

Bench Mark: B.M. No. 12 Elev. 424.62 Chiseled Square on top of Concrete Headwall 80' Rt. of  $\text{C.L.}$  F.A.I. - 270 Sta. 455+72.

**Existing Structures:**  
 The original structures were constructed in 1987 (SB) and 1994 (NB) as FAI Route 255, Section 60-9NB. The dual structures consist of continuous three span composite welded plate girder bridges. The decks consist of 5" slab cast upon 2 1/2" precast prestressed panels (SS) and 7 1/2" reinforced concrete (NB). The substructures consist of sand-filled vaulted abutments supported on steel piles and concrete piers on concrete piles. The back-to-back of support bent dimension is 323'-1 1/4" (NB & SB) and out-to-out of deck dimension 59'-2" (SB) and varies 72'-1 1/4" to 67'-11" (NB). The span lengths (C.I. bearing to C.I. bearing) are 79'-7", 87'-9 1/2", and 108'-8 1/2" (NB & SB). Both structures have a 1°-48'-14" left ahead skew. Two lanes of traffic will be maintained in each direction utilizing stage construction.

**DESIGN SPECIFICATIONS**

*Original Construction*  
 AASHTO 1977 plus 1978 thru 1982 Interims

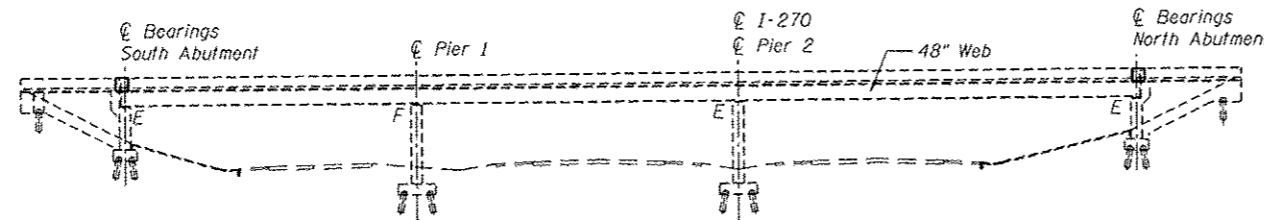
**DESIGN CRITERIA:**

*Original Construction*  
 Live Load: HS 20-44 and alternate military loading allow 25 psf for future wearing Surface.

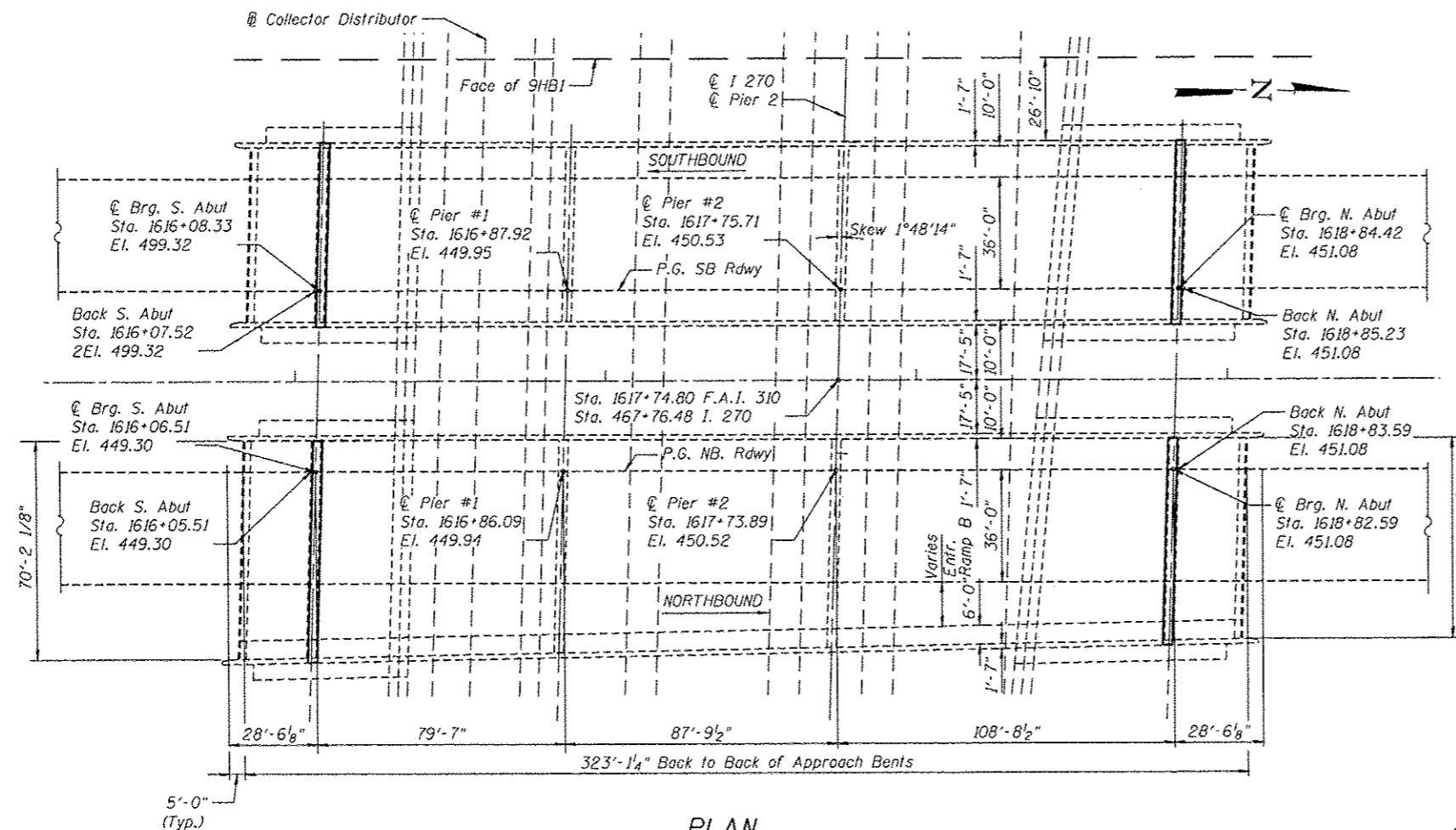
**DESIGN STRESSES**

*Original Construction*  
 Field units  
 $f'_c = 3,500$  psi  
 $f_y = 60,000$  psi (Reinforcement)  
 $f_y = 50,000$  psi (AASHTO M223 Grade 50) (Structural Steel)  
 $f_y = 36,000$  psi (AASHTO M183) (Structural Steel)

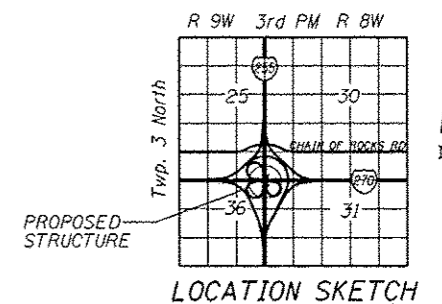
*New Construction*  
 Field units  
 $f'_c = 3,500$  psi  
 $f_y = 60,000$  psi (Reinforcement)



**ELEVATION**

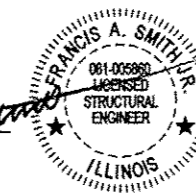


**PLAN**



**LOCATION SKETCH**

*F. Allen Smith*  
 F. ALLEN SMITH, P.E., S.E.  
 NO. 081-005860  
 EXP. DATE 11/30/2014



10/18/13

F.A.I. 255 OVER  
 F.A.I. 270  
 SECTION 60-(8,9)RS-1  
 STATION 1617+74.80  
 MADISON COUNTY  
 STRUCTURE NO. 060-0222 (S.B.)  
 060-0242 (N.B.)

g:\s\16172013\060-0222\16172013-0222-0242\060-0222-0242-76F10-C-06E.dgn  
 \$TIME\$  
 10/17/2013

FILE NAME: \*FILES\*



USER NAME: *edgum	DESIGNED - SOC	REVISED -
PLOT SCALE: *SCALE*	CHECKED - FAS	REVISED -
PLOT DATE: 10/17/2013	DRAWN - DMG	REVISED -
	CHECKED - SDG	REVISED -

STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

GENERAL PLAN AND ELEVATION  
 STRUCTURE NO. 060-0222SB & 060-0242NB  
 SHEET NO. 1 OF 14 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
255	60-(8,9) RS-1	MADISON	206	170
CONTRACT NO. 76F10			ILLINOIS FED. AID PROJECT	