), s	6.8	6.8	6.8	6.1	6.8	6.8	6.1	6.8
Max Green Setting (Gmax), s	15.2	30.1	22.2	31.0	10.4	34.9	10.5	42.7
Max Q Clear Time (g_c+I1), s	17.2	24.9	24.2	25.9	8.7	25.6	7.6	21.2
Green Ext Time (p_c), s	0.0	3.4	0.0	2.1	0.0	6.0	1.4	4.0

Intersection Summary		
HCM 2010 Ctrl Delay		66.7
HCM 2010 LOS		E

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	351	17	52	5	14	13	163	1375	11	19	881	441
Future Volume (veh/h)	351	17	52	5	14	13	163	1375	11	19	881	441
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		0.98	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1863	1900	1863	1900	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	366	18	54	5	15	14	170	1432	11	20	918	0
Adj No. of Lanes	0	1	1	0	1	0	1	2	0	1	2	1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	210	6	559	47	124	87	198	1391	11	55	1083	484
Arrive On Green	0.36	0.36	0.36	0.36	0.36	0.36	0.11	0.39	0.39	0.03	0.31	0.00
Sat Flow, veh/h	362	18	1570	0	348	244	1774	3599	28	1774	3539	1583
Grp Volume(v), veh/h	384	0	54	34	0	0	170	704	739	20	918	0
Grp Sat Flow(s),veh/h/ln	380	0	1570	592	0	0	1774	1770	1857	1774	1770	1583
Q Serve(g_s), s	0.0	0.0	2.0	0.0	0.0	0.0	8.2	33.6	33.6	1.0	21.2	0.0
Cycle Q Clear(g_c), s	31.0	0.0	2.0	31.0	0.0	0.0	8.2	33.6	33.6	1.0	21.2	0.0
Prop In Lane	0.95		1.00	0.15		0.41	1.00		0.01	1.00		1.00
Lane Grp Cap(c), veh/h	216	0	559	258	0	0	198	684	718	55	1083	484
V/C Ratio(X)	1.78	0.00	0.10	0.13	0.00	0.00	0.86	1.03	1.03	0.37	0.85	0.00
Avail Cap(c_a), veh/h	216	0	559	258	0	0	198	684	718	143	1204	539
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	33.8	0.0	18.7	20.8	0.0	0.0	38.0	26.7	26.7	41.3	28.3	0.0
Incr Delay (d2), s/veh	367.3	0.0	0.1	0.2	0.0	0.0	29.6	42.0	41.4	4.0	5.4	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	27.2	0.0	0.9	0.6	0.0	0.0	5.6	24.3	25.4	0.5	11.1	0.0
LnGrp Delay(d),s/veh	401.1	0.0	18.7	21.0	0.0	0.0	67.6	68.7	68.1	45.4	33.7	0.0
LnGrp LOS	F		B	C			E	F	F	D	C	
Approach Vol, veh/h		438			34			1613			938	
Approach Delay, s/veh		353.9			21.0			68.3			34.0	
Approach LOS		F			C			E			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	9.5	40.4		37.1	16.5	33.4		37.1
Change Period (Y+Rc), s	6.8	6.8		6.1	6.8	6.8		6.1
Max Green Setting (Gmax), s	7.0	32.3		31.0	9.7	29.6		31.0
Max Q Clear Time (g_c+I1), s	3.0	35.6		33.0	10.2	23.2		33.0
Green Ext Time (p_c), s	0.0	0.0		0.0	0.0	3.5		0.0

Intersection Summary		
HCM 2010 Ctrl Delay		98.5
HCM 2010 LOS		F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	27	70	160	476	120	148	304	1141	666	108	1048	24
Future Volume (veh/h)	27	70	160	476	120	148	304	1141	666	108	1048	24
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.94	1.00		0.98	1.00		0.99	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	28	74	10	501	126	21	320	1201	299	114	1103	25
Adj No. of Lanes	1	1	1	2	1	1	1	2	1	1	3	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	150	158	126	565	306	255	347	1709	754	138	1867	42
Arrive On Green	0.08	0.08	0.08	0.16	0.16	0.16	0.20	0.48	0.48	0.08	0.37	0.37
Sat Flow, veh/h	1774	1863	1493	3442	1863	1551	1774	3539	1562	1774	5114	116
Grp Volume(v), veh/h	28	74	10	501	126	21	320	1201	299	114	731	397
Grp Sat Flow(s),veh/h/ln	1774	1863	1493	1721	1863	1551	1774	1770	1562	1774	1695	1840
Q Serve(g_s), s	1.9	4.8	0.8	18.2	7.8	1.5	22.7	34.0	15.7	8.1	22.3	22.4
Cycle Q Clear(g_c), s	1.9	4.8	0.8	18.2	7.8	1.5	22.7	34.0	15.7	8.1	22.3	22.4
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.06
Lane Grp Cap(c), veh/h	150	158	126	565	306	255	347	1709	754	138	1238	672
V/C Ratio(X)	0.19	0.47	0.08	0.89	0.41	0.08	0.92	0.70	0.40	0.83	0.59	0.59
Avail Cap(c_a), veh/h	305	320	257	592	320	267	398	1709	754	159	1238	672
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	54.5	55.9	54.0	52.3	48.0	45.3	50.5	25.9	21.2	58.2	32.9	32.9
Incr Delay (d2), s/veh	0.6	2.2	0.3	14.8	0.9	0.1	24.8	2.4	1.6	25.7	2.1	3.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.0	2.6	0.3	9.9	4.1	0.6	13.5	17.1	7.1	5.0	10.8	12.1
LnGrp Delay(d),s/veh	55.1	58.0	54.3	67.1	48.9	45.5	75.4	28.4	22.7	83.9	35.0	36.7
LnGrp LOS	E	E	D	E	D	D	E	C	C	F	C	D
Approach Vol, veh/h		112			648			1820			1242	
Approach Delay, s/veh		57.0			62.8			35.7			40.0	
Approach LOS		E			E			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	16.1	67.9		16.9	31.1	52.8		27.1
Change Period (Y+Rc), s	6.1	6.1		6.1	6.1	6.1		6.1
Max Green Setting (Gmax), s	11.5	48.1		22.0	28.7	30.9		22.0
Max Q Clear Time (g_c+I1), s	10.1	36.0		6.8	24.7	24.4		20.2
Green Ext Time (p_c), s	0.0	10.5		0.3	0.4	6.0		0.6

Intersection Summary	
HCM 2010 Ctrl Delay	42.3
HCM 2010 LOS	D

Intersection						
Int Delay, s/veh	1.3					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	16	28	1520	54	120	814
Future Vol, veh/h	16	28	1520	54	120	814
Conflicting Peds, #/hr	0	0	0	6	6	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	50	-	350	195	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	98	98	98	98	98	98
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	16	29	1551	55	122	831

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	2217	782	0	0	1557	0
Stage 1	1557	-	-	-	-	-
Stage 2	660	-	-	-	-	-
Critical Hdwy	6.84	6.94	-	-	4.14	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	-	-	2.22	-
Pot Cap-1 Maneuver	37	337	-	-	421	-
Stage 1	159	-	-	-	-	-
Stage 2	476	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	26	335	-	-	421	-
Mov Cap-2 Maneuver	108	-	-	-	-	-
Stage 1	158	-	-	-	-	-
Stage 2	338	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	26.7	0	2.2
HCM LOS	D		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	108	335	421	-
HCM Lane V/C Ratio	-	-	0.151	0.085	0.291	-
HCM Control Delay (s)	-	-	44.2	16.7	17	-
HCM Lane LOS	-	-	E	C	C	-
HCM 95th %tile Q(veh)	-	-	0.5	0.3	1.2	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	277	331	112	103	265	224	199	1441	65	122	910	175
Future Volume (veh/h)	277	331	112	103	265	224	199	1441	65	122	910	175
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		1.00	1.00		0.98	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1835	1835	1835	1844	1844	1844	1881	1881	1881
Adj Flow Rate, veh/h	292	348	21	108	279	0	209	1517	29	128	958	0
Adj No. of Lanes	2	1	1	1	1	1	1	2	1	1	2	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	336	430	359	126	375	318	238	1572	692	146	1409	630
Arrive On Green	0.10	0.23	0.23	0.07	0.20	0.00	0.14	0.45	0.45	0.08	0.39	0.00
Sat Flow, veh/h	3476	1881	1572	1747	1835	1560	1756	3504	1543	1792	3575	1599
Grp Volume(v), veh/h	292	348	21	108	279	0	209	1517	29	128	958	0
Grp Sat Flow(s),veh/h/ln	1738	1881	1572	1747	1835	1560	1756	1752	1543	1792	1787	1599
Q Serve(g_s), s	9.2	19.4	1.2	6.8	15.8	0.0	12.9	46.6	1.2	7.8	24.5	0.0
Cycle Q Clear(g_c), s	9.2	19.4	1.2	6.8	15.8	0.0	12.9	46.6	1.2	7.8	24.5	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	336	430	359	126	375	318	238	1572	692	146	1409	630
V/C Ratio(X)	0.87	0.81	0.06	0.85	0.74	0.00	0.88	0.97	0.04	0.88	0.68	0.00
Avail Cap(c_a), veh/h	336	493	412	126	448	381	284	1594	702	146	1409	630
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	49.2	40.4	33.3	50.7	41.3	0.0	46.9	29.6	17.1	50.2	27.7	0.0
Incr Delay (d2), s/veh	20.4	9.1	0.1	39.4	5.9	0.0	21.5	15.0	0.0	40.5	1.3	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.3	11.1	0.5	4.7	8.6	0.0	7.7	25.6	0.5	5.5	12.4	0.0
LnGrp Delay(d),s/veh	69.7	49.4	33.4	90.1	47.2	0.0	68.4	44.6	17.2	90.8	29.1	0.0
LnGrp LOS	E	D	C	F	D		E	D	B	F	C	
Approach Vol, veh/h		661			387			1755			1086	
Approach Delay, s/veh		57.9			59.2			47.0			36.3	
Approach LOS		E			E			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	13.2	55.0	12.2	30.2	19.2	49.0	14.9	27.5
Change Period (Y+Rc), s	* 4.2	5.4	* 4.2	4.9	* 4.2	5.4	* 4.2	* 4.9
Max Green Setting (Gmax), s	* 9	50.3	* 8	29.0	* 18	41.4	* 11	* 27
Max Q Clear Time (g_c+I1), s	9.8	48.6	8.8	21.4	14.9	26.5	11.2	17.8
Green Ext Time (p_c), s	0.0	1.0	0.0	2.7	0.1	12.9	0.0	3.1

Intersection Summary	
HCM 2010 Ctrl Delay	47.1
HCM 2010 LOS	D

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	330	46	220	21	57	45	311	1200	25	31	593	205
Future Volume (veh/h)	330	46	220	21	57	45	311	1200	25	31	593	205
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.95	1.00		0.99	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1900	1863	1863	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	374	0	51	22	59	4	321	1237	26	32	611	0
Adj No. of Lanes	2	0	1	0	1	1	1	2	0	1	2	1
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	523	0	231	53	142	160	362	1594	34	43	957	428
Arrive On Green	0.15	0.00	0.15	0.11	0.11	0.11	0.20	0.45	0.45	0.02	0.27	0.00
Sat Flow, veh/h	3548	0	1567	499	1339	1507	1774	3544	74	1774	3539	1583
Grp Volume(v), veh/h	374	0	51	81	0	4	321	618	645	32	611	0
Grp Sat Flow(s),veh/h/ln	1774	0	1567	1838	0	1507	1774	1770	1849	1774	1770	1583
Q Serve(g_s), s	9.1	0.0	2.6	3.8	0.0	0.2	16.0	26.8	26.9	1.6	13.9	0.0
Cycle Q Clear(g_c), s	9.1	0.0	2.6	3.8	0.0	0.2	16.0	26.8	26.9	1.6	13.9	0.0
Prop In Lane	1.00		1.00	0.27		1.00	1.00		0.04	1.00		1.00
Lane Grp Cap(c), veh/h	523	0	231	195	0	160	362	796	832	43	957	428
V/C Ratio(X)	0.72	0.00	0.22	0.42	0.00	0.03	0.89	0.78	0.78	0.74	0.64	0.00
Avail Cap(c_a), veh/h	1052	0	465	545	0	447	481	914	954	82	1030	461
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	37.0	0.0	34.2	38.1	0.0	36.5	35.2	21.2	21.2	44.1	29.3	0.0
Incr Delay (d2), s/veh	1.8	0.0	0.5	1.4	0.0	0.1	14.5	3.7	3.6	21.6	1.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.6	0.0	1.2	2.0	0.0	0.1	9.3	13.9	14.5	1.1	6.9	0.0
LnGrp Delay(d),s/veh	38.8	0.0	34.7	39.5	0.0	36.5	49.8	24.9	24.7	65.7	30.5	0.0
LnGrp LOS	D		C	D		D	D	C	C	E	C	
Approach Vol, veh/h		425			85			1584			643	
Approach Delay, s/veh		38.3			39.3			29.9			32.2	
Approach LOS		D			D			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	9.0	47.8		19.0	25.4	31.4		15.2
Change Period (Y+Rc), s	6.8	6.8		5.6	6.8	6.8		5.6
Max Green Setting (Gmax), s	4.2	47.0		27.0	24.7	26.5		27.0
Max Q Clear Time (g_c+I1), s	3.6	28.9		11.1	18.0	15.9		5.8
Green Ext Time (p_c), s	0.0	12.1		1.4	0.6	8.0		0.3

Intersection Summary

HCM 2010 Ctrl Delay		32.0	
HCM 2010 LOS		C	

Notes

User approved volume balancing among the lanes for turning movement.

Intersection

Int Delay, s/veh 17.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	55	2	224	0	0	0	577	163	18	3	117	84
Future Vol, veh/h	55	2	224	0	0	0	577	163	18	3	117	84
Conflicting Peds, #/hr	0	0	0	0	0	0	7	0	7	7	0	7
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	50	-	-	-	75	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	-	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	93	93	93	93	93	93	93	93	93	93	93	93
Heavy Vehicles, %	6	6	6	2	2	2	2	2	2	2	2	2
Mvmt Flow	59	2	241	0	0	0	620	175	19	3	126	90

Major/Minor	Minor2						Major1			Major2		
Conflicting Flow All	1610	1626	178				223	0	0	202	0	0
Stage 1	184	184	-				-	-	-	-	-	-
Stage 2	1426	1442	-				-	-	-	-	-	-
Critical Hdwy	6.46	6.56	6.26				4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	5.46	5.56	-				-	-	-	-	-	-
Critical Hdwy Stg 2	5.46	5.56	-				-	-	-	-	-	-
Follow-up Hdwy	3.554	4.054	3.354				2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	113	100	855				1346	-	-	1370	-	-
Stage 1	838	740	-				-	-	-	-	-	-
Stage 2	217	194	-				-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	60	0	849				1346	-	-	1370	-	-
Mov Cap-2 Maneuver	60	0	-				-	-	-	-	-	-
Stage 1	830	0	-				-	-	-	-	-	-
Stage 2	116	0	-				-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	56.6	7.6	0.1
HCM LOS	F		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	SBL	SBT	SBR
Capacity (veh/h)	1346	-	-	60	849	1370	-	-
HCM Lane V/C Ratio	0.461	-	-	1.022	0.284	0.002	-	-
HCM Control Delay (s)	9.9	-	-	236	10.9	7.6	0	-
HCM Lane LOS	A	-	-	F	B	A	A	-
HCM 95th %tile Q(veh)	2.5	-	-	4.9	1.2	0	-	-

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	993	307	388	502	0	764
Future Volume (vph)	993	307	388	502	0	764
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Grade (%)	-3%			-3%	-3%	
Total Lost time (s)	5.6	4.0	5.6	5.6		5.6
Lane Util. Factor	0.91	1.00	0.97	0.95		0.88
Frpb, ped/bikes	1.00	1.00	1.00	1.00		1.00
Flpb, ped/bikes	1.00	1.00	1.00	1.00		1.00
Frt	1.00	0.85	1.00	1.00		0.85
Flt Protected	1.00	1.00	0.95	1.00		1.00
Satd. Flow (prot)	5111	1591	3485	3592		2828
Flt Permitted	1.00	1.00	0.95	1.00		1.00
Satd. Flow (perm)	5111	1591	3485	3592		2828
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	1056	327	413	534	0	813
RTOR Reduction (vph)	0	0	0	0	0	29
Lane Group Flow (vph)	1056	327	413	534	0	784
Confl. Peds. (#/hr)						13
Heavy Vehicles (%)	3%	3%	2%	2%	2%	2%
Turn Type	NA	Free	Prot	NA		Over
Protected Phases	6		8	2 8		8
Permitted Phases		Free				8
Actuated Green, G (s)	17.2	46.8	18.4	46.8		18.4
Effective Green, g (s)	17.2	46.8	18.4	46.8		18.4
Actuated g/C Ratio	0.37	1.00	0.39	1.00		0.39
Clearance Time (s)	5.6		5.6			5.6
Vehicle Extension (s)	3.0		3.0			3.0
Lane Grp Cap (vph)	1878	1591	1370	3592		1111
v/s Ratio Prot	c0.21		0.12	0.15		c0.28
v/s Ratio Perm		0.21				
v/c Ratio	0.56	0.21	0.30	0.15		0.71
Uniform Delay, d1	11.8	0.0	9.8	0.0		11.9
Progression Factor	1.00	1.00	1.00	1.00		1.00
Incremental Delay, d2	0.4	0.3	0.1	0.0		2.1
Delay (s)	12.2	0.3	9.9	0.0		14.0
Level of Service	B	A	A	A		B
Approach Delay (s)	9.4			4.3	14.0	
Approach LOS	A			A	B	

Intersection Summary

HCM 2000 Control Delay	9.0	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.64		
Actuated Cycle Length (s)	46.8	Sum of lost time (s)	11.2
Intersection Capacity Utilization	56.6%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	15	372	24	421	19	1115	622	308	501	26
Future Volume (veh/h)	0	0	15	372	24	421	19	1115	622	308	501	26
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.97	1.00		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1776	1776	1863	1863	1863	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	0	0	0	397	0	156	19	1138	0	314	511	27
Adj No. of Lanes	0	1	1	2	0	1	1	2	2	1	2	0
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	7	7	7	2	2	2	2	2	2	2	2	2
Cap, veh/h	0	2	48	660	0	287	54	1415	1114	359	1954	103
Arrive On Green	0.00	0.00	0.00	0.19	0.00	0.19	0.03	0.40	0.00	0.20	0.57	0.57
Sat Flow, veh/h	0	1776	1509	3548	0	1540	1774	3539	2787	1774	3419	180
Grp Volume(v), veh/h	0	0	0	397	0	156	19	1138	0	314	264	274
Grp Sat Flow(s),veh/h/ln	0	1776	1509	1774	0	1540	1774	1770	1393	1774	1770	1829
Q Serve(g_s), s	0.0	0.0	0.0	7.4	0.0	6.6	0.8	20.6	0.0	12.4	5.4	5.5
Cycle Q Clear(g_c), s	0.0	0.0	0.0	7.4	0.0	6.6	0.8	20.6	0.0	12.4	5.4	5.5
Prop In Lane	0.00		1.00	1.00		1.00	1.00		1.00	1.00		0.10
Lane Grp Cap(c), veh/h	0	2	48	660	0	287	54	1415	1114	359	1011	1046
V/C Ratio(X)	0.00	0.00	0.00	0.60	0.00	0.54	0.35	0.80	0.00	0.87	0.26	0.26
Avail Cap(c_a), veh/h	0	49	88	1276	0	554	196	1552	1222	417	1011	1046
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	0.0	0.0	0.0	27.0	0.0	26.6	34.3	19.2	0.0	27.9	7.8	7.8
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.9	0.0	1.6	3.8	2.9	0.0	16.5	0.1	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	0.0	3.7	0.0	2.9	0.4	10.5	0.0	7.7	2.7	2.8
LnGrp Delay(d),s/veh	0.0	0.0	0.0	27.8	0.0	28.3	38.1	22.1	0.0	44.4	7.9	7.9
LnGrp LOS				C		C	D	C		D	A	A
Approach Vol, veh/h		0			553			1157			852	
Approach Delay, s/veh		0.0			28.0			22.4			21.4	
Approach LOS					C			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	19.7	34.0		0.0	7.3	46.4		18.6
Change Period (Y+Rc), s	5.1	5.1		3.0	5.1	5.1		5.1
Max Green Setting (Gmax), s	17.0	31.7		2.0	8.0	40.7		26.0
Max Q Clear Time (g_c+I1), s	14.4	22.6		0.0	2.8	7.5		9.4
Green Ext Time (p_c), s	0.3	6.3		0.0	0.0	15.6		1.8

Intersection Summary	
HCM 2010 Ctrl Delay	23.3
HCM 2010 LOS	C

Notes

User approved volume balancing among the lanes for turning movement.

Intersection												
Int Delay, s/veh	4.4											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	18	887	21	17	782	51	13	1	24	45	2	18
Future Vol, veh/h	18	887	21	17	782	51	13	1	24	45	2	18
Conflicting Peds, #/hr	10	0	8	8	0	10	6	0	1	0	0	1
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	93	93	93	93	93	93	93	93	93	93	93	93
Heavy Vehicles, %	3	3	3	2	2	2	2	2	2	2	2	2
Mvmt Flow	19	954	23	18	841	55	14	1	26	48	2	19

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	906	0	0	984	0	0	1476	1954	497	1432	1938	464
Stage 1	-	-	-	-	-	-	1012	1012	-	915	915	-
Stage 2	-	-	-	-	-	-	464	942	-	517	1023	-
Critical Hdwy	4.16	-	-	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.23	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	740	-	-	698	-	-	88	63	519	95	65	545
Stage 1	-	-	-	-	-	-	256	315	-	294	350	-
Stage 2	-	-	-	-	-	-	548	340	-	509	311	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	736	-	-	697	-	-	75	55	515	81	57	537
Mov Cap-2 Maneuver	-	-	-	-	-	-	75	55	-	81	57	-
Stage 1	-	-	-	-	-	-	240	295	-	275	329	-
Stage 2	-	-	-	-	-	-	495	319	-	454	291	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.5	0.5	35	92
HCM LOS			E	F

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	160	736	-	-	697	-	-	104
HCM Lane V/C Ratio	0.255	0.026	-	-	0.026	-	-	0.672
HCM Control Delay (s)	35	10	0.3	-	10.3	0.3	-	92
HCM Lane LOS	E	B	A	-	B	A	-	F
HCM 95th %tile Q(veh)	1	0.1	-	-	0.1	-	-	3.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	22	846	87	58	581	18	212	12	104	57	12	41
Future Volume (veh/h)	22	846	87	58	581	18	212	12	104	57	12	41
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.98	1.00		0.98	0.99		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1845	1845	1900	1900	1863	1863	1900	1863	1863
Adj Flow Rate, veh/h	24	920	95	63	632	20	230	13	0	62	13	45
Adj No. of Lanes	1	2	0	1	2	0	0	1	1	0	1	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	3	3	3	2	2	2	2	2	2
Cap, veh/h	414	1483	153	286	1590	50	484	19	462	529	98	460
Arrive On Green	0.46	0.46	0.46	0.46	0.46	0.46	0.29	0.29	0.00	0.29	0.29	0.29
Sat Flow, veh/h	772	3233	334	546	3466	110	1146	65	1583	1332	336	1574
Grp Volume(v), veh/h	24	503	512	63	319	333	243	0	0	75	0	45
Grp Sat Flow(s),veh/h/ln	772	1770	1798	546	1752	1823	1210	0	1583	1668	0	1574
Q Serve(g_s), s	1.0	10.1	10.1	4.6	5.7	5.7	7.6	0.0	0.0	0.0	0.0	1.0
Cycle Q Clear(g_c), s	6.7	10.1	10.1	14.7	5.7	5.7	9.0	0.0	0.0	1.4	0.0	1.0
Prop In Lane	1.00		0.19	1.00		0.06	0.95		1.00	0.83		1.00
Lane Grp Cap(c), veh/h	414	812	825	286	804	836	503	0	462	627	0	460
V/C Ratio(X)	0.06	0.62	0.62	0.22	0.40	0.40	0.48	0.00	0.00	0.12	0.00	0.10
Avail Cap(c_a), veh/h	427	840	854	301	851	885	857	0	877	1008	0	871
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	10.6	9.6	9.6	15.2	8.4	8.4	15.6	0.0	0.0	12.3	0.0	12.1
Incr Delay (d2), s/veh	0.1	1.3	1.3	0.4	0.3	0.3	0.7	0.0	0.0	0.1	0.0	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	5.2	5.3	0.7	2.7	2.8	2.9	0.0	0.0	0.7	0.0	0.4
LnGrp Delay(d),s/veh	10.7	10.9	10.9	15.6	8.7	8.7	16.3	0.0	0.0	12.4	0.0	12.2
LnGrp LOS	B	B	B	B	A	A	B			B		B
Approach Vol, veh/h		1039			715			243			120	
Approach Delay, s/veh		10.9			9.3			16.3			12.3	
Approach LOS		B			A			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		27.6		19.3		27.6		19.3
Change Period (Y+Rc), s		6.1		5.6		* 6.1		5.6
Max Green Setting (Gmax), s		22.3		26.0		* 23		26.0
Max Q Clear Time (g_c+I1), s		12.1		3.4		16.7		11.0
Green Ext Time (p_c), s		7.3		2.0		4.7		1.8

Intersection Summary	
HCM 2010 Ctrl Delay	11.1
HCM 2010 LOS	B

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Intersection												
Int Delay, s/veh	81.8											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	1000	11	27	565	0	4	0	49	272	64	147
Future Vol, veh/h	0	1000	11	27	565	0	4	0	49	272	64	147
Conflicting Peds, #/hr	0	0	8	8	0	0	1	0	3	3	0	1
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	240	-	-	0	-	85	120	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	98	98	98	98	98	98	98	98	98	98	98	98
Heavy Vehicles, %	2	2	2	4	4	4	2	2	2	2	2	2
Mvmt Flow	0	1020	11	28	577	0	4	0	50	278	65	150

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	-	0	0	1040	0	0	1411	-	527	1145	1672	289
Stage 1	-	-	-	-	-	-	1034	-	-	632	632	-
Stage 2	-	-	-	-	-	-	377	-	-	513	1040	-
Critical Hdwy	-	-	-	4.18	-	-	7.54	-	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	-	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	-	-	6.54	5.54	-
Follow-up Hdwy	-	-	-	2.24	-	-	3.52	-	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	0	-	-	653	-	0	98	0	496	~ 154	95	708
Stage 1	0	-	-	-	-	0	248	0	-	435	472	-
Stage 2	0	-	-	-	-	0	616	0	-	512	306	-
Platoon blocked, %		-	-		-							
Mov Cap-1 Maneuver	-	-	-	651	-	-	30	-	491	~ 133	90	707
Mov Cap-2 Maneuver	-	-	-	-	-	-	30	-	-	~ 133	90	-
Stage 1	-	-	-	-	-	-	248	-	-	435	452	-
Stage 2	-	-	-	-	-	-	397	-	-	459	304	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	0.5	23	$ 358.9
HCM LOS			C	F

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBL	WBT	SBLn1	SBLn2
Capacity (veh/h)	30	491	-	-	651	-	133	230
HCM Lane V/C Ratio	0.136	0.102	-	-	0.042	-	2.087	0.936
HCM Control Delay (s)	143.1	13.2	-	-	10.8	-	$ 568.5	88.7
HCM Lane LOS	F	B	-	-	B	-	F	F
HCM 95th %tile Q(veh)	0.4	0.3	-	-	0.1	-	22.7	8.1

Notes

~: Volume exceeds capacity $: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon

Intersection						
Int Delay, s/veh	0.6					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	1190	175	78	593	0	0
Future Vol, veh/h	1190	175	78	593	0	0
Conflicting Peds, #/hr	0	11	11	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	115	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	97	97	97	97	97	97
Heavy Vehicles, %	2	2	5	5	2	2
Mvmt Flow	1227	180	80	611	0	0

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	1418	0	1794	715
Stage 1	-	-	-	-	1328	-
Stage 2	-	-	-	-	466	-
Critical Hdwy	-	-	4.2	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	-	-	2.25	-	3.52	3.32
Pot Cap-1 Maneuver	-	-	461	-	72	373
Stage 1	-	-	-	-	212	-
Stage 2	-	-	-	-	598	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	461	-	59	369
Mov Cap-2 Maneuver	-	-	-	-	59	-
Stage 1	-	-	-	-	210	-
Stage 2	-	-	-	-	494	-

Approach	EB	WB	NB
HCM Control Delay, s	0	1.7	0
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	-	-	-	461	-
HCM Lane V/C Ratio	-	-	-	0.174	-
HCM Control Delay (s)	0	-	-	14.5	-
HCM Lane LOS	A	-	-	B	-
HCM 95th %tile Q(veh)	-	-	-	0.6	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	266	874	49	28	388	325	47	232	37	98	45	236
Future Volume (veh/h)	266	874	49	28	388	325	47	232	37	98	45	236
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.98	1.00		0.98	0.99		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1900	1776	1776	1776
Adj Flow Rate, veh/h	271	892	50	29	396	332	48	237	38	100	46	0
Adj No. of Lanes	1	2	0	1	2	0	1	1	0	1	1	1
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	7	7	7
Cap, veh/h	323	1425	80	79	510	423	497	471	75	298	535	455
Arrive On Green	0.18	0.42	0.42	0.04	0.28	0.28	0.30	0.30	0.30	0.30	0.30	0.00
Sat Flow, veh/h	1774	3406	191	1774	1820	1510	1351	1563	251	1039	1776	1509
Grp Volume(v), veh/h	271	463	479	29	385	343	48	0	275	100	46	0
Grp Sat Flow(s),veh/h/ln	1774	1770	1828	1774	1770	1561	1351	0	1813	1039	1776	1509
Q Serve(g_s), s	9.2	12.9	12.9	1.0	12.5	12.7	1.7	0.0	7.8	5.5	1.2	0.0
Cycle Q Clear(g_c), s	9.2	12.9	12.9	1.0	12.5	12.7	2.8	0.0	7.8	13.3	1.2	0.0
Prop In Lane	1.00		0.10	1.00		0.97	1.00		0.14	1.00		1.00
Lane Grp Cap(c), veh/h	323	740	765	79	496	437	497	0	546	298	535	455
V/C Ratio(X)	0.84	0.63	0.63	0.37	0.78	0.78	0.10	0.00	0.50	0.34	0.09	0.00
Avail Cap(c_a), veh/h	422	740	765	198	517	456	672	0	782	433	765	651
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	24.7	14.4	14.4	29.1	20.7	20.8	16.7	0.0	18.0	23.5	15.7	0.0
Incr Delay (d2), s/veh	11.0	1.7	1.6	2.9	7.0	8.4	0.1	0.0	0.7	0.7	0.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.5	6.7	6.9	0.5	7.1	6.5	0.6	0.0	4.0	1.6	0.6	0.0
LnGrp Delay(d),s/veh	35.7	16.0	16.0	31.9	27.8	29.2	16.8	0.0	18.7	24.2	15.8	0.0
LnGrp LOS	D	B	B	C	C	C	B		B	C	B	
Approach Vol, veh/h		1213			757			323			146	
Approach Delay, s/veh		20.4			28.6			18.5			21.5	
Approach LOS		C			C			B			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	7.9	31.3		23.5	16.5	22.7		23.5
Change Period (Y+Rc), s	5.1	5.1		4.6	5.1	5.1		4.6
Max Green Setting (Gmax), s	7.0	26.2		27.0	14.9	18.3		27.0
Max Q Clear Time (g_c+I1), s	3.0	14.9		15.3	11.2	14.7		9.8
Green Ext Time (p_c), s	0.0	7.6		2.0	0.3	2.9		2.3

Intersection Summary	
HCM 2010 Ctrl Delay	22.8
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	227	681	58	103	321	224	60	628	170	214	409	81
Future Volume (veh/h)	227	681	58	103	321	224	60	628	170	214	409	81
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.99	1.00		0.99	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1825	1825	1825	1845	1845	1845	1810	1810	1810
Adj Flow Rate, veh/h	236	709	13	107	334	46	62	654	62	223	426	26
Adj No. of Lanes	1	2	1	1	1	1	1	2	1	1	2	1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	3	3	3	5	5	5
Cap, veh/h	210	1005	442	133	442	372	101	974	433	204	1166	508
Arrive On Green	0.12	0.28	0.28	0.08	0.24	0.24	0.06	0.28	0.28	0.12	0.34	0.34
Sat Flow, veh/h	1774	3539	1558	1739	1825	1534	1757	3505	1559	1723	3438	1500
Grp Volume(v), veh/h	236	709	13	107	334	46	62	654	62	223	426	26
Grp Sat Flow(s),veh/h/ln	1774	1770	1558	1739	1825	1534	1757	1752	1559	1723	1719	1500
Q Serve(g_s), s	11.9	18.0	0.6	6.1	17.0	2.4	3.5	16.6	3.0	11.9	9.4	1.2
Cycle Q Clear(g_c), s	11.9	18.0	0.6	6.1	17.0	2.4	3.5	16.6	3.0	11.9	9.4	1.2
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	210	1005	442	133	442	372	101	974	433	204	1166	508
V/C Ratio(X)	1.12	0.71	0.03	0.80	0.76	0.12	0.62	0.67	0.14	1.09	0.37	0.05
Avail Cap(c_a), veh/h	210	1022	450	171	491	412	166	1214	540	204	1273	555
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	44.3	32.2	26.0	45.6	35.3	29.7	46.3	32.2	27.3	44.3	25.0	22.3
Incr Delay (d2), s/veh	99.0	2.2	0.0	18.6	6.0	0.1	6.0	1.0	0.1	89.7	0.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	11.6	9.1	0.3	3.6	9.4	1.0	1.9	8.2	1.3	10.7	4.5	0.5
LnGrp Delay(d),s/veh	143.2	34.4	26.0	64.2	41.2	29.9	52.2	33.2	27.4	134.0	25.2	22.4
LnGrp LOS	F	C	C	E	D	C	D	C	C	F	C	C
Approach Vol, veh/h		958			487			778			675	
Approach Delay, s/veh		61.1			45.2			34.3			61.1	
Approach LOS		E			D			C			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	18.0	34.0	13.8	34.6	11.9	40.2	18.0	30.4
Change Period (Y+Rc), s	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1
Max Green Setting (Gmax), s	11.9	34.8	9.9	29.0	9.5	37.2	11.9	27.0
Max Q Clear Time (g_c+I1), s	13.9	18.6	8.1	20.0	5.5	11.4	13.9	19.0
Green Ext Time (p_c), s	0.0	7.0	0.0	4.6	0.0	8.7	0.0	4.2

Intersection Summary	
HCM 2010 Ctrl Delay	51.2
HCM 2010 LOS	D

H. Intersection Level of Service Calculations – Background Plus Project Conditions

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	129	315	67	783	466	215	42	516	431	222	856	45
Future Volume (veh/h)	129	315	67	783	466	215	42	516	431	222	856	45
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1835	1835	1835	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	159	389	0	967	575	0	52	637	0	274	1057	56
Adj No. of Lanes	1	2	1	2	2	1	1	2	2	2	2	0
Peak Hour Factor	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	411	548	245	969	728	326	79	943	1538	326	1082	57
Arrive On Green	0.23	0.15	0.00	0.29	0.21	0.00	0.04	0.27	0.00	0.09	0.32	0.32
Sat Flow, veh/h	1774	3539	1583	3390	3486	1560	1774	3539	2787	3442	3419	181
Grp Volume(v), veh/h	159	389	0	967	575	0	52	637	0	274	547	566
Grp Sat Flow(s),veh/h/ln	1774	1770	1583	1695	1743	1560	1774	1770	1393	1721	1770	1830
Q Serve(g_s), s	10.1	14.0	0.0	38.1	20.9	0.0	3.9	21.5	0.0	10.5	40.9	40.9
Cycle Q Clear(g_c), s	10.1	14.0	0.0	38.1	20.9	0.0	3.9	21.5	0.0	10.5	40.9	40.9
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.10
Lane Grp Cap(c), veh/h	411	548	245	969	728	326	79	943	1538	326	560	579
V/C Ratio(X)	0.39	0.71	0.00	1.00	0.79	0.00	0.65	0.68	0.00	0.84	0.98	0.98
Avail Cap(c_a), veh/h	411	821	367	969	1236	553	93	943	1538	373	560	579
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	43.3	53.6	0.0	47.7	50.1	0.0	62.8	43.9	0.0	59.5	45.2	45.2
Incr Delay (d2), s/veh	0.6	1.7	0.0	28.5	2.0	0.0	12.3	1.9	0.0	14.2	32.1	31.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.0	6.9	0.0	21.6	10.3	0.0	2.2	10.8	0.0	5.6	24.9	25.8
LnGrp Delay(d),s/veh	43.9	55.3	0.0	76.2	52.1	0.0	75.2	45.8	0.0	73.7	77.3	76.8
LnGrp LOS	D	E		E	D		E	D		E	E	E
Approach Vol, veh/h		548			1542			689			1387	
Approach Delay, s/veh		52.0			67.2			48.0			76.4	
Approach LOS		D			E			D			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	19.5	42.4	45.0	26.8	12.8	49.1	37.1	34.7
Change Period (Y+Rc), s	6.8	6.8	6.8	6.1	6.8	6.8	6.1	6.8
Max Green Setting (Gmax), s	14.5	34.8	38.2	31.0	7.0	42.3	21.8	47.4
Max Q Clear Time (g_c+I1), s	12.5	23.5	40.1	16.0	5.9	42.9	12.1	22.9
Green Ext Time (p_c), s	0.2	8.0	0.0	1.9	0.0	0.0	2.1	4.1

Intersection Summary	
HCM 2010 Ctrl Delay	65.1
HCM 2010 LOS	E

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	297	2	100	9	8	19	30	778	4	6	1336	430
Future Volume (veh/h)	297	2	100	9	8	19	30	778	4	6	1336	430
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1863	1900	1863	1900	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	338	2	114	10	9	22	34	884	5	7	1518	0
Adj No. of Lanes	0	1	1	0	1	0	1	2	0	1	2	1
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	233	1	503	46	50	57	77	1682	10	22	1540	689
Arrive On Green	0.32	0.32	0.32	0.32	0.32	0.32	0.04	0.47	0.47	0.01	0.44	0.00
Sat Flow, veh/h	498	3	1577	0	155	180	1774	3608	20	1774	3539	1583
Grp Volume(v), veh/h	340	0	114	41	0	0	34	434	455	7	1518	0
Grp Sat Flow(s),veh/h/ln	501	0	1577	335	0	0	1774	1770	1859	1774	1770	1583
Q Serve(g_s), s	0.0	0.0	5.2	0.0	0.0	0.0	1.8	16.8	16.8	0.4	41.2	0.0
Cycle Q Clear(g_c), s	31.0	0.0	5.2	31.0	0.0	0.0	1.8	16.8	16.8	0.4	41.2	0.0
Prop In Lane	0.99		1.00	0.24		0.54	1.00		0.01	1.00		1.00
Lane Grp Cap(c), veh/h	233	0	503	153	0	0	77	825	866	22	1540	689
V/C Ratio(X)	1.46	0.00	0.23	0.27	0.00	0.00	0.44	0.53	0.53	0.32	0.99	0.00
Avail Cap(c_a), veh/h	233	0	503	153	0	0	128	825	866	128	1540	689
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	38.0	0.0	24.3	26.3	0.0	0.0	45.4	18.4	18.4	47.6	27.2	0.0
Incr Delay (d2), s/veh	227.5	0.0	0.2	0.9	0.0	0.0	4.0	0.6	0.6	8.0	19.5	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	21.0	0.0	2.3	0.8	0.0	0.0	1.0	8.3	8.7	0.2	24.2	0.0
LnGrp Delay(d),s/veh	265.5	0.0	24.5	27.2	0.0	0.0	49.3	19.0	18.9	55.6	46.7	0.0
LnGrp LOS	F		C	C			D	B	B	E	D	
Approach Vol, veh/h		454			41			923			1525	
Approach Delay, s/veh		205.0			27.2			20.1			46.7	
Approach LOS		F			C			C			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	8.0	52.1		37.1	11.0	49.1		37.1
Change Period (Y+Rc), s	6.8	6.8		6.1	6.8	6.8		6.1
Max Green Setting (Gmax), s	7.0	42.3		31.0	7.0	42.3		31.0
Max Q Clear Time (g_c+I1), s	2.4	18.8		33.0	3.8	43.2		33.0
Green Ext Time (p_c), s	0.0	18.3		0.0	0.0	0.0		0.0

Intersection Summary	
HCM 2010 Ctrl Delay	62.5
HCM 2010 LOS	E

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	15	21	152	679	85	23	182	546	410	50	807	12
Future Volume (veh/h)	15	21	152	679	85	23	182	546	410	50	807	12
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	17	24	0	780	98	4	209	628	146	57	928	14
Adj No. of Lanes	1	1	1	2	1	1	1	2	1	1	3	0
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	87	91	77	845	457	387	517	1655	733	84	1153	17
Arrive On Green	0.05	0.05	0.00	0.25	0.25	0.25	0.29	0.47	0.47	0.05	0.22	0.22
Sat Flow, veh/h	1774	1863	1583	3442	1863	1576	1774	3539	1568	1774	5160	78
Grp Volume(v), veh/h	17	24	0	780	98	4	209	628	146	57	609	333
Grp Sat Flow(s),veh/h/ln	1774	1863	1583	1721	1863	1576	1774	1770	1568	1774	1695	1848
Q Serve(g_s), s	1.2	1.6	0.0	28.3	5.4	0.2	12.1	14.7	7.0	4.0	21.8	21.8
Cycle Q Clear(g_c), s	1.2	1.6	0.0	28.3	5.4	0.2	12.1	14.7	7.0	4.0	21.8	21.8
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.04
Lane Grp Cap(c), veh/h	87	91	77	845	457	387	517	1655	733	84	757	413
V/C Ratio(X)	0.20	0.26	0.00	0.92	0.21	0.01	0.40	0.38	0.20	0.68	0.80	0.81
Avail Cap(c_a), veh/h	305	320	272	890	482	407	517	1655	733	133	757	413
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	58.5	58.7	0.0	47.1	38.5	36.5	36.4	22.1	20.0	60.0	47.1	47.1
Incr Delay (d2), s/veh	1.1	1.5	0.0	14.5	0.2	0.0	0.5	0.7	0.6	9.1	8.9	15.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.6	0.9	0.0	15.1	2.8	0.1	6.0	7.3	3.2	2.2	11.1	12.8
LnGrp Delay(d),s/veh	59.6	60.2	0.0	61.6	38.7	36.5	36.9	22.7	20.6	69.1	55.9	62.4
LnGrp LOS	E	E		E	D	D	D	C	C	E	E	E
Approach Vol, veh/h		41			882			983			999	
Approach Delay, s/veh		59.9			59.0			25.4			58.8	
Approach LOS		E			E			C			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	12.2	65.9		12.4	43.4	34.7		37.5
Change Period (Y+Rc), s	6.1	6.1		6.1	6.1	6.1		6.1
Max Green Setting (Gmax), s	9.6	38.9		22.0	19.9	28.6		33.1
Max Q Clear Time (g_c+I1), s	6.0	16.7		3.6	14.1	23.8		30.3
Green Ext Time (p_c), s	0.0	5.6		0.1	2.4	2.5		1.1

Intersection Summary	
HCM 2010 Ctrl Delay	47.6
HCM 2010 LOS	D

Intersection						
Int Delay, s/veh	2.2					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	34	108	702	100	181	1260
Future Vol, veh/h	34	108	702	100	181	1260
Conflicting Peds, #/hr	0	0	0	5	5	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	50	-	350	195	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	86	86	86	86	86	86
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	40	126	816	116	210	1465

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1974	413	0	0	821	0
Stage 1	821	-	-	-	-	-
Stage 2	1153	-	-	-	-	-
Critical Hdwy	7.54	6.94	-	-	4.14	-
Critical Hdwy Stg 1	6.54	-	-	-	-	-
Critical Hdwy Stg 2	6.54	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	-	-	2.22	-
Pot Cap-1 Maneuver	~ 37	588	-	-	804	-
Stage 1	335	-	-	-	-	-
Stage 2	210	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	~ 29	585	-	-	804	-
Mov Cap-2 Maneuver	108	-	-	-	-	-
Stage 1	335	-	-	-	-	-
Stage 2	155	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	23.2	0	1.4
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	108	585	804	-
HCM Lane V/C Ratio	-	-	0.366	0.215	0.262	-
HCM Control Delay (s)	-	-	56.4	12.8	11.1	-
HCM Lane LOS	-	-	F	B	B	-
HCM 95th %tile Q(veh)	-	-	1.5	0.8	1	-

Notes

~: Volume exceeds capacity $: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	169	300	179	116	336	88	94	623	64	107	1045	194
Future Volume (veh/h)	169	300	179	116	336	88	94	623	64	107	1045	194
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.99	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1835	1835	1835	1844	1844	1844	1881	1881	1881
Adj Flow Rate, veh/h	184	326	55	126	365	0	102	677	20	116	1136	0
Adj No. of Lanes	2	1	1	1	1	1	1	2	1	1	2	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	313	490	415	156	476	405	165	1194	529	173	1227	549
Arrive On Green	0.09	0.26	0.26	0.09	0.26	0.00	0.09	0.34	0.34	0.10	0.34	0.00
Sat Flow, veh/h	3476	1881	1592	1747	1835	1560	1756	3504	1551	1792	3575	1599
Grp Volume(v), veh/h	184	326	55	126	365	0	102	677	20	116	1136	0
Grp Sat Flow(s),veh/h/ln	1738	1881	1592	1747	1835	1560	1756	1752	1551	1792	1787	1599
Q Serve(g_s), s	4.5	13.6	2.3	6.2	16.1	0.0	4.9	13.9	0.8	5.5	26.9	0.0
Cycle Q Clear(g_c), s	4.5	13.6	2.3	6.2	16.1	0.0	4.9	13.9	0.8	5.5	26.9	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	313	490	415	156	476	405	165	1194	529	173	1227	549
V/C Ratio(X)	0.59	0.67	0.13	0.81	0.77	0.00	0.62	0.57	0.04	0.67	0.93	0.00
Avail Cap(c_a), veh/h	317	622	526	159	621	528	180	1202	532	188	1234	552
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	38.4	29.0	24.9	39.2	30.0	0.0	38.2	23.6	19.3	38.3	27.7	0.0
Incr Delay (d2), s/veh	2.4	2.1	0.2	24.6	4.6	0.0	4.7	0.6	0.0	7.2	11.8	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.3	7.4	1.0	4.1	8.7	0.0	2.6	6.8	0.3	3.1	15.3	0.0
LnGrp Delay(d),s/veh	40.8	31.2	25.0	63.8	34.7	0.0	42.9	24.3	19.4	45.6	39.6	0.0
LnGrp LOS	D	C	C	E	C		D	C	B	D	D	
Approach Vol, veh/h		565			491			799			1252	
Approach Delay, s/veh		33.7			42.1			26.5			40.1	
Approach LOS		C			D			C			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	12.7	35.3	12.0	27.8	12.5	35.5	12.1	27.7
Change Period (Y+Rc), s	* 4.2	5.4	* 4.2	4.9	* 4.2	5.4	* 4.2	* 4.9
Max Green Setting (Gmax), s	* 9.2	30.1	* 8	29.0	* 9	30.3	* 8	* 30
Max Q Clear Time (g_c+I1), s	7.5	15.9	8.2	15.6	6.9	28.9	6.5	18.1
Green Ext Time (p_c), s	0.0	10.2	0.0	4.4	0.0	1.3	0.1	4.0

Intersection Summary	
HCM 2010 Ctrl Delay	35.8
HCM 2010 LOS	D

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	238	37	169	23	23	28	117	538	18	42	883	369
Future Volume (veh/h)	238	37	169	23	23	28	117	538	18	42	883	369
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1900	1863	1863	1863	1863	1900	1792	1792	1792
Adj Flow Rate, veh/h	319	0	0	28	28	3	141	648	22	51	1064	0
Adj No. of Lanes	2	0	1	0	1	1	1	2	0	1	2	1
Peak Hour Factor	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	6	6	6
Cap, veh/h	482	0	215	42	42	72	175	1676	57	64	1424	637
Arrive On Green	0.14	0.00	0.00	0.05	0.05	0.05	0.10	0.48	0.48	0.04	0.42	0.00
Sat Flow, veh/h	3548	0	1583	909	909	1574	1774	3493	119	1707	3406	1524
Grp Volume(v), veh/h	319	0	0	56	0	3	141	328	342	51	1064	0
Grp Sat Flow(s),veh/h/ln	1774	0	1583	1817	0	1574	1774	1770	1842	1707	1703	1524
Q Serve(g_s), s	7.0	0.0	0.0	2.5	0.0	0.2	6.4	9.8	9.8	2.4	21.8	0.0
Cycle Q Clear(g_c), s	7.0	0.0	0.0	2.5	0.0	0.2	6.4	9.8	9.8	2.4	21.8	0.0
Prop In Lane	1.00		1.00	0.50		1.00	1.00		0.06	1.00		1.00
Lane Grp Cap(c), veh/h	482	0	215	83	0	72	175	849	883	64	1424	637
V/C Ratio(X)	0.66	0.00	0.00	0.67	0.00	0.04	0.80	0.39	0.39	0.80	0.75	0.00
Avail Cap(c_a), veh/h	1163	0	519	596	0	516	233	894	930	199	1671	747
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	33.8	0.0	0.0	38.7	0.0	37.6	36.3	13.7	13.7	39.3	20.3	0.0
Incr Delay (d2), s/veh	1.6	0.0	0.0	9.1	0.0	0.2	13.9	0.3	0.3	19.9	1.6	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.6	0.0	0.0	1.5	0.0	0.1	3.8	4.8	5.0	1.5	10.5	0.0
LnGrp Delay(d),s/veh	35.3	0.0	0.0	47.8	0.0	37.8	50.2	14.0	14.0	59.2	21.9	0.0
LnGrp LOS	D			D		D	D	B	B	E	C	
Approach Vol, veh/h		319			59			811			1115	
Approach Delay, s/veh		35.3			47.3			20.3			23.6	
Approach LOS		D			D			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	9.9	46.3		16.8	14.9	41.2		9.4
Change Period (Y+Rc), s	6.8	6.8		5.6	6.8	6.8		5.6
Max Green Setting (Gmax), s	9.6	41.6		27.0	10.8	40.4		27.0
Max Q Clear Time (g_c+I1), s	4.4	11.8		9.0	8.4	23.8		4.5
Green Ext Time (p_c), s	0.0	15.3		1.0	0.1	10.7		0.2

Intersection Summary

HCM 2010 Ctrl Delay		24.6	
HCM 2010 LOS		C	

Notes

User approved volume balancing among the lanes for turning movement.

Intersection												
Int Delay, s/veh	6.8											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	17	2	196	0	0	0	295	64	7	1	83	41
Future Vol, veh/h	17	2	196	0	0	0	295	64	7	1	83	41
Conflicting Peds, #/hr	0	0	0	0	0	0	5	0	7	7	0	5
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	50	-	-	-	75	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	-	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	94	94	94	94	94	94	94	94	94	94	94	94
Heavy Vehicles, %	7	7	7	2	2	2	2	2	2	2	2	2
Mvmt Flow	18	2	209	0	0	0	314	68	7	1	88	44

Major/Minor	Minor2						Major1			Major2		
Conflicting Flow All	816	827	115				137	0	0	83	0	0
Stage 1	117	117	-				-	-	-	-	-	-
Stage 2	699	710	-				-	-	-	-	-	-
Critical Hdwy	6.47	6.57	6.27				4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	5.47	5.57	-				-	-	-	-	-	-
Critical Hdwy Stg 2	5.47	5.57	-				-	-	-	-	-	-
Follow-up Hdwy	3.563	4.063	3.363				2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	340	301	924				1447	-	-	1514	-	-
Stage 1	896	789	-				-	-	-	-	-	-
Stage 2	484	429	-				-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	263	0	920				1447	-	-	1514	-	-
Mov Cap-2 Maneuver	263	0	-				-	-	-	-	-	-
Stage 1	891	0	-				-	-	-	-	-	-
Stage 2	377	0	-				-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	11	6.6	0.1
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	SBL	SBT	SBR
Capacity (veh/h)	1447	-	-	263	920	1514	-	-
HCM Lane V/C Ratio	0.217	-	-	0.077	0.227	0.001	-	-
HCM Control Delay (s)	8.2	-	-	19.8	10.1	7.4	0	-
HCM Lane LOS	A	-	-	C	B	A	A	-
HCM 95th %tile Q(veh)	0.8	-	-	0.2	0.9	0	-	-

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	508	255	637	804	0	292
Future Volume (vph)	508	255	637	804	0	292
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Grade (%)	-3%			-3%	-3%	
Total Lost time (s)	5.6	4.0	5.6	5.6		5.6
Lane Util. Factor	0.91	1.00	0.97	0.95		0.88
Frpb, ped/bikes	1.00	1.00	1.00	1.00		1.00
Flpb, ped/bikes	1.00	1.00	1.00	1.00		1.00
Frt	1.00	0.85	1.00	1.00		0.85
Flt Protected	1.00	1.00	0.95	1.00		1.00
Satd. Flow (prot)	5111	1591	3485	3592		2828
Flt Permitted	1.00	1.00	0.95	1.00		1.00
Satd. Flow (perm)	5111	1591	3485	3592		2828
Peak-hour factor, PHF	0.79	0.79	0.79	0.79	0.79	0.79
Adj. Flow (vph)	643	323	806	1018	0	370
RTOR Reduction (vph)	0	0	0	0	0	146
Lane Group Flow (vph)	643	323	806	1018	0	224
Confl. Peds. (#/hr)						9
Heavy Vehicles (%)	3%	3%	2%	2%	2%	2%
Turn Type	NA	Free	Prot	NA		Over
Protected Phases	6		8	2 8		8
Permitted Phases		Free				8
Actuated Green, G (s)	12.6	39.3	15.5	39.3		15.5
Effective Green, g (s)	12.6	39.3	15.5	39.3		15.5
Actuated g/C Ratio	0.32	1.00	0.39	1.00		0.39
Clearance Time (s)	5.6		5.6			5.6
Vehicle Extension (s)	3.0		3.0			3.0
Lane Grp Cap (vph)	1638	1591	1374	3592		1115
v/s Ratio Prot	0.13		c0.23	c0.28		0.08
v/s Ratio Perm		0.20				
v/c Ratio	0.39	0.20	0.59	0.28		0.20
Uniform Delay, d1	10.4	0.0	9.4	0.0		7.8
Progression Factor	1.00	1.00	1.00	1.00		1.00
Incremental Delay, d2	0.2	0.3	0.6	0.0		0.1
Delay (s)	10.5	0.3	10.0	0.0		7.9
Level of Service	B	A	B	A		A
Approach Delay (s)	7.1			4.5	7.9	
Approach LOS	A			A	A	

Intersection Summary			
HCM 2000 Control Delay	5.7	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.51		
Actuated Cycle Length (s)	39.3	Sum of lost time (s)	11.2
Intersection Capacity Utilization	46.6%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	4	556	31	164	16	509	274	175	885	15
Future Volume (veh/h)	0	0	4	556	31	164	16	509	274	175	885	15
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	1.00		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1863	1827	1827	1827	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	0	0	0	705	0	48	20	621	0	213	1079	18
Adj No. of Lanes	0	1	1	2	0	1	1	2	2	1	2	0
Peak Hour Factor	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82
Percent Heavy Veh, %	2	2	2	4	4	4	2	2	2	2	2	2
Cap, veh/h	0	3	55	926	0	410	58	1209	952	261	1623	27
Arrive On Green	0.00	0.00	0.00	0.27	0.00	0.27	0.03	0.34	0.00	0.15	0.46	0.46
Sat Flow, veh/h	0	1863	1583	3480	0	1541	1774	3539	2787	1774	3562	59
Grp Volume(v), veh/h	0	0	0	705	0	48	20	621	0	213	536	561
Grp Sat Flow(s),veh/h/ln	0	1863	1583	1740	0	1541	1774	1770	1393	1774	1770	1852
Q Serve(g_s), s	0.0	0.0	0.0	11.6	0.0	1.5	0.7	8.7	0.0	7.3	14.8	14.8
Cycle Q Clear(g_c), s	0.0	0.0	0.0	11.6	0.0	1.5	0.7	8.7	0.0	7.3	14.8	14.8
Prop In Lane	0.00		1.00	1.00		1.00	1.00		1.00	1.00		0.03
Lane Grp Cap(c), veh/h	0	3	55	926	0	410	58	1209	952	261	807	844
V/C Ratio(X)	0.00	0.00	0.00	0.76	0.00	0.12	0.34	0.51	0.00	0.82	0.66	0.66
Avail Cap(c_a), veh/h	0	60	103	1450	0	642	227	1520	1197	338	871	911
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	0.0	0.0	0.0	21.1	0.0	17.3	29.5	16.4	0.0	25.8	13.3	13.3
Incr Delay (d2), s/veh	0.0	0.0	0.0	1.3	0.0	0.1	3.4	0.3	0.0	11.3	1.7	1.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	0.0	5.8	0.0	0.6	0.4	4.3	0.0	4.4	7.5	7.9
LnGrp Delay(d),s/veh	0.0	0.0	0.0	22.4	0.0	17.5	33.0	16.7	0.0	37.1	15.0	14.9
LnGrp LOS				C		B	C	B		D	B	B
Approach Vol, veh/h		0			753			641			1310	
Approach Delay, s/veh		0.0			22.1			17.3			18.6	
Approach LOS					C			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	14.3	26.4		0.0	7.2	33.5		21.7
Change Period (Y+Rc), s	5.1	5.1		3.0	5.1	5.1		5.1
Max Green Setting (Gmax), s	11.9	26.8		2.0	8.0	30.7		26.0
Max Q Clear Time (g_c+I1), s	9.3	10.7		0.0	2.7	16.8		13.6
Green Ext Time (p_c), s	0.2	10.2		0.0	0.0	9.2		2.4

Intersection Summary	
HCM 2010 Ctrl Delay	19.2
HCM 2010 LOS	B

Notes

User approved volume balancing among the lanes for turning movement.

Intersection

Int Delay, s/veh 2.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	24	396	19	21	736	53	13	1	7	24	2	12
Future Vol, veh/h	24	396	19	21	736	53	13	1	7	24	2	12
Conflicting Peds, #/hr	7	0	11	11	0	7	2	0	0	0	0	2
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	84	84	84	84	84	84	84	84	84	84	84	84
Heavy Vehicles, %	6	6	6	3	3	3	14	14	14	2	2	2
Mvmt Flow	29	471	23	25	876	63	15	1	8	29	2	14

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	946	0	0	505	0	0	1042	1547	258	1258	1527	479
Stage 1	-	-	-	-	-	-	551	551	-	965	965	-
Stage 2	-	-	-	-	-	-	491	996	-	293	562	-
Critical Hdwy	4.22	-	-	4.16	-	-	7.78	6.78	7.18	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.78	5.78	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.78	5.78	-	6.54	5.54	-
Follow-up Hdwy	2.26	-	-	2.23	-	-	3.64	4.14	3.44	3.52	4.02	3.32
Pot Cap-1 Maneuver	697	-	-	1049	-	-	168	101	706	128	116	533
Stage 1	-	-	-	-	-	-	457	485	-	274	331	-
Stage 2	-	-	-	-	-	-	498	295	-	691	508	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	696	-	-	1049	-	-	146	89	699	114	102	528
Mov Cap-2 Maneuver	-	-	-	-	-	-	146	89	-	114	102	-
Stage 1	-	-	-	-	-	-	426	452	-	256	312	-
Stage 2	-	-	-	-	-	-	455	278	-	641	474	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.8	0.4	26.8	39
HCM LOS			D	E

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	190	696	-	-	1049	-	-	150
HCM Lane V/C Ratio	0.132	0.041	-	-	0.024	-	-	0.302
HCM Control Delay (s)	26.8	10.4	0.3	-	8.5	0.2	-	39
HCM Lane LOS	D	B	A	-	A	A	-	E
HCM 95th %tile Q(veh)	0.4	0.1	-	-	0.1	-	-	1.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	12	359	55	72	722	25	0	7	42	20	10	22
Future Volume (veh/h)	12	359	55	72	722	25	0	7	42	20	10	22
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		1.00	0.99		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1792	1792	1900	1827	1827	1900	1900	1776	1776	1900	1827	1827
Adj Flow Rate, veh/h	14	433	66	87	870	30	0	8	0	24	12	27
Adj No. of Lanes	1	2	0	1	2	0	0	1	1	0	1	1
Peak Hour Factor	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83
Percent Heavy Veh, %	6	6	6	4	4	4	7	7	7	4	4	4
Cap, veh/h	434	1526	231	605	1763	61	0	205	174	281	88	179
Arrive On Green	0.52	0.52	0.52	0.52	0.52	0.52	0.00	0.12	0.00	0.12	0.12	0.12
Sat Flow, veh/h	592	2963	449	875	3423	118	0	1776	1509	794	766	1549
Grp Volume(v), veh/h	14	248	251	87	441	459	0	8	0	36	0	27
Grp Sat Flow(s),veh/h/ln	592	1703	1709	875	1736	1805	0	1776	1509	1560	0	1549
Q Serve(g_s), s	0.5	2.6	2.6	2.0	5.2	5.2	0.0	0.1	0.0	0.0	0.0	0.5
Cycle Q Clear(g_c), s	5.7	2.6	2.6	4.6	5.2	5.2	0.0	0.1	0.0	0.6	0.0	0.5
Prop In Lane	1.00		0.26	1.00		0.07	0.00		1.00	0.67		1.00
Lane Grp Cap(c), veh/h	434	877	880	605	894	930	0	205	174	370	0	179
V/C Ratio(X)	0.03	0.28	0.29	0.14	0.49	0.49	0.00	0.04	0.00	0.10	0.00	0.15
Avail Cap(c_a), veh/h	546	1199	1203	784	1249	1299	0	1458	1239	1423	0	1271
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	6.9	4.4	4.4	5.7	5.0	5.0	0.0	12.4	0.0	12.6	0.0	12.6
Incr Delay (d2), s/veh	0.0	0.2	0.2	0.1	0.4	0.4	0.0	0.1	0.0	0.1	0.0	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	1.2	1.2	0.5	2.6	2.7	0.0	0.1	0.0	0.3	0.0	0.2
LnGrp Delay(d),s/veh	6.9	4.5	4.5	5.8	5.4	5.4	0.0	12.5	0.0	12.8	0.0	13.0
LnGrp LOS	A	A	A	A	A	A		B		B		B
Approach Vol, veh/h		513			987			8			63	
Approach Delay, s/veh		4.6			5.4			12.5			12.9	
Approach LOS		A			A			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		22.4		9.3		22.4		9.3
Change Period (Y+Rc), s		6.1		5.6		* 6.1		5.6
Max Green Setting (Gmax), s		22.3		26.0		* 23		26.0
Max Q Clear Time (g_c+I1), s		7.7		2.6		7.2		2.1
Green Ext Time (p_c), s		8.2		0.2		8.5		0.2

Intersection Summary

HCM 2010 Ctrl Delay	5.5
HCM 2010 LOS	A

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Intersection												
Int Delay, s/veh	24.6											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	419	3	32	652	0	4	0	14	140	45	164
Future Vol, veh/h	0	419	3	32	652	0	4	0	14	140	45	164
Conflicting Peds, #/hr	0	0	9	6	0	0	2	0	0	0	0	2
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	240	-	-	0	-	85	120	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	81	81	81	81	81	81	81	81	81	81	81	81
Heavy Vehicles, %	6	6	6	4	4	4	2	2	2	2	2	2
Mvmt Flow	0	517	4	40	805	0	5	0	17	173	56	202

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	-	0	0	530	0	0	1039	-	269	1143	1414	404
Stage 1	-	-	-	-	-	-	528	-	-	884	884	-
Stage 2	-	-	-	-	-	-	511	-	-	259	530	-
Critical Hdwy	-	-	-	4.18	-	-	7.54	-	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	-	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	-	-	6.54	5.54	-
Follow-up Hdwy	-	-	-	2.24	-	-	3.52	-	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	0	-	-	1020	-	0	185	0	729	~ 155	136	596
Stage 1	0	-	-	-	-	0	502	0	-	307	362	-
Stage 2	0	-	-	-	-	0	514	0	-	723	525	-
Platoon blocked, %		-	-		-							
Mov Cap-1 Maneuver	-	-	-	1020	-	-	78	-	723	~ 147	130	595
Mov Cap-2 Maneuver	-	-	-	-	-	-	78	-	-	~ 147	130	-
Stage 1	-	-	-	-	-	-	502	-	-	307	348	-
Stage 2	-	-	-	-	-	-	273	-	-	706	521	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	0.4	19.9	102.2
HCM LOS			C	F

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBL	WBT	SBLn1	SBLn2
Capacity (veh/h)	78	723	-	-	1020	-	147	336
HCM Lane V/C Ratio	0.063	0.024	-	-	0.039	-	1.176	0.768
HCM Control Delay (s)	54.3	10.1	-	-	8.7	-	189.5	43.7
HCM Lane LOS	F	B	-	-	A	-	F	E
HCM 95th %tile Q(veh)	0.2	0.1	-	-	0.1	-	9.8	6.1

Notes

~: Volume exceeds capacity $: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon

Intersection						
Int Delay, s/veh	0.4					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	461	112	56	685	0	0
Future Vol, veh/h	461	112	56	685	0	0
Conflicting Peds, #/hr	0	10	10	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	115	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	81	81	81	81	81	81
Heavy Vehicles, %	5	5	2	2	4	4
Mvmt Flow	569	138	69	846	0	0

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	717	0	1209	364
Stage 1	-	-	-	-	648	-
Stage 2	-	-	-	-	561	-
Critical Hdwy	-	-	4.14	-	6.88	6.98
Critical Hdwy Stg 1	-	-	-	-	5.88	-
Critical Hdwy Stg 2	-	-	-	-	5.88	-
Follow-up Hdwy	-	-	2.22	-	3.54	3.34
Pot Cap-1 Maneuver	-	-	880	-	172	627
Stage 1	-	-	-	-	477	-
Stage 2	-	-	-	-	529	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	880	-	157	621
Mov Cap-2 Maneuver	-	-	-	-	157	-
Stage 1	-	-	-	-	472	-
Stage 2	-	-	-	-	488	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.7	0
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	-	-	-	880	-
HCM Lane V/C Ratio	-	-	-	0.079	-
HCM Control Delay (s)	0	-	-	9.4	-
HCM Lane LOS	A	-	-	A	-
HCM 95th %tile Q(veh)	-	-	-	0.3	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	99	342	20	8	481	199	21	69	3	23	27	238
Future Volume (veh/h)	99	342	20	8	481	199	21	69	3	23	27	238
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		0.99	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1900	1863	1863	1900	1863	1863	1900	1792	1792	1792
Adj Flow Rate, veh/h	115	398	23	9	559	231	24	80	3	27	31	0
Adj No. of Lanes	1	2	0	1	2	0	1	1	0	1	1	1
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86
Percent Heavy Veh, %	3	3	3	2	2	2	2	2	2	6	6	6
Cap, veh/h	193	1341	77	29	744	307	70	295	11	74	304	259
Arrive On Green	0.11	0.40	0.40	0.02	0.31	0.31	0.04	0.17	0.17	0.04	0.17	0.00
Sat Flow, veh/h	1757	3367	194	1774	2437	1004	1774	1783	67	1707	1792	1524
Grp Volume(v), veh/h	115	207	214	9	406	384	24	0	83	27	31	0
Grp Sat Flow(s),veh/h/ln	1757	1752	1808	1774	1770	1672	1774	0	1850	1707	1792	1524
Q Serve(g_s), s	3.2	4.1	4.2	0.3	10.7	10.7	0.7	0.0	2.0	0.8	0.8	0.0
Cycle Q Clear(g_c), s	3.2	4.1	4.2	0.3	10.7	10.7	0.7	0.0	2.0	0.8	0.8	0.0
Prop In Lane	1.00		0.11	1.00		0.60	1.00		0.04	1.00		1.00
Lane Grp Cap(c), veh/h	193	698	720	29	540	510	70	0	306	74	304	259
V/C Ratio(X)	0.60	0.30	0.30	0.31	0.75	0.75	0.34	0.00	0.27	0.36	0.10	0.00
Avail Cap(c_a), veh/h	242	698	720	241	652	616	241	0	968	248	955	812
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	21.9	10.6	10.6	25.1	16.2	16.2	24.1	0.0	18.8	24.0	18.1	0.0
Incr Delay (d2), s/veh	2.9	0.2	0.2	5.9	4.0	4.3	2.9	0.0	0.5	3.0	0.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.7	2.1	2.1	0.2	5.8	5.5	0.4	0.0	1.1	0.4	0.4	0.0
LnGrp Delay(d),s/veh	24.8	10.8	10.8	30.9	20.1	20.4	27.0	0.0	19.3	26.9	18.2	0.0
LnGrp LOS	C	B	B	C	C	C	C		B	C	B	
Approach Vol, veh/h		536			799			107			58	
Approach Delay, s/veh		13.8			20.4			21.0			22.3	
Approach LOS		B			C			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	5.9	25.7	6.6	13.4	10.8	20.8	6.8	13.1
Change Period (Y+Rc), s	5.1	5.1	4.6	4.6	5.1	5.1	4.6	4.6
Max Green Setting (Gmax), s	7.0	19.1	7.0	27.5	7.1	19.0	7.5	27.0
Max Q Clear Time (g_c+I1), s	2.3	6.2	2.7	2.8	5.2	12.7	2.8	4.0
Green Ext Time (p_c), s	0.0	6.2	0.0	0.6	0.0	3.0	0.0	0.5

Intersection Summary			
HCM 2010 Ctrl Delay		18.2	
HCM 2010 LOS		B	

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	87	325	88	94	425	131	54	358	56	112	664	132
Future Volume (veh/h)	87	325	88	94	425	131	54	358	56	112	664	132
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	1.00		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1808	1808	1808	1810	1810	1810	1863	1863	1863
Adj Flow Rate, veh/h	101	378	18	109	494	26	63	416	12	130	772	31
Adj No. of Lanes	1	2	1	1	1	1	1	2	1	1	2	1
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86
Percent Heavy Veh, %	2	2	2	3	3	3	5	5	5	2	2	2
Cap, veh/h	128	1022	453	133	531	450	106	968	432	149	1076	477
Arrive On Green	0.07	0.29	0.29	0.08	0.29	0.29	0.06	0.28	0.28	0.08	0.30	0.30
Sat Flow, veh/h	1774	3539	1570	1722	1808	1530	1723	3438	1535	1774	3539	1568
Grp Volume(v), veh/h	101	378	18	109	494	26	63	416	12	130	772	31
Grp Sat Flow(s),veh/h/ln	1774	1770	1570	1722	1808	1530	1723	1719	1535	1774	1770	1568
Q Serve(g_s), s	5.1	7.7	0.7	5.7	24.1	1.1	3.2	9.0	0.5	6.6	17.6	1.3
Cycle Q Clear(g_c), s	5.1	7.7	0.7	5.7	24.1	1.1	3.2	9.0	0.5	6.6	17.6	1.3
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	128	1022	453	133	531	450	106	968	432	149	1076	477
V/C Ratio(X)	0.79	0.37	0.04	0.82	0.93	0.06	0.60	0.43	0.03	0.88	0.72	0.07
Avail Cap(c_a), veh/h	137	1053	467	133	538	455	133	1288	575	149	1349	598
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	41.5	25.7	23.2	41.3	31.1	23.0	41.5	26.6	23.6	41.1	28.1	22.4
Incr Delay (d2), s/veh	24.9	0.2	0.0	32.0	22.7	0.1	5.3	0.3	0.0	40.0	1.4	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.4	3.8	0.3	3.9	15.3	0.5	1.7	4.3	0.2	4.9	8.8	0.6
LnGrp Delay(d),s/veh	66.4	25.9	23.3	73.3	53.9	23.1	46.8	27.0	23.6	81.1	29.5	22.5
LnGrp LOS	E	C	C	E	D	C	D	C	C	F	C	C
Approach Vol, veh/h		497			629			491			933	
Approach Delay, s/veh		34.1			56.0			29.4			36.5	
Approach LOS		C			E			C			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	13.7	31.7	13.1	32.3	11.7	33.7	12.6	32.8
Change Period (Y+Rc), s	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1
Max Green Setting (Gmax), s	7.6	34.0	7.0	27.0	7.0	34.6	7.0	27.0
Max Q Clear Time (g_c+I1), s	8.6	11.0	7.7	9.7	5.2	19.6	7.1	26.1
Green Ext Time (p_c), s	0.0	9.1	0.0	5.6	0.0	7.3	0.0	0.5

Intersection Summary	
HCM 2010 Ctrl Delay	39.4
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	94	698	77	635	564	459	96	683	924	458	668	73
Future Volume (veh/h)	94	698	77	635	564	459	96	683	924	458	668	73
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1835	1835	1835	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	98	727	0	661	588	0	100	711	0	477	696	76
Adj No. of Lanes	1	2	1	2	2	1	1	2	2	2	2	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	360	831	372	624	753	337	124	834	1170	433	939	102
Arrive On Green	0.20	0.23	0.00	0.18	0.22	0.00	0.07	0.24	0.00	0.13	0.29	0.29
Sat Flow, veh/h	1774	3539	1583	3390	3486	1560	1774	3539	2787	3442	3217	351
Grp Volume(v), veh/h	98	727	0	661	588	0	100	711	0	477	383	389
Grp Sat Flow(s),veh/h/ln	1774	1770	1583	1695	1743	1560	1774	1770	1393	1721	1770	1798
Q Serve(g_s), s	5.6	23.9	0.0	22.2	19.2	0.0	6.7	23.2	0.0	15.2	23.6	23.6
Cycle Q Clear(g_c), s	5.6	23.9	0.0	22.2	19.2	0.0	6.7	23.2	0.0	15.2	23.6	23.6
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.20
Lane Grp Cap(c), veh/h	360	831	372	624	753	337	124	834	1170	433	516	525
V/C Ratio(X)	0.27	0.88	0.00	1.06	0.78	0.00	0.81	0.85	0.00	1.10	0.74	0.74
Avail Cap(c_a), veh/h	360	909	407	624	1233	552	153	883	1208	433	516	525
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	40.6	44.5	0.0	49.2	44.6	0.0	55.3	44.1	0.0	52.7	38.6	38.6
Incr Delay (d2), s/veh	0.4	9.0	0.0	53.0	1.8	0.0	22.1	7.7	0.0	73.2	5.6	5.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.8	12.7	0.0	14.9	9.4	0.0	4.0	12.3	0.0	11.6	12.3	12.5
LnGrp Delay(d),s/veh	41.0	53.4	0.0	102.2	46.4	0.0	77.4	51.8	0.0	126.0	44.3	44.2
LnGrp LOS	D	D		F	D		E	D		F	D	D
Approach Vol, veh/h		825			1249			811			1249	
Approach Delay, s/veh		52.0			76.0			55.0			75.5	
Approach LOS		D			E			E			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	22.0	35.2	29.0	34.4	15.2	42.0	30.6	32.9
Change Period (Y+Rc), s	6.8	6.8	6.8	6.1	6.8	6.8	6.1	6.8
Max Green Setting (Gmax), s	15.2	30.1	22.2	31.0	10.4	34.9	10.5	42.7
Max Q Clear Time (g_c+I1), s	17.2	25.2	24.2	25.9	8.7	25.6	7.6	21.2
Green Ext Time (p_c), s	0.0	3.2	0.0	2.1	0.0	6.0	1.4	4.0

Intersection Summary	
HCM 2010 Ctrl Delay	66.9
HCM 2010 LOS	E

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	351	17	52	5	14	13	163	1389	11	19	883	441
Future Volume (veh/h)	351	17	52	5	14	13	163	1389	11	19	883	441
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		0.98	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1863	1900	1863	1900	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	366	18	54	5	15	14	170	1447	11	20	920	0
Adj No. of Lanes	0	1	1	0	1	0	1	2	0	1	2	1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	210	6	559	47	124	87	198	1391	11	55	1083	484
Arrive On Green	0.36	0.36	0.36	0.36	0.36	0.36	0.11	0.39	0.39	0.03	0.31	0.00
Sat Flow, veh/h	362	18	1570	0	348	244	1774	3600	27	1774	3539	1583
Grp Volume(v), veh/h	384	0	54	34	0	0	170	711	747	20	920	0
Grp Sat Flow(s),veh/h/ln	380	0	1570	592	0	0	1774	1770	1857	1774	1770	1583
Q Serve(g_s), s	0.0	0.0	2.0	0.0	0.0	0.0	8.2	33.6	33.6	1.0	21.2	0.0
Cycle Q Clear(g_c), s	31.0	0.0	2.0	31.0	0.0	0.0	8.2	33.6	33.6	1.0	21.2	0.0
Prop In Lane	0.95		1.00	0.15		0.41	1.00		0.01	1.00		1.00
Lane Grp Cap(c), veh/h	216	0	559	258	0	0	198	684	718	55	1083	484
V/C Ratio(X)	1.78	0.00	0.10	0.13	0.00	0.00	0.86	1.04	1.04	0.37	0.85	0.00
Avail Cap(c_a), veh/h	216	0	559	258	0	0	198	684	718	143	1204	539
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	33.8	0.0	18.7	20.8	0.0	0.0	38.0	26.7	26.7	41.3	28.3	0.0
Incr Delay (d2), s/veh	367.3	0.0	0.1	0.2	0.0	0.0	29.6	45.1	44.6	4.0	5.5	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	27.2	0.0	0.9	0.6	0.0	0.0	5.6	24.9	26.0	0.5	11.2	0.0
LnGrp Delay(d),s/veh	401.1	0.0	18.7	21.0	0.0	0.0	67.6	71.8	71.2	45.4	33.8	0.0
LnGrp LOS	F		B	C			E	F	F	D	C	
Approach Vol, veh/h		438			34			1628			940	
Approach Delay, s/veh		353.9			21.0			71.1			34.1	
Approach LOS		F			C			E			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	9.5	40.4		37.1	16.5	33.4		37.1
Change Period (Y+Rc), s	6.8	6.8		6.1	6.8	6.8		6.1
Max Green Setting (Gmax), s	7.0	32.3		31.0	9.7	29.6		31.0
Max Q Clear Time (g_c+I1), s	3.0	35.6		33.0	10.2	23.2		33.0
Green Ext Time (p_c), s	0.0	0.0		0.0	0.0	3.4		0.0

Intersection Summary		
HCM 2010 Ctrl Delay		99.8
HCM 2010 LOS		F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	27	70	160	476	120	148	304	1146	666	108	1049	24
Future Volume (veh/h)	27	70	160	476	120	148	304	1146	666	108	1049	24
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.94	1.00		0.98	1.00		0.99	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	28	74	10	501	126	21	320	1206	299	114	1104	25
Adj No. of Lanes	1	1	1	2	1	1	1	2	1	1	3	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	150	158	126	565	306	255	347	1709	754	138	1867	42
Arrive On Green	0.08	0.08	0.08	0.16	0.16	0.16	0.20	0.48	0.48	0.08	0.37	0.37
Sat Flow, veh/h	1774	1863	1493	3442	1863	1551	1774	3539	1562	1774	5114	116
Grp Volume(v), veh/h	28	74	10	501	126	21	320	1206	299	114	732	397
Grp Sat Flow(s),veh/h/ln	1774	1863	1493	1721	1863	1551	1774	1770	1562	1774	1695	1840
Q Serve(g_s), s	1.9	4.8	0.8	18.2	7.8	1.5	22.7	34.2	15.7	8.1	22.4	22.4
Cycle Q Clear(g_c), s	1.9	4.8	0.8	18.2	7.8	1.5	22.7	34.2	15.7	8.1	22.4	22.4
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.06
Lane Grp Cap(c), veh/h	150	158	126	565	306	255	347	1709	754	138	1238	672
V/C Ratio(X)	0.19	0.47	0.08	0.89	0.41	0.08	0.92	0.71	0.40	0.83	0.59	0.59
Avail Cap(c_a), veh/h	305	320	257	592	320	267	398	1709	754	159	1238	672
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	54.5	55.9	54.0	52.3	48.0	45.3	50.5	26.0	21.2	58.2	32.9	32.9
Incr Delay (d2), s/veh	0.6	2.2	0.3	14.8	0.9	0.1	24.8	2.5	1.6	25.7	2.1	3.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.0	2.6	0.3	9.9	4.1	0.6	13.5	17.2	7.1	5.0	10.8	12.1
LnGrp Delay(d),s/veh	55.1	58.0	54.3	67.1	48.9	45.5	75.4	28.4	22.7	83.9	35.0	36.7
LnGrp LOS	E	E	D	E	D	D	E	C	C	F	C	D
Approach Vol, veh/h		112			648			1825			1243	
Approach Delay, s/veh		57.0			62.8			35.7			40.0	
Approach LOS		E			E			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	16.1	67.9		16.9	31.1	52.8		27.1
Change Period (Y+Rc), s	6.1	6.1		6.1	6.1	6.1		6.1
Max Green Setting (Gmax), s	11.5	48.1		22.0	28.7	30.9		22.0
Max Q Clear Time (g_c+I1), s	10.1	36.2		6.8	24.7	24.4		20.2
Green Ext Time (p_c), s	0.0	10.4		0.3	0.4	5.9		0.6

Intersection Summary		
HCM 2010 Ctrl Delay		42.3
HCM 2010 LOS		D

Intersection						
Int Delay, s/veh	1.3					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	16	28	1534	54	120	816
Future Vol, veh/h	16	28	1534	54	120	816
Conflicting Peds, #/hr	0	0	0	6	6	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	50	-	350	195	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	98	98	98	98	98	98
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	16	29	1565	55	122	833

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	2232	789	0	0	1571	0
Stage 1	1571	-	-	-	-	-
Stage 2	661	-	-	-	-	-
Critical Hdwy	6.84	6.94	-	-	4.14	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	-	-	2.22	-
Pot Cap-1 Maneuver	36	333	-	-	416	-
Stage 1	157	-	-	-	-	-
Stage 2	475	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	25	331	-	-	416	-
Mov Cap-2 Maneuver	107	-	-	-	-	-
Stage 1	156	-	-	-	-	-
Stage 2	336	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	27	0	2.2
HCM LOS	D		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	107	331	416	-
HCM Lane V/C Ratio	-	-	0.153	0.086	0.294	-
HCM Control Delay (s)	-	-	44.6	16.9	17.2	-
HCM Lane LOS	-	-	E	C	C	-
HCM 95th %tile Q(veh)	-	-	0.5	0.3	1.2	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	277	331	112	103	266	236	199	1441	65	124	910	175
Future Volume (veh/h)	277	331	112	103	266	236	199	1441	65	124	910	175
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		1.00	1.00		0.98	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1835	1835	1835	1844	1844	1844	1881	1881	1881
Adj Flow Rate, veh/h	292	348	21	108	280	0	209	1517	29	131	958	0
Adj No. of Lanes	2	1	1	1	1	1	1	2	1	1	2	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	336	430	359	126	375	318	238	1572	692	146	1409	630
Arrive On Green	0.10	0.23	0.23	0.07	0.20	0.00	0.14	0.45	0.45	0.08	0.39	0.00
Sat Flow, veh/h	3476	1881	1572	1747	1835	1560	1756	3504	1543	1792	3575	1599
Grp Volume(v), veh/h	292	348	21	108	280	0	209	1517	29	131	958	0
Grp Sat Flow(s),veh/h/ln	1738	1881	1572	1747	1835	1560	1756	1752	1543	1792	1787	1599
Q Serve(g_s), s	9.2	19.4	1.2	6.8	15.8	0.0	12.9	46.6	1.2	8.0	24.5	0.0
Cycle Q Clear(g_c), s	9.2	19.4	1.2	6.8	15.8	0.0	12.9	46.6	1.2	8.0	24.5	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	336	430	359	126	375	318	238	1572	692	146	1409	630
V/C Ratio(X)	0.87	0.81	0.06	0.85	0.75	0.00	0.88	0.97	0.04	0.90	0.68	0.00
Avail Cap(c_a), veh/h	336	493	412	126	448	381	284	1594	702	146	1409	630
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	49.2	40.4	33.3	50.7	41.3	0.0	46.9	29.6	17.1	50.3	27.7	0.0
Incr Delay (d2), s/veh	20.4	9.1	0.1	39.4	6.0	0.0	21.5	15.0	0.0	45.4	1.3	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.3	11.1	0.5	4.7	8.6	0.0	7.7	25.6	0.5	5.8	12.4	0.0
LnGrp Delay(d),s/veh	69.7	49.4	33.4	90.1	47.3	0.0	68.4	44.6	17.2	95.7	29.1	0.0
LnGrp LOS	E	D	C	F	D		E	D	B	F	C	
Approach Vol, veh/h		661			388			1755			1089	
Approach Delay, s/veh		57.9			59.2			47.0			37.1	
Approach LOS		E			E			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	13.2	55.0	12.2	30.2	19.2	49.0	14.9	27.5
Change Period (Y+Rc), s	* 4.2	5.4	* 4.2	4.9	* 4.2	5.4	* 4.2	* 4.9
Max Green Setting (Gmax), s	* 9	50.3	* 8	29.0	* 18	41.4	* 11	* 27
Max Q Clear Time (g_c+I1), s	10.0	48.6	8.8	21.4	14.9	26.5	11.2	17.8
Green Ext Time (p_c), s	0.0	1.0	0.0	2.7	0.1	12.9	0.0	3.1

Intersection Summary	
HCM 2010 Ctrl Delay	47.3
HCM 2010 LOS	D

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	330	48	220	30	70	59	311	1200	26	33	593	205
Future Volume (veh/h)	330	48	220	30	70	59	311	1200	26	33	593	205
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.96	1.00		0.99	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1900	1863	1863	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	375	0	51	31	72	19	321	1237	27	34	611	0
Adj No. of Lanes	2	0	1	0	1	1	1	2	0	1	2	1
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	520	0	230	66	153	180	360	1572	34	45	942	421
Arrive On Green	0.15	0.00	0.15	0.12	0.12	0.12	0.20	0.44	0.44	0.03	0.27	0.00
Sat Flow, veh/h	3548	0	1567	552	1283	1515	1774	3540	77	1774	3539	1583
Grp Volume(v), veh/h	375	0	51	103	0	19	321	618	646	34	611	0
Grp Sat Flow(s),veh/h/ln	1774	0	1567	1835	0	1515	1774	1770	1848	1774	1770	1583
Q Serve(g_s), s	9.4	0.0	2.7	4.9	0.0	1.0	16.5	27.9	27.9	1.8	14.3	0.0
Cycle Q Clear(g_c), s	9.4	0.0	2.7	4.9	0.0	1.0	16.5	27.9	27.9	1.8	14.3	0.0
Prop In Lane	1.00		1.00	0.30		1.00	1.00		0.04	1.00		1.00
Lane Grp Cap(c), veh/h	520	0	230	218	0	180	360	786	821	45	942	421
V/C Ratio(X)	0.72	0.00	0.22	0.47	0.00	0.11	0.89	0.79	0.79	0.76	0.65	0.00
Avail Cap(c_a), veh/h	1025	0	453	530	0	438	469	890	929	80	1004	449
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	38.1	0.0	35.2	38.4	0.0	36.7	36.2	22.2	22.2	45.3	30.4	0.0
Incr Delay (d2), s/veh	1.9	0.0	0.5	1.6	0.0	0.3	15.6	4.2	4.1	23.2	1.4	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.8	0.0	1.2	2.6	0.0	0.5	9.6	14.5	15.1	1.2	7.1	0.0
LnGrp Delay(d),s/veh	40.0	0.0	35.7	40.0	0.0	37.0	51.9	26.4	26.3	68.5	31.8	0.0
LnGrp LOS	D		D	D		D	D	C	C	E	C	
Approach Vol, veh/h		426			122			1585			645	
Approach Delay, s/veh		39.5			39.5			31.5			33.7	
Approach LOS		D			D			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	9.1	48.3		19.3	25.8	31.7		16.7
Change Period (Y+Rc), s	6.8	6.8		5.6	6.8	6.8		5.6
Max Green Setting (Gmax), s	4.2	47.0		27.0	24.7	26.5		27.0
Max Q Clear Time (g_c+I1), s	3.8	29.9		11.4	18.5	16.3		6.9
Green Ext Time (p_c), s	0.0	11.6		1.4	0.5	7.7		0.5

Intersection Summary	
HCM 2010 Ctrl Delay	33.6
HCM 2010 LOS	C

Notes

User approved volume balancing among the lanes for turning movement.

Intersection

Int Delay, s/veh 20.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	55	2	226	0	0	0	577	163	18	3	117	84
Future Vol, veh/h	55	2	226	0	0	0	577	163	18	3	117	84
Conflicting Peds, #/hr	0	0	0	0	0	0	7	0	7	7	0	7
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	50	-	-	-	75	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	-	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	93	93	93	93	93	93	93	93	93	93	93	93
Heavy Vehicles, %	6	6	6	2	2	2	2	2	2	2	2	2
Mvmt Flow	59	2	243	0	0	0	620	175	19	3	126	90

Major/Minor	Minor2			Major1			Major2		
Conflicting Flow All	1610	1626	178	223	0	0	202	0	0
Stage 1	184	184	-	-	-	-	-	-	-
Stage 2	1426	1442	-	-	-	-	-	-	-
Critical Hdwy	7.16	6.56	6.26	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.16	5.56	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.16	5.56	-	-	-	-	-	-	-
Follow-up Hdwy	3.554	4.054	3.354	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	82	100	855	1346	-	-	1370	-	-
Stage 1	809	740	-	-	-	-	-	-	-
Stage 2	165	194	-	-	-	-	-	-	-
Platoon blocked, %					-	-		-	-
Mov Cap-1 Maneuver	~ 52	53	849	1346	-	-	1370	-	-
Mov Cap-2 Maneuver	~ 52	53	-	-	-	-	-	-	-
Stage 1	433	733	-	-	-	-	-	-	-
Stage 2	89	105	-	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	71.2	7.6	0.1
HCM LOS	F		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	SBL	SBT	SBR
Capacity (veh/h)	1346	-	-	52	849	1370	-	-
HCM Lane V/C Ratio	0.461	-	-	1.179	0.286	0.002	-	-
HCM Control Delay (s)	9.9	-	-	$ 310.2	10.9	7.6	0	-
HCM Lane LOS	A	-	-	F	B	A	A	-
HCM 95th %tile Q(veh)	2.5	-	-	5.4	1.2	0	-	-

Notes

~: Volume exceeds capacity $: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	994	307	395	512	0	765
Future Volume (vph)	994	307	395	512	0	765
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Grade (%)	-3%			-3%	-3%	
Total Lost time (s)	5.6	4.0	5.6	5.6		5.6
Lane Util. Factor	0.91	1.00	0.97	0.95		0.88
Frpb, ped/bikes	1.00	1.00	1.00	1.00		1.00
Flpb, ped/bikes	1.00	1.00	1.00	1.00		1.00
Frt	1.00	0.85	1.00	1.00		0.85
Flt Protected	1.00	1.00	0.95	1.00		1.00
Satd. Flow (prot)	5111	1591	3485	3592		2828
Flt Permitted	1.00	1.00	0.95	1.00		1.00
Satd. Flow (perm)	5111	1591	3485	3592		2828
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	1057	327	420	545	0	814
RTOR Reduction (vph)	0	0	0	0	0	29
Lane Group Flow (vph)	1057	327	420	545	0	785
Confl. Peds. (#/hr)						13
Heavy Vehicles (%)	3%	3%	2%	2%	2%	2%
Turn Type	NA	Free	Prot	NA		Over
Protected Phases	6		8	2 8		8
Permitted Phases		Free				8
Actuated Green, G (s)	17.2	46.8	18.4	46.8		18.4
Effective Green, g (s)	17.2	46.8	18.4	46.8		18.4
Actuated g/C Ratio	0.37	1.00	0.39	1.00		0.39
Clearance Time (s)	5.6		5.6			5.6
Vehicle Extension (s)	3.0		3.0			3.0
Lane Grp Cap (vph)	1878	1591	1370	3592		1111
v/s Ratio Prot	c0.21		0.12	0.15		c0.28
v/s Ratio Perm		0.21				
v/c Ratio	0.56	0.21	0.31	0.15		0.71
Uniform Delay, d1	11.8	0.0	9.8	0.0		11.9
Progression Factor	1.00	1.00	1.00	1.00		1.00
Incremental Delay, d2	0.4	0.3	0.1	0.0		2.1
Delay (s)	12.2	0.3	9.9	0.0		14.0
Level of Service	B	A	A	A		B
Approach Delay (s)	9.4			4.3	14.0	
Approach LOS	A			A	B	

Intersection Summary

HCM 2000 Control Delay	9.0	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.64		
Actuated Cycle Length (s)	46.8	Sum of lost time (s)	11.2
Intersection Capacity Utilization	56.6%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	15	380	24	421	19	1116	623	308	510	26
Future Volume (veh/h)	0	0	15	380	24	421	19	1116	623	308	510	26
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.97	1.00		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1776	1776	1863	1863	1863	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	0	0	0	405	0	156	19	1139	0	314	520	27
Adj No. of Lanes	0	1	1	2	0	1	1	2	2	1	2	0
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	7	7	7	2	2	2	2	2	2	2	2	2
Cap, veh/h	0	2	48	667	0	289	54	1412	1112	359	1953	101
Arrive On Green	0.00	0.00	0.00	0.19	0.00	0.19	0.03	0.40	0.00	0.20	0.57	0.57
Sat Flow, veh/h	0	1776	1509	3548	0	1540	1774	3539	2787	1774	3422	177
Grp Volume(v), veh/h	0	0	0	405	0	156	19	1139	0	314	268	279
Grp Sat Flow(s),veh/h/ln	0	1776	1509	1774	0	1540	1774	1770	1393	1774	1770	1830
Q Serve(g_s), s	0.0	0.0	0.0	7.6	0.0	6.6	0.8	20.7	0.0	12.4	5.6	5.6
Cycle Q Clear(g_c), s	0.0	0.0	0.0	7.6	0.0	6.6	0.8	20.7	0.0	12.4	5.6	5.6
Prop In Lane	0.00		1.00	1.00		1.00	1.00		1.00	1.00		0.10
Lane Grp Cap(c), veh/h	0	2	48	667	0	289	54	1412	1112	359	1010	1044
V/C Ratio(X)	0.00	0.00	0.00	0.61	0.00	0.54	0.35	0.81	0.00	0.87	0.27	0.27
Avail Cap(c_a), veh/h	0	49	88	1271	0	552	196	1546	1218	416	1010	1044
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	0.0	0.0	0.0	27.0	0.0	26.6	34.5	19.3	0.0	28.0	7.9	7.9
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.9	0.0	1.6	3.8	3.0	0.0	16.7	0.1	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	0.0	3.8	0.0	2.9	0.4	10.6	0.0	7.8	2.7	2.8
LnGrp Delay(d),s/veh	0.0	0.0	0.0	27.9	0.0	28.2	38.2	22.3	0.0	44.7	8.0	8.0
LnGrp LOS				C		C	D	C		D	A	A
Approach Vol, veh/h		0			561			1158			861	
Approach Delay, s/veh		0.0			28.0			22.6			21.4	
Approach LOS					C			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	19.8	34.0		0.0	7.3	46.5		18.7
Change Period (Y+Rc), s	5.1	5.1		3.0	5.1	5.1		5.1
Max Green Setting (Gmax), s	17.0	31.7		2.0	8.0	40.7		26.0
Max Q Clear Time (g_c+I1), s	14.4	22.7		0.0	2.8	7.6		9.6
Green Ext Time (p_c), s	0.3	6.2		0.0	0.0	15.7		1.9

Intersection Summary	
HCM 2010 Ctrl Delay	23.4
HCM 2010 LOS	C

Notes

User approved volume balancing among the lanes for turning movement.

Intersection												
Int Delay, s/veh	9.5											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	19	887	21	17	782	55	13	1	24	68	2	26
Future Vol, veh/h	19	887	21	17	782	55	13	1	24	68	2	26
Conflicting Peds, #/hr	10	0	8	8	0	10	6	0	1	0	0	1
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	93	93	93	93	93	93	93	93	93	93	93	93
Heavy Vehicles, %	3	3	3	2	2	2	2	2	2	2	2	2
Mvmt Flow	20	954	23	18	841	59	14	1	26	73	2	28

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	910	0	0	984	0	0	1478	1961	497	1436	1942	466
Stage 1	-	-	-	-	-	-	1014	1014	-	917	917	-
Stage 2	-	-	-	-	-	-	464	947	-	519	1025	-
Critical Hdwy	4.16	-	-	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.23	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	738	-	-	698	-	-	88	63	519	94	64	543
Stage 1	-	-	-	-	-	-	256	314	-	293	349	-
Stage 2	-	-	-	-	-	-	548	338	-	508	311	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	734	-	-	697	-	-	73	55	515	80	56	535
Mov Cap-2 Maneuver	-	-	-	-	-	-	73	55	-	80	56	-
Stage 1	-	-	-	-	-	-	239	293	-	273	328	-
Stage 2	-	-	-	-	-	-	486	317	-	451	290	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.5	0.5	36.1	166
HCM LOS			E	F

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	156	734	-	-	697	-	-	103
HCM Lane V/C Ratio	0.262	0.028	-	-	0.026	-	-	1.002
HCM Control Delay (s)	36.1	10	0.3	-	10.3	0.3	-	166
HCM Lane LOS	E	B	A	-	B	A	-	F
HCM 95th %tile Q(veh)	1	0.1	-	-	0.1	-	-	6.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	22	869	87	58	595	18	212	12	104	57	12	41
Future Volume (veh/h)	22	869	87	58	595	18	212	12	104	57	12	41
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.98	1.00		0.98	0.99		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1845	1845	1900	1900	1863	1863	1900	1863	1863
Adj Flow Rate, veh/h	24	945	95	63	647	20	230	13	0	62	13	45
Adj No. of Lanes	1	2	0	1	2	0	0	1	1	0	1	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	3	3	3	2	2	2	2	2	2
Cap, veh/h	409	1493	150	280	1597	49	483	19	462	528	98	459
Arrive On Green	0.46	0.46	0.46	0.46	0.46	0.46	0.29	0.29	0.00	0.29	0.29	0.29
Sat Flow, veh/h	761	3243	326	534	3469	107	1145	65	1583	1332	336	1574
Grp Volume(v), veh/h	24	516	524	63	327	340	243	0	0	75	0	45
Grp Sat Flow(s),veh/h/ln	761	1770	1799	534	1752	1823	1210	0	1583	1668	0	1574
Q Serve(g_s), s	1.0	10.5	10.5	4.8	5.8	5.8	7.6	0.0	0.0	0.0	0.0	1.0
Cycle Q Clear(g_c), s	6.9	10.5	10.5	15.3	5.8	5.8	9.1	0.0	0.0	1.5	0.0	1.0
Prop In Lane	1.00		0.18	1.00		0.06	0.95		1.00	0.83		1.00
Lane Grp Cap(c), veh/h	409	815	828	280	807	840	501	0	462	626	0	459
V/C Ratio(X)	0.06	0.63	0.63	0.23	0.40	0.41	0.48	0.00	0.00	0.12	0.00	0.10
Avail Cap(c_a), veh/h	418	836	850	292	847	881	852	0	872	1003	0	867
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	10.7	9.7	9.7	15.5	8.4	8.4	15.7	0.0	0.0	12.3	0.0	12.2
Incr Delay (d2), s/veh	0.1	1.5	1.5	0.4	0.3	0.3	0.7	0.0	0.0	0.1	0.0	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	5.4	5.4	0.7	2.9	3.0	2.9	0.0	0.0	0.7	0.0	0.4
LnGrp Delay(d),s/veh	10.8	11.2	11.2	15.9	8.8	8.8	16.4	0.0	0.0	12.4	0.0	12.3
LnGrp LOS	B	B	B	B	A	A	B			B		B
Approach Vol, veh/h		1064			730			243			120	
Approach Delay, s/veh		11.2			9.4			16.4			12.4	
Approach LOS		B			A			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		27.8		19.4		27.8		19.4
Change Period (Y+Rc), s		6.1		5.6		* 6.1		5.6
Max Green Setting (Gmax), s		22.3		26.0		* 23		26.0
Max Q Clear Time (g_c+I1), s		12.5		3.5		17.3		11.1
Green Ext Time (p_c), s		7.2		2.0		4.4		1.8

Intersection Summary

HCM 2010 Ctrl Delay	11.2
HCM 2010 LOS	B

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Intersection												
Int Delay, s/veh	84.7											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	1023	11	27	569	0	4	0	49	272	64	147
Future Vol, veh/h	0	1023	11	27	569	0	4	0	49	272	64	147
Conflicting Peds, #/hr	0	0	8	8	0	0	1	0	3	3	0	1
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	240	-	-	0	-	85	120	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	98	98	98	98	98	98	98	98	98	98	98	98
Heavy Vehicles, %	2	2	2	4	4	4	2	2	2	2	2	2
Mvmt Flow	0	1044	11	28	581	0	4	0	50	278	65	150

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	-	0	0	1063	0	0	1436	-	539	1161	1699	291
Stage 1	-	-	-	-	-	-	1057	-	-	636	636	-
Stage 2	-	-	-	-	-	-	379	-	-	525	1063	-
Critical Hdwy	-	-	-	4.18	-	-	7.54	-	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	-	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	-	-	6.54	5.54	-
Follow-up Hdwy	-	-	-	2.24	-	-	3.52	-	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	0	-	-	639	-	0	94	0	487	~ 150	91	706
Stage 1	0	-	-	-	-	0	240	0	-	433	470	-
Stage 2	0	-	-	-	-	0	615	0	-	504	298	-
Platoon blocked, %		-	-		-							
Mov Cap-1 Maneuver	-	-	-	637	-	-	27	-	482	~ 130	86	705
Mov Cap-2 Maneuver	-	-	-	-	-	-	27	-	-	~ 130	86	-
Stage 1	-	-	-	-	-	-	240	-	-	433	449	-
Stage 2	-	-	-	-	-	-	395	-	-	450	296	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	0.5	24.4	$ 376.6
HCM LOS			C	F

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBL	WBT	SBLn1	SBLn2
Capacity (veh/h)	27	482	-	-	637	-	130	221
HCM Lane V/C Ratio	0.151	0.104	-	-	0.043	-	2.135	0.974
HCM Control Delay (s)	160.8	13.3	-	-	10.9	-	$ 591.1	100.2
HCM Lane LOS	F	B	-	-	B	-	F	F
HCM 95th %tile Q(veh)	0.5	0.3	-	-	0.1	-	23	8.6

Notes

~: Volume exceeds capacity $: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon

Intersection						
Int Delay, s/veh	0.6					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	1203	185	78	597	0	0
Future Vol, veh/h	1203	185	78	597	0	0
Conflicting Peds, #/hr	0	11	11	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	115	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	97	97	97	97	97	97
Heavy Vehicles, %	2	2	5	5	2	2
Mvmt Flow	1240	191	80	615	0	0

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	1442	0	1816	726
Stage 1	-	-	-	-	1347	-
Stage 2	-	-	-	-	469	-
Critical Hdwy	-	-	4.2	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	-	-	2.25	-	3.52	3.32
Pot Cap-1 Maneuver	-	-	451	-	69	367
Stage 1	-	-	-	-	207	-
Stage 2	-	-	-	-	596	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	451	-	56	363
Mov Cap-2 Maneuver	-	-	-	-	56	-
Stage 1	-	-	-	-	205	-
Stage 2	-	-	-	-	490	-

Approach	EB	WB	NB
HCM Control Delay, s	0	1.7	0
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	-	-	-	451	-
HCM Lane V/C Ratio	-	-	-	0.178	-
HCM Control Delay (s)	0	-	-	14.7	-
HCM Lane LOS	A	-	-	B	-
HCM 95th %tile Q(veh)	-	-	-	0.6	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	266	887	49	28	390	325	47	232	37	98	45	238
Future Volume (veh/h)	266	887	49	28	390	325	47	232	37	98	45	238
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.98	1.00		0.98	0.99		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1900	1776	1776	1776
Adj Flow Rate, veh/h	271	905	50	29	398	332	48	237	38	100	46	0
Adj No. of Lanes	1	2	0	1	2	0	1	1	0	1	1	1
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	7	7	7
Cap, veh/h	323	1426	79	79	511	422	496	471	75	298	535	454
Arrive On Green	0.18	0.42	0.42	0.04	0.28	0.28	0.30	0.30	0.30	0.30	0.30	0.00
Sat Flow, veh/h	1774	3409	188	1774	1824	1507	1351	1563	251	1039	1776	1509
Grp Volume(v), veh/h	271	470	485	29	386	344	48	0	275	100	46	0
Grp Sat Flow(s),veh/h/ln	1774	1770	1828	1774	1770	1561	1351	0	1813	1039	1776	1509
Q Serve(g_s), s	9.2	13.2	13.2	1.0	12.6	12.7	1.7	0.0	7.8	5.5	1.2	0.0
Cycle Q Clear(g_c), s	9.2	13.2	13.2	1.0	12.6	12.7	2.8	0.0	7.8	13.3	1.2	0.0
Prop In Lane	1.00		0.10	1.00		0.97	1.00		0.14	1.00		1.00
Lane Grp Cap(c), veh/h	323	740	765	79	496	438	496	0	546	298	535	454
V/C Ratio(X)	0.84	0.63	0.63	0.37	0.78	0.79	0.10	0.00	0.50	0.34	0.09	0.00
Avail Cap(c_a), veh/h	422	740	765	198	517	456	672	0	782	433	765	650
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	24.7	14.4	14.4	29.1	20.7	20.8	16.7	0.0	18.0	23.5	15.7	0.0
Incr Delay (d2), s/veh	11.0	1.8	1.7	2.9	7.1	8.5	0.1	0.0	0.7	0.7	0.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.5	6.8	7.0	0.5	7.1	6.5	0.6	0.0	4.0	1.6	0.6	0.0
LnGrp Delay(d),s/veh	35.7	16.2	16.2	32.0	27.9	29.3	16.8	0.0	18.8	24.2	15.8	0.0
LnGrp LOS	D	B	B	C	C	C	B		B	C	B	
Approach Vol, veh/h		1226			759			323			146	
Approach Delay, s/veh		20.5			28.7			18.5			21.5	
Approach LOS		C			C			B			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	7.9	31.3		23.5	16.5	22.7		23.5
Change Period (Y+Rc), s	5.1	5.1		4.6	5.1	5.1		4.6
Max Green Setting (Gmax), s	7.0	26.2		27.0	14.9	18.3		27.0
Max Q Clear Time (g_c+I1), s	3.0	15.2		15.3	11.2	14.7		9.8
Green Ext Time (p_c), s	0.0	7.5		2.0	0.3	2.8		2.3

Intersection Summary	
HCM 2010 Ctrl Delay	22.8
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	227	681	58	103	321	224	60	629	170	214	416	81
Future Volume (veh/h)	227	681	58	103	321	224	60	629	170	214	416	81
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.99	1.00		0.99	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1825	1825	1825	1845	1845	1845	1810	1810	1810
Adj Flow Rate, veh/h	236	709	13	107	334	46	62	655	62	223	433	26
Adj No. of Lanes	1	2	1	1	1	1	1	2	1	1	2	1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	3	3	3	5	5	5
Cap, veh/h	210	1004	442	133	442	372	101	975	434	204	1167	509
Arrive On Green	0.12	0.28	0.28	0.08	0.24	0.24	0.06	0.28	0.28	0.12	0.34	0.34
Sat Flow, veh/h	1774	3539	1558	1739	1825	1534	1757	3505	1560	1723	3438	1500
Grp Volume(v), veh/h	236	709	13	107	334	46	62	655	62	223	433	26
Grp Sat Flow(s),veh/h/ln	1774	1770	1558	1739	1825	1534	1757	1752	1560	1723	1719	1500
Q Serve(g_s), s	11.9	18.0	0.6	6.1	17.1	2.4	3.5	16.7	3.0	11.9	9.6	1.2
Cycle Q Clear(g_c), s	11.9	18.0	0.6	6.1	17.1	2.4	3.5	16.7	3.0	11.9	9.6	1.2
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	210	1004	442	133	442	372	101	975	434	204	1167	509
V/C Ratio(X)	1.12	0.71	0.03	0.80	0.76	0.12	0.62	0.67	0.14	1.09	0.37	0.05
Avail Cap(c_a), veh/h	210	1021	450	171	490	412	166	1214	540	204	1273	555
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	44.3	32.2	26.0	45.6	35.3	29.8	46.3	32.2	27.3	44.3	25.1	22.3
Incr Delay (d2), s/veh	99.2	2.2	0.0	18.6	6.0	0.1	6.0	1.0	0.1	90.0	0.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	11.6	9.1	0.3	3.6	9.4	1.0	1.9	8.2	1.3	10.7	4.5	0.5
LnGrp Delay(d),s/veh	143.5	34.4	26.0	64.2	41.3	29.9	52.3	33.2	27.4	134.3	25.3	22.4
LnGrp LOS	F	C	C	E	D	C	D	C	C	F	C	C
Approach Vol, veh/h		958			487			779			682	
Approach Delay, s/veh		61.2			45.3			34.3			60.8	
Approach LOS		E			D			C			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	18.0	34.1	13.8	34.6	11.9	40.2	18.0	30.4
Change Period (Y+Rc), s	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1
Max Green Setting (Gmax), s	11.9	34.8	9.9	29.0	9.5	37.2	11.9	27.0
Max Q Clear Time (g_c+I1), s	13.9	18.7	8.1	20.0	5.5	11.6	13.9	19.1
Green Ext Time (p_c), s	0.0	7.1	0.0	4.6	0.0	8.7	0.0	4.2

Intersection Summary	
HCM 2010 Ctrl Delay	51.2
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	129	315	67	783	466	215	42	516	431	222	856	45
Future Volume (veh/h)	129	315	67	783	466	215	42	516	431	222	856	45
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1835	1835	1835	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	159	389	0	967	575	0	52	637	0	274	1057	56
Adj No. of Lanes	1	2	1	2	2	1	1	3	1	2	3	0
Peak Hour Factor	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	438	572	256	1028	760	340	86	1131	832	310	1306	69
Arrive On Green	0.25	0.16	0.00	0.30	0.22	0.00	0.05	0.22	0.00	0.09	0.26	0.26
Sat Flow, veh/h	1774	3539	1583	3390	3486	1560	1774	5085	1583	3442	4944	262
Grp Volume(v), veh/h	159	389	0	967	575	0	52	637	0	274	724	389
Grp Sat Flow(s),veh/h/ln	1774	1770	1583	1695	1743	1560	1774	1695	1583	1721	1695	1816
Q Serve(g_s), s	8.8	12.3	0.0	33.0	18.4	0.0	3.4	13.2	0.0	9.4	23.8	23.8
Cycle Q Clear(g_c), s	8.8	12.3	0.0	33.0	18.4	0.0	3.4	13.2	0.0	9.4	23.8	23.8
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.14
Lane Grp Cap(c), veh/h	438	572	256	1028	760	340	86	1131	832	310	895	480
V/C Ratio(X)	0.36	0.68	0.00	0.94	0.76	0.00	0.61	0.56	0.00	0.88	0.81	0.81
Avail Cap(c_a), veh/h	438	923	413	1061	1388	621	107	1267	874	310	944	506
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	37.0	46.9	0.0	40.4	43.5	0.0	55.4	41.1	0.0	53.4	40.9	40.9
Incr Delay (d2), s/veh	0.5	1.4	0.0	15.3	1.6	0.0	6.7	0.5	0.0	24.6	5.1	9.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.4	6.1	0.0	17.6	9.0	0.0	1.8	6.2	0.0	5.5	11.8	13.2
LnGrp Delay(d),s/veh	37.5	48.4	0.0	55.6	45.1	0.0	62.2	41.5	0.0	78.1	46.0	50.2
LnGrp LOS	D	D		E	D		E	D		E	D	D
Approach Vol, veh/h		548			1542			689			1387	
Approach Delay, s/veh		45.2			51.7			43.1			53.5	
Approach LOS		D			D			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	17.5	33.2	42.8	25.3	12.5	38.2	35.4	32.7
Change Period (Y+Rc), s	6.8	6.8	6.8	6.1	6.8	6.8	6.1	6.8
Max Green Setting (Gmax), s	10.7	29.6	37.2	31.0	7.2	33.1	20.9	47.3
Max Q Clear Time (g_c+I1), s	11.4	15.2	35.0	14.3	5.4	25.8	10.8	20.4
Green Ext Time (p_c), s	0.0	9.6	1.0	2.0	0.0	5.6	2.2	4.2

Intersection Summary	
HCM 2010 Ctrl Delay	50.0
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	94	698	77	635	564	459	96	683	924	458	668	73
Future Volume (veh/h)	94	698	77	635	564	459	96	683	924	458	668	73
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1835	1835	1835	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	98	727	0	661	588	0	100	711	0	477	696	76
Adj No. of Lanes	1	2	1	2	2	1	1	3	1	2	3	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	417	806	360	752	747	334	124	1003	663	511	1284	139
Arrive On Green	0.24	0.23	0.00	0.22	0.21	0.00	0.07	0.20	0.00	0.15	0.28	0.28
Sat Flow, veh/h	1774	3539	1583	3390	3486	1560	1774	5085	1583	3442	4656	504
Grp Volume(v), veh/h	98	727	0	661	588	0	100	711	0	477	505	267
Grp Sat Flow(s),veh/h/ln	1774	1770	1583	1695	1743	1560	1774	1695	1583	1721	1695	1770
Q Serve(g_s), s	5.8	25.8	0.0	24.4	20.6	0.0	7.2	16.9	0.0	17.7	16.4	16.6
Cycle Q Clear(g_c), s	5.8	25.8	0.0	24.4	20.6	0.0	7.2	16.9	0.0	17.7	16.4	16.6
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.28
Lane Grp Cap(c), veh/h	417	806	360	752	747	334	124	1003	663	511	935	488
V/C Ratio(X)	0.23	0.90	0.00	0.88	0.79	0.00	0.81	0.71	0.00	0.93	0.54	0.55
Avail Cap(c_a), veh/h	417	848	379	1106	1547	692	219	1223	732	511	935	488
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	40.0	48.6	0.0	48.7	48.0	0.0	59.3	48.5	0.0	54.4	39.9	39.9
Incr Delay (d2), s/veh	0.3	12.5	0.0	5.8	1.9	0.0	11.5	1.5	0.0	24.5	0.6	1.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.9	14.0	0.0	12.0	10.2	0.0	3.9	8.0	0.0	10.1	7.7	8.3
LnGrp Delay(d),s/veh	40.3	61.0	0.0	54.5	49.9	0.0	70.8	49.9	0.0	78.9	40.5	41.2
LnGrp LOS	D	E		D	D		E	D		E	D	D
Approach Vol, veh/h		825			1249			811			1249	
Approach Delay, s/veh		58.6			52.3			52.5			55.3	
Approach LOS		E			D			D			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	26.0	32.3	35.5	35.6	15.8	42.5	36.5	34.5
Change Period (Y+Rc), s	6.8	6.8	6.8	6.1	6.8	6.8	6.1	6.8
Max Green Setting (Gmax), s	19.2	31.1	42.2	31.0	16.0	34.3	15.8	57.4
Max Q Clear Time (g_c+I1), s	19.7	18.9	26.4	27.8	9.2	18.6	7.8	22.6
Green Ext Time (p_c), s	0.0	6.0	2.3	1.4	0.1	8.9	3.2	4.5

Intersection Summary	
HCM 2010 Ctrl Delay	54.5
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	297	2	100	9	8	19	30	778	4	6	1336	430
Future Volume (veh/h)	297	2	100	9	8	19	30	778	4	6	1336	430
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.98	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1863	1900	1863	1900	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	338	2	114	10	9	22	34	884	5	7	1518	0
Adj No. of Lanes	0	1	1	0	1	0	1	2	0	1	2	1
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	393	2	351	19	17	41	74	1724	10	22	1588	710
Arrive On Green	0.22	0.22	0.22	0.05	0.05	0.05	0.04	0.48	0.48	0.01	0.45	0.00
Sat Flow, veh/h	1764	10	1575	406	366	893	1774	3608	20	1774	3539	1583
Grp Volume(v), veh/h	340	0	114	41	0	0	34	434	455	7	1518	0
Grp Sat Flow(s),veh/h/ln	1775	0	1575	1665	0	0	1774	1770	1859	1774	1770	1583
Q Serve(g_s), s	19.7	0.0	6.5	2.6	0.0	0.0	2.0	18.2	18.2	0.4	44.4	0.0
Cycle Q Clear(g_c), s	19.7	0.0	6.5	2.6	0.0	0.0	2.0	18.2	18.2	0.4	44.4	0.0
Prop In Lane	0.99		1.00	0.24		0.54	1.00		0.01	1.00		1.00
Lane Grp Cap(c), veh/h	396	0	351	77	0	0	74	846	888	22	1588	710
V/C Ratio(X)	0.86	0.00	0.32	0.53	0.00	0.00	0.46	0.51	0.51	0.32	0.96	0.00
Avail Cap(c_a), veh/h	513	0	456	109	0	0	116	846	888	116	1625	727
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	40.0	0.0	34.9	50.0	0.0	0.0	50.2	19.3	19.3	52.5	28.5	0.0
Incr Delay (d2), s/veh	11.1	0.0	0.5	5.7	0.0	0.0	4.4	0.5	0.5	8.2	13.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	10.9	0.0	2.9	1.3	0.0	0.0	1.1	8.9	9.4	0.3	24.4	0.0
LnGrp Delay(d),s/veh	51.1	0.0	35.4	55.7	0.0	0.0	54.6	19.9	19.8	60.7	41.8	0.0
LnGrp LOS	D		D	E			D	B	B	E	D	
Approach Vol, veh/h		454			41			923			1525	
Approach Delay, s/veh		47.2			55.7			21.1			41.9	
Approach LOS		D			E			C			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	8.1	58.0		30.0	11.3	54.9		11.0
Change Period (Y+Rc), s	6.8	6.8		6.1	6.8	6.8		6.1
Max Green Setting (Gmax), s	7.0	49.2		31.0	7.0	49.2		7.0
Max Q Clear Time (g_c+I1), s	2.4	20.2		21.7	4.0	46.4		4.6
Green Ext Time (p_c), s	0.0	21.7		1.7	0.0	1.7		0.0

Intersection Summary	
HCM 2010 Ctrl Delay	36.4
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	351	17	52	5	14	13	163	1389	11	19	883	441
Future Volume (veh/h)	351	17	52	5	14	13	163	1389	11	19	883	441
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.95	1.00		0.98	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1863	1900	1863	1900	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	366	18	54	5	15	14	170	1447	11	20	920	0
Adj No. of Lanes	0	1	1	0	1	0	1	2	0	1	2	1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	416	20	384	10	31	29	200	1606	12	52	1282	574
Arrive On Green	0.25	0.25	0.25	0.04	0.04	0.04	0.11	0.45	0.45	0.03	0.36	0.00
Sat Flow, veh/h	1695	83	1564	248	745	695	1774	3600	27	1774	3539	1583
Grp Volume(v), veh/h	384	0	54	34	0	0	170	711	747	20	920	0
Grp Sat Flow(s),veh/h/ln	1778	0	1564	1688	0	0	1774	1770	1857	1774	1770	1583
Q Serve(g_s), s	22.6	0.0	2.9	2.1	0.0	0.0	10.2	40.4	40.4	1.2	24.3	0.0
Cycle Q Clear(g_c), s	22.6	0.0	2.9	2.1	0.0	0.0	10.2	40.4	40.4	1.2	24.3	0.0
Prop In Lane	0.95		1.00	0.15		0.41	1.00		0.01	1.00		1.00
Lane Grp Cap(c), veh/h	437	0	384	70	0	0	200	789	829	52	1282	574
V/C Ratio(X)	0.88	0.00	0.14	0.49	0.00	0.00	0.85	0.90	0.90	0.39	0.72	0.00
Avail Cap(c_a), veh/h	509	0	448	109	0	0	252	800	840	114	1327	594
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	39.4	0.0	32.0	50.9	0.0	0.0	47.2	27.8	27.9	51.7	29.8	0.0
Incr Delay (d2), s/veh	14.5	0.0	0.2	5.2	0.0	0.0	19.3	13.2	12.8	4.6	1.8	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	12.9	0.0	1.3	1.1	0.0	0.0	6.1	22.4	23.7	0.7	12.2	0.0
LnGrp Delay(d),s/veh	53.9	0.0	32.2	56.1	0.0	0.0	66.5	41.0	40.6	56.4	31.6	0.0
LnGrp LOS	D		C	E			E	D	D	E	C	
Approach Vol, veh/h		438			34			1628			940	
Approach Delay, s/veh		51.2			56.1			43.5			32.2	
Approach LOS		D			E			D			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	10.0	55.2		32.8	19.1	46.1		10.6
Change Period (Y+Rc), s	6.8	6.8		6.1	6.8	6.8		6.1
Max Green Setting (Gmax), s	7.0	49.1		31.1	15.4	40.7		7.0
Max Q Clear Time (g_c+I1), s	3.2	42.4		24.6	12.2	26.3		4.1
Green Ext Time (p_c), s	0.0	6.0		1.4	0.1	12.0		0.0

Intersection Summary	
HCM 2010 Ctrl Delay	41.3
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	169	300	179	116	336	88	94	623	64	107	1045	194
Future Volume (veh/h)	169	300	179	116	336	88	94	623	64	107	1045	194
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.99	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1835	1835	1835	1844	1844	1881	1881	1881	1919
Adj Flow Rate, veh/h	184	326	57	126	365	0	102	677	70	116	1136	0
Adj No. of Lanes	2	1	1	1	1	1	1	3	0	1	3	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	327	508	430	158	488	415	171	1466	150	180	1638	0
Arrive On Green	0.09	0.27	0.27	0.09	0.27	0.00	0.10	0.32	0.32	0.10	0.32	0.00
Sat Flow, veh/h	3476	1881	1592	1747	1835	1560	1756	4635	475	1792	5305	0
Grp Volume(v), veh/h	184	326	57	126	365	0	102	489	258	116	1136	0
Grp Sat Flow(s),veh/h/ln	1738	1881	1592	1747	1835	1560	1756	1678	1754	1792	1712	0
Q Serve(g_s), s	4.2	12.8	2.3	5.9	15.3	0.0	4.7	9.8	9.9	5.2	16.2	0.0
Cycle Q Clear(g_c), s	4.2	12.8	2.3	5.9	15.3	0.0	4.7	9.8	9.9	5.2	16.2	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.27	1.00		0.00
Lane Grp Cap(c), veh/h	327	508	430	158	488	415	171	1061	555	180	1638	0
V/C Ratio(X)	0.56	0.64	0.13	0.80	0.75	0.00	0.60	0.46	0.47	0.65	0.69	0.00
Avail Cap(c_a), veh/h	336	651	551	184	666	566	189	1174	614	197	1809	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	36.3	27.0	23.2	37.3	28.2	0.0	36.2	22.9	23.0	36.2	24.9	0.0
Incr Delay (d2), s/veh	1.7	1.6	0.2	17.8	3.5	0.0	3.5	0.3	0.6	5.5	1.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.1	6.8	1.0	3.6	8.2	0.0	2.4	4.5	4.9	2.9	7.8	0.0
LnGrp Delay(d),s/veh	38.0	28.7	23.3	55.1	31.7	0.0	39.7	23.2	23.6	41.7	26.0	0.0
LnGrp LOS	D	C	C	E	C		D	C	C	D	C	
Approach Vol, veh/h		567			491			849			1252	
Approach Delay, s/veh		31.1			37.7			25.3			27.4	
Approach LOS		C			D			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	12.6	31.9	11.8	27.5	12.4	32.1	12.1	27.2
Change Period (Y+Rc), s	* 4.2	5.4	* 4.2	4.9	* 4.2	5.4	* 4.2	* 4.9
Max Green Setting (Gmax), s	* 9.2	29.3	* 8.8	29.0	* 9	29.5	* 8.1	* 30
Max Q Clear Time (g_c+I1), s	7.2	11.9	7.9	14.8	6.7	18.2	6.2	17.3
Green Ext Time (p_c), s	0.0	11.8	0.0	4.5	0.0	8.5	0.1	4.4

Intersection Summary	
HCM 2010 Ctrl Delay	29.1
HCM 2010 LOS	C

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	277	331	112	103	266	236	199	1441	65	124	910	175
Future Volume (veh/h)	277	331	112	103	266	236	199	1441	65	124	910	175
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		1.00	1.00		0.98	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1835	1835	1835	1844	1844	1881	1881	1881	1919
Adj Flow Rate, veh/h	292	348	24	108	280	0	209	1517	68	131	958	0
Adj No. of Lanes	2	1	1	1	1	1	1	3	0	1	3	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	365	462	386	139	404	343	243	1900	85	165	1739	0
Arrive On Green	0.11	0.25	0.25	0.08	0.22	0.00	0.14	0.39	0.39	0.09	0.34	0.00
Sat Flow, veh/h	3476	1881	1574	1747	1835	1560	1756	4935	221	1792	5305	0
Grp Volume(v), veh/h	292	348	24	108	280	0	209	1032	553	131	958	0
Grp Sat Flow(s),veh/h/ln	1738	1881	1574	1747	1835	1560	1756	1678	1800	1792	1712	0
Q Serve(g_s), s	7.8	16.2	1.1	5.7	13.3	0.0	11.0	25.8	25.8	6.8	14.3	0.0
Cycle Q Clear(g_c), s	7.8	16.2	1.1	5.7	13.3	0.0	11.0	25.8	25.8	6.8	14.3	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.12	1.00		0.00
Lane Grp Cap(c), veh/h	365	462	386	139	404	343	243	1292	693	165	1739	0
V/C Ratio(X)	0.80	0.75	0.06	0.78	0.69	0.00	0.86	0.80	0.80	0.79	0.55	0.00
Avail Cap(c_a), veh/h	434	579	484	163	520	442	308	1335	716	205	1739	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	41.3	33.0	27.3	42.7	33.9	0.0	39.8	25.8	25.8	42.0	25.4	0.0
Incr Delay (d2), s/veh	8.2	4.7	0.1	16.7	3.1	0.0	16.4	3.4	6.2	14.4	0.4	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.1	9.0	0.5	3.4	7.0	0.0	6.5	12.5	14.0	4.0	6.8	0.0
LnGrp Delay(d),s/veh	49.5	37.7	27.4	59.4	37.1	0.0	56.3	29.2	32.0	56.4	25.8	0.0
LnGrp LOS	D	D	C	E	D		E	C	C	E	C	
Approach Vol, veh/h		664			388			1794			1089	
Approach Delay, s/veh		42.5			43.3			33.2			29.5	
Approach LOS		D			D			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	12.9	41.8	11.7	28.1	17.3	37.4	14.1	25.7
Change Period (Y+Rc), s	* 4.2	5.4	* 4.2	4.9	* 4.2	5.4	* 4.2	* 4.9
Max Green Setting (Gmax), s	* 11	37.6	* 8.8	29.1	* 17	31.8	* 12	* 27
Max Q Clear Time (g_c+I1), s	8.8	27.8	7.7	18.2	13.0	16.3	9.8	15.3
Green Ext Time (p_c), s	0.0	8.6	0.0	3.4	0.1	13.2	0.2	3.5

Intersection Summary	
HCM 2010 Ctrl Delay	34.8
HCM 2010 LOS	C

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	17	2	196	0	0	0	295	64	7	1	83	41
Future Volume (veh/h)	17	2	196	0	0	0	295	64	7	1	83	41
Number	7	4	14				5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				0.99		0.99	0.99		0.99
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1776	1776				1863	1863	1900	1900	1863	1900
Adj Flow Rate, veh/h	18	2	25				314	68	7	1	88	44
Adj No. of Lanes	0	1	1				1	1	0	0	1	0
Peak Hour Factor	0.94	0.94	0.94				0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	7	7	7				2	2	2	2	2	2
Cap, veh/h	118	13	116				855	650	67	174	458	227
Arrive On Green	0.08	0.08	0.08				0.39	0.39	0.39	0.39	0.39	0.39
Sat Flow, veh/h	1529	170	1509				1244	1660	171	4	1169	580
Grp Volume(v), veh/h	20	0	25				314	0	75	133	0	0
Grp Sat Flow(s),veh/h/ln	1699	0	1509				1244	0	1831	1753	0	0
Q Serve(g_s), s	0.2	0.0	0.3				2.7	0.0	0.5	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.2	0.0	0.3				3.7	0.0	0.5	1.1	0.0	0.0
Prop In Lane	0.90		1.00				1.00		0.09	0.01		0.33
Lane Grp Cap(c), veh/h	131	0	116				855	0	717	859	0	0
V/C Ratio(X)	0.15	0.00	0.22				0.37	0.00	0.10	0.15	0.00	0.00
Avail Cap(c_a), veh/h	1451	0	1289				1595	0	1807	1900	0	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00				1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	9.1	0.0	9.1				4.9	0.0	4.1	4.2	0.0	0.0
Incr Delay (d2), s/veh	0.5	0.0	0.9				0.3	0.0	0.1	0.1	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	0.0	0.2				1.5	0.0	0.3	0.5	0.0	0.0
LnGrp Delay(d),s/veh	9.6	0.0	10.0				5.2	0.0	4.1	4.3	0.0	0.0
LnGrp LOS	A		B				A		A	A		
Approach Vol, veh/h		45						389			133	
Approach Delay, s/veh		9.9						5.0			4.3	
Approach LOS		A						A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		
Phs Duration (G+Y+Rc), s		13.9		7.2		13.9		
Change Period (Y+Rc), s		5.6		5.6		5.6		
Max Green Setting (Gmax), s		20.8		18.0		20.8		
Max Q Clear Time (g_c+I1), s		5.7		2.3		3.1		
Green Ext Time (p_c), s		2.1		0.1		2.2		

Intersection Summary	
HCM 2010 Ctrl Delay	5.2
HCM 2010 LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	55	2	226	0	0	0	577	163	18	3	117	84
Future Volume (veh/h)	55	2	226	0	0	0	577	163	18	3	117	84
Number	7	4	14				5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1792	1792				1863	1863	1900	1900	1863	1900
Adj Flow Rate, veh/h	59	2	23				620	175	19	3	126	90
Adj No. of Lanes	0	1	1				1	1	0	0	1	0
Peak Hour Factor	0.93	0.93	0.93				0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	6	6	6				2	2	2	2	2	2
Cap, veh/h	178	6	164				917	990	108	98	609	427
Arrive On Green	0.11	0.11	0.11				0.60	0.60	0.60	0.60	0.60	0.60
Sat Flow, veh/h	1654	56	1524				1156	1651	179	4	1015	711
Grp Volume(v), veh/h	61	0	23				620	0	194	219	0	0
Grp Sat Flow(s),veh/h/ln	1710	0	1524				1156	0	1830	1730	0	0
Q Serve(g_s), s	1.3	0.0	0.5				13.0	0.0	1.8	0.0	0.0	0.0
Cycle Q Clear(g_c), s	1.3	0.0	0.5				15.2	0.0	1.8	2.2	0.0	0.0
Prop In Lane	0.97		1.00				1.00		0.10	0.01		0.41
Lane Grp Cap(c), veh/h	185	0	164				917	0	1098	1133	0	0
V/C Ratio(X)	0.33	0.00	0.14				0.68	0.00	0.18	0.19	0.00	0.00
Avail Cap(c_a), veh/h	802	0	715				1453	0	1947	1931	0	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00				1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	15.8	0.0	15.5				5.7	0.0	3.4	3.5	0.0	0.0
Incr Delay (d2), s/veh	1.0	0.0	0.4				0.9	0.0	0.1	0.1	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.6	0.0	0.2				5.2	0.0	0.9	1.1	0.0	0.0
LnGrp Delay(d),s/veh	16.9	0.0	15.9				6.6	0.0	3.5	3.6	0.0	0.0
LnGrp LOS	B		B				A		A	A		
Approach Vol, veh/h		84						814			219	
Approach Delay, s/veh		16.6						5.9			3.6	
Approach LOS		B						A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		
Phs Duration (G+Y+Rc), s		28.6		9.7		28.6		
Change Period (Y+Rc), s		5.6		5.6		5.6		
Max Green Setting (Gmax), s		40.8		18.0		40.8		
Max Q Clear Time (g_c+I1), s		17.2		3.3		4.2		
Green Ext Time (p_c), s		5.8		0.3		6.3		

Intersection Summary	
HCM 2010 Ctrl Delay	6.2
HCM 2010 LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	24	396	19	21	736	53	13	1	7	24	2	12
Future Volume (veh/h)	24	396	19	21	736	53	13	1	7	24	2	12
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		1.00	0.99		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1792	1900	1900	1845	1900	1900	1667	1900	1900	1863	1900
Adj Flow Rate, veh/h	29	471	23	25	876	63	15	1	8	29	2	14
Adj No. of Lanes	0	2	0	0	2	0	0	1	0	0	1	0
Peak Hour Factor	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84
Percent Heavy Veh, %	6	6	6	3	3	3	14	14	14	2	2	2
Cap, veh/h	155	1713	82	129	1795	127	240	30	49	262	23	50
Arrive On Green	0.56	0.56	0.56	0.56	0.56	0.56	0.11	0.11	0.11	0.11	0.11	0.11
Sat Flow, veh/h	67	3041	145	32	3188	226	634	280	457	818	217	468
Grp Volume(v), veh/h	268	0	255	508	0	456	24	0	0	45	0	0
Grp Sat Flow(s),veh/h/ln	1649	0	1604	1810	0	1636	1370	0	0	1503	0	0
Q Serve(g_s), s	0.0	0.0	2.8	0.0	0.0	5.7	0.0	0.0	0.0	0.4	0.0	0.0
Cycle Q Clear(g_c), s	2.6	0.0	2.8	5.6	0.0	5.7	0.5	0.0	0.0	0.9	0.0	0.0
Prop In Lane	0.11		0.09	0.05		0.14	0.62		0.33	0.64		0.31
Lane Grp Cap(c), veh/h	1046	0	903	1131	0	921	319	0	0	335	0	0
V/C Ratio(X)	0.26	0.00	0.28	0.45	0.00	0.50	0.08	0.00	0.00	0.13	0.00	0.00
Avail Cap(c_a), veh/h	1638	0	1555	1842	0	1586	3101	0	0	3450	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	3.8	0.0	3.8	4.5	0.0	4.5	13.7	0.0	0.0	13.9	0.0	0.0
Incr Delay (d2), s/veh	0.1	0.0	0.2	0.3	0.0	0.4	0.1	0.0	0.0	0.2	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.3	0.0	1.2	2.9	0.0	2.6	0.2	0.0	0.0	0.4	0.0	0.0
LnGrp Delay(d),s/veh	3.9	0.0	4.0	4.7	0.0	4.9	13.8	0.0	0.0	14.1	0.0	0.0
LnGrp LOS	A		A	A		A	B			B		
Approach Vol, veh/h		523			964			24			45	
Approach Delay, s/veh		4.0			4.8			13.8			14.1	
Approach LOS		A			A			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		24.7		9.2		24.7		9.2
Change Period (Y+Rc), s		5.6		5.6		5.6		5.6
Max Green Setting (Gmax), s		32.9		75.9		32.9		75.9
Max Q Clear Time (g_c+I1), s		4.8		2.9		7.7		2.5
Green Ext Time (p_c), s		12.0		0.4		11.4		0.4

Intersection Summary	
HCM 2010 Ctrl Delay	4.9
HCM 2010 LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	19	887	21	17	782	55	13	1	24	68	2	26
Future Volume (veh/h)	19	887	21	17	782	55	13	1	24	68	2	26
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		0.99	0.99		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1845	1900	1900	1863	1900	1900	1863	1900	1900	1863	1900
Adj Flow Rate, veh/h	20	954	23	18	841	59	14	1	26	73	2	28
Adj No. of Lanes	0	2	0	0	2	0	0	1	0	0	1	0
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	3	3	3	2	2	2	2	2	2	2	2	2
Cap, veh/h	120	1718	41	119	1648	114	188	47	164	321	34	66
Arrive On Green	0.51	0.51	0.51	0.51	0.51	0.51	0.16	0.16	0.16	0.16	0.16	0.16
Sat Flow, veh/h	23	3358	80	22	3222	223	291	284	997	868	206	401
Grp Volume(v), veh/h	519	0	478	481	0	437	41	0	0	103	0	0
Grp Sat Flow(s),veh/h/ln	1798	0	1664	1814	0	1653	1572	0	0	1474	0	0
Q Serve(g_s), s	0.0	0.0	6.8	0.0	0.0	6.1	0.0	0.0	0.0	1.2	0.0	0.0
Cycle Q Clear(g_c), s	6.6	0.0	6.8	5.9	0.0	6.1	0.7	0.0	0.0	2.0	0.0	0.0
Prop In Lane	0.04		0.05	0.04		0.14	0.34		0.63	0.71		0.27
Lane Grp Cap(c), veh/h	1028	0	851	1036	0	845	398	0	0	420	0	0
V/C Ratio(X)	0.50	0.00	0.56	0.46	0.00	0.52	0.10	0.00	0.00	0.25	0.00	0.00
Avail Cap(c_a), veh/h	1183	0	1002	1192	0	996	934	0	0	929	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	5.7	0.0	5.8	5.6	0.0	5.6	12.4	0.0	0.0	12.9	0.0	0.0
Incr Delay (d2), s/veh	0.4	0.0	0.6	0.3	0.0	0.5	0.1	0.0	0.0	0.3	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.4	0.0	3.2	3.0	0.0	2.8	0.3	0.0	0.0	0.9	0.0	0.0
LnGrp Delay(d),s/veh	6.1	0.0	6.4	5.9	0.0	6.1	12.5	0.0	0.0	13.2	0.0	0.0
LnGrp LOS	A		A	A		A	B			B		
Approach Vol, veh/h		997			918			41			103	
Approach Delay, s/veh		6.2			6.0			12.5			13.2	
Approach LOS		A			A			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		23.3		11.3		23.3		11.3
Change Period (Y+Rc), s		5.6		5.6		5.6		5.6
Max Green Setting (Gmax), s		20.8		18.0		20.8		18.0
Max Q Clear Time (g_c+I1), s		8.8		4.0		8.1		2.7
Green Ext Time (p_c), s		8.8		0.6		9.3		0.6

Intersection Summary	
HCM 2010 Ctrl Delay	6.6
HCM 2010 LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	419	3	32	652	0	4	0	14	140	45	164
Future Volume (veh/h)	0	419	3	32	652	0	4	0	14	140	45	164
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	0	1792	1900	1827	1827	0	1900	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	0	517	4	40	805	0	5	0	17	173	56	202
Adj No. of Lanes	0	2	0	1	2	0	0	1	1	1	1	0
Peak Hour Factor	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81
Percent Heavy Veh, %	0	6	6	4	4	0	2	2	2	2	2	2
Cap, veh/h	0	1373	11	427	1376	0	401	0	515	451	116	417
Arrive On Green	0.00	0.40	0.40	0.40	0.40	0.00	0.33	0.00	0.33	0.33	0.33	0.33
Sat Flow, veh/h	0	3553	27	856	3563	0	683	0	1580	1388	355	1279
Grp Volume(v), veh/h	0	254	267	40	805	0	5	0	17	173	0	258
Grp Sat Flow(s),veh/h/ln	0	1703	1787	856	1736	0	683	0	1580	1388	0	1634
Q Serve(g_s), s	0.0	4.3	4.3	1.4	7.3	0.0	0.1	0.0	0.3	4.6	0.0	5.1
Cycle Q Clear(g_c), s	0.0	4.3	4.3	5.7	7.3	0.0	5.2	0.0	0.3	9.8	0.0	5.1
Prop In Lane	0.00		0.01	1.00		0.00	1.00		1.00	1.00		0.78
Lane Grp Cap(c), veh/h	0	675	708	427	1376	0	401	0	515	451	0	532
V/C Ratio(X)	0.00	0.38	0.38	0.09	0.59	0.00	0.01	0.00	0.03	0.38	0.00	0.48
Avail Cap(c_a), veh/h	0	862	905	521	1757	0	547	0	722	633	0	746
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	8.6	8.6	10.6	9.6	0.0	13.0	0.0	9.3	14.9	0.0	10.9
Incr Delay (d2), s/veh	0.0	0.3	0.3	0.1	0.4	0.0	0.0	0.0	0.0	0.5	0.0	0.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	2.0	2.1	0.3	3.5	0.0	0.0	0.0	0.1	1.8	0.0	2.4
LnGrp Delay(d),s/veh	0.0	9.0	9.0	10.7	10.0	0.0	13.0	0.0	9.3	15.4	0.0	11.6
LnGrp LOS		A	A	B	A		B		A	B		B
Approach Vol, veh/h		521			845			22			431	
Approach Delay, s/veh		9.0			10.0			10.1			13.1	
Approach LOS		A			A			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		21.6		18.7		21.6		18.7
Change Period (Y+Rc), s		5.6		5.6		5.6		5.6
Max Green Setting (Gmax), s		20.4		18.4		20.4		18.4
Max Q Clear Time (g_c+I1), s		6.3		11.8		9.3		7.2
Green Ext Time (p_c), s		7.6		1.2		6.4		1.7

Intersection Summary	
HCM 2010 Ctrl Delay	10.4
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	1023	11	27	569	0	4	0	49	272	64	147
Future Volume (veh/h)	0	1023	11	27	569	0	4	0	49	272	64	147
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	0	1863	1900	1827	1827	0	1900	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	0	1044	11	28	581	0	4	0	50	278	65	150
Adj No. of Lanes	0	2	0	1	2	0	0	1	1	1	1	0
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	0	2	2	4	4	0	2	2	2	2	2	2
Cap, veh/h	0	1556	16	246	1505	0	431	0	548	474	174	401
Arrive On Green	0.00	0.43	0.43	0.43	0.43	0.00	0.35	0.00	0.35	0.35	0.35	0.35
Sat Flow, veh/h	0	3681	38	522	3563	0	834	0	1579	1347	500	1155
Grp Volume(v), veh/h	0	515	540	28	581	0	4	0	50	278	0	215
Grp Sat Flow(s),veh/h/ln	0	1770	1856	522	1736	0	834	0	1579	1347	0	1655
Q Serve(g_s), s	0.0	11.9	11.9	2.3	5.8	0.0	0.1	0.0	1.1	10.0	0.0	5.0
Cycle Q Clear(g_c), s	0.0	11.9	11.9	14.2	5.8	0.0	5.1	0.0	1.1	15.1	0.0	5.0
Prop In Lane	0.00		0.02	1.00		0.00	1.00		1.00	1.00		0.70
Lane Grp Cap(c), veh/h	0	767	805	246	1505	0	431	0	548	474	0	575
V/C Ratio(X)	0.00	0.67	0.67	0.11	0.39	0.00	0.01	0.00	0.09	0.59	0.00	0.37
Avail Cap(c_a), veh/h	0	845	886	269	1658	0	468	0	600	518	0	628
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	11.6	11.6	17.2	9.8	0.0	14.4	0.0	11.2	18.2	0.0	12.5
Incr Delay (d2), s/veh	0.0	1.8	1.7	0.2	0.2	0.0	0.0	0.0	0.1	1.5	0.0	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	6.1	6.4	0.3	2.8	0.0	0.0	0.0	0.5	3.9	0.0	2.3
LnGrp Delay(d),s/veh	0.0	13.4	13.3	17.4	10.0	0.0	14.4	0.0	11.3	19.7	0.0	12.9
LnGrp LOS		B	B	B	B		B		B	B		B
Approach Vol, veh/h		1055			609			54			493	
Approach Delay, s/veh		13.3			10.3			11.5			16.7	
Approach LOS		B			B			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		27.8		23.3		27.8		23.3
Change Period (Y+Rc), s		5.6		5.6		5.6		5.6
Max Green Setting (Gmax), s		24.4		19.4		24.4		19.4
Max Q Clear Time (g_c+I1), s		13.9		17.1		16.2		7.1
Green Ext Time (p_c), s		7.3		0.6		6.0		2.0

Intersection Summary	
HCM 2010 Ctrl Delay	13.2
HCM 2010 LOS	B

I. Intersection Level of Service Calculations – Cumulative Without Project Conditions

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	238	579	112	269	823	489	80	720	382	566	1082	92
Future Volume (veh/h)	238	579	112	269	823	489	80	720	382	566	1082	92
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1835	1835	1835	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	251	609	0	283	866	0	84	758	0	596	1139	97
Adj No. of Lanes	1	2	1	2	2	1	1	3	1	2	3	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	283	1108	496	350	895	709	107	853	429	682	1458	124
Arrive On Green	0.16	0.31	0.00	0.10	0.26	0.00	0.06	0.17	0.00	0.20	0.31	0.31
Sat Flow, veh/h	1774	3539	1583	3390	3486	1560	1774	5085	1583	3442	4774	406
Grp Volume(v), veh/h	251	609	0	283	866	0	84	758	0	596	809	427
Grp Sat Flow(s),veh/h/ln	1774	1770	1583	1695	1743	1560	1774	1695	1583	1721	1695	1790
Q Serve(g_s), s	16.8	17.4	0.0	9.9	29.9	0.0	5.7	17.7	0.0	20.4	26.5	26.5
Cycle Q Clear(g_c), s	16.8	17.4	0.0	9.9	29.9	0.0	5.7	17.7	0.0	20.4	26.5	26.5
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.23
Lane Grp Cap(c), veh/h	283	1108	496	350	895	709	107	853	429	682	1036	547
V/C Ratio(X)	0.89	0.55	0.00	0.81	0.97	0.00	0.78	0.89	0.00	0.87	0.78	0.78
Avail Cap(c_a), veh/h	341	1108	496	588	895	709	266	908	446	911	1036	547
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	50.0	34.7	0.0	53.3	44.7	0.0	56.3	49.5	0.0	47.3	38.5	38.5
Incr Delay (d2), s/veh	20.6	0.6	0.0	4.5	22.6	0.0	11.8	10.3	0.0	7.4	3.9	7.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	9.9	8.5	0.0	4.9	17.1	0.0	3.1	9.1	0.0	10.4	12.9	14.2
LnGrp Delay(d),s/veh	70.6	35.2	0.0	57.8	67.3	0.0	68.2	59.8	0.0	54.7	42.4	45.7
LnGrp LOS	E	D		E	E		E	E		D	D	D
Approach Vol, veh/h		860			1149			842			1832	
Approach Delay, s/veh		45.6			64.9			60.6			47.2	
Approach LOS		D			E			E			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	30.9	27.2	19.4	44.2	14.1	43.9	25.5	38.0
Change Period (Y+Rc), s	6.8	6.8	6.8	6.1	6.8	6.8	6.1	6.8
Max Green Setting (Gmax), s	32.2	21.7	21.1	33.5	18.2	35.7	23.4	31.2
Max Q Clear Time (g_c+I1), s	22.4	19.7	11.9	19.4	7.7	28.5	18.8	31.9
Green Ext Time (p_c), s	1.7	0.6	0.6	4.1	0.1	5.8	0.6	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	53.7
HCM 2010 LOS	D

Notes

User approved pedestrian interval to be less than phase max green.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	130	4	108	11	9	21	31	1088	6	18	1294	257
Future Volume (veh/h)	130	4	108	11	9	21	31	1088	6	18	1294	257
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1863	1900	1863	1900	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	141	4	117	12	10	23	34	1183	7	20	1407	0
Adj No. of Lanes	0	1	1	0	1	0	1	2	0	1	2	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	305	7	377	86	79	107	85	1655	10	57	1568	701
Arrive On Green	0.24	0.24	0.24	0.24	0.24	0.24	0.05	0.46	0.46	0.03	0.44	0.00
Sat Flow, veh/h	867	31	1575	100	328	447	1774	3607	21	1774	3539	1583
Grp Volume(v), veh/h	145	0	117	45	0	0	34	580	610	20	1407	0
Grp Sat Flow(s),veh/h/ln	898	0	1575	875	0	0	1774	1770	1859	1774	1770	1583
Q Serve(g_s), s	0.1	0.0	4.5	0.2	0.0	0.0	1.4	19.3	19.3	0.8	26.8	0.0
Cycle Q Clear(g_c), s	13.3	0.0	4.5	13.4	0.0	0.0	1.4	19.3	19.3	0.8	26.8	0.0
Prop In Lane	0.97		1.00	0.27		0.51	1.00		0.01	1.00		1.00
Lane Grp Cap(c), veh/h	312	0	377	272	0	0	85	812	853	57	1568	701
V/C Ratio(X)	0.46	0.00	0.31	0.17	0.00	0.00	0.40	0.71	0.71	0.35	0.90	0.00
Avail Cap(c_a), veh/h	568	0	670	556	0	0	170	812	853	170	1568	701
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	26.1	0.0	22.8	22.1	0.0	0.0	33.7	15.9	15.9	34.6	18.8	0.0
Incr Delay (d2), s/veh	1.1	0.0	0.5	0.3	0.0	0.0	3.1	5.3	5.1	3.7	8.5	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.8	0.0	2.0	0.7	0.0	0.0	0.7	10.6	11.0	0.5	14.7	0.0
LnGrp Delay(d),s/veh	27.2	0.0	23.3	22.4	0.0	0.0	36.8	21.2	21.0	38.3	27.3	0.0
LnGrp LOS	C		C	C			D	C	C	D	C	
Approach Vol, veh/h		262			45			1224			1427	
Approach Delay, s/veh		25.5			22.4			21.5			27.4	
Approach LOS		C			C			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	9.1	40.3		23.7	10.3	39.1		23.7
Change Period (Y+Rc), s	6.8	6.8		6.1	6.8	6.8		6.1
Max Green Setting (Gmax), s	7.0	32.3		31.0	7.0	32.3		31.0
Max Q Clear Time (g_c+I1), s	2.8	21.3		15.3	3.4	28.8		15.4
Green Ext Time (p_c), s	0.0	9.9		1.3	0.0	3.3		1.3

Intersection Summary		
HCM 2010 Ctrl Delay		24.7
HCM 2010 LOS		C

Notes

User approved pedestrian interval to be less than phase max green.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	15	21	152	677	85	40	182	709	417	69	1035	12
Future Volume (veh/h)	15	21	152	677	85	40	182	709	417	69	1035	12
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	17	23	17	752	94	8	202	788	122	77	1150	13
Adj No. of Lanes	1	1	1	2	1	1	1	2	1	1	3	0
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	105	110	92	751	406	344	210	1569	695	102	1983	22
Arrive On Green	0.06	0.06	0.06	0.22	0.22	0.22	0.12	0.44	0.44	0.06	0.38	0.38
Sat Flow, veh/h	1774	1863	1561	3442	1863	1575	1774	3539	1567	1774	5183	59
Grp Volume(v), veh/h	17	23	17	752	94	8	202	788	122	77	752	411
Grp Sat Flow(s),veh/h/ln	1774	1863	1561	1721	1863	1575	1774	1770	1567	1774	1695	1852
Q Serve(g_s), s	1.0	1.3	1.1	24.0	4.6	0.4	12.5	17.5	5.2	4.7	19.4	19.4
Cycle Q Clear(g_c), s	1.0	1.3	1.1	24.0	4.6	0.4	12.5	17.5	5.2	4.7	19.4	19.4
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.03
Lane Grp Cap(c), veh/h	105	110	92	751	406	344	210	1569	695	102	1297	709
V/C Ratio(X)	0.16	0.21	0.18	1.00	0.23	0.02	0.96	0.50	0.18	0.75	0.58	0.58
Avail Cap(c_a), veh/h	355	373	312	751	406	344	210	1569	695	121	1297	709
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	49.1	49.3	49.2	43.0	35.4	33.8	48.3	21.9	18.5	51.1	26.9	26.9
Incr Delay (d2), s/veh	0.7	0.9	0.9	33.2	0.3	0.0	51.6	1.2	0.6	19.7	1.9	3.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.5	0.7	0.5	14.8	2.4	0.2	9.1	8.8	2.3	2.9	9.4	10.6
LnGrp Delay(d),s/veh	49.9	50.2	50.2	76.2	35.7	33.8	99.8	23.1	19.0	70.8	28.8	30.4
LnGrp LOS	D	D	D	F	D	C	F	C	B	E	C	C
Approach Vol, veh/h		57			854			1112			1240	
Approach Delay, s/veh		50.1			71.3			36.6			32.0	
Approach LOS		D			E			D			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	12.4	54.9		12.6	19.1	48.2		30.1
Change Period (Y+Rc), s	6.1	6.1		6.1	6.1	6.1		6.1
Max Green Setting (Gmax), s	7.5	32.1		22.0	13.0	26.6		24.0
Max Q Clear Time (g_c+I1), s	6.7	19.5		3.3	14.5	21.4		26.0
Green Ext Time (p_c), s	0.0	9.6		0.1	0.0	4.5		0.0

Intersection Summary	
HCM 2010 Ctrl Delay	44.2
HCM 2010 LOS	D

Intersection						
Int Delay, s/veh	2.4					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	34	108	1160	100	181	1827
Future Vol, veh/h	34	108	1160	100	181	1827
Conflicting Peds, #/hr	0	0	0	5	5	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	50	-	350	195	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	89	89	89	89	89	89
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	38	121	1303	112	203	2053

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	2741	657	0	0	1308	0
Stage 1	1308	-	-	-	-	-
Stage 2	1433	-	-	-	-	-
Critical Hdwy	6.84	6.94	-	-	4.14	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	-	-	2.22	-
Pot Cap-1 Maneuver	~ 16	407	-	-	525	-
Stage 1	217	-	-	-	-	-
Stage 2	186	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	~ 10	405	-	-	525	-
Mov Cap-2 Maneuver	72	-	-	-	-	-
Stage 1	216	-	-	-	-	-
Stage 2	114	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	37.6	0	1.5
HCM LOS	E		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	72	405	525	-
HCM Lane V/C Ratio	-	-	0.531	0.3	0.387	-
HCM Control Delay (s)	-	-	101.3	17.6	16.1	-
HCM Lane LOS	-	-	F	C	C	-
HCM 95th %tile Q(veh)	-	-	2.2	1.2	1.8	-

Notes

~: Volume exceeds capacity $: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	164	376	236	136	391	109	161	715	73	113	1295	201
Future Volume (veh/h)	164	376	236	136	391	109	161	715	73	113	1295	201
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.99	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1835	1835	1835	1844	1844	1881	1881	1881	1919
Adj Flow Rate, veh/h	173	396	127	143	412	0	169	753	77	119	1363	0
Adj No. of Lanes	2	1	1	1	1	1	1	3	0	1	3	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	298	510	431	177	525	446	202	1543	157	166	1594	0
Arrive On Green	0.09	0.27	0.27	0.10	0.29	0.00	0.12	0.33	0.33	0.09	0.31	0.00
Sat Flow, veh/h	3476	1881	1592	1747	1835	1560	1756	4640	471	1792	5305	0
Grp Volume(v), veh/h	173	396	127	143	412	0	169	543	287	119	1363	0
Grp Sat Flow(s),veh/h/ln	1738	1881	1592	1747	1835	1560	1756	1678	1755	1792	1712	0
Q Serve(g_s), s	4.4	17.9	5.8	7.4	19.1	0.0	8.7	11.9	12.0	6.0	23.0	0.0
Cycle Q Clear(g_c), s	4.4	17.9	5.8	7.4	19.1	0.0	8.7	11.9	12.0	6.0	23.0	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.27	1.00		0.00
Lane Grp Cap(c), veh/h	298	510	431	177	525	446	202	1116	584	166	1594	0
V/C Ratio(X)	0.58	0.78	0.29	0.81	0.78	0.00	0.84	0.49	0.49	0.72	0.85	0.00
Avail Cap(c_a), veh/h	606	593	502	356	646	549	244	1116	584	287	1702	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	40.6	31.1	26.7	40.6	30.3	0.0	40.0	24.5	24.6	40.7	29.9	0.0
Incr Delay (d2), s/veh	1.3	5.9	0.5	6.5	5.5	0.0	17.8	0.3	0.6	4.2	4.3	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.2	10.2	2.6	3.9	10.4	0.0	5.2	5.6	5.9	3.1	11.5	0.0
LnGrp Delay(d),s/veh	41.9	37.0	27.1	47.1	35.8	0.0	57.8	24.9	25.2	44.9	34.2	0.0
LnGrp LOS	D	D	C	D	D		E	C	C	D	C	
Approach Vol, veh/h		696			555			999			1482	
Approach Delay, s/veh		36.4			38.7			30.5			35.0	
Approach LOS		D			D			C			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	12.8	36.1	13.5	29.9	14.8	34.1	12.1	31.3
Change Period (Y+Rc), s	* 4.2	5.4	* 4.2	4.9	* 4.2	5.4	* 4.2	* 4.9
Max Green Setting (Gmax), s	* 15	28.6	* 19	29.1	* 13	30.6	* 16	* 33
Max Q Clear Time (g_c+I1), s	8.0	14.0	9.4	19.9	10.7	25.0	6.4	21.1
Green Ext Time (p_c), s	0.1	11.5	0.2	4.3	0.1	3.7	0.3	4.9

Intersection Summary			
HCM 2010 Ctrl Delay		34.6	
HCM 2010 LOS		C	

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	376	22	244	21	21	26	195	850	9	27	1378	458
Future Volume (veh/h)	376	22	244	21	21	26	195	850	9	27	1378	458
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1900	1863	1863	1863	1863	1900	1792	1792	1792
Adj Flow Rate, veh/h	445	0	108	24	24	0	222	966	10	31	1566	0
Adj No. of Lanes	2	0	1	0	1	1	1	2	0	1	2	1
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	6	6	6
Cap, veh/h	560	0	247	35	35	61	226	2059	21	38	1597	714
Arrive On Green	0.16	0.00	0.16	0.04	0.04	0.00	0.13	0.57	0.57	0.02	0.47	0.00
Sat Flow, veh/h	3548	0	1565	909	909	1583	1774	3589	37	1707	3406	1524
Grp Volume(v), veh/h	445	0	108	48	0	0	222	476	500	31	1566	0
Grp Sat Flow(s),veh/h/ln	1774	0	1565	1817	0	1583	1774	1770	1856	1707	1703	1524
Q Serve(g_s), s	14.4	0.0	7.5	3.1	0.0	0.0	14.9	18.8	18.8	2.2	54.0	0.0
Cycle Q Clear(g_c), s	14.4	0.0	7.5	3.1	0.0	0.0	14.9	18.8	18.8	2.2	54.0	0.0
Prop In Lane	1.00		1.00	0.50		1.00	1.00		0.02	1.00		1.00
Lane Grp Cap(c), veh/h	560	0	247	70	0	61	226	1015	1065	38	1597	714
V/C Ratio(X)	0.79	0.00	0.44	0.69	0.00	0.00	0.98	0.47	0.47	0.81	0.98	0.00
Avail Cap(c_a), veh/h	802	0	354	411	0	358	226	1015	1065	101	1597	714
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	48.4	0.0	45.5	56.7	0.0	0.0	52.0	14.9	14.9	58.1	31.2	0.0
Incr Delay (d2), s/veh	3.6	0.0	1.2	11.3	0.0	0.0	55.0	0.3	0.3	31.6	18.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.3	0.0	3.3	1.8	0.0	0.0	10.7	9.2	9.7	1.4	29.2	0.0
LnGrp Delay(d),s/veh	52.0	0.0	46.7	68.1	0.0	0.0	107.0	15.2	15.2	89.8	49.3	0.0
LnGrp LOS	D		D	E			F	B	B	F	D	
Approach Vol, veh/h		553			48			1198			1597	
Approach Delay, s/veh		51.0			68.1			32.2			50.0	
Approach LOS		D			E			C			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	9.5	75.3		24.5	22.0	62.8		10.2
Change Period (Y+Rc), s	6.8	6.8		5.6	6.8	6.8		5.6
Max Green Setting (Gmax), s	7.1	64.1		27.0	15.2	56.0		27.0
Max Q Clear Time (g_c+I1), s	4.2	20.8		16.4	16.9	56.0		5.1
Green Ext Time (p_c), s	0.0	30.8		1.6	0.0	0.0		0.2

Intersection Summary	
HCM 2010 Ctrl Delay	44.2
HCM 2010 LOS	D

Notes

User approved volume balancing among the lanes for turning movement.

Intersection												
Int Delay, s/veh	8.1											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	45	2	288	0	0	0	361	188	7	1	241	181
Future Vol, veh/h	45	2	288	0	0	0	361	188	7	1	241	181
Conflicting Peds, #/hr	0	0	0	0	0	0	5	0	7	7	0	5
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	50	-	-	-	75	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	-	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	7	7	7	2	2	2	2	2	2	2	2	2
Mvmt Flow	47	2	303	0	0	0	380	198	7	1	254	191

Major/Minor	Minor2						Major1			Major2		
Conflicting Flow All	1318	1328	354				449	0	0	212	0	0
Stage 1	356	356	-				-	-	-	-	-	-
Stage 2	962	972	-				-	-	-	-	-	-
Critical Hdwy	6.47	6.57	6.27				4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	5.47	5.57	-				-	-	-	-	-	-
Critical Hdwy Stg 2	5.47	5.57	-				-	-	-	-	-	-
Follow-up Hdwy	3.563	4.063	3.363				2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	169	152	679				1111	-	-	1358	-	-
Stage 1	698	620	-				-	-	-	-	-	-
Stage 2	363	324	-				-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	110	0	676				1111	-	-	1358	-	-
Mov Cap-2 Maneuver	110	0	-				-	-	-	-	-	-
Stage 1	694	0	-				-	-	-	-	-	-
Stage 2	238	0	-				-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	21.3	6.4	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	SBL	SBT	SBR
Capacity (veh/h)	1111	-	-	110	676	1358	-	-
HCM Lane V/C Ratio	0.342	-	-	0.45	0.448	0.001	-	-
HCM Control Delay (s)	9.9	-	-	62.1	14.6	7.7	0	-
HCM Lane LOS	A	-	-	F	B	A	A	-
HCM 95th %tile Q(veh)	1.5	-	-	1.9	2.3	0	-	-

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	691	300	848	1104	0	486
Future Volume (vph)	691	300	848	1104	0	486
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Grade (%)	-3%			-3%	-3%	
Total Lost time (s)	5.6	4.0	5.6	5.6		5.6
Lane Util. Factor	0.91	1.00	0.97	0.95		0.88
Frpb, ped/bikes	1.00	1.00	1.00	1.00		1.00
Flpb, ped/bikes	1.00	1.00	1.00	1.00		1.00
Frt	1.00	0.85	1.00	1.00		0.85
Flt Protected	1.00	1.00	0.95	1.00		1.00
Satd. Flow (prot)	5111	1591	3485	3592		2828
Flt Permitted	1.00	1.00	0.95	1.00		1.00
Satd. Flow (perm)	5111	1591	3485	3592		2828
Peak-hour factor, PHF	0.88	0.88	0.88	0.88	0.88	0.88
Adj. Flow (vph)	785	341	964	1255	0	552
RTOR Reduction (vph)	0	0	0	0	0	51
Lane Group Flow (vph)	785	341	964	1255	0	502
Confl. Peds. (#/hr)						9
Heavy Vehicles (%)	3%	3%	2%	2%	2%	2%
Turn Type	NA	Free	Prot	NA		Over
Protected Phases	6		8	2 8		8
Permitted Phases		Free				8
Actuated Green, G (s)	16.3	55.0	27.5	55.0		27.5
Effective Green, g (s)	16.3	55.0	27.5	55.0		27.5
Actuated g/C Ratio	0.30	1.00	0.50	1.00		0.50
Clearance Time (s)	5.6		5.6			5.6
Vehicle Extension (s)	3.0		3.0			3.0
Lane Grp Cap (vph)	1514	1591	1742	3592		1414
v/s Ratio Prot	c0.15		c0.28	0.35		0.18
v/s Ratio Perm		0.21				
v/c Ratio	0.52	0.21	0.55	0.35		0.35
Uniform Delay, d1	16.1	0.0	9.5	0.0		8.4
Progression Factor	1.00	1.00	1.00	1.00		1.00
Incremental Delay, d2	0.3	0.3	0.4	0.1		0.2
Delay (s)	16.4	0.3	9.9	0.1		8.5
Level of Service	B	A	A	A		A
Approach Delay (s)	11.5			4.3	8.5	
Approach LOS	B			A	A	

Intersection Summary			
HCM 2000 Control Delay	7.0	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.54		
Actuated Cycle Length (s)	55.0	Sum of lost time (s)	11.2
Intersection Capacity Utilization	56.1%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	4	573	31	204	16	871	291	211	1375	15
Future Volume (veh/h)	0	0	4	573	31	204	16	871	291	211	1375	15
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1863	1827	1827	1827	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	0	0	0	676	0	75	18	990	0	240	1562	17
Adj No. of Lanes	0	1	1	2	0	1	1	2	2	1	2	0
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	2	2	2	4	4	4	2	2	2	2	2	2
Cap, veh/h	0	2	48	844	0	373	51	1426	1123	281	1908	21
Arrive On Green	0.00	0.00	0.00	0.24	0.00	0.24	0.03	0.40	0.00	0.16	0.53	0.53
Sat Flow, veh/h	0	1863	1583	3480	0	1539	1774	3539	2787	1774	3586	39
Grp Volume(v), veh/h	0	0	0	676	0	75	18	990	0	240	770	809
Grp Sat Flow(s),veh/h/ln	0	1863	1583	1740	0	1539	1774	1770	1393	1774	1770	1856
Q Serve(g_s), s	0.0	0.0	0.0	14.2	0.0	3.0	0.8	18.1	0.0	10.3	28.1	28.2
Cycle Q Clear(g_c), s	0.0	0.0	0.0	14.2	0.0	3.0	0.8	18.1	0.0	10.3	28.1	28.2
Prop In Lane	0.00		1.00	1.00		1.00	1.00		1.00	1.00		0.02
Lane Grp Cap(c), veh/h	0	2	48	844	0	373	51	1426	1123	281	942	987
V/C Ratio(X)	0.00	0.00	0.00	0.80	0.00	0.20	0.35	0.69	0.00	0.86	0.82	0.82
Avail Cap(c_a), veh/h	0	48	87	1162	0	514	182	1572	1238	321	942	987
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	0.0	0.0	0.0	27.7	0.0	23.5	37.1	19.3	0.0	31.9	15.1	15.1
Incr Delay (d2), s/veh	0.0	0.0	0.0	2.9	0.0	0.3	4.0	1.2	0.0	17.9	5.7	5.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	0.0	7.2	0.0	1.3	0.4	9.0	0.0	6.4	15.0	15.7
LnGrp Delay(d),s/veh	0.0	0.0	0.0	30.6	0.0	23.8	41.1	20.5	0.0	49.9	20.8	20.7
LnGrp LOS				C		C	D	C		D	C	C
Approach Vol, veh/h		0			751			1008			1819	
Approach Delay, s/veh		0.0			29.9			20.8			24.6	
Approach LOS					C			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	17.4	36.5		0.0	7.4	46.5		24.0
Change Period (Y+Rc), s	5.1	5.1		3.0	5.1	5.1		5.1
Max Green Setting (Gmax), s	14.1	34.6		2.0	8.0	40.7		26.0
Max Q Clear Time (g_c+I1), s	12.3	20.1		0.0	2.8	30.2		16.2
Green Ext Time (p_c), s	0.1	11.3		0.0	0.0	9.5		2.2

Intersection Summary	
HCM 2010 Ctrl Delay	24.6
HCM 2010 LOS	C

Notes

User approved volume balancing among the lanes for turning movement.

Intersection												
Int Delay, s/veh	1.7											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	15	468	19	21	784	27	13	1	7	20	2	11
Future Vol, veh/h	15	468	19	21	784	27	13	1	7	20	2	11
Conflicting Peds, #/hr	7	0	11	11	0	7	2	0	0	0	0	2
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	88	88	88	88	88	88	88	88	88	88	88	88
Heavy Vehicles, %	6	6	6	3	3	3	14	14	14	2	2	2
Mvmt Flow	17	532	22	24	891	31	15	1	8	23	2	13

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	929	0	0	564	0	0	1084	1564	288	1262	1560	470
Stage 1	-	-	-	-	-	-	588	588	-	961	961	-
Stage 2	-	-	-	-	-	-	496	976	-	301	599	-
Critical Hdwy	4.22	-	-	4.16	-	-	7.78	6.78	7.18	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.78	5.78	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.78	5.78	-	6.54	5.54	-
Follow-up Hdwy	2.26	-	-	2.23	-	-	3.64	4.14	3.44	3.52	4.02	3.32
Pot Cap-1 Maneuver	708	-	-	997	-	-	156	99	674	127	111	540
Stage 1	-	-	-	-	-	-	433	465	-	275	333	-
Stage 2	-	-	-	-	-	-	494	302	-	683	489	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	707	-	-	997	-	-	138	89	667	116	100	535
Mov Cap-2 Maneuver	-	-	-	-	-	-	138	89	-	116	100	-
Stage 1	-	-	-	-	-	-	413	444	-	264	314	-
Stage 2	-	-	-	-	-	-	454	285	-	650	467	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.5	0.4	27.9	35.5
HCM LOS			D	E

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	181	707	-	-	997	-	-	155
HCM Lane V/C Ratio	0.132	0.024	-	-	0.024	-	-	0.242
HCM Control Delay (s)	27.9	10.2	0.2	-	8.7	0.2	-	35.5
HCM Lane LOS	D	B	A	-	A	A	-	E
HCM 95th %tile Q(veh)	0.4	0.1	-	-	0.1	-	-	0.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	18	395	83	146	725	28	88	18	130	23	11	19
Future Volume (veh/h)	18	395	83	146	725	28	88	18	130	23	11	19
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1792	1792	1900	1827	1827	1900	1900	1776	1776	1900	1827	1827
Adj Flow Rate, veh/h	20	449	94	166	824	32	100	20	0	26	12	22
Adj No. of Lanes	1	2	0	1	2	0	0	1	1	0	1	1
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	6	6	6	4	4	4	7	7	7	4	4	4
Cap, veh/h	413	1420	295	543	1724	67	357	55	260	327	119	267
Arrive On Green	0.51	0.51	0.51	0.51	0.51	0.51	0.17	0.17	0.00	0.17	0.17	0.17
Sat Flow, veh/h	617	2804	583	840	3406	132	1019	317	1509	933	692	1548
Grp Volume(v), veh/h	20	271	272	166	420	436	120	0	0	38	0	22
Grp Sat Flow(s),veh/h/ln	617	1703	1684	840	1736	1802	1336	0	1509	1625	0	1548
Q Serve(g_s), s	0.8	3.4	3.5	5.3	5.7	5.7	2.4	0.0	0.0	0.0	0.0	0.4
Cycle Q Clear(g_c), s	6.5	3.4	3.5	8.7	5.7	5.7	3.0	0.0	0.0	0.6	0.0	0.4
Prop In Lane	1.00		0.35	1.00		0.07	0.83		1.00	0.68		1.00
Lane Grp Cap(c), veh/h	413	862	853	543	879	912	412	0	260	447	0	267
V/C Ratio(X)	0.05	0.31	0.32	0.31	0.48	0.48	0.29	0.00	0.00	0.09	0.00	0.08
Avail Cap(c_a), veh/h	473	1029	1018	637	1072	1114	1160	0	1090	1258	0	1118
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	8.0	5.3	5.3	7.9	5.9	5.9	13.8	0.0	0.0	12.7	0.0	12.6
Incr Delay (d2), s/veh	0.0	0.2	0.2	0.3	0.4	0.4	0.4	0.0	0.0	0.1	0.0	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	1.6	1.6	1.2	2.8	2.9	1.1	0.0	0.0	0.3	0.0	0.2
LnGrp Delay(d),s/veh	8.0	5.5	5.5	8.2	6.3	6.2	14.1	0.0	0.0	12.8	0.0	12.8
LnGrp LOS	A	A	A	A	A	A	B			B		B
Approach Vol, veh/h		563			1022			120			60	
Approach Delay, s/veh		5.6			6.6			14.1			12.8	
Approach LOS		A			A			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		11.9		24.5		11.9		24.5
Change Period (Y+Rc), s		5.6		6.1		5.6		* 6.1
Max Green Setting (Gmax), s		26.3		22.0		26.3		* 23
Max Q Clear Time (g_c+I1), s		5.0		8.5		2.6		10.7
Green Ext Time (p_c), s		0.9		8.1		0.9		7.4

Intersection Summary	
HCM 2010 Ctrl Delay	7.0
HCM 2010 LOS	A

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Intersection												
Int Delay, s/veh	44.1											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	544	3	32	673	0	4	0	14	195	45	221
Future Vol, veh/h	0	544	3	32	673	0	4	0	14	195	45	221
Conflicting Peds, #/hr	0	0	9	6	0	0	2	0	0	0	0	2
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	240	-	-	0	-	85	120	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	88	88	88	88	88	88	88	88	88	88	88	88
Heavy Vehicles, %	6	6	6	4	4	4	2	2	2	2	2	2
Mvmt Flow	0	618	3	36	765	0	5	0	16	222	51	251

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	-	0	0	631	0	0	1112	-	320	1147	1469	384
Stage 1	-	-	-	-	-	-	629	-	-	838	838	-
Stage 2	-	-	-	-	-	-	483	-	-	309	631	-
Critical Hdwy	-	-	-	4.18	-	-	7.54	-	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	-	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	-	-	6.54	5.54	-
Follow-up Hdwy	-	-	-	2.24	-	-	3.52	-	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	0	-	-	934	-	0	163	0	676	~ 154	126	614
Stage 1	0	-	-	-	-	0	437	0	-	327	380	-
Stage 2	0	-	-	-	-	0	534	0	-	676	473	-
Platoon blocked, %		-	-		-							
Mov Cap-1 Maneuver	-	-	-	934	-	-	62	-	670	~ 146	120	613
Mov Cap-2 Maneuver	-	-	-	-	-	-	62	-	-	~ 146	120	-
Stage 1	-	-	-	-	-	-	437	-	-	327	365	-
Stage 2	-	-	-	-	-	-	260	-	-	660	469	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	0.4	23.2	164
HCM LOS			C	F

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBL	WBT	SBLn1	SBLn2
Capacity (veh/h)	62	670	-	-	934	-	146	362
HCM Lane V/C Ratio	0.073	0.024	-	-	0.039	-	1.518	0.835
HCM Control Delay (s)	67.6	10.5	-	-	9	-	$ 320.5	49.3
HCM Lane LOS	F	B	-	-	A	-	F	E
HCM 95th %tile Q(veh)	0.2	0.1	-	-	0.1	-	15	7.5

Notes

~: Volume exceeds capacity $: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon

Intersection						
Int Delay, s/veh	0.5					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	617	136	74	704	0	0
Future Vol, veh/h	617	136	74	704	0	0
Conflicting Peds, #/hr	0	10	10	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	115	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	88	88	88	88	88	88
Heavy Vehicles, %	5	5	2	2	4	4
Mvmt Flow	701	155	84	800	0	0

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	866	0	1356	438
Stage 1	-	-	-	-	788	-
Stage 2	-	-	-	-	568	-
Critical Hdwy	-	-	4.14	-	7.58	6.98
Critical Hdwy Stg 1	-	-	-	-	6.58	-
Critical Hdwy Stg 2	-	-	-	-	6.58	-
Follow-up Hdwy	-	-	2.22	-	3.54	3.34
Pot Cap-1 Maneuver	-	-	773	-	106	561
Stage 1	-	-	-	-	346	-
Stage 2	-	-	-	-	470	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	773	-	96	556
Mov Cap-2 Maneuver	-	-	-	-	96	-
Stage 1	-	-	-	-	346	-
Stage 2	-	-	-	-	419	-

Approach	EB	WB	NB
HCM Control Delay, s	0	1	0
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	-	-	-	773	-
HCM Lane V/C Ratio	-	-	-	0.109	-
HCM Control Delay (s)	0	-	-	10.2	-
HCM Lane LOS	A	-	-	B	-
HCM 95th %tile Q(veh)	-	-	-	0.4	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	210	382	25	8	492	337	23	78	3	210	56	264
Future Volume (veh/h)	210	382	25	8	492	337	23	78	3	210	56	264
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		0.99	0.99		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1900	1863	1863	1900	1863	1863	1900	1792	1792	1792
Adj Flow Rate, veh/h	233	424	28	9	547	374	26	87	3	233	62	0
Adj No. of Lanes	1	2	0	1	2	0	1	1	0	1	1	1
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	3	3	3	2	2	2	2	2	2	6	6	6
Cap, veh/h	281	1539	101	29	636	434	457	504	17	422	505	429
Arrive On Green	0.16	0.46	0.46	0.02	0.32	0.32	0.28	0.28	0.28	0.28	0.28	0.00
Sat Flow, veh/h	1757	3337	220	1774	2003	1369	1329	1790	62	1246	1792	1524
Grp Volume(v), veh/h	233	222	230	9	483	438	26	0	90	233	62	0
Grp Sat Flow(s),veh/h/ln	1757	1752	1804	1774	1770	1603	1329	0	1851	1246	1792	1524
Q Serve(g_s), s	7.9	4.8	4.8	0.3	15.7	15.8	0.9	0.0	2.3	10.7	1.6	0.0
Cycle Q Clear(g_c), s	7.9	4.8	4.8	0.3	15.7	15.8	2.5	0.0	2.3	12.9	1.6	0.0
Prop In Lane	1.00		0.12	1.00		0.85	1.00		0.03	1.00		1.00
Lane Grp Cap(c), veh/h	281	808	832	29	561	509	457	0	521	422	505	429
V/C Ratio(X)	0.83	0.27	0.28	0.31	0.86	0.86	0.06	0.00	0.17	0.55	0.12	0.00
Avail Cap(c_a), veh/h	341	808	832	202	614	556	667	0	814	619	788	670
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	25.0	10.2	10.2	29.9	19.7	19.7	17.3	0.0	16.7	21.5	16.4	0.0
Incr Delay (d2), s/veh	13.3	0.2	0.2	6.0	11.2	12.2	0.1	0.0	0.2	1.1	0.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.9	2.3	2.4	0.2	9.4	8.7	0.3	0.0	1.2	3.8	0.8	0.0
LnGrp Delay(d),s/veh	38.2	10.4	10.4	35.9	30.9	31.9	17.4	0.0	16.8	22.7	16.5	0.0
LnGrp LOS	D	B	B	D	C	C	B		B	C	B	
Approach Vol, veh/h		685			930			116			295	
Approach Delay, s/veh		19.9			31.4			16.9			21.4	
Approach LOS		B			C			B			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	6.1	33.4		21.9	14.9	24.6		21.9
Change Period (Y+Rc), s	5.1	5.1		4.6	5.1	5.1		4.6
Max Green Setting (Gmax), s	7.0	26.2		27.0	11.9	21.3		27.0
Max Q Clear Time (g_c+I1), s	2.3	6.8		14.9	9.9	17.8		4.5
Green Ext Time (p_c), s	0.0	9.1		1.4	0.1	1.7		1.7

Intersection Summary	
HCM 2010 Ctrl Delay	25.2
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	130	416	244	134	563	92	108	569	56	58	837	153
Future Volume (veh/h)	130	416	244	134	563	92	108	569	56	58	837	153
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	1.00		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1808	1808	1808	1810	1810	1810	1863	1863	1863
Adj Flow Rate, veh/h	144	462	271	149	626	102	120	632	62	64	930	170
Adj No. of Lanes	1	2	1	1	1	1	1	2	1	1	2	1
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	3	3	3	5	5	5	2	2	2
Cap, veh/h	153	1155	513	177	620	525	130	1082	483	92	1030	456
Arrive On Green	0.09	0.33	0.33	0.10	0.34	0.34	0.08	0.31	0.31	0.05	0.29	0.29
Sat Flow, veh/h	1774	3539	1572	1722	1808	1531	1723	3438	1535	1774	3539	1567
Grp Volume(v), veh/h	144	462	271	149	626	102	120	632	62	64	930	170
Grp Sat Flow(s),veh/h/ln	1774	1770	1572	1722	1808	1531	1723	1719	1535	1774	1770	1567
Q Serve(g_s), s	9.6	12.1	16.7	10.1	40.9	5.6	8.3	18.4	3.4	4.2	30.2	10.3
Cycle Q Clear(g_c), s	9.6	12.1	16.7	10.1	40.9	5.6	8.3	18.4	3.4	4.2	30.2	10.3
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	153	1155	513	177	620	525	130	1082	483	92	1030	456
V/C Ratio(X)	0.94	0.40	0.53	0.84	1.01	0.19	0.92	0.58	0.13	0.70	0.90	0.37
Avail Cap(c_a), veh/h	153	1155	513	271	620	525	130	1082	483	104	1050	465
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	54.2	31.1	32.7	52.6	39.2	27.6	54.8	34.3	29.2	55.7	40.7	33.6
Incr Delay (d2), s/veh	55.1	0.2	1.0	13.5	38.7	0.2	55.9	0.8	0.1	16.1	10.7	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.1	5.9	7.4	5.5	27.0	2.4	6.0	8.8	1.5	2.5	16.3	4.5
LnGrp Delay(d),s/veh	109.3	31.4	33.7	66.1	78.0	27.8	110.8	35.1	29.3	71.8	51.4	34.1
LnGrp LOS	F	C	C	E	F	C	F	D	C	E	D	C
Approach Vol, veh/h		877			877			814			1164	
Approach Delay, s/veh		44.9			70.1			45.8			50.0	
Approach LOS		D			E			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	12.3	43.7	18.3	45.1	15.1	40.8	16.4	47.0
Change Period (Y+Rc), s	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1
Max Green Setting (Gmax), s	7.0	37.4	18.8	32.4	9.0	35.4	10.3	40.9
Max Q Clear Time (g_c+I1), s	6.2	20.4	12.1	18.7	10.3	32.2	11.6	42.9
Green Ext Time (p_c), s	0.0	10.8	0.2	7.3	0.0	2.6	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	52.6
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	116	870	87	248	801	683	138	758	653	697	750	125
Future Volume (veh/h)	116	870	87	248	801	683	138	758	653	697	750	125
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1835	1835	1835	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	118	888	0	253	817	0	141	773	0	711	765	112
Adj No. of Lanes	1	2	1	2	2	1	1	3	1	2	3	0
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	154	964	431	319	976	437	168	1021	467	767	1474	214
Arrive On Green	0.09	0.27	0.00	0.09	0.28	0.00	0.09	0.20	0.00	0.22	0.33	0.33
Sat Flow, veh/h	1774	3539	1583	3390	3486	1560	1774	5085	1583	3442	4483	651
Grp Volume(v), veh/h	118	888	0	253	817	0	141	773	0	711	577	300
Grp Sat Flow(s),veh/h/ln	1774	1770	1583	1695	1743	1560	1774	1695	1583	1721	1695	1744
Q Serve(g_s), s	8.2	30.8	0.0	9.2	27.8	0.0	9.9	18.1	0.0	25.5	17.4	17.6
Cycle Q Clear(g_c), s	8.2	30.8	0.0	9.2	27.8	0.0	9.9	18.1	0.0	25.5	17.4	17.6
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.37
Lane Grp Cap(c), veh/h	154	964	431	319	976	437	168	1021	467	767	1114	573
V/C Ratio(X)	0.77	0.92	0.00	0.79	0.84	0.00	0.84	0.76	0.00	0.93	0.52	0.52
Avail Cap(c_a), veh/h	154	995	445	623	1320	590	285	1224	530	801	1114	573
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	56.4	44.6	0.0	56.0	42.8	0.0	56.2	47.6	0.0	48.0	34.3	34.4
Incr Delay (d2), s/veh	20.7	13.2	0.0	4.5	3.6	0.0	10.4	2.3	0.0	16.3	0.4	0.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.9	16.8	0.0	4.5	13.9	0.0	5.3	8.7	0.0	13.9	8.2	8.6
LnGrp Delay(d),s/veh	77.1	57.9	0.0	60.4	46.4	0.0	66.6	49.8	0.0	64.3	34.7	35.2
LnGrp LOS	E	E		E	D		E	D		E	C	D
Approach Vol, veh/h		1006			1070			914			1588	
Approach Delay, s/veh		60.1			49.7			52.4			48.1	
Approach LOS		E			D			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	35.0	32.1	18.7	40.5	18.8	48.3	17.0	42.1
Change Period (Y+Rc), s	6.8	6.8	6.8	6.1	6.8	6.8	6.1	6.8
Max Green Setting (Gmax), s	29.4	30.4	23.2	35.5	20.3	39.5	10.9	47.8
Max Q Clear Time (g_c+I1), s	27.5	20.1	11.2	32.8	11.9	19.6	10.2	29.8
Green Ext Time (p_c), s	0.6	4.8	0.7	1.6	0.2	11.4	0.4	5.5

Intersection Summary	
HCM 2010 Ctrl Delay	52.0
HCM 2010 LOS	D

Notes

User approved pedestrian interval to be less than phase max green.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	139	19	53	9	16	15	169	1603	13	19	627	244
Future Volume (veh/h)	139	19	53	9	16	15	169	1603	13	19	627	244
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.99	0.99		0.99	1.00		0.98	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1863	1900	1863	1900	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	142	19	54	9	16	15	172	1636	13	19	640	0
Adj No. of Lanes	0	1	1	0	1	0	1	2	0	1	2	1
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	247	29	462	62	103	70	208	1659	13	52	1320	591
Arrive On Green	0.30	0.30	0.30	0.30	0.30	0.30	0.12	0.46	0.46	0.03	0.37	0.00
Sat Flow, veh/h	588	97	1567	46	349	237	1774	3598	29	1774	3539	1583
Grp Volume(v), veh/h	161	0	54	40	0	0	172	804	845	19	640	0
Grp Sat Flow(s),veh/h/ln	685	0	1567	632	0	0	1774	1770	1857	1774	1770	1583
Q Serve(g_s), s	0.4	0.0	2.3	0.4	0.0	0.0	8.7	41.2	41.3	1.0	12.7	0.0
Cycle Q Clear(g_c), s	24.0	0.0	2.3	24.1	0.0	0.0	8.7	41.2	41.3	1.0	12.7	0.0
Prop In Lane	0.88		1.00	0.22		0.37	1.00		0.02	1.00		1.00
Lane Grp Cap(c), veh/h	276	0	462	234	0	0	208	816	856	52	1320	591
V/C Ratio(X)	0.58	0.00	0.12	0.17	0.00	0.00	0.83	0.99	0.99	0.37	0.48	0.00
Avail Cap(c_a), veh/h	337	0	530	303	0	0	348	816	856	135	1320	591
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	31.3	0.0	23.6	24.9	0.0	0.0	39.6	24.4	24.4	43.7	22.0	0.0
Incr Delay (d2), s/veh	2.0	0.0	0.1	0.3	0.0	0.0	8.1	27.8	27.4	4.3	0.3	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.1	0.0	1.0	0.8	0.0	0.0	4.7	26.2	27.4	0.5	6.3	0.0
LnGrp Delay(d),s/veh	33.2	0.0	23.7	25.3	0.0	0.0	47.7	52.2	51.9	48.0	22.3	0.0
LnGrp LOS	C		C	C			D	D	D	D	C	
Approach Vol, veh/h		215			40			1821			659	
Approach Delay, s/veh		30.8			25.3			51.6			23.0	
Approach LOS		C			C			D			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	9.5	49.1		33.4	17.6	41.0		33.4
Change Period (Y+Rc), s	6.8	6.8		6.1	6.8	6.8		6.1
Max Green Setting (Gmax), s	7.0	42.3		31.0	18.0	31.3		31.0
Max Q Clear Time (g_c+I1), s	3.0	43.3		26.0	10.7	14.7		26.1
Green Ext Time (p_c), s	0.0	0.0		0.5	0.3	13.5		0.5

Intersection Summary	
HCM 2010 Ctrl Delay	42.7
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	27	70	160	476	120	156	304	1408	661	117	1217	24
Future Volume (veh/h)	27	70	160	476	120	156	304	1408	661	117	1217	24
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.94	1.00		0.98	1.00		0.99	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	28	72	13	491	124	24	313	1452	313	121	1255	25
Adj No. of Lanes	1	1	1	2	1	1	1	2	1	1	3	0
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	149	156	125	558	302	252	336	1748	771	123	1919	38
Arrive On Green	0.08	0.08	0.08	0.16	0.16	0.16	0.19	0.49	0.49	0.07	0.37	0.37
Sat Flow, veh/h	1774	1863	1493	3442	1863	1551	1774	3539	1562	1774	5131	102
Grp Volume(v), veh/h	28	72	13	491	124	24	313	1452	313	121	829	451
Grp Sat Flow(s),veh/h/ln	1774	1863	1493	1721	1863	1551	1774	1770	1562	1774	1695	1843
Q Serve(g_s), s	1.9	4.7	1.0	17.8	7.6	1.7	22.2	45.1	16.2	8.7	25.9	26.0
Cycle Q Clear(g_c), s	1.9	4.7	1.0	17.8	7.6	1.7	22.2	45.1	16.2	8.7	25.9	26.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.06
Lane Grp Cap(c), veh/h	149	156	125	558	302	252	336	1748	771	123	1268	689
V/C Ratio(X)	0.19	0.46	0.10	0.88	0.41	0.10	0.93	0.83	0.41	0.98	0.65	0.65
Avail Cap(c_a), veh/h	305	320	257	592	320	267	337	1748	771	123	1268	689
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	54.6	55.9	54.2	52.4	48.1	45.6	51.1	27.8	20.5	59.5	33.2	33.2
Incr Delay (d2), s/veh	0.6	2.1	0.4	13.8	0.9	0.2	31.9	4.8	1.6	74.9	2.6	4.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.0	2.5	0.4	9.5	4.0	0.7	13.8	23.1	7.3	6.8	12.6	14.1
LnGrp Delay(d),s/veh	55.2	58.0	54.6	66.1	49.0	45.8	83.0	32.6	22.1	134.3	35.8	38.0
LnGrp LOS	E	E	D	E	D	D	F	C	C	F	D	D
Approach Vol, veh/h		113			639			2078			1401	
Approach Delay, s/veh		56.9			62.1			38.6			45.0	
Approach LOS		E			E			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	15.0	69.3		16.8	30.3	54.0		26.9
Change Period (Y+Rc), s	6.1	6.1		6.1	6.1	6.1		6.1
Max Green Setting (Gmax), s	8.9	50.7		22.0	24.3	35.3		22.0
Max Q Clear Time (g_c+I1), s	10.7	47.1		6.7	24.2	28.0		19.8
Green Ext Time (p_c), s	0.0	3.5		0.4	0.0	7.0		0.7

Intersection Summary	
HCM 2010 Ctrl Delay	44.8
HCM 2010 LOS	D

Intersection						
Int Delay, s/veh	1.7					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	16	28	2029	54	120	1118
Future Vol, veh/h	16	28	2029	54	120	1118
Conflicting Peds, #/hr	0	0	0	6	6	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	50	-	350	195	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	98	98	98	98	98	98
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	16	29	2070	55	122	1141

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	2891	1041	0	0	2076	0
Stage 1	2076	-	-	-	-	-
Stage 2	815	-	-	-	-	-
Critical Hdwy	6.84	6.94	-	-	4.14	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	-	-	2.22	-
Pot Cap-1 Maneuver	~ 13	227	-	-	264	-
Stage 1	82	-	-	-	-	-
Stage 2	396	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	~ 7	226	-	-	264	-
Mov Cap-2 Maneuver	57	-	-	-	-	-
Stage 1	82	-	-	-	-	-
Stage 2	213	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	48.1	0	2.9
HCM LOS	E		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	57	226	264	-
HCM Lane V/C Ratio	-	-	0.286	0.126	0.464	-
HCM Control Delay (s)	-	-	91.8	23.2	29.9	-
HCM Lane LOS	-	-	F	C	D	-
HCM 95th %tile Q(veh)	-	-	1	0.4	2.3	-

Notes

~: Volume exceeds capacity $: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	334	423	156	113	371	273	252	1349	93	160	872	192
Future Volume (veh/h)	334	423	156	113	371	273	252	1349	93	160	872	192
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	1.00		0.98	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1835	1835	1835	1844	1844	1881	1881	1881	1919
Adj Flow Rate, veh/h	341	432	67	115	379	0	257	1377	95	163	890	0
Adj No. of Lanes	2	1	1	1	1	1	1	3	0	1	3	0
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	407	527	441	142	448	381	289	1652	114	194	1479	0
Arrive On Green	0.12	0.28	0.28	0.08	0.24	0.00	0.16	0.34	0.34	0.11	0.29	0.00
Sat Flow, veh/h	3476	1881	1577	1747	1835	1560	1756	4803	331	1792	5305	0
Grp Volume(v), veh/h	341	432	67	115	379	0	257	962	510	163	890	0
Grp Sat Flow(s),veh/h/ln	1738	1881	1577	1747	1835	1560	1756	1678	1778	1792	1712	0
Q Serve(g_s), s	9.6	21.6	3.2	6.5	19.8	0.0	14.4	26.5	26.5	9.0	15.0	0.0
Cycle Q Clear(g_c), s	9.6	21.6	3.2	6.5	19.8	0.0	14.4	26.5	26.5	9.0	15.0	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.19	1.00		0.00
Lane Grp Cap(c), veh/h	407	527	441	142	448	381	289	1155	611	194	1479	0
V/C Ratio(X)	0.84	0.82	0.15	0.81	0.85	0.00	0.89	0.83	0.83	0.84	0.60	0.00
Avail Cap(c_a), veh/h	443	551	462	153	477	405	336	1180	625	228	1479	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	43.4	33.8	27.2	45.4	36.2	0.0	41.0	30.3	30.3	43.9	30.8	0.0
Incr Delay (d2), s/veh	11.9	9.5	0.2	24.4	13.0	0.0	21.2	5.2	9.3	19.6	0.7	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.3	12.5	1.4	4.1	11.6	0.0	8.7	13.0	14.5	5.5	7.2	0.0
LnGrp Delay(d),s/veh	55.3	43.3	27.4	69.8	49.2	0.0	62.2	35.5	39.6	63.5	31.5	0.0
LnGrp LOS	E	D	C	E	D		E	D	D	E	C	
Approach Vol, veh/h		840			494			1729			1053	
Approach Delay, s/veh		46.9			54.0			40.7			36.4	
Approach LOS		D			D			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	15.1	39.9	12.4	33.0	20.7	34.3	16.0	29.4
Change Period (Y+Rc), s	* 4.2	5.4	* 4.2	4.9	* 4.2	5.4	* 4.2	* 4.9
Max Green Setting (Gmax), s	* 13	35.3	* 8.8	29.4	* 19	28.9	* 13	* 26
Max Q Clear Time (g_c+I1), s	11.0	28.5	8.5	23.6	16.4	17.0	11.6	21.8
Green Ext Time (p_c), s	0.1	6.1	0.0	2.9	0.2	10.1	0.1	2.3

Intersection Summary	
HCM 2010 Ctrl Delay	42.5
HCM 2010 LOS	D

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	377	46	321	21	57	45	369	1678	25	31	772	345
Future Volume (veh/h)	377	46	321	21	57	45	369	1678	25	31	772	345
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.95	1.00		0.99	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1900	1863	1863	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	423	0	140	22	59	4	380	1730	26	32	796	0
Adj No. of Lanes	2	0	1	0	1	1	1	2	0	1	2	1
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	533	0	235	49	132	148	409	1886	28	40	1135	508
Arrive On Green	0.15	0.00	0.15	0.10	0.10	0.10	0.23	0.53	0.53	0.02	0.32	0.00
Sat Flow, veh/h	3548	0	1568	499	1339	1501	1774	3569	54	1774	3539	1583
Grp Volume(v), veh/h	423	0	140	81	0	4	380	856	900	32	796	0
Grp Sat Flow(s),veh/h/ln	1774	0	1568	1838	0	1501	1774	1770	1853	1774	1770	1583
Q Serve(g_s), s	14.3	0.0	10.3	5.2	0.0	0.3	26.0	54.8	55.2	2.2	24.5	0.0
Cycle Q Clear(g_c), s	14.3	0.0	10.3	5.2	0.0	0.3	26.0	54.8	55.2	2.2	24.5	0.0
Prop In Lane	1.00		1.00	0.27		1.00	1.00		0.03	1.00		1.00
Lane Grp Cap(c), veh/h	533	0	235	181	0	148	409	935	979	40	1135	508
V/C Ratio(X)	0.79	0.00	0.59	0.45	0.00	0.03	0.93	0.92	0.92	0.79	0.70	0.00
Avail Cap(c_a), veh/h	772	0	341	400	0	327	475	958	1003	57	1135	508
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	50.9	0.0	49.2	52.7	0.0	50.5	46.7	26.7	26.8	60.3	36.9	0.0
Incr Delay (d2), s/veh	3.6	0.0	2.4	1.7	0.0	0.1	23.0	13.0	12.9	37.5	2.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.3	0.0	4.6	2.7	0.0	0.1	15.4	30.0	31.5	1.5	12.2	0.0
LnGrp Delay(d),s/veh	54.5	0.0	51.6	54.4	0.0	50.6	69.7	39.7	39.7	97.9	38.9	0.0
LnGrp LOS	D		D	D		D	E	D	D	F	D	
Approach Vol, veh/h		563			85			2136			828	
Approach Delay, s/veh		53.8			54.3			45.0			41.2	
Approach LOS		D			D			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	9.6	72.4		24.2	35.4	46.6		17.8
Change Period (Y+Rc), s	6.8	6.8		5.6	6.8	6.8		5.6
Max Green Setting (Gmax), s	4.0	67.2		27.0	33.2	38.0		27.0
Max Q Clear Time (g_c+I1), s	4.2	57.2		16.3	28.0	26.5		7.2
Green Ext Time (p_c), s	0.0	8.3		1.6	0.6	10.3		0.3

Intersection Summary			
HCM 2010 Ctrl Delay		45.7	
HCM 2010 LOS		D	

Notes

User approved volume balancing among the lanes for turning movement.

Intersection												
Int Delay, s/veh	424.5											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	139	2	264	0	0	0	696	485	18	3	306	190
Future Vol, veh/h	139	2	264	0	0	0	696	485	18	3	306	190
Conflicting Peds, #/hr	0	0	0	0	0	0	7	0	7	7	0	7
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	50	-	-	-	75	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	-	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	96	96	96	96	96	96	96	96	96	96	96	96
Heavy Vehicles, %	6	6	6	2	2	2	2	2	2	2	2	2
Mvmt Flow	145	2	275	0	0	0	725	505	19	3	319	198

Major/Minor	Minor2						Major1			Major2		
Conflicting Flow All	2396	2412	425				524	0	0	531	0	0
Stage 1	431	431	-				-	-	-	-	-	-
Stage 2	1965	1981	-				-	-	-	-	-	-
Critical Hdwy	6.46	6.56	6.26				4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	5.46	5.56	-				-	-	-	-	-	-
Critical Hdwy Stg 2	5.46	5.56	-				-	-	-	-	-	-
Follow-up Hdwy	3.554	4.054	3.354				2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	~ 36	32	621				1043	-	-	1036	-	-
Stage 1	647	576	-				-	-	-	-	-	-
Stage 2	~ 117	104	-				-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	~ 11	0	617				1043	-	-	1036	-	-
Mov Cap-2 Maneuver	~ 11	0	-				-	-	-	-	-	-
Stage 1	640	0	-				-	-	-	-	-	-
Stage 2	~ 35	0	-				-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	$ 2177.1	9.2	0.1
HCM LOS	F		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	SBL	SBT	SBR
Capacity (veh/h)	1043	-	-	11	617	1036	-	-
HCM Lane V/C Ratio	0.695	-	-	13.352	0.446	0.003	-	-
HCM Control Delay (s)	15.9	-	-	$ 6224.5	15.4	8.5	0	-
HCM Lane LOS	C	-	-	F	C	A	A	-
HCM 95th %tile Q(veh)	5.9	-	-	19.8	2.3	0	-	-

Notes

~: Volume exceeds capacity $: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	1575	509	579	687	0	824
Future Volume (vph)	1575	509	579	687	0	824
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Grade (%)	-3%			-3%	-3%	
Total Lost time (s)	5.6	4.0	5.6	5.6		5.6
Lane Util. Factor	0.91	1.00	0.97	0.95		0.88
Frpb, ped/bikes	1.00	1.00	1.00	1.00		1.00
Flpb, ped/bikes	1.00	1.00	1.00	1.00		1.00
Frt	1.00	0.85	1.00	1.00		0.85
Flt Protected	1.00	1.00	0.95	1.00		1.00
Satd. Flow (prot)	5111	1591	3485	3592		2828
Flt Permitted	1.00	1.00	0.95	1.00		1.00
Satd. Flow (perm)	5111	1591	3485	3592		2828
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	1641	530	603	716	0	858
RTOR Reduction (vph)	0	0	0	0	0	5
Lane Group Flow (vph)	1641	530	603	716	0	853
Confl. Peds. (#/hr)						13
Heavy Vehicles (%)	3%	3%	2%	2%	2%	2%
Turn Type	NA	Free	Prot	NA		Over
Protected Phases	6		8	2 8		8
Permitted Phases		Free				8
Actuated Green, G (s)	25.2	59.8	23.4	59.8		23.4
Effective Green, g (s)	25.2	59.8	23.4	59.8		23.4
Actuated g/C Ratio	0.42	1.00	0.39	1.00		0.39
Clearance Time (s)	5.6		5.6			5.6
Vehicle Extension (s)	3.0		3.0			3.0
Lane Grp Cap (vph)	2153	1591	1363	3592		1106
v/s Ratio Prot	c0.32		0.17	0.20		c0.30
v/s Ratio Perm		0.33				
v/c Ratio	0.76	0.33	0.44	0.20		0.77
Uniform Delay, d1	14.7	0.0	13.4	0.0		15.9
Progression Factor	1.00	1.00	1.00	1.00		1.00
Incremental Delay, d2	1.6	0.6	0.2	0.0		3.4
Delay (s)	16.4	0.6	13.6	0.0		19.2
Level of Service	B	A	B	A		B
Approach Delay (s)	12.5			6.2	19.2	
Approach LOS	B			A	B	

Intersection Summary			
HCM 2000 Control Delay	11.9	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.77		
Actuated Cycle Length (s)	59.8	Sum of lost time (s)	11.2
Intersection Capacity Utilization	69.9%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	15	415	24	446	19	1774	695	327	862	26
Future Volume (veh/h)	0	0	15	415	24	446	19	1774	695	327	862	26
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.97	1.00		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1776	1776	1863	1863	1863	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	0	0	0	440	0	219	19	1810	0	334	880	27
Adj No. of Lanes	0	1	1	2	0	1	1	2	2	1	2	0
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	7	7	7	2	2	2	2	2	2	2	2	2
Cap, veh/h	0	1	41	596	0	258	47	1847	1454	351	2431	75
Arrive On Green	0.00	0.00	0.00	0.17	0.00	0.17	0.03	0.52	0.00	0.20	0.69	0.69
Sat Flow, veh/h	0	1776	1509	3548	0	1535	1774	3539	2787	1774	3505	108
Grp Volume(v), veh/h	0	0	0	440	0	219	19	1810	0	334	444	463
Grp Sat Flow(s),veh/h/ln	0	1776	1509	1774	0	1535	1774	1770	1393	1774	1770	1843
Q Serve(g_s), s	0.0	0.0	0.0	16.1	0.0	18.9	1.4	68.3	0.0	25.4	14.0	14.0
Cycle Q Clear(g_c), s	0.0	0.0	0.0	16.1	0.0	18.9	1.4	68.3	0.0	25.4	14.0	14.0
Prop In Lane	0.00		1.00	1.00		1.00	1.00		1.00	1.00		0.06
Lane Grp Cap(c), veh/h	0	1	41	596	0	258	47	1847	1454	351	1227	1278
V/C Ratio(X)	0.00	0.00	0.00	0.74	0.00	0.85	0.41	0.98	0.00	0.95	0.36	0.36
Avail Cap(c_a), veh/h	0	26	62	676	0	293	104	1860	1464	351	1227	1278
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	0.0	0.0	0.0	53.9	0.0	55.1	65.4	31.9	0.0	54.1	8.6	8.6
Incr Delay (d2), s/veh	0.0	0.0	0.0	3.7	0.0	18.6	5.6	16.3	0.0	35.4	0.2	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	0.0	8.2	0.0	9.3	0.8	37.4	0.0	15.9	6.8	7.1
LnGrp Delay(d),s/veh	0.0	0.0	0.0	57.6	0.0	73.7	71.0	48.2	0.0	89.5	8.7	8.7
LnGrp LOS				E		E	E	D		F	A	A
Approach Vol, veh/h		0			659			1829			1241	
Approach Delay, s/veh		0.0			63.0			48.4			30.5	
Approach LOS					E			D			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	32.1	76.3		0.0	8.7	99.7		28.0
Change Period (Y+Rc), s	5.1	5.1		3.0	5.1	5.1		5.1
Max Green Setting (Gmax), s	27.0	71.7		2.0	8.0	90.7		26.0
Max Q Clear Time (g_c+I1), s	27.4	70.3		0.0	3.4	16.0		20.9
Green Ext Time (p_c), s	0.0	0.9		0.0	0.0	49.2		1.2

Intersection Summary	
HCM 2010 Ctrl Delay	45.0
HCM 2010 LOS	D

Notes

User approved volume balancing among the lanes for turning movement.

Intersection												
Int Delay, s/veh	8.4											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	22	972	25	20	847	61	16	1	29	54	2	22
Future Vol, veh/h	22	972	25	20	847	61	16	1	29	54	2	22
Conflicting Peds, #/hr	10	0	8	8	0	10	6	0	1	0	0	1
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	3	3	3	2	2	2	2	2	2	2	2	2
Mvmt Flow	23	1023	26	21	892	64	17	1	31	57	2	23

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	966	0	0	1057	0	0	1586	2099	534	1535	2080	494
Stage 1	-	-	-	-	-	-	1091	1091	-	976	976	-
Stage 2	-	-	-	-	-	-	495	1008	-	559	1104	-
Critical Hdwy	4.16	-	-	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.23	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	703	-	-	655	-	-	73	51	491	79	53	521
Stage 1	-	-	-	-	-	-	229	289	-	270	327	-
Stage 2	-	-	-	-	-	-	525	316	-	481	285	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	699	-	-	654	-	-	59	43	487	64	45	513
Mov Cap-2 Maneuver	-	-	-	-	-	-	59	43	-	64	45	-
Stage 1	-	-	-	-	-	-	209	264	-	246	301	-
Stage 2	-	-	-	-	-	-	460	291	-	413	260	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.6	0.6	48.3	180.2
HCM LOS			E	F

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	130	699	-	-	654	-	-	84
HCM Lane V/C Ratio	0.372	0.033	-	-	0.032	-	-	0.977
HCM Control Delay (s)	48.3	10.3	0.4	-	10.7	0.4	-	180.2
HCM Lane LOS	E	B	A	-	B	A	-	F
HCM 95th %tile Q(veh)	1.5	0.1	-	-	0.1	-	-	5.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	18	896	103	145	645	22	236	14	143	74	14	22
Future Volume (veh/h)	18	896	103	145	645	22	236	14	143	74	14	22
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.98	0.99		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1845	1845	1900	1900	1863	1863	1900	1863	1863
Adj Flow Rate, veh/h	19	943	108	153	679	23	248	15	0	78	15	23
Adj No. of Lanes	1	2	0	1	2	0	0	1	1	0	1	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	3	3	3	2	2	2	2	2	2
Cap, veh/h	435	1793	205	299	1939	66	405	19	439	479	84	436
Arrive On Green	0.56	0.56	0.56	0.56	0.56	0.56	0.28	0.28	0.00	0.28	0.28	0.28
Sat Flow, veh/h	739	3196	366	529	3457	117	1112	67	1583	1398	305	1573
Grp Volume(v), veh/h	19	522	529	153	344	358	263	0	0	93	0	23
Grp Sat Flow(s),veh/h/ln	739	1770	1793	529	1752	1822	1180	0	1583	1702	0	1573
Q Serve(g_s), s	1.0	13.3	13.3	18.3	7.8	7.8	13.0	0.0	0.0	0.0	0.0	0.8
Cycle Q Clear(g_c), s	8.8	13.3	13.3	31.6	7.8	7.8	15.9	0.0	0.0	2.9	0.0	0.8
Prop In Lane	1.00		0.20	1.00		0.06	0.94		1.00	0.84		1.00
Lane Grp Cap(c), veh/h	435	993	1006	299	983	1022	424	0	439	564	0	436
V/C Ratio(X)	0.04	0.53	0.53	0.51	0.35	0.35	0.62	0.00	0.00	0.17	0.00	0.05
Avail Cap(c_a), veh/h	448	1025	1039	312	1027	1068	545	0	578	691	0	574
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	11.1	9.9	9.9	19.7	8.7	8.7	26.0	0.0	0.0	19.9	0.0	19.2
Incr Delay (d2), s/veh	0.0	0.5	0.5	1.4	0.2	0.2	1.5	0.0	0.0	0.1	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	6.5	6.6	2.8	3.8	3.9	5.1	0.0	0.0	1.4	0.0	0.3
LnGrp Delay(d),s/veh	11.1	10.4	10.3	21.1	8.9	8.9	27.5	0.0	0.0	20.1	0.0	19.2
LnGrp LOS	B	B	B	C	A	A	C			C		B
Approach Vol, veh/h		1070			855			263			116	
Approach Delay, s/veh		10.4			11.1			27.5			19.9	
Approach LOS		B			B			C			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		25.7		46.7		25.7		46.7
Change Period (Y+Rc), s		5.6		6.1		5.6		* 6.1
Max Green Setting (Gmax), s		26.4		41.9		26.4		* 42
Max Q Clear Time (g_c+I1), s		17.9		15.3		4.9		33.6
Green Ext Time (p_c), s		1.4		16.1		2.2		6.9

Intersection Summary

HCM 2010 Ctrl Delay	13.1
HCM 2010 LOS	B

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Intersection												
Int Delay, s/veh	228											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	1145	13	32	636	0	5	0	59	364	77	172
Future Vol, veh/h	0	1145	13	32	636	0	5	0	59	364	77	172
Conflicting Peds, #/hr	0	0	8	8	0	0	1	0	3	3	0	1
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	240	-	-	0	-	85	120	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	98	98	98	98	98	98	98	98	98	98	98	98
Heavy Vehicles, %	2	2	2	4	4	4	2	2	2	2	2	2
Mvmt Flow	0	1168	13	33	649	0	5	0	60	371	79	176

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	-	0	0	1190	0	0	1613	-	602	1301	1904	325
Stage 1	-	-	-	-	-	-	1183	-	-	714	714	-
Stage 2	-	-	-	-	-	-	430	-	-	587	1190	-
Critical Hdwy	-	-	-	4.18	-	-	7.54	-	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	-	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	-	-	6.54	5.54	-
Follow-up Hdwy	-	-	-	2.24	-	-	3.52	-	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	0	-	-	571	-	0	69	0	443	~ 118	~ 68	671
Stage 1	0	-	-	-	-	0	201	0	-	388	433	-
Stage 2	0	-	-	-	-	0	574	0	-	463	259	-
Platoon blocked, %		-	-		-							
Mov Cap-1 Maneuver	-	-	-	569	-	-	-	-	438	~ 97	~ 64	670
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	-	-	~ 97	~ 64	-
Stage 1	-	-	-	-	-	-	201	-	-	388	408	-
Stage 2	-	-	-	-	-	-	322	-	-	398	257	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	0.6		$ 930.2
HCM LOS			-	F

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBL	WBT	SBLn1	SBLn2
Capacity (veh/h)	-	438	-	-	569	-	97	171
HCM Lane V/C Ratio	-	0.137	-	-	0.057	-	3.829	1.486
HCM Control Delay (s)	-	14.5	-	-	11.7	-	$ 1363.6	296.7
HCM Lane LOS	-	B	-	-	B	-	F	F
HCM 95th %tile Q(veh)	-	0.5	-	-	0.2	-	38	16.2

Notes

~: Volume exceeds capacity $: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon

Intersection						
Int Delay, s/veh	0.7					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	1405	204	91	668	0	0
Future Vol, veh/h	1405	204	91	668	0	0
Conflicting Peds, #/hr	0	11	11	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	115	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	97	97	97	97	97	97
Heavy Vehicles, %	2	2	5	5	2	2
Mvmt Flow	1448	210	94	689	0	0

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	1670	0	2097	840
Stage 1	-	-	-	-	1565	-
Stage 2	-	-	-	-	532	-
Critical Hdwy	-	-	4.2	-	7.54	6.94
Critical Hdwy Stg 1	-	-	-	-	6.54	-
Critical Hdwy Stg 2	-	-	-	-	6.54	-
Follow-up Hdwy	-	-	2.25	-	3.52	3.32
Pot Cap-1 Maneuver	-	-	367	-	30	309
Stage 1	-	-	-	-	116	-
Stage 2	-	-	-	-	499	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	367	-	24	306
Mov Cap-2 Maneuver	-	-	-	-	24	-
Stage 1	-	-	-	-	116	-
Stage 2	-	-	-	-	371	-

Approach	EB	WB	NB
HCM Control Delay, s	0	2.2	0
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	-	-	-	367	-
HCM Lane V/C Ratio	-	-	-	0.256	-
HCM Control Delay (s)	0	-	-	18.1	-
HCM Lane LOS	A	-	-	C	-
HCM 95th %tile Q(veh)	-	-	-	1	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	369	980	56	32	429	623	52	270	43	276	53	278
Future Volume (veh/h)	369	980	56	32	429	623	52	270	43	276	53	278
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.98	1.00		0.99	0.99		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1900	1776	1776	1776
Adj Flow Rate, veh/h	377	1000	57	33	438	636	53	276	44	282	54	0
Adj No. of Lanes	1	2	0	1	2	0	1	1	0	1	1	1
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	7	7	7
Cap, veh/h	371	1552	88	75	511	449	520	554	88	287	629	534
Arrive On Green	0.21	0.46	0.46	0.04	0.29	0.29	0.35	0.35	0.35	0.35	0.35	0.00
Sat Flow, veh/h	1774	3403	194	1774	1770	1553	1341	1565	249	999	1776	1509
Grp Volume(v), veh/h	377	520	537	33	438	636	53	0	320	282	54	0
Grp Sat Flow(s),veh/h/ln	1774	1770	1827	1774	1770	1553	1341	0	1814	999	1776	1509
Q Serve(g_s), s	20.9	22.6	22.6	1.8	23.4	28.9	2.7	0.0	13.8	21.6	2.0	0.0
Cycle Q Clear(g_c), s	20.9	22.6	22.6	1.8	23.4	28.9	4.8	0.0	13.8	35.4	2.0	0.0
Prop In Lane	1.00		0.11	1.00		1.00	1.00		0.14	1.00		1.00
Lane Grp Cap(c), veh/h	371	807	833	75	511	449	520	0	642	287	629	534
V/C Ratio(X)	1.02	0.64	0.64	0.44	0.86	1.42	0.10	0.00	0.50	0.98	0.09	0.00
Avail Cap(c_a), veh/h	371	807	833	124	511	449	520	0	642	287	629	534
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	39.5	21.0	21.0	46.8	33.6	35.6	23.1	0.0	25.3	41.8	21.5	0.0
Incr Delay (d2), s/veh	51.1	1.8	1.7	4.1	13.5	200.4	0.1	0.0	0.6	47.8	0.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	15.5	11.4	11.7	1.0	13.3	37.3	1.0	0.0	7.0	11.6	1.0	0.0
LnGrp Delay(d),s/veh	90.7	22.7	22.7	50.8	47.1	235.9	23.2	0.0	25.9	89.6	21.6	0.0
LnGrp LOS	F	C	C	D	D	F	C		C	F	C	
Approach Vol, veh/h		1434			1107			373			336	
Approach Delay, s/veh		40.6			155.7			25.5			78.6	
Approach LOS		D			F			C			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	9.3	50.7		40.0	26.0	34.0		40.0
Change Period (Y+Rc), s	5.1	5.1		4.6	5.1	5.1		4.6
Max Green Setting (Gmax), s	7.0	42.8		35.4	20.9	28.9		35.4
Max Q Clear Time (g_c+I1), s	3.8	24.6		37.4	22.9	30.9		15.8
Green Ext Time (p_c), s	0.0	13.4		0.0	0.0	0.0		3.8

Intersection Summary		
HCM 2010 Ctrl Delay		82.0
HCM 2010 LOS		F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	87	799	135	241	570	194	129	869	82	153	627	308
Future Volume (veh/h)	87	799	135	241	570	194	129	869	82	153	627	308
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.99	1.00		0.99	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1825	1825	1825	1845	1845	1845	1810	1810	1810
Adj Flow Rate, veh/h	91	832	141	251	594	202	134	905	85	159	653	321
Adj No. of Lanes	1	2	1	1	1	1	1	2	1	1	2	1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	3	3	3	5	5	5
Cap, veh/h	111	920	404	275	649	548	160	988	440	183	1022	444
Arrive On Green	0.06	0.26	0.26	0.16	0.36	0.36	0.09	0.28	0.28	0.11	0.30	0.30
Sat Flow, veh/h	1774	3539	1556	1739	1825	1540	1757	3505	1560	1723	3438	1494
Grp Volume(v), veh/h	91	832	141	251	594	202	134	905	85	159	653	321
Grp Sat Flow(s),veh/h/ln	1774	1770	1556	1739	1825	1540	1757	1752	1560	1723	1719	1494
Q Serve(g_s), s	6.4	28.7	9.3	17.9	39.2	12.3	9.5	31.5	5.2	11.5	20.8	24.3
Cycle Q Clear(g_c), s	6.4	28.7	9.3	17.9	39.2	12.3	9.5	31.5	5.2	11.5	20.8	24.3
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	111	920	404	275	649	548	160	988	440	183	1022	444
V/C Ratio(X)	0.82	0.90	0.35	0.91	0.91	0.37	0.84	0.92	0.19	0.87	0.64	0.72
Avail Cap(c_a), veh/h	111	923	406	288	664	560	221	1053	468	190	1022	444
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	58.4	45.2	38.0	52.2	38.8	30.2	56.4	43.9	34.4	55.5	38.5	39.7
Incr Delay (d2), s/veh	36.4	12.2	0.5	30.4	17.2	0.4	17.8	11.8	0.2	31.3	1.3	5.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.3	15.5	4.1	11.0	22.9	5.3	5.4	16.8	2.3	7.1	10.1	10.7
LnGrp Delay(d),s/veh	94.8	57.4	38.5	82.6	56.0	30.6	74.3	55.6	34.6	86.8	39.8	45.4
LnGrp LOS	F	E	D	F	E	C	E	E	C	F	D	D
Approach Vol, veh/h		1064			1047			1124			1133	
Approach Delay, s/veh		58.1			57.5			56.3			48.0	
Approach LOS		E			E			E			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	19.5	41.7	26.1	38.9	17.6	43.6	14.0	51.0
Change Period (Y+Rc), s	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1
Max Green Setting (Gmax), s	13.9	37.9	20.9	32.9	15.9	35.9	7.9	45.9
Max Q Clear Time (g_c+I1), s	13.5	33.5	19.9	30.7	11.5	26.3	8.4	41.2
Green Ext Time (p_c), s	0.0	2.0	0.1	1.8	0.1	7.3	0.0	3.7

Intersection Summary	
HCM 2010 Ctrl Delay	54.9
HCM 2010 LOS	D

J. Intersection Level of Service Calculations – Cumulative Plus Project Conditions

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	238	579	112	276	823	489	80	721	383	566	1090	92
Future Volume (veh/h)	238	579	112	276	823	489	80	721	383	566	1090	92
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1835	1835	1835	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	251	609	0	291	866	0	84	759	0	596	1147	97
Adj No. of Lanes	1	2	1	2	2	1	1	3	1	2	3	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	283	1099	492	358	894	709	107	854	433	682	1460	123
Arrive On Green	0.16	0.31	0.00	0.11	0.26	0.00	0.06	0.17	0.00	0.20	0.31	0.31
Sat Flow, veh/h	1774	3539	1583	3390	3486	1560	1774	5085	1583	3442	4777	404
Grp Volume(v), veh/h	251	609	0	291	866	0	84	759	0	596	814	430
Grp Sat Flow(s),veh/h/ln	1774	1770	1583	1695	1743	1560	1774	1695	1583	1721	1695	1791
Q Serve(g_s), s	16.8	17.4	0.0	10.2	29.9	0.0	5.7	17.8	0.0	20.4	26.7	26.7
Cycle Q Clear(g_c), s	16.8	17.4	0.0	10.2	29.9	0.0	5.7	17.8	0.0	20.4	26.7	26.7
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.23
Lane Grp Cap(c), veh/h	283	1099	492	358	894	709	107	854	433	682	1036	547
V/C Ratio(X)	0.89	0.55	0.00	0.81	0.97	0.00	0.78	0.89	0.00	0.87	0.79	0.79
Avail Cap(c_a), veh/h	341	1099	492	588	894	709	265	907	450	911	1036	547
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	50.0	34.9	0.0	53.2	44.7	0.0	56.4	49.5	0.0	47.3	38.6	38.6
Incr Delay (d2), s/veh	20.6	0.6	0.0	4.5	22.6	0.0	11.8	10.4	0.0	7.4	4.1	7.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	9.9	8.6	0.0	5.0	17.2	0.0	3.1	9.1	0.0	10.4	13.0	14.3
LnGrp Delay(d),s/veh	70.7	35.5	0.0	57.7	67.3	0.0	68.2	59.9	0.0	54.7	42.6	46.1
LnGrp LOS	E	D		E	E		E	E		D	D	D
Approach Vol, veh/h		860			1157			843			1840	
Approach Delay, s/veh		45.8			64.9			60.7			47.4	
Approach LOS		D			E			E			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	30.9	27.2	19.7	43.9	14.1	44.0	25.5	38.0
Change Period (Y+Rc), s	6.8	6.8	6.8	6.1	6.8	6.8	6.1	6.8
Max Green Setting (Gmax), s	32.2	21.7	21.1	33.5	18.2	35.7	23.4	31.2
Max Q Clear Time (g_c+I1), s	22.4	19.8	12.2	19.4	7.7	28.7	18.8	31.9
Green Ext Time (p_c), s	1.7	0.6	0.6	4.1	0.1	5.7	0.6	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	53.8
HCM 2010 LOS	D

Notes

User approved pedestrian interval to be less than phase max green.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	130	4	108	11	9	21	31	1090	6	18	1309	257
Future Volume (veh/h)	130	4	108	11	9	21	31	1090	6	18	1309	257
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1863	1900	1863	1900	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	141	4	117	12	10	23	34	1185	7	20	1423	0
Adj No. of Lanes	0	1	1	0	1	0	1	2	0	1	2	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	305	7	377	86	79	107	85	1655	10	57	1568	701
Arrive On Green	0.24	0.24	0.24	0.24	0.24	0.24	0.05	0.46	0.46	0.03	0.44	0.00
Sat Flow, veh/h	867	31	1575	100	328	447	1774	3607	21	1774	3539	1583
Grp Volume(v), veh/h	145	0	117	45	0	0	34	581	611	20	1423	0
Grp Sat Flow(s),veh/h/ln	898	0	1575	875	0	0	1774	1770	1859	1774	1770	1583
Q Serve(g_s), s	0.1	0.0	4.5	0.2	0.0	0.0	1.4	19.3	19.3	0.8	27.3	0.0
Cycle Q Clear(g_c), s	13.3	0.0	4.5	13.4	0.0	0.0	1.4	19.3	19.3	0.8	27.3	0.0
Prop In Lane	0.97		1.00	0.27		0.51	1.00		0.01	1.00		1.00
Lane Grp Cap(c), veh/h	312	0	377	272	0	0	85	812	853	57	1568	701
V/C Ratio(X)	0.46	0.00	0.31	0.17	0.00	0.00	0.40	0.72	0.72	0.35	0.91	0.00
Avail Cap(c_a), veh/h	568	0	670	556	0	0	170	812	853	170	1568	701
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	26.1	0.0	22.8	22.1	0.0	0.0	33.7	15.9	15.9	34.6	18.9	0.0
Incr Delay (d2), s/veh	1.1	0.0	0.5	0.3	0.0	0.0	3.1	5.4	5.1	3.7	9.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.8	0.0	2.0	0.7	0.0	0.0	0.7	10.6	11.1	0.5	15.3	0.0
LnGrp Delay(d),s/veh	27.2	0.0	23.3	22.4	0.0	0.0	36.8	21.3	21.0	38.3	28.2	0.0
LnGrp LOS	C		C	C			D	C	C	D	C	
Approach Vol, veh/h		262			45			1226			1443	
Approach Delay, s/veh		25.5			22.4			21.6			28.3	
Approach LOS		C			C			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	9.1	40.3		23.7	10.3	39.1		23.7
Change Period (Y+Rc), s	6.8	6.8		6.1	6.8	6.8		6.1
Max Green Setting (Gmax), s	7.0	32.3		31.0	7.0	32.3		31.0
Max Q Clear Time (g_c+I1), s	2.8	21.3		15.3	3.4	29.3		15.4
Green Ext Time (p_c), s	0.0	9.9		1.3	0.0	2.8		1.3

Intersection Summary	
HCM 2010 Ctrl Delay	25.2
HCM 2010 LOS	C

Notes

User approved pedestrian interval to be less than phase max green.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	15	21	152	677	85	40	182	710	417	69	1041	12
Future Volume (veh/h)	15	21	152	677	85	40	182	710	417	69	1041	12
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	17	23	17	752	94	8	202	789	122	77	1157	13
Adj No. of Lanes	1	1	1	2	1	1	1	2	1	1	3	0
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	105	110	92	751	406	344	210	1569	695	102	1983	22
Arrive On Green	0.06	0.06	0.06	0.22	0.22	0.22	0.12	0.44	0.44	0.06	0.38	0.38
Sat Flow, veh/h	1774	1863	1561	3442	1863	1575	1774	3539	1567	1774	5184	58
Grp Volume(v), veh/h	17	23	17	752	94	8	202	789	122	77	757	413
Grp Sat Flow(s),veh/h/ln	1774	1863	1561	1721	1863	1575	1774	1770	1567	1774	1695	1852
Q Serve(g_s), s	1.0	1.3	1.1	24.0	4.6	0.4	12.5	17.6	5.2	4.7	19.5	19.5
Cycle Q Clear(g_c), s	1.0	1.3	1.1	24.0	4.6	0.4	12.5	17.6	5.2	4.7	19.5	19.5
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.03
Lane Grp Cap(c), veh/h	105	110	92	751	406	344	210	1569	695	102	1297	709
V/C Ratio(X)	0.16	0.21	0.18	1.00	0.23	0.02	0.96	0.50	0.18	0.75	0.58	0.58
Avail Cap(c_a), veh/h	355	373	312	751	406	344	210	1569	695	121	1297	709
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	49.1	49.3	49.2	43.0	35.4	33.8	48.3	21.9	18.5	51.1	27.0	27.0
Incr Delay (d2), s/veh	0.7	0.9	0.9	33.2	0.3	0.0	51.6	1.2	0.6	19.7	1.9	3.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.5	0.7	0.5	14.8	2.4	0.2	9.1	8.8	2.3	2.9	9.5	10.7
LnGrp Delay(d),s/veh	49.9	50.2	50.2	76.2	35.7	33.8	99.8	23.1	19.0	70.8	28.9	30.5
LnGrp LOS	D	D	D	F	D	C	F	C	B	E	C	C
Approach Vol, veh/h		57			854			1113			1247	
Approach Delay, s/veh		50.1			71.3			36.6			32.0	
Approach LOS		D			E			D			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	12.4	54.9		12.6	19.1	48.2		30.1
Change Period (Y+Rc), s	6.1	6.1		6.1	6.1	6.1		6.1
Max Green Setting (Gmax), s	7.5	32.1		22.0	13.0	26.6		24.0
Max Q Clear Time (g_c+I1), s	6.7	19.6		3.3	14.5	21.5		26.0
Green Ext Time (p_c), s	0.0	9.6		0.1	0.0	4.3		0.0

Intersection Summary	
HCM 2010 Ctrl Delay	44.2
HCM 2010 LOS	D

Intersection						
Int Delay, s/veh	2.4					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	34	108	1162	100	181	1842
Future Vol, veh/h	34	108	1162	100	181	1842
Conflicting Peds, #/hr	0	0	0	5	5	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	50	-	350	195	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	89	89	89	89	89	89
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	38	121	1306	112	203	2070

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	2753	658	0	0	1311	0
Stage 1	1311	-	-	-	-	-
Stage 2	1442	-	-	-	-	-
Critical Hdwy	6.84	6.94	-	-	4.14	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	-	-	2.22	-
Pot Cap-1 Maneuver	~ 16	407	-	-	524	-
Stage 1	216	-	-	-	-	-
Stage 2	184	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	~ 10	405	-	-	524	-
Mov Cap-2 Maneuver	72	-	-	-	-	-
Stage 1	215	-	-	-	-	-
Stage 2	113	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	37.6	0	1.4
HCM LOS	E		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	72	405	524	-
HCM Lane V/C Ratio	-	-	0.531	0.3	0.388	-
HCM Control Delay (s)	-	-	101.3	17.6	16.2	-
HCM Lane LOS	-	-	F	C	C	-
HCM 95th %tile Q(veh)	-	-	2.2	1.2	1.8	-

Notes

~: Volume exceeds capacity $: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	164	378	236	136	391	111	161	715	73	126	1295	201
Future Volume (veh/h)	164	378	236	136	391	111	161	715	73	126	1295	201
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.99	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1835	1835	1835	1844	1844	1881	1881	1881	1919
Adj Flow Rate, veh/h	173	398	127	143	412	0	169	753	77	133	1363	0
Adj No. of Lanes	2	1	1	1	1	1	1	3	0	1	3	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	295	509	431	176	525	446	202	1552	158	168	1608	0
Arrive On Green	0.08	0.27	0.27	0.10	0.29	0.00	0.11	0.33	0.33	0.09	0.31	0.00
Sat Flow, veh/h	3476	1881	1592	1747	1835	1560	1756	4640	471	1792	5305	0
Grp Volume(v), veh/h	173	398	127	143	412	0	169	543	287	133	1363	0
Grp Sat Flow(s),veh/h/ln	1738	1881	1592	1747	1835	1560	1756	1678	1755	1792	1712	0
Q Serve(g_s), s	4.5	18.2	5.9	7.5	19.2	0.0	8.8	12.0	12.1	6.8	23.1	0.0
Cycle Q Clear(g_c), s	4.5	18.2	5.9	7.5	19.2	0.0	8.8	12.0	12.1	6.8	23.1	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.27	1.00		0.00
Lane Grp Cap(c), veh/h	295	509	431	176	525	446	202	1122	587	168	1608	0
V/C Ratio(X)	0.59	0.78	0.29	0.81	0.78	0.00	0.84	0.48	0.49	0.79	0.85	0.00
Avail Cap(c_a), veh/h	567	588	498	336	640	544	241	1122	587	302	1737	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	41.0	31.4	26.9	41.0	30.6	0.0	40.4	24.6	24.7	41.3	29.9	0.0
Incr Delay (d2), s/veh	1.4	6.2	0.5	6.6	5.6	0.0	18.2	0.3	0.6	6.2	3.9	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.2	10.3	2.6	3.9	10.5	0.0	5.3	5.6	5.9	3.7	11.4	0.0
LnGrp Delay(d),s/veh	42.4	37.7	27.4	47.6	36.2	0.0	58.6	24.9	25.3	47.5	33.8	0.0
LnGrp LOS	D	D	C	D	D		E	C	C	D	C	
Approach Vol, veh/h		698			555			999			1496	
Approach Delay, s/veh		37.0			39.1			30.7			35.0	
Approach LOS		D			D			C			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	12.9	36.5	13.6	30.1	14.9	34.5	12.1	31.6
Change Period (Y+Rc), s	* 4.2	5.4	* 4.2	4.9	* 4.2	5.4	* 4.2	* 4.9
Max Green Setting (Gmax), s	* 16	28.6	* 18	29.1	* 13	31.5	* 15	* 33
Max Q Clear Time (g_c+I1), s	8.8	14.1	9.5	20.2	10.8	25.1	6.5	21.2
Green Ext Time (p_c), s	0.1	11.5	0.2	4.2	0.1	4.0	0.3	4.9

Intersection Summary	
HCM 2010 Ctrl Delay	34.8
HCM 2010 LOS	C

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	376	37	244	23	23	28	195	850	18	42	1378	458
Future Volume (veh/h)	376	37	244	23	23	28	195	850	18	42	1378	458
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1900	1863	1863	1863	1863	1900	1792	1792	1792
Adj Flow Rate, veh/h	457	0	108	26	26	2	222	966	20	48	1566	0
Adj No. of Lanes	2	0	1	0	1	1	1	2	0	1	2	1
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	6	6	6
Cap, veh/h	570	0	251	38	38	66	224	1971	41	61	1584	709
Arrive On Green	0.16	0.00	0.16	0.04	0.04	0.04	0.13	0.56	0.56	0.04	0.47	0.00
Sat Flow, veh/h	3548	0	1566	909	909	1572	1774	3546	73	1707	3406	1524
Grp Volume(v), veh/h	457	0	108	52	0	2	222	482	504	48	1566	0
Grp Sat Flow(s),veh/h/ln	1774	0	1566	1817	0	1572	1774	1770	1850	1707	1703	1524
Q Serve(g_s), s	14.9	0.0	7.5	3.4	0.0	0.1	15.0	20.0	20.0	3.4	54.8	0.0
Cycle Q Clear(g_c), s	14.9	0.0	7.5	3.4	0.0	0.1	15.0	20.0	20.0	3.4	54.8	0.0
Prop In Lane	1.00		1.00	0.50		1.00	1.00		0.04	1.00		1.00
Lane Grp Cap(c), veh/h	570	0	251	76	0	66	224	984	1028	61	1584	709
V/C Ratio(X)	0.80	0.00	0.43	0.68	0.00	0.03	0.99	0.49	0.49	0.79	0.99	0.00
Avail Cap(c_a), veh/h	796	0	351	408	0	353	224	984	1028	101	1584	709
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	48.7	0.0	45.6	56.9	0.0	55.3	52.5	16.3	16.3	57.6	31.9	0.0
Incr Delay (d2), s/veh	4.1	0.0	1.2	10.2	0.0	0.2	57.5	0.4	0.4	19.8	19.8	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.6	0.0	3.3	1.9	0.0	0.1	10.9	9.9	10.3	1.9	30.0	0.0
LnGrp Delay(d),s/veh	52.8	0.0	46.7	67.1	0.0	55.5	110.0	16.7	16.7	77.4	51.7	0.0
LnGrp LOS	D		D	E		E	F	B	B	E	D	
Approach Vol, veh/h		565			54			1208			1614	
Approach Delay, s/veh		51.6			66.7			33.8			52.5	
Approach LOS		D			E			C			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	11.1	73.7		24.9	22.0	62.8		10.6
Change Period (Y+Rc), s	6.8	6.8		5.6	6.8	6.8		5.6
Max Green Setting (Gmax), s	7.1	64.1		27.0	15.2	56.0		27.0
Max Q Clear Time (g_c+I1), s	5.4	22.0		16.9	17.0	56.8		5.4
Green Ext Time (p_c), s	0.0	30.2		1.6	0.0	0.0		0.2

Intersection Summary	
HCM 2010 Ctrl Delay	46.0
HCM 2010 LOS	D

Notes

User approved volume balancing among the lanes for turning movement.

Intersection												
Int Delay, s/veh	8.2											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	45	2	299	0	0	0	361	188	7	1	241	181
Future Vol, veh/h	45	2	299	0	0	0	361	188	7	1	241	181
Conflicting Peds, #/hr	0	0	0	0	0	0	5	0	7	7	0	5
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	50	-	-	-	75	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	-	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	7	7	7	2	2	2	2	2	2	2	2	2
Mvmt Flow	47	2	315	0	0	0	380	198	7	1	254	191

Major/Minor	Minor2						Major1			Major2		
Conflicting Flow All	1318	1328	354				449	0	0	212	0	0
Stage 1	356	356	-				-	-	-	-	-	-
Stage 2	962	972	-				-	-	-	-	-	-
Critical Hdwy	6.47	6.57	6.27				4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	5.47	5.57	-				-	-	-	-	-	-
Critical Hdwy Stg 2	5.47	5.57	-				-	-	-	-	-	-
Follow-up Hdwy	3.563	4.063	3.363				2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	169	152	679				1111	-	-	1358	-	-
Stage 1	698	620	-				-	-	-	-	-	-
Stage 2	363	324	-				-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	110	0	676				1111	-	-	1358	-	-
Mov Cap-2 Maneuver	110	0	-				-	-	-	-	-	-
Stage 1	694	0	-				-	-	-	-	-	-
Stage 2	238	0	-				-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	21.3	6.4	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	SBL	SBT	SBR
Capacity (veh/h)	1111	-	-	110	676	1358	-	-
HCM Lane V/C Ratio	0.342	-	-	0.45	0.466	0.001	-	-
HCM Control Delay (s)	9.9	-	-	62.1	14.9	7.7	0	-
HCM Lane LOS	A	-	-	F	B	A	A	-
HCM 95th %tile Q(veh)	1.5	-	-	1.9	2.5	0	-	-

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	701	300	849	1106	0	494
Future Volume (vph)	701	300	849	1106	0	494
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Grade (%)	-3%			-3%	-3%	
Total Lost time (s)	5.6	4.0	5.6	5.6		5.6
Lane Util. Factor	0.91	1.00	0.97	0.95		0.88
Frpb, ped/bikes	1.00	1.00	1.00	1.00		1.00
Flpb, ped/bikes	1.00	1.00	1.00	1.00		1.00
Frt	1.00	0.85	1.00	1.00		0.85
Flt Protected	1.00	1.00	0.95	1.00		1.00
Satd. Flow (prot)	5111	1591	3485	3592		2828
Flt Permitted	1.00	1.00	0.95	1.00		1.00
Satd. Flow (perm)	5111	1591	3485	3592		2828
Peak-hour factor, PHF	0.88	0.88	0.88	0.88	0.88	0.88
Adj. Flow (vph)	797	341	965	1257	0	561
RTOR Reduction (vph)	0	0	0	0	0	48
Lane Group Flow (vph)	797	341	965	1257	0	513
Confl. Peds. (#/hr)						9
Heavy Vehicles (%)	3%	3%	2%	2%	2%	2%
Turn Type	NA	Free	Prot	NA		Over
Protected Phases	6		8	2 8		8
Permitted Phases		Free				8
Actuated Green, G (s)	16.3	55.0	27.5	55.0		27.5
Effective Green, g (s)	16.3	55.0	27.5	55.0		27.5
Actuated g/C Ratio	0.30	1.00	0.50	1.00		0.50
Clearance Time (s)	5.6		5.6			5.6
Vehicle Extension (s)	3.0		3.0			3.0
Lane Grp Cap (vph)	1514	1591	1742	3592		1414
v/s Ratio Prot	c0.16		c0.28	0.35		0.18
v/s Ratio Perm		0.21				
v/c Ratio	0.53	0.21	0.55	0.35		0.36
Uniform Delay, d1	16.1	0.0	9.5	0.0		8.4
Progression Factor	1.00	1.00	1.00	1.00		1.00
Incremental Delay, d2	0.3	0.3	0.4	0.1		0.2
Delay (s)	16.5	0.3	9.9	0.1		8.6
Level of Service	B	A	A	A		A
Approach Delay (s)	11.6			4.3	8.6	
Approach LOS	B			A	A	

Intersection Summary			
HCM 2000 Control Delay	7.1	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.54		
Actuated Cycle Length (s)	55.0	Sum of lost time (s)	11.2
Intersection Capacity Utilization	56.4%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	4	574	31	204	16	880	300	211	1377	15
Future Volume (veh/h)	0	0	4	574	31	204	16	880	300	211	1377	15
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1863	1827	1827	1827	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	0	0	0	677	0	75	18	1000	0	240	1565	17
Adj No. of Lanes	0	1	1	2	0	1	1	2	2	1	2	0
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	2	2	2	4	4	4	2	2	2	2	2	2
Cap, veh/h	0	2	48	844	0	374	51	1426	1123	281	1908	21
Arrive On Green	0.00	0.00	0.00	0.24	0.00	0.24	0.03	0.40	0.00	0.16	0.53	0.53
Sat Flow, veh/h	0	1863	1583	3480	0	1539	1774	3539	2787	1774	3586	39
Grp Volume(v), veh/h	0	0	0	677	0	75	18	1000	0	240	772	810
Grp Sat Flow(s),veh/h/ln	0	1863	1583	1740	0	1539	1774	1770	1393	1774	1770	1856
Q Serve(g_s), s	0.0	0.0	0.0	14.3	0.0	3.0	0.8	18.3	0.0	10.3	28.2	28.3
Cycle Q Clear(g_c), s	0.0	0.0	0.0	14.3	0.0	3.0	0.8	18.3	0.0	10.3	28.2	28.3
Prop In Lane	0.00		1.00	1.00		1.00	1.00		1.00	1.00		0.02
Lane Grp Cap(c), veh/h	0	2	48	844	0	374	51	1426	1123	281	942	987
V/C Ratio(X)	0.00	0.00	0.00	0.80	0.00	0.20	0.35	0.70	0.00	0.86	0.82	0.82
Avail Cap(c_a), veh/h	0	48	87	1160	0	513	182	1571	1237	321	942	987
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	0.0	0.0	0.0	27.8	0.0	23.5	37.1	19.4	0.0	32.0	15.1	15.2
Incr Delay (d2), s/veh	0.0	0.0	0.0	2.9	0.0	0.3	4.0	1.3	0.0	18.0	5.8	5.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	0.0	7.2	0.0	1.3	0.4	9.1	0.0	6.4	15.0	15.9
LnGrp Delay(d),s/veh	0.0	0.0	0.0	30.7	0.0	23.8	41.2	20.6	0.0	49.9	20.9	20.8
LnGrp LOS				C		C	D	C		D	C	C
Approach Vol, veh/h		0			752			1018			1822	
Approach Delay, s/veh		0.0			30.0			21.0			24.7	
Approach LOS					C			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	17.4	36.5		0.0	7.4	46.6		24.0
Change Period (Y+Rc), s	5.1	5.1		3.0	5.1	5.1		5.1
Max Green Setting (Gmax), s	14.1	34.6		2.0	8.0	40.7		26.0
Max Q Clear Time (g_c+I1), s	12.3	20.3		0.0	2.8	30.3		16.3
Green Ext Time (p_c), s	0.1	11.1		0.0	0.0	9.4		2.2

Intersection Summary	
HCM 2010 Ctrl Delay	24.7
HCM 2010 LOS	C

Notes

User approved volume balancing among the lanes for turning movement.

Intersection												
Int Delay, s/veh	2.1											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	24	468	19	21	784	53	13	1	7	24	2	12
Future Vol, veh/h	24	468	19	21	784	53	13	1	7	24	2	12
Conflicting Peds, #/hr	7	0	11	11	0	7	2	0	0	0	0	2
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	88	88	88	88	88	88	88	88	88	88	88	88
Heavy Vehicles, %	6	6	6	3	3	3	14	14	14	2	2	2
Mvmt Flow	27	532	22	24	891	60	15	1	8	27	2	14

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	958	0	0	564	0	0	1104	1614	288	1297	1595	485
Stage 1	-	-	-	-	-	-	608	608	-	976	976	-
Stage 2	-	-	-	-	-	-	496	1006	-	321	619	-
Critical Hdwy	4.22	-	-	4.16	-	-	7.78	6.78	7.18	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.78	5.78	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.78	5.78	-	6.54	5.54	-
Follow-up Hdwy	2.26	-	-	2.23	-	-	3.64	4.14	3.44	3.52	4.02	3.32
Pot Cap-1 Maneuver	690	-	-	997	-	-	151	92	674	119	106	528
Stage 1	-	-	-	-	-	-	421	455	-	270	327	-
Stage 2	-	-	-	-	-	-	494	292	-	665	478	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	689	-	-	997	-	-	131	81	667	106	93	523
Mov Cap-2 Maneuver	-	-	-	-	-	-	131	81	-	106	93	-
Stage 1	-	-	-	-	-	-	393	425	-	253	308	-
Stage 2	-	-	-	-	-	-	452	275	-	618	446	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.8	0.4	29.3	41.8
HCM LOS			D	E

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	172	689	-	-	997	-	-	140
HCM Lane V/C Ratio	0.139	0.04	-	-	0.024	-	-	0.308
HCM Control Delay (s)	29.3	10.4	0.3	-	8.7	0.2	-	41.8
HCM Lane LOS	D	B	A	-	A	A	-	E
HCM 95th %tile Q(veh)	0.5	0.1	-	-	0.1	-	-	1.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	18	399	83	146	751	28	88	18	130	23	11	19
Future Volume (veh/h)	18	399	83	146	751	28	88	18	130	23	11	19
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1792	1792	1900	1827	1827	1900	1900	1776	1776	1900	1827	1827
Adj Flow Rate, veh/h	20	453	94	166	853	32	100	20	0	26	12	22
Adj No. of Lanes	1	2	0	1	2	0	0	1	1	0	1	1
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	6	6	6	4	4	4	7	7	7	4	4	4
Cap, veh/h	404	1428	294	543	1734	65	356	54	259	326	119	266
Arrive On Green	0.51	0.51	0.51	0.51	0.51	0.51	0.17	0.17	0.00	0.17	0.17	0.17
Sat Flow, veh/h	600	2809	579	837	3411	128	1019	316	1509	933	692	1548
Grp Volume(v), veh/h	20	273	274	166	434	451	120	0	0	38	0	22
Grp Sat Flow(s),veh/h/ln	600	1703	1685	837	1736	1803	1335	0	1509	1625	0	1548
Q Serve(g_s), s	0.8	3.4	3.5	5.3	6.0	6.0	2.4	0.0	0.0	0.0	0.0	0.4
Cycle Q Clear(g_c), s	6.8	3.4	3.5	8.8	6.0	6.0	3.1	0.0	0.0	0.6	0.0	0.4
Prop In Lane	1.00		0.34	1.00		0.07	0.83		1.00	0.68		1.00
Lane Grp Cap(c), veh/h	404	866	856	543	882	917	410	0	259	445	0	266
V/C Ratio(X)	0.05	0.32	0.32	0.31	0.49	0.49	0.29	0.00	0.00	0.09	0.00	0.08
Avail Cap(c_a), veh/h	459	1024	1013	632	1067	1109	1155	0	1085	1253	0	1113
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	8.1	5.3	5.3	7.9	5.9	5.9	13.8	0.0	0.0	12.8	0.0	12.7
Incr Delay (d2), s/veh	0.1	0.2	0.2	0.3	0.4	0.4	0.4	0.0	0.0	0.1	0.0	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	1.6	1.6	1.2	2.9	3.0	1.1	0.0	0.0	0.3	0.0	0.2
LnGrp Delay(d),s/veh	8.2	5.5	5.5	8.2	6.3	6.3	14.2	0.0	0.0	12.9	0.0	12.9
LnGrp LOS	A	A	A	A	A	A	B			B		B
Approach Vol, veh/h		567			1051			120			60	
Approach Delay, s/veh		5.6			6.6			14.2			12.9	
Approach LOS		A			A			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		11.9		24.7		11.9		24.7
Change Period (Y+Rc), s		5.6		6.1		5.6		* 6.1
Max Green Setting (Gmax), s		26.3		22.0		26.3		* 23
Max Q Clear Time (g_c+I1), s		5.1		8.8		2.6		10.8
Green Ext Time (p_c), s		0.9		8.2		0.9		7.5

Intersection Summary	
HCM 2010 Ctrl Delay	7.0
HCM 2010 LOS	A

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Intersection												
Int Delay, s/veh	48.7											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	548	3	32	699	0	4	0	14	195	45	221
Future Vol, veh/h	0	548	3	32	699	0	4	0	14	195	45	221
Conflicting Peds, #/hr	0	0	9	6	0	0	2	0	0	0	0	2
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	240	-	-	0	-	85	120	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	88	88	88	88	88	88	88	88	88	88	88	88
Heavy Vehicles, %	6	6	6	4	4	4	2	2	2	2	2	2
Mvmt Flow	0	623	3	36	794	0	5	0	16	222	51	251

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	-	0	0	635	0	0	1130	-	322	1178	1502	399
Stage 1	-	-	-	-	-	-	633	-	-	867	867	-
Stage 2	-	-	-	-	-	-	497	-	-	311	635	-
Critical Hdwy	-	-	-	4.18	-	-	7.54	-	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	-	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	-	-	6.54	5.54	-
Follow-up Hdwy	-	-	-	2.24	-	-	3.52	-	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	0	-	-	931	-	0	158	0	674	~ 146	121	601
Stage 1	0	-	-	-	-	0	434	0	-	314	368	-
Stage 2	0	-	-	-	-	0	523	0	-	674	471	-
Platoon blocked, %		-	-		-							
Mov Cap-1 Maneuver	-	-	-	931	-	-	58	-	668	~ 138	115	600
Mov Cap-2 Maneuver	-	-	-	-	-	-	58	-	-	~ 138	115	-
Stage 1	-	-	-	-	-	-	434	-	-	314	354	-
Stage 2	-	-	-	-	-	-	250	-	-	658	467	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	0.4	24.2	184.3
HCM LOS			C	F

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBL	WBT	SBLn1	SBLn2
Capacity (veh/h)	58	668	-	-	931	-	138	350
HCM Lane V/C Ratio	0.078	0.024	-	-	0.039	-	1.606	0.864
HCM Control Delay (s)	72.3	10.5	-	-	9	-	$ 360.8	54.9
HCM Lane LOS	F	B	-	-	A	-	F	F
HCM 95th %tile Q(veh)	0.2	0.1	-	-	0.1	-	15.7	8.1

Notes

~: Volume exceeds capacity $: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon

Intersection						
Int Delay, s/veh	0.5					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	619	138	74	730	0	0
Future Vol, veh/h	619	138	74	730	0	0
Conflicting Peds, #/hr	0	10	10	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	115	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	88	88	88	88	88	88
Heavy Vehicles, %	5	5	2	2	4	4
Mvmt Flow	703	157	84	830	0	0

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	870	0	1375	440
Stage 1	-	-	-	-	792	-
Stage 2	-	-	-	-	583	-
Critical Hdwy	-	-	4.14	-	6.88	6.98
Critical Hdwy Stg 1	-	-	-	-	5.88	-
Critical Hdwy Stg 2	-	-	-	-	5.88	-
Follow-up Hdwy	-	-	2.22	-	3.54	3.34
Pot Cap-1 Maneuver	-	-	770	-	134	559
Stage 1	-	-	-	-	402	-
Stage 2	-	-	-	-	516	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	770	-	118	554
Mov Cap-2 Maneuver	-	-	-	-	118	-
Stage 1	-	-	-	-	398	-
Stage 2	-	-	-	-	460	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.9	0
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	-	-	-	770	-
HCM Lane V/C Ratio	-	-	-	0.109	-
HCM Control Delay (s)	0	-	-	10.2	-
HCM Lane LOS	A	-	-	B	-
HCM 95th %tile Q(veh)	-	-	-	0.4	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	210	384	25	8	507	337	23	78	3	210	56	275
Future Volume (veh/h)	210	384	25	8	507	337	23	78	3	210	56	275
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		0.99	0.99		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1900	1863	1863	1900	1863	1863	1900	1792	1792	1792
Adj Flow Rate, veh/h	233	427	28	9	563	374	26	87	3	233	62	0
Adj No. of Lanes	1	2	0	1	2	0	1	1	0	1	1	1
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	3	3	3	2	2	2	2	2	2	6	6	6
Cap, veh/h	281	1546	101	29	648	430	456	503	17	421	504	428
Arrive On Green	0.16	0.46	0.46	0.02	0.32	0.32	0.28	0.28	0.28	0.28	0.28	0.00
Sat Flow, veh/h	1757	3338	218	1774	2029	1348	1329	1790	62	1246	1792	1524
Grp Volume(v), veh/h	233	223	232	9	491	446	26	0	90	233	62	0
Grp Sat Flow(s),veh/h/ln	1757	1752	1804	1774	1770	1607	1329	0	1851	1246	1792	1524
Q Serve(g_s), s	7.9	4.8	4.9	0.3	16.1	16.1	0.9	0.0	2.3	10.7	1.6	0.0
Cycle Q Clear(g_c), s	7.9	4.8	4.9	0.3	16.1	16.1	2.5	0.0	2.3	13.0	1.6	0.0
Prop In Lane	1.00		0.12	1.00		0.84	1.00		0.03	1.00		1.00
Lane Grp Cap(c), veh/h	281	811	835	29	565	513	456	0	520	421	504	428
V/C Ratio(X)	0.83	0.28	0.28	0.31	0.87	0.87	0.06	0.00	0.17	0.55	0.12	0.00
Avail Cap(c_a), veh/h	338	811	835	201	610	554	663	0	809	615	784	666
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	25.1	10.2	10.2	30.0	19.8	19.8	17.5	0.0	16.8	21.7	16.5	0.0
Incr Delay (d2), s/veh	13.5	0.2	0.2	6.0	12.2	13.2	0.1	0.0	0.2	1.1	0.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.9	2.3	2.4	0.2	9.7	8.9	0.3	0.0	1.2	3.8	0.8	0.0
LnGrp Delay(d),s/veh	38.6	10.4	10.4	36.1	32.0	33.0	17.5	0.0	16.9	22.8	16.6	0.0
LnGrp LOS	D	B	B	D	C	C	B		B	C	B	
Approach Vol, veh/h		688			946			116			295	
Approach Delay, s/veh		19.9			32.5			17.1			21.5	
Approach LOS		B			C			B			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	6.1	33.7		22.0	15.0	24.8		22.0
Change Period (Y+Rc), s	5.1	5.1		4.6	5.1	5.1		4.6
Max Green Setting (Gmax), s	7.0	26.2		27.0	11.9	21.3		27.0
Max Q Clear Time (g_c+I1), s	2.3	6.9		15.0	9.9	18.1		4.5
Green Ext Time (p_c), s	0.0	9.2		1.4	0.1	1.6		1.7

Intersection Summary	
HCM 2010 Ctrl Delay	25.8
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	130	416	244	134	563	92	108	577	56	58	838	153
Future Volume (veh/h)	130	416	244	134	563	92	108	577	56	58	838	153
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	1.00		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1808	1808	1808	1810	1810	1810	1863	1863	1863
Adj Flow Rate, veh/h	144	462	271	149	626	102	120	641	62	64	931	170
Adj No. of Lanes	1	2	1	1	1	1	1	2	1	1	2	1
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	3	3	3	5	5	5	2	2	2
Cap, veh/h	153	1183	525	177	634	537	130	1057	472	91	1004	445
Arrive On Green	0.09	0.33	0.33	0.10	0.35	0.35	0.08	0.31	0.31	0.05	0.28	0.28
Sat Flow, veh/h	1774	3539	1572	1722	1808	1531	1723	3438	1535	1774	3539	1567
Grp Volume(v), veh/h	144	462	271	149	626	102	120	641	62	64	931	170
Grp Sat Flow(s),veh/h/ln	1774	1770	1572	1722	1808	1531	1723	1719	1535	1774	1770	1567
Q Serve(g_s), s	9.6	11.9	16.6	10.2	41.1	5.5	8.3	19.0	3.5	4.2	30.6	10.4
Cycle Q Clear(g_c), s	9.6	11.9	16.6	10.2	41.1	5.5	8.3	19.0	3.5	4.2	30.6	10.4
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	153	1183	525	177	634	537	130	1057	472	91	1004	445
V/C Ratio(X)	0.94	0.39	0.52	0.84	0.99	0.19	0.92	0.61	0.13	0.70	0.93	0.38
Avail Cap(c_a), veh/h	153	1183	525	271	634	537	130	1057	472	104	1019	451
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	54.3	30.5	32.0	52.7	38.5	27.0	54.9	35.2	29.9	55.8	41.6	34.4
Incr Delay (d2), s/veh	55.5	0.2	0.9	13.5	32.5	0.2	56.4	1.0	0.1	16.3	13.9	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.1	5.9	7.3	5.5	26.2	2.4	6.0	9.1	1.5	2.5	16.8	4.6
LnGrp Delay(d),s/veh	109.8	30.7	32.9	66.2	71.1	27.2	111.3	36.2	30.0	72.0	55.5	34.9
LnGrp LOS	F	C	C	E	E	C	F	D	C	E	E	C
Approach Vol, veh/h		877			877			823			1165	
Approach Delay, s/veh		44.4			65.1			46.7			53.4	
Approach LOS		D			E			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	12.3	42.8	18.4	46.0	15.1	40.0	16.4	48.0
Change Period (Y+Rc), s	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1
Max Green Setting (Gmax), s	7.0	36.4	18.8	33.4	9.0	34.4	10.3	41.9
Max Q Clear Time (g_c+I1), s	6.2	21.0	12.2	18.6	10.3	32.6	11.6	43.1
Green Ext Time (p_c), s	0.0	10.1	0.2	7.6	0.0	1.4	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	52.5
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	116	870	87	249	801	683	138	765	660	697	751	125
Future Volume (veh/h)	116	870	87	249	801	683	138	765	660	697	751	125
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1835	1835	1835	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	118	888	0	254	817	0	141	781	0	711	766	112
Adj No. of Lanes	1	2	1	2	2	1	1	3	1	2	3	0
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	154	963	431	320	975	436	168	1022	468	767	1474	214
Arrive On Green	0.09	0.27	0.00	0.09	0.28	0.00	0.09	0.20	0.00	0.22	0.33	0.33
Sat Flow, veh/h	1774	3539	1583	3390	3486	1560	1774	5085	1583	3442	4483	651
Grp Volume(v), veh/h	118	888	0	254	817	0	141	781	0	711	578	300
Grp Sat Flow(s),veh/h/ln	1774	1770	1583	1695	1743	1560	1774	1695	1583	1721	1695	1744
Q Serve(g_s), s	8.2	30.8	0.0	9.3	27.9	0.0	9.9	18.3	0.0	25.6	17.4	17.6
Cycle Q Clear(g_c), s	8.2	30.8	0.0	9.3	27.9	0.0	9.9	18.3	0.0	25.6	17.4	17.6
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.37
Lane Grp Cap(c), veh/h	154	963	431	320	975	436	168	1022	468	767	1115	573
V/C Ratio(X)	0.77	0.92	0.00	0.79	0.84	0.00	0.84	0.76	0.00	0.93	0.52	0.52
Avail Cap(c_a), veh/h	154	994	445	622	1318	590	285	1223	530	800	1115	573
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	56.5	44.7	0.0	56.0	42.8	0.0	56.2	47.7	0.0	48.1	34.3	34.4
Incr Delay (d2), s/veh	20.4	13.3	0.0	4.5	3.7	0.0	10.4	2.4	0.0	16.4	0.4	0.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.9	16.8	0.0	4.5	13.9	0.0	5.3	8.8	0.0	13.9	8.3	8.6
LnGrp Delay(d),s/veh	76.9	58.0	0.0	60.5	46.5	0.0	66.6	50.1	0.0	64.5	34.7	35.3
LnGrp LOS	E	E		E	D		E	D		E	C	D
Approach Vol, veh/h		1006			1071			922			1589	
Approach Delay, s/veh		60.2			49.8			52.6			48.1	
Approach LOS		E			D			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	35.0	32.2	18.7	40.5	18.8	48.4	17.1	42.2
Change Period (Y+Rc), s	6.8	6.8	6.8	6.1	6.8	6.8	6.1	6.8
Max Green Setting (Gmax), s	29.4	30.4	23.2	35.5	20.3	39.5	10.9	47.8
Max Q Clear Time (g_c+I1), s	27.6	20.3	11.3	32.8	11.9	19.6	10.2	29.9
Green Ext Time (p_c), s	0.6	4.7	0.7	1.6	0.2	11.5	0.4	5.5

Intersection Summary	
HCM 2010 Ctrl Delay	52.1
HCM 2010 LOS	D

Notes

User approved pedestrian interval to be less than phase max green.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	139	19	53	9	16	15	169	1617	13	19	629	244
Future Volume (veh/h)	139	19	53	9	16	15	169	1617	13	19	629	244
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.99	0.99		0.99	1.00		0.98	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1863	1900	1863	1900	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	142	19	54	9	16	15	172	1650	13	19	642	0
Adj No. of Lanes	0	1	1	0	1	0	1	2	0	1	2	1
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	247	29	463	61	103	70	208	1658	13	52	1319	590
Arrive On Green	0.30	0.30	0.30	0.30	0.30	0.30	0.12	0.46	0.46	0.03	0.37	0.00
Sat Flow, veh/h	586	97	1567	45	348	236	1774	3599	28	1774	3539	1583
Grp Volume(v), veh/h	161	0	54	40	0	0	172	811	852	19	642	0
Grp Sat Flow(s),veh/h/ln	683	0	1567	629	0	0	1774	1770	1857	1774	1770	1583
Q Serve(g_s), s	0.4	0.0	2.3	0.4	0.0	0.0	8.7	41.9	42.0	1.0	12.8	0.0
Cycle Q Clear(g_c), s	24.1	0.0	2.3	24.2	0.0	0.0	8.7	41.9	42.0	1.0	12.8	0.0
Prop In Lane	0.88		1.00	0.22		0.37	1.00		0.02	1.00		1.00
Lane Grp Cap(c), veh/h	276	0	463	234	0	0	208	815	856	52	1319	590
V/C Ratio(X)	0.58	0.00	0.12	0.17	0.00	0.00	0.83	0.99	1.00	0.37	0.49	0.00
Avail Cap(c_a), veh/h	335	0	529	301	0	0	348	815	856	135	1319	590
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	31.3	0.0	23.6	24.9	0.0	0.0	39.6	24.6	24.7	43.7	22.1	0.0
Incr Delay (d2), s/veh	2.0	0.0	0.1	0.3	0.0	0.0	8.1	30.1	29.7	4.3	0.3	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.1	0.0	1.0	0.8	0.0	0.0	4.7	27.1	28.4	0.5	6.3	0.0
LnGrp Delay(d),s/veh	33.3	0.0	23.7	25.3	0.0	0.0	47.7	54.7	54.4	48.0	22.4	0.0
LnGrp LOS	C		C	C			D	D	D	D	C	
Approach Vol, veh/h		215			40			1835			661	
Approach Delay, s/veh		30.9			25.3			53.9			23.1	
Approach LOS		C			C			D			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	9.5	49.1		33.5	17.6	41.0		33.5
Change Period (Y+Rc), s	6.8	6.8		6.1	6.8	6.8		6.1
Max Green Setting (Gmax), s	7.0	42.3		31.0	18.0	31.3		31.0
Max Q Clear Time (g_c+I1), s	3.0	44.0		26.1	10.7	14.8		26.2
Green Ext Time (p_c), s	0.0	0.0		0.5	0.3	13.5		0.5

Intersection Summary	
HCM 2010 Ctrl Delay	44.3
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	27	70	160	476	120	156	304	1413	661	117	1218	24
Future Volume (veh/h)	27	70	160	476	120	156	304	1413	661	117	1218	24
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.94	1.00		0.98	1.00		0.99	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	28	72	13	491	124	24	313	1457	313	121	1256	25
Adj No. of Lanes	1	1	1	2	1	1	1	2	1	1	3	0
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	149	156	125	558	302	252	336	1748	771	123	1919	38
Arrive On Green	0.08	0.08	0.08	0.16	0.16	0.16	0.19	0.49	0.49	0.07	0.37	0.37
Sat Flow, veh/h	1774	1863	1493	3442	1863	1551	1774	3539	1562	1774	5131	102
Grp Volume(v), veh/h	28	72	13	491	124	24	313	1457	313	121	830	451
Grp Sat Flow(s),veh/h/ln	1774	1863	1493	1721	1863	1551	1774	1770	1562	1774	1695	1843
Q Serve(g_s), s	1.9	4.7	1.0	17.8	7.6	1.7	22.2	45.3	16.2	8.7	26.0	26.0
Cycle Q Clear(g_c), s	1.9	4.7	1.0	17.8	7.6	1.7	22.2	45.3	16.2	8.7	26.0	26.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.06
Lane Grp Cap(c), veh/h	149	156	125	558	302	252	336	1748	771	123	1268	689
V/C Ratio(X)	0.19	0.46	0.10	0.88	0.41	0.10	0.93	0.83	0.41	0.98	0.65	0.65
Avail Cap(c_a), veh/h	305	320	257	592	320	267	337	1748	771	123	1268	689
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	54.6	55.9	54.2	52.4	48.1	45.6	51.1	27.9	20.5	59.5	33.2	33.2
Incr Delay (d2), s/veh	0.6	2.1	0.4	13.8	0.9	0.2	31.9	4.9	1.6	74.9	2.6	4.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.0	2.5	0.4	9.5	4.0	0.7	13.8	23.2	7.3	6.8	12.6	14.1
LnGrp Delay(d),s/veh	55.2	58.0	54.6	66.1	49.0	45.8	83.0	32.7	22.1	134.3	35.9	38.0
LnGrp LOS	E	E	D	E	D	D	F	C	C	F	D	D
Approach Vol, veh/h		113			639			2083			1402	
Approach Delay, s/veh		56.9			62.1			38.7			45.1	
Approach LOS		E			E			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	15.0	69.3		16.8	30.3	54.0		26.9
Change Period (Y+Rc), s	6.1	6.1		6.1	6.1	6.1		6.1
Max Green Setting (Gmax), s	8.9	50.7		22.0	24.3	35.3		22.0
Max Q Clear Time (g_c+I1), s	10.7	47.3		6.7	24.2	28.0		19.8
Green Ext Time (p_c), s	0.0	3.2		0.4	0.0	6.9		0.7

Intersection Summary	
HCM 2010 Ctrl Delay	44.8
HCM 2010 LOS	D

Intersection						
Int Delay, s/veh	1.7					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	16	28	2043	54	120	1120
Future Vol, veh/h	16	28	2043	54	120	1120
Conflicting Peds, #/hr	0	0	0	6	6	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	50	-	350	195	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	98	98	98	98	98	98
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	16	29	2085	55	122	1143

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	2907	1048	0	0	2091	0
Stage 1	2091	-	-	-	-	-
Stage 2	816	-	-	-	-	-
Critical Hdwy	6.84	6.94	-	-	4.14	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	-	-	2.22	-
Pot Cap-1 Maneuver	~ 12	224	-	-	261	-
Stage 1	81	-	-	-	-	-
Stage 2	395	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	~ 6	223	-	-	261	-
Mov Cap-2 Maneuver	56	-	-	-	-	-
Stage 1	81	-	-	-	-	-
Stage 2	210	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	49.1	0	2.9
HCM LOS	E		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	56	223	261	-
HCM Lane V/C Ratio	-	-	0.292	0.128	0.469	-
HCM Control Delay (s)	-	-	93.8	23.5	30.4	-
HCM Lane LOS	-	-	F	C	D	-
HCM 95th %tile Q(veh)	-	-	1	0.4	2.3	-

Notes

~: Volume exceeds capacity $: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	334	423	156	113	372	285	252	1349	93	162	872	192
Future Volume (veh/h)	334	423	156	113	372	285	252	1349	93	162	872	192
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	1.00		0.98	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1835	1835	1835	1844	1844	1881	1881	1881	1919
Adj Flow Rate, veh/h	341	432	67	115	380	0	257	1377	95	165	890	0
Adj No. of Lanes	2	1	1	1	1	1	1	3	0	1	3	0
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	407	527	442	142	448	381	289	1648	114	196	1480	0
Arrive On Green	0.12	0.28	0.28	0.08	0.24	0.00	0.16	0.34	0.34	0.11	0.29	0.00
Sat Flow, veh/h	3476	1881	1577	1747	1835	1560	1756	4802	331	1792	5305	0
Grp Volume(v), veh/h	341	432	67	115	380	0	257	962	510	165	890	0
Grp Sat Flow(s),veh/h/ln	1738	1881	1577	1747	1835	1560	1756	1678	1778	1792	1712	0
Q Serve(g_s), s	9.7	21.6	3.2	6.5	19.9	0.0	14.4	26.6	26.6	9.1	15.0	0.0
Cycle Q Clear(g_c), s	9.7	21.6	3.2	6.5	19.9	0.0	14.4	26.6	26.6	9.1	15.0	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.19	1.00		0.00
Lane Grp Cap(c), veh/h	407	527	442	142	448	381	289	1152	610	196	1480	0
V/C Ratio(X)	0.84	0.82	0.15	0.81	0.85	0.00	0.89	0.84	0.84	0.84	0.60	0.00
Avail Cap(c_a), veh/h	442	550	461	153	476	405	335	1178	624	228	1480	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	43.5	33.8	27.2	45.4	36.2	0.0	41.1	30.4	30.4	43.9	30.8	0.0
Incr Delay (d2), s/veh	12.0	9.5	0.2	24.5	13.2	0.0	21.3	5.3	9.5	20.1	0.7	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.3	12.6	1.4	4.1	11.7	0.0	8.7	13.1	14.6	5.6	7.2	0.0
LnGrp Delay(d),s/veh	55.5	43.4	27.4	69.9	49.5	0.0	62.4	35.7	39.9	64.0	31.5	0.0
LnGrp LOS	E	D	C	E	D		E	D	D	E	C	
Approach Vol, veh/h		840			495			1729			1055	
Approach Delay, s/veh		47.0			54.2			40.9			36.6	
Approach LOS		D			D			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	15.2	39.9	12.4	33.1	20.8	34.4	16.0	29.4
Change Period (Y+Rc), s	* 4.2	5.4	* 4.2	4.9	* 4.2	5.4	* 4.2	* 4.9
Max Green Setting (Gmax), s	* 13	35.3	* 8.8	29.4	* 19	28.9	* 13	* 26
Max Q Clear Time (g_c+I1), s	11.1	28.6	8.5	23.6	16.4	17.0	11.7	21.9
Green Ext Time (p_c), s	0.1	6.0	0.0	2.9	0.2	10.1	0.1	2.3

Intersection Summary	
HCM 2010 Ctrl Delay	42.6
HCM 2010 LOS	D

Notes

User approved pedestrian interval to be less than phase max green.
* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	377	46	321	30	70	59	369	1678	26	33	772	345
Future Volume (veh/h)	377	46	321	30	70	59	369	1678	26	33	772	345
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.95	1.00		0.99	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1900	1863	1863	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	423	0	140	31	72	19	380	1730	27	34	796	0
Adj No. of Lanes	2	0	1	0	1	1	1	2	0	1	2	1
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	530	0	234	60	140	164	408	1858	29	43	1116	499
Arrive On Green	0.15	0.00	0.15	0.11	0.11	0.11	0.23	0.52	0.52	0.02	0.32	0.00
Sat Flow, veh/h	3548	0	1567	552	1283	1509	1774	3566	56	1774	3539	1583
Grp Volume(v), veh/h	423	0	140	103	0	19	380	857	900	34	796	0
Grp Sat Flow(s),veh/h/ln	1774	0	1567	1835	0	1509	1774	1770	1852	1774	1770	1583
Q Serve(g_s), s	14.5	0.0	10.5	6.7	0.0	1.4	26.5	56.8	57.2	2.4	25.1	0.0
Cycle Q Clear(g_c), s	14.5	0.0	10.5	6.7	0.0	1.4	26.5	56.8	57.2	2.4	25.1	0.0
Prop In Lane	1.00		1.00	0.30		1.00	1.00		0.03	1.00		1.00
Lane Grp Cap(c), veh/h	530	0	234	200	0	164	408	922	965	43	1116	499
V/C Ratio(X)	0.80	0.00	0.60	0.52	0.00	0.12	0.93	0.93	0.93	0.79	0.71	0.00
Avail Cap(c_a), veh/h	758	0	335	392	0	322	466	941	985	56	1116	499
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	51.9	0.0	50.2	53.2	0.0	50.8	47.7	28.1	28.2	61.3	38.2	0.0
Incr Delay (d2), s/veh	3.9	0.0	2.4	2.0	0.0	0.3	23.9	15.0	15.0	41.3	2.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.4	0.0	4.7	3.5	0.0	0.6	15.7	31.5	33.0	1.7	12.6	0.0
LnGrp Delay(d),s/veh	55.8	0.0	52.6	55.2	0.0	51.1	71.6	43.1	43.2	102.7	40.4	0.0
LnGrp LOS	E		D	E		D	E	D	D	F	D	
Approach Vol, veh/h		563			122			2137			830	
Approach Delay, s/veh		55.0			54.6			48.2			42.9	
Approach LOS		E			D			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	9.9	72.6		24.5	35.9	46.6		19.4
Change Period (Y+Rc), s	6.8	6.8		5.6	6.8	6.8		5.6
Max Green Setting (Gmax), s	4.0	67.2		27.0	33.2	38.0		27.0
Max Q Clear Time (g_c+I1), s	4.4	59.2		16.5	28.5	27.1		8.7
Green Ext Time (p_c), s	0.0	6.6		1.6	0.5	9.8		0.5

Intersection Summary	
HCM 2010 Ctrl Delay	48.3
HCM 2010 LOS	D

Notes

User approved volume balancing among the lanes for turning movement.

Intersection												
Int Delay, s/veh	424.2											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	139	2	266	0	0	0	696	485	18	3	306	190
Future Vol, veh/h	139	2	266	0	0	0	696	485	18	3	306	190
Conflicting Peds, #/hr	0	0	0	0	0	0	7	0	7	7	0	7
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	50	-	-	-	75	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	-	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	96	96	96	96	96	96	96	96	96	96	96	96
Heavy Vehicles, %	6	6	6	2	2	2	2	2	2	2	2	2
Mvmt Flow	145	2	277	0	0	0	725	505	19	3	319	198

Major/Minor	Minor2						Major1			Major2		
Conflicting Flow All	2396	2412	425				524	0	0	531	0	0
Stage 1	431	431	-				-	-	-	-	-	-
Stage 2	1965	1981	-				-	-	-	-	-	-
Critical Hdwy	6.46	6.56	6.26				4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	5.46	5.56	-				-	-	-	-	-	-
Critical Hdwy Stg 2	5.46	5.56	-				-	-	-	-	-	-
Follow-up Hdwy	3.554	4.054	3.354				2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	~ 36	32	621				1043	-	-	1036	-	-
Stage 1	647	576	-				-	-	-	-	-	-
Stage 2	~ 117	104	-				-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	~ 11	0	617				1043	-	-	1036	-	-
Mov Cap-2 Maneuver	~ 11	0	-				-	-	-	-	-	-
Stage 1	640	0	-				-	-	-	-	-	-
Stage 2	~ 35	0	-				-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	$ 2166.5	9.2	0.1
HCM LOS	F		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	SBL	SBT	SBR
Capacity (veh/h)	1043	-	-	11	617	1036	-	-
HCM Lane V/C Ratio	0.695	-	-	13.352	0.449	0.003	-	-
HCM Control Delay (s)	15.9	-	-	$ 6224.5	15.5	8.5	0	-
HCM Lane LOS	C	-	-	F	C	A	A	-
HCM 95th %tile Q(veh)	5.9	-	-	19.8	2.3	0	-	-

Notes

~: Volume exceeds capacity $: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	1575	509	586	697	0	825
Future Volume (vph)	1575	509	586	697	0	825
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Grade (%)	-3%			-3%	-3%	
Total Lost time (s)	5.6	4.0	5.6	5.6		5.6
Lane Util. Factor	0.91	1.00	0.97	0.95		0.88
Frpb, ped/bikes	1.00	1.00	1.00	1.00		1.00
Flpb, ped/bikes	1.00	1.00	1.00	1.00		1.00
Frt	1.00	0.85	1.00	1.00		0.85
Flt Protected	1.00	1.00	0.95	1.00		1.00
Satd. Flow (prot)	5111	1591	3485	3592		2828
Flt Permitted	1.00	1.00	0.95	1.00		1.00
Satd. Flow (perm)	5111	1591	3485	3592		2828
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	1641	530	610	726	0	859
RTOR Reduction (vph)	0	0	0	0	0	5
Lane Group Flow (vph)	1641	530	610	726	0	854
Confl. Peds. (#/hr)						13
Heavy Vehicles (%)	3%	3%	2%	2%	2%	2%
Turn Type	NA	Free	Prot	NA		Over
Protected Phases	6		8	2 8		8
Permitted Phases		Free				8
Actuated Green, G (s)	25.2	59.8	23.4	59.8		23.4
Effective Green, g (s)	25.2	59.8	23.4	59.8		23.4
Actuated g/C Ratio	0.42	1.00	0.39	1.00		0.39
Clearance Time (s)	5.6		5.6			5.6
Vehicle Extension (s)	3.0		3.0			3.0
Lane Grp Cap (vph)	2153	1591	1363	3592		1106
v/s Ratio Prot	c0.32		0.18	0.20		c0.30
v/s Ratio Perm		0.33				
v/c Ratio	0.76	0.33	0.45	0.20		0.77
Uniform Delay, d1	14.7	0.0	13.4	0.0		15.9
Progression Factor	1.00	1.00	1.00	1.00		1.00
Incremental Delay, d2	1.6	0.6	0.2	0.0		3.4
Delay (s)	16.4	0.6	13.7	0.0		19.3
Level of Service	B	A	B	A		B
Approach Delay (s)	12.5			6.3	19.3	
Approach LOS	B			A	B	

Intersection Summary			
HCM 2000 Control Delay	11.9	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.77		
Actuated Cycle Length (s)	59.8	Sum of lost time (s)	11.2
Intersection Capacity Utilization	69.9%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	15	423	24	446	19	1745	696	327	871	26
Future Volume (veh/h)	0	0	15	423	24	446	19	1745	696	327	871	26
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.97	1.00		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1776	1776	1863	1863	1863	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	0	0	0	449	0	219	19	1781	0	334	889	27
Adj No. of Lanes	0	1	1	2	0	1	1	2	2	1	2	0
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	7	7	7	2	2	2	2	2	2	2	2	2
Cap, veh/h	0	1	41	598	0	259	47	1838	1447	353	2427	74
Arrive On Green	0.00	0.00	0.00	0.17	0.00	0.17	0.03	0.52	0.00	0.20	0.69	0.69
Sat Flow, veh/h	0	1776	1509	3548	0	1535	1774	3539	2787	1774	3506	106
Grp Volume(v), veh/h	0	0	0	449	0	219	19	1781	0	334	449	467
Grp Sat Flow(s),veh/h/ln	0	1776	1509	1774	0	1535	1774	1770	1393	1774	1770	1843
Q Serve(g_s), s	0.0	0.0	0.0	16.3	0.0	18.7	1.4	66.0	0.0	25.2	14.2	14.2
Cycle Q Clear(g_c), s	0.0	0.0	0.0	16.3	0.0	18.7	1.4	66.0	0.0	25.2	14.2	14.2
Prop In Lane	0.00		1.00	1.00		1.00	1.00		1.00	1.00		0.06
Lane Grp Cap(c), veh/h	0	1	41	598	0	259	47	1838	1447	353	1225	1276
V/C Ratio(X)	0.00	0.00	0.00	0.75	0.00	0.85	0.41	0.97	0.00	0.95	0.37	0.37
Avail Cap(c_a), veh/h	0	26	62	681	0	295	105	1872	1474	353	1225	1276
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	0.0	0.0	0.0	53.6	0.0	54.6	64.9	31.5	0.0	53.5	8.6	8.6
Incr Delay (d2), s/veh	0.0	0.0	0.0	4.1	0.0	18.1	5.6	14.1	0.0	33.8	0.2	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	0.0	8.3	0.0	9.3	0.8	35.8	0.0	15.7	6.9	7.2
LnGrp Delay(d),s/veh	0.0	0.0	0.0	57.7	0.0	72.7	70.5	45.6	0.0	87.4	8.8	8.8
LnGrp LOS				E		E	E	D		F	A	A
Approach Vol, veh/h		0			668			1800			1250	
Approach Delay, s/veh		0.0			62.6			45.9			29.8	
Approach LOS					E			D			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	32.1	75.5		0.0	8.7	98.9		28.0
Change Period (Y+Rc), s	5.1	5.1		3.0	5.1	5.1		5.1
Max Green Setting (Gmax), s	27.0	71.7		2.0	8.0	90.7		26.0
Max Q Clear Time (g_c+I1), s	27.2	68.0		0.0	3.4	16.2		20.7
Green Ext Time (p_c), s	0.0	2.4		0.0	0.0	48.4		1.3

Intersection Summary	
HCM 2010 Ctrl Delay	43.5
HCM 2010 LOS	D

Notes

User approved volume balancing among the lanes for turning movement.

Intersection

Int Delay, s/veh 18.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	23	972	25	20	847	65	16	1	29	77	2	30
Future Vol, veh/h	23	972	25	20	847	65	16	1	29	77	2	30
Conflicting Peds, #/hr	10	0	8	8	0	10	6	0	1	0	0	1
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	3	3	3	2	2	2	2	2	2	2	2	2
Mvmt Flow	24	1023	26	21	892	68	17	1	31	81	2	32

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	970	0	0	1057	0	0	1588	2105	534	1540	2084	496
Stage 1	-	-	-	-	-	-	1093	1093	-	978	978	-
Stage 2	-	-	-	-	-	-	495	1012	-	562	1106	-
Critical Hdwy	4.16	-	-	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.23	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	700	-	-	655	-	-	72	51	491	~ 79	52	519
Stage 1	-	-	-	-	-	-	229	288	-	269	327	-
Stage 2	-	-	-	-	-	-	525	315	-	479	284	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	696	-	-	654	-	-	57	43	487	~ 64	44	511
Mov Cap-2 Maneuver	-	-	-	-	-	-	57	43	-	~ 64	44	-
Stage 1	-	-	-	-	-	-	208	262	-	244	301	-
Stage 2	-	-	-	-	-	-	452	290	-	410	258	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.6	0.6	49.8	$ 319.8
HCM LOS			E	F

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	127	696	-	-	654	-	-	83
HCM Lane V/C Ratio	0.381	0.035	-	-	0.032	-	-	1.382
HCM Control Delay (s)	49.8	10.4	0.4	-	10.7	0.4	-	$ 319.8
HCM Lane LOS	E	B	A	-	B	A	-	F
HCM 95th %tile Q(veh)	1.6	0.1	-	-	0.1	-	-	8.8

Notes

~: Volume exceeds capacity $: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	18	919	103	145	649	22	236	14	143	74	14	22
Future Volume (veh/h)	18	919	103	145	649	22	236	14	143	74	14	22
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.98	0.99		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1845	1845	1900	1900	1863	1863	1900	1863	1863
Adj Flow Rate, veh/h	19	967	108	153	683	23	248	15	0	78	15	23
Adj No. of Lanes	1	2	0	1	2	0	0	1	1	0	1	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	3	3	3	2	2	2	2	2	2
Cap, veh/h	434	1804	201	292	1946	66	404	19	438	478	84	435
Arrive On Green	0.56	0.56	0.56	0.56	0.56	0.56	0.28	0.28	0.00	0.28	0.28	0.28
Sat Flow, veh/h	736	3206	358	517	3458	116	1112	67	1583	1399	304	1573
Grp Volume(v), veh/h	19	534	541	153	346	360	263	0	0	93	0	23
Grp Sat Flow(s),veh/h/ln	736	1770	1794	517	1752	1822	1179	0	1583	1703	0	1573
Q Serve(g_s), s	1.1	13.8	13.8	19.2	7.8	7.8	13.1	0.0	0.0	0.0	0.0	0.8
Cycle Q Clear(g_c), s	8.9	13.8	13.8	33.0	7.8	7.8	16.0	0.0	0.0	2.9	0.0	0.8
Prop In Lane	1.00		0.20	1.00		0.06	0.94		1.00	0.84		1.00
Lane Grp Cap(c), veh/h	434	996	1010	292	986	1025	422	0	438	562	0	435
V/C Ratio(X)	0.04	0.54	0.54	0.52	0.35	0.35	0.62	0.00	0.00	0.17	0.00	0.05
Avail Cap(c_a), veh/h	443	1017	1031	302	1019	1060	540	0	573	686	0	570
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	11.1	10.0	10.0	20.3	8.7	8.7	26.2	0.0	0.0	20.1	0.0	19.4
Incr Delay (d2), s/veh	0.0	0.5	0.5	1.5	0.2	0.2	1.5	0.0	0.0	0.1	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	6.8	6.9	2.8	3.8	4.0	5.1	0.0	0.0	1.4	0.0	0.3
LnGrp Delay(d),s/veh	11.1	10.5	10.5	21.8	8.9	8.9	27.7	0.0	0.0	20.2	0.0	19.4
LnGrp LOS	B	B	B	C	A	A	C			C		B
Approach Vol, veh/h		1094			859			263			116	
Approach Delay, s/veh		10.5			11.2			27.7			20.1	
Approach LOS		B			B			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		25.8		47.1		25.8		47.1
Change Period (Y+Rc), s		5.6		6.1		5.6		* 6.1
Max Green Setting (Gmax), s		26.4		41.9		26.4		* 42
Max Q Clear Time (g_c+I1), s		18.0		15.8		4.9		35.0
Green Ext Time (p_c), s		1.4		16.2		2.2		6.1

Intersection Summary

HCM 2010 Ctrl Delay	13.2
HCM 2010 LOS	B

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Intersection												
Int Delay, s/veh	236.6											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	1168	13	32	640	0	5	0	59	364	77	172
Future Vol, veh/h	0	1168	13	32	640	0	5	0	59	364	77	172
Conflicting Peds, #/hr	0	0	8	8	0	0	1	0	3	3	0	1
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	240	-	-	0	-	85	120	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	98	98	98	98	98	98	98	98	98	98	98	98
Heavy Vehicles, %	2	2	2	4	4	4	2	2	2	2	2	2
Mvmt Flow	0	1192	13	33	653	0	5	0	60	371	79	176

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	-	0	0	1213	0	0	1638	-	614	1317	1931	328
Stage 1	-	-	-	-	-	-	1206	-	-	718	718	-
Stage 2	-	-	-	-	-	-	432	-	-	599	1213	-
Critical Hdwy	-	-	-	4.18	-	-	7.54	-	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	-	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	-	-	6.54	5.54	-
Follow-up Hdwy	-	-	-	2.24	-	-	3.52	-	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	0	-	-	560	-	0	66	0	435	~ 115	~ 65	668
Stage 1	0	-	-	-	-	0	195	0	-	386	431	-
Stage 2	0	-	-	-	-	0	572	0	-	455	253	-
Platoon blocked, %		-	-		-							
Mov Cap-1 Maneuver	-	-	-	558	-	-	-	-	430	~ 94	~ 61	667
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	-	-	~ 94	~ 61	-
Stage 1	-	-	-	-	-	-	195	-	-	386	406	-
Stage 2	-	-	-	-	-	-	320	-	-	390	251	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	0.6		$ 975.8
HCM LOS			-	F

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBL	WBT	SBLn1	SBLn2
Capacity (veh/h)	-	430	-	-	558	-	94	164
HCM Lane V/C Ratio	-	0.14	-	-	0.059	-	3.951	1.549
HCM Control Delay (s)	-	14.7	-	-	11.9	-	$ 1420.8	$ 325.4
HCM Lane LOS	-	B	-	-	B	-	F	F
HCM 95th %tile Q(veh)	-	0.5	-	-	0.2	-	38.3	16.9

Notes

~: Volume exceeds capacity $: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon

Intersection						
Int Delay, s/veh	0.7					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	1418	214	91	672	0	0
Future Vol, veh/h	1418	214	91	672	0	0
Conflicting Peds, #/hr	0	11	11	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	115	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	97	97	97	97	97	97
Heavy Vehicles, %	2	2	5	5	2	2
Mvmt Flow	1462	221	94	693	0	0

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	1693	0	2117	852
Stage 1	-	-	-	-	1583	-
Stage 2	-	-	-	-	534	-
Critical Hdwy	-	-	4.2	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	-	-	2.25	-	3.52	3.32
Pot Cap-1 Maneuver	-	-	360	-	43	303
Stage 1	-	-	-	-	154	-
Stage 2	-	-	-	-	552	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	360	-	31	300
Mov Cap-2 Maneuver	-	-	-	-	31	-
Stage 1	-	-	-	-	152	-
Stage 2	-	-	-	-	408	-

Approach	EB	WB	NB
HCM Control Delay, s	0	2.2	0
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	-	-	-	360	-
HCM Lane V/C Ratio	-	-	-	0.261	-
HCM Control Delay (s)	0	-	-	18.5	-
HCM Lane LOS	A	-	-	C	-
HCM 95th %tile Q(veh)	-	-	-	1	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	369	993	56	32	431	623	52	270	43	276	53	280
Future Volume (veh/h)	369	993	56	32	431	623	52	270	43	276	53	280
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.98	1.00		0.99	0.99		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1900	1776	1776	1776
Adj Flow Rate, veh/h	377	1013	57	33	440	636	53	276	44	282	54	0
Adj No. of Lanes	1	2	0	1	2	0	1	1	0	1	1	1
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	7	7	7
Cap, veh/h	371	1553	87	75	511	449	520	554	88	287	629	534
Arrive On Green	0.21	0.46	0.46	0.04	0.29	0.29	0.35	0.35	0.35	0.35	0.35	0.00
Sat Flow, veh/h	1774	3406	192	1774	1770	1553	1341	1565	249	999	1776	1509
Grp Volume(v), veh/h	377	526	544	33	440	636	53	0	320	282	54	0
Grp Sat Flow(s),veh/h/ln	1774	1770	1828	1774	1770	1553	1341	0	1814	999	1776	1509
Q Serve(g_s), s	20.9	23.0	23.0	1.8	23.5	28.9	2.7	0.0	13.8	21.6	2.0	0.0
Cycle Q Clear(g_c), s	20.9	23.0	23.0	1.8	23.5	28.9	4.8	0.0	13.8	35.4	2.0	0.0
Prop In Lane	1.00		0.10	1.00		1.00	1.00		0.14	1.00		1.00
Lane Grp Cap(c), veh/h	371	807	833	75	511	449	520	0	642	287	629	534
V/C Ratio(X)	1.02	0.65	0.65	0.44	0.86	1.42	0.10	0.00	0.50	0.98	0.09	0.00
Avail Cap(c_a), veh/h	371	807	833	124	511	449	520	0	642	287	629	534
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	39.5	21.1	21.1	46.8	33.6	35.6	23.1	0.0	25.3	41.8	21.5	0.0
Incr Delay (d2), s/veh	51.1	1.9	1.8	4.1	13.9	200.4	0.1	0.0	0.6	47.8	0.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	15.5	11.7	12.1	1.0	13.5	37.3	1.0	0.0	7.0	11.6	1.0	0.0
LnGrp Delay(d),s/veh	90.7	22.9	22.9	50.8	47.5	235.9	23.2	0.0	25.9	89.6	21.6	0.0
LnGrp LOS	F	C	C	D	D	F	C		C	F	C	
Approach Vol, veh/h		1447			1109			373			336	
Approach Delay, s/veh		40.6			155.7			25.5			78.6	
Approach LOS		D			F			C			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	9.3	50.7		40.0	26.0	34.0		40.0
Change Period (Y+Rc), s	5.1	5.1		4.6	5.1	5.1		4.6
Max Green Setting (Gmax), s	7.0	42.8		35.4	20.9	28.9		35.4
Max Q Clear Time (g_c+I1), s	3.8	25.0		37.4	22.9	30.9		15.8
Green Ext Time (p_c), s	0.0	13.3		0.0	0.0	0.0		3.8

Intersection Summary	
HCM 2010 Ctrl Delay	81.9
HCM 2010 LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	87	799	137	241	570	194	129	870	82	153	634	308
Future Volume (veh/h)	87	799	137	241	570	194	129	870	82	153	634	308
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.99	1.00		0.99	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1825	1825	1825	1845	1845	1845	1810	1810	1810
Adj Flow Rate, veh/h	91	832	143	251	594	202	134	906	85	159	660	321
Adj No. of Lanes	1	2	1	1	1	1	1	2	1	1	2	1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	3	3	3	5	5	5
Cap, veh/h	111	920	404	275	649	548	160	988	440	183	1022	444
Arrive On Green	0.06	0.26	0.26	0.16	0.36	0.36	0.09	0.28	0.28	0.11	0.30	0.30
Sat Flow, veh/h	1774	3539	1556	1739	1825	1540	1757	3505	1560	1723	3438	1494
Grp Volume(v), veh/h	91	832	143	251	594	202	134	906	85	159	660	321
Grp Sat Flow(s),veh/h/ln	1774	1770	1556	1739	1825	1540	1757	1752	1560	1723	1719	1494
Q Serve(g_s), s	6.4	28.7	9.5	17.9	39.2	12.3	9.5	31.6	5.2	11.5	21.1	24.3
Cycle Q Clear(g_c), s	6.4	28.7	9.5	17.9	39.2	12.3	9.5	31.6	5.2	11.5	21.1	24.3
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	111	920	404	275	649	548	160	988	440	183	1022	444
V/C Ratio(X)	0.82	0.90	0.35	0.91	0.91	0.37	0.84	0.92	0.19	0.87	0.65	0.72
Avail Cap(c_a), veh/h	111	923	406	288	664	560	221	1053	468	190	1022	444
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	58.4	45.2	38.1	52.2	38.8	30.2	56.4	43.9	34.4	55.5	38.6	39.7
Incr Delay (d2), s/veh	36.4	12.2	0.5	30.4	17.2	0.4	17.8	11.9	0.2	31.3	1.4	5.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.3	15.5	4.1	11.0	22.9	5.3	5.4	16.9	2.3	7.1	10.2	10.7
LnGrp Delay(d),s/veh	94.9	57.4	38.6	82.6	56.0	30.6	74.3	55.8	34.6	86.8	40.0	45.4
LnGrp LOS	F	E	D	F	E	C	E	E	C	F	D	D
Approach Vol, veh/h		1066			1047			1125			1140	
Approach Delay, s/veh		58.1			57.5			56.4			48.0	
Approach LOS		E			E			E			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	19.5	41.7	26.1	38.9	17.6	43.6	14.0	51.0
Change Period (Y+Rc), s	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1
Max Green Setting (Gmax), s	13.9	37.9	20.9	32.9	15.9	35.9	7.9	45.9
Max Q Clear Time (g_c+I1), s	13.5	33.6	19.9	30.7	11.5	26.3	8.4	41.2
Green Ext Time (p_c), s	0.0	2.0	0.1	1.8	0.1	7.3	0.0	3.7

Intersection Summary	
HCM 2010 Ctrl Delay	54.9
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	164	378	236	136	391	111	161	715	73	126	1295	201
Future Volume (veh/h)	164	378	236	136	391	111	161	715	73	126	1295	201
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.99	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1835	1835	1835	1844	1844	1881	1881	1881	1919
Adj Flow Rate, veh/h	173	398	128	143	412	0	169	753	77	133	1363	0
Adj No. of Lanes	2	1	1	2	1	1	1	3	0	1	3	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	283	510	431	273	495	421	201	1690	172	165	1756	0
Arrive On Green	0.08	0.27	0.27	0.08	0.27	0.00	0.11	0.36	0.36	0.09	0.34	0.00
Sat Flow, veh/h	3476	1881	1592	3390	1835	1560	1756	4640	471	1792	5305	0
Grp Volume(v), veh/h	173	398	128	143	412	0	169	543	287	133	1363	0
Grp Sat Flow(s),veh/h/ln	1738	1881	1592	1695	1835	1560	1756	1678	1756	1792	1712	0
Q Serve(g_s), s	4.7	19.0	6.2	3.9	20.5	0.0	9.2	11.9	12.1	7.1	23.1	0.0
Cycle Q Clear(g_c), s	4.7	19.0	6.2	3.9	20.5	0.0	9.2	11.9	12.1	7.1	23.1	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.27	1.00		0.00
Lane Grp Cap(c), veh/h	283	510	431	273	495	421	201	1222	639	165	1756	0
V/C Ratio(X)	0.61	0.78	0.30	0.52	0.83	0.00	0.84	0.44	0.45	0.81	0.78	0.00
Avail Cap(c_a), veh/h	286	567	480	279	566	481	231	1222	639	282	1913	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	43.1	32.8	28.1	42.9	33.4	0.0	42.2	23.4	23.5	43.3	28.6	0.0
Incr Delay (d2), s/veh	3.3	6.6	0.5	1.3	9.5	0.0	20.4	0.3	0.5	6.8	1.9	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.4	10.8	2.8	1.9	11.7	0.0	5.6	5.6	5.9	3.8	11.2	0.0
LnGrp Delay(d),s/veh	46.4	39.4	28.6	44.2	42.9	0.0	62.6	23.7	24.0	50.1	30.6	0.0
LnGrp LOS	D	D	C	D	D		E	C	C	D	C	
Approach Vol, veh/h		699			555			999			1496	
Approach Delay, s/veh		39.1			43.3			30.4			32.3	
Approach LOS		D			D			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	13.1	40.8	12.0	31.2	15.3	38.6	12.1	31.1
Change Period (Y+Rc), s	* 4.2	5.4	* 4.2	4.9	* 4.2	5.4	* 4.2	* 4.9
Max Green Setting (Gmax), s	* 15	33.7	* 8	29.3	* 13	36.2	* 8	* 30
Max Q Clear Time (g_c+I1), s	9.1	14.1	5.9	21.0	11.2	25.1	6.7	22.5
Green Ext Time (p_c), s	0.1	14.7	0.1	4.0	0.1	8.1	0.1	3.7

Intersection Summary	
HCM 2010 Ctrl Delay	34.7
HCM 2010 LOS	C

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	334	423	156	113	372	285	252	1349	93	162	872	192
Future Volume (veh/h)	334	423	156	113	372	285	252	1349	93	162	872	192
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	1.00		0.98	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1835	1835	1835	1844	1844	1881	1881	1881	1919
Adj Flow Rate, veh/h	341	432	43	115	380	0	257	1377	95	165	890	0
Adj No. of Lanes	2	1	1	2	1	1	1	3	0	1	3	0
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	407	535	448	259	447	380	289	1652	114	196	1484	0
Arrive On Green	0.12	0.28	0.28	0.08	0.24	0.00	0.16	0.34	0.34	0.11	0.29	0.00
Sat Flow, veh/h	3476	1881	1577	3390	1835	1560	1756	4803	331	1792	5305	0
Grp Volume(v), veh/h	341	432	43	115	380	0	257	962	510	165	890	0
Grp Sat Flow(s),veh/h/ln	1738	1881	1577	1695	1835	1560	1756	1678	1778	1792	1712	0
Q Serve(g_s), s	9.7	21.5	2.0	3.3	19.9	0.0	14.4	26.5	26.5	9.1	15.0	0.0
Cycle Q Clear(g_c), s	9.7	21.5	2.0	3.3	19.9	0.0	14.4	26.5	26.5	9.1	15.0	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.19	1.00		0.00
Lane Grp Cap(c), veh/h	407	535	448	259	447	380	289	1154	611	196	1484	0
V/C Ratio(X)	0.84	0.81	0.10	0.44	0.85	0.00	0.89	0.83	0.83	0.84	0.60	0.00
Avail Cap(c_a), veh/h	442	563	472	270	474	403	335	1181	625	228	1484	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	43.5	33.4	26.5	44.4	36.3	0.0	41.1	30.4	30.4	43.9	30.8	0.0
Incr Delay (d2), s/veh	12.0	8.4	0.1	0.9	13.5	0.0	21.3	5.2	9.3	20.2	0.7	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.3	12.4	0.9	1.6	11.7	0.0	8.7	13.1	14.6	5.6	7.2	0.0
LnGrp Delay(d),s/veh	55.5	41.9	26.6	45.3	49.8	0.0	62.4	35.6	39.7	64.1	31.4	0.0
LnGrp LOS	E	D	C	D	D		E	D	D	E	C	
Approach Vol, veh/h		816			495			1729			1055	
Approach Delay, s/veh		46.8			48.8			40.8			36.5	
Approach LOS		D			D			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	15.2	40.0	11.9	33.5	20.8	34.5	16.0	29.4
Change Period (Y+Rc), s	* 4.2	5.4	* 4.2	4.9	* 4.2	5.4	* 4.2	* 4.9
Max Green Setting (Gmax), s	* 13	35.4	* 8	30.1	* 19	29.0	* 13	* 26
Max Q Clear Time (g_c+I1), s	11.1	28.5	5.3	23.5	16.4	17.0	11.7	21.9
Green Ext Time (p_c), s	0.1	6.1	0.1	3.2	0.2	10.1	0.1	2.2

Intersection Summary	
HCM 2010 Ctrl Delay	41.8
HCM 2010 LOS	D

Notes

User approved pedestrian interval to be less than phase max green.
* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	45	2	299	0	0	0	361	188	7	1	241	181
Future Volume (veh/h)	45	2	299	0	0	0	361	188	7	1	241	181
Number	7	4	14				5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1776	1776				1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	47	2	30				380	198	7	1	254	51
Adj No. of Lanes	0	1	1				1	1	0	1	1	0
Peak Hour Factor	0.95	0.95	0.95				0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	7	7	7				2	2	2	2	2	2
Cap, veh/h	123	5	114				478	991	35	5	430	86
Arrive On Green	0.08	0.08	0.08				0.27	0.55	0.55	0.00	0.29	0.29
Sat Flow, veh/h	1625	69	1509				1774	1788	63	1774	1503	302
Grp Volume(v), veh/h	49	0	30				380	0	205	1	0	305
Grp Sat Flow(s),veh/h/ln	1694	0	1509				1774	0	1851	1774	0	1805
Q Serve(g_s), s	1.0	0.0	0.7				7.3	0.0	2.0	0.0	0.0	5.3
Cycle Q Clear(g_c), s	1.0	0.0	0.7				7.3	0.0	2.0	0.0	0.0	5.3
Prop In Lane	0.96		1.00				1.00		0.03	1.00		0.17
Lane Grp Cap(c), veh/h	128	0	114				478	0	1026	5	0	517
V/C Ratio(X)	0.38	0.00	0.26				0.79	0.00	0.20	0.21	0.00	0.59
Avail Cap(c_a), veh/h	833	0	742				848	0	1694	242	0	1035
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00				1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	16.1	0.0	16.0				12.4	0.0	4.1	18.2	0.0	11.2
Incr Delay (d2), s/veh	1.9	0.0	1.2				3.0	0.0	0.1	19.8	0.0	1.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.5	0.0	0.0				3.9	0.0	1.1	0.0	0.0	2.8
LnGrp Delay(d),s/veh	18.0	0.0	17.2				15.5	0.0	4.2	38.0	0.0	12.3
LnGrp LOS	B		B				B		A	D		B
Approach Vol, veh/h		79						585			306	
Approach Delay, s/veh		17.7						11.5			12.4	
Approach LOS		B						B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		
Phs Duration (G+Y+Rc), s	4.6	24.8		7.3	14.4	15.0		
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		
Max Green Setting (Gmax), s	5.0	33.5		18.0	17.5	21.0		
Max Q Clear Time (g_c+I1), s	2.0	4.0		3.0	9.3	7.3		
Green Ext Time (p_c), s	0.0	3.3		0.2	0.8	2.6		

Intersection Summary	
HCM 2010 Ctrl Delay	12.3
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	139	2	266	0	0	0	696	485	18	3	306	190
Future Volume (veh/h)	139	2	266	0	0	0	696	485	18	3	306	190
Number	7	4	14				5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1792	1792				1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	145	2	74				725	505	19	3	319	43
Adj No. of Lanes	0	1	1				1	1	0	1	1	0
Peak Hour Factor	0.96	0.96	0.96				0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	6	6	6				2	2	2	2	2	2
Cap, veh/h	194	3	176				777	1248	47	10	429	58
Arrive On Green	0.12	0.12	0.12				0.44	0.70	0.70	0.01	0.27	0.27
Sat Flow, veh/h	1685	23	1524				1774	1783	67	1774	1605	216
Grp Volume(v), veh/h	147	0	74				725	0	524	3	0	362
Grp Sat Flow(s),veh/h/ln	1708	0	1524				1774	0	1851	1774	0	1821
Q Serve(g_s), s	6.9	0.0	3.7				32.0	0.0	9.8	0.1	0.0	15.0
Cycle Q Clear(g_c), s	6.9	0.0	3.7				32.0	0.0	9.8	0.1	0.0	15.0
Prop In Lane	0.99		1.00				1.00		0.04	1.00		0.12
Lane Grp Cap(c), veh/h	197	0	176				777	0	1295	10	0	486
V/C Ratio(X)	0.75	0.00	0.42				0.93	0.00	0.40	0.30	0.00	0.74
Avail Cap(c_a), veh/h	393	0	351				959	0	1530	172	0	697
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00				1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	35.3	0.0	33.9				22.0	0.0	5.2	40.9	0.0	27.7
Incr Delay (d2), s/veh	5.5	0.0	1.6				13.7	0.0	0.2	15.9	0.0	2.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.5	0.0	0.1				18.5	0.0	5.0	0.1	0.0	7.9
LnGrp Delay(d),s/veh	40.9	0.0	35.5				35.7	0.0	5.4	56.7	0.0	30.2
LnGrp LOS	D		D				D		A	E		C
Approach Vol, veh/h		221						1249			365	
Approach Delay, s/veh		39.1						23.0			30.5	
Approach LOS		D						C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		
Phs Duration (G+Y+Rc), s	5.1	63.3		14.1	40.8	27.6		
Change Period (Y+Rc), s	4.6	5.6		4.6	4.6	5.6		
Max Green Setting (Gmax), s	8.0	68.2		19.0	44.6	31.6		
Max Q Clear Time (g_c+I1), s	2.1	11.8		8.9	34.0	17.0		
Green Ext Time (p_c), s	0.0	7.1		0.7	2.1	5.0		

Intersection Summary	
HCM 2010 Ctrl Delay	26.4
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	24	468	19	21	784	53	13	1	7	24	2	12
Future Volume (veh/h)	24	468	19	21	784	53	13	1	7	24	2	12
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	0.99		1.00	0.99		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1792	1900	1900	1845	1900	1900	1667	1900	1900	1863	1900
Adj Flow Rate, veh/h	27	532	22	24	891	60	15	1	8	27	2	14
Adj No. of Lanes	0	2	0	0	2	0	0	1	0	0	1	0
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	6	6	6	3	3	3	14	14	14	2	2	2
Cap, veh/h	184	1740	70	166	1792	119	305	5	39	312	6	41
Arrive On Green	0.56	0.56	0.56	0.56	0.56	0.56	0.08	0.08	0.08	0.08	0.08	0.08
Sat Flow, veh/h	51	3113	126	29	3206	213	872	58	465	955	71	495
Grp Volume(v), veh/h	300	0	281	513	0	462	24	0	0	43	0	0
Grp Sat Flow(s),veh/h/ln	1682	0	1607	1809	0	1639	1395	0	0	1521	0	0
Q Serve(g_s), s	0.0	0.0	2.3	0.0	0.0	4.4	0.0	0.0	0.0	0.3	0.0	0.0
Cycle Q Clear(g_c), s	2.2	0.0	2.3	4.3	0.0	4.4	0.3	0.0	0.0	0.6	0.0	0.0
Prop In Lane	0.09		0.08	0.05		0.13	0.62		0.33	0.63		0.33
Lane Grp Cap(c), veh/h	1096	0	899	1161	0	916	349	0	0	360	0	0
V/C Ratio(X)	0.27	0.00	0.31	0.44	0.00	0.50	0.07	0.00	0.00	0.12	0.00	0.00
Avail Cap(c_a), veh/h	1330	0	1150	1434	0	1172	1174	0	0	1285	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	2.9	0.0	3.0	3.4	0.0	3.4	10.7	0.0	0.0	10.8	0.0	0.0
Incr Delay (d2), s/veh	0.1	0.0	0.2	0.3	0.0	0.4	0.1	0.0	0.0	0.1	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.1	0.0	1.1	2.1	0.0	2.0	0.2	0.0	0.0	0.3	0.0	0.0
LnGrp Delay(d),s/veh	3.1	0.0	3.2	3.7	0.0	3.8	10.8	0.0	0.0	11.0	0.0	0.0
LnGrp LOS	A		A	A		A	B			B		
Approach Vol, veh/h		581			975			24			43	
Approach Delay, s/veh		3.1			3.7			10.8			11.0	
Approach LOS		A			A			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		18.6		6.6		18.6		6.6
Change Period (Y+Rc), s		4.5		4.5		4.5		4.5
Max Green Setting (Gmax), s		18.0		18.0		18.0		18.0
Max Q Clear Time (g_c+I1), s		4.3		2.6		6.4		2.3
Green Ext Time (p_c), s		8.3		0.2		7.4		0.2

Intersection Summary	
HCM 2010 Ctrl Delay	3.8
HCM 2010 LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	23	972	25	20	847	65	16	1	29	77	2	30
Future Volume (veh/h)	23	972	25	20	847	65	16	1	29	77	2	30
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		0.99	0.99		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1845	1900	1900	1863	1900	1900	1863	1900	1900	1863	1900
Adj Flow Rate, veh/h	24	1023	26	21	892	68	17	1	31	81	2	32
Adj No. of Lanes	0	2	0	0	2	0	0	1	0	0	1	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	3	3	3	2	2	2	2	2	2	2	2	2
Cap, veh/h	131	1971	49	129	1883	142	201	28	136	324	8	55
Arrive On Green	0.59	0.59	0.59	0.59	0.59	0.59	0.13	0.13	0.13	0.13	0.13	0.13
Sat Flow, veh/h	26	3340	84	23	3191	240	386	208	1024	1013	63	415
Grp Volume(v), veh/h	557	0	516	513	0	468	49	0	0	115	0	0
Grp Sat Flow(s),veh/h/ln	1787	0	1663	1805	0	1650	1619	0	0	1491	0	0
Q Serve(g_s), s	0.0	0.0	6.0	0.0	0.0	5.3	0.0	0.0	0.0	1.4	0.0	0.0
Cycle Q Clear(g_c), s	5.8	0.0	6.0	5.1	0.0	5.3	0.9	0.0	0.0	2.2	0.0	0.0
Prop In Lane	0.04		0.05	0.04		0.15	0.35		0.63	0.70		0.28
Lane Grp Cap(c), veh/h	1170	0	981	1180	0	974	364	0	0	387	0	0
V/C Ratio(X)	0.48	0.00	0.53	0.44	0.00	0.48	0.13	0.00	0.00	0.30	0.00	0.00
Avail Cap(c_a), veh/h	1370	0	1179	1381	0	1170	995	0	0	985	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	3.9	0.0	4.0	3.8	0.0	3.8	12.6	0.0	0.0	13.1	0.0	0.0
Incr Delay (d2), s/veh	0.3	0.0	0.4	0.3	0.0	0.4	0.2	0.0	0.0	0.4	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.9	0.0	2.7	2.7	0.0	2.4	0.4	0.0	0.0	1.0	0.0	0.0
LnGrp Delay(d),s/veh	4.2	0.0	4.4	4.0	0.0	4.2	12.7	0.0	0.0	13.5	0.0	0.0
LnGrp LOS	A		A	A		A	B			B		
Approach Vol, veh/h		1073			981			49			115	
Approach Delay, s/veh		4.3			4.1			12.7			13.5	
Approach LOS		A			A			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		23.6		8.8		23.6		8.8
Change Period (Y+Rc), s		4.5		4.5		4.5		4.5
Max Green Setting (Gmax), s		23.0		18.0		23.0		18.0
Max Q Clear Time (g_c+I1), s		8.0		4.2		7.3		2.9
Green Ext Time (p_c), s		11.2		0.7		11.6		0.7

Intersection Summary	
HCM 2010 Ctrl Delay	4.9
HCM 2010 LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	548	3	32	699	0	4	0	14	195	45	221
Future Volume (veh/h)	0	548	3	32	699	0	4	0	14	195	45	221
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	0	1792	1900	1827	1827	0	1900	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	0	623	3	36	794	0	5	0	16	222	51	251
Adj No. of Lanes	0	2	0	1	2	0	0	1	1	1	1	0
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	0	6	6	4	4	0	2	2	2	2	2	2
Cap, veh/h	0	1356	7	386	1355	0	437	0	595	507	103	508
Arrive On Green	0.00	0.39	0.39	0.39	0.39	0.00	0.38	0.00	0.38	0.38	0.38	0.38
Sat Flow, veh/h	0	3565	17	778	3563	0	666	0	1581	1390	274	1348
Grp Volume(v), veh/h	0	305	321	36	794	0	5	0	16	222	0	302
Grp Sat Flow(s),veh/h/ln	0	1703	1789	778	1736	0	666	0	1581	1390	0	1622
Q Serve(g_s), s	0.0	5.1	5.1	1.4	7.0	0.0	0.1	0.0	0.2	5.6	0.0	5.5
Cycle Q Clear(g_c), s	0.0	5.1	5.1	6.5	7.0	0.0	5.6	0.0	0.2	11.3	0.0	5.5
Prop In Lane	0.00		0.01	1.00		0.00	1.00		1.00	1.00		0.83
Lane Grp Cap(c), veh/h	0	664	698	386	1355	0	437	0	595	507	0	611
V/C Ratio(X)	0.00	0.46	0.46	0.09	0.59	0.00	0.01	0.00	0.03	0.44	0.00	0.49
Avail Cap(c_a), veh/h	0	795	835	446	1620	0	534	0	738	632	0	757
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	8.7	8.7	11.2	9.3	0.0	11.4	0.0	7.6	13.6	0.0	9.2
Incr Delay (d2), s/veh	0.0	0.5	0.5	0.1	0.4	0.0	0.0	0.0	0.0	0.6	0.0	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	2.5	2.6	0.3	3.4	0.0	0.0	0.0	0.1	2.2	0.0	2.5
LnGrp Delay(d),s/veh	0.0	9.2	9.2	11.3	9.7	0.0	11.4	0.0	7.6	14.2	0.0	9.8
LnGrp LOS		A	A	B	A		B		A	B		A
Approach Vol, veh/h		626			830			21			524	
Approach Delay, s/veh		9.2			9.8			8.5			11.7	
Approach LOS		A			A			A			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		19.6		19.0		19.6		19.0
Change Period (Y+Rc), s		4.5		4.5		4.5		4.5
Max Green Setting (Gmax), s		18.0		18.0		18.0		18.0
Max Q Clear Time (g_c+I1), s		7.1		13.3		9.0		7.6
Green Ext Time (p_c), s		6.7		1.2		5.8		2.0

Intersection Summary	
HCM 2010 Ctrl Delay	10.1
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	1168	13	32	640	0	5	0	59	364	77	172
Future Volume (veh/h)	0	1168	13	32	640	0	5	0	59	364	77	172
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	0	1863	1900	1827	1827	0	1900	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	0	1192	13	33	653	0	5	0	60	371	79	176
Adj No. of Lanes	0	2	0	1	2	0	0	1	1	1	1	0
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	0	2	2	4	4	0	2	2	2	2	2	2
Cap, veh/h	0	1593	17	221	1542	0	436	0	591	488	192	428
Arrive On Green	0.00	0.44	0.44	0.44	0.44	0.00	0.37	0.00	0.37	0.37	0.37	0.37
Sat Flow, veh/h	0	3679	39	453	3563	0	778	0	1580	1335	514	1144
Grp Volume(v), veh/h	0	588	617	33	653	0	5	0	60	371	0	255
Grp Sat Flow(s),veh/h/ln	0	1770	1855	453	1736	0	778	0	1580	1335	0	1658
Q Serve(g_s), s	0.0	13.7	13.7	3.2	6.4	0.0	0.2	0.0	1.2	12.7	0.0	5.6
Cycle Q Clear(g_c), s	0.0	13.7	13.7	16.9	6.4	0.0	5.8	0.0	1.2	18.5	0.0	5.6
Prop In Lane	0.00		0.02	1.00		0.00	1.00		1.00	1.00		0.69
Lane Grp Cap(c), veh/h	0	786	824	221	1542	0	436	0	591	488	0	620
V/C Ratio(X)	0.00	0.75	0.75	0.15	0.42	0.00	0.01	0.00	0.10	0.76	0.00	0.41
Avail Cap(c_a), veh/h	0	805	844	226	1578	0	436	0	591	488	0	620
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	11.4	11.4	18.5	9.4	0.0	13.6	0.0	10.1	18.9	0.0	11.5
Incr Delay (d2), s/veh	0.0	3.8	3.6	0.3	0.2	0.0	0.0	0.0	0.1	6.8	0.0	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	7.4	7.7	0.4	3.0	0.0	0.1	0.0	0.5	5.9	0.0	2.6
LnGrp Delay(d),s/veh	0.0	15.3	15.1	18.8	9.6	0.0	13.6	0.0	10.2	25.7	0.0	11.9
LnGrp LOS		B	B	B	A		B		B	C		B
Approach Vol, veh/h		1205			686			65			626	
Approach Delay, s/veh		15.2			10.0			10.4			20.1	
Approach LOS		B			B			B			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		26.5		23.0		26.5		23.0
Change Period (Y+Rc), s		4.5		4.5		4.5		4.5
Max Green Setting (Gmax), s		22.5		18.5		22.5		18.5
Max Q Clear Time (g_c+I1), s		15.7		20.5		18.9		7.8
Green Ext Time (p_c), s		5.5		0.0		3.0		2.4

Intersection Summary	
HCM 2010 Ctrl Delay	14.9
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	210	384	25	8	507	337	23	78	3	210	56	275
Future Volume (veh/h)	210	384	25	8	507	337	23	78	3	210	56	275
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		0.99	0.99		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1900	1863	1863	1863	1863	1863	1900	1792	1792	1792
Adj Flow Rate, veh/h	233	427	28	9	563	127	26	87	3	233	62	0
Adj No. of Lanes	1	2	0	1	1	1	1	1	0	1	1	1
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	3	3	3	2	2	2	2	2	2	6	6	6
Cap, veh/h	277	1712	112	28	691	582	422	483	17	387	483	411
Arrive On Green	0.16	0.51	0.51	0.02	0.37	0.37	0.27	0.27	0.27	0.27	0.27	0.00
Sat Flow, veh/h	1757	3339	218	1774	1863	1568	1328	1790	62	1245	1792	1524
Grp Volume(v), veh/h	233	223	232	9	563	127	26	0	90	233	62	0
Grp Sat Flow(s),veh/h/ln	1757	1752	1804	1774	1863	1568	1328	0	1851	1245	1792	1524
Q Serve(g_s), s	9.5	5.2	5.3	0.4	20.0	4.1	1.1	0.0	2.7	13.0	1.9	0.0
Cycle Q Clear(g_c), s	9.5	5.2	5.3	0.4	20.0	4.1	3.0	0.0	2.7	15.7	1.9	0.0
Prop In Lane	1.00		0.12	1.00		1.00	1.00		0.03	1.00		1.00
Lane Grp Cap(c), veh/h	277	899	925	28	691	582	422	0	499	387	483	411
V/C Ratio(X)	0.84	0.25	0.25	0.32	0.81	0.22	0.06	0.00	0.18	0.60	0.13	0.00
Avail Cap(c_a), veh/h	356	983	1012	169	845	711	552	0	681	510	659	560
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	30.0	10.0	10.0	35.7	20.8	15.8	21.4	0.0	20.6	26.6	20.3	0.0
Incr Delay (d2), s/veh	13.3	0.1	0.1	6.2	5.1	0.2	0.1	0.0	0.2	1.5	0.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.6	2.5	2.6	0.2	11.2	1.8	0.4	0.0	1.4	4.6	1.0	0.0
LnGrp Delay(d),s/veh	43.3	10.1	10.1	42.0	25.9	16.0	21.5	0.0	20.8	28.1	20.4	0.0
LnGrp LOS	D	B	B	D	C	B	C		C	C	C	
Approach Vol, veh/h		688			699			116			295	
Approach Delay, s/veh		21.4			24.3			20.9			26.5	
Approach LOS		C			C			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	6.3	42.8		24.4	16.7	32.3		24.4
Change Period (Y+Rc), s	5.1	5.1		4.6	5.1	5.1		4.6
Max Green Setting (Gmax), s	7.0	41.2		27.0	14.9	33.3		27.0
Max Q Clear Time (g_c+I1), s	2.4	7.3		17.7	11.5	22.0		5.0
Green Ext Time (p_c), s	0.0	8.4		1.2	0.2	5.2		1.7

Intersection Summary	
HCM 2010 Ctrl Delay	23.3
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	369	993	56	32	431	623	52	270	43	276	53	280
Future Volume (veh/h)	369	993	56	32	431	623	52	270	43	276	53	280
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.98	1.00		0.99	0.99		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1863	1863	1863	1900	1776	1776	1776
Adj Flow Rate, veh/h	377	1013	57	33	440	443	53	276	44	282	54	0
Adj No. of Lanes	1	2	0	1	1	1	1	1	0	1	1	1
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	7	7	7
Cap, veh/h	364	1553	87	75	546	455	520	554	88	287	629	534
Arrive On Green	0.20	0.46	0.46	0.04	0.29	0.29	0.35	0.35	0.35	0.35	0.35	0.00
Sat Flow, veh/h	1774	3406	192	1774	1863	1554	1341	1565	249	999	1776	1509
Grp Volume(v), veh/h	377	526	544	33	440	443	53	0	320	282	54	0
Grp Sat Flow(s),veh/h/ln	1774	1770	1828	1774	1863	1554	1341	0	1814	999	1776	1509
Q Serve(g_s), s	20.5	23.0	23.0	1.8	21.9	28.2	2.7	0.0	13.8	21.6	2.0	0.0
Cycle Q Clear(g_c), s	20.5	23.0	23.0	1.8	21.9	28.2	4.8	0.0	13.8	35.4	2.0	0.0
Prop In Lane	1.00		0.10	1.00		1.00	1.00		0.14	1.00		1.00
Lane Grp Cap(c), veh/h	364	807	833	75	546	455	520	0	642	287	629	534
V/C Ratio(X)	1.04	0.65	0.65	0.44	0.81	0.97	0.10	0.00	0.50	0.98	0.09	0.00
Avail Cap(c_a), veh/h	364	807	833	124	546	455	520	0	642	287	629	534
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	39.8	21.1	21.1	46.8	32.7	35.0	23.1	0.0	25.3	41.8	21.5	0.0
Incr Delay (d2), s/veh	57.0	1.9	1.8	4.1	8.7	35.1	0.1	0.0	0.6	47.8	0.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	15.8	11.7	12.1	1.0	12.6	16.5	1.0	0.0	7.0	11.6	1.0	0.0
LnGrp Delay(d),s/veh	96.7	22.9	22.9	50.8	41.4	70.1	23.2	0.0	25.9	89.6	21.6	0.0
LnGrp LOS	F	C	C	D	D	E	C		C	F	C	
Approach Vol, veh/h		1447			916			373			336	
Approach Delay, s/veh		42.1			55.6			25.5			78.6	
Approach LOS		D			E			C			E	

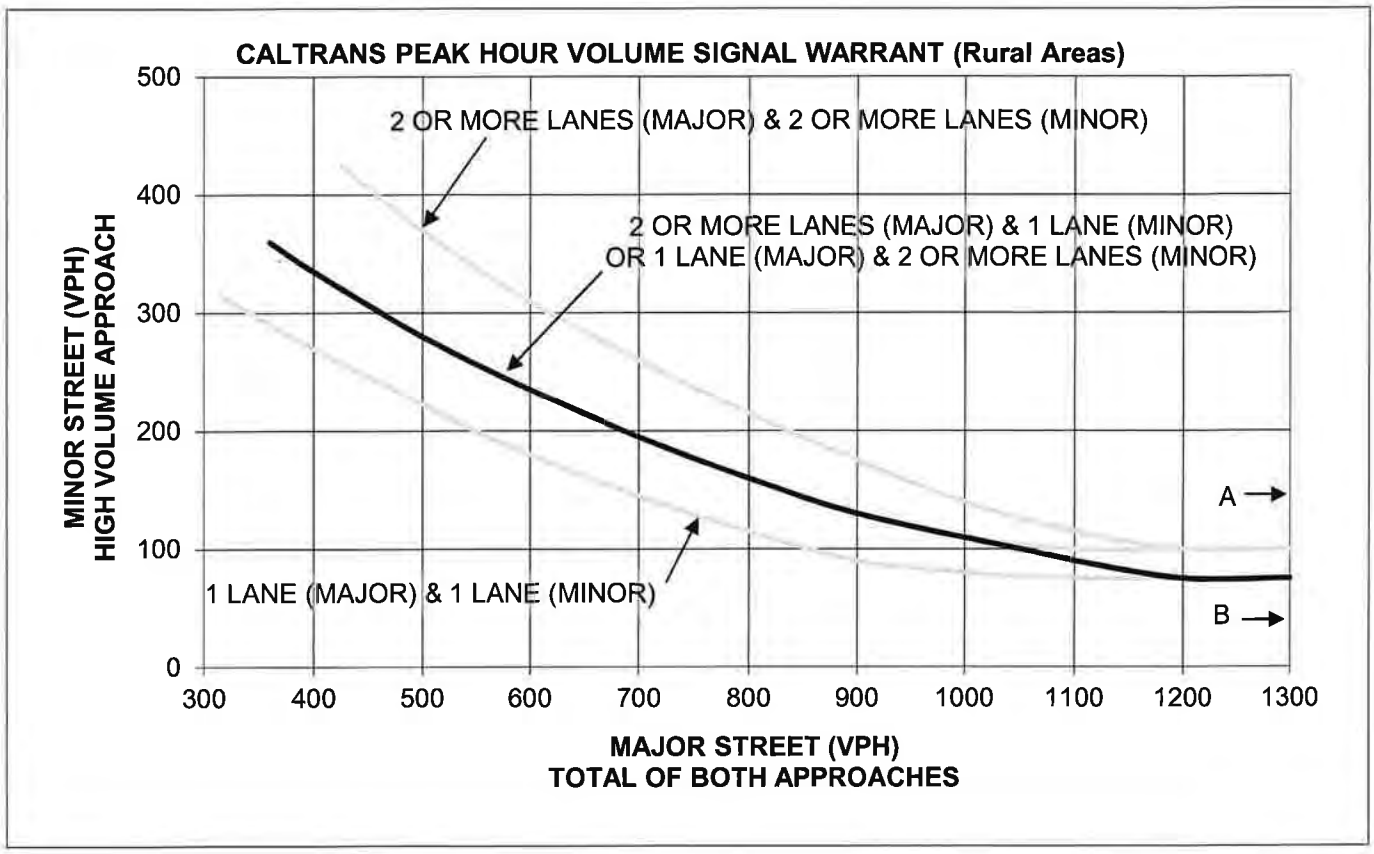
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	9.3	50.7		40.0	25.6	34.4		40.0
Change Period (Y+Rc), s	5.1	5.1		4.6	5.1	5.1		4.6
Max Green Setting (Gmax), s	7.0	42.8		35.4	20.5	29.3		35.4
Max Q Clear Time (g_c+I1), s	3.8	25.0		37.4	22.5	30.2		15.8
Green Ext Time (p_c), s	0.0	11.1		0.0	0.0	0.0		3.8

Intersection Summary		
HCM 2010 Ctrl Delay		48.1
HCM 2010 LOS		D

K. Warrant Worksheets

Warrant 3A - Peak Hour Warrant

Intersection #4 - Sherwood Drive / Sherwood Place



Scenario	Sherwood North/South	Sherwood East/West	Warrant Met?
A. Cum+Pro AM	3285	142	Yes
B. Cum+Pro PM	3337	44	No

Notes:

1. 100 VPH applies as the lower threshold volume for a minor street approach with two or more lanes and 75 VPH applies as the lower threshold volume for a minor street approaching with one lane.
2. Bold line applies to intersection geometry.
3. Northbound and Westbound right turn movement have been excluded from this analysis, as they are free right turns and would not be controlled by a potential signal at this location.

Warrant 3 (Part B) - Peak Hour Delay
#4 - Sherwood Drive / Sherwood Place

Number of Approaches to Intersection: 3 approaches **Minimum Entering Vehicles:** **650**

Total Entering Volumes: Cum+Pro AM: 3,486 vehicles
Cum+Pro PM: 3,491 vehicles

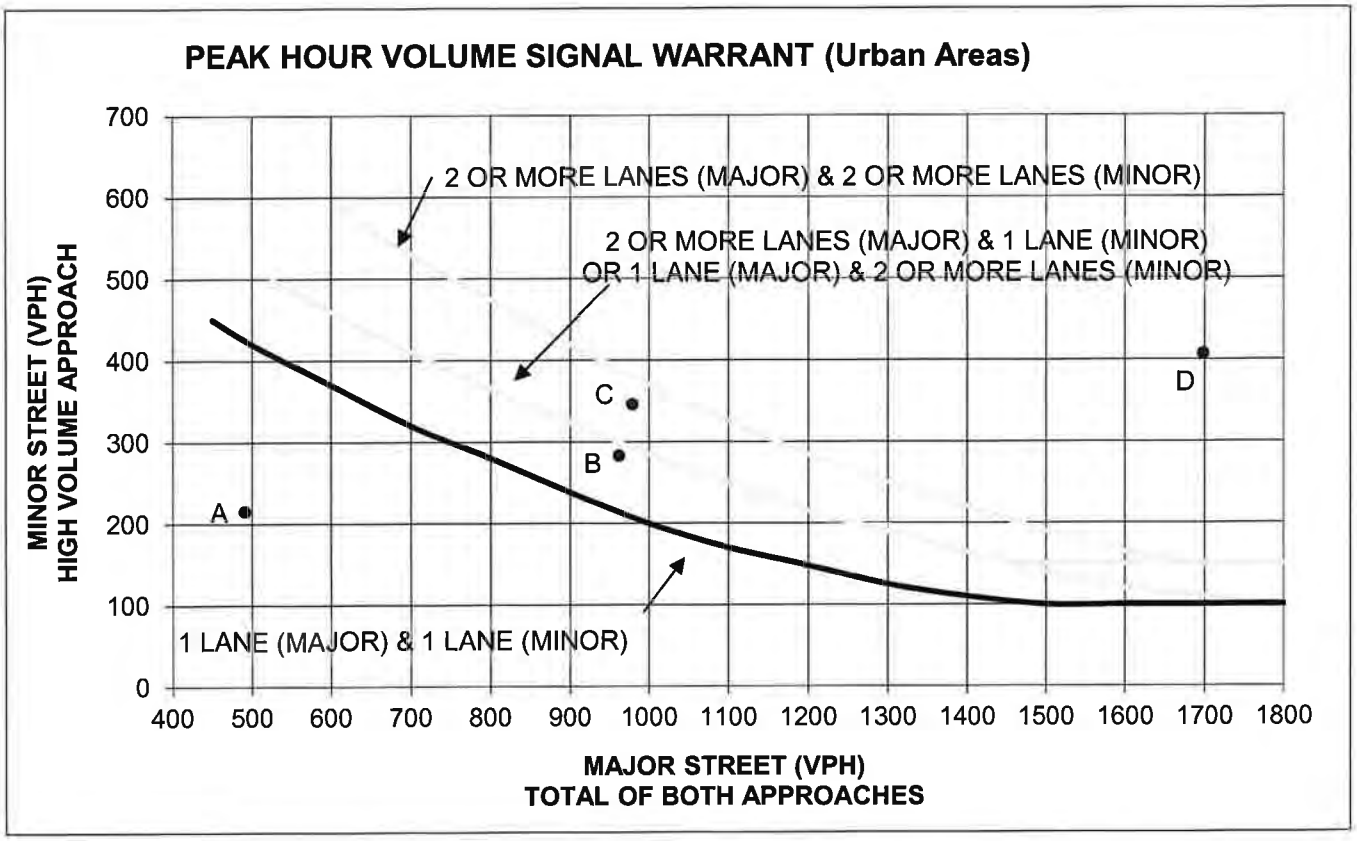
Street	Direction	Scenario	Peak Hour	No. of Stopped Vehicles	Average Vehicle Delay (sec)	Total Vehicle Delay (sec)	Total Delay (hours)	Min. 4 Veh-Hrs of Delay? (Approach)	At least 100 Veh? (Approach)	At least 650 Veh? (Intersection)	Warrant Met?
Sherwood Place	WB	Cum+Pro	AM	142	37.6	5,339	1.48	NO	Yes	Yes	**NO**
Sherwood Place	WB	Cum+Pro	PM	44	49.1	2,160	0.60	NO	NO	Yes	**NO**

Notes:
1. Warrant based on level of service calculations.
2. NB, SB, EB, WB = Northbound, Southbound, Eastbound, Westbound.
3. Cum+Pro = Cumulative Plus Project.

Warrant 3A - Peak Hour Warrant

Intersection #7 -

Kern Street / US 101 Northbound Ramps - Mobray Way



Scenario	Kern North/South	US 101 NB East/West	Warrant Met?
A. Bk+Pro AM	491	215	No
B. Bk+Pro PM	962	283	Yes
C. Cum+Pro AM	979	346	Yes
D. Cum+Pro PM	1698	407	Yes

Notes:

1. 150 VPH applies as the lower threshold volume for a minor street approach with two or more lanes and 100 VPH applies as the lower threshold volume for a minor street approaching with one lane.
2. Bold line applies to intersection geometry.

Warrant 3 (Part B) - Peak Hour Delay
#7 - Kern Street / US 101 Northbound Ramps - Mobray Way

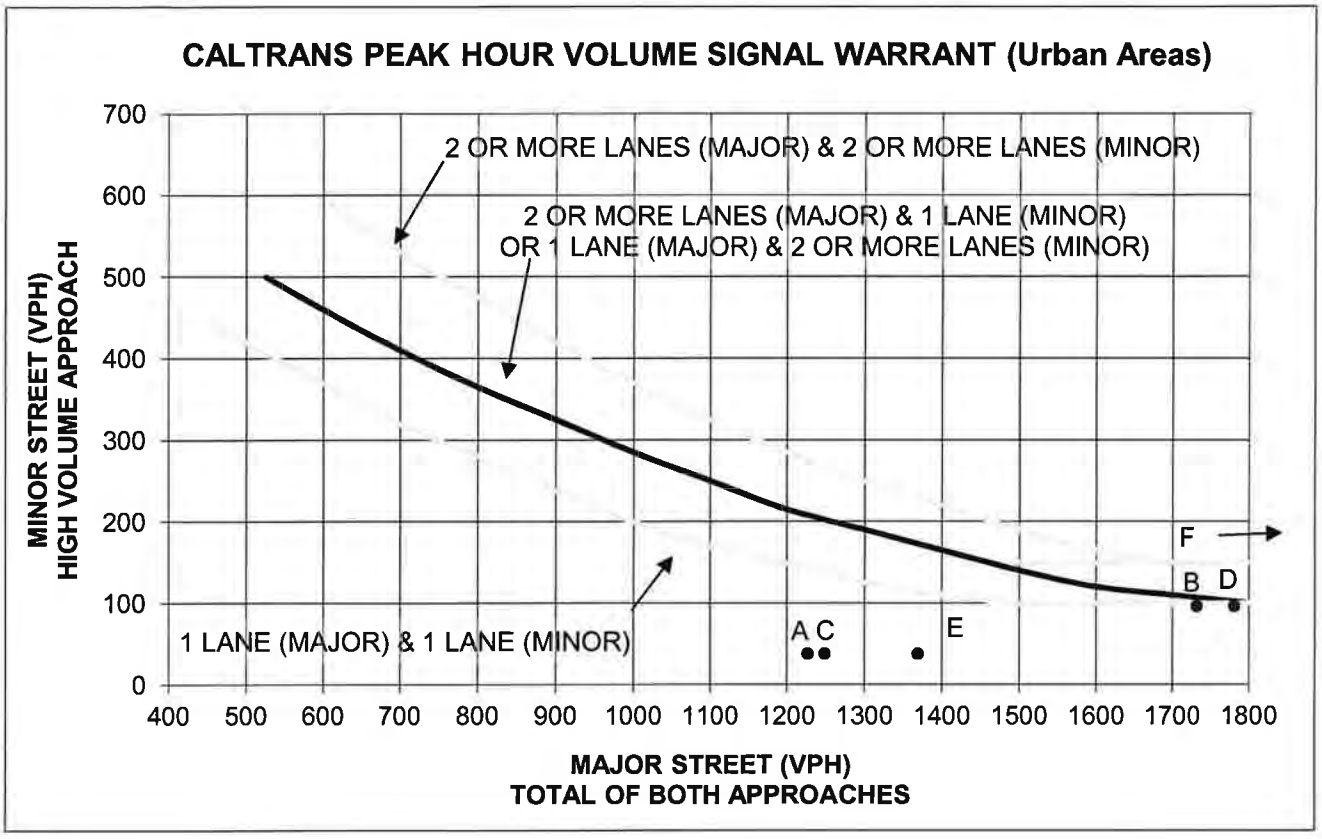
Number of Approaches to Intersection:		4 approaches	**Minimum Entering Vehicles:**	**800 vehicles**
Total Entering Volumes:	Bk+Pro AM:	706 vehicles		
	Bk+Pro PM:	1,248 vehicles		
	Cum+Pro AM:	910 vehicles		
	Cum+Pro PM:	1,676 vehicles		

Street	Direction	Scenario	Peak Hour	No. of Stopped Vehicles	Average Vehicle Delay (sec)	Total Vehicle Delay (sec)	Total Delay (hours)	Min. 4 Veh-Hrs of Delay? (Approach)	At least 100 Veh? (Approach)	At least 800 Veh? (Intersection)	Warrant Met?
US 101 NB	EB	Bk+Pro	AM	215	11.0	2,365.0	0.66	NO	Yes	NO	**NO**
US 101 NB	EB	Bk+Pro	PM	283	71.2	20,149.6	5.60	Yes	Yes	Yes	**Yes**
US 101 NB	EB	Cum+Pro	AM	346	21.3	7,369.8	2.05	NO	Yes	Yes	**NO**
US 101 NB	EB	Cum+Pro	PM	407	266.5	108,465.5	30.13	Yes	Yes	Yes	**Yes**

Notes:
1. Warrant based on level of service calculations.
2. NB, SB, EB, WB = Northbound, Southbound, Eastbound, Westbound.
3. Bk+Pro, Cum+Pro = Background Plus Project, Cumulative Plus Project

Warrant 3A - Peak-Hour Warrant

Intersection #10 - Sun Street - E Market Street



Scenario	E Market East/West	Sun North/South	Warrant Met?
A. Ex+Pro AM	1227	38	No
B. Ex+Pro PM	1732	96	No
C. Bk+Pro AM	1249	38	No
D. Bk+Pro PM	1781	96	No
E. Cum+Pro AM	1369	38	No
F. Cum+Pro PM	1952	109	Yes

Notes:

1. 150 VPH applies as the lower threshold volume for a minor street approach with two or more lanes and 100 VPH applies as the lower threshold volume for a minor street approaching with one lane.

2. Bold line applies to intersection geometry.

Warrant 3 (Part B) - Peak Hour Delay
#10 - Sun Street / E Market Street

Number of Approaches to Intersection: 4 approaches **Minimum Entering Vehicles:** **800**

Total Entering Volumes:

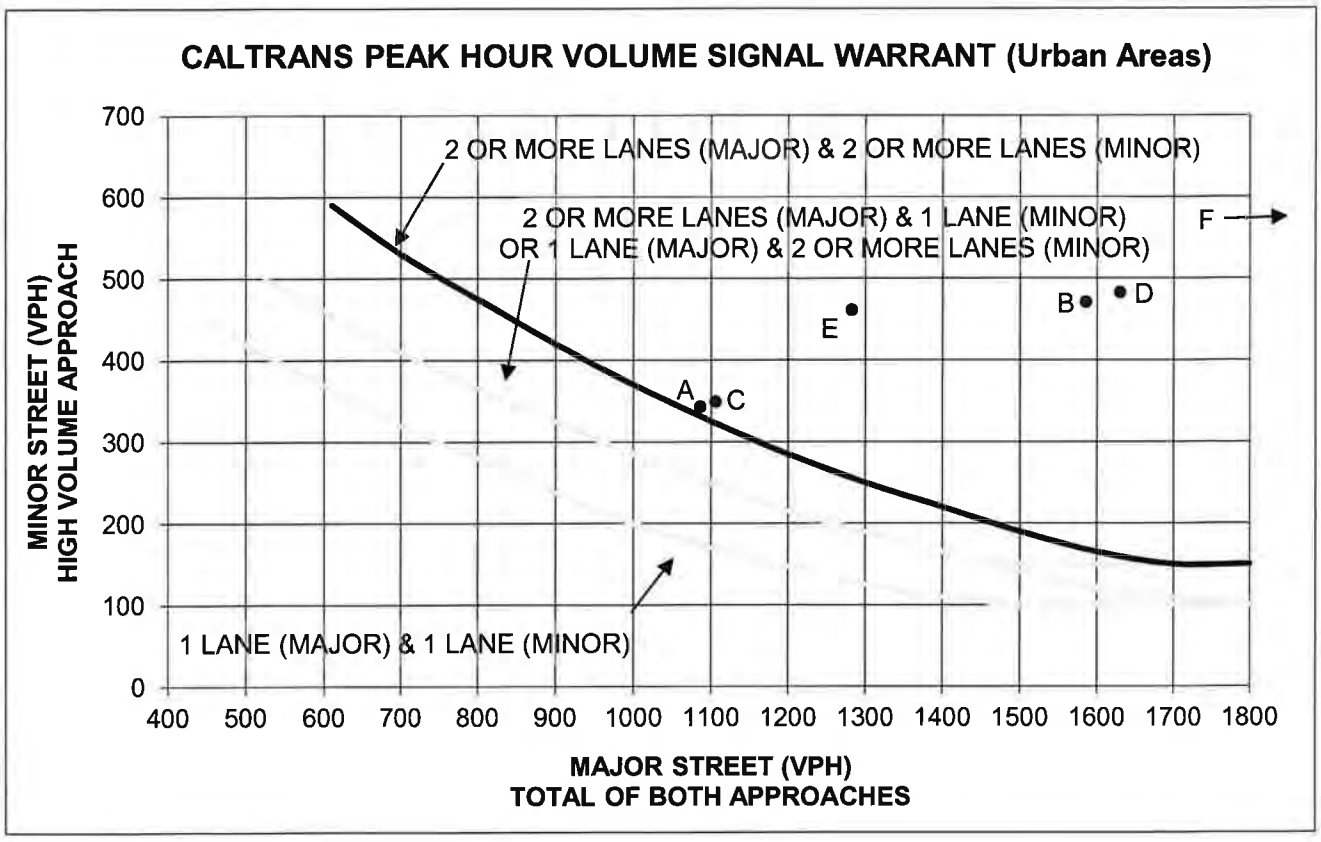
Ex+Pro AM:	1,284 vehicles	Cum+Pro AM:	1,470 vehicles
Ex+Pro PM:	1,875 vehicles	Cum+Pro PM:	2,058 vehicles
Bk+Pro AM:	1,306 vehicles		
Bk+Pro PM:	1,924 vehicles		

Street	Direction	Scenario	Peak Hour	No. of Stopped Vehicles	Average Vehicle Delay (sec)	Total Vehicle Delay (sec)	Total Delay (hours)	Min. 4 Veh-Hrs of Delay? (Approach)	At least 100 Veh? (Approach)	At least 800 Veh? (Intersection)	Warrant Met?
Sun	NB	Ex+Pro	AM	21	25.8	542	0.15	NO	NO	Yes	**NO**
Sun	SB	Ex+Pro	AM	34	34.7	1,180	0.33	NO	NO	Yes	**NO**
Sun	NB	Ex+Pro	PM	38	33.4	1,269	0.35	NO	NO	Yes	**NO**
Sun	SB	Ex+Pro	PM	96	142.2	13,651	3.79	NO	NO	Yes	**NO**
Sun	NB	Bk+Pro	AM	21	26.8	563	0.16	NO	NO	Yes	**NO**
Sun	SB	Bk+Pro	AM	38	39	1,482	0.41	NO	NO	Yes	**NO**
Sun	NB	Bk+Pro	PM	38	36.1	1,372	0.38	NO	NO	Yes	**NO**
Sun	SB	Bk+Pro	PM	96	166	15,936	4.43	Yes	NO	Yes	**NO**
Sun	NB	Cum+Pro	AM	21	29.3	615	0.17	NO	NO	Yes	**NO**
Sun	SB	Cum+Pro	AM	38	41.8	1,588	0.44	NO	NO	Yes	**NO**
Sun	NB	Cum+Pro	PM	46	49.8	2,291	0.64	NO	NO	Yes	**NO**
Sun	SB	Cum+Pro	PM	109	319.8	34,858	9.68	Yes	Yes	Yes	**Yes**

Notes:
1. Warrant based on level of service calculations.
2. NB, SB, EB, WB = Northbound, Southbound, Eastbound, Westbound.
3. Ex+Pro, Bk+Pro, Cum+Pro = Existing Plus Project, Background Plus Project, Cumulative Plus Project

Warrant 3A - Peak-Hour Warrant

Intersection #12 - Merced Street - US 101 Southbound Offramp / E Market Street



Scenario	E Market East/West	Merced North/South	Warrant Met?
A. Ex+Pro AM	1086	343	Yes
B. Ex+Pro PM	1585	471	Yes
C. Bk+Pro AM	1106	349	Yes
D. Bk+Pro PM	1630	483	Yes
E. Cum+Pro AM	1282	461	Yes
F. Cum+Pro PM	1853	613	Yes

Notes:

1. 150 VPH applies as the lower threshold volume for a minor street approach with two or more lanes and 100 VPH applies as the lower threshold volume for a minor street approaching with one lane.

2. Bold line applies to intersection geometry.

Warrant 3 (Part B) - Peak Hour Delay
#12 - Merced Street / US 101 Southbound Offramp / E Market Street

Number of Approaches to Intersection: 4 approaches **Minimum Entering Vehicles: 800**

Total Entering Volumes:

Ex+Pro AM:	1,450 vehicles	Cum+Pro AM:	1,737 vehicles
Ex+Pro PM:	2,116 vehicles	Cum+Pro PM:	2,536 vehicles
Bk+Pro AM:	1,476 vehicles		
Bk+Pro PM:	2,173 vehicles		

Street	Direction	Scenario	Peak Hour	No. of Stopped Vehicles	Average Vehicle Delay (sec)	Total Vehicle Delay (sec)	Total Delay (hours)	Min. 4 Veh-Hrs of Delay? (Approach)	At least 100 Veh? (Approach)	At least 800 Veh? (Intersection)	Warrant Met?
Merced	NB	Ex+Pro	AM	18	19.2	346	0.10	NO	NO	Yes	**NO**
US 101 SB Offramp	SB	Ex+Pro	AM	343	90.8	31,144	8.65	Yes	Yes	Yes	**Yes**
Merced	NB	Ex+Pro	PM	53	22.2	1,177	0.33	NO	NO	Yes	**NO**
US 101 SB Offramp	SB	Ex+Pro	PM	471	321.3	151,332	42.04	Yes	Yes	Yes	**Yes**
Merced	NB	Bk+Pro	AM	18	19.9	358	0.10	NO	NO	Yes	**NO**
US 101 SB Offramp	SB	Bk+Pro	AM	349	102.2	35,668	9.91	Yes	Yes	Yes	**Yes**
Merced	NB	Bk+Pro	PM	53	24.4	1,293	0.36	NO	NO	Yes	**NO**
US 101 SB Offramp	SB	Bk+Pro	PM	483	376.6	181,898	50.53	Yes	Yes	Yes	**Yes**
Merced	NB	Cum+Pro	AM	18	24.2	436	0.12	NO	NO	Yes	**NO**
US 101 SB Offramp	SB	Cum+Pro	AM	461	184.3	84,962	23.60	Yes	Yes	Yes	**Yes**
Merced	NB	Cum+Pro	PM[4]	64	2,500.0	160,000	44.44	Yes	NO	Yes	**NO**
US 101 SB Offramp	SB	Cum+Pro	PM	613	975.8	598,165	166.16	Yes	Yes	Yes	**Yes**

Notes:
1. Warrant based on level of service calculations.
2. NB, SB, EB, WB = Northbound, Southbound, Eastbound, Westbound.
3. Ex+Pro, Bk+Pro, Cum+Pro = Existing Plus Project, Background Plus Project, Cumulative Plus Project
4. Delay exceeds ability to be quantified by analysis software; therefore, delay is assumed to be 2,500 seconds.

L. Traffic Volume Count Comparisons

RODEO PROPERTY TIA TRAFFIC COUNT COMPARISON

INTERSECTION 1

Intersection 1		AM PEAK HOUR																
		Eastbound				Westbound				Northbound				Southbound				
Natividad / Laurel		Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	TOTAL
Rodeo Property Counts		126	309	66	501	761	457	211	1429	41	455	422	918	218	631	44	893	3741
Rodeo Property TIA Existing Volume		126	309	66	501	761	457	211	1429	41	505	422	968	218	831	44	1093	3991
Adjustment to Rodeo Property Count		0	0	0	0	0	0	0	0	0	50	0	50	0	200	0	200	250
Hacienda Phase III/IV TIA	1/14/2014	128	415	95	638	769	606	382	1757	36	571	516	1123	299	761	59	1119	4637
Difference	Rodeo Volumes - Hacienda TIA	-2	-106	-29	-137	-8	-149	-171	-328	5	-66	-94	-155	-81	70	-15	-26	-646
Ratio	Rodeo Volumes / Hacienda TIA	0.98	0.74	0.69	0.79	0.99	0.75	0.55	0.81	1.14	0.88	0.82	0.86	0.73	1.09	0.75	0.98	0.86

Intersection 1		PM PEAK HOUR																
		Eastbound				Westbound				Northbound				Southbound				
Natividad / Laurel		Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	TOTAL
Rodeo Property Counts		91	678	75	844	566	548	446	1560	93	656	890	1639	445	548	71	1064	5107
Rodeo Property TIA Existing Volume		91	678	75	844	616	548	446	1610	93	656	890	1639	445	648	71	1164	5257
Adjustment to Rodeo Property Count		0	0	0	0	50	0	0	50	0	0	0	0	0	100	0	100	150
Hacienda Phase III/IV TIA	1/14/2014	92	685	65	842	616	569	407	1592	86	578	846	1510	382	505	70	957	4901
Difference	Rodeo Volumes - Hacienda TIA	-1	-7	10	2	0	-21	39	18	7	78	44	129	63	143	1	207	356
Ratio	Rodeo Volumes / Hacienda TIA	0.99	0.99	1.15	1	1	0.96	1.1	1.01	1.08	1.13	1.05	1.09	1.16	1.28	1.01	1.22	1.07

RODEO PROPERTY TIA TRAFFIC COUNT COMPARISON

INTERSECTION 2

		AM PEAK HOUR																
Intersection 2		Eastbound				Westbound				Northbound				Southbound				
Natividad-Sherwood / Bernal		Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	TOTAL
Rodeo Property Counts		291	2	48	341	9	8	19	36	29	594	4	627	6	1146	422	1574	2578
Rodeo Property TIA Existing Volume		291	2	98	391	9	8	19	36	29	761	4	794	6	1295	422	1723	2944
Adjustment to Rodeo Property Count		0	0	50	50	0	0	0	0	0	167	0	167	0	149	0	149	366
Hacienda Phase III/IV TIA	1/14/2014	300	5	88	393	12	7	25	44	55	812	6	873	16	1300	388	1704	3014
Difference	Rodeo Volumes - Hacienda TIA	-9	-3	10	-2	-3	1	-6	-8	-26	-51	-2	-79	-10	-5	34	19	-70
Ratio	Rodeo Volumes / Hacienda TIA	0.97	0.4	1.11	0.99	0.75	1.14	0.76	0.82	0.53	0.94	0.67	0.91	0.38	1	1.09	1.01	0.98

		PM PEAK HOUR																
Intersection 2		Eastbound				Westbound				Northbound				Southbound				
Natividad-Sherwood / Bernal		Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	TOTAL
Rodeo Property Counts		341	17	50	408	5	14	13	32	158	1334	11	1503	19	715	428	1162	3105
Rodeo Property TIA Existing Volume		341	17	50	408	5	14	13	32	158	1335	11	1504	19	855	428	1302	3246
Adjustment to Rodeo Property Count		0	0	0	0	0	0	0	0	0	1	0	1	0	140	0	140	141
Hacienda Phase III/IV TIA	1/14/2014	365	9	60	434	9	8	19	36	169	1283	13	1465	12	793	377	1182	3117
Difference	Rodeo Volumes - Hacienda TIA	-24	8	-10	-26	-4	6	-6	-4	-11	52	-2	39	7	62	51	120	129
Ratio	Rodeo Volumes / Hacienda TIA	0.93	1.89	0.83	0.94	0.56	1.75	0.68	0.89	0.93	1.04	0.85	1.03	1.58	1.08	1.14	1.1	1.04

RODEO PROPERTY TIA TRAFFIC COUNT COMPARISON

INTERSECTION 3

Intersection 3		AM PEAK HOUR																
Main / Bernal		Eastbound				Westbound				Northbound				Southbound				
		Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	TOTAL
Rodeo Property Counts		15	21	152	188	666	85	23	774	182	534	402	1118	49	785	12	846	2926
Rodeo Property TIA Existing Volume		15	21	152	188	666	85	23	774	182	534	402	1118	49	785	12	846	2926
Adjustment to Rodeo Property Count		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Intersection 3		PM PEAK HOUR																
Main / Bernal		Eastbound				Westbound				Northbound				Southbound				
		Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	TOTAL
Rodeo Property Counts		27	70	160	257	462	120	144	726	304	1108	647	2059	105	1017	24	1146	4188
Rodeo Property TIA Existing Volume		27	70	160	257	462	120	144	726	304	1108	647	2059	105	1017	24	1146	4188
Adjustment to Rodeo Property Count		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

RODEO PROPERTY TIA TRAFFIC COUNT COMPARISON

INTERSECTION 4

		AM PEAK HOUR																
Intersection 4		Eastbound				Westbound				Northbound				Southbound				
Sherwood / Sherwood Place		Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	TOTAL
Rodeo Property Counts		0	0	0	0	26	0	40	66	0	604	43	647	81	1210	0	1291	2004
Rodeo Property TIA Existing Volume		0	0	0	0	34	0	108	142	0	686	100	786	181	1221	0	1402	2330
Adjustment to Rodeo Property Count		0	0	0	0	8	0	68	76	0	82	57	139	100	11	0	111	326
Hacienda Phase III/IV TIA	1/14/2014	0	0	0	0	34	0	108	142	0	765	100	865	181	1219	0	1400	2407
Difference	Rodeo Volumes - Hacienda TIA	0	0	0	0	0	0	0	0	0	-79	0	-79	0	2	0	2	-77
Ratio	Rodeo Volumes / Hacienda TIA					1		1	1		0.9	1	0.91	1	1		1	0.97

		PM PEAK HOUR																
Intersection 4		Eastbound				Westbound				Northbound				Southbound				
Sherwood / Sherwood Place		Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	TOTAL
Rodeo Property Counts		0	0	0	0	5	0	6	11	0	1500	3	1503	12	803	0	815	2329
Rodeo Property TIA Existing Volume		0	0	0	0	16	0	28	44	0	1476	54	1530	120	790	0	910	2484
Adjustment to Rodeo Property Count		0	0	0	0	11	0	22	33	0	-24	51	27	108	-13	0	95	155
Hacienda Phase III/IV TIA	1/14/2014	0	0	0	0	34	0	108	142	0	765	100	865	181	1219	0	1400	2407
Difference	Rodeo Volumes - Hacienda TIA	0	0	0	0	-18	0	-80	-98	0	711	-46	665	-61	-429	0	-490	77
Ratio	Rodeo Volumes / Hacienda TIA					0.47		0.26	0.31		1.93	0.54	1.77	0.66	0.65		0.65	1.03

RODEO PROPERTY TIA TRAFFIC COUNT COMPARISON

INTERSECTION 5

		AM PEAK HOUR																
Intersection 5		Eastbound				Westbound				Northbound				Southbound				
Main / Rossi		Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	TOTAL
Rodeo Property Counts		154	231	163	548	105	248	68	421	85	566	48	699	75	950	176	1201	2869
Rodeo Property TIA Existing Volume		154	271	163	588	105	305	78	488	85	566	58	709	85	950	176	1211	2996
Adjustment to Rodeo Property Count		0	40	0	40	0	57	10	67	0	0	10	10	10	0	0	10	127
Hacienda Phase III/IV TIA	1/14/2014	124	261	194	579	111	269	73	453	104	594	59	757	84	1069	180	1333	3122
Difference	Rodeo Volumes - Hacienda TIA	30	10	-31	9	-6	36	5	35	-19	-28	-1	-48	1	-119	-4	-122	-126
Ratio	Rodeo Volumes / Hacienda TIA	1.24	1.04	0.84	1.02	0.95	1.13	1.07	1.08	0.82	0.95	0.98	0.94	1.01	0.89	0.98	0.91	0.96

		PM PEAK HOUR																
Intersection 5		Eastbound				Westbound				Northbound				Southbound				
Main / Rossi		Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	TOTAL
Rodeo Property Counts		269	321	109	699	100	257	217	574	193	1253	63	1509	118	791	170	1079	3861
Rodeo Property TIA Existing Volume		269	321	109	699	100	257	217	574	193	1253	63	1509	118	791	170	1079	3861
Adjustment to Rodeo Property Count		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hacienda Phase III/IV TIA	1/14/2014	230	276	122	628	88	258	194	540	158	1182	70	1410	103	762	148	1013	3591
Difference	Rodeo Volumes - Hacienda TIA	39	45	-13	71	12	-1	23	34	35	71	-7	99	15	29	22	66	270
Ratio	Rodeo Volumes / Hacienda TIA	1.17	1.16	0.89	1.11	1.14	1	1.12	1.06	1.22	1.06	0.9	1.07	1.15	1.04	1.15	1.07	1.08

RODEO PROPERTY TIA TRAFFIC COUNT COMPARISON

INTERSECTION 6

		AM PEAK HOUR																
Intersection 6		Eastbound				Westbound				Northbound				Southbound				
Sherwood / Rossi-Calle Cebu		Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	TOTAL
Rodeo Property Counts		173	22	166	361	21	21	26	68	115	482	9	606	17	909	272	1198	2233
Rodeo Property TIA Existing Volume		233	22	166	421	21	21	26	68	115	527	9	651	27	866	362	1255	2395
Adjustment to Rodeo Property Count		60	0	0	60	0	0	0	0	0	45	0	45	10	-43	90	57	162
Hacienda Phase III/IV TIA	1/14/2014	250	19	156	425	12	24	26	62	130	588	3	721	28	913	301	1242	2450
Difference	Rodeo Volumes - Hacienda TIA	-17	3	10	-4	9	-3	0	6	-15	-61	6	-70	-1	-47	61	13	-55
Ratio	Rodeo Volumes / Hacienda TIA	0.93	1.16	1.06	0.99	1.75	0.88	1	1.1	0.88	0.9	3	0.9	0.96	0.95	1.2	1.01	0.98
City of Salinas Count	9/14/2016	275	15	167	457	21	24	30	75	93	646	5	744	21	1011	331	1363	2639
Difference	Rodeo Volumes - Salinas Count	-42	7	-1	-36	0	-3	-4	-7	22	-119	4	-93	6	-145	31	-108	-244
Ratio	Rodeo Volumes / Salinas Count	0.85	1.47	0.99	0.92	1	0.88	0.87	0.91	1.24	0.82	1.8	0.88	1.29	0.86	1.09	0.92	0.91

		PM PEAK HOUR																
Intersection 6		Eastbound				Westbound				Northbound				Southbound				
Sherwood / Rossi-Calle Cebu		Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	TOTAL
Rodeo Property Counts		320	46	214	580	21	57	45	123	302	1099	25	1426	31	571	199	801	2930
Rodeo Property TIA Existing Volume		320	46	214	580	21	57	45	123	302	1165	25	1492	31	576	199	806	3001
Adjustment to Rodeo Property Count		0	0	0	0	0	0	0	0	0	66	0	66	0	5	0	5	71
Hacienda Phase III/IV TIA	1/14/2014	261	29	207	497	8	56	41	105	256	1189	9	1454	20	518	223	761	2817
Difference	Rodeo Volumes - Hacienda TIA	59	17	7	83	13	1	4	18	46	-24	16	38	11	58	-24	45	184
Ratio	Rodeo Volumes / Hacienda TIA	1.23	1.59	1.03	1.17	2.63	1.02	1.1	1.17	1.18	0.98	2.78	1.03	1.55	1.11	0.89	1.06	1.07
City of Salinas Count	9/14/2016	310	47	225	582	45	55	84	184	247	1126	24	1397	26	632	249	907	3070
Difference	Rodeo Volumes - Salinas Count	10	-1	-11	-2	-24	2	-39	-61	55	39	1	95	5	-56	-50	-101	-69
Ratio	Rodeo Volumes / Salinas Count	1.03	0.98	0.95	1	0.47	1.04	0.54	0.67	1.22	1.03	1.04	1.07	1.19	0.91	0.8	0.89	0.98

RODEO PROPERTY TIA TRAFFIC COUNT COMPARISON

INTERSECTION 7

	AM PEAK HOUR																
Intersection 7	Eastbound				Westbound				Northbound				Southbound				
Kern / NB 101 Ramps	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	TOTAL
Rodeo Property Counts	17	2	181	200	0	0	0	0	289	63	7	359	1	81	40	122	681
Rodeo Property TIA Existing Volume	17	2	181	200	0	0	0	0	289	63	7	359	1	81	40	122	681
Adjustment to Rodeo Property Count	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

	PM PEAK HOUR																
Intersection 7	Eastbound				Westbound				Northbound				Southbound				
Kern / NB 101 Ramps	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	TOTAL
Rodeo Property Counts	53	2	217	272	0	0	0	0	560	158	18	736	3	114	82	199	1207
Rodeo Property TIA Existing Volume	53	2	217	272	0	0	0	0	560	158	18	736	3	114	82	199	1207
Adjustment to Rodeo Property Count	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

RODEO PROPERTY TIA TRAFFIC COUNT COMPARISON

INTERSECTION 8

Intersection 8	AM PEAK HOUR																
	Eastbound				Westbound				Northbound				Southbound				
Front / E. Market	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	TOTAL
Rodeo Property Counts	488	299	0	787	0	0	278	278	0	0	0	0	624	0	786	1410	2475
Rodeo Property TIA Existing Volume	488	250	0	738	0	268	278	546	0	0	0	0	624	0	786	1410	2694
Adjustment to Rodeo Property Count	0	-49	0	-49	0	268	0	268	0	0	0	0	0	0	0	0	219

Intersection 8	PM PEAK HOUR																
	Eastbound				Westbound				Northbound				Southbound				
Front / E. Market	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	TOTAL
Rodeo Property Counts	964	298	0	1262	0	0	742	742	0	0	0	0	345	0	446	791	2795
Rodeo Property TIA Existing Volume	964	298	0	1262	0	297	742	1039	0	0	0	0	377	0	487	864	3165
Adjustment to Rodeo Property Count	0	0	0	0	0	297	0	297	0	0	0	0	32	0	41	73	370

RODEO PROPERTY TIA TRAFFIC COUNT COMPARISON

INTERSECTION 9

		AM PEAK HOUR																
Intersection 9		Eastbound				Westbound				Northbound				Southbound				
Sherwood / E. Market		Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	TOTAL
Rodeo Property Counts		0	0	4	4	515	31	135	681	16	490	281	787	172	847	15	1034	2506
Rodeo Property TIA Existing Volume		0	0	4	4	544	31	161	736	16	490	260	766	172	866	15	1053	2559
Adjustment to Rodeo Property Count		0	0	0	0	29	0	26	55	0	0	-21	-21	0	19	0	19	53
Hacienda Phase III/IV TIA	1/14/2014	0	0	3	3	287	19	188	494	21	567	197	785	192	842	20	1054	2336
Difference	Rodeo Volumes - Hacienda TIA	0	0	1	1	257	12	-27	242	-5	-77	63	-19	-20	24	-5	-1	223
Ratio	Rodeo Volumes / Hacienda TIA			1.33	1.33	1.9	1.63	0.86	1.49	0.76	0.86	1.32	0.98	0.9	1.03	0.75	1	1.1

		PM PEAK HOUR																
Intersection 9		Eastbound				Westbound				Northbound				Southbound				
Sherwood / E. Market		Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	TOTAL
Rodeo Property Counts		0	0	15	15	361	24	409	794	19	1083	575	1677	299	486	26	811	3297
Rodeo Property TIA Existing Volume		0	0	15	15	361	24	409	794	19	1083	604	1706	299	486	26	811	3326
Adjustment to Rodeo Property Count		0	0	0	0	0	0	0	0	0	0	29	29	0	0	0	0	29
Hacienda Phase III/IV TIA	1/14/2014	0	0	18	18	241	38	328	607	25	1159	344	1528	233	496	20	749	2902
Difference	Rodeo Volumes - Hacienda TIA	0	0	-3	-3	120	-14	81	187	-6	-76	260	178	66	-10	6	62	424
Ratio	Rodeo Volumes / Hacienda TIA			0.83	0.83	1.5	0.63	1.25	1.31	0.76	0.93	1.76	1.12	1.28	0.98	1.3	1.08	1.15

RODEO PROPERTY TIA TRAFFIC COUNT COMPARISON
INTERSECTION 10

Intersection 10		AM PEAK HOUR																
		Eastbound				Westbound				Northbound				Southbound				
Sun / E. Market		Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	TOTAL
Rodeo Property Counts		15	364	19	398	21	659	27	707	13	1	7	21	20	2	11	33	1159
Rodeo Property TIA Existing Volume		15	388	19	422	21	722	27	770	13	1	7	21	20	2	11	33	1246
Adjustment to Rodeo Property Count		0	24	0	24	0	63	0	63	0	0	0	0	0	0	0	0	87
Sun Street Transfer Station	2006/2011	14	387	23	424	19	657	23	699	12	1	4	17	22	0	11	33	1173
Difference	Rodeo Vols - Sun St Transfer Sta TIA	1	1	-4	-2	2	65	4	71	1	0	3	4	-2	2	0	0	73
Ratio	Rodeo Vols / Sun St Transfer Sta TIA	1.07	1	0.83	1	1.11	1.1	1.17	1.1	1.08	1	1.75	1.24	0.91		1	1	1.06

Intersection 10		PM PEAK HOUR																
		Eastbound				Westbound				Northbound				Southbound				
Sun / E. Market		Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	TOTAL
Rodeo Property Counts		18	846	21	885	17	699	51	767	13	1	24	38	45	2	18	65	1755
Rodeo Property TIA Existing Volume		18	861	21	900	21	722	27	770	13	1	24	38	45	2	18	65	1773
Adjustment to Rodeo Property Count		0	15	0	15	4	23	-24	3	0	0	0	0	0	0	0	0	18
Sun Street Transfer Station	2006/2011	10	781	16	807	1	633	55	689	15	0	9	24	42	1	15	58	1578
Difference	Rodeo Vols - Sun St Transfer Sta TIA	8	80	5	93	20	89	-28	81	-2	1	15	14	3	1	3	7	195
Ratio	Rodeo Vols / Sun St Transfer Sta TIA	1.8	1.1	1.31	1.12	21	1.14	0.49	1.12	0.87		2.67	1.58	1.07	2	1.2	1.12	1.12

RODEO PROPERTY TIA TRAFFIC COUNT COMPARISON

INTERSECTION 11

Intersection 11		AM PEAK HOUR																
		Eastbound				Westbound				Northbound				Southbound				
E. Market / Griffin - Simas		Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	TOTAL
Rodeo Property Counts		12	342	55	409	72	638	25	735	66	7	42	115	20	10	22	52	1311
Rodeo Property TIA Existing Volume		12	348	55	415	72	682	25	779	66	7	42	115	20	10	22	52	1361
Adjustment to Rodeo Property Count		0	6	0	6	0	44	0	44	0	0	0	0	0	0	0	0	50
Sun Street Transfer Station	2006/2011	18	327	68	413	92	593	22	707	93	16	99	208	19	10	13	42	1370
Difference	Rodeo Vols - Sun St Transfer Sta TIA	-6	21	-13	2	-20	89	3	72	-27	-9	-57	-93	1	0	9	10	-9
Ratio	Rodeo Vols / Sun St Transfer Sta TIA	0.67	1.06	0.81	1	0.78	1.15	1.14	1.1	0.71	0.44	0.42	0.55	1.05		1.69	1.24	0.99
City of Salinas Counts	1/3/2017	6	339	74	419	66	724	21	811	63	7	39	109	14	8	10	32	1371
Difference	Rodeo Vols - City Counts	6	9	-19	-4	6	-42	4	-32	3	0	3	6	6	2	12	20	-10
Ratio	Rodeo Vols / City Counts	2	1.03	0.74	0.99	1.09	0.94	1.19	0.96	1.05	1	1.08	1.06	1.43	1.25	2.2	1.63	0.99

Intersection 11		PM PEAK HOUR																
		Eastbound				Westbound				Northbound				Southbound				
E. Market / Griffin - Simas		Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	TOTAL
Rodeo Property Counts		22	801	87	910	58	510	18	586	212	12	104	328	57	12	41	110	1934
Rodeo Property TIA Existing Volume		22	821	87	930	58	574	18	650	212	12	104	328	57	12	41	110	2018
Adjustment to Rodeo Property Count		0	20	0	20	0	64	0	64	0	0	0	0	0	0	0	0	84
Sun Street Transfer Station	2006/2011	9	721	102	832	84	496	13	593	172	16	139	327	59	17	21	97	1849
Difference	Rodeo Vols - Sun St Transfer Sta TIA	13	100	-15	98	-26	78	5	57	40	-4	-35	1	-2	-5	20	13	169
Ratio	Rodeo Vols / Sun St Transfer Sta TIA	2.44	1.14	0.85	1.12	0.69	1.16	1.38	1.1	1.23	0.75	0.75	1	0.97		1.95	1.13	1.09
City of Salinas Counts	1/3/2017	18	814	114	946	50	541	38	629	168	8	106	282	43	9	18	70	1927
Difference	Rodeo Vols - City Counts	4	7	-27	-16	8	33	-20	21	44	4	-2	46	14	3	23	40	91
Ratio	Rodeo Vols / City Counts	1.22	1.01	0.76	0.98	1.16	1.06	0.47	1.03	1.26	1.5	0.98	1.16	1.33	1.33	2.28	1.57	1.05

RODEO PROPERTY TIA TRAFFIC COUNT COMPARISON

INTERSECTION 12

Intersection 12	**AM PEAK HOUR**																
	Eastbound				Westbound				Northbound				Southbound				
E. Market / SB 101 Off-ramp	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	TOTAL
Rodeo Property Counts	0	388	3	391	32	628	0	660	4	0	14	18	137	45	161	343	1412
Rodeo Property TIA Existing Volume	0	407	3	410	32	614	0	646	4	0	14	18	137	45	161	343	1417
Adjustment to Rodeo Property Count	0	19	0	19	0	-14	0	-14	0	0	0	0	0	0	0	0	5

Intersection 12	**PM PEAK HOUR**																
	Eastbound				Westbound				Northbound				Southbound				
E. Market / SB 101 Off-ramp	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	TOTAL
Rodeo Property Counts	0	937	11	948	27	549	0	576	4	0	49	53	264	64	143	471	2048
Rodeo Property TIA Existing Volume	0	971	11	982	27	549	0	576	4	0	49	53	264	64	143	471	2082
Adjustment to Rodeo Property Count	0	34	0	34	0	0	0	0	0	0	0	0	0	0	0	0	34

RODEO PROPERTY TIA TRAFFIC COUNT COMPARISON

INTERSECTION 13

Intersection 13	AM PEAK HOUR																
	Eastbound				Westbound				Northbound				Southbound				
E. Market / SB US 101 On-ramp	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	TOTAL
Rodeo Property Counts	0	429	108	537	55	688	0	743	0	0	0	0	0	0	0	0	1280
Rodeo Property TIA Existing Volume	0	450	108	558	55	646	0	701	0	0	0	0	0	0	0	0	1259
Adjustment to Rodeo Property Count	0	21	0	21	0	-42	0	-42	0	0	0	0	0	0	0	0	-21

Intersection 13	PM PEAK HOUR																
	Eastbound				Westbound				Northbound				Southbound				
E. Market / SB US 101 On-ramp	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	TOTAL
Rodeo Property Counts	0	1153	170	1323	76	576	0	652	0	0	0	0	0	0	0	0	1975
Rodeo Property TIA Existing Volume	0	1155	170	1325	76	576	0	652	0	0	0	0	0	0	0	0	1977
Adjustment to Rodeo Property Count	0	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2

RODEO PROPERTY TIA TRAFFIC COUNT COMPARISON

INTERSECTION 14

		AM PEAK HOUR																
Intersection 14		Eastbound				Westbound				Northbound				Southbound				
Kern / E. Market		Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	TOTAL
Rodeo Property Counts		97	333	20	450	8	457	195	660	21	68	3	92	23	26	223	272	1474
Rodeo Property TIA Existing Volume		97	312	20	429	8	457	195	660	21	68	3	92	23	26	272	321	1502
Adjustment to Rodeo Property Count		0	-21	0	-21	0	0	0	0	0	0	0	0	0	0	49	49	28
City of Salinas Counts	10/3/2016																	1546

		PM PEAK HOUR																
Intersection 14		Eastbound				Westbound				Northbound				Southbound				
Kern / E. Market		Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	TOTAL
Rodeo Property Counts		258	849	48	1155	27	343	316	686	46	225	36	307	95	44	229	368	2516
Rodeo Property TIA Existing Volume		258	849	48	1155	27	377	316	720	46	225	36	307	95	44	229	368	2550
Adjustment to Rodeo Property Count		0	0	0	0	0	34	0	34	0	0	0	0	0	0	0	0	34
City of Salinas Counts	10/3/2016																	2515

RODEO PROPERTY TIA TRAFFIC COUNT COMPARISON

INTERSECTION 15

		AM PEAK HOUR																
Intersection 15		Eastbound				Westbound				Northbound				Southbound				
Front/ Alisal		Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	TOTAL
Rodeo Property Counts		85	231	56	372	89	342	118	549	53	343	51	447	95	650	129	874	2242
Rodeo Property TIA Existing Volume		85	321	86	492	89	422	118	629	53	343	51	447	95	650	129	874	2442
Adjustment to Rodeo Property Count		0	90	30	120	0	80	0	80	0	0	0	0	0	0	0	0	200
Police Station TIA		54	207	50	311	66	293	106	465	39	270	34	343	74	543	97	714	1833
Difference	Rodeo Volumes - Police Sta TIA	31	114	36	181	23	129	12	164	14	73	17	104	21	107	32	160	609
Ratio	Rodeo Volumes / Police Sta TIA	1.57	1.55	1.72	1.58	1.35	1.44	1.11	1.35	1.36	1.27	1.5	1.3	1.28	1.2	1.33	1.22	1.33
Hacienda Phase III/IV TIA		94	290	80	464	97	451	118	666	54	317	51	422	98	660	97	855	2407
Difference	Rodeo Volumes - Hacienda TIA	-9	31	6	28	-8	-29	0	-37	-1	26	0	25	-3	-10	32	19	35
Ratio	Rodeo Volumes / Hacienda TIA	0.9	1.11	1.08	1.06	0.92	0.94	1	0.94	0.98	1.08	1	1.06	0.97	0.98	1.33	1.02	1.01
City of Salinas Counts	9/21/2016	120	253	70	443	88	411	100	599	64	320	52	436	109	640	120	869	2347
Difference	Rodeo Volumes - City Counts	-35	68	16	49	1	11	18	30	-11	23	-1	11	-14	10	9	5	95
Ratio	Rodeo Volumes / Counts	0.71	1.27	1.23	1.11	1.01	1.03	1.18	1.05	0.83	1.07	0.98	1.03	0.87	1.02	1.08	1.01	1.04

		PM PEAK HOUR																
Intersection 15		Eastbound				Westbound				Northbound				Southbound				
Front/ Alisal		Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	TOTAL
Rodeo Property Counts		220	663	56	939	98	314	209	621	58	610	163	831	187	372	74	633	3024
Rodeo Property TIA Existing Volume		220	663	56	939	98	314	209	621	58	610	163	831	199	397	79	675	3066
Adjustment to Rodeo Property Count		0	0	0	0	0	0	0	0	0	0	0	0	12	25	5	42	42
Police Station TIA		208	692	48	948	89	331	212	632	38	634	169	841	179	357	69	605	3026
Difference	Rodeo Volumes - Police Sta TIA	12	-29	8	-9	9	-17	-3	-11	20	-24	-6	-10	20	40	10	70	40
Ratio	Rodeo Volumes / Police Sta TIA	1.06	0.96	1.17	0.99	1.1	0.95	0.99	0.98	1.53	0.96	0.96	0.99	1.11	1.11	1.14	1.12	1.01
Hacienda Phase III/IV TIA		170	670	71	911	80	372	178	630	49	611	169	829	190	358	70	618	2988
Difference	Rodeo Volumes - Hacienda TIA	50	-7	-15	28	18	-58	31	-9	9	-1	-6	2	9	39	9	57	78
Ratio	Rodeo Volumes / Hacienda TIA	1.29	0.99	0.79	1.03	1.23	0.84	1.17	0.99	1.18	1	0.96	1	1.05	1.11	1.13	1.09	1.03
City of Salinas Counts	9/21/2016	211	776	61	1048	81	377	165	623	33	625	155	813	158	386	105	649	3133
Difference	Rodeo Volumes - City Counts	9	-113	-5	-109	17	-63	44	-2	25	-15	8	18	41	11	-26	26	-67
Ratio	Rodeo Volumes / Counts	1.04	0.85	0.92	0.9	1.21	0.83	1.27	1	1.76	0.98	1.05	1.02	1.26	1.03	0.75	1.04	0.98

Rincon Consultants, Inc.

Environmental Scientists *Planners* *Engineers*

M E M O R A N D U M

■ Monterey

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Date: October 23, 2018

To: Bobby Latino

Project: Contract Planning Assignment, 295 Sun Way Project Technical Study Peer Review

From: Megan Jones, Senior Program Manager

E-mail: mjones@rinconconsultants.com

cc: Stephen Svete, svete@rinconconsultants.com

Re: Peer Review of the Rodeo Property Project
Revised Technical Reports

In June 2018, Rincon peer reviewed the following technical reports for the 295 Sun Way Project in Salinas, Monterey County, California:

- Air Quality Impact Analysis
- Greenhouse Gas Impact Analysis
- Biological Resources Assessment
- Phase I Cultural and Paleontological Resources Assessment

All reports were revised by FirstCarbon Solutions in August 2018. Per request by the City, Rincon has reviewed the revised reports. The findings of this second review are presented below.

Air Quality Impact Analysis/Greenhouse Gas Impact Analysis

Most comments provided in Rincon's June 20, 2018 peer review memo were addressed in the revised Air Quality Impact Analysis and the revised Greenhouse Gas Impact Analysis (First Carbon Solutions August 2018). The following two comments were not addressed:

- The emissions results for the various construction activities presented in Table 12 of the Air Quality Impact Analysis do not match the CalEEMod results.
- The mobile emissions reported exclusively include emissions from CH_4 and CO_2, as CalEEMod does not calculate mobile N_2O emissions.

Rincon continues to recommend that the N_2O emissions be calculated and added to Table 3 of the GHG Study. However, Rincon does not question the overall findings of the revised report.

Biological Resources Assessment

All comments provided in Rincon's June 29, 2018 peer review memo were addressed in the revised Biological Resources Assessment (First Carbon Solutions August 2018). However, Rincon offers the following comments on the revised analysis:

- Despite the expansion to a nine-quad search, the California Native Plant Society (CNPS) search only returned four plants. This appears low and should be verified.
- Although additional detail is provided regarding the regulatory background of tree removal, the report does not clearly indicate if any tree removal is required. Additionally, the methods section states that that "species listed in any applicable ordinances identified on-site were noted, and their locations were recorded using a handheld GPS unit and were identified on a topographic map." However, a map is not included showing this information.
- Analysis and supporting discussion for California red-legged frog (CRLF), California tiger salamander (CTS), and burrowing owl (BUOW) does not consider connectivity or existing use/setting. In addition, the potential to occur table has not been revised to include all species from the nine-quad search.
- The special status plant species discussion is limited to one species (Congdon's tarplant) based on the results of a reconnaissance survey. Additional species cannot be excluded without full botanical surveys; however, impacts to non-listed species are unlikely to be considered significant under CEQA given the site conditions, and this just needs to be discussed. In addition, the report does not include a discussion of potential impacts or significance under CEQA.
- New measures for BUOW include passive exclusion measure. This species cannot be excluded during the nesting season, and consultation with CDFW would be required. This should be acknowledged in the measure.

Clarifying the above points would be preferable and recommended for legal defensibility. However, Rincon does not question the overall findings of the revised report.

Phase I Cultural and Paleontological Resources Assessment Report

All comments related to paleontological resources and most comments pertaining to cultural resources in Rincon's June 20, 2018 peer review memo were addressed in the revised Phase I Cultural and Paleontological Resources Assessment Report (First Carbon Solutions August 2018). However, Rincon offers the following comments on the revised analysis:

- The revised report notes that a historic transmission line is immediately adjacent to the south side of the project site and recommends that the line be recorded and evaluated for its potential significance. It is not clear if the authors are recommending that the line should be recorded and evaluated simply because it is historic in age or if it is because the project has the potential to indirectly impact the resource. If the intent of the report is to provide information for a CEQA-level analysis of the proposed project, we recommend discussion about whether the project has the potential to impact the transmission line. If there is a potential, then the historic period resource should be recorded and evaluated as part of the cultural assessment. If the transmission line will not be impacted by the project, no further edits would be recommended.

Although Rincon does not question the findings of the revised report, addressing the above comment would be strengthen the analysis and defensibility.

Ohlone/Costanoan-Esselen Nation

Previously acknowledged as
The San Carlos Band of
Mission Indians
The Monterey Band
And also known as
O.C.E.N. or Esselen Nation
P.O. Box 1301
Monterey, CA 93942

www.ohlonecostanoanesselennation.org.

December 18, 2017

Bobby Latino
Associate Planner
City of Salinas Community Development Department
65 West Alisal Street
Salinas, CA 93901

Re: 295 Sun Way Project and 10 Simas Street, Salinas, CA - General Plan Amendments– As stated
General Plan Amendment
AB52 and SB18 – 90 Days consultation period

Saleki Atsa,

Ohlone/Costanoan-Esselen Nation is an historically documented previously recognized tribe. OCEN is the legal tribal government representative for over 600 enrolled members of Esselen, Carmeleno, Monterey Band, Rumsen, Chalon, Soledad Mission, San Carlos Mission and/or Costanoan Mission Indian descent of Monterey County. Though other indigenous people may have lived in the area, the area is the indigenous homeland of our people. Included with this letter please find a territorial map by Taylor 1856; Levy 1973; and Milliken 1990, indentifying Tribal areas.

Ohlone/Costanoan-Esselen Nation objects to all excavation in known cultural lands, even when they are described as previously disturbed, and of no significant archaeological value. Please be advised that it is our first priority that our ancestor's remains be protected and undisturbed. We desire that all sacred burial items be left with our ancestors on site or as culturally determined by OCEN. All cultural items returned to Ohlone/Costanoan-Esselen Nation. We ask for the respect that is afforded all of our current day deceased, by no other word these burial sites are cemeteries, respect for our ancestors as you would expect respect for your deceased family members in today's cemeteries. **Our definition of respect is no disturbance.**

OCEN's Tribal leadership desires to be provided with:

Archaeological reports/surveys, including subsurface testing, and presence/absence testing.
OCEN request to be included in mitigation and recovery programs,
Reburial of any of our ancestral remains,
Placement of all cultural items, and that
A Native American Monitor of Ohlone/Costanoan-Esselen Nation, approved by the OCEN Tribal Council is used within our aboriginal territory.
Cultural and Tribal sections to reflect Tribal request.

Projects affecting the General Plan allow for 90 days response according to SB18. We ask that a sacred lands search with the Northwest Information Center, Sonoma State University and the Native American Heritage Commission. Please feel free to contact me at (408) 629-5189. Nimasianexelpasaleki. Thank you

Sincerely and Respectfully Yours,

Louise J. Miranda Ramirez, Chairperson
Ohlone/Costanoan-Esselen Nation
(408) 629-5189
Cc: OCEN Tribal Council

RESOLUTION NO. 8514 (N.C.S.)

BE IT RESOLVED BY THE COUNCIL OF SALINAS that the Mayor of Salinas be and he is hereby authorized and directed, for and on behalf of the City of Salinas and as its act and deed, to execute the attached agreement between California Rodeo Association, a corporation, and Salinas, a municipal corporation.

PASSED AND ADOPTED this 10th day of June, 1974, by the following vote:

AYES: Councilmen James B. Barnes, Ed Norris, John C. Vondracek, R. C. Wherritt, Henry Hibino (Mayor)

NOES: None

ABSENT: None

Henry Hibino
Mayor

ATTEST:

Evelyn Reynolds
City Clerk

A G R E E M E N T

THIS AGREEMENT, made and entered into this 10th day of June, 1974, between CALIFORNIA RODEO ASSOCIATION, a corporation, hereinafter called "Association," and SALINAS, a municipal corporation, hereinafter called "City,"

W I T N E S S E T H:

WHEREAS, the Association is the owner of certain lands shown on the attached map marked Exhibit "A" which is used for a period of three weeks each year as an exposition site and carnival grounds in connection with the California Rodeo, and during the remainder of the entire year has no need to use said grounds, and

WHEREAS, it has been necessary for the Association to expend substantial sums of money for the development and improvement of said grounds as an exposition site as listed in the attached letter of May 30, 1974, from the co-chairman of the exposition site committee of the Association, attached hereto and marked Exhibit "B", and

WHEREAS, the Association has offered to lease said exposition site to the City for a term of 25 years at the nominal rent of one dollar per year, for use by City as a public park and recreation area, reserving use of the grounds for its own purposes during the three-week period at rodeo time in June, provided the City is willing to advance the sum of $55,000.00 to the Association to assist in financing the cost of said capital improvements and services, such advance to be repaid to City with interest as hereinafter set forth, and will also undertake the care, maintenance and management of the park during the term of such lease, and

WHEREAS, City has a present need for park and recreation facilities in this area and is willing to enter into such lease upon said terms and conditions,

NOW, THEREFORE, in consideration of the mutual promises and covenants herein contained, the parties do agree as follows:

1. Association agrees to execute as lessor a lease to City as lessee for a term of 25 years commencing in July 1974 for the lands in the area of Sherwood Drive, East Lake Street, and U.S. Highway 101, known as the California Rodeo Exposition Site, upon the terms and conditions contained in a draft of lease which is in course of preparation and has been reviewed by the parties and is acceptable to them.

2. City agrees to execute as lessee the lease above referred to.

3. City agrees to advance to Association at this time the sum of $55,000.00 to assist in the financing of the expenses and improvements incurred and to be incurred by Association in the development and use of the exposition site, including the items listed on Exhibit "B" attached hereto.

4. Association agrees to repay to City said advance of $55,000.00 by payment of the sum of $5,500.00 per year plus interest on all unpaid principal balances from the date of the advance to the date of repayment at the rate of 7% per annum, the first principal payment of $5,500.00 and interest to be paid on January 1, 1975, and annually thereafter on the first day of January of each year until the entire amount of principal and interest has been repaid to City.

5. Association agrees to complete with all due speed and diligence, and in a good and workmanlike manner, all of the work and improvements which are necessary and proper to put the grounds in reasonably suitable condition for use as an exposition site, and a park and recreation area, including the items listed on Exhibit "B" attached hereto, all as heretofore discussed and understood by the parties hereto.

6. This agreement shall bind and inure to the benefit of the successors in interest and assigns of the parties hereto.

IN WITNESS WHEREOF, the parties hereto have caused this agreement to be executed as of the day and year first above written.

CALIFORNIA RODEO ASSOCIATION

By Gene D. Nelson
Its President

By _____
Its

SALINAS, a municipal corporation

By Henry Ibarra
Its Mayor

ATTEST:

Evelyn Reynolds
City Clerk

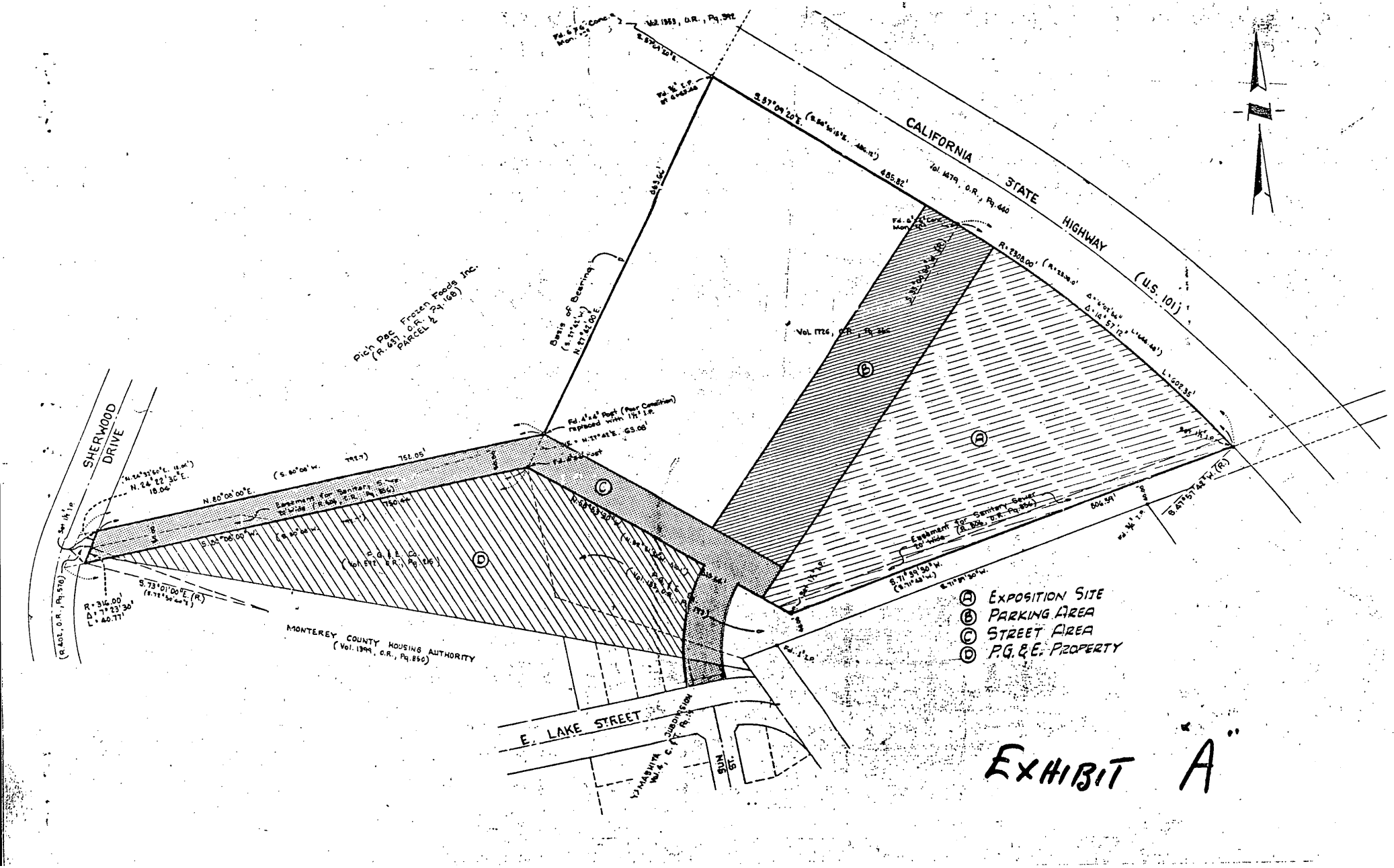
CALIFORNIA STATE HIGHWAY (U.S. 101)
SHERWOOD DRIVE
E. LAKE STREET
MONTEREY COUNTY HOUSING AUTHORITY
(Vol. 1399, O.R., Pg. 850)
Pich Pac Frozen Foods Inc.
(R. 657, O.R., Pg. 168)
PARCEL 2
Basis of Bearing
Vol. 1479, O.R., Pg. 440
Vol. 1726, O.R., Pg. 346
Easement for Sanitary Sewer
20' Wide (R. 826, O.R., Pg. 864)
C.G.E.C.
(Vol. 512 O.R., Pg. 236)
P.G.&E.
(Vol. 483 O.R., Pg. 33)
R = 316.00'
D = 7°23'30"
L = 40.77'
R = 2308.00'
L = 602.35'
(A) EXPOSITION SITE
(B) PARKING AREA
(C) STREET AREA
(D) P.G.&E. PROPERTY

EXHIBIT "A"

California Rodeo at SALINAS

POST OFFICE BOX 1648 • 1034 NORTH MAIN, SALINAS, CALIFORNIA 93901 • PHONE (408) 424-1203

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President

SHERWOOD CAUSLEY
First Vice President

CHET BEHEN
Second Vice President

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Stanley Morisoli
Warren Munro
Gene Nielsen
Jim O'Connell
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Gordon Ray
Harry L. Rhodes, Jr.
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Sal Russo
George Scovel
Mateo Secondo
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Luther Veden
Robert Vestal
Allan Wallace
R. J. Wallace

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William Jeffery
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E. J. Leach, D.D.S.
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Al Mignola
D. D. Noggle
H. E. "Jack" Patton
Ki Silacci
Lester Stirling
Roland Tavernetti
H. H. Weile
Frank E. Wiebe, M.D.
H. R. Wisely

May 30, 1974

Mr. Warren Lynch
City Attorney
City Hall
200 Lincoln Ave.
Salinas, Calif. 93901

Dear Warren,

Listed below is a summary of the remaining work to be performed at the California Rodeo Exposition Site:

1.	Entrance from Lake Street (install sidewalk on west side).	1,000.00
2.	Complete seal coat in areas designated as C and B (entrance roads and parking area).	13,000.00
3.	Electroliers in area designated as B (parking area)	5,000.00
4.	Restroom and storage area	9,000.00
5.	Install a complete sprinkler system and turf area in the areas designated as A(Exposition Site) and D (P.G.&E. property)	22,000.00
6.	Policing of carnival	2,996.86
7.	Fire Protection - Rodeo Grounds	881.94
		53,878.80

The above estimated figures I am sure might change by the time bids are submitted and returned to the City of Salinas for confirmation. It would appear that we are working with an approximate cost of $55,000.00.

With prices continually increasing it is most important that we finalize the bidding and complete the unfinished projects as soon as possible.

Sincerely,

Woody

Sherwood Causley
Co-Chairman
Exposition Site Committee

EXHIBIT "B"

July 19 · 20 · 21 · 22 · 1973

TAMC
TRANSPORTATION AGENCY
FOR MONTEREY COUNTY

55-B Plaza Circle, Salinas, CA 93901-2902 • Tel: (831) 775-0903 • Website: www.tamcmonterey.org

October 23, 2019

Bobby Latino, Associate Planner
Community Development Department
City of Salinas
65 West Alisal Street
Salinas, CA 93901

SUBJECT: **Comments on the Initial Study/Mitigated Negative Declaration of the General Plan Amendment (GPA 2017-001) and Rezoning (2017-002) for 295 Sun Way**

Dear Mr. Latino:

The Transportation Agency for Monterey County (TAMC) is the Regional Transportation Planning and Congestion Management Agency for Monterey County. TAMC staff have reviewed the Initial Study and Mitigated Negative Declaration for the General Plan Amendment 2017-001 (GPA 2017-001) to change a 7.67-acre site from Park to Central Commercial/Light Industrial its rezoning (RZ 2017-002). Transportation Agency staff offers the following comment:

1. The mitigation measures included in the Initial Study for transportation impacts should include efforts to maintain or improve bike and pedestrian facilities while increasing capacity. For example:
    - Consider adding a bike lane between the right turn lane and through-lane on Natividad at East Laurel Drive, and
    - Consider providing median pedestrian refuge for longer crosswalks, especially where a third lane is added.

Thank you for the opportunity to comment on the proposal. If you have any questions, please contact Madilyn Jacobsen of my staff at 831-775-4402 or madilyn@tamcmonterey.org.

Sincerely,

Debra L. Hale
Executive Director

RECEIVED
OCT 28 2019
COMMUNITY DEVELOPMENT
DEPARTMENT

File #: ID#19-624, Version: 1

General Plan Amendment 2017-002; Rezone 2017-001; and Conditional Use Permit 2017-019 located at 10 Simas Street in the IGC-F (Industrial-General Commercial - Flood Plain Overlay) Zoning District

Affirm the findings and adopt the proposed Mitigated Negative Declaration in accordance with the California Environmental Quality Act, approve a Resolution for General Plan Amendment 2017-002, adopt an Ordinance for Rezone 2017-001, and approve a Resolution for Conditional Use Permit 2017-019.

CITY OF SALINAS
COUNCIL STAFF REPORT

DATE: **DECEMBER 3, 2019**

DEPARTMENT: **COMMUNITY DEVELOPMENT DEPARTMENT**

FROM: **MEGAN HUNTER, COMMUNITY DEVELOPMENT DIRECTOR**

THROUGH: **COURTNEY GROSSMAN, PLANNING MANAGER**

BY: **BOBBY LATINO, ASSOCIATE PLANNER**

TITLE: **GENERAL PLAN AMENDMENT 2017-002 (GPA 2017-002); REZONE 2017-001 (RZ 2017-001); AND CONDITIONAL USE PERMIT (CUP 2017-019) LOCATED AT 10 SIMAS STREET IN THE IGC-F (INDUSTRIAL-GENERAL COMMERCIAL – FLOOD PLAIN OVERLAY) ZONING DISTRICT**

RECOMMENDED MOTION:

A motion to adopt the proposed Mitigated Negative Declaration, approve a Resolution for General Plan Amendment 2017-002, adopt an Ordinance for Rezone 2017-001, and approve a Resolution for Conditional Use Permit 2017-019.

RECOMMENDATION:

Staff recommends that the City Council affirm the findings and adopt the proposed Mitigated Negative Declaration in accordance with the California Environmental Quality Act, approve a Resolution for General Plan Amendment 2017-002, adopt an Ordinance for Rezone 2017-001, and approve a Resolution for Conditional Use Permit 2017-019.

EXECUTIVE SUMMARY:

Simas-East Market Street LLC, Applicant and Property Owner, is requesting approval of a General Plan Amendment 2017-002 (GPA 2017-002) to change the General Plan designation of 94,235 square feet (2.16 acres) of a 401,197 (9.21 acres) lot from General Commercial/Light Industrial to Arterial Frontage, Rezone 2017-001 (RZ 2017-001) to change the Zoning designation of 94,235 square feet (2.16 acres) of a 401,197 (9.21 acres) lot from Industrial-General Commercial to Mixed Arterial Frontage, and a Conditional Use Permit (CUP 2017-019) to establish and operate a religious assembly use in an existing 18,150 square foot building.

BACKGROUND:

A nonconforming religious assembly use has been operating at the subject site within an existing 18,150 square foot building (former seven-plex indoor movie theater) for approximately nine

years. Temporary Use of Land Permit 2010-045 initially approved the temporary use of religious assembly and Building Permit No. B10-0314 approved the tenant improvement. The building is part of a larger Industrial Complex that was approved by Conditional Use Permit (CUP 1987-028). The proposed CUP will modify CUP 1987-028 to replace the indoor theater with the religious assembly use. Religious Assembly uses are not permitted in the underlying base Zoning District of IGC but is conditionally allowed in the Mixed Arterial Frontage (MAF) District. The subject site is located immediately adjacent to a MAF zoned parcel and consistent with this zoning designation that has been established along Market Way. Thus, the proposed zone change to MAF zoning for a portion of the parcel nearest to Market Way is appropriate. Simas-East Market Street LLC has applied for the requested permits to achieve long term zoning compliance with the religious assembly use.

DISCUSSION:

On November 6, 2019, the Salinas Planning Commission voted 7-0, to recommended that the City Council adopt the proposed Mitigated Negative Declaration, approve General Plan Amendment 2017-002, adopt Rezone 2017-001, and approve Conditional Use Permit 2017-019 (See attached Planning Commission Resolution 2019-16 and November 6, 2019 minutes). During the public hearing, ten people spoke in favor of the proposal. However, one member of the public expressed concern that the zone change would create a "spot zone". Staff clarified to the Planning Commission that the proposed "Arterial Frontage" land use designation is not a "spot zone" and would be consistent with the adjacent lots to the west, which are designated the same "Arterial Frontage". Although the parcel has a split zone designation, this type of zoning is fairly common with large parcels, which front busy streets as is the case with the subject property.

The proposed Amendment and Rezone is consistent with Salinas General Plan Policies. The proposed zoning amendment will not create an unrelated zoning district because the rezoning would extend the boundary of the existing and contiguous MAF base zoning district to include the proposed portion of the lot located at 10 Simas Street. The rezone results in an extension of the existing MAF zone to the west of the site.

Consistent with Land use Policy LU-3.7, the Amendment and Rezone allows for a formerly vacant 18,150 square foot theater building to be revitalized into a viable and compliant use. The infill development of establishing the religious assembly use in the former vacant theater building with no proposed exterior modifications is consistent with scale and character of the existing Industrial Complex development in conformance with Community Design Policy CD-2.3.

Upon the effective date of the General Plan Amendment and Rezone, a religious assembly use would be subject to a Conditional Use Permit in the proposed MAF Zoning District per Section 37-30.240, Table 37-30.110. This CUP will modify CUP 1987-028 to replace the subject 18,150 square foot theater with a religious assembly use and modify select conditions related to the former theater.

CEQA CONSIDERATION:

The environmental impacts of the project have been analyzed in accordance with the California Environmental Quality Act (CEQA). An Initial Study was prepared to evaluate the potential impacts associated with the project. Based upon review of the Initial Study, the proposed project will not have a significant effect on the environment because the mitigation measures outlined in the proposed Mitigation Monitoring Program have been included in the project (see attached Initial Study and Mitigated Negative Declaration). The Initial Study and Mitigated Negative Declaration were routed to responsible agencies and posted at the County Clerk's Office on September 26, 2019; the deadline for comments was October 16, 2019. Action on the environmental document should precede any action on the requested permits. Monterey County Planning Department provided "No Comments" on the Mitigated Negative Declaration during the review period.

STRATEGIC PLAN INITIATIVE:

The proposed General Plan Amendment, Rezone, and Conditional Use Permit will assist the City Council's goal of Economic Diversity and Prosperity and Well Planned City and Excellent Infrastructure by facilitating an appropriate change of Land Use and Zoning designation to bring a nonconforming use into conformity and keeping a formally vacant theater building occupied with a conforming use.

DEPARTMENTAL COORDINATION:

The Current Planning Division of the Community Development Department was the lead project manager for the proposed General Plan Amendment, Rezone, and Conditional Use Permit. The Legal Department was instrumental in the review of the proposed Resolutions and Ordinance and provided support to the Planning Commission.

FISCAL AND SUSTAINABILITY IMPACT:

No significant impacts to the City's General Fund are anticipated with the application.

ATTACHMENTS:

Draft Ordinance for Rezone 2017-001, including the following exhibit:
- Exhibit A: Proposed Rezone 2017-001 Map for 10 Simas Street

Draft Resolution for General Plan Amendment 2017-002, including the following exhibit:
- Exhibit A: Proposed General Plan Amendment 2017-002 Map for 10 Simas Street

Draft Resolution for Conditional Use Permit 2017-019

Draft Conditional Use Permit 2017-019, including the following exhibits:
- Exhibit "A" Vicinity Map
- Exhibit "B" Engineer's Report, dated May 15, 2018
- Exhibit "C" Existing Site Plan with Proposed General Plan Amendment and Rezone
- Exhibit "D" Existing Floor Plan (Sheet A101)
- Exhibit "E" Revised Floor Plan for Sanctuary (Sheet A101B)

Exhibit "F" Mitigated Negative Declaration, Mitigation Monitoring Program, and Initial Study

Planning Commission Staff Report dated November 6, 2019 w/o Exhibits

Planning Commission Resolution 2019-016 for Rezone 2017-001, General Plan Amendment 2017-002, and Conditional Use Permit 2017-019, including the following exhibits:

Exhibit A: Mitigated Negative Declaration and Mitigation Monitoring and Reporting Program

Exhibit B: Proposed General Plan Amendment 2017-002 Map for 10 Simas Street

Exhibit C: Proposed Rezone 2017-001 Map for 10 Simas Street

Planning Commission Minutes for November 6, 2019

Initial Study for 10 Simas Street, including the following exhibits:

1. Vicinity Map
2. Engineer's Report, dated May 15, 2018
3. Existing Site Plan with Proposed General Plan Amendment and Rezone
4. Existing Floor Plan (Sheet A101)
5. Revised Floor Plan for Sanctuary (Sheet A101B)
6. Mitigation Monitoring and Reporting Program
7. Letter from Ohlone/Costanoan-Esselen Nation (OCEN), dated December 17, 2018

ORDINANCE NO. _____ (N.C.S.)

AN ORDINANCE AMENDING THE ZONING MAP BY RECLASSIFYING A 94,235 SQUARE FEET (2.16 ACRES) OF A 401,197 (9.21 ACRES) LOT FROM "INDUSTRIAL-GENERAL COMMERCIAL" TO "MIXED ARTERIAL FRONTAGE" (RELATED TO GPA 2017-002)

WHEREAS, on December 3, 2019, the Salinas City Council, at the request of the City of Salinas, Applicant/Property Owner, held a duly noticed public hearing to consider Rezone 2017-001 to change the Zoning designation of 94,235 square feet (2.16 acres) of a 401,197 (9.21 acres) lot from "Industrial-General Commercial" to "Mixed Arterial Frontage" located at 10 Simas Street (APN: 003-091-011-000); and

WHEREAS, on November 6, 2019, the Salinas Planning Commission, held a duly noticed public hearing to consider Rezone 2017-002; and

WHEREAS, the Planning Commission considered a Mitigated Negative Declaration prepared for this project and independently determined that all impacts were adequately addressed in accordance with the California Environmental Quality Act; and

WHEREAS, on November 6, 2019, the Salinas Planning Commission weighed the evidence presented at said public hearing, considered the staff report, determined that positive findings could be made for approval of the project, adopted Resolution No. 2019-016 recommending adoption of the related Mitigated Negative Declaration and approval of Rezone 2017-001; and

WHEREAS, the City Council weighed the evidence presented at said public hearing, including the Staff Report which is on file at the Community Development Department together with the record of environmental review; and

WHEREAS, the City Council has reviewed and considered the information contained in the Initial Study and related environmental documents including the Mitigated Negative Declaration; and

WHEREAS, by Resolution adopted by the City Council on December 3, 2019, the City Council adopted the Mitigated Negative Declaration prepared for Rezone 2017-001.

NOW, THEREFORE, BE IT RESOLVED by the Salinas City Council that the Council approve Rezone 2017-002, and adopts the following findings as the basis for its determination, and that the foregoing recitations are true and correct, and are included herein by reference as findings:

Rezone 2017-001:

1. **The amendment is consistent with the Salinas general plan, any applicable specific plan, and other plans and policies adopted by the Salinas city council;**

The proposed Amendment is consistent with Salinas General Plan Policies. Consistent with Land use Policy LU-3.7, the Amendment allows for a formerly vacant 18,150 square foot theater building to be revitalized into a viable compliant use. The infill development of establishing the religious assembly use in the former vacant theater building with no proposed exterior modifications is consistent with scale and character of the existing Industrial Complex development on-site and conforms to Community Design Policy CD-2.3. The proposed "Arterial Frontage" land use designation is not expected to result in negative impacts or conflict with surrounding properties, because the adjacent lots to the west are designated the same "Arterial Frontage".

2. **The amendment will not have the effect of reversing the policies of the Salinas general plan, any applicable specific plan, and other plans and policies adopted by the Salinas city council;**

There are no policies within the Salinas General Plan that would be reversed as a result of this amendment. There are no Specific Plans or Precise Plans applicable to the site.

3. **The amendment would not create an isolated district unrelated to adjacent zoning districts;**

The proposed zoning amendment will not create an unrelated zoning district because the rezoning would extend the boundary of the existing and contiguous MAF base zoning district to include the proposed portion of the lot located at 10 Simas Street. The rezone results in an extension of the existing MAF zone to the west of the site.

4. **The city has the capability to provide public utilities, roads, and services to serve the uses allowed by the proposed amendment.**

Salinas is an urbanized area and public infrastructure is presently in place to serve most uses. The proposed Rezoning would not create the need for additional infrastructure.

NOW, THEREFORE, THE SALINAS CITY COUNCIL HEREBY ORDAINS AS FOLLOWS:

SECTION 1. The City of Salinas's Zoning Map, a copy of which is on file with the City Clerk of the City of Salinas and which copy constitutes the original record, is hereby amended to reflect the following:

That certain real property located in the City of Salinas, County of Monterey, State of California, and shown and designated on that certain map attached hereto as Exhibit 1 and made a part hereof, entitled "Rezone Map – Rezone 2017-001" and which real property,

approximately 94,235 square feet (2.16 acres) of a 401,197 (9.21 acres) lot (APN: APN: 003-091-011-000) located at 10 Simas Street and now classified in the Industrial-General Commercial (IGC) Zoning District, is hereby reclassified as shown on the attached "Rezone Map – Rezone 2017-001" into the Mixed Arterial Frontage (MAF) Zoning District.

SECTION 2. The aforesaid map and all notations, references and other information shown thereon shall be as much a part of this ordinance as if the matters and information shown on said map were fully described herein.

SECTION 3. This ordinance shall take effect and be in force thirty days from and after its adoption.

SECTION 4. The Salinas City Clerk is hereby directed to cause the following summary of the ordinance to be published by one insertion in the *Californian*, a newspaper of general circulation published and circulated in the City of Salinas and hereby designated for that general purpose by the Salinas City Council:

> "The City of Salinas's Zoning Map has been amended by reclassifying approximately 94,235 square feet (2.16 acres) of a 401,197 (9.21 acres) lot from the Industrial-General Commercial (IGC) Zoning District to the Mixed Arterial Frontage (MAF) Zoning District on property located at 10 Simas Street. This Ordinance goes into effect 30 days after adoption. For additional detail concerning this amendment, contact Community Development Department, 65 West Alisal Street, Salinas, CA 93901."

This ordinance was introduced and read December 3, 2019 and passed and adopted on December 17, 2019, by the following vote:

AYES:

NOES:

ABSENT:

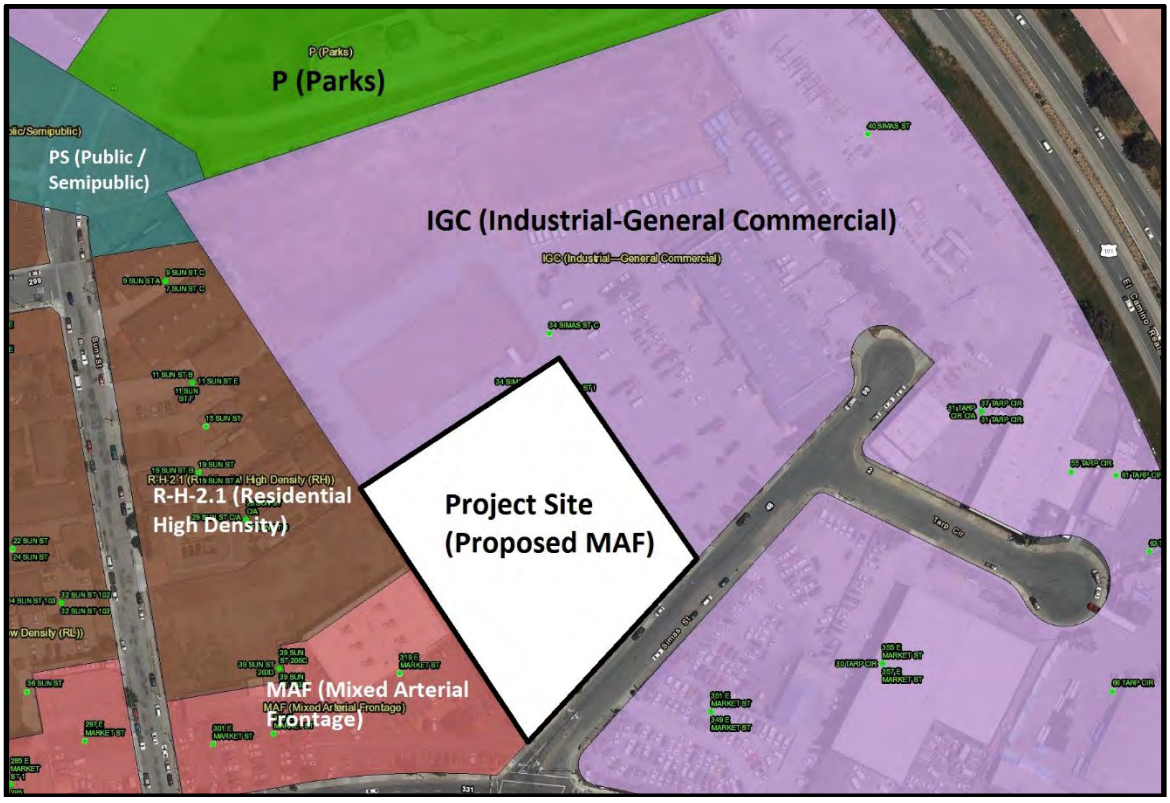
_____
Joe Gunter
MAYOR

ATTEST:

_____
Patricia Barajas
City Clerk

EFFECTIVE DATE: January 16, 2020
Attachment: Exhibit A: Proposed Rezone Map 2017-001 Map for 10 Simas Street

North Rezoning Map



REZONE 2017-001

(Related to General Plan Amendment 2017-002)

Project Description: Change 94,235 square feet (2.16 acres) of a 401,197 (9.21 acres) lot from Industrial-General Commercial to Mixed Arterial Frontage.

\\SalSvr44\DeptPvt\ComDev\robertl\Documents\10 Simas Street\GPA 2017-002 and RZ 2017-001\RZ 2017-001 Map Exhibit.docx

RESOLUTION NO. _____(N.C.S.)

RESOLUTION APPROVING AN AMENDMENT TO THE SALINAS GENERAL PLAN TO CHANGE THE GENERAL PLAN DESIGNATION OF OF 94,235 SQUARE FEET (2.16 ACRES) OF A 401,197 (9.21 ACRES) LOT LOCATED AT 10 SIMAS STREET (RELATED TO RZ 2017-001)

WHEREAS, on December 3, 2019, the Salinas City Council, at the request of the City of Salinas, Applicant/Property Owner, held a duly noticed public hearing to consider General Plan Amendment 2017-002 to change the General Plan designation of 94,235 square feet (2.16 acres) of a 401,197 (9.21 acres) lot from General Commercial/Light Industrial to Arterial Frontage located at 10 Simas Street (APN: 003-091-011-000); and

WHEREAS, on November 6, 2019, the Salinas Planning Commission, held a duly noticed public hearing to consider General Plan Amendment 2017-001; and

WHEREAS, the Planning Commission considered a Mitigated Negative Declaration prepared for this project and independently determined that all impacts were adequately addressed in accordance with the California Environmental Quality Act; and

WHEREAS, on November 6, 2019, the Salinas Planning Commission weighed the evidence presented at said public hearing, considered the staff report, determined that positive findings could be made for approval of the project, adopted Resolution No. 2019-__ recommending adoption of the related Mitigated Negative Declaration and approval of General Plan Amendment 2017-002; and

WHEREAS, the City Council weighed the evidence presented at said public hearing, including the Staff Report which is on file at the Community Development Department together with the record of environmental review; and

WHEREAS, the City Council has reviewed and considered the information contained in the Initial Study and related environmental documents including the Mitigated Negative Declaration; and

WHEREAS, by Resolution adopted by the City Council on December 3, 2019, the City Council adopted the Mitigated Negative Declaration prepared for General Plan Amendment 2017-002.

NOW, THEREFORE, BE IT RESOLVED by the Salinas City Council that the Council approve General Plan Amendment 2017-002, and adopts the following findings as the basis for its determination, and that the foregoing recitations are true and correct, and are included herein by reference as findings:

General Plan Amendment 2017-001:

1. ***The proposed general plan amendment is consistent with all other goals, policies, programs, and land uses of applicable elements of the general plan;***

   The proposed Amendment is consistent with Salinas General Plan Policies. Consistent with Land use Policy LU-3.7, the Amendment allows for a formerly vacant 18,150 square foot theater building to be revitalized into a viable compliant use. The infill development of establishing the religious assembly use in the former vacant theater building with no proposed exterior modifications is consistent with scale and character of the existing Industrial Complex development on-site and conforms to Community Design Policy CD-2.3. The proposed "Arterial Frontage" land use designation is not expected to result in negative impacts or conflict with surrounding properties, because the adjacent lots to the west are designated "Arterial Frontage" and there is an existing 6-foot high fence with two abutting landscape planters that separate the proposed area for designation from an existing retail use and a vacant lot.

2. ***The proposed general plan amendment promotes the public necessity, convenience, and general welfare.***

   The General Plan Amendment promotes the public necessity, convenience and general welfare because the proposal will create a General Plan and Zoning designation to allow for the continuation of religious assembly use that took over a vacant building.

PASSED AND APPROVED this 3rd day of December 2019, by the following vote:

AYES:

NOES:

ABSENT:

ABSTAIN:

APPROVED

_____

Joe Gunter, Mayor

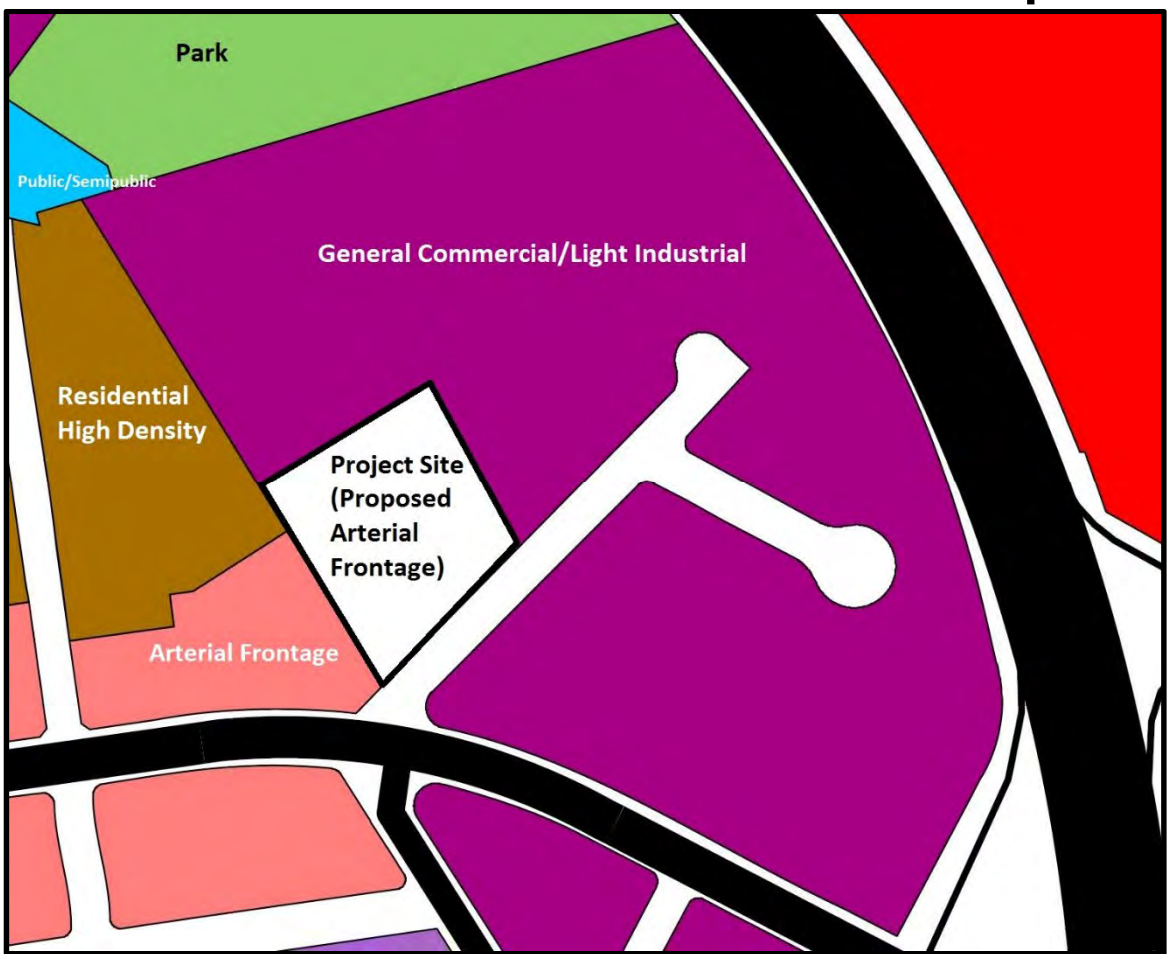
ATTEST

_____
Patricia M. Barajas, City Clerk

Attachment:

Exhibit A: Proposed General Plan Amendment 2017-002 Map for 10 Simas Street

North **General Plan Amendment Map**



GENERAL PLAN AMENDMENT 2017-002

(Related to Rezone 2017-001)

Project Description: Change 94,235 square feet (2.16 acres) of a 401,197 (9.21 acres) lot from General Commercial/Light Industrial to Arterial Frontage

\\SalSvr44\DeptPvt\ComDev\robertl\Documents\10 Simas Street\GPA 2017-002 and RZ 2017-001\GPA 2017-002 Map Exhibit.docx

RESOLUTION NO. _____

RESOLUTION APPROVING CONDITIONAL USE PERMIT TO TO ESTABLISH AND OPERATE A RELIGIOUS ASSEMBLY USE IN AN EXISTING 18,150 SQUARE FOOT BUILDING LOCATED AT 10 SIMAS STREET (RELATED TO GPA 2017-002 AND RZ 2017-001)

WHEREAS, on December 3, 2019, the Salinas City Council, at the request of the City of Salinas, Applicant/Property Owner, held a duly noticed public hearing to consider Conditional Use Permit 2017-019 to establish and operate a religious assembly use in an existing 18,150 square foot building located at 10 Simas Street (APN: 003-091-011-000); and

WHEREAS, on November 6, 2019, the Salinas Planning Commission, held a duly noticed public hearing to consider Conditional Use Permit 2017-019; and

WHEREAS, the Planning Commission considered a Mitigated Negative Declaration prepared for this project and independently determined that all impacts were adequately addressed in accordance with the California Environmental Quality Act; and

WHEREAS, on November 6, 2019, the Salinas Planning Commission weighed the evidence presented at said public hearing, considered the staff report, determined that positive findings could be made for approval of the project, adopted Resolution No. 2019-__ recommending adoption of the related Mitigated Negative Declaration and approval of Conditional use Permit 2017-019; and

WHEREAS, the City Council weighed the evidence presented at said public hearing, including the Staff Report which is on file at the Community Development Department together with the record of environmental review; and

WHEREAS, the City Council has reviewed and considered the information contained in the Initial Study and related environmental documents including the Mitigated Negative Declaration; and

WHEREAS, by Resolution adopted by the City Council on December 3, 2019, the City Council adopted the Mitigated Negative Declaration prepared for Conditional Use Permit 2017-019.

NOW, THEREFORE, BE IT RESOLVED by the Salinas City Council that the Council approve Conditional Use Permit 2017-019, and adopts the following findings as the basis for its determination, and that the foregoing recitations are true and correct, and are included herein by reference as findings:

Conditional Use Permit 2017-019:

1. ***The proposed location of the use is in accordance with the objectives of the Salinas General Plan, this Zoning Code and the purposes of the district in which the site is located;***

   The proposed Amendment is consistent with Salinas General Plan Policies. Consistent with Land use Policy LU-3.7, the Amendment allows for a formerly vacant 18,150 square foot theater building to be revitalized into a viable compliant use. The infill development of establishing the religious assembly use in the former vacant theater building with no proposed exterior modifications is consistent with scale and character of the existing Industrial Complex development on-site and conforms to Community Design Policy CD-2.3. The proposed "Arterial Frontage" land use designation is not expected to result in negative impacts or conflict with surrounding properties, because the adjacent lots to the west are designated "Arterial Frontage" and there is an existing 6-foot high fence with two abutting landscape planters that separate the proposed area for designation from an existing retail use and a vacant lot.

   Upon a successful General Plan Amendment and Rezone, a religious assembly use is subject to a Conditional Use Permit in the MAF Zoning District per Section 37-30.240, Table 37-30.110. Per Section 37-30.230(e)(1) the purpose of the MAF District is to provide a combination of uses along certain areas on East Market Street. Per Section 37-60.505 non-administrative Conditional Use Permits are subject to the review and approval of the Planning Commission; Non-administrative Conditional Use Permits apply to development review proposals that the City Planner has determined are not statutorily or categorically exempt from the California Environmental Quality Act.

2. ***The proposed location of the conditional use and the proposed conditions under which it would be operated or maintained are consistent with the Salinas General Plan and will not be detrimental to the public health, safety, or welfare of persons residing or working in or adjacent to the neighborhood of such use, nor detrimental to properties or improvements in the vicinity or the general welfare of the City of Salinas; and***

   The proposed Amendment is consistent with Salinas General Plan Policies. Consistent with Land use Policy LU-3.7, the Amendment allows for a formerly vacant 18,150 square foot theater building to be revitalized into a viable compliant use. The infill development of establishing the religious assembly use in the former vacant theater building with no proposed exterior modifications is consistent with scale and character of the existing Industrial Complex development on-site and conforms to Community Design Policy CD-2.3. The proposed "Arterial Frontage" land use

designation is not expected to result in negative impacts or conflict with surrounding properties, because the adjacent lots to the west are designated "Arterial Frontage" and there is an existing 6-foot high fence with two abutting landscape planters that separate the proposed area for designation from an existing retail use and a vacant lot.

It is the continued operation of a nonconforming use in an existing building. The proposed establishment and operation of a Religious Assembly use would not be detrimental to the public health, safety and general welfare of the people of the City. A six-foot high fence and abutting landscape planters separate the subject portion of the lot from adjacent uses on other lots. The project provides adequate off-street parking and meets the recycling and trash recycling provisions of the Zoning Code.

3. The proposed conditional use will comply with the provisions of the Salinas Zoning Code, including any specific conditions required for the proposed use.

Conditions have been recommended for this permit to ensure that, when implemented, the project will conform and comply with the provisions of the Salinas Zoning Code. For example, a condition requires all environmental mitigation measures contained in the Mitigation Monitoring and Reporting Plan (MMRP) shall be conditions of approval incorporated herein by reference.

PASSED AND ADOPTED this 3rd day of December 2019, by the following vote:

AYES:

NOES:

ABSENT:

ABSTAIN:

APPROVED

_____
Joe Gunter, Mayor

ATTEST

_____
Patricia Barajas, City Clerk

\\SalSvr44\DeptPvt\ComDev\robertl\Documents\10 Simas Street\GPA 2017-002 and RZ 2017-001\CUP 2017-019 CC Resolution.docx

When recorded, return to:

CITY OF SALINAS
Community Development Department
65 West Alisal Street, Salinas, CA 93901
Attn: Bobby Latino, Associate Planner

SPACE ABOVE FOR RECORDER'S USE ONLY

Title of Document

CONDITIONAL USE PERMIT NO. 2017-019
City of Salinas
Community Development Department
(Amends Conditional Use Permit 1987-023)

WHEREAS, the Salinas City Council, at a public hearing duly noticed and held on December 3, 2019, found that the proposed location of the use and structure is in accord with the objectives of the Salinas Zoning Code and the purposes of the zoning district in which the site is located; that the location of the use and structure and the proposed conditions under which it would be operated and maintained will be consistent with the Salinas General Plan and will not be detrimental to the public health, safety, or welfare of persons residing or working in or adjacent to the neighborhood of such use, nor detrimental to properties or improvements in the vicinity or the general welfare of the City of Salinas; that the use and structure will comply with the provisions of the Salinas Zoning Code, including the specific conditions required for the proposed use and structure; and that this conditional use has been evaluated in accordance with the California Environmental Quality Act, as amended; and that the Salinas City Council has reviewed and considered an Mitigated Negative Declaration and Mitigation Monitoring and Reporting Program.

NOW, THEREFORE, the Salinas City Council hereby grants and issues Conditional Use Permit No. 2017-019 pursuant to *Article VI, Division 8: Conditional Use Permits*, of Chapter 37 of the Salinas City Code and upon the following terms and conditions and not otherwise, to wit:

ISSUED TO PROPERTY OWNER: Simas-East Market Street LLC

FOR USE: Establish and operate a religious assembly use in an existing 18,150 square foot building.

ON PROPERTY LOCATED AT: 10 Simas Street

ASSESSOR'S PARCEL NO.: 003-091-011-000

ZONING DISTRICT: MAF -F (Mixed Arterial Frontage – Flood Plain Overlay)

ENVIRONMENTAL REVIEW ACTION & DATE: The environmental impacts of the project have been analyzed in accordance with the California Environmental Quality Act (CEQA) on December 3, 2019. An Initial Study was prepared to evaluate the potential impacts associated with the project. Based upon review of the Initial Study, a Mitigated Negative Declaration was adopted that identified that the proposed project will not have a significant effect on the environment because the mitigation measures outlined in the proposed Mitigation Monitoring Program have been included in the project

EXPIRATION DATE: None, once properly established, unless the subject religious assembly use ceases operation for a continuous period of six (6) months or more.

RIGHT TO OPERATE/DEVELOP

1. The Permittee shall have the right to establish and operate a religious assembly use in an existing 18,150 square foot building on the above-described property in accordance with the following exhibits incorporated herein by reference and made a part of this Permit:

Exhibit "A" Vicinity Map
Exhibit "B" Engineer's Report, dated May 15, 2018
Exhibit "C" Existing Site Plan with Proposed General Plan Amendment and Rezone
Exhibit "D" Existing Floor Plan (Sheet A101)
Exhibit "E" Revised Floor Plan for Sanctuary (Sheet A101B)
Exhibit "F" Mitigated Negative Declaration, Mitigation Monitoring Program, and Initial Study

LIMITATIONS ON USE

1. "For Use" Section of CUP 1987-028 shall be revised to reflect the following changes (changes shown in strikethrough/underline format):

~~Seven-plex indoor theater~~Religious Assembly use in 18,150 sq. ft building
79,570 sq. ft commercial service/
Industrial space

2. Condition No. 1 of CUP 1987-028 shall be revised to reflect the following changes (changes shown in strikethrough/underline format):

The permittee shall have the right to construct and operate a ~~seven-plex theater~~Religious Assembly use (totaling 18,150 sq. ft.) and four commercial

service/industrial buildings totaling 79,570 square feet on the above-described property in accordance with the following exhibits attached hereto and made part of this permit:
Exhibit “A” – Site Plan
Exhibit “B” – Building Elevations and material Sample Boards
Exhibit “C” – Landscape Plan
Exhibit “D” – Master Sign Plan 2017-003
Exhibit “E” – Public works Memo dated 10/17/89
Exhibit “F” – Fire Department Memo dated 10/6/89
Exhibit “G” – Use List

3. Condition No. 4 of CUP 1987-028 shall be deleted in its entirety.

4. All remaining terms, requirements, and conditions of Conditional Use Permit 1987-028 remain in full force and effect.

5. The City Planner may conduct a review of this Permit after inauguration, and may require modifications, if appropriate. The City Planner may also schedule a review by the Salinas Planning Commission, at a public hearing, if considered necessary. In the event that a public hearing is necessary, the Permittee shall reimburse the City of Salinas for all costs and expenses required to prepare for and conduct said hearing.

6. If the subject religious assembly use ceases operation for a continuous period of six (6) months or more, this Conditional Use Permit shall become null and void.

7. This Permit shall not be effective until the effective date of the related Rezone 2017-001 and General Plan Amendment 2017-002. All provisions of the Rezone and General Plan Amendment adopted by action of the Salinas City Council shall be incorporated herein as conditions of approval into this Conditional Use Permit.

ENVIRONMENTAL MITIGATIONS

8. All environmental mitigation measures contained in the Mitigation Monitoring and Reporting Plan (MMRP), attached as Exhibit “F,” shall be conditions of approval incorporated herein by reference.

FIRE PROTECTION REQUIREMENTS

9. If required, all fire sprinkler apparatus shall be incorporated into the overall site plan and building design. Such apparatus shall be located within building interiors, garages, stairwells, utility areas, trash areas and/or other areas substantially out of the public view. Fire Department connection pipes shall be painted to match the adjacent building.

PARKING REQUIREMENTS

10. All off-street parking and loading areas shall be graded, paved, drained, landscaped, striped, and maintained in accordance with *Article V, Division 2: Parking, Loading, and Outdoor Lighting* of the Salinas City Code.

SIGNS

11. A Sign Permit issued in accordance with *Article V, Division 3: Signs* of the Salinas City Code, shall be required for all signs.

12. No canvas signs, banners, pennants, flags, streamers, balloons or other temporary or wind signs; no mobile, A-frame, or portable signs; no roof or canopy signs extending above a building roof; no signs that resemble any official marker erected by the city, state or any governmental agency, or that by reason of position, shape, color or illumination would conflict with the proper functioning of any traffic sign or signal or would be a hazard to vehicular or pedestrian traffic; no signs which produce odor, sound, smoke, fire or other such emissions; and no animated, flashing, moving or rotating signs shall be permitted unless permitted in accordance with *Article 5, Division 3: Signs* of the Salinas Zoning Code, as may be amended from time to time.

OUTDOOR LIGHTING

13. Exterior lighting may be installed in accordance with Zoning Code Section 37-50.480 under the following limitations:

    a. No floodlighting will be allowed on any structure.
    b. Parking lot lighting shall be shielded to confine light spread to within the site boundaries and shall not exceed 25 feet in height.
    c. Prior to the issuance of a Building Permit, the applicant shall submit a detailed lighting plan for review and approval by the Community Development Department.

MAINTENANCE

14. All parking areas, driveways, other paved surfaces, accessways and grounds shall be regularly maintained and kept free of weeds, litter, and debris. All traffic signs and pavement markings shall be clear and legible at all times. All landscaped areas shall be maintained free of weeds, trash, and debris, and all plant material shall be continuously maintained in a healthy, growing condition. All exterior building and wall surfaces shall be regularly maintained, and any damage caused by weathering, vandalism, or other factors shall be repaired in conformance with the terms and

conditions of this Permit.

PUBLIC IMPROVEMENTS

15. All existing damaged and hazardous sidewalks, and unused driveways shall be reconstructed to City standards prior to issuance of a Certificate of Occupancy.

16. Public improvements to serve the development shall be reviewed and approved by the City Engineer and shall be installed in accordance with City standards. All utilities shall be installed underground with details to be included on the final improvement plans.

UTILITIES/EQUIPMENT SCREENING

17. All new utility lines shall be placed underground and all new power transformers shall be placed underground where permitted by the utility company. Where transformers must be pad-mounted above ground, they shall be located away from the general public view or shall be effectively concealed by landscaping or a screen fence of a design approved by the utility company and the City Planner.

18. All new mechanical equipment and appurtenances (i.e. gas, water meters, electrical boxes, HVAC systems, refrigeration equipment, etc.), building or ground mounted, shall be screened from public view and adjacent properties. Roof vents shall be painted to blend with roof materials. Details shall be shown on the final construction and/or land plans and are subject to the approval of the City Planner.

19. The Applicant, or successor-in-interest shall eradicate graffiti painted or marked on the facility within seventy-two (72) hours of occurrence pursuant to Municipal Code Section 5-03.19(a)(4).

PERMIT NOT TO SUPERSEDE OTHER REQUIRED LICENSING OR PERMITS

20. The issuance of this Permit shall not relieve the Permittee of any requirement to obtain permits or licensing from any county, regional, state or federal agencies. If applicable, a City Business License shall be obtained prior to commencement of use.

21. This Permit may be subject to water and sanitary sewer allocations. The Permittee will proceed at their own risk as water and sanitary sewer allocation may not be available at the time requested.

MODIFICATION OF APPROVED USE AND PLANS

22. Any modification to the terms and conditions of this Permit are subject to the issuance of a new Permit. The City Planner may approve minor modifications to this Permit if the City Planner finds the modification to be in substantial compliance with the original approval.

VIOLATION; REVOCATION

23. Use of the property shall be conducted in such a way that it does not constitute a nuisance to the use and enjoyment of surrounding properties or the City. Any permittee, person, firm, corporation, whether as principal, agent, employee or otherwise, violating, causing or maintaining the violation of any of the provision of this Permit shall be guilty of a misdemeanor or an infraction, as charged. Alternatively, any violation of this Permit may be prosecuted administratively pursuant to the City's Administrative Remedies Ordinance and/or other applicable laws, regulations or codes. Upon determination by the City Planner that there are reasonable grounds for revocation of this Permit, a revocation hearing shall be set to be heard before the Salinas Planning Commission in accordance with *Article VI, Division 18: Enforcement and Penalties* of the Salinas Zoning Code or such codes as may be subsequently adopted.

SUBSTANTIAL ACTION TIME LIMIT

24. This Permit shall expire one year after its effective date unless:

    a. The use is established in conformance with the provisions of the Zoning Code; or
    b. The City Planner determines that substantial action has commenced to carry out the terms and intent of the Conditional Use Permit.

PERMIT VALIDATION

25. Pursuant to Zoning Code Section 37-60.530, this Permit shall be null and void and all terms and conditions shall have no force or effect unless this Permit is signed by the Permittee(s) and returned to City of Salinas Community Development Department within 90 days of approval. ***It is the applicant's responsibility to track the 90-day expiration date. No notice will be sent.***

STANDARD CONDITIONS

26. Pursuant to **Salinas City Code Section 1-8.1: Civil action enforcement**, and **Section 1-8.2: Liability for costs**, permittee shall reimburse the City of Salinas for all costs and expenses (including but not limited to fees and

charges of architects, engineers, attorneys, and other professionals, and court costs) incurred by the City in enforcing the provisions of this Permit.

27. The applicant(s) shall defend, indemnify, and hold harmless the City of Salinas or any of its boards, commissions, agents, officers, and employees from any claim, action or proceeding against the City, its boards, commissions, agents, officers, or employees to attack, set aside, void, or annul, the approval of this use. The City shall promptly notify the applicant(s) of any such claim, action, or proceeding. The City shall cooperate in the defense. Nothing contained in this condition shall prohibit the City from participation in a defense of any claim, action, or proceeding if the City bears its own attorney's fees and costs, and the City defends the action in good faith.

28. Notwithstanding any of the provisions in this permit, all improvements and uses shall comply with all other ordinances and regulations of the City of Salinas and all local, state and federal laws and regulations.

29. No further development other than that shown on this permit or attached exhibits shall be allowed unless or until an amendment to this permit has been approved. Requests for a minor modification of an approved permit may be granted by the City Planner provided the modification is substantially in compliance with the original approval and conditions.

NOTICE OF CHALLENGE LIMITATIONS

30. Code of Civil Procedure Section 1094.6 requires all Court challenges to the decision to grant this Permit be initiated within 90 days of the final decision of the City in this matter.

EXECUTIONS

THIS CONDITIONAL USE PERMIT *was approved by action of the Salinas City Council on December 17, 2019, and shall become effective:*

Effective Date: January 16, 2020 _____

Courtney Grossman
Planning Manager, City of Salinas

(Signatures Listed Below on Pages 8 Through 9 Must Be Notarized)

THIS CONDITIONAL USE PERMIT *is hereby accepted upon the express terms and conditions hereof, and the undersigned Permittee agrees to strictly conform to and comply with each and all of this Permit's terms and conditions.*

Dated: _____ _____

Bill Viera, President and COO
Simas-East Market Street LLC
Permittee / Property Owner

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

STATE OF CALIFORNIA
COUNTY OF MONTEREY

On _____ 201__, before me, _____, Notary Public, personally appeared _____, who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

Signature _____

Dated: _____

_____
Robert Atkinson, Senior VP Development
Simas-East Market Street LLC
Permittee / Property Owner

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

STATE OF CALIFORNIA
COUNTY OF MONTEREY

On _____ 201__, before me, _____, Notary Public, personally appeared _____, who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

Signature _____

\\SalSvr44\DeptPvt\ComDev\robertl\Documents\10 Simas Street\CUP 2017-019\CUP 2017-019 - 10 Simas St.docx

SALINAS PLANNING COMMISSION

Staff Report

Planning Manager Approval	Agenda Item

City of Salinas
Community Development Department
65 West Alisal Street
Salinas, CA 93901
(831) 758-7206
(831) 758-7215 *fax*

Director:
Megan Hunter

Planning Manager:
Courtney Grossman

Planning Commission:

Brad Griffin, Chair
John Meeks, Vice-Chair
George Anzo
Joel Hernandez Laguna
Matt Nohr
Matthew Ottone
Marcelino Rocamora Jr.

DATE: November 6, 2019

TO: Planning Commission

FROM: Courtney Grossman, Planning Manager

BY: Bobby Latino, Associate Planner

SUBJECT: GENERAL PLAN AMENDMENT 2017-002 (GPA 2017-002); REZONE 2017-001 (RZ 2017-001); AND CONDITIONAL USE PERMIT (CUP 2017-019) LOCATED AT 10 SIMAS STREET IN THE IGC-F (INDUSTRIAL-GENERAL COMMERCIAL – FLOOD PLAIN OVERLAY) ZONING DISTRICT

RECOMMENDATION

Staff recommends that the Planning Commission affirm the findings and approve the attached Resolution recommending that the City Council adopt the proposed Mitigated Negative Declaration, approve General Plan Amendment 2017-002, adopt Rezone 2017-001, and approve CUP 2017-019.

BACKGROUND

Simas-East Market Street LLC, property owner and applicant, is requesting approval of a General Plan Amendment 2017-002 (GPA 2017-002) to change the General Plan designation of 94,235 square feet (2.16 acres) of a 401,197 (9.21 acres) lot from General Commercial/Light Industrial to Arterial Frontage, Rezone 2017-001 (RZ 2017-001) to change the Zoning designation of 94,235 square feet (2.16 acres) of a 401,197 (9.21 acres) lot from Industrial-General Commercial to Mixed Arterial Frontage, and a Conditional Use Permit (CUP 2017-019) to establish and operate a religious assembly use in an existing 18,150 square foot building.

A nonconforming religious assembly use has been operating at the

subject site within an existing 18,150 square foot building (former seven-plex indoor movie theater) for approximately nine years. Temporary Use of Land Permit 2010-045 initially approved the temporary use of religious assembly and Building Permit No. B10-0314 approved the tenant improvement. The building is part of a larger Industrial Complex that was approved by Conditional Use Permit (CUP 1987-028). The proposed CUP will modify CUP 1987-028 to replace the indoor theater with the religious assembly use. Religious Assembly uses are not permitted in the underlying base Zoning District of IGC, but is conditionally allowed in the Mixed Arterial Frontage District. Simas-East Market Street LLC has applied for the requested permits to achieve long term zoning compliance with the religious assembly use.

The property is located in the Industrial-General Commercial (IGC) base District and Floodplain Overlay (F) overlay District. The following provides an overview of the land uses and zoning districts adjacent to the project site:

North: Park/P (Parks)
South: Minor Vehicle Repair, Vehicle Sales, and Vehicle-related Retail Sales and Services uses/IGC-F (Industrial-General Commercial – Flood Plain Overlay)
East: Building Materials and Service use/IGC-F (Industrial-General Commercial – Flood Plain Overlay)
West: Retail Sales/MAF-F (Mixed Arterial Frontage – Flood Plain Overlay)

ANALYSIS

General Plan Amendment and Rezone

The proposed Amendment and Rezone is consistent with Salinas General Plan Policies. Consistent with Land use Policy LU-3.7, the Amendment and Rezone allows for a formerly vacant 18,150 square foot theater building to be revitalized into a viable and compliant use. The infill development of establishing the religious assembly use in the former vacant theater building with no proposed exterior modifications is consistent with scale and character of the existing Industrial Complex development in conformance with Community Design Policy CD-2.3.

Conditional Use Permit

Upon the effective date of the General Plan Amendment and Rezone, a religious assembly use would be subject to a Conditional Use Permit in the proposed MAF Zoning District per Section 37-30.240, Table 37-30.110. This CUP will modify CUP 1987-028 to replace the subject 18,150 square foot theater with a religious assembly use and modify select conditions related to the former theater.

ENVIRONMENTAL REVIEW

The environmental impacts of the project have been analyzed in accordance with the California Environmental Quality Act (CEQA). An Initial Study was prepared to evaluate the potential impacts associated with the project. Based upon review of the Initial Study, the proposed project will not have a significant effect on the environment because the mitigation measures outlined in the proposed Mitigation Monitoring Program have been included in the project (see attached Initial Study and Mitigated Negative Declaration). The Initial Study and Mitigated Negative Declaration were routed to responsible agencies and posted at the County Clerk's Office on September 26, 2019; the deadline for comments was October 16, 2019. Action on the environmental document should precede any action on the requested permits. Monterey County Planning Department provided "No Comments" on the Mitigated Negative Declaration during the review period.

FINDINGS

Mitigated Negative Declaration:

Prior to recommending approval to the Council of the requested General Plan Amendment, Rezone, and Conditional Use Permit, the Planning Commission will need to confirm that the proposed environmental document is adequate for the proposed project by establishing the finding set forth in the attached Planning Commission Resolution.

General Plan Amendment/Rezone:

The Planning Commission may recommend approval of a General Plan Amendment and Rezone if all of the findings set forth in the attached Planning Commission Resolution are established. Per Zoning Code Section 37-60.920(d)(2), an affirmative vote of a majority (no less than four (4) votes) of the Planning Commission is required for the Commission to make a recommendation of the General Plan Amendment to the City Council.

Conditional Use Permit:

Per Section 37-60.505, the Planning Commission may recommend approval of an application for Conditional Use Permit to the Council, if all of the findings set forth in the attached proposed Planning Commission Resolution are established.

TIME CONSIDERATION

The proposed project includes requests for a General Plan Amendment and a Rezone, which are both legislative acts and are not subject to the Permit Streamlining Act (PSA).

ALTERNATIVES AVAILABLE TO THE COMMISSION

The Planning Commission has the following alternatives:

1. Affirm the findings set forth in the attached Resolution, recommending that the City Council adopt the Mitigated Negative Declaration, approve General Plan Amendment 2017-002, introduce and adopt Rezone 2017-001, and approve Conditional Use Permit 2017-019 with modifications; or

2. Find that the proposal applications are not appropriate and establish findings at the public hearing recommending that the City Council deny General Plan Amendment 2017-002, Rezone 2017-001, and Conditional Use Permit 2017-019.

CONCLUSION

The proposed General Plan Amendment, Rezone, and Conditional Use Permit will be consistent with General Plan and Zoning Code policies. The proposed applications would allow for a religious assembly use in a former vacant theater building with no negative impacts to surrounding properties. The Initial Study and Mitigated Negative Declaration did not identify significant environmental impacts.

COURTNEY GROSSMAN
Planning Manager

BY: _____
Bobby Latino
Associate Planner

Attachments:
- Proposed Planning Commission Resolution, including the following exhibits:
  - Exhibit A: Mitigated Negative Declaration and Mitigation Monitoring and Reporting Program
  - Exhibit B: Proposed General Plan Amendment 2017-002 Map for 10 Simas Street
  - Exhibit C: Proposed Rezone 2017-001 Map for 10 Simas Street
- Draft City Council Ordinance for Rezone 2017-001, including the following exhibit:
  - Exhibit A: Proposed Rezone 2017-001 Map for 10 Simas Street
- Draft Conditional Use Permit 2017-019, including the following exhibits:
  - Exhibit "A" Vicinity Map
  - Exhibit "B" Engineer's Report, dated May 15, 2018
  - Exhibit "C" Existing Site Plan with Proposed General Plan Amendment and Rezone

Exhibit "D" Existing Floor Plan (Sheet A101)
Exhibit "E" Revised Floor Plan for Sanctuary (Sheet A101B)
Exhibit "F" Mitigated Negative Declaration, Mitigation Monitoring Program, and Initial Study

Initial Study for 10 Simas Street, including the following exhibits:

1. Vicinity Map
2. Engineer's Report, dated May 15, 2018
3. Existing Site Plan with Proposed General Plan Amendment and Rezone
4. Existing Floor Plan (Sheet A101)
5. Revised Floor Plan for Sanctuary (Sheet A101B)
6. Mitigation Monitoring and Reporting Program
7. Letter from Ohlone/Costanoan-Esselen Nation (OCEN), dated December 17, 2018

SALINAS PLANNING COMMISSION
RESOLUTION NO. 2019-16

Resolution Recommending that City Council Approve a General Plan Amendment, Rezone, and Conditional Use Permit to Establish and Operate a Religious Assembly Use Located at 10 Simas Street (GPA 2017-002, RZ 2017-001, and CUP 2017-019)

WHEREAS, on November 6, 2019, the Salinas Planning Commission, at the request of the Applicant/Property Owner, Simas-East Market Street LLC, held a duly noticed public hearing to consider General Plan Amendment 2017-002 (GPA 2017-002) to change the General Plan designation of 94,235 square feet (2.16 acres) of a 401,197 (9.21 acres) lot from General Commercial/Light Industrial to Arterial Frontage, Rezone 2017-001 (RZ 2017-001) to change the Zoning designation of 94,235 square feet (2.16 acres) of a 401,197 (9.21 acres) lot from Industrial-General Commercial to Mixed Arterial Frontage, and Conditional Use Permit (CUP 2017-019) to establish and operate a religious assembly use in an existing 18,150 square foot building (Assessor's Parcel Number 003-091-011-000); and

WHEREAS, the Planning Commission weighed the evidence presented at said public hearing, including the Staff Report which is on file at the Community Development Department together with the record of environmental review; and

WHEREAS, the Planning Commission has reviewed and considered the information contained in the Initial Study and related environmental documents including the Mitigated Negative Declaration and Mitigation Monitoring and Reporting Program.

NOW, THEREFORE, BE IT RESOLVED by the Salinas Planning Commission that it recommends that the City Council adopt the proposed Mitigated Negative Declaration and Mitigation Monitoring and Reporting Program and approve General Plan Amendment 2017-002, Rezone 2017-001, and Conditional Use Permit 2017-019 and adopts the following findings as the basis for its determination, and that the foregoing recitations are true and correct, and are included herein by reference as findings:

For the Mitigated Negative Declaration:

The Planning Commission hereby finds that a Mitigated Negative Declaration (MND) has been prepared with respect to the project in compliance with the California Environmental Quality Act (CEQA) of 1970, as amended, and the guidelines promulgated thereunder. Further, this Commission has independently reviewed and considered the information contained in the Initial Study and related environmental documents, together with the comments received during the public review process. On the basis of the whole record before it, the Commission finds that, with the conditions of approval and the proposed mitigation measures, there is no substantial evidence that the project will have a significant effect on the environment and that the MND reflects the Commission's independent judgment and analysis. On this basis, the Commission adopts the Mitigated Negative Declaration and Mitigation Monitoring and Reporting Program.

The environmental impacts of the project have been analyzed in

accordance with the California Environmental Quality Act (CEQA). An Initial Study was prepared to evaluate the potential impacts associated with the project. Based upon review of the Initial Study, the proposed project will not have a significant effect on the environment because the mitigation measures outlined in the proposed Mitigation Monitoring Program have been included in the. The Initial Study and Mitigated Negative Declaration were routed to responsible agencies and posted at the County Clerk's Office on September 26, 2019; the deadline for comments was October 16, 2019. Monterey County Planning Department provided "No Comments" on the Mitigated Negative Declaration during the review period.

For the General Plan Amendment:

1. ***The proposed general plan amendment is consistent with all other goals, policies, programs, and land uses of applicable elements of the general plan;***

   The proposed Amendment is consistent with Salinas General Plan Policies. Consistent with Land use Policy LU-3.7, the Amendment allows for a formerly vacant 18,150 square foot theater building to be revitalized into a viable compliant use. The infill development of establishing the religious assembly use in the former vacant theater building with no proposed exterior modifications is consistent with scale and character of the existing Industrial Complex development on-site and conforms to Community Design Policy CD-2.3. The proposed "Arterial Frontage" land use designation is not expected to result in negative impacts or conflict with surrounding properties.

2. ***The proposed general plan amendment promotes the public necessity, convenience, and general welfare.***

   The General Plan Amendment promotes the public necessity, convenience and general welfare because the project would result in conforming zoning for the continuation of an existing religious assembly use.

For the Rezone:

1. ***The amendment is consistent with the Salinas general plan, any applicable specific plan, and other plans and policies adopted by the Salinas city council;***

   The proposed Amendment is consistent with Salinas General Plan Policies. Consistent with Land use Policy LU-3.7, the Amendment allows for a formerly vacant 18,150 square foot theater building to be revitalized into a viable compliant use. The infill development of establishing the religious

assembly use in the former vacant theater building with no proposed exterior modifications is consistent with scale and character of the existing Industrial Complex development on-site and conforms to Community Design Policy CD-2.3. The proposed "Arterial Frontage" land use designation is not expected to result in negative impacts or conflict with surrounding properties.

2. ***The amendment will not have the effect of reversing the policies of the Salinas general plan, any applicable specific plan, and other plans and policies adopted by the Salinas city council;***

   There are no policies within the Salinas General Plan that would be reversed as a result of this amendment. There are no Specific Plans or Precise Plans applicable to the site.

3. ***The amendment would not create an isolated district unrelated to adjacent zoning districts;***

   The proposed rezone will not create an unrelated zoning district because the rezoning would extend the boundary of the existing and contiguous MAF base zoning district to include the proposed portion of the lot located at 10 Simas Street.

4. ***The city has the capability to provide public utilities, roads, and services to serve the uses allowed by the proposed amendment.***

   Salinas is an urbanized area and public infrastructure is presently in place to serve most uses. The proposed Rezoning would not create the need for additional infrastructure.

For the Conditional Use Permit:

1. ***The proposed location of the use is in accordance with the objectives of the Salinas General Plan, this Zoning Code and the purposes of the district in which the site is located;***

   The proposed Amendment to the existing Conditional Use Permit is consistent with Salinas General Plan Policies. Consistent with Land use Policy LU-3.7, the Amendment allows for a formerly vacant 18,150 square foot theater building to be revitalized into a viable compliant use. The infill development of establishing the religious assembly use in the former vacant theater building with no proposed exterior modifications is consistent with scale and character of the existing Industrial Complex development on-site and conforms to Community Design Policy CD-2.3. The project is not expected to result in negative impacts or conflict with surrounding

properties, because the adjacent lots to the west are designated "Arterial Frontage" and an existing 6-foot high fence with two abutting landscape planters that separate the site from an existing retail use and a vacant lot.

Upon a successful General Plan Amendment and Rezone, a religious assembly use would be subject to a Conditional Use Permit in the MAF Zoning District per Section 37-30.240, Table 37-30.110. Per Section 37-30.230(e)(1) the purpose of the MAF District is to provide a combination of uses along certain areas on East Market Street.

2. ***The proposed location of the conditional use and the proposed conditions under which it would be operated or maintained are consistent with the Salinas General Plan and will not be detrimental to the public health, safety, or welfare of persons residing or working in or adjacent to the neighborhood of such use, nor detrimental to properties or improvements in the vicinity or the general welfare of the City of Salinas; and***

The proposed Amendment to the existing Conditional Use Permit is consistent with Salinas General Plan Policies. Consistent with Land use Policy LU-3.7, the Amendment allows for a formerly vacant 18,150 square foot theater building to be revitalized into a viable compliant use. The infill development of establishing the religious assembly use in the former vacant theater building with no proposed exterior modifications is consistent with scale and character of the existing Industrial Complex development on-site and conforms to Community Design Policy CD-2.3. The project is not expected to result in negative impacts or conflict with surrounding properties, because the adjacent lots to the west are designated "Arterial Frontage" and an existing 6-foot high fence with two abutting landscape planters separate the site from an existing retail use and a vacant lot.

The proposed establishment and operation of a Religious Assembly use would not be detrimental to the public health, safety and general welfare of the people of the City. A six-foot high fence and abutting landscape planters separate the subject portion of the lot from adjacent uses on other lots. The project provides adequate off-street parking and meets the recycling and trash recycling provisions of the Zoning Code.

3. ***The proposed conditional use will comply with the provisions of the Salinas Zoning Code, including any specific conditions required for the proposed use.***

Conditions have been recommended for this permit to ensure that, when implemented, the project will conform and comply with the provisions of the Salinas Zoning Code. For example, a condition requires all environmental

mitigation measures contained in the Mitigation Monitoring and Reporting Plan (MMRP) shall be conditions of approval incorporated herein by reference.

PASSED AND ADOPTED this 6th day of November 2019, by the following vote:

AYES: Chairperson Griffin, Vice Chairperson Meeks, Commissioners Anzo, Hernandez, Nohr, Ottone, and Rocamora

NOES: None

ABSTAIN: None

ABSENT: None

THIS IS TO CERTIFY that the foregoing is a full, true, and correct copy of a Resolution of the Planning Commission of the City of Salinas, that said Resolution was passed and adopted by the affirmative and majority vote of said Planning Commission at a meeting held on November 6, 2019, and that said Resolution has not been modified, amended, or rescinded, and is now in full force and effect.

SALINAS PLANNING COMMISSION

Date: 11/15/19

Courtney Grossman
Secretary

Attach:

Exhibit A: Mitigated Negative Declaration and Mitigation Monitoring and Reporting Program
Exhibit B: Proposed General Plan Amendment 2017-002 Map for 10 Simas Street
Exhibit C: Proposed Rezone 2017-001 Map for 10 Simas Street

\\SalSvr44\DeptPvt\ComDev\robertl\Documents\10 Simas Street\GPA 2017-002 and RZ 2017-001\10 Simas Street PC Reso MND.docx

CITY OF SALINAS
Community Development Department
65 West Alisal Street, Salinas, CA 93901

(MITIGATED) NEGATIVE DECLARATION

The project described below has been reviewed in accordance with the California Environmental Quality Act (CEQA) and has been determined to have a less than significant impact upon the environment.

Project's Common Name/Description:	General Plan Amendment 2017-002 (GPA 2017-002) from General Commercial/Light Industrial to Arterial Frontage; and Rezone 2017-001 (RZ 2017-001) from Industrial-General Commercial to Mixed Arterial Frontage; Conditional Use Permit (CUP 2017-019) to establish and operate religious assembly use within an existing 18,150 square foot building.
File Nos.:	GPA 2017-002; RZ 2017-001; CUP 2017-019
Project Applicant:	Simas -East Market LLC
Project Location:	10 Simas Street in the IGC-F (Industrial-General Commercial – Flood Plain Overlay) Zoning District (APN 003-091-011-000)

Determination: The attached Initial Study has been prepared for the above project in accordance with the California Environmental Quality Act and procedures established in the *CEQA Guidelines* adopted by the City of Salinas. On the basis of the Initial Study, the City of Salinas makes the following determination:

☐ The above project will not have a significant effect on the environment, and a NEGATIVE DECLARATION is hereby approved.

☒ The above project could have a significant effect on the environment, but WILL NOT have a significant effect in this case because the attached mitigation measures have been made by or agreed to by the applicant which will avoid the effects or mitigate the effects to a point where clearly no significant effects will occur. Furthermore, there is no substantial evidence before the City of Salinas that the proposed project, as revised, may have a significant effect on the environment. A (MITIGATED) NEGATIVE DECLARATION is hereby approved.

Mitigation measures, if any, included in the project to avoid potentially significant effects are found in the attached Mitigation Monitoring Program. Further information about this project and about its probable environmental impact will be on file in the Community Development Department, 65 West Alisal Street, Salinas, CA 93901.

COURTNEY GROSSMAN
Planning Manager

By: _____ Date: 9/10/19
Bobby Latino
Associate Planner

Attach: Mitigation Monitoring and Reporting Program

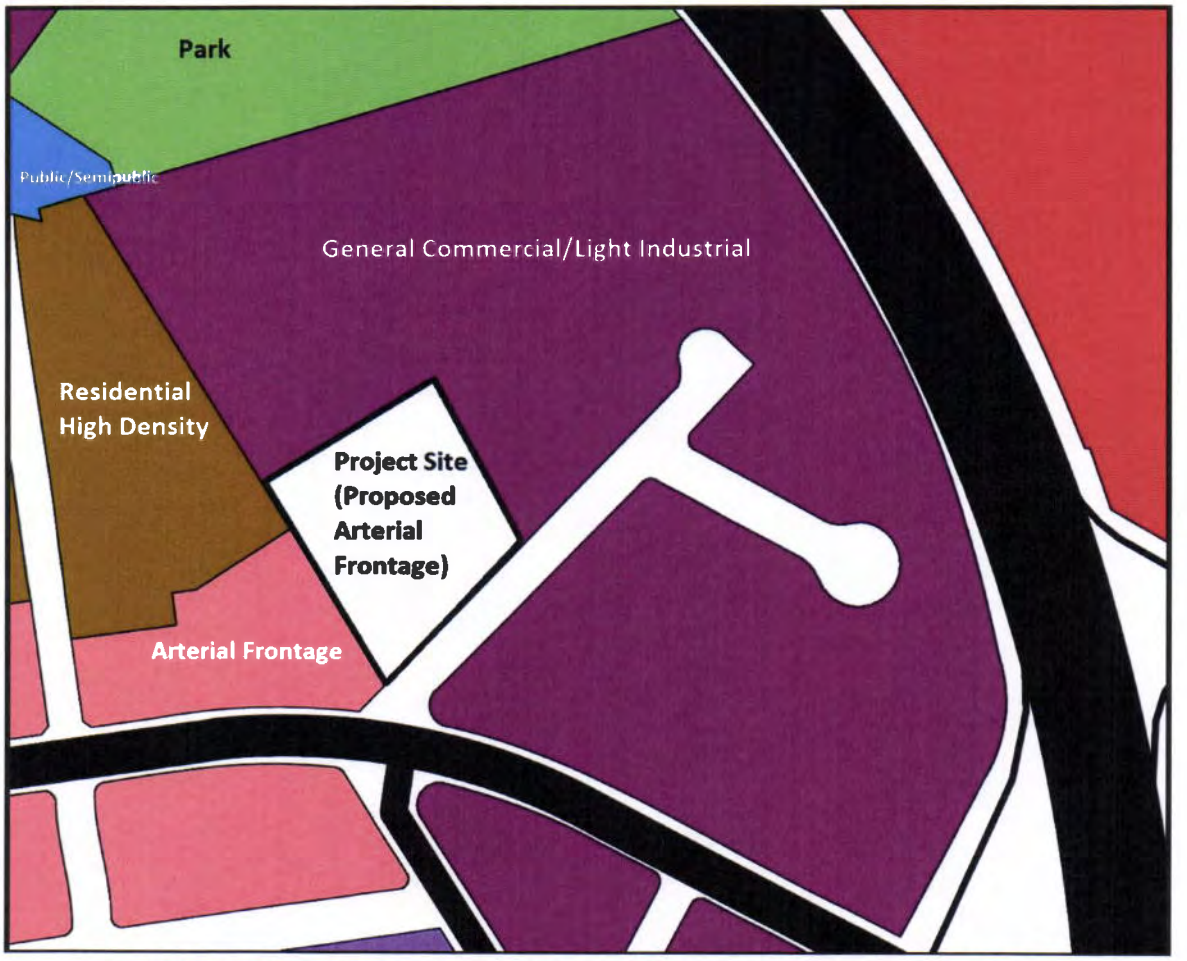
\\SalSvr44\DeptPvt\ComDev\robertl\Documents\10 Simas Street\ER 2017-003\10 Simas Street Mitigated Negative Declaration.docx

GENERAL PLAN AMENDMENT 2017-002 (GPA 2017-002) FROM GENERAL COMMERCIAL/LIGHT INDUSTRIAL TO ARTERIAL FRONTAGE; AND REZONE 2017-001 (RZ 2017-001) FORM INDUSTRIAL-GENERAL COMMERCIAL TO MIXED ARTERIAL FRONTAGE; CONDITIONAL USE PERMIT (CUP 2017-019) TO ESTABLISH AND OPERATE RELIGIOUS ASSEMBLY USE
MITIGATION MONITORING AND REPORTING PROGRAM
10 SIMAS STREET

Mitigation Number	Nature of Mitigation	Result after Mitigation	Party Responsible for Implementing	Party Responsible for Monitoring: Method to Confirm Implementation	Timing for Implementation
CU-1	In the event that cultural materials are encountered during grading/construction, all work shall cease until the find has been evaluated and mitigation measures put in place for the disposition and protection of any find pursuant to Public Resources Code Section 21083.2.	To ensure compliance with Public Resources Code Section 21083.2	Applicant, or Successor in Interest	Community Development Department, Current Planning	During grading/ construction activities
TCR-1	In the event that cultural materials are encountered during grading/construction, all work shall cease until the find has been evaluated and mitigation measures put in place for the disposition and protection of any find pursuant to Public Resources Code Section 21083.2.	To ensure compliance with Public Resources Code Section 21083.2	Applicant, or Successor in Interest	Community Development Department, Current Planning	During grading/ construction activities

North

General Plan Amendment Map



GENERAL PLAN AMENDMENT 2017-002

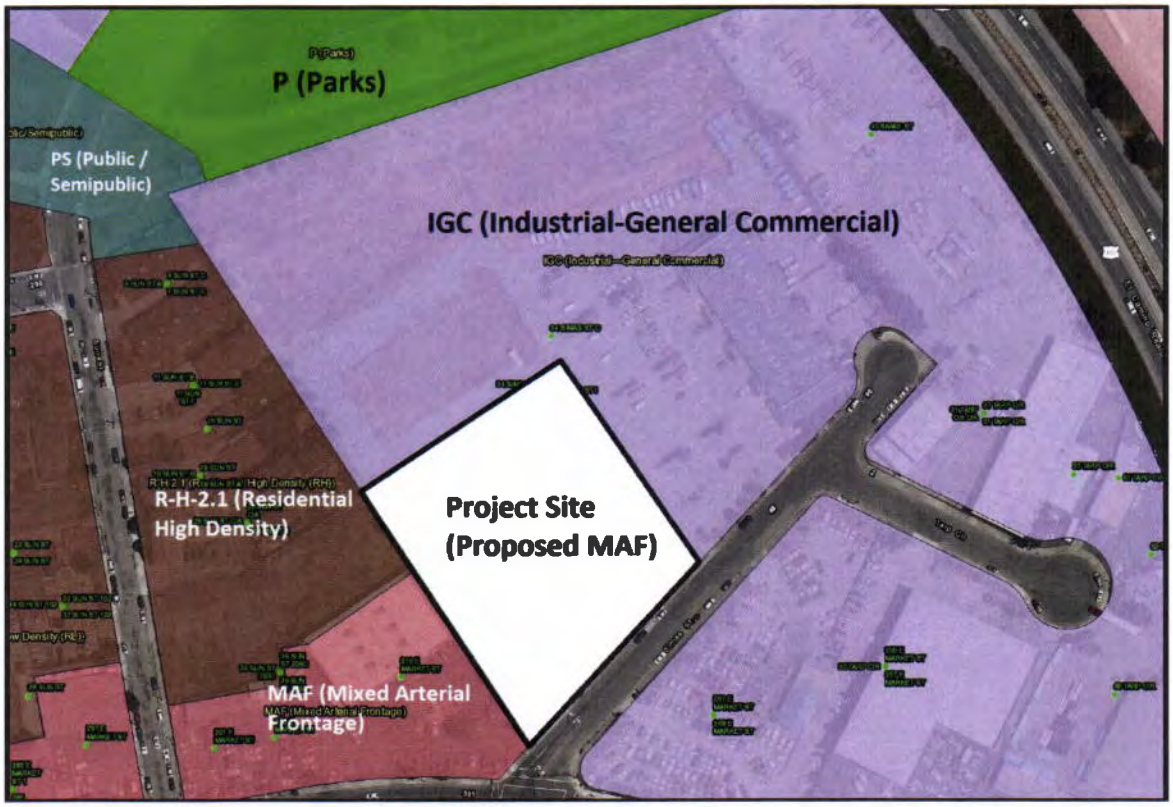
(Related to Rezone 2017-001)

Project Description: Change 94,235 square feet (2.16 acres) of a 401,197 (9.21 acres) lot from General Commercial/Light Industrial to Arterial Frontage

\\SalSvr44\DeptPvt\ComDev\robertl\Documents\10 Simas Street\GPA 2017-002 and RZ 2017-001\GPA 2017-002 Map Exhibit.docx

North

Rezoning Map



REZONE 2017-001

(Related to General Plan Amendment 2017-002)

Project Description: Change 94,235 square feet (2.16 acres) of a 401,197 (9.21 acres) lot from Industrial-General Commercial to Mixed Arterial Frontage.

\\SalSvr44\DeptPvt\ComDev\robertl\Documents\10 Simas Street\GPA 2017-002 and RZ 2017-001\RZ 2017-001 Map Exhibit.docx

UNOFFICIAL MINUTES
OF THE
SALINAS PLANNING COMMISSION

November 6, 2019

The meeting was called to order at 3:30 p.m. in the City Council Chamber Rotunda.

PLEDGE OF ALLEGIENCE

ROLL CALL

WELCOME AND STAFF INTRODUCTIONS

PRESENT: Chairperson Griffin, Commissioners, Anzo, Hernandez, Meeks, Nohr, Ottone (Arrived at 3:55 p.m.), and Rocamora.

ABSENT: None

STAFF: Community Development Director, Megan Hunter; City Attorney, Chris A. Callihan; Planning Manager, Courtney Grossman; Senior Planner, Jill Miller; Associate Planner, Bobby Latino; and Administrative Aide, Maira Flores

COMMENTS FROM THE PUBLIC FOR ITEMS NOT ON THE AGENDA

Chairperson Griffin opened for public comment at 3:32 p.m.

No public comment received.

Chairperson Griffin closed for public comment at 3:32 p.m.

APPROVAL OF THE MINUTES: October 16, 2019

Upon motion by Commissioner Meeks, second by Commissioner Anzo, the minutes of October 16, 2019 were approved. The motion carried by the following vote:

AYES: Chairperson Griffin, Commissioners, Anzo, Meeks, and Nohr.

NOES: None

ABSTAIN: Commissioner Hernandez and Rocamora

ABSENT: Commissioner Ottone (Arrived at 3:55 p.m.)

CONSIDERATIONS

None

PUBLIC HEARINGS

Bobby Latino, Associate Planner, presented a PowerPoint Presentation regarding Variance 2019-001; a request to vary fence height at 1072 Industrial Street. This presentation is on file at the Community Development Department.

Commissioner Meeks inquired if there would be any major changes to the building structure to ensure compliance with commercial cannabis regulations. Bobby Latino indicated that compliance with regulations and building code would be secured through the Commercial Cannabis Business Permit process.

Commissioner Nohr requested clarification on the protest letter received for the project as it referenced concerns with the homeless population on the railroad right of way as opposed to the use of the site. Bobby Latino clarified that the use was previously established through a Site Plan Review and that the Variance was strictly to vary the fence height.

Chairperson Griffin opened for public comment at 3:39 p.m.

No public comment received.

Chairperson Griffin closed for public comment at 3:40 p.m.

Commissioner Meeks provided comments on the homeless camp referenced in the protest letter.

Commissioner Meeks motioned to adopt the resolution approving Variance 2019-001; A request to vary fence height at 1072 Industrial Street. Commissioner Nohr seconded this motion. The motion carried by the following vote:

AYES:	Chairperson Griffin, Commissioners Anzo, Hernandez, Meeks, Nohr, and Rocamora
NOES:	None
ABSTAIN:	None
ABSENT:	Commissioner Ottone (Arrived at 3:55 p.m.)

Bobby Latino, Associate Planner, presented a PowerPoint Presentation regarding General Plan Amendment 2017-001; a request to change a 7.67-acre site from Park to General Commercial/Light Industrial and Rezone 2017-002; a request to change a 7.67-acre site from

Parks to Industrial – General Commercial located at 295 Sun Way. This presentation is on file at the Community Development Department.

Commissioner Hernandez indicated that residents of Rancho Salinas Mobile Home Park are concerned with the rezone as they viewed this location as a recreational resource. Megan Hunter, Community Development Director, informed commissioners that the City determined not to continue to lease this privately-owned property for recreational use. Instead, the City's Master Park Plan will focus on maintenance and making capital improvements to existing parks; hence, the rezone for 295 Sun Way.

Commissioner Rocamora inquired if there was any information on the proposed use for the rezoned area since there's currently a need for housing. Ms. Hunter responded that due to the location of the site's proximity to the freeway and most of the surrounding areas being zoned as Industrial – General Commercial, this site would not be ideal for housing. Ms. Hunter also informed that as part of the Chinatown's Revitalization Plan, the City will continue to expand areas and identify opportunity sites for housing.

Robert Atkinson, Syufy Enterprises - Applicant, made a statement regarding the current use of the property and spoke in support of the project.

Chairperson Griffin opened for public comment at 3:54 p.m.

No public comment received.

Chairperson Griffin closed for public comment at 3:54 p.m.

Commissioner Hernandez motioned to approve the resolution recommending that City Council adopt the proposed Mitigated Negative Declaration, approved General Plan Amendment 2017-001, and introduce then adopt Rezone 2017-002. Commissioner Anzo seconded this motion. The motion carried by the following vote:

AYES:	Chairperson Griffin, Commissioners Anzo, Hernandez, Meeks, Nohr, and Rocamora
NOES:	None
ABSTAIN:	Commissioner Ottone (Arrived at 3:55 p.m.)
ABSENT:	None

Bobby Latino, Associate Planner, presented a PowerPoint Presentation regarding General Plan Amendment 2017-002; a request to change the General Plan designation of 94,235 square feet of a 401,197 lot from General Commercial/Light Industrial to Arterial Frontage, Rezone 2017-001; a request to change the Zoning designation of 94,235 square feet of a 401,197 lot from Industrial-General Commercial to Mixed Arterial Frontage, and Conditional Use Permit 2017-019; a request to establish and operate a religious assembly use in a an existing 18,150 square foot building located at 10 Simas Street. This presentation is on file at the Community Development Department.

Commissioner Nohr requested clarification regarding the buildings on the parcel that would be impacted by the project. Mr. Latino provided clarification.

Robert Atkinson, Syufy Enterprises - Applicant, made a statement regarding the current use of the property and spoke in support of the project.

Chairperson Griffin opened for public comment at 4:06 p.m.

David Mack, Salinas Resident, expressed a concern that the project may imply spot zoning.

Terry Green, Lead Pastor of Celebration Church, provided public comment in support of the project.

Karen Green, Lead Pastor of Celebration Church, provided public comment in support of the project.

Rosanna Guerrero, Congregation Member of Celebration Church, provided public comment in support of the project.

Jason Green, Youth Pastor of Celebration Church, provided public comment in support of the project.

John and Lily Martin, Congregation Members of Celebration Church, provided public comment in support of the project.

Shara Green Pena, Associate Pastor of Celebration Church, provided public comment in support of the project.

Luis Ortiz Jr., Local Mortician, provided public comment in support of the project.

Jesse, Congregation Member of Celebration Church, provided public comment in support of the project.

Echo Grijalva, Youth Mentor of Celebration Church, provided public comment in support of the project.

Received public comment in support of the project from two other unidentified Congregation Member of Celebration Church.

Chairperson Griffin closed for public comment at 4:32 p.m.

Commissioner Meeks inquired if there were any other areas in which spot zoning exists. Ms. Hunter informed the commissioners that this project was not considered spot zoning and it was not uncommon to have parcels with split zoning.

Commissioner Hernandez spoke in support of the project and commended the work of Celebration Church.

Commissioner Meeks motioned to approve the resolution recommending that City Council adopt the proposed Mitigated Negative Declaration, approved General Plan Amendment 2017-002, and introduce then adopt Rezone 2017-001 and approve Conditional Use Permit 2017-019. Commissioner Hernandez seconded this motion. The motion carried by the following vote:

AYES:	Chairperson Griffin, Commissioners Anzo, Hernandez, Meeks, Nohr, Ottone and Rocamora
NOES:	None
ABSTAIN:	None
ABSENT:	None

OTHER BUSINESS

Jill Miller, Senior Planner, presented a PowerPoint regarding the Study Session: West Area Specific Plan. This presentation is on file at the Community Development Department.

Commissioner Meeks inquired if it had been determined who would pay for sewage connections of Bolsa Knolls residences that could potentially result because of the project. Jill Miller informed that this would be determined by Monterey County regulations and not the City. Ms. Miller indicated she would research and present more information regarding this inquiry when the project returns to the Planning Commission for formal consideration.

Commissioner Ottone inquired when the Final Environmental Impact Report would be available for review. Courtney Grossman, Planning Manager, anticipated these documents would be available no later than Friday, November 15, 2019, (for consideration at the November 20, 2019 Planning Commission meeting), or as required by CEQA regulations.

Commissioner Ottone also inquired if action on the Development Agreement would be required from the Planning Commission. Christopher A. Callihan, City Attorney, responded

that only City Council would be required to action on the Development Agreement; however, it would be part of the package presented for consideration to the Planning Commission.

Commissioner Nohr, asked how Assembly Bill 68 and other senate bills impact the West Area Specific Plan. Jill Miller, Senior Plan, indicated that the plan currently meets municipal code; however, changes would be made as necessary to ensure compliance with the state law.

Chairperson Griffin opened for public comment at 4:53 p.m.

David Mack, resident of Salinas, stated concerns regarding potential impacts and sewer connections that could arise with the project.

Natalie Vaughn, California State University of Monterey Bay, provided public comment.

Chairperson Griffin closed for public comment at 4:58 p.m. No action is required with the study session.

Megan Hunter, Community Development Director, spoke regarding the need for an advisory Design Review Board to assist in providing applicants with review and feedback on project design. Ms. Hunter asked if the Planning Commissioners had any input or ideas for the layout and structure of such committee.

Courtney Grossman, Planning Manager, provided examples of previous advisory committees.

Commissioner Nohr agreed with the need for a Design Review Board and provided feedback.

Chairperson Griffin asked if documentation of the structure to follow of previous existing boards that assisted in similar functions could be referenced when considering the design of the committee.

Commissioner Ottone suggested consideration on expanding membership of the Ad Hoc Review Committee to subject matter experts of neighboring cities.

FOLLOW UP REPORTS

Megan Hunter, Community Development Director, apprised the Planning Commission that a second reading at City Council was held on November 5, 2019 to approve the Zoning Code Amendments that were recommended for approval by the Planning Commission on October 2, 2019 as well as the approval of the Alisal Vibrancy Plan presented on October 16, 2019. Both projects were approved.

Ms. Hunter also provided information regarding the report to City Council on November 5, 2019 by Joseph DeSante, Permit Center Manager and Building Official. As of September 30, 2019, over 1,800 Building Permits have been issued.

Additionally, Ms. Hunter informed that the City Council will be establishing a Business Development Committee which will serve as an advisory committee for building permitting improvements. Planning Commissioners should contact Ms. Hunter if interested.

FUTURE AGENDA ITEMS

The West Area Specific Plan and the Mitigated Negative Declaration for the Airport Lease Project located at 1341 Mercer Way are expected to be presented to the Planning Commission on November 20, 2019. Public works is also expected to present a Mitigated Negative Declaration for East Laurel Drive on this date.

The Chinatown Revitalization Project is expected for presentation to the Planning Commission on either December 4, 2019 or December 18, 2019.

Planning Commissioner attendance for November 20, 2019 was confirmed.

ADJOURNMENT

The meeting was adjourned at 5:20 p.m.

_____	_____
BRAD GRIFFIN	COURTNEY GROSSMAN
Chairperson	Executive Secretary

North

Vicinity Map

GPA 2017-002, RZ 2017-001, and CUP 2017-019 10 Simas Street

Exhibit A

\\SalSvr44\DeptPvt\ComDev\robertl\Documents\10 Simas Street\ER 2017-003\GPA 2017-002, RZ 2017-001, CUP 2017-019 Vicinity Map.doc

CITY OF SALINAS

DEVELOPMENT ENGINEERING, *A division of the Public Works Department*
65 West Alisal Street | Salinas, CA 93901 | 831-758-7251 | *www.ci.salinas.ca.us*

ENGINEER'S REPORT

PURPOSE: CUP2017-019 **DATE:** 5/15/2018
LOCATION: 10 Simas St **PLANNER:** Bobby Latino
OWNER/APPLICANT: Simas-East Markert LLC/SyWest Development

DEVELOPMENT PROPOSAL: A proposal to establish religious assembly at old movie theater.

RECOMMENDATION: Approve with Conditions
SWDS THRESHOLD: N/A

DEVELOPMENT REVIEW: *Development Review Submittal prepared by JWF Architecture and BKF, dated 11/16/2017.*

CONDITION OF APPROVAL

1. FEMA Compliance – Applicant shall provide documentation for cost of all improvements that converted the use of the facility along with an appraisal indicating the market value the structure.
2. Fees – Based on CUP1987-028, the existing theater had 1200 seats. Trips associated with the theater use exceeds the proposed religious use. Therefore, no traffic impact fees are assessed for this change in land use.

Notice: The Conditions of Approval for this Site Plan Review include certain fees and development requirements. Pursuant to Government Code Section 66020 (d)(1), this hereby constitutes written notice stating the amount of said fees, and describing the development requirements. The applicant is hereby notified that the 90-day appeal period in which he/she/they may protest these fees and development requirements, pursuant to Government Code Section 66020 (a), begins on the date the office land use permit is approved. If applicant files a written protest within this 90-day period complying with all requirements of Section 66020, he/she/they will be legally barred from challenging such fees and/or requirements at a later date.

CITY OF SALINAS
Reviewed By:

Report Prepared By/Applicant Questions

Adriana Robles 5/15/2018 (adrianar@ci.salinas.ca.us)
Adriana Robles, P.E. **Dated**
Permit Center Senior Engineer (758-7194)
for **Jim Sandoval, P.E.**
City Engineer

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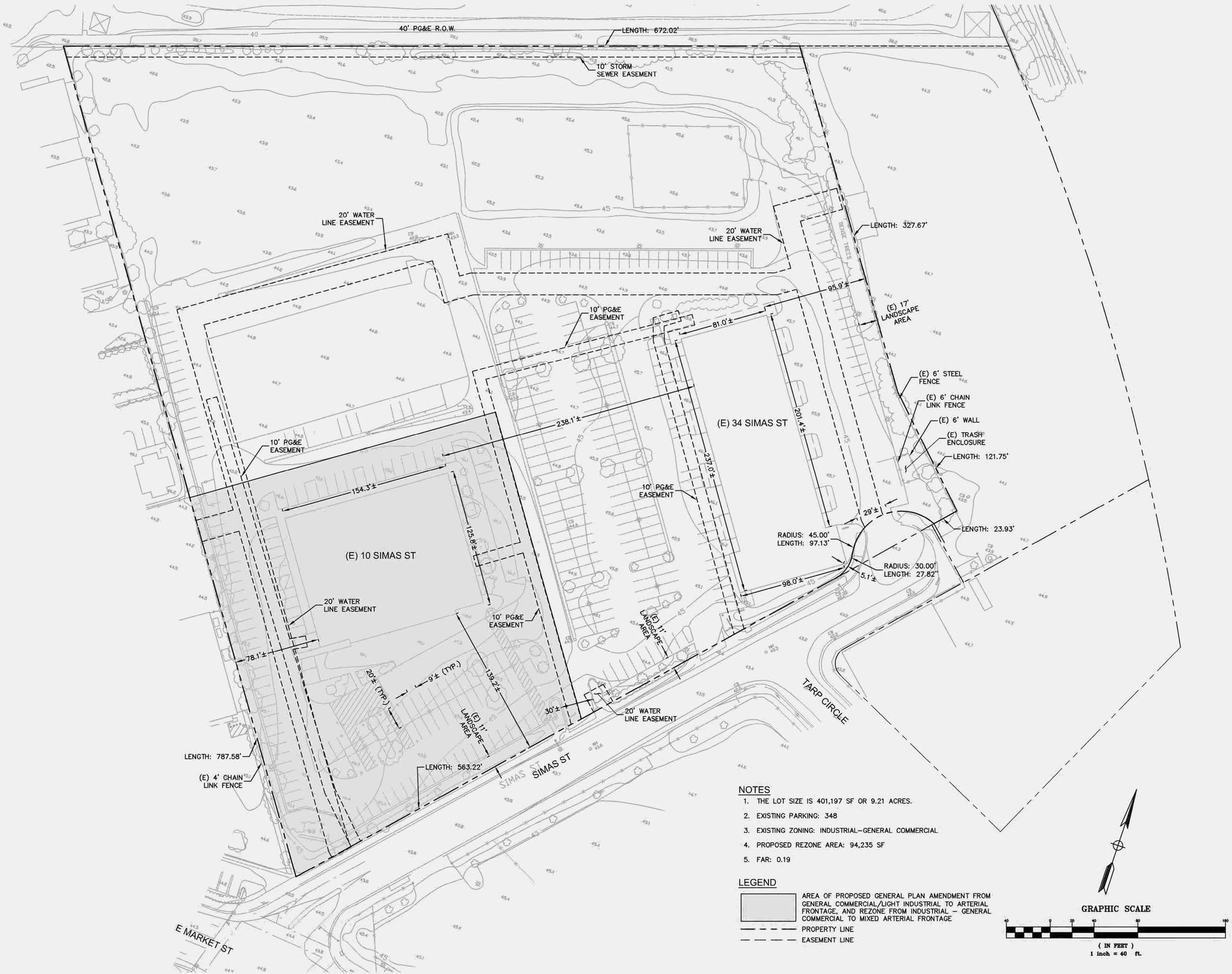

NOTES

1. THE LOT SIZE IS 401,197 SF OR 9.21 ACRES.
2. EXISTING PARKING: 348
3. EXISTING ZONING: INDUSTRIAL–GENERAL COMMERCIAL
4. PROPOSED REZONE AREA: 94,235 SF
5. FAR: 0.19

LEGEND

AREA OF PROPOSED GENERAL PLAN AMENDMENT FROM GENERAL COMMERCIAL/LIGHT INDUSTRIAL TO ARTERIAL FRONTAGE, AND REZONE FROM INDUSTRIAL – GENERAL COMMERCIAL TO MIXED ARTERIAL FRONTAGE

PROPERTY LINE

EASEMENT LINE

GRAPHIC SCALE

40 0 20 40 80 160

(IN FEET)
1 inch = 40 ft.

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(510) 899-7300
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EXISTING SITE PLAN
10 SIMAS STREET
PROPERTY REZONING

COUNTY OF MONTEREY
STATE OF CALIFORNIA
CITY OF SALINAS

No.	Revisions

Date 11/16/2017
Scale 1"=40'
Design AP
Drawn AP
Approved KW
Job No 20171012

Drawing Number:

1 OF 1

DRAWING NAME: P:\2017\171012_SyWest_Salinas_Rezoning\ENG\ZONING\SIMAS\SHEETS\01_SS_SITE-PLAN.dwg
PLOT DATE: 11-16-17 PLOTTED BY: phia

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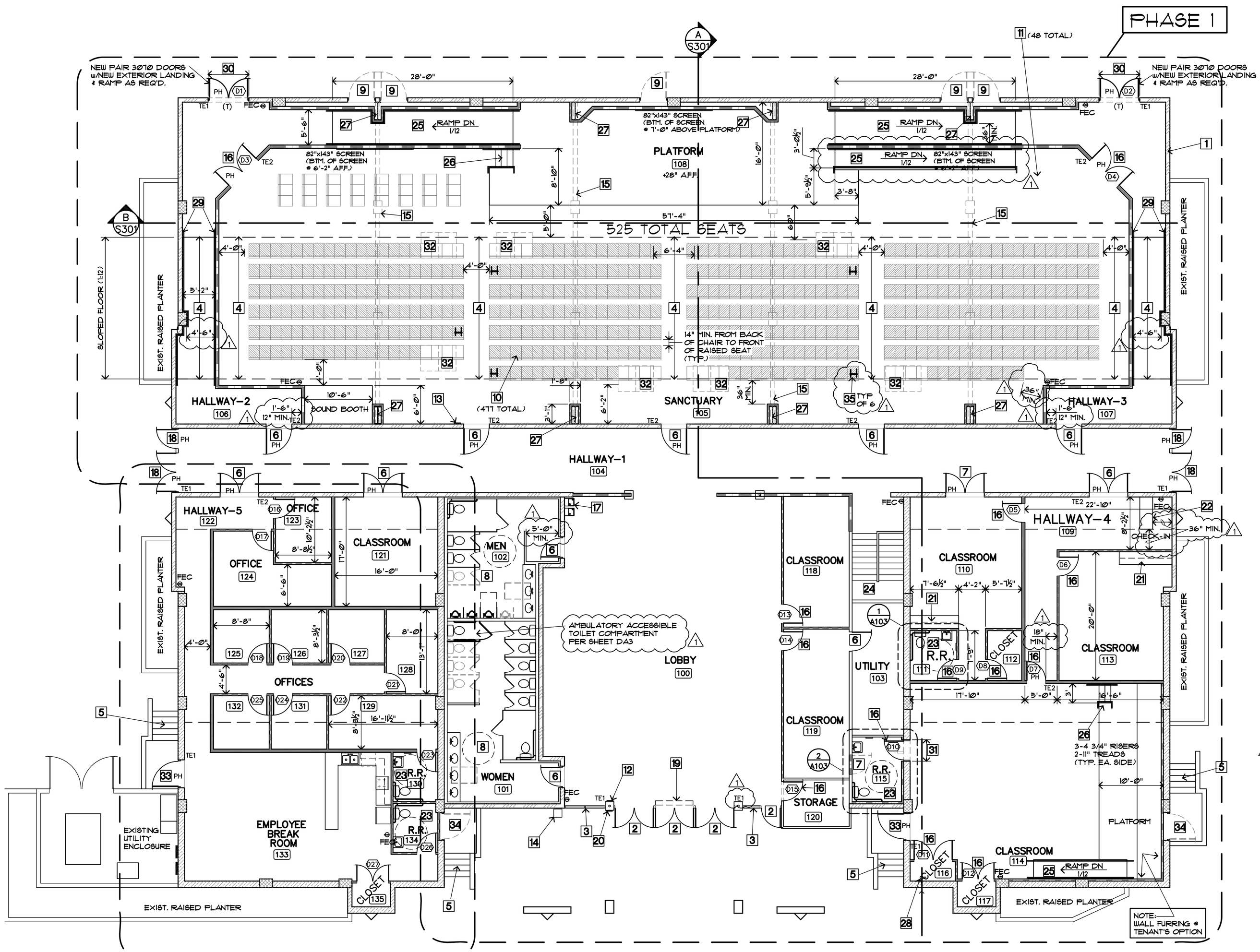

PHASE 2

NOTE:
NO CHANGE PROPOSED TO THIS AREA AS PART OF PHASE I CONSTRUCTION
- FUTURE IMPROVEMENTS SHOWN FOR REFERENCE ONLY

LEGEND

[X]	KEY NOTE
(X)	DOOR DESIGNATION (REFER TO SHEET A301)
[XXX]	ROOM DESIGNATION
PH	INDICATES PANIC HARDWARE REQUIRED –MOUNT BETWEEN 30 INCHES & 44 INCHES A.F.F.
TE1 TE2	INDICATES TACTILE 'EXIT' SIGN INDICATES TACTILE 'EXIT ROUTE' SIGN –REFER TO SIGNAGE DETAILS ON SHEET DA2
(T)	INDICATES EXTERIOR ALUMINUM THRESHOLD PER DETAIL 3/A301
FEC	INDICATES NEW TYPE 2A–10BC FIRE EXTINGUISHERS PLACED NOT TO EXCEED 75 FEET OF TRAVEL FROM ANY POINT IN THE BUILDING AND NOT HIGHER THAN 60 INCHES ABOVE THE FLOOR.

HANDICAP ACCESSIBILITY DETAIL REFERENCES

REFER TO SHEET DA1 FOR:
A) MANEUVERING CLEARANCES AT DOORS
B) MINIMUM CLEAR FLOOR SPACE FOR WHEELCHAIRS
C) SPACE ALLOWANCE & REACH RANGE ALONG AN ACCESSIBLE ROUTE
D) CLEARANCES AROUND OBJECTS PROTRUDING FROM WALLS ALONG AN ACCESSIBLE ROUTE

REFER TO SHEET DA2 FOR:
A) SIGNAGE REQUIREMENTS FOR BRAILLE, HEARING IMPAIRED & BUILDING ENTRANCE
B) STAIRWAY ACCESSIBILITY (NOT STRUCTURAL REQ'TS.)
C) RAMP SLOPE & HANDRAIL REQUIREMENTS
D) CURB RAMPS

REFER TO SHEET DA3 FOR:
A) MULTIPLE ACCOMODATION RESTROOMS & TOILET STALLS
B) SINGLE ACCOMODATION RESTROOM CLEARANCES
C) PLUMBING FIXTURE CLEARANCES
D) PUBLIC RESTROOM DOOR SIGNAGE
E) CONTROLS, SWITCHES & OUTLET MOUNTING HEIGHT
F) TOILET ACCESSORY MOUNTING HEIGHT
G) HANDRAIL AND GRAB BAR MOUNTING REQ'TS.

MOVABLE SEATING REQUIREMENTS

CLEAR WIDTH BETWEEN CHAIRS PER CALIFORNIA FIRE CODE SECTION 2501.10.1 "WHEN SEATING ROWS HAVE 14 OR LESS SEATS, THE MINIMUM CLEAR WIDTH BETWEEN ROWS SHALL NOT BE LESS THAN 12 INCHES MEASURED AS THE CLEAR HORIZONTAL DISTANCE FROM THE BACK OF THE ROW AHEAD AND THE NEAREST PROJECTION OF THE ROW BEHIND."

CLEAR WIDTH BETWEEN CHAIRS PER CALIFORNIA FIRE CODE SECTION 2501.10.1 "FOR ROWS OF SEATING SERVED BY AISLES OR DOORWAYS AT BOTH ENDS.... THE MINIMUM CLEAR WIDTH OF 12 INCHES BETWEEN ROWS SHALL BE INCREASED BY 0.3 INCH FOR EVERY ADDITIONAL SEAT BEYOND 14..."
– ALL OTHER ROWS REQUIRE MIN 12" CLR. SPACE

BONDING OF CHAIRS PER CALIFORNIA FIRE CODE SECTION 2501.10.2 "LOOSE CHAIRS THAT ARE NOT FIXED TO THE FLOOR SHALL BE BONDED TOGETHER IN GROUPS OF 3 OR MORE."
EXCEPTIONS
1. WHEN NOT MORE THAN 300 SEATS ARE PROVIDED, BONDING IS NOT REQUIRED.
2. THE BONDING OF CHAIRS IS NOT REQUIRED WHEN TABLES ARE PROVIDED, AS WHEN THE OCCUPANCY IS USED FOR DINING OR SIMILAR PURPOSES.

READILY REMOVABLE SEATS WHERE SHOWN, SHALL NOT BE FIXED TO THE GROUND IN ORDER TO ALLOW REMOVAL TO ACCOMMODATE FOR WHEELCHAIR USERS.

ASSISTIVE LISTENING SYSTEM

AN ASSISTIVE LISTENING SYSTEM IS REQUIRED FOR THE SANCTUARY AREA OF THIS TENANT.
– PROVIDE RECEIVERS FOR A MINIMUM OF 4% OF TOTAL SEATING (21 REQUIRED)
– SYSTEM MUST BE IN PLACE AND OPERATIONAL AT TIME OF FINAL INSPECTION
– REFER TO SHEET DA3 FOR REQUIRED SIGNAGE

FLOOR PLAN KEYNOTES

No.	Description
1	Existing concrete masonry exterior wall (No Change)
2	Existing storefront entry door to remain (No Change)
3	Existing storefront glazing to remain (No Change)
4	Existing sloped floor (1:12 max slope) to remain (No Change)
5	Existing steps to be filled–in with concrete – Refer to Structural Drawings for detailed requirements
6	Existing interior door to remain (No Change)
7	Existing interior door to remain as exit only (No hardare on pull–side of door)
8	Existing multi–accomodation restrooms with new fixtures – Refer to Plumbing Drawings for detailed requirements
9	Existing exterior door to be permanently locked.
10	Shading indicates new fixed chair layout (Self–rising seats) – Re–use existing chairs where possible
11	New movable seating / Refer to spacing requirements this sheet
12	Occupancy capacity sign stating "MAXIMUM BUILDING OCCUPANCY 1176"
13	Occupancy capacity sign stating "MAXIMUM OCCUPANCY THIS ROOM 728"
14	Fire Department approved Key Box. (See General Notes / Sheet TS1)
15	Existing CMU wall and pilaster to be removed – Refer to Structural Drawings
16	New interior door (Solid Core) / Match existing – Refer to Door Schedule, Sheet A301
17	New Hi/Low wall mounted drinking fountains – Refer to Plumbing Drawings
18	Existing exterior hollow metal door to remain (No Change)
19	New sign over door w/1" high letters stating: "THIS DOOR TO REMAIN UNLOCKED WHENEVER THE BUILDING IS OCCUPIED"
20	6" x 6" Square International Symbol of Accessibility at primary entrance. – mount @ 60" a.f.f to c/l
21	New base & upper cabinets – Refer to detail 5/A301
22	New Base Cabinet & Counter – Refer to detail 6/A301
23	New Single–Accomodation restroom – Refer to enlarged plan on sheet A102
24	Existing stairs to 2nd floor storage mezzanine – No Change
25	New ramp to Platform / 1:12 max slope w/handrails each side – Refer to details on Sheets DA2 & S402
26	New stairs to platform / 7" Risers (Max) & 11" Treads (Min) w/Handrails each side of stairs / Refer to details on Sheets DA2 & S402
27	New steel frame column – Refer to structural drawings
28	Location of existing fire sprinkler riser – No Change
29	Provide handrails each side of ramp – Refer to details on Sheets DA2 & DA3
30	New 6'–4" Wide x 7'–2" High opening in existing CMU wall – Refer to detail B/S401
31	New 3'–4" Wide x 7'–2" High opening in existing CMU wall – Refer to detail B/S401
32	48"x66" Clear floor space of wheelchair seating (7 locations provided) – Readily removable seats may be provided in these locations when such spaces are not required to accommodate wheelchair users. (CBC Section 1104B.3.7)
33	Existing hollow metal door to be removed & re–installed at interior finished floor elevation – Cut existing wall and provide new opening so that door may be re–installed at new interior finished floor height – Refer to detail 15/S402
34	Existing hollow metal door to be removed & re–installed at interior finished floor elevation – Cut existing wall and provide new opening so that door may be re–installed at new interior finished floor height – Door to be welded shut from inside – Refer to detail 15/S402
35	"H" – Indicates aisle seat with no arm rest on aisle side. – Each seat shall be identified by sign or marker with International Symbol of Accessibility

WALL LEGEND

NEW INTERIOR BEARING WALL
2x6, D.F. #1 STUDS @ 16" O.C. TO 8'–0".
WITH 5/8" GYPSUM BOARD EACH SIDE
– USE MOISTURE RESISTANT GYP BD @ TOILET ROOMS.
– REFER TO DETAILS 13/S402 & 14/S402.

NEW INTERIOR NON–BEARING WALL
2x4 D.F. STUDS @ 24" O.C. TO 8'–0".
WITH 5/8" GYPSUM BOARD EACH SIDE
– USE MOISTURE RESISTANT GYP BD @ TOILET ROOMS.
– REFER TO DETAIL 14/S402 & SHEET S101 FOR TYPICAL DETAILS

NEW INTERIOR NON–BEARING WALL
2x6 D.F. STUDS @ 16" O.C. TO 8'–0".
WITH 5/8" GYPSUM BOARD EACH SIDE
– USE MOISTURE RESISTANT GYP BD @ TOILET ROOMS.
– REFER TO DETAIL 14/S402 & SHEET S101 FOR TYPICAL DETAILS

NEW INTERIOR WALL FURRING
3 5/8" X 25 GA. METAL STUDS @ 24" O.C. ATTACHED TO EXIST. CMU WALL
– FINISH WITH WITH 5/8" GYPSUM BOARD
– REFER TO DETAIL 9/S101

EXISTING INTERIOR NON–BEARING WALL
2x STUDS AT 16" O.C.

EXISTING EXTERIOR/INTERIOR MASONRY WALL
8" CONCRETE MASONRY UNITS.

EXISTING EXTERIOR MASONRY WALL
12" CONCRETE MASONRY UNITS.

EXISTING MASONRY PILASTER
16"x24" CONCRETE MASONRY PILASTER

JWF ARCHITECTURE
10 Riverpark Place East, #104
Fresno, CA 93720
(559) 485–8520
FAX. (866) 302–2735
EMAIL: jwfarchitect@att.net

REVISION	DATE	DESCRIPTION
1	7/12/10	BUILDING DEPT. P.C.
2	7/12/10	TENANT'S REVISIONS
3	8/30/10	BUILDING DEPT. P.C.

BUILDING RENOVATION FOR:
celebrationchurch.cc
10 SIMAS STREET
SALINAS, CA 93901

Drawing Title
FLOOR PLAN

Scale: 1/8"=1'–0"

09/02/10

LICENSED ARCHITECT
JON FRAME
C–27352
REN. 1- 31- 11
STATE OF CALIFORNIA

SHEET #
A101

C:\ARCHDESK\CEL CHURCH-SALINAS\CCS-A101-FIXED SEATS.DWG

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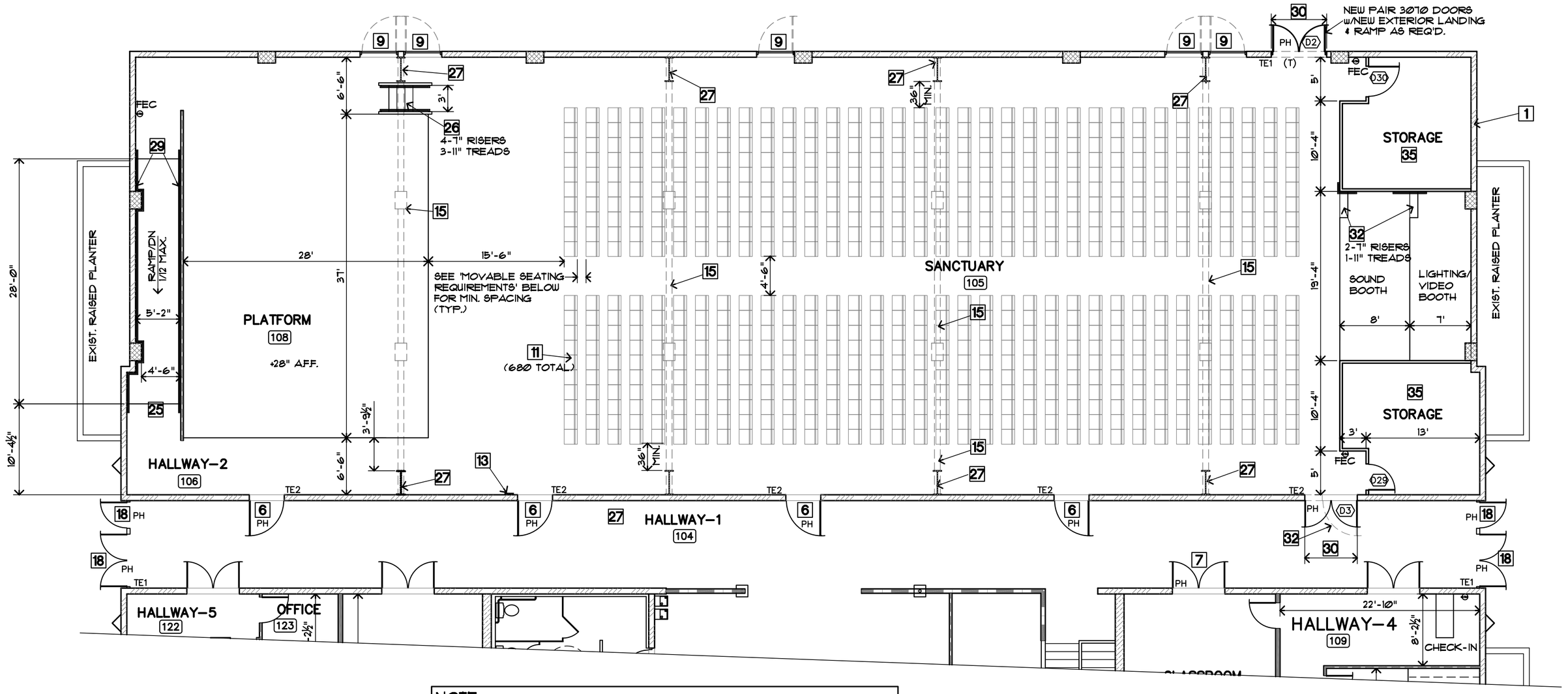

NOTE:
THIS REVISION APPLIES TO WORSHIP AREA ONLY
- REFER TO SHEET A101 FOR ALL OTHER REQUIREMENTS

FLOOR PLAN KEYNOTES

No.	Description
1	Existing concrete masonry exterior wall (No Change)
2	Existing storefront entry door to remain (No Change)
3	Existing storefront glazing to remain (No Change)
4	--- NOT USED ----
5	Existing steps to be filled-in with concrete – Refer to Structural Drawings for detailed requirements
6	Existing interior door to remain (No Change)
7	Existing interior door to remain as exit only (No hardare on pull-side of door)
8	Existing multi-accomodation restrooms with new fixtures – Refer to Plumbing Drawings for detailed requirements
9	Existing exterior door to be permanently locked.
10	--- NOT USED ----
11	New movable seating / Refer to spacing requirements this sheet
12	Occupancy capacity sign stating "MAXIMUM BUILDING OCCUPANCY 1343"
13	Occupancy capacity sign stating "MAXIMUM OCCUPANCY THIS ROOM 938"
14	Fire Department approved Key Box. (See General Notes / Sheet TS1)
15	Existing CMU wall and pilaster to be removed – Refer to Structural Drawings
16	New interior door (Solid Core) / Match existing – Refer to Door Schedule, Sheet A301
17	New Hi/Low wall mounted drinking fountains – Refer to Plumbing Drawings
18	Existing exterior hollow metal door to remain (No Change)
19	New sign over door w/1" high letters stating: "THIS DOOR TO REMAIN UNLOCKED WHENEVER THE BUILDING IS OCCUPIED"
20	6" x 6" Square International Symbol of Accessibility at primary entrance. – mount @ 60" a.f.f to c/l
21	New base & upper cabinets – Refer to detail 5/A301
22	New Base Cabinet & Counter – Refer to detail 6/A301
23	New Single-Accomodation restroom – Refer to enlarged plan on sheet A102
24	Existing stairs to 2nd floor storage mezzanine – No Change
25	New ramp to Platform / 1:12 max slope w/handrails each side – Refer to details on Sheets DA2 & S402
26	New stairs to platform / 7" Risers (Max) & 11" Treads (Min) w/Handrails each side of stairs / Refer to details on Sheets DA2 & S402
27	New steel frame column – Refer to structural drawings
28	Location of existing fire sprinkler riser – No Change
29	Provide handrails each side of ramp – Refer to details on Sheets DA2 & DA3
30	New 6'-4" Wide x 7'-2" High opening in existing CMU wall – Refer to detail B/S401
31	New 3'-4" Wide x 7'-2" High opening in existing CMU wall – Refer to detail B/S401
32	New stairs to sound/lighting booth / 7" Risers (Max) & 11" Treads (Min) w/Handrail on one side of stairs / Refer to details on Sheets DA2 & S402
33	Existing hollow metal door to be removed & re-installed at interior finished floor elevation – Cut existing wall and provide new opening so that door may be re-installed at new interior finished floor height – Refer to detail 15/S402
34	Existing hollow metal door to be removed & re-installed at interior finished floor elevation – Cut existing wall and provide new opening so that door may be re-installed at new interior finished floor height – Door to be welded shut from inside – Refer to detail 15/S402
35	TENANT'S OPTION: – Provide 2X8 ceiling joists @ 24" o.c. W/5/8" gyp. bd. ceiling – Joists shall run in the shortest possible direction – Finished ceiling height to be determined – Refer to detail 8/S101

WALL LEGEND

NEW INTERIOR BEARING WALL
2x6, D.F. #1 STUDS @ 16" O.C. TO 8'-0".
WITH 5/8" GYPSUM BOARD EACH SIDE
– USE MOISTURE RESISTANT GYP BD @ TOILET ROOMS.
– REFER TO DETAILS 13/S402 & 14/S402.

NEW INTERIOR NON-BEARING WALL
2x4 D.F. STUDS @ 24" O.C. TO 8'-0".
WITH 5/8" GYPSUM BOARD EACH SIDE
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3 5/8" X 25 GA. METAL STUDS @ 24" O.C. ATTACHED TO EXIST. CMU WALL
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EXISTING INTERIOR NON-BEARING WALL
2x STUDS AT 16" O.C.

EXISTING EXTERIOR/INTERIOR MASONRY WALL
8" CONCRETE MASONRY UNITS.

EXISTING EXTERIOR MASONRY WALL
12" CONCRETE MASONRY UNITS.

EXISTING MASONRY PILASTER
16"x24" CONCRETE MASONRY PILASTER

LEGEND

[X]	KEY NOTE
⟨X⟩	DOOR DESIGNATION (REFER TO SHEET A301)
[XXX]	ROOM DESIGNATION
PH	INDICATES PANIC HARDWARE REQUIRED –MOUNT BETWEEN 30 INCHES & 44 INCHES A.F.F.
TE1 TE2	INDICATES TACTILE 'EXIT' SIGN INDICATES TACTILE 'EXIT ROUTE' SIGN –REFER TO SIGNAGE DETAILS ON SHEET DA2
(T)	INDICATES EXTERIOR ALUMINUM THRESHOLD PER DETAIL 3/A301
FEC	INDICATES NEW TYPE 2A-10BC FIRE EXTINGUISHERS PLACED NOT TO EXCEED 75 FEET OF TRAVEL FROM ANY POINT IN THE BUILDING AND NOT HIGHER THAN 60 INCHES ABOVE THE FLOOR.

HANDICAP ACCESSIBILITY DETAIL REFERENCES

REFER TO SHEET DA1 FOR:
A) MANEUVERING CLEARANCES AT DOORS
B) MINIMUM CLEAR FLOOR SPACE FOR WHEELCHAIRS
C) SPACE ALLOWANCE & REACH RANGE ALONG AN ACCESSIBLE ROUTE
D) CLEARANCES AROUND OBJECTS PROTRUDING FROM WALLS ALONG AN ACCESSIBLE ROUTE

REFER TO SHEET DA2 FOR:
A) SIGNAGE REQUIREMENTS FOR BRAILLE, HEARING IMPAIRED & BUILDING ENTRANCE
B) STAIRWAY ACCESSIBILITY (NOT STRUCTURAL REQ'TS.)
C) RAMP SLOPE & HANDRAIL REQUIREMENTS
D) CURB RAMPS

REFER TO SHEET DA3 FOR:
A) MULTIPLE ACCOMODATION RESTROOMS & TOILET STALLS
B) SINGLE ACCOMODATION RESTROOM CLEARANCES
C) PLUMBING FIXTURE CLEARANCES
D) PUBLIC RESTROOM DOOR SIGNAGE
E) CONTROLS, SWITCHES & OUTLET MOUNTING HEIGHT
F) TOILET ACCESSORY MOUNTING HEIGHT
G) HANDRAIL AND GRAB BAR MOUNTING REQ'TS.

MOVABLE SEATING REQUIREMENTS

CLEAR WIDTH BETWEEN CHAIRS PER CALIFORNIA FIRE CODE SECTION 2501.10.1
"WHEN SEATING ROWS HAVE 14 OR LESS SEATS, THE MINIMUM CLEAR WIDTH BETWEEN ROWS SHALL NOT BE LESS THAN 12 INCHES MEASURED AS THE CLEAR HORIZONTAL DISTANCE FROM THE BACK OF THE ROW AHEAD AND THE NEAREST PROJECTION OF THE ROW BEHIND."

CLEAR WIDTH BETWEEN CHAIRS PER CALIFORNIA FIRE CODE SECTION 2501.10.1
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– ALL OTHER ROWS REQUIRE MIN 12" CLR. SPACE

BONDING OF CHAIRS PER CALIFORNIA FIRE CODE SECTION 2501.10.2
"LOOSE CHAIRS THAT ARE NOT FIXED TO THE FLOOR SHALL BE BONDED TOGETHER IN GROUPS OF 3 OR MORE."
EXCEPTIONS
1. WHEN NOT MORE THAN 300 SEATS ARE PROVIDED, BONDING IS NOT REQUIRED.
2. THE BONDING OF CHAIRS IS NOT REQUIRED WHEN TABLES ARE PROVIDED, AS WHEN THE OCCUPANCY IS USED FOR DINING OR SIMILAR PURPOSES.

READILY REMOVABLE SEATS WHERE SHOWN, SHALL NOT BE FIXED TO THE GROUND IN ORDER TO ALLOW REMOVAL TO ACCOMMODATE FOR WHEELCHAIR USERS.

ASSISTIVE LISTENING SYSTEM

AN ASSISTIVE LISTENING SYSTEM IS REQUIRED FOR THE SANCTUARY AREA OF THIS TENANT.
– PROVIDE RECEIVERS FOR A MINIMUM OF 4% OF TOTAL SEATING (27 REQUIRED)
– SYSTEM MUST BE IN PLACE AND OPERATIONAL AT TIME OF FINAL INSPECTION
– REFER TO SHEET DA3 FOR REQUIRED SIGNAGE

JON FRAME ARCHITECTURE
10 Riverpark Place East, #104
Fresno, CA 93720
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FAX. (866) 302-2735
EMAIL: jwfarchitect@att.net

REVISION	DATE	DESCRIPTION
1	7/12/10	BUILDING DEPT. P.C.
2	7/12/10	TENANT'S REVISIONS
3	8/30/10	BUILDING DEPT. P.C.
4	10/5/10	TENANT'S REVISIONS
5	2/22/11	FIELD CONDITION REVISIONS

BUILDING RENOVATION FOR:
celebrationchurch.cc
10 SIMAS STREET
SALINAS, CA 93901

Drawing Title
ALTERNATE FLOOR PLAN

N

Scale: 1/8"=1'-0"

02/22/11

LICENSED ARCHITECT
JON FRAME
C-27352
REN. 1-31-11
STATE OF CALIFORNIA

SHEET #
A101B

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CITY OF SALINAS
Community Development Department
65 West Alisal Street, Salinas, CA 93901

(MITIGATED) NEGATIVE DECLARATION

The project described below has been reviewed in accordance with the California Environmental Quality Act (CEQA) and has been determined to have a less than significant impact upon the environment.

Project's Common Name/Description:	General Plan Amendment 2017-002 (GPA 2017-002) from General Commercial/Light Industrial to Arterial Frontage; and Rezone 2017-001 (RZ 2017-001) from Industrial-General Commercial to Mixed Arterial Frontage; Conditional Use Permit (CUP 2017-019) to establish and operate religious assembly use within an existing 18,150 square foot building.
File Nos.:	GPA 2017-002; RZ 2017-001; CUP 2017-019
Project Applicant:	Simas -East Market LLC
Project Location:	10 Simas Street in the IGC-F (Industrial-General Commercial – Flood Plain Overlay) Zoning District (APN 003-091-011-000)

Determination: The attached Initial Study has been prepared for the above project in accordance with the California Environmental Quality Act and procedures established in the *CEQA Guidelines* adopted by the City of Salinas. On the basis of the Initial Study, the City of Salinas makes the following determination:

☐ The above project will not have a significant effect on the environment, and a NEGATIVE DECLARATION is hereby approved.

☒ The above project could have a significant effect on the environment, but WILL NOT have a significant effect in this case because the attached mitigation measures have been made by or agreed to by the applicant which will avoid the effects or mitigate the effects to a point where clearly no significant effects will occur. Furthermore, there is no substantial evidence before the City of Salinas that the proposed project, as revised, may have a significant effect on the environment. A (MITIGATED) NEGATIVE DECLARATION is hereby approved.

Mitigation measures, if any, included in the project to avoid potentially significant effects are found in the attached Mitigation Monitoring Program. Further information about this project and about its probable environmental impact will be on file in the Community Development Department, 65 West Alisal Street, Salinas, CA 93901.

COURTNEY GROSSMAN
Planning Manager

By: _____
Bobby Latino
Associate Planner

Date: 9/10/19

Attach: Mitigation Monitoring and Reporting Program

\\SalSvr44\DeptPvt\ComDev\robertl\Documents\10 Simas Street\ER 2017-003\10 Simas Street Mitigated Negative Declaration.docx

GENERAL PLAN AMENDMENT 2017-002 (GPA 2017-002) FROM GENERAL COMMERCIAL/LIGHT INDUSTRIAL TO ARTERIAL FRONTAGE; AND REZONE 2017-001 (RZ 2017-001) FORM INDUSTRIAL-GENERAL COMMERCIAL TO MIXED ARTERIAL FRONTAGE; CONDITIONAL USE PERMIT (CUP 2017-019) TO ESTABLISH AND OPERATE RELIGIOUS ASSEMBLY USE
MITIGATION MONITORING AND REPORTING PROGRAM
10 SIMAS STREET

Mitigation Number	Nature of Mitigation	Result after Mitigation	Party Responsible for Implementing	Party Responsible for Monitoring: Method to Confirm Implementation	Timing for Implementation
CU-1	In the event that cultural materials are encountered during grading/construction, all work shall cease until the find has been evaluated and mitigation measures put in place for the disposition and protection of any find pursuant to Public Resources Code Section 21083.2.	To ensure compliance with Public Resources Code Section 21083.2	Applicant, or Successor in Interest	Community Development Department, Current Planning	During grading/ construction activities
TCR-1	In the event that cultural materials are encountered during grading/construction, all work shall cease until the find has been evaluated and mitigation measures put in place for the disposition and protection of any find pursuant to Public Resources Code Section 21083.2.	To ensure compliance with Public Resources Code Section 21083.2	Applicant, or Successor in Interest	Community Development Department, Current Planning	During grading/ construction activities

City of Salinas
COMMUNITY DEVELOPMENT DEPARTMENT
65 W. Alisal Street, 2nd Floor • Salinas, California 93901
(831) 758-7387 • (831) 775-4258 (Fax) • www.ci.salinas.ca.us

1. BACKGROUND

Project Name: General Plan Amendment 2017-002 (GPA 2017-002); Rezone 2017-001 (RZ 2017-001); and Conditional Use Permit (CUP 2017-019)

Project Location: 10 Simas Street in the IGC-F (Industrial-General Commercial – Flood Plain Overlay) Zoning District

Assessor Parcel Number: 003-091-011-000

☒ **See Attached Vicinity Map**

Current Land Use: Nonconforming Religious Assembly use within an existing 18,150 square foot building in an existing Industrial Complex

Surrounding Land Uses/Zoning Districts:

North: Park/P (Parks)
South: Minor Vehicle Repair, Vehicle Sales, and Vehicle-related Retail Sales and Services uses/IGC-F (Industrial-General Commercial – Flood Plain Overlay)
East: Building Materials and Service use/IGC-F (Industrial-General Commercial – Flood Plain Overlay)
West: Retail Sales/MAF-F (Mixed Arterial Frontage – Flood Plain Overlay)

Lead Agency Contact Person: Bobby Latino, Associate Planner

Telephone: (831) 758-7206

Location and Existing Setting: City of Salinas / Existing Industrial Complex

Project Description: General Plan Amendment 2017-002 (GPA 2017-002) to change the General Plan designation from General Commercial/Light Industrial to Arterial Frontage, Rezone 2017-001 (RZ 2017-001) the Zoning designation from Industrial-General Commercial to Mixed Arterial Frontage, and Conditional Use Permit (CUP 2017-

019) to establish and operate a religious assembly use in an existing 18,150 square foot building.

Environmental Factors Potentially Affected:

☐ Aesthetics	☐ Agricultural Resources	☐ Air Quality
☐ Biological Resources	☒ Cultural Resources	☐ Energy
☐ Geology/Soils	☐ Greenhouse Gas Emissions	☐ Hazards & Hazardous Materials
☐ Hydrology/Water Quality	☐ Land Use/Planning	☐ Mineral Resources
☐ Noise	☐ Population/Housing	☐ Public Services
☐ Recreation	☐ Transportation	☒ Tribal Cultural Resources
☐ Utilities/Service Systems	☐ Wildfire	☐ Mandatory Findings of Significance

2. CHECKLIST

Issue	Impact				Source *(Refer to Section 3: Source List)*
	No Impact	Less Than Significant Impact	Potentially Significant Unless Mitigation Incorporated	Potentially Significant Impact	
1. AESTHETICS. Except as provided in Public Resources Code Section 21099, *would the proposal:*	☒	☐	☐	☐	A1, A2, N1
(a) Affect a scenic vista or scenic highway?	☒	☐	☐	☐	
(b) In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that area experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with					

Issue	Impact				Source (Refer to Section 3: Source List)
	No Impact	Less Than Significant Impact	Potentially Significant Unless Mitigation Incorporated	Potentially Significant Impact	
applicable zoning and other regulations governing scenic quality?					
(c) Substantially degrade the existing visual character or quality of the site and its surroundings?	☒	☐	☐	☐	
(d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	☒	☐	☐	☐	

Discussion

(a-b) The site is in an urbanized area and would not be located adjacent to or near a scenic vista or a scenic highway.

(c) The proposed project would not degrade the existing visual character or quality of the site and its surroundings.

(d) The proposed project would not create a new source of substantial light or glare. If required or proposed, new lighting would be subject to the City of Salinas Zoning Code outdoor lighting ordinance.

Mitigation

No mitigation is required.

Issue	Impact				Source *(Refer to Section 3: Source List)*
	No Impact	Less Than Significant Impact	Potentially Significant Unless Mitigation Incorporated	Potentially Significant Impact	
2. AGRICULTURAL RESOURCES. *Would the proposal:*					A1, A2, N1
(a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	☒	☐	☐	☐	
(b) Conflict with existing zoning for agricultural use or a Williamson Act contract?	☒	☐	☐	☐	
(c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code 12220(g)), timberland (as defined by Public Resources Code Section 4526), or timberland zoned Timberland Production (as defined by Government Code Section 51104(g))?	☒	☐	☐	☐	
(d) Result in the loss of forest land or conversion of forest land to non-forest use?	☒	☐	☐	☐	
(e) Involve other changes in the existing environment which, due to their location or nature, could	☒	☐	☐	☐	

Issue	Impact				Source (Refer to Section 3: Source List)
	No Impact	Less Than Significant Impact	Potentially Significant Unless Mitigation Incorporated	Potentially Significant Impact	
result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?					

Discussion

(a-e) The site is located on an in-fill property within the IGC-F (Industrial-General Commercial – Flood Plain Overlay) Zoning District. Farming activities and forest land are not located on the site.

Mitigation

No mitigation is required.

Issue	Impact				Source (Refer to Section 3: Source List)
	No Impact	Less Than Significant Impact	Potentially Significant Unless Mitigation Incorporated	Potentially Significant Impact	
3. AIR QUALITY. *Would the proposal:*					A1, A2, A3, F1, F2
(a) Conflict with or obstruct implementation of the applicable air quality plan?	☒	☐	☐	☐	
(b) Result in cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality	☒	☐	☐	☐	

Issue	Impact				Source *(Refer to Section 3: Source List)*
	No Impact	Less Than Significant Impact	Potentially Significant Unless Mitigation Incorporated	Potentially Significant Impact	
standard?					
(c) Expose sensitive receptors to substantial pollutant concentrations?	☒	☐	☐	☐	
(d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	☒	☐	☐	☐	

Discussion

(a-c) Salinas lies within the North Central Coast Air Basin, which meets the federal standard for ozone levels but falls short of the higher State standards for ozone and PM10. Ozone is the primary constituent of smog and is formed in the atmosphere via a chemical reaction involving nitrogen oxides (NOx), volatile organic gases (VOC), and sunlight. The primary sources are motor vehicles, organic solvents, pesticides, and industry. The Monterey Bay Air Resources District (MBARD) oversees various air quality regulations and programs.

MBARD Board of Directors adopted the 2012-2015 Air Quality Management Plan in March 2017, which represents the latest edition of the 2012 Triennial Plan, which addresses NOx and reactive organic gasses (ROG) emissions as precursors to ozone. The air quality impact generated by the project is expected to be less than significant, because it will create only occasional vehicle trips.

The revised CEQA Air Quality Guidelines prepared by the Monterey Bay Air Resources District, dated February 2008, stipulate maximum thresholds for air quality as follows:

a) Emit less than 137 lb/day of VOC's or NOx;
b) Directly emit less than 550 lb/day of CO or will not cause a violation of CO ambient air quality standards (AAQS) at existing or reasonably foreseeable receptors;
c) Not significantly impact traffic levels of service or will not cause a violation of CO or contribute 550 lb/day to an existing or projected violation at existing

or reasonably foreseeable receptors;

d) Directly emit less than 82 lb/day of PM10 on-site or will not cause a violation of particulate matter, ten micron diameter (PM10) AAQS or contribute 82 lb/day to an existing or projected violation at existing or reasonably foreseeable receptors;

e) Not indirectly generate PM10 along unpaved roads or will not cause a violation of PM10 AAQS or contribute 82 lb/day to an existing projected violation at existing or reasonably foreseeable receptors;

f) Directly emit less than 150 lb/day of sulfur oxide (SOx) or will not cause a violation of sulfur dioxide (SO2) AAQS at existing or reasonably foreseeable receptors.

The project does not entail construction; therefore, impacts to air quality are not expected to be significant.

(d) Objectionable odors are unlikely to be produced because no odor generating activities occur with the religious assembly use.

Mitigation

No mitigation is required.

Issue	Impact				Source *(Refer to Section 3: Source List)*
	No Impact	Less Than Significant Impact	Potentially Significant Unless Mitigation Incorporated	Potentially Significant Impact	
4. BIOLOGICAL RESOURCES. *Would the proposal result in impacts to:*					A1, A2, A3 A4, A7, M1, N1
(a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and	☒	☐	☐	☐	

Issue	Impact				Source *(Refer to Section 3: Source List)*
	No Impact	Less Than Significant Impact	Potentially Significant Unless Mitigation Incorporated	Potentially Significant Impact	
Wildlife Service?					
(b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or US Fish and Wildlife Service	☒	☐	☐	☐	
(c) Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	☒	☐	☐	☐	
(d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	☒	☐	☐	☐	
(e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	☒	☐	☐	☐	
(f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved	☒	☐	☐	☐	

Issue	Impact				Source (Refer to Section 3: Source List)
	No Impact	Less Than Significant Impact	Potentially Significant Unless Mitigation Incorporated	Potentially Significant Impact	
local, regional, or state habitat conservation plan?					

Discussion

(a-f) The site is located on an in-fill property within the IGC-F (Industrial-General Commercial – Flood Plain Overlay) Zoning District. There is no native flora or fauna on the project site. It is not located within a wetland habitat, riparian woodland or vernal pool, nor is it located near any sensitive habitat areas. It will not conflict with a Habitat Conservation Plan, or other habitat plan.

Mitigation

No mitigation is required.

Issue	Impact				Source (Refer to Section 3: Source List)
	No Impact	Less Than Significant Impact	Potentially Significant Unless Mitigation Incorporated	Potentially Significant Impact	
5. CULTURAL RESOURCES. *Would the proposal:*					A1, A2, A3, Q3
(a) Cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5	☒	☐	☐	☐	
(b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	☐	☐	☒	☐	

Issue	Impact				Source *(Refer to Section 3: Source List)*
	No Impact	Less Than Significant Impact	Potentially Significant Unless Mitigation Incorporated	Potentially Significant Impact	
(c) Disturb any human remains, including those interred outside of formal cemeteries?	☐	☐	☒	☐	

Discussion

(a) The subject site was not included in either of the City of Salinas 1989 or 2016 City Historic and Architectural Surveys.

(b-c) Per Section 5.8 (Cultural Resources) of the Final Environmental Impact Report for the Salinas General Plan (Source A1), little archaeological investigation has occurred in the City of Salinas or in Monterey County. No construction is proposed with this project. However, there is always the potential to encounter subsurface materials during grading and construction. Therefore, pursuant to the Public Resources Code (Section 21083.2), in the event that cultural materials are encountered during grading/construction, all work shall cease until the find has been evaluated and mitigation measures put in place for the disposition and protection of any find. With this requirement, there is little potential for a significant impact on the environment.

On October 12, 2017, pursuant to Public Resources Code Section 21080.3.1, subd. (d), Assembly Bill 52 (AB52), and California Senate Bill 18 (SB18), City of Salinas staff sent via certified mail, a consultation request on the proposed project within 30-days of the date of the letter to all applicable California Native American Tribes whose geographic area of traditional and cultural affiliation lands boundary includes the City of Salinas as specified by the Native American Heritage Foundation.

On December 18, 2017, the Ohlone /Costanoan-Esselen Nation (OCEN) provided a response letter stating concern with the proposed project site and recommending that an OCEN Tribal Monitor be located on-site during construction (see Attachment 7). The proposed project site has previously been disturbed through the grading and construction in connection with the existing building in 1991. While no construction is proposed with this project, mitigation is proposed. Per Mitigation

Measure CU-1 below, pursuant to Public Resources Code (Section 21083.2), in the event that cultural materials are encountered during grading/construction, all work shall cease until the find has been evaluated and mitigation measures put in place for the disposition and protection of any find. With this requirement, there is little potential for a significant impact on the cultural resources and this will address OCEN's comments.

Mitigation

CU-1 In the event that cultural materials are encountered during grading/construction, all work shall cease until the find has been evaluated and mitigation measures put in place for the disposition and protection of any find pursuant to Public Resources Code Section 21083.2.

Issue	Impact				Source *(Refer to Section 3: Source List)*
	No Impact	Less Than Significant Impact	Potentially Significant Unless Mitigation Incorporated	Potentially Significant Impact	
6. ENERGY. *Would the proposal:*					A1, A2, G1
(a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?	☒	☐	☐	☐	
(b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	☒	☐	☐	☐	

Discussion

(a) The project does not involve construction. No permanent, long-term, or substantial energy consumption would occur during or as a result of the project. Therefore, impacts related to wasteful, inefficient, or unnecessary consumption of energy resources would be less than significant.

(b) The City of Salinas is part of Monterey Bay Community Power Authority (MBCP), a regional Community Choice Energy project. MBCP was formed to provide locally-controlled, carbon-free electricity to residents and businesses in

Monterey, San Benito, and Santa Cruz counties (MBCP 2019). The goals of MBCP are to increase utilization of renewable power, create local and sustainable energy sources, and create green jobs.

The project involves a reuse of an existing use located in an existing building. No permanent, long-term, or substantial energy consumption would occur during or as a result of the project. Due to the limited duration and scope of energy-consuming activity, substantial use of energy would not occur. Therefore, the project would not conflict with the goals of MBCP, and impacts would be less than significant.

Mitigation

No mitigation is required.

Issue	Impact				Source *(Refer to Section 3: Source List)*
	No Impact	Less Than Significant Impact	Potentially Significant Unless Mitigation Incorporated	Potentially Significant Impact	
7. GEOLOGY/SOILS. *Would the proposal result in or expose people to potential impacts involving:*					A1, A2, A3, A4, A7, M1, N1
(a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:	☒	☐	☐	☐	
(i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.	☒	☐	☐	☐	

Issue	Impact				Source (Refer to Section 3: Source List)
	No Impact	Less Than Significant Impact	Potentially Significant Unless Mitigation Incorporated	Potentially Significant Impact	
(ii) Strong seismic ground shaking?	☒	☐	☐	☐	
(iii) Seismic-related ground failure, including liquefaction?	☒	☐	☐	☐	
(iv) Landslides?	☒	☐	☐	☐	
(b) Result in substantial soil erosion or the loss of topsoil?	☒	☐	☐	☐	
(c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on-or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	☒	☐	☐	☐	
(d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?	☒	☐	☐	☐	
(e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?	☒	☐	☐	☐	
(f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☒	☐	☐	☐	

Discussion

a (i-iv) All structures located in Salinas are required to be designed to at least Seismic Design Category D in accordance with Section 1613 of the 2010 California Building Code. As shown on the Seismic Hazards Map for the Greater Salinas Planning Area (Figure 5.10-1 of the Salinas General Plan Final EIR), the project site is located within the Moderately High Seismic Hazard Zone. Any future development on the site will be subject to the most recent, adopted edition of the California Building Code as a part of the building permit process to ensure that adequate seismic design is provided.

(b-d) No construction will happen on the project site; therefore, it will not induce substantial changes to the topography or to the soil conditions with a result of excavation or grading. The project site was developed as an Industrial Complex. Any future development would be subject to the most recent version of the California Building Code, and related Codes, as a part of the building permit process to ensure adequate seismic safety. The project site is currently developed and is basically flat.

(e) The subject property is currently served by the City's sewer system. The proposed project would not involve the use of septic systems or alternative waste water disposal systems.

(f) No proposed construction is proposed with this project. No paleontological resources or unique geological features are evident on the subject property. The Monterey County General Plan EIR indicates that fossils are found throughout the County because of widespread distribution of marine deposits. Per Exhibit 4.10.1 of the Monterey County General Plan EIR, no sites of significant scientific value were located in the vicinity of the City of Salinas. However, pursuant to Public Resources Code (Section 21083.2), in the event that cultural materials are encountered during grading/construction, all work shall cease until the find has been evaluated in accordance with Mitigation Measure CU-1. The proposed project is subject to all local, state, and federal laws relative to discovery of paleontological resources during any construction. With this requirement, there is little potential for a significant impact on the environment.

Mitigation

No mitigation is required.

Issue	Impact				Source *(Refer to Section 3: Source List)*
	No Impact	Less Than Significant Impact	Potentially Significant Unless Mitigation Incorporated	Potentially Significant Impact	
8. GREENHOUSE GAS EMISSIONS. *Would the project:*					A1, A2, A3
(a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	☒	☐	☐	☐	
(b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	☒	☐	☐	☐	

Discussion

(a) The proposed project will not generate, either directly or indirectly, greenhouse gas emissions causing a significant impact on the environment.

(b) The proposed project will not conflict with any other applicable plans, policies, or regulations adopted for the purposes of reducing the emissions of greenhouse gases including:

- Assembly Bill 32, which requires the state board to adopt a statewide greenhouse gas emissions limit equivalent to the statewide greenhouse gas emissions levels in 1990 to be achieved by 2020.

- Senate Bill 375, which requires the state board, working in consultation with the metropolitan planning organizations, to provide each affected region with greenhouse gas emission reduction targets for the automobile and light truck sector for 2020 and 2035 by September 30, 2010.

- City of Salinas General Plan 2002, at the time, the issue of greenhouse gas emissions and the need to combat it in general plans had not risen to a critical level of concern. Nevertheless, the City adopted numerous goals and policies with the intent of improving development sustainability. These goals and policies have both direct and indirect benefits in terms of reducing GHG

emissions. Important overall land use/urban design related themes in the General Plan that serve this purpose include:

i. Increasing density and intensity of development to promote more compact development and reuse/revitalization,
ii. Facilitating in-fill development as a means to promote compact development, and
iii. Promoting mixed-use development and a compact city core, emphasizing Traditional Neighborhood Development (TND) design, walkable neighborhoods, and transit-oriented development, especially in new growth areas.

Mitigation

No mitigation is required.

Issue	Impact				Source *(Refer to Section 3: Source List)*
	No Impact	Less Than Significant Impact	Potentially Significant Unless Mitigation Incorporated	Potentially Significant Impact	
9. HAZARDS & HAZARDOUS MATERIALS. *Would the proposal:*					A1, A2, A3, M1, N1
(a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	☒	☐	☐	☐	
(b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	☒	☐	☐	☐	
(c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	☒	☐	☐	☐	

Issue	Impact				Source (Refer to Section 3: Source List)
	No Impact	Less Than Significant Impact	Potentially Significant Unless Mitigation Incorporated	Potentially Significant Impact	
(d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	☒	☐	☐	☐	
(e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?	☒	☐	☐	☐	
(f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	☒	☐	☐	☐	
(g) Expose people or structures, either directly or indirectly to a significant risk of loss, injury or death involving wildland fires?	☒	☐	☐	☐	

(a-b) The project will not create a significant hazard to the public or the environment through the routine transport, use, or disposal of materials. Compliance with local, state, and federal requirements would ensure that the hazards to the public are reduced to a level of insignificance.

(c) The proposed project will not emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an

existing or proposed school. The closest school is Mt. Toro High School (10 Sherwood Dr.), which is approximately 1,484 feet away (measured from parcel to parcel) [(see also above discussion (a-b)].

(d) The site is not known to be included on a list of hazardous materials sites.

(e) The site is not located within an airport land use plan area nor located within the Airport Area of Influence per Figure LU-11 of the Salinas General Plan. The site is located approximately 9,450 feet away (over a mile and half away) miles from the end of the runway (8-26) of the Salinas Municipal Airport and would not create a hazard to persons residing or working in the project area.

(f) The project will not interfere with an adopted emergency response plan or emergency evacuation plan.

(g) The project will not expose people or structures to risk of loss, injury or death involving wildland fires, because the site is an infill property and no wildlands are located nearby.

Mitigation

No mitigation is required.

Issue	Impact				Source *(Refer to Section 3: Source List)*
	No Impact	Less Than Significant Impact	Potentially Significant Unless Mitigation Incorporated	Potentially Significant Impact	
10. HYDROLOGY AND WATER QUALITY. *Would the proposal:*					A1, A2, A3, A4, A7,
(a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?	☒	☐	☐	☐	
(b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede	☒	☐	☐	☐	

Issue	Impact				Source *(Refer to Section 3: Source List)*
	No Impact	Less Than Significant Impact	Potentially Significant Unless Mitigation Incorporated	Potentially Significant Impact	
sustainable groundwater management of the basin?					
(c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or through the addition of impervious surfaces in a manner which would:					
i. result in substantial erosion or siltation on- or off-site;	☒	☐	☐	☐	
ii. substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite:	☒	☐	☐	☐	
iii. create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or	☒	☐	☐	☐	
iv. impede or redirect floor flows?	☒	☐	☐	☐	
(d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?	☒	☐	☐	☐	
(e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater	☒	☐	☐	☐	

Issue	Impact				Source (Refer to Section 3: Source List)
	No Impact	Less Than Significant Impact	Potentially Significant Unless Mitigation Incorporated	Potentially Significant Impact	
management plans?					
(f) With regards to NPDES compliance:					
(i) Potential impact of project construction on storm water runoff?	☒	☐	☐	☐	
(ii) Potential impact of project post-construction activity on storm water runoff?	☒	☐	☐	☐	
(iii) Potential for discharge of storm water from material storage areas, vehicle or equipment fueling, vehicle or equipment maintenance (including washing), waste handling, hazardous materials handling or storage, delivery areas or loading docks, or other outdoor work areas?	☒	☐	☐	☐	
(iv) Potential for discharge of storm water to impair the beneficial uses of the receiving waters or areas that provide water quality benefit?	☒	☐	☐	☐	
(v) Potential for the discharge of storm water to cause significant harm on the biological integrity of the waterways and water bodies?	☒	☐	☐	☐	

Issue	Impact				Source *(Refer to Section 3: Source List)*
	No Impact	Less Than Significant Impact	Potentially Significant Unless Mitigation Incorporated	Potentially Significant Impact	
(vi) Potential for significant changes in the flow velocity or volume of storm water runoff that can cause environmental harm?					
(vii) Potential for significant increases in erosion of the project site or surrounding areas?					
(viii) Could this proposed project result in an increase in pollutant discharges to receiving waters? Consider water quality parameters such as temperature, dissolved oxygen, turbidity, and other typical Stormwater pollutants (e.g., heavy metals, pathogens, petroleum derivatives, synthetic organics, sediment, nutrients, oxygen-demanding substances, and trash).	☒	☐	☐	☐	
(ix) Could the proposed project result in a decrease in treatment and retention capacity for the site's Stormwater run-on?	☒	☐	☐	☐	
(x) Could the proposed project result in significant alteration of					

Issue	Impact				Source *(Refer to Section 3: Source List)*
	No Impact	Less Than Significant Impact	Potentially Significant Unless Mitigation Incorporated	Potentially Significant Impact	
receiving water quality during or following construction?					
(xi) Could the proposed project result in increased impervious surfaces and associated increased urban runoff?	☒	☐	☐	☐	
(xii) Could the proposed project create a significant adverse environmental impact to drainage patterns due to changes in urban runoff flow rates and/or volumes?	☒	☐	☐	☐	
(xiii) Could the proposed project result in increased erosion downstream?	☒	☐	☐	☐	
(xiv) Could the proposed project alter the natural ranges of sediment supply and transport to receiving waters?	☒	☐	☐	☐	
(xv) Is the project tributary to an already impaired water body, as listed on the CWA Section 303(d) list? If so, can it result in an increase in any pollutant for which the water body is already impaired?	☒	☐	☐	☐	
(xvi) Could the proposed project have a potentially significant	☒	☐	☐	☐	

Issue	Impact				Source *(Refer to Section 3: Source List)*
	No Impact	Less Than Significant Impact	Potentially Significant Unless Mitigation Incorporated	Potentially Significant Impact	
environmental impact on surface water quality, to either marine, fresh, or wetland waters?					
(xvii) Could the proposed project result in decreased baseflow quantities to receiving surface waterbodies?	☒	☐	☐	☐	
(xviii) Could the proposed project cause of contribute to an exceedance of applicable surface or groundwater receiving water quality objectives or degradation of beneficial uses?	☒	☐	☐	☐	
	☒	☐	☐	☐	
(xix) Does the proposed project adversely impact the hydrologic or water quality function of the 100-year floodplain area?					
(xx) Does the proposed project site layout adhere to the Permittee's waterbody setback requirements?	☒	☐	☐	☐	
(xxi) Can the proposed project impact aquatic, wetland, or riparian habitat?	☒	☐	☐	☐	

Issue	Impact				Source *(Refer to Section 3: Source List)*
	No Impact	Less Than Significant Impact	Potentially Significant Unless Mitigation Incorporated	Potentially Significant Impact	
	☒	☐	☐	☐	

Discussion

(a) The site is presently developed with an existing building and parking lot and would not create any new impervious surface.

(b) The project does not include any new water connections. Thus, the project would not substantially deplete groundwater supplies and would not interfere substantially with the direction or rate of flow of groundwater.

(c) The project site is basically flat and is currently developed with structures, pavement and associated site improvements. There are no rivers or streams on or near the site.

(d) Although the site is located within a 100-year flood area, the project includes the reuse of an existing building. Inundation by seiche, tsunami, or mudflow is unlikely because the site is located a considerable distance from the ocean and is relatively flat thereby negating a potential mudflow.

(e -f)(i – xxi) (see "a" above)

Mitigation

No mitigation is required.

Issue	Impact				Source *(Refer to Section 3: Source List)*
	No Impact	Less Than Significant Impact	Potentially Significant Unless Mitigation Incorporated	Potentially Significant Impact	
11. LAND USE AND PLANNING. *Would the proposal:*					A1, A2, A3 M1, N1
(a) Physically divide an established community?	☒	☐	☐	☐	
(b) Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?	☒	☐	☐	☐	

Discussion

(a) The project does not have the potential to disrupt or divide the physical arrangement of the community. Existing and planned adjacent uses will not be disrupted or divided as a result of the project.

(b) The proposed project includes a General Plan Amendment from General Commercial/Light Industrial to Arterial Frontage and Rezone from Industrial-General Commercial to Mixed Arterial Frontage (MAF). In the MAF Zoning District, a religious assembly use may be considered subject to a Conditional Use Permit. The proposed use would be consistent with the proposed MAF District regulations; therefore, significant environmental impacts are not expected.

Mitigation

No mitigation is required.

Issue	Impact				Source (Refer to Section 3: Source List)
	No Impact	Less Than Significant Impact	Potentially Significant Unless Mitigation Incorporated	Potentially Significant Impact	
12. MINERAL RESOURCES. *Would the proposal:*					A1, A2, A3
(a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	☒	☐	☐	☐	
(b) Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?	☒	☐	☐	☐	

Discussion

(a-b) The project will not result in the loss of availability of a known mineral resource that would be of value to the region or the residents of the state.

Mitigation

No mitigation is required.

Issue	Impact				Source (Refer to Section 3: Source List)
	No Impact	Less Than Significant Impact	Potentially Significant Unless Mitigation Incorporated	Potentially Significant Impact	
13. NOISE. *Would the proposal result in:*					A1, A2, A3, M1
(a) Generation of a substantial temporary or permanent increase in ambient noise	☒	☐	☐	☐	

Issue	Impact				Source *(Refer to Section 3: Source List)*
	No Impact	Less Than Significant Impact	Potentially Significant Unless Mitigation Incorporated	Potentially Significant Impact	
levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?					
(b) Generation of excessive groundborne vibration or groundborne noise levels?	☒	☐	☐	☐	
(c) For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	☒	☐	☐	☐	

Discussion

(a) No substantial permanent, or temporary or periodic, increases in the ambient noise level are expected with the project. According to the General Plan Master Environmental Assessment Section 9.2, ambient noise is defined as the "all encompassing noise associated with a given environment, being a composite of sounds from many sources, near and far."

(b) The site is located within the 60 CNEL contour as shown on *Figure 5.3-1 Noise Contours (CNEL)* of the Salinas General Plan, Final Environmental Impact Report, 2002. The Future Noise Contours as shown on Figure 5.3-4 of the Salinas General Plan, Final Environmental Impact Report, 2002, shows the project site as located within the 70 CNEL contour. Traffic generates the main source of noise for the depicted 70 CNEL contour.

Groundborne vibration or groundborne noise levels generated by any future

proposed uses on the project site are not expected to be excessive. The Zoning Code Standards regarding noise are expected to reduce noise impacts to a level of insignificance.

(c) The site is located approximately 1.86 miles from the Salinas Municipal Airport and is located within the 55 CNEL contour as shown on *Figure 5.3-2: Salinas Airport Future Noise Contours)* of the Salinas General Plan, Final Environmental Impact Report, 2002. Noise impacts from airport operations will not have an adverse impact on the site.

Mitigation

No mitigation is required.

Issue	Impact				Source *(Refer to Section 3: Source List)*
	No Impact	Less Than Significant Impact	Potentially Significant Unless Mitigation Incorporated	Potentially Significant Impact	
14. POPULATION AND HOUSING. *Would the proposal:*					
(a) Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly *(for example, through extension of roads or other infrastructure)*?	☒	☐	☐	☐	A1, A2, A3, M1, N1
(b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?	☒	☐	☐	☐	

Discussion

(a-b) The proposed project does not include a residential component. It will not induce substantial growth, and it will not displace housing units or people. The subject site is an existing developed in-fill site.

Mitigation

No mitigation is required.

Issue	Impact				Source (Refer to Section 3: Source List)
	No Impact	Less Than Significant Impact	Potentially Significant Unless Mitigation Incorporated	Potentially Significant Impact	
15. PUBLIC SERVICES. *Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:*					A1, A2, A3, M1, N1
(a) Fire protection?	☒	☐	☐	☐	
(b) Police protection?	☒	☐	☐	☐	
(c) Schools?	☒	☐	☐	☐	
(d) Parks?	☒	☐	☐	☐	
(e) Other public facilities?	☒	☐	☐	☐	

Discussion

(a-e) The site is located on an in-fill site presently developed as a theater with a nonconforming Religious Assembly use. Police and Fire services are currently available to serve the site. No schoolchildren will be generated by the project. East Market Street and Simas Street have been designed and constructed to accommodate the demands of this project. No other government services are expected to be impacted by the project.

Mitigation

No mitigation is required.

Issue	Impact				Source (Refer to Section 3: Source List)
	No Impact	Less Than Significant Impact	Potentially Significant Unless Mitigation Incorporated	Potentially Significant Impact	
16. RECREATION. *Would the proposal:*					A1, A2, A3, M1, N1
(a) Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	☒	☐	☐	☐	
(b) Include recreational facilities or require the construction or expansion of recreational facilities, which might have an adverse physical effect on the environment?	☒	☐	☐	☐	

Discussion

(a-b) The proposed project will not increase the use in park facilities because it does not include residential development. The proposed project does not include recreational facilities.

Mitigation

No mitigation is required.

Issue	Impact				Source (Refer to Section 3: Source List)
	No Impact	Less Than Significant Impact	Potentially Significant Unless Mitigation Incorporated	Potentially Significant Impact	
17. TRANSPORTATION. *Would the project:*					A1, A2 A3, A4, A7, M1, N1
(a) Conflict with a program plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?	☒	☐	☐	☐	
(b) Would the project conflict or be inconsistent with CEQA Guidelines Section 15064.3, Subdivision (b)?	☒	☐	☐	☐	
(c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	☒	☐	☐	☐	
(d) Result in inadequate emergency access?	☒	☐	☐	☐	

Discussion

(a-b) The proposed project is not expected to generate significant traffic trips. Any future development is required to pay all applicable traffic impact fees as determined by the City Engineer at the time of building permit issuance. Payment of traffic fees will ensure that potential traffic impacts are reduced to a level of insignificance.

The proposed project will not result in substantial impacts resulting from increased trip generation. The proposed project will not exceed 2,500 Average Daily Trips (ADT) and is not subject to the Vehicle Trip Reduction provisions of the Salinas Zoning Code (Section 37-50.330).

(c-d) The project will not substantially increase hazards due to design features or incompatible uses. The proposal will not result in inadequate emergency access.

Mitigation

No mitigation is required.

Issue	Impact				Source (Refer to Section 3: Source List)
	No Impact	Less Than Significant Impact	Potentially Significant Unless Mitigation Incorporated	Potentially Significant Impact	
18. TRIBAL CULTURAL RESOURCES. *Would the project:*					A5, A6, Q3
(a) Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a Californian Native American tribe, and that is:					
i. Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code Section 5020.1(k); or	☒	☐	☐	☐	
ii. A resource determined by the Lead Agency, in its discretion and supported by substantial evidence,	☐	☒	☐	☐	

Issue	Impact				Source (Refer to Section 3: Source List)
	No Impact	Less Than Significant Impact	Potentially Significant Unless Mitigation Incorporated	Potentially Significant Impact	
to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1 In applying the criteria set forth in Subdivision (c) of Public Resource Code 5024.1, the Lead Agency shall consider the significance of the resource to a California Native American tribe.					

(a)(i) The subject site was not included in either of the City of Salinas 1989 or 2016 City Historic and Architectural Surveys. Furthermore, the building is less than 50 years old.

(a)(ii) Per Section 5.8 (Cultural Resources) of the Final Environmental Impact Report for the Salinas General Plan (Source A1), little archaeological investigation has occurred in the City of Salinas or in Monterey County. However, there is always the potential to encounter subsurface materials during grading and construction. Therefore, pursuant to the Public Resources Code (Section 21083.2), in the event that cultural materials are encountered during grading/construction, all work shall cease until the find has been evaluated and mitigation measures put in place for the disposition and protection of any find. With this requirement, there is little potential for a significant impact on the environment.

On October 12, 2017, pursuant to Public Resources Code Section 21080.3.1, subd. (d), Assembly Bill 52 (AB52), and California Senate Bill 18 (SB18), City of Salinas staff sent via certified mail, a consultation request regarding the proposed project. Within 30-days of the date of the letter to all applicable California Native American Tribes whose geographic area of traditional and cultural affiliation lands boundary includes the City of Salinas as specified by the Native American Heritage Foundation.

On December 18, 2017, the Ohlone /Costanoan-Esselen Nation (OCEN) provided a response letter stating concern with the proposed project site and recommending that an OCEN Tribal Monitor be located on-site during construction (see Attachment 7). The proposed project site has previously been disturbed through the grading and construction in connection with the existing building in 1991. While no construction is proposed with this project, mitigation is proposed. Per Mitigation Measure TCR-1 below, pursuant to Public Resources Code (Section 21083.2), in the event that cultural materials are encountered during grading/construction, all work shall cease until the find has been evaluated and mitigation measures put in place for the disposition and protection of any find. With this requirement, there is little potential for a significant impact on the cultural resources and this will address OCEN's comments.

Mitigation

TCR-1 In the event that cultural materials are encountered during grading/construction, all work shall cease until the find has been evaluated and mitigation measures put in place for the disposition and protection of any find pursuant to Public Resources Code Section 21083.2.

Issue	Impact				Source *(Refer to Section 3: Source List)*
	No Impact	Less Than Significant Impact	Potentially Significant Unless Mitigation Incorporated	Potentially Significant Impact	
19. UTILITIES & SERVICE SYSTEMS. *Would the project:*					A1, A2, A3, A7, M1
(a) Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effect?	☒	☐	☐	☐	
(b) Have sufficient water supplies available to serve	☒	☐	☐	☐	

Issue	Impact				Source (Refer to Section 3: Source List)
	No Impact	Less Than Significant Impact	Potentially Significant Unless Mitigation Incorporated	Potentially Significant Impact	
the project and reasonably foreseeable future development during normal, dry, and multiple dry years?		☐	☐	☐	
(c) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has the adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	☒	☐	☐	☐	
(d) Generate solid waste in excess of State or Local standards, or in excess of the capacity of local infrastructure, or otherwise impact the attainment of solid waste reduction goals?	☒	☐	☐	☐	
(e) Comply with federal, state, and local management and reduction statues and regulations related to solid waste?	☒				

Discussion

(a) The project does not include construction.

(b-c) No construction is proposed; therefore, the project does not include new water connections. The religious assembly use is not a heavy water user. Furthermore, it will not discharge significant quantities of water into the wastewater treatment plant (also see Hydrology and Water Quality above).

(d-e) The project will not generate significant solid waste because there are no products produced. Disposal of waste generated by the project is not expected to be significant and it will be required to comply with federal, state, and local reduction statutes related to solid waste.

Mitigation

No mitigation is required.

Issue	Impact				Source *(Refer to Section 3: Source List)*
	No Impact	Less Than Significant Impact	Potentially Significant Unless Mitigation Incorporated	Potentially Significant Impact	
20. WILDFIRE. *If located in or near State responsibility areas or lands classified as very high fire hazard severity zones, would the project:*					A1, A2, M1, N1
(a) Substantially impair an adopted emergency response plan or emergency evacuation plan?	☒	☐	☐	☐	
(b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?	☒	☐	☐	☐	
(c) Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines, or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?	☒	☐	☐	☐	
(d) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?	☒	☐	☐	☐	

Discussion

(a-d) The City of Salinas is not located in or near State responsible areas or lands classified at very high fire hazard severity zones.

Mitigation

No mitigation is required.

Mandatory Findings of Significance	No Impact	Less Than Significant Impact	Potentially Significant Unless Mitigated	Potentially Significant Impact
1. Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	☒	☐	☐	☐
2. Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)? *("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects).*	☒	☐	☐	☐
3. Does the project have environmental effects, which will cause substantial adverse effects on human beings, either directly or indirectly?	☒	☐	☐	☐

3. SOURCE LIST

Source	Source Number
City of Salinas:	
Salinas General Plan, 2002.	A1
Salinas General Plan, Final Environmental Impact Report, 2002.	A2
Salinas Zoning Code: ☒ *Entire Code Section:* _____	A3
City of Salinas Stormwater Ordinance, dated March 2013	A4
1989 City Historical and Architectural Survey	A5
2016 City Historical and Architectural Survey	A6
Engineer's Report for proposed project, dated May 15, 2018	A7
Monterey Bay Air Resources District:	
CEQA Air Quality Guidelines prepared by the Monterey Bay Air Resources District, dated February 2008	F1
Monterey Bay Air Resources District. 2012-105 Air Quality Management Plan, dated March 2017	F2
Monterey Bay Community Power Authority:	
Monterey Bay Community Power Authority Implementation Plan, August 2017	G1
Field Inspections:	
By City staff, various dates	M1
Maps/Aerial Photography:	
City's aerial photographs, 2007.	N1
Other:	
Native American Heritage Commission	Q3

4. DETERMINATION

On the basis of this Initial Study:

☐ I find that the proposed project ***COULD NOT*** have a significant effect on the environment, and a ***NEGATIVE DECLARATION*** will be prepared.

☒ I find that although the proposed project could have a significant effect on the environment, there ***WILL NOT*** be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A ***MITIGATED NEGATIVE DECLARATION*** will be prepared.

☐ I find that the proposed project ***MAY*** have a significant effect on the environment, and an ***ENVIRONMENTAL IMPACT REPORT*** is required.

☐ I find that the proposed project ***MAY*** have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect:

(a) Has been adequately analyzed in *(Reference document)* pursuant to applicable legal standards; and

(b) Has been addressed by mitigation measures based on the earlier analysis as described in *Section 2: Checklist*, if the effect is a "Potentially Significant Impact" or a Negative Declaration: "Potentially Significant Unless Mitigation Incorporated".

An ***ENVIRONMENTAL IMPACT REPORT*** is required, but it must analyze only the effects that remain to be addressed.

☐ I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects:

(a) Have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and;

(b) Have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project.

NOTHING FURTHER IS REQUIRED.

Prepared by: _____ Dated: _____

Courtney Grossman
Planning Manager

Attachments:

1. Vicinity Map
2. Engineer's Report, dated May 15, 2018
3. Existing Site Plan with Proposed General Plan Amendment and Rezone
4. Existing Floor Plan (Sheet A101)
5. Revised Floor Plan for Sanctuary (Sheet A101B)
6. Mitigation Monitoring and Reporting Program
7. Letter from Ohlone/Costanoan-Esselen Nation (OCEN), dated December 17, 2018

North

Vicinity Map

GPA 2017-002, RZ 2017-001, and CUP 2017-019 10 Simas Street

Exhibit A

\\SalSvr44\DeptPvt\ComDev\robertl\Documents\10 Simas Street\ER 2017-003\GPA 2017-002, RZ 2017-001, CUP 2017-019 Vicinity Map.doc

CITY OF SALINAS

DEVELOPMENT ENGINEERING, *A division of the Public Works Department*
65 West Alisal Street | Salinas, CA 93901 | 831-758-7251 | *www.ci.salinas.ca.us*

ENGINEER'S REPORT

PURPOSE: CUP2017-019 **DATE:** 5/15/2018
LOCATION: 10 Simas St **PLANNER:** Bobby Latino
OWNER/APPLICANT: Simas-East Markert LLC/SyWest Development

DEVELOPMENT PROPOSAL: A proposal to establish religious assembly at old movie theater.

RECOMMENDATION: Approve with Conditions
SWDS THRESHOLD: N/A

DEVELOPMENT REVIEW: *Development Review Submittal prepared by JWF Architecture and BKF, dated 11/16/2017.*

CONDITION OF APPROVAL

1. FEMA Compliance – Applicant shall provide documentation for cost of all improvements that converted the use of the facility along with an appraisal indicating the market value the structure.
2. Fees – Based on CUP1987-028, the existing theater had 1200 seats. Trips associated with the theater use exceeds the proposed religious use. Therefore, no traffic impact fees are assessed for this change in land use.

Notice: The Conditions of Approval for this Site Plan Review include certain fees and development requirements. Pursuant to Government Code Section 66020 (d)(1), this hereby constitutes written notice stating the amount of said fees, and describing the development requirements. The applicant is hereby notified that the 90-day appeal period in which he/she/they may protest these fees and development requirements, pursuant to Government Code Section 66020 (a), begins on the date the office land use permit is approved. If applicant files a written protest within this 90-day period complying with all requirements of Section 66020, he/she/they will be legally barred from challenging such fees and/or requirements at a later date.

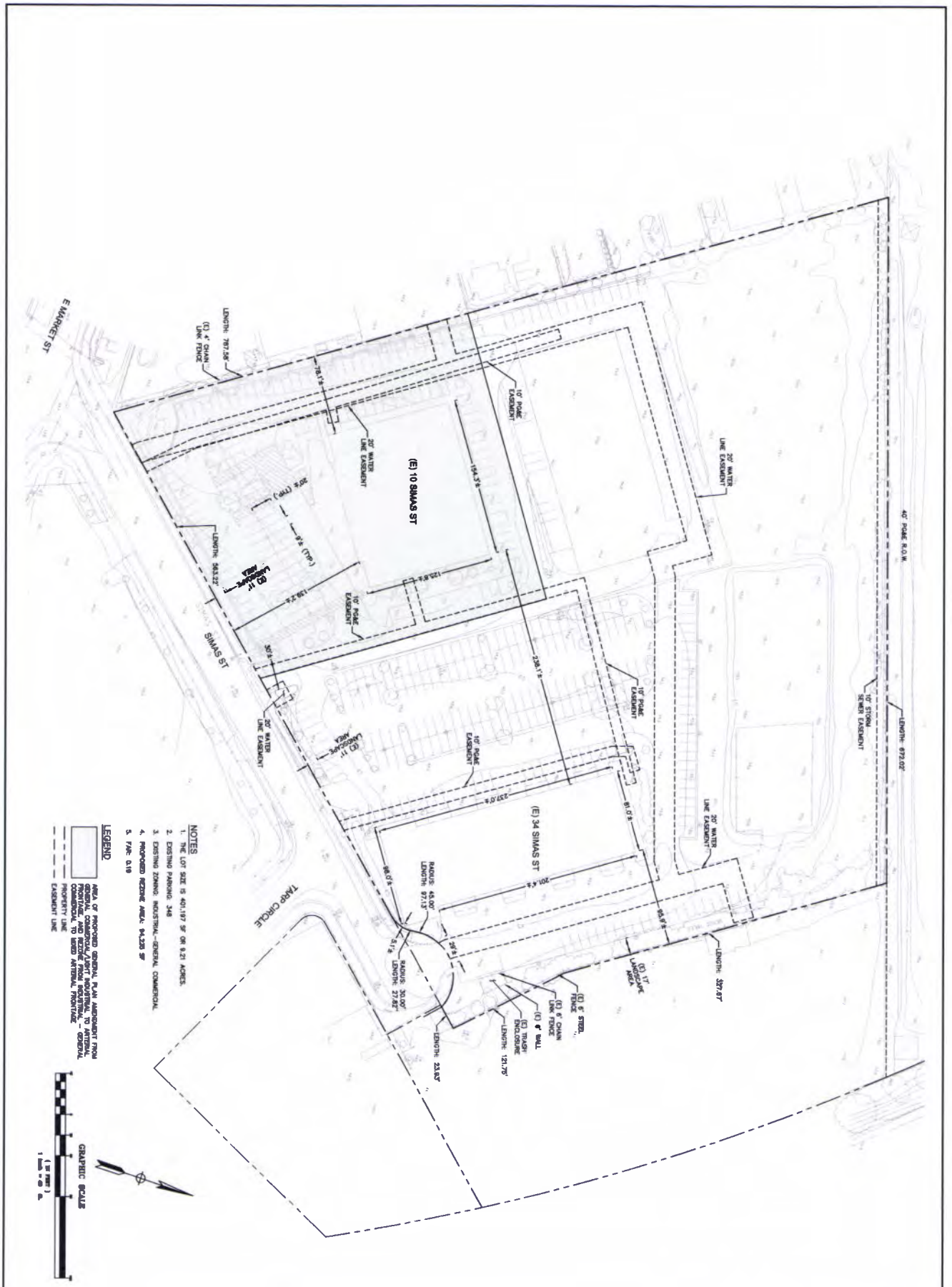
CITY OF SALINAS
Reviewed By:

Report Prepared By/Applicant Questions

Adriana Robles 5/15/2018 (adrianar@ci.salinas.ca.us)

Adriana Robles, P.E. **Dated**
Permit Center Senior Engineer (758-7194)
for **Jim Sandoval, P.E.**
City Engineer

DRAWING NAME: P:\2017\171012_SyWest_Salinas_Rezoning\ENG\ZONING\SIMAS\SHEETS\01_SS_SITE-PLAN.dwg
PLOT DATE: 11-16-17 PLOTTED BY: phle



NOTES

1. THE LOT SIZE IS 401,197 SF OR 9.21 ACRES.
2. EXISTING PARKING: 348
3. EXISTING ZONING: INDUSTRIAL--GENERAL COMMERCIAL
4. PROPOSED REZONE AREA: 94,320 SF
5. FAR: 0.19

LEGEND

AREA OF PROPOSED GENERAL PLAN AMENDMENT FROM INDUSTRIAL TO COMMERCIAL AND REZONE FROM INDUSTRIAL - GENERAL COMMERCIAL TO MIXED ARTERIAL FRONTAGE

PROPERTY LINE

EASEMENT LINE

GRAPHIC SCALE

(IN FEET)
1 inch = 40 ft.

Drawing Number:	Date	11/16/2017	No.	Revisions
1 of 1	Scale	1"=40'		
	Design	AP		
	Drawn	AP		
	Approved	KW		
	Job No	20171012		

EXISTING SITE PLAN
10 SIMAS STREET
PROPERTY REZONING

CITY OF SALINAS COUNTY OF MONTEREY STATE OF CALIFORNIA

BkF 100 YEARS
ENGINEERS . SURVEYORS . PLANNERS
300 FRANK OGAWA PLAZA, SUITE 380
OAKLAND, CA 94612
(510) 899-7300
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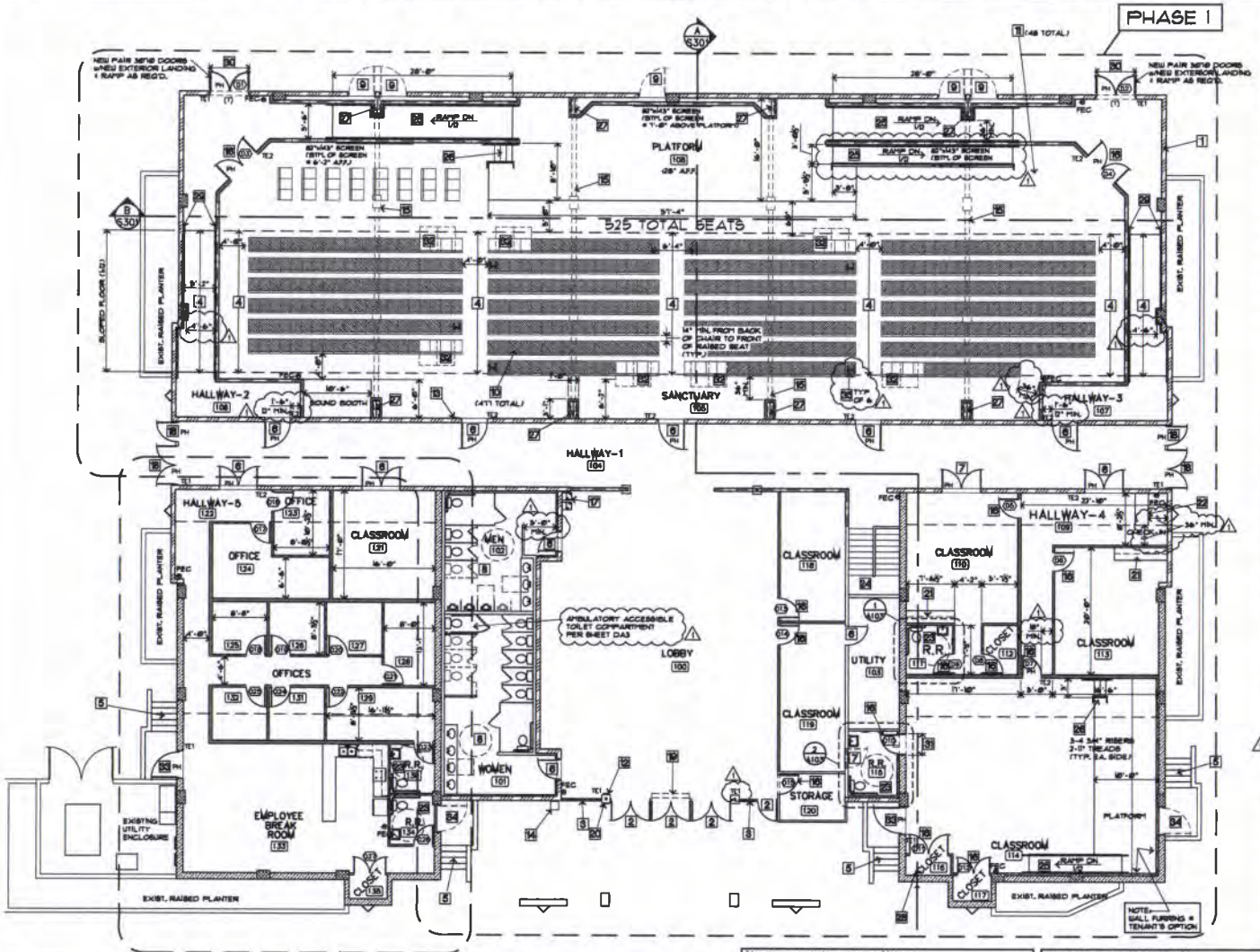

PHASE 2

NOTE:
NO CHANGE PROPOSED TO THIS AREA AS PART OF PHASE 1 CONSTRUCTION
- FUTURE IMPROVEMENTS SHOWN FOR REFERENCE ONLY

LEGEND

- (X) KEY NOTE
- (X) DOOR DESIGNATION (REFER TO SHEET A301)
- XXX ROOM DESIGNATION
- PH INDICATES PANIC HARDWARE REQUIRED -MOUNT BETWEEN 30 INCHES & 44 INCHES A.F.F.
- TE1 INDICATES TACTILE "EXIT" SIGN
- TE2 INDICATES TACTILE "EXIT ROUTE" SIGN -REFER TO SIGNAGE DETAILS ON SHEET DA2
- (T) INDICATES EXTERIOR ALUMINUM THRESHOLD PER DETAIL 5/A301
- FEC INDICATES NEW TYPE 2A-10BC FIRE EXTINGUISHERS PLACED NOT TO EXCEED 75 FEET OF TRAVEL FROM ANY POINT IN THE BUILDING AND NOT HIGHER THAN 80 INCHES ABOVE THE FLOOR.

HANDICAP ACCESSIBILITY DETAIL REFERENCES

REFER TO SHEET DA1 FOR:
A) SIGNAGE REQUIREMENTS FOR BRAILLE, HEARING IMPAIRED & BUILDING ENTRANCE
B) STAIRWAY ACCESSIBILITY (NOT STRUCTURAL REQ'TS.)
C) RAMP SLOPE & HANDRAIL REQUIREMENTS
D) CURB RAMPS

REFER TO SHEET DA2 FOR:
A) SIGNAGE REQUIREMENTS FOR BRAILLE, HEARING IMPAIRED & BUILDING ENTRANCE
B) MINIMUM CLEAR FLOOR SPACE FOR WHEELCHAIRS
C) SPACE ALLOWANCE & REACH RANGE ALONG AN ACCESSIBLE ROUTE
D) CLEARANCES AROUND OBJECTS PROTRUDING FROM WALLS ALONG AN ACCESSIBLE ROUTE

REFER TO SHEET DA3 FOR:
A) MULTIPLE ACCOMMODATION RESTROOMS & TOILET STALLS
B) SINGLE ACCOMMODATION RESTROOM CLEARANCES
C) PLUMBING FIXTURE CLEARANCES
D) PUBLIC RESTROOM DOOR SIGNAGE
E) CONTROLS, SWITCHES & OUTLET MOUNTING HEIGHT
F) TOILET ACCESSORY MOUNTING HEIGHT
G) HANDRAIL AND GRAB BAR MOUNTING HEIGHTS

MOVABLE SEATING REQUIREMENTS

CLEAR WIDTH BETWEEN CHAIRS PER CALIFORNIA FIRE CODE SECTION 2501.10.1
"WHEN SEATING ROWS HAVE 14 OR LESS SEATS, THE MINIMUM CLEAR WIDTH BETWEEN ROWS SHALL NOT BE LESS THAN 12 INCHES MEASURED AS THE CLEAR HORIZONTAL DISTANCE FROM THE BACK OF THE ROW AHEAD AND THE NEAREST PROJECTION OF THE ROW BEHIND."

CLEAR WIDTH BETWEEN CHAIRS PER CALIFORNIA FIRE CODE SECTION 2501.10.1
"FOR ROWS OF SEATING SERVED BY AISLES OR DOORWAYS AT BOTH ENDS, ... THE MINIMUM CLEAR WIDTH OF 12 INCHES BETWEEN ROWS SHALL BE INCREASED BY 0.3 INCH FOR EVERY ADDITIONAL SEAT BEYOND 14."
- ALL OTHER ROWS REQUIRE MIN 12" CLR. SPACE

BONDING OF CHAIRS PER CALIFORNIA FIRE CODE SECTION 2501.10.3
"LOOSE CHAIRS THAT ARE NOT FIXED TO THE FLOOR SHALL BE BONDED TOGETHER IN GROUPS OF 3 OR MORE."
EXCEPTIONS:
1. WHEN NOT MORE THAN 200 SEATS ARE PROVIDED, BONDING IS NOT REQUIRED.
2. THE BONDING OF CHAIRS IS NOT REQUIRED WHEN TABLES ARE PROVIDED, AND WHEN THE OCCUPANCY IS LIMITED TO FIXED DINING OR SIMILAR PURPOSES.

READILY REMOVABLE SEATS WHERE SHOWN, SHALL NOT BE FIXED TO THE GROUND IN ORDER TO ALLOW REMOVAL TO ACCOMMODATE FOR WHEELCHAIR USERS.

ASSISTIVE LISTENING SYSTEM

AN ASSISTIVE LISTENING SYSTEM IS REQUIRED FOR THE SANCTUARY AREA OF THIS TENANT.
- PROVIDE RECEIVERS FOR A MINIMUM OF 4% OF TOTAL SEATING (21 REQUIRED)
- SYSTEM MUST BE IN PLACE AND OPERATIONAL AT TIME OF FINAL INSPECTION
- REFER TO SHEET DA3 FOR REQUIRED SIGNAGE

FLOOR PLAN KEYNOTES

No.	Description
1	Existing concrete masonry exterior wall (No Change)
2	Existing storefront entry door to remain (No Change)
3	Existing storefront glazing to remain (No Change)
4	Existing sloped floor (1:12 max slope) to remain (No Change)
5	Existing steps to be filled-in with concrete -- Refer to Structural Drawings for detailed requirements
6	Existing interior door to remain (No Change)
7	Existing interior door to remain as exit only (No handles on pull-side of door)
8	Existing multi-accomodation restrooms with new fixtures -- Refer to Plumbing Drawings for detailed requirements
9	Existing exterior door to be permanently locked.
10	Shading indicates new fixed chair layout (Self-rising seats) -- Re-use existing chairs where possible
11	New movable seating / Refer to spacing requirements this sheet
12	Occupancy capacity sign stating "MAXIMUM BUILDING OCCUPANCY 1176"
13	Occupancy capacity sign stating "MAXIMUM OCCUPANCY THIS ROOM 728"
14	Fire Department approved Key Box. (See General Notes / Sheet T51)
15	Existing CMU wall and pilaster to be removed -- Refer to Structural Drawings
16	New interior door (Solid Core) / Match existing -- Refer to Door Schedule, Sheet A301
17	New HI/Lo wall mounted drinking fountains -- Refer to Plumbing Drawings
18	Existing exterior hollow metal door to remain (No Change)
19	New sign over door 5/7" high letters stating: "THIS DOOR TO REMAIN UNLOCKED WHENEVER THE BUILDING IS OCCUPIED"
20	6" x 8" Square International Symbol of Accessibility at primary entrance. -- mount @ 60" o.c.l to c/l
21	New base & upper cabinets -- Refer to detail 6/A301
22	New Base Cabinet & Counter -- Refer to detail 6/A301
23	New Single-Accomodation restroom -- Refer to enlarged plan on sheet A102
24	Existing stairs to 2nd floor storage mezzanine -- No Change
25	New ramp to Platform / 1:12 max slope w/handrails each side -- Refer to details on Sheets DA2 & S402
26	New stairs to platform / 7" Risers (Max) & 11" Treads (Min) w/handrails each side of stairs / Refer to details on Sheets DA2 & S402
27	New steel frame column -- Refer to structural drawings
28	Location of existing fire sprinkler riser -- No Change
29	Provide handrails each side of ramp -- Refer to details on Sheets DA2 & DA3
30	New 5'-4" Wide x 7'-2" High opening in existing CMU wall -- Refer to detail 8/S401
31	New 3'-4" Wide x 7'-2" High opening in existing CMU wall -- Refer to detail 8/S401
32	48"x66" Clear floor space of wheelchair seating (7 locations provided) -- Readily removable seats may be provided in these locations when such spaces are not required to accommodate wheelchair users. (CBC Section 11048.5.7)
33	Existing hollow metal door to be removed & re-installed at interior finished floor elevation -- Cut existing wall and provide new opening so that door may be re-installed at new interior finished floor height -- Refer to detail 13/S402
34	Existing hollow metal door to be removed & re-installed at interior finished floor elevation -- Cut existing wall and provide new opening so that door may be re-installed at new interior finished floor height -- Door to be welded shut from inside -- Refer to detail 13/S402
35	"H" indicates glass wall with no vision mark on clear glass -- Each wall shall be identified by sign or marker with International Symbol of Accessibility

WALL LEGEND

- NEW INTERIOR BEARING WALL: 2x4 O.F., @ STUDS @ 16" O.C. TO 8'-0". WITH 5/8" GYPSUM BOARD EACH SIDE. - USE MOISTURE RESISTANT GYP BD @ TOILET ROOMS. - REFER TO DETAILS 13/S402 & 14/S402.
- NEW INTERIOR NON-BEARING WALL: 2x4 O.F., STUDS @ 24" O.C. TO 8'-0", WITH 5/8" GYPSUM BOARD EACH SIDE. - USE MOISTURE RESISTANT GYP BD @ TOILET ROOMS. - REFER TO DETAIL 14/S402 & SHEET S101 FOR TYPICAL DETAILS
- NEW INTERIOR NON-BEARING WALL: 2x4 O.F., STUDS @ 16" O.C. TO 8'-0", WITH 5/8" GYPSUM BOARD EACH SIDE. - USE MOISTURE RESISTANT GYP BD @ TOILET ROOMS. - REFER TO DETAIL 14/S402 & SHEET S101 FOR TYPICAL DETAILS
- NEW INTERIOR WALL FURRING: 2 1/2" x 25 GA. METAL STUDS @ 24" O.C. ATTACHED TO EXIST. CMU WALL - FINISH WITH 5/8" GYPSUM BOARD - REFER TO DETAIL 5/S101
- Existing Interior Non-Bearing Wall: 3x STUDS AT 16" O.C.
- Existing Exterior/Interior Masonry Wall: 8" CONCRETE MASONRY UNITS.
- Existing Exterior Masonry Wall: 12" CONCRETE MASONRY UNITS.
- Existing Masonry Pilaster: 16"x24" CONCRETE MASONRY PILASTER

ARCHITECTURE
10 Whatney Plaza Email, #104
Fresno, CA 93720
(559) 448-8520
FAX, (866) 302-2735
EMAIL: jonframe@sbcglobal.net

REVISIONS	DATE	DESCRIPTION
	7/13/06	BUILDING DEPT. P.C.
	7/24/06	PLANNING REVISIONS
	8/09/06	BUILDING DEPT. P.C.

BUILDING RENOVATION FOR: celebrationchurch.cc, 10 MARKET STREET, SALINAS, CA 93901

Drawing Title: FLOOR PLAN

Scale: 1/8"=1'-0"

69,497.76

LICENSED ARCHITECT, JON FRAME, C-27352, REN. 1-31-11, STATE OF CALIFORNIA

SHEET #: A101

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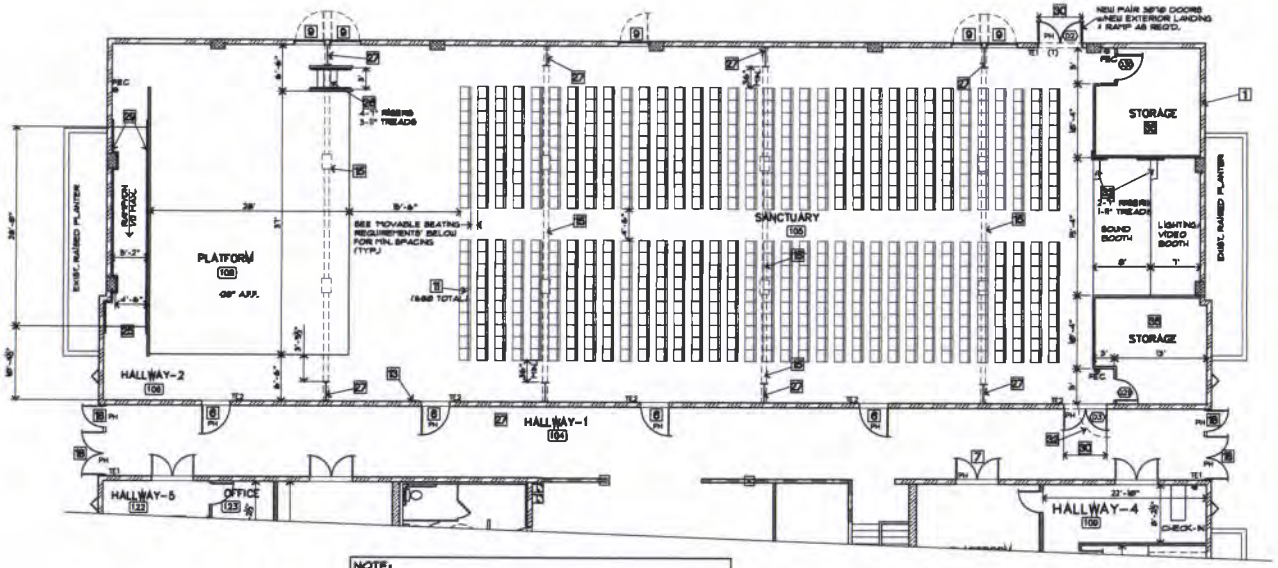


NOTE:
THIS REVISION APPLIES TO WORSHIP AREA ONLY
- REFER TO SHEET A101 FOR ALL OTHER REQUIREMENTS

FLOOR PLAN KEYNOTES

No.	Description
1	Existing concrete masonry exterior wall (No Change)
2	Existing storefront entry door to remain (No Change)
3	Existing storefront glazing to remain (No Change)
4	--- NOT USED -----
5	Existing steps to be filled-in with concrete – Refer to Structural Drawings for detailed requirements
6	Existing interior door to remain (No Change)
7	Existing interior door to remain as exit only (No hardare on pull-side of door)
8	Existing multi-accomodation restrooms with new fixtures – Refer to Plumbing Drawings for detailed requirements
9	Existing exterior door to be permanently locked.
10	--- NOT USED -----
11	New movable seating / Refer to spacing requirements this sheet
12	Occupancy capacity sign stating "MAXIMUM BUILDING OCCUPANCY 1343"
13	Occupancy capacity sign stating "MAXIMUM OCCUPANCY THIS ROOM 838"
14	Fire Department approved Key Box. (See General Notes / Sheet T01)
15	Existing CMU wall and plaster to be removed – Refer to Structural Drawings
16	New interior door (Solid Core) / Match existing – Refer to Door Schedule, Sheet A301
17	New Hi/Low wall mounted drinking fountains – Refer to Plumbing Drawings
18	Existing exterior hollow metal door to remain (No Change)
19	New sign over door 6/1" high letters stating: "THIS DOOR TO REMAIN UNLOCKED WHENEVER THE BUILDING IS OCCUPIED"
20	8" x 8" Square International Symbol of Accessibility at primary entrance. – mount @ 60" a.f.f. to c/l
21	New base & upper cabinets – Refer to detail 6/A301
22	New Base Cabinet & Counter – Refer to detail 8/A301
23	New Single-Accomodation restroom – Refer to enlarged plan on sheet A102
24	Existing stairs to 2nd floor storage mezzanine – No Change
25	New ramp to Platform / 1:12 max slope w/handrails each side – Refer to details on Sheets DA2 & S402
26	New stairs to platform / 7" Risers (Max) & 11" Treads (Min) w/handrails each side of stairs / Refer to details on Sheets DA2 & S402
27	New steel frame column – Refer to structural drawings
28	Location of existing fire sprinkler riser – No Change
29	Provide handrails each side of ramp – Refer to details on Sheets DA2 & DA3
30	New 6'-4" Wide x 7'-2" High opening in existing CMU wall – Refer to detail 8/S401
31	New 3'-4" Wide x 7'-2" High opening in existing CMU wall – Refer to detail 8/S401
32	New stairs to sound/lighting booth / 7" Risers (Max) & 11" Treads (Min) w/handrail on one side of stairs / Refer to details on Sheets DA2 & S402
33	Existing hollow metal door to be removed & re-installed at interior finished floor elevation – Cut existing wall and provide new opening so that door may be re-installed at new interior finished floor height – Refer to detail 13/S402
34	Existing hollow metal door to be removed & re-installed at interior finished floor elevation – Cut existing wall and provide new opening so that door may be re-installed at new interior finished floor height – Door to be vended vinyl from inside – Refer to detail 13/S402
35	TENANT'S OPTION: – Provide 2X8 ceiling joists @ 24" o.c. 5/8"/8" gyp. bd. ceiling – Joists shall run in the shortest possible direction – Finished ceiling height to be determined – Refer to detail 8/S101

WALL LEGEND

NEW INTERIOR BEARING WALL
2x4 S.F. @ STUDS @ 16" O.C. TO 8'-0".
WITH 5/8" GYPSUM BOARD EACH SIDE
- USE MOISTURE RESISTANT GYP BD @ TOILET ROOMS.
- REFER TO DETAILS 13/S402 & 14/S402.

NEW INTERIOR NON-BEARING WALL
2x4 S.F. STUDS @ 24" O.C. TO 8'-0",
WITH 5/8" GYPSUM BOARD EACH SIDE
- USE MOISTURE RESISTANT GYP BD @ TOILET ROOMS.
- REFER TO DETAIL 14/S402 & SHEET S101 FOR TYPICAL DETAILS

NEW INTERIOR NON-BEARING WALL
2x4 S.F. STUDS @ 16" O.C. TO 8'-0",
WITH 5/8" GYPSUM BOARD EACH SIDE
- USE MOISTURE RESISTANT GYP BD @ TOILET ROOMS.
- REFER TO DETAIL 14/S402 & SHEET S101 FOR TYPICAL DETAILS

NEW INTERIOR WALL FURRING
2" FURR @ 25 GA. METAL STUDS @ 24" O.C. ATTACHED TO EXIST. CMU WALL
- FINISH WITH WITH 5/8" GYPSUM BOARD
- REFER TO DETAIL 9/S101

Existing Interior Non-Bearing Wall
2x STUDS AT 16" O.C.

Existing Exterior Bearing Masonry Wall
8" CONCRETE MASONRY UNITS.

Existing Exterior Masonry Wall
12" CONCRETE MASONRY UNITS.

Existing Masonry Planter
16"x24" CONCRETE MASONRY PLANTER

LEGEND

X	KEY NOTE
(X)	DOOR DESIGNATION (REFER TO SHEET A301)
XXX	ROOM DESIGNATION
PH	INDICATES PANIC HARDWARE REQUIRED –MOUNT BETWEEN 30 INCHES & 44 INCHES A.F.F.
TE1 TE2	INDICATES TACTILE "EXIT" SIGN INDICATES TACTILE "EXIT ROUTE" SIGN –REFER TO SIGNAGE DETAILS ON SHEET DA2
(T)	INDICATES EXTERIOR ALUMINUM THRESHOLD PER DETAIL 2/A301
FEC	INDICATES NEW TYPE 2A-10BC FIRE EXTINGUISHERS PLACED NOT TO EXCEED 75 FEET OF TRAVEL FROM ANY POINT IN THE BUILDING AND NOT HIGHER THAN 60 INCHES ABOVE THE FLOOR.

HANDICAP ACCESSIBILITY DETAIL REFERENCES

REFER TO SHEET DA1 FOR:
A) MANEUVERING CLEARANCES AT DOORS
B) MINIMUM CLEAR FLOOR SPACE FOR WHEELCHAIRS
C) SPACE ALLOWANCE & REACH RANGE ALONG AN ACCESSIBLE ROUTE
D) CLEARANCES AROUND OBJECTS PROTRUDING FROM WALLS ALONG AN ACCESSIBLE ROUTE

REFER TO SHEET DA2 FOR:
A) SIGNAGE REQUIREMENTS FOR BRAILLE, HEARING IMPAIRED & BUILDING ENTRANCE
B) STAIRWAY ACCESSIBILITY (NOT STRUCTURAL REQ'TS.)
C) RAMP SLOPE & HANDRAIL REQUIREMENTS
D) CURB RAMPS

REFER TO SHEET DA3 FOR:
A) MULTIPLE ACCOMODATION RESTROOMS & TOILET STALLS
B) SINGLE ACCOMODATION RESTROOM CLEARANCES
C) PLUMBING FIXTURE CLEARANCES.
D) PUBLIC RESTROOM DOOR SIGNAGE
E) CONTROLS, SWITCHES & OUTLET MOUNTING HEIGHT
F) TOILET ACCESSORY MOUNTING HEIGHT
G) HANDRAIL AND GRAB BAR MOUNTING REQ'TS.

MOVABLE SEATING REQUIREMENTS

CLEAR WIDTH BETWEEN CHAIRS PER CALIFORNIA FIRE CODE SECTION 2501.10.1
"WHEN SEATING ROWS HAVE 14 OR LESS SEATS, THE MINIMUM CLEAR WIDTH BETWEEN ROWS SHALL NOT BE LESS THAN 12 INCHES MEASURED AS THE CLEAR HORIZONTAL DISTANCE FROM THE BACK OF THE ROW AHEAD AND THE NEAREST PROJECTION OF THE ROW BEHIND."

CLEAR WIDTH BETWEEN CHAIRS PER CALIFORNIA FIRE CODE SECTION 2501.10.1
"FOR ROWS OF SEATING SERVED BY AISLES OR DOORWAYS AT BOTH ENDS..... THE MINIMUM CLEAR WIDTH OF 12 INCHES BETWEEN ROWS SHALL BE INCREASED BY 0.3 INCH FOR EVERY ADDITIONAL SEAT BEYOND 14."
- ALL OTHER ROWS REQUIRE MIN 12" CLR. SPACE

BONDING OF CHAIRS PER CALIFORNIA FIRE CODE SECTION 2501.10.3
"LOOSE CHAIRS THAT ARE NOT FIXED TO THE FLOOR SHALL BE BONDED TOGETHER IN GROUPS OF 3 OR MORE."
EXCEPTIONS
1. WHEN NOT MORE THAN 300 SEATS ARE PROVIDED, BONDING IS NOT REQUIRED.
2. THE BONDING OF CHAIRS IS NOT REQUIRED WHEN TABLES ARE PROVIDED, AS WHEN THE OCCUPANCY IS USED FOR DINING OR SIMILAR PURPOSES.

READILY REMOVABLE SEATS WHERE SHOWN, SHALL NOT BE FIXED TO THE GROUND IN ORDER TO ALLOW REMOVAL TO ACCOMMODATE FOR WHEELCHAIR USERS.

ASSISTIVE LISTENING SYSTEM

AN ASSISTIVE LISTENING SYSTEM IS REQUIRED FOR THE SANCTUARY AREA OF THIS TENANT.
- PROVIDE RECEIVERS FOR A MINIMUM OF 4% OF TOTAL SEATING (27 REQUIRED)
- SYSTEM MUST BE IN PLACE AND OPERATIONAL AT TIME OF FINAL INSPECTION
- REFER TO SHEET DA3 FOR REQUIRED SIGNAGE

JON FRAME ARCHITECTURE
10 Whitworth Place East, #104
Fresno, CA 93720
(559) 435-8330
FAX: (559) 302-2728
EMAIL: jon@jonframearchitect.com

symbols	date	comments
	7/12/10	BUILDING DEPT. P.C.
	7/12/10	TENANT'S REVISIONS
	8/26/10	BUILDING DEPT. P.C.
	10/19/10	TENANT'S REVISIONS
	2/22/11	FIELD CONDITION REVISIONS

BUILDING RENOVATION FOR:
celebrationchurch.cc
TO: 4665 E STREET
SELMA, CA 93662

Drawing title
ALTERNATE FLOOR PLAN

N

Scale: 1/8"=1'-0"

07/22/11

LICENSED ARCHITECT
JON FRAME
C-27352
REN. 8-31-12
STATE OF CALIFORNIA

SHEET #
A101B

G:\PROJECTS\CEL CHURCH-SELMA\CD'S-A10'S - TURNED AUG\TENANT.DWG

GENERAL PLAN AMENDMENT 2017-002 (GPA 2017-002) FROM GENERAL COMMERCIAL/LIGHT INDUSTRIAL TO ARTERIAL FRONTAGE; AND REZONE 2017-001 (RZ 2017-001) FORM INDUSTRIAL-GENERAL COMMERCIAL TO MIXED ARTERIAL FRONTAGE; CONDITIONAL USE PERMIT (CUP 2017-019) TO ESTABLISH AND OPERATE RELIGIOUS ASSEMBLY USE
MITIGATION MONITORING AND REPORTING PROGRAM
10 SIMAS STREET

Mitigation Number	Nature of Mitigation	Result after Mitigation	Party Responsible for Implementing	Party Responsible for Monitoring: Method to Confirm Implementation	Timing for Implementation
CU-1	In the event that cultural materials are encountered during grading/construction, all work shall cease until the find has been evaluated and mitigation measures put in place for the disposition and protection of any find pursuant to Public Resources Code Section 21083.2.	To ensure compliance with Public Resources Code Section 21083.2	Applicant, or Successor in Interest	Community Development Department, Current Planning	During grading/ construction activities
TCR-1	In the event that cultural materials are encountered during grading/construction, all work shall cease until the find has been evaluated and mitigation measures put in place for the disposition and protection of any find pursuant to Public Resources Code Section 21083.2.	To ensure compliance with Public Resources Code Section 21083.2	Applicant, or Successor in Interest	Community Development Department, Current Planning	During grading/ construction activities

Ohlone/Costanoan-Esselen Nation

Previously acknowledged as
The San Carlos Band of
Mission Indians
The Monterey Band
And also known as
O.C.E.N. or Esselen Nation
P.O. Box 1301
Monterey, CA 93942

www.ohlonecostanoanesselennation.org.

December 18, 2017

Bobby Latino
Associate Planner
City of Salinas Community Development Department
65 West Alisal Street
Salinas, CA 93901

Re: 295 Sun Way Project and 10 Simas Street, Salinas, CA - General Plan Amendments– As stated
General Plan Amendment
AB52 and SB18 – 90 Days consultation period

Saleki Atsa,

Ohlone/Costanoan-Esselen Nation is an historically documented previously recognized tribe. OCEN is the legal tribal government representative for over 600 enrolled members of Esselen, Carmeleno, Monterey Band, Rumsen, Chalon, Soledad Mission, San Carlos Mission and/or Costanoan Mission Indian descent of Monterey County. Though other indigenous people may have lived in the area, the area is the indigenous homeland of our people. Included with this letter please find a territorial map by Taylor 1856; Levy 1973; and Milliken 1990, indentifying Tribal areas.

Ohlone/Costanoan-Esselen Nation objects to all excavation in known cultural lands, even when they are described as previously disturbed, and of no significant archaeological value. Please be advised that it is our first priority that our ancestor's remains be protected and undisturbed. We desire that all sacred burial items be left with our ancestors on site or as culturally determined by OCEN. All cultural items returned to Ohlone/Costanoan-Esselen Nation. We ask for the respect that is afforded all of our current day deceased, by no other word these burial sites are cemeteries, respect for our ancestors as you would expect respect for your deceased family members in today's cemeteries. **Our definition of respect is no disturbance.**

OCEN's Tribal leadership desires to be provided with:

Archaeological reports/surveys, including subsurface testing, and presence/absence testing.
OCEN request to be included in mitigation and recovery programs,
Reburial of any of our ancestral remains,
Placement of all cultural items, and that
A Native American Monitor of Ohlone/Costanoan-Esselen Nation, approved by the OCEN Tribal Council is used within our aboriginal territory.
Cultural and Tribal sections to reflect Tribal request.

Projects affecting the General Plan allow for 90 days response according to SB18. We ask that a sacred lands search with the Northwest Information Center, Sonoma State University and the Native American Heritage Commission. Please feel free to contact me at (408) 629-5189. Nimasianexelpasaleki. Thank you

Sincerely and Respectfully Yours,

Louise J. Miranda Ramirez, Chairperson
Ohlone/Costanoan-Esselen Nation
(408) 629-5189
Cc: OCEN Tribal Council

City of Salinas
COMMUNITY DEVELOPMENT DEPARTMENT
65 W. Alisal Street, 2nd Floor • Salinas, California 93901
(831) 758-7387 • (831) 775-4258 (Fax) • www.ci.salinas.ca.us

1. BACKGROUND

Project Name: General Plan Amendment 2017-002 (GPA 2017-002); Rezone 2017-001 (RZ 2017-001); and Conditional Use Permit (CUP 2017-019)

Project Location: 10 Simas Street in the IGC-F (Industrial-General Commercial – Flood Plain Overlay) Zoning District

Assessor Parcel Number: 003-091-011-000

☒ **See Attached Vicinity Map**

Current Land Use: Nonconforming Religious Assembly use within an existing 18,150 square foot building in an existing Industrial Complex

Surrounding Land Uses/Zoning Districts:

North: Park/P (Parks)
South: Minor Vehicle Repair, Vehicle Sales, and Vehicle-related Retail Sales and Services uses/IGC-F (Industrial-General Commercial – Flood Plain Overlay)
East: Building Materials and Service use/IGC-F (Industrial-General Commercial – Flood Plain Overlay)
West: Retail Sales/MAF-F (Mixed Arterial Frontage – Flood Plain Overlay)

Lead Agency Contact Person: Bobby Latino, Associate Planner

Telephone: (831) 758-7206

Location and Existing Setting: City of Salinas / Existing Industrial Complex

Project Description: General Plan Amendment 2017-002 (GPA 2017-002) to change the General Plan designation from General Commercial/Light Industrial to Arterial Frontage, Rezone 2017-001 (RZ 2017-001) the Zoning designation from Industrial-General Commercial to Mixed Arterial Frontage, and Conditional Use Permit (CUP 2017-

019) to establish and operate a religious assembly use in an existing 18,150 square foot building.

Environmental Factors Potentially Affected:

☐ Aesthetics	☐ Agricultural Resources	☐ Air Quality
☐ Biological Resources	☒ Cultural Resources	☐ Energy
☐ Geology/Soils	☐ Greenhouse Gas Emissions	☐ Hazards & Hazardous Materials
☐ Hydrology/Water Quality	☐ Land Use/Planning	☐ Mineral Resources
☐ Noise	☐ Population/Housing	☐ Public Services
☐ Recreation	☐ Transportation	☒ Tribal Cultural Resources
☐ Utilities/Service Systems	☐ Wildfire	☐ Mandatory Findings of Significance

2. CHECKLIST

Issue	Impact				Source *(Refer to Section 3: Source List)*
	No Impact	Less Than Significant Impact	Potentially Significant Unless Mitigation Incorporated	Potentially Significant Impact	
1. AESTHETICS. Except as provided in Public Resources Code Section 21099, *would the proposal:*	☒	☐	☐	☐	A1, A2, N1
(a) Affect a scenic vista or scenic highway?	☒	☐	☐	☐	
(b) In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that area experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with					

Issue	Impact				Source (Refer to Section 3: Source List)
	No Impact	Less Than Significant Impact	Potentially Significant Unless Mitigation Incorporated	Potentially Significant Impact	
applicable zoning and other regulations governing scenic quality?					
(c) Substantially degrade the existing visual character or quality of the site and its surroundings?	☒	☐	☐	☐	
(d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	☒	☐	☐	☐	

Discussion

(a-b) The site is in an urbanized area and would not be located adjacent to or near a scenic vista or a scenic highway.

(c) The proposed project would not degrade the existing visual character or quality of the site and its surroundings.

(d) The proposed project would not create a new source of substantial light or glare. If required or proposed, new lighting would be subject to the City of Salinas Zoning Code outdoor lighting ordinance.

Mitigation

No mitigation is required.

Issue	Impact				Source *(Refer to Section 3: Source List)*
	No Impact	Less Than Significant Impact	Potentially Significant Unless Mitigation Incorporated	Potentially Significant Impact	
2. AGRICULTURAL RESOURCES. *Would the proposal:*					A1, A2, N1
(a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	☒	☐	☐	☐	
(b) Conflict with existing zoning for agricultural use or a Williamson Act contract?	☒	☐	☐	☐	
(c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code 12220(g)), timberland (as defined by Public Resources Code Section 4526), or timberland zoned Timberland Production (as defined by Government Code Section 51104(g))?	☒	☐	☐	☐	
(d) Result in the loss of forest land or conversion of forest land to non-forest use?	☒	☐	☐	☐	
(e) Involve other changes in the existing environment which, due to their location or nature, could	☒	☐	☐	☐	

Issue	Impact				Source (Refer to Section 3: Source List)
	No Impact	Less Than Significant Impact	Potentially Significant Unless Mitigation Incorporated	Potentially Significant Impact	
result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?					

Discussion

(a-e) The site is located on an in-fill property within the IGC-F (Industrial-General Commercial – Flood Plain Overlay) Zoning District. Farming activities and forest land are not located on the site.

Mitigation

No mitigation is required.

Issue	Impact				Source (Refer to Section 3: Source List)
	No Impact	Less Than Significant Impact	Potentially Significant Unless Mitigation Incorporated	Potentially Significant Impact	
3. AIR QUALITY. *Would the proposal:*					A1, A2, A3, F1, F2
(a) Conflict with or obstruct implementation of the applicable air quality plan?	☒	☐	☐	☐	
(b) Result in cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality	☒	☐	☐	☐	

Issue	Impact				Source *(Refer to Section 3: Source List)*
	No Impact	Less Than Significant Impact	Potentially Significant Unless Mitigation Incorporated	Potentially Significant Impact	
standard?					
(c) Expose sensitive receptors to substantial pollutant concentrations?	☒	☐	☐	☐	
(d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	☒	☐	☐	☐	

Discussion

(a-c) Salinas lies within the North Central Coast Air Basin, which meets the federal standard for ozone levels but falls short of the higher State standards for ozone and PM10. Ozone is the primary constituent of smog and is formed in the atmosphere via a chemical reaction involving nitrogen oxides (NOx), volatile organic gases (VOC), and sunlight. The primary sources are motor vehicles, organic solvents, pesticides, and industry. The Monterey Bay Air Resources District (MBARD) oversees various air quality regulations and programs.

MBARD Board of Directors adopted the 2012-2015 Air Quality Management Plan in March 2017, which represents the latest edition of the 2012 Triennial Plan, which addresses NOx and reactive organic gasses (ROG) emissions as precursors to ozone. The air quality impact generated by the project is expected to be less than significant, because it will create only occasional vehicle trips.

The revised CEQA Air Quality Guidelines prepared by the Monterey Bay Air Resources District, dated February 2008, stipulate maximum thresholds for air quality as follows:

a) Emit less than 137 lb/day of VOC's or NOx;
b) Directly emit less than 550 lb/day of CO or will not cause a violation of CO ambient air quality standards (AAQS) at existing or reasonably foreseeable receptors;
c) Not significantly impact traffic levels of service or will not cause a violation of CO or contribute 550 lb/day to an existing or projected violation at existing

or reasonably foreseeable receptors;

d) Directly emit less than 82 lb/day of PM10 on-site or will not cause a violation of particulate matter, ten micron diameter (PM10) AAQS or contribute 82 lb/day to an existing or projected violation at existing or reasonably foreseeable receptors;

e) Not indirectly generate PM10 along unpaved roads or will not cause a violation of PM10 AAQS or contribute 82 lb/day to an existing projected violation at existing or reasonably foreseeable receptors;

f) Directly emit less than 150 lb/day of sulfur oxide (SOx) or will not cause a violation of sulfur dioxide (SO2) AAQS at existing or reasonably foreseeable receptors.

The project does not entail construction; therefore, impacts to air quality are not expected to be significant.

(d) Objectionable odors are unlikely to be produced because no odor generating activities occur with the religious assembly use.

Mitigation

No mitigation is required.

Issue	Impact				Source *(Refer to Section 3: Source List)*
	No Impact	Less Than Significant Impact	Potentially Significant Unless Mitigation Incorporated	Potentially Significant Impact	
4. BIOLOGICAL RESOURCES. *Would the proposal result in impacts to:*					A1, A2, A3 A4, A7, M1, N1
(a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and	☒	☐	☐	☐	

Issue	Impact				Source *(Refer to Section 3: Source List)*
	No Impact	Less Than Significant Impact	Potentially Significant Unless Mitigation Incorporated	Potentially Significant Impact	
Wildlife Service?					
(b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or US Fish and Wildlife Service	☒	☐	☐	☐	
(c) Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	☒	☐	☐	☐	
(d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	☒	☐	☐	☐	
(e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	☒	☐	☐	☐	
(f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved	☒	☐	☐	☐	

Issue	Impact				Source (Refer to Section 3: Source List)
	No Impact	Less Than Significant Impact	Potentially Significant Unless Mitigation Incorporated	Potentially Significant Impact	
local, regional, or state habitat conservation plan?					

Discussion

(a-f) The site is located on an in-fill property within the IGC-F (Industrial-General Commercial – Flood Plain Overlay) Zoning District. There is no native flora or fauna on the project site. It is not located within a wetland habitat, riparian woodland or vernal pool, nor is it located near any sensitive habitat areas. It will not conflict with a Habitat Conservation Plan, or other habitat plan.

Mitigation

No mitigation is required.

Issue	Impact				Source (Refer to Section 3: Source List)
	No Impact	Less Than Significant Impact	Potentially Significant Unless Mitigation Incorporated	Potentially Significant Impact	
5. CULTURAL RESOURCES. *Would the proposal:*					A1, A2, A3, Q3
(a) Cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5	☒	☐	☐	☐	
(b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	☐	☐	☒	☐	

Issue	Impact				Source *(Refer to Section 3: Source List)*
	No Impact	Less Than Significant Impact	Potentially Significant Unless Mitigation Incorporated	Potentially Significant Impact	
(c) Disturb any human remains, including those interred outside of formal cemeteries?	☐	☐	☒	☐	

Discussion

(a) The subject site was not included in either of the City of Salinas 1989 or 2016 City Historic and Architectural Surveys.

(b-c) Per Section 5.8 (Cultural Resources) of the Final Environmental Impact Report for the Salinas General Plan (Source A1), little archaeological investigation has occurred in the City of Salinas or in Monterey County. No construction is proposed with this project. However, there is always the potential to encounter subsurface materials during grading and construction. Therefore, pursuant to the Public Resources Code (Section 21083.2), in the event that cultural materials are encountered during grading/construction, all work shall cease until the find has been evaluated and mitigation measures put in place for the disposition and protection of any find. With this requirement, there is little potential for a significant impact on the environment.

On October 12, 2017, pursuant to Public Resources Code Section 21080.3.1, subd. (d), Assembly Bill 52 (AB52), and California Senate Bill 18 (SB18), City of Salinas staff sent via certified mail, a consultation request on the proposed project within 30-days of the date of the letter to all applicable California Native American Tribes whose geographic area of traditional and cultural affiliation lands boundary includes the City of Salinas as specified by the Native American Heritage Foundation.

On December 18, 2017, the Ohlone /Costanoan-Esselen Nation (OCEN) provided a response letter stating concern with the proposed project site and recommending that an OCEN Tribal Monitor be located on-site during construction (see Attachment 7). The proposed project site has previously been disturbed through the grading and construction in connection with the existing building in 1991. While no construction is proposed with this project, mitigation is proposed. Per Mitigation

Measure CU-1 below, pursuant to Public Resources Code (Section 21083.2), in the event that cultural materials are encountered during grading/construction, all work shall cease until the find has been evaluated and mitigation measures put in place for the disposition and protection of any find. With this requirement, there is little potential for a significant impact on the cultural resources and this will address OCEN's comments.

Mitigation

CU-1 In the event that cultural materials are encountered during grading/construction, all work shall cease until the find has been evaluated and mitigation measures put in place for the disposition and protection of any find pursuant to Public Resources Code Section 21083.2.

Issue	Impact				Source *(Refer to Section 3: Source List)*
	No Impact	Less Than Significant Impact	Potentially Significant Unless Mitigation Incorporated	Potentially Significant Impact	
6. ENERGY. *Would the proposal:*					A1, A2, G1
(a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?	☒	☐	☐	☐	
(b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	☒	☐	☐	☐	

Discussion

(a) The project does not involve construction. No permanent, long-term, or substantial energy consumption would occur during or as a result of the project. Therefore, impacts related to wasteful, inefficient, or unnecessary consumption of energy resources would be less than significant.

(b) The City of Salinas is part of Monterey Bay Community Power Authority (MBCP), a regional Community Choice Energy project. MBCP was formed to provide locally-controlled, carbon-free electricity to residents and businesses in

Monterey, San Benito, and Santa Cruz counties (MBCP 2019). The goals of MBCP are to increase utilization of renewable power, create local and sustainable energy sources, and create green jobs.

The project involves a reuse of an existing use located in an existing building. No permanent, long-term, or substantial energy consumption would occur during or as a result of the project. Due to the limited duration and scope of energy-consuming activity, substantial use of energy would not occur. Therefore, the project would not conflict with the goals of MBCP, and impacts would be less than significant.

Mitigation

No mitigation is required.

Issue	Impact				Source *(Refer to Section 3: Source List)*
	No Impact	Less Than Significant Impact	Potentially Significant Unless Mitigation Incorporated	Potentially Significant Impact	
7. GEOLOGY/SOILS. *Would the proposal result in or expose people to potential impacts involving:*					A1, A2, A3, A4, A7, M1, N1
(a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:	☒	☐	☐	☐	
(i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.	☒	☐	☐	☐	

Issue	Impact				Source (Refer to Section 3: Source List)
	No Impact	Less Than Significant Impact	Potentially Significant Unless Mitigation Incorporated	Potentially Significant Impact	
(ii) Strong seismic ground shaking?	☒	☐	☐	☐	
(iii) Seismic-related ground failure, including liquefaction?	☒	☐	☐	☐	
(iv) Landslides?	☒	☐	☐	☐	
(b) Result in substantial soil erosion or the loss of topsoil?	☒	☐	☐	☐	
(c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on-or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	☒	☐	☐	☐	
(d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?	☒	☐	☐	☐	
(e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?	☒	☐	☐	☐	
(f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☒	☐	☐	☐	

Discussion

a (i-iv) All structures located in Salinas are required to be designed to at least Seismic Design Category D in accordance with Section 1613 of the 2010 California Building Code. As shown on the Seismic Hazards Map for the Greater Salinas Planning Area (Figure 5.10-1 of the Salinas General Plan Final EIR), the project site is located within the Moderately High Seismic Hazard Zone. Any future development on the site will be subject to the most recent, adopted edition of the California Building Code as a part of the building permit process to ensure that adequate seismic design is provided.

(b-d) No construction will happen on the project site; therefore, it will not induce substantial changes to the topography or to the soil conditions with a result of excavation or grading. The project site was developed as an Industrial Complex. Any future development would be subject to the most recent version of the California Building Code, and related Codes, as a part of the building permit process to ensure adequate seismic safety. The project site is currently developed and is basically flat.

(e) The subject property is currently served by the City's sewer system. The proposed project would not involve the use of septic systems or alternative waste water disposal systems.

(f) No proposed construction is proposed with this project. No paleontological resources or unique geological features are evident on the subject property. The Monterey County General Plan EIR indicates that fossils are found throughout the County because of widespread distribution of marine deposits. Per Exhibit 4.10.1 of the Monterey County General Plan EIR, no sites of significant scientific value were located in the vicinity of the City of Salinas. However, pursuant to Public Resources Code (Section 21083.2), in the event that cultural materials are encountered during grading/construction, all work shall cease until the find has been evaluated in accordance with Mitigation Measure CU-1. The proposed project is subject to all local, state, and federal laws relative to discovery of paleontological resources during any construction. With this requirement, there is little potential for a significant impact on the environment.

Mitigation

No mitigation is required.

Issue	Impact				Source *(Refer to Section 3: Source List)*
	No Impact	Less Than Significant Impact	Potentially Significant Unless Mitigation Incorporated	Potentially Significant Impact	
8. GREENHOUSE GAS EMISSIONS. *Would the project:*					A1, A2, A3
(a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	☒	☐	☐	☐	
(b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	☒	☐	☐	☐	

Discussion

(a) The proposed project will not generate, either directly or indirectly, greenhouse gas emissions causing a significant impact on the environment.

(b) The proposed project will not conflict with any other applicable plans, policies, or regulations adopted for the purposes of reducing the emissions of greenhouse gases including:

- Assembly Bill 32, which requires the state board to adopt a statewide greenhouse gas emissions limit equivalent to the statewide greenhouse gas emissions levels in 1990 to be achieved by 2020.

- Senate Bill 375, which requires the state board, working in consultation with the metropolitan planning organizations, to provide each affected region with greenhouse gas emission reduction targets for the automobile and light truck sector for 2020 and 2035 by September 30, 2010.

- City of Salinas General Plan 2002, at the time, the issue of greenhouse gas emissions and the need to combat it in general plans had not risen to a critical level of concern. Nevertheless, the City adopted numerous goals and policies with the intent of improving development sustainability. These goals and policies have both direct and indirect benefits in terms of reducing GHG

emissions. Important overall land use/urban design related themes in the General Plan that serve this purpose include:

i. Increasing density and intensity of development to promote more compact development and reuse/revitalization,
ii. Facilitating in-fill development as a means to promote compact development, and
iii. Promoting mixed-use development and a compact city core, emphasizing Traditional Neighborhood Development (TND) design, walkable neighborhoods, and transit-oriented development, especially in new growth areas.

Mitigation

No mitigation is required.

Issue	Impact				Source *(Refer to Section 3: Source List)*
	No Impact	Less Than Significant Impact	Potentially Significant Unless Mitigation Incorporated	Potentially Significant Impact	
9. HAZARDS & HAZARDOUS MATERIALS. *Would the proposal:*					A1, A2, A3, M1, N1
(a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	☒	☐	☐	☐	
(b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	☒	☐	☐	☐	
(c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	☒	☐	☐	☐	

Issue	Impact				Source (Refer to Section 3: Source List)
	No Impact	Less Than Significant Impact	Potentially Significant Unless Mitigation Incorporated	Potentially Significant Impact	
(d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	☒	☐	☐	☐	
(e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?	☒	☐	☐	☐	
(f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	☒	☐	☐	☐	
(g) Expose people or structures, either directly or indirectly to a significant risk of loss, injury or death involving wildland fires?	☒	☐	☐	☐	

(a-b) The project will not create a significant hazard to the public or the environment through the routine transport, use, or disposal of materials. Compliance with local, state, and federal requirements would ensure that the hazards to the public are reduced to a level of insignificance.

(c) The proposed project will not emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an

existing or proposed school. The closest school is Mt. Toro High School (10 Sherwood Dr.), which is approximately 1,484 feet away (measured from parcel to parcel) [(see also above discussion (a-b)].

(d) The site is not known to be included on a list of hazardous materials sites.

(e) The site is not located within an airport land use plan area nor located within the Airport Area of Influence per Figure LU-11 of the Salinas General Plan. The site is located approximately 9,450 feet away (over a mile and half away) miles from the end of the runway (8-26) of the Salinas Municipal Airport and would not create a hazard to persons residing or working in the project area.

(f) The project will not interfere with an adopted emergency response plan or emergency evacuation plan.

(g) The project will not expose people or structures to risk of loss, injury or death involving wildland fires, because the site is an infill property and no wildlands are located nearby.

Mitigation

No mitigation is required.

Issue	Impact				Source *(Refer to Section 3: Source List)*
	No Impact	Less Than Significant Impact	Potentially Significant Unless Mitigation Incorporated	Potentially Significant Impact	
10. HYDROLOGY AND WATER QUALITY. *Would the proposal:*					A1, A2, A3, A4, A7,
(a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?	☒	☐	☐	☐	
(b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede	☒	☐	☐	☐	

Issue	Impact				Source *(Refer to Section 3: Source List)*
	No Impact	Less Than Significant Impact	Potentially Significant Unless Mitigation Incorporated	Potentially Significant Impact	
sustainable groundwater management of the basin?					
(c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or through the addition of impervious surfaces in a manner which would:					
i. result in substantial erosion or siltation on- or off-site;	☒	☐	☐	☐	
ii. substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite:	☒	☐	☐	☐	
iii. create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or	☒	☐	☐	☐	
iv. impede or redirect floor flows?	☒	☐	☐	☐	
(d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?	☒	☐	☐	☐	
(e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater	☒	☐	☐	☐	

Issue	Impact				Source (Refer to Section 3: Source List)
	No Impact	Less Than Significant Impact	Potentially Significant Unless Mitigation Incorporated	Potentially Significant Impact	
management plans?					
(f) With regards to NPDES compliance:					
(i) Potential impact of project construction on storm water runoff?	☒	☐	☐	☐	
(ii) Potential impact of project post-construction activity on storm water runoff?	☒	☐	☐	☐	
(iii) Potential for discharge of storm water from material storage areas, vehicle or equipment fueling, vehicle or equipment maintenance (including washing), waste handling, hazardous materials handling or storage, delivery areas or loading docks, or other outdoor work areas?	☒	☐	☐	☐	
(iv) Potential for discharge of storm water to impair the beneficial uses of the receiving waters or areas that provide water quality benefit?	☒	☐	☐	☐	
(v) Potential for the discharge of storm water to cause significant harm on the biological integrity of the waterways and water bodies?	☒	☐	☐	☐	

Issue	Impact				Source *(Refer to Section 3: Source List)*
	No Impact	Less Than Significant Impact	Potentially Significant Unless Mitigation Incorporated	Potentially Significant Impact	
(vi) Potential for significant changes in the flow velocity or volume of storm water runoff that can cause environmental harm?					
(vii) Potential for significant increases in erosion of the project site or surrounding areas?					
(viii) Could this proposed project result in an increase in pollutant discharges to receiving waters? Consider water quality parameters such as temperature, dissolved oxygen, turbidity, and other typical Stormwater pollutants (e.g., heavy metals, pathogens, petroleum derivatives, synthetic organics, sediment, nutrients, oxygen-demanding substances, and trash).	☒	☐	☐	☐	
(ix) Could the proposed project result in a decrease in treatment and retention capacity for the site's Stormwater run-on?	☒	☐	☐	☐	
(x) Could the proposed project result in significant alteration of					

Issue	Impact				Source *(Refer to Section 3: Source List)*
	No Impact	Less Than Significant Impact	Potentially Significant Unless Mitigation Incorporated	Potentially Significant Impact	
receiving water quality during or following construction?					
(xi) Could the proposed project result in increased impervious surfaces and associated increased urban runoff?	☒	☐	☐	☐	
(xii) Could the proposed project create a significant adverse environmental impact to drainage patterns due to changes in urban runoff flow rates and/or volumes?	☒	☐	☐	☐	
(xiii) Could the proposed project result in increased erosion downstream?	☒	☐	☐	☐	
(xiv) Could the proposed project alter the natural ranges of sediment supply and transport to receiving waters?	☒	☐	☐	☐	
(xv) Is the project tributary to an already impaired water body, as listed on the CWA Section 303(d) list? If so, can it result in an increase in any pollutant for which the water body is already impaired?	☒	☐	☐	☐	
(xvi) Could the proposed project have a potentially significant	☒	☐	☐	☐	

Issue	Impact				Source *(Refer to Section 3: Source List)*
	No Impact	Less Than Significant Impact	Potentially Significant Unless Mitigation Incorporated	Potentially Significant Impact	
environmental impact on surface water quality, to either marine, fresh, or wetland waters?					
(xvii) Could the proposed project result in decreased baseflow quantities to receiving surface waterbodies?	☒	☐	☐	☐	
(xviii) Could the proposed project cause of contribute to an exceedance of applicable surface or groundwater receiving water quality objectives or degradation of beneficial uses?	☒	☐	☐	☐	
	☒	☐	☐	☐	
(xix) Does the proposed project adversely impact the hydrologic or water quality function of the 100-year floodplain area?					
(xx) Does the proposed project site layout adhere to the Permittee's waterbody setback requirements?	☒	☐	☐	☐	
(xxi) Can the proposed project impact aquatic, wetland, or riparian habitat?	☒	☐	☐	☐	

Issue	Impact				Source *(Refer to Section 3: Source List)*
	No Impact	Less Than Significant Impact	Potentially Significant Unless Mitigation Incorporated	Potentially Significant Impact	
	☒	☐	☐	☐	

Discussion

(a) The site is presently developed with an existing building and parking lot and would not create any new impervious surface.

(b) The project does not include any new water connections. Thus, the project would not substantially deplete groundwater supplies and would not interfere substantially with the direction or rate of flow of groundwater.

(c) The project site is basically flat and is currently developed with structures, pavement and associated site improvements. There are no rivers or streams on or near the site.

(d) Although the site is located within a 100-year flood area, the project includes the reuse of an existing building. Inundation by seiche, tsunami, or mudflow is unlikely because the site is located a considerable distance from the ocean and is relatively flat thereby negating a potential mudflow.

(e -f)(i – xxi) (see "a" above)

Mitigation

No mitigation is required.

Issue	Impact				Source *(Refer to Section 3: Source List)*
	No Impact	Less Than Significant Impact	Potentially Significant Unless Mitigation Incorporated	Potentially Significant Impact	
11. LAND USE AND PLANNING. *Would the proposal:*					A1, A2, A3 M1, N1
(a) Physically divide an established community?	☒	☐	☐	☐	
(b) Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?	☒	☐	☐	☐	

Discussion

(a) The project does not have the potential to disrupt or divide the physical arrangement of the community. Existing and planned adjacent uses will not be disrupted or divided as a result of the project.

(b) The proposed project includes a General Plan Amendment from General Commercial/Light Industrial to Arterial Frontage and Rezone from Industrial-General Commercial to Mixed Arterial Frontage (MAF). In the MAF Zoning District, a religious assembly use may be considered subject to a Conditional Use Permit. The proposed use would be consistent with the proposed MAF District regulations; therefore, significant environmental impacts are not expected.

Mitigation

No mitigation is required.

Issue	Impact				Source (Refer to Section 3: Source List)
	No Impact	Less Than Significant Impact	Potentially Significant Unless Mitigation Incorporated	Potentially Significant Impact	
12. MINERAL RESOURCES. *Would the proposal:*					A1, A2, A3
(a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	☒	☐	☐	☐	
(b) Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?	☒	☐	☐	☐	

Discussion

(a-b) The project will not result in the loss of availability of a known mineral resource that would be of value to the region or the residents of the state.

Mitigation

No mitigation is required.

Issue	Impact				Source (Refer to Section 3: Source List)
	No Impact	Less Than Significant Impact	Potentially Significant Unless Mitigation Incorporated	Potentially Significant Impact	
13. NOISE. *Would the proposal result in:*					A1, A2, A3, M1
(a) Generation of a substantial temporary or permanent increase in ambient noise	☒	☐	☐	☐	

Issue	Impact				Source *(Refer to Section 3: Source List)*
	No Impact	Less Than Significant Impact	Potentially Significant Unless Mitigation Incorporated	Potentially Significant Impact	
levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?					
(b) Generation of excessive groundborne vibration or groundborne noise levels?	☒	☐	☐	☐	
(c) For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	☒	☐	☐	☐	

Discussion

(a) No substantial permanent, or temporary or periodic, increases in the ambient noise level are expected with the project. According to the General Plan Master Environmental Assessment Section 9.2, ambient noise is defined as the "all encompassing noise associated with a given environment, being a composite of sounds from many sources, near and far."

(b) The site is located within the 60 CNEL contour as shown on *Figure 5.3-1 Noise Contours (CNEL)* of the Salinas General Plan, Final Environmental Impact Report, 2002. The Future Noise Contours as shown on Figure 5.3-4 of the Salinas General Plan, Final Environmental Impact Report, 2002, shows the project site as located within the 70 CNEL contour. Traffic generates the main source of noise for the depicted 70 CNEL contour.

Groundborne vibration or groundborne noise levels generated by any future

proposed uses on the project site are not expected to be excessive. The Zoning Code Standards regarding noise are expected to reduce noise impacts to a level of insignificance.

(c) The site is located approximately 1.86 miles from the Salinas Municipal Airport and is located within the 55 CNEL contour as shown on *Figure 5.3-2: Salinas Airport Future Noise Contours)* of the Salinas General Plan, Final Environmental Impact Report, 2002. Noise impacts from airport operations will not have an adverse impact on the site.

Mitigation

No mitigation is required.

Issue	Impact				Source *(Refer to Section 3: Source List)*
	No Impact	Less Than Significant Impact	Potentially Significant Unless Mitigation Incorporated	Potentially Significant Impact	
14. POPULATION AND HOUSING. *Would the proposal:*					
(a) Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly *(for example, through extension of roads or other infrastructure)*?	☒	☐	☐	☐	A1, A2, A3, M1, N1
(b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?	☒	☐	☐	☐	

Discussion

(a-b) The proposed project does not include a residential component. It will not induce substantial growth, and it will not displace housing units or people. The subject site is an existing developed in-fill site.

Mitigation

No mitigation is required.

Issue	Impact				Source (Refer to Section 3: Source List)
	No Impact	Less Than Significant Impact	Potentially Significant Unless Mitigation Incorporated	Potentially Significant Impact	
15. PUBLIC SERVICES. *Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:*					A1, A2, A3, M1, N1
(a) Fire protection?	☒	☐	☐	☐	
(b) Police protection?	☒	☐	☐	☐	
(c) Schools?	☒	☐	☐	☐	
(d) Parks?	☒	☐	☐	☐	
(e) Other public facilities?	☒	☐	☐	☐	

Discussion

(a-e) The site is located on an in-fill site presently developed as a theater with a nonconforming Religious Assembly use. Police and Fire services are currently available to serve the site. No schoolchildren will be generated by the project. East Market Street and Simas Street have been designed and constructed to accommodate the demands of this project. No other government services are expected to be impacted by the project.

Mitigation

No mitigation is required.

Issue	Impact				Source (Refer to Section 3: Source List)
	No Impact	Less Than Significant Impact	Potentially Significant Unless Mitigation Incorporated	Potentially Significant Impact	
16. RECREATION. *Would the proposal:*					A1, A2, A3, M1, N1
(a) Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	☒	☐	☐	☐	
(b) Include recreational facilities or require the construction or expansion of recreational facilities, which might have an adverse physical effect on the environment?	☒	☐	☐	☐	

Discussion

(a-b) The proposed project will not increase the use in park facilities because it does not include residential development. The proposed project does not include recreational facilities.

Mitigation

No mitigation is required.

Issue	Impact				Source (Refer to Section 3: Source List)
	No Impact	Less Than Significant Impact	Potentially Significant Unless Mitigation Incorporated	Potentially Significant Impact	
17. TRANSPORTATION. *Would the project:*					A1, A2 A3, A4, A7, M1, N1
(a) Conflict with a program plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?	☒	☐	☐	☐	
(b) Would the project conflict or be inconsistent with CEQA Guidelines Section 15064.3, Subdivision (b)?	☒	☐	☐	☐	
(c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	☒	☐	☐	☐	
(d) Result in inadequate emergency access?	☒	☐	☐	☐	

Discussion

(a-b) The proposed project is not expected to generate significant traffic trips. Any future development is required to pay all applicable traffic impact fees as determined by the City Engineer at the time of building permit issuance. Payment of traffic fees will ensure that potential traffic impacts are reduced to a level of insignificance.

The proposed project will not result in substantial impacts resulting from increased trip generation. The proposed project will not exceed 2,500 Average Daily Trips (ADT) and is not subject to the Vehicle Trip Reduction provisions of the Salinas Zoning Code (Section 37-50.330).

(c-d) The project will not substantially increase hazards due to design features or incompatible uses. The proposal will not result in inadequate emergency access.

Mitigation

No mitigation is required.

Issue	Impact				Source (Refer to Section 3: Source List)
	No Impact	Less Than Significant Impact	Potentially Significant Unless Mitigation Incorporated	Potentially Significant Impact	
18. TRIBAL CULTURAL RESOURCES. *Would the project:*					A5, A6, Q3
(a) Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a Californian Native American tribe, and that is:					
i. Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code Section 5020.1(k); or	☒	☐	☐	☐	
ii. A resource determined by the Lead Agency, in its discretion and supported by substantial evidence,	☐	☒	☐	☐	

Issue	Impact				Source (Refer to Section 3: Source List)
	No Impact	Less Than Significant Impact	Potentially Significant Unless Mitigation Incorporated	Potentially Significant Impact	
to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1 In applying the criteria set forth in Subdivision (c) of Public Resource Code 5024.1, the Lead Agency shall consider the significance of the resource to a California Native American tribe.					

(a)(i) The subject site was not included in either of the City of Salinas 1989 or 2016 City Historic and Architectural Surveys. Furthermore, the building is less than 50 years old.

(a)(ii) Per Section 5.8 (Cultural Resources) of the Final Environmental Impact Report for the Salinas General Plan (Source A1), little archaeological investigation has occurred in the City of Salinas or in Monterey County. However, there is always the potential to encounter subsurface materials during grading and construction. Therefore, pursuant to the Public Resources Code (Section 21083.2), in the event that cultural materials are encountered during grading/construction, all work shall cease until the find has been evaluated and mitigation measures put in place for the disposition and protection of any find. With this requirement, there is little potential for a significant impact on the environment.

On October 12, 2017, pursuant to Public Resources Code Section 21080.3.1, subd. (d), Assembly Bill 52 (AB52), and California Senate Bill 18 (SB18), City of Salinas staff sent via certified mail, a consultation request regarding the proposed project. Within 30-days of the date of the letter to all applicable California Native American Tribes whose geographic area of traditional and cultural affiliation lands boundary includes the City of Salinas as specified by the Native American Heritage Foundation.

On December 18, 2017, the Ohlone /Costanoan-Esselen Nation (OCEN) provided a response letter stating concern with the proposed project site and recommending that an OCEN Tribal Monitor be located on-site during construction (see Attachment 7). The proposed project site has previously been disturbed through the grading and construction in connection with the existing building in 1991. While no construction is proposed with this project, mitigation is proposed. Per Mitigation Measure TCR-1 below, pursuant to Public Resources Code (Section 21083.2), in the event that cultural materials are encountered during grading/construction, all work shall cease until the find has been evaluated and mitigation measures put in place for the disposition and protection of any find. With this requirement, there is little potential for a significant impact on the cultural resources and this will address OCEN's comments.

Mitigation

TCR-1 In the event that cultural materials are encountered during grading/construction, all work shall cease until the find has been evaluated and mitigation measures put in place for the disposition and protection of any find pursuant to Public Resources Code Section 21083.2.

Issue	Impact				Source *(Refer to Section 3: Source List)*
	No Impact	Less Than Significant Impact	Potentially Significant Unless Mitigation Incorporated	Potentially Significant Impact	
19. UTILITIES & SERVICE SYSTEMS. *Would the project:*					A1, A2, A3, A7, M1
(a) Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effect?	☒	☐	☐	☐	
(b) Have sufficient water supplies available to serve	☒	☐	☐	☐	

Issue	Impact				Source (Refer to Section 3: Source List)
	No Impact	Less Than Significant Impact	Potentially Significant Unless Mitigation Incorporated	Potentially Significant Impact	
the project and reasonably foreseeable future development during normal, dry, and multiple dry years?		☐	☐	☐	
(c) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has the adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	☒	☐	☐	☐	
(d) Generate solid waste in excess of State or Local standards, or in excess of the capacity of local infrastructure, or otherwise impact the attainment of solid waste reduction goals?	☒	☐	☐	☐	
(e) Comply with federal, state, and local management and reduction statues and regulations related to solid waste?	☒				

Discussion

(a) The project does not include construction.

(b-c) No construction is proposed; therefore, the project does not include new water connections. The religious assembly use is not a heavy water user. Furthermore, it will not discharge significant quantities of water into the wastewater treatment plant (also see Hydrology and Water Quality above).

(d-e) The project will not generate significant solid waste because there are no products produced. Disposal of waste generated by the project is not expected to be significant and it will be required to comply with federal, state, and local reduction statutes related to solid waste.

Mitigation

No mitigation is required.

Issue	Impact				Source *(Refer to Section 3: Source List)*
	No Impact	Less Than Significant Impact	Potentially Significant Unless Mitigation Incorporated	Potentially Significant Impact	
20. WILDFIRE. *If located in or near State responsibility areas or lands classified as very high fire hazard severity zones, would the project:*					A1, A2, M1, N1
(a) Substantially impair an adopted emergency response plan or emergency evacuation plan?	☒	☐	☐	☐	
(b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?	☒	☐	☐	☐	
(c) Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines, or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?	☒	☐	☐	☐	
(d) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?	☒	☐	☐	☐	

Discussion

(a-d) The City of Salinas is not located in or near State responsible areas or lands classified at very high fire hazard severity zones.

Mitigation

No mitigation is required.

Mandatory Findings of Significance	No Impact	Less Than Significant Impact	Potentially Significant Unless Mitigated	Potentially Significant Impact
1. Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	☒	☐	☐	☐
2. Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)? *("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects).*	☒	☐	☐	☐
3. Does the project have environmental effects, which will cause substantial adverse effects on human beings, either directly or indirectly?	☒	☐	☐	☐

3. SOURCE LIST

Source	Source Number
City of Salinas:	
Salinas General Plan, 2002.	A1
Salinas General Plan, Final Environmental Impact Report, 2002.	A2
Salinas Zoning Code: ☒ *Entire Code Section:* _____	A3
City of Salinas Stormwater Ordinance, dated March 2013	A4
1989 City Historical and Architectural Survey	A5
2016 City Historical and Architectural Survey	A6
Engineer's Report for proposed project, dated May 15, 2018	A7
Monterey Bay Air Resources District:	
CEQA Air Quality Guidelines prepared by the Monterey Bay Air Resources District, dated February 2008	F1
Monterey Bay Air Resources District. 2012-105 Air Quality Management Plan, dated March 2017	F2
Monterey Bay Community Power Authority:	
Monterey Bay Community Power Authority Implementation Plan, August 2017	G1
Field Inspections:	
By City staff, various dates	M1
Maps/Aerial Photography:	
City's aerial photographs, 2007.	N1
Other:	
Native American Heritage Commission	Q3

4. DETERMINATION

On the basis of this Initial Study:

☐ I find that the proposed project ***COULD NOT*** have a significant effect on the environment, and a ***NEGATIVE DECLARATION*** will be prepared.

☒ I find that although the proposed project could have a significant effect on the environment, there ***WILL NOT*** be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A ***MITIGATED NEGATIVE DECLARATION*** will be prepared.

☐ I find that the proposed project ***MAY*** have a significant effect on the environment, and an ***ENVIRONMENTAL IMPACT REPORT*** is required.

☐ I find that the proposed project ***MAY*** have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect:

(a) Has been adequately analyzed in *(Reference document)* pursuant to applicable legal standards; and

(b) Has been addressed by mitigation measures based on the earlier analysis as described in *Section 2: Checklist*, if the effect is a "Potentially Significant Impact" or a Negative Declaration: "Potentially Significant Unless Mitigation Incorporated".

An ***ENVIRONMENTAL IMPACT REPORT*** is required, but it must analyze only the effects that remain to be addressed.

☐ I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects:

(a) Have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and;

(b) Have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project.

NOTHING FURTHER IS REQUIRED.

Prepared by: _____ Dated: _____

Courtney Grossman
Planning Manager

Attachments:

1. Vicinity Map
2. Engineer's Report, dated May 15, 2018
3. Existing Site Plan with Proposed General Plan Amendment and Rezone
4. Existing Floor Plan (Sheet A101)
5. Revised Floor Plan for Sanctuary (Sheet A101B)
6. Mitigation Monitoring and Reporting Program
7. Letter from Ohlone/Costanoan-Esselen Nation (OCEN), dated December 17, 2018

North

Vicinity Map

GPA 2017-002, RZ 2017-001, and CUP 2017-019 10 Simas Street

Exhibit A

\\SalSvr44\DeptPvt\ComDev\robertl\Documents\10 Simas Street\ER 2017-003\GPA 2017-002, RZ 2017-001, CUP 2017-019 Vicinity Map.doc

CITY OF SALINAS

DEVELOPMENT ENGINEERING, *A division of the Public Works Department*
65 West Alisal Street | Salinas, CA 93901 | 831-758-7251 | *www.ci.salinas.ca.us*

ENGINEER'S REPORT

PURPOSE: CUP2017-019 **DATE:** 5/15/2018
LOCATION: 10 Simas St **PLANNER:** Bobby Latino
OWNER/APPLICANT: Simas-East Markert LLC/SyWest Development

DEVELOPMENT PROPOSAL: A proposal to establish religious assembly at old movie theater.

RECOMMENDATION: Approve with Conditions
SWDS THRESHOLD: N/A

DEVELOPMENT REVIEW: *Development Review Submittal prepared by JWF Architecture and BKF, dated 11/16/2017.*

CONDITION OF APPROVAL

1. FEMA Compliance – Applicant shall provide documentation for cost of all improvements that converted the use of the facility along with an appraisal indicating the market value the structure.
2. Fees – Based on CUP1987-028, the existing theater had 1200 seats. Trips associated with the theater use exceeds the proposed religious use. Therefore, no traffic impact fees are assessed for this change in land use.

Notice: The Conditions of Approval for this Site Plan Review include certain fees and development requirements. Pursuant to Government Code Section 66020 (d)(1), this hereby constitutes written notice stating the amount of said fees, and describing the development requirements. The applicant is hereby notified that the 90-day appeal period in which he/she/they may protest these fees and development requirements, pursuant to Government Code Section 66020 (a), begins on the date the office land use permit is approved. If applicant files a written protest within this 90-day period complying with all requirements of Section 66020, he/she/they will be legally barred from challenging such fees and/or requirements at a later date.

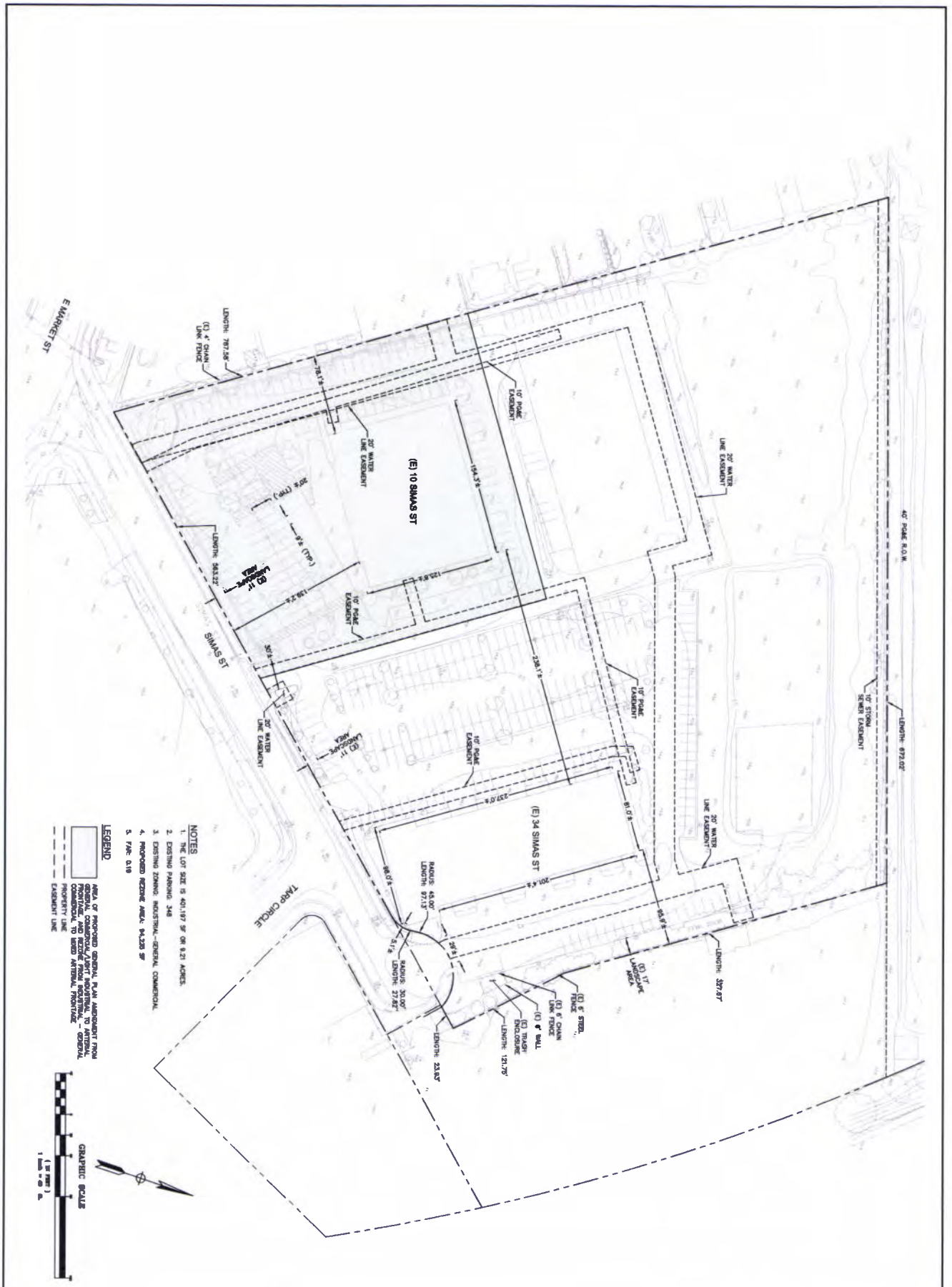
CITY OF SALINAS
Reviewed By:

Report Prepared By/Applicant Questions

Adriana Robles 5/15/2018 (adrianar@ci.salinas.ca.us)

Adriana Robles, P.E. **Dated**
Permit Center Senior Engineer (758-7194)
for **Jim Sandoval, P.E.**
City Engineer

DRAWING NAME: P:\2017\171012_SyWest_Salinas_Rezoning\ENG\ZONING\SIMAS\SHEETS\01_SS_SITE-PLAN.dwg
PLOT DATE: 11-16-17 PLOTTED BY: phle



NOTES

1. THE LOT SIZE IS 401,197 SF OR 9.21 ACRES.
2. EXISTING PARKING: 348
3. EXISTING ZONING: INDUSTRIAL--GENERAL COMMERCIAL
4. PROPOSED REZONE AREA: 94,320 SF
5. FAR: 0.19

LEGEND

AREA OF PROPOSED GENERAL PLAN AMENDMENT FROM INDUSTRIAL TO COMMERCIAL AND REZONE FROM INDUSTRIAL - GENERAL COMMERCIAL TO MIXED ARTERIAL FRONTAGE

PROPERTY LINE

EASEMENT LINE

GRAPHIC SCALE

(IN FEET)
1 inch = 40 ft.

Drawing Number:	Date	11/16/2017	No.	Revisions
1 of 1	Scale	1"=40'		
	Design	AP		
	Drawn	AP		
	Approved	KW		
	Job No	20171012		

EXISTING SITE PLAN
10 SIMAS STREET
PROPERTY REZONING

CITY OF SALINAS COUNTY OF MONTEREY STATE OF CALIFORNIA

BkF 100 YEARS
ENGINEERS . SURVEYORS . PLANNERS
300 FRANK OGAWA PLAZA, SUITE 380
OAKLAND, CA 94612
(510) 899-7300
www.bkf.com

© BKF Engineers

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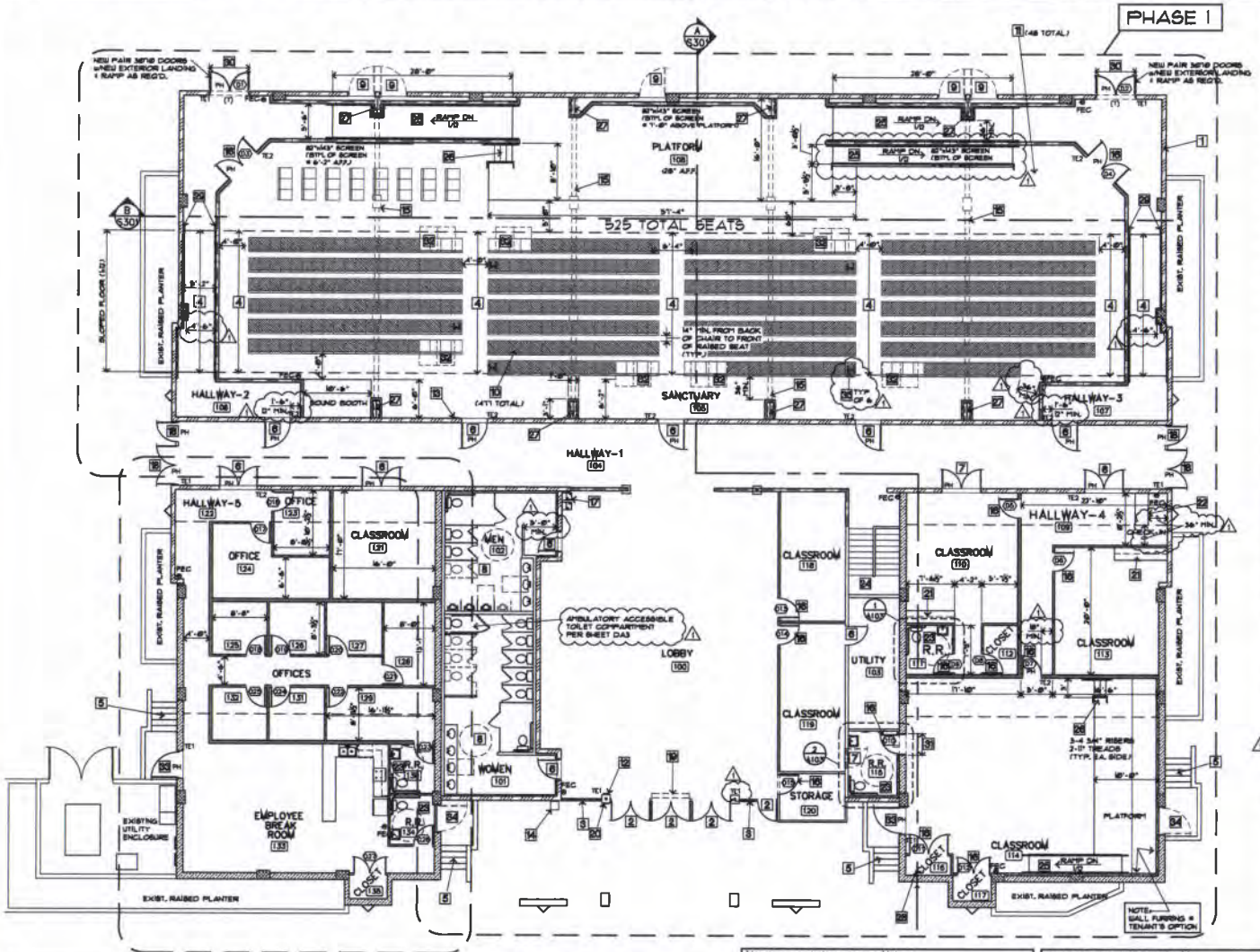

PHASE 2

NOTE:
NO CHANGE PROPOSED TO THIS AREA AS PART OF PHASE 1 CONSTRUCTION
- FUTURE IMPROVEMENTS SHOWN FOR REFERENCE ONLY

LEGEND

- (X) KEY NOTE
- (X) DOOR DESIGNATION (REFER TO SHEET A301)
- XXX ROOM DESIGNATION
- PH INDICATES PANIC HARDWARE REQUIRED -MOUNT BETWEEN 30 INCHES & 44 INCHES A.F.F.
- TE1 INDICATES TACTILE "EXIT" SIGN
- TE2 INDICATES TACTILE "EXIT ROUTE" SIGN -REFER TO SIGNAGE DETAILS ON SHEET DA2
- (T) INDICATES EXTERIOR ALUMINUM THRESHOLD PER DETAIL 5/A301
- FEC INDICATES NEW TYPE 2A-10BC FIRE EXTINGUISHERS PLACED NOT TO EXCEED 75 FEET OF TRAVEL FROM ANY POINT IN THE BUILDING AND NOT HIGHER THAN 80 INCHES ABOVE THE FLOOR.

HANDICAP ACCESSIBILITY DETAIL REFERENCES

REFER TO SHEET DA1 FOR:
A) SIGNAGE REQUIREMENTS FOR BRAILLE, HEARING IMPAIRED & BUILDING ENTRANCE
B) STAIRWAY ACCESSIBILITY (NOT STRUCTURAL REQ'TS.)
C) RAMP SLOPE & HANDRAIL REQUIREMENTS
D) CURB RAMPS

REFER TO SHEET DA2 FOR:
A) SIGNAGE REQUIREMENTS FOR BRAILLE, HEARING IMPAIRED & BUILDING ENTRANCE
B) MINIMUM CLEAR FLOOR SPACE FOR WHEELCHAIRS
C) SPACE ALLOWANCE & REACH RANGE ALONG AN ACCESSIBLE ROUTE
D) CLEARANCES AROUND OBJECTS PROTRUDING FROM WALLS ALONG AN ACCESSIBLE ROUTE

REFER TO SHEET DA3 FOR:
A) MULTIPLE ACCOMMODATION RESTROOMS & TOILET STALLS
B) SINGLE ACCOMMODATION RESTROOM CLEARANCES
C) PLUMBING FIXTURE CLEARANCES
D) PUBLIC RESTROOM DOOR SIGNAGE
E) CONTROLS, SWITCHES & OUTLET MOUNTING HEIGHT
F) TOILET ACCESSORY MOUNTING HEIGHT
G) HANDRAIL AND GRAB BAR MOUNTING HEIGHTS

MOVABLE SEATING REQUIREMENTS

CLEAR WIDTH BETWEEN CHAIRS PER CALIFORNIA FIRE CODE SECTION 2501.10.1
"WHEN SEATING ROWS HAVE 14 OR LESS SEATS, THE MINIMUM CLEAR WIDTH BETWEEN ROWS SHALL NOT BE LESS THAN 12 INCHES MEASURED AS THE CLEAR HORIZONTAL DISTANCE FROM THE BACK OF THE ROW AHEAD AND THE NEAREST PROJECTION OF THE ROW BEHIND."

CLEAR WIDTH BETWEEN CHAIRS PER CALIFORNIA FIRE CODE SECTION 2501.10.1
"FOR ROWS OF SEATING SERVED BY AISLES OR DOORWAYS AT BOTH ENDS, ... THE MINIMUM CLEAR WIDTH OF 12 INCHES BETWEEN ROWS SHALL BE INCREASED BY 0.3 INCH FOR EVERY ADDITIONAL SEAT BEYOND 14."
- ALL OTHER ROWS REQUIRE MIN 12" CLR. SPACE

BONDING OF CHAIRS PER CALIFORNIA FIRE CODE SECTION 2501.10.3
"LOOSE CHAIRS THAT ARE NOT FIXED TO THE FLOOR SHALL BE BONDED TOGETHER IN GROUPS OF 3 OR MORE."
EXCEPTIONS:
1. WHEN NOT MORE THAN 200 SEATS ARE PROVIDED, BONDING IS NOT REQUIRED.
2. THE BONDING OF CHAIRS IS NOT REQUIRED WHEN TABLES ARE PROVIDED, AND WHEN THE OCCUPANCY IS LIMITED TO FIXED DINING OR SIMILAR PURPOSES.

READILY REMOVABLE SEATS WHERE SHOWN, SHALL NOT BE FIXED TO THE GROUND IN ORDER TO ALLOW REMOVAL TO ACCOMMODATE FOR WHEELCHAIR USERS.

ASSISTIVE LISTENING SYSTEM

AN ASSISTIVE LISTENING SYSTEM IS REQUIRED FOR THE SANCTUARY AREA OF THIS TENANT.
- PROVIDE RECEIVERS FOR A MINIMUM OF 4% OF TOTAL SEATING (21 REQUIRED)
- SYSTEM MUST BE IN PLACE AND OPERATIONAL AT TIME OF FINAL INSPECTION
- REFER TO SHEET DA3 FOR REQUIRED SIGNAGE

FLOOR PLAN KEYNOTES

No.	Description
1	Existing concrete masonry exterior wall (No Change)
2	Existing storefront entry door to remain (No Change)
3	Existing storefront glazing to remain (No Change)
4	Existing sloped floor (1:12 max slope) to remain (No Change)
5	Existing steps to be filled-in with concrete -- Refer to Structural Drawings for detailed requirements
6	Existing interior door to remain (No Change)
7	Existing interior door to remain as exit only (No handles on pull-side of door)
8	Existing multi-accomodation restrooms with new fixtures -- Refer to Plumbing Drawings for detailed requirements
9	Existing exterior door to be permanently locked.
10	Shading indicates new fixed chair layout (Self-rising seats) -- Re-use existing chairs where possible
11	New movable seating / Refer to spacing requirements this sheet
12	Occupancy capacity sign stating "MAXIMUM BUILDING OCCUPANCY 1176"
13	Occupancy capacity sign stating "MAXIMUM OCCUPANCY THIS ROOM 728"
14	Fire Department approved Key Box. (See General Notes / Sheet T51)
15	Existing CMU wall and pilaster to be removed -- Refer to Structural Drawings
16	New interior door (Solid Core) / Match existing -- Refer to Door Schedule, Sheet A301
17	New HI/Lo wall mounted drinking fountains -- Refer to Plumbing Drawings
18	Existing exterior hollow metal door to remain (No Change)
19	New sign over door 5/7" high letters stating: "THIS DOOR TO REMAIN UNLOCKED WHENEVER THE BUILDING IS OCCUPIED"
20	6" x 8" Square International Symbol of Accessibility at primary entrance. -- mount @ 60" o.c.l to c/l
21	New base & upper cabinets -- Refer to detail 6/A301
22	New Base Cabinet & Counter -- Refer to detail 6/A301
23	New Single-Accomodation restroom -- Refer to enlarged plan on sheet A102
24	Existing stairs to 2nd floor storage mezzanine -- No Change
25	New ramp to Platform / 1:12 max slope w/handrails each side -- Refer to details on Sheets DA2 & S402
26	New stairs to platform / 7" Risers (Max) & 11" Treads (Min) w/handrails each side of stairs / Refer to details on Sheets DA2 & S402
27	New steel frame column -- Refer to structural drawings
28	Location of existing fire sprinkler riser -- No Change
29	Provide handrails each side of ramp -- Refer to details on Sheets DA2 & DA3
30	New 5'-4" Wide x 7'-2" High opening in existing CMU wall -- Refer to detail 8/S401
31	New 3'-4" Wide x 7'-2" High opening in existing CMU wall -- Refer to detail 8/S401
32	48"x66" Clear floor space of wheelchair seating (7 locations provided) -- Readily removable seats may be provided in these locations when such spaces are not required to accommodate wheelchair users. (CBC Section 11048.5.7)
33	Existing hollow metal door to be removed & re-installed at interior finished floor elevation -- Cut existing wall and provide new opening so that door may be re-installed at new interior finished floor height -- Refer to detail 13/S402
34	Existing hollow metal door to be removed & re-installed at interior finished floor elevation -- Cut existing wall and provide new opening so that door may be re-installed at new interior finished floor height -- Door to be welded shut from inside -- Refer to detail 13/S402
35	"H" indicates glass wall with no vision mark on clear glass -- Each wall shall be identified by sign or marker with International Symbol of Accessibility

WALL LEGEND

- NEW INTERIOR BEARING WALL: 2x4 O.F., @ STUDS @ 16" O.C. TO 8'-0". WITH 5/8" GYPSUM BOARD EACH SIDE. - USE MOISTURE RESISTANT GYP BD @ TOILET ROOMS. - REFER TO DETAILS 13/S402 & 14/S402.
- NEW INTERIOR NON-BEARING WALL: 2x4 O.F., STUDS @ 24" O.C. TO 8'-0", WITH 5/8" GYPSUM BOARD EACH SIDE. - USE MOISTURE RESISTANT GYP BD @ TOILET ROOMS. - REFER TO DETAIL 14/S402 & SHEET S101 FOR TYPICAL DETAILS
- NEW INTERIOR NON-BEARING WALL: 2x4 O.F., STUDS @ 16" O.C. TO 8'-0", WITH 5/8" GYPSUM BOARD EACH SIDE. - USE MOISTURE RESISTANT GYP BD @ TOILET ROOMS. - REFER TO DETAIL 14/S402 & SHEET S101 FOR TYPICAL DETAILS
- NEW INTERIOR WALL FURRING: 2 1/2" x 25 GA. METAL STUDS @ 24" O.C. ATTACHED TO EXIST. CMU WALL - FINISH WITH 5/8" GYPSUM BOARD - REFER TO DETAIL 5/S101
- Existing Interior Non-Bearing Wall: 3x STUDS AT 16" O.C.
- Existing Exterior/Interior Masonry Wall: 8" CONCRETE MASONRY UNITS.
- Existing Exterior Masonry Wall: 12" CONCRETE MASONRY UNITS.
- Existing Masonry Pilaster: 16"x24" CONCRETE MASONRY PILASTER

ARCHITECTURE
10 Whatney Plaza Email, #104
Fresno, CA 93720
(559) 448-8520
FAX, (866) 302-2735
EMAIL: jonframe@sbcglobal.net

REVISIONS	DATE	DESCRIPTION
	7/13/06	BUILDING DEPT. P.C.
	7/24/06	PLANNING REVISIONS
	8/09/06	BUILDING DEPT. P.C.

BUILDING RENOVATION FOR: celebrationchurch.cc, 10 MARKET STREET, SALINAS, CA 93901

Drawing Title: FLOOR PLAN

Scale: 1/8"=1'-0"

69,497.76

LICENSED ARCHITECT, JON FRAME, C-27352, REN. 1-31-11, STATE OF CALIFORNIA

SHEET #: A101

G:\ARCHDESK\CEL CHURCH-SALINAS\CC5-A101-FIXED SEATING.DWG

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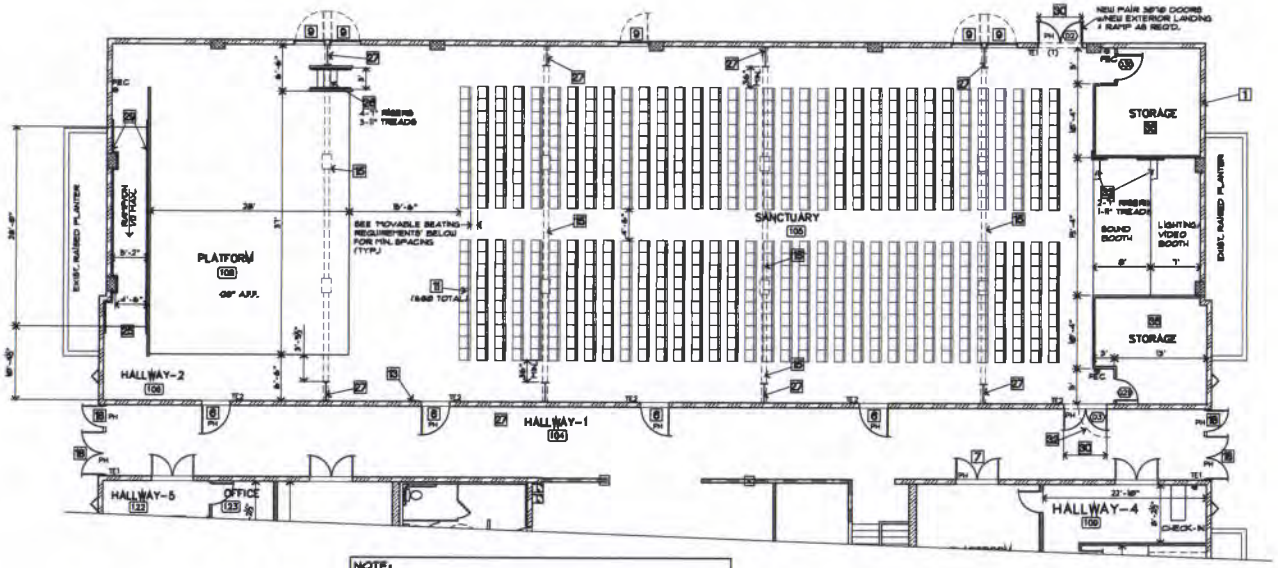

NOTE:
THIS REVISION APPLIES TO WORSHIP AREA ONLY
- REFER TO SHEET A101 FOR ALL OTHER REQUIREMENTS

FLOOR PLAN KEYNOTES

No.	Description
1	Existing concrete masonry exterior wall (No Change)
2	Existing storefront entry door to remain (No Change)
3	Existing storefront glazing to remain (No Change)
4	--- NOT USED -----
5	Existing steps to be filled-in with concrete – Refer to Structural Drawings for detailed requirements
6	Existing interior door to remain (No Change)
7	Existing interior door to remain as exit only (No hardare on pull-side of door)
8	Existing multi-accomodation restrooms with new fixtures – Refer to Plumbing Drawings for detailed requirements
9	Existing exterior door to be permanently locked.
10	--- NOT USED -----
11	New movable seating / Refer to spacing requirements this sheet
12	Occupancy capacity sign stating "MAXIMUM BUILDING OCCUPANCY 1343"
13	Occupancy capacity sign stating "MAXIMUM OCCUPANCY THIS ROOM 838"
14	Fire Department approved Key Box. (See General Notes / Sheet T01)
15	Existing CMU wall and plaster to be removed – Refer to Structural Drawings
16	New interior door (Solid Core) / Match existing – Refer to Door Schedule, Sheet A301
17	New Hi/Low wall mounted drinking fountains – Refer to Plumbing Drawings
18	Existing exterior hollow metal door to remain (No Change)
19	New sign over door 6/1" high letters stating: "THIS DOOR TO REMAIN UNLOCKED WHENEVER THE BUILDING IS OCCUPIED"
20	8" x 8" Square International Symbol of Accessibility at primary entrance. – mount @ 60" a.f.f. to c/l
21	New base & upper cabinets – Refer to detail 6/A301
22	New Base Cabinet & Counter – Refer to detail 8/A301
23	New Single-Accomodation restroom – Refer to enlarged plan on sheet A102
24	Existing stairs to 2nd floor storage mezzanine – No Change
25	New ramp to Platform / 1:12 max slope w/handrails each side – Refer to details on Sheets DA2 & S402
26	New stairs to platform / 7" Risers (Max) & 11" Treads (Min) w/handrails each side of stairs / Refer to details on Sheets DA2 & S402
27	New steel frame column – Refer to structural drawings
28	Location of existing fire sprinkler riser – No Change
29	Provide handrails each side of ramp – Refer to details on Sheets DA2 & DA3
30	New 6'-4" Wide x 7'-2" High opening in existing CMU wall – Refer to detail 8/S401
31	New 3'-4" Wide x 7'-2" High opening in existing CMU wall – Refer to detail 8/S401
32	New stairs to sound/lighting booth / 7" Risers (Max) & 11" Treads (Min) w/handrail on one side of stairs / Refer to details on Sheets DA2 & S402
33	Existing hollow metal door to be removed & re-installed at interior finished floor elevation – Cut existing wall and provide new opening so that door may be re-installed at new interior finished floor height – Refer to detail 13/S402
34	Existing hollow metal door to be removed & re-installed at interior finished floor elevation – Cut existing wall and provide new opening so that door may be re-installed at new interior finished floor height – Door to be vended vinyl from inside – Refer to detail 13/S402
35	TENANT'S OPTION: – Provide 2X8 ceiling joists @ 24" o.c. 5/8"/8" gyp. bd. ceiling – Joists shall run in the shortest possible direction – Finished ceiling height to be determined – Refer to detail 8/S101

WALL LEGEND

NEW INTERIOR BEARING WALL
2x4 S.F. @ STUDS @ 16" O.C. TO 8'-0".
WITH 5/8" GYPSUM BOARD EACH SIDE
- USE MOISTURE RESISTANT GYP BD @ TOILET ROOMS.
- REFER TO DETAILS 13/S402 & 14/S402.

NEW INTERIOR NON-BEARING WALL
2x4 S.F. STUDS @ 24" O.C. TO 8'-0",
WITH 5/8" GYPSUM BOARD EACH SIDE
- USE MOISTURE RESISTANT GYP BD @ TOILET ROOMS.
- REFER TO DETAIL 14/S402 & SHEET S101 FOR TYPICAL DETAILS

NEW INTERIOR NON-BEARING WALL
2x4 S.F. STUDS @ 16" O.C. TO 8'-0",
WITH 5/8" GYPSUM BOARD EACH SIDE
- USE MOISTURE RESISTANT GYP BD @ TOILET ROOMS.
- REFER TO DETAIL 14/S402 & SHEET S101 FOR TYPICAL DETAILS

NEW INTERIOR WALL FURRING
2" FURR @ 25 GA. METAL STUDS @ 24" O.C. ATTACHED TO EXIST. CMU WALL
- FINISH WITH WITH 5/8" GYPSUM BOARD
- REFER TO DETAIL 9/S101

Existing Interior Non-Bearing Wall
2x STUDS AT 16" O.C.

Existing Exterior Bearing Masonry Wall
8" CONCRETE MASONRY UNITS.

Existing Exterior Masonry Wall
12" CONCRETE MASONRY UNITS.

Existing Masonry Planter
16"x24" CONCRETE MASONRY PLANTER

LEGEND

X	KEY NOTE
(X)	DOOR DESIGNATION (REFER TO SHEET A301)
XXX	ROOM DESIGNATION
PH	INDICATES PANIC HARDWARE REQUIRED –MOUNT BETWEEN 30 INCHES & 44 INCHES A.F.F.
TE1 TE2	INDICATES TACTILE "EXIT" SIGN INDICATES TACTILE "EXIT ROUTE" SIGN –REFER TO SIGNAGE DETAILS ON SHEET DA2
(T)	INDICATES EXTERIOR ALUMINUM THRESHOLD PER DETAIL 2/A301
FEC	INDICATES NEW TYPE 2A-10BC FIRE EXTINGUISHERS PLACED NOT TO EXCEED 75 FEET OF TRAVEL FROM ANY POINT IN THE BUILDING AND NOT HIGHER THAN 60 INCHES ABOVE THE FLOOR.

HANDICAP ACCESSIBILITY DETAIL REFERENCES

REFER TO SHEET DA1 FOR:
A) MANEUVERING CLEARANCES AT DOORS
B) MINIMUM CLEAR FLOOR SPACE FOR WHEELCHAIRS
C) SPACE ALLOWANCE & REACH RANGE ALONG AN ACCESSIBLE ROUTE
D) CLEARANCES AROUND OBJECTS PROTRUDING FROM WALLS ALONG AN ACCESSIBLE ROUTE

REFER TO SHEET DA2 FOR:
A) SIGNAGE REQUIREMENTS FOR BRAILLE, HEARING IMPAIRED & BUILDING ENTRANCE
B) STAIRWAY ACCESSIBILITY (NOT STRUCTURAL REQ'TS.)
C) RAMP SLOPE & HANDRAIL REQUIREMENTS
D) CURB RAMPS

REFER TO SHEET DA3 FOR:
A) MULTIPLE ACCOMODATION RESTROOMS & TOILET STALLS
B) SINGLE ACCOMODATION RESTROOM CLEARANCES
C) PLUMBING FIXTURE CLEARANCES.
D) PUBLIC RESTROOM DOOR SIGNAGE
E) CONTROLS, SWITCHES & OUTLET MOUNTING HEIGHT
F) TOILET ACCESSORY MOUNTING HEIGHT
G) HANDRAIL AND GRAB BAR MOUNTING REQ'TS.

MOVABLE SEATING REQUIREMENTS

CLEAR WIDTH BETWEEN CHAIRS PER CALIFORNIA FIRE CODE SECTION 2501.10.1
"WHEN SEATING ROWS HAVE 14 OR LESS SEATS, THE MINIMUM CLEAR WIDTH BETWEEN ROWS SHALL NOT BE LESS THAN 12 INCHES MEASURED AS THE CLEAR HORIZONTAL DISTANCE FROM THE BACK OF THE ROW AHEAD AND THE NEAREST PROJECTION OF THE ROW BEHIND."

CLEAR WIDTH BETWEEN CHAIRS PER CALIFORNIA FIRE CODE SECTION 2501.10.1
"FOR ROWS OF SEATING SERVED BY AISLES OR DOORWAYS AT BOTH ENDS..... THE MINIMUM CLEAR WIDTH OF 12 INCHES BETWEEN ROWS SHALL BE INCREASED BY 0.3 INCH FOR EVERY ADDITIONAL SEAT BEYOND 14."
- ALL OTHER ROWS REQUIRE MIN 12" CLR. SPACE

BONDING OF CHAIRS PER CALIFORNIA FIRE CODE SECTION 2501.10.3
"LOOSE CHAIRS THAT ARE NOT FIXED TO THE FLOOR SHALL BE BONDED TOGETHER IN GROUPS OF 3 OR MORE."
EXCEPTIONS
1. WHEN NOT MORE THAN 300 SEATS ARE PROVIDED, BONDING IS NOT REQUIRED.
2. THE BONDING OF CHAIRS IS NOT REQUIRED WHEN TABLES ARE PROVIDED, AS WHEN THE OCCUPANCY IS USED FOR DINING OR SIMILAR PURPOSES.

READILY REMOVABLE SEATS WHERE SHOWN, SHALL NOT BE FIXED TO THE GROUND IN ORDER TO ALLOW REMOVAL TO ACCOMMODATE FOR WHEELCHAIR USERS.

ASSISTIVE LISTENING SYSTEM

AN ASSISTIVE LISTENING SYSTEM IS REQUIRED FOR THE SANCTUARY AREA OF THIS TENANT.
- PROVIDE RECEIVERS FOR A MINIMUM OF 4% OF TOTAL SEATING (27 REQUIRED)
- SYSTEM MUST BE IN PLACE AND OPERATIONAL AT TIME OF FINAL INSPECTION
- REFER TO SHEET DA3 FOR REQUIRED SIGNAGE

JON FRAME ARCHITECTURE
10 Whitworth Place East, #104
Fresno, CA 93720
(559) 435-8330
FAX: (559) 302-2728
EMAIL: jon@jonframearchitect.com

symbols	date	comments
	7/12/10	BUILDING DEPT. P.C.
	7/12/10	TENANT'S REVISIONS
	8/26/10	BUILDING DEPT. P.C.
	10/19/10	TENANT'S REVISIONS
	2/22/11	FIELD CONDITION REVISIONS

BUILDING RENOVATION FOR:
celebrationchurch.cc
TO: 4665 E STREET
SELMA, CA 93662

Drawing title
ALTERNATE FLOOR PLAN

N

Scale: 1/8"=1'-0"

07/22/11

LICENSED ARCHITECT
JON FRAME
C-27352
REN. 8-31-12
STATE OF CALIFORNIA

SHEET #
A101B

G:\PROJECTS\CEL CHURCH-SELMA\CD'S-A10'S - TURNED AUG\TENANT.DWG

GENERAL PLAN AMENDMENT 2017-002 (GPA 2017-002) FROM GENERAL COMMERCIAL/LIGHT INDUSTRIAL TO ARTERIAL FRONTAGE; AND REZONE 2017-001 (RZ 2017-001) FORM INDUSTRIAL-GENERAL COMMERCIAL TO MIXED ARTERIAL FRONTAGE; CONDITIONAL USE PERMIT (CUP 2017-019) TO ESTABLISH AND OPERATE RELIGIOUS ASSEMBLY USE
MITIGATION MONITORING AND REPORTING PROGRAM
10 SIMAS STREET

Mitigation Number	Nature of Mitigation	Result after Mitigation	Party Responsible for Implementing	Party Responsible for Monitoring: Method to Confirm Implementation	Timing for Implementation
CU-1	In the event that cultural materials are encountered during grading/construction, all work shall cease until the find has been evaluated and mitigation measures put in place for the disposition and protection of any find pursuant to Public Resources Code Section 21083.2.	To ensure compliance with Public Resources Code Section 21083.2	Applicant, or Successor in Interest	Community Development Department, Current Planning	During grading/ construction activities
TCR-1	In the event that cultural materials are encountered during grading/construction, all work shall cease until the find has been evaluated and mitigation measures put in place for the disposition and protection of any find pursuant to Public Resources Code Section 21083.2.	To ensure compliance with Public Resources Code Section 21083.2	Applicant, or Successor in Interest	Community Development Department, Current Planning	During grading/ construction activities

Ohlone/Costanoan-Esselen Nation

Previously acknowledged as
The San Carlos Band of
Mission Indians
The Monterey Band
And also known as
O.C.E.N. or Esselen Nation
P.O. Box 1301
Monterey, CA 93942

www.ohlonecostanoanesselennation.org.

December 18, 2017

Bobby Latino
Associate Planner
City of Salinas Community Development Department
65 West Alisal Street
Salinas, CA 93901

Re: 295 Sun Way Project and 10 Simas Street, Salinas, CA - General Plan Amendments– As stated
General Plan Amendment
AB52 and SB18 – 90 Days consultation period

Saleki Atsa,

Ohlone/Costanoan-Esselen Nation is an historically documented previously recognized tribe. OCEN is the legal tribal government representative for over 600 enrolled members of Esselen, Carmeleno, Monterey Band, Rumsen, Chalon, Soledad Mission, San Carlos Mission and/or Costanoan Mission Indian descent of Monterey County. Though other indigenous people may have lived in the area, the area is the indigenous homeland of our people. Included with this letter please find a territorial map by Taylor 1856; Levy 1973; and Milliken 1990, indentifying Tribal areas.

Ohlone/Costanoan-Esselen Nation objects to all excavation in known cultural lands, even when they are described as previously disturbed, and of no significant archaeological value. Please be advised that it is our first priority that our ancestor's remains be protected and undisturbed. We desire that all sacred burial items be left with our ancestors on site or as culturally determined by OCEN. All cultural items returned to Ohlone/Costanoan-Esselen Nation. We ask for the respect that is afforded all of our current day deceased, by no other word these burial sites are cemeteries, respect for our ancestors as you would expect respect for your deceased family members in today's cemeteries. **Our definition of respect is no disturbance.**

OCEN's Tribal leadership desires to be provided with:

Archaeological reports/surveys, including subsurface testing, and presence/absence testing.
OCEN request to be included in mitigation and recovery programs,
Reburial of any of our ancestral remains,
Placement of all cultural items, and that
A Native American Monitor of Ohlone/Costanoan-Esselen Nation, approved by the OCEN Tribal Council is used within our aboriginal territory.
Cultural and Tribal sections to reflect Tribal request.

Projects affecting the General Plan allow for 90 days response according to SB18. We ask that a sacred lands search with the Northwest Information Center, Sonoma State University and the Native American Heritage Commission. Please feel free to contact me at (408) 629-5189. Nimasianexelpasaleki. Thank you

Sincerely and Respectfully Yours,

Louise J. Miranda Ramirez, Chairperson
Ohlone/Costanoan-Esselen Nation
(408) 629-5189
Cc: OCEN Tribal Council

File #: ID#19-606, Version: 1

Ordinance Regarding Commercial Cannabis Business License Tax Rates

Adopt an Ordinance amending Salinas Municipal Code (SMC) Sec. 19A.10.070 repealing the scheduled automatic business license tax increase for Commercial Cannabis Businesses.

CITY OF SALINAS
COUNCIL STAFF REPORT

DATE: **NOVEMBER 19, 2019**

DEPARTMENT: **FINANCE DEPARTMENT**

FROM: **MATT N. PRESSEY, CPA, FINANCE DIRECTOR**

BY: **KELLY MILLER, PLANNING CONSULTANT (RINCON CONSULTANTS)**

TITLE: **ORDINANCE REGARDING COMMERCIAL CANNABIS BUSINESS LICENSE TAX RATES**

RECOMMENDED MOTION:

A motion to adopt an ordinance amending Salinas Municipal Code (SMC) Sec. 19A.10.070 repealing the scheduled automatic business license tax increase for commercial cannabis businesses (CCBs).

RECOMMENDATION:

Staff recommends that the City Council adopt an ordinance amending Salinas Municipal Code (SMC) Sec. 19A.10.070 repealing the scheduled automatic business license tax increase for CCB.

EXECUTIVE SUMMARY:

The current tax rate for CCB is scheduled to automatically increase on January 1, 2019. Staff is requesting the City Council repeal the scheduled tax increase because it may jeopardize what the City currently receives.

DISCUSSION:

Current and Scheduled Tax Rates for Commercial Cannabis Businesses

The City of Salinas collects a business license tax from the City's permitted CCBs. The following CCB types are taxed: cultivation, dispensary, delivery, and manufacturing.

Tax rates on CCBs were approved by Salinas Voters via Measure L on November 8, 2016. A "NO" vote was a vote against imposing a business tax on commercial cannabis businesses. A "YES" vote was a vote for establishing initial tax rates along with a scheduled increase after three years. Measure L passed with 74.18 percent "YES" votes. The measure was codified as Chapter 19A of the Salinas Municipal Code.

Pursuant to Section 19A.10.070, the City's current cannabis business tax rates are as follows:

Cultivation:	$15 per square foot of canopy area
Dispensary/ Delivery/ Manufacturing:	5% of gross receipts

The code has a scheduled automatically increase, which would be applied beginning January 1, 2020 and would establish the following increased rates:

Cultivation:	$25 per square foot of canopy area, then automatically adjusted, and adjusted annually, based on the Consumer Price Index
Dispensary/ Delivery/ Manufacturing:	10% of gross receipts

Considerations Regarding the Scheduled Tax Rate Increase

The commercial cannabis industry has grown steadily but slowly in Salinas throughout the past several years. Taxes and other industry-specific expenses are obstacles to entry and sustainability for prospective and operational CCB permit-holders. Industry-specific taxes and expenses for CCBs in Salinas include the following:

- 15% State excise tax
- State license fee (varies)
- Local taxes (described above)
- Application fee for a new permit: $3,144.75
- Annual permit renewal fee: $1,443.25
- Annual monitoring fees: between $16,000 and $27,000 (varies based on business type)

The expenses listed above are unique to the cannabis industry and are in addition to the normal expenses that any business faces, as well as other unique expenses such as the high level of product monitoring and security that is required of CCBs.

Staff has observed that the financial and regulatory challenges for CCBs have delayed the ability of some permitted businesses to commence commercial operations, and have challenged the ability of operational businesses to maintain viability. Furthermore, it is generally believed that throughout California the expenses associated with operating a legally compliant CCB have resulted in high product prices, which in turn sustains the illegal/black market despite the maturation of the legal adult-use (recreational) market.

While a substantial amount of regulatory expenses and taxes is inherent in the commercial cannabis industry, reasonable limits to these expenses should be maintained. Therefore, a repeal of the scheduled tax increase should be considered. As described below under Fiscal and Sustainability Impact, substantial tax revenue is already being collected at the current rates,

whereas a rate increase could potentially result in tax revenue reduction if some businesses are no longer able to remain compliant and profitable.

There is local precedent for adjusting tax rates to reduce the financial burden on CCBs. On July 24, 2018, Monterey County reduced the rate on cannabis cultivation per square foot of canopy area from $15 to $5 (for greenhouse grows) or $8 (for indoor grows). Scheduled rate increases will reach a maximum of $15 per square foot of canopy area. The County's rates for other cannabis business types currently range from three percent to four and a half percent, with scheduled incremental increases.

CEQA CONSIDERATION:

The proposed actions are not projects as defined by the California Environmental Quality Act (CEQA) (CEQA Guidelines section 15378).

DEPARTMENT COORDINATION:

The Finance Department coordinated with the Community Development Department and the City Attorney's Office on this report and recommendation.

STRATEGIC PLAN INITIATIVE:

The Commercial Cannabis pertains to the following City Council goals: 1: Economic Diversity and Prosperity; Goal 2: Safe, Livable Community; and Goal 3: Effective, Sustainable Government.

FISCAL AND SUSTAINABILITY IMPACT:

The table below shows tax revenue collected during 2018 and the first two quarters of 2019. Total revenue for 2019 is projected by doubling revenue collected during Quarter 1 (Q1) and Q2.

Commercial Cannabis Business Tax Collected 2018-19

Q1 2018	Q2 2018	Q3 2018	Q4 2018	Q1 2019	Q2 2019
120,736.87	143,838.70	328,894.12	276,979.18	332,421.50	352,270.40

2018 Total Tax Revenue: $870,448.87

2019 Projected Total Tax Revenue: $1,369,383.80

Taxes collected to date are all from dispensary, delivery, and manufacturing businesses, at the current rate of five percent of gross receipts[1]. Based on the total projected tax revenue for 2019, the scheduled rate increase (to ten percent) would collect an additional $1.3 million annually.

[1] Permits for cultivation have been issued but no cultivation business has commenced business operations as of the writing of this report

However, as described above, the rate increase could also have a reverse effect by impacting the viability of some operational businesses, and by preventing new applicants from pursuing business or successfully opening for business in the City. If the tax increase resulted in the closure of businesses that are paying the current rates, the rate increase could result in a net loss of tax revenue.

Salinas Municipal Code Description of Cannabis Tax Authority

City Council is authorized to amend or repeal the City's cannabis business tax. City Council may also, later, restore the rate of tax to any level not exceeding that described in Section 19A of the Salinas Municipal Code. Amendment and repeal of the City's cannabis business tax is governed by Section 19A.10.330, as follows:

> This chapter may be repealed or amended by the City Council without a vote of the people. However, as required by Chapter XIIIC of the California Constitution, voter approval is required for any amendment provision that would increase the rate of any tax levied pursuant to this chapter. The voters of the city affirm that the following actions shall not constitute an increase of the rate of a tax:
>
> a) The restoration of the rate of the tax to a rate that is no higher than that set by this chapter, if the City Council has acted to reduce the rate of the tax;
>
> b) An action that interprets or clarifies the methodology of the tax, or any definition applicable to the tax, so long as interpretation or clarification (even if contrary to some prior interpretation or clarification) is not consistent with the language of this chapter;
>
> c) The establishment of a class or person that is exempt or excepted from the tax or the discontinuation of any such exemption or exception (other than the discontinuation of an exemption or exception specifically set forth in this chapter); or
>
> d) The collection of the tax imposed by this chapter, even if the city had, for some period, failed to collect the tax.

ATTACHMENTS:

1. Ordinance

ORDINANCE NO. _____ (N.C.S.)

AN ORDINANCE AMENDING THE MUNICIPAL CODE REGARDING THE COLLECTION OF ASSESSMENTS FOR THE SALINAS UNITED BUSINESS ASSOCIATION (SUBA) BUSINESS IMPROVEMENT AREA

BE IT ORDAINED BY THE COUNCIL OF SALINAS as follows:

SECTION 1. Section 19A.10.070 of the Salinas Municipal Code is hereby amended as follows:

"19A.10.070. Amount of cannabis business tax owed.

(a) Every person whether it is a "not for profit", "a nonprofit" or a "non-profit organization" as defined in this section, or a for-profit entity who is engaged in a Commercial Cannabis Cultivation business in the city shall pay an annual cannabis business tax on medical marijuana and non-medical marijuana where it is permissible by both state and local law. The tax shall be set at a rate of fifteen dollars per square foot of canopy space utilized in connection with cultivation of marijuana. The tax rate may be increased by Resolution of the City Council up to twenty- five dollars per square foot. Beginning on January 1, 2021, and each succeeding year thereafter, the amount of each tax imposed by this section may be adjusted by Resolution of the City Council up to the equivalent to the most recent change in the annual average of the Consumer Price Index ("CPI") for all urban consumers in the San Francisco-Oakland-San Jose areas as published by the United States Government Bureau of Labor Statistics; however, no such adjustment shall decrease any tax imposed by this section.

The tax set forth in this subsection shall be applicable to all portions of a cultivation operation except nursery operations. Every person whether it is a "not for profit" or a "non-profit organization" as defined in this section, or a for-profit entity who is engaged in a commercial cannabis business in the city that is dedicated exclusively to a nursery operation shall pay an annual cannabis business tax on medical marijuana and non-medical marijuana, where it is permissible by both state and local law. Nursery operations shall be taxed at the rate of two dollars per square foot of canopy space utilized in connection with cultivation of marijuana. The tax rate may be increased by Resolution of the City Council up to five dollars per square foot. Beginning on January 1, 2021, and each succeeding year thereafter, the amount of each tax imposed by this section may be adjusted by Resolution of the City Council up to the equivalent to the most recent change in the annual average of the Consumer Price Index ("CPI") for all urban consumers in the San Francisco-Oakland-San Jose areas as published by the United States Government Bureau of Labor Statistics; however, no such adjustment shall decrease any tax imposed by this section. The city must be notified immediately if any portion designated as a nursery is converted to another use. If a subsequent inspection by the city or its representatives discovers that an area designated as nursery is in fact being used for other cultivation purposes, the cultivation business shall be responsible to pay the tax rates described in this section back to the previous city inspection, including any penalties and interest.

(b) Every person whether it is a "not for profit", "a nonprofit" or a non-profit organization" as defined in this section, or a for-profit entity who is engaged in business as a dispensary, delivery

service, or manufacturer of commercial Cannabis in the city shall pay an annual cannabis business tax on medical marijuana and non-medical marijuana where permissible by both state and local law. The tax shall be set at five percent of the gross receipts annually. The tax rate may be increased by Resolution of the City Council up to ten percent of the annual gross receipts."

SECTION 2. Severability. If any section, subsection, sentence, clause, or phrase of this ordinance is for any reason held to be invalid or unconstitutional by a decision of any court of any competent jurisdiction, such decision shall not affect the validity of the remaining portions of this ordinance. The Salinas City Council hereby declares that it would have passed this ordinance, and each and every section, subsection, clause, and phase thereof not declared invalid or unconstitutional without regard to whether any portion of the ordinance would be subsequently declared invalid or unconstitutional.

SECTION 4. Effective Date. This Ordinance will take effect thirty (30) days from and after its adoption.

SECTION 4. California Environmental Quality Act. This ordinance is categorically exempt from the California Environmental Quality Act (CEQA) pursuant to Guidelines section 15061(b)(3). This exemption is allowed when the activity, in this case the recommendation of adoption of the ordinance, does not have the potential for causing a significant effect on the environment.

PASSED AND ADOPTED this _____ day of _____, 2019, by the following vote:

AYES:

NOES:

ABSENT:

ABSTAIN:

APPROVED:

_____
Joe Gunter, Mayor

ATTEST:

_____

Patricia M. Barajas, City Clerk

APPROVED AS TO FORM:

_____

Christopher A. Callihan, City Attorney

File #: ID#19-613, Version: 1

West Area Park Impact Fee Update

Approve a Resolution to update the development impact fees related to the development of parks within the proposed West Area Specific Plan Project.

CITY OF SALINAS
COUNCIL STAFF REPORT

DATE: **NOVEMBER 19, 2019**

DEPARTMENT: **FINANCE**

FROM: **MATT N. PRESSEY, CPA, FINANCE DIRECTOR**

TITLE: **PARK IMPACT FEE UPDATE**

RECOMMENDED MOTION:

A motion to approve a resolution to update the park impact fee schedule.

RECOMMENDATION:

Staff recommends that the City Council approve the resolution to update the park impact fee schedule.

EXECUTIVE SUMMARY:

As part of the North of Boronda Future Growth Area development, an update to the park fee was needed to ensure that enough funds would be collected to fund the necessary parks to meet the City's current park standards. The City hired Willdan to conduct a park impact fee update study. The study results in an updated schedule of park impact fees. One of the park fees is unique to the West Area Specific Plan (WASP). The WASP developers assisted with the development of this unique fee in the park fee schedule. To stay on schedule with the approval of the WASP and a development agreement with the WASP developers, staff is brining the unique WASP park fee (referred to as the West Area Park Impact Fee or WAPIF) forward as an update to the park fee schedule. The remaining park fees updated from the study will come back at a future City Council meeting for consideration.

BACKGROUND:

On December 5, 2018, the City released a request for proposal (RFP) for a park impact fee nexus study update. The City received 5 responses to the RFP. A review committee ranked Willdan as the top firm. The scope of the study included updating the City's park fee including coming up with a unique park fees for the WASP, Central Area Specific Plan (CASP), and City-wide.

DISCUSSION:

California Government Code Sections 66000-66008, also known as the Mitigation Fee Act, provides local jurisdictions the authority to impose fees as a condition of approval of a

development project to defray all or a portion of the cost of public facilities related to the project. The Mitigation Fee Act broadly defines public facilities to include public improvements, public services, and community amenities. Although not specifically addressed in the Act, other provisions of the Government Code prohibit the use of impact fees for maintenance or operating costs. The Act also contains specific requirements for establishing, increasing, and imposing impact fees, as well as for the collection and expenditure of those fees, and required annual reporting and periodic re-evaluation of the fee program.

Attached to this staff report is the park impact fee update study report. The fee for the WASP will only be charged to the WASP developers and is projected to be sufficient to cover the costs of all the parks planned for the WASP in accordance with the City's current park standards that were updated in the last year.

CEQA CONSIDERATION:

The proposed actions are not projects as defined by the California Environmental Quality Act (CEQA) (CEQA Guidelines section 15378).

STRATEGIC PLAN INITIATIVE:

The updated park fee will impact all five of the City Council's goals:

1. Economic Diversity and Prosperity
2. Safe, Livable Community
3. Effective, Sustainable Government
4. Well-planned City and excellent infrastructure
5. Quality of Life

DEPARTMENTAL COORDINATION:

The Finance Department worked close with the Library and Community Services, Public Works, City Attorney and the Community Development Department.

FISCAL AND SUSTAINABILITY IMPACT:

There is no fiscal impact related to this item at this time. The park fee schedule is updated by adding the unique WASP fee:

Park Impact Fee Summary Table

Land Use	WASP*
Single Family	$10,280
Multifamily	$ 8,751

*Park fee unique to the West Area Specific Plan (WASP)

ATTACHMENTS:

1. Resolution
2. Willdan's Park Facilities Development Impact Fee Update Study

RESOLUTION NO. _____ (N.C.S.)

A RESOLUTION UPDATING THE PARK IMPACT FEE SCHEDULE

WHEREAS, California Government Code §§ 66000-66008, also known as the Mitigation Fee Act, provide local jurisdictions the authority to impose fees to defray all or part of the cost of public facilities related to new development; and

WHEREAS, the City of Salinas desires to recover the costs of park land and facilities necessary to maintain established City service standards for new development within the City; and

WHEREAS, the City of Salinas completed a Park Facilities Development Impact Fee Update Study dated November 5, 2019 establishing the findings and nexus required to support such fees pursuant to the Mitigation Fee Act; and

WHEREAS, a park impact fee unique to the West Area Specific Plan (WASP) of the North of Boronda Future Growth Area [the West Area Park Impact Fee (WAPIF)] will fund park improvements within the West Area Specific Plan. The fee was developed with the assistance of West Area Specific Plan developers in order to meet their park facilities dedication requirements and to facilitate the credits and reimbursements between developers within the West Area Specific Plan; and

WHEREAS, the City of Salinas has adopted and codified Ordinance Number 1847 (N.C.S.) establishing a park development impact fee Chapter 9, Article V of the Salinas Municipal Code; and

WHEREAS, the WAPIF is consistent with and within the scope of Ordinance Number 1847.

NOW, THEREFORE BE IT RESOLVED by the Salinas City Council that the park impact fees are hereby updated to include the WAPIF according to the schedule shown below.

Park Impact Fee Summary Table	
Land Use	**WASP***
Single Family	$10,280
Multifamily	$ 8,751
*Park fee unique to the West Area Specific Plan (WASP)	

PASSED AND ADOPTED this 19th day of November 2019 by the following vote:

AYES:

NOES:

ABSENT:

ABSTAIN:

APPROVED:

_____
Joe Gunter, Mayor

ATTEST:

_____
Patricia M. Barajas, City Clerk

CITY OF SALINAS

PARK FACILITIES DEVELOPMENT IMPACT FEE UPDATE STUDY

ADMINISTRATIVE DRAFT

NOVEMBER 5, 2019

DRAFT

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Orlando, FL
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Seattle, WA

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1. Introduction

This report summarizes an analysis of the need for public facilities and capital improvements to support future development within the City of Salinas through 2040. It is the City's intent that the costs representing future development's share of these facilities and improvements be imposed on that development in the form of a development impact fee, also known as a public facilities fee. The public facilities and improvements included in this analysis of the City's public facilities fee program all fall into the park facilities category.

Background and Study Objectives

The primary policy objective of a public facilities fee program is to ensure that new development pays the capital costs associated with growth. To fulfill this objective, public agencies should review and update their fee programs periodically to incorporate the best available information. The primary purpose of this report is to create fees that incorporate current capital facility plans to serve a 2040 service population for the City of Salinas.

The City currently collects park facilities fees under the Quimby Act for development within its boundaries. This report will update the City's Quimby fees and propose two new impact fees to fund park facilities within the West Area and Central Area Specific Plans.

The City imposes public facilities fees under authority granted by the *Mitigation Fee Act*, contained in *California Government Code* Sections 66000 *et seq*. This report provides the necessary findings required by the *Act* for adoption of the fees presented in the fee schedules contained herein.

Depending on the characteristics of the development project, the City may use the Quimby Act to calculate impact fees. The Quimby Act allows a city to require developers to dedicate at least three acres and up to five acres per 1,000 residents, if the city's existing park standard as of the last Census justifies the higher level.

Public Facilities Financing in California

The changing fiscal landscape in California during the past 40 years has steadily undercut the financial capacity of local governments to fund infrastructure. Three dominant trends stand out:

- The passage of a string of tax limitation measures, starting with Proposition 13 in 1978 and continuing through the passage of Proposition 218 in 1996;
- Declining popular support for bond measures to finance infrastructure for the next generation of residents and businesses; and
- Steep reductions in federal and state assistance.

Faced with these trends, many cities and counties have had to adopt a policy of "growth pays its own way." This policy shifts the burden of funding infrastructure expansion from existing taxpayers onto new development. This funding shift has been accomplished primarily through the imposition of assessments, special taxes, and development impact fees also known as public facilities fees. Assessments and special taxes require approval of property owners and are appropriate when the funded facilities are directly related to the developing property. Development fees, on the other hand, are an appropriate funding source for facilities that benefit all development jurisdiction-wide. Development fees need only a majority vote of the legislative body for adoption.

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Organization of the Report

The determination of a public facilities fee begins with the selection of a planning horizon and development of projections for population and employment. These projections are used throughout the analysis of different facility categories and are summarized in Chapter 2.

Chapter 3 is devoted to documenting the maximum justified public facilities fee for park facilities.

Chapter 4 documents park impact fees for the West Area Specific Plan area.

Chapter 5 documents park impact fees for the Central Area Specific Plan area.

Chapter 6 describes the fee implementation process. The five statutory findings required for adoption of the proposed public facilities fees in accordance with the *Mitigation Fee Act* (codified in *California Government Code* Sections 66000 through 66025) are summarized in Chapter 7.

Facility Standards and Cost Allocation Approach

A facility standard is a policy that indicates the amount of facilities required to accommodate service demand. Examples of facility standards include building square feet per capita and park acres per capita. Standards also may be expressed in monetary terms such as the value of facilities per capita, or the value of improvements per acre or per capita. The adopted facility standard is a critical component in determining development's need for new facilities and the amount of the fee. Standards determine new development's fair share of planned facilities and ensure that new development does not fund deficiencies associated with the existing city infrastructure.

The park facilities fees calculated in this report use an existing inventory demand standard translated into facility costs per capita to determine new development's fair share of planned facility costs. A cost standard provides a reasonable method for converting disparate types of facilities, in this case parkland and special use recreational facilities, into a single measure of demand (capital cost per capita). The citywide fee cost standard is based on the **existing inventory** of park facilities. New development would fund the expansion of facilities at the same rate that existing development has provided facilities to date, thus by definition, there is no existing deficiency. Fees for the specific plan areas are based on achieving a 3.0-acre per 1,000 resident standard consistent with the minimum Quimby Act standard.

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2. Land Use Assumptions

This chapter describes the projections of growth used in this study. The existing service population in 2019 is used as the base year of the study and the planning horizon is the year 2040. This chapter also describes the sources of the unit costs for land and buildings used in this study.

Use of Growth Projections for Impact Fees

Estimates of the existing service population and projections of growth are critical assumptions used throughout this report. These estimates are used as follows:

- Estimates of total development in 2040 are used to determine the total amount of public facilities required to accommodate the future service population.
- Estimates of existing and new development are used to allocate the fair share of total planned facility costs between existing and new development.

Land Use Types

To ensure a reasonable relationship between each fee and the type of development paying the fee, growth projections distinguish between different land use types. The land use types used in this analysis are defined below.

- **Single-family:** Detached and attached one-family dwelling units.
- **Multi-family:** All attached multi-family dwellings such as duplexes, condominiums, plus mobile homes, apartments, and dormitories.

The City should have the discretion to impose the park facilities fee based on the specific aspects of a proposed development regardless of zoning. The guideline to use is the probable occupant density of the development. The fee imposed should be based on the land use type that most closely matches the probable occupant density of the development.

Growth Projections for City of Salinas

Park and recreation facilities in Salinas primarily serve residents in the City of Salinas. Therefore, residents comprise the park and recreation facilities service population.

The base year for this study is the year 2019. The planning horizon is 2040. Resident growth between 2019 and 2040 comprises the growth increment in this analysis. The City's population in 2010 is used to calculate the parkland standard under the *Quimby Act.* The AMBAG 2018 Regional Growth Forecast identified total projected residents in the City in 2040.

Table 2.1 shows estimates of the growth in terms of residents between 2019 and 2040. The table also shows the City's population in 2010.

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Table 2.1: Citywide Parks Service Population

	Residents
Census (2010)	150,441
Existing (2019)	160,555
Growth (2019 - 2040)	24,044
Total (2040)	184,599

Sources: US Census, 2010; CA Department of Finance, Table E-5, 2019; AMBAG 2018 Regional Growth Forecast.

Occupant Densities

Occupant densities ensure a reasonable relationship between the increase in service population and amount of the fee. Developers pay the fee based on the number of additional housing units for residential development. The fee schedule must convert service population estimates into these measures of housing units. This conversion is done with average occupant density factors by land use type, shown in **Table 2.2**. The residential occupant density factors for both the various types of dwelling units were derived from the most recently available data from US Census' American Community Survey.

Table 2.2: Occupant Density

All Dwelling Units Citywide	3.67	Residents Per Dwelling Unit
Single Family	3.90	Residents Per Dwelling Unit
Multifamily	3.32	Residents Per Dwelling Unit

Sources: U.S. Census Bureau, 2013-2017 American Community Survey 5-Year Estimates, Tables B25024 and B25033.

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3. Parks & Recreation Facilities

The following chapter documents the nexus analysis, demonstrating the need for new park and recreation facilities demanded by new development. This analysis documents two separate fees based on the Quimby Act and the Mitigation Fee Act. The City would collect the fee based a standard of 3.0 acres per 1,000 residents if the development was subject to the Quimby Act land dedication requirement. For all other development, the City would collect based on the existing standard through the Mitigation Fee Act. The City would only collect one of the two fees depending on which was appropriate. Fees for the West Area Specific Plan and the Central Area Specific Plan are calculated in Chapters 4 and 5.

Existing Park and Recreation Facilities Inventory

The City of Salinas maintains several park and recreation facilities throughout the city. **Table 3.1** summarizes the City's existing parkland inventory. All facilities are located within the City limits. The inventory distinguishes between developed and unimproved parkland. Developed parkland includes parks that are open for public use with typical park amenities. Undeveloped parkland represents land that the City owns but does not yet include any improvements or amenities.

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Table 3.1: Existing Parkland Inventory

Park Name	Improved Park Acres	Unimproved Park Acres	Total
Community Parks			
Cesar Chavez Community Park	28.82	-	28.82
El Dorado Community Park	5.71	-	5.71
Gene Robinson Park	1.16	-	1.16
Monte Bella Community Park	18.53	-	18.53
Natividad Creek Community Park	55.25	-	55.25
Sherwood Park	25.64	-	25.64
Subtotal	135.11	-	135.11
Neighborhood Parks			
Claremont Manor Neighborhood Park	4.60	-	4.60
Creekbridge Neighborhood Park	1.82	-	1.82
Frank Paul School Park	4.23	-	4.23
Harden Neighborhood Park	4.95	-	4.95
Hartnell Neighborhood Park	4.22	-	4.22
La Paz Neighborhood Park	1.46	-	1.46
Laurel Heights Neighborhood Park	2.98	-	2.98
Laurel Neighborhood Park	3.70	-	3.70
Laurelwood Neighborhood Park	2.97	-	2.97
Los Padres Neighborhood Park	2.65	-	2.65
McKinnon Neighborhood Park	4.52	-	4.52
Mission Neighborhood Park	2.50	-	2.50
Natividad Neighborhood Park	1.80	-	1.80
Northgate Neighborhood Park	4.75	-	4.75
Rossi Rico Linear Parkway	10.78	-	10.78
Sanborn Neighborhood Park	4.54	-	4.54
Santa Rita Neighborhood Park	4.88	-	4.88
Soberanes Neighborhood Park	2.72	-	2.72
Steinbeck Neighborhood Park	3.12	-	3.12
Williams Ranch Neighborhood Park	4.58	-	4.58
Woodside Neighborhood Park	2.97	-	2.97
Subtotal	80.74	-	80.74
Small Parks			
Azahel Cruz Park	0.82	-	0.82
Bataan Memorial Park	0.71	-	0.71
Clay Street Play Lot	0.40	-	0.40
Gabilan Play Lot	0.46	-	0.46
Jaycee Tot Lot	0.65	-	0.65
Maple Play Lot	0.78	-	0.78
Myrtle Court Play Lot	0.68	-	0.68
Northgate Tot Lot	0.40	-	0.40
Santa Lucia Playground	0.49	-	0.49
Soto Square	0.70	-	0.70
Subtotal	6.09	-	6.09
Special Use Recreation Facilities			
Constitution Soccer Complex	19.34	-	19.34
Acacia Court	-	0.09	0.09
Carmel Corner	-	0.41	0.41
Cornell Corner	-	0.08	0.08
Veterans Memorial Park	3.48	-	3.48
Salinas Sports Complex	62.89	-	62.89
Subtotal	85.71	0.58	86.29
Total Park Acres	307.65	0.58	308.23

Source: City of Salinas.

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Parkland Unit Costs

Table 3.2 shows the estimated cost per acre for developing parkland, including land acquisition. A land acquisition cost assumption $250,000 per acre is used based on discussions with City staff and the development community.

The standard park improvement cost per acre is based on the assumed cost per acre for neighborhood parks based on Willdan's recent experience with other clients, and discussions with Salinas developers and City staff. Full line item cost estimates park improvement costs are included in the appendix of this report.

Table 3.2: Parkland Unit Costs

Item	Total Value
Standard Park Improvements Cost per Acre	$ 610,500
Land Acquisition	250,000
Total Parkland Acquisition and Improvement Cost per Acre	$ 860,500

Source: Appendix Table A.2.

Improved Parkland Equivalent

Before calculating the existing standards, unimproved parkland owned by the City must be converted to an equivalent amount of improved parkland. **Table 3.3** details this conversion. The conversion is based on the ratio of the cost of an unimproved acre of land relative to an acre of improved parkland. The assumptions for the value of unimproved and improved parkland are shown above in Table 3.2.

Table 3.3: Improved Parkland Equivalent

Type	Cost per Acre		Acres
Unimproved Parkland	$ 250,000		
Improved Parkland	860,500		
Unimproved Parkland Land Costs as a Relative Percentage of Parkland Costs	29%		
Existing Unimproved Parkland			0.58
Improvement Factor		x	29%
Equivalent Improved Acres			0.17

Note: Figures have been rounded.

Sources: Tables 3.1 and 3.2.

Park Facility Standards

Park facility standards establish a reasonable relationship between new development and the need for expanded park facilities. Information regarding the City's existing inventory of existing parks facilities was obtained from City staff.

The most common measure in calculating new development's demand for parks is the ratio of park acres per resident. In general, facility standards may be based on the Mitigation Fee Act (using a city's existing inventory of park facilities), or an adopted policy standard contained in a master facility plan or general plan. Facility standards may also be based on a land dedication standard established by the Quimby Act.[1] The land dedication standard refers to the number of acres per 1,000 residents that the required land dedication or a fee in-lieu of land dedication is based on. A typical Quimby Act standard for land dedication is 3.0 acres per 1,000 residents, though the standard can vary by jurisdiction. Another example of a land dedication standard can be found in a city that charges at 5.0 acres per 1,000 residents to meet its general plan goals. The standards used in this analysis are discussed in depth below.

Mitigation Fee Act

The Mitigation Fee Act does not dictate use of a particular type or level of facility standard for public facilities fees. To comply with the findings required under the law, facility standards must not burden new development with any cost associated with facility deficiencies attributable to existing development.[2] A simple and clearly defensible approach to calculating a facility standard is to use the city's existing ratio of park acreage per 1,000 residents. Under this approach, new development is required to fund new park facilities at the same level as existing residents have provided those same types of facilities to date.

Quimby Act

The Quimby Act does specify facility standards to use for parkland dedication. The Act only includes dedication of parkland and does not require construction of park improvements. The Act specifies that the dedication requirement must be a minimum of 3.0 acres and a maximum of 5.0 acres per 1,000 residents. Funds collected through the Quimby ordinance can only be used for purchasing land to create neighborhood and community parks, not open space. The city can require residential developers to dedicate above the three-acre minimum if the city's existing park standard as of the last Census justifies the higher level (up to five acres per 1,000 residents). The standard used must also conform to the City's adopted general or specific plan standards.

The Quimby Act only applies to land subdivisions. A city cannot apply the Quimby Act to development on land subdivided prior to adoption of a Quimby ordinance, such as development on infill lots. The Quimby Act also would not apply to residential development on future approved projects on single parcels, such as many types of multi-family development.

The Quimby Act allows payment of a fee in lieu of land dedication. The fee is calculated to fund acquisition of the same amount of land that would have been dedicated. The fee does not include the cost of park improvements because the land dedication requirement does not include improvements. Developments paying the Quimby Act fee in-lieu of dedication are also subject to a Mitigation Fee Act fee for park improvements, calculated at the existing standard.

The Quimby Act allows use of in-lieu fee revenue for developing new or rehabilitating existing neighborhood or community park or recreational facilities to serve the subdivision paying the fee, including land acquisition, unless certain conditions are met. The City can use Quimby fee

[1] California Government Code §66477.

[2] See the benefit and burden findings in Chapter 7, Mitigation Fee Act Findings.

revenue for purpose of developing new or rehabilitating existing park or recreational facilities in a neighborhood other than the neighborhood paying the fees if the following conditions are met:[3]

1. The neighborhood in which the fees are to be spent has a standard of less than 3.0 park area per 1,000 members of the neighborhood population.
2. The neighborhood paying the fees has park standard that meets or exceeds 3.0 acres per 1,000 persons.
3. The City Council holds a public hearing before using the fees.
4. The City Council makes a finding that it is reasonably foreseeable that future inhabitants of the subdivision paying the fees will use the proposed park and recreational facilities in the neighborhood where the fees are used.
5. The fees are used within a specified radius that complies with the city's Quimby ordinance and are consistent with the adopted general plan or specific plan of the city. "Specified radius" includes a planning area, zone of influence, or other geographic region designated by the city.

City of Salinas Park Facilities Standards

To calculate new development's need for new parks, municipalities commonly use a ratio expressed in terms of developed park acres per 1,000 residents. **Table 3.4** shows the existing standard for improved park acreage per 1,000 residents and documents the City's standard as of the last Census for the Quimby Act standard.

Table 3.4: Level of Service Standards

	Mitigation Fee Act Standard (2019)	Quimby Act Standard (2010)[1]
Improved Park Acreage	307.65	307.65
Unimproved Park Acreage Equivalent	0.17	0.17
Total - Park Acres	307.82	307.82
Service Population (Residents)	160,555	150,441
Level of Service Standard (Acres per 1,000 Residents)	1.92	2.05

[1] The City can charge Quimby fees in-lieu of parkland dedication, or require parkland dedication at the 3.0 acre per 1,000 resident standard because its existing standard as of the last Federal Census in 2010 was less than 3.0 acres per 1,000 residents.

Sources: Tables 2.1, 3.1 and 3.3.

Facilities Needed to Accommodate New Development

Table 3.5 shows the park facilities needed to accommodate new development at the existing standard. To achieve the standard by the planning horizon, depending on the amount of

[3] Conditions are paraphrased. Refer to *California Government Code* §66477(a)(3)(B) for full text.

development subject to the Quimby Act, new development must fund the purchase and improvement of between 46.16 and 72.13 parkland acres, at a total cost ranging between $39.7 and $46.2 million.

The facility standards and resulting fees under the Quimby Act are higher because development will be charged to provide 3.0 acres of parkland per 1,000 residents, and 1.92 acres of improvements, whereas development not subject to the Quimby Act will be charged to provide only 1.92 acres of parkland per 1,000 residents, and 1.92 acres of improvements. Since the exact amount of development that will be subject to the Quimby fees is unknown at this time, Table 3.5 presents the range of total facility costs that may be incurred depending on the amount of development subject to the Quimby Act.

Table 3.5: Park Facilities to Accommodate New Development

	Calculation	Parkland	Improvements	Total Range[1]
Parkland (Quimby Act), Improvements (Mitigation Fee Act)[2]				
Facility Standard (acres/1,000 residents)	*A*	3.00	1.92	
Resident Growth (2019-2040)	*B*	24,044	24,044	
Facility Needs (acres)	*C = (B / 1,000) x A*	72.13	46.16	
Average Unit Cost (per acre)	*D*	$ 250,000	610,500	
Total Cost of Parkland To Serve New Development	*E = C x D*	$ 18,032,500	$ 28,180,680	$ 46,213,180
Parkland and Improvements - Mitigation Fee Act[3]				
Facility Standard (acres/1,000 residents)	*F*	1.92	1.92	
Resident Growth (2019-2040)	*G*	24,044	24,044	
Facility Needs (acres)	*H = (G / 1,000) / F*	46.16	46.16	
Average Unit Cost (per acre)	*D*	$ 250,000	610,500	
Total Cost of Parkland To Serve New Development	*I = H x D*	$ 11,540,000	$ 28,180,680	$ 39,720,680

Note: Totals rounded to the thousands.

[1] Values in this column show the range of the cost of parkland acquisition and development should all development be either subject to the Quimby Act, or to the Mitigation Fee Act, respectively.

[2] Cost of parkland to serve new development shown if all development is subject to the Quimby Act (subdivisions). Parkland charged at 3.0 acres per 1,000 residents; improvements charged at the existing standard.

[3] Cost of parkland to serve new development shown if all development is subject to the Mitigation Fee Act. Parkland and improvements are charged at the existing standard.

Sources: Tables 2.1, 3.2 and 3.4.

Parks Cost per Capita

Table 3.6 shows the cost per capita of providing new park facilities at the Quimby standard, and the existing facility standard. The cost per capita is shown separately for land and improvements. The costs per capita in this table will serve as the basis of three fees:

- A Quimby Act Fee in-lieu of land dedication. This fee is payable by residential development occurring in subdivisions outside of the West Area and Central Area Specific Plans.
- A Mitigation Fee Act Fee for land acquisition. This fee is payable by residential development outside of the West Area and Central Area Specific Plans not occurring in subdivisions.

- A Mitigation Fee Act Fee for parkland improvements. This fee is payable by all residential development outside of the West Area and Central Area Specific Plans.

A development project outside of the West Area and Central Area Specific Plans pays either the Quimby Act Fee in-lieu of land dedication, or the Mitigation Fee Act Fee for land acquisition, not both. All development projects outside of the West Area and Central Area Specific Plans pay the Mitigation Fee Act Fee for park improvements.

Table 3.6: Cost per Capita

		Land[1]				
	Calculation	Quimby Act	OR	Mitigation Fee Act	AND	*Improvements*
Parkland Investment (per acre)	*A*	$ 250,000		$ 250,000		$ 610,500
Level of Service (acres per 1,000 residents)	*B*	3.00		1.92		1.92
Total Cost Per 1,000 capita	*C = A x B*	$ 750,000		$ 480,000		$ 1,172,200
Cost Per Resident	*D = C / 1,000*	$ 750		$ 480		$ 1,172

[1] A development project pays either the Quimby Act Fee In-Lieu of land dedication, or the Mitigation Fee Act Fee for land acquisition, not both. All development projects pay the Mitigation Fee Act Fee for park improvements.

Sources: Tables 3.2, 3.4 and Appendix Table A.1.

Use of Fee Revenue

The City plans to use park facilities fee revenue to purchase parkland or construct improvements to add to the system of park facilities that serves new development. The City may only use impact fee revenue to provide facilities and intensify usage of existing facilities needed to serve new development. Depending on the amount of development subject to the Quimby Act, new development must fund the purchase and improvement of between 46.16 and 72.13 parkland acres through the planning horizon of 2040.

Fee Schedule

To calculate fees by land use type, the investment in park facilities is determined on a per resident basis for both land acquisition and improvement. These investment factors (shown in Table 3.6) are investment per capita based on the unit cost estimates and facility standards.

The City anticipates that the park fees would be the primary revenue source to fund new development's investment in park facilities. **Tables 3.7.a and 3.7b** show the park facilities fee based on the existing standard and the minimum Quimby standard, respectively. The City would collect the fee based on only one of the two approaches as appropriate. Each fee includes a component for park improvements based on the City's existing standard. The investment per capita is converted to a fee per dwelling unit using the occupancy density assumptions from Table 2.2.

The total fee includes an administrative charge to fund costs that include: (1) legal, accounting, and other administrative support and (2) impact fee program administrative costs including revenue collection, revenue and cost accounting, mandated public reporting, and fee justification analyses.

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Table 3.7a: Citywide Park and Recreation Facilities Fee Schedule - Mitigation Fee Act

Land Use	A Cost Per Capita	B Density	C = A x B Base Fee[1]	D = C x 0.02 Admin Charge[1, 2]	E = C + D Total Fee[1]
Single Family					
Parkland	$ 480	3.90	$ 1,872	$ 37	$ 1,909
Improvements	1,172	3.90	4,571	91	4,662
Total	$ 1,652		$ 6,443		$ 6,571
Multifamily					
Parkland	$ 480	3.32	$ 1,594	$ 32	$ 1,626
Improvements	1,172	3.32	3,891	78	3,969
Total	$ 1,652		$ 5,485		$ 5,595

[1] Fee per dwelling unit.
[2] Administrative charge of 2.0 percent for (1) legal, accounting, and other administrative support and (2) impact fee program administrative costs including revenue collection, revenue and cost accounting, mandated public reporting, and fee justification analyses.

Sources: Tables 2.2 and 3.6.

Table 3.7b: Citywide Park and Recreation Facilities Fee Schedule - Quimby Act

Land Use	A Cost Per Capita	B Density	C = A x B Base Fee[1]	D = C x 0.02 Admin Charge[1, 2]	E = C + D Total Fee[1]
Single Family					
Parkland	$ 750	3.90	$ 2,925	$ 59	$ 2,984
Improvements	1,172	3.90	4,571	91	4,662
Total	$ 1,922		$ 7,496		$ 7,646
Multifamily					
Parkland	$ 750	3.32	$ 2,490	$ 50	$ 2,540
Improvements	1,172	3.32	3,891	78	3,969
Total	$ 1,922		$ 6,381		$ 6,509

[1] Fee per dwelling unit.
[2] Administrative charge of 2.0 percent for (1) legal, accounting, and other administrative support and (2) impact fee program administrative costs including revenue collection, revenue and cost accounting, mandated public reporting, and fee justification analyses.

Sources: Tables 2.2 and 3.6.

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4. West Area Park Improvement Fee

The West Area Park Improvement Fee ("WAPIF") will fund park improvements within the West Area Specific Plan at a 3.0 acre per 1,000 resident standard. The fee was developed with the assistance of West Area Specific Plan developers in order to meet their park facilities dedication requirements and to facilitate the credits and reimbursements between developers within the Specific Plan.

Estimated Service Population

Table 4.1 estimates the potential West Area Specific Plan Service population. Based on discussions with West Area developers, it is reasonable to assume the construction of 4,150 dwelling units in the Specific Plan area. The estimated dwelling units is multiplied by the Citywide average residents per dwelling unit to estimate the future residents in the West Area Specific Plan. Note that these projections of dwelling units and residents do not drive the fee calculations. Rather, the fee calculations are based on ensuring that the Specific Plan area achieves a 3.0 park acre per residential standard.

Table 4.1: WASP Land Use Assumptions

Assumed Dwelling Units	4,150
Residents per Dwelling Unit[1]	3.67
Projected Residents - WASP	15,231

[1] See Table 2.2.

Sources: City of Salinas; Table 2.2, Willdan Financial Services.

Planned Park Facilities

Table 4.2 displays the planned West Area Specific Plan Parks. The table also displays the estimated amount of street frontage associated with each park. City engineering staff estimated the linear feet of street frontage. The Specific Plan includes one community park, four neighborhood parks and six small parks for a total of 49.76 park acres.

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Table 4.2: Planned WASP Parks

Park Type	Approximate Acres	Estimated Linear Feet of Street Frontage
Community Park	30.83	3,940
Neighborhood Parks		
WA 1	3.54	1,560
WA 2	2.35	940
WA 3	3.00	1,320
WA 4	3.63	1,520
Subtotal	12.52	5,340
Small Parks		
WS 1	1.68	1,610
WS 2	1.86	1,620
WS 3	0.50	80
WS 4	0.50	-
WS 5	1.37	940
WS 6	0.50	-
Subtotal	6.41	4,250
Total	49.76	13,530

Source: Table 2-3: Park Type and Acreage Summary, Draft West Area Specific Plan; Willdan Financial Services.

Park Cost Assumptions

Table 4.3 calculates the total cost of the parks in the Specific Plan. The land acquisition cost per acre of $250,000 is consistent with assumptions used in the other chapters of this report. The park improvement cost per acre assumptions for community, neighborhood and small parks respectively differs on the type of park and were developed based on Willdan's recent experience with other clients, and discussions with Salinas developers and City staff. Full line item cost estimates for each of the three types of parkland are included in the appendix of this report. In total, the West Area Specific Plan parks are estimated to cost $39.9 million.

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Table 4.3: WASP Park Cost Assumptions

	Land Acquisition Cost per Acre	Park Improvement Cost per Acre	Total Cost per Acre	Total Acres	Total Cost
Community Parks	$ 250,000	$ 497,000	$ 747,000	30.83	$ 23,030,010
Neighborhood Parks	250,000	610,500	860,500	12.52	10,773,460
Small Parks	250,000	637,200	887,200	6.41	5,686,952
Bathrooms[1]				-	400,000
Total				49.76	$ 39,890,422

[1] Assumes two neighborhood park bathrooms per specific plan area.

Sources: Tables 3.2, A.1 A.2 and A.3; Willdan Financial Services.

The cost of street frontage associated with the West Area Specific Plan parks is estimated in **Table 4.4.** The analysis assumes that the linear cost per square foot of street frontage (including curb, gutter, sidewalk and one travel lane) is $219, based on recent experience with other clients. In total the street frontage associated with the West Area Specific Plan parks is estimated to cost nearly $3 million.

Table 4.4: WASP Street Frontage Costs

	Linear Feet of Frontage	Cost per Linear Foot[1]	Total Cost
Community Parks	3,940	$ 219	$ 862,860
Neighborhood Parks	5,340	219	1,169,460
Small Parks	4,250	219	930,750
Total			$ 2,963,070

[1] Includes curb, gutter, sidewalk and one travel lane.

Sources: Table 4.2, Willdan Financial Services.

Cost per Capita

Table 4.5 shows the cost per capita of providing parks in the West Area Specific Plan at a 3.0 acre per 1,000 resident standard. The total cost of parks and street frontage is divided by the total park acreage in the Specific Plan to determine the average cost per park acre. This figure is then multiplied by the 3.0-acre standard to determine the cost to serve 1,000 residents. The cost per 1,000 residents is then divided by 1,000 to determine the cost per resident.

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Table 4.5: WASP Park Cost per Capita

Cost of Parks	$ 39,890,422
Cost of Street Frontage	2,963,070
Total	$ 42,853,492
Total Park Acreage	49.76
Average Cost per Acre	$ 861,204
Acreage Standard per 1,000 Residents	3.00
Cost per 1,000 Residents	$ 2,583,612
Cost per Resident	$ 2,584

Sources: Tables 4.2, 4.3 and 4.4.

West Area Park Improvement Fee Schedule

To calculate fees by land use type, the cost per capita from Table 4.5 is multiplied by the dwelling unit occupancy density assumptions from Table 2.2 to determine the base fee per dwelling unit. The base fee per dwelling unit is multiplied by two-percent to determine the administrative charge. The administrative charge funds costs that include: (1) legal, accounting, and other administrative support and (2) impact fee program administrative costs including revenue collection, revenue and cost accounting, mandated public reporting, and fee justification analyses.

Table 4.6: WASP Park Facilities Impact Fee Schedule

	A	*B*	*C = A x B*	*D = C x 0.02*	*E = C + D*
Land Use	**Cost Per Capita**	**Density**	**Base Fee[1]**	**Admin Charge[1, 2]**	**Total Fee[1]**
Single Family	$ 2,584	3.90	$ 10,078	$ 202	$ 10,280
Multifamily	2,584	3.32	8,579	172	8,751

[1] Fee per dwelling unit.

[2] Administrative charge of 2.0 percent for (1) legal, accounting, and other administrative support and (2) impact fee program administrative costs including revenue collection, revenue and cost accounting, mandated public reporting, and fee justification analyses.

Sources: Tables 2.2 and 4.5.

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5. Central Area Park Improvement Fee

The Central Area Park Improvement Fee ("CAPIF") will fund park improvements within the Central Area Specific Plan at a 3.0 acre per 1,000 resident standard. The fee was developed with the assistance of West Area Specific Plan developers in order to meet their park facilities dedication requirements and to facilitate the credits and reimbursements between developers within the Specific Plan.

Estimated Service Population

Table 5.1 estimates the potential Central Area Specific Plan Service population. Acres within the Specific Plan are multiplied by the minimum dwelling unit density allocated to estimate the potential dwelling units in the area. The estimated dwelling units is multiplied by the Citywide average residents per dwelling unit to estimate the future residents in the Central Area Specific Plan. Note that these projections of dwelling units and residents do not drive the fee calculations. Rather, the fee calculations are based on ensuring that the Specific Plan area achieves a 3.0 park acre per residential standard.

Table 5.1: CASP Land Use Assumptions

Zoning	Acres (Within City)	Acres (Unincorporated)	Total Acres	Dwelling Unit Density[1]	Potential Dwelling Units
NE-A	92.42	16.17	108.59	5	543
NE-B	71.15	18.18	89.33	7	625
NG-A	53.93	3.01	56.94	8	456
NG-B	31.46	-	31.46	9	283
NG-C	33.23	-	33.23	14	465
VC-A	27.35	-	27.35	18	492
VC-B	17.08	-	17.08	24	410
Total	326.62	37.36	363.98		3,274
Residents per Dwelling Unit[2]					3.67
Total Residents - CASP					12,016

[1] Assumes minimum units per net acre allowed by CASP.
[2] See Table 1.2.

Sources: Appendix G, CASP; Table 2.2 Willdan Financial Services.

Planned Park Facilities

Table 5.2 displays the planned Central Area Specific Plan Parks. The table also displays the estimated amount of street frontage associated with each park. City engineering staff estimated

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the linear feet of street frontage. The Specific Plan includes eight neighborhood parks and 17 small parks for a total of 44.06 park acres.

Table 5.2: Planned CASP Parks

	Acres	Estimated Linear Feet of Street Frontage
Neighborhood Parks		
CA 1[1]	3.00	1,530
CA 2	5.38	1,450
CA 3	2.01	1,140
CA 4	3.75	1,150
CA 5	3.50	1,510
CA 6	3.50	1,710
CA 7	3.07	1,600
CA 8	3.47	700
Subtotal	27.68	10,790
Small Parks		
CS 1[1]	1.62	1,070
CS 2	0.50	880
CS 3	1.04	510
CS 4	0.92	1,140
CS 5	2.05	3,030
CS 6	1.00	740
CS 7	0.40	510
CS 8	1.47	1,030
CS 9	1.00	120
CS 10	0.50	410
CS 11	1.76	1,150
CS 12	0.79	750
CS 13	0.50	300
CS 14	0.50	200
CS 15	0.50	330
CS 16	0.93	450
CS 17	0.90	1,050
Subtotal	16.38	13,670
Total	44.06	24,460

[1] These parks are currently in unincorporated areas.

Source: Table 4.01 Central Area Park Acreage, Sport Fields And Courts; CASP.

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Park Cost Assumptions

Table 5.3 calculates the total cost of the parks in the Specific Plan. The land acquisition cost per acre of $250,000 is consistent with assumptions used in the other chapters of this report. The park improvement cost per acre assumptions for neighborhood and small parks, respectively, differs on the type of park and were developed based on Willdan's recent experience with other clients, and discussions with Salinas developers and City staff. Full line item cost estimates for each of the three types of parkland are included in the appendix of this report. In total, the Central Area Specific Plan parks are estimated to cost $38.8 million.

Table 5.3: CASP Park Cost Assumptions

	Land Acquisition Cost per Acre	Park Improvement Cost per Acre	Total Cost per Acre	Total Acres	Total Cost
CASP					
Neighborhood Parks	$ 250,000	$ 610,500	$ 860,500	27.68	$ 23,818,640
Small Parks	250,000	637,200	887,200	16.38	14,532,336
Bathrooms[1]				-	400,000
Total				44.06	$ 38,750,976

[1] Assumes two neighborhood park bathrooms per specific plan area.

Sources: Tables 3.2, A.2 and A.3; Willdan Financial Services.

The cost of street frontage associated with the Central Area Specific Plan parks is estimated in **Table 5.4.** The analysis assumes that the linear cost per square foot of street frontage (including curb, gutter, sidewalk and one travel lane) is $219, based on recent experience with other clients. In total the street frontage associated with the Central Area Specific Plan parks is estimated to cost nearly $5.4 million.

Table 5.4: CASP Street Frontage Costs

	Linear Feet of Frontage	Cost per Linear Foot[1]	Total Cost
CASP			
Neighborhood Parks	10,790	$ 219	$ 2,363,010
Small Parks	13,670	219	2,993,730
Total			$ 5,356,740

[1] Includes curb, gutter, sidewalk and one travel lane.

Sources: Table 5.2, Willdan Financial Services.

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Cost per Capita

Table 5.5 shows the cost per capita of providing parks in the Central Area Specific Plan at a 3.0 acre per 1,000 resident standard. The total cost of parks and street frontage is divided by the total park acreage in the Specific Plan to determine the average cost per park acre. This figure is then multiplied by the 3.0-acre standard to determine the cost to serve 1,000 residents. The cost per 1,000 residents is then divided by 1,000 to determine the cost per resident.

Table 5.5: CASP Park Cost per Capita

CASP	
Cost of Parks	$38,750,976
Cost of Street Frontage	5,356,740
Total	$44,107,716
Total Park Acreage	44.06
Average Cost per Acre	$ 1,001,083
Acreage Standard per 1,000 Residents	3.00
Cost per 1,000 Residents	$ 3,003,249
Cost per Resident	$ 3,003

Sources: Tables 5.1, 5.3 and 5.4.

Central Area Park Improvement Fee Schedule

To calculate fees by land use type, the cost per capita from Table 5.5 is multiplied by the dwelling unit occupancy density assumptions from Table 2.2 to determine the base fee per dwelling unit. The base fee per dwelling unit is multiplied by two-percent to determine the administrative charge. The administrative charge funds costs that include: (1) legal, accounting, and other administrative support and (2) impact fee program administrative costs including revenue collection, revenue and cost accounting, mandated public reporting, and fee justification analyses.

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Table 5.6: CASP Park Facilities Impact Fee Schedule

Land Use	A Cost Per Capita	B Density	C = A x B Base Fee[1]	D = C x 0.02 Admin Charge[1, 2]	E = C + D Total Fee[1]
CASP					
Single Family	$ 3,003	3.90	$ 11,712	$ 234	$ 11,946
Multifamily	3,003	3.32	9,970	199	10,169

[1] Fee per dwelling unit.

[2] Administrative charge of 2.0 percent for (1) legal, accounting, and other administrative support and (2) impact fee program administrative costs including revenue collection, revenue and cost accounting, mandated public reporting, and fee justification analyses.

Sources: Tables 2.2 and 5.5.

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6. Implementation

Impact Fee Program Adoption Process

Impact fee program adoption procedures are found in the *California Government Code Section 66016*. Adoption of an impact fee program requires the City Council to follow certain procedures including holding a public meeting. A fourteen-day mailed public notice is required for those registering for such notification. Data, such as an impact fee report, must be made available at least 10 days prior to the public meeting. The City's legal counsel should inform you of any other procedural requirements as well as advice regarding adoption of an enabling ordinance and/or a resolution. After adoption there is a mandatory 60-day waiting period before the fees go into effect. This procedure must also be followed for fee increases.

Inflation Adjustment

The City has kept its impact fee program up to date by periodically adjusting the fees for inflation. Such adjustments should be completed regularly to ensure that new development will fully fund its share of needed facilities. We recommend that the following indices be used for adjusting fees for inflation:

- Buildings – Engineering News-Record's Building Cost Index (BCI)
- Equipment – Consumer Price Index, All Items, 1982-84=100 for All Urban Consumers (CPI-U)

The indices recommended can be found for local jurisdictions (state, region), and for the nation. With the exception of land, we recommend that the national indices be used to adjust for inflation, as the national indices are not subject to frequent dramatic fluctuations that the localized indices are subject to.

Due to the highly variable nature of land costs, there is no particular index that captures fluctuations in land values. We recommend that the City adjust land values based on recent land purchases, sales or appraisals at the time of the update.

While fee updates using inflation indices are appropriate for periodic updates to ensure that fee revenues keep up with increases in the costs of public facilities, the City will also need to conduct more extensive updates of the fee documentation and calculation (such as this study) when significant new data on growth forecasts and/or facility plans become available.

Reporting Requirements

For fee revenue collected under the Mitigation Fee Act, The City should comply with the annual and five-year reporting requirements summarized below in Table 6.1. For facilities to be funded by a combination of public fees and other revenues, identification of the source and amount of these non-fee revenues is essential. Identification of the timing of receipt of other revenues to fund the facilities is also important.

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Table 6.1: Mitigation Fee Act - Annual and Five-year Administrative Requirements

CA Gov't Code Section	Timing	Reporting Requirements[1]	Recommended Fee Adjustment
66001.(d)	The fifth fiscal year following the first deposit into the account or fund, and every five years thereafter	(A) Identify the purpose to which the fee is to be put. (B) Demonstrate a reasonable relationship between the fee and the purpose for which it is charged. (C) Identify all sources and amounts of funding anticipated to complete financing in incomplete improvements. (D) Designate the approximate dates on which supplemental funding is expected to be deposited into the appropriate account or fund.	Comprehensive Update
66006. (b)	Within 180 days after the last day of each fiscal year	(A) A brief description of the type of fee in the account or fund. (B) The amount of the fee. (C) The beginning and ending balance of the account or fund. (D) The amount of the fees collected and the interest earned. (E) An identification of each public improvement on which fees were expended including share funded by fees. (F) An identification of an approximate date by which the construction of the public improvement will commence. (G) A description of any potential interfund transfers. (H) The amount of refunds made (if any).	Inflationary Adjustment

[1] Edited for brevity. Refer to the government code for full description.

Sources: CA Government Code sections 66001.(d) and 66006.(b).

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Fee Accounting

The City should deposit fee revenues into separate restricted fee accounts for each of the fees identified in this report. Fees collected for a given facility category should only be expended on new facilities of that same category.

Programming Revenues and Projects with the CIP

The City should commit all projected fee revenues and fund balances to specific projects in its Capital Improvements Program. These should represent the types of facilities needed to serve growth and described in this report. The use of the CIP in this manner documents a reasonable relationship between new development and the use of those revenues. The CIP also provides the documentation necessary for the City to hold funds in a project account for longer than five years if necessary to collect sufficient monies to complete a project.

The City may decide to alter the scope of the planned projects or to substitute new projects as long as those new projects continue to represent an expansion of the City's facilities. If the total cost of facilities varies from the total cost used as a basis for the fees, the City should consider revising the fees accordingly.

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7. Mitigation Fee Act Findings

Fees are assessed and typically paid when a building permit is issued and imposed on new development projects by local agencies responsible for regulating land use (cities and counties). To guide the imposition of facilities fees, the California State Legislature adopted the *Mitigation Fee Act* with Assembly Bill 1600 in 1987 and subsequent amendments. The *Act*, contained in *California Government Code* §§66000 – 66025*,* establishes requirements on local agencies for the imposition and administration of fees. The Act requires local agencies to document five statutory findings when adopting fees.

The five findings in the Act required for adoption of the maximum justified fees documented in this report are: 1) Purpose of fee, 2) Use of fee Revenues, 3) Benefit Relationship, 4) Burden Relationship, and 5) Proportionality. They are each discussed below and are supported throughout this report.

Purpose of Fee

- Identify the purpose of the fee (§66001(a)(1) of the Act).

We understand that it is the policy of the City that new development will not burden the existing service population with the cost of facilities required to accommodate growth. Page LU-41 of the General Plan Land Use Element states: "The City will continue to collect and impose impact fees on new development to help pay for circulation improvements, sewer and storm drain infrastructure, parks and libraries." The purpose of the fees proposed by this report is to implement this policy by providing a funding source from new development for park improvements to serve that development. The fees advance a legitimate City interest by enabling the City to provide park facilities to new development.

Use of Fee Revenues

- Identify the use to which the fees will be put. If the use is financing facilities, the facilities shall be identified. That identification may, but need not, be made by reference to a capital improvement plan as specified in §65403 or §66002, may be made in applicable general or specific plan requirements, or may be made in other public documents that identify the facilities for which the fees are charged (§66001(a)(2) of the Act).

Fees proposed in this report, if enacted by the City, would be available to fund expanded facilities to serve new development. Facilities funded by these fees are designated to be located within the City. Fees addressed in this report have been identified by the City to be restricted to funding park facilities.

An estimate of the amount of parkland needed to serve new development is identified in *Chapter 3* of this report. More thorough descriptions of certain planned facilities, including their specific location, if known at this time, are included in master plans, capital improvement plans, or other City planning documents or are available from City staff. The City may change the list of planned facilities to meet changing needs and circumstances of new development, as it deems necessary. The fees should be updated if these amendments result in a significant change in the fair share cost allocated to new development.

Benefit Relationship

- Determine the reasonable relationship between the fees' use and the type of development project on which the fees are imposed (§66001(a)(3) of the Act).

We expect that the City will restrict fee revenue to the acquisition of land, construction of facilities and buildings, and purchase of related equipment, furnishings, vehicles, and services used to serve new development as described above under the "Use of Fee Revenues" finding. The City should keep fees in segregated accounts. Facilities funded by the fees are expected to provide a citywide network of facilities accessible to the additional residents and workers associated with new development. Under the *Act*, fees are not intended to fund planned facilities needed to correct existing deficiencies. Thus, a reasonable relationship can be shown between the use of fee revenue and the new development residential and non-residential use classifications that will pay the fees.

Burden Relationship

- Determine the reasonable relationship between the need for the public facilities and the types of development on which the fees are imposed (§66001(a)(4) of the Act).

Facilities need is based on a facility standard that represents the demand generated by new development for those facilities. Facilities demand is determined as follows:

The service population is established based upon the number of residents living in Salinas. Service population correlates to the demand for park facilities.

For park facilities, demand is measured by a single facility standard (park acres per 1,000 residents) that can be applied across land use types to ensure a reasonable relationship to the type of development.

The standards used to identify growth needs are also used to determine if planned facilities will partially serve the existing service population by correcting existing deficiencies. This approach ensures that new development will only be responsible for its fair share of planned facilities, and that the fees will not unfairly burden new development with the cost of facilities associated with serving the existing service population.

Chapter 2, Land Use Assumptions provides a description of how service population and growth projections are calculated. Facility standards are described in the *Facility Inventories, Plans & Standards* sections of in Chapter 3.

Proportionality

- Determine how there is a reasonable relationship between the fees amount and the cost of the facilities or portion of the facilities attributable to the development on which the fee is imposed (§66001(b) of the Act).

The reasonable relationship between each facilities fee for a specific new development project and the cost of the facilities attributable to that project is based on the estimated service population growth the project will accommodate. Fees for a specific project are based on the project's size or increases in the number of dwelling units. Larger new development projects can result in a higher service population, resulting in higher fee revenue than smaller projects in the same land use classification. Thus, the fees can ensure a reasonable relationship between a specific new development project and the cost of the facilities attributable to that project.

See *Chapter 2, Land Use Assumptions* for a description of how service population or dwelling unit occupancy factors are determined for different types of land uses. See the *Fee Schedule* section of *Chapters 3, 4 and 5* for a presentation of the proposed facilities fees.

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Appendix

Appendix Table A.1: Community Park Prototypical Park Cost Estimate

Description	Quantity	Unit	Unit Cost	Total Cost (10 Acre Park)	Multiplier	Total Cost for Community Park
MASS GRADING	10	Acres	$ 50,000	$ 500,000		
Subtotal				$ 500,000	1	$ 500,000
SITE PREPARATION						
Soil Testing	1	ALLOW	$ 3,500	$ 3,500		
Site Survey	1	ALLOW	25,000	25,000		
SWPPP	1	ALLOW	3,000	3,000		
Subtotal				$ 31,500	3	$ 94,500
SOCCER FIELD (225' x 360')						
Goals	2	EA	$ 2,500	$ 5,000		
(See "Landscape" for turf costs)				-		
Subtotal				$ 5,000	6	$ 30,000
BASEBALL (300' x 300')						
Skinned Infield	12,000	SF	$ 2	$ 18,000		
Backstop (Arch style with 10' extension)	1	EA	25,000	25,000		
6' Ht. Dugout fence	104	LF	18	1,872		
4' Ht. Foul line fence	600	LF	16	9,600		
Dugout Benches- 10' length	4	EA	1,500	6,000		
Alum. Bleachers - 3 Levels, 21' Length	2	EA	2,500	5,000		
Scoreboard	1	EA	6,000	6,000		
(See "Landscape" for turf costs)				-		
Subtotal				$ 71,472	4	$ 285,888
BASKETBALL COURT						
4" depth concrete	1	ALLOW	$ 28,000	$ 28,000		
Goal Posts, Backboards, Nets, Rims, Str	1	ALLOW	6,500	6,500		
Subtotal				$ 34,500	4	$ 138,000
FITNESS STATIONS						
Exercise Stations	6	EA	$ 4,000	$ 24,000		
Subtotal				$ 24,000	1	$ 24,000
SHADE STRUCTURES						
44' Pavilion	1	EA	$ 40,000	$ 40,000		
24' Pavilion	1	EA	30,000	30,000		
Concrete Pads	1,600	SF	8	12,800		
Subtotal				$ 82,800	2	$ 165,600
TRASH RECEPTACLES						
Concrete	15	EA	$ 800	$ 12,000		
Subtotal				$ 12,000	2	$ 24,000

Source: County of San Diego Parks and Recreation; City of Salinas.

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Appendix Table A.1: Community Park Prototypical Park Cost Estimate

Description	Quantity	Unit	Unit Cost	Total Cost (10 Acre Park)	Multiplier	Total Cost for Community Park
PICNIC TABLES						
Concrete - ADA accessible 8' length	30	EA	$ 1,700	$ 51,000		
Subtotal				$ 51,000	1	$ 51,000
BENCHES						
Concrete	10	EA	$ 1,250	$ 12,500		
Subtotal				$ 12,500	3	$ 37,500
DRINKING FOUNTAINS						
Metal, 2 dish, ADA accessible	4	EA	$ 4,000	$ 16,000		
Concrete Pads w/ detection scoring	400	SF	8	3,200		
Subtotal				$ 19,200	2	$ 38,400
FLAGPOLE						
Aluminum - 35' height	1	EA	$ 3,000	$ 3,000		
Subtotal				$ 3,000	1	$ 3,000
BARBECUES						
Single post - 36" square	3	EA	$ 600	$ 1,800		
Single post - 24" square	10	EA	500	5,000		
Concrete Pads	208	SF	8	1,664		
Subtotal				$ 8,464	2	$ 16,928
HOT ASH BINS						
Concrete	4	EA	$ 550	$ 2,200		
Subtotal				$ 2,200	2	$ 4,400
TRASH ENCLOSURE						
Split faced block, Gate, Bins	1	ALLOW	$ 15,000	$ 15,000		
Vehicular Concrete Pad w/ curbing	715	SF	7	5,005		
Subtotal				$ 20,005	2	$ 40,010
PLAYGROUND (YOUTH-5-12 Y.O.)						
Equipment	1	ALLOW	$ 115,000	$ 115,000		
Rubber Surfacing (80%)	2,691	SF	25	67,275		
Concrete Pads (80%)	2,691	SF	8	21,528		
Conc. Curb @ Perimeter	230	LF	18	4,140		
Sand (20%)	673	SF	6	4,038		
Drain Inlet w/ filter fabric, connections	1	ALLOW	1,000	1,000		
Subtotal				$ 212,981	1	$ 212,981

Source: County of San Diego Parks and Recreation; City of Salinas.

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Appendix Table A.1: Community Park Prototypical Park Cost Estimate

Description	Quantity	Unit	Unit Cost	Total Cost (10 Acre Park)	Multiplier	Total Cost for Community Park
PLAYGROUND (TOTS 2-5 Y.O.)						
Equipment	1	ALLOW	$ 60,000	$ 60,000		
Rubber Surfacing (80%)	1,885	SF	25	47,125		
Concrete Pad (80%)	1,885	SF	8	15,080		
Conc. Curb @ Perimeter	194	LF	18	3,492		
Sand (20%)	471	SF	6	2,826		
Drain Inlet w/ filter fabric, connections	1	ALLOW	1,000	1,000		
Subtotal				$ 129,523	1	$ 129,523
PARKING LOT						
4" Depth Asphalt, 4" Class B Aggregate	20,275	SF	$ 16	$ 324,400		
Striping (Includes 2 Handicap)	1	ALLOW	1,000	1,000		
Wheel Stops	37	EA	65	2,405		
Concrete Curb	755	LF	18	13,590		
Subtotal				$ 341,395	3	$ 1,024,185
RESTROOM						
4 Unisex, ADA accessible, Split face bloc	1	ALLOW	$ 200,000	$ 200,000		
Subtotal				$ 200,000	3	$ 600,000
SIGNAGE						
Monument Entry Sign	1	EA	$ 30,000	$ 30,000		
Kiosk Sign	2	EA	4,500	9,000		
Subtotal				$ 39,000	1.5	$ 58,500
BICYCLE RACKS						
Bicycle Racks	2	EA	$ 850	$ 1,700		
Subtotal				$ 1,700	3	$ 5,100
CONCRETE WALKS						
4" depth, natural color, broom finish	34,000	SF	$ 8	$ 272,000		
Subtotal				$ 272,000	1	$ 272,000
CONCRETE MOW CURBS	1475	L.F.	$ 10	$ 14,750		
Subtotal				$ 14,750	2	$ 29,500
PLASTIC HEADERS	1475	LF	$ 4	$ 5,900		
Subtotal				$ 5,900	3	$ 17,700
UTILITIES						
Potable Water	1	ALLOW	$ 60,000	$ 60,000		
Sewer	1	ALLOW	25,000	25,000		
Electric	1	ALLOW	30,000	30,000		
Reclaimed Water	1	ALLOW	10,000	10,000		
Subtotal				$ 125,000	2	$ 250,000

Source: County of San Diego Parks and Recreation; City of Salinas.

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Appendix Table A.1: Community Park Prototypical Park Cost Estimate

Description	Quantity	Unit	Unit Cost	Total Cost (10 Acre Park)	Multiplier	Total Cost for Community Park
LANDSCAPING						
Grading	435,600	SF	$ 0.50	$ 217,800		
Soil Preparation	64	CY	10.00	640		
Planting	35,000	SF	4.00	140,000		
Mulch	503	CY	36.00	18,108		
Turf - hydroseed	279,924	SF	0.10	27,992		
Subtotal				$ 404,540	3	$ 1,213,620
IRRIGATION						
Turf area	279,924	SF	$ 3.00	$ 839,772		
Shrub Area	67,925	SF	3.50	237,738		
Subtotal				$ 1,077,510	3	$ 3,232,529
VOLUNTEER PAD						
Vehicular Concrete, fencing, shed, hook-u	1	ALLOW	$ 100,000	$ 100,000		
Subtotal				$ 100,000	1	$ 100,000
SECURITY LIGHTING						
Site Safety Lighting	5	EA	$ 8,500	$ 42,500		
Subtotal				$ 42,500	3	$ 127,500
ADDITIONAL FACILITIES						
Amphitheater	1	EA	$ 97,308	$ 97,308		
Field Lighting	3	Fields	454,103	1,362,309		
Dog Park	1	Dog Park	510,867	510,867		
Subtotal				$ 1,970,484	1	$ 1,970,484
TOTAL - Construction Costs				$ 5,814,924		$ 10,696,848
DPR ADMINISTRATION	10%	of Construction Costs				$ 1,069,685
SURVEY AND DESIGN	7%	of Construction Costs				748,779
STORMWATER						30,000
CEQA						75,000
CONSTRUCTION MANAGEMENT	5%	of Construction Costs				534,842
CONTINGENCY	18%	of Construction Costs				1,925,433
PURCHASING AND CONTRACTING	1%	of Construction Costs				106,968
MOBILIZATION	1.26%	of Construction Costs				134,780
Total - Soft Costs						$ 4,625,488
Grand Total - Community Park						$ 15,322,335
Cost per Acre						$ 497,000

Source: County of San Diego Parks and Recreation; City of Salinas; Willdan.

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Appendix Table A.2: Neighborhood Park Cost Estimate - 3.13 Acre Prototype

Description	Quantity	Unit		Unit Cost		Total Cost
MOBILIZATION						
Equipment, Trailers, Port-a-potties, etc.	1	ALLOW	$	18,467	$	18,467
Subtotal					$	18,467
MASS GRADING	3.13	Acre	$	50,000	$	156,500
Subtotal					$	156,500
SITE PREPARATION						
Soil Testing	1	ALLOW	$	1,096	$	1,096
Site Survey	1	ALLOW		7,825		7,825
SWPPP	1	ALLOW		939		939
Subtotal					$	9,860
SOCCER FIELD (225' x 360')						
Goals	2	EA	$	2,500	$	5,000
(See "Landscape" for turf costs)						-
Subtotal					$	5,000
BASEBALL (300' x 300')						
Skinned Infield	12,000	SF	$	2	$	18,000
Backstop (Arch style with 10' extension)	1	EA		25,000		25,000
6' Ht. Dugout fence	104	LF		18		1,872
4' Ht. Foul line fence	600	LF		16		9,600
Dugout Benches- 10' length	4	EA		1,500		6,000
Alum. Bleachers - 3 Levels, 21' Length	2	EA		2,500		5,000
Scoreboard	1	EA		6,000		6,000
(See "Landscape" for turf costs)						-
Subtotal					$	71,472
SHADE STRUCTURES						
24' Pavilion	1	EA		30,000		30,000
Concrete Pads	501	SF		8		4,006
Subtotal					$	34,006
TRASH RECEPTACLES						
Concrete	5	EA	$	800	$	4,000
Subtotal					$	4,000
PICNIC TABLES						
Concrete - ADA accessible 8' length	5	EA	$	1,700	$	8,500
Subtotal					$	8,500
BENCHES						
Concrete	3	EA	$	1,250	$	3,750
Subtotal					$	3,750

Source: County of San Diego Parks and Recreation.

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Appendix Table A.2: Neighborhood Park Cost Estimate - 3.13 Acre Prototype

Description	Quantity	Unit	Unit Cost	Total Cost
DRINKING FOUNTAINS				
Metal, 2 dish, ADA accessible, clean-out par	1	EA	$ 4,000	$ 4,000
Concrete Pads w/ detection scoring	125	SF	8	1,002
Subtotal				$ 5,002
FLAGPOLE				
Aluminum - 35' height	1	EA	$ 3,000	$ 3,000
Subtotal				$ 3,000
BARBECUES				
Single post - 36" square	1	EA	$ 600	$ 600
Single post - 24" square	2	EA	500	1,000
Concrete Pads	665	SF	8	5,316
Subtotal				$ 6,916
HOT ASH BINS				
Concrete	1	EA	$ 550	$ 550
Subtotal				$ 550
PLAYGROUND (YOUTH-5-12 Y.O.)				
Equipment	1	ALLOW	$ 115,000	$ 115,000
Rubber Surfacing (80%)	2,691	SF	25	67,275
Concrete Pads (80%)	2,691	SF	8	21,528
Conc. Curb @ Perimeter	230	LF	18	4,140
Sand (20%)	673	SF	6	4,038
Drain Inlet w/ filter fabric, connections	1	ALLOW	1,000	1,000
Subtotal				$ 212,981
PLAYGROUND (TOTS 2-5 Y.O.)				
Equipment	1	ALLOW	$ 60,000	$ 60,000
Rubber Surfacing (80%)	1,885	SF	25	47,125
Concrete Pad (80%)	1,885	SF	8	15,080
Conc. Curb @ Perimeter	194	LF	18	3,492
Sand (20%)	471	SF	6	2,826
Drain Inlet w/ filter fabric, connections	1	ALLOW	1,000	1,000
Subtotal				$ 129,523
SIGNAGE				
Monument Entry Sign	1	EA	$ 30,000	$ 30,000
Kioks Sign	1	EA	4,500	4,500
Subtotal				$ 34,500
BICYCLE RACKS				
Bicycle Racks	1	EA	$ 850	$ 850
Subtotal				$ 850
CONCRETE WALKS				
4" depth, natural color, broom finish	8,332	SF	$ 8	$ 66,656
Subtotal				$ 66,656
CONCRETE MOW CURBS	461.675	L.F.	$ 10	$ 4,617
Subtotal				$ 4,617

Source: County of San Diego Parks and Recreation.

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Appendix Table A.2: Neighborhood Park Cost Estimate - 3.13 Acre Prototype

Description	Quantity	Unit	Unit Cost	Total Cost
PLASTIC HEADERS	461.675	LF	$ 4	$ 1,847
Subtotal				$ 1,847
UTILITIES				
Potable Water	1	ALLOW	$ 18,780	$ 18,780
Sewer	1	ALLOW	25,000	-
Electric	1	ALLOW	30,000	-
Reclaimed Water	1	ALLOW	3,130	3,130
Fire Hydrant	1	EA	30,000	-
Subtotal				$ 21,910
LANDSCAPING				
Grading	136,343	SF	$ 0.50	$ 68,171
Soil Preparation	20	CY	10.00	200
Planting	10,955	SF	4.00	43,820
Mulch	157	CY	36.00	5,668
Turf - hydroseed	87,616	SF	0.10	8,762
Subtotal				$ 126,621
IRRIGATION				
Turf area	87,616	SF	$ 3.00	$ 262,849
Shrub Area	21,261	SF	3.50	74,412
Subtotal				$ 337,260
SECURITY LIGHTING				
Site Safety Lighting	2	EA	$ 8,500	$ 17,000
Subtotal				$ 17,000
TOTAL - Construction Costs				$ 1,280,788
DPR ADMINISTRATION	10%	of Construction Costs		$ 128,079
SURVEY AND DESIGN	7%	of Construction Costs		89,655
STORMWATER				30,000
CEQA				75,000
CONSTRUCTION MANAGEMENT	5%	of Construction Costs		64,039
CONTINGENCY	18%	of Construction Costs		230,542
PURCHASING AND CONTRACTING	1%	of Construction Costs		12,808
Total - Soft Costs				$ 630,123
Grand Total -	**Park Acres**		3.13	$ 1,910,912
Cost per Acre				$ 610,500

Source: County of San Diego Parks and Recreation.

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Appendix Table A.3: Small Park Cost Estimate - 1.07 Acre Prototype

Description	Quantity	Unit	Unit Cost	Total Cost
MOBILIZATION				
Equipment, Trailers, Port-a-potties, etc.	1	ALLOW	$ 6,303	$ 6,303
Subtotal				$ 6,303
MASS GRADING	1.068333	Acre	$ 50,000	$ 53,417
Subtotal				$ 53,417
SITE PREPARATION				
Soil Testing	1	ALLOW	$ 374	$ 374
Site Survey	1	ALLOW	2,671	2,671
SWPPP	1	ALLOW	321	321
Subtotal				$ 3,365
TRASH RECEPTACLES				
Concrete	2	EA	$ 800	$ 1,600
Subtotal				$ 1,600
PICNIC TABLES				
Concrete - ADA accessible 8' length	2	EA	$ 1,700	$ 3,400
Subtotal				$ 3,400
BENCHES				
Concrete	2	EA	$ 1,250	$ 2,500
Subtotal				$ 2,500
DRINKING FOUNTAINS				
Metal, 2 dish, ADA accessible, clean-out pan	1	EA	$ 4,000	$ 4,000
Concrete Pads w/ detection scoring	43	SF	8	342
Subtotal				$ 4,342

Source: County of San Diego Parks and Recreation.

DRAFT

Appendix Table A.3: Small Park Cost Estimate - 1.07 Acre Prototype

Description	Quantity	Unit	Unit Cost	Total Cost
PLAYGROUND (TOTS 2-5 Y.O.)				
Equipment	1	ALLOW	$ 60,000	$ 60,000
Rubber Surfacing (80%)	1,885	SF	25	47,125
Concrete Pad (80%)	1,885	SF	8	15,080
Conc. Curb @ Perimeter	194	LF	18	3,492
Sand (20%)	471	SF	6	2,826
Drain Inlet w/ filter fabric, connections	1	ALLOW	1,000	1,000
Subtotal				$ 129,523
SIGNAGE				
Monument Entry Sign	0	EA	$ 30,000	$ -
Kioks Sign	1	EA	4,500	4,500
Subtotal				$ 4,500
BICYCLE RACKS				
Bicycle Racks	1	EA	$ 850	$ 850
Subtotal				$ 850
CONCRETE WALKS				
4" depth, natural color, broom finish	2,844	SF	$ 8	$ 22,751
Subtotal				$ 22,751
CONCRETE MOW CURBS	157.5792	L.F.	$ 10	$ 1,576
Subtotal				$ 1,576
PLASTIC HEADERS	157.5792	LF	$ 4	$ 630
Subtotal				$ 630

Source: County of San Diego Parks and Recreation.

DRAFT

Appendix Table A.3: Small Park Cost Estimate - 1.07 Acre Prototype

Description	Quantity	Unit	Unit Cost	Total Cost
UTILITIES				
Potable Water	1	ALLOW	$ 6,410	$ 6,410
Sewer	1	ALLOW	25,000	-
Electric	1	ALLOW	30,000	-
Reclaimed Water	1	ALLOW	1,068	1,068
Fire Hydrant	1	EA	30,000	-
Subtotal				$ 7,478
LANDSCAPING				
Grading	46,537	SF	$ 1	$ 23,268
Soil Preparation	7	CY	10	68
Planting	3,739	SF	4	14,957
Mulch	54	CY	36	1,935
Turf - hydroseed	29,905	SF	0	2,991
Subtotal				$ 43,218
IRRIGATION				
Turf area	29,905	SF	$ 3	$ 89,716
Shrub Area	7,257	SF	4	25,398
Subtotal				$ 115,114
SECURITY LIGHTING				
Site Safety Lighting	1	EA	$ 8,500	$ 8,500
Subtotal				$ 8,500
TOTAL - Construction Costs				$ 409,068
DPR ADMINISTRATION	10%	of Construction Costs		$ 40,907
SURVEY AND DESIGN	7%	of Construction Costs		28,635
STORMWATER				30,000
CEQA				75,000
CONSTRUCTION MANAGEMENT	5%	of Construction Costs		20,453
CONTINGENCY	18%	of Construction Costs		73,632
PURCHASING AND CONTRACTING	1%	of Construction Costs		4,091
Total - Soft Costs				$ 272,718
Grand Total -	**Park Acres**		1.07	$ 681,786
Cost per Acre				$ 637,200

Source: County of San Diego Parks and Recreation.

DRAFT

File #: ID#19-661, Version: 1

Minutes

Approve minutes of November 19, 2019.

File #: ID#19-662, Version: 1

Financial Claims

Approve financial claims report.

City of Salinas

Claim Check Report 436128-436256

From Payment Date: 11/19/2019 - To Payment Date: 11/19/2019

Number	Date	Status	Payee Name	Transaction Amount
General Account - General Account				
Check				
436128	11/19/2019	Open	Angeline Sickler	$20.00
436129	11/19/2019	Open	Beth Mariano	$34.00
436130	11/19/2019	Open	Maria Elizabeth Soto	$228.23
436131	11/19/2019	Open	Mila Rianto	$140.81
436132	11/19/2019	Open	Chayene Garcia	$256.50
436133	11/19/2019	Open	City of Fresno	$802.00
436134	11/19/2019	Open	College of Alameda	$350.00
436135	11/19/2019	Open	Gaynda Gomez	$237.20
436136	11/19/2019	Open	Jacqueline Buenrostro	$237.20
436137	11/19/2019	Open	2NDNATURE, LLC	$32,400.49
436138	11/19/2019	Open	4 Imprint	$1,410.56
436139	11/19/2019	Open	AG RX	$122.91
436140	11/19/2019	Open	Aircraft Owners And Pilots Assoc	$79.00
436141	11/19/2019	Open	Alhambra and Sierra Spring DS Waters of America LP	$463.52
436142	11/19/2019	Open	Amazon.Com	$706.43
436143	11/19/2019	Open	Ameri Pride Valley Uniform Services	$2,304.42
436144	11/19/2019	Open	American Supply Company	$1,327.41
436145	11/19/2019	Open	Analgesic Services Inc	$178.00
436146	11/19/2019	Open	Arrowhead Evaluation Services, Inc.	$1,425.00
436147	11/19/2019	Open	AT and T	$6,981.30
436148	11/19/2019	Open	AT and T	$165.59
436149	11/19/2019	Open	AT&T Mobility	$141.39
436150	11/19/2019	Open	Beacon Integrated Professionals Resources Inc	$2,857.91
436151	11/19/2019	Open	BFS Landscape Architects	$8,360.00
436152	11/19/2019	Open	Boots Road Group LLC	$2,933.00
436153	11/19/2019	Open	Burton's Fire Inc	$4,624.76
436154	11/19/2019	Open	C & S Engineers, Inc.	$7,271.50
436155	11/19/2019	Open	Cal-West	$17,805.00
436156	11/19/2019	Open	California Towing and Transport	$840.30
436157	11/19/2019	Open	California Water Service	$182.88
436158	11/19/2019	Open	Cathy's Action Packed Fun Jumps Inc	$2,226.39
436159	11/19/2019	Open	CDW-G	$13,235.87
436160	11/19/2019	Open	CEB	$432.73
436161	11/19/2019	Open	Central Coast Systems Inc	$105.00
436162	11/19/2019	Open	Cintas	$1,973.76
436163	11/19/2019	Open	Citi Cards	$915.36
436164	11/19/2019	Open	Coffman Associates, Inc.	$3,050.00
436165	11/19/2019	Open	County of Monterey Information Technology Dept	$130.00
436166	11/19/2019	Open	CW Nielsen Manufacturing Corp	$1,111.90
436167	11/19/2019	Open	Dataflow Business Systems Inc	$4,314.53
436168	11/19/2019	Open	Denise Ledezma Petty Cash	$169.98

City of Salinas

Claim Check Report 436128-436256

From Payment Date: 11/19/2019 - To Payment Date: 11/19/2019

Number	Date	Status	Payee Name	Transaction Amount
General Account - General Account				
Check				
436169	11/19/2019	Open	Department Of Justice	$1,703.00
436170	11/19/2019	Open	Devon Fehn dba Fehn Electric Co	$1,990.80
436171	11/19/2019	Open	Digital Data Services, Inc.	$6,950.00
436172	11/19/2019	Open	Don Chapin Inc	$1,311.68
436173	11/19/2019	Open	Entenmann Rovin Company	$137.13
436174	11/19/2019	Open	Fastenal Company	$63.77
436175	11/19/2019	Open	Fed Ex	$45.17
436176	11/19/2019	Open	Ferguson Enterprises Inc #679	$102.25
436177	11/19/2019	Open	First Alarm	$152.50
436178	11/19/2019	Open	First Book	$1,320.40
436179	11/19/2019	Open	Flying	$18.00
436180	11/19/2019	Open	Gavilan Printers LLC	$381.65
436181	11/19/2019	Open	Golden State Emergency Vehicle Service Inc	$776.31
436182	11/19/2019	Open	Goldfarb and Lipman	$2,128.00
436183	11/19/2019	Open	Griffin Carpet, Inc. dba Wheeler's Flooring	$3,300.00
436184	11/19/2019	Open	Ground Zero Analysis, Inc	$704.00
436185	11/19/2019	Open	Herc Rentals Inc.	$113.62
436186	11/19/2019	Open	Hilda Garcia Petty Cash Custodian	$50.00
436187	11/19/2019	Open	Home Depot Credit Services	$444.63
436188	11/19/2019	Open	Hydro Turf	$179.54
436189	11/19/2019	Open	Ingram Book Company	$278.44
436190	11/19/2019	Open	Interim Inc	$19,688.57
436191	11/19/2019	Open	Iteris Inc	$12,967.98
436192	11/19/2019	Open	Jacob Construction & Design, Inc.	$163,784.83
436193	11/19/2019	Open	James J Klimas Dba Klimas Janitorial Services	$1,700.00
436194	11/19/2019	Open	Jeffrey D. Heithoff dba Independent Fee Estimates	$4,760.00
436195	11/19/2019	Open	Jose Luis Corral dba Salinas Pizza	$219.28
436196	11/19/2019	Open	Kimley Horn And Assoc Inc	$64,315.94
436197	11/19/2019	Open	Kirtley Overhead Doors	$1,181.30
436198	11/19/2019	Open	Kosmont & Associates, Inc. dba Kosmont Companies	$11,703.90
436199	11/19/2019	Open	Lakeshore Learning Materials	$120.14
436200	11/19/2019	Open	LAZ Karp Assoc., LLC dba LAZ Parking California	$25,487.98
436201	11/19/2019	Open	Leon De Asis	$2,000.00
436202	11/19/2019	Open	LexisNexis Risk Data Management Inc Accurint Acct	$351.80
436203	11/19/2019	Open	Martha Carvey Petty Cash Custodian	$27.25
436204	11/19/2019	Open	Midwest Tape, LLC dba Midwest Tape	$869.02
436205	11/19/2019	Open	Mission Uniform Service	$235.41
436206	11/19/2019	Open	Monterey Coast Brewing Company	$65.22
436207	11/19/2019	Open	Monterey County Bar Association	$99.00
436208	11/19/2019	Open	Monterey County District Attorney	$1,021.00
436209	11/19/2019	Open	Monterey County Petroleum	$60,795.98

City of Salinas

Claim Check Report 436128-436256

From Payment Date: 11/19/2019 - To Payment Date: 11/19/2019

Number	Date	Status	Payee Name	Transaction Amount
General Account - General Account				
Check				
436210	11/19/2019	Open	Monterey County Tax Collector	$4,810.60
436211	11/19/2019	Open	Monterey County The Herald	$2,238.25
436212	11/19/2019	Open	Monterey County Transportation Agency	$111,270.35
436213	11/19/2019	Open	Monterey County Women Lawyers Association	$80.00
436214	11/19/2019	Open	Monterey One Water	$740.26
436215	11/19/2019	Open	Monterey Pen Engineering	$191,805.00
436216	11/19/2019	Open	Monterey Transfer and Storage Inc	$340.00
436217	11/19/2019	Open	Monterra Ranch Of Monterey Home Owner's Associatio	$1,880.00
436218	11/19/2019	Open	National Development Council	$5,833.33
436219	11/19/2019	Open	Office Depot Business Service Division	$175.77
436220	11/19/2019	Open	Pacific Gas and Electric Company	$2,863.23
436221	11/19/2019	Open	Pedro C Estrada Dba Estrada Janitorial Service	$4,500.00
436222	11/19/2019	Open	Pinnacle Medical Group Inc	$20.00
436223	11/19/2019	Open	Praetorian Group, Inc. dba Praetorian Digital; EVA	$9,500.00
436224	11/19/2019	Open	Pure Water	$84.50
436225	11/19/2019	Open	Railroad Management Company LLC	$1,089.62
436226	11/19/2019	Open	Rancho Cielo Youth Center	$14,294.98
436227	11/19/2019	Open	Recorded Books	$110.34
436228	11/19/2019	Open	Republic Services of Salinas	$1,552.77
436229	11/19/2019	Open	Rincon Consultants, Inc.	$7,947.24
436230	11/19/2019	Open	Russell Auria Pest Control Services	$190.00
436231	11/19/2019	Open	Salinas Union High School District	$750.00
436232	11/19/2019	Open	Same Day Shred	$97.50
436233	11/19/2019	Open	San Jose Sharks, LLC	$6,216.00
436234	11/19/2019	Open	San Lorenzo Lumber	$2,612.96
436235	11/19/2019	Open	Securitas Security Services USA, Inc	$2,511.00
436236	11/19/2019	Open	Silver and Wright LLP	$3,142.28
436237	11/19/2019	Open	Smart and Final Iris	$324.37
436238	11/19/2019	Open	Smith and Enright Landscaping	$10,986.53
436239	11/19/2019	Open	Smokey Key Service	$166.94
436240	11/19/2019	Open	SVG Partners LLC	$70,000.00
436241	11/19/2019	Open	Target Pest Control	$185.00
436242	11/19/2019	Open	Tina La Perle	$3,660.00
436243	11/19/2019	Open	Tri County Fire Protection	$1,011.28
436244	11/19/2019	Open	Trowbridge Enterprises dba Palace Art and Office S	$3,905.02
436245	11/19/2019	Open	Tyler Business Forms	$224.83
436246	11/19/2019	Open	U.S. Bank National Association ND	$16,576.56
436247	11/19/2019	Open	United Site Services	$218.65
436248	11/19/2019	Open	Uretsky Security	$4,326.00
436249	11/19/2019	Open	Veritiv Operating Company Formerly xpedx	$937.47
436250	11/19/2019	Open	Verizon Wireless	$4,840.24

City of Salinas

Claim Check Report 436128-436256

From Payment Date: 11/19/2019 - To Payment Date: 11/19/2019

Number	Date	Status	Payee Name	Transaction Amount
General Account - General Account				
Check				
436251	11/19/2019	Open	Verizon Wireless	$3,310.80
436252	11/19/2019	Open	Weber Hayes & Associates	$18,781.26
436253	11/19/2019	Open	Wood Rodgers Inc	$280.00
436254	11/19/2019	Open	California Department of Motor Vehicles	$50.00
436255	11/19/2019	Open	Cristela Aguilar	$28.30
436256	11/19/2019	Open	Gerry Reynolds	$25.00
Type Check Totals:				$1,032,592.55
General Account - General Account Totals				

City of Salinas

Claim Check Report 436257-436441

From Payment Date: 11/19/2019 - To Payment Date: 11/26/2019

Number	Date	Status	Payee Name	Transaction Amount
General Account - General Account				
Check				
436257	11/19/2019	Open	Crabill, David	$884.32
436258	11/19/2019	Open	Empresa De Fuego	$1,331.37
436259	11/19/2019	Open	Tony Valencia	$301.33
436260	11/20/2019	Open	Central Coast Federal Credit Union	$22,412.48
436261	11/22/2019	Open	Pacific Gas and Electric Company	$100,587.06
436262	11/26/2019	Open	Alberto Duran	$58.00
436263	11/26/2019	Open	Betty Wilder	$12.00
436264	11/26/2019	Open	Dave Dungan	$12.00
436265	11/26/2019	Open	Derek Gibson	$51.00
436266	11/26/2019	Open	Elani Trejo	$36.41
436267	11/26/2019	Open	James Godwin	$134.67
436268	11/26/2019	Open	James Goulart	$12.00
436269	11/26/2019	Open	Jeffrey Alford	$144.75
436270	11/26/2019	Open	Jesse Gilpas	$12.00
436271	11/26/2019	Open	Jose Arreola	$195.75
436272	11/26/2019	Open	Jose G. Garcia	$12.00
436273	11/26/2019	Open	Justin Heckman	$24.75
436274	11/26/2019	Open	Kimberly Robinson	$198.75
436275	11/26/2019	Open	Matt N. Pressey	$156.60
436276	11/26/2019	Open	Max Blackwell	$129.32
436277	11/26/2019	Open	Robert Miller	$51.00
436278	11/26/2019	Open	Ronald Patterson	$423.51
436279	11/26/2019	Open	Sabrina Webb	$12.00
436280	11/26/2019	Open	Scott Myhre	$2,192.05
436281	11/26/2019	Open	South Bay Regional Public Safety	$3,640.00
436282	11/26/2019	Open	Sylvia Enriquez	$748.50
436283	11/26/2019	Open	Adolfo Lopez	$12.00
436284	11/26/2019	Open	Alejandro Rodriguez	$58.00
436285	11/26/2019	Open	Chayene Garcia	$255.00
436286	11/26/2019	Open	CSULB Foundation	$431.00
436287	11/26/2019	Open	Froylan Aranda	$255.00
436288	11/26/2019	Open	Ichelle Herrera	$12.00
436289	11/26/2019	Open	Jesse Rivas	$716.97
436290	11/26/2019	Open	Luis Manzo	$43.55
436291	11/26/2019	Open	Mario Avina	$24.75
436292	11/26/2019	Open	Omar Harasis	$12.00
436293	11/26/2019	Open	Oscar Dydasco	$12.00
436294	11/26/2019	Open	Pete Magallon	$255.00
436295	11/26/2019	Open	Tommy Kor	$255.00
436296	11/26/2019	Open	Tonya Erickson	$96.56

City of Salinas

Claim Check Report 436257-436441

From Payment Date: 11/19/2019 - To Payment Date: 11/26/2019

Number	Date	Status	Payee Name	Transaction Amount
General Account - General Account				
Check				
436297	11/26/2019	Open	ABAG Power Purchasing Pool	$40,683.37
436298	11/26/2019	Open	Acme Car Wash (William Pierce Inc)	$420.00
436299	11/26/2019	Open	AG RX	$122.91
436300	11/26/2019	Open	Alhambra and Sierra Spring DS Waters of America LP	$27.50
436301	11/26/2019	Open	Alpha	$111.42
436302	11/26/2019	Open	Ameri Pride Valley Uniform Services	$243.97
436303	11/26/2019	Open	American Supply Company	$48.81
436304	11/26/2019	Open	American Textile and Supply Inc	$956.63
436305	11/26/2019	Open	Asap Alisal Signs And Printing	$53.53
436306	11/26/2019	Open	AssetWorks LLC	$6,041.70
436307	11/26/2019	Open	AT and T	$20,337.49
436308	11/26/2019	Open	AutoZone West Inc	$105.11
436309	11/26/2019	Open	Bear Electrical Solutions Inc	$34,368.85
436310	11/26/2019	Open	Beth Mariano	$1,000.00
436311	11/26/2019	Open	BrightView Landscape Services, Inc	$30,240.00
436312	11/26/2019	Open	Bureau Veritas North America Inc.	$776.25
436313	11/26/2019	Open	Cal-West	$2,220.00
436314	11/26/2019	Open	California Water Service	$327.19
436315	11/26/2019	Open	Canon Financial Services Inc	$508.02
436316	11/26/2019	Open	CDW-G	$1,381.34
436317	11/26/2019	Open	Central Coast Glass & Window Co., Inc.	$272.49
436318	11/26/2019	Open	Central Coast YMCA	$13,750.00
436319	11/26/2019	Open	Cintas	$140.34
436320	11/26/2019	Open	City Of Monterey	$8,276.79
436321	11/26/2019	Open	Coast Automotive Warehouse Inc	$983.18
436322	11/26/2019	Open	Coastal Tractor	$170.81
436323	11/26/2019	Open	Commercial Truck Company	$215.53
436324	11/26/2019	Open	CONCERN	$3,175.38
436325	11/26/2019	Open	Consolidated Electrical Distributors, Inc.	$2,546.95
436326	11/26/2019	Open	Copymat	$2,182.27
436327	11/26/2019	Open	CSC Of Salinas	$445.42
436328	11/26/2019	Open	CSG Consultants	$18,967.20
436329	11/26/2019	Open	Data Ticket Inc	$152.35
436330	11/26/2019	Open	Davgp, Inc. dba Salinas Valley Tire	$79.50
436331	11/26/2019	Open	Don Chapin Inc	$779.98
436332	11/26/2019	Open	Elmer's Auto Parts	$16.74
436333	11/26/2019	Open	Emergency Services Consulting International	$5,935.00
436334	11/26/2019	Open	Emergency Vehicle Specialists, Inc.	$4,976.01
436335	11/26/2019	Open	En Pointe Technologies Sales LLC	$633.33
436336	11/26/2019	Open	Fastenal Company	$369.76

City of Salinas

Claim Check Report 436257-436441

From Payment Date: 11/19/2019 - To Payment Date: 11/26/2019

Number	Date	Status	Payee Name	Transaction Amount
General Account - General Account				
Check				
436337	11/26/2019	Open	Fed Ex	$312.04
436338	11/26/2019	Open	Ferguson Enterprises Inc #679	$421.49
436339	11/26/2019	Open	First Alarm	$440.00
436340	11/26/2019	Open	First Alarm Security and Patrol Inc	$1,386.00
436341	11/26/2019	Open	Fred D Jr Hardee	$5,478.76
436342	11/26/2019	Open	Galls Incorporated	$2,545.97
436343	11/26/2019	Open	Golden State Emergency Vehicle Service Inc	$2,582.14
436344	11/26/2019	Open	Golz Construction, Inc.	$2,450.00
436345	11/26/2019	Open	Granite Construction Company	$83,540.99
436346	11/26/2019	Open	Granite Rock Co	$844.82
436347	11/26/2019	Open	Gym Tek, Inc.	$4,800.00
436348	11/26/2019	Open	Harris and Associates	$15,373.50
436349	11/26/2019	Open	Hobart Sales	$183.51
436350	11/26/2019	Open	Hope Rehabilitation Services	$356.20
436351	11/26/2019	Open	Hydro Turf	$1,691.24
436352	11/26/2019	Open	ID Concepts LLC	$1,030.23
436353	11/26/2019	Open	Ingram Book Company	$696.21
436354	11/26/2019	Open	Iteris Inc	$5,868.15
436355	11/26/2019	Open	Jimenez Autobody Parts, Inc dba C & J Auto Parts	$412.62
436356	11/26/2019	Open	Johnson Associates	$464.31
436357	11/26/2019	Open	Jose Luis Corral dba Salinas Pizza	$1,205.07
436358	11/26/2019	Open	Jose Martinez Dba Juanitas Jumping House	$60.00
436359	11/26/2019	Open	Joseph Gunter	$1,232.80
436360	11/26/2019	Open	Julio Gil dba Central Coast Sign and Design	$745.22
436361	11/26/2019	Open	Julita Galleguillos Dba Core Education	$900.00
436362	11/26/2019	Open	Kelly-Moore Paint Company	$220.35
436363	11/26/2019	Open	Kysmet Security & Patrol	$1,758.00
436364	11/26/2019	Open	L.C. Action	$1,809.18
436365	11/26/2019	Open	L.N. Curtis & Sons dba Curtis Blue Line	$17,252.76
436366	11/26/2019	Open	Law Enforcement Psychological Services	$1,200.00
436367	11/26/2019	Open	Liebert Cassidy Whitmore	$150.00
436368	11/26/2019	Open	MCSI Water Systems Management	$648.95
436369	11/26/2019	Open	Midwest Tape, LLC dba Midwest Tape	$99.77
436370	11/26/2019	Open	Mike Signs	$2,731.25
436371	11/26/2019	Open	Monterey Coast Brewing Company	$136.56
436372	11/26/2019	Open	Monterey County District Attorney	$9,228.35
436373	11/26/2019	Open	Monterey County Health Department	$14,650.00
436374	11/26/2019	Open	Monterey County Petroleum	$223.59
436375	11/26/2019	Open	Monterey Sanitary Supply Inc Altius Medical	$463.00
436376	11/26/2019	Open	Municipal Resource Group LLC	$18,590.40

City of Salinas

Claim Check Report 436257-436441

From Payment Date: 11/19/2019 - To Payment Date: 11/26/2019

Number	Date	Status	Payee Name	Transaction Amount
General Account - General Account				
Check				
436377	11/26/2019	Open	My Jeep	$68,214.54
436378	11/26/2019	Open	New Horizons Computer Learning Centers Inc	$2,975.00
436379	11/26/2019	Open	New Image Landscape Company	$20,038.00
436380	11/26/2019	Open	Northridge Owner, L.P.	$1,500.00
436381	11/26/2019	Open	Office Depot Business Service Division	$1,129.92
436382	11/26/2019	Open	Owen Equipment Sales	$4,123.13
436383	11/26/2019	Open	Pacific Coast Battery Service Inc	$52.11
436384	11/26/2019	Open	Pacific Gas and Electric Company	$1,673.63
436385	11/26/2019	Open	Pacific Truck Parts Inc	$1,901.27
436386	11/26/2019	Open	PARS Retirement Services	$300.00
436387	11/26/2019	Open	Pedro C Estrada Dba Estrada Janitorial Service	$4,695.00
436388	11/26/2019	Open	Pinnacle Medical Group Inc	$20.00
436389	11/26/2019	Open	Preferred Alliance Inc.	$103.00
436390	11/26/2019	Open	R Johanson T Wilson J MacLaren PTRS Family Medical	$178.00
436391	11/26/2019	Open	R3 Consulting Group, Inc.	$7,380.00
436392	11/26/2019	Open	Ray Corpuz	$38.43
436393	11/26/2019	Open	RDO Equipment Company	$255.59
436394	11/26/2019	Open	Recorded Books	$62.09
436395	11/26/2019	Open	Red Mountain Inc	$102.70
436396	11/26/2019	Open	Remcho, Johansen & Purcell, LLP	$142.50
436397	11/26/2019	Open	Republic Services of Salinas	$850.82
436398	11/26/2019	Open	RobotLAB Inc.	$11,471.25
436399	11/26/2019	Open	Safety-Kleen Corp	$2,540.93
436400	11/26/2019	Open	Salinas Radiator Shop	$977.79
436401	11/26/2019	Open	Salinas Toyota	$28,709.55
436402	11/26/2019	Open	Salinas Valley Ford Inc	$105.34
436403	11/26/2019	Open	Salinas Valley Solid Waste Authority	$3,576.80
436404	11/26/2019	Open	Sam Klemek	$1,000.00
436405	11/26/2019	Open	Same Day Shred	$90.00
436406	11/26/2019	Open	San Diego Police Equipment Company	$839.48
436407	11/26/2019	Open	San Lorenzo Lumber	$250.35
436408	11/26/2019	Open	Securitas Security Services USA, Inc	$2,430.00
436409	11/26/2019	Open	Serco Inc.	$95,038.40
436410	11/26/2019	Open	Smith and Enright Landscaping	$4,574.69
436411	11/26/2019	Open	Smokey Key Service	$78.67
436412	11/26/2019	Open	Star Sanitation Services	$332.08
436413	11/26/2019	Open	Steve Striffler	$1,000.00
436414	11/26/2019	Open	Steven M Barone	$16,637.59
436415	11/26/2019	Open	SWRCB Accounting Office	$22,605.00
436416	11/26/2019	Open	Tara Hullinger	$250.00

City of Salinas

Claim Check Report 436257-436441

From Payment Date: 11/19/2019 - To Payment Date: 11/26/2019

Number	Date	Status	Payee Name	Transaction Amount
General Account - General Account				
Check				
436417	11/26/2019	Open	Target Pest Control	$390.00
436418	11/26/2019	Open	Taylor Logistics Company LLC dba Farm Fresh Deli	$339.23
436419	11/26/2019	Open	TEC Equipment, Inc.	$85.44
436420	11/26/2019	Open	Tenacity Forensic Examination Services	$14,310.60
436421	11/26/2019	Open	Thomson-West/Barclays	$628.14
436422	11/26/2019	Open	Tina La Perle	$2,700.00
436423	11/26/2019	Open	Tuscany Enterprises, Inc dba Everclear Hydro-jetti	$513.04
436424	11/26/2019	Open	U.S. Bank National Association ND	$406.64
436425	11/26/2019	Open	United Parcel Service	$89.09
436426	11/26/2019	Open	Uretsky Security	$5,544.00
436427	11/26/2019	Open	Vegetable Growers Supply Company	$61.63
436428	11/26/2019	Open	Verizon Wireless	$420.00
436429	11/26/2019	Open	W W Grainger Inc	$635.36
436430	11/26/2019	Open	Walmart Community BRC	$1,384.02
436431	11/26/2019	Open	Wayne Lagger dba LPS Tactical & Personal Security	$2,616.00
436432	11/26/2019	Open	Willdan Financial Services	$1,845.00
436433	11/26/2019	Open	York Risk Services Group, Inc.	$6,950.58
436434	11/26/2019	Open	Alex Marquez c/o Cali NNN BKRE	$100.00
436435	11/26/2019	Open	Avila Construction Company	$1,563.00
436436	11/26/2019	Open	Casey Kubo	$7.75
436437	11/26/2019	Open	CM Corporation	$2,000.00
436438	11/26/2019	Open	Joshua Hedges	$100.00
436439	11/26/2019	Open	Kimley-Horn and Associates, Inc	$1,725.67
436440	11/26/2019	Open	Lorena Carrillo	$556.80
436441	11/26/2019	Open	Timberwolff Construction	$1,563.00
Type Check Totals:				$899,217.64
General Account - General Account Totals				

File #: ID#19-620, Version: 1

Alarm Program Administration and Collection Services Agreement

Approve a Resolution authorizing execution of an agreement with PM AM Corporation for Alarm Program Administration and Collection Services.

CITY OF SALINAS
COUNCIL STAFF REPORT

DATE: **DECEMBER 3, 2019**

DEPARTMENT: **SALINAS POLICE DEPARTMENT**

FROM: **ADELE FRESÉ, CHIEF OF POLICE**

BY: **TONYA ERICKSON, MANAGEMENT ANALYST**

TITLE: **AGREEMENT FOR ALARM PROGRAM ADMINISTRATION AND COLLECTION SERVICES**

RECOMMENDED MOTION:

A motion to approve a Resolution approving agreement with PM AM Corporation for Alarm Program Administration and Collection Services.

RECOMMENDATION:

Staff recommends that the City Council approve an agreement with PM AM Corporation, of Dallas, Texas, for Alarm Program Administration and Collection Services, in accordance with the City's Alarm Ordinance.

EXECUTIVE SUMMARY:

The Salinas Police Department desires to contract with PM AM Corporation for the Alarm Program Administration and Collection Services. Transitioning services to this new contractor is anticipated to result in the additional annual revenue due to a higher rate of successful collections with the new vendor, as well as an increase in the City's percentage of the revenue sharing agreement under the new contract.

BACKGROUND:

The Salinas Police Department has approximately 5,500 registered alarm user permits that are comprised of homeowners and businesses throughout the City. Registration by alarm users and businesses is required by Chapter 22 of the City Code. The purpose of the chapter is to establish standard and controls for the various types of emergency signals from alarm systems that require police response or investigation. The goal is to encourage responsible use of alarm systems and to reduce the number of false alarms to which public safety officers must respond by accurately tracking false alarm instances and assessing fees and penalties as required by the Alarm Ordinance.

The City of Salinas has contracted with a third-party to provide alarm program administration and collection services since 2011. The City and the vendor share the revenue generated from fees, fines, and penalties as outlined in the agreement.

The City currently contracts with CryWolf Managed Services to provide data storage, permit fee collection, false alarm notification, and fine collection. The current contractor agreement has a tiered revenue sharing rate under which they retain 35% of the first $75,000 in revenue, 25% of the next $75,000 in revenue, with decreasing percentages applied to subsequent tiers. All revenue sharing tiers are shown on the table below. For CY 2018, the vendor retained 23.3% of revenue as the contractual service fee, based upon the tiered revenue sharing agreement. The 2018 City share of revenue was $231,187. The contractor reported an overall collection rate of 85.76%

The responsiveness and level of customer service provided by the current contractor, CryWolf Managed Services, has decreased over the last year, with challenges accessing contractor staff and receiving consistent data related to collections and revenue. Additionally, the existing contract does not provide for regular data sharing or reports from the contractor. The decision was made to research alternate vendors to provide the contracted alarm program administration and collection services.

Salinas Police Department staff researched vendors and identified PM AM Corporation as an alternate provider of Alarm Management Administration and Collection Services. PM AM is currently the number one provider of fully managed false alarm billing software services in the country and has a demonstrated collection rate of 95% which is almost ten percent higher than the current contractor. Additionally, the revenue sharing agreement with PM AM Corporation will provide the contractor to a set 18%, which is five percent lower than the current rate. The improved collection rate, and decreased contractor share of revenue, will result in more revenue for the City, while also facilitating increased accessibility to data.

	Current: CryWolf	**Proposed: PM AM Corp.**
Contractor Percentage of Revenue Sharing	2018: 23.3% of total revenue Revenue Sharing Tiers *35% 0 - $75,000* *25% $75,001 - $150,000* *18% $150,001 - $250,000* *15% $250,000 and above*	18% total revenue
Collection Rate *(successful collections)*	85.76% (2018 percentage)	95.0%

The PM AM Corporation has a proven track record of transitioning Alarm Program Administration from the current vendor. A total of 17 cities have recently made the switch from CryWolf Managed Services to PM AM Corporation, including the California cities of Arcadia, Morgan Hill, Roseville, San Luis Obispo and Vallejo. The City of Salinas will not have to pay anything to get

the program up and running with PM AM Corporation. In addition to the fiscal advantages of this agreement, the PM AM Corporation will provide data related to permits, false alarm calls and fees collected.

The agreement with PM AM Corporation will run for a period of three (3) years, with an automatic extension from year to year thereafter on the same terms unless either party notifies the other at least 60 days prior to expiration.

CEQA CONSIDERATION:

Not a Project. The City of Salinas has determined that the proposed action is not a project as defined by the California Environmental Quality Act (CEQA) (CEQA Guidelines Section 15378).

STRATEGIC PLAN INITIATIVE:

Approving the proposed resolution will support the City Council's Strategic Plan Goals of Safe, Livable Community and Effective, Sustainable Government.

DEPARTMENTAL COORDINATION:

The Police Department will work with the Legal and Finance Departments during contract approval and transition of contracted services.

FISCAL AND SUSTAINABILITY IMPACT:

The PM AM Corporation fee for service is based on a revenue sharing formula outlined in the contract. Utilizing 2018 collections data, the annual city revenue will increase by approximately $42,000 upon transition to this vendor. This increase in revenue is anticipated based upon the higher rate of successful collection by the contractor, as well as an increase in the City's percentage of the revenue sharing agreement.

ATTACHMENTS:

Resolution
Contract with PM AM Corporation for Alarm Program Administration and Collection Services

RESOLUTION NO. _____ (N.C.S.)

RESOLUTION APPROVING A CONTRACT FOR ALARM PROGRAM ADMINISTRATION AND COLLECTION SERVICES WITH PM AM CORPORATION

WHEREAS, the City Council has enacted an ordinance, codified at Article II of Chapter 22 of the Salinas City Code and titled Security Alarm Systems ("Alarm Ordinance"); and

WHEREAS, the goal of Salinas in enacting the Alarm Ordinance is to encourage more responsible use of alarm systems and to reduce the number of false alarms to which public safety officers must respond by accurately tracking false alarm instances and assessing fees and penalties as required by the Alarm Ordinance; and

WHEREAS, the contractor desires to provide alarm program administration and collection services; and

WHEREAS, the Salinas Police Department desires to engage the contractor to assume alarm management services as described in the contract.

NOW, THEREFORE, BE IT RESOLVED that the Salinas City Council authorizes the Mayor to execute the contract with PM AM Corporation for Alarm Program Administration and Collection Services; and

BE IT FURTHER RESOLVED that the City Manager and/or his/her designee are authorized to take whatever additional actions may be necessary to effectuate the intent of this Resolution including execution of all contractual activities related to the transition of alarm program management services to the PM AM Corporation and extensions of the agreement approved by this Resolution.

PASSED AND APPROVED this 3rd day of December, 2019, by the following vote:

AYES:

NOES:

ABSENT:

ABSTAIN:

APPROVED:

_____
Joe Gunter, Mayor

ATTEST:

_____
Patricia M. Barajas, City Clerk

CONTRACT FOR ALARM PROGRAM ADMINISTRATION

AND COLLECTION SERVICES

This Contract for Alarm Program Administration and Collection Services (the "**Agreement**") is made and entered into in Dallas County, Texas by and between PMAM Corporation, a Texas corporation whose address is 5430 LBJ Freeway, Suite 370 Dallas, TX 75240, (the "**Contractor**") and the City of Salinas, State of _____ (the "**City**") to be effective upon the date of execution of this Agreement by the City Manager or the City's authorized designee as set forth on the Signature Page hereto (the "**Effective Date**").

Recitals

WHEREAS, the City desires to engage the services of Contractor to provide certain installation, conversion, operation and service of a False Alarm Management Program including the collection services in accordance with the City's alarm ordinances in accordance with the terms of this Agreement (as hereinafter defined) (collectively, the "**Services**"); and

NOW THEREFORE, in exchange for the mutual covenants set forth herein and other valuable consideration, the sufficiency and receipt of which are hereby acknowledged, the parties agree as follows:

Article 1
Scope of Services

1.1 The parties agree that Contractor shall perform the Services in accordance with the terms and conditions of the City's alarm ordinance and this Agreement. The parties' agreement consists of this Agreement and the following Exhibits**,** which are incorporated herein and made a part hereof by this reference thereto:

Scope of Work and Contract Requirements – Exhibit A
Pricing and Receipt of Collections - Exhibit B

In the event of a conflict in interpretation, the documents shall control in the following order: (ii) the Agreement, (ii) Exhibit A, and (iii) Exhibit B, as further modified by the written agreement by the parties as a result of software implemented and deployed by the parties.

Article 2
Terms of Agreement

2.1 The initial term of this Agreement shall be for a period of three (3) years commencing on the Contract Implementation Date (as hereinafter defined) and ending on the day immediately preceding the third anniversary of the Contract Implementation Date (the '**Initial Term**"), subject to earlier termination as set forth in Article 6 hereof. Upon the expiration of the Initial Term, this Agreement shall be subject to automatic extension from year to year thereafter (each an "**Extended Term**") on the same terms and conditions as set forth herein, unless either party notifies the other in writing at least sixty (60) days prior to the expiration of the Initial Term or the Extended Term, as applicable, that such party will not further extend the term of this Agreement. As used herein, the term "**Contract Implementation Date**" shall mean the first day

of the calendar month for which Contractor commences billing for its Services to the City hereunder following the installation of the False Alarm Management Program.

2.2 Contractor shall receive compensation, including authorized reimbursements including reimbursement for any City fees paid by Contractor to the City to permit Contractor to provide the Services or Special Services hereunder, for all Services rendered under this Agreement at the rates set forth in pricing included in this Agreement as Exhibit "B". The compensation is based on a revenue sharing model. In order to facilitate the sharing of revenues as set forth in Exhibit "B" hereto, the City authorizes Contractor to open a P.O. Box and bank account on the City's behalf. Withdrawals from such account shall be controlled by the City, and any such withdrawals be made only by signatories designated by the City.

2.3 At any time during the term of this Agreement, the City may request that Contractor perform Special Services for additional compensation to be agreed upon by the City and Contractor prior to the performance of any Special Services by Contractor. As used herein, Special Services means any work which is determined by the City to be necessary for this Agreement, but which the parties did not reasonably anticipate would be necessary at the execution of this Agreement and which Contractor agrees to perform. If the City and Contractor reach an agreement on the performance of Special Services, Contractor shall undertake such Special Services after receiving the authorization from the City.

2.4 The City acknowledges and agrees that Contractor reserves the right to offer, and may offer, similar services to other government agencies under similar terms and conditions as stated herein except that the revenue share percentage allocated to Contractor and the other government agency may be negotiated between Contractor and such other agency based on the specific revenue expectations, agency reimbursed costs, the exact scope of services to be provided by Contractor, and other agency requirements. Contractor acknowledges and agrees that the City shall have no responsibility or liability whatsoever hereunder with respect to any agreement entered into between Contractor and such other government agency.

Article 3
Contractor Responsibilities

3.1 Subject to the limitations hereinafter set forth, Contractor agrees to and shall defend, indemnify and hold harmless the City, its officers, and management employees from and against all claims, damages, losses and expenses, including reasonable attorney's fees, litigation costs and expenses, arising out of the performance of the Services or Special Services, caused solely by any grossly negligent act or omission of Contractor, or any subcontractor of Contractor. Lack of insurance coverage does not negate Contractor's obligation under this paragraph of this Agreement.

3.2 At all times during the term of this Agreement, Contractor shall be an independent contractor and shall not be an employee of the City. The City shall have the right to control Contactor only insofar as the results of Contractor's services rendered pursuant to this Agreement. The City shall not have the right to control the means by which Contractor accomplishes services rendered pursuant to this Agreement.

3.3 Notwithstanding any other provision of this Agreement to the contrary, in no event whatsoever shall Contractor be liable for damages attributable to its actions or inactions, or its subcontractor's actions or inactions, with respect to the Services or Special Services provided

hereunder, whether for indemnification or otherwise, in excess of the sum of: (i) any insurance proceeds actually received by Contractor, or paid by Contractor's insurance carrier to the City, with respect to the claim for indemnification by the City hereunder, and (ii) the amount of fees actually retained by Contractor under this Agreement as its fee during the six (6) months immediately preceding the act or omission that generated Contractor's indemnification obligation hereunder; provided, however, the limitations on the indemnification obligations of Contractor set forth in this Section shall not apply to the obligation of Contractor to pay the City its share of the collected revenues as set forth in this Agreement.

3.4 Notwithstanding any other obligation of Contractor hereunder, in no event shall Contractor be liable for any indirect, incidental, special, consequential or punitive damages, including loss of fees, profits or income, arising directly or indirectly out of the provision or non-provision of Services or Special Services hereunder, whether or not Contractor had any knowledge that such damages might be incurred.

3.5 If Contractor is required to indemnify the City hereunder, Contractor may assume the defense of the City with counsel reasonably acceptable to the City at the expense of Contractor. In addition, the City may engage its own counsel to participate in any defense in any such proceeding at the City's expense.

Article 4
The City's Responsibility

4.1 The City shall cooperate with and assist Contractor by, among other things, making available, as reasonably requested by Contractor, management decisions, personnel, information, approvals, IT assistance and acceptance that are needed by the Contractor to carry out its obligation under this agreement.

Article 5
Insurance Requirements

5.1 At the current time, Contractor does not maintain any offices in the State in which the City is located, nor does Contractor maintain any employees in such State. All Services required to be performed by Contractor hereunder shall be performed by Contractor at its offices in the State of Texas or elsewhere outside the State in which the City is located. Contractor shall, at its own expense, purchase, maintain and keep in force during the term of this Agreement such insurance as set forth below. Contractor shall not commence work under this Agreement until it has obtained all the insurance required under this Agreement and such insurance has been approved by the City, nor shall Contractor allow any subcontractor to commence work on its subcontract until all similar insurance of the subcontractor has been obtained and approved. The insurance requirements shall remain in effect throughout the term of this Agreement. Contractor, at Contractor's sole cost, shall purchase and maintain, during the term of this Agreement, insurance coverage providing not less than the following:

5.1.1 Comprehensive or Commercial General Liability: $500,000 combined single limit per occurrence for bodily injury, personal injury or death and property damage. The coverage's under this policy shall include those found in the Comprehensive General Liability Broad Form endorsement. This policy shall have no standard coverage removed by exclusions, unless approved by the City.

5.1.2 Automobile Liability: $500,000 combined single limit per accident for bodily injury and property damage. Coverage should be provided as a "Code 1," any auto.

5.1.3 Workers' Compensation and Employers' Liability: Statutory. Employers Liability policy limits of $100,000 for each accident, $500,000 policy limit- Disease. The insurer shall agree to waive all rights of subrogation against the City, its officials, employees and volunteers for losses arising from the activities under this Agreement.

5. 2 All insurance policies, other than Professional Liability, provided under this Agreement shall be written on an occurrence basis.

5.3 The City shall be named as additional insured on the General Liability and Automobile Liability insurance policies. These insurance policies shall contain the appropriate additional insured endorsement signed by a person authorized by that insurer to bind coverage on its behalf. If Contractor, for any reason, fails to maintain insurance coverage which is required under this agreement, the failure shall be deemed a material breach of contract. The City, at its sole option, may terminate this Agreement.

5.4 Each insurance policy shall be endorsed to state that coverage shall not be canceled, reduced in coverage or in limits except after thirty (30) days prior written notice has been provided to the City, or in the event of cancellation because of nonpayment of premium, that the insurer shall give written notice to the City not later than ten (10) days following cancellation.

5.5 Insurance is to be placed with insurers with a Best rating of no less than A:VII. Insurers must be duly authorized to transact business in the State of Texas.

5.6 Certificates of Insurance if requested shall be submitted on the Accord form only. Certificates and endorsements effecting coverage required by this clause shall be forwarded to the City's Purchasing Department.

Article 6
Termination of Agreement

6.1 Grounds for Termination

6.1.1 The City shall inform in writing to Contractor, if Contractor fails to perform its duties under this Agreement with a ninety (90) days window to correct the problem. Contractor shall remedy the problem within ninety (90) days from the receipt of such notice. Should Contractor fail to remedy the problem within ninety (90) days, the City may terminate this Agreement.

6.1.2 Contractor's Fee Schedule and pricing for any and all Services to be provided by Contractor to the City under this Agreement have been set, established and agreed to be based upon the current provisions of applicable City ordinances relating to alarms. Should said ordinances change at any time during the term of this Agreement to reduce the applicable fee, fines and charges, then the Contractor reserves the express right to enter into good faith negotiations with the City to modify the Fee Schedule and pricing accordingly. If, within thirty (30) days of notice from Contractor to the City of its desire to so renegotiate, the parties are unable to reach an agreement mutually acceptable to both parties, then Contractor reserves the right to terminate this Agreement. Said termination shall not be deemed to be a default by Contractor under this Agreement,

Contractor shall be paid all fees and costs due and owing Contractor as of the date of said termination.

6.1.3 Contractor may terminate this Agreement upon written notice to the City if the City misuses or attempts to appropriate the proprietary software of Contractor.

6.2 Effect of Termination

6.2.1 If this Agreement is terminated as provided herein, the City may require Contractor to provide all finished and/or unfinished data and other information of any kind possessed by Contractor in connection with the performance of Services under this Agreement. Contractor shall be required to provide such information within a reasonable period of time of receipt of the request not to exceed thirty (30) days. Specifically, in the event the City shall terminate this Agreement:

6.2.1a All data relating to alarm permits shall be owned by the City. Upon termination of this Agreement, Contractor shall promptly deliver to the City all data in MS-SQL format.

6.2.1b. Contractor retains all right and title to the Application software, including but not limited to, all publication rights, all development rights, all reproductions rights, and all rights that may follow from the commercial development of the software. The City does not acquire any ownership rights to the Application software. The Software is protected in favor of PMAM, as well as any future registered trademarks, are trademarks of PMAM.

6.2.1c. The proprietary software is considered loaned to the City during the duration of this Agreement as laid out in this Agreement and the City will not have any access to PMAM's proprietary software after the conclusion of the Agreement.

6.2.1d. The City shall pay Contractor all fees and costs due and owing Contractor as of the date of said termination.

6.2.1e. The provisions of this Section shall survive the termination of this Agreement.

Article 7
Confidentiality of Information

7.1 At all times, the Contractor shall recognize the City's sole and exclusive ownership of all information provided by the City, and the sole and exclusive right and jurisdiction of the City to control the use of this information. Similarly, the City recognizes that the proprietary software described in Section 6.2.1c. above is owned by Contractor and the City has no rights or claim thereto.

7.2 Each party agrees that neither it, nor its employees, subsidiaries, subcontractors, or agents shall disclose confidential information of the other party, to any person or to anyone except as necessary to perform its obligations under this Agreement, without the expressed written permission of the other party or unless required to do so by law.

7.3 Each party further agrees that in the event that any documents containing confidential information of the other party should be improperly used or removed in any way from the possession or control of the other party by a party, the breaching party shall immediately notify the other party orally and in writing, and shall join with the other party at their request in taking such reasonable steps as the owner of the confidential information may deem advisable to enjoin the misuse and regain possession of such confidential information, or steps otherwise necessary for the protection of the owner's rights and the confidentiality of the information.

7.4 The Contractor agrees to return any and all data furnished and information derived hereunder promptly upon a request by the City and its authorized designee.

Article 8
General Provisions

8.1 This Agreement and its attachments constitute the sole and only agreement between the parties and supersede any prior understandings written or oral agreements between the parties with respect to this subject matter.

8.2 Except as otherwise provided herein, neither this Agreement nor any of the rights, interests or obligations hereunder may be assigned by any of the parties hereto without the prior written consent of the other party; provided that Contractor may assign this Agreement to its successor without consent by the City by giving written notice to the City. This Agreement shall be binding on and inure to the benefit of the parties to it and their respective heirs, executors, administrators, legal representatives, successors and assigns.

8.3 This Agreement shall be governed by the laws of the State of Texas; and venue for any action concerning this Agreement shall be in Dallas County, Texas.

8.4 This Agreement may be amended by the mutual written agreement of the parties.

8.5 In the event any one or more of the provisions contained in this Agreement shall for any reason be held to be invalid, illegal, or unenforceable in any respect, such invalidity, illegality or unenforceability shall not effect any other provisions, and the Agreement shall be construed as if such invalid, illegal, or unenforceable provision had never been contained in it.

8.6 Any notice required or permitted to be delivered hereunder may be sent by first class mail or overnight courier to the address specified below, or to such other party or address as either party may designate in writing, and shall be deemed received three (3) days after delivery set forth herein:

City of Salinas: _____
_____
_____
_____

Contractor: PMAM Corporation
Attn: Mr. Pankaj Kumar, President
5430 LBJ Freeway, Suite 370
Dallas, TX 75240

8.7 This Agreement may be signed in counterparts, each of which shall constitute an original.

(Signature Page Follows on Next Page)

IN WITNESS WHEREOF, the parties hereto have executed this Agreement as of the

_____ day of _____ in the year _____.

City of Salinas

By: _____
Name: Joe Gunter
Title: Mayor

Attest:

By: _____
Name: Patricia M. Barajas
Title: City Clerk

APPROVED AS TO FORM:

By: _____
Christopher A. Callihan
Title: City Attorney

PMAM Corporation

By: _____
PANKAJ KUMAR,
Chief Executive Officer

Attest:

By: _____
Name: _____
Title: _____

Exhibit A

Scope of Work and Requirements

Scope of Work:

It will be the Contractor's responsibility to provide, install, and operate the Professional Services Alarm Management Services Program based on a "False Alarm Management Solution" system hereafter referred to as a FAMS system and all other necessary equipment and services on a "software as a service" basis.. The Contractor shall accurately convert all pertinent data downloaded from the City's current primary alarm and accounts/receivable databases to populate the FAMS system. Effective interfaces shall ensure that all parties share and benefit from the most current and accurate information.

Contractor shall provide appropriate supplies and services including but not limited to;

1. Single point of contact and daily resident assistance
2. Maintenance of databases:
    a. Alarm permits
    b. Permit Holders
    c. Permit Holders with outstanding charges
    d. Non-permitted locations with outstanding charges
    e. Address verification database
3. Collection of payments in accordance with the rates established by the alarm ordinance, and any implementing resolutions or orders, as may be amended from time to time by the City
4. Performance of all the billing in accordance with the City's alarm ordinance, as may be amended from time to time by the City
5. Generation of the following reports including but not limited to:
    a. New alarm permits issued and fees collected
    b. Annual permit renewals billed and fees collected
    c. Permits inactivated or revoked and reason for inactivation or revocation
    d. Permits reinstated and reason for reinstatement
    e. Number of false burglar alarms
    f. Number of false burglar alarms billed and fees collected
    g. Number of false robbery alarms
    h. Number of false robbery alarms billed and fees collected
    i. Number of reinstatement fees billed and fees collected
    j. False burglary and/or robbery alarms for permit owners
    k. False burglary and/or robbery alarms for non-permitted owners
    l. Suspension or revocation Report for permit holders as per ordinance, if applicable

6. System functionality to capture the following information:

   a. Permit number

   b. Permit issue date

   c. Permit expiration date

   d. Permit type (residential / commercial)

   e. Name of business or residential permit holder

   f. Site
      1) Street address and zip code of property
      2) Type of property (residential / commercial)
      3) Telephone numbers
      4) Contact persons (minimum of 2) and phone number(s)
      5) Type of alarm system installed (burglary, panic, robbery)

   g. Billing
      1) Name
      2) Full mailing address (includes zip code)
      3) Contact person and phone number(s)

   h. Permit Holder Responsible for Alarm
      1) Name
      2) Complete mailing address
      3) Phone numbers

   i. Name and telephone number of alarm monitoring company

   j. Name and telephone number of company that installed the alarm system

   k. Special Medical Concerns

   l. Pet Information

7. System functionality to generate notices to alarm users without permits

8. Transfer on line and/or via magnetic media a skeleton version of entire registration database from FAMS system to RMS including the following:
      1) Permit number (or non-permitted identifier)
      2) Name of permit holder
      3) Location of permit holder
      4) Permit status
      5) Expiration date
      6) Last false alarm incident date and time
      7) Alarm type (i.e., burglar, panic, etc.)
      8) False alarm incident count

9. Transfer on line and/or via magnetic media incident records from RMS to FAMS including:
      1) Incident number
      2) Priority
      3) Call code
      4) Disposition

5) Date
6) Time:
    (a) Received
    (b) Dispatched
    (c) Arrived
    (d) Cleared
7) Remarks
8) Site name and address
9) Reportee name, address, phone number
10) Dispatcher- employee number and terminal
11) Phone clerk - employee number and terminal
12) Cleared code and disposition (true/false)
13) Officer number
14) Unit(s) assigned

Collection requirements and provisions:

PMAM will design, implement and maintain a system to serve as the billing and collections agent and accounts receivable (A/R) manager for the City Alarm Program Administration and Collection Service. The Contractor will provide all hardware, software, materials, supplies, space, and staff resources as required. The system will meet the following collection specifications:

1. Bill format will provide stub or appropriate remittance form to accompany payment.
2. Bill format, permit forms, envelopes and related correspondence will identify the location of a Contractor staffed and maintained office so the customer may have the ability to obtain direct answers to questions about their bills and related false alarm system information.
3. All bills, correspondence and related matters will be approved by the City.
4. Bills will be due in time lines specified in the ordinance and or rules and regulations as appropriate.
5. Records of bills will be retained by Contractor to apply to Account Receivable system (A/R) to be maintained by Contractor.
6. Contractor will develop an A/R file, which the City will have access to review at any time.
7. System functionality for the City to print a bill for customers wishing to make payments at the walk in cashier location(s) of the City and to provide on-line information to the Contractor regarding such payments so that Contractor can maintain A/R file.
8. Contractor will provide the ability for customer to pay on-line, by mail and via walk-in cashier.
9. Payments made by mail will be directed to a P.O. Box address in Texas maintained and managed by the Contractor, unless and until the City directs that such payments be directed to a lock box address established by the City.
10. Contractor system will track NSF or insufficient fund check occurrences and occurrences where customer stop payments have been ordered.
11. Contractor will provide system for billing the customer for the appropriate NSF or insufficient fund check fee charges and charges for stop payment situations.

12. Notwithstanding the foregoing, the Services provided hereunder do not extend to any debt collection activities in the event the property owner does not pay the amount of the invoice submitted by Contractor. Any such debt collection activities shall be performed by an independent contractor selected either by (i) the Contractor with the prior written consent of the City or its designee, or (ii) the City or its designee or agent upon written notice to the Contractor.

Processing:

The Contractor shall provide the services covered under this Agreement and Scope from its offices in Texas and make available hardware and software and services necessary to establish and provide the Alarm Program Administration and Collection Service.

Contractor's Obligation:

In addition to the above, the Contractor shall:

1. Maintain the proposed equipment, hardware, and software, documentation, and support services for the equipment installed, including the timely incorporation of all engineering changes.
2. Supply the City with an interface document describing the type, size, location, and medium of transfer from the City RMS.
3. Defer to the city regarding the waiver of any false alarm fee incurred where there is question about the validity of any response or action taken by an employee(s) of the City regarding a specified alarm call.
4. When possible, reports shall be produced based on the entry of variable parameters. Threshold fields shall allow a specific date range or other criteria. When possible, all report searches, shall allow for multiple parameters..

Training

1. The Contractor shall provide training for the City and Police employees. Training shall be conducted in several sessions on an as needed basis.

System Coordination

1. The Contractor shall coordinate with the City's Finance Department, Information Services and the City Police Department to develop a system that will allow walk-in payments under the Agreement.

2. The Contractor shall provide during the life of the Agreement on-going computer hardware, software support and maintenance to ensure uninterrupted operation. In the unlikely event of interruption, Contractor will make best efforts to restore service within seventy-two (72) hours

3. The Contractor under this Agreement shall establish and provide public education, awareness and information regarding the City's Alarm Management Program.

City Licensing Fees

1. The City acknowledges and agrees that Contractor shall be exempt from any applicable City license fees in performing its services hereunder.

Exhibit "B"

Pricing and Receipt of Collections

This is a revenue sharing contract. The Contractor shall retain the percentages and amounts listed in the table below of all collections and remit the percentage balance and amounts listed in the table below to the City for the total of the actual revenues generated and collected for the City during the life of this Agreement including all adjustments for:

a. Alarm permit and renewal fees;
b. False alarms violation fee above a mandated limit;
c. Reinstatement fees;
d. Late fee for false alarms, permit fees and renewal fees
e. Other charges imposed by the City in relation to the City's
f. Alarm Program Management and Collection Services (except for criminal penalties).

City of Salinas	**PMAM Corporation**
82%	**18%**

The City and Contractor shall share the revenue generated from fees, fines, and penalties as described above; provided that all bank charges incurred in connection with the Services rendered under this Agreement by Contractor shall be paid by the program before the foregoing split of fees.

In addition, the City shall reimburse Contractor for its out-of-pocket postage expenses incurred by Contractor in performing its services to the City hereunder promptly upon receipt of an invoice from Contractor for such postage expense. At the election of Contractor, Contractor may submit an invoice to the City for such postage expense or Processing Fee and deduct and offset such amount(s) from the percentage amount to the City hereunder.

Contractor reserves the right to renegotiate this pricing should the City change the fee schedule for the false alarm ordinance.

The City acknowledges that Contractor is installing the Program at no cost the City. Consequently, in the event the City terminates this Agreement within 12 months from the Effective Date for any reason other than the failure of Contractor to perform its Services hereunder that has not been cured by Contractor within 30 days of receipt of written notice of the problem, Contractor shall be entitled to receive, and the City shall pay to Contractor, the fees that Contractor would have received hereunder for a period of 12 months less the number of months, if any, that Contractor was paid its fees hereunder prior to the termination of this Agreement (the "**Guaranteed Period**"). If this Agreement is terminated after the Contract Implementation Date, the amount of the fees to be paid to Contractor shall be the average of the monthly fees retained by Contractor prior to termination of this Agreement multiplied by the number of months remaining in the Guaranteed Period. If this Agreement is terminated prior to the Contract Implementation Date, the amount of fees to be paid to Contractor shall be the amount of the fees projected by the parties to be retained by Contractor during the Guaranteed Period at the time this

Agreement was executed. The amount of any fees payable to Contractor pursuant to the provisions of this paragraph shall be paid by the City upon termination this Agreement unless the parties agree to have such amount paid in equal monthly installments over an agreed period of time. The provisions of this paragraph shall survive the termination of this Agreement.

The share of the revenues payable to Contractor and the City in accordance with the provisions of this Exhibit B shall be determined and paid monthly within 15 days after the end of each calendar month during the Term hereof based upon the amount of collections during the immediately preceding calendar month, adjusted for any outstanding authorized reimbursements or expenses payable to Contractor in accordance with the terms of this Agreement.

File #: ID#19-640, Version: 1

Direct Purchase of Active Shooter Ballistic Protection Kits for Salinas Police Officers

Approve a Resolution authorizing the purchase of Active Shooter ballistic vests and Helmets by the Salinas Police Department from Aardvark Inc. at a total cost of $155,811.58.

CITY OF SALINAS
COUNCIL STAFF REPORT

DATE: **DECEMBER 3, 2019**

DEPARTMENT: **POLICE DEPARTMENT**

FROM: **ADELE FRESE, CHIEF OF POLICE**

BY: **DALE FORS, SERGEANT**

TITLE: **DIRECT PURCHASE OF LEVEL IV ACTIVE SHOOTER RESPONSE KITS FOR SWORN POLICE OFFICERS.**

RECOMMENDED MOTION:

It is recommended the City Council approve a resolution authorizing the direct purchase of 154 Level IV active shooter response kits for all sworn police officers from Aardvark Inc. at a total cost of $155,811.58.

RECOMMENDATION:

It is recommended the City Council approve the recommended motion to purchase Level IV active shooter kits for police personnel. This equipment will undoubtable provide a greater level of ballistic protection for officers when responding to volatile situations which may involve an active shooter or a critical incident involving a suspect armed with a rifle. By providing this equipment, officers will be able to respond to these events in a more efficient and safe manner while safeguarding lives within the community.

DISCUSSION:

Over the past several decades communities like ours have seen an increase in violent related crimes and active shooters who have and will commit mass homicide with a firearm(s). From recorded incidents such as the Columbine high school massacre in April 1999 to workplace and nightclub shootings such as the Pulse nightclub shooting in 2016, there have been a total of 277 active shooter incidents since the year of 2000. Last year alone, 85 lives were lost during active shooter incidents in the U.S. according to FBI statistics. During these incidents we have learned through the subsequent investigations and historical data these suspects have taken the lives of many community members and officers by way of high-powered rifles and in most cases multiple firearms. As disturbing as these figures are, we have also seen a growing trend of police officers losing their lives to ambush encounters on routine calls such as Officer Natalie Corona who was shot during a routine traffic stop in the City of Davis, CA on January 10th of this year.

In order to combat this, police agencies across the nation have employed new tactics, upgraded necessary equipment and collaborated with medical personnel to better respond in a safe, efficient and effective manner. These agencies have developed rescue task forces, equipped their officers and medical personnel with proper ballistic equipment and created new policies and procedures to save lives. By doing this, the morale and legal standard for police officers has changed. As always, patrol officers charge forward into the gunfire immediately as these incidents rapidly unfold to confront gunman and ultimately end the loss of life. When this occurs, officers place themselves to extreme risk with only the equipment they are issued. When an incident such as this occurs in the city of Salinas, our officers will currently respond with patrol level body armor that is handgun rated only and that will not stop rifle fire. They will also respond with no head protection and thus be further exposed to loss of life.

Projecting that an incident such as this will occur in the City of Salinas, it is the departments duty to provide the best equipment possible to give our officers the chance to save the lives of others while also preserving their own. No city is exempt from this type of incident as we have most recently seen at the Gilroy Garlic Festival when officers from the Salinas Police department responded to assist in an active shooter that killed 3 and wounded a total of 17 with an assault rifle.

Based on these facts, the Salinas Police Department wishes to purchase Level IV active shooter kits for patrol officers. These kits include a rifle rated ballistic vest and helmet for each officer that will come with a carry bag and extra pouches for necessary life-saving equipment. These ballistic vests and helmets would be kept in the trunks of each officer's patrol vehicle and would be available for them to quickly place them over their uniform to rapidly deploy with rifle rated protection. The vests will be provided by Aardvark Inc. who have agreed to develop the latest rifle rated ballistic vest that will be custom tailored to the Salinas Police Departments active shooter needs. This vendor was also chosen after contacting several vendors and conducting demonstrations to find the best quality vests at an acceptable price. Vendors from other sources quoted up to double the price of the Aardvark Inc. active shooter kit. The police department is currently asking to purchase these kits for 154 officers, which is our current sworn strength, at a total cost of $155,811.58.

City council has the authority to approve this purchase under Salinas Municipal code Section12-27 and without application of the local purchasing preference pursuant to Salinas Municipal Code Section 12-28.080.

This report has been presented to the Police Community Advisory Committee.

CEQA CONSIDERATION:

The City of Salinas has determined that the proposed action is not a project as defined by the California Environmental Quality Act (CEQA) (CEQA Guidelines Section 15378). In addition, CEQA Guidelines Section 15061 includes the general rule that CEQA applies only to activities, which have the potential for causing a significant effect on the environment. Where it can be seen

with certainty that there is no possibility that the activity in question may have a significant effect on the environment, the activity is not subject to CEQA. Because the proposed action and this matter have no potential to cause any effect on the environment, or because it falls within a category of activities excluded as projects pursuant to CEQA Guidelines section 15378, this matter is not a project. Because the matter does not cause a direct or foreseeable indirect physical change on or in the environment, this matter is not a project. Any subsequent discretionary projects resulting from this action will be assessed for CEQA applicability.

STRATEGIC PLAN INITIATIVE:

1. Economic Diversity and Prosperity: This item does not specifically relate to one of the Council's Strategic Plans or Goals.

2. Safe, Livable Community: Relates specifically under the objective "Update Technology in Public Safety."

3. Effective, Sustainable Government: This item does not specifically relate to one of the Council's Strategic Plans or Goals.

4. Well Planned City and Excellent Infrastructure: This item does not specifically relate to one of the Council's Strategic Plans or Goals.

5. Quality of Life: This item does not specifically relate to one of the Council's Strategic Plans or Goals.

DEPARTMENTAL COORDINATION:

The Salinas Police Department will coordinate with the Finance Department to complete this purchase upon City Council's approval.

FISCAL AND SUSTAINABILITY IMPACT:

Account #1100.40.4220-62.4300 currently has funding available for purchase of the active shooter kits. This account currently has $161,336.96. Total cost of the active shooter kits is 155,811.58.

ATTACHMENTS:

Council Resolution
Quotes

RESOLUTION NO._____(N.C.S.)

A RESOLUTION AUTHORIZING THE DIRECT PURCHASE OF 154- LEVEL 4 ACTIVE SHOOTER KITS FROM AARDVARD INC. AT A TOTAL COST OF $155,811.58

WHEREAS, there are funds available in the current 2019-2020 fiscal year budget account 1000.40.4220-62.5120 which has funding available for the purchase of the equipment at a total cost of $155,811.58.

WHEREAS, the Aardvark Level IV ballistic vest and helmet kit were identified as the best suited for the needs of the department; and

WHEREAS, Aardvark Inc. will create a custom active shooter kit and provides the preferred price for the department's needs; and

WHEREAS, the City Council can approve this purchase pursuant to Salinas Municipal Code Section 12-27 (purchases without notice, advertising or competitive bids) in contracting for equipment, materials, supplies and services and pursuant to Salinas Municipal code 12-28.080 (Exception to local purchasing requirement).

NOW, THEREFORE, BE IT RESOLVED BY THE SALINAS CITY COUNCIL that the Finance Director, as the City's Purchasing Agent is hereby authorized to direct purchase 154- active shooter kits from Aardvark Inc. at a total cost of $155,811.58 using funding from general fund account 1000.40.4220-62.5120

PASSED AND APPROVE the 3rd day of December 2019 by the following votes:

AYES:

NOES:

ABSTAIN:

ABSENT:

APPROVED:

_____

Joe Gunter, Mayor

ATTEST:

_____

Patricia M. Barajas, City Clerk

CUSTOMIZABLE ACTIVE SHOOTER KIT

Active Shooter and First Responder incidents are changing the way officers operate, and we at AARDVARK want to step in and help. AARDVARK's Active Shooter Kits offer a fast, simple, and affordable way to increase ballistic capability. With our selection of carriers and rifle plates, we're able to address a wide range of potential threats and tactical situations by allowing the end user to choose based on their department's requirements.

CARRIERS

TAC-PH

- Modular Webbing Carrier
- Adjustable side buckle
- Adjustable shoulder straps with D rings to provide a platform for accessory attachment

TAC-PR

- Side adjustable buckles
- Fully padded & adjustable shoulder straps
- Bottom-loading front and back plate pockets

TAC-AR

- Dual-side closure system
- Outer Cummerbund
- Bottom-loading front and back plate pockets

PLATES

PT2114G – LEVEL IV
8.3 lbs // 0.69" Thin

PT2230 – LEVEL IV
7.5 lbs // 1.2" Thin

PT2113MC-3 – LEVEL III
3.1 lbs // 1.14" Thin

X-CAL LP – LEVEL III ICW
5.1 lbs // 0.4" Thin

OPTIONAL ACCESSORIES

COMPACT TFAK

PATCHES

POUCHES

OPTIONAL HELMETS

DELTA 4
2.78 lbs

DELTA 5
1.87 lbs

AARDVARK
PROTECTING TACTICAL OPERATORS

For more information contact:
STEVEN BUTLER – CHANNEL MANAGER
sbutler@aardvarktactical.com
C (626) 513 3275
O (909) 451 6100
AARDVARKTACTICAL.COM

AARDVARK
1935 Puddingstone Drive
La Verne, CA 91750
TEL: (909) 451-6100 FAX: (909) 392-3823
FED TAX ID: 95-4451904

QUOTE

Quote #	QSTD-15516
Date:	10/1/2019
Payment Terms:	Net 30 Days
SPID:	SBUTLER
RM:	BUTLER158
Page:	1 of 1
Quote Expiration Date:	*11/30/2019*

Sold To: Salinas Police Department
222 Lincoln Ave
Salinas, CA 93901
USA

Ship To: Salinas Police Department
222 Lincoln Ave
Salinas, CA 93901
USA

Entered by	Customer No.	Shipping Method	PO Number/Contract #	Last 4 C/C #
dgraff	SALINASPD01	BESTWAY		

Qty	Unit / Cpnt Qty	Item Number	CT	Description	Price	Ext Price
154	EA	AARD-CUSTPRO		Salinas PD Level IV Active Shooter Kit Includes: (1) Delta 4 Helmet w R2S Suspension (1) TAC-PH Plate Carrier (2) 2014 G Level IV Plates 10x12 (1) Double M4 Mag Pouch (1) Bag (2) ID Patches	920.75	141,795.50
				* This quote was prepared for Sgt. Dale Flore at dalef@ci.salinas.ca.us * DELIVERY 90-120 DAYS ARO ** Please contact Brittany Baeza at (909) 451-6102 or bbaeza@aardvarktactical.com when you are ready to place this order. Thank you and have a great day!		

No return will be accepted unless a Return Authorization is issued prior to the goods being returned . If the error which necessitates the return is a result of an Aardvark error , no restocking fee will be charged. Merchandise may be returned within 30 days of purchase and buyer will be subject to a 20% restocking fee. All returns must be Freight Prepaid and in new sellable condition. Credit for the value of the returned merchandise (less restocking fees and shipping charges) will be made. Defective merchandise is not subject to any restocking fee. Customized orders are non-returnable

Subtotal	141,795.50
Freight	900.00
Estimated Sales Tax	13,116.08
Total	**155,811.58**

File #: ID#19-641, Version: 2

Salinas Municipal Airport Lighting Management Control System Grant Funding

Approve a Resolution for the application and acceptance of a grant funding from the Federal Aviation Administration and Caltrans Division of Aeronautics for the design and installation of an Airport Lighting Management Control System at the Salinas Municipal Airport.

CITY OF SALINAS
CITY COUNCIL STAFF REPORT

DATE: **DECEMBER 3, 2019**

DEPARTMENT: **PUBLIC WORKS, AIRPORT DIVISION**

BY: **DAVID JACOBS, PUBLIC WORKS DIRECTOR**

FROM: **BRETT J. GODOWN, AIRPORT MANAGER**

TITLE: **FEDERAL AVIATION ADMINISTRATION AND CALTRANS DIVISION OF AERONAUTICS GRANT FUNDING FOR THE DESIGN AND INSTALLATION OF AN AIRPORT LIGHTING MANAGEMENT CONTROL SYSTEM AT THE SALINAS MUNICIPAL AIRPORT**

RECOMMENDED MOTION:

A motion to approve a Resolution for the application and acceptance of grant funding from the Federal Aviation Administration and Caltrans Division of Aeronautics for the design and installation of an Airport Lighting Management Control System at the Salinas Municipal Airport.

RECOMMENDATION:

It is recommended that the City Council approve a Resolution for the application and acceptance of grant funding from the Federal Aviation Administration and Caltrans Division of Aeronautics for the design and installation of an Airport Lighting Management Control System at the Salinas Municipal Airport. The Resolution includes the following actions:

1. Approve submittal of the preliminary and final grant applications for the Federal Aviation Administration (FAA) Airport Improvement Program Number 3-06-0206-29 (AIP 29);

2. Approve and accept grant offer being received from the FAA and California Department of Transportation Division of Aeronautics (Caltrans), including amendments and change orders, consistent with Constitutional and Local Law requirements; and

3. Authorize and empower the City Manager and or Designee to execute on behalf of the City of Salinas all required documentation with respect to the application for and the acceptance of FAA and Caltrans grant funding for the design and installation of an Airport Lighting Management Control System Salinas Municipal Airport, for FAA Airport Improvement Program No. 3-06-0206-29 (AIP 29) upon prior approval as to form by the City Attorney.

EXECUTIVE SUMMARY:

This grant will provide needed capital funding to replace the infrastructure that controls the airport lighting systems (Runways, Taxiways, and Visual Aids Lighting). The existing system was installed in the 1970's and replacement parts are becoming less common. This project was included in this year's City Council approved Airport Capital Improvement Plan transmittal (ACIP) to the FAA.

BACKGROUND:

Each year the Federal Aviation Administration (FAA) requires airports to develop an Airport Capital Improvement Plan (ACIP) for the purpose of distributing Airport Improvement Program grants for the planning, construction, and maintenance of airport facilities. The ACIP is funded through the Airport Improvement Program (AIP). As a Non-primary airport, the Salinas Municipal Airport receives an annual entitlement of $150,000. The annual entitlement amount allocated to an airport is based on the amount of development that airport has identified within the National Plan of Integrated Airport System (NPIAS). The NPIAS is derived from the annual ACIP submittal provided by the airport sponsor. The maximum entitlement amount a non-primary general aviation airport can receive is $150,000 per year. Any ACIP funds requested from the FAA over $150,000 in a fiscal year must be competed for from discretionary funds the FAA has set aside.

The proposed project involves installing a new Airport Lighting Control and Monitoring System (ALCMS) conforming to the FAA Advisory Circular 150/5345-56B and other appropriate FAA Advisory Circulars and Specifications. A unit will be installed in both the Air Traffic Control Tower (ATCT) and airfield electrical vault. By installing the new ALCMS in the electrical vault building and Air Traffic Control Tower, increased safety and reliability of the airfield electrical system will increase. The current system is dated and hard to find parts for; by upgrading to the new ALCMS system, the dependability of the system will be more consistent, leading to overall airfield safety.

Following the acceptance of the initial grant application by the FAA, City Staff will prepare advertisement for the PS&E along with the Invitation to Bid. City Staff will bring this item before City Council for approval to advertise. Following the receipt of bids, Staff will prepare a revised grant application based on bids and submit the revised application to the FAA. Acceptance of the grant based on bids will require signatures from the City Manager and the City Attorney's office.

The pre-construction and construction observation work associated with this project, including designing Plans, Specifications, and Engineer's Estimate (PS&E) will be completed under contract with the Airport's current firm on retainer, C&S Engineer's, Inc. (C&S). The Task Order will be presented to the Airport Commission for recommendation and City Council for final approval in early 2020.

At the November 21, 2019 Airport Commission meeting, the Airport Commission recommended City Council approve the submittal of the preliminary FAA Grant application (AIP29) and that the City Manager be authorized to execute on behalf of the City of Salinas all required documentation with respect to the application for and the acceptance of FAA and Caltrans, including change orders for the design and installation of ALCMS at the Salinas Municipal Airport.

CEQA/NEPA CONSIDERATION:

CEQA:
The City of Salinas has determined that the project is exempt (Categorical Exemption – CATEX) from the California Environmental Quality Act (CEQA) Guidelines (Section 15300, Class 1) because the project proposes the replacement of an existing public facility (airport electrical systems) that will not expand beyond the existing limits. This project will ensure the airport remains a safe operating facility as mandated by the FAA.

NEPA:
Because the City is accepting federal funds for this project, the work is subject to National Environmental Policy Act (NEPA). The City of Salinas has determined that the project is exempt (Categorical Exemption – CATEX) pursuant to FAA Order 1050.1E paragraph 310e because the project proposes the replacement of an existing public facility (airport electrical systems)that will not expand beyond the existing limits. This project will ensure the airport remains a safe operating facility as mandated by the FAA.

STRATEGIC PLAN INITIATIVE:

The project complements the City Council's Goals for Excellent Infrastructure, and Economic Diversity and Prosperity.

FISCAL AND SUSTAINABILITY IMPACT:

There will be no impact to the City's General Fund. Funding to complete this work will come from the FAA, Caltrans Division of Aeronautics, and the Airport Enterprise Fund. Approximately $165,741.00 is being requested from the FAA to fund this project. Federal grants under this program require a 10% match; $8,287.00 is being requested from CalTrans Division of Aeronautics, leaving the City's matching portion of approximately $10,129.00 for the design and installation of Airport Lighting Management Control System Salinas Municipal Airport. The estimated project costs are based on engineer's estimates provided by C&S. The FAA provides grants based on bids; it is anticipated the actual grant amount and local matching component will vary within ±10% of the engineer's estimate.

The current budget for the design and installation of Airport Lighting Management Control System Salinas Municipal Airport., AIP 29 (City CIP No. has not been assigned, this will happen during the mid-year budget.) is as follows:

FY 20-21	
Funding Source	**Appropriations**
FAA	165,741
CalTrans	8,287
Municipal Airport Fund	10,129
	$184,157

And below is a summary of the projected cost:

FY 20-21			
	FAA Portion (90%)	**Local Funds/Match (10%)**	**Total**
Construction	98,100.00	10,900.00	109,000.00
Engineering	31,339.80	3,482.20	34,822.00
Preliminary Expense	2,700.00	300.00	3,000.00
Project Inspection	16,650.00	1,850.00	18,500.00
City Admin.	16,951.50	1,884	18,835.00
Total Project Costs	**165,741**	**18,415.70**	**184,157.00**

DEPARTMENTAL COORDINATION

Approval and execution of the grant will require City Attorney review as to form and the City Manager's approval. Public Works staff will review the Plans, Specifications, and Estimate.

ATTACHMENTS:

Applications for Federal Assistance - FAA AIP NO. 3-06-0206-29 (AIP 29)

NEPA/CEQA Documents

RESOLUTION NO. _____ (N.C.S.)

A RESOLUTION FOR THE APPLICATION AND ACCEPTANCE OF A GRANT FUNDING FROM THE FEDERAL AVIATION ADMINISTRATION AND CALTRANS DIVISION OF AERONAUTICS FOR THE DESIGN AND INSTALLATION OF AN AIRPORT LIGHTING MANAGEMENT CONTROL SYSTEM AT THE SALINAS MUNICIPAL AIRPORT (AIP-29)

WHEREAS, each year the City of Salinas (City) is required to submit a five-year proposed Airport Capital Improvement Plan (ACIP) to the Federal Aviation Administration (FAA) and California Department of Transportation, Division of Aeronautics (Caltrans) to allow for appropriate planning and budgeting for future projects; and

WHEREAS, on December 3, 2019, the City Council approved the transmittal of the Salinas Municipal Airport five-year ACIP to the FAA and Caltrans; and

WHEREAS, the FAA and Caltrans requires the City of Salinas to submit in this fiscal year a preliminary and final Airport Improvement Program (AIP) grant application for design and installation of an airport lighting and control monitoring system (ALCMS); and

WHEREAS, on November 21, 2019, the Airport Commission recommended City Council approve the acceptance of the AIP grant agreements being offered by the FAA and Caltrans; and

WHEREAS, the Unites States of America, acting through the Department of Transportation, Federal Aviation Administration and Caltrans is offering a Grant Agreement to the City of Salinas for design and installation of an ALCMS at the Salinas Municipal Airport; and

WHEREAS, the acceptance of this AIP grant funding requires the City to adopt a resolution authorizing the acceptance of an allocation of AIP grant funds, execution of the grant agreements, and certify the availability of local matching funds in connection with the project; and

WHEREAS, the City Council desires the City to receive the maximum of available FAA and Caltrans grants to be used for this project.

THEREFORE, BE IT RESOLVED by the City Council of Salinas that:

1. Submittal of preliminary and final application for FAA and Caltrans AIP grants for FY 2019 and 2020 for Entitlement Projects and Discretionary Projects are hereby approved.

2. Upon grant offers being received from the FAA and Caltrans, including amendments thereto are hereby approved and accepted when received, consistent with Constitutional and local law requirements.

3. The City Manager and or Designee are hereby authorized and empowered to execute on behalf of the City of Salinas all required documentation upon prior approval as to form by the City Attorney.

PASSED AND APPROVED this 3rd day of December 2019, by the following vote:

AYES:

NOES:

ABSENT:

ABSTAIN:

APPROVED:

_____
Joe Gunter, Mayor

ATTEST:

_____
Patricia M. Barajas, City Clerk

APPENDIX A. DOCUMENTED CATEX

Airport sponsors may use this form for projects eligible for a categorical exclusion (CATEX) that have greater potential for extraordinary circumstances or that otherwise require additional documentation, as described in the Environmental Orders (FAA Order 1050.1F and FAA Order 5050.4B).

To request a CATEX determination from the FAA, the sponsor should review potentially affected environmental resources, review the requirements of the applicable special purpose laws, and **consult with the Airports District Office or Regional Airports Division Office staff** about the type of information needed. The form and supporting documentation should be completed in accordance with the provisions of FAA Order 5050.4B, paragraph 302b, and submitted to the appropriate FAA Airpor5ts District/Division Office. The CATEX cannot be approved until all information/documentation is received and all requirements have been fulfilled.

Name of Airport, LOC ID, and location:

Salinas Municipal Airport (SNS), 30 Mortensen Ave., Salinas, California 93905

Project Title:

Airport Lighting Control Monitoring System (ALCMS)

Give a brief, but complete description of the proposed project, including all project components, justification, estimated start date, and duration of the project. Include connected actions necessary to implement the proposed project (including but not limited to moving NAVAIDs, change in flight procedures, haul routes, new material or expanded material sources, staging or disposal areas). Attach a sketch or plan of the proposed project. Photos can also be helpful.

The proposed project at Salinas Municipal Airport involves installing a new Airport Light Control and Monitoring System (ALCMS) to replace the existing mechanical system (see **Attachment 1 – Proposed Project**). The ALCMS will be installed in accordance with the FAA Advisory Circular 150/5345-56B. A unit will be installed in both the air traffic control tower (ATCT) and the electrical vault. Additionally, the proposed project will include trenching (2' width x 90' +/- length at 2.5' depth) to install new conduit communication cable. The proposed project limits will be constrained to the area between the ATCT and the existing electrical vault, which is approximately 90 feet. There will be no impact to normal airport operations. Construction is anticipated to begin in late August of 2020.

Give a brief, but complete, description of the proposed project area. Include any unique or natural features within or surrounding airport property.

Salinas Municipal Airport is located in the City of Salinas (City) in Monterey County, roughly 10 miles east of the Monterey Bay area and less than an hour from Silicon Valley. The Airport is owned and operated by the City and resides on 605 acres. The Airport sits at an elevation of 84 feet mean sea level. The proposed project site consists of a combination of disturbed areas and asphalt between the electrical vault and the ATCT.

Identify the appropriate CATEX paragraph(s) from Order 1050.1F (paragraph 5-6.1 through 5-6.6) or 5050.4B (Tables 6-1 and 6-2) that apply to the project. Describe if the project differs in any way from the specific language of the CATEX or examples given as described in the Order.

The appropriate CATEX paragraph from order 1050.1F includes paragraphs 5-6.3 (b) and (g) and 5-6.4 (n):

b. Establishment, installation, upgrade, or relocation of any of the following on designated airport or FAA property: airfield or approach lighting systems, visual approach aids, beacons, and electrical distribution systems as described in FAA Order 6850.2, Visual Guidance Lighting Systems, and other related facilities. (ATO, ARP)

g. Replacement or upgrade of power and control cables for existing facilities and equipment, such as airfield or approach lighting systems (ALS), commercial space launch site lighting systems, visual approach aids, beacons, and electrical distribution systems as described in FAA Order 6850.2, Visual Guidance Lighting Systems, or airport surveillance radar (ASR), commercial space launch site surveillance radar, Instrument Landing System (ILS), and Runway Visual Range (RVR). (ATO)

n. Minor expansion of facilities, including the addition of equipment such as telecommunications equipment, on an existing facility where no additional land is required, or when expansion is due to remodeling of space in current quarters or existing buildings. Additions may include antennas, concrete pad, and minor trenching for cable. (ATO, AST)

The circumstances one must consider when documenting a CATEX are listed below along with each of the impact categories related to the circumstance. Use FAA Environmental Orders 1050.1F, 5050.4B, and the Desk Reference for Airports Actions, as well as other guidance documents to assist you in determining what information needs to be provided about these resource topics to address potential impacts. Keep in mind that both construction and operational impacts must be included. Indicate whether or not there would be any effects under the particular resource topic and, **if needed**, cite available references to support these conclusions. Additional analyses and inventories can be attached or cited as needed.

5-2.b(1) National Historic Preservation Act (NHPA) resources

	YES	NO
Are there historic/cultural resources listed (or eligible for listing) on the National Register of Historic Places located in the Area of Potential Effect? If yes, provide a record of the historic and/or cultural resources located therein and check with your local Airports Division/District Office to determine if a Section 106 finding is required. A search of the National Register of Historic Places Database found no historic or cultural resources located within the Area of Potential Effect for the proposed project. The closest historic or cultural resources are approximately one mile northwest in downtown Salinas.	☐	☒
Does the project have the potential to cause effects? If yes, describe the nature and extent of the effects. The proposed project will not have an effect on the historical/cultural resources listed here. The proposed project will take place entirely on airport property. However, in the instance that a historic or cultural resource is discovered during construction, all work will be stopped immediately and the appropriate agency will be contacted.	☐	☒

	YES	NO
Is the project area undisturbed? If not, provide information on the prior disturbance (including type and depth of disturbance, if available) The proposed project area has been previously disturbed including asphalt surfaces that consists of the ATCT, parking spaces, and electrical vault. Although previously disturbed, approximately 90 feet between the ATCT and electrical vault will need to be cut into at a depth of 2.5 feet.	☐	☒
Will the project impact tribal land or land of interest to tribes? If yes, describe the nature and extent of the effects and provide information on the tribe affected. Consultation with their THPO or a tribal representative along with the SHPO may be required. The proposed project area has previously been disturbed. All activities will take place on airport property and will not impact tribal land or land of interest to tribes.	☐	☒

5-2.b(2) Department of Transportation Act Section 4(f) and 6(f) resources

	YES	NO
Are there any properties protected under Section 4(f) (as defined by FAA Order 1050.1F) in or near the project area? This includes publicly owned parks, recreation areas, and wildlife or waterfowl refuges of national, state or local significance or land from a historic site of national, state or local significance. No Section 4(f) properties have been identified in or near the proposed project area. The closest Section 4(f) properties would be the Los Padres Neighborhood Park and the Salinas Fairways Golf Course located more than half a mile northwest of the proposed project area. The closest wildlife refuge of national importance is the Salinas River National Wildlife Refuge located approximately 12 miles northwest of Airport property.	☐	☒
Will project construction or operation physically or constructively "use" any Section 4(f) resource? If yes, describe the nature and extent of the use and/or impacts, and why there are no prudent and feasible alternatives. See 5050.4B Desk Reference Chapter 7. The proposed project will not use or affect any Section 4(f) resources.	☐	☒
Will the project affect any recreational or park land purchased with Section 6(f) Land and Water Conservation Funds? If so, please explain, if there will be impacts to those properties. The proposed project will not affect any recreational or park purchased with Section 6(f) land and Water Conservation Funds.	☐	☒

5-2.b(3) Threatened or Endangered Species

	YES	NO
Are there any federal or state listed endangered, threatened, or candidate species or designated critical habitat in or near the project area? This includes species protected by individual statute, such as the Bald Eagle. An official list of federal and state listed endangered, threatened or candidate species and critical habitats was reviewed and is provided as Attachment 2 - Federal and State Listed Species. The following species were identified as having the potential to occur around airport property with no critical habitats identified within the proposed project area: • California Condor- *Gymnogyps califonianus* • Least Bell's Viero- *Viero belli pusillus* • Southwestern Willow Flycatcher- *Empidonax traillii extimus* • California Red-legged Frog- *Rana draytonii* • California Tiger Salamander- *Ambystoma californiense* • Santa Cruz Long-toed Salamander – *Ambystoma macrodactylum croceum* • Vernal Pool Fairy Shrimp- *Branchinecta lynchi* • Marsh Sandwort- *Arenaria paludicola* • Tricolored Blackbird- *Agelaius tricolor* The project site is located within the footprint of disturbed and asphalt surfaces and does not support the habitat for any of the above species.	☒	☐
Does the project affect or have the potential to affect, directly or indirectly, any federal or state-listed, threatened, endangered or candidate species, or designated habitat under the Endangered Species Act? If yes, Section 7 consultation between the FAA and the US Fish & Wildlife Service, National Marine Fisheries Service, and/or the appropriate state agency will be necessary. Provide a description of the impacts and how impacts will be avoided, minimized, or mitigated. Provide the Biological Assessment and Biological Opinion, if required. The proposed project will take place entirely on airport property and within existing disturbed and asphalt areas. The project does not include tree removal or work within forested areas, wet areas (i.e., wetlands, creeks, marshes) or agricultural lands. Since the proposed project area does not support habitat preferred by the protected species identified in **Attachment 2**, no impact to the species is anticipated.	☐	☒
Does the project have the potential to take birds protected by the Migratory Bird Treaty Act? Describe steps to avoid, minimize, or mitigate impacts (such as timing windows determined in consultation with the US Fish & Wildlife Service). The proposed project is not anticipated to have the potential to take birds protected by the Migratory Bird Treaty Act. However, in the instance that this is necessary, official consultation with the US Fish & Wildlife Service will be conducted.	☐	☒

5-2.b (4) Other Resources

Items to consider include:

a. Fish and Wildlife Coordination Act	YES	NO
Does the project area contain resources protected by the Fish and Wildlife Coordination Act? If yes, describe any impacts and steps taken to avoid, minimize, or mitigate impacts. The proposed project does not contain resources protected by the Fish and Wildlife Coordination Act.	☐	☒
b. Wetlands and Other Waters of the U.S.	**YES**	**NO**
Are there any wetlands or other waters of the U.S. in or near the project area? No wetlands have been identified in or near the proposed project area. The closest designated Freshwater Emergent Wetland and Riverine system is approximately 0.1 miles south of the proposed project area.	☐	☒
Has wetland delineation been completed within the proposed project area? If yes, please provide U.S. Army Corps of Engineers (USACE) correspondence and jurisdictional determination. If delineation was not completed, was a field check done to confirm the presence/absence of wetlands or other waters of the U.S.? If no to both, please explain what methods were used to determine the presence/absence of wetlands. Based on a review of the US Fish and Wildlife National Wetlands Inventory (NWI) map and the California Aquatic Resource Inventory (CARI), the project will not occur within State or Federally regulated wetland areas. NWI and CARI wetlands maps are provided in **Attachments 3 and 4**, respectively.	☐	☒
If wetlands are present, will the project result in impacts, directly or indirectly (including tree clearing)? Describe any steps taken to avoid, minimize or mitigate the impact. The proposed project will take place entirely on airport property and within a combination of previously disturbed and asphalt surfaces. No impacts to wetlands are anticipated.	☐	☒
Is a USACE Clean Water Act Section 404 permit required? If yes, does the project fall within the parameters of a general permit? If so, which general permit? A USACE Clean Water Act Section 404 permit will not be required for the proposed project.	☐	☒
c. Floodplains	**YES**	**NO**
Will the project be located in, encroach upon or otherwise impact a floodplain? If yes, describe impacts and any agency coordination or public review completed including coordination with the local floodplain administrator. Attach the FEMA map if applicable and any documentation. The proposed project is located in a floodplain area designated as Zone X with a 0.2 percent annual chance of flood hazard (see **Attachment 5 - FEMA FIRM Map**). Therefore, the proposed project is not anticipated to affect the floodplain values for this area.	☐	☒

d. Coastal Resources	YES	NO
Will the project occur in or impact a coastal zone as defined by the State's Coastal Zone Management Plan? If yes, discuss the project's consistency with the State's CZMP. Attach the consistency determination if applicable. The proposed project is not in a coastal zone.	☐	☒
Will the project occur in or impact the Coastal Barrier Resource System as defined by the US Fish and Wildlife Service? The proposed project is not in a coastal zone and will take place entirely on airport property.	☐	☒
e. National Marine Sanctuaries	**YES**	**NO**
Is a National Marine Sanctuary located in the project area? If yes, discuss the potential for the project to impact that resource. The proposed project is not located in or near a National Marine Sanctuary.	☐	☒
f. Wilderness Areas	**YES**	**NO**
Is a Wilderness Area located in the project area? If yes, discuss the potential for the project to impact that resource. The proposed project is not located in or near a Wilderness Area.	☐	☒
g. Farmland	**YES**	**NO**
Is there prime, unique, state, or locally important farmland in/near the project area? Describe any significant impacts from the project. According to the Farmland Classification Map (**Attachment 6**) from the U.S. Department of Agriculture, the proposed project area resides on land classified as prime farmland if irrigated. Due to the nature of the proposed project taking place on a combination of disturbed and asphalt areas along with buildings, no significant impacts to farmland are anticipated.	☒	☐
Does the project include the acquisition and conversion of farmland? If farmland will be converted, describe coordination with the US Natural Resources Conservation and attach the completed Form AD-1006. The proposed project does not include the acquisition and conversion of farmland.	☐	☒

h. Energy Supply and Natural Resources	YES	NO
Will the project change energy requirements or use consumable natural resources either during construction or during operations? A temporary increase in energy and consumable natural resources related to construction activities is anticipated to occur.	☒	☐
Will the project change aircraft/vehicle traffic patterns that could alter fuel usage either during construction or operations? The proposed project will not involve changes to aircraft/vehicle traffic patterns.	☐	☒
i. Wild and Scenic Rivers	**YES**	**NO**
Is there a river on the Nationwide Rivers Inventory, a designated river in the National System, or river under State jurisdiction (including study or eligible segments) near the project? The closest designated wild and scenic river is the Big Sur River approximately 50 miles southwest of the Airport.	☐	☒
Will the project directly or indirectly affect the river or an area within ¼ mile of its ordinary high water mark? The proposed project will not affect the river.	☐	☒
j. Solid Waste Management	**YES**	**NO**
Does the project (either the construction activity or the completed, operational facility) have the potential to generate significant levels of solid waste? If so, discuss how these will be managed. The proposed project will not generate significant levels of solid waste.	☐	☒

5-2.b(5) Disruption of an Established Community

	YES	NO
Will the project disrupt a community, planned development or be inconsistent with plans or goals of the community? The proposed project will take place entirely on airport property and is consistent with the areas existing function.	☐	☒
Are residents or businesses being relocated as part of the project? No residents or businesses will be relocated as part of the proposed project.	☐	☒

5-2.b(6) Environmental Justice

	YES	NO
Are there minority and/or low-income populations in/near the project area? The proposed project will take place entirely on airport property.	☐	☒
Will the project cause any disproportionately high and adverse impacts to minority and/or low-income populations? Attach census data if warranted. The proposed project will not cause any disproportionately high and adverse impacts to minority and/or low-income populations.	☐	☒

5-2.b(7) Surface Transportation

	YES	NO
Will the project cause a significant increase in surface traffic congestion or cause a degradation of level of service provided? The proposed project is not anticipated to affect surface traffic congestion.	☐	☒
Will the project require a permanent road relocation or closure? If yes, describe the nature and extent of the relocation or closure and indicate if coordination with the agency responsible for the road and emergency services has occurred. The proposed project will not require a permanent road relocation or closure.	☐	☒

5-2.b(8) Noise

	YES	NO
Will the project result in an increase in aircraft operations, nighttime operations, or change aircraft fleet mix? The proposed project will not result in an increase in aircraft operations, nighttime operations, or aircraft fleet mix.	☐	☒
Will the project cause a change in airfield configuration, runway use, or flight patterns either during construction or after the project is implemented? The proposed project will not cause a change in airfield configuration, runway use, or flight patterns.	☐	☒
Does the forecast exceed 90,000 annual propeller operations, 700 annual jet operations or 10 daily helicopter operations or a combination of the above? If yes, a noise analysis may be required if the project would result in a change in operations. The proposed project will not result in a change in operations.	☐	☒

	YES	NO
Has a noise analysis been conducted, including but not limited to generated noise contours, a specific point analysis, area equivalent method analysis, or other screening method. If yes, provide that documentation. Factors that contribute to changes in noise exposure include increases in the number of aircraft operations, changes in aircraft types, and changes in day/night operations splits. The proposed project will not influence aircraft operations, airport fleet mix, or day/night operation splits. As such, a noise analysis is not required as no changes to noise exposure will occur as a result of this project.	☐	☒
Could the project have a significant impact (DNL 1.5 dB or greater increase) on noise levels over noise sensitive areas within the 65+ DNL noise contour? Project-related noise level increases are associated with construction equipment observed during construction activities. These noise level increases are temporary; noise levels will return to pre-project levels once construction is complete. Increases in aviation noise levels as a result of this project will not occur.	☐	☒

5-2.b(9) Air Quality

	YES	NO
Is the project located in a Clean Air Act non-attainment or maintenance area? Salinas Municipal Airport is located in Monterey County and is not designated as a non-attainment or maintenance area according to the EPA Green Book current as of September 30, 2019.	☐	☒
If yes, is it listed as exempt, presumed to conform or will emissions (including construction emissions) from the project be below *de minimis* levels (provide the paragraph citation for the exemption or presumed to conform list below, if applicable) Is the project accounted for in the State Implementation Plan or specifically exempted? Attach documentation. Not applicable.	☐	☐
Does the project have the potential to increase landside or airside capacity, including an increase of surface vehicles? The proposed project will not increase landside or airside capacity. Project-related increase in surface vehicles is associated with construction vehicles and is temporary. The surface vehicle levels will return to pre-project levels once construction is complete.	☐	☒

	YES	NO
Could the project impact air quality or violate local, State, Tribal or Federal air quality standards under the Clean Air Act Amendments of 1990 either during construction or operations? Air pollution resulting from construction equipment and fugitive dust from exposed soil will temporarily impact air quality. The creation of equipment emissions and fugitive dust can be minimized but is inevitable during construction projects. To minimize potential adverse impacts to air quality, proper and standard construction practices will be used. These include periodic watering of dusty on-site travel routes during dry conditions, utilization of a designated entrance that will minimize soil being carried onto adjacent roads by construction vehicles leaving the Project site, and cessation of earthwork activities during particularly dry and high wind conditions if the generation of such dust could potentially impact adjacent properties.	☐	☒

5-2.b (10) Water Quality

	YES	NO
Are there water resources within or near the project area? These include groundwater, surface water (lakes, rivers, etc.), sole source aquifers, and public water supply. If yes, provide a description of the resource, including the location (distance from project site, etc.). Based on a search of the U.S. EPA NEPAssist mapper, there are no water sources near or within the proposed project area.	☐	☒
Will the project impact any of the identified water resources either during construction or operations? Describe any steps that will be taken to protect water resources during and after construction. The proposed project will not impact any water resources.	☐	☒
Will the project increase the amount or rate of stormwater runoff either during construction or during operations? Describe any steps that will be taken to ensure it will not impact water quality. The proposed project involves trenching to install new conduits for communication cables. The area is currently disturbed including asphalt surfaces; therefore, the proposed project is not anticipated to increase the amount or rate of stormwater runoff.	☐	☒
Does the project have the potential to violate federal, state, tribal or local water quality standards established under the Clean Water and Safe Drinking Water Acts? According to the California Water Board 2019 Water Quality Status report, the wells surrounding the Airport are contaminated with Nitrate above the drinking water standards. The proposed project will not impact the groundwater wells.	☐	☒

	YES	NO
Are any water quality related permits required? If yes, list the appropriate permits. The proposed project will not require any water quality related permits.	☐	☒

5-2.b(11) Highly Controversial on Environmental Grounds

	YES	NO
Is the project highly controversial? The term "highly controversial" means a substantial dispute exists as to the size, nature, or effect of a proposed federal action. The effects of an action are considered highly controversial when reasonable disagreement exists over the project's risks of causing environmental harm. Mere opposition to a project is not sufficient to be considered highly controversial on environmental grounds. Opposition on environmental grounds by a federal, state, or local government agency or by a tribe or a substantial number of the persons affected by the action should be considered in determining whether or not reasonable disagreement exists regarding the effects of a proposed action. The proposed project is not considered highly controversial.	☐	☒

5-2.b(12) Inconsistent with Federal, State, Tribal or Local Law

	YES	NO
Will the project be inconsistent with plans, goals, policy, zoning, or local controls that have been adopted for the area in which the airport is located? The proposed project is consistent with the existing use of the area.	☐	☒
Is the project incompatible with surrounding land uses? The proposed project is consistent with the existing use of the area.	☐	☒

5-2 .b (13) Light Emissions, Visual Effects, and Hazardous Materials

a. Light Emissions and Visual Effects	YES	NO
Will the proposed project produce light emission impacts? The proposed project does not involve changes to existing lighting conditions, or addition of light emissions. No light emission impacts will occur as a result of this project.	☐	☒
Will there be visual or aesthetic impacts as a result of the proposed project and/or have there been concerns expressed about visual/aesthetic impacts? Since the project is taking place entirely within airport property, no adverse visual or aesthetic impacts are anticipated.	☐	☒

b. Hazardous Materials	YES	NO
Does the project involve or affect hazardous materials? The proposed project does not involve or affect hazardous materials.	☐	☒
Will construction take place in an area that contains or previously contained hazardous materials? According to the EPA's NEPAssist online mapper, there are no hazardous waste sites located within or immediately adjacent to the proposed project area. According to US EPA Cleanups in My Community (CIMC) database there are no known contaminated sites within or immediately adjacent to the project area. National Pollutant Discharge Elimination System (NPDES) sites are shown on the CIMC Map but are not located within or immediately adjacent to the project area.	☐	☒
If the project involves land acquisition, is there a potential for this land to contain hazardous materials or contaminants? The project does not involve land acquisition.	☐	☒
Will the proposed project produce hazardous and/or solid waste either during construction or after? If yes, how will the additional waste be handled? The proposed project will not produce hazardous waste and does not involve significantly expanding airport operations or passenger terminal facilities. The project will not create conditions likely to produce a large increase in solid waste collection, control, or disposal other than short-term waste associated with construction activities. Construction debris generated as part of this project will be disposed of consistent with federal, state, and local regulations.	☒	☐

5-2 .b (14) Public Involvement

	YES	NO
Was there any public notification or involvement? If yes, provide documentation. The proposed project did not involve public notification or involvement.	☐	☒

5-2 .b (15) Indirect/Secondary/Induced Impacts

	YES	NO
Will the project result in indirect/secondary/induced impacts? The proposed project will not result in a significant change in airport operations. As a result, there will be no change in population growth or movement, demands for public services, or changes in business or economic activity as a result of this project. Based on this information, there are no secondary (induced) impacts as a result of the proposed project.	☐	☒

	YES	NO
When considered with other past, present, and reasonably foreseeable future projects, on or off airport property and regardless of funding source, would the proposed project result in a significant cumulative impact? As documented within this CATEX, there are no anticipated significant adverse impacts associated with the proposed project and therefore, no adverse cumulative impacts would result from implementation of the proposed project.	☐	☒

Permits

List any permits required for the proposed project that have not been previously discussed. Provide details on the status of permits.

Environmental Commitments

List all measures and commitments made to avoid, minimize, mitigate, and compensate for impacts on the environment, which are needed for this project to qualify for a CATEX.

Preparer Information

Point of Contact: Sasha Schultz		
Address: 2355 Northside Drive, suite 350		
City: San Diego	**State:** CA	**Zip Code:** 92108
Phone: 619-819-2288	**Email Address:** sschultz@cscos.com	

Signature: _____ Date: 10/07/19

Airport Sponsor Information and Certification (may not be delegated to consultant)

Provide contact information for the designated sponsor point of contact and any other individuals requiring notification of the FAA decision.

Point of Contact: Brett Godown		
Address: 30 Mortensen Avenue		
City: Salinas	**State:** CA	**Zip Code:** 93905
Phone Number: 831-758-7214	**Email Address:** brett.godown@ci.salinas.ca.us	
Additional Name(s):	**Additional Email Address(es):**	

I certify that the information I have provided above is, to the best of my knowledge, correct. I also recognize and agree that no construction activity, including but not limited to site preparation, demolition, or land disturbance, shall proceed for the above proposed project(s) until FAA issues a final environmental decision for the proposed project(s) and until compliance with all other applicable FAA approval actions (e.g., ALP approval, airspace approval, grant approval) has occurred.

Signature: _____ Date: 10/10/19

FAA Decision

Having reviewed the above information, it is the FAA's decision that the proposed project (s) or development warrants environmental processing as indicated below.

Name of Airport, LOC ID, and location:

Salinas Municipal Airport (SNS), 30 Mortensen Ave., Salinas, California 93905

Project Title:

Airport Lighting Control Monitoring System (ALCMS)

☐ No further NEPA review required. Project is categorically excluded per (cite applicable 1050.1.F CATEX that applies:)

☐ ..An Environmental Assessment (EA) is required.

☐ ..An Environmental Impact Statement (EIS) is required.

☐ ..The following additional documentation is necessary for FAA to perform a complete environmental evaluation of the proposed project.

Name: Title:

Responsible FAA Official

Signature: _____ Date:

ATTACHMENT 1

Proposed Project

SALINAS MUNICIPAL AIRPORT

PROPOSED ALCMS CONSTRUCTION PROJECT

ATTACHMENT 1

LEGEND

PROPOSED LIMITS OF TRENCHING (2' WIDTH x 90'± LENGTH x 2.5' DEPTH)

PROPOSED STAGING AREA

PROPOSED HAUL ROUTE

05:18:38 PM - Oct 02 2019 dmoreno P:\Project\21 - City of Salinas\ACIP\SFY24-26\Exhibits\CATEX Exhibit\CATEX EXHIBIT - Attachment 1.dwg

ATTACHMENT 2

Federal and State

Listed Species

United States Department of the Interior

FISH AND WILDLIFE SERVICE
Ventura Fish And Wildlife Office
2493 Portola Road, Suite B
Ventura, CA 93003-7726
Phone: (805) 644-1766 Fax: (805) 644-3958

In Reply Refer To:
Consultation Code: 08EVEN00-2020-SLI-0011
Event Code: 08EVEN00-2020-E-00027
Project Name: Salinas Municipal Airport

October 04, 2019

Subject: List of threatened and endangered species that may occur in your proposed project location, and/or may be affected by your proposed project

To Whom It May Concern:

The enclosed list identifies species listed as threatened and endangered, species proposed for listing as threatened or endangered, designated and proposed critical habitat, and species that are candidates for listing that may occur within the boundary of the area you have indicated using the U.S. Fish and Wildlife Service's (Service) Information Planning and Conservation System (IPaC). The species list fulfills the requirements under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 et seq.). Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, the species list should be verified after 90 days. We recommend that verification be completed by visiting the IPaC website at regular intervals during project planning and implementation for updates to species lists following the same process you used to receive the enclosed list. Please include the Consultation Tracking Number in the header of this letter with any correspondence about the species list.

Due to staff shortages and excessive workload, we are unable to provide an official list more specific to your area. Numerous other sources of information are available for you to narrow the list to the habitats and conditions of the site in which you are interested. For example, we recommend conducting a biological site assessment or surveys for plants and animals that could help refine the list.

If a Federal agency is involved in the project, that agency has the responsibility to review its proposed activities and determine whether any listed species may be affected. If the project is a major construction project*, the Federal agency has the responsibility to prepare a biological assessment to make a determination of the effects of the action on the listed species or critical habitat. If the Federal agency determines that a listed species or critical habitat is likely to be adversely affected, it should request, in writing through our office, formal consultation pursuant to section 7 of the Act. Informal consultation may be used to exchange information and resolve conflicts with respect to threatened or endangered species or their critical habitat prior to a

written request for formal consultation. During this review process, the Federal agency may engage in planning efforts but may not make any irreversible commitment of resources. Such a commitment could constitute a violation of section 7(d) of the Act.

Federal agencies are required to confer with the Service, pursuant to section 7(a)(4) of the Act, when an agency action is likely to jeopardize the continued existence of any proposed species or result in the destruction or adverse modification of proposed critical habitat (50 CFR 402.10(a)). A request for formal conference must be in writing and should include the same information that would be provided for a request for formal consultation. Conferences can also include discussions between the Service and the Federal agency to identify and resolve potential conflicts between an action and proposed species or proposed critical habitat early in the decision-making process. The Service recommends ways to minimize or avoid adverse effects of the action. These recommendations are advisory because the jeopardy prohibition of section 7(a)(2) of the Act does not apply until the species is listed or the proposed critical habitat is designated. The conference process fulfills the need to inform Federal agencies of possible steps that an agency might take at an early stage to adjust its actions to avoid jeopardizing a proposed species.

When a proposed species or proposed critical habitat may be affected by an action, the lead Federal agency may elect to enter into formal conference with the Service even if the action is not likely to jeopardize or result in the destruction or adverse modification of proposed critical habitat. If the proposed species is listed or the proposed critical habitat is designated after completion of the conference, the Federal agency may ask the Service, in writing, to confirm the conference as a formal consultation. If the Service reviews the proposed action and finds that no significant changes in the action as planned or in the information used during the conference have occurred, the Service will confirm the conference as a formal consultation on the project and no further section 7 consultation will be necessary. Use of the formal conference process in this manner can prevent delays in the event the proposed species is listed or the proposed critical habitat is designated during project development or implementation.

Candidate species are those species presently under review by the Service for consideration for Federal listing. Candidate species should be considered in the planning process because they may become listed or proposed for listing prior to project completion. Preparation of a biological assessment, as described in section 7(c) of the Act, is not required for candidate species. If early evaluation of your project indicates that it is likely to affect a candidate species, you may wish to request technical assistance from this office.

Only listed species receive protection under the Act. However, sensitive species should be considered in the planning process in the event they become listed or proposed for listing prior to project completion. We recommend that you review information in the California Department of Fish and Wildlife's Natural Diversity Data Base. You can contact the California Department of Fish and Wildlife at (916) 324-3812 for information on other sensitive species that may occur in this area.

[*A Biological Assessment is required for construction projects (or other undertakings having similar physical impacts) that are major Federal actions significantly affecting the quality of the human environment as defined in the National Environmental Policy Act (42 U.S.C. 4332(2)(c)). For projects other than major construction activities, the Service suggests that a biological evaluation similar to a Biological Assessment be prepared to determine whether the project may affect listed or proposed species and/or designated or proposed critical habitat. Recommended contents of a Biological Assessment are described at 50 CFR 402.12.]

Attachment(s):

- Official Species List

Official Species List

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

This species list is provided by:

Ventura Fish And Wildlife Office
2493 Portola Road, Suite B
Ventura, CA 93003-7726
(805) 644-1766

Project Summary

Consultation Code: 08EVEN00-2020-SLI-0011

Event Code: 08EVEN00-2020-E-00027

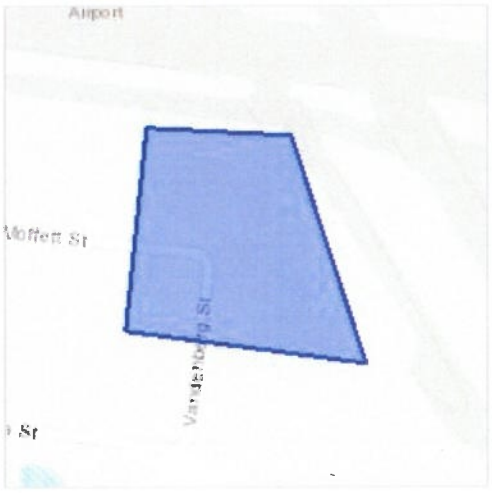
Project Name: Salinas Municipal Airport

Project Type: DEVELOPMENT

Project Description: ALCMS Project

Project Location:

Approximate location of the project can be viewed in Google Maps: https://www.google.com/maps/place/36.65973531664079N121.60640709679937W



Counties: Monterey, CA

Endangered Species Act Species

There is a total of 8 threatened, endangered, or candidate species on this species list.

Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries[1], as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

---

1. NOAA Fisheries, also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

Birds

NAME	STATUS
California Condor *Gymnogyps californianus* Population: U.S.A. only, except where listed as an experimental population There is **final** critical habitat for this species. Your location is outside the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/8193	Endangered
Least Bell's Vireo *Vireo bellii pusillus* There is **final** critical habitat for this species. Your location is outside the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/5945	Endangered
Southwestern Willow Flycatcher *Empidonax traillii extimus* There is **final** critical habitat for this species. Your location is outside the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/6749	Endangered

Amphibians

NAME	STATUS
California Red-legged Frog *Rana draytonii* There is **final** critical habitat for this species. Your location is outside the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/2891	Threatened
California Tiger Salamander *Ambystoma californiense* Population: U.S.A. (Central CA DPS) There is **final** critical habitat for this species. Your location is outside the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/2076	Threatened
Santa Cruz Long-toed Salamander *Ambystoma macrodactylum croceum* There is **proposed** critical habitat for this species. The location of the critical habitat is not available. Species profile: https://ecos.fws.gov/ecp/species/7405	Endangered

Crustaceans

NAME	STATUS
Vernal Pool Fairy Shrimp *Branchinecta lynchi* There is **final** critical habitat for this species. Your location is outside the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/498	Threatened

Flowering Plants

NAME	STATUS
Marsh Sandwort *Arenaria paludicola* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/2229	Endangered

Critical habitats

THERE ARE NO CRITICAL HABITATS WITHIN YOUR PROJECT AREA UNDER THIS OFFICE'S JURISDICTION.

State Listed Species

Element_Type	Scientific_Name	Common_Name	Federal_Status	State_Status	CDFW_Status	Taxonomic_Sort
Animals - Amphibians	Ambystoma californiense	California tiger salamander	Threatened	Threatened	WL	Animals - Amphibians - Ambystomatidae - Ambystoma californiense
Animals - Amphibians	Rana draytonii	California red-legged frog	Threatened	None	SSC	Animals - Amphibians - Ranidae - Rana draytonii
Animals - Amphibians	Spea hammondii	western spadefoot	None	None	SSC	Animals - Amphibians - Scaphiopodidae - Spea hammondii
Animals - Birds	Accipiter cooperii	Cooper's hawk	None	None	WL	Animals - Birds - Accipitridae - Accipiter cooperii
Animals - Birds	Eremophila alpestris actia	California horned lark	None	None	WL	Animals - Birds - Alaudidae - Eremophila alpestris actia
Animals - Birds	Agelaius tricolor	tricolored blackbird	None	Threatened	SSC	Animals - Birds - Icteridae - Agelaius tricolor
Animals - Birds	Setophaga petechia	yellow warbler	None	None	SSC	Animals - Birds - Parulidae - Setophaga petechia
Animals - Birds	Coturnicops noveboracensis	yellow rail	None	None	SSC	Animals - Birds - Rallidae - Coturnicops noveboracensis
Animals - Birds	Athene cunicularia	burrowing owl	None	None	SSC	Animals - Birds - Strigidae - Athene cunicularia
Animals - Mammals	Dipodomys venustus venustus	Santa Cruz kangaroo rat	None	None	-	Animals - Mammals - Heteromyidae - Dipodomys venustus venustus
Animals - Reptiles	Emys marmorata	western pond turtle	None	None	SSC	Animals - Reptiles - Emydidae - Emys marmorata
Plants - Vascular	Centromadia parryi ssp. congdonii	Congdon's tarplant	None	None	-	Plants - Vascular - Asteraceae - Centromadia parryi ssp. congdonii
Plants - Vascular	Lessingia hololeuca	woolly-headed lessingia	None	None	-	Plants - Vascular - Asteraceae - Lessingia hololeuca
Plants - Vascular	Astragalus tener var. tener	alkali milk-vetch	None	None	-	Plants - Vascular - Fabaceae - Astragalus tener var. tener
Plants - Vascular	Fritillaria liliacea	fragrant fritillary	None	None	-	Plants - Vascular - Liliaceae - Fritillaria liliacea
Plants - Vascular	Clarkia lewisii	Lewis' clarkia	None	None	-	Plants - Vascular - Onagraceae - Clarkia lewisii
Plants - Vascular	Leptosiphon latisectus	broad-lobed leptosiphon	None	None	-	Plants - Vascular - Polemoniaceae - Leptosiphon latisectus
Plants - Vascular	Eriogonum nortonii	Pinnacles buckwheat	None	None	-	Plants - Vascular - Polygonaceae - Eriogonum nortonii

ATTACHMENT 3

National Wetlands Inventory

(NWI) Map

U.S. Fish and Wildlife Service

National Wetlands Inventory

Salinas Municipal Airport

October 7, 2019

Wetlands

- Estuarine and Marine Deepwater
- Estuarine and Marine Wetland
- Freshwater Emergent Wetland
- Freshwater Forested/Shrub Wetland
- Freshwater Pond
- Lake
- Other
- Riverine

This map is for general reference only. The US Fish and Wildlife Service is not responsible for the accuracy or currentness of the base data shown on this map. All wetlands related data should be used in accordance with the layer metadata found on the Wetlands Mapper web site.

National Wetlands Inventory (NWI)
This page was produced by the NWI mapper

ATTACHMENT 4

FEMA FIRM Map

Salinas Municipal Airport

Notes

ALCMS

Basemap data provided by © OpenStreetMap

Legend

Existing Aquatic Resources - CARI

Drainage Features

Fluvial Tidal

Wetlands

Estuarine and Marine

- Tidal Flat and Marsh Panne
- Tidal Marsh
- Managed and Muted Tidal Habitats
- Pond
- Subtidal Water
- Beach, Dune, and Rocky Shore
- Tidal Channel

Palustrine and Riverine

- Pond and associated vegetation
- Lake, Reservoir and associated vegetation
- Playa
- Fluvial Channel
- Slope and Seep Wetlands
- Vernal Pool

The California Aquatic Resource Inventory (CARI) is a standardized statewide map of wetlands, streams, and riparian areas. CARI v0 is a compilation of multiple data sources to produce seamless coverage across the state. Datasets used in CARI v0 include the National Wetland Inventory (USFWS), National Hydrography Dataset (USGS), and regional intensified maps. The effort to stitch together a statewide dataset from multiple sources is largely a classification crosswalk exercise. Due to this there may be errors in classification of the features or boundaries of wetland extent in CARI v0. This is particularly an issue with depressional features or freshwater ponds and marshes. The CARI map is not intended for regulatory purposes and does not serve as a jurisdictional delineation. Efforts to correct both spatial accuracy and classification errors will be addressed in CARI v1. Please provide comments or corrections (including screen shot or lat/longs) to CARImapping@sfei.org

Modern Delta Habitat Types

- Water
- Freshwater emergent wetland
- Willow thicket
- Willow riparian scrub/shrub
- Valley foothill riparian
- Wet meadow/Seasonal wetland
- Vernal pool complex
- Alkali seasonal wetland complex
- Stabilized interior dune vegetation
- Grassland
- Managed wetlands
- Agriculture/Non-native/Ruderal
- Urban/Barren
- Unknown

ATTACHMENT 5

FEMA FIRM

National Flood Hazard Layer FIRMette

FEMA

Legend

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT

SPECIAL FLOOD HAZARD AREAS
- Without Base Flood Elevation (BFE) *Zone A, V, A99*
- With BFE or Depth *Zone AE, AO, AH, VE, AR*
- Regulatory Floodway

OTHER AREAS OF FLOOD HAZARD
- 0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile *Zone X*
- Future Conditions 1% Annual Chance Flood Hazard *Zone X*
- Area with Reduced Flood Risk due to Levee. See Notes. *Zone X*
- Area with Flood Risk due to Levee *Zone D*

OTHER AREAS
- NO SCREEN Area of Minimal Flood Hazard *Zone X*
- Effective LOMRs
- Area of Undetermined Flood Hazard *Zone D*

GENERAL STRUCTURES
- Channel, Culvert, or Storm Sewer
- Levee, Dike, or Floodwall

OTHER FEATURES
- 20.2 / 17.5 Cross Sections with 1% Annual Chance / Water Surface Elevation
- Coastal Transect
- Base Flood Elevation Line (BFE)
- Limit of Study
- Jurisdiction Boundary
- Coastal Transect Baseline
- Profile Baseline
- Hydrographic Feature

MAP PANELS
- Digital Data Available
- No Digital Data Available
- Unmapped

N

The pin displayed on the map is an approximate point selected by the user and does not represent an authoritative property location.

This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The basemap shown complies with FEMA's basemap accuracy standards

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on 10/4/2019 at 2:45:45 PM and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

This map image is void if the one or more of the following map elements do not appear: basemap imagery, flood zone labels, legend, scale bar, map creation date, community identifiers, FIRM panel number, and FIRM effective date. Map images for unmapped and unmodernized areas cannot be used for regulatory purposes.

ATTACHMENT 6

Farmland Classification

United States Department of Agriculture

NRCS

Natural Resources Conservation Service

A product of the National Cooperative Soil Survey, a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local participants

Custom Soil Resource Report for Monterey County, California

October 7, 2019

Preface

Soil surveys contain information that affects land use planning in survey areas. They highlight soil limitations that affect various land uses and provide information about the properties of the soils in the survey areas. Soil surveys are designed for many different users, including farmers, ranchers, foresters, agronomists, urban planners, community officials, engineers, developers, builders, and home buyers. Also, conservationists, teachers, students, and specialists in recreation, waste disposal, and pollution control can use the surveys to help them understand, protect, or enhance the environment.

Various land use regulations of Federal, State, and local governments may impose special restrictions on land use or land treatment. Soil surveys identify soil properties that are used in making various land use or land treatment decisions. The information is intended to help the land users identify and reduce the effects of soil limitations on various land uses. The landowner or user is responsible for identifying and complying with existing laws and regulations.

Although soil survey information can be used for general farm, local, and wider area planning, onsite investigation is needed to supplement this information in some cases. Examples include soil quality assessments (http://www.nrcs.usda.gov/wps/portal/nrcs/main/soils/health/) and certain conservation and engineering applications. For more detailed information, contact your local USDA Service Center (https://offices.sc.egov.usda.gov/locator/app?agency=nrcs) or your NRCS State Soil Scientist (http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/contactus/?cid=nrcs142p2_053951).

Great differences in soil properties can occur within short distances. Some soils are seasonally wet or subject to flooding. Some are too unstable to be used as a foundation for buildings or roads. Clayey or wet soils are poorly suited to use as septic tank absorption fields. A high water table makes a soil poorly suited to basements or underground installations.

The National Cooperative Soil Survey is a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local agencies. The Natural Resources Conservation Service (NRCS) has leadership for the Federal part of the National Cooperative Soil Survey.

Information about soils is updated periodically. Updated information is available through the NRCS Web Soil Survey, the site for official soil survey information.

The U.S. Department of Agriculture (USDA) prohibits discrimination in all its programs and activities on the basis of race, color, national origin, age, disability, and where applicable, sex, marital status, familial status, parental status, religion, sexual orientation, genetic information, political beliefs, reprisal, or because all or a part of an individual's income is derived from any public assistance program. (Not all prohibited bases apply to all programs.) Persons with disabilities who require

alternative means for communication of program information (Braille, large print, audiotape, etc.) should contact USDA's TARGET Center at (202) 720-2600 (voice and TDD). To file a complaint of discrimination, write to USDA, Director, Office of Civil Rights, 1400 Independence Avenue, S.W., Washington, D.C. 20250-9410 or call (800) 795-3272 (voice) or (202) 720-6382 (TDD). USDA is an equal opportunity provider and employer.

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Soil Information for All Uses

Suitabilities and Limitations for Use

The Suitabilities and Limitations for Use section includes various soil interpretations displayed as thematic maps with a summary table for the soil map units in the selected area of interest. A single value or rating for each map unit is generated by aggregating the interpretive ratings of individual map unit components. This aggregation process is defined for each interpretation.

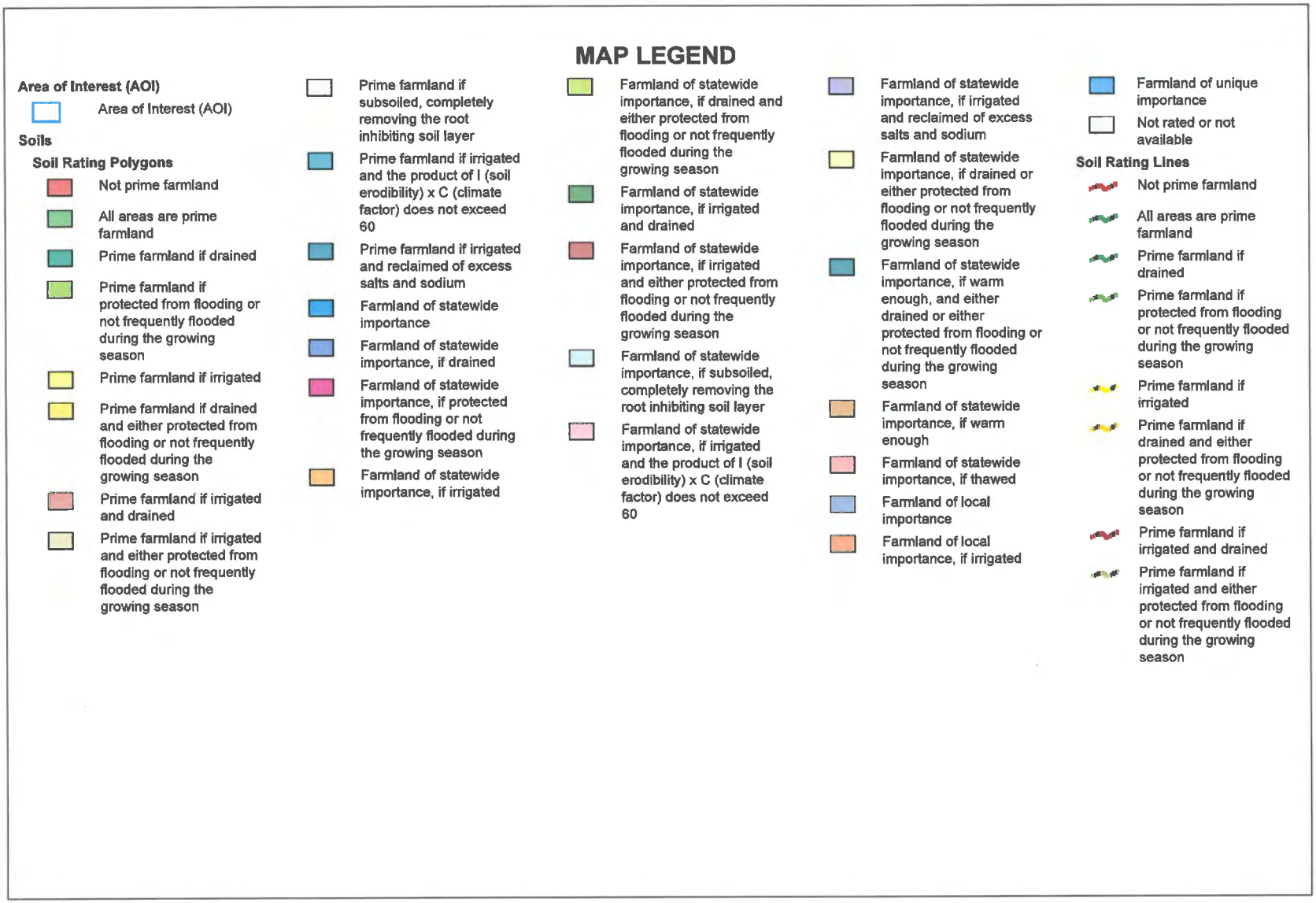
Land Classifications

Land Classifications are specified land use and management groupings that are assigned to soil areas because combinations of soil have similar behavior for specified practices. Most are based on soil properties and other factors that directly influence the specific use of the soil. Example classifications include ecological site classification, farmland classification, irrigated and nonirrigated land capability classification, and hydric rating.

Farmland Classification (Salinas Municipal Airport)

Farmland classification identifies map units as prime farmland, farmland of statewide importance, farmland of local importance, or unique farmland. It identifies the location and extent of the soils that are best suited to food, feed, fiber, forage, and oilseed crops. NRCS policy and procedures on prime and unique farmlands are published in the "Federal Register," Vol. 43, No. 21, January 31, 1978.

Custom Soil Resource Report
Map—Farmland Classification (Salinas Municipal Airport)


MAP LEGEND
Area of Interest (AOI)
Area of Interest (AOI)
Soils
Soil Rating Polygons
Not prime farmland
All areas are prime farmland
Prime farmland if drained
Prime farmland if protected from flooding or not frequently flooded during the growing season
Prime farmland if irrigated
Prime farmland if drained and either protected from flooding or not frequently flooded during the growing season
Prime farmland if irrigated and drained
Prime farmland if irrigated and either protected from flooding or not frequently flooded during the growing season
Prime farmland if subsoiled, completely removing the root inhibiting soil layer
Prime farmland if irrigated and the product of I (soil erodibility) x C (climate factor) does not exceed 60
Prime farmland if irrigated and reclaimed of excess salts and sodium
Farmland of statewide importance
Farmland of statewide importance, if drained
Farmland of statewide importance, if protected from flooding or not frequently flooded during the growing season
Farmland of statewide importance, if irrigated
Farmland of statewide importance, if drained and either protected from flooding or not frequently flooded during the growing season
Farmland of statewide importance, if irrigated and drained
Farmland of statewide importance, if irrigated and either protected from flooding or not frequently flooded during the growing season
Farmland of statewide importance, if subsoiled, completely removing the root inhibiting soil layer
Farmland of statewide importance, if irrigated and the product of I (soil erodibility) x C (climate factor) does not exceed 60
Farmland of statewide importance, if irrigated and reclaimed of excess salts and sodium
Farmland of statewide importance, if drained or either protected from flooding or not frequently flooded during the growing season
Farmland of statewide importance, if warm enough, and either drained or either protected from flooding or not frequently flooded during the growing season
Farmland of statewide importance, if warm enough
Farmland of statewide importance, if thawed
Farmland of local importance
Farmland of local importance, if irrigated
Farmland of unique importance
Not rated or not available
Soil Rating Lines
Not prime farmland
All areas are prime farmland
Prime farmland if drained
Prime farmland if protected from flooding or not frequently flooded during the growing season
Prime farmland if irrigated
Prime farmland if drained and either protected from flooding or not frequently flooded during the growing season
Prime farmland if irrigated and drained
Prime farmland if irrigated and either protected from flooding or not frequently flooded during the growing season

- Prime farmland if subsoiled, completely removing the root inhibiting soil layer
- Prime farmland if irrigated and the product of I (soil erodibility) x C (climate factor) does not exceed 60
- Prime farmland if irrigated and reclaimed of excess salts and sodium
- Farmland of statewide importance
- Farmland of statewide importance, if drained
- Farmland of statewide importance, if protected from flooding or not frequently flooded during the growing season
- Farmland of statewide importance, if irrigated
- Farmland of statewide importance, if drained and either protected from flooding or not frequently flooded during the growing season
- Farmland of statewide importance, if irrigated and drained
- Farmland of statewide importance, if irrigated and either protected from flooding or not frequently flooded during the growing season
- Farmland of statewide importance, if subsoiled, completely removing the root inhibiting soil layer
- Farmland of statewide importance, if irrigated and the product of I (soil erodibility) x C (climate factor) does not exceed 60
- Farmland of statewide importance, if irrigated and reclaimed of excess salts and sodium
- Farmland of statewide importance, if drained or either protected from flooding or not frequently flooded during the growing season
- Farmland of statewide importance, if warm enough, and either drained or either protected from flooding or not frequently flooded during the growing season
- Farmland of statewide importance, if warm enough
- Farmland of statewide importance, if thawed
- Farmland of local importance
- Farmland of local importance, if irrigated
- Farmland of unique importance
- Not rated or not available

Soil Rating Points

- Not prime farmland
- All areas are prime farmland
- Prime farmland if drained
- Prime farmland if protected from flooding or not frequently flooded during the growing season
- Prime farmland if irrigated
- Prime farmland if drained and either protected from flooding or not frequently flooded during the growing season
- Prime farmland if irrigated and drained
- Prime farmland if irrigated and either protected from flooding or not frequently flooded during the growing season
- Prime farmland if subsoiled, completely removing the root inhibiting soil layer
- Prime farmland if irrigated and the product of I (soil erodibility) x C (climate factor) does not exceed 60
- Prime farmland if irrigated and reclaimed of excess salts and sodium
- Farmland of statewide importance
- Farmland of statewide importance, if drained
- Farmland of statewide importance, if protected from flooding or not frequently flooded during the growing season
- Farmland of statewide importance, if irrigated

- Farmland of statewide importance, if drained and either protected from flooding or not frequently flooded during the growing season
- Farmland of statewide importance, if irrigated and drained
- Farmland of statewide importance, if irrigated and either protected from flooding or not frequently flooded during the growing season
- Farmland of statewide importance, if subsoiled, completely removing the root inhibiting soil layer
- Farmland of statewide importance, if irrigated and the product of I (soil erodibility) x C (climate factor) does not exceed 60
- Farmland of statewide importance, if irrigated and reclaimed of excess salts and sodium
- Farmland of statewide importance, if drained or either protected from flooding or not frequently flooded during the growing season
- Farmland of statewide importance, if warm enough, and either drained or either protected from flooding or not frequently flooded during the growing season
- Farmland of statewide importance, if warm enough
- Farmland of statewide importance, if thawed
- Farmland of local importance
- Farmland of local importance, if irrigated
- Farmland of unique importance
- Not rated or not available

Water Features

- Streams and Canals

Transportation

- Rails
- Interstate Highways
- US Routes
- Major Roads
- Local Roads

Background

- Aerial Photography

The soil surveys that comprise your AOI were mapped at 1:24,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Monterey County, California
Survey Area Data: Version 16, Sep 16, 2019

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Oct 1, 2018—Dec 31, 2018

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Table—Farmland Classification (Salinas Municipal Airport)

Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
CbA	Chualar loam, 0 to 2 percent slopes	Prime farmland if irrigated	12.8	100.0%
Totals for Area of Interest			**12.8**	**100.0%**

Rating Options—Farmland Classification (Salinas Municipal Airport)

Aggregation Method: No Aggregation Necessary

Tie-break Rule: Lower

References

American Association of State Highway and Transportation Officials (AASHTO). 2004. Standard specifications for transportation materials and methods of sampling and testing. 24th edition.

American Society for Testing and Materials (ASTM). 2005. Standard classification of soils for engineering purposes. ASTM Standard D2487-00.

Cowardin, L.M., V. Carter, F.C. Golet, and E.T. LaRoe. 1979. Classification of wetlands and deep-water habitats of the United States. U.S. Fish and Wildlife Service FWS/OBS-79/31.

Federal Register. July 13, 1994. Changes in hydric soils of the United States.

Federal Register. September 18, 2002. Hydric soils of the United States.

Hurt, G.W., and L.M. Vasilas, editors. Version 6.0, 2006. Field indicators of hydric soils in the United States.

National Research Council. 1995. Wetlands: Characteristics and boundaries.

Soil Survey Division Staff. 1993. Soil survey manual. Soil Conservation Service. U.S. Department of Agriculture Handbook 18. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/soils/?cid=nrcs142p2_054262

Soil Survey Staff. 1999. Soil taxonomy: A basic system of soil classification for making and interpreting soil surveys. 2nd edition. Natural Resources Conservation Service, U.S. Department of Agriculture Handbook 436. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/soils/?cid=nrcs142p2_053577

Soil Survey Staff. 2010. Keys to soil taxonomy. 11th edition. U.S. Department of Agriculture, Natural Resources Conservation Service. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/soils/?cid=nrcs142p2_053580

Tiner, R.W., Jr. 1985. Wetlands of Delaware. U.S. Fish and Wildlife Service and Delaware Department of Natural Resources and Environmental Control, Wetlands Section.

United States Army Corps of Engineers, Environmental Laboratory. 1987. Corps of Engineers wetlands delineation manual. Waterways Experiment Station Technical Report Y-87-1.

United States Department of Agriculture, Natural Resources Conservation Service. National forestry manual. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/home/?cid=nrcs142p2_053374

United States Department of Agriculture, Natural Resources Conservation Service. National range and pasture handbook. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/landuse/rangepasture/?cid=stelprdb1043084

United States Department of Agriculture, Natural Resources Conservation Service. National soil survey handbook, title 430-VI. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/scientists/?cid=nrcs142p2_054242

United States Department of Agriculture, Natural Resources Conservation Service. 2006. Land resource regions and major land resource areas of the United States, the Caribbean, and the Pacific Basin. U.S. Department of Agriculture Handbook 296. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/soils/?cid=nrcs142p2_053624

United States Department of Agriculture, Soil Conservation Service. 1961. Land capability classification. U.S. Department of Agriculture Handbook 210. http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_052290.pdf

AIP Grant Application Checklist

AIRPORT NAME: (SNS) Salinas Municipal Airport **DATE:** _____

SYSTEM FOR AWARD MANAGEMENT (SAM) CAGE CODE #: 4B5W0

SYSTEM FOR AWARD MANAGEMENT (SAM) EXPIRATION DATE: May 27, 2020

This checklist (and attached instructions) is a tool to assist a grantee (airport sponsor) in identifying the requirements and considerations associated with preparing an Airport Improvement Program (AIP) grant application package for submittal to the FAA. Airport sponsors should read and consider each of the items carefully. **Some of the items can be answered by simply checking the "Yes" and "No" boxes while others require providing additional information as part of the airport's request for AIP funds.**

Ref.		Yes	No	N/A	Comments Attached
ITEMS REQUIRED TO COMPLETE APPLICATION REVIEW:					
1.	Standard Form 424 *(signed)*	☒	☐	☐	☐
2.	Project Cost Breakdown *(attached)*	☒	☐	☐	☐
3.	Project Sketch *(at the request of the ADO)*	☒	☐	☐	☐
4.	Project Narrative *(attached or within Form 5100-11/101 Part IV)*	☒	☐	☐	☐
5.	Form 5100-100 (parts II - IV) *(airport development grants)* Form 5100-101 (parts II - IV) *(planning grants)*	☒	☐	☐	☐
6.	Bid Tabulations/Negotiated Amounts *(attached or previously submitted to the ADO)*	☐	☐	☐	☒
7.	Exhibit A *(attached or previously submitted to the ADO)*	☒	☐	☐	☐
8.	Title Certificate or Long Term Lease Agreement *(at the request of the ADO)*	☒	☐	☐	☐

SAM Search Results
List of records matching your search for :

Record Status: Active
CAGE Code: 4B5W0

ENTITY SALINAS, CITY OF Status: Active

DUNS: 010919447 +4: CAGE Code: 4B5W0 DoDAAC:

Expiration Date: 05/27/2020 Has Active Exclusion?: No Debt Subject to Offset?: No

Address: 200 LINCOLN AVE
City: SALINAS State/Province: CALIFORNIA
ZIP Code: 93901-2639 Country: UNITED STATES

OMB Number: 4040-0004
Expiration Date: 12/31/2019

Application for Federal Assistance SF-424

* 1. Type of Submission:
- [ ] Preapplication
- [x] Application
- [ ] Changed/Corrected Application

* 2. Type of Application:
- [x] New
- [ ] Continuation
- [ ] Revision

* If Revision, select appropriate letter(s):

* Other (Specify):

* 3. Date Received:

4. Applicant Identifier: SNS

5a. Federal Entity Identifier: 3-06-0206

5b. Federal Award Identifier:

State Use Only:

6. Date Received by State:

7. State Application Identifier:

8. APPLICANT INFORMATION:

* a. Legal Name: City of Salinas

* b. Employer/Taxpayer Identification Number (EIN/TIN): 94-6000412

* c. Organizational DUNS: 0109194470000

d. Address:

* Street1: 200 Lincoln Avenue
Street2:
* City: Salinas
County/Parish: Monterey
* State: CA: California
Province:
* Country: USA: UNITED STATES
* Zip / Postal Code: 93901-2639

e. Organizational Unit:

Department Name: Public Works

Division Name: Salinas Municipal Airport

f. Name and contact information of person to be contacted on matters involving this application:

Prefix: Mr.
* First Name: Brett
Middle Name:
* Last Name: Godown
Suffix:

Title: Airport Manager

Organizational Affiliation:

* Telephone Number: (831) 758-7214
Fax Number: (831) 759-2518

* Email: brett.godown@ci.salinas.ca.us

Application for Federal Assistance SF-424

*** 9. Type of Applicant 1: Select Applicant Type:**

C: City or Township Government

Type of Applicant 2: Select Applicant Type:

Type of Applicant 3: Select Applicant Type:

* Other (specify):

*** 10. Name of Federal Agency:**

Federal Aviation Administration

11. Catalog of Federal Domestic Assistance Number:

20.106

CFDA Title:

Airport Improvement Program

*** 12. Funding Opportunity Number:**

N/A

* Title:

N/A

13. Competition Identification Number:

N/A

Title:

N/A

14. Areas Affected by Project (Cities, Counties, States, etc.):

City of Salinas, Monterey County, CA.pdf | Add Attachment | Delete Attachment | View Attachment

*** 15. Descriptive Title of Applicant's Project:**

Install Airfield Lighting Control and Monitoring System (ALCMS) (Design & Construction)

Attach supporting documents as specified in agency instructions.

Add Attachments | Delete Attachments | View Attachments

Application for Federal Assistance SF-424

16. Congressional Districts Of:

* a. Applicant: 17 * b. Program/Project: 17

Attach an additional list of Program/Project Congressional Districts if needed.

Add Attachment | Delete Attachment | View Attachment

17. Proposed Project:

* a. Start Date: 04/01/2020 * b. End Date: 07/31/2021

18. Estimated Funding ($):

* a. Federal	165,741.00
* b. Applicant	10,129.00
* c. State	8,287.00
* d. Local	0.00
* e. Other	0.00
* f. Program Income	0.00
* g. TOTAL	184,157.00

*** 19. Is Application Subject to Review By State Under Executive Order 12372 Process?**

☒ a. This application was made available to the State under the Executive Order 12372 Process for review on .

☐ b. Program is subject to E.O. 12372 but has not been selected by the State for review.

☐ c. Program is not covered by E.O. 12372.

*** 20. Is the Applicant Delinquent On Any Federal Debt? (If "Yes," provide explanation in attachment.)**

☐ Yes ☒ No

If "Yes", provide explanation and attach

Add Attachment | Delete Attachment | View Attachment

21. *By signing this application, I certify (1) to the statements contained in the list of certifications and (2) that the statements herein are true, complete and accurate to the best of my knowledge. I also provide the required assurances** and agree to comply with any resulting terms if I accept an award. I am aware that any false, fictitious, or fraudulent statements or claims may subject me to criminal, civil, or administrative penalties. (U.S. Code, Title 218, Section 1001)**

☒ ** I AGREE

** The list of certifications and assurances, or an internet site where you may obtain this list, is contained in the announcement or agency specific instructions.

Authorized Representative:

Prefix: Mr. * First Name: Brett

Middle Name:

* Last Name: Godown

Suffix:

* Title: Airport Manager

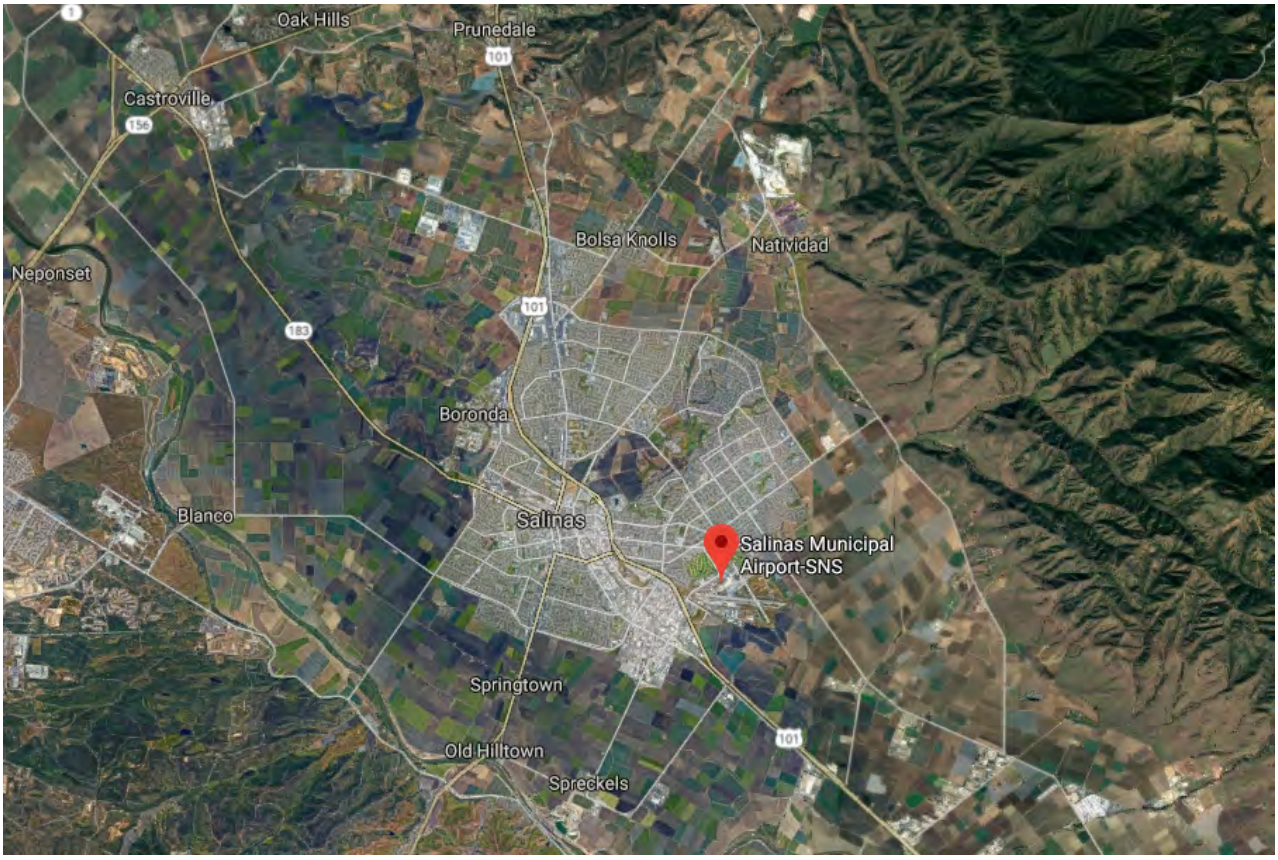
* Telephone Number: (831) 758-7214 Fax Number: (831) 759-2518

* Email: brett.godown@ci.salinas.ca.us

* Signature of Authorized Representative: * Date Signed:

14. Areas Affected by Project (Cities, Counties, States, etc.):

City of Salinas, Monterey County, CA



Application for Federal Assistance (Development and Equipment Projects)

PART II – PROJECT APPROVAL INFORMATION

Part II - SECTION A

The term "Sponsor" refers to the applicant name provided in box 8 of the associated SF-424 form.

Item 1.
Does Sponsor maintain an active registration in the System for Award Management (www.SAM.gov)?
☒ Yes ☐ No

Item 2.
Can Sponsor commence the work identified in the application in the fiscal year the grant is made or within six months after the grant is made, whichever is later?
☒ Yes ☐ No ☐ N/A

Item 3.
Are there any foreseeable events that would delay completion of the project? If yes, provide attachment to this form that lists the events.
☐ Yes ☒ No ☐ N/A

Item 4.
Will the project(s) covered by this request have impacts or effects on the environment that require mitigating measures? If yes, attach a summary listing of mitigating measures to this application and identify the name and date of the environmental document(s).
☐ Yes ☒ No ☐ N/A

Item 5.
Is the project covered by this request included in an approved Passenger Facility Charge (PFC) application or other Federal assistance program? If yes, please identify other funding sources by checking all applicable boxes.
☐ Yes ☒ No ☐ N/A

☐ The project is included in an *approved* PFC application.
If included in an approved PFC application,
does the application *only* address AIP matching share? ☐ Yes ☐ No

☐ The project is included in another Federal Assistance program. Its CFDA number is below.

Item 6.
Will the requested Federal assistance include Sponsor indirect costs as described in 2 CFR Appendix VII to Part 200, States and Local Government and Indian Tribe Indirect Cost Proposals?
☐ Yes ☒ No ☐ N/A

If the request for Federal assistance includes a claim for allowable indirect costs, select the applicable indirect cost rate the Sponsor proposes to apply:

☐ De Minimis rate of 10% as permitted by 2 CFR § 200.414.

☐ Negotiated Rate equal to % as approved by (the Cognizant Agency) on (Date) (2 CFR part 200, appendix VII).

Note: Refer to the instructions for limitations of application associated with claiming Sponsor indirect costs.

PART II - SECTION B

Certification Regarding Lobbying

The declarations made on this page are under the signature of the authorized representative as identified in box 21 of form SF-424, to which this form is attached. The term “Sponsor” refers to the applicant name provided in box 8 of the associated SF-424 form.

The Authorized Representative certifies, to the best of his or her knowledge and belief, that:

(1) No Federal appropriated funds have been paid or will be paid, by or on behalf of the Sponsor, to any person for influencing or attempting to influence an officer or employee of an agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.

(2) If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the Authorized Representative shall complete and submit Standard Form-LLL, ‘‘Disclosure Form to Report Lobbying,’’ in accordance with its instructions.

(3) The Authorized Representative shall require that the language of this certification be included in the award documents for all sub-awards at all tiers (including subcontracts, subgrants, and contracts under grants, loans, and cooperative agreements) and that all subrecipients shall certify and disclose accordingly.

This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by section 1352, title 31, U.S. Code. Any person who fails to file the required certification shall be subject to a civil penalty of not less than $10,000 and not more than $100,000 for each such failure.

PART II – SECTION C

The Sponsor hereby represents and certifies as follows:

1. Compatible Land Use – The Sponsor has taken the following actions to assure compatible usage of land adjacent to or in the vicinity of the airport:

For all adjacent land, the City ensures compatible land use through development controls, zoning and oversight. An airport land use compatibility plan is in place.

2. Defaults – The Sponsor is not in default on any obligation to the United States or any agency of the United States Government relative to the development, operation, or maintenance of any airport, except as stated herewith:

None

3. Possible Disabilities – There are no facts or circumstances (including the existence of effective or proposed leases, use agreements or other legal instruments affecting use of the Airport or the existence of pending litigation or other legal proceedings) which in reasonable probability might make it impossible for the Sponsor to carry out and complete the Project or carry out the provisions of the Grant Assurances, either by limiting its legal or financial ability or otherwise, except as follows:

None

4. Consistency with Local Plans – The project is reasonably consistent with plans existing at the time of submission of this application) of public agencies that are authorized by the State in which the project is located to plan for the development of the area surrounding the airport.

Project is consistent with the City's plans

5. Consideration of Local Interest – It has given fair consideration to the interest of communities in or near where the project may be located.

Projects are not anticipated to disrupt local community. Any potential impacts were considered in NEPA/CEQA process

6. Consultation with Users – In making a decision to undertake an airport development project under Title 49, United States Code, it has consulted with airport users that will potentially be affected by the project (§ 47105(a)(2)).

Airport Users have been notified and any potential disruption during construction will be discussed as part of the design

7. Public Hearings – In projects involving the location of an airport, an airport runway or a major runway extension, it has afforded the opportunity for public hearings for the purpose of considering the economic, social, and environmental effects of the airport or runway location and its consistency with goals and objectives of such planning as has been carried out by the community and it shall, when requested by the Secretary, submit a copy of the transcript of such hearings to the Secretary. Further, for such projects, it has on its management board either voting representation from the communities where the project is located or has advised the communities that they have the right to petition the Secretary concerning a proposed project.

N/A

8. Air and Water Quality Standards – In projects involving airport location, a major runway extension, or runway location it will provide for the Governor of the state in which the project is located to certify in writing to the Secretary that the project will be located, designed, constructed, and operated so as to comply with applicable and air and water quality standards. In any case where such standards have not been approved and where applicable air and water quality standards have been promulgated by the Administrator of the Environmental Protection Agency, certification shall be obtained from such Administrator. Notice of certification or refusal to certify shall be provided within sixty days after the project application has been received by the Secretary.

N/A

PART II – SECTION C (Continued)

9. **Exclusive Rights** – There is no grant of an exclusive right for the conduct of any aeronautical activity at any airport owned or controlled by the Sponsor except as follows:

None

10. **Land** – (a) The sponsor holds the following property interest in the following areas of land, which are to be developed or used as part of or in connection with the Airport subject to the following exceptions, encumbrances, and adverse interests, all of which areas are identified on the aforementioned property map designated as Exhibit "A". [1]

The City owns and controls the airport property as identified on the Exhibit A, dated 11/23/2010 on file with the FAA.

The Sponsor further certifies that the above is based on a title examination by a qualified attorney or title company and that such attorney or title company has determined that the Sponsor holds the above property interests.

(b) The Sponsor will acquire within a reasonable time, but in any event prior to the start of any construction work under the Project, the following property interest in the following areas of land on which such construction work is to be performed, all of which areas are identified on the aforementioned property map designated as Exhibit "A". [1]

N/A

(c) The Sponsor will acquire within a reasonable time, and if feasible prior to the completion of all construction work under the Project, the following property interest in the following areas of land which are to be developed or used as part of or in connection with the Airport as it will be upon completion of the Project, all of which areas are identified on the aforementioned property map designated as Exhibit "A". [1]

N/A

[1] State the character of property interest in each area and list and identify for each all exceptions, encumbrances, and adverse interests of every kind and nature, including liens, easements, leases, etc. The separate areas of land need only be identified here by the area numbers shown on the property map.

PART III – BUDGET INFORMATION – CONSTRUCTION

SECTION A – GENERAL	
1. Federal Domestic Assistance Catalog Number:	20.106
2. Functional or Other Breakout:	Airport Improvement Program

SECTION B – CALCULATION OF FEDERAL GRANT			
Cost Classification	**Latest Approved Amount (Use only for revisions)**	**Adjustment + or (-) Amount (Use only for revisions)**	**Total Amount Required**
1. Administration expense			$ 18,835
2. Preliminary expense			3,000
3. Land, structures, right-of-way			
4. Architectural engineering basic fees			34,822
5. Other Architectural engineering fees			
6. Project inspection fees			18,500
7. Land development			
8. Relocation Expenses			
9. Relocation payments to Individuals and Businesses			
10. Demolition and removal			
11. Construction and project improvement			109,000
12. Equipment			
13. Miscellaneous			
14. **Subtotal** (Lines 1 through 13)			$ 184,157
15. Estimated Income (if applicable)			
16. Net Project Amount (Line 14 minus 15)			184,157
17. **Less**: Ineligible Exclusions (Section C, line 23 g.)			
18. **Subtotal** (Lines 16 through 17)			$ 184,157
19. Federal Share requested of Line 18			165,741
20. Grantee share			10,129
21. Other shares			8,287
22. **TOTAL PROJECT** (Lines 19, 20 & 21)			$ 184,157

SECTION C – EXCLUSIONS	
23. Classification (Description of non-participating work)	**Amount Ineligible for Participation**
a.	
b.	
c.	
d.	
e.	
f.	
g. Total	

SECTION D – PROPOSED METHOD OF FINANCING NON-FEDERAL SHARE	
24. Grantee Share – Fund Categories	**Amount**
a. Securities	
b. Mortgages	
c. Appropriations (by Applicant)	10,129
d. Bonds	
e. Tax Levies	
f. Non-Cash	
g. Other (Explain):	
h. **TOTAL** - Grantee share	$ 10,129
25. Other Shares	**Amount**
a. State	8,287
b. Other	
c. **TOTAL** - Other Shares	$ 8,287
26. TOTAL NON-FEDERAL FINANCING	$ 18,416

SECTION E – REMARKS

(Attach sheets if additional space is required)

RFP's anticipated to be received by April 2020 at which time the Bid Tabulation will be submitted to the FAA.

The following are preliminary expenses to be paid by the City of Salinas (Sponsor) prior to grant award (reimbursable to the Sponsor upon receipt of the grant):

- Item 1. Administration Expense: Grant Application Preparation = $1,118.47
- Item 1. Administration Expense: Prepare for Grant Award = $561.42
- Item 2. Preliminary Expense: Independent Fee Estimate (IFE) = $3,000

PART IV – PROGRAM NARRATIVE

(Suggested Format)

PROJECT: Install Airfield Lighting Control and Monitoring System (ALCMS) (Design & Construction)

AIRPORT: (SNS) Salinas Municipal Airport

1. Objective:

Project involves installing a new Airport Lighting Control and Monitoring System (ALCMS) conforming to the FAA Advisory Circular 150/5345-56B (or most current AC) and other appropriate FAA Advisory Circulars and Specifications. A unit will be installed in both the Air Traffic Control Tower (ATCT) and electrical vault.

2. Benefits Anticipated:

By installing the new ALCMS in the electrical vault building and Air Traffic Control Tower, increased safety and reliability of the airfield electrical system will increase. The current system is dated and hard to find parts for; by upgrading to the new ALCMS system, the dependability of the system will be more consistent, leading to overall airfield safety.

3. Approach: (See approved Scope of Work in Final Application)

This project will not follow a traditional design-bid-build procurement process, but will rather be a Request for Proposals (RFP) to select a construction team. Attached Consultant scope of work is to prepare the RFP documents, suitable for a solicitation procurement method. It is anticipated that RFP's will be received by April 2020 with construction anticipated for August 2020.

4. Geographic Location:

36-39-46.0314N / 121-36-22.9191W
3 miles SE of Salinas, CA

5. If Applicable, Provide Additional Information:

N/A

6. Sponsor's Representative: (include address & telephone number)

Brett Godown, Airport Manager
30 Mortensen Avenue, Salinas, CA 93905
(831) 758-7214 / brett.godown@ci.salinas.ca.us

Administration Cost Breakdown - Salinas Municipal Airport
ALCMS (Design & Construction)

Labor	Airport Manager	Operations Supervisor	Labor Compliance Officer	Construction Inspector Supervisor	Facility Maintenance Worker	Administrative Secretary	TOTAL
	$82.07	$68.67	$45.08	$60.05	$38.42	$45.51	
Grant Application Preparation	5	0	4	5	0	5	$ 1,118.47
Prepare for Grant Award	5	0	0	1	0	2	$ 561.42
Project Kick-Off Meeting	3	3	2	3	2	2	$ 890.39
FAA Coordination	5	5	2	1	0	2	$ 994.93
Consultant Meetings	5	5	5	5	5	1	$ 1,516.96
Review/Process Deliverables	5	0	15	5	0	5	$ 1,614.35
Project Coordination	40	80	5	5	40	2	$ 10,929.87
Process Pay Requests / Grant Reimbursements	5	0	5	0	0	5	$ 863.30
Final Project Deliverable review	2	0	2	0	0	2	$ 345.32
Total Hours:	75	93	40	25	47	26	306
Total Labor Cost:	$ 6,155	$ 6,386	$ 1,803	$ 1,501	$1,806	$1,183	**$18,835**

Expenses

Independent Fee Estimate - Other							$3,000
							$3,000

$21,835

SCHEDULE A

SCOPE OF WORK

DESIGN

Project Title: **Airport Lighting Control and Monitoring System (ALCMS) Project**
Airport Name: **Salinas Municipal Airport**
Services Provided: **Design and Solicitation Services**

Project Description:
The CONSULTANT shall provide required services on a lump sum basis to design the Airport Lighting Control and Monitoring System (ALCMS) Project (the "Project"). The Project will be performed and constructed by the SPONSOR with grant assistance from the Federal Aviation Administration (FAA) Airport Improvement Program (AIP). This project will not follow a traditional design-bid-build procurement process, but will rather be a Request for Proposals to select a construction team. CONSULTANT scope of work is to prepare the RFP documents, suitable for a solicitation procurement method.

Services to be provided by the CONSULTANT shall include electrical engineering services, as applicable, required to accomplish the following items ("Basic Services"):

ADMINISTRATION PHASE
The CONSULTANT shall aid the SPONSOR by acting as its liaison and Project coordinator with the FAA during the Project's design. In addition, the CONSULTANT shall assist the SPONSOR in the preparation of paperwork required to secure funds for the Project. The specific services to be provided or furnished for this Phase of the Project are the following:

1. Preparation of grant application packages; coordination of their execution by the SPONSOR; and submission to the funding agencies.
2. Preparation of reimbursement request packages; coordination of their execution by the SPONSOR; and submission to the funding agencies.
3. During the Design Phase, to aid the SPONSOR by acting as its liaison and Project coordinator with the funding agencies.

DEVELOP DOCUMENTS TO INCLUDE IN RFP
The services to be performed during this Phase consist generally of services required to furnish the SPONSOR with a Project Narrative, preliminary drawings and a performance specification to obtain a Contractor to procure and install the ALCMS.

The specific services to be provided or furnished for this Phase of the Project are the following:

1. Conduct one site visit to investigate existing vault building and Air Traffic Control Tower (ATCT) to determine location for the ALCMS and miscellaneous site improvements required between ATCT and vault. Conduct pre-design kickoff meeting with the SPONSOR.

2. Prepare a Categorical Exclusion environmental document, including the collection and review of available documents such as published wetland maps, soil conservation survey maps, and previous master plan and environmental archaeological studies, to identify potential impacts the Project may have on the environment.

3. Prepare preliminary Contract Drawings (approximately 30% complete) providing sufficient detail for review of design concepts by the SPONSOR and FAA.

4. Prepare General Specifications and prepare written Technical Specifications for all construction materials and installations.

5. Prepare written narrative documenting items such as design concepts, assumptions, and alternative designs.

6. Develop a schematic Construction Safety Phasing Plan (CSPP) that endeavors to limit interference by the Project's construction with airport and tenant operations.

7. Prepare the 7460 form, Notice of Proposed Construction or Alteration.

8. Submit both the CSPP and 7460 form electronically to the FAA.

9. Prepare preliminary technical specifications expected to be required for the proposed work.

10. Prepare opinion of probable construction cost to reflect the outcomes of preliminary Project design.

11. Submit sufficient copies of preliminary design documents to the SPONSOR and FAA for their review and comment.

12. Schedule and conduct a meeting with the SPONSOR via conference call to review the design.

13. Incorporate SPONSOR and FAA comments into the final preliminary documents to include in the RFP.

CONTRACTOR PROCUREMENT AND SELECTION PHASE
This Phase shall include assisting the SPONSOR with finalizing the procurement process for Contractor selection.

1. Assist the SPONSOR in the procurement process.

2. Receive and respond as required to questions from potential bidders regarding the Contract Documents.

3. Support and assist SPONSOR with conducting evaluations of the received qualifications proposals from interested Contractors.

4. Support the SPONSOR with regards to the final selection of the respective Contractor.

EXCLUSIONS
The following items have been excluded from this scope of work. Should they be desired, an amendment can be prepared to include the requested items.

1. Environmental review and permitting.
2. Permit fees for environmental (to be provided by SPONSOR).
3. Record drawings (may be provided under a separate task order, if requested).
4. Construction administration and/or observation (may be provided under a separate task order, if requested).
5. Public bid documents. Project assumes RFP solicitation method.

END OF SCHEDULE

CONSULTING/ENGINEERING COST SUMMARY SCHEDULE "B"

PROJECT NAME: Airport Lighting Control and Monitoring System (ALCMS) Project
PROJ DESCRIPTION: Design, Solicitation Services
CLIENT: Salinas Airport
CLIENT MANAGER: Brett Godown

DATE: 10/9/2019
A/E: C & S ENGINEERS, INC.

I. DIRECT SALARY , OVERHEAD & PROFIT COSTS:

	TITLE	RATE OF PAY ($/HR)	@	HOURS		COST
A.	Admin Asst.	$ 74.00	X	19.00	=	$1,406
B.	Grants Administrator	$ 98.00	X	12.00	=	$1,176
C.	Designer	$ 101.00	X	46.00	=	$4,646
D.	Planner	$ 122.00	X	20.00	=	$2,440
E.	Managing Planner	$ 190.00	X	8.00	=	$1,520
F.	Sr. Project Engineer	$ 180.00	X	90.00	=	$16,200
G.	Managing Engineer	$ 255.00	X	24.00	=	$6,120

TOTAL ESTIMATE OF LABOR: $33,508

II. ESTIMATE OF DIRECT EXPENSES:

A.	TRAVEL, BY AUTO:							
		400	mile* @	1	Trip(s) @	$0.58	=	$232.00
B.	TRAVEL, BY AIR:							
		1	TRIPS @	1	PERSON @	$500.00	=	$500.00
C.	PER DIEM							
		2	DAYS @	1	PERSON @	$216.00	=	$432.00
D.	MISC. ITEMS (Printing, Shipping, Etc.)							$150.00

TOTAL ESTIMATE OF DIRECT EXPENSES: $1,314.00

III. TOTALS:

TOTAL LUMP SUM ENGINEERING AND CONSTRUCTION SUPPORT SERVICES : $34,822.00

C&S ENGINEERS, INC.
ARCHITECTURAL/ENGINEERING
WORK SUMMARY

PROJECT: Airport Lighting Control and Monitoring System (ALCMS) Project
SERVICES: Design, Solicitation Services
CLIENT: Salinas Airport
CLIENT MGR: Brett Godown

CONT NO.	PHASE NO.	TASK	Admin Asst.	Grants Administrator	Designer	Planner	Managing Planner	Sr. Project Engineer	Managing Engineer	TOTAL LABOR HOURS	TOTAL LABOR	DIRECT COSTS	TOTALS
		RATE	*$ 74.00*	*$ 98.00*	*$ 101.00*	*$ 122.00*	*$ 190.00*	*$ 180.00*	*$ 255.00*				
		Administration Phase	**8**	**12**				**6**	**6**	**32**	**$4,378**	**$150**	**$4,528**
		Prepare Grant Application	2	4					2	8	$1,050		$1,050
		Prepare Grant Reimbursement Packages	2	8				2		12	$1,292		$1,292
		Project Management	4					4	4	12	$2,036	$150	$2,186
		Develop Performance Specification Documents	**4**		**46**	**20**	**8**	**66**	**16**	**160**	**$24,862**	**$1,164**	**$26,026**
		Pre-design Meeting and Preliminary Site Inspection						24	8	32	$6,360	$1,164	$7,524
		Categorical Exclusion				20	8			28	$3,960		$3,960
		Develop Preliminary Plans (30%)	2		16			24		42	$6,084		$6,084
		Develop CSPP			8			4		12	$1,528		$1,528
		Prepare Opinion of Probable Construction Cost			4			4		8	$1,124		$1,124
		Specification preparation			8			8		16	$2,248		$2,248
		Review Conf Call			2			2	2	6	$1,072		$1,072
		Revisions and Resubmit	2		8				6	16	$2,486		$2,486
		Contractor Procurement and Selection Phase	**7**					**18**	**2**	**27**	**$4,268**		**$4,268**
		Assist City with Procurement	1						1	2	$329		$329
		Respond to Bidder Questions						6		6	$1,080		$1,080
		Pre-Bid Meeting						8	1	9	$1,695		$1,695
		Perform Bid Review & Bid Tabulation	4					2		6	$656		$656
		Recommendation of Award	2					2		4	$508		$508
		All Tasks Total	**19**	**12**	**46**	**20**	**8**	**90**	**24**	**219**	**$33,508**	**$1,314**	**$34,822**

PROBABLE PROJECT COST

SALINAS MUNICIPAL AIRPORT
Airport Lighting Control Monitoring System

11/14/19

ITEM NO	DESCRIPTION	QUANTITY	UNITS	UNIT PRICE	TOTAL
1	ALCMS SYSTEM	1	LS	$55,000.00	$55,000.00
2	CABLES (#12 AWG)	1	LS	$1,800.00	$1,800.00
3	FIBER	1	LS	$6,000.00	$6,000.00
4	WIREWAY	1	LS	$3,000.00	$3,000.00
5	CONDUIT (3/4")	1	LS	$1,200.00	$1,200.00
6	CONDUIT (2")	1	LS	$4,800.00	$4,800.00
7	MISCELLANEOUS VAULT AND ATCT WORK	1	LS	$16,000.00	$16,000.00
8	MISCELLANEOUS REMOVALS AND OTHER WORK	1	LS	$13,000.00	$13,000.00
9	MAINTENANCE AND PROTECTION OF TRAFFIC	1	LS	$2,500.00	$2,500.00
10	MOBILIZATION (6%+/-)	1	LS	$5,700.00	$5,700.00
	TOTAL CONSTRUCTION COST				$109,000.00
	ENGINEERING & CONTRACTOR PROCUREMENT				$34,822.00
	SPONSOR ADMINISTRATION				$21,835.00
	CONSTRUCTION MANAGEMENT				$18,500.00
	TOTAL PROJECT COST				$184,157.00

Construction Project Final Acceptance
Airport Improvement Program Sponsor Certification

Sponsor: City of Salinas

Airport: (SNS) Salinas Municipal Airport

Project Number: 3-06-0206

Description of Work: Install Airfield Lighting Control and Monitoring System (ALCMS) (Design & Construction)

Application

49 USC § 47105(d), authorizes the Secretary to require me certification from the sponsor that it will comply with the statutory and administrative requirements in carrying out a project under the Airport Improvement Program. General standards for final acceptance and close out of federally funded construction projects are in 2 CFR § 200.343 – Closeout and supplemented by FAA Order 5100.38. The sponsor must determine that project costs are accurate and proper in accordance with specific requirements of the grant agreement and contract documents.

Certification Statements

Except for certification statements below marked not applicable (N/A), this list includes major requirements of the construction project. Selecting "Yes" represents sponsor acknowledgment and confirmation of the certification statement. The term "will" means Sponsor action taken at appropriate time based on the certification statement focus area, but no later than the end of the project period of performance. This list is not comprehensive and does not relieve the sponsor from fully complying with all applicable statutory and administrative standards. The source of the requirement is referenced within parenthesis.

1. The personnel engaged in project administration, engineering supervision, project inspection, and acceptance testing were or will be determined to be qualified and competent to perform the work (Grant Assurance).
   ☒ Yes ☐ No ☐ N/A
2. Construction records, including daily logs, were or will be kept by the resident engineer/construction inspector that fully document contractor's performance in complying with:
   a. Technical standards (Advisory Circular (AC) 150/5370-12);
   b. Contract requirements (2 CFR part 200 and FAA Order 5100.38); and
   c. Construction safety and phasing plan measures (AC 150/5370-2).
   ☒ Yes ☐ No ☐ N/A
3. All acceptance tests specified in the project specifications were or will be performed and documented. (AC 150/5370-12).
   ☒ Yes ☐ No ☐ N/A

4. Sponsor has taken or will take appropriate corrective action for any test result outside of allowable tolerances (AC 150/5370-12).

   ☒ Yes ☐ No ☐ N/A

5. Pay reduction factors required by the specifications were applied or will be applied in computing final payments with a summary made available to the FAA (AC 150/5370-10).

   ☒ Yes ☐ No ☐ N/A

6. Sponsor has notified, or will promptly notify the Federal Aviation Administration (FAA) of the following occurrences:

   a. Violations of any federal requirements set forth or included by reference in the contract documents (2 CFR part 200);

   b. Disputes or complaints concerning federal labor standards (29 CFR part 5); and

   c. Violations of or complaints addressing conformance with Equal Employment Opportunity or Disadvantaged Business Enterprise requirements (41 CFR Chapter 60 and 49 CFR part 26).

   ☒ Yes ☐ No ☐ N/A

7. Weekly payroll records and statements of compliance were or will be submitted by the prime contractor and reviewed by the sponsor for conformance with federal labor and civil rights requirements as required by FAA and U.S. Department of Labor (29 CFR Part 5).

   ☒ Yes ☐ No ☐ N/A

8. Payments to the contractor were or will be made in conformance with federal requirements and contract provisions using sponsor internal controls that include:

   a. Retaining source documentation of payments and verifying contractor billing statements against actual performance (2 CFR § 200.302 and FAA Order 5100.38);

   b. Prompt payment of subcontractors for satisfactory performance of work (49 CFR § 26.29);

   c. Release of applicable retainage upon satisfactory performance of work (49 CFR § 26.29); and

   d. Verification that payments to DBEs represent work the DBE performed by carrying out a commercially useful function (49 CFR §26.55).

   ☒ Yes ☐ No ☐ N/A

9. A final project inspection was or will be conducted with representatives of the sponsor and the contractor present that ensure:

   a. Physical completion of project work in conformance with approved plans and specifications (Order 5100.38);

   b. Necessary actions to correct punch list items identified during final inspection are complete (Order 5100.38); and

   c. Preparation of a record of final inspection and distribution to parties to the contract (Order 5100.38);

   ☒ Yes ☐ No ☐ N/A

10. The project was or will be accomplished without material deviations, changes, or modifications from approved plans and specifications, except as approved by the FAA (Order 5100.38).

    ☒ Yes ☐ No ☐ N/A

11. The construction of all buildings have complied or will comply with the seismic construction requirements of 49 CFR § 41.120.

    ☐ Yes ☐ No ☒ N/A

12. For development projects, sponsor has taken or will take the following close-out actions:

    a. Submit to the FAA a final test and quality assurance report summarizing acceptance test results, as applicable (Grant Condition);

    b. Complete all environmental requirements as established within the project environmental determination (Oder 5100.38); and

    c. Prepare and retain as-built plans (Order 5100.38).

    ☒ Yes ☐ No ☐ N/A

13. Sponsor has revised or will revise their airport layout plan (ALP) that reflects improvements made and has submitted or will submit an updated ALP to the FAA no later than 90 days from the period of performance end date. (49 USC § 47107 and Order 5100.38).

    ☒ Yes ☐ No ☐ N/A

Attach documentation clarifying any above item marked with “No” response.

Sponsor’s Certification

I certify, for the project identified herein, responses to the forgoing items are accurate as marked and additional documentation for any item marked “no” is correct and complete.

Executed on this day of , .

Name of Sponsor: City of Salinas

Name of Sponsor’s Authorized Official: Brett Godown

Title of Sponsor’s Authorized Official: Airport Manager

Signature of Sponsor’s Authorized Official: _____

I declare under penalty of perjury that the foregoing is true and correct. I understand that knowingly and willfully providing false information to the federal government is a violation of 18 USC § 1001 (False Statements) and could subject me to fines, imprisonment, or both.

Drug-Free Workplace
Airport Improvement Program Sponsor Certification

Sponsor: City of Salinas

Airport: (SNS) Salinas Municipal Airport

Project Number: 3-06-0206

Description of Work: Install Airfield Lighting Control and Monitoring System (ALCMS) (Design & Construction)

Application

49 USC § 47105(d) authorizes the Secretary to require certification from the sponsor that it will comply with the statutory and administrative requirements in carrying out a project under the Airport Improvement Program (AIP). General requirements on the drug-free workplace within federal grant programs are described in 2 CFR part 182. Sponsors are required to certify they will be, or will continue to provide, a drug-free workplace in accordance with the regulation. The AIP project grant agreement contains specific assurances on the Drug-Free Workplace Act of 1988.

Certification Statements

Except for certification statements below marked as not applicable (N/A), this list includes major requirements of the construction project. Selecting “Yes” represents sponsor acknowledgement and confirmation of the certification statement. The term “will” means Sponsor action taken at appropriate time based on the certification statement focus area, but no later than the end of the project period of performance. This list is not comprehensive and does not relieve the sponsor from fully complying with all applicable statutory and administrative standards. The source of the requirement is referenced within parenthesis.

1. A statement has been or will be published prior to commencement of project notifying employees that the unlawful manufacture, distribution, dispensing, possession, or use of a controlled substance is prohibited in the sponsor's workplace, and specifying the actions to be taken against employees for violation of such prohibition (2 CFR § 182.205).

   ☒ Yes ☐ No ☐ N/A

2. An ongoing drug-free awareness program (2 CFR § 182.215) has been or will be established prior to commencement of project to inform employees about:

   a. The dangers of drug abuse in the workplace;

   b. The sponsor's policy of maintaining a drug-free workplace;

   c. Any available drug counseling, rehabilitation, and employee assistance programs; and

   d. The penalties that may be imposed upon employees for drug abuse violations occurring in the workplace.

   ☒ Yes ☐ No ☐ N/A

3. Each employee to be engaged in the performance of the work has been or will be given a copy of the statement required within item 1 above prior to commencement of project (2 CFR § 182.210).

   ☒ Yes ☐ No ☐ N/A

4. Employees have been or will be notified in the statement required by item 1 above that, as a condition employment under the grant (2 CFR § 182.205(c)), the employee will:

   a. Abide by the terms of the statement; and

   b. Notify the employer in writing of his or her conviction for a violation of a criminal drug statute occurring in the workplace no later than five calendar days after such conviction.

   ☒ Yes ☐ No ☐ N/A

5. The Federal Aviation Administration (FAA) will be notified in writing within 10 calendar days after receiving notice under item 4b above from an employee or otherwise receiving actual notice of such conviction (2 CFR § 182.225). Employers of convicted employees must provide notice, including position title of the employee, to the FAA (2 CFR § 182.300).

   ☒ Yes ☐ No ☐ N/A

6. One of the following actions (2 CFR § 182.225(b)) will be taken within 30 calendar days of receiving a notice under item 4b above with respect to any employee who is so convicted:

   a. Take appropriate personnel action against such an employee, up to and including termination, consistent with the requirements of the Rehabilitation Act of 1973, as amended; and

   b. Require such employee to participate satisfactorily in drug abuse assistance or rehabilitation programs approved for such purposes by a federal, state, or local health, law enforcement, or other appropriate agency.

   ☒ Yes ☐ No ☐ N/A

7. A good faith effort will be made, on a continuous basis, to maintain a drug-free workplace through implementation of items 1 through 6 above (2 CFR § 182.200).

   ☒ Yes ☐ No ☐ N/A

Site(s) of performance of work (2 CFR § 182.230):

Location 1
Name of Location: Salinas Municipal Airport
Address: 30 Mortensen Avenue, Salinas, CA 93905

Location 2 (if applicable)
Name of Location:
Address:

Location 3 (if applicable)
Name of Location:
Address:

Attach documentation clarifying any above item marked with a “No” response.

Sponsor’s Certification

I certify, for the project identified herein, responses to the forgoing items are accurate as marked and additional documentation for any item marked “no” is correct and complete.

Executed on this day of , .

Name of Sponsor: City of Salinas

Name of Sponsor’s Authorized Official: Brett Godown

Title of Sponsor’s Authorized Official: Airport Manager

Signature of Sponsor’s Authorized Official: _____

I declare under penalty of perjury that the foregoing is true and correct. I understand that knowingly and willfully providing false information to the federal government is a violation of 18 USC § 1001 (False Statements) and could subject me to fines, imprisonment, or both.

Equipment and Construction Contracts
Airport Improvement Sponsor Certification

Sponsor: City of Salinas

Airport: (SNS) Salinas Municipal Airport

Project Number: 3-06-0206

Description of Work: Install Airfield Lighting Control and Monitoring System (ALCMS) (Design & Construction)

Application

49 USC § 47105(d) authorizes the Secretary to require certification from the sponsor that it will comply with the statutory and administrative requirements in carrying out a project under the Airport Improvement Program (AIP). General procurement standards for equipment and construction contracts within Federal grant programs are described in 2 CFR §§ 200.317-200.326. Labor and Civil Rights Standards applicable to the AIP are established by the Department of Labor (www.dol.gov) AIP Grant Assurance C.1—General Federal Requirements identifies all applicable Federal Laws, regulations, executive orders, policies, guidelines and requirements for assistance under the AIP. Sponsors may use state and local procedures provided the procurement conforms to these federal standards.

This certification applies to all equipment and construction projects. Equipment projects may or may not employ laborers and mechanics that qualify the project as a "covered contract" under requirements established by the Department of Labor requirements. Sponsor shall provide appropriate responses to the certification statements that reflect the character of the project regardless of whether the contract is for a construction project or an equipment project.

Certification Statements

Except for certification statements below marked as not applicable (N/A), this list includes major requirements of the construction project. Selecting "Yes" represents sponsor acknowledgement and confirmation of the certification statement. The term "will" means Sponsor action taken at appropriate time based on the certification statement focus area, but no later than the end of the project period of performance. This list is not comprehensive and does not relieve the sponsor from fully complying with all applicable statutory and administrative standards. The source of the requirement is referenced within parenthesis.

1. A written code or standard of conduct is or will be in effect prior to commencement of the project that governs the performance of the sponsor's officers, employees, or agents in soliciting, awarding and administering procurement contracts (2 CFR § 200.318).

   ☒ Yes ☐ No ☐ N/A

2. For all contracts, qualified and competent personnel are or will be engaged to perform contract administration, engineering supervision, construction inspection, and testing (Grant Assurance C.17).

   ☒ Yes ☐ No ☐ N/A

3. Sponsors that are required to have a Disadvantage Business Enterprise (DBE) program on file with the FAA have included or will include clauses required by Title VI of the Civil Rights Act and 49 CFR Part 26 for Disadvantaged Business Enterprises in all contracts and subcontracts.

   ☒ Yes ☐ No ☐ N/A

4. Sponsors required to have a DBE program on file with the FAA have implemented or will implement monitoring and enforcement measures that:

   a. Ensure work committed to Disadvantaged Business Enterprises at contract award is actually performed by the named DBEs (49 CFR § 26.37(b));

   b. Include written certification that the sponsor has reviewed contract records and has monitored work sites for performance by DBE firms (49 CFR § 26.37(b)); and

   c. Provides for a running tally of payments made to DBE firms and a means for comparing actual attainments (i.e. payments) to original commitments (49 CFR § 26.37(c)).

   ☒ Yes ☐ No ☐ N/A

5. Sponsor procurement actions using the competitive sealed bid method (2 CFR § 200.320(c)). was or will be:

   a. Publicly advertised, allowing a sufficient response time to solicit an adequate number of interested contractors or vendors;

   b. Prepared to include a complete, adequate and realistic specification that defines the items or services in sufficient detail to allow prospective bidders to respond;

   c. Publicly opened at a time and place prescribed in the invitation for bids; and

   d. Prepared in a manner that result in a firm fixed price contract award to the lowest responsive and responsible bidder.

   ☐ Yes ☐ No ☒ N/A

6. For projects the Sponsor proposes to use the competitive proposal procurement method (2 CFR § 200.320(d)), Sponsor has requested or will request FAA approval prior to proceeding with a competitive proposal procurement by submitting to the FAA the following:

   a. Written justification that supports use of competitive proposal method in lieu of the preferred sealed bid procurement method;

   b. Plan for publicizing and soliciting an adequate number of qualified sources; and

   c. Listing of evaluation factors along with relative importance of the factors.

   ☒ Yes ☐ No ☐ N/A

7. For construction and equipment installation projects, the bid solicitation includes or will include the current federal wage rate schedule(s) for the appropriate type of work classifications (2 CFR Part 200, Appendix II).

   ☒ Yes ☐ No ☐ N/A

8. Concurrence was or will be obtained from the Federal Aviation Administration (FAA) prior to contract award under any of the following circumstances (Order 5100.38D):

    a. Only one qualified person/firm submits a responsive bid;

    b. Award is to be made to other than the lowest responsible bidder; and

    c. Life cycle costing is a factor in selecting the lowest responsive bidder.

    ☒ Yes ☐ No ☐ N/A

9. All construction and equipment installation contracts contain or will contain provisions for:

    a. Access to Records (§ 200.336)

    b. Buy American Preferences (Title 49 U.S.C. § 50101)

    c. Civil Rights - General Provisions and Title VI Assurances(41 CFR part 60)

    d. Federal Fair Labor Standards (29 U.S.C. § 201, et seq)

    e. Occupational Safety and Health Act requirements (20 CFR part 1920)

    f. Seismic Safety – building construction (49 CFR part 41)

    g. State Energy Conservation Requirements - as applicable(2 CFR part 200, Appendix II)

    h. U.S. Trade Restriction (49 CFR part 30)

    i. Veterans Preference (49 USC § 47112(c))

    ☒ Yes ☐ No ☐ N/A

10. All construction and equipment installation contracts exceeding $2,000 contain or will contain the provisions established by:

    a. Davis-Bacon and Related Acts (29 CFR part 5)

    b. Copeland “Anti-Kickback” Act (29 CFR parts 3 and 5)

    ☒ Yes ☐ No ☐ N/A

11. All construction and equipment installation contracts exceeding $3,000 contain or will contain a contract provision that discourages distracted driving (E.O. 13513).

    ☒ Yes ☐ No ☐ N/A

12. All contracts exceeding $10,000 contain or will contain the following provisions as applicable:

    a. Construction and equipment installation projects - Applicable clauses from 41 CFR Part 60 for compliance with Executive Orders 11246 and 11375 on Equal Employment Opportunity;

    b. Construction and equipment installation - Contract Clause prohibiting segregated facilities in accordance with 41 CFR part 60-1.8;

    c. Requirement to maximize use of products containing recovered materials in accordance with 2 CFR § 200.322 and 40 CFR part 247; and

    d. Provisions that address termination for cause and termination for convenience (2 CFR Part 200, Appendix II).

    ☒ Yes ☐ No ☐ N/A

13. All contracts and subcontracts exceeding $25,000: Measures are in place or will be in place (e.g. checking the System for Award Management) that ensure contracts and subcontracts are not awarded to individuals or firms suspended, debarred, or excluded from participating in federally assisted projects (2 CFR parts 180 and 1200).

    ☒ Yes ☐ No ☐ N/A

14. Contracts exceeding the simplified acquisition threshold (currently $250,000) include or will include provisions, as applicable, that address the following:

    a. Construction and equipment installation contracts - a bid guarantee of 5%, a performance bond of 100%, and a payment bond of 100% (2 CFR § 200.325);

    b. Construction and equipment installation contracts - requirements of the Contract Work Hours and Safety Standards Act (40 USC 3701-3708, Sections 103 and 107);

    c. Restrictions on Lobbying and Influencing (2 CFR part 200, Appendix II);

    d. Conditions specifying administrative, contractual and legal remedies for instances where contractor of vendor violate or breach the terms and conditions of the contract (2 CFR §200, Appendix II); and

    e. All Contracts - Applicable standards and requirements issued under Section 306 of the Clean Air Act (42 USC 7401-7671q), Section 508 of the Clean Water Act (33 USC 1251-1387, and Executive Order 11738.

    ☒ Yes ☐ No ☐ N/A

Attach documentation clarifying any above item marked with “No” response.

Sponsor’s Certification

I certify, for the project identified herein, responses to the forgoing items are accurate as marked and additional documentation for any item marked “no” is correct and complete.

Executed on this day of , .

Name of Sponsor: City of Salinas

Name of Sponsor’s Authorized Official: Brett Godown

Title of Sponsor’s Authorized Official: Airport Manager

Signature of Sponsor’s Authorized Official: _____

I declare under penalty of perjury that the foregoing is true and correct. I understand that knowingly and willfully providing false information to the federal government is a violation of 18 USC § 1001 (False Statements) and could subject me to fines, imprisonment, or both.

Project Plans and Specifications
Airport Improvement Program Sponsor Certification

Sponsor: City of Salinas

Airport: (SNS) Salinas Municipal Airport

Project Number: 3-06-0206

Description of Work: Install Airfield Lighting Control and Monitoring System (ALCMS) (Design & Construction)

Application

49 USC § 47105(d) authorizes the Secretary to require certification from the sponsor that it will comply with the statutory and administrative requirements in carrying out a project under the Airport Improvement Program (AIP). Labor and civil rights standards applicable to AIP are established by the Department of Labor (www.dol.gov/). AIP Grant Assurance C.1—General Federal Requirements identifies applicable federal laws, regulations, executive orders, policies, guidelines and requirements for assistance under AIP. A list of current advisory circulars with specific standards for procurement, design or construction of airports, and installation of equipment and facilities is referenced in standard airport sponsor Grant Assurance 34 contained in the grant agreement.

Certification Statements

Except for certification statements below marked as not applicable (N/A), this list includes major requirements of the construction project. Selecting "Yes" represents sponsor acknowledgement and confirmation of the certification statement. The term "will" means Sponsor action taken at appropriate time based on the certification statement focus area, but no later than the end of the project period of performance. This list is not comprehensive and does not relieve the sponsor from fully complying with all applicable statutory and administrative standards. The source of the requirement is referenced within parenthesis.

1. The plans and specifications were or will be prepared in accordance with applicable federal standards and requirements, so that no deviation or modification to standards set forth in the advisory circulars, or FAA-accepted state standard, is necessary other than those explicitly approved by the Federal Aviation Administration (FAA) (14 USC § 47105).

   ☒ Yes ☐ No ☐ N/A

2. Specifications incorporate or will incorporate a clear and accurate description of the technical requirement for the material or product that does not contain limiting or proprietary features that unduly restrict competition (2 CFR §200.319).

   ☒ Yes ☐ No ☐ N/A

3. The development that is included or will be included in the plans is depicted on the current airport layout plan as approved by the FAA (14 USC § 47107).

   ☒ Yes ☐ No ☐ N/A

4. Development and features that are ineligible or unallowable for AIP funding have been or will be omitted from the plans and specifications (FAA Order 5100.38, par. 3-43).

   ☒ Yes ☐ No ☐ N/A

5. The specification does not use or will not use “brand name” or equal to convey requirements unless sponsor requests and receives approval from the FAA to use brand name (FAA Order 5100.38, Table U-5).

   ☒ Yes ☐ No ☐ N/A

6. The specification does not impose or will not impose geographical preference in their procurement requirements (2 CFR §200.319(b) and FAA Order 5100.38, Table U-5).

   ☒ Yes ☐ No ☐ N/A

7. The use of prequalified lists of individuals, firms or products include or will include sufficient qualified sources that ensure open and free competition and that does not preclude potential entities from qualifying during the solicitation period (2 CFR §319(d)).

   ☐ Yes ☐ No ☒ N/A

8. Solicitations with bid alternates include or will include explicit information that establish a basis for award of contract that is free of arbitrary decisions by the sponsor (2 CFR § 200.319(a)(7)).

   ☒ Yes ☐ No ☐ N/A

9. Concurrence was or will be obtained from the FAA if Sponsor incorporates a value engineering clause into the contract (FAA Order 5100.38, par. 3-57).

   ☒ Yes ☐ No ☐ N/A

10. The plans and specifications incorporate or will incorporate applicable requirements and recommendations set forth in the federally approved environmental finding (49 USC §47106(c)).

    ☐ Yes ☐ No ☐ N/A

11. The design of all buildings comply or will comply with the seismic design requirements of 49 CFR § 41.120. (FAA Order 5100.38d, par. 3-92)

    ☐ Yes ☐ No ☒ N/A

12. The project specification include or will include process control and acceptance tests required for the project by as per the applicable standard:

    a. Construction and installation as contained in Advisory Circular (AC) 150/5370-10.

       ☒ Yes ☐ No ☐ N/A

b. Snow Removal Equipment as contained in AC 150/5220-20.

☐ Yes ☐ No ☒ N/A

c. Aircraft Rescue and Fire Fighting (ARFF) vehicles as contained in AC 150/5220-10.

☐ Yes ☐ No ☒ N/A

13. For construction activities within or near aircraft operational areas(AOA):

a. The Sponsor has or will prepare a construction safety and phasing plan (CSPP) conforming to Advisory Circular 150/5370-2.

b. Compliance with CSPP safety provisions has been or will be incorporated into the plans and specifications as a contractor requirement.

c. Sponsor will not initiate work until receiving FAA's concurrence with the CSPP (FAA Order 5100.38, Par. 5-29).

☒ Yes ☐ No ☐ N/A

14. The project was or will be physically completed without federal participation in costs due to errors and omissions in the plans and specifications that were foreseeable at the time of project design (49 USC §47110(b)(1) and FAA Order 5100.38d, par. 3-100).

☒ Yes ☐ No ☐ N/A

Attach documentation clarifying any above item marked with "No" response.

Sponsor's Certification

I certify, for the project identified herein, responses to the forgoing items are accurate as marked and additional documentation for any item marked "no" is correct and complete.

Executed on this day of , .

Name of Sponsor: City of Salinas

Name of Sponsor's Authorized Official: Brett Godown

Title of Sponsor's Authorized Official: Airport Manager

Signature of Sponsor's Authorized Official: _____

I declare under penalty of perjury that the foregoing is true and correct. I understand that knowingly and willfully providing false information to the federal government is a violation of 18 USC § 1001 (False Statements) and could subject me to fines, imprisonment, or both.

Selection of Consultants
Airport Improvement Program Sponsor Certification

Sponsor: City of Salinas

Airport: (SNS) Salinas Municipal Airport

Project Number: 3-06-0206

Description of Work: Install Airfield Lighting Control and Monitoring System (ALCMS) (Design & Construction)

Application
49 USC § 47105(d) authorizes the Secretary to require certification from the sponsor that it will comply with the statutory and administrative requirements in carrying out a project under the Airport Improvement Program (AIP). General requirements for selection of consultant services within federal grant programs are described in 2 CFR §§ 200.317-200.326. Sponsors may use other qualifications-based procedures provided they are equivalent to standards of Title 40 chapter 11 and FAA Advisory Circular 150/5100-14, Architectural, Engineering, and Planning Consultant Services for Airport Grant Projects.

Certification Statements
Except for certification statements below marked as not applicable (N/A), this list includes major requirements of the construction project. Selecting “Yes” represents sponsor acknowledgement and confirmation of the certification statement. The term “will” means Sponsor action taken at appropriate time based on the certification statement focus area, but no later than the end of the project period of performance. This list is not comprehensive and does not relieve the sponsor from fully complying with all applicable statutory and administrative standards. The source of the requirement is referenced within parenthesis.

1. Sponsor acknowledges their responsibility for the settlement of all contractual and administrative issues arising out of their procurement actions (2 CFR § 200.318(k)).

   ☒ Yes ☐ No ☐ N/A

2. Sponsor procurement actions ensure or will ensure full and open competition that does not unduly limit competition (2 CFR § 200.319).

   ☒ Yes ☐ No ☐ N/A

3. Sponsor has excluded or will exclude any entity that develops or drafts specifications, requirements, or statements of work associated with the development of a request-for-qualifications (RFQ) from competing for the advertised services (2 CFR § 200.319).

   ☒ Yes ☐ No ☐ N/A

4. The advertisement describes or will describe specific project statements-of-work that provide clear detail of required services without unduly restricting competition (2 CFR § 200.319).

   ☒ Yes ☐ No ☐ N/A

5. Sponsor has publicized or will publicize a RFQ that:

   a. Solicits an adequate number of qualified sources (2 CFR § 200.320(d)); and

   b. Identifies all evaluation criteria and relative importance (2 CFR § 200.320(d)).

   ☒ Yes ☐ No ☐ N/A

6. Sponsor has based or will base selection on qualifications, experience, and disadvantaged business enterprise participation with price not being a selection factor (2 CFR § 200.320(d)).

   ☒ Yes ☐ No ☐ N/A

7. Sponsor has verified or will verify that agreements exceeding $25,000 are not awarded to individuals or firms suspended, debarred or otherwise excluded from participating in federally assisted projects (2 CFR §180.300).

   ☒ Yes ☐ No ☐ N/A

8. A/E services covering multiple projects: Sponsor has agreed to or will agree to:

   a. Refrain from initiating work covered by this procurement beyond five years from the date of selection (AC 150/5100-14); and

   b. Retain the right to conduct new procurement actions for projects identified or not identified in the RFQ (AC 150/5100-14).

   ☒ Yes ☐ No ☐ N/A

9. Sponsor has negotiated or will negotiate a fair and reasonable fee with the firm they select as most qualified for the services identified in the RFQ (2 CFR § 200.323).

   ☒ Yes ☐ No ☐ N/A

10. The Sponsor's contract identifies or will identify costs associated with ineligible work separately from costs associated with eligible work (2 CFR § 200.302).

    ☒ Yes ☐ No ☐ N/A

11. Sponsor has prepared or will prepare a record of negotiations detailing the history of the procurement action, rationale for contract type and basis for contract fees (2 CFR §200.318(i)).

    ☐ Yes ☐ No ☐ N/A

12. Sponsor has incorporated or will incorporate mandatory contact provisions in the consultant contract for AIP-assisted work (49 U.S.C. Chapter 471 and 2 CFR part 200 Appendix II)

    ☒ Yes ☐ No ☐ N/A

13. For contracts that apply a time-and-material payment provision (also known as hourly rates, specific rates of compensation, and labor rates), the Sponsor has established or will establish:

    a. Justification that there is no other suitable contract method for the services (2 CFR §200.318(j));

    b. A ceiling price that the consultant exceeds at their risk (2 CFR §200.318(j)); and

    c. A high degree of oversight that assures consultant is performing work in an efficient manner with effective cost controls in place 2 CFR §200.318(j)).

    ☒ Yes ☐ No ☐ N/A

14. Sponsor is not using or will not use the prohibited cost-plus-percentage-of-cost (CPPC) contract method. (2 CFR § 200.323(d)).

    ☒ Yes ☐ No ☐ N/A

Attach documentation clarifying any above item marked with “no” response.

Sponsor’s Certification

I certify, for the project identified herein, responses to the forgoing items are accurate as marked and additional documentation for any item marked “no” is correct and complete.

I declare under penalty of perjury that the foregoing is true and correct. I understand that knowingly and willfully providing false information to the federal government is a violation of 18 USC § 1001 (False Statements) and could subject me to fines, imprisonment, or both.

Executed on this day of , .

Name of Sponsor: City of Salinas

Name of Sponsor’s Authorized Official: Brett Godown

Title of Sponsor’s Authorized Official: Airport Manager

Signature of Sponsor’s Authorized Official: _____

I declare under penalty of perjury that the foregoing is true and correct. I understand that knowingly and willfully providing false information to the federal government is a violation of 18 USC § 1001 (False Statements) and could subject me to fines, imprisonment, or both.

Certification and Disclosure Regarding Potential Conflicts of Interest
Airport Improvement Program Sponsor Certification

Sponsor: City of Salinas

Airport: (SNS) Salinas Municipal Airport

Project Number: 3-06-0206

Description of Work: Install Airfield Lighting Control and Monitoring System (ALCMS) (Design & Construction)

Application

Title 2 CFR § 200.112 and § 1201.112 address Federal Aviation Administration (FAA) requirements for conflict of interest. As a condition of eligibility under the Airport Improvement Program (AIP), sponsors must comply with FAA policy on conflict of interest. Such a conflict would arise when any of the following have a financial or other interest in the firm selected for award:

a) The employee, officer or agent,

b) Any member of his immediate family,

c) His or her partner, or

d) An organization which employs, or is about to employ, any of the above.

Selecting “Yes” represents sponsor or sub-recipient acknowledgement and confirmation of the certification statement. Selecting “No” represents sponsor or sub-recipient disclosure that it cannot fully comply with the certification statement. If “No” is selected, provide support information explaining the negative response as an attachment to this form. This includes whether the sponsor has established standards for financial interest that are not substantial or unsolicited gifts are of nominal value (2 CFR § 200.318(c)). The term “will” means Sponsor action taken at appropriate time based on the certification statement focus area, but no later than the end of the project period of performance.

Certification Statements

1. The sponsor or sub-recipient maintains a written standards of conduct governing conflict of interest and the performance of their employees engaged in the award and administration of contracts (2 CFR § 200.318(c)). To the extent permitted by state or local law or regulations, such standards of conduct provide for penalties, sanctions, or other disciplinary actions for violations of such standards by the sponsor’s and sub-recipient’s officers, employees, or agents, or by contractors or their agents.

   ☒ Yes ☐ No

2. The sponsor's or sub-recipient's officers, employees or agents have not and will not solicit or accept gratuities, favors or anything of monetary value from contractors, potential contractors, or parties to sub-agreements (2 CFR § 200.318(c)).

   ☒ Yes ☐ No

3. The sponsor or sub-recipient certifies that is has disclosed and will disclose to the FAA any known potential conflict of interest (2 CFR § 1200.112).

   ☒ Yes ☐ No

Attach documentation clarifying any above item marked with "no" response.

Sponsor's Certification

I certify, for the project identified herein, responses to the forgoing items are accurate as marked and have the explanation for any item marked "no" is correct and complete.

Executed on this day of , .

Name of Sponsor: City of Salinas

Name of Sponsor's Authorized Official: Brett Godown

Title of Sponsor's Authorized Official: Airport Manager

Signature of Sponsor's Authorized Official: _____

I declare under penalty of perjury that the foregoing is true and correct. I understand that knowingly and willfully providing false information to the federal government is a violation of 18 USC § 1001 (False Statements) and could subject me to fines, imprisonment, or both.

CERTIFICATION REGARDING LOBBYING

Certification for Contracts, Grants, Loans, and Cooperative Agreements

The undersigned certifies, to the best of his or her knowledge and belief, that:

(1) No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of an agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.

(2) If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, "Disclosure of Lobbying Activities," in accordance with its instructions.

(3) The undersigned shall require that the language of this certification be included in the award documents for all subawards at all tiers (including subcontracts, subgrants, and contracts under grants, loans, and cooperative agreements) and that all subrecipients shall certify and disclose accordingly. This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by section 1352, title 31, U.S. Code. Any person who fails to file the required certification shall be subject to a civil penalty of not less than $10,000 and not more than $100,000 for each such failure.

Statement for Loan Guarantees and Loan Insurance

The undersigned states, to the best of his or her knowledge and belief, that:

If any funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this commitment providing for the United States to insure or guarantee a loan, the undersigned shall complete and submit Standard Form-LLL, "Disclosure of Lobbying Activities," in accordance with its instructions. Submission of this statement is a prerequisite for making or entering into this transaction imposed by section 1352, title 31, U.S. Code. Any person who fails to file the required statement shall be subject to a civil penalty of not less than $10,000 and not more than $100,000 for each such failure.

* APPLICANT'S ORGANIZATION

City of Salinas

* PRINTED NAME AND TITLE OF AUTHORIZED REPRESENTATIVE

Prefix: Mr. * First Name: Brett Middle Name:

* Last Name: Godown Suffix:

* Title: Airport Manager

* SIGNATURE: * DATE:

STANDARD DOT TITLE VI ASSURANCES

City of Salinas (hereinafter referred to as the Sponsor) hereby agrees that as a condition to receiving Federal financial assistance from the Department of Transportation (DOT), it will comply with Title VI of the Civil Rights Act of 1964 (42 U.S.C. 2000d et seq.) and all requirements imposed by 49 CFR Part 21, Nondiscrimination in Federally Assisted Programs of the Department of Transportation -- Effectuation of Title VI of the Civil Rights Act of 1964 (hereinafter referred to as the "Regulations") to the end that no person in the United States shall, on the ground of race, color, or national origin, be excluded from participation in, be denied the benefits of, or be otherwise subjected to discrimination under any program or activity for which the applicant receives Federal financial assistance and will immediately take any measures necessary to effectuate this agreement. Without limiting the above general assurance, the Sponsor agrees concerning this grant that:

1. Each "program" and "facility" (as defined in Section 21.23(a) and 21.23(b)) will be conducted or operated in compliance with all requirements of the Regulations.

2. It will insert the clauses of Attachment 1 of this assurance in every contract subject to the Act and the Regulations.

3. Where Federal financial assistance is received to construct a facility, or part of a facility, the assurance shall extend to the entire facility and facilities operated in connection therewith.

4. Where Federal financial assistance is in the form or for the acquisition of real property or an interest in real property, the assurance shall extend to rights to space on, over, or under such property.

5. It will include the appropriate clauses set forth in Attachment 2 of this assurance, as a covenant running with the land, in any future deeds, leases, permits, licenses, and similar agreements entered into by the Sponsor with other parties:

   (a) for the subsequent transfer of real property acquired or improved with Federal financial assistance under this project; and

   (b) for the construction or use of or access to space on, over, or under real property acquired or improved with Federal financial assistance under this Project.

6. This assurance obligates the Sponsor for the period during which Federal financial assistance is extended to the program, except where the Federal financial assistance is to provide, or is in the form of personal property or real property or interest therein or structures or improvements thereon, in which case the assurance obligates the Sponsor or any transferee for the longer of the following periods:

   (a) the period during which the property is used for a purpose for which Federal financial assistance is extended, or for another purpose involving the provision of similar services or benefits; or
   (b) the period during which the Sponsor retains ownership or possession of the property.

7. **It will provide for such methods of administration for the program as are found by the Secretary of transportation of the official to whom he delegates specific authority to give reasonable guarantees that it, other sponsors, subgrantees, contractors, subcontractors, transferees, successors in interest, and other participants of Federal financial assistance under such program will comply with all requirements imposed or pursuant to the act, the Regulations, and this assurance.**

STANDARD DOT TITLE VI ASSURANCES *(Continued)*

8. It agrees that the United States has a right to seek judicial enforcement with regard to any matter arising under the Act, the Regulations, and this assurance.

THIS ASSURANCE is given in consideration of and for the purpose of obtaining Federal financial assistance for this Project and is binding on its contractors, the Sponsor, subcontractors, transferees, successors in interest and other participants in the Project. The person or persons whose signatures appear below are authorized to sign this assurance on behalf of the Sponsor.

DATED _____

City of Salinas
(Sponsor)

_____
(Signature of Authorized Official)

FAA
Airports

Current FAA Advisory Circulars Required for Use in AIP Funded and PFC Approved Projects

Updated: 4/18/2019

View the most current versions of these ACs and any associated changes at:
http://www.faa.gov/airports/resources/advisory_circulars and
http://www.faa.gov/regulations_policies/advisory_circulars/

NUMBER	TITLE
70/7460-1L Change 2	Obstruction Marking and Lighting
150/5000-9A	Announcement of Availability Report No. DOT/FAA/PP/92-5, Guidelines for the Sound Insulation of Residences Exposed to Aircraft Operations
150/5000-17	Critical Aircraft and Regular Use Determination
150/5020-1	Noise Control and Compatibility Planning for Airports
150/5070-6B Changes 1 - 2	Airport Master Plans
150/5070-7 Change 1	The Airport System Planning Process
150/5100-13B	Development of State Standards for Nonprimary Airports
150/5200-28F	Notices to Airmen (NOTAMs) for Airport Operators
150/5200-30D Change 1	Airport Field Condition Assessments and Winter Operations Safety
150/5200-31C Changes 1 - 2	Airport Emergency Plan
150/5210-5D	Painting, Marking, and Lighting of Vehicles Used on an Airport
150/5210-7D	Aircraft Rescue and Fire Fighting Communications
150/5210-13C	Airport Water Rescue Plans and Equipment

NUMBER	TITLE
150/5210-14B	Aircraft Rescue Fire Fighting Equipment, Tools and Clothing
150/5210-15A	Aircraft Rescue and Firefighting Station Building Design
150/5210-18A	Systems for Interactive Training of Airport Personnel
150/5210-19A	Driver's Enhanced Vision System (DEVs)
150/5220-10E	Guide Specification for Aircraft Rescue and Fire Fighting (ARFF) Vehicles
150/5220-16E, Change 1	Automated Weather Observing Systems (AWOS) for Non-Federal Applications
150/5220-17B	Aircraft Rescue and Fire Fighting (ARFF) Training Facilities
150/5220-18A	Buildings for Storage and Maintenance of Airport Snow and Ice Control Equipment and Materials
150/5220-20A	Airport Snow and Ice Control Equipment
150/5220-21C	Aircraft Boarding Equipment
150/5220-22B	Engineered Materials Arresting Systems (EMAS) for Aircraft Overruns
150/5220-23	Frangible Connections
150/5220-24	Foreign Object Debris Detection Equipment
150/5220-25	Airport Avian Radar Systems
150/5220-26, Changes 1 - 2	Airport Ground Vehicle Automatic Dependent Surveillance - Broadcast (ADS-B) Out Squitter Equipment
150/5300-13A, Change 1	Airport Design
150/5300-14C	Design of Aircraft Deicing Facilities
150/5300-16A	General Guidance and Specifications for Aeronautical Surveys: Establishment of Geodetic Control and Submission to the National Geodetic Survey
150/5300-17C Change 1	Standards for Using Remote Sensing Technologies in Airport Surveys
150/5300-18B Change 1	General Guidance and Specifications for Submission of Aeronautical Surveys to NGS: Field Data Collection and Geographic Information System (GIS) Standards
150/5320-5D	Airport Drainage Design

NUMBER	TITLE
150/5320-6F	Airport Pavement Design and Evaluation
150/5320-12C, Changes 1 - 8	Measurement, Construction, and Maintenance of Skid Resistant Airport Pavement Surfaces
150/5320-15A	Management of Airport Industrial Waste
150/5325-4B	Runway Length Requirements for Airport Design
150/5335-5C	Standardized Method of Reporting Airport Pavement Strength - PCN
150/5340-1L	Standards for Airport Markings
150/5340-5D	Segmented Circle Airport Marker System
150/5340-18F	Standards for Airport Sign Systems
150/5340-26C	Maintenance of Airport Visual Aid Facilities
150/5340-30J	Design and Installation Details for Airport Visual Aids
150/5345-3G	Specification for L-821, Panels for the Control of Airport Lighting
150/5345-5B	Circuit Selector Switch
150/5345-7F	Specification for L-824 Underground Electrical Cable for Airport Lighting Circuits
150/5345-10H	Specification for Constant Current Regulators and Regulator Monitors
150/5345-12F	Specification for Airport and Heliport Beacons
150/5345-13B	Specification for L-841 Auxiliary Relay Cabinet Assembly for Pilot Control of Airport Lighting Circuits
150/5345-26D	FAA Specification For L-823 Plug and Receptacle, Cable Connectors
150/5345-27E	Specification for Wind Cone Assemblies
150/5345-28G	Precision Approach Path Indicator (PAPI) Systems
150/5345-39D	Specification for L-853, Runway and Taxiway Retroreflective Markers
150/5345-42H	Specification for Airport Light Bases, Transformer Housings, Junction Boxes, and Accessories
150/5345-43J	Specification for Obstruction Lighting Equipment

NUMBER	TITLE
150/5345-44K	Specification for Runway and Taxiway Signs
150/5345-45C	Low-Impact Resistant (LIR) Structures
150/5345-46E	Specification for Runway and Taxiway Light Fixtures
150/5345-47C	Specification for Series to Series Isolation Transformers for Airport Lighting Systems
150/5345-49D	Specification L-854, Radio Control Equipment
150/5345-50B	Specification for Portable Runway and Taxiway Lights
150/5345-51B	Specification for Discharge-Type Flashing Light Equipment
150/5345-52A	Generic Visual Glideslope Indicators (GVGI)
150/5345-53D	Airport Lighting Equipment Certification Program
150/5345-54B	Specification for L-884, Power and Control Unit for Land and Hold Short Lighting Systems
150/5345-55A	Specification for L-893, Lighted Visual Aid to Indicate Temporary Runway Closure
150/5345-56B	Specification for L-890 Airport Lighting Control and Monitoring System (ALCMS)
150/5360-12F	Airport Signing and Graphics
150/5360-13A	Airport Terminal Planning
150/5360-14A	Access to Airports By Individuals With Disabilities
150/5370-2G	Operational Safety on Airports During Construction
150/5370-10H	Standard Specifications for Construction of Airports
150/5370-11B	Use of Nondestructive Testing in the Evaluation of Airport Pavements
150/5370-13A	Off-Peak Construction of Airport Pavements Using Hot-Mix Asphalt
150/5370-15B	Airside Applications for Artificial Turf
150/5370-16	Rapid Construction of Rigid (Portland Cement Concrete) Airfield Pavements
150/5370-17	Airside Use of Heated Pavement Systems
150/5390-2C	Heliport Design
150/5395-1B	Seaplane Bases

THE FOLLOWING ADDITIONAL APPLY TO AIP PROJECTS ONLY

Updated: 3/22/2019

NUMBER	TITLE
150/5100-14E, Change 1	Architectural, Engineering, and Planning Consultant Services for Airport Grant Projects
150/5100-17, Changes 1 - 7	Land Acquisition and Relocation Assistance for Airport Improvement Program Assisted Projects
150/5300-15A	Use of Value Engineering for Engineering and Design of Airport Grant Projects
150/5320-17A	Airfield Pavement Surface Evaluation and Rating Manuals
150/5370-12B	Quality Management for Federally Funded Airport Construction Projects
150/5380-6C	Guidelines and Procedures for Maintenance of Airport Pavements
150/5380-7B	Airport Pavement Management Program
150/5380-9	Guidelines and Procedures for Measuring Airfield Pavement Roughness

FAA
Airports

ASSURANCES

Airport Sponsors

A. General.

1. These assurances shall be complied with in the performance of grant agreements for airport development, airport planning, and noise compatibility program grants for airport sponsors.
2. These assurances are required to be submitted as part of the project application by sponsors requesting funds under the provisions of Title 49, U.S.C., subtitle VII, as amended. As used herein, the term "public agency sponsor" means a public agency with control of a public-use airport; the term "private sponsor" means a private owner of a public-use airport; and the term "sponsor" includes both public agency sponsors and private sponsors.
3. Upon acceptance of this grant offer by the sponsor, these assurances are incorporated in and become part of this grant agreement.

B. Duration and Applicability.

1. **Airport development or Noise Compatibility Program Projects Undertaken by a Public Agency Sponsor.**

   The terms, conditions and assurances of this grant agreement shall remain in full force and effect throughout the useful life of the facilities developed or equipment acquired for an airport development or noise compatibility program project, or throughout the useful life of the project items installed within a facility under a noise compatibility program project, but in any event not to exceed twenty (20) years from the date of acceptance of a grant offer of Federal funds for the project. However, there shall be no limit on the duration of the assurances regarding Exclusive Rights and Airport Revenue so long as the airport is used as an airport. There shall be no limit on the duration of the terms, conditions, and assurances with respect to real property acquired with federal funds. Furthermore, the duration of the Civil Rights assurance shall be specified in the assurances.

2. **Airport Development or Noise Compatibility Projects Undertaken by a Private Sponsor.**

   The preceding paragraph 1 also applies to a private sponsor except that the useful life of project items installed within a facility or the useful life of the facilities developed or equipment acquired under an airport development or noise compatibility program project shall be no less than ten (10) years from the date of acceptance of Federal aid for the project.

3. **Airport Planning Undertaken by a Sponsor.**

Unless otherwise specified in this grant agreement, only Assurances 1, 2, 3, 5, 6, 13, 18, 25, 30, 32, 33, and 34 in Section C apply to planning projects. The terms, conditions, and assurances of this grant agreement shall remain in full force and effect during the life of the project; there shall be no limit on the duration of the assurances regarding Airport Revenue so long as the airport is used as an airport.

C. Sponsor Certification.

The sponsor hereby assures and certifies, with respect to this grant that:

1. **General Federal Requirements.**

It will comply with all applicable Federal laws, regulations, executive orders, policies, guidelines, and requirements as they relate to the application, acceptance and use of Federal funds for this project including but not limited to the following:

Federal Legislation

a. Title 49, U.S.C., subtitle VII, as amended.
b. Davis-Bacon Act - 40 U.S.C. 276(a), et seq.[1]
c. Federal Fair Labor Standards Act - 29 U.S.C. 201, et seq.
d. Hatch Act – 5 U.S.C. 1501, et seq.[2]
e. Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 Title 42 U.S.C. 4601, et seq.[1 2]
f. National Historic Preservation Act of 1966 - Section 106 - 16 U.S.C. 470(f).[1]
g. Archeological and Historic Preservation Act of 1974 - 16 U.S.C. 469 through 469c.[1]
h. Native Americans Grave Repatriation Act - 25 U.S.C. Section 3001, et seq.
i. Clean Air Act, P.L. 90-148, as amended.
j. Coastal Zone Management Act, P.L. 93-205, as amended.
k. Flood Disaster Protection Act of 1973 - Section 102(a) - 42 U.S.C. 4012a.[1]
l. Title 49, U.S.C., Section 303, (formerly known as Section 4(f))
m. Rehabilitation Act of 1973 - 29 U.S.C. 794.
n. Title VI of the Civil Rights Act of 1964 (42 U.S.C. § 2000d et seq., 78 stat. 252) (prohibits discrimination on the basis of race, color, national origin);
o. Americans with Disabilities Act of 1990, as amended, (42 U.S.C. § 12101 et seq.), prohibits discrimination on the basis of disability).
p. Age Discrimination Act of 1975 - 42 U.S.C. 6101, et seq.
q. American Indian Religious Freedom Act, P.L. 95-341, as amended.
r. Architectural Barriers Act of 1968 -42 U.S.C. 4151, et seq.[1]
s. Power plant and Industrial Fuel Use Act of 1978 - Section 403- 2 U.S.C. 8373.[1]
t. Contract Work Hours and Safety Standards Act - 40 U.S.C. 327, et seq.[1]
u. Copeland Anti-kickback Act - 18 U.S.C. 874.1
v. National Environmental Policy Act of 1969 - 42 U.S.C. 4321, et seq.[1]
w. Wild and Scenic Rivers Act, P.L. 90-542, as amended.
x. Single Audit Act of 1984 - 31 U.S.C. 7501, et seq.[2]
y. Drug-Free Workplace Act of 1988 - 41 U.S.C. 702 through 706.

z. The Federal Funding Accountability and Transparency Act of 2006, as amended (Pub. L. 109-282, as amended by section 6202 of Pub. L. 110-252).

Executive Orders

a. Executive Order 11246 - Equal Employment Opportunity[1]
b. Executive Order 11990 - Protection of Wetlands
c. Executive Order 11998 – Flood Plain Management
d. Executive Order 12372 - Intergovernmental Review of Federal Programs
e. Executive Order 12699 - Seismic Safety of Federal and Federally Assisted New Building Construction[1]
f. Executive Order 12898 - Environmental Justice

Federal Regulations

a. 2 CFR Part 180 - OMB Guidelines to Agencies on Governmentwide Debarment and Suspension (Nonprocurement).
b. 2 CFR Part 200, Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards. [OMB Circular A-87 Cost Principles Applicable to Grants and Contracts with State and Local Governments, and OMB Circular A-133 - Audits of States, Local Governments, and Non-Profit Organizations].[4, 5, 6]
c. 2 CFR Part 1200 – Nonprocurement Suspension and Debarment
d. 14 CFR Part 13 - Investigative and Enforcement Procedures14 CFR Part 16 - Rules of Practice For Federally Assisted Airport Enforcement Proceedings.
e. 14 CFR Part 150 - Airport noise compatibility planning.
f. 28 CFR Part 35- Discrimination on the Basis of Disability in State and Local Government Services.
g. 28 CFR § 50.3 - U.S. Department of Justice Guidelines for Enforcement of Title VI of the Civil Rights Act of 1964.
h. 29 CFR Part 1 - Procedures for predetermination of wage rates.[1]
i. 29 CFR Part 3 - Contractors and subcontractors on public building or public work financed in whole or part by loans or grants from the United States.[1]
j. 29 CFR Part 5 - Labor standards provisions applicable to contracts covering federally financed and assisted construction (also labor standards provisions applicable to non-construction contracts subject to the Contract Work Hours and Safety Standards Act).[1]
k. 41 CFR Part 60 - Office of Federal Contract Compliance Programs, Equal Employment Opportunity, Department of Labor (Federal and federally assisted contracting requirements).[1]
l. 49 CFR Part 18 - Uniform administrative requirements for grants and cooperative agreements to state and local governments.[3]
m. 49 CFR Part 20 - New restrictions on lobbying.
n. 49 CFR Part 21 – Nondiscrimination in federally-assisted programs of the Department of Transportation - effectuation of Title VI of the Civil Rights Act of 1964.
o. 49 CFR Part 23 - Participation by Disadvantage Business Enterprise in Airport Concessions.

p. 49 CFR Part 24 – Uniform Relocation Assistance and Real Property Acquisition for Federal and Federally Assisted Programs.[1] [2]
q. 49 CFR Part 26 – Participation by Disadvantaged Business Enterprises in Department of Transportation Programs.
r. 49 CFR Part 27 – Nondiscrimination on the Basis of Handicap in Programs and Activities Receiving or Benefiting from Federal Financial Assistance.[1]
s. 49 CFR Part 28 – Enforcement of Nondiscrimination on the Basis of Handicap in Programs or Activities conducted by the Department of Transportation.
t. 49 CFR Part 30 - Denial of public works contracts to suppliers of goods and services of countries that deny procurement market access to U.S. contractors.
u. 49 CFR Part 32 – Governmentwide Requirements for Drug-Free Workplace (Financial Assistance)
v. 49 CFR Part 37 – Transportation Services for Individuals with Disabilities (ADA).
w. 49 CFR Part 41 - Seismic safety of Federal and federally assisted or regulated new building construction.

Specific Assurances

Specific assurances required to be included in grant agreements by any of the above laws, regulations or circulars are incorporated by reference in this grant agreement.

Footnotes to Assurance C.1.

[1] These laws do not apply to airport planning sponsors.

[2] These laws do not apply to private sponsors.

[3] 49 CFR Part 18 and 2 CFR Part 200 contain requirements for State and Local Governments receiving Federal assistance. Any requirement levied upon State and Local Governments by this regulation and circular shall also be applicable to private sponsors receiving Federal assistance under Title 49, United States Code.

[4] On December 26, 2013 at 78 FR 78590, the Office of Management and Budget (OMB) issued the Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards in 2 CFR Part 200. 2 CFR Part 200 replaces and combines the former Uniform Administrative Requirements for Grants (OMB Circular A-102 and Circular A-110 or 2 CFR Part 215 or Circular) as well as the Cost Principles (Circulars A-21 or 2 CFR part 220; Circular A-87 or 2 CFR part 225; and A-122, 2 CFR part 230). Additionally it replaces Circular A-133 guidance on the Single Annual Audit. In accordance with 2 CFR section 200.110, the standards set forth in Part 200 which affect administration of Federal awards issued by Federal agencies become effective once implemented by Federal agencies or when any future amendment to this Part becomes final. Federal agencies, including the Department of Transportation, must implement the policies and procedures applicable to Federal awards by promulgating a regulation to be effective by December 26, 2014 unless different provisions are required by statute or approved by OMB.

[5] Cost principles established in 2 CFR part 200 subpart E must be used as guidelines for determining the eligibility of specific types of expenses.

[6] Audit requirements established in 2 CFR part 200 subpart F are the guidelines for audits.

2. **Responsibility and Authority of the Sponsor.**

   a. Public Agency Sponsor:

   It has legal authority to apply for this grant, and to finance and carry out the proposed project; that a resolution, motion or similar action has been duly adopted or passed as an official act of the applicant's governing body authorizing the filing of the application, including all understandings and assurances contained therein, and directing and authorizing the person identified as the official representative of the applicant to act in connection with the application and to provide such additional information as may be required.

   b. Private Sponsor:

   It has legal authority to apply for this grant and to finance and carry out the proposed project and comply with all terms, conditions, and assurances of this grant agreement. It shall designate an official representative and shall in writing direct and authorize that person to file this application, including all understandings and assurances contained therein; to act in connection with this application; and to provide such additional information as may be required.

3. **Sponsor Fund Availability.**

   It has sufficient funds available for that portion of the project costs which are not to be paid by the United States. It has sufficient funds available to assure operation and maintenance of items funded under this grant agreement which it will own or control.

4. **Good Title.**

   a. It, a public agency or the Federal government, holds good title, satisfactory to the Secretary, to the landing area of the airport or site thereof, or will give assurance satisfactory to the Secretary that good title will be acquired.

   b. For noise compatibility program projects to be carried out on the property of the sponsor, it holds good title satisfactory to the Secretary to that portion of the property upon which Federal funds will be expended or will give assurance to the Secretary that good title will be obtained.

5. **Preserving Rights and Powers.**

   a. It will not take or permit any action which would operate to deprive it of any of the rights and powers necessary to perform any or all of the terms, conditions, and assurances in this grant agreement without the written approval of the Secretary, and will act promptly to acquire, extinguish or modify any outstanding rights or claims of right of others which would interfere with such performance by the sponsor. This shall be done in a manner acceptable to the Secretary.

b. It will not sell, lease, encumber, or otherwise transfer or dispose of any part of its title or other interests in the property shown on Exhibit A to this application or, for a noise compatibility program project, that portion of the property upon which Federal funds have been expended, for the duration of the terms, conditions, and assurances in this grant agreement without approval by the Secretary. If the transferee is found by the Secretary to be eligible under Title 49, United States Code, to assume the obligations of this grant agreement and to have the power, authority, and financial resources to carry out all such obligations, the sponsor shall insert in the contract or document transferring or disposing of the sponsor's interest, and make binding upon the transferee all of the terms, conditions, and assurances contained in this grant agreement.

c. For all noise compatibility program projects which are to be carried out by another unit of local government or are on property owned by a unit of local government other than the sponsor, it will enter into an agreement with that government. Except as otherwise specified by the Secretary, that agreement shall obligate that government to the same terms, conditions, and assurances that would be applicable to it if it applied directly to the FAA for a grant to undertake the noise compatibility program project. That agreement and changes thereto must be satisfactory to the Secretary. It will take steps to enforce this agreement against the local government if there is substantial non-compliance with the terms of the agreement.

d. For noise compatibility program projects to be carried out on privately owned property, it will enter into an agreement with the owner of that property which includes provisions specified by the Secretary. It will take steps to enforce this agreement against the property owner whenever there is substantial non-compliance with the terms of the agreement.

e. If the sponsor is a private sponsor, it will take steps satisfactory to the Secretary to ensure that the airport will continue to function as a public-use airport in accordance with these assurances for the duration of these assurances.

f. If an arrangement is made for management and operation of the airport by any agency or person other than the sponsor or an employee of the sponsor, the sponsor will reserve sufficient rights and authority to insure that the airport will be operated and maintained in accordance Title 49, United States Code, the regulations and the terms, conditions and assurances in this grant agreement and shall insure that such arrangement also requires compliance therewith.

g. Sponsors of commercial service airports will not permit or enter into any arrangement that results in permission for the owner or tenant of a property used as a residence, or zoned for residential use, to taxi an aircraft between that property and any location on airport. Sponsors of general aviation airports entering into any arrangement that results in permission for the owner of residential real property adjacent to or near the airport must comply with the requirements of Sec. 136 of Public Law 112-95 and the sponsor assurances.

6. **Consistency with Local Plans.**

   The project is reasonably consistent with plans (existing at the time of submission of this application) of public agencies that are authorized by the State in which the project is located to plan for the development of the area surrounding the airport.

7. **Consideration of Local Interest.**

   It has given fair consideration to the interest of communities in or near where the project may be located.

8. **Consultation with Users.**

   In making a decision to undertake any airport development project under Title 49, United States Code, it has undertaken reasonable consultations with affected parties using the airport at which project is proposed.

9. **Public Hearings.**

   In projects involving the location of an airport, an airport runway, or a major runway extension, it has afforded the opportunity for public hearings for the purpose of considering the economic, social, and environmental effects of the airport or runway location and its consistency with goals and objectives of such planning as has been carried out by the community and it shall, when requested by the Secretary, submit a copy of the transcript of such hearings to the Secretary. Further, for such projects, it has on its management board either voting representation from the communities where the project is located or has advised the communities that they have the right to petition the Secretary concerning a proposed project.

10. **Metropolitan Planning Organization.**

    In projects involving the location of an airport, an airport runway, or a major runway extension at a medium or large hub airport, the sponsor has made available to and has provided upon request to the metropolitan planning organization in the area in which the airport is located, if any, a copy of the proposed amendment to the airport layout plan to depict the project and a copy of any airport master plan in which the project is described or depicted.

11. **Pavement Preventive Maintenance.**

    With respect to a project approved after January 1, 1995, for the replacement or reconstruction of pavement at the airport, it assures or certifies that it has implemented an effective airport pavement maintenance-management program and it assures that it will use such program for the useful life of any pavement constructed, reconstructed or repaired with Federal financial assistance at the airport. It will provide such reports on pavement condition and pavement management programs as the Secretary determines may be useful.

12. **Terminal Development Prerequisites.**

    For projects which include terminal development at a public use airport, as defined in Title 49, it has, on the date of submittal of the project grant application, all the safety equipment required for certification of such airport under section 44706 of Title 49, United States Code, and all the security equipment required by rule or regulation, and

has provided for access to the passenger enplaning and deplaning area of such airport to passengers enplaning and deplaning from aircraft other than air carrier aircraft.

13. **Accounting System, Audit, and Record Keeping Requirements.**

    a. It shall keep all project accounts and records which fully disclose the amount and disposition by the recipient of the proceeds of this grant, the total cost of the project in connection with which this grant is given or used, and the amount or nature of that portion of the cost of the project supplied by other sources, and such other financial records pertinent to the project. The accounts and records shall be kept in accordance with an accounting system that will facilitate an effective audit in accordance with the Single Audit Act of 1984.

    b. It shall make available to the Secretary and the Comptroller General of the United States, or any of their duly authorized representatives, for the purpose of audit and examination, any books, documents, papers, and records of the recipient that are pertinent to this grant. The Secretary may require that an appropriate audit be conducted by a recipient. In any case in which an independent audit is made of the accounts of a sponsor relating to the disposition of the proceeds of a grant or relating to the project in connection with which this grant was given or used, it shall file a certified copy of such audit with the Comptroller General of the United States not later than six (6) months following the close of the fiscal year for which the audit was made.

14. **Minimum Wage Rates.**

    It shall include, in all contracts in excess of $2,000 for work on any projects funded under this grant agreement which involve labor, provisions establishing minimum rates of wages, to be predetermined by the Secretary of Labor, in accordance with the Davis-Bacon Act, as amended (40 U.S.C. 276a-276a-5), which contractors shall pay to skilled and unskilled labor, and such minimum rates shall be stated in the invitation for bids and shall be included in proposals or bids for the work.

15. **Veteran's Preference.**

    It shall include in all contracts for work on any project funded under this grant agreement which involve labor, such provisions as are necessary to insure that, in the employment of labor (except in executive, administrative, and supervisory positions), preference shall be given to Vietnam era veterans, Persian Gulf veterans, Afghanistan-Iraq war veterans, disabled veterans, and small business concerns owned and controlled by disabled veterans as defined in Section 47112 of Title 49, United States Code. However, this preference shall apply only where the individuals are available and qualified to perform the work to which the employment relates.

16. **Conformity to Plans and Specifications.**

    It will execute the project subject to plans, specifications, and schedules approved by the Secretary. Such plans, specifications, and schedules shall be submitted to the Secretary prior to commencement of site preparation, construction, or other performance under this grant agreement, and, upon approval of the Secretary, shall be incorporated into this grant agreement. Any modification to the approved plans,

specifications, and schedules shall also be subject to approval of the Secretary, and incorporated into this grant agreement.

17. **Construction Inspection and Approval.**

    It will provide and maintain competent technical supervision at the construction site throughout the project to assure that the work conforms to the plans, specifications, and schedules approved by the Secretary for the project. It shall subject the construction work on any project contained in an approved project application to inspection and approval by the Secretary and such work shall be in accordance with regulations and procedures prescribed by the Secretary. Such regulations and procedures shall require such cost and progress reporting by the sponsor or sponsors of such project as the Secretary shall deem necessary.

18. **Planning Projects.**

    In carrying out planning projects:

    a. It will execute the project in accordance with the approved program narrative contained in the project application or with the modifications similarly approved.

    b. It will furnish the Secretary with such periodic reports as required pertaining to the planning project and planning work activities.

    c. It will include in all published material prepared in connection with the planning project a notice that the material was prepared under a grant provided by the United States.

    d. It will make such material available for examination by the public, and agrees that no material prepared with funds under this project shall be subject to copyright in the United States or any other country.

    e. It will give the Secretary unrestricted authority to publish, disclose, distribute, and otherwise use any of the material prepared in connection with this grant.

    f. It will grant the Secretary the right to disapprove the sponsor's employment of specific consultants and their subcontractors to do all or any part of this project as well as the right to disapprove the proposed scope and cost of professional services.

    g. It will grant the Secretary the right to disapprove the use of the sponsor's employees to do all or any part of the project.

    h. It understands and agrees that the Secretary's approval of this project grant or the Secretary's approval of any planning material developed as part of this grant does not constitute or imply any assurance or commitment on the part of the Secretary to approve any pending or future application for a Federal airport grant.

19. **Operation and Maintenance.**

    a. The airport and all facilities which are necessary to serve the aeronautical users of the airport, other than facilities owned or controlled by the United States, shall be operated at all times in a safe and serviceable condition and in accordance with the minimum standards as may be required or prescribed by applicable Federal,

state and local agencies for maintenance and operation. It will not cause or permit any activity or action thereon which would interfere with its use for airport purposes. It will suitably operate and maintain the airport and all facilities thereon or connected therewith, with due regard to climatic and flood conditions. Any proposal to temporarily close the airport for non-aeronautical purposes must first be approved by the Secretary. In furtherance of this assurance, the sponsor will have in effect arrangements for-

1) Operating the airport's aeronautical facilities whenever required;
2) Promptly marking and lighting hazards resulting from airport conditions, including temporary conditions; and
3) Promptly notifying airmen of any condition affecting aeronautical use of the airport. Nothing contained herein shall be construed to require that the airport be operated for aeronautical use during temporary periods when snow, flood or other climatic conditions interfere with such operation and maintenance. Further, nothing herein shall be construed as requiring the maintenance, repair, restoration, or replacement of any structure or facility which is substantially damaged or destroyed due to an act of God or other condition or circumstance beyond the control of the sponsor.

b. It will suitably operate and maintain noise compatibility program items that it owns or controls upon which Federal funds have been expended.

20. **Hazard Removal and Mitigation.**

It will take appropriate action to assure that such terminal airspace as is required to protect instrument and visual operations to the airport (including established minimum flight altitudes) will be adequately cleared and protected by removing, lowering, relocating, marking, or lighting or otherwise mitigating existing airport hazards and by preventing the establishment or creation of future airport hazards.

21. **Compatible Land Use.**

It will take appropriate action, to the extent reasonable, including the adoption of zoning laws, to restrict the use of land adjacent to or in the immediate vicinity of the airport to activities and purposes compatible with normal airport operations, including landing and takeoff of aircraft. In addition, if the project is for noise compatibility program implementation, it will not cause or permit any change in land use, within its jurisdiction, that will reduce its compatibility, with respect to the airport, of the noise compatibility program measures upon which Federal funds have been expended.

22. **Economic Nondiscrimination.**

a. It will make the airport available as an airport for public use on reasonable terms and without unjust discrimination to all types, kinds and classes of aeronautical activities, including commercial aeronautical activities offering services to the public at the airport.

b. In any agreement, contract, lease, or other arrangement under which a right or privilege at the airport is granted to any person, firm, or corporation to conduct or

to engage in any aeronautical activity for furnishing services to the public at the airport, the sponsor will insert and enforce provisions requiring the contractor to-

1) furnish said services on a reasonable, and not unjustly discriminatory, basis to all users thereof, and

2) charge reasonable, and not unjustly discriminatory, prices for each unit or service, provided that the contractor may be allowed to make reasonable and nondiscriminatory discounts, rebates, or other similar types of price reductions to volume purchasers.

c. Each fixed-based operator at the airport shall be subject to the same rates, fees, rentals, and other charges as are uniformly applicable to all other fixed-based operators making the same or similar uses of such airport and utilizing the same or similar facilities.

d. Each air carrier using such airport shall have the right to service itself or to use any fixed-based operator that is authorized or permitted by the airport to serve any air carrier at such airport.

e. Each air carrier using such airport (whether as a tenant, non-tenant, or subtenant of another air carrier tenant) shall be subject to such nondiscriminatory and substantially comparable rules, regulations, conditions, rates, fees, rentals, and other charges with respect to facilities directly and substantially related to providing air transportation as are applicable to all such air carriers which make similar use of such airport and utilize similar facilities, subject to reasonable classifications such as tenants or non-tenants and signatory carriers and non-signatory carriers. Classification or status as tenant or signatory shall not be unreasonably withheld by any airport provided an air carrier assumes obligations substantially similar to those already imposed on air carriers in such classification or status.

f. It will not exercise or grant any right or privilege which operates to prevent any person, firm, or corporation operating aircraft on the airport from performing any services on its own aircraft with its own employees [including, but not limited to maintenance, repair, and fueling] that it may choose to perform.

g. In the event the sponsor itself exercises any of the rights and privileges referred to in this assurance, the services involved will be provided on the same conditions as would apply to the furnishing of such services by commercial aeronautical service providers authorized by the sponsor under these provisions.

h. The sponsor may establish such reasonable, and not unjustly discriminatory, conditions to be met by all users of the airport as may be necessary for the safe and efficient operation of the airport.

i. The sponsor may prohibit or limit any given type, kind or class of aeronautical use of the airport if such action is necessary for the safe operation of the airport or necessary to serve the civil aviation needs of the public.

23. **Exclusive Rights.**

It will permit no exclusive right for the use of the airport by any person providing, or intending to provide, aeronautical services to the public. For purposes of this paragraph, the providing of the services at an airport by a single fixed-based operator shall not be construed as an exclusive right if both of the following apply:

a. It would be unreasonably costly, burdensome, or impractical for more than one fixed-based operator to provide such services, and

b. If allowing more than one fixed-based operator to provide such services would require the reduction of space leased pursuant to an existing agreement between such single fixed-based operator and such airport. It further agrees that it will not, either directly or indirectly, grant or permit any person, firm, or corporation, the exclusive right at the airport to conduct any aeronautical activities, including, but not limited to charter flights, pilot training, aircraft rental and sightseeing, aerial photography, crop dusting, aerial advertising and surveying, air carrier operations, aircraft sales and services, sale of aviation petroleum products whether or not conducted in conjunction with other aeronautical activity, repair and maintenance of aircraft, sale of aircraft parts, and any other activities which because of their direct relationship to the operation of aircraft can be regarded as an aeronautical activity, and that it will terminate any exclusive right to conduct an aeronautical activity now existing at such an airport before the grant of any assistance under Title 49, United States Code.

24. **Fee and Rental Structure.**

It will maintain a fee and rental structure for the facilities and services at the airport which will make the airport as self-sustaining as possible under the circumstances existing at the particular airport, taking into account such factors as the volume of traffic and economy of collection. No part of the Federal share of an airport development, airport planning or noise compatibility project for which a grant is made under Title 49, United States Code, the Airport and Airway Improvement Act of 1982, the Federal Airport Act or the Airport and Airway Development Act of 1970 shall be included in the rate basis in establishing fees, rates, and charges for users of that airport.

25. **Airport Revenues.**

a. All revenues generated by the airport and any local taxes on aviation fuel established after December 30, 1987, will be expended by it for the capital or operating costs of the airport; the local airport system; or other local facilities which are owned or operated by the owner or operator of the airport and which are directly and substantially related to the actual air transportation of passengers or property; or for noise mitigation purposes on or off the airport. The following exceptions apply to this paragraph:

1) If covenants or assurances in debt obligations issued before September 3, 1982, by the owner or operator of the airport, or provisions enacted before September 3, 1982, in governing statutes controlling the owner or operator's financing, provide for the use of the revenues from any of the airport owner or

operator's facilities, including the airport, to support not only the airport but also the airport owner or operator's general debt obligations or other facilities, then this limitation on the use of all revenues generated by the airport (and, in the case of a public airport, local taxes on aviation fuel) shall not apply.

2) If the Secretary approves the sale of a privately owned airport to a public sponsor and provides funding for any portion of the public sponsor's acquisition of land, this limitation on the use of all revenues generated by the sale shall not apply to certain proceeds from the sale. This is conditioned on repayment to the Secretary by the private owner of an amount equal to the remaining unamortized portion (amortized over a 20-year period) of any airport improvement grant made to the private owner for any purpose other than land acquisition on or after October 1, 1996, plus an amount equal to the federal share of the current fair market value of any land acquired with an airport improvement grant made to that airport on or after October 1, 1996.

3) Certain revenue derived from or generated by mineral extraction, production, lease, or other means at a general aviation airport (as defined at Section 47102 of title 49 United States Code), if the FAA determines the airport sponsor meets the requirements set forth in Sec. 813 of Public Law 112-95.

b. As part of the annual audit required under the Single Audit Act of 1984, the sponsor will direct that the audit will review, and the resulting audit report will provide an opinion concerning, the use of airport revenue and taxes in paragraph (a), and indicating whether funds paid or transferred to the owner or operator are paid or transferred in a manner consistent with Title 49, United States Code and any other applicable provision of law, including any regulation promulgated by the Secretary or Administrator.

c. Any civil penalties or other sanctions will be imposed for violation of this assurance in accordance with the provisions of Section 47107 of Title 49, United States Code.

26. **Reports and Inspections.**

It will:

a. submit to the Secretary such annual or special financial and operations reports as the Secretary may reasonably request and make such reports available to the public; make available to the public at reasonable times and places a report of the airport budget in a format prescribed by the Secretary;

b. for airport development projects, make the airport and all airport records and documents affecting the airport, including deeds, leases, operation and use agreements, regulations and other instruments, available for inspection by any duly authorized agent of the Secretary upon reasonable request;

c. for noise compatibility program projects, make records and documents relating to the project and continued compliance with the terms, conditions, and assurances of this grant agreement including deeds, leases, agreements, regulations, and other instruments, available for inspection by any duly authorized agent of the Secretary upon reasonable request; and

d. in a format and time prescribed by the Secretary, provide to the Secretary and make available to the public following each of its fiscal years, an annual report listing in detail:

1) all amounts paid by the airport to any other unit of government and the purposes for which each such payment was made; and

2) all services and property provided by the airport to other units of government and the amount of compensation received for provision of each such service and property.

27. **Use by Government Aircraft.**

It will make available all of the facilities of the airport developed with Federal financial assistance and all those usable for landing and takeoff of aircraft to the United States for use by Government aircraft in common with other aircraft at all times without charge, except, if the use by Government aircraft is substantial, charge may be made for a reasonable share, proportional to such use, for the cost of operating and maintaining the facilities used. Unless otherwise determined by the Secretary, or otherwise agreed to by the sponsor and the using agency, substantial use of an airport by Government aircraft will be considered to exist when operations of such aircraft are in excess of those which, in the opinion of the Secretary, would unduly interfere with use of the landing areas by other authorized aircraft, or during any calendar month that –

a. Five (5) or more Government aircraft are regularly based at the airport or on land adjacent thereto; or

b. The total number of movements (counting each landing as a movement) of Government aircraft is 300 or more, or the gross accumulative weight of Government aircraft using the airport (the total movement of Government aircraft multiplied by gross weights of such aircraft) is in excess of five million pounds.

28. **Land for Federal Facilities.**

It will furnish without cost to the Federal Government for use in connection with any air traffic control or air navigation activities, or weather-reporting and communication activities related to air traffic control, any areas of land or water, or estate therein, or rights in buildings of the sponsor as the Secretary considers necessary or desirable for construction, operation, and maintenance at Federal expense of space or facilities for such purposes. Such areas or any portion thereof will be made available as provided herein within four months after receipt of a written request from the Secretary.

29. **Airport Layout Plan.**

a. It will keep up to date at all times an airport layout plan of the airport showing

1) boundaries of the airport and all proposed additions thereto, together with the boundaries of all offsite areas owned or controlled by the sponsor for airport purposes and proposed additions thereto;

2) the location and nature of all existing and proposed airport facilities and structures (such as runways, taxiways, aprons, terminal buildings, hangars and

roads), including all proposed extensions and reductions of existing airport facilities;

3) the location of all existing and proposed nonaviation areas and of all existing improvements thereon; and

4) all proposed and existing access points used to taxi aircraft across the airport's property boundary. Such airport layout plans and each amendment, revision, or modification thereof, shall be subject to the approval of the Secretary which approval shall be evidenced by the signature of a duly authorized representative of the Secretary on the face of the airport layout plan. The sponsor will not make or permit any changes or alterations in the airport or any of its facilities which are not in conformity with the airport layout plan as approved by the Secretary and which might, in the opinion of the Secretary, adversely affect the safety, utility or efficiency of the airport.

b. If a change or alteration in the airport or the facilities is made which the Secretary determines adversely affects the safety, utility, or efficiency of any federally owned, leased, or funded property on or off the airport and which is not in conformity with the airport layout plan as approved by the Secretary, the owner or operator will, if requested, by the Secretary (1) eliminate such adverse effect in a manner approved by the Secretary; or (2) bear all costs of relocating such property (or replacement thereof) to a site acceptable to the Secretary and all costs of restoring such property (or replacement thereof) to the level of safety, utility, efficiency, and cost of operation existing before the unapproved change in the airport or its facilities except in the case of a relocation or replacement of an existing airport facility due to a change in the Secretary's design standards beyond the control of the airport sponsor.

30. **Civil Rights.**

It will promptly take any measures necessary to ensure that no person in the United States shall, on the grounds of race, creed, color, national origin, sex, age, or disability be excluded from participation in, be denied the benefits of, or be otherwise subjected to discrimination in any activity conducted with, or benefiting from, funds received from this grant.

a. Using the definitions of activity, facility and program as found and defined in §§ 21.23 (b) and 21.23 (e) of 49 CFR § 21, the sponsor will facilitate all programs, operate all facilities, or conduct all programs in compliance with all non-discrimination requirements imposed by, or pursuant to these assurances.

b. Applicability

1) Programs and Activities. If the sponsor has received a grant (or other federal assistance) for any of the sponsor's program or activities, these requirements extend to all of the sponsor's programs and activities.

2) Facilities. Where it receives a grant or other federal financial assistance to construct, expand, renovate, remodel, alter or acquire a facility, or part of a facility, the assurance extends to the entire facility and facilities operated in connection therewith.

3) Real Property. Where the sponsor receives a grant or other Federal financial assistance in the form of, or for the acquisition of real property or an interest in real property, the assurance will extend to rights to space on, over, or under such property.

c. Duration.

The sponsor agrees that it is obligated to this assurance for the period during which Federal financial assistance is extended to the program, except where the Federal financial assistance is to provide, or is in the form of, personal property, or real property, or interest therein, or structures or improvements thereon, in which case the assurance obligates the sponsor, or any transferee for the longer of the following periods:

1) So long as the airport is used as an airport, or for another purpose involving the provision of similar services or benefits; or

2) So long as the sponsor retains ownership or possession of the property.

d. Required Solicitation Language. It will include the following notification in all solicitations for bids, Requests For Proposals for work, or material under this grant agreement and in all proposals for agreements, including airport concessions, regardless of funding source:

"The **(Name of Sponsor)**, in accordance with the provisions of Title VI of the Civil Rights Act of 1964 (78 Stat. 252, 42 U.S.C. §§ 2000d to 2000d-4) and the Regulations, hereby notifies all bidders that it will affirmatively ensure that any contract entered into pursuant to this advertisement, disadvantaged business enterprises and airport concession disadvantaged business enterprises will be afforded full and fair opportunity to submit bids in response to this invitation and will not be discriminated against on the grounds of race, color, or national origin in consideration for an award."

e. Required Contract Provisions.

1) It will insert the non-discrimination contract clauses requiring compliance with the acts and regulations relative to non-discrimination in Federally-assisted programs of the DOT, and incorporating the acts and regulations into the contracts by reference in every contract or agreement subject to the non-discrimination in Federally-assisted programs of the DOT acts and regulations.

2) It will include a list of the pertinent non-discrimination authorities in every contract that is subject to the non-discrimination acts and regulations.

3) It will insert non-discrimination contract clauses as a covenant running with the land, in any deed from the United States effecting or recording a transfer of real property, structures, use, or improvements thereon or interest therein to a sponsor.

4) It will insert non-discrimination contract clauses prohibiting discrimination on the basis of race, color, national origin, creed, sex, age, or handicap as a

covenant running with the land, in any future deeds, leases, license, permits, or similar instruments entered into by the sponsor with other parties:

a) For the subsequent transfer of real property acquired or improved under the applicable activity, project, or program; and

b) For the construction or use of, or access to, space on, over, or under real property acquired or improved under the applicable activity, project, or program.

f. It will provide for such methods of administration for the program as are found by the Secretary to give reasonable guarantee that it, other recipients, sub-recipients, sub-grantees, contractors, subcontractors, consultants, transferees, successors in interest, and other participants of Federal financial assistance under such program will comply with all requirements imposed or pursuant to the acts, the regulations, and this assurance.

g. It agrees that the United States has a right to seek judicial enforcement with regard to any matter arising under the acts, the regulations, and this assurance.

31. **Disposal of Land.**

a. For land purchased under a grant for airport noise compatibility purposes, including land serving as a noise buffer, it will dispose of the land, when the land is no longer needed for such purposes, at fair market value, at the earliest practicable time. That portion of the proceeds of such disposition which is proportionate to the United States' share of acquisition of such land will be, at the discretion of the Secretary, (1) reinvested in another project at the airport, or (2) transferred to another eligible airport as prescribed by the Secretary. The Secretary shall give preference to the following, in descending order, (1) reinvestment in an approved noise compatibility project, (2) reinvestment in an approved project that is eligible for grant funding under Section 47117(e) of title 49 United States Code, (3) reinvestment in an approved airport development project that is eligible for grant funding under Sections 47114, 47115, or 47117 of title 49 United States Code, (4) transferred to an eligible sponsor of another public airport to be reinvested in an approved noise compatibility project at that airport, and (5) paid to the Secretary for deposit in the Airport and Airway Trust Fund. If land acquired under a grant for noise compatibility purposes is leased at fair market value and consistent with noise buffering purposes, the lease will not be considered a disposal of the land. Revenues derived from such a lease may be used for an approved airport development project that would otherwise be eligible for grant funding or any permitted use of airport revenue.

b. For land purchased under a grant for airport development purposes (other than noise compatibility), it will, when the land is no longer needed for airport purposes, dispose of such land at fair market value or make available to the Secretary an amount equal to the United States' proportionate share of the fair market value of the land. That portion of the proceeds of such disposition which is proportionate to the United States' share of the cost of acquisition of such land will, (1) upon application to the Secretary, be reinvested or transferred to another

eligible airport as prescribed by the Secretary. The Secretary shall give preference to the following, in descending order: (1) reinvestment in an approved noise compatibility project, (2) reinvestment in an approved project that is eligible for grant funding under Section 47117(e) of title 49 United States Code, (3) reinvestment in an approved airport development project that is eligible for grant funding under Sections 47114, 47115, or 47117 of title 49 United States Code, (4) transferred to an eligible sponsor of another public airport to be reinvested in an approved noise compatibility project at that airport, and (5) paid to the Secretary for deposit in the Airport and Airway Trust Fund.

c. Land shall be considered to be needed for airport purposes under this assurance if (1) it may be needed for aeronautical purposes (including runway protection zones) or serve as noise buffer land, and (2) the revenue from interim uses of such land contributes to the financial self-sufficiency of the airport. Further, land purchased with a grant received by an airport operator or owner before December 31, 1987, will be considered to be needed for airport purposes if the Secretary or Federal agency making such grant before December 31, 1987, was notified by the operator or owner of the uses of such land, did not object to such use, and the land continues to be used for that purpose, such use having commenced no later than December 15, 1989.

d. Disposition of such land under (a) (b) or (c) will be subject to the retention or reservation of any interest or right therein necessary to ensure that such land will only be used for purposes which are compatible with noise levels associated with operation of the airport.

32. **Engineering and Design Services.**

It will award each contract, or sub-contract for program management, construction management, planning studies, feasibility studies, architectural services, preliminary engineering, design, engineering, surveying, mapping or related services with respect to the project in the same manner as a contract for architectural and engineering services is negotiated under Title IX of the Federal Property and Administrative Services Act of 1949 or an equivalent qualifications-based requirement prescribed for or by the sponsor of the airport.

33. **Foreign Market Restrictions.**

It will not allow funds provided under this grant to be used to fund any project which uses any product or service of a foreign country during the period in which such foreign country is listed by the United States Trade Representative as denying fair and equitable market opportunities for products and suppliers of the United States in procurement and construction.

34. **Policies, Standards, and Specifications.**

It will carry out the project in accordance with policies, standards, and specifications approved by the Secretary including but not limited to the advisory circulars listed in the Current FAA Advisory Circulars for AIP projects, dated _____ (the latest approved version as of this grant offer) and included in this grant, and in accordance

with applicable state policies, standards, and specifications approved by the Secretary.

35. **Relocation and Real Property Acquisition.**

    a. It will be guided in acquiring real property, to the greatest extent practicable under State law, by the land acquisition policies in Subpart B of 49 CFR Part 24 and will pay or reimburse property owners for necessary expenses as specified in Subpart B.
    b. It will provide a relocation assistance program offering the services described in Subpart C and fair and reasonable relocation payments and assistance to displaced persons as required in Subpart D and E of 49 CFR Part 24.
    c. It will make available within a reasonable period of time prior to displacement, comparable replacement dwellings to displaced persons in accordance with Subpart E of 49 CFR Part 24.

36. **Access By Intercity Buses.**

    The airport owner or operator will permit, to the maximum extent practicable, intercity buses or other modes of transportation to have access to the airport; however, it has no obligation to fund special facilities for intercity buses or for other modes of transportation.

37. **Disadvantaged Business Enterprises.**

    The sponsor shall not discriminate on the basis of race, color, national origin or sex in the award and performance of any DOT-assisted contract covered by 49 CFR Part 26, or in the award and performance of any concession activity contract covered by 49 CFR Part 23. In addition, the sponsor shall not discriminate on the basis of race, color, national origin or sex in the administration of its DBE and ACDBE programs or the requirements of 49 CFR Parts 23 and 26. The sponsor shall take all necessary and reasonable steps under 49 CFR Parts 23 and 26 to ensure nondiscrimination in the award and administration of DOT-assisted contracts, and/or concession contracts. The sponsor's DBE and ACDBE programs, as required by 49 CFR Parts 26 and 23, and as approved by DOT, are incorporated by reference in this agreement. Implementation of these programs is a legal obligation and failure to carry out its terms shall be treated as a violation of this agreement. Upon notification to the sponsor of its failure to carry out its approved program, the Department may impose sanctions as provided for under Parts 26 and 23 and may, in appropriate cases, refer the matter for enforcement under 18 U.S.C. 1001 and/or the Program Fraud Civil Remedies Act of 1936 (31 U.S.C. 3801).

38. **Hangar Construction.**

    If the airport owner or operator and a person who owns an aircraft agree that a hangar is to be constructed at the airport for the aircraft at the aircraft owner's expense, the airport owner or operator will grant to the aircraft owner for the hangar a long term lease that is subject to such terms and conditions on the hangar as the airport owner or operator may impose.

39. **Competitive Access.**

a. If the airport owner or operator of a medium or large hub airport (as defined in section 47102 of title 49, U.S.C.) has been unable to accommodate one or more requests by an air carrier for access to gates or other facilities at that airport in order to allow the air carrier to provide service to the airport or to expand service at the airport, the airport owner or operator shall transmit a report to the Secretary that-

   1) Describes the requests;

   2) Provides an explanation as to why the requests could not be accommodated; and

   3) Provides a time frame within which, if any, the airport will be able to accommodate the requests.

b. Such report shall be due on either February 1 or August 1 of each year if the airport has been unable to accommodate the request(s) in the six month period prior to the applicable due date.

File #: ID#19-643, Version: 1

Agreement for FY 2019 Urban Areas Security Initiative (UASI) Grant Funds

Approve a Resolution accepting FY 2019 UASI Grant Funds and authorize execution of all grant acceptance documents with the City and County of San Francisco for the creation of the Regional Monterey County Automated License Plate Recognition Program.

CITY OF SALINAS
COUNCIL STAFF REPORT

DATE: **DECEMBER 3, 2019**

DEPARTMENT: **SALINAS POLICE DEPARTMENT**

FROM: **ADELE FRESÉ, CHIEF OF POLICE**

BY: **TONYA ERICKSON, MANAGEMENT ANALYST**

TITLE: **AGREEMENT FOR FY 2019 URBAN AREAS SECURITY INITIATIVE (UASI) GRANT FUNDS**

RECOMMENDED MOTION:

A motion to approve a resolution accepting FY 2019 UASI Grant Funds and authorize execution of all grant acceptance documents with the City and County of San Francisco.

RECOMMENDATION:

Staff recommends that the City Council accept FY 2019 Bay Area UASI grant award of $197,600, as administered by the City and County of San Francisco, for the creation of the Regional Monterey County Automated License Plate Recognition Program.

EXECUTIVE SUMMARY:

The Salinas Police Department, serving as Fiscal Agent for the Regional Monterey County Automated License Plate Recognition (ALPR) Program, has been selected to receive the 2019 Bay Area UASI Grant award of $197,600, as administered by the City and County of San Francisco. The grant will support the purchase of cameras, licenses, initial storage and software for participating cities in the Regional ALPR Program. Cameras will be installed at major intersections and access points for each participating city in Monterey County. The participating agencies will coordinate with each other, the California Department of Justice (DOJ), and the Norther California Regional Intelligence Center (NCRIC). This partnership will allow for information sharing, alerting law enforcement agencies to vehicles on hot lists, assisting with both terrorist and criminal investigations, and intelligence gathering.

BACKGROUND:

Since its inception in FY 2003, the intent of the Urban Area Security Initiative (UASI) program has been to enhance regional terrorism preparedness in major metropolitan areas by developing integrated systems for terrorism prevention, protection, response, and recovery. The FY 2019 UASI program focused on financial assistance to address the unique regional, multi-discipline terrorism preparedness planning, organization, equipment, training, and exercise needs of high-

threat, high-density urban areas. UASI funds are intended for regional approaches to overall preparedness and adopt regional response structures whenever appropriate.

On September 27, 2019, the 2019 Bay Area UASI grant in the amount of $197,600 was awarded to the City of Salinas, as the Fiscal Agent for the Regional Monterey County Automated License Plate Recognition (ALPR) Program. The Monterey County ALPR Program will alert law enforcement personnel of hot-list or stolen vehicles and maintain searchable collected data; assisting with the prevention and investigation of terrorist attacks, and other criminal investigations, from all over the state. Monterey County attracts millions from all over the world and is a host to several major international events; home to a major agricultural industry that feeds the nation; and has notable state thoroughfares, Highway 1 and 101. ALPR allows for real-time collection, processing, and dissemination. The proposed project includes the purchase of 12 cameras, licenses, initial storage and software; however, recurring fees will be covered by the cities. Cameras will be installed at major intersections and access points. Participating agencies will coordinate with each other, DOJ, and NCRIC, which will allow for information sharing, alerting agencies to vehicles on hot-lists, assisting with terrorist and criminal investigations, and intelligence gathering.

The grant period runs from November 1, 2019 through December 31, 2020.

CEQA CONSIDERATION:

Not a Project. The City of Salinas has determined that the proposed action is not a project as defined by the California Environmental Quality Act (CEQA) (CEQA Guidelines Section 15378).

STRATEGIC PLAN INITIATIVE:

Approving the proposed resolution will support the City Council's Strategic Plan Goal of Safe, Livable Community.

DEPARTMENTAL COORDINATION:

The Police Department will work with the Legal Department during approval, and with the Finance Department during implementation.

FISCAL AND SUSTAINABILITY IMPACT:

Proposed funding from the 2019 Bay Area UASI Grant will be used to purchase 12 cameras, licenses, initial storage and software; however, recurring fees will be covered by the cities. The City of Salinas will serve as the Fiscal Agent for the grant, with no matching funds required.

ATTACHMENTS:

Resolution
Agreement with City and County of San Francisco for Distribution of FY 2019 UASI Grant Funds
Final Grant Application – FY19 Bay Area UASI

RESOLUTION NO. _____ (N.C.S.)

RESOLUTION ACCEPTING THE FY 2019 URBAN AREAS SECURITY INITIATIVE (UASI) GRANT AWARD IN THE AMOUNT OF $197,600 AND AUTHORIZING EXECUTION OF ALL GRANT ACCEPTANCE DOCUMENTS WITH THE CITY AND COUNTY OF SAN FRANCISCO

WHEREAS, the Urban Areas Security Initiative (UASI) Program provides grant funding to law enforcement agencies to enhance regional terrorism preparedness in major metropolitan areas by developing integrates systems for terrorism prevention, protection, response and recovery; and

WHEREAS, the Salinas Police Department desires to serve as the Fiscal Agent for participating cities working together as the Regional Monterey County Automated License Plate Recognition (ALPR) Program.

NOW, THEREFORE, BE IT RESOLVED that the Salinas City Council authorizes the City Manager or his designee to accept funding in the amount of $197,600, as administered by the City and County of San Francisco, and further authorize the signing of all grant acceptance documents; and

BE IT FURTHER RESOLVED that this authorization shall include all aspects of program operation including any amendments, extension, renewals, or further funding for this for this program provided funding is made available by Bay Area UASI, as administered by the City and County of San Francisco.

PASSED AND APPROVED this 3rd day of December, 2019, by the following vote:

AYES:

NOES:

ABSENT:

ABSTAIN:

APPROVED:

_____
Joe Gunter, Mayor

ATTEST:

_____
Patricia M. Barajas, City Clerk

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AGREEMENT BETWEEN THE CITY AND COUNTY OF SAN FRANCISCO AND THE CITY OF SALINAS FOR THE DISTRIBUTION OF FY 2019 UASI GRANT FUNDS

THIS AGREEMENT is made this **NOVEMBER 1, 2019** in the City and County of San Francisco, State of California, by and between the **CITY OF SALINAS** ("SALINAS") and the CITY AND COUNTY OF SAN FRANCISCO, a municipal corporation ("San Francisco" or "City"), in its capacity as fiscal agent for the Approval Authority, as defined below, acting by and through the San Francisco Department of Emergency Management ("DEM").

RECITALS

WHEREAS, The United States Department of Homeland Security ("DHS") consolidated the separate San Jose, Salinas, and San Francisco Urban Areas into a combined Bay Area Urban Area ("UASI Region") for the purpose of application for and allocation and distribution of federal Urban Areas Security Initiative ("UASI") program grant funds; and

WHEREAS, The Bay Area Urban Area Approval Authority ("Approval Authority") was established as the Urban Area Working Group ("UAWG") for the UASI Region, to provide overall governance of the homeland security grant program across the UASI Region, to coordinate development and implementation of all UASI program initiatives, and to ensure compliance with all UASI program requirements; and

WHEREAS, The UASI General Manager is responsible for implementing and managing the policy and program decisions of the Approval Authority, directing the work of the UASI Management Team personnel, and performing other duties as determined and directed by the Approval Authority, and

WHEREAS, San Francisco has been designated as the grantee for UASI funds granted by the DHS through the California Office of Emergency Services ("Cal OES") to the UASI Region, with responsibility to establish procedures and execute subgrant agreements for the distribution of UASI program grant funds to jurisdictions selected by the Approval Authority to receive grant funding; and

WHEREAS, San Francisco has been designated to serve as the fiscal agent for the Approval Authority, and to establish procedures and provide all financial services for distribution of UASI program grant funds within the UASI Region; and

WHEREAS, Pursuant to grant allocation decisions by the Approval Authority, the UASI Management Team has asked San Francisco to distribute a portion of the regional UASI grant funds to SALINAS on the terms and conditions set forth herein;

NOW, THEREFORE, in consideration of the premises and the mutual covenants contained in this Agreement and for other good and valuable consideration, the receipt and adequacy of which is hereby acknowledged, the parties hereto agree as follows:

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ARTICLE 1
DEFINITIONS

1.1 **Specific Terms**. Unless the context requires otherwise, the following capitalized terms (whether singular or plural) shall have the meanings set forth below:

(a) "**ADA**" shall mean the Americans with Disabilities Act (including all rules and regulations there under) and all other applicable federal, state and local disability rights legislation, as the same may be amended, modified or supplemented from time to time.

(b) "**Authorized Expenditures**" shall mean expenditures for those purposes identified and budgeted in Appendix A, attached hereto and incorporated by reference as though fully set forth herein.

(c) "**Event of Default**" shall have the meaning set forth in Section 7.1.

(d) "**Fiscal Quarter**" shall mean each period of three calendar months commencing on July 1, October 1, January 1, and April 1, respectively.

(e) "**Grant Funds**" shall mean any and all funds allocated or disbursed to SALINAS (DUNS#: 010919447) under this Agreement. This Agreement shall specifically cover funds allocated or disbursed from Cal OES Grant No. 2019-0035, Cal OES ID No. 075-95017, CFDA No. 97.067, per Cal OES award notice dated September 26, 2019.

(f) "**Grant Plan**" shall mean the plans, performances, events, exhibitions, acquisitions or other activities or matter, and the budget and requirements, described in Appendix A and the WebGrants system. If SALINAS requests any modification to the Grant Plan, SALINAS shall submit a written request to the UASI General Manager with the following information: Scope of change requested, reason for change, proposed plan for change, summary of approved and requested modifications to the Grant Plan, and any necessary approvals in support of change (e.g., EHP).

(g) "**Indemnified Parties**" shall mean: (i) San Francisco, including all commissions, departments including DEM, agencies, and other subdivisions of San Francisco; (ii) San Francisco's elected officials, directors, officers, employees, agents, successors, and assigns; and (iii) all persons or entities acting on behalf of the foregoing.

(h) "**Losses**" shall mean any and all liabilities, obligations, losses, damages, penalties, claims, actions, suits, judgments, fees, expenses and costs of whatsoever kind and nature (including legal fees and expenses and costs of investigation, of prosecuting or defending any Loss described above) whether or not such Loss be founded or unfounded, of whatsoever kind and nature.

(i) "**Reimbursement Request**" shall have the meaning set forth in Section 3.10(a).

1.2 **Additional Terms**. The terms "as directed," "as required" or "as permitted" and similar terms shall refer to the direction, requirement, or permission of City. The terms "sufficient," "necessary" or "proper" and similar terms shall mean sufficient, necessary or proper in the sole judgment of City. The terms "approval," "acceptable" or "satisfactory" or similar terms shall mean approved by, or acceptable or satisfactory to, City. The terms "include," "included" or "including" and similar terms shall be deemed to be followed by the words "without limitation." The use of the term "subcontractor," "subgrantee," "successor" or "assign" herein refers only to a subcontractor, subgrantee, successor or assign expressly permitted under Article 8.

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1.3 **References to this Agreement**. References to this Agreement include: (a) any and all appendices, exhibits, schedules, and attachments hereto; (b) any and all statutes, ordinances, regulations or other documents expressly incorporated by reference herein; and (c) any and all amendments, modifications or supplements hereto made in accordance with Section 10.2. References to articles, sections, subsections or appendices refer to articles, sections or subsections of or appendices to this Agreement, unless otherwise expressly stated. Terms such as "hereunder," "herein" or "hereto" refer to this Agreement as a whole.

1.4 **Reference to laws.** Any reference in this Agreement to a federal or state statute, regulation, executive order, requirement, policy, guide, guideline, information bulletin, or instruction shall mean that statute, regulation, executive order, requirement, policy, guide, guideline, information bulletin, or instruction as is currently in effect and as may be amended, modified or supplemented from time to time.

ARTICLE 2
ALLOCATION AND CERTIFICATION OF GRANT FUNDS; LIMITATIONS ON SAN FRANCISCO'S OBLIGATIONS

2.1 **Risk of Non-Allocation of Grant Funds**. This Agreement is subject to all federal and state grant requirements and guidelines, including DHS and Cal OES requirements, guidelines, information bulletins, and instructions, the decision-making of the Cal OES and the Approval Authority, the terms and conditions of the grant award; the approved application, and to the extent applicable the budget and fiscal provisions of the San Francisco Charter. The Approval Authority shall have no obligation to allocate or direct disbursement of funds for this Agreement in lieu of allocations for new or other agreements. SALINAS acknowledges and agrees that grant decisions are subject to the discretion of the Cal OES and Approval Authority. Further, SALINAS acknowledges and agrees that the City shall have no obligation to disburse grant funds to SALINAS until City and SALINAS have fully and finally executed this Agreement. SALINAS acknowledges and agrees that if it takes any action, informal or formal, to appropriate, encumber or expend Grant Funds before final allocation decisions by Cal OES and the Approval Authority, and before this Agreement is fully and finally executed, it assumes all risk of possible non-allocation or non-reimbursement of funds, and such acknowledgement and agreement is part of the consideration of this Agreement.

2.2 **Certification of Controller; Guaranteed Maximum Costs**. No funds shall be available under this Agreement without prior written authorization certified by the San Francisco Controller. In addition, as set forth in Section 21.19 of the San Francisco Administrative Code:

(a) San Francisco's obligations hereunder shall not at any time exceed the amount approved in the grant award and/or by the Approval Authority, and certified by the Controller for the purpose and period stated in such certification.

(b) Except as may be provided by San Francisco ordinances governing emergency conditions, San Francisco and its employees and officers, and the UASI Management Team and its personnel, are not authorized to request SALINAS to perform services or to provide materials, equipment and supplies that would result in SALINAS performing services or providing materials, equipment and supplies that are beyond the scope of the services, materials, equipment and supplies specified in this Agreement, unless this Agreement is amended in writing and approved as required by law to authorize the additional services, materials, equipment or supplies. San Francisco is not required to pay SALINAS for services, materials, equipment or supplies that are provided by SALINAS that are beyond the scope of the services, materials, equipment and supplies agreed upon herein and which were not approved by a written amendment to this Agreement having been lawfully executed by San Francisco.

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(c) San Francisco and its employees and officers, and the UASI Management Team and its personnel, are not authorized to offer or promise to SALINAS additional funding for this Agreement that would exceed the maximum amount of funding provided for herein. Additional funding for this Agreement in excess of the maximum provided herein shall require lawful approval and certification by the Controller. San Francisco is not required to honor any offered or promised additional funding that exceeds the maximum provided in this Agreement that requires lawful approval and certification of the Controller when the lawful approval and certification by the Controller has not been obtained.

(d) The Controller is not authorized to make payments on any agreement for which funds have not been certified as available in the budget or by supplemental appropriation.

2.3 **SUPERSEDURE OF CONFLICTING PROVISIONS.** IN THE EVENT OF ANY CONFLICT BETWEEN ANY OF THE PROVISIONS OF THIS ARTICLE 2 AND ANY OTHER PROVISION OF THIS AGREEMENT, THE APPLICATION DOCUMENTS OR ANY OTHER DOCUMENT OR COMMUNICATION RELATING TO THIS AGREEMENT, THE TERMS OF THIS ARTICLE 2 SHALL GOVERN.

ARTICLE 3
PERFORMANCE OF THE AGREEMENT

3.1 **Duration of Term**. The term of this Agreement shall commence on **NOVEMBER 1, 2019** and shall end at 11:59 p.m. San Francisco time on **DECEMBER 31, 2020**.

3.2 **Maximum Amount of Funds**. In no event shall the amount of Grant Funds disbursed hereunder exceed **ONE HUNDRED NINETY-SEVEN THOUSAND SIX HUNDRED DOLLARS ($197,600).** The City will not automatically transfer Grant Funds to SALINAS upon execution of this Agreement. SALINAS must submit a Reimbursement Request under Section 3.10 of this Agreement, approved by the UASI Management Team and City, before the City will disburse Grant Funds to SALINAS.

3.3 **Use of Funds**.

(a) General Requirements. SALINAS shall use the Grant Funds received under this Agreement for the purposes and in the amounts set forth in the Grant Plan. SALINAS shall not use or expend Grant Funds for any other purpose, including but not limited to, for matching funds for other federal grants/cooperative agreements, lobbying or intervention in federal regulatory or adjudicatory proceedings, or to sue the federal government or any other government entity. SALINAS shall not permit any federal employee to receive Grant Funds.

(b) Modification of Grant Plan. Under Sections 1.1(f) and 10.2 of this Agreement, SALINAS may submit a written request to modify the Grant Plan. SALINAS shall not appropriate, encumber or expend any additional or reallocated Grant Funds pursuant to such a request for modification until (1) the General Manager or designee has provided written approval for the request and (2) the parties have finally executed a modification of this Agreement under Section 10.2, to reflect the modified Grant Plan. In addition, if the modification request requires approval from the Approval Authority and/or Cal OES, as determined by the General Manager, SALINAS shall not appropriate, encumber or expend any additional or reallocated Grant Funds pursuant to the modification request without approval from the Approval Authority and/or Cal OES.

(c) No Supplanting. SALINAS shall use Grant Funds to supplement existing funds, and not replace (supplant) funds that have been appropriated for the same purpose.

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(d) Obligations. SALINAS must expend Grant Funds in a timely manner consistent with the grant milestones, guidance and assurances; and make satisfactory progress toward the goals, objectives, milestones and deliverables in this Agreement.

3.4 **Grant Assurances; Other Requirements; Cooperation with Monitoring**.

(a) SALINAS shall comply with all Grant Assurances included in Appendix B, attached hereto and incorporated by reference as though fully set forth herein. SALINAS shall require all subgrantees, contractors and other entities receiving Grant Funds through or from SALINAS to execute a copy of the Grant Assurances, and shall ensure that they comply with those Grant Assurances.

(b) In addition to complying with all Grant Assurances, SALINAS shall comply with all applicable statutes, regulations, executive orders, requirements, policies, guides, guidelines, information bulletins, Cal OES grant management memos, and instructions; the terms and conditions of the grant award; the approved application, and any conditions imposed by Cal OES or the Approval Authority. SALINAS shall require and ensure that all subgrantees, contractors and other entities receiving Grant Funds through or from SALINAS comply with all applicable statutes, regulations, executive orders, requirements, policies, guides, guidelines, information bulletins, Cal OES grant management memos, and instructions; the terms and conditions of the grant award; the approved application, and any conditions imposed by Cal OES or the Approval Authority.

(c) SALINAS shall promptly comply with all standards, specifications and formats of San Francisco and the UASI Management Team, as they may from time to time exist, related to evaluation, planning and monitoring of the Grant Plan and compliance with this Agreement. SALINAS shall cooperate in good faith with San Francisco and the UASI Management Team in any evaluation, inspection, planning or monitoring activities conducted or authorized by DHS, Cal OES, San Francisco or the UASI Management Team. For ensuring compliance with non-supplanting requirements, upon request by City or the UASI Management Team, SALINAS shall supply documentation certifying that a reduction of non-federal resources occurred for reasons other than the receipt or expected receipt of Grant Funds.

3.5 **Administrative, Programmatic and Financial Management Requirements.** SALINAS shall establish and maintain administrative, programmatic and financial management systems and records in accordance with federal and State of California requirements. This provision requires, at a minimum, that SALINAS comply with the following non-exclusive list of regulations commonly applicable to DHS grants, as applicable to this Agreement and the Grant Plan:

(a) Administrative Requirements:
1. 2 CFR Part 200, *Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards* (formerly 44 CFR Part 13, OMB Circulars A-21, A-87, A-89, A-102, A-110, A-122, and A-133).

(b) Cost Principles:
1. 2 CFR Part 200, Subpart E - *Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards* (formerly 44 CFR Part 13, OMB Circulars A-21, A-87, A-89, A-102, A-110, A-122, and A-133);
2. Federal Acquisition Regulations (FAR), Part 31.2 *Contract Principles and Procedures, Contracts with Commercial Organizations*.

(c) Audit Requirements:

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1. 2 CFR Part 200 Subpart F - *Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards* (formerly 44 CFR Part 13, OMB Circulars A-21, A-87, A-89, A-102, A-110, A-122, and A-133).

3.6 **Technology Requirements.**

(a) National Information Exchange Model ("NIEM"). SALINAS shall use the latest NIEM specifications and guidelines regarding the use of Extensible Markup Language ("XML") for all awards of Grant Funds.

(b) Geospatial Guidance. SALINAS is encouraged to use Geospatial technologies, which can capture, store, analyze, transmit and/or display location-based information (i.e., information linked to a latitude and longitude), and to align any geospacial activities with the guidance available on the Federal Emergency Management Agency ("FEMA") website.

(c) Criminal Intelligence Systems Operating Policies. Any information technology system funded or supported by Grant Funds shall comply with 28 CFR Part 23, *Criminal Intelligence Systems Operating Policies*, if applicable.

(d) SALINAS is encouraged to use the DHS guidance in *Best Practices for Government Use of CCTV: Implementing the Fair Information Practice Principles*, if Grant Funds are used to purchase or install closed circuit television (CCTV) systems or to support operational CCTV systems.

3.7 **Procurement Requirements.**

(a) General Requirements. SALINAS shall follow its own procurement requirements as long as those requirements comply with all applicable federal and State of California statutes, regulations, requirements, policies, guides, guidelines and instructions.

(b) Specific Purchases. If SALINAS is using Grant Funds to purchase interoperable communication equipment, SALINAS shall consult DHS's SAFECOM's coordinated grant guidance, which outlines standards and equipment information to enhance interoperable communication. If SALINAS is using Grant Funds to acquire critical emergency supplies, prior to expending any Grant Funds, SALINAS shall submit to the UASI Management Team for approval by Cal OES a viable inventory management plan, an effective distribution strategy, sustainment costs for such an effort, and logistics expertise to avoid situations where funds are wasted because supplies are rendered ineffective due to lack of planning.

(c) Bond requirement. SALINAS shall obtain a performance bond for any equipment items over $250,000 or any vehicle, aircraft or watercraft financed with Grant Funds.

3.8 **Subgrantee and Contractor Requirements.**

(a) SALINAS shall ensure and independently verify that any subgrantee, contractor or other entity receiving Grant Funds through or from SALINAS is not debarred, suspended, or otherwise excluded from or ineligible for participation in federal assistance programs, under Executive Orders 12549 and 12689, as implemented at 2 CFR Part 3000. SALINAS shall obtain documentation of eligibility before disbursing Grant Funds to any subgrantee, contractor or other entity. SALINAS shall maintain documentary proof of this verification in its files. SALINAS shall establish procedures for the effective use of the "Excluded Parties List System," to assure that it does not provide Grant Funds to excluded parties. SALINAS shall also establish procedures to provide for effective use and/or

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dissemination of the list to assure that its grantees and subgrantees, including contractors, at any tier do not make awards in violation of the non-procurement debarment and suspension common rule.

(b) SALINAS shall ensure that any subgrantee, contractor or other entity receiving Grant Funds through or from SALINAS complies with the requirements of 44 CFR Part 18, *New Restrictions on Lobbying*; and

(c) SALINAS shall ensure that any subgrantee, contractor or other entity receiving Grant Funds through or from SALINAS complies with the requirements of 2 CFR Part 3001, *Requirements for Drug-Free Workplace (Financial Assistance).*

3.9 **Monitoring Grant Performance.**

(a) City and the UASI Management Team are both authorized to perform periodic monitoring reviews of SALINAS's performance under this Agreement, to ensure that the Grant Plan goals, objectives, performance requirements, timelines, milestone completion, budgets and other criteria are being met. Programmatic monitoring may include the Regional Federal Preparedness Coordinators, or other federal or state personnel, when appropriate. Monitoring may involve a combination of desk-based reviews and on-site monitoring visits, inspection of records, and verifications of grant activities. These reviews will involve a review and analysis of the financial, programmatic, performance and administrative issues relative to each program and will identify areas where technical assistance and other support may be needed. The reviews may include, but are not limited to:

1. Evaluating eligibility of expenditures;
2. Comparing actual grant activities to those approved by the Approval Authority and specified in the Grant Plan;
3. Ensuring that any advances have been deposited in an interest bearing account and disbursed in accordance with applicable guidelines; and
4. Confirming compliance with: Grant Assurances; information provided on performance reports and payment requests; and needs and threat assessments and strategies.

(b) SALINAS is responsible for monitoring and auditing the grant activities of any subgrantee, contractor or other entity receiving Grant Funds through or from SALINAS. This requirement includes but is not limited to mandatory on-site verification visits.

(c) If after any monitoring review, the DHS or Cal OES makes findings that require a Corrective Action Plan by SALINAS, the City shall place a hold on all Reimbursement Requests from SALINAS until the findings are resolved.

3.10 **Disbursement Procedures**. San Francisco shall disburse Grant Funds to SALINAS as follows:

(a) SALINAS shall submit to the UASI Management Team, in the manner specified for notices pursuant to Article 9, a document ("Reimbursement Request") substantially in the form attached as Appendix C, attached hereto and incorporated by reference as though fully set forth herein. The UASI Management Team shall serve as the primary contact for SALINAS regarding any Reimbursement Request.

(b) The UASI Management Team will review all Reimbursement Requests for compliance with this Agreement and all applicable guidelines and requirements. The UASI Management Team will return to SALINAS any Reimbursement Request that is submitted and not approved by the UASI Management Team, with a brief statement of the reason for the rejection of the Reimbursement Request.

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(c) The UASI Management Team will submit any Reimbursement Request that is approved by the UASI Management Team to DEM. City through DEM shall review the Reimbursement Request for compliance with this Agreement and all applicable guidelines and requirements. City shall return to the UASI Management Team any Reimbursement Request that is not approved by City, with a brief explanation of the reason for the rejection of the Reimbursement Request.

(d) If a rejection relates only to a portion of the expenditures itemized in any Reimbursement Request, City shall have no obligation to disburse any Grant Funds for any other expenditures itemized in such Reimbursement Request unless and until SALINAS submits a Reimbursement Request that is in all respects acceptable to the UASI Management Team and to City.

(e) If SALINAS is not in compliance with any provision of this Agreement, City may withhold disbursement of Grant Funds until SALINAS has taken corrective action and currently complies with all terms and conditions of the Agreement.

3.11 **Disallowance**. SALINAS agrees that if it claims or receives reimbursement from City for an expenditure that is later disallowed by the State of California or the federal government, SALINAS shall promptly refund the disallowed amount to City upon City's written request. At its option, City may offset all or any portion of the disallowed amount against any other payment due to SALINAS hereunder or under any other Agreement with SALINAS. Any such offset with respect to a portion of the disallowed amount shall not release SALINAS from SALINAS's obligation hereunder to refund the remainder of the disallowed amount.

3.12 **Sustainability**. Grant Funded programs that contain continuing personnel and operating expenses, over and above planning and implementation costs, must be sustained once the Grant Funding ends. If Equipment is purchased with grant funds the equipment must be sustained through the useful life of equipment. By executing this Agreement, SALINAS acknowledges its responsibility and agrees to sustain continuing programs beyond the Grant Funding period. SALINAS acknowledges and agrees that this sustainability requirement is a material term of the Agreement.

3.13 **EHP Requirements.**

(a) Grant Funded projects must comply with the federal Environmental and Historic Preservation ("EHP") program. SALINAS shall not initiate any project with the potential to impact environmental or historic properties or resources until Cal OES and FEMA have completed EHP reviews and approved the project. Examples of projects that may impact EHP resources include: communications towers, physical security enhancements, new construction, and modifications to buildings, structures and objects that are 50 years old or greater. SALINAS shall notify the UASI Management Team of any project that may require an EHP review. SALINAS agrees to provide detailed project information to FEMA, Cal OES and/or the UASI Management Team, to cooperate fully in the review, and to prepare any documents requested for the review. SALINAS shall comply with all conditions placed on the project as the result of the EHP review, and implement any treatment or mitigation measures deemed necessary to address potential adverse impacts. With prior approval of the UASI Management Team, SALINAS may use Grant Funds toward the costs of preparing documents and/or implementing treatment or mitigation measures. Any change to the approved project scope of work will require re-evaluation for compliance with EHP requirements. If ground disturbing activities occur during project implementation, SALINAS shall notify the UASI Management Team and ensure monitoring of ground disturbance. If any potential archeological resources are discovered, SALINAS shall immediately cease construction in that area and notify the UASI Management Team, which will notify the appropriate State Historic Preservation Office. If SALINAS is using Grant Funds for a communication tower project, SALINAS

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shall complete its Federal Communication Commission ("FCC") EHP process before preparing its Cal OES/FEMA EHP materials, and shall include the FCC EHP materials in the Cal OES/FEMA submission.

(b) Any construction or other project that SALINAS initiates without the necessary EHP review and approval will not be eligible for reimbursement. Failure of SALINAS to meet federal, State, and local EHP requirements, obtain applicable permits, or comply with any conditions that may be placed on the project as the result of FEMA's and/or Cal OES's EHP review will result in the denial of Reimbursement Requests.

3.14 **National Energy Conservation Policy and Energy Policy Acts**. SALINAS shall comply with the following requirements:

(a) Grant Funds may not be used in contravention of the Federal buildings performance and reporting requirements of Executive Order 13123, part 3 of Title V of the National Energy Conservation Policy Act (42 USC §8251 et seq.), or Subtitle A of Title I of the Energy Policy Act of 2005; and

(b) Grant Funds may not be used in contravention of Section 303 of the Energy Policy Act of 1992 (42 USC §13212).

3.15 **Royalty-Free License**. SALINAS understands and agrees that FEMA reserves a royalty-free, non-exclusive and irrevocable license to reproduce, publish or otherwise use, and authorize others to use, for federal government purposes: (a) the copyright in any work developed using Grant Funds; and (b) any rights of copyright that SALINAS purchases or acquires using Grant Funds. SALINAS shall consult with the UASI Management Team and FEMA regarding the allocation of any patent rights that arise from, or are purchased with, Grant Funds.

3.16 **Publication Statements**. SALINAS shall ensure that all publications created or developed under this Agreement prominently contain the following statement: "This document was prepared under a grant from the Federal Emergency Management Agencies Grant Programs Directorate (FEMA/GPD) within the US Department of Homeland Security. Points of view or opinions expressed in this document are those of the authors and do not necessarily represent the official position or policies of FEMA/GPD or the US Department of Homeland Security."

ARTICLE 4
REPORTING REQUIREMENTS; AUDITS

4.1 **Regular Reports**. SALINAS shall provide, in a prompt and timely manner, financial, operational and other reports, as requested by the UASI Management Team or by City, in form and substance satisfactory to the UASI Management Team or City. Such reports, including any copies, shall be submitted on recycled paper and printed on double-sided pages, to the maximum extent possible.

4.2 **Notification of Defaults or Changes in Circumstances**. SALINAS shall notify the UASI Management Team and City immediately of (a) any Event of Default or event that, with the passage of time, would constitute an Event of Default; (b) any change of circumstances that would cause any of the representations or warranties contained in Article 5 to be false or misleading at any time during the term of this Agreement; and (c) any change of circumstances or events that would cause SALINAS to be out of compliance with the Grant Assurances in Appendix B.

4.3 **Books and Records**. SALINAS shall establish and maintain accurate files and records of all aspects of the Grant Plan and the matters funded in whole or in part with Grant Funds. Without limiting the scope of the foregoing, SALINAS shall establish and maintain accurate financial books and accounting records relating to Authorized Expenditures and to Grant Funds received and expended under

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this Agreement, together with all invoices, documents, payrolls, time records and other data related to the matters covered by this Agreement, whether funded in whole or in part with Grant Funds. SALINAS shall maintain all of the files, records, books, invoices, documents, payrolls and other data required to be maintained under this Section in a readily accessible location and condition for a period of not less than three (3) years after expiration of this Agreement or until any final audit by Cal OES has been fully completed, whichever is later.

4.4 **Inspection and Audit**. SALINAS shall make available to the UASI Management Team and to City, and to UASI Management Team and City employees and authorized representatives, during regular business hours, all of the files, records, books, invoices, documents, payrolls and other data required to be established and maintained by SALINAS under Section 4.3, and allow access and the right to examine those items. SALINAS shall permit the UASI Management Team and City, and UASI Management Team and City employees and authorized representatives, to inspect, audit, examine and make excerpts and transcripts from any of the foregoing. The rights of the UASI Management Team and City pursuant to this Section shall remain in effect so long as SALINAS has the obligation to maintain such files, records, books, invoices, documents, payrolls and other data under this Article 4. The DHS, the Comptroller General of the United States or designee, and Cal OES shall have the same inspection and audit rights as the City and UASI Management Team. SALINAS shall cooperate with any federal or state audit.

4.5 **Audit Report.** If the amount specified in Section 3.2 of this agreement is $750,000 or more, SALINAS shall submit an organization-wide financial and compliance audit report. The audit must be performed in accordance with GAO's *Government Auditing Standards*, and 2 CFR Part 200 Subpart F - *Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards*. SALINAS shall submit its audit report to the UASI Management Team no later than six months after the end of SALINAS's fiscal year.

ARTICLE 5
REPRESENTATIONS AND WARRANTIES

SALINAS represents and warrants each of the following as of the date of this Agreement and at all times throughout the term of this Agreement:

5.1 **No Misstatements**. No document furnished or to be furnished by SALINAS to the UASI Management Team or to City in connection with this Agreement, any Reimbursement Request or any other document relating to any of the foregoing, contains or will contain any untrue statement of material fact or omits or will omit a material fact necessary to make the statements contained therein not misleading, under the circumstances under which any such statement shall have been made.

5.2 **Eligibility to Receive Federal Funds**. By executing this Agreement, SALINAS certifies that it is eligible to receive federal funds, and specifically certifies as follows:

(a) SALINAS is not suspended, debarred or otherwise excluded from participation in federal assistance programs, as required by Executive Order 12549 and 12689, "Debarment and Suspension" and implemented at 2 CFR Part 3000.

(b) SALINAS complies with 31 U.S.C. §1352, *Limitation on use of appropriated funds to influence federal contracting and financial transactions*, as implemented at 44 CFR Part 18 and 6 CFR Part 9.

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(c) SALINAS complies with the Drug-Free Workplace Act of 1988, as amended, 41 U.S.C. §701 et seq., as implemented in 2 CFR Part 3001, and will continue to provide a drug-free workplace as required under that Act and implementing regulations.

(d) SALINAS is not delinquent in the repayment of any federal debt. See OMB Circular A-129.

SALINAS acknowledges that these certifications of eligibility to receive federal funds are material terms of the Agreement.

5.3 **NIMS Compliance.** To be eligible to receive Grant Funds, SALINAS must meet National Incident Management System ("NIMS") compliance requirements, and report full NIMS compliance via the National Incident Management System Capability Assessment Support Tool ("NIMSCAST"). By executing this Agreement, SALINAS certifies that it is in full NIMS compliance, and that it has reported that compliance via the NIMSCAST. SALINAS shall provide documentation of its NIMS compliance to the UASI Management Team. SALINAS acknowledges that this certification is a material term of the Agreement.

ARTICLE 6
INDEMNIFICATION AND GENERAL LIABILITY

6.1 **Indemnification**. SALINAS shall indemnify, protect, defend and hold harmless each of the Indemnified Parties from and against any and all Losses arising from, in connection with or caused by SALINAS's performance of this Agreement, including, but not limited to, the following: (a) a material breach of this Agreement SALINAS; (b) a material breach of any representation or warranty of SALINAS contained in this Agreement; (c) any personal injury or death caused, directly or indirectly, by any act or omission of SALINAS or its employees, subgrantees or agents; (d) any loss of or damage to property caused, directly or indirectly, by any act or omission of SALINAS or its employees, subgrantees or agents; (e) the use, misuse or failure of any equipment or facility used by SALINAS, or by any of its employees, subgrantees or agents, regardless of whether such equipment or facility is furnished, rented or loaned to SALINAS by an Indemnified Party; (f) any tax, fee, assessment or other charge for which SALINAS is responsible under Section 10.4; or (g) any infringement of patent rights, copyright, trade secret or any other proprietary right or trademark of any person or entity in consequence of the use by any Indemnified Party of any goods or services furnished by SALINAS or its employees, subgrantees or agents to such Indemnified Party in connection with this Agreement. The foregoing indemnity shall include, without limitation, reasonable fees of attorneys, consultants and experts and related costs and San Francisco's costs of investigating any claims against San Francisco.

6.2 **Duty to Defend; Notice of Loss**. SALINAS acknowledges and agrees that its obligation to defend the Indemnified Parties under Section 6.1: (a) is an immediate obligation, independent of its other obligations hereunder; (b) applies to any Loss which actually or potentially falls within the scope of Section 6.1, regardless of whether the allegations asserted in connection with such Loss are or may be groundless, false or fraudulent; and (c) arises at the time the Loss is tendered to SALINAS by the Indemnified Party and continues at all times thereafter. The Indemnified Party shall give SALINAS prompt notice of any Loss under Section 6.1 and SALINAS shall have the right to defend, settle and compromise any such Loss; provided, however, that the Indemnified Party shall have the right to retain its own counsel at the expense of SALINAS if representation of such Indemnified Party by the counsel retained by SALINAS would be inappropriate due to conflicts of interest between such Indemnified Party and SALINAS. An Indemnified Party's failure to notify SALINAS promptly of any Loss shall not relieve SALINAS of any liability to such Indemnified Party pursuant to Section 6.1, unless such failure materially impairs SALINAS's ability to defend such Loss. SALINAS shall seek the Indemnified Party's

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prior written consent to settle or compromise any Loss if SALINAS contends that such Indemnified Party shares in liability with respect thereto.

6.3 **Incidental and Consequential Damages**. Losses covered under this Article 6 shall include any and all incidental and consequential damages resulting in whole or in part from SALINAS's acts or omissions. Nothing in this Agreement shall constitute a waiver or limitation of any rights that any Indemnified Party may have under applicable law with respect to such damages.

6.4 **LIMITATION ON LIABILITY OF SAN FRANCISCO**. CITY'S OBLIGATIONS UNDER THIS AGREEMENT SHALL BE LIMITED TO THE AGGREGATE AMOUNT OF GRANT FUNDS ACTUALLY DISBURSED HEREUNDER. NOTWITHSTANDING ANY OTHER PROVISION CONTAINED IN THIS AGREEMENT OR ANY OTHER DOCUMENT OR COMMUNICATION RELATING TO THIS AGREEMENT, IN NO EVENT SHALL CITY BE LIABLE, REGARDLESS OF WHETHER ANY CLAIM IS BASED ON CONTRACT OR TORT, FOR ANY SPECIAL, CONSEQUENTIAL, INDIRECT OR INCIDENTAL DAMAGES, INCLUDING LOST PROFITS, ARISING OUT OF OR IN CONNECTION WITH THIS AGREEMENT, THE GRANT FUNDS, THE GRANT PLAN OR ANY ACTIVITIES PERFORMED IN CONNECTION WITH THIS AGREEMENT.

ARTICLE 7
EVENTS OF DEFAULT AND REMEDIES; TERMINATION FOR CONVENIENCE

7.1 **Events of Default**. The occurrence of any one or more of the following events shall constitute an "Event of Default" under this Agreement:

(a) **False Statement**. Any statement, representation, certification or warranty contained in this Agreement, in any Reimbursement Request, or in any other document submitted to the UASI Management Team or to City under this Agreement is found by the UASI Management Team or by City to be false or misleading.

(b) **Failure to Perform Other Covenants**. SALINAS fails to perform or breaches any provision or covenant of this Agreement to be performed or observed by SALINAS as and when performance or observance is due and such failure or breach continues for a period of ten (10) days after the date on which such performance or observance is due.

(c) **Failure to Comply with Applicable Laws**. SALINAS fails to perform or breaches any of the terms or provisions of Article 12.

(d) **Voluntary Insolvency**. SALINAS (i) is generally not paying its debts as they become due, (ii) files, or consents by answer or otherwise to the filing against it of, a petition for relief or reorganization or arrangement or any other petition in bankruptcy or for liquidation or to take advantage of any bankruptcy, insolvency or other debtors' relief law of any jurisdiction, (iii) makes an assignment for the benefit of its creditors, (iv) consents to the appointment of a custodian, receiver, trustee or other officer with similar powers of SALINAS or of any substantial part of SALINAS's property or (v) takes action for the purpose of any of the foregoing.

(e) **Involuntary Insolvency**. Without consent by SALINAS, a court or government authority enters an order, and such order is not vacated within ten (10) days, (i) appointing a custodian, receiver, trustee or other officer with similar powers with respect to SALINAS or with respect to any substantial part of SALINAS's property, (ii) constituting an order for relief or approving a petition for relief or reorganization or arrangement or any other petition in bankruptcy or for liquidation or to take advantage of any bankruptcy, insolvency or other debtors' relief law of any jurisdiction or (iii) ordering the dissolution, winding-up or liquidation of SALINAS.

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7.2 **Remedies upon Event of Default**. Upon and during the continuance of an Event of Default, City may do any of the following, individually or in combination with any other remedy:

(a) **Termination**. City may terminate this Agreement by giving a written termination notice to SALINAS and, on the date specified in such notice, this Agreement shall terminate and all rights of SALINAS hereunder shall be extinguished. In the event of such termination, City will pay SALINAS for Authorized Expenditures in any Reimbursement Request that was submitted and approved by the UASI Management Team and by City prior to the date of termination specified in such notice.

(b) **Withholding of Grant Funds**. City may withhold all or any portion of Grant Funds not yet disbursed hereunder, regardless of whether SALINAS has previously submitted a Reimbursement Request or whether the UASI Management Team and/or City has approved the disbursement of the Grant Funds requested in any Reimbursement Request. Any Grant Funds withheld pursuant to this Section and subsequently disbursed to SALINAS after cure of applicable Events of Default shall be disbursed without interest.

(c) **Return of Grant Funds**. City may demand the immediate return of any previously disbursed Grant Funds that have been claimed or expended by SALINAS in breach of the terms of this Agreement, together with interest thereon from the date of disbursement at the maximum rate permitted under applicable law.

7.3 **Termination for Convenience.**

(a) City shall have the option, in its sole discretion, to terminate this Agreement, at any time during the term hereof, for convenience and without cause. City shall exercise this option by giving SALINAS written notice of termination. The notice shall specify the date on which termination shall become effective.

(b) Upon receipt of the notice, SALINAS shall commence and perform, with diligence, all actions necessary on the part of SALINAS to effect the termination of this Agreement on the date specified by City and to minimize the liability of SALINAS and City to third parties as a result of termination. All such actions shall be subject to the prior approval of the UASI Management Team.

(c) Within 30 days after the specified termination date, SALINAS shall submit to the UASI Management Team an invoice for all Authorized Expenses incurred through the termination date. For Authorized Expenses incurred after receipt of the notice of termination, City will only reimburse SALINAS if the Authorized Expenses received prior approval from the UASI Management Team as specified in subparagraph (b).

(d) In no event shall City be liable for costs incurred by SALINAS or any of its contractors or subgrantees after the termination date specified by City.

(e) City's payment obligation under this Section shall survive termination of this Agreement.

7.4 **Remedies Nonexclusive**. Each of the remedies provided for in this Agreement may be exercised individually or in combination with any other remedy available hereunder or under applicable laws, rules and regulations. The remedies contained herein are in addition to all other remedies available to City at law or in equity by statute or otherwise and the exercise of any such remedy shall not preclude or in any way be deemed to waive any other remedy.

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ARTICLE 8
ASSIGNMENTS

8.1 **No Assignment by SALINAS**. SALINAS shall not, either directly or indirectly, assign, transfer, hypothecate, subcontract or delegate all or any portion of this Agreement or any rights, duties or obligations of SALINAS hereunder without the prior written consent of the UASI Management Team; provided, however, that any contractor or subgrantee specifically referenced in Appendix A shall not require the consent of Management Team. This Agreement shall not, nor shall any interest herein, be assignable as to the interest of SALINAS involuntarily or by operation of law without the prior written consent of City. A change of ownership or control of SALINAS or a sale or transfer of substantially all of the assets of SALINAS shall be deemed an assignment for purposes of this Agreement.

8.2 **Agreement Made in Violation of this Article**. Any agreement made in violation of Section 8.1 shall confer no rights on any person or entity and shall automatically be null and void.

8.3 **SALINAS Retains Responsibility**. SALINAS shall in all events remain liable for the performance by any subgrantee contractor, or assignee of all of the covenants, terms and conditions in this Agreement.

ARTICLE 9
NOTICES AND OTHER COMMUNICATIONS

9.1 **Requirements**. Unless otherwise specifically provided herein, all notices, consents, directions, approvals, instructions, requests and other communications hereunder shall be in writing, shall be addressed to the person and address set forth below and shall be (a) deposited in the U.S. mail, first class, certified with return receipt requested and with appropriate postage, (b) hand delivered or (c) sent via e-mail:

If to San Francisco:

San Francisco Department of Emergency Management
1011 Turk Street
San Francisco, CA 94102
Attn: Mary Ellen Carroll, Executive Director
maryellen.carroll@sfgov.org

If to the UASI Management Team:

UASI Management Team
711 Van Ness Avenue, Suite #420
San Francisco, CA 94102
Attn: Craig Dziedzic, General Manager
craig.dziedzic@sfgov.org

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If to SALINAS:

City of Salinas Police Department
222 Lincoln Avenue
Salinas, CA 93901
Attn: Adele Fresé, Police Chief
adelef@ci.salinas.ca.us

9.2 **Effective Date**. All communications sent in accordance with Section 9.1 shall become effective on the date of receipt. Such date of receipt shall be determined by: (a) if mailed, the return receipt, completed by the U.S. postal service; (b) if sent via hand delivery, a receipt executed by a duly authorized agent of the party to whom the notice was sent; or (c) if sent via facsimile, the date of telephonic confirmation of receipt by a duly authorized agent of the party to whom the notice was sent or, if such confirmation is not reasonably practicable, the date indicated in the facsimile machine transmission report of the party giving such notice.

9.3 **Change of Address**. From time to time any party hereto may designate a new address or recipient for notice for purposes of this Article 9 by written notice to the other party and the UASI Management Team.

ARTICLE 10
MISCELLANEOUS

10.1 **No Waiver**. No waiver by San Francisco of any default or breach of this Agreement shall be implied from any failure by the UASI Management Team or San Francisco to take action on account of such default if such default persists or is repeated. No express waiver by San Francisco shall affect any default other than the default specified in the waiver and shall be operative only for the time and to the extent therein stated. Waivers by San Francisco of any covenant, term or condition contained herein shall not be construed as a waiver of any subsequent breach of the same covenant, term or condition. The consent or approval by the UASI Management Team or San Francisco of any action requiring further consent or approval shall not be deemed to waive or render unnecessary the consent or approval to or of any subsequent similar act.

10.2 **Modification**. This Agreement may not be modified, nor may compliance with any of its terms be waived, except by written instrument executed and approved in the same manner as this Agreement; provided, however, that the General Manager or designee may establish alternate procedures for modification of the Appendix A and the Grant Plan.

10.3 **Governing Law; Venue**. The formation, interpretation and performance of this Agreement shall be governed by the laws of the State of California, without regard to its conflict of laws principles. Venue for all litigation relative to the formation, interpretation and performance of this Agreement shall be in San Francisco.

10.4 **SALINAS to Pay All Taxes**. SALINAS shall pay to the appropriate governmental authority, as and when due, any and all taxes, fees, assessments or other governmental charges, including possessory interest taxes and California sales and use taxes, levied upon or in connection with this Agreement, the Grant Plan, the Grant Funds or any of the activities contemplated by this Agreement.

10.5 **Headings**. All article and section headings and captions contained in this Agreement are for reference only and shall not be considered in construing this Agreement.

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10.6 **Entire Agreement**. This Agreement sets forth the entire Agreement between the parties, and supersedes all other oral or written provisions. The following Appendices are attached to and a part of this Agreement:

- Appendix A, Authorized Expenditures and Timelines
- Appendix B, Grant Assurances
- Appendix C, Form of Reimbursement Request

10.7 **Certified Resolution of Signatory Authority**. Upon request of San Francisco, SALINAS shall deliver to San Francisco a copy of the corporate resolution(s) authorizing the execution, delivery and performance of this Agreement, certified as true, accurate and complete by the appropriate authorized representative of SALINAS.

10.8 **Severability**. Should the application of any provision of this Agreement to any particular facts or circumstances be found by a court of competent jurisdiction to be invalid or unenforceable, then (a) the validity of other provisions of this Agreement shall not be affected or impaired thereby, and (b) such provision shall be enforced to the maximum extent possible so as to effect the intent of the parties and shall be reformed without further action by the parties to the extent necessary to make such provision valid and enforceable.

10.9 **Successors; No Third-Party Beneficiaries**. Subject to the terms of Article 8, the terms of this Agreement shall be binding upon, and inure to the benefit of, the parties hereto and their successors and assigns. Nothing in this Agreement, whether express or implied, shall be construed to give any person or entity (other than the parties hereto and their respective successors and assigns and, in the case of Article 6, the Indemnified Parties) any legal or equitable right, remedy or claim under or in respect of this Agreement or any covenants, conditions or provisions contained herein.

10.10 **Survival of Terms**. The obligations of SALINAS and the terms of the following provisions of this Agreement shall survive and continue following expiration or termination of this Agreement: Sections 4.3 and 4.4, Article 6, this Article 10, and the Grant Assurances of Appendix B.

10.11 **Further Assurances**. From and after the date of this Agreement, SALINAS agrees to do such things, perform such acts, and make, execute, acknowledge and deliver such documents as may be reasonably necessary or proper and usual to complete the transactions contemplated by this Agreement and to carry out the purpose of this Agreement in accordance with this Agreement.

10.12 **Disclosure of Subawards and Executive Compensation.** Pursuant to the Federal Funding Accountability and Transparency Act (FFATA) (P.L. 109-282) as amended by Section 6202(a) of the Government Funding Transparency Act of 2008 (P.L. 110-252), full disclosure to the public of entities or organizations receiving federal funds is now required. As defined by the Office of Management and Budget (OMB), all new Federal awards of $25,000 or more as of October 1, 2010, are subject to FFATA reporting requirements. The Transparency Act definition of "Federal awards" includes not only prime awards for grantees, cooperators, and contractors, but also awards to sub-recipients. If applicable, SALINAS must provide the following information on SALINAS letterhead within 30 days of receipt of this Agreement.

1. Subawards greater than $25,000:

   a) Name of entity receiving award;
   b) Amount of award;
   c) Funding agency;
   d) The Catalog of Federal Domestic Assistance program number;

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e) Award title (descriptive of the purpose of the funding action);
f) Location of the entity and primary location of performance including city, state, and Congressional district;
g) Dun & Bradstreet (D&B) DUNS Number of the entity, and its parent if applicable; and,
h) Total compensation and names of top five executives (same thresholds as for prime recipients).

2. The Total compensation and names of the top five executives if:

a) 80% or more of annual gross revenues are from Federal awards (contracts, sub-contracts and Federal financial assistance), and $25,000,000 or more in annual gross revenues from Federal awards; and,
b) Compensation information is not already available through reporting to the Securities and Exchange Commission.

10.13 **Cooperation with UASI Programs and Activities**.

(a) Subject to reasonable terms and conditions, SALINAS agrees to participate in UASI-sponsored exercises, and to make available equipment acquired with Grant Funds for use as part of such exercises.

(b) To the extent permitted by law, SALINAS agrees to share with the Approval Authority informational work products (such as plans, reports, data, etc.) created or acquired using Grant Funds.

(c) SALINAS agrees to provide input towards the development of the regional Threat and Hazard Identification and Risk Assessment (THIRA) and Stakeholder Preparedness Review (SPR) as requested by UASI.

ARTICLE 11
INSURANCE

11.1 **Types and Amounts of Coverage.** Without limiting SALINAS's liability pursuant to Article 6 of this Agreement, SALINAS shall maintain in force, during the full term of the Agreement, insurance in the following amounts and coverages:

(a) Workers' Compensation, in statutory amounts, with Employers' Liability Limits not less than $1,000,000 each accident, injury, or illness; and

(b) Commercial General Liability Insurance with limits not less than $1,000,000 each occurrence Combined Single Limit for Bodily Injury and Property Damage, including Contractual Liability, Personal Injury, Products and Completed Operations; and

(c) Commercial Automobile Liability Insurance with limits not less than $1,000,000 each occurrence Combined Single Limit for Bodily Injury and Property Damage, including Owned, Non-Owned and Hired auto coverage, as applicable.

11.2 **Additional Requirements for General and Automobile Coverage.** Commercial General Liability and Commercial Automobile Liability Insurance policies must be endorsed to provide:

(a) Name as Additional Insured the City and County of San Francisco, its Officers, Agents, and Employees.

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(b) That such policies are primary insurance to any other insurance available to the Additional Insureds, with respect to any claims arising out of this Agreement, and that insurance applies separately to each insured against whom claim is made or suit is brought.

11.3 **Additional Requirements Regarding Workers' Compensation.** Regarding Workers' Compensation, SALINAS hereby agrees to waive subrogation which any insurer of SALINAS may acquire from SALINAS by virtue of the payment of any loss. SALINAS agrees to obtain any endorsement that may be necessary to effect this waiver of subrogation. The Workers' Compensation policy shall be endorsed with a waiver of subrogation in favor of the City for all work performed by the SALINAS, its employees, agents and subcontractors.

11.4 **Additional Requirements for All Policies.** All policies shall provide thirty days' advance written notice to the City of reduction or nonrenewal of coverages or cancellation of coverages for any reason. Notices shall be sent to the City address in Article 9, Notices and Other Communications.

11.5 **Required Post-Expiration Coverage.** Should any of the required insurance be provided under a claims-made form, SALINAS shall maintain such coverage continuously throughout the term of this Agreement and, without lapse, for a period of three years beyond the expiration of this Agreement, to the effect that, should occurrences during the Agreement term give rise to claims made after expiration of the Agreement, such claims shall be covered by such claims-made policies.

11.6 **General Annual Aggregate Limit/Inclusion of Claims Investigation or Legal Defense Costs.** Should any of the required insurance be provided under a form of coverage that includes a general annual aggregate limit or provides that claims investigation or legal defense costs be included in such general annual aggregate limit, such general annual aggregate limit shall be double the occurrence or claims limits specified above.

11.7 **Lapse in Insurance.** Should any required insurance lapse during the term of this Agreement, requests for reimbursement originating after such lapse may not be processed, in the City's sole discretion, until the City receives satisfactory evidence of reinstated coverage as required by this Agreement, effective as of the lapse date. If insurance is not reinstated, the City may, at its sole option, terminate this Agreement effective on the date of such lapse of insurance.

11.8 **Evidence of Insurance.** Before commencing any operations or expending any Grant Funds under this Agreement, SALINAS shall furnish to City certificates of insurance and additional insured policy endorsements with insurers with ratings comparable to A-, VIII or higher, that are authorized to do business in the State of California, and that are satisfactory to City, in form evidencing all coverages set forth above. Failure to maintain insurance shall constitute a material breach of this Agreement.

11.9 **Effect of Approval.** Approval of the insurance by City shall not relieve or decrease the liability of SALINAS hereunder.

11.10 **Insurance for Subcontractors and Evidence of this Insurance.** If a subcontractor or subgrantee will be used to complete any portion of this Agreement, SALINAS shall ensure that the subcontractor or subgrantee shall provide all necessary insurance and shall name the City and County of San Francisco, its officers, agents and employees and the SALINAS as additional insureds.

11.11 **Authority to Self-Insure.** Nothing in this Agreement shall preclude SALINAS from self-insuring all or part of the insurance requirement in this Article. However, SALINAS shall provide proof of self-insurance, in a form acceptable to San Francisco, in the amounts of each line of self-insurance.

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ARTICLE 12
COMPLIANCE

12.1 **Nondiscrimination**. In the performance of this Agreement, SALINAS agrees not to discriminate against any employee, San Francisco employee working with SALINAS or any subgrantee of SALINAS, applicant for employment with SALINAS or subgrantee of SALINAS, or against any person seeking accommodations, advantages, facilities, privileges, services, or membership in all business, social, or other establishments or organizations, on the basis of the fact or perception of a person's race, color, creed, religion, national origin, ancestry, age, height, weight, sex, sexual orientation, gender identity, domestic partner status, marital status, disability or Acquired Immune Deficiency Syndrome or HIV status (AIDS/HIV status), or association with members of such protected classes, or in retaliation for opposition to discrimination against such classes.

12.2 **Conflict of Interest**. Through its execution of this Agreement, SALINAS acknowledges that it is familiar with the provisions of Section 87100 et seq. and Section 1090 et seq. of the Government Code of the State of California, and certifies that it does not know of any facts which constitutes a violation of said provisions and agrees that it will immediately notify City if it becomes aware of any such fact during the term of this Agreement. SALINAS agrees that it will promptly notify City in writing of all violations of State or Federal criminal law involving fraud, bribery, or gratuities affecting or involving the use of Grant Funds.

12.3 **Compliance with ADA**. SALINAS acknowledges that, pursuant to the ADA, programs, services and other activities provided by a public entity to the public, whether directly or through a grantee or contractor, must be accessible to the disabled public. SALINAS shall not discriminate against any person protected under the ADA in connection with all or any portion of the Grant Plan and shall comply at all times with the provisions of the ADA.

12.4 **Prohibition on Political Activity with City Funds**. In accordance with San Francisco Administrative Code Chapter 12G, SALINAS may not participate in, support, or attempt to influence any political campaign for a candidate or for a ballot measure (collectively, "Political Activity") in the performance of the services provided under this Agreement. SALINAS agrees to comply with San Francisco Administrative Code Chapter 12G and any implementing rules and regulations promulgated by San Francisco's Controller. The terms and provisions of Chapter 12G are incorporated herein by this reference. In the event Contractor violates the provisions of this section, San Francisco may, in addition to any other rights or remedies available hereunder, (i) terminate this Agreement, and (ii) prohibit SALINAS from bidding on or receiving any new City contract for a period of two (2) years. The Controller will not consider SALINAS's use of profit as a violation of this section.

12.5 **Submitting False Claims; Monetary Penalties**. Pursuant to San Francisco Administrative Code §21.35, any contractor, subcontractor or consultant who submits a false claim shall be liable to the City for the statutory penalties set forth in that section. The text of Section 21.35, along with the entire San Francisco Administrative Code is available on the web at http://www.municode.com/Library/clientCodePage.aspx?clientID=4201. A contractor, subcontractor or consultant will be deemed to have submitted a false claim to the City if the contractor, subcontractor or consultant: (a) knowingly presents or causes to be presented to an officer or employee of the City a false claim or request for payment or approval; (b) knowingly makes, uses, or causes to be made or used a false record or statement to get a false claim paid or approved by the City; (c) conspires to defraud the City by getting a false claim allowed or paid by the City; (d) knowingly makes, uses, or causes to be made or used a false record or statement to conceal, avoid, or decrease an obligation to pay or transmit money or property to the City; or (e) is a beneficiary of an inadvertent submission of a false claim to the City, subsequently discovers the falsity of the claim, and fails to disclose the false claim to the City within a reasonable time after discovery of the false claim.

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IN WITNESS WHEREOF, the parties hereto have caused this Agreement to be duly executed as of the date first specified herein.

CITY AND COUNTY OF SAN FRANCISCO:

SAN FRANCISCO DEPARTMENT OF EMERGENCY MANAGEMENT

By:

_____

MARY ELLEN CARROLL
EXECUTIVE DIRECTOR

CITY OF SALINAS:

By:

_____

RAY E. CORPUZ
CITY MANAGER

Federal Tax ID #: 94-6000412

Approved as to Form:
Dennis J. Herrera
City Attorney

By: _____
Jana Clark
Deputy City Attorney

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Appendix A — Authorized Expenditures and Timelines

ENTITY: **SALINAS**

Total allocation to be spent on the following solution areas:

IJ Number and Title	Program Description	Due Dates	Solution Areas	Amount
Project Title: Regional Monterey County Automated License Plate Recognition Program				
IJ-8: Strengthen Information Sharing Collaboration	Funds to purchase cameras, licenses, initial storage and software for the Regional ALPR Program. Cameras will be installed at major intersections and access points in Monterey County.	Project Completion date: 12/31/2020	Equipment: 03OE-01-ALPR	PROJECT NOT TO EXCEED $197,600
		TOTAL ALLOCATION		**TOTAL NOT TO EXCEED: $197,600**

EQUIPMENT

Reimbursement for Equipment Requires:

- An approved EHP memo, if applicable.
- A performance bond is required for any equipment item that exceeds $250,000, or for any vehicle, aircraft, or watercraft, regardless of the cost. Failure to obtain and submit a performance bond to the UASI may result in disallowance of cost.
- As allowable under Federal guidelines, procurement of equipment must follow local policies and procedures for competitive purchasing (provided they are not in conflict with Federal regulations which supersede them). If sole source approval is needed, SALINAS must transmit the request to the UASI for request to the State.

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- Prior to reimbursement, SALINAS must submit all invoices, AEL numbers, and a list of all equipment ID numbers and the deployed locations.
- SALINAS must inventory, type, organize and track all equipment purchased in order to facilitate the dispatch, deployment, and recovery of resources before, during, and after an incident.

- **All requests for reimbursements must be submitted within 30 days of project completion unless an earlier deadline is set in this Appendix. SALINAS should submit reimbursement requests on a quarterly basis, as applicable.**
- **Authorized expenditures must fall into one of the following categories: Planning, Organization, Equipment, Training, or Exercises. Descriptions of authorized expenditures are in the following documents:**
- *FY 2019 Homeland Security Grant Program Notice of Funding Opportunity*: https://www.fema.gov/media-library-data/1555008381091-144e7470ec5e1958d6ad5e103c0825ad/FY_2019_HSGP_NOFO_FINAL_508.pdf
- *California Supplement to the Federal Funding Opportunity Announcement*, dated September 2018, available at https://www.caloes.ca.gov/GrantsManagementSite/Documents/FY%202018%20HSGP%20State%20Guidance.pdf as *"FY 2018 Homeland Security Grant Program California Supplement to the Federal Notice of Funding Opportunity."*
- *Authorized Equipment List: http://www.fema.gov/authorized-equipment-list*
- *Cal OES Rules and Regulations, including the Recipient Handbook: http://www.caloes.ca.gov/GrantsManagementSite/Documents/2019%20Subrecipient%20Handbook.pdf*

- ***Any equipment purchased under this Agreement must match the UASI 2019 Grant Application Workbook. Any modification to the inventory list in that Workbook must receive prior written approval from by the Bay Area UASI Program Manager.***

- ***No Management and Administration expenses are allowed, unless expressly identified and authorized in this Appendix.***

- ***Sustainability requirements may apply to some or all of the grant funded projects or programs authorized in this Appendix. See Agreement, ¶3.12.***

- ***All EHP documentation must be submitted and approved prior to any expenditure of funds requiring EHP submission.***

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Appendix B-- Grant Assurances

Name of Jurisdiction: CITY OF SALINAS, POLICE DEPARTMENT

Name of Authorized Agent: Adele Fresé, Chief of Police

Address: 222 Lincoln Avenue

City: Salinas State: CA Zip Code: 93901

Telephone Number: (831) 758-7286

E-Mail Address: adelef@ci.salinas.ca.us

As the duly **authorized representative of SALINAS, I hereby certify** that SALINAS has the legal authority to apply for federal assistance and the institutional, managerial and financial capability (including funds sufficient to pay any non-federal share of project cost) to ensure proper planning, management, and completion of the project described in this application, within prescribed timelines.

I further acknowledge that SALINAS is responsible for reviewing and adhering to all requirements within the:

(a) Applicable Federal Regulations (see below);
(b) Federal Program Notice of Funding Opportunity (NOFO);
(c) Federal Preparedness Grants Manual;
(d) California Supplement to the NOFO; and
(e) Federal and State Grant Program Guidelines.

Federal Regulations
Government cost principles, uniform administrative requirements, and audit requirements for federal grant programs are set forth in Title 2, Part 200 of the Code of Federal Regulations (C.F.R.). Updates are issued by the Office of Management and Budget (OMB) and can be found at http://www.whitehouse.gov/omb/.

Significant state and federal grant award requirements (some of which appear in the documents listed above) are set forth below. SALINAS hereby agrees to comply with the following:

1. **Proof of Authority**
   SALINAS will obtain written authorization from the city council, governing board, or authorized body in support of this project. This written authorization must specify that SALINAS and the city council, governing board, or authorized body agree:

   (a) To provide all matching funds required for the grant project and that any cash match will be appropriated as required;

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(b) Any liability arising out of the performance of this agreement shall be the responsibility of SALINAS and the city council, governing board, or authorized body;
(c) Grant funds shall not be used to supplant expenditures controlled by the city council, governing board, or authorized body; and
(d) The official executing this agreement is, in fact authorized to do so.

This Proof of Authority must be maintained on file and readily available upon request.

2. Period of Performance

SALINAS will initiate work after approval of the award and complete all work within the period of performance specified in the grant.

3. Lobbying and Political Activities

As required by Section 1352, Title 31 of the United States Code (U.S.C.), for persons entering into a contract, grant, loan, or cooperative agreement from an agency or requests or receives from an agency a commitment providing for the United States to insure or guarantee a loan, SALINAS certifies that:

(a) No federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of an agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any federal grant, the making of any federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any federal contract, grant, loan, or cooperative agreement.
(b) If any funds other than federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, “Disclosure Form to Report Lobbying”, in accordance with its instructions.
(c) The undersigned shall require that the language of this certification be included in the award documents for all subawards at all tiers (including subcontracts, subgrants, and contracts under grants, loans, and cooperative agreements) and that all subrecipients shall certify and disclose accordingly.

SALINAS will also comply with provisions of the Hatch Act (5 U.S.C. §§ 1501- 1508 and §§ 7324-7328) which limit the political activities of employees whose principal employment activities are funded in whole or in part with federal funds.

Finally, SALINAS agrees that federal funds will not be used, directly or indirectly, to support the enactment, repeal, modification or adoption of any law, regulation or policy without the express

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written approval from the California Governor's Office of Emergency Services (Cal OES) or the federal awarding agency.

4. Debarment and Suspension

As required by Executive Orders 12549 and 12689, and 2 C.F.R. § 200.213 and codified in 2 C.F.R. Part 180, Debarment and Suspension, SALINAS will provide protection against waste, fraud, and abuse by debarring or suspending those persons deemed irresponsible in their dealings with the federal government. SALINAS certifies that it and its principals, recipients, or subrecipients:

(a) Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from covered transactions by any federal department or agency;
(b) Have not within a three-year period preceding this application been convicted of or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (federal, state, or local) transaction or contract under a public transaction; violation of federal or state antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property;
(c) Are not presently indicted for or otherwise criminally or civilly charged by a governmental entity (federal, state, or local) with commission of any of the offenses enumerated in paragraph (2)(b) of this certification; and
(d) Have not within a three-year period preceding this application had one or more public transaction (federal, state, or local) terminated for cause or default.

Where SALINAS is unable to certify to any of the statements in this certification, he or she shall attach an explanation to this application.

5. Non-Discrimination and Equal Employment Opportunity

SALINAS will comply with all federal statutes relating to non-discrimination. These include, but are not limited to, the following:

(a) Title VI of the Civil Rights Act of 1964 (Public Law (P.L.) 88-352 and 42 U.S.C. § 2000d et. seq.) which prohibits discrimination on the basis of race, color, or national origin and requires that recipients of federal financial assistance take reasonable steps to provide meaningful access to persons with limited English proficiency (LEP) to their programs and services;
(b) Title IX of the Education Amendments of 1972, (20 U.S.C. §§ 1681-1683, and 1685-1686), which prohibits discrimination on the basis of sex in any federally funded educational program or activity;
(c) Section 504 of the Rehabilitation Act of 1973, (29 U.S.C. § 794), which prohibits discrimination against those with disabilities or access and functional needs;
(d) Americans with Disabilities Act (ADA) of 1990, which prohibits discrimination on the basis of disability and requires buildings and structures be accessible to those with disabilities and

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access and functional needs (42 U.S.C. §§ 12101- 12213);

(e) Age Discrimination Act of 1975, (42 U.S.C. §§ 6101-6107), which prohibits discrimination on the basis of age;

(f) Public Health Service Act of 1912 (42 U.S.C. §§ 290 dd—2), relating to confidentiality of patient records regarding substance abuse treatment;

(g) Title VIII of the Civil Rights Act of 1968 (42 U.S.C. § 3601 et seq.), relating to nondiscrimination in the sale, rental or financing of housing as implemented by the Department of Housing and Urban Development at 24 C.F.R. Part 100. The prohibition on disability discrimination includes the requirement that new multifamily housing with four or more dwelling units—i.e., the public and common use areas and individual apartment units (all units in buildings with elevators and ground-floor units in buildings without elevators)— be designed and constructed with certain accessible features (See 24 C.F.R. § 100.201);

(h) Executive Order 11246, which prohibits federal contractors and federally assisted construction contractors and subcontractors, who do over $10,000 in Government business in one year from discriminating in employment decisions on the basis of race, color, religion, sex, sexual orientation, gender identification or national origin;

(i) Executive Order 11375, which bans discrimination on the basis of race, color, religion, sex, sexual orientation, gender identification, or national origin in hiring and employment in both the United States federal workforce and on the part of government contractors;

(j) California Public Contract Code § 10295.3, which prohibits discrimination based on domestic partnerships and those in same sex marriages;

(k) DHS policy to ensure the equal treatment of faith-based organizations, under which all applicants and recipients must comply with equal treatment policies and requirements contained in 6 C.F.R. Part 19;

(l) Any other nondiscrimination provisions in the specific statute(s) under which application for federal assistance is being made; and

(m) The requirements of any other nondiscrimination statute(s) which may apply to the application.

In addition to the items listed in (a) through (m), SALINAS will comply with California's Fair Employment and Housing Act (FEHA). FEHA prohibits harassment and discrimination in employment because of ancestry, familial status, race, color, religious creed (including religious dress and grooming practices), sex (which includes pregnancy, childbirth, breastfeeding and medical conditions related to pregnancy, childbirth or breastfeeding), gender, gender identity, gender expression, sexual orientation, marital status, national origin, ancestry, mental and physical disability, genetic information, medical condition, age, pregnancy, denial of medical and family care leave, or pregnancy disability leave (California Government Code §§12940, 12945, 12945.2), military and veteran status, and/or retaliation for protesting illegal discrimination related to one of these categories, or for reporting patient abuse in tax supported institutions.

6. Drug-Free Workplace

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As required by the Drug-Free Workplace Act of 1988 (41 U.S.C. § 701 et seq.), SALINAS certifies that it will maintain a drug-free workplace and a drug-free awareness program as outlined in the Act.

7. Environmental Standards

SALINAS will comply with state and federal environmental standards, which may be prescribed pursuant to the following, as applicable:

(a) California Environmental Quality Act (CEQA) (California Public Resources Code §§ 21000-21177), to include coordination with the city or county planning agency;
(b) CEQA Guidelines (California Code of Regulations, Title 14, Division 6, Chapter 3, §§ 15000-15387);
(c) Federal Clean Water Act (CWA) (33 U.S.C. § 1251 et seq.), which establishes the basic structure for regulating discharges of pollutants into the waters of the United States and regulating quality standards for surface waters;
(d) Federal Clean Air Act of 1955 (42 U.S.C. § 7401) which regulates air emissions from stationary and mobile sources;
(e) Institution of environmental quality control measures under the National Environmental Policy Act (NEPA) of 1969 (P.L. 91-190); the Council on Environmental Quality Regulations for Implementing the Procedural Provisions of NEPA; and Executive Order 12898 which focuses on the environmental and human health effects of federal actions on minority and low-income populations with the goal of achieving environmental protection for all communities;
(f) Evaluation of flood hazards in floodplains in accordance with Executive Order 11988;
(g) Executive Order 11514 which sets forth national environmental standards;
(h) Executive Order 11738 instituted to assure that each federal agency empowered to enter into contracts for the procurement of goods, materials, or services and each federal agency empowered to extend federal assistance by way of grant, loan, or contract shall undertake such procurement and assistance activities in a manner that will result in effective enforcement of the Clean Air Act and the Federal Water Pollution Control Act Executive Order 11990 which requires preservation of wetlands;
(i) The Safe Drinking Water Act of 1974, (P.L. 93-523);
(j) The Endangered Species Act of 1973, (P.L. 93-205);
(k) Assurance of project consistency with the approved state management program developed under the Coastal Zone Management Act of 1972 (16 U.S.C. §§1451 et seq.);
(l) Conformity of Federal Actions to State (Clear Air) Implementation Plans under Section 176(c) of the Clean Air Act of 1955, as amended (42 U.S.C. §§7401 et seq.);
(m) Wild and Scenic Rivers Act of 1968 (16 U.S.C. § 1271 et seq.) related to protecting components or potential components of the national wild and scenic rivers system.

SALINAS shall not be: 1) in violation of any order or resolution promulgated by the State Air Resources Board or an air pollution district; 2) subject to a cease and desist order pursuant to §

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13301 of the California Water Code for violation of waste discharge requirements or discharge prohibitions; or 3) determined to be in violation of federal law relating to air or water pollution.

8. Audits

For subrecipients expending $750,000 or more in federal grant funds annually, SALINAS will cause to be performed the required financial and compliance audits in accordance with the Single Audit Act Amendments of 1996 and Title 2 of the Code of Federal Regulations, Part 200, Subpart F Audit Requirements.

9. Access to Records

In accordance with 2 C.F.R. § 200.336, SALINAS will give the awarding agency, the Comptroller General of the United States and, if appropriate, the state, through any authorized representative, access to and the right to examine all records, books, papers, or documents related to the award. SALINAS will require any subrecipients, contractors, successors, transferees and assignees to acknowledge and agree to comply with this provision.

10. Conflict of Interest

SALINAS will establish safeguards to prohibit employees from using their positions for a purpose that constitutes or presents the appearance of personal or organizational conflict of interest, or personal gain.

11. Financial Management

False Claims for Payment - SALINAS will comply with 31 U.S.C §§ 3729-3733 which sets forth that no subrecipient, recipient, or subrecipient shall submit a false claim for payment, reimbursement or advance.

12. Reporting - Accountability

SALINAS agrees to comply with applicable provisions of the Federal Funding Accountability and Transparency Act (FFATA) (P.L. 109-282), specifically (a) the reporting of subawards obligating $25,000 or more in federal funds and (b) executive compensation data for first-tier subawards. This includes the provisions of FFATA, which includes requirements for executive compensation, and also requirements implementing the Act for the non-federal entity at 2 C.F.R. Part 25 Financial Assistance Use of Universal Identifier and Central Contractor Registration and 2 C.F.R. Part 170 Reporting Subaward and Executive Compensation Information.

13. Whistleblower Protections

SALINAS also must comply with statutory requirements for whistleblower protections at 10 U.S.C. § 2409, 41 U.S.C. § 4712, and 10 U.S.C. § 2324, 41 U.S.C. § 4304 and § 4310.

14. Human Trafficking

SALINAS will comply with the requirements of Section 106(g) of the Trafficking Victims Protection

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Act of 2000, as amended (22 U.S.C. § 7104) which prohibits grant award recipients or a subrecipient from: (1) engaging in trafficking in persons during the period of time that the award is in effect; (2) procuring a commercial sex act during the period of time that the award is in effect; or (3) using forced labor in the performance of the award or subawards under the award.

15. Labor Standards

SALINAS will comply with the following federal labor standards:

(a) The Davis-Bacon Act (40 U.S.C. §§ 276a to 276a-7), as applicable, and the Copeland Act (40 U.S.C. § 3145 and 18 U.S.C. § 874) and the Contract Work Hours and Safety Standards Act (40 U.S.C. §§ 327-333), regarding labor standards for federally-assisted construction contracts or subcontracts, and
(b) The Federal Fair Labor Standards Act (29 U.S.C. § 201 et al.) as they apply to employees of institutes of higher learning (IHE), hospitals and other non-profit organizations.

16. Worker's Compensation

SALINAS must comply with provisions which require every employer to be insured to protect workers who may be injured on the job at all times during the performance of the work of this Agreement, as per the workers compensation laws set forth in California Labor Code §§ 3700 et seq.

17. Property-Related

If applicable to the type of project funded by this federal award, SALINAS will:

(a) Comply with the requirements of Titles II and III of the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 (P.L. 91-646) which provide for fair and equitable treatment of persons displaced or whose property is acquired as a result of federal or federally-assisted programs. These requirements apply to all interests in real property acquired for project purposes regardless of federal participation in purchase;
(b) Comply with flood insurance purchase requirements of Section 102(a) of the Flood Disaster Protection Act of 1973 (P.L. 93-234) which requires subrecipients in a special flood hazard area to participate in the program and to purchase flood insurance if the total cost of insurable construction and acquisition is $10,000 or more;
(c) Assist the awarding agency in assuring compliance with Section 106 of the
(d) National Historic Preservation Act of 1966, as amended (16 U.S.C. § 470), Executive Order 11593 (identification and protection of historic properties), and the Archaeological and Historic Preservation Act of 1974 (16 U.S.C. § 469a-1 et seq.); and
(e) Comply with the Lead-Based Paint Poisoning Prevention Act (42 U.S.C. § 4831 and 24 CFR Part 35) which prohibits the use of lead-based paint in construction or rehabilitation of residence structures.

18. Certifications Applicable Only to Federally-Funded Construction Projects

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For all construction projects, SALINAS will:

(a) Not dispose of, modify the use of, or change the terms of the real property title or other interest in the site and facilities without permission and instructions from the awarding agency. Will record the federal awarding agency directives and will include a covenant in the title of real property acquired in whole or in part with federal assistance funds to assure nondiscrimination during the useful life of the project;
(b) Comply with the requirements of the awarding agency with regard to the drafting, review and approval of construction plans and specifications; and
(c) Provide and maintain competent and adequate engineering supervision at the construction site to ensure that the complete work conforms with the approved plans and specifications and will furnish progressive reports and such other information as may be required by the assistance awarding agency or State.

19. Use of Cellular Device While Driving is Prohibited

SALINASs are required to comply with California Vehicle Code sections 23123 and 23123.5. These laws prohibit driving motor vehicle while using an electronic wireless communications device to write, send, or read a text-based communication. Drivers are also prohibited from the use of a wireless telephone without hands-free listening and talking, unless to make an emergency call to 911, law enforcement, or similar services.

20. California Public Records Act and Freedom of Information Act

SALINAS acknowledges that all information submitted in the course of applying for funding under this program, or provided in the course of an entity's grant management activities that are under Federal control, is subject to the Freedom of Information Act (FOIA), 5 U.S.C. § 552, and the California Public Records Act, California Government Code section 6250 et seq. SALINAS should consider these laws and consult its own State and local laws and regulations regarding the release of information when reporting sensitive matters in the grant application, needs assessment, and strategic planning process.

HOMELAND SECURITY GRANT PROGRAM (HSGP) – PROGRAM SPECIFIC ASSURANCES / CERTIFICATIONS

21. Reporting Accusations and Findings of Discrimination

If during the past three years the recipient has been accused of discrimination on any basis the recipient must provide a list of all such proceedings, pending or completed, including outcome and copies of settlement agreements to the DHS Financial Assistance Office and the DHS Office for Civil Rights and Civil Liberties (CRCL) by e-mail at CRCL@hq.dhs.gov or by mail at U.S. Department of Homeland Security, Office for Civil Rights and Civil Liberties, Building 410, Mail Stop #0190, Washington, D.C. 20528.

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In the courts or administrative agencies make a finding of discrimination on grounds of race, color, national origin (including LEP), sex, age, disability, religion, or familial status against the recipient, or the recipients settle a case or matter alleging such discrimination, recipients must forward a copy of the complaint and findings to the DHS Financial Assistance Office and the CRCL by e-mail or mail at the addresses listed above.

The United States has the right to seek judicial enforcement of these obligations.

22. Acknowledgment of Federal Funding from DHS

All recipients must acknowledge their use of federal funding when issuing statements, press releases, requests for proposals, bid invitations, and other documents describing projects or programs funded in whole or in part with federal funds.

23. Activities Conducted Abroad

All recipients must ensure that project activities carried on outside the United States are coordinated as necessary with appropriate government authorities and that appropriate licenses, permits, or approvals are obtained.

24. Best Practices for Collection and Use of Personally Identifiable Information (PII)

DHS defines personally identifiable information (PII) as any information that permits the identity of an individual to be directly or indirectly inferred, including any information that is linked or linkable to that individual. All recipients who collect PII are required to have a publically-available privacy policy that describes standards on the usage and maintenance of PII they collect. Recipients may also find the DHS Privacy Impact Assessments: Privacy Guidance and Privacy template a useful resource respectively.

25. Copyright

All recipients must affix the applicable copyright notices of 17 U.S.C. §§ 401 or 402 and an acknowledgement of U.S. Government sponsorship (including the award number) to any work first produced under federal financial assistance awards.

26. Duplication of Benefits

Any cost allocable to a particular federal financial assistance award provided for in 2 C.F.R. Part 200, Subpart E may not be charged to other federal financial assistance awards to overcome fund deficiencies, to avoid restrictions imposed by federal statutes, regulations, or federal financial assistance award terms and conditions, or for other reasons. However, these prohibitions would not preclude recipients from shifting costs that are allowable under two or more awards in accordance with existing federal statutes, regulations, or the federal financial assistance award terms and conditions.

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27. Energy Policy and Conservation Act

All recipients must comply with the requirements of 42 U.S.C. § 6201 which contain policies relating to energy efficiency that are defined in the state energy conservation plan issued in compliance with this Act.

28. Federal Debt Status

All recipients are required to be non-delinquent in their repayment of any federal debt. Examples of relevant debt include delinquent payroll and other taxes, audit disallowances, and benefit overpayments. See OMB Circular A-129.

29. Fly America Act of 1974

All recipients must comply with Preference for U.S. Flag Air Carriers: (air carriers holding certificates under 49 U.S.C. § 41102) for international air transportation of people and property to the extent that such service is available, in accordance with the International Air Transportation Fair Competitive Practices Act of 1974 (49 U.S.C. § 40118) and the interpretative guidelines issued by the Comptroller General of the United States in the March 31, 1981, amendment to Comptroller General Decision B-138942.

30. Hotel and Motel Fire Safety Act of 1990

In accordance with Section 6 of the Hotel and Motel Fire Safety Act of 1990, all SALINASs must ensure that all conference, meeting, convention, or training space funded in whole or in part with federal funds complies with the fire prevention and control guidelines of the Federal Fire Prevention and Control Act of 1974, as amended, 15 U.S.C. § 2225a.

31. Non-supplanting Requirement

All recipients who receive federal financial assistance awards made under programs that prohibit supplanting by law must ensure that federal funds do not replace (supplant) funds that have been budgeted for the same purpose through non-federal sources.

32. Patents and Intellectual Property Rights

Unless otherwise provided by law, recipients are subject to the Bayh-Dole Act, Pub. L. No. 96-517, as amended, and codified in 35 U.S.C. § 200 et seq. All recipients are subject to the specific requirements governing the development, reporting, and disposition of rights to inventions and patents resulting from financial assistance awards located at 37 C.F.R. Part 401 and the standard patent rights clause located at 37 C.F.R. § 401.14.

33. SAFECOM

All recipients who receive federal financial assistance awards made under programs that provide emergency communication equipment and its related activities must comply with the SAFECOM Guidance for Emergency Communication Grants, including provisions on technical standards that ensure and enhance interoperable communications.

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34. **Terrorist Financing**
    All recipients must comply with Executive Order 13224 and U.S. law that prohibit transactions with, and the provisions of resources and support to, individuals and organizations associated with terrorism. Recipients are legally responsible to ensure compliance with the Order and laws.

35. **Reporting of Matters Related to Recipient Integrity and Performance**
    If the total value of the recipient's currently active grants, cooperative agreements, and procurement contracts from all federal assistance offices exceeds $10,000,000 for any period of time during the period of performance of this federal financial assistance award, you must comply with the requirements set forth in the government-wide Award Term and Condition for Recipient Integrity and Performance Matters located at 2 C.F.R. Part 200, Appendix XII, the full text of which is incorporated here by reference in the award terms and conditions.
36. **USA Patriot Act of 2001**
    All recipients must comply with requirements of the Uniting and Strengthening America by Providing Appropriate Tools Required to Intercept and Obstruct Terrorism Act (USA PATRIOT Act), which amends 18 U.S.C. §§ 175–175c.

37. **Use of DHS Seal, Logo, and Flags**
    All recipients must obtain permission from their DHS Financial Assistance Office, prior to using the DHS seal(s), logos, crests or reproductions of flags or likenesses of DHS agency officials, including use of the United States Coast Guard seal, logo, crests or reproductions of flags or likenesses of Coast Guard officials.

IMPORTANT

The purpose of the assurance is to obtain federal and state financial assistance, including any and all federal and state grants, loans, reimbursement, contracts, etc. SALINAS recognizes and agrees that state financial assistance will be extended based on the representations made in this assurance. This assurance is binding on SALINAS, its successors, transferees, assignees, etc. Failure to comply with any of the above assurances may result in suspension, termination, or reduction of grant funds.

All appropriate documentation, as outlined above, must be maintained on file by SALINAS and available for Cal OES or public scrutiny upon request. Failure to comply with these requirements may result in suspension of payments under the grant or termination of the grant or both and the subrecipient may be ineligible for award of any future grants if the Cal OES determines that any of the following has occurred: (1) the recipient has made false certification, or (2) violates the certification by failing to carry out the requirements as noted above.

All of the language contained within this document must be included in the award documents for all subawards at all tiers. All recipients are bound by the Department of Homeland Security Standard Terms and Conditions 2018, Version 8.1, hereby incorporated by reference, which can be found at:

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https://www.dhs.gov/publication/fy15-dhs-standard-terms-and-conditions.

The undersigned represents that he/she is authorized by SALINAS to enter into this agreement for and on behalf of Applicant.

Signature of Authorized Agent:_____

Printed Name of Authorized Agent:_____

Title: _____Date: _____

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Appendix C -- Form of Reimbursement Request

REIMBURSEMENT REQUEST

Date: _____

UASI Management Team
711 Van Ness Avenue, Suite 420
San Francisco, CA 94102

Re: FY 19 UASI Grant Reimbursement Request

Pursuant to Section 3.10 of the "Agreement between the City and County of San Francisco and the City of SALINAS for the Distribution of FY 2019 UASI Grant Funds" (the "Agreement"), dated NOVEMBER 1, 2019, between the City of SALINAS ("SALINAS") and the City and County of San Francisco, SALINAS hereby requests reimbursement as follows:

Total Amount of Reimbursement Requested in this Request:	$_____
Maximum Amount of Funds Specified in Section 3.2 of the Agreement:	$_____
Total of All Funds Disbursed Prior to this Request:	$_____

SALINAS certifies that:

(a) The total amount of funds requested pursuant to this Reimbursement Request will be used to reimburse SALINAS for Authorized Expenditures, which expenditures are set forth on the attached Schedule 1, to which are attached true and correct copies of all required documentation of such expenditures.

(b) After giving effect to the disbursement requested pursuant to this Reimbursement Request, the Funds disbursed as of the date of this disbursement will not exceed the maximum amount set forth in Section 3.2 of the Agreement, or the not to exceed amounts specified in Appendix A for specific projects and programs.

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(c) The representations, warranties and certifications made in the Agreement are true and correct in all material respects as if made on the date hereof, and SALINAS is in compliance with all Grant Assurances in Appendix B of the Agreement. Furthermore, by signing this report, SALINAS certifies to the best of their knowledge and belief that the report is true, complete and accurate and expenditures, disbursements, and cash receipts are for the purpose and objectives set forth in the terms and conditions of the federal award. SALINAS is aware that any false, fictitious or fraudulent information or the omission of any material fact, may subject SALINAS to criminal civil or administrative penalties for fraud, false statements, false claims or otherwise.

(d) No Event of Default has occurred and is continuing.

(e) The undersigned is an officer of SALINAS authorized to execute this Reimbursement Request on behalf of SALINAS.

Signature of Authorized Agent: _____

Printed Name of Authorized Agent: _____

Title: _____Date: _____

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SCHEDULE 1 TO REQUEST FOR REIMBURSEMENT

The following is an itemized list of Authorized Expenditures for which reimbursement is requested:

Project	Payee	Amount	Description	If final claim for project, check box
				☐
				☐
				☐

The following are attached as part of this Schedule 1 (Please check items that are applicable):

Planning:

- ☐ Invoice/Payroll Charges
- ☐ Payroll Register
- ☐ Cleared Check Payment
- ☐ Job Description
- ☐ Functional Timesheets
- ☐ Deliverables/Progress Reports

Organization:

- ☐ Invoice/Payroll Charges
- ☐ Payroll Register
- ☐ Cleared Check Payment
- ☐ Job Description
- ☐ Functional Timesheets
- ☐ Deliverables/Progress Reports

Equipment:

- ☐ Invoice
- ☐ Cleared Check Payment
- ☐ Purchase Order
- ☐ Packing Slip
- ☐ EHP Approval
- ☐ Watercraft or Aviation
- ☐ Sole Source
- ☐ Performance Bond
- ☐ Equipment Ledger (Please submit electronic copy to Grants Specialist)

Training:

- ☐ Invoice
- ☐ Cleared Check Payment
- ☐ Training Feedback Number
- ☐ EHP Approval
- ☐ Certificates/Proof of Participation
- ☐ Sign In Sheet
- ☐ Agenda

Exercise:

- ☐ Invoice
- ☐ Cleared Check Payment
- ☐ After Action Report
- ☐ EHP Approval
- ☐ Overtime Authorization

For inquiries/questions, please contact:

_____ Phone #: _____ Email: _____

Print Name

Bay Area UASI Grant Management System

Application

08205 - FY19 Bay Area UASI - Final Application

08625 - Regional Monterey County Automated License Plate Recognition Program
UASI Grant Program

Status: Submitted

Original Submitted Date: 10/11/2018 1:30 PM

Last Submitted Date: 10/25/2018 7:09 PM

I certify that this project will be used to supplement existing funds and will not replace (supplant) funds that have been appropriated for the same purpose.* Yes

I have attended the Project Proposal Kick-off meeting or viewed the on-line webinar.* Yes

I have received department head approval to submit this application.* Yes

Department Head Information

Name Amy Christey
FIRST LAST

Title* Chief of Police
Agency* Pacific Grove Police Department
Email* achristey@cityofpacificgrove.org
Phone* 831-648-3143

Applicant Information

Project Lead:

Name:* Mr. (Salutation) Roberto (First Name) (Middle Name) Filice (Last Name)

Title: Deputy Chief

Work Email:* robertof@ci.salinas.ca.us

Work Address:* 222 Lincoln Avenue

* Salinas (City) California (State/Province) 93901 (Postal Code/Zip)

Phone:* 831-758-7335 (Phone) Ext.

Organization Information

Organization Name:* Salinas Police Department

Organization Type: Government

Organization Website: www.salinaspd.com

Address:* 222 Lincoln Avenue

* Salinas (City) California (State/Province) 93901 (Postal Code/Zip)

Phone:* 831-758-7090 Ext.

Fax:

If you are unsure of your agency's DUNS number please contact your finance department.

DUNS Number* 010919447

Funding Categories

Please select the appropriate funding category for your project:*	South Bay Hub
Please describe how your project will benefit more than two operational areas (counties)?	The Monterey County ALPR Program will alert personnel of hot-list or stolen vehicles and maintain searchable collected data; assisting with the prevention and investigation of terrorist attacks, and other criminal investigations, from all over the state. Monterey County receives visitors from all over the world, including many from the other Bay Area UASI counties, proving a beneficial regional tool. Especially to Santa Cruz and San Benito; sharing borders, highways and resources with Monterey. This field is limited to 500 characters.

Project Description

Select a goal:*	Goal 1: Public Safety Information Sharing
Select a Core Capability:*	Intelligence and Information Sharing
Select a nexus to terrorism: This project will enhance regional capacity to:*	Prevent Terrorist Attacks Select all that apply
Describe the nexus to terrorism in detail:*	ALPR allows for real-time collection, processing, and dissemination. ALPR will help not only identify hot-listed vehicles and assist terrorist investigations, but also recognize movement patterns consistent with an individual acting within a terrorism pre-planning cycle prior to an attack. 300 Characters Maximum
Project Summary- Provide a brief description of your project: For planning projects include a final deliverable.*	The proposed project would create a Regional ALPR Program. Monterey County attracts millions from all over the world and is a host to several major international events; home to a major agricultural industry that feeds the nation; and has notable state thoroughfares, Highway 1 and 101. The proposed project includes the purchase of 12 cameras, licenses, initial storage and software; however, recurring fees will be covered by the cities. Cameras will be installed at major intersections and access points. Participating agencies will coordinate with each other, DOJ, and NCRIC, which will allow for information sharing, alerting agencies to vehicles on hot-lists, assisting with terrorist and criminal investigations, and intelligence gathering. This field is limited to 750 characters.
For equipment projects, please provide an inventory of the requested item currently used in the county:*	03OE-01-ALPR ? System, Automated License Plate Recognition

Compliance Requirements

Sole Source Approval

This project will require Sole Source Approval	Sole Source Request Form

Enviromental and Historic Preservation Request
Required for:
- *Field Based Training*
- *Field Based Exercise*
- *Non Portable Equipment on this list*

Yes
Enviromental and Historic Preservation Screening Form

This project will require an Environmental & Historic Preservation Form

Watercraft Projects
If project includes purchase of watercraft or watercraft equipment
the California Office of Emergency Services (CalOES) has a seperate request form to complete.

This project will require a Watercraft Request Form Watercraft Request Form

Aviation Projects
If project includes the purchase of aircraft or aviation equipment
the California Office of Emergency Services (CalOES) has a seperate request form to complete.

This project will require an Aviation Request Form Aviation Request Form

Performance bonds
Required for:
- *Vehicles*
- *Aircraft*
- *Watercraft*
- *Equipment costing over $250,000*

This project will require a Performance Bond

Personnel Declaration
If project includes hiring personnel, this field is required.

This project will require grant funded personnel (no supplanting)

Project Timeline

Project Dates* 11/01/2019 Project Start Date — 12/31/2020 Project End Date

Milestones

Milestone	Please Describe	Estimated Completion Date
(EQUIPMENT) Create Specifications		11/22/2019
(EQUIPMENT) RFP Release		12/02/2019
(EQUIPMENT) EHP Request Form Submitted to UASI		02/14/2020
(EQUIPMENT) Contract Award		04/01/2020
(EQUIPMENT) Receive Equipment		06/30/2020
(EQUIPMENT) Site Installation		07/31/2020
(EQUIPMENT) Test Equipment		09/30/2020
(EQUIPMENT) System Acceptance		10/30/2020
(EQUIPMENT) Equipment Inventory Work Sheet		11/30/2020
(EQUIPMENT) Project Completion		12/31/2020

Equipment

Select a category of FEMA Authorized Equipment	Select the appropriate AEL #	Quantity	Price Each	Total
Other Authorized Equipment	03OE-01-ALPR System, Automated License Plate Recognition	12.0	$16,666.67	$200,000.04
			$16,666.67	$200,000.04

Planning

Category	Planning Total
Planning	$0.00

Organization

Category	Organization Total
Organizations	$0.00

Equipment

Category	Equipment Total
Equipment	$200,000.04

Training

Category	Training Total
Training	$0.00

Exercise

Category	Exercises Total
Exercise	$0.00

Total

Total Project Cost	$200,000.04

File #: ID#19-650, Version: 1

Measure X Funding Agreement Amendment No. 1

Approve a Resolution approving Amendment No. 1 for the Measure X Master Programs Funding Agreement between the Transportation Agency for Monterey county (TAMC) and the City of Salinas.

CITY OF SALINAS
COUNCIL STAFF REPORT

DATE: **DECEMBER 3, 2019**

DEPARTMENT: **PUBLIC WORKS**

FROM: **DAVID JACOBS P.E., L.S., PUBLIC WORKS DIRECTOR**

THRU: **RODGER A. OLDS P.E., CITY ENGINEER**

BY: **EDA HERRERA P.E., SENIOR CIVIL ENGINEER**

TITLE: **MEASURE X FUNDING AGREEMENT AMENDMENT NO. 1**

RECOMMENDED MOTION:

A motion to approve a resolution approving Amendment No. 1 for the Measure X Master Programs Funding Agreement between the Transportation Agency for Monterey County (TAMC) and the City of Salinas.

RECOMMENDATION:

It is recommended that the City Council approve a resolution to approve Amendment No. 1 for the Measure X Master Programs Funding Agreement to revise the Measure X Maintenance of Effort calculation.

BACKGROUND:

Voters passed Measure X, a 3/8 cent local sales tax, in November 2016. TAMC is the responsible agency for the administration of the Measure X funds throughout the county, and each agency within Monterey County is required to have a cost sharing agreement with TAMC in order to receive their share of the Measure X Local Streets and Roads revenue. On June 20, 2017, the Salinas City Council approved the Measure X Master Programs Funding Agreement between the City of Salinas and TAMC. The agreement requires the City of Salinas to submit reports annually to TAMC regarding the use of Measure X funds by the City. It has been requested by TAMC that Amendment No. 1 be approved by the City prior to the next annual report. The next annual report is due to TAMC by December 31, 2019.

Maintenance of Effort is a standard requirement of transportation related sales tax measures to ensure that additional revenue generated is used to increase transportation funding levels, rather than supplement other non-transportation related programs. This is done by determining the level of discretionary funding spent on transportation by an agency prior to the sales tax measure and requiring that the agency continue that same level of discretionary funding for transportation

throughout the life of the measure. TAMC's Board of Directors adopted an ordinance to clarify and modify the Measure X Maintenance of Effort calculation on October 23, 2019.

The proposed amendment obligates the City to expend each fiscal year from its general fund for street and highway purposes an amount not less than the annual average of its expenditures from its general fund during the 2009-10, 2010-11, and 2011-12 fiscal years, but not less than what was expended in 2016-17 (when Measure X was passed).

The Maintenance of Effort amount calculated by TAMC for the City of Salinas is $3,984,744. This amount will be adjusted annually per the Engineering News Record construction cost index. Sufficient funds are budgeted in the currently approved City budget to meet this Maintenance of Effort requirement.

CEQA CONSIDERATION:

Not a Project. The City of Salinas has determined that the proposed action is not a project as defined by the California Environmental Quality Act (CEQA) (CEQA Guidelines Section 15378). In addition, CEQA Guidelines Section 15061 includes the general rule that CEQA applies only to activities which have the potential for causing a significant effect on the environment. Where it can be seen with certainty that there is no possibility that the activity in question may have a significant effect on the environment, the activity is not subject to CEQA. Because the proposed action and this matter have no potential to cause any effect on the environment, or because it falls within a category of activities excluded as projects pursuant to CEQA Guidelines section 15378, this matter is not a project. Because the matter does not cause a direct or foreseeable indirect physical change on or in the environment, this matter is not a project. Any subsequent discretionary projects resulting from this action will be assessed for CEQA applicability.

STRATEGIC PLAN INITIATIVE:

This item relates to the strategic plan of "Well planned City and excellent infrastructure". The Measure X funding will contribute to maintenance and repair of City Roads, pedestrian and bicycle improvements in City right of way.

DEPARTMENTAL COORDINATION:

The Public Works Department and Finance Department work closely during the annual reporting, daily accounting and annual audits to comply with the Measure X Funding Agreement.

FISCAL AND SUSTAINABILITY IMPACT:

The Maintenance of Effort amount is expended from the General Fund for street and highway purposes, an amount not less than the annual average of its expenditures from its general fund during the 2009-10, 2010-11 and, 2001-12 fiscal years, but not less than what was expended in 2016-17 (when Measure X was passed), as reported to the controller pursuant to Streets and Highways Code Section 2151. The baseline maintenance of effort is $3,984,744, which will be adjusted annually per the Engineering News Record construction cost index.

Currently Measure X funds are assisting with funding the following CIP projects:

CIP NUMBER	PROJECT TITLE	FUNDING SOURCE	
9006	Lincoln Ave. Storm Drain Improvements	2510	MX
9071	Williams Rd U.D./Street/Streetscape & Median Island	2510	MX
9094	Priority Traffic Signals	2510	MX
9103	Geographic Information Systems	2510	MX
9163	Traffic Calming Improvements	2510	MX
9216	ADA Pedestrian Ramp	2510	MX
9218	Bardin Rd Safe Route to School	2510	MX
9219	E Alvin/Linwood/Maryal Routes	2510	MX
9220	E Laurel Dr Sidewalk & Lights	2510	MX
9253	ADA Traffic Signal Upgrades	2510	MX
9267	Streetlight Installation	2510	MX
9358	T/S Williams Rd & Garner Avenue	2510	MX
9981	Slurry Seal Improvements	2510	MX
9090	Downtown Complete Streets	5202	MX Bond Proceeds
9094	Priority Traffic Signals	5202	MX Bond Proceeds
9163	Traffic Calming Improvements	5202	MX Bond Proceeds
9216	ADA Pedestrian Ramp	5202	MX Bond Proceeds
9218	Bardin Rd Safe Route to School	5202	MX Bond Proceeds
9220	E Laurel Dr Sidewalk & Lights	5202	MX Bond Proceeds
9227	T/S Constitution & Las Casitas	5202	MX Bond Proceeds
9230	Vibrancy Plan Infrastructure	5202	MX Bond Proceeds
9253	ADA Traffic Signal Upgrades	5202	MX Bond Proceeds
9268	T/S E Laurel and St Edwards	5202	MX Bond Proceeds
9438	Annual City Sts Rehab Program (MVF Tax 7360)	5202	MX Bond Proceeds
9510	E Boronda Rd Traffic Congestion Relief	5202	MX Bond Proceeds
9654	Traffic Signal Installation	5202	MX Bond Proceeds
9720	Sidewalk & Drainage Repairs	5202	MX Bond Proceeds

ATTACHMENTS:
Resolution
Amendment No. 1

RESOLUTION No. _____ (N.C.S.)

A RESOLUTION OF THE SALINAS CITY COUNCIL APPROVING AMENDMENT NO. 1 FOR THE MEASURE X AGREEMENT MASTER PROGRAMS FUNDING AGREEMENT

WHEREAS, on November 2016, voters passed a 3/8% local sales tax thereby providing the City of Salinas with Measure X proceeds; and,

WHEREAS, on June 20, 2017 City Council authorized the Mayor to execute two Measure X related Agreements: Master Programs Funding Agreement and the Agreement for Allocation of Funding approved by the Transportation Agency Board of Directors; and

WHEREAS, on October 23, 2019 the Transportation Agency of Monterey County (TAMC) Board of Directors approved adoption of Ordinance 2019-01 to revise the method of calculating the existing required Maintenance of Effort; and

WHEREAS, on October 17, 2019, the City of Salinas received a letter from TAMC requesting approval of Amendment No. 1 of the Measure X Master Programs Funding Agreement prior to the December 31, 2019 annual report.

NOW, THEREFORE, BE IT RESOLVED that the Salinas City Council hereby approves Amendment No 1 for the Measure X Master Programs Funding Agreement between TAMC and the City of Salinas and authorizes the Mayor to sign said amendment for and on behalf of the City of Salinas.

PASSED AND APPROVED this 3rd day of December 2019 by the following vote:

AYES:

NOES:

ABSENT:

ABSTAIN:

APPROVED:

_____

Joe Gunter, Mayor

ATTEST:

_____

Patricia M. Barajas, City Clerk

AMENDMENT #1 TO MEASURE X MASTER PROGRAMS FUNDING AGREEMENT BETWEEN THE TRANSPORTATION AGENCY FOR MONTEREY COUNTY AND SALINAS

THIS AMENDMENT No. 1 to the agreement originally dated June 20, 2017, between the Transportation Agency for Monterey County, hereinafter referred to as "TAMC," and Salinas, hereinafter referred to as "Jurisdiction," is hereby entered into between TAMC and the Jurisdiction.

R E C I T A L S:

A. **WHEREAS**, TAMC and Jurisdiction entered into a Measure X Master Programs Funding Agreement on June 20, 2017, hereinafter referred to as "Agreement;"

B. **WHEREAS,** both the Agreement and Measure X implementing ordinance (Ordinance 2016-01) included a Maintenance of Effort requirement defined as an average of the prior three years spent for local transportation purposes; and

C. **WHEREAS,** subsequent to the adoption of Measure X, the State of California adopted "SB 1," which provided, among other things, funding to local jurisdictions based upon a different Maintenance of Effort calculation, thus creating potential confusion and conflicts in such calculations for Measure X jurisdictions; and

D. **WHEREAS,** TAMC also received feedback from local jurisdictions during the Fiscal Year 2017/18 Measure X Annual Reporting period that this Maintenance of Effort calculation would penalize local jurisdictions that make large one-time investments in transportation maintenance improvements;

E. **WHEREAS,** on July 16, 2019, the Measure X Citizens Oversight Committee recommended that the Maintenance of Effort definition be revised to "an amount not less than the annual average of its expenditures from its general fund during the preceding three fiscal years 2009-10, 2010-11, and 2011-12 fiscal years, but not less than what was expended in 2016-17 (when Measure X passed), as reported to the Controller pursuant to Streets and Highways Code section 2151. This baseline amount will be indexed annually to the Engineering News Record construction index.";

F. **WHEREAS**, on October 23, 2019, the TAMC Board of Directors, with support from the Measure X Citizens Oversight Committee and Jurisdiction, duly approved Ordinance 2019-01, which amended the Measure X implementing ordinance (Ordinance 2016-01) to revise the definition for calculating the Maintenance of Effort, as described above; and

G. **WHEREAS,** TAMC and Jurisdiction desire to amend the Agreement to make the Maintenance of Effort definition consistent with Ordinance 2019-01.

NOW, THEREFORE, the parties agree to amend the Agreement as follows:

1. Article I, Paragraph 4

The definition of "Maintenance of Effort Report" shall be replaced in its entirety with the following:

Maintenance of Effort Report: A report to be adopted by a jurisdiction, no later than December 31 of each year the Measure X tax is in effect, verifying that Measure X funds received by the reporting jurisdiction have been used to augment, and not supplant, local resources spent in the fiscal year, as described in Article IV Section A.6. The amount of local resources spent for the fiscal year is calculated as the annual average of its expenditures from its general fund during the 2009-10, 2010-11, and 2011-12 fiscal years, but not less than what was expended in 2016-17 (when Measure X passed), as reported to the Controller pursuant to Streets and Highways Code section 2151. This baseline amount will be indexed annually to the Engineering News Record construction index."

2. Article IV, Section A, Paragraph 6

Article IV, Section A, Paragraph 6 shall be replaced in its entirety with the following:

6. RECIPIENT shall certify, no later than August 31, 2017 and December 31st of each year thereafter, in an annual Maintenance of Effort Report verification that these Measure X funds are used to augment and not supplant local resources spent. RECIPIENT shall expend each fiscal year from its general fund for street and highway purposes an amount not less than the annual average of its expenditures from its general fund during the 2009-10, 2010-11, and 2011-12 fiscal years, but not less than what was expended in 2016-17 (when Measure X passed), as reported to the Controller pursuant to Streets and Highways Code section 2151 ("Maintenance of Effort"). This baseline amount will be indexed annually to the Engineering News Record construction index."

3. REMAINDER OF TERMS UNCHANGED

All other terms of the Agreement remain in full effect.

An executed copy of this Amendment No. 1 shall be attached to the Agreement and shall be incorporated as if fully set forth therein.

IN WITNESS WHEREOF, the parties hereto have executed this Amendment No. 1 to the Agreement with Consultant.

TAMC :

_____
Debra L. Hale
Executive Director

_____
(date)

APPROVED AS TO FORM:

_____
TAMC Counsel

_____
(date)

JURISDICTION:

_____
Joe Gunter,
Mayor

_____
(date)

APPROVED AS TO FORM:

_____
Christopher A. Callihan,
City Attorney

_____
(date)