

HORIZONTAL & VERTICAL CONTROL

Chain EBUS20 contains:
 A41 CUR 210 CUR 220 CUR 230 CUR 240 CUR 250 CUR 260A CUR 260B CUR 270 CUR 280 -
 CUR 290 CUR 300 CUR 310 CUR 1210 CUR 1220 CUR 320 CUR 330 CUR 340 CUR 350 CUR 3-
 60 CUR 370 CUR 380 CUR 390 CUR 1200 CUR 1350

Beginning chain EBUS20 description
 =====

Point A41 N 2,116,769.4382 E 2,173,476.8314 Sta 110+45.2000

Course from A41 to PC 210 135° 50' 12.0423" Dist 92.4908'

Curve Data

Curve 210
 P.I. Station 121+53.2106 N 2,115,974.5993 E 2,174,248.7890
 Delta = 26° 33' 56.4358" (LT)
 Degree = 1° 19' 54.9535"
 Tangent = 1,015.5198'
 Length = 1,994.5227'
 Radius = 4,301.7061'
 External = 118.2437'
 Long Chord = 1,976.7048'
 Mid. Ord. = 115.0804'
 P.C. Station 111+37.6908 N 2,116,703.0894 E 2,173,541.2703
 P.T. Station 131+32.2135 N 2,115,639.4405 E 2,175,207.4074
 C.C. N 2,119,700.1139 E 2,176,627.1282

Course from PT 210 to PC 220 109° 16' 15.6066" Dist 3,183.2844'

Curve Data

Curve 220
 P.I. Station 181+95.1149 N 2,113,968.4973 E 2,179,986.6249
 Delta = 14° 45' 19.4403" (RT)
 Degree = 0° 23' 40.9006"
 Tangent = 1,879.6171'
 Length = 3,738.4345'
 Radius = 14,516.4834'
 External = 121.1821'
 Long Chord = 3,728.1123'
 Mid. Ord. = 120.1788'
 P.C. Station 163+15.4979 N 2,114,588.8399 E 2,178,212.3263
 P.T. Station 200+53.9324 N 2,112,916.7109 E 2,181,544.4136
 C.C. N 2,100,885.7425 E 2,173,421.3543

Course from PT 220 to PC 230 124° 01' 35.0469" Dist 179.2427'

Curve Data

Curve 230
 P.I. Station 207+91.4482 N 2,112,504.0155 E 2,182,155.6518
 Delta = 27° 20' 30.5247" (LT)
 Degree = 2° 29' 46.8188"
 Tangent = 558.2731'
 Length = 1,095.2766'
 Radius = 2,295.1927'
 External = 66.9204'
 Long Chord = 1,084.9136'
 Mid. Ord. = 65.0245'
 P.C. Station 202+33.1752 N 2,112,816.4111 E 2,181,692.9664
 P.T. Station 213+28.4518 N 2,112,439.0305 E 2,182,710.1298
 C.C. N 2,114,718.6205 E 2,182,977.2985

Course from PT 230 to PC 240 96° 41' 04.5221" Dist 1,033.9474'

Curve Data

Curve 240
 P.I. Station 230+93.9816 N 2,112,233.5165 E 2,184,463.6575
 Delta = 34° 18' 03.4570" (RT)
 Degree = 2° 25' 00.9096"
 Tangent = 731.5824'
 Length = 1,419.2017'
 Radius = 2,370.6120'
 External = 110.3181'
 Long Chord = 1,398.1031'
 Mid. Ord. = 105.4126'
 P.C. Station 223+62.3992 N 2,112,318.6753 E 2,183,737.0484
 P.T. Station 237+81.6009 N 2,111,753.6945 E 2,185,015.9108
 C.C. N 2,109,964.1788 E 2,183,461.1007

Course from PT 240 to PC 250 130° 59' 07.9792" Dist 776.8101'

Curve Data

Curve 250
 P.I. Station 247+83.0856 N 2,111,096.8521 E 2,185,771.9065
 Delta = 20° 32' 25.6417" (RT)
 Degree = 4° 37' 14.7098"
 Tangent = 224.6746'
 Length = 444.5262'
 Radius = 1,239.9664'
 External = 20.1905'
 Long Chord = 442.1496'
 Mid. Ord. = 19.8670'
 P.C. Station 245+58.4110 N 2,111,244.2091 E 2,185,602.3053
 P.T. Station 250+02.9372 N 2,110,899.3557 E 2,185,879.0223
 C.C. N 2,110,308.1895 E 2,184,789.0503

Course from PT 250 to PC 260A 151° 31' 33.6209" Dist 371.6949'

Curve Data

Curve 260A
 P.I. Station 257+73.1171 N 2,110,222.3417 E 2,186,246.2132
 Delta = 43° 30' 25.6437" (LT)
 Degree = 5° 44' 14.7756"
 Tangent = 398.4850'
 Length = 758.3023'
 Radius = 998.6301'
 External = 76.5686'
 Long Chord = 740.2149'
 Mid. Ord. = 71.1159'
 P.C. Station 253+74.6321 N 2,110,572.6234 E 2,186,056.2315
 P.T. Station 261+32.9344 N 2,110,099.0782 E 2,186,625.1543
 C.C. N 2,111,048.7301 E 2,186,934.0609

Curve Data

Curve 260B
 P.I. Station 265+56.3698 N 2,109,968.0967 E 2,187,027.8221
 Delta = 50° 27' 57.4743" (LT)
 Degree = 6° 22' 36.4961"
 Tangent = 423.4353'
 Length = 791.3990'
 Radius = 898.5030'
 External = 94.7770'
 Long Chord = 766.0638'
 Mid. Ord. = 85.7335'
 P.C. Station 261+32.9344 N 2,110,099.0782 E 2,186,625.1543
 P.T. Station 269+24.3334 N 2,110,195.2785 E 2,187,385.1538
 C.C. N 2,110,953.5138 E 2,186,903.0886

Course from PT 260B to PC 270 57° 33' 10.5028" Dist 215.2083'

Curve Data

Curve 270
 P.I. Station 274+50.1507 N 2,110,477.3902 E 2,187,828.8844
 Delta = 17° 32' 23.5776" (RT)
 Degree = 2° 50' 44.6120"
 Tangent = 310.6090'
 Length = 616.3589'
 Radius = 2,013.3979'
 External = 23.8181'
 Long Chord = 613.9550'
 Mid. Ord. = 23.5396'
 P.C. Station 271+39.5417 N 2,110,310.7421 E 2,187,566.7654
 P.T. Station 277+55.9006 N 2,110,557.2957 E 2,188,129.0394
 C.C. N 2,108,611.6611 E 2,188,646.9945

Course from PT 270 to PC 280 75° 05' 34.0805" Dist 2,767.6989'

Curve Data

Curve 280
 P.I. Station 309+75.7742 N 2,111,385.6217 E 2,191,240.5441
 Delta = 24° 03' 46.3737" (RT)
 Degree = 2° 42' 02.1842"
 Tangent = 452.1747'
 Length = 891.0176'
 Radius = 2,121.5892'
 External = 47.6509'
 Long Chord = 884.4838'
 Mid. Ord. = 46.6042'
 P.C. Station 305+23.5995 N 2,111,269.2979 E 2,190,803.5880
 P.T. Station 314+14.6171 N 2,111,313.6728 E 2,191,686.9579
 C.C. N 2,109,219.1134 E 2,191,349.3757

Course from PT 280 to PC 290 99° 09' 20.4541" Dist 2,018.9751'

Curve Data

Curve 290
 P.I. Station 340+79.3624 N 2,110,889.6650 E 2,194,317.7534
 Delta = 31° 29' 54.5453" (LT)
 Degree = 2° 30' 07.8095"
 Tangent = 645.7702'
 Length = 1,258.8471'
 Radius = 2,289.8442'
 External = 89.3165'
 Long Chord = 1,243.0544'
 Mid. Ord. = 85.9634'
 P.C. Station 334+33.5922 N 2,110,992.4183 E 2,193,680.2105
 P.T. Station 346+92.4393 N 2,111,135.1527 E 2,194,915.0430
 C.C. N 2,113,253.0891 E 2,194,044.5650

Course from PT 290 to PC 300 67° 39' 25.9089" Dist 370.7675'

Curve Data

Curve 300
 P.I. Station 354+84.3342 N 2,111,436.1894 E 2,195,647.4872
 Delta = 20° 21' 23.6060" (RT)
 Degree = 2° 26' 33.5781"
 Tangent = 421.1275'
 Length = 833.3764'
 Radius = 2,345.6300'
 External = 37.5042'
 Long Chord = 829.0001'
 Mid. Ord. = 36.9139'
 P.C. Station 350+63.2068 N 2,111,276.0989 E 2,195,257.9755
 P.T. Station 358+96.5832 N 2,111,450.7855 E 2,196,068.3616
 C.C. N 2,109,106.5648 E 2,196,149.6602

FILE NAME =	USER NAME = cushmanbw	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	HORIZONTAL & VERTICAL CONTROL	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
c:\pwwork\pwwork\cushmanbw\d0117386\022808-ATB.dgn		DRAWN -	REVISED -			301	31T	JO DAVIESS	160	24	
PLOT SCALE = 50.0000' / IN.		CHECKED -	REVISED -			CONTRACT NO. 64D92					
PLOT DATE = Wed Dec 09 11:18:30 2009		DATE -	REVISED -			ILLINOIS FED. AID PROJECT					
SCALE: SHEET NO. OF SHEETS STA. TO STA.											