

NON-CONFIDENTIAL DESIGN-BUILD QUESTIONS
Bridge Package 15 - Contract ID 8862230 - Anderson, Chester, Chesterfield, and Lancaster Counties

FINAL RFP - ROUND 3

Date Received: 1/19/2023

Question No.	Category	Section	Page / Doc No.	Question/Comment	SCDOT	
					Response	Explanation
1	Attach_B	Environmental	18 of S-294 PCE	We understand that the Department previously answered that, information on "formal" was needed for the bat studies. However, according to each of the BAs "Tricolored bat habitat was surveyed and identified within the forested areas on site as well as under the S-XYZ bridge; however, there were no signs of bat usage. A formal survey for tricolored bat was not conducted." Is there, or will there be a bat-related tree-clearing or demolition restrictions, or additional surveys required for any of the bridges if a proposer's design does not increase the clearing area from the Department's findings in NEPA? If a proposer's design does not increase the tree clearing, do additional bat surveys need to be done now or after NLEB changes status or Tri-color is listed? If there is habitat, will all bridges need to be surveyed if these cannot occur after tricolor is listed? If so, please elaborate on what needs to be done, who is responsible, and if you foresee any affects on the project schedule. Is the programmatic BO still applicable once NLEB the is E? If the BA is not sufficient for either, describe what needs to be accomplished to reach an updated effect determination.	No_Revision	Per the USFWS, the decision to issue the final rule on NLEB is being evaluated to be extended. Existing determinations will stand as is until such rule is formalized. Per a recent email from FWS, the counties in which all Package 15 bridges are located are not considered within the range of the NLEB. Currently the tricolor bat is not officially listed as a threatened or endangered species under Section 7 regulations. If the status of tricolor bats changes, it would be expected that the projects would need to comply with promulgated regulations as published by USFWS. The SCDOT cannot speculate on what the specific requirements will be but can deduce based on current direction regarding NLEB counties, that acoustic surveys and structure (culvert) inspections may be required for each uncleared site. Clearing moratoriums may be part of the USFWS's requirements but there is no published guidance to date regarding tricolor bats.
2	Attach_A	Exhibit 6	323/324	Can the SCDOT please state the time frame teams should anticipate waiting for the USACE to turn around a GP or NWP approval? For example, would SCDOT consider providing a USACE permitting chart similar to the SCDHEC chart located in the information package.	No_Revision	No chart. General estimated timeframes for GP/NWPs are 90-180 days based on complete submittals and coordination effort level.
3	Attach_A	Exhibit 6	323/324	If a proposer uses the GP, would SCDOT please define the stream impact length which, if exceeded, the agencies will require stream mitigation?	No_Revision	Each submittal would be considered on its own merit by the USACE. Based on NWP Regional conditions, the loss of more than 0.005 acres of stream bed will require mitigaion and a PCN submission to the USACE.
4	RFP	4	Exhibit 4b Section 2.1.16	In the RFP Exhibit 4b Section 2.1.16 Pile Sizes and Types, it states where the geotechnical report indicates corrosion is a concern, use the entire perimeter of steel in contact with soil/water when determining sacrificial thickness for the design life of the member The Geotechnical Baseline Reports indicates that three bridge sites are "non-aggressive" while the soil conditions at S-108 over Brown Creek is "aggressive". Can SCDOT provide an expected corrosion rate for all proposers to use in their design for this site?	Revision	For S-108 over Brown Creek, use a corrosion rate of 0.0005 inches per year for steel piles exposed to in-situ soil.



5	Attach_B			Hydro Section, Package 15 Min Span Length: Can SCDOT confirm the required minimum channel span length for S-53 over Little Rocky Creek. Hydraulics requirements in Attachment B show 100' however, the Concept Plans show 90' channel span. Please confirm for all teams.	No_Revision	Concept Bridge plans and min. channel length in Attachment B both show 100' minimum channel span. 100' is the minimum channel span length.
6	RFP	4	15/41	In Section 4.1 Technical Proposal, #2 Proposer's Innovation and Added Value, can the proposers put the quality matrix within our appendices?	No_Revision	Yes. This is stated in Section 4.1 (6)(j).
7				Fairfield Electric Coop has stated that they are waiting for the completion of Project ID P038282 (SC 901 Mountain Gap Road Bridge Over Rocky Creek) to be completed before they can relocate their lines over S-53 (Ross Dye Road). Can a timeline be provided as to the expected completion date of Project ID P038282 so we can work this date into the critical path of our schedule?	No_Revision	Current contract completion date is 9/30/23.



NON-CONFIDENTIAL DESIGN-BUILD QUESTIONS
Bridge Package 15 - Contract ID 8862230 - Anderson, Chester, Chesterfield, and Lancaster Counties

FINAL RFP - ROUND 2

Date Received: 1/4/2023

				SCDOT		
Question No.	Category	Section	Page / Doc No.	Question/Comment	Response	Explanation
1	Attach_A	Exhibit 4e	Page 3 / 2.2.1.4	<p>*FIGURES 1-6 ARE INCLUDED IN THE SUBMITTAL IN ADDTION TO THIS SPREADSHEET*</p> <p>As recommended in the RFP, RK&K ran the HEC-RAS Model provided by SCDOT for S-294 bridge replacement over Wilson Creek. In our review of the provided model, RK&K found several technical inconsistencies in the model that do not meet SCDOT criteria.</p> <p>1. The RFP Conceptual Proposed Bridge Model used a 100' single span bridge, however, the Conceptual Bridge Plans showed a 130' multi-span bridge.</p> <p>2. The existing bridge structure depth, pier widths, pier locations, bridge length, and ineffective flow locations and elevations.</p> <p>3. The ground line provided in the model shows a significant increase in grade elevation at the bridge that is unrealistic of a natural stream grade line (See Figure 1).</p> <p>4. Ineffective flows for the Corrected model were showing the bridge overtopping at the 50-year event. However, all storm events were blocked downstream of the bridge.</p> <p>5. Contraction and Expansion Coefficients do not follow the guidance provided in the HECRAS Hydraulic Reference Manual for both the corrected and proposed bridge models (Figure 3).</p> <p>6. Bank Stations vary from the unrestricted, corrected, and proposed models. These bank stations should match across all three models (Figures 4-6)</p> <p>Once the provided models were corrected, the Existing Conditions backwater increased from 1.52 ft. to 2.69 ft.</p>	Revision	<p>1. The RFP Conceptual Proposed Bridge Model used a 100' single span bridge, however, the Conceptual Bridge Plans showed a 130' multi-span bridge. Updated model provided with correct bridge length.</p> <p>2. The existing bridge structure depth, pier widths, pier locations, bridge length, and ineffective flow locations and elevations. Updated model provided.</p> <p>3. The ground line provided in the model shows a significant increase in grade elevation at the bridge that is unrealistic of a natural stream grade line (See Figure 1). Ground line reflects survey data in the vicinity of the bridge. Effective model had an approximate channel "burned" into the data. Survey reflects actual field data. A more consistent stream line may require additional survey upstream and downstream as opposed to assumed data.</p> <p>4. Ineffective flows for the Corrected model were showing the bridge overtopping at the 50-year event. However, all storm events were blocked downstream of the bridge. Updated model provided correcting this issue.</p> <p>5. Contraction and Expansion Coefficients do not follow the guidance provided in the HECRAS Hydraulic Reference Manual for both the corrected and proposed bridge models (Figure 3). Updated model provided with conraction/expansion coefficients.</p> <p>6. Bank Stations vary from the unrestricted, corrected, and proposed models. These bank stations should match across all three models (Figures 4-6). Updated model provided with corrected bank stations.</p>



NON-CONFIDENTIAL DESIGN-BUILD QUESTIONS
Bridge Package 15 - Contract ID 8862230 - Anderson, Chester, Chesterfield, and Lancaster Counties

FINAL RFP - ROUND 1

Date Received: 12/9/2022

						SCDOT	
Question No.	Category	Section	Page / Doc No.	Question/Comment	Discipline	Response	Explanation
1	Attach_A	Exhibit 4e	P3 / 2.2.1.3	Please clarify whether Freeboard is based upon our proposed bridge 25-year event water surface elevation, or natural (unconstructed) 25-year event water surface elevation.	Hydrology	Revision	Freeboard is based on the design event with the proposed structure. The RFP will be revised to clarify.
2	Attach_B	Hydraulics	3	In Exhibit 4e Section 2.2.1.1, the RFP states "Hydraulic Models and Memos are provided in Project Information Package. These models provide natural, existing, and conceptual designs. Teams will create new geometry files and project runs for proposed designs so that provided models are not changed." The design team believes there are issues that need corrected in the unrestricted (natural) run and possibly some changes that should be made to the existing models, including updating the models to reflect the effects of the downstream dam and adding S-766 into the natural model per standard industry practice and the RFP backwater requirements. Please confirm that it is acceptable to update the natural and existing runs which will result in changing the provided models.	Hydrology	Revision	It is acceptable to update any model runs as the EOR deems necessary. The intent is for Teams to rename them so that they can be identified from the model files provided by SCDOT in submittals. The RFP will be revised to clarify.
3	Attach_A	Exhibit_4a	Page 3	Section 2.12 lists requirements for superelevation rates and addresses criteria for correcting superelevation in curves however it does not dictate requirements for where construction ends. If construction ends within a curve and the profile ties down, does SCDOT desire teams to correct the full curve and transition limits or will it be suitable to tie into the existing superelevation rate at the tie location?	Roadway	Revision	With the exception of S-53, it is acceptable to tie into the existing superelevation rate at the profile end. Ensure proper transitions are utilized to tie into said superelevation rate.
4	Attach_A	Exhibit_4a	Page 3	Section 2.14 references the RDM Chapter 18 3R criteria for roadside safety. RDM Section 18.2.12 states "Achieving a roadside clear zone on a 3R project may be impractical. The roadside environment.....the designer cannot ignore the consequences for a run-off-the-road vehicle. Therefore, the designer should exercise considerable judgment when determining the appropriate clear zone on the 3R project. The most desirable objective for 3R projects will be to provide a clear zone equal to the criteria for new construction and reconstruction projects." Does the department desire to correct roadside slopes in causeway/wetland areas with deficient slopes or provide guardrail to an acceptable termination point where existing roadside slopes meet design criteria, or will the SCDOT only require guardrail for bridge end protection to minimize R/W from traversable fill slopes.	Roadway	No_Revision	As stated "the designer should exercise considerable judgement". Each 3R bridge site will require engineering judgement for the appropriate roadside design. The designer will need to balance clearzone with other elements that affect each site, such as environmental/wetlands, etc.



NON-CONFIDENTIAL DESIGN-BUILD QUESTIONS
Bridge Package 15 - Contract ID 8862230 - Anderson, Chester, Chesterfield, and Lancaster Counties

RFP FOR INDUSTRY REVIEW

Date Received: 11/18/2022

Meeting Date: 11/30/2022

						SCDOT	
Question No.	Category	Section	Page / Doc No.	Question/Comment	Discipline	Response	Explanation
1	Attach_A	Agreement	13	Section states contractor shall provide sufficient number of SCDOT certified personnel. Can more explanation be given for "sufficient number"?	Construction	No_Revision	It is up to the Contractor to determine the sufficient number of certified personnel to complete the project.
2	Attach_A	Agreement	26	The construction windows for each of the bridges appear relatively short. Based on these schedules, the work would likely require accelerated construction methods and extended work hours that come at an increased cost. Will the department consider extending all or any of the construction schedules to eliminate these additional expenditures?	Construction	Revision	Construction timeframes will be revised.
3	Attach_B	Environmental	PCEs	Will the Design-Build team be responsible for formal bat surveys due to the potential uplisting of the northern long-eared bat and/or the proposed listing of tri-colored bat?	Environmental	No_Revision	Need info on "formal". NLEB analysis was done in accordance with the Programmatic BO and therefore the effect determination stands per coordination between FHWA and FWS. Teams will be responsible for determining effects to tri-color as part of their final design through appropriate level field assessment.
4	Attach_A	Exhibit 4f	P5 / 2.0	Paragraph 3 states "Where required by design and construction, all temporary and permanent shoring submittals shall be reviewed and approved by the Lead Design Engineer and Geotechnical Engineer of Record (GEOR) for the Project prior to submitting to SCDOT's Resident Construction Engineer (RCE)". Please define situations that are required versus those that are not required.	Geotechnical	Revision	All temporary and permanent shoring submittals shall be reviewed and approved by the EOR and GEOR. "Where required by design and construction," has been removed from the RFP for clarity.
5	Attach_A	Exhibit 4f	P3 / 4th Paragraph	Please define "structural element" in this paragraph. Is an As-Installed Driven Pile Foundation Package required for each individual substructure element? For example for each bent vs. each footing.	Geotechnical	No_Revision	Generally speaking, this would apply to each structural element that has different driving criteria, which would typically be per bent, though could be per column footing if driving conditions differ that drastically. If structural elements have the same driving criteria, then they could be grouped into a single package. The language is included to prevent the Contractor from sending PDA reports and/or production pile driving logs to the RCE that haven't been reviewed by the EOR and GEOR.
6	RFP	6	82 of 323 of PDF	Page 35 of 92 of the Agreement (page 82 of 323 of the PDF); paragraph 6, Hazardous Materials Insurance Requirement. Limits of pollution liability is missing the annual aggregate dollar amount.	HazMat	Revision	Dollar amount added.



7	Attach_A	Exhibit 4e	4	<p>For S-765 it states backwater modeling will be based on future replacement of the S-766 bridge that produces less than 1 foot of backwater. Is there any design information available of the S-766 bridge site.</p> <p>Without any proposed design for S-766, achieving backwater requirements may not be possible.</p>	Hydrology	No_Revision	A conceptual downstream bridge model is included in the PIP. Teams may use this downstream conceptual model or develop their own for S-766. The intent is for S-766 to produce 1 foot(maximum) of backwater for design of the upstream S-765 bridge.
8	Attach_A	Exhibit 4e	4	<p>RFQ Section 2.3 states "The Project Information Package, which is posted on the SCDOT Design-Build website, is for information only and is not part of the Contract. SCDOT makes no representations or warranties regarding the reliability or accuracy of the information contained therein and Proposers assume the risk in using this information."</p> <p>Does this include modeling assumptions made during preliminary modeling efforts for the S-765 bridge and in reference to assumptions made regarding the geometry of the S-766 proposed future bridge? What assumptions should be utilized for the future S-766 bridge during the pursuit phase since a 2D model cannot be prepared within the pursuit time frame as the preliminary data acquired, including survey, is insufficient to produce a 2D model?</p>	Hydrology	No_Revision	Memos and Models will remain in PIP because they are not complete and final documents. Assumption of downstream S-766 bridge producing max 1 foot of backwater for design of S-765 bridge. A conceptual downstream bridge model is included in the PIP. Teams can use this downstream conceptual model or develop their own for S-766. The intent is for S-766 to produce 1 foot (maximum) of backwater for the design of the upstream S-765 bridge.
9	Attach_A	Exhibit 4e	P4 / 2.2.1.4	Are the plans and hydraulic models available for the future S-766 bridge replacement? If so, will they be provided?	Hydrology	No_Revision	A conceptual downstream bridge model is included in the PIP. Teams may use this downstream conceptual model or develop their own for S-766. The intent is for S-766 to produce 1 foot(maximum) of backwater for design of the upstream S-765 bridge. No future plans are available.
10	Attach_A	Exhibit 4e	P4 / 2.2.1.4	If there are no plans/hydraulic models for S-766, should the preliminary study assumption of 0.4' of backwater be used in the S-765 Study?	Hydrology	No_Revision	Hydro model will contain a conceptual S-766 bridge model. Teams may use this model or develop their own downstream S-766 model to produce one foot or less of backwater to design the upstream S-765 bridge.
11	Attach_A	Exhibit 4e	P4 / 2.2.1.4 - 4th Bullet	Why is a 2D study required? Is it to verify the ineffective flow information? Please provide more information as to what the objective is for the 2D study.	Hydrology	No_Revision	2D required for significant improvement in calculating hydraulic variables at the bridge.
12	Attach_A	Exhibit 4e	P4 / 2.2.1.4	Will requiring a Level 3 (2D) Analysis violate PCDM-11 removing the project from Low Volume status?	Hydrology	No_Revision	No.
13	Attach_A	Exhibit 4e	P4 / 2.2.1.7	Requirements stipulate 5-foot setback from top of channel bank, however conceptual plans for S-04-294 show drilled shaft only 2-feet from the top channel bank and in the channel bank slope. Is placement of drilled shaft allowable as shown in conceptual plans?	Hydrology	No_Revision	Yes, setback is achieved from surveyed top of bank line.
14	Attach_A	Exhibit 4e	P4 / 2.2.1.7 & 2.2.1.8	In the case of a meandering stream, are the required setbacks to be applied at the centerline or at the closest point upstream or downstream?	Hydrology	Revision	See Figure 4 in HDB 2019-4. For S-108 a revision will be made to Exhibit 4e to allow for design as shown in conceptual plans.



15	Attach_A	Exhibit 4e	P5 / 2.2.1.9	Bullet 2 states " <i>the 500-year design storm event is not required</i> ", however bullet 4 states that " <i>S-53 must meet standard SCDOT design criteria</i> ". Please clarify if bullet 2 is for all bridges or for all except S-53.	Hydrology	Revision	Will Clarify that 500 year is not required for qualling low volume criteria bridges but is required for S-53 because of its need to meet full design criteria.
16	PIP	Hydraulics		In the last SCDOT Package 14 RFP, SCDOT provided hydraulic memos and models as part of the Attachment B and included as part of the project Design Criteria that the design team can use as the basis of our design. In the Package 15, the R1_Hydro Models and Reports are listed under Project Information Package. Would SCDOT consider moving this to Attachment B and part of the design criteria?	Hydrology	No_Revision	Memos and Models will remain in PIP because they are not complete and final documents.
17	Attach_A	Agreement	9	"A complete submittal package shall be limited to one phase (ex. Preliminary/Right Of Way (ROW)/Final/Release For Construction (RFC)) of one roadway segment or structure and include all design deliverables specified in Exhibit 4z." Suggest change to "...one roadway segment AND/OR structure..." to allow roadway and structure plans to be submitted simultaneously.	DM	Revision	Language will be changed as requested to allow for a road and a bridge package to be submitted simultaneously.
18	Attach_B	Survey		Is there any available survey data for the S-766 bridge site downstream from the S-765 bridge?	Roadway	No_Revision	Survey data for the S-765 downstream bridge is not available. All available survey files have been provided in Attachment B.
19	RFP		125 of 323 of PDF	Page 78 of 92 of the Agreement (page 125 of 323 of the PDF); DBE goal is set at 17.1% (0.1% for professional services, 17% for construction trades). This is a very high goal for this type of work. Package 14 has an 11.6% goal, CLRB 2021-1 had a 10% goal & CLRB 2020-1 had a 5% goal. Would SCDOT consider a reducing the goal on this package to a goal more in line with these aforementioned projects?	Other	No_Revision	No. The DBE goal will not be revised.
20	Attach_B	Hydraulics	3	Can the total minimum bridge lengths provided in Attachment B/Hydrology be reduced if all other hydraulic design criteria are met?	Structures	No_Revision	In most cases, no. In select cases, we will evaluate total bridge length reduction through the ATC process, if the team demonstrates with hydraulic modelling that all criteria is met, including maintaining or reducing the backwater values provided in the conceptual designs.
21	Attach_A	Exhibit_4b	2.1.2	Section 2.1.2 of Exhibit 4b says seismic design summary reports are not required for all sites, however Exhibit 4z Section 2.0 requires Preliminary, Final, & RFC Seismic Design Summary submittals. Please clarify.	Structures	Revision	Exhibit 4z Section 2.0 will be revised for consistency.
22	Attach_A	Exhibit 4d_Pt 1	P5 / 2.4	Section 2.4 states that " <i>The CONTRACTOR shall use the detour routes provided in Attachment B</i> " however no detour routes are provided in Attachment B. Please provide detour routes if available.	Traffic	Revision	Will be provided.
23	Attach_B	Traffic	176 of 323 of PDF	Page 5 of the Traffic Design Criteria (page 176 of 323 of the PDF); detour routes are said to be provided in Attachment B. These routes are not available yet in Attachment B. Please provide.	Traffic	Revision	Will be provided.



NON-CONFIDENTIAL DESIGN-BUILD QUESTIONS
Bridge Package 15 - Contract ID 8862230 - Anderson, Chester, Chesterfield, and Lancaster Counties

REQUEST FOR QUALIFICATIONS

Date Received: 10/6/2022

Question No.	Category	Section	Page / Doc No.	Question/Comment	SCDOT	
					Response	Explanation
1		3	3.5.2, page 15 of 27	The sixth question at the top of the page, "Has an owner, a Lead Contractor, or any member of a joint venture pursued compensation from the Lead Designer due to errors and omissions?" Owner and joint venture are not capitalized (assumed to be a general reference), Lead Contractor and Lead Designer are capitalized. Please clarify if "Lead Contractor" and "Lead Designer" are specific references to these entities for this project and are therefore capitalized, or if they are used in general reference and should be lower case.	No_Revision	"Lead Contractor" and "Lead Designer" are specific references to the entities for this project.
2		3	3.5.2, page 15 of 27	The seventh question at the top of the page, "Has the Lead Designer filed legal proceedings against the Lead Contractor, or vice versa, on a design-build contract?" Since "Lead Designer" and "Lead Contractor" are capitalized, please confirm that these are specific references to these entities for this project.	No_Revision	"Lead Contractor" and "Lead Designer" are specific references to the entities for this project.
3			3	We have reviewed the opportunities for DBE subcontractors on the project and feel the DBE goal of 17.1% is high for the scope of work. Would SCDOT consider revising the DBE goal?	No_Revision	No. The DBE goal will not be revised.

