

RAMP E_R83_E

Curve Data

Curve E R83 E-1
 P.I. Station = 0+85.91 N 1,916,312.2934 E 1,084,380.7405
 Delta = 10° 47' 09.81" (RT)
 Degree = 6° 17' 46.46"
 Tangent = 85.9086
 Length = 171.3095
 Radius = 910.0000
 External = 4.0461
 Long Chord = 171.0567
 Mid. Ord. = 4.0282
 P.C. Station = 0+00.00 N 1,916,327.3178 E 1,084,296.1559
 P.T. Station = 1+71.31 N 1,916,281.7050 E 1,084,461.0190
 C.C. = N 1,915,431.3424 E 1,084,137.0075
 Back = S 79° 55' 40.23" E
 Ahead = S 69° 08' 30.43" E
 Chord Bear = S 74° 32' 05.33" E

Curve Data

Curve E R83 E-2
 P.I. Station = 3+57.56 N 1,916,215.3907 E 1,084,635.0598
 Delta = 58° 10' 35.71" (RT)
 Degree = 17° 06' 52.05"
 Tangent = 186.2466
 Length = 339.9266
 Radius = 334.7800
 External = 48.3198
 Long Chord = 325.5112
 Mid. Ord. = 42.2253
 P.C. Station = 1+71.31 N 1,916,281.7050 E 1,084,461.0190
 P.T. Station = 5+11.24 N 1,916,032.5445 E 1,084,670.4863
 C.C. = N 1,915,968.8650 E 1,084,341.8184
 Back = S 69° 08' 30.43" E
 Ahead = S 10° 57' 54.72" E
 Chord Bear = S 40° 03' 12.57" E

Curve Data

Curve E R83 E-3
 P.I. Station = 10+35.44 N 1,915,517.9103 E 1,084,770.1967
 Delta = 132° 26' 12.94" (RT)
 Degree = 24° 48' 12.12"
 Tangent = 524.2046
 Length = 533.9474
 Radius = 231.0000
 External = 341.8450
 Long Chord = 422.7714
 Mid. Ord. = 137.8492
 P.C. Station = 5+11.24 N 1,916,032.5445 E 1,084,670.4863
 P.T. Station = 10+45.18 N 1,915,791.5859 E 1,084,323.1037
 C.C. = N 1,915,988.6053 E 1,084,443.7037
 Back = S 10° 57' 54.72" E
 Ahead = N 58° 31' 41.77" W
 Chord Bear = S 55° 15' 11.76" W

RAMP E_R83_E

Curve Data

Curve E R83 E-4
 P.I. Station = 11+38.99 N 1,915,840.5589 E 1,084,243.0986
 Delta = 21° 15' 04.49" (RT)
 Degree = 11° 27' 32.96"
 Tangent = 93.8039
 Length = 185.4521
 Radius = 500.0000
 External = 8.7231
 Long Chord = 184.3909
 Mid. Ord. = 8.5735
 P.C. Station = 10+45.18 N 1,915,791.5859 E 1,084,323.1037
 P.T. Station = 12+30.64 N 1,915,915.2002 E 1,084,186.2844
 C.C. = N 1,916,218.0348 E 1,084,584.1426
 Back = N 58° 31' 41.77" W
 Ahead = N 37° 16' 37.28" W
 Chord Bear = N 47° 54' 09.53" W

Curve Data

Curve E R83 E-5
 P.I. Station = 13+45.75 N 1,916,006.8018 E 1,084,116.5607
 Delta = 33° 44' 48.84" (RT)
 Degree = 15° 05' 47.18"
 Tangent = 115.1185
 Length = 223.5421
 Radius = 379.5318
 External = 17.0746
 Long Chord = 220.3249
 Mid. Ord. = 16.3395
 P.C. Station = 12+30.64 N 1,915,915.2002 E 1,084,186.2844
 P.T. Station = 14+54.18 N 1,916,121.7019 E 1,084,109.4724
 C.C. = N 1,916,145.0709 E 1,084,488.2841
 Back = N 37° 16' 37.28" W
 Ahead = N 3° 31' 48.44" W
 Chord Bear = N 20° 24' 12.86" W

RAMP E_R83_F

Curve Data

Curve E R83 F-1
 P.I. Station = 2+23.48 N 1,916,209.7757 E 1,084,938.6111
 Delta = 63° 39' 43.12" (LT)
 Degree = 15° 54' 55.78"
 Tangent = 223.4791
 Length = 400.0000
 Radius = 360.0000
 External = 63.7250
 Long Chord = 379.7391
 Mid. Ord. = 54.1413
 P.C. Station = 0+00.00 N 1,916,190.1812 E 1,085,161.2295
 P.T. Station = 4+00.00 N 1,916,018.9602 E 1,084,822.2824
 C.C. = N 1,915,831.5676 E 1,085,129.6649
 Back = N 84° 58' 11.57" W
 Ahead = S 31° 22' 05.32" W
 Chord Bear = S 63° 11' 56.88" W

Course from PT E R83 F-1 to PC E R83 F-2 S 31° 22' 05.32" W Dist 219.5811

Curve Data

Curve E R83 F-2
 P.I. Station = 7+09.86 N 1,915,754.3887 E 1,084,660.9891
 Delta = 32° 04' 53.10" (RT)
 Degree = 18° 14' 49.43"
 Tangent = 90.2795
 Length = 175.8169
 Radius = 314.0000
 External = 12.7207
 Long Chord = 173.5291
 Mid. Ord. = 12.2254
 P.C. Station = 6+19.58 N 1,915,831.4730 E 1,084,707.9827
 P.T. Station = 7+95.40 N 1,915,714.0351 E 1,084,580.2303
 C.C. = N 1,915,994.9210 E 1,084,439.8769
 Back = S 31° 22' 05.32" W
 Ahead = S 63° 26' 58.42" W
 Chord Bear = S 47° 24' 31.87" W

Course from PT E R83 F-2 to PC E R83 F-3 S 63° 26' 58.42" W Dist 341.3854

Curve Data

Curve E R83 F-3
 P.I. Station = 13+09.59 N 1,915,484.2002 E 1,084,120.2673
 Delta = 65° 14' 22.10" (LT)
 Degree = 21° 13' 14.37"
 Tangent = 172.8033
 Length = 307.4338
 Radius = 270.0000
 External = 50.5635
 Long Chord = 291.0929
 Mid. Ord. = 42.5880
 P.C. Station = 11+36.78 N 1,915,561.4407 E 1,084,274.8470
 P.T. Station = 14+44.22 N 1,915,311.4812 E 1,084,125.6648
 C.C. = N 1,915,319.9146 E 1,084,395.5331
 Back = S 63° 26' 58.42" W
 Ahead = S 1° 47' 23.68" E
 Chord Bear = S 30° 49' 47.37" W

FILE NAME =	DESIGNED - AJP	REVISED -
...\\expln_rbc\d1_2\08_r_data\expln_52.dgn	DRAWN - TMB	REVISED -
USER NAME = jma_jewaki	CHECKED - JMM	REVISED -
PLDT DATE = 11/13/2009	DATE - 10/16/09	REVISED -

benesch

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**ALIGNMENT PLAN
 I-290 CURVE DATA**

SCALE: N.T.S. SHEET NO. 42 OF 44 SHEETS STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
*	22(1, 1-1, 2&3)RS-7	DUPAGE	546	67
*290,355		CONTRACT NO.	60651	
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		