

BENCHMARK: Chiseled Square on top of Pier.
 SN 035-0001, Station 927+60, 17' right, Elevation 355.23

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

EXISTING STRUCTURE: SN 035-0001 was originally built in 1935 as S.B.I. Route 140, Section 115AC. In 1980, the superstructure was replaced and widened, a pier was added, and precast concrete bridge slabs were utilized to widen the approaches. The superstructure consists of two 21" deck beam simple spans. The substructure consists of two reinforced concrete closed abutments on timber piles and a pile bent pier. The back-to-back abutments length is 82'-11"; the out-to-out width is 33'-0". The existing superstructure, approach pavements, and approach shoulder bridge slabs shall be removed and replaced using stage construction to maintain traffic.

Salvage: The existing steel beam shoring system shall be salvaged. See Special Provision.

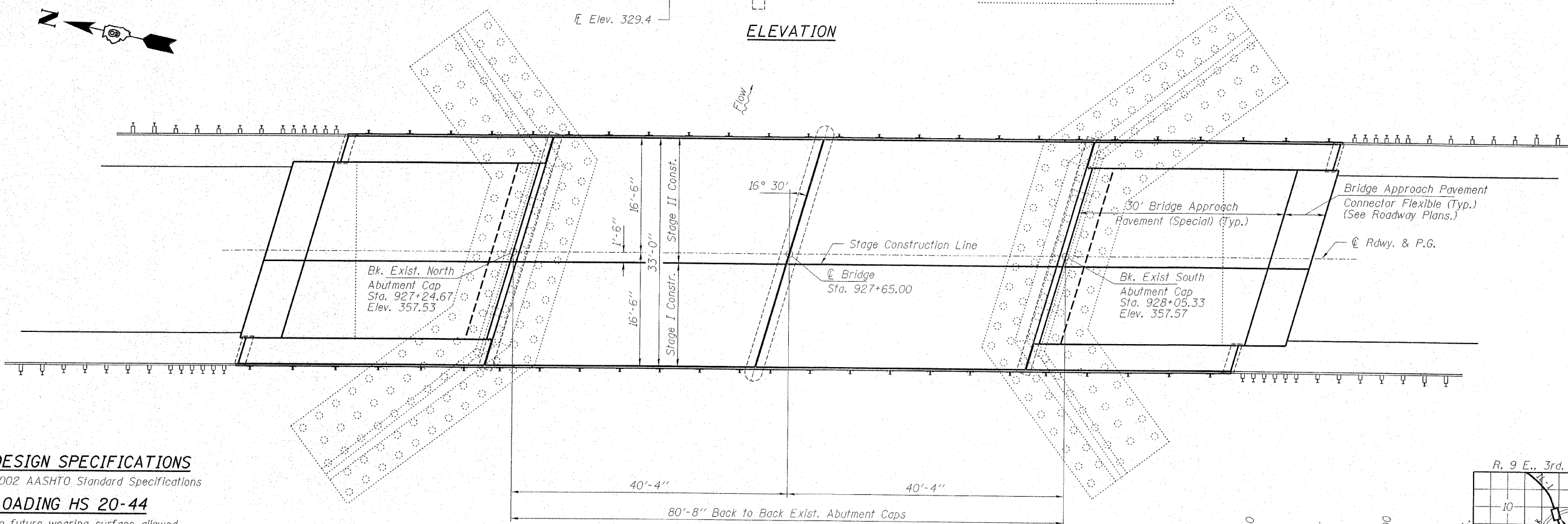
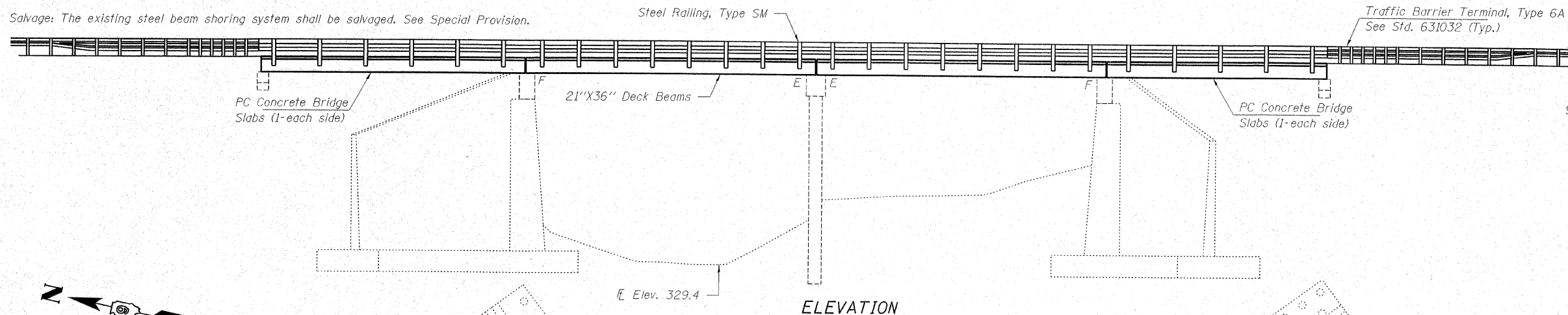
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.P. 782	115BR-1	Hardin	83	20

SHEET NO. 1
16 SHEETS

Contract #78026

INDEX OF STRUCTURE SHEETS

1. General Plan & Elevation
2. General Details
3. Stage Construction Details
4. Steel Railing (Temporary)
5. Temporary Concrete Barrier For Stage Construction
6. Superstructure
- 7-8. Superstructure Details
- 9-10. Approach Details
11. Steel Railing, Type SM with Concrete Wearing Surface
12. Expansion Joint
13. North Abutment
14. South Abutment
15. Pier
16. Bar Splicer Assembly Details



DESIGN SPECIFICATIONS

2002 AASHTO Standard Specifications

LOADING HS 20-44

No future wearing surface allowed

DESIGN STRESSES

FIELD UNITS

$f'_c = 5,000$ psi (Concrete Wearing Surface)
 $f'_c = 3,500$ psi (All Concrete except CWS)
 $f_y = 60,000$ psi (Reinf.)

PRECAST PRESTRESSED UNITS

$f'_c = 5,000$ psi
 $f'_{ci} = 4,000$ psi
 $f'_s = 270,000$ psi ($\frac{1}{2}$ " low lax. strands)
 $f'_{si} = 201,960$ psi ($\frac{1}{2}$ " low lax. strands)
 $f_y = 60,000$ psi (Reinf.)

PRECAST UNITS

$f'_c = 4,500$ psi
 $f_y = 60,000$ psi (Reinf.)

SCOPE OF WORK

1. Remove existing superstructure, approach pavements, and approach shoulder bridge slabs.
2. Repair substructure as specified.
3. Construct a new two span PPC deck beam superstructure with concrete wearing surface, approach pavements and approach shoulders with Precast Concrete Bridge Slabs with concrete wearing surface.

APPROVED
 FOR STRUCTURAL ADEQUACY ONLY

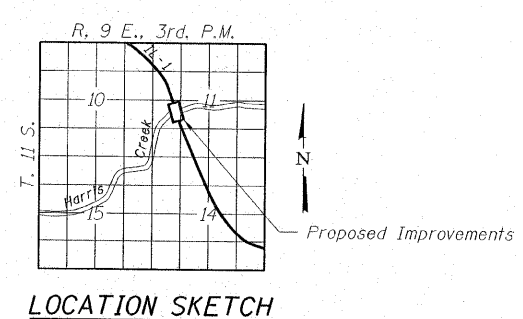
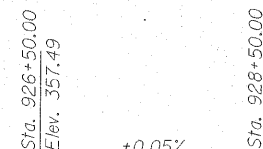
Ralph E. Anderson
 ENGINEER OF BRIDGES AND STRUCTURES



Michael D. Ciura
 ILLINOIS STRUCTURAL NO. 081-5984

1-18-2008

Expires 11-30-08



HAMPTON, LENZINI & RENWICK, INC.
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ELGIN • SPRINGFIELD

PROJECT NUMBER: 12-98-0016-1 DATE: 01/18/08
 DESIGNED: M.D.C. CHECKED: S.M.S. DRAWN: D.T.M.

GENERAL PLAN AND ELEVATION
 IL. ROUTE 1 OVER HARRIS CREEK
 F.A.P. ROUTE 782 / SECTION 115BR-1
 HARDIN COUNTY
 STATION 927+65
 STRUCTURE NO. 035-0001