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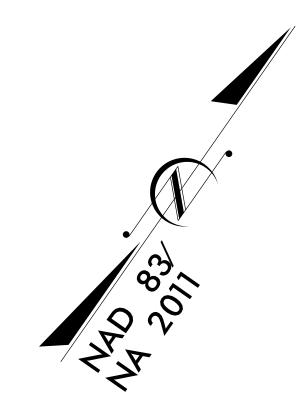
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N.C.RW01 06 B-5644

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

# PENDER COUNTY

REPLACE BRIDGE NO. 15 OVER CROOKED RUN ON NC 11



BEGIN TIP PROJECT B-5644 -L-POT STA. 11+00.00

-L-POT STA. 20 + 00.00

END TIP PROJECT B-5644

TO US 421

THE THE THE NC 11 

US 117

#### **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

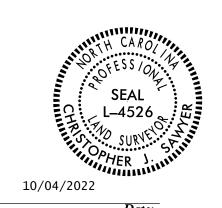
2018 STANDARD SPECIFICATIONS

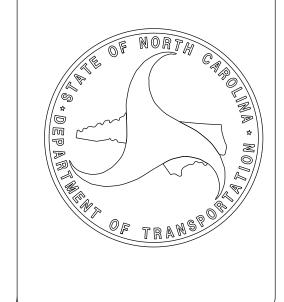
RIGHT OF WAY DATE: **NOVEMBER** 23, 2021

LETTING DATE: **DECEMBER** 20, 2022 PROFESSIONAL LAND **SURVEYOR** 

Christopher & Sawyer

SIGNATURE:





GRAPHIC SCALE

PLANS

5644

B

PROJECT:

TIP

BL

BL1

BL2

BL3

GPS2

GPS1

POINT

DESC.

TRV CAP & REBA

TRV CAP & REBAR

TRV CAP & REBAR

GPS CAP & REBAR

GPS CAP & REBAR

NORTH

333587.4510

333795.3980

334017.2470

334317.2230

334910.0820

### SURVEY CONTROL SHEET

#### W/EXISTING CENTERLINE ALIGNMENTS PRIOR TO CONSTRUCTION

BL STATION

12+50.70

16+06.31

12+50.78

10+23.30

15+39.05

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.

Christopher Hawyer Professional Land Surveyor L-4526

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:

PROJECT SURVEYOR

PROJECT REFERENCE NO.

B-5644

Location and Surveys

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

SHEET NO.

RW02C-1

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

EL									
POINT	N	Е	BEARING	DIST	DELTA		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	3Ø9853.61
PT	333449.939	2287456.283							
LINE			N 55°Ø5′42.7" E	1300.93					
POT	334194.350	2288523.180							

\*\*\*\*\*\*\*

EAST

2287625.6170

2287914.0930

2288241.1060

2288669.8870

2289523.1970

NC-II 23' BST <u>N 55° 15′ 28" E</u>` ELEVATION = 54.42 E 2287727 N 333598 ELEVATION = 55.09 RR SPIKE IN POWER POLE N 333929 E 22882Ø2

ELEVATION

55.44

51.54

53.49

62.34

65.15

NOTES:

RR SPIKE IN POWER POLE

- 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.

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# PROPOSED ALIGNMENT CONTROL SHEET

I, CHRISTOPHER J. SAWYER, 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 28TH day of APRIL, 2022.

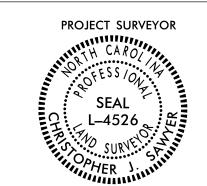
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Professional Land Surveyor L-4526

PROJECT REFERENCE NO. SHEET
B-5644 RW02

Location and Surveys

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



DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

TYPE	STATION		
POT	10+00.00	333475.8671	2287493.4432
POT	22+55.62	334194.3503	2288523.18Ø3
-			

#### **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.

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RIGHT OF WAY CONTROL SHEET

Location and Surveys

PROJECT REFERENCE NO.

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

SHEET NO.

PROJECT SURVEYOR

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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.

DocuSigned by:
Christophery Sawyer

Professional Land Surveyor L-4526

# ROW MARKER IRON PIN AND CAP-E

ALIGN	STATION	OFFSET	NORTH	EAST
	10+00.00	-40.00	333508.6713	2287470.5546
	10+00.00	40.00	333443.0630	2287516.3318
	12+40.00	40.00	333580.3945	2287713.1567
	14+00.00	-40.00	333737.5572	2287798.5962
	14+00.00	-50.00	333745.7582	2287792.8740
	14+00.00	66.00	333650.6262	2287859.25Ø9
	17+50.00	-50.00	333946.0334	2288079.9104
	17+50.00	- 40.00	333937.8323	2288Ø85.6325
	18+45.42	66.00	333905.5041	2288224.5444
	18+45.42	40.00	333926.8235	22882Ø9.6622
	22+55.62	40.00	334161.5461	2288546.0689
	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.

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PERMANENT EASEMENT CONTROL SHEETS

Location and Surveys

PROJECT REFERENCE NO.

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

SHEET NO.

PROJECT SURVEYOR

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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.

DocuSigned by:
Christophytewyer

9700CB2E1D21467

Professional Land Surveyor L-4526

## ROW MARKER PERMANENT EASEMENT-E

ALIGN	STATION	OFFSET	NORTH	EAST
	10+35.00	40.00	333463.0905	2287545.0354
	10+35.00	64.00	333443.4080	2287558.7686
	11+00.00	-50.00	333574.0938	2287546.8429
	11+00.00	-40.00	333565.8928	2287552.5650
	11+00.00	40.00	333500.2845	2287598.3422
	11+00.00	64.00	333480.6020	2287612.0753
	11+65.00	-50.00	333611.2878	2287600.1496
	12+40.00	64.00	333560.7120	2287726.8899
	13+00.00	-40.00	333680.3357	2287716.5858
	13+00.00	-45.00	333684.4362	2287713.7247
	13+55.00	-45.00	333715.9070	2287758.8290
	13+55.00	-40.00	333711.8065	2287761.6900
	13+87.69	64.00	333645.2224	2287848.0110
	17+50.00	-45.00	333941.9329	2288Ø82.7714
	18+30.00	-45.00	333987.7101	2288148.3797
	18+30.00	-40.00	333983.6095	2288151.2408
	20+00.00	-40.00	334080.8860	2288290.6585
	20+00.00	-45.00	334Ø84.9866	2288287.7974

#### 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.

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