

09/08/99

STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	B-5982	RW01	08

STATE OF NORTH CAROLINA
 DIVISION OF HIGHWAYS
 SURVEY CONTROL, EXISTING CENTERLINES,
 RIGHT OF WAY, EASEMENTS AND PROPERTY TIES

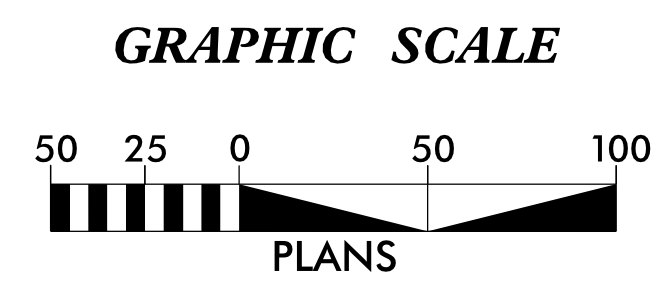
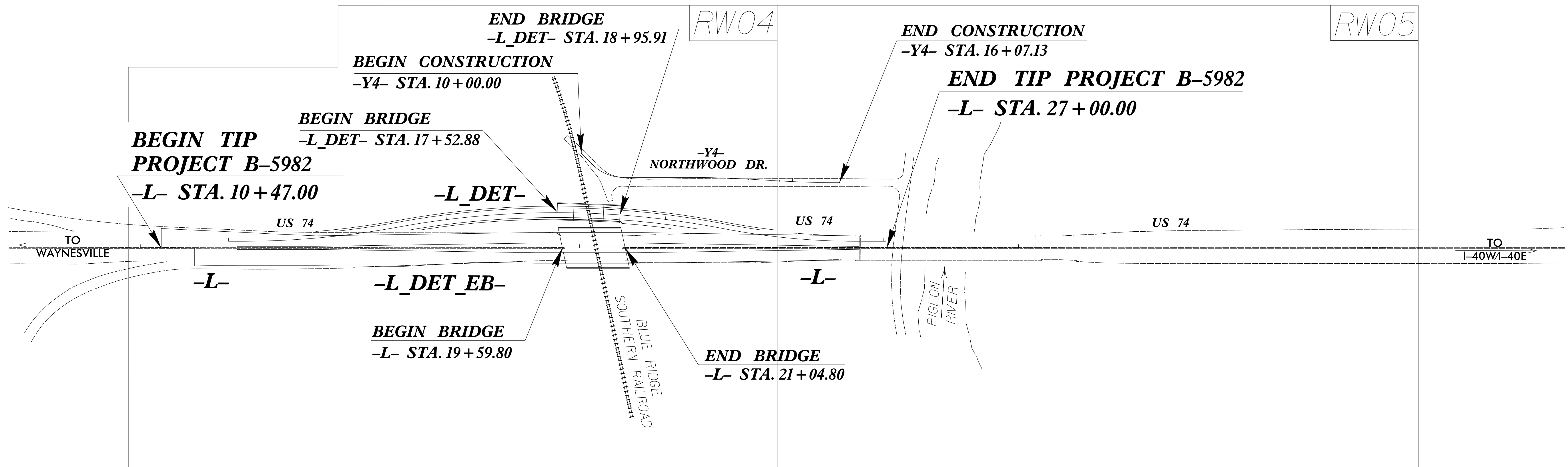
HAYWOOD COUNTY

LOCATION: TOWN OF CLYDE - REPLACE BRIDGE
 430095 ON US 74 OVER BLUE RIDGE
 SOUTHERN RAILROAD

TYPE OF WORK: GRADING, DRAINAGE, PAVING, AND
 STRUCTURE



TIP PROJECT: B-5982



DATUM DESCRIPTION

THE LOCALIZED COORDINATE SYSTEM DEVELOPED FOR THIS PROJECT IS BASED ON THE STATE PLANE COORDINATES ESTABLISHED BY NCGS FOR MONUMENT "GPS 111" WITH NAD 83/NSRS 2011 STATE PLANE GRID COORDINATES OF NORTHING: 650902.117(ft) EASTING: 806319.849(ft) ELEVATION "GPS 122": 2,583.10(ft) THE AVERAGE COMBINED GRID FACTOR USED ON THIS PROJECT (GROUND TO GRID) IS: 0.9997513314 THE N.C. LAMBERT GRID BEARING AND LOCALIZED HORIZONTAL GROUND DISTANCE FROM "GPS 111" TO -L- STATION 10+47.00 IS N 52°56'31.6" E 33,429.22(ft) ALL LINEAR DIMENSIONS ARE LOCALIZED HORIZONTAL DISTANCES VERTICAL DATUM USED IS NAVD 88

Prepared in the Office of:

LOCATION AND SURVEYS, DIVISION 14
 122 BONNIE LANE
 SYLVA, NC 28779

2024 STANDARD SPECIFICATIONS

RIGHT OF WAY DATE:
 04/28/2023

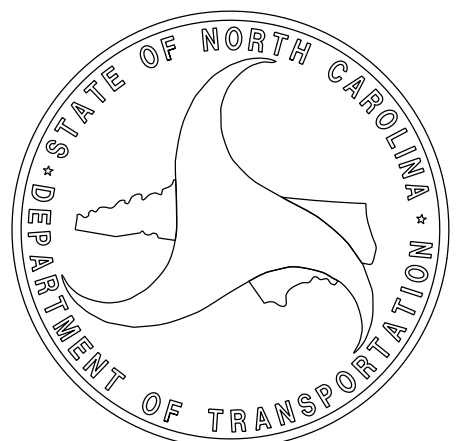
LETTING DATE:
 8/20/2024

PROFESSIONAL LAND
 SURVEYOR



DocuSigned by:
 Brian Barnatt
 SIGNATURE

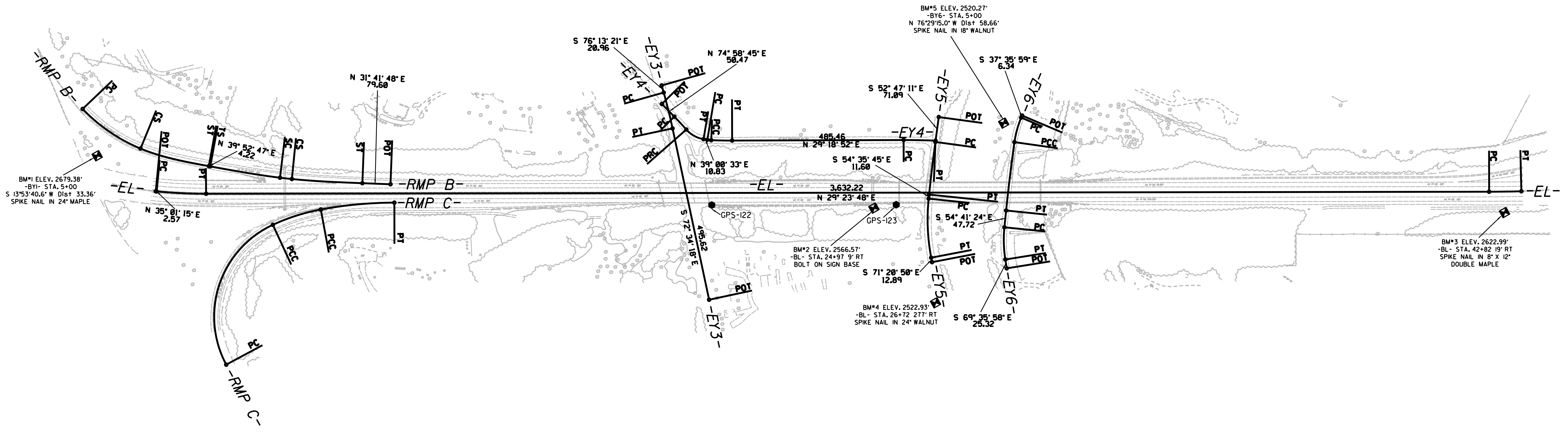
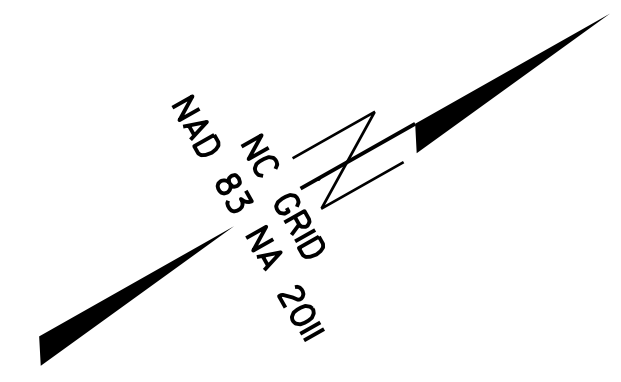
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 Date:



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 babar.watt

SURVEY CONTROL SHEET

W/ EXISTING CENTERLINE ALIGNMENTS PRIOR TO CONSTRUCTION



**SEE SHEET RW02C-3
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

6/2/09

30-OCT-2018 09:08
C:\Users\jll\OneDrive\Documents\Projects\B-5982\12-12-12\B-5982-US-74-Bridge\Send\Corrections\B5982-1s-rw02c-1.dgn

SURVEY CONTROL SHEET

W/ EXISTING CENTERLINE ALIGNMENTS PRIOR TO CONSTRUCTION

BL	POINT	DESC.	NORTH	EAST	ELEVATION
1		BL - 1	670616.4920	832794.1790	2675.14
2		BL - 2	671493.0070	833298.1170	2613.24
G122		GPS - 122	671956.2170	833548.6220	2583.10
G123		GPS - 123	672411.1700	833804.7740	2568.79
3		BL - 3	673025.4970	834155.7180	2569.42
4		BL - 4	673931.8010	834668.3180	2619.57

.....
 BM1 ELEVATION = 2679.38
 N 670510 E 832571
 SPIKE NAIL IN 24" MAPLE

BY1	POINT	DESC.	NORTH	EAST	ELEVATION
5		BY1 - 5	670542.6920	832578.7240	2678.96
Y1		BL - 1	670616.4920	832794.1790	2675.14

.....
 BM2 ELEVATION = 2566.57
 N 672352 E 833782
 BOLT ON SIGN BASE

BY2	POINT	DESC.	NORTH	EAST	ELEVATION
6		BY2 - 6	670624.0120	833048.1120	2649.56
YY1		BL - 1	670616.4920	832794.1790	2675.14

.....
 BM3 ELEVATION = 2622.99
 N 673899 E 834672
 SPIKE NAIL IN 8" X 12" DOUBLE MAPLE

BY3	POINT	DESC.	NORTH	EAST	ELEVATION
Y8		BY4 - 8	671976.4380	833338.1670	2563.11
7		BY3 - 7	671890.5430	833509.3540	2555.48

.....
 BM4 ELEVATION = 2522.93
 N 672372 E 834101
 SPIKE NAIL IN 24" WALNUT

BY4	POINT	DESC.	NORTH	EAST	ELEVATION
8		BY4 - 8	671976.4380	833338.1670	2563.11
Y9		BY5 - 9	672585.7780	833677.8700	2523.71

.....
 BM5 ELEVATION = 2520.27
 N 672790 E 833753
 SPIKE NAIL IN 18" WALNUT

BY5	POINT	DESC.	NORTH	EAST	ELEVATION
9		BY5 - 9	672585.7780	833677.8700	2523.71
Y123		GPS - 123	672411.1700	833804.7740	2568.79
10		BY5 - 10	672485.9130	833886.2640	2523.02

BY6	POINT	DESC.	NORTH	EAST	ELEVATION
11		BY6 - 11	672776.0580	833810.4940	2521.95
12		BY6 - 12	672581.1520	834093.8290	2522.29

NOTES:

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- 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

6/2/09

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SURVEY CONTROL SHEET

W/ EXISTING CENTERLINE ALIGNMENTS PRIOR TO CONSTRUCTION

6/2/09

REVISIONS

E1

POINT	N	E	BEARING	DIST	DELTA	D	L	T	R
PT	67858.893	83279.962	N 38°01'15.4" E	2.87					
LINE	67858.196	83274.226	N 32°12'31.6" E	148.18	82°37'27.5" (L)	84°08'37.9"	148.24	78.18	1428.64
CURVE	678725.886	832815.144	N 29°23'47.8" E	3632.22					
LINE	67899.347	832499.825	N 28°43'42.8" E	91.31	81°28'11.6" (L)	81°27'49.5"	91.31	45.66	3914.33
PT	672978.217	832642.912							

EY3

POINT	N	E	BEARING	DIST	DELTA	D	L	T	R
PT	67199.384	833181.238	S 78°13'28.8" E	28.96					
LINE	67199.313	833281.593	S 74°23'49.6" E	184.45	83°39'02.4" (R)	83°29'48.1"	184.47	52.26	1639.61
LINE	67196.219	833385.196	S 72°34'18.4" E	496.62					
PT	671817.775	833778.865							

EY4

POINT	N	E	BEARING	DIST	DELTA	D	L	T	R
PT	67193.917	833236.898	N 74°08'45.9" E	58.47					
LINE	67198.997	833278.841	N 78°34'49.1" E	49.73	82°12'07.2" (R)	86°26'18.6"	49.73	24.87	889.89
CURVE	67198.637	83327.289	N 58°35'43.1" E	55.85	39°18'19.2" (L)	68°46'39.9"	55.95	25.64	83.31
LINE	672027.648	833374.879	N 39°08'33.9" E	18.83					
LINE	672036.896	833381.696	N 38°19'06.8" E	11.28	87°21'13.7" (L)	69°36'42.5"	11.21	5.61	87.33
LINE	672045.194	833388.174	N 31°34'28.2" E	8.88					
LINE	672045.194	833388.174	N 31°34'28.2" E	8.88					
CURVE	672056.132	833418.161	N 38°23'06.2" E	93.11	82°28'27.9" (L)	83°57'37.1"	93.11	29.56	146.75
LINE	672056.132	833418.161	N 38°23'06.2" E	93.11					
LINE	672059.224	833781.887	N 38°35'55.9" E	98.48	82°34'07.3" (R)	82°58'28.7"	98.41	45.21	2816.53
PT	672097.233	833781.856	S 31°52'59.6" W	8.88					

EY5

POINT	N	E	BEARING	DIST	DELTA	D	L	T	R
PT	67268.886	833648.211	S 62°47'18.8" E	71.89					
LINE	67268.886	833784.828	S 53°41'27.9" E	149.91	81°48'34.2" (L)	81°12'25.2"	149.92	74.96	4746.93
CURVE	67268.292	833825.632	S 54°35'45.8" E	11.68					
LINE	672499.563	833836.898	S 62°08'17.6" E	167.16	16°45'05.1" (L)	89°59'18.0"	167.74	84.47	974.76
LINE	672423.611	833983.982	S 71°28'58.1" E	12.89					
PT	672419.488	833996.197							

EY6

POINT	N	E	BEARING	DIST	DELTA	D	L	T	R
PT	67285.587	833786.633	S 37°35'58.9" E	6.34					
LINE	672848.481	833784.583	S 49°01'48.3" E	71.95	14°51'22.8" (L)	28°35'28.7"	72.15	36.28	278.25
CURVE	672789.632	833815.482	N 52°27'21.7" W	8.88					
LINE	672789.632	833815.482	N 52°27'21.7" W	8.88					
LINE	672873.331	833972.188	S 53°34'22.9" E	194.86	82°14'02.8" (L)	81°08'47.9"	194.86	97.44	4997.58
LINE	672846.349	834011.222	S 54°41'24.2" E	47.72					
CURVE	672883.743	834091.743	S 62°08'48.9" E	91.19	14°54'33.4" (L)	16°18'15.1"	91.44	45.98	361.42
LINE	672883.743	834091.743	S 62°08'48.9" E	91.19					
PT	672894.917	834115.474							

RPB

POINT	N	E	BEARING	DIST	DELTA	D	L	T	R	DELTA S	Ls	LT	ST
PT	8.888	8.888	N 98°08'08.8" E	8.88						88°08'08.8" (R)	8.88	8.88	8.88
SPRAL	678535.672	832436.218	N 63°52'47.4" E	198.54	24°08'08.8" (L)	12°08'08.8"	208.88	181.49	477.46				
CURVE	678627.888	832613.483	N 43°52'42.8" E	199.61						12°08'08.8" (L)	208.88	133.64	66.95
LINE	678778.962	832751.899	N 39°52'47.4" E	4.22									
LINE	678774.284	832754.548	N 38°42'47.8" E	199.37						83°38'08.8" (L)	208.88	133.36	66.69
SPRAL	678938.236	832875.611	N 36°47'17.8" E	33.81	81°18'59.5" (L)	83°38'08.8"	33.81	16.98	1637.82				
CURVE	678957.658	832899.388	N 32°51'47.7" E	199.37						83°38'08.8" (L)	208.88	133.36	66.69
LINE	671125.624	833887.885	N 31°51'47.8" E	79.68									
PT	671193.368	833849.713											

RPC


POINT	N	E	BEARING	DIST	DELTA	D	L	T	R
PT	678537.218	833265.833	N 42°03'58.8" W	416.98	33°24'08.8" (R)	28°08'08.8"	467.88	381.88	286.48
CURVE	678846.986	832985.671	N 11°45'48.4" E	142.51	14°17'16.8" (R)	18°08'08.8"	142.88	71.81	572.96
LINE	678986.494	833814.766	N 24°09'47.4" E	289.16	18°28'21.8" (R)	69°08'08.8"	289.49	185.82	1145.92
CURVE	671177.431	833188.372							

NOTES:

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PROPOSED ALIGNMENT CONTROL SHEET

PROJECT REFERENCE NO. B-5982	SHEET NO. RW02D-1
Location and Surveys	
LOCATION AND SURVEYS, DIVISION 14 122 BONNIE LANE SYLVA, NC 28779	
PROJECT SURVEYOR	
	
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	

I, Brian Barwatt, 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 18th day of June, 2024.

DocuSigned by:
Brian Barwatt
Professional Land Surveyor L-4727

REVISIONS

L

TYPE	STATION	NORTH	EAST
POT	10+00.00	671006.3396	832974.1945
POT	31+00.00	672835.9495	834004.9844

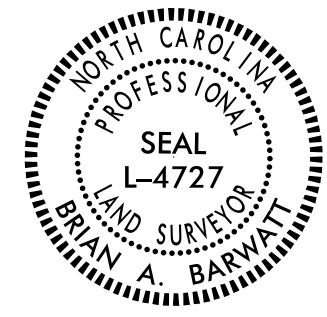
Y4

TYPE	STATION	NORTH	EAST
POT	10+00.00	671986.9965	833278.8408
PC	10+35.46	671996.1856	833313.0853
PT	11+15.01	672043.6836	833374.2927
PC	12+66.25	672175.4464	833448.5271
PT	13+98.94	672289.1054	833516.9733
PC	14+71.16	672349.8617	833556.0031
PT	16+07.13	672466.3805	833626.0578

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 INFORMATION REGARDING PROJECT CONTROL IS NEEDED, PLEASE CONTACT THE LOCATION AND SURVEYS UNIT.

RIGHT OF WAY CONTROL SHEET

PROJECT REFERENCE NO. B-5982	SHEET NO. RW03E-1
Location and Surveys	
LOCATION AND SURVEYS, DIVISION 14 122 BONNIE LANE SYLVA, NC 28779	
PROJECT SURVEYOR	
	
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	

I, Brian Barwatt, 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 during December, 2023 and all coordinates are based on NAD83/2011; That this survey was performed to meet the requirements of 21NCAC 56.1600 as applicable.

This 15th day of July, 2024.

DocuSigned by:
Brian Barwatt
Professional Land Surveyor L-4727

REVISIONS

CONTROL ACCESS MARKER REBAR AND CAP

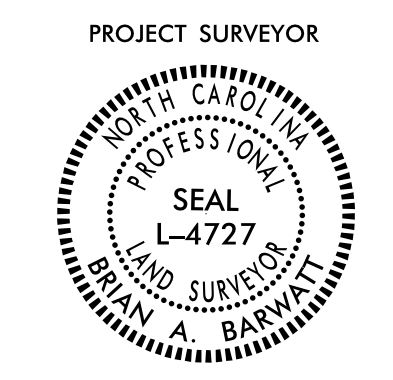
ALIGN	STATION	OFFSET	NORTH	EAST
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L	18+87.00	161.00	671700.1048	833549.8506
L	19+69.41	161.00	671771.9057	833590.3028

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 DURING DECEMBER, 2023.

Location and Surveys

LOCATION AND SURVEYS, DIVISION 14
122 BONNIE LANE
SYLVA, NC 28779



PROJECT SURVEYOR
DOCUMENT NOT CONSIDERED FINAL
UNLESS ALL SIGNATURES COMPLETED

4

ROGER WILLIAM FRICKS
DB 856 PG 2463

-Y4- PT Sta. 11+15.01
-Y4- PC Sta. 12+66.25
-Y4- PT Sta. 13+98.94

-Y4- CURVE DATA

PI Sta 10+77.47	PI Sta 13+32.61
$\Delta = 45^{\circ} 34' 57.7''$ (LT)	$\Delta = 3^{\circ} 19' 12.2''$ (RT)
D = 57' 17" 44.8"	D = 2' 30' 07.2"
L = 79.56'	L = 132.70'
T = 42.02'	T = 66.37'
R = 100.00'	R = 2,290.00'
SE = NC	SE = NC
V = 25MPH	V = 25MPH

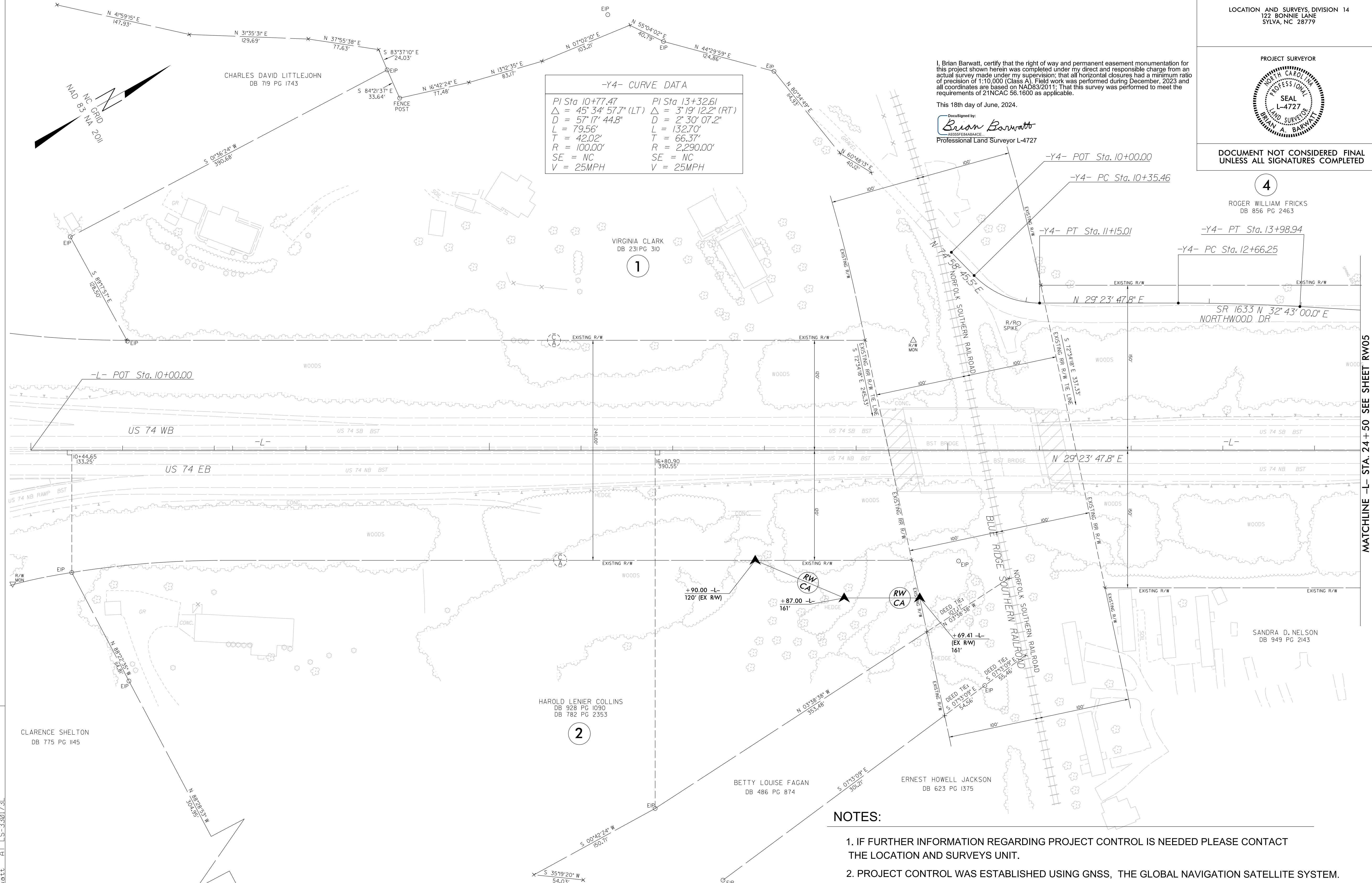
I, Brian Barwatt, certify that the right of way and permanent easement monumentation for this project shown herein was completed under my direct and responsible charge from an actual survey made under my supervision; that all horizontal closures had a minimum ratio of precision of 1:10,000 (Class A). Field work was performed during December, 2023 and all coordinates are based on NAD83/2011; That this survey was performed to meet the requirements of 21NCAC 56.1600 as applicable.

This 18th day of June, 2024.

DocuSigned by:
Brian Barwatt
Professional Land Surveyor L-4727

REVISIONS

MATCHLINE -L- STA. 24 + 50 SEE SHEET RW05



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 DURING DECEMBER, 2023.

18 JUN 2024 10:30
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 Brian Barwatt
 PL S-3301731

Location and Surveys

LOCATION AND SURVEYS, DIVISION 14
122 BONNIE LANE
SYLVA, NC 28779

PROJECT SURVEYOR



DOCUMENT NOT CONSIDERED FINAL
UNLESS ALL SIGNATURES COMPLETED

I, Brian Barwatt, 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 during December, 2023 and all coordinates are based on NAD83/2011; That this survey was performed to meet the requirements of 21NCAC 56.1600 as applicable.

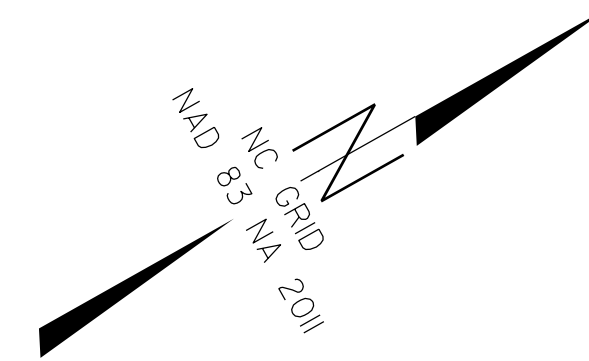
This 18th day of June, 2024.

Designed by:
Brian Barwatt
Professional Land Surveyor L-4727

DONALD CARROLL HOOPER
DB 262 PG 81

BERNICE D. HAYNES
DB 201E PG 299

-Y4- CURVE DATA	
PI Sta	15+39.17
Δ	= 3° 24' 07.7" (LT)
D	= 2° 30' 07.2"
L	= 135.98'
T	= 68.01'
R	= 2,290.00'
SE	= NC

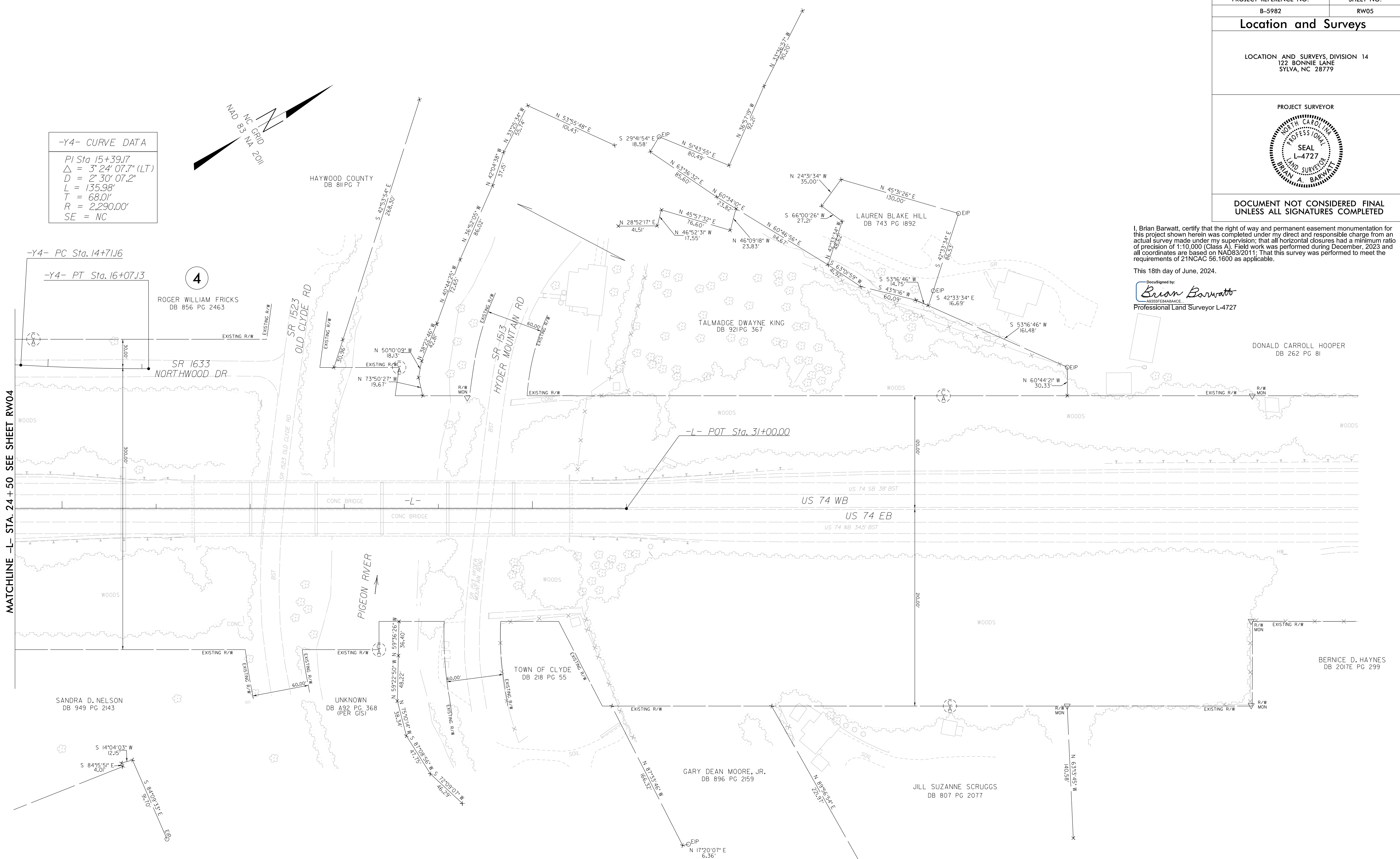


-Y4- PC Sta. 14+71.16
-Y4- PT Sta. 16+07.13

4

ROGER WILLIAM FRICKS
DB 856 PG 2463

MATCHLINE -L- STA. 24+50 SEE SHEET RW04



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 DURING DECEMBER, 2023.

REVISIONS

18 JUN 2024 10:49
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 barwatt