ROANOKE

Franklin Road Bridge Replacement over NS Railway

ITB# 17-02-04

QUESTIONS AND ANSWERS
OCTOBER 4, 2016

Drilled Shafts

Reference the last two sentences of Paragraph VIII of the Special Provision for Drilled Shafts (page 220/3220):

"If concrete placement is not completed within three days of beginning drilling, enlarge the design drilled shaft diameter by a minimum of 6 inches, or as required by the City, the entire length of the shaft at no additional cost to the City. Enlarging the drilled shaft includes replacing the steel casing with steel casing the same size to which the drilled shaft is enlarged at no additional cost to the City." Please clarify the intent of these sentences above. Specifically:

1) Is "beginning drill" defined as the initial drilling prior to installing the permanent casing pipe or is it defined as the point where drilling begins by the slurry method below uncased holes? (Please define "beginning drilling" as it relates to this project?)

2) What is the purpose of this requirement? Shafts may be as deep as 100' and the drilling will be difficult. It is highly likely that the drilling of a shaft, approval of the shaft, placement of the reinforcing steel and placement of the concrete will require more than three days. Accordingly, if "beginning drilling "is defined as the moment the auger touches the ground, or there is not a way to avoid this three-day time limit, the shafts may well be "unbuildable".

3) If "beginning drilling" is defined as Standard Excavation below an uncased hole, please advise if we are permitted to case the full length of the standard excavation.

(Reference Paragraph VII. Construction Methods and Equipment: Part 5 Permanent Casing Construction Method (page 219/322)

"Unless specifically allowed by the plans, placement of permanent casing in an oversized hole or temporary casing outside the permanent casing beneath the ground surface will not be allowed"

4) If we are not allowed to case the full length of the standard excavation or if "beginning drilling" does not begin when standard excavation resumes below the casing, what is the maximum diameter shaft the City will require on the second

attempt? If the second attempt also fails to meet this time limit, will the shaft be increased in size again?

5) If "beginning drilling" is defined as standard excavation below casing and casing is installed to the full depth of the standard excavation such that this three day "challenge" is avoided, will the casing be paid as permanent if the City or Norfolk Southern will not allow it to be pulled?

Answer for Questions 1. to 5.:The provisions cited apply to an uncased hole utilizing the Wet Construction Method, the drilling of which is considered to begin below the elevation of casing. Extension of casing beyond the depth and of the size shown on the Plans will be permitted as temporary casing. The cost of temporary extension of the casing should be included in the price bid for Standard Excavation. If the temporary casing cannot be extracted due to no fault of the Contractor, then the Contractor shall be compensated for the casing on a linear foot basis with the Permanent Steel Casing Bid Price.

Also note that a related question has been answered in September 23, 2016 Questions and Answers No. 8.

<u>Construction Methods and Equipment</u>
Reference Paragraph VII. Construction Methods and Equipment: Part 5 Permanent Casing Construction Method (page 219/322)

If full penetration of the permanent casing cannot be attained to the projected depth, excavate a selected depth inside the permanent casing, resume casing advancing, and repeat the process as necessary until the casing reaches the projected depth

1. Is this a Norfolk Southern Requirement? The borings indicate that limestone will be encountered before this depth is reached at Pier 4 and the situation at Pier 3 is unknown. In order to install the 48" permanent casing to a depth of 20', we will need to install an oversized casing in the standard excavation zone and perform 48" rock excavation to the 20' depth. If not a Norfolk Southern requirement, can the depth of the permanent casing be reduced? If a Norfolk Southern requirement, can you add the appropriate bid items necessary to place a 48" casing in a rock socket?

Answer: Item II: Permanent casing will not be required to extend below the elevation where rock is encountered.

<u>Decorative Metal Panels</u>

1. Is there any detail for the metal panels (sketch, schematic, anything?) or a list of one, two or three approved fabricators that have a general idea of what is desired by the City. Or could you possible just include an allowance for the panels in the bid and let a committee of one or more, select the design and manufacturer?

Answer: ***Metal Panels: Drawing CB-027 includes a schematic representation of the design concept for the metal panels. Development of the design included consultation with Twist & Turns Manufacturing (625 W. Campbell Ave., Roanoke, VA 24016, Tel. (540) 985-9513).***

Materials

1. Can you ask about eliminating the transverse stiffeners and additional connection plates if the web thickness is increased? Also, how much would the web thickness need to be increased?

Answer: The Contractor has the option of eliminating the transverse stiffeners by increasing the web thickness to 5/8 inch. The bearing stiffeners are still required as shown on the plans, as well as the cross frame connector plates (which the bearing stiffeners are as well). Only the transverse stiffeners (6"x ½" plate, which do not connect to cross frames) would be eliminated.

2. Please provide the wall thickness that you plan to use on the pipe pilings on this job. I know its 240 ft. of 48 in OD, but I didn't see the wall gauge of that pipe.
Answer: Sheet CB-036, Section A-A shows 3/8" thickness.

Plan Document Inquiry

1. On sheet CB-011, it states that the contractor shall conduct exploratory borings in the vicinity of the Abutment B footing. How many of these borings will be required?
Answer: The intent of the borings was to provide a more detailed basis to proceed with planning and ordering of materials for this foundation, considering the variability of the several borings we completed during design. The number of borings should be determined by the contractor based on what the borings reveal and the level of detail desired for planning, and should be sufficient to provide adequate information for the contractor to propose any modifications to the plan details.

2. The last (2) pages are plan sheets from the WVWA calling for sewer and water line relocation. Are these part of the project or bidding separately? Also, the plan pages are illegible. Can a "Clearer" version of the plan sheets be provided?

Answer: The sanitary and water line relocations are not part of the Project. The relocations will be performed by the Western Virginia Water Authority as a separate contract.

Qualification

1. Does the General Contractor need to be a VDOT Prequalified Structure Contractor?

Answer: There are no VDOT pre-qualifications for the project.

2. Do the Subcontractors need to be VDOT Prequalified?

Answer: There are no VDOT pre-qualifications for the project.