

RAMP E_STCHARLES_C

Point 770 N 1,901,782.5102 E 1,096,726.9750 Sta 0+00.00

Course from 770 to PC E STCHRLS C-1 N 1° 27' 44.45" E Dist 18.3533

Curve Data

Curve E STCHRLS C-1
 P.I. Station 0+47.76 N 1,901,830.2281 E 1,096,728.8425
 Delta = 6° 24' 16.47" (RT)
 Degree = 10° 54' 07.36"
 Tangent = 29.4039
 Length = 58.7466
 Radius = 525.5508
 External = 0.8219
 Long Chord = 58.7160
 Mid. Ord. = 0.8206
 P.C. Station 0+18.35 N 1,901,800.8575 E 1,096,727.4434
 P.T. Station 0+77.10 N 1,901,859.2593 E 1,096,733.5091
 C.C. N 1,901,775.8507 E 1,097,252.3989
 Back = N 2° 43' 38.22" E
 Ahead = N 9° 07' 54.69" E
 Chord Bear = N 5° 55' 46.46" E

Curve Data

Curve E STCHRLS C-2
 P.I. Station 2+50.24 N 1,902,030.2074 E 1,096,760.9880
 Delta = 42° 57' 35.42" (RT)
 Degree = 13° 01' 18.37"
 Tangent = 173.1425
 Length = 329.9079
 Radius = 440.0000
 External = 32.8407
 Long Chord = 322.2341
 Mid. Ord. = 30.5598
 P.C. Station 0+77.10 N 1,901,859.2593 E 1,096,733.5091
 P.T. Station 4+07.01 N 1,902,136.5860 E 1,096,897.5966
 C.C. N 1,901,789.4282 E 1,097,167.9324
 Back = N 9° 07' 54.69" E
 Ahead = N 52° 05' 30.11" E
 Chord Bear = N 30° 36' 42.40" E

Course from PT E STCHRLS C-2 to PC E STCHRLS C-3 N 52° 05' 30.11" E Dist 200.4486

Curve Data

Curve E STCHRLS C-3
 P.I. Station 6+66.87 N 1,902,296.2456 E 1,097,102.6270
 Delta = 25° 21' 59.77" (LT)
 Degree = 21° 42' 10.61"
 Tangent = 59.4141
 Length = 116.8809
 Radius = 264.0000
 External = 6.6031
 Long Chord = 115.9287
 Mid. Ord. = 6.4420
 P.C. Station 6+07.46 N 1,902,259.7416 E 1,097,055.7496
 P.T. Station 7+24.34 N 1,902,349.3128 E 1,097,129.3462
 C.C. N 1,902,468.0363 E 1,096,893.5481
 Back = N 52° 05' 30.11" E
 Ahead = N 26° 43' 30.34" E
 Chord Bear = N 39° 24' 30.23" E

Course from PT E STCHRLS C-3 to PC E STCHRLS C-4 N 26° 43' 30.34" E Dist 180.1907

RAMP E_STCHARLES_C

Curve Data

Curve E STCHRLS C-4
 P.I. Station 10+32.00 N 1,902,624.1053 E 1,097,267.7033
 Delta = 65° 01' 18.54" (RT)
 Degree = 28° 38' 52.40"
 Tangent = 127.4676
 Length = 226.9690
 Radius = 200.0000
 External = 37.1666
 Long Chord = 214.9841
 Mid. Ord. = 31.3422
 P.C. Station 9+04.53 N 1,902,510.2545 E 1,097,210.3798
 P.T. Station 11+31.50 N 1,902,620.2195 E 1,097,395.1116
 C.C. N 1,902,420.3125 E 1,097,389.0147
 Back = N 26° 43' 30.34" E
 Ahead = S 88° 15' 11.11" E
 Chord Bear = N 59° 14' 09.61" E

Course from PT E STCHRLS C-4 to 771 S 88° 15' 11.11" E Dist 78.2074

Point 771 N 1,902,617.8354 E 1,097,473.2826 Sta 12+09.70

RAMP E_STCHARLES_D

Curve Data

Curve E STCHRLS D-1
 P.I. Station 1+22.07 N 1,902,409.0970 E 1,096,726.2207
 Delta = 44° 01' 13.35" (LT)
 Degree = 18° 58' 26.57"
 Tangent = 122.0659
 Length = 232.0031
 Radius = 301.9692
 External = 23.7385
 Long Chord = 226.3389
 Mid. Ord. = 22.0083
 P.C. Station 0+00.00 N 1,902,531.0369 E 1,096,720.6755
 P.T. Station 2+32.00 N 1,902,325.2644 E 1,096,814.9460
 C.C. N 1,902,544.7548 E 1,097,022.3329
 Back = S 2° 36' 13.45" E
 Ahead = S 46° 37' 26.80" E
 Chord Bear = S 24° 36' 50.12" E

Curve Data

Curve E STCHRLS D-2
 P.I. Station 4+12.72 N 1,902,211.2513 E 1,096,955.1649
 Delta = 95° 48' 20.68" (LT)
 Degree = 35° 05' 27.30"
 Tangent = 180.7216
 Length = 273.0215
 Radius = 163.2781
 External = 80.2790
 Long Chord = 242.3078
 Mid. Ord. = 53.8182
 P.C. Station 2+32.00 N 1,902,325.2644 E 1,096,814.9460
 P.T. Station 5+05.02 N 1,902,362.2841 E 1,097,054.4091
 C.C. N 1,902,451.9491 E 1,096,917.9543
 Back = S 50° 53' 06.65" E
 Ahead = N 33° 18' 32.67" E
 Chord Bear = N 81° 12' 43.01" E

Curve Data

Curve E STCHRLS D-3
 P.I. Station 6+85.75 N 1,902,513.3169 E 1,097,153.6534
 Delta = 95° 48' 20.68" (LT)
 Degree = 35° 05' 27.30"
 Tangent = 180.7216
 Length = 273.0215
 Radius = 163.2781
 External = 80.2790
 Long Chord = 242.3078
 Mid. Ord. = 53.8182
 P.C. Station 5+05.02 N 1,902,362.2841 E 1,097,054.4091
 P.T. Station 7+78.05 N 1,902,596.7742 E 1,096,993.3562
 C.C. N 1,902,451.9491 E 1,096,917.9543
 Back = N 33° 18' 32.67" E
 Ahead = N 62° 29' 48.01" W
 Chord Bear = N 14° 35' 37.67" W

Curve Data

Curve E STCHRLS D-4
 P.I. Station 8+61.75 N 1,902,634.4953 E 1,096,918.6296
 Delta = 24° 51' 42.78" (LT)
 Degree = 15° 05' 16.58"
 Tangent = 83.7075
 Length = 164.7799
 Radius = 379.7456
 External = 9.1164
 Long Chord = 163.4901
 Mid. Ord. = 8.9027
 P.C. Station 7+78.05 N 1,902,596.7742 E 1,096,993.3562
 P.T. Station 9+42.83 N 1,902,637.3032 E 1,096,834.9692
 C.C. N 1,902,257.7713 E 1,096,822.2311
 Back = N 63° 12' 57.04" W
 Ahead = N 88° 04' 39.82" W
 Chord Bear = N 75° 38' 48.43" W

FILE NAME =	DESIGNED - AJP	REVISED -	benesch	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	ALIGNMENT PLAN I-290 CURVE DATA			F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
... \expln\ABC_C4_290_R_Data_exalign_62.dgn	DRAWN - TMB	REVISED -			290	2009-0998R	COOK/DUPAGE	309	34			
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. 20 OF 26 SHEETS	STA. TO STA.	FED. ROAD DIST. NO.	ILLINOIS FED. AID PROJECT			