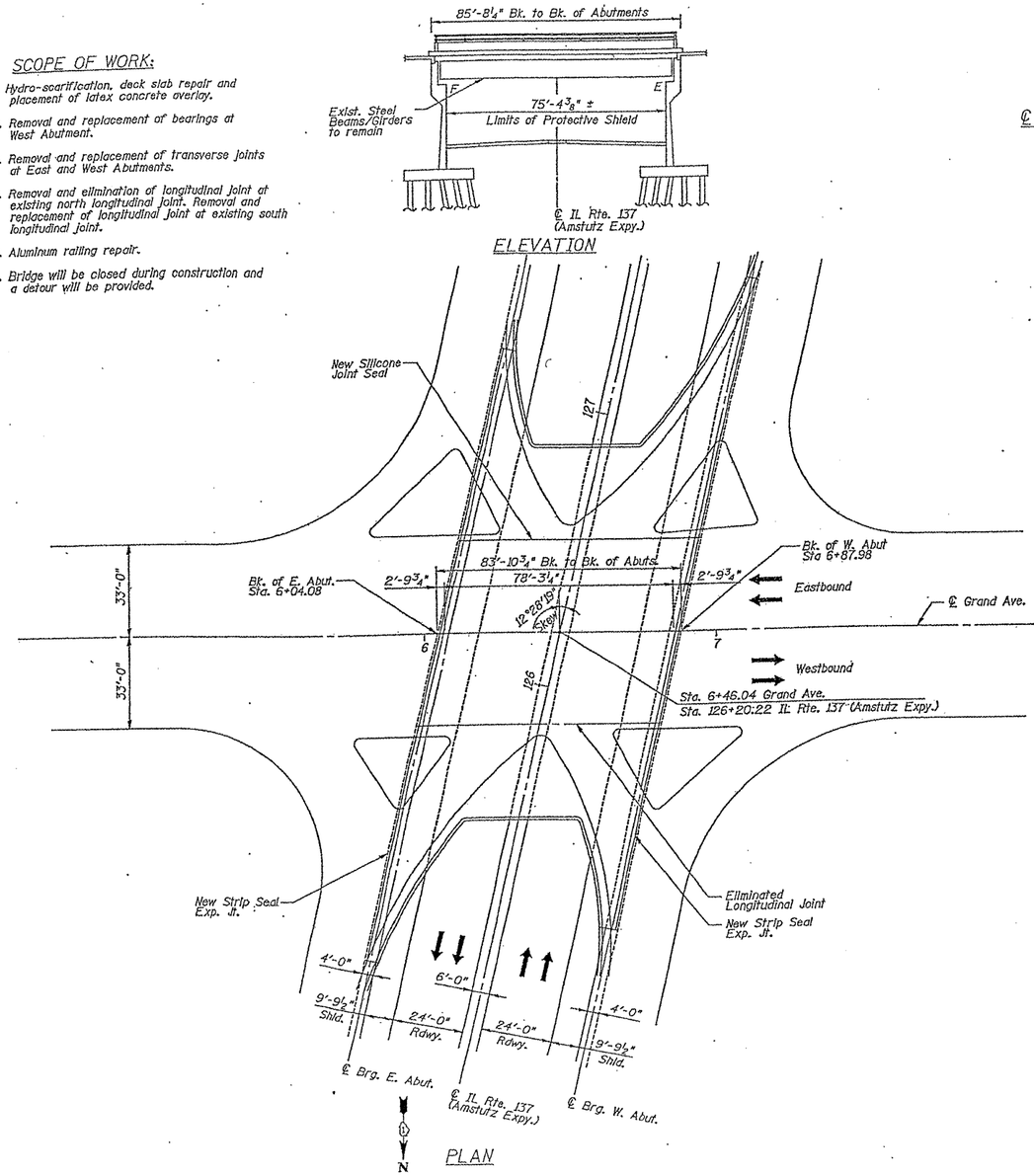
ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NUMBER
VARIOUS	2009-079 BP	COOK & LAKE	26	13

Contract 60I16

SCOPE OF WORK:

1. Hydro-scarification, deck slab repair and placement of latex concrete overlay.
2. Removal and replacement of bearings at West Abutment.
3. Removal and replacement of transverse joints at East and West Abutments.
4. Removal and elimination of longitudinal joint at existing north longitudinal joint. Removal and replacement of longitudinal joint at existing south longitudinal joint.
5. Aluminum railing repair.
6. Bridge will be closed during construction and a detour will be provided.



DESIGN SPECIFICATIONS

AASHTO 17th Edition, 2002

℄ IL RTE. 137 (AMSTUTZ EXPY.) CURVE DATA

P.I. = 129+25.08
Δ = 18°20'36"
D = 1°00'00"
R = 5729.58'
T = 925.08'
L = 1834.34'
E = 74.20'
S.E. = 0.03 ft/ft.

DESIGN STRESSES

Field Units

f'_c = 3,500 psi
f_y = 60,000 psi (Reinforcement)

GENERAL NOTES

Fasteners shall be AASHTO M164 Type 1 mechanically galvanized bolts. Bolts ¾" ϕ, holes $^{13}/_{16}$" ϕ, unless otherwise noted.

All structural steel shall be AASHTO M270 Grade 36.

No field welding is permitted except as specified in the contract documents.

Reinforcement bars shall conform to the requirements of ASTM A706 Gr 60 (IL Modified). See Special Provisions.

Reinforcement bars designated (E) shall be epoxy coated.

Prior to pouring the new concrete deck, all heavy or loose rust, loose mill scale, and other loose or potentially detrimental foreign material shall be removed from the surfaces in contact with concrete. Tightly adhered paint may remain unless otherwise noted. Removal shall be accomplished by methods that will not damage the steel and the cost will be included in the pay item covering removal of the existing concrete.

As directed by the Engineer, existing construction accessories welded to the top flange of beams and girders shall be removed. The weld areas shall be ground flush and inspected for cracks using magnetic particle testing (MT) or dye penetrant testing (PT) by an individual acceptable to the Engineer. Any cracks that cannot be removed by grinding ¼ in. deep shall be identified and reported to the Bureau of Bridges and Structures for further disposition. The cost of removing welded accessories, grinding and inspecting weld areas and grinding cracks will be paid for according to Article 109.04 of the Standard Specifications.

Plan dimensions and details relative to existing plans are subject to routine variations. The Contractor shall field verify existing dimensions and details affecting new construction and make necessary approved adjustments prior to construction or ordering 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.

Cleaning and field painting of structural steel shall be done under a separate painting contract.

The existing structural steel coating contains lead. The Contractor shall take appropriate precautions to deal with the presence of lead on this project.

Joint openings shall be adjusted according to Article 520.04 of the Standard Specifications when the deck is poured at an ambient temperature other than 50°F.

All structural steel at expansion joints shall be shop painted with the inorganic zinc rich primer per AASHTO M300, Type 1. Cost included with Preformed Joint Strip Seal.

Areas of deck repairs shown are estimated. The Engineer shall show actual locations of deck repairs on As-Built Plans.

All new fasteners shall be high strength bolts. Holes shall be subpunched or subdrilled $^{13}/_{16}$" dia. and reamed in the field to $^{15}/_{16}$" dia. for ¾" dia. bolts, unless otherwise noted.

Existing reinforcement bars extending into the removal area shall be cleaned, straightened and incorporated into the new construction. Any reinforcement bars that are damaged during concrete removal shall be replaced with an approved bar splicer or anchorage system. Cost included with Concrete Removal.

TOTAL BILL OF MATERIAL

ITEM	UNIT	QUANTITY
CONCRETE REMOVAL	CU. YD.	120.0
PROTECTIVE SHIELD	SQ. YD.	1,362
CONCRETE SUPERSTRUCTURE	CU. YD.	132.0
BRIDGE DECK GROOVING	SQ. YD.	1,130
PROTECTIVE COAT	SQ. YD.	1,630
FURNISHING AND ERECTING STRUCTURAL STEEL	POUND	5,880
JACK AND REMOVE EXISTING BEARINGS	EACH	27
REINFORCEMENT BARS, EPOXY COATED	POUND	15,980
PREFORMED JOINT STRIP SEAL	FOOT	488
ELASTOMERIC BEARING ASSEMBLY, TYPE I	EACH	27
ANCHOR BOLTS, 1"	EACH	50
ANCHOR BOLTS, 1½"	EACH	4
POLYMER CONCRETE	CU. FT.	14
SILICONE JOINT SEALER, 1"	FOOT	83
BRIDGE DECK LATEX CONCRETE OVERLAY, 2½"	SQ. YD.	1,058
STRUCTURAL REPAIR OF CONCRETE (DEPTH >5")	SQ. FT.	80
STRUCTURAL REPAIR OF CONCRETE (DEPTH=<5")	SQ. FT.	818
BRIDGE DECK HYDRO-SCARIFICATION, ½"	SQ. YD.	1,016
DECK SLAB REPAIR (FULL DEPTH, TYPE I)	SQ. YD.	3
DECK SLAB REPAIR (FULL DEPTH, TYPE II)	SQ. YD.	32
ALUMINUM RAILING, SPECIAL	FOOT	26

FOR INFORMATION ONLY

ILLINOIS DEPARTMENT OF TRANSPORTATION

EXISTING BRIDGE PLAN
SN 049-0118
(LOC. 2)