

**Clarifications No. 2, July 18, 2011 – Fresno 180 Braided Ramps Design-Build Project Contract No. 06-0C1104**

RFC No.	Class	Document	Section	Clarification	Response
22	3	Book 2	Section 1.3.1, Page 1-1	<p>Basic Configuration</p> <p>Horizontal Alignment is listed as part of the basic configuration. Are revisions to the horizontal alignment allowed as part of the design process as long as they conform with Caltrans' standards and design criteria?</p>	See Addendum No. 1
23	3	Book 2	Section 1.3.1, Page 1-1	<p>Basic Configuration</p> <p>Lane and Shoulder Widths and Number of Lanes of the ramps are listed as part of the basic configuration. Are revisions to the lane and shoulder widths and number of lanes allowed as part of the design process as long as they conform with Caltrans' standards and design criteria?</p>	No. Changes to these areas would require an ATC or will require Department Approval per Section 2.4.1 of the Design-Build Contract (Book 1). Department understands that final design will require some flexibility in lane and shoulder tapers.
24	2	Book 2	Sec. 15.2.3 & 15.3.1	<p>Visual Quality</p> <p>Book 2 states in Sec. 15.2.3 that the "Design-Builder shall coordinate Aesthetic Themes and Concepts for the Project with existing concepts along the corridor for consistency and unity" and in Sec. 15.3.1 to "develop design solutions that maintain or enhance existing visual quality". This is assumed to mean that the aesthetic features of new construction should be consistent with the existing aesthetic features within the corridor. Currently, the existing bridge columns within the corridor have flared tops, but the new piers shown in the Preliminary Engineering Plans and the APS do not. Please clarify whether or not the Department expects the Design-Builder to add flares to the tops of new bridge piers to conform to the existing <u>visual character</u> of the project corridor.</p>	Column flares should match existing visual character of adjacent bridge piers. If the chosen bridge span configuration ends up requiring outrigger bents as shown on the APS studies, then top of column flares would not be required.

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25	2	Book 2	Sec. 18.3.1.2 (page 18-7)	<p>MOT</p> <p>This section states "the infield slope shall not be steeper than 1:4 (v:h)". We understand that a design exception for up to 2:1 (h:v) for embankment slopes has been approved in the permanent condition along ramps N1, N2, N3, N4, S1, S2, S3 and S5. Please clarify if side slopes steeper than 4:1 (h:v) during construction are allowed. Also, please clarify what is meant by "infield slope" and in what locations along the project corridor this occurs.</p>	<p>During construction, side slopes could be steeper than 4:1 (H:V) within the project limits as long as all storm water requirements are met.</p> <p>"Infield slope" and "side slope" are equivalent.</p>
26	3	Book 2	Sec. 21.3.3, first bullet under "Traffic Considerations" (page 21-4)	<p>Pavement Design</p> <p>In Book 2, Sec. 21.3.3, it states "the Design-Builder shall use the traffic projections provided in the Project Report or the Final Environmental Document to determine expected traffic loads". The percentage of heavy vehicles in the documents referenced above is stated to be 4%. The traffic data on the Caltrans website shows the percentage to be 3% and the lane closure charts included in the traffic data most recently posted on the RID website indicates 5%. Please confirm that the data shown in the Project Report or the Final Environmental Document take precedence.</p>	<p>Five (5) percent should be used.</p>
27	3	RID	NA	<p>Will Caltrans permit an ATC changing the horizontal and vertical alignments provide for in the RID geometry? If so to what degree?</p>	<p>See Addendum No. 1.</p>
28	2	RID	Conceptual Plans	<p>There seems to be some discrepancies on the Layouts between the pdf version and the dgn versions. As an example, the pdf layout sheet L-3 shows two 12-foot lanes for ramp "S4" at Station 171+00 in the pdf version and a single 12-foot lane at the same location in the dgn version.</p>	<p>The Department has posted corrected copies of the layouts to the RID. In this case, the dgn files were correct.</p>

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29	2	RID - Preliminary Engineering Plans	Layout Sheets L-1 and L-2	<p>Design Exceptions</p> <p>The retaining wall with barrier shown along the right ES of connector ramp S1 does not meet the Caltrans horizontal sight distance requirement as stated in the Caltrans Highway Design Manual (HDM) Section 201.1 and Table 201.1 (page 200-1). In order to meet Caltrans standards and criteria and not require a design exception, the wall and barrier would have to be moved approximately 11' to the right of the ES per Figure 201.6 on page 200-7 of the HDM. This would require significant additional roadway fill, several hundred feet of additional paving between the ES and barrier, taller walls and potential impacts to utilities, landscaping, irrigation, drainage, etc between the wall and right-of-way beyond what is shown in the Preliminary Engineering Plans. Does the Department anticipate that the Design-Builder will receive approval of this design exception?</p>	<p>Plans provided by the Department were preliminary and provided for reference only. The Design-Builder will need to determine the location of the wall/barrier to meet design standards including stopping sight distance.</p> <p>The Department is unable to provide pre-approval of a design exception.</p>
30	2	RID - Preliminary Engineering Plans	Layout Sheets L-4 and L-5	<p>The Preliminary Engineering Plans show only a soundwall from S3 Sta 25+00, 24' Rt to S3 Sta 32+00, 24' Rt, without any retaining walls in that area. Our preliminary analysis of the basic configuration indicates that the profile of S3 and S5 would result in up to a 25% cross slope differential between the gore and ramps where they converge and would result in an undesirable merging situation. This also does not meet the gore cross slope differential requirement as stated in the Caltrans Highway Design Manual (HDM) Section 301.2 (c) page 300-1 and Section 504.2 (5) page 500-14. In order to meet Caltrans standards and criteria and not require a design exception, the profile of S3 would have to be raised, which would require a retaining wall approximately 500' long with a maximum height of 13' along the south side of S3 to stay within the existing right-of-way. Does the Department anticipate that the Design-Builder will receive approval of this design exception? If not, does the retaining wall described above become part of the basic configuration?</p>	<p>Plans provided by the Department were preliminary and provided for reference only. The Design-Builder will need to determine the location of the wall/barrier to meet design standards.</p> <p>The Department is unable to provide pre-approval of a design exception.</p>