CITY OF TEMECULA AGENDA REPORT

TO: City Manager/City Council

FROM: Patrick Thomas, Director of Public Works/City Engineer

DATE: March 28, 2023

SUBJECT: Establish All-Way Stop Control at the Intersection of Pujol Street and Main Street

PREPARED BY: Anissa Sharp, Management Assistant

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RECOMMENDATION: That the City Council adopt a resolution entitled:

RESOLUTION NO.

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF TEMECULA, ESTABLISHING AN ALL-WAY STOP CONTROL AT THE INTERSECTION OF PUJOL STREET AND MAIN STREET AND FINDING THAT THE ACTION IS EXEMPT FROM CALIFORNIA ENVIRONMENTAL QUALITY ACT (CEQA) UNDER SECTION 15301(C) OF THE CEQA GUIDELINES

BACKGROUND: Over the past several years, City of Temecula staff have received a citizen request to consider the feasibility of implementing all way stop controls and crosswalks across Pujol Street at Main Street to address concerns of excessive speeding and lack of pedestrian crossings (see Exhibit A). The request for an all-way stop and pedestrian controls at the intersection of Pujol Street at Main Street would provide needed pedestrian connectivity to residential units and a church on the west side of Pujol Street. Due to active development projects in the vicinity of the intersection, City staff performed a study to determine if all-way stop controls are warranted at this intersection.

Pujol Street is a forty (40) foot wide local residential roadway providing access to numerous single family and multi-family residences from Felix Valdez Road to southern city limits. The posted speed limit on Pujol Street near Main Street is 25 MPH and the Average Daily Traffic (ADT) volume is approximately 4,100 ADT. Recent speed data collection confirmed an 85th percentile speed of 26 MPH for this stretch of Pujol Street.

Main Street is a forty-two (42) foot wide collector roadway that provides access across to Old Town Temecula and residences along Pujol Street. Main Street has a speed limit of 25 MPH and carries approximately 500 ADT.

Traffic volume data was collected and used to evaluate entering volumes and prevailing speeds for the intersection of Pujol Street and Main Street. In addition to the data collection, a review of intersection characteristics and conditions was performed, which included an evaluation of sight distance, collision history, and completion of a multi-way stop warrant analysis at both intersections.

An evaluation of sight distance was performed at the intersection of Pujol Street and Main Street. A minimum unobstructed sight distance of 150 feet is required for the posted 25 mph speed limit on Pujol Street. The results of the evaluation are shown in the table below. As shown in the table above, the visibility at the intersection of Pujol Street and Main Street is more than adequate for the posted speed limit although site distance would be limited if on-street parking were to be fully utilized.

Location	Sight Distance	Required Visibility (Posted 25 MPH)
 Main Street Looking North along Pujol Street Looking South along Pujol Street 	> 500' > 500'	150° 150°

A review of the collision history for the three (3) year period from February 1, 2020 to January 31, 2023, indicates there was one (1) reported collision at the intersection of Pujol Street and Main Street which does not meet the minimum amount for satisfying the Collision History warrant.

The Multi-Way Stop Sign Installation Policy for Residential Streets' warrant criteria was used to evaluate the need for multi-way stop signs at the intersection. The warrants allow for the installation of multi-way stop signs when the following conditions are satisfied:

1. Minimum Traffic Volumes

- a. The total vehicular volume entering the intersection from all approaches is equal to or greater than three hundred (300) vehicles per hour for any eight (8) hours of an average day; and
- b. The combined vehicular volume and pedestrian volume from the minor street is equal to or greater than one hundred (100) per hour for the same eight (8) hours.

2. Collision History

a. Three (3) or more reported collisions within a twelve (12) month period of a type susceptible to correction by a multi-way stop installation. Such accidents include right and left-turn collisions as well as right-angle collisions.

- 3. Roadway Characteristics
 - a. The traffic volume on the uncontrolled street exceeds two thousand (2,000) vehicles per day,
 - b. The intersection has four (4) legs, with the streets extending 600 feet or more away from the intersection on at least three (3) of the legs.
 - c. The vehicular volumes on both streets are nearly equal to a forty/sixty percent (40/60%) split; and
 - d. Both streets are 44 feet wide or narrower.

Warrants for Minimum Traffic Volumes, Collision History and Roadway Characteristics must be met to justify the installation of a multi-way stop. Other criteria that may be considered when evaluating the need for multi-way stop signs include:

- 4. Visibility
 - a. The intersections sight distance is less than:
 - 150 feet for 25 MPH
 - 200 feet for 30 MPH
 - 250 feet for 35 MPH
- 5. The need to control left-turn conflicts.
- 6. The need to control vehicle/pedestrian conflicts near locations that generate high pedestrian volumes such as schools, parks and activity centers.
- 7. The roadways and intersection appear on a Suggested Route to School plan.
- 8. There are no traffic signals or all-way stop controls located within 600 feet of the intersection.
- 9. The installation of multi-way stop signs is compatible with overall traffic circulation needs of the residential area.

The multi-way stop warrant analysis performed found that the required Warrants 1, 2 & 3 were not satisfied and all-way stop controls are not justified at the intersection based on quantitative data. The Policy does however provide the flexibility to consider other roadway and land use conditions to justify the need for an all-way stop. Staff believes the site conditions below help to justify the need for all-way stops at the intersection of Pujol Street and Main Street:

• Pujol Street is a residential street with substantial vehicular volumes. For residential units on the west side of Pujol Street, there is no convenient and safe location to cross Pujol Street. The nearest controlled crosswalk locations are 1,000 feet in either direction of the intersection.

- Main Street is the main roadway that connects residents of Pujol Street to Old Town Temecula and the Murrieta Creek Trail. An -all-way stop with controlled crosswalk will provide safe pedestrian and bike connectivity to the busy city center.
- The installation of an all-way stop is compatible with the overall traffic circulation of the residential area.
- Recently approved development projects will further necessitate the need for a controlled intersection. The Vine Creek Apartment project would be installing the pedestrian upgrades and the all-way stop at the intersection. The Altair project will be constructing a pedestrian paseo at the west leg of the intersection which will significantly increase future pedestrian and bike traffic.

Due to the reasons noted above, Staff recommends establishing all-way stop controls and striped pedestrian crosswalks at the intersection of Pujol Street and Main Street.

FISCAL IMPACT: None, work will be completed by developer.

ATTACHMENTS: 1. Resolution

2. Exhibit A - Location Map

3. Multi-Way Stop Warrant Analysis

4. Collision Summary Report