				CONST	RUCTION TYP	E CODE	ODE		
CODE No.	ITEM	UNIT		URBAN BRIDGE	URBAN BRIDGE	URBAN BRIDGE	URBAN ROADWAY		
			TOTAL		SN 090-0046				
			QUANTITY	0013	0013	0013	0006		
70103815	TRAFFIC CONTROL SURVEILLANCE	CAL DA	120	40	40	40			
70407005			400	400	400	400			
/010/025	CHANGEABLE MESSAGE SIGN	CAL DA	480	160	160	160			
70400100	TEMPORARY CONCRETE BARRIER	FOOT	2400	1875		525			
70400200	RELOCATE TEMPORARY CONCRETE BARRIER	FOOT	500	 		500			
70600260	IMPACT ATTENUATORS, TEMPORARY (FULLY, REDIRECTIVE, NARROW), TEST LEVEL 3	EACH	2	1		1			
70600332	IMPACT ATTENUATORS, RELOCATE (FULLY, REDIRECTIVE, NARROW), TEST LEVEL 3	EACH	1			1			
78009004	MODIFIED URETHANE PAVEMENT MARKING - LINE 4"	FOOT	12105				12105		
78009006	MODIFIED URETHANE PAVEMENT MARKING - LINE 6"	FOOT	1054				1054		
78009008	MODIFIED URETHANE PAVEMENT MARKING - LINE 8"	FOOT	2336				2336		
78009012	MODIFIED URETHANE PAVEMENT MARKING - LINE 12"	FOOT	330	-			330		
X4402020	CONCRETE MEDIAN SURFACE REMOVAL	SQ FT	1695				1695		
X5060603	CONTAINMENT AND DISPOSAL OF NON-LEAD PAINT CLEANING RESIDUES NO. 3	LSUM	1			1			
	COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.24 (TEMPORARY)	FOOT	188				188		
X7010216	TRAFFIC CONTROL AND PROTECTION, (SPECIAL)	LSUM	1	0.34	0.33	0.33			
Z0001899	JACK AND REMOVE EXISTING BEARINGS	EACH	27	27		-			
70001005			2540	<u>hunn</u>	2540				
	STRUCTURAL STEEL REPAIR REMOVAL OF EXISTING BEARINGS	FACH	2540 40	*******	2540 40 [°] 3				
Z0007101	CONTAINMENT AND DISPOSAL OF LEAD PAINT CLEANING RESIDUES NO. 1								
Z0007102		LSUM	1		1				
Z0012754	STRUCTURAL REPAIR OF CONCRETE (DEPTH EQUAL TO OR LESS THAN 5")	SQ FT	3754.9	3658.9	96				
Z0016200	DECK SLAB REPAIR (PARTIAL)	SQ YD	225.0	225.0					
Z0021920	SILICONE JOINT SEALER SPECIAL	FOOT	40	36	4				
Z0032400	JOINT REPAIR	EACH	14	11	3				
Z0062456	TEMPORARY PAVEMENT	SQ YD	230				230		
70073200	TEMPORARY SHORING AND CRIBBING	EACH	97	57	40				

USER NAME = bcd	DESIGNED - BCD	REVISED - 11
	DRAWN - GDC	REVISED -
PLOT SCALE = 1:1	CHECKED - LDC	REVISED -
PLOT DATE = 11/21/2018	DATE - 10/8/2018	REVISED -

11/21/2018	STATE OF ILLINOIS							F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		SUMMARY OF QUANTITIES						(50B-4)BR;12[(HVB,HB)BR]BR	TAZEWELL	61	4	
	DEPARTMENT OF TRANSPORTATION		J				-	9		CONTRACT	F NO.68	D59
		SCALE:	SHEET	OF	SHEETS	STA.	TO STA.		ILLINOIS FED. AI	D PROJECT		
		-										

Bench Mark: Chiseled cross on guard rail bolt. Station 13+35 ± 45-ft right along Existing F.A.U. Rte. 6712 centerline. Elevation 484.47

Existing Structure: Originally built in 1958 as F.A. Rt 10 (Spur) Section (12-HB) and rehabilitated in 1991 as a three span composite steel I-beam bridge having spans of 36'-3", 84'-0", and 45'-8" with a back to back abutment length of 165-11", measured along the tangent to the horizontal curved roadway. The bridge has a skew of 12°-4'-22". The out-to-out width of the structure is 63'-8" with 1'-7" wide parapets on both sides and a 3'-0" wide raised median. The bridge is supported by driven steel pile supported abutments and multi-column piers supported on driven steel piling.







11/27/2018 10:53:23 AM

INDEX OF SHEETS

1. General Plan & Elevation

- 2. General Data
- 3. Median Repair Details
- 4. Bearing Details
- 5. Bearing Details
- 6. Structural Steel Repair 7. Structural Steel Repair
- 8. Pier 1 Concrete Removal Details
- 9. Pier 1 Details 10. Pier 1 Details
- 11. Pier 2 Concrete Removal Details
- 12. Pier 2 Details
- 13. Pier 2 Details
- 14. Pier 2 Concrete Repair Details
- 15. Existing Steel Cleaning and Painting

CURVE DATA

- P.I. Sta. = 16+66.65 $\Delta = 45^{\circ} - 00' - 00''$
- $D = 2^{\circ} 54' 00''$
- R = 1,975.72'
- T = 818.37' $L = 1,551.72^{\circ}$
- E = 162.78'
- P.C. Sta. = 8+48.28
- P.T. Sta. = 24+00.00

DESIGN STRESSES

Existing Structure f'c = 3.500 psify = 60,000 psi (Reinforcement) fy = 36,000 psi (M183 Grade 36) New Construction $f'c = \overline{4,000 \text{ psi}(Superstructure)}$ f'c = 3,500 psi (Substructure) fy = 60,000 psi (Reinforcement) fy = 50,000 psi (M270 Grade 50)

DESIGN SPECIFICATIONS 2002 AASHTO Standard Specifications for Highway Bridges

LOADING HS20-44 No future wearing surface shall be installed.

* Indicates Locations for "Joint Repair"

GENERAL PLAN & ELEVATION RIVERFRONT DRIVE OVER WEST WASHINGTON ST. F.A.U. RTE. 6712, SEC. (12-HVB)BR-1 TAZEWELL COUNTY STATION 9+65.44 STRUCTURE NO. 090-0046

ELEVATION		SECTION	COUNTY	TOTAL	SH ET NO.
		(50B-4)BR:12[(HVB.HB)BR]BR	TAZEWELL	61	32
030-0040			CONTRA	CT NO. 6	8D59
SHEETS		ILLINOIS FED. A	MID ROJECT		
		4	Λ REV 1/	4/201	9

GENERAL NOTES

All structural steel shall be AASHTO M 270 Grade 50. Reinforcement bars designated (E) shall be epoxy coated.

Prior to pouring the new concrete, all heavy or loose rust, loose mill scale, and other loose or potentially detrimental foreign material shall be removed from surfaces in contact with the concrete. Removal shall be accomplished by methods that will not damage the steel and the cost will be included with Concrete Removal.

Plan dimensions and details relative to existing plans are subject to nominal construction variations. The Contractor shall field verify existing dimensions and details affecting new construction and make necessary approved adjustments prior to construction or ordering of materials. Such variations shall not be cause for additional compensation for a change in scope of the work, however, the Contractor will be paid for the quantity actually furnished at the unit price bid for the work.

Bearing seat surfaces shall be constructed or adjusted to the designated elevations within a tolerance of $\frac{1}{6}$ inch (0.01 ft.). Adjustment shall be made either by grinding the surface or by shimming the bearings.

The existing bridge deck at the pier joints is heaving due to pack rust at the bearings. The Contractor shall adjust the bearing seat elevations as needed to bring the bridge deck to a level plane.

All structural steel and exposed surfaces of bearings within a distance of 5 ft. each way from the deck joints shall be painted as specified in Section 506 of the Standard Specifications.

The structural steel plates of the Bearing Assembly shall conform to the requirements of AASHTO M 270 Grade 50.

Two $\frac{1}{3}$ in. adjusting shims shall be provided for each bearing in addition to all other plates or shims and placed as shown on bearing details.

Existing reinforcement shall be cleaned and incorporated into the new construction. Cost included with Concrete Removal.

Any reinforcement bars damaged during the Concrete Removal operations shall be repaired or replaced using an approved bar splicer or anchorage system. Cost included with Concrete Removal. Joint openings shall be adjusted according to Article 520.04 of the Standard Specifications when the deck is poured at ambient temperature other than 50°F.

The existing structural steel coating contains lead. The Contractor should take appropriate precautions to deal with the presence of lead on this project.

Existing structural steel that will be in contact with new structural steel shall be cleaned and painted prior to erection as required by the Special Provision "Cleaning and Painting Contact Surface Areas of Existing Steel Structures".

Cleaning and painting of the existing structural steel shall be as specified in the special provision for "Cleaning and Painting Existing Steel Structures". Areas to be cleaned and painted shall consist of all beam ends, end diaphragms and steel components of the steel bearings at the abutments and piers. Beam end painting shall extend 5 feet from the ends of the beams longitudinally. This surface preparation shall be accomplished according to the requirements of Near-White Metal Blast Cleaning SSPC-SP 10. The paint system shall be applied as specified for System 1 0Z/E/U. The color of the final finish coat shall be Blue, Munsell No. 10B 3/6.

Containment and disposal as specified shall follow the special provision for "Containment and Disposal of Lead Paint Cleaning Residue". The use of four air monitors will be required to monitor abrasive blasting operations.

The painting contractor shall be SSPC-QP 1 and SSPC-QP2 certified for this project and shall maintain certification throughout the duration of the project.

Fasteners shall be high strength bolts. Bolts $7\!\!/_8$ open holes ${}^{15}\!\!/_{16}$, unless otherwise noted.

Cost of removal and re-installation of all members necessary to complete the work as detailed on the plans and as specified in the Special Provisions shall be included with Structural Steel Repair.

SCOPE OF WORK

- 1. Install temporary shoring to each side of Pier 1 and Pier 2.
- 2. Remove existing pier caps at Pier 1 & Pier 2.
- 3. Repair designated beam ends.
- 4. Construct new pier caps at Pier 1 and Pier 2.
- 5. Replace bearings at Pier 1 and Pier 2.
- 6. Complete Structural Repair of Concrete to designated areas of Pier 2.
- 7. Clean and Paint structure at designated locations.
- 8. Repair joints at existing concrete median on structure.







PROFILE GRADE

F.A.U. RTE. 6712 (Along @ Roadway)

Å.		USER NAME =	DESIGNED - MC	REVISED -		GENERAL DATA
μ	ASKASKIA 618 203.5877 phone		CHECKED - BB	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	STRUCTURE NO. 09
E NA	Patrice Ing Group, ETC. Include So.	PLOT SCALE =	DRAWN - MC	REVISED -		
	Professional Engineering Group 20-500/586	PLOT DATE =	CHECKED - BB	REVISED -		SHEET 2 OF 15 SH
	11/27/2018 10:54:55 AM	-				

TOTAL	BILL	0F	MATERIAL

		C1 //		
ITEM	UNIT	SUPER	SUB	TOTAL
moval	CU. YD.	-	60.1	60.1
ructures	CU. YD.	-	70.2	70.2
nt Bars (Epoxy Coated)	POUND	-	10,590	10,590
nt Bars (Epoxy Coated) Existing Bearings	EACH	40	-	40
Bearing Assembly, Type I	EACH	10	-	10
and Erecting Structural Steel	POUND	3,660	-	3,660
Painting Steel Bridge Location 2	L. SUM	1	-	1
epair of Concrete	SQ. FT.	5.0	91.0	96.0
l to or Less than 5")	50.11.	5.0	91.0	90.0
nt Sealer (Special)	FOOT	4	-	4
3/4"	EACH	80	-	80
Shoring and Cribbing	EACH	40	-	40
teel Repair	POUND	2,540	-	2,540
	EACH	3	-	3
and Disposal of Lead Paint sidues No. 2	L. SUM	1	-	1



first REV. 1/2/19