Bench Mark: IDOT District Network Monument 65723070, 131.5 Feet South of I-280 Centerline at Sta. 283+31.91. Elev. 579.52.

Existing Structures: S.N. 081-0024 (W.B.) and S.N. 081-0025 (E.B.) built as F.A.I. Route 280, Section 81-1VB-1, at Station 264+83.02 in 1968. Deck wearing surface and expansion joints were replaced in 1989. Each superstructure consists of 4 span continuous, composite rolled steel beams with partial length flange cover plates. Each substructure consists of concrete abutments supported on piles and concrete hammerhead piers bearing on rock. The Westbound Structure is 269'-0" long back to back of abutments and the Eastbound Structure is 272'-11" long back to back of abutments. The deck of both structures is 36'-0" out to out. Traffic is to be routed to one side of the interstate roadway during construction of the structure on the other side.

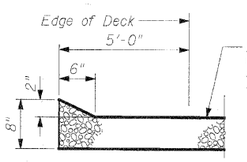
No Salvage.

Note: All existing elevations shown on these drawings are 0.20 feet lower than the corresponding elevations shown on the original drawings.

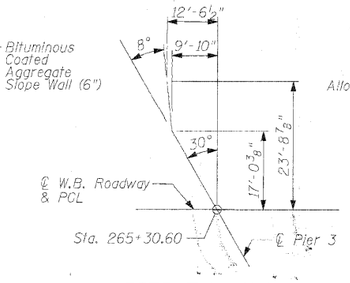
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

* See Sheet 3 for Existing and Proposed Horizontal Clearances.

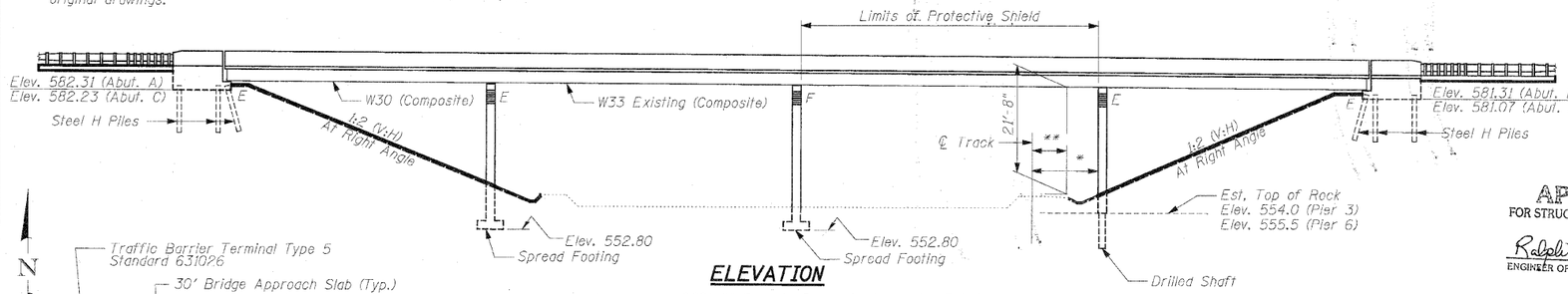
** Minimum vertical clearance is located within 8'-0" of the centerline of track. The point of low vertical clearance is beneath the bottom flange splice plate.



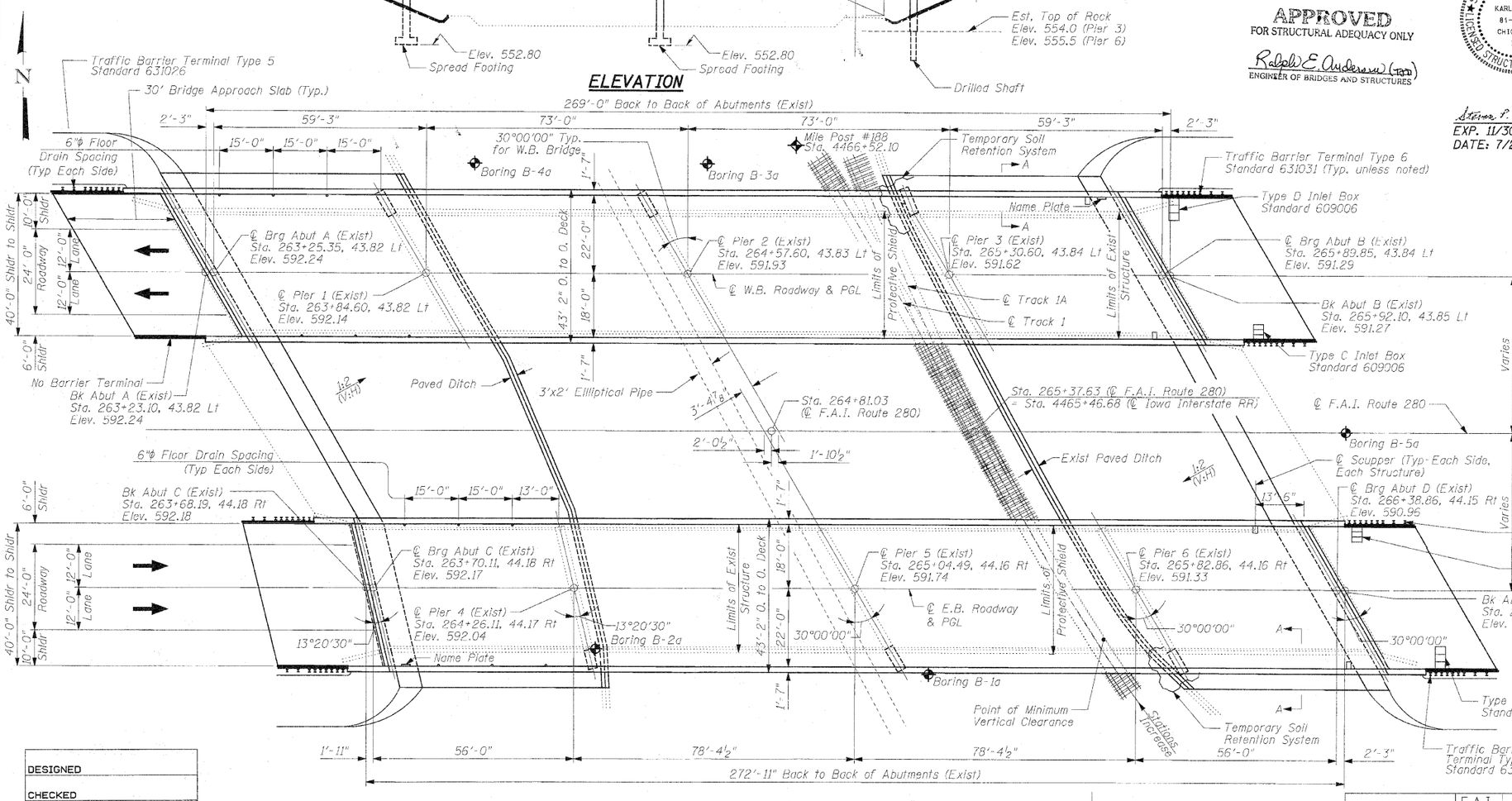
SECTION A-A



PIER 3 LAYOUT



ELEVATION



PLAN

LEGEND

◆ - Soil Boring Location

Note: No deck drains will be permitted in the span over tracks or within 10' of cross arms of a rail road pole line.

APPROVED
FOR STRUCTURAL ADEQUACY ONLY
Ralph E. Anderson (TDD)
ENGINEER OF BRIDGES AND STRUCTURES

STATE OF ILLINOIS
STEVEN P. KARLOWSKI
81-4663
CHICAGO, IL
LICENSED STRUCTURAL ENGINEER

Steven P. Karlowski
EXP. 11/30/2010
DATE: 7/23/2010

DESIGN SPECIFICATIONS

AASHTO 2002 Standard Specifications for Highway Bridges

LOADING HS20-44 & ALT

Allow 25#/sq. ft. for future wearing surface.

DESIGN STRESSES

FIELD UNITS (New Construction)

f'_c = 3,500 psi (Concrete)
f_y = 60,000 psi (Reinforcement)
f_y = 50,000 psi (Structural Steel AASHTO M270 Grade 50)
f_y = 36,000 psi (Structural Steel AASHTO M270 Grade 36)

FIELD UNITS (Existing Construction)

f'_c = 1,000 psi (Concrete)
f_s = 20,000 psi (Reinforcement)
f_s = 20,000 psi (Structural Steel)

SEISMIC DATA

Seismic Performance Category (SPC) = A
Bedrock Acceleration Coefficient (A) = 0.034
Site Coefficient (S) = 1.0

STATION 264+81.03
RE-BUILT BY
STATE OF ILLINOIS
F.A.I. RT. 280 SEC. 81-1(VB-1)R
LOADING HS20 & ALT.
STR. NO. 081-0024

WESTBOUND LANES NAME PLATE

See Std. 515001

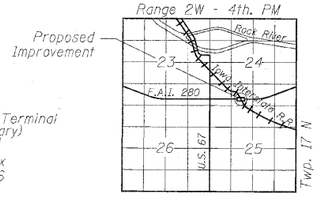
Existing Name Plate shall be cleaned and relocated next to new Name Plate. Cost included with Name Plates.

STATION 264+81.03
RE-BUILT BY
STATE OF ILLINOIS
F.A.I. RT. 280 SEC. 81-1(VB-1)R
LOADING HS20 & ALT.
STR. NO. 081-0025

EASTBOUND LANES NAME PLATE

See Std. 515001

Existing Name Plate shall be cleaned and relocated next to new Name Plate. Cost included with Name Plates.



LOCATION SKETCH

GENERAL PLAN & ELEVATION
I-280 OVER IOWA INTERSTATE RAILROAD
F.A.I. RTE. 280 - SEC. 81-1(VB-1)R
ROCK ISLAND COUNTY
STATION 264+81.03
STRUCTURE NO. 081-0024 (W.B.)
STRUCTURE NO. 081-0025 (E.B.)

DESIGNED	
CHECKED	
DRAWN	ASJ
CHECKED	SPK

INFRASTRUCTURE ENGINEERING INCORPORATED
33 West Monroe | Suite 1540 | Chicago, IL 60603
P 312.425.9560 | F 312.425.9564 | www.infrastructure-eng.com

SHEET NO. 1	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
77 SHEETS	280	81-1(VB-1)R	ROCK ISLAND	503	337
			CONTRACT NO. 64815		
	FED. ROAD DIST. NO. _	ILLINOIS	FED. AID PROJECT		