

SURVEY CONTROL SHEET

(BASELINES & BENCHMARKS FROM R-2707AB)

DATUM DESCRIPTION

THE LOCALIZED COORDINATE SYSTEM DEVELOPED FOR THIS PROJECT IS BASED ON THE STATE PLANE COORDINATES ESTABLISHED BY NCGS FOR MONUMENT "M 77"

WITH NAD 83/95 STATE PLANE GRID COORDINATES OF
 NORTHING: 573127.522(±ft) EASTING: 124297.658(±ft)
 ELEVATION: 852.279'(±ft)

THE AVERAGE COMBINED GRID FACTOR USED ON THIS PROJECT (GROUND TO GRID) IS: 0.99984410

THE N.C. LAMBERT GRID BEARING AND LOCALIZED HORIZONTAL GROUND DISTANCE FROM "M 77" TO -L- L STATION 5+03.30 IS
 N 75 36 14 W 3868.1352'

ALL LINEAR DIMENSIONS ARE LOCALIZED HORIZONTAL DISTANCES
 VERTICAL DATUM USED IS NAVD 88

BL	POINT	DESC.	NORTH	EAST	ELEVATION	L STATION	OFFSET
51		BL-51	574330.0960	1199951.0580	777.82	6+46.09	9.65 LT
52		BL-52	573787.7590	1201029.3960	840.29	18+41.60	102.14 RT
53		BL-53	573539.9250	1201703.5230	863.31	25+41.98	181.21 RT
54		BL-54	573528.5710	1202429.1060	867.46	32+48.73	87.92 RT
GPS1	R2707-1	BL-1	573421.5670	1203564.8650	857.78	43+80.14	152.12 RT
55		BL-55	573484.3420	1204642.2090	815.49	54+56.10	68.91 RT
56		BL-56	573481.7304	1206193.1674	869.44	70+06.83	42.09 RT
57		BL-57	573448.2746	1207572.8073	904.02	83+85.43	52.32 RT
58		BL-58	573345.4930	1207880.5420	910.16	86+85.84	163.89 RT
GPS31	R2707-31	BL-3	573379.9860	1208167.8730	903.36	89+69.03	148.70 RT
59		BL-59	573674.8680	1209275.1970	900.41	100+98.79	2.65 RT
60		BL-60	573747.8850	1210159.0270	896.86	109+83.94	57.30 RT
61		BL-61	574007.8410	1211439.9910	884.96	122+88.96	16.02 LT
62		BL-62	574196.6720	1211949.1260	856.00	128+19.93	129.78 LT
63		BL-63	574117.4520	1212359.8770	863.93	132+15.05	7.60 RT
64		BL-64	574165.7160	1212705.1130	865.49	135+63.64	9.41 RT
65		BL-65	574311.9220	1213654.1150	839.65	145+23.34	12.28 RT
66		BL-66	574536.0740	1214854.5830	769.85	157+29.50	126.46 RT
67		BL-67	574774.0100	1215824.1240	829.63	166+85.29	305.06 RT
68		BL-68	575199.5170	1216535.5970	814.52	174+90.11	299.85 RT
69		BL-69	575543.4290	1217484.3040	833.90	184+75.79	516.09 RT
70		BL-70	575899.8230	1218150.9200	848.57	192+77.03	545.30 RT
GPS4	R2707-4	BL-4	576194.7690	1219011.5400	875.11	202+59.67	621.30 RT
71		BL-71	576719.3775	1219753.9080	846.57	211+55.67	346.13 RT
72		BL-72	576680.3044	1220309.0066	838.40	216+75.12	545.72 RT
73		BL-73	576872.7786	1220584.3134	812.27	219+94.66	442.10 RT

BY	POINT	DESC.	NORTH	EAST	ELEVATION	SR3 STATION	OFFSET
184	BY184	BL-53	573539.9250	1201703.5230	863.31	20+61.05	102.57 LT
185	BY-185		573149.7890	1201741.2030	849.14	OUTSIDE PROJECT LIMITS	

BY1	POINT	DESC.	NORTH	EAST	ELEVATION	Y2 STATION	OFFSET
187		BY1-187	573881.1120	1203503.7520	866.48	18+92.39	21.02 RT
186	BY1-186	R2707-1	573421.5670	1203564.8650	857.78	23+55.68	4.46 RT

BY2	POINT	DESC.	NORTH	EAST	ELEVATION	Y2 STATION	OFFSET
188	BY2-188	R2707-1	573421.5670	1203564.8650	857.78	23+55.68	4.46 RT
189		BY2-189	572653.5030	1203419.2600	835.16	31+59.00	153.82 RT
190		BY2-190	572001.6760	1203339.5730	829.78	38+21.31	22.69 LT

BY3	POINT	DESC.	NORTH	EAST	ELEVATION	L STATION	OFFSET
191		BY3-191	574306.3750	1208596.4200	902.60	95+17.72	719.78 LT
192	BY3-192	R2707-31	573379.9860	1208167.8730	903.36	89+69.03	148.70 RT
193		BY3-193	572864.1070	1207894.4440	896.50	86+77.18	645.39 RT

BY4	POINT	DESC.	NORTH	EAST	ELEVATION	Y4 STATION	OFFSET
194	BY4-194	BL-60	573747.8850	1210159.0270	896.86	36+32.25	126.41 RT
195		BY4-195	572968.0350	1210559.6090	887.32	45+74.91	8.36 RT
196		BY4-196	572250.1070	1210605.8100	872.91	52+93.92	15.51 LT
197		BY4-197	571473.0730	1210583.4530	870.98	60+70.07	14.94 RT

BY5	POINT	DESC.	NORTH	EAST	ELEVATION	Y5 STATION	OFFSET
198		BY5-198	577349.0600	1218681.4870	889.61	11+13.94	20.52 RT
199		BY5-199	576630.4710	1218866.3930	873.82	18+55.90	13.26 RT
220	BY5-220	R2707-4	576194.7690	1219011.5400	875.11	23+13.69	23.22 LT

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BM1      ELEVATION = 780.10
N 574452      E 1199980
L STATION 6+19.00 132 LEFT
RR SPIKE IN 18 INCH OAK
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BM2      ELEVATION = 866.06
N 573685      E 1201854
L STATION 26+61.00 11 RIGHT
RR SPIKE IN 30 INCH OAK
*****
BM3      ELEVATION = 832.22
N 572054      E 1203304
L STATION 41+46.00 1524 RIGHT
RR SPIKE IN 18 INCH MAPLE
*****
BM4      ELEVATION = 908.06
N 573223      E 1207632
L STATION 84+41.00 278 RIGHT
RR SPIKE IN 28 INCH OAK
*****
BM5      ELEVATION = 908.12
N 574478      E 1208631
L STATION 95+76.00 885 LEFT
RR SPIKE IN 28 INCH OAK
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NOTES:

1. THE SITE CALIBRATION SHOWN IS BASED UPON A NETWORK TIED TO THE HARN (HIGH ACCURACY REFERENCE NETWORK) NAD 83/95 ADJUSTMENT. THIS CALIBRATION WILL ALLOW THE END USER TO WORK WITHIN THE SAME COORDINATE SYSTEM WHEN USING RTK (REAL TIME KINEMATIC) GPS AND A LOCAL BASE STATION. IF ANOTHER SYSTEM SUCH AS VRS (VIRTUAL REFERENCE STATION) IS USED, ADDITIONAL FIELD TIES MAY BE NEEDED TO REDUCE POSSIBLE ERRORS, OR BIASES.
2. THE CONTROL DATA FOR THIS PROJECT CAN BE FOUND ELECTRONICALLY BY SELECTING PROJECT CONTROL DATA AT:
[HTTP://WWW.NCDOT.ORG/DOH/PRECONSTRUCT/HIGHWAY/LOCATION/PROJECT/](http://www.ncdot.org/DOH/PRECONSTRUCT/HIGHWAY/LOCATION/PROJECT/)
 THE FILES TO BE FOUND ARE AS FOLLOWS:
 R2707A_LS_GPSALIB_100701.PDF
 R2707A_LS_WGS84_100701.TXT
 R2707A_LS_LOCAL_100701.TXT
 R2707A_LS_CONTROL_100701.TXT

THE WGS84 AND LOCAL FILES ARE COMMA DELIMITED AND CAN BE USED TO REPRODUCE THE SITE CALIBRATION FOR THE END USER'S GPS EQUIPMENT. IF FURTHER INFORMATION IS NEEDED, PLEASE CONTACT THE LOCATION AND SURVEYS UNIT.