

09/06/19

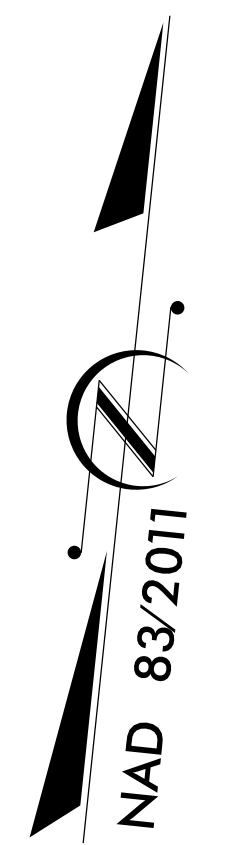
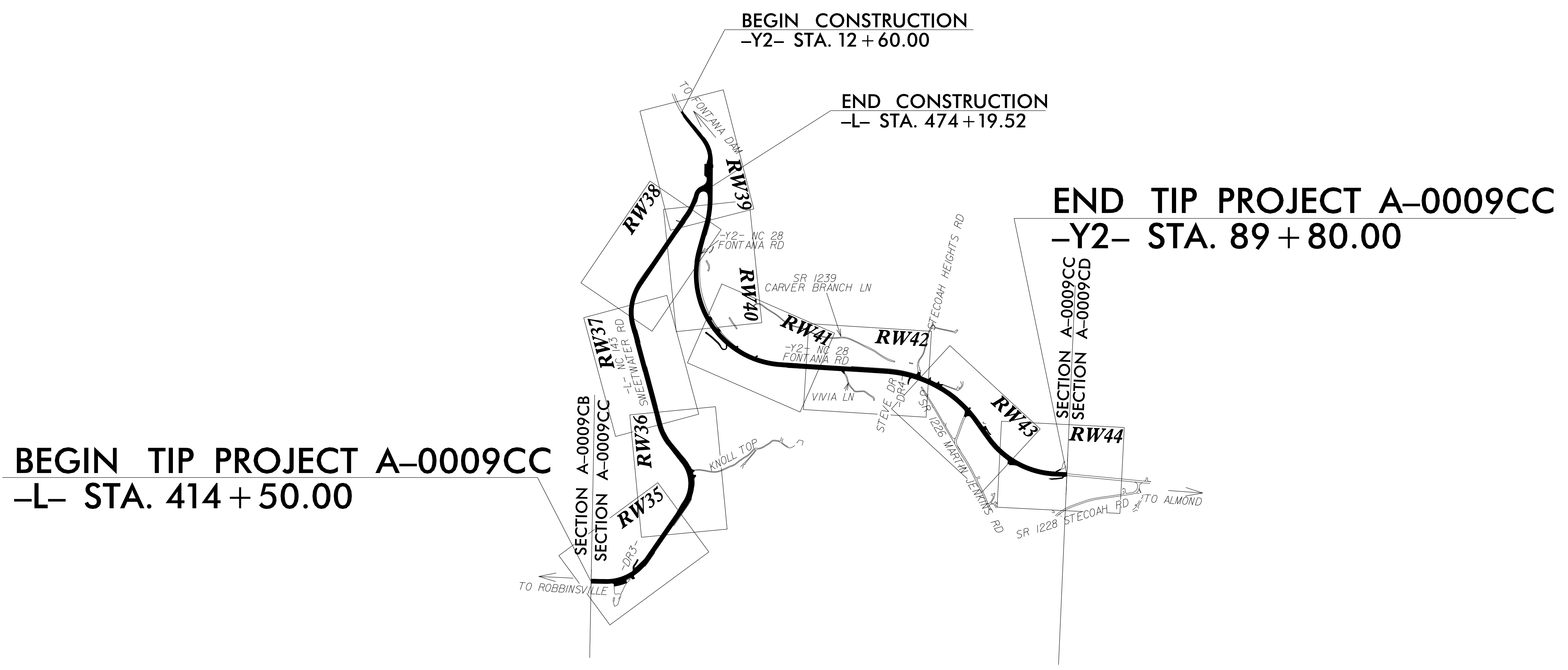
TIP PROJECT: A-0009CC

STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	A-0009CC	RW01	36

STATE OF NORTH CAROLINA
 DIVISION OF HIGHWAYS

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

GRAHAM COUNTY

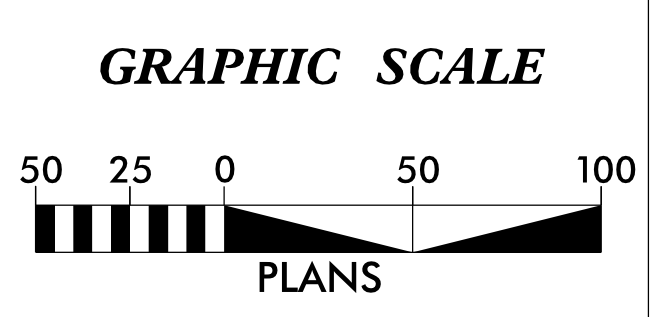


BEGIN TIP PROJECT A-0009CC
 -L- STA. 414 + 50.00

BEGIN CONSTRUCTION
 -Y2- STA. 12 + 60.00

END CONSTRUCTION
 -L- STA. 474 + 19.52

END TIP PROJECT A-0009CC
 -Y2- STA. 89 + 80.00



DATUM DESCRIPTION

THE LOCALIZED COORDINATE SYSTEM DEVELOPED FOR THIS PROJECT IS BASED ON THE STATE PLANE COORDINATES ESTABLISHED BY NCDOT FOR MONUMENT "A0009C-10" WITH NAD 83/NA 2011 STATE PLANE GRID COORDINATES OF NORTHING: 612,531.117(ft) EASTING: 584,817.003(ft) ELEVATION: 2,216.16(ft) THE AVERAGE COMBINED GRID FACTOR USED ON THIS PROJECT (GROUND TO GRID) IS: 0.999772236 THE N.C. LAMBERT GRID BEARING AND LOCALIZED HORIZONTAL GROUND DISTANCE FROM "A0009C-10" TO -L- STATION 414+50 IS N 51-45°07.2" E 13,718.44(ft) ALL LINEAR DIMENSIONS ARE LOCALIZED HORIZONTAL DISTANCES VERTICAL DATUM USED IS NAVD 88

Prepared in the Office of:

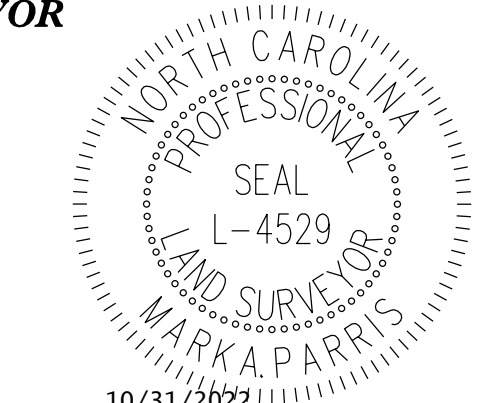
V&M
Vaughn & Melton
 1318-F Patton Avenue
 Asheville, NC 28806
 Firm License # F-1088

2018 STANDARD SPECIFICATIONS

RIGHT OF WAY DATE:
 08/12/2021

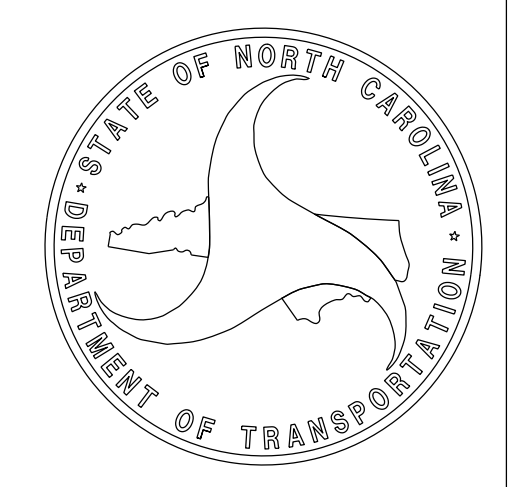
LETTING DATE:
 12/20/2022

PROFESSIONAL LAND SURVEYOR



DocuSigned by:
 Mark A. Parris
 SIGNATURE

Date:
 10/31/2022




\$\$\$\$\$ SYSTEM \$\$\$\$\$\$
 \$\$\$ DDN \$\$\$
 \$\$\$ USERNAME \$\$\$

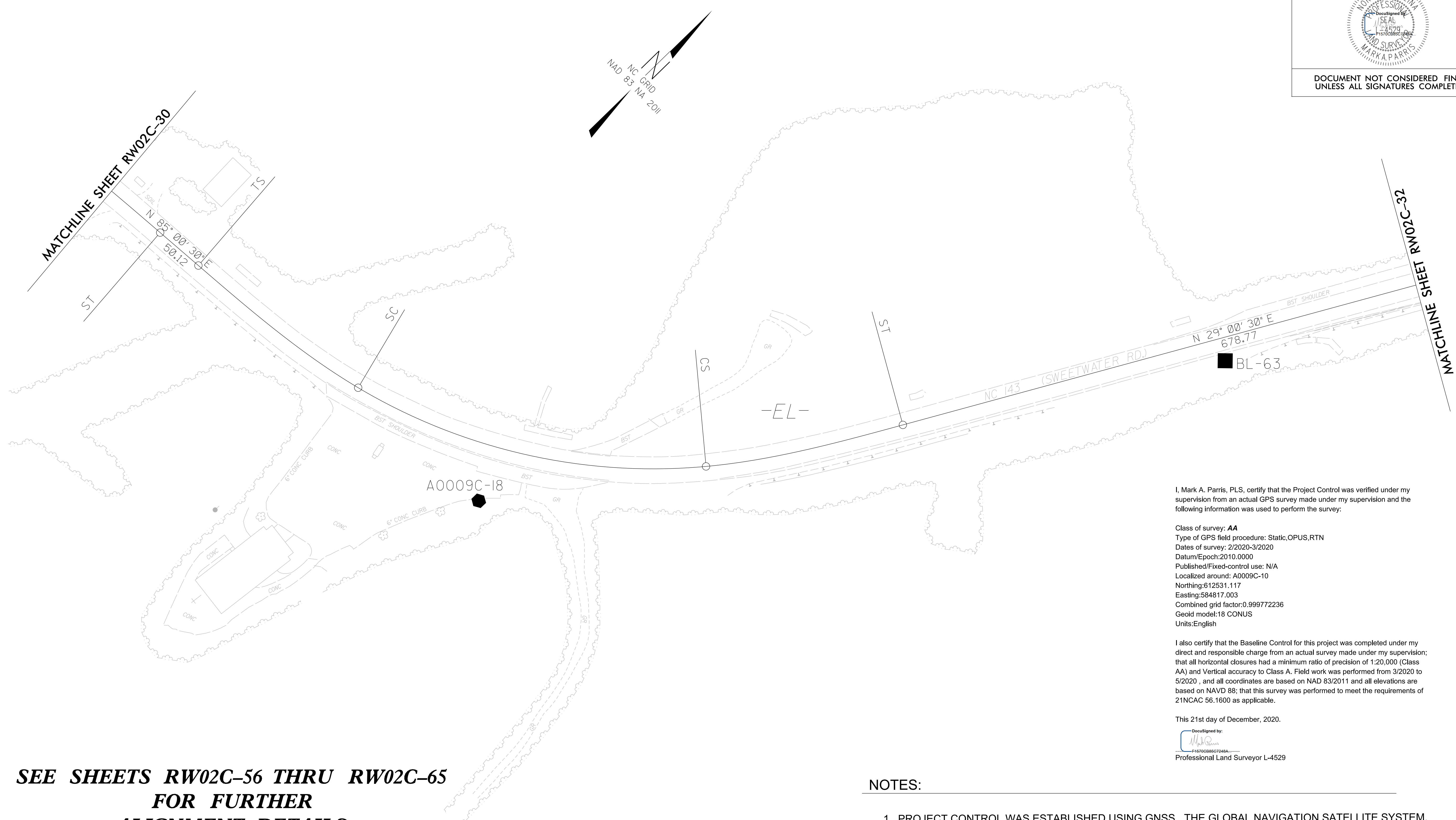
6/2/19

30-NOV-2021 11:44
V:\NC\Survey\02112-21\A-0009CA ROW Stak.mg\Survey\RW and Control Sheets\A-0009CC\A0009CC-1s-RW02C-31.dgn
jcgordon

SURVEY CONTROL SHEET

W/ EXISTING CENTERLINE ALIGNMENTS PRIOR TO CONSTRUCTION

PROJECT REFERENCE NO. A-0009CC	SHEET NO. RW02C-31
Location and Surveys	
	
PROJECT SURVEYOR 	
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	



**SEE SHEETS RW02C-56 THRU RW02C-65
FOR FURTHER
ALIGNMENT DETAILS**

I, Mark A. Parris, PLS, certify that the Project Control was verified under my supervision from an actual GPS survey made under my supervision and the following information was used to perform the survey:

Class of survey: **AA**
 Type of GPS field procedure: Static, OPUS, RTN
 Dates of survey: 2/2020-3/2020
 Datum/Epoch: 2010.0000
 Published/Fixed-control use: N/A
 Localized around: A0009C-10
 Northing: 612531.117
 Easting: 584817.003
 Combined grid factor: 0.999772236
 Geoid model: 18 CONUS
 Units: English

I also certify that the Baseline Control for this project 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 1:20,000 (Class AA) and Vertical accuracy to Class A. Field work was performed from 3/2020 to 5/2020, and all coordinates are based on NAD 83/2011 and all elevations are based on NAVD 88; that this survey was performed to meet the requirements of 21NCAC 56.1600 as applicable.

This 21st day of December, 2020.



 Professional Land Surveyor L-4529

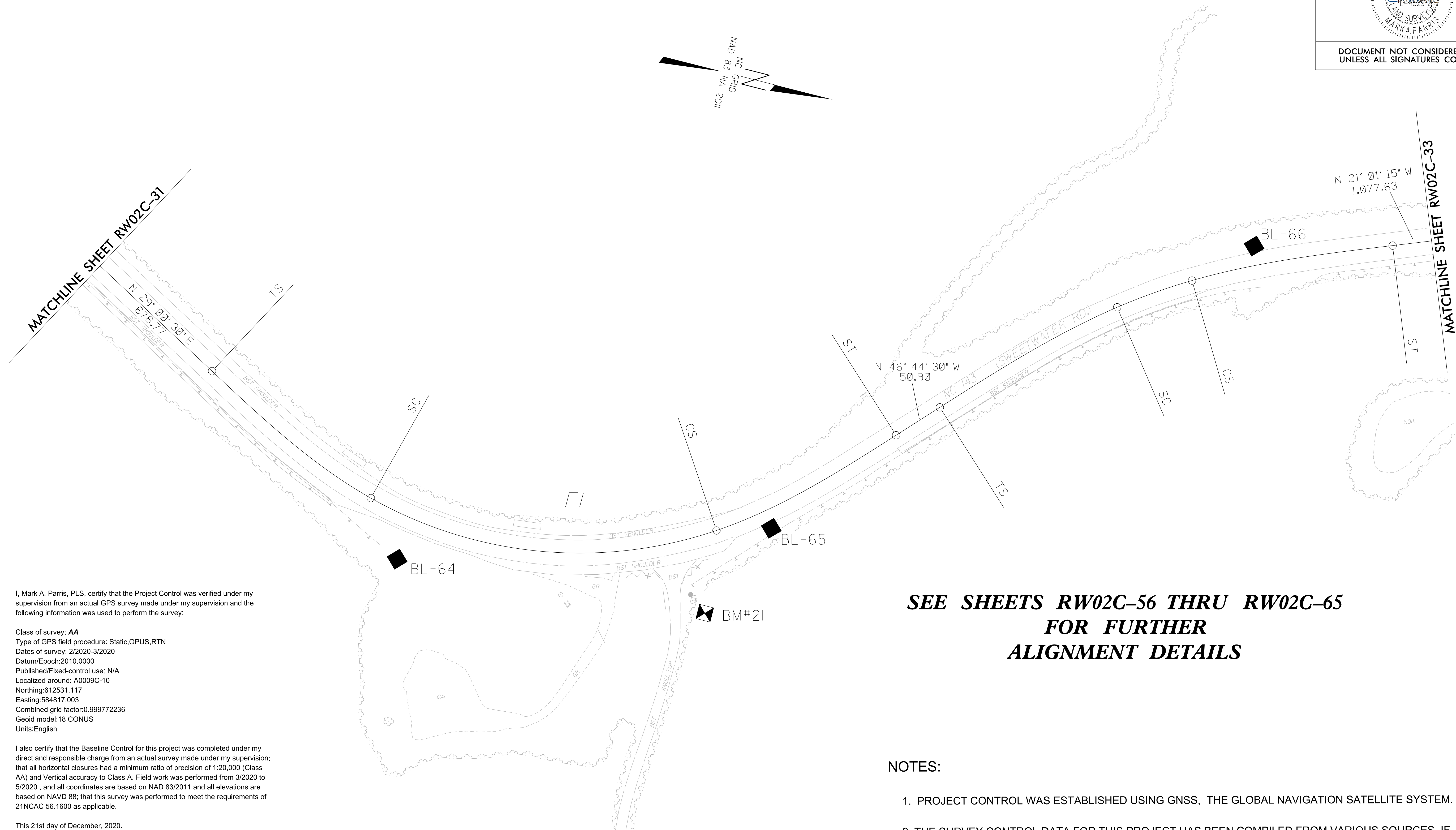
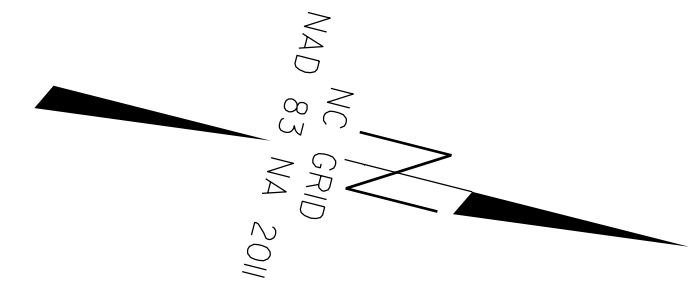
NOTES:

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.

SURVEY CONTROL SHEET

W/ EXISTING CENTERLINE ALIGNMENTS PRIOR TO CONSTRUCTION

PROJECT REFERENCE NO. A-0009CC	SHEET NO. RW02C-32
Location and Surveys	
	
PROJECT SURVEYOR	
	
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	

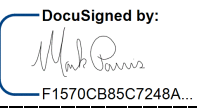


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 Datum/Epoch: 2010.0000
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This 21st day of December, 2020.

DocuSigned by:

 F1870C889C7248A
 Professional Land Surveyor L-4529


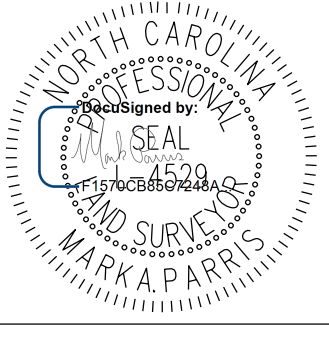
**SEE SHEETS RW02C-56 THRU RW02C-65
 FOR FURTHER
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NOTES:

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REVISIONS

30-NOV-2021 11:46
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 Jcgordon

PROJECT REFERENCE NO. A-0009CC	SHEET NO. RW02C-33
Location and Surveys	
	
PROJECT SURVEYOR 	
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	

SURVEY CONTROL SHEET

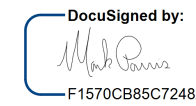
W/ EXISTING CENTERLINE ALIGNMENTS PRIOR TO CONSTRUCTION

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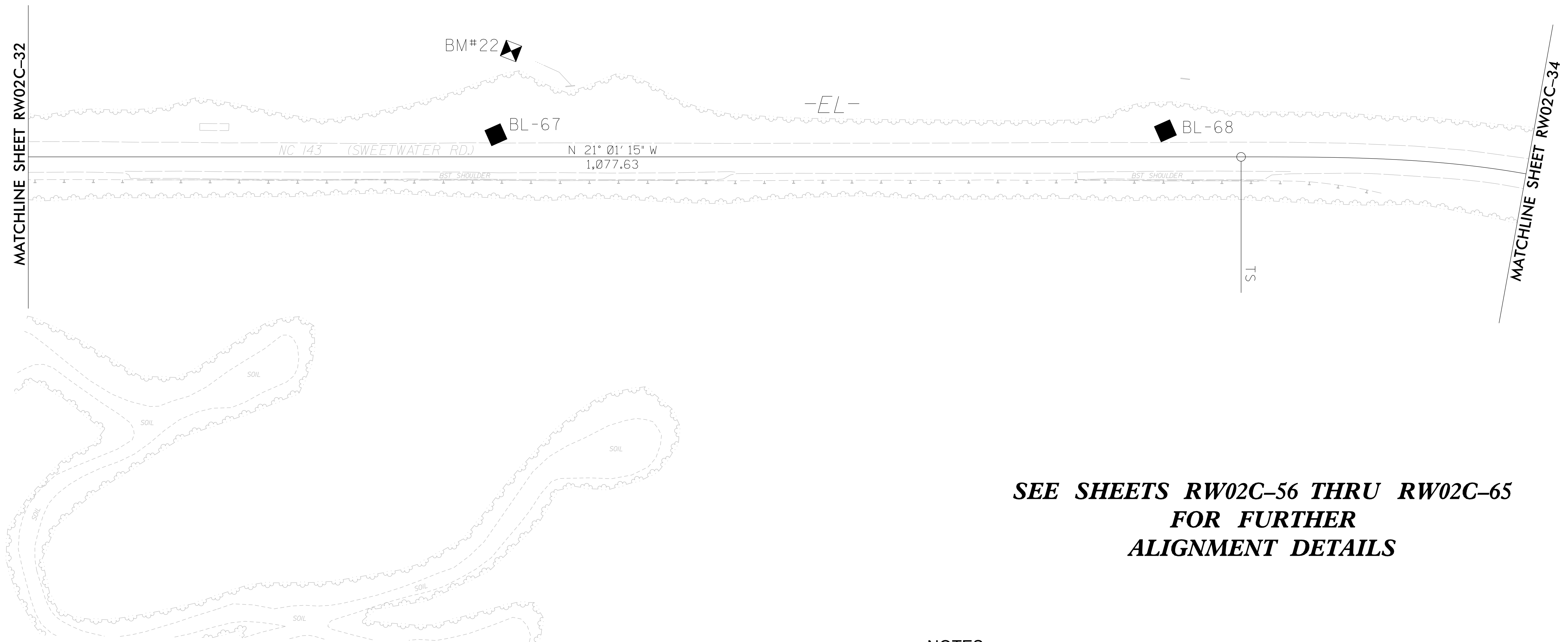
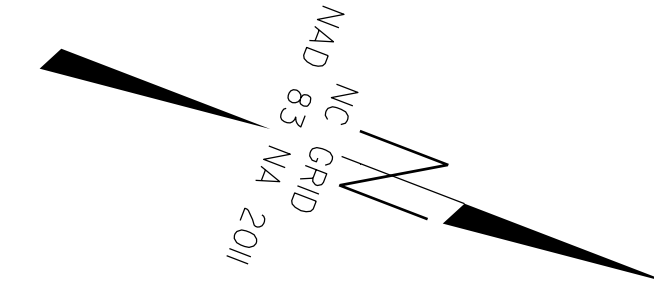
Class of survey: AA
 Type of GPS field procedure: Static, OPUS, RTN
 Dates of survey: 2/2020-3/2020
 Datum/Epoch: 2010.0000
 Published/Fixed-control use: N/A
 Localized around: A0009C-10
 Northing: 612531.117
 Easting: 584817.003
 Combined grid factor: 0.999772236
 Geoid model: 18 CONUS
 Units: English

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This 21st day of December, 2020.

DocuSigned by:

 F1570C885C7248A

Professional Land Surveyor L-4529



**SEE SHEETS RW02C-56 THRU RW02C-65
 FOR FURTHER
 ALIGNMENT DETAILS**

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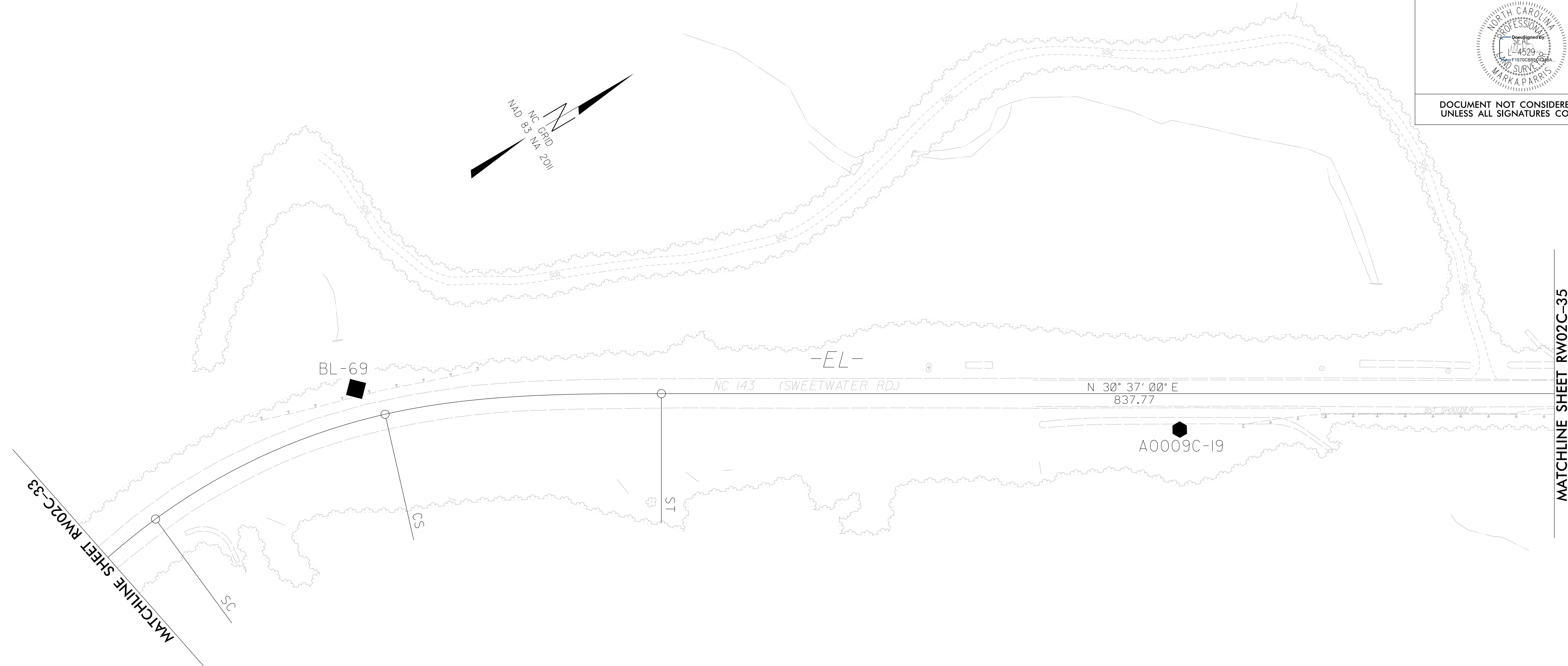
REVISIONS

6/2/19

SURVEY CONTROL SHEET

W/ EXISTING CENTERLINE ALIGNMENTS PRIOR TO CONSTRUCTION

PROJECT REFERENCE NO. A-0009CC	SHEET NO. RW02C-34
Location and Surveys	
	
PROJECT SURVEYOR	
	
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	



REVISIONS

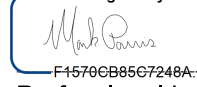
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 Type of GPS field procedure: Static, OPUS, RTN
 Dates of survey: 2/2020-3/2020
 Datum/Epoch: 2010.0000
 Published/Fixed-control use: N/A
 Localized around: A0009C-10
 Northing: 612531.117
 Easting: 584817.003
 Combined grid factor: 0.999772236
 Geoid model: 18 CONUS
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This 21st day of December, 2020.

DocuSigned by:

 F15790C86507248A
 Professional Land Surveyor L-4529

**SEE SHEETS RW02C-56 THRU RW02C-65
 FOR FURTHER
 ALIGNMENT DETAILS**

NOTES:

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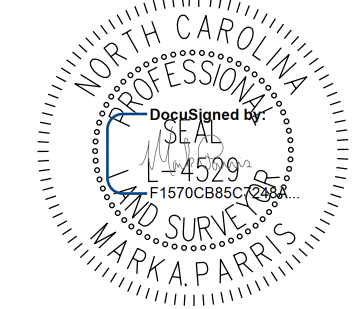
SURVEY CONTROL SHEET

W/ EXISTING CENTERLINE ALIGNMENTS PRIOR TO CONSTRUCTION

Location and Surveys



PROJECT SURVEYOR



DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

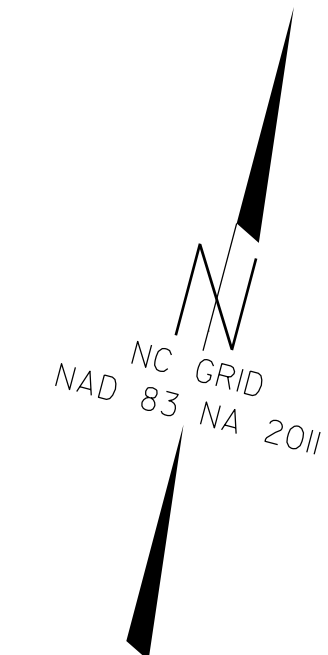
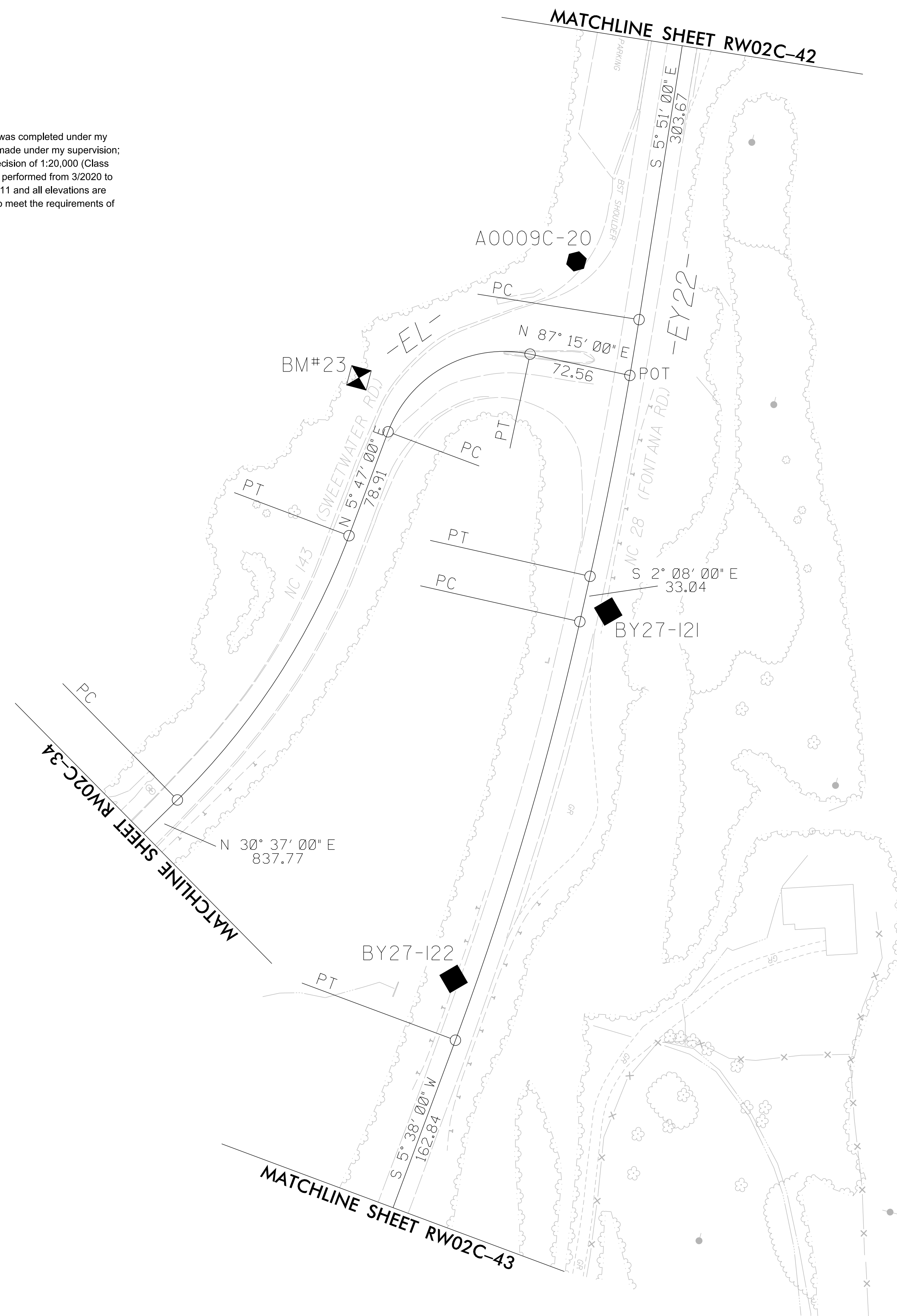
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Type of GPS field procedure: Static, OPUS, RTN
Dates of survey: 2/2020-3/2020
Datum/Epoch: 2010.0000
Published/Fixed-control use: N/A
Localized around: A0009C-10
Northing: 612531.117
Easting: 584817.003
Combined grid factor: 0.999772236
Geoid model: 18 CONUS
Units: English

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This 21st day of December, 2020.

Professional Land Surveyor L-4529
Professional Land Surveyor L-4529




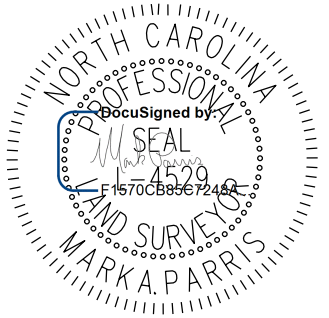
SEE SHEETS RW02C-56 THRU RW02C-65 FOR FURTHER ALIGNMENT DETAILS

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REVISIONS

30-NOV-2021 11:53
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jcgordon

PROJECT REFERENCE NO. A-0009CC	SHEET NO. RW02C-41
Location and Surveys	
	
PROJECT SURVEYOR	
	
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	

SURVEY CONTROL SHEET

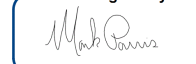
W/ EXISTING CENTERLINE ALIGNMENTS PRIOR TO CONSTRUCTION

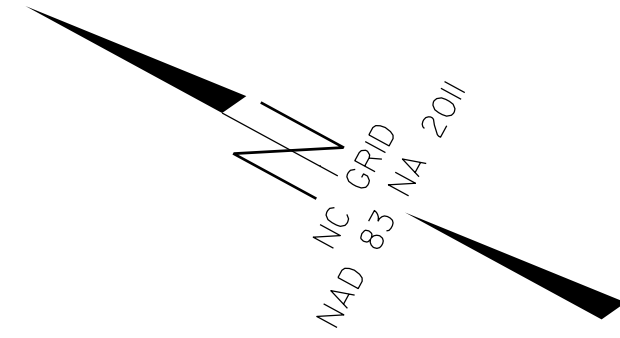
I, Mark A. Parris, PLS, certify that the Project Control was verified under my supervision from an actual GPS survey made under my supervision and the following information was used to perform the survey:

Class of survey: **AA**
 Type of GPS field procedure: Static, OPUS, RTN
 Dates of survey: 2/2020-3/2020
 Datum/Epoch: 2010.0000
 Published/Fixed-control use: N/A
 Localized around: A0009C-10
 Northing: 612531.117
 Easting: 584817.003
 Combined grid factor: 0.999772236
 Geoid model: 18 CONUS
 Units: English

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This 21st day of December, 2020.

Designed by:

 F1570CB85C7248A
 Professional Land Surveyor L-4529



**SEE SHEETS RW02C-56 THRU RW02C-65
 FOR FURTHER
 ALIGNMENT DETAILS**

NOTES:

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REVISIONS

30-NOV-2021 11:55
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 jcgordon

6/2/19

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Type of GPS field procedure: Static, OPUS, RTN
Dates of survey: 2/2020-3/2020
Datum/Epoch: 2010.0000
Published/Fixed-control use: N/A
Localized around: A0009C-10
Northing: 612531.117
Easting: 584817.003
Combined grid factor: 0.99977236
Geoid model: 18 CONUS
Units: English

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This 21st day of December, 2020.

DocuSigned by:
Mark A. Parris
F1570C85C7248A

Professional Land Surveyor L-4529

SURVEY CONTROL SHEET

W/ EXISTING CENTERLINE ALIGNMENTS PRIOR TO CONSTRUCTION

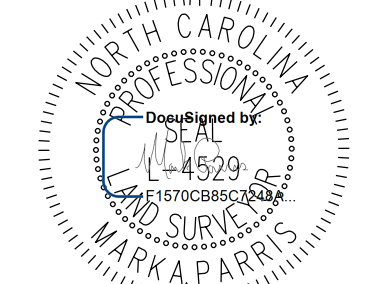
PROJECT REFERENCE NO. SHEET NO.

A-0009CC RW02C-42

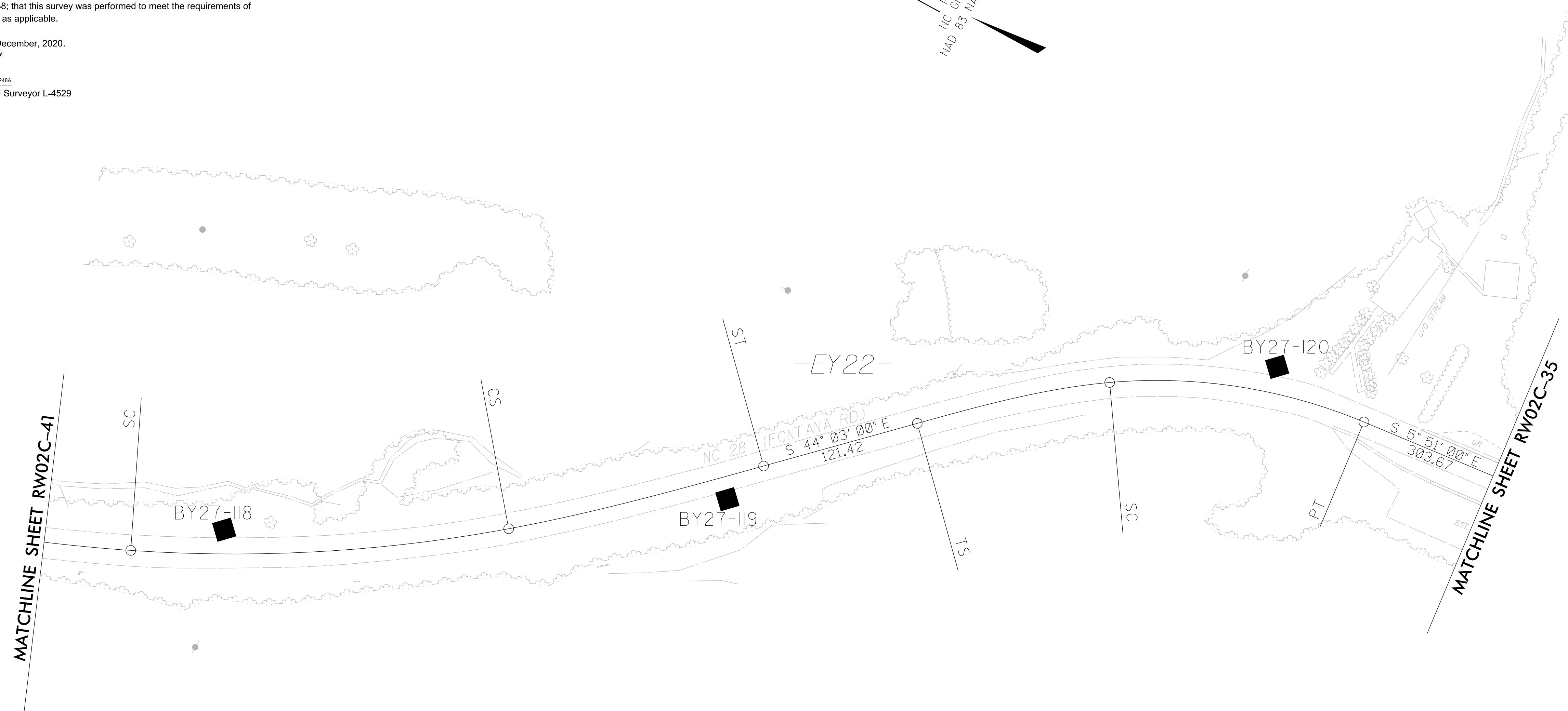
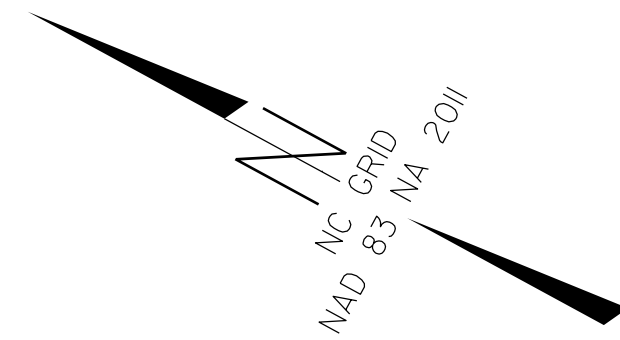
Location and Surveys



PROJECT SURVEYOR



DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED



REVISIONS

30-NOV-2021 11:56
V:\NC\Survey\032112-21-A-0009CA ROW Staking\Survey\RW and Control Sheets\A-0009CC\A0009CC_1s-RW02C-42.dgn
jcgordon

**SEE SHEETS RW02C-56 THRU RW02C-65
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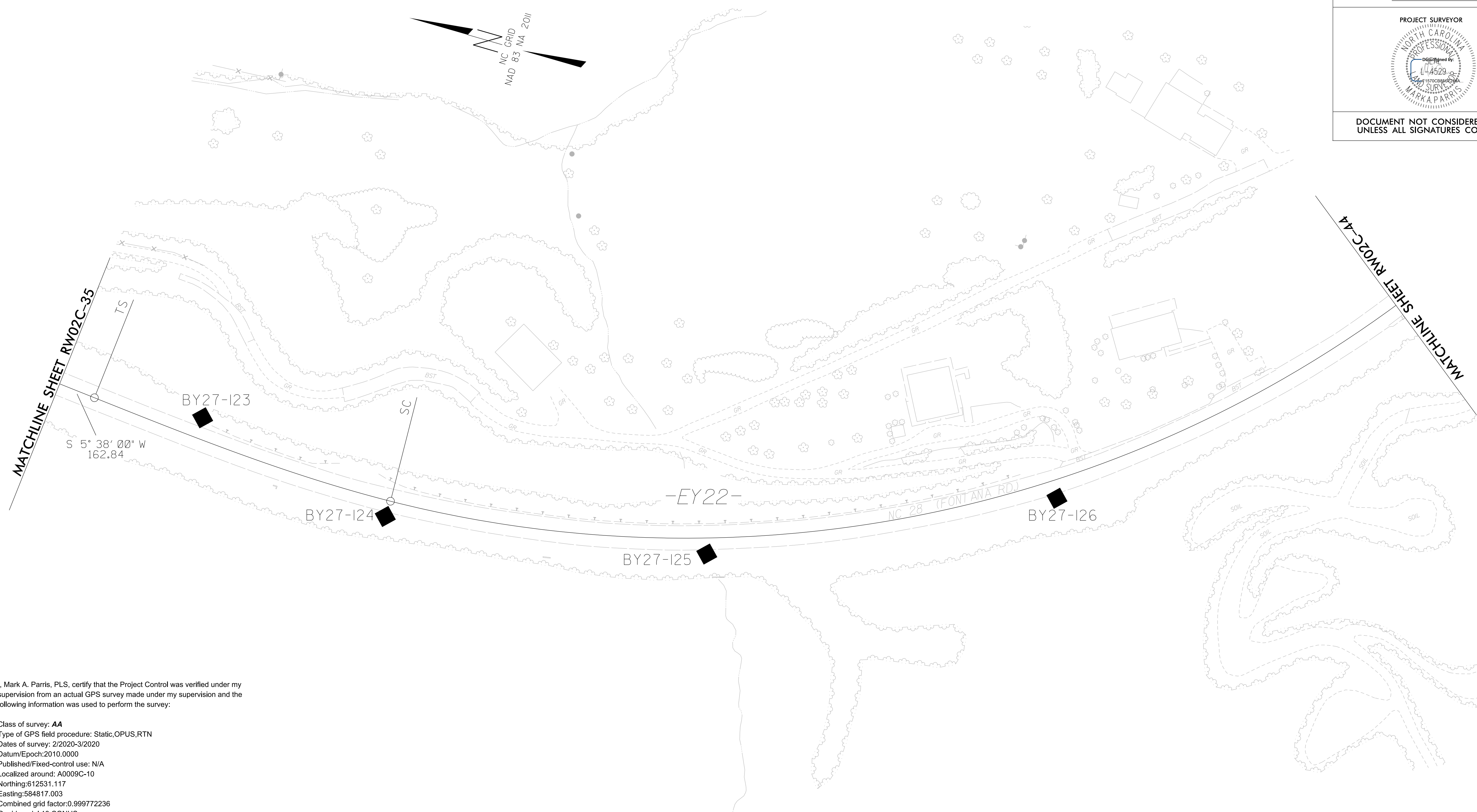
NOTES:

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SURVEY CONTROL SHEET

W/ EXISTING CENTERLINE ALIGNMENTS PRIOR TO CONSTRUCTION

PROJECT REFERENCE NO. A-0009CC	SHEET NO. RW02C-43
Location and Surveys	
	
PROJECT SURVEYOR 	
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	



REVISIONS

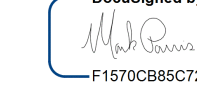
30-NOV-2021 11:58 AM V:\NC\Survey\202111-21\A-0009CC\ROW Staking\Survey\RW and Control Sheets\A-0009CC\A0009CC-1s-RW02C-43.dgn jcgordon

I, Mark A. Parris, PLS, certify that the Project Control was verified under my supervision from an actual GPS survey made under my supervision and the following information was used to perform the survey:

Class of survey: **AA**
 Type of GPS field procedure: Static.OPUS,RTN
 Dates of survey: 2/2020-3/2020
 Datum/Epoch: 2010.0000
 Published/Fixed-control use: N/A
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This 21st day of December, 2020.


 Professional Land Surveyor L-4529

SEE SHEETS RW02C-56 THRU RW02C-65 FOR FURTHER ALIGNMENT DETAILS

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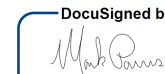
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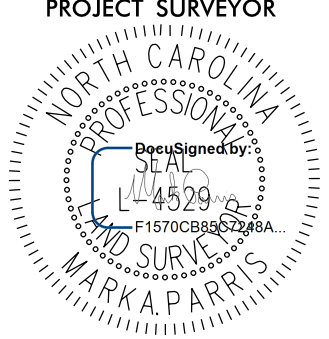
This 21st day of December, 2020.

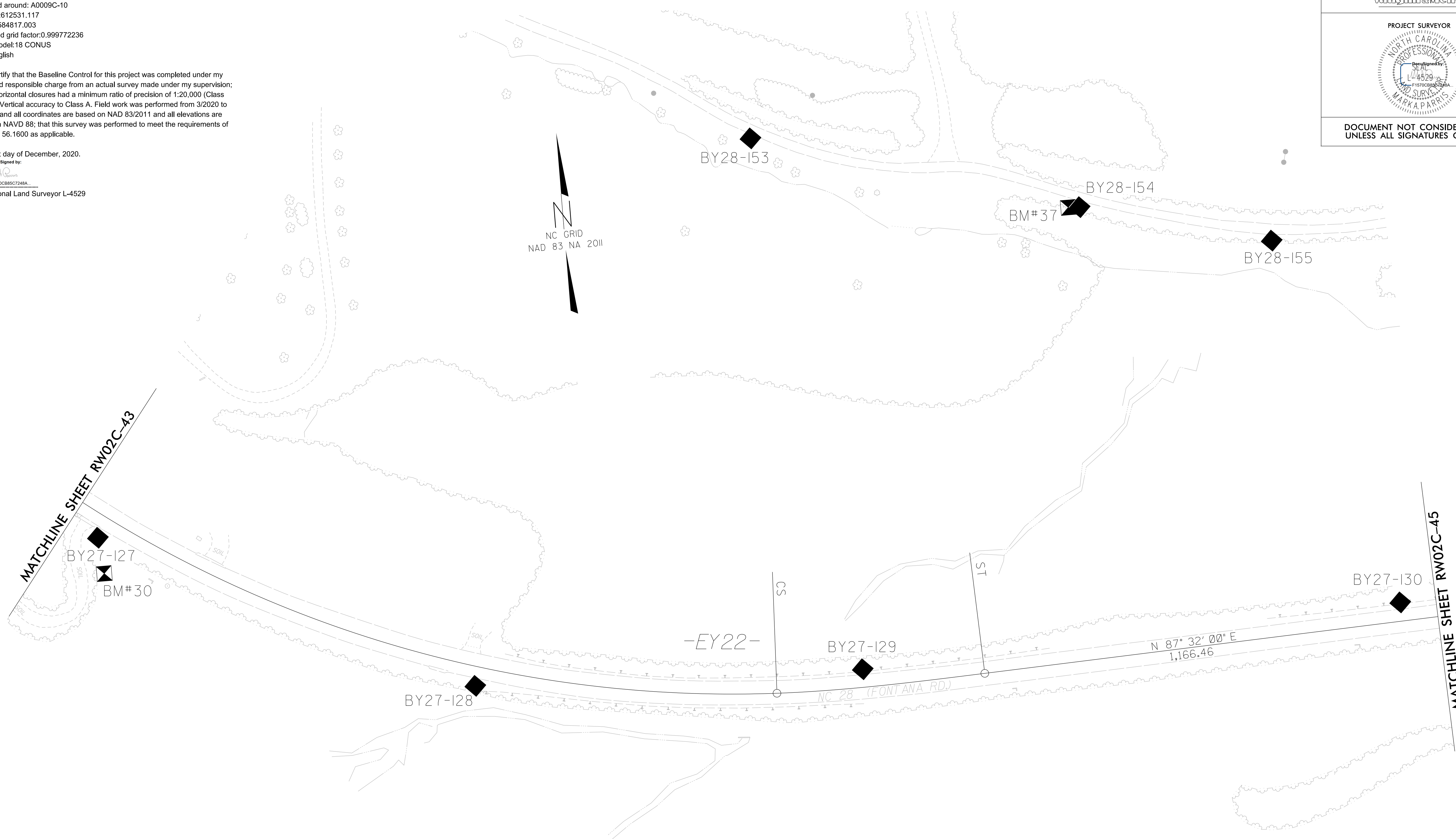
DocuSigned by:

F1570C885C7248A

Professional Land Surveyor L-4529

SURVEY CONTROL SHEET

W/ EXISTING CENTERLINE ALIGNMENTS PRIOR TO CONSTRUCTION

PROJECT REFERENCE NO. A-0009CC	SHEET NO. RW02C-44
Location and Surveys	
	
PROJECT SURVEYOR 	
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	



**SEE SHEETS RW02C-56 THRU RW02C-65
FOR FURTHER
ALIGNMENT DETAILS**

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.

REVISIONS

30-NOV-2021 11:59
V:\NC\Survey\02112-21-A-0009CA ROW Staking\Survey\RW and Control Sheets\A-0009CC\A0009CC-1s-RW02C-44.dgn
jcgordon

SURVEY CONTROL SHEET

W/ EXISTING CENTERLINE ALIGNMENTS PRIOR TO CONSTRUCTION


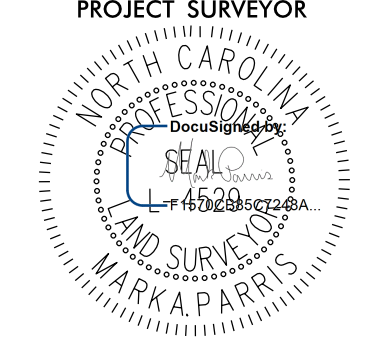
I, Mark A. Parris, PLS, certify that the Project Control was verified under my supervision from an actual GPS survey made under my supervision and the following information was used to perform the survey:

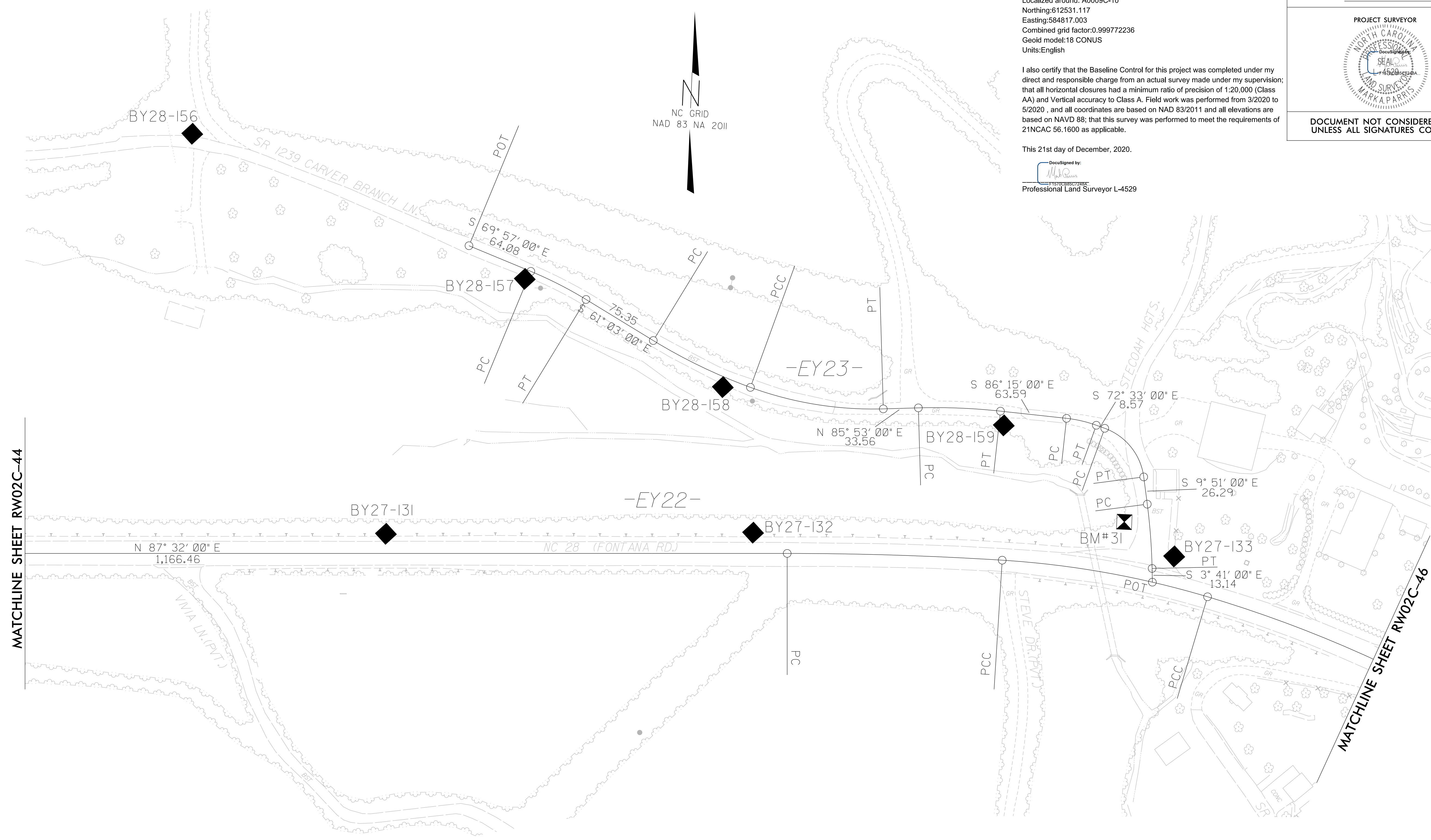
Class of survey: AA
Type of GPS field procedure: Static, OPUS, RTN
Dates of survey: 2/2020-3/2020
Datum/Epoch: 2010.0000
Published/Fixed-control use: N/A
Localized around: A0009C-10
Northing: 612531.117
Easting: 584817.003
Combined grid factor: 0.999772236
Geoid model: 18 CONUS
Units: English

I also certify that the Baseline Control for this project 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 1:20,000 (Class AA) and Vertical accuracy to Class A. Field work was performed from 3/2020 to 5/2020, and all coordinates are based on NAD 83/2011 and all elevations are based on NAVD 88; that this survey was performed to meet the requirements of 21NCAC 56.1600 as applicable.

This 21st day of December, 2020.

DocuSigned by:
Mark A. Parris
Professional Land Surveyor L-4529

PROJECT REFERENCE NO. A-0009CC	SHEET NO. RW02C-45
Location and Surveys	
	
PROJECT SURVEYOR 	
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	



REVISIONS

MATCHLINE SHEET RW02C-44

MATCHLINE SHEET RW02C-46

**SEE SHEETS RW02C-56 THRU RW02C-65
FOR FURTHER
ALIGNMENT DETAILS**

NOTES:

1. PROJECT CONTROL WAS ESTABLISHED USING GNSS, THE GLOBAL NAVIGATION SATELLITE SYSTEM.
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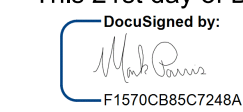
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jcgordon

I, Mark A. Parris, PLS, certify that the Project Control was verified under my supervision from an actual GPS survey made under my supervision and the following information was used to perform the survey:

Class of survey: AA
Type of GPS field procedure: Static, OPUS, RTN
Dates of survey: 2/2020-3/2020
Datum/Epoch: 2010.0000
Published/Fixed-control use: N/A
Localized around: A0009C-10
Northing: 612531.117
Easting: 584817.003
Combined grid factor: 0.999772236
Geoid model: 18 CONUS
Units: English

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This 21st day of December, 2020.



Professional Land Surveyor L-4529

SURVEY CONTROL SHEET

W/ EXISTING CENTERLINE ALIGNMENTS PRIOR TO CONSTRUCTION

PROJECT REFERENCE NO. A-0009CC	SHEET NO. RW02C-46
Location and Surveys	
PROJECT SURVEYOR	
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	



NOTES:

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**SEE SHEETS RW02C-56 THRU RW02C-65
FOR FURTHER
ALIGNMENT DETAILS**

REVISIONS

SURVEY CONTROL SHEET

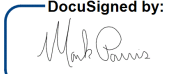
W/ EXISTING CENTERLINE ALIGNMENTS PRIOR TO CONSTRUCTION


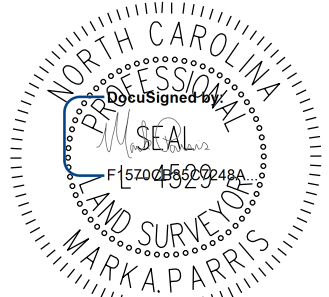
I, Mark A. Parris, PLS, certify that the Project Control was verified under my supervision from an actual GPS survey made under my supervision and the following information was used to perform the survey:

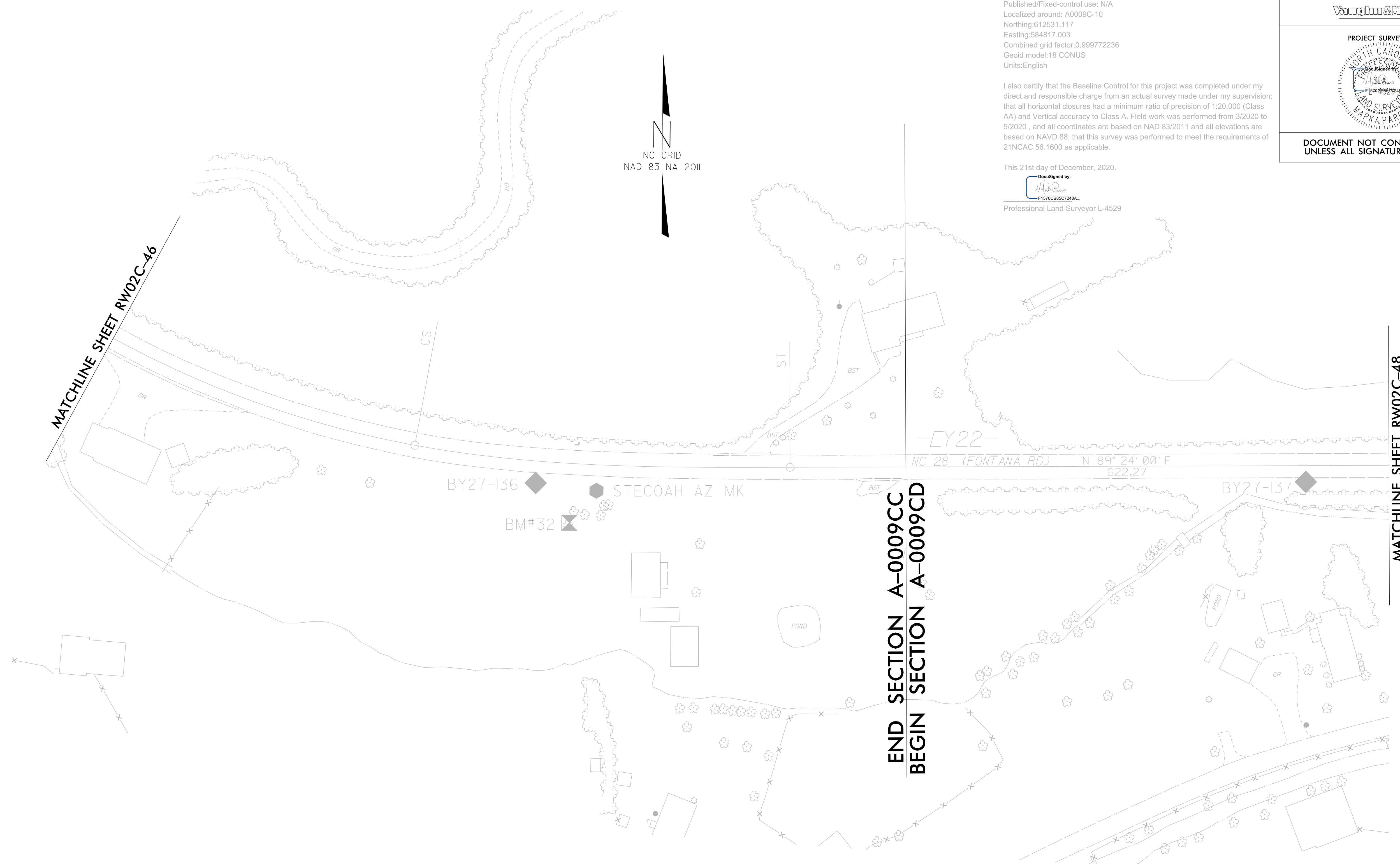
Class of survey: AA
Type of GPS field procedure: Static, OPUS, RTN
Dates of survey: 2/2020-3/2020
Datum/Epoch: 2010.0000
Published/Fixed-control use: N/A
Localized around: A0009C-10
Northing: 612531.117
Easting: 584817.003
Combined grid factor: 0.99977236
Geoid model: 18 CONUS
Units: English

I also certify that the Baseline Control for this project 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 1:20,000 (Class AA) and Vertical accuracy to Class A. Field work was performed from 3/2020 to 5/2020, and all coordinates are based on NAD 83/2011 and all elevations are based on NAVD 88; that this survey was performed to meet the requirements of 21NCAC 56.1600 as applicable.

This 21st day of December, 2020.

DocuSigned by:

F1570CB85C7248A...
Professional Land Surveyor L-4529

PROJECT REFERENCE NO. A-0009CC	SHEET NO. RW02C-47
Location and Surveys	
	
PROJECT SURVEYOR 	
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	



**SEE SHEETS RW02C-56 THRU RW02C-65
FOR FURTHER
ALIGNMENT DETAILS**

NOTES:


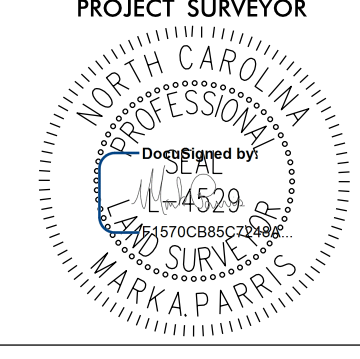
1. PROJECT CONTROL WAS ESTABLISHED USING GNSS, THE GLOBAL NAVIGATION SATELLITE SYSTEM.
2. THE SURVEY CONTROL DATA FOR THIS PROJECT HAS BEEN COMPILED FROM VARIOUS SOURCES. IF FURTHER INFORMATION REGARDING PROJECT CONTROL IS NEEDED, PLEASE CONTACT THE LOCATION AND SURVEYS UNIT.

REVISIONS

27-OCT-2022 09:59
V:\NC\Survey\032212-31\p13--con.vam2\Survey\Project\stuf\A0009CC_1s_RW02C-47.dgn
P:\shpman

SURVEY CONTROL SHEET

W/EXISTING CENTERLINE ALIGNMENTS PRIOR TO CONSTRUCTION

PROJECT REFERENCE NO.	SHEET NO.
A-0009-C	RW02C-56
Location and Surveys	
	
PROJECT SURVEYOR	
	
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	

BL	POINT	DESC.	NORTH	EAST	ELEVATION
1		BL -1	607480.8260	568146.0580	1993.46
2		BL -2	607668.6540	568423.9930	1992.40
3		BL -3	607975.2340	568973.6670	1998.76
4		BL -4	607895.6970	569695.5230	2012.80
5		BL -5	607664.7910	570164.0000	2013.94
6		BL -6	607499.3880	570616.0120	2015.91
7		BL -7	607337.3140	571059.8600	2020.97
8		BL -8	607188.9590	571436.3810	2015.83
9		BL -9	607008.3250	571960.6260	2023.68
10		BL -10	606851.1840	572395.1610	2036.09
11		BL -11	606835.5810	572745.4190	2045.11
GPS5		A0009C-5	607061.2380	573293.1200	2060.95
12		BL -12	607391.1830	573795.7120	2097.53
13		BL -13	607663.3560	574364.8790	2139.38
14		BL -14	607670.8580	574860.6500	2157.62
15		BL -15	607547.9820	575334.7410	2161.09
16		BL -16	607453.2850	576050.4320	2138.21
17		BL -17	607648.7420	576599.1850	2112.89
18		BL -18	608143.3850	576938.7680	2084.57
19		BL -19	608772.5500	577402.4760	2087.33
20		BL -20	609212.6580	577878.2080	2105.61
GPS7		A0009C-7	609410.9490	578471.3700	2105.62
21		BL -21	609631.0670	579169.3910	2120.08
22		BL -22	609900.2280	579995.4600	2143.59
23		BL -23	610179.2680	580857.8860	2150.87
24		BL -24	610376.2540	581461.9310	2155.15
25		BL -25	610560.2610	582027.5120	2160.21
26		BL -26	610924.7490	582430.3420	2168.99
27		BL -27	611457.8380	582822.4360	2178.94
28		BL -28	612053.8860	583254.4340	2187.77
29		BL -29	612599.1420	583666.0720	2197.33
30		BL -30	612783.3070	584100.4350	2202.40
GPS9		A0009C-9	612913.2580	584695.7140	2208.43
31		BL -31	613055.7330	585366.3940	2217.12
32		BL -32	613221.8360	586178.6200	2228.54
33		BL -33	613574.5010	586706.2820	2234.82
34		BL -34	614067.4120	587191.5890	2245.18
35		BL -35	614664.9920	587814.9680	2262.31
36		BL -36	615091.2660	588382.2260	2274.06
37		BL -37	615469.1960	588936.7060	2287.81
38		BL -38	615948.6020	589168.9120	2301.93
39		BL -39	616494.7660	589416.3220	2316.28
GPS11		A0009C-11	617324.4280	589561.2440	2335.15
40		BL -40	617874.8580	589687.9530	2353.90
41		BL -41	618420.5900	589810.2160	2392.11
42		BL -42	618968.9160	589996.9380	2439.77
43		BL -43	619404.8890	590492.6090	2489.55
44		BL -44	619919.5370	590902.2820	2544.28
45		BL -45	620597.1760	591057.1780	2599.60
46		BL -46	621020.7940	591422.4830	2643.76
47		BL -47	621188.0490	591920.5580	2684.81
48		BL -48	621540.1460	592296.4520	2724.38
49		BL -49	621890.8420	592554.1220	2760.76
50		BL -50	622282.7570	593217.4850	2822.43
GPS13		A0009C-13	622270.7170	593578.2810	2849.80
51		BL -51	621928.8920	593815.8700	2880.42
52		BL -52	621311.4490	593648.1260	2924.14
53		BL -53	620845.9440	593442.8150	2961.77
54		BL -54	620272.7540	593436.8130	3001.33
55		BL -55	619821.2230	593190.3870	3037.94
56		BL -56	619313.5090	593159.2730	3072.25
57		BL -57	618744.5480	593199.0420	3111.86
GPS15		A0009C-15	618530.1870	593483.6780	3128.98
GPS16		A0009C-16	618695.0490	593826.6310	3133.05
58		BL -58	619036.0340	594022.1770	3122.53
59		BL -59	619437.9470	594211.7200	3100.95
60		BL -60	619776.2050	594618.6070	3060.18
61		BL -61	620124.3470	594920.6190	3029.73
62		BL -62	620691.0820	595016.2590	2990.54
GPS17		A0009C-17	621003.0840	595356.0870	2958.21
GPS18		A0009C-18	621064.6070	596036.0000	2910.01
63		BL -63	621692.4700	596453.4800	2863.40
64		BL -64	622233.7870	596739.2000	2835.09
65		BL -65	622582.2170	596619.6530	2803.93
66		BL -66	622973.4180	596234.8630	2760.57
67		BL -67	623508.1470	596025.7490	2713.87
68		BL -68	624042.3910	595816.8510	2673.09
69		BL -69	624613.5480	595723.7020	2634.00
GPS19		A0009C-19	625233.1270	596132.9040	2577.91
GPS20		A0009C-20	626011.6230	596470.4230	2510.58

BY1	POINT	DESC.	NORTH	EAST	ELEVATION
GPS1		A0009C-1	608026.2410	567925.9280	1990.27
70		BL -70	607787.1890	568057.8430	1992.29
81		BL -1	607480.8260	568146.0580	1993.46
71		BL -71	607129.5170	568082.9430	1996.57
72		BL -72	606909.6870	567957.3210	1998.83
73		BY1-73	606655.7600	567978.5330	2000.34
BY14		37-0020 BY1-4	606487.2560	567958.7680	2002.49
8L1		37-0020 BL-1	606304.6550	567974.9810	2004.20
BY13		37-0020 BY1-3	606116.8260	568009.0020	2004.87
74		BY1-74	605917.0380	568072.0300	2007.27
75		BY1-75	605574.2960	568141.7460	2010.67
76		BY1-76	605137.8990	568300.2280	2016.71
77		BY1-77	604679.2980	568472.5590	2023.55
GPS3		A0009C-3	604306.4560	568686.9910	2023.79
BY3	POINT	DESC.	NORTH	EAST	ELEVATION
872		BY1-72	606909.6870	567957.3210	1998.83
78		BY3-78	606721.8800	568115.0010	1996.20
BY4	POINT	DESC.	NORTH	EAST	ELEVATION
79		BY4-79	606945.1130	567521.5510	2022.32
80		BY4-80	606772.0230	567761.9900	2011.66
BY14		37-0020 BY1-4	606487.2560	567958.7680	2002.49
BY5	POINT	DESC.	NORTH	EAST	ELEVATION
BBL1		37-0020 BL-1	606304.6550	567974.9810	2004.20
BL2		37-0020 BL-2	606326.8200	568195.8070	2002.82
81		BY5-81	606347.5430	568394.8310	1997.00
G100		37-0020 GPS-100	606393.0410	568537.8980	1999.19
82		BY5-82	606497.5480	568790.9510	2008.98
83		BY5-83	606654.7710	569036.2550	2020.81
91		BY9-91	606757.2530	569284.7900	2028.99
84		BY5-84	606942.5900	569105.8710	2029.11
85		BY5-85	607203.9050	568976.8430	2035.48
86		BY5-86	607523.3980	568999.6830	2035.73
87		BY5-87	607782.3720	569110.8320	2037.37
88		BY5-88	607862.7850	569372.9780	2026.12
BB4		BL-4	607895.6970	569695.5230	2012.80
BY10	POINT	DESC.	NORTH	EAST	ELEVATION
92		BY10-92	608436.8970	569737.0970	1991.61
84		BL-4	607895.6970	569695.5230	2012.80
BY13	POINT	DESC.	NORTH	EAST	ELEVATION
93		BY13-93	607021.7880	572659.0690	2029.79
B10		BL-10	606851.1840	572395.1610	2036.09
BY14	POINT	DESC.	NORTH	EAST	ELEVATION
94		BY14-94	607398.5460	573392.9230	2050.28
BGPS5		A0009C-5	607061.2380	573293.1200	2060.95

BY15	POINT	DESC.	NORTH	EAST	ELEVATION
B13		BL -13	607663.3560	574364.8790	2139.38
95		BY15-95	607498.8190	574666.8040	2150.10

BY16	POINT	DESC.	NORTH	EAST	ELEVATION
B15		BL -15	607547.9820	575334.7410	2161.09
96		BY16-96	607399.3180	574980.5940	2165.30
97		BY16-97	607474.2510	575425.5600	2137.91

BY17	POINT	DESC.	NORTH	EAST	ELEVATION
B16		BL -16	607453.2850	576050.4320	2138.21
98		BY17-98	607364.1270	576184.5940	2120.10
99		BY17-99	607446.5980	576478.5560	2087.59

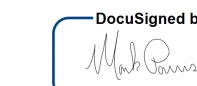
BY18	POINT	DESC.	NORTH	EAST	ELEVATION
100		BY18-100	608788.9920	577195.9890	2087.10
B19		BL -19	608772.5500	577402.4760	2087.33

I, Mark A. Parris, PLS, certify that the Project Control was verified under my supervision from an actual GPS survey made under my supervision and the following information was used to perform the survey:

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Dates of survey: 2/2020-3/2020
Datum/Epoch: 2010.0000
Published/Fixed-control use: N/A
Localized around: A0009C-10
Northing: 612531.117
Easting: 584817.003
Combined grid factor: 0.999772236
Geoid model: 18 CONUS
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This 21st day of December, 2020.


Professional Land Surveyor L-4529

NOTES:

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REVISIONS

SURVEY CONTROL SHEET

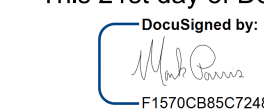
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Localized around: A0009C-10
Northing: 612531.117
Easting: 584817.003
Combined grid factor: 0.999772236
Geoid model: 18 CONUS
Units: English

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This 21st day of December, 2020.



Professional Land Surveyor L-4529

PROJECT REFERENCE NO.	SHEET NO.
A-0009-C	RW02C-57
Location and Surveys	
PROJECT SURVEYOR	
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	

POINT	DESC.	NORTH	EAST	ELEVATION
B40	BL - 40	617874.8580	589687.9530	2353.90
101	BY25-101	618094.3990	589858.2180	2361.85
102	BY25-102	618463.3860	589933.2950	2375.42
103	BY25-103	618773.9610	590049.0190	2397.53
104	BY25-104	618852.4620	590231.3830	2421.71
105	BY25-105	619074.5250	590376.8040	2435.57
106	BY25-106	619127.6290	590572.0880	2449.68
107	BY25-107	619223.1130	590671.1520	2459.21
108	BY25-108	619426.6460	590723.2200	2470.81
109	BY25-109	619592.5040	590924.7330	2489.75
110	BY25-110	619780.3410	590959.9380	2500.97
111	BY25-111	619891.7040	591079.8550	2520.42
112	BY25-112	620091.3970	591018.2560	2533.21
113	BY25-113	620152.7280	591158.2880	2553.95
114	BY25-114	620295.9930	591222.2840	2569.85
115	BY25-115	620440.2020	591197.9380	2584.80
B45	BL - 45	620597.1760	591057.1780	2599.60

POINT	DESC.	NORTH	EAST	ELEVATION
153	BY28-153	624417.1610	597608.9850	2263.12
154	BY28-154	624325.8510	597917.7750	2239.15
155	BY28-155	624278.9330	598098.4640	2225.72
156	BY28-156	624314.9970	598370.3740	2206.90
157	BY28-157	624189.9470	598694.1370	2184.02
158	BY28-158	624094.7480	598887.8720	2173.67
159	BY28-159	624069.7320	599157.9850	2162.39
YY133	BY27-133	623951.4930	599326.2620	2177.41

POINT	DESC.	NORTH	EAST	ELEVATION
160	BY31-160	623371.8520	601893.1250	2051.44
161	BY31-161	623169.7250	602151.7110	2030.72
162	BY31-162	623029.9760	602213.0550	2023.15
Y138	BY27-138	622916.3840	602164.6920	2021.20

POINT	DESC.	NORTH	EAST	ELEVATION
116	BY27-116	627668.7710	595746.1540	2396.26
117	BY27-117	627326.8000	595877.6660	2423.89
118	BY27-118	627008.2080	596006.2820	2451.34
119	BY27-119	626682.7130	596209.7880	2482.85
120	BY27-120	626363.1360	596498.3810	2514.49
YGPS20	A0009C-20	626011.6230	596470.4230	2510.58
121	BY27-121	625776.6740	596555.8310	2502.81
122	BY27-122	625496.1090	596516.2830	2484.55
123	BY27-123	625187.5690	596523.0380	2464.13
124	BY27-124	624993.6440	596480.9010	2451.73
125	BY27-125	624688.4920	596531.7970	2427.37
126	BY27-126	624381.8220	596676.0270	2401.29
127	BY27-127	624086.8430	596954.9890	2369.62
128	BY27-128	623916.0190	597303.6880	2338.16
129	BY27-129	623901.6750	597674.7440	2307.40
130	BY27-130	623923.5690	598192.9300	2266.46
131	BY27-131	623940.6670	598571.9230	2236.14
132	BY27-132	623956.8800	598922.7950	2207.83
133	BY27-133	623951.4930	599326.2620	2177.41
134	BY27-134	623822.0140	599570.4980	2153.60
GPS21	A0009C-21	623606.0530	599868.7320	2122.69
135	BY27-135	623071.7070	600405.2240	2080.82
136	BY27-136	622910.5300	600884.0640	2063.26
137	BY27-137	622916.7800	601599.8220	2037.15
138	BY27-138	622916.3840	602164.6920	2021.20
139	BY27-139	622957.2640	602736.5220	2012.03
140	BY27-140	622929.6210	603417.6160	1997.79
GPS23	NCGS "STECCOAH"	622976.4500	603945.8670	1988.16
141	BY27-141	622938.6050	604456.0790	1978.34
142	BY27-142	622940.8330	605087.6130	1966.33
143	BY27-143	623053.9380	605538.9120	1958.94
144	BY27-144	623316.9250	606070.0410	1975.21
145	BY27-145	623582.7310	606398.6840	2000.07
146	BY27-146	623836.6670	606805.8240	2032.90
147	BY27-147	623961.9320	607208.1130	2055.75
148	BY27-148	623945.1160	607549.4850	2064.37
149	BY27-149	623769.6940	607845.3930	2068.27
150	BY27-150	623659.4710	608229.4840	2063.54
151	BY27-151	623714.6670	608713.6890	2041.99
152	BY27-152	623896.7650	609047.4660	2018.05
GPS25	A0009C-25	624253.0900	609365.0450	1986.82

POINT	DESC.	NORTH	EAST	ELEVATION
YGPS23	NCGS "STECCOAH"	622976.4500	603945.8670	1988.16
163	BY32-163	623189.2390	604079.3270	1991.07
164	BY32-164	623535.8830	604485.6710	2006.37
165	BY32-165	623766.7880	604751.7330	2005.72

.....
BM1 ELEVATION = 1993.80
N 607747 E 568452
SPIKE NAIL IN 18" MAPLE
.....

.....
BM2 ELEVATION = 2015.91
N 607797 E 569652
CHISELED "X" IN CONC PAD FOR TRAFFICSIGNAL BOX
.....

.....
BM3 ELEVATION = 2016.23
N 607058 E 571713
SPIKE NAIL IN 10" POPLAR
.....

.....
BM4 ELEVATION = 2108.41
N 607414 E 573959
SPIKE NAIL IN 14" PINE
.....

.....
BM5 ELEVATION = 2132.48
N 607421 E 576156
SPIKE NAIL IN 15" DOUBLE OAK
.....

.....
BM6 ELEVATION = 2100.03
N 609056 E 577733
SPIKE NAIL IN 24" WHITE OAK
.....

.....
BM7 ELEVATION = 2125.10
N 609693 E 579533
SPIKE NAIL IN 20" POPLAR
.....

.....
BM8 ELEVATION = 2148.72
N 610368 E 581380
SPIKE NAIL IN 14" POPLAR
.....

.....
BM9 ELEVATION = 2183.22
N 611767 E 583110
SPIKE NAIL IN 30" MAPLE
.....

.....
BM10 ELEVATION = 2200.60
N 612773 E 584352
SPIKE NAIL IN 14" DOUBLE POPLAR
.....

.....
BM11 ELEVATION = 2234.92
N 613603 E 586710
SPIKE NAIL IN 18" POPLAR
.....

.....
BM12 ELEVATION = 2269.68
N 614929 E 588131
SPIKE NAIL IN 15" POPLAR
.....

.....
BM13 ELEVATION = 2313.25
N 616593 E 589377
SPIKE NAIL IN 24" POPLAR
.....

.....
BM14 ELEVATION = 2410.76
N 618630 E 589915
SPIKE NAIL IN 14" POPLAR
.....

.....
BM15 ELEVATION = 2571.99
N 620243 E 591023
SPIKE NAIL IN 10" POPLAR
.....

.....
BM16 ELEVATION = 2715.81
N 621413 E 592250
SPIKE NAIL IN 13" PINE
.....

.....
BM17 ELEVATION = 2882.87
N 621951 E 593832
SPIKE NAIL IN 12" POPLAR
.....

.....
BM18 ELEVATION = 3033.61
N 619882 E 593172
SPIKE NAIL IN 10" POPLAR
.....

.....
BM19 ELEVATION = 3094.55
N 619399 E 594281
SPIKE NAIL IN 24" MAPLE
.....

.....
BM20 ELEVATION = 2982.50
N 620695 E 595078
SPIKE NAIL IN 20" POPLAR
.....

.....
BM21 ELEVATION = 2806.49
N 622539 E 596717
SPIKE NAIL IN 24" PRINCESS TREE
.....

.....
BM22 ELEVATION = 2715.62
N 623495 E 595954
SPIKE NAIL IN 12" POPLAR
.....

.....
BM23 ELEVATION = 2523.73
N 625892 E 596342
SPIKE NAIL IN 15" POPLAR
.....

.....
BM24 ELEVATION = 1989.37
N 608121 E 567911
BOLT IN MCDONALDS SIGN BASE
.....

.....
BM25 ELEVATION = 2027.51
N 604128 E 568732
SPIKE NAIL IN 18" WALNUT
.....

.....
BM26 ELEVATION = 2018.64
N 606947 E 567547
SPIKE NAIL IN SYCAMORE
.....

.....
BM27 ELEVATION = 2011.45
N 606635 E 568845
SPIKE NAIL IN 12" POPLAR
.....

.....
BM28 ELEVATION = 2360.04
N 618106 E 589822
SPIKE NAIL IN 14" POPLAR
.....

.....
BM29 ELEVATION = 2368.94
N 627954 E 595589
SPIKE NAIL IN 18" POPLAR
.....

.....
BM30 ELEVATION = 2373.76
N 624052 E 596958
SPIKE NAIL IN 30" POPLAR
.....

.....
BM31 ELEVATION = 2178.05
N 623982 E 599277
SPIKE NAIL IN 26" POPLAR
.....

.....
BM32 ELEVATION = 2055.94
N 622874 E 600916
SPIKE NAIL IN 36" POPLAR
.....

.....
BM33 ELEVATION = 2011.30
N 622984 E 602906
SPIKE NAIL IN 10" POPLAR
.....

.....
BM34 ELEVATION = 1956.92
N 623016 E 605233
SPIKE NAIL IN 18" WALNUT
.....

.....
BM35 ELEVATION = 2036.22
N 623779 E 606834
SPIKE NAIL IN 12" DOUBLE POPLAR
.....

.....
BM36 ELEVATION = 2022.34
N 623959 E 608884
SPIKE NAIL IN 24" POPLAR
.....

.....
BM37 ELEVATION = 2238.93
N 624326 E 597907
SPIKE NAIL IN 12" TRIPLE POPLAR
.....

.....
BM38 ELEVATION = 2021.11
N 622788 E 602130
SPIKE NAIL SET IN 6X6 BRIDGE BEAM
.....

.....
BM39 ELEVATION = 2056.76
N 623380 E 601878
SPIKE NAIL SET IN 36" DOUBLE SYCAMORE
.....

.....
BM40 ELEVATION = 2001.31
N 623696 E 604730
SPIKE NAIL IN 30" POPLAR
.....

.....
BM41 ELEVATION = 2063.76
N 624033 E 607585
SPIKE NAIL IN 22" POPLAR
.....

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.

REVISIONS

SURVEY CONTROL SHEET

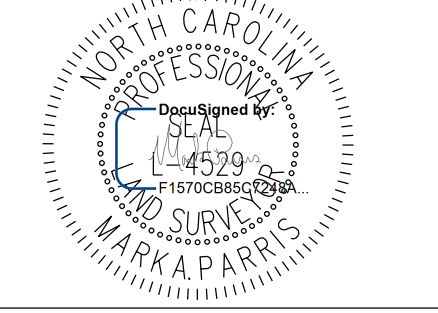
W/ EXISTING CENTERLINE ALIGNMENTS PRIOR TO CONSTRUCTION

PROJECT REFERENCE NO. SHEET NO.
A-0009-C RW02C-59

Location and Surveys



PROJECT SURVEYOR



DOCUMENT NOT CONSIDERED FINAL
UNLESS ALL SIGNATURES COMPLETED

EL POINT	N	E	BEARING	DIST	DELTA	D	L	T	R	DELTA S	Ls	LT	ST
CURVE				124.26	12*27'00.0"(LT)	10*00'00.0"	124.50	62.50	572.96				
CS	621322.082	592084.956	N 53*06'00.0" E										
SPIRAL			N 40*12'26.9" E	199.73						10*00'00.0"(LT)	200.00	133.55	66.86
ST	621474.618	592213.893											
LINE			N 36*52'30.0" E	142.18									
TS	621588.358	592299.214											
SPIRAL			N 38*52'29.3" E	199.90						06*00'00.0"(RT)	200.00	133.41	66.74
SC	621743.986	592424.677											
CURVE			N 47*44'30.0" E	162.03	09*44'00.0"(RT)	06*00'00.0"	162.22	81.31	954.93				
CS	621852.945	592544.597											
SPIRAL			N 56*36'30.7" E	199.90						06*00'00.0"(RT)	200.00	133.41	66.74
ST	621962.963	592711.501											
LINE			N 58*36'30.0" E	385.31									
TS	622163.667	593040.415											
SPIRAL			N 65*36'01.2" E	298.21						21*00'00.0"(RT)	300.00	201.43	101.30
SC	622286.858	593311.993											
CURVE			S 50*29'00.0" E	626.17	99*49'00.0"(RT)	14*00'00.0"	712.98	486.15	409.26				
CS	621888.423	593795.048											
SPIRAL			S 13*25'58.8" W	298.21						21*00'00.0"(RT)	300.00	201.43	101.30
ST	621598.368	593725.771											
LINE			S 20*25'30.0" W	538.56									
TS	621093.672	593537.825											
SPIRAL			S 17*05'33.1" W	199.73						10*00'00.0"(LT)	200.00	133.55	66.86
SC	620902.764	593479.122											
CURVE			S 03*45'26.9" W	199.73						10*00'00.0"(LT)	200.00	133.55	66.86
CS	620703.464	593466.033											
SPIRAL			S 00*25'30.7" W	111.15									
ST	620592.317	593465.208											
LINE			S 03*45'26.9" W	199.73						10*00'00.0"(RT)	200.00	133.55	66.86
TS	620393.017	593452.119											
SPIRAL			S 14*58'30.0" W	90.90	09*06'00.0"(RT)	10*00'00.0"	91.00	45.60	572.96				
SC	620305.200	593428.630											
CURVE			S 26*11'33.1" W	199.73						10*00'00.0"(RT)	200.00	133.55	66.86
CS	620125.980	593340.471											
SPIRAL			S 29*31'30.0" W	49.21									
ST	620083.162	593316.221											
LINE			S 27*01'31.3" W	149.89						07*30'00.0"(LT)	150.00	100.09	50.08
TS	619949.643	593248.115											
SPIRAL			S 17*08'30.0" W	97.55	09*46'00.0"(LT)	10*00'00.0"	97.67	48.95	572.96				
SC	619856.427	593219.365											
CURVE			S 07*15'28.7" W	149.89						07*30'00.0"(LT)	150.00	100.09	50.08
CS	619707.743	593200.428											
SPIRAL			S 04*45'30.0" W	117.27									
ST	619590.879	593190.701											
LINE			S 02*38'00.0" W	212.45	04*15'00.0"(LT)	02*00'00.0"	212.50	106.30	2864.79				
TS	619378.652	593180.940											
SPIRAL			S 00*30'30.0" W	368.42									
SC	619010.249	593177.671											
CURVE			S 05*07'15.0" E	199.23						16*54'00.0"(LT)	200.00	133.95	67.22
CS	618811.816	593195.454											
SPIRAL			S 74*29'30.0" E	575.65	116*12'00.0"(LT)	16*54'00.0"	687.57	544.67	339.03				
ST	618657.900	593750.146											
LINE			N 36*08'15.0" E	199.23						16*54'00.0"(LT)	200.00	133.95	67.22
TS	618818.797	593867.635											
SPIRAL			N 30*30'30.0" E	410.40									
SC	619172.381	594075.982											
CURVE			N 31*50'29.8" E	199.96						04*00'00.0"(RT)	200.00	133.37	66.70
CS	619342.246	594181.473											
SPIRAL			N 38*15'30.0" E	187.37	07*30'00.0"(RT)	04*00'00.0"	187.50	93.88	1432.39				
ST	619489.371	594297.492											
LINE			N 44*40'30.2" E	199.96						04*00'00.0"(RT)	200.00	133.37	66.70
TS	619631.561	594438.079											
SPIRAL			N 46*00'30.0" E	379.05									
SC	619894.832	594710.783											
CURVE			N 42*40'33.1" E	199.73						10*00'00.0"(LT)	200.00	133.55	66.86
CS	620041.673	594846.169											
SPIRAL			N 26*30'30.0" E	189.13	19*00'00.0"(LT)	10*00'00.0"	190.00	95.88	572.96				
ST	620210.920	594930.584								10*00'00.0"(LT)	200.00	133.55	66.86
LINE			N 10*20'26.9" E	199.73									
TS	620407.406	594966.436											
SPIRAL			N 07*00'30.0" E	1.54									
SC	620408.936	594966.624								10*00'00.0"(RT)	200.00	133.55	66.86
CURVE			N 10*20'26.9" E	199.73									
CS	620605.422	595002.476											
SPIRAL			N 44*45'30.0" E	533.55	55*30'00.0"(RT)	10*00'00.0"	555.00	301.45	572.96				
ST	620984.290	595378.162											
LINE			N 80*50'36.1" E	249.47						12*30'00.0"(RT)	250.00	167.08	83.71
TS	621023.989	595624.454											
SPIRAL			N 85*00'30.0" E	50.12									
SC	621028.350	595674.381											
CURVE			N 81*40'33.1" E	199.73						10*00'00.0"(LT)	200.00	133.55	66.86
CS	621057.266	595872.006											
SPIRAL			N 57*00'30.0" E	354.11	36*00'00.0"(LT)	10*00'00.0"	360.00	186.17	572.96				
ST	621250.083	596169.013											
LINE			N 32*20'26.9" E	199.73						10*00'00.0"(LT)	200.00	133.55	66.86
TS	621418.831	596275.859											
SPIRAL			N 29*00'30.0" E	678.77									
SC	622012.451	596605.022											
CURVE			N 24*25'38.1" E	199.49						13*45'00.0"(LT)	200.00	133.74	67.03
CS	622194.083	596687.517											
SPIRAL			N 08*52'00.0" W	340.63	48*15'00.0"(LT)	13*45'00.0"	350.91	186.62	416.70				
ST	622530.644	596635.014											
LINE			N 42*09'38.1" W	199.49						13*45'00.0"(LT)	200.00	133.74	67.03
TS	622678.518	596501.115											
SPIRAL			N 46*44'30.0" W	50.90									
SC	622713.396	596464.049											
CURVE			N 43*39'32.5" W	199.77						09*15'00.0"(RT)	200.00	133.52	66.83
CS	622857.921	596326.136											
SPIRAL			N 33*52'52.5" W	78.01	07*13'15.0"(RT)	09*15'00.0"	78.06	39.08	619.41				
ST	622922.686	596282.647											
LINE			N 24*06'12.5" W	199.77						09*15'00.0"(RT)	200.00	133.52	66.83
TS	623105.036	596201.064											

REVISIONS

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V:\NC\Survey\2020\12-14_A-0009
CON\Survey\A\WKS-1503PY-34
jcgordon

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I, Mark A. Parris, PLS, certify that the Project Control was verified under my supervision from an actual GPS survey made under my supervision and the following information was used to perform the survey:

Class of survey: **AA**
Type of GPS field procedure: Static, OPUS, RTN
Dates of survey: 2/2020-3/2020
Datum/Epoch: 2010.0000
Published/Fixed-control use: N/A
Localized around: A0009C-10
Northing: 612531.117
Easting: 584817.003
Combined grid factor: 0.999772236
Geoid model: 18 CONUS
Units: English

I also certify that the Baseline Control for this project 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 1:20,000 (Class AA) and Vertical accuracy to Class A. Field work was performed from 3/2020 to 5/2020, and all coordinates are based on NAD 83/2011 and all elevations are based on NAVD 88; that this survey was performed to meet the requirements of 21NCAC 56.1600 as applicable.

This 21st day of December, 2020.

Decided by:

F1570C88C724E4
Professional Land Surveyor L-4529

NOTES:

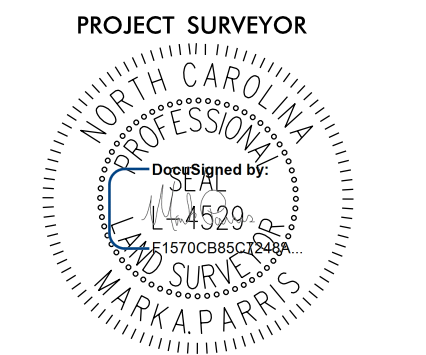
1. PROJECT CONTROL WAS ESTABLISHED USING GNSS, THE GLOBAL NAVIGATION SATELLITE SYSTEM.
2. THE SURVEY CONTROL DATA FOR THIS PROJECT HAS BEEN COMPILED FROM VARIOUS SOURCES. IF FURTHER INFORMATION REGARDING PROJECT CONTROL IS NEEDED, PLEASE CONTACT THE LOCATION AND SURVEYS UNIT.

SURVEY CONTROL SHEET

W/ EXISTING CENTERLINE ALIGNMENTS PRIOR TO CONSTRUCTION

PROJECT REFERENCE NO.	SHEET NO.
A-0009-C	RW02C-60

Location and Surveys



DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

EL POINT	N	E	BEARING	DIST	DELTA	D	L	T	R	DELTA S	L _s	LT	ST
LINE			N 21°01'15.0" W	1077.63									
TS	624110.952	595814.510											
SPIRAL	624398.554	595732.590	N 15°53'56.3" W	299.04						15°22'30.0"(RT)	300.00	200.76	100.69
SC	624624.463	595756.650											
CURVE			N 06°04'45.0" E	227.19	23°27'00.0"(RT)	10°15'00.0"	228.78	116.01	558.98				
CS	624847.995	595867.357											
SPIRAL	625568.973	596294.026	N 26°20'51.5" E	249.44						12°48'45.0"(RT)	250.00	167.11	83.73
ST	625781.762	596363.987											
LINE			N 30°37'00.0" E	837.77									
PC	625860.267	596371.938											
CURVE			N 18°12'00.0" E	223.99	24°50'00.0"(LT)	11°00'00.0"	225.76	114.68	520.87				
PT	625939.430	596455.408											
LINE			N 05°47'00.0" E	78.91									
PC	625942.911	596527.882											
CURVE			N 46°31'00.0" E	115.04	81°28'00.0"(RT)	65°00'00.0"	125.33	75.91	88.15				
PT													
LINE			N 07°15'00.0" E	72.56									
POT													

EY1 POINT	N	E	BEARING	DIST	DELTA	D	L	T	R	DELTA S	L _s	LT	ST
POT	605123.939	568331.392											
LINE			N 19°52'00.0" W	772.34									
TS	605850.311	568068.927											
SPIRAL	606039.722	568004.814	N 18°42'00.1" W	199.97						03°30'00.0"(RT)	200.00	133.36	66.69
SC	606995.539	568014.963											
CURVE			N 00°36'30.0" E	955.87	33°57'00.0"(RT)	03°30'00.0"	970.00	499.71	1637.02				
CS	607043.747	568030.240											
SPIRAL	607236.301	568083.942	N 00°00'00.0" E	0.00						00°00'00.0"(RT)	0.00	0.00	0.00
ST	607977.418	567929.537											
LINE			N 17°35'00.0" E	50.57									
TS	607977.418	567929.537											
SPIRAL	607977.418	567929.537	N 15°35'00.7" E	199.90						06°00'00.0"(LT)	200.00	133.41	66.74
SC													
CURVE			N 11°46'07.5" W	757.03	46°42'15.0"(LT)	06°00'00.0"	778.40	412.29	954.93				
CS													
SPIRAL			N 39°07'15.7" W	199.90						06°00'00.0"(LT)	200.00	133.41	66.74
ST													

EY2 POINT	N	E	BEARING	DIST
POT	606376.640	567943.210		
LINE			S 79°51'54.5" E	155.16
POT	606349.336	568095.954		

EY3 POINT	N	E	BEARING	DIST	DELTA	D	L	T	R
PC	606848.675	567645.797							
CURVE			S 50°44'00.0" E	102.59	07°42'00.0"(RT)	07°30'00.0"	102.67	51.41	763.94
PT	606783.743	567725.223							
LINE			S 46°53'00.0" E	294.91					
POT	606582.179	567940.493							

EY4 POINT	N	E	BEARING	DIST	DELTA	D	L	T	R
POT	606951.118	567789.285							
LINE			S 49°45'30.0" E	166.73					
PC	606843.406	567916.557							
CURVE			S 64°12'30.0" E	38.13	28°54'00.0"(LT)	75°00'00.0"	38.53	19.69	76.39
PT	606826.817	567950.885							
LINE			S 78°39'30.0" E	19.94					
POT	606822.895	567970.438							

EY5 POINT	N	E	BEARING	DIST	DELTA	D	L	T	R
PC	607847.825	569260.651							
CURVE			S 89°08'02.5" E	112.52	14°40'05.0"(RT)	13°00'00.0"	112.83	56.73	440.74
PT	607846.124	569373.162							
LINE			S 81°48'00.0" E	197.97					
PC	607817.888	569569.103							
CURVE			N 59°12'30.1" E	62.92	77°58'59.9"(LT)	114°35'29.6"	68.05	40.48	50.00
PT	607850.099	569623.154							
LINE			N 20°13'00.1" E	33.93					
POT	607881.939	569634.880							

EY6 POINT	N	E	BEARING	DIST	DELTA	D	L	T	R
POT	608201.941	569722.672							
LINE			S 09°55'00.0" W	210.03					
PC	607995.052	569686.502							
CURVE			S 14°59'00.0" W	101.20	10°08'00.0"(RT)	10°00'00.0"	101.33	50.00	572.96
PT	607897.291	569660.337							
LINE			S 20°03'00.0" W	23.13					
POT	607875.565	569652.408							

REVISIONS

I, Mark A. Parris, PLS, certify that the Project Control was verified under my supervision from an actual GPS survey made under my supervision and the following information was used to perform the survey:

Class of survey: **AA**
Type of GPS field procedure: **Static, OPUS, RTN**
Dates of survey: **2/2020-3/2020**
Datum/Epoch: **2010.0000**
Published/Fixed-control use: **N/A**
Localized around: **A0009C-10**
Northing: **612531.117**
Easting: **584817.003**
Combined grid factor: **0.99972236**
Geoid model: **18 CONUS**
Units: **English**

I also certify that the Baseline Control for this project 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 1:20,000 (Class AA) and Vertical accuracy to Class A. Field work was performed from 3/2020 to 5/2020, and all coordinates are based on NAD 83/2011 and all elevations are based on NAVD 88; that this survey was performed to meet the requirements of 21NCAC 56.1600 as applicable.

This 21st day of December, 2020.

Documented by:

F1570CB85C7248A

Professional Land Surveyor L-4529

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.

SURVEY CONTROL SHEET

W/ EXISTING CENTERLINE ALIGNMENTS PRIOR TO CONSTRUCTION

PROJECT REFERENCE NO. A-0009-C	SHEET NO. RW02C-61
Location and Surveys	
PROJECT SURVEYOR 	
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	

EY7

POINT	N	E	BEARING	DIST
POT	607636.414	570714.779		
LINE			S 38°12'00.0" W	150.00
POT	607518.536	570622.018		

EY15

POINT	N	E	BEARING	DIST
POT	609032.793	577605.804		
LINE			S 42°16'47.3" E	150.00
POT	608921.813	577706.716		

EY8

POINT	N	E	BEARING	DIST	DELTA	D	L	T	R
POT	607196.569	571496.314							
LINE			S 20°13'00.1" W	111.20					
PC	607092.219	571457.887							
CURVE			S 01°03'59.9" E	297.10	42°34'00.1"(L T)	14°00'00.0"	304.05	159.43	409.26
PT	606795.167	571463.417							

EY16

POINT	N	E	BEARING	DIST
POT	609572.432	578514.608		
LINE			S 01°42'30.0" E	170.56
POT	609401.948	578519.693		

EY9

POINT	N	E	BEARING	DIST	DELTA	D	L	T	R
POT	606865.913	572432.267							
LINE			N 30°08'00.0" E	28.91					
PC	606890.914	572446.779							
CURVE			N 44°41'00.0" E	61.25	29°06'00.0"(R T)	47°00'00.0"	61.91	31.64	121.91
PT	606934.464	572489.850							
LINE			N 59°14'00.0" E	148.10					
POT	607010.225	572617.110							

EY17

POINT	N	E	BEARING	DIST
POT	612710.734	583644.833		
LINE			S 29°41'30.0" E	136.01
POT	612592.578	583712.205		

EY10

POINT	N	E	BEARING	DIST	DELTA	D	L	T	R
POT	607389.438	573365.625							
LINE			S 14°23'30.0" W	178.53					
PC	607216.513	573321.252							
CURVE			S 07°28'45.0" E	71.15	43°44'30.0"(L T)	60°00'00.0"	72.90	38.33	95.49
PT	607145.973	573330.512							
LINE			S 29°21'00.0" E	36.56					
POT	607114.103	573348.434							

EY18

POINT	N	E	BEARING	DIST
POT	612920.172	584838.284		
LINE			S 15°22'29.8" E	344.00
POT	612588.483	584929.490		

EY11

POINT	N	E	BEARING	DIST	DELTA	D	L	T	R
PC	607647.033	574393.491							
CURVE			S 55°42'30.1" E	136.63	32°53'59.7"(L T)	23°45'00.0"	138.53	71.23	241.25
PT	607570.054	574506.372							
LINE			S 72°09'30.0" E	47.20					
PC	607555.594	574551.299							
CURVE			S 62°36'04.2" E	80.11	19°06'51.5"(R T)	23°45'00.0"	80.48	40.62	241.25
PT	607518.730	574622.421							

EY19

POINT	N	E	BEARING	DIST	DELTA	D	L	T	R
POT	613267.000	586230.207							
LINE			S 13°33'00.0" E	27.47					
PC	613240.298	586236.642							
CURVE			S 25°12'30.0" E	39.92	23°19'00.0"(L T)	58°00'00.0"	40.20	20.38	98.79
PT	613204.175	586253.646							
LINE			S 36°52'00.0" E	15.32					
PC	613191.923	586262.835							
CURVE			S 04°40'00.0" W	30.39	83°04'00.0"(R T)	250°00'00.0"	33.23	20.30	22.92
PT	613161.631	586260.362							
LINE			S 46°12'00.0" W	58.79					
POT	613120.940	586217.930							

EY12

POINT	N	E	BEARING	DIST
POT	607589.735	575171.722		
LINE			S 01°22'30.0" E	145.64
POT	607444.137	575175.217		

EY13

POINT	N	E	BEARING	DIST	DELTA	D	L	T	R
POT	607479.326	576108.768							
LINE			S 05°41'00.0" E	48.23					
PC	607431.335	576113.544							
CURVE			S 44°01'37.7" E	73.29	76°41'15.5"(L T)	97°00'00.1"	79.06	46.72	59.07
PCC	607378.640	576164.480							
CURVE			N 87°03'22.3" E	48.06	21°08'44.5"(L T)	43°45'00.0"	48.33	24.44	130.96
PT	607381.108	576212.476							
LINE			N 76°29'00.0" E	24.63					
PC	607386.864	576236.422							
CURVE			N 74°17'30.0" E	67.42	04°23'00.0"(L T)	06°30'00.0"	67.44	33.73	881.47
PT	607405.117	576301.323							
LINE			N 72°06'00.0" E	141.60					
PC	607448.640	576436.073							
CURVE			N 79°08'43.1" E	86.49	14°05'26.2"(R T)	16°15'00.0"	86.71	43.58	352.59
PT	607464.929	576521.019							

EY14

POINT	N	E	BEARING	DIST	DELTA	D	L	T	R
PC	608774.473	577205.716							
CURVE			S 78°55'30.0" E	95.80	44°12'00.0"(R T)	44°59'59.9"	98.22	51.70	127.32
PT	608756.069	577299.736							
LINE			S 56°49'30.0" E	56.83					
POT	608724.972	577347.303							

REVISIONS

21-MAN-20210009
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I, Mark A. Parris, PLS, certify that the Project Control was verified under my supervision from an actual GPS survey made under my supervision and the following information was used to perform the survey:

Class of survey: **AA**
 Type of GPS field procedure: Static, OPUS, RTN
 Dates of survey: 2/2020-3/2020
 Datum/Epoch: 2010.0000
 Published/Fixed-control use: N/A
 Localized around: A0009C-10
 Northing: 612531.117
 Easting: 584817.003
 Combined grid factor: 0.999772236
 Geoid model: 18 CONUS
 Units: English

I also certify that the Baseline Control for this project 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 1:20,000 (Class AA) and Vertical accuracy to Class A. Field work was performed from 3/2020 to 5/2020, and all coordinates are based on NAD 83/2011 and all elevations are based on NAVD 88; that this survey was performed to meet the requirements of 21NCAC 56.1600 as applicable.

This 21st day of December, 2020.


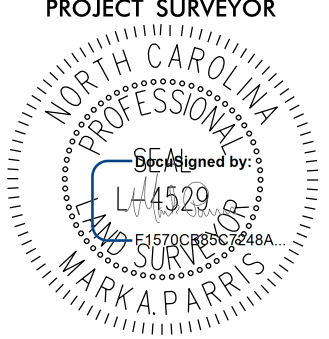
 Professional Land Surveyor L-4529

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.

SURVEY CONTROL SHEET

W/ EXISTING CENTERLINE ALIGNMENTS PRIOR TO CONSTRUCTION

PROJECT REFERENCE NO. A-0009-C	SHEET NO. RW02C-62
Location and Surveys	
	
PROJECT SURVEYOR 	
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	

REVISIONS

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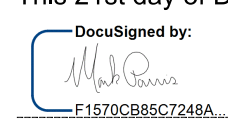
EY20		N	E	BEARING	DIST	DELTA	D	L	T	R
POT	POINT									
PC	617950.675	589725.298		N 83°12'00.0" E	45.76					
CURVE	617956.093	589770.734		N 63°37'55.9" E	30.70	39°08'08.3"(L T)	125°00'00.2"	31.31	16.29	45.84
PCC	617969.729	589798.243		N 29°42'25.9" E	45.83	28°42'51.7"(L T)	62°00'00.1"	46.31	23.65	92.41
PT	618009.536	589820.955		N 15°21'00.0" E	240.69					
PC	618241.636	589884.668		N 15°46'00.0" E	27.78	00°50'00.0"(RT)	03°00'00.0"	27.78	13.89	1909.86
CURVE	618268.369	589892.216		N 16°11'00.0" E	52.62					
PC	618318.902	589906.882		N 15°31'30.0" E	43.89	01°19'00.0"(L T)	03°00'00.0"	43.89	21.95	1909.86
CURVE	618361.189	589918.629		N 14°52'00.0" E	178.51					
PC	618533.722	589964.429		N 15°06'00.0" E	46.67	00°28'00.0"(RT)	01°00'00.0"	46.67	23.33	5729.58
CURVE	618578.777	589976.585		N 15°20'00.0" E	224.24					
PC	618795.031	590035.881		N 19°54'11.4" E	52.93	09°08'22.7"(RT)	17°15'00.0"	52.98	26.55	332.15
CURVE	618844.797	590053.899		N 61°36'11.4" E	87.01	74°15'37.3"(RT)	79°30'00.0"	93.41	54.57	72.07
PCC	618886.175	590130.437		S 81°16'00.0" E	50.47					
CURVE	618878.512	590180.324		N 71°12'38.0" E	87.17	55°02'44.0"(L T)	60°45'00.1"	90.61	49.14	94.31
PCC	618906.587	590262.844		N 31°37'08.0" E	79.21	24°08'16.0"(L T)	30°15'00.0"	79.79	40.50	189.41
CURVE	618974.035	590304.369		N 19°33'00.0" E	61.89					
PT	619032.355	590325.079		N 50°46'30.0" E	99.01	62°27'00.0"(RT)	60°00'00.0"	104.08	57.89	95.49
PC	619094.964	590401.776		N 82°00'00.0" E	65.49					
CURVE	619104.078	590466.626		N 73°35'55.0" E	74.41	16°48'10.0"(L T)	22°30'00.0"	74.68	37.61	254.65
PCC	619125.089	590538.010		N 59°20'34.2" E	80.61	11°42'31.5"(L T)	14°30'00.0"	80.75	40.52	395.14
CURVE	619166.192	590607.353		N 32°37'09.2" E	129.59	41°44'18.5"(L T)	31°30'00.0"	132.50	69.35	181.89
PCC	619275.344	590677.210		N 11°45'00.0" E	40.71					
CURVE	619315.198	590685.500		N 26°21'36.5" E	132.89	29°13'13.0"(RT)	21°45'00.0"	134.35	68.67	263.43
PC	619434.275	590744.507		N 44°27'06.5" E	132.55	06°57'47.0"(RT)	05°15'00.0"	132.63	66.40	1091.35
CURVE	619528.893	590837.331		N 47°56'00.0" E	98.27					
PC	619594.733	590910.283		N 42°19'05.4" E	44.41	11°13'49.3"(L T)	25°15'00.0"	44.48	22.31	226.91
CURVE	619627.567	590940.179		N 12°37'05.4" E	72.22	48°10'10.7"(L T)	64°45'00.0"	74.39	39.55	88.49
PCC	619698.044	590955.956		N 11°28'00.0" W	57.01					
CURVE	619753.914	590944.623		N 26°36'00.0" E	82.16	76°08'00.0"(RT)	86°00'00.0"	88.53	52.18	66.62
PCC	619827.375	590981.409		N 64°40'00.0" E	53.21					
CURVE	619850.141	591029.499		N 22°34'20.1" E	98.48	84°11'19.8"(L T)	78°00'00.1"	107.93	66.36	73.46
PC	619941.080	591067.302		N 24°31'39.9" W	47.61	10°00'40.2"(L T)	21°00'00.0"	47.67	23.90	272.84
CURVE	619984.395	591047.537		N 29°32'00.0" W	65.08					
PT	620041.018	591015.458		N 28°29'00.0" E	135.94	116°02'00.0"(RT)	71°30'00.0"	162.28	128.32	80.13
PC	620160.503	591000.288		N 86°30'00.0" E	55.27					
CURVE	620163.877	591135.457		N 49°18'49.8" E	96.19	74°22'20.4"(L T)	72°00'00.0"	103.29	60.37	79.58
PCC	620226.587	591208.400		N 02°49'49.8" E	60.20	18°35'39.6"(L T)	30°45'00.0"	60.47	30.50	186.33
CURVE	620286.718	591211.373		N 06°28'00.0" W	73.71					
PT	620359.956	591203.072		N 13°07'53.8" W	88.67	13°19'47.7"(L T)	15°00'00.0"	88.87	44.63	381.97
PC	620446.303	591182.928		N 34°13'53.8" W	86.56	28°52'12.3"(L T)	33°00'00.0"	87.49	44.69	173.62
CURVE	620517.871	591134.233		N 48°40'00.0" W	85.01					
PCC	620574.015	591070.401								

EY21		N	E	BEARING	DIST	DELTA	D	L	T	R
POT	POINT									
PC	618500.969	589629.459		S 72°07'00.9" E	117.31	22°07'58.1"(L T)	18°45'00.0"	118.04	59.77	305.58
CURVE	618464.946	589741.101		S 83°11'00.0" E	98.99					
PCC	618453.196	589839.391								

I, Mark A. Parris, PLS, certify that the Project Control was verified under my supervision from an actual GPS survey made under my supervision and the following information was used to perform the survey:

Class of survey: **AA**
Type of GPS field procedure: Static, OPUS, RTN
Dates of survey: 2/2020-3/2020
Datum/Epoch: 2010.0000
Published/Fixed-control use: N/A
Localized around: A0009C-10
Northing: 612531.117
Easting: 584817.003
Combined grid factor: 0.999772236
Geoid model: 18 CONUS
Units: English

I also certify that the Baseline Control for this project 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 1:20,000 (Class AA) and Vertical accuracy to Class A. Field work was performed from 3/2020 to 5/2020, and all coordinates are based on NAD 83/2011 and all elevations are based on NAVD 88; that this survey was performed to meet the requirements of 21NCAC 56.1600 as applicable.

This 21st day of December, 2020.

Professional Land Surveyor L-4529

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.

SURVEY CONTROL SHEET

W/ EXISTING CENTERLINE ALIGNMENTS PRIOR TO CONSTRUCTION

PROJECT REFERENCE NO. A-0009-C SHEET NO. RW02C-63 Location and Surveys V&M Vaughn & Melton PROJECT SURVEYOR NORTH CAROLINA PROFESSIONAL SURVEYOR MARK A. PARRIS DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

REVISIONS

Table with columns: POINT, N, E, BEARING, DIST, DELTA, D, L, T, R, DELTA S, Ls, LT, ST. Includes data for PC, CURVE, PT, LINE, TS, SPIRAL, SC, CS, ST across various stationing points.

I, Mark A. Parris, PLS, certify that the Project Control was verified under my supervision from an actual GPS survey made under my supervision and the following information was used to perform the survey:

Class of survey: AA Type of GPS field procedure: Static, OPUS, RTN Dates of survey: 2/2020-3/2020 Datum/Epoch: 2010.0000 Published/Fixed-control use: N/A Localized around: A0009C-10 Northing: 612531.117 Easting: 504817.003 Combined grid factor: 0.99972236 Geoid model: 18 CONUS Units: English

I also certify that the Baseline Control for this project 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 1:20,000 (Class AA) and Vertical accuracy to Class A. Field work was performed from 3/2020 to 5/2020, and all coordinates are based on NAD 83/2011 and all elevations are based on NAVD 88; that this survey was performed to meet the requirements of 21NCAC 56.1600 as applicable.

This 21st day of December, 2020. Professional Land Surveyor L-4529


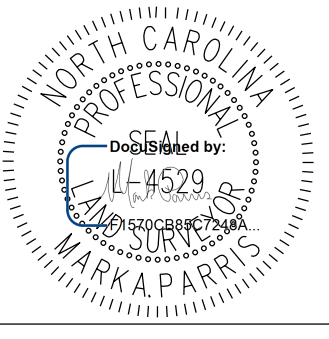
NOTES:

- 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.

6/2/19

SURVEY CONTROL SHEET

W/ EXISTING CENTERLINE ALIGNMENTS PRIOR TO CONSTRUCTION

PROJECT REFERENCE NO. A-0009-C	SHEET NO. RW02C-64
Location and Surveys	
	
PROJECT SURVEYOR 	
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	

EY23									
POINT	N	E	BEARING	DIST	DELTA	D	L	T	R
POT	624219.431	598639.498	S 69°57'00.0" E	64.08					
LINE									
PC	624197.463	598699.690	S 65°30'00.0" E	59.27	08°54'00.0"(RT)	15°00'00.0"	59.33	29.73	381.97
CURVE									
PT	624172.883	598753.627	S 61°03'00.0" E	75.35					
LINE									
PC	624136.409	598819.563	S 66°44'00.9" E	103.17	11°22'01.8"(LT)	11°00'00.0"	103.34	51.84	520.87
CURVE									
PCC	624095.657	598914.341	S 83°16'00.9" E	128.78	21°41'58.2"(LT)	16°45'00.0"	129.55	65.56	342.06
CURVE									
PT	624080.559	599042.230	N 85°53'00.0" E	33.56					
LINE									
PC	624082.968	599075.708	N 89°49'00.0" E	78.60	07°52'00.0"(RT)	10°00'00.0"	78.67	39.40	572.96
CURVE									
PT	624083.220	599154.312	S 86°15'00.0" E	63.59					
LINE									
PC	624079.061	599217.770	S 79°24'00.0" E	29.24	13°42'00.0"(RT)	46°45'00.0"	29.30	14.72	122.56
CURVE									
PT	624073.683	599246.506	S 72°33'00.0" E	8.57					
LINE									
PC	624071.113	599254.681	S 41°12'00.0" E	59.62	62°42'00.0"(RT)	100°00'00.0"	62.70	34.90	57.30
CURVE									
PT	624026.256	599293.951	S 09°51'00.0" E	26.29					
LINE									
PC	624000.354	599298.448	S 06°46'00.0" E	61.64	06°10'00.0"(RT)	10°00'00.0"	61.67	30.86	572.96
CURVE									
PT	623939.146	599305.711	S 03°41'00.0" E	13.14					
LINE									
POT	623926.029	599306.555							

EY24									
POINT	N	E	BEARING	DIST	DELTA	D	L	T	R
POT	623569.043	599945.874	S 24°40'00.0" W	65.79					
LINE									
PC	623509.253	599918.416	S 20°17'30.0" W	48.56	08°45'00.0"(LT)	18°00'00.0"	48.61	24.35	318.31
CURVE									
PT	623463.703	599901.574	S 15°55'00.0" W	47.85					
LINE									
POT	623417.684	599888.451							

EY25				
POINT	N	E	BEARING	DIST
POT	622936.181	602112.442	S 00°36'00.0" W	136.15
LINE				
POT	622800.042	602111.016		

EY25A									
POINT	N	E	BEARING	DIST	DELTA	D	L	T	R
POT	622749.119	601911.855	N 75°05'00.0" E	188.50					
LINE									
PC	622797.642	602094.005	S 86°25'30.0" E	45.43	36°59'00.0"(RT)	80°00'00.0"	46.23	23.95	71.62
CURVE									
PT	622794.810	602139.348	S 67°56'00.0" E	104.60					
LINE									
POT	622755.515	602236.282							

EY26									
POINT	N	E	BEARING	DIST	DELTA	D	L	T	R
PC	623401.804	601878.990	S 52°02'47.2" E	47.45	17°01'34.4"(RT)	35°45'00.0"	47.63	23.99	160.27
CURVE									
PT	623372.621	601916.405	S 43°32'00.0" E	67.43					
LINE									
PC	623323.738	601962.847	S 47°31'30.0" E	145.03	07°59'00.0"(LT)	05°30'00.0"	145.15	72.69	1041.74
CURVE									
PT	623225.801	602069.820	S 51°31'00.0" E	86.11					
LINE									
PC	623172.217	602137.225	S 44°14'41.8" E	36.72	14°32'36.3"(RT)	39°30'00.0"	36.82	18.51	145.05
CURVE									
PCC	623145.912	602162.846	S 18°44'41.8" E	128.02	36°27'23.7"(RT)	28°00'00.0"	130.20	67.39	204.63
CURVE									
PT	623024.685	602203.985	S 00°31'00.0" E	87.84					
LINE									
POT	622936.852	602204.777							

EY27									
POINT	N	E	BEARING	DIST	DELTA	D	L	T	R
POT	623720.789	604718.473	S 50°30'00.0" W	14.91					
LINE									
PC	623711.302	604706.964	S 54°09'00.0" W	121.58	07°18'00.0"(RT)	06°00'00.0"	121.67	60.92	954.93
CURVE									
PT	623640.095	604608.414	S 57°48'00.0" W	42.89					
LINE									
PC	623617.239	604572.120	S 52°05'00.0" W	120.15	11°26'00.0"(LT)	09°30'00.0"	120.35	60.38	603.11
CURVE									
PT	623543.404	604477.332	S 46°22'00.0" W	65.94					
LINE									
PC	623497.902	604429.605	S 47°38'00.0" W	126.66	02°32'00.0"(RT)	02°00'00.0"	126.67	63.34	2864.79
CURVE									
PT	623412.552	604336.025	S 48°54'00.0" W	152.39					
LINE									
PC	623312.372	604221.187	S 52°46'30.0" W	154.88	07°45'00.0"(RT)	05°00'00.0"	155.00	77.62	1145.92
CURVE									
PT	623218.677	604097.860	S 56°39'00.0" W	88.56					
LINE									
PC	623169.990	604023.883	S 24°00'30.0" W	123.62	65°17'00.0"(LT)	50°00'00.0"	130.57	73.40	114.59
CURVE									
PT	623057.067	603973.586	S 08°38'00.0" E	108.46					
LINE									
POT	622949.834	603989.868							

EY28									
POINT	N	E	BEARING	DIST	DELTA	D	L	T	R
POT	623026.491	605523.570	S 14°36'00.0" W	34.14					
LINE									
PC	622993.457	605514.965	S 26°33'00.0" W	37.37	23°54'00.0"(RT)	63°30'00.0"	37.64	19.10	90.23
CURVE									
PT	622960.031	605498.264	S 38°30'00.0" W	35.71					
LINE									
PC	622932.085	605476.034	S 45°24'40.3" W	122.57	13°49'20.6"(RT)	11°15'00.0"	122.87	61.73	509.30
CURVE									
PT	622846.041	605388.746							

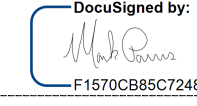
EY29									
POINT	N	E	BEARING	DIST	DELTA	D	L	T	R
PC	624120.468	607578.448	S 17°25'45.1" W	92.64	09°02'29.8"(RT)	09°45'00.0"	92.73	46.46	587.65
CURVE									
PT	624032.083	607550.700	S 21°57'00.0" W	14.85					
LINE									
PC	624018.309	607545.150	S 19°42'00.0" W	44.99	04°30'00.0"(LT)	10°00'00.0"	45.00	22.51	572.96
CURVE									
PT	623975.954	607529.984	S 17°27'00.0" W	61.19					
LINE									
POT	623917.582	607511.635							

I, Mark A. Parris, PLS, certify that the Project Control was verified under my supervision from an actual GPS survey made under my supervision and the following information was used to perform the survey:

Class of survey: **AA**
 Type of GPS field procedure: **Static, OPUS, RTN**
 Dates of survey: **2/2020-3/2020**
 Datum/Epoch: **2010.0000**
 Published/Fixed-control use: **N/A**
 Localized around: **A0009C-10**
 Northing: **612531.117**
 Easting: **584817.003**
 Combined grid factor: **0.999772236**
 Geoid model: **18 CONUS**
 Units: **English**

I also certify that the Baseline Control for this project 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 1:20,000 (Class AA) and Vertical accuracy to Class A. Field work was performed from 3/2020 to 5/2020, and all coordinates are based on NAD 83/2011 and all elevations are based on NAVD 88; that this survey was performed to meet the requirements of 21NCAC 56.1600 as applicable.

This 21st day of December, 2020.

DocuSigned by:

 Professional Land Surveyor L-4529

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.

REVISIONS

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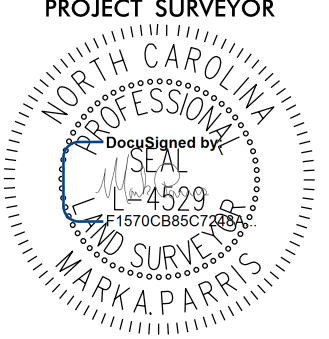
REVISIONS

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 Jcgordon

SURVEY CONTROL SHEET

W/ EXISTING CENTERLINE ALIGNMENTS PRIOR TO CONSTRUCTION

PROJECT REFERENCE NO. A-0009-C	SHEET NO. RW02C-65
Location and Surveys	
	
PROJECT SURVEYOR 	
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	

A9L

POINT	N	E	BEARING	DIST	DELTA	D	L	T	R	DELTA S	Ls	LT	ST
POT	623847.513	607709.708											
LINE			S 67°04'52.0" E	2.69									
TS	623846.467	607712.183											
SPIRAL			S 69°34'18.7" E	295.05						07°28'24.1"(LT)	295.27	197.03	98.58
SC	623743.484	607988.679											
CURVE			N 73°01'05.5" E	1213.90	64°51'16.8"(LT)	05°03'43.1"	1281.21	719.08	1131.89				
CS	624098.026	609149.653											
SPIRAL			N 35°36'29.7" E	295.05						07°28'24.1"(LT)	295.27	197.03	98.58
ST	624098.026	609149.653											

A9R

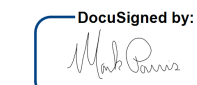
POINT	N	E	BEARING	DIST	DELTA	D	L	T	R	DELTA S	Ls	LT	ST
POT	623847.513	607709.708											
LINE			S 67°04'52.0" E	56.69									
TS	623825.437	607761.922											
SPIRAL			S 69°34'18.7" E	295.05						07°28'24.1"(LT)	295.27	197.03	98.58
SC	623722.454	608038.418											
CURVE			N 73°01'05.5" E	1213.90	64°51'16.8"(LT)	05°03'43.1"	1281.21	719.08	1131.89				
CS	624076.996	609199.392											
SPIRAL			N 35°36'29.7" E	295.05						07°28'24.1"(LT)	295.27	197.03	98.58
ST	624076.996	609199.392											

I, Mark A. Parris, PLS, certify that the Project Control was verified under my supervision from an actual GPS survey made under my supervision and the following information was used to perform the survey:

Class of survey: **AA**
 Type of GPS field procedure: Static, OPUS, RTN
 Dates of survey: 2/2020-3/2020
 Datum/Epoch: 2010.0000
 Published/Fixed-control use: N/A
 Localized around: A0009C-10
 Northing: 612531.117
 Easting: 584817.003
 Combined grid factor: 0.999772236
 Geoid model: 18 CONUS
 Units: English

I also certify that the Baseline Control for this project 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 1:20,000 (Class AA) and Vertical accuracy to Class A. Field work was performed from 3/2020 to 5/2020, and all coordinates are based on NAD 83/2011 and all elevations are based on NAVD 88; that this survey was performed to meet the requirements of 21NCAC 56.1600 as applicable.



This 21st day of December, 2020.

DocuSigned by:

 F1870CB85C7248A
 Professional Land Surveyor L-4529

NOTES:

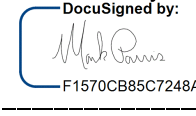
1. PROJECT CONTROL WAS ESTABLISHED USING GNSS, THE GLOBAL NAVIGATION SATELLITE SYSTEM.
2. THE SURVEY CONTROL DATA FOR THIS PROJECT HAS BEEN COMPILED FROM VARIOUS SOURCES. IF FURTHER INFORMATION REGARDING PROJECT CONTROL IS NEEDED, PLEASE CONTACT THE LOCATION AND SURVEYS UNIT.

PROPOSED ALIGNMENT CONTROL SHEET

PROJECT REFERENCE NO. A-0009CC	SHEET NO. RW02D-1
Location and Surveys	
	
PROJECT SURVEYOR 	
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	

I, Mark A. Parris, 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 14th day of January, 2022.


 Designed by
 F1570CB85C7248A
 Professional Land Surveyor L-4529

L			
TYPE	STATION	NORTH	EAST
POT	414+50.00	621023.7409	595590.6228
PC	416+23.25	621038.5482	595763.2360
PT	422+13.30	621347.7477	596237.9840
PC	430+49.81	622081.1321	596640.3537
PT	436+46.29	622627.7350	596551.6117
PC	438+60.52	622773.3111	596394.4339
PT	441+57.53	623017.1077	596229.3454
PC	454+16.49	624192.3341	595777.8930
PT	459+32.23	624691.3549	595809.3867
PC	469+39.75	625578.9779	596286.0492
PRC	472+25.36	625849.8161	596371.2892
PT	473+57.81	625937.3077	596457.7161
POT	474+31.52	625946.8081	596530.8094

Y2A			
TYPE	STATION	NORTH	EAST
POT	10+00.00	623799.0972	599354.5032
POT	12+30.00	623617.7361	599495.9534

DR4R			
TYPE	STATION	NORTH	EAST
POT	10+00.00	623926.5185	599208.2448
PC	10+56.06	623873.2264	599190.8543
PRC	10+99.17	623830.6600	599186.5891
PT	11+44.88	623785.0316	599187.6974
POT	12+00.26	623729.7691	599183.9822

Y2			
TYPE	STATION	NORTH	EAST
PC	10+00.00	627063.1765	595958.5034
PT	13+94.94	626739.2051	596180.9412
PC	16+71.33	626541.5511	596374.1390
PT	19+72.33	626273.8539	596498.7922
PC	24+30.38	625817.9781	596543.4216
PT	27+50.52	625498.9999	596531.9971
PC	30+66.24	625187.7841	596478.8347
PT	50+44.19	623891.8559	597619.5388
PC	63+27.91	623945.6948	598902.1312
PT	76+34.95	623450.2663	600065.4310
PC	78+67.46	623276.0186	600219.3744
PT	88+29.49	622919.7708	601077.7389


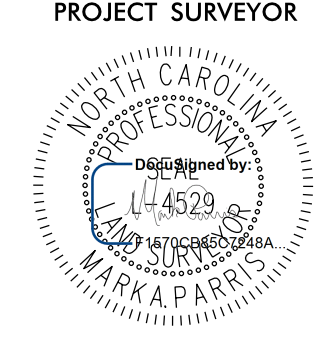
REVISIONS

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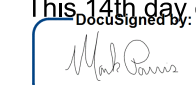
NOTES:

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.	SHEET NO.
A-0009CC	RW03E-1
Location and Surveys	
	
	
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	

I, Mark A. Parris, 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 11/15/21 to 1/14/22, and all coordinates are based on NAD83/2011; That this survey was performed to meet the requirements of 21NCAC 56.1600 as applicable.

This 14th day of January, 2022.

 Professional Land Surveyor L-4529

ROW MARKER IRON PIN AND CAP-E				
ALIGN	STATION	OFFSET	NORTH	EAST
L	419+90.00	-49.84	621214.4451	596065.0410
L	421+88.00	-52.90	621353.2113	596180.0836
L	428+92.00	-48.30	621966.0105	596522.0978
L	430+22.00	-60.00	622085.6103	596574.3734
L	430+49.81	-60.00	622109.9926	596597.7507
L	436+46.29	-60.00	622583.7151	596510.8410
L	438+60.52	-50.00	622736.6279	596360.4584
L	441+57.53	-50.00	622999.1780	596182.6707
L	454+16.49	-50.00	624174.4044	595731.2183
L	455+64.81	-50.00	624329.9607	595692.6296
L	455+69.20	50.00	624345.8866	595791.4502
L	459+32.23	50.00	624667.6995	595853.4369
L	466+50.75	50.00	625300.7189	596193.3747
L	468+60.00	-50.00	625532.3756	596204.2698
L	468+60.00	-41.39	625528.3012	596211.8570
L	469+39.75	-50.00	625602.6334	596241.9990
L	472+08.89	-50.00	625840.3963	596319.6699

ROW MARKER PERMANENT EASEMENT-E				
ALIGN	STATION	OFFSET	NORTH	EAST
L	414+65.00	-54.00	621078.8253	595600.9526
L	414+65.00	-47.18	621072.0305	595601.5355
L	416+00.00	84.00	620952.8687	595747.2534
L	416+00.00	51.95	620984.8024	595744.5140
L	416+44.00	84.00	620957.2849	595793.9475
L	416+44.00	50.59	620990.4584	595789.9420
L	416+50.00	-54.00	621094.9714	595782.8223
L	416+50.00	-49.37	621090.3852	595783.4226
L	417+63.00	-49.00	621113.0665	595884.4924
L	418+86.00	-105.00	621207.6445	595959.4100
L	418+89.00	-57.00	621167.4359	595985.7537
L	419+00.00	51.00	621080.2837	596050.4615
L	419+00.00	96.00	621041.8449	596073.8611
L	419+38.00	99.00	621063.4836	596112.4815
L	419+42.00	68.00	621091.4537	596098.3597
L	419+52.00	-112.00	621243.0426	596000.8335
L	419+75.00	86.00	621099.4309	596138.9333
L	419+93.00	89.00	621110.1890	596156.7832
L	420+20.00	-118.00	621282.6385	596039.3841
L	422+20.00	-110.50	621406.7749	596144.3306
L	423+82.00	79.00	621457.6519	596388.3916
L	423+82.00	107.00	621444.1836	596412.9397
L	424+31.00	71.00	621504.4590	596404.9473
L	424+31.00	108.00	621486.6617	596437.3858
L	425+90.00	65.00	621646.7429	596476.1673
L	426+23.00	63.00	621676.6366	596490.2872
L	427+52.00	59.00	621791.6570	596548.8304
L	428+90.00	-110.50	621994.1747	596466.6061
L	429+25.00	51.85	621946.7696	596625.7734
L	430+22.00	-122.00	622115.4328	596520.0170
L	430+49.81	-122.00	622139.8151	596533.3943
L	431+31.00	52.15	622138.9666	596722.2708
L	431+31.00	81.00	622129.8534	596749.6437
L	431+50.00	85.00	622150.1664	596760.1198
L	432+02.00	54.67	622215.3858	596743.7655
L	433+62.00	71.00	622396.9783	596757.2629
L	433+62.00	56.82	622394.2729	596743.3422
L	433+86.00	71.00	622424.1004	596751.2373
L	433+86.00	56.67	622420.6203	596737.3350
L	436+46.29	-122.00	622538.2279	596468.7113
L	436+80.00	-67.00	622601.4873	596481.3509
L	436+80.00	-122.00	622561.1357	596443.9778
L	436+80.00	-58.43	622607.7775	596487.1768
L	437+60.00	-60.00	622660.9839	596427.4143
L	437+60.00	-54.69	622664.8780	596431.0210
L	437+65.00	53.32	622747.5198	596500.7477
L	437+76.00	90.00	622781.9058	596517.6024
L	437+97.00	53.71	622769.5509	596477.5361
L	438+05.00	82.00	622795.7423	596490.8900
L	438+80.00	-50.00	622751.1083	596345.2863
L	438+80.00	-58.50	622745.0480	596339.3262
L	440+68.00	57.28	622963.6859	596317.2392
L	440+84.00	105.00	622998.5764	596352.6768
L	441+16.00	57.07	623002.6610	596297.3236
L	441+25.00	98.00	623026.7166	596331.3768
L	441+57.53	-58.50	622996.1300	596174.7360
L	442+65.00	-50.00	623099.4962	596144.1344
L	442+65.00	-58.50	623096.4482	596136.1997
L	443+95.00	55.11	623258.5431	596195.6393
L	444+55.00	108.00	623333.5178	596223.4938
L	444+77.00	108.00	623354.0547	596215.6047
L	444+77.00	55.10	623335.0860	596166.2253
L	444+82.00	-50.00	623302.0644	596066.3197
L	444+82.00	-57.00	623299.5543	596059.7852
L	446+36.00	-55.00	623444.0295	596006.4289
L	446+36.00	-50.00	623445.8225	596011.0963
L	447+50.00	-77.00	623542.5588	595945.0124
L	448+06.00	-78.00	623594.4759	595923.9977

ROW MARKER IRON PIN AND CAP-E				
ALIGN	STATION	OFFSET	NORTH	EAST
Y2	12+60.00	-50.00	626871.5316	596132.1286
Y2	12+60.00	-60.00	626877.6330	596140.0515
Y2	13+94.94	-60.00	626781.1451	596223.8486
Y2	16+71.33	-60.00	626583.4910	596417.0463
Y2	18+31.00	53.04	626388.5954	596414.5686
Y2	19+72.33	-60.00	626279.6998	596558.5067
Y2	21+36.55	-60.00	626116.2602	596574.5072
Y2	21+45.78	-71.27	626108.1747	596586.6259
Y2	22+31.00	83.32	626008.2947	596441.0678
Y2	26+10.00	149.78	625646.3754	596397.9311
Y2	26+87.00	79.40	625571.0722	596462.1712
Y2	30+76.12	50.00	625186.0226	596427.8561
Y2	44+08.62	50.00	624000.3950	596985.9328

ROW MARKER PERMANENT EASEMENT-E				
ALIGN	STATION	OFFSET	NORTH	EAST
L	448+25.00	-66.50	623616.3361	595927.9196
L	448+25.00	-50.00	623622.2529	595943.3222
L	448+61.00	140.00	623723.9913	596107.7767
L	448+61.00	55.06	623693.5308	596028.4816
L	449+20.00	55.05	623748.6044	596007.3179
L	449+20.00	140.00	623779.0675	596086.6197
L	452+40.00	-66.50	624003.7361	595779.1034
L	452+40.00	-50.00	624009.6528	595794.5061
L	452+69.00	-75.00	624027.7593	595760.7695
L	452+90.00	-75.00	624047.3627	595753.2391
L	453+10.00	-50.00	624074.9974	595769.4046
L	453+10.00	-58.50	624071.9494	595761.4699
L	453+25.00	-58.50	624085.9518	595756.0910
L	453+33.00	55.05	624134.1391	595859.2233
L	453+38.00	170.00	624180.0257	595964.7326
L	453+75.00	170.00	624214.5650	595951.4647
L	453+75.00	55.46	624173.4926	595844.5444
L	454+16.49	-58.50	624171.3564	595723.2836
L	456+62.84	-58.50	624436.3370	595680.1215
L	457+90.00	282.00	624487.9371	596030.3333
L	458+03.00	50.00	624558.1236	595809.0191
L	458+11.00	-110.00	624611.0315	595657.7902
L	458+11.00	-68.51	624599.1374	595697.5379
L	458+39.00	-69.98	624629.2922	595705.7888
L	458+39.00	-110.00	624642.5410	595668.0259
L	458+50.00	50.00	624599.0553	595822.4288
L	458+67.00	274.00	624529.6476	596035.7419
L	459+60.00	50.00	624692.1609	595866.5729
L	460+27.00	139.00	624709.0815	595976.6806
L	464+23.00	137.00	625058.9055	596162.2694
L	465+53.00	50.00	625214.5964	596147.1261
L	466+39.00	50.00	625290.3628	596187.8134
L	467+02.00	70.00	625336.4039	596235.2393
L	467+10.00	52.46	625351.7489	596223.5738
L	467+26.00	-107.00	625441.2882	596090.6561
L	467+26.00	-46.96	625412.8820	596143.5530
L	467+56.00	-115.00	625471.5032	596097.8013
L	467+72.00	55.04	625405.1518	596255.1772
L	467+87.00	-55.00	625470.4278	596165.3279
L	467+95.00	140.00	625385.2198	596340.9086
L	468+28.00	133.00	625417.6047	596350.3542
L	468+28.00	57.37	625453.3867	596283.7221
L	468+60.00	-75.00	625544.2033	596182.2447
L	469+39.75	-72.12	625613.1005	596222.5074
L	469+57.00	63.00	625565.7297	596350.2057
L	469+57.00	78.00	625558.9358	596363.5766
L	469+87.00	78.00	625588.7143	596377.9751
L	469+87.00	65.74	625593.8315	596366.8361
L	471+93.00	-50.00	625825.7129	596317.4635
L	471+93.00	-63.73	625827.8955	596303.9034

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 11/15/21 TO 1/14/22 .

REVISIONS

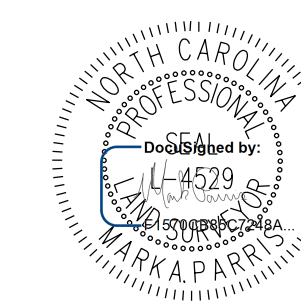
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 pushman

RIGHT OF WAY CONTROL SHEET

Location and Surveys



PROJECT SURVEYOR



DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

ROW MARKER PERMANENT EASEMENT - E

ALIGN	STATION	OFFSET	NORTH	EAST
Y2	13+28.00	50.03	626755.5880	596097.8193
Y2	13+38.00	70.00	626734.5091	596089.7443
Y2	13+73.00	50.38	626720.5185	596129.0649
Y2	13+73.00	70.00	626707.0745	596114.7736
Y2	15+07.00	-128.00	626748.5370	596350.8101
Y2	15+32.00	-155.00	626749.5319	596387.0933
Y2	16+07.00	-60.00	626629.4943	596372.0802
Y2	16+81.00	-60.00	626575.5583	596424.6333
Y2	19+50.00	-68.00	626306.0248	596563.3190
Y2	19+50.00	-60.00	626304.8470	596555.4062
Y2	19+85.00	-68.00	626267.8691	596567.7032
Y2	19+85.00	-60.00	626267.0896	596559.7413
Y2	22+25.00	-71.63	626029.3647	596594.7006
Y2	22+82.00	-71.83	625972.6556	596600.4553
Y2	23+20.00	-138.00	625941.2832	596670.0100
Y2	23+35.00	-71.27	625919.8528	596605.0580
Y2	23+38.00	-127.00	625922.2971	596660.8161
Y2	23+47.00	-102.00	625910.9041	596636.8120
Y2	24+95.00	-161.00	625760.5719	596708.8293
Y2	25+54.00	-176.00	625693.5937	596725.1108
Y2	26+05.00	-185.00	625634.7077	596732.5408
Y2	26+61.00	-157.00	625572.8889	596700.0646
Y2	27+58.47	-110.00	625472.6407	596639.0878
Y2	27+59.00	73.82	625503.0675	596457.7989
Y2	27+65.00	-77.24	625471.7168	596605.6945
Y2	27+95.00	88.00	625469.9686	596437.7632
Y2	28+28.00	68.54	625434.1622	596451.3935
Y2	32+25.00	50.00	625031.2230	596413.3827
Y2	32+25.00	66.00	625031.6416	596397.3882
Y2	32+63.00	67.00	624991.3776	596396.0241
Y2	33+50.00	50.00	624900.7207	596417.3179
Y2	35+22.00	-112.88	624762.4997	596604.7802
Y2	35+58.00	-130.00	624735.8589	596629.5007
Y2	35+69.00	50.00	624676.1300	596459.3710
Y2	35+73.00	-113.33	624718.4080	596617.1778
Y2	36+10.00	69.00	624629.2383	596454.0917
Y2	36+42.00	50.00	624603.6471	596483.1204
Y2	38+88.00	76.00	624359.7419	596575.2189
Y2	38+88.00	50.00	624373.7972	596597.0923
Y2	40+07.00	102.00	624240.3447	596629.3062
Y2	40+18.00	50.00	624264.0602	596677.0518
Y2	43+67.00	80.00	623997.8173	596932.6994
Y2	43+67.00	50.00	624023.1046	596948.8411
Y2	43+98.00	80.00	623980.3289	596960.9589
Y2	43+98.00	50.00	624006.0571	596976.3881
Y2	44+08.00	-100.14	624130.1710	597061.4279
Y2	44+59.00	-209.00	624203.8905	597152.7360
Y2	44+65.00	-97.91	624103.0869	597105.7672
Y2	44+93.00	-229.00	624209.3625	597186.1239
Y2	45+14.00	-215.00	624189.4935	597195.2583
Y2	46+77.00	61.83	623877.5985	597239.1913
Y2	47+31.00	87.00	623838.2449	597288.2221
Y2	48+00.00	93.00	623816.8952	597359.9349
Y2	48+02.00	-81.88	623988.6863	597392.7298
Y2	48+50.00	97.00	623804.5379	597412.9351
Y2	49+16.00	94.00	623800.1330	597484.5303
Y2	49+60.00	95.00	623796.5714	597532.1506
Y2	50+27.00	81.22	623810.0717	597604.5087
Y2	51+34.00	-158.00	624053.4835	597702.6436
Y2	52+76.00	-64.29	623965.8067	597848.4490
Y2	53+03.00	-157.00	624059.5722	597871.5368
Y2	53+12.00	-144.00	624046.9611	597881.0741
Y2	55+40.00	-94.00	624006.5673	598110.9705
Y2	55+40.00	-64.58	623977.1688	598112.2046
Y2	55+66.00	-64.60	623978.2878	598138.1805
Y2	55+66.00	-94.00	624007.6578	598136.9476
Y2	58+90.00	-64.96	623992.2322	598461.8805
Y2	58+90.00	-115.00	624042.2277	598459.7818
Y2	59+21.00	85.01	623843.6983	598499.1427
Y2	59+44.00	107.00	623822.6878	598523.0449
Y2	59+61.00	107.00	623823.4008	598540.0300

ROW MARKER PERMANENT EASEMENT - E

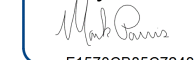
ALIGN	STATION	OFFSET	NORTH	EAST
Y2	59+76.00	84.95	623846.0654	598554.0918
Y2	59+84.00	-121.00	624052.1648	598553.4475
Y2	60+12.00	-65.09	623997.4829	598583.7675
Y2	60+23.00	-93.00	624025.8251	598593.5875
Y2	66+00.00	66.84	623865.7951	599163.9483
Y2	66+09.00	91.00	623840.6546	599168.8549
Y2	67+77.00	-95.77	623988.6903	599371.6802
Y2	68+25.00	-115.00	623992.9639	599426.4298
Y2	68+42.00	-96.96	623970.3230	599438.4663
Y2	70+82.00	54.61	623738.2416	599606.0967
Y2	70+82.00	67.00	623727.2012	599600.4742
Y2	72+80.00	63.02	623633.6495	599764.8604
Y2	75+85.00	-107.00	623560.6548	600109.4681
Y2	75+85.00	-65.28	623531.9853	600079.1578
Y2	76+14.00	-107.00	623537.8434	600130.6222
Y2	76+79.00	-74.00	623466.2460	600150.0563
Y2	77+90.00	-64.00	623376.4366	600216.0514
Y2	77+90.00	-90.50	623393.9848	600235.9142
Y2	78+67.46	-90.50	623335.9388	600287.1977
Y2	86+76.00	84.00	622837.9112	600917.3112
Y2	86+76.00	67.53	622854.3229	600918.6998
Y2	87+02.00	66.94	622852.9177	600946.3188
Y2	87+02.00	83.00	622836.8868	600945.3577
Y2	88+29.49	-81.84	623001.4629	601072.7992
Y2	88+29.49	-84.50	623004.1182	601072.6386

REVISIONS

07-OCT-2022 10:55 AM V:\NC\Survey\Property Data\09_stuff\A0009CC_Revise\dgn\A0009CC_1s_RW03E-2.dgn

I, Mark A. Parris, 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 11/15/21 to 1/14/22, and all coordinates are based on NAD83/2011; That this survey was performed to meet the requirements of 21NCAC 56.1600 as applicable.

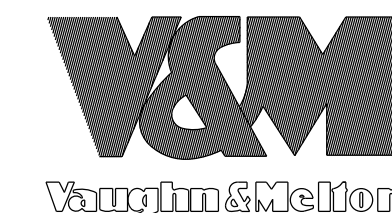
This 14th day of January, 2022.


 F1570CB8C7248A
 Professional Land Surveyor L-4529

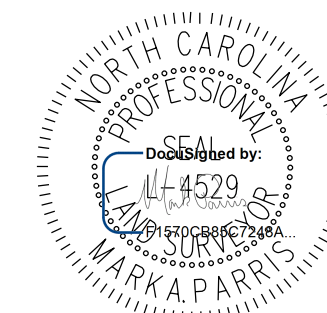
NOTES:

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 11/15/21 TO 1/14/22 .

Location and Surveys



PROJECT SURVEYOR



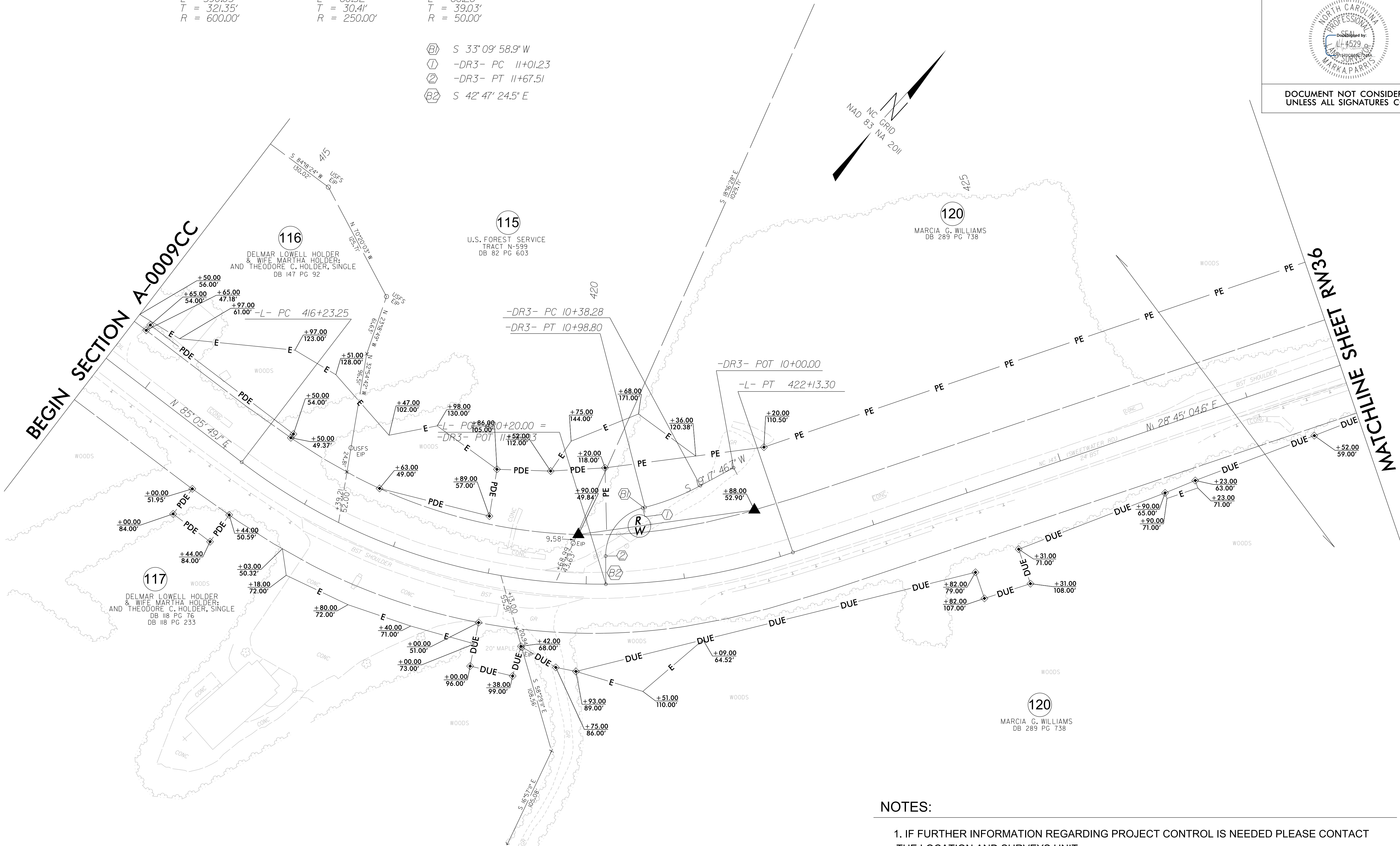
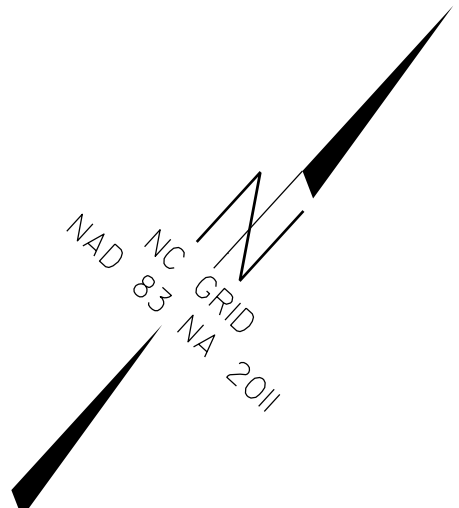
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

I, Mark A. Parris, 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 11/15/21 to 1/14/22, and all coordinates are based on NAD83/2011; That this survey was performed to meet the requirements of 21NCAC 56.1600 as applicable.

This is a true and correct copy of January, 2022.
Professional Land Surveyor L-4529

-L- CURVE DATA	-DR3- CURVE DATA	
PI Sta 419+44.60	PI Sta 10+68.68	PI Sta 11+40.26
Δ = 56° 20' 44.5" (LT)	Δ = 13° 52' 12.2" (RT)	Δ = 75° 57' 23.4" (LT)
D = 9° 32' 57.5"	D = 22° 55' 05.9"	D = 114° 35' 29.6"
L = 590.05'	L = 60.52'	L = 66.28'
T = 321.35'	T = 30.41'	T = 39.03'
R = 600.00'	R = 250.00'	R = 50.00'

- ⓑ S 33° 09' 58.9" W
- ⓓ -DR3- PC 11+01.23
- ⓔ -DR3- PT 11+67.51
- ⓑ S 42° 47' 24.5" E



REVISIONS

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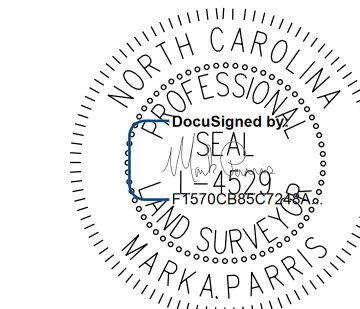
NOTES:

- 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.
- RIGHT OF WAY MONUMENTATION ESTABLISHED 11/15/21 TO 1/14/22 .

Location and Surveys



PROJECT SURVEYOR



DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

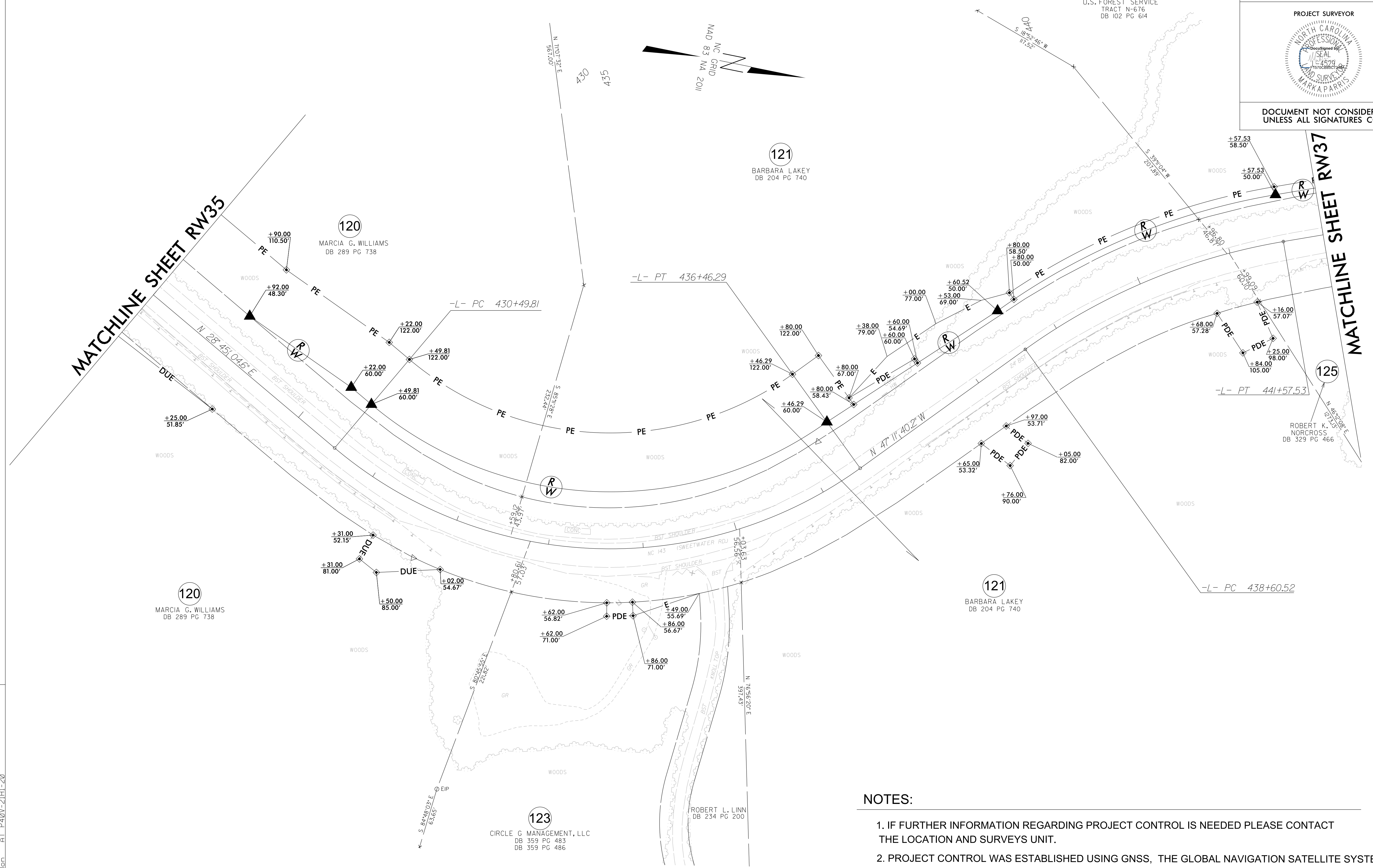
I, Mark A. Parris, certify that the right of way and permanent easement monumentation for this project shown herein was completed under my direct and responsible charge from an actual survey made under my supervision; that all horizontal closures had a minimum ratio of precision of 1:10,000 (Class A). Field work was performed from 11/15/21 to 1/14/22, and all coordinates are based on NAD83/2011. That this survey was performed to meet the requirements of 21NCAC 56.1600 as applicable.

This 14th day of January, 2022.

DocuSigned by:
Professional Land Surveyor L-4529

-L- CURVE DATA

PI Sta 434+01.05	PI Sta 440+11.67
$\Delta = 75^{\circ} 56' 44.8''$ (LT)	$\Delta = 26^{\circ} 10' 50.5''$ (RT)
D = 12' 43' 56.6"	D = 8' 48' 53.0"
L = 596.48'	L = 297.01'
T = 351.24'	T = 151.14'
R = 450.00'	R = 650.00'



REVISIONS

20 JUN 2022 10:35
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 jsgordon
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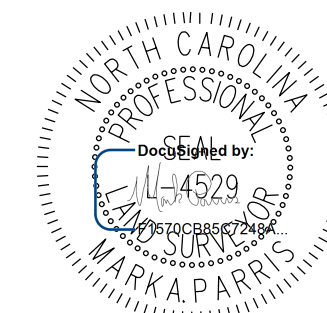
NOTES:

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 11/15/21 TO 1/14/22.

Location and Surveys



PROJECT SURVEYOR



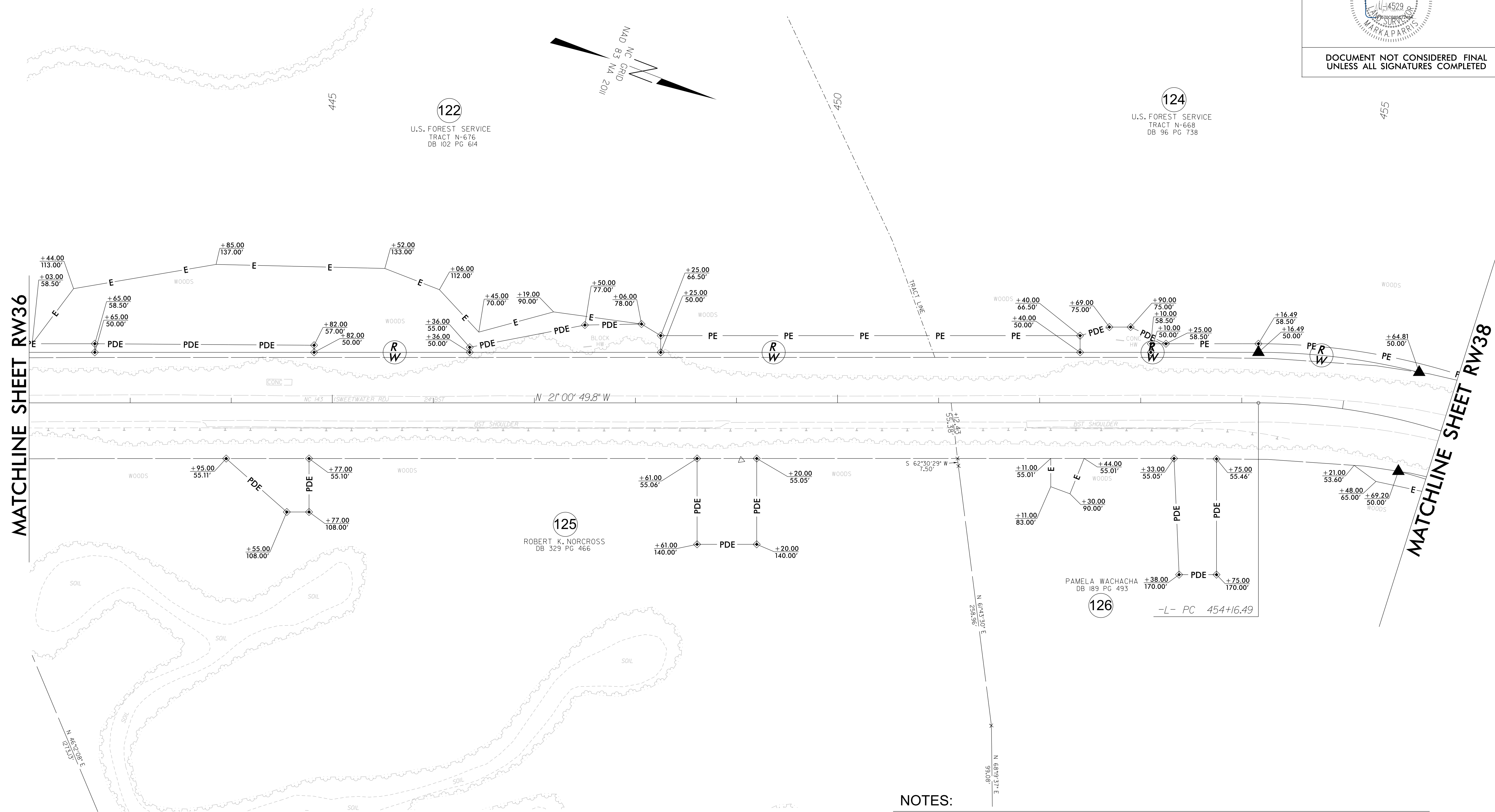
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

I, Mark A. Paris, 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 11/15/21 to 1/14/22, and all coordinates are based on NAD83/2011. That this survey was performed to meet the requirements of 21NCAC 58.1600 as applicable.

This 14th day of January, 2022.

 Professional Land Surveyor L-4529

-L- CURVE DATA
 PI Sta 456+91.51
 $\Delta = 49^{\circ}15'00.2''$ (RT)
 $D = 9^{\circ}32'57.5''$
 $L = 515.75'$
 $T = 275.02'$
 $R = 600.00'$



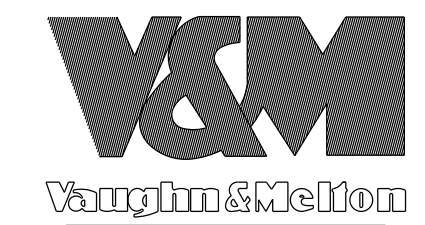
REVISIONS

20-JUN-2022 10:35
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 Jsgordon

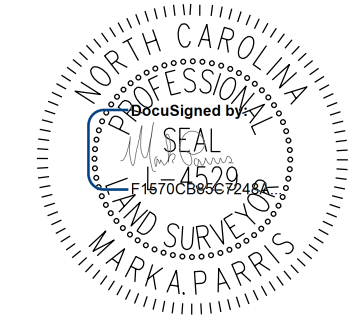
NOTES:

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 11/15/21 TO 1/14/22.

Location and Surveys



PROJECT SURVEYOR



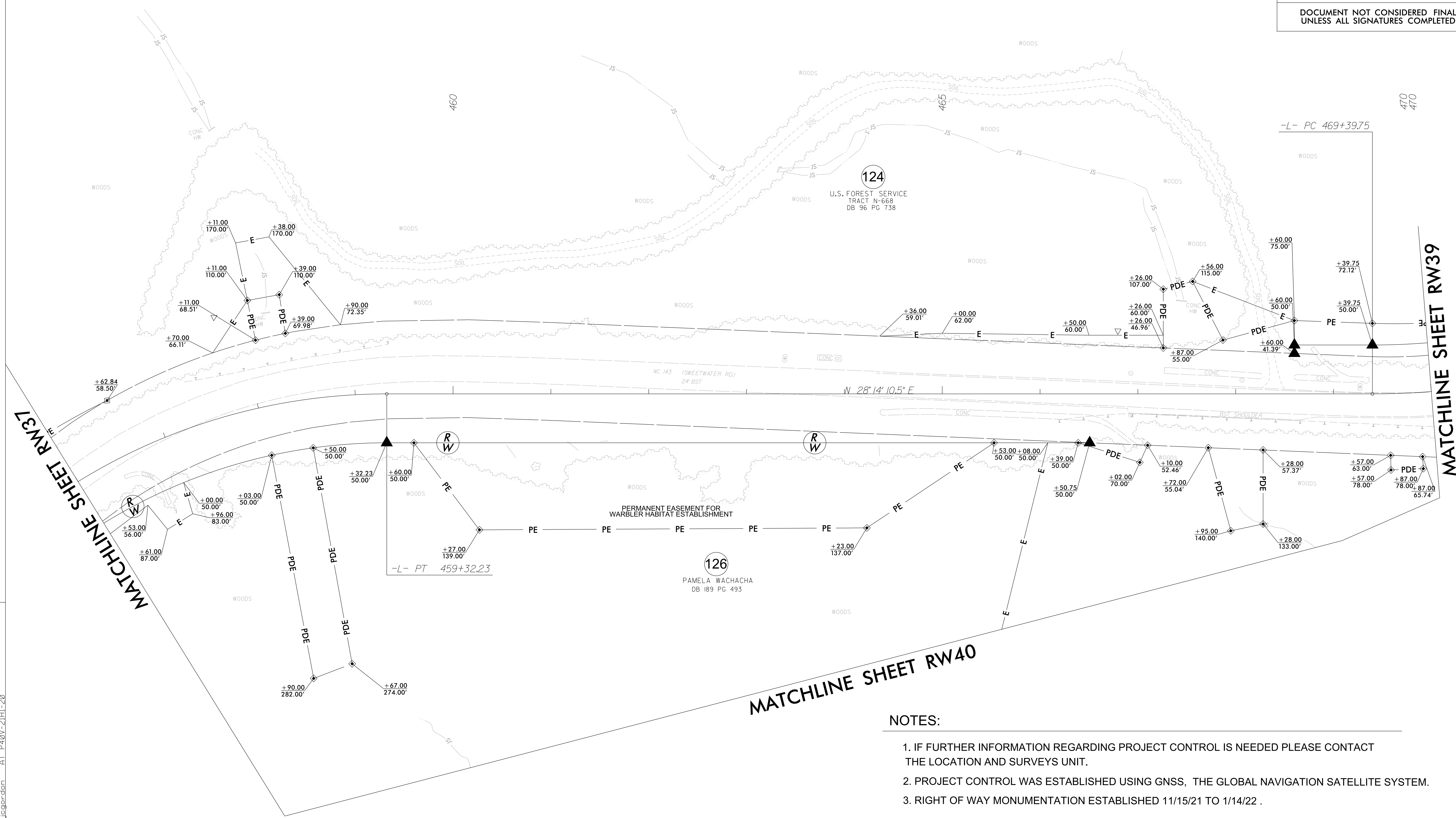
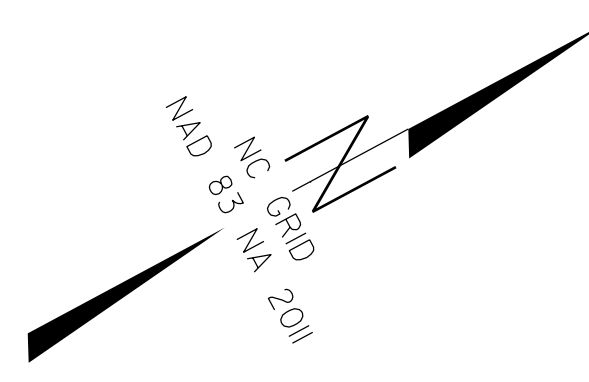
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

I, Mark A. Parris, 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 11/15/21 to 1/14/22, and all coordinates are based on NAD83/2011; That this survey was performed to meet the requirements of 21NCAC 56.1600 as applicable.

This 14th day of January, 2022.
DocuSigned by:
Professional Land Surveyor L-4529

-L- CURVE DATA

PI Sta 456+91.51	PI Sta 470+84.26
$\Delta = 49^{\circ}15'00.2''$ (RT)	$\Delta = 21^{\circ}31'55.6''$ (LT)
D = 9' 32" 57.5"	D = 7' 32" 20.1"
L = 515.75'	L = 285.61'
T = 275.02'	T = 144.51'
R = 600.00'	R = 760.00'



REVISIONS

C:\N:\2022\10\31\11-21-A-0009CC-RW and Control Sheets\A-0009CC\A0009CC-1s-RW38.dgn
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MATCHLINE SHEET RW37

MATCHLINE SHEET RW39

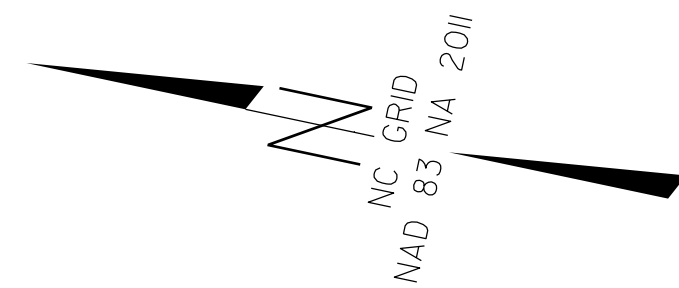
MATCHLINE SHEET RW40

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 11/15/21 TO 1/14/22 .

-Y2- CURVE DATA

PI Sta 25+91.41	PI Sta 44+39.36
$\Delta = 15^{\circ}17'06.5"$ (RT)	$\Delta = 102^{\circ}05'50.9"$ (LT)
D = 4' 46' 28.7"	D = 5' 09' 42.4"
L = 320.13'	L = 1,977.95'
T = 161.02'	T = 1,373.12'
R = 1,200.00'	R = 1,110.00'

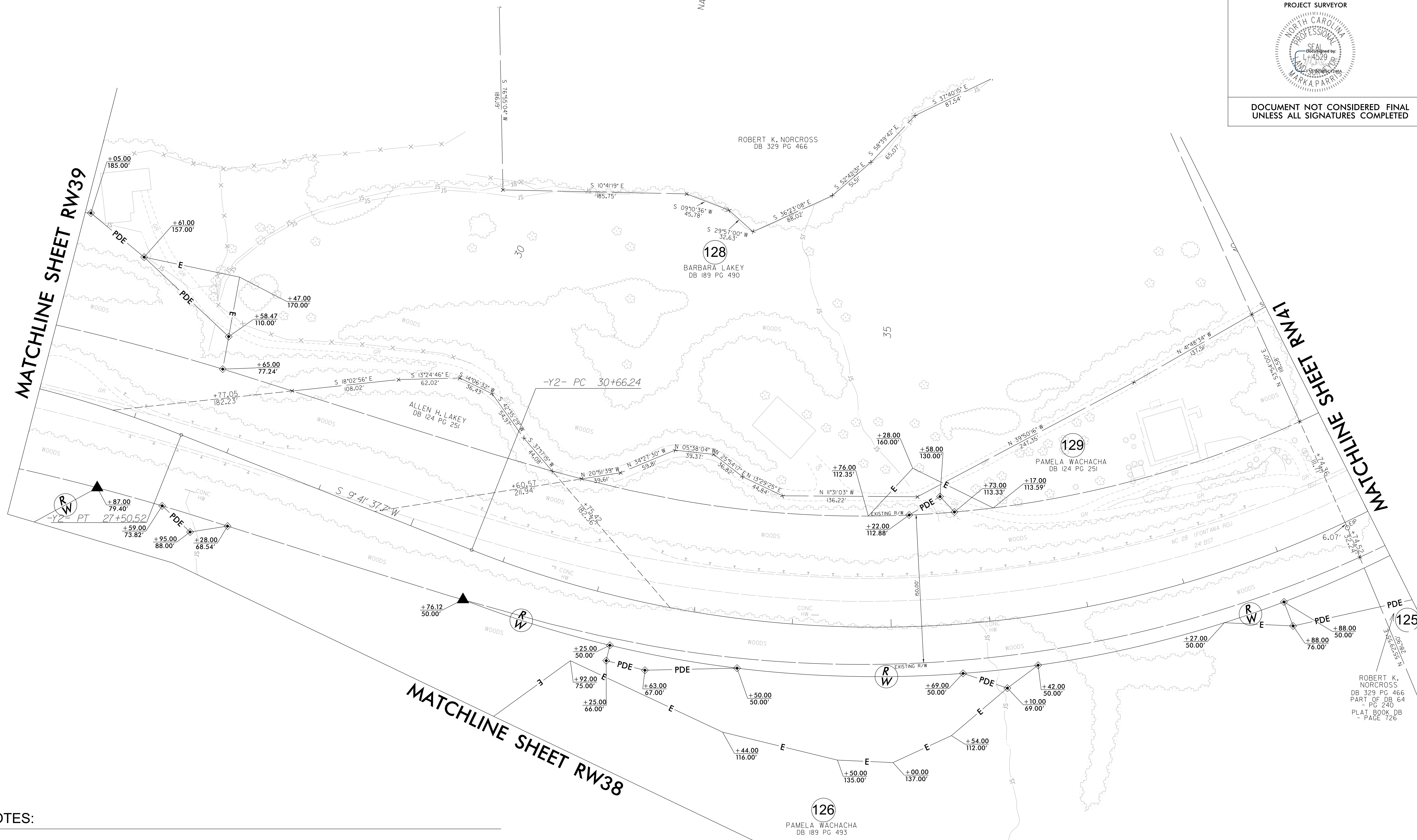


I, Mark A. Parris, certify that the right of way and permanent easement monumentation for this project shown herein was completed under my direct and responsible charge from an actual survey made under my supervision; that all horizontal closures had a minimum ratio of precision of 1:10,000 (Class A). Field work was performed from 11/15/21 to 1/14/22, and all coordinates are based on NAD83/2011. That this survey was performed to meet the requirements of 21NCAC 56.1600 as applicable.

This 14th day of January, 2022.

Mark A. Parris
Professional Land Surveyor L-4529

PROJECT REFERENCE NO. A-0009CC	SHEET NO. RW40
Location and Surveys	
PROJECT SURVEYOR	
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	



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 11/15/21 TO 1/14/22 .

REVISIONS

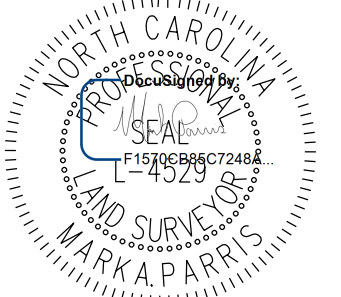
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 jsgordon

ROBERT K. NORCROSS
DB 329 PG 466
PART OF DB 64
PG 240
PLAT BOOK DB
- PAGE 726

Location and Surveys



PROJECT SURVEYOR



DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

I, Mark A. Parris, 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 11/15/21 to 1/14/22, and all coordinates are based on NAD83/2011; That this survey was performed to meet the requirements of 21NCAC 56.1600 as applicable.

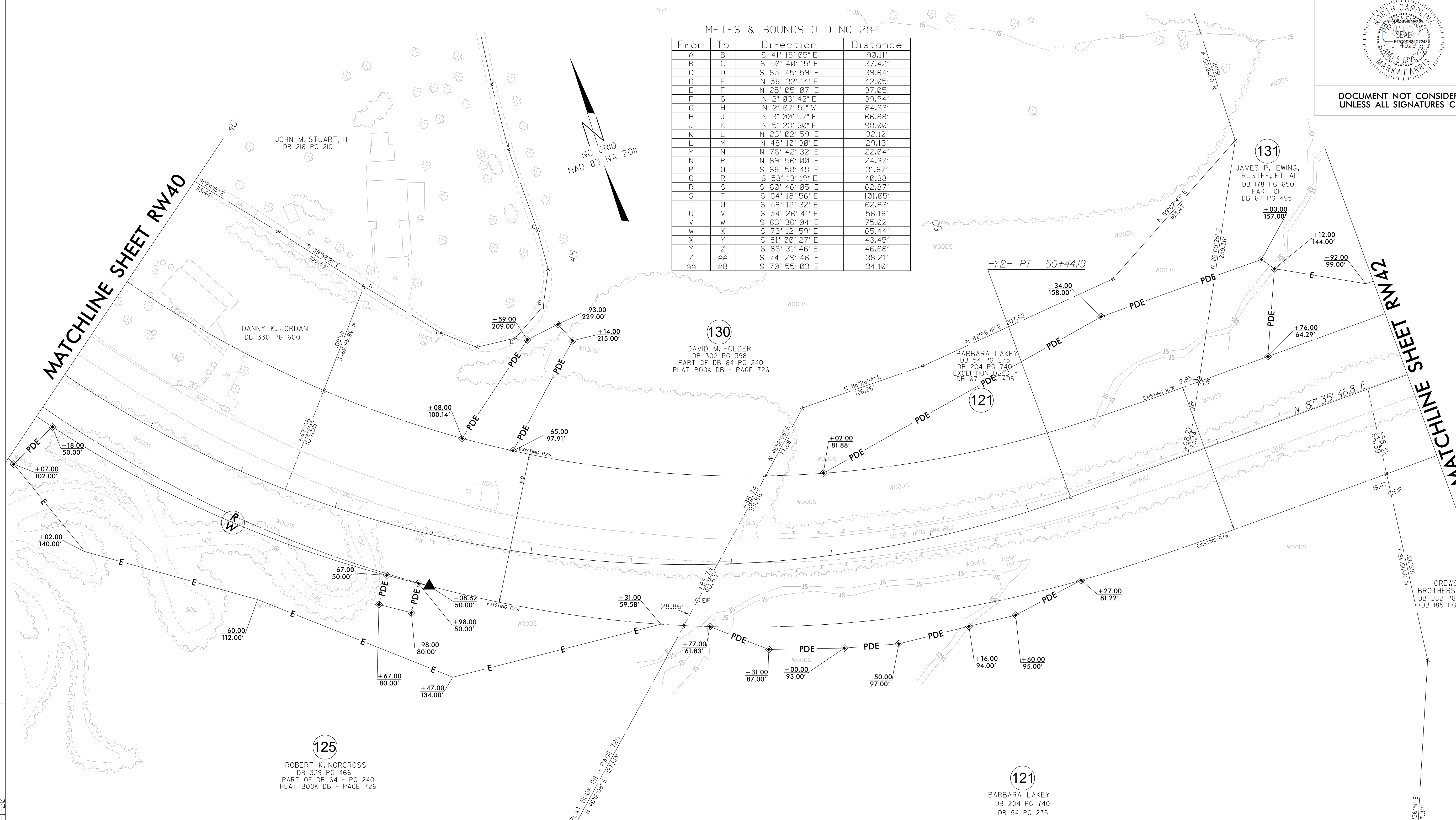
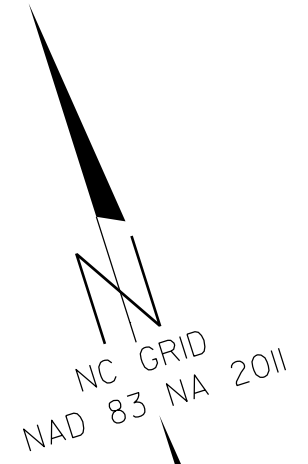
This 14th day of January, 2022.
Professional Land Surveyor L-4529

-Y2- CURVE DATA

PI Sta 44+39.36
Δ = 102° 05' 50.9" (LT)
D = 5° 09' 42.4"
L = 1,977.95'
T = 1,373.12'
R = 1,110.00'

METES & BOUNDS OLD NC 28

From	To	Direction	Distance
A	B	S 41° 15' 05" E	90.11'
B	C	S 50° 40' 15" E	37.42'
C	D	S 85° 45' 59" E	39.64'
D	E	N 58° 32' 14" E	42.05'
E	F	N 25° 05' 07" E	37.05'
F	G	N 2° 03' 42" E	39.94'
G	H	N 2° 07' 51" W	84.63'
H	J	N 3° 00' 57" E	66.88'
J	K	N 5° 23' 30" E	98.00'
K	L	N 23° 02' 59" E	32.12'
L	M	N 48° 10' 30" E	29.13'
M	N	N 76° 42' 32" E	22.04'
N	P	N 89° 56' 00" E	24.37'
P	Q	S 68° 58' 48" E	31.67'
Q	R	S 58° 13' 19" E	40.38'
R	S	S 60° 46' 05" E	62.87'
S	T	S 64° 18' 56" E	101.05'
T	U	S 58° 12' 32" E	62.93'
U	V	S 54° 26' 41" E	56.18'
V	W	S 63° 36' 04" E	75.02'
W	X	S 73° 12' 59" E	65.44'
X	Y	S 81° 00' 27" E	43.45'
Y	Z	S 86° 31' 46" E	46.68'
Z	AA	S 74° 29' 46" E	38.21'
AA	AB	S 70° 55' 03" E	34.10'



REVISIONS

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jcjordan
A-0009CC-112-21-A-0009CC-1s-RW41-20

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 11/15/21 TO 1/14/22 .

-Y2- CURVE DATA

PI Sta 70+28.18
Δ = 50° 56' 38.0" (RT)
D = 3' 53' 51.6"
L = 1,307.03'
T = 700.27'
R = 1,470.00'

-DR4- CURVE DATA

PI Sta 10+77.95
Δ = 24° 42' 06.2" (LT)
D = 57' 17" 44.8"
L = 43.1'
T = 21.90'
R = 100.00'

PI Sta 11+22.09
Δ = 10° 28' 29.8" (RT)
D = 22' 55" 05.9"
L = 45.7'
T = 22.92'
R = 250.00'

① -DR4- PC 10+56.06
② -DR4- PRC 10+99.17
③ -DR4- PT 11+44.88

I, Mark A. Parris, 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 11/15/21 to 1/14/22, and all coordinates are based on NAD83/2011. That this survey was performed to meet the requirements of 21NCAC 56.1600 as applicable.

This 14th day of January, 2022.
Professional Land Surveyor L-4529

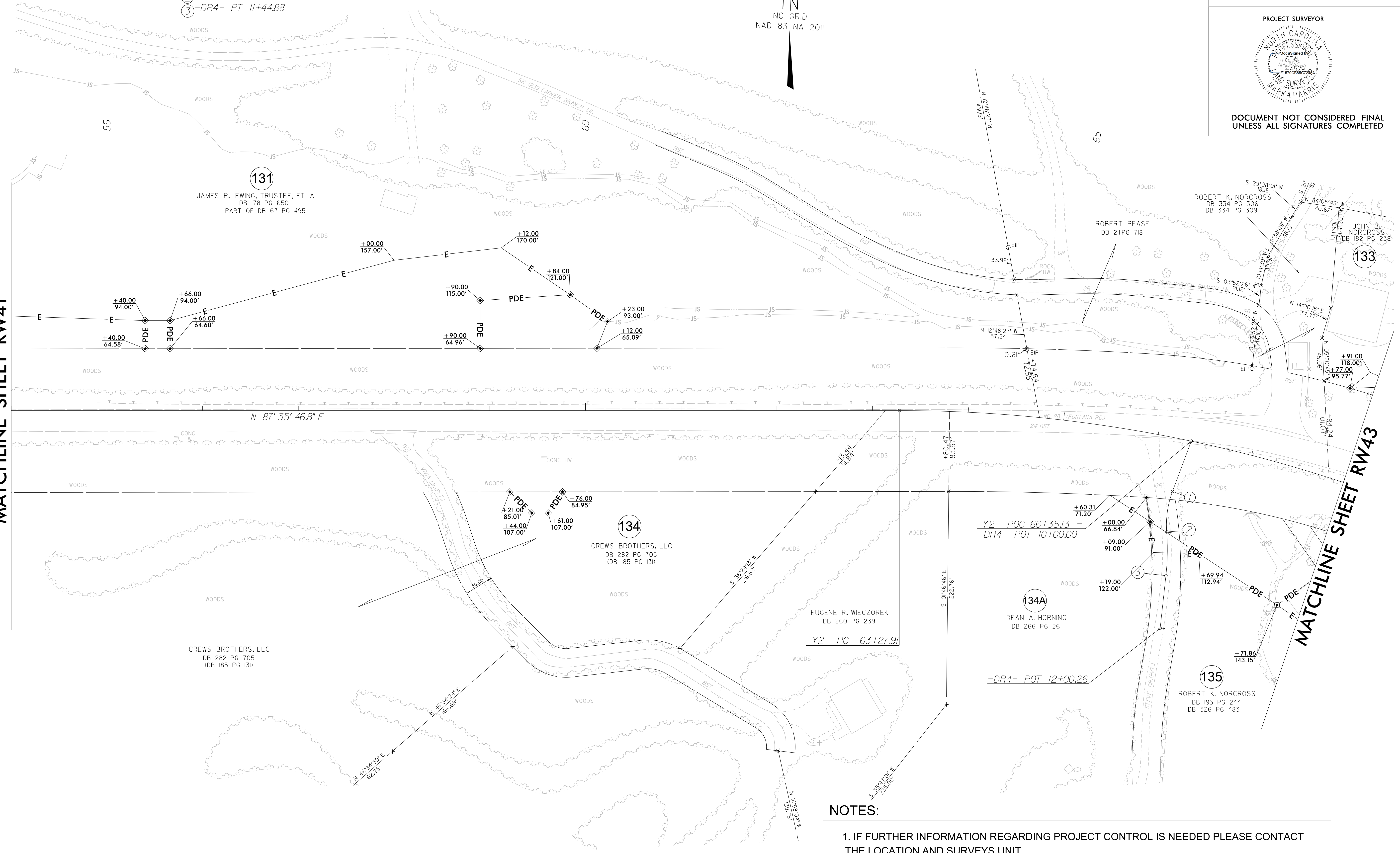
PROJECT REFERENCE NO.	SHEET NO.
A-0009CC	RW42
Location and Surveys	
PROJECT SURVEYOR	
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	

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NAD 83 NA 2011

REVISIONS

MATCHLINE SHEET RW41

MATCHLINE SHEET RW43



NOTES:

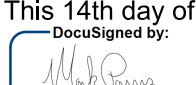
1. IF FURTHER INFORMATION REGARDING PROJECT CONTROL IS NEEDED PLEASE CONTACT THE LOCATION AND SURVEYS UNIT.
2. PROJECT CONTROL WAS ESTABLISHED USING GNSS, THE GLOBAL NAVIGATION SATELLITE SYSTEM.
3. RIGHT OF WAY MONUMENTATION ESTABLISHED 11/15/21 TO 1/14/22 .


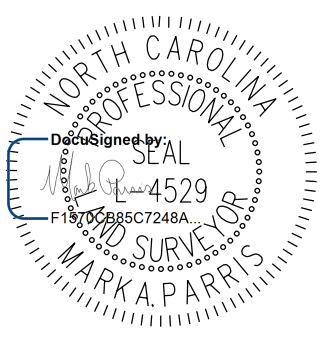
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 Jsgordon
 11/15/21

-Y2- CURVE DATA

PI Sta 70+28.18	PI Sta 83+84.46
$\Delta = 50^{\circ}56'38.0''$ (RT)	$\Delta = 52^{\circ}00'01.9''$ (LT)
$D = 3^{\circ}53'51.6''$	$D = 5^{\circ}24'18.9''$
$L = 1,307.03'$	$L = 962.04'$
$T = 700.27'$	$T = 517.00'$
$R = 1,470.00'$	$R = 1,060.00'$

I, Mark A. Parris, 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 11/15/21 to 1/14/22, and all coordinates are based on NAD83/2011; that this survey was performed to meet the requirements of 21NCAC 56.1800 as applicable.

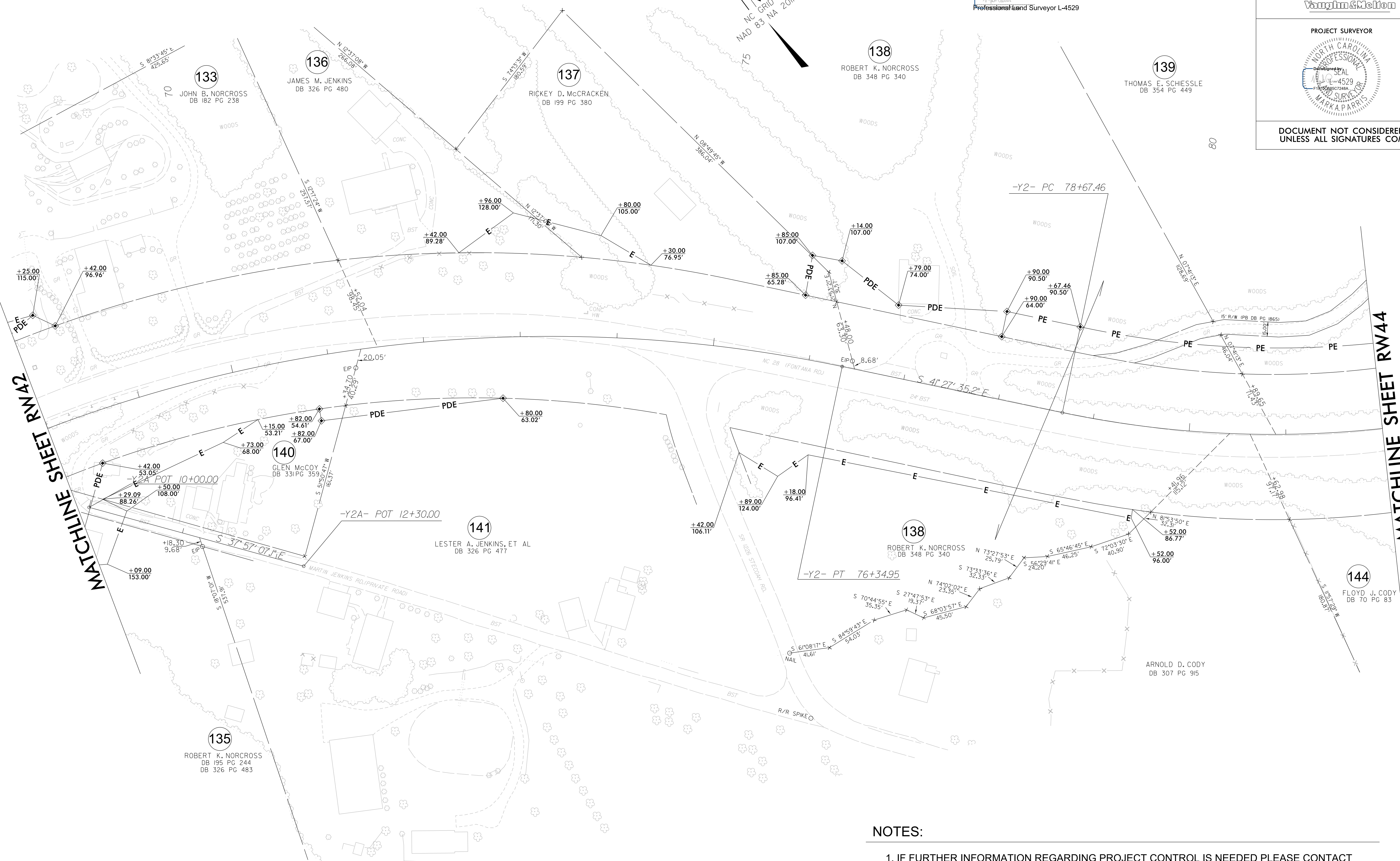
This 14th day of January, 2022.
 Documented by:

 Professional Land Surveyor L-4529

PROJECT REFERENCE NO. A-0009CC	SHEET NO. RW43
Location and Surveys	
	
PROJECT SURVEYOR	
	
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	

REVISIONS

MATCHLINE SHEET RW42

MATCHLINE SHEET RW44



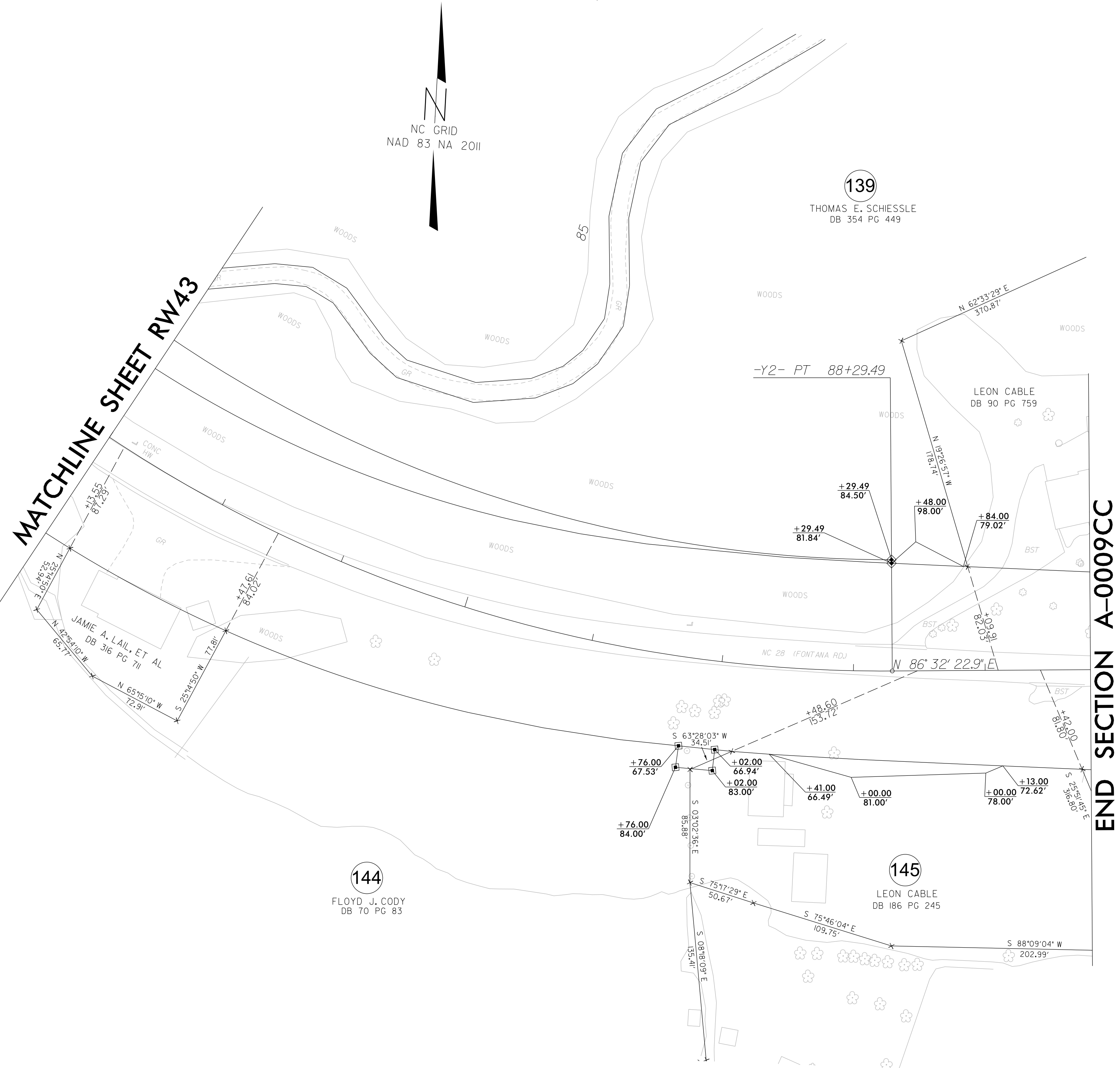
NOTES:

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2. PROJECT CONTROL WAS ESTABLISHED USING GNSS, THE GLOBAL NAVIGATION SATELLITE SYSTEM.
3. RIGHT OF WAY MONUMENTATION ESTABLISHED 11/15/21 TO 1/14/22 .

REVISIONS

-Y2- CURVE DATA

PI Sta 83+84.46	PI Sta 93+85.36
$\Delta = 52^{\circ}00'01.9"$ (LT)	$\Delta = 3^{\circ}06'33.3"$ (RT)
D = 5'24'18.9"	D = 0'29'53.6"
L = 962.04'	L = 624.07'
T = 517.00'	T = 312.11'
R = 1,060.00'	R = 11,500.00'



This 14th day of January, 2022.
 Documented by:
 Professional Land Surveyor L-4529

PROJECT REFERENCE NO. A-0009CC	SHEET NO. RW44
Location and Surveys	
PROJECT SURVEYOR	
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	

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3. RIGHT OF WAY MONUMENTATION ESTABLISHED 11/15/21 TO 1/14/22 .