

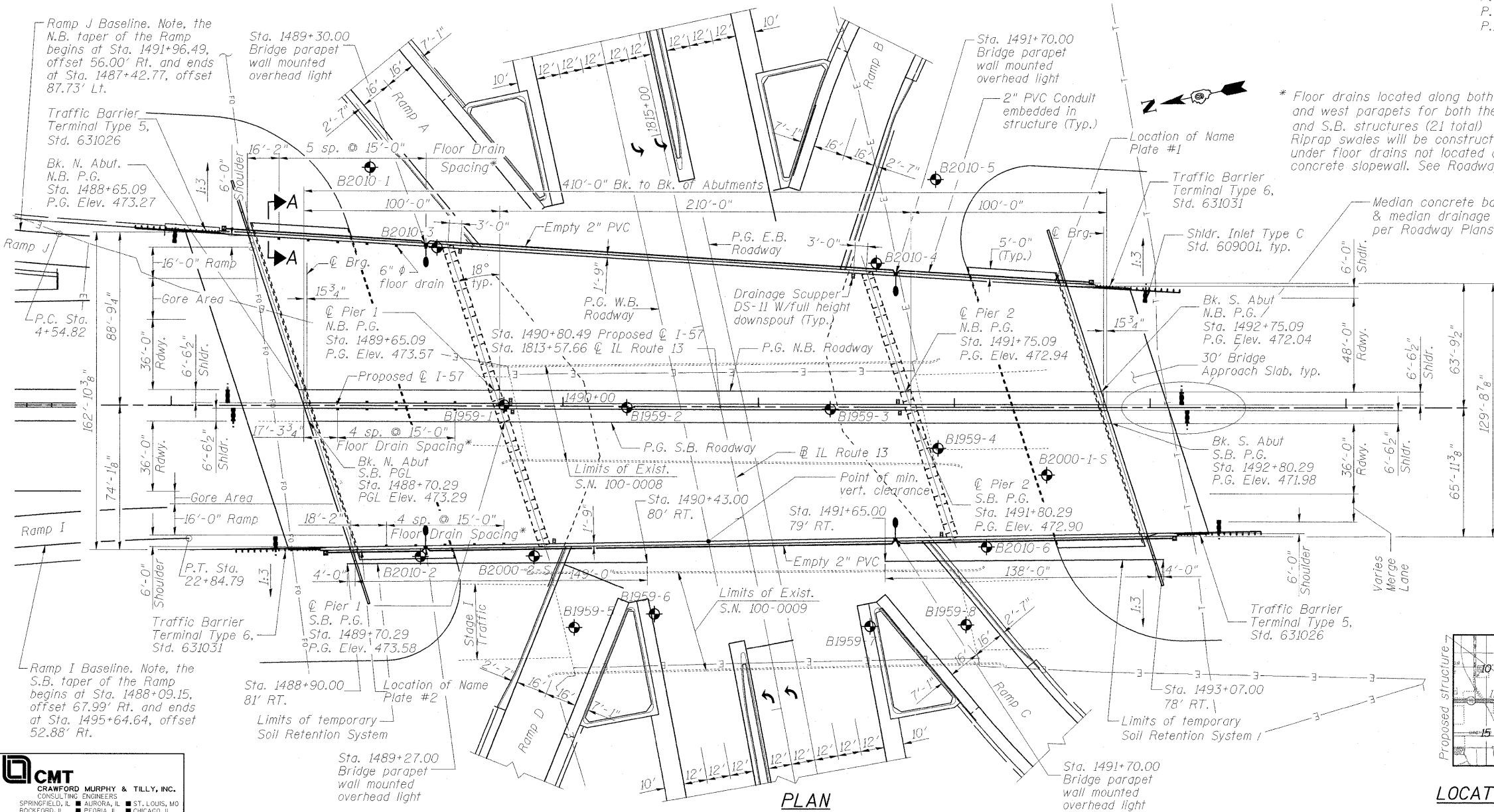
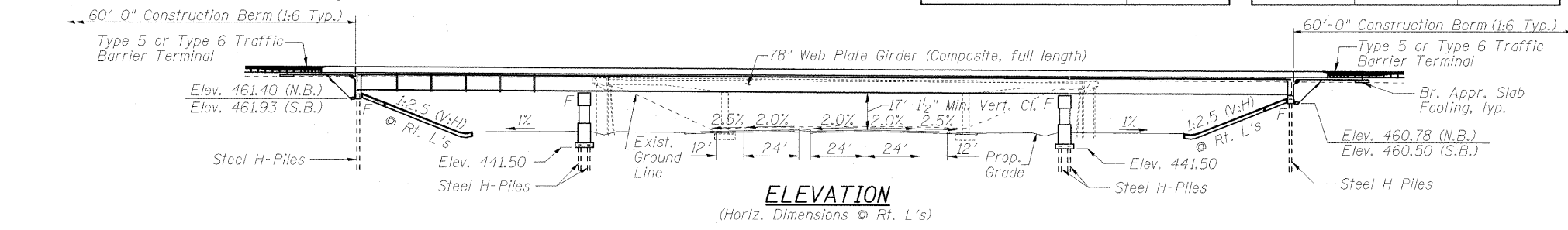
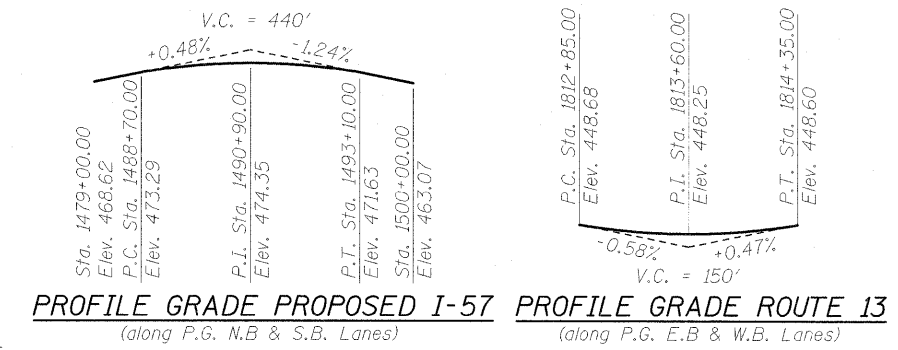
Bench Mark: IDOT District 9 Survey Control Point for I-57, Point No. NDCP11. Aluminum Permanent Survey Marker (PSM) set in concrete cap stamped "CP11 1489+00", located in I-57 median north of bridge over new Route 13. 49.5' Right of the I-57 NBL CL at Sta. 1489+00. Elevation = 470.137

Existing Structures: S.N. 100-0008 (N.B.) and S.N. 100-0009 (S.B.) built in 1959 as F.A.I. Route 57, Sec XI-6 HB-1 and XI-6 HB-2 at Sta. 1490+79.70 & Sta. 1491+10.38, respectively. Existing structures consist of two separate three span deck plate girder bridges (51' - 104'-3" - 51'). The back to back of abutment length is 210'-3" and the out to out bridge width is variable 48' min. to 53' max (±6"). Structure is supported on pile bent abutments and multiple column piers supported on piles. Existing structure 100-0008 is to be removed and replaced with staged traffic by shifting I-57 horizontal alignments onto 100-0009. After new structures have been opened, existing Structure 100-0009 is to be removed

Salvage: None.

**BORINGS**

BORING	STATION	OFFSET	BORING	STATION	OFFSET
B1959-1	1489+70	1' Lt.	B2000-1-S	1492+47	34' Rt.
B1959-2	1490+33	0' Rt.	B2000-2-S	1489+85	77' Rt.
B1959-3	1491+37	1' Rt.	B2010-1	1489+01	122' Lt.
B1959-4	1491+92	21' Rt.	B2010-2	1489+27	77' Rt.
B1959-5	1490+06	113' Rt.	B2010-3	1489+36	81' Lt.
B1959-6	1490+47	106' Rt.	B2010-4	1491+60	74' Lt.
B1959-7	1491+57	112' Rt.	B2010-5	1491+90	116' Rt.
B1959-8	1492+06	111' Rt.	B2010-6	1492+17	71' Rt.



**CURVE DATA**

IL Route 13	Ramp I	Ramp J
PROP. CURVE PR13-2	PROP. CURVE 1	PROP. CURVE 1
$\Delta = 13^\circ 26' 51''$ (LT)	$\Delta = 15^\circ 08' 25''$ (RT)	$\Delta = 53^\circ 16' 45''$ (RT)
$D = 0^\circ 57' 50''$	$D = 4^\circ 46' 29''$	$D = 7^\circ 32' 20''$
$T = 700.71$	$T = 159.48$	$T = 381.24'$
$L = 1394.99$	$L = 317.10$	$L = 706.72'$
$E = 41.16'$	$E = 10.55'$	$E = 90.26'$
$R = 5943.56'$	$R = 1200.00'$	$R = 760.00'$
$e = N.C.$	$e = 7.0\%$	$e = 8.0\%$
P.C. = Sta. 1799+75.68	P.C. = NA	T.R. = N/A
P.T. = Sta. 1813+70.67	S.E. Run = 225'	S.E. Run = 255'
P.I. = Sta. 1806+76.39	P.C. = Sta. 19+67.69	P.C. = Sta. 4+54.82
	P.T. = Sta. 22+84.79	P.T. = Sta. 11+61.54
	P.I. = Sta. 21+27.17	P.I. = Sta. 8+36.06

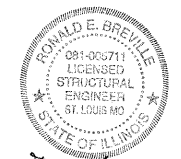
**DESIGN SPECIFICATIONS**  
2010 AASHTO LRFD Bridge Design Specifications, 5th Edition, with 2010 Interims.

**DESIGN STRESSES**  
**FIELD UNITS**  
 $f'_c = 3,500$  psi  
 $f_y = 60,000$  psi (Reinforcement)  
 $f_y = 50,000$  psi (M270 Grade 50)  
 $f_y = 36,000$  psi (M270 Grade 36)

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

**SEISMIC DATA**  
Seismic Performance Zone (SPZ) = 2  
Design Spectral Acceleration at 1.0 sec. ( $S_{D1}$ ) = 0.277  
Design Spectral Acceleration at 0.2 sec. ( $S_{D5}$ ) = 0.759  
Soil Site Class = C

**APPROVED**  
FOR STRUCTURAL ADEQUACY ONLY  
*Rob Heady*  
ENGINEER OF BRIDGES AND STRUCTURES



*Ronald E. Breville*  
4 Oct 2011  
EXP. 30 NOV 2012



**GENERAL PLAN & ELEVATION**  
**I-57 OVER ILLINOIS ROUTE 13**  
**F.A.I. ROUTE 57**  
**SECTION (XI-6-2)HBK-2**  
**WILLIAMSON COUNTY**  
**STA. 1490+80.49**  
**STRUCTURE NO. 100-0088 (N.B.) &**  
**STRUCTURE NO. 100-0089 (S.B.)**

**CMT**  
CRAWFORD MURPHY & TILLY, INC.  
CONSULTING ENGINEERS  
SPRINGFIELD, IL ■ AURORA, IL ■ ST. LOUIS, MO  
ROCKFORD, IL ■ PEORIA, IL ■ CHICAGO, IL

FILE NAME = ...I-57\001.GENERAL PLAN.ELEV.dgn  
USER NAME = Rob Heady  
PLOT SCALE =  
PLOT DATE = 10/3/2011

DESIGNED - BPD	REVISD -
CHECKED - WLB	REVISD -
DRAWN - GLD	REVISD -
CHECKED - BPD	REVISD -

**STATE OF ILLINOIS**  
**DEPARTMENT OF TRANSPORTATION**

SHEET NO. 1 OF 75 SHEETS

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
57	(XI-6-2)HBK-2	WILLIAMSON	968	586
F.A.I. 57 AND F.A.P. 331			CONTRACT NO. 78182	
ILLINOIS FED. AID PROJECT				