

Fasteners shall be AASHTO M164 Type I, mechanically galvanized bolts. Bolts 3/4 in.  $\phi$ , holes 7/8 in.  $\phi$ , unless otherwise noted.

Calculated weight of Structural Steel = 19,734 pounds AASHTO M270, Grade 36.

No field welding is permitted except as specified in the contract documents.

The Contractor shall test the existing welds by non-destructive methods within 2 ft. of the end of the existing cover plates for cracks after removal of the existing concrete deck. Dye penetrant (PT), magnetic particle (MT), or other approved testing method shall be performed by qualified personnel approved by the Engineer. If cracks are found, report them to the Bureau of Bridges and Structures for disposition. The cost of testing is included in Removal of Existing Concrete Deck. The cost of crack repair, if necessary, will be paid for according to Article 109.04 of the Standard Specifications.

Reinforcement bars shall conform to the requirements of ASTM A 706 Gr 60. See Special Provisions.

Reinforcement bars designated (E) shall be epoxy coated.

Prior to pouring the new concrete deck, all heavy or loose rust, loose mill scale, and other loose or potentially detrimental foreign material shall be removed from the surfaces in contact with concrete. Tightly adhered paint may remain unless otherwise noted. Removal shall be accomplished by methods that will not damage the steel and the cost will be included in the pay item covering removal of the existing concrete.

As directed by the Engineer, existing construction accessories welded to the top flange of beams and girders shall be removed. The weld areas shall be ground flush and inspected for cracks using magnetic particle testing (MT) or dye penetrant testing (PT) by qualified personnel approved by the Engineer.

Any cracks that cannot be removed by grinding 1/4 inch deep shall be identified and reported to the Bureau of Bridges and Structures for further disposition. The cost of removing welded accessories, grinding and inspecting weld areas and grinding cracks will be paid for according to Article 109.04 of the Standard Specifications.

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 their designated elevations within a tolerance of 1/8 inch (0.01 ft.).

Adjustment shall be made either by grinding the surface or by shimming the bearings.

Concrete Sealer shall be applied to the designated areas of the abutments and piers 5, 6, & 8. Designated areas are the exposed surfaces of the abutment backwall and all new concrete on the abutment bearing seat and cap. All exposed surfaces of piers 5, 6, & 8 shall be treated.

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

Cleaning and painting of the existing structural steel shall be as specified in the special provision for "Cleaning and Painting Existing Steel Structures". All beams, bearings and other structural steel within 5 ft. (measured along the beam) of either side of deck joints shall be cleaned per Near White Blast Cleaning - SSPC-SP10. The exterior surfaces and bottom of the bottom flange of the fascia beams shall be cleaned per Power Tool Cleaning - Commercial Grade.

The designated areas cleaned per Near White Blast Cleaning - SSPC-SP10 and per Power Tool Cleaned - Commercial Grade shall be painted according to the requirements of Paint System 1 - OZ/E/U. The color of the final finish coat for all interior steel surface shall be Gray, Munsell No 5B 7/1. The color of the final finish coat for the exterior and bottom flange of the fascia beams shall be Blue, Munsell No 10B 3/6.

The Inorganic Zinc Rich Primer / Acrylic / Acrylic Paint System shall be used for shop and field painting of new structural steel except where otherwise noted. The color of the final finish coat for all interior steel surfaces shall be gray, Munsell No. 5B 7/1. See Special Provision for "Cleaning and Painting New Metal Structures".

A minimum of (4) air monitors(s) will be required to monitor abrasive blasting operations at this site, see special provision for "Containment and Disposal of Lead Paint Cleaning Residues".

All cross frames or diaphragms shall be installed as steel is erected and secured with erection pins and bolts except as otherwise noted. Individual cross frames or diaphragms at supports may be temporarily disconnected to install bearing anchor rods.

Two 1/8 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 Name Plate shall be cleaned and relocated next to new Name Plate. Cost included with Name Plates.

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

Slip forming of the parapets is not allowed.

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

TOTAL BILL OF MATERIAL

ITEM	UNIT	SUPER STRUCTURE	SUB STRUCTURE	TOTAL
Porous Granular Embankment, Special	Cu. Yd.		171	171
Concrete Removal	Cu. Yd.		222.6	222.6
Removal of Existing Concrete Deck	Each	1		1
Protective Shield	Sq. Yd.	1221		1221
Structure Excavation	Cu. Yd.		240	240
Concrete Structures	Cu. Yd.		271.8	271.8
Concrete Superstructure	Cu. Yd.	1106.3		1106.3
Bridge Deck Grooving	Sq. Yd.	3046		3046
Protective Coat	Sq. Yd.	3675		3675
Furnishing and Erecting Structural Steel	Pound	19734		19734
Stud Shear Connectors	Each	11640		11640
Jack and Remove Existing Bearings	Each	16		16
Structural Steel Removal	Pound	16404		16404
Cleaning and Painting Steel Bridge	L. Sum	1		1
Containment and Disposal of Lead Paint Cleaning Residues	L. Sum	1		1
Reinforcement Bars, Epoxy Coated	Pound	241340	40570	281910
Bar Splicers	Each	3512	328	3840
Temporary Sheet Piling	Sq. Ft.	790		790
Name Plates	Each	1		1
Preformed Joint Strip Seal	Foot	243		243
Elastomeric Bearing Assembly, Type I	Each	40		40
Elastomeric Bearing Assembly, Type II	Each	8		8
Elastomeric Bearing Assembly, Type III	Each	8		8
Anchor Bolts, 1"	Each	160		160
Concrete Sealer	Sq. Ft.		5692	5692
Epoxy Crack Injection	Foot		16	16
Geocomposite Wall Drain	Sq. Yd.		85	85
Pipe Underdrains for Structures 4"	Foot		130	130
Drainage Scuppers, DS-12	Each	5		5
Structural Repair of Concrete (Depth Greater than 5 inches)	Sq. Ft.		8	8
Structural Repair of Concrete (Depth Equal to or Less than 5 inches)	Sq. Ft.		115	115
Jacking and Cribbing	Each	48		48
Temporary Support System, No. 1	Each		1	1
Temporary Support System, No. 2	Each		1	1
Temporary Support System, No. 3	Each		1	1
Mechanical Splicer	Each		30	30
Drainage System	L. Sum		1	1

Conduit in Parapets and at retaining wall light pole foundations is scheduled in the lighting plans.

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STATION 1236+06.66  
REBUILT 2010 BY  
STATE OF ILLINOIS  
LOADING HS-20  
STRUCTURE NO. 058-0014

NAME PLATE  
See Std. 515001

GENERAL NOTES, BILL OF  
MATERIALS, AND DETAILS  
U.S. 51 BUSINESS OVER CERRO  
GORDO ST., N.S.R.R. & WABASH AVE.  
F.A.P. ROUTE 710 SECTION (50Z-VB)BR  
MACON COUNTY  
STATION 1236+06.66  
STRUCTURE NO. 058-0014

DESIGNED	MJB/MAJ
CHECKED	JFS
DRAWN	MSJ/MLB
CHECKED	MJB



SHEET NO. 2 49 SHEETS	F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	710	(50Z-VB)BR	MACON	79	28
FED. ROAD DIST. NO.			ILLINOIS	FED. AID PROJECT	
CONTRACT NO. 74215					