

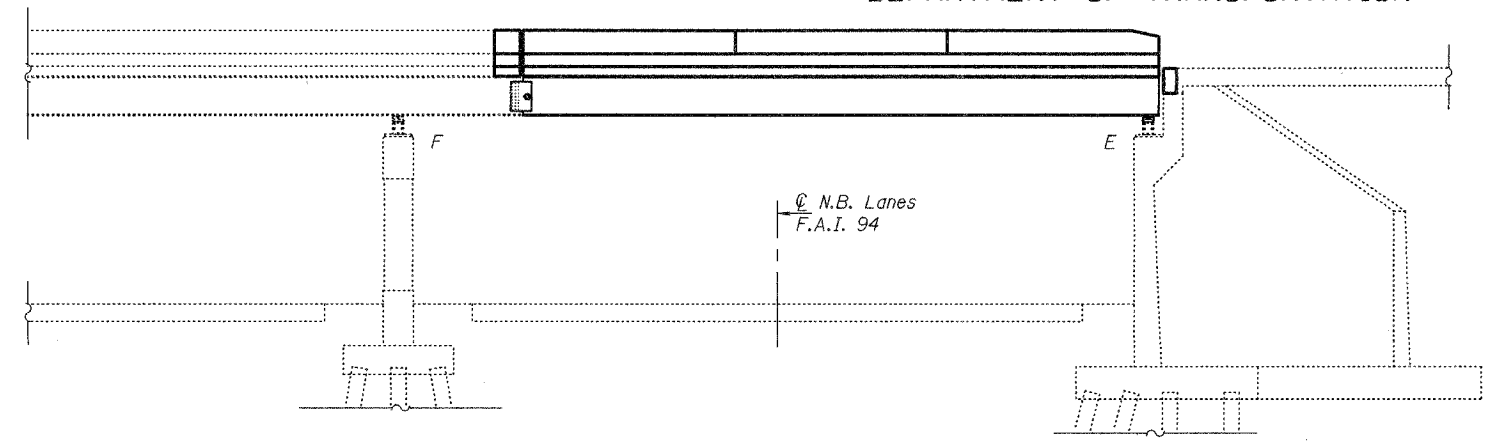
STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	SHEET NO. 1 15 SHEETS
FAI 94	*	COOK	30	4	
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT			

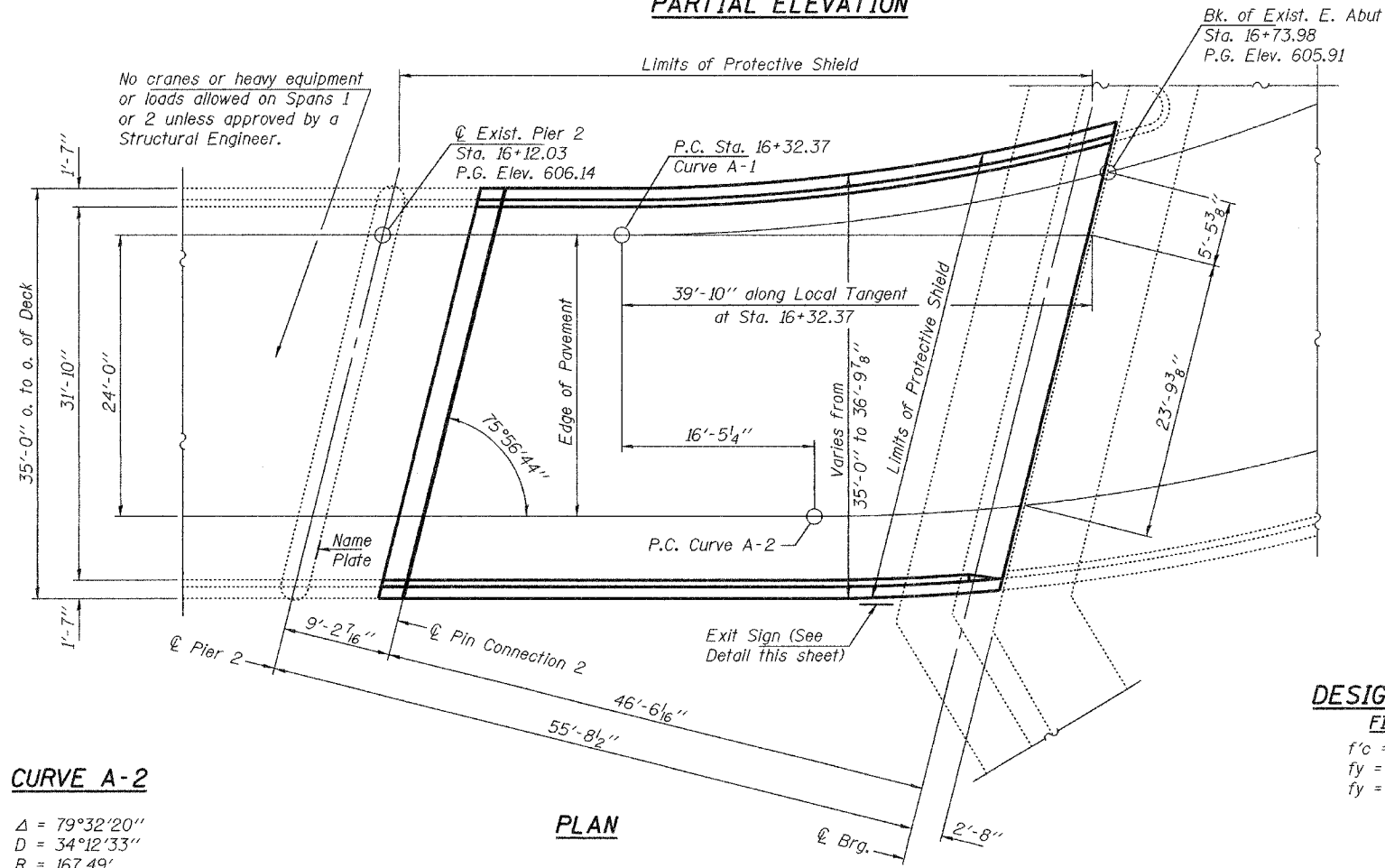
Contract Number: 60E12  
\* 1111-700 HB-BR

**GENERAL NOTES**

All structural steel shall conform to AASHTO Classification M-270 Gr. 36, unless otherwise noted.  
Fasteners shall be high strength bolts. Bolts 3/4"φ, open holes 13/16"φ, unless otherwise noted.  
Reinforcement bars shall conform to the requirements of ASTM A 706 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.  
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, except the pin diameters, 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 based upon the unit price bid for the work.  
Cost of removal and re-installation of all members necessary to complete the work as detailed on the plans and as specified in the Special Provisions shall be included with Furnishing and Erecting Structural Steel.  
The Inorganic Zinc Rich Primer / Acrylic / Acrylic Paint System shall be used for shop and field painting of new structural steel except where otherwise noted. The color of the final finish coat shall be Interstate Green, Munsell No. 7.5 4/8. See Special Provision "Cleaning and Painting New Metal Structures". Cost included with Furnishing and Erecting Structural Steel.  
All existing steel surfaces behind link plates shall be cleaned and primed before installation of new link plates. Cost included with Furnishing and Erecting Structural Steel.  
Existing structural steel that will be in contact with new structural steel shall be cleaned and painted prior to erection as required by the Special Provision "Cleaning and Painting Contact Surface Areas of Existing Steel Structures". Cost included with Furnishing and Erecting Structural Steel.  
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.  
Diaphragm connection holes shall be 15/16"φ for 3/4"φ bolts. Two hardened washers shall be required at diaphragm connections.  
The Pins and Link Plates shall conform to the minimum Charpy V-Notch Toughness of 25 ft.-lbs. at 40° F.  
The pins, link plates, bushings, nuts, and silicone sealant are the items included in Pin and Link Plate Replacement.  
The existing structural steel coating contains lead. The Contractor shall take appropriate precautions to deal with the presence of lead on this project.



**PARTIAL ELEVATION**



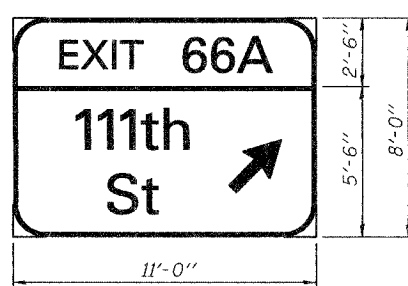
**PLAN**

**DESIGN STRESSES**

**FIELD UNITS**  
f'c = 3,500 psi  
fy = 60,000 psi (Reinf.)  
fy = 36,000 psi

**TOTAL BILL OF MATERIAL**

ITEM	UNIT	QUANTITY
** Removal of Existing Concrete Deck	Each	1
Concrete Superstructure	Cu. Yd.	55.8
* Structural Steel Removal	Pound	9720
Furnishing and Erecting Structural Steel	Pound	9720
Beam Repositioning	Each	4
Beam Straightening	L.S.	1
Pin and Link Plate Replacement	Each	5
Elastomeric Bearing Assembly Type I	Each	5
Preformed Joint Strip Seal	Foot	75
Reinforcement Bars, Epoxy Coated	Pound	13,830
Stud Shear Connectors	Each	375
Bridge Deck Grooving	Sq. Yd.	167
Protective Coat	Sq. Yd.	235.6
Overhead Sign Structure - Bridge Mounted	Foot	13
Protective Shield	Sq. Yd.	205
Sign Panel, Type 3	Sq. Ft.	88



**EXIT SIGN DETAIL**

\* Quantity includes damaged Beam 1 already removed from bridge and stored behind guardrail on F.A.I. 94 North Bound.

\*\* Quantity includes section of deck already removed from bridge and stored behind guardrail on F.A.I. 94 North Bound.

**CURVE A-1**

Δ = 79°32'20"  
D = 35°09'03"  
R = 163.00'  
T = 135.66'  
L = 225.30'  
E = 49.07'  
P.C. Sta. 16+32.37

**CURVE A-2**

Δ = 79°32'20"  
D = 34°12'33"  
R = 167.49'  
T = 139.39'  
L = 232.51'  
E = 50.42'

DESIGNED	Adrian J. Holloway
CHECKED	Vickie H. Volitz
DRAWN	Steffen
CHECKED	ATH VHV

MAY 16, 2008  
EXAMINED *Carl Pussey*  
ENGINEER OF STRUCTURAL SERVICES  
PASSED *Ralph E. Quinn*  
ENGINEER OF BRIDGES AND STRUCTURES



EXPIRES 11-30-2008

**PLAN & ELEVATION**  
**115th ST. OVER FAI RT. 94**  
**COOK COUNTY**  
**SN 016-2042**