

# SURVEY CONTROL SHEET

(BASELINES & BENCHMARKS FROM R-2707B)

FINAL

BL	POINT	DESC.	NORTH	EAST	ELEVATION	L STATION	OFFSET
	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
	74	BL 74	577109.3662	1220959.9758	833.61	224+23.06	325.63 RT
	75	BL 75	577312.3431	1221369.8696	853.53	228+74.38	251.30 RT
	76	BL 76	577698.6054	1222201.6874	873.50	237+82.77	125.00 RT
	77	BL 77	577877.4566	1222710.9535	889.90	243+22.07	102.78 RT
GPS 6	R2707-6		578041.4940	1223321.3870	891.43	249+53.79	124.30 RT
	78	BL 78	578523.0905	1223343.4117	857.82	260+71.94	37.59 LT
	79	BL 79	578766.0758	1225055.6213	833.17	268+24.07	61.63 LT
	80	BL 80	578897.8289	1225575.7159	851.41	273+62.83	34.96 LT
	81	BL 81	579194.1181	1226908.2502	847.95	287+23.48	48.53 RT
	82	BL 82	579500.3278	1228367.6384	844.88	302+17.83	49.76 RT
	83	BL 83	579623.3137	1229442.5167	824.88	312+98.25	113.93 RT
	84	BL 84	579861.5262	1230604.6440	753.71	324+84.02	78.87 RT
	85	BL 85	579917.2312	1231047.6184	736.23	329+29.43	100.29 RT
	86	BL 86	579999.9612	1231617.0553	778.41	334+94.85	143.73 RT
	87	BL 87	580106.4693	1231965.8510	762.11	338+64.29	121.66 RT
	88	BL 88	580182.1603	1232650.1704	746.27	345+67.32	147.66 RT
	89	BL 89	580254.7601	1233031.0044	772.82	349+50.42	115.15 RT
GPS 8	R2707-8		580239.3390	1233459.6170	811.53	353+64.64	197.06 RT
	90	BL 90	580499.7062	1234006.2199	807.65	359+47.10	36.13 RT
	91	BL 91	580653.6979	1234513.7582	763.47	364+75.14	0.87 RT
	92	BL 92	580787.4190	1234972.5183	778.06	369+52.98	1.52 RT
	93	BL 93	581010.5855	1235703.0526	769.83	377+16.83	2.09 LT
	94	BL 94	581155.9601	1236203.9489	717.34	382+38.41	1.97 RT
	95	BL 95	581329.7707	1236682.0576	757.35	387+42.83	51.04 LT

  

BY9	POINT	DESC.	NORTH	EAST	ELEVATION	Y1 STATION	OFFSET
	360	BY9 360	581416.7323	1233713.6148	799.32	18+47.85	18.70 LT
	361	BY9 361	580831.7503	1233650.7821	803.25	24+33.70	24.73 RT
GPS 8	R2707-8		580239.3390	1233459.6170	811.53	30+53.94	24.73 RT
GPS 7	R2707-7		579006.8290	1233137.4580	816.98	43+26.78	16.91 RT

  

BY6	POINT	DESC.	NORTH	EAST	ELEVATION	L STATION	OFFSET
	350	BY6 350	577523.1977	1221074.9543	835.21	226+53.96	36.53 LT
	351	BY6 351	577499.1909	1221882.6446	863.19	234+19.37	222.47 RT
	352	BY6 352	577479.5026	1222523.1124	882.29	240+26.13	428.47 RT
	353	BY6 353	577475.5770	1223172.7895	871.02	246+46.29	622.09 RT

  

BY7	POINT	DESC.	NORTH	EAST	ELEVATION	Y7 STATION	OFFSET
	354	BY7 354	579433.4648	1222439.4342	889.80	10+27.62	48.36 LT
	355	BY7 355	578800.9780	1222568.4036	890.67	16+66.44	34.94 RT
	356	BY7 356	578348.7630	1222909.1844	890.47	22+30.54	22.02 LT
6	R2707-6		578041.4940	1223321.3870	881.43	27+57.44	48.36 LT
5	R2707-5		577485.5880	1224323.7950	887.49	OUTSIDE PROJECT LIMITS	

  

BY8	POINT	DESC.	NORTH	EAST	ELEVATION	L STATION	OFFSET
	357	BY8 357	578737.8507	1222867.6235	878.47	247+23.34	674.26 LT
	358	BY8 358	578255.4401	1223549.2655	870.65	252+34.25	13.71 LT
	359	BY8 359	578108.2606	1224289.2647	865.78	258+98.93	343.31 RT

  

BY10	POINT	DESC.	NORTH	EAST	ELEVATION	L STATION	OFFSET
	362	BY10 362	582016.7270	1236469.3313	733.57	386+84.78	767.58 LT
	363	BY10 363	581443.2347	1236575.2458	752.92	386+64.10	184.80 LT
	95	BL 95	581329.7707	1236682.0576	757.35	387+42.83	51.04 LT
	364	BY10 364	581047.9599	1236951.0094	777.81	389+54.41	278.10 RT
	365	BY10 365	580920.1510	1237376.2533	794.84	393+71.11	470.82 RT
	366	BY10 366	580898.8189	1238009.8400	810.01	399+95.80	578.75 RT

**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 215+00.00 IS  
 N 80 07 30 W 23,380.7581'

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

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BMB8 ELEVATION = 813.42  
 N 576951 E 1220582  
 L STATION 220+16.00 366 RIGHT  
 8 INCH NAIL IN BASE OF 10 INCH MAPLE  
 .....

BMB9 ELEVATION = 866.89  
 N 577568 E 1222066  
 L STATION 236+14.00 210 RIGHT  
 8 INCH NAIL IN TOP OF 20 INCH PINE STUMP  
 .....

BMB10 ELEVATION = 881.23  
 N 578261 E 1223301  
 L STATION 249+98.00 91 LEFT  
 8 INCH NAIL IN ROOT OF 18 INCH WHITE PINE  
 .....

BMB11 ELEVATION = 830.29  
 N 578565 E 1224891  
 L STATION 266+07.00 83 RIGHT  
 8 INCH NAIL SET IN BASE OF DOUBLE POPLAR  
 .....

BMB12 ELEVATION = 825.96  
 N 578860 E 1226306  
 L STATION 280+52.00 209 RIGHT  
 8 INCH NAIL IN TOP OF 9 INCH PINE STUMP  
 .....

BMB13 ELEVATION = 797.84  
 N 579480 E 1227679  
 L STATION 295+39.00 64 LEFT  
 8 INCH NAIL IN BASE OF 22 INCH WHITE OAK  
 .....

BMB14 ELEVATION = 812.07  
 N 579425 E 1229068  
 L STATION 308+95.00 244 RIGHT  
 8 INCH NAIL IN BASE OF 15 INCH WHITE PINE  
 .....

BMB15 ELEVATION = 776.99  
 N 579762 E 1230605  
 L STATION 324+68.00 177 RIGHT  
 8 INCH NAIL IN ROOT OF 18 INCH POPLAR  
 .....

BMB16 ELEVATION = 735.98  
 N 580071 E 1232384  
 L STATION 342+83.00 228 RIGHT  
 8 INCH NAIL IN BASE OF 24 INCH RED OAK  
 .....

BMB17 ELEVATION = 707.47  
 N 581329 E 1236485  
 L STATION 385+52.00 94 LEFT  
 8 INCH NAIL IN BASE OF 20 INCH SYCAMORE  
 .....

BMB18 ELEVATION = 778.74  
 N 581170 E 1236857  
 L STATION 388+83.00 141 RIGHT  
 8 INCH NAIL IN BASE OF 20 INCH WHITE OAK  
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## SURVEY CONTROL SHEET R-2707B

**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.DOHDOT.STATE.NC.US/PRECONSTRUCT/HIGHWAY/LOCATION/PROJECT/](http://www.doh.dot.state.nc.us/preconstruct/highway/location/project/)  
 THE FILES TO BE FOUND ARE AS FOLLOWS:  
 R2707B\_LS\_GPSALIB\_100909.HTM  
 R2707B\_LS\_WGS84\_100909.TXT  
 R2707B\_LS\_LOCAL\_100909.TXT  
 R2707B\_LS\_CONTROL\_100909.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.