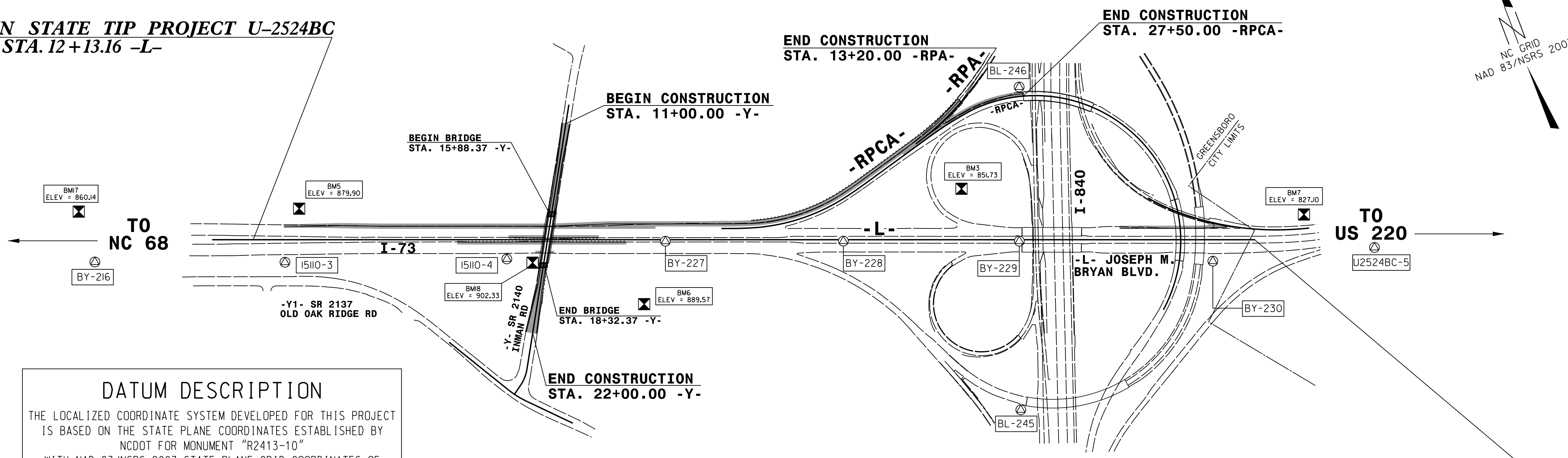


# U2524BC SURVEY CONTROL SHEET

**BEGIN STATE TIP PROJECT U-2524BC  
POT STA. 12+13.16 -L-**



**DATUM DESCRIPTION**  
 THE LOCALIZED COORDINATE SYSTEM DEVELOPED FOR THIS PROJECT IS BASED ON THE STATE PLANE COORDINATES ESTABLISHED BY NCDOT FOR MONUMENT "R2413-10" WITH NAD 83/NSRS 2007 STATE PLANE GRID COORDINATES OF NORTHING: 881462.071(ft) EASTING: 1720890.584(ft) ELEVATION: 886.31'(ft)  
 THE AVERAGE COMBINED GRID FACTOR USED ON THIS PROJECT (GROUND TO GRID) IS: 0.9999635813  
 THE N.C. LAMBERT GRID BEARING AND LOCALIZED HORIZONTAL GROUND DISTANCE FROM "R2413-10" TO -L- STATION 13+73.50 IS  
 S 22°39'59" E 18,799.87'  
 ALL LINEAR DIMENSIONS ARE LOCALIZED HORIZONTAL DISTANCES  
 VERTICAL DATUM USED IS NAVD 88

**END STATE TIP PROJECT U-2524BC  
POT STA 64+12.00 -L-**

**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 SYSTEM) 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:

[HTTPS://CONNECT.NCDOT.GOV/RESOURCES/LOCATION/PAGES/DEFAULT.ASPX](https://connect.ncdot.gov/resources/location/pages/default.aspx)

THE FILES TO BE FOUND ARE AS FOLLOWS:

- U2524BC\_LS\_GPSCALIB\_141119.HTML
- U2524BC\_LS\_WGS84\_141119.TXT
- U2524BC\_LS\_LOCAL\_141119.TXT
- U2524BC\_LS\_CONTROL\_141119.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.

PROJECT CONTROL ESTABLISHED USING GLOBAL POSITIONING SYSTEM. NETWORK ESTABLISHED FROM EXISTING MONUMENTATION.

**NOTE: DRAWING NOT TO SCALE**

**BASELINE DATA**

BL POINT	DESC.	NORTH	EAST	ELEVATION	BL STATION	OFFSET
7	U2524BC-7	855087.3320	1729792.5150	875.39	5+00.00	0.00
8	U2524BC-8	856205.5500	1729816.0850	844.74	16+18.47	0.00
240	BL-240	857184.2092	1730039.4829	840.87	26+22.30	0.00
241	BL-241	858057.7738	1730349.3158	835.20	35+49.18	0.00
242	BL-242	858932.8041	1730659.4828	836.54	44+77.56	0.00
243	BL-243	859884.0794	1730995.5848	847.05	54+86.46	0.00
244	BL-244	860732.4791	1731409.2753	874.17	64+30.35	0.00
245	BL-245	861949.0434	1731409.1026	857.31	76+46.91	0.00
A229	BY-229	862751.7611	1731700.6188	852.35	85+00.93	0.00
246	BL-246	863477.5589	1731983.9017	868.81	92+80.05	0.00
247	BL-247	864176.5882	1732749.3443	883.43	103+16.65	0.00
248	BL-248	865013.2593	1732842.0604	889.38	111+58.44	0.00
249	BL-249	865305.0971	1733313.1960	903.37	117+12.64	0.00

BY POINT	DESC.	NORTH	EAST	ELEVATION	BY STATION	OFFSET
1	I5110-1	864389.9620	1722022.3470	867.67	102+45.95	0.00
2	I5110-2	864793.8080	1722957.4560	854.50	112+64.54	0.00
213	BY-213	864761.8659	1724073.5675	836.19	123+81.11	0.00
214	BY-214	864697.9081	1724911.5145	829.60	132+21.49	0.00
215	BY-215	864485.6735	1726002.8344	820.19	143+33.26	0.00
216	BY-216	864355.2287	1727176.0611	838.68	155+13.71	0.00
3	I5110-3	864028.2020	1728108.5850	863.97	165+01.92	0.00
4	I5110-4	863626.4870	1729186.5010	876.12	176+52.25	0.00
227	BY-227	863403.8479	1729983.1274	876.16	184+79.41	0.00
228	BY-228	863076.5443	1730847.1100	865.16	194+03.31	0.00
229	BY-229	862751.7611	1731700.6188	852.35	203+16.52	0.00
230	BY-230	862321.3232	1732642.0327	836.15	213+51.67	0.00
5	U2524BC-5	862102.4180	1733419.2790	829.76	221+59.16	0.00
6	U2524BC-6	862330.2850	1734368.7800	809.76	231+35.62	0.00

**BENCHMARK DATA**

BM1	ELEVATION = 845.77
N 857663	E 1730270
BL STATION 31+51.00 57 RIGHT	
RR SPIKE IN 9' PINE	
BM2	ELEVATION = 862.05
N 860386	E 1731302
BL STATION 60+72.00 56 RIGHT	
RR SPIKE IN 19' PECAN	
BM3	ELEVATION = 851.73
N 863113	E 1731517
BL STATION 87+70.00 302 LEFT	
RR SPIKE IN 10' OAK	
BM4	ELEVATION = 892.67
N 864404	E 1732372
BL STATION 105+01.00 400 LEFT	
RR SPIKE IN 18' OAK	
BM5	ELEVATION = 879.90
N 864245	E 1728238
L STATION 14+23.00 159 LEFT	
RR SPIKE IN 12' POPLAR	
BM6	ELEVATION = 889.57
N 863138	E 1729764
L STATION 32+43.00 335 RIGHT	
RR SPIKE IN 13' OAK	
BM7	ELEVATION = 827.10
N 862336	E 1733119
L STATION 64+13.00	
N 87+28+55.12' E DIST 272.78	
SE CORNER OF SHOULDER SIDE OVERHEAD SIGN FOUNDATION	
BM15	ELEVATION = 870.41
N 865019	E 1723163
BL STATION 77+17.00 8799 LEFT	
RR SPIKE IN ROOT OF 12' BLACK GUM	
BM16	ELEVATION = 851.41
N 864580	E 1725046
BL STATION 79+48.00 6879 LEFT	
CHISELED SQUARE IN SW END BENT OF BRIDGE WING WALL	
BM17	ELEVATION = 860.14
N 864629	E 1727191
BL STATION 86+10.00 4884 LEFT	
RR SPIKE IN ROOT OF 18' POPLAR	
BM18	ELEVATION = 902.33
N 863533	E 1729324
L STATION 26+91.00 121 RIGHT	
BOLT IN SW END BENT OF BRIDGE WING WALL	