MOUNTAIN VALLEY PROJECT

Final Environmental Impact Report

SCH# 93043036

August 1998

Prepared for

City of Salinas

Department of Community Development

ESA Environmental Science Associates

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MOUNTAIN VALLEY PROJECT
FINAL ENVIRONMENTAL IMPACT REPORT

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1.0 INTRODUCTION

1.1 EIR PURPOSE

This environmental impact report has been prepared in order to:

- Satisfy the requirements of the California Environmental Quality Act (CEQA);
- Inform the public and responsible and/or interested public agencies of the potential project and cumulative environmental effects of the proposed Mountain Valley project, and of possible measures to mitigate potentially significant environmental effects; and
- Enable the Salinas Planning Commission, Salinas City Council, and the Monterey County Local Agency Formation Commission (LAFCO) to consider courses of action on the proposed project, including the proposed General Plan amendment, Precise Plan adoption, zoning reclassification, amendment of the Sphere of Influence, and reorganization.

1.2 EIR SCOPE

This EIR identifies and analyzes potential impacts of the proposed approximately 200-acre, 853-dwelling-unit Mountain Valley residential project, by itself and in the context of cumulative development. In evaluating the proposed project effects in a cumulative context, this EIR has analyzed applicable development projects for sites in the project vicinity that the City believes are reasonably foreseeable, including those approved for construction.

The EIR also analyzes alternatives to the proposed project. The No Project Alternative analyzes the existing conditions plus cumulative development in the project vicinity, but without the project. A 160-acre Alternative analyzes a reduced-scale development that would not require adjustment of the Salinas Sphere of Influence, and a General Plan Alternative analyzes residential development at increased densities from that proposed by the project, as currently designated in the Salinas *General Plan*.

1.3 CEQA EIR PROCESS

NOTICE OF PREPARATION

In accordance with Section 15082 of CEQA Guidelines, the City of Salinas, as the Lead Agency, prepared an Initial Study and Notice of Preparation (NOP) of an EIR. The NOP was circulated

2.0 SUMMARY

2.1 PROJECT DESCRIPTION

The proposed project would include the following discretionary approvals:

- Certification of this EIR;
- An amendment to the Salinas *General Plan* land use diagram to reflect predominantly residential medium-density with some residential low-density as well as public/semipublic and park land uses on the site. The current *General Plan* land use diagram shows predominantly residential low-density with some residential medium-density, some residential high-density, and park land uses;
- Adoption of a Precise Plan;
- Pre-zoning of the site consistent with the Precise Plan;
- An amendment to the City of Salinas Sphere of Influence to enlarge the Sphere by approximately 36 acres (to be approved by the Monterey County Local Agency Formation Commission (LAFCO));
- Reorganization involving 199.7 acres of land including annexation to the City of Salinas, attachment to the Monterey Regional County Sanitation District - Monterey Regional Water Pollution Control Agency, and detachment from the Salinas Rural Fire Protection District and the Monterey County Resource Conservation District; and
- Subdivision approval, public facilities assessments intended to provide infrastructure improvements, donation in fee title of parklands and an elementary school site, and related actions intended to implement the proposed project.

The approximately 36 acres of the project site that is outside the City of Salinas' Sphere of Influence, as designated by LAFCO, includes the proposed roadway that would border the site on the east, Freedom Parkway. Other proposed improvements outside the current Sphere of Influence includes single-family residential lots, a portion of a community park, a portion of an elementary school, and a lot for a water well. The Freedom Parkway and East Alisal Street roadway rights-of-ways would serve as a buffer area between the residential uses and agricultural uses to the east and south. All arterial routes surrounding the project site's boundary would contain a vegetation buffer, a sound wall to reduce traffic noise, a bike lane, and a pedestrian path.

The proposed Precise Plan calls for development of 853 single-family dwelling units and one community park. The single-family dwellings would be constructed in six neighborhoods built around an internal roadway network. The average density of single-family units would be 5.6 units per gross acre. The project includes 661 lots ranging in size from 4,000 to 4,500 square feet, including 102 lots (at 4,000 square feet) to be sold as inclusionary housing units. A total of 192 lots would be included at a lot size of 6,500 square feet to be sold at the market rate. The project also would include donation in fee title of a community park of about 21.5 acres and donation in fee title of a 9-acre school site to the Alisal School district. Park improvements consisting of lawn and irrigation would be installed as part of the project. The remaining park improvements would be the responsibility of the City. Two acres would also be sold to the School District for expansion of the Bardin Elementary School site. Semipublic lands are also proposed for dedication, including 1.7 acres for a stormwater detention basin and three 20,000 square foot sites and one 10,000 square foot site for water well lots.

Access to the project site would be from Williams Road, the proposed Freedom Parkway (south of Williams Road), and the proposed East Alisal Street (east of Bardin Road). Access also would be available via three existing streets, Countryside Drive, Argentine Drive, and Del Monte Avenue, from the west and northwest. Williams Road would be widened adjacent to the project site. In addition to connections between the project site and the surrounding roadways, a series of internal streets would be constructed. The streets would extend Countryside Drive, Argentine Drive, and Del Monte Avenue onto the site and would link those three streets with the proposed Freedom Parkway and East Alisal Street extensions along the east and south sides of the site. The proposed project would include a series of "local minor" street loops and cul-de-sacs, connecting to the internal street network, around which the single-family residences would be built. Pedestrian pathways would connect some of the cul-de-sacs with the local street network.

In addition to the roadway network, the proposed project would include development of utility services to supply the site. Four new wells are proposed that would be drilled on-site to supply drinking water and water for fire-fighting. A water supply distribution network would also be constructed. Alco Water Service would use the wells to provide water service to the development.

The project sponsor would be responsible for agreements with local utilities to provide gas and electric and telephone service. In accordance with requirements of the Monterey County Water Resources Agency, storm water siltation/detention would be provided as part of the project. The proposed storm water siltation/detention basin would be a rectangular 1.7-acre site in the

southwest corner of the project site, adjacent to Bardin School. It would be connected to a storm drain network that would be constructed by the sponsor. A sanitary sewer system also would be built, and would be linked to the Salinas Municipal wastewater system. At a projected 3.2 persons per unit, the proposed project would have a buildout population of about 2,730 persons.

2.2 IMPACTS AND MITIGATION MEASURES

Project impacts identified in this EIR are summarized in Table S-1, Summary of Impacts and Mitigation Measures, located at the end of this chapter. This table lists impacts and mitigation measures in three major categories: significant impacts that would remain significant even with mitigation (significant unavoidable impacts); significant impacts that can be mitigated to a level of less-than-significance; and impacts that would not be significant. For each significant impact, the table includes a summary of mitigation measure(s) identified by the EIR, followed by a column that indicates whether the impact would be mitigated to a less-than-significant level. Please refer to Chapter 4.0, Environmental Setting, Impacts, and Mitigation Measures for a complete discussion of each impact and associated mitigation.

2.3 ALTERNATIVES TO THE PROPOSED PROJECT

NO-PROJECT

The No-Project Alternative would involve no change in land use on the site. Existing agricultural uses would remain, and no residential uses would be constructed. The project site would not be annexed to the City of Salinas, nor would any of the other changes in governmental organization occur. This alternative would not rule out future development of the site (most likely as residential, given surrounding land uses).

With this alternative, none of the project impacts would occur. Existing conditions would remain much as described in the Setting portions of Chapter 4.0 of this report. Agricultural land would not be converted to urban use. Groundwater pumping and water consumption would remain as at present (that is, overdrafting would be greater than with the proposed project), subject to any future changes that may be required by the Monterey County Water Resources Agency.

160-ACRE ALTERNATIVE

With this alternative, only that portion of the site within the existing City of Salinas Sphere of Influence would be developed, limiting the size of the site to about 160 acres. The principal change in site configuration would be that the eastern project boundary would be moved westerly, compared to the proposed project, to coincide with the Sphere of Influence boundary. This alternative would result in approximately 691 housing units, which reflects the proposed project's average number of housing units (5.6 units per gross acreage) multiplied by the gross area of residential development (123.4 acres). This alternative would result in development of about 19 percent fewer units (691 vs. 853) than proposed under the project. Based on 3.2 persons per unit, population would be about 2,210 (compared to about 2,730 with the project).

Because this alternative would not extend the project area as far east as the existing Freedom Parkway / Williams Road intersection, this alternative would result in a "jog" between the Freedom/Williams intersection and the easterly project intersection. East Alisal Street would continue to be extended east of Bardin Road as far as the project's eastern boundary. The existing Sphere of Influence includes the proposed project's East Alisal Street public right-of-way. Other components, including the internal circulation network and infrastructure improvements, would be similar to those proposed under the project.

This alternative would not require adjustment of the Salinas Sphere of Influence by the Monterey County Local Agency Formation Commission (LAFCO). It would require other governmental reorganization, including annexation to the City of Salinas and annexation to and detachment from the same service districts and public services as the proposed project. About 160 acres of agricultural land, mostly prime farmland, would be converted to urban use; this would be a significant, unavoidable effect, as with the proposed project. Residential water consumption and groundwater pumping for residential water consumption would be marginally less than with the proposed project, but within the 200-acre project site, overall water consumption would be incrementally greater than with the proposed project, since less agriculture would be removed from production.

The 160-Acre alternative would generate a total of about 7,885 daily trips, including about 793 weekday p.m. peak-hour trips (vs. about 9,495 daily trips and about 945 p.m. peak-hour trips with the project). Intersection levels of service resulting from traffic generated by this alternative would be the same as with the project, as would freeway levels of service. As with the project, this alternative would incrementally worsen existing poor operations at three intersections and would contribute to a significant cumulative effect at a fourth. The intersection

connecting Williams Road with Boulevard A would operate at LOS B with traffic from this alternative, as with the project, with mitigation (also required with the project) in the form of signalization. Air quality effects due to project operation would be less than significant, as with the project. Demand for public services would be comparable to that of the project. Due to fewer units, and subsequently fewer potential students, the effects on the school districts would be reduced as compared to the proposed project. Cumulative traffic noise effects along Williams Road would be significant and unavoidable, as with the project.

Because of the reduced development density, this alternative would be the environmentally superior alternative among the three alternatives that would involve project construction.

GENERAL PLAN ALTERNATIVE

This alternative would retain the acreage of the proposed project (199.7) but the site would have a different mix of residential units based on the Salinas *General Plan* policy 3.3.K. There would be a total of 987 units built with this alternative, about 16 percent more than under the proposed project. Those units would include 545 single-family, 99 medium-density, and 461 high-density multi-family units, including 118 affordable multi-family units. Based on 3.2 persons per unit, population would be about 3,158 (compared to about 2,730 with the project). Park and school site acreage would be the same as the project.

The General Plan alternative would generate a total of about 9,077 daily trips, including about 950 weekday p.m. peak-hour trips (vs. about 9,495 daily about 945 p.m. peak-hour trips with the project). Intersection levels of service resulting from traffic generated by this alternative generally would be the same as with the project, as would freeway levels of service. Traffic generated by this alternative would cause incremental increases in delay at other intersections, compared to the project. Air quality effects due to project operation would be ~~less than~~ significant, in contrast to the project. ~~as with the project.~~ Cumulative traffic noise effects along Williams Road would be significant and unavoidable, as with the project.

This alternative would remove approximately 199.7 acres of agricultural land from production and convert it to urban use. This would be a significant, unavoidable effect, as with the project. Impacts related to water consumption and groundwater pumping would be greater than with the project because of the greater population. Water consumption would be greater than with the proposed project, but still about 25 percent less than at present, and this impact would be less than significant, as with the project. Air quality impacts would be somewhat more severe than

with the project, due to the increase in vehicle trips, but would be less than significant. Demand for public services and utilities would be somewhat greater than under the project; effects on the school districts that would serve the site would be greater than the proposed project.

The General Plan Alternative was chosen for analysis to show the potential impacts of a plan that would be more consistent with existing City land use policies and designations. The net effects from General Plan Alternative buildout would be greater than the proposed project.

TABLE S-1: SUMMARY OF IMPACTS AND MITIGATION MEASURES

A. SIGNIFICANT UNAVOIDABLE IMPACTS

SIGNIFICANT IMPACT	MITIGATION MEASURES	LEVEL OF SIGNIFICANCE AFTER MITIGATION
4.1 Land Use, Plans and Polices, and Zoning		
4.1.1: Implementation of the proposed project would alter the existing on-site land uses. The project would convert 199.7 acres of prime agricultural land to urban residential use. [4.1-21]	**4.1.1** None available.	**Unavoidable significant impact**
4.1.2: Combined with the Williams Ranch project north of Williams Road and other projects in the Salinas vicinity, the cumulative impact on agricultural lands would be a reduction in farmland availability. [4.1-22]	**4.1.2** None available.	**Unavoidable significant cumulative impact**
4.2 Traffic and Circulation		
4.2.1: The project, along with cumulative development, would result in a deterioration in the level of service for minor street movements at unsignalized intersections in the project vicinity.		
4.2.1a: U.S. 101 NB Ramps / Sanborn Road. The proposed project would cause the minor street turn movement at the unsignalized intersection of Sanborn Road and U.S. 101 Northbound Ramps, currently operating at LOS F, to experience increased delays in the future, during the weekday p.m. peak hour. Cumulative plus project-generated traffic would further increase delays. [4.2-12]	**4.2.1a** Signalization would avoid this impact; however, no funding is available, and the project contribution would not be substantial enough to require the project sponsor to install a signal.	**Unavoidable significant cumulative impact**

How? to signalize

TABLE S-1: SUMMARY OF IMPACTS AND MITIGATION MEASURES (Continued)

A. SIGNIFICANT UNAVOIDABLE IMPACTS

SIGNIFICANT IMPACT	MITIGATION MEASURES	LEVEL OF SIGNIFICANCE AFTER MITIGATION
4.2.1b: Williams Road / East Laurel Drive. The proposed project would cause the minor street turn movement at the unsignalized intersection of Williams Road and East Laurel Drive, currently operating at LOS F, to experience increased delays in the future, during the weekday p.m. peak hour. Cumulative plus project-generated traffic would further increase delays. [4.2-14]	**4.2.1b** Signalization would avoid this impact; however, no funding is available, and the project contribution would not be substantial enough to require the project sponsor to install a signal.	**Unavoidable significant cumulative impact**
4.2.1c: Williams Road / Garner Avenue. The proposed project would cause the minor street turn movement at the unsignalized intersection of Williams Road and Garner Avenue, currently operating at LOS F, to experience increased delays in the future, during the weekday p.m. peak hour. Cumulative plus project-generated traffic would further increase delays. [4.2-16]	**4.2.1c** Signalization would avoid this impact; however, no funding is available, and the project contribution would not be substantial enough to require the project sponsor to install a signal.	**Unavoidable significant cumulative impact**
4.2.3: Sanborn Road / Alisal Street. The proposed project would cause the intersection of North Sanborn Road and East Alisal Street to degrade incrementally from LOS A (v/c = 0.53) at present to LOS A (v/c = 0.58) with traffic from the proposed project, during the weekday p.m. peak hour. Project-generated traffic would not cause any change in the level of service. With traffic from cumulative development, the intersection would degrade to LOS E (v/c = 0.92).(Cumulative impact, Less-than-significant project impact) [4.2-18]	**4.2.3** No mitigation is required for the project impact. Mitigation of the cumulative impact could be achieved by providing a second eastbound left turn lane from East Alisal Street onto northbound North Sanborn Road unless additional study does not confirm the need for the additional turn lane. No funding is available for this mitigation measure.	**Less-than-significant project impact; Unavoidable significant cumulative impact**

[4.1-22] = Page in text where impact appears.

TABLE S-1: SUMMARY OF IMPACTS AND MITIGATION MEASURES (Continued)

A. SIGNIFICANT UNAVOIDABLE IMPACTS

SIGNIFICANT IMPACT	MITIGATION MEASURES	LEVEL OF SIGNIFICANCE AFTER MITIGATION
4.2.5b: If Del Monte Avenue were not used as an access route between Williams Road and the proposed project, project-generated traffic would increase the daily weekday traffic volumes on Countryside Drive, and possibly Argentine Drive, beyond the threshold for local residential collector streets of 3,000 vehicles per day. [4.2-24]	**4.2.5b** Implementation of traffic calming measures such as those identified in Measure 4.2.5a ~~4.2.4a~~ would reduce traffic volumes on Countryside Drive and, potentially, Argentine Drive. However, it is unlikely that volumes on Countryside Drive would be reduced below the 3,000-vehicles-per-day threshold.	**Unavoidable significant impact**
4.5 Air Quality		
4.5.1: Construction activities would temporarily generate criteria air pollutants, particularly PM-10, over the expected six-year construction period. [4.5-9]	**4.5.1a** The project sponsor shall require site preparation and home building contractors to implement a dust control program during construction to reduce the contribution of project construction to local PM-10 concentrations, including watering active sites at least twice daily and more often when winds exceed 15 mph; prohibiting grading during high winds; paving interior roads as soon as practicable; enforcing a 15-mph speed limit on unpaved surfaces; replacing ground cover in disturbed areas as quickly as possible; enclosing, covering or otherwise reducing dust from exposed stock piles and inactive construction areas; sweeping streets daily if soils are carried off the site; covering haul trucks or maintaining two feet of freeboard; sweeping spilled dirt or debris; installing wheel washers for exiting trucks; posting the MBUAPCD telephone complaint number; designating person(s) to oversee dust control; and maintaining and operating construction equipment so as to minimize particulates from exhaust.	**Unavoidable significant impact**

[4.1-22] - Page in text where impact appears.

TABLE S-1: SUMMARY OF IMPACTS AND MITIGATION MEASURES (Continued)

A. SIGNIFICANT UNAVOIDABLE IMPACTS

SIGNIFICANT IMPACT	MITIGATION MEASURES	LEVEL OF SIGNIFICANCE AFTER MITIGATION
4.7 Noise		
4.7.2: Project-generated vehicular traffic would result in an increase in ambient noise levels on nearby roadways used to access the site. (Cumulative impact) [4.7-8]	**4.7.2** No mitigation is available for increased traffic noise levels along already developed portions of Williams Road.	This would be a **significant, unavoidable cumulative effect**; however, the project's contribution to this effect would be incremental (maximum of two decibels at Williams east and west of Del Monte).

[4.1-22] - Page in text where impact appears.

TABLE S-1: SUMMARY OF IMPACTS AND MITIGATION MEASURES (Continued)

B. SIGNIFICANT IMPACTS MITIGABLE TO A LEVEL OF INSIGNIFICANCE

SIGNIFICANT IMPACT	MITIGATION MEASURES	LEVEL OF SIGNIFICANCE AFTER MITIGATION
4.1 Land Use, Plans and Polices, and Zoning		
4.1.3: The proposed project could be inconsistent with the surrounding agricultural land uses and could generate nuisance complaints by residents due to agricultural noise and dust. [4.1-23]	**4.1.3a** The Freedom Parkway and East Alisal Street rights-of-way (approximately 110 feet each) shall be removed from agricultural production by the project sponsor prior to initiation of grading or construction activities. **4.1.3b** The proposed agricultural use disclosure notice shall be provided to prospective home site purchasers prior to closing of home purchase; and shall include buyer(s) signature. Form and content of said notice shall be subject to approval by the Community Development Department prior to approval of the first final subdivision map, and each said notice shall be recorded. In addition, a notice shall be recorded for the entire project site.	**Less-than-significant.**
4.2 Traffic and Circulation		
4.2.1: The project, along with cumulative development, would result in a deterioration in the level of service for minor street movements at unsignalized intersections in the project vicinity.		
4.2.1d: The project, along with cumulative development, would result in a deterioration in the level of service for minor street movements at unsignalized intersections in the project vicinity. [4.2-17]	**4.2.1d** No TFO project is planned for the intersection of Airport Boulevard and Terven Avenue. However, the City has secured funding for the installation of a traffic signal at this intersection, and also at the Airport – De La Torre intersection. Those projects are designed and currently under construction. These signals are expected to be completed by summer of 1998.	**Less-than-significant.**

[4.1-22] - Page in text where impact appears.

TABLE S-1: SUMMARY OF IMPACTS AND MITIGATION MEASURES (Continued)

B. SIGNIFICANT IMPACTS MITIGABLE TO A LEVEL OF INSIGNIFICANCE

SIGNIFICANT IMPACT		MITIGATION MEASURES	LEVEL OF SIGNIFICANCE AFTER MITIGATION
4.2.2: Williams Road / Boulevard A.. Project-generated traffic would result in an unacceptable level of service (LOS F in the p.m. peak hour) for the minor street turn movement at the future unsignalized intersection of Williams Road and Boulevard A, constructed as part of the project. [4.2-17]	**4.2.2**	No TFO project is planned for the intersection of Williams Road and Boulevard A. The project sponsor shall install a traffic signal at the intersection prior to issuance of the first certificate of occupancy.	**Less-than-significant.**
4.2.6: Project-generated transit ridership, along with project and cumulative traffic on Williams Road, could impede transit service on Williams Road. [4.2-25]	**4.2.6**	The project sponsor shall construct a bus turnout on the project's Williams Road frontage to meet the requirements of Monterey-Salinas Transit.	**Less-than-significant.**
4.3 Public Services and Utilities			
4.3.3: The proposed project would increase the demand for, and frequency of, fire protection services and emergency responses to the project site. [4.3-9]	**4.3.3**	Construction of Fire Station No. 5 shall be completed prior to the issuance of a certificate of occupancy for any unit in Phase 4 or above.	**Less-than-significant.**
4.3.7: The proposed project would increase the flow of wastewater discharged into the sewage system. [4.3-13]	**4.3.7**	Prior to the issuance of building permits, construction of a relief main in East Alisal Street shall be completed.	**Less-than-significant.**
4.3.8: The proposed project would increase discharge to the City's storm drainage system. [4.3-14]	**4.3.8a**	Prior to the issuance of the first grading or building permits, the project sponsor shall install a temporary (interim) storm water siltation/detention basin. Design shall be subject to City approval and shall permit discharge of a 10-year pre-development storm. Discharge from the basin shall be at a rate that will preclude any increase in the existing rate of runoff from the site (20.38 cubic feet per second).	**Less-than-significant.**

[4.1-22] - Page in text where impact appears.

TABLE S-1: SUMMARY OF IMPACTS AND MITIGATION MEASURES (Continued)

B. SIGNIFICANT IMPACTS MITIGABLE TO A LEVEL OF INSIGNIFICANCE

SIGNIFICANT IMPACT	MITIGATION MEASURES	LEVEL OF SIGNIFICANCE AFTER MITIGATION
	4.3.8b Prior to the issuance of building permits for dwelling construction for units in Phase 3 or beyond, the project sponsor shall install the permanent storm water siltation/detention basin (capacity of 3.5 acre-feet). Discharge from the basin shall be at a rate that will preclude any increase in the existing rate of runoff from the site (20.83 cubic feet per second). Storm water discharged from the detention basin shall be reduced to compensate for runoff from northern portions of the project site that would not be captured by the detention basin.	
4.4 Hydrology, Drainage and Water Quality		
4.4.2: Increased water runoff resulting from the proposed project would cause localized flooding in the project vicinity and/or flooding in downstream areas. [4.4-13]	**4.4.2** Implementation of Mitigation Measures 4.3.8a and 4.3.8b, along with construction of storm water detention facilities proposed as part of the project, would reduce the potential impacts from flooding to a level of less than significance.	**Less-than-significant.**
4.4.3: Degradation of surface water and groundwater quality may be caused by storm water runoff from the proposed project during and after construction. [4.4-14]	**4.4.3a** The project sponsor shall obtain and comply with a NPDES General Construction Stormwater Permit issued by the Regional Water Quality Control Board (RWQCB), Central Coast Region. (Required by law)	**Less-than-significant.**
	4.4.3b The project sponsor shall comply with all NPDES requirements in effect at the time of project construction. (Required by law)	

[4.1-22] - Page in text where impact appears.

TABLE S-1: SUMMARY OF IMPACTS AND MITIGATION MEASURES (Continued)

B. SIGNIFICANT IMPACTS MITIGABLE TO A LEVEL OF INSIGNIFICANCE

SIGNIFICANT IMPACT	MITIGATION MEASURES		LEVEL OF SIGNIFICANCE AFTER MITIGATION
	4.4.3c	The project sponsor shall ensure that the contractor installs storm drain sediment traps in the project vicinity as part of the installation of storm drainage facilities. (Required by law)	
4.4.4: The existing plume of nitrate contamination in the groundwater basin may be dispersed or otherwise impacted by the proposed project. [4.4-15]	**4.4.4a**	New wells installed to serve the proposed project shall be constructed ~~by the project sponsor~~ to withdraw water from levels below existing nitrate contamination.	**Less-than-significant.**
	4.4.4b	New well sites ~~installed to serve the proposed project shall be constructed~~ provided by the project sponsor ~~to~~ shall meet the minimum lot size requirements set by Alco Water Service.	**Less-than-significant.**
	4.4.4c	Prior to the start of construction, the project sponsor shall provide a monitoring well on the project site to the satisfaction of the County Water Resources Agency and the County Department of Health.	
4.4.5: Abandoned agricultural wells on the project site could serve as a conduit to introduce pollutants into the groundwater basin. Storm water or irrigation runoff could enter an improperly abandoned well and contaminate the aquifer. [4.4-16]	**4.4.5**	Prior to the issuance of a certificate of occupancy for dwelling units on the project site, the project sponsor shall abandon unused agricultural well(s) in accordance with state and county standards, or convert the unused well(s) into monitoring wells, at the discretion of the County Water Resources Agency.	**Less-than-significant.**

[4.1-22] - Page in text where impact appears.

TABLE S-1: SUMMARY OF IMPACTS AND MITIGATION MEASURES (Continued)

B. SIGNIFICANT IMPACTS MITIGABLE TO A LEVEL OF INSIGNIFICANCE

SIGNIFICANT IMPACT	MITIGATION MEASURES	LEVEL OF SIGNIFICANCE AFTER MITIGATION
4.5 Air Quality		
Note: Impact 4.5.2 has been revised from that in the DEIR and is now determined to be less than significant.		

TABLE S-1: SUMMARY OF IMPACTS AND MITIGATION MEASURES (Continued)

B. SIGNIFICANT IMPACTS MITIGABLE TO A LEVEL OF INSIGNIFICANCE

SIGNIFICANT IMPACT	MITIGATION MEASURES	LEVEL OF SIGNIFICANCE AFTER MITIGATION
4.7 Noise		
4.7.1: Grading and construction activities in the project area would intermittently and temporarily generate noise levels above ambient background levels. [4.7-7]	**4.7.1a** Construction equipment noise shall be minimized during project construction by muffling and shielding intakes and exhaust on construction equipment (per the manufacturers' specifications) and by shrouding or shielding impact tools.	**Less-than-significant.**
	4.7.1b The project sponsor shall coordinate with administrators of the three nearby schools to develop a construction schedule that would minimize the potential for interference with school functions and activities.	
4.8 Flora and Fauna		
4.8.1: Development of the proposed project could result in potentially adverse impacts on nesting and foraging habitat of the burrowing owl and, potentially, individuals of this species. [4.8-4]	**4.8.1** The project sponsor shall ensure that preconstruction surveys for burrowing owls are conducted by a qualified biologist in accordance with California Department of Fish and Game (CDFG) survey protocol 30 days prior to the start of each phase of project development. Survey results shall be submitted to the CDFG.	**Less-than-significant.**
4.9 Historic and Archaeological		
4.9.1: Construction of the project could disturb previously undiscovered subsurface prehistoric cultural resources. [4.9-2]	**4.9.1** The project sponsor shall ensure that in the event that unknown prehistoric cultural resources are discovered during subsurface construction, land alteration work in the general vicinity of the find is halted and a qualified archaeologist is consulted immediately.	**Less-than-significant.**

[4.1-22] - Page in text where impact appears.

TABLE S-1: SUMMARY OF IMPACTS AND MITIGATION MEASURES

C. LESS-THAN-SIGNIFICANT IMPACTS

IMPACT	MITIGATION MEASURES	LEVEL OF SIGNIFICANCE AFTER MITIGATION
4.1 Land Use, Plans and Polices, and Zoning		
4.1.4: The proposed project would expose residents and occupants of project facilities to a negligible level of risk associated with possible aircraft accidents at Salinas Municipal Airport. [4.1-23]	**4.1.4** None required.	**Less-than-significant.**
4.2 Traffic and Circulation		
4.2.4: Project-generated traffic would increase U.S. 101 freeway volumes in the peak direction, in the segment north of North Sanborn Road, by less than one percent during the p.m. peak hour, and would not result in any change in level of service or substantial increases in delay or congestion. Cumulative traffic would result in a degradation to LOS E, but the project contribution would not be substantial. [4.2-21 ~~19~~]	**4.2.4** No project mitigation is required. Mitigation of cumulative impacts could be achieved through addition of a lane to the freeway. However, the project contribution to freeway would be negligible.	**Less-than-significant**
4.2.5a: Project-generated traffic would increase the daily weekday traffic volumes on Countryside Drive, Argentine Drive and Del Monte Avenue as follows: Countryside Drive, from about 1,000 to about 2,800 daily vehicle trips. Argentine Drive, from about 1,000 to about 2,200 daily vehicle trips. Del Monte Avenue, from about 1,000 to about 2,200 daily vehicle trips. [4.2-23~~22~~]	**4.2.5a** None required. However, to reduce further local traffic impacts of the proposed project, the ~~City could require that the~~ project sponsor would incorporate neighborhood traffic safety measures into the design of the proposed project.	**Less-than-significant**

[4.1-22] - Page in text where impact appears.

TABLE S-1: SUMMARY OF IMPACTS AND MITIGATION MEASURES

C. LESS-THAN-SIGNIFICANT IMPACTS

IMPACT	MITIGATION MEASURES		LEVEL OF SIGNIFICANCE AFTER MITIGATION
4.2.7: Construction traffic could access the Mountain Valley site via Del Monte Avenue, Argentine Drive and Countryside Drive. The additional trucks, delivery vehicles and other construction related trips will add vehicles to local residential collector roadways throughout the construction phases. [4.2-26]	**4.2.7**	No mitigation is required. However, to avoid disruption of local traffic during construction, the City could prohibit access via Del Monte, Argentine, and Countryside. Prior to the start of grading or construction, acceptable access (as determined by the City Public Works Department) could be required to be provided via Williams Road and/or Alisal Street extension. In addition, the project sponsor could be required to prepare, before the start of construction, a construction mitigation plan detailing proposed truck circulation, volume, staging locations, and other information to minimize disruptions to traffic and transit caused by construction traffic and other activity.	**Less-than-significant**
4.3 Public Services and Utilities			
4.3.1: The proposed project would generate an additional enrollment of about 512 new students in the Alisal Union Elementary School District and about 235 new students in the Salinas Union High School District. [4.3-6]	**4.3.1**	None required.	**Less than significant.**
4.3.2: The proposed project would increase the demand for police services. This would be a less-than-significant impact. [4.3-9]	**4.3.2**	None required.	**Less-than-significant.**
4.3.4: The proposed project would result in additional demand for library services. [4.3-10]	**4.3.4**	None required.	**Less-than-significant.**
4.3.5: The proposed project would increase demand on the City's parks and recreation facilities. [4.3-11]	**4.3.5**	None required.	**Less-than-significant.**

[4.1-22] - Page in text where impact appears.

TABLE S-1: SUMMARY OF IMPACTS AND MITIGATION MEASURES

C. LESS-THAN-SIGNIFICANT IMPACTS

IMPACT	MITIGATION MEASURES	LEVEL OF SIGNIFICANCE AFTER MITIGATION
4.3.6: The proposed project would create new water demand for Alco Water Service. [4.3-11]	**4.3.6** None required. However, as part of the Tentative Map process, the City would require that the project applicant provide the proposed four well sites of sufficient size to meet Alco Water Service specifications. The project sponsor would be ultimately responsible for construction of the wells to ensure adequate water service is available to the project site.	**Less-than-significant.**
4.3.9: The proposed project would increase demand for solid waste disposal facilities. This would be a less than significant impact. [4.3-16]	**4.3.9** None required.	**Less-than-significant.**
4.3.10: The proposed project would increase demand for gas and electric and telephone facilities. [4.3-16]	**4.3.10** None required.	**Less-than-significant.**
4.4 Hydrology, Drainage and Water Quality		
4.4.1: The project would result in a decrease in on-site water consumption of about 34 percent. [4.4-8]	Because the project would result in a decrease in water consumption on the project site, this impact was determined to be less than significant, and no mitigation is required. Because groundwater overdrafting will continue to be a concern in the Salinas Valley, particularly as more residential development increases the more "permanent" commitment of water to dwellings, the following measures are identified to further reduce the project's less-than-significant impact on groundwater consumption.	**Less-than-significant**

[4.1-22] - Page in text where impact appears.

TABLE S-1: SUMMARY OF IMPACTS AND MITIGATION MEASURES

C. LESS-THAN-SIGNIFICANT IMPACTS

IMPACT	MITIGATION MEASURES	LEVEL OF SIGNIFICANCE AFTER MITIGATION
	4.4.1a Water conservation could occur at the project site through increased xeriscaping in landscaped areas in addition to that proposed in the Mountain Valley Precise Plan.	
	4.4.1b Water conservation could occur at the project site through retiring agricultural land from crop production on the entire project site prior to the start of construction.	
	4.4.1c The City could encourage retrofitting plumbing fixtures such as toilets and shower heads in existing urban areas that draw water from the East Side Area sub-basin.	
4.5 Air Quality		
4.5.2: Criteria air pollutants generated by the proposed project would increase total air pollutant emissions in the region. [4.5-13]	**4.5.2a** None required. However, the following measures are recommended to minimize the long-term increase in criteria air pollutant emissions from the project. The project sponsor ~~shall~~ could ensure that all homes designed to accommodate wood burning include EPA-certified wood stoves and/or fireplace inserts.	**Less-than-significant.**

[4.1-22] Page in text where impact appears

TABLE S-1: SUMMARY OF IMPACTS AND MITIGATION MEASURES

C. LESS-THAN-SIGNIFICANT IMPACTS

IMPACT	MITIGATION MEASURES	LEVEL OF SIGNIFICANCE AFTER MITIGATION
	4.5.2b The following additional measures are identified to reduce the emissions associated with home energy use, since the vehicle trip reduction plan would not be expected to reduce the net increase in project-related HC emissions to less than 150 pounds per day, the MBUAPCD significance criterion. The project sponsor ~~shall~~ could • provide information on solar space heating, hot water systems, and pool heating to buyers; • require that home builders install low-NO_x space heaters and water heaters; • require that home designs exploit solar energy to the extent feasible; • require home builders to provide exterior electrical outlets for electric garden tools; and • require home builders, as feasible, to install the most energy-efficient appliances available.	
4.5.3: Project-related traffic would raise ambient carbon monoxide concentrations along access roadways and intersections. [4.5-16]	**4.5.3** None required.	**Less-than-significant.**
4.5.4: The project, along with regional growth and development, would have a cumulative air quality impact. [4.5-17]	**4.5.4** None required.	**Less-than-significant.**

TABLE S-1: SUMMARY OF IMPACTS AND MITIGATION MEASURES

C. LESS-THAN-SIGNIFICANT IMPACTS

IMPACT	MITIGATION MEASURES	LEVEL OF SIGNIFICANCE AFTER MITIGATION
4.6 Soils Contamination		
4.6: There is no indication that the soils proposed to be disturbed for project development are contaminated with hazardous materials or wastes. There is no foreseeable risk to people, or to animal or plant populations, on the project site or in the vicinity. [4.6-3]	**4.6** None required.	**Less-than-significant.**
4.7 Noise		
4.7.3: The project would introduce a noise-sensitive use to an area that would experience substantial traffic noise and that lies within the vicinity of an Airport. [4.7-11]	**4.7.3** None required.	**Less-than-significant.**

[4.1-22] - Page in text where impact appears.

3.0 PROJECT DESCRIPTION

3.1 PROJECT SPONSOR'S OBJECTIVES

The proponent of the Mountain Valley Project is the Sconberg Ranch Partnership. The objective of the proponent is to develop an area of single-family affordable housing units in the predominantly renter-occupied area of east Salinas. According to the project sponsor, in 1995 nearly 60 percent of the approximately 10,500 units surveyed in east Salinas were renter-occupied, and more than 45 percent were attached units (apartments, duplexes, etc.). The proposed project would help reduce the population density in east Salinas while providing increased opportunities for home ownership along with amenities such as a community park, a new elementary school site, and an expansion area for the existing Bardin Elementary School.

In order to create a four-way intersection at the project's easternmost perimeter, the sponsor seeks to include as part of the project site approximately 40 acres outside the Salinas Sphere of Influence. This would allow for an extension of the existing Freedom Parkway across Williams Road and along the project's eastern boundary.

The sponsor seeks to develop a project that would respond to various policies in the Salinas *General Plan* by directing growth away from the most productive agricultural land (Policies 3.1.A and 3.3.A) and by siting the project adjacent to existing urban development (Policy 3.1.I); by constructing single-family dwellings in an area with a large concentration of apartments (Policy 3.3.N); by constructing dwelling units at a lower density than the maximum currently provided for in the *General Plan* and thus resulting in projected water savings (Policies 7.1.A, B, and E); and by providing for detention of surface water runoff (Policy 8.2.A). Those and other *General Plan* policies are discussed in Section 4.1 of this EIR, Land Use, Plans and Policies, and Zoning, and in the appropriate subject sections in Chapter 4.0.

The sponsor further seeks to develop a project that responds to various policies enacted by the Monterey County Local Agency Formation Commission (LAFCO), which must approve the annexation of the project site and the proposed change in the City of Salinas Sphere of Influence.

LAFCO is charged by state law with encouraging orderly growth and development patterns, guiding development away from open space and prime agricultural land unless it would promote

orderly development, and ensuring that adequate public services are provided. The site is largely within the City's Sphere of Influence and Urban Transition Area, meaning 160 acres of the site is designated by LAFCO for eventual urban development. The site is prime agricultural land, although not the best agricultural land in the Salinas area. The site would also receive adequate public services (see Section 4.3). (See Section 4.1 for a more complete discussion of the project's relationship to LAFCO standards.)

3.2 PROJECT LOCATION

The approximately 200-acre project site is located in unincorporated Monterey County, immediately adjacent to the City of Salinas. The site is approximately the western half of what is known as the Sconberg Ranch; the entire ranch totals about 460 acres. The site is contiguous on its western and northern boundaries with the Salinas city limits.[1] It is bordered on the north by Williams Road and, across Williams Road, by Alisal Community School and Alisal High School and single-family residential development.[2] To the west, also within the city limits, is Bardin Elementary School and residential development, including apartments and single-family dwellings. Agricultural fields exist south and east of the site, on unincorporated county land. The project site itself is currently used for agricultural production. Figure 1 shows the project location.

3.3 PROJECT CHARACTERISTICS

The project would include:

- An amendment to the Salinas *General Plan* land use diagram to reflect predominantly residential medium-density with some residential low-density as well as public/semipublic and park land uses on the site. The current *General Plan* land use diagram shows predominantly residential low-density with some residential medium-density, some residential high-density, and park land uses;
- Adoption of a Precise Plan;
- Pre-zoning of the site consistent with the Precise Plan;

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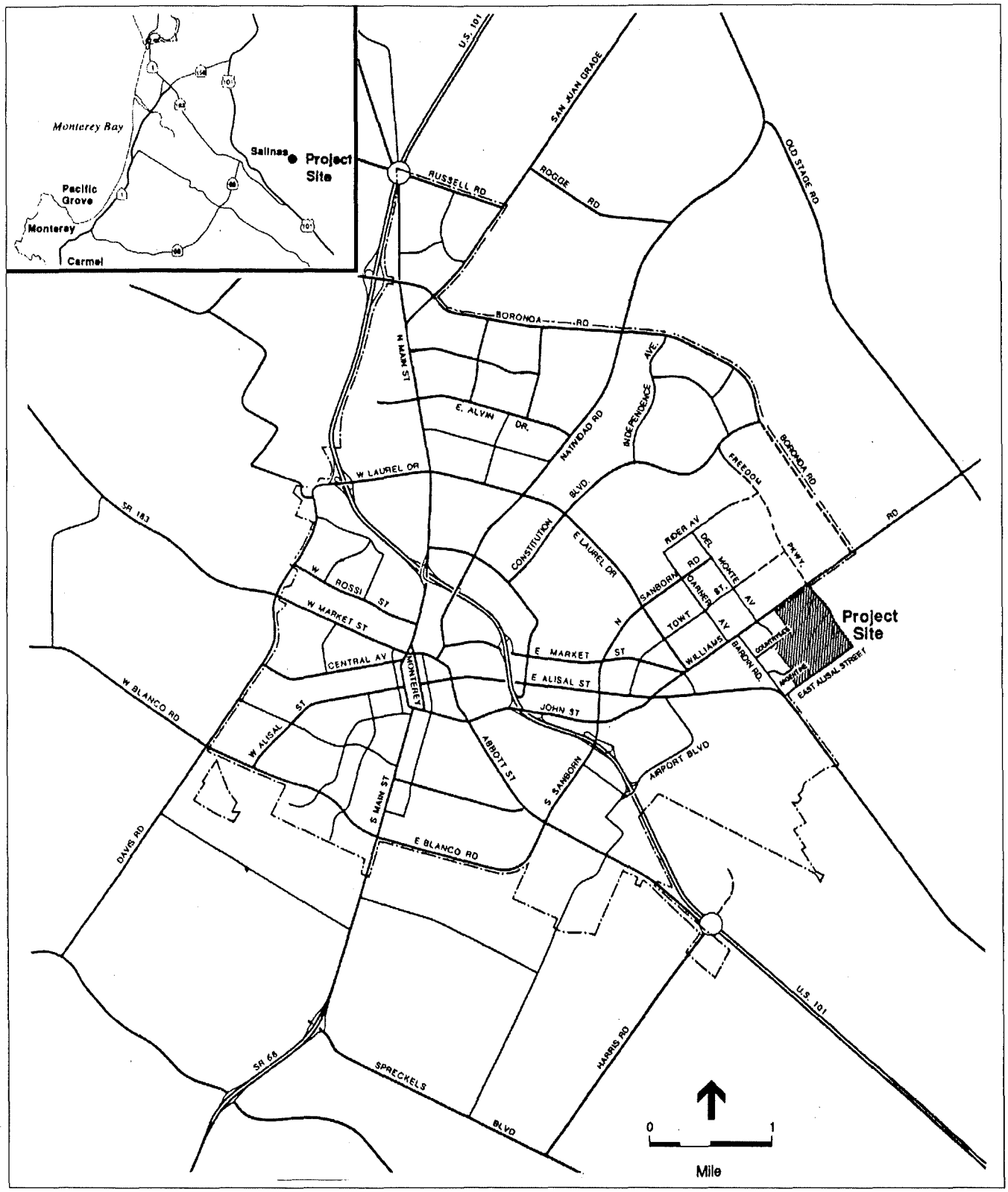
1 Because of the orientation of surrounding streets, the project site is rotated approximately 40 degrees from true north. For purposes of this report, Williams Road is considered an east-west street and Bardin Road, a north-south street. Williams Road thus forms the northern project boundary.

2 Development of about 2,100 residential units and about 250,000 sq. ft. of commercial and office space on the property north of the project site is currently under way. The development was analyzed in the Supplemental EIR for the Williams Ranch Planned Community Precise Plan, Final SEIR published by the City of Salinas, January 1993.



SOURCE: DKS Associates

Mountain Valley / 960352 ■

Figure 1

Project Area / Regional Location

- An amendment to the City of Salinas Sphere of Influence to enlarge the Sphere by approximately 36 acres (to be approved by the Monterey County Local Agency Formation Commission (LAFCO));
- Reorganization involving 199.7 acres of land including annexation to the City of Salinas, attachment to the Monterey Regional County Sanitation District - Monterey Regional Water Pollution Control Agency, and detachment from the Salinas Rural Fire Protection District and the Monterey County Resource Conservation District;
- Subdivision approval, public facilities assessments intended to provide infrastructure improvements, donation in fee title of parklands and an elementary school site, and related actions intended to implement the proposed project; and
- The City and the project sponsor also may enter into a development agreement, a binding contract governing certain aspects of the project.

The approximately 36 acres of the project site outside the City of Salinas' Sphere of Influence, as designated by LAFCO, includes two proposed roadways that would border the site on the east and south, Freedom Parkway and East Alisal Street. Other proposed improvements outside the current Sphere of Influence includes single-family residential lots, a portion of a community park, one of four proposed on-site water well lots, and a portion of an elementary school.

The Freedom Parkway and East Alisal Street roadway rights-of-ways would serve as a buffer area between the proposed residential uses and existing agricultural uses to the east and south. All arterial routes surrounding the project site's boundary would contain a landscape buffer, a sound wall to reduce traffic noise, a bike lane, and a pedestrian path.

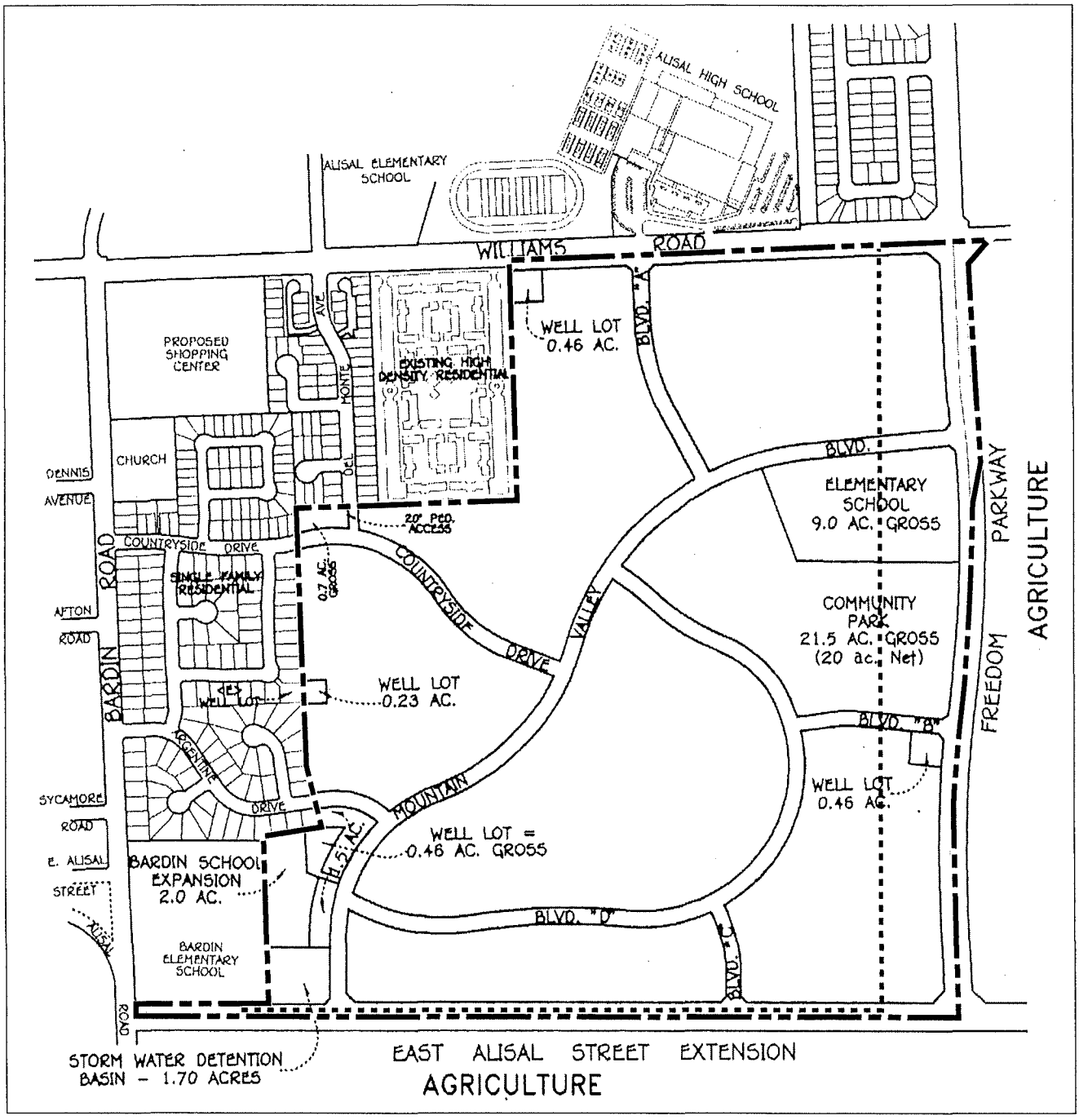
The proposed Precise Plan calls for development of 853 single-family dwelling units and one community park. The single-family dwellings would be constructed in six neighborhoods built around an internal roadway network. The average gross density of single-family units would be 5.6 units per gross acre. The project includes 661 lots ranging in size from 4,000 to 4,500 square feet, including 102 lots (at 4,000 square feet) to be sold as inclusionary housing units. A total of 192 lots would be included at a lot size of 6,500 square feet to be sold at the market rate. The project also would include donation in fee title of a community park of 21.5 acres and donation in fee title of a 9-acre school site to the Alisal Union Elementary School District. The sponsor would also sell two additional acres to the District for expansion of the existing Bardin Elementary School site, adjacent to the southwest corner of the project site. Pursuant to an agreement between the project sponsor and the Alisal Union Elementary and Salinas Union High School Districts, the project sponsor has agreed to pay $639,000 to the high school district, in addition to the state-authorized school fee of $1.84 per square foot of residential construction.

Park improvements consisting of lawn and irrigation would be installed as part of the project. The remaining park improvements would be the responsibility of the City. Semipublic lands are proposed for dedication, including 1.7 acres for a stormwater detention basin and three 20,000 square foot sites and one 10,000 square foot site for water well lots. The proposed site plan is shown in Figure 2. Project characteristics are summarized in Table 1.

Access to the project site would be from Williams Road, the proposed Freedom Parkway (south of Williams Road), and the proposed East Alisal Street (east of Bardin Road). Access also would be available via three existing streets, Countryside Drive, Argentine Drive and Del Monte Avenue, from the west and northwest. Williams Road would be widened adjacent to the project site. In addition to connections between the project site and the surrounding roadways, a series of internal streets would be constructed. The streets would extend Countryside Drive, Argentine Drive, and Del Monte Avenue onto the site and would link those three streets with the proposed Freedom Parkway and East Alisal Street extensions along the east and south sides of the site. The proposed project would include a series of "local minor" street loops and cul-de-sacs, connecting to the internal street network, around which the single-family residences would be built. Pedestrian pathways would connect some of the cul-de-sacs with the local street network.

In addition to the roadway network, the proposed project would include development of utility services to supply the site. Four new wells are proposed that would be drilled on-site to supply drinking water and water for fire-fighting. A water supply distribution network would also be constructed. Alco Water Service would use the wells to provide water service to the development.

The project sponsor would be responsible for agreements with local utilities to provide gas and electric and telephone service. In accordance with requirements of the Monterey County Water Resources Agency, storm water siltation/detention would be provided as part of the project. The proposed storm water siltation/detention basin would be a rectangular 1.7-acre site in the southwest corner of the project site, adjacent to Bardin School. It would be connected to a storm drain network that would be constructed by the sponsor. A sanitary sewer system also would be built, and would be linked to the Salinas Municipal wastewater system. At a projected 3.2 persons per unit (based on the 1990 census), the proposed project would have a buildout population of about 2,730 persons.



SOURCE: EMC Planning Group, H.D. Peters

Mountain Valley / 960352 ■

Figure 2
Project Site Plan

TABLE 1: PROJECT CHARACTERISTICS

Land Use		Gross Acreage	Number of Units
Residential			
Single-Family Residential		151.1	853
Major Streets			
East Alisal Street, Freedom Parkway, and Williams Road Rights-of-way and landscape buffers		12.8	
	Subtotal	**163.9**	**853**
Public and Semipublic			
Community Park Site		21.5	
New Elementary School		9.0	
Expansion of Bardin School		2.0	
Storm Water Detention Basin		1.7	
Well Lots			
Bardin Elementary School Expansion site		0.5	
Boulevard "B" and Freedom Parkway		0.5	
Williams Road		0.5	
Attach the existing well lot on Surrey Way (10,000 square feet)		0.2	
	Subtotal	**35.8**	
	TOTAL	**199.7**	**853**

Numbers may not add due to rounding.

SOURCE: EMC Planning Group, February 1998.

3.4 PROJECT SCHEDULE

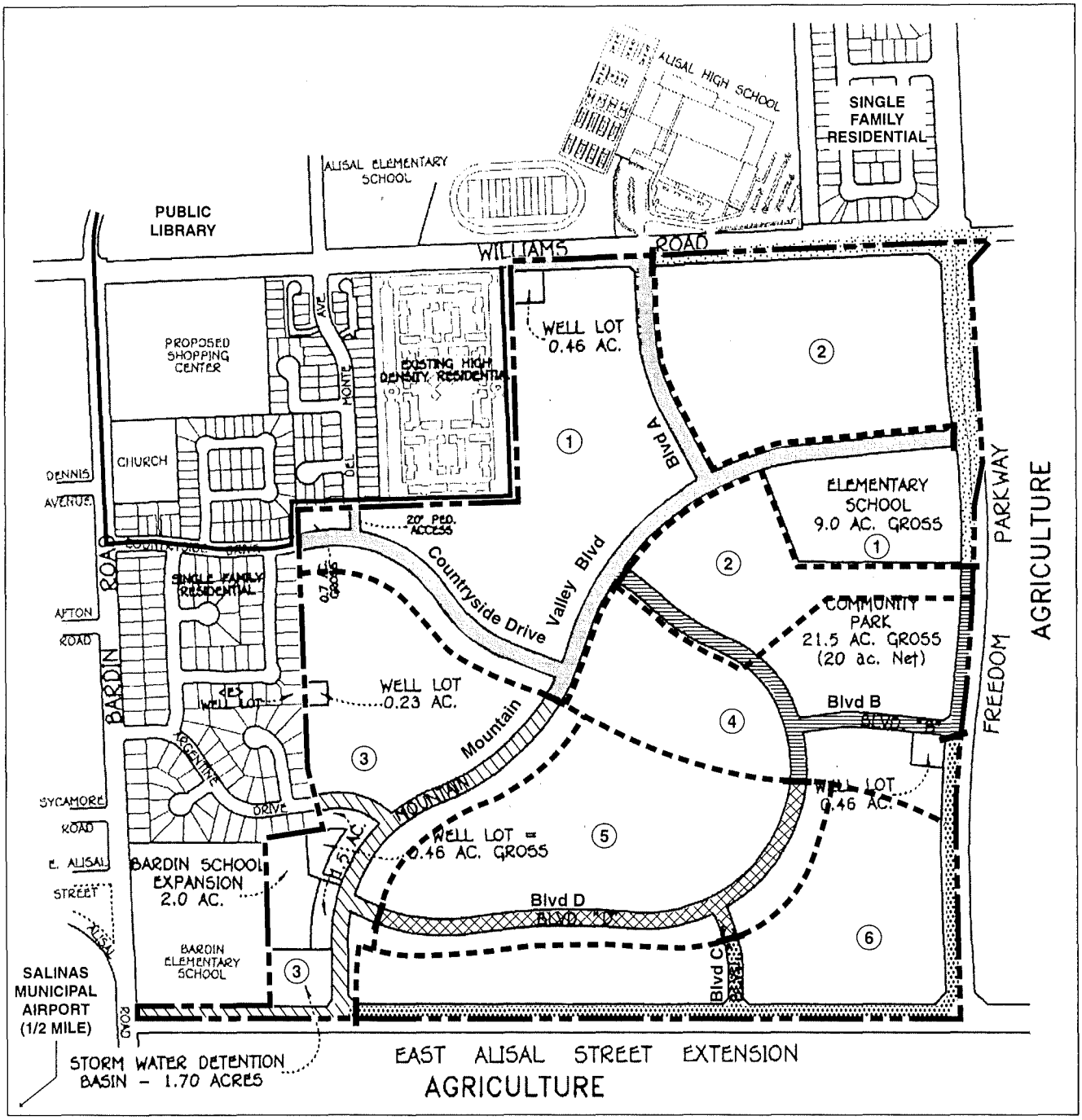
Development of the proposed project includes six phases that would occur over approximately six years. Water, sewer, and storm drainage networks would be constructed as needed to serve the project. The 1.7-acre siltation/detention basin would be constructed as part of Phase 3 of the project, to coincide with drainage infrastructure installations; a temporary detention basin would be constructed prior to commencement of grading to detain runoff from the Phase 1 and 2

portions of the property. The timetable for development of inclusionary units would be expected to coincide with construction of market-rate housing (as required by the Inclusionary Housing Ordinance), with 80 percent of the inclusionary units to be built as part of the first three project phases. Donation of land for the community park and the elementary school site would occur concurrent with approval of the final subdivision map. Construction of the community park would be completed in two phases. Basic site improvements (lawn and irrigation) would be completed as part of the project. Approximately 10 acres would be improved in Phase 2 of the project, and the remaining acreage would be completed in Phase 4. Figure 3 depicts proposed phasing of project development.

Roadways would be built as needed to serve phased project traffic needs: the Precise Plan shows that Phase 1, when construction would occur on the northern portion of the site, would include construction of extensions of Countryside Drive and Del Monte Boulevard, a new Boulevard "A," to intersect with Williams Road, and the northern half of Mountain Valley Boulevard, which ultimately would extend from southwest to northeast across most of the site (see Figure 3). Half the width of the Freedom Parkway (full width to Mountain Valley Boulevard) and East Alisal Street extension right-of-ways would be built to serve the development, including a two lane road with landscaping, pathways, and a bike lane. Freedom Parkway would be constructed as part of Phases 2, 4, and 6, and East Alisal Street, as part of Phases ~~2~~ 3 and 6, as development proceeded towards the southeastern corner of the site. The extension of Argentine Drive and the southern half of Mountain Valley Boulevard would be included in Phase 3, and the remaining internal roadways would be constructed in Phases 4 and 5. Full-width development of the Freedom Parkway and East Alisal Street right-of-way widths would not occur unless further development were to occur to the east and/or south.

3.5 APPROVALS REQUIRED

The City Council would have to certify this environmental impact report prior to approving any action on the project. The Council must then approve an amendment to the Salinas *General Plan* land use map to allow predominately medium-density homes (see Section 4.1, Land Use, Plans and Policies, and Zoning). The *General Plan* also requires the adoption of a Precise Plan. Requirements of a Precise Plan are to ensure orderly residential development of the site and comprehensive development decisions, rather than addressing development activities on a parcel-by-parcel basis. Objectives of the Precise Plan are to include detail concerning implementation measures and regulations, programs, public works projects, financing measures, text and maps that specify land uses. The Council must also approve pre-zoning of the site to the



SOURCE: H.D. Peters Co.; EMC Planning Group Inc.

Mountain Valley / 960352 ■

Figure 3
Phasing Plan

appropriate residential zoning district(s) (RM-4.0, medium-density residential, and RM-6.5, medium-density residential).[3] The proposed siltation/detention basin, well sites, and school property would be zoned PS (Public and Semipublic). The entire site would also be designated with a Precise Plan Overlay.

The project would require annexation to the City of Salinas for the entire site; this annexation would have to be approved by the City Council and by the Monterey County Local Agency Formation Commission (LAFCO). Immediately prior to the annexation approval, LAFCO would have to approve the addition of about 36 acres of the site to the City's Sphere of Influence. Those portions of the site already within the Sphere of Influence must be redesignated by LAFCO from Urban Transition Area to Urban Service Area. LAFCO would consider the EIR and an accompanying Plan for Providing and Financing Services and the Precise Plan in its decision-making. As part of the annexation process, the City and Monterey County must prepare a property-tax transfer agreement. Attachment to the Monterey Regional County Sanitation District - Monterey Regional Water Pollution Control Agency and detachment from the Salinas Rural Fire Protection District and the Monterey County Resource Conservation District would also require LAFCO approval.

Once the reorganization process is complete, the City would have to approve tentative and final subdivision maps and benefit assessment district(s). The City must issue building permits prior to any construction on the project site.

[3] Pre-zoning may be to a temporary A (Agriculture) district, with subsequent rezoning to residential district(s) consistent with the tentative subdivision map at the time the map is filed.

4.0 ENVIRONMENTAL SETTING, IMPACTS, AND MITIGATION MEASURES

4.1 LAND USE, PLANS AND POLICIES, AND ZONING

SETTING

Land Use

Salinas, with a population of approximately 123,300 residents, is an agricultural, service and administrative center in northern Monterey County located nine miles east of Monterey Bay, 13 miles northeast of the City of Monterey, and about two miles west of the Gabilan Mountain Range. Santa Clara and Santa Cruz Counties are located to the north, and San Benito County to the east. Salinas is the Monterey County seat and is the county's government and commercial center. The former Fort Ord Military Reservation, closed in 1993 and now the location of California State University, Monterey Bay (and other uses) is southwest; between Monterey and Salinas.

Land uses in Salinas include a concentration of retail uses, along with City and Monterey County government offices, in Oldtown Salinas and additional retail uses in shopping malls and centers along North Main Street, South Main Street, and on the west side of U.S. 101. Salinas is surrounded by prime agricultural land,[1] with the best soils and higher land values to the south and west. Recent residential growth has taken place in the northeast, where the land has moderate or significant limitations to productivity and, therefore, agricultural rents are lower (City of Salinas, 1988a). Industrial uses, including agricultural packing plants, are located along U.S. 101 in the southern portions of the City. There are large residential areas in the south, north and east parts of Salinas.

The project site (portions of Assessor's Parcels 153-011-035 and 153-011-021) is unincorporated land located adjacent to the eastern city limits, on prime agricultural land. The site is outside of and adjacent to the City's eastern limits in an area designated as a Conditional Growth Area, mostly within the City's Sphere of Influence, and about 3.25 miles east of downtown (Figure 1).

[1] Under the state's soil classification system, Prime Farmlands are the most important agricultural soils. Also listed as "important" farmlands are Farmlands of Statewide Importance, Farmlands of Local Importance, and Unique Farmlands.

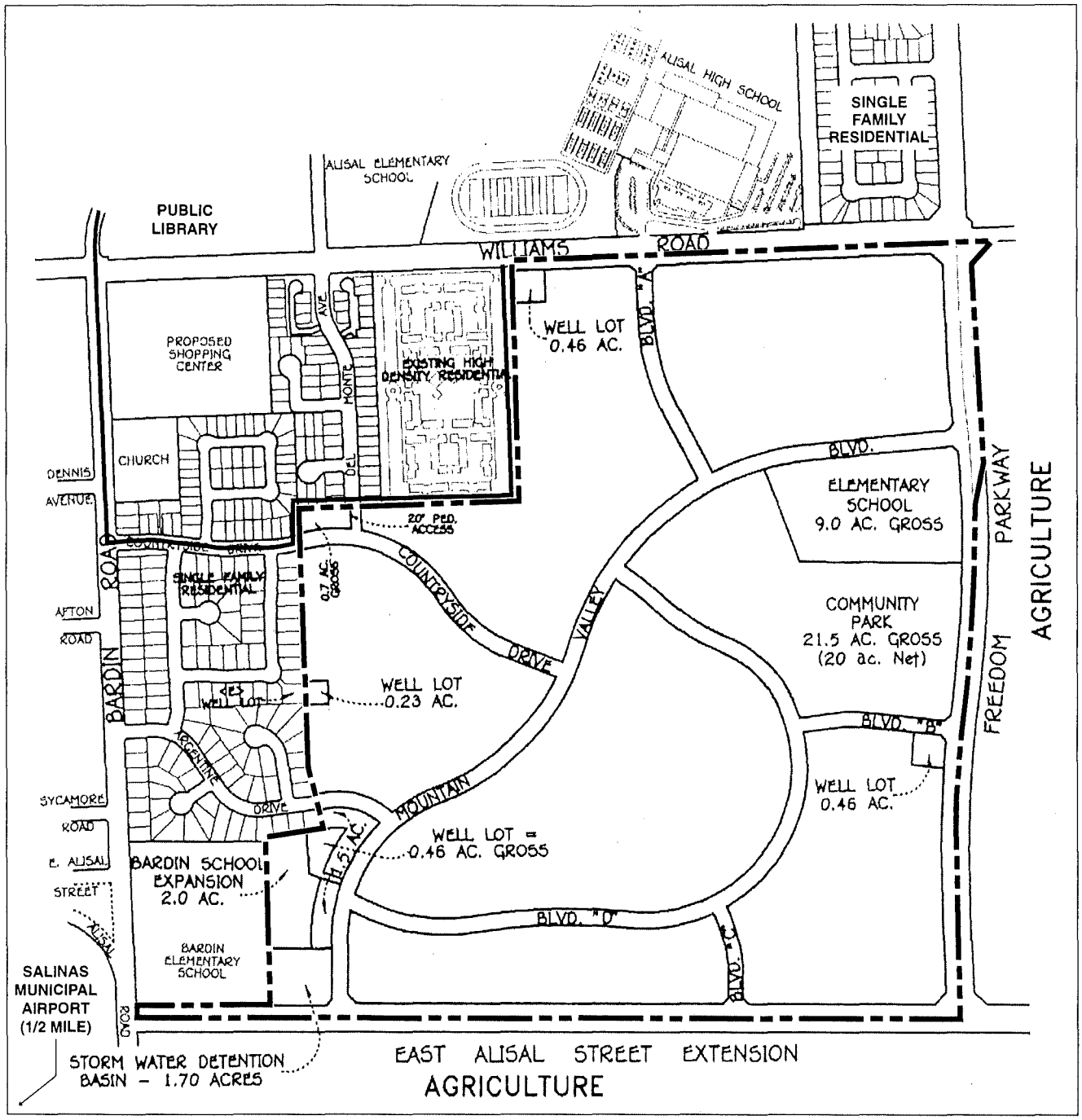
Land uses surrounding the project site include an existing single-family residential neighborhood and an existing multi-family housing development; these two residential areas form the western project boundary, along with Bardin Elementary School, at the southwest corner of the project site on Alisal Road. Alisal High School and Alisal Community School are to the north and northwest, respectively, across Williams Road.[2] The Cesar Chavez branch of the Salinas Public Library is northwest of the site. The Salinas Municipal Airport and Hartnell College East Campus are one-half mile southwest of the site, across Alisal Road. North of the project site, across Williams Road, is the partially completed 466-acre Williams Ranch Planned Community that is to include mixed-density residential development, with schools, parks, a community center, a fire station, and commercial uses. Agricultural uses are located to the south and east of the project site. Existing land uses near the site are shown on Figure 4.

Current Agricultural Uses

The project site is currently farmed by Allen W. Johnson as Ranch No. 10, or "Jack's Ranch." Soil on the project site is suitable for a variety of crops. In previous years, broccoli, cauliflower, spinach, lettuce, beans, strawberries, sugar beets, and bok choy were planted on the project site. Broccoli is one of Monterey County's highest dollar volume crops, although water supply and temperature fluctuations make its production problematic. Head lettuce and strawberries are also among the highest economic value crops in Monterey County (Monterey County Agricultural Commissioner, 1996). In 1996 and 1997 strawberries were grown on the site.

Soils are grouped by capability classes according to their limitations when used for field crops, the risk of damage when used, and the manner in which they respond to treatment. Class I soils have few limitations that restrict their use, while Class VIII soils and land forms have limitations that nearly preclude commercial agricultural use. Most of the soils of the proposed project site are classified as Class I Chualar loam (with a zero to two percent slope [CbA I(14)\0-2%] and are representative of those found on alluvial fan terraces, flood plains and river benches) and Class III in small areas of the site. Within each Roman numeral soil class, Arabic-numbered capability units further describe soil characteristics. Project site soils are in Capability Unit I(14), a well-drained soil that formed in mixed alluvium. Soils in this classification are suited to and used for all adapted crops in Monterey County, and have few limitations when

[2] Because of the orientation of surrounding streets, the project site is rotated approximately 40 degrees from true - north. For purposes of this report, Williams Road is considered an east-west street and Bardin Road, a north-south street. Williams Road thus forms the northern project boundary.



SOURCE: Environmental Science Associates: EMC Planning Group

Mountain Valley / 960352 ■

Figure 4
Surrounding Land Uses

farmed intensively. They require only good management practices to remain highly productive and may be irrigated by any method (Oliver, 1993).[3]

Found in smaller areas on the project site (less than one-fourth of the site) is CbA III-c-I(15), which is also a Chualar loam found on alluvial plains in smaller valleys. Class III soils have severe limitations that may reduce the choice of plants or require special conservation practices. Although most of the project site consists of high-quality productive soils suited for several types of crop, a smaller area is more suitable to all of the field, forage, orchard and truck crops grown in Monterey County (Oliver, 1993). Most of the soil found on the project site is of higher than average quality, and has a rent of about $500 per acre, due to the types of crop grown (Monterey County Planning Department, 1986; Nutter, 1993; Rochester, 1997).

Agriculture is the largest land use category in Monterey County and the Greater Salinas Planning Area. Of the total County land area, about 1.3 million acres are used for agricultural production (California Department of Conservation, 1996). Of this area, about 174,600 acres are considered Prime Farmlands that have the best combination of physical and chemical features to sustain long-term production of agricultural crops.

The largest land use category in the Greater Salinas Planning Area (one of eight County planning areas) is agriculture. In 1986, agricultural land (including cultivated grazing land) covered about 86,300 acres, or about 84 percent, of the area. (Of that, about 35,000 acres was prime agricultural land.) Incorporated Salinas occupied about 11.5 percent, and commercial, public lands, industrial and unimproved lands, about 4.4 percent (Monterey County, 1986). The project site represents approximately 0.2 percent of the agricultural land and about 0.6 percent of the cultivated prime agricultural land in the Greater Salinas Planning Area.

CONSISTENCY WITH PLANS AND POLICIES

Salinas *General Plan*

Each city and county in California is required to adopt a general plan that is used to establish goals, objectives, and policies for future development in its respective jurisdiction. The Salinas *General Plan* was adopted in November 1988. Consistency of the project with land use and agricultural plans, policies and density limits in the *General Plan* is discussed as part of the

[3] Prime agricultural soils west of Salinas are primarily Class I and II soils - Salinas Clay Loam, 0-2% slopes [SbA; Class I(14)], Cropley Silty Clay, 0-2% slopes [CnA; IIs-5(14)], and Clear Lake Clay [Cg; IIw-5(14)].

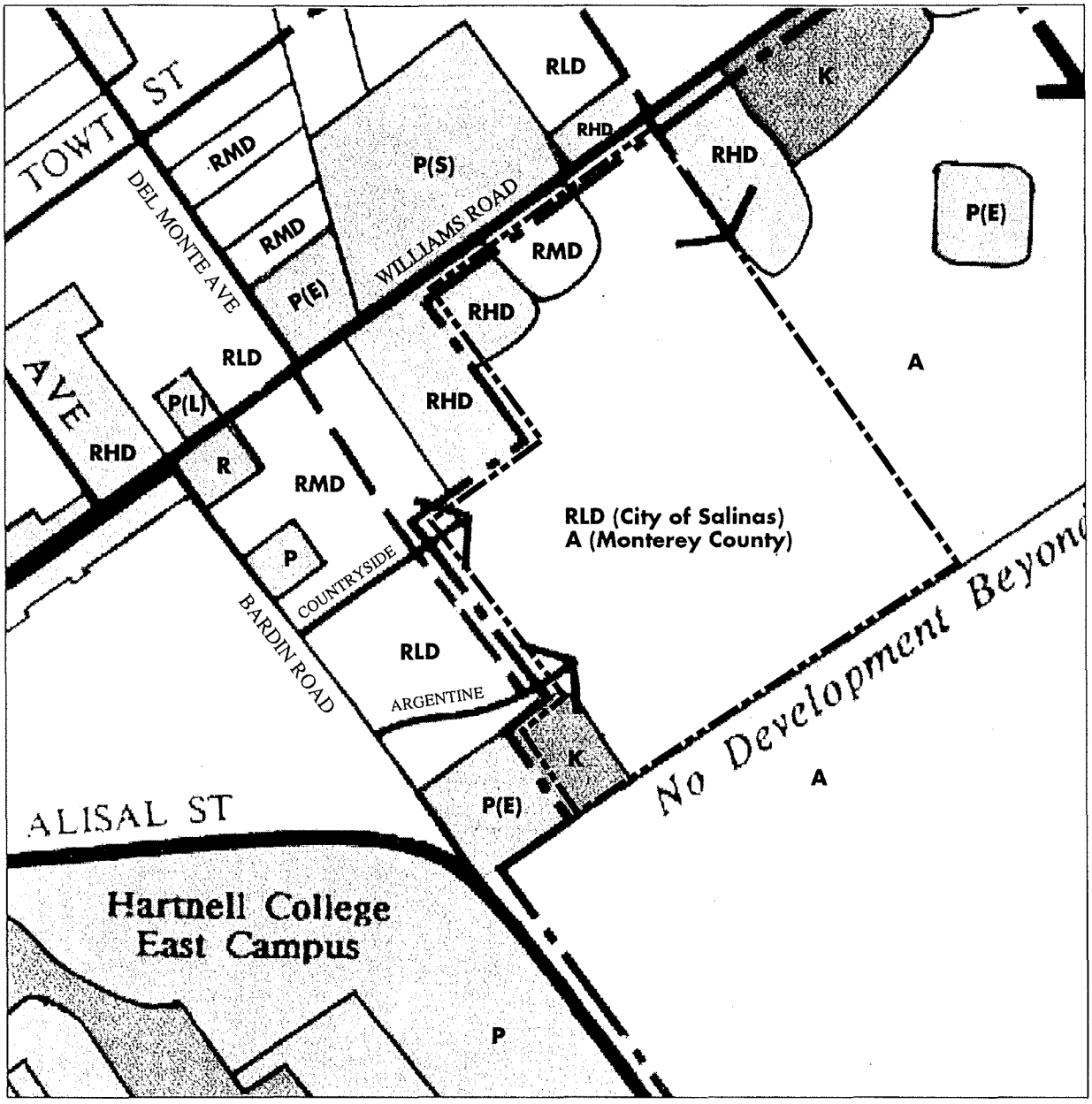
Environmental Setting, consistent with CEQA *Guidelines* Section 15125(b). Consistency of the project with other goals and policies of the *General Plan* is discussed in other sections of this EIR specific to the topic, including hydrology and drainage, transportation, air quality, and public services.

A summary of the project relationship to key *General Plan* policies is included here and in other applicable sections of this EIR. Please also refer to Appendix A of the Precise Plan for additional discussion of the project's consistency with the Salinas *General Plan.*

In order to classify land uses and make growth conditional on the City's ability to meet "quality of life" standards (e.g., provision of adequate services), the City of Salinas divides the urban areas on the *General Plan* map into two categories. The first is named the Existing Urban Area, and is defined as the area within the City limits, unincorporated area that is already developed, and the areas approved for development prior to 1988. The project site is in the second category, the Conditional Growth Areas, generally around the northern and eastern perimeter of the City. The conditional growth area is land designated for potential urban development outside the Existing Urban Area, but for which development has not been approved. According to the *General Plan,* development in the Conditional Growth Areas must be included in a Precise Plan, and have boundaries defined by the city (*General Plan* Policy 3.1.J). A key goal of the *General Plan* is to direct future growth towards the north and east, away from the most important agricultural lands surrounding Salinas on the south and west (Policies 3.1.A and 3.3.A).

Existing *General Plan* land use designations for the site are for predominantly low-density (average 4.25 units per gross acre), but also include medium-density (average 8 units per gross acres) and high-density (average 14.4 units per gross acre) housing, as well as parks (Figure 5).[4] The proposed project would be composed of 853 units with six predominantly medium-density neighborhoods that include affordable housing units, with an overall average gross density of 5.6 units per acre, and would therefore require an amendment to the *General Plan* land use map.

[4] State law, the Salinas General Plan, and Salinas Zoning Code allow for a 25 percent density bonus for projects that include 10 percent of their units as affordable by very-low-income households; 20 percent as affordable by low-income households, or 50 percent for qualifying households. With the density bonus, the average gross densities for the land use designations in this paragraph are 5.31, 10.0, and 18.0 units per gross acre, respectively. Note that these *General Plan* densities differ from the densities provided for in the Salinas Zoning Code, which governs density per net acre (lot size). No density bonus is sought as part of the proposed project.



RLD Residential - Low Density
RMD Residential - Medium Density
RHD Residential - High Density
P Public / Semi-Public
(E) Elementary School
(S) Senior High School
(L) Library

R Retail
K Park
A Agriculture
Project Boundary

0 1000
Feet

SOURCE: EMC Planning Group; Salinas General Plan

Mountain Valley / 960352 ■

Figure 5
Existing General Plan
Land Use Designations

The proposed densities would be consistent with the *General Plan* requirements. This *General Plan* Amendment would be adopted as part of the project approval process.[5]

General Plan Policy 3.3.K states, "In each precise plan area, the goal is to include a total number of units equal to a mix of 55 percent low-density (single-family detached), 10 percent medium-density, and 35 percent high-density (apartments). The mix of housing types may vary slightly from this standard so long as the total number of units and project impacts remains the same."

The City has determined that, because this policy is stated as a goal, a General Plan Amendment would not be required.[6] Development at the density proposed under the project would result in more single-family units and fewer total units, with less population (and less resulting water consumption), than under the existing *General Plan* densities. An alternative that would develop the site at the densities provided for in the current *General Plan* is examined in Chapter 5, Alternatives to the Proposed Project. Policy 3.3.C states, "Maintain the single-family residential character of Salinas by limiting the share of multifamily units to be built in Conditional Growth Areas." As noted above, the project would provide 853 single-family homes.

Several other *General Plan* policies are applicable to the project. Policy 4.2.D requires a "permanent agricultural buffer as part of residential developments intended by the *General Plan* to form a permanent urban edge. The purpose is to mitigate the adverse impacts of residential use on adjoining agricultural operations." This policy applies to the southern project boundary. The project would reach the urban edge and would include a buffer in the form of an approximately 110-foot[7] roadway right-of-way on the proposed East Alisal Street extension.

Policy 4.2.C states, "Where feasible, bound the urban area with an arterial road." The project would include partial roadways on the project's southern and eastern edges, with roadway rights-of-way of approximately 110 feet surrounding the entire site. Policy 3.1.I states, "Encourage new development to be contiguous to existing urban development." The proposed project would be built contiguous to existing development. Policy 4.3.2.A states, "Require new residential

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5 According to the *Precise Plan* for the project, a total of 987 residential units could be built on the project site under *General Plan* policy 3.3.K density designations. The density bonus allows up to 1,233 residential units to be constructed within the planning area (based on Average Base Density for Conditional Growth area plus 25 percent) (EMC, 1998). No density bonus is sought as part of the proposed project.

6 The Mountain Valley *Precise Plan* notes that in East Salinas, where the project site is located, multi-family housing is relatively more abundant than in other parts of the City, with nearly 60 percent of the approximately 10,500 units surveyed in east Salinas in 1995 being renter-occupied. Further, the text accompanying *General Plan* Policy 3.3.N states, "the area between East Laurel Drive and the 1987 urban edge northeast of Del Monte Avenue has more than a fair share of apartments, so single-family homes are desired wherever sites large enough to create a satisfactory environment are available.

7 A 112-foot right-of-way assumes ultimate construction of four 13-foot travel lanes (two each direction), two 6-foot bicycle lanes, an 18-foot landscaped median, a 20-foot landscaped area between the lot line and curb with a meandering sidewalk, and a 10-foot landscaped strip at the outermost edge with a stormwater interceptor swale.

development to provide land and/or fees to achieve a minimum of three acres per 1,000 population for developed public parklands for community or neighborhood parks." The project, with a projected population of about 2,730 persons,[8] would require 8.1 acres of developed parks. The donation of title fee and improvement (lawn and irrigation) of a community park of 21.5 acres[9] is proposed.

A portion of the project site is within the Airport Local Area of Influence (City of Salinas, 1988b). Policy 5.7.F requires the dedication of an avigation easement[10] as a condition of subdivision approval. Airport-related issues are discussed in a later section.

Policy 5.7.G, specifically referring to areas near Salinas Municipal Airport such as the project site, requires the dedication of a buffer strip adjoining land designated for agricultural use. The project would provide a buffer strip in the form of rights-of-way for Freedom Parkway and East Alisal Street. (Policy 5.7.G does not apply to the eastern project boundary, as the land east of the site is designated for development in the *General Plan*. However, because the land east of the site would remain in agricultural production for at least the immediate future, a buffer strip would be provided there as part of the project.) The project would include construction of East Alisal Street, along the southern project boundary, and Freedom Parkway, along the eastern boundary, to a width of approximately 50 feet in each case. A wall would surround the northern, eastern, and southern project boundaries. Such buffers would limit the potential nuisance to project residents of agricultural activities.

With approval of the proposed *General Plan* Amendment, the inclusion of an agricultural buffer, and incorporation of an avigation easement, the Mountain Valley project would be consistent with the Salinas *General Plan*, viewed as a whole.

Greater Salinas Area Plan (Part of the Monterey County *General Plan*)[11]

The *Greater Salinas Area Plan*, adopted in 1986 as an amendment to the *Monterey County General Plan*, sets forth planning goals and objectives for unincorporated lands surrounding

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8 Assumes 3.2 persons per household at 853 units.

9 The *General Plan* specifies 20 acres as the minimum size for a community park (Policy 4.3.1.J). According to the *Precise Plan,* the community park would share approximately 2 acres with the proposed elementary school adjacent to the park (EMC, 1997).

10 An avigation easement acknowledges the operation of aircraft above the land in question and provides notification of the aircraft uses to underlying property owners.

11 Discussion of the Monterey County *General Plan* is for information only. With project approval and annexation of the site to the City of Salinas, the project site would no longer be under the jurisdiction of Monterey County.

Salinas. Policy 26.1.14.1 (a-b) states that the Monterey County Local Agency Formation Commission (LAFCO), the City and the County should jointly plan with the objective of providing for orderly annexation and infilling of existing urban areas, efficient use of land proposed for annexation, and the prevention of premature urbanization. In addition, Policy 26.1.14.1(c) states that "productive farmlands are to be preserved, enhanced and expanded" (Monterey County Planning Department, 1986).

The proposed project would not conform with the *Greater Salinas Area Plan* in that it would convert prime agricultural lands to urban uses. However, it is consistent with policy 2.6.1.14.1(a-b). With respect to policy 2.6.1.14.1(c), 160 acres of the site is designated as "Urban Reserve" in the Plan and is therefore intended for annexation to the City and urban development. As noted in Chapter 3.0, Project Description, the project sponsor seeks to include as part of the project site approximately 40 acres outside the Salinas Sphere of Influence (and the Urban Reserve lands) to allow for an extension of the existing Freedom Parkway across Williams Road and along the project's eastern boundary.

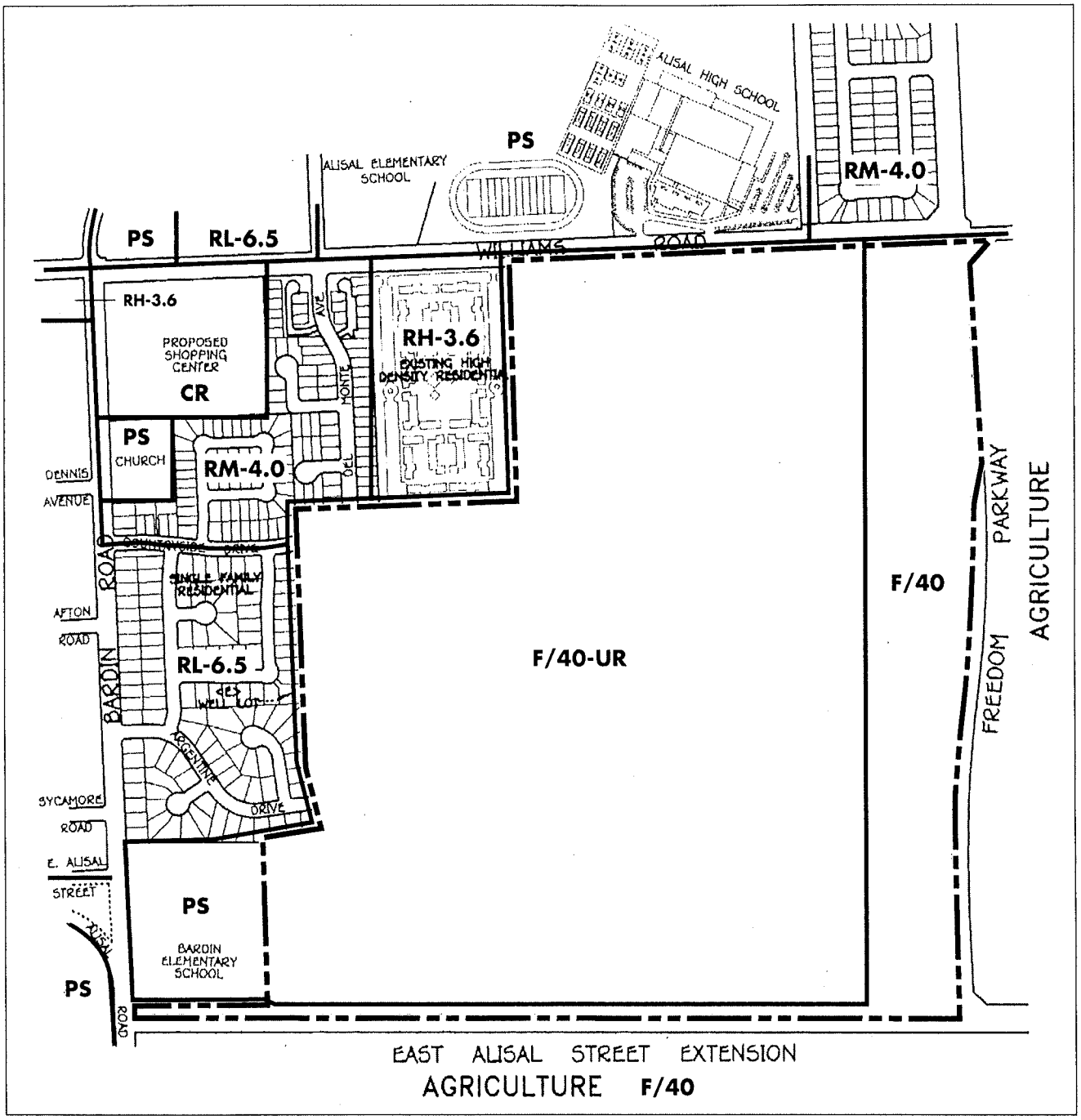
Zoning

The site is currently zoned for agricultural use (40-acre minimum lot size) by Monterey County. The approximately 160-acre portion of the site within the City's Sphere of Influence (see below, under LAFCO) is also zoned for agriculture with an "urban reserve" overlay. Existing zoning is shown in Figure 6.

Williamson Act Lands

Under the provisions of the Williamson Act (California Land Conservation Act of 1965, §51200 et seq.), landowners may contract with the county to maintain agricultural or open space use of their lands in return for a reduced property tax assessment. The development restriction imposed upon the land is self-renewing. The landowner may notify the county at any time of intent to withdraw the land from preserve status. There is a 10-year process for withdrawing from a Williamson Act contract.

No portion of the project site is on Williamson Act lands. The closest and most recent lands designated under the Williamson Act in the project vicinity are approximately 1.5 miles southwest and 1.3 miles northeast of the project site; they were placed under Williamson Act contracts in 1981 (Lent, 1993; Rochester, 1997). Land in the project vicinity under the Williamson Act is shown in Figure 7.



0 600
Feet

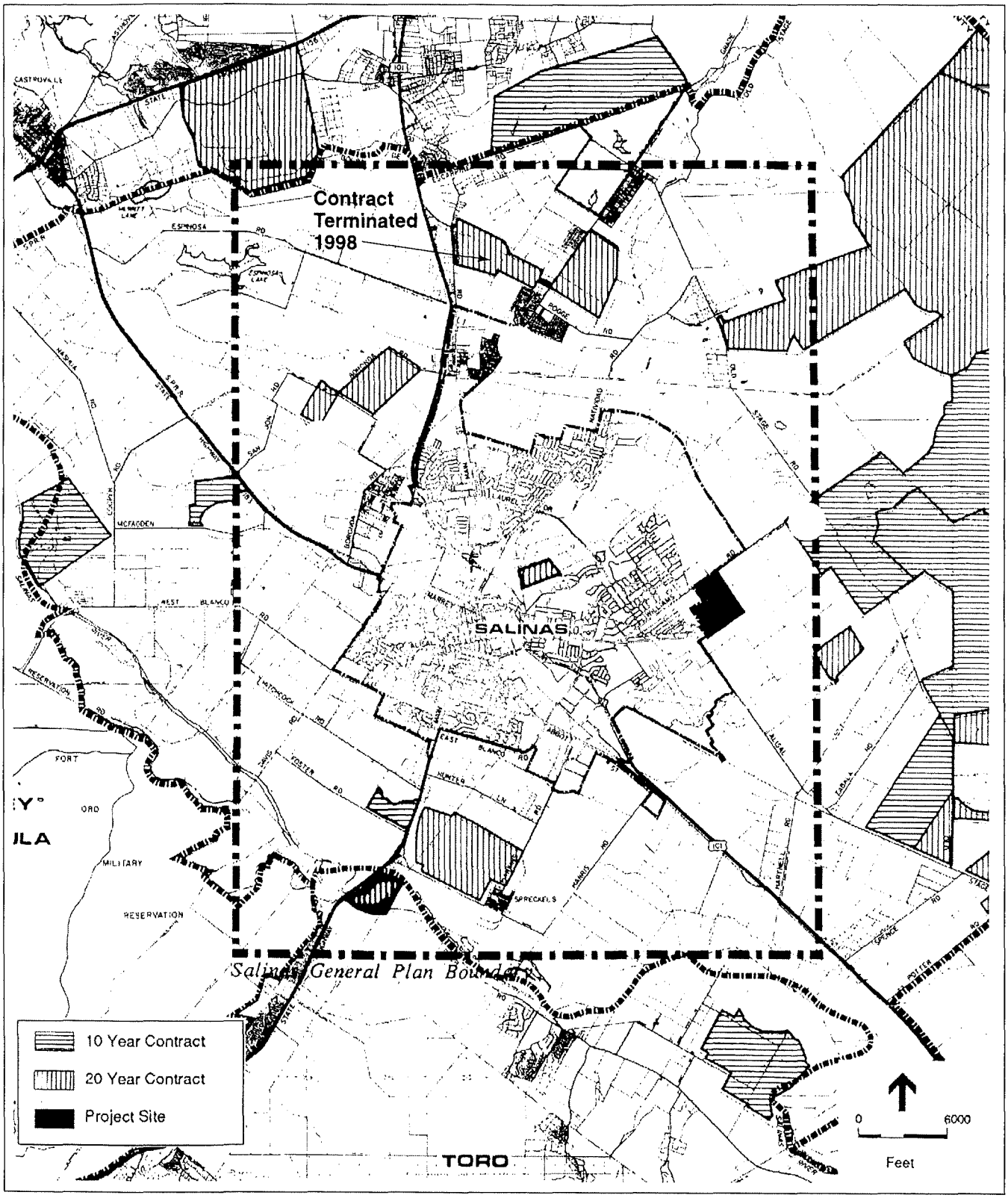
RL-6.5 Low Density Residential
RM-4.0 Medium Density Residential
RH-3.6 High Density Residential
PS Public and Semi Public
CR Commercial Retail

F/40 Agriculture, 40-acre minimum (Monterey County)
F/40-UR Agriculture, 40-acre minimum, Urban Reserve (Monterey County)
Project Boundary

SOURCE: Salinas Zoning Code; Monterey County Planning Department; EMC Planning Group

Mountain Valley / 960352 ■

Figure 6
Existing Zoning Designations



SOURCE: Salinas General Plan EIR

Mountain Valley / 960352 ■

Figure 7
Williamson Act Lands

Lands east and southwest of the project site are under 10-year contract, and lands northwest, southwest and southeast of the site are under 20-year contract.

Annexation of the site by the City of Salinas, as part of the project, would remove the site from county jurisdiction and place it under the City's zoning ordinance. The project would include prezoning of the site. Proposed zoning for the project site is shown in Figure 8.

Monterey County Local Agency Formation Commission (LAFCO)

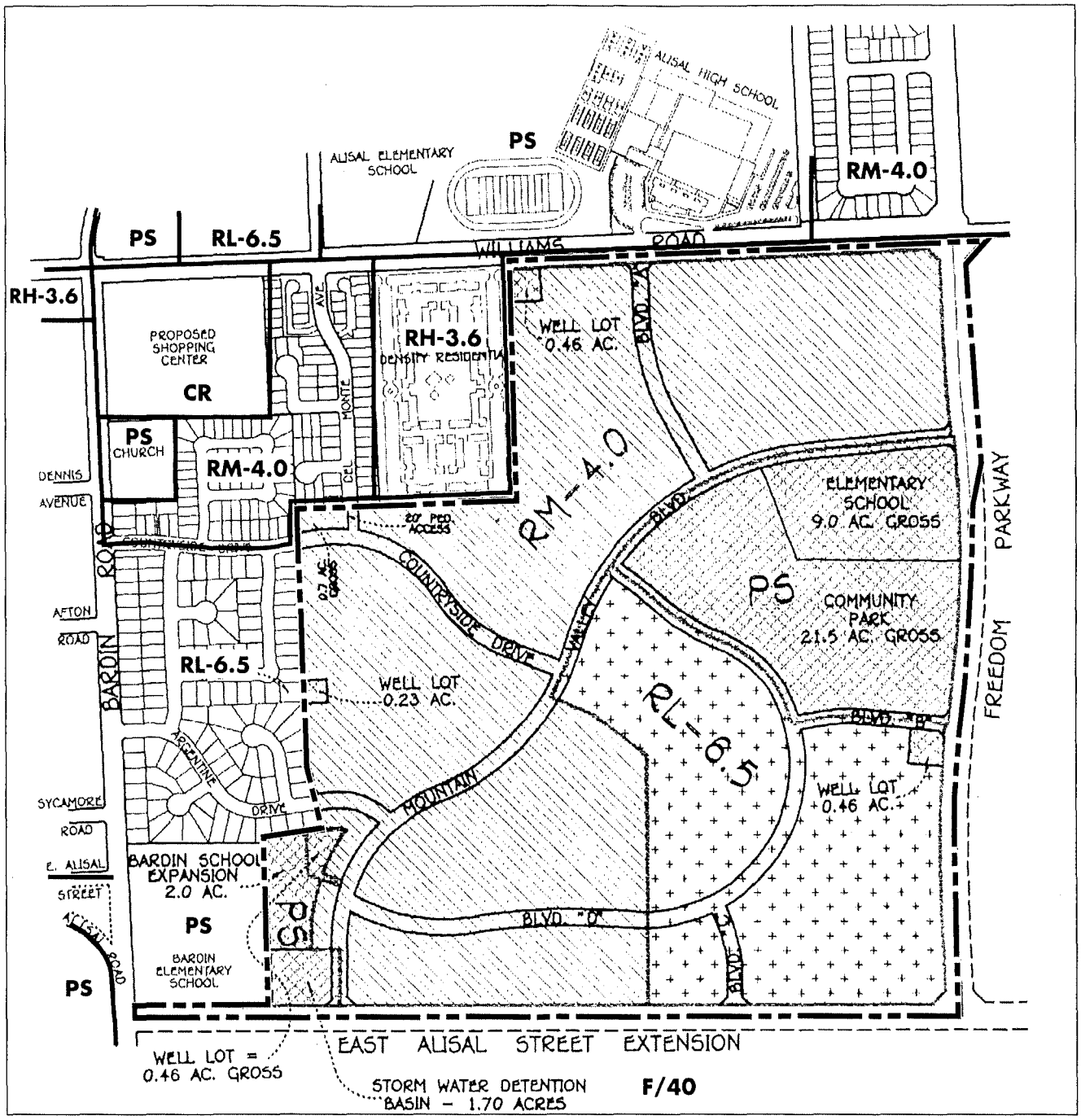
Under state legislation, each County LAFCO is empowered to ensure that change in governmental organization occurs in an orderly manner that provides efficient services and preserves agricultural and open space land. Annexation of the site to the City of Salinas must be approved by LAFCO. Figure 9 shows the existing Sphere of Influence boundary. Because the project includes annexation, state-mandated LAFCO policies provide guidelines for approval of the proposed annexation.

LAFCO's powers are set forth in the Cortese-Knox Local Government Reorganization Act of 1985, commencing with §56000 of the California Government Code. The legislative intent (§56300) is that each LAFCO establish policies and exercise its powers in a manner that provides planned, well-ordered, efficient urban development patterns with appropriate consideration to preserving open space and agricultural lands within those patterns. The Act's purposes (§56301) are the discouragement of urban sprawl and the encouragement of the orderly formation of local agencies based upon local conditions and circumstances. Specific policy elements established by the Act applicable to the Mountain Valley project site are as follows:

- To encourage orderly growth and development patterns (§56001);
- To shape the development of local agencies so as to advantageously provide for the present and future needs of each county and its communities (§56301); and
- To guide development away from open space and prime agricultural land uses unless such action would not promote planned, orderly and efficient development (§56377).

To implement the legislative mandate, LAFCOs have the specific authority to review the following actions:

- annexations to, or detachment from, cities or districts;



0 600 Feet

RL-6.5 Low Density Residential
RM-4.0 Medium Density Residential
RH-3.6 High Density Residential
PS Public and Semi Public
CR Commercial Retail

F/40 Agriculture, 40-acre minimum (Monterey County)

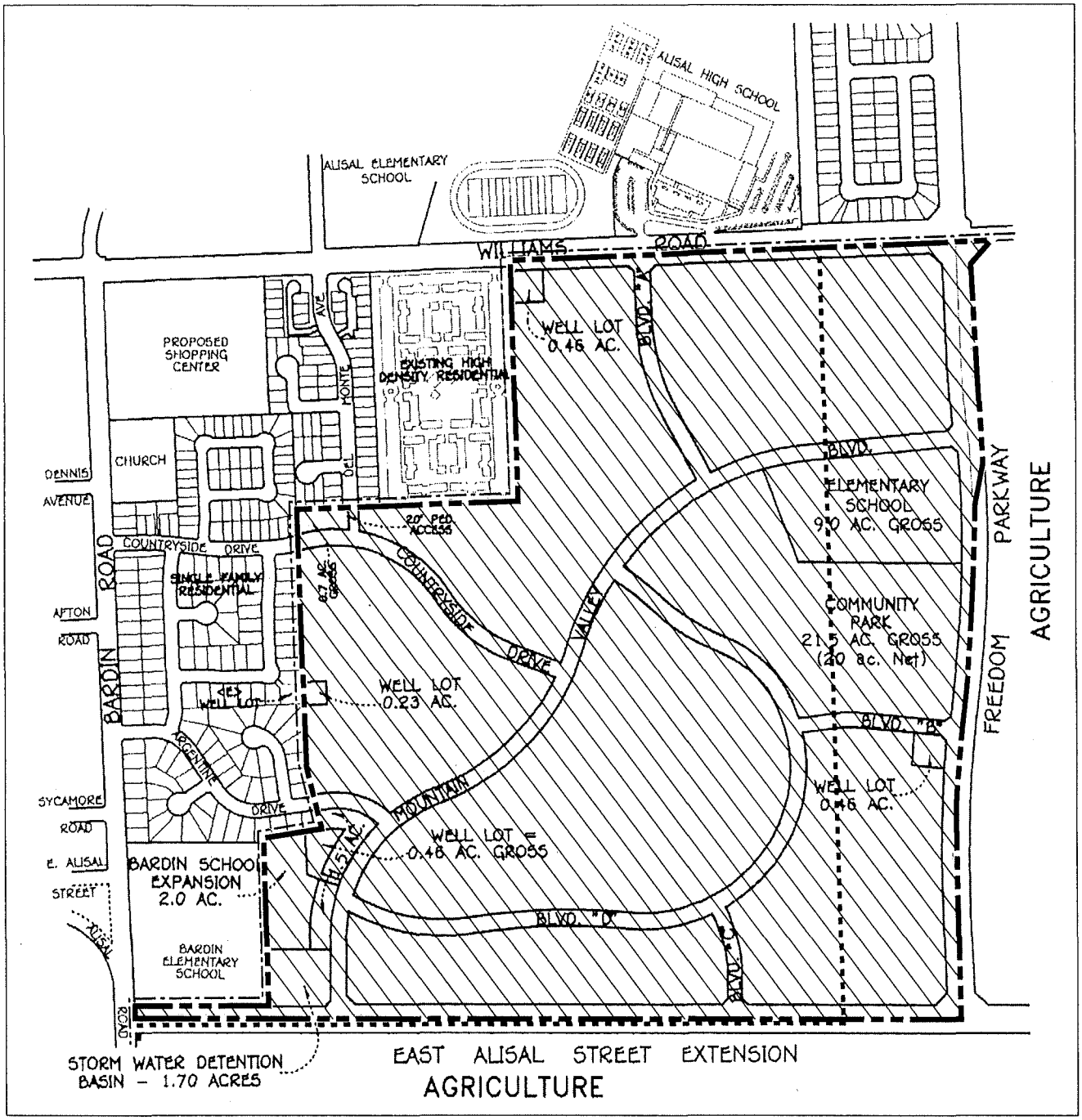
Project Boundary

NOTE: Precise on-site zoning boundaries to be determined as tentative subdivision maps are filed.

SOURCE: Salinas Zoning Code; Monterey County Planning Department; EMC Planning Group

Mountain Valley / 960352 ■

Figure 8
Proposed Zoning Designations



Project Boundary

Proposed Expansion of City Limit and Urban Service Area

Existing Salinas Sphere of Influence (Urban Transition Area)

Existing Salinas City Limit

0 600

Feet

Mountain Valley / 960352 ■

SOURCE: EMC Planning Group, H.D. Peters

Figure 9

City of Salinas Sphere of Influence

- formation or dissolution of districts;
- incorporation or reorganization of cities or districts;
- establishment of subsidiary districts; and development of, and amendments to Spheres of Influence.[12]

To implement the legislative policies, LAFCO has the power to approve or disapprove applications and impose conditions (§56844). However, LAFCO may not exercise direct land use authority through use of the zoning or subdivision process. Annexation of the project site to the City of Salinas, detachment of the site from rural services districts (Salinas Rural Fire Protection District, Monterey County Resource Conservation District), and attachment of the site to the Monterey Regional County Sanitation District - Monterey Regional Water Pollution Control Agency would require LAFCO approval. Through its review process, LAFCO seeks to ensure local agency coordination, particularly in the provision of public services.

The Monterey County LAFCO has adopted standards for the evaluation of proposals for governmental reorganization (including annexations), as permitted by State law. The standards include evaluation criteria corresponding to LAFCO policies on site boundaries, duplication of service provision, conformity with *General Plans* and other planning documents, Spheres of Influence, environmental impacts (including the requirement for review under the California Environmental Quality Act, which is satisfied by this EIR), economics, provision of public services, phasing of development, open space, and preservation of agricultural land (Monterey County LAFCO, 1991). (See Section 4.4, Hydrology, Drainage, and Water Quality, for a discussion of the proposed project's consistency with LAFCO Groundwater Standards.)

PROJECT CONSISTENCY WITH LAFCO POLICIES

Approval of the proposed annexation would lead to conversion of prime agricultural lands to urban uses. LAFCO policies do not specifically preclude the approval of annexations that may lead to the development of agricultural lands. Under state law, LAFCO is directed to guide development from prime agricultural toward non-prime land, unless this would not result in an orderly and efficient development (California Government Code §56377). LAFCO would make a determination of consistency during review of the proposed annexation.

[12] The Sphere of Influence, whose boundary is set by LAFCO, is the area surrounding the developed portion of a City that is expected to become urbanized and is included in local plans as potential urban expansion.

The currently adopted Sphere of Influence encompasses about 160 acres of the project site, which is adjacent to the city limits (Figure 8). Areas outside the current Sphere include the proposed Freedom Parkway and East Alisal Street rights-of-way along the east and south project boundaries, respectively (about 10 acres) and a strip of land along the eastern project boundary (about 25 acres). With the exception of a segment of Freedom Parkway serving the Williams Road intersection, Freedom Parkway and East Alisal Street would be constructed at half of their ultimately planned widths adjacent to the project site. The segment of Freedom Parkway between Williams Road and Mountain Valley Boulevard would be fully developed (EMC, 1998). The developed roadways and remaining undeveloped rights-of-ways (each approximately 110 feet wide) would be expected to serve as buffers between the project's residential areas and the adjacent agricultural use. In the past, LAFCO has generally required such buffers to be on-site in order to avoid jurisdictional conflicts (Wells, 1998), and it is unlikely that LAFCO would approve the splitting of the buffer between on- and off-site uses. However, it is possible that adjustment of the Sphere of Influence to accommodate a four-way intersection of Williams Road and Freedom Parkway, rather than two "T" intersections, could be acceptable to LAFCO (Wells, 1998).

Those portions of the site already within the Sphere of Influence must be redesignated from Urban Transition Area to Urban Service Area as part of LAFCO's approval. Those portions outside the Sphere of Influence must be approved for inclusion and designated Urban Service Area.

LAFCO would evaluate the effect of the project on adjacent areas (§56377), local government structure (§56841(c)), provision of public services (§56841(b)), and the effect of the proposal on maintaining physical and economic integrity of agricultural land (§56016). LAFCO would make a determination of consistency regarding the sphere of influence change. A separate analysis for the provision and financing of services has been prepared for the proposed project. LAFCO will use that document in its review of the feasibility of public service provision to the project site.

Relative to LAFCO Standards for the Evaluation of Proposals, the project could be viewed favorably because it: would not result in duplication of responsibility for provision of public services between two or more agencies; would conform with the Salinas *General Plan* (as it would be amended by the project); would be consistent with policies in the Greater Salinas Area Plan (part of the Monterey County *General Plan*) regarding productive farmlands and the site's designation as "Urban Reserve;" would allow for the provision of appropriate public services;

would provide for stormwater retention; would incorporate water conservation measures; and would result in a net on-site decrease in water use. The project could be viewed unfavorably because it: would not conform with aspects of the Greater Salinas Area Plan; would require a change in the City of Salinas Sphere of Influence; would result in the conversion of prime agricultural land to an urbanized area, although 160 acres are anticipated to undergo urban development as these are within Urban Reserve; and would not use reclaimed wastewater. LAFCO would balance the project's beneficial effects with its adverse effects in making a decision on project approval. As stated in the commission's standards, "It should be noted that no one standard is of paramount importance nor is universally absolute. Because local circumstances and conditions vary, the Commission must consider the facts in evidence as they relate to all standards." It should be noted that LAFCO previously approved designation of 160 acres of the approximately 200-acre site for ultimate urban expansion when the Commission approved the existing Sphere of Influence.

SALINAS MUNICIPAL AIRPORT

Airport Master Plan and Runway Usage

The Monterey County Airport Land Use Commission (ALUC), created by state law, is composed of seven members: two representing cities, two representing the County, two representing airport operators, and one representing the public. The ALUC's duties include making recommendations for the use of land surrounding airports to assure safety of air navigation, and promoting air commerce. In 1993 the City adopted the Salinas Municipal Airport Master Plan 1990-2010. The Master Plan evaluates existing facilities, assesses airport demand, and plans airport improvements to accommodate demand to the year 2010.[13]

There are four runways at Salinas Municipal Airport. Runways 13/31 and 8/26 accommodate most of the aircraft activity. According to the 1993 Master Plan, about 60 percent of existing operations occur on runway 8/26 and 40 percent occur on runway 13/31. However, the Master Plan acknowledges that some additional training ("touch-and-go") and crop dusting operations are carried out on runway 14/32 and also on runway 3/21 (City of Salinas, 1993; Wadell Engineering, 1996). The number of operations performed on Runway 3/21 is apparently small. The Airport Layout Plan (ALP) included in the 1993 Master Plan indicates that the runway is now used for transient aircraft parking. As indicated in the Master Plan and on the ALP, future

[13] The Master Plan is primarily concerned with airport facilities development. An airport comprehensive plan that typically addresses land use issues surrounding the airport has not been adopted (Hopkins, 1997).

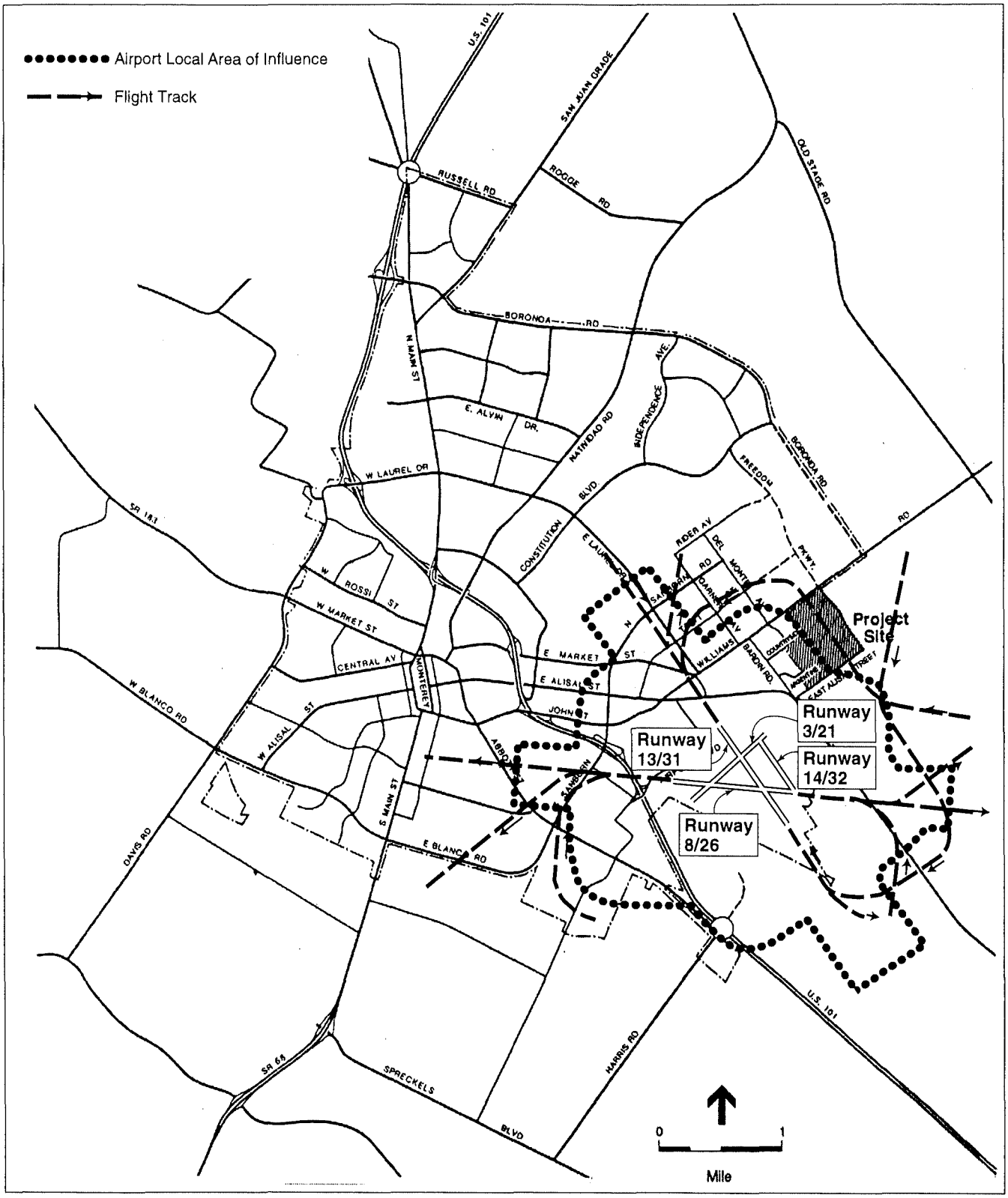
improvements, including airplane hangars, are planned at the end of runway 3/21 within the existing runway protection zone. These future improvements would effectively eliminate use of runway 3/21 when implemented as part of Master Plan Stage II (11 to 20 years).

Airport Land Use Planning Handbook

The southwest boundary of the Mountain Valley project site is located about one-half mile from the end of Salinas Municipal Airport runway 3/21. The project site is situated beneath common flight tracks for runway 3/21 and for runway 13/31 and is within that portion of the Federal Aviation Regulation (FAR) Part 77 runway protection area known as the "Horizontal Surface." FAR Part 77 has been adopted as a means of monitoring and protecting the airspace in the vicinity of airports to ensure safe operation of aircraft at the airport. FAR Part 77 establishes standards for identifying potential obstructions to air navigation in the vicinity of an airport. The standards apply within zones defined as planes, or "imaginary surfaces," that extend outward from the "Primary Surface," which includes the runway, through the "Transitional Surface," "Approach Surface," "Horizontal Surface," and "Conical Surface." The airspace protection zones defined under FAR Part 77 typically extend two to three miles from runway ends but may extend almost eight miles for precision approach corridors. The project site is also partly within the "Airport Local Area of Influence," as shown in the City of Salinas *General Plan.* The flight tracks over the project site and the Local Area of Influence are shown on Figure 10.

The proposed project would be compatible with the applicable FAR Part 77 standards. The project includes no design elements over 200 feet in height, nor other elements that would require an FAA FAR Part 77 obstruction analysis. However, pursuant to CEQA Section 21096, the project site is within an area that warrants analysis using the Airport Land Use Handbook published by Caltrans (Caltrans, 1993). This section states that the Handbook "shall be utilized as a technical resource to assist in the preparation of the environmental impact report as the report relates to airport-related safety hazards and noise problems." Noise issues are described in section 4.7 of this EIR; safety-related Handbook recommendations are discussed below.

Land use compatibility considerations applicable to the project site are described within the Handbook under Chapter 9, Safety Compatibility Policy Issues (within Part II, Airport Land Use Compatibility Issues). The Handbook presents guidelines that are suggested for the Airport Land Use Commissions' use in promoting a high degree of compatibility between airports and surrounding land uses. The guidelines vary according to zones established by the Handbook.



SOURCE: DKS Associates, Salinas General Plan

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Figure 10
Airport Local Area of Influence

Like the FAR Part 77 "surfaces," the Handbook zones extend outward from the immediate area of the runway (the "Inner Safety Zone") to the "Traffic Pattern Zone," which is described as follows: "Encompassing the common flight tracks to and from the airport, the limits of this zone could generally be defined by the FAR Part 77 horizontal surface" (Caltrans, 1993). The entire project site thus is located within the Traffic Pattern Zone for Salinas Municipal Airport.

The Handbook provides guidelines for uses within zones but states that these guidelines are "recommendations and suggestions for consideration by individual airport land use commissions, counties, and cities" and are not regulation, policies, or standards (Caltrans, 1993). The following text from the Handbook provides guidelines for land uses within the Traffic Pattern Zone.

> **Traffic Pattern Zone**- Within other portions of the airport area routinely overflown by aircraft, the potential for aircraft accidents is relatively low and the need for land use restrictions is thus minimal.
>
> - *Density of Use* - Only very large assemblies of people - in the 150 or more people per acre range - need to be avoided.
> - *Residential Land Uses* - In small communities, typical residential subdivision densities of 4 to 6 dwelling units per acre are acceptable from a safety perspective. In urban areas, even higher densities may be reasonable, especially if development is clustered to provide open space as discussed below.
> - *Special Functions* - Schools, hospitals and nursing homes should be avoided in traffic pattern zones unless no other feasible alternatives are available.

The following text describes Handbook guidelines concerning open space requirements.

> **Traffic Pattern Zone**- Elsewhere within the airport environment, 10%-15% usable open space or an open area approximately every 1/4 to 1/2 mile should be provided.

Consistency with Airport Land Use Handbook Guidelines

The design of the proposed project would conflict with an applicable Airport Handbook land use recommendation. The proposed project includes a school within the Traffic Pattern Zone; as noted above, schools are considered "special functions" that "should be avoided in traffic pattern zones unless no other feasible alternatives are available." The Handbook further notes that state law requires any school district proposing to acquire a site for an elementary or secondary school located within two miles of a runway to notify the state Department of Transportation (Caltrans) of the intended action. The Caltrans Division of Aeronautics is then required to evaluate the site and communicate its findings to the school district.

In other respects, the project would conform with Handbook guidelines, including the recommendation that residential densities be maintained within a range between 4.0 to 6.0 units per acre. The proposed project would have a gross density of approximately 4.3 units per acre, using the project's total proposed acreage of 199.7 acres. (This value differs from the 5.6 units per acre discussed in Section 3.3, Project Characteristics, because that value is based solely on the acreage proposed for residential development.) The proposed project also designates more than 10 percent of developable land as a park, which is consistent with Handbook recommendations regarding open space. Additional open space, in the form of farmlands, extends to the east and south of the project site.

IMPACTS AND MITIGATION MEASURES

Significance Criteria

Based on the CEQA *Guidelines,* a project normally would have a significant effect on the environment if it would conflict with adopted environmental plans and goals of the community where it is located; disrupt or divide the physical arrangement of an established community; conflict with established recreational, educational, religious or scientific uses of the area; or convert prime agricultural land to non-agricultural use or impair the agricultural productivity of prime agricultural land.

Impact 4.1.1: Implementation of the proposed project would alter the existing on-site land uses. The project would convert 199.7 acres of prime agricultural land to urban residential use. This would be a significant impact.

Although the project site represents approximately 0.2 percent of the agricultural land (and 0.6 percent of the prime farmland) in the Greater Salinas Planning Area (as defined by Monterey County), the loss of agricultural land to urban use would be permanent.

Mitigation Measure

4.1.1 None available. The conversion of prime agricultural land to urban use is considered an unavoidable significant impact.

Impact 4.1.2: Combined with the Williams Ranch project north of Williams Road and other projects in the Salinas vicinity, the cumulative impact on agricultural lands would be a reduction in farmland availability. This would be a significant impact.

The cumulative impact of land conversion in East Salinas from agricultural uses to urban uses would decrease farm land availability. The proposed project (about 200 acres), combined with the Williams Ranch Planned Community north of Williams Road (466 acres) would permanently remove from agricultural use 652 acres of prime agricultural land in Monterey County. The cumulative loss of prime agricultural land in East Salinas as a result of these two projects would be 1.9 percent of the prime farmland in the Greater Salinas Planning Area, and about 0.4 percent of the prime farmland in the county as a whole. Overall agricultural farmland in the Planning Area, including lower quality lands and grazing pastures, would be reduced by 0.8 percent; the loss of countywide agricultural land would be less than 0.1 percent.

Together, the two projects would continue an ongoing trend. Between 1992 and 1994, about 346 acres of agricultural land in Monterey County was converted to urban use, including 255 acres of Prime Farmland (California Department of Conservation, 1996). Another large pending development outside the immediate project area, the Salinas Auto Center project in northwest Salinas, would result in additional loss of 102 acres of prime agricultural land, and the Westridge development (under construction) eliminated about 85 acres of agricultural land, including about 15 acres of land designated prime agricultural or farmland of statewide importance, the second most important category in the state's soil classification system.

The project could create pressure to convert surrounding agricultural land to urban uses. However, the potential for such development is limited by the fact that agricultural lands east and south of the project site are outside of the City's Sphere of Influence and are within County jurisdiction, designated as agricultural land without the Urban Reserve Overlay. Of this land, approximately 200 acres of the Sconberg Ranch east of the project site are designated for development in the Salinas General Plan. The General Plan further states that no development will occur beyond the southern boundary of the project site.

Mitigation Measure

4.1.2 None available. The conversion of prime agricultural land to urban use is considered an unavoidable significant impact.

Impact 4.1.3: The proposed project could be inconsistent with the surrounding agricultural land uses and could generate nuisance complaints by residents due to agricultural noise and dust. This would be a significant impact.

Noise, dust and odors from agricultural operations are sometimes considered a nuisance by nearby residents. The proposed Precise Plan requires that the project sponsor and/or subsequent developers ensure that ensure that all prospective home site purchasers are provided with a copy of an agricultural use disclosure notice prior to closing of the home purchase. Such a notice will inform prospective purchasers of the potential for noise, dust and odors that could occur as a result of normal agricultural operations. Trespassing onto agricultural fields, theft, vandalism, and damage by domestic animals may occur due to the proximity of adjacent agricultural lands causing a nuisance for farmers. It should be noted, however, that the proposed project would essentially extend to the south and east what is now an urban-agricultural boundary at the northern and western project boundaries and, as such, would essentially maintain existing conditions.

Mitigation Measure

4.1.3a The Freedom Parkway and East Alisal Street rights-of-way (approximately 110 feet each) shall be removed from agricultural production by the project sponsor prior to initiation of grading or construction activities.

4.1.3b The proposed agricultural use disclosure notice shall be provided to prospective home site purchasers prior to closing of home purchase; and shall include buyer(s) signature. Form and content of said notice shall be subject to approval by the Community Development Department prior to approval of the first final subdivision map, and each said notice shall be recorded. In addition, a notice shall be recorded for the entire project site.

Implementation of the above mitigation measures would reduce this impact to a less-than-significant level.

Impact 4.1.4: The proposed project would expose residents and occupants of project facilities to a negligible level of risk associated with possible aircraft accidents at Salinas Municipal Airport. This would be a less-than-significant impact.

The risk of an aircraft accident at the project site is extremely low. Accident rates for all types of aviation in the U.S. have declined in recent decades. Salinas Municipal Airport is a general aviation (GA) facility, used by piston-type single-engine and twin-engine aircraft, helicopters, and a growing number of turboprop and jet aircraft. The number of GA accidents nationally

decreased from 5,196 in 1965 to 1,989 in 1994 (U.S. Department of Transportation, Bureau of Transportation Statistics, 1996). The GA accident rate in the same period has decreased from about 31 accidents per 100,000 aircraft hours flown to about nine accidents per 100,000 aircraft hours flown, and the GA fatal accident rate has decreased from about 3 per 100,000 aircraft hours flown to less than two per 100,000 aircraft hours flown.

The great majority of aircraft accidents occur during departure or arrival, and on or immediately adjacent to the runway (Caltrans, 1993). For this reason, onboard injuries and fatalities are far more common than fatalities or injuries to people on the ground. In a survey of 400 GA accidents involving 238 fatalities and 114 serious injuries, only four of the fatalities and five of the serious injuries were sustained by non-occupants of the aircraft on the ground (Caltrans, 1993). In another study of GA accidents involving objects on the ground (e.g., structures, trees), only about 18 accidents per year in the U.S. involved residences and other buildings, and of the accidents involving residences and other buildings, only about one per year in the U.S. resulted in death or serious injury (Caltrans, 1993). Thus, the risk to residents and occupants of the project over the life of the project is negligible. Given a national rate of about one fatality or serious injury to occupants of residences and other buildings per 38,000,000 GA operations annually, such accidents would occur about once every 200 years in the vicinity of Salinas Municipal Airport.[14] The probable frequency of such accidents at the project site itself would be even less.

In regard to the school site location, it is noted that the California Department of Transportation (Aeronautics Program) has analyzed the proposed site (on request by the school district and pursuant to State law). The Caltrans evaluation revealed that, although the site may be subject to some aircraft overflights, these would not present undue safety hazards or noise problems. The department thus had no objection to the school district's acquisition of the site (Gargas, 1997).

Mitigation Measure

4.1.4 None required.

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[14] The calculation assumes the highest activity level forecast in the 1993 Master Plan for the Airport (about 177,000 operations per year in 2010).

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4.2 TRAFFIC AND CIRCULATION

SETTING

Regional Access

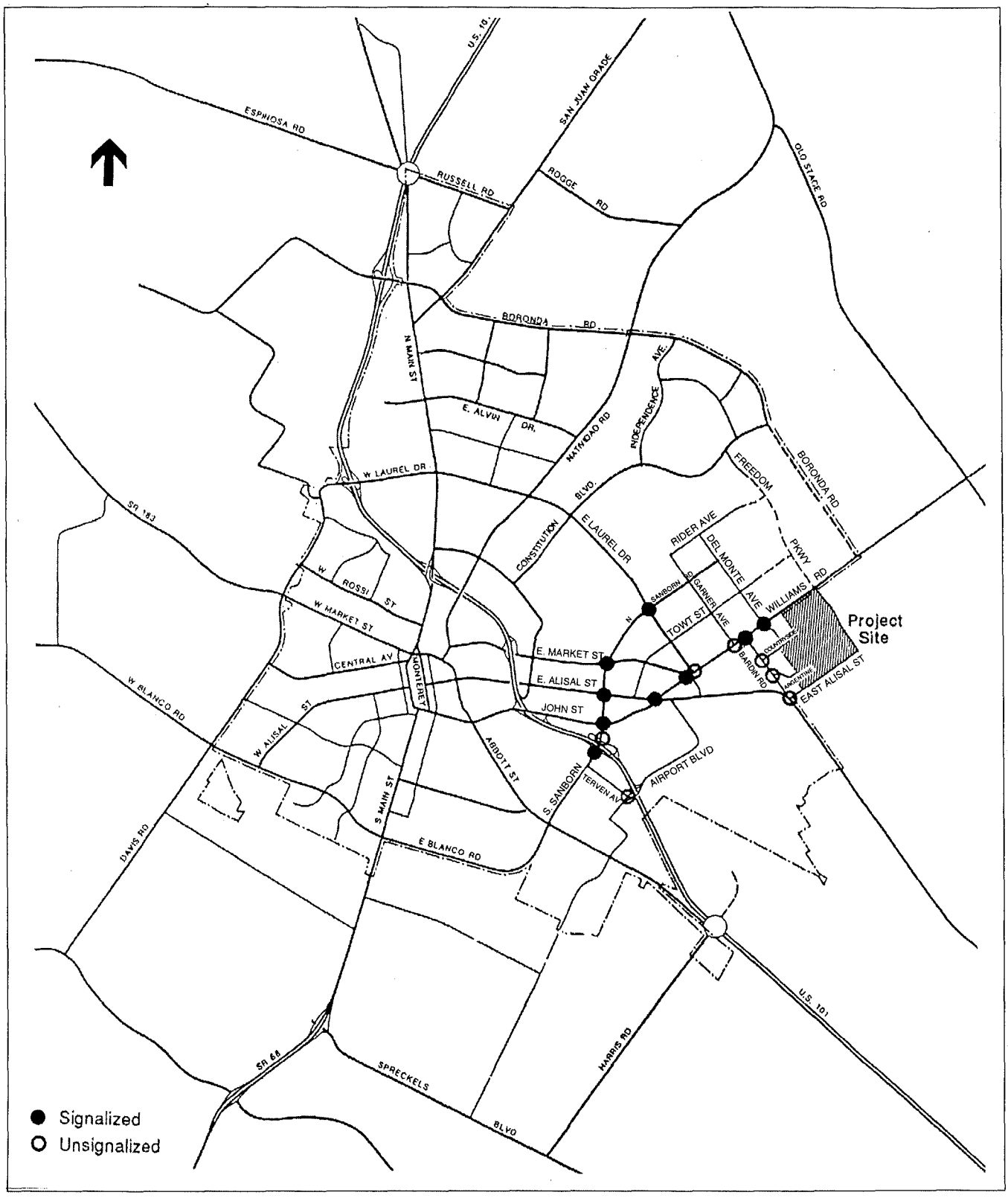
Regional access to the project area is provided via U.S. Highway 101, State Route (SR) 68 and SR 183 (Figure 11). U.S. 101 is a north-south four-lane freeway with an average daily traffic (ADT) volume of between 43,000 vehicles (south of Sanborn Road) and 52,000 vehicles (north of North Main Street) in the project vicinity. The ADT reaches 63,000 vehicles between West Laurel Drive and Boronda Road, in North Salinas (Caltrans, 1997).

SR 68 (Salinas-Monterey Highway) is a four-lane roadway that connects Salinas to Monterey, looping south of Fort Ord and serving the Monterey Peninsula Airport. It has an ADT volume of about 33,000 vehicles at Blanco Road, near the southern Salinas city limit. North of Blanco Road, the ADT is 31,500 vehicles (Caltrans, 1997). SR 183 is a two-lane roadway that connects Salinas to Castroville. Through Salinas (Davis Road to U.S. 101), it is a four-lane facility. The ADT volume is 29,000 vehicles just west of the U.S. 101 interchange and 16,000 vehicles in the vicinity of the Salinas west city limit at Davis Road (Caltrans, 1997).

Local Access

Local access to the project area is provided via Williams Road, which borders the project site on the north.[1] Other nearby streets include East Alisal Street, Bardin Road, and Alisal Road, which serve the areas immediately west of the site. Three local streets - Del Monte Avenue, Countryside Drive and Argentine Drive - dead-end near the project's western boundary. Each of these streets currently carries light traffic, defined as no higher than 2,000 vehicles per day and 200 vehicles in the peak hour. Williams Road is currently a four-lane arterial west of its intersection with Bardin Road, and effectively a two-lane collector east of Bardin Road in the vicinity of the project. (As part of the project, Williams Road would be widened to four lanes adjacent to the project site.) East Alisal Street is a four-lane arterial connecting downtown Salinas with eastern Salinas. Bardin Road is a four-lane minor arterial roadway from Alisal Street to Toro Avenue that primarily serves residential traffic and traffic associated with the Hartnell College East Campus. Alisal Road is a two-lane roadway that connects Salinas with

[1] Because of the orientation of surrounding streets, the project site is rotated approximately 40 degrees from true north. For purposes of this report, Williams Road is considered an east-west street and Bardin Road, a north-south street. Williams Road thus forms the northern project boundary.



SOURCE: DKS Associates

Mountain Valley / 960352 ■

Figure 11
Study Area Intersections
and Existing Traffic Control

rural areas to the southeast; it turns northwest to become East Alisal Street at Bardin Elementary School.

Extension of Boronda Road and Freedom Parkway as far south as Williams Road is included in the City's *General Plan* and in the City of Salinas Traffic Fee Ordinance (Salinas Department of Public Works, 1987). Boronda Road is ultimately planned to be extended as a six-lane arterial in the vicinity of the project in conjunction with other development projects. With the proposed project, Freedom Parkway would be extended southerly across Williams Road into the project site.

Transit Service

Transit service is currently provided by Monterey-Salinas Transit bus service. Bus 34 runs from the Salinas Transit Center in downtown Salinas to Alisal High School in East Salinas, via East Alisal Street. Bus 35 runs from the Salinas Transit Center to East Salinas, via East Market Street.

Existing Traffic Conditions

To help evaluate current traffic conditions, vehicle turning movement counts were conducted during the p.m. peak hour at nine signalized intersections and seven unsignalized intersections in the vicinity of the project site. Figure 11 illustrates intersection locations and existing traffic control. The list of study intersections was developed in cooperation with the City of Salinas Public Works Department. Intersections studied were:

Signalized:

South Sanborn Road / U.S. 101 southbound ramps / Elvee Drive
South Sanborn Road / John Street
North Sanborn Road / East Alisal Street
North Sanborn Road / East Market Street
North Sanborn Road / East Laurel Drive
East Alisal Street / Williams Road
East Market Street / Williams Road
Del Monte Avenue / Williams Road
Bardin Road / Williams Road

Unsignalized:

~~North~~ South Sanborn Road / U.S. 101 northbound ramps
East Laurel Drive / Williams Road
Garner Avenue / Williams Road
Bardin Road / Countryside Drive
Bardin Road / Argentine Drive
Bardin Road / East Alisal Street
Airport Boulevard / Terven Avenue

Level of service (LOS) is a common measure of traffic service to indicate the amount of congestion and delay. LOS A is free flow conditions. LOS B and C represent some intersection delay, while LOS D indicates substantial delay. LOS D is typically considered acceptable for peak-hour periods in urban areas. LOS E is approaching or at capacity and LOS F represents conditions above capacity. For signalized intersections, level of service analysis is based on the volume of conflicting traffic movements versus the design capacity of the intersection. The resulting value is known as the volume-to-capacity (v/c) ratio, and provides the LOS for the intersection as a whole. At unsignalized intersections, each traffic movement that must yield to another movement is evaluated separately and assigned a LOS. The LOS at unsignalized intersections is based on the relative ability of this yielding traffic to find adequate gaps in conflicting traffic flows. Definitions of traffic levels of service for signalized and unsignalized intersections are provided in Appendix B, Tables B-1 and B-2, respectively. Table 4, p. 4.2-13, ~~below~~ summarizes the intersection LOS analysis for the existing weekday p.m. peak hour condition.

In the City of Salinas, the following *General Plan* policies pertain to the proposed project and its traffic impacts:

5.1.A Strive to maintain traffic level of service (LOS) C or better as the standard for all intersections and roadways in Conditional Growth Areas as mapped [in the *General Plan*].[2]

5.1.B Strive to maintain traffic level of service (LOS) D or better within the existing urban area. LOS D should be limited to one-hour peak periods (*e.g.*, a.m., p.m., and noon peak hours), except where improvements to meet this standard would be prohibitively costly or disruptive. At such locations, accept LOS D during two-hour peak periods.[2]

[2] The project site is within a Conditional Growth Area, as would be the future intersections of Williams Road / Freedom Parkway and Williams Road / Boulevard A and the intersections within the project site; Policy 5.1.A would apply. All other study intersections are within the Existing Urban Area; Policy 5.1.B would apply to those intersections.

For this EIR, the *Circular 212* methodology was used to analyze signalized intersections operated by the City of Salinas (Transportation Research Board, 1980). For analysis of the US 101 /Sanborn Road intersections and all unsignalized "T" and 2-way stop-controlled intersections, the *Highway Capacity Manual* methodology was used (Transportation Research Board, 1994). These methodologies are consistent with other EIRs recently conducted for the City of Salinas, and provide reasonable estimates for evaluating existing and future traffic conditions.

Currently, each of the nine signalized intersections analyzed in this report operates at an acceptable LOS (*i.e.*, LOS C or better) during the weekday p.m. peak hour. Except for the Bardin Road intersections (at Countryside Drive, Argentine Drive and East Alisal Street), each of the seven unsignalized study intersections experiences long traffic delays (LOS F) for minor street traffic turning onto the major street during the weekday p.m. peak hour. This is not unusual for stop-controlled intersections with only a small percentage of traffic on the minor street approach.

Substantial queuing was observed during the p.m. peak hour at several locations in Salinas. Of the intersections analyzed in this report, vehicles were observed to experience long delays at the ~~North~~ South Sanborn Road / U.S. 101 northbound off-ramp while attempting left turns from the off-ramp onto ~~North~~ Sanborn Road. Due to the heavy through traffic movement on Sanborn Road, vehicles often wait several minutes before finding a suitable gap. Delays were also observed for motorists along Laurel Drive in both directions.

IMPACTS AND MITIGATION MEASURES

Significance Criteria

In general, based on the Salinas *General Plan* standards, the project would have a significant impact where project traffic would cause intersection LOS to deteriorate to a level worse than LOS D (*i.e.*, LOS E or F) within the existing urban area, as shown in Figure 1 in the *General Plan*. Where a signalized intersection is already at LOS E or F, an increase of 0.01 or greater in volume-to-capacity (v/c) ratio would be considered a significant effect. Within conditional growth areas, including the project site, the project would have a significant impact where project traffic would cause intersection LOS to deteriorate to a level worse than LOS C (*i.e.*, LOS D, E, or F). (None of the existing study intersections are within conditional growth areas. Two intersections to be constructed as part of the project would be within a conditional growth area.)

Based on Appendix G of the CEQA *Guidelines*, the project would have a significant impact on local streets (other than intersections) if it would cause an increase in traffic that is substantial in relation to the existing traffic load and capacity of the street system. Based on Salinas *General Plan* standards, the project would have a significant impact where project traffic would cause future local residential streets to exceed 500 to 800 vehicles per day, and future residential collector streets to exceed 3,000 vehicles per day. Del Monte Avenue, Countryside Drive and Argentine Drive would function as residential collector roadways after the project is built. Bardin Road currently functions as a four-lane minor arterial and is not considered a residential street.

Internal Roadway Network

The project would have an internal roadway network that would connect with both existing and future roadways in East Salinas. Countryside Drive would be extended east to meet at a "T" intersection with the proposed Mountain Valley Boulevard. Argentine Drive would also be extended east to meet at a "T" intersection with Mountain Valley Boulevard. Del Monte Avenue would be extended south to meet at a "T" intersection with Argentine Drive within the project site. Freedom Parkway would be extended south across Williams Road into the Mountain Valley project site, where it would intersect Mountain Valley Boulevard, Boulevard B, and also the East Alisal Street Extension. East Alisal Street would be constructed east from Alisal Road at Bardin Road to Freedom Parkway. Several local roadways also would be developed within the Mountain Valley project site (see Figure 2 in Chapter 3.0, Project Description).

Programmed Improvements

As part of the City's Traffic Fee Ordinance (Salinas Department of Public Works, 1987), several roadway and intersection improvements are planned in conjunction with development projects:

- Boronda Road, which currently extends east from U.S. 101 to Constitution Boulevard, is ultimately to be completed as a six-lane arterial from U.S. 101 to Williams Road. It will be constructed to Williams Road as a two-lane street by 2001.
- Freedom Parkway, which was recently opened to public traffic between Constitution Boulevard and Williams Road.
- Williams Road will be upgraded from a two-lane arterial to a four-lane arterial east of Bardin Road, extending to Boronda Road.
- The intersections of Williams Road at Boronda Road and Williams Road at Freedom Parkway will be signalized.

Several assumptions regarding the roadway network in East Salinas were made in order to perform the analysis in this report. Each of the following roadway improvements is included in the development agreement for the approved Williams Ranch project, located across Williams Road from the proposed Mountain Valley project site, and would be funded by developer fees from Williams Ranch and by funds collected as part of the City's Traffic Fee Ordinance.

- The intersection of Williams Road at Boronda Road would be signalized by the time the proposed Mountain Valley development is fully occupied.
- The intersection of Williams Road at Freedom Parkway would be signalized by the time the proposed Mountain Valley development is fully occupied.

As part of the proposed project, the following intersection improvement would be implemented:

- The intersection of Bardin Road at East Alisal Street would be reconfigured between East Alisal Street and Alisal Road in order to accommodate the East Alisal Street extension along the project's south boundary. As part of this improvement, the unrestricted right-turn eastbound movement from East Alisal Street onto southbound Alisal Road would be modified so that vehicles would come to a stop (Higgins Associates, 1997).

Trip Generation

Assumptions regarding cumulative projects in the vicinity of the proposed Mountain Valley project were obtained from the City of Salinas Community Development Department.[3] Table 2 lists the projects used in this analysis and Figure 12 illustrates their locations. The trip generation characteristics of the cumulative projects (i.e., approved and pending) and the proposed Mountain Valley project were determined by referencing Institute of Transportation Engineers' *Trip Generation* (Institute of Transportation Engineers, 1991 and 1995) and the City's Traffic Fee Ordinance. The average weekday daily and p.m. peak-hour trip generation for each cumulative project is included in Table 3. Cumulative projects would generate a total of about 132,914 daily trips, including about 13,395 p.m. peak-hour trips.

The weekday daily and p.m. peak-hour trip generation for the proposed project is shown in Table 3, p. 4.2-10. The proposed project would generate a total of about 9,495 daily trips, including about 947 weekday p.m. peak hour trips.

[3] Cumulative projects are defined as reasonably foreseeable developments that are currently under construction, approved but not under construction, or under environmental review.

TABLE 2: TRIP GENERATION FOR CUMULATIVE PROJECTS[a]

		Daily[b]			P.M. Peak Hour[c]		
	Size & Unit	Rate	No. Trips	Rate	Total	In	Out
Thrust IV							
Residential - SFDU	1,600 du	10.00	16,000	1.02	1,632	1,056	576
Retail (Community)	176.0 ksf	64.00	11,264	5.34	940	470	470
Office	600.0 ksf	21.00	12,600	1.44	858	126	732
Arcadia							
Residential - SFDU	120 du	10.00	1,200	1.02	122	79	43
Harden Ranch							
Residential - SFDU	1,008 du	10.00	10,080	1.02	1,028	665	363
Residential - MFDU	719 du[e]	6.00	4,314	0.69	497	288	209
Retail	53.6 ksf	41.00	2,198	5.38	288	144	144
Office	220.0 ksf	12.00	2,640	1.51	330	55	275
Schools	2,200 students	1.00	2,200	0.25	550	308	242
Park[d]	20.9 acre	3.00	63	3.14	66	23	43
Williams Ranch							
Residential - SFDU	1,251 du	10.00	12,510	1.02	1,276	826	450
Residential - MFDU	419 du	6.00	2,514	0.69	290	168	122
Office	55.5 ksf	12.00	666	2.17	120	20	100
Retail (Community)	255.0 ksf	64.00	16,320	4.67	1,194	597	597
Schools (2,400 students)	28.1 acre	60.00	1,686	0.25	600	336	264
Park[d]	47.35 acre	3.00	142	3.14	149	52	97
Institution	3.0 ksf	5.00	15	1.08	3	0	3
Westridge							
Regional Discount Retail	493.35 ksf	36.00	18,249	3.33	1,638	868	770
Hotel	250 rooms	8.60	2,143	0.76	190	107	83
Mini-Storage	40.0 ksf	2.40	94	0.28	11	6	5
Williams/Bardin Shopping Center							
Retail (Community)	103.4 ksf	64.00	6,618	6.48	670	335	335
Auto Center							
Auto Center	Phases 1 & 2	[f]	9,398	[f]	943	434	509
TOTAL			**132,914**		**13,395**	**6,963**	**6,432**

a Approved and Reasonably Foreseeable Projects list provided by City of Salinas Department of Community Development. (Other approved projects, such as Rossi-Rico, Madison Lane Commercial and Steinbeck Square, are not included here as they would not affect the Mountain Valley Project study area intersection and roadways.)

b Daily trips rates based on City of Salinas, Traffic Fee Ordinance, 1987; Westridge daily trips based Westridge Center FEIR, City of Salinas, 1994.

c PM Peak Hour trip rates based on ITE, *Trip Generation*, 5th Edition, 1991.

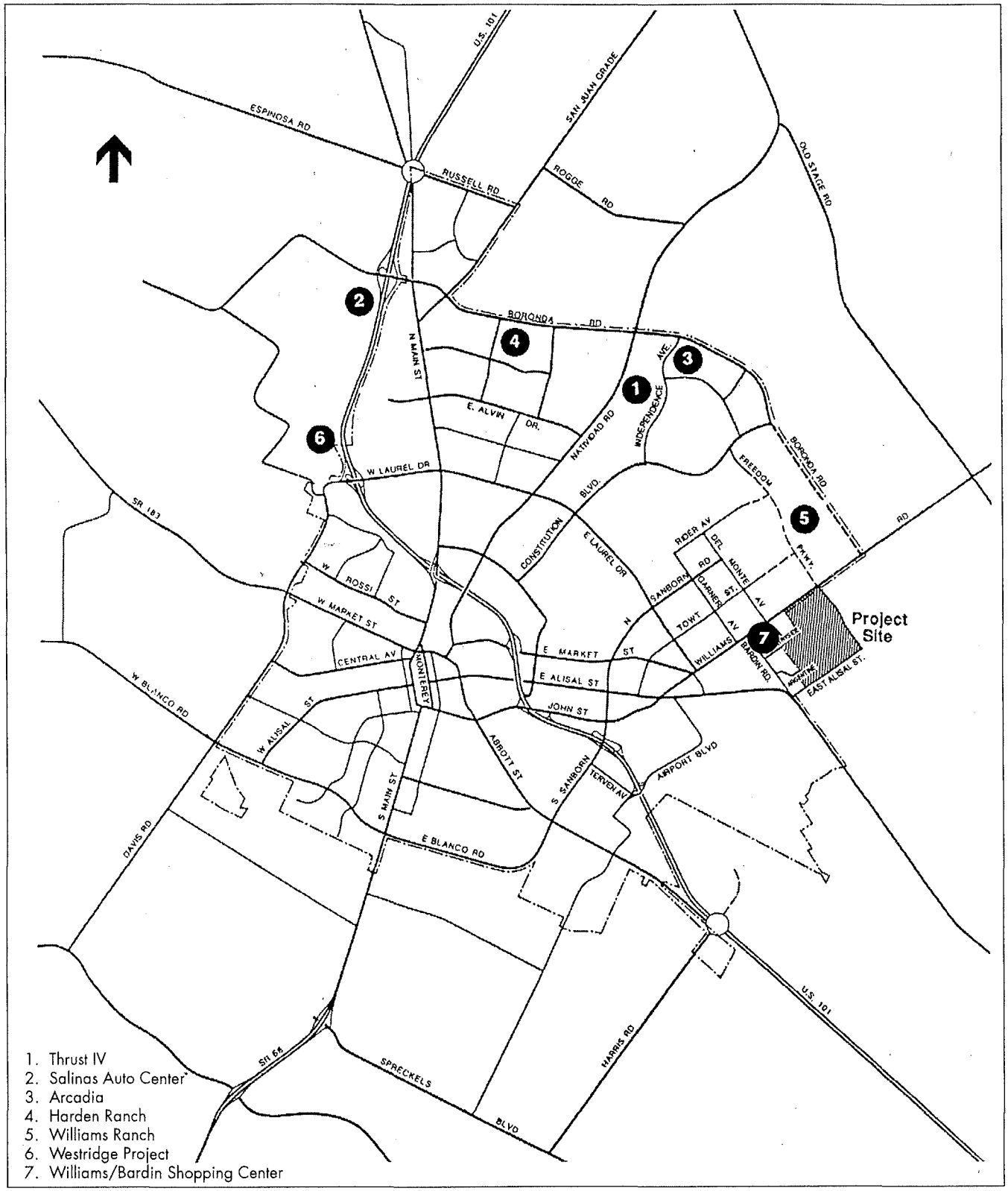
d Trip rates for parks differ between City TFO and ITE. ITE numbers used in analysis of p.m. peak-hour traffic produces conservative analysis.

e EIR analysis assumed 719 multi-family dwelling units to provide a conservative analysis. The revised Harden Ranch development may have fewer units.

f Trip generation data for Auto Center from Salinas Auto Center FEIR, City of Salinas, June 1997.

ksf = Thousand Square Feet
du = Dwelling Unit (mf = multi-family; sf = single family)

SOURCES: Institute of Transportation Engineers, *Trip Generation*, 5th Ed., 1991; Salinas Traffic Fee Ordinance; DKS Assoc.



SOURCE: DKS Associates

Mountain Valley / 960352 ■

Figure 12
Location of Approved and Pending Projects

TABLE 3: PROJECT TRIP GENERATION

Project Component	Land Use	Size Unit	Daily Trips[a] Rate	Daily Trips[a] Trips	PM Peak Hour[b] Total	PM Peak Hour[b] In	PM Peak Hour[b] Out
Phase 1	Residential - SFDU	204 du	10.00	2,040	208	135	73
Phase 2	Residential - SFDU	153 du	10.00	1,530	156	101	55
Phase 3	Residential - SFDU	148 du	10.00	1,480	151	98	53
Phase 4	Residential - SFDU	88 du	10.00	880	90	58	32
Phase 5	Residential - SFDU	142 du	10.00	1,420	145	94	51
Phase 6	Residential - SFDU	118 du	10.00	1,180	120	78	42
Parks	Community/ Neighborhood	21.5 acre	3.00	65	68	24	44
School	Elementary	900 students	1.00	900	9	5	4
Totals				**9,495**	**947**	**593**	**354**

a ADT trip rates based on City of Salinas, Traffic Fee Ordinance, 1987.
b PM Peak Hour trip based on ITE, *Trip Generation*, 5th Edition, 1991.

SFDU = Single-Family Dwelling Unit

SOURCE: Institute of Transportation Engineers, *Trip Generation*, 5th Ed., 1991; Salinas Traffic Fee Ordinance; DKS Associates

Trip Distribution

The trip distribution pattern assumptions for cumulative projects and the proposed project were based on the *Williams Ranch Planned Community Precise Plan EIR* (City of Salinas, 1991), and the *Westridge Center EIR* (City of Salinas, 1994). The patterns were reviewed with City staff and compared with other recent traffic studies for consistency, and incorporated in this analysis. Figure 13 shows trip distribution patterns for the proposed Mountain Valley project. About 70 percent of project-generated trips (all residential) would begin and end in Salinas; others would have origins or destinations outside the City.

Trip Assignment

Trips generated by cumulative projects and the proposed Mountain Valley project were assigned to the street network along the most reasonable paths based on the distribution indicated in Figure 13. Traffic assignment was done with the assistance of the TRAFFIX traffic impact model, using logical paths and route choices. In cases where more than one reasonable route was

TABLE 4: INTERSECTION LEVEL OF SERVICE (LOS) ANALYSIS - PM PEAK HOUR

	Existing Conditions		Existing + Proposed Project		Existing + Proposed Project (Mitigated)		Existing + Proposed Project + Cumulative (incl. all other developments)		Existing + Project + Cumulative w/ Mitigation	
Study Intersections	V/C[a]	LOS	V/C	LOS	V/C	LOS	V/C	LOS	V/C	LOS
Signalized Intersections										
S. S'nb'rn Rd/US 101 SB Rmp[d]	14.9	B	15.8	C	-	-	21.5	C	-	-
No. Sanborn Rd / John Street	0.46	A	0.53	A	-	-	0.79	C	-	-
No. Sanborn Rd / E. Alisal Str	0.53	A	0.58	A	-	-	0.92	E	0.65	B
No. Sanborn Rd / E. Market St	0.62	B	0.65	B	-	-	0.85	D	-	-
No. Sanborn Rd / E. Laurel Dr	0.48	A	0.54	A	-	-	0.76	C	-	-
Williams Rd/E. Alisal St/John St	0.47	A	0.53	A	-	-	0.87	D	-	-
Williams Rd / E. Market Street	0.42	A	0.48	A	-	-	0.60	A	-	-
Williams Rd / Del Monte Ave.	0.34	A	0.35	A	-	-	0.56	A	-	-
Williams Rd / Bardin Road	0.33	A	0.53	A	-	-	0.61	B	-	-
Williams Rd / Freedom Blvd	[b]		0.19	A	-	-	0.57	A	-	-
Unsignalized Intersections[c]										
S. S'nb'rn Rd/US 101 NB Rmp[d]		**F**		**F**	10.0	B		**F**	27.5	D
Williams Rd / E. Laurel Drive		**F**		**F**	0.32	A		**F**	0.58	A
Williams Rd / Garner Avenue		**F**		**F**	0.30	A		**F**	0.71	C
Bardin Rd / Countryside Drive		B		C	-	-		C	-	-
Bardin Rd / Argentine Drive		B		B	-	-		B	-	-
Bardin Rd / E. Alisal Street		B		C	-	-		C	-	-
Airport Blvd / Terven Avenue[e]		**F**	0.76	C	0.76	C	0.81	D	0.81	D
Williams Rd / Boulevard A	[b]			**F**	0.42	A		**F**	0.67	B

Bold-face text indicated unacceptable Level of Service.

a V/C = Volume-to-Capacity ratio (basis of LOS determination for signalized intersections), as measured by *Circular 212* methodology (Transportation Research Board, 1980), except Sanborn/U.S. 101 Ramps; see note "d" below. See Appendix B for level of service definitions.

b Intersection does not exist in current conditions; proposed as part of Salinas Traffic Fee Ordinance.

c Unsignalized intersection level of service designation reflects conditions for the movement with the worst level of service (typically left-turns from the minor street onto the major street). LOS determination by use of *Highway Capacity Manual* methodology (Transportation Research Board, 1994).

d Intersection calculated by 1994 Highway Capacity Manual operations methodology, using average delay per vehicle to determine level of service. This intersection is operated by Caltrans District 5 and was analyzed using an operations methodology that is consistent with Caltrans requirements. Numbers in "v/c" column represent average vehicle delay in seconds.

e Signal installation to be complete in summer 1998.

SOURCE: DKS Associates

It should be noted that breaks in traffic resulting from operation of the traffic signal at the nearby intersection of Sanborn Road and the U.S. 101 southbound ramps could allow for left-turns from the northbound ramps with less delay than is calculated as part of this analysis. Therefore, conditions projected in this analysis may be conservative. The project is not projected to add traffic to the left-turn volumes, but would add to traffic volumes on Sanborn Road, thereby reducing gaps in cross traffic and substantially increasing calculated delays for left-turning vehicles. As a result, drivers could attempt unsafe turning movements without adequate clearance in cross-traffic, or choose another route. As previously noted, the calculated delay could be conservative due to the presence of a nearby signal. Further, these long delays would be experienced by less than 2 percent of the traffic at the intersection. The project contribution to this impact would be negligible. Cumulative plus project-generated traffic would further increase delays.

Mitigation Measure

4.2.1a No TFO project is planned for the intersection of ~~North~~ South Sanborn Road and U.S. 101 Northbound Ramps. With the addition of traffic from the proposed project, the intersection would satisfy a Caltrans peak-hour signal warrant. Other warrants and conditions, however, should be considered before a traffic signal is installed, such as pedestrian and vehicular safety, distance between adjacent intersections, and accident history (Caltrans, 1992). The project sponsor shall be required to fund a proportionate share of intersection improvements, based on the project's contribution to the impact.

Once the intersection is signalized, the intersection would operate at LOS B (average delay = 10.0 sec.) with the proposed project, and at LOS D (average delay = 27.5 sec.) with cumulative development plus the proposed project. Implementation of this measure would reduce the impact to a less-than-significant level.

Because there is no identified funding source that would completely fund this mitigation measure, the impact would be significant and unavoidable. For reference, Table 5, p. 4.2-19, provides the project's contribution to traffic volumes at each study intersection. This information can be used as one measure in assessing the project's fair share contribution towards the cost of a new traffic signal. New traffic signals typically cost about $150,000.

4.2.1b: Williams Road / East Laurel Drive. The proposed project would cause the minor street turn movement at the unsignalized intersection of Williams Road and East Laurel Drive, currently operating at LOS F, to experience increased delays in the future,

during the weekday p.m. peak hour. Existing southbound vehicles on Laurel Drive turning left onto Williams Road (about 70 vehicles in the p.m. peak hour, or about 4 percent of total intersection volume) experience an average of about 90 seconds delay per vehicle. With a projected increase of more than 100 additional left-turning vehicles due to project traffic and reduced gaps in cross traffic due to project-generated increased volumes on Williams Road, calculated average delays for this movement would increase substantially. As a result, drivers could attempt unsafe turning movements without adequate clearance in cross-traffic, or choose another route. It should be noted that breaks in traffic resulting from operation of the traffic signal at the nearby intersection of Williams Road and East Market Street could allow for left-turns from Laurel Drive with less delay than calculated for this analysis. Therefore, conditions projected in this analysis may be conservative. The lengthy delays would be experienced by about 8 percent of total intersection traffic under existing-plus-project conditions. Cumulative plus project-generated traffic would further increase delays. This would be a significant impact in that project traffic and traffic from cumulative development would contribute measurably to an existing unacceptable level of service.

Mitigation Measure

4.2.1b No TFO project is planned for the intersection of Williams Road and East Laurel Drive. With the addition of traffic from the proposed project, the intersection would satisfy a Caltrans peak-hour signal warrant. Other warrants and conditions, however, should be considered before a traffic signal is installed, such as pedestrian and vehicular safety, distance between adjacent intersections, and accident history (Caltrans, 1992). The project sponsor shall be required to fund a proportionate share of intersection improvements, based on the project's contribution to the impact.

Once the intersection is signalized, the intersection would operate at LOS A (v/c = 0.32) with the proposed project, and at LOS A (v/c = 0.58) with cumulative development plus the proposed project. Implementation of this measure would reduce the impact to a less-than-significant level.

Because there is no identified funding source that would completely fund this mitigation measure, the impact would be significant and unavoidable. For reference, Table 5, p. 4.2-19, provides the project's contribution to traffic volumes at each study intersection.

Alternatives to traffic signalization also exist, but would require further study by the City before implementation, and are therefore not recommended at this time. These alternatives include reducing the number of streets with access to Williams Road, creating streets with right turn in -right turn out access only on Williams Road, including

a median on Williams Road to enforce the left turn restrictions. These measures may be somewhat more cost effective than new traffic signals, and would allow better progression between traffic signals that are in close proximity to one another.

4.2.1c: Williams Road / Garner Avenue. The proposed project would cause the minor street turn movement at the unsignalized intersection of Williams Road and Garner Avenue, currently operating at LOS F, to experience increased delays in the future, during the weekday p.m. peak hour. Existing southbound vehicles on ~~Laurel Drive~~ Garner Avenue turning left onto Williams Road (about 70 vehicles in the p.m. peak hour, or about 5 percent of total intersection volume) experience LOS F conditions. The project is not projected to add traffic to the left-turn volumes, but would add to traffic volumes on Williams Road, thereby reducing gaps in cross traffic and substantially increasing calculated delays for left-turning vehicles. As a result, drivers could attempt unsafe turning movements without adequate clearance in cross-traffic, or choose another route. It should be noted that breaks in traffic resulting from operation of the traffic signal at the nearby intersection of Williams Road and Bardin Road could allow for left-turns from Garner Avenue with less delay than calculated in this analysis. Therefore, conditions projected in this analysis may be conservative. The lengthy delays would be experienced by about 3 percent of total intersection traffic under existing-plus-project conditions. Cumulative plus project-generated traffic would further increase delays. This would be a significant impact in that project traffic and traffic from cumulative development would contribute measurably to an existing unacceptable level of service.

Mitigation Measure

4.2.1c No TFO project is planned for the intersection of Williams Road and Garner Avenue. With the addition of traffic from the proposed project, the intersection would satisfy a Caltrans peak-hour signal warrant. Other warrants and conditions, however, should be considered before a traffic signal is installed, such as pedestrian and vehicular safety, distance between adjacent intersections, and accident history (Caltrans, 1992). The project sponsor shall be required to fund a proportionate share of intersection improvements, based on the project's contribution to the impact.

Once the intersection is signalized, the intersection would operate at LOS A (v/c = 0.30) with the proposed project, and at LOS C (v/c = 0.71) with cumulative development plus the proposed project. Implementation of this measure would reduce the impact to a less-than-significant level.

Because there is no identified funding source that would completely fund this mitigation measure, the impact would be significant and unavoidable. For reference, Table 5, p. 4.2-19, provides the project's contribution to traffic volumes at each study intersection.

4.2.1d: Airport Boulevard / Terven Avenue. The proposed project would cause the minor street turn movement at the unsignalized intersection of Airport Boulevard and Terven Avenue, currently operating at LOS F, to experience increased delays in the future, during the weekday p.m. peak hour. However, the City has secured funding for the installation of a traffic signal at this intersection, and also at the Airport – De La Torre intersection. Those projects are designed and currently under construction. These signals are expected to be completed by summer of 1998, and are fully funded. Once the intersection is signalized, the intersection would operate at LOS C (v/c = 0.75) prior to other development, at LOS C (v/c = 0.76) with the proposed project, and at LOS D (v/c = 0.81) with cumulative plus the proposed project. This would be a less-than-significant impact.

Mitigation Measure

4.2.1d None required.

Impact 4.2.2: Project-generated traffic would result in an unacceptable level of service for the minor street turn movement at the future unsignalized intersection of Williams Road and Boulevard A, constructed as part of the project. This would be a significant impact.

4.2.2: Williams Road / Boulevard A. Project-generated traffic would cause the minor street turn movement at Williams Road / Boulevard A to operate at LOS F during the weekday p.m. peak hour.

Mitigation Measure

4.2.2 No TFO project is planned for the intersection of Williams Road and Boulevard A. The project sponsor shall install a traffic signal at the intersection prior to issuance of the first certificate of occupancy.

With the addition of traffic from the proposed project, the intersection would satisfy a Caltrans peak-hour signal warrant. With signalization, the intersection would operate at LOS A (v/c = 0.42) with the proposed project, and (LOS B (v/c = 0.67) with cumulative development plus the proposed project.

The project sponsor shall be responsible for the design of the intersection, including signal timing and locations, to the satisfaction of the Salinas Public Works Department. Issues that will require consideration include school bus turning radii, pedestrian crosswalks, drop-off maneuvers at Alisal High School, and potential backups on Williams Road near the school driveways.

Implementation of the above measures would reduce the impact to a less-than-significant level.

Impact 4.2.3: The project, along with cumulative development, would result in a deterioration in the level of service at the signalized intersection of Sanborn Road and Alisal Street. This would be a significant cumulative impact.

Sanborn Road / Alisal Street. The proposed project would cause the intersection of North Sanborn Road and East Alisal Street to degrade incrementally from LOS A (v/c = 0.53) at present to LOS A (v/c = 0.58) with traffic from the proposed project, during the weekday p.m. peak hour. Project-generated traffic would not cause any change in the level of service.

With traffic from cumulative development, the intersection would degrade to LOS E (v/c = 0.92).This would be a significant cumulative impact, resulting from additional traffic generated by approved and planned development.

Mitigation Measure

4.2.3 No mitigation is required for the project impact. Mitigation of the cumulative impact could be achieved by providing a second eastbound left turn lane from East Alisal Street onto northbound North Sanborn Road unless additional study does not confirm the need for the additional turn lane.

With the mitigation measure, the intersection would operate at LOS B (v/c = 0.65) with cumulative development, and with the proposed project. Implementation of this measure would reduce the cumulative impact to a less-than-significant level.

Because there is no identified funding source that would completely fund this mitigation measure, the cumulative impact would be significant and unavoidable. For reference, Table 5, p. 4.2-19, provides the project's contribution to traffic volumes at each study intersection.

TABLE 5: PROJECT CONTRIBUTION TO STUDY INTERSECTION TRAFFIC VOLUMES

Intersection	Existing Volume	Exist. LOS	Project Volume	Existing +Project Volume	Exist.+ Project LOS	Signif. Impact?	Cumul. Volume	Total Volume	Cumul. + Proj. LOS	Signif. Impact?	Mitigation Measure	Mit. LOS	Total Mitigation Cost	Project Percent of Total Vol.	Project Mitigation Cost /a/
Signalized Intersections															
Sanborn/US 101 SB	2,163	B	138	2,301	C	No	1,108	3,409	C	No	n/a	n/a	n/a	4.0%	n/a
Sanborn/John	2,413	A	309	2,722	A	No	839	3,561	C	No	n/a	n/a	n/a	8.7%	n/a
Sanborn/Alisal	3,250	A	135	3,385	A	No	1,128	4,513	**E**	Cumul.	Restripe	B	$50,000	3.0%	$1,496
Sanborn/Market	2,993	B	44	3,037	B	No	1,340	4,377	D	No	n/a	n/a	n/a	1.0%	n/a
Sanborn/Laurel	3,066	A	164	3,230	A	No	1,300	4,530	C	No	n/a	n/a	n/a	3.6%	n/a
Williams/Alisal/John	1,745	A	444	2,189	A	No	837	3,026	D	No	n/a	n/a	n/a	14.7%	n/a
Williams/Market	1,737	A	453	2,190	A	No	946	3,136	A	No	n/a	n/a	n/a	14.4%	n/a
Williams/Del Monte	1,233	A	184	1,417	A	No	1,380	2,797	A	No	n/a	n/a	n/a	6.6%	n/a
Williams/Bardin	1,674	A	599	2,273	A	No	1,012	3,285	B	No	n/a	n/a	n/a	18.2%	n/a
Williams/Freedom	597	n/a	309	906	A	No	1,212	2,118	A	No	n/a	n/a	n/a	14.6%	n/a
Unsignalized Intersections															
Sanborn/US 101 NB	2,776	**F**	175	2,951	**F**	No	1,099	4,050	**F**	Cumul.	Signal	D	$150,000	4.3%	$6,481
Williams/Laurel	1,619	**F**	599	2,218	**F**	Yes	1,013	3,231	**F**	Cumul.	Signal	A	$150,000	18.5%	$27,809
Williams/Garner	1,482	**F**	599	2,081	**F**	Yes	1,012	3,093	**F**	Cumul.	Signal	C	$150,000	19.4%	$29,049
Bardin/Countryside	638	B	415	1,053	C	No	0	1,053	C	No	n/a	n/a	n/a	39.4%	n/a
Bardin/Argentine	575	B	109	684	B	No	0	684	B	No	n/a	n/a	n/a	15.9%	n/a
Bardin/Alisal	773	B	48	821	C	No	0	821	C	No	n/a	n/a	n/a	5.8%	n/a
Airport/Terven /b/	1,910	**F**	14	1,924	D	No	0	1,924	D	No	n/a	D	n/a	0.7%	n/a
Williams/Blvd A /c/	1,808	n/a	251	2,059	**F**	Yes	1,380	3,439	**F**	Yes	Signal	B	$150,000	n/a	$150,000

/a/ Project Mitigation Cost based on estimate of $150,000 for installation of traffic signal.
/b/ Signal to be installed by summer 1998.
/c/ Intersection would not exist until construction of project; therefore, project must bear full cost of mitigation.

SOURCE: DKS Associates

Trip Reduction Ordinance

Pursuant to Section 37-165.1 of the Salinas Municipal Code, the project sponsor has proposed several trip reduction measures designed to reduce the number of single occupant vehicles associated with the Mountain Valley development. The purpose and intent of the trip reduction program is to ~~conform with air quality and congestion management mandates,~~ implement General Plan policies, support transit regional goals, and achieve a 1.6 percent per year vehicle trip reduction and/or a 60 percent drive alone rate. A Facilities Trip Reduction Plan is required for all new residential developments of more than 25 units. (The traffic analysis in this EIR did not assume a reduction in vehicle trips attributable to a trip reduction plan, in order to provide a conservative analysis.)

Of the 14 measures that may be required by the City of Salinas in order to meet the trip reduction goals, the following 6 would have the most affect on reducing vehicle trips at a new residential development:

1. Provision of ridesharing/transit and child care information to buyers as part of move-in materials
2. Bicycle amenities, such as bicycle racks and bicycle lanes on roadways
3. Bus pull-outs, pedestrian access, transit stops, shelters and amenities as part of the site plan
4. Transportation information at kiosks
5. Pedestrian facilities linking transit stops and common areas
6. Transit and/or pedestrian oriented design

The project sponsor, as part of their Precise Plan, completed a Facilities Trip Reduction Plan Application. The Mountain Valley Trip Reduction Plan includes each of the first five elements listed above. Item 6 would require that a portion of the units be higher density housing. By taking the allowable reduction percentages, the Mountain Valley project may achieve a total of a 7.5 percent reduction in vehicle trips.

These measures could lead to a 1.6 percent per year trip reduction, which would level off at 7.5 percent. Implementation of these measures, collectively, would reduce vehicle trips, but would not change traffic congestion levels in the City of Salinas. Congestion relief would require many more people using transit (much higher transit mode share), less free parking at work sites anxd other locations, and provision of more services (shopping, medical, recreational,

school, etc.) within walking distance. While every measure listed above is an important contributing factor to reducing vehicle trips, overall traffic congestion relief is a regional issue as much as a citywide issue, and requires the efforts of many entities. The actual success of the project's Trip Reduction Plan would depend on a number of elements, including future increases in transit service, availability of employment opportunities accessible by transit and/or bicycle, provision of goods and services in proximity to residences, and other factors.

Freeway Impacts

Impact 4.2.4: Project-generated traffic would increase freeway volumes in the peak direction by less than one percent during the p.m. peak hour, and would not result in any change in level of service or substantial increases in delay or congestion. Cumulative development would cause the U.S. 101 freeway, in the segment north of ~~North~~ Sanborn Road, to degrade from LOS D to LOS E in the peak (northbound) direction during the p.m. peak hour. This would be a less-than-significant project impact, and a significant cumulative impact, to which the project would not make a substantial contribution.

The Transportation Agency of Monterey County, which also serves as the County's Congestion Management Agency (CMA), is responsible for monitoring service levels along the Congestion Management Program (CMP) roadway network. The CMP network includes all state highways (U.S. 101, SR 68 and SR 183 in Salinas), as well as North Main Street, Market Street ~~and~~ Davis Road, Blanco Road, South Sanborn Road, Boronda Road, Laurel Drive, Natividad Drive, Sherwood Drive, and Alisal Street in Salinas. The intersection LOS analysis presented above can be used to assess service levels along Market Street between Williams Road and ~~North~~ South Sanborn Road. The freeway LOS analysis presented in this section shows service levels along U.S. 101. As determined by the County CMA, LOS D is the established minimum acceptable service level for U.S. 101 through Salinas.

Table 6 shows freeway mainline traffic volumes and levels of service along U.S. 101, using the methodology outlined in the *Highway Capacity Manual* (Transportation Research Board, 1994). As shown in Table 6, cumulative development would increase existing peak-direction traffic volumes by about 28 percent in the freeway segment between ~~North~~ South Sanborn Road and John Street, and the p.m. peak-hour level of service would drop from LOS D to LOS E. Project-generated traffic would add less than a one percent increase in existing freeway traffic volumes along this LOS E segment, and less than one percent of the existing freeway capacity (estimated at 4,000 vehicles per hour for two lanes).

TABLE 6: PM PEAK HOUR FREEWAY ANALYSIS

Freeway Segment		Existing		Existing + Proposed Project		Existing + Proposed Project + Cumulative	
		Vol.	LOS[a]	Vol.	LOS	Vol.	LOS
US 101 betw. ~~North~~ South Sanborn Road and John Street	NB	2,763	D	2,794	D	3,559	**E**
	SB	1,548	B	1,607	C	2,040	C
US 101 betw. Airport Boulevard and ~~North~~ South Sanborn Road	NB	2,698	D	2,718	D	3,112	D
	SB	1,900	C	1,920	C	2,282	C
US 101 south of Airport Boulevard	NB	1,625	B	1,643	C	2,034	C
	SB	875	A	885	B	1,246	B

Bold-face text indicated unacceptable Level of Service.

[a] LOS = level of service, as defined in Chapter 3 of the *Highway Capacity Manual*, Transportation Research Board Special Report 209, 1994.

Vol. = total volume in each direction

SOURCE: DKS Associates

Although not related to the Mountain Valley project, development on the Shipper's site and Ottone Business Park in central Salinas has been conditioned on construction of a four-lane street (Work Street) between John Street and Sanborn Road, parallel to U.S. 101. Approximately one-half of this street has been constructed and the other half is expected to be completed by late 1998. Completion of this roadway will provide a street connection (minimum two-lane width) from Alisal Street to Airport Boulevard, parallel to the freeway. This facility will include traffic signals at all major streets (Alisal Street, John Street, Sanborn Road and Airport Boulevard) and will provide improved access for local street without the need to use U.S. 101.

Mitigation Measure

4.2.4 No project mitigation measure would be required.

The mitigation measure for the cumulative impact would be the addition of a third freeway lane in each direction along U.S. 101 in Salinas, which would be consistent with the City's *General Plan* and reduce this impact to a less-than-significant level.

Neighborhood Impacts

Impact 4.2.5a: Project-generated traffic would increase the daily weekday traffic volumes on Countryside Drive, Argentine Drive and Del Monte Avenue as follows:

Countryside Drive, from about 1,000 to about 2,800 daily vehicle trips.
Argentine Drive, from about 1,000 to about 2,200 daily vehicle trips.
Del Monte Avenue, from about 1,000 to about 2,200 daily vehicle trips.

This would be a less-than-significant project impact, as these residential collector street volumes would not exceed General Plan standards.

Because the proposed Mountain Valley project is adjacent to existing residential areas, the potential for cut-through traffic would be created. Motorists would use Del Monte Avenue, Countryside Drive and Argentine Drive to access Bardin Road and Williams Road. Intersection capacity analysis indicated that traffic service levels would not create a significant impact along Countryside Drive, Argentine Drive or Del Monte Avenue.

Although traffic volumes would increase along these residential streets, overall traffic conditions would be considered light to moderate. Residents and visitors would be expected to be able to cross streets safely and maneuver in and out of driveways with little difficulty. The significance threshold for local residential collector streets is a daily volume of 3,000 vehicles. The project would not exceed this threshold. In addition, the project sponsor would include traffic calming features as part of the project's street design.

Mitigation Measure

4.2.5a None required. However, to reduce further local traffic impacts of the proposed project, the ~~City could require that the~~ project sponsor would incorporate neighborhood traffic safety measures into the design of the proposed project.

Traffic calming measures could be incorporated into the site design and the interface between the project site and the adjacent existing neighborhood. Measures that should be considered include speed humps and speed tables, narrowing of streets (e.g., constrictors, curb extenders, etc.), partial street diverters, stop signs, and landscaping elements that are aimed at slowing down and/or diverting traffic to the outer arterial roadways (East Alisal and Freedom Parkway). The traffic calming measures, combined with enforcement of traffic laws, would be aimed at protecting the neighborhood along Argentine Drive, Countryside Drive and Del Monte Avenue from additional vehicles generated by the Mountain Valley project.

With the extension of Freedom Parkway along the eastern perimeter of the Mountain Valley site and East Alisal Street along the south, motorists would tend to use those collector roadways, rather than Del Monte Avenue, Countryside Drive and Argentine Drive. Traffic cannot be entirely eliminated from the residential streets, but perimeter local arterial roadways would result in less traffic intrusion into the adjacent neighborhood than would otherwise occur.

Impact 4.2.5b: If Del Monte Avenue were not used as an access route between Williams Road and the proposed project, project-generated traffic would increase the daily weekday traffic volumes on Countryside Drive, and possibly Argentine Drive, beyond the threshold for local residential collector streets of 3,000 vehicles per day. This would be a significant impact.

The project originally proposed the extension of Del Monte Avenue into the project site, along with extensions of Countryside and Argentine Drives. During a neighborhood meeting on September 20, 1997, a group of neighbors indicated their support for extending both Countryside and Argentine, but wanted to "close" Del Monte in a cul-de-sac with only pedestrian and bicycle access to the project site. The Precise Plan was revised to reflect this change; however, the project description in the EIR continues to reflect Del Monte's extension into the project site (the staff-supported option).

If Del Monte were not available as a third access and egress route, most of the approximately 1,200 project-generated vehicles that would have used Del Monte would instead use Countryside Drive. Some vehicles might shift to Argentine Drive or to another route through the project site (e.g., Boulevard "A" or Freedom Parkway), but the proximity of Countryside Drive to Del Monte Avenue and the fact that Countryside would provide the shortest route to Williams Road makes it likely that most Del Monte vehicles would shift to Countryside.

Mitigation Measure

4.2.5b Implementation of traffic calming measures such as those identified in Measure <u>4.2.5a</u> ~~4.2.4a~~ would reduce traffic volumes on Countryside Drive and, potentially, Argentine Drive. However, it is unlikely that volumes on Countryside Drive would be reduced below the 3,000-vehicles-per-day threshold, and this impact would be significant and unavoidable.

Pedestrian, Transit, Bicycle, and Parking Impacts

No significant impacts to pedestrian safety are anticipated as a result of the proposed project. Sidewalks and pedestrian walkways will be incorporated into the development. Pedestrian crossing buttons would be incorporated into all new traffic signal installations.

The incorporation of pedestrian paths between residential areas and school and park facilities would contribute to pedestrian safety, and would be consistent with the Salinas *General Plan.* Such measures would also be consistent with the City's Trip Reduction Ordinance.

Impact 4.2.6: Project-generated transit ridership, along with project and cumulative traffic on Williams Road, could impede transit service on Williams Road.

The project would not be expected to result in transit ridership that could not be accommodated, as Monterey-Salinas Transit already provides service along Williams Road in the vicinity of the proposed site. However, with increased traffic on Williams Road and increased transit ridership to and from the site, buses could have difficulty maneuvering in and out of traffic.

Mitigation Measure

4.2.6 The project sponsor shall construct a bus turnout on the project's Williams Road frontage to meet the requirements of Monterey-Salinas Transit.

The Precise Plan indicates that the project's widening of the Williams Road right-of-way would include a 30-foot greenway that would be "wide enough to construct a bus turnout should Monterey-Salinas Transit determine that volume warrants its construction." The project sponsor shall consult with Monterey-Salinas Transit (MST), and if MST determines that a bus turnout is required, the sponsor shall construct a turnout as part of the Phase 2 project construction. Additional bus turnouts shall be installed by the sponsor as deemed necessary by Monterey-Salinas Transit and the City of Salinas.

It is not anticipated that the project would result in significant bicycle use impacts. The proposed project would include Class II bicycle lanes on the Freedom Parkway Extension, East Alisal Street Extension, Mountain Valley Boulevard and Boulevard "A." To encourage increased bicycle use, the City could provide bicycle racks or lockers and shower facilities at the

park facilities. Incorporation of the above measures would be consistent with the Salinas *General Plan* and the City's Trip Reduction Ordinance.

Because the proposed project would consist entirely of residences, a school, and a park, no significant parking impacts are anticipated. The project would comply with the Salinas Zoning Code requirement of two covered parking spaces per single-family unit (City of Salinas, 1993). It is expected that, with the addition of driveway parking and on-street parking, no parking overflow problems will occur.

Construction Impacts

Impact 4.2.7: Construction traffic could access the Mountain Valley site via Del Monte Avenue, Argentine Drive and Countryside Drive. The additional trucks, delivery vehicles and other construction related trips will add vehicles to local residential collector roadways throughout the construction phases. This would be a less-than-significant impact.

Mitigation Measure

4.2.7 No mitigation is required. However, to avoid disruption of local traffic during construction, the City could prohibit access via Del Monte, Argentine, and Countryside. Prior to the start of grading or construction, acceptable access (as determined by the City Public Works Department) could be required to be provided via Williams Road and/or Alisal Street extension. In addition, the project sponsor could be required to prepare, before the start of construction, a construction mitigation plan that, at a minimum, considers:

- The number of truck trips;
- Time of day and location of any street closures;
- Time of day arrival and departure of trucks;
- Limitations on the size and type of trucks;
- Provision of a truck staging area, with limitations on the number of trucks that can be waiting;
- Provision of a truck circulation pattern;
- Mobile office placement and associated parking;
- Manual traffic control when necessary;
- Proper advance warning and posted signage concerning street closures and construction activity;

- Provisions for pedestrian safety;
- Relocation of MST Transit Bus stops, if necessary.

Cumulative Impacts

This section provides a qualitative discussion of potential projects that may adversely affect traffic service levels throughout the City of Salinas. Cumulative traffic impacts are analyzed above for the intersections that would be affected by project traffic, and are included in Table 4.

The Transportation Agency for Monterey County is currently in the process of preparing a North Salinas Traffic Study. As part of that work effort, year 2015 traffic modeling is being conducted that includes segments of U.S. 101 north of Laurel Drive, as well as other roadways throughout North Salinas. Because the proposed Mountain Valley project is located in southeast Salinas, the project's anticipated impacts would be located mostly south of Constitution Boulevard and east of Natividad Road, and therefore would not correspond to the study area for the North Salinas Traffic Study. Only the project traffic that would use Boronda Road to travel to and from North Salinas would affect the North Salinas Traffic Study Area.

The *Salinas Auto Center Draft EIR* analyzed transportation impacts for the year 2015 cumulative condition. The analysis was based largely on *General Plan* buildout in Salinas. The analysis in this report, however, uses a detailed approved projects list, which in turn provides a more conservative analysis of transportation impacts, as more trips were added to the roadway system under this analysis. (Revisions, General Plan Amendments, and annexations have resulted in more traffic being forecast in Salinas than was assumed under the *General Plan* analysis.)

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4.3 PUBLIC SERVICES AND UTILITIES

SETTING

Public Services

Schools

The City of Salinas is served by four school districts. The project site would be within the Alisal Union Elementary School District and the Salinas Union High School District, both currently operating near or beyond permanent capacity and using temporary facilities to accommodate the overflow.

The Alisal Union Elementary School District operates eight elementary schools (Grades K-6). The enrollment of 6,466 elementary school students in the school district in 1996-1997 made up 97 percent of the district's permanent and temporary capacity of 6,560 students (Hausrath, 1998). Bardin Elementary School is located contiguous to the project site to the southwest, and Alisal Elementary is located northwest of the site on Williams Road.

The Salinas Union High School District operates three middle schools. The 1996-1997 school year enrollment of 3,598 junior high students fills approximately 95 percent of combined permanent and temporary capacity of 3,780 junior high school students (Hausrath, 1998). The nearest existing middle school to the project site is El Sausal Middle School, located approximately one mile west of the site. A fourth site is planned in the Williams Ranch on Sanborn Road at Paseo Grande Way.

The Salinas Union High School District also operates four high schools. The 1996-1997 enrollment of 7,310 high school students uses approximately 99 percent of the combined permanent and temporary capacity of 7,370 high school students (Hausrath, 1998). Alisal High School is the nearest high school, across Williams Road and north of the project site.

Police

The Salinas Police Department maintains its headquarters in the Civic Center complex on Lincoln Avenue, approximately 3.25 miles west of the project site. The Police Department employs 150 sworn officers, including two positions paid for by a federal grant (Wilson, 1998). The current level of service is 1.22 officers per 1,000 persons, based on a resident population of

123,300; and 1.09 officers per 1,000 persons, based on a service population of 135,600,[1] a ratio which is relatively low among California cities (Wilson, 1998).

The project site is within Beat 11 (of 12), an area that has seen considerable gang-related activity in recent years, particularly north of the site along Sanborn Road. The Williams Ranch project, now under construction across Williams Road from the project site, is also in Beat 11 (Wilson, 1998).

Fire Protection and Emergency Medical Service

The project site is within the Salinas Rural Fire Protection District service area, but would be served directly by the Salinas Fire Department after annexation to the City.

The Salinas Fire Department operates a total of five stations and has a total of 79 firefighters. The department aims to maintain a 3-5 minute response time, although the *General Plan* specifies a targeted 6.5-7.5 minutes response time. The City has a service standard of approximately 9,200 housing units per station (Hausrath, 1998). Firefighters are trained to provide emergency medical assistance, and American Medical Response is under contract to provide emergency medical transport services.

Currently, the nearest fire station to the project site is Station No. 4 at 308 Williams Road, about 1.0 mile from the project site. A new fire station, Station No. 5, is to be built within the Williams Ranch project about 0.75 miles northwest the project site. Station No. 5 is included in the City's current six-year Capital Improvement Program. However, funds have not been allocated for construction of the new fire station, and construction may not occur before 2000. The existing Station No. 4 would provide secondary response to the project site.

Libraries

The City of Salinas maintains a library system comprising ~~of~~ the Salinas Main (John Steinbeck) Library, El Gabilan Branch Library, and the Cesar Chavez (formerly Santa Lucia) Branch Library, the nearest branch, at the northeast corner of Bardin Way and Williams Road, approximately 0.3 mile northwest of the project site. Because the library administration is

[1] The service population is based on the projected 1997 resident population of 123,300 plus one-fourth of the Salinas employment (Hausrath, 1997).

centralized and materials are transferred routinely among the three libraries, all library materials essentially are accessible to the public at all branches.

The library system currently has a total of 42,753 square feet of space. This represents 0.35 square feet per person. Planned expansion of the El Gabilan library would bring the space standard to 0.43 square feet per person (Hausrath, 1998).

Parks and Recreation

The existing developed park acreage in the City of Salinas consists of approximately 236 acres of community and neighborhood parks to serve the City's 1997 population of approximately 123,300 people (Hausrath, 1998). This represents a ratio of approximately 1.9 acres per 1,000 residents, less than the *General Plan* standard of 3.0 acres per 1,000 residents (City of Salinas, 1988).

The seven-acre Closter Community Park, with facilities for basketball, tennis, baseball, soccer, football, and picnicking, is located approximately 0.75 miles northwest of the project site. Smaller parks such as the 0.5-acre Gabilan Play Lot and the 0.75-acre tot lot, each about 0.1 mile from the project site, are geared toward young children in the neighborhood. A 64-acre community / open space park (Natividad Creek Park) is being developed as part of the Williams Ranch development to the north (the first phase has been recently completed). Salinas also operates nine community centers for meetings, exhibits and other public gatherings and recreational activities. East Salinas is currently served by the Firehouse Recreation Center on Alisal Street and the Breadbox Recreation Center on Sanborn Road.

East Salinas is currently underserved by park facilities, and the existing Closter Park does not meet the community park acreage standard of a minimum of 20 acres (City of Salinas, 1988). According to the *General Plan*, the high demand on schools makes joint use of schools as recreational facilities difficult; however, joint use is nonetheless encouraged.

Public Utilities

Water Service

Groundwater is the primary source of water for agricultural, industrial, commercial and residential uses in the Salinas Valley. Alco Water Service Company provides residential and

commercial water service to the southeastern portion of the City of Salinas in the project area. The drinking water currently conforms to primary and secondary water quality standards without any form of treatment; however, water treatment facilities would be installed if changes in State Department of Health requirements or deteriorating groundwater quality necessitate treatment (Adcock, 1993; Fuog, 1998).

Adjacent to the project site are existing 12-inch water mains located in Williams Road, Del Monte Avenue, Countryside Drive, and the Gabilan Village apartment complex east of Del Monte Avenue, and a six-inch water main in Argentine Drive (EMC, 1998). There is an existing pumping station at the western corner of Alisal High School on Burke Street which pumps 2,600 gpm (City of Salinas, 1991). The project site contains one of four wells that supply agricultural irrigation water to the Sconberg Ranch.

Sewer Service

Salinas' wastewater discharges to the Salinas Pump Station, and then is transported and treated at the regional wastewater treatment plant in Marina. The City of Salinas owns and operates the collection facilities within its urban boundaries, and the Monterey Regional Water Pollution Control Agency provides sewage treatment service at the treatment plant. With a treatment capacity of 29.6 million gallons per day (mgd), the plant currently operates at an average flow of 20 mgd (Hausrath, 1998). Not all of the capacity of the plant is available. The plant's usable capacity is governed by the plant's operating permit issued by the Monterey Bay Unified Air Pollution Control District. The Air District permits the Water Pollution Control Agency to serve a population that is consistent with the District's Air Quality Management Plan. Each jurisdiction served by the Marina plant, including the City of Salinas, receives an allocation based on the projected growth within the jurisdiction, as determined by the Air Quality Management Plan. The Association of Monterey Bay Area Governments (AMBAG) has found the project to be consistent with the Air Quality Management Plan (Papadakis, 1998). Sufficient capacity currently exists to accommodate regional growth including the proposed Mountain Valley project (Hausrath, 1998; Schaap, 1998). As a result of the consistency finding and the availability of capacity, the Air District finds that there is no obstacle to supplying sewer service to the project site (Brennan, 1998).

There are three existing sewer mains adjacent to the project area: a 15-inch main within the East Alisal Street right-of-way, and two 10-inch mains within the rights-of-way for Argentine Drive

and Countryside Drive, which drain into the 15-inch main. The 15-inch main in East Alisal Street is currently operating over capacity during periods of wet-weather flow. The City's sewage and drainage master plan identified a need to expand capacity along East Alisal Street (Brown and Caldwell, 1992). ~~No funding source has been identified for construction of a relief main to provide the needed capacity.~~ The relief main is included in the City's current six-year Capital Improvement Program; however, no funds have yet been allocated. Other identified "downstream" improvements needed to accommodate new development in the eastern portion of Salinas include the addition of 24-inch collector pipes along South Wood Street and Los Palos Drive, as well as expansion of the Kipling Street collector pipe (currently under construction) (Hausrath, 1998).

There are existing deficiencies in the City's overall sanitary sewer facilities. The costs to make repairs required by the Regional Water Quality Control Board are estimated at $12 million to $14 million. On April 7, 1998, the City Council adopted an ordinance increasing the citywide sewer collector system fee (user fee) from 15 percent to 35 percent (percentage of total sewer bill). This increase is anticipated to fully fund the needed improvements implemented through the City's six-year Capital Improvement Program.

Storm Drainage

The Salinas Public Works Department is responsible for ongoing maintenance of the drainage network. The basin containing the project site and its vicinity is served by storm drain network 16, which is currently operating at capacity (Brown and Caldwell, 1992). However, the site currently generates limited runoff, as its present use as agricultural land allows rainfall to percolate into the soil with little runoff from the site. The City's Master Sewage and Drainage Plan indicates that there are several maintenance problems in the area of the project site.

Solid Waste

Salinas Disposal Service collects and disposes municipal refuse under contract with the City of Salinas, and also provides services to adjacent unincorporated areas. Solid waste is deposited in the Crazy Horse Landfill (owned by the Salinas Valley ~~Landfill Joint Powers~~ Solid Waste Authority), located approximately 10 miles northeast of the city. Salinas Disposal also operates recycling programs, including residential curbside pickup at single-family dwellings and some multi-family buildings. The Crazy Horse Landfill has sufficient capacity to accommodate demand for solid waste disposal to approximately the year 2002 (City of Salinas, 1994). The City is currently seeking approval to increase the capacity of the landfill by increasing the allowable fill height.

As a member of the Salinas Valley ~~Landfill Joint Powers~~ Solid Waste Authority, the City could utilize another dump site if the landfill is not expanded (Hausrath, 1998).

Natural Gas, Electricity, and Telephone Service

Gas and electric services are provided in the project area by Pacific Gas & Electric, and telephone service is provided by Pacific Bell.

IMPACTS AND MITIGATION MEASURES

Significance Criteria

Any increase in demand for public services or utilities created by the proposed project would be considered significant if the increase were to result in a substantial reduction in the level of service currently provided to the project site and the surrounding area. An impact would be considered significant if it exceeded a threshold, service ratio or minimum standard established in the Salinas *General Plan* that is currently met; or substantially affected an existing substandard condition; or interfered with emergency response plans or emergency evacuation plans.

Financing for additional services and utility capacity is central in the determination of a service provider's ability to accommodate additional demand. The fiscal impacts and financing mechanisms associated with this project are analyzed in a separate document, the *Draft Services and Facilities Plan for the Mountain Valley Residential Development*, prepared concurrently by Hausrath Economics Group.

Public Services

Impact 4.3.1: The proposed project would generate an additional enrollment of about 512 new students in the Alisal Union Elementary School District and about 235 new students in the Salinas Union High School District. This would be a less-than-significant impact.

With a proposed 853 housing units, the project would result in about 512 elementary school students, about 107 middle school students, and about 128 high school students (Hausrath, 1998).

The *Greater Salinas Area School Facilities Master Plan* (School Facility Consultants, 1993) presents a strategy to accommodate projected student enrollment growth over the next twenty years. The Alisal Union Elementary School District plans to add six elementary schools, each with a capacity of 620 students, plus additional classroom space at existing schools. Funding for that expansion is not assured. Two of the new elementary schools will be in the Williams Ranch planned community, north of the project site, one of which has been constructed and is in operation. The Salinas *General Plan* also indicates a school site on the Sconberg Ranch property immediately east of the project site (and outside the current Salinas Sphere of Influence).

The Salinas Union High School District plans to accommodate projected enrollment growth of about 2,100 additional junior high students in the next twenty years by building two new junior high schools, one of which is located in the adjacent Williams Ranch development, and a nine classroom addition to the existing Harden Middle School on McKinnon Drive in North Salinas. The District also plans to add three high schools, each accommodating about 1,700 students. Funding for those additions is not secured.

As part of a previous agreement between the project sponsor and the school districts (Alisal and Salinas Union), the project sponsor has agreed to donate fee title of nine acres of land for a new elementary school and offer two acres of land adjacent to the existing Bardin School for sale to the district. This donation would occur in conjunction with filing of the final subdivision map for Phase 1 of the project. The project sponsor would also pay the Alisal School District the required school impact fees of $1.84 per square foot of development, which is the maximum that school districts can levy under state law. However, this fee would not fully offset the impact of development on the school districts. Because the project would involve legislative action on the part of the City (annexation, *General Plan* Amendment, and rezoning), the City could legally impose a fee greater than the $1.84 state maximum. However, it is probably not feasible for the City to increase the development fee to cover the entire amount of per residential unit cost of school impacts (Hausrath, 1998). Pursuant to previous school agreements between the project sponsor and Alisal and Salinas Union School Districts, the project sponsor has agreed to pay $639,000 to the high school district as a supplement to the state maximum fee. The state's maximum fee would total approximately $2,111,032.[2] Payment of statutory school impact fees would occur in conjunction with issuance of individual building permits. The project sponsor would also donate in fee title a 9-acre school site to the Alisal Union Elementary School District.

[2] Assumes average livable building square footage of 1,333 and 1,500 for proposed 4,500 square foot lots and 6,500 square foot lots, respectively.

The actual cost to construct facilities to accommodate project-generated students would be approximately $6 million, while the incremental costs of accommodating middle school and high school students would total nearly $5 million (Hausrath, 1998). This would require a per-unit fee of nearly $13,000 to fully offset the cost to the Alisal Elementary School District, a figure that would not be feasible to implement because it would increase the cost of each dwelling unit by such an extent that units would be substantially less affordable.

Land donation would occur in conjunction with filing of the final subdivision map for Phase 1 of the project. Payment of statutory school impact fees would occur in conjunction with issuance of individual building permits.

Implementation of the above measures proposed as part of the project would reduce the project's impact on school facilities to a less-than-significant level since agreements have been accepted by both school districts. However, it should be noted that the project sponsor would not be funding the entire cost of school facilities impacts.

Elementary school students residing within the project site could attend the school proposed on-site, or may attend Bardin, Alisal Community, or Cesar Chavez School in the Williams Ranch development. Middle school students in the area could attend either the existing El Sausal Middle School or the proposed junior high school in Williams Ranch, and high school students would attend Alisal High School. The middle school and high school are currently at capacity and will require additional facilities and/or new school to accommodate students from the proposed project and other projected growth. The project sponsor has also agreed to pay the Salinas Union High School District an additional fee, as described above.

Should the project be completed prior to the needed expansion of the school facilities to accommodate the enrollment growth, the elementary and high school districts would rely on temporary facilities, busing and year-round schedules until such time as permanent facilities can be made available.

Mitigation Measure

4.3.1 None required (mitigation proposed as part of project, as described above).

Impact 4.3.2: The proposed project would increase the demand for police services. This would be a less-than-significant impact.

The Salinas Police Department would provide services to the site. Because of the relatively large amount of activity in Beat 11, which includes the project site as well as the Williams Ranch site, the project could result in some lengthening of response times. To maintain the present level of service, the project would require about two additional police officers and one additional vehicle (Hausrath, 1998). (Please see the *Draft Services and Facilities Plan for the Mountain Valley Residential Development*, prepared concurrently by Hausrath Economics Group [Hausrath, 1998] for a discussion of the project's fiscal effects on the Police Department.)

Mitigation Measure

4.3.2 No mitigation is required.

Impact 4.3.3: The proposed project would increase the demand for, and frequency of, fire protection services and emergency responses to the project site. This would be a significant impact.

Primary fire protection to the Mountain Valley project would be from Station No. 5, a new station to be located within the nearby Williams Ranch project on Freedom Parkway. Secondary response would be from the existing Station No. 4, located about 1.0 mile to west of the project site at 308 Williams Road. The staffing and vehicles for Station No. 5 would be redistributed from Station No. 4 and other existing stations.

As noted in the Setting, construction of Station No. 5 is in the City's Capital Improvement Program, although the project is not yet funded, and construction may not occur before 2000. The Precise Plan (Policy 27) includes a requirement that each residential developer on the Mountain Valley project site pay a fire protection services fee of $140 per unit (the fair share calculated by the City, based on the fire protection fee assessed to the adjacent Williams Ranch project) towards the cost of construction of Station No. 5; this fee would be paid at the time of building permit issuance (EMC, 1998). However, this fee would raise approximately $120,000, which is slightly more than 10 percent of the estimated cost of constructing the new fire station. Additional funds would be required, most likely from the City's General Fund.

If Mountain Valley development were to precede the construction of Station No. 5, it would be necessary to serve the project out of Station No. 4. In such an event, this would result in a

response time to Mountain Valley of approximately 5-7 minutes, longer than the current city standard of 3-5 minutes, and a dilution of the protection afforded the Station No. 4 service area.

In compliance with city ordinance, all residential units constructed in the project would be required to be equipped with sprinkler systems to minimize the risk of fire at the project site.

Mitigation Measure

4.3.3 Construction of Fire Station No. 5 shall be completed prior to the issuance of a certificate of occupancy for any unit in Phase 4 or above.

Construction of Fire Station No. 5 shall be completed prior to occupancy of units in Mountain Valley Phases 4 through 6, which would be the most distant from the existing Station No. 4 (more than 1.5 miles). This would ensure that adequate response times could be maintained to the project site, and would reduce the impact to a less-than-significant level.

Impact 4.3.4: The proposed project would result in additional demand for library services. This would be a less-than-significant impact.

The City's Capital Improvement Program includes expansions to the El Gabilan Library, totaling about 10,054 square feet (Hausrath, 1998). Previous plans to expand the Steinbeck and Cesar Chavez libraries have been indefinitely delayed due to budgetary constraints. If the City only builds the El Gabilan expansion, the library space area per resident would equal 0.43 square feet. The proposed project would reduce this rate to 0.42 square feet of library space per resident, which would not be a substantial change.[3] The Precise Plan includes payment of a library fee (also applicable to the Williams Ranch project), and currently $353 per residential unit and indexed annually, at the time of building permit issuance (EMC, 1998). At the current fee, approximately $300,000 would be raised.

Mitigation Measure

4.3.4 None required.

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[3] Assumes a 1997 population of 123,300, project generation of 2,730 persons, and 52,747 square feet of library space.

Impact 4.3.5: The proposed project would increase demand on the City's parks and recreation facilities. This would be a less-than-significant impact.

The project would include a community park of about 21.5 acres (at full buildout) along the eastern border (EMC, 1998). The 21.5 acres of park would provide more than the *General Plan* standard of three developed acres per 1,000 residents. The project would thus meet the project-generated demand for park facilities and would offset a portion of the City's existing park deficiency. The developer would also fund, through a landscape maintenance district, annual maintenance of ~~8.7~~ 8.1 acres of the community park.

The expansion of the Lincoln Avenue recreation center as set forth in the *General Plan*, and the addition of 50,000 square feet of additional community facilities (including 30,000 square feet in a multi-use complex in Natividad Creek Park) as specified in the Salinas Park and Recreation Development reports, would offset the demand for other recreational facilities generated by new development (Hausrath, 1998).

Mitigation Measure

4.3.5 None required.

Public Utilities

Impact 4.3.6: The proposed project would create new water demand for Alco Water Service. This would be a less-than-significant impact.

Demand for domestic water would increase with project development. (For water supply issues and hydrological impacts please refer to Section 4.4, Hydrology, Drainage, and Water Quality.)

Alco customers in the vicinity have voiced concerns regarding water quality and inadequate water pressure. Available documentation, in the form of water sample testing results (including a random test performed by the City of Salinas in March 1998), shows no evidence that State or federal water quality standards have been violated.

The California Public Utilities Commission (CPUC) is the regulatory body for water pressure, and its standard is a pressure of 40 pounds per square inch (psi), with a minimum pressure

standard of 30 psi during hourly maximum demand. According to Alco, the company's standard operating pressure is 40 psi or higher, and usually within a range of 50-60 psi; however, water pressure did drop to 28 psi for approximately one hour in July 1997 when two pump motors burned out. Maintenance of water pressure is the responsibility and jurisdiction of the State, not the City.

The supply of water to the project site would not be expected to reduce water pressure for other Alco Water Service customers (Fuog, 1998).

Another issue related to Alco's provision of water to the project is the number of authorized connections within the Alco service area. Currently, the number of service connections required to accommodate planned and approved single-family projects in the service area (excluding Mountain Valley) is about 1,000 less than is currently authorized by the State Department of Health Services. Alco will thus need to receive authorization for additional connections in the near future. This matter is also within the responsibility and jurisdiction of the State, not the City.

The project proposal includes the ~~construction~~ provision of four new well sites on the project site and the construction of a water distribution system; Alco Water Service would construct the wells, and the sponsor would provide primary funding for construction of three of the wells and limited funding for the fourth. The sponsor would be ultimately responsible for construction of the wells to ensure adequate water service is available to the project site. The proposed well sites would be located on a site on the corner of proposed Boulevard "B" and Freedom Parkway, on a lot near the Bardin Elementary School expansion, on a site on Williams Road at the western corner of the property, and on a site near Surrey Way (see Figure 2 in Chapter 3.0, Project Description). These wells are required to provide water to the new development and to adequately guard against the threat of nitrate and salt water intrusion, currently being experienced at other well sites in the Salinas area (Fuog, 1997). Installation of four water well sites that meet Alco Water Service specifications will reduce the project's impact on water facilities to a less-than-significant level. Each well site must normally have a net usable area of 0.5 acre (Fuog, 1997); for this project, Alco would require a minimum of 20,000 square feet of net usable area (Adcock, 1998).

Each of the five existing mains in the vicinity of the project would be extended into the site, and 16-inch water mains would be located within rights-of-way for Williams Road, Freedom Parkway, and Alisal Road; these are illustrated as "future mains" in the *General Plan* Public Services and Utilities Element. Internal water mains would be constructed as part of the on-site infrastructure network.

Mitigation Measure

4.3.6 None required. However, as part of the Tentative Map process, the City would require that the project applicant provide the proposed four well sites of sufficient size to meet Alco Water Service specifications. The project sponsor would be ultimately responsible for construction of the wells to ensure adequate water service is available to the project site.

In order to provide for future water treatment, each well site must have a net usable area of ~~0.5 acres~~ 20,000 square feet, taking into account front yard landscape requirements, minimum distance to sanitary sewer lines, utility easements, access roads, and access to equipment (Adcock, 1998 ~~Fuog, 1997~~).

Implementation of the above mitigation measure would avoid water services impacts.

Impact 4.3.7: The proposed project would increase the flow of wastewater discharged into the sewage system. This would be a significant impact.

The project would generate about 215,000 gallons of wastewater per day[4]. Sufficient unused capacity exists at the regional wastewater plant in Marina to accommodate the proposed project. The project site would be annexed to the Monterey Regional County Sanitation District - Monterey Regional Water Pollution Control Agency as part of the project.

The terrain of the planning area requires two portions of the project area to discharge into existing mains to the west within the Argentine Drive and Countryside Drive Street right-of-way. The remaining portion of the project would drain to the southeastern corner of the site through an on-site network of sewer mains and then to a 15-inch main to be constructed within the right-of-way of the proposed East Alisal Street extension. This main would connect with the existing 15-inch main on East Alisal Street (EMC, 1998). The 15-inch East Alisal Street main is currently operating over capacity during periods of wet-weather flow. Expansion of wastewater capacity along East Alisal Street is required (Brown and Caldwell, 1992; Hausrath, 1998).

Mitigation Measure

4.3.7 Prior to the issuance of building permits, construction of a relief main in East Alisal Street shall be completed.

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[4] Based on 90 percent of residential water use of 350 gallons water consumed per dwelling per day, plus 16 acre-feet per year water consumed at elementary school.

Based on the City's formula for development fees, the project sponsor would contribute approximately $830,000 in Sanitary Sewer Development fees.[5] Construction of an Alisal Street bypass collector sewer line and other improvements on South Wood and Los Palos Drive are proposed in accordance with the Salinas Sewage and Drainage Master Plan and the City's current six-year Capital Improvements Program (CIP). However, no funds have been identified or allocated for construction of the bypass line, estimated at $2.6 million. The current CIP shows the bypass line not being funded until 2002-03. Therefore, because the existing Alisal Street sewer is at capacity, the project sponsor would be required to fund the entire cost of installing a relief main. The City and/or other developers would reimburse the project sponsor at a later date for costs in excess of the sponsor's required fee of approximately $830,000. Further study of the relief main may conclude that additional capacity exists. In this event, the Public Works Department may accordingly determine that some of the building permits could be issued prior to the completion of the relief main.

Implementation of the above Mitigation Measure would reduce sewage system impacts to a less-than-significant level.

Impact 4.3.8: The proposed project would increase discharge to the City's storm drainage system. This would be a significant impact.

Development of the project would alter existing drainage patterns, resulting in storm water runoff from the site, where virtually none occurs now. The City's existing storm drainage system is currently operating at capacity, and cannot accept additional demands.

A temporary detention basin would be constructed as part of Phase 1 grading and site preparation, and shall detain storm water from the Phase 1 and 2 portions of the property and release it at a reduced rate prior to construction of the permanent detention basin. .The temporary basin would be located east of the intersection of Countryside Drive and the proposed Mountain Valley Boulevard. Maintenance of the temporary basin would be the responsibility of the project sponsor. Once the permanent basin were operational, the temporary basin would be filled in and the site developed as housing.

As required by the Monterey County Water Resources Agency and the City of Salinas, the project would include construction of a 1.7-acre siltation/detention basin as part of Phase 3 of the project, to coincide with drainage infrastructure installations. The proposed storm water siltation/detention basin would be a rectangular site with a capacity of 3.5 acre-feet, located

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[5] Based on a $278 per bedroom Sanitary Sewer Trunk Line Fee, and assuming half of the project units will have three bedrooms and the other half, four bedrooms.

adjacent to the Bardin School property in the southwest corner of the project site. The siltation/ detention basin would be funded by the project sponsor.

The storm drain system would be designed to meet City and County standards, and engineering calculations prepared by a California licensed civil engineer that verify the design would be submitted and approved to the permitting agency(s) prior to final project approval. Both the temporary and permanent siltation/detention basins would be sized to conform to the County Water Resources Agency policy requiring on-site detention for the differential between runoff from pre-development 10-year storm and post-development 100-year intensity rainfall.

The project sponsor would also develop a siltation/detention basin management plan to maintain adequate storage volume over the life of the project. Periodic maintenance may be needed since accumulation of sediment and vegetative growth would reduce the basin storage capacity over time. The management plan would propose a schedule and designate responsibility for anticipated maintenance. Maintenance of the siltation/detention basin would be funded through a maintenance assessment district.

Mitigation Measures

4.3.8a Prior to the issuance of the first grading or building permits, the project sponsor shall install a temporary (interim) storm water siltation/detention basin.

Design shall be subject to approval by the City and the Monterey County Water Resources Agency and shall permit discharge of a 10-year pre-development storm. Discharge from the basin shall be at a rate that will preclude any increase in the existing rate of runoff from the site (20.38 cubic feet per second).

4.3.8b Prior to the issuance of building permits for dwelling construction for units in Phase 3 or beyond, the project sponsor shall install the permanent storm water siltation/detention basin (capacity of 3.5 acre-feet).

Design shall be subject to approval by the City and the Monterey County Water Resources Agency. Discharge from the basin shall be at a rate that will preclude any increase in the existing rate of runoff from the site (20.83 cubic feet per second). Storm water discharged from the detention basin shall be reduced to compensate for runoff from northern portions of the project site that would not be captured by the detention basin.

Implementation of the above measure would reduce the project's impact on storm drainage facilities to a less-than-significant level.

Impact 4.3.9: The proposed project would increase demand for solid waste disposal facilities. This would be a less-than-significant impact.

The Crazy Horse landfill currently has capacity for solid waste disposal only until approximately the year 2002 (City of Salinas, 1994). The project would generate approximately 1,310 tons (about 2,730 cubic yards at 0.48 tons per cubic yard) of solid waste per year, or about 0.9 percent of the City's total.[6] The City of Salinas and other local communities recently formed the Salinas Valley ~~Landfill Joint Powers~~ Solid Waste Authority (SVSWA ~~SVLJPA~~). The Crazy Horse Landfill was sold to the SVSWA ~~SVLJPA~~. While the Crazy Horse Landfill is quickly approaching capacity, other landfills owned and operated by the SVSWA ~~SVLJPA~~ are expected to have sufficient capacity to accommodate solid waste generated by the proposed project, as sufficient capacity is available well into the middle of the 21st century (Hausrath, 1998).

Mitigation Measures

4.3.9 None required.

Impact 4.3.10: The proposed project would increase demand for gas and electric and telephone facilities. This would be a less-than-significant impact.

New utility lines would be extended into the project site from facilities located along Williams Road (EMC, 1998). All utility lines would be placed underground, including primary and secondary electrical lines, natural gas, telephone, and cable television (EMC, 1998).

Mitigation Measure

4.3.10 None required.

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[6] Generation based on 2.49 pounds per person per day for residential service and total municipal solid waste tonnage of 142,433 tons (Appel, 1994).

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4.4 HYDROLOGY, DRAINAGE, AND WATER QUALITY

SETTING

Drainage Basin

The project site is located in the lower Salinas Valley, to the north of the Salinas River, in the general vicinity of the Santa Rita, Gabilan, Natividad, and Alisal Creeks. These creeks flow from the westerly slopes of Gabilan Mountains towards the City of Salinas, and empty into Reclamation Ditch No. 1665, which is operated by the Monterey County Water Resources Agency. The Gabilan and Natividad creek channels pass through Carr Lake before reaching the Reclamation Ditch. Carr Lake is one of nine depressions along the Reclamation Ditch which were once lakes, but are now only flooded during the rainy season. Water flows from the Reclamation Ditch to Monterey Bay at Moss Landing. The surface hydrology of the project vicinity is illustrated in Figure 14.

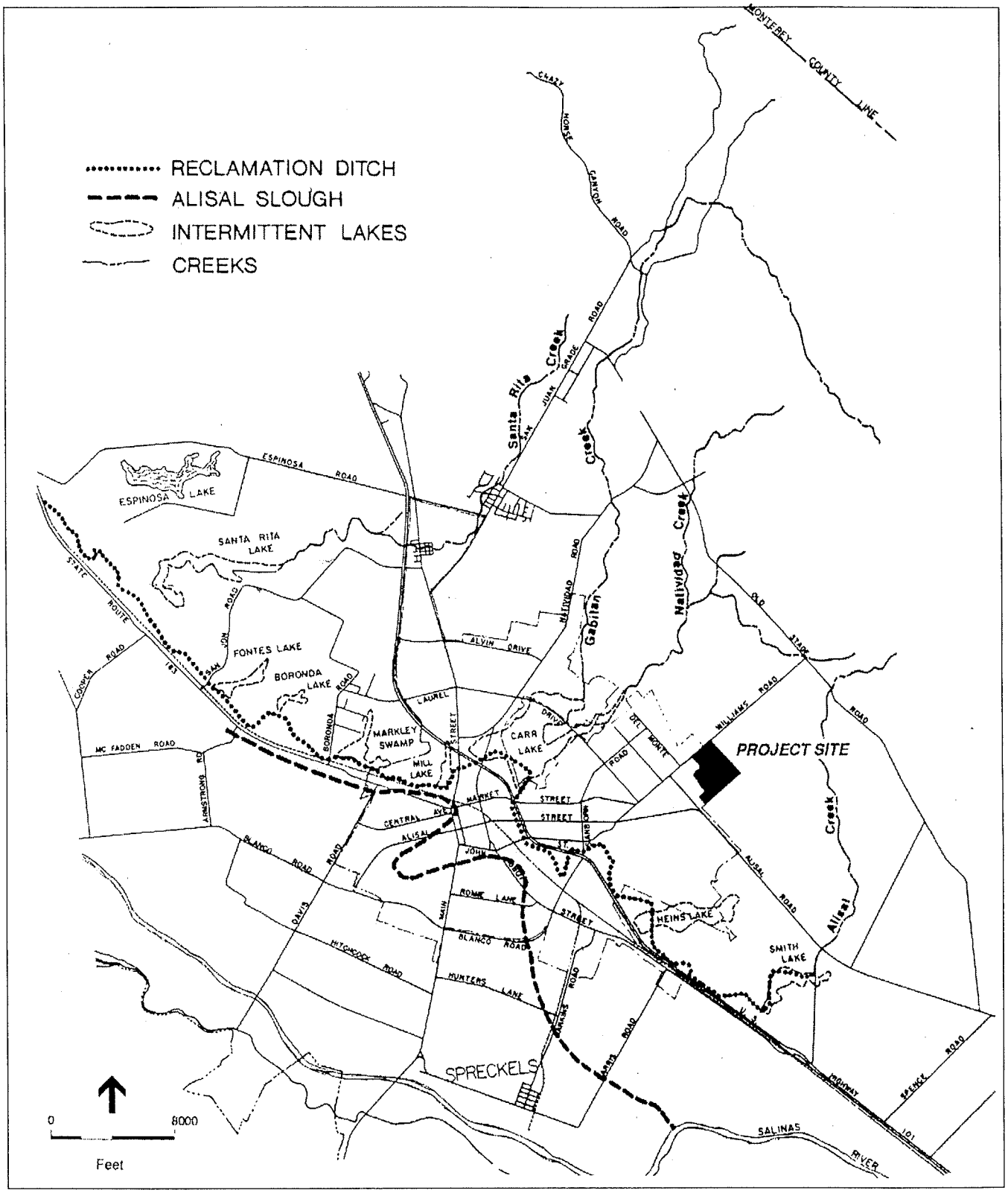
The project site is located on a gently sloping alluvial fan at the base of the Gabilan Mountain range. Soil on the Sconberg Ranch has been classified as predominantly Chualar loam, a soil with relatively slow permeability. The upper (eastern) edge of the site is at approximately elevation 130 feet. The land slopes at about a 1 percent grade (one foot vertical fall for each 100 feet horizontally) towards the west, where the property boundary is at roughly elevation 110 feet. In its existing state as agricultural land, very little storm water runs off the site.

Climate

The Salinas Valley is a prime agricultural area characterized by dry summers that range from moderately warm and somewhat foggy in the Salinas area to hot and dry in the southern portion of the valley, and a rainy season occurring predominantly in the months of December, January and February. The City of Salinas experiences an average annual rainfall of approximately 14 inches, and an annual potential evaporation of 48 inches (Creegan + D'Angelo, 1992).

Surface Hydrology

The Sconberg Ranch has been intensively farmed for many years, and little evidence of undisturbed surface hydrological features exists. The project site has been divided into several rectangular fields separated by dirt roads and drainage/percolation ditches. Each field has been graded nearly flat, and the ditches have been trenched between the fields to catch furrow runoff,



SOURCE: Salinas General Plan

Mountain Valley / 960352 ■

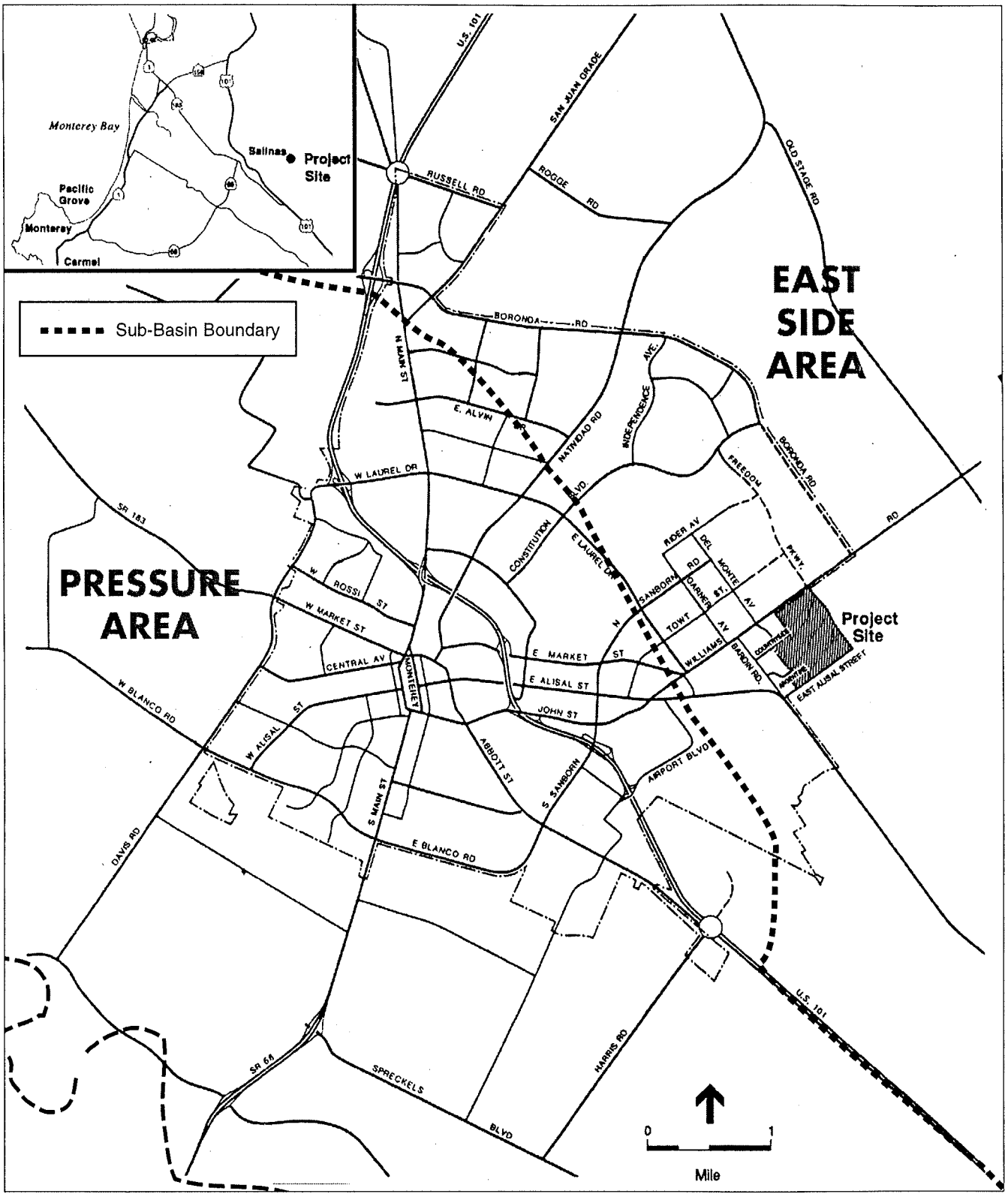
Figure 14
Salinas Area Surface Hydrology

and to convey runoff from higher areas through the project site. The unvegetated ditches are typically rectangular in cross-section, three feet wide and three to five feet deep. A larger drainage ditch, which is up to 15 feet in width, flows westerly along Williams Road and conveys run-off from tributary areas east of the project site as well as runoff from the Sconberg Ranch. No natural seeps, springs, creeks, or ponds were observed on the project site. Along the westerly boundary of the site, adjacent to the existing development along Alisal Road, a one-foot-high berm prevents surface water from leaving the farmed area. Two man-made storage reservoirs are located east of the project site on Sconberg Ranch property.

Groundwater Hydrology

The project site is located in the East Side Area sub-basin of the Salinas Valley Aquifer (see Figure 15). Many years of groundwater withdrawal, primarily for agricultural irrigation, has resulted in salt water (seawater) intrusion and a lowered water table in the Salinas Valley Aquifer. In the Castroville area, west of Salinas, a shallow aquifer (about 180 feet deep) has long been abandoned due to salt water intrusion, and a deeper aquifer (about 400 feet deep), which supplies drinking and agricultural water to Salinas, has been substantially intruded by seawater. While there is no evidence of salt water intrusion into wells in Salinas, ongoing groundwater depletion raises the likelihood that, absent preventative measures to reduce groundwater pumping, subsurface water supplies in Salinas will eventually suffer salt water intrusion as well (City of Salinas, 1988). Previous studies indicate that saltwater within the Pressure Area's 180-foot aquifer extends to the east near San Jon Road, which is approximately two miles from the northeast Salinas city limits, and about six miles from the project site (Monterey County, 1996). If the saltwater intrusion continues to move in the direction of the East Side Area sub-basin, its progress may be impeded by reduced permeability at the boundary between the East Side and Pressure Area sub-basins. Additional testing is recommended to monitor salt water intrusion in the aquifer (Staal, Gardner and Dunne, 1993).

The East Side Area sub-basin, like the larger Salinas Valley Aquifer, is slowly replenished (recharged) by percolation of surface water. Replenishment occurs from the bed of the Salinas River and its tributaries, from rainfall, from deeply percolating irrigation water, and from underground flow originating in the foothills surrounding the valley. At the Sconberg Ranch, the depth to groundwater was between 160 and 198.5 feet as measured at four locations in December 1990. In the East Side Area, groundwater withdrawal by approximately 5,000 to



SOURCE: DKS Associates

Mountain Valley / 960352 ■

Figure 15
Salinas Area Groundwater
Sub-Basin Boundary

8,000 acre feet per year in excess of recharge (Stewart, 1994) has led to a situation in which the water table has been drawn down substantially below sea level.

Existing Water Use

The project sponsor retained an engineering firm to prepare an analysis (H.D. Peters, 1997) of water issues pertinent to the proposed development. The analysis examines existing and proposed water use on the project site. The methods and assumptions used in the plan have been reviewed by ESA and provide the primary basis for determining existing water use on the project site.

Virtually all the water used for irrigation, industry, and domestic consumption in the Salinas Valley is pumped from groundwater storage. Residents and businesses in the City of Salinas are supplied with groundwater by several private water companies. In the area of the proposed project, water is supplied by Alco Water Service (Alco). Alco is a privately owned water company with approximately 5,000 customers. The water company is regulated by the California Public Utilities Commission, California Department of Health Services, and the Monterey County Health Department, Division of Environmental Health.

The operators of the greater Sconberg Ranch area pump groundwater from four wells for the irrigation of 460 acres of crops. Only one of the wells is located on the project site; however the four wells function in conjunction with storage and piping as a single system to distribute water throughout the ranch. The wells send water to two storage reservoirs on the ranch, which then serve water to the fields with furrow irrigation.

The project site has historically been used for strawberry production in alternate years, which is the most water intensive crop grown on the site. Gross agricultural water consumption on the project site, assuming strawberry crops every other year, equals approximately 732 acre feet per year (H.D. Peters, 1997). When a percolation return factor of 20% is taken into consideration the project site would have a net agricultural water use of approximately 586 acre feet per year (H.D. Peters, 1997; Creegan + D'Angelo, 1992).

Water Quality

The main water quality issues in the project vicinity are salt water intrusion, discussed previously, and nitrate contamination.

For a conservative estimate of future water consumption, including potential increases in consumption such as could occur if a homeowner were to increase the planted area of turf or other water-intensive landscaping, or were to install new bathroom fixtures, this report uses the Alco "all units" demand of 350 gallons per day. (The newly constructed units could include some that either were not occupied throughout the year or were not fully landscaped, and thus used less water than would otherwise be the case.)

A breakdown of water usage by differing land uses (e.g., residential, school, park, and public landscaping) is shown in Table 7. As noted above, the existing gross water usage on the site for agricultural uses is 732 acre feet per year and net water use (considering percolation) equals approximately 586 acre feet per year. Considering the net water consumption figure, the proposed project would result in a reduction in water use on the 200-acre site of almost 200 acre feet per year, which would represent a reduction of about 34 percent.

TABLE 7: EXISTING AND PROJECTED WATER USE

	Acre-feet per year
Existing Consumption[a]	
Estimated Use	732
Percolation return (20%)	(146)
NET CONSUMPTION	586
Projected Consumption	
Residential domestic and landscaping[b]	334
Park irrigation	29
School	16
Detention Basin, Bardin School Addition, and Greenway strips	10
TOTAL	389
Projected savings	197
	-34%

a Based on approximately 193.6-acres of irrigated lands and 6.9 acres of field roads. Alternate years of strawberry and other crop production are included in this calculation.

b Projected residential consumption provided based on Alco Water Service records for 1997 consumption of 350 gallons per day for all single-family units in its service area (east Salinas, including the project site).

SOURCE: H.D. Peters, Co., Inc., 1997; Environmental Science Associates

For the interim period between cessation of crop production on each development phase of the project site and occupation of the proposed dwellings in that phase, a substantially greater temporary reduction in groundwater use would occur. The lack of groundwater pumping during the construction and sales phases of the proposed project would temporarily contribute to the recovery of the groundwater table and incrementally help slow the intrusion of seawater.

Although the project would result in a substantial reduction in water demand on the 200-acre site, the extraction of water from the aquifer would contribute, albeit more slowly, to groundwater overdraft which is occurring throughout the Salinas Valley. The project would require an irretrievable commitment to continue groundwater extractions which would, in conjunction with other pumping, contribute to continued ground water overdrafting and seawater intrusion. Urban water demand is different from agricultural demand. Agricultural demand is seasonal and allows for some aquifer recovery or an increase in water levels during the rainy season and fallow periods, while urban demand occurs continuously throughout the year and does not allow for a period of aquifer or water level recovery. This phenomenon has been observed with existing groundwater pumping in the City of Salinas.

With water conservation features included in the project, the project would decrease water use on the site by approximately 34 percent, compared to existing agricultural use. As a result, it would be less likely that pumping from on-site wells would cause changes in the groundwater gradient. Also, there is no reason to believe that domestic water pumping will affect water availability for neighboring agricultural pumping, or vice versa (Fuog, 1998).

As required by CEQA Section 21151.9 and Sections 10910 - 10914 of the California Water Code, the City consulted with Alco Water Service to determine whether (a) the projected water demand of the proposed Mountain Valley project was included in Alco's most recently adopted urban water management plan, and (b) whether Alco's projected water supplies over the 20-year period contained in the urban water management plan, including dry water years, would adequately meet the proposed demand. Alco stated that the project demand is included in the urban water management plan, which forecasts adequate water supply to serve the project and other existing and projected Alco users (Adcock, 1998a). Appendix A contains Alco's urban water management plan and the correspondence with the City relative to this project.

As noted, conversion of irrigated agricultural land to residential use generally reduces water demand at a given location. Cumulatively, continued residential development in the Salinas

Valley and, in particular, in the East Side groundwater sub-basin, would be expected to result in an incremental decrease in groundwater overdrafting in the future.

Presently, virtually all of the project site is covered with relatively permeable soil, either in the form of cultivated fields or dirt roads. Under the existing agricultural land use, it has been estimated that only 10 percent of rainwater runs off the project site; the remainder percolates into the ground. Construction of the proposed Mountain Valley project, however, would increase runoff because permeable soil surfaces would be replaced with paved streets, sidewalks, driveways, houses, patios, and other impervious surfaces.

On an annual basis, about 27 acre-feet of rainwater is available for on-site groundwater recharge under existing land uses. After project development, increased runoff and evaporation due to increased impervious surfaces would substantially reduce rainfall percolation to groundwater. In addition to the loss of potential rainwater recharge, the potential for excess landscape irrigation water to percolate into the groundwater would also be substantially reduced after project development.

Mitigation Measures

Because the project would result in a decrease in water consumption on the project site, this impact was determined to be less than significant, and no mitigation is required. Because groundwater overdrafting will continue to be a concern in the Salinas Valley, particularly as more residential development increases the more "permanent" commitment of water to dwellings, the following measures are identified to further reduce the project's less-than-significant impact on groundwater consumption.

4.4.1a Water conservation could occur at the project site through increased xeriscaping in landscaped areas in addition to that proposed in the Mountain Valley Precise Plan.

4.4.1b Water conservation could occur at the project site through retiring agricultural land from crop production on the entire project site prior to the start of construction.

4.4.1c The City could encourage retrofitting plumbing fixtures such as toilets and shower heads in existing urban areas that draw water from the East Side Area sub-basin.

Installing xeriscaping instead of turf could save approximately one acre-foot of water per 43,000 square feet of residential xeriscaped area per year (Creegan + D'Angelo, 1992). Retiring

agricultural land could save approximately 3.1 acre-feet per acre per year, based on existing consumption on the project site (H.D. Peters, 1997; Creegan + D'Angelo, 1992).[1] Retrofitting existing single-family residences with ultra-low-flow toilets could save about one acre-foot per year for each 33 to 43 homes, assuming 3.2 persons and one toilet per residence (California Urban Water Conservation Council, 1992; Monterey Peninsula Water Management District,[2] 1997).[3]

Overdrafting in the Salinas Valley is being addressed through regional planning efforts that are beyond the scope of this report. A 34 percent reduction in water use resulting from the proposed project would substantially offset the site's contribution to the depletion of the basin, and would exceed the Monterey County Water Resource Agency's goal of 20 percent reduction for a change in land use.

Implementation of the above mitigation measures would further reduce the proposed project's less-than-significant impact on groundwater consumption.

Impact 4.4.2: Increased water runoff resulting from the proposed project would cause localized flooding in the project vicinity and/or flooding in downstream areas. This would be a significant impact.

With construction of the proposed project, the land surface at the project site would be largely changed from pervious, exposed soil to impervious asphalt roadways, driveways and parking areas, concrete patios, and areas covered by houses and buildings. Some areas would exist as lawns and landscaped common areas; however, even those areas would experience increased runoff potential. During high intensity storms, as much as 50 percent of the rainfall would run off the site compared to 10 percent with existing conditions (Creegan + D'Angelo, 1992).

Increased runoff would have several detrimental effects. The undersized storm drain network in the project area cannot accept additional flows during heavy rainfall without backing-up and causing localized flooding. Soil erosion in the drainage basin has caused siltation of the drainage system in the project vicinity that further reduces drainage capacity. Increased runoff may add to

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1 Assumes strawberry crop water usage.
2 MPWMD assumes a savings of 0.023 acre-feet per year per toilet replaced.
3 Actual water savings could vary. The figures in this paragraph are intended to provide a range of magnitude estimate of possible savings.

the existing siltation problem. Finally, even if the storm drains in the project area could carry additional flows generated by the proposed project, flooding problems downstream would be exacerbated by the additional runoff.

As described in Section 4.3, Public Services and Utilities, the project would include a temporary siltation/detention basin built in Phase 1 to serve construction Phases 1 and 2, and a permanent 1.7-acre siltation/detention basin built in Phase 3 with 3.5 acre-feet of storage capacity, the capacity estimated to be adequate to contain additional runoff (H.D. Peters, 1997; EMC, 1998; Williams, 1998). Siltation/detention facilities would be constructed to meet City and County standards, and would be sized to conform to the County Water Resources Agency policy requiring on-site detention for the differential between runoff from pre-development 10-year storm and post-development 100-year intensity rainfall. (See the discussion and mitigation measures under Impact 4.3.8 for additional detail on flood control facilities.)

Mitigation Measures

Implementation of Mitigation Measures 4.3.8a and 4.3.8b, along with construction of storm water detention facilities proposed as part of the project, would reduce the potential impacts from flooding to a level of less than significance.

Impact 4.4.3: Degradation of surface water and groundwater quality may be caused by stormwater runoff from the proposed project during and after construction. This would be a significant impact.

Mitigation Measures

4.4.3a The project sponsor shall obtain and comply with a NPDES General Construction Stormwater Permit issued by the Regional Water Quality Control Board (RWQCB), Central Coast Region. (Required by law)

This permit is required by the RWQCB for construction projects with greater than five acres of land disturbance. In obtaining a stormwater permit, the project sponsor would be required to develop Best Management Practices to reduce or eliminate pollutants in stormwater. The Best Management Practices may include the following points:

- Construction Scheduling - earthwork during the rainy season should be avoided. Exposed soil shall be covered or vegetated as soon as practical.

- Erosion Control - silt fences, hay bales or gravel sediment traps, and temporary earth berms shall be used to control erosion.

- Spill Prevention - A spill prevention plan shall be developed describing measures to ensure proper collection and disposal of all pollutants handled or produced on the site during construction. The plan shall cover fuels, solvents, chemicals, sanitary wastes, concrete rinse water, and all other potential sources of stormwater pollution.

4.4.3b The project sponsor shall comply with all NPDES requirements in effect at the time of project construction. (Required by law)

As required by law, the project would be subject to all regulations under the National Pollution Discharge Elimination System.

4.4.3c The project sponsor shall ensure that the contractor installs storm drain sediment traps in the project vicinity as part of the installation of storm drainage facilities. (Required by law)

The traps shall be installed as recommended in the City of Salinas Sewage and Drainage Master Plan, and as required by the County Water Resources Agency and the City of Salinas Public Works Department.

As noted above (Mitigation Measure 4.4.2), the project sponsor proposed to construct a storm water siltation/detention basin as part of the project. The siltation/detention basin, which is recommended in the City's *Sewage and Drainage Master Plan,* would serve to remove silt from storm water runoff before it enters the City storm drain system.

Implementation of these mitigation measures would reduce the stormwater related water quality impacts of the proposed project to a less-than-significant level.

Impact 4.4.4: The existing plume of nitrate contamination in the groundwater basin may be dispersed or otherwise impacted by the proposed project. This would be a significant impact.

Mitigation Measures

4.4.4a New wells installed to serve the proposed project shall be constructed ~~by the project sponsor~~ to withdraw water from levels below existing nitrate contamination.

Alco proposes to install 800-foot deep wells with the top 300 feet of each well casing sealed. Groundwater therefore would be drawn only from the screened portions of the casing, at depths greater than 300 feet (Adcock, 1993). This would minimize or eliminate disturbance of the shallow nitrate plumes in the vicinity of the project. In

general, the conversion of fertilized agricultural land to residential development reduces the source of nitrate contamination, and has a beneficial impact on groundwater quality. The project sponsor would provide primary funding for construction of three of the wells and limited funding for the fourth, and would have ultimate responsibility for construction of the wells to ensure that adequate water service is provided to the project.

4.4.4b New well sites ~~installed to serve the proposed project shall be constructed~~ provided by the project sponsor ~~to~~ shall meet the minimum lot size requirements set by Alco Water Service.

Alco normally requires that all new groundwater wells be built on lots with a minimum net size of 0.5 acres (Fuog, 1998); for this project, Alco would require a minimum of 20,000 square feet of net usable area (Adcock, 1998b).[4] This would allow room for future water treatment facilities should nitrate contamination become a problem at the project site. These water treatment facilities would reduce the impact of nitrate contamination to a less-than-significant level. The project sponsor would have ultimate responsibility for construction of the wells to ensure that adequate water service is provided to the project.

4.4.4c Prior to the start of construction, the project sponsor shall provide a monitoring well on the project site to the satisfaction of the County Water Resources Agency and the County Department of Health.

The monitoring well would be used by the County to gather data on basin-wide groundwater quality and quantity. The possible conversion of the existing agricultural well on the project site into a monitoring well should be considered by the parties involved. Alternatively, construction of a new monitoring well, which is often less costly than conversion of an existing well, could be undertaken in conjunction with construction of one of the project's water supply wells (Mulholland, 1994).

Implementation of the above mitigation measures and Mitigation Measure 4.4.5, below, would reduce the impact of nitrate contamination to a less-than-significant level.

Impact 4.4.5: Abandoned agricultural wells on the project site could serve as a conduit to introduce pollutants into the groundwater basin. Stormwater or irrigation runoff could enter an improperly abandoned well and contaminate the aquifer. This would be a significant impact.

Mitigation Measure

4.4.5 Prior to the issuance of a certificate of occupancy for dwelling units on the project site, the project sponsor shall abandon unused agricultural well(s) in accordance with state and county standards, or convert the unused well(s) into monitoring wells, at the discretion of the County Water Resources Agency.

Proper abandonment would involve filling the well with concrete or another approved material, and removing the exposed well head. Proper abandonment shall be verified by the County Water Resources Agency and, if necessary, by the County Health Department.

Implementation of the above measure would reduce the potential impact of abandoned agricultural wells to a less-than-significant level.

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[4] One of the proposed well sites would be an addition to an existing well lot on Surrey Way; the total site would have to be 20,000 net sq. ft.

LAFCO Groundwater Standards

The Monterey County Local Agency Formation Commission (LAFCO), which must approve a change in the Salinas Sphere of Influence and annexation of the project site (see Section 4.1, Land Use, Plans and Policies, and Zoning), has adopted standards for the evaluation of annexations and other jurisdictional boundary changes. Included among those standards are the following policy statements regarding groundwater, presented in summary form. After each statement is a brief description of the project's consistency, based on the impacts analysis in this section.

- The Commission will encourage projects that use reclaimed wastewater, minimize nitrate concentration, and provide beneficial use of storm waters.

  The project would not use reclaimed wastewater. The project would not increase nitrate concentrations (sometimes caused by percolation of nutrient-rich irrigation water or animal waste), and would provide for groundwater recharge from the proposed storm water basin.

- The Commission will encourage projects that incorporate water conservation measures.

  The project proposes a number of water conservation measures, including limitations on turf planting, use of low-flow plumbing fixtures, provision of information on conservation, and provision of drip irrigation equipment.

- The Commission will encourage projects that conform with adopted water allocation plans.

  The City of Salinas is no longer required to have a water allocation plan.

- The Commission will encourage projects in which the affected jurisdiction has achieved water savings or new water sources that would offset the project's increase in water use.

  The project would result in a decrease in on-site water use through conversion of agricultural land to residential development.

- The Commission will discourage projects that contribute to cumulative effects on the groundwater basin unless those projects promote planned and orderly development.

  The project, in conjunction with cumulative development, would contribute to ongoing groundwater overdrafting but to a much lesser degree than current conditions. As noted above, the project would result in a net decrease of water use on the project site, and would therefore incrementally reduce the rate of overdraft. Regarding promotion of orderly development, the majority of the project is primarily within the City of Salinas sphere of influence, and thus planned for urban development. The project, after implementation of mitigation measures, would result in conversion of prime agricultural land to developed use. The project would not result in unmet demand for any other public services. LAFCO's overall

"Standards for the Evaluation of Proposals" state that the standards are not absolute and that all standards must be related to the facts of a particular case.

- The Commission will discourage projects that result in a significant adverse impact on the groundwater basin even with mitigation.

  As stated above, the project would result in a net decrease in water use on-site.

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4.5 AIR QUALITY

SETTING

Climate and Meteorology

The primary factors that determine air quality are the locations of air pollutant sources and the amounts of pollutants emitted. Meteorological and topographical conditions, however, are also important. Atmospheric conditions such as wind speed, wind direction, and air temperature gradients interact with the physical features of the landscape to determine the movement and dispersal of air pollutants.

The project site is located in Salinas Valley, which lies within the North Central Coast Air Basin. Salinas Valley extends from Salinas at the northwest end to King City at the southeast end. The Gabilan Range is to the east of the Valley, while the Sierra de Salinas and the coastal Santa Lucia Range are to the west of the Valley (Monterey Bay Unified Air Pollution Control District, 1995).

The predominant high pressure cell off the coast determines the climate of the region. Salinas Valley has a moderate year-round climate, because of the proximity of the ocean and the prevailing northwesterly winds. Summers are generally dry; over 90 percent of the annual rainfall occurs between November and April (City of Salinas, 1988). In summer, the high pressure cell causes a stable temperature inversion of hot air over a cool coastal layer of air. This warmer air acts as a lid to prevent vertical dispersion of air pollutants.

The onshore air currents passing over the cool ocean water bring fog and relatively cool air into the coastal valleys. The prevalence of morning fog with winds from the northwest contributes to the cool temperatures. Summer fogs generally dissipate by noon. In winter, there are some days of heavy fog, but they are infrequent and of short duration. The general absence of persistent inversions and occasional storm systems usually result in good air quality in the region during winter and early spring. In fall, the surface winds become weak, and at times winds from the north and the east bring pollutants from the San Francisco Bay Area or the Central Valley into the Air Basin.

In general, the prevailing winds during summer are predominantly from the northwest with maximum speeds of seven to eight miles per hour. During the winter months the prevailing

winds are from the southeast with slightly higher average speeds. Strong wind patterns are generally associated with winter storm systems (City of Salinas, 1988).

Air Quality Regulatory Context

Regulation of air quality is achieved through implementation of national and state ambient air quality (concentration) standards and enforcement of emissions limits for individual sources of air pollutants. The federal Clean Air Act required the U.S. Environmental Protection Agency (U.S. EPA) to identify National Ambient Air Quality Standards (national standards) to protect public health and welfare. National standards have been established for ozone, carbon monoxide, nitrogen dioxide, sulfur dioxide, suspended particulate matter (PM-10), and lead. These pollutants are called "criteria" air pollutants because the corresponding ambient standards satisfy criteria specified under the Clean Air Act. The State of California has established its own ambient air quality standards (state standards) which are generally more stringent than their national counterparts.

The federal Clean Air Act required U.S. EPA to designate Air Basins, or portions thereof, as either "attainment" or "nonattainment" for each criteria air pollutant, based on whether or not the national standards have been achieved. The California Clean Air Act, patterned after the federal Clean Air Act, also required that areas be designated as "attainment" or "nonattainment" but with respect to the state standards rather than the national standards. The project site is located within the North Central Coast Air Basin (Air Basin). This Air Basin is currently designated as "nonattainment" for state standards for ozone and fine particulate matter, known as PM-10 (California Air Resources Board, 1996). The Air Basin, although originally designated as "nonattainment" for the national ozone standard, is now designated as "attainment" for the national ozone standard based on recent monitoring data (Brennan, 1997). The Air Basin is "attainment" or "unclassified" with respect to the other state and national ambient air quality standards.

Under the federal Clean Air Act, Air Basins designated as "nonattainment" were required to prepare air quality plans which set forth a strategy to attain the standards. The plans and programs developed for a given state are referred to as State Implementation Plans (SIPs). California's SIP is comprised of plans developed at the regional or local level. Since the North Central Coast Air Basin had once been designated "nonattainment" for the national ozone standard, a regional air quality plan for the Air Basin was prepared. Under the federal Clean Air

Act Amendments of 1990, the regional air quality agencies (Monterey Bay Unified Air Pollution Control District, Association of Monterey Bay Area Governments, and San Benito County Council of Governments) prepared a "Maintenance Plan" in anticipation of U.S. EPA's recognition that the Air Basin has attained (and now must maintain) the national ozone standard.

Under the California Clean Air Act, Air Basins designated as "nonattainment" with respect to the state standards must prepare plans to achieve the standards or that, at a minimum, implements all feasible measures. Therefore, the Monterey Bay Unified Air Pollution Control District (MBUAPCD) prepared and adopted the *1991 Air Quality Management Plan for the Monterey Bay Region* (1991 AQMP). The 1991 AQMP addressed planning requirements related to the state ozone standard and recommended adoption of 20 measures to control emissions of reactive organic gases (ROG) from stationary sources, 5 measures for stationary sources of nitrogen oxides (NO_X), and 8 transportation control measures. In December 1994, the District adopted an update to this plan, the 1994 AQMP, which showed that the District could achieve the required reduction in ROG and NOx by 1997 without the control measures referenced in the 1991 AQMP.

Regulatory Agencies

The California Air Resources Board (CARB), California's state air quality management agency, regulates mobile emissions sources and oversees the activities of Air Pollution Control Districts and Air Quality Management Districts. CARB indirectly regulates local air quality by having established state ambient air quality standards and vehicle emission standards, by conducting research activities, and by planning and coordinating activities.

The Monterey Bay Unified Air Pollution Control District (MBUAPCD) is the regional agency empowered to regulate air pollution emissions from stationary sources in the North Central Coast Air Basin. MBUAPCD regulates air quality through its permit authority over most types of stationary emission sources and through its planning and review activities. MBUAPCD operates air quality monitoring stations that provide information on ambient concentrations of criteria air pollutants.

Association of Monterey Bay Area Governments (AMBAG) does not regulate emissions directly but develops transportation control measures and employment and population forecasts which are used in developing the AQMP. For projects that would lead to an increase in population in Monterey County, AMBAG determines whether the increase in population would be consistent with the population assumptions that were used to develop the AQMP. If consistent with those

assumptions, a project is regarded as included in the AQMP; and as such, is consistent with the strategies included in the AQMP to improve regional ozone concentrations. If not consistent, then the project is deemed to contribute to a significant adverse cumulative effect on regional ozone concentrations (see page 4.5-15 for AMBAG's determination regarding the proposed Mountain Valley project).

Existing Air Quality

MBUAPCD's air quality monitoring stations provide information on ambient concentrations of criteria air pollutants. Table 8 is a five year-summary of the highest annual criteria air pollutant concentrations. The ozone data shown in Table 8 are a compilation of data from all of the monitoring stations in the Air Basin since ozone is a regional pollution. Pollutant data for carbon monoxide and PM-10 were collected at the Salinas II air quality monitoring station, 1270 Natividad Road, about 2 miles northwest of the project site. Carbon monoxide and PM-10 are more local in character than ozone. In Table 8, air pollutant concentrations are compared with the state ambient air quality standards, which are generally more stringent than the corresponding national standards. The major criteria air pollutants are described below.

Ozone

Ozone is not emitted directly into the atmosphere, but is a secondary air pollutant produced in the atmosphere through a complex series of photochemical reactions involving reactive organic gases (ROG) and nitrogen oxides (NO_X). ROG and NO_X are referred to as precursors to ozone. Significant ozone production generally requires about three hours in a stable atmosphere with strong sunlight. Ozone is a regional air pollutant because its precursors are transported and diffused by wind concurrently with ozone production, and high ozone concentrations can occur miles away from the source of the precursors. Motor vehicles are generally the major source of ozone precursors.

Short-term exposure to ozone can result in injury and damage to the lung, decreases in pulmonary function and impairment of immune mechanisms (Monterey Bay Unified Air Pollution Control District, 1995). These changes have been implicated in the development of chronic lung disease as the result of longer-term exposure. Symptoms of ozone irritation include shortness of breath, chest pain when inhaling deeply, wheezing, and coughing. In addition, effects on vegetation have been documented at concentrations below the standards. On-road motor vehicles contribute

TABLE 8: SALINAS AIR POLLUTANT SUMMARY, 1992-1996[a]

Pollutant	*Standard*[b]	1992	1993	1994	1995	1996
Ozone						
Highest one-hour average, ppm[c]	*0.09*	**0.10**	**0.11**	**0.10**	**0.14**	**0.12**
Number of standard violations[d]		1	12	6	8	16
Carbon Monoxide						
Highest one-hour average, ppm	*20.0*	4.0	4.0	5.0	3.0	6.0
Number of standard violations		0	0	0	0	0
Highest eight-hour average, ppm	*9.0*	2.9	2.7	2.2	1.7	2.9
Number of standard violations		0	0	0	0	0
Particulate Matter (PM-10)						
Highest 24-hour average, $\mu g/m^3$ [c]	*50*	41	**86**	50	50	50
Number of standard violations[e]		0	3	0	0	0
Annual Geometric Mean, $\mu g/m^3$	*30.0*	20.3	17.9	18.0	17.7	17.2

[a] Ozone data represent basin-wide values based on data from all of the monitoring stations. Pollutant data for carbon monoxide and PM-10 were collected at MBUAPCD's Salinas II monitoring station, 1270 Natividad Road.
[b] State standard, not to be exceeded.
[c] ppm - parts per million; $\mu g/m^3$ - micrograms per cubic meter.
[d] Refers to the number of days (in a given year) during which violations of the applicable standard were measured.
[e] Typically measured every sixth day.

Note: Values in **bold type** are in excess of applicable standard.

SOURCE: California Air Resources Board, *Air Quality Data Summaries*, 1992-1996.

approximately 30 to 40 percent of the ROG and NO_X emitted in the North Central Coast Air Basin (California Air Resources Board, 1995a). As shown in Table 8, the state standard for ozone is violated on an average of approximately six days per year within the region.

Carbon Monoxide

Carbon monoxide is an odorless, invisible gas usually formed as the result of incomplete combustion of organic substances. Ambient carbon monoxide concentrations normally correspond closely to the spatial and temporal distributions of vehicular traffic. Carbon monoxide concentrations also are influenced by wind speed and atmospheric mixing. Under

inversion conditions, carbon monoxide concentrations may be distributed more uniformly over an area out to some distance from vehicular sources.

When carbon monoxide combines with hemoglobin in the blood, the oxygen-carrying capacity of the blood is reduced and the release of oxygen is inhibited or slowed (Monterey Bay Unified Air Pollution Control District, 1995). This condition places angina patients, persons with other cardiovascular diseases or with chronic obstructive lung disease, asthma, persons with anemia, and fetuses at risk. Symptoms of exposure may include headaches, dizziness, sleepiness, nausea, vomiting, confusion, and disorientation. On-road motor vehicles are responsible for approximately 63% of the carbon monoxide emitted within the Air Basin (California Air Resources Board, 1995a). The state standards for carbon monoxide have not been violated at the monitoring station in Salinas over the past five years.

Particulate Matter (PM-10)

PM-10 consists of particulates 10 microns (a micron is one one-millionth of a meter) or less in diameter, which can be inhaled and cause adverse health effects. Particulates in the atmosphere result from many kinds of dust- and fume-producing industrial and agricultural operations, combustion, and atmospheric photochemical reactions. In the NCCAB, the major sources of PM-10 emissions are paved and unpaved road dust (60%), windblown dust (14%), construction (12%), and farming operations (7%). Particulate concentrations near residential sources generally are higher during the winter, when more fireplaces are in use and meteorological conditions prevent the dispersion of directly emitted contaminants. Very small particles of certain substances (e.g., sulfates and nitrates) can cause lung damage directly, or can contain adsorbed gases (e.g., chlorides or ammonium) that may be injurious to health. Particulates also can damage materials and reduce visibility. The state 24-hour PM-10 standard has been violated on rare occasions over the past five years at the monitoring station in Salinas.

Existing Emissions Associated with the Project Site

The existing site is used for agricultural purposes. Existing emissions sources include tilling (fugitive dust), windblown dust (fugitive dust), pesticide application (fugitive ROG), and combustion of fuel by farm equipment (ROG, NO_X, and PM-10). Emissions from these sources have been estimated and are shown, on an annual average basis, in Table 9.

TABLE 9: ESTIMATED EXISTING EMISSIONS ASSOCIATED WITH PROJECT SITE

	Annual Average (pounds per day)[a]				
Pollutant	Tilling	Windblown Dust	Pesticide Application	Farm Equipment	Total
Carbon Monoxide	--	--	--	4	4
Reactive Organic Gases	--	--	5	1	6
Nitrogen Oxides	--	--	--	3	3
Sulfur Oxides	--	--	--	--	0
Particulate (PM-10)	22	48	--	--	70

[a] Emissions categories, formulas, assumptions, and references are contained in Appendix C.

-- denotes negligible emissions.

SOURCE: Environmental Science Associates, 1997.

Sensitive Receptors

Land uses such as schools, hospitals, and convalescent homes are considered to be relatively sensitive to poor air quality because infants and children, the elderly, and people with health afflictions, especially respiratory ailments, are more susceptible to respiratory infections and other air-quality-related health problems than the general public. Residential areas are also considered to be sensitive to air pollution because residents (including children and the elderly) tend to be at home for extended periods of time, resulting in sustained exposure to any pollutants present.

Industrial and commercial districts are less sensitive to poor air quality because exposure periods are shorter and workers in these districts are, in general, the healthier segment of the public. Recreational land uses are moderately sensitive to air pollution. Although exposure periods are generally short in such places, vigorous exercise associated with recreation places a high demand on the human respiratory functions, which air pollution can impair. Noticeable air pollution also detracts from the recreational experience.

For this project, the Bardin Elementary School, the Alisal Elementary and High School, and nearby residential land uses would be considered sensitive receptors.

IMPACTS AND MITIGATION MEASURES

Air quality impacts would result both from construction activities and from the operation of the project. Construction emissions would have a temporary effect, while operational emissions would continue to affect air quality throughout the lifetime of the project.

Construction emissions would consist mainly of dust generated during earthwork and other construction activities, exhaust emissions from construction-related equipment and vehicles, and relatively minor emissions of ROG from paints and other architectural coatings. Over the long-term, the primary source of criteria air pollutant emissions from a residential development would be vehicular emissions generated by project-related traffic. Natural gas used for space heating would also generate air pollutants, but to a much lesser extent.

Significance Criteria

Appendix G of the *CEQA Guidelines* states that a project would normally have a significant air quality impact if it would violate any air quality standard, contribute substantially to an existing or projected air quality violation, or expose sensitive receptors to substantial pollutant concentrations.

Dispersion modeling techniques provide estimates in terms of concentrations (e.g., parts per million) which can be directly compared to ambient air quality standards; however, since dispersion modeling is not feasible for a regional pollutant like ozone, MBUAPCD recommends the use of emissions-based criteria to evaluate the significance of increases in emissions of ozone precursor emissions (Monterey Bay Unified Air Pollution Control District, 1995). For ROG or NO_X emissions, an increase of 150 pounds per day or more from direct and indirect sources would be considered significant. In this context, direct sources refer to those emissions sources that emit air pollutants at a given site, such as water heaters and space heaters at a residence, and indirect sources refer to those sources that emit air pollutants primarily away from the site and yet are connected with the use of the site, such as auto trips to and from work, shopping, or other destinations.

For PM-10, MBUAPCD recommends a threshold of 82 pounds per day from direct sources as the significance criterion. Carbon monoxide impacts are evaluated through dispersion modeling techniques so that a direct comparison with ambient air quality standards can be used to evaluate

the significance of carbon monoxide impacts. Cumulative impacts on regional ozone concentrations are based upon a consistency determination with the AQMP.

Methodology

Fugitive dust from project construction activities is quantified on the basis of emissions factors published by the U.S. EPA (U.S. Environmental Protection Agency, 1995). Operational-phase vehicular emissions from the proposed 853 single-family residences are estimated using the URBEMIS computer program developed by the California Air Resources Board (California Air Resources Board, 1995b). The vehicle fleet mix recommended by MBUAPCD's *CEQA Air Quality* Guidelines was modified slightly to more accurately reflect the fleet mix generated by a residential subdivision. Stationary source emissions from the residential units were estimated using factors developed by the California Air Resources Board (California Air Resources Board, 1995c). Stationary and mobile source emissions were added and total emissions were compared against the significance thresholds established by the MBUAPCD (e.g., 150 pounds per day for ROG or NOx).

Roadside carbon monoxide concentrations were modeled using the line dispersion model, CALINE4. This Gaussian dispersion model calculates one-hour concentrations on the basis of peak-hour traffic volumes, roadway configurations, and worst-case meteorological assumptions. CALINE4-generated concentrations are added to projected background concentrations obtained from MBUAPCD's *CEQA Air Quality Guidelines*. Eight-hour carbon monoxide concentrations were estimated from the one-hour concentrations by using a persistence factor of 0.7 and then adding in the appropriate eight-hour background concentration. The resulting ambient carbon monoxide concentrations were then compared to the one-hour and eight-hour state carbon monoxide standards to determine if there would be any air quality standard violations.

The cumulative impact on regional ozone concentration is evaluated based on a determination of the consistency of the project with the AQMP. Association of Monterey Bay Area Governments (AMBAG) makes this determination for projects in Monterey County.

Impact 4.5.1: Construction activities would temporarily generate criteria air pollutants, particularly PM-10, over the expected six-year construction period. This would be a short-term significant effect.

Construction of the project would generate fugitive dust (including PM-10), and other criteria air pollutants from exhaust emissions. A large portion of the total construction dust emissions

would result from grading activities and heavy equipment travel over temporary roads at the construction site. Dust emissions would vary from day to day, depending on the level and type of activity, silt content of the soil, and the weather. Equipment and vehicles used for the construction of the project would generate criteria air pollutants from engine exhausts.

Development of the proposed project would include six phases that would occur over approximately six years. Typically, with this size of development, three builders would proceed on development of 50 lots each during a given year. The sequence of construction for each of these 50-unit blocks of homes would begin with approximately four months of site preparation during which most of the grading would occur followed by four months of home construction. Most of the first month would be devoted to rough grading of roadways and building pads. The next two months would be needed for installation of storm, sewer, and water infrastructure, and one month would be needed for utilities and streets. Actual building construction would then occur over the next four months. Most construction activities typically end by the end of November for the winter and do not start again until the beginning of March. Since excavation and grading activities would occur intermittently, rather than continually, no PM-10 concentration modeling was performed for this assessment.

While most of the dust associated with project construction would occur during the first month of site preparation, dust would also be generated during installation of infrastructure and underground utilities primarily from trenching activities and heavy vehicle movement over unpaved surfaces. In addition, following installation of underground utilities, approximately one week of roadway regrading is required before paving. Relatively little dust would be generated during the four months when the homes would be built since the homes would be slab-on-grade construction (i.e. would not include excavated basements) and since the interior roads would be paved after site preparation and prior to building construction (paved interior roads would reduce the dust generated by vehicle movement over unpaved surfaces on the project site). During home construction, however, dust would be generated during regrading of the lots prior to landscaping. This regrading would take approximately one day per unit.

As stated above, dust emissions would vary from day to day, depending on the level and type of activity, silt content of the soil, and the weather. Over the course of the year, PM-10 emissions could vary from virtually zero on non-workdays and from December through February to approximately 280 to 350 pounds per day on days when rough grading would be taking place. This estimate for PM-10 from rough grading is based on a U.S. EPA emissions factor for heavy

construction activity of 0.77 tons per acre per month which was converted to 70 pounds per acre per day (assuming 22 work days per month and no dust abatement) and an estimate of a maximum of four to five acres of grading on any one given day of construction (assuming three builders). If only two of the builders were to conduct rough grading at the same time, PM-10 emissions would be approximately 190 to 235 pounds per day, and if only one builder were to be grading on a given day, PM-10 emissions would be approximately 95 to 115 pounds per day. Based on these estimates, there would be days when construction-related PM-10 emissions would exceed the MBUAPCD-recommended threshold of 82 pounds per day.

Since construction could generate substantial amounts of dust (i.e., greater than 82 pounds per day), construction could also elevate local PM-10 concentrations to the extent that state PM-10 standards would be violated. Additionally, land uses in the immediate vicinity of the project site include sensitive land uses such as two elementary schools, one high school and residences. In later stages of project development, residents of the homes built earlier would also be exposed. Therefore, project construction would have a significant, albeit temporary and intermittent, effect on air quality.

According to MBUAPCD's *CEQA Air Quality Guidelines*, calculating temporary ROG and NO_X emissions from construction is not necessary because those emissions have been accounted for in state- and federally-required plans (Monterey Bay Unified Air Pollution Control District, 1995). ROG emissions from paints and other architectural coatings, similarly, would be relatively minimal compared to regional emission totals.

Mitigation Measure

4.5.1a The project sponsor shall require site preparation and home building contractors to implement the following dust control program during construction to reduce the contribution of project construction to local PM-10 concentrations:

- Water active sites at least twice daily. Increase the frequency of watering when wind speeds exceed 15 miles per hour. Effective watering generally reduces dust by as much as 50 percent over uncontrolled conditions.

- Prohibit all grading activities during periods of high winds (instantaneous gusts over 15 miles per hour).

- Pave interior roads as soon as practicable after the close of site preparation to reduce dust emissions from vehicle movement over unpaved roads on the project site.

- Enforce a speed limit of 15 miles per hour on unpaved surfaces.

- Replace ground cover in disturbed areas as quickly as possible.

- Enclose, cover, water twice daily, or apply non-toxic soil binders to exposed stock piles (e.g. sand, gravel, or dirt) and inactive construction areas.

- Sweep streets at the end of each construction day if visible soil material is carried out from the construction site to adjacent thoroughfares.

- Cover all trucks hauling dirt, sand, soil, or other loose materials or require that all haul trucks maintain at least two feet of freeboard.

- Sweep up dirt or debris spilled onto paved surfaces immediately to reduce re-suspension of particulate matter through vehicle movement over these surfaces.

- Install wheel washers at the entrance to the construction site(s) for all exiting trucks.

- Post a publicly visible sign that specifies the telephone number and person to contact regarding dust complaints. This person shall respond to all complaints and take corrective action within 48 hours. The phone number of MBUAPCD shall be visible on the sign to ensure compliance with Rule 402 of the MBUAPCD Rules and Regulations (Nuisance).

- Designate a person or persons to oversee the implementation of a comprehensive dust control program and to increase watering, as necessary.

- Maintain and operate construction equipment so as to minimize particulates from exhaust emissions. During construction, trucks and equipment should be running only when necessary. Equipment should be kept in good condition and well-tuned, to minimize exhaust emissions.

With implementation of these mitigation measures, an approximately 75 percent reduction in PM-10 emissions would be expected. This would reduce the chance that PM-10 standards would be violated in the vicinity of the project site or at occupied home sites within project site during the later stages of project build-out. Although violations could still occur, they would be intermittent over the total construction period.

A further reduction the amount of PM-10 generated daily could be achieved through limiting the amount of grading at any one time. Such a limitation, however, might not be feasible in that it would require that no more than five acres would be undergoing grading, assuming 70 pounds per acre per day of uncontrolled PM-10 emissions and 75 percent reduction through mitigation.

Implementation of the above mitigation measure would reduce the impact of construction-generated PM-10. However, it is not certain that construction-generated PM-10 emissions would be reduced to below the MBUAPCD's threshold of 82 pounds per day, and therefore this impact is considered significant and unavoidable.

Impact 4.5.2: Criteria air pollutants generated by the proposed project would increase total air pollutant emissions in the region. This would be a less-than-significant impact.

Long-term air quality would be adversely affected by air pollutant emissions from both mobile and stationary sources. Mobile emissions would consist of emissions from vehicle trips associated with the residential units. Stationary source emissions would consist mainly of emissions from natural gas used for space heating, fireplaces, architectural coatings, and use of aerosols and other volatile consumer products. Project emissions in Year 2005 (i.e. at assumed buildout) have been estimated and are shown in Table 10. Table 11 shows the net change in emissions due to the Project once existing emissions have been taken into account (see Table 9), As shown in Table 11, net project emissions of reactive organic gases, nitrogen oxides, sulfur oxides, and particulates would be below MBUAPCD CEQA significance thresholds. ~~However, net emissions of reactive organic gases, also known as hydrocarbons, would exceed the threshold of 150 pounds per day.~~ (Carbon monoxide (CO) emissions are evaluated differently from the other criteria pollutants. See Impact 4.5.3, below.)

As described in Section 4.2, Traffic and Circulation, the project sponsor has developed a Facilities Trip Reduction Plan, as required by the Salinas Municipal Code. The trip reduction plan states that the project could achieve up to 7.5 percent reduction in vehicle trips, compared to conditions without such a plan, by implementation of features such as provision of ridesharing/ transit and child care information to buyers, inclusion of bicycle racks and bicycle lanes on roadways, provision of transit information, and creation of transit stops and shelters, and provision of pedestrian facilities. (The traffic analysis in this EIR did not assume a reduction in vehicle trips attributable to a trip reduction plan, in order to provide a conservative analysis.) Assuming the plan reduces vehicle trips (and associated VMT) by one-half of its 7.5 percent goal (a conservative assumption), net emissions of reactive organic gases would be reduced by about 4 pounds per day (from 147 ~~159~~ pounds per day to 143 ~~155~~ pounds per day). ~~, which would exceed the MBUAPCD significance threshold by 5 pounds per day.~~

TABLE 10: ESTIMATED EMISSIONS ASSOCIATED WITH THE PROJECT, YEAR 2005

Pollutant	Annual Average (pounds per day)[a] Traffic[b]	Stationary	Total
Carbon Monoxide	~~858~~ 1,176	267	~~1,125~~ 1,443
Reactive Organic Gases	~~100~~ 88	65	~~165~~ 153
Nitrogen Oxides	~~104~~ 96	33	~~137~~ 129
Sulfur Oxides	12	1	13
Particulate	149	32	181

a Emissions categories, formulas, assumptions, and references are contained in Appendix C.
b Emissions reflect wintertime conditions for carbon monoxide and summertime conditions for the other pollutants listed in the table.

SOURCE: Environmental Science Associates, 1998.

TABLE 11: ESTIMATED NET INCREASE IN EMISSIONS ASSOCIATED WITH THE PROJECT, YEAR 2005

Pollutant	Annual Average (pounds per day)[a] Existing Emissions	Project Emissions	Difference	Applicable Significance Criterion	Project Site-only Emissions[c]	Applicable Significance Criterion
Carbon Monoxide (CO)	4	~~1,125~~ 1,443	~~1,121~~ 1,439	b	N/A	N/A
Reactive Organic Gases (ROG)	6	~~165~~ 153	~~159~~ 147	150	N/A	N/A
Nitrogen Oxides (NOx)	3	~~137~~ 129	~~134~~ 126	150	N/A	N/A
Sulfur Oxides (SOx)	0	13	13	150	N/A	N/A
Particulate (PM-10)[c]	70	181	111	N/A	32	82

a Derived from emissions estimates contained in Tables 9 and 10.
b Because carbon monoxide emissions from the project would be primarily emitted from indirect sources (*i.e.*, motor vehicles), the significance of carbon monoxide impacts is evaluated by dispersion modeling rather than by using the 550 pounds per day emissions threshold.
c MBUAPCD criterion for PM-10 is based on direct (on-site) emissions only.

N/A = Not Applicable

SOURCE: Environmental Science Associates, 1998.

Mitigation Measures

4.5.2a: <u>None required. However, the following measures are recommended to minimize the long-term increase in criteria air pollutant emissions from the project.</u> The project sponsor ~~shall~~ <u>could</u> ensure that all homes designed to accommodate wood burning include EPA-certified wood stoves and/or fireplace inserts.

EPA-certified stoves have been shown to have 70 to 90 percent less emissions than conventional stoves. Use of EPA-certified equipment would reduce annual average residential wood-burning emissions of PM-10 from 30 pounds per day to 6 pounds per day, and would also reduce emissions of reactive organic gases.

4.5.2b: The following additional measures are identified to reduce the emissions associated with home energy use.~~, since the vehicle trip reduction plan would not be expected to reduce the net increase in project-related HC emissions to less than 150 pounds per day, the MBUAPCD significance criterion.~~

- The sponsor ~~shall~~ <u>could</u> provide an information package on solar space heating, hot water systems, and pool heating to prospective home owners.
- The sponsor ~~shall~~ <u>could</u> require that home builders install low-NO_X space heaters and water heaters, which would reduce NO_X emissions from that source by 25 to 60 percent. (Along with ROG, NO_X is an ozone precursor.)
- The sponsor ~~shall~~ <u>could</u> require that home designs exploit solar energy to the extent feasible, including solar panels and passive solar features.
- The sponsor ~~shall~~ <u>could</u> require home builders to provide exterior electrical outlets to enable residents to use electrical garden equipment (lawnmowers, etc.) instead of gasoline-powered equipment, potentially reducing emissions from such equipment.
- The sponsor ~~shall~~ <u>could</u> require home builders, to the extent feasible, to install the most energy-efficient appliances available on the market.

Implementation of the above mitigation measures would be expected to reduce emissions of criteria air pollutants due to project operation and, in particular, would be expected to achieve a reduction in emissions of reactive organic gases of at least 5 pounds per day. ~~This would result in net project emissions of reactive organic gases that would not exceed the MBUAPCD threshold of 150 pounds per day. As noted in the above analysis, the calculations have been completed assuming the project is completed by 2005. Because emission factors used in the calculations anticipate continued decrease in emissions from automobiles, the same calculations performed for the year 2007 would show enough of a decrease in emissions, compared to those in 2005, to avoid any exceedance of the MBUAPCD thresholds. In view of the above,~~ <u>With or without the above mitigation measures,</u> project emissions of criteria air pollutants would be less than significant. ~~with mitigation.~~

Impact 4.5.3: Project-related traffic would raise ambient carbon monoxide concentrations along access roadways and intersections. This would be a less-than-significant impact.

Carbon monoxide concentrations were modeled for evening peak-hour traffic conditions for the three intersections most affected by project traffic using CALINE4. The results of the modeling effort are shown in Table 12. As shown in the table, carbon monoxide concentrations would not violate the air quality standards under any of the analyzed scenarios. Carbon monoxide emission rates are projected to decrease into the future due to cleaner burning fuels and improved combustion technologies. Since the project would not cause any carbon monoxide standard violations, project-generated traffic would not have a significant effect on ambient carbon monoxide concentrations. Cumulative effects on local carbon monoxide concentrations would also be less-than-significant.

TABLE 12: PROJECTED CARBON MONOXIDE CONCENTRATIONS AT SELECTED INTERSECTIONS

Intersection	Averaging Time (hr)	Concentrations (ppm)[a,b] Existing 1997	Existing + Project 2005	Cumulative 2005
E. Laurel Dr./Sanborn St.	1	13.5	8.7	9.6
	8	8.4	5.2	5.8
E. Alisal St./John St./Williams Rd.	1	11.8	8.2	9.2
	8	7.2	4.8	5.5
Sanborn St./E. Market St.	1	14.5	9.6	10.7
	8	**9.1**	5.8	6.6

a Projected using CALINE4 dispersion model, worst-case meteorological assumptions, and evening peak-hour traffic estimates. Receptors were placed at a distance of 50 feet from the center of the intersection. Composite emissions factors from MBUAPCD's *CEQA Air Quality Guidelines* were used for this analysis. CALINE4 printouts showing input and results are provided in Appendix C.

b One-hour average concentrations include a background concentration of 4.4 ppm in 1997 and 3.9 ppm in 2005. Eight-hour average concentrations are assumed to be 70 percent of the local contribution to the one hour concentrations, plus a background concentration of 2.0 ppm in 1997 and 1.8 ppm in 2005.

Note: The state one-hour carbon monoxide standard is 20 ppm and the federal standard is 35 ppm. The state and federal eight-hour carbon monoxide standards are 9.0 ppm. **Bold-face** values indicate violation of standard.

SOURCE: Environmental Science Associates, 1998.

Mitigation Measure 4.5.3: None required.

Impact 4.5.4: The project, along with regional growth and development, would have a cumulative air quality impact. This would be a less-than-significant impact.

The project would incrementally add to regional emissions of ozone precursors (ROG and NO_X), along with such emissions resulting from regional growth and development. AMBAG has determined that the project is consistent with the regional AQMP (Papadakis, 1998).[1] Therefore, the project would not be considered to have a significant cumulative effect on regional air quality.

Mitigation Measure 4.5.4: No mitigation is required.

REFERENCES - Air Quality

Brennan, Janet, Senior Planner, Monterey Bay Unified Air Pollution Control District, telephone conversation, July 23, 1997.

California Air Resources Board, *Emissions Inventory 1993*, June 1995a.

California Air Resources Board, *URBEMIS Computer Program, Version 5.0, User Guide*, July 1995b.

California Air Resources Board, *Emission Inventory Procedural Manual, Volume III: Methods for Assessing Area Source Emissions*, September 1995c.

California Air Resources Board, *Proposed Amendments to the Area Designations for State Ambient Air Quality Standards*, November 1996.

City of Salinas, *Salinas General Plan Master Environmental Assessment*, November 1988.

Monterey Bay Unified Air Pollution Control District, *CEQA Air Quality Guidelines*, October 1995.

Papadakis, Nicolas, Executive Director, Association of Monterey Bay Area Governments, letter February 26, 1998.

U.S. Environmental Protection Agency, *Compilation of Air Pollutant Emission Factors*, AP-42, 1995.

[1] The consistency finding was based on a previously proposed, larger project, and would remain applicable to the project analyzed herein. A copy of the letter containing AMBAG's consistency determination is included in Appendix C.

4.6 SOILS CONTAMINATION

SETTING

Definitions

A substance may be considered hazardous due to a number of criteria, including toxicity, ignitability, corrosivity, or reactivity. A hazardous material is defined as "a substance or combination of substances which, because of its quantity, concentration, or physical, chemical or infectious characteristics, may either (1) cause, or significantly contribute to, an increase in mortality or an increase in serious irreversible, or incapacitating reversible, illness; or (2) pose a substantial present or potential hazard to human health or environment when improperly treated, stored, transported or disposed of or otherwise managed" (Title 22, California Code of Regulations, Section 66084).

Once a hazardous material is ready for discard, it becomes a hazardous waste. A "hazardous waste", for the purpose of this report, is any hazardous material that is abandoned, discarded, or (planned to be) recycled (California Health and Safety Code, Section 25124). In addition, hazardous wastes may occasionally be generated by actions that change the composition of previously non-hazardous materials. The same criteria that render a material hazardous make a waste hazardous: toxicity, ignitability, corrosivity, or reactivity.

Toxic, ignitable, corrosive and reactive materials are all subsets of hazardous materials and wastes. For example, if a material is toxic, it is hazardous, but not all hazardous materials are toxic. Specific tests for toxicity, ignitability, corrosivity and reactivity are set forth in Title 22, California Code of Regulations, Sections 66693 - 66708. Each type of hazardous material is defined below.

Toxic substances may cause short-term or long-lasting health effects, ranging from temporary effects to permanent disability, or even death. For example, such substances can cause disorientation, acute allergic reactions, asphyxiation, skin irritation or other adverse health effects if human exposure exceeds certain levels (the level depends on the substance involved). Carcinogens (substances known to cause cancer) are a class of toxic substances. Examples of toxic substances include benzene, which is a component of gasoline and a suspected carcinogen, and methylene chloride, a paint stripper.

Ignitable substances are hazardous because of their ability to burn. Gasoline, hexane and natural gas are examples of ignitable substances.

Corrosive materials can cause severe burns or damage materials; these include strong acids and bases, such as lye or sulfuric (battery) acid.

Reactive materials may cause explosions or generate toxic gases. Explosives, pure sodium or potassium metal (which react violently with water), and cyanides (which react with acids to produce toxic hydrogen cyanide) are examples of reactive materials.

Contamination and contaminants are not necessarily hazardous materials or waste. Soil or water is considered to be contaminated if it contains elevated (above background) levels of a chemical substance, and if the resulting soil or water has the potential to cause human health effects or adversely affect the natural environment.

Even if soil or groundwater at a contaminated site does not have the characteristics of a hazardous material, remediation (clean-up) of the site may be required by the regulatory agencies. Several regulatory agencies usually become involved in overseeing site remediation activities. Clean-up requirements are determined on a case-by-case basis.

Government Regulations

The use of hazardous materials is subject to numerous laws and regulations at all levels of government. Appendix D provides a brief overview of these laws and regulations.

Hazardous Materials Use at and Near the Project Site

The project site is the location of the Sconberg Ranch, which is and has been used for agricultural land uses. Because of the agricultural uses on the site, the potential exists for surface soils to be contaminated from pesticide application. Consequently, a soil survey was performed in April of 1997 to characterize the degree and extent of potential pesticide contamination on the project site (Lee & Pierce, 1997). Ten soil samples were collected from row ends identified in a review of historic aerial photographs of the project site. All ten samples were tested for the presence of pesticides in a California certified laboratory using EPA method 8080. All laboratory results indicated that detected residual pesticide contamination is below state hazardous waste thresholds. In addition, the ten samples were composited into two samples for

analysis of metals content. With consideration given to dilution processes required to composite the samples, detected metals concentrations were also below state hazardous waste thresholds.

The State of California Cortese hazardous waste and substance sites list was also consulted for contamination sites in the project area as required by CEQA. No hazardous waste sites or hazardous substances are identified on the project site.

IMPACTS & MITIGATION MEASURES

Significance Criteria

In accordance with the California Environmental Quality Act (CEQA), State CEQA Guidelines, and agency and professional standards, a project would be considered to pose a significant impact if it would:

- pose public health and safety hazards through release of emissions or risk of upset;
- result in unsafe conditions for employees or surrounding neighborhoods;
- not comply with all applicable laws regarding the handling of hazardous materials; or
- involve the use, production, or disposal of materials in a manner that poses a hazard to people, or to animal or plant populations in the area affected.

As discussed above, there is no indication that the soils proposed to be disturbed for project development are contaminated with hazardous materials or wastes. There is no foreseeable risk to people, or to animal or plant populations, on the project site or in the vicinity. Consequently, this impact is considered to be less than significant.

REFERENCES - Soils Contamination

California Code of Regulations, Title 22, Division 4.5 "Environmental Health Standards for the Management of Hazardous Wastes," Chapter 11, Article 3 (Characteristics of Hazardous Waste), Sections 66261.20-24.

Lee & Pierce Inc., *Residual Pesticide and Metals Investigations for Sconberg Ranch, Salinas, California*, April 9, 1997.

4.7 NOISE

SETTING

Introduction to Noise Principles and Descriptors

Environmental noise is usually measured in A-weighted decibels (dBA).[1] Environmental noise typically fluctuates over time, and different types of noise descriptors are used to account for this variability. Typical noise descriptors include the energy-equivalent noise level (L_{eq}), the day-night average noise level (L_{dn}), and the Community Noise Equivalent Level (CNEL).[2] The L_{dn} and CNEL are commonly used in establishing noise exposure guidelines for specific land uses. By virtue of the logarithmic nature of the decibel, a doubling of a noise source (e.g., 400 auto passby events compared to 200 auto passby events in an hour) results in an increase of three dBA. In general, an increase of two to three dBA is regarded as the threshold of "noticeable" change in a noise environment while an increase of ten dBA is perceived as a doubling of loudness.

The noise level experienced at a receptor depends on the type of noise source, the distance between the source and the receptor, presence or absence of noise barriers and other shielding features, and the amount of noise attenuation (lessening) provided by the intervening terrain. For line sources, such as vehicular traffic, noise decreases by approximately 3.0 to 4.5 dBA for every doubling of the distance from the source. For point or stationary noise sources, such as fans or generator, a noise reduction of 6.0 to 7.5 dBA is experienced for each doubling of the distance from the source.

Regulatory Setting

Noise is regulated in the City of Salinas through implementation of policies contained in the Noise Element of the *General Plan* (Noise Element) and through enforcement of City

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1 A decibel (dB) is a logarithmic unit of sound energy intensity. Sound waves exert a sound pressure (commonly called "sound level"), measured in decibels. An A-weighted decibel (dBA) is a decibel corrected for the variation in frequency response of the typical human ear at commonly-encountered noise levels. The highest dBA recorded in a given period of time is known as the maximum noise level (L_{max}). All of the noise levels reported herein are "A-weighted" unless stated otherwise.

2 L_{eq}, the energy equivalent noise level (or "average" noise level), is the equivalent steady-state continuous noise level which, in a stated period of time, contains the same acoustic energy as the time-varying sound level actually measured during the same period. L_{dn}, the day-night average noise level, is a weighted 24-hour average noise level. With the L_{dn} descriptor, noise levels between 10:00 p.m. and 7:00 a.m. are adjusted upward by ten dBA to take into account the greater annoyance of nighttime noise as compared to daytime noise. The Community Noise Equivalent Level (CNEL) is similar to the L_{dn}, except that it includes an approximate five-dBA adjustment to evening noise (7:00 p.m. to 10:00 p.m.) in addition to the ten-dBA adjustment for nighttime noise.

ordinances. The Noise Element identifies compatible noise environments for different types of land uses in the City (City of Salinas, 1988). Table 13 contains the noise/land use compatibility guidelines for the types of uses found in the project vicinity. For residential and school land uses, the City strives to achieve an exterior noise level of 60 L_{dn}. Guiding policies of the Noise Element include the following:

- Minimize vehicular and stationary noise sources, and noise emanating from temporary activities;
- Ensure that new development can be made compatible with the noise environment;
- Through design review, require features to reduce the impact of noise on inhabitants of residential development; and
- Locate urban development within the Salinas Municipal Airport "area of influence" to be compatible with the Airport noise environment.

Implementing policies of the Noise Element include the following:

- Require noise-attenuation measures including measures to shield sensitive uses from noise sources for new developments exposed to noise levels above "normally acceptable" levels.
- Mitigate interior noise to 45 L_{dn} in habitable rooms in new residential projects.
- Ensure that new development or changes in use mitigate noise to acceptable levels at the property line.
- Minimize residential population increases within the 55 CNEL contour related to the Salinas Municipal Airport as projected to the year 2000 (Section 37-154(a) and Chapter 21A of the Salinas Municipal Code).

In addition to Noise Element policies, the City also has two Noise Ordinances, Chapter 21A and Chapter 37 of the Salinas Municipal Code. Chapter 21A limits construction noise to the hours of 7:00 a.m. to 9:00 p.m. Chapter 37, the Zoning Code, contains additional noise regulations.

Existing Noise Sources and Levels

Existing noise sources in the project area include vehicular traffic along Williams and Alisal Roads, and aircraft overflights associated with Salinas Municipal Airport (Airport), located approximately one-half mile southwest of the project site. The eastern portion of the project site lies beneath a flight track for incoming aircraft (City of Salinas, 1993). In general, aircraft overflights are characterized by brief intermittent noise events that intrude over background noise levels generated by such sources as traffic and wind.

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TABLE 13: LAND USE COMPATIBILITY STANDARDS FOR COMMUNITY EXTERIOR NOISE ENVIRONMENTS

	Community Noise Exposure, L_{dn}			
Land Use Category	Normally Acceptable[a]	Conditionally Acceptable[b]	Normally Unacceptable[c]	Clearly Unacceptable[d]
Residential	up to 60	60 to 70	70 to 75	above 75
Schools, Libraries, Churches, Hospitals, Nursing Homes	up to 60	60 to 70	70 to 80	above 80
Playgrounds, Neighborhood Parks	up to 70	N/A	70 to 72	above 72

[a] Normally Acceptable: Specified land use is satisfactory, based upon the assumption that any buildings involved are of normal conventional construction, without any special noise requirements.

[b] Conditionally Acceptable: New construction or development should be undertaken only after a detailed analysis of the noise reduction requirements is made and needed noise insulation features included in the design.

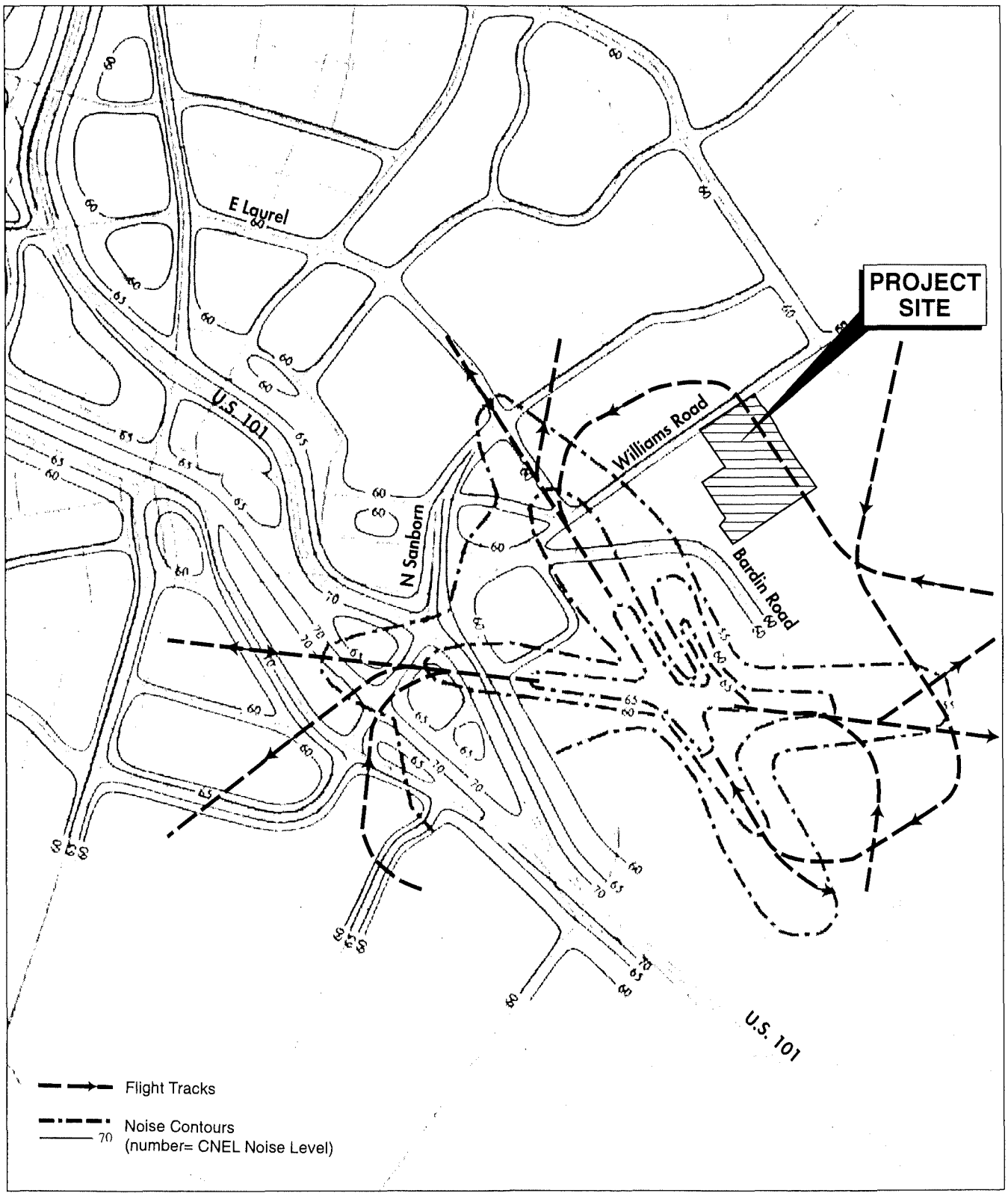
[c] Normally Unacceptable: New construction or development should be discouraged. If new construction or development does proceed, a detailed analysis of the noise reduction requirements must be made and needed noise insulation features included in the design.

[d] Clearly Unacceptable: New construction or development should generally not be undertaken.

SOURCE: City of Salinas, Noise Element of the *General Plan*, 1988.

Approximately 90 percent of all aircraft operations at the Airport are performed by piston-powered aircraft, and among these operations, touch-and-go (training) operations represent a sizable portion (approximately 36 percent). Jet aircraft comprise approximately 1 percent of total annual aircraft operations at the Airport.

The Noise Element includes noise contours from vehicular traffic along major roadways in Salinas, and based on those contours, the project site experiences traffic noise levels that are less than 60 L_{dn} except for the strip of land immediately adjacent to Williams Road which experiences approximately 60 L_{dn} (see Figure 16). Existing aircraft noise at the project site is 55 L_{dn} based on noise contours developed for the Airport, as shown on Figure 16 (City of Salinas, 1993).



SOURCE: Salinas General Plan

Mountain Valley / 960352 ■

Figure 16
Projected Community Noise Equivalent Level (CNEL)

Airport Land Use Planning Handbook

Pursuant to CEQA Section 21096, the project site is within an area that warrants analysis under the Airport Land Use Handbook (hereafter referred to as "Handbook") published by Caltrans (Caltrans, 1993). The CEQA section states that the Handbook "shall be utilized as a technical resource to assist in the preparation of the environmental impact report as the report relates to airport-related safety hazards and noise problems." The Handbook includes noise-related recommendations that suggest the airport's 55 CNEL noise generation level is well below the 60 CNEL criteria, which is considered suitable for airports in suburban settings. Therefore, the proposed project would be consistent with the noise-related guidelines included within the Handbook. (See Section 4.1, Land Use, for a discussion of safety-related issues.)

Sensitive Receptors

Some land uses are considered more sensitive to ambient noise levels than others, due to the amount of noise exposure (in terms of both exposure duration and insulation from noise) and the types of activities typically involved. Residences, motels and hotels, schools, libraries, churches, hospitals, nursing homes, auditoriums, and parks and other outdoor recreation areas generally are more sensitive to noise than are commercial and industrial land uses.

Noise-sensitive land uses in the project area include an existing single-family residential neighborhood and an existing multi-family affordable housing development to the west and the Bardin Elementary School located at the southwest corner of the project site on Alisal Road. Alisal High School and Community School and a single family residential neighborhood are to the northwest and north of the project site, respectively, across Williams Road. Agricultural land uses are predominant to the south and east of the project site, and are not considered noise-sensitive. The project itself includes residential and school land uses, both of which are considered noise-sensitive.

IMPACTS AND MITIGATION MEASURES

Future noise sources associated with the proposed project would include noise from construction activities and operational noise from intensified land use on the project site. Construction noise would have a short-term effect, while operational noise, primarily from vehicle traffic, would continue throughout the lifetime of the project.

Approach to Analysis

Temporary, construction-related noise impacts are based on estimates of typical noise levels generated during different phases of construction. The impact of construction noise is determined by comparing construction noise to existing ambient levels at noise-sensitive uses taking into account the distance between construction activities and the duration of the construction period.

Long-term noise impacts associated with increased vehicular traffic are assessed by using the Federal Highway Administration's (FHWA) traffic noise prediction model (U.S. Department of Transportation, 1978). The model uses roadway traffic volumes, projected in the traffic analysis, to predict resultant noise levels with and without the project. Road segments where existing traffic volumes would increase by 10 percent or more as a result of the project were modeled. Roadway segments not adjacent to noise-sensitive land uses were eliminated from this analysis.

Significance Criteria

CEQA Guidelines Appendix G states that a project would normally have a significant adverse impact on the environment if it would increase substantially the ambient noise levels of adjoining areas.

Temporary impacts during construction are considered significant if they would be substantially greater than existing ambient noise levels, would substantially interfere with affected land uses, would continue for a substantial period, or would affect noise-sensitive uses during the nighttime. For assessment of temporary construction noise impacts, "substantially greater" means more than five dBA (hourly L_{eq} or L_{dn}).

To assess long-term changes in the ambient noise environment, the following significance criteria take into account both the absolute change in noise levels due to a project and the relationship between the resultant noise level and the City's noise/land use compatibility standards (see Table 13). Where the resultant noise level would remain "normally acceptable" for the affected land use, a change of five L_{dn} or more is significant. Where the resultant noise level would be in range described as "conditionally acceptable," a change of three L_{dn} or more is significant, and where the resultant noise level would be "unacceptable," a change of 1.5 L_{dn} or more is significant. It should be noted that the noise standards in Table 13 apply to new construction, and do not specifically apply to existing uses. However, for purposes of a

conservative analysis, these standards are generally relied upon to assist in determining the significance of noise impacts.

Impact 4.7.1: Grading and construction activities in the project area would intermittently and temporarily generate noise levels above ambient background levels. This would be a significant impact.

Noise from construction activity would fluctuate depending on the particular type, number, and usage rates of various pieces of construction equipment. Table 14 shows typical construction noise levels generated during various phases of construction. While the project is expected to be under construction for six years, the impact of construction at any one location would be of considerably less duration as residences would be completed in a given area and construction would proceed to the next phase and location.

TABLE 14: TYPICAL RESIDENTIAL CONSTRUCTION NOISE LEVELS

Construction Phase	Noise Level (L_{eq})[a]
Ground Clearing	83
Excavation	88
Foundations	81
Erection	81
Finishing	88

[a] Noise levels corresponds to a distance of 50 feet from the noisiest piece of equipment associated with a given phase of construction and 200 feet from the rest of the equipment associated with that phase.

SOURCE: U.S. Environmental Protection Agency, *Noise from Construction Equipment and Operations, Building Equipment, and Home Appliances*, December 1971.

Based on the estimates shown in Table 14, excavation (grading) and finishing activities would be the noisiest phases of construction during which noise levels would reach approximately 88 L_{eq} at a distance of 50 feet from the noisiest piece of equipment associated with a particular phase of construction and a distance of 200 feet from the rest of the equipment associated with that phase (U.S. Environmental Protection Agency, 1971).

Hours of construction would be limited to between 7:00 a.m. and 9:00 p.m., as required by the City of Salinas' Noise Ordinance.

Noise from construction activities generally attenuates at 6 to 7.5 dBA per doubling of distance. Assuming an attenuation rate of 6 dBA per doubling of distance, construction noise of 88 L_{eq} at 50 feet would attenuate to a level of 82 dBA at 100 feet, and 76 dBA at 200 feet. Depending upon the phase and location of construction on any given working day, nearby residences and schools would experience noise levels that would be substantially higher than existing background levels, which are relatively low. Since construction activities would substantially increase ambient noise levels at noise-sensitive locations, albeit temporarily, construction noise would be a significant effect of the project.

Mitigation Measures

4.7.1a Construction equipment noise shall be minimized during project construction by muffling and shielding intakes and exhaust on construction equipment (per the manufacturers' specifications) and by shrouding or shielding impact tools.

To minimize noise generated during project construction, the construction contractor shall be required to muffle and shield intakes and exhaust on construction equipment per the manufacturers' specifications and shroud or shield impact tools.

4.7.1b The project sponsor shall coordinate with administrators of the three nearby schools to develop a construction schedule that would minimize the potential for interference with school functions and activities.

In addition to the coordination requirement, the project sponsor shall provide school administrators with a phone number to call and report noise problems that arise over the course of project construction.

Implementation of the above mitigation measures would reduce the impact of construction noise to a less-than-significant level.

Impact 4.7.2: Project-generated vehicular traffic would result in an increase in ambient noise levels on nearby roadways used to access the site. This would be a significant impact.

Based on the traffic analysis prepared for this report, the proposed project would be expected to generate approximately 9,495 additional daily vehicle trips. These trips would be distributed over the local street network and would affect roadside noise levels.

To assess the impact of project traffic on roadside noise levels, noise level projections were made using the FHWA noise prediction model (U.S. Department of Transportation, 1978) for those road segments that would experience an increase in traffic volume of greater than 10 percent and that would pass through areas where residential uses are located. The results of the modeling effort are shown in Table 15. For the modeling effort, p.m. peak-hour traffic volumes during weekdays were used. Estimated noise levels shown in Table 15 correspond to a distance of approximately 50 feet from the centerline of the applicable road segment.

In areas where noise is dominated by traffic, the p.m. peak-hour L_{eq} is generally equivalent to the L_{dn} or CNEL at that location. Thus, the noise level estimates shown in Table 15 can be used to evaluate the 24-hour noise environment in terms of L_{dn}, the descriptor used to determine noise / land use compatibility.

Project-generated traffic would not significantly increase traffic noise levels. The increase along both segments of Williams Road, an area in which the resultant noise level would be "conditionally acceptable" for residential land use, would be less than 3 L_{dn} based on the peak-hour traffic noise estimates. However, the cumulative impact, which is shown through a comparison of "existing" noise levels with those under "existing plus project plus cumulative," would be significant since the cumulative change would be greater than 3 L_{dn} east of Del Monte Avenue.

This impact could be reduced through construction of sound walls along Williams Road. However, this approach is probably not feasible, given that existing homes along Williams Road are oriented to the street, with front yards along Williams Road. Cumulative development, including the project, would increase noise levels in the area to a level comparable to those in a moderately dense urban environment. As shown in Table 15, the project would make an incremental contribution to this impact.

The increase due to project traffic along Bardin Road and Argentine Drive would be 3 L_{dn} or less based on the peak-hour noise level estimates shown in Table 15. The resulting traffic noise levels along Bardin Road and Argentine Road would be "normally acceptable" for residential uses. Because the addition of project-related traffic would not substantially increase the noise environment for residents on modeled roadway segments, this impact would be less than significant. The cumulative impact along these roads would be minimal, and would be less than significant.

TABLE 15: EXISTING AND PROJECTED PEAK-HOUR TRAFFIC-NOISE LEVELS

Roadway Segment	Peak Hour Noise Level (Leq)[a]		
	Existing (1997)	Existing + Project	Existing + Project + Cumulative
Williams Road - west of Del Monte Avenue[b]	66	67	69
Williams Road - east of Del Monte Avenue[c]	63	64	68
Bardin Road - north of Countryside Drive[d]	58	60	60
Bardin Road - south of Countryside Drive[e]	58	59	59
Argentine Drive - east of Bardin Road[f]	51	54	54

a Noise levels were calculated using the FHWA traffic noise prediction model for p.m. peak-hour conditions and the results of the traffic analysis conducted for this report. Noise levels were calculated at 50 feet from the centerline of the roadway. A vehicle mix of 98 percent autos (two-axle, four wheel vehicles up to 9,900 pounds) and 2 percent medium trucks (two-axle, six wheel vehicles up to 26,000 pounds) was used for Williams Road. A vehicle mix of 99 percent autos and 1 percent medium trucks was used for all other road segments.
b Williams Road between Bardin Road and Del Monte Avenue. The average vehicle speed was assumed to be 35 mph.
c Williams Road between Del Monte Avenue and proposed Freedom Parkway. The average vehicle speed was assumed to be 35 mph.
d Bardin Road between Williams Road and Countryside Drive. The average vehicle speed was assumed to be 25 mph.
e Bardin Road between Countryside Drive and Argentine Drive. The average vehicle speed was assumed to be 25 mph.
f Argentine Drive east of Bardin Drive. The average vehicle speed was assumed to be 25 mph.

SOURCE: Environmental Science Associates, 1997.

Mitigation Measure

4.7.2 No mitigation is available for increased traffic noise levels along already developed portions of Williams Road.

This would be a significant, unavoidable cumulative effect; however, the project's contribution to this effect would be incremental (one decibel on Williams east and west of Del Monte), and would not likely be noticeable where the resulting noise level would be greatest (Williams west of Del Monte, where the total increase, including noise from cumulative traffic, would be three decibels, and Williams east of Del Monte, where the cumulative increase would be five decibels).

Impact 4.7.3: The project would introduce a noise-sensitive use to an area that would experience substantial traffic noise and that lies within the vicinity of an Airport. This would be a less-than-significant impact.

Based on the traffic noise estimates described under Impact 4.7.2, future traffic noise along Williams Road (east of Del Monte Avenue) would exceed 60 L_{dn} within approximately 150 feet of the centerline of that road. Depending upon how close residential parcels would be located to Williams Road, the project may be introducing noise-sensitive uses to noise levels in excess of those considered "normally acceptable." However, the project sponsor has anticipated this impact and proposes sound walls along arterial routes surrounding the site's boundary, including Williams Road. The noise analysis concludes that such a wall would be required along Williams Road assuming that provision of a buffer alone (150 feet from the centerline) would not be possible on the Williams Road frontage. To be effective, sound walls must be solid, continuous, flush to the ground, and must break the line-of-site between receptors and the noise source. In this instance, the proposed 8-foot sound wall would be sufficient to reduce future traffic noise to 60 L_{dn} for ground-level receptors at the project site along Williams Road. A sound wall, along with double-paned windows, would also ensure that interior noise levels meet the *General Plan* interior noise standard of 45 dBA, Ldn.

Future residents of the project site would also experience intermittent aircraft noise since they would be located beneath an arrival flight track for Salinas Municipal Airport. Figure 16 shows the flight tracks and future (Year 2010) noise contours from aircraft operations associated with Salinas Municipal Airport. As shown in Figure 16, the project site would continue to lie outside of the 55 CNEL contour of the Airport for the foreseeable future, and as such, would not be significantly affected by aircraft noise.

Implementation of the above measure would reduce the impact to a less-than-significant level.

Mitigation Measure

4.7.3 None required (mitigation proposed as part of project, as described above).

REFERENCES - Noise

Caltrans, California Department of Transportation, Division of Aeronautics; *Airport Land Use Planning Handbook*, December 1993, Table 7B, p. 7-15.

City of Salinas, *Draft Environmental Assessment/Environmental Impact Report for Salinas Municipal Airport Master Plan and First Stage Development*, May 1993.

City of Salinas, *General Plan, Noise Element*, 1988.

U.S. Department of Transportation, *FHWA Traffic Noise Prediction Model*, 1978.

U.S. Environmental Protection Agency, *Noise from Construction Equipment and Operations, Building Equipment, and Home Appliances*, December 31, 1971, pp. 20, 56-61.

4.8 FLORA AND FAUNA

SETTING

Flora

Agriculture has been practiced for so long and so extensively on the project site and surrounding area that no known native plant communities remain.

Three major communities of native flora have been identified in the greater Salinas Area: riparian woodland, grassland, and broadleaf evergreen. Wetlands occur to the west and south of the City along the Salinas River and chaparral occurs both above the river and in the hills to the east of the City.

Riparian woodland communities are found along permanently and seasonally flowing freshwater streams, creeks, and rivers. Flora in riparian woodland often includes such trees as black cottonwood, white alder, box elder, California bay laurel, and willows. Shrubs commonly found along the banks include wild rose, wild blackberry, and mugwort.

The largest and most representative communities of riparian woodland are found along the Salinas River, but some also exist along Natividad and Gabilan Creeks, about one and two miles, respectively, northwest of the project site. These two creeks and the associated habitat are the major environmentally sensitive areas in Salinas.

Grassland usually occurs in hills having too little moisture to support larger types of vegetation. It occurs on marine terraces, ridge tops and in dry, hot valleys. Grassland species may also appear intermittently in closed-cone pine and cypress forest and in foothill woodland. The grassland community -- which itself was created, for the most part, by burning practices of the early American Indians, and agricultural practices of farmers -- has in turn been declining in the face of more intensive agricultural and urban development. Many of today's annual grasses, such as rye, wild oats, bromegrass, meadow fescue, needle grass, bluegrass, and blue bunch grass were introduced by settlers. Native grasses include lupine, clarkia, clover, storksbill, bird's foot trefoil, and owl's clover. Extensive grassland is located to the north and east of the project site, east of Old Stage Road, about two miles away.

Broadleaf evergreen communities are characterized by madrone, tan oak, coast live oak, interior live oak, valley oak, and blue oak. Depending on local conditions, other trees may associate with the dominate oak species. Common underbrush includes poison oak, miner's lettuce, toyon, California buckeye, oak mistletoe, climbing bedstraw, mule ears, and fiesta flowers.

While broadleaf evergreen vegetation is found mainly in the Gabilan Mountains east of the project site, a fine stand of oak remains virtually unchanged from before the coming of the Spanish on the west corner of Williams Road and Old Stage Road about 1.5 miles east of the project site.

No riparian woodland, grassland, broadleaf evergreen, chaparral or wetlands have been identified in the project vicinity (City of Salinas, 1988).

Fauna

Agricultural lands generally do not provide the same habitat values for mammals, reptiles, and amphibians as they do for birds. The requirements of large herbivorous mammals for food and cover from predators and the elements in their territory, as well as those for suitable courting and pairing habitats are generally not met by agricultural uses. Agricultural fields, which generally consist of monocrops of a uniform height, do not provide the diversity of structural components needed for large herbivores. Food diversity is also not available for larger mammals, such as deer, which eat bark, and a variety of foliage, and berries. To obtain this habitat diversity, the mammals would have to travel farther in large agricultural areas, which would decrease their energy efficiency. Herbivores are likely to use agricultural fields along their travel corridors from one natural community to another, although supportive studies are lacking.

Because the natural communities in the Salinas Area are so limited in extent, little wildlife remains. What animal species still exist are mainly those associated with urban, and to some degree, riparian environments. Gabilan and Natividad Creeks and the ponds between them are the most likely areas for a significant wildlife presence. Birds and mammals observed or tracked in these areas include great blue herons, snowy egrets, white tailed kites, tree swallows, bushtits, titmice, and chickadees, and raccoon, skunk, black tailed deer, grey and red fox, coyote, and a large variety of rodents (City of Salinas, 1988). There is potential for sensitive species that have adapted to moderate human disturbance, such as burrowing owl, to occur in the area.

IMPACTS AND MITIGATION MEASURES

Significance Criteria

CEQA *Guidelines* Section 15065(a) specifies that a lead agency shall find that a project may have a significant effect on the environment when the project has the potential to "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, or reduce the number of a rare or endangered species." The *Guidelines* (Appendix G) provide examples of impacts that normally are considered significant, including those that would:

- substantially affect a rare or endangered species of animal or plant or the habitat of the species;
- interfere substantially with the movement of any resident or migratory fish or wildlife species; or
- substantially diminish habitat for fish, wildlife or plants.

Given these standards, a project would be considered to have a significant adverse impact on biological resources if it would result in substantial disruption to, or destruction of, any special status species, their habitat, or breeding grounds. Special status species include those plants and animals that are State and/or federally listed as endangered or threatened; Category 1 or 2 candidates for federal listing; and species of special concern as designated by the California Department of Fish and Game.

A project would also be considered to have a significant impact if it would result in a substantial loss of important plant or animal species; would cause a change in species composition, abundance or diversity beyond that of normal variability; or would indirectly result in the measurable degradation of sensitive habitats (e.g., wetlands, riparian corridors, vernal pools, oak woodlands) through, for example, the introduction of erosion or runoff materials.

Impacts are generally considered not significant if the habitats and species affected are common and widespread in the region and the State. Examples include areas supporting landscaping and cultivated crops. These areas can readily be enhanced or rehabilitated.

Flora

Impact: None.

Fauna

Impact 4.8.1: Development of the proposed project could result in potentially adverse impacts on nesting and foraging habitat of the burrowing owl and, potentially, individuals of this species. This would be a significant impact.

Potential nesting and foraging habitat exists for the burrowing owl (*Speotyto cunicularia*), a California species of concern, along the edges of the agricultural field that would be converted to residential use by the project. Individual owls could be affected directly by destruction of burrows.

Typically, the male burrowing owl builds a nest during late winter, prior to the mating season, which begins in February, and attracts a female burrowing owl to the nest. Pair bonding occurs in late February. Pair formation starts as early as December, but the California Department of Fish and Game (CDFG) considers February 1 as the cut-off date for relocation of one or more owls from a burrow location. In September the family and pairs break up.

Mitigation Measure

4.8.1 The project sponsor shall ensure that preconstruction surveys for burrowing owls are conducted by a qualified biologist in accordance with California Department of Fish and Game (CDFG) survey protocol 30 days prior to the start of each phase of project development. Survey results shall be submitted to the CDFG.

If no owls are present then no further mitigation is required. If owls are present, the CDFG should be notified. To mitigate the loss of foraging and burrow habitat on the project site, the project sponsor may be required to acquire, if necessary, and permanently protect appropriately located foraging habitat, consistent with CDFG guidelines. Monitoring of said habitat, with reporting to the CDFG, to determine the success of the mitigation, may also be required. In addition: ~~implement preventive measures in accordance with the proposed Burrowing Owl Survey Protocol Guidelines created by CDFG based on the work of the Burrowing Owl Consortium. These measures include:~~

a) If owls are found within the development area outside the nesting season, the project sponsor shall use passive relocation or other techniques in consultation with the CDFG to encourage the owls to relocate prior to excavation or other activities that could affect burrows. ~~The project sponsor shall ensure that either surveys are conducted to determine which identified ground squirrel burrows are being used by burrowing owls, or shall assume that all ground squirrel burrows are inhabited by burrowing owls and evict the owls with one-way trap doors prior to filling.~~

b) If owls are found within the development during the nesting season (February 1 through August 31), there shall be no disturbance within 75 meters (250 feet) of the nest burrow. Temporary fences shall be put in place to prevent accidental disturbance of the buffer area. After the young have fledged, the owls may be evicted and the burrow destroyed. ~~Surveys for burrowing owls shall be conducted by a qualified burrowing owl biologist during the winter and during the spring nesting season to determine active burrows and nest sites. If owls are found within the construction area after February 1 (during the nesting season) no owl eviction shall occur, and construction in the area shall either stop or continue only after the burrows are cordoned off with a buffer zone 50 feet in diameter.~~

~~c) If owls are found during the winter survey within the development area prior to February 1, the project sponsor shall implement an owl relocation plan prior to excavation or other activities that could affect burrows. The plan shall consist of set-aside land at a 1:1 ratio (land lost: land set aside) or at a ratio determined by CDFG and placement in all burrows of exclusion devices (with one-way trap doors, allowing exit from the burrow only) constructed by a qualified wildlife biologist to CDFG specifications.~~

~~d) To assure no new nesting areas are disturbed with construction, a survey shall be undertaken no more than 30 days prior to excavation or other activities that could affect burrows.~~

~~e) After the chicks have fledged, the owls may be evicted and the burrows filled in.~~

Implementation of the above mitigation measure would reduce potential impacts on burrowing owls to a less-than-significant level.

REFERENCE - Flora and Fauna

City of Salinas, 1988. *Salinas General Plan Master Environmental Assessment* (MEA), November 15.

4.9 HISTORIC AND ARCHAEOLOGICAL RESOURCES

SETTING

Human occupation of the Monterey Bay Area goes back at least 10,000 years. A distinct group of Indians, the Costanoans, is believed to have inhabited the entire northern range of Monterey County, including the Salinas Valley as far south as Soledad and east of the Gabilan Range.

Little of the area's prehistory is known because less than 5 percent of the county has been surveyed. Even so, nearly 1,100 archaeological sites have been discovered in the county in recent years. The mapping of these sites along with such topographic information as sources of water and shelter has allowed the County to delineate "archaeological sensitivity zones." Generally, a high-sensitivity zone contains a large number of recorded archaeological sites and one or more of the following topographic features: coastal bluffs, rivers, and streams; lakes, estuaries, or marshes; permanent springs; and rock shelters or exposed bedrock adjacent to oaks. A moderate-sensitivity zone has large areas with scattered finds and one or more of the following features: alluvial fans; low or broken slopes; ridgecrests; mountainous areas; sand dunes; and open meadows and mountain passes. Low-sensitivity zones possess few finds, if any, and the topography is dominated by marshes, floodplains, and unsheltered rocky areas.

An Archaeological Sensitivity Map for the Greater Salinas Planning Area identifies the Carr Lake/Natividad Creek corridor and the land northwest of the city on either side of Highway 101 as areas of high sensitivity (City of Salinas, 1988). Actual finds in the Salinas area consist of a burial mound at Espinosa Lake north of the city, a habitat at Old Chinatown, and a burial site northeast of Soto Square; none of these sites is in the vicinity of the project site. No other finds have been reported in the Salinas area.

The Mission era, the subsequent rancho period, and the growth of the city in the late 19th century have provided Salinas with many buildings and sites of historic interest. Three sites have been listed in either the National Register of Historic Places or the State Historic Landmark Register, none of which are located in or near the project site.

IMPACTS AND MITIGATION MEASURES

Impact 4.9.1: Construction of the project could disturb previously undiscovered subsurface prehistoric cultural resources. This would be a significant impact.

No sites containing subsurface cultural resources are recorded on or near the project site. Therefore, it is unlikely that impacts to cultural resources would occur as a result of project construction. However, the possibility exists of discovering unknown, unanticipated prehistoric cultural resources during construction. If found, buried archaeological sites can render important scientific information regarding prehistoric ways of life and address long-standing research considerations in prehistoric population antiquity, origins and migration, settlement patterns, religion, cultural exchange and trade, resource procurement strategies, technologies and social organization.

Mitigation Measure

4.9.1 The project sponsor shall ensure that in the event that unknown prehistoric cultural resources are discovered during subsurface construction, land alteration work in the general vicinity of the find is halted and a qualified archaeologist is consulted immediately.

Consultation with a qualified archaeologist would ensure that prompt evaluation could be made regarding the significance/importance of any cultural resources that may be found. The California Native American Heritage Commission in Sacramento and local Native American organizations shall be consulted and involved in making resource management decisions. All applicable federal and state legal requirements concerning the treatment of cultural materials and Native American burials shall be enforced.

In the event that significant/important cultural deposits are identified, a mitigation program consistent with *CEQA Guidelines* Appendix K requirements would be developed and implemented. Under the circumstances, mitigation options would probably be limited and scientific data retrieval through excavation would likely be the recommended course of action. The program would likely consist of delaying project excavation at the site location for a period of time necessary to retrieve a representative sample of that portion of the resource that would be damaged or destroyed. Once a sufficient volume of archaeological material were removed for laboratory analysis and interpretation, construction could likely proceed throughout the site. Any such archaeological work shall be conducted within the context of a relevant research design and prevailing professional standards; all archaeological activities shall result in detailed technical reports. All applicable federal, state and local environmental guidelines and legal requirements shall be adhered to.

Implementation of the above mitigation measure would reduce the impact on prehistoric cultural resources to a less-than-significant level.

REFERENCE - Historic and Archaeological Resources

City of Salinas, 1988. *Salinas General Plan Master Environmental Assessment* (MEA), November 15.

5.0 ALTERNATIVES TO THE PROPOSED PROJECT

5.1 NO PROJECT

The No Project Alternative would involve no change in land use on the site. Existing agricultural uses would remain, and no residential uses would be constructed. The project site would not be annexed to the City of Salinas, nor would any of the other governmental reorganization take place (see Chapter 3.0, Project Description, for a list of approvals required for the project). The site would remain as currently designated in both the *Greater Salinas Area Plan* (Monterey County) and the Salinas *General Plan*; Monterey County would retain jurisdiction over the site, and the County's F/40 and F/40-UR zoning would apply. This alternative would not rule out future development of the site (most likely as residential, given surrounding land uses).

Under this alternative, none of the project-generated impacts described in Chapter 4.0 would occur; cumulative effects related to other development in the project vicinity would occur as described in Chapter 4.0. Existing conditions on the site would remain much as described in the Setting portions of Chapter 4.0. Agricultural land would not be converted to urban use. Groundwater pumping and water consumption would remain as at present (that is, overdrafting would be greater than with the proposed project), subject to any future changes that may be required by the Monterey County Water Resources Agency. Because it would not remove agricultural land from production, would not generate increased traffic, would not result in construction-related particulate emissions or construction-related noise, and would not increase demand for services, particularly wastewater generation but also including increased school enrollment and increased demand for police and fire services, this alternative would be the environmentally superior alternative.

5.2 160-ACRE ALTERNATIVE

Under this alternative, only that portion of the site within the existing City of Salinas Sphere of Influence would be developed, limiting the size of the site to about 160 acres. The principal change in site configuration would be that the eastern project boundary would be moved westerly, compared to the project, to coincide with the Sphere of Influence boundary. The entire project would be located within the Sphere of Influence.

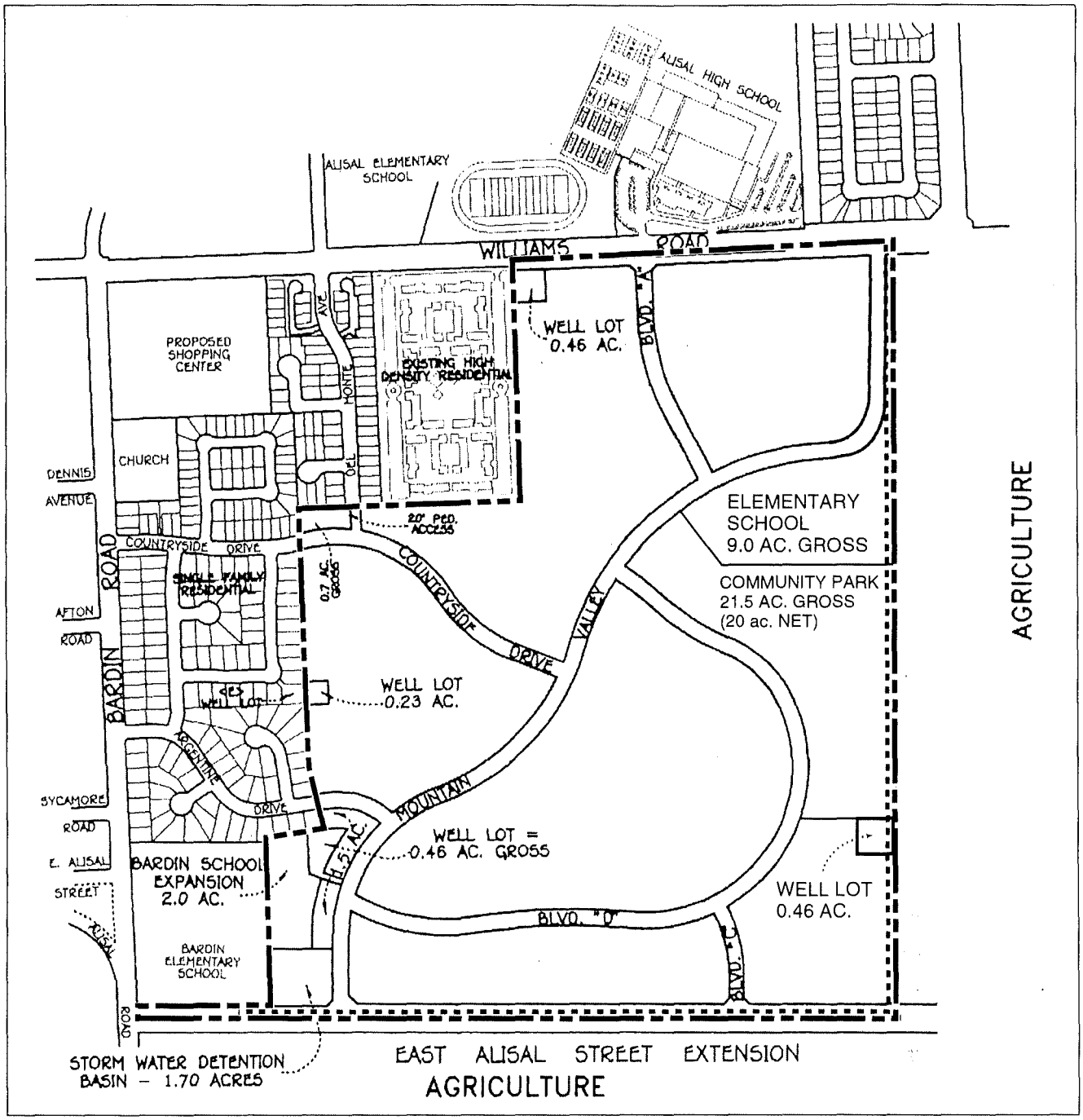
Freedom Parkway would not be built as an extension of the existing intersection of Williams Road and Freedom Parkway; rather, there would be two "T" intersections in close proximity instead of a single point with four-way traffic through-movement. The curvilinear Mountain Valley Parkway could carry traffic through the project site to indirectly and inefficiently connect Freedom Parkway with the East Alisal Street Extension (Figure 17). Alternatively, an "extension" of Freedom Parkway could be located along the 160-acre project's eastern boundary, but would still result in a sharp "jog" between the Freedom/Williams intersection and the easterly project intersection. In either case, a discontinuity in the circulation system would result. East Alisal Street would continue to be extended east of Bardin Road as far as the project's eastern boundary. The existing Sphere of Influence includes the proposed project's East Alisal Street public right-of-way (EMC, 1997). Other components, including the internal circulation network and infrastructure improvements, would be similar to those proposed under the project.

Public and semi-public land dedication would not change substantially under this alternative with the exception of an increase in the number of water wells. Four wells would be built to satisfy identified ALCO water service needs (one would be moved, compared to the location with the proposed project), each well would total 0.6 acres to accommodate any landscaping or other siting constraints (Fuog, 1997).[1] A breakdown of land uses for the 160-Acre alternative is shown in Table 16 below. This alternative would result in approximately 691 housing units, which reflects the proposed project's average number of housing units (5.6 units per gross acreage) multiplied by the gross area of residential development (123.4 acres). This alternative would result in development of about 19 percent fewer units (691 vs. 853) than proposed under the project. Based on 3.2 persons per unit, population would be about 2,210 (compared to about 2,730 with the project). As this alternative would have a population about 19 percent less than that of the project, the sponsor would fund, through a landscape maintenance district, annual maintenance of 6.6 acres of the community park, compared to 8.1 acres with the project.

This alternative would not require adjustment of the Salinas Sphere of Influence by the Monterey County Local Agency Formation Commission (LAFCO). It would require other governmental reorganization, including annexation to the City of Salinas and annexation to and detachment from the same service districts and public services as the proposed project (see Chapter 3.0, Project Description, for a list of approvals required for the project).

About 160 acres of agricultural land, mostly prime farmland, would be converted to urban use; this would be a significant, unavoidable effect (although lessened), as with the proposed project.

[1] According to Fuog Water Resources, Inc. (consultant to ALCO Water Services) each well site requires a total of 0.5 net acres, which excludes any landscaping or street right of way.



SOURCE: EMC Planning Group, H.D. Peters

Mountain Valley / 960352 ■

Figure 17
160-Acre Alternative

TABLE 16: 160-ACRE ALTERNATIVE PROJECT CHARACTERISTICS

Land Use	Gross Acreage	Number of Units
Single-Family Residential	123.4	691
Community Park Site	21.5	
New Elementary School	9.0	
Expansion of Bardin School	2.0	
Storm Water Detention Basin	1.7	
Well Lots (4 total)	2.4	
TOTAL	**160.0**	**691**

SOURCE: Environmental Science Associates, 1997.

Residential water consumption by residents and for on-site residential irrigation would be marginally less than with the proposed project, but within the 200-acre project site, overall water consumption would be incrementally greater than with the proposed project, since less agriculture would be removed from production.

The 160-Acre alternative would generate a total of about 7,885 daily trips, including about 793 weekday p.m. peak-hour trips (vs. about 9,495 daily trips and about 945 p.m. peak-hour trips with the project; see Table 17). Intersection levels of service resulting from traffic generated by this alternative would be the same as with the project (see Table 18), as would freeway levels of service (see Table 19). The intersection connecting Williams Road with Boulevard A would operate at LOS B with traffic from approved and reasonably foreseeable projects and this alternative, as with the project, with mitigation (also required with the project) in the form of signalization. Operational air quality effects due to this alternative would be less than significant without mitigation, ~~in contrast to those of~~ as with the project the project. Demand for public services would be comparable to that of the project. Due to fewer units, and subsequently fewer potential students, the effects on the school districts would be reduced as compared to the proposed project; however, the sponsor could seek to renegotiate the agreement with the Alisal Union Elementary School District and the Salinas Union High School District concerning donation of an elementary school site and payment of additional fees beyond the state's maximum fee. Cumulative traffic noise effects along Williams Road would be significant and unavoidable, as with the project.

TABLE 17: TRIP GENERATION - PROJECT ALTERNATIVES

Alternative	Land Use	Size Unit	Daily Trips[a] Rate	Daily Trips[a] Trips	PM Peak-Hour[b] Total	PM Peak-Hour[b] In	PM Peak-Hour[b] Out
160-Acre Alternative							
Neighborhoods	Residential - SFDU	691 du	10.00	6,910	705	455	250
Parks	Community	21.5 acre	3.00	75	79	28	51
Schools	Elementary	900 students	1.00	900	9	5	4
Totals		**691 du**		**7,885**	**793**	**488**	**305**

Alternative	Land Use	Size Unit	Daily Trips[a] Rate	Daily Trips[a] Trips	PM Peak-Hour[b] Total	PM Peak-Hour[b] In	PM Peak-Hour[b] Out
General Plan Alternative							
Neighborhoods	Residential - SFDU	545 du	10.00	5,450	556	359	197
Medium Density	Residential - MFDU	99 du	6.00	594	69	40	29
High Density A	Residential - MFDU	225 du	6.00	1,350	156	90	66
Affordable Housing	Residential - MFDU	118 du	6.00	708	81	47	34
Parks	Community	21.5 acre	3.00	75	79	28	51
School	Elementary	900 students	1.00	900	9	5	4
Totals		**987 du**		**9,077**	**950**	**569**	**381**

a ADT trip rates based on City of Salinas, Traffic Fee Ordinance, 1987.
b PM Peak Hour trip based on ITE, Trip Generation, 5th Edition, 1991.

du = Dwelling Unit (mf = multi-family; sf = single family)

SOURCE: DKS Associates

Although water consumption would be somewhat greater since less land would be removed from agriculture, because of the reduced development density, this alternative would be the environmentally superior alternative among the three alternatives that would involve project construction.

TABLE 18: INTERSECTION LEVEL OF SERVICE (LOS) ANALYSIS - PM PEAK HOUR

Study Intersections	Existing + Proposed Project		Existing + Proposed Project + Cumulative		Existing + 160-Acre Alternative		Existing + 160-Acre Alternative+ Cumulative		Existing + General Plan Alternative		Existing + General Plan Alternative+ Cumulative	
	V/C	LOS	V/C	LOS	V/C	LOS	V/C	LOS	V/C	LOS	V/C	LOS
Signalized Intersections												
S. Sanborn Rd/US 101 SB Rmp[d]	15.8	C	21.5	C	15.7	C	21.1	C	15.7	C	21.5	C
No. Sanborn Rd / John Street	0.53	A	0.79	C	0.53	A	0.76	C	0.53	A	0.79	C
No. Sanborn Rd / E. Alisal Street	0.58	A	0.92	**E**	0.58	A	0.95	**E**	0.58	A	0.95	**E**
No. Sanborn Rd / E. Market St	0.65	B	0.85	D	0.64	B	0.87	D	0.65	B	0.86	D
No. Sanborn Rd / E. Laurel Dr	0.54	A	0.76	C	0.53	A	0.74	C	0.54	A	0.75	C
Williams Rd/E. Alisal St/John St	0.53	A	0.87	D	0.51	A	0.66	B	0.52	A	0.67	B
Williams Rd / E. Market Street	0.48	A	0.60	A	0.46	A	0.58	A	0.48	A	0.60	A
Williams Rd / Del Monte Ave	0.35	A	0.56	A	0.35	A	0.56	A	0.35	A	0.56	A
Williams Rd / Bardin Road	0.53	A	0.61	B	0.52	A	0.58	A	0.54	A	0.60	B
Williams Rd / Freedom Blvd	0.19	A	0.57	A	0.14	A	0.55	A	0.19	A	0.56	A
Unsignalized Intersections[c]												
S. Sanborn Rd/US 101 NB Rmp		**F**		**F**		**F**		**F**		**F**		**F**
Williams Rd / E. Laurel Drive		**F**		**F**		**F**		**F**		**F**		**F**
Williams Rd / Garner Avenue		**F**		**F**		**F**		**F**		**F**		**F**
Bardin Rd / Countryside Drive		C		C		C		C		C		C
Bardin Rd / Argentine Drive		B		B		C		C		B		C
Bardin Rd / E. Alisal Street		C		C		C		C		C		B
Airport Blvd / Terven Avenue	0.76	C	0.81	D	0.76	C	0.81	D	0.76	C	0.81	D
Williams Rd / Boulevard A		**F**		**F**		**F**		**F**		**F**		**F**

Bold-face text indicated unacceptable Level of Service.

a V/C = Volume-to-Capacity ratio (basis of LOS determination for signalized intersections), as measured by *Circular 212* methodology (Transportation Research Board, 1980), except So. Sanborn/U.S. 101 SB Ramps; see note "d" below. See Appendix B for level of service definitions.

b Intersection does not exist in current conditions; proposed as part of Salinas Traffic Fee Ordinance.

c Unsignalized intersection level of service designation reflects conditions for the movement with the worst level of service (typically left-turns from the minor street onto the major street). LOS determination by use of *Highway Capacity Manual* methodology (Transportation Research Board, 1994).

d Intersection calculated by 1994 Highway Capacity Manual operations methodology, using average delay per vehicle to determine level of service. This intersection is operated by Caltrans District 5 and was analyzed using an operations methodology that is consistent with Caltrans requirements. Numbers in "v/c" column represent average vehicle delay in seconds.

SOURCE: DKS Associates

TABLE 19: PM PEAK HOUR FREEWAY ANALYSIS

Freeway Segment		Existing		Existing + Proposed Project		Existing + Proposed Project + Cumulative		Existing + 160-Acre Alternative		Existing + 160-Acre Alternative + Cumulative		Existing + General Plan Alternative		Existing + General Plan Alternative + Cumulative	
		Vol.	LOS[a]	Vol.	LOS	Vol.	LOS			Vol.	LOS			Vol.	LOS
US 101 betw. South Sanborn Rd. and John Street	NB	2,763	D	2,794	D	3,559	**E**	2,787	D	3,552	**E**	2,794	D	3,559	**E**
	SB	1,548	B	1,607	B	2,040	C	1,596	B	2,029	C	1,607	B	2,040	C
US 101 betw. Airport Boulevard and South Sanborn Road	NB	2,698	D	2,718	D	3,112	D	2,715	D	3,112	D	2,718	D	3,112	D
	SB	1,900	C	1,920	C	2,282	C	1,919	C	2,281	C	1,920	C	2,282	C
US 101 south of Airport Blvd.	NB	1,625	B	1,643	B	2,038	C	1,639	B	2,034	C	1,643	B	2,038	C
	SB	875	A	888	A	1,248	B	883	A	1,246	B	888	A	1,248	B

Bold-face text indicated unacceptable Level of Service.

[a] LOS = level of service, as defined in Chapter 3 of the *Highway Capacity Manual*, Transportation Research Board Special Report 209, 1994.

Vol. = total volume in each direction

SOURCE: DKS Associates

5.3 GENERAL PLAN ALTERNATIVE

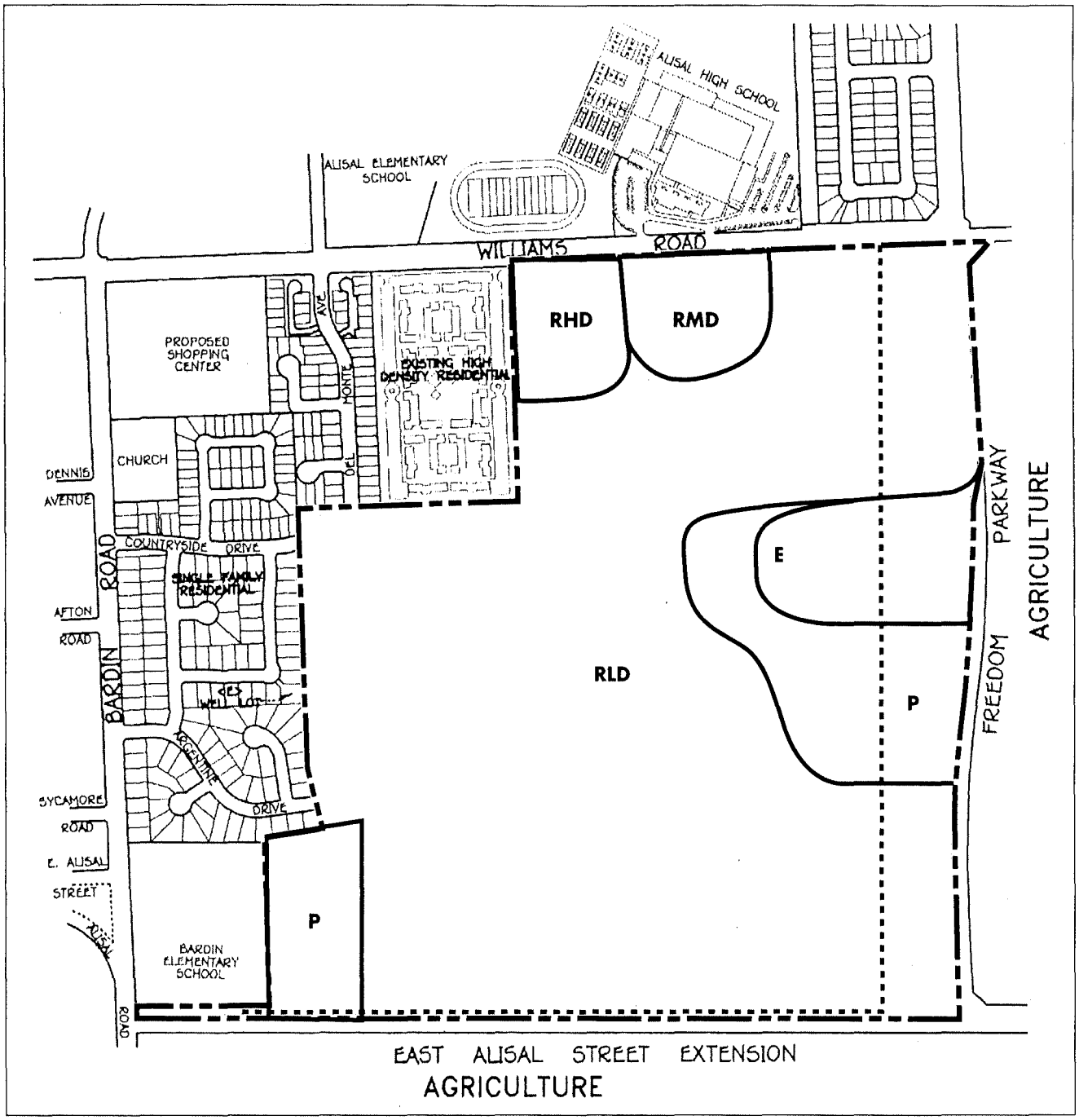
This alternative would retain the acreage of the proposed project (199.7) but the site would have a different mix of residential units based on the existing Salinas *General Plan* land use policies, designations, and densities. There would be a total of 987 units built with this alternative, about 16 percent more than under the proposed project (does not assume a density bonus). Those units would include 545 single-family, 99 medium-density, and 343 high-density multi-family units. Of the high-density units, 118 units would be affordable multi-family units (pursuant to the City's Inclusionary Housing Ordinance). Based on 3.2 persons per unit, population would be about 3,158 (compared to about 2,730 with the project). Park acreage would be the same as the project at 21.5 acres.

The school site and school expansion site essentially would be the same as with the project. This alternative is depicted in Figure 18.

The General Plan alternative would generate a total of about 9,077 daily trips, including about 950 weekday p.m. peak-hour trips (vs. about 9,495 daily about 945 p.m. peak-hour trips with the project; see Table 17). Intersection levels of service resulting from traffic generated by this alternative generally would be the same as with the project (see Table 18). Freeway levels of service would be the same as with the project (see Table 19). Traffic generated by this alternative would cause incremental increases in delay at other intersections, compared to the project. Cumulative traffic noise effects along Williams Road would be significant and unavoidable, as with the project.

This alternative would remove approximately 199.7 acres of agricultural land from production and convert it to urban use, as would the project. This would be a significant, unavoidable effect, as with the project. Impacts related to water consumption and groundwater pumping would be greater than with the project because of the greater population. Water consumption would be greater than with the proposed project, but still about 25 percent less than at present, and this impact would be less than significant, as with the project

Air quality impacts would be somewhat more severe than with the project, due to the increase in vehicle trips, ~~but~~ and would ~~still~~ likely be ~~below~~ above applicable significance thresholds of the Monterey Bay Air Pollution Control District with mitigation, and would ~~not~~ therefore be significant. Demand for public services and utilities would be somewhat greater than under the project; effects on the school districts that would serve the site would be greater than the proposed project.



0 600
Feet

RLD Residential - Low Density
RMD Residential - Medium Density
RHD Residential - High Density
P Park
E School

Salinas Sphere of Influnce (Urban Transition Area)
Project Boundary
Note: Site Plan is Schematic

SOURCE: Salinas Zoning Code; Monterey County Planning Department; EMC Planning Group

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Figure 18
General Plan Alternative

The General Plan Alternative was chosen for analysis to show the potential impacts of a plan that is more consistent with existing City land use policies and designations. The net effects from buildout of the General Plan Alternative would be greater than with the proposed project.

5.4 ALTERNATIVE SITE

Alternative locations were briefly explored, and it was determined that there is no feasible alternative location that would meet a majority of the basic objectives of the project and also lessen or avoid significant impacts. There are 200-acre developable sites located north of Boronda Road that are designated by the Salinas *General Plan* for residential, school, and park uses (these are not within LAFCO's Sphere of Influence). The project proponents, however, do not have the ability to acquire, control, or otherwise have access to these sites. Further, significant and unavoidable impacts related to agricultural land conversion and farmland availability would be the same for these sites as for the project.

Other possible alternative sites are either not contiguous with City boundaries and thus not designated for urban use (in the case of annexation), or are of insufficient size (in the case of "infill" sites within the city limits).

REFERENCES - Alternatives to the Proposed Project

EMC Planning Group, 1998. Draft *Precise Plan* for Mountain Valley Project, February 1998.

Fuog, René, Fuog Water Resources, Inc., Letter in Response to NOP dated June 2, 1997.

6.0 IMPACT OVERVIEW

6.1 UNAVOIDABLE SIGNIFICANT ADVERSE IMPACTS

The proposed Mountain Valley project, if implemented, would result in certain environmental effects, as described in Chapter 4.0 of this EIR. Mitigation Measures included in the project and identified in this report would, if implemented, reduce some impacts to a less-than-significant level. The following impacts would be unavoidable even with implementation of mitigation measures.

- As discussed in Section 4.1, the project would convert about 200 acres of Prime Farmlands to urban use.

- As discussed in Section 4.2, the project would result in increased delays for minor street turning movements at three unsignalized intersections that currently operate at an unacceptable level of service (LOS F): U.S. 101 Northbound Ramps / ~~North~~ South Sanborn Road, Williams Road / East Laurel Drive, and Williams Road / Garner Avenue. (Signalization would eliminate these impacts, but is not feasible because no funding source has been identified.)

- As discussed in Section 4.2, project-generated traffic would not cause any change in the level of service at the intersection of Sanborn Road / Alisal Street. However, with traffic from cumulative development, the intersection would degrade to an unacceptable level of service (LOS E). (Mitigation of the cumulative impact could be achieved by providing a second eastbound left turn lane from East Alisal Street onto northbound North Sanborn Road; however, mitigation is infeasible as no funding has been identified.) (Cumulative impact; Less-than-significant project impact)

- As discussed in Section 4.2, if Del Monte Avenue were not used as an access route between Williams Road and the proposed project, project-generated traffic would increase the daily weekday traffic volumes on Countryside Drive, and possibly Argentine Drive, beyond the threshold for local residential collector streets of 3,000 vehicles per day.

- As discussed in Section 4.5, the project could result in intermittent, temporary increases in particulate dust emissions resulting from construction.

- As discussed in Section 4.7, the project would contribute incrementally to "conditionally acceptable" noise levels on Williams Road (east and west of Del Monte Avenue).

6.2 GROWTH INDUCEMENT

Growth-inducing impacts are defined in CEQA Guidelines Section 15126(g) as those effects that "could foster economic or population growth, or the construction of additional housing, either directly or indirectly, in the surrounding environment."

The project could indirectly cause further growth in East Salinas through a combination of two primary factors. First, the project would extend the Salinas city limit and would include extension of public services and utilities, in particular, a 15-inch sewer main, to an approximately 199-acre site that is not currently provided with urban services. This expansion of services and utilities would make development of adjacent land to the east and south more feasible. Second, by expanding the area of urban development farther into agricultural land surrounding the City, the project could place increased pressure on owners of farmland to develop their land or to sell to prospective developers. Land to the east and south of the project site is also in agricultural use; land immediately east of the project site is under the same ownership.

The project also could indirectly generate commercial growth by attracting new residents to Salinas. The Salinas *General Plan* anticipates, encourages, and provides for additional retail and other business activity by designating certain areas for retail, office and business park, and industrial use. In particular, Policy 3.4.G calls for strengthening the East Alisal Street business district, in the project vicinity.

The growth-inducing effects of a given project, including the proposed Mountain Valley project, must be considered in the context of local planning. To a large extent, growth in North Salinas and East Salinas, where the project site is located, will be guided by the Salinas *General Plan,* which directs most future growth to the area in an arc that extends east from Russell Road at San Juan Grade Road to Old Stage Road, and south to Williams Road, and continuing south of Williams Road for about 0.6 mile between Boronda Road and the existing city limit. This latter area includes the project site. While much of this Conditional Growth Area is classified as prime farmland, it is generally less valuable than the agricultural land on the west side of the City (City of Salinas, 1988). The City has therefore determined that it is the most suitable area for urban expansion.

Existing local and regional policy constraints would relieve the project's growth-inducing effects to some extent. The Conditional Growth Area identified in the Salinas *General Plan* is

contiguous to the existing developed urban area of the city. Portions are within the City Sphere of Influence as defined by the Monterey County Local Agency Formation Commission (LAFCO), including most of the project site. The area (approximately 40 acres) immediately east of the project site, south of Williams Road, is within the Conditional Growth Area but outside the Sphere of Influence.

In addition to the Salinas *General Plan*, Monterey County, through its *Greater Salinas Area Plan,* and the Monterey County LAFCO, through its approval authority over Spheres of Influence and annexations, have established policies to preserve prime agricultural land outside the City of Salinas Sphere of Influence; 160 acres of the project site is designated as "Urban Reserve" in the *Greater Salinas Area Plan* and is therefore intended for annexation to the City and urban development. Those policies are discussed in Section 4.1 of this EIR, Land Use, Plans and Policies, and Zoning.

Should existing policy constraints to development be removed or modified, the project's potential to induce growth of surrounding areas could be increased.

6.3 CUMULATIVE IMPACTS

CEQA *Guidelines* §15130(a) states that, "Cumulative impacts shall be discussed when they are significant." The EIR discussion of cumulative impacts requires consideration of impacts that may be individually limited, but collectively or "cumulatively" considerable. Cumulative impacts describe the incremental effects of an individual project when viewed in connection with effects of planned or reasonably foreseeable future projects in the vicinity [CEQA *Guidelines* §15130(b)]. For the proposed Mountain Valley project, cumulative impacts could occur in connection with other development projects constructed within a similar time frame as the proposed project. Table 20 lists approved and pending projects in the vicinity that would contribute to either localized impacts or regional impacts (e.g., air quality).

Cumulative impacts that may be significant are discussed in Chapter 4.0 of this report for specific issue areas. In summary, significant cumulative effects to which the project would contribute include the conversion of prime agricultural land in the project vicinity to urban use, in combination with the Williams Ranch project; traffic impacts at various local intersections resulting in increased delays at three intersections operating at unacceptable levels of service (U.S. 101 Northbound Ramps / ~~North~~ South Sanborn Road, Williams Road / East Laurel Drive, and Williams Road / Garner Avenue), for which mitigation is infeasible; a degradation in level

TABLE 20: APPROVED AND PLANNED MAJOR DEVELOPMENTS

Name	Land Use	Number of Dwelling Units (du) Square footage (sq. ft.)
Thrust IV	Housing	1,600 du
	Retail	176,000 sq. ft.
	Office	600,000 sq. ft.
Arcadia	Housing	120 du
Williams Ranch	Housing	1,251 du
	Housing	419 du
	Office	55,500 sq. ft.
	Retail	255,000 sq. ft.
	School	2,400 students
	Park	47.35 acres
	Institutional	3,000 sq. ft.
Westridge Center	Retail	493,350 sq. ft.
	Hotel Rooms	250 rooms
	Mini-Storage	40,000 sq. ft.
Salinas Auto	Auto Center	1 Center
Harden Ranch	Housing	1,008 du
	Housing	533 du
	Retail	53,600 sq. ft.
	Office	220,000 sq. ft.
	School	2,200 students
	Park	20.90 acres
Williams/Bardin Shopping Center	General Retail	46,625 sq. ft.
	Grocery	30,000 sq. ft.
	Drug Store (Rite Aid)	16,300 sq. ft.
	Medical/Dental Office	7,500 sq. ft.
	Fast Food Restaurant	3,000 sq. ft.

SOURCE: DKS Associates; City of Salinas

of service at one intersection (North Sanborn Road / East Alisal Street), for which mitigation is also infeasible; traffic impacts on transit service along Williams Road; and a traffic-related increase in noise on Williams Road.

6.4 SIGNIFICANT IRREVERSIBLE ENVIRONMENTAL CHANGES

The project would result in permanent conversion of prime agricultural land to urban uses. Once removed from agricultural use and developed, agricultural land is seldom returned to production. To the extent that the project would induce further urban growth (see 6.1, Growth Inducement, above), it could lead to permanent conversion of additional farmland.

The project would result in an irreversible commitment of potable water to serve the residences on the site. Other irreversible changes would include the commitment of natural resources during project construction, including the use of energy and of building materials.

6.5 IMPACTS FOUND NOT TO BE SIGNIFICANT

In 1994, a Draft Environmental Impact Report was published for a similar project on the 200-acre Mountain Valley site. The scope of the current EIR was determined through a process that involved review of the Initial Study prepared in 1993 (for the previously proposed project), including a review of related source documents (references); review of other documents and data related to the previously-proposed project; a staff-level scoping session for the current project conducted in July 1996; and responses to the Notice of Preparation for the current project, which was sent to governmental agencies and other parties with interest in or jurisdiction over the project. The following impacts were determined not to be significant: population and housing (displacement of existing housing, especially affordable housing); geological problems (fault rupture; seismic ground shaking; seismic ground failure, including liquefaction; and expansive soils); air quality (creation of objectionable odors); transportation and circulation (insufficient parking capacity on-site or off-site); energy and mineral resources (use of substantial amounts of fuel or energy; use of non-renewable resources in a wasteful and inefficient manner); hazards (risk of accidental explosion or release of hazardous substances; possible interference with an emergency response plan or emergency evacuation plan); and aesthetics (effects on a scenic vista or scenic highway; demonstrable negative aesthetic effect; and creation of light or glare to the detriment of adjacent land uses).

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7.0 EIR AUTHORS; PERSONS AND ORGANIZATIONS CONSULTED

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8.0 COMMENTS ON THE DRAFT EIR AND RESPONSES TO COMMENTS

This chapter contains written comments on the Draft EIR (DEIR) received by the City during the public comment period (May 22, 1998, through July 6, 1998), and responses to those comments. Each comment letter is reproduced, and the responses follow each letter. In certain cases, a response refers to a previous response. Each response is coded alphabetically (by comment letter) and numerically (by comment number within each letter). (Where a commenter has not numbered the comments in the comment letter, numbers are provided in the margin.) For reference purposes, the first comment in letter "C" is designated "Comment C-1," and so on.

LIST OF PERSONS COMMENTING

A. Charles Larwood, District 5 Intergovernmental Review Coordinator, California Department of Transportation (Caltrans), letter, July 13, 1998

B. Brian Hunter, Regional Manager, Region 3, California Department of Fish and Game, letter July 6, 1998

C. Janet Brennan, Supervising Planner, Monterey Bay Unified Air Pollution Control District, letter, June 2, 1998

D. Joe Lopez, Transportation Planning Supervisor, Transportation Agency for Monterey County (TAMC), letter, July 2, 1998

E. Bill Hopkins, Staff, Monterey County Airport Land Use Commission, letter, June 26, 1998

F. William L. Phillips, Director, Monterey County Planning and Building Inspection Department, letter, July 6, 1998

G. Arlene H. Wells, Senior Analyst, Monterey County Local Agency Formation Commission (LAFCO), letter, June 22, 1998

H. Thomas R. Adcock, Vice President, Alisal Water Corporation (Alco Water Service), letter, July 6, 1998

I. Brian Finegan, Finegan and Cling (attorney for the project sponsor), letter, July 6, 1998

J. Cara Galloway, Planner, EMC Planning Group (planning consultant for the project sponsor), letter, July 6, 1998

K. Mark A. Blum, Horan, Lloyd, Karachale, Dyer, Schwartz, Law & Cook, Inc., letter, July 6, 1998

L. Robert C. Taylor Jr., Attorney at Law, letter, July 6, 1998

M. Gillian Taylor, Chair, Ventana Chapter, Sierra Club, letter, July 6, 1998

N. Mary Ann Matthews, Conservation Chair, Monterey Bay Chapter, California Native Plant Society, letter, July 6, 1998

O. Mike Weaver, letter, July 6, 1998

P. Johan Jongens, letter, July 2, 1998

Q. Annemarie Tresch, letter, July 4, 1998

R. Robert Kennedy, letter, undated

STATE OF CALIFORNIA — BUSINESS, TRANSPORTATION AND HOUSING AGENCY PETE WILSON, Governor

DEPARTMENT OF TRANSPORTATION
50 HIGUERA STREET
SAN LUIS OBISPO, CA 93403-8114
TELEPHONE: (805) 549-3111
TDD (805) 549-3259

July 13, 1998

A

5-MON-101-86.12
Mountain Valley DEIR
SCH# 93043036

Jenny Mahoney
Senior Planner
Community Development Department
200 Lincoln Avenue
Salinas, California 93901

Dear Ms. Mahoney:

Caltrans District 5 Staff has reviewed the above-referenced Draft Environmental Impact Report (DEIR) for the proposed Mountain Valley Project. This project includes the development of 853 single-family homes along with a 21-acre community park and a 9-acre school site. The following comments were generated as a result of the review:

1. Please include a discussion regarding John Street at the southbound and northbound ramp intersections. Staff believes that this project may cause significant impacts to these intersections. 1
2. Page 5-6. Please show the existing Level of Service in Table 18. 2
3. Page 6-1, Bullet 2. Caltrans strongly recommends that the DEIR identify potential funding sources that could implement the mitigation discussed in this document. It is paramount that some financial vehicle be explored to offset significant impacts caused by the project. Without proper mitigation, regional and local transportation mobility will continue to decline to unacceptable levels. Caltrans further recommends that this project be included in the City's Traffic Impact Fee Ordinance Program. 3

In essence, the DEIR suggests that no mitigation should be required for any impacts to the State Highway System. For example, there is no discussion of impacts to mainline SR 101 between south and north Salinas. Caltrans has great concerns over this or any other development that will generate additional traffic on this section of State Route (SR) 101 or the SR 68 Corridor. Furthermore, until improvements to SR 101 are built, the LOS in this area will continue to decline.

One of the objectives of the recently enacted Senate Bill 45 is to transfer transportation decision-making responsibility to those who are closest to the problems. Project selection for 75% of State and Federal Highway funding for transportation projects will now be decided at the regional level. Consequently, local agencies should consider their land use approvals in concert with regional transportation decisions. This requires a strong commitment from the Cities to ensure that their perspective with regard to congestion is represented at the Transportation Agency for Monterey County (TAMC). Caltrans urges the City to work together with the TAMC to develop traffic mitigation in order to maintain an acceptable regional transportation network. It is for this reason we believe it would be a prudent land use decision to delay making a determination on this project until an implementation plan for proposed mitigation is complete

3
Cont'd.

Thank you for your consideration of our comments on this proposed project. We request that the city include Caltrans in the development of the FEIR with respect to our concerns mentioned herein. We would be happy to meet with you to discuss these issues.

Please send us a copy of the Final Environmental Impact report when it is available (Ref: California Environmental Quality Act of 1970, Section 21092.2). If you have any questions, please contact me at (805) 549-3131.

Sincerely,

Charles Larwood

Charles Larwood
District 5
Intergovernmental Review Coordinator

CDL:cdl/
cc: C Belsky, SCH
N. Papadakis, AMBAG
J. Lopez, TAMC

LETTER A – Charles Larwood, California Department of Transportation, July 13, 1998

A-1) The list of intersections analyzed in the EIR was developed in consultation with staff from the Salinas Department of Community Development and the Salinas Department of Public Works. It includes those intersections that would be most substantially affected by the proposed project. The two freeway ramp intersections analyzed were Sanborn Road / U.S. 101 southbound and Sanborn Road / U.S. 101 northbound. Because the Sanborn Road / U.S. 101 interchange is closer to the proposed project site than the John Street / U.S. 101 interchange, and because the Sanborn Road / U.S. 101 interchange could more easily accommodate all traffic movements on and off the freeway, it was considered to be the more likely choice for motorists traveling to and from the Mountain Valley project site. Traffic traveling between the project site and U.S. 101 at the south end of Salinas was distributed to the Sanborn Road / U.S. 101 interchange.

In addition, as noted on p. 4.2-22, construction is proceeding on an extension of Work Street between John Street and Sanborn Road, parallel to U.S. 101. Completion of this roadway in 1998, in conjunction with City-sponsored improvements at the Airport Boulevard / Terven Avenue intersection (near Airport Boulevard / U.S. 101) will provide a street connection from Alisal Street to Airport Boulevard, parallel to the freeway, improving local circulation without affecting freeway traffic.

A-2) The existing levels of service for all intersections included in Table 18, p. 5-6, are indicated both in Table 4, p. 4.2-13, and Table 5, p. 4.2-19.

A-3) As stated in Section 4.2, Traffic and Circulation, the project sponsor will be required to fund a proportionate share of required mitigation at local intersections where intersection operations would be unacceptable. The sponsor's share of mitigation is based on the project contribution to traffic at the affected intersection, as shown in Table 5, p. 4.2-19. In only one instance (Williams Road / Boulevard A) is the project identified as a major contributor to the impact, and at several intersections, operations are unacceptable under existing conditions. However, the City of Salinas is limited to imposing mitigation based on the project's contribution to the affected intersections.

Regarding the City's Traffic Fee Ordinance (TFO), the project sponsor will be assessed a TFO fee, as are all developers. The sponsor will also construct arterial roadways that are not included in the TFO. The City is currently revising the TFO, which is expected to include several large improvement projects that are regional in scope, such as construction and widening of arterial streets and interchange improvements on U.S. 101.

As stated in the EIR, several of the problematic intersections analyzed are not currently included in the TFO program, and no TFO funding is available for those intersections; these intersections not in the TFO are typically less regional-serving in nature. The City

could attempt to identify another funding source for improvements at these intersections. However, in the absence of any certainty of feasible mitigation, the EIR identifies a significant, unavoidable impact at U.S. 101 Northbound Ramps / Sanborn Road, Williams Road / East Laurel Drive, Williams Road / Garner Avenue, and Sanborn Road / Alisal Street, as recapitulated on p. 6-1.

Regarding effects on regional roadways, as stated on p. 4.2-21, the project would not result in a substantial effect on U.S. Highway 101. Based on trip distribution assumptions used in the EIR (see Figure 13, p. 4.2-11), effects on State Route 68 would be expected to be similar.

State of California - The Resources Agency
PETE WILSON, Governor
DEPARTMENT OF FISH AND GAME
http://www.dfg.ca.gov
POST OFFICE BOX 47
YOUNTVILLE, CALIFORNIA 94599
(707) 944-5500

B

July 6, 1998

Ms. Jenny Mahoney
City of Salinas
200 Lincoln Avenue
Salinas, California 93901

Dear Ms. Mahoney:

Mountain Valley Residential Community
Draft Environmental Impact Report (DEIR)
SCH# 93043036, Monterey County

Department of Fish and Game personnel have reviewed the DEIR for the Mountain Valley Residential Community project. The proposed project would construct 853 units and a park on 200 acres of farm land.

The mitigation for burrowing owls is not adequate and would not mitigate impacts to a level of insignificance. It also does not meet the Burrowing Owl Survey Protocol Guidelines created by our Department as stated in the DEIR. The likelihood of owls being on the site while it is farmed is low, but there is a possibility of them moving in once farming has stopped, particularly since development will be phased. The mitigation identified in the DEIR is to do a preconstruction survey prior to the start of the project and prevent the take of the birds. This would not mitigate the loss of habitat if birds are found there.

The DEIR does not accurately reflect our Guidelines dated September 25, 1995. If owls are found and adequate land cannot be maintained for them on-site, the Guidelines state 6.5 acres of habitat per pair or unpaired resident bird should be acquired and permanently protected. 1

We recommend the following mitigation be included in the DEIR and made a condition of project approval.

1. The project sponsor shall ensure, *for each phase of project development*, that preconstruction surveys for burrowing owls are conducted by a qualified biologist in accordance with Department survey protocol no more than 30 days prior to excavation or other activities that could affect burrows. Survey reports shall be submitted to the Department.

2. If no owls are present, no further mitigation is required. If owls are present, the Department should be notified. To mitigate the loss of foraging and burrow habitat on the project site, the project sponsor shall acquire and permanently protect a minimum of 6.5 acres of foraging habitat per pair or unpaired resident bird. The protected lands should be adjacent to occupied burrowing owl habitat and at a location acceptable to the Department. The project sponsor shall monitor those lands for five years, with annual reports to the Department, to determine the success of the mitigation. In addition:

   a. If owls are found within the development area outside the nesting season, the project sponsor shall use passive relocation or other techniques in consultation with the Department to encourage the owls to relocate prior to excavation or other activities that could affect burrows.

   b. If owls are found within the development area during the nesting season (February 1 through August 31), there shall be no disturbance within 75 meters (250 feet) of the nest burrow. Temporary fences shall be put in place to prevent accidental disturbance of the buffer area. After the young have fledged, the owls may be evicted and the burrow destroyed.

1 Cont'd.

We believe, if this mitigation is included in the DEIR, potential impacts to burrowing owls will be reduced to a level of insignificance.

Department personnel are available to address our concerns in more detail. For further information, please contact Ms. Terry Palmisano, Associate Wildlife Biologist, at (408) 484-2586; or Mr. Carl Wilcox, Environmental Services Supervisor, at (707) 944-5525.

Sincerely,

Brian Hunter
Regional Manager
Region 3

LETTER B – Brian Hunter, California Department of Fish and Game, July 6, 1998

B-1) A review of the literature and electronic files of the California Natural Diversity Data Base reveals that burrowing owl were observed in Prunedale in 1983, in Natividad in 1994 and in Salinas in 1997. Therefore, the Salinas area is used by burrowing owl for either nesting or over-wintering habitat. As stated on p. 4.8-4, development of the proposed project has the potential to adversely affect burrowing owls and their habitat if the converted land during the different phases of development provides habitat for burrowing owl. However, use of a site is determined by several factors that make a site attractive to burrowing owls, including:

- Presence of ground squirrels, to provide refuge holes;
- Debris, cement areas or railroad tracks under which the owls can create holes;
- Berm areas that provide owls friable soils in which to dig holes;
- Low cropped grass to aid in the detection of prey and predators; and
- Fences or other elevated perches that can be used as look-outs.

Based on these habitat requirements a site will not provide habitat for burrowing owl if it contains tall grasses (greater than 12 inches in height) and other ruderal species, such as mustard. Tall vegetation will limit the presence of ground squirrels, and will limit the accessibility of prey items to burrowing owls and reduce the owls ability to detect predators. Active agricultural production similarly discourages use of the site by burrowing owl.

The proposed project is to be developed in several phases. To avoid affecting burrowing owl, the remaining areas not undergoing development could be maintained in active farm production, using similar methods currently in practice that make the site unattractive to burrowing owls, or these area could be hydroseeded to encourage the growth of tall grasses, including during the period after rough grading and road construction, when construction for a phase is to be inactive during the months of October through July.

Mitigation Measure 4.8.1 on p. 4.8-4 is revised to account for the Department of Fish and Game's most current burrowing owl guidelines.

We appreciate the opportunity to review this Draft EIR document and look forward to your response to our comments. We would like to request that a copy of the Final EIR be forwarded to us when it has been completed. If you have any questions, please contact Mike Galizio of my staff at 755-4835.

Sincerely,

Joe Lopez
Transportation Planning Supervisor

cc: Nicolas Papadakis, AMBAG
Charles Larwood, Caltrans District 5
Douglas Quetin, MBUAPCD

(TAMC File: 9806)

LETTER D – Joe Lopez, Transportation Agency for Monterey County (TAMC), July 2, 1998

D-1) The future intersection of Williams Road / Boronda Road would operate as follows:

Project	Existing plus Project			Signif.	Cumul.	Cumulative + Project			Signif.	Mitigation
Volume	Volume	V/C	LOS	Impact?	Volume	Volume	V/C	LOS	Impact?	Measure
138	735	0.18	A	No	134	869	0.27	A	No	n/a

"Existing" = Future Base traffic attributed to redistribution, after intersection is in operation.

This intersection would operate at an acceptable level of service, and would not be adversely affected by the proposed project. No mitigation is required.

D-2) The commenter has incorrectly interpreted the text under Impact 4.2.3 on p. 4.2-18: the EIR states that no project-specific mitigation is required at the Sanborn Road / Alisal Street intersection because project traffic would not result in any degradation in level of service (existing and existing-plus-project LOS A). The EIR identifies realignment of the intersection as mitigation for a *cumulative* impact (degradation to LOS E), but notes that funding for this mitigation measure is not identified. Therefore, the impact is considered significant and unavoidable.

D-3) Please see the response to Comment A-3, p. 8-5.

D-4) The first paragraph on p. 4.2-20 is revised to reflect the suggested revisions.

D-5) The second full paragraph on p. 4.2-21 is amended to include Blanco Road, South Sanborn Road, Boronda Road, Laurel Drive, Natividad Drive, Sherwood Drive, and Alisal Street as part of the CMP network.

D-6) The description of the City of Salinas Trip Reduction Ordinance on page 4.2-20, as well as Mitigation Measure 4.2.6 on p. 4.2-25, specifically address bicycle impacts and mitigation measures. The text notes the inclusion of Class II bike lanes as part of the proposed project, and mentions the possibility of including bicycle racks, lockers and other amenities; the Mountain Valley Precise Plan (Appendix D, Attachment A) states that the project would include bicycle racks at the bus stop on Williams Road, the community park site, and the elementary school site. City staff recommends that bicycle racks also be installed at Bardin Elementary School and at the permanent siltation/ detention basin, which will be available for recreational purposes much of the time.

The proposed project would conform to the Salinas Bikeways Plan by providing bicycle lanes along Freedom Parkway extension, Alisal Street extension, and Williams Road. The inclusion of bicycle paths through the project site and pedestrian/bicycle-friendly access to park and school sites would also be consistent with, and exceed the requirements of, the Bikeways Plan.

MONTEREY COUNTY

AIRPORT LAND USE COMMISSION
P.O. BOX 1208 SALINAS, CALIFORNIA 93902 (408) 755-5025

June 26, 1998

E

Jenny Mahoney
Senior Planner, City of Salinas
Community Development Department
200 Lincoln Ave.
Salinas, CA 93901

SUBJECT: Mountain Valley Project

Dear Ms. Mahoney:

On June 22, 1998 the Monterey County Airport Land Use Commission (ALUC) considered the above referenced project and the associated Draft Environmental Impact Report. The Commission offers the following comments:

Comments on Draft EIR

The Commission found that Draft EIR adequately discussed the potential aviation related noise and safety impacts associated with the project, however, the Commission wanted to be sure that the manager of the Salinas Municipal Airport be given the opportunity to comment on the Draft EIR; 1

Comments on Project

The ALUC did not make a recommendation for either approval or denial of the project. The Commission did, however, want to make the City aware that the project is located in the Traffic Pattern Zone of the Salinas Municipal Airport as well as in the Airport Area of Influence. It should also be noted that the CalTrans Airport Land Use Planning Handbook recommends against locating schools within the Traffic Pattern Zone. 2

If approved, the Commission recommends that an Avigation Easement be required on all the newly created lots as a condition of approval. 3

The Commission appreciates the opportunity to comment on this project. If you have any questions please call me at (408) 755-5141.

Sincerely,

Bill Hopkins
Airport Land Use Commission Staff

cc: Jim Chappell, Salinas Airport Manager

LETTER E – Bill Hopkins, Monterey County Airport Land Use Commission, June 26, 1998

E-1) Comment noted. The airport manager was provided with a copy of the Draft EIR, and did not submit comments.

E-2) Comment noted. The EIR indicates, on p. 4.1-20, that "the entire project site thus is located within the Traffic Pattern Zone for Salinas Municipal Airport" and that the Caltrans Airport Land Use Handbook recommends "schools, hospitals and nursing homes should be avoided in traffic pattern zones unless no other feasible alternatives are available."

E-3) Comment noted. As stated on p. 4.1-8, Salinas *General Plan* Policy 5.7.F requires the dedication of an avigation easement for projects in the Airport Local Area of Influence, which includes a portion of the project site.

MONTEREY COUNTY

PLANNING AND BUILDING INSPECTION DEPARTMENT

P.O. BOX 1208 SALINAS, CALIFORNIA 93902 PLANNING: (408) 755-5025 BUILDING: (408) 755-5027 FAX (408) 755 5487
MONTEREY COURTHOUSE, 1200 AGUAJITO ROAD, MONTEREY, CALIFORNIA 93940 (408) 647-7620 FAX (408) 647-7877

WILLIAM L. PHILLIPS, DIRECTOR

F

July 6, 1998

Jenny Mahoney, Associate Urban Planner
City of Salinas Community Development Dept
200 Lincoln Avenue
Salinas, CA 93901

Subject: Schoenberg Ranch DEIR

Dear Ms. Mahoney:

This office has not received the above referenced document for review and comment. However, we are particularly concerned that the cumulative impact analysis in the Final EIR include development potential from the *Rancho San Juan Area of Development Concentration* located in unincorporated Monterey County. The EIR should also assess and require as mitigation a fair share contribution to mitigate cumulative impacts on traffic. 1

Should you have any questions regarding this matter, please contact Wes Arvig, Supervising Planner for the Inland Planning Team.

Sincerely,

by Nicholas Chimbas

William L. Phillips, Director
Planning and Building Inspection Department

BP:bf.

MONTEREY COUNTY

PLANNING AND BUILDING INSPECTION DEPARTMENT

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WILLIAM L. PHILLIPS, DIRECTOR

July 9, 1998

Jenny Mahoney
City of Salinas Community Development Dept.
200 Lincoln Ave.
Salinas, CA 93901

SUBJECT: Mountain Valley Project Draft Environmental Impact Report

Dear Jenny:

The following comments should be included as an addendum to comments sent on behalf of the County Planning and Building Inspection Department:

It appears that of the 661 lots to be developed, 102 are proposed to be inclusionary (15%). This percentage represents the minimum requirement under the County's requirement for inclusionary housing. Since the significant unavoidable impacts for this project are considerable, it would seem appropriate that a benefit associated with the production of affordable units should also be considerable.

There are few opportunities for development of a large number of units in the unincorporated area; therefore development adjacent to cities should yield the highest number of affordable units possible. The final EIR should provide more detail on the types and amount of housing that will be targeted to various income levels (very low, low, median, moderate.) Due to the great need for affordable housing in Monterey County, it is strongly urged that the percentage of affordable units be increased. 2

Sincerely,

William L. Phillips
Director of Planning and Building Inspection

We look forward to receiving your responses and the final EIR.

Sincerely,

Arlene H. Wells
LAFCO Analyst

LETTER G – Arlene H. Wells, Monterey County Local Agency Formation Commission, June 22, 1998

G-1) As noted in Table 6-4 in the EIR, the analysis of cumulative impacts includes nearly 5,000 dwelling units approved or planned in Salinas. Approximately 850 units were completed between February 1997 and July 1998.

As can be seen in Figure 12, p. 4.2-9, with the exception of Williams Ranch, the 5,000 units included in the cumulative analysis are all in North Salinas. The project sponsor believes that there is a need for single-family affordable housing units in the predominantly renter-occupied area of east Salinas.

G-2) Comment noted. The EIR states that the eastern portion of the project site is outside the existing Sphere of Influence and that the project would require that LAFCO change the Sphere of Influence.

G-3) Mitigation Measure 4.3.7, p. 4.3-13, states that a relief wastewater main must be constructed in East Alisal Street prior to the issuance of building permits for the proposed project. As stated in the text accompanying Mitigation Measure 4.3.7 on p. 4.3-14, "The current [Capital Improvement Program] shows the bypass line not being funded until 2002-03. Therefore, because the existing Alisal Street sewer is at capacity, the project sponsor would be required to fund the entire cost of installing a relief main. The City and/or other developers would reimburse the project sponsor at a later date for costs in excess of the sponsor's required fee of approximately $830,000." (The City increased the sanitary sewer surcharge to 35 percent, effective June 1, 1998, to collect additional funds towards a variety of sewer improvements needed throughout the City.) The EIR also notes, "Further study of the relief main may conclude that additional capacity exists. In this event, the Public Works Department may accordingly determine that some of the building permits could be issued prior to the completion of the relief main." The City has entered into an agreement with Kennedy Jenks Consultants to review current discharge flows. Once this study is complete, the City will be able to determine whether the information in the 1992 Sewer and Storm Drainage Master Plan is still valid.

Alternatively, the project sponsor may choose to wait to start construction until either the City constructs the relief main or the City determines, through the additional study noted, that additional capacity exists to accommodate some or all of the proposed units.

ALISAL WATER CORPORATION

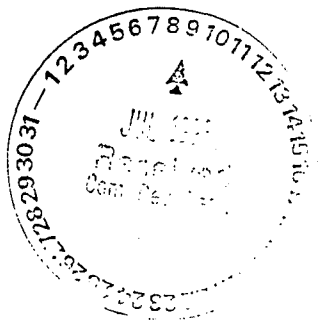
A California Corporation
dba ALCO WATER SERVICE

Robert T. Adcock
President

249 Williams Road
Salinas, Ca. 93905
(408) 424 - 0441

H

July 6, 1998



City of Salinas
Department of Community Development
200 Lincoln Avenue
Salinas, CA 93901

Re: Mountain Valley Project
Draft Environmental Impact Report
SCH# 93043036

Gentlemen:

Alco Water Service has reviewed the draft Environmental Impact Report for the Mountain Valley Project and in particular those portions of the report dealing with water related issues.

After review of the report, Alco believes this report accurately reflects the information it provided on this project as well as the general overall water system information.

The quality of the water Alco currently provides to its customers meets all requirements for potable water and is continually monitored to assure compliance with water quality standards. Water pressure throughout Alco's system also meets the pressure standards required by the California Public Utilities Commission and the State Department of Health Services. 1

Alco is prepared for the incorporation of the Mountain Valley Project into its water system and to provide water service to the project that meets all quality and quantity standards.

Thank you for the opportunity to comment on the draft report.

Sincerely,

Thomas R. Adcock
Vice President

cc: Rene Fuog

LETTER H – Thomas R. Adcock, Alisal Water Corporation (Alco Water Service), July 6, 1998

H-1) Comment noted.

BRIAN FINEGAN
AND
MICHAEL D. CLING
A PROFESSIONAL CORPORATION
ATTORNEYS AT LAW
SIXTY WEST ALISAL STREET, SUITE 1
POST OFFICE BOX 2058
SALINAS, CALIFORNIA 93902

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SALINAS TELEPHONE 757-3641
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TELEFACSIMILE 757-9329

July 6, 1998

I

City of Salinas
Community Development Department
200 Lincoln Avenue
Salinas, California 93901

HAND DELIVERED

Att: Ms. Jenny Mahoney

Re: Draft EIR for Mountain Valley Project

To Whom It May Concern:

Thank you for the opportunity to review and comment on the Draft Environmental Impact Report for the Mountain Valley Project. On behalf of the Sconberg Family Partnership (the owners of the project) I have the following comments:

1. **Page 1-1, Section 1.2**. To the second sentence of the second paragraph add the following words:

"but without the Mountain Valley Project." 1

This addition makes clearer the meaning of the No Project Alternative.

2. **Page 2-4, 160-Acre Alternative**. The last sentence of the third paragraph is confusing. Revise the sentence to read as follows:

> "Residential water consumption and groundwater pumping for residential water consumption would be marginally less than with the proposed project, but within the 200-acre project, overall water consumption would be incrementally greater than with the proposed project, since less agriculture would be removed from production." 2

3. **Page 2-5, 160-acre Alternative**. The property owner disagree that this would be the environmentally superior alternative for the following reasons: 3

- It would not avoid or substantially lessen any of the significant effects of the project (farmland conversion, impacts on unsignalized intersections, cumulative traffic impacts, construction dust, noise);
- It would result in an unacceptable alignment of a major thoroughfare (Freedom Boulevard);
- With the reduced residential unit yield (20% reduction) the dedication of 21.5 acres of parkland, the dedication of 9 acres of school site and the payment of $639,000 of additional school fees are not feasible.

3 Cont'd.

4. **Page 3-1, Section 3.1**. The second paragraph of this section should reflect that the inclusion within the project of the additional ±40 acres in order to create a four-way interesection with Freedom Boulevard was done at the suggestion of the City of Salinas. 4

5. **Page 3-8, First Full Paragraph**. The statement that East Alisal Street would be constructed as part of Phases 2 and 6 is incorrect. It will be constructed as part of Phases 3 and 6. 5

6. **Page 3-9, Figure 3**.

a) It would be more appropriate to use Figure 31 from the Precise Plan here, which shows the phasing of the residential development, rather than just the phasing of the streets. 6

b) Labels for Boulevard A, Boulevard C and Mountain Valley Boulevard are missing form this figure. The streets should be labeled to aid reference from the text.

7. **Page 4.1-7, General Plan Policies**. The proposed General Plan amendment to allow exclusively single family residential development in the Mountain Valley Project is intended also to implement the explanatory text of General Plan Policy 3.3.N which provides as follows: 7

> "The area between East Laurel Drive and the 1987 urban edge northwest of Del Monte Avenue has more than a fair share of apartments, so single family homes are desired wherever sites large enough to create a satisfactory environment are available.:

8. **Page 4.1-9, Williamson Act Lands**. The text should make clear that no part of the Mountain Valley Project is under a Williamson Act contract. 8

9. **Page 4.1-5, Footnote 4**. Footnote 4 on this page concerns density bonuses. The Mountain Valley Project is not utilizing a density bonus. Either this footnote should be deleted, or text should be added making clear that the density bonus rules are not applicable to this project. 9

10. **Page 4.1-7, Footnote 5**. See Comment #9 above. 10

11. **Page 4.1-22, Conversion of Agricultural Land**. The Department of Conservation annual report not only reflects the number of acres of prime farmland converted; it also reports that in Monterey County, significantly more land has been converted into productive agricultural use than has been taken out of production. 11

12. **Page 4.2-5, Third Paragraph**. The second sentence of this paragraph, referring to "the North Sanborn Road/U.S. 101 northbound off-ramp" is confusing (see also, Paragraph 4.2.1a on page 4.2-12). Sanborn Road is generally aligned in a north/south direction; from Alisal Street north it is "North Sanborn Road;" and from Alisal Street south it is "South Sanborn Road." All off-ramps from Highway 101 are to South Sanborn Road. It is unclear whether the left-turn problem discussed in the text is a) for southbound Highway 101 traffic exiting at Sanborn Road and turning left to go north on Sanborn Road, or b) for northbound Highway 101 traffic exiting at Sanborn Road onto Fairview Avenue, and then turning left to go south on Sanborn Road. 12

13. **Page 4.2-12, Impact 4.2.1a**. See Comment #12 above. 13

14. **Page 4.2-16, Impact 4.2.1c**. The reference in the fourth line of this paragraph to "Laurel Drive" would appear to apply to Garner Avenue. 14

15. **Page 4.2-20, Trip Reduction Ordinance**. The discussion here of the Trip Reduction Ordinance should state (as is done in the air quality section, see page 4.5-13) that the traffic analysis prepared for the EIR, in order to be conservative, did not assume any reduction in vehicle trips attributable to the trip reduction plan. 15

16. **Page 4.2-23, Mitigation Measure 4.2.5a**. Because the impact is less than significant, this mitigation cannot be imposed as a requirement. However, it should be noted that the project owner is voluntarily proposing "traffic-calming" measures in its street design. 16

17. **Page 4.2-24, Impact 4.2.5b**. The applicant agrees to revise the Precise Plan to use Del Monte Avenue as an access route between Williams Road and the project in order to reduce traffic on Countryside Drive and Argentina Drive. The applicant would also recommend that speed bumps be placed on Del Monte, Countryside and Argentine at their entrance to the project. 17

18. **Page 4.2-24, Mitigation Measure 4.2.5b**. This measure refers to traffic-calming measures "identified in Measure 4.2.4a." There is no Measure 4.2.4a. This Measure)and Table S-1) should be corrected to refer to Measure 4.2.5a which does refer to traffic-calming measures. 18

19. **Page 4.3-9, Impact 4.3.3**. The second paragraph of this section refers to the $140 fire protection fee to be paid for this project. The text should reflect that this fee has been determined by the City to be a "fair share" contribution for this project, based upon the number of residences within the proposed service area of the fire station, and the contribution made by adjacent developments. 19

20. **Page 4.3-10, Mitigation 4.3.3**. This owner has no control over the funding of the City's share of the cost of the fire station, and this owner has no control over the construction of the fire station. This mitigation measure is therefore infeasible, and should not be adopted. 20

21. **Page 4.3-11, Impact 4.3.5**. The text states that the developer will fund annual maintenance of 8.7 acres of the community park. The agreement with the City provides for the project to fund 40% of the annual maintenance cost through a landscape maintenance district, which would amount to 8.6 acres of the total 21,5. 21

22. **Page 4.3-12, New Well Sites**.

a) The text intimates that the developer will construct four new wells. Actually, the developer will provide four well sites. Alco Water Company will provide the wells and pumping equipment on those sites, not the developer. 22

b) The text also indicates that all well sites must be 0.5 acres in size. Actually, one of the sites is ±10,00 square feet in size. This is confirmed by the letter from Also Water Company attached as an appendix to the EIR.

23. **Page 4.3-13, Mitigation Measure 4.3.7**. It appears that the relief sewer main required by this mitigation measure is not required solely as an impact of the Mountain Valley Project, but is 23

required to adequately serve existing development. Thus the Mountain Valley Project can be required only to fund its fair share of the facility. This mitigation measure, which would require the developer to advance more than three times its fair share of the cost of this improvement, is not feasible and would kill the project. This is particularly true because there does not appear to be any additional development beyond the Sconberg Ranch to fund a reimbursement to this developer. The proposed relief main, however, is a project included in the City's adopted CIP. Although "no funds have been...allocated for construction of the bypass line..." (page 4.3-14), the facility is one of the projects to be funded by the recently-adopted city-wide sewer system improvement charge. It is more appropriate for the City to advance the cost of this facility, to be reimbursed by this developer for its $830,000 fair share contribution, with the balance to be reimbursed to the City form the increased city-wide sewer fees. 23 Cont'd.

24. **Page 4.4-8, Impact 4.4.1**. The gross reduction of groundwater pumping which will result from the Mountain Valley Project must be identified as a beneficial project impact, even though there remains a cumulative groundwater overdraft. 24

25. **Page 4.4-12, Mitigation Measures 4.4.1a, 4.4.1b and 4.4.1c**. There is no rational basis for the imposition of these "extra" mitigation measures. The project is not required to mitigate cumulative impacts beyond its contribution to those impacts, and the project-level groundwater impacts of this project are positive and beneficial. Furthermore, as noted in the text, the effect of these three measures is insignificant. 25

26. **Page 4.4-15, Mitigation Measure 4.4.4a**. See Comment #22a above. 26

27. **Page 4.4-16, Mitigation Measure 4.4.4b**. See Comment #22b above. 27

28. **Page 4.5-9, Impact 4.5.1**. It is the owners' belief that this impact is incorrectly analyzed as being significant after mitigation. Based upon the comments contained in the comment letter from Cara Galloway of EMC, it is their belief that the EIR should reflect that this potentially significant impact is reduced to a less than significant level by the recommended mitigations. 28

29. **Page 5-1, Section 5.1**. The No-Project Alternative would not attain any of the basic objectives of the project. 29

30. **Page 5-1 *et seq.*, Section 5.2**. See Comment #2 above. 30

31. **Page 5-8, Section 5.3**. Because it would involve a component of high-density multi-family development, the General Plan Alternative would be expected to have an adverse impact on police services significantly higher than the proposed project. 31

32. **Page 5-10, Section 5.4**. The text should reflect that there is no evidence that any 200-acre site in or adjacent to the City of Salinas could feasibly attain most of the basic objectives of the Mountain Valley Project, while avoiding or substantially lessening any of the identified significant impacts. 32

Overall, this EIR is very thorough and readable, and provides decisionmakers and the public with a clear description of the project and an objective analysis of its impacts. We look forward to seeing the Consultant's responses to the above comments.

Very truly yours,

Brian Finegan

BF:pml

cc: Sconberg Family Partnership
Bill Shaw
Karl f. Heisler, ESA

LETTER I - Brian Finegan, Finegan and Cling, July 6, 1998

I-1) The change recommended by the commenter is made in the second line on p. 1-1.

I-2) The change recommended by the commenter is made in the second line on p. 2-4. A similar change is made in the first paragraph of p. 5-4.

I-3) Impacts of the 160-acre alternative would be somewhat less substantial than those of the proposed project, as stated on p. 5-4. Although, as stated on the same page, total water use for the entire 200-acre site analyzed in the EIR would be somewhat greater than with the project due to less agricultural land being removed from production, the 160-acre alternative would result in a permanent commitment of potable water to 19 percent fewer units than with the project (691 vs. 853). It would also result in the loss of 20 percent less prime agricultural land. Regarding Freedom Boulevard, this alternative would result in a less convenient alignment, but would not result in significant impacts, assuming both intersections at Williams Road were signalized.

The comment regarding the feasibility of the park and school site dedication is noted. The description of the 160-acre alternative is modified to state that this alternative would result in the project sponsor being responsible for maintenance of less park acreage (see p. 5-3) and could affect the agreement concerning donation of a school site and payment of additional fees beyond the state maximum (see p. 5-4).

I-4) It is acknowledged that City staff supports adjustment of the Sphere of Influence as proposed to permit Freedom Boulevard to cross Williams Road; however, the Local Agency Formation Commission must still approve the change.

I-5) Comment noted. Page 3-8 is revised accordingly.

I-6) Figure 3, p. 3-9, is revised to include the information requested.

I-7) Comment noted. The noted text is added to footnote 6 on p. 4.1-7. Also, reference to Policy 3.3.N is added to the Project Sponsor's Objectives on p. 3-1.

I-8) The last paragraph on p. 4.1-9 is revised to reflect the comment.

I-9) A sentence has been added to footnote 4 stating that no density bonus is sought as part of the project.

I-10) A sentence has been added to footnote 5 stating that no density bonus is sought as part of the project.

I-11) Comment noted. The report indicates that, while there was a net increase in total agricultural land of 130 acres between 1992 and 1994, there was a net loss of 769 acres

of prime farmland, and a net increase of 665 acres of urban and built-up land. During that same period, 18 acres of urban land was converted to agricultural use, including 16 acres to prime farmland. The point being made on p. 4.1-22 is that land, once converted to urban use, is lost to agriculture, in most cases permanently.

I-12) References to Sanborn Road ramps at U.S. 101 have been revised to refer to South Sanborn Road. Substantial delays are currently experienced by motorists making both movements referred to by the commenter (see the discussion of Impact 4.2.1a on p. 4.2-12; as noted there, a relatively small volume of traffic experiences these delays). (Sanborn Road is considered an east-west road in the EIR because it is parallel to Williams Road in the project vicinity and Williams is considered east-west.)

I-13) See the response to Comment I-12.

I-14) The comment is correct, and the EIR text on p. 4.2-16 is revised to correct the reference to "Garner Avenue."

I-15) The change recommended by the commenter is already included in the first paragraph on p. 4.2-20.

I-16) Comment noted. The City could require implementation of traffic safety measures as conditions of approval to protect public health and safety. The project sponsor's proposal to include traffic calming measures in the project street design is added to the EIR text on p. 4.2-23.

I-17) Comment noted. Use of Del Monte Avenue as a project access route would avoid Impact 4.2.5b.

I-18) The noted correction is made to the text of Mitigation Measure 4.2.5b on p. 4.2-24, and in the Summary Table (Table 1), on p. 2-9.

I-19) The recommended text is added to p. 4.3-9.

I-20) Mitigation Measure 4.3.10 could require a joint agreement between the City and the project sponsor to ensure that Fire Station No. 5 were constructed prior to the buildout of project phase 4. Construction of this fire station would be required to ensure the safety of residents of the southeastern most portions of the project site.

I-21) The total park acreage that would be required for the project, based on project population, is 8.1 acres, as stated on p. 4.1-8. Therefore, the sponsor would be responsible for maintenance of 8.1 acres of the community park. The text in the first paragraph under Impact 4.3.5, p. 4.3-11, is revised to reflect this figure.

I-22) The text on p. 4.3-12 is revised to note that the project sponsor would provide four well sites and Alco Water Service would construct the wells. (The sponsor would be responsible for primary funding of construction for three of the wells, and limited funding for the fourth.) The project sponsor is ultimately responsible for construction of the wells to ensure adequate water service is available to the project site, and this is also included on the revised pp. 4.3-12 and 4.3-13.

Regarding the size of well sites, Alco Water Service has indicated that a minimum requirement for a well site is 20,000 square feet of net usable area, exclusive of setbacks, landscaping, fencing, and other City requirements that may reduce the available usable area for the well and associated equipment (Adcock, 1998). Twenty thousand square feet, or 0.46 acre, is slightly less than the half-acre site size requirement noted in the Draft EIR, and the EIR is revised accordingly on p. 4.3-12 and 4.3-13, as well as p. 4.4-16. The approximately 10,000-square-foot site would be an addition to an existing well lot on Surrey Way, between Countryside Drive and Argentine Drive. Alco would require that the total site be a minimum of 20,000 square feet of net usable area (Adcock, 1998).

The project sponsor has proposed well sites of 0.46 acres *gross* (about 20,040 square feet), which would not meet Alco's needs for a minimum of 20,000 square feet of net usable area. Note that the letter from Alco Water Service that is included in an appendix in the EIR states that well sites of approximately 20,000 square feet *of net usable space* would be purchased by Alco from the project sponsor (emphasis added).

I-23) Please see the response to Comment G-3, p. 8-23.

I-24) Comment noted. The EIR distinguishes between "significant" and "less-than-significant" effects; beneficial effect are, by definition, within the latter category.

I-25) As noted on p. 4.4-12, "groundwater overdrafting will continue to be a concern in the Salinas Valley, particularly as more residential development increases the more "permanent" commitment of water to dwellings." Therefore, the City must actively seek means of reducing water consumption.

I-26) Mitigation Measures 4.4.4a is revised to acknowledge that the project sponsor would provide four well sites and Alco Water Service would construct the wells. (The sponsor would be responsible for funding construction of three of the wells.) As noted in the response to Comment I-22, the project sponsor is ultimately responsible for construction of the wells to ensure adequate water service is available to the project site.

I-27) Mitigation Measures 4.4.4b is revised to acknowledge that the project sponsor would provide four well sites and Alco Water Service would construct the wells. As noted in

the response to Comment I-22, the project sponsor is ultimately responsible for construction of the wells to ensure adequate water service is available to the project site.

I-28) Please see the response to Comment C-1, p. 8-11.

I-29) Comment noted. CEQA requires analysis of a No Project Alternative.

I-30) See the responses to Comments I-2 and I-3.

I-31) The EIR notes, on p. 5-8, that with the General Plan Alternative, "demand for public services and utilities would be somewhat greater than under the project."

I-32) As stated on p. 5-10, "significant and unavoidable impacts related to agricultural land conversion and farmland availability would be the same for [alternative] sites as for the project" and "possible alternative sites are either not contiguous with City boundaries and thus not designated for urban use (in the case of annexation), or are of insufficient size (in the case of "infill" sites within the city limits)."

REFERENCES – Letter I

Adcock, Thomas R., Vice President, Alco Water Service. Telephone communication, July 28, 1998.

EMC Planning Group Inc.

A Land Use Planning and Design Firm

J

July 6, 1998

Ms. Charmaine Geiger
Community Development Director
City of Salinas Community Development Department
200 Lincoln Avenue
Salinas, CA 93901

Re: Mountain Valley Project
Comments on Draft Environmental Impact Report

Dear Ms. Geiger:

Thank you for the opportunity to review the Draft Environmental Impact Report (EIR) that has been prepared for the Mountain Valley project. The following letter addresses my comments on this document.

p. 3-7	The paragraph beginning on this page and continuing to page 3-8 describes the phasing of project development. However, the figure that is referenced in this paragraph (Figure 3) illustrates the street phasing plan, not the development phasing plan. The Mountain Valley Precise Plan provides a figure (Figure 31) that illustrates the development phasing plan. Figure 31 of the Precise Plan should be included as a figure in the EIR and referenced in this paragraph in order to more clearly describe the proposed project phasing.	1
p. 3-8	The first complete paragraph on this page states that East Alisal Street would be constructed as part of Phases 2 and 6. This is incorrect. East Alisal Street will be constructed as part of Phases 3 and 6. The text should be revised to reflect this correction.	2
p. 3-9	Labels for Boulevard A, Boulevard C, and Mountain Valley Boulevard are missing from Figure 3. These streets should be labeled.	3
p. 4.1-5	The footnote on this page (footnote 4) concerns density bonuses. This discussion is irrelevant, and the footnote should be omitted.	4
p. 4.1-7	Footnote 5 concerns density bonuses. This discussion is irrelevant, and the footnote should be omitted.	5
p. 4.2-20	The discussion of the City's trip reduction ordinance and the proposed trip reduction plan included in the Mountain Valley project begins on this page.	6

The text in this section should stipulate that the traffic analysis prepared for the EIR did not assume a reduction in vehicle trips attributable to this trip reduction plan in order to provide a conservative analysis. 6 Cont'd.

p. 4.2-24 Mitigation Measure 4.2.5b references traffic calming measures identified in Mitigation Measure 4.2.4a. There is no Mitigation Measure 4.2.4a. Traffic calming measures are identified in Mitigation Measure 4.2.5a. Mitigation Measure 4.2.5b should be revised to reference 4.2.5a. This revision to Mitigation Measure 4.2.5b should also be made in Table S-1. 7

p. 4.3-11 The first paragraph under Impact 4.3.5 states that the developer would fund the annual maintenance of 8.7 acres of the community park. This is incorrect. As stated in the first (incomplete) paragraph on page 4.1-8, the project would require 8.1 acres of developed parks. The text should be revised to indicate that the developer would fund the annual maintenance of 8.1 acres of the community park. 8

p. 4.3-12 This comment relates to the third paragraph on this page, as well as page 4.3-13 (discussion under Mitigation Measure 4.3.6), page 4.4-6 (first complete paragraph), page 4.4-16 (discussion under Mitigation Measure 4.4.4b), page 5-2 (first complete paragraph), and page 5-2 (footnote 1). The text references René Fuog, of Fuog Water Resources, Inc., as stating that each well site must have a net usable area of 0.5 acre. The Mountain Valley project proposes to provide three 20,000 square foot well sites and one 10,000 square foot well site as part of the project. An April 17, 1998 letter to Ms. Jenny Mahoney, City of Salinas Community Development Department, from Mr. Thomas R. Adcock, Vice President of Alisal Water Corporation, which is included as an attachment to the Draft EIR, acknowledges the sizes of the well sites included in the proposed project. Since the Alisal Water Corporation will be responsible for the drilling of the well and any other related equipment on the proposed well sites, the Alisal Water Corporation should be the responsible party for determining the necessary size of each well site. All references to Mr. Fuog's requirement for 0.5-acre well sites should be omitted from the text. 9

p. 4.3-13 Mitigation Measure 4.3.7, which starts on this page and continues on page 4.3-14, requires that the project sponsor would be required to fund the entire cost of installing a relief main in Alisal Street, and that the City and/or other developers would reimburse the project sponsor at a later date for costs in excess of the sponsor's required fee of approximately $830,000. Assuming that the Alisal Street relief main is included in the City's current six-year Capital Improvements Program (CIP), and assuming that the ordinance increasing the citywide sewer collector system fee from 15 percent to 35 10

percent will fully fund the needed improvements implemented through the City's CIP (as stated on page 4.3-5), then this mitigation measure should be revised. The revised mitigation measure should state that the City, not the project sponsor, should fund the cost that is in excess of the sponsor's required fee for installing a relief main in Alisal Street as part of the City's CIP. 10 Cont'd.

p. 4.5-9 Impact 4.5.1 begins on this page and continues to page 4.5-11, and Mitigation Measure 4.5.1a (which should be renumbered to "4.5.1" since this is the only mitigation measure identified for this impact) begins on page 4.5-11 and continues to page 4.5-13. This comment relates to this impact and mitigation measure. The first complete paragraph on page 4.5-12 states that, "with implementation of these mitigation measures, an approximately 75 percent reduction in PM-10 emissions would be expected." The first (incomplete) paragraph on p. 4.5-13 states that, "it is not certain that construction-generated PM-10 emissions would be reduced to below the MBUAPCD's threshold of 82 pounds per day, and therefore, this impact is considered significant and unavoidable." Assuming that the mitigation measure identified for this impact will reduce PM-10 emissions by 75 percent, PM-10 emissions exceeding 328 pounds per day would exceed the MBUAPCD threshold. The first (incomplete) paragraph on page 4.5-11 states that if one builder was conducting rough grading, PM-10 emissions would be approximately 95 to 115 pounds per day, and if two builders were conducting rough grading, PM-10 emissions would be approximately 190-235 pounds per day. Since these PM-10 emissions are less that 328 pounds per day, the identified mitigation measure would reduce air quality impacts to below the MBUAPCD threshold, and the impact would be less-than-significant. 11

Further, air quality impacts associated with project development will be intermittent and temporary. In the discussion of noise impacts on page 4.7-7, the Draft EIR concludes that although grading and construction activities in the project area would intermittently and temporarily increase noise levels, the impact of construction at any one location would be of considerably less duration as residences would be completed in a given area and construction would proceed to the next phase and location. The Draft EIR provides mitigation measures for construction-related noise impacts and concludes that the impact of construction noise will be a less-than-significant impact. The discussion of intermittent and temporary air quality impacts associated with construction should be addressed in the same manner.

The EIR's conclusion that intermittent, temporary construction-related air quality impacts are significant and unavoidable is inappropriate. The EIR should be revised to conclude that construction-related air quality impacts

can be mitigated to a less-than-significant level. This revision should also be made in Table S-1. In addition, the fifth bullet item on page 6-1 (under "Unavoidable Significant Adverse Impacts") should be omitted. 11 Cont'd.

p. 5-1 The discussion of the 160-acre alternative begins on this page and continues to page 5-7. The EIR identifies this alternative as the environmentally superior alternative. However, there does not seem to be evidence in support of this conclusion. The 160-acre alternative results in the same significant, unavoidable impacts as the proposed project, including land use – agricultural conversion, traffic – increased traffic at intersections, noise – increased operational noise due to increased traffic, and air quality – intermittent, temporary increase in construction-related PM-10 emissions (although, as stated above, this should be considered a less-than-significant impact instead of a significant, unavoidable impact). In addition, this alternative would result in increased water consumption over the entire proposed project area since the area outside the City's sphere of influence would remain in agricultural production. Also, under this alternative, the Williams Road alignment would be atypical, inefficient and unsatisfactory. This alternative would also provide fewer low-income houses than the proposed project, since fewer total houses would be constructed. For these reasons, the EIR should identify the proposed project as the environmentally superior alternative instead of the 160-acre alternative. 12

It should also be noted that the EIR's description of the 160-acre alternative as containing the same amount of parks and schools as the proposed project is erroneous. With a smaller project, the area devoted to parks and schools would be less since there would be fewer houses to serve and to provide funding for these improvements.

Thank you again for allowing me to comment on the Mountain Valley Project Draft EIR. I look forward to receiving the Final EIR for this project. And please note that we will revise the Mountain Valley Precise Plan to correspond with the project EIR.

If you have any questions regarding this letter, please call me at (408) 649-1799.

Sincerely,

Cara Galloway
Planner

c: Bill Shaw, Shaw Development

LETTER J - Cara Galloway, EMC Planning Group, July 6, 1998

Note to the reader: Many of the comments in this letter duplicate comments in Letter I. As a result, the reader is frequently referred to responses to Letter I.

J-1) Please see the response to Comment I-6.

J-2) Please see the response to Comment I-5.

J-3) Please see the response to Comment I-6.

J-4) Please see the response to Comment I-9.

J-5) Please see the response to Comment I-10.

J-6) Please see the response to Comment I-15.

J-7) Please see the response to Comment I-18.

J-8) Please see the response to Comment I-21.

J-9) Please see the response to Comment I-22.

J-10) Please see the response to Comment G-3, p. 8-23.

J-11) The commenter objects to the conclusion made in the EIR concerning the impact of construction-related PM-10 after mitigation. This objection derives from emissions estimates that correspond to a maximum of two builders performing rough grading simultaneously at the project site. However, the EIR's conclusion of significance with respect to construction dust derives from an assumption of three builders, not two. The last paragraph on EIR p. 4.5-10 states that PM-10 emissions would be approximately 280 to 350 pounds per day on days when rough grading would be taking place. This paragraph from the EIR and the continuing discussion on the following page (i.e., p. 4.5-11) provide the assumptions upon which this estimate is made. It is not known how many builders would be conducting rough grading simultaneously at the site, and thus, the EIR provides a conservative assessment by assuming three builders. The EIR's conclusion that this impact could be significant, even after mitigation, is appropriate.

In addition, the commenter asserts that construction PM-10 impacts should be treated the same as construction noise given that, in both instances, the impact is temporary and intermittent. However, construction-related PM-10 emissions pose health concerns, as well as nuisance concerns, whereas, construction noise is, in essence, only a nuisance issue. The EIR's separate treatment and conclusions regarding construction PM-10 and noise is appropriate.

Please see also the response to Comment C-1, p. 8-11.

Mitigation Measure 4.5.1a is renumbered 4.5.1; the "a" is deleted.

J-12) Please see the response to Comment I-3.

LAW OFFICES OF
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July 6, 1998

OUR FILE NO. 0026.04

VIA FACSIMILE & MAIL

City of Salinas
Department of Community Development
Attention: Jenny Mahoney
200 Lincoln Avenue
Salinas, California 93901

Re: Mountain Valley Project DEIR SCH #93043036

Dear Ms. Mahoney:

The following comments are submitted on behalf of certain owners of property within the Rancho San Juan Area of Development Concentration (ADC).

1. The DEIR does not, but should, mention the Rancho San Juan ADC, which is the subject of a Memorandum of Understanding between the County of Monterey and the City of Salinas, in its evaluation of cumulative impacts; 1

2. Whether or not its individual impacts are considered significant, the Mountain Valley project and all projects should be treated similarly with respect to cumulative impacts. For example, there should be a mechanism for an overall fair share cumulative traffic impact fee on all projects, such as a fee levied on a "per-unit" basis; and 2

3. Figure 7, on page 4.1-11, inaccurately shows some Rancho San Juan ADC parcels in Williamson Act contract which are either no longer subject to the Williamson Act or are scheduled to come out of contract this year or next. 3

499 VAN BUREN STREET
MONTEREY, CALIFORNIA 93940

Thank you for your thoughtful consideration of these matters.

Yours very truly,

HORAN, LLOYD, KARACHALE, DYER,
SCHWARTZ, LAW & COOK INCORPORATED

By: Mark A. Blum

MAB:mh

cc: Charmaine Geiger
Dave Mora
David Swanson
William Phillips
Wes Arvig
\HYH\LTR\MAHONEY.L-1

LETTER K - Mark A. Blum, Horan, Lloyd, Karachale, Dyer, Schwartz, Law & Cook, Inc., July 6, 1998

K-1) Please see the response to Comment F-1, p. 8-20.

K-2) Comment noted. The City of Salinas has a Traffic Fee Ordinance that requires collection of a fee from developers to fund identified projects. However, as described in Section 4.2, Traffic and Circulation, certain improvements are required that are not included in the Ordinance at present, as there is a limited amount of funding available for traffic improvements. The project sponsor would be required to contribute to the Traffic Fee Ordinance fund.

K-3) Figure 7 has been revised to note the updated status of Williamson Act parcels in the Rancho San Juan Area of Development Concentration.

ROBERT C. TAYLOR, JR.
ATTORNEY AT LAW
955 BLANCO CIRCLE, SUITE B
SALINAS, CALIFORNIA 93901
(408) 422-2611
FAX: (408) 422-6986

L

July 6, 1998

Community Development Department
City of Salinas
200 Lincoln Avenue
Salinas, CA 93901

Attn: Jenny Mahoney

Re: Mountain Valley Residential Development

Dear Jenny,

I represent the Higashi Irrevocable Trust 1982 and Higashi Farms, Inc., which own land and conduct farming operations in Carr Lake. I wrote to the City on May 1, 1998 regarding my clients' concerns with drainage and flooding associated with the inadequacies of the reclamation ditch in the Carr Lake area. We have now reviewed the draft Environmental Impact Report (DEIR), draft Precise Plan (DPP), and Services and Facilities Plan (SFP) for the Mountain Valley Residential Development proposed project. We believe this project, and others which may follow, will have a significant impact on the problems referenced in my letter of May 1, 1998.

My clients' experience with Carr Lake extends over sixty years. Historically, Carr Lake has flooded for brief periods of time with the water draining out of the lake through the reclamation ditch which was constructed in approximately 1918. More recently, and coincident with the development of the Creekbridge and related housing projects upstream from Carr Lake, my clients have experienced a large increase in the accumulation of sand. We believe this accumulation is directly related to upstream development in two respects. First, the velocity of the water has increased, which exponentially increases the carrying capacity of the water entering Carr Lake; and second, changes to the creek bed, particularly in Gabilan Creek, prevent the sand from silting out in the areas above Carr Lake where siltation previously occurred. 1

The accumulation of sand, in turn, creates two problems in Carr Lake. First, the sand clogs the reclamation ditch, causing the water to back flow, increasing the areas and frequency of flooding. Second, the sand effectively raises the height of the outfall at Sherwood Drive and Main Street, preventing my clients' farmland from draining, since water does not run uphill.

If the outfall is properly constructed and maintained, and the sand is captured upstream, the volume of water entering Carr Lake is not a significant problem, since the water remains on the farmland for only a limited period of time. This is not to say that there will not be cumulative damage to the farmland from pollutants and other materials in the water as a result of upstream development. The important point for understanding our concerns with the proposed developments is that we are not so concerned with the volume of water as we are concerned with the timing of inflows and outflows.

The DEIR recognizes that discharges to the City's storm drainage system and flooding potential are potential significant impacts. In addition, the DEIR recognizes there are maintenance problems in the area of the project site (Page 4.3-5), that the existing storm drainage system is currently operating at capacity (Page 4.3-14), that flooding problems in the ditch will be exacerbated by additional runoff (Page 4.4-7), and that siltation exists as a problem and may be increased by this project (Page 4.4-13 and 14).

The proposed solution to all of these problems is the requirement of a detention basin.

Unless the sand situation is addressed, we believe the detention basin will increase the problems we have experienced. The detention basin will control the rate of flow, delay runoff, and may even include a pumping system to move water after the peak flows. (See SFP 3-8, 1-6 and DPP 60). This may alleviate the potential for peak water flooding, but it will extend the period of time during which the reclamation ditch is full, in turn delaying the drainage of my clients' agricultural fields. In very simple terms, until the ditch is dry, the accumulation of sand cannot be removed by the County Water Resources Agency. If the sand is not removed, the fields don't drain. If the fields do not drain, my clients cannot farm the land and they have suffered significant injury as a result. 1 Cont'd.

We believe the solution to this problem is to establish, through the Water Resources Agency, a regular maintenance plan, together with physical improvements to the outfall at Sherwood Drive and Main Streets. The ultimate solution is to detain the sand upstream.

From conversations with representatives of the Water Resources Agency, we understand that the agency is without sufficient funds to improve or maintain the ditch as is required to deal with the increases in sand. We also understand that the City of Salinas has experienced sand problems in Gabilan Creek, as well.

The SFP notes in several places that the costs for maintaining the drainage and reclamation system are unknown, but that the staff's experience is that the current fees are inadequate to maintain these facilities. While the SFP assumes an assessment district for maintaining the detention basin, nothing is contained in the environmental documents to deal with funding either cumulative or downstream remedies.

With respect to the drainage issues as they present themselves in Carr Lake, there is no discussion in the environmental documents of the direct impacts on Carr Lake from this project or of any cumulative impacts. Even assuming that a detention basin is an appropriate mitigation, there is no discussion of the impacts of a series of detention basins in future developments. Since detention basins are designed to affect the timing of the water flow, and since the timing of the water flow is precisely the problem we have experienced in draining our fields, we believe there should be an analysis of the cumulative impact of development in this respect.

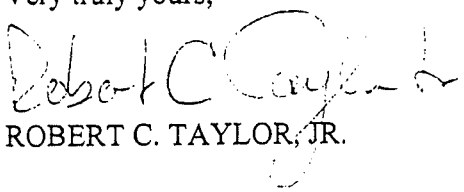
Finally, as we have indicated above, there is no discussion of any funding for the Water Resources Agency, which is charged with the maintenance of the reclamation ditch. The Water Resources Agency is currently unable to adequately maintain the ditch, much less make necessary improvements to the outfall. This project will simply add to the problem. The cumulative impacts have not even been addressed. 1 Cont'd.

In its simplest form, the detention basin may serve to alleviate flooding concerns by metering the flow of water into Carr Lake. However, the farming operations in Carr Lake have been uniquely and disproportionately impacted by developments of this type. It does not solve the problem to simply meter the flow of water into an area that does not drain because of the inadequacy of existing public facilities, particularly where there is no plan or funding for the work necessary to cure those inadequacies.

The net result is that a substantial portion of my clients' land has been placed out of production, without consideration of this fact in the environmental documents or compensation to my clients.

We believe the impact of this project, particularly in the cumulative scenario, has neither been addressed in the environmental documents, nor adequately mitigated to a level of insignificance.

Very truly yours,



ROBERT C. TAYLOR, JR.

RCT/kaf

LETTER L - Robert C. Taylor Jr., Attorney at Law, July 6, 1998

L-1) The siltation/detention basin proposed as part of the project would, as noted by the commenter, control the rate of storm water flow off the project site and, ultimately, into Carr Lake and the Salinas River. By detaining peak storm water flows, the siltation/detention basin would also capture silt and sand, allowing it to settle in the basin before water is discharged toward Carr Lake. Maintenance of the siltation/detention basin would be ensured through a management plan that must be developed by the sponsor. Mitigation Measure 4.4.3c would also require the installation of storm drain sediment traps. Thus, the project would be expected to result in little, if any, increase in downstream siltation, and could actually decrease downstream siltation by detaining silt from agricultural uses upstream of the project site. It is true that the project, by increasing the amount of impervious surface at the site, would increase total runoff. The siltation/detention basin would avoid any increase in flooding, but would incrementally extend the period during which water drains from the site.

With regard to other sources of siltation, the City is working with agricultural users upstream from Carr Lake, particularly north of Boronda Road, to try to reduce the volume of silt that is entering the storm drainage system.

Carr Lake was once a natural lake and is at a level that routinely floods in wet weather, serving as a temporary detention area but not endangering urbanized (populated) land uses. It is prudent for the City to require upstream development to avoid increasing peak storm water flows that could result in flooding beyond the boundaries of Carr Lake, potentially causing property damage and injury or loss of life. The result is the avoidance of adverse physical environmental effects, although there may be economic consequences.

SIERRA CLUB

VENTANA CHAPTER
P.O. Box 5667 Carmel, California 93921 408 • 624 • 8032

July 6,1998

Ms. Charmaine Geiger
City of Salinas
Department of Community Development
Salinas, CA 93901

Subject: DEIR for Mountain Valley Project, SCH# 93043036

Dear Ms. Geiger:

The Ventana Chapter, Sierra Club has reviewed the DEIR for the Mountain Valley Project which plans for 853 residential units. The project has many unmitigatible impacts that violate provisions of both the City and County General Plans, For these reasons the DEIR has shown clearly that this is an inappropriate project for this location . Some of those impacts are listed as follows:

Water The entire area is overdrafted more than 200 %. When drought times occur, farm lands can be laid fallow. People need and use water during flood or drought. A moratorium is needed on **any new development until a solution to the water problem is in place. The residential use would prevent the partial recharge of the aquifer that occurs with agricultural irrigation. How would you address this impact?** 1

In the discussion of mitigations, it is suggested the Alco Water Company is capable of supplying this project with water. The company's recent history would contradict this statement. The inability of this company to maintain sufficient water pressure to safely operate fire sprinklers illustrates the need for a new water supplier. How will the City assure that the needed water pressure is maintained ? How will the additional inspections that are needed be managed and funded ? 2

If this project is permitted, **water saving plumbing fixtures should be required, the use of lawns prohibited and drip irrigation required for any landscaping. Drought tolerant non-invasive plants need to be specified for use in any landscaping. The installation of cisterns to collect rooftop runoff for use in irrigation should also be considered. Who will pay for the monitoring required to ensure compliance with these necessary mitigations ?** 3

Prime Agricultural Land Both general plans call for the preservation of prime agricultural lands. This project calls for the conversion of 199.7 acres of prime agricultural lands. The loss of part of the primary source of the Salinas Valley economy, 4

agriculture, may cause a loss of jobs and a loss of some of the food which is shipped throughout the nation and the world. How do you mitigate this loss ? **What is the justification for not complying with the area's General Plans ?** 4 Cont'd.

Traffic Impacts This project would require more mitigations than can be paid for by this project. The area is already suffering from projects that have been built without the infrastructure that is required to support the increased numbers of trips generated by the projects. **No new projects should be permitted unless the developer funds and builds infrastructure before the project is built. Can the City participate with Cal Trans to facilitate and monitor this aspect of the project ?** 5

Schools School facilities for the project's residents do not presently exist. The existing schools are already operating near capacity. Federal and State funding is not available and recent school bonds have failed to pass. **Any proposed project must pay the full cost of schools before they are permitted.** The proposed mitigation is not adequate and the conclusion is drawn that it is not feasible to pay the additional $13,000 per unit that full mitigation would require. **Therefore, it is clear that this project itself is not feasible and should be denied a permit. How do you justify permitting development without ,at the very least, adequate school facilities ?** 6

Police The project DEIR correctly points out the need for additional police. At present some of the funding for police comes from a federal grant. This funding may soon have to be replaced . **Who will provide funding for the needed additional officers ?** 7

Libraries The project needs to provide funding for expansion of El Gabilan Library. Is this being required ? 8

Storm Drainage The DEIR states that the storm drain system currently operates at capacity. A subdivision will increase the storm run-off substantially. The developer should pay for the needed improvements to the storm drain system. Who will monitor and maintain this system? 9

Alternatives There need to be additional alternatives considered to complete this DEIR. Are there any locations where a project such as this could be fully mitigated ? Non-ownership by the project proponent doesn't relieve the authors of the DEIR from the obligation to consider such alternatives. A lower density project needs to be considered. A smaller project could produce fewer impacts. 10

In conclusion, we consider the DEIR inadequate in considerations of alternative projects. We recommend that the DEIR not be certified until this deficiency is cured. Thank you for the opportunity to comment on this DEIR. Any questions or comments should be directed to our Administrative Chair, Janie Figen, 1443 Deer Flat Road, Monterey, CA 93940, phone (831) 375 9667, fax 375 1666. 11

Sincerely,

Janie Figen

for Gillian Taylor, Chair

JF/GT

LETTER M - Gillian Taylor, Chair, Ventana Chapter, Sierra Club, July 6, 1998

M-1) On p. 4.4-12, the EIR acknowledges that "increased runoff and evaporation due to increased impervious surfaces would substantially reduce rainfall percolation to groundwater" following development of the project. However, water consumption at the site is expected to decrease with the project, even accounting for the loss of existing percolation; therefore, the impact is not significant.

M-2) The City is precluded from regulating water pressure; this is the province of the California Public Utilities Commission, as stated on p. 4.3-11.

M-3) As stated on p. 4.4-9, the project would include a water conservation plan that would include limitations on turf, installation of low-flow plumbing fixtures, and other features.

M-4) The EIR states on p. 4.1-21 that no mitigation is available for the loss of prime agricultural land. This would be a significant, unavoidable adverse effect of the project.

M-5) The traffic analysis in Section 4.2 notes that, while the project would pay its proportionate share towards traffic improvements at affected intersections, certain intersections are or would be operating at unacceptable levels of service due to existing or already approved projects. Under CEQA, the project sponsor cannot be required to pay more than a proportionate share towards mitigation of cumulative impacts. As stated on p. 4.2-21, the project would not result in a significant effect on U.S. Highway 101; therefore, Caltrans facilities would not be adversely affected.

M-6) Although the project would not fully fund construction of school facilities to accommodate the number of students it would generate, the EIR authors deferred to the Alisal Union Elementary School District and the Salinas Union High School District in the assessment of impacts on the districts. As described on p. 4.3-7, the districts have negotiated an agreement with the project sponsor that the districts consider satisfactory. Therefore, the EIR authors judged school impacts to be adequately mitigated.

M-7) The EIR concluded that impacts to police services would be relatively limited, and therefore less than significant.

M-8) As noted on p. 4.3-10, the project would pay a library fee totaling approximately $300,000. A decision on how to spend the monies collected would be made by the City Council.

M-9) As stated on pp. 4.3-14 - 4.3-15, the project would include construction of a siltation/ detention basin, funded by the project sponsor, and sized in conformance with the County Water Resources Agency policy requiring on-site detention for the differential between runoff from pre-development 10-year storm and post-development 100-year

intensity rainfall. As stated on p. 4.3-15, maintenance of the siltation/detention basin would be funded through a maintenance assessment district.

M-10) The EIR found that it is unlikely that another site that would substantially reduce project impacts and that would be suitable for urbanization could be located in or adjacent to the City of Salinas (see p. 5-10).

The 160-acre alternative would result in some reduction in impacts, although as noted on p. 5-4, total water consumption on the 200-acre site would be greater than with the project, since there would be less reduction in agricultural water use.

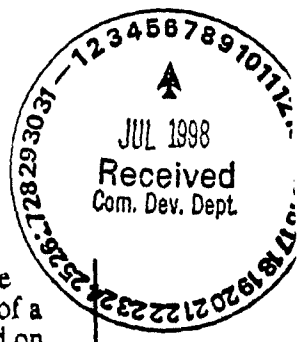
M-11) As noted in the above responses, the EIR has adequately addressed the concerns raised by the commenter.

California Native Plant Society

Monterey Bay Chapter

P. O. Box 381
Carmel Valley, CA 93924
July 6, 1998

Salinas Community Development Dept.
City Hall
Salinas, CA



IRE: "Mountain Valley" DEIR

Ladies and Gentlemen:

The Monterey Bay Chapter of the California Native Plant Society, whose boundaries include Monterey and San Benito Counties, has just learned of a proposal to build a large housing development on prime agricultural land on 200 acres of the Sconberg Ranch within the jurisdiction of the city of Salinas.

Our organization strongly opposes the conversion of agricultural land. The County General Plan has forceful policies protecting such lands, and when the Supervisors failed to uphold these policies, as in the case of Chualar II, the local citizens rose up to overturn the decision. We would hope that the city of Salinas would be no less protective of the prime lands within its jurisdiction. 1

The preferred alternative is an example of the type of urban sprawl that has destroyed the fertile and productive character of the Santa Clara Valley. When the best agricultural lands are taken for development purposes, the result is often that less productive lands are converted to crops, requiring more water and fertilizer for reduced results. Such policies are extremely shortsighted, especially given the water issues in the Salinas Valley.

We urge you to require the environmental report to include an alternative that protects the best land for growing crops.

Sincerely yours,

Mary Ann Matthews
Conservation Chair

Faxed 4:30 7-6-98

LETTER N - Mary Ann Matthews, Conservation Chair, Monterey Bay Chapter, California Native Plant Society, July 6, 1998

N-1) Comment noted. The comment addresses the merits of the project and not the adequacy of the EIR. No further response is required.

(1)

O

Director of Community Development
City of Salinas
200 Lincoln Avenue
Salinas, CA 93901
via fax: (408) 758-7215

July 6, 1998

COMMENTS ON THE MOUNTAIN VALLEY PROJECT ON FARMLAND KNOWN AS THE SCONBERG RANCH
D.E.I.R. SCH#93043036

Dear Ms. Geiger,

I would like to address some of the problems associated with the above referenced D.E.I.R.

2.3 Alternatives to the proposed project, NO-PROJECT. This analysis states that no project would not rule out future development, but then incorrectly states "most likely as residential, given surrounding land uses". SURROUNDING land uses are NOT residential. Some residential, mostly agricultural. I recommend a colored map showing exactly what the current surrounding land uses are. This property is not an oasis in the middle of a city. Rather, it is farmland on the outskirts of a city that has for too long been following the tired path of urban sprawl with its associated results. 1

Additionally, this same analysis incorrectly assumes "Groundwater pumping and water consumption would remain as present (that is overdrafting would be greater than the proposed project), subject to any changes that may be required by the Monterey County water Resources Agency." This statement fails to take into account the following:

1) Different types of farming consume different amounts of water, it would not necessarily remain as present.
2) Developer's tendencies to grow high water intensive crops on farmland for several years prior to coming forward with their high density development proposal. They then can conveniently say that they will be using less water with the "new" use.
3) In the event of an extended drought farmland can be left fallow, no water use, housing in comparison, has a rather constant use of water.
4) Some of the water used to water farmland percolates back beneath the ground, housing on the other hand sends its water into sewer mains. 2
5) Although the Monterey County water Resources Agency is mentioned, the State of California Water Resources Control Board that has threatened adjudication of the Salinas Valley is not mentioned.
6) Fails to mention that prior to irrigation, dry farming was the norm in the Salinas Valley.
7) Fails to mention the historic uses of the property. (grazing land?)

(2)

2-5 GENERAL PLAN ALTERNATIVE

This analysis fails to mention that the Salinas General Plan was ammended/changed several years ago without an environmental impact report that addressed the impacts, no environmental impact report at all, even though vast new uses were to be allowed on properties thoughout the city. Minimal review, minimal consideration of cumulative impacts, no public hearings necessary in many cases. Thus it not too surprising to read the final sentence of this analysis. "The net effects from General Plan Alternative buildout would be greater than the proposed project." Taken in the proper context, it is truly a sad state of affairs. From the out-of-town developer's perspective, it's like finding free money. Build like crazy. Build housing for people that currently live and work in the next County. And the best part is, the locals in control don't pay much more than lip service to rising crime, overcrowded schools, congested dangerous highways, a crumbling infrastructure, poor water pressure, and increasingly poor water quality and air quality. Falling into line behind their theme song, "You can't stop progress", they're not even willing to slow it down enough to play catch up with the increasing problems. The costs associated with these problems are going to have to be addressed, but it won't be by these people apparently. Whose turn is it next month to sell their farmland? 3

(3)

Significant Impacts, Traffic and Circulation

The D.E.I.R. consistently downplays or fails to mention the regional traffic impacts to surrounding State Highways and County Roads. The Congestion Management Program for Monterey County requires Level of Service "C". In no case is it supposed to drop below its current Level of Service, if below "C". The D.E.I.R. also fails to mention the possible project of Rancho San Juan (The City of Salinas has a copy of the Administrative Draft).

One recent newspaper article recently estimated that 40% of the new housing being purchased in the North Salinas area is being purchased by people who work in San Jose. These people then commute north on Highway 101, currently rated as Level of Service "F" by Cal-Trans. Cal-Trans has stated it cannot and should not handle one more car. 4

Although, the D.E.I.R. does some analysis of surrounding city streets and intersections, it fails miserably at a regional analysis. An E.I.R. must address impacts. Approximately 8,500 additional average daily trips generated by this proposed development will not all drive around the city streets of Salinas. Impacts to State Highways 1, 156, 101, and Highway 68 as well as impacts to surrounding County Roads must be addressed. As most of these are currently below Level of Service "C" during peak hours. Mitigation measures and associated costs must be ascribed. For example, State Highway 68's traffic is currently 70% through traffic from the city of Salinas and to a lesser extent the City of Monterey. Where is the estimate as to how much additional traffic this project will add to this? More importantly, what traffic analysis methodology was used by E.S.A. in coming up with the L.O.S. figures they have?

Significant Impacts, Schools

Although the development proposal projects setting aside some land for a school, it fails to address who or how the school will be built. Current development school impact fees in the City of Salinas of $1.86 per sq. ft. do not even cover 25% of the impact, nor the money needed. This statistic was verified by Salinas Union High School District Superintendent Elizondo at a public hearing. The estimated additional enrollment figures of 512 new students at Alisal Union Elementary School and 235 new students in the Salinas Union High School District is unbelievably labeled "Less-than-significant". Who produced these numbers? 5

Significant Impact, Water

Page 2-19, Impact 4.3.6 says "The proposed project would create new water demand for Alco water Service."
Mitigation Measures "None required...shall provide well sites...to meet Alco Water Service specifications." 6
Level of Service after mitigation is labeled Less-than-Significant.

(4)

For those that have followed the repeated problems of bad tasting water, discolored water, water that has to be blended to stay below the nitrate threshold, and poor and irregular water pressure problems in the Alco Service Area, this must be some kind of joke. Please reference the attached copy of a letter recently sent out regarding water pressure problems in the ALCO Service area. The City of Salinas has not enacted an ordinance requiring a minimum 55 lb/per/sq/in. water pressure and thus the problem continues. Without such an ordinance in place the Public Utilities Commission has no teeth to enforce better water pressure.

6 Cont'd.

Thank you for the opportunity to comment on the D.E.I.R. SCH#93043036.

Mike Weaver

Mike Weaver
Salinas, CA
(408) 484-2243

(5)

RE: D.E.I.R. SCH #93043036

WATER PRESSURE!

There is a safety issue that has been being ignored by the Salinas City Government. While they have approved literally hundreds of houses to be built in the Williams Ranch area, a blind eye has been given to the issue of water pressure. Why is water pressure important? It's because it takes 55 pounds per square inch of pressure to make the fire sprinkler systems in these houses work!

These houses are densely packed together on small lots. In the event of a fire in one house, it would easily spread to neighboring houses. Trouble is, there is often insufficient pressure in one house for the fire sprinkler system to work, much less if the entire block was involved in flames. There is a "check valve" on these fire sprinkler systems that holds the pressure in the immediate pipes to a higher pressure. However, in the event of a catastrophic fire, once that immediate water in the pipes is gone, the system relies on the pressure available from the water system supplied by the water company.

Officials cannot say they are unaware of this problem, as there have been many newspaper articles for the past several years about it. Residents in East Salinas have reported in the past that their water pressure was so low that it took 40 minutes to fill a washing machine. They have reported water pressure so low that their lawn sprinklers wouldn't even turn.

6 Cont'd.

A homeowner in the Williams Ranch area reported to me that this last Thanksgiving day he had no water pressure. No water pressure on the day when ovens and stoves are all going, and many families are gathered together! Since then, he and a neighbor have been independently measuring their water pressure... pressure from the street. Surprise, almost half the days it's measured it falls below the 55 psi threshold, sometimes far below.

The City of Salinas' Community Development Department told me that the City is not the water purveyor, therefore they rely on the water purveyor to provide them with a "can and will serve" letter. Apparently, they are not required nor directed to review it beyond that. A representative of the Salinas Fire Department told me that they test the fire hydrant(s) at the invitation of the developer, on a day and time chosen by the water purveyor. If there is sufficient flow and pressure then the subdivision is allowed to proceed with building houses. When I reported that many houses were experiencing less than adequate pressure, and that there was a safety issue involved here with sprinkler systems, I was told that if I had a concern, that I should call the Public Utilities Commission. Well, I did call the Public Utilities Commission. I was told that unless the City of Salinas has an ordinance requiring a minimum water pressure, basically, there wasn't much they could do.

The developers are making money selling houses. The water purveyor is making money with every new hook up. The public buying these houses, in good faith, are having their families safety jeopordized.

(6)

It doesn't take a scientist, nor a water hydrologist, to know that the more hook ups there are on a system, the more people there are using water, the lower the pressure is going to be. I ask, who is minding the store? Sadly, no one I know. Because, the problem has been there, the problem is still there, and the City of Salinas is contemplating adding another 1300 houses to the problem AND another 853 houses at the Sconberg Ranch. 6 Cont'd.

Signed,

Mike Weaver

Mike Weaver
Salinas, CA

(408) 484-2243

LETTER O - Mike Weaver, July 6, 1998

O-1) The statement concerning surrounding land uses on p. 5-1 is intended to indicate that, were the project site to undergo development in the future, residential use would be the most likely outcome. As is seen in Figure 4, p. 4.1-3, there are existing residential uses to the north and west of the site; agriculture is to the south and east. Continuation of existing agriculture would not constitute "development;" the most likely change in land use, were it to occur separate from the proposed project, would be to residential use.

O-2) While it is true that factors such as the type of crops grown can affect water consumption, agricultural water use is typically greater on a per-acre basis than is residential water use, assuming the use of low-flow fixtures that are currently required. Percolation is taken into account in the EIR's water use calculations (see Table 7, p. 4.4-10). The EIR also notes, on p. 4.4-11, that conversion of agricultural land to urban uses "would require an irretrievable commitment to continue groundwater extractions which would, in conjunction with other pumping, contribute to continued ground water overdrafting and seawater intrusion." Concerning the State Water Resources Board, the land use is irrelevant to the decision of the Board as to whether or not to adjudicate. That is, the Board will adjudicate or will not do so whether the site is in agricultural or urban use. Further, no litigation has been initiated. Historical land uses are not relevant in calculating the change in water use from existing conditions.

O-3) The comment does not address the adequacy of the EIR, and no response is required. For information, it should be noted that the City completed an EIR for the *General Plan* on November 15, 1988.

O-4) Regional traffic impacts, specifically on U.S. Highway 101, are discussed on p. 4.2-21. The distribution and assignment of vehicle trips generated by the proposed project considered employment locations as well as shopping areas, schools and recreational activity centers.

Using Table 3 on p. 4.2-10 (Trip Generation), and the distribution patterns noted on Figure 13 on page 4.2-11, the number of vehicle trips that would access local, regional and state facilities can be found. Because the exact path of travel becomes more subjective as vehicles move further from the proposed project site, only those intersections and roadways that would be most affected by the proposed project in an measurable way are addressed in the EIR.

The methodology used for the traffic analysis followed professionally accepted standards used for EIR traffic analysis in Monterey County and elsewhere. Information was gathered from the Monterey County Regional Travel Forecast Model, the City of Salinas Citywide Travel Forecast Model, recently conducted intersection turning movement

counts, and Caltrans' published freeway volumes. Level of service and traffic impact analysis methodologies published by the Institute of Transportation Engineers, the Transportation Research Board, and the City of Salinas were used. A focused intersection traffic impact model was created for this project's analysis, using the TRAFFIX software program.

Concerning the Monterey County Congestion Management Program level of service (LOS) standard, as stated on EIR p. 4.2-21, LOS D is the established minimum acceptable service level for U.S. 101 within Salinas. (LOS C is the standard in the rural area south of Salinas, while north of Salinas, the standard is LOS E.) The LOS standard varies similarly between LOS C and LOS E on other state highways within the CMP network.

Concerning the Rancho San Juan Area of Development Concentration, please see the response to Comment F-1, p. 8-20.

Please also see the response to Comments A-3, p. 8-5, and

O-5) Please see the response to Comment M-6, p. 8-51.

The student generation factors used in the EIR were provided by the Alisal Union Elementary School District and the Salinas Union High School District, as described in the May 1998 *Services and Facilities Plan for the Mountain Valley Residential Development,* prepared by Hausrath Economics Group and cited in the EIR on p. 4.3-6.

O-6) As stated on p. 4.3-11, the California Public Utilities Commission (CPUC) is the regulatory body for water pressure. The CPUC's standard is a pressure of 40 pounds per square inch (psi), with a minimum pressure standard of 30 psi during hourly maximum demand. The City cannot require that a water purveyor provide a water pressure greater than the CPUC standard.

In regard to the operation of fire sprinklers, the City could require as a condition of approval that dwellings in the Mountain Valley project be equipped with fire sprinklers that will operate at 40 psi, rather than the 55 psi required for some older fire sprinkler systems. This would ensure added fire safety in the event that water pressure falls below 55 psi.

P

JOHAN JONGENS
566 SAN FELIPE STREET
SALINAS, CA 93901
(408) 758-3247

Salinas, July 2 nd 19

Community Development
City of Salinas
City Council.

Dear members,

I hereby voice my opposition to the MOUNTAIN VALLEY Project that will eliminate some 200 acres of PRIME FARMLAND

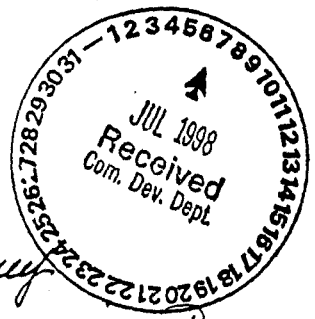
Loss of agricultural product value will be ANAVG. of a 1 Million dollars for vegetables, if Strawberries are grown it will be as high as $4 Million dollars/yr. Doesn't the council See what they are doing with the valley farmland. It must be stopped now!!!

1

Johan Jongens

LETTER P - Johan Jongens, July 2, 1998

P-1) The comment does not address the adequacy of the EIR, and no response is required. The commenter's opposition to the project will be considered by the decision-makers (Planning Commission, City Council, and Monterey County Local Agency Formation Commission) in their review of the project.



July 4th, 1998

Q

Cp:

Jenny Mahoney
Director of Community Development
City of Salinas Community Development Department
200 Lincoln Avenue
Salinas, CA 93901

RE: (Sonberg Ranch) Mountain Valley Residential application Precise Plan, General Plan Amendment, and Prezoning and concerns.

Dear Ms. Mahoney:

I have some very important concerns on this proposed project such as:

Items of concern in the Draft Environmental Impact Report concerning the Mountain Valley Project are:

① In section 2.1 loss of Prime farmland (1,200 acres).

② Page 2-3 ... "Projected 3.2 persons per unit project would have a buildout population of about 2,730 persons 853 single family dwelling units _ (You had better double or triple that amount! It will be more ACCURATE!) Show me 1 BLOCK of residential area in East Alisal that has only 3.2 persons per house. 1

③ Section 2.3. Lets be realistic! The amount of pop

(more than 3.2 persons per unit) if this is approved and developed would be using MORE WATER than designated in your draft EIR! (See paragraph above #3) Who is going to monitor the amount of people per dwelling and enforce it (3.2)? Who came up with the 3.2 persons per unit?

1 Cont'd.

④ Page 2-5.. Water consumption would be only 25% less than at the present? - (3.2 persons per unit) lets get real - double or triple the amount of residents = (MORE WATER CONSUMPTION than predicted!

⑤ Section 2.3, Page 2-4: Traffic is ALREADY a problem in E. Alisal - and 9,495 daily trips and about 945 pm. peak-hour trips are certainly NOT NEEDED to make more CONJESTION. This will certainly cause unavoidable IMPACTS and cumulative impacts/ responsive of public services/ and emergency will be effected!

2

⑥ Streets and intersections not addressed in your EIR... Williams Rd/ Bronda Rd, Williams Rd/ Freedom Pkwy, Williams Rd/ Old Stage Rd. and Alisal Rd.. I feel that the EIR is INCOMPLETE IN TRAFFIC STUDY - REMEMBER MORE PEOPLE (NOT MORE TRAFFIC!

(7) Traffic. have the traffic IMPACTS been considered by the Alisal Elementary School and the Alisal High School Safety for the children for crossing?

(8) 4.2.1a : U.S. 101 NB RAMPS / SANBORN RD - (already at LOS F). Not enough funding or contributions from this project substantial enough for a signal (Why didn't the William Ranch help contribute?)

(9) 4.2.1b Williams Rd / East Laurel Dr. (already at LOS F) would cause an increase in delay!

(10) 4.2.1c Williams Rd / Garner Ave. (already at LOS F would cause MORE DELAYS!

(11) 4.2.3 Sanborn Rd. / Alisal St. This intersection was degrade to LOS A to LOS E! No funding available for this mitigation measure.

2 Cont'd.

(12) 4.1.3 - Deep Concerns about Farming Verses Residen (Complaints) - There is NO BUFFER ZONE DESIGN WHY??

(13) 4.1.3b Proposed Agricultural use disclosure) note to homebuyers - prior to final home purchase What if vandalism is done by NON-RESIDEN to farmers? Or Visa Versa?

3

(14) 4.2.2 – Williams Rd/Boulevard A Project-generated traffic would result in unacceptable LOS (LOS F-p. peak hour) 4

(15) Public Services and Utilities —

4.3.3 The proposed project would INCREASE the demand for, and frequency of, fire protection services and emergency responses to the project site - plus the accidents caused in the effected Streets and intersections if this is built! (If this is approved - Fire Station #5 should be built 1ST not ~~in~~ in Phase 4!) 5

(16) 4.3.8 Why install a TEMPORARY (interim) storm water siltation/detention basin - why not fix it right to begin with? A Storm Water Detention Pond by the BARDIN SCHOOL (1.70 ACRES) isn't that dangerous for the children of Bardin Schl (Drowning, etc) 6

(17) 4.4.4a New Well (4 of them!) MORE Proposed wells in AREA! (East Salina) MOST SEVERLY OVERDRAFT. Will any of this water go to the water supply for the Williams Ranch? (They do not have enough water pressure and quality) if so 7

There is NO WATER SAVINGS! Between the Mountain Valley Ranch (with more people) and the Williams Ran (same problems) where is the water SAVINGS?? WHEN WILL THE OVERPUMPING STOP?? 7 Cont'd.

(18) 4.1.4 - Proposed Project would possibly expose residents and occupants with possible AIRCRAFT ACCIDENTS - This is a TRAFFIC PATTERN ZONE - (Expos of possible aircraft accidents!) Concerns of peoples Safety! 8

(19) 4.2. Traffic and Circulation - INCREASE U.S. 101 thru North Sanborn Rd. to LOSE suggests an ADDITION of a LANE to Freeway? Seem this project is not feasable cost wise! (And getting worse by the minute.) 9

(20) 4.25a & 4.2.7 Traffic Impacts are unavoidable in the beginning of construction, during, and when completed - (Plus the extra costs at oth streets - Highway 101 and all effected intersections plus the ones not addressed in this report - This project does not seem feasible costwise, consid all the impacts it would cause. 10

(21) Schools (512 NEW STUDENTS ? in the Elementary School District) and (235 NEW Stu in the Salinas High School Dist) Probably more! (not 3.2 per household) Schools are already OVERCROWDED - if approved New School Built by the Developer and Land Donated also before any occupancy of any houses - (Not last!) 11

(22) 4.3.6 New Water Demand for ALCO WATER SER There is proposed 4 new well sites on this property - this area (right across from the Williams Ranch) is the MOST SEVERELY OVER DRAFTED AREA in E. Alisal (Salinas) putting in more wells will certainly Not help matters! There will be no percolation into the ground - (except for reuse Sewer water taken elsewhere does not help mat 12 This area is BELOW SEA LEVEL - will this OVER PUMPING cause the sea water to come in faster ? (Salt water intrusion) Especially since and over pumping of 4 new wells (overdraft and again will this water supply the Williams Ranch ? (the last phase that was approved)

(23.) 4.4.1 I feel that this project would not decrease 34% in consumption - first there will be more people per dwelling (3.2?) and the Salmas Valley DOES HAVE A CONCERN OF OVER-DRAFTING and housing is a Permanent WATER-USE, where FARMING, if necessary, can lay fallow or be alternated by crops if there is a drought. We have had long Droughts in the past, has this been taken into consideration? Plus 4.4.1 says ON-SITE WATER - how much is going to supply the Williams Ranch - or something else? 12 Cont'd.

(24) What good does it do to put low-flo plumbing when there will be double or more people in the homes or residences? 13

(25.) 4.5.3, 4.5.4 AIR QUALITY - This size of project WOULD HAVE a cumulative impact on OUR AIR QUALITY and does NEED TO BE ADDRESSED! 14

(26). The loss of Farmland is the sad thing (God does not make any more farmland) including the 200 acres of this project plus the Williams Ranch, 466 acres 652 ACRES of LOST to RESIDENTIAL - GONE! 15

With all of the list of (26) items plus this Statement I OBJECT to any annexation of the S Corberg Ranch (36 acres) for residential, and to any approval or AMENDMENT to the General Plan particularly this "prime farmland" which is to be "PROTECTED"! I URGE everyone who will be voting on this land change use (and LA. to choose the "NO ALTERNATIVE" - Keep it farmla 16

Because of all the IMPACTS and EXTRA COSTS this project is NOT FEASIBLE COSTWISE - I support and would like to request the "NO ALTERNATIVE PROJECT.

Sincerely -

Annemarie Tresch
665 Middle Field Rd.
Salinas, CA. 93906

P.S. Yes, I do own property in E. Alisal and would impact me!

LETTER Q - Annemarie Tresch, July 4, 1998

Q-1) As stated on p. 3-5, the figure of 3.2 persons per unit is based on 1990 census data. As stated on p. 4.4-9, water use is estimated based on consumption data provided by Alco Water Service for the company's East Salinas service area. As noted on p. 4.4-10, the figure of 350 gallons per unit for all single-family dwellings was used (rather than a lower figure for new units only).

Q-2) Several intersection impacts noted by the commenter are addressed in the EIR, which notes, in Section 4.2 and in Chapter 6, that the project would result in increased delays for minor street turning movements at three unsignalized intersections that currently operate at an unacceptable level of service (LOS F): U.S. 101 Northbound Ramps / South Sanborn Road, Williams Road / East Laurel Drive, and Williams Road / Garner Avenue. These impacts would be considered significant and unavoidable. (Signalization would eliminate these impacts, but is not feasible because no funding source has been identified.)

Of the three intersections on Williams Road that were listed in the comment, one (Williams Road/Freedom Parkway) was included in the EIR analysis, one is addressed in the response to Comment D-1, p. 8-15, and one would not be measurably affected by the project. The Williams Road/Freedom Parkway intersection is included in Tables 4 and 5 of Section 4.2, Traffic and Circulation; it is listed last of the signalized intersections. The Williams Road/Boronda Road intersection and Williams Road/Old Stage Road intersections were not included in the EIR analysis as they are not anticipated to be adversely affected by the proposed project. This was confirmed in the response to Comment D-1, which discussed the Williams Road/Boronda Road intersection. Because of the location of the proposed project with respect to employment, shopping and school areas, it is anticipated that only a few, if any, weekday p.m. peak-hour project-generated vehicles would travel on the eastern segment of Williams Road between Boronda Road and Old Stage Road. Alisal Road intersections at Sanborn, at Williams/John and at Bardin Road are also analyzed in the EIR.

Concerning traffic safety impacts relative to Alisal Elementary School and Alisal High School, there is a pedestrian signal at Williams Road and Bardin Road and, as stated on p. 4.2-17, the project sponsor would install a traffic signal at the newly created intersection of Williams Road and Boulevard A. This signal, in combination with a sidewalk that would be installed by the sponsor as part of the improvements to the project site's Williams Road frontage, would allow for a safe crossing of Williams Road between the project site and both the elementary school and the high school across the street.

Regarding project contribution to cumulative unacceptable levels of service for which no mitigation is feasible, and regarding regional traffic impacts, please see also the response to Comment A-3, p. 8-5.

Q-3) As stated on p. 4.1-8, "The project would provide a buffer strip in the form of rights-of-way for Freedom Parkway and East Alisal Street." The agricultural disclosure notice described on p. 4.1-23 is intended to inform home buyers of the potential for noise, dust and odors that could occur as a result of normal agricultural operations. As stated on that page, "Trespassing onto agricultural fields, theft, vandalism, and damage by domestic animals may occur due to the proximity of adjacent agricultural lands causing a nuisance for farmers It should be noted, however, that the proposed project would essentially extend to the south and east what is now an urban-agricultural boundary at the northern and western project boundaries and, as such, would essentially maintain existing conditions." Therefore, the project would not substantially alter existing land use patterns, and would not be expected to substantially alter the relationship between existing adjacent land uses.

Q-4) Installation of a traffic signal at the Williams Road/Boulevard A intersection is identified as mitigation on p. 4.2-17. With this signal, the intersection would operate an acceptable level of service, as stated on p. 4.2-18.

Q-5) Mitigation Measure 4.3.3 would insure that Fire Station No. 5 is constructed prior to occupancy of the most distant home sites from the existing Fire Station No. 4, thereby ensuring that emergency response times would be adequate.

Q-6) As stated in Mitigation Measures 4.3.8a and 4.3.8b, both the temporary detention basin, and the permanent basin to be constructed later, would ensure that runoff from the site would not increase over the existing rate of runoff. As stated on p. 4.3-15, "The project sponsor would also develop a siltation/detention basin management plan to maintain adequate storage volume over the life of the project. . . . The management plan would propose a schedule and designate responsibility for anticipated maintenance." Further, the design of the detention basin shall be subject to approval by the City and the Monterey County Water Resources Agency, as stated on the same page. The siltation/detention basin would be designed to complement the open space opportunity it is intended to provide, while also ensuring public safety.

Q-7) Please see the response to Comment Q-12, below.

Q-8) The EIR includes an extensive discussion of Salinas Municipal Airport (pp. 4.1-17 - 21, and Impact 4.1-4, pp. 4.1-23 - 24). The discussion under Impact 4.1-4 states, assuming the highest airport activity level forecast in the 1993 Airport Master Plan, "the risk to residents and occupants of the project over the life of the project is negligible. Given a

national rate of about one fatality or serious injury to occupants of residences and other buildings per 38,000,000 GA operations annually, such accidents would occur about once every 200 years in the vicinity of Salinas Municipal Airport. The probable frequency of such accidents at the project site itself would be even less."

Q-9) Regarding regional traffic impacts, please see the response to Comment A-3, p. 8-5.

Q-10) Please see the response to Comment Q-2.

Q-11) Please see the response to Comment M-6, p. 8-51.

Q-12) Regarding the decrease in percolation to groundwater, the EIR states on p. 4.4-12 that "increased runoff and evaporation due to increased impervious surfaces would substantially reduce rainfall percolation to groundwater" following development of the project. However, the EIR found that, even accounting for the loss of existing percolation, water consumption at the site would be less than under existing conditions.

Regarding seawater intrusion into the Salinas Valley aquifer, the EIR states on p. 4.4-11, "The project would require an irretrievable commitment to continue groundwater extractions which would, in conjunction with other pumping, contribute to continued ground water overdrafting and seawater intrusion." The EIR continues, "Urban water demand is different from agricultural demand. Agricultural demand is seasonal and allows for some aquifer recovery or an increase in water levels during the rainy season and fallow periods, while urban demand occurs continuously throughout the year and does not allow for a period of aquifer or water level recovery. This phenomenon has been observed with existing groundwater pumping in the City of Salinas."

Regarding Williams Ranch, Alco Water Service, which would provide water service to the project site, also serves Williams Ranch. The four wells that Alco would install at the Mountain Valley site would be interconnected with Alco's existing distribution system. The new wells would draw water from the same aquifer that serves Williams Ranch and other areas of East Salinas.

Q-13) As stated on p. 4.4-7, the Salinas *Zoning Code* "requires that 'xeriscaping principles' be incorporated in all residential development. Those principles include use of native and low-water-use plants, low-flow sprinklers, timers on sprinkler systems, and a limit on turf (grass) area to no more than 20 percent of the total landscaped area." Such features result in the greatest potential to limit water consumption by future development.

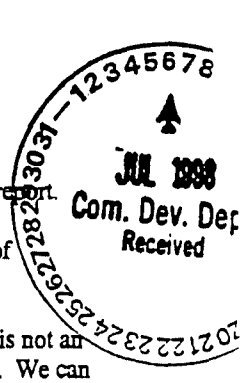
Q-14) As stated in the EIR (as revised), the project would not result in a significant effect on air quality, with the exception of construction, which would result in a significant, if temporary, unavoidable effect due to the potential for generation of fine particulates

(dust) in excess of the standard set by the Monterey Bay Unified Air Pollution Control District (see Impact 4.5.1, p. 4.5-9).

Q-15) The EIR identifies conversion of prime farmland to urban use as a significant, unavoidable impact (Impacts 4.1.1 and 4.1.2, pp. 4.1-21 - 22).

Q-16) The commenter's opposition to the project is noted, and will be considered by the decision-makers (Planning Commission, City Council, and Monterey County Local Agency Formation Commission) in their review of the project.

TO: COMMUNITY DEVELOPMENT



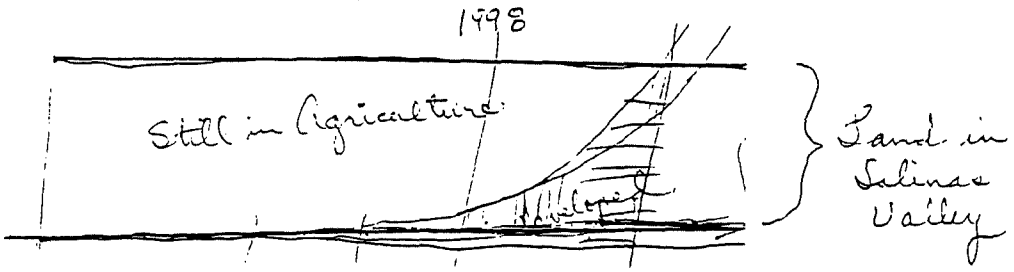
The Mountain Valley EIR is a very professional looking document and professionally sounding report.

Reading it from the standpoint of land use conversion, where does it talk about the "I" (impact) of **destroying** some of the richest dollar wise, and productive, food wise, land in the entire world?

Especially when the same project could be placed on rolling hills two or three miles away. This is not an **"either/or"** situation. Either we have housing — **or** — we save our green agriculture gold mine. We can have both! Housing & development goes on the surrounding hills and agriculture in the valley.

1. This project establishes a new trend. Official's 30 years ago said we couldn't leap frog to the hills. We must have a corridor! The corridor to the hills was to be between the proposed 101 bypass and Main St. A few years later they excused development southeast of that corridor by insisting the southeastern boundary of the corridor had to be Williams Road. This proposed development "Mountain Valley Project"; goes past that southern boundary of Williams Road heading straight down the valley. This is the beginning of San Jose. For many of us approval of this project says San Jose has been approved by our City **Fathers.** 1

2. Another vantage point is the **rate of growth.** Graph the growth over the past 40 years; extrapolate that curve into the future using the model say of the city of Milpitas and Freemont. This valley will be another San Jose in another 25 years.



2

3. Reading the EIR reminded me of going to the encyclopedia to get data about some country to write a social studies report: Population, land area, geography, climate, resources etc. Fine scholarly introductory remarks. They stated **what is.** This **project** proposes to mess with what is, and this **report** of that project is supposed to address the **impacts** of messing with what it is. This *land use* part of the EIR report doesn't even dance around the impacts of destroying this unique land.

4. How about jobs? How about the impact on the Salinas economy? Today and especially in the future. The report states the Land is Prime Class I and alludes to its value by stating its category as "Unique". That's a nice introductory statement but they seem scared to death to mention the dollars of produce it generates each year compared to the productivity of land elsewhere. Obviously the developer paid for this report. **This report is flawed!**

5. It's awesome! California produces 24% of the nations table food. A big part of that comes from these very Unique acres this project would destroy. Monterey Co. is 10 % of the state ag receipts and we do it on a little sliver of land called the Salinas Valley. The whole Unites States Ag output was 168 Billion dollars including Alaska and Hawaii. And we produced 2.2 billion of that on a little sliver of land only five miles wide where it enters the ocean and feathers out to almost nothing 45 miles upstream. 3

We have 52 crops grossing over 3000 dollars per acre. Most of the rest of the nation is limited to growing 5 or 6 agronomy crops that gross less than 500 dollars per acre. **There are few other places on the face of the earth where the *climate* is conducive to the commercial growing of cool season vegetable crops.**

Next Page

6. Most of us have traveled all over the state and have seen houses all over the hills.

The question is,

What would be lost if the developer moved his project to the hills?

There should be a pretty detailed long list to justify changing the zoning from *"agriculture only"* and cementing over a portion of this rich gold mine. What would this list look like? I can't think of a single thing to go on this list. Can You? And when you get a list here, the next question to ask of items on that list is, "Couldn't these items be obtained without destroying our God given rich land?

1.
2.
3.
4.
5.
6.

4

On the other hand if the development was directed to the hills:

Lumber yards would still sell lumber——— And the some farm workers wouldn't lose their jobs.
Painters could still paint———————— And lettuce trucks would still bring money to town.
Cable TV would still make hookups———— And farm workers children would still buy shirts.
Car dealers would still sell cars————— And packing sheds would still pack.
School teachers could still ply their skills—— And ag production wouldn't suffer.
Newspaper boys would still deliver papers—And our great grandchildren would etc etc

Statesmen take the long view. Politicians take the short view.

Robert Kennedy
845 LOS PALOS

PRIME versus UNIQUE (SUPER PRIME) Economically

The USDA Land Capability Classification system was established before most of us were born. Originally it grouped lands, primarily on the basis of physical and chemical properties into one of eight classes. Class I land came to be associated with the word PRIME. Class I land had to have an unimpeded profile greater than 40 inches deep.

Certain crops, many of them very high value crops, could successfully be grown on relatively shallow soils. Lettuce as an example, even though it is a tap-rooted plant, is only in the ground for 60 to 90 days. This showed a weakness in the above early system of evaluating soils only on their physical and chemical characteristics. So, the Land Use Capability Classification has been fine tuned and amended many times over the years.

One of the major changes was to add additional categories. **U - UNIQUE FARMLANDS** was added to reflect the above-mentioned **economic** disparity.

Quoting from USDA NRCS CA506-18(2) (II-V (NCMP), SUPPLEMENT CA-4, February 1981)

U – UNIQUE Farmlands

Unique Farmland is land other than 'Prime' and 'Additional Farmland of Statewide Importance', that is currently used for the production of specific high value food and fiber crops.

These lands are currently producing the following crops of very high economic importance to California as identified in the annual report of the Department of Food and Agriculture.

Fruit Orchard Crops

Apples
Apricots
Avocados
Cherries
Citrus
Dates
Figs
Nectarines
Olives
Peaches
Pears
Persimmons
Plums
Pomegranates
Prunes

Vegetable Crops

Artichokes
Asparagus
Beans (Dry & Snap)
Broccoli
Brussels Spts
Cabbage
Carrots
Cauliflower
Celery
Cucumber
Garlic
Lettuce
Melons
Onions
Peas
Peppers
Potatoes
Spinach
Tomatoes

Tree Nuts

Almonds
Walnuts
Pistachio

Vineyard & Caneberries

Bushberries
Grapes
Kiwi Fruit

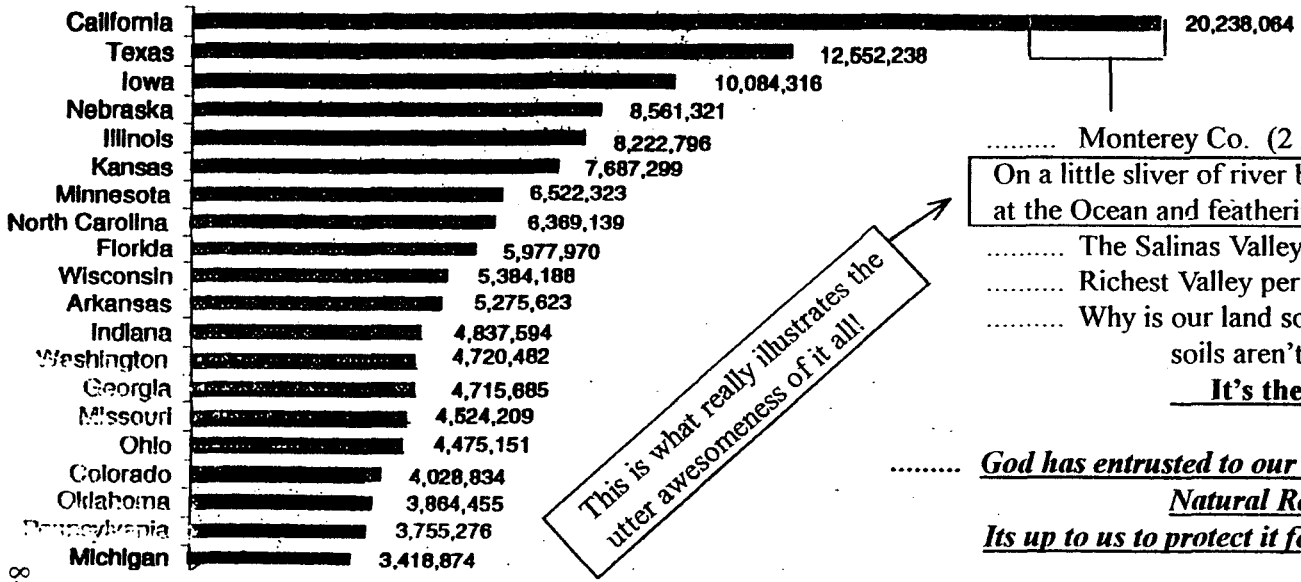
Irrigated Field Crops

Alfalfa
Barley
Corn
Cotton
Oats
Rice
Safflower
Sorghum
Sugarbeets
Wheat

Specialties (not elsewhere classified)

Cut Flowers
Hops
Ladino Clover Seed
Nursery Products
Strawberries

Figure 1-3.
Cash Receipts from Farming in 1994 (1,000 Dollars)
(1994 U.S. Total Cash Receipts from Farm Marketings: $179,669 Million)



times 1,000 equals BILLIONS

This is what really illustrates the utter awesomeness of it all!

..... Monterey Co. (2 Billion - 10 % of State)

On a little sliver of river bottom land only 5 miles wide at the Ocean and feathering out to nothing 50 miles upstream.

..... The Salinas Valley -- ***Green Gold.***

..... Richest Valley per capita in World.

..... Why is our land so productive when most of our soils aren't Prime Class I?

It's the Climate!

..... ***God has entrusted to our stewardship this awesome Natural Resource***

Its up to us to protect it for future generations.

8-80

Source: USDA Economic Research Servive Computer File.

..... California produces 24% of the North American Continent's table food on only 3% of the nations cultivated crop land.

..... Remember during Desert Storm, we heard frequently that AGRICULTURE is America's Oil.!

If a developer proposed cementing over one of Iraq's oil wells to build a housing development. What do you suppose Sadaam's answer would be? The answer is so obvious and simple! He would say, "NO WAY!" And he would come right back with a better solution. Yes, "we need the housing, you can build it, but build it around the oil wells----we must not destroy our black gold mines, our nations lifeblood".

---------- "We can have our cake and eat it too." ----------

That's what our supervisors and council members should be saying: Keep off our green gold mines. Put your development a couple miles away

We must not be destroyers of God's greatest asset to us. We are to be stewards and protectors.

---------- "We can have our cake and eat it too." ----------

----------Only 15% of Monterey county is **UNIQUE** vegetable land. The rest can be used for other needs. ----------

Super Prime - (Economically)

LETTER R - Robert Kennedy, undated

R-1) As stated on p. 4.1-22 and illustrated in Figure 5, p. 4.1-6, the Salinas *General Plan* states that no development will occur beyond the southern boundary of the project site (south of a line parallel to Williams Road).

R-2) These comment do not address the adequacy of the EIR.

R-3) CEQA does not require analysis of economic effects of a project, except to the extent that economic effects may be used to trace a chain of cause and effect leading to a physical impact. Such analysis is not necessary here, as the EIR concludes that conversion of prime farmland to urban use would be a significant, unavoidable impact (Impacts 4.1.1 and 4.1.2, pp. 4.1-21 - 22)

R-4) Please see the response to Comment I-32, p. 8-35.

STAFF-INITIATED TEXT CHANGES AND ERRATA

The following changes are made to the DEIR text to make minor corrections to the text or to account for new information received since publication of the DEIR that does not result in any new or more substantial impacts (revised and new language underlined (except where the entire change involves new text); deleted language shown in ~~strikethrough~~).

On p. 2-2, the eighth sentence of the first paragraph is revised as follows:

> The remaining park improvements would be the responsibility of the City.

A similar change is made in the second sentence on p. 3-5.

On p. 2-7 and 2-8 (in Summary Table 1), the level of significance after mitigation for Impacts 4.2.1a, 4.2.1b, and 4.2.1c is restated at "Unavoidable significant cumulative impact" to clarify that there would not be a project-specific significant impact at the affected intersections.-

On p. 3-2, the first full sentence of the first paragraph is revised as follows:

> The site is largely within the City's Sphere of Influence and Urban Transition Area, meaning 160 acres of the site is designated by LAFCO for eventual urban development.

On p. 4.1-1 and 4.3-2, the text is revised to state that the population of the City of Salinas is 123,300 (instead of 123,000).

Mitigation Measure 4.1.3b, p. 4.1-23, is revised as follows (the same change is made in the summary table, Table 1):

> **4.1.3b The proposed agricultural use disclosure notice shall be provided to prospective home site purchasers prior to closing of home purchase; and shall include buyer(s) signature. Form and content of said notice shall be subject to approval by the Community Development Department prior to approval of the first final subdivision map, and each said notice shall be recorded. In addition, a notice shall be recorded for the entire project site.**

On p. 4.2-4, a page reference is added for Table 4 near the end of the large paragraph in the center of the page.

On p. 4.2-4, a reference to footnote 2 is added to the last paragraph, concerning *General Plan* Policy 5.1.B.

On p. 4.2-6, a new fourth sentence is added to the second paragraph, as follows:

> Del Monte Avenue would be extended south to meet at a "T" intersection with Argentine Drive within the project site.

On p. 4.3-2, the word "of" is deleted from the first line of the last paragraph.

On p. 4.3-5, the first paragraph is revised as follows to clarify the funding status of the East Alisal Street relief main:

> and Countryside Drive, which drain into the 15-inch main. The 15-inch main in East Alisal Street is currently operating over capacity during periods of wet-weather flow. The City's sewage and drainage master plan identified a need to expand capacity along East Alisal Street (Brown and Caldwell, 1992). ~~No funding source has been identified for construction of a relief main to provide the needed capacity.~~ The relief main is included in the City's current six-year Capital Improvement Program; however, no funds have yet been allocated. Other identified "downstream" improvements needed to accommodate new development in the eastern portion of Salinas include the addition of 24-inch collector pipes along South Wood Street and Los Palos Drive, as well as expansion of the Kipling Street collector pipe (currently under construction) (Hausrath, 1998).

On pp. 4.3-5, 4.3-6, and 4.3-16, the name of the joint powers authority that operates the Crazy Horse Landfill is corrected to read "Salinas Valley ~~Landfill Joint Powers~~ Solid Waste Authority."

On p. 4.3-10, the text following mitigation measure 4.3.3 is revised as follows:

> Construction of Fire Station No. 5 shall be completed prior to occupancy of units in Mountain Valley Phases 4 through 6, which would be the most distant from the existing Station No. 4 (more than 1.5 miles). This would ensure that adequate response times could be maintained to the project site, and would reduce the impact to a less-than-significant level.

On p. 4.3-13, Mitigation Measure 4.3.6 is revised as follows (the same change is made in the summary table, Table 1):

> **4.3.6 None required. However, as part of the Tentative Map process, the City would require that the project applicant provide the proposed four well sites of sufficient size to meet Alco Water Service specifications. The project sponsor would be ultimately responsible for construction of the wells to ensure adequate water service is available to the project site.**

On p. 4.4-7, the fifth paragraph is revised to refer to Division 17 (instead of Division 14) of the Salinas Zoning Code.

On p. 4.7-2, the last paragraph prior to the heading "Existing Noise Sources and Levels" is revised as follows:

> In addition to Noise Element policies, the City also has two Noise Ordinances, Chapter 21A and Chapter 37 of the Salinas Municipal Code. Chapter 21A limits construction noise to the hours of 7:00 a.m. to 9:00 p.m. Chapter 37, the Zoning Code, contains additional noise regulations.

9.0 APPENDICES

A. WATER USE CONSULTATION

B. TRAFFIC AND CIRCULATION

C. AIR QUALITY DATA

D. HEALTH AND SAFETY LAWS AND REGULATIONS

APPENDIX A: WATER USE CONSULTATION

City of Salinas
COMMUNITY DEVELOPMENT DEPARTMENT • 200 Lincoln Avenue • Salinas, California 93901 • (408) 758-7206

March 23, 1998

Tom Adcock
Alco Water Services
249 Williams Road
Salinas, Ca 93905

SUBJECT: ASSESSMENT OF AVAILABILITY OF WATER; MOUNTAIN VALLEY (SCONBERG RANCH)

Dear Mr. Adcock:

As briefly discussed last week, I am forwarding this request for an assessment pursuant to California Water Code Section 10910, et. seq. (code section attached). In accordance with this section, the City of Salinas requests that Alco Water Services assess the following:

a. Whether the projected water demand associated with the proposed Mountain Valley residential project was included as part of your most recently adopted urban water management plan; and

b. Whether Alco's total projected water supplies available during normal, single-dry, and multiple-dry water years included in the 20-year projection contained in the urban water management plan will meet the projected water demand associated with the proposed Mountain Valley project, in addition to Alco water system's existing and planned future uses.

If the assessment determines that supplies are, or will be, insufficient, additional information is required to be provided by Alco to the City pursuant to Section 10911(a).

Please feel free to call with any questions. I have also enclosed the most recent version of the Mountain Valley Precise Plan for your reference.

Sincerely,

Jenny Mahoney

JENNY MAHONEY
Senior Planner

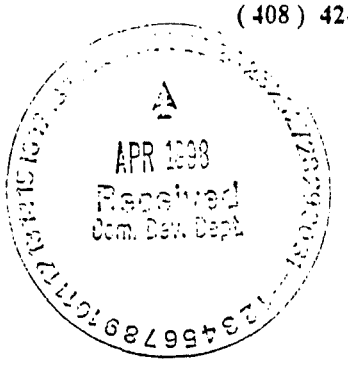
Enclosures

ALISAL WATER CORPORATION

A California Corporation
dba ALCO WATER SERVICE

Robert T. Adcock
President

249 Williams Road
Salinas, Ca. 93905
(408) 424 - 0441



April 17, 1998

Ms. Jenny Mahoney
Senior Planner
City of Salinas
200 Lincoln Avenue
Salinas, CA 93901

Re: ASSESSMENT OF AVAILABILITY OF WATER
MOUNTAIN VALLEY DEVELOPMENT

Dear Ms. Mahoney:

This letter is in response to your letter of March 23, 1998, requesting information from Alco on the availability of water to the proposed Mountain Valley development.

The two questions posed to Alco and our response is:

A. Whether the projected water demand associated with the proposed Mountain Valley residential project was included as part of your most recently adopted urban water management plan.

Response: Yes. The projected water demand for the Mountain Valley Project was included as part of our most recent urban water management plan. A copy is included for your files.

B. Whether Alco's total projected water supplies available during normal, single-dry, and multiple-dry water years included in the 20 year projection contained in the urban water management plan will meet the projected water demand associated with the proposed Mountain Valley project, in addition to Alco water systems's existing and planned future uses.

Response: Yes. See section in urban water management plan discussing Alco's projections and incorporating into these projections, Alco's actual experience with its well production during the most recent multiple-dry years which occurred in the early 1990's.

Alco's most recent urban water management plan provides for the acquisition of four well sites in this project, as well as the completion of four production wells scheduled as follows:

1. Well #1 should be on line prior to the issuance of the first certificate of occupancy in Phase 1.

2. Wells #2 and 3 should be on line prior to the issuance of the first certificate of occupancy in Phase 4.

3. Well #4 should be on line prior to the issuance of the first certificate of occupancy in Phase 5.

Alco's urban water management plan assessment demonstrates that its total projected water supply available during normal, single-dry and multiple-dry water years will meet the projected water demand associated with the proposed project. Incorporated in Alco's projections is the addition of the four pumping stations discussed above. The well sites, comprising approximately 20,000 square feet of net usable space, will be purchased from the developer pursuant to Main Extension Rule 15. Wells 1, 2 and 3 will be drilled to the specification of Alco Water and shall be the financial responsibility of the developer, including all related facilities such as pump, motor, pressure tank, site improvements, i.e., sound wall, gated entrance, paved driveway approach, and electrical power. Alco shall be responsible for the purchase of the sites from the developer, the diesel powered generator and the pumphouse at each site.

Alco shall be responsible for the drilling of the well and any other related equipment at the 4th well site, however, the developer shall be responsible to provide the electrical power to the site and the construction of the sound wall.

Alco estimates the total cost of each well and related facilities to be provided by the developer to be approximately $185,000 per site at sites 1, 2, and 3, and approximately $50,000 at site 4. All of the costs associated with the Mountain Valley Project, including on-site, off-site and source facilities, will be detailed in the Main Extension contract executed by the parties.

An amended Water Supply Permit will be obtained from the Department of Health Services for the addition of these new water sources. All building permits required will be obtained from the City of Salinas. The well driller will be responsible for obtaining a well drilling permit for each well from the County of Monterey.

The estimated time schedule for the completion of each well, including the permitting process, drilling of the well, installation of the pump and motor, electric power at the site, and the construction of the pumphouse is 6-7 months, barring any unanticipated problems, such as weather, labor strikes, etc.

I have included all of the information outlined above, which answers the requirements of California Code Section 10911, even though Alco's urban water management plan included the projected water demand associated with this project. The installation of the water facilities that are included in the Mountain Valley project are also a part of Alco's long range projections in its water management plan.

In closing, I would like to bring to your attention that my review of the Draft Precise Plan for Mountain Valley revealed several inaccuracies in sections relating to water issues. I feel these should be corrected prior to the finalization of the Precise Plan. The inaccurate statements deal primarily with the well lots that Alco will be purchasing from the developer. At the bottom of page 13 and continuing onto page 14, the plan makes reference to the reversion of the well sites to the property owners for residential use, in the event that the well sites have not been used for water facilities within five years after completion of the Mountain Valley project. Alco could not and would not agree to such a condition, because to do so would be in conflict with Public Utility Code Section 851.

Alco will be purchasing these well lots from the developer under the terms of a Main Extension agreement, and will be acquiring fee title to the sites. Once they have been purchased by the utility, in fee title, the utility is prohibited, by statute, from selling, mortgaging, encumbering or disposing in any manner, of utility property, without the authorization of the California Public Utilities Commission. (PU Code 851)

This same language is also contained on page 56, Section 2.6.1, Water System, and page 74, Table 5. I would appreciate your noting these corrections prior to the finalization of the Precise Plan.

If you have any further questions about the water supply to this project, please contact me at 424-0441.

Sincerely,

Thomas R. Adcock
Vice-President

cc: Bill Shaw

enclosures

URBAN WATER MANAGEMENT PLAN

ALISAL WATER CORPORATION

A California Corporation
dba ALCO WATER SERVICE

249 Williams Road
Salinas, CA 93905
(408) 424 - 0441

Robert T. Adcock President
Thomas R. Adcock Vice President

SECTION I
Plan Adoption and Planning Coordination

Plan Adoption

Alisal Water Corporation, dba Alco Water Service (Alco), prepared this plan in compliance with the requirements of California Water Code Division 6, Part 2.6 (Urban Water Management Planning). The plan was adopted by the Board members of Alco at a regularly scheduled Board meeting and was submitted to the California Department of Water Resources (DWR) within thirty (30) days of Board approval.

Planning Coordination

Alco has met with and coordinated the development of this plan with its consulting engineer and local offices including fire, health, public works, planning and water conservation agencies and other water utility companies.

SECTION II
Alco Water Service - History and Water Facilities

Alisal Water Corporation, dba Alco Water Service (Alco), is a privately owned public utility that began serving water in 1932 in an unincorporated area commonly referred to as the Alisal. This area was annexed to the City of Salinas in the early 1960's. With the incorporation of the Alisal area, all water served within the city boundaries is provided by public utility water companies.

Alco is governed by the California Public Utilities Commission (PUC), which regulates water rates and quality of service. Water quality is regulated by the California Department of Health Services, Public Water Branch and the Monterey County Department of Environmental Health, Environmental Health Division.

Population and Service Area

Alco serves a population of approximately 27,000, which includes 5,463 metered connections and 184 unmetered connections, within its service area, outlined in Map A, attached. The service area, approximately 6 square miles, encompasses the northeast area of Salinas in the County of Monterey. Alco's service area comprises mainly residential and agricultural areas with a development expansion potential in the northeast portion. The western boundary adjoins the service area of California Water Service Company (Cal Water).

Geography and Climate

The geography and climate in Salinas is moderate and conducive to agriculture, primarily lettuce and

strawberry crops and floriculture. Summer months are mild and fairly dry and winter months are mild and cool with an annual precipitation between the months of November and March.

The groundwater in the Salinas area is obtained from the Salinas Groundwater Basin's two subareas, the Pressure Area and the East Side Area. The Pressure Area extends from Monterey Bay to Gonzales. The East Side Area lies between the Pressure Area and the Gabilan Range. These subareas contain aquifers of 180, 400 and 700 feet in depth. Alco Service area straddles these two subareas of the Salinas Groundwater Basin.

Water Sources and Facilities

All water supplied by Alco to its customers comes from groundwater sources. Alco currently has eight water wells in service. The locations of these eight wells are dispersed throughout Alco's service area, see locations indicated on the attached service area map, Map A. In addition to the eight sources, Alco has a total of 205,000 gallons of water storage capacity, comprised of three 50,000 gallon storage tanks and six hydropneumatic tanks located at various well sites.

In 1989, following the Loma Prieta earthquake, Alco installed Onan automatic power transfer switch devices at its largest production well sites. In the event of a power failure, these automatic switch devices permit the automatic transfer of power from PG&E to Alco's diesel-powered standby generators. Alco personnel routinely inspect and operate the automatic switch devices to assure proper functioning of the standby generator system in an emergency situation.

Alco's distribution system contains a total of approximately 400,000 feet of distribution pipeline ranging in size from 3 to 24-inch in diameter. The distribution mains are primarily Transite or C-900 PVC pipe. For purposes of mutual aid in the event of emergencies, it is possible to establish a cross-connection between the distribution systems of Cal Water and Alco. This type of cross-connection occurred in 1989 after the Loma Prieta earthquake.

SECTION III
Past, Current and Projected Water Supply

All of the water supplied by Alco Water Service is drawn from the Salinas Groundwater Basin by its water supply sources. These sources have always been groundwater wells which have been supplemented, enhanced or replaced over the years.

The current eight wells are distributed throughout Alco's service area and have a capacity range of 800 to 4,000 gallons per minute (GPM) with a total capacity of 21,300 GPM, see Table S. The water produced by each source is monitored for quality on a regular basis and is within the California Department of Health Services acceptable drinking water standards. In 1997, Alco extracted approximately 1325.5 MG, or 4,067.8 acre-feet per year (AFY). Currently, there is a recycled water use program in effect on the Monterey Peninsula. This program reduces water used from the Salinas Groundwater Basin for agricultural purposes by approximately 30,000 AFY.

There are currently seven development projects which have been approved or are in the EIR process within the Alco service area boundaries. These projects are expected to be fully completed by the year 2002. Alco plans to drill seven additional water supply wells between now and the year 2002 to increase its total capacity.

Based on the capacity of the current eight water wells, which draw from the same aquifers the additional wells will draw from, the projected capacities for the new wells will be a minimum of 1,000 GPM, see Table C. In addition to the existing and projected water wells, Alco maintains approximately 10 well lots, dispersed throughout its service area, which do not currently have active wells. In the event an existing or proposed well proves insufficient, ie, the water did not meet California Health Standards, the well's production diminished or ceased, or the population growth pattern increased at a greater rate than projected, these 10 well lots would be available to drill additional sources.

Alco's groundwater wells have proven to be a reliable source of water for its service area. During the major droughts of 1978-1979 and the late 1980's/early 1990's, Alco's water capacity did not diminish and the water wells continued to constitute a reliable supply during single and multiple drought years. There was no significant impact on the supply of water contained in the aquifers of the Salinas Groundwater Basin. Alco's water supply and distribution system is not reliant upon any surface water or storage water for water supply. It is projected that the groundwater supply will continue to be reliable in any drought situation in the future.

Financing of Water System Facilities

Alco Water Service is a public utility regulated by the California Public Utilities Commission. Alco's rate and rate structure are reviewed and approved by the PUC, which also reviews and approves for reasonableness monies spent on capital improvements.

Facilities installed to provide service to new developments are covered by a Rule 15 Main Extension Agreement, a standard contract approved by the PUC. This contract allows the utility to obtain the financing from developers in order to provide service to their projects. The PUC is the final authority on all agreements made in the Main Extension contract.

Water system improvements and additional facilities that are added by the utility for purposes of existing water service are investments made by the public utility. The PUC allows public utilities to invest funds in capital improvements and attain a rate of return on these investments through rates paid by the customers. The PUC recognizes that water utilities are required to maintain certain service standards, established by both the PUC and the DHS, in water production, system pressure and water quality. Through its approval process, the PUC allows the utility to obtain the funds to maintain these service standards.

SECTION IV
Past, Current and Projected Water Use

In the past, Alco has not differentiated water consumption by customer sector. Additionally, multi-family residential connections have been traditionally master-metered. In more recent years, in order

to improve water conservation efforts as well as to better monitor individual water consumption for purposes of high demand audits and leak detection, multi-family residential connections have been individually metered. Individual metering also allows a more accurate demand projection for multi-family residential as demand can be calculated similarly to single-family residential connections. See Table D for information on annual water demand.

Although it can be seen that existing water supplies have the ability to meet the existing demand as well as the projected future demand on an average annual basis, it must be noted that our system is a "pressure system" with a negligible amount of storage. Therefore, to accurately forecast the instantaneous water demand during peak use, we must calculate using peaking factors along with the average annual demand. These factors are peak month factor (1.35), peak day factor (2.00), peak hour factor (1.5). Table P shows the projected peak hourly water demand to the year 2020 versus projected peak production.

Since approximately 1990, all new connections are required to utilize water-use efficient plumbing fixtures. Additionally, all new developments in areas previously used for agricultural purposes are required by the City of Salinas to utilize a smaller percentage of water which was used on the same land by the agricultural user. The conversion of agricultural land to residential through new developments will therefore yield a net savings of water usage in new development areas.

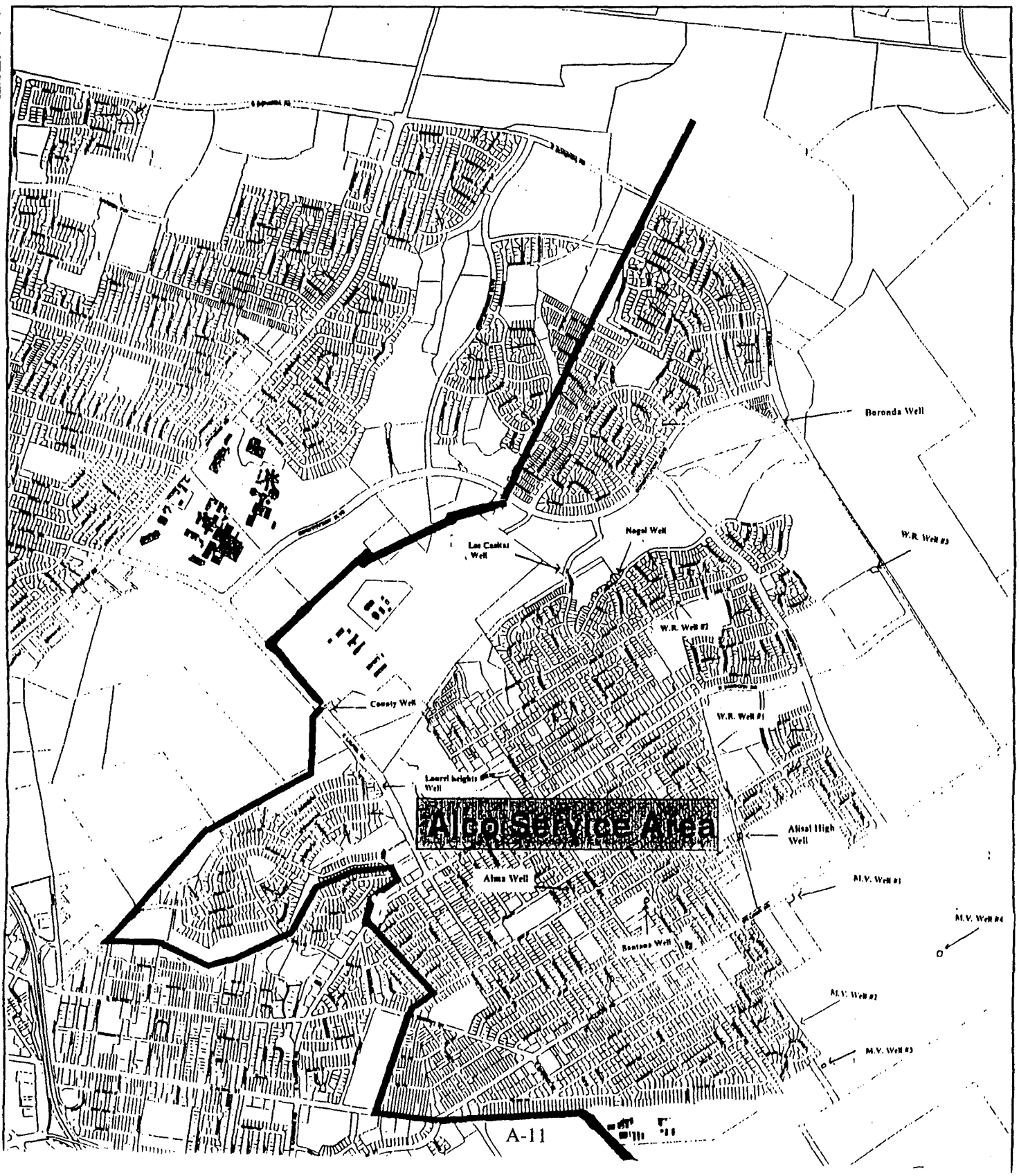
From approximately 1998 to 2002, there will be seven development projects which will add 2,839 total service connections to Alco's existing service area. The projected use for these developments is illustrated in Table D.

SECTION V
Water Conservation Programs

Alco Water Service maintains a public education and a leak inspection program. A part of its public awareness program for water conservation is the use of printed materials used as inserts in Alco's monthly water billing to its customers. These types of conservation education materials are also distributed and available to customers at the Alco office.

Alco also participates in water education and conservation programs conducted through the local school district. Educational materials, including teacher aids, are provided for use in the classroom to increase student awareness regarding the importance of the wise use of water as a valuable natural resource. Alco personnel are also available to speak to students about water issues and have visited classrooms in the local high school and elementary school.

Alco's leak inspection program is a direct response to customer inquiries regarding high usage in their homes. An Alco representative visits residences and conducts an extensive leak survey and discusses methods of improvement with the resident. This program has been quite effective and Alco will continue this form of public education in the future.



Alco Service Area

TABLE C
Alco Water Service
Projected Annual Water Production Capacity 1998 to 2020

Wells	1998		1999		2000		2001		2002		2005		2010		2015		2020	
	MG/Yr	GPM	MG/Yr	GPM	MG/Yr	GPM	MG/Yr	GPM	MG/Yr	GPM	MG/Yr	GPM	MG/Yr	GPM	MG/Yr	GPM	MG/Yr	GPM
Alisal High	1156.3	2200	1156.3	2200	1156.3	2200	1156.3	2200	1156.3	2200	1156.3	2200	1156.3	2200	1156.3	2200	1156.3	2200
Alma	210.3	400	210.3	400	210.3	400	210.3	400	210.3	400	210.3	400	210.3	400	210.3	400	210.3	400
Boronda	788.4	1500	788.4	1500	788.4	1500	788.4	1500	788.4	1500	788.4	1500	788.4	1500	788.4	1500	788.4	1500
County	1156.3	2200	1314	2500	1314	2500	1314	2500	1314	2500	1314	2500	1314	2500	1314	2500	1314	2500
Las Casitas	1093.2	2080	1156.3	2200	1156.3	2200	1156.3	2200	1156.3	2200	1156.3	2200	1156.3	2200	1156.3	2200	1156.3	2200
Laurel Heights	262.8	500	525.6	1000	525.6	1000	525.6	1000	525.6	1000	525.6	1000	525.6	1000	525.6	1000	525.6	1000
Nogal	956.6	1820	1051.2	2000	1051.2	2000	1051.2	2000	1051.2	2000	1051.2	2000	1051.2	2000	1051.2	2000	1051.2	2000
Santana	535	1018	535	1018	535	1018	535	1018	535	1018	535	1018	535	1018	535	1018	535	1018
MV #1 *	-	-	525.6	1000	525.6	1000	525.6	1000	525.6	1000	525.6	1000	525.6	1000	525.6	1000	525.6	1000
MV #2 *	-	-	-	-	525.6	1000	525.6	1000	525.6	1000	525.6	1000	525.6	1000	525.6	1000	525.6	1000
MV#3 *	-	-	-	-	525.6	1000	525.6	1000	525.6	1000	525.6	1000	525.6	1000	525.6	1000	525.6	1000
MV#4 *	-	-	-	-	-	-	-	-	525.6	1000	525.6	1000	525.6	1000	525.6	1000	525.6	1000
WR #1 *	525.6	1000	525.6	1000	525.6	1000	525.6	1000	525.6	1000	525.6	1000	525.6	1000	525.6	1000	525.6	1000
WR #2 *	-	-	525.6	1000	525.6	1000	525.6	1000	525.6	1000	525.6	1000	525.6	1000	525.6	1000	525.6	1000
WR #3 *	-	-	-	-	-	-	525.6	1000	525.6	1000	525.6	1000	525.6	1000	525.6	1000	525.6	1000
Totals	**6,684.5**	**12,718**	**8,313.9**	**15,818**	**9,890.7**	**17,818**	**10,416.3**	**18,818**	**10,941.9**	**19,818**	**10,941.9**	**19,818**	**10,941.9**	**19,818**	**10,941.9**	**19,818**	**10,941.9**	**19,818**

* These are the projected wells to meet growth demand.

TABLE D
Alco Water Service
Annual Metered Water Demand 1993 to 2020
Customer Sectors in Million Gallons (MG)

Customer Sectors	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2005	2010	2015	2020
Single Family Residential					789.7	834.3	919.8	973.9	1005.2	1016.4	1078.1	1194.0	1328.4	1481.9
Multi Family Residential*					369.9	369.9	412.6	424.5	436.4	436.4	443.5	455.4	467.3	479.2
Commercial/ Institutional					82.5	90.6	95.5	104.4	108.4	108.4	112.4	120.5	128.6	136.7
Irrigation					23.0	26.3	30.4	32.5	33.7	33.7	37.4	43.5	49.7	55.9
Totals	1118.4	1032	1206.2	1210.1	1265.1	1321.1	1458.3	1535.3	1594.9	1594.9	1671.4	1813.4	1974.0	2153.7

Please note: Prior to 1997, there has been no separation of customer sectors.

* Multi-family residential connections have historically been master-metered. All new connections in multi-family residential dwellings are now individually metered.

TABLE P Alco Water Service Projected Peak Hourly Water Demand and Projected Peak Hourly Production		
Year	**Demand (GPM)**	**Supply (GPM)***
1993	8738	8,778
1994	8063	8,778
1995	9424	10,598
1996	9454	10,598
1997	9884	10,598
1998	10,321	12,830
1999	11,393	15,930
2000	11,996	17,930
2001	12,370	18,930
2002	12,460	19,930
2005	13,058	19,930
2010	14,167	19,930
2015	16,422	19,930
2020	16,826	19,930

* The figure for Supply includes 112 GPM obtained from storage facilities.

TABLE S
Alco Water Service
Annual Water Supply
Existing Wells

Existing Wells	Well Capacity		Existing Pump Capacity		Additional Pump Capacity*	
	GPM	MG/Yr	GPM	MG/Yr	GPM	MG/Yr
Alisal High Well	4,000	2,102.4	2,200	1,156.3	1,800	946.1
Alma Well	800	420.5	400	210.3	400	210.2
Boronda Well	2,500	1,314	1,500	788.4	1,000	525.6
County Well	3,500	1,839.6	2,200	1,156.3	1,300	683.3
Las Casitas Well	4,000	2,102.4	2,080	1,093.2	1,920	1,009.2
Laurel Heights Well	1,000	525.6	500	262.8	500	262.8
Nogal Well	3,500	1,839.6	1,820	956.6	1,680	883
Santana Well	2,500	1,314	1,018	535	1,482	779
Totals	**21,800**	**11,458**	**11,718**	**6,159.1**	**10,082**	**5,298.9**

* Additional pump capacity can be achieved by replacing current pumps with higher production pumps.

APPENDIX B: TRAFFIC AND CIRCULATION

Intersection capacity (level of service) calculation sheets are included in a separate technical appendix, available for review at the Salinas Community Development Department, 200 Lincoln Avenue.

TABLE B-1: LEVEL OF SERVICE CRITERIA FOR SIGNALIZED INTERSECTIONS

Level of Service	Typical Operating Characteristics	Volume-to Capacity (v/c) Ratio	Average Stopped Delay
A	Level of Service A describes a condition where the approach to an intersection appear quite open and turning movements are made easily. Little or no delay is experienced. No vehicles wait longer than one red traffic signal indication. Most vehicles do not stop at all. Short cycle lengths may also contribute to low delay. The traffic operation can generally be described as excellent.	0.00-0.60	0.0 - 5.0
B	Level of Service B describes a condition where the approach to an intersection is occasionally fully utilized and some delays may be encountered, but delays are generally low. This generally occurs with good progression and/or short cycle lengths. Many drivers begin to feel somewhat restricted within groups of vehicles. The traffic operation can generally be described as very good.	0.61-0.70	5.1 - 15.0
C	Level of Service C describes a condition where the approach to an intersection is often fully utilized and back-ups may occur behind turning vehicles, with moderate delays. These higher delays may result from fair progression and/or longer cycle lengths. Most drivers feel somewhat restricted, but not objectionably so. The driver occasionally may have to wait more than one red traffic signal indication. The traffic operation can generally be described as good.	0.71-0.80	15.1-25.0
D	Level of Service D describes a condition of increasing restriction causing substantial delays and queues of vehicles on approaches to the intersection during short times within the peak period. Congestion is more noticeable. Longer delays may result from some combination of unfavorable progression, long cycle lengths, or high volume-to-capacity ratios. However, there are enough signal cycles with lower demand such that queues are periodically cleared, thus preventing excessive back-ups. The traffic operation can generally be described as fair.	0.81-0.90	25.1-40.0
E	Capacity occurs at Level of Service E, when operations are measured using volume-to-capacity ratios. LOS E represents the most vehicles an intersection can accommodate. At capacity there may be long queues of vehicles waiting upstream of the intersection and vehicles may be delayed up to several signal cycles. LOS E also indicates operations at the limit of acceptable delay, generally indicating poor progression, long cycle lengths, and high volume-to-capacity ratios. Vehicles may be delayed through several signal cycles. The traffic operation can generally be described as poor.	0.91-1.00	40.1-60.0
F	Level of Service F represents a jammed condition, with delay unacceptable to most drivers. This condition often occurs when arrival flow rates exceed the capacity of the intersection. Back-ups from locations downstream or on the cross street may restrict or prevent movement of vehicles out of the approach under consideration. Hence, volumes of vehicles passing through the intersection vary from signal cycle to signal cycle. Because of the jammed condition, this volume would be less than capacity. Poor progression and long cycle lengths may also contribute to such delay levels.	1.00+	60.0+

SOURCE: Environmental Science Associates, Inc. from *Transportation Research Circular No. 212*, Transportation Research Board, 1980; and Special Report 209, Transportation Research Board, updated October 1994.

TABLE B-2: LEVEL OF SERVICE CRITERIA FOR UNSIGNALIZED INTERSECTIONS, WITH CONTROL ON MINOR STREET ONLY

Level of Service	Typical Operating Characteristics	Average Stopped Delay (Seconds per Vehicle)
A	Level of Service A describes a condition where the approach to an intersection appears quite open and turning movements are made easily. Little or no delay is experienced. The traffic operation can generally be described as excellent.	≤ 5
B	Level of Service B describes a condition where one or more critical movement approach to an intersection is occasionally fully used and short delays may be encountered. The traffic operation can generally be described as very good.	> 5 and ≤ 10
C	Level of Service C describes a condition where one or more critical movement approach to an intersection is often fully used and queuing may occur. The traffic operation can generally be described as good with average traffic delays.	> 10 and ≤ 20
D	Level of Service D describes a condition of increasing restriction and fewer gaps in the major street traffic flow, causing substantial delays and queues of vehicles on critical movement approaches to the intersection during short times within the peak period. The expected delay for minor street traffic is long; however, traffic operation can generally be described as fair.	> 20 and ≤ 30
E	Level of Service E describes the condition at which capacity of particular critical movement(s) is reached. It represents the most vehicles that any particular critical movement can accommodate; however, overall intersection operations may continue to operate at acceptable levels of service. At capacity there may be long queues of vehicles waiting up-stream of the critical movement, these vehicles may experience very long delays and potentially interfere with major street traffic flows. The traffic operation can generally be described as poor.	> 30 and ≤ 45
F	Level of Service F represents a jammed condition. Insufficient gaps restrict the movement of vehicles out of one or more critical movement to the intersection. Extremely long delays occur, and drivers may select less than usual gaps, potentially affecting other traffic movements on the intersection. In such cases, safety may be a problem. This condition usually warrants improvement to the intersection.	> 45

SOURCE: Environmental Science Associates, Inc. from *Highway Capacity Manual,* Special Report 209, Transportation Research Board, updated October 1994.

APPENDIX C: AIR QUALITY DATA

This appendix documents emissions and concentrations estimates provided in the air quality section of the EIR. In addition, a copy of the consistency determination from the Association of Monterey Bay Area Governments (AMBAG), which forms the basis for the cumulative impact discussion, is included as an attachment at the back of this appendix.

Emissions Estimates

Table 1 documents emissions estimates from existing emissions sources associated with the project site, including tilling, windblown dust, pesticide application, and farm equipment. Table 2 documents emissions estimates from stationary sources associated with the operational-phase of the project. These sources would include gasoline refueling losses, natural gas combustion, power plant emissions associated with project electricity use, woodburning, consumer product use, and utility, lawn and garden equipment. Table 3 summarizes emissions estimates from mobile sources associated with the operational-phase of the project. Emissions estimates in Table 3 are based on the California Air Resources Board's URBEMIS5 model. URBEMIS5 input/output sheets (winter and summer seasons) that provided the information from which Table 3 was derived are provided immediately after Table 3.

Carbon Monoxide Concentration Estimates

Table 4 shows how the carbon monoxide concentration estimates were derived and introduces a list that matches CALINE4 file names with their associated scenarios. The CALINE4 files themselves follow Table 4 and provide additional details concerning the assumptions used for this portion of the analysis.

Cumulative Effect

The cumulative effect of the project is evaluated on the basis of its consistency with the regional air quality plan. At the back of this appendix, a copy of a letter containing a consistency determination from AMBAG is provided. This consistency determination relates to a earlier version of the project, which proposed development of 901 residential units. However, since the 901-unit project was found to be consistent with the regional air quality plan, and since the current project would result in less population growth than the earlier proposal, the current project (853 units) would also be consistent with the regional air quality plan.

TABLE 1: EXISTING EMISSIONS ESTIMATES FOR PROJECT SITE

Existing Emissions				rev 5/19/98									
Current Operations:	200 Acres												
	Crops: strawberries in 1997 (per project description)												
Sources: Agricultural Tilling, Windblown Dust, Pesticide Application, Farm Equipment													
Agricultural Tilling:		PM10	Emission Factor:		EF=(.33(4.8)(s)^0.6)*0.45			lbs/acre-pass					
Source:					Silt content=18%								
ARB 9/95, Section 7.4					EF=	4.04		lbs/acre-pass					
					Project site=10 acre-pass/acre = 2000 total acre-passes								
		PM10	Emissions:		8,080	lbs/year							
					22	**lbs/day**							
Windblown Dust:		PM10	Emissions Factor:		E=a*I*C*K*L*V		tons/acre/year						
Source:					a=Portion of total wind erosion losses as PM10 (0.0125)								
ARB 9/95, Section 7.11					I=Soil erodibility, tons/acre/year (assume 86 for sandy loam)								
					C=Climatic factor (assume 0.15)								
					K=Surface roughness (assume 0.6 for misc. vegetables)								
					L=Unsheltered field width factor (assume 0.57)								
					V=Vegetative cover factor (assume 0.80)								
		PM10	Emissions:		17,647	pounds/year							
					48	**pounds/day**							
Pesticide Application:		HC	Emissions:		200 Acres/1,333,320 total acres								
Source:					6,406 tons/HC emissions for 1987								
ARB 9/95, Section 6.4													
		HC	Emissions:		1,922	lbs/year							
					5	**lbs/day**							
Farm Equipment:		Source: EPA Nonroad Emission Study, 11/91											
				g/hp-hr		g/hp-hr		g/hp-hr		g/hp-hr			
	Emissions	CO	Tractor	8.94	Sprayer	283.40	Tiller	817.00	Other	4.37			
	Factors:	HC	(diesel)	2.61	4-str gas	19.25	4-str gas	99.84	diesel	2.16			
		NOx		11.21		5.24		0.81		11.12			
		SOx		0.87		0.28		0.37		0.92			
		PM		2.05		0.06		2.66		1.51			
		Rated HP	98	HP	24	HP	5.6	HP	57	HP			
		load factor	70%		50%		40%		51%				
		annual use	425	hours	75	hours	60	hours	345	hours			
		Emissions:											Total:
		CO		574.1	lb/yr	561.8	lb/yr	241.9	lb/yr	96.5	lb/yr		**1,474**
		CO		1.6	lb/day	1.5	lb/day	0.7	lb/day	0.3	lb/day		**4**
		HC		167.8	lb/yr	38.2	lb/yr	29.6	lb/yr	47.8	lb/yr		**283**
		HC		0.5	lb/day	0.1	lb/day	0.1	lb/day	0.1	lb/day		**1**
		NOx		719.9	lb/yr	10.4	lb/yr	0.2	lb/yr	245.6	lb/yr		**976**
		NOx		2.0	lb/day	0.0	lb/day	0.0	lb/day	0.7	lb/day		**3**
		SOx		55.9	lb/yr	0.6	lb/yr	0.1	lb/yr	20.3	lb/yr		**77**
		SOx		0.2	lb/day	0.0	lb/day	0.0	lb/day	0.1	lb/day		**0**
		PM		131.6	lb/yr	0.1	lb/yr	0.8	lb/yr	33.4	lb/yr		**166**
		PM		0.4	lb/day	0.0	lb/day	0.0	lb/day	0.1	lb/day		**0**
Total Existing Emissions:		**CO**	**4**										
annual average		**HC**	**6**										
lb/day		**NOx**	**3**										
		SOx	**0**										
		PM	**70**										

Stationary Source Emissions Estimates for Mountain Valley Project							rev 5/20/98				
Project Characteristics:		Single Family Residences:			853	units					
		Estimated Population:			2,810	people based on AMBAG letter, February 1998,					
							adjusted to reflect 853 residences.				
Stationary Emissions Sources: Gasoline distribution, natural gas consumption, electricity generation, woodburning,											
	lawn and garden equipment, consumer products.										
Gasoline Distribution						Emission factors (ARB, 9/95, Section 4.10)					
						Assuming 5% defect rate					
						Underground tank:			lb/1000 gal		
						- Working Loss			0.475		
						- Breathing Loss			0.5		
Total gallons consumed:		4,125	gallons per day (based on URBEMIS5)			Vehicle Refueling					
						- Vapor Displacement			0.1		
						- Spillage			0.7		
								Total:	1.775		
						Note: 98.3% of fueling facilities in Monterey County					
			Pollutant		**lb/day**	have Phase II controls (AQMP, 1994)					
	Project emissions:		**ROG**		**7**						
Natural Gas Consumption:			(Source: ARB, 9/95, Section 7.2)								
1991 Residential Energy Sales for Monterey County:				69,780,406	therms						
1991 Population for County:		356,815	(Source: 1994 AQMP, extrapolating between years 1990 and 1995)								
Usage per resident in 1991:		196	therms/person/year	or	18,625	cubic feet/person/year					
Total project usage:		52,334,638	cubic feet per year	or	52	million cubic feet (MMcf) per year					
			Pollutant	lb/MMcf	(Source: ARB 9/95, Section 7.2)						
	Emission Factors:		CO	40							
			ROG	4.36							
			NOx	94							
			SOx	0.6							
			PM-10	11.18							
			Pollutant	lb/year	**lb/day**						
	Project emissions:		**CO**	2,093	**6**						
			ROG	228	**1**						
			NOx	4,919	**13**						
			SOx	31	**0**						
			PM-10	585	**2**						
Electricity Generation:			Pollutant	lb/MMBtu	(Source: CEC, Electricity Report, November 1992).						
	Emission Factors:		CO	0.038							
			ROG	0.001							
			NOx	0.11							
			SOx	0.001							
			PM-10	0.003							
Annual Residential Use:		6,500	KWh/year/res.	Source: PG&E 1991 Annual Report							
		66,547,000	Btu	(Takes into account losses from converting electrical power to heat)							
			Pollutant	lb/yr	**lb/day**						
	Project Emissions:		**CO**	2,157	**6**						
			ROG	57	**0**						
			NOx	6,244	**17**						
			SOx	57	**0**						
			PM-10	170	**0**						

TABLE 2: STATIONARY SOURCE EMISSIONS ESTIMATES FOR MOUNTAIN VALLEY PROJECT (continued)

Residential Woodburning:		Pollutant	ton/year/res.	Source: ARB 9/95, Section 7.1	
	Emission Factors:	CO	0.04743	Based on 74,589 single family homes in Monterey County	
		ROG	0.00296		
		NOx	0.00056		
		SOx	0.00008		
		PM-10	0.00648		
		Pollutant	tons/year	lb/day	
	Project Emissions:	**CO**	40.46	**222**	
		ROG	2.53	**14**	
		NOx	0.48	**3**	
		SOx	0.07	**0**	
		PM-10	5.53	**30**	
Consumer Products - Non-aerosol Solvents			(Source: ARB, 9/95, Section 6.1.)		
		ROG	482	tons in 1987 in Monterey County.	
		Population	336,093	est. for 1987 for Monterey County.	
	Emissions Factor:	ROG	2.87	pounds per person per year.	
		ROG	0.008	pounds per person per day.	
	With ARB Regulation:	ROG	0.006	pounds per person per day; reflects ARB consumer products rule.	
				source: BAAQMD, Source Category Methodologies, 1993.	
		Pollutant		lb/day	
	Project Emissions:	**ROG**		17	
Aerosol Residential Pesticides			(Source: ARB, 9/95, Section 6.2)		
		ROG	63	tons in 1987 in Monterey County.	
		Population	336,093	est. for 1987 for Monterey County.	
	Emissions Factor:	ROG	0.377	pounds per person per year.	
		ROG	0.001	pounds per person per day.	
		Pollutant		lb/day	
	Project Emissions:	**ROG**		3	
Consumer Products: Aerosol Solvents				(Source: ARB 9/91, Section 3-7, divided by 27,663,000 in Cal. in 1987)	
	Emissions Factor:	ROG	3.40	pounds per person per year.	
		ROG	0.009	pounds per person per day.	
	With ARB Regulation:	ROG	0.007	pounds per person per day; reflects ARB consumer products rule.	
				source: BAAQMD, Source Category Methodologies, 1993.	
		Pollutant		lb/day	
	Project Emissions:	**ROG**		20	
Utility, Lawn and Garden Equipment				(Source: ARB 9/95, Section 7.14, based on 74,589 single-family residences in Monterey County).	
	Emissions Factors:	CO	14.265	pounds per year per residence.	
		ROG	1.546	pounds per year per residence.	
		NOx	0.067	pounds per year per residence.	
		SOx	0.003	pounds per year per residence.	
		PM-10	0.032	pounds per year per residence.	
		Pollutant	lb/year	lb/day	
	Project Emissions:	**CO**	12,168	**33**	
		ROG	1,319	**4**	
		NOx	57	**0**	
		SOx	2	**0**	
		PM-10	27	**0**	
		Pollutant		lb/day	
TOTAL STATIONARY EMISSIONS:		**CO**		**267**	
		ROG		**65**	
		NOx		**33**	
		SOx		1	
		PM-10		**32**	

TABLE 3: MOBILE SOURCE EMISSIONS ESTIMATES FOR MOUNTAIN VALLEY PROJECT

Mobile Emissions Associated with Mountain Valley Project						rev 5/20/98	
EMISSIONS IN POUNDS PER DAY				ADJUSTMENTS			
				Convert	Add in	**Total**	
	Urbemis5	Urbemis5	Annual	TOG to	paved road	**Mobile**	
Pollutant	Winter	Summer	Weighted	ROG	dust	**Emissions**	Pollutant
Carbon Monoxide	1,176	699	858	NA	NA	**858**	Carbon monoxide
Total Organic Gases	138	97	111	100	NA	**100**	Reactive Organic Gases
Nitrogen Oxides	118	96	104	NA	NA	**104**	Nitrogen Oxides
Sulfur Oxides	12	12	12	NA	NA	**12**	Sulfur Oxides
Particulate Matter (PM-10)	17	17	17	NA	131	**149**	Particulate Matter (PM-10)
Entrained road dust based on 0.69 grams per mile (BAAQMD CEQA Guidelines, 1996).							
URBEMIS5 input: 35 mph ave. speed; 50 degrees winter and 75 degrees summer; 9.1 miles per trip; Year 2005 emissions factors.							
NOTE: URBEMIS5 Printouts are provided following this table.							

PROJECT NAME: Mountain Valley / [redacted] Date: 05-19-1998

Project Area: North Central Coast (Monterey Bay)

Analysis Year: 2005 Temperature (F): 50 Season: Winter

EMFAC Version: Emfac7f1.1(12/93)

Summary of Land Uses:

Unit Type	Trip Rate	Size	Tot Trips
Single Family Housing	10.0/Unit	853	8530
Elementary School	1.0/student	900	900
Community/Neighborhood	3.0/acre	22	65

Vehicle Assumptions:

Fleet Mix:

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Duty Autos	60.3	1.0	98.7	0.3
Light Duty Trucks	32.6	0.0	99.7	0.3
Medium Duty Trucks	5.1	0.1	99.9	0.0
Heavy Duty Trucks	0.0	14.3	85.7	N/A
Heavy Duty Trucks	0.0	N/A	N/A	100.0
Motorcycles	2.0	100.0	N/A	N/A

Travel Conditions:

	Residential			Commercial	
	Home-Work	Home-Shop	Home-Other	Work	Non-Work
Trip Length	9.1	9.1	9.1	9.1	9.1
% Started Cold	88.7	40.5	59.0	78.0	27.8
Trip Speed	35	35	35	35	35
Percent Trip	27.3	21.2	51.5		

Project Emissions Report in Lb/Day:

Unit Type	TOG	CO	NOx
Single Family Housing	127.42	1081.87	106.33
Elementary School	9.86	87.91	10.82
Community/Neighborhood	0.66	5.74	0.77
TOTALS	137.94	1175.52	117.92

Project Emissions Report in Lb/Day (Continued)

Unit Type	FUEL (Gal.)	PM10	SOx
Single Family Housing	3706.4	15.50	10.76
Elementary School	391.1	1.64	1.14
Community/Neighborhood	28.0	0.12	0.08
TOTALS	4125.4	17.25	11.98

PROJECT NAME: Mountain Valley / [redacted] Date: 05-19-1998

Project Area: North Central Coast (Monterey Bay)

Analysis Year: 2005 Temperature (F): 75 Season: Summer

EMFAC Version: Emfac7f1.1(12/93)

Summary of Land Uses:

Unit Type	Trip Rate	Size	Tot Trips
Single Family Housing	10.0/Unit	853	8530
Elementary School	1.0/student	900	900
Community/Neighborhood	3.0/acre	22	65

Vehicle Assumptions:

Fleet Mix:

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Duty Autos	60.3	1.0	98.7	0.3
Light Duty Trucks	32.6	0.0	99.7	0.3
Medium Duty Trucks	5.1	0.1	99.9	0.0
Heavy Duty Trucks	0.0	14.3	85.7	N/A
Heavy Duty Trucks	0.0	N/A	N/A	100.0
Motorcycles	2.0	100.0	N/A	N/A

Travel Conditions:

	Residential			Commercial	
	Home-Work	Home-Shop	Home-Other	Work	Non-Work
Trip Length	9.1	9.1	9.1	9.1	9.1
% Started Cold	88.7	40.5	59.0	78.0	27.8
Trip Speed	35	35	35	35	35
Percent Trip	27.3	21.2	51.5		

Project Emissions Report in Lb/Day:

Unit Type	TOG	CO	NOx
Single Family Housing	89.24	637.45	86.97
Elementary School	7.18	57.82	8.78
Community/Neighborhood	0.50	3.94	0.62
TOTALS	96.92	699.22	96.37

Project Emissions Report in Lb/Day (Continued)

Unit Type	FUEL (Gal.)	PM10	SOx
Single Family Housing	3706.4	15.50	10.76
Elementary School	391.1	1.64	1.14
Community/Neighborhood	28.0	0.12	0.08
TOTALS	4125.4	17.25	11.98

TABLE 4: LOCAL CARBON MONOXIDE ANALYSIS RESULTS

Local Carbon Monoxide Analysis rev 5/20/98

Background Concentrations (per MBUAPCD CEQA Guidelines)

Year	1-hour	8-hour
1997	4.4	2.0
2005	3.9	1.8

CO Emission Factor / Intersection Mode for CALINE4

Year	grams per mile at 16 mph
1997	19.3
2005	9.9

source: MBUAPCD, CEQA Guidelines, Table 7-14.

Local Increment

Intersection	#	Averaging Period	YEAR 1997 Existing	YEAR 2005 Existing + Project	YEAR 2005 Cumulative
East Laurel Dr / Sanborn Street	6	1 hour	9.1	4.8	5.7
		8 hour	6.4	3.4	4.0
E. Alisal St./ John St. / Williams Rd.	11	1 hour	7.4	4.3	5.3
		8 hour	5.2	3.0	3.7
Sanborn St. / E. Market	5	1 hour	10.1	5.7	6.8
		8 hour	7.1	4.0	4.8

Note: Eight-hour local increment is based on the one-hour concentration by applying a persistence factor of 0.7.

Local Increment Plus Background Concentration

Intersection	#	Averaging Period	YEAR 1997 Existing	YEAR 2005 Existing + Project	YEAR 2005 Cumulative
East Laurel Dr / Sanborn Street	6	1 hour	13.5	8.7	9.6
		8 hour	8.4	5.2	5.8
E. Alisal St./ John St. / Williams Rd.	11	1 hour	11.8	8.2	9.2
		8 hour	7.2	4.8	5.5
Sanborn St. / E. Market	5	1 hour	14.5	9.6	10.7
		8 hour	**9.1**	5.8	6.6

CALINE4 Printouts are provided in the following order:

File Name	Intersection	Scenario
MVSLEX	E. Laurel / Sanborn	Existing Conditions
MVSLEP	E. Laurel / Sanborn	Existing Plus Project
MVSLC	E. Laurel / Sanborn	Cumulative
MVWJAEX	Alisal / John / Williams	Existing Conditions
MVWJAEP	Alisal / John / Williams	Existing Plus Project
MVWJAC	Alisal / John / Williams	Cumulative
MVSMEX	Sanborn / Market	Existing Conditions
MVSMEP	Sanborn / Market	Existing Plus Project
MVSMC	Sanborn / Market	Cumulative

REPORT FOR FILE : MVSLEX

1. Site Variables

U=	1.0 M/S	ZO=	108.0 CM
BRG=	0.0 DEGREES	VD=	0.0 CM/S
CLASS=	G STABILITY	VS=	0.0 CM/S
MIXH=	1000.0 M	AMB=	0.0 PPM
SIGTH=	10.0 DEGREES	TEMP=	16.0 DEGREE (C)

2. Link Description

LINK DESCRIPTION	LINK COORDINATES (M) X1	Y1	X2	Y2	TYPE	VPH	EF (G/MI)	H (M)	W (M)
A. NORTHBOUND	5	-500	5	500	IN	454	19.3	0.5	12.6
B. SOUTHBOUND	-5	500	-5	-500	IN	734	19.3	0.5	9.3
C. EASTBOUND	-500	-5	500	-5	IN	1111	19.3	0.5	12.6
D. WESTBOUND	500	5	-500	5	IN	767	19.3	0.5	12.6

LINK	MIXW L (M)	R (M)	STPL (M)	DCLT (SEC)	ACCT (SEC)	SPD (MPH)	NCYC	NDLA	VPHO	EFI (G/MIN)	IDT1 (SEC)	IDT2 (SEC)
A.	0	0	490	8.8	15.9	35	11	6	801	5.5	50.0	0.0
B.	0	0	490	8.8	15.9	35	10	5	350	5.5	50.0	0.0
C.	0	0	490	8.8	15.9	35	15	8	1088	5.5	50.0	0.0
D.	0	0	490	8.8	15.9	35	11	6	827	5.5	50.0	0.0

3. Receptor Coordinates

		X	Y	Z
RECEPTOR	1	15	-15	1.8
RECEPTOR	2	15	15	1.8
RECEPTOR	3	-15	15	1.8
RECEPTOR	4	-15	-15	1.8

MODEL RESULTS FOR FILE MVSLEX

RECEPTOR	PRED CONC (PPM)	WIND BRG (DEG)	COCN/LINK (PPM) A	B	C	D
RECPT 1	8.3	285	2.3	0.3	4.9	0.8
RECPT 2	7.7	198	2.8	0.3	0.9	3.7
RECPT 3	9.0	105	0.7	3.5	0.9	3.9
RECPT 4	9.1	16	0.8	3.2	4.4	0.8

REPORT FOR FILE : MVSLEP

1. Site Variables

U=	1.0 M/S	ZO=	108.0 CM
BRG=	0.0 DEGREES	VD=	0.0 CM/S
CLASS=	G STABILITY	VS=	0.0 CM/S
MIXH=	1000.0 M	AMB=	0.0 PPM
SIGTH=	10.0 DEGREES	TEMP=	16.0 DEGREE (C)

2. Link Description

LINK DESCRIPTION	LINK COORDINATES (M) X1	Y1	X2	Y2	TYPE	VPH	EF (G/MI)	H (M)	W (M)
A. NORTHBOUND	5	-500	5	500	IN	511	9.9	0.5	12.6
B. SOUTHBOUND	-5	500	-5	-500	IN	829	9.9	0.5	9.3
C. EASTBOUND	-500	-5	500	-5	IN	1123	9.9	0.5	12.6
D. WESTBOUND	500	5	-500	5	IN	767	9.9	0.5	12.6

LINK	MIXW L (M)	R (M)	STPL (M)	DCLT (SEC)	ACCT (SEC)	SPD (MPH)	NCYC	NDLA	VPHO	EFI (G/MIN)	IDT1 (SEC)	IDT2 (SEC)
A.	0	0	490	8.8	15.9	35	12	6	852	3.0	50.0	0.0
B.	0	0	490	8.8	15.9	35	13	6	457	3.0	50.0	0.0
C.	0	0	490	8.8	15.9	35	15	8	1088	3.0	50.0	0.0
D.	0	0	490	8.8	15.9	35	12	6	833	3.0	50.0	0.0

3. Receptor Coordinates

		X	Y	Z
RECEPTOR	1	15	-15	1.8
RECEPTOR	2	15	15	1.8
RECEPTOR	3	-15	15	1.8
RECEPTOR	4	-15	-15	1.8

MODEL RESULTS FOR FILE MVSLEP

RECEPTOR	PRED CONC (PPM)	WIND BRG (DEG)	COCN/LINK (PPM) A	B	C	D
RECPT 1	4.4	284	1.3	0.2	2.6	0.4
RECPT 2	3.9	198	1.5	0.2	0.5	1.8
RECPT 3	4.5	105	0.4	1.7	0.5	1.9
RECPT 4	4.8	15	0.4	1.7	2.4	0.4

REPORT FOR FILE : MVSLC

1. Site Variables

U=	1.0 M/S	ZO=	108.0 CM
BRG=	0.0 DEGREES	VD=	0.0 CM/S
CLASS=	G STABILITY	VS=	0.0 CM/S
MIXH=	1000.0 M	AMB=	0.0 PPM
SIGTH=	10.0 DEGREES	TEMP=	16.0 DEGREE (C)

2. Link Description

LINK DESCRIPTION	*	LINK COORDINATES (M) X1	Y1	X2	Y2	* TYPE	VPH	EF (G/MI)	H (M)	W (M)
A. NORTHBOUND		5	-500	5	500	IN	545	9.9	0.5	12.6
B. SOUTHBOUND		-5	500	-5	-500	IN	942	9.9	0.5	9.3
C. EASTBOUND		-500	-5	500	-5	IN	1795	9.9	0.5	12.6
D. WESTBOUND		500	5	-500	5	IN	1273	9.9	0.5	12.6

LINK	*	MIXW L (M)	R (M)	STPL (M)	DCLT (SEC)	ACCT (SEC)	SPD (MPH)	NCYC	NDLA	VPHO	EFI (G/MIN)	IDT1 (SEC)	IDT2 (SEC)
A.		0	0	490	8.8	15.9	35	13	7	936	3.0	50.0	0.0
B.		0	0	490	8.8	15.9	35	14	7	491	3.0	50.0	0.0
C.		0	0	490	8.8	15.9	35	24	12	1736	3.0	50.0	0.0
D.		0	0	490	8.8	15.9	35	19	10	1392	3.0	50.0	0.0

3. Receptor Coordinates

		X	Y	Z
RECEPTOR	1	15	-15	1.8
RECEPTOR	2	15	15	1.8
RECEPTOR	3	-15	15	1.8
RECEPTOR	4	-15	-15	1.8

MODEL RESULTS FOR FILE MVSLC

RECEPTOR	*	PRED CONC (PPM)	*WIND BRG (DEG)	COCN/LINK (PPM) A	B	C	D
RECPT 1	*	5.3	284	1.3	0.2	3.3	0.5
RECPT 2	*	4.7	198	1.6	0.2	0.6	2.2
RECPT 3	*	5.6	104	0.4	1.9	0.5	2.8
RECPT 4	*	5.7	15	0.4	2.0	2.7	0.5

REPORT FOR FILE : MVWJAEX

1. Site Variables

U=	1.0 M/S	ZO=	108.0 CM
BRG=	0.0 DEGREES	VD=	0.0 CM/S
CLASS=	G STABILITY	VS=	0.0 CM/S
MIXH=	1000.0 M	AMB=	0.0 PPM
SIGTH=	10.0 DEGREES	TEMP=	16.0 DEGREE (C)

2. Link Description

LINK DESCRIPTION	LINK COORDINATES (M) X1	Y1	X2	Y2	TYPE	VPH	EF (G/MI)	H (M)	W (M)
A. NORTHBOUND	5	-500	5	500	IN	301	19.3	0.5	9.3
B. SOUTHBOUND	-5	500	-5	-500	IN	456	19.3	0.5	12.6
C. EASTBOUND	-500	-5	500	-5	IN	540	19.3	0.5	12.6
D. WESTBOUND	500	5	-500	5	IN	448	19.3	0.5	12.6

LINK	MIXW L (M)	R (M)	STPL (M)	DCLT (SEC)	ACCT (SEC)	SPD (MPH)	NCYC	NDLA	VPHO	EFI (G/MIN)	IDT1 (SEC)	IDT2 (SEC)
A.	0	0	490	8.8	15.9	35	11	6	411	5.5	50.0	0.0
B.	0	0	490	8.8	15.9	35	5	3	370	5.5	50.0	0.0
C.	0	0	490	8.8	15.9	35	8	4	571	5.5	50.0	0.0
D.	0	0	490	8.8	15.9	35	5	3	393	5.5	50.0	0.0

3. Receptor Coordinates

		X	Y	Z
RECEPTOR	1	15	-15	1.8
RECEPTOR	2	15	15	1.8
RECEPTOR	3	-15	15	1.8
RECEPTOR	4	-15	-15	1.8

MODEL RESULTS FOR FILE MVWJAEX

RECEPTOR	PRED CONC (PPM)	WIND BRG (DEG)	COCN/LINK (PPM) A	B	C	D
RECPT 1	5.2	290	1.4	0.5	2.8	0.5
RECPT 2	6.3	195	1.7	0.4	0.5	3.6
RECPT 3	7.4	105	0.4	3.7	0.6	2.8
RECPT 4	6.8	16	0.4	2.8	3.1	0.5

REPORT FOR FILE : MVWJAEP

1. Site Variables

U=	1.0 M/S	ZO=	108.0 CM
BRG=	0.0 DEGREES	VD=	0.0 CM/S
CLASS=	G STABILITY	VS=	0.0 CM/S
MIXH=	1000.0 M	AMB=	0.0 PPM
SIGTH=	10.0 DEGREES	TEMP=	16.0 DEGREE (C)

2. Link Description

LINK DESCRIPTION	LINK COORDINATES (M) X1	Y1	X2	Y2	TYPE	VPH	EF (G/MI)	H (M)	W (M)
A. NORTHBOUND	5	-500	5	500	IN	305	9.9	0.5	9.3
B. SOUTHBOUND	-5	500	-5	-500	IN	543	9.9	0.5	12.6
C. EASTBOUND	-500	-5	500	-5	IN	741	9.9	0.5	12.6
D. WESTBOUND	500	5	-500	5	IN	600	9.9	0.5	12.6

LINK	MIXW L (M)	MIXW R (M)	STPL (M)	DCLT (SEC)	ACCT (SEC)	SPD (MPH)	NCYC	NDLA	VPHO	EFI (G/MIN)	IDT1 (SEC)	IDT2 (SEC)
A.	0	0	490	8.8	15.9	35	13	6	458	3.0	50.0	0.0
B.	0	0	490	8.8	15.9	35	5	3	383	3.0	50.0	0.0
C.	0	0	490	8.8	15.9	35	12	6	846	3.0	50.0	0.0
D.	0	0	490	8.8	15.9	35	7	3	502	3.0	50.0	0.0

3. Receptor Coordinates

	X	Y	Z
RECEPTOR 1	15	-15	1.8
RECEPTOR 2	15	15	1.8
RECEPTOR 3	-15	15	1.8
RECEPTOR 4	-15	-15	1.8

MODEL RESULTS FOR FILE MVWJAEP

RECEPTOR	PRED CONC (PPM)	WIND BRG (DEG)	COCN/LINK (PPM) A	B	C	D
RECPT 1	3.0	288	0.7	0.2	1.9	0.3
RECPT 2	3.2	195	0.8	0.2	0.4	1.8
RECPT 3	4.3	105	0.2	2.3	0.4	1.4
RECPT 4	3.9	16	0.2	1.7	1.8	0.2

REPORT FOR FILE : MVWJAC

1. Site Variables

U=	1.0 M/S	ZO=	108.0 CM
BRG=	0.0 DEGREES	VD=	0.0 CM/S
CLASS=	G STABILITY	VS=	0.0 CM/S
MIXH=	1000.0 M	AMB=	0.0 PPM
SIGTH=	10.0 DEGREES	TEMP=	16.0 DEGREE (C)

2. Link Description

LINK DESCRIPTION	LINK COORDINATES (M) X1	Y1	X2	Y2	TYPE	VPH	EF (G/MI)	H (M)	W (M)
A. NORTHBOUND	5	-500	5	500	IN	305	9.9	0.5	9.3
B. SOUTHBOUND	-5	500	-5	-500	IN	543	9.9	0.5	12.6
C. EASTBOUND	-500	-5	500	-5	IN	1201	9.9	0.5	12.6
D. WESTBOUND	500	5	-500	5	IN	977	9.9	0.5	12.6

LINK	MIXW L (M)	R (M)	STPL (M)	DCLT (SEC)	ACCT (SEC)	SPD (MPH)	NCYC	NDLA	VPHO	EFI (G/MIN)	IDT1 (SEC)	IDT2 (SEC)
A.	0	0	490	8.8	15.9	35	13	6	458	3.0	50.0	0.0
B.	0	0	490	8.8	15.9	35	5	3	383	3.0	50.0	0.0
C.	0	0	490	8.8	15.9	35	18	9	1306	3.0	50.0	0.0
D.	0	0	490	8.8	15.9	35	12	6	879	3.0	50.0	0.0

3. Receptor Coordinates

	X	Y	Z
RECEPTOR 1	15	-15	1.8
RECEPTOR 2	15	15	1.8
RECEPTOR 3	-15	15	1.8
RECEPTOR 4	-15	-15	1.8

MODEL RESULTS FOR FILE MVWJAC

RECEPTOR	PRED CONC (PPM)	WIND BRG (DEG)	COCN/LINK (PPM) A	B	C	D
RECPT 1	3.9	284	0.7	0.2	2.6	0.4
RECPT 2	3.8	196	0.8	0.2	0.5	2.3
RECPT 3	5.3	104	0.2	2.3	0.5	2.3
RECPT 4	4.5	16	0.2	1.7	2.2	0.4

REPORT FOR FILE : MVSMEX

1. Site Variables

U=	1.0 M/S	ZO=	108.0 CM
BRG=	0.0 DEGREES	VD=	0.0 CM/S
CLASS=	G STABILITY	VS=	0.0 CM/S
MIXH=	1000.0 M	AMB=	0.0 PPM
SIGTH=	10.0 DEGREES	TEMP=	16.0 DEGREE (C)

2. Link Description

LINK DESCRIPTION	LINK COORDINATES (M) X1	Y1	X2	Y2	TYPE	VPH	EF (G/MI)	H (M)	W (M)
A. NORTHBOUND	5	-500	5	500	IN	333	19.3	0.5	12.6
B. SOUTHBOUND	-5	500	-5	-500	IN	721	19.3	0.5	12.6
C. EASTBOUND	-500	-5	500	-5	IN	941	19.3	0.5	12.6
D. WESTBOUND	500	5	-500	5	IN	998	19.3	0.5	12.6

LINK	MIXW L (M)	R (M)	STPL (M)	DCLT (SEC)	ACCT (SEC)	SPD (MPH)	NCYC	NDLA	VPHO	EFI (G/MIN)	IDT1 (SEC)	IDT2 (SEC)
A.	0	0	490	8.8	15.9	35	10	5	724	5.5	50.0	0.0
B.	0	0	490	8.8	15.9	35	7	3	482	5.5	50.0	0.0
C.	0	0	490	8.8	15.9	35	15	7	1048	5.5	50.0	0.0
D.	0	0	490	8.8	15.9	35	10	5	739	5.5	50.0	0.0

3. Receptor Coordinates

	X	Y	Z
RECEPTOR 1	15	-15	1.8
RECEPTOR 2	15	15	1.8
RECEPTOR 3	-15	15	1.8
RECEPTOR 4	-15	-15	1.8

MODEL RESULTS FOR FILE MVSMEX

RECEPTOR	PRED CONC (PPM)	WIND BRG (DEG)	COCN/LINK (PPM) A	B	C	D
RECPT 1	6.9	288	1.8	0.4	3.9	0.7
RECPT 2	8.3	195	2.1	0.4	0.8	5.0
RECPT 3	10.1	104	0.7	4.2	0.8	4.5
RECPT 4	8.0	18	0.8	3.0	3.5	0.7

REPORT FOR FILE : MVSMEP

1. Site Variables

U=	1.0 M/S	ZO=	108.0 CM
BRG=	0.0 DEGREES	VD=	0.0 CM/S
CLASS=	G STABILITY	VS=	0.0 CM/S
MIXH=	1000.0 M	AMB=	0.0 PPM
SIGTH=	10.0 DEGREES	TEMP=	16.0 DEGREE (C)

2. Link Description

LINK DESCRIPTION	LINK COORDINATES (M) X1	Y1	X2	Y2	TYPE	VPH	EF (G/MI)	H (M)	W (M)
A. NORTHBOUND	5	-500	5	500	IN	354	9.9	0.5	12.6
B. SOUTHBOUND	-5	500	-5	-500	IN	738	9.9	0.5	12.6
C. EASTBOUND	-500	-5	500	-5	IN	941	9.9	0.5	12.6
D. WESTBOUND	500	5	-500	5	IN	1004	9.9	0.5	12.6

LINK	MIXW L (M)	R (M)	STPL (M)	DCLT (SEC)	ACCT (SEC)	SPD (MPH)	NCYC	NDLA	VPHO	EFI (G/MIN)	IDT1 (SEC)	IDT2 (SEC)
A.	0	0	490	8.8	15.9	35	10	5	733	3.0	50.0	0.0
B.	0	0	490	8.8	15.9	35	7	4	505	3.0	50.0	0.0
C.	0	0	490	8.8	15.9	35	15	7	1060	3.0	50.0	0.0
D.	0	0	490	8.8	15.9	35	10	5	739	3.0	50.0	0.0

3. Receptor Coordinates

		X	Y	Z
RECEPTOR	1	15	-15	1.8
RECEPTOR	2	15	15	1.8
RECEPTOR	3	-15	15	1.8
RECEPTOR	4	-15	-15	1.8

MODEL RESULTS FOR FILE MVSMEP

RECEPTOR	PRED CONC (PPM)	WIND BRG (DEG)	COCN/LINK (PPM) A	B	C	D
RECPT 1	3.7	288	1.0	0.3	2.1	0.4
RECPT 2	4.5	195	1.1	0.3	0.4	2.7
RECPT 3	5.7	104	0.3	2.6	0.4	2.4
RECPT 4	4.7	16	0.4	2.1	1.9	0.3

REPORT FOR FILE : MVSMC

1. Site Variables

U=	1.0 M/S	ZO=	108.0 CM
BRG=	0.0 DEGREES	VD=	0.0 CM/S
CLASS=	G STABILITY	VS=	0.0 CM/S
MIXH=	1000.0 M	AMB=	0.0 PPM
SIGTH=	10.0 DEGREES	TEMP=	16.0 DEGREE (C)

2. Link Description

LINK DESCRIPTION	LINK COORDINATES (M) X1	Y1	X2	Y2	TYPE	VPH	EF (G/MI)	H (M)	W (M)
A. NORTHBOUND	5	-500	5	500	IN	403	9.9	0.5	12.6
B. SOUTHBOUND	-5	500	-5	-500	IN	848	9.9	0.5	12.6
C. EASTBOUND	-500	-5	500	-5	IN	1563	9.9	0.5	12.6
D. WESTBOUND	500	5	-500	5	IN	1563	9.9	0.5	12.6

LINK	MIXW L (M)	MIXW R (M)	STPL (M)	DCLT (SEC)	ACCT (SEC)	SPD (MPH)	NCYC	NDLA	VPHO	EFI (G/MIN)	IDT1 (SEC)	IDT2 (SEC)
A.	0	0	490	8.8	15.9	35	12	6	835	3.0	50.0	0.0
B.	0	0	490	8.8	15.9	35	8	4	565	3.0	50.0	0.0
C.	0	0	490	8.8	15.9	35	24	12	1732	3.0	50.0	0.0
D.	0	0	490	8.8	15.9	35	17	9	1245	3.0	50.0	0.0

3. Receptor Coordinates

		X	Y	Z
RECEPTOR	1	15	-15	1.8
RECEPTOR	2	15	15	1.8
RECEPTOR	3	-15	15	1.8
RECEPTOR	4	-15	-15	1.8

MODEL RESULTS FOR FILE MVSMC

RECEPTOR	PRED CONC (PPM)	WIND BRG (DEG)	COCN/LINK (PPM) A	B	C	D
RECPT 1	4.7	284	1.0	0.3	3.0	0.5
RECPT 2	5.1	195	1.2	0.3	0.6	3.0
RECPT 3	6.8	103	0.4	2.6	0.5	3.3
RECPT 4	5.4	18	0.4	2.1	2.3	0.5

AMBAG ASSOCIATION OF MONTEREY BAY AREA GOVERNMENTS

(408) 883-3750 *FAX (408) 883-3755*

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February 26, 1998

Mr. Erik Brown
Environmental Science Associates
225 Bush Street, Suite 1700
San Francisco, CA 94104

Dear Mr Brown:

This letter is in response to your July 17, 1997 request for a determination of consistency of the Mountain Valley project with the *1997 Air Quality Management Plan for the Monterey Bay Region* (AQMP). Our response to your request was delayed pending receipt of additional project information requested from you, needed to complete the consistency determination. Consistency of individual projects to the AQMP is determined by comparing population growth due to the proposed project to the applicable jurisdiction's growth forecasted in the *AMBAG 1997 Regional Population and Employment Forecast.* The AMBAG forecast is disaggregated from the county level to individual jurisdictions, areas within the sphere of influence of jurisdictions, and Census tracts. The Mountain Valley project encompasses one of Salinas' sphere of influence areas.

Project impacts. As described in your July 17, 1997 letter and our February 18, 1998 phone conversation, the project includes 901 total residential units, 150 units to be built by 2000 with the remaining units completed by 2005. To estimate population impacts, AMBAG assumes average household size in Salinas to be 3.414 persons per dwelling unit. (January 1, 1997, per State Department of Finance *Official State Estimates* of May 1997). However, actual resident population will be less due to vacancy. The latest applicable vacancy rate of 3.52% for Salinas is used for this project, from the same source. Based on the above assumptions, AMBAG staff estimates that the project's 901 units could add 2,968 residents to Salinas (494 by 2000 and 2,474 by 2005).

Cumulative impacts. Cumulative impacts are determined by adding the 2,968 new residents expected from the proposed project to other growth approved in the jurisdiction during the 1990 - 1996 period.

The cumulative population growth in the city of Salinas is estimated from data supplied by the Transportation Agency for Monterey County on permits issued between 1990 and 1996. The assumption is made that these approved units will be constructed and occupied by the year 2000. Applying the same average household size and vacancy rate as was assumed for the project's dwelling units, 2,112 permitted new units could add 6,957 residents to Salinas.

Consistency finding. Consistency between the population growth impacts of the project and population growth forecasts used for the *1997 Air Quality Management Plan for the Monterey*

Bay Region is found by comparing the cumulative total for the jurisdiction to the amount of population increase show in the *AMBAG 1997 Regional Population and Employment Forecast*, the adopted forecast for the 1997 AQMP. Summary Table 2 of those forecasts show the population of Salinas growing by 10,553 persons between 1995 and 2000 and 13,606 person between 2000 and 2005.

Since the cumulative population growth added to that of the Mountain Valley project (7,451 by year 2000 and 2,474 by 2005) is less that the population growth for Salinas forecasted in the *AMBAG 1997 Regional Population and Employment Forecast,(*10,553 growth between years 1995 and 2000 and 13,606 between 2000 and 2005) the project is **consistent** with the AQMP.

Please feel free to contact Todd Muck of our staff if you have any questions about this determination.

Sincerely,

Nicolas Papadakis
Executive Director

cc: Janet Brennan, MBUAPCD
Jim Colangelo, LAFCO

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APPENDIX D: HEALTH AND SAFETY LAWS AND REGULATIONS

Table D-1
Health and Safety Laws and Regulations

Management of Hazardous Chemicals	State and federal laws require detailed planning to ensure that hazardous chemicals are properly handled, used, stored, and disposed of, and in the event that such materials are accidentally released, to prevent or to mitigate injury to health or the environment. These laws require hazardous chemical users to prepare written plans, such as Hazard Communication Plans, Hazardous Materials Business Plans, and Chemical Hygiene Plans. Laws and regulations require hazardous chemical users to store these materials appropriately and to train employees to manage them safely. A number of agencies participate in enforcing hazardous chemical management requirements. For the project area, the Monterey County Department of Health is the agency most involved.
Hazardous Materials Transportation	The U.S. Department of Transportation regulates hazardous materials transportation between states. Within California, the state agencies with primary responsibility for enforcing federal and state regulations and for responding to transportation emergencies are the California Highway Patrol and the California Department of Transportation. Together, federal and state agencies determine driver training requirements, load labeling procedures, and container specifications. Although special requirements apply to transporting hazardous materials, requirements for transporting hazardous waste are more stringent, and hazardous waste haulers must be licensed to transport hazardous waste on public roads.
Hazardous Chemical Waste Handling	The California Environmental Protection Agency's Department of Toxic Substances Control regulates the generation, transportation, treatment, storage, and disposal of hazardous chemical waste. These laws impose "cradle-to-grave" regulatory systems that require generators of hazardous chemical waste to handle it in a manner that protects human health and the environment to the extent possible. Within the project area, the Monterey County Department of Health enforces on-site waste management requirements applicable to hazardous chemical waste generators, such as requirements for secondary containment around stored wastes to prevent environmental contamination in the event of a spill. The California Department of Toxic Substances Control permits and oversees hazardous chemical waste treatment, long-term storage, and disposal facilities.
Soil and Groundwater Contamination	The Comprehensive Environmental Response, Compensation, and Liability Act and associated Superfund Amendments provide the U.S. Environmental Protection Agency with the authority to identify hazardous sites, to require site remediation, and to recover the costs of site remediation from polluters. California has enacted similar laws intended to supplement the federal program. The California Environmental Protection Agency's Department of Toxic Substances Control is primarily responsible for implementing California's Superfund law.
Emergency Response	California has developed an Emergency Response Plan to coordinate emergency services provided by federal, state, and local government and private agencies. Responding to hazardous materials incidents is one part of this plan. The plan is administered by the State Office of Emergency Services, which coordinates the responses of other agencies, including the California Environmental Protection Agency, the California Highway Patrol, the Department of Fish and Game, the Central Coast Regional Water Quality Control Board, and the local fire department. The fire department provides first response capabilities, if needed, for hazardous materials emergencies within the project area.

SOURCE: Environmental Science Associates