

## **ADDENDUM NO. 5:**

Issued to All Bid Document Holders of Record, SIBA, and SCCTD.ORG

Date: January 6, 2023

This Addendum forms a part of the Contract for the subject project. The original Contract Documents and any prior Addenda remain in full force and effect except as modified by the following which shall take precedence over any contrary provisions in the prior documents.

### **SUBMITTED BIDDER QUESTIONS AND RESPONSES:**

1. Question – Do the member sizes of the end spans need to match the member sizes of the longer middle span? Truss height, chord sizes, chord height?  
Response – Member sizes can vary; however, the truss heights shall match.
2. Question – What is the measurement from the top of the deck to the top of the top chord?  
Response – The dimension from top of deck to top of top chord should be determined by the design of the Truss Manufacturer. The end span trusses shall be the same height as the main span truss. The minimum height of the truss must be greater than the height of the safety rail.
3. Question – What is the safety rail spacing?  
Response – The clear spacing between Safety Rails is 4 inches. The minimum dimension from the top of Concrete Deck to the top of the Safety Rail is 4'-6"
4. Question – What is the rub rail type?  
Response – The rub rail and toe rail shall be steel channel or HSS section.
5. Question – What is the railing height from the top of the deck to the top of the top rail?  
Response – Based on the fabricators design with a minimum dimension of 4 feet, 6 inches from the top of the Concrete Deck to the top of the Safety Rail.
6. Question – Plan sheet 102 calls for both a vehicle loading of H5 and maintenance vehicle 17,200 lbs?  
Response – The maintenance vehicle, based on higher axle load, will control the design of the bridge.
7. Question – Plan shows a toe plate. Is a steel channel acceptable for the toe rail?  
Response – Yes. A steel channel is acceptable.
8. Question – The bridge specification calls for stay in place forms with a G165 min coating designation. The coating was updated to the industry standard G90 with the IL DOT revision on 12/9/2022. Is G90 acceptable??  
Response – Yes. G90 min. thickness is acceptable in accordance with IDOT standards.
9. Question – The plans call for an inorganic paint system. Will you consider an organic zinc rich primer which is common for this style of bridge?  
Response – Yes. An organic zinc-rich system is acceptable, per IDOT Article 1008.05.

10. Question – Regarding the Precast Box Culvert Schedule and General Notes sheet 123. The “min. depth of granular base under slab (x’)” and “min. depth of overdig under granular base (x’)” columns refer to the same dimension. The second column implies excavation below the first which would increase your excavation. Should the second column in this scenario read “min. depth of overdig under slab or for granular base (x’)”??  
Response – The intent is to provide (x +6”) of over-excavation and granular backfill below the bottom of the culvert. See various culvert “SECTION THRU BARREL” sections for graphical representation. The thickness of the granular base under slab is 6 inches. The depth of the over excavation under the granular base is 2 feet.
11. Question – The majority of the project will be constructed away from any existing track. Will RR Protective Ins. still be required?  
Response – Yes, Railroad Protective Liability Insurance is required.
12. Question – Is Flagging required? Who is responsible for payment?  
Response – Yes, flagging is required. Contractor is responsible for all cost associated with flagging per requirements included in Section 01 14 01.
13. Question – Plan sheet 75 shows guardrail at the end of the cul-de-sac. Should there be a line item for this on the bid form under B.6.1?  
Response - The cost for guardrail shall be included in Item B.6.1.g Signage.
14. Question – On sheet 21, detail for sub ballast extension, it appears this work is to be covered by this contract. Please confirm the 2” of aggregate shown is to be included with this contract.  
Response - Yes, the subballast extension, including the 2 inches of compacted crushed stone, is included in the Facilities – Double Track contract.
15. Question – What brand/manufacturer joint is shown/specified as shown on page 95 of the plans? Additionally, are we free to bid using the compatible joint system supplied by either manufacturer specified??  
Response - The compression joint seal shown on sheet 95 is D.S. Brown Delastic. The compression joint seal may also be Watson Bowman Acme Jeene.
16. Question – There is a spec section 34 42 40 for cable trough, but I don’t see a drawing identifying where cable trough is installed or details of the trough installation. Is cable trough to be furnished and installed as part of the double track bid package?  
Response - Cable troughs will be furnished and installed by others. Specification Section 34 42 40 was included for the Facilities - Double Track contractor to reference when procuring/installing manholes and pull boxes.
17. Question – On drawing sheet 162, conduit A2 is shown to be new for the feeder east section, but duct bank A is existing with the same conduit for the feeder east section. Can you clarify what work needs to be done to ductbank A2.  
Response - The Facilities – Double Track contractor to confirm conduit A2 is stubbed-out at the existing 1995+35 OCS foundation. Contractor to complete installation to ensure that a spout is set up so that cable can be pulled through the OCS pole and out through a spout to the OCS.

18. Question – The Crushed Stone specification reads that limestone is not allowed. Historically on other railroad projects a CA6 type material is typically used for the subballast. Will CA6 or a similar type limestone material be allowed? Producing and using a traprock material will have a much higher cost.?  
Response - Yes, limestone crushed stone that meets IDOT CA6 gradation is acceptable.
19. Question – 19.Regarding the bearing assemblies, are the thicknesses provided for the sole plates the center line thickness (so tapered sole plates need to be calculated) or are they the true thickness of the plates?  
Response - The provided dimension is for the center line thickness for the sole plates. Sole plates are tapered.
20. Question – On Page 20 & 21 of the Technical Specifications, it states that for the Monarch Butterfly Habitat Seeding, that “the exposed soil surface should be ‘hydroseeded and straw mulched with a tackifier’”. However, the section continues to state that “A 100% biodegradable erosion control blanket” is to be used. Which should be used? If both, what goes where?  
Response - Both a straw mulch with a tackifier and biodegradable erosion control blanket should be used over the entire area to be seeded for the Monarch Butterfly habitat. The straw mulch with a tackifier should be applied with the hydroseeding and then the biodegradable erosion control blanket will be placed on top as the final layer. The straw mulch will provide short term protection of the seed during rain events and the blanket will provide erosion protection for up to 24 months in the long term to this sensitive type of seed mix.
21. Question – The plan sheets 56-67 in the plans it indicates all seeded areas are to be covered with erosion control blanket. Is this correct or will some areas be straw mulched? If it is all blanketed, do we use the same blanket specification from the monarch butterfly specification (page 20-21 in the technical specifications) or is there another blanket spec we should follow, if so please provide?  
Response - There is no straw mulch needed for the normal erosion control measures and seed mixes shown on Plan Sheets 56 to 67. The normal Erosion Control Blanket or Temporary Erosion Control Blanket shall conform to the IDOT Standard Specifications Sections 251 and 280 respectively. When the location for the Monarch Butterfly Habitat is determined, its requirements shall supersede and replace the seed mixes and blanket types shown in the plans as the area to seed for the habitat is not shown on the plans.
22. Question – On Sheet 121 (Culvert 39.41) & 128 (Double Box Culvert 38.59) There are Concrete Aprons with Storm Sewer and Manholes. Are these included in the scope of work for this bid? If they are, what materials are to be used to bring them to grade?  
Response - Yes, the storm sewers and concrete aprons are included in the scope of work. See the notes on the plan sheets referencing highway standards and applicable portions of the Standard Specifications.

23. Question – There is a pay item for Embankment Instrumentation (B.2 – a) on page 75 of the General Bid Form. After reading the specifications and plans we cannot locate any information about this pay item. Can you please direct to the locations within the plans and specs to find related info. If none, please provide?

Response - Information relative to Item B.2-a Embankment Instrumentation can be found in Technical Specification JSP-4 SETTLEMENT MONITORING AREAS and Plan Sheet 24 GEOTECHNICAL INSTRUMENTATION LOCATION AND DETAILS.

24. Question – On Page 85 of the technical specifications it discusses for a degree of tolerance for the pre-graded section? What should the tolerances be for the soil for the final embankment construction and the subballast?

Response – Project to be built to the lines and grades shown on the plans. Contractor to follow IDOT Standard Specification Divisions 200 & 300 regarding embankment and subgrade tolerances.

25. Question – After reading through the plans and specifications we were unable to find the extents of the demolition/ site clearing pay item (B.1 -a,b,c) on page 75 of the General Bid Form. If there is any demolition and site clearing, where would this be?

Response - Site Clearing is required within the construction limits as shown on the plans and as detailed on Sheet 21 in the “Typical – Vegetation Clearing Envelope”, other than the tree clearing referenced on see Sheet 5, General Note 15.

26. Question – On sheet 25 (Sheet Layout Guide) and 46 (Embankment Grading Plan) of the plans it calls out the Rieder Rd. Interlock. Is there a grading sheet and detail for this interlock? If yes, where? If no, where can other information be located about this interlock?

Response - Grading information for the interlocking bungalow area can be found in the plans via Plan Sheet 21, Subballast Extension Detail Section, and cross section at 2135+00 on Plan Sheet 267.

27. Question – Per IDOT Spec. on the box culvert porous granular material either sand or clean coarse aggregate can be used. Please confirm that the Contractor can use either sand or coarse aggregate for the all of the areas shown in the plans that call for porous granular.

Response - Per the CONSTRUCTION SPECIFICATIONS on the PRECAST CULVERT SCHEDULE AND GENERAL NOTES sheet, “POROUS GRANULAR BACKFILL SHALL BE IN ACCORDANCE WITH SECTION 207 OF THE STANDARD SPECIFICATIONS”. If the materials meet this requirement, then they will be allowed.

**TECHNICAL SPECIFICATIONS:**

1. DESIGN PROFESSIONALS OF RECORD
  - Insert Page 5. Added Design Professional responsibility for Subballast special provisions.
2. SECTION 505 – PEDESTRIAN TRUSS SUPERSTRUCTURE
  - Replace entire Section. Revised language to allow G90 min. coating designation.
3. SECTION 32 11 26 – SUBBALLAST
  - Insert entire Section.

**DRAWINGS:**

1. BIKE TRAIL BRIDGE OVER SEIBERT ROAD TRUSS AND DECK DETAILS
  - Replace Sheet 108.

**CLARIFICATIONS:**

1. No updates to the bid opening date or other contract documents will be required with this addendum.

**ATTACHMENTS:**

1. Revisions as noted above.

**ACKNOWLEDGEMENT:**

Each Bidder shall acknowledge receipt of this Addendum by affixing his signature below, by noting this Addendum on his Solicitation, Acceptance and Award Form (Section 00 52 13, Block 11), and by attaching this Addendum to his Bid.

The undersigned acknowledges receipt of this Addendum and the Bid submitted is in accordance with information, instructions, and stipulations set forth herein.

Bidder: \_\_\_\_\_

By: \_\_\_\_\_

Date: \_\_\_\_\_

END OF DOCUMENT

SCCTD Contract No. SCC MAA ML EXT - 01  
Facilities – Double Track

St. Clair County MetroLink Extension  
Shiloh-Scott to MidAmerica St. Louis Airport

10. Trackwork

- a) Greg Toth  
IL PE # 062.049140
- b) WSP USA Inc.  
License # 184000414-0006  
Expires 04/30/2023
- c) Responsible for:
  - 32 11 26 Subballast



DocuSigned by:  
*William Gregory Toth*  
1/5/2023 11:50:57 AM 1B7B471...

**Expires: 11-30-2023**

## PEDESTRIAN TRUSS SUPERSTRUCTURE

**Description:** This work shall consist of the design, fabrication, storage, delivery and erection of a welded steel, pedestrian truss superstructure. Also included in this work shall be the furnishing and installation of a deck, all bearings, anchors and/or retainers, railings, fencing and miscellaneous items as indicated on the plans.

### Materials:

Truss. Structural steel shall conform to the requirements of Section 1006 of the Standard Specifications, ASTM A847 for cold formed welded square and rectangular tubing, AASHTO M270 Grade 50, as applicable, unless otherwise shown on the plans or approved by the Engineer. All structural steel field connections shall be bolted with high strength bolts. High strength bolts shall be ASTM F3125 Grade A325 Type 1, mechanically galvanized bolts in painted areas. The high strength bolts shall be mechanically galvanized according to the requirements of Article 1006.08(a) of the Standard Specifications.

Deck. The deck type shall be as specified on the plans. The materials shall comply with the applicable portions of the materials section of the Standard Specifications.

When specified for use, the concrete deck and stay-in-place forms shall be non-composite. Metal Forms shall have a minimum thickness of 0.0359 in. (912 microns) or 20 Gage and shall be galvanized per ASTM A653 (A653M) with a G90 (Z275) min. coating designation.

Railing. The railing shall consist of a smooth rub rail, a toe plate and misc. elements, all located on the inside face of the truss.

Bearings. The bearing shall be designed and furnished as detailed in the plans, in the absence of details, the bearings details shall be as specified by the bridge manufacturer.

When specified for use, elastomeric bearings shall be according to Article 1083 of the Standard Specifications. Teflon surfaces shall be per Article 1083.02(b) of the Standard Specification and shall be bonded to the bearing plate.

Suppliers. The Department maintains a pre-qualified list of proprietary structural systems allowed for pedestrian truss superstructures. This list can be found on the Departments web site under Prequalified Structural Systems. The Contractor's options are limited to those systems pre-qualified by the Department on the date that the project is bid. These systems have been reviewed for structural feasibility and adequacy only. Presence on this list shall in no case relieve the Contractor of the site-specific design or QC/QA requirements stated herein.

The manufacturer shall provide evidence of current certification by AISC according to Article 106.08(b) of the Standard Specifications.

**Design:** The superstructure shall conform to the clear span, clear width, and railing configuration shown on the contract plans. The design shall be according to the LRFD Guide Specifications for the Design of Pedestrian Bridges. The design loads shall be as specified by the Guide Specification except as follows:

Design Wind Loads ( $P_z$ ) for Pedestrian Trusses in Illinois		
Application	psf (kPa)	Applied to:
Circular Members	35 (1.68)	Projected vertical area of member
Flat Members	55 (2.63)	Projected vertical area of member
Signs	35 (1.68)	Projected vertical area of sign
Chain Link Fencing	10 (0.48)	Full projected area of fencing as if solid

The railings shall be designed per the appropriate Bridge Design Specifications for bicycle railings as shown on the plans. Smooth rub rails shall be attached to the bicycle railing and located at a bicycle handlebar height of 3.5 ft. (1.1 m) above the top of the deck.

Prior to beginning construction or fabrication, the Contractor shall submit design calculations and six sets of shop drawings for each pedestrian bridge to the Engineer for review and approval. In addition, for bridges with any span over 150 ft. (46 m), or over a State or Federal Route, or within the States Right-of-Way, a copy of the shop drawings will be reviewed and approved for structural adequacy, by the Bureau of Bridges and Structures prior to final approval of shop drawings. The shop drawings shall include all support reactions for each load type. The following certification shall be placed on the first sheet of the bridge shop plans adjacent to the seal and signature of the Structural Engineer:

“I certify that to the best of my knowledge, information and belief, this bridge design is structurally adequate for the design loading shown on the plans and complies with the requirements of the Contract and the current ‘Guide Specifications for Design of Pedestrian Bridges’.”

The substructure is designed per the appropriate Bridge Design Specifications and based on the assumed truss loads, as shown on the plans. If the manufacturer’s design exceeds those loads and/or the substructure needs to be adjusted to accommodate the truss superstructure chosen, then the Contractor shall submit the redesign to the Engineer for approval prior to ordering any material or starting construction. All design calculations, shop drawings and redesigned substructure drawings shall be sealed by a Structural Engineer licensed in the State of Illinois.

**Construction:** Truss erection procedures shall be according to the manufacturer’s instructions. The deck shall be placed according to the applicable Sections of the Standard Specifications.

When weathering steel is used, all structural steel shall be prepared according to Article 506.07.

When painting is specified, all structural steel shall be cleaned and painted according to Section 506. The paint system and color of the finish coat shall be as specified in the plans.



## SECTION 32 11 26

### SUBBALLAST

#### PART 1 GENERAL

##### 1.01 DESCRIPTION:

- A. This Section includes furnishing, placing, and compacting requirements for aggregate subballast.

##### 1.02 REFERENCES

- A. Standard Specifications for Road and Bridge Construction, Illinois Department of Transportation, 2022 (SSIDOT).

##### 1.03 SUBMITTALS

- A. Submit all required documentation in accordance with Section 01 33 01 – Submittal Procedures.
- B. Prior to shipment, submit subballast material properties and certified test results prepared by an independent testing laboratory.
- C. Submit a list of all equipment to be used to place and compact the subballast.
- D. Submit records of field compaction test results prepared by an independent testing laboratory.

#### PART 2 PRODUCTS

##### 2.01 MATERIALS

- A. Subballast shall consist of carbonate crushed stone as defined by SSIDOT Article 1004.01(a)(4)(a).
- B. Subballast quality shall conform with Class A standards of SSIDOT Article 1004.01(b).
- C. Subballast gradation shall be CA 6 as defined by SSIDOT Article 1004.01(c).

### PART 3 EXECUTION

#### 3.01 EXAMINATION

- A. Verify that subgrade has been prepared, inspected, and approved prior to placement of subballast.

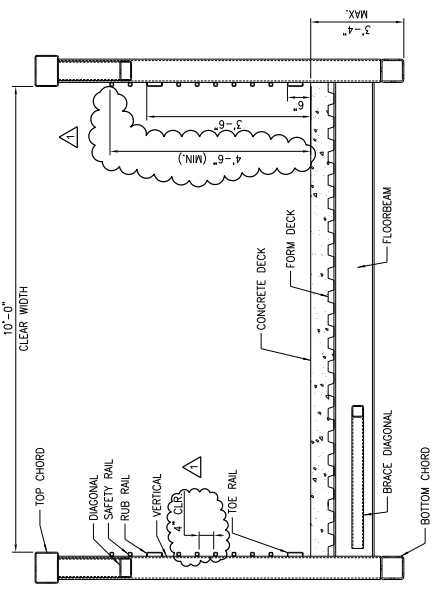
#### 3.02 PLACEMENT

- A. Construction of the subballast shall conform with SSIDOT Section 311 Granular Subbase except as stated or modified within this specification.
- B. Subballast shall be placed to the elevation, grade, shape, and thickness indicated in the drawings.
- C. The maximum compacted thickness of any one layer shall not exceed 5 inches. The subballast shall be constructed in two or more layers of approximately equal thickness.
- D. Subballast shall be compacted as specified in SSIDOT Article 311.05(a).
- E. The surface of the subballast shall be well drained at all times. If at any time the compacted subballast or subgrade becomes unstable, it shall be the Contractor's responsibility to restore, at his expense, the earth subgrade and the subballast to the required grade, cross section, and density.

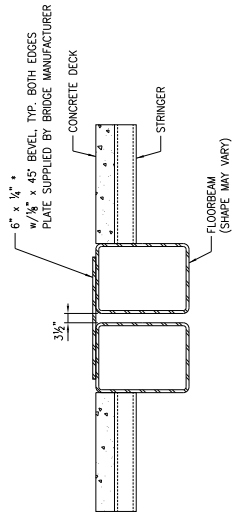
#### 3.03 TOLERANCES

- A. Flatness: Maximum variation of 1/4 inch measured with 10-foot straight edge.
- B. Variation from true elevation: within 1/2 inch.

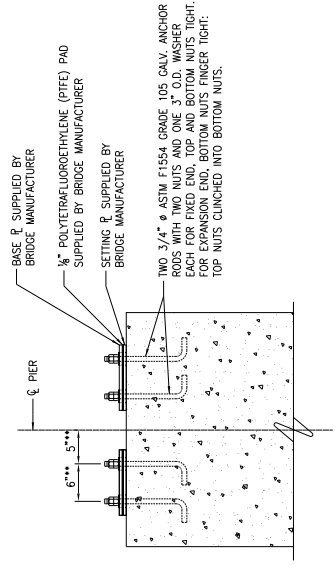
END OF SECTION 32 11 26



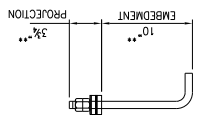
SECTION THRU FABRICATED BRIDGE STRUCTURE



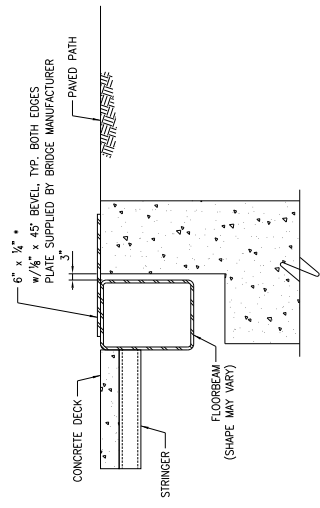
JOINT SEAL AT PIERS



BEARING DETAIL AT PIER



ANCHOR BOLT DETAIL



JOINT SEAL AT ABUTMENTS

- CONTRACTOR SHALL COORDINATE PLATE DIMENSIONS WITH TRUSS MANUFACTURER PRIOR TO CONSTRUCTION
- CONTRACTOR SHALL COORDINATE THE LOCATION AND LAYOUT OF THE ANCHOR BOLTS WITH THE BRIDGE MANUFACTURER



REV	DATE	BY	APP.	DESCRIPTION
1	1/5/23	JE	PL	ADDENDUM NO. 5
DESIGNED:	MAI			
DRAWN:	MN			
CHECKED:	JFE			
APPROVED:	PJL			
DATE:	11-03-22			

					ST. CLAIR COUNTY METROLINK EXTENSION SHELTON-SCOTT TO HENDERSON ST. LOUIS REPORT	FACILITIES - DOUBLE TRACK CONTRACT NO. SCC MA M.L. EXT - 02 DRAWING NO. W2BK5008 SHEET NO. 108 OF 281
BICYCLIST RESPONSIBILITY I hereby certify that the documents herein are the responsibility of the undersigned. I am a duly licensed and in good standing Professional Engineer in the State of Missouri. I am not providing any professional services in any other state or jurisdiction. I am not providing any professional services in any other state or jurisdiction. I am not providing any professional services in any other state or jurisdiction.					BIKE TRAIL BRIDGE OVER SEIBERT ROAD TRUSS AND DECK DETAILS	