

Existing Structure: S.N. 014-0049 built in 1973 as F.A. 409, Section 14-12B at Sta. 2769+75. The structure is a nine span PPC I-Beam on open stub abutments supported on piles and solid wall hammerhead piers supported on piles.

Proposed Structure Improvements for S.N. 014-0049 include:
 Remove and replace existing expansion joints, plug and extend deck drains as detailed, remove existing aluminum handrail and construct concrete parapet retrofit, PPC I-beam repair, formed concrete repair at abutments and piers, & seal concrete deck.
 Traffic to be maintained utilizing Stage Construction.
 Existing aluminum handrail to be salvaged. (See Bridge Rail Removal Special Provision)

INDEX OF SHEETS

- 1 - General Plan & Elevation
- 2 - Stage Construction Details
- 3 - Temporary Concrete Barrier
- 4 - Existing Superstructure and Drain Details
- 5 - Superstructure Concrete Removal at Abutment Locations
- 6-7 - Superstructure Concrete Removal at Piers 3 & 6
- 8 - Superstructure Details
- 9 - Parapet Details
- 10 - Preformed Joint Strip Seal
- 11 - Abutment Concrete Repair Details
- 12 - Pier Concrete Repair Details
- 13-16 - PPC I-Beam Repair Details
- 17 - Bar Splicer Details

TOTAL BILL OF MATERIAL

ITEM	UNIT	SUPER	SUB	TOTAL
Concrete Removal	Cu. Yd.	81.5		81.5
Bridge Rail Removal	Foot	1172		1172
Concrete Superstructure	Cu. Yd.	83		83
Floor Drain Extension	Each	66		66
Reinforcement Bars, Epoxy Coated	Pound	13820		13820
Bar Splicers	Each	134		134
Relocating Name Plate	Each	1		1
Preformed Joint Strip Seal	Foot	160		160
Concrete Sealer	Sq. Yd.	3045		3045
Cleaning Bridge Seats	Sq. Ft.		512	512
Plug Existing Deck Drains	Each	114		114
Polymer Modified Portland Cement Mortar	Sq. Ft.	29.8		29.8
Structural Repair of Concrete (Depth Equal to or Less Than 5in.)	Sq. Ft.	55.6	136.5	192.1
Retrofit Concrete Parapet	Foot	1106		1106

* Concrete Sealer shall be applied to the surface of the deck and the top and inside vertical faces of the parapets.

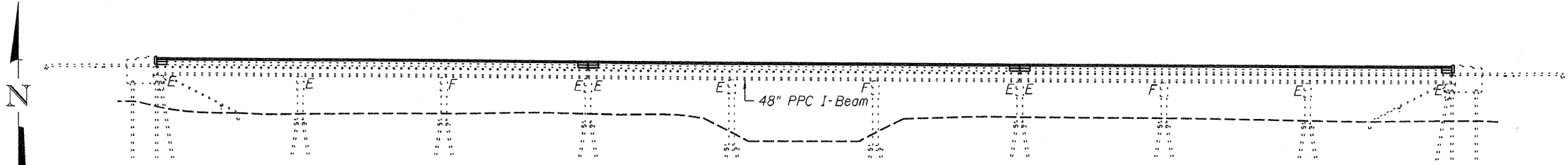
GENERAL NOTES

Reinforcement bars shall conform to the requirements of ASTM A 706 Gr 60. See Special Provisions.
 Reinforcement bars designated (E) shall be epoxy coated.
 Plan dimensions and details relative to existing plans are subject to nominal construction variations. The Contractor shall field verify existing dimensions and details affecting new construction 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 at the unit price bid for the work.
 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 operations shall be repaired or replaced using an approved bar splicer or anchorage system. Cost included in concrete removal.
 Removal and reinstallation of the existing name plate will be necessary for construction of the expansion joint at the East Abutment. This work and all materials shall be included in the contract unit price for Relocating Name Plates.
 The Contractor shall use extreme care during concrete removal so as not to damage the PPC I-Beams.
 The existing abutment seats and seats at piers 3 & 6 shall be cleaned according to the special provision for "Cleaning Bridge Seats".
 The deck surface shall have its final finish tined according to Article 420.09(e)(1) of the Standard Specifications. Cost included with Concrete Superstructures.
 Joint openings shall be adjusted according to Article 520.04 of the Std. Specs. when the deck is poured at an ambient temperature other than 50° F.

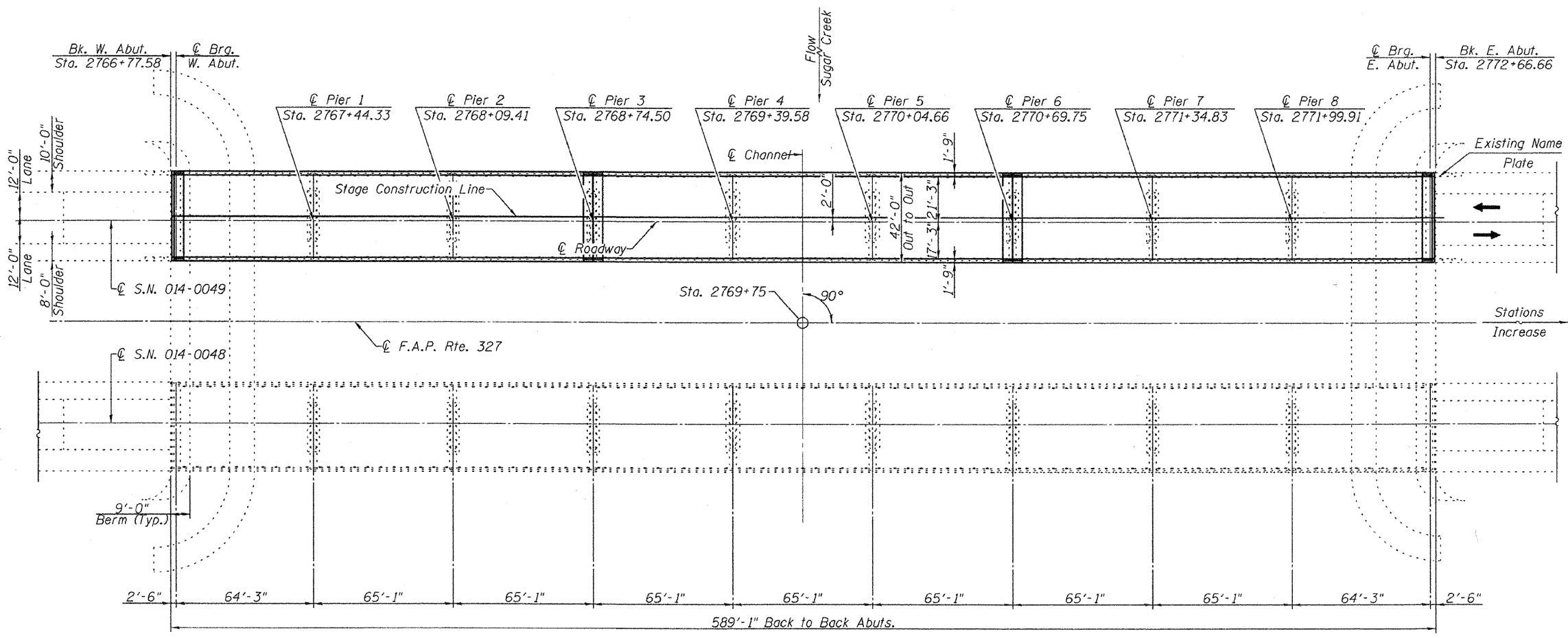
DESIGN STRESSES

NEW CONSTRUCTION
 FIELD UNITS
 f'c = 3,500 psi
 fy = 60,000 (reinforcement)

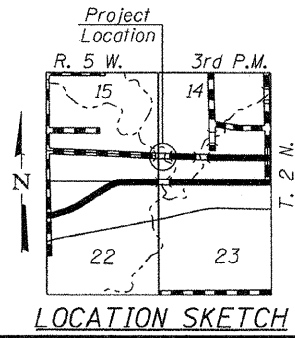
GENERAL PLAN & ELEVATION
U.S. ROUTE 50 OVER SUGAR CREEK
F.A.P. 327 SEC. 14-12BR-1
CLINTON COUNTY
STATION 2769+75
S.N. 014-0049



ELEVATION



PLAN



LOCATION SKETCH

Professional Engineer Seal for Gerald B. Rothberg, License No. 081-065673, State of Illinois. Expiration Date 11/30/2010.

Allen Henderson & Associates, Inc.
 Civil and Structural Engineers Springfield, IL.
 62703 Phone: (217)544-8033 IL Design Firm No. 184-001907

SHEET NO. 1 17 SHEETS	F.A.P. RTE. 327	SECTION 14-12BR-1	COUNTY CLINTON	TOTAL SHEETS 72	SHEET NO. 45
	CONTRACT NO. 76B27				
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT		