Staff Report



To: City of Imperial Traffic Commission

From: Othon Mora, Community Development Director

Date: October 7, 2020

Subject: Proposed new four-way stop signs and crosswalks @ the intersection of

Canon Drive and Neckel Road.

Background:

At a City Council meeting during reports, a council member requested an evaluation of the above reference location, be conducted in order to formulate possible mitigation measures regarding the rising safety concerns. The City of Imperial has received various concerns regarding pedestrian safety, speeding, and visibility from residents, at this intersection. The ideal mitigation for the residents, is the placement of a four-way stop.

Cannon Drive is controlled by stop sign while Neckel Road in uncontrolled. Sidewalks are provided at all approaches to the intersection, there are no marked crosswalks, and there are parking restrictions at the approaches of the intersection.

The item was reviewed by the Traffic Commission on July 22nd, 2020. The Commission requested staff additional information, including, other mitigation measures and cost estimate for review.

Analysis:

The Development Review Committee explored various traffic and safety mitigation measures regarding the intersection of Canon Drive and Neckel Road.

The following Development Review Committee members reviewed the item:

- Imperial Police Chief, Leonard Barra
- Public Services Director, Jackie Loper
- Parks Superintendent, Tony Lopez

- Imperial County Fire Representative, Andrew Loper
- Community Development Director, Othon Mora
- Planner, Lisa Tylenda

The Development Review Committee (DRC) has based the recommendation on the following guidelines from the "Manual on Uniform Traffic Control Devices (MUTCD)" as follows:

Section 2B.04, "Right of Way at Intersections", of the CA-MUTCD states that "In addition, the use of YIELD or STOP signs should be considered at the intersection of two minor streets or local roads where the intersection has more than three approaches and where one or more of the following conditions exist:

- The combined vehicular, bicycle, and pedestrian volume entering the intersection from all approaches average more than 2,000 units per day.
- The ability to see conflicting traffic on an approach is not sufficient to allow a road user to stop or yield in compliance with the normal right-of-way rule if such stopping or yielding is necessary.
- Crash records indicate that five or more crashes that involve the failure to yield the right-of-way at the intersection under the normal right-of-way rule have been reported within a 3-year period, or that three or more such crashes have been reported within a 2-year period.
- Section 2B.07, "Multi-way Stop Application", of the CA-MUTCD stipulates that multi way stops to be considered as an option on "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".
- YIELD or STOP signs should not be used for speed control.

Staff's findings are as follows:

- The CA-MUTCD defines minimum requirements for traffic volumes, pedestrian volumes, and bicycle volumes to warrant an all-way stop controlled intersection. Based on field observations, the intersection of Cannon Drive and Neckel Road would not meet these minimum volume requirements. Currently, there is not a recent traffic study available for the area. IPD provided traffic counts and speed survey at this intersection (Please see attached data). Days and times that data was obtained by IPD were the following:
 - o August 5, 6 and 7, 2020 (3 times each day)
 - 9:00am-10:00am
 - 12:00pm-1:00pm
 - 4:30pm-5:30pm
- Utilizing the Statewide Incident Traffic Reporting System and the City's database, a review of the collision history at the intersection was conducted for a three-year period.

Reports show that there have been 2 collisions (1 property damage and 1 minor injury), 0 citations or traffic violations reported for that intersection.

• Based on field observations, there were not "visibility" obstructions at the intersection for drivers "stopping" on Cannon Drive.

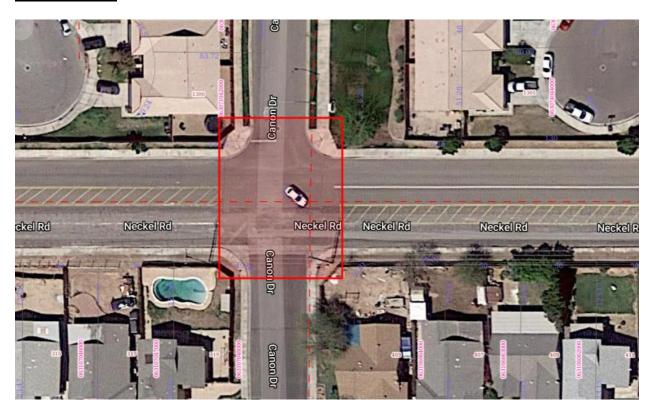
Staff Recommendation:

Based on these findings, staff do not recommend installation of a four-way stop sign at Cannon Drive and Neckel Road.

Other Mitigation Measures Options and Cost:

Stop Signs \$8,414.00 RRPF (Rectangular Rapid Flashing Beacons) Pedestrian Crosswalk Systems \$17,732 Asphalt Speed Bumps \$12,000.00 Asphalt Speed Humps \$15,000.00 Rubber Speed Bumps \$2,000.00 Rubber Speed Humps \$2,250.00 Speed Radar Signs \$29,500.00

Location Map:





NECKEL AND CANON

Wednesday	MPH	Vehicle	es
	*	10	
		15	
		20	(
		25	10
		30	20
		35	I
		40	(
		45	(
		50	(
		55	(
Thursday	MPH		
		10	(
		15	(
		20	(
		25	12
		30	28
		35	11
		40	5
		45	C
		50	C
		55	C
riday	MPH		
		10	0
		15	0
		20	7
		25	21
		30	18
		35	15
		40	0
		45	0
		Γ.Ο.	0
		50	U

