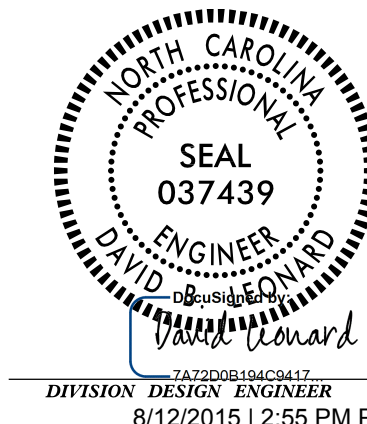


STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS
ALIGNMENT DESCRIPTIONS



Chain Y1 contains:
1000 CUR Y1 C1 1002

Beginning chain Y1 description

Point 1000 N 115,507.2502 E 2,333,388.7400 Sta 10+00.00

Course from 1000 to PC Y1 C1 N 13° 43' 02.68" E Dist 880.0834

| Curve Data | | | |
|--------------|------------|---------------------|----------------|
| -----x----- | | | |
| Curve Y1 C1 | | | |
| P.J. Station | 19+35.13 N | 116,415.7044 E | 2,333,610.4897 |
| Delta | = | 90° 02' 42.37" (RT) | |
| Degree | = | 104° 10' 26.92" | |
| Tangent | = | 55.0433 | |
| Length | = | 86.4371 | |
| Radius | = | 55.0000 | |
| External | = | 22.8124 | |
| Long Chord | = | 77.8124 | |
| Mid.Ord. | = | 16.1244 | |
| P.C. Station | 18+80.08 N | 116,362.2311 E | 2,333,597.4371 |
| P.T. Station | 19+66.52 N | 116,402.6097 E | 2,333,663.9528 |
| C.C. | N | 116,349.1887 E | 2,333,650.8684 |
| Back | = N | 13° 43' 02.68" E | |
| Ahead | = S | 76° 14' 14.95" E | |
| Chord Bear | = N | 58° 44' 23.87" E | |

Course from PT Y1 C1 to 1002 S 76° 14' 14.95" E Dist 49.3843

Point 1002 N 116,390.8613 E 2,333,711.9192 Sta 20+15.90

Ending chain Y1 description

Chain Y2 contains:
1003 1004

Beginning chain Y2 description

Point 1003 N 116,390.8613 E 2,333,711.9192 Sta 10+00.00

Course from 1003 to 1004 S 73° 18' 29.22" E Dist 708.6613

Point 1004 N 116,187.3161 E 2,334,390.7198 Sta 17+08.66

Ending chain Y2 description

Chain Y3 contains:
1005 1006

Beginning chain Y3 description

Point 1005 N 116,894.4639 E 2,333,447.2576 Sta 10+00.00

Course from 1005 to 1006 N 89° 35' 12.73" E Dist 388.7056

Point 1006 N 116,897.2667 E 2,333,835.9531 Sta 13+88.71

Ending chain Y3 description

Chain Y4 contains:
1007 1008

Beginning chain Y4 description

Point 1007 N 116,955.2414 E 2,333,850.1528 Sta 10+00.00

Course from 1007 to 1008 S 70° 26' 44.77" E Dist 225.7608

Point 1008 N 116,879.6795 E 2,334,062.8929 Sta 12+25.76

Ending chain Y4 description

Chain Y5 contains:
1010 1011

Beginning chain Y5 description

Point 1010 N 118,011.7133 E 2,333,652.6612 Sta 10+00.00

Course from 1010 to 1011 S 76° 17' 56.93" E Dist 443.6256

Point 1011 N 117,906.6394 E 2,334,083.6637 Sta 14+43.63

Ending chain Y5 description

Chain Y6 contains:
1012 1013

Beginning chain Y6 description

Point 1012 N 118,016.7216 E 2,334,110.4111 Sta 10+00.00

Course from 1012 to 1013 S 78° 19' 47.77" E Dist 247.8448

Point 1013 N 117,966.5887 E 2,334,352.8626 Sta 12+47.84

Ending chain Y6 description

Chain Y7 contains:
1014 1015

Beginning chain Y7 description

Point 1014 N 118,430.5016 E 2,334,072.7821 Sta 10+00.00

Course from 1014 to 1015 S 77° 47' 01.72" E Dist 134.7730

Point 1015 N 118,401.9835 E 2,334,204.5033 Sta 11+34.77

Ending chain Y7 description

Chain Y8 contains:
1016 1017

Beginning chain Y8 description

Point 1016 N 118,729.9707 E 2,334,284.8372 Sta 10+00.00

Course from 1016 to 1017 N 88° 43' 08.75" E Dist 344.2361

Point 1017 N 118,737.6658 E 2,334,628.9873 Sta 13+44.24

Ending chain Y8 description

Chain Y9 contains:
1018 1019

Beginning chain Y9 description

Point 1018 N 119,159.6207 E 2,334,049.8376 Sta 10+00.00

Course from 1018 to 1019 N 88° 18' 51.52" E Dist 342.8524

Point 1019 N 119,169.7063 E 2,334,392.5416 Sta 13+42.85

Ending chain Y9 description

Chain Y10 contains:
1020 1021

Beginning chain Y10 description

Point 1020 N 119,576.9566 E 2,334,492.2894 Sta 10+00.00

Course from 1020 to 1021 N 87° 48' 53.09" E Dist 287.2324

Point 1021 N 119,587.9089 E 2,334,779.3130 Sta 12+87.23

Ending chain Y10 description

Chain Y11 contains:
1022 1023

Beginning chain Y11 description

Point 1022 N 119,856.1059 E 2,334,385.3160 Sta 10+00.00

Course from 1022 to 1023 S 79° 11' 26.88" E Dist 170.5378

Point 1023 N 119,824.1234 E 2,334,552.8280 Sta 11+70.54

Ending chain Y11 description

Chain Y12 contains:
1024 1025

Beginning chain Y12 description

Point 1024 N 120,377.4581 E 2,334,556.3884 Sta 10+00.00

Course from 1024 to 1025 S 77° 45' 47.90" E Dist 128.2245

Point 1025 N 120,350.2809 E 2,334,681.6997 Sta 11+28.22

Ending chain Y12 description