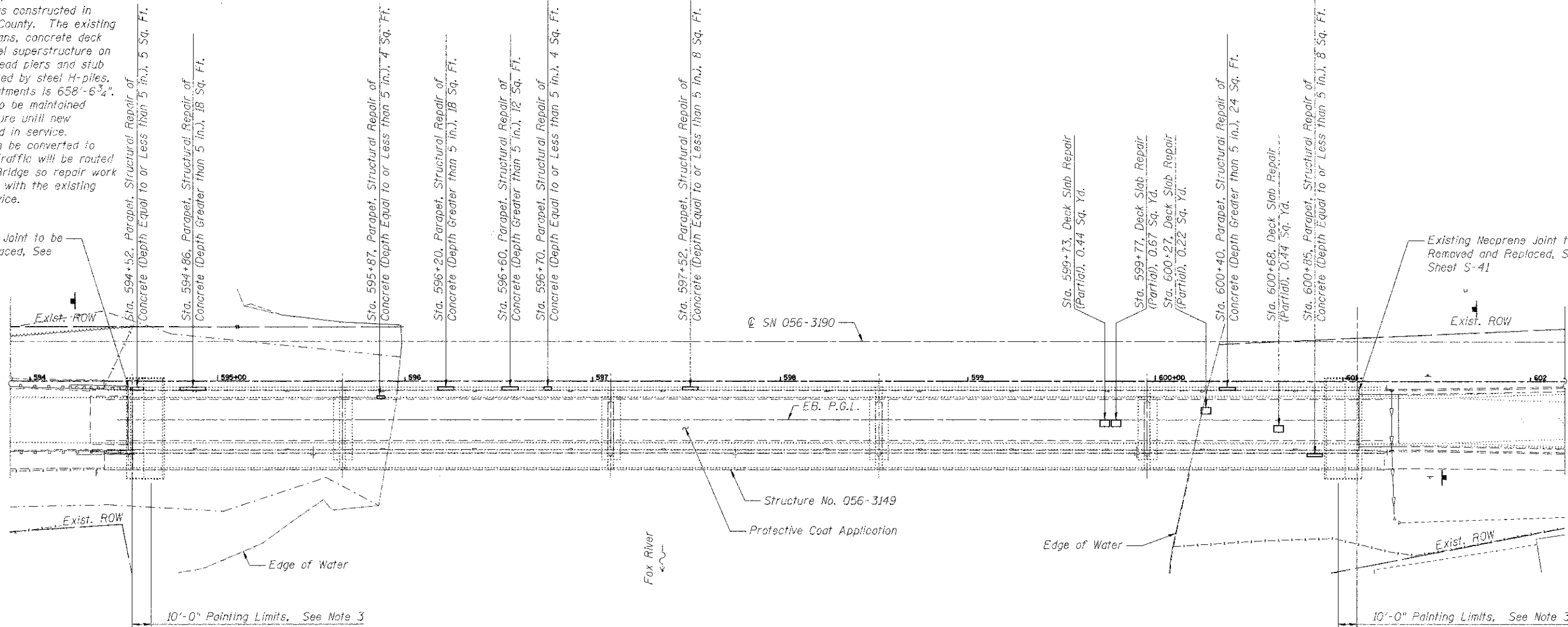


Existing Structure: S.N. 056-3149 was constructed in 1989 by McHenry County. The existing structure is 5 spans, concrete deck on continuous steel superstructure on concrete hammerhead piers and stub abutments supported by steel H-piles. Back to Back Abutments is 658'-6 3/4". Two way traffic to be maintained on existing structure until new structure is placed in service. Structure will then be converted to two lanes, EB. Traffic will be routed to the Proposed Bridge so repair work can be performed with the existing bridge out of service.

Existing Neoprene Joint to be Removed and Replaced, See Sheet S-40



Notes:

- All deck repairs shall be in accordance with Guide Bridge Special Provision 28 Deck Slab Repair (Partial).
- Parapet repairs shall be in accordance with Guide Bridge Special Provision 53 Structural Repair of Concrete to the depth indicated on the plan.
- The cleaning and painting of existing steel shall conform to the Guide Bridge Special Provision CLEANING AND PAINTING EXISTING STEEL STRUCTURES. All exposed steel beam, diaphragm, stiffener and bearing surfaces within 10' -0" of each end of each beam shall be cleaned and painted in accordance with the above specification. The surface preparation shall conform to specification section Surface Preparation (HOLD POINT), Section c) Commercial Grade Power Tool Cleaning. The paint system shall conform to specification section d) System 4- PS/EM/AC-for Overcoating an Existing System or specification section f) System 6-MCU-for Overcoating an Existing System. This work shall be paid for at the contract lump sum price for CLEANING AND PAINTING STEEL BRIDGE NO. 1, and shall include all Costs for Containment and Disposal of Non-Lead Paint Cleaning Residues according to GBSP 60.
- Protective Coat shall be applied to the entire surface of the deck of the existing Charles J. Miller Road Bridge crossing after patching and to the roadway face of each parapet in accordance with Article 503.19 of The Standard Specifications except that the 14 day minimum concrete curing time shall be replaced with a 72 hour cure for Class PP Concrete Patches. All debris shall be removed from the deck and from the existing deck drains as part of the Deck Cleaning Process and the cost of this work shall be included in the unit price for Protective Coat.

To the best of my knowledge, information and belief, this bridge design is structurally adequate for the design loading shown on the plans. The design is an economical one for the style of structure and complies with the requirements of the current "AASHTO Standard Specifications for Highway Bridges".

Structural Engineer Expires: 11/30/2012  
HRGreen



HRGreen.com  
Illinois Professional Design Firm  
# 184-001322

TOTAL BILL OF MATERIAL

ITEM	UNIT	SUPER	SUB	TOTAL
Concrete Removal	Cu. Yd.	2.5		2.5
Concrete Superstructure	Cu. Yd.	2.1		2.1
Protective Coat	Sq. Yd.	2879.8		2879.8
Reinforcement Bars, Epoxy Coated	Pound	180		180
Neoprene Expansion Joint 4"	Foot	44		44
Neoprene Expansion Joint 6 1/2"	Foot	44.3		44.3
Cleaning and Painting Steel Bridge No. 1	L Sum	1		1
Structural Repair of Concrete (Depth Equal to or Less Than 5 in.)	Sq. Ft.	9		9
Structural Repair of Concrete (Depth Greater Than 5 in.)	Sq. Ft.	66		66
Deck Slab Repair (partial)	Sq. Yd.	3.3		3.3
Polymer Concrete	Cu. Ft.	10.6		10.6

GENERAL PLAN AND ELEVATION  
EB. CHARLES J. MILLER ROAD  
OVER FOX RIVER  
SUPERSTRUCTURE REPAIRS  
STRUCTURE NO. 056-3149 (EXISTING)  
McHENRY COUNTY

DATE: 7/23/12

DESIGNED	SSM
CHECKED	RGD
DRAWN	WJH
CHECKED	RGD

SHEET NO. S-39	F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	3860	09-00372-00-PW	McHENRY	252	162
S-41 SHEETS	CONTRACT NO.			63633	
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT					

FILE NAME: 090727-000000.dwg  
PLOT DATE: 7/23/12  
PLOT TIME: 10:00:00 AM  
PLOT SCALE: 1/8"=1'-0"