ADDENDUM No. 4

Walnut Street Bridge Repair and Rehabilitation
TDOT PIN: 128099.00
Federal Project Number: STP-M-9202(134)
State Project Number: 33LPLM-F3-229
Chattanooga Department of Public Works

This Addendum #4, is being issued to provide:

1. Revised Special Provision SP-7 (Schedule)
2. Added Special Provision SP-8 (Guarantees and Warranties)
3. Revised Bid Item Form
4. Revised plan sheets 2, 4,4A, 4C,13, and E-0.3
5. Remainder of Questions and Answers

Should you require additional clarification or need additional information please contact City of Chattanooga Purchasing (423. 643.7230), or by emailing bidinfo@chattanooga.gov. Please include the title 'Walnut Street Bridge Repair and Rehabilitation' with your request for information.

Bidder Must Acknowledge Receipt of this Addendum on Bid Form

July 22, 2024

/s/ William C. Payne, P.E., City Engineer

July 22, 2024

SPECIAL PROVISION 7

REGARDING SCHEDULE

General

A. Schedule

The project schedule is as follows.

Task	***Date***
City advertises project	Sunday, May 26, 2024
Pre-bid meeting	Friday, June 14, 2024
Deadline for questions	Friday, July 12, 2024
Last addendum issued	Friday, July 19, 2024
Bid Opening	Thursday, August 1, 2024
Bid review & analysis	Thursday, August 8, 2024
TDOT concurs with the intent to award, City Council awards contract	Thursday, September 5, 2024
City executes contract	Friday, October 18, 2024
Limited Notice to proceed / Pre-Construction Meeting /Meeting with the Public about Bridge Closure	Friday, October 25, 2024
Contractor provide shop drawing/ long lead times for needed materials (4 months 20 days Time Buffer)	Friday, October 25, 2024 Thru March 17, 2025
Begin Construction (First day bridge can be closed)	Monday, March 17, 2025
Construction completion *	Monday, September 14, 2026
Final Records	Monday, November 9, 2026

* Construction window is 18 months. Bridge closure is 14 months maximum.

July 22, 2024

SPECIAL PROVISION 8

REGARDING GUARANTEES AND WARRANTIES

1.01 GENERAL WARRANTY

A. The Contractor shall warrant all equipment, materials, products, and workmanship provided by the Contractor under these Contract Documents for a period of twenty-four (24) months after the date of final acceptance of the work by the OWNER.

B. If, during the warranty period (a) any equipment, materials or products furnished and/or installed by the Contractor are found to be defective in service by reason of the Contractor's faulty process, structural and/or mechanical design or specification, or (b) any equipment, materials, or products furnished and/or installed by the Contractor are found to be defective by reason of defects in material or workmanship, the Contractor shall, as soon as possible after receipt of written notice from the OWNER, repair or cause to be repaired such defective equipment, materials or products, or replace such defective equipment, materials, or products.

C. In the event of multiple equipment failures of major consequence prior to the expiration of the one-year warranty described above the affected equipment shall be disassembled, inspected, and modified or replaced as necessary to prevent further occurrences. All related components which may have been damaged or rendered non-serviceable as a consequence of the equipment failure shall be replaced. A new twenty-four (24) month warranty against defective or deficient design, workmanship, and materials shall commence on the day that the item of equipment is reassembled and placed back into operation. As used herein, multiple equipment failures shall be interpreted to mean two (2) or more successive failures of the same kind in the same item of equipment or failures of the same kind in two (2) or more items of equipment. Major equipment failures may include, but are not limited to, cracked or broken housings, piping, or vessels, excessive deflections, bent or broken shafts or structural members, broken or chipped gear teeth overheating, premature bearing failure, excessive wear, or excessive leakage around the seals. Equipment failures which are directly and clearly traceable to operator abuse, such as substitution of unauthorized replacement parts, use of incorrect lubricants or chemicals, flagrant over or under lubrication and using maintenance procedures not conforming with published maintenance instructions, shall be exempted from the scope of the two-year warranty. Should multiple equipment failures occur in a given item or type of equipment, all equipment of the same size and type shall be disassembled, inspected, modified or replaced, as necessary, and re-warranted for one year.

D. Neither the foregoing paragraphs nor any provision in the Contract Documents, nor any special guarantee time limit implies any limitation of the Contractor's liability with the law of the place of Construction.

E. Submit guarantees for manufactured materials or units used in this project.

1.02 START-UP OF OPERABLE COMPONENTS

A. Because of the need to maintain operation during construction, it will be necessary to accept and start-up operable components of the project at various times prior to the completion and final acceptance of the entire project.

B. A component of the project, as used herein, shall mean a complete process subsystem and shall include all associated structures, equipment, piping, controls, etc.

C. When a component of the project has been completed, checked out, field tested, and made ready for operation, the Contractor shall notify the ENGINEER in writing that the component is substantially complete and request an inspection for substantial completion. The ENGINEER will schedule the inspection within 10 days of the Contractor's request. If he concurs in the Contractor's statement, the ENGINEER will notify the Contractor in writing that the component is accepted as Substantially complete. At the same time, the ENGINEER will submit to the Contractor a list of items that must be completed or corrected before final acceptance can be given.

D. If a component of the project is needed in order to maintain operation during construction and if it has been accepted as substantially complete, the Contractor shall start up the component when directed by the ENGINEER. Once the component has achieved stable and satisfactory operation (minimum 95 percent availability over a 7-day period), the Contractor shall request beneficial occupancy by the OWNER. The OWNER, if he concurs in the Contractor's statement that stable and satisfactory operation has been achieved, will notify the Contractor in writing within 10 days that he is assuming beneficial occupancy of the component.

E. On the date that the OWNER assumes beneficial occupancy, the following shall occur, if it is not contrary to the General or Supplemental General Conditions:

1. The one-year warranties for the component specified in Part 1.01 of the Section will begin; and

2. The OWNER will assume responsibility for operating and maintaining the component.

END OF DOCUMENT

ESTIMATED ROADWAY QUANTITIES

REV	ITEM NO.	DESCRIPTION	UNIT	QUANITY	UNIT PRICE (EACH)	TOTAL
	201-07.01	REMOVAL AND DISPOSAL OF BRUSH & TREES	LS	1		
	203-01	ROAD & DRAINAGE EXCAVATION (UNCLASSIFIED)	C.Y.	175		
	203-07	FURNISHING & SPREADING TOPSOIL	C.Y.	375		
	209-05	SEDIMENT REMOVAL	C.Y.	30		
	303-10.01	MINERAL AGGREGATE (SIZE 57)	TON	22		
2	601-10.10	TREATED TIMBER LAMINATED DECKING	MBFM	147		
2	601-10.11	TREATED TIMBER (SIDEWALK PLANKS AND CURBS)	MBFM	166		
	602-02.10	STRUCTURAL STEEL (NORTH VIADUCT - FLOOR BEAM MODIFICATIONS)	LS	1		
	602-10.20	BOLTS	EACH	176		
2	602-10.51	STRUCTURAL STEEL REPAIR (DECK CLIPS)	EACH	7,110		
	602-10.52	STRUCTURAL STEEL REPAIR (WOOD STRINGER KEEPER ANGLES)	EACH	1,180		
	602-10.53	STRUCTURAL STEEL REPAIR (STRINGER PACK RUST REMOVAL)	EACH	19		
	602-10.54	STRUCTURAL STEEL REPAIR (BEARING GUSSET PACK RUST REMOVAL)	EACH	3		
	602-10.55	STRUCTURAL STEEL REPAIR (EYEBAR PACK RUST REMOVAL)	EACH	66		
	602-10.57	STRUCTURAL STEEL REPAIR (NUT REPLACEMENT)	EACH	1		
	602-10.58	STRUCTURAL STEEL REPAIR (KNEE BRACE REPLACEMENT)	EACH	3		
	602-10.59	STRUCTURAL STEEL REPAIR (DIAPHRAGM REPLACEMENT)	EACH	2		
	602-10.70	STRUCTURAL STEEL CRACK REPAIR	EACH	2		
	603-02.01	REPAINTING EXISTING STEEL STRUCTURES (WALNUT ST BRIDGE)	LS	1		
	603-02.15	REPAINT EXISTING BEARINGS	LS	1		
	603-05.20	CONTAINMENT & DISPOSAL OF WASTE (WALNUT ST BRIDGE)	LS	1		
	604-01.01	CLASS A CONCRETE (ROADWAY)	C.Y.	9		
	604-01.02	STEEL BAR REINFORCEMENT (ROADWAY)	LB.	926		
	604-04.01	APPLIED TEXTURE FINISH (NEW STRUCTURES)	S.Y.	40		
1	604-10.89	MISCELLANEOUS BRIDGE ITEMS (DISPOSE EXISTING DECK BOARDS)	LS	1		
	707-08.10	TEMPORARY CONSTRUCTION FENCE	L.F.	2,500		
	709-05.05	MACHINED RIP-RAP (CLASS A-3)	TON	220		
	712-01	TRAFFIC CONTROL	LS	1		
	712-04.01	FLEXIBLE DRUMS (CHANNELIZING)	EACH	10		
	712-06	SIGNS (CONSTRUCTION)	S.F.	722		
	SUB TOTAL OF BID (SHEET 1)					

REVISION 1 - 7/8/24

REVISION 2 - 7/22/24

ESTIMATED ROADWAY QUANTITIES (CONTINUED)

REV	ITEM NO.	DESCRIPTION	UNIT	QUANITY	UNIT PRICE (EACH)	TOTAL
	712-07.01	TEMPORARY BARRICADES (TYPE I)	L.F.	39		
	712-07.03	TEMPORARY BARRICADES (TYPE III)	L.F.	96		
	713-16.01	CHANGEABLE MESSAGE SIGN	EACH	2		
	714-01.37	LIGHT STANDARDS (PEDESTRIAN/STREET LIGHT)	EACH	16		
	714-01.64	ELECTRICAL SYSTEM	LS	1		
	714-03.03	DIRECT BURIAL CONDUIT (SCHED. 40 PVC, UTILITY TRANSFORMER SECONDARY)	L.F.	135		
1	714-03.04	DIRECT BURIAL CONDUIT (SCHED. 40 PVC, UNDERGROUND BRANCH CIRCUIT CONDUITS)	L.F.	100		
	714-04.03	CONDUIT (3/4" CONDUIT)	L.F.	8,000		
	714-04.04	CONDUIT (1-1/4" CONDUIT)	L.F.	4,500		
	714-04.05	CONDUIT (1-1/2" CONDUIT)	L.F.	13,750		
	714-04.06	CONDUIT (2" CONDUIT)	L.F.	15,000		
	714-04.07	CONDUIT (2-1/2" CONDUIT)	L.F.	3,000		
	714-04.08	CONDUIT (4" CONDUIT)	L.F.	4,000		
	714-05.05	PULL BOXES (BRANCH CIRCUIT PULL BOXES)	EACH	40		
	714-05.06	PULL BOXES (BRANCH CIRCUIT JUNCTION BOXES)	EACH	150		
	714-05.07	PULL BOXES (COMMUNICATIONS PULL BOXES)	EACH	20		
	714-06.03	CABLE (1/C #10 AWG)	L.F.	38,000		
	714-06.04	CABLE (1/C #8 AWG)	L.F.	105,000		
	714-06.06	CABLE (1/C #4 AWG)	L.F.	126,000		
	714-06.07	CABLE (1/C #2 AWG)	L.F.	28,000		
	714-06.08	CABLE (1/C #1/0 AWG)	L.F.	20,000		
	714-09.09	LUMINAIRES (BRIDGE MOUNTED, TYPES VARY)	EACH	482		
	714-12.01	CONTROL CENTER (NO. 1)	LS	1		
	714-12.02	CONTROL CENTER (NO. 2)	LS	1		
	714-16.01	NAVIGATIONAL LIGHTING	LS	1		
	714-25.02	ELECTRICAL CONNECTION (ELECTRIC POWER BOARD - EPB - ELECTRICT SERVICE #1)	LS	1		
	714-25.03	ELECTRICAL CONNECTION (ELECTRIC POWER BOARD - EPB - ELECTRICT SERVICE #2)	LS	1		
	714-40	LOCATING UTILITIES	LS	1		
	717-01	MOBILIZATION	LS	1		
	722-01.01	FIELD OFFICE (TYPE 1)	LS	1		
	SUB TOTAL OF BID (SHEET 2)					

REVISION 1 - 7/8/24

ESTIMATED ROADWAY QUANTITIES (CONTINUED)

REV	ITEM NO.	DESCRIPTION	UNIT	QUANITY	UNIT PRICE (EACH)	TOTAL
	725-02.16	CONDUIT (STRUCTURES - CCTV CAMERAS)	L.F.	10,000		
	725-03.80	CCTV CAMERA SYSTEM	EACH	11		
	725-05.02	FIBER OPTIC CABLE (60 STRAND SINGLE MODE)	L.F.	2,300		
	725-20.75	COMMUNICATION CONNECTION (ELECTRIC POWER BOARD - EPB - FIBER TO CAMERAS)	LS	1		
	725-23.29	FIBER OPTIC TERMINATION CABINET	EACH	4		
	740-10.03	GEOTEXTILE (TYPE III) (EROSION CONTROL)	S.Y.	425		
	740-11.03	TEMPORARY SEDIMENT TUBE 18IN	L.F.	1,850		
	801-01.07	TEMPORARY SEEDING (WITH MULCH)	UNIT	205		
	801-01.65	TEMPORARY MULCH	UNIT	50		
	801-03	WATER (SEEDING & SODDING)	M.G.	65		
	803-01	SODDING (NEW SOD)	S.Y.	6,000		
	920-10.04	STRUCTURAL STEEL REPAIR (BEARING PLATE WELD REPAIR)	EACH	18		
	920-10.05	BRIDGE DECK AND SIDEWALK POWER WASHING AND SEALING	LS	1		
	920-11.04	STRUCTURAL STEEL REPAIR (SPACER PLATE WELD REPAIR)	EACH	2		
	920-11.05	BIRD NETTING SYSTEM	LS	1		
	920-12.04	STRUCTURAL STEEL REPAIR (STRINGER PLATE WELD REPAIR)	EACH	2		
	920-12.05	REMOVE NAME PLATES AND PROVIDE TO OWNER	LS	1		
	920-13.04	STRUCTURAL STEEL REPAIR (TRUSS VERTICAL WELD REPAIR)	EACH	1		
	920-13.05	REMOVE & REPLACE BENCHES, TRASH CANS, & PLANTERS	LS	1		
	920-14.04	STRUCTURAL STEEL REPAIR (PAD WELDING)	EACH	7		
	920-14.05	RELOCATION OF EXISTING UTILITIES	LS	1		
	920-15.04	STRUCTURAL STEEL REPAIR (STRINGER SUPPORT PLATE)	EACH	2		
	920-16.04	TREATED TIMBER (RISER BLOCKS)	EACH	195		
	920-16.05	UTILITY LINE CLEANING AND PAINTING	LS	1		
2	920-17.04	TREATED TIMBER (SIDEWALK STRINGERS)	EACH	278		
	920-17.05	PERMITS - CITY OF CHATTANOOGA	LS	1		
	920-18.05	PVC WATER LINE REPLACEMENT	LS	1		
	920-19.04	UTILITY CONDUIT AND HARDWARE	EACH	3		
	920-20.04	IN-KIND STRUCTURAL STEEL REPLACEMENT (MISCELLANEOUS)	EACH	2		
	920-20.05	REMOVAL AND DISPOSAL OF ELECTRICAL SYSTEM	LS	1		
	SUB TOTAL OF BID (SHEET 3)					

REVISION 2 - 7/22/24

ESTIMATED ROADWAY QUANTITIES (CONTINUED)

REV	ITEM NO.	DESCRIPTION	UNIT	QUANITY	UNIT PRICE (EACH)	TOTAL
	920-20.12	REMOVE, CLEAN, AND RESET EXISTING DECK JOINTS	EACH	17		
	920-20.13	HISTORICAL SIGN CLEANING AND PAINTING	LS	1		
	920-20.20	STRUCTURAL STEEL REPAIR (STRINGER SECTION REPLACEMENT)	EACH	2		
1	920-20.21	REMOVE & REPLACE EDUCATIONAL SIGNS	LS	1		
	920-20.28	DECK DRAIN SCUPPERS	EACH	316		
	920-20.29	IRRIGATION SYSTEM (REPAIR)	LS	1		
	920-20.37	ADDITIONAL FASTENERS	LS	1		
1	920-20.40	STRAND REPLACEMENT	L.F.	4,000		
1	920-20.44	STRAND ADJUSTMENT	EACH	33		
1	920-20.45	WORK PLAN AND ANALYSIS	LS	1		
1	920-20.53	MONITORING SYSTEMS	LS	1		
	SUB TOTAL OF BID (SHEET 4)					

GRAND TOTAL (FIGURE)	
GRAND TOTAL (WORD)	

REVISION 1 - 7/8/24

ESTIMATED QUANTITIES

	ITEM NO.	DESCRIPTION	UNIT	CONTRACT QUANTITY	AS-BUILT QUANTITY
(1)	201-07.01	REMOVAL AND DISPOSAL OF BRUSH & TREES	LS	1	
(E1)	203-01	ROAD & DRAINAGE EXCAVATION (UNCLASSIFIED)	C.Y.	175	
(E2)	203-07	FURNISHING & SPREADING TOPSOIL	CY	375	
(E3)	209-05	SEDIMENT REMOVAL	C.Y.	30	
(2)	303-10.01	MINERAL AGGREGATE (SIZE 57)	TON	22	
2 (3)	601-10.10	TREATED TIMBER LAMINATED DECKING	MBFM	147	
2 (4)	601-10.11	TREATED TIMBER (SIDEWALK PLANKS AND CURBS)	MBFM	166	
(5)	602-02.10	STRUCTURAL STEEL (NORTH VIADUCT - FLOOR BEAM MODIFICATIONS)	LS	1	
(6)	602-10.20	BOLTS	EACH	200	
(7)	602-10.51	STRUCTURAL STEEL REPAIR (DECK CLIPS)	EACH	7,110	
(8)	602-10.52	STRUCTURAL STEEL REPAIR (WOOD STRINGER KEEPER ANGLES)	EACH	1,180	
(9)	602-10.53	STRUCTURAL STEEL REPAIR (STRINGER PACK RUST REMOVAL)	EACH	19	
(10)	602-10.54	STRUCTURAL STEEL REPAIR (BEARING GUSSET PACK RUST REMOVAL)	EACH	3	
(11)	602-10.55	STRUCTURAL STEEL REPAIR (EYEBAR PACK RUST REMOVAL)	EACH	218	
(12)	602-10.57	STRUCTURAL STEEL REPAIR (NUT REPLACEMENT)	EACH	1	
(13)	602-10.58	STRUCTURAL STEEL REPAIR (KNEE BRACE REPLACEMENT)	EACH	50	
(14)	602-10.59	STRUCTURAL STEEL REPAIR (DIAPHRAGM REPLACEMENT)	EACH	2	
(15)	602-10.70	STRUCTURAL STEEL CRACK REPAIR	EACH	2	
(16)	603-02.01	REPAINTING EXISTING STEEL STRUCTURES (WALNUT ST BRIDGE)	LS	1	
(17)	603-02.15	REPAINT EXISTING BEARINGS	LS	1	
(18)	603-05.20	CONTAINMENT & DISPOSAL OF WASTE (WALNUT ST BRIDGE)	LS	1	
(19)	604-01.01	CLASS A CONCRETE (ROADWAY)	C.Y.	9	
(20)	604-01.02	STEEL BAR REINFORCEMENT (ROADWAY)	LB.	926	
(21)	604-04.01	APPLIED TEXTURE FINISH (NEW STRUCTURES)	S.Y.		
(22)	604-10.89	MISCELLANEOUS BRIDGE ITEMS (DISPOSE EXISTING DECK BOARDS)	LS	1	
(23)	707-08.10	TEMPORARY CONSTRUCTION FENCE	L.F.	2,500	
(E1)	709-05.05	MACHINED RIP-RAP (CLASS A-3)	TON	220	
(24)	712-01	TRAFFIC CONTROL	LS	1	
(23)	712-04.01	FLEXIBLE DRUMS (CHANNELIZING)	EACH	10	
(25)	712-06	SIGNS (CONSTRUCTION)	S.F.	737	
(23)	712-07.01	TEMPORARY BARRICADES (TYPE I)	L.F.	39	
(23)	712-07.03	TEMPORARY BARRICADES (TYPE III)	L.F.	96	
	714-01.37	LIGHT STANDARDS (PEDESTRIAN/STREET LIGHT)	EACH	16	
	714-01.64	ELECTRICAL SYSTEM	LS	1	
	714-03.03	DIRECT BURIAL CONDUIT (SCHED. 40 PVC, UTILITY TRANSFORMER SECONDARY)	L.F.	135	
1	714-03.04	DIRECT BURIAL CONDUIT (SCHED. 40 PVC, UNDERGROUND BRANCH CIRCUIT CONDUITS)	L.F.	100	
	714-04.03	CONDUIT (3/4" CONDUIT)	L.F.	8,000	
	714-04.04	CONDUIT (1-1/4" CONDUIT)	L.F.	4,500	
	714-04.05	CONDUIT (1-1/2" CONDUIT)	L.F.	13,750	
	714-04.06	CONDUIT (2" CONDUIT)	L.F.	15,000	
	714-04.07	CONDUIT (2-1/2" CONDUIT)	L.F.	3,000	
	714-04.08	CONDUIT (4" CONDUIT)	L.F.	4,000	
	714-05.05	PULL BOXES (BRANCH CIRCUIT PULL BOXES)	EACH	40	
	714-05.06	PULL BOXES (BRANCH CIRCUIT JUNCTION BOXES)	EACH	150	
	714-05.07	PULL BOXES (COMMUNICATIONS PULL BOXES)	EACH	20	
	714-06.03	CABLE (1/C #10 AWG)	L.F.	38,000	
	714-06.04	CABLE (1/C #8 AWG)	L.F.	105,000	
	714-06.06	CABLE (1/C #4 AWG)	L.F.	126,000	
	714-06.07	CABLE (1/C #2 AWG)	L.F.	28,000	
	714-06.08	CABLE (1/C #1/0 AWG)	L.F.	20,000	
	714-09.09	LUMINAIRES (BRIDGE MOUNTED, TYPES VARY)	EACH	482	
	714-12.01	CONTROL CENTER (NO. 1)	LS	1	
	714-12.02	CONTROL CENTER (NO. 2)	LS	1	
	714-16.01	NAVIGATIONAL LIGHTING	LS	1	
	714-25.02	ELECTRICAL CONNECTION (ELECTRIC POWER BOARD - EPB - ELECTRICT SERVICE #1)	LS	1	
	714-25.03	ELECTRICAL CONNECTION (ELECTRIC POWER BOARD - EPB - ELECTRICT SERVICE #2)	LS	1	
	714-40	LOCATING UTILITIES	LS	1	
	717-01	MOBILIZATION	LS	1	
	722-01.01	FIELD OFFICE (TYPE 1)	LS	1	
	725-02.16	CONDUIT (STRUCTURES - CCTV CAMERAS)	L.F.	10,000	

SEE SHEET 2A for ITEM NUMBER FOOTNOTES, SEE SHEET E-0.3 for LIGHTING FOOTNOTES

REVISION 2 SEALED BY:

JOHN Q. ALLEN Registered Engineer No. 101782 STATE OF TENNESSEE
07/19/2024

ESTIMATED QUANTITIES (CONTINUED)

	ITEM NO.	DESCRIPTION	UNIT	CONTRACT QUANTITY	AS-BUILT QUANTITY
	725-03.80	CCTV CAMERA SYSTEM	EACH	11	
	725-05.02	FIBER OPTIC CABLE (60 STRAND SINGLE MODE)	L.F.	2,300	
	725-20.75	COMMUNICATION CONNECTION (ELECTRIC POWER BOARD - EPB - FIBER TO CAMERAS)	LS	1	
	725-23.29	FIBER OPTIC TERMINATION CABINET	EACH	4	
(E1)	740-10.03	GEOTEXTILE (TYPE III) (EROSION CONTROL)	S.Y.	425	
	740-11.03	TEMPORARY SEDIMENT TUBE 18IN	L.F.	1,850	
	801-01.07	TEMPORARY SEEDING (WITH MULCH)	UNIT	205	
(E4)	801-01.65	TEMPORARY MULCH	UNIT	50	
(E5)	801-03	WATER (SEEDING & SODDING)	M.G.	65	
(E6)	803-01	SODDING (NEW SOD)	S.Y.	6,000	
(26)	920-10.04	STRUCTURAL STEEL REPAIR (BEARING PLATE WELD REPAIR)	EACH	18	
(27)	920-10.05	BRIDGE DECK AND SIDEWALK POWER WASHING AND SEALING	LS	1	
(28)	920-11.04	STRUCTURAL STEEL REPAIR (SPACER PLATE WELD REPAIR)	EACH	2	
(29)	920-11.05	BIRD NETTING SYSTEM	LS	1	
(30)	920-12.04	STRUCTURAL STEEL REPAIR (STRINGER PLATE WELD REPAIR)	EACH	2	
(31)	920-12.05	REMOVE AND RESET NAME PLATES	LS	1	
(32)	920-13.04	STRUCTURAL STEEL REPAIR (TRUSS VERTICAL WELD REPAIR)	EACH	1	
(33)	920-13.05	REMOVE & REPLACE BENCHES, TRASH CANS, & PLANTERS	LS	1	
(34)	920-14.04	STRUCTURAL STEEL REPAIR (PAD WELDING)	EACH	7	
	920-14.05	RELOCATION OF EXISTING UTILITIES	LS	1	
(35)	920-15.04	STRUCTURAL STEEL REPAIR (STRINGER SUPPORT PLATE)	EACH	2	
(36)	920-16.04	TREATED TIMBER (RISER BLOCKS)	EACH	195	
(37)	920-16.05	UTILITY LINE CLEANING AND PAINTING	LS	1	
2 (38)	920-17.04	TREATED TIMBER (SIDEWALK STRINGERS)	EACH	278	
(39)	920-17.05	PERMITS - CITY OF CHATTANOOGA	LS	1	
(40)	920-18.05	PVC WATER LINE REPLACEMENT	LS	1	
(41)	920-19.04	UTILITY CONDUIT AND HARDWARE	EACH	3	
(42)	920-19.05	REMOVE & REPLACE PET WASTE DISPENSERS	LS	1	
(43)	920-20.04	IN-KIND STRUCTURAL STEEL REPLACEMENT (MISCELLANEOUS)	EACH	2	
	920-20.05	REMOVAL AND DISPOSAL OF ELECTRICAL SYSTEM	LS	1	
(44)	920-20.12	REMOVE, CLEAN, AND RESET EXISTING DECK JOINTS	EACH	17	
(45)	920-20.13	HISTORICAL SIGN CLEANING AND PAINTING	LS	1	
(46)	920-20.20	STRUCTURAL STEEL REPAIR (STRINGER SECTION REPLACEMENT)	EACH	2	
1 (47)	920-20.21	REMOVE & REPLACE EDUCATIONAL SIGNS	LS	1	
(48)	920-20.28	DECK DRAIN SCUPPERS	EACH	16	
(E7)	920-20.29	IRRIGATION SYSTEM (REPAIR)	LS	1	
(49)	920-20.37	ADDITIONAL FASTENERS	LS	1	
1 (50)	920-20.40	STRAND REPLACEMEENT	L.F.	4,000	
1 (51)	920-20.44	STRAND ADJUSTMENT	EACH	33	
1 (52)	920-20.45	WORK PLAN AND ANALYSIS	LS	1	
1 (53)	920-20.53	MONITORING SYSTEMS	LS	1	

1 **QUANTITIES NOTES**

- ANY DAMAGE THAT OCCURS TO THE EXISTING STRUCTURE DURING THE DURATION OF THE PROJECT SHALL BE REPAIRED TO THE SATISFACTION OF THE OWNER AT NO ADDITIONAL COST.
- PRIOR TO CONSTRUCTION, ALL DIMENSIONS OF THE EXITING STRUCTURE THAT WILL AFFECT THE WORK ITEMS DESCRIBED HEREIN SHALL BE FIELD VERIFIED BY THE CONTRACTOR. THE CONTRACTOR SHALL SUBMIT VERIFICATION OF THE EXISTING BRIDGE ELEMENTS TO THE OWNDER FOR APPROVAL. AS PART OF THE SUBMITTAL, THE CONTRACTOR SHALL PROVIDE A SIGNED STATEMENT CITING THAT THE FIELD VERIFICATION WAS PERFORMED. THE SUBMITTAL SHALL ALSO INCLUDE A DETAILED SUMMARY OF ANY MODIFICATIONS REQUIRED. IF NO MODIFICATIONS ARE REQUIRED, THIS SHALL BE IDENTIFIED IN THE SIGNED STATEMENT FROM THE CONTRACTOR. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ADJUSTING THE ELEMENTS OF THE NEW CONSTRUCTION TO ENSURE PROPER FIT WITH THE EXISTING STRUCTURE.

EPSC FOOTNOTES

(E1) 125 CY FOR TEMPORARY CONSTRUCTION EXITS. 50 CY FOR RE-GRADING TO EXPOSE STEEL THAT HAS BEEN COVERED WITH VEGETATION AND DIRT TO ACHIEVE POSITIVE DRAINAGE AWAY FROM THE FOUNDATION.
(E2) THREE INCHES OF TOPSOIL IS REQUIRED BENEATH REPLACEMENT OF PERMANENT SOD.
(E3) SEE SUBSECTION 209.07 OF THE TDOT STANDARD SPECIFICATIONS FOR MAINTENANCE REPLACEMENT. ALL QUANTITIES ARE TO BE USED AS DIRECTED BY THE ENGINEER.
(E4) INCLUDES 6 UNITS TO BE USED DURING MOON RIVER FESTIVAL AS DESCRIBED IN NOTE 4 ON SHEET 4. INCLUDES 44 UNITS TO BE USED IN THE DISTURBED AREA WITHIN COOLIDGE PARK AS NEEDED TO PREVENT MUDDY CONDITIONS. EACH UNIT IS DESCRIBED AS 1,000 SQUARE FEET AT EIGHT (8) INCHES DEPTH.
(E5) INCLUDES 20 THOUSAND GALLONS FOR EROSION PREVENTION AND SEDIMENT CONTROL. INCLUDES 45 THOUSAND GALLONS FOR PLACEMENT OF PERMANENT SOD.
(E6) INCLUDES 5,915 S.Y. IN COOLIDGE PARK. INCLUDES 85 S.Y. AT THE SOUTHEAST CORNER OF THE BRIDGE ADJACENT TO THE EXISTING ABUTMENT CONCRETE SLOPE PAVING. CONTRACTOR IS TO CONSULT WITH THE CITY OF CHATTANOOGA AS TO THE TYPE AND VARIETY REQUIRED.
(E7) THIS BID ITEM COVERS THE REPAIR OF EXISTING IRRIGATION BENEATH THE WALNUT STREET BRIDGE WITHIN COOLIDGE PARK PRIOR TO THE PLACEMENT OF NEW SOD. THIS BID ITEM ALSO COVERS REPAIR OR REPLACEMENT OF IRRIGATION AT THE SOUTHEAST CORNER OF THE WALNUT STREET BRIDGE WITHIN THE HATCHED AREA SEEN ON SHEET 22F, AS WELL AS CONNECTION TO EXISTING RAINBIRD. INCLUDES ALL LABOR AND MATERIALS REQUIRED FOR THIS WORK.

CITY OF CHATTANOOGA SEAL

CITY OF CHATTANOOGA
DIVISION OF TRANSPORTATION
CONTRACT #E-13-002-103
WALNUT STREET PEDESTRIAN BRIDGE
BRIDGE REPAIRS - PHASES 2, 3, & 4
WILLIAM C. PAYNE, P.E., CITY ENGINEER

ESTIMATED QUANTITIES

NO.	REVISION	DATE	SIG.
1	REV. ITEMS	7/19/24	JOA
1	REV. ITEMS	7/5/24	JOA

SCALE NO SCALE
DRAWN N. RUSSELL
DESIGN A. CAGLE
CHECKED J. ECKEL

VOLKERT

DENNIS A. BOUTON Registered Engineer No. 0011548 STATE OF TENNESSEE
03/22/2024

APPROVED

JOB NO. 457003.17
DATE 03/22/2024
SHEET 2
FILE NO.

7/19/2024
c:\volkert.pw.workingdir\john.allen@volkert.com\d0200066\002_Estimated Quant.dgn

BRIDGE GENERAL NOTES

THIRD-PARTY INSPECTION

IT SHOULD BE NOTED THAT NEAR COMPLETION OF THE WORK ITEMS OUTLINED IN THESE PLANS, THE OWNER SHALL CONTRACT WITH A THIRD PARTY OF THEIR CHOOSING TO PERFORM AN IN-DEPTH INSPECTION OF THE BRIDGE THAT WILL SERVE AS AN UPDATE TO THE MOST RECENT BRIDGE INSPECTION REPORT. ANY ELEMENTS DETERMINED TO REQUIRE FURTHER REPAIR MAY BE REQUESTED BY THE OWNER AS ADDITIONAL ITEMS OF WORK.

WEIGHT RESTRICTIONS, SHORING, & STOCKPILING MATERIALS

THE CONTRACTOR IS SOLELY RESPONSIBLE FOR THE STABILITY OF THE STRUCTURE DURING CONSTRUCTION AND SHALL PROVIDE ADEQUATE BRACING AND SHORING AS REQUIRED TO PERFORM VARIOUS ITEMS OF WORK WHERE STABILITY IS A CONCERN. ALL TEMPORARY BRACING AND SHORING SHALL COMPLY WITH THE REQUIREMENTS SET FORTH BELOW. THIS SHALL BE CONSIDERED AS AN INCIDENTAL ITEM.

THE CONTRACTOR SHALL PROVIDE ADEQUATE BRACING AND SHORING AS REQUIRED TO PERFORM VARIOUS ITEMS OF WORK WHERE STABILITY IS A CONCERN AND WHERE DISASSEMBLY OF THE COMPONENT OR STRUCTURAL SYSTEM IS REQUIRED. THE CONTRACTOR SHALL EMPLOY THE SERVICE OF A TENNESSEE REGISTERED PROFESSIONAL ENGINEER WHO IS KNOWLEDGEABLE IN THE FIELD OF BRIDGE DESIGN. A COMPLETE SET OF BRACING AND SHORING PLANS ALONG WITH DESIGN CALCULATIONS SHALL BE SUBMITTED TO THE PROJECT ENGINEER FOR REVIEW AND APPROVAL PRIOR TO THE START OF WORK. THE PLANS AND DESIGN CALCULATIONS SHALL BEAR THE DESIGN ENGINEER'S SEAL. STOCKPILING OF REMOVAL ITEMS ON THE BRIDGE IS PROHIBITED AND THE EQUIPMENT USED FOR TRANSPORTING THESE ITEMS OFF OF THE BRIDGE SHALL BE LIMITED TO RUBBER TRACKED, RUBBER TIRED COMPACT EQUIPMENT. REMOVAL ITEMS SHALL INCLUDE, BUT ARE NOT LIMITED TO DEBRIS, OLD STEEL, TIMBER ELEMENTS, TRASH CANS, AND PARK BENCHES. SPECIFICATIONS FOR THE COMPACT EQUIPMENT SELECTED BY THE CONTRACTOR SHALL BE SUBMITTED TO THE OWNER. THESE SPECIFICATIONS SHALL INCLUDE THE OPERATING WEIGHT, AXLE WEIGHTS, AND SPACINGS.

SPECIFICATIONS & LOADING

(1) **SPECIFICATIONS:** STANDARD ROAD AND BRIDGE SPECIFICATIONS OF THE TENNESSEE DEPARTMENT OF TRANSPORTATION (JANUARY 1, 2021 EDITION), AND THE 4TH EDITION (2017) AASHTO LRFD BRIDGE CONSTRUCTION SPECIFICATIONS WITH INTERIMS.

(2) **DESIGN SPECIFICATIONS:** AASHTO STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES, 17TH EDITION, 2002 WITH ADDENDA.

(3) **LOADING**: AASHTO SECTION 3.14.1 PEDESTRIAN LOADING FOR EVERYDAY USE; 90 PSF PEDESTRIAN LOADING WITH ROADWAY WIDTH RESTRICTED TO NINE (9) FEET ON THE TRUSS SPANS FOR FESTIVAL USE.

MISCELLANEOUS GENERAL NOTES

(4) **SPECIAL EVENTS REQUIRING THE BRIDGE TO BE OPEN:** IT SHOULD BE NOTED THAT SPECIFIC EVENTS DURING THE LIFE OF THE CONTRACT SHALL REQUIRE THAT THE BRIDGE BE OPEN TO PEDESTRIAN ACCESS FROM CURB TO CURB IN A CONDITION THAT IS CONSIDERED BY THE OWNER TO BE FULLY OPERATIONAL. WHILE THE BRIDGE IS OPEN TO PEDESTRIANS, THE CONTRACTOR SHALL PROVIDE A LIGHTING SCHEME THAT ENSURES SAFE ACCESS FOR THE DURATION OF EACH EVENT. SIDEWALKS MAY REMAIN CLOSED DURING EVENTS GIVEN THAT THE CONTRACTOR PROVIDE AND MAINTAIN CONSTRUCTION FENCING TO PROTECT AND RESTRICT PEDESTRIANS FROM ENTERING WORK AREAS. THE CONTRACTOR SHALL SUBMIT THE PROPOSED LIGHTING SCHEME AND CONSTRUCTION FENCING FOR APPROVAL BY THE OWNER A MINIMUM OF **14 CALENDAR DAYS BEFORE EACH EVENT.** ACCESS SHALL BE FREE OF TRIPPING HAZARDS AND AVAILABLE FOR RUNNERS. ACCESS TO OUTDOOR CHATTANOOGA, LOCATED IN THE NORTHEAST CORNER OF COOLIDGE PARK, SHALL BE AVAILABLE AT ALL TIMES, AND THE CONTRACTOR SHOULD TAKE CARE SO AS NOT TO BLOCK ENTRANCES AND EXITS IN THE CASE OF AN EMERGENCY.

(5) IT SHOULD BE NOTED THAT THE DATES IDENTIFIED IN THE CONSTRUCTION PLANS AND BID DOCUMENTS ARE CONSIDERED TENTATIVE AND MAY BE SUBJECT TO CHANGE. THE CONTRACTOR SHALL HAVE THE BRIDGE OPEN TO PEDESTRIAN ACCESS AND RIVER ACCESS AND IN A CONDITION CONSIDERED BY THE OWNER TO BE FULLY OPERATIONAL INCLUDING PROVIDING RAILINGS AND ALL SAFETY MEASURES REQUIRED FOR THE EVENTS BY **7:00 AM ON THE THURSDAY PRIOR TO EACH EVENT.** AT THIS TIME, THE OWNER SHALL CONDUCT AN INSPECTION OF THE BRIDGE, AND ADJUSTMENTS SHALL BE MADE BY THE CONTRACTOR AT THE OWNER'S DISCRETION UNTIL A FINAL APPROVAL IS REACHED. THE CONTRACTOR MAY COMMENCE WORK AGAIN **AT 9:00 AM THE MONDAY FOLLOWING EACH EVENT** UPON APPROVAL BY THE OWNER. BELOW ARE THE EVENTS THAT WILL OCCUR IN 2024 AND 2025 FOR WHICH THE WALNUT STREET BRIDGE SHALL BE OPEN TO PEDESTRIAN ACCESS. ANY EVENT SPECIFIC REQUIREMENTS ARE ALSO LISTED BELOW.

1. CHATTANOOGA MARATHON - MARCH
2. EASTER – APRIL
   - I. THE BRIDGE IS NOT REQUIRED TO BE OPEN
   - II. BOTH RIVER STREET AND ALL SIDEWALKS WITHIN COOLIDGE PARK SHALL REMAIN OPEN FOR THIS EVENT
   - III. THE CONTRACTOR SHALL INSTALL AN 8 INCH THICK LAYER OF WOOD MULCH WITHIN THE TWO OPENINGS SHOWN ON FIGURE ONE ON THIS SHEET.
3. IRONMAN 70.3 - MAY
4. ~~RIVERBEND & RIVERBEND RUN – MAY/JUNE~~
5. CHATTANOOGA WATERFRONT TRIATHLON - JUNE
6. ~~MOON RIVER FESTIVAL – SEPTEMBER~~
   - ~~I. ITEMS II AND III FOR EASTER SHALL ALSO APPLY FOR THE MOON RIVER FESTIVAL~~
7. IRONMAN - SEPTEMBER
8. 7 BRIDGES MARATHON - OCTOBER
9. HEAD OF THE HOOCH – NOVEMBER

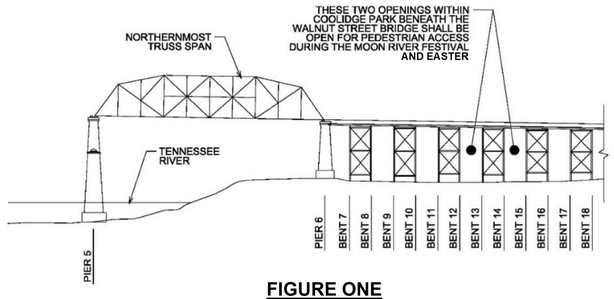


FIGURE ONE

(6) **SHOP DRAWINGS:** REFER TO SECTION 105.02 OF THE STANDARD SPECIFICATIONS. IF USING PAPER COPIES, SHOP DRAWINGS ARE TO BE SENT TO THE CITY OF CHATTANOOGA PROJECT MANAGER, FOR ELECTRONIC SUBMITTALS, SEE SECTION 105.02 OF THE STANDARD SPECIFICATIONS. EACH SHOP DRAWING SHALL CONTAIN IN THE TITLE BLOCK THE FOLLOWING: THE CITY PROJECT NUMBER, COUNTY, BRIDGE NAME, AND BRIDGE NUMBER (OR STRUCTURE TYPE AND NUMBER). SHOP DRAWINGS WITH TITLE BLOCKS NOT INCLUDING THE FOREGOING IDENTIFICATION WILL BE RETURNED FOR CORRECTION BEFORE ANY REVIEWS FOR APPROVAL ARE CONDUCTED.

(7) **UTILITY PROTECTION PLAN:** THE CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING AND PROTECTING ALL EXISTING UTILITIES, AND PRIOR TO COMMENCING WORK, THE CONTRACTOR SHALL SUBMIT A UTILITY PROTECTION PLAN FOR APPROVAL BY THE OWNER DESCRIBING THE MEANS AND METHODS BY WHICH ALL EXISTING UTILITIES SHALL BE PROTECTED FROM CONSTRUCTION OPERATIONS FOR THE DURATION OF THE CONTRACT. THE CONTRACTOR SHALL ALSO BE RESPONSIBLE FOR TEMPORARILY SUPPORTING ALL EXISTING UTILITIES WHILE TIMBER ELEMENTS ARE BEING REPLACED. THIS SHALL BE CONSIDERED AN INCIDENTAL ITEM. AS PART OF THE UTILITY PROTECTION PLAN, THE CONTRACTOR SHALL MEET ALL REQUIREMENTS OUTLINED IN NOTE 88 ON SHEET 4C REGARDING THE EXISTING WATER LINE.

(8) **REMOVAL OF ITEMS FROM THE JOB SITE :** CONTRACTOR SHALL USE EXTREME CARE AND TAKE ANY MEASURES NECESSARY TO ENSURE THAT NO DEBRIS IS DROPPED INTO THE HYDRAULIC, PEDESTRIAN, OR ROADWAY CROSSING BELOW THE STRUCTURE. ANY DEBRIS WHICH IS ALLOWED TO DROP ON THE BANKS BELOW THE BRIDGE SHALL NOT BE ALLOWED TO EXIT THE WORK AREA AND SHALL BE REMOVED AND DISPOSED OF BY THE CONTRACTOR. ALL ITEMS REMOVED FROM THE EXISTING STRUCTURE AND WORK AREA, INCLUDING DEBRIS, OLD STEEL, TIMBER ELEMENTS, TRASH CANS, PARK BENCHES, ETC. SHALL BECOME THE PROPERTY OF THE CONTRACTOR AND ITS REMOVAL FROM THE JOB SITE SHALL BE INCLUDED IN THE UNIT PRICE BID FOR OTHER ITEMS. HAULING OF REMOVAL ITEMS SHALL BE RESTRICTED TO TIMES OF DAY THAT WILL AVOID INTERRUPTIONS TO TRAFFIC FLOW DURING PEAK HOUR VOLUMES. IN ADDITION NO HAULING SHALL BE ALLOWED DURING MORNING OR EVENING RUSH HOUR, WHICH SHALL BE CONSIDERED TO BE BETWEEN THE HOURS OF 7:00 AM TO 9:00 AM AND 4:00 PM TO 7:00 PM.

(9) **DEMOLITION:** THE CONTRACTOR SHALL TAKE SPECIAL CARE TO PROTECT ANY PARTS OF THE STRUCTURE THAT ARE NOT TO BE REMOVED SPECIFICALLY. ALL DEVICES PROPOSED FOR DEMOLITION SHALL MEET THE APPROVAL OF THE ENGINEER.

(10) **BRIDGE LIGHTING:** LUMP SUM FOR BRIDGE LIGHTING INCLUDES ALL ITEMS AND LABOR NECESSARY TO MAKE THE BRIDGE LIGHTING COMPLETE AS SHOWN ON THE PLANS, INCLUDING CONNECTION TO THE EXISTING POWER SOURCE. SEE LIGHTING REPAIR DETAILS FOR ADDITIONAL INFORMATION.

(11) **VERIFICATION OF EXISTING CONDITIONS:** THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS, CLEARANCES, AND MEMBER SIZES BEFORE SUBMITTING SHOP DRAWINGS. COST TO BE INCLUDED IN THE COST OF OTHER ITEMS.

(12) **FALSEWORK OVER TRAFFIC:** SEE SECTION 604.06 OF THE STANDARD SPECIFICATIONS.

(13) **FALL PROTECTION:** THE CONTRACTOR SHALL PROVIDE 100% CONVENTIONAL FALL PROTECTION FOR WORKERS INSTALLING DECKING ABOVE 15 FEET.

(14) **CONSTRUCTION SEQUENCING:** REMOVAL AND REPLACEMENT OF TIMBER ELEMENTS SHALL BE PERFORMED BEGINNING ON THE SOUTH END OF THE BRIDGE AND MOVING NORTH ACROSS THE BRIDGE UNTIL COMPLETION. ALL OTHER CONSTRUCTION OPERATIONS ARE AT THE DISCRETION OF THE CONTRACTOR. THE CONTRACTOR SHALL ESTABLISH A PLAN PRIOR TO BEGINNING CONSTRUCTION OPERATIONS TO BE REVIEWED BY THE ENGINEER. SEE SPECIAL PROVISION SP-6 FOR ADDITIONAL DETAILS.

CONSTRUCTION STAGING: PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL COORDINATE WITH THE CITY OF CHATTANOOGA TO DETERMINE A SUITABLE LOCATION FOR CONSTRUCTION STAGING. THE CONTRACTOR IS RESPONSIBLE FOR ANY PERMITTING REQUIRED FOR OFF-SITE STAGING.

(15) **SPECIAL NOTE CONCERNING WORK OVER A NAVIGABLE WATERWAY:** THE CONTRACTOR SHALL COMPLY FULLY WITH ANY REQUIREMENTS ESTABLISHED BY THE CORPS OF ENGINEERS, U.S. COAST GUARD, AND ANY OTHER AGENCIES WHICH MAY HAVE JURISDICTION RELATIVE TO CONSTRUCTION WORK OVER A NAVIGABLE STREAM WHICH IS APPLICABLE TO THIS CONTRACT, AND WHICH MAY NOT BE COVERED BY EXISTING PERMITS. THE CONTRACTOR SHALL ALSO NOTIFY THE CORPS OF ENGINEERS INFORMING THEM OF WORK TO BE PERFORMED BEFORE ANY WORK OVER THE WATERWAY BEGINS. THE CONTRACTOR SHALL SUBMIT A DESCRIPTION OF WORK AND SKETCHES OF ANY FALSEWORK, SCAFFOLDING, DEBRIS CONTAINMENT SYSTEMS, ETC. WHICH MAY BE REQUIRED DURING CONSTRUCTION WHICH MAY ENCROACH UPON THE VERTICAL AND/OR HORIZONTAL CLEARANCES FOR WATERWAY TRAFFIC TO THE U.S. COAST GUARD FOR APPROVAL BEFORE ANY WORK BEGINS.

CONTACT: ERIC WASHBURN
U.S. COAST GUARD
BRIDGE ADMINISTRATOR
1222 SPRUCE STREET
ST. LOUIS, MO 63103-2832

(16) **REFERENCE DOCUMENTS**: FOR ADDITIONAL DETAILS, DIMENSIONS AND MEMBER SIZES OF THE EXISTING BRIDGE, THE CONTRACTOR IS REFERRED TO THE FOLLOWING DOCUMENTS (PROVIDED UPON REQUEST):
   - A. REHABILITATION PLANS – 1990, 2009, AND 2016
   - B. INSPECTION REPORT – 2015

(17) **MAINTENANCE OF TRAFFIC ON BRIDGE:** SEE PROJECT SPECIFICATIONS.

(18) **MAINTENANCE OF TRAFFIC IN COOLIDGE PARK:** SEE WORK ZONE DETAIL SHEETS.

REVISION 2 SEALED BY:

JOHN Q. ALLEN
Registered Engineer
CIRCULATED
DEPT. OF COMMERCE
No. 101755
STATE OF TENNESSEE
07/19/2024

CITY OF CHATTANOOGA
SEAL
CORPORATION
TENNESSEE

CITY OF CHATTANOOGA
DIVISION OF TRANSPORTATION
CONTRACT #E-13-002-103
WALNUT STREET PEDESTRIAN BRIDGE
BRIDGE REPAIRS - PHASES 2,3,& 4
WILLIAM C. PAYNE, P.E., CITY ENGINEER

BRIDGE GENERAL NOTES (1 OF 4)

NO.	REVISION	DATE	SIG.
2	REV. NOTES	7/19/24	JOA
1	REV. NOTES	1/1/24	JOA

SCALE NO SCALE
DRAWN N. RUSSELL
DESIGN A. CAGLE
CHECKED J. ECKEL

VOLKERT

DENNIS A. BOLTON
REGISTERED ENGINEER
AGRICULTURE
DEPT. OF COMMERCE
No. 0011541
STATE OF TENNESSEE
03/22/2024

APPROVED

JOB NO. 457003.17
DATE 03/22/2024
SHEET 4
FILE NO.

7/19/2024
c:\volkert_pw_workingdir\john.allen@volkert.com\d0200066\004_BRIDGE Gen Notes.dgn

BRIDGE GENERAL NOTES (CONTINUED)

TIMBER & SEALANT

(19) **GLUED LAMINATED TIMBER DECK PANELS:** TREATED ALASKAN YELLOW CEDAR. SHALL CONFORM TO NBS VOLUNTARY PRODUCT STANDARD PS 56 AND AITC STANDARD SERIES 100.

(20) **TIMBER SIDEWALK PLANKS:** TREATED ALASKAN YELLOW CEDAR, STRESS GRADES FOR STRUCTURAL PURPOSES, NO. 1.

(21) **TIMBER CURBS AND RISER BLOCKS:** TREATED ALASKAN YELLOW CEDAR, S4S.

(22) **TIMBER SIDEWALK STRINGERS:** TREATED ALASKAN YELLOW CEDAR, STRESS GRADES FOR STRUCTURAL PURPOSES, NO. 1.

(23) **TIMBER SEALANT:** SEALANT SHALL BE QNAP2, TENINO COPPER NAPHTHENATE 2%, OR AWPA APPRFOVED EQUAL.

(24) **TIMBER SEALANT:** SHALL BE APPLIED TO ALL EXPOSED SURFACES OF THE TIMBER SIDEWALK AND DECK FOR THE FULL LENGTH OF BRIDGE PER THE MANUFACTURER'S RECOMMENDATIONS. IT SHOULD BE NOTED THAT SEALANT SHALL ALSO BE APPLIED TO CUT ENDS OF TREATED LUMBER . DECK AND SIDEWALK SURFACE SHALL BE CLEANED TO REMOVE ALL COATINGS, DIRT, OIL, MOLD, AND OTHER FOREIGN SUBSTANCES BY POWER WASHING PRIOR TO SEALING TO THE SATISFACTION OF THE ENGINEER. POWER WASHING SHALL BE PAID FOR WITH PAY ITEM 920-10.05 BRIDGE DECK AND SIDEWALK POWER WASHING AND SEALING, LS.

(25) **CONTAINMENT:** THE CONTRACTOR SHALL USE CONTAINMENT SCREENS OR OTHER MEASURES AS NECESSARY TO PREVENT ANY DECK SEALANT FROM ENTERING THE ENVIRONMENT. CONTAINMENT MEASURES SHALL BE APPROVED BY THE ENGINEER. CONTAINMENT WILL NOT BE MEASURED AND PAID FOR DIRECTLY, BUT WILL BE INCLUDED IN THE COST OF OTHER ITEMS.

(26) **WASTE COLLECTION**: THE WASTEWATER FROM THE PRESSURE WASHING OPERATION SHALL BE COLLECTED AND FILTERED. THE COLLECTED WASTEWATER SHALL NOT BE RELEASED INTO THE ENVIRONMENTAL UNTIL IT IS CLEAR. ALL SOLID DEBRIS FROM THE PRESSURE WASHING OPERATION SHALL BE COLLECTED AND DISPOSED OF IN AN APPROPRIATE MANNER. WASTE COLLECTION WILL NOT BE MEASURED AND PAID FOR DIRECTLY, BUT WILL BE INCLUDED IN THE COST OF OTHER ITEMS.

STEEL, BOLTS, AND WELDING

(27) **STRUCTURAL STEEL:** ALL STRUCTURAL STEEL REPAIRS SHALL BE COMPLETED AND IN PLACE PRIOR TO COMMENCING BLAST CLEANING AND PAINTING OPERATIONS. STRUCTURAL STEEL SHALL CONFORM TO ASTM A709 GRADE 50S UNLESS OTHERWISE NOTED. ALL STRUCTURAL STEEL FOR GIRDER FLANGES IN TENSION AND ALL WEBS SHALL MEET THE SUPPLEMENTAL REQUIREMENTS FOR LONGITUDINAL CHARPY V-NOTCH TESTS SPECIFIED IN THE ASTM SPECIFICATIONS. FOR BOTH NON-FRACTURE CRITICAL AND FRACTURE CRITICAL CRITERIA, MINIMUM AVERAGE ENERGY REQUIREMENTS FOR ZONE 2 SHALL APPLY.
ALL FRACTURE CRITICAL STRUCTURAL STEEL ELEMENTS SHALL MEET THE REQUIREMENTS OF THE AASHTO GUIDE SPECIFICATIONS FOR FRACTURE CRITICAL NON-REDUNDANT STEEL BRIDGE MEMBERS AS REQUIRED FOR ZONE 2. FABRICATION OF FRACTURE CRITICAL BRIDGE MEMBERS SHALL BE ACCOMPLISHED BY FABRICATORS CERTIFIED UNDER THE AISC QUALITY MANAGEMENT SYSTEMS CERTIFICATION – CERTIFIED BRIDGE FABRICATOR - ADVANCED. NO OTHER CERTIFICATION PROGRAM WILL BE ACCEPTABLE.

(28) **BOLTS:** SHALL BE HIGH TENSILE STRENGTH BOLTS (ASTM-F3125, GRADE A325), TYPE 1, UNLESS OTHERWISE NOTED. SEE SECTION 602 OF THE STANDARD SPECIFICATIONS. **NUTS:** SHALL BE ASTM A563, GRADE DH. **WASHERS:** SHALL BE ASTM F436, TYPE 1. EXISTING CONTACT SURFACES SHALL BE CLEANED OF ALL EXISTING PAINT AND RUST TO BARE METAL PRIOR TO ATTACHMENT OF NEW MEMBERS. BOLTS, NUTS, AND WASHERS USED ARE TO BE GALVANIZED. FOR GALVANIZING, SEE SECTION 908 IN THE STANDARD AND SUPPLEMENTAL SPECIFICATIONS. NUTS SHALL BE HEAVY HEX AND TAPPED OVERSIZE THE MINIMUM AMOUNT REQUIRED FOR PROPER ASSEMBLY. BOLTS, NUTS, AND WASHERS SHALL NOT BE REUSED AFTER TIGHTENING. THE REQUIREMENTS AS DESCRIBED IN THIS NOTE SHALL APPLY TO BOLTS PAID FOR UNDER ITEM NO. 602-10.20.

(29) **WELDING:** SEE CURRENT EDITION OF THE AASHTO/AWS D1.5 BRIDGE WELDING CODE. CONTRACTOR IS TO SUBMIT WELDING PROCEDURE SPECIFICATIONS (BASED ON SUCCESSFUL TEST RESULTS AS RECORDED IN A PROCEDURE QUALIFICATION TEST RECORD, SEE AASHTO/AWS D1.5 SECTION 1.9 AND SECTION 5 (QUALIFICATION)) AND WELDER QUALIFICATIONS TO THE ENGINEER FOR REVIEW BEFORE WELDING WILL BE ALLOWED. WELDER QUALIFICATION SHALL INCLUDE PROOF OF CONTINUOUS WORK USING THE SPECIFIED WELDING PROCESS. WELDING PROCEDURE SPECIFICATIONS ARE NOT REQUIRED FOR TEMPORARY WELDS (STAY-IN-PLACE METAL DECK FORMS ARE CONSIDERED TEMPORARY.) THE WELDING PROCEDURE SPECIFICATIONS SHOULD BE ON SITE FOR WELDER AND INSPECTOR REVIEW.

WELDING IS TO BE DONE BY QUALIFIED WELDERS. SUPERVISION OF NON-QUALIFIED WELDERS IS NOT PERMITTED. THE OWNER HAS THE OPTION OF HAVING THE WELDER RECERTIFIED IF QUESTIONABLE WORK IS OBSERVED. THE COST OF THIS REQUALIFICATION IS TO BE PAID FOR BY THE CONTRACTOR. WELDER QUALIFICATION POSITIONS FOR FILLET AND GROOVE WELDS: FLAT (F), HORIZONTAL (H), VERTICAL (V), OVERHEAD (OH). SEE FIG 5.4 OR FIG 5.5 IN AASHTO/AWS D1.5 FOR POSITION LIMITS.

2 THE CONTRACTOR SHALL HAVE A CERTIFIED WELDING INSPECTOR (CWI) ON EACH WORK SHIFT WHERE WELDING ~~OR OTHER SIGNIFICANT~~ WORK IS PERFORMED.

QUALIFICATION TEST		TYPE OF WELD AND POSITION OF WELDING QUALIFIED PLATE	
WELD	POSITION	GROOVE	FILLET
GROOVE	1G	F	F,H
	2G	F,H	F,H
	3G	F,H,V	F,H,V
	4G	F,OH	F,H,OH
	3G AND 4G	ALL	ALL
FILLET	1F		F
	2F		F,H
	3F		F,H,V
	4F		F,H,OH
	3F AND 4F		ALL

FROM TABLE 5.8, WELDER QUALIFICATION – TYPE AND POSITION LIMITATIONS, AASHTO/AWS D1.5

BLAST CLEANING AND PAINTING (SYSTEM "A") NOTES

(30) **CLEANING AND PAINTING:** ALL STRUCTURAL STEEL AND HANDRAILS SHALL BE BLAST CLEANED AND PAINTED. BLAST CLEANING, PAINTING, AND ALL OTHER INCIDENTAL OPERATIONS ASSOCIATED WITH THE PAINTING OPERATION SHALL CONFORM TO SECTION 603 OF THE STANDARD SPECIFICATIONS. BLAST CLEANING SHALL BE IN ACCORDANCE WITH SECTION 603.05(B.2) OF THE STANDARD SPECIFICATIONS. PAINT SHALL BE SYSTEM "A" (QPL 3.001) – INORGANIC ZINC. SEE SECTIONS 603 AND 910 OF THE STANDARD SPECIFICATIONS. THE CONTRACTOR SHALL ALSO HAVE THE OPTION TO USE ORGANIC ZINC IN SYSTEM "A" INSTEAD OF AN INORGANIC ZINC. ORGANIC ZINC SYSTEMS SHALL BE FROM QPL 3.002.

(31) ALL ELECTRICAL PANELS AND CONDUIT ATTACHED TO THE BRIDGE SHALL ALSO BE PAINTED TO MATCH THE COLOR OF THE STRUCTURAL STEEL. THIS SHALL BE CONSIDERED AN INCIDENTAL ITEM.

(32) BLAST CLEANING SHALL BE IN ACCORDANCE WITH SECTION 603.05(B.2) AND CLEANED TO SSPC-SP 10 "NEAR -WHITE METAL BLAST CLEANING" (OR NACE EQUIVALENT). BLAST CLEANING SHOULD PRODUCE A UNIFORM SURFACE PROFILE BETWEEN 1.5 MIL AND 3.5 MIL. IF THE PROFILE REQUIREMENTS OF THE COATING MANUFACTURER ARE MORE RESTRICTIVE, THE CONTRACTOR SHALL ADVISE THE ENGINEER AND COMPLY WITH THE MORE RESTRICTIVE REQUIREMENTS.

(33) DRY FILM THICKNESSES SHOWN IN SECTION 603.06 OF THE STANDARD SPECIFICATIONS ARE THICKNESSES ABOVE THE SURFACE PROFILE.

(34) ROLLER AND DAUBER NAP SHALL NOT BE ALLOWED IN THE COATINGS.

(35) FINS, TEARS, SLIVERS, AND DELAMINATIONS ARE TO BE GROUND FOLLOWED BY RE-BLASTING. AT THE DISCRETION OF THE ENGINEER, THE USE OF POWER TOOLS TO CLEAN THE LOCALIZED AREAS AFTER GRINDING AND ESTABLISH A SURFACE PROFILE ACCEPTABLE TO THE COATING MANUFACTURER CAN BE USED IN LIEU OF RE-BLASTING.

(36) ALL THREE COATS SHALL BE TINTED TO CONTRAST AGAINST THE PRECEDING OR FOLLOWING COAT.

(37) SEE TDOT QUALIFIED PRODUCTS LIST 3.001 (INORGANIC ZINC SYSTEM) OR 3.002 (ORGANIC ZINC SYSTEM) FOR ACCEPTABLE COATINGS FOR THE SYSTEM "A" PAINT SYSTEM. THE SAME MANUFACTURER SHALL SUPPLY ALL PRODUCTS USED, INCLUDING THINNERS.

(38) **CONTAINMENT AND DISPOSAL:** OUR RECORDS SHOW THAT THIS BRIDGE HAS OR HAS HAD LEAD-BASED/CHROMATE-BASED PAINT APPLIED TO IT DURING ITS HISTORY; THEREFORE, THE CONTRACTOR SHALL ASSUME THAT REMNANTS OF THAT PAINT REMAIN ON THE BRIDGE. SEE SECTION 603.13 OF THE STANDARD SPECIFICATIONS FOR SPECIAL PRECAUTIONS THAT MUST BE TAKEN IN THE REMOVAL; CONTAINMENT AND DISPOSAL OF THE SURFACE PREPARATION WASTE AND PAINT REMOVAL MEDIA; AND WORKER AND PUBLIC SAFETY. FOR AESTHETIC PURPOSES NO MORE THAN TWO OF THE TRUSS SPANS CAN BE ENCLOSED WITH A 1 CONTAINMENT SYSTEM UNLESS THE WORK PLAN DEVELOPED BY THE CONTRACTOR'S ENGINEER IS MORE RESTRICTIVE.

(39) **EXISTING LEAD-BASED PAINT:** OUR RECORDS SHOW THAT THIS BRIDGE HAS OR HAS HAD LEAD-BASED/CHROMATE-BASED PAINT APPLIED TO IT DURING ITS HISTORY. THEREFORE, THE CONTRACTOR SHALL ASSUME THAT REMNANTS OF THAT PAINT REMAIN ON THE BRIDGE ALONG WITH THE POSSIBILITY OF THE PRESENCE OF MILLSCALE. CONTRACTOR SHALL BID ACCORDINGLY.

(40) **WORKER PROTECTION FROM LEAD-BASED PAINT:** OUR MAINTENANCE RECORDS INDICATE THAT THIS BRIDGE WAS ORIGINALLY PAINTED WITH MATERIALS CONTAINING LEAD AND/OR CHROMATES AND THE CONTRACTOR SHALL BE REQUIRED TO PROCEED ACCORDINGLY AND TAKE ALL MANDATORY SAFEGUARDS PRESCRIBED BY THE STATE AND FEDERAL LAW FOR WORKER PROTECTION AND HAZARDOUS MATERIALS DISPOSAL.

(41) **VERTICAL CLEARANCE:** THE CONTRACTOR SHALL MAINTAIN A VERTICAL CLEARANCE OF 17 FEET FOR THE DURATION OF THE CONTAINMENT AND PAINTING OPERATIONS SUCH THAT THE WORK DOES NOT IMPEDE VEHICULAR TRAFFIC. IF THIS CLEARANCE CANNOT BE MAINTAINED, THE CONTRACTOR SHALL PROVIDE A TRAFFIC CONTROL PLAN WITH AN ACCEPTABLE DETOUR TO BE APPROVED BY THE OWNER. THE COST OF THE TRAFFIC CONTROL PLAN AND ADDITIONAL MAINTENANCE OF TRAFFIC ITEMS WILL NOT BE MEASURED AND PAID FOR DIRECTLY, BUT WILL BE INCLUDED IN THE COST OF OTHER ITEMS. ALL VEHICULAR ROUTES UNDERNEATH THE BRIDGE SHALL REMAIN OPEN AND ACCESSIBLE, UNLESS SPECIFIED OTHERWISE IN THE CONTRACT DOCUMENTS OR CONSTRUCTION PLANS.

(42) **STRUCTURAL STEEL COLOR:** THE COLOR OF THE FINISH COAT SHALL BE A SHADE OF BLUE SUPPLIED BY SHERWIN-WILLIAMS, CARBOLINE, OR AN APPROVED EQUAL. THE CONTRACTOR SHALL SUBMIT A SAMPLE OF THE FINISH COAT COLOR TO BE APPROVED BY THE OWNER.

(43) **HANDRAIL COLOR:** THE COLOR OF THE FINISH COAT SHALL BE INSIGNIA WHITE CONFORMING TO AMS-STD-595 (37925).

(44) **COATING SYSTEM APPROVAL:** PRIOR TO COMMENCING BLAST CLEANING AND PAINTING OPERATIONS, THE OWNER SHALL SELECT A LOCATION ON THE BRIDGE NO LARGER THAN 10 FEET HIGH FOR THE CONTRACTOR TO PREPARE A REPRESENTATIVE SAMPLE OF THE COMPLETE COATING SYSTEM. THE CONTRACTOR SHALL DEMONSTRATE ALL BLAST CLEANING AND PAINTING OPERATIONS WITHIN THIS AREA, AND THE FINISH COAT COLOR SHALL BE APPROVED BY THE OWNER UPON COMPLETION OF THE REPRESENTATIVE SAMPLE. IF THE FINISH COAT COLOR IS FOUND TO BE UNSATISFACTORY, THE CONTRACTOR SHALL SUBMIT A NEW FINISH COAT COLOR, AND A NEW REPRESENTATIVE SAMPLE SHALL BE PREPARED BY THE CONTRACTOR FOR APPROVAL BY THE OWNER USING THE MEANS AND METHODS DESCRIBED ABOVE.

BEARING PAINTING NOTES

(45) **PAINT:** SHALL BE SYSTEM "B" (QPL 3.005) IN ACCORDANCE WITH SECTION 603.06 OF THE STANDARD SPECIFICATIONS. COLOR OF THE FINISH COAT SHALL MATCH THE STRUCTURAL STEEL COLOR DESCRIBED IN NOTE 42. SEE SECTIONS 603 AND 910 OF THE STANDARD SPECS. ALL PRODUCTS USED IN THIS COATING SYSTEM, INCLUDING THINNERS, MUST BE SUPPLIED BY THE SAME MANUFACTURER.

REVISION 2 SEALED BY:

JOHN Q. ALLEN
Registered Engineer
AGRICULTURE
COMMERCE
No. 101792
STATE OF TENNESSEE
07/19/2024

CITY OF CHATTANOOGA SEAL TENNESSEE

CITY OF CHATTANOOGA
DIVISION OF TRANSPORTATION
CONTRACT #E-13-002-103
WALNUT STREET PEDESTRIAN BRIDGE
BRIDGE REPAIRS - PHASES 2,3,& 4
WILLIAM C. PAYNE, P.E., CITY ENGINEER

BRIDGE GENERAL NOTES (2 OF 4)

NO.	REVISION	DATE	SIG.
2	REV. NOTE	7/19/24	JOA
1	REV. NOTE	7/3/24	JOA

SCALE NO SCALE
DRAWN N. RUSSELL
DESIGN A. CAGLE
CHECKED J. ECKEL

VOLKERT

DENNIS A. BOURN
REGISTERED ENGINEER
AGRICULTURE
COMMERCE
No. 0011548
STATE OF TENNESSEE
03/22/2024

APPROVED

JOB NO. 457003.17
DATE 03/22/2024
SHEET 4A
FILE NO.

7/19/2024
c:\volkert_pw_workingdir\johnallen@volkert.com\d0200066\004A_BRIDGE Gen Notes.dgn

BRIDGE GENERAL NOTES (CONTINUED)

(71) WITH THE PACK RUST REMOVED, THE REPAIR AREAS SHALL BE DRIED BY APPLYING ARTIFICIAL HEAT UNTIL THE SURFACE TEMPERATURE REACHES 250°F. THE METHOD OF APPLYING ARTIFICIAL HEAT SHALL BE APPROVED BY THE FIELD ENGINEER. IF TORCHES ARE USED THE CONTRACTOR SHALL DEMONSTRATE TO THE FIELD ENGINEER THAT THE AREA CAN BE DRIED WITHOUT DAMAGING THE STEEL.

(72) IMMEDIATELY AFTER THE SURFACE HAS BEEN DRIED, A CORROSION INHIBITING PENETRATING SEALER SHALL BE APPLIED TO THE REPAIR AREA. THE SEALER SHALL BE ONE OF THE FOLLOWING, OR AN APPROVED EQUAL, APPLIED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS:

TERMARUST 2000 SERIES HIGH RATIO CALCIUM SULFONATE PENETRANT/SEALER BY TERMARUST TECHNOLOGIES, MONTREAL, CANADA

RUSTBOND PENETRATING SEALER SG BY CARBOLINE COMPANY, ST. LOUIS, MO.

(73) AFTER THE SEALER HAS DRIED, ANY EMPTY RIVET HOLES SHALL BE FILLED WITH HIGH TENSILE STRENGTH BOLTS AS PER THE RIVET REMOVAL PROCEDURE DESCRIBED ON THIS SHEET.

(74) AFTER THE BOLTING HAS BEEN COMPLETED A CORROSION INHIBITING PRIMER TOPCOAT SHALL BE APPLIED TO THE REPAIR AREA. THE PRIMER SHALL BE ONE OF THE FOLLOWING, OR APPROVED EQUAL, APPLIED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS:

TERMARUST 2000 SERIES HIGH RATIO CALCIUM SULFONATE PRIMER TOPCOAT BY TERMARUST TECHNOLOGIES, MONTREAL, CANADA.

RUSTBOND PENETRATING SEALER SG BY CARBOLINE COMPANY, ST. LOUIS, MO.

(75) THE AREAS TO BE SEALED SHALL BE FREE OF DIRT, DUST, RUST OR LOOSE PAINT, AND OTHER MATERIAL THAT WOULD INTERFERE WITH THE ADHESION OF THE SEALANT. SEALED AREAS OF PACK RUST REPAIR SHALL BE FILLED FLUSH WITH THE VERTICAL EDGES OF STEEL FLANGES AND WITHOUT VOIDS OR AIR POCKETS.

1 FILLER TO BE AN APPROVED STRUCTURAL ADHESIVE.

PAD WELDING

(76) THE LOCATIONS AND LIMITS OF THESE REPAIRS SHALL INCLUDE ALL AREAS IDENTIFIED ON SHEETS 15 THRU 20A AND ANY OTHER LOCATIONS IDENTIFIED BY THE FIELD ENGINEER.

(77) REMOVE THE EXISTING PAINT A MINIMUM OF 6" ON EITHER SIDE OF THE REPAIR AREA, IN ACCORDANCE WITH THE PARAMETERS OF TDOT SPEC 603.05B AND THE GENERAL NOTES ON SHEET 4A OF THESE PLANS.

(78) PREPARE THE SURFACE AREA USING A HANDHELD POWER WIRE BRUSH TO CLEAN THE AREA OF ALL CORROSION.

(79) REPAIR ALL PITTING AND SECTION LOSS BY FILLING THE DETERIORATED AREAS WITH PADDING WELDS BACK TO THE ORIGINAL LIMITS OF THE COMPONENT USING AN AWS SMAW LOW HYDROGEN ELECTRODE E7018 WELD.

(80) USING A HANDHELD POWER GRINDER, SMOOTH OUT THE WELDED SURFACE. ALWAYS GRIND IN ONE DIRECTION PERPENDICULAR TO THE WELD.

RIVET REMOVAL

(81) RIVETS THAT ARE DETERIORATED, DEFORMED, OR FAILED SHALL BE REMOVED AS IDENTIFIED ON SHEETS 15 THRU 20A AND OTHER LOCATIONS DIRECTED BY THE FIELD ENGINEER IN ACCORDANCE WITH THE REPAIR PROCEDURES DESCRIBED BELOW. REMOVAL OF RIVETS ALONG A GAGE LINE SHALL BE STAGGERED SUCH THAT TWO ADJACENT RIVETS ARE NOT REMOVED AT THE SAME TIME. IN CASES WHERE MULTIPLE RIVETS ARE TO BE REMOVED FROM A CONNECTION, REPLACEMENT BOLTS SHALL BE INSTALLED IN EACH REMOVAL AREA PRIOR TO REMOVING THE NEXT RIVET. RIVETS SHALL BE REMOVED BY ON OF THE FOLLOWING METHODS:

A. SHEAR RIVET HEAD USING A PNEUMATIC RIVET BREAKER (HELLDOG), AND DRIVE OUT RIVET SHANK WITH A PNEUMATIC PUNCH

B. FLAME CUT RIVET HEAD ABOVE THE BASE METAL USING A RIVET SCARING TIP WITHOUT DAMAGING THE BASE METAL, AND DRIVE OUT THE SHANK USING A PNEUMATIC PUNCH. IF PUNCHING WILL DAMAGE THE BASE METAL, THE SHANK SHALL BE REMOVED BY DRILLING. ANY DAMAGE TO THE BASE METAL SHALL BE REPAIRED AT NO ADDITIONAL COST TO THE CITY.

(82) EMPTY RIVET HOLES SHALL BE FILLED WITH HIGH TENSILE STRENGTH BOLTS OF THE GRADE AND TYPE SPECIFIED ON SHEET 4A OF THESE PLANS. ALL HIGH STRENGTH BOLTS SHALL BE THE SAME DIAMETER AS THE RIVETS THEY REPLACE. HIGH STRENGTH BOLTS SHALL BE INSTALLED AFTER THE NICKS, BURRS AND FOREIGN SUBSTANCES THAT MIGHT INTERFERE WITH SEATING OF THE BOLT HEAD AND NUT WASHERS ARE REMOVED. LIGHT GRINDING MAY BE REQUIRED.

(83) INSTALLATION AND INSPECTION OF HIGH STRENGTH BOLTS SHALL BE PERFORMED IN ACCORDANCE WITH THE AISC STEEL CONSTRUCTION MANUAL. IF IT BECOMES NECESSARY TO DISCONNECT OR ADJUST STEEL REMAINING AS PART OF THE STRUCTURE TO COMPLETE THE WORK, THE CONTRACTOR SHALL OBTAIN THE FIELD ENGINEERS APPROVAL PRIOR TO PERFORMING DISCONNECTIONS OR ADJUSTMENTS.

(84) IF THE BOLT WILL NOT FIT THE RIVET HOLE, THE HOLE MAY BE REAMED SUFFICIENTLY TO ACCOMMODATE THE BOLT.

(85) THE TORQUEING AND SEQUENCING OF BOLT INSTALLATIONS SHALL BE PERFORMED IN SUCH A MANNER THAT SEPARATED AND DEFORMED PLIES OF PLATE MAY BE SEQUENTIALLY DRAWN TOGETHER.

LIGHT POLE SUPPORTS

(86) IN AREAS WHERE NEW LIGHT POLES ARE REQUIRED, THE CONTRACTOR SHALL MODIFY THE EXISTING FLOORBEAM AND FABRICATE A NEW SUPPORT THAT MATCHES THE EXISTING RETROFIT AS SHOWN IN THE FOLLOWING PICTURE. ALL LABOR, MATERIALS, AND INCIDENTALS NECESSARY TO ACCOMPLISH THIS ITEM OF WORK SHALL BE PAID FOR UNDER PAY ITEM 602-02.10 STRUCTURAL STEEL (NORTH VIADUCT – FLOOR BEAM MODIFICATIONS), LS.

EXISTING WATERLINE & ASBESTOS

(87) THE EXISTING WATERLINE THAT BEGINS ON THE SOUTH END OF THE BRIDGE AND RUNS NORTH UNDERNEATH THE WESTERN EDGE OF THE SIDEWALK PORTION OF THE DECK SHALL REMAIN IN PLACE. IT SHOULD BE NOTED THAT THE WATERLINE HAS BEEN IDENTIFIED AS AN ASBESTOS-CONTAINING MATERIAL (ACM), AND IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO FOLLOW ALL ABATEMENT REQUIREMENTS AS OUTLINED IN SPECIAL PROVISION SP202ACM AND THE NOTES ON SHEET 2C. FOR COATING OPERATIONS AT OR NEAR THE WATERLINE, THE CONTRACTOR SHALL CEASE BLASTING WITHIN 6 INCHES OF THE EXISTING WATERLINE AND EMPLOY A CLEANING METHOD IN ACCORDANCE WITH SECTION 603.05(B.1) OF THE STANDARD SPECIFICATIONS. HAND (SSPC-SP 2) OR POWER (SSPC-SP 3) TOOL CLEANING SHALL REMOVE ALL RUST, SCALE, LOOSE PAINT, AND DIRT. FOR ABRASIVE BLASTING IN CLOSE PROXIMITY TO THE WATERLINE, THE CONTRACTOR SHALL UTILIZE A SHIELDING METHOD TO PROTECT THE WATERLINE FROM BLASTING MEDIA, AND THE SHIELDING METHODOLOGY SHALL BE OUTLINED IN THE CONTRACTOR'S UTILITY PROTECTION PLAN, AS DESCRIBED IN NOTE 7 ON SHEET 4. THE COST FOR THIS WORK WILL BE INCLUDED IN PAY ITEM 603-02.01 REPAINTING EXISTING STEEL STRUCTURES (WALNUT ST BRIDGE), LS.

EDUCATIONAL SIGNS

(88) EDUCATIONAL SIGNS, LOCATED AT EACH PIER, SHALL BE REMOVED AND REPLACED IN KIND UNDER PAY ITEM 920-20.21 REMOVE & REPLACE EDUCATIONAL SIGNS, LS. THE SIGNS SHALL BE REINSTALLED AT THEIR EXISTING LOCATION. ANY HARDWARE NEEDED TO ATTACH THE NEW SIGNS WILL NOT BE MEASURED AND PAID FOR DIRECTLY, BUT WILL BE INCLUDED IN THE COST OF PAY ITEM 920-20.21. THE CITY SHALL PROVIDE THE EDUCATIONAL INSERTS FOR THE SIGNS

1 EDUCATIONAL SIGNS TO MEET THE NATIONAL PARK SERVICE STANDARDS.

CONTRACTOR UTILITY AND POWER NEEDS

(89) IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO PROVIDE HIS OWN INDEPENDENT POWER SUPPLY AND UTILITIES (SUCH AS A WATER SUPPLY) FOR THE ENTIRE DURATION OF ALL WORK ITEMS. THE CITY OF CHATTANOOGA WILL NOT BE RESPONSIBLE FOR SUPPLYING ANY ASSISTANCE FOR THESE ITEMS.

DRAPING THE BRIDGE

(90) NO MORE THAN TWO (2) TRUSS SPANS OVER THE TENNESSEE RIVER SHALL BE DRAPED AT ANY GIVEN TIME FOR PAINT OR OTHER CONSTRUCTION ACTIVITIES. DRAPING SHALL NOT REMAIN IN PLACE FOR MORE THAN FORTY-FIVE (45) CALENDAR DAYS IF WORK REMAINS DORMANT WITHIN THE DRAPED AREA.

REVISION 2 SEALED BY:

JOHN Q. ALLEN Registered Engineer AGRICULTURE COMMERCE No. 101162 STATE OF TENNESSEE

07/19/2024

CITY OF CHATTANOOGA SEAL TENNESSEE

CITY OF CHATTANOOGA
DIVISION OF TRANSPORTATION
CONTRACT #E-13-002-103
WALNUT STREET PEDESTRIAN BRIDGE
BRIDGE REPAIRS - PHASES 2,3,& 4
WILLIAM C. PAYNE, P.E., CITY ENGINEER

BRIDGE GENERAL NOTES (4 OF 4)

NO.	REVISION	DATE	SIG.
1	REV. NOTES	7/19/24	JOA

SCALE NO SCALE
DRAWN N. RUSSELL
DESIGN A. CAGLE
CHECKED J. ECKEL

VOLKERT

DENNIS A. BRUTON REGISTERED ENGINEER AGRICULTURE COMMERCE No. 0011541 STATE OF TENNESSEE

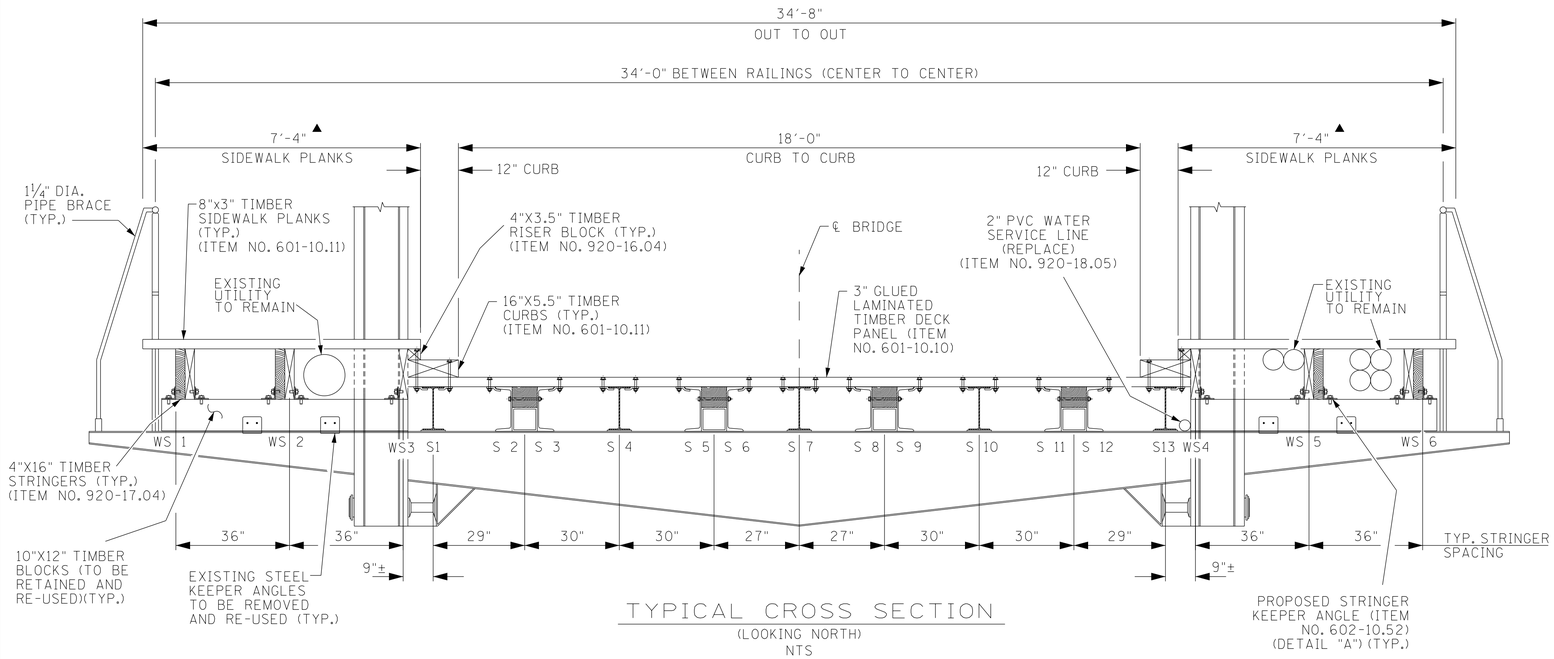
03/22/2024

APPROVED

JOB NO. 457003.17
DATE 03/22/2024
SHEET 4C
FILE NO.

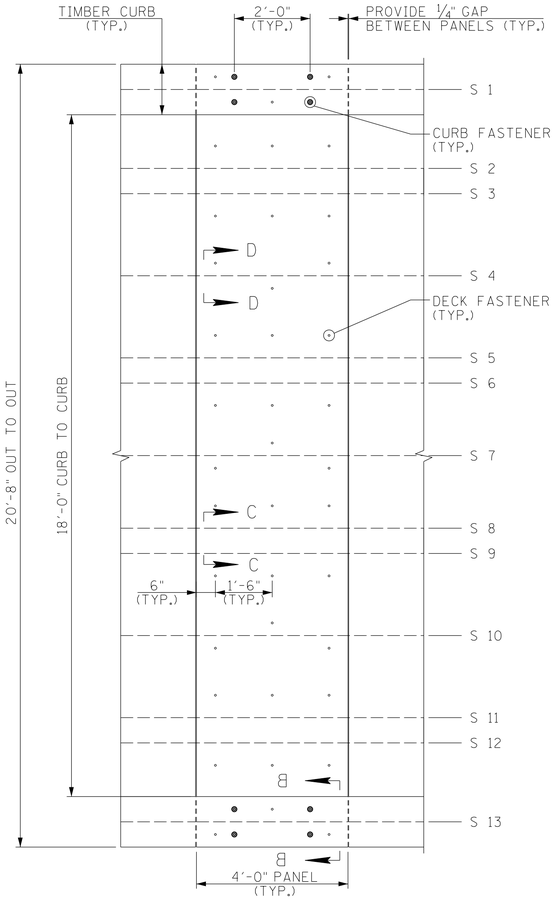
7/19/2024
c:\volkert_pw_workingdir\john.allen@volkert.com\d0200066\004C_BRIDGE Gen Notes.dgn

▲ SIDEWALK PLANK LENGTHS VARY OVER PIERS 1-6. CONTRACTOR IS TO VERIFY LENGTHS PRIOR TO ORDERING MATERIALS.



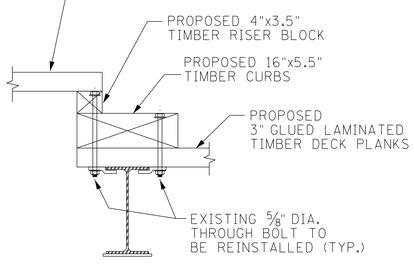
TYPICAL CROSS SECTION

(LOOKING NORTH)
NTS



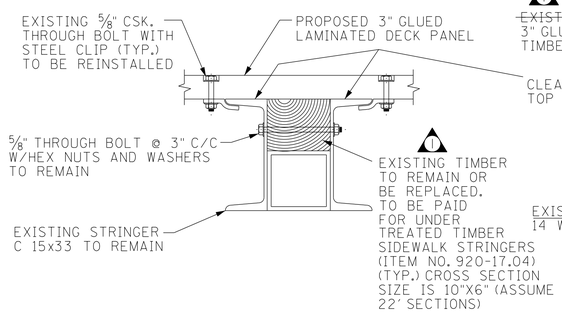
TYPICAL GLUED LAMINATED DECK PANEL

1 NOTE: SIDEWALK PLANKS TO BE FASTENED TO STRINGERS USING LAG SCREWS AND WASHERS TO MATCH THE EXISTING. EXISTING SCREWS AND WASHERS MAY BE USED IF IN GOOD CONDITION. LAG SCREWS ARE TO BE PREDRILLED AND COUNTERBORED. ALL LAG SCREWS, WASHERS, AND INSTALLATION ARE TO BE INCLUDED IN THE COST OF THE SIDEWALK PLANKS.



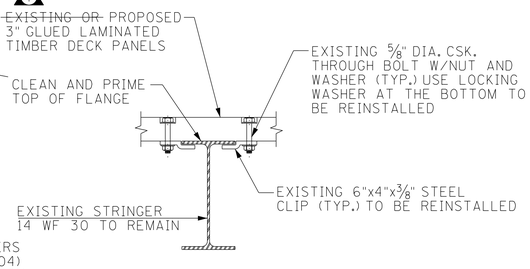
SECTION B-B

SHOWING CURB DETAIL



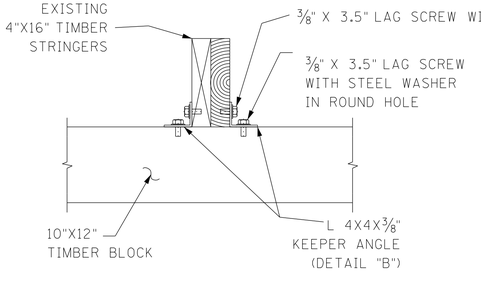
SECTION C-C

SHOWING DECK CLIP ARRANGEMENT FOR C 15X33 STRINGER



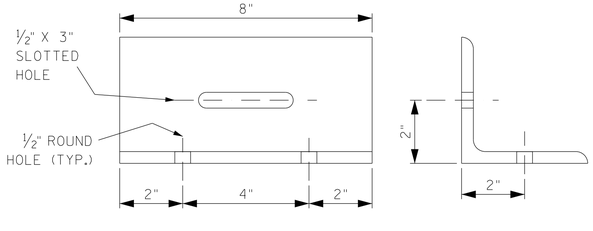
SECTION D-D

SHOWING DECK CLIP ARRANGEMENT FOR 14 WF 30 STRINGER



DETAIL "A"

PROPOSED STRINGER KEEPER ANGLE (ITEM NO. 602-10.52)



DETAIL "B"

L 4X4X⅜" KEEPER ANGLE (ITEM NO. 602-10.52)

REVISION 2 SEALED BY:

JOHN Q. ALLEN
Registered Engineer
GRICULTURE
STATE OF TENNESSEE
07/19/2024

DECK PANEL REPLACEMENT NOTES:

1. CONTRACTOR TO PROVIDE CONSTRUCTION PLAN FOR REPLACEMENT OF PANELS FOR APPROVAL PRIOR TO CONSTRUCTION. THIS REPAIR IS TO BE COORDINATED AROUND ANY DATES IDENTIFIED IN THE CONTRACT DOCUMENTS AND CONSTRUCTION SPECIFICATIONS IN WHICH THE BRIDGE DECK MUST BE FULLY OPEN AND ACCESSABLE.
2. CONTRACTOR SHALL ADJUST DETAILS AS NEEDED TO ACCOMODATE IN-KIND RE-INSTALLATION OF RAMPS AT PIERS. SEE SHEETS 11 AND 12 FOR APPROXIMATE RAMP LOCATIONS AND DIMENSIONS. COST WILL NOT BE PAID DIRECTLY AND SHALL BE INCLUDED IN THE COST OF ITEM NO. 601-10.10
3. EXISTING DECK CLIPS SHALL BE REMOVED AND RE-USED BY THE CONTRACTOR. COST TO BE INCLUDED IN OTHER ITEMS. MISSING CLIPS SHALL BE REPLACED BY THE CONTRACTOR. COST TO REPLACE MISSING CLIPS TO BE PAID UNDER ITEM NO. 602-10.51, EACH.
4. ALL EXISTING HARDWARE USED FOR ANCHORING TIMBER ELEMENTS SHALL BE REUSED WHEN INSTALLING NEW TIMBER. THIS SHALL INCLUDE, BUT IS NOT LIMITED TO: DECK FASTENERS, CURB FASTENERS, AND EXISTING THROUGH BOLTS, NUTS, AND WASHERS. ANY HARDWARE THAT IS MISSING OR CANNOT BE REUSED SHALL BE REPLACED BY THE CONTRACTOR AT NO ADDITIONAL COST.

KEEPER ANGLE NOTES:

1. CONTRACTOR MAY RELOCATE STRINGER KEEPER ANGLES AS NEEDED TO AVOID CONFLICTS WITH UTILITIES.
2. LAG BOLTS AND WASHERS SHALL BE HOT DIPPED GALVANIZED.
3. LAG BOLTS AND WASHERS WILL NOT BE MEASURED AND PAID FOR DIRECTLY, BUT WILL BE INCLUDED IN THE COST FOR OTHER ITEMS.

CITY OF CHATTANOOGA SEAL TENNESSEE

CITY OF CHATTANOOGA
DIVISION OF TRANSPORTATION
CONTRACT #E-13-002-103
WALNUT STREET PEDESTRIAN BRIDGE
BRIDGE REPAIRS - PHASES 2, 3, & 4
WILLIAM C. PAYNE, P.E., CITY ENGINEER

TYPICAL SECTION & TIMBER REPAIR ITEMS

NO.	REVISION	DATE	SIG.
1	REV. DETAILS	7/19/24	SIG.

SCALE	NO SCALE
DRAWN	N. RUSSELL
DESIGN	A. CAGLE
CHECKED	J. ECKEL

VOLKERT

DENNIS A. BOUTON
REGISTERED ENGINEER
AGRICULTURE
COMMERCE
No. 0011541
STATE OF TENNESSEE
03/22/2024

APPROVED

JOB NO. 457003.17
DATE 03/22/2024
SHEET 13
FILE NO.

7/19/2024
c:\volkert_pw_workingdir\john.allen@volkert.com\d0200066\03_TYP. SECT.Bridge.dgn

ESTIMATED LIGHTING AND ITS QUANTITIES

FOOTNOTES	ITEM NO.	DESCRIPTION	UNIT	QUANTITY
(1)	714-01.37	LIGHT STANDARDS (PEDESTRIAN/STREET LIGHT)	EACH	16
(2)	714-01.64	ELECTRICAL SYSTEM	LS	1
(3)	714-03.03	DIRECT BURIAL CONDUIT (2" SCHED. 40 PVC, UTILITY TRANSFORMER SECONDARY)	LF	135
(4)	714-03.04	DIRECT BURIAL CONDUIT (2" SCHED. 40 PVC, UNDERGROUND BRANCH CIRCUIT CONDUITS)	LF	100
(5)	714-04.03	CONDUIT (3/4" CONDUIT)	LF	8,000
(5)	714-04.04	CONDUIT (1-1/4" CONDUIT)	LF	4,500
(5)	714-04.05	CONDUIT (1-1/2" CONDUIT)	LF	13,750
(5)	714-04.06	CONDUIT (2" CONDUIT)	LF	15,000
(5)	714-04.07	CONDUIT (2-1/2" CONDUIT)	LF	3,000
(5)	714-04.08	CONDUIT (3" CONDUIT)	LF	4,000
(21)	714-05.05	PULL BOXES (BRANCH CIRCUIT AND FEEDER PULL BOXES)	EACH	40
(20)	714-05.06	PULL BOXES (BRANCH CIRCUIT JUNCTION BOXES)	EACH	150
(22)	714-05.07	PULL BOXES (COMMUNICATIONS PULL BOXES)	EACH	20
(7)	714-06.03	CABLE (1/C #10 AWG)	LF	38,000
(7)	714-06.04	CABLE (1/C #8 AWG)	LF	105,000
(7)	714-06.06	CABLE (1/C #4 AWG)	LF	126,000
(7)	714-06.07	CABLE (1/C #2 AWG)	LF	28,000
(7)	714-06.08	CABLE (1/C #1/0 AWG)	LF	20,000
(8)	714-09.09	LUMINAIRES	EACH	482
(19)	714-12.01	CONTROL CENTER (MLCP-1)	LS	1
(24)	714-12.02	CONTROL CENTER (MLCP-2)	LS	1
(8)	714-16.01	NAVIGATIONAL LIGHTING	LS	1
(9) (16)	714-25.02	ELECTRICAL CONNECTION (ELECTRIC POWER BOARD - EPB - ELECTRIC SERVICE #1)	LS	1
(9) (23)	714-25.03	ELECTRICAL CONNECTION (ELECTRIC POWER BOARD - EPB - ELECTRIC SERVICE #2)	LS	1
(12)	714-40	LOCATING UTILITIES	LS	1
(11) (14)	725-20.75	COMMUNICATIONS CONNECTION (ELECTRIC POWER BOARD - EPB - FIBER TO CAMERAS)	LS	1
(13)	725-02.16	CONDUIT (STRUCTURES - CCTV CAMERAS - ITS)	LF	10,000
(17)	725-03.80	CCTV CAMERA SYSTEM (ITS)	EACH	11
(15)	725-05.02	FIBER OPTIC CABLE (EPB - SINGLE MODE FIBER - ITS)	LF	2300
(18)	725-23.29	FIBER OPTIC TERMINATION CABINET (ITS)	EACH	4
(10)	920-14.05	RELOCATION OF EXISTING UTILITIES	LS	1
(6)	920-20.05	REMOVAL AND DISPOSAL OF ELECTRICAL SYSTEMS	LS	1

QUANTITIES NOTES:

1.) QUANTITIES SHOWN IN SHEDULE ABOVE ARE APPROXIMATE AND NOT EXACT. CONTRACTOR IS RESPONSIBLE FOR DETERMINING EXACT SIZES AND QUANTITIES OF ALL CABLING, CONDUITS, DEVICES, EQUIPMENT, ETC.

FOOTNOTES

(1) INCLUDES ALL LABOR, MATERIALS, AND INCIDENTALS NECESSARY TO MOUNT (16) LIGHT FIXTURE POLES ON BRIDGE AS SHOWN ON ELECTRICAL PLANS. CONTRACTOR SHALL ALSO PROVIDE MOUNTING HARDWARE FOR POLES AS REQUIRED. REFER TO LUMINAIRE SCHEDULE ON ELECTRICAL PLANS FOR ADDITIONAL INFORMATION.

(2) INCLUDES ALL LABOR, MATERIALS, AND INCIDENTALS ASSOCIATED WITH THE INSTALLATION OF ELECTRICAL EQUIPMENT, DEVICES (RECEPTACLES), CUSTOM EVENT AND CONTROL PANELS, RV PEDESTALS, CONCRETE PADS, GROUNDING RODS, GROUNDING ELECTRODE CONDUCTORS, EMERGENCY LIGHTING INVERTER, DECK BOARDS, AND ALL OTHER ELECTRICAL ITEMS NOT INDICATED IN OTHER FOOTNOTES. CONTRACTOR SHALL PROVIDE AND INSTALL A TEMPORARY POWER SYSTEM TO SUPPLY EQUIPMENT THROUGHOUT THE DURATION OF CONSTRUCTION. TEMPORARY RECEPTACLES AND OTHER ELECTRICAL CONNECTIONS SHALL BE COORDINATED WITH OTHER TRADES AND THE PROJECT SCOPE.

(3) INCLUDES LABOR, MATERIALS, AND INCIDENTALS ASSOCIATED WITH INSTALLATION OF (4) UNDERGROUND PVC CONDUITS FROM SECONDARY SIDE OF UTILITY TRANSFORMERS AS REQUIRED BY EPB.

(4) INCLUDES LABOR, MATERIALS, AND INCIDENTALS ASSOCIATED WITH INSTALLATION OF UNDERGROUND PVC CONDUITS FOR BRANCH CIRCUITS AS REQUIRED BY ELECTRTICAL PLANS.

(5) INCLUDES LABOR, MATERIALS, AND INCIDENTALS ASSOCIATED WITH INSTALLATION OF INTERMEDIATE METAL CONDUITS (IMC) FOR BRANCH CIRCUITS AND FEEDERS ON THE BRIDGE FROM ELECTRICAL EQUIPMENT AS REQUIRED BY ELECTRTICAL PLANS. INCLUDES CONDUIT SUPPORTS AND ASSOCIATED MOUNTING HARDWARE AS REQUIRED BY ELECTRICAL PLANS. INCLUDES PAINTING OF ALL EXPOSED CONDUITS, CONDUIT SUPPORT BRACKETS, AND ASSOCIATED BOXES. INCLUDES EXPANSION FITTINGS AND COUPLINGS. COORDINATE LOCATIONS OF EXPANSION JOINTS WITH STRUCTURAL PLANS. INSTALL BONDING STRAPS LISTED FOR USE WITH IMC EXPANSION FITTINGS. 2

(6) CONTRACTOR SHALL COORDINATE REMOVAL OF LUMINAIRES, BOXES, CONDUITS, DEVICES, AND ELECTRICAL SYSTEMS WITH THE CITY OF CHATTANOOGA. CONTRACTOR IS RESPONSIBLE FOR ANY DAMAGE THAT MAY OCCUR DURING REMOVAL OF LIGHTING, CONDUITS, BOXES, DEVICES, AND OTHER ELECTRICAL SYSTEMS. CONTRACTOR IS TO TAKE PHOTOS OF ANY EXISTING DAMAGE TO THE BRIDGE STRUCTURE PRIOR TO REMOVAL OF ANY ELECTRICAL SYSTEMS. ONCE REMOVED, ALL ITEMS MENTIONED ABOVE BECOME PROPERTY OF CONTRACTOR. CONTRACTOR IS RESPONSIBLE FOR THE DISPOSAL OF ALL ELECTRICAL ITEMS. CONTRACTOR SHALL COORDINATE SHUTDOWN OF ALL ELECTRICAL SYSTEMS WITH THE CITY OF CHATTANOOGA NOT LESS THAN 48 HOURS PRIOR TO SHUTDOWN.

(7) INCLUDES LABOR, MATERIALS, AND INCIDENTALS ASSOCIATED WITH INSTALLATION OF COPPER THWN CONDUCTORS FOR BRANCH CIRCUITS, EQUIPMENT GROUNDING CONDUCTORS, BONDING JUMPERS, AND FEEDERS AS REQUIRED BY ELECTRTICAL PLANS.

(8) INCLUDES LABOR. MATERIALS, AND INCIDENTALS ASSOCIATED WITH INSTALLATION OF LUMINAIRES, MOUNTING HARDWARE, AND OTHER ACCESSORIES AS INDICATED ON ELECTRICAL PLANS. REFER TO LIGHTING FIXTURE SCHEDULE ON SHEET E-0.2 FOR TYPES OF FIXTURES AND MANUFACTURERS. REFER TO LIGHTING PLANS FOR LOCATIONS OF FIXTURES. PRIOR TO BIDDING, CONTRACTOR IS PERMITTED TO SUBMIT ALTERNATE MANUFACTURERS OF LUMINAIRES NOT INDICATED ON PLANS FOR REVIEW. THE CONTRACTOR SHALL CONFIRM WITH THE CITY OF CHATTANOOGA AND TDOT THAT THE LUMINAIRES MEET ALL REQUIREMENTS OF BOTH PARTIES PRIOR TO BIDDING. REFER TO SPECIFICATION SECTION 714 FOR ADDITIONAL INFORMATION.

(9) THE CONTRACTOR SHALL CONTACT BRAD SMITH WITH EPB AT (423)-648-3324 TO OBTAIN THE ESTIMATE FOR ANY CHARGES BY THE UTLITY FOR PROVIDING ELECTRICAL SERVICE. THESE CHARGES SHALL BE INCLUDED IN THE BID FOR THIS ITEM. ALSO, INCLUDES THE COST OF WIRES.

(10) THE EXISTING ELECTRICAL PLATFORM AT THE SOUTHEAST CORNER OF THE BRIDGE HAS UNDERGROUND UTILITIES THAT RUN DOWNHILL TOWARD RIVERFRONT PARKWAY. THESE UNDERGROUND UTILITIES CONFLICT WITH THE ELECTRICAL PLATFORM THAT WILL HOUSE THE PROPOSED BRIDGE LIGHTING CONTROLS INCLUDED IN THIS PROJECT. THIS PAY ITEM INCLUDES ALL LABOR, MATERIALS, AND INCIDENTALS NECESSARY TO EXCAVATE, RELOCATE, AND RECONNECT THESE UTILITIES IN SUCH A WAY THAT THE PROPOSED PLATFORM AND BRIDGE LIGHTING CONTROLS CAN BE SUCCESSFULLY INSTALLED. COORDINATE WITH ALL UTILITIES WITHIN THE AREA. ANY CHARGES BY UTILITIES FOR RELOCATION SHALL BE INCLUDED IN THIS ITEM. REFER TO ELECTRICAL SITE PLANS FOR ADDITIONAL INFORMATION.

(11) INCLUDES LABOR, MATERIALS, AND INCIDENTALS ASSOCIATED WITH COMMUNICATIONS CONNECTIONS AS REQUIRED BY ELECTRTICAL PLANS. EPB FIBER SHALL BE INSTALLED AS REQUIRED FOR CAMERAS. COORDINATE WITH ALL COMMUNICATIONS UTILITIES LOCATED WITHIN THE AREA OF WORK.

(12) INCLUDES LABOR, MATERIALS, AND INCIDENTALS ASSOCIATED WITH LOCATING EXISTING UTILITIES AS REQUIRED FOR INSTALLATION OF UNDERGROUND ELECTRICAL AND COMMUNICATION SYSTEMS AS INDICATED ON ELECTRTICAL PLANS.

(13) INCLUDES LABOR, MATERIALS, AND INCIDENTALS ASSOCIATED WITH INSTALLATION OF CONDUITS FOR CAMERAS AND COMMUNCATIONS CABLING AS REQUIRED BY ELECTRTICAL PLANS.

(14) THE CONTRACTOR SHALL CONTACT SID CROSS WITH EPB AT (423)-648-1544 TO OBTAIN THE ESTIMATE FOR ANY CHARGES BY THE UTLITY FOR PROVIDING FIBER OPTIC SERVICE. THESE CHARGES SHALL BE INCLUDED IN THE BID FOR THIS ITEM.

(15) INCLUDES LABOR, MATERIALS, AND INCIDENTALS FOR INSTALLATION OF FIBER OPTIC CABLES TO LIGHTING CONTROL PANELS AND DATA ENABLER PANELS AS INDICATED ON LIGHTING PLANS AND DETAILS.

(16) INCLUDES (2) METERS, (2) METER PEDESTALS, AND ELECTRICAL TERMINATIONS FOR THE ELECTRIC SERVICE AT THE SOUTH END OF THE BRIDGE. EPB SHALL PROVIDE CONDUCTORS FROM TRANSFORMER TO METER ENCLOSURE. IT IS NOT PERMITTED UNDER ANY CIRCUMSTANCES TO SHUTOFF POWER TO THE ADJACENT ELECTRICAL SERVICES THAT FEED THE WALNUT STREET PLAZA AND ITS ASSOCIATED LIGHTING. COORDINATE EXACT LOCATIONS OF SERVICE EQUIPMENT AND UNDERGROUND ELECTRICAL INFRASTRUCTURE WITH THE CITY OF CHATTANOOGA AND EPB PRIOR TO BEGINNING WORK.

(17) INCLUDES ALLOWANCE FOR INSTALLATION OF CAMERAS AS INDICATED ON ELECTRICAL PLANS. COORDINATE WITH THE CITY OF CHATTANOOGA.

(18) INCLUDES LABOR, MATERIALS, AND INCIDENTALS FOR INSTALLATION OF FIBER OPTIC TERMINATION ENCLOSURES AS INDICATED ON PLANS. EPB SHALL PROVIDE FIBER CONNECTION AND CITY OF CHATTANOOGA IS RESPONSIBLE FOR THE ETHERNET CABLES AND POWER OVER ETHERNET INJECTOR. COORDINATE WITH EPB AND CITY OF CHATTANOOGA.

(19) INCLUDES LABOR, MATERIALS, AND INCIDENTALS FOR INSTALLATION OF ALL LIGHTING CONTROL EQUIPMENT AND DEVICES FOR THE SOUTHERN SECTION OF THE BRIDGE. THIS INCLUDES ALL ELECTRICAL EQUIPMENT, DIGITAL CONTROLLERS, CABLING, CUSTOM ENCLOSURES OR PANELS, AND ANY OTHER MATERIALS ASSOCIATED WITH THE CONTROL OF THE LIGHTING SYSTEM.

(20) INCLUDES LABOR, MATERIALS, AND INCIDENTALS FOR INSTALLATION OF ALL JUNCTION BOXES INSTALLED FOR BRANCH CIRCUITS AND CAMERA DATA CABLING ON THE BRIDGE AND IN ELECTRICAL EQUIPMENT AREAS. THIS INCLUDES ALL MOUNTING HARDWARE REQUIRED. ALL BOXES SHALL BE SIZED IN ACCORDANCE WITH THE NATIONAL ELECTRIC CODE.

(21) INCLUDES LABOR, MATERIALS, AND INCIDENTALS FOR INSTALLATION OF ALL PULL BOXES INSTALLED FOR BRANCH CIRCUITS AND FEEDERS ON THE BRIDGE AND IN AREAS CONTAINING ELECTRICAL EQUIPMENT. THIS INCLUDES ALL MOUNTING HARDWARE REQUIRED. ALL BOXES SHALL BE SIZED IN ACCORDANCE WITH THE NATIONAL ELECTRIC CODE.

(22) INCLUDES LABOR, MATERIALS, AND INCIDENTALS FOR INSTALLATION OF ALL PULL BOXES INSTALLED FOR FIBER LINES ON THE BRIDGE TO FEED CAMERAS. THIS INCLUDES ALL MOUNTING HARDWARE REQUIRED. ALL BOXES SHALL BE SIZED IN ACCORDANCE WITH THE NATIONAL ELECTRIC CODE AND EPB GUIDELINES.

(23) INCLUDES (2) METERS, (2) METER PEDESTALS, AND ELECTRICAL TERMINATIONS FOR THE ELECTRIC SERVICE AT THE NORTH END OF THE BRIDGE. EPB SHALL PROVIDE CONDUCTORS FROM TRANSFORMER TO METER ENCLOSURE.

(24) INCLUDES LABOR, MATERIALS, AND INCIDENTALS FOR INSTALLATION OF ALL LIGHTING CONTROL EQUIPMENT AND DEVICES FOR THE NORTHERN SECTION OF THE BRIDGE. THIS INCLUDES ALL ELECTRICAL EQUIPMENT, DIGITAL CONTROLLERS, CABLING, CUSTOM ENCLOSURES OR PANELS, AND ANY OTHER MATERIALS ASSOCIATED WITH THE CONTROL OF THE LIGHTING SYSTEM.

MAFFETT LOFTIS ENGINEERING, LLC
1 S JEFFERSON AVE, STE 101
COOKEVILLE, TN 38501
TEL: (931) 526-5143
www.maffett-loftis.com

CITY OF CHATTANOOGA SEAL

CITY OF CHATTANOOGA
DIVISION OF TRANSPORTATION
CONTRACT #E-13-002-103
WALNUT STREET PEDESTRIAN BRIDGE
BRIDGE REPAIRS - PHASES 2, 3, & 4

TOM HUTKA, ADMINISTRATOR
WILLIAM C. PAYNE, P.E., CITY ENGINEER

ELECTRICAL QUANTITES

NO.	REVISION	DATE	SIG.
2	REVISION 2	7-19-24	GDL
1	REVISION 1	7-3-24	GDL

SCALE	AS NOTED
DRAWN	AJG
DESIGN	AJG
CHECKED	GDL

VOLKERT

GARY DALE LOFTIS REGISTERED ENGINEER 03/21/2024 STATE OF TENNESSEE

APPROVED

JOB NO.	457003.17
MLE JOB NO.	21080
DATE	03/21/2024
SHEET	E-0.3
FILE NO.	

Question	Answer
The Proposal Contract does not appear to require a Project Warranty following Owner's final acceptance of the Project. Please confirm a warranty is not required.	City Of Chattanooga requesting a two-year warranty on improvements based off the construction drawings. If an item has a longer warranty period we want that to be extended to the City.
Just curious what the coatings spec was and what they have came up with as prep/prime/intermediate/topcoat system?	See notes on plan sheet 4A
Will barge be allowed to use for project?	The City does not have restrictions on the use of barges other than during events that utilize the river. During those events the contractor will need to coordinate with the City to ensure the event will able to safely use the river. The contractor is responsible for all complying with all other restrictions that may be imposed by Federal or State agencies, including but not limited to the Corps of Engineers, TVA, and Coast Guard.
Will the bridge be shutdown for pedestrians for duration of project?	The construction length of the project is 18 months with a 14 month complete closure minus the events that the contractor has to have the bridge open. The remaining four months the contractor has to have the bridge open to pedestrian traffic.
What are the allowable workable hours contractor may utilize?	Monday through Saturday 7 AM to 7 PM
Bid Item No. 601-10.10 Treated Timber Laminated Decking - The quantity of this bid item appears that it will replace decking for about 1700 LF of the bridge. Is the intent to replace the decking from the South Abutment to the North Abutment? Or are some sections of decking remaining in place?	Quantity revised
Bid item 920-16.04 is to be priced as unit EACH. The plan sheet details provide the width and height of these timbers but not the length. Please provide the specified length.	Approximately 7 feet but Contractor to verify.
Are the events shown on sheet 4 the only events the contractor will have to open the bridge for?	These are the only events that the contractor has to have the bridge open. The city has decided to remove Moon River and Riverbend from the events that the contractor has to have the bridge open.
Sheet 2D note 13 indicates the contractor is required to obtain all necessary environmental permits. Is the owner aware of any required permits for this work?	Some permit guidance was given in addendum #3 but the contractor is responsible for obtaining all required permits necessary to complete the project described in the contract documents.
Sheet 2d note 16 indicates the contractor shall review all existing permits. Can these permits be provided?	Permit guidance was given in addendum 3
Can the owner indicate which steel items are fracture critical and which items require charpy v notch testing.	The contractor's work plan and analysis engineer will have to determine this because of the complexity introduced by the external post tensioning. Tension and compression members can potentially change with differing work plans.
Are samples required of any steel items for testing? Who will perform and pay for the testing?	See TDOT specifications for testing requirements. Contractor is responsible for all costs .
Sheet 4A indicates the contractor shall have a certified welding inspector onsite during significant work is performed. Which items are deemed significant and is the contractor providing and/or paying for this inspector?	The words "other significant" will be removed from the plans note.
On sheet 4b note 64 indicates the contractor must remove the existing monitoring system for the tensioning of cables. Will these items require replacement?	Yes. See Special Provision 6
Sheet 4c note 87 states the waterline contains asbestos. Will it require abatement and removal by the contractor?	There is no removal of the asbestos waterline but contractor shall coordinate with and allow the Tennessee American Water Company contractor access and time to paint the waterline and replace bearing pads
Who performs and pays for ultrasonic, magnetic particle, and radiographic testing?	The Contractor.
Can the owner provide the value of the electrical service fee referenced on sheet E0.3?	Utility contact information has been provided.
What does item 714-25.02 and 714-25.03 include? Can the owner provide the value of any third party fees?	See footnotes in plans. Utility contact information has been provided.
Can the owner provide the value of the fees required under item 920-17.05?	Permit guidance was given in addendum 3
If third party fees the contractor is directed to include in their bid increase from those provided at bid time will the contractor receive compensation for the price increase?	No
Can a detail be provided on how to fasten the sidewalk planks to the structure?	A revision will describe the fastner requirements.
Will a TDOT format cpm schedule be required?	Contractor to provide a TDOT format CPM schedule.
Can the owner provide the value of the fees referenced on page 141 section 1.05 of the specifications?	Contractor is responsible for verifying all required fees and/or charges associated with the project.
Will the 10”x12” Timber Blocks have to be removed in order to paint the tops of the floor beams?	Yes.
Plan Sheet 13 Does the top flange of the bridge stringer beams require paint removal and a new coating? It is not clear if this is required in the painting scope.	Yes.
We are in receipt of addendum No. 2 Even though it includes additional sections of the Truss/Stringer repairs, it only identifies the structural members that need repairs. Would you please be so kind as to forward us any as built drawings available identifying the structural members of the bridge, in order for our company to develop an accurate take off for the required painting. The said drawings would show the length/width/components of the vertical, diagonal and horizontal members of the structure in question. We would appreciate any effort on your part to do so.	All the plans that are available have been provided in addendum 2 and 3.

Question	Answer
On the steel repairs the required steel cannot be determined from the photos or existing drawings provided. Can existing drawings be provided with dimensions to determine the size of steel members/diameter and length of bolts? In lieu of or addition to this can a maximum amount of weight per repair by deficiency code be provided? It may be advantageous to bid some of these items by the pound in lieu of each as additional work could possibly be paid by the pound where per each prices are all unique.	All the plans that are available have been provided in addendum 2 and 3. The weight of steel required for the repairs with a unit item of each is to be estimated by the contractor.
What type of treatment is required on the bridge timber items?	See TDOT Construction Specification 911.02
Can the sidewalk planks and curbs, and timber stringers be glued laminated?	Yes, as long as the service life is not dimenished.
Most Alaska Cedar is grown in Canada. Is use of trees grown in Canada acceptable?	Timber items must meet the requirements of the plans and specifications.
What info is required on the outside of the bid envelope?	See Contractor's Identification form in addendum 2
I am still unclear on the asbestos requirements on the project. The generic spec indicates the contract documents will outline the requirements. Which if any asbestos items require abatement? Is the contractor responsible for any testing for asbestos on the project? Is yes, and additional areas other than those specified to be abated are found will this be compensated for as extra work?	All information that is available has been provided. From the reports we don't anticipate asbestos involvement with the repairs. The water line will be handled by the utility company.
If there is asbestos abatement required can a bid item be added to the schedule of values?	From the reports we don't anticipate asbestos involvement with the repairs. The water line will be handled by the utility company.
Special provision 7 second to last line has a range of dates in the task category and a double asterisk. What does this info mean?	Will be clarified in this addendum 4.
The structural repair photos on sheets 15-20a are small and difficult to view. Can they be provided in a larger format in the best resolution available?	Not at this time.
Due to market availability, some of the Alaskan Yellow Cedar Solid Timber dimensions are unavailable. Is it acceptable to utilize the proposed Alaskan Yellow Cedar Glulam in place of all Solid Timber or at minimum when required due to availability? Please see attachment "ANSI117-2020" for the standard specifications for structural glued laminated timber of softwood species for review.	Yes, as long as the service life is not dimenished.
S&ME's Asbestos Report states:S&ME understand that TAWC has communicated to Volkert, Inc. that they intend to replace this waterline (including the abatement of the identified ACM) prior to the commencement of the bridge rehabilitation project When is the waterline going to be replaced?	Waterline is to remain. Contractor shall coordinate with and allow the Tennessee American Water Company contractor access and time to paint the waterline and replace bearing pads.
If project comes in over budget, will City still award the job?	The city will not predetermine the answer to this question.
Is there an estimated surface area of structural steel to be painted?	We are not aware of an engineer's estimate of the surface area.
Does Planet, Inc. have an estimated surface area of structural steel?	Contact Planet, Inc.
Please provide contact information for Planet, Inc.	Mark Rader - 865-354-0605 - planetinc@comcast.net - 920 N. Front Ave., Rockwood, TN 37854
Also, will City consider extending the bid date past 7/25?	Schedule has been revised in this Addendum No. 4. See attached SP-7.
Where are the limits of construction to stage equipment?	Contractors has to stay within the construction limits, contractor may need to find lay down area outside what is being given. This is up to the contractor to find staging area away from the job site.
Is ALL structural steel to be blasted and painted?	Per the contract documents.
General Do the steel deck clips, keeper angles, and/or bottom of the deck through-bolts need to be painted?	All material either needs to be painted blue or white this includes any new material such as conduit or any remaining material that is supposed to stay on the bridge such as existing conduit. This does exclude the new wood material/existing wood material. And the existing Tennessee American Water line. Water Company will come in and paint the waterline.
Plan Seet 4A, Note 24 Bridge General Note 24 states that all exposed surfaces of the timber sidewalk and deck are to be sealed. Does this include the underside of the deck and sidewalk?	No.
Addendum 2 - Plan Sheet 2 In Addendum 2, revised Plan Sheet 2, and Item No. 602-10.51, the estimated quantity of deck clips was changed to 7,110 Each from 500 Each. The bid form in Addendum 2 still shows the quantity at 500 Each. Please clarify if 500 Each is the correct quantity.	Bid form quantity to be revised to match plans.
Addendum 3 - Report of Limited Asbestos Evaluation In Addendum 3, the Report of Limited Asbestos Evaluation dated January 25, 2023 states that the Tennessee American Water Company has or will replace the utility waterline on the bridge. However, this same utility line has been shown in the Walnut Street Pedestrian Bridge Repair project plans as needing asbestos abatement before painting. Please clarify if asbestos abatement will be required for this utility line on this project?	Tennessee American will handle their own waterline and perform maintenance on the bearing pads and paint the waterline, during construction of the 18 month project. Please contact Tyler Cross Engineering Project Manager, 423-771-4704, Tyler.cross@amwater.com
Plan Sheet 4C Regarding Plan Sheet 4C, Bridge General Note 75 states that areas of pack rust repair shall be filled flush with the vertical edges of steel flanges. Since the sealant specified is a penetration type sealer only, what product will be used to fill in these areas?	Note will be revised to require an approved structural adhesive as filler material.
Electric scope - is the use of marine-grade MC cable allowed in any applications. Are there any concerns with the sway from the bridge and the use of IMC?	Marine-grade MC cable is not permitted for any application in this project. The sway of the bridge is not a concern as expansion fittings are to be installed at structural expansion joints per Revision 1 (Dated 07/02/2024).
Electric scope - There are (4) 4" conduits running the length of the bridge. These appear to be fiber lines. Are these to be demoed as well or left in place?	There are existing utilities that are active and should remain in place.
Electric scope - Is there a specific contact from EPB that we should contact regarding the secondary feeder requirements for this project?	You should contact for the Power Side regarding EPB, David Vanzant, office number 423-551-0730 email address is vanzantda@epb.net, he's the account coordinator on behalf of the City for EPB, he should be able to direct you to the proper person. Fiber Side please get with Sid Cross with EPB email address is crosssl@epb.net phone number is 423-648-1544

Question	Answer
Timber Specification - Our sources are having difficutly locating the size of solid timbers for this project. Can Alaskan Yellow Cedar Glued Laminated timbers be an alternative to the specified solid timber sizes listed?	Yes, as long as the service life is not dimenished.
2" PVC waterline - Please provide details and a specification for the 2" PVC waterline replacement scope?	The irrigation line needs to be in the same area that it currently is in with the proper alignment. Hose bibs need to have a secure access. It may be easier to have these boxes located in the floor deck. These locations should be at every pier located near the access door. Also on the south side of the bridge will need to have a way cut the water off and provide a valve to drain the water during the winter months. All of this is currently on the bridge now. It just needs to be replaced as new with all new material including making everything schedule 80 PVC material.
Plan Sheets 2C and 4C, Please verify if the contractor will be responsible for procuring an Asbestos Survey of the bridge, and please direct us where we can find SP202ACM Special Provision regarding abatement requirements. Will cleaning of the existing waterline containing asbestos be required to performed by an Accredited Abatement Firm?	All information that is available has been provided. From the reports we don't anticipate asbestos involvement with the repairs. The water line will be handled by the utility company.
Plan Sheet 13, Does the top flange of the bridge stringer beams require paint removal and a new coating? It is not clear if this is required in the painting scope.	Yes
Can you send and RFI about Item #714-04.08 if it hasn't already been asked? The item is for (IMC conduit). I have two different spread sheets one with 3" and one with 4"	Per our most recent E-0.3 sheet 4" conduit is not listed.
On the steel repairs the required steel cannot be determined from the photos or existing drawings provided. Can existing drawings be provided with dimensions to determine the size of steel members/diameter and length of bolts? In lieu of or addition to this can a maximum amount of weight per repair by deficiency code be provided? It may be advantageous to bid some of these items by the pound in lieu of each as additional work could possibly be paid by the pound where per each prices are all unique.	All the plans that are available have been provided in addendum 2 and 3. The weight of steel required for the repairs with a unit item of each is to be estimated by the contractor.