



TO: City Council
For Bragg, CA

FROM: Tahoe Design & Engineering
Ali Ahmad, P.E.
Hari Perugu, Ph.D., T.E.

DATE: July 9, 2025

SUBJECT: Analysis of Harbor Avenue and Ocean View Drive Intersection: No Warrant for 3-Way Stop Signal per California MUTCD

Dear Honorable City Council Members,

This memorandum is submitted to provide our engineering judgment and rationale regarding the determination that a 3-way stop control is not warranted at the intersection of Harbor Avenue and Ocean View Drive. This assessment is conducted in strict adherence to the criteria established in the California Manual on Uniform Traffic Control Devices (MUTCD), specifically Chapter 2B.07 (Multi-Way Stop Applications).

Based on a comprehensive engineering assessment and a thorough review of existing conditions and traffic data, it is our professional opinion that the current operational characteristics of this intersection do not necessitate the installation of a 3-way stop control. Key factors supporting this conclusion, derived from sound traffic engineering practices, include:

1. **Existing Traffic Conditions (Level of Service - LOS):** Our analysis confirms that the Harbor Avenue and Ocean View Drive intersection currently operates at healthy Levels of Service (LOS), generally ranging from B to A during peak periods, as indicated by the previous Auto Zone Study. These operational levels are well above the maximum allowable LOS D stipulated in the City's Coastal General Plan for side-street stop-sign controlled intersections. From an engineering standpoint, the current traffic flow demonstrates that the intersection is functioning efficiently and safely without the need for additional control.
2. **Traffic Volume Warrants:** The MUTCD provides specific volume thresholds for considering multi-way stop control. Our review of available traffic data and general traffic patterns in the vicinity indicates that the observed and projected traffic volumes at the Harbor Avenue and Ocean View Drive intersection do not meet these established MUTCD volume warrants. Even accounting for the traffic increases from the proposed new apartment complex development, the volumes remain insufficient to warrant a multi-way stop based on engineering criteria.



3. **Collision History:** A critical warrant for multi-way stop installation often involves a documented history of specific types of collisions (e.g., right-angle collisions) that are amenable to correction by such control. Our detailed review of available collision data (<https://tims.berkeley.edu>) for this intersection does not reveal a pattern or frequency of collisions that, in our engineering judgment, would meet the MUTCD's criteria for warranting a multi-way stop based on safety concerns.
4. **Other Warrants:** Other MUTCD warrants for multi-way stops, such as those related to complex intersections, sight distance limitations, or the need to control approaches where traffic signals are not justified, are also not met at this location based on our assessment. The intersection's geometry and existing controls are deemed adequate for current conditions, and there are no unique circumstances that would, in our professional opinion, justify an exception.

Conclusion:

Drawing upon a detailed application of the California MUTCD (Chapter 2B.07) criteria and informed by our professional engineering judgment, we conclude that the intersection of Harbor Avenue and Ocean View Drive does not currently warrant the installation of a 3-way stop control. Implementing traffic control devices without meeting established warrants can, in our experience, lead to unnecessary delays, increased driver disregard for traffic control, and potential safety issues due to a false sense of security or unexpected driver behavior.

It is our firm belief that this determination is consistent with established traffic engineering principles, best practices, and the City's adopted policies for maintaining safe and efficient transportation infrastructure.

Sincerely,

Tahoe Design & Engineering

Ali Ahmad, P.E. President & Principal Engineer



Harikishan Perugu

Hari Perugu, Ph.D., T.E. Senior Transportation Engineer