

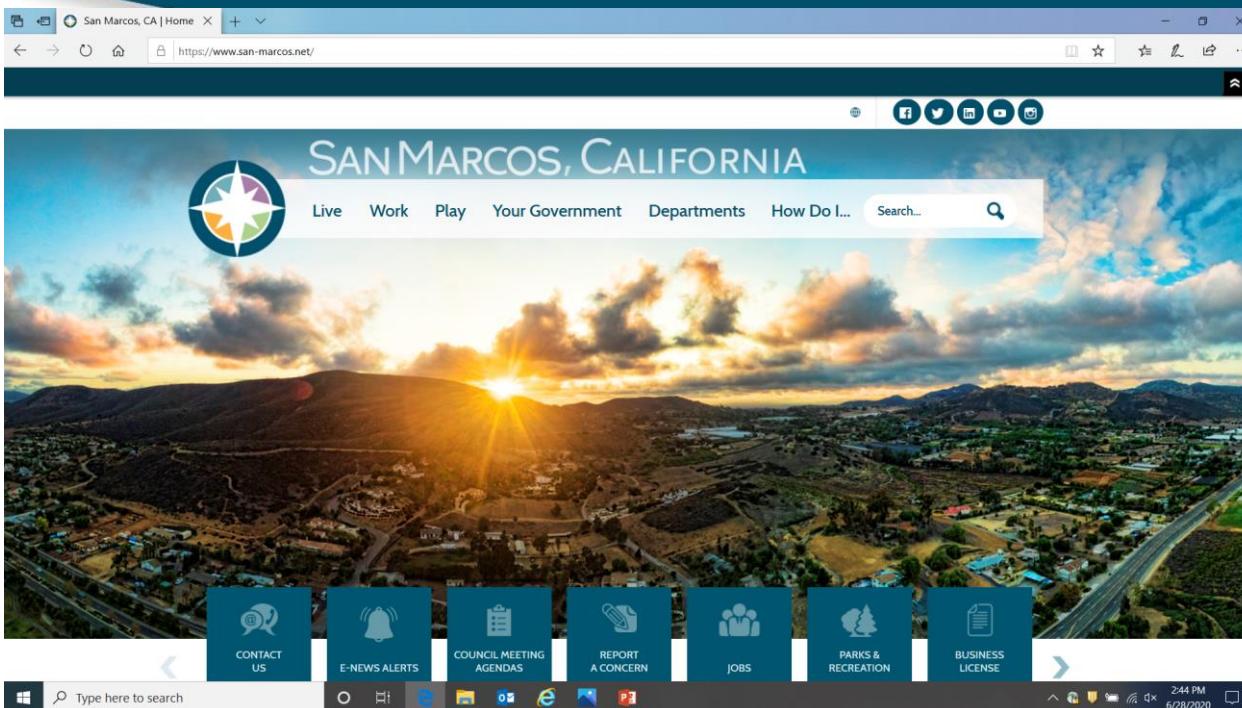


TRAFFIC COMMISSION MEETING

June 2, 2021

SAN MARCOS
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REPORT A CONCERN (TRAFFIC SAFETY)



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- Select Traffic Congestion
- Enter description of traffic safety concerns (speeding, new signs, new markings, etc.)
- Enter phone number/email contact

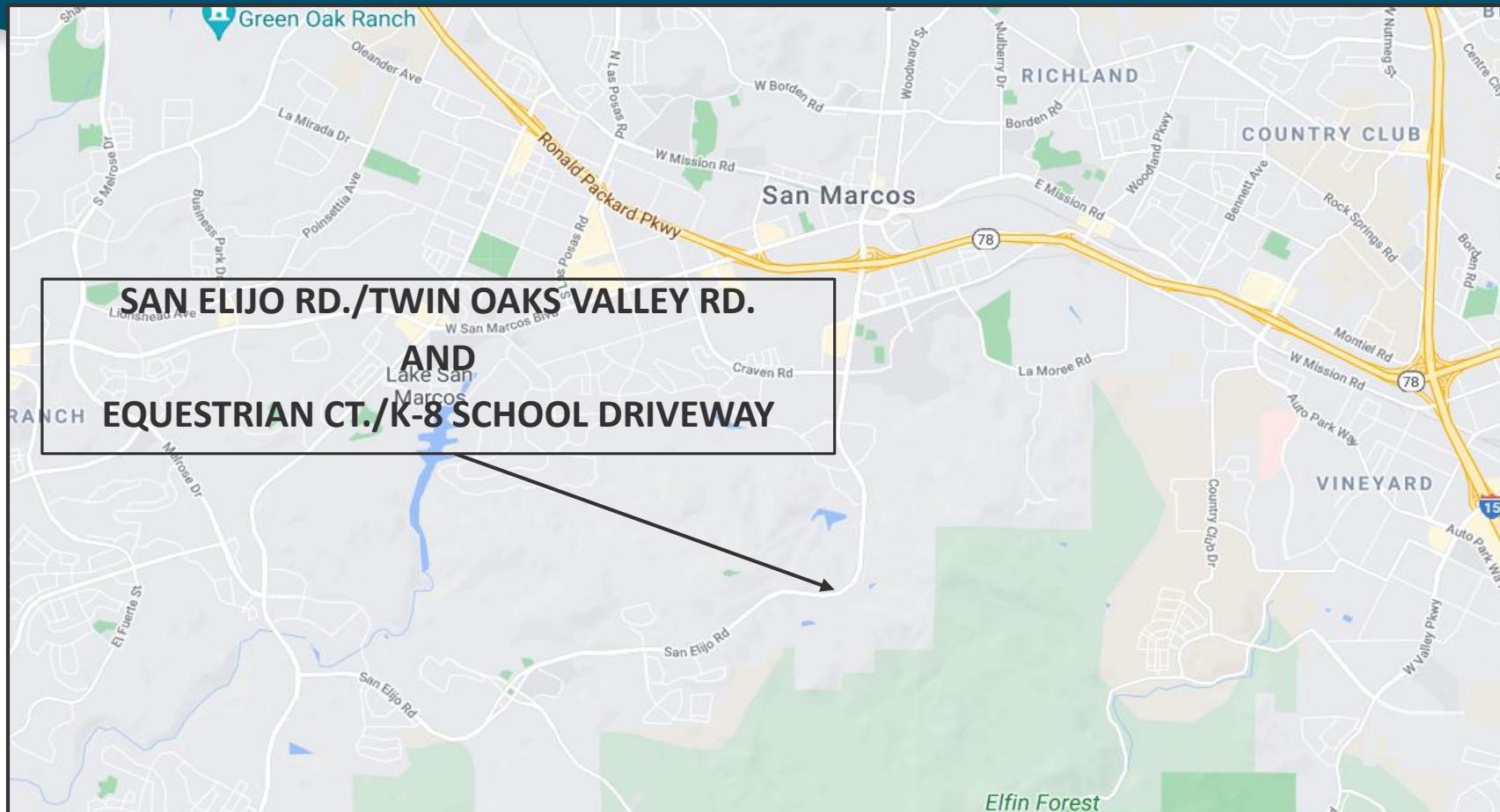


AGENDA ITEM #7A

“NO TURN ON RED” sign- San Elijo Rd/Twin Oaks Valley Rd and Equestrian Court/Double Peak K-8 School Driveway

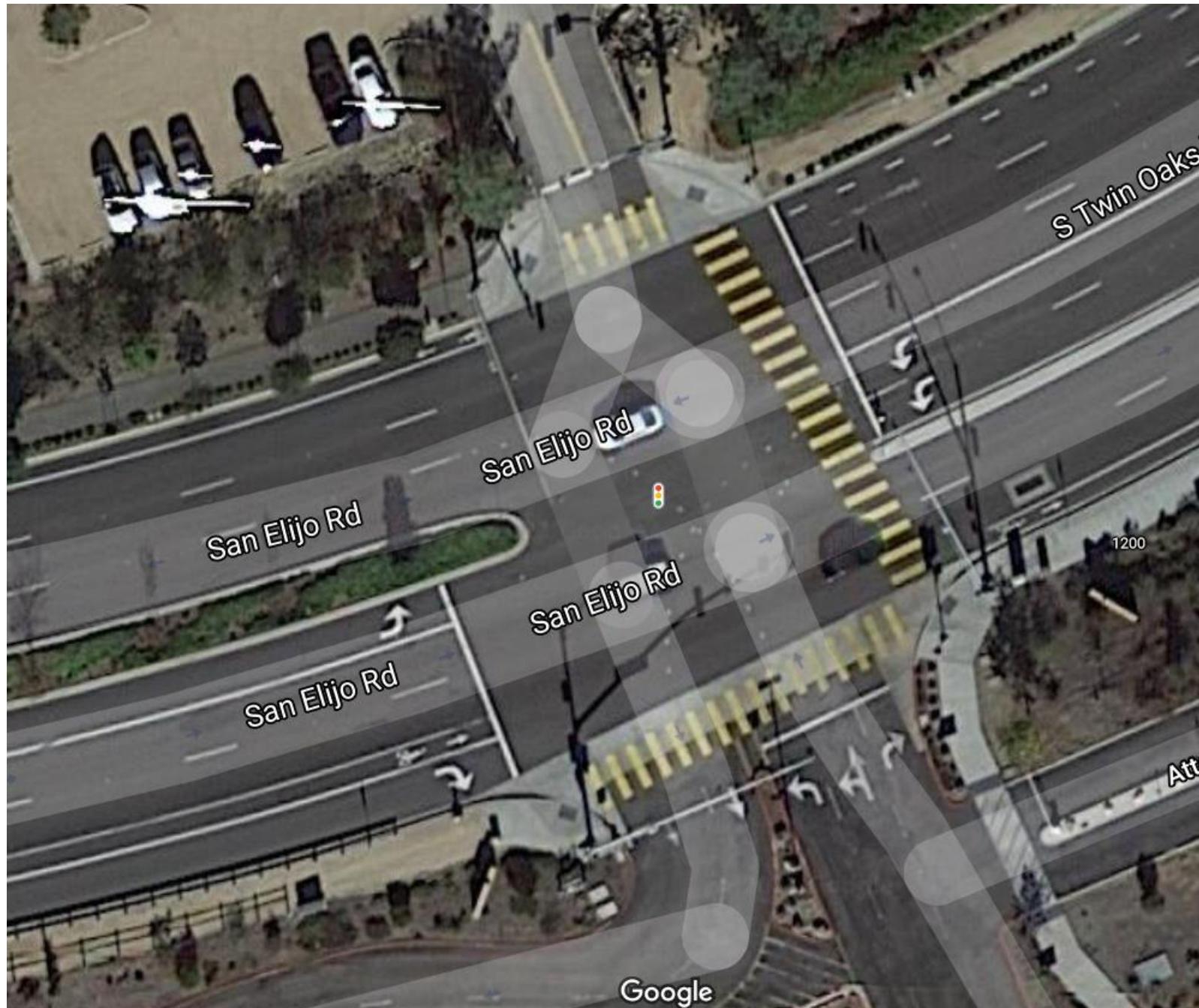
BACKGROUND

- Traffic Engineering Division received several requests to install “No turn on Red” sign at the intersection of San Elijo Rd/Twin Oaks Valley Rd and Equestrian Court/Double Peak K-8 School Driveway.
- Constant Flow of Eastbound turning traffic into the school grounds deprives westbound left turn traffic of its opportunity to turn left on green.
- Right Turn on Red also causes conflict with students as queued vehicles encroach into the driveway, blocking the crosswalk.
- Based on the residents’ requests, Engineering staff initiated a traffic safety evaluation at this signalized intersection.



- VICINITY MAP
- “NO TURN ON RED” SIGN
- AGENDA ITEM #7A-JUNE 2, 2021

- Study area – Signalized intersection of San Elijo Rd/Twin Oaks Valley Rd @ Equestrian Court/Double Peak K-8 School Driveway
- Southern part of the City



- San Elijo Rd/Twin Oaks Valley Rd (Major Arterial) - (3) lanes in WB direction, (2) lanes in EB direction.
- Posted speed limit - 45 MPH
- Street grade approx. 8% in the vicinity of this intersection.
- Equestrian Ct/Double Peak School approaches are single lane
- Due to restricted line of sight, blank-out signs are posted on both Equestrian Dr and the Double Peak K-8 Driveway
- Pedestrian crossings are marked on all legs except the west leg
- A six-phase traffic signal operation w/north-south split.

Looking Eastbound on San Elijo Rd
(DP school driveway on right)



Looking westbound on Twin Oaks Valley Rd



Looking northbound from Double Peak K-8 School Driveway





ENGINEERING STUDY/ANALYSIS

- Engineering staff and Public Works Staff made several visits to the site to observe traffic patterns.
- Eastbound right turn was observed turning into school driveway at all times.
- Westbound left turn traffic was unable to turn within its allotted green time.
- Eastbound right turn traffic encroached at times onto the crosswalk.
- Engineering Staff met with School District to identify a long-term solution to this issue.

ENGINEERING STUDY/ANALYSIS

Per the California Manual on Uniform Traffic Control Devices (CAMUTCD), Section 2B.54, No turn on Red sign should be considered if one or more of the following conditions are met:

- a) Inadequate sight distance to vehicles approaching from the left (or right if applicable);
- b) Geometrics or operational characteristics of the intersection that might result in unexpected conflicts;
- c) An exclusive pedestrian phase;

ENGINEERING STUDY/ANALYSIS

- d) Unexpected number of pedestrian conflicts with right-turn-on-red maneuvers, especially involving children, older pedestrians or persons with disabilities.
- e) The skew of the intersecting roadways creates difficulty for traffic approaching from left.

ENGINEERING STUDY/ANALYSIS

- Based on current condition, CAMUTCD criteria (b) and (d) for “No turn on Red” (NTOR) sign are justified.
- The NTOR sign is recommended to be installed on the far signal pole of the intersection and to be oversized (36”X48”) for better visibility (as shown on next slide).
- Intermittent enforcement of this regulatory sign by the Sheriff’s Department will be requested for the sign to be effective.
- Engineering staff continues to work with School District toward expanding the available queuing area to include the parking lot, in order to accommodate a larger volume of queued vehicles on premises and avoid spillback outside of the school driveway during pick-up and drop-off times.

ENGINEERING STUDY/ANALYSIS



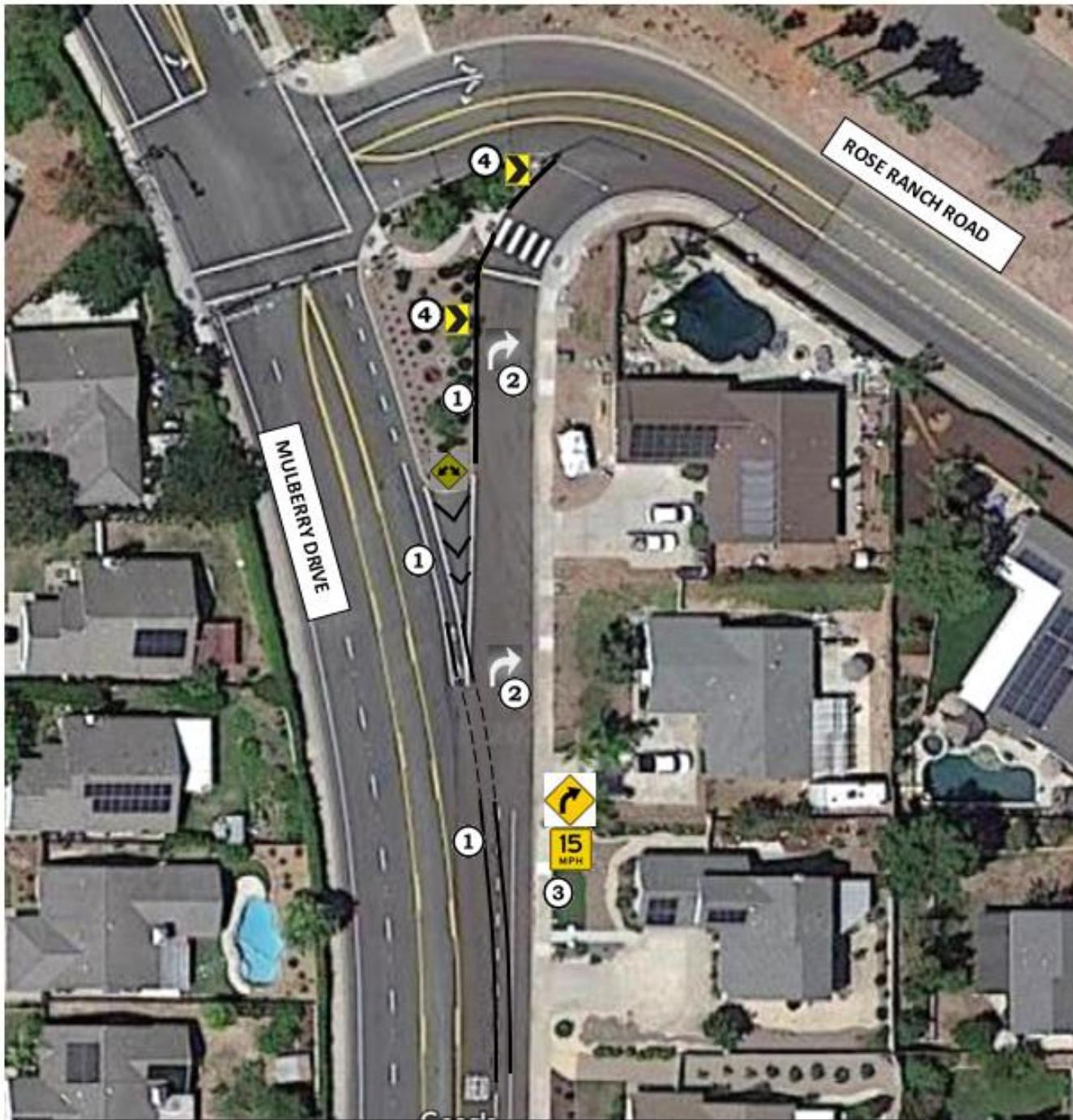
**“NO TURN ON RED SIGN” ON A SIGNAL POLE ON EAST LEG
FACING EASTBOUND TRAFFIC**

STAFF RECOMMENDATIONS

- Engineering staff requests that the Traffic Commission approves staff's recommendations for the installation of "No turn on red" sign at the intersection of San Elijo Rd/Twin Oaks Valley Rd and Double Peak K-8 School Driveway consistent with the CAMUTCD standards as a low-cost and effective countermeasure for improving the queuing at the school driveway.
- The installation of this regulatory sign would prohibit eastbound right turn traffic from turning on red, and should give westbound left turn movement the opportunity to turn into the school driveway.
- Engineering staff also recommends intermittent enforcement of the turn restriction by the Sheriff's Department to prevent turning on red by eastbound traffic.

INFORMATION: Work Order Updates

- Traffic Signing and Striping Improvements - Mulberry Drive @ Rose Ranch Road Signalized Intersection- item was presented to Traffic Commission in May; Traffic Commission approved staff's recommendations for the installation of additional traffic signing and striping improvements consistent with CAMUTCD standards as low-cost and effective countermeasures for reducing vehicular speeds.
- The improvements are expected to warn drivers of the roadway curvature, and enhance visibility of the intersection.



- Engineering staff recommends traffic signing and striping improvements be installed at the intersection of Mulberry Drive and Rose Ranch Road to include the following:
 - 1) A five-foot bike lane extended through the right-turn slip lane on northbound Mulberry Drive to assist in channelizing vehicular through traffic.
 - 1) Installation of painted gore area to separate traffic for northbound Mulberry Drive from the existing right-turn slip lane.
 - 1) Installation of left edgeline (yellow) adjacent to the raised "porkchop" island to improve visibility of the limit of travel way.
 - 2) Installation of new right turn pavement arrows in the right-turn slip lane.
 - 3) Installation of new advance curve warning sign with a supplementary 15-MPH speed advisory plaque.
 - 4) Installation of new curve alignment warning signs "Chevrons" to delineate the curved raised island and roadway.

BEFORE: Looking northbound on Mulberry Drive towards Rose Ranch Rd.



BEFORE: Looking northbound on Mulberry Drive (inside right-turn slip lane).



INFORMATION: Work Order Updates

Looking northbound on Mulberry Drive towards Rose Ranch Road



INFORMATION: Work Order Updates

AFTER: Looking northbound on Mulberry Drive approaching right turn slip lane



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INFORMATION: Sight Distance (Vineyard @ Mulberry Drive)



- Commission Kovrig concerned about sight distance at intersection
- SD calculated at 1175 feet to the north adequate for 45 MPH (430' required)
- Recommend vegetation trimming to improve line of sight
- 8' back from the curbline; not impacting bike lane
- CA Vehicle code allows motorist to creep beyond limit line to improve line of sight
- City staff to issue work order to remove/trim back vegetation to increase SD

INFORMATION: Sight Distance (Vineyard @ Mulberry Drive)



-Sight distance unobstructed to the south

INFORMATION: Sight Distance (Avenida Ricardo/Walmart Drive @ Center Drive)



- Commissioner Erickson concerned about sight distance at intersection
- SD calculated at 283 feet to the north adequate for 25 MPH (150' required) @ limit line
- Recommend vegetation trimming to improve line of sight and removal of object marker and bollard
- New sign (OM3-R) to be installed in front of traffic signal pole (see next slide)

INFORMATION: Sight Distance (Avenida Ricardo/Walmart Drive @ Center Drive)

