

**CITY OF MANHATTAN BEACH
DEPARTMENT OF COMMUNITY DEVELOPMENT**

TO: Parking and Public Improvements Commission

FROM: Richard Thompson, Director of Community Development
Esteban Danna, Assistant Planner

BY: Erik Zandvliet, Traffic Engineer

DATE: July 23, 2009

SUBJECT: Consider Installation of Stop Signs
Laurel Avenue at 27th Street

RECOMMENDATION:

That the Commission pass a motion to approve the following:

1. Paint red curb on both sides of 27th Street within 75 feet of the intersection at Laurel Avenue.
2. Direct staff to take actions to remove landscaping sight distance restrictions on the northwest, northeast and southeast corners of the intersection at 27th Street and Laurel Avenue.

BACKGROUND:

On October 28, 2004, the Parking and Public Improvements Commission reviewed a petition from Ms. Kimi Beck, a local resident and girl scout, to install stop signs in all directions at the intersection of 27th Street and Laurel Avenue. The petition stated that drivers exceed the speed limit and many children walk through the intersection on their way to/from school. It also stated that a large maple tree on the northeast corner blocks the view of cars on 27th Street. After discussion, the Commission denied the request for additional stop signs, but approved red curb on the northeast and southwest corners, as well as required the trimming of tree branches on the northeast corner.

In May 2009, the City received a request from Pamela Nemzer, a local resident at 2619 Laurel Avenue, to improve visibility and/or add 4-way stop signs at the intersection of Laurel Avenue and 27th Street. The City Traffic Engineer has analyzed this intersection to determine if any conditions have changed since the prior evaluation in 2004. His findings are summarized in this report.

DISCUSSION:

27th Street is a 22 to 30-foot wide, two-lane local street that carries approximately 750 vehicles per day and provides east-west traffic circulation through a residential area. 27th Street is stopped at Agnes Road to the west and Pacific Avenue to the east. Laurel Avenue is a 19 to 24-foot wide, two-lane local street that carries approximately 1,400 vehicles per day and connects

with Rosecrans Avenue to the north and Valley Drive to the south. 27th Street also connects to Valley Drive to the east. Parking is allowed on both sides of both streets. The speed limit on both streets is 25 mph. Neither street has curbs, gutters or sidewalks.

The intersection of 27th Street and Laurel Avenue is located in a single family residential area. It is controlled with stop signs on Laurel Avenue in the north-south directions. There is a downhill vertical slope on 27th Street in the eastbound direction. There is one cross-gutter on the south leg.

A traffic volume count was conducted on Wednesday, October 13, 2004 during a typical day. A summary of the peak hour and daily traffic volume is provided below:

DIRECTION	AM PEAK HOUR	PM PEAK HOUR	DAILY TOTAL
Northbound (Laurel Ave.)	28	24	266
Southbound (Laurel Ave.)	51	51	480
Subtotal	79	75	746
Eastbound (27 th Street)	58	72	691
Westbound (27 th Street)	56	63	674
Subtotal	114	135	1,365
Intersection Total	193	210	2,111

The traffic collision history between January 1, 2005 and September 31, 2008 was analyzed for the intersection. According to City records, there have been no collisions reported near the intersection during this 3 ¾ year period that would be correctable by stop signs.

Field Observations

Field observations were made at and near the intersections during peak periods. Field observations confirm the traffic count and physical characteristics noted earlier. Both streets have moderate traffic volumes for local streets, mainly due to the long blocks between intersections. However, no delays were observed at the intersection. There are existing conditions that reduce sight distance for drivers stopped on Laurel Avenue on all four corners. First, vehicles parked close to the intersection restrict the ability to turn and block the view up and down the hill on 27th Street. Second, existing landscaping and steep topography close to the intersection further restrict the view. The cross-gutter on the south leg makes drivers naturally assume that vehicles on Laurel Avenue are supposed to stop. Due to the absence of sidewalks, pedestrians must walk along the curb or edge of pavement. The streets are narrow and provide only one travel lane if vehicles are parked on both sides of the street. Recurrent speeding was not observed on any of the approaching street segments, however, drivers waiting on Laurel Avenue may underestimate the actual speed of motorists on 27th Street due to the vertical slope.

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

State criteria are satisfied that indicate the existing traffic control devices are not sufficient to assign proper right-of-way.

A stop sign warrant checklist was completed that indicates that multi-way stop signs may be warranted at this intersection based on restricted sight visibility, if it can not be remedied first by other means. However, multi-way stop signs are usually only appropriate at locations with higher volumes and/or a traffic collision history.

The Traffic Engineer also considered switching the existing stop signs from Laurel Avenue to 27th Street. However, he noted that sight distance restrictions would still be present due to landscaping and vertical curves. It would also remove the only traffic control on Laurel Avenue between Valley Drive and 31st Street, almost one-quarter mile long. Therefore, this option is not recommended.

If the existing conditions that restrict sight distance can not be removed reasonably, then all-way stop signs could be considered. It should be noted that the addition of stop signs would not be expected to reduce vehicle speeds along either street, since prevailing speeds are below normal for residential streets. In fact, additional noise and vehicle delay in the neighborhood would be expected. Additionally, stop signs along 27th Street may cause some drivers to accelerate faster to make up for lost time.

Public Notice

Residents in the vicinity of the intersection were notified of the proposed stop sign request and were invited to give input to the Commission.

CONCLUSION:

Based on restricted sight distance for motorists waiting at the existing stop signs and required turning radius on a narrow street, the following actions are recommended:

1. Paint red curb on both sides of 27th Street within 75 feet of the intersection at Laurel Avenue.
2. Direct staff to take necessary actions to remove landscaping sight distance restrictions on the northwest, northeast and southeast corners of the intersection at 27th Street and Laurel Avenue.

The installation of stop signs should only be considered after removing all possible sight distance restrictions.

Attachments:

- A – Location Photos
- B – Aerial Photo Sketch
- C – Stop Sign Worksheets
- D – Public Notice

C:\My Documents\Projects\JN 16242-Manhattan Beach TE\PPIC\PPIC-laurel at 27th stop signs.doc



27th Street at Laurel Avenue Looking Eastbound (from North Leg)



27th Street at Laurel Avenue Looking Westbound (from North Leg)



27th Street at Laurel Avenue Looking Eastbound (from South Leg)



27th Street at Laurel Avenue Looking Westbound (from South Leg)



Laurel Avenue at 27th Street Looking Northbound (from East Leg)



Laurel Avenue at 27th Street Looking Southbound (from East Leg)



Laurel Avenue at 27th Street at Looking Northbound (from West Leg)



Laurel Avenue at 27th Street at Looking Southbound (from West Leg)

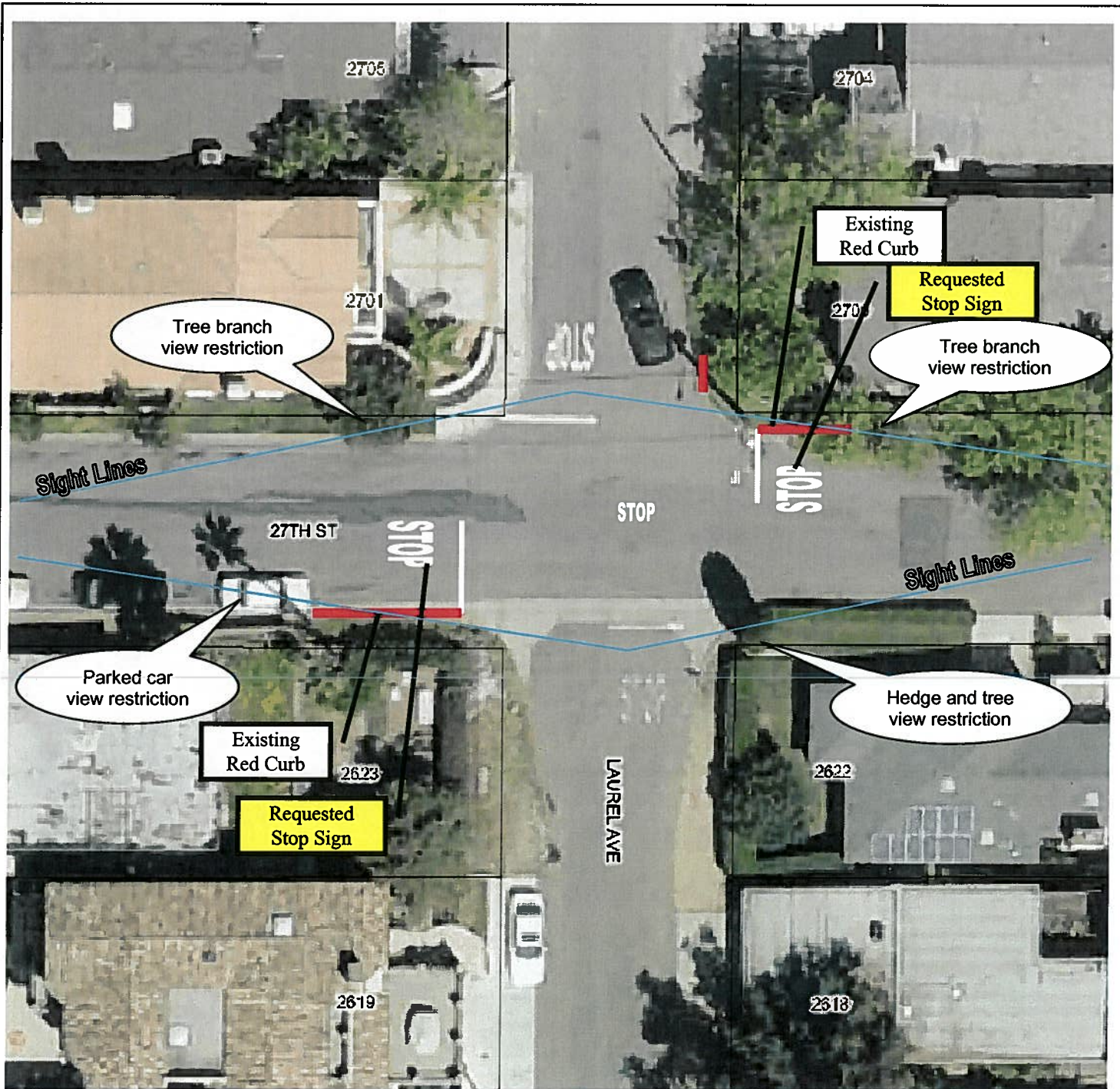


EXHIBIT
B



City of Manhattan Beach
Department of Community Development

LAUREL AVENUE AT 27TH STREET
Consider All-Way Stop Signs



STOP SIGN WARRANT CHECKLIST

MAJOR STREET: 27th Street MINOR STREET: Laurel Avenue

REQUESTED BY: Citizen DATE: 7/15/09

REVIEWED BY: EHZ

Warranted?

SINGLE STREET STOP SIGN WARRANTS - None

- 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 legally established through highway or street.
- At an unsignalized intersection in a signalized area.
- At other intersections where high speeds, restricted view, or crash record indicates a need for control by a stop sign.

MULTI-WAY STOP SIGN WARRANTS – Not Applicable

- Where traffic signals are warranted, and stop signs are used as an interim measure to control traffic while the signal is installed.
- Where a crash problem exists, as indicated by five or more reported accidents within a 12 month period of a type correctable by a multi-way stop sign.
- 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 is at least 30 seconds per vehicle during the highest hour, and
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 four or more reported accidents within a 12 month 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.

- Other locations where multi-way stop signs are justified based on an engineering study.

EXHIBIT
C



City of Manhattan Beach

Community Development

Phone: (310) 802-5500
FAX: (310) 802-5501
TDD: (310) 546-3501

July 13, 2009

***** **PUBLIC MEETING NOTICE** *****
Consider Stop Signs at Laurel Avenue and 27th Street

Dear Property Owner:

The City recently received a concern from a local resident about visibility and speeding at the intersection of Laurel Avenue and 27th Street.

The City Traffic Engineer has conducted a study at the intersection and will be presenting the findings at the next Parking and Public Improvements Commission meeting. The public meeting will be held on Thursday, July 23, 2009 in the City Council Chamber, at 1400 Highland Avenue, and will begin at 6:30 p.m. Interested parties are encouraged to attend the meeting and provide comments.

You are encouraged to forward any comments or questions you may have to me by mail at the address on this letter, via e-mail at edanna@cityymb.info, or by phone at (310) 802-5514.

Sincerely,

Esteban Danna
Assistant Planner
Community Development Department

EXHIBIT
D