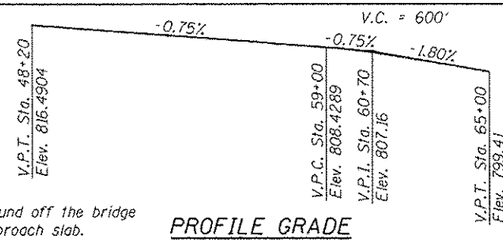
Benchmark: #4848-2 - Chiseled square on the Southwest wing of Structure No. 057-0061. Elev. 813.96.

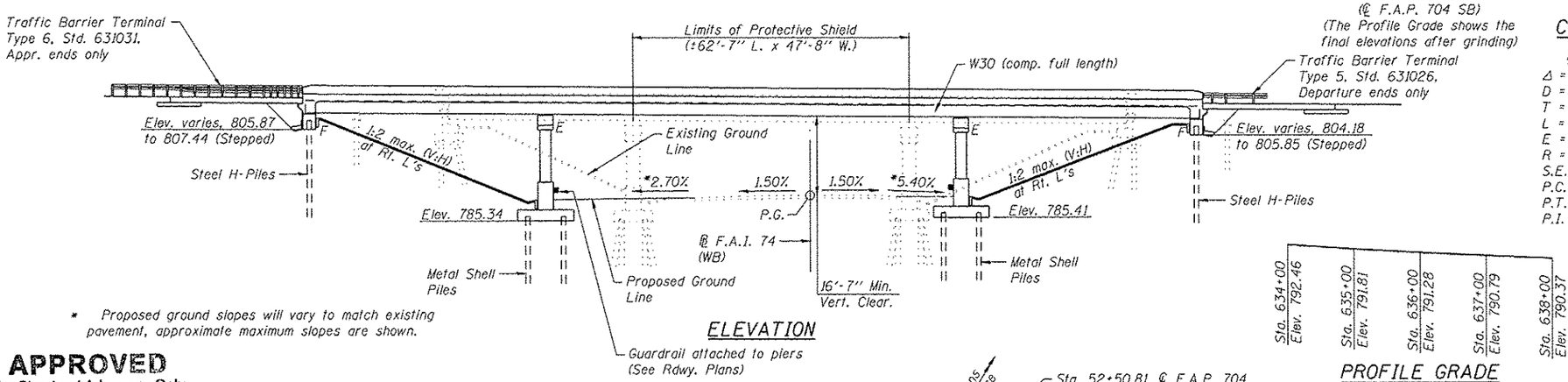
Existing Structure: S.N. 057-0062 was constructed in 1963 as F.A.I. Rte. 74, Section 57-20HB, at Sta. 635+75.15. The bridge is three simple composite spans with concrete deck slab on steel beams located on a horizontal curve on the F.A.P. Rte. 704 southbound alignment and spans 156'-7" back to back abutments and measures 47'-8" in width. The bridge is skewed 31°11'24" left forward over a tangent section of the F.A.I. 74 WB alignment. The bridge was rehabilitated in 1993 as F.A.I. 74, Section 57-20HBR with a concrete overlay, new parapets and steel diaphragms, and substructure repairs.

The existing structure shall be removed and replaced using staged construction to maintain one lane of traffic. Ramps E and F will be closed during Stage II.
No salvage.



Note:
Up to 1/4" will be ground off the bridge slab and the bridge approach slab.

PROFILE GRADE
(℄ F.A.P. 704 SB)
(The Profile Grade shows the final elevations after grinding)



* Proposed ground slopes will vary to match existing pavement, approximate maximum slopes are shown.

ELEVATION

CURVE DATA
F.A.P. 704

Δ = 72° 26' 50" (RT)
D = 2° 29' 57"
T = 1,679.29'
L = 2,898.71'
E = 549.26'
R = 2,292.48'
S.E. = 4.50%
P.C. = Sta. 38+00.02
P.T. = Sta. 66+98.73
P.I. = Sta. 54+79.31

INDEX OF SHEETS

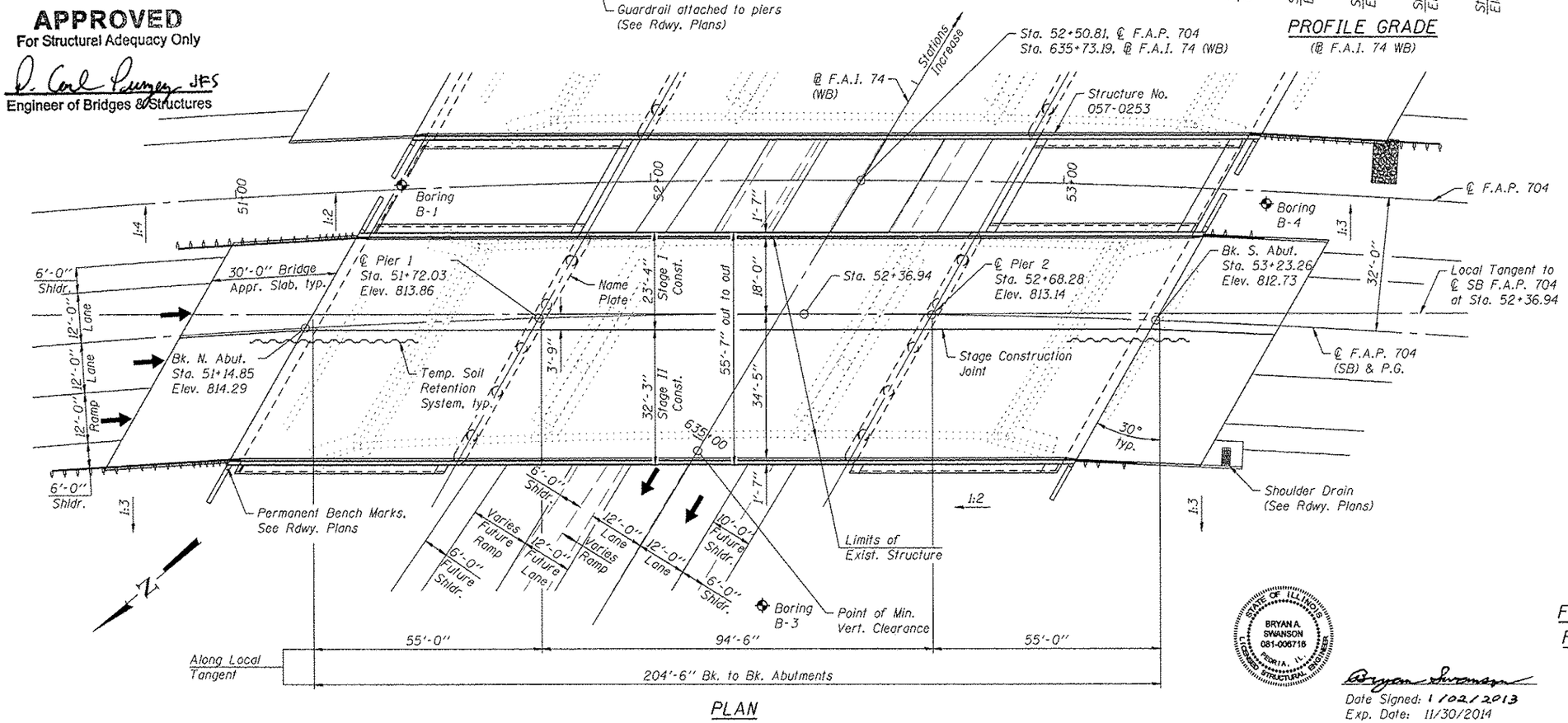
1. General Plan and Elevation
2. General Data
3. Slope Wall and Foundation Layout
4 Stage Construction Details
5. Modified Temporary Concrete Barrier
6.-8. Top of Slab Elevations
9.-10. Top of Approach Slab Elevations
11. Superstructure
12. Superstructure Details
13. Integral Abutment Diaphragm Details
14.-16. Bridge Approach Slab Details
17. Structural Steel
18. Bearing Details
19.-20. Abutments
21.-22. Piers
23. Metal Shell Pile Details
24. HP Pile Details
25. Bar Splicer Assembly
26.-28. Soil Borings

STATION 635+73.19
BUILT BY
STATE OF ILLINOIS
F.A.I. RT. 74 SEC. (57-20HB)BR-1
LOADING HL-93
STRUCTURE NO. 057-0254

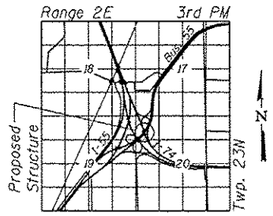
NAME PLATE
See Std. 515001

PROFILE GRADE
(℄ F.A.I. 74 WB)

APPROVED
For Structural Adequacy Only
R. Carl Peugeot JES
Engineer of Bridges & Structures



PLAN



LOCATION SKETCH

DESIGN SPECIFICATIONS
2010 AASHTO LRFD Bridge Design Specifications with 2010 Interims

LOADING HL-93
Allow 50#/sq. ft. for future wearing surface.

DESIGN STRESSES
FIELD UNITS
f'c = 3,500 psi
fy = 60,000 psi (Reinforcement)
fy = 50,000 psi (M270 Grade 50) (Primary)
fy = 36,000 psi (M270 Grade 36)

SEISMIC DATA
Seismic Performance Zone (SPZ) = 1
Design Spectral Acceleration at 1.0 sec. (S_{D1}) = 0.087
Design Spectral Acceleration at 0.2 sec. (S_{DS}) = 0.152
Soil Site Class = C

STATE OF ILLINOIS
BRYAN A. SWANSON
081-006716
PEORIA, IL
LICENSED STRUCTURAL ENGINEER

Bryan Swanson
Date Signed: 1/02/2013
Exp. Date: 11/30/2014

GENERAL PLAN AND ELEVATION
FAI 55 BUSINESS (SB) OVER I-74(WB)
F.A.I. 74 (WB) - SEC. (57-20HB)BR-1
MCLEAN COUNTY
STA. 635+73.19
STRUCTURE NO. 057-0254

FILE NAME = 0570254-70570-001-GPE.dgn	USER NAME = baswanson	DESIGNED - BAS	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION			
MAURER-STUTZ ENGINEERS SURVEYORS		CHECKED - JAE	REVISED -				
	PLOT SCALE =	DRAWN - SGM	REVISED -				
	PLOT DATE = 11/7/2012 11:08:13 AM	CHECKED - BAS	REVISED -		SHEET NO. 1 OF 28 SHEETS		

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(57-20HB)BR-1	MCLEAN	440	236
		CONTRACT NO. 70570		
		ILLINOIS FED. AID PROJECT		