Project No. 040533 Sale Date - 11/3/2004

<u>Question Submitted:</u> 10/1/2004 <u>Question Number:</u> 1

We request control for this project be reduced to 40%. This reduction will allow for more bidders and more competative pricing.

Question Submitted: 10/14/2004 Question Number: 2

Ross County: SR 207 Project

Plan sheets 81 & 82 detail a Temporary Construction Access Driveway.

#1: Could you provide the end areas and resulting volumes for the cross-sections?

#2: How is this earthwork paid for by ODOT?

#3: Can this cut stay "as is" following completion of the project?

#4: Will ODOT pay for temporary and permanent seeding?

Question Submitted: 10/18/2004 Question Number: 3

Item #0038 – Rock Channel Protection, Type B with Filter Fabric, bid quantity of 371 cy, per the general summary (page 83), 168 cubic yards of the quantity is defined on sheet #705 (Fencing Plans). Plan sheet #705, further directs you to look at sheets #1 through 21 of the fencing plans for this quantity. After review of these plans I can not find where this work is located. I have found the quantities defined by the sheets, but no definition of the work. Please provide location and dimensions of the work.

The Rock Channel Protection, Type B with Filter Fabric quantities shown on the fencing plan sheets are the estimated quantities for the fence stream crossings shown on the sheets. See Standard Construction Drawing F-3.4 for details and dimensions of stream crossings.

Question Submitted: 10/20/2004

Question Number: 4

1)Item #0038 – Rock Channel Protection, Type B with Filter Fabric, bid quantity of 371 cy, per the general summary (page 83), 168 cubic yards of the quantity is defined on sheet #705 (Fencing Plans). Plan sheet #705, further directs you to look at sheets #1 through 21 of the fencing plans for this quantity. After review of these plans I can not find where this work is located. I have found the quantities defined by the sheets, but no definition of the work. Please provide location and dimensions of the work.

2)Bid Item #112, Low Strength Mortar Backfill (Type 1), bid quantity is 1,447.0 cy. The work is defined on plan sheet #588. It appears that the volume is base upon 1:1 side slopes in the pavement area (northern & southern limits) and a vertical face at the pavement edge (eastern & western limits). Since Low Strength Mortar backfill will not stand straight up & down and the high liquid head of this material, will ODOT revise this quantity to allow for a 1:1 slopes at the pavement edge (eastern & western limits)?

3)Bid Item #68 – 15" Conduit, Type B, bid quantity – 2,061 feet, per the General Summary, page 84, 1,380 feet of this item is from page #28. Bid Item #217 – 15" Conduit, Type B, bid quantity – 1,380 feet, per the General Summary, page 86, 1,380 feet of this item is from page #28. It appears that this is the same pipe and the quantity is covered by both Bid Items. Please confirm and correct bid items.

Question Submitted: 10/21/2004

**Question Number:** 5

**Question Number:** 6

1.Sheet 654/781 has a note for 511, Class S Concrete, Superstructure, APP but the concrete in the biditems is QC/QA. Please verify which class of concrete should be used for the superstructure and if the note on sheet 654 is applicable.

2.Please verify that the piling quantities for bridge ROS-207-0065 under the CSX Railway are correct.

Question Submitted: 10/21/2004

What is the pavement section for the temporary access drive detailed on plan sheets 81 and 82?

Where will we be paid for this pavement?

Question Submitted: 10/22/2004 Question Number: 7

1. Bid Item #3 - Pavement Removal, on plan sheet #588, US 23, station 950+25, pavement removal quantity does not include the asphalt shoulders. Since the asphalt shoulders will be removed with the pavement, will this quantity be measured and paid for under the Pavement Removal Item?

#### Question Submitted: 10/22/2004

Question Number: 8

1. Addendum #5, page #4, a question was ask regarding Item #203 Granular Embankment Material Type B. Specifically "Where do we include the cost for the removal of unsuitable?" The answer provided by ODOT does not address this question. It appears the cross sections do not cover this excavation. Please provide answer.

In addition, on plan sheet #24, the Unsuitable Foundation Soils Table, 4th column, "Depth of Granular Subgrade for Stabilization", provides depth of undercut & granular refill, in addition it requires the granular material to be placed over FABRIC. What type of fabric is required? How will ODOT pay for this Fabric? Will a bid item be added to cover the fabric?

#### Question Submitted: 10/26/2004

Question Number: 9

The structure foundation investigation information shows fine sand and sandy silt with relatively high blow counts where the plans call for 12" and 14" diameter shell or tube piling being driven only 30' to 35' deep. Has this been taken into consideration in the selection of the foundation piling? What happens if the piling cannot be driven to the minimum 80% without collapsing? Will predrilling be added? Is H-Pile warranted?

Question 1). YES, type, size, and estimated lengths were determined based on foundation investigation information and bearing capacity required based on design loads applied to piles. Question 2) ODOT bridges: ODOT specifications do not specify material properties for the metal shells of cast-in-place reinforced concrete piles, under Section 507.03 of the CMS. Contractor is responsible for selection of the type of casing in accordance with Section 507.06 of the CMS. Piles are to be driven in accordance with Section 507.04 of the CMS and it addresses actions to be taken if piles begin to crush or if bearing capacity is obtained before the pile has penetrated 80 percent of its estimated depth. Contractor is responsible for both the selection of casing for the piles and the selection of the equipment required to drive the piles. Response for CSX Transportation, Inc. Bridge: Piles are to be driven in accordance with Section 507.04 of the CMS and it addresses actions to be taken if piles begin to crush or if bearing capacity is obtained before the pile has penetrated 80 percent of its estimated depth. Contractor is responsible for both the selection of casing for the piles and the selection of the equipment required to drive the piles. Question 3) Response for ODOT bridges: If piles begin to crush or if bearing capacity is obtained before the pile has penetrated 80 percent of its estimated depth and if the Director determines that preboring will be required in accordance with Section 507.04, the Department will make an adjustment and modify the Contract as specified in 108.06 and 109.05. for CSX Transportation, Inc. Bridge: If piles begin to crush or if bearing capacity is obtained before the pile has penetrated 80 percent of its estimated depth and if the Director determines that preboring will be required in accordance with Section 507.04, the Department will make an adjustment and modify the Contract as specified in 108.06 and 109.05. Question 4) NO, they were considered, but were not selected because of the number of and estimate lengths of the piles required to meet the Design Loadings.

#### Question Submitted: 10/27/2004

Question Number: 10

In regard to CSX defined contract work, is the contractor required to complete the 4 hour "ON-TRACK SAFETY PROGRAM" required by the railroad for all employees working on a CSX Project? This program is manditory on all contracts direct to CSX Transportation.

In addition, will CSX require daily job safety briefings?

The CSX Transportation Safety Training is required, also see plan note entitled "RAILROAD SAFETY RULES" on Sheet 523 of 781 for additional requirements when working on CSX Transportation Property. Safety briefing is required when Contractor is working on CSX Transportation Work or is working within or crossing CSX Transportation Right-of-Way (Existing and Proposed), see plan note entitled "FLAGMEN:" on Sheet 523 of 781 and note entitled "COORDINATION WITH RAILROAD" on Sheet 654 of 781. Additional response for CSX Transportation: YES, also, when working within CSXT R/W and within 25 feet of track, or when a piece of equipment (crane) would be in a position to foul track. A Daily Job Safety Briefing ( or anytime the work plan/conditions change)will be required with the CSXT Flagman on site

Question Submitted: 10/27/2004 Question Number: 11

The soldier pile retaining wall shown on sheets 679 through 682, with wood lagging, has the inherent potential of allowing voids to form after the wall is constructed and does not assist in the control of groundwater other than it being free draining into the excavation. With this in mind and the fact that there is a seam of fine sand acting as an aquifer above the final excavation which could easily be compromised with the wood lagging, we have a large concern for the protection of the railroad with this system. Would a continuous sheet pile wall with the same tie-back system be considered as an alternative to the soldier piles? The sheet piling would minimize the potential for the formation of voids and assist in the control of groundwater from beneath the tracks.

The EXCAVATION SUPPORT AND DEWATERING plan was prepared to meet the CSX Transportation Inc. and AREMA requirements and has been approved for construction. Contractor is to working drawings for shoring based on this Plan prepared by a Professional Engineer to CSX Transportation for review and approval before this work is started as part of Ref. No. 0279 - COFFERDAMS, CRIBS AND SHEETING. If Contractor decides to develop a design for an alternate wall system, the "VALUE ENGINEERING CHANGE PROPOSAL - CONSTRUCTION COSTS & TIME" proposal note will be applicable and Contractor will be responsible for the design costs and any time delays that result from the alternate design process.

Question Submitted: 10/27/2004

Question Number: 12

Bid Item #112, Low Strength Mortar Backfill (Type 1), bid quantity is 1,447.0 cy. The work is defined on plan sheet #588. It appears that the volume is based upon 1:1 side slopes in the pavement area (northern & southern limits) and a vertical face at the pavement edge (eastern & western limits). At this location an existing 6'1" x 4'7" Metal Arch Pipe is to be removed. Due to the close proximity of this removal to installation of the proposed 102" Concrete Pipe, it appears the trench bottom will be wider then the proposed 12'6" as defined by the typical section on page #588. Does ODOT intend to fill the void created by the removal of the existing pipe with Low Strength Mortar Backfill? Is this volume measured and paid for by the Low Strength Mortar Backfill Item?

Question 1) Yes. all excavation under the pavement between the edges of the pavement is to be filled with LOW STRENGTH MORTAR BACKFILL (TYPE 1) Question 2) The Department will pay for the additional material if the Engineer determines that the bottom width of the trench must be changed in accordance with Section 104 of the CMS.

Question Submitted: 10/28/2004

**Question Number:** 13

Addendum #8 revised the quantity of the Granular Material Type B. Because this quantity of work is directly related to Unclassifed Excavation, should the bid quantity for this item be increased?

No, Addendum No. 8 revised Ref. No. 14 which is related to Ref. No. 0012 - ITEM 203, EXCAVATION and removal of "UNSUITABLE FOUNDATION SOILS" as referenced on Plan Sheet No. 24 and is not related to any UNCLASSIFIED EXCAVATION bid item.

Question Submitted: 10/5/2004

Question Number: 14

Addendum #3 revised several bearing quantities, however there appears to still be errors in the table. Reference No. 345 & 348 should be 8 each instead of 16 each. These are for bearings under CB27-36 fascia beams which only have 1 bearing under each end as shown on sheet 638/781. Also, the description for item 345 was changed to (10" x 10" x 3 1/4" thick...). This does not match the table for these bearings on sheet 638/781.

Question Submitted: 10/5/2004

Question Number: 15

Just received addendum no. 3 on 533. You have one quantity to correct. You have Ref.#349 at 48 each laminated bearings. It should be 52.

Calculation: Rear abutment is 13 beams wide x 2 pads per beam (26) plus pier 11 is 13 beams wide x 2 pads per beam (26).

The Quantity for Reference No 349 in Addendum No. 3 is correct. Calculation: Rear abutment is 11 - CB27-42 beams wide x 2 pads per beam (22) and 2 - CB27-36 beams wide x 1 pads per beam (2) for at abutment total of 24 Each. Pier 11 is 11 - CB27-42 beams wide x 2 pads per beam (22) and 2 - CB27-36 beams wide x 1 pads per beam (2) for a pier total of 24 Each. Total = 48

Question Submitted: 10/5/2004

**Question Number:** 16

Just received addendum no. 3 on 533. You have one quantity to correct. You have Ref.#349 at 48 each laminated bearings. It should be 52.

Calculation: Rear abutment is 13 beams wide x 2 pads per beam (26) plus pier 11 is 13 beams wide x 2 pads per beam (26). Total = 52.

Question Submitted: 10/5/2004 Question Number: 17

I cannot locate in the proposal the limits for insurance for the Railroad protective insurance. Maybe I have missed it, but I have looked twice now.

Sincerely,

David A. Thelen

#### ANSWER:

Question Submitted: 10/8/2004

Question Number: 18

Addendum #4 added bid items to paint steel casings for 16" dia. cast in place pier piles. These items were added in error to Section 12 in the addendum and the EBS file. Section 12 is for the Scioto River bridge 0085, which has encased 14x73 H-piling specified. These items should have been added to Section 13, which is bridge 0163 over the Scioto River overflow.

Question Submitted: 10/8/2004 Question Number: 19

DRAWING NO. 450A SHOWS THE LIMITS OF UNCLASSIFIED EXCAVATION FOR THE CULVERT HAVING A VERTICAL FACE ON THE INSIDE OF THE CULVERT. SHEETING WILL BE REQUIRED TO ACHIEVE THIS. IS IT THE INTENT OF THE PLANS TO REQUIRE THIS VERTICLE FACE?

Question Submitted: 10/8/2004 Question Number: 20

Re: Item 203 Granular Material Type B

The table on plan sheet 24/781 lists areas throughout the project where unsuitable material needs to be removed and replaced. Where do we include the cost for removal of unsuitable? Has this quantity been included in the cross-section volumes, or should a separate bid item be added to cover unsuitable removal?

In my opinion, there should be a separate pay item for unsuitable removal since the cost for such removal will differ significantly from typical roadway excavation.

Question Submitted: 10/8/2004 Question Number: 21

Re: Sign/Billboard Removal

There are numerous signs and billboards in the right-of-way that will need to be removed. The proposal does not include any pay items to cover this cost. Should a new item be added to the proposal for sign/billboard removal?

#### Question Submitted: 11/1/2004

Question Number: 22

- 1) Comment (not question): ODOT has 2 areas on their web site where addenda are listed.... the "Addendum List" and the "Addendum Summary" under the Bidding Documents section of Contract Sales. Both locations show 8 addenda for this project, but when you go to the actual listing under the "Summary" section to retrieve and print, there are 9 addenda. This 9th addendum also states that there is a 7th EBS ammendment. But the EBS section of the Web Site only lists 6 amendments. What do we do?
- 2) There are extensive notes on plan sheet 683/781 reagrding dewatering of the excavations in the area of the new Railroad Bridge (207-0065). Some of the wording of the notes lead you to assume that they apply to just the excavation for the lagging installation within the confines of the temporary RxR shoring, while other areas of these notes discuss the scope of the entire RxR structure as though they are intended to be applied there also, and presumably to the entire mass site excavation in the area. Please clarify. The difference is substantial.
  - Q1) The website has been updated. Q2) The excavation support and dewatering plan is for the construction of Bridge No. ROS-207-0065 and includes the entire bridge site during construction of the bridge as show in the plan view on sheet 679. This is all included under Ref. No. 0279, Item 503, Cofferdams, Cribs and Sheeting, As Per Plan with the exception of the drainage items shown on sheet 679 which will be incorporated into the permanent drainage for this project. See plan note on sheet 654/781 which incorporates Sheets 679 thru 683 of 781 into this pay item for the CSX Transportation, Inc. Bridge No. ROS

All prospective bidders, subcontractors, suppliers, materialmen and all others who have an interest in these prebid questions and answers are advised that these items are being provided for informational purposes only and are not part of the bidding documents. If a question warrants a clarification, the Department will issue an addenda addressing the request for clarification to all plan holders. If the Department believes that the bidding documents adequately address the request, the contractor will be advised accordingly.

Question Submitted: 9/21/2004 Question Number: 23

On Project 040533, Ross County, SR 207, there are several errors in the quantities on the laminated elastomeric bearings with load plates on two bridges.

Bridge 207-0085

Ref. #343 24 each Laminated elastomeric bearings with load plates.

The actual quantity is 30.

6 each with beveled load plates @ pier 11. see page 647

12 each with beveled load plates @ pier 13.

6 each with beveled load plates @ pier 12.

6 each with flat load plates @ pier 12.

Ref. #344 18 each Laminated elastomeric bearings with load plates.

The actual quantity is 12.

12 each @ pier 14 see page 647

Ref. #345 8 each Laminated elastomeric bearings with load plates.

The actual quantity is 16.

8 each for CB 27-36 @ pier 2 see page 638

8 each for CB 27-36 @ pier 9.

Also the table at top of page 638 shows incorrect information. Under the "LOCATION" heading all references to CB 27-42 should be changed to read

CB 27-48 as shown on pages 636 & 637.

Ref. #348 8 each Laminated elastomeric bearings with load plates.

The actual quantity is 16.

8 each for CB 27-36 @ pier 1. see page 638

8 each for CB 27-36 @ pier 10.

Ref. #349 4 each Laminated elastomeric bearings with load plates.

The actual quantity is 8.

4 each for CB 27-36 @ pier 11. see page 638 4 each for CB 27-36 @ rear abutment.

Bridge 207-0163

Ref. #407 24 each Laminated elastomeric bearings with load plates.

The actual quantity is zero. see page 609

No bearing in the table matches any of the references.

Ref. #408 6 each Laminated elastomeric bearings with load plates.

The actual quantity is 30.

12 each @ pier 1. see page 609 12 each @ pier 4.

6 each @ forward abutment.

Question Submitted: 9/29/2004 Question Number: 24

- 1.Sheet 685/781 states that the MSE walls and bridge approach embankment shall be built prior to the abutment piling installation for Bridge ROS-207-0024. Typically the piles are installed prior to building the MSE wall and sleeved with plastic pipe. Installing the piles first ensures that no MSE wall panels will be cracked from vibrations during piling installation. Will this be an acceptable construction sequence?
- 2.Sheet 685/781 states that the parapet and transition on the approach slab shall be cast integrally to the top of the approach slab. Sheet 702/781 shows a construction joint between the parapet and the approach slab. Will this construction joint be allowed?
- 3.Sheet 689/781 shows cross-sections for the MSE walls. According to the notes on this sheet, the excavation and backfill for the MSE wall undercuts are to be included in the MSE walls for payment. Will the undercut material need to be Type B Granular Material, 703.16.C per the note for Unclassified Excavation, APP on sheet 685/781 or will the requirements of 203, Embankment using natural soils be acceptable in the undercut area?
  - A1) No. The existing ground settlement due to the weight of the MSE Wall and approach embankment has been estimated occur during the embankment construction and the piles are not to be driven until the settlement has occurred to prevent down drag forces of the pile and possible displacement. See MSE Wall Special Provisions Section 4.5 PILE SLEEVES for addition requirements. A2) YES A3) Embankment for the area of the undercut below the bottom elevation of the 203, Select Granular Backfill Elev. 698.00 (Elev. 700.50) is to be Item 203, Embankment and the volume is included in Item 203, Embankment as stated in the notes on the sheet.