

RAMP E_MANN_E

Curve Data
 Curve E_MANN_E-1
 P.I. Station 0+54.77 N 1,895,498.2228 E 1,105,568.4976
 Delta = 6° 16' 10.14" (LT)
 Degree = 5° 43' 46.48"
 Tangent = 54.7662
 Length = 109.4231
 Radius = 1,000.0000
 External = 1.4985
 Long Chord = 109.3686
 Mid. Ord. = 1.4963
 P.C. Station 0+00.00 N 1,895,500.6296 E 1,105,513.7843
 P.T. Station 1+09.42 N 1,895,501.8053 E 1,105,623.1466
 C.C. = N 1,896,499.6635 E 1,105,557.7314
 Back = S 87° 28' 52.34" E
 Ahead = N 86° 14' 57.52" E
 Chord Bear = N 89° 23' 02.59" E

Course from PT E_MANN_E-1 to PC E_MANN_E-2 N 86° 14' 57.52" E Dist 573.2985

Curve Data
 Curve E_MANN_E-2
 P.I. Station 8+05.33 N 1,895,545.9154 E 1,106,317.6479
 Delta = 28° 54' 01.91" (LT)
 Degree = 12° 02' 31.44"
 Tangent = 122.6089
 Length = 239.9964
 Radius = 475.7969
 External = 15.5438
 Long Chord = 237.4603
 Mid. Ord. = 15.0520
 P.C. Station 6+82.72 N 1,895,539.3077 E 1,106,195.2172
 P.T. Station 9+22.72 N 1,895,610.8698 E 1,106,421.6377
 C.C. = N 1,896,014.4132 E 1,106,169.5753
 Back = N 86° 54' 38.49" E
 Ahead = N 58° 00' 36.58" E
 Chord Bear = N 72° 27' 37.54" E

RAMP E_MANN_F

Point 930 N 1,895,597.7354 E 1,106,430.9752 Sta 9+22.71
 Course from 930 to PC E_MANN_F-1 N 57° 55' 03.54" E Dist 406.1865
 Curve Data
 Curve E_MANN_F-1
 P.I. Station 13+76.48 N 1,895,838.7511 E 1,106,815.4504
 Delta = 21° 53' 26.59" (RT)
 Degree = 23° 17' 06.19"
 Tangent = 47.5862
 Length = 94.0119
 Radius = 246.0625
 External = 4.5591
 Long Chord = 93.4411
 Mid. Ord. = 4.4762
 P.C. Station 13+28.90 N 1,895,813.4763 E 1,106,775.1312
 P.T. Station 14+22.91 N 1,895,847.1711 E 1,106,862.2857
 C.C. = N 1,895,604.9911 E 1,106,905.8243
 Back = N 57° 55' 03.54" E
 Ahead = N 79° 48' 30.13" E
 Chord Bear = N 68° 51' 46.83" E

RAMP E_MANN_G

Curve Data
 Curve E_MANN_G-1
 P.I. Station 1+84.19 N 1,895,876.2640 E 1,108,808.5350
 Delta = 4° 18' 31.61" (LT)
 Degree = 1° 10' 12.68"
 Tangent = 184.1928
 Length = 368.2121
 Radius = 4,896.2806
 External = 3.4633
 Long Chord = 368.1253
 Mid. Ord. = 3.4609
 P.C. Station 0+00.00 N 1,895,884.6125 E 1,108,992.5386
 P.T. Station 3+68.21 N 1,895,854.1147 E 1,108,625.6788
 C.C. = N 1,890,993.3637 E 1,109,214.4606
 Back = S 87° 24' 07.92" W
 Ahead = S 83° 05' 36.31" W
 Chord Bear = S 85° 14' 52.12" W

Course from PT E_MANN_G-1 to PC E_MANN_G-2 S 82° 19' 01.11" W Dist 218.2901

Curve Data
 Curve E_MANN_G-2
 P.I. Station 6+58.09 N 1,895,812.5501 E 1,108,338.8391
 Delta = 0° 23' 26.85" (LT)
 Degree = 0° 16' 22.61"
 Tangent = 71.5879
 Length = 143.1753
 Radius = 20,991.5350
 External = 0.1221
 Long Chord = 143.1750
 Mid. Ord. = 0.1221
 P.C. Station 5+86.50 N 1,895,824.9309 E 1,108,409.3483
 P.T. Station 7+29.68 N 1,895,799.6887 E 1,108,268.4160
 C.C. = N 1,875,149.7072 E 1,112,039.7292
 Back = S 80° 02' 27.27" W
 Ahead = S 79° 39' 00.42" W
 Chord Bear = S 79° 50' 43.84" W

Curve Data
 Curve E_MANN_G-3
 P.I. Station 9+26.71 N 1,895,763.7592 E 1,108,074.6870
 Delta = 1° 55' 05.82" (LT)
 Degree = 0° 29' 12.62"
 Tangent = 197.0326
 Length = 394.0284
 Radius = 11,768.9444
 External = 1.6492
 Long Chord = 394.0100
 Mid. Ord. = 1.6490
 P.C. Station 7+29.68 N 1,895,799.6887 E 1,108,268.4160
 P.T. Station 11+23.71 N 1,895,721.3648 E 1,107,882.2694
 C.C. = N 1,884,228.0736 E 1,110,414.5232
 Back = S 79° 29' 35.27" W
 Ahead = S 77° 34' 29.45" W
 Chord Bear = S 78° 32' 02.36" W

Curve Data
 Curve E_MANN_G-4
 P.I. Station 13+02.15 N 1,895,682.9693 E 1,107,708.0011
 Delta = 36° 23' 04.13" (RT)
 Degree = 10° 33' 06.15"
 Tangent = 178.4478
 Length = 344.8208
 Radius = 543.0000
 External = 28.5703
 Long Chord = 339.0560
 Mid. Ord. = 27.1422
 P.C. Station 11+23.71 N 1,895,721.3648 E 1,107,882.2694
 P.T. Station 14+68.53 N 1,895,755.4348 E 1,107,544.9294
 C.C. = N 1,896,251.6466 E 1,107,765.4353
 Back = S 77° 34' 29.45" W
 Ahead = N 66° 02' 26.41" W
 Chord Bear = N 84° 13' 58.48" W

FILE NAME =	DESIGNED - AJP	REVISED -
...Nexpln_ABC.C2.290_R_Data_exalign_26.dgn	DRAWN - TMB	REVISED -
USER NAME = tblank	CHECKED - JMM	REVISED -
PLOT DATE = 1/25/2010	DATE = 1/25/10	REVISED -

benesch

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**ALIGNMENT PLAN
 I-290 RAMP CURVE DATA**

SCALE: N.T.S. SHEET NO. 17 OF 22 SHEETS STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
290	(3435, ETC., 3838)RS-5	COOK	264	42
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		
		CONTRACT NO. 60G52		