

Benchmark: Top of nut on fire hydrant located at the northwest corner of the intersection of Randall Road and Silver Glen Road. Elev. 809.17

Existing Structure: None

Salvage: None

CURVE DATA (along \hat{C} Path)

	CURVE 7 (C-7)	CURVE 8 (C-8)	CURVE 9 (C-9)	CURVE 10 (C-10)	CURVE 11 (C-11)
Δ =	86°11'13" (RT)	95°06'35" (RT)	5°06'35" (RT)	30°29'29" (RT)	30°29'29" (LT)
D =	424'24'47"	424'24'47"	19'05'54"	33'42'12"	33'42'12"
T =	12.63'	14.76'	13.39'	46.33'	46.33'
L =	20.31'	22.41'	26.75'	90.47'	90.47'
R =	13.50'	13.50'	300.00'	170.00'	170.00'
E =	4.99'	6.50'	0.30'	6.20'	6.20'
Sta. PI =	16+44.35	16+66.79	19+06.45	21+35.26	22+40.73
Sta. PC =	16+31.72	16+52.03	18+93.06	20+88.93	21+94.40
Sta. PT =	16+52.03	16+74.44	19+19.82	21+79.40	22+84.87

ROUTE NO.	SECTION	COUNTY	SHEETS	SHEET NO.
FAU 2505	94-P4008-01-BR	KANE	81	25

SHEET NO. S-1
S-42 SHEETS

Contract #83984

DESIGN SPECIFICATIONS

2002 AASHTO with Interim Specifications
1997 AASHTO Guide Specifications for the Design of Pedestrian Bridges
2003 AASHTO Guide Specifications for Horizontally Curved Steel Girder Highway Bridges

LOADING H5 & PEDESTRIAN

85 psf Pedestrian Loading
MSE wall shall be designed for a min. surcharge of 85 psf and an equivalent fluid pressure of 50 psf.

DESIGN STRESSES

FIELD UNITS

f'_c = 3,500 psi
 f_y = 60,000 psi (reinforcement)
 f_y = 50,000 psi (Struct.) (M270 Grade 50W)

SEISMIC DATA

Seismic Performance Category (SPC) = A
Bedrock Acceleration Coefficient (A) = 0.04g
Site Coefficient (S) = 1.0

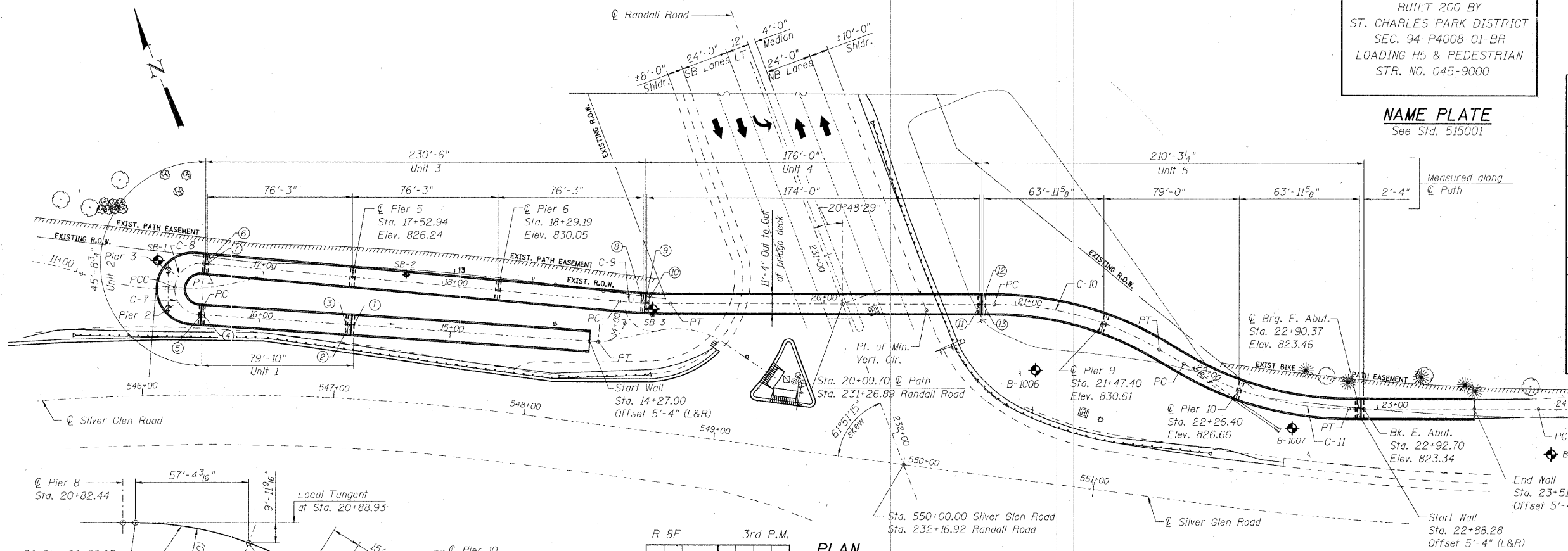
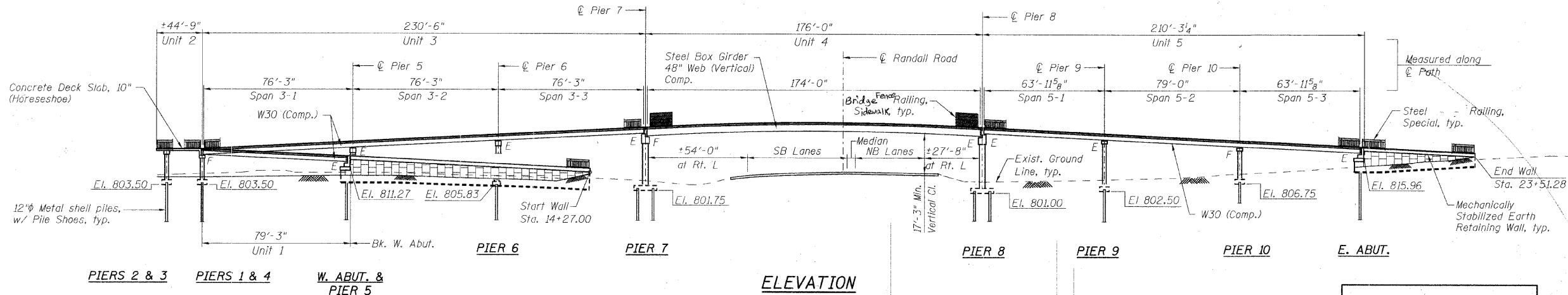
DATA POINTS

① Bk. W. Abut. Sta. 15+50.39 Elev. 818.26	⑦ \hat{C} E. Brg. Pier 4 Sta. 16+76.69 Elev. 822.42
② \hat{C} Brg. W. Abut. Sta. 15+52.72 Elev. 818.38	⑧ \hat{C} W. Brg. Pier 7 Sta. 19+05.44 Elev. 833.86
③ End Wall Sta. 15+54.80 Offset 5'-4" (L&R)	⑨ \hat{C} Pier 7 Sta. 19+06.44 Elev. 833.91
④ \hat{C} E. Brg. Pier 1 Sta. 16+29.47 Elev. 822.18	⑩ \hat{C} E. Brg. Pier 7 Sta. 19+07.44 Elev. 833.96
⑤ \hat{C} Pier 1 Sta. 16+30.22 Elev. 822.22	⑪ \hat{C} W. Brg. Pier 8 Sta. 20+81.44 Elev. 833.91
⑥ \hat{C} Pier 4 Sta. 16+75.94 Elev. 822.39	⑫ \hat{C} Pier 8 Sta. 20+82.44 Elev. 833.86
	⑬ \hat{C} E. Brg. Pier 8 Sta. 20+83.44 Elev. 833.81

BUILT 200 BY
ST. CHARLES PARK DISTRICT
SEC. 94-P4008-01-BR
LOADING H5 & PEDESTRIAN
STR. NO. 045-9000

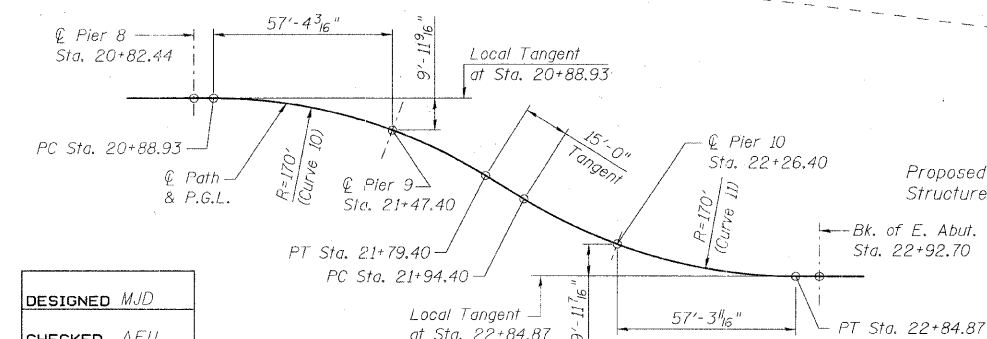
NAME PLATE

See Std. 515001

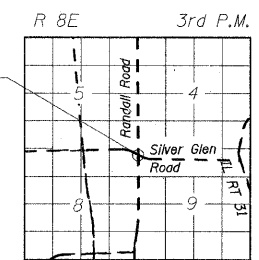


DESIGNED MJD
CHECKED AEU
DRAWN MJD
CHECKED AEU

OFFSET SKETCH UNIT 5



LOCATION SKETCH



I certify that to the best of knowledge and belief, this bridge design is structurally adequate for the design loading shown on the plans. The design is an economical one for the style of structure and complies with requirements of the current "AASHTO" Standard Specifications for Highway Bridges.



Signature: Andrew E. Underwager
Date: November 4, 2008
License Expires: November 30, 2010

RH&A
Robert H. Anderson & Associates, Inc.
Consulting Engineers
License No. 184-005281

GENERAL PLAN & ELEVATION

PEDESTRIAN BRIDGE OVER RANDALL ROAD
AT SILVER GLEN ROAD
FAU 2505, SECTION 94-P4008-01-BR
KANE COUNTY
STRUCTURE NO. 045-9000
DATE: OCTOBER 31, 2008