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October 14, 2025 Addendum No. 1

Re: **TRU – Ohltown Viaduct; PID 116733**
Addendum No. 1 for Bid Proposal

Instructions to the Bidders: This addendum forms a part of the bidding documents. Acknowledge receipt of this addendum in the space provided below. Please amend the bid proposal as follows:

Bid Due Date has been moved to October 31th, 2025 at 11:00 AM.
Replace sheets 22 and 40 of the plan set. See attached for changes.
Replace the bid book with the attached, updated for the removal of DBE requirements

A Pre-Bid Meeting is scheduled for Monday October 20, 2025 at 10:00 am at the office of the Trumbull County Engineer, 650 North River Rd. NW, Warren, Ohio 44483. Prospective Bidders are highly encouraged to attend this meeting.

Pre-Bid Questions:

The following pre-bid questions were posed and below in RED please find the responses.

1. Is there a limit on how many spandrels can be excavated at one time? The suggested sequence of construction on page 21 is confusing.
   Response: There is no limit, per say. However, Note #3 under the Suggested Construction Sequence states that the top of the existing fill elevation shall be maintained to within 2.0 feet in each adjacent span. This means that the fill cannot just be completely removed in one span and then move onto the next span. It shall be removed keeping those fill heights in adjacent spans within the tolerable 2.0 feet limit. As shown on the site plan, the fill at the ends can be removed in a sloped 1.5:1 manner to allow an excavator to navigate the ends.

2. It appears that the patching on the arches only indicates the underside of the structure (page 24-28). How will additional time and compensation to the contractor be quantified if additional patching/repair work is needed in the spandrels, which cannot be seen or quantified, and would affect the sequencing of men and equipment?
   Response: The contingency quantities, as described with an asterisk and quantified in the tables on sheets 24-28 allow for additional quantities on the

portions of the arch and spandrels that cannot be determined until after the existing fill is removed. Furthermore, the patching note on sheet 22 describes that the contractor is responsible for sounding the tops of the arches after the fill is removed, and the exact amount of patching shall be determined by the contractor as directed by the engineer.

3. Should patching the underside of the structure take place only when the spandrel fill has been previously removed to prevent fill material from entering the reservoir?
   Response: Yes.

4. Are soil borings available to determine the type of fill material used in the spandrels and whether it has solidified over time? Are the contractors to assume that the material is loose and diggable with an excavator?
   Response: No, soil borings were not performed within the limits of the bridge. There is no information on the type of spandrel fill used in the existing bridge on the original plans. It has been our experience with previous, similar projects that the existing fill material is likely granular and loose enough to excavate without issue. **See Response to Questions #15.**

5. Has the designer specified a weight limit for excavators and trucks on the structure to remove the spandrel fill material?
   Response: No. It is the contractor's responsibility to hire a firm to perform the calculations necessary to abide by the requirements of ODOT C&MS 501.05.B.6 when determining the weight limits of equipment allowed for use in construction. If requested by the awarded contractor, GPD would be available to perform this task.

6. With the recent developments at the federal level regarding DBEs, will the County now remove the DBE goal from the project?

   Does the DBE Goal still apply to this project and do contractors still need to submit the DBE goal as part of the bid files?
   Response: The DBE goals have been removed. **See new Bid Book for revisions.**

7. Can the plan note for the Meander Creek Reservoir Avoidance on Page 5 and the Environmental Commitment note on Page 21 be clarified further? Specifically, what does an additional 5'-0" beyond the winter pool for a minimum of 20'-0" beyond the limits of the demolition work mean? Can this be depicted in a drawing to understand the intent of the note?
   Response: Where the winter pool elevation meets the embankment at the abutment ends, protect at least 5'-0" past that longitudinally. Laterally (transversely) protect 20'-0" outside of the proposed demolition limits. The note states to provide a plan for review at least 10 days before the start of demolition work.

   Concerning the 20' offset for the protecting the waterway, remember that the contractor will have to bring in a barge system to work under the bridge. That is

why we provided the construction access plan on plan sheet 5. Therefore, the way we envision it is for the contractor to use the barge as a way to catch any falling debris. Setting the barge to the required limits and placing some type of plastic sheet on top to catch anything that falls. This can be placed and moved under each span. We agree that trying to attach something to the bridge would be almost impossible for 20' beyond the bridge width. But again, they will need to use a barge to perform the work under the bridge anyway.

Ultimately, it is a means and methods type of plan. If the contractor has a better option that meets the needs of the project and gets the approval of the engineer/owner on site, then they would be free to do what works.

8. Can a drawing with details be provided for the sheeting described in Note 3 on Page 21 of the suggested sequence of construction?
   Response: This sheeting is only required if the contractor's proposed excavation methods at the ends warrant support of the excavation. If so, the contractor would provide the proposed design.

9. Please consider adding protection to the Type 2 waterproofing to prevent damage to the waterproofing membrane when the Type C granular stone is placed and compacted in the spandrels. We were thinking ¾ expansion material or foamboard. Please include a pay item for the protection.
   Response: The Type 2 Waterproofing item has been revised to an As Per Plan item, to include adding a geotextile fabric or foamboard for protection of the waterproofing. The fabric or foamboard shall be incidental to the cost of the Type 2 Waterproofing. **See revised plan sheets.**

10. Please consider a bid item for full-depth patching. From our inspection, it appears that there may be some areas that require full-depth patching. More may appear once patching begins.
    Response: Based on the project field inspection, which consisted of inspecting all spans from underneath on a snooper truck and small boat, no obvious signs of full-depth patching were observed. There would be no way of knowing how much of a quantity of full-depth patching is required. It shall be noted that contingency quantities of patching are already included in the plans and quantities to account for those parts of the bridge that can only be observed once the spandrel fill is removed. Therefore, it is our recommendation at this time to leave the patching item and quantity as is.

11. On page no. 55 of the bid documents, the start/completion dates are left blank. Is it up to the contractor to fill these in with our submittal?
    Response: Yes, the contractor is to fill in the start and completion dates as part of their bid

12. Would it be possible to delay the letting of this project based on S. Main Ave. project is bidding on this date and the results could impact contractor's pricing?
    Response: The Bid Due date has been changed to October 31, 2025 at 11:00 am.

13. The requirement to maintain 20' protection on both sides of the structure (approximately 68' wide barge/platform) is not feasible. A platform cannot be constructed that far out without driving piles into the reservoir, and a barge would need to be approximately 68' x110' just to open one span of work at a time. Regularly available and more affordable barges are typically only 40-50' long. The plan note on sheet 5 suggests the 20' protection is needed for not only demo but also new railing construction, patching, and concrete sealing. Does the design actually intend that roughly a half span of rehabilitation work would be performed at a time? This would be a grossly expensive and inefficient means of construction likely out of budget. Where does the 20' requirement originate from – MVSD or GPD?
Response: This requirement is based on our engineering judgement and experience with other projects. In addition, in determining what this effective width of protection should be, it is noted that for railroad bridges, it is typically 25 feet. Using 25 feet as a guideline, we arrived at 20 feet as an effective width. This takes into account the height of the bridge over the water, protecting against the possibility of wind blowing debris from the demolition and other operations. Therefore, provide 20' minimum protection in each direction from the work being performed. It would not have to extend a whole 68' as referenced in the pre-bid question. We acknowledge the protection setup would have to be moved along the spans to the location of the work being performed at that time. Ultimately, the contractor has the flexibility to use a protective system that they would propose and that meets the requirements and restrictions of the project. As stated in our previous response to the County on this question, the contractor shall submit a shield protection plan for review at least 10 working days prior to the start of any demolition or renovation work.

14. The requirement of spandrel fill remaining within 2' elevation between spans is not viable. The entire bridge would need to be gradually dug out and then refilled approximately equally to maintain this requirement. Access to the center spans would become virtually impossible. Per the issues listed in bullet point 1, we cannot even work in multiple spandrels at once given the current restrictions. The sequencing does not work. What is the engineering justification for this 2' elevation requirement?
Response: For clarification of the note on sheet 21, see the attached pdf for a 3-stage removal plan of the existing pavement and spandrel fill. Stage 1 shall be removal of the existing asphalt wearing surface, original macadam pavement, and any subgrade down to a level not to exceed the tops of the concrete arches at the center of each span. This stage removal can occur from end-to-end of the bridge. Once Stage 1 removal is complete, Stage 2 removal shall commence from the center of the bridge, working its way out to each end. Stage 2 removal shall include the existing spandrel fill highlighted in blue in the attached pdf over each pier, for a maximum depth of 4 feet. Again, working its way from the center of the bridge out to each end of the bridge. Once Stage 2 is complete, Stage 3 removal shall again start at the center of the bridge and work its way out to each end, removing the remaining fill over each pier, starting with the designated, highlighted area "A" and continuing out to area "E" at each end. Based on past experience with similar structure

rehabilitation, the staged removal process as identified provides better control of the combined compression and bending stresses within the arch members. After the tops of the arches are repaired and it is time to place the new fill within the spans, the new fill shall be placed in reverse order of how the existing fill was removed. Per the response to #4 below, based on the contractor's submitted calculations and procedures, the spandrel fill removal/replacement operations and equipment size/weight could be altered from that noted.

15. Boring logs need to be provided to the contractor. At this time, it is a complete guess as to what material is beneath the macadam pavement. The cost difference between a diggable embankment material or some kind of hard slag, concrete, etc. is exponential. If the plans shall remain as they are, we need written confirmation that the contractor may assume diggable granular or embankment material and that anything not easily diggable would be a change of condition and warrant monetary compensation to the contractor.
Response: There is currently no information on the type of spandrel fill used in the existing bridge on the original plans. It has been our experience with previous, similar projects that the existing fill material is likely granular and loose enough to excavate without issue. Assume the existing fill is removable, **however a boring will be obtained and the results provided prior to the bid opening.**

16. Structural analysis to size equipment needs to be provided to the contractor prior to the letting, not after the award. Once again, the cost and productivity difference between using small skid steers and mini excavators is significantly different than using larger machines. This is also a significant safety concern given the amount of work required on the underside of the structure.
Response: Based on the load rating of the bridge, it shall be assumed that for the sake of a competitive bid amongst all contractors, that an excavator similar to a Komatsu 228, with a maximum operating weight of 49,670 lbs. can be used for the Stage 1 removal operations described above in response #2 above. For Stage 2 and 3 removal operations, an excavator similar to a John Deere 135G (or approved equal), with a maximum operating weight of 33,000 lbs. can be utilized. Additionally, a skid steer similar to a John Deere 333 (or approved equal) is permitted to transport the fill materials off the structure. The excavators used for Stage 2 and 3 removal operations shall have rubber tracks to prevent damage to the existing concrete arches. As stated in our previous response to the County on this question, GPD is available to assist the awarded contractor with the calculations to determine exactly the maximum weight of the excavating equipment that is permitted on the bridge to perform the proposed work. Based on the contractor's submitted calculations and procedures, the spandrel fill removal/replacement operations and equipment size/weight could be altered from that noted above.

Responders are to **sign and fax** or **scan/email** (hwshaffe@co.trumbull.oh.us) Addendum No. 1 back to this office, attention: Gary Shaffer, P.E.
In addition, include signed Addendum No. 1 with submitted bid documents, or under separate cover received before the bid opening.

Acknowledged: _____
Company Name

_____
By