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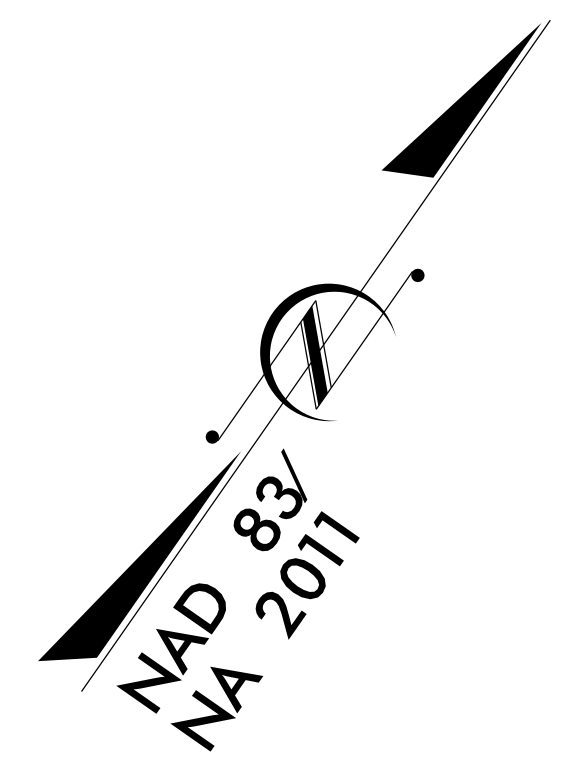
STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	B-5644	RW01	06

STATE OF NORTH CAROLINA
 DIVISION OF HIGHWAYS

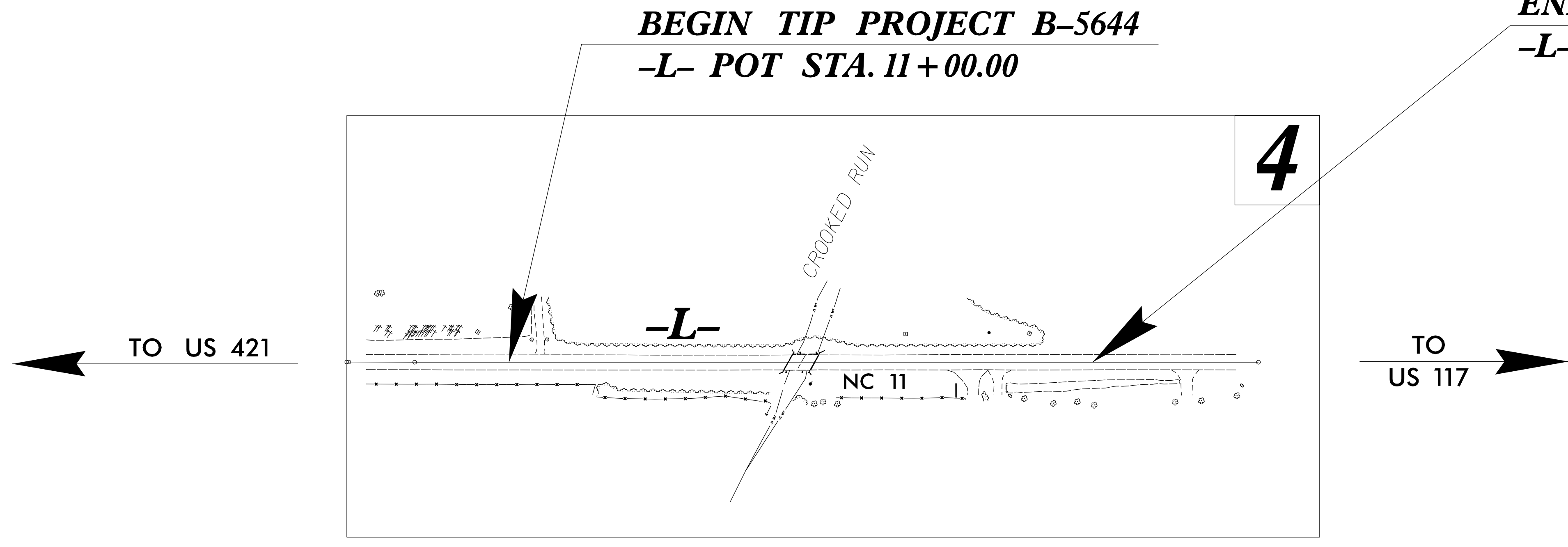
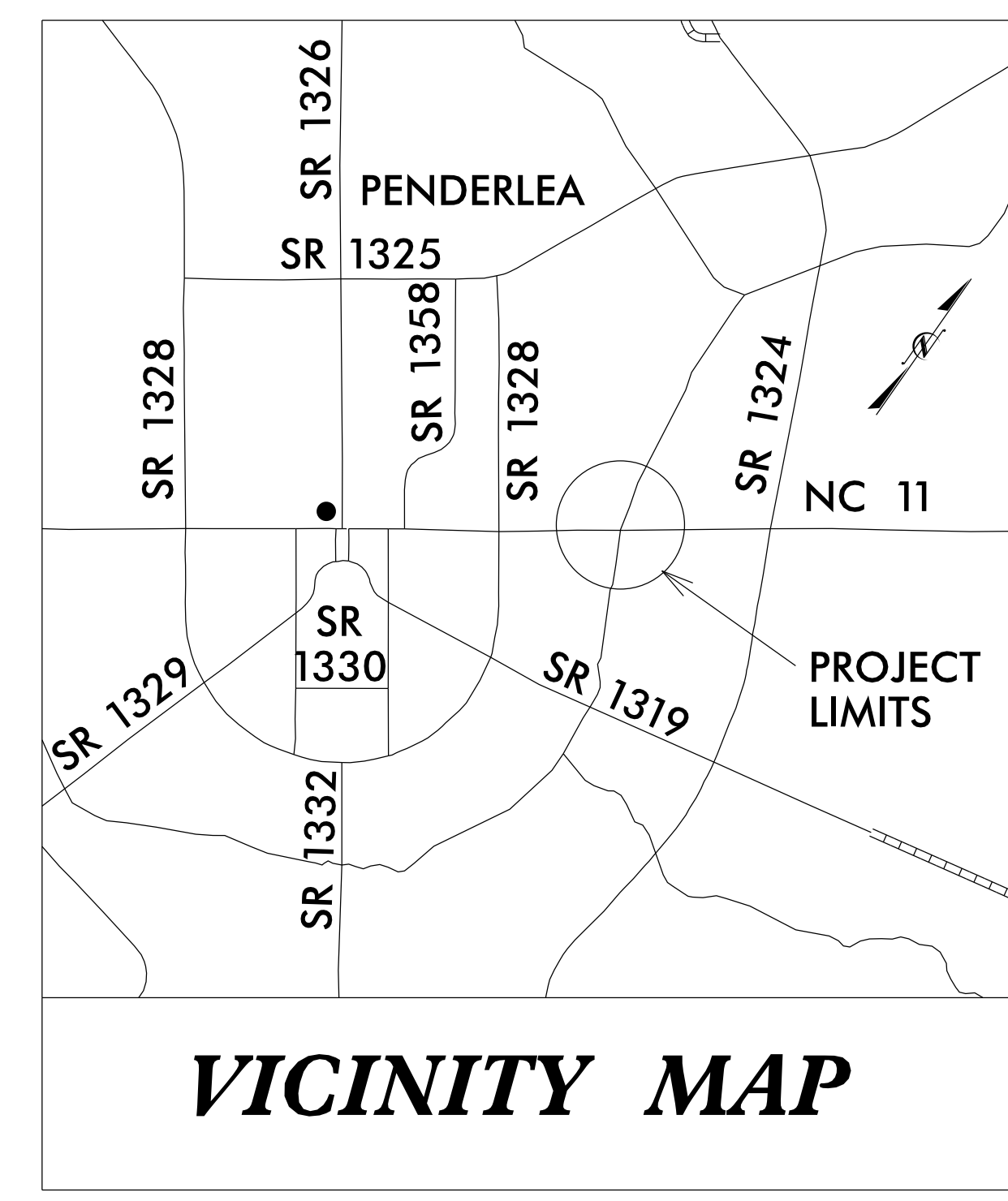
SURVEY CONTROL, EXISTING CENTERLINES,
 RIGHT OF WAY, EASEMENTS AND PROPERTY TIES

PENDER COUNTY

**REPLACE BRIDGE NO. 15 OVER
 CROOKED RUN ON NC 11**



TIP PROJECT: B-5644



DATUM DESCRIPTION

THE LOCALIZED COORDINATE SYSTEM DEVELOPED FOR THIS PROJECT IS BASED ON THE STATE PLANE COORDINATES ESTABLISHED BY NCGS FOR MONUMENT "GPS-2" WITH NAD 83/NA2011 STATE PLANE GRID COORDINATES OF NORTHING: 334317.223(ft) EASTING: 2288669.887(ft) ELEVATION: 62.340(ft)

THE AVERAGE COMBINED GRID FACTOR USED ON THIS PROJECT (GROUND TO GRID) IS: 0.9999273799

THE N.C. LAMBERT GRID BEARING AND LOCALIZED HORIZONTAL GROUND DISTANCE FROM "GPS-2" TO -L- STATION 10+00.00 IS S 54-25' 43.60" W 1446.34(ft)

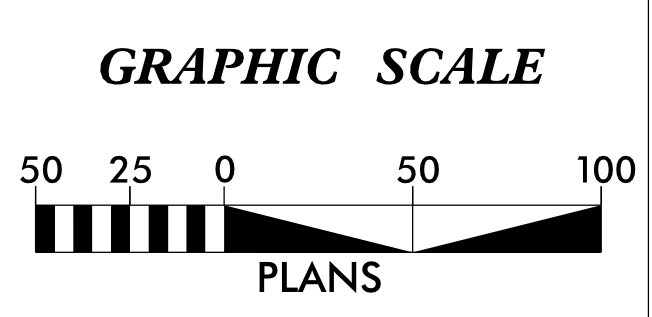
ALL LINEAR DIMENSIONS ARE LOCALIZED HORIZONTAL DISTANCES VERTICAL DATUM USED IS NAVD 88

PREPARED IN THE OFFICE OF:
 LOCATION AND SURVEYS UNIT
 DIVISION 3
 5310 BARBADOS BLVD. SUITE 102
 CASTLE HAYNE, NORTH CAROLINA 28429

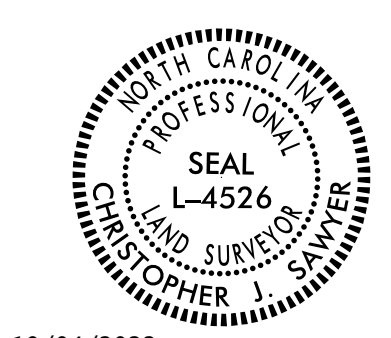
2018 STANDARD SPECIFICATIONS

RIGHT OF WAY DATE: **NOVEMBER 23, 2021**

LETTING DATE: **DECEMBER 20, 2022**

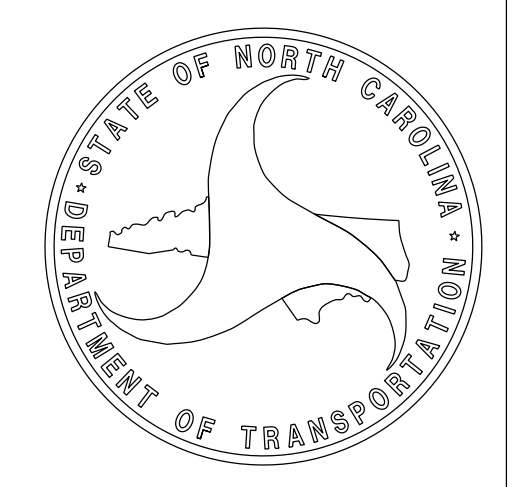


PROFESSIONAL LAND SURVEYOR



DocuSigned by:
 Christopher J. Swisher
 SIGNATURE: _____


Date: 10/04/2022



04-OCT-2022 15:59 S:\units\div03\Projects\BRID0E\Pender\B5644_0015\Working\150 plan sheets\b5644_ls_rw01_220927.dgn Individual AT LS-328725L 09/08/99

SURVEY CONTROL SHEET

W/ EXISTING CENTERLINE ALIGNMENTS PRIOR TO CONSTRUCTION

PROJECT REFERENCE NO. B-5644	SHEET NO. RW02C-1
Location and Surveys	
DIVISION 3 5310 BARBADOS BLVD., SUITE 102 CASTLE HAYNE, N.C., 28429	
	
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	

I, CHRISTOPHER J. SAWYER, 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: VRS
 Dates of survey: MARCH 15, 2017
 Datum/Epoch: NAD 83/NA 2011
 Published/Fixed-control use: (N/A for RTN)
 Localized around: "GPS2"
 Northing: 334317.223
 Easting: 2288669.887
 Combined grid factor: 0.9999273799
 Geoid model: G12 NC
 Units: US SURVEY FEET

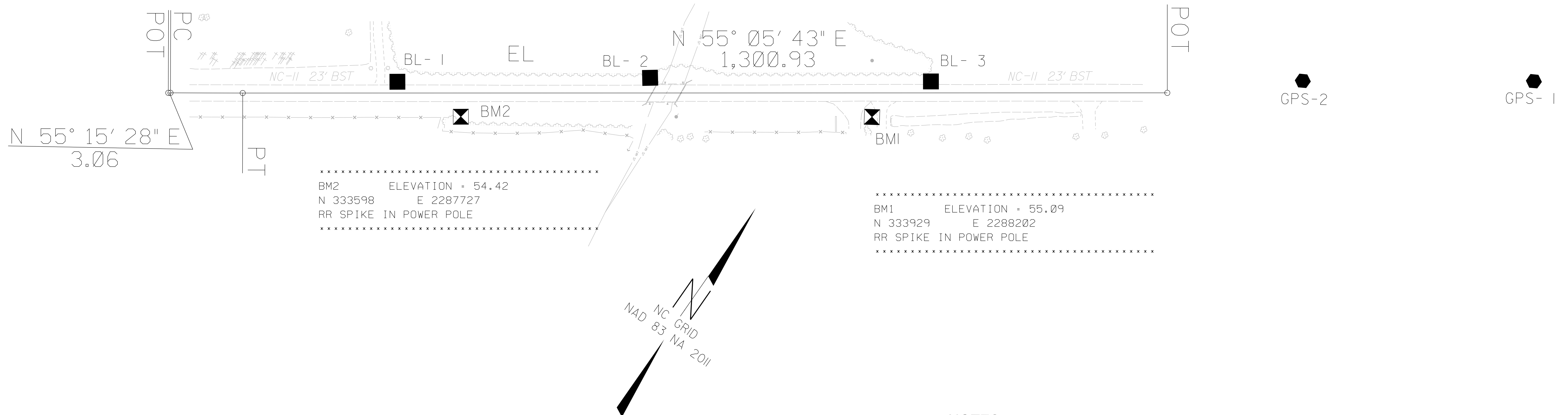
I also certify that the Baseline Control for this project was completed under my direct and responsible charge from an actual survey made under my supervision; that all horizontal closures had a minimum ratio of precision of 1:20,000 (Class AA) and Vertical accuracy to Class A. Field work was performed from MARCH 2017 to APRIL 2017, 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 28TH day of APRIL, 2022.


 Professional Land Surveyor L-4526

BL	POINT	DESC.	NORTH	EAST	ELEVATION	BL STATION
BL1	TRV CAP & REBA		333587.4510	2287625.6170	55.44	12+50.70
BL2	TRV CAP & REBAR		333795.3980	2287914.0930	51.54	16+06.31
BL3	TRV CAP & REBAR		334017.2470	2288241.1060	53.49	12+50.78
GPS2	GPS CAP & REBAR		334317.2230	2288669.8870	62.34	10+23.30
GPS1	GPS CAP & REBAR		334910.0820	2289523.1970	65.15	15+39.05


EL	POINT	N	E	BEARING	DIST	DELTA	D	L	T	R
POT		333390.265	2287370.268							
LINE				N 55°15'27.7" E	3.06					
PC		333392.010	2287372.784							
CURVE				N 55°14'53.9" E	101.63	00°01'07.7"(LT)	00°01'06.6"	101.63	50.81	309853.61
PT		333449.939	2287456.283							
LINE				N 55°05'42.7" E	1300.93					
POT		334194.350	2288523.180							



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.

RIGHT OF WAY CONTROL SHEET

PROJECT REFERENCE NO. B-5644	SHEET NO. RW03E-1
Location and Surveys	
DIVISION 3 5310 BARBADOS BLVD, SUITE 102 CASTLE HAYNE, N.C., 28429	
	
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	

I, CHRISTOPHER J. SAWYER, PLS 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 February 15, 2022, and all coordinates are based on NAD83/2011; That this survey was performed to meet the requirements of 21NCAC 56.1600 as applicable.

This 28TH day of APRIL, 2022.


 Professional Land Surveyor L-4526

ROW MARKER IRON PIN AND CAP - E

ALIGN	STATION	OFFSET	NORTH	EAST
L	10+00.00	- 40.00	333508.6713	2287470.5546
L	10+00.00	40.00	333443.0630	2287516.3318
L	12+40.00	40.00	333580.3945	2287713.1567
L	14+00.00	- 40.00	333737.5572	2287798.5962
L	14+00.00	- 50.00	333745.7582	2287792.8740
L	14+00.00	66.00	333650.6262	2287859.2509
L	17+50.00	- 50.00	333946.0334	2288079.9104
L	17+50.00	- 40.00	333937.8323	2288085.6325
L	18+45.42	66.00	333905.5041	2288224.5444
L	18+45.42	40.00	333926.8235	2288209.6622
L	22+55.62	40.00	334161.5461	2288546.0689
L	22+55.62	- 40.00	334227.1556	2288500.2934

NOTES:

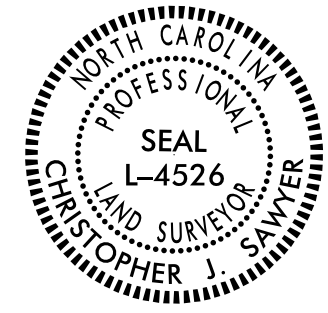
1. IF FURTHER INFORMATION REGARDING PROJECT CONTROL IS NEEDED PLEASE CONTACT THE LOCATION AND SURVEYS UNIT.
2. PROJECT CONTROL WAS ESTABLISHED USING GNSS, THE GLOBAL NAVIGATION SATELLITE SYSTEM.

REVISIONS

Location and Surveys

DIVISION 3
5310 BARBADOS BLVD., SUITE 102
CASTLE HAYNE, N.C. 28429

PROJECT SURVEYOR



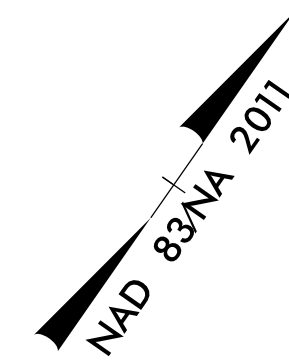
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UNLESS ALL SIGNATURES COMPLETED

I, CHRISTOPHER J. SAWYER, PLS 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 February 15, 2022, and all coordinates are based on NAD83/2011; That this survey was performed to meet the requirements of 21NCAC 56.1600 as applicable.

This 28TH day of APRIL, 2022.

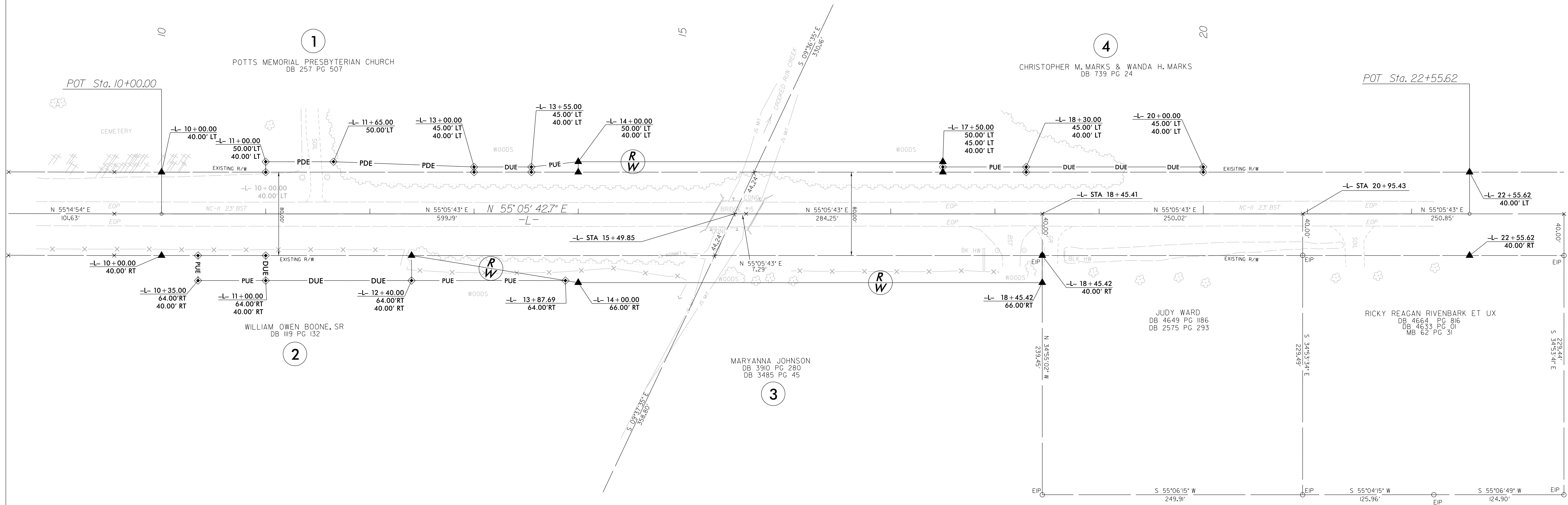
DocuSigned by:
Christopher J Sawyer
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Professional Land Surveyor L-4526



REVISIONS

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NOTES:

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