



Administrative Report

J.1., File # PW22-4228

Meeting Date: 5/23/2022

To: PUBLIC WORKS COMMISSION
From: DEPARTMENT OF PUBLIC WORKS

TITLE
FELTON LANE AND RUHLAND AVENUE ALL-WAY STOP CONTROLS

EXECUTIVE SUMMARY

In response to a request from residents, Staff has performed an analysis of all-way stop controls at the intersection of Felton Lane and Ruhland Avenue. The subject intersection was evaluated with respect to enhancing pedestrian and motorist safety. This item is being advanced based on analysis of reported correctable traffic collisions at the intersection. SWITRS data indicates there were five reported crashes in a twelve-month period that can be considered potentially correctable. Installing all-way stop controls at the subject intersection could increase pedestrian and vehicle safety by reducing conflicts to motorists, pedestrians and cyclists.

A vicinity map of the study area, the recommended traffic controls and the SWITRS data are provided in the attachments.

BACKGROUND

Staff received a petition in November 2021 requesting all-way stop controls at the intersection of Felton Lane and Ruhland Avenue.

Felton Lane is classified as a local street and has a 25-mph residential prima facie speed limit. Felton Lane runs north-south. Stopping is prohibited on the west side of the street and parking is allowed on the east side. It is approximately 28 feet wide with one travel lane in each direction that are separated by a dashed yellow centerline. There are all-way stop controls approximately 300 feet to the north of the subject intersection at Voorhees Avenue and all-way stop controls approximately 300 feet to the south at Nelson Avenue.

Ruhland Avenue is classified as a local street, has a 25-mph residential prima facie speed limit and runs west-east with one travel lane in each direction. It is approximately 28 feet wide with parallel parking allowed on the south side of the street and no stopping allowed on the north side. Ruhland Avenue is stop controlled at the subject intersection and has marked crosswalks. There are all-way stop controls approximately 600 feet to the west of the subject intersection at Phelan Lane and all-way stop controls approximately 600 feet to the east at Perkins Lane.

Fronting development in the vicinity of the intersection is predominantly single and multi-family residential. Several commercial sites are located approximately 1000 feet south of the subject intersection on Artesia Boulevard. Madison Elementary School is approximately 650 west of the

intersection. There are sidewalk, curb and gutter improvements on all legs.

Per current policy regarding resident requests for all-way stops, staff mailed a survey to 42 residences within 150-feet of the intersection proceeded to determine support for the request. To date only 14 responses have been received, all supportive, which is a response rate of 33%. The response rate required to advance the issue is 66%, which was not met.

Staff also collected and analyzed reported traffic collision data from SWITRS. A review of the available SWITRS crash data at this intersection during the four-year period ending 12/31/2021 revealed 7 reported accidents between 1/1/2018 and 12/31/2021. that might be considered correctable by all-way stop controls. More significantly in the support of stop sign placement, five of these crashed occurred in the 12-month period between December 2020 and November 2021. Therefore, staff is advancing this request based on the collision history analysis. SWITRS data is included in the attachments.

The California Manual on Uniform Traffic Control Devices (CA MUTCD) provides guidance for the installation of all-way stop controls. It suggests that all-way stop controls should be considered when:

- **Criteria A** - Where traffic control signals are justified, the multi-way stop is an interim measure that can be installed quickly to control traffic while arrangements are being made for the installation of the traffic control signal.
- **Criteria B** - When there are five or more reported crashes in a 12-month period that are susceptible to correction by a multi-way stop installation. Such crashes include right-turn and left-turn collisions as well as right-angle collisions.
- **Criteria C** - Where the vehicular volume entering the intersection from the major street approaches (total of both approaches) averages at least 300 vehicles per hour for any 8 hours of an average day; and combined vehicular, pedestrian, and bicycle volume entering the intersection from the minor street approaches (total of both approaches) averages at least 200 units per hour for the same 8 hours, with an average delay to minor-street vehicular traffic of at least 30 seconds per vehicle during the highest hour. When the 85th-percentile approach speed of the major-street traffic exceeds 40 mph, the minimum vehicular volume warrants may be reduced to 70 percent of the above values.
- **Criteria D** - Where no single criterion is satisfied, but where Criteria B and C are all satisfied to 80 percent of the minimum values.

The CA MUTCD also provides other criteria that may be considered, including:

- The need to control left-turn conflicts;
- The need to control vehicle/pedestrian conflicts near locations that generate high pedestrian volumes;
- Locations where a road user, after stopping, cannot see conflicting traffic and is not able to negotiate the intersection unless conflicting cross traffic is also required to stop; and,

- An intersection of two residential neighborhood collector (through) streets of similar design and operating characteristics where all-way stop control would improve traffic operational characteristics of the intersection.

Based on the above information, the collision criteria (Criteria B) is satisfied and supports an all-way stop control installation. Criteria A, C and D could not be evaluated due to lack of collection of speed and volume data. Therefore, staff recommends installation of an all-way stop at the subject intersection.

ALTERNATIVES AVAILABLE:

1. Install all-way stop controls at the intersection of Felton Lane and Ruhland Avenue.
2. Other actions as determined by the Public Works Commission

COORDINATION

Coordination of the safety evaluation and this report took place within the Public Works Department.