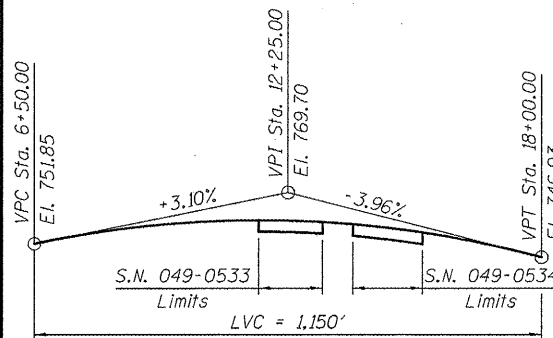
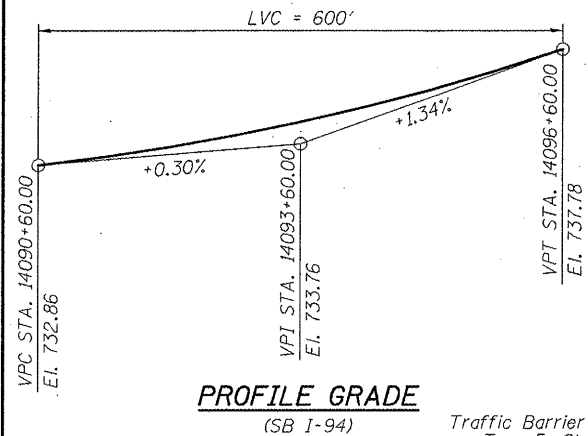


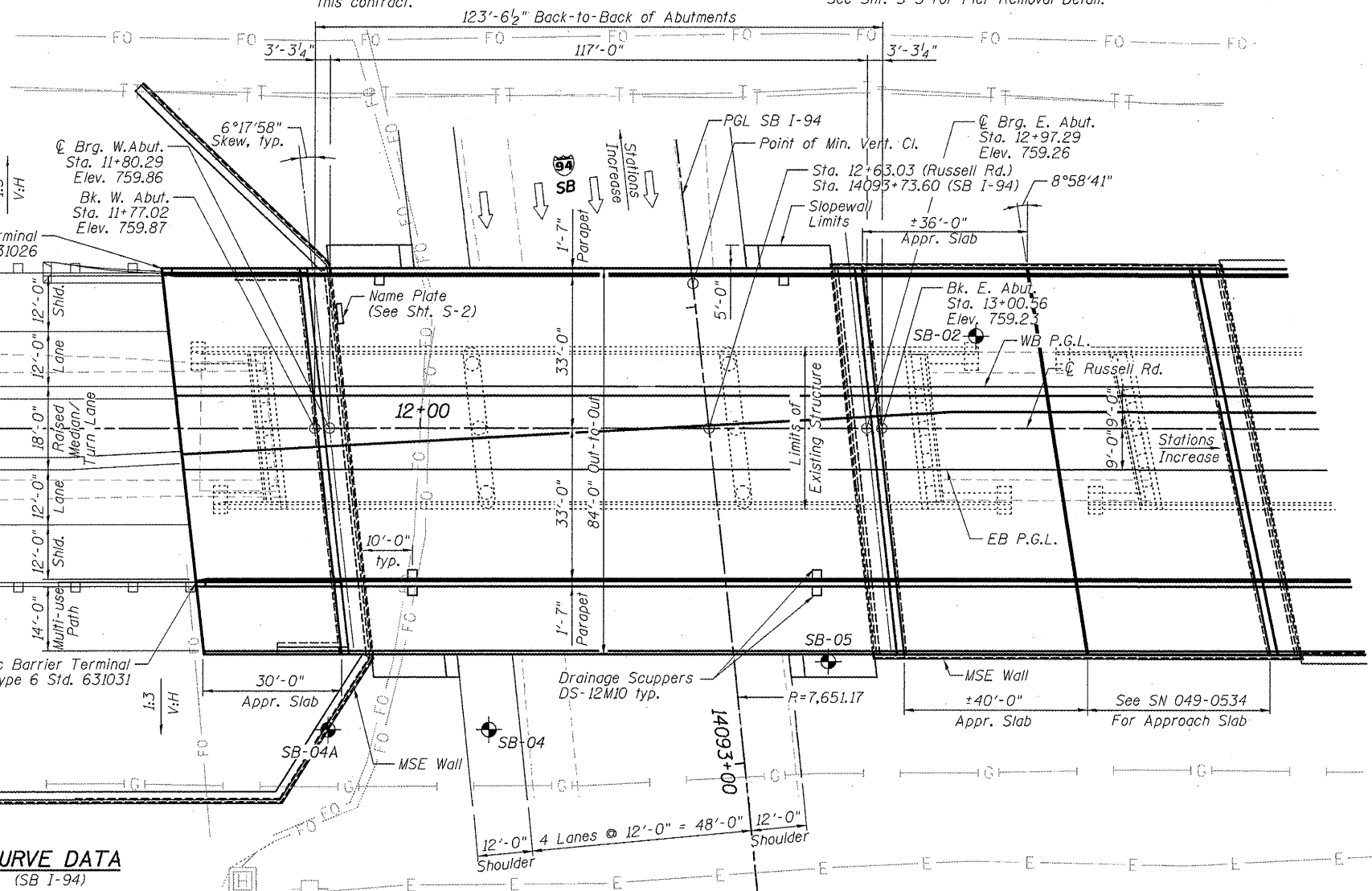
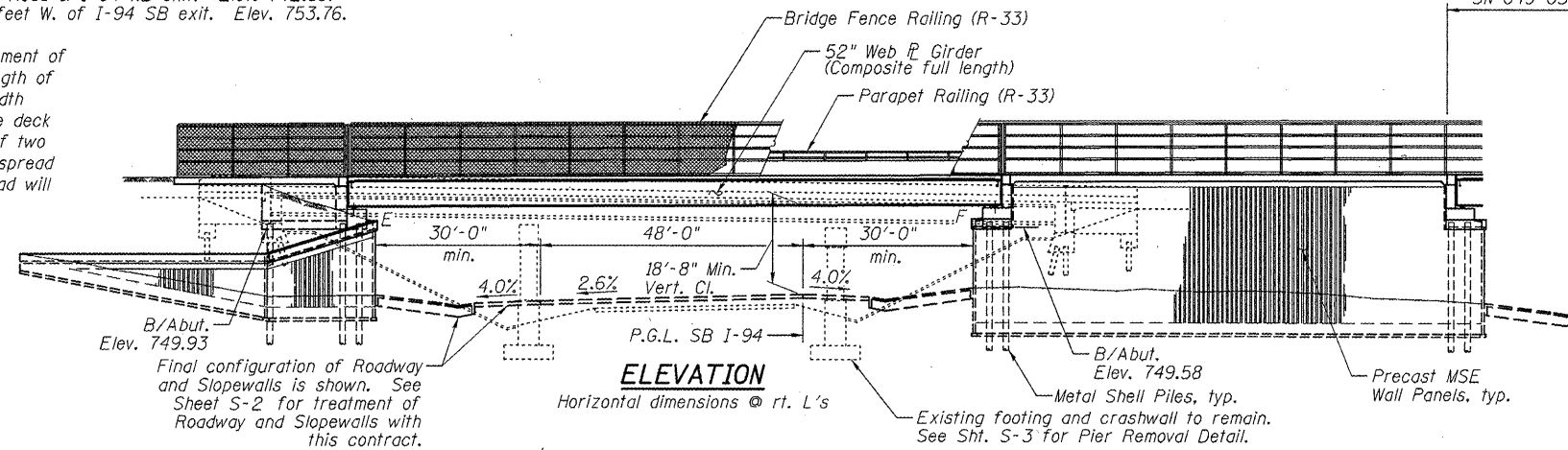
Bench Marks: Chiseled "□" on light pole foundation at S.W. corner Russell Road & I-94 NB exit. Elev. 742.89.
Chiseled "□" on N. curb of Russell Road approximately 90 feet W. of I-94 SB exit. Elev. 753.76.

Existing Structure: S.N. 049-0089 was built in 1959 by the Illinois Department of Transportation. The existing structure has three simple spans, with a length of 147'-10³/₄" from back-to-back of abutments, and a constant out-to-out width of 35'-2". The superstructure consists of a 9" thick reinforced concrete deck built composite with 42" deep PPC I-beams. The substructure consists of two stub abutments on concrete piles and two multi-column shoulder piers on spread footings. The existing bridge is to be removed and replaced. Russell Road will be closed to traffic during construction of new bridge.

No Salvage.



CURVE DATA
(SB I-94)
P.I. = Sta. 14096+54.48
Δ = 20°33'20" LT
D = 0°44'56"
R = 7,651.17'
L = 2,744.97'
T = 1387.40'
E = 124.77'
e = 2.6%
P.C. = Sta. 14082+67.09
P.T. = Sta. 14110+12.05



BOWMAN, BARRETT & ASSOCIATES INC.
CONSULTING ENGINEERS
Chicago, Illinois
312.228.0100
www.bbainc.com

FILE NAME =	USER NAME =	DESIGNED - MRM	REVISIONS -
		CHECKED - TL	REVISIONS -
		DRAWN - MTR	REVISIONS -
		CHECKED - SF	REVISIONS -

DESIGNED - MRM	REVISIONS -
CHECKED - TL	REVISIONS -
DRAWN - MTR	REVISIONS -
CHECKED - SF	REVISIONS -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

See Special Provisions for status of utilities to be adjusted.

LEGEND:
SB-XX = Soil Boring Location/Identifier

DESIGN SPECIFICATIONS
2010 AASHTO LRFD Bridge Design Specifications with 2010 Interims

DESIGN STRESSES

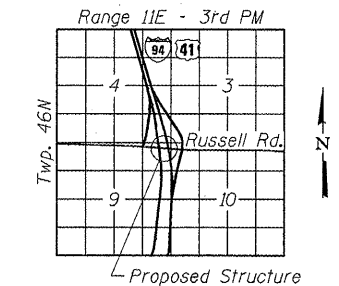
FIELD UNITS
f'c = 3,500 psi
fy = 60,000 psi (Reinforcement)
fy = 36,000 psi (AASHTO M270 Grade 36)
fy = 50,000 psi (AASHTO M270 Grade 50)

LOADING HL-93

Allow 50#/sq. ft. for future wearing surface.

SEISMIC DATA

Seismic Performance Zone (SPZ) = 1
Design Spectral Acceleration at 1.0 sec. (SD1) = 0.074g
Design Spectral Acceleration at 0.2 sec. (SDs) = 0.117g
Soil Site Class = D



LOCATION SKETCH



SIGNED: *Brian L. Umbright*
DATE: December 13, 2011
EXPIRES: November 30, 2012

APPROVED
For Structural Adequacy Only
D. Carl Krueger
Engineer of Bridges & Structures

GENERAL PLAN & ELEVATION
RUSSELL ROAD OVER SOUTHBOUND I-94
F.A.U. RTE. 1199 - SEC. 49-1(HB & HB-1)R
LAKE COUNTY
STATION 12+63.03
STRUCTURE NO. 049-0533

F.A.U. RTE. 1199	SECTION 49-1(HB & HB-1)R	COUNTY LAKE	TOTAL SHEETS 225	SHEET NO. 115
				CONTRACT NO. 60L76
ILLINOIS FED. AID PROJECT				

SHEET NO. S-1 OF S-33 SHEETS

S:\MIDN05-CADD\60L76 RussellRd\60L76 Sheets\0490533-60L76-001-GPE.dgn 1/27/2012 3:50:34 PM