Existing Structure:
Structure No. 016-0386 was built in 1953 at Sta. 92+30.70 as S.B.I. Route 53 (F.A. Route 62), Section 539-BY. In 1975, under Section 1974-127-N, the sidewalks were removed and roadway was widened. Existing structure is a single span reinforced concrete slab bridge on closed abutments, measuring 30'-0" bk. to bk. abutments, 69'-9" out to out deck with a left ahead skew of 29°-32'. Stage construction shall be utilized to maintain traffic during construction.

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DESIGN SPECIFICATIONS

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

DESIGN STRESSES

FIELD UNITS

Existing Construction
fc = 1,400 psi (Super)
fc = 800 psi (Sub)
fs = 20,000 psi (Reinforcement)

New Construction
f'c = 3,500 psi
fy = 60,000 psi (Reinforcement)

LOADING HS 20-44

(Original Construction)

SCOPE OF WORK

1. Remove existing HMA overlay
2. Hydroscarify ½" slab surface
3. Remove and replace concrete median and concrete below median within the limits of the bridge
4. Place 2¼" latex concrete overlay on deck
5. Repair abutment concrete
6. Repair corrugated metal pipe at the east abutment

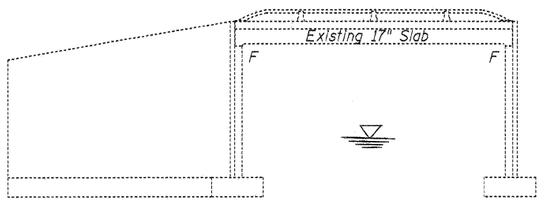
INDEX OF SHEETS

GENERAL NOTES

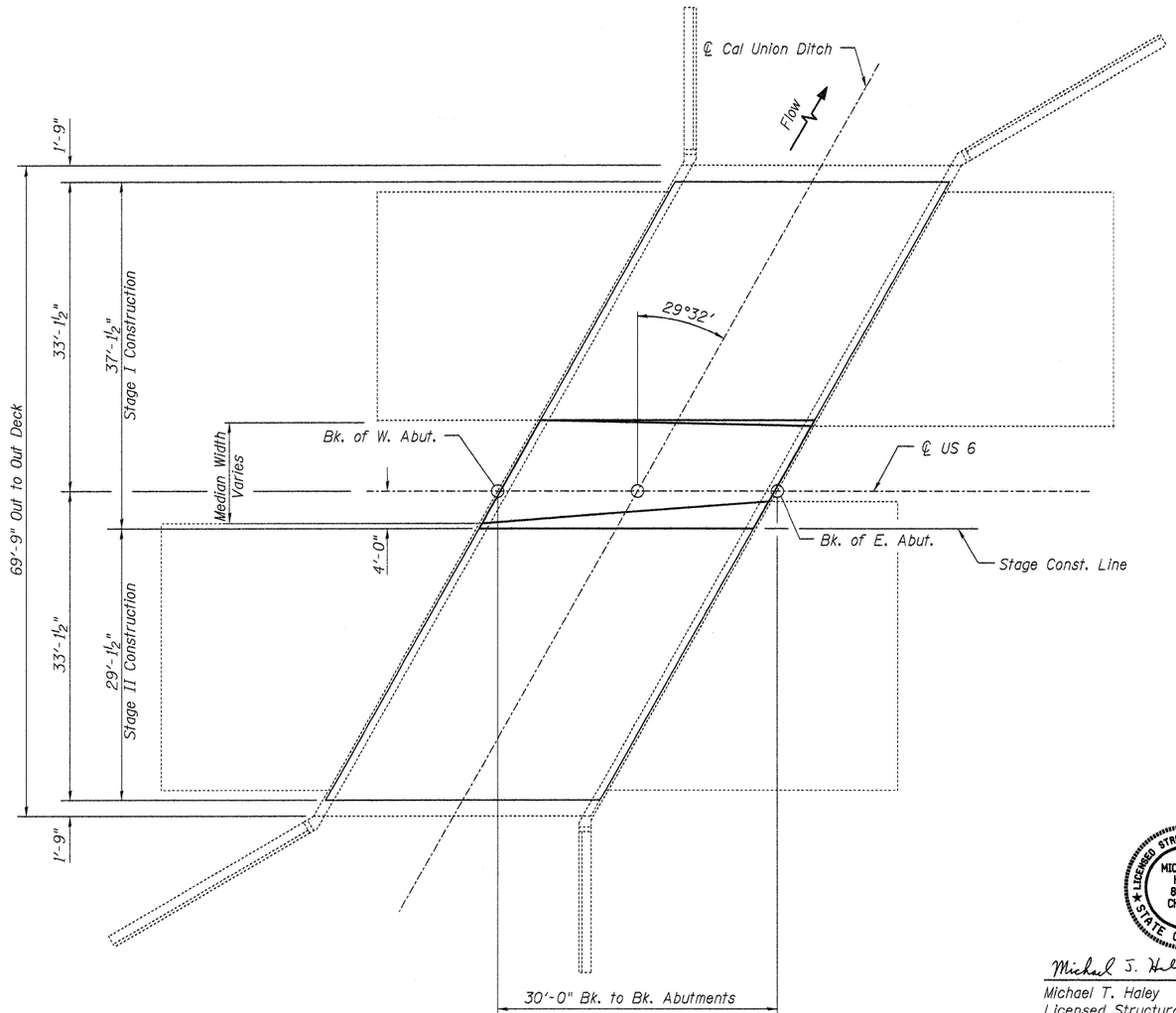
Reinforcement bars shall conform to the requirements of ASTM A 706 Gr 60. See Special Provisions.

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.



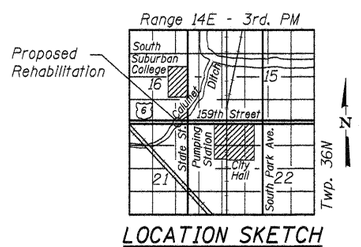
ELEVATION



PLAN

TOTAL BILL OF MATERIAL

ITEM	UNIT	SUPER	SUB	TOTAL
Hot-Mix Asphalt Surface Removal (Deck)	Sq. Yd.	180	-	180
Concrete Removal	Cu. Yd.	21.2	-	21.2
Concrete Superstructure	Cu. Yd.	21.7	-	21.7
Bridge Deck Grooving	Sq. Yd.	172	-	172
Protective Coat	Sq. Yd.	218	-	218
Reinforcement Bars, Epoxy Coated	Pound	4,880	-	4,880
Polymer Concrete	Cu. Ft.	6.1	-	6.1
Bridge Deck Latex Concrete Overlay, 2¼"	Sq. Yd.	182	-	182
Structural Repair Concrete (Depth Greater Than 5 in.)	Sq. Ft.	-	14	14
Structural Repair Concrete (Depth Equal To or Less Than 5 in)	Sq. Ft.	-	80	80
Insertion Culvert Liner (Special)	Foot	-	50	50
Bridge Deck Hydro-scarification ½"	Sq. Yd.	186	-	186



LOCATION SKETCH

LICENSED STRUCTURAL ENGINEER
MICHAEL T. HALEY
81-5991
CHATHAM
STATE OF ILLINOIS

Michael J. Haley 2/1/10
Michael T. Haley Date
Licensed Structural Engineer
State of Illinois No. 81-5991
Expires 11/30/2010

GENERAL PLAN AND ELEVATION
US RTE 6 (159th ST.) OVER CAL UNION DITCH
F.A.P. RTE. 351 SECTION 539 B-I
COOK COUNTY
STRUCTURE NO. 016-0386

LIN ENGINEERING, LTD.
Consulting Engineers
Chatham, Illinois

Designed By: TBP | Checked By: MTH | Drawn By: TBP
Date: 1/2010 | Files: 016-0386.dgn

SHEET NO. 1
6 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
351	539 B-I	COOK	21	11
		CONTRACT NO. 60J36		
	ILLINOIS FED. AID PROJECT			