

Existing Structure: S.N. 045-0017 built in 1959 as F.A. Route 6, Section 8R-HB-3 at Station 176+58.26. In 1975, wingwall parapets were removed and replaced. In 1987, deck was patched, joints were reconstructed and longitudinal joint was removed. In 2004, sidewalks and bridge rail were removed and replaced and beams were repaired and straightened. Structure consists of a simple span steel WF beam bridge with 70'-10" back-to-back abutments, out-to-out deck width of 70'-0", and closed abutments on spread footings. Stage construction shall be utilized to maintain one lane of traffic in each direction at all times.

SCOPE OF WORK

1. Replace the preformed joint seals at the abutment joints with Silicone Joint Sealer.
2. Repair deck slab.
3. Provide permanent protective shield over traffic lanes.
4. Resurface approaches.

DESIGN STRESSES

FIELD UNITS (New Const.)
 $f'_c = 3,500$ psi
 $f_y = 60,000$ psi (Reinforcement)

FIELD UNITS (Existing)
 $f_c = 1,400$ psi (Superstructure)
 $f_c = 1,000$ psi (Substructure)
 $f_s = 20,000$ psi (Reinforcement)
 $f_s = 18,000$ psi (Structural Steel)

LOADING HS 20
 (Original Construction)

INDEX OF SHEETS

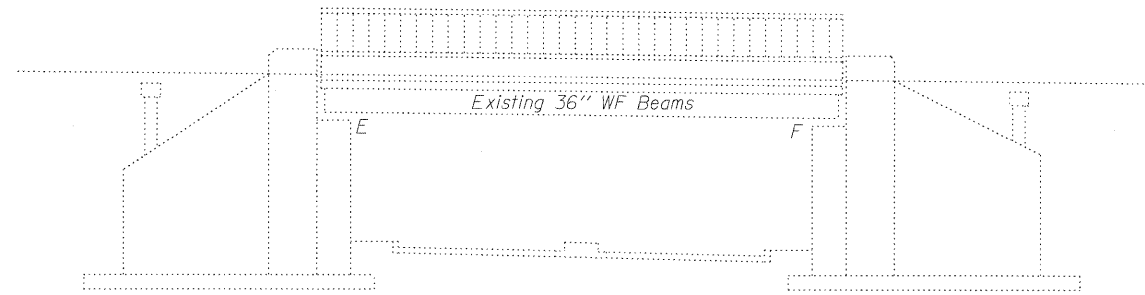
1. General Plan and Elevation
2. Stage Construction Details
3. Superstructure Repair
4. Protective Shield Details

DESIGN SPECIFICATIONS

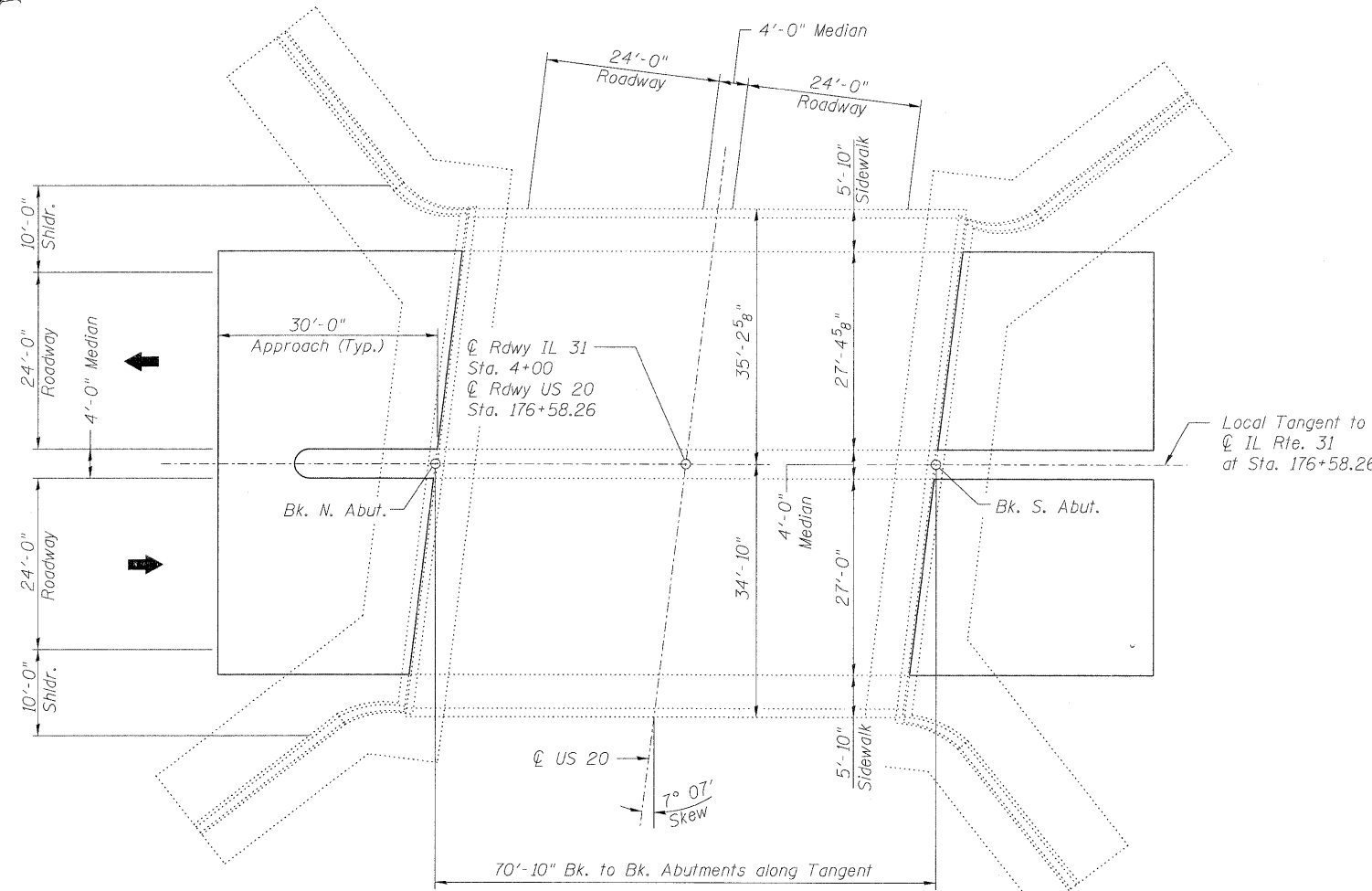
(New Construction)
 2002 AASHTO "Standard Specifications for Highway Bridges"

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.



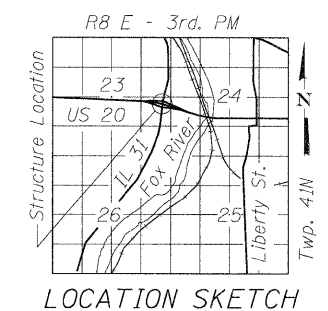
ELEVATION



PLAN

TOTAL BILL OF MATERIAL

ITEM	UNIT	SUPER	SUB	TOTAL
Bituminous Materials (Prime Coat)	Ton	0.1	-	0.1
Hot-Mix Asphalt Surface Course, Mix "D", N70, 1 1/2"	Ton	31	-	31
Hot-Mix Asphalt Surface Removal, 1 1/2"	Sq. Yd.	368	-	368
Protective Shield (Permanent)	Sq. Yd.	443	-	443
Silicone Joint Sealer, 1 3/4"	Foot	142	-	142
Deck Slab Repair (Partial)	Sq. Yd.	22.9	-	22.9



LOCATION SKETCH

GENERAL PLAN AND ELEVATION
IL 31 OVER US 20
FAP RTE 345 - SECTION 8R-1-RS-4
KANE COUNTY
STATION 176+58.26
STRUCTURE NO. 045-0017