

Existing Structure: S.N. 045-0004 built in 1960 as F.A. Route 6, Section 8R-B at Station 200+22.00. In 1986, the railing was replaced, floor drains installed, expansion joints reconstructed, substructure repaired, deck was patched and overlay was placed. In 2006, expansion joints were reconstructed and substructure was repaired. Structure consists of a five span steel beam bridge with 660'-0" back-to-back abutments along the roadway, 63'-8" out-to-out deck width, two-column piers on spread footing and vaulted abutments. Stage construction shall be utilized to maintain one lane of traffic in each direction at all times.

INDEX OF SHEETS

1. General Plan and Elevation
2. Stage Construction Details
3. Superstructure Repair
4. Substructure Repair
5. Drainage Scupper, DS-11
6. Barrier Wall Repair
7. Protective Shield Details

GENERAL NOTES

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.

The protective shield shall not rest upon existing lighting fixtures, conduits or utilities. Any lighting fixtures, conduits or utilities damaged by the Contractor's operation shall be replaced or repaired by the Contractor at their expense. See Roadway Plans for maintenance of traffic details.

SCOPE OF WORK

1. Repair deck slab.
2. Repair concrete barrier wall between Raymond St. and Fox River.
3. Remove and replace north west abutment vault door.
4. Remove and replace the drainage scupper assembly for the east bound lanes at the east abutment.
5. Provide permanent protective shield in spans over railroads and bike path.
6. Clean the gutter along the east abutment.

DESIGN STRESSES

FIELD UNITS

NEW CONSTRUCTION	EXISTING CONSTRUCTION
$f'_c = 3,500$ psi	$f'_c = 1,400$ psi (Superstructure)
$f_y = 60,000$ psi (Reinforcement)	$f'_c = 800$ psi (Substructure)
$f_y = 36,000$ psi (Structural Steel)	$f_s = 20,000$ psi (Reinforcement)
	$f_s = 18,000$ psi (Structural Steel)

LOADING HS-20

(Original Construction)

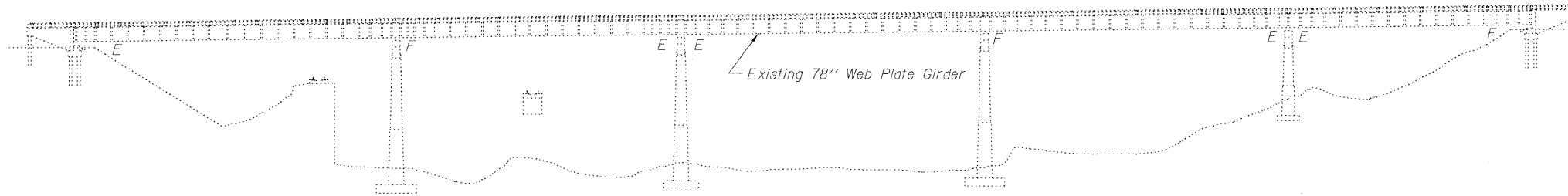
DESIGN SPECIFICATIONS

(New Construction)
2002 AASHTO "Standard Specifications for Highway Bridges"

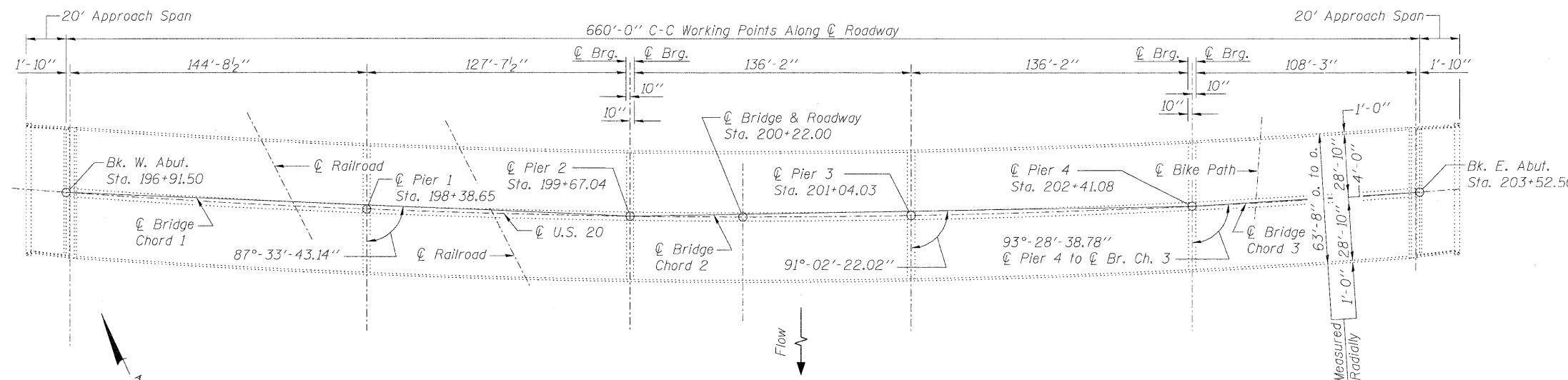


Michael J. Haley 3-24-2011
Date

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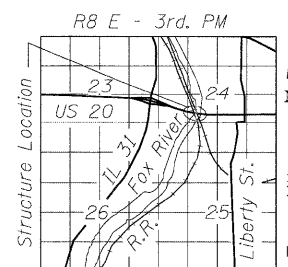
ELEVATION



PLAN

TOTAL BILL OF MATERIAL

ITEM	UNIT	SUPER	SUB	TOTAL
Protective Shield (Permanent)	Sq. Yd.	468	-	468
Gutters To Be Cleaned	Foot	-	70	70
Drainage Scuppers, DS-11	Each	1	-	1
Deck Slab Repair (Full Depth, Type II)	Sq. Yd.	25.1	-	25.1
Deck Slab Repair (Partial)	Sq. Yd.	246.9	-	246.9
Structural Repair of Concrete (Depth greater than 5 in.)	Sq. Ft.	73	-	73
Structural Repair of Concrete (Depth equal to or less than 5 in.)	Sq. Ft.	10	-	10
Furnish and Install Access Door	Each	-	1	1



LOCATION SKETCH

Railroad Protective Liability Insurance is required. See Special Provisions

**GENERAL PLAN AND ELEVATION
US 20 BY-PASS OVER FOX RIVER
FAP RTE 345 - SECTION 8R-1-RS-4
KANE COUNTY
STATION 200+22.00
STRUCTURE NO. 045-0004**