

**Mission Canyon Bridge Studies
Potential Design Exceptions/Constraints**

Design Exception	Nonstandard Feature	Exception Description	Exception Reference	Reason	Constraint	Team's Recommendation
1	Centerline radii of curves in realigned portion of Mission Canyon Road are anticipated to be 200 feet with a normal crown or minimum adverse superelevation.	Per the AASHTO Greenbook and the Caltrans Highway Design Manual (HDM), the minimum curve radius given a design speed of 25 mph and a Normal Crowned roadway is 2,050 feet.	AASHTO Greenbook Table 3-8 HDM Section 202.2(1) and Table 202.2A Mandatory Exception	The 200 foot radius curve beginning at Station 201+77 cannot be any larger due to the constriction point created by the lower reservoir to the east and the mission aqueduct column to the west. Similarly, the 200 foot radius curve at Station 203+86 cannot be any larger due to the necessity to avoid additional impacts to the historic wall to the west and Rocky Nook Park to the east. Finally, the 200 foot radius curve at Station 206+53 cannot be any larger due to the existing geometry of Puesta Del Sol and the Santa Barbara Woman's Club driveway, as well as the requirement to conform to the existing alignment of Mission Canyon Road to the north.	1. Meeting standard would result in the relocation or removal of several culturally and historically significant features, removal of trees, and significant acquisition of property from Rocky Nook Park and private parties. 2. 200 foot radius curves will not meet the current posted speed limit from 35 mph. 3. The 200 foot radius curves are an improvement to the existing roadway geometrics.	Approval with consideration of a special speed zone for 25 mph
2	Lane widths are anticipated to be 11 feet throughout the project except just south of the bridge, where they will be narrowed to 10 feet in width for approximately 50 feet.	1. The minimum lane width given an ADT of 10,600 is 12 feet 2. The minimum lane width is 11 feet for conventional highways with posted speeds less than 40 mph	1. County of Santa Barbara Standard Detail 6-070 2. HDM Section 301.1 Mandatory Exception	Lane widths throughout the project were set to 11 feet to keep with the character of the existing Mission Canyon Road, as well as to limit the impacts to historic structures in the area. Lane widths were narrowed to 10 feet from the intersection with Mountain Drive to the south conform of the project in order to accomodate the constriction point between the lower reservoir and the mission aqueduct column at Station 202+50 as well as to limit the impacts to the Mission Canyon Bridge	Meeting standard would result in the relocation or removal of several culturally and historically significant features.	Approval
3	Sidewalk widths immediately south of Mission Canyon Bridge at Station 202+50 are anticipated to be 4 feet or less	1. The minimum sidewalk width in "existing constrained conditions when increasing the sidewalk zone is not practical" is 5' 2. The minimum width of a sidewalk should be 6' when contiguous to a curb	1. City of Santa Barbara Pedestrian Design Guide, Table VIII-2 2. <u>HDM Section 105.2 Advisory Exception</u>	Due to space constraints between the lower reservoir to the east and the mission aqueduct column to the west, the proposed design narrows the sidewalks to a minimum width of approximately 3.8 feet at one point. The sidewalk width would be increased to 6 feet as soon as possible to the south and would be 6 feet across the bridge. PROWAG prefers to see a minimum of 4 feet for the ADA path of travel. Given the reduction is small and over a small distance this should not result in a safety issue for ADA users.	Meeting standard would result in the relocation or removal of several culturally and historically significant features.	Approval
4	Driveway grades at 2539 Puesta Del Sol exceed 15% and the grade break between Puesta Del Sol and the private driveway would exceed 10%	1. Grades shall not exceed 15% for short driveways 2. Crest grade breaks shall be limited to 10% to prevent bottoming out of vehicles	1. County of Santa Barbara Standard Detail 4-060, Note 4 <u>Advisory Exception</u> 2. County of Santa Barbara Standard Detail 4-060, Note 3 <u>Advisory Exception</u>	Mission Canyon Road has a reverse superelevation from the northern project limits to approximately Sta 206+00. This reverse super elevation has resulted in vehicles not navigating the existing curve and hitting the existing utility pole and historic stone wall near Sta 207+00. In order to achieve appropriate superelevation for the curve located at Station 207+75 and allowable ADA grades within the crosswalks at the intersection of Mission Canyon Road and Puesta Del Sol, steepening of the driveway at 2539 Puesta Del Sol is necessary.	1. Meeting standard would require extending the limits of reconstruction along Puesta Del Sol (which is well beyond the project area), the relocation or removal of several historically significant walls, the removal of trees, the reconstruction of a private driveway, and the acquisition of private property. 2. It is likely that this work would not be a participating cost through the Highway Bridge Program funding	Approval

