



CITY OF SALINAS COUNCIL STAFF REPORT

DATE: DECEMBER 19, 2017

DEPARTMENT: PUBLIC WORKS, TRANSPORTATION & TRAFFIC DIVISION

FROM: ANDREW EASTERLING, TRAFFIC ENGINEER

TITLE: TRAFFIC SIGNAL AT NORTH MAIN STREET AND CHEROKEE DRIVE INTERSECTION

RECOMMENDED MOTION:

A motion to:

(1) approve the installation of a traffic signal at the North Main Street and Cherokee Drive intersection based on traffic studies; and

(2) approve a Memorandum of Understanding with Salinas Shopping Center Associates Limited Partnership and Harden Ranch Plaza Associates for funding the design and the installation of a Traffic Signal at North Main Street and Cherokee Drive Intersection.

RECOMMENDATION:

Staff recommends the Council approve the installation of a traffic signal at the North Main Street and Cherokee Intersection and approve a Memorandum of Understanding with Salinas Shopping Center Associates Limited Partnership and Harden Ranch Plaza Associates for funding the design and the installation of said traffic signal.

EXECUTIVE SUMMARY:

Staff received a request from the Harden Ranch Shopping Center to analyze traffic delay and safety concerns at the intersection of North Main Street and Cherokee Drive along with a proposal to signalize the intersection. Staff has reviewed the traffic analysis for the proposed traffic signal and considered the potential impacts and improvements from the change in access and signalization at the intersection. The conclusions of the traffic analysis show a reduction in overall delay for the intersection and additional reduction of delay on adjacent intersections resulting from a redistribution of trips. Therefore, staff recommends the approval of the signalization project. Staff is working with Harden Ranch Shopping Center on a Memorandum of Agreement which will provide for their funding of the proposed improvements.

BACKGROUND:

Staff received a request to analyze traffic delay and safety concerns at the intersection of North Main Street and Cherokee Drive from the Harden Ranch Plaza Management Group. Harden Ranch Management group submitted a traffic signal warrant study for the intersection, prepared by a licensed civil engineer, which showed 3 of the 8 Caltrans signal warrants were met to consider a traffic signal (see attachment 1). An intersection meeting these warrants does not mean a signal must be installed, but it is an indication that a signal may be recommended. Other factors need to be considered. Staff met with the Harden Ranch Group to review ongoing concerns regarding delay and safety at the intersection of N Main St and Cherokee Dr. The request was presented to the Traffic and Transportation Commission on February 11, 2016, wherein the Commission provided the direction to continue the discussion regarding signalization.

Following the February Traffic and Transportation Commission Meeting, staff required that Harden Ranch provide a traffic analysis of signalization concepts and review potential impacts.

Staff also performed an initial assessment and collected traffic counts for the weekend midday peak period and the weekday afternoon (PM) peak period at the intersection and adjacent intersections. Staff's initial assessment found that the intersection was currently experiencing significant overall delay and was operating at level of service (LOS) "F" during both peak periods. The significant overall delay could mostly be attributed to the movement exiting the Harden Ranch Plaza. The initial assessment found that the intersection could improve overall delay by converting the two-way stop controlled condition with restricted access to a signalized intersection.

Staff worked with the Harden Ranch Plaza engineer to develop a concept traffic signal plan and to prepare a detailed analysis of the proposed traffic signal. The study would consider a full access signalized intersection with pedestrian crossing. The concept was developed with an effort to minimize the distribution to progression of northbound and southbound traffic on Main Street while improving overall performance of the intersection and with an effort to increase pedestrian mobility and safety across North Main Street. The concept included an evaluation of queue lengths and determined sufficient storage requirements for all turn pockets.

The detailed traffic analysis found that the proposed concept would improve overall signal operations from a LOS "F" to a LOS "B" in both the weekday PM and weekend midday peak periods. The analysis shows the adjacent intersections could also benefit slightly due to a redistribution of trips. The tradeoff for the overall improved performance comes from the northbound and southbound traffic on N Main St, that in the existing condition the two directions are free flow, and would experience some delay once signalized. However, the added delay is somewhat insignificant, and the analysis shows that the two approaches would still perform at a LOS "B" or better during both peak period. An adaptive signal system is currently operating along the North Main Street corridor to better move platoons of vehicles through the corridor. The proposed signal will need to be included in the adaptive system.

Some added safety features would be added at the intersection through signalization. The traffic signal will eliminate the need for turning and merging vehicles to judge adequate gaps in traffic. The signalized intersection provides pedestrians a controlled crosswalk to navigate across N Main

Street. Based on the anticipated safety and operational improvements, staff recommends the signalization of the North Main Street and Cherokee Drive intersection.

The traffic signal would not score high under the City's signal prioritization program and therefore does not have funding. Because the signal is a desired improvement by the Harden Ranch Shopping Center, the shopping center has opted to fund the project. The consideration to move forward with the proposed concept and with the understanding of a forthcoming funding agreement was taken to the Traffic and Transportation Commission at its October 2017 meeting. A recommendation to Council to signalize the intersection was approved by the Commission on a 3-2 vote. The two non-supporting votes were based on the concern that a roundabout needed to be considered and that the City should look at slowing traffic on streets. Staff does not recommend a roundabout along the corridor since there is a working adaptive signal system that controls progression along the corridor that will not work with a roundabout. Although the City arterial streets are designed to handle high volumes and faster traffic, the proposed signal will not increase speeds. There was also concern that the signal will result in increased traffic along the adjacent residential area of Cherokee Drive. Staff is currently investigating the need for traffic calming improvements on Cherokee Drive west of Madrid Street. Traffic calming improvements that result from this study will benefit the area of Cherokee Drive near the proposed signal as well. At the same time, the traffic signal installation will improve access by residents to North Main Street and the shopping center. The access, operations and safety improvements proposed by the project are the reasons staff recommends the signal installation.

Memorandum of Understanding

Harden Ranch and its affiliates propose to fund the traffic signal design and improvements to accelerate its construction. The shopping center will design and construct the traffic signal and associated intersection improvements in accordance with requirements for a public works project. City will review plans, specifications, and required submittals for compliance with city standards. Plans, Specifications and Estimates (PS&E) will be brought to Council for approval. The City will provide inspection services to ensure compliance with approved plans, prevailing wages and other requirements that a public work would be subject to. Upon meeting the City requirements, the completed project will be brought to Council to accept for maintenance. A Memorandum of Agreement will be negotiated among the City staff and the Harden Ranch group.

CEQA CONSIDERATION:

Categorical Exemptions. The City of Salinas has determined that the project is exempt from the California Environmental Quality Act (CEQA) Guidelines (Section 15031.Existing Facilities) because the project proposes improvements to existing streets, sidewalks, gutters and other pedestrian facilities and restoration or replacement of existing drainage features and facilities.

STRATEGIC PLAN INITIATIVE:

The installation of the North Main Street and Cherokee Drive traffic signal supports the Council's goal of Excellent Infrastructure.

FISCAL AND SUSTAINABILITY IMPACT:

The City staff is working with Harden Ranch Plaza management group to privately fund the costs to design and build the traffic signal. A funding agreement was developed with Salinas Shopping Center Associates Limited Partnership for the Installation of a Traffic Signal at North Main Street and Cherokee Drive Intersection (see attachment). The cost of design and construction of the new signal will be borne by the shopping center, with said cost being approximately \$500,000. The cost to the City will begin after acceptance of the project. Maintenance and operations cost of a new traffic signal is estimated at approximately \$3,000 per year.

ATTACHMENTS:

Resolution

Warrant Study Associated Transportation Engineers

Traffic Signal Analysis

Letters from Residents