South Carolina Department of Transportation

NON-CONFIDENTIAL DESIGN-BUILD QUESTIONS

Carolina Crossroads Phase 3—I-20/26/126 System Interchanges Design-Build Project - Project ID P039720 - Richland and Lexington Counties

FINAL RFP - ROUND 3

Date Received: 7/6/2023

Non-Confidential Meeting Date: 7/11/23

						SCDOT	
Question No.	Category	Section	Page / Doc No.	Question/Comment	Discipline	Response	Explanation
1	RFP Addendum 3	TP 150.3		Where CSX right of way is limited to 50', confirm the CSX application that should be applied is 10' ditch width (2' flat ditch with 2-4' slopes), 3 tracks at 15' track centers, 2-12' shoulders before the ditches start, and another 10' ditch for a total of 74' of clearance centered around the CSX right of way.	Railroad	No_Revision	Contractor is responsible for spanning the RR ROW. An additional 5' (beyond the ROW) shall be provided from the ROW to any permanent structure in accordance with TP 150. See TP 700 for additional requirements to horizontal layouts of walls.
2	RFP Addendum 3	RFP 685.3.1		RFP Section 685.3.1 states "The contractor shall remove and dispose of the remaining existing ITS infrastructure that is impacted by construction, including but not limited to poles, foundations, service boxes, concrete pads, conduit and cabling." Are the removals of conduit required primary for the areas where the foundations/pads are located or is the entire conduit runs, from service to element, that need to be excavated and removed rather abandoned in place?	Traffic	No_Revision	Underground conduit removals are primarily for the areas at the foundations, poles, and pads. The existing conduit is not required to be removed for the entire run and may be abandoned.
3	Non-Confidential Design-Build Questions RFP for Industry Review #2 Date Posted 3/31/2023	Question 48		Response to Question 48 states "A single, compiled pdf is anticipated for the submittal of Technical Proposal." Given the information requested in the Technical Proposal Appendices, ie. plans, schedule, ATCs, forms, etc, it is likely the file size of a single PDF for the Technical Proposal will exceed 1 gigabyte and it may be difficult to upload/download/open/view the Technical Proposal. Does the DOT have a maximum size limit for the Technical Proposal PDF? If the Technical Proposal exceeds 1 gigabyte, is it Is it permissible to submit the Technical Proposal in multiple parts/PDFs? For example, a separate PDF for Narrative, Appendix A, Appendix B, and Appendix C?	PM	Revision	SCDOT does not have a maximum file size. An addendum will be issued to allow technical proposals to be submitted in multiple PDFs.

4	TPA 140-1 through 140-10			Can SCDOT provide the CAD files for the alignments referenced in the utility MOAs?	Utilities	Revision	The CAD alignment file was provided as TPA 809-6 with Addendum #6.
5		714.3.1.7 Design Coordination – Adjacent Carolina Crossroads Program Phases		We are working though the Phase 1 tie-in design and need SCDOT Input. At the CSX, we have cases where the Phase 3 flow is less than the Phase 1 development Flow but does not meet the CSX criteria, CSX drainage Manual indicates : E. Rate and quantity of storm water runoff from any proposed development shall not exceed the rate and quantity of runoff prior to development. This standard shall be maintained for all design storms up to the 100-year storm event. Is this sufficient to meet SCDOT criteria? Or is the expectation that SCDOT would be responsible for improving undersized CSX Infrastructure?	Hydrology		The Contractor is required to design roadway drainage elements to satisfy SCDOT design criteria and address stormwater runoff to railroad right-of-way by ensuring post-construction flows are less than pre-construction flows. If there is an increase in flows to railroad right-of-way, the Contractor is responsible for coordinating with the railroad and potentially improving conveyance downstream through railroad right-of-way. The Contractor must obtain agreement(s) with CSX and will be subject to their requirements in the Public Project Information Manual as defined by CSX for potential drainage impacts. The Phase 1 design included increases to railroad right-of-way which were mitigated with improvements (additional pipes) under the rail. These were coordinated through the railroad agreement.

6	Final RFP	714.3.1.1, TPA 714-1		Section 714.3.1.1 states that "At locations where fill height is greater than or equal to ten feet, provide a minimum five-foot buffer between the toe of fill and the nearest top of bank of any proposed sideline ditch or swale except in locations where this buffer requires additional right-of-way or creates impacts to utilities. A detail is included in TP Attachment 714-1." TPA 714-1 shows a 2:1 fill slope condition for the detail. Please confirm this detail is only to be used for 2:1 fill heights greater than or equal to ten feet.	Hydrology	No_Revision	The requirement to provide a 5-ft buffer between the fill slope and ditch is intended for only 2:1 fill slopes. The buffer is included to minimize erosion at the toe of slopes. The Contractor shall use engineering judgement regarding the need for a buffer at the toe of all slopes.
7	RFP Addendum 4	Project Information Package Section 200 - Modified Selected Alternative Layout		Can SCDOT please update the MSA to include profiles for the connection to Zimalcrest Dr, the driveway to Lexington Medical Center, and the driveway to Progressive insurance? The proximity between those access locations and the Browning Rd bridge over I-20 (MSA BR #25) requires construction outside identified pavement limits on Zimalcrest or within ROW for property access.	Roadway	Revision	Entrance permissions are currently being coordinated for Tracts 317 and 184. Details will be provided in a future addendum. Zimalcrest tie-in details will be posted as a PIP document.

Post Office Box 191
Columbia, South Carolina 29202-0191

Phone: (803) 737-2314
TTY: (803) 737-3870

8		TP Attachment 100-1		Will Design-Builder need to reconstruct existing driveways that are within project ROW but do not meet SCDOT Access and Roadway Access Standards 2008? For example, the entrances to Miss B's Southern Soul Food and Badcock's Home Furniture &more exceed driveway criteria.	Roadway	Revision	Driveways that are not impacted by construction may be retained. Drives that require reconstruction due to this Project will need to be constructed to ARMS guidelines. If ARMS guidelines cannot be met without additional right of way, design driveway such that the existing condition is not degraded. TP 200 will be amended to provide guidance on not degrading existing driveway conditions.
9	RFP	TP-690		Can existing high mast pole assemblies be refurbished to meet Technical Provisions 690 Lighting requirements? This will consist of refurbishing the pole structure, ring assembly and lowering mechanism.	Traffic	No_Revision	No, all high mast poles and infrastructure shall be new.
10	RFP	TP-690		Will utilizing existing high mast pole foundations be allowed?	Traffic	No_Revision	No, all high mast pole foundations shall be new.
11	RFP - Add 4	TP-700 4.1.5		"In RFP Addendum. #4 Section 700.4.1.5 states “Drilled shafts that have a diameter of 6 ft or greater and a length of 5 ft or greater are considered to be mass concrete elements per Supplemental Specs., Sec 702.4.2.5, dated Jan. 1, 2022. However the referenced Supplemental Specs., Sec 702.4.2.5, dated Jan. 1, 2022. States “In the case of a circular cross-section, a mass concrete placement is defined as a pour that has a diameter of 5 ft or greater and a length of 4 feet or greater”. What diameter of a drilled shaft is considered mass concrete? 5 ft diameter or 6 ft diameter?"	Structures	Revision	Reference to specification and diameter will be removed from Technical Provision. Standard Specifications, including Supplemental Specifications referenced, will govern for mass concrete requirements.

12	RFP	TP-690		Please confirm that high mast lighting, underpass lighting, and sign lighting can be powered from a common electrical service cabinet and electrical power service meter as shown in Phase 1 and 2 RFC plans.	Traffic	No_Revision	Yes, the various lighting systems can be powered from a common electrical service cabinet, provided the service cabinet is only used for lighting systems and does not power other components, such as signals.
13	RFP	TP-690		Please confirm that high mast lighting, underpass lighting, and sign lighting electrical conductors can share the same pull box, as shown in Phase 1 and 2 RFC plans.	Traffic	No_Revision	Yes, the various lighting systems can share pull boxes, provided the pull box is only used for lighting systems.
14	RFP	TP-690		Please confirm that high mast lighting, underpass lighting, and sign lighting electrical conductors can share the same conduit.	Traffic	No_Revision	Yes, the various lighting systems can share conduit, provided the conduit is sized accordingly per the NEC and is only used for lighting systems.
15	RFP	714.3.1.7	590	At CSX, we have cases where the Phase 3 flow is less than the Pre development Flow but does not meet the CSX criteria for HW/D. Is this sufficient to meet SCDOT criteria? Or is the expectation that SCDOT would be responsible for improving undersized CSX Infrastructure?	Hydrology	No_Revision	The Contractor is required to design roadway drainage elements to satisfy SCDOT design criteria and address stormwater runoff to railroad right-of-way by ensuring post-construction flows are less than pre-construction flows. If there is an increase in flows to railroad right-of-way, the Contractor is responsible for coordinating with the railroad and potentially improving conveyance downstream through along the right-of-way. The Contractor must obtain agreement(s) with CSX and will be subject to their requirements in the Public Project Information Manual as defined by CSX for potential drainage impacts. The Phase 1 design included increases to railroad right-of-way which were mitigated with improvements (additional pipes) under the rail. These were coordinated through the railroad agreement.
16	RFP	714.3.1.7	590	At CSX, we have cases where the Phase 3 flow is less than the Phase 1 development Flow but does not meet the CSX criteria. Is this sufficient to meet SCDOT criteria? Or is the expectation that SCDOT would be responsible for improving undersized CSX Infrastructure?	Hydrology	No_Revision	The Contractor is required to design roadway drainage elements to satisfy SCDOT design criteria and address stormwater runoff to railroad right-of-way by ensuring post-construction flows are less than pre-construction flows. If there is an increase in flows to railroad right-of-way, the Contractor is responsible for coordinating with the railroad and potentially improving conveyance downstream through along the right-of-way. The Contractor must obtain agreement(s) with CSX and will be subject to their requirements in the Public Project Information Manual as defined by CSX for potential drainage impacts. The Phase 1 design included increases to railroad right-of-way which were mitigated with improvements (additional pipes) under the rail. These were coordinated through the railroad agreement.
17	TPAs	Utilities	140-1	If the Contractor's concept allows for a reduction in relocation scope, will the Contractor be held contractually to complete the original scope of relocations listed in the MOAs?	Utilities	No_Revision	The original scope of relocations listed in the MOA/SAs is based on conflicts/impacts and mitigation per the Schematic Design; if the Contractor's design eliminates or minimizes any conflict/impact, the Contractor will only be responsible for the impacted areas of the facilities while making certain the system remains whole and functional.

18	RFP	14	180	Please describe what will be provided to the Proposers regarding SCDOTs Section 7 consultation for tricolored bats (e.g., 2023 acoustic survey findings, habitat assessment findings, formal/informal coordination with FWS including a concurrence letter with mitigation requirements, etc.), and when we may expect it.	Environmental	No_Revision	SCDOT is in the process of site investigations and discussions with other Governmental Agencies. Information will be provided as soon as it becomes available to ensure Proposers are informed of the requirements.
19	RFP	TP Section 1000, Section 815; TP Section 714.2.1		Will there be an addendum modifying RFP language that requires coordination, communication, etc. with SCDHEC if SCDHEC is dissolved and reformed into a new state environmental agency?	Hydrology	Revision	S.399 was signed into law by Gov. McMaster and made effective as Act 60 on May 26, 2023. The environmental component will become the Department of Environmental Services. The realignment will not take place until July 1, 2024. This law has already changed before the Setting Date, so it would not be a Change in Law. The RFP will be updated in an addendum to reflect the new agency naming conventions as stated by this law.
20	TPAs	Hydrology	714-4	At the culvert crossing EC-1901 in the existing condition, the roadway (Jamil Road) is overtopped in the design storm and the HW/D is approx. 1.80. Is it the intent for the design build team to follow only TP Attachment 714-4 and extend the existing 5' x 6' culvert regardless of the other design criteria that are not being met? If that is not the intent, and the design build team is required to meet the design requirements for this culvert crossing, regardless of what was noted in TP Attachment 714-4, could the RFP and/or TPA 714-4 be updated to note that?	Hydrology	No_Revision	See TP 714 section 714.3.1.5 Pipe Inspection section for guidance.

21	TPAs	Environmental	160-6, Page 4	The 401 Water Quality Certification (TPA 160-6) has the "General Conditions of Navigable Waters Permits" attached to it. There are no special conditions included in the document. Do any special conditions outside of TPA 160-6 apply to the project?	Environmental	No_Revision	The 401 Water Quality Certification conditions provided by SCDHEC and reflected in TPA 160-6 are all that have been provided by permitting agencies. These conditions, and any others that may be associated with other permits will be applicable to the work associated with the project.
22	RFP	714.3.1.1	Page 582	714.3.1.1 General indicates: "...Gutter spread calculations shall be based on the applicable SCDOT design storm and account for bypass flow based on the selected inlet type. Gutter spread calculations shall verify the spread is within the allowable limits for the specific roadway studied..."Section 714.3.1.4 Catch Basin Layout / Storm System Design indicates "...Spread analysis and Type-25 catch basin spacing may be performed using the SCDOT design aids available on the SCDOT website as well as other design aids based on HEC-22 methodologies.... The SCDOT design aid provides error messages when spread width is not met; 90% efficiency is not met or 0.5 cfs bypass flow is exceeded. What is the governing criteria: spread width, efficiency or bypass?	Hydrology	No_Revision	The governing criteria for spread analysis is the spread calculations. The contractor will need to consider inlet efficiency and bypass in the design and address accordingly. Error messages within the design aid do not automatically reflect a design issue.
23	RFP	714.3.1.1	Page 582	The RFP indicates to reference the AASHTO Drainage Design manual Table 13-2. Manning's n for Gutters indicates the Asphalt Pavement Smooth texture n= 0.013 Rough texture n= 0.016. This differs from the Manning's n of 0.011 in the SCDOT Type 25 Design Aid. Please provide guidance on appropriate Manning's n for spread calculations.	Hydrology	No_Revision	The Contractor is responsible for determining the appropriate roughness value for design calculations based on the project design criteria. If using the SCDOT Type 25 Design Aid, a roughness value of 0.011 shall be used.
24	PIP	General		Please provide the approved Construction Quality Management Plans (CQMP) from Phases 1 and 2 of the CCR Project.	Construction	Revision	The Phase 1 and Phase 2 Construction Quality Management Plans (CQMPs) will be included as Project Information Package (PIP) documents in an addendum.

25	TPAs	General	SCDOT Geotechnical Design Manual	Within the Geotechnical Design Manual (GDM), the check flood and the design flood are defined as 500-year or 100-year flood, respectively, or an overtopping flood of lesser recurrence interval. Further within the GDM, the check flood is used to determine the loading and scour on the structure during the check flood event. This is then used in the Extreme Event II load case to check the foundations are designed to ensure the stability of the structure during the check flood event. For the remaining portions of the bridge structure (columns, piers, superstructure) the SCDOT Bridge Design Manual is silent on using the Check Flood in association with the EE II load case. Does SCDOT require the design of components other than the foundations to resist the check flood event in combination with the EE II load case? Designing to 500-yr flood for components beyond the foundations will drive up cost of the river crossing structures.	Structures	No_Revision	The EE II check scour condition is intended for the stability checks for the foundation elements, in accordance with the AASHTO requirements.
26	TPAs	General		A review of the required standards within TPA 100-1 and the LRFD Specifications for Structural Supports for Highway Signs, Luminaires, and Traffic Signals does not provide guidance on SCDOT required sign panel area for the design of the sign structure. Can SCDOT provide guidance on the minimum sign panel area required for design of the Overhead Bridge and Cantilevered Sign Structures?	Traffic	No_Revision	SCDOT does not have a standard structure design for sign bridge or cantilever structures that is based on a minimum sign face area. Each structure requires a site specific design that is based on the total area of the final signs (sizes are included in the structure dimensional drawings and sign layout sheets) included in the RFC plans to be erected on that structure. Design also depends on the roadway cross section at the specific location, which along with the orientation of the signs over the travel lanes, will determine the cantilever arm length or the sign bridge span length as well as the length of the structure uprights.

27	TPAs	Utilities	TPA 140-2	Can SCDOT confirm that if City of Columbia's 30" PCCP lines are in an easement and the relocations cannot be done within the existing easement, SCDOT would work with City of Columbia for a ROW transfer, not requiring any additional work from the Contractor?	Utilities	No_Revision	All utility work should be performed within SCDOT ROW or existing utility's easements. SCDOT would work with the City of Columbia and transfer ROW to them, not requiring any additional work from the Contractor.
28				How was access intended to be provided to Track 317 in the MSA design?	ROW	No_Revision	See NCQ #7 response. Entrance permission is being coordinated with property owner and will be provided once obtained.
29	TPAs	General	100-1 (Page 6)	Please confirm the proposed design for noise walls should conform with SCDOT Traffic Noise Policy (Rev. October 2019).	Environmental	No_Revision	See NCQ #41 (FINAL RFP R1) for response.
30	RFP	4	25 of 57	Due to the scale of this project, would SCDOT consider increasing the page limit for the Technical Proposal Narrative from 30 to 35 pages (Preferred) and/or decrease line spacing from 2 to 1.5 (Less Desirable)?	PM	Revision	The ITP will be revised to allow for a total of 35 pages for the Technical Proposal Narrative.
31	Agreement_and_TPs	Agreement	5.16.5 (d)	With multiple references to 23 USC 313, 23 CFR 635.410, Buy America, and the recent addition of Build America, Buy America (BABA) in the RFP, please clarify if this requirement will apply to all in-contract utilities for prior rights cost only as SCDOT will be using a combination of federal and local funds to accomplish those adjustments. If required to meet, please provide approved manufacture's list for each utility company.	Utilities	Revision	Relocations of utilities with prior rights will be required to follow Buy America requirements. Approved manufacturer's lists will be provided.

32	Agreement_and_TPs	Agreement	41	As utility relocations often need temporary construction easements (e.g. stringing out pipe for welding and HDD for interstate crossings), would the cost of temporary construction easements be addressed in the MOA? Additionally, what party will be responsible for securing the required construction easements (SCDOT, Utility Owner, or Contractor)?	Utilities	No_Revision	The cost would not be addressed in the MOA. This would be considered Additional Areas.
33	Agreement_and_TPs	Agreement	67	As SCDOT intends to sever the ITS fiber and abandon the ITS fiber within the project limits prior to construction, why are there liquidated damages associated with damage? How can the ITS fiber be damaged if abandoned or is this intended for the DOA fiber? Also, please provide the specification for the DOA relocation.	Utilities	Revision	The SCDOT ITS fiber will be severed as part of the work described in the RFP. The liquidated damages language reflected in section 7.6.2.5 is specific to the SC Department of Administration (DoA) ITS/fiber facilities and is therefore not applicable to the SCDOT ITS work as this line is to be severed. An addendum will be issued to clarify this language, including specification data for the DoA relocations.
34	PIP	Utilities		There is a private force main that dumps into MH S1111 along Browning Road for tracts 184 or 185. Typically for private utilities owned by the property owner is a cost to cure in right-of-way settlement. Please confirm the property owners are responsible for the cost and relocation of this force main.	Utilities	No_Revision	If this force main is ultimately a 'privately-owned' facility, then determination of all affected users/owners would need to be determined for the applicable ROW process; SCDOT would manage this ROW acquisition. If determined to be SCWU-owned, then the relocation would be handled by the normal utility relocation process through MOA.
35	Agreement_and_TPs	Agreement		14.9.2 - Please revise Section 14.9.2 as set forth below. Contractor should be entitled to recover certain costs incurred in rearranging its Work plan due to disruption events caused by SCDOT, even if those disruption events do not impact a Completion Deadline. "Disruption damages incurred may be recoverable, whether from a single event of continual, multiple or repetitive events, and may include costs of rearranging Contractor's Work plan not associated with an extension of any Completion Deadline, but shall exclude loss of efficiency, momentum or productivity."	Legal		No response at this time. Question is under review by SCDOT, and if a change is made, the revision will be included in a future Addendum.