



**OHIO TURNPIKE AND
INFRASTRUCTURE COMMISSION**

ADDENDUM NO. 3
ISSUED: NOVEMBER 4, 2022

PROJECT NO. 43-22-06

**BRIDGE REPAIR AND REHABILITATION OHIO TURNPIKE OVER CUYAHOGA RIVER M.P.
176.9, SUMMIT COUNTY, OHIO**

ISSUED OCTOBER 19, 2022

OPENING DATE: 2:00 P.M. (EASTERN TIME) NOVEMBER 9, 2022

ATTENTION OF BIDDERS IS DIRECTED TO:

ANSWERS TO QUESTIONS RECEIVED THROUGH 12:00 P.M. ON NOVEMBER 4, 2022

Issued by the Ohio Turnpike and Infrastructure Commission through Aimee W. Lane, Esq., Director of Contracts Administration.

Aimee W. Lane

Aimee W. Lane, Esq.,
Director of Contracts Administration

November 4, 2022
Date

ANSWERS TO QUESTIONS RECEIVED THROUGH 12:00 P.M. ON NOVEMBER 4, 2022:

Q#9 Splice Location Verification/ Adjustment:

We compared the existing shop drawings for the Pier 8 Westbound modular expansion joint with the contract plans. Upon review, we believe the removal limits (i.e. saw cut line) currently indicated in the contract plans appear to be located through a group of support boxes, which is to be avoided. The support box spacing shown in the existing shop drawings does not match the spacing mentioned in the existing plan set (B83 of B129, Contract 43-99-01). In which case, it would be ideal to revise the length and limits of removal prior to bid, for accuracy purposes.

Select shop drawings are included for review on the following sheets.

Please advise if the length and limits of removal can be adjusted prior to bid. We understand the contractor is responsible for verifying much of what is detailed for Type J Repair, however adjusting quantities in advance is likely preferred.

A#9 From the modular joint requirements listed on plan 26/41 D.S. Brown is the only manufacturer to be used. Any determined adjustment of saw cut locations or joint length needed by the manufacturer to replace the damaged joint around the cracked rail (located approximately 10 ft from the parapet face) in the bid quote shall be accepted by the engineer during construction after field verification. The bid cost of the joint replacement shall include the full cost of the joint replacement as determined by the manufacturer and shall not be adjusted during construction unless a valid unforeseen change is detected during construction. The as-built plans can be updated based on the final approved shop drawings.

Q#10 Field Splice Detail:

We would like to propose the use of complete penetration welded butt joints to connect adjoining expansion device center beams, in lieu of the field splice method shown in Section C and Section D, Sheet 23 of 30 (a.k.a. fish-plate per NCHRP Report 402). For several reasons, we believe the field splice details currently shown in the plans will be problematic, mainly due to the following:

- Contract plans indicate the fish-plates are partially shop attached and partially field welded. By doing so, the length of the replacement modular joint would exceed that of the removal limits. Inserting the new length of modular joint into position would be hindered by these fish plates that need to be located at the bottom of the center beam. (note: shop attaching the fish-plates would also prevent any extra length for field fit-up.)
- In addition, given the length of the fish-plate, there will likely be a conflict between the fish-plate and the center beam-to-support bar connection in certain locations.
- Alternate sequencing of the fish-plate attachments would require more welding with limited access, making the suggested CJP butt weld preferred. Note: Our modulares routinely use the CJP method on field splices.

Please confirm the use of complete penetration welded butt joints for field splicing the center beams is acceptable.

A#10 The proposed complete penetration welded butt joints for field splicing the center beams are acceptable. During construction the proposed means and methods shall be submitted to the OTIC Chief Engineer for review and approval.

Q#11 Allow Galvanizing as Alternate to Metallized Finish:

The contract documents currently indicate a metallized finish on the modular expansion joint assembly (see sheet 25 of 30). In lieu of a metallized finish, we would recommend that a galvanized finish meeting the requirements of ASTM A123 be allowed as an alternative. We firmly believes that a galvanized finish will provide superior performance over a metallized surface for the following two reasons. Galvanizing is metallurgically bonded to the base metal while metallizing relies on a mechanical bond that is significantly affected by surface preparation. Additionally, the unique geometry of modular expansion joint assemblies produce several difficult to access details (i.e. inside the support boxes). While the application process for galvanizing (full submersion by hot-dipping) ensures that all surfaces receive an equal coating, the spray-on metallizing process is far more difficult.

In addition, the corrosion protection system for the modular joint currently in service at the repair location is hot-dipped galvanized. In which case, we would be matching that of the existing modular joint.

Please confirm hot-dipped galvanized coating for the modular expansion joint system is acceptable.

A#11 Hot-dipped galvanized coating of the modular expansion joint system is acceptable.

Q#12 Increase Blockout Depth:

The contract documents currently indicate 1'-0"± blockout depth (see sheet 23 of 30). Please adjust this dimension to 1'-2 ¼" minimum to be consistent with the existing shop drawings and aid with the placement of the modular joint. Note: the overall depth of the joint system is 1'-0 1/8" which does not include the clearance below the support box for concrete to flow or grout pad placed to ensure a uniform bearing surface.

Select shop drawings are included for review on the following sheets.

A#12 Increasing the blockout depth to 1'-2¼" ± is acceptable and shall be included in the bid cost for the replacement of the damaged modular joint. The as-builts can be updated based on the final field verified dimensions during construction.