

Delaware Department of Transportation
QUESTIONS AND ANSWERS
T201507602.01

Yellow highlighting = previous questions answered in this posting: n/a

BR 3-154 on US9 Savannah Road and BR 3-153 on SR1 Rehoboth Avenue over Lewes-Rehoboth Canal, Sussex County
Friday, July 27, 2018

Q #	Question	Answer
50	Can you extend the bid date?	No, the bid date will not be extended.
49	On page 123 of the specifications under Flux Vector Drive item 1 calls out a spare “One fully programmed touchscreen display for each size provided”. Are you referring to the remote VFD keypad since neither the VFD or the VFD cabinet has an HMI?	Two HMI touchscreen displays are located on the control desk and one HMI touchscreen display is in the switchboard/electrical room control cabinet for each bridge. One (1) spare fully programmed touchscreen HMI display shall be provided for each bridge for each size provided. A separate HMI touchscreen display or spare is not required on the drive cabinet. A spare VFD keypad will be included with item 8 on page 123 (all the internal components of the VFD).
48	Can you confirm if we will be replacing only one of the two 15HP span motors at the Savannah Bridge as per sheet 116 of 180 (SE-2) Note 6 Paragraph 2? If so, is it the east or west span motor?	The referenced note is written for each leaf; both motors are to be replaced. This is also indicated by the new equipment line type and weight designation for the west and east span motors on SM-2, SE-13 and 14, SE-34 and 37.
47	Reference Special Provision 625500, Epoxy Overlay System: Three manufacturer’s products are listed as preferred for this project. These products appear to be designed for use over a concrete substrate. Since the project application is over a steel substrate, please confirm that these are acceptable products for this use. Please provide appropriate field tensile rupture test procedures for the 2’-0” x 2’-0” test patches as the manufacturers base their testing on ASTM C1583/ACI 503R.	The manufacturers listed are suppliers of epoxy overlay systems, however this is not an exclusive list. Contractor shall confirm with the manufacturer that their proposed system is appropriate for this project, including the application over steel substrate as noted in the Description. The minimum bond strength of the epoxy to the substrate shall be 250 psi or as per the manufacturer’s recommendations for this application.
46	Regarding the response to Question 17, if the owner does not have test reports for ACM’s at the project sites, then appropriate bid items and/or allowances should be provided for testing and abatement of ACM’s.	There is no evidence that there is ACM at the bridges. However, if the contractor encounters ACM, they are to stop work in that area and notify DelDOT. DelDOT or their representative will assess the site and remediate it as necessary.

Q #	Question	Answer
45	Reference Drawing SS-01, Bridge Plan: Centerline of Bearings stationing on the north side of the bridge equals 84.9 feet. Bering Centerlines on the south side are dimensioned at 85'-0". Please clarify if the bearings are out of alignment.	The distance between center of bearings, when the leafs are in the seated position, is 85'-0". The stations are as follows: West Leaf Centerline Bearing: STA 11+88.27 Centerline Span: STA 12+30.77 East Leaf Centerline Bearing: STA 12+73.27

Thursday, July 26, 2018

44	How much time will the Contractor be given for Shop Drawings and Material Procurement between time of Contract Award and NTP - start of construction time?	The Contractor is advised that their scheduling of engineering and construction activities will have a significant impact on the success of this project. The rehabilitation of the mechanical and electrical systems on the movable bridges includes specialized components that may require significant time to design, fabricate, shop test and install within the restrictions contained in this Contract. The Contractor is strongly encouraged to begin their construction engineering, planning and shop drawing process immediately upon receiving Notice To Proceed. After NTP is issued, it is anticipated that a 45 day period will be provided to the Contractor to prepare shop drawings before the first chargeable day of the Contract commences. In any case, the contractor cannot take lanes out of service on BR 3-153 after 8/31/19.
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Monday, July 23, 2018

43	The answer to Question #5 states that we are to assume lead paint is present in the existing steel coatings. a. Please add bid items for item 616003 "Testing and Disposal of Existing Hazardous Steel Coating"	Item 616003 will be added to the bid items for each bridge.
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Q #	Question	Answer
42	<p>Plan Sheet GS-01 describes the work that makes up the Lump Sum bid item for Steel Structure Repair at bridge 3-154. The DelDOT pay item on the chart has a note that says: “Repair quantities for these item numbers have been increased by 10% over the quantities measured during the bridge inspections that began on May 18, 2015. Payment will be based upon the actual quantities required to complete the repairs.” The Steel Structure Repair bid item is a Lump Sum with no quantities.</p> <p>a. Please provide quantities for the portions of this bid item that cannot be quantified from the plans (ie. How many missing bolts at handrail? How many locations for trimming sidewalk angles Br. 3-153, etc.)</p>	<p>The ** footnote on sheet 10 is removed since item 615006 is a lump sum item. Compensation for any additional steel repair work not shown on the Plans that is requested and approved by DelDOT will be negotiated with the Contractor during construction.</p>

Thursday, July 19, 2018

41	<p>What is the listed Quantity of gear oil for each of the gear boxes on each bridge?</p>	<p>The estimated quantity of oil to fill each of the speed reducers to the proper level are as follows: Bridge 3-153 – Differential Reducer – approximately 10 gallons Bridge 3-153 – Secondary Speed Reducer – approximately 400 gallons each Bridge 3-153 – Span Lock Reducer – approximately 10 gallons each Bridge 3-154 – Tail Lock Reducer – approximately 15 gallons each Bridge 3-154 – Center Lock Reducer - approximately 15 gallons</p>
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Q #	Question	Answer
40	<p>PAGE 68 Welding. Welding required for machinery shall be done in accordance with the requirements for AASHTO/AWS D.15M/D1.5:2015 Bridge Welding Code. At a minimum, the center lock guides, receiving sockets, actuator supports, and span motor and motor brake support weldment shall be stress relieved prior to final machining. Completely test all welds used to fabricate machinery by ultrasonic inspection (ASTM E164-13) according to AASHTO/AWS D.15M/D1.5:2015 Bridge Welding Code for compression members unless noted otherwise. Perform all machining after welding and stress relieving.</p> <p>Welding joint types, sizes and details shall be shown on shop, assembly and/or working drawings.</p> <p>Distortion during fabrication shall be kept to a minimum by the use of welding fixtures and proper welding procedures.</p> <p>You indicate that ALL welds on fabricated machinery parts will be Ultrasonic Tested. IAW AWS D1.5 2015 Bridge Welding Code. Clause 6.7.2 MT is the method prescribed for Fillet welds. The machinery parts have a limited amount of Complete Penetration Welds (CJP). Please clarify this statement.</p>	<p>On page 68, Welding Section, First Paragraph, replace:</p> <p>“Completely test all welds used to fabricate machinery by ultrasonic inspection (ASTM E164-13) according to AASHTO/AWS D.15M/D1.5:2015 Bridge Welding Code for compression members unless noted otherwise.”</p> <p>with:</p> <p>“Completely test all full penetration welds used to fabricate machinery by ultrasonic inspection (ASTM E164-13) according to AASHTO/AWS D.15M/D1.5:2015 Bridge Welding Code unless noted otherwise. Testing of fillet welds shall be performed in accordance with the testing specified within AWS D1.5 for main members.”</p>
39	<p>Due to the complexity of the above contract our company would like to request a bid date extension.</p>	<p>At this time the Department does not intend to extend the bid date.</p>
38	<p>Savannah Road Bridge states to overcoat with system that is functional with the existing top coat. What is the current existing top coat?</p>	<p>The top coat applied in 2011 was a moisture cured urethane (MCU).</p>

Q #	Question	Answer
37	The description of painting scope for the Rehoboth Ave Bridge includes a statement of cleaning and painting Miscellaneous Areas Exhibiting paint failure and corrosion. The bid item for painting is a Lump Sum item. Since the referenced scope includes an unmeasurable area should there not be an item for this part of the work as a SF price? How can one determine and who will determine what is paint failure and corrosion?	The approximate paint quantities in square feet are given on Drawing RS-14. Additionally, Note 2 gives an allowance for miscellaneous spot cleaning and painting that is not specifically covered on the drawings.
36	Can you please consider changing Item 615503 – Bridge Mechanical System and Item 615504 – Bridge Electrical System for both bridge 3-153 and bridge 3-154 (4 items total) to Specialty Items per section 108 of the Standard Specifications?	Yes, this will be addressed via addendum.
35	The Joint Replacement Plan on plan sheet number 22 refers to Item 624009 – Asphaltic Plug Joint when calling out a new hot poured seal. The aggregate size in the asphaltic plug joint material per 1042.01.5 C. is larger than the width of the joint being replaced in the cross section on plan sheet 23. New cross section details would need to be provided in order to accurately provide an asphaltic plug joint. Is it the intention of the DOT to replace these joints with a hot pour joint sealant or does an actual asphaltic plug joint need to be provided?	The intent is to replace the joint seals in kind. A preformed joint filler is to be installed in the existing joint opening and filled with a hot poured seal in accordance with AASHTO M 213 – Preformed Expansion Joint Fillers for Concrete Paving and Structural Construction. Hot poured seal will be applied in accordance with AASHTO M 324 and ASTM D6690 – Standard Specification for Joint and Crack Sealants, Hot Applied, for Concrete and Asphalt Pavements.

Wednesday, July 18, 2018

34	Please provide copies of any permits received to date for this project, such as USCG, US ACE, etc.	No “in-hand” permits were issued. This project’s work was issued under a Nationwide permit #3 with no pre construction notification needed and a Special Exemption from DNREC, again just an FYI notification email. A copy of the permits arrival notification and the FYI emails will be posted, along with the Section 408 authorization from the US Army Corps. We are currently in the process of obtaining the Letter of Approval from the US Coast Guard. Per the USCG, the Letter of Approval cannot be issued until the start of construction. Once that letter is received it will be forwarded to the appropriate parties.
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Q #	Question	Answer
33	Plan Sheet 165, Note 10, Painting, This note states that the painting shall occur at night between the hours of 8PM and 6AM. Abrasive blasting of the steel elements is a very loud operation and will exceed the local noise ordinances. Will a variance be provided to the noise ordinance for this work?	The previous painting projects on these bridges were successfully completed at night time. The Contractor shall coordinate noise ordinance requirements with the Cities of Lewes and Rehoboth.
32	Plan Sheets EC 2/3, Environmental Compliance Plan, There is a note in the lower left corner of these sheet that states that a 240 SF Barge will be used to access the structure. What is the basis for this area size limitation? A floating platform of this size is not adequate for many aspects required to construct this project.	A 240 SF Barge was coordinated with the USCG but the contractor may coordinate with the USCG to use a different size barge.
31	Special Provision 615506, Walkway Grating, Basis of Payment, Is the epoxy overlay on top of the grating incidental to the grating or paid under 625500 Epoxy Overlay.	As per note 4 on sheet 99, the epoxy fill for the walkway grating is paid for under Item 625500.
30	In the General Description Section, Completion Time, This section states that the contract completion time is 404 CD. It further states that there are 67 days of weather allowance built into the 404 CD. Please confirm that the completion time of 404 CD will not change as a result of less than 67 weather days incurred on the project.	The number of calendar days will not be reduced from 404 if there are less than 67 weather days.
29	On Special Provisions Page 154, Bridge Opening Table, The table is missing the months of November thru March. Please provide opening data for these months.	A boater can request the bridges be opened in November thru March but we have no record that this has been requested in recent years.

Q #	Question	Answer																																										
28	<p>On Special Provisions Page 154, Bridge Opening Table, There is a large difference in the number of openings from 2006-2008 versus the period of 2009-2016. Can you provide clarification on why the large difference in openings in these two time blocks.</p>	<p>The number of requested openings has decreased in recent years. The Department has no information on why this has occurred. Contractor is to refer to the table below for recent bridge opening summary.</p> <p>Recent Bridge Opening Log:</p> <table border="1" data-bbox="1041 342 1976 902"> <thead> <tr> <th>Month</th> <th>Bridge 3-153</th> <th>Bridge 3-154</th> </tr> </thead> <tbody> <tr><td>May 2017</td><td>1</td><td>1</td></tr> <tr><td>June 2017</td><td>2</td><td>1</td></tr> <tr><td>July 2017</td><td>5</td><td>0</td></tr> <tr><td>August 2017</td><td>6</td><td>0</td></tr> <tr><td>September 2017</td><td>6</td><td>1</td></tr> <tr><td>October 2017</td><td>2</td><td>2</td></tr> <tr><td>November 2017</td><td>0</td><td>0</td></tr> <tr><td>December 2017</td><td>0</td><td>0</td></tr> <tr><td>January 2018</td><td>0</td><td>0</td></tr> <tr><td>February 2018</td><td>0</td><td>0</td></tr> <tr><td>March 2018</td><td>0</td><td>0</td></tr> <tr><td>April 2018</td><td>0</td><td>2</td></tr> <tr><td>Annual Total</td><td>22</td><td>7</td></tr> </tbody> </table>	Month	Bridge 3-153	Bridge 3-154	May 2017	1	1	June 2017	2	1	July 2017	5	0	August 2017	6	0	September 2017	6	1	October 2017	2	2	November 2017	0	0	December 2017	0	0	January 2018	0	0	February 2018	0	0	March 2018	0	0	April 2018	0	2	Annual Total	22	7
Month	Bridge 3-153	Bridge 3-154																																										
May 2017	1	1																																										
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September 2017	6	1																																										
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27	<p>On Special Provisions Page 153, Bridge Operator, This SP directs that the contractor provide a trained bridge operator from Contract Award until acceptance for maintenance. Please consider changing this requirement to start at Notice to Proceed (NTP) since the contractor will not be onsite until NTP.</p>	<p>Replace the first paragraph of the “Bridge Operator” section (Page 161U) with the following: During the construction period, from the first day work is performed at the specific bridge until acceptance of the bridge by DelDOT, the Contractor shall provide and train personnel to operate the bridge, during scheduled bridge openings.</p>																																										
26	<p>Reference Drawing RS-11, Sections A-A & B-B: a. Notations refer to L5x4x1/2 angles, which are not a standard size. Is the intent to cut an L6x4x1/2 or L5x5x1/2 to provide the noted size? b. If replacement angles are provided, are they bolted to the sidewalk panel and what is size & spacing of fasteners? c. What are the size and spacing of stiffeners for the angles?</p>	<p>Either angle may be cut to provide the 4” vertical leg and 5 horizontal leg. Cut the leg parallel to the embedded plate (approximately 8.5h:12v) to provide a ½” gap. Attach the angles to the last sidewalk panel with ½ diameter bolts at 12” max. (if edge bar is present on panel) or 5/16” fillet welds, 1.5” long, to every other bearing bar (if edge bar is not present on panel). Stiffeners are to be ½” thick, attached with 5/16” fillet welds and spaced at 6”.</p>																																										

Q #	Question	Answer
25	Reference Drawing SS-13, Lower Brace Repair, Existing Conditions: The Detail indicates to "Blast clean and paint area of corroded steel". The 'Note' calls out to "Mechanically Remove All paint . . . Please clarify required procedure.	The method of removing corrosion and preparing the existing structural steel for cleaning and painting is at the discretion of the contractor provided the requirements of the Specifications are met.
24	Reference Drawing SS-11, Section B Repairs Detail: The L5 stiffener angle under the rear post for the lock mechanism has a 1/2 x 5 x 16 fill plate. Existing details show the top flange angles to be 6 x 6 x 3/4. Should the fill plate required be 3/4" or is there some other condition not shown? Same applies to the end stiffener angles.	A 3/4" fill plate is correct. The Section B-B Repairs Detail on Drawing SS-11 should use 3/4" fill plates to match the thickness of the existing angle leg.
23	Ref. SS-10: Please provide the spacing on the longitudinal and transverse intermediate plates.	The new transverse intermediate plates and longitudinal plates shall have the same spacing as the existing. The intermediate plates are approximately 8" c-c. The longitudinal plates are 7" c-c and 8 3/8" c-c to the trim bar.
22	Ref. SS-10, Detail 1 and Repair Detail: Detail 1 shows a 3/8" Trim Bar. The repair Detail is showing a 1" X 2-3/8" Trim Bar. Please clarify.	The Repairs Detail trim bar dimension is correct. The trim bar shown in Detail 1 shall be revised to 1" thick.
21	Ref. SS-10, Repairs Detail: please clarify if the field welds as noted are continuous.	None of the welds shown are continuous. The welds between the trim bar and the 4" plate as well as the weld between the 4" plate and the existing angle shall be 2" long, centered between each intermediate plate (approximately 8").
20	Ref. SS-10: Please provide weld details for installation of the new intermediate plates and wear plates.	All welds shall be 5/16" fillet welds. The intermediate plates are spaced at approximately 8" on center, welded to the longitudinal bars at each end. Intermediate plates shall a 2" long weld to the top flange midway between each longitudinal bar. The wear plates shall be welded along the full length of each leg.
19	Reference Drawing SS-10, Detail 1: What is the thickness of the 2-1/4 x 1-3/4 wear plate? Is there only one as shown or at all corners of the key-in joint?	Note 1 on Drawing SS-10 says the minimum clearance at the key in joint shall be 3/4". With a 1 1/2" minimum gap between the trim bars noted in Detail 1, thickness of wear plates is 3/8". Wear plates are to be installed on each corner (4 required).
18	Reference Drawing RS-11, New South Sidewalk Framing, Detail in upper right: A dimension of 7'-1/2" is shown from the face of the rail post to the inside of the curb. This is in conflict with the 6'-0" dimension shown in Section A-A on RS-09. Please clarify.	The 6'-0" nominal clear width of the sidewalk on the span, as shown on RS-09 is correct. The 7'-0 1/2" dimension on the panel detail on RS-11 should be dimensioned to include the width of the barrier post.

Q #	Question	Answer
17	Do any of the sealants, floor and ceiling tiles, mastic, roofing, caulking, insulation or other materials that will be disturbed on the project sites have asbestos containing materials (ACM's)?	The Contractor shall assume the existing sealants, floor and ceiling tiles, mastic, roofing, caulking, insulation and other materials that will be disturbed may contain asbestos materials and shall take the appropriate measures in regards to testing, and removal, handling, disposal, etc.
16	Does the existing bridge steel contain lead paint?	The Contractor shall assume the existing paint systems contain lead based paint and shall take the appropriate measures in regards to removal, handling, disposal, etc.
15	Reference Drawing RS-10, Detail 2: This detail depicts bearing bars at 6" on center. Specifications require bearing bars are 2-3/8" on center and as such, the first bearing bar in from the angle will interfere with the angle and the ability to install the bolts a shown. Please clarify.	The bottom portion of bearing bars that are located over the support angle and bolts may be trimmed along their length to avoid interference.
14	Special Provision 615506 E3 and F specify the top plate to be welded to the grating and hot dip galvanized. Special Provision 625500 specifies surface preparation of the sidewalk panels to be SP10, near white blast cleaned. Please confirm this is the intent.	The SP10 cleaning is intended for removing the dirt, debris, rust, scale from the existing grid deck steel above the floorbeams at BR 3-154, which receives new epoxy fill.
13	Please reference drawing SS-16 and Panel Details for the A,B and C panels: Details indicate to field weld panel to sidewalk supports. Please provide weld details for this. Are the welds only on the leading edge of the panels as they are installed?	The sidewalk grid panels are bolted to the support brackets and W-beams. The contractor shall propose the welded connections between the top plate and the sidewalk grating based on their selected manufacturer and installation procedure.
12	Please reference drawing SS-16 and Panel Details table for 'B' series panels. The table indicates that "Dim 2" values are less than "Dim 1" values. Should these be reversed?	Agree. The table values in Dim 1 and Dim 2 should be reversed.
11	The 430 SF quantity for the walkway grating on bridge 3-154 appears substantially light. Please review and confirm the quantity.	The quantity for line 0440, bid item 615506 Walkway Grating, should be 860 SF.
10	Please provide record/As-Built drawings of the two bridges.	The record drawings for both bridges have been uploaded to the Website.
9	If the Contractor uses a full roadway closure with detour at night for certain work but keeps one sidewalk open on the bridge for pedestrians and bicycles, will a shuttle bus still be required?	A shuttle bus service is not required as long as safe accommodations are provided for pedestrians and bicycles wishing to cross the bridge during the closure.

Q #	Question	Answer
8	Will extended detours beyond one night be allowed for the Floor Beam 0 / Toe Modifications at Bridge 3-154 which require 1 leaf to be partially opened?	Note 8 of Sheet 165 provides the procedure for requesting this type of MOT modification.
7	Does DelDOT have any areas near the project available for office/laydown use by the contractor?	No staging area is being provided by DelDOT.
6	Please clarify the payment method of Unit Price Items on the Breakout sheets for Lump Sum Items, for example Item 3E has a quantity of 68,845 LBS of Span Balance Steel Plates at Bridge 3-154, will the Contractor be paid actual weight of steel plates installed at the unit price given, or will this be treated as a lump sum breakout for the steel plates shown on the plans?	The quantity provided in the breakout sheets is the engineer's estimate of the amount of material needed. Should that quantity increase or decrease, the contractor will be paid for the actual amount approved for use.
5	Regarding the Cleaning and Painting Existing Steel Bid Items (616000), please confirm that the existing paint system on the bridges to be removed is not considered hazardous.	The Contractor shall assume the existing paint systems contain lead based paint and shall take the appropriate measures in regards to removal, handling, disposal, etc.
4	Plan sheet SS-19, Control House Repairs for Bridge 3-154, note 10, states the approximate square footage of ceiling tile replacement is 35 SF, there is currently no ceiling tile installed at that location, it has been removed, please clarify.	Since all of the existing ceiling tiles have been removed, the square footage provided in Note 10 of Sheet 102 for new tiles shall be increased from 35 SF to 176 SF.

Friday, July 13, 2018

3	<p>Page 161GG (Addendum 1) last paragraph states "The breakout sheet provided in the Bid Proposal shall be completed and attached to the Contractor's bid. Failure to submit the breakout sheet with the Bid Proposal will result in Bid Proposal being declared non-responsive and rejected." Similar requirements are stated on page 74. However, the Breakout Sheet Instructions in the Bid Proposal Forms section states "BREAKOUT SHEET(S) MUST BE SUBMITTED EITHER WITH YOUR BID DOCUMENTS OR WITHIN SEVEN (7) CALENDAR DAYS FOLLOWING THE BID DATE BY THE LOWEST APPARENT BIDDER."</p> <p>Please clarify that the Breakout Sheets can be submitted within 7 calendar days and the Bid Proposal still be responsive.</p>	<p>Breakout Sheets can be submitted within 7 calendar days after the Bid Proposal and still be responsive.</p> <p>The last two sentences of the following Special Provisions are to be stricken as shown below: Special Provision 615503 -BRIDGE MECHANICAL SYSTEM p74; Special Provision 615504 -BRIDGE ELECTRICAL SYSTEM p161GG; Special Provision 763512 -TPO ROOFING p188; Special Provision 763569 -BUILDING RENOVATION p202.</p> <p>The breakout sheet provided in the Bid Proposal shall be completed and attached to the Contractor's bid. Failure to submit the breakout sheet with the Bid Proposal will result in the Bid Proposal being declared non-responsive and rejected.</p>
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Q #	Question	Answer
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Thursday, July 12, 2018

2	<p>Special Provision 763623 – “Netting, Migratory Bird Exclusion” is for the installation, maintenance, and removal of a barrier that will prevent the nesting of migratory birds. Bid items 0220 and 0620 “Netting Migratory Bird Exclusion” are individual lump sums for this work at Bridges 3-153 & 3-154 respectively. Bid item 0610 “Building Renovation” includes the removal of existing netting and the installation of new netting at Bridge 3-154.</p> <p>a. Is it the Department’s intent for there to be multiple installs/removals of the migratory bird netting at Bridge 3-154? Should this work be removed from the lump sum Bid Item 0610 “Building Renovation” for Bridge 3-154?</p>	<p>The migratory bird netting (Bid Item 0620) is to be installed and remain in place prior to the migratory bird nesting season (April 15 thru August 1) in any season that construction may occur. However, when the Contractor performs continuous construction activities on the bridge, as per the Engineer, the netting may be removed.</p> <p>The permanent bird netting contained in Bid Item 610, is independent of the migratory bird netting and shall be installed according to Special Provision 763569 – Building Renovation.</p>
1	<p>What is the engineer’s estimated construction cost for the subject project or otherwise what is the engineer’s estimated construction cost range for the subject project?</p>	<p>DelDOT does not provide the engineer’s estimate or cost range prior to bid opening.</p>