

**RAMP E\_STCHARLES\_A**

Curve Data

Curve E STCHRLS A-1  
 P.I. Station = 0+50.68 N 1,903,504.4155 E 1,096,719.2568  
 Delta = 13° 36' 09.36" (LT)  
 Degree = 13° 28' 55.96"  
 Tangent = 50.6848  
 Length = 100.8930  
 Radius = 424.9732  
 External = 3.0118  
 Long Chord = 100.6562  
 Mid. Ord. = 2.9906  
 P.C. Station = 0+00.00 N 1,903,555.0774 E 1,096,717.7337  
 P.T. Station = 1+00.89 N 1,903,455.5329 E 1,096,732.6522  
 C.C. = N 1,903,567.8479 E 1,097,142.5150  
 Back = S 1° 43' 19.24" E  
 Ahead = S 15° 19' 28.60" E  
 Chord Bear = S 8° 31' 23.92" E

Curve Data

Curve E STCHRLS A-2  
 P.I. Station = 2+50.01 N 1,903,310.6878 E 1,096,768.1039  
 Delta = 38° 37' 59.22" (LT)  
 Degree = 13° 28' 04.16"  
 Tangent = 149.1205  
 Length = 286.8550  
 Radius = 425.4272  
 External = 25.3779  
 Long Chord = 281.4517  
 Mid. Ord. = 23.9493  
 P.C. Station = 1+00.89 N 1,903,455.5329 E 1,096,732.6522  
 P.T. Station = 3+87.75 N 1,903,219.6742 E 1,096,886.2286  
 C.C. = N 1,903,556.6734 E 1,097,145.8820  
 Back = S 13° 45' 11.20" E  
 Ahead = S 52° 23' 10.42" E  
 Chord Bear = S 33° 04' 10.81" E

Course from PT E STCHRLS A-2 to PC E STCHRLS A-3 S 52° 37' 31.45" E Dist 194.0972

Curve Data

Curve E STCHRLS A-3  
 P.I. Station = 6+48.37 N 1,903,061.4684 E 1,097,093.3435  
 Delta = 26° 22' 05.22" (RT)  
 Degree = 20° 10' 28.45"  
 Tangent = 66.5282  
 Length = 130.6998  
 Radius = 284.0000  
 External = 7.6882  
 Long Chord = 129.5494  
 Mid. Ord. = 7.4856  
 P.C. Station = 5+81.85 N 1,903,101.8526 E 1,097,040.4746  
 P.T. Station = 7+12.54 N 1,903,001.8048 E 1,097,122.7758  
 C.C. = N 1,902,876.1624 E 1,096,868.0799  
 Back = S 52° 37' 31.45" E  
 Ahead = S 26° 15' 26.24" E  
 Chord Bear = S 39° 26' 28.84" E

Course from PT E STCHRLS A-3 to PC E STCHRLS A-4 S 26° 15' 26.24" E Dist 211.8152

Curve Data

Curve E STCHRLS A-4  
 P.I. Station = 10+44.52 N 1,902,704.0825 E 1,097,269.6432  
 Delta = 61° 59' 44.17" (LT)  
 Degree = 28° 38' 52.40"  
 Tangent = 120.1617  
 Length = 216.4055  
 Radius = 200.0000  
 External = 33.3213  
 Long Chord = 206.0021  
 Mid. Ord. = 28.5626  
 P.C. Station = 9+24.36 N 1,902,811.8454 E 1,097,216.4834  
 P.T. Station = 11+40.77 N 1,902,700.4190 E 1,097,389.7491  
 C.C. = N 1,902,900.3260 E 1,097,395.8467  
 Back = S 26° 15' 26.24" E  
 Ahead = S 88° 15' 10.41" E  
 Chord Bear = S 57° 15' 18.32" E

**RAMP E\_STCHARLES\_B**

Curve Data

Curve E STCHRLS B-1  
 P.I. Station = 0+65.86 N 1,902,865.3633 E 1,096,708.8790  
 Delta = 20° 40' 48.20" (RT)  
 Degree = 15° 52' 21.89"  
 Tangent = 65.8598  
 Length = 130.2865  
 Radius = 360.9695  
 External = 5.9590  
 Long Chord = 129.5805  
 Mid. Ord. = 5.8622  
 P.C. Station = 0+00.00 N 1,902,799.5610 E 1,096,711.6303  
 P.T. Station = 1+30.29 N 1,902,927.8974 E 1,096,729.5430  
 C.C. = N 1,902,814.6405 E 1,097,072.2847  
 Back = N 2° 23' 39.22" W  
 Ahead = N 18° 17' 08.98" E  
 Chord Bear = N 7° 56' 44.88" E

Curve Data

Curve E STCHRLS B-2  
 P.I. Station = 1+93.20 N 1,902,987.9259 E 1,096,748.3903  
 Delta = 31° 58' 07.84" (RT)  
 Degree = 26° 05' 08.02"  
 Tangent = 62.9177  
 Length = 122.5538  
 Radius = 219.6456  
 External = 8.8338  
 Long Chord = 120.9702  
 Mid. Ord. = 8.4922  
 P.C. Station = 1+30.29 N 1,902,927.8974 E 1,096,729.5430  
 P.T. Station = 2+52.84 N 1,903,028.8715 E 1,096,796.1617  
 C.C. = N 1,902,862.1018 E 1,096,939.1024  
 Back = N 17° 25' 50.87" E  
 Ahead = N 49° 23' 58.71" E  
 Chord Bear = N 33° 24' 54.79" E

Curve Data

Curve E STCHRLS B-3  
 P.I. Station = 22+76.63 N 1,904,222.9660 E 1,098,430.1327  
 Delta = 170° 39' 42.81" (RT)  
 Degree = 34° 39' 53.15"  
 Tangent = 2,023.7894  
 Length = 492.3209  
 Radius = 165.2854  
 External = 1,865.2423  
 Long Chord = 329.4737  
 Mid. Ord. = 151.8311  
 P.C. Station = 2+52.84 N 1,903,028.8715 E 1,096,796.1617  
 P.T. Station = 7+45.16 N 1,902,779.5672 E 1,097,011.5690  
 C.C. = N 1,902,895.4230 E 1,096,893.6848  
 Back = N 53° 50' 27.34" E  
 Ahead = S 44° 30' 10.15" W  
 Chord Bear = S 40° 49' 41.25" E

Curve Data

Curve E STCHRLS B-4  
 P.I. Station = 8+18.50 N 1,902,727.2643 E 1,096,960.1660  
 Delta = 44° 19' 57.74" (RT)  
 Degree = 31° 49' 50.66"  
 Tangent = 73.3339  
 Length = 139.2764  
 Radius = 180.0014  
 External = 14.3652  
 Long Chord = 135.8280  
 Mid. Ord. = 13.3035  
 P.C. Station = 7+45.16 N 1,902,779.5672 E 1,097,011.5690  
 P.T. Station = 8+84.44 N 1,902,725.7739 E 1,096,886.8472  
 C.C. = N 1,902,905.7382 E 1,096,883.1891  
 Back = S 44° 30' 10.15" W  
 Ahead = S 88° 50' 07.89" W  
 Chord Bear = S 66° 40' 09.02" W

Course from PT E STCHRLS B-4 to 761 S 88° 50' 07.89" W Dist 100.8826

Point 761 N 1,902,723.7237 E 1,096,785.9854 Sta 9+85.32

FILE NAME =	DESIGNED - AJP	REVISED -	<b>benesch</b>	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>ALIGNMENT PLAN I-290 CURVE DATA</b>			F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
...expIn_ABC_C4_290_R_Data_exaligr_6.dgn	DRAWN - TMB	REVISED -			290	2009-0998R	COOK/DUPAGE	309	33			
USER NAME = tblank	CHECKED - JMM	REVISED -			CONTRACT NO. 60157							
PLOT DATE = 11/13/2009	DATE = 10/16/09	REVISED -			SCALE: N.T.S.	SHEET NO. 19 OF 26 SHEETS	STA. TO STA.	FED. ROAD DIST. NO.	ILLINOIS FED. AID PROJECT			