

BENCHMARK: Chiseled Square on top of Northeast Wingwall.
 SN 044-0014, Station 730+31.33, 17' left, Elevation 372.71

EXISTING STRUCTURE: SN 044-0014 was originally built in 1930 as S.B.I. Route 146, Section 107A with six steel I-Beam Sections and one truss span. In 1975, the truss span was replaced with a two span 21" PPC Deck Beam superstructure and new pier. The structure was also widened with additional steel beams and a new concrete deck was placed on the existing spans. Approach pavements were added to the abutments. The substructure consists of concrete pile bents and two solid concrete piers on footings. The back-to-back abutments length is 385'-2 1/2"; the out-to-out width is 33'-0". The existing PPC deck beam superstructure shall be removed and replaced using stage construction to maintain traffic.

No Salvage.

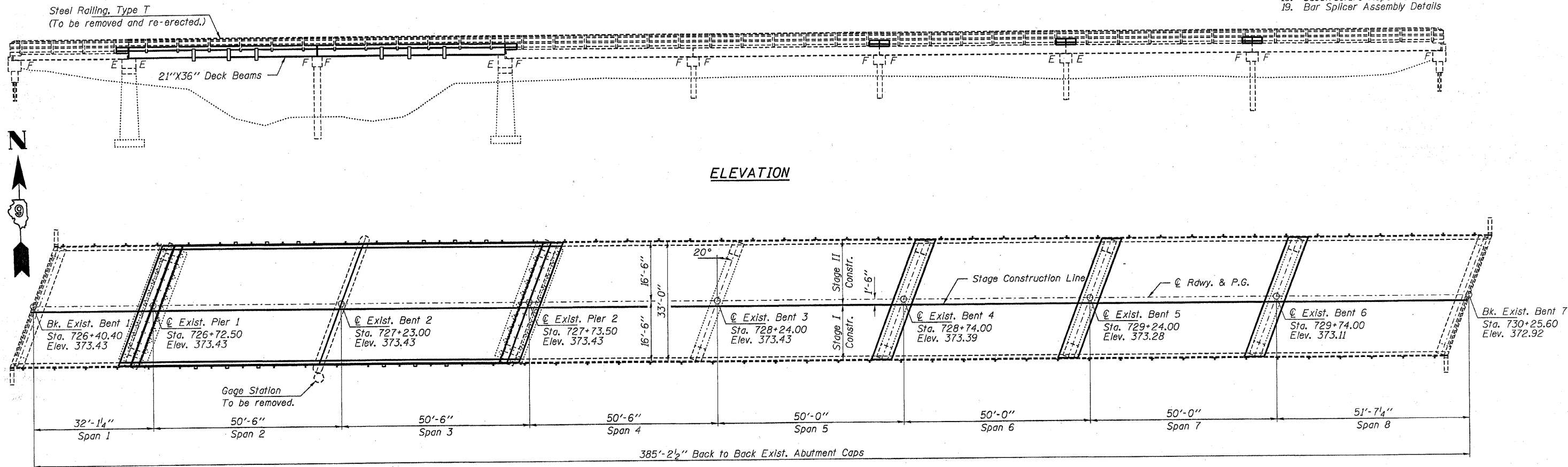
STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	SHEET	SHEET NO.
F.A.P. 885	107BR-1	Johnson	94	22
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT		

Contract #78030

INDEX OF STRUCTURE SHEETS

1. General Plan & Elevation
2. General Details
3. Stage Construction Details
4. Temporary Concrete Barrier For Stage Construction
5. Superstructure Spans 2 & 3
- 6.-9. Superstructure Details
- 10.-11. Deck Slab Repair
12. Painting Plan
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14. Strip Seal Expansion Joint
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18. Substructure Repair Details
19. Bar Splicer Assembly Details



DESIGN SPECIFICATIONS

2007 AASHTO LRFD Bridge Design Specifications

LOADING HL-93 (New Construction)

No future wearing surface allowed

DESIGN STRESSES

FIELD UNITS

f'c = 3,500 psi
 fy = 60,000 psi (Reinf.)

PRECAST PRESTRESSED UNITS

f'c = 6,000 psi
 f'ci = 5,000 psi
 f's = 270,000 psi (1/2" low lax. strands)
 f'si = 201,960 psi (1/2" low lax. strands)
 fy = 60,000 psi (Reinf.)

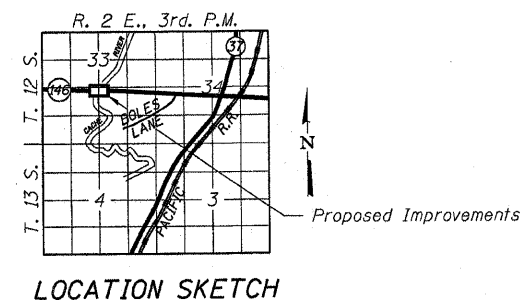
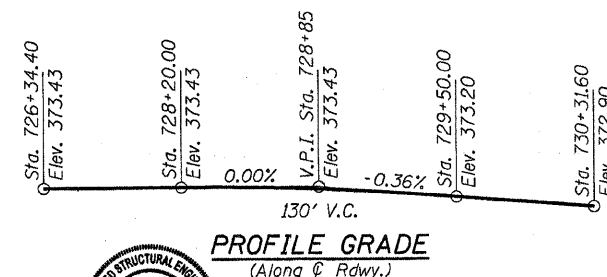
SCOPE OF WORK

1. Remove existing H.M.A. wearing surface on the entire structure.
2. Remove existing Span 2 & Span 3 superstructure and corresponding railing.
3. Repair superstructure and substructure as specified.
4. Replace spans 2 and 3 with new PPC deck beam superstructure and replace existing steel railing.
5. Replace expansion joints with new strip seal expansion joints.
6. Place new Waterproofing Membrane System & H.M.A. wearing surface on entire structure.
7. Clean and Paint beam ends within 6' of expansion joints.

APPROVED
 FOR STRUCTURAL ADEQUACY ONLY

Ralph E. Anderson
 ENGINEER OF BRIDGES AND STRUCTURES

Michael D. Ciura
 ILLINOIS STRUCTURAL NO. 081-5984



4-24-08
 Expires 11-30-08

HAMPTON, LENZINI & RENWICK, INC.
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ELGIN • SPRINGFIELD

PROJECT NUMBER: 12-52-0007-1 DATE: 04/02/08
 DESIGNED: S.M.S. CHECKED: M.D.C. DRAWN: D.T.M.

GENERAL PLAN AND ELEVATION
 IL. ROUTE 146 OVER CACHE RIVER
 F.A.P. ROUTE 885 / SECTION 107BR-1
 JOHNSON COUNTY
 STATION 727+23.00
 STRUCTURE NO. 044-0014