

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

Existing Structure: S.N. 016-0377 built in 1962 as F.A. Route 61, Section 531-1-B-7 at Station 142+20.00. Structure consists of single span precast prestressed concrete beam bridge with 63'-3" back-to-back abutments span, 210'-0" out-to-out deck width, and closed abutments. In 1971, deck repairs, and overlay placement. In 1991, overlay replacement, deck slab repair, expansion joint replacement, longitudinal joint closures, and parapet retrofit. In 1999, overlay replacement, and substructure repairs were performed. In 2003, substructure repairs were performed.

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.

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

See Roadway plans for maintenance of traffic details.

SCOPE OF WORK

1. Replace P.J.S. with Silicone Joint Sealer at abutment expansion joints.
2. Repair Deck Slab.
3. Repair substructure concrete.
4. Extend deck drains.
5. Apply Concrete Sealer to top of deck surface and top and inside vertical face of parapets.
6. Clean and reseal approach pavement relief joints.

INDEX OF SHEETS

1. General Plan and Elevation
2. Deck Slab Repair
3. Abutment Repair
4. Joint and Deck Drain Details

TOTAL BILL OF MATERIAL

Item	Unit	Super	Sub	Total
Concrete Sealer	Sq. Ft.	14156	-	14156
Silicone Joint Sealer, 1"	Foot	209	-	209
Silicone Joint Sealer, 1 3/4"	Foot	209	-	209
Structural Repair of Concrete (Depth equal to or less than 5 in.)	Sq. Ft.	-	7	7
Deck Slab Repair (Partial)	Sq. Yd.	3.9	-	3.9
Deck Slab Repair (Full Depth, Type II)	Sq. Yd.	4.9	-	4.9
Cleaning and Painting Exposed Rebar	Sq. Ft.	92	-	92
Epoxy Crack Injection	Foot	-	194	194
Floor Drain Extension	Each	18	-	18
Clean and Reseal Relief Joint	Foot	394	-	394

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)
 $f_s = 20,000$ psi (Structural Steel)

PRECAST PRESTRESSED UNITS (Existing)

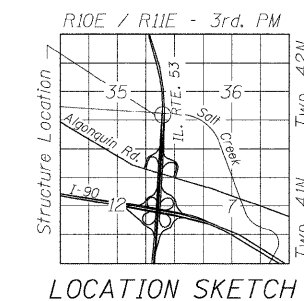
$f'_c = 5,000$ psi
 $f'_{ci} = 4,000$ psi
 $f'_s = 248,000$ psi (Strands)
 $f_{si} = 173,600$ psi (Strands)

DESIGN SPECIFICATIONS

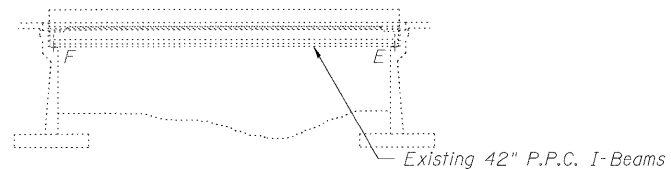
(New Construction)
2002 AASHTO "Standard Specifications for Highway Bridges"

LOADING HS-20 & ALT.

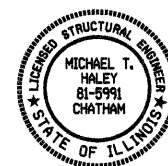
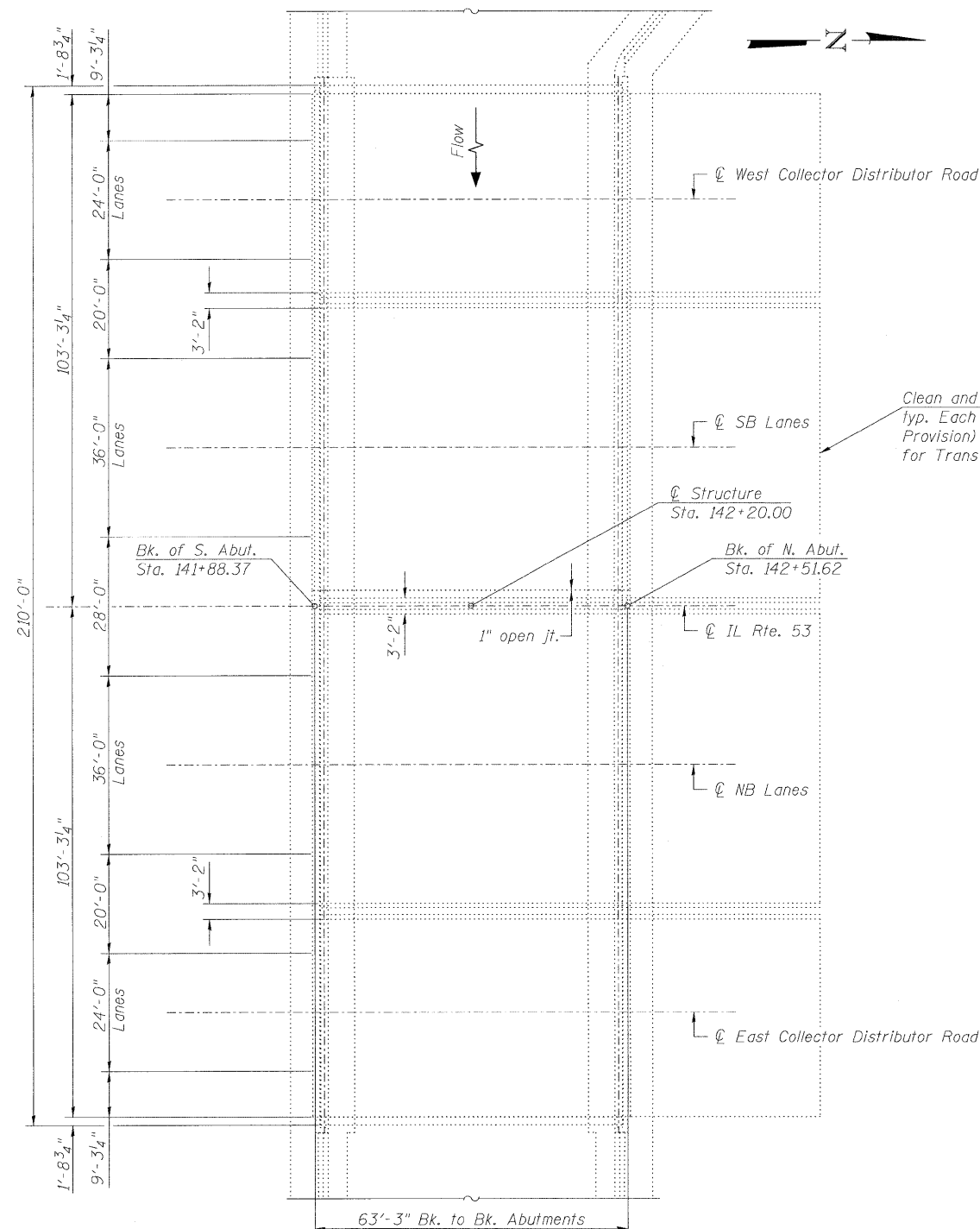
(Original Construction)



ELEVATION



PLAN



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State of Illinois No. 81-5991
Expires 11/30/2010

GENERAL PLAN AND ELEVATION
IL ROUTE 53 OVER SALT CREEK
F.A.I. 290-SEC (531-3.1,0305-302K)RS-5
COOK COUNTY
STATION 142+20.00
STRUCTURE NO. 016-0377

	SHEET NO. 1	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
	4 SHEETS	290	(531-3.1,0305-302K)RS-5	COOK	314	292	
		CONTRACT NO. 60138					
		FED. ROAD DIST. NO. _ ILLINOIS		FED. AID PROJECT			