

**NON-CONFIDENTIAL DESIGN-BUILD QUESTIONS**  
**US 301 over Four Hole Swamp - Project ID 0040308 - Orangeburg County**

**FINAL RFP - ROUND 1**

Date Received: 6/29/2022

Meeting Date: 7/7/2022

						SCDOT	
Question No.	Category	Section	Page / Doc No.	Question/Comment	Discipline	Response	Explanation
1	PIP	Utilities	Sue Info	Please confirm utility information provided is Level D only. Typically Level B has been provided on Design-Build projects.	Utilities	No_Revision	Confirmed.
2	Attach_A	Exhibit_4a	2	Follow up on CRC/NS Team Confidential Question #2 - Are recoverable slopes acceptable outside of the shoulder widening in the traffic safety portion of the project?	Roadway	Revision	Yes. The intent for the traffic safety portion of the project is to not reconstruct the full shoulder width, which is consistent with other traffic safety projects around the state. Tie to existing ground (approximately 2 inches) as best as practical using recoverable slopes. Design side slopes for bridge replacement shall be in compliance with RDM. RFP will be clarified.
3	Attach_A	Exhibit 4d_Pt 2	P. 5 & P. 7	Addendum 1 - added some language in the Traffic Control portion that is conflicting. In Exhibit 4d, Part 2, Section 2.2, it states the regulatory speed limit will be 35 mph during lane closures. However in Section 2.6, a paragraph was added requiring the design speed for the TMP to be 60 mph.	Traffic	No_Revision	The RFP requires any lane closures during construction, being a reduction from two lanes in either direction on US-301, to be covered by a 35mph speed limit. The geometrics of the temporary alignments at the bridge shall be designed to meet 60mph.
4	Attach_A	Exhibit 4z	Section 2.0, 3.2.3, 3.3.3 & 3.4.4.	Exhibit 4z, Section 2.0 includes submittals (Preliminary, ROW & Final) for ITS Plans. Exhibit 4z, Sections 3.2.3, 3.3.3 & 3.4.4 states that "The Contractor shall develop and furnish ITS design plans as indicated in Exhibit 5*". However, there are no ITS plan requirements in Exhibit 5. Please verify if the project is to include any ITS.	PM	No_Revision	The project does not include any ITS.
5	Attach_A	Agreement	Article IV.A.1	The schedule seems to be very tight with design, permitting and construction of both bridges in 600 days. Can the 600 days be increased by 60 to 90 days?	Construction	Revision	Article IV.A. contract time will be revised to 660 days for substantial completion.
6	RFP	2	177 of 296	RFP Hydraulic Design Criteria requires HEC-RAS model to include backwater effects from any downstream controls. SCDOT "Requirements for Hydraulic Design Studies" states that "all bridges should be designed so that backwater for the 1 percent AEP flood is one (1) foot or less when compared to the unrestricted or natural conditions in the stream reach upstream of the proposed bridge. In the case of replacement bridges, the proposed bridge must meet the above stated backwater standard, but also should not create more backwater than the existing bridge. If the design policies for road overtopping, freeboard, free-surface flow, or backwater as described in Section 1.1.1 cannot be met, a request for a design variance will be required." There is no residential property in the backwater affected area for the US 301 project. Is the above criteria required for this project? If so, if it is determined through analysis that the proposed backwater exceeds 1 ft, but is less than existing conditions, will a design variance be approved?	Hydrology	Revision	Backwater will be allowed up to 1.5 feet over the natural or unrestricted condition when improving conditions over the existing backwater. The EOR will also certify that there will be no impacts on upstream properties. Teams will need to verify acceptance with the Army Corp of Engineers during permit acquisition. Teams will be responsible for any necessary permits and/or landowner agreements for any increased amount of backwater greater than 1 foot when compared to the natural or unrestricted condition. Justification in the report narrative and maps showing the natural, existing, and proposed backwater widths and their property impacts will be required. The goal remains to limit the backwater to as close to 1 foot above natural while minimizing the length of the proposed structure. Hydraulic modeling will extend upstream far enough to where no backwater is caused by the proposed bridge at that furthest upstream cross section.



7	Attach_A	Exhibit 4f	182 of 296	Please clarify if discrete elements or rigid inclusions are allowed as a method for ground improvement.	Geotechnical	No_Revision	Discrete elements and rigid inclusions are allowed, but may not use the design methodology stated in the RFP. Note that the language in the RFP is specific to mitigating the soil shear strength loss itself, not the effects of soil shear strength loss.
8	Attach_B	Geotechnical	N/A	On the project website in Attachment B, 1. Geotechnical Subsurface Data Report and 2. Field Testing Data Files both contain information on the I-20 Wateree River Bridge replacement project.	Geotechnical	Revision	There was a bad link reference on the website. The link has been updated to reference the correct information.
9	Attach_A	Exhibit 4f	182 of 296	Can geosynthetics be used to reinforcement embankments for stability as a seismic mitigation method for soil shear strength loss?	Geotechnical	No_Revision	Yes, geosynthetics are allowed. Note that the language in the RFP is specific to mitigating the soil shear strength loss itself, not the effects of soil shear strength loss.
10	Attach_A	Exhibit 4f	182 of 296	Can soil structure interaction analyses be performed between the bridge foundation and embankment displacements as a seismic mitigation method for soil shear strength loss?	Geotechnical	No_Revision	Yes, in accordance with the GDM.
11	Attach_A	Exhibit 4f	182 of 296	Can a site specific response analyses be performed after award in leu of three point ADRS curve provided to reduce seismic demand?	Geotechnical	No_Revision	No.
12	Attach_A	Exhibit 4f	182 of 296	Can stone column, load transfer platform or other discrete elements be used to reduce loadings as a seismic mitigation method for soil shear strength loss?	Geotechnical	No_Revision	Yes, though you may not use the design methodology as stated in the RFP. The language in the RFP is specific to stopping soil shear strength loss from occurring and the design methodology used.

