

STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	41499.1.1	RW01	28

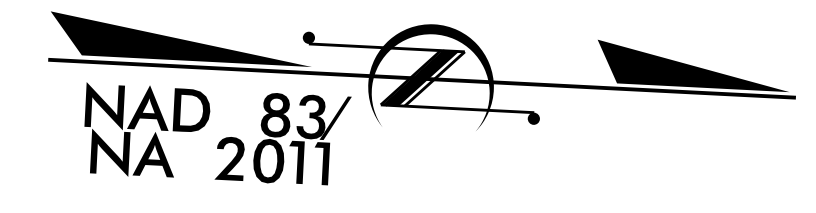
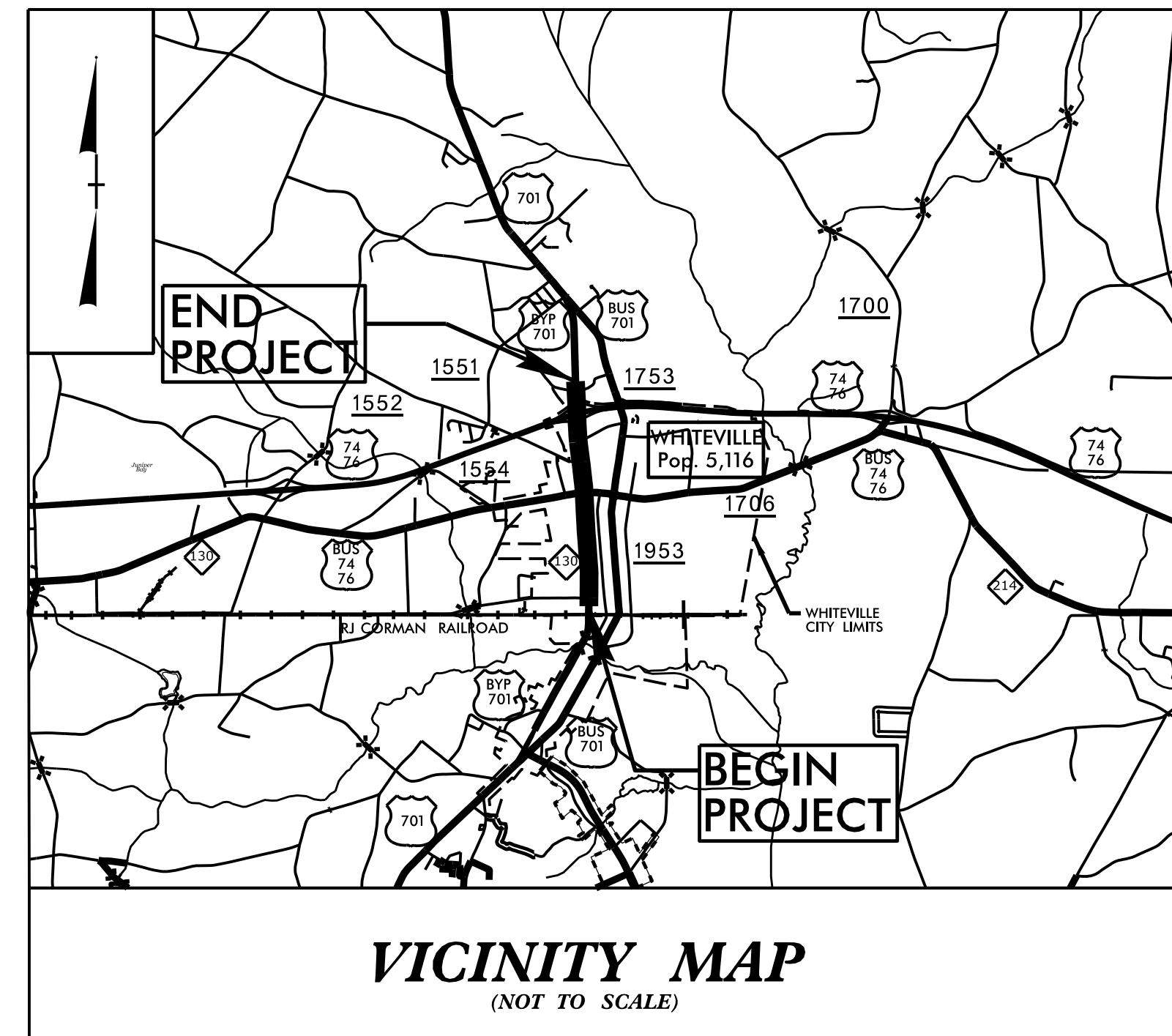
See Sheet 1A for Index of Sheets
See Sheet 1B for Conventional Symbols

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

SURVEY CONTROL, EXISTING CENTERLINES,
RIGHT OF WAY, EASEMENTS AND PROPERTY TIES

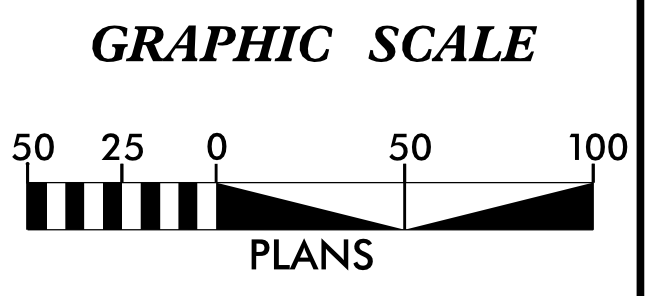
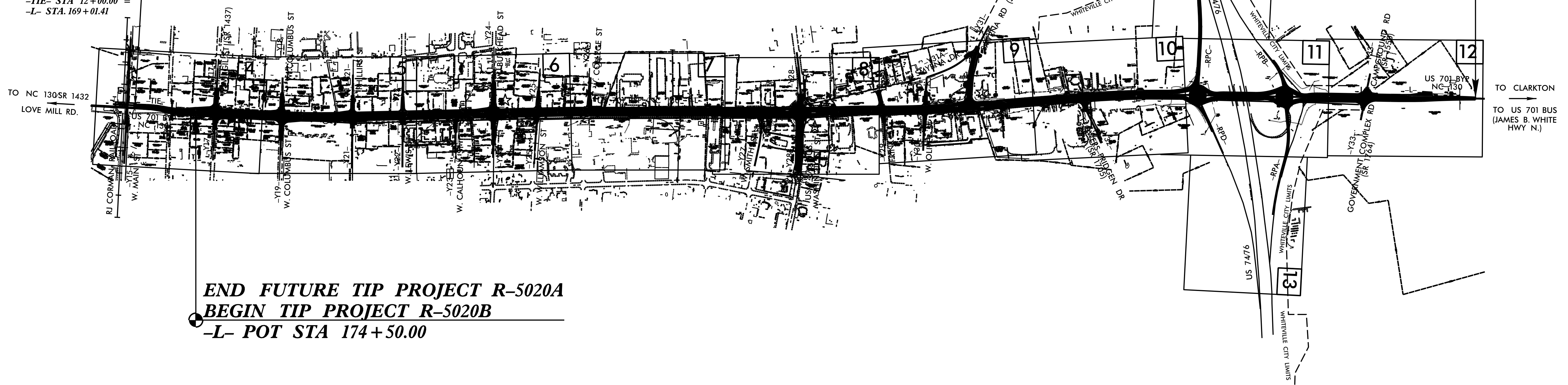
COLUMBUS COUNTY

TIP PROJECT: 5-5020B



END TIP PROJECT R-5020B
-L- POT STA 289+75.00

BEGIN CONSTRUCTION
-TIE- STA 12+00.00 =
-L- STA 169+01.41



DATUM DESCRIPTION

THE LOCALIZED COORDINATE SYSTEM DEVELOPED FOR THIS PROJECT IS BASED ON THE STATE PLANE COORDINATES ESTABLISHED BY NCGS FOR MONUMENT "R-5020-33" WITH NAD 83/NSRS 2011 STATE PLANE GRID COORDINATES OF NORTHING: 206591.4750(ft) EASTING: 2087686.1940(ft) ELEVATION: 111.66(ft)

THE AVERAGE COMBINED GRID FACTOR USED ON THIS PROJECT (GROUND TO GRID) IS: 1.0000020

THE N.C. LAMBERT GRID BEARING AND LOCALIZED HORIZONTAL GROUND DISTANCE FROM "R-5020-33" TO -L- STATION 12+00.00 IS S 15-51'16" W 2025.77(ft)

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

Prepared in the Office of:

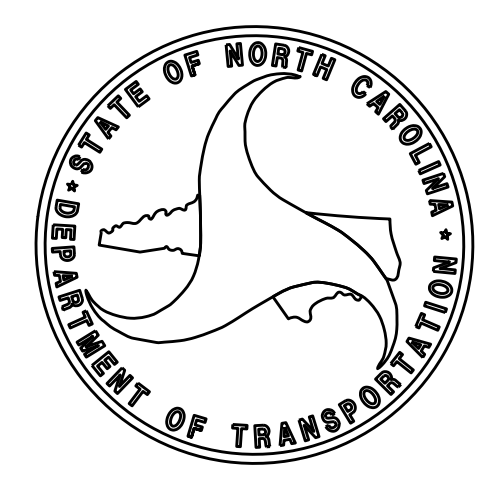


KCI Associates of N.C., P.A.
4505 Falls of Neuse Road, Suite 400
Raleigh, NC 27609
Phone (919) 783-9214
Fax (919) 783-9266

PROFESSIONAL LAND SURVEYOR



DATE: 04/16/2020
SIGNATURE: [Signature]



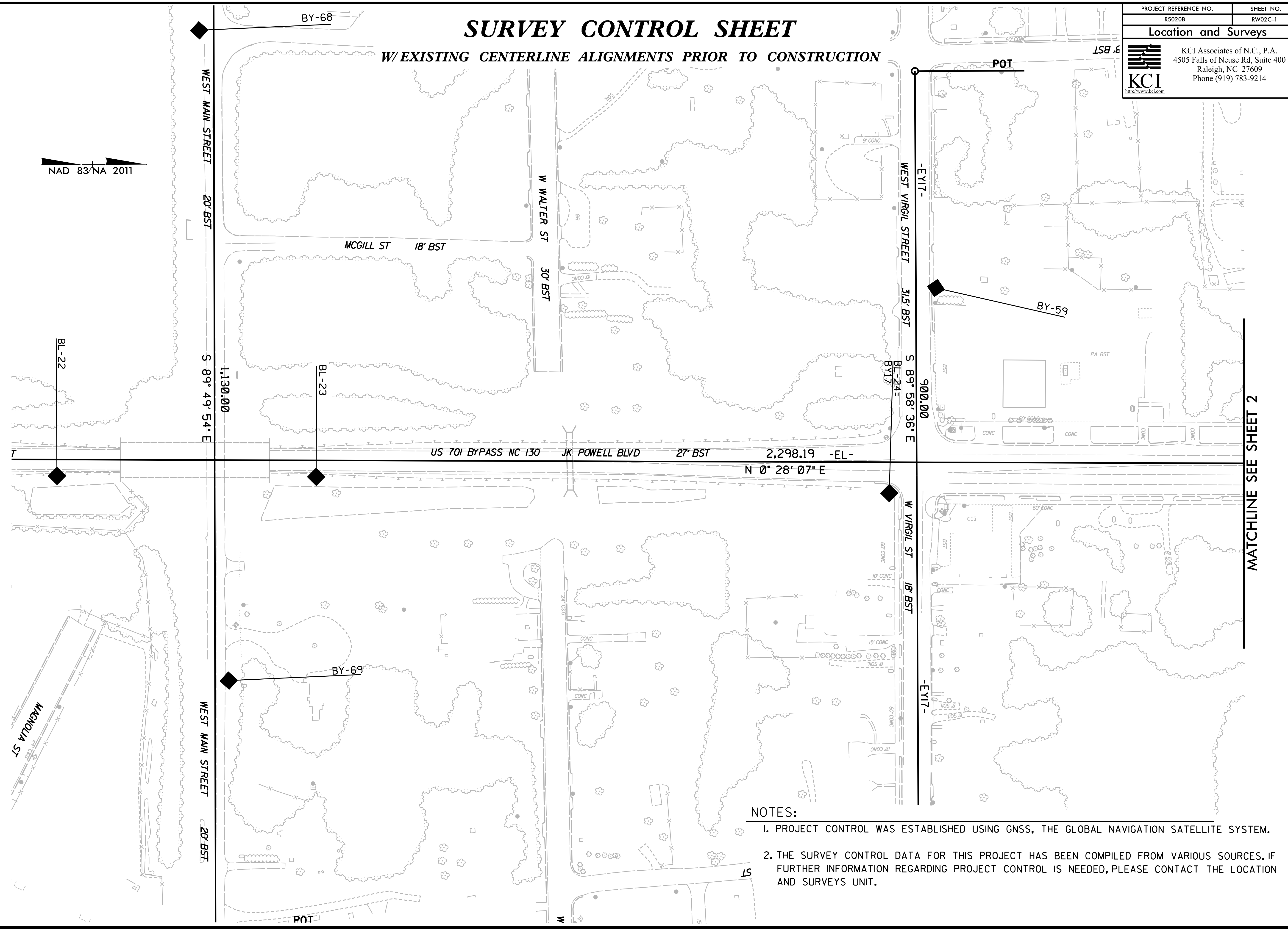
2018 STANDARD SPECIFICATIONS

RIGHT OF WAY DATE: 03/19/2020	LETTING DATE: 07/21/2020
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\$\$\$\$\$SYTIME\$\$\$\$\$
\$\$\$\$\$DCN\$\$\$\$\$
\$\$\$\$\$USERNAME\$\$\$\$\$

SURVEY CONTROL SHEET


W/ EXISTING CENTERLINE ALIGNMENTS PRIOR TO CONSTRUCTION



MATCHLINE SEE SHEET 2

NOTES:

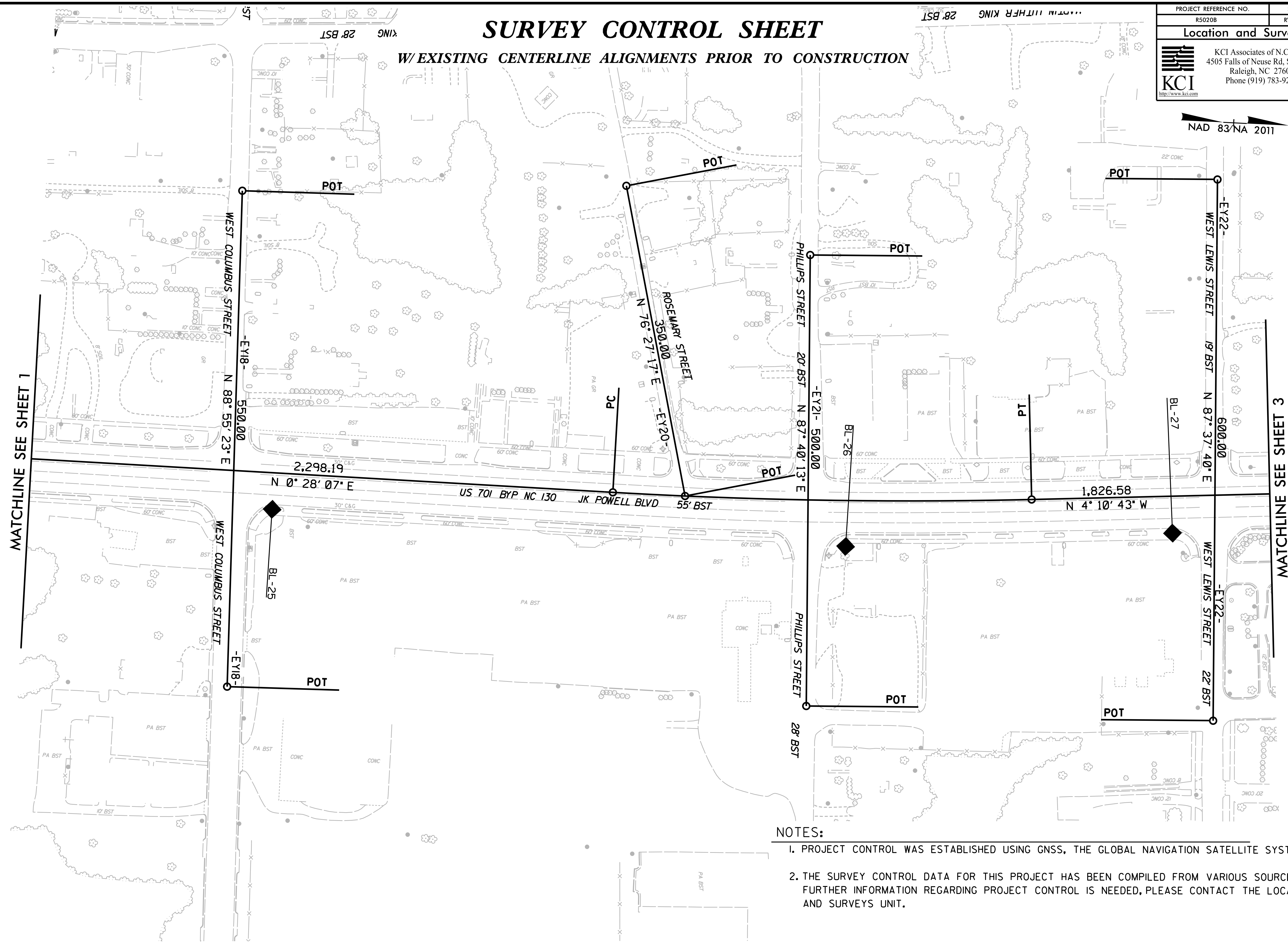
1. PROJECT CONTROL WAS ESTABLISHED USING GNSS, THE GLOBAL NAVIGATION SATELLITE SYSTEM.
2. THE SURVEY CONTROL DATA FOR THIS PROJECT HAS BEEN COMPILED FROM VARIOUS SOURCES. IF FURTHER INFORMATION REGARDING PROJECT CONTROL IS NEEDED, PLEASE CONTACT THE LOCATION AND SURVEYS UNIT.

PROJECT REFERENCE NO.	SHEET NO.
R5020B	RW02C-2
Location and Surveys	
	
KCI Associates of N.C., P.A. 4505 Falls of Neuse Rd, Suite 400 Raleigh, NC 27609 Phone (919) 783-9214 http://www.kci.com	

SURVEY CONTROL SHEET

W/ EXISTING CENTERLINE ALIGNMENTS PRIOR TO CONSTRUCTION

NAD 83/NA 2011



MATCHLINE SEE SHEET 1

MATCHLINE SEE SHEET 3

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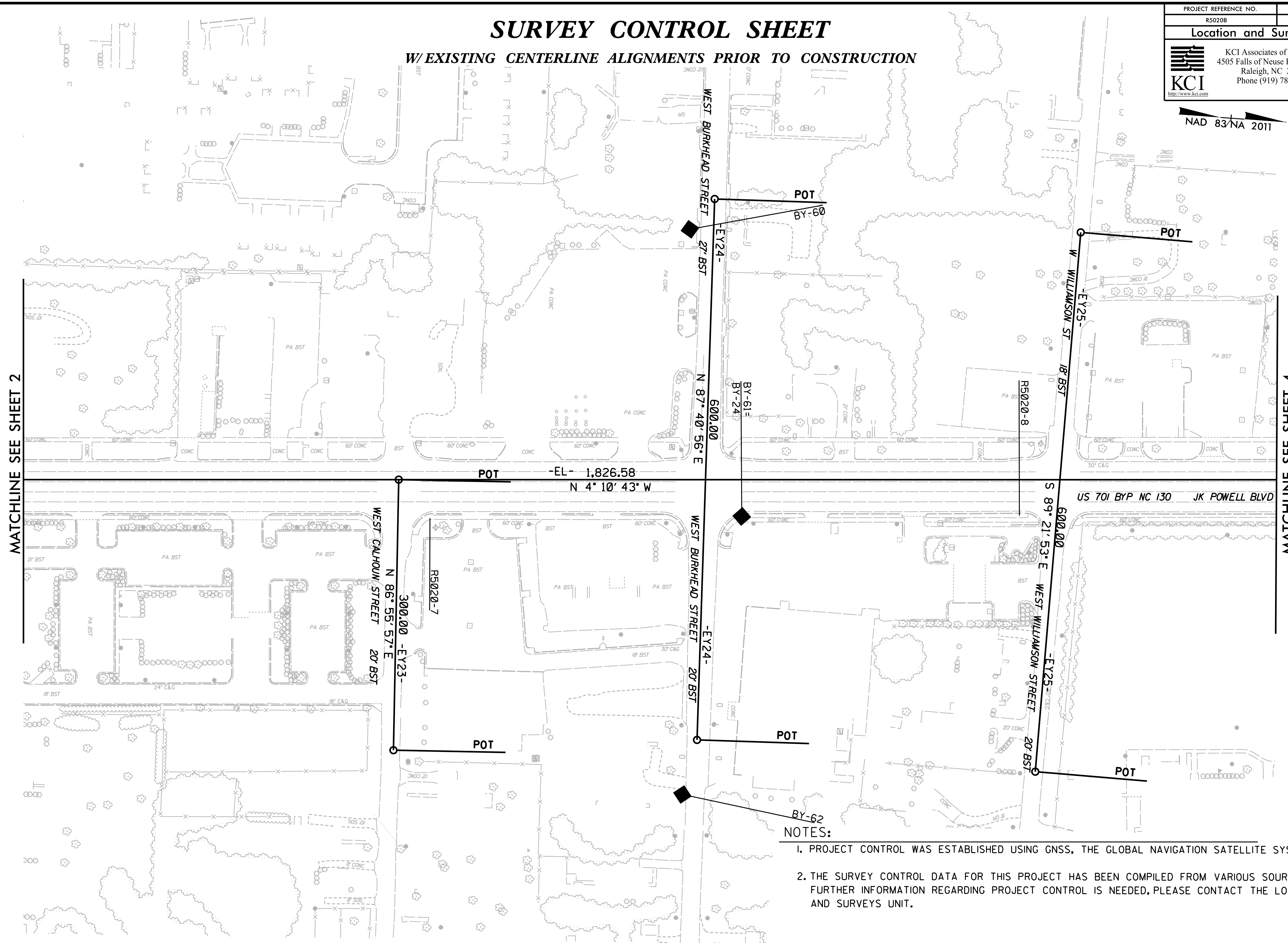
6/2/2019

REVISIONS

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SURVEY CONTROL SHEET

W/ EXISTING CENTERLINE ALIGNMENTS PRIOR TO CONSTRUCTION



MATCHLINE SEE SHEET 2

MATCHLINE SEE SHEET 4

NOTES:

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6/2/09

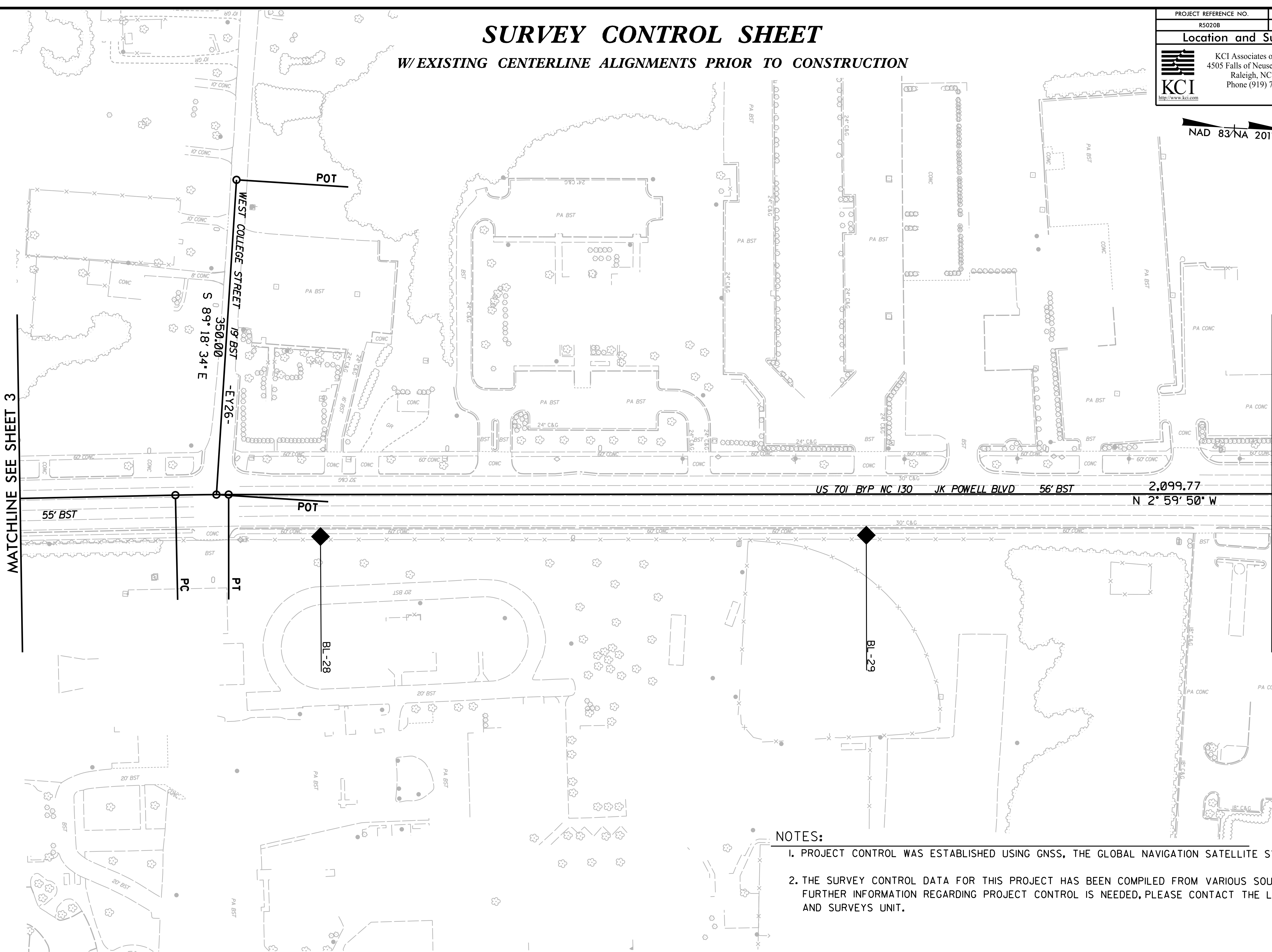
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SURVEY CONTROL SHEET

W/ EXISTING CENTERLINE ALIGNMENTS PRIOR TO CONSTRUCTION

NAD 83/NA 2011



MATCHLINE SEE SHEET 3

MATCHLINE SEE SHEET 5

NOTES:


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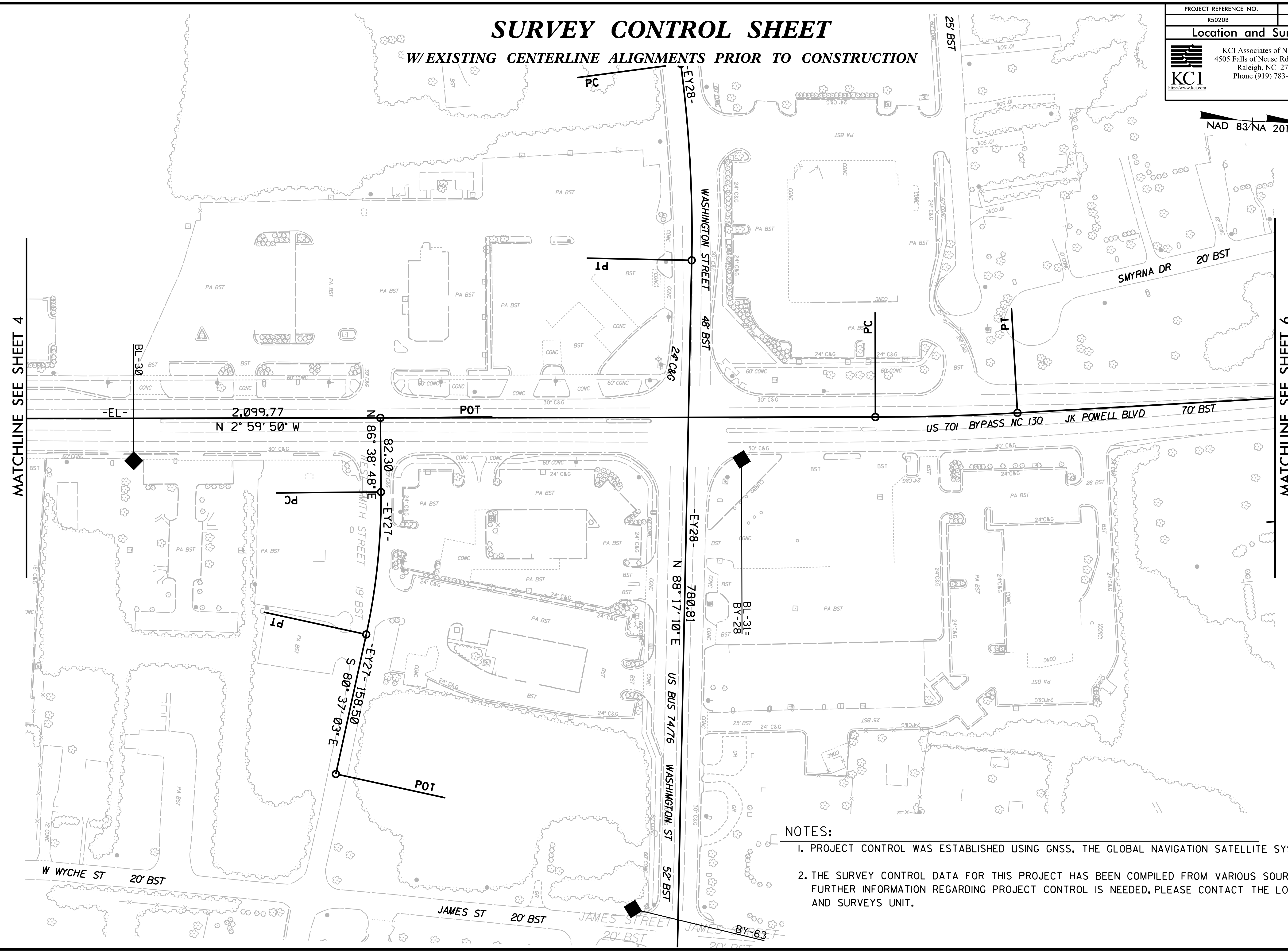
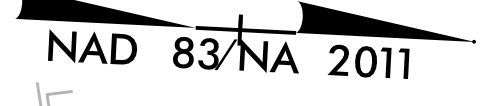
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REVISIONS

SURVEY CONTROL SHEET

W/ EXISTING CENTERLINE ALIGNMENTS PRIOR TO CONSTRUCTION

PROJECT REFERENCE NO.	SHEET NO.
R5020B	RW02C-5
Location and Surveys	
	
KCI Associates of N.C., P.A. 4505 Falls of Neuse Rd. Suite 400 Raleigh, NC 27609 Phone (919) 783-9214 http://www.kci.com	



NOTES:

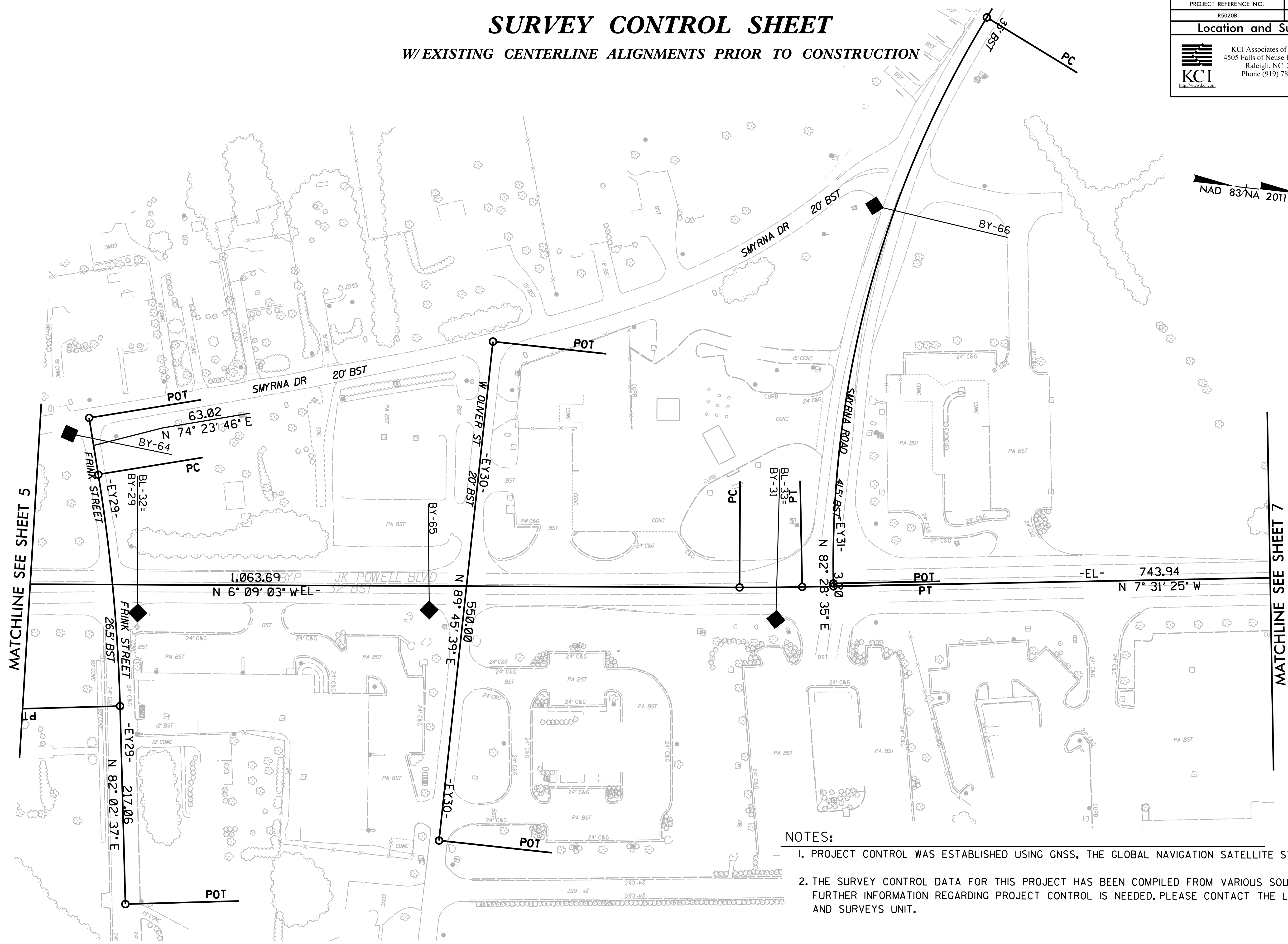
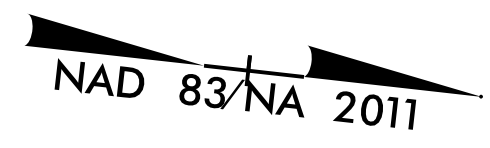
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REVISIONS

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SURVEY CONTROL SHEET

W/ EXISTING CENTERLINE ALIGNMENTS PRIOR TO CONSTRUCTION



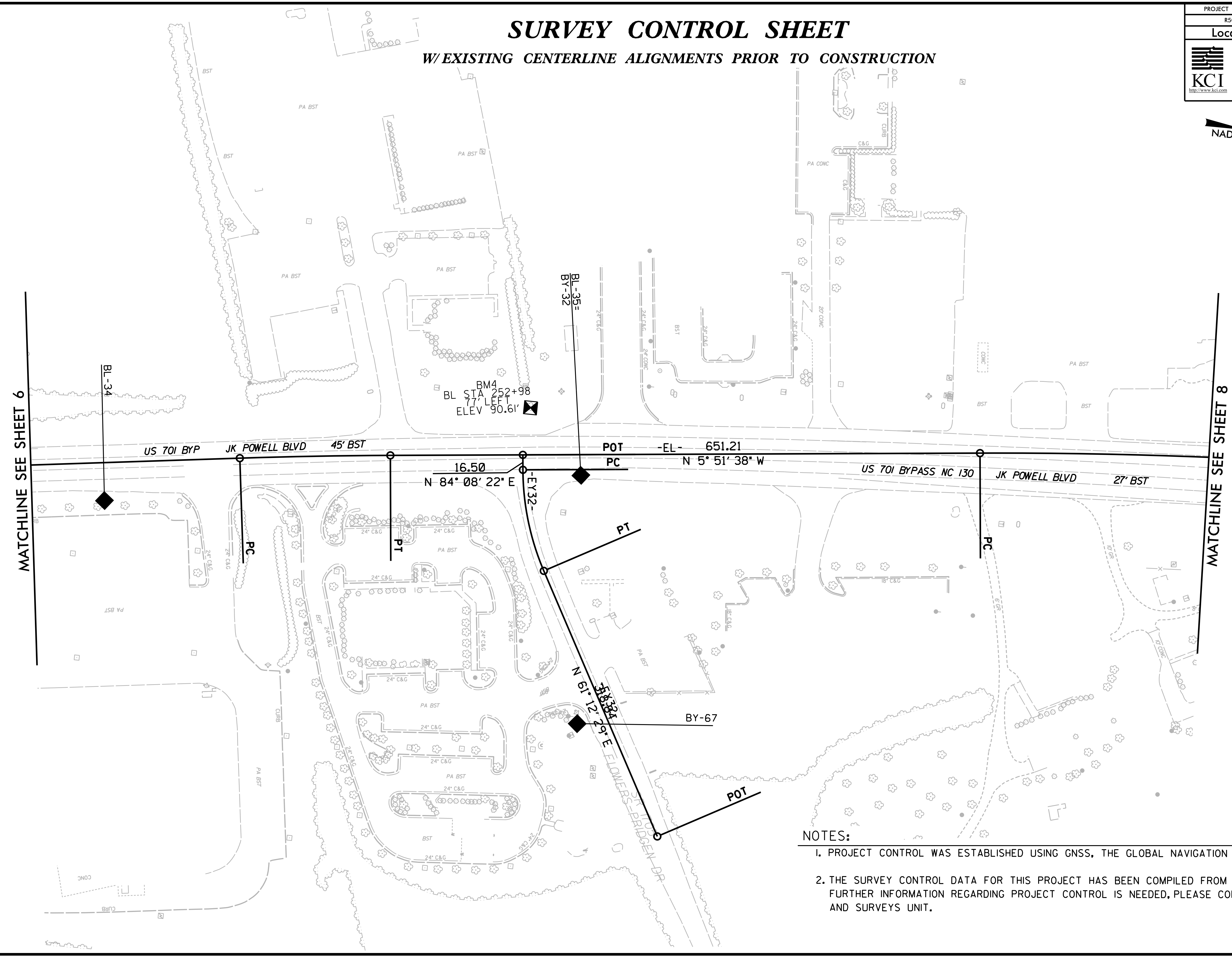
- NOTES:**
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SURVEY CONTROL SHEET

W/EXISTING CENTERLINE ALIGNMENTS PRIOR TO CONSTRUCTION



MATCHLINE SEE SHEET 6

MATCHLINE SEE SHEET 8


NOTES:

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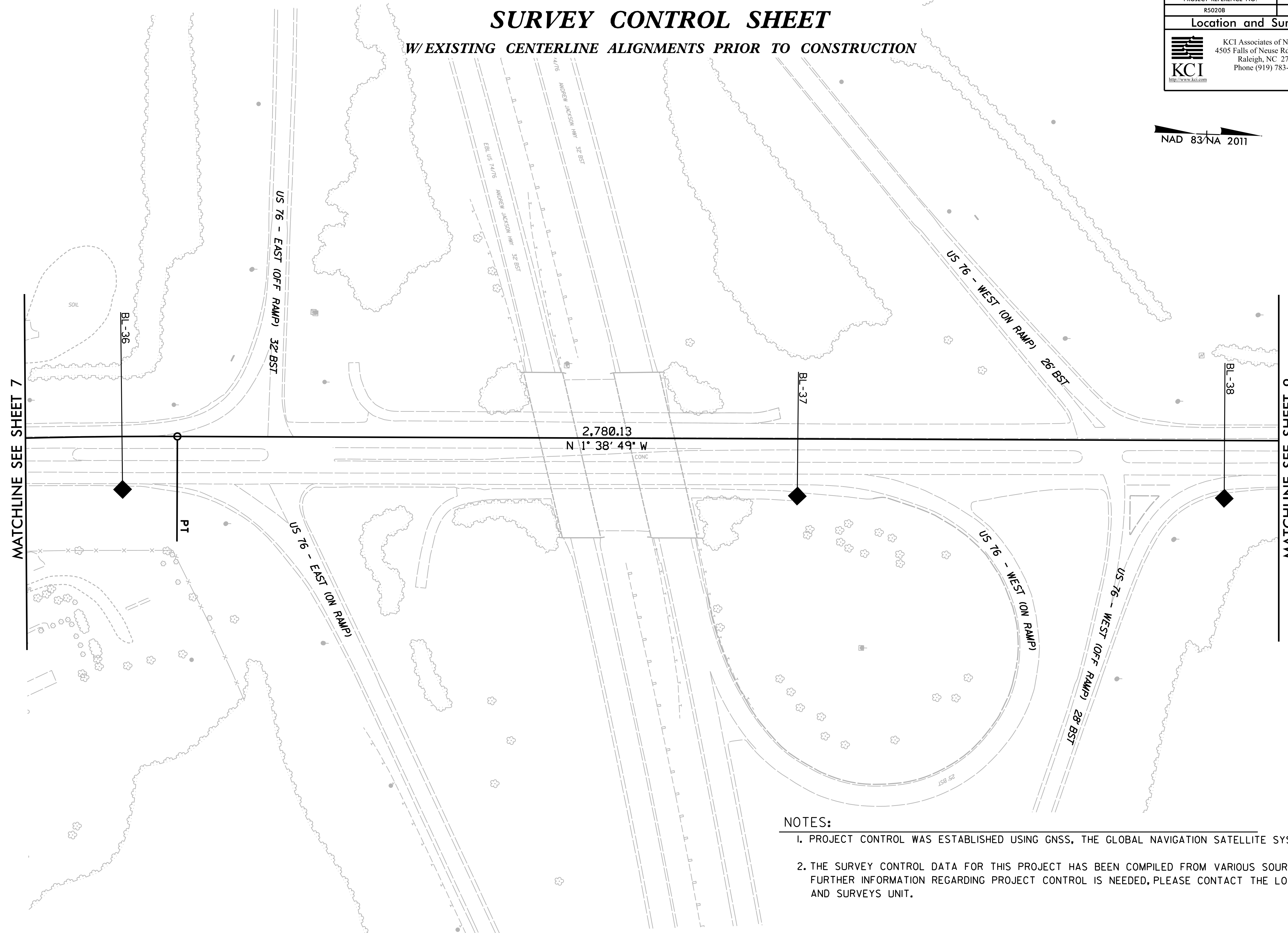
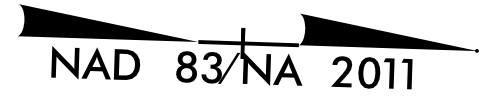
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PROJECT REFERENCE NO.	SHEET NO.
R5020B	RW02C-8
Location and Surveys	
 KCI Associates of N.C., P.A. 4505 Falls of Neuse Rd, Suite 400 Raleigh, NC 27609 Phone (919) 783-9214 http://www.kci.com	

SURVEY CONTROL SHEET

W/ EXISTING CENTERLINE ALIGNMENTS PRIOR TO CONSTRUCTION



MATCHLINE SEE SHEET 7

MATCHLINE SEE SHEET 9

NOTES:

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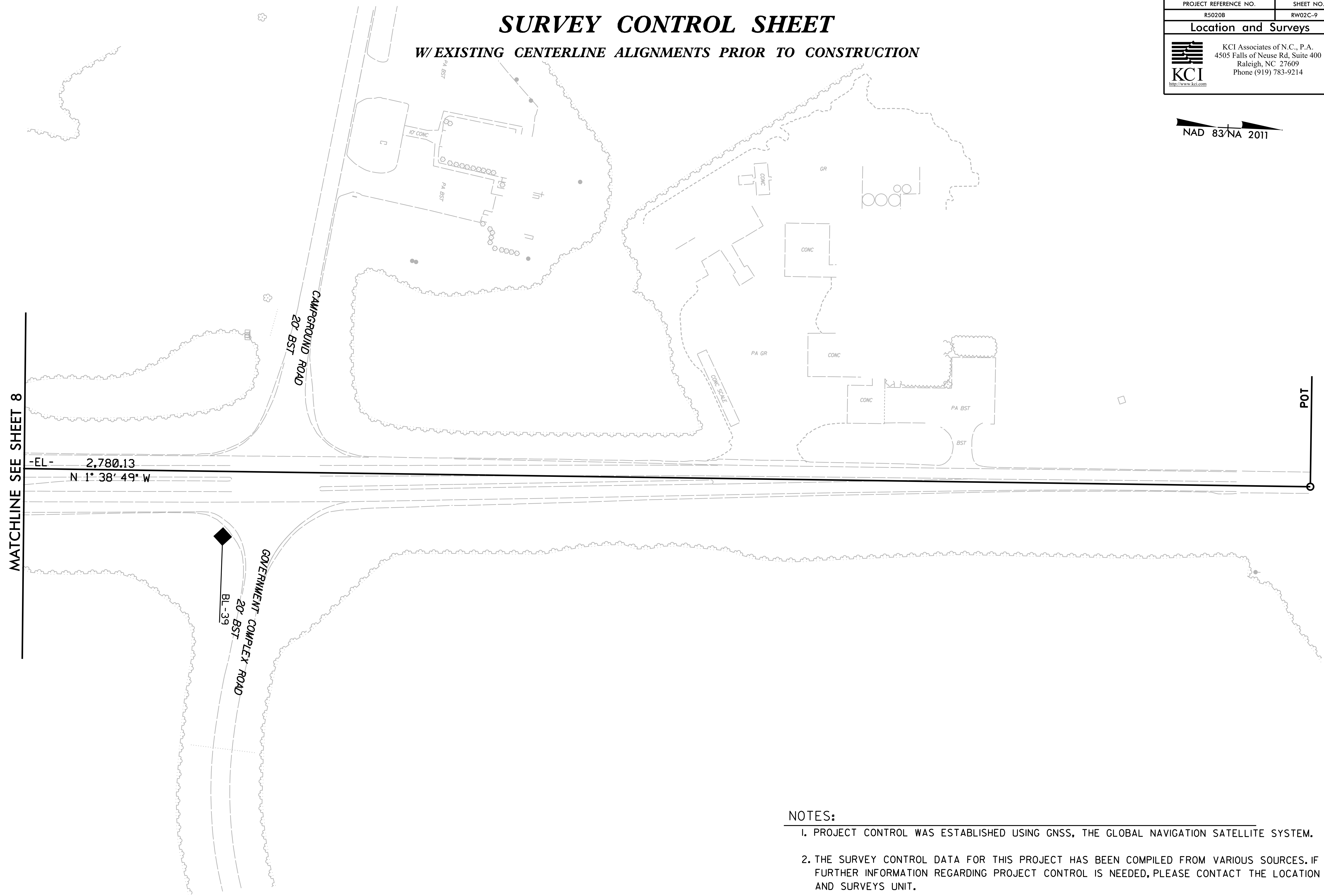
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SURVEY CONTROL SHEET

W/ EXISTING CENTERLINE ALIGNMENTS PRIOR TO CONSTRUCTION



MATCHLINE SEE SHEET 8

POT


NOTES:

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SURVEY CONTROL SHEET

W/ EXISTING CENTERLINE ALIGNMENTS PRIOR TO CONSTRUCTION

PROJECT REFERENCE NO.	SHEET NO.
R5020B	RW02C-10
Location and Surveys	
 KCI Associates of N.C., P.A. 4505 Falls of Neuse Rd, Suite 400 Raleigh, NC 27609 Phone (919) 783-9214 http://www.kci.com	

BL	POINT	DESC.	NORTH	EAST	ELEVATION
1		R-5020 BL-1	195651.7920	2079145.4950	80.80
2		R-5020 BL-2	196138.3280	2079611.4550	86.46
102		R-5020-2	196642.2590	2080133.4850	94.56
3		R-5020 BL-3	196944.6980	2080403.1640	99.92
4		R-5020 BL-4	197498.2390	2080968.0050	92.21
5		R-5020 BL-5	198153.2630	2081655.7340	101.63
6		R-5020 BL-6	198611.4990	2082144.6740	105.32
7		R-5020 BL-7	199086.3310	2082658.7520	96.85
8		R-5020 BL-8	199380.8720	2082969.4580	92.35
9		R-5020 BL-9	199807.2860	2083434.6610	87.18
10		R-5020 BL-10	200221.0740	2083881.7470	88.42
11		R-5020 BL-11	200681.0900	2084364.0780	96.46
103		R-5020-3	201157.0300	2084829.2610	97.32
104		R-5020-4	201452.9770	2085159.3000	95.08
12		R-5020 BL-12	201726.2840	2085087.0260	94.22
13		R-5020 BL-13	202487.0810	2085503.2830	78.24
14		R-5020 BL-14	203079.1500	2085796.0160	73.29
15		R-5020 BL-15	203616.4000	2086065.3920	77.08
16		R-5020 BL-16	204122.9210	2086337.2730	83.60
55		R-5020 BY-55	204368.7170	2086471.6370	83.09
17		R-5020 BL-17	204646.6600	2086624.3090	78.82
105		R-5020-5	205099.8270	2086912.8970	72.52
106		R-5020-6	205567.2530	2087176.0020	66.06
18		R-5020 BL-18	206187.3840	2087496.4850	58.75
19		R-5020 BL-19	206706.3480	2087769.4180	58.71
20		R-5020 BL-20	207308.5480	2088098.1870	60.27
21		R-5020 BL-21	207927.0060	2088256.4600	73.58
22		R-5020 BL-22	208290.9980	2088256.1600	81.81
23		R-5020 BL-23	208585.2960	2088258.6250	81.10
24		R-5020 BL-24	209235.9160	2088280.4750	61.66
25		R-5020 BL-25	209908.2380	2088291.2640	69.48
26		R-5020 BL-26	210545.5920	2088300.9270	79.53
27		R-5020 BL-27	210907.0030	2088268.2960	82.31
107		R-5020-7	211465.4380	2088229.3790	75.55
61		R-5020 BY-61	211810.1980	2088202.1180	77.55
108		R-5020-8	212117.2790	2088178.8550	83.22
28		R-5020 BL-28	212733.9980	2088143.2900	82.18
29		R-5020 BL-29	213338.8680	2088110.5390	72.91
30		R-5020 BL-30	213907.5030	2088082.3820	73.11
31		R-5020 BL-31	214580.9310	2088046.7590	73.82
32		R-5020 BL-32	215288.9420	2087967.1210	81.98
65		R-5020 BY-65	215606.2160	2087928.2210	86.48
33		R-5020 BL-33	215984.8200	2087896.1270	88.01
34		R-5020 BL-34	216602.9350	2087821.3650	89.55
35		R-5020 BL-35	217123.7960	2087742.0230	92.88
36		R-5020 BL-36	217921.6130	2087707.3300	95.55
37		R-5020 BL-37	218669.8190	2087690.2320	97.72
38		R-5020 BL-38	219143.2180	2087677.3100	99.81
39		R-5020 BL-39	219540.3780	2087675.0260	100.03

BY15	POINT	DESC.	NORTH	EAST	ELEVATION
68		R-5020 BY-68	208454.9880	2087750.7580	54.72
123		POINT NOT SET	208475.4760	2088257.7052	UNKNOWN
69		R-5020 BY-69	208484.8480	2088489.6010	54.54

BY17	POINT	DESC.	NORTH	EAST	ELEVATION
59		R-5020 BY-59	209290.0840	2088047.6290	59.40
124			209235.9160	2088280.4750	61.66

BY24	POINT	DESC.	NORTH	EAST	ELEVATION
60		R-5020 BY-60	211729.6000	2087888.8210	73.95
161			211810.1980	2088202.1180	77.55
62		R-5020 BY-62	211766.9790	2088514.3630	73.67

BY28	POINT	DESC.	NORTH	EAST	ELEVATION
131			214580.9310	2088046.7590	73.82
63		R-5020 BY-63	214485.7610	2088551.0090	77.32

BY29	POINT	DESC.	NORTH	EAST	ELEVATION
64		R-5020 BY-64	215192.8880	2087780.3000	81.24
132			215288.9420	2087967.1210	81.98

BY31	POINT	DESC.	NORTH	EAST	ELEVATION
66		R-5020 BY-66	216041.6220	2087433.5720	81.26
133			215984.8200	2087896.1270	88.01

BY32	POINT	DESC.	NORTH	EAST	ELEVATION
135			217123.7960	2087742.0230	92.88
67		R-5020 BY-67	217146.6830	2088015.1480	93.90

.....
 BM1 ELEVATION = 86.28
 N 196263 E 2079645
 RR SPIKE IN BASE 30" HARDWOOD

.....
 BM2 ELEVATION = 78.90
 N 203628 E 2085817
 RR SPIKE IN BASE 16" PINE

.....
 BM3 ELEVATION = 52.04
 N 206218 E 2087567
 RR SPIKE IN BASE 18" PINE

.....
 BM4 ELEVATION = 90.61
 N 217061 E 2087673
 RR SPIKE IN BASE 17" PINE

NOTES:

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REVISIONS

SURVEY CONTROL SHEET

W/ EXISTING CENTERLINE ALIGNMENTS PRIOR TO CONSTRUCTION

EL POINT	N	E	BEARING	DIST	DELTA	D	L	T	R
POT	195151.302	2078824.763							
LINE			N 25°40'26.2" E	154.72					
PC	195290.744	2078891.794							
CURVE			N 35°07'25.6" E	627.14	18°53'58.9"(RT)	03°00'00.0"	629.99	317.88	1909.86
PT	195803.686	2079252.614							
LINE			N 44°34'25.1" E	1862.32					
PC	197130.311	2080559.640							
CURVE			N 45°32'36.8" E	387.95	01°56'23.4"(RT)	00°30'00.0"	387.97	194.00	11459.16
PT	197402.017	2080836.551							
LINE			N 46°30'48.5" E	2503.89					
PC	199125.153	2082653.213							
CURVE			N 46°40'12.5" E	31.33	00°18'48.0"(RT)	01°00'00.0"	31.33	15.67	5729.58
PT	199146.654	2082676.004							
LINE			N 46°49'36.5" E	2148.62					
PC	200616.751	2084242.967							
CURVE			N 37°42'34.4" E	1037.58	18°14'04.2"(LT)	01°45'00.0"	1041.97	525.43	3274.04
PT	201437.602	2084877.611							
LINE			N 28°35'32.3" E	6613.86					
PC	207244.888	2088042.834							
CURVE			N 14°31'49.7" E	766.30	28°07'25.1"(LT)	03°38'00.0"	774.04	394.98	1576.95
PT	207986.675	2088235.094							
LINE			N 00°28'07.2" E	2298.19					
PC	210284.791	2088253.893							
CURVE			N 01°51'18.0" W	464.61	04°38'50.4"(LT)	01°00'00.0"	464.73	232.49	5729.58
PT	210749.153	2088238.853							
LINE			N 04°10'43.2" W	1826.58					
PC	212570.873	2088105.757							
CURVE			N 03°35'16.8" W	59.06	01°10'52.7"(RT)	02°00'00.0"	59.07	29.53	2864.79
PT	212629.822	2088102.060							
LINE			N 02°59'50.5" W	2099.77					
PC	214726.722	2087992.263							
CURVE			N 04°34'26.5" W	157.65	03°09'12.0"(LT)	02°00'00.0"	157.67	78.85	2864.79
PT	214883.867	2087979.691							
LINE			N 06°09'02.5" W	1063.69					
PC	215941.433	2087865.724							
CURVE			N 06°50'13.7" W	68.64	01°22'22.4"(LT)	02°00'00.0"	68.64	34.32	2864.79
PT	216009.588	2087857.552							
LINE			N 07°31'24.9" W	743.94					
PC	216747.121	2087760.145							
CURVE			N 06°41'31.4" W	166.30	01°39'47.0"(RT)	01°00'00.0"	166.31	83.16	5729.58
PT	216912.288	2087740.765							
LINE			N 05°51'37.9" W	651.21					
PC	217560.092	2087674.273							
CURVE			N 03°45'13.3" W	421.27	04°12'49.0"(RT)	01°00'00.0"	421.36	210.78	5729.58
PT	217980.455	2087646.693							
LINE			N 01°38'48.8" W	2780.13					
POT	220759.437	2087566.793							

EY15 POINT	N	E	BEARING	DIST
POT	208471.870	2087639.814		
LINE			S 89°49'53.7" E	1130.00
POT	208468.549	2088769.809		

EY17 POINT	N	E	BEARING	DIST
POT	209267.427	2087801.347		
LINE			S 89°58'35.8" E	900.00
POT	209267.060	2088701.349		

EY18 POINT	N	E	BEARING	DIST
POT	209857.797	2087940.245		
LINE			N 88°55'23.3" E	550.00
POT	209868.133	2088490.148		

EY20 POINT	N	E	BEARING	DIST
POT	210282.994	2087913.722		
LINE			N 76°27'17.2" E	350.00
POT	210364.969	2088253.988		

EY21 POINT	N	E	BEARING	DIST
POT	210490.438	2087980.258		
LINE			N 87°40'13.4" E	500.00
POT	210510.762	2088479.844		

EY22 POINT	N	E	BEARING	DIST
POT	210937.461	2087874.349		
LINE			N 87°37'40.5" E	600.00
POT	210962.294	2088473.834		

EY23 POINT	N	E	BEARING	DIST
POT	211427.766	2088189.273		
LINE			N 86°55'57.5" E	300.00
POT	211443.819	2088488.843		

EY24 POINT	N	E	BEARING	DIST
POT	211754.549	2087853.369		
LINE			N 87°40'56.3" E	600.00
POT	211778.814	2088452.878		

EY25 POINT	N	E	BEARING	DIST
POT	212162.210	2087860.661		
LINE			S 89°21'52.7" E	600.00
POT	212155.557	2088460.624		

EY26 POINT	N	E	BEARING	DIST
POT	212620.520	2087752.826		
LINE			S 89°18'33.8" E	350.00
POT	212616.301	2088102.800		

EY27 POINT	N	E	BEARING	DIST	DELTA	D	L	T	R
POT	214178.473	2088020.970							
LINE			N 86°38'47.7" E	82.30					
PC	214183.287	2088103.127							
CURVE			S 86°59'07.4" E	158.87	12°44'09.7"(RT)	08°00'00.0"	159.20	79.93	716.20
PT	214174.932	2088261.780							
LINE			S 80°37'02.6" E	158.50					
POT	214149.092	2088418.161							

EY28 POINT	N	E	BEARING	DIST	DELTA	D	L	T	R
POT	214482.093	2087561.994							
LINE			N 79°32'39.1" E	50.65					
PC	214491.285	2087611.802							
CURVE			N 83°54'54.3" E	218.33	08°44'30.5"(RT)	04°00'00.0"	218.54	109.48	1432.39
PT	214514.429	2087828.904							
LINE			N 88°17'09.6" E	780.81					
POT	214537.783	2088609.363							

EY29 POINT	N	E	BEARING	DIST	DELTA	D	L	T	R
POT	215212.244	2087760.735							
LINE			N 74°23'45.9" E	63.02					
PC	215229.197	2087821.437							
CURVE			N 78°13'11.4" E	254.73	07°38'51.0"(RT)	03°00'00.0"	254.92	127.65	1909.86
PT	215281.201	2088070.799							
LINE			N 82°02'36.8" E	217.06					
POT	215311.247	2088285.772							

EY30 POINT	N	E	BEARING	DIST
POT	215642.756	2087628.181		
LINE			N 89°45'39.0" E	550.00
POT	215645.052	2088178.177		

EY31 POINT	N	E	BEARING	DIST	DELTA	D	L	T	R
POT	216211.028	2087064.855							
LINE			S 64°58'22.4" E	165.47					
PC	216141.026	2087214.790							
CURVE			S 81°14'25.5" E	642.59	32°33'58.8"(LT)	05°00'00.0"	651.33	334.72	1145.92
PT	216043.166	2087849.889							
LINE			N 82°28'35.1" E	3.20					
POT	216043.585	2087853.062							

EY32 POINT	N	E	BEARING	DIST	DELTA	D	L	T	R
POT	217057.853	2087725.824							
LINE			N 84°08'22.1" E	16.50					
PC	217059.538	2087742.240							
CURVE			N 72°40'25.5" E	113.89	22°55'53.2"(LT)	20°00'00.0"	114.66	58.11	286.48
PT	217093.457	2087850.965							
LINE			N 61°12'28.9" E	318.84					
POT	217247.018	2088130.386							

NOTES:

- PROJECT CONTROL WAS ESTABLISHED USING GNSS, THE GLOBAL NAVIGATION SATELLITE SYSTEM.
- THE SURVEY CONTROL DATA FOR THIS PROJECT HAS BEEN COMPILED FROM VARIOUS SOURCES. IF FURTHER INFORMATION REGARDING PROJECT CONTROL IS NEEDED, PLEASE CONTACT THE LOCATION AND SURVEYS UNIT.

6/2/09

REVISIONS

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 matthew.koss

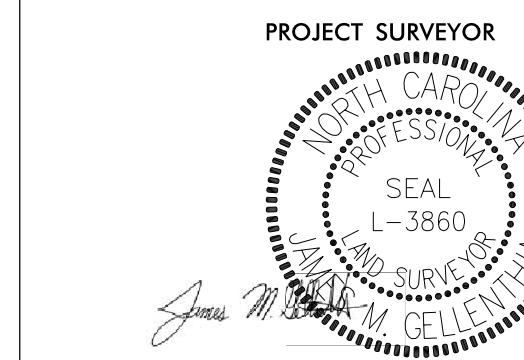
PROPOSED ALIGNMENT CONTROL SHEET

PROJECT REFERENCE NO. SHEET NO.
RR5020B RW02D-1

Location and Surveys



KCI Associates of N.C., P.A.
4505 Falls of Neuse Rd, Suite 400
Raleigh, NC 27609
Phone (919) 783-9214



**DOCUMENT NOT CONSIDERED FINAL
UNLESS ALL SIGNATURES COMPLETED**

I, JAMES M GELLENTHIN, PLS, certify that the data compiled came from available surveys/mapping performed by others and provided to me by NCDOT and do not certify to the accuracy or quality of the individual data sources.

This 16TH day of APRIL, 2020.

James M. Gellenthin
Professional Land Surveyor L-3860

6/2/19

REVISIONS

I:\15552000_0744 NCDOT - Survey\A-R5020B RW Stationing\DRAWINGS\5020b-1s-rw02d-1.dgn
15552000_0744_20200614_12-2XXPTG2 AT matthew.koss

L		N	E	BEARING	DIST	DELTA	D	L	T	R
POT		206304.625	2087552.215	N 28°57'36.4" E	1055.53					
LINE										
PC		207228.172	2088063.305	N 14°37'25.3" E	792.37	28°40'22.4"(LT)	03°34'51.6"	800.70	408.92	1600.00
CURVE										
PT		207994.872	2088263.354	N 00°17'14.1" E	1662.29					
LINE										
PC		209657.145	2088271.688	N 01°57'07.3" W	781.46	04°28'42.8"(LT)	00°34'22.6"	781.66	391.03	10000.00
CURVE										
PT		210438.149	2088245.069	N 04°11'28.8" W	1907.67					
LINE										
PC		212340.718	2088105.643	N 03°32'44.3" W	225.38	01°17'28.8"(RT)	00°34'22.6"	225.38	112.70	10000.00
CURVE										
PT		212565.664	2088091.705	N 02°53'59.9" W	2006.76					
LINE										
PC		214569.859	2087990.177	N 03°57'44.4" W	296.65	02°07'28.9"(LT)	00°42'58.3"	296.66	148.35	8000.00
CURVE										
PCC		214865.798	2087969.679	N 03°57'44.4" W	296.65	02°07'28.9"(RT)	00°42'58.3"	296.66	148.35	8000.00
CURVE										
PT		215161.737	2087949.180	N 02°53'59.9" W	140.93					
LINE										
PC		215302.485	2087942.050	N 05°09'27.8" W	630.32	04°30'55.8"(LT)	00°42'58.3"	630.48	315.40	8000.00
CURVE										
PT		215930.252	2087885.386	N 07°24'55.7" W	1179.09					
LINE										
PC		217099.483	2087733.208	N 04°38'33.9" W	773.99	05°32'43.6"(RT)	00°42'58.3"	774.29	387.45	8000.00
CURVE										
PT		217870.933	2087670.560	N 01°52'12.1" W	1953.84					
LINE										
PC		219823.731	2087606.802	N 03°06'16.6" W	344.74	02°28'09.1"(LT)	00°42'58.3"	344.76	172.41	8000.00
CURVE										
PCC		220167.963	2087588.131	N 02°59'35.0" W	375.88	02°41'32.3"(RT)	00°42'58.3"	375.92	187.99	8000.00
CURVE										
PT		220543.334	2087568.504	N 01°38'48.8" W	216.06					
LINE										
POT		220759.308	2087562.295							

ROUND1		N	E	BEARING	DIST	DELTA	D	L	T	R
PC		218030.425	2087665.352	N 43°07'47.9" E	80.61	90°00'00.0"(LT)	100°31'08.1"	89.54	57.00	57.00
CURVE										
PCC		218089.255	2087720.462	N 46°52'12.1" W	80.61	90°00'00.0"(LT)	100°31'08.1"	89.54	57.00	57.00
CURVE										
PCC		218144.364	2087661.632	S 43°07'47.9" W	80.61	90°00'00.0"(LT)	100°31'08.1"	89.54	57.00	57.00
CURVE										
PCC		218085.535	2087606.523	S 46°52'12.1" E	80.61	90°00'00.0"(LT)	100°31'08.1"	89.54	57.00	57.00
CURVE										
PT		218030.425	2087665.352							

ROUND2		N	E	BEARING	DIST	DELTA	D	L	T	R
PC		218810.010	2087639.899	N 43°07'47.9" E	80.61	90°00'00.0"(LT)	100°31'08.1"	89.54	57.00	57.00
CURVE										
PCC		218868.839	2087695.009	N 46°52'12.1" W	80.61	90°00'00.0"(LT)	100°31'08.1"	89.54	57.00	57.00
CURVE										
PCC		218923.949	2087636.179	S 43°07'47.9" W	80.61	90°00'00.0"(LT)	100°31'08.1"	89.54	57.00	57.00
CURVE										
PCC		218865.119	2087581.070	S 46°52'12.1" E	80.61	90°00'00.0"(LT)	100°31'08.1"	89.54	57.00	57.00
CURVE										
PT		218810.010	2087639.899							

RPA		N	E	BEARING	DIST	DELTA	D	L	T	R	DELTA S	Ls	LT	ST
PC		218816.308	2088706.109	N 82°11'55.5" W	347.05	07°06'21.9"(RT)	02°02'46.6"	347.27	173.86	2800.00				
CURVE														
CS		218863.415	2088362.275	N 77°57'49.0" W	100.00						01°01'23.3"(RT)	100.00	66.67	33.33
SPIRAL														
SS		218884.268	2088264.475	N 79°24'46.5" W	149.94						05°22'17.3"(LT)	150.00	100.05	50.04
SPIRAL														
SC		218911.817	2088117.086	S 88°52'06.8" W	226.48	16°16'29.3"(LT)	07°09'43.1"	227.24	114.39	800.00				
CURVE														
PT		218907.345	2087890.654	S 80°43'52.1" W	255.93									
LINE														
POT		218866.123	2087638.067											

RPB		N	E	BEARING	DIST	DELTA	D	L	T	R
POT		218655.753	2087226.027	N 48°43'23.2" E	151.78					
LINE										
PC		218755.879	2087340.090	N 64°43'37.6" E	220.56	32°00'29.0"(RT)	14°19'26.2"	223.46	114.73	400.00
CURVE										
PT		218850.044	2087539.543	N 80°43'52.1" E	99.83					
LINE										
POT		218866.123	2087638.067							

RPC		N	E	BEARING	DIST	DELTA	D	L	T	R	DELTA S	Ls	LT	ST
POT		217933.470	2086257.910	N 73°41'39.7" E	82.96									
LINE														
TS		217956.763	2086337.535	N 74°12'21.3" E	150.00						01°32'05.0"(RT)	150.00	100.00	50.00
SPIRAL														
SC		217997.589	2086481.867	N 81°55'24.1" E	652.80	13°23'19.0"(RT)	02°02'46.6"	654.29	328.64	2800.00				
CURVE														
CS		218089.306	2087128.196	N 89°38'26.9" E	150.00						01°32'05.0"(RT)	150.00	100.00	50.00
SPIRAL														
ST		218090.246	2087278.188	S 89°50'51.4" E	385.25									
LINE														
POT		218089.222	2087663.433											

RPD		N	E	BEARING	DIST
POT		218342.106	2088176.785	S 63°00'59.0" W	575.76
LINE					
POT		218080.864	2087663.706		

Y17		N	E	BEARING	DIST
POT		209267.101	2087868.095	S 89°53'05.9" E	743.78
LINE					
POT		209265.607	2088611.879		

Y18		N	E	BEARING	DIST
POT		209853.830	2087920.701	N 88°19'19.3" E	350.03
LINE					
POT		209864.080	2088270.584		

Y19		N	E	BEARING	DIST
POT		209864.080	2088270.584	N 89°04'42.5" E	350.00
LINE					
POT		209869.709	2088620.539		

Y21		N	E	BEARING	DIST
POT		210484.695	2087863.169	N 87°46'27.1" E	845.74
LINE					
POT		210517.542	2088708.275		

Y22		N	E	BEARING	DIST
POT		210934.063	2087857.788	N 87°22'17.5" E	818.02
LINE					
POT		210971.577	2088674.945		

Y23		N	E	BEARING	DIST
POT		211426.454	2088172.643	N 87°26'03.1" E	350.14
LINE					
POT		211442.129	2088522.433		

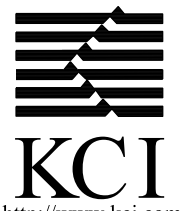
Y24		N	E	BEARING	DIST
POT		211749.464	2087747.897	N 87°39'04.4" E	800.41
LINE					
POT		211782.266	2088547.638		

NOTES:

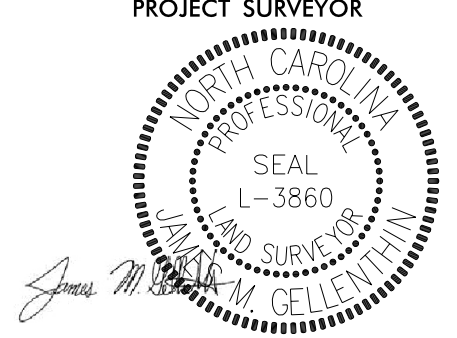
- PROJECT CONTROL WAS ESTABLISHED USING GNSS, THE GLOBAL NAVIGATION SATELLITE SYSTEM.
- THE PROPOSED ALIGNMENT CONTROL DATA FOR THIS PROJECT HAS BEEN COMPILED FROM VARIOUS SOURCES. IF FURTHER INFORMATINO REGARDING PROJECT CONTROL IS NEEDED, PLEASE CONTACT THE LOCATION AND SURVEYS UNIT.

REVISIONS

PROPOSED ALIGNMENT CONTROL SHEET

PROJECT REFERENCE NO.	SHEET NO.
R5020B	RW02D-2
Location and Surveys	
 KCI Associates of N.C., P.A. 4505 Falls of Neuse Rd, Suite 400 Raleigh, NC 27609 Phone (919) 783-9214 http://www.kci.com	

PROJECT SURVEYOR



**DOCUMENT NOT CONSIDERED FINAL
UNLESS ALL SIGNATURES COMPLETED**

I, JAMES M GELLENTHIN, PLS, certify that the data compiled came from available surveys/mapping performed by others and provided to me by NCDOT and do not certify to the accuracy or quality of the individual data sources.

This 6TH day of APRIL, 2020.


Professional Land Surveyor L-3860

Y25

POINT	N	E	BEARING	DIST
POT	212162.965	2087812.990	S 89°12'09.5" E	652.74
LINE				
POT	212153.882	2088465.664		

Y26

POINT	N	E	BEARING	DIST
POT	212622.881	2087780.612	S 89°13'37.1" E	308.43
LINE				
POT	212618.720	2088089.017		

Y27

POINT	N	E	BEARING	DIST	DELTA	D	L	T	R
POT	214173.937	2088010.234							
LINE			N 87°06'00.1" E	75.95					
PC	214177.780	2088086.091							
CURVE			S 86°42'28.1" E	258.87	12°23'03.6"(RT)	04°46'28.7"	259.38	130.20	1200.00
PT	214162.914	2088344.536							
LINE			S 80°30'56.3" E	161.67					
POT	214136.273	2088503.999							

Y28

POINT	N	E	BEARING	DIST	DELTA	D	L	T	R
POT	214463.154	2087459.702							
LINE			N 79°32'56.9" E	95.73					
PC	214480.519	2087553.847							
CURVE			N 84°01'00.4" E	373.90	08°56'07.0"(RT)	02°23'14.4"	374.28	187.52	2400.00
PT	214519.494	2087925.711							
LINE			N 88°29'03.9" E	623.09					
POT	214535.974	2088548.587							

Y29

POINT	N	E	BEARING	DIST
POT	215211.325	2087760.213	N 74°14'21.9" E	191.01
LINE				
POT	215263.206	2087944.040	N 82°00'17.9" E	272.28
LINE				
POT	215301.077	2088213.675		

Y30

POINT	N	E	BEARING	DIST
POT	215643.117	2087626.781	N 89°52'57.7" E	661.63
LINE				
POT	215644.472	2088288.406		

Y31

POINT	N	E	BEARING	DIST	DELTA	D	L	T	R
POT	216183.799	2087124.148							
LINE			S 64°49'18.9" E	111.70					
PC	216136.278	2087225.236							
CURVE			S 77°10'07.1" E	449.04	24°41'36.4"(LT)	05°27'24.3"	452.53	229.83	1050.00
PT	216036.555	2087663.059							
LINE			S 89°30'55.3" E	208.73					
POT	216034.790	2087871.780							

Y31A

POINT	N	E	BEARING	DIST	DELTA	D	L	T	R
POT	216069.734	2087409.926	S 01°52'36.1" W	32.34					
LINE									
PC	216037.409	2087408.866							
CURVE			S 21°38'43.8" E	47.89	47°02'39.9"(LT)	95°29'34.7"	49.26	26.12	60.00
PCC	215992.894	2087426.532							
CURVE			S 35°59'10.3" E	202.64	18°21'47.0"(RT)	09°01'22.6"	203.51	102.64	635.00
PCC	215828.922	2087545.604							
CURVE			S 24°29'04.5" E	125.49	04°38'24.6"(RT)	03°41'47.4"	125.53	62.80	1550.00
PT	215714.713	2087597.615							
LINE			S 22°09'52.2" E	77.31					
POT	215643.117	2087626.781							

Y32

POINT	N	E	BEARING	DIST	DELTA	D	L	T	R
POT	217065.318	2087737.655							
LINE			N 82°35'04.3" E	47.24					
PC	217071.414	2087784.497							
CURVE			N 71°52'30.5" E	74.33	21°25'07.5"(LT)	28°38'52.4"	74.77	37.82	200.00
PT	217094.538	2087855.140							
LINE			N 61°09'56.8" E	321.50					
POT	217249.591	2088136.781							

Y33

POINT	N	E	BEARING	DIST
POT	219627.372	2087390.450	S 81°25'05.6" E	428.72
LINE				
POT	219563.399	2087814.365		

NOTES:

1. PROJECT CONTROL WAS ESTABLISHED USING GNSS, THE GLOBAL NAVIGATION SATELLITE SYSTEM.
2. THE PROPOSED ALIGNMENT CONTROL DATA FOR THIS PROJECT HAS BEEN COMPILED FROM VARIOUS SOURCES. IF FURTHER INFORMATINO REGARDING PROJECT CONTROL IS NEEDED, PLEASE CONTACT THE LOCATION AND SURVEYS UNIT.

RIGHT OF WAY CONTROL SHEET

PROJECT REFERENCE NO. R5020B	SHEET NO. RRW03E-1
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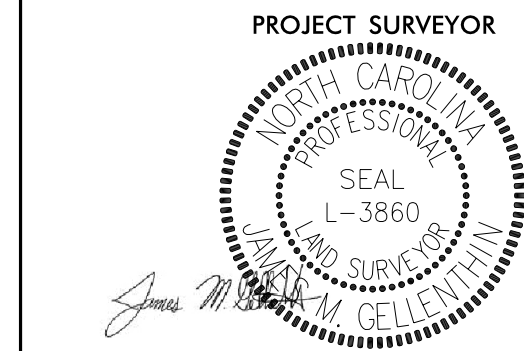
Location and Surveys

KCI Associates of N.C., P.A.
4505 Falls of Neuse Rd, Suite 400
Raleigh, NC 27609
Phone (919) 783-9214

I, JAMES M GELLENTHIN, certify that the right of way and permanent easement monumentation for this project shown herein was completed under my direct and responsible charge from an actual survey made under my supervision; that all horizontal closures had a minimum ratio of precision of 1:10,000 (Class A). Field work was performed from 03-16-2020 to 03-19-2020, and all coordinates are based on NAD83/2011. That this survey was performed to meet the requirements of 21NCAC 56.1600 as applicable.

This 16TH day of APRIL, 2020.

Professional Land Surveyor L-3860



DOCUMENT NOT CONSIDERED FINAL
UNLESS ALL SIGNATURES COMPLETED

ROW MARKER PERMANENT EASEMENT - E

ALIGN	STATION	OFFSET	NORTH	EAST
Y28	11+82.12	-30.52	214524.8492	2087634.6074
Y28	11+83.13	-41.77	214536.1246	2087633.9861
Y28	14+45.00	-70.00	214588.6541	2087898.1301
Y28	16+41.00	57.65	214466.3870	2088098.1630
Y28	16+54.00	70.00	214454.3843	2088111.4851
Y28	16+79.00	36.95	214488.0830	2088135.6022
Y28	17+22.00	-46.00	214572.1422	2088176.3932
Y28	17+22.00	-52.50	214578.6399	2088176.2213
Y28	17+61.00	36.86	214490.3414	2088217.5712
Y28	17+61.00	54.00	214473.2087	2088218.0245
Y28	17+88.00	54.00	214473.9228	2088245.0150
Y28	17+88.00	36.83	214491.0850	2088244.5609
Y28	18+35.00	-48.00	214577.1302	2088289.3008
Y28	18+71.00	36.74	214493.3709	2088327.5295
Y28	18+71.00	52.00	214478.1173	2088327.9331
Y28	18+93.00	52.00	214478.6992	2088349.9254
Y28	18+95.00	36.71	214494.0319	2088351.5204
Y28	19+70.00	-55.00	214587.6983	2088424.0684
Y28	20+87.93	-45.00	214580.8209	2088542.2184

ROW MARKER PERMANENT EASEMENT - E

ALIGN	STATION	OFFSET	NORTH	EAST
Y31	15+34.00	-35.74	216072.9618	2087634.1682
Y31	15+34.00	-50.00	216087.2113	2087634.6992
Y31	15+60.00	-50.00	216086.5955	2087659.4528
Y31	15+60.00	-35.94	216072.5411	2087659.2773
Y31	16+23.00	55.00	215981.0600	2087721.3609
Y31	16+66.50	87.00	215948.6932	2087764.5886

ROW MARKER PERMANENT EASEMENT - E

ALIGN	STATION	OFFSET	NORTH	EAST
Y31A	11+31.91	-27.11	215973.7098	2087481.3422

ROW MARKER PERMANENT EASEMENT - E

ALIGN	STATION	OFFSET	NORTH	EAST
Y32	10+83.25	66.69	217015.7204	2087839.9115
Y32	10+99.50	30.37	217056.7308	2087846.4276

ROW MARKER PERMANENT EASEMENT - E

ALIGN	STATION	OFFSET	NORTH	EAST
Y29	12+61.00	-40.76	215313.3096	2088007.6822
Y29	12+99.00	29.33	215249.1793	2088055.0625
Y29	13+43.05	-124.25	215407.3985	2088077.3266
Y29	13+63.11	-124.24	215410.1777	2088097.1915
Y29	13+63.79	-153.34	215439.0911	2088093.8175

ROW MARKER PERMANENT EASEMENT - E

ALIGN	STATION	OFFSET	NORTH	EAST
Y30	10+50.50	-41.00	215684.2204	2087677.1971
Y30	10+50.50	-34.56	215677.7852	2087677.2102
Y30	12+17.13	-45.13	215688.6951	2087843.8134
Y30	13+58.57	-46.85	215690.7026	2087985.2525
Y30	13+62.00	38.44	215605.4141	2087988.8590
Y30	15+05.00	-38.84	215682.9862	2088131.7005

NOTES:

1. IF FURTHER INFORMATION REGARDING PROJECT CONTROL IS NEEDED PLEASE CONTACT THE LOCATION AND SURVEYS UNIT.
2. PROJECT CONTROL WAS ESTABLISHED USING GNSS, THE GLOBAL NAVIGATION SATELLITE SYSTEM.
3. RIGHT OF WAY MONUMENTATION ESTABLISHED 03-16-2020 TO 03-19-2020.

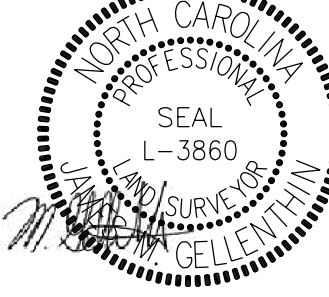
REVISIONS

6/2/09

I:\15-156-2020-081362 NCDOT - Survey\A-R5020B RW Stationing\DRAWINGS\5020B-1s-rw03e-3.dgn
15-156-2020-081362
12-21-2020
matt.hawkess

Location and Surveys

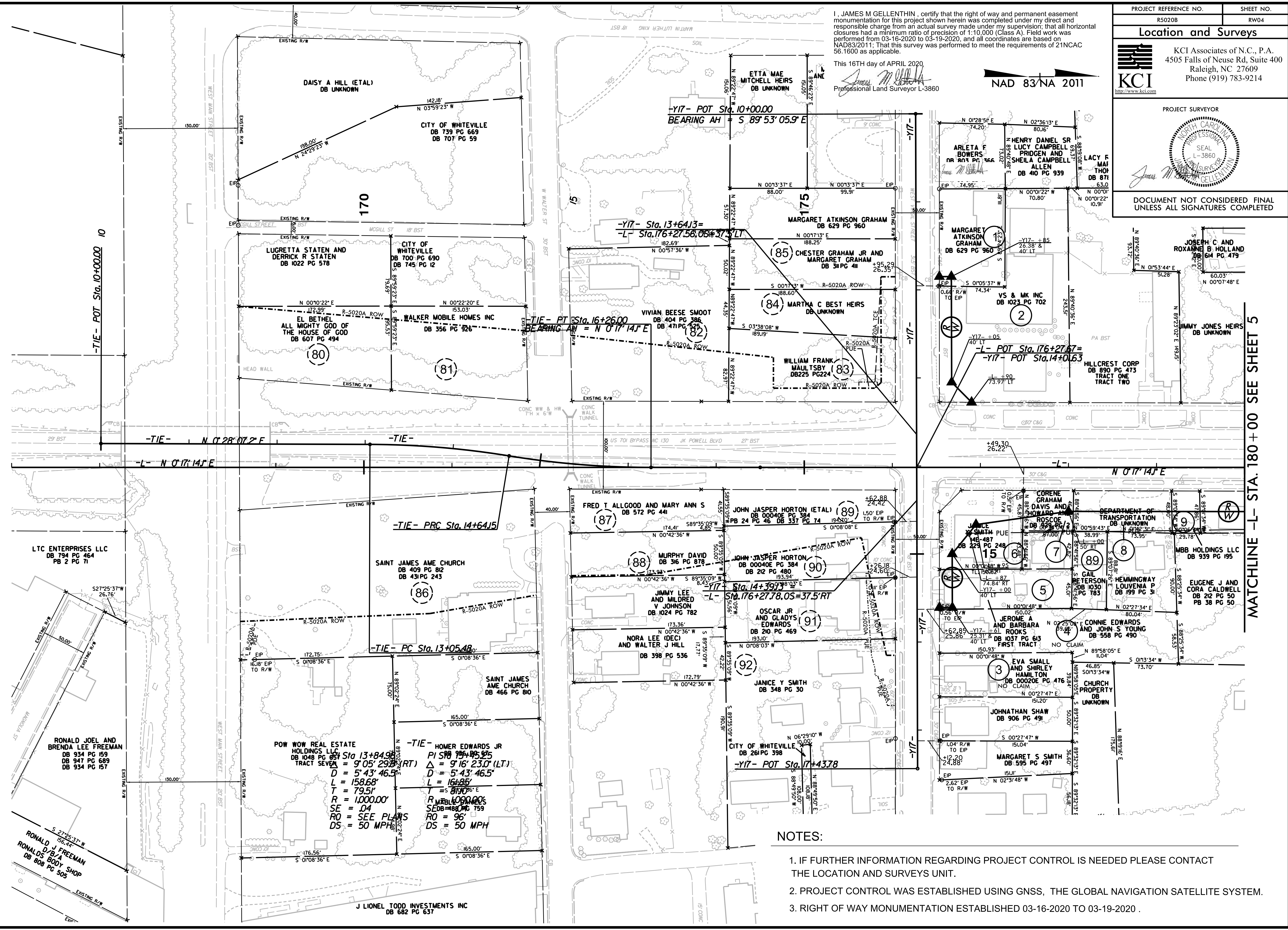
KCI Associates of N.C., P.A.
4505 Falls of Neuse Rd, Suite 400
Raleigh, NC 27609
Phone (919) 783-9214
<http://www.kci.com>

PROJECT SURVEYOR

 DOCUMENT NOT CONSIDERED FINAL
 UNLESS ALL SIGNATURES COMPLETED

I, JAMES M GELLENTHIN, certify that the right of way and permanent easement monumentation for this project shown herein was completed under my direct and responsible charge from an actual survey made under my supervision; that all horizontal closures had a minimum ratio of precision of 1:10,000 (Class A). Field work was performed from 03-16-2020 to 03-19-2020, and all coordinates are based on NAD83/2011; That this survey was performed to meet the requirements of 21NCAC 56.1600 as applicable.

This 16TH day of APRIL 2020

 Professional Land Surveyor L-3860
 NAD 83/NA 2011



REVISIONS

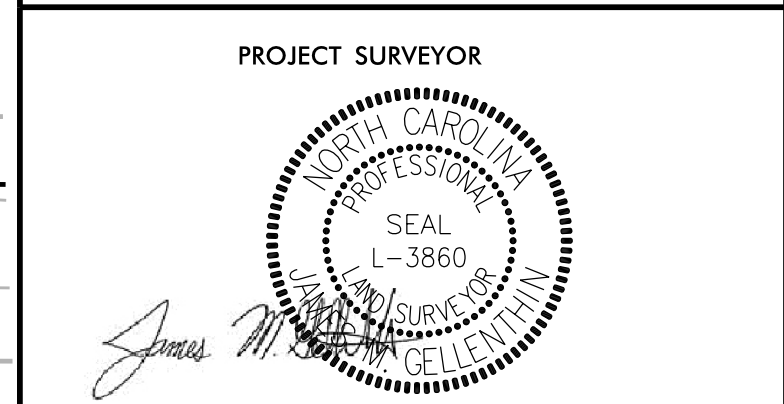
MATCHLINE -L- STA. 180+00 SEE SHEET 5

- NOTES:
1. IF FURTHER INFORMATION REGARDING PROJECT CONTROL IS NEEDED PLEASE CONTACT THE LOCATION AND SURVEYS UNIT.
 2. PROJECT CONTROL WAS ESTABLISHED USING GNSS, THE GLOBAL NAVIGATION SATELLITE SYSTEM.
 3. RIGHT OF WAY MONUMENTATION ESTABLISHED 03-16-2020 TO 03-19-2020 .

6/2/09
 15-156-2020-1807 NCDOT - Survey\A-R5020B RW Station\DRAWINGS\5020B-1s-rw04.dgn
 15-156-2020-1807 NCDOT - Survey\A-R5020B RW Station\A-R5020B-1s-rw04.dgn
 15-156-2020-1807 NCDOT - Survey\A-R5020B RW Station\A-R5020B-1s-rw04.dgn

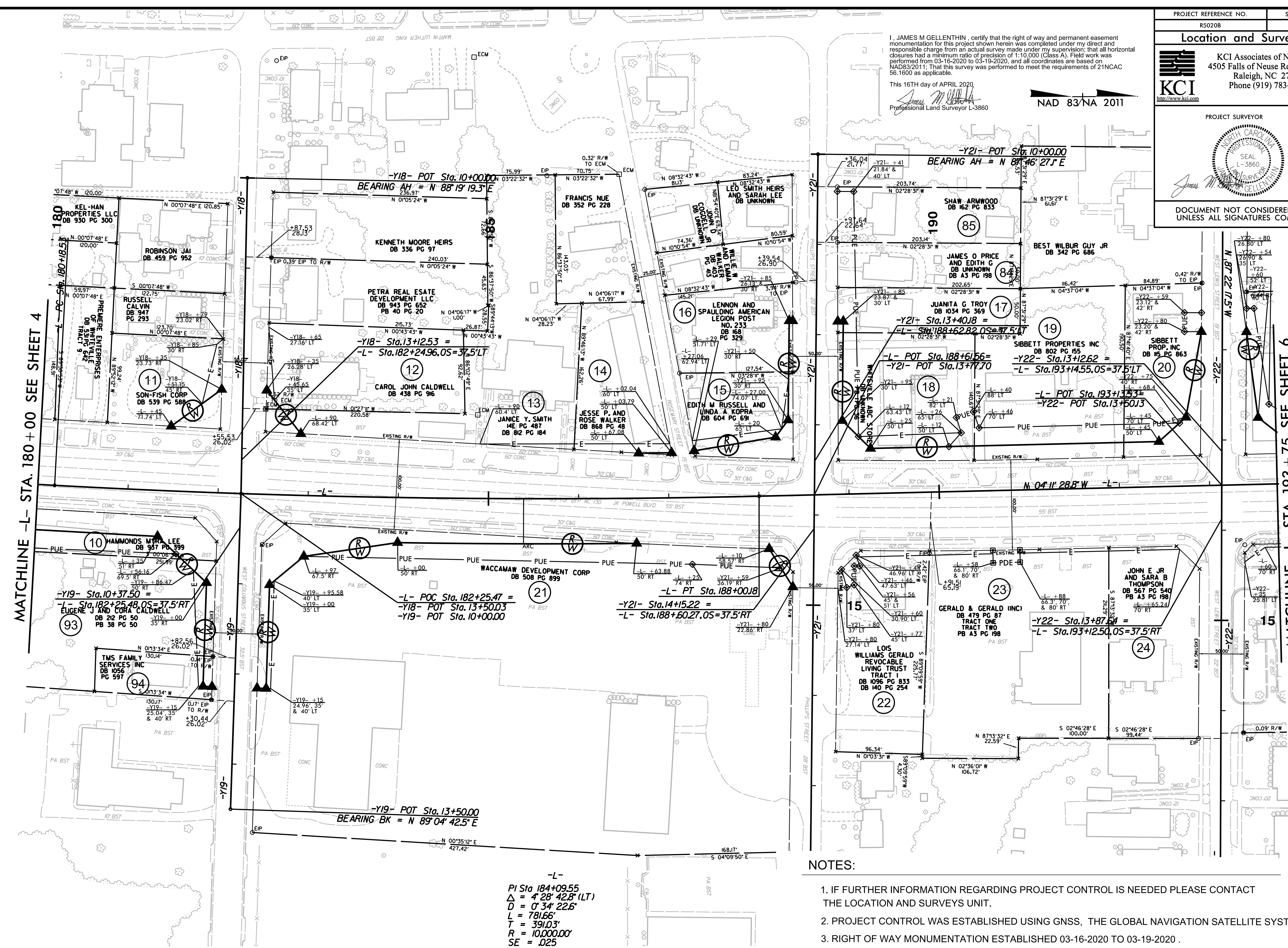
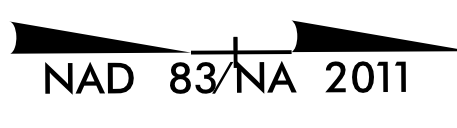
Location and Surveys

KCI Associates of N.C., P.A.
4505 Falls of Neuse Rd, Suite 400
Raleigh, NC 27609
Phone (919) 783-9214



PROJECT SURVEYOR
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

I, JAMES M GELLENTHIN, certify that the right of way and permanent easement monumentation for this project shown herein was completed under my direct and responsible charge from an actual survey made under my supervision; that all horizontal closures had a minimum ratio of precision of 1:10,000 (Class A). Field work was performed from 03-16-2020 to 03-19-2020, and all coordinates are based on NAD83/2011; That this survey was performed to meet the requirements of 21NCAC 56.1600 as applicable.
This 16TH day of APRIL 2020
Professional Land Surveyor L-3860



MATCHLINE -L- STA. 180 + 00 SEE SHEET 4

MATCHLINE -L- STA. 193 + 75 SEE SHEET 6

REVISIONS

15:15:2020 2020 2020 NCDOT - Survey\A-R5020B RW Stationing\DRAWINGS\A-5020B-1.s-rw05.dgn

-L-
PI Sta 184+09.55
Δ = 4' 28" 42.8" (LT)
D = 0' 34" 22.6"
L = 781.66'
T = 391.03'
R = 10,000.00'
SE = .025


NOTES:

1. IF FURTHER INFORMATION REGARDING PROJECT CONTROL IS NEEDED PLEASE CONTACT THE LOCATION AND SURVEYS UNIT.
2. PROJECT CONTROL WAS ESTABLISHED USING GNSS, THE GLOBAL NAVIGATION SATELLITE SYSTEM.
3. RIGHT OF WAY MONUMENTATION ESTABLISHED 03-16-2020 TO 03-19-2020 .

Location and Surveys

KCI Associates of N.C., P.A.
 4505 Falls of Neuse Rd, Suite 400
 Raleigh, NC 27609
 Phone (919) 783-9214

PROJECT SURVEYOR



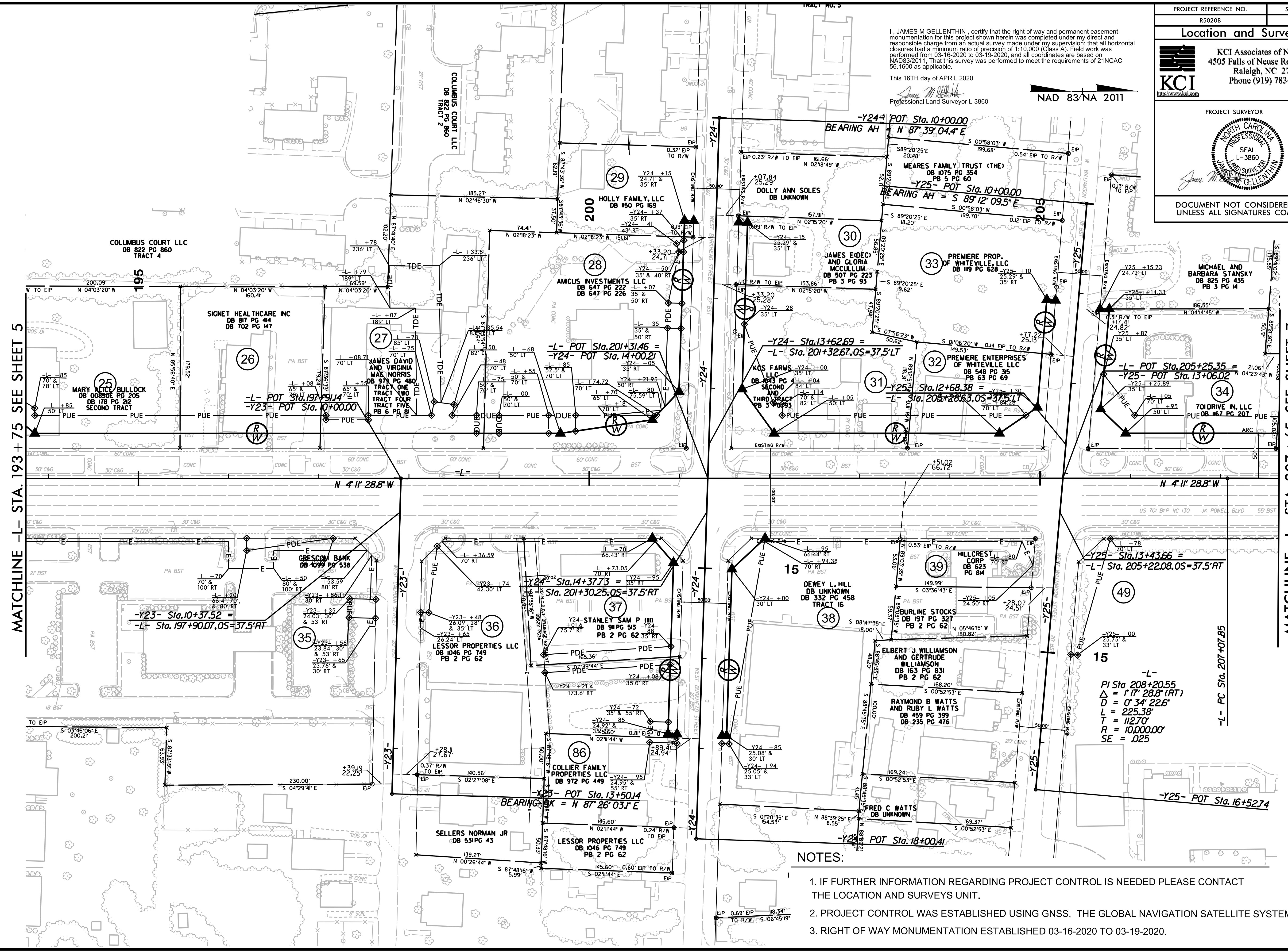
DOCUMENT NOT CONSIDERED FINAL
 UNLESS ALL SIGNATURES COMPLETED

I, JAMES M. GELLENTHIN, certify that the right of way and permanent easement monumentation for this project shown herein was completed under my direct and responsible charge from an actual survey made under my supervision; that all horizontal closures had a minimum ratio of precision of 1:10,000 (Class A). Field work was performed from 03-16-2020 to 03-19-2020, and all coordinates are based on NAD83/2011; That this survey was performed to meet the requirements of 21NCAC 56.1600 as applicable.

This 16TH day of APRIL 2020

James M. Gellenthin
 Professional Land Surveyor L-3860

NAD 83/NA 2011



- NOTES:
1. IF FURTHER INFORMATION REGARDING PROJECT CONTROL IS NEEDED PLEASE CONTACT THE LOCATION AND SURVEYS UNIT.
 2. PROJECT CONTROL WAS ESTABLISHED USING GNSS, THE GLOBAL NAVIGATION SATELLITE SYSTEM.
 3. RIGHT OF WAY MONUMENTATION ESTABLISHED 03-16-2020 TO 03-19-2020.

REVISIONS

MATCHLINE -L- STA. 193+75 SEE SHEET 5


MATCHLINE -L- STA. 207+65 SEE SHEET 7

6/2/09
 15-Apr-2020 16:42
 I:\Projects\2020\1642\1642.kss\Desk\top\DRAWINGS\5020B\1s_r\06.dgn
 211
 1642

Location and Surveys

KCI Associates of N.C., P.A.
 4505 Falls of Neuse Rd, Suite 400
 Raleigh, NC 27609
 Phone (919) 783-9214
<http://www.kci.com>

PROJECT SURVEYOR

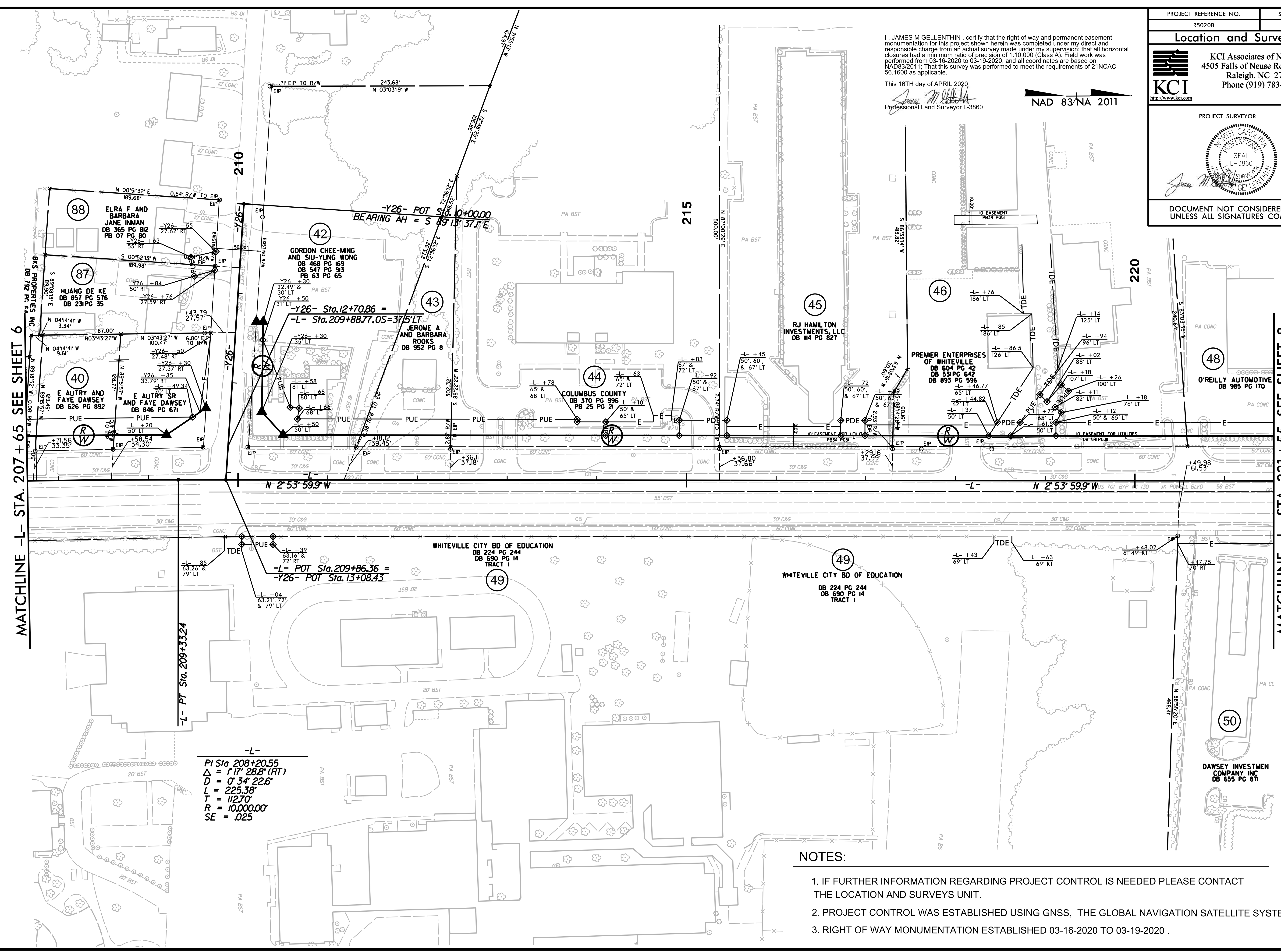
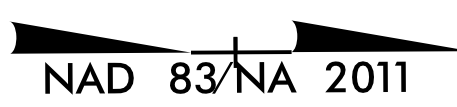


DOCUMENT NOT CONSIDERED FINAL
 UNLESS ALL SIGNATURES COMPLETED

I, JAMES M GELLENTHIN, certify that the right of way and permanent easement monumentation for this project shown herein was completed under my direct and responsible charge from an actual survey made under my supervision; that all horizontal closures had a minimum ratio of precision of 1:10,000 (Class A). Field work was performed from 03-16-2020 to 03-19-2020, and all coordinates are based on NAD83/2011; That this survey was performed to meet the requirements of 21NCAC 56.1600 as applicable.

This 16TH day of APRIL 2020

James M. Gellenthin
 Professional Land Surveyor L-3860



MATCHLINE -L- STA. 207 + 65 SEE SHEET 6

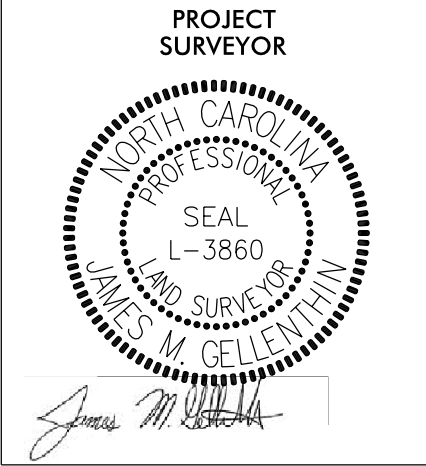
MATCHLINE -L- STA. 221 + 55 SEE SHEET 8

-L-
 PI Sta 208+20.55
 $\Delta = 1'17.288'$ (RT)
 $D = 0'34.226'$
 $L = 225.38'$
 $T = 112.70'$
 $R = 10,000.00'$
 $SE = .025$

- NOTES:
1. IF FURTHER INFORMATION REGARDING PROJECT CONTROL IS NEEDED PLEASE CONTACT THE LOCATION AND SURVEYS UNIT.
 2. PROJECT CONTROL WAS ESTABLISHED USING GNSS, THE GLOBAL NAVIGATION SATELLITE SYSTEM.
 3. RIGHT OF WAY MONUMENTATION ESTABLISHED 03-16-2020 TO 03-19-2020 .

REVISIONS

6/2/09
 I:\1562020_00372_NCDOT - Survey\A-R5020B RW Station\DRAWINGS\A-R5020B-1s-rw07.dgn
 1562020_00372_NCDOT - Survey\A-R5020B RW Station\DRAWINGS\A-R5020B-1s-rw07.dgn
 1562020_00372_NCDOT - Survey\A-R5020B RW Station\DRAWINGS\A-R5020B-1s-rw07.dgn



I, James M. Gelenthin, a Professional Land Surveyor in the state of North Carolina hereby certify to the best of my knowledge and belief that the following work items (base map compilation, R/W Staking) performed under my responsible charge meet NCDOT Survey Standards as directed in the NCDOT Location & Surveys guidelines and procedures.

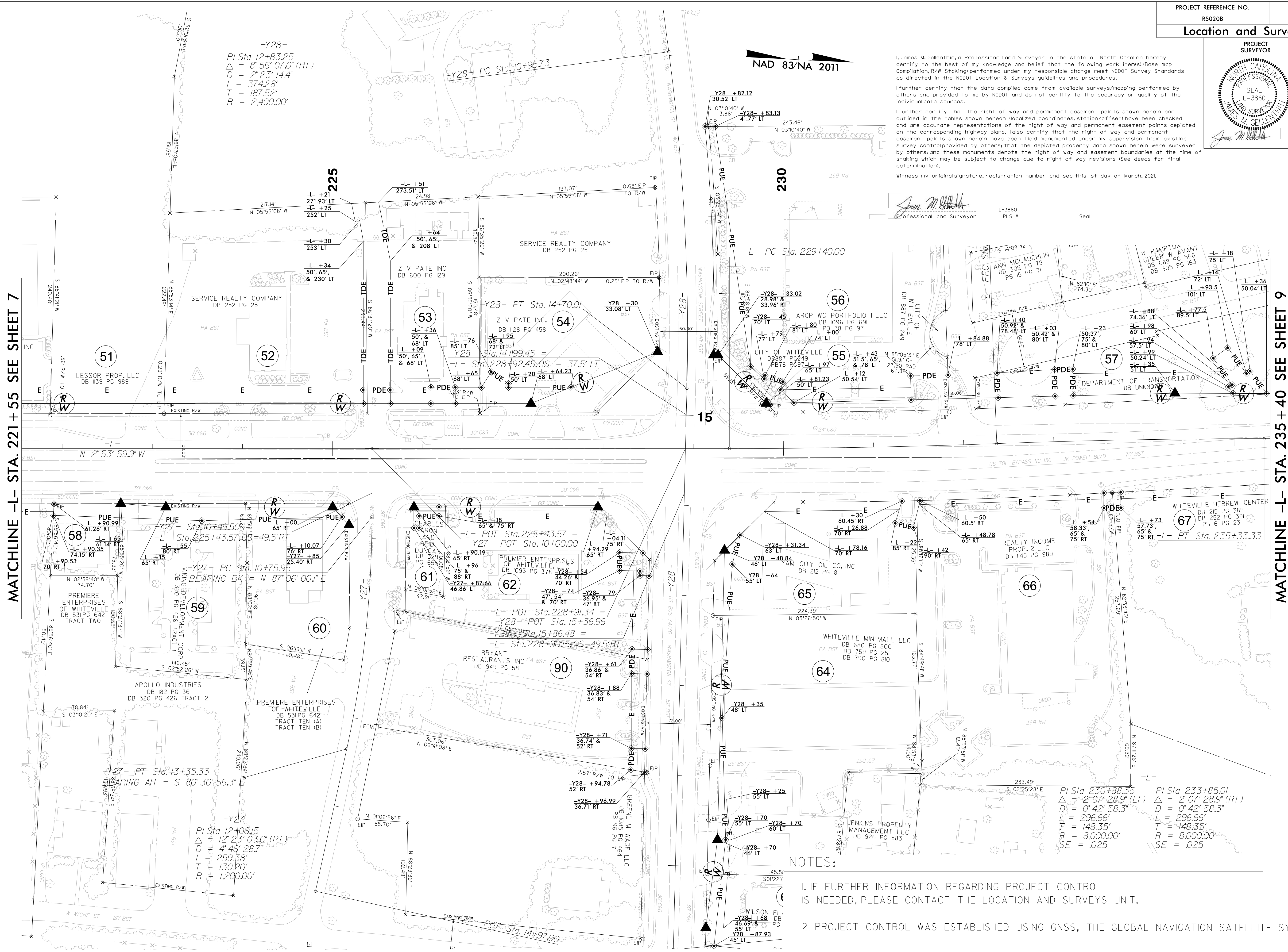
I further certify that the data compiled came from available surveys/mapping performed by others and provided to me by NCDOT and do not certify to the accuracy or quality of the individual data sources.

I further certify that the right of way and permanent easement points shown herein and outlined in the tables shown hereon localized coordinates, station/offsets have been checked and are accurate representations of the right of way and permanent easement points depicted on the corresponding highway plans. I also certify that the right of way and permanent easement points shown herein have been field monumented under my supervision from existing survey control provided by others; that the depicted property data shown herein were surveyed by others; and these monuments denote the right of way and easement boundaries at the time of staking which may be subject to change due to right of way revisions (See deeds for final determination).

Witness my original signature, registration number and seal this 1st day of March, 2021.

James M. Gelenthin
Professional Land Surveyor

L-3860
PLS * Seal



-Y28-
PI Sta 12+83.25
 $\Delta = 8^{\circ} 56' 07.0''$ (RT)
D = 2' 23' 14.4"
L = 374.28'
T = 187.52'
R = 2,400.00'

NAD 83/NA 2011

MATCHLINE -L- STA. 221+55 SEE SHEET 7

MATCHLINE -L- STA. 235+40 SEE SHEET 9

0:\MAPS\2021\1800284 NCDOT\N-R5020B Div 6 - US 701 Bypass Whiteville\STAKING\R5020B ROW\N-R-5020B-Rdy-RW-8.cdr
DATE: 03/01/21 10:51:00 AM
DRAWN BY: JMG

NOTES:

- IF FURTHER INFORMATION REGARDING PROJECT CONTROL IS NEEDED, PLEASE CONTACT THE LOCATION AND SURVEYS UNIT.
- PROJECT CONTROL WAS ESTABLISHED USING GNSS, THE GLOBAL NAVIGATION SATELLITE SYSTEM.

PI Sta 230+88.35
 $\Delta = 2^{\circ} 07' 28.9''$ (LT)
D = 0' 42' 58.3"
L = 296.66'
T = 148.35'
R = 8,000.00'
SE = .025

PI Sta 233+85.01
 $\Delta = 2^{\circ} 07' 28.9''$ (RT)
D = 0' 42' 58.3"
L = 296.66'
T = 148.35'
R = 8,000.00'
SE = .025

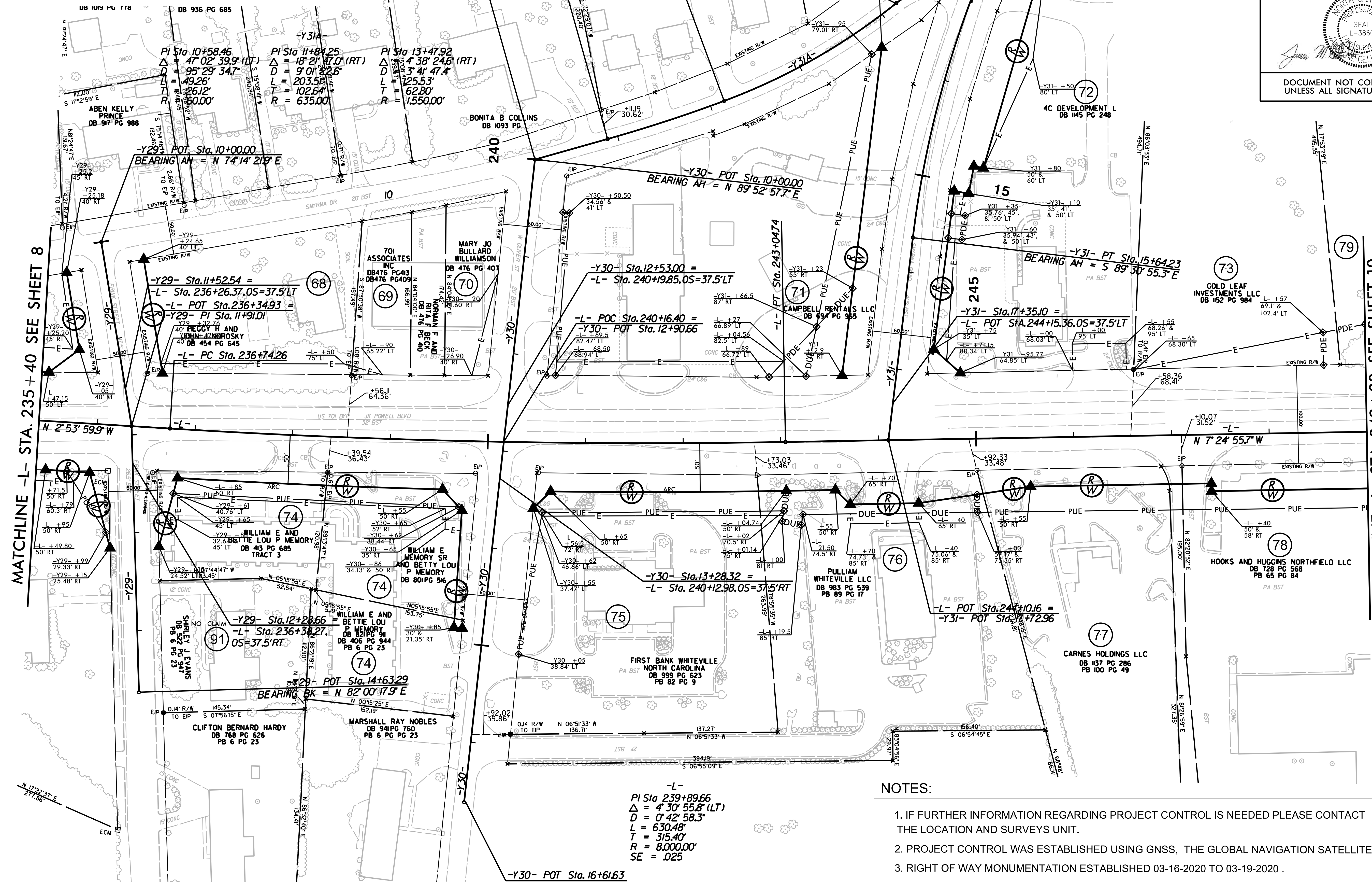
REVISIONS
REVISIONS



6/2/19

I, JAMES M GELLENTHIN, certify that the right of way and permanent easement monumentation for this project shown herein was completed under my direct and responsible charge from an actual survey made under my supervision; that all horizontal closures had a minimum ratio of precision of 1:10,000 (Class A). Field work was performed from 03-16-2020 to 03-19-2020, and all coordinates are based on NAD83/2011; That this survey was performed to meet the requirements of 21NCAC 56.1600 as applicable.

This 16TH day of APRIL 2020

Professional Land Surveyor L-3860



PROJECT REFERENCE NO. R5020B	SHEET NO. RW09
Location and Surveys	
 KCI Associates of N.C., P.A. 4505 Falls of Neuse Rd, Suite 400 Raleigh, NC 27609 Phone (919) 783-9214	
PROJECT SURVEYOR	
	
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	

NAD 83/NA 2011

REVISIONS

MATCHLINE -L- STA. 235 + 40 SEE SHEET 8



MATCHLINE -L- STA. 249 + 00 SEE SHEET 10

-L-
 PI Sta 239+89.66
 $\Delta = 4^{\circ} 30' 55.8''$ (LT)
 $D = 0^{\circ} 42' 58.3''$
 $L = 630.48'$
 $T = 315.40'$
 $R = 8,000.00'$
 $SE = .025$

NOTES:

1. IF FURTHER INFORMATION REGARDING PROJECT CONTROL IS NEEDED PLEASE CONTACT THE LOCATION AND SURVEYS UNIT.
2. PROJECT CONTROL WAS ESTABLISHED USING GNSS, THE GLOBAL NAVIGATION SATELLITE SYSTEM.
3. RIGHT OF WAY MONUMENTATION ESTABLISHED 03-16-2020 TO 03-19-2020 .

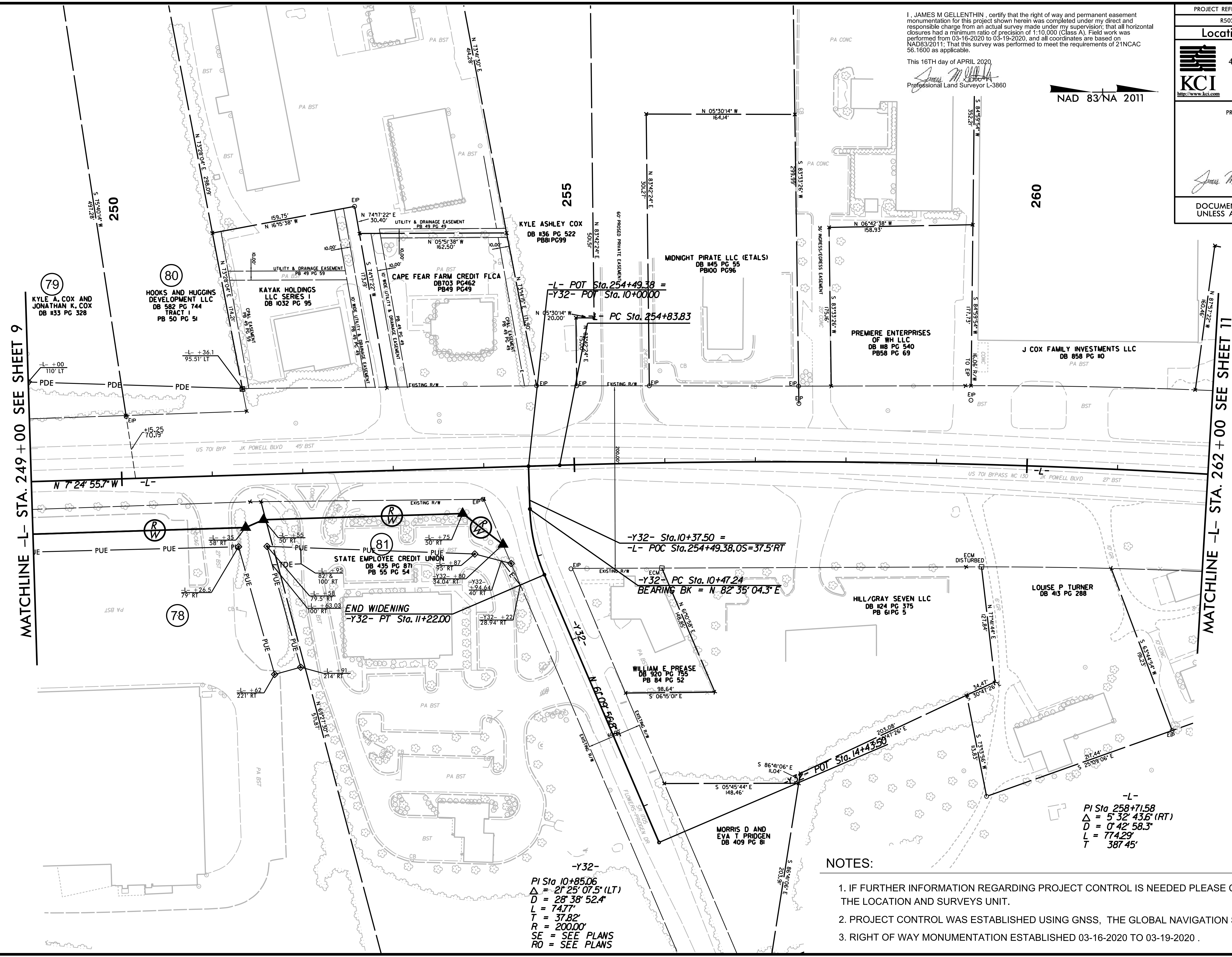
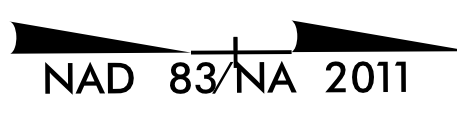
15:15:2020_06132_NCDOT - Survey\A-R5020B.RW.Staking\DRAWINGS\A-5020B-1.s_rw09.dgn

PROJECT REFERENCE NO.	SHEET NO.
R5020B	RW10
Location and Surveys	
 KCI Associates of N.C., P.A. 4505 Falls of Neuse Rd, Suite 400 Raleigh, NC 27609 Phone (919) 783-9214 http://www.kci.com	
PROJECT SURVEYOR	
	
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	

I, JAMES M GELLENTHIN, certify that the right of way and permanent easement monumentation for this project shown herein was completed under my direct and responsible charge from an actual survey made under my supervision; that all horizontal closures had a minimum ratio of precision of 1:10,000 (Class A). Field work was performed from 03-16-2020 to 03-19-2020, and all coordinates are based on NAD83/2011. That this survey was performed to meet the requirements of 21NCA 56.1600 as applicable.

This 16TH day of APRIL 2020

James M. Gellenthin
Professional Land Surveyor L-3860



MATCHLINE -L- STA. 249 + 00 SEE SHEET 9

MATCHLINE -L- STA. 262 + 00 SEE SHEET 11

REVISIONS


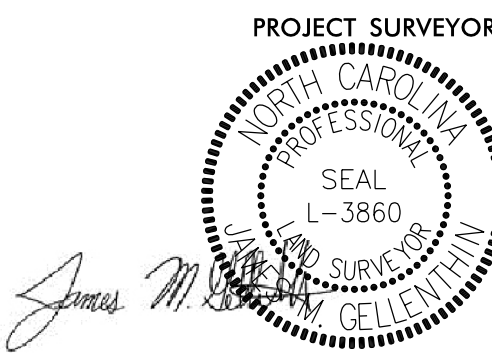
I:\1515\2020\03\06\3172 NCDOT - Survey\A-R5020B RW Stationing\DRAWINGS\A-5020B-1.s_rw10.dgn

-Y32-
 PI Sta 10+85.06
 $\Delta = 21' 25" 07.5' (LT)$
 $D = 28' 38" 52.4'$
 $L = 74.77'$
 $T = 37.82'$
 $R = 200.00'$
 SE = SEE PLANS
 RO = SEE PLANS

NOTES:

1. IF FURTHER INFORMATION REGARDING PROJECT CONTROL IS NEEDED PLEASE CONTACT THE LOCATION AND SURVEYS UNIT.
2. PROJECT CONTROL WAS ESTABLISHED USING GNSS, THE GLOBAL NAVIGATION SATELLITE SYSTEM.
3. RIGHT OF WAY MONUMENTATION ESTABLISHED 03-16-2020 TO 03-19-2020 .

-L-
 PI Sta 258+71.58
 $\Delta = 5' 32" 43.6' (RT)$
 $D = 0' 42" 58.3'$
 $L = 774.29'$
 $T = 387.45'$

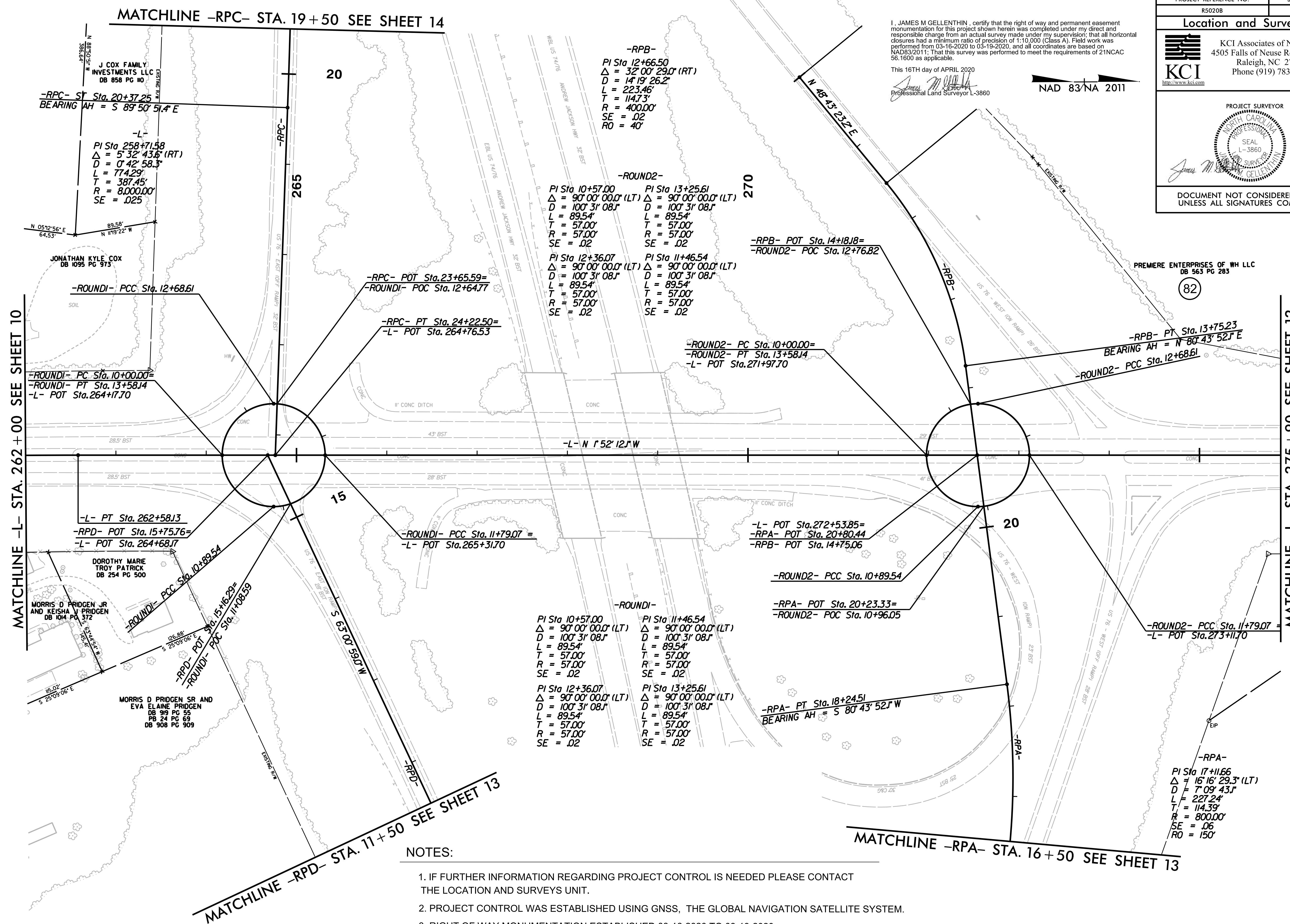
PROJECT REFERENCE NO. R5020B	SHEET NO. RW11
Location and Surveys	
	
KCI Associates of N.C., P.A. 4505 Falls of Neuse Rd, Suite 400 Raleigh, NC 27609 Phone (919) 783-9214	
PROJECT SURVEYOR 	
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	

I, JAMES M GELLENTHIN, certify that the right of way and permanent easement monumentation for this project shown herein was completed under my direct and responsible charge from an actual survey made under my supervision; that all horizontal closures had a minimum ratio of precision of 1:10,000 (Class A). Field work was performed from 03-16-2020 to 03-19-2020, and all coordinates are based on NAD83/2011; That this survey was performed to meet the requirements of 21NCAC 56.1600 as applicable.

This 16TH day of APRIL 2020

James M. Gellenthin
Professional Land Surveyor L-3860

NAD 83/NA 2011



-RPB-
 PI Sta 12+66.50
 $\Delta = 32^{\circ} 00' 29.0''$ (RT)
 $D = 14^{\circ} 19' 26.2''$
 $L = 223.46'$
 $T = 114.73'$
 $R = 400.00'$
 $SE = .02$
 $RO = 40'$

-ROUND2- PI Sta 10+57.00 $\Delta = 90^{\circ} 00' 00.0''$ (LT) $D = 100^{\circ} 31' 08.1''$ $L = 89.54'$ $T = 57.00'$ $R = 57.00'$ $SE = .02$	-ROUND2- PI Sta 13+25.61 $\Delta = 90^{\circ} 00' 00.0''$ (LT) $D = 100^{\circ} 31' 08.1''$ $L = 89.54'$ $T = 57.00'$ $R = 57.00'$ $SE = .02$
-ROUND2- PI Sta 12+36.07 $\Delta = 90^{\circ} 00' 00.0''$ (LT) $D = 100^{\circ} 31' 08.1''$ $L = 89.54'$ $T = 57.00'$ $R = 57.00'$ $SE = .02$	-ROUND2- PI Sta 11+46.54 $\Delta = 90^{\circ} 00' 00.0''$ (LT) $D = 100^{\circ} 31' 08.1''$ $L = 89.54'$ $T = 57.00'$ $R = 57.00'$ $SE = .02$

-L-
 PI Sta 258+71.58
 $\Delta = 5^{\circ} 32' 43.6''$ (RT)
 $D = 0^{\circ} 42' 58.3''$
 $L = 774.29'$
 $T = 387.45'$
 $R = 8,000.00'$
 $SE = .025$

-ROUND1- PCC Sta. 12+68.61
-ROUND1- PT Sta. 13+58.14
-L- POT Sta. 264+17.70

-RPC- POT Sta. 23+65.59=
-ROUND1- POC Sta. 12+64.77

-RPC- PT Sta. 24+22.50=
-L- POT Sta. 264+76.53

-RPB- POT Sta. 14+18.18=
-ROUND2- POC Sta. 12+76.82

-ROUND2- PC Sta. 10+00.00=
-ROUND2- PT Sta. 13+58.14
-L- POT Sta. 271+97.70

-RPB- PT Sta. 13+75.23
 BEARING AH = $N 80^{\circ} 43' 52.1'' E$
-ROUND2- PCC Sta. 12+68.61

-L- PT Sta. 262+58.13
-RPD- POT Sta. 15+75.76=
-L- POT Sta. 264+68.17

-ROUND1- PCC Sta. 11+79.07 =
-L- POT Sta. 265+31.70

-L- POT Sta. 272+53.85=
-RPA- POT Sta. 20+80.44
-RPB- POT Sta. 14+75.06

-ROUND2- PCC Sta. 10+89.54

-RPA- POT Sta. 20+23.33=
-ROUND2- POC Sta. 10+96.05

-ROUND1- PI Sta 10+57.00 $\Delta = 90^{\circ} 00' 00.0''$ (LT) $D = 100^{\circ} 31' 08.1''$ $L = 89.54'$ $T = 57.00'$ $R = 57.00'$ $SE = .02$	-ROUND1- PI Sta 11+46.54 $\Delta = 90^{\circ} 00' 00.0''$ (LT) $D = 100^{\circ} 31' 08.1''$ $L = 89.54'$ $T = 57.00'$ $R = 57.00'$ $SE = .02$
-ROUND1- PI Sta 12+36.07 $\Delta = 90^{\circ} 00' 00.0''$ (LT) $D = 100^{\circ} 31' 08.1''$ $L = 89.54'$ $T = 57.00'$ $R = 57.00'$ $SE = .02$	-ROUND1- PI Sta 13+25.61 $\Delta = 90^{\circ} 00' 00.0''$ (LT) $D = 100^{\circ} 31' 08.1''$ $L = 89.54'$ $T = 57.00'$ $R = 57.00'$ $SE = .02$

-RPA- PT Sta. 18+24.51
 BEARING AH = $S 80^{\circ} 43' 52.1'' W$

-RPA-
 PI Sta 17+11.66
 $\Delta = 16^{\circ} 16' 29.3''$ (LT)
 $D = 7^{\circ} 09' 43.1''$
 $L = 227.24'$
 $T = 114.39'$
 $R = 800.00'$
 $SE = .06$
 $RO = 150'$

NOTES:

1. IF FURTHER INFORMATION REGARDING PROJECT CONTROL IS NEEDED PLEASE CONTACT THE LOCATION AND SURVEYS UNIT.
2. PROJECT CONTROL WAS ESTABLISHED USING GNSS, THE GLOBAL NAVIGATION SATELLITE SYSTEM.
3. RIGHT OF WAY MONUMENTATION ESTABLISHED 03-16-2020 TO 03-19-2020 .

6/2/19
 15-155-2020-0817
 15-155-2020-0817
 NCDOT - Survey\A-R5020B RW Station\DRAWINGS\5020B-1s-rw11.dgn
 12-22-2020
 JMG

REVISIONS

MATCHLINE -L- STA. 262 + 00 SEE SHEET 10

MATCHLINE -RPD- STA. 11 + 50 SEE SHEET 13

MATCHLINE -L- STA. 275 + 90 SEE SHEET 12

MATCHLINE -RPA- STA. 16 + 50 SEE SHEET 13