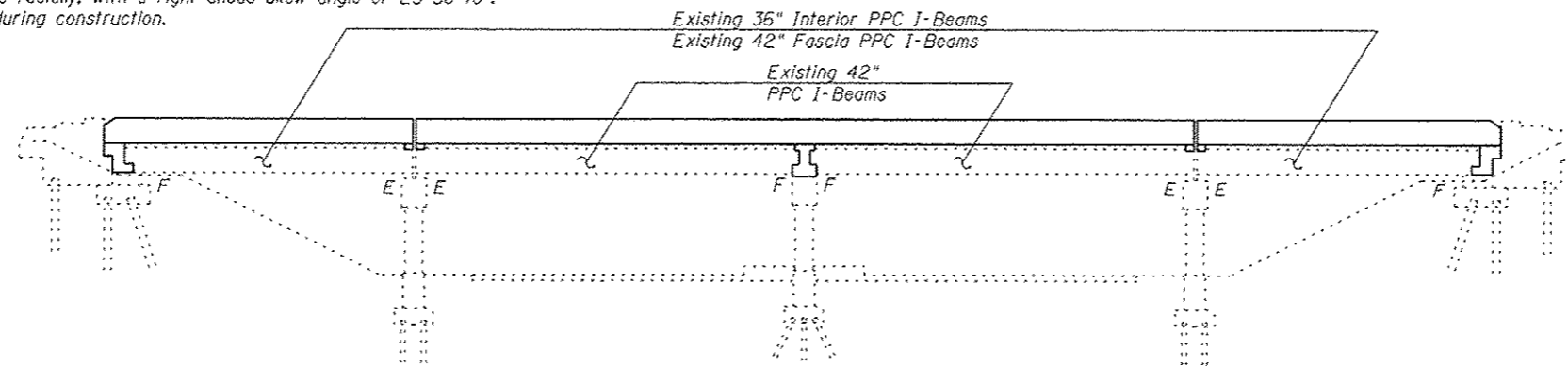


**Existing Structure:**

Structure No. 022-0114, constructed in 1966 as F.A. 7, Section JR-HB. In 1985 under FAU 3545, the deck was scarified and a 2 1/2" plasticized concrete overlay was provided; all existing transverse joints were replaced with a preformed joint seal; the longitudinal joint at the median was closed. Existing structure is a four span bridge utilizing PPC I-Beams, supported by multi-column concrete piers and pile bent abutments, 193'-8" back to back abutments along the C.L. 64'-0" out to out deck measured radially, with a right ahead skew angle of 25°38'40". Stage Construction shall be utilized to maintain traffic during construction.



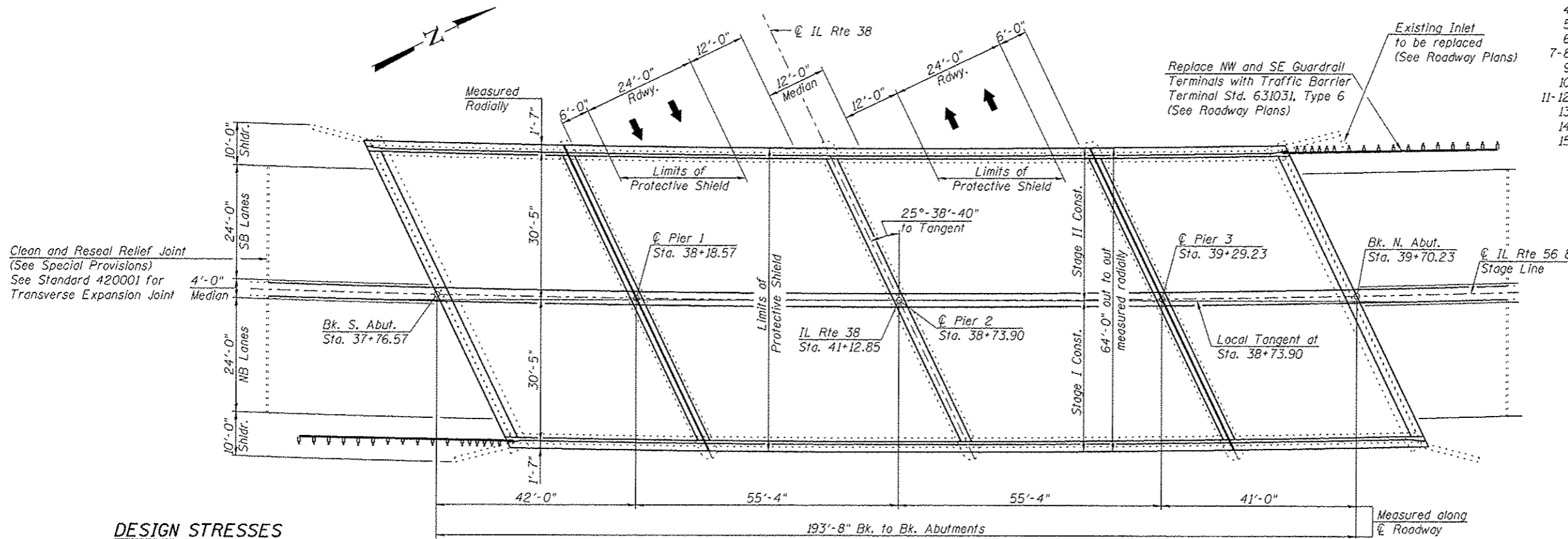
**ELEVATION**

**SCOPE OF WORK**

1. Remove and replace concrete deck adjacent to transverse joints in order to provide preformed joint strip seal joints at piers 1 and 3.
2. Remove concrete adjacent to transverse joints and close joint with a new concrete diaphragm at abutments and pier 2.
3. Remove and reconstruct concrete parapets.
4. Plug or clean deck drains.
5. Scarify existing concrete overlay and replace with new latex concrete overlay.
6. Remove and replace existing asphalt overlay on approach slabs.
7. Repair deck slab and approach slab.
8. Apply Protective Coat to top of new concrete at abutment and pier joints and top and inside vertical face of parapets.
9. Clean and Reseal Relief Joints.
10. Repair deteriorated concrete on piers and slope wall.
11. Jack and remove existing expansion bearings and replace with elastomeric bearings.

**INDEX OF SHEETS**

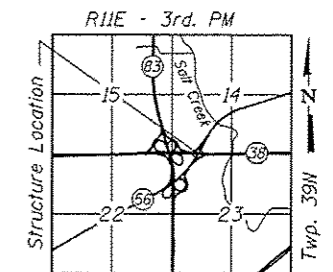
1. General Plan and Elevation
2. General Data
3. Stage Construction Details
4. Temporary Concrete Barrier for Stage Construction
5. Deck Slab Repair
6. Joint Replacement Details at Abutments
- 7-8. Joint Replacement Details at Piers
9. Preformed Joint Strip Seal
10. Parapet Replacement Details
- 11-12. Bearing Details
13. Slope Wall Repair
14. Pier Repair
15. Bar Splicer Assembly and Mechanical Splicer Details



**PLAN**

**EXISTING CURVE DATA**

Δ = 34° 58' 12" (LT)  
 D = 1° 20' 35"  
 R = 4266.15'  
 T = 1343.86'  
 L = 2603.76'  
 E = 206.66'  
 P.C. = Sta. 14+10.83  
 P.T. = Sta. 40+14.53  
 P.I. = Sta. 27+54.69



**LOCATION SKETCH**

**DESIGN STRESSES**

**FIELD UNITS**

**Existing Construction**

f<sub>c</sub> = 1,400 psi  
 f<sub>s</sub> = 20,000 psi (Reinforcement)

**New Construction**

f<sub>c</sub> = 3,500 psi  
 f<sub>y</sub> = 60,000 psi (Reinforcement)  
 f<sub>y</sub> = 36,000 psi (Structural Steel) (M270 Gr. 36)

**PRECAST PRESTRESSED UNITS**

**Existing Construction**

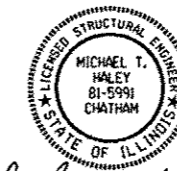
f<sub>c</sub> = 5,000 psi  
 f<sub>ci</sub> = 4,000 psi  
 f<sub>su</sub> = 248,000 psi  
 f<sub>si</sub> = 173,600 psi

**DESIGN SPECIFICATIONS**

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

**LOADING HS 20-44**

(Original Construction)



*Michael T. Haley* 12-4-12  
 Michael T. Haley Date  
 Licensed Structural Engineer  
 State of Illinois No. 81-5991  
 Expires 11/30/2014

**GENERAL PLAN AND ELEVATION**  
**IL RTE 56 OVER IL RTE 38**  
**FAP RTE 347 SECTION JR-HB-1-1**  
**DUPAGE COUNTY**  
**STATION 38+73.90**  
**STRUCTURE NO. 022-0114**



USER NAME *	DESIGNED - PSS
FILE NAME *	CHECKED - TBP
PLOT SCALE *	DRAWN - AJF
PLOT DATE *	CHECKED - MTH

REVISOR	REVISION

**STATE OF ILLINOIS**  
**DEPARTMENT OF TRANSPORTATION**

**GENERAL PLAN AND ELEVATION**  
**STRUCTURE NO. 022-0114**

SHEET NO. 1 OF 15 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
347	JR-HB-1-1	DUPAGE	30	13
CONTRACT NO. 60N77				ILLINOIS FED. AID PROJECT