

Existing Structure:  
 Structure No. 016-1121, constructed in 1963 as FA 61, Section 531-1-HB-8, is a three span hinged continuous steel superstructure with a 7" reinforced concrete deck supported by multi-column piers and stub abutments. In 1971, the deck was patched and overlay was placed. In 1981, longitudinal joint was closed and expansion joint was reconstructed. In 1991, joint and parapet were reconstructed, overlay was replaced and deck was patched. In 2001, the expansion bearings were replaced. The structure is 202'-7 1/4" bk. to bk. abutments measured along north bound bridge tangent at Sta. 193+08.57, 60'-9 1/4" out to out and has a left ahead skew angle of 42°42'58". Stage Construction shall be utilized to maintain traffic during construction.

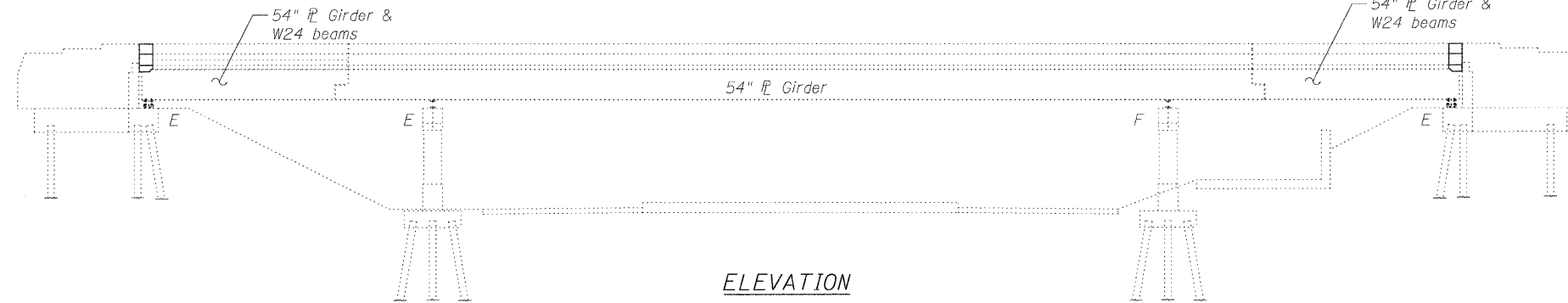
STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

SCOPE OF WORK

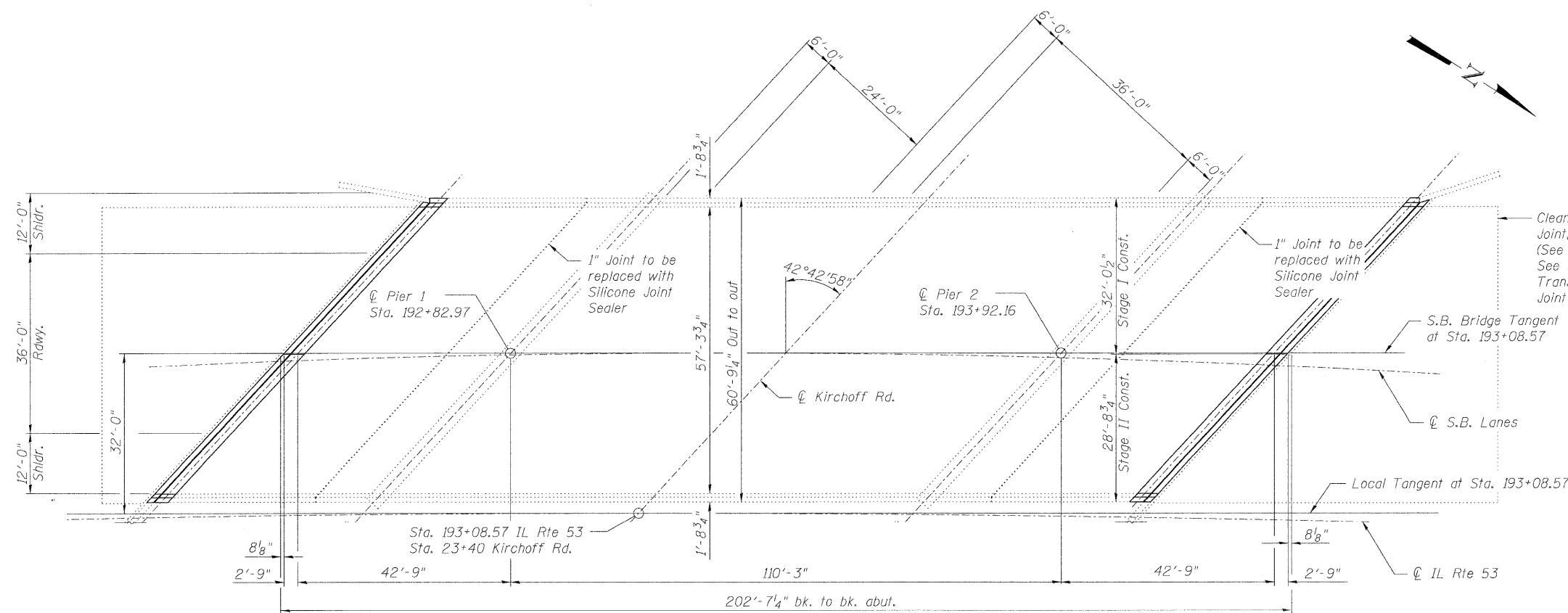
1. Remove and replace concrete deck adjacent to abutment expansion joints.
2. Provide preformed joint strip seal expansion joints at abutments.
3. Apply concrete sealer to top of concrete deck and top and inside vertical face of parapets.
4. Repair deck slab.
5. Clean and paint exposed reinforcement bars on underside deck, and repair parapet.
6. Clean and Reseal Relief Joints.
7. Repair deteriorated concrete on slope wall.

INDEX OF SHEETS

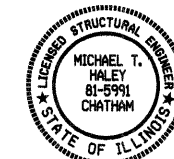
1. General Plan and Elevation
2. General Notes and Details
3. Temporary Concrete Barrier for Stage Construction
4. Superstructure Repair
5. Concrete Removal
6. Concrete Details
7. Slope Wall Repair
8. Preformed Joint Strip Seal
9. Bar Splicer Assembly and Mechanical Splicer Details



ELEVATION



PLAN



Michael J. Haley 2/8/10  
 Michael T. Haley Date  
 Licensed Structural Engineer  
 State of Illinois No. 81-5991  
 Expires 11/30/2010

DESIGN STRESSES

FIELD UNITS

Existing Construction  
 $f_c = 1,400$  psi (Substructure & Superstructure)  
 $f_s = 20,000$  psi (Reinforcement)  
 $f_s = 20,000$  psi (Structural Steel)

New Construction

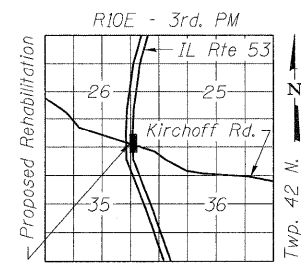
$f_c = 3,500$  psi  
 $f_y = 60,000$  psi (Reinforcement)  
 $f_y = 36,000$  psi (Structural Steel) (M270 Gr. 36)

DESIGN SPECIFICATIONS

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

LOADING HS 20-44

(Original Construction)



LOCATION SKETCH

GENERAL PLAN AND ELEVATION  
 SB IL RTE 53 OVER KIRCHOFF ROAD  
 FAI RTE 290  
 SECTION (531-3.1,0305-302K)RS-5  
 COOK COUNTY  
 STATION 193+08.57  
 STRUCTURE NO. 016-1121

 SHEET NO. 1 9 SHEETS	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	290	(531-3.1,0305-302K)RS-5	COOK	314	233
FED. ROAD DIST. NO. _ ILLINOIS			FED. AID PROJECT		
CONTRACT NO. 60138					