



**CITY OF MANHATTAN BEACH
DEPARTMENT OF COMMUNITY DEVELOPMENT
TRAFFIC ENGINEERING DIVISION
MEMORANDUM**

DATE: July 28, 2022

TO: Parking and Public Improvements Commission

FROM: Carrie Tai, AICP, Community Development Director

BY: Erik Zandvliet, T.E., City Traffic Engineer

SUBJECT: Consider a Request for Stop Signs in All Directions at Pacific Avenue and 18th Street

RECOMMENDATION

Staff recommends that the Commission pass a motion to recommend approval of stop signs in all directions at the intersection of Pacific Avenue and 18th Street.

BACKGROUND

In June 2022, Mr. Paul Beswick, at 1729 Pacific Avenue, submitted a neighborhood petition requesting stop signs in all directions at the intersection of Pacific Avenue and 18rd Street. (Exhibit A) The petition states that the intersection is unsafe for both pedestrians and drivers. The petition is signed by 24 residents representing 24 homes in the area. There are two existing stop signs on the 18th Street approaches of this intersection.

On November 25, 2007, the Parking and Public Improvements Commission (Commission) reviewed a similar petition request for stop signs in all directions at this intersection. The Commission did not recommend additional stop signs on the Pacific Avenue approaches, but did recommend the installation of 25 feet of red curb on the northeast and southwest corners for improved visibility, and the installation of new pedestrian crossing signs.

DISCUSSION

Pacific Avenue is a 40-foot wide, two-lane major local street that connects with Valley Drive/Ardmore Avenue/Marine Avenue to the north and Manhattan Beach Boulevard to the

south. Pacific Avenue provides north-south circulation for several streets in the area and has stop controls at 19th Street approximately 400' to the north and 17th Street 400' to the south. Pacific Avenue has stop controls at all cross-streets between 14th Street and Marine Avenue except at 18th Street. 18th Street is a 30-foot wide, two-lane local street that connects Ardmore Avenue to the west and Poinsettia Avenue to the east. 18th Street has stop controls at Pacific Avenue. The speed limit on both streets is 25 mph. Both streets have curbs, gutters and sidewalks. (Exhibit B)

The intersection of Pacific Avenue and 18th Street is located in a single family residential area. There is a slight downhill slope on Pacific Avenue in a southerly direction near 18th Street. Parking is allowed on both sides of both streets. Pacific Elementary School is on Pacific Avenue at 17th Street south of subject intersection. American Martyrs Catholic Elementary School is located one block west of the intersection at 18th Street and Agnes Road. The intersection is painted with yellow crosswalks on all approaches, and high visibility school crossing signs are posted on Pacific Avenue in at 18th Street. Pacific Avenue is a key crossing point at 18th Street on the Suggested Routes to School Map for American Martyrs Elementary School, located one block to the west (Exhibit C). Students attending Pacific Elementary School normally walk north and south along Pacific Avenue and cross Pacific Avenue at 17th Street instead.

A traffic volume count was conducted in June 2022 on typical school days. A summary of the peak hour and daily traffic volume is provided below:

DIRECTION	AM PEAK HOUR	PM PEAK HOUR	DAILY
Northbound (Pacific Ave.)	152 (8 AM)	177 (12 NN)	2,073
Southbound (Pacific Ave.)	165 (8 AM)	221 (12 NN)	1,968
Subtotal	317	398	4,041
Eastbound (18 th Street)	10 (8 AM)	13 (3 PM)	124
Westbound (18 th Street)	13 (8 AM)	17 (12 NN)	201
	23	30	325

A speed survey was conducted in June 2022 using a calibrated RADAR speed measuring device during free-flow traffic conditions. A statistical summary of the recorded speeds shown below confirms that prevailing speeds on Pacific Avenue are typical for a residential area.

Average Speed	22 mph
85 th Percentile Speed	26 mph
10-mile Pace Speed	18-27 mph

The traffic collision history between January 1, 2015 and December 31, 2021 was analyzed for the intersection. According to City records, no traffic collisions have been reported near the intersection during this seven-year period. No collision patterns were identified.

Field observations were made at the intersection during peak travel periods of 7-9am and 2-6pm on typical school weekdays. Staff confirmed the empirical traffic count data and speed data. Pacific Avenue carries moderate traffic volumes appropriate for its designation as a major local street. 18th Street carries very low traffic volumes. No delays were observed at the intersection. Intersection visibility is good in all directions from the stopped approaches on 18th Street with the exception of a large tree on the northeast corner the partly restricts the view of westbound drivers. Existing red curbs on Pacific Avenue prevent parked vehicles from significantly obstructing views near the intersection. Due to the location of the crosswalks, drivers on 18th Street may have to stop first for possible pedestrians and then move forward slightly for better visibility before entering or crossing Pacific Avenue. Also, it was observed that a driver unfamiliar with the neighborhood may occasionally slow down or stop at the crosswalks on Pacific Avenue even if there are no pedestrians.

This intersection is a key crossing for school pedestrians attending American Martyrs School. High pedestrian volumes crossing both Pacific Avenue and 18th Street were noted by the Traffic Engineer during field observations that coincided with the peak travel times. However, there is no crossing guard assigned to this location. School parents use this intersection as a primary access route to drop off and pick up their children for both schools, which results in a large number of turning movements across the crosswalks. This set of conditions increase the potential for collisions between vehicles and pedestrians. In addition, the absence of stop signs on Pacific Avenue increases the potential for collisions since the uncontrolled intersection is inconsistent with the five other consecutively stopped intersections between Manhattan Beach Boulevard and Ardmore Avenue.

One of the key themes in the City's Mobility Plan is to provide safe and convenient pedestrian crossings. Installation of stop signs at crosswalks, where warranted, can improve the safety of uncontrolled crossings. Safer pedestrian crossings support the Mobility Element's policies of promoting active transportation (I-3.8), improving pedestrian and bicycle safety around schools (I-3.9) and enhancing the Safe Routes to Schools programs (I-3.10), as well as the nation's Vision Zero goal of reducing traffic related deaths.

Multi-way Stop Signs: The State of California has established guidelines for the installation of stop signs. These criteria have been widely accepted and are used by the City of Manhattan Beach. Multi-way or all-way stop controls are generally recommended when one or more of

the criteria are satisfied. It is also advised that less intrusive measures be tried before resorting to multi-way stop signs. More important, stop signs should not be used for speed control.

A stop sign warrant checklist is attached to this report (Exhibit D) that indicates that multi-way stop signs would not be justified at this intersection based on volumes, speed or collision history. However, there are certain special conditions at this intersection that meet other criteria for the installation of multi-way stop signs, namely: the need to control vehicle/pedestrian conflicts near locations that generate high pedestrian volumes. Based on the proximity to two elementary schools that generate high pedestrian volumes, school related traffic conflicts and designation as a crossing location on the Suggested Route to School map, multi-way stop signs are warranted at this intersection.

PUBLIC NOTIFICATION, OUTREACH, AND COMMENT

A courtesy notice was mailed to all property owners and residents within a 300-foot radius of the subject location as well as to the schools' administrators and stop sign petitioners with instructions on how to comment on this agenda item and/or attend this meeting.

CONCLUSION

Based on the proximity to two elementary schools, key crossing point on the Suggested Routes to School map, concentration of pedestrian activity and need to control vehicle/pedestrian conflicts at this location during school periods, the Traffic Engineer recommends the installation of stop signs in all directions at the intersection of Pacific Avenue and 18th Street.

EXHIBITS:

- A. Resident Petition
- B. Aerial Photo and Site Plan
- C. American Martyrs Suggested Routes to School Map
- D. Stop Sign Warrant Checklist

EXHIBIT A



City of Manhattan Beach Stop Sign Petition Form

We, the undersigned residents, do hereby petition the City of Manhattan Beach to install stop signs in all directions at the following intersection:

MAIN STREET: Pacific Avenue

CROSS STREET: 18th Street

We attest that each undersigned person is 18 years or older and is a responsible owner or resident in the city.

The designated contact person(s) are:

CONTACT PERSON: Paul Beswick DAYTIME PHONE NO: (310) 545-5229

ALTERNATE CONTACT: Jennifer Gale DAYTIME PHONE NO: (310) 480-3101

NOTE: Only one responsible signature per residence is required.

	SIGNATURE Or "Opposed" or "No Contact"	PRINT NAME	PRINT STREET ADDRESS	PRINT DATE
1.	<i>Melinda Beswick</i>	Melinda Beswick	1729 Pacific Avenue	3/23/2022
2.	<i>GABRIELLA LIM</i>	Gabriella Lim	747 18th St.	3/23/2022
3.	<i>Dianne Ehrhard</i>	Dianne Ehrhard	1728 Pacific Ave.	3/23/2022
4.	<i>BARBARA SHEEKY</i>	BARBARA SHEEKY	1725 Pacific	3/24/22
5.	<i>Jennifer Gale</i>	Jennifer Gale	1809 Pacific Ave	3/24/2022
6.	<i>Randy Seltzer</i>	Randy Seltzer	1813 Pacific Ave	3/24/22
7.	<i>LORRAINE ARVIN</i>	LORRAINE ARVIN	1717 Pacific Ave	3/24/22
8.	<i>Claire Regenscheid</i>	Claire Regenscheid	818 18th St	3/25/22
9.	<i>MARY ARCANGELI</i>	MARY ARCANGELI	1801 John Street	3/25/22
10.	<i>David Harrington</i>	David Harrington	1713 Pacific Ave	3/26/22

I declare under penalty of perjury, pursuant to the laws of the State of California, that the foregoing is true and correct.

Paul G. Beswick
Signed by Contact

Executed on 3/26/22 in Manhattan Beach, California.
Date

Stop Sign Petition for 4-Way Stop at Pacific Avenue and 18th Street

NOTE: Only one responsible signature per residence is required.

SIGNATURE Or "Opposed" or "No Contact"	PRINT NAME	PRINT STREET ADDRESS	PRINT DATE
	Chad Blocker	801 18 th St. MB, CA	4/1/22
	Patricia Scholl	1821 Pacific Ave MB	4/10/22
	CARLA PETROFF	1721 PACIFIC AVE MB	7-6-22
	Lorraine Amurphy	1709 Pacific Ave MB	7-6-22
	Mark Hotchkiss	1918 Pacific Ave MB	4.6.22
	Karen Hall	2200 Pacific Ave, MB	7-17-22
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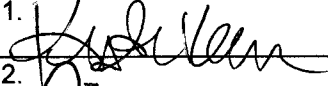
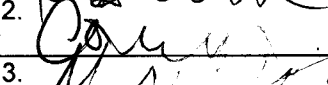
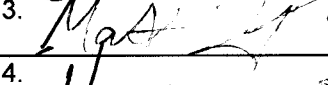
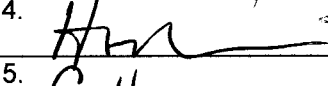
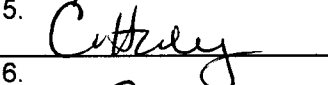

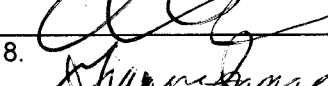

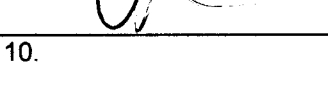
I declare under penalty of perjury, pursuant to the laws of the State of California, that the foregoing is true and correct.

Signed by Contact

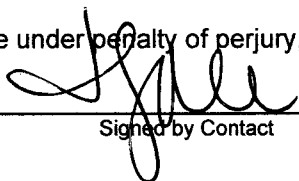
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Date

Stop Sign Petition for 4-Way Stop at Pacific Avenue and 18th Street

NOTE: Only one responsible signature per residence is required.

SIGNATURE Or "Opposed" or "No Contact"	PRINT NAME	PRINT STREET ADDRESS	PRINT DATE
	Kristen Keenan	1202 Cypress Ave HB	3/29/22
	Courtney Black	8411 11 th St MB	3/29/22
	Matt Young	719 19 th St MB	3/29/22
	Hugh Jaerke	2708 Pacific MB	3/29/22
	Catherine Steley	908 14 th St. MB	3/29/22
	Ashley Ritter	1805 Walnut Ave MB	3/29/22
	Alison Rosenthal	2004 Laurel Ave MB	3/29/22
	Gianna Ingram	800 19 th St. MB	3/24/22
	Lindsay Geiden	2559 N. Valley MB	3/24/22
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I declare under penalty of perjury, pursuant to the laws of the State of California, that the foregoing is true and correct.



Executed on 7-14-2022 in Manhattan Beach, California.

Signed by Contact

Date

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EXHIBIT B



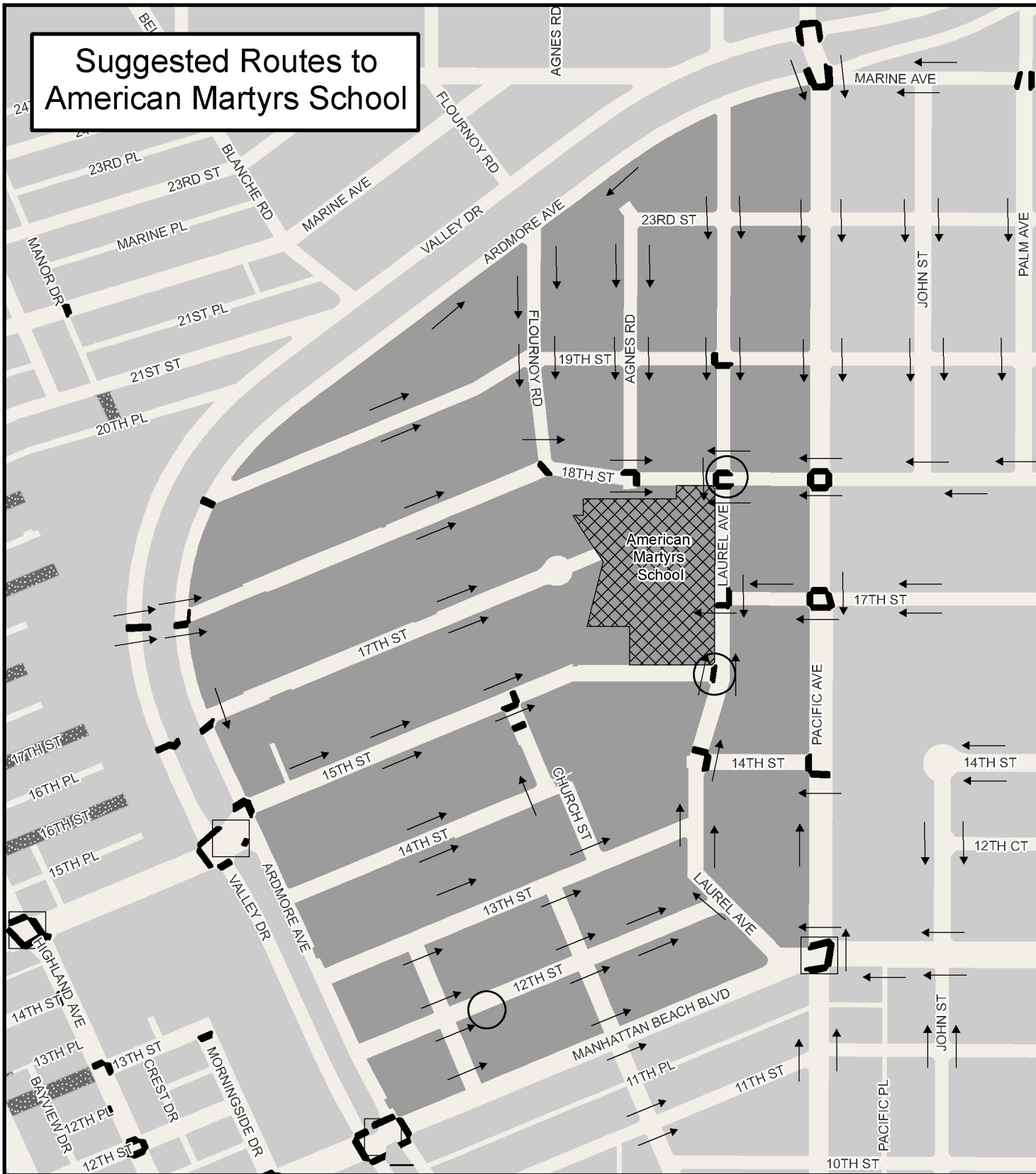
City of Manhattan Beach
Community Development
Traffic Engineering Division

Request for Stop Signs
Pacific Avenue at 18th Street
Aerial Photo and Location Map

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EXHIBIT C

Suggested Routes to American Martyrs School



Legend

- Robinson School
- Traffic Signals
- Crossing Guard
- Crosswalks
- Suggested Route

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0 225 450 900 Feet

City of Manhattan Beach

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EXHIBIT D

STOP SIGN WARRANT CHECKLIST 2014 CA – MUTCD

MAJOR STREET: Pacific Avenue MINOR STREET: 18th Street

REQUESTED BY: Resident Petition DATE: July 2022

REVIEWED BY: Erik Zandvliet

MINOR STREET STOP SIGN WARRANTS (LOWER VOLUME STREET)

Warranted?

- On a less important road where the normal right-of-way rules would not be expected to provide reasonable compliance with the law.
- On a street entering a designated through highway or street.
- At an unsignalized intersection in a signalized area.
- Where the vehicular volume on the through street exceeds 6,000 vehicles per day.
- Where restricted view exists that requires users to stop to observe approaching through traffic.
- At an intersection with 5+ crashes in 2-year period or 3+ crashes in 1-year correctable by stop signs.
- 4 or more legged local intersection with a combined vehicle/bike/ped volume over 2,000 per day.
- 4 or more legged local intersection with sight distance that is insufficient for normal right-of-way rule.
- 4 or more legged local intersection with 5+ crashes in 3-year period, or 3+ crashes in 2-years.

MULTI-WAY STOP SIGN WARRANTS

- Where traffic signals are warranted, and stop signs are used as an interim measure to control traffic while the signal is installed.
- At an intersection with 5+ crashes in a 1-year period of a type correctable by stop signs.
- Where the total vehicular volume entering from the major street approaches average at least 300 vehicles per hour* for any 8 hours, and the combined vehicular, bicycle and pedestrian volume from the minor street approaches average at least 200 units per hour* for the same 8 hours, with an average delay to the minor street traffic of at least 30 seconds per vehicle during the highest hour.

*But, if the 85th percentile approach speed of the major street traffic exceeds 40 MPH, the minimum vehicular volume warrant is 70 percent of the above requirements.

- Where there 4+ reported accidents within a 1-year period of a type correctable by a multi-way stop sign, and the average major and minor street volumes are at least 80% of the minimum values.
- Where there is a need to control left turn conflicts.
- Where there is a need to control vehicle/pedestrian conflicts near locations that generate high pedestrian volumes.
- Where a road user, after stopping, cannot see conflicting traffic and is unable to negotiate the intersection without also requiring the conflicting cross traffic to stop.
- At an intersection of two residential collector streets where multi-way stop control would improve the operational characteristics of the intersection.

MULTI-WAY STOP SIGN WORKSHEET

MAJOR STREET: Pacific Avenue MINOR STREET: 18th Street

DATE: July 2022 85TH SPEED: 26 mph

TRAFFIC VOLUMES **WARRANTED** **YES** **NO**

If the 85th percentile speed of the major street exceeds 40 MPH, use 70% volume.

Street	Min Volume	70%	80%	Ave.	Hour / Volume							
					8AM	10AM	11AM	12NN	1PM	3PM	4PM	6PM
Major	300	210	240	307	317	227	292	398	326	344	311	244
Minor	200	140	160	21	19	25	22	21	19	24	19	21

And, does the minor street have an average delay of at least 30 seconds in the peak hour?

Peak Average Delay	< 30 mph
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COLLISION RECORD **WARRANTED** **YES** **NO**

Are there five or more reported collisions within a 12 month period of a type correctable by a multi-way stop sign?

DATE	TIME	DIRECTION	TYPE	CAUSE
2021		None		
2019		None		
2018		None		
2017		None		
2016		None		
2015		None		

80% COMBINATION **WARRANTED** **YES** **NO**

Are there four or more reported accidents within a 12 month period of a type correctable by a multi-way stop sign, and

Average major and minor street volumes are at least 80% of the minimum values?

OTHER MULTI-WAY STOP CONDITIONS **WARRANTED**

- | | | |
|--|------------|-----------|
| A. Need to control left turn conflicts | YES | NO |
| B. Need to control vehicle/pedestrian conflicts at high ped locations | YES | NO |
| C. Visibility obstruction after stopping on minor street approach. See notes | YES | NO |
| D. Two similar neighborhood collector streets that would improve operation | YES | NO |

Notes:

Minor sight distance reduction on northeast corner. Wide crossing on Pacific Avenue. High school pedestrian volumes on all legs from two nearby elementary schools. No crossing guard. Elevated rate of conflicts between pedestrians and school related traffic turning at intersection. More active vehicle controls would improve pedestrian crossing safety. Uncontrolled intersection between consecutively stopped intersections on Pacific Avenue leads to unnecessary stops by unfamiliar road users.