

GENERAL NOTES

- Fasteners shall be ASTM A325 Type 1, mechanically galvanized bolts in painted areas and A325 Type 3 in unpainted areas. Bolts 7/8 in. φ, holes 15/16 in. φ, unless otherwise noted.
- Calculated weight of Structural Steel = 768,180 Pounds
- All structural steel shall be AASHTO M 270 Grade 50 W (except expansion joints which shall be AASHTO M 270 Grade 36). All structural steel shall be cleaned as specified in Article 506.07.
- No field welding is permitted except as specified in the contract documents.
- Reinforcement bars shall conform to the requirements of ASTM A 706 Gr 60. See Special Provisions.
- Reinforcement bars designated (E) shall be epoxy coated.
- 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 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.
- The Contractor shall mask bridge piers down to within 1'-0" of the water line. Pier masking must be in-place between bearing installation and the casting of the deck concrete.
- All structural steel within a distance of 10 ft. each way from the deck joints shall be painted as specified in Article 506.08 and 506.09. The paint system outlined in 506.08(b) (a/e/u) shall be used. All exposed steel surfaces of bearing assemblies and retainers for abutments and piers (see S-24 and S-25) shall also be painted as outlined in this note.
- Layout of slope protection system may be varied to suit ground conditions in the field as directed by the Engineer.
- The embankment configuration shown shall be the minimum that must be placed and compacted prior to construction of the abutments.
- The Contractor shall obtain a construction permit from the Illinois Department of Natural Resources (IDNR), Office of Water Resources for any temporary construction activity placed in the water. This shall include the placement of material for run-arounds, causeways, etc. Any permit application by the Contractor shall refer to the IDNR 3704 Floodway Construction permit number allowing permanent construction as shown in the contract plans. A Permit from the McHenry County Stormwater Commission must be obtained prior to the start of construction.
- Seal coat thickness design is based on the Cofferdam Water Surface Elevation (CWSE). Cofferdam design shall be submitted to the Engineer for approval in accordance with the Special Provision for "Cofferdams".
- 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.
- Slip Forming of the parapets is not allowed.
- Existing Steel Sheet Pile walls are to remain in place. Design details are not available. Contractor shall assume walls are not adequate to support superimposed construction loads.

CHARLES J. MILLER ROAD
OVER THE FOX RIVER
BUILT 2013 BY
McHENRY COUNTY DIVISION OF TRANSPORTATION
SEC. 09-00372-00-PW
F.A.U. RT. 3860 STATION 597+81.17
STR. NO. 056-3190 LOADING HL-93

NAME PLATE
See Std. 515001

TOTAL BILL OF MATERIAL

For SN 056-3190 only (See S-39 for SN 056-3149)

ITEM	UNIT	SUPER	SUB	TOTAL
Stone Dumped Riprap, Class A4	Sq. Yd.		82	82
Filter Fabric	Sq. Yd.		173	173
Concrete Removal	Cu. Yd.		6.2	6.2
Structure Excavation	Cu. Yd.		27	27
Cofferdam Excavation	Cu. Yd.		424	424
Cofferdam (Type 2) (Location - 1)	Each		1	1
Cofferdam (Type 2) (Location - 2)	Each		1	1
Cofferdam (Type 2) (Location - 3)	Each		1	1
Cofferdam (Type 2) (Location - 4)	Each		1	1
Concrete Structures	Cu. Yd.	18.4	378.7	397.1
Concrete Superstructure	Cu. Yd.	775.1		775.1
Bridge Deck Grooving	Sq. Yd.	2,075		2,075
Seal Coat Concrete	Cu. Yd.		149.5	149.5
Concrete Encasement	Cu. Yd.		7.7	7.7
Protective Coat	Sq. Yd.	2,817		2,817
Furnishing and Erecting Structural Steel	L. Sum		1	1
Stud Shear Connectors	Each	10,688		10,688
Reinforcement Bars	Pound		36,830	36,830
Reinforcement Bars, Epoxy Coated	Pound	212,540	9,210	221,750
Bar Splicers	Each		56	56
Slope Wall 6 Inch	Sq. Yd.		200	200
Furnishing Steel Piles HPI0X42	Foot		1,070	1,070
Furnishing Steel Piles HPI2X53	Foot		2,854	2,854
Driving Piles	Foot		3,924	3,924
Test Pile Steel HPI0X42	Each		2	2
Test Pile Steel HPI2X53	Each		4	4
Pile Shoes	Each		36	36
Name Plates	Each		1	1
Preformed Joint Strip Seal	Foot	30.0		30.0
Finger Plate Expansion Joint, 5"	Foot	28.0		28.0
Elastomeric Bearing Assembly, Type II	Each		4	4
Elastomeric Bearing Assembly, Type III	Each		4	4
Anchor Bolts, 1"	Each		64	64
Anchor Bolts, 1 1/4"	Each		8	8
Concrete Sealer	Sq. Ft.		784.4	784.4
Geocomposite Wall Drain	Sq. Yd.		48	48
Furnishing High Load Multi-Rotational Bearings, Guided Expansion, 450K	Each	12		12
High Load Multi-Rotational Bearings, Guided Expansion, 450K (Erect Only)	Each	12		12
Porous Granular Embankment, Special	Cu. Yd.		103	103
Drainage Scupper, DS-11	Each		4	4
Drainage Scupper, DS-33	Each		4	4
Drainage System	L. Sum		1	1
Temporary Sheet Piling	Sq. Ft.		740	740
Pipe Underdrains for Structures 4"	Foot		72	72

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DESIGN SCOUR ELEVATION TABLE

Design Scour Elevation (ft.)	W. Abut.	Pier 1	Pier 2	Pier 3	Pier 4	E. Abut.
	742.20	730.50	725.00	725.00	727.00	742.09

WATERWAY INFORMATION

Drainage Area = 1256 SQ. MI. Low Grade Elev. 741.56 @ Sta. 590+50

Flood	Freq. Yr.	Opening Sq. Ft.		Nat. H.W.E.		Head - Ft.		Headwater E.	
		Exist.	Prop.	Exist.	Prop.	Exist.	Prop.	Exist.	Prop.
	10	4,370	3,158	3,158	738.3	0.0	0.0	738.3	738.3
Design	50	6,300	3,500	3,500	739.0	0.0	0.0	739.0	739.0
Base	100	7,420	3,729	3,729	739.5	0.0	0.0	739.5	739.5
	500	10,110	4,200	4,200	740.3	0.0	0.0	740.3	740.3

**BILL OF MATERIALS
AND GENERAL NOTES
STRUCTURE NO. 056-3190**

DESIGNED	SSM
CHECKED	RGD
DRAWN	WJH
CHECKED	RGD



HRGreen.com
Illinois Professional Design Firm
184-001322

WB CHARLES J. MILLER ROAD BRIDGE

DATE: 7/23/12

SHEET NO. S-02	F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	3860	09-00372-00-PW	McHENRY	252	125
S-41 SHEETS		CONTRACT NO.		63633	
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT					

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