

November 5, 2001

Honorable Chairman and Members of  
The Hermosa Beach Public Works Commission

Regular Meeting of  
November 14, 2001

**REQUEST FOR STOP SIGNS ON ARDMORE AVENUE AT 16<sup>TH</sup> STREET  
TO CREATE A 3-WAY STOP**

**Recommendation:**

It is recommended that the Commission deny the request to install stop signs on Ardmore Avenue at 16<sup>th</sup> Street to create a 3-way stop.

**Background:**

A letter (see Attachment 1) was received from residents requesting that the intersection of Ardmore Avenue and 16<sup>th</sup> Street be analyzed to determine if it would be appropriate to install stop signs on Ardmore Avenue to create a 3-way stop. This is a "T" intersection that currently has a stop sign only on the 16<sup>th</sup> Street approach. The intersection is at the northwest corner of the Hermosa Beach Pavilion retail center. A crossing guard is stationed at this intersection to assist school children and crosswalks are in place across Ardmore Avenue and 16<sup>th</sup> Street. Please refer to the attached Site Location Map.

**Analysis:**

In response to the request for a 3-way stop, staff monitored the intersection and conducted a technical analysis to determine if a 3-way stop is warranted according to the standard Caltrans criteria. The analysis involves an assessment of traffic volumes, accident statistics, vehicle delay, and pedestrian activity. The Caltrans guidelines suggest certain threshold values that should be used in the decision-making process in order to provide consistency throughout a community and throughout the state. The warrant criteria and the actual measured values for the intersection of Ardmore Avenue and 16<sup>th</sup> Street are shown below.

<b>Warrant Criteria</b>	<b>Threshold Value</b>	<b>Measured Value (AM/PM Peak Hour)</b>	<b>Threshold Exceeded</b>
Accidents per Year	5/year	1	No
Total Traffic at Intersection	500 vehicles/hour	549/486	Yes/No
Minor Street Vehicle & Pedestrian Volume	200 vehicles & pedestrians/hour	114/89	No/No
Delay (during peak hour)	30 sec/veh (average)	10/7	No/No

As shown on the table, the traffic volumes are above the state-recommended thresholds only for the total volume of traffic passing through the intersection during the AM peak hour. The total traffic volumes during the PM peak hour are below the threshold. The combined traffic and pedestrian volumes entering the intersection from the minor street (16<sup>th</sup> Street) are below the thresholds for both the AM and PM peak hours. According to the guidelines, the values

for the total traffic and the minor street traffic should both be above the thresholds to justify the installation of a 3-way stop. Furthermore, the state guidelines indicate that the thresholds should be exceeded for eight hours of the day. At this intersection, the thresholds are not exceeded even for the peak hours of traffic activity. A 3-way stop would not, therefore, be warranted based on the state guidelines.

It should be noted that the Caltrans criteria and thresholds are not hard-and-fast rules but are guidelines that should be used in the decision-making process. It is sometimes acceptable to install a 3-way stop if there are unique circumstances that clearly indicate that a 3-way stop would be advantageous. At the intersection of Ardmore Avenue and 16<sup>th</sup> Street there are some visibility constraints associated with the parking structure on the southeast corner and the building on the northeast corner. Motorists stopped at the stop sign on 16<sup>th</sup> Street must edge forward to see the oncoming traffic on Ardmore. This was not observed to result in a safety problem, however, because the drivers can readily observe the oncoming traffic prior to proceeding into the travel lanes on Ardmore Avenue. As parking is prohibited on Ardmore, there are no parking-related visibility constraints.

Another unique situation associated with the Ardmore/16<sup>th</sup> Street intersection is that school-age pedestrians cross Ardmore at this location. It was observed that up to 50 pedestrians cross Ardmore Avenue at this location at the beginning and ending of each school day. If a crossing guard were not present, this level of pedestrian crossing activity may constitute a safety problem and stop signs may be justified. The crossing guard, however, effectively stops the oncoming traffic to create a safe crossing environment for the pedestrians. While stop signs would make it easier for the crossing guard to stop the vehicles on Ardmore, the additional stop signs would require all motorists to stop at this location throughout the day and night, thereby resulting in additional delays for thousands of motorists, increased emissions, increased noise levels, increased fuel consumption, and an additional nuisance for motorists on this arterial roadway.

In summary, the conclusion of the analysis is that it would not be warranted to install stop signs on Ardmore Avenue at 16<sup>th</sup> Street to create a 3-way stop. The warrant criteria for a 3-way stop are not satisfied and there are no unique circumstances indicating that a 3-way stop is needed. The staff recommendation, therefore, is for the Commission to deny the request to install stop signs on Ardmore Avenue at 16<sup>th</sup> Street to create a 3-way stop.

### **Alternatives:**

1. Approve staff's recommendation to deny the request to install stop signs on Ardmore Avenue at 16<sup>th</sup> Street to create a 3-way stop.
2. Approve the request to install stop signs on Ardmore Avenue at 16<sup>th</sup> Street to create a 3-way stop.
3. Send back to Staff for further study.

### **Fiscal Impact:**

None associated with denial of the request. If approved for forwarding the to City Council, the estimated cost of installing two stop signs and the associated pavement markings would be \$400. Funds would be available under the current Operations and Maintenance budget of Street Maintenance.

Attachments: Site Location Map

Letter of Request

Respectfully submitted,

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Richard D. Garland, P.E.  
Contract Traffic Engineer

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Harold C. Williams, P.E.  
Director of Public Works/City Engineer

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