



July 20, 2020

Mr. Henry R. Belmonte  
VJB Vineyards & Cellars  
60 Shaw Avenue  
Kenwood, CA 95452

## **Addendum to the *Updated Traffic Impact Study for the VJB Vineyard and Cellars***

Dear Mr. Belmonte;

As requested, this letter provides additional information relative to a left turn lane on Highway 12 at Shaw Avenue and analysis provided in the *Updated Traffic Impact Study for the VJB Vineyard and Cellars* (TIS) dated July 17, 2019.

### **Left-turn Lane**

Previous analyses going back to 2005 have consistently indicated that the traffic volume warrant is met for a left-turn lane on Highway 12 at Shaw Avenue. However, as volume warrants are routinely met along high-volume corridors such as Highway 12 for turn lanes, signals, additional stop signs, and other modifications, the volume warrant is typically not the only one used to determine if there is a need for an improvement. Consideration should also be given to operational and safety concerns to establish whether there is an actual need for the improvement or not.

In the case of the intersection of Highway 12/Shaw Avenue, the operational analysis provided in the TIS indicates that drivers turning left onto Shaw Avenue from Highway 12 would encounter an average delay of about 10 seconds or less, which represents acceptable LOS A operation – even under projected 2040 traffic volumes. Given that this is well above the County's threshold of LOS D, there is no operational concern that has been identified or forecasted that would require installation of a separate left-turn pocket.

Similarly, a review of the collision history for this location indicates that since 2000 there have been a total of three crashes reported that include a westbound left-turning vehicle; the most recent of these was in 2012. Crash analyses are typically based on a five-year study period, so had the shorter five-year study period been used, no crashes of a type that could be addressed through installation of a left-turn pocket would be included in the analysis. Based on this review, it is clear that no safety problems have been identified that would require the installation of a left-turn pocket.

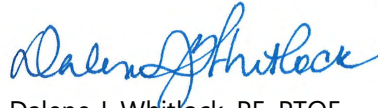
It is noted that there is an approximately 6-foot wide "painted median" on the westbound approach to Shaw Avenue that is used by some drivers while turning left into Shaw Avenue. While this is an illegal movement and is therefore neither suggested nor supported, this median does provide space that separates directions of travel and can be used in an emergency, thereby giving an increased measure of safety to this location that would not otherwise exist.

The need for a left-turn lane is based solely on traffic volumes and not on any actual operational deficiency or safety concern. As the intersection can operate adequately and accommodate the existing and projected number of vehicles, the addition of a separate left turn lane does not appear to be necessary at this time.

Thus, we continue to recommend that the installation of the improvement be deferred, though right-of-way along the project site's Highway 12 frontage should be dedicated if not already available to allow future installation of a center turn lane through Kenwood, as is planned by Caltrans.

We hope this information is of assistance in the review process. Thank you for giving us the opportunity to provide these services.

Sincerely,



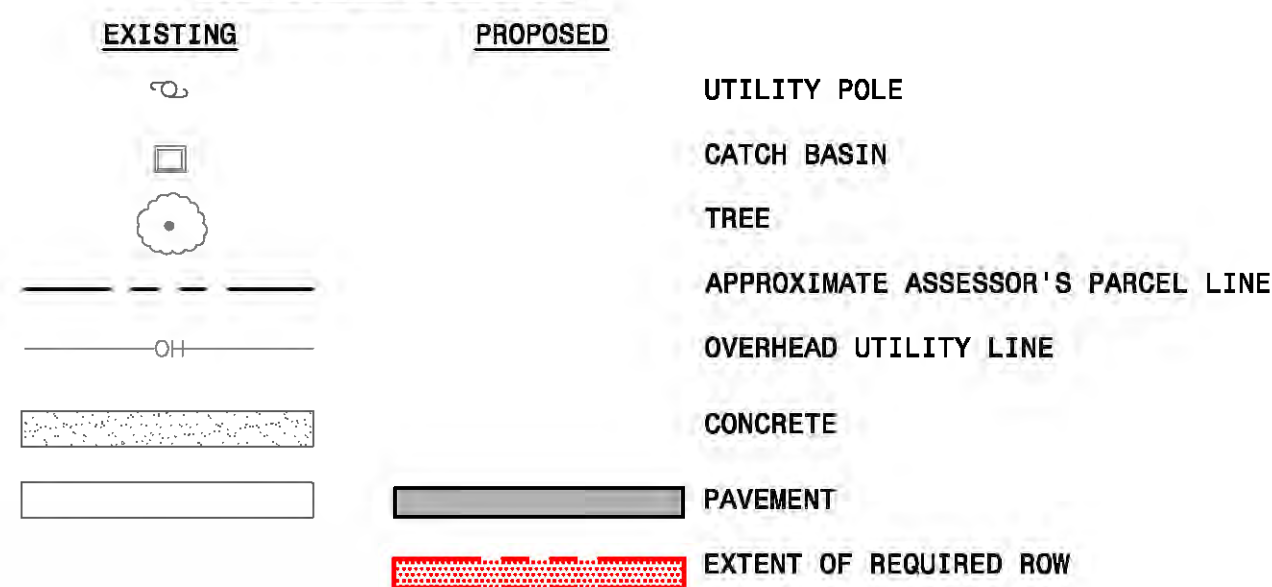
Dalene J. Whitlock, PE, PTOE  
Senior Principal



**ABBREVIATIONS**

- AC ASPHALT CONCRETE
- APN ASSESSOR'S PARCEL NUMBER
- DWY DRIVEWAY
- EG EXISTING GROUND
- EP EDGE OF PAVEMENT
- ER EDGE OF ROAD
- FT FOOT
- HDM CALTRANS HIGHWAY DESIGN MANUAL
- HWY HIGHWAY
- IB "I" BEAM
- IP IRON PIPE
- EX EXISTING
- MIN MINIMUM
- MPH MILE PER HOUR
- NB NORTHBOUND
- PUE PUBLIC UTILITY EASEMENT
- ROW RIGHT OF WAY
- SB SOUTHBOUND
- TYP TYPICAL
- UB UTILITY BOX

**SYMBOLS & LEGEND**



**DESIGN INPUTS**

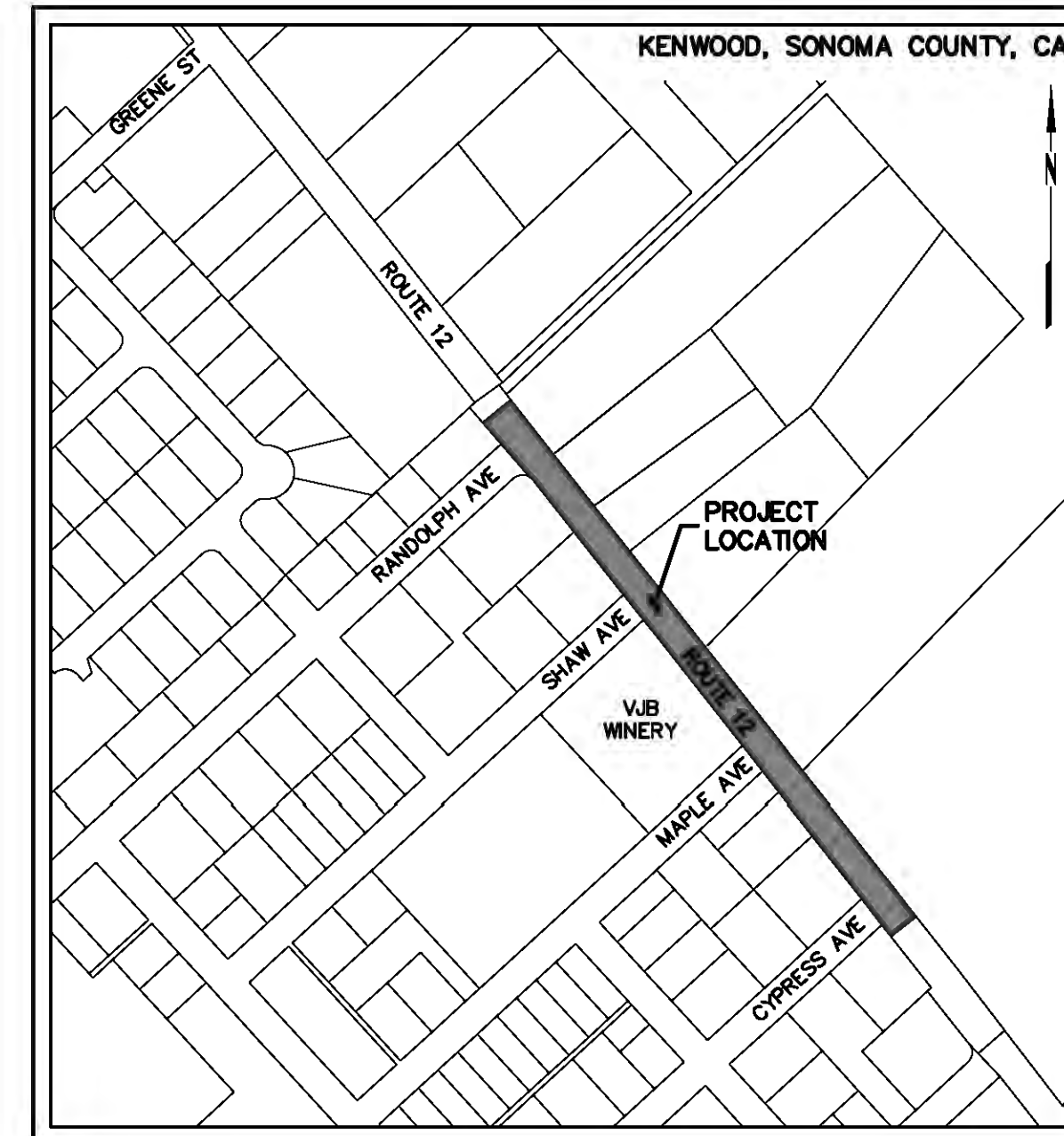
HIGHWAY CATEGORY.....CONVENTIONAL HIGHWAY-URBAN ARTERIAL-TROUGHWAY  
 POSTED SPEED ADVISORY.....45 MPH  
 AVERAGE DAILY TRAFFIC.....16,900 VEHICLES PER DAY (TRAFFIC IMPACT STUDY DRAFT REPORT BY W-TRANS, FEBRUARY 1, 2018)  
 STOPPING SIGHT DISTANCE.....400'  
 CORNER SIGHT DISTANCE.....495'  
 DESIGN VEHICLE.....STAA

**PURPOSE STATEMENT:**

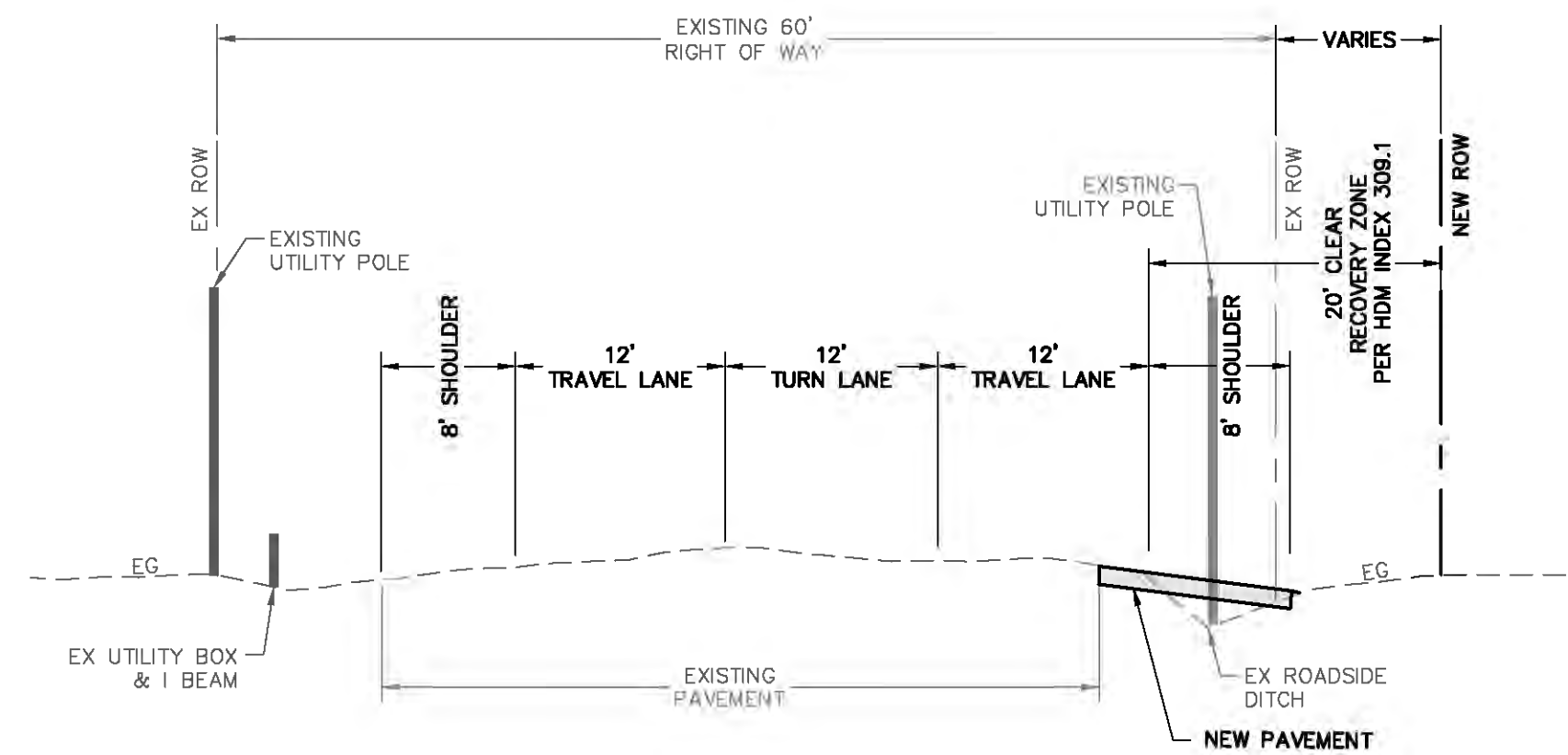
BKF ENGINEERS WAS RETAINED TO EVALUATE THE FEASIBILITY OF PROVIDING A DEDICATED LEFT-TURN LANE FROM HIGHWAY 12 TO SHAW AVE. WE DETERMINED THAT THIS TURN LANE COULD NOT BE BUILT WITHIN THE EXISTING RIGHT OF WAY WHILE CONFORMING TO THE REQUIREMENTS OF THE CALTRANS HIGHWAY DESIGN MANUAL AND REFERENCED STANDARDS. THIS CONCEPTUAL EXHIBIT HAS BEEN PREPARED AT THE REQUEST OF SONOMA COUNTY TO SHOW A LEFT-TURN LANE AND THE EXTENT OF THE REQUIRED RIGHT OF WAY DEDICATION.

**MAPPING NOTES:**

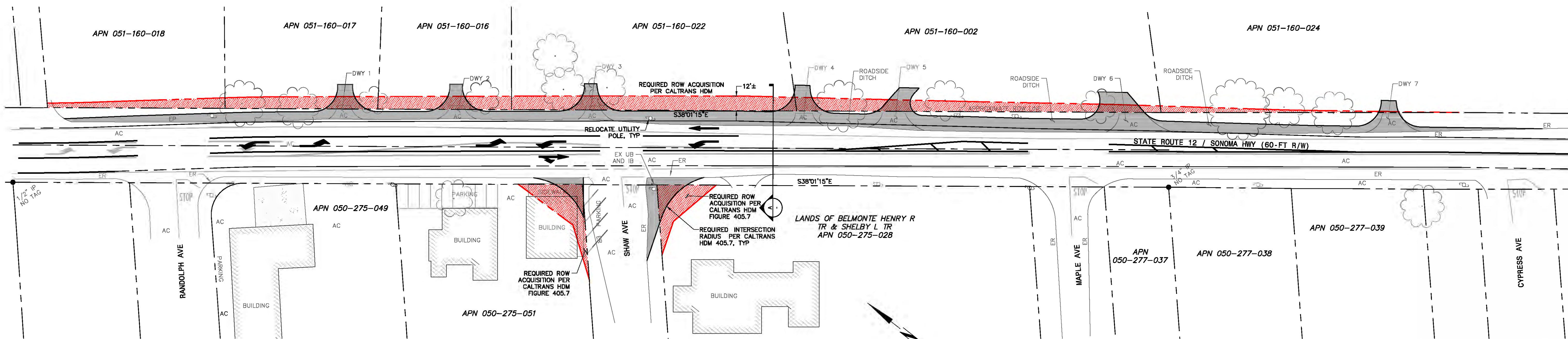
EXISTING FEATURES SHOWN HEREON WERE OBTAINED FROM CALTRANS RECORD DRAWINGS SONOMA COUNTY GIS DATA AND A FIELD SURVEY CONDUCTED BY BKF ENGINEERS ON OCTOBER 22, 2019 .



**VICINITY MAP**  
NOT TO SCALE



**SECTION "A"**  
NO SCALE



**LEFT-TURN LANE & EXTENT OF  
REQUIRED ROW CONCEPTUAL  
EXHIBIT**

VJB WINERY  
 SONO12623 / SON-12-26.68-26.75  
 66 SHAW AVE, KENWOOD, CA (APN 050-275-051)  
 DECEMBER 2019

**PRELIMINARY**  
 NOT FOR CONSTRUCTION  
 DATE: 12/20/2019  
 ERIC D. WADE C 81862

PREPARED BY  
**BKF**  
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