



8/12/2015 2:55 PM PT

STATE OF NORTH CAROLINA  
DIVISION OF HIGHWAYS  
**ALIGNMENT DESCRIPTIONS**

Chain L contains:  
MEDIAN1 MEDIAN24 CUR MDC1 CUR MDC2 CUR MDC3 CUR MDC4  
CUR MDC5 CUR MDC6 CUR MDC7 CUR MDC11 MEDIAN37

Beginning chain L description

Point MEDIAN1 N 115,814.3110 E 2,333,570.7048 Sta 10+00.00  
Course from MEDIAN1 to MEDIAN24 N 13° 45' 45.05" E Dist 5,162.5886  
Point MEDIAN24 N 120,828.6824 E 2,334,798.8746 Sta 61+62.59

Curve Data  
Curve MDC1  
P.I. Station = 65+18.53 N 121,744.4088 E 2,334,883.5533  
Delta = 23° 55' 29.91" (LT)  
Degree = 3° 24' 37.67"  
Tangent = 355.9456  
Length = 701.5169  
Radius = 1,680.0000  
External = 37.2936  
Long Chord = 696.4313  
Mid.Ord. = 36.4837  
P.C. Station = 61+62.59 N 120,828.6824 E 2,334,798.8746  
P.T. Station = 68+64.11 N 121,524.7700 E 2,334,820.7503  
C.C. = N 121,228.3511 E 2,333,167.1072  
Back = N 13° 45' 45.05" E  
Ahead = N 10° 09' 44.85" W  
Chord Bear = N 1° 48' 00.10" E

Course from PT MDC1 to PC MDC2 N 10° 09' 44.85" W Dist 5,513.3386

Curve Data  
Curve MDC2  
P.I. Station = 125+98.31 N 127,169.0120 E 2,333,809.0083  
Delta = 6° 51' 35.92" (LT)  
Degree = 1° 33' 17.42"  
Tangent = 220.8649  
Length = 441.2020  
Radius = 3,685.0000  
External = 6.6130  
Long Chord = 440.9385  
Mid.Ord. = 6.6011  
P.C. Station = 123+77.44 N 126,951.6122 E 2,333,847.9777  
P.T. Station = 128+18.65 N 127,380.2009 E 2,333,744.3510  
C.C. = N 126,301.4313 E 2,330,220.7901  
Back = N 10° 09' 44.85" W  
Ahead = N 17° 01' 20.77" W  
Chord Bear = N 13° 35' 32.81" W

Course from PT MDC2 to PC MDC3 N 17° 01' 20.77" W Dist 1,086.0928

Curve Data  
Curve MDC3  
P.I. Station = 141+62.08 N 128,664.7757 E 2,333,351.0669  
Delta = 11° 28' 49.65" (RT)  
Degree = 2° 14' 17.22"  
Tangent = 257.3374  
Length = 512.9518  
Radius = 2,560.0000  
External = 12.9016  
Long Chord = 512.0941  
Mid.Ord. = 12.8369  
P.C. Station = 139+04.74 N 128,418.7122 E 2,333,426.4015  
P.T. Station = 144+17.69 N 128,920.9103 E 2,333,326.2146  
C.C. = N 129,168.1424 E 2,335,874.2484  
Back = N 17° 01' 20.77" W  
Ahead = N 5° 32' 31.12" W  
Chord Bear = N 11° 16' 55.95" W

Course from PT MDC3 to PC MDC4 N 5° 32' 31.12" W Dist 5,667.9422

Curve Data  
Curve MDC4  
P.I. Station = 204+06.37 N 134,881.5919 E 2,332,747.8582  
Delta = 10° 11' 26.83" (RT)  
Degree = 1° 35' 34.36"  
Tangent = 320.7322  
Length = 639.7724  
Radius = 3,597.0000  
External = 14.2710  
Long Chord = 638.9295  
Mid.Ord. = 14.2146  
P.C. Station = 200+85.63 N 134,562.3589 E 2,332,778.8329  
P.T. Station = 207+25.41 N 135,201.2689 E 2,332,773.8529  
C.C. = N 134,909.7392 E 2,336,359.0195  
Back = N 5° 32' 31.12" W  
Ahead = N 4° 38' 55.71" E  
Chord Bear = N 0° 26' 47.71" W

Course from PT MDC4 to PC MDC5 N 4° 38' 55.71" E Dist 1,699.4451

Curve Data  
Curve MDC5  
P.I. Station = 226+01.34 N 137,071.0314 E 2,332,925.8936  
Delta = 3° 06' 00.55" (LT)  
Degree = 0° 52' 42.60"  
Tangent = 176.4889  
Length = 352.8916  
Radius = 6,522.0000  
External = 2.3875  
Long Chord = 352.8485  
Mid.Ord. = 2.3866  
P.C. Station = 224+24.85 N 136,895.1232 E 2,332,911.5895  
P.T. Station = 227+77.74 N 137,247.4558 E 2,332,930.6634  
C.C. = N 137,423.7183 E 2,326,411.0456  
Back = N 4° 38' 55.71" E  
Ahead = N 1° 32' 55.16" E  
Chord Bear = N 3° 05' 55.43" E

Course from PT MDC5 to PC MDC6 N 1° 32' 55.16" E Dist 855.2407

Curve Data  
Curve MDC6  
P.I. Station = 239+98.02 N 138,467.2861 E 2,332,963.6423  
Delta = 23° 57' 51.03" (RT)  
Degree = 3° 19' 52.14"  
Tangent = 365.0353  
Length = 719.3964  
Radius = 1,720.0000  
External = 38.3091  
Long Chord = 714.1642  
Mid.Ord. = 37.4744  
P.C. Station = 236+32.98 N 138,102.3841 E 2,332,953.7770  
P.T. Station = 243+52.38 N 138,796.7263 E 2,333,120.8679  
C.C. = N 138,055.8997 E 2,334,673.1487  
Back = N 1° 32' 55.16" E  
Ahead = N 25° 30' 46.18" E  
Chord Bear = N 13° 31' 50.67" E

Course from PT MDC6 to PC MDC7 N 25° 30' 46.18" E Dist 2,566.4600

Curve Data  
Curve MDC7  
P.I. Station = 272+27.21 N 141,391.2264 E 2,334,359.0941  
Delta = 15° 06' 36.86" (LT)  
Degree = 2° 27' 51.60"  
Tangent = 308.3678  
Length = 613.1570  
Radius = 2,325.0000  
External = 20.3605  
Long Chord = 611.3816  
Mid.Ord. = 20.1837  
P.C. Station = 269+18.84 N 141,112.9279 E 2,334,226.2760  
P.T. Station = 275+32.00 N 141,694.5257 E 2,334,414.7741  
C.C. = N 142,114.3360 E 2,332,127.9894  
Back = N 25° 30' 46.18" E  
Ahead = N 10° 24' 09.32" E  
Chord Bear = N 17° 57' 27.75" E

Course from PT MDC7 to PC MDC11 N 10° 24' 09.32" E Dist 702.6235

Curve Data  
Curve MDC11  
P.I. Station = 282+54.74 N 142,405.3903 E 2,334,545.2754  
Delta = 0° 43' 13.83" (RT)  
Degree = 1° 47' 25.78"  
Tangent = 20.1207  
Length = 40.2408  
Radius = 3,200.0000  
External = 0.0633  
Long Chord = 40.2405  
Mid.Ord. = 0.0633  
P.C. Station = 282+34.62 N 142,385.6004 E 2,334,541.6423  
P.T. Station = 282+74.86 N 142,425.1330 E 2,334,549.1570  
C.C. = N 141,807.7968 E 2,337,689.0449  
Back = N 10° 24' 09.32" E  
Ahead = N 11° 07' 23.15" E  
Chord Bear = N 10° 45' 46.24" E

Course from PT MDC11 to MEDIAN37 N 11° 07' 23.15" E Dist 2,168.8786

Point MEDIAN37 N 144,553.2692 E 2,334,967.5718 Sta 304+43.74

Ending chain L description

Chain LI contains:  
MEDIAN25 CUR MDC8 CUR MDC9 CUR MDC10 MEDIAN32

Beginning chain LI description

Point MEDIAN25 N 143,759.9920 E 2,334,952.8031 Sta 10+00.00  
Course from MEDIAN25 to PC MDC8 N 61° 49' 09.30" W Dist 95.0471

Curve Data  
Curve MDC8  
P.I. Station = 12+93.25 N 143,898.4824 E 2,334,694.3110  
Delta = 26° 46' 06.57" (RT)  
Degree = 6° 52' 41.68"  
Tangent = 198.2066  
Length = 389.1762  
Radius = 833.0000  
External = 23.2563  
Long Chord = 385.6464  
Mid.Ord. = 22.6246  
P.C. Station = 10+95.05 N 143,804.8785 E 2,334,869.0226  
P.T. Station = 14+84.22 N 144,060.7429 E 2,334,580.4806  
C.C. = N 144,539.1364 E 2,335,262.4107  
Back = N 61° 49' 09.30" W  
Ahead = N 35° 03' 02.73" W  
Chord Bear = N 48° 26' 06.02" W

Course from PT MDC8 to PC MDC9 N 35° 03' 02.73" W Dist 514.6672

Curve Data  
Curve MDC9  
P.I. Station = 20+89.65 N 144,556.3749 E 2,334,232.7806  
Delta = 4° 31' 10.96" (LT)  
Degree = 2° 29' 28.04"  
Tangent = 90.7635  
Length = 181.4328  
Radius = 2,300.0000  
External = 1.7902  
Long Chord = 181.3858  
Mid.Ord. = 1.7888  
P.C. Station = 19+98.89 N 144,482.0719 E 2,334,284.9063  
P.T. Station = 21+80.32 N 144,626.3392 E 2,334,174.9619  
C.C. = N 143,161.775 E 2,332,402.0261  
Back = N 35° 03' 02.73" W  
Ahead = N 39° 34' 13.70" W  
Chord Bear = N 37° 18' 38.21" W

Course from PT MDC9 to PC MDC10 N 39° 34' 13.70" W Dist 1,923.2492

Curve Data  
Curve MDC10  
P.I. Station = 144+50.75 N 154,084.8915 E 2,326,358.3743  
Delta = 13° 28' 09.40" (RT)  
Degree = 1° 56' 55.81"  
Tangent = 347.1727  
Length = 691.1448  
Radius = 2,940.0000  
External = 20.4271  
Long Chord = 689.5544  
Mid.Ord. = 20.2862  
P.C. Station = 141+03.57 N 153,817.2763 E 2,326,579.5326  
P.T. Station = 147+94.72 N 154,396.6590 E 2,326,205.6329  
C.C. = N 155,690.1351 E 2,328,845.8071  
Back = N 39° 34' 13.70" W  
Ahead = N 26° 06' 04.29" W  
Chord Bear = N 32° 50' 08.99" W

Course from PT MDC10 to MEDIAN32 N 26° 06' 04.29" W Dist 1,576.4274

Point MEDIAN32 N 155,812.3198 E 2,325,512.0713 Sta 163+71.14

Ending chain LI description

5/28/99

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