Docusign Envelope ID: 739BDB6F-66D2-43EC-A030-912AFCCDA945

O001B

HE

PROJECT:

TIP

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

STATE STATE PROJECT REFERENCE NO.

SHEET TOTAL SHEETS

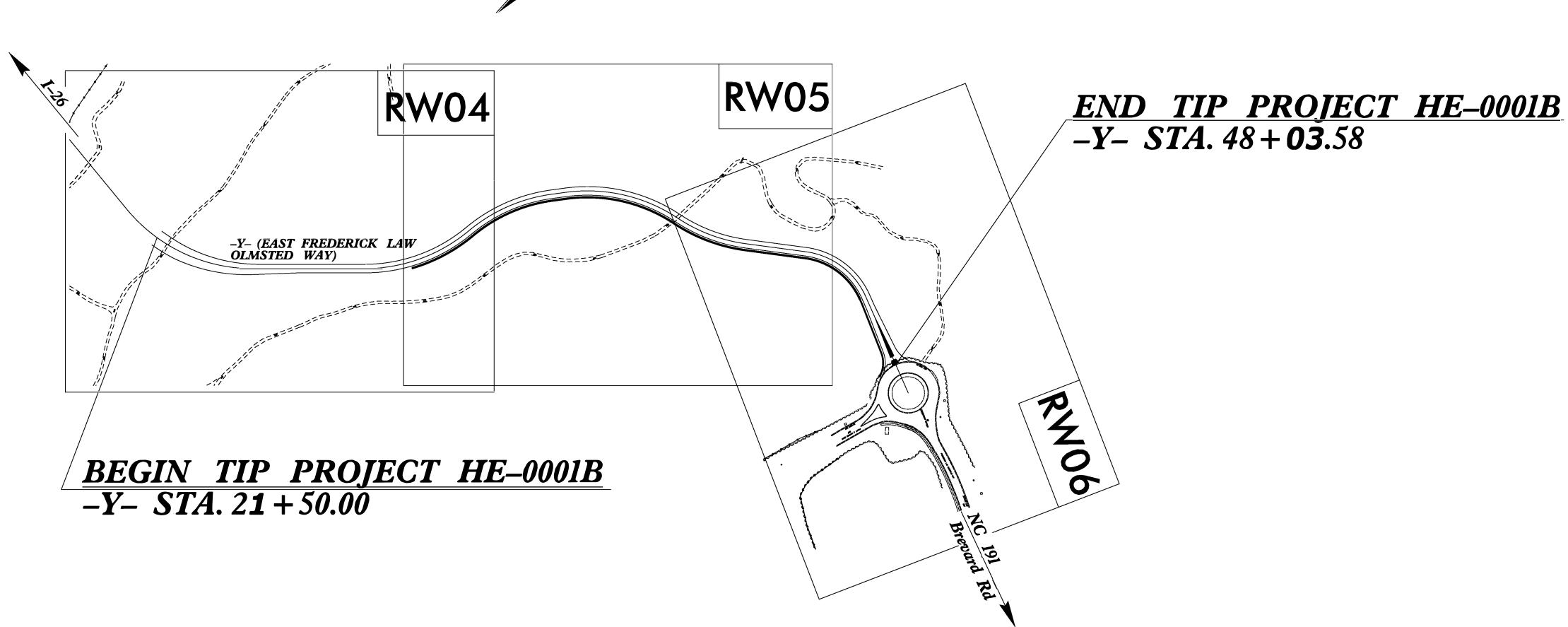
NO.

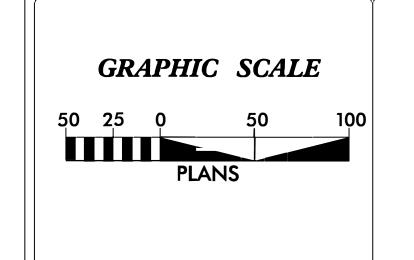
RW01 11

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

BUNCOMBE COUNTY







DATUM DESCRIPTION

THE LOCALIZED COORDINATE SYSTEM DEVELOPED FOR THIS PROJECT IS BASED ON THE STATE PLANE COORDINATES ESTABLISHED BY NCDOT FOR MONUMENT "I4400C-20"
WITH NAD 83/NA 2011 STATE PLANE GRID COORDINATES OF NORTHING: 628,284.137(ft) EASTING: 949,025.993(ft) ELEVATION: 2,091.760(ft)
THE AVERAGE COMBINED GRID FACTOR USED ON THIS PROJECT (GROUND TO GRID) IS: 0.99978203
THE N.C. LAMBERT GRID BEARING AND LOCALIZED HORIZONTAL GROUND DISTANCE FROM "I4400C-20" TO -Y- STATION 10+00 IS N 21-00'50.9" W 32,005.55(ft)

ALL LINEAR DIMENSIONS ARE LOCALIZED HORIZONTAL DISTANCES

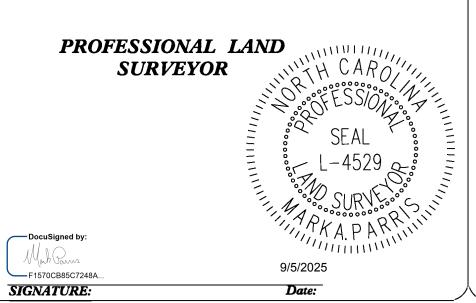
VERTICAL DATUM USED IS NAVD 88

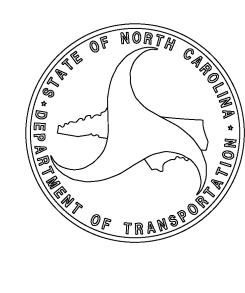


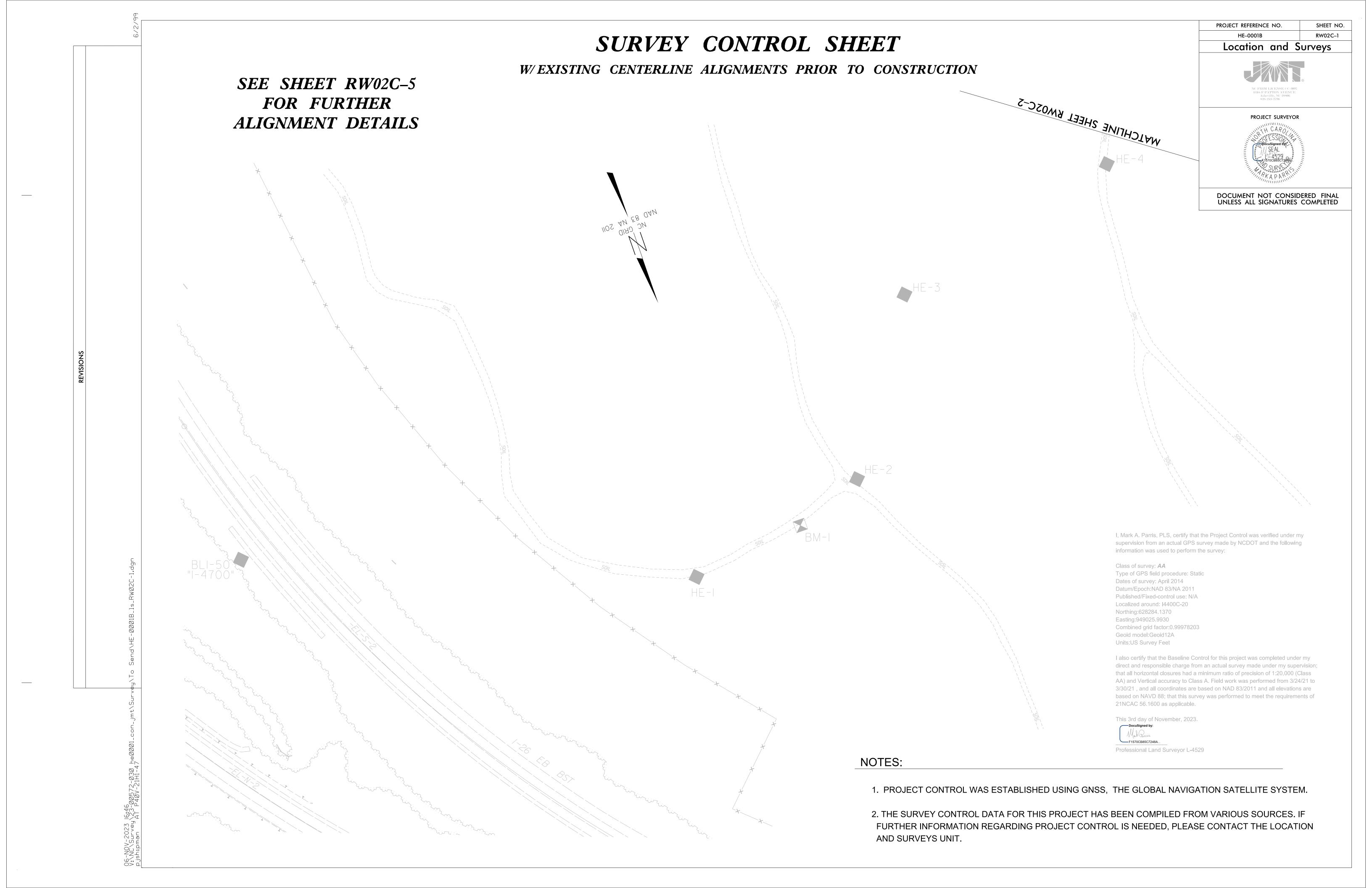
2024 STANDARD SPECIFICATIONS

RIGHT OF WAY DATE:
1/28/25

LETTING DATE: 11/18/25







SURVEY CONTROL SHEET

WEXISTING CENTERLINE ALIGNMENTS PRIOR TO CONSTRUCTION

PROBLE BYSINGS NO. SHEET NO.

HEAD IN THE SHEET NO. SHEET NO.

HEAD IN THE SHEET NO.

HEAD IN THE SHEET NO.

HEAD IN THE SHEET NO.

DOCUMENT NOT CONSIDERED FINAL INCLUSION CONFILING COMPILIES.

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

Class of survey: *AA*Type of GPS field procedure: Static Dates of survey: April 2014
Datum/Epoch:NAD 83/NA 2011
Published/Fixed-control use: N/A
Localized around: I4400C-20
Northing:628284.1370
Easting:949025.9930
Combined grid factor:0.99978203
Geoid model:Geoid12A
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 3/24/21 to 3/30/21, 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 3rd day of November, 2023.

DocuSigned by:

F1570CB85C7248A...

Professional Land Surveyor L-4529

SEE SHEET RW02C-5
FOR FURTHER
ALIGNMENT DETAILS

- 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

NAD 83 NA 2011

Location and Surveys

SHEET NO.

RW02C-3

PROJECT REFERENCE NO.

HE-0001B

NC FIRM LICENSE # C-30 1318-F PATTON AVENU Asheville, NC 28806 828-253-2796

PROJECT SURVEYOR

CARO

Docusigned by

SEA

1570CB85C72084...

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

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

Class of survey: AA

Type of GPS field procedure: Static
Dates of survey: April 2014
Datum/Epoch:NAD 83/NA 2011
Published/Fixed-control use: N/A
Localized around: I4400C-20
Northing:628284.1370
Easting:949025.9930
Combined grid factor:0.99978203
Geoid model:Geoid12A
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 3/24/21 to 3/30/21, 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 3rd day of November, 2023.

F1570CB85C7248A...

Professional Land Surveyor L-4529

SEE SHEET RW02C-5 FOR FURTHER ALIGNMENT DETAILS

- 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 Location and Surveys W/EXISTING CENTERLINE ALIGNMENTS PRIOR TO CONSTRUCTION PROJECT SURVEYOR DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED I, Mark A. Parris, PLS, certify that the Project Control was verified under my supervision from an actual GPS survey made by NCDOT and the following information was used to perform the survey: Class of survey: AA Type of GPS field procedure: Static Dates of survey: April 2014 Datum/Epoch:NAD 83/NA 2011 Published/Fixed-control use: N/A Localized around: I4400C-20 Northing:628284.1370 Easting:949025.9930 Combined grid factor: 0.99978203 Geoid model:Geoid12A 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 3/24/21 to 3/30/21, 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 3rd day of November, 2023. Professional Land Surveyor L-4529 SEE SHEET RW02C-5 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

PROJECT REFERENCE NO. HE-0001B

FURTHER INFORMATION REGARDING PROJECT CONTROL IS NEEDED, PLEASE CONTACT THE LOCATION

AND SURVEYS UNIT.

RW02C-4

/2/99

SURVEY CONTROL SHEET

W/EXISTING CENTERLINE ALIGNMENTS PRIOR TO CONSTRUCTION

HE-0001B	RW02C-4
Location and	Surveys

PROJECT REFERENCE NO.



SHEET NO.

PROJECT SURVEYOR



DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

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

Class of survey: AA

Type of GPS field procedure: Static
Dates of survey: April 2014
Datum/Epoch:NAD 83/NA 2011
Published/Fixed-control use: N/A
Localized around: I4400C-20
Northing:628284.1370
Easting:949025.9930
Combined grid factor:0.99978203
Geoid model:Geoid12A
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 3/24/21 to 3/30/21, 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 3rd day of November, 2023.

F1570CB85C7248A

Professional Land Surveyor L-4529

BL					
	POINT	DESC.	NORTH	EAST	ELEVATION
50		BL1-50 "I-4700"	658410.8925	937191.4614	2040.55
1		HE - 1	658617.3322	936665.5207	2102.06
2		HE - 2	658568.6484	936437.7591	2102.15
3		HE - 3	658372.1214	936306.7791	2098.36
4		HE - 4	658302.3859	936016.7287	2044.98
5		HE - 5	658050.3396	935901.4603	2047.87
6		HE - 6	657813.6738	935674.9922	2055.56
7		HE - 7	657553.1388	935589.2624	2068.49
8		HE - 8	657387.2714	935390.9793	2075.12
9		HE - 9	657113.5022	935284.1125	2091.89
10		HE - 10	656852.1772	935263.9507	2107.19
1 1		HE - 1 1	656875.0531	935008.8780	2126.09
12		HE - 12	657029.8390	934755.2681	2186.57
13		HE - 13	656995.6639	934472.7879	2186.30
14		HE - 14	657099.9083	933918.8737	2177.78

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.

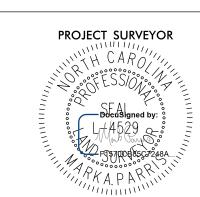
/-NUV-2023 U(:33 /:\NC\Survey\23-00572-030 he0001_con_jmt\Survey\To o ishipman AT P40V-21H1-36 PROPOSED ALIGNMENT CONTROL SHEET

PROJECT REFERENCE NO.

HE-0001B RW02D-1

Location and Surveys

NC FIRM LICENSE # C-3097 1318-F PATTON AVENUE Asheville, NC 28806



DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

Y

		l	
TYPE	STATION	NORTH	EAST
POT	10+00.00	658161.0575	937548.8515
PC	19+13.41	658293.4743	936645.0915
PT	23+83.47	658160.9906	936209.8361
PC	27+48.06	657916.1162	935939.7215
PRC	31+18.66	657595.1071	935769.8526
PT	34+16.96	657326.1404	935650.0997
PC	34+62.71	657291.1065	935620.6679
PRC	38+46.87	657107.0413	935292.9188
PT	40+87.97	657Ø18.9299	935070.7059
PC	42+84.82	656907.1829	934908.6448
PT	45+40.39	656884.5814	934665.1110
POT	48+83.84	657024.1840	934351.3109

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.

—DocuSigned by:

1 BWB-1-175

RIGHT OF WAY CONTROL SHEET

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 10/12/23 to 10/25/23, and all coordinates are based on NAD83/2011; That this survey was performed to meet the requirements of 21NCAC 56.1600 as applicable.

This 3rd day of November, 2023.

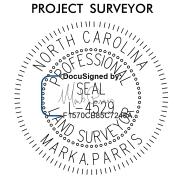
Professional Prand Surveyor L-4529

PROJECT REFERENCE NO. HE-0001B

RW03E-1 Location and Surveys

SHEET NO.

NC FIRM LICENSE # C-3097 1318-F PATTON AVENUE Asheville, NC 28806 828-253-2796

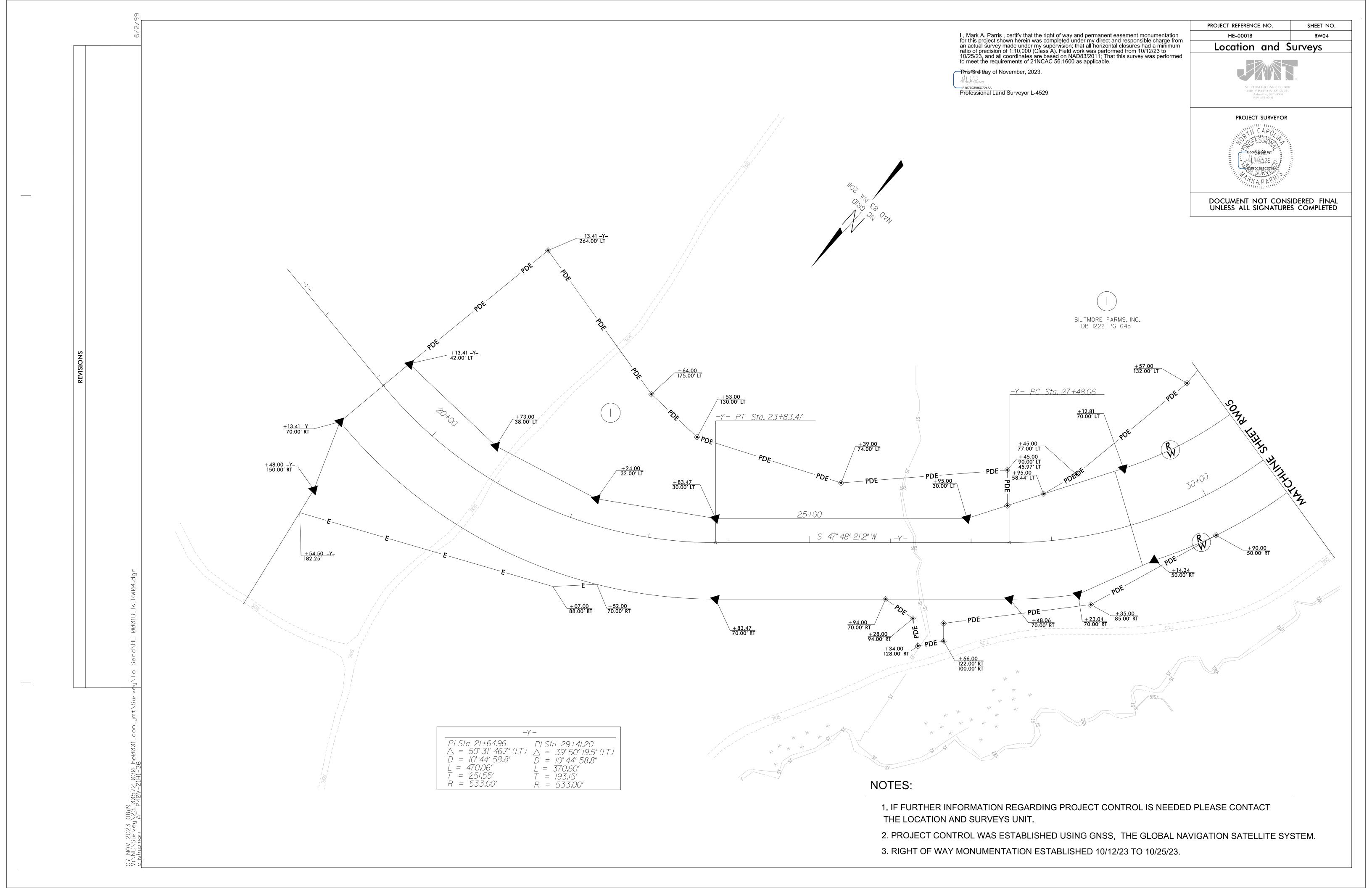


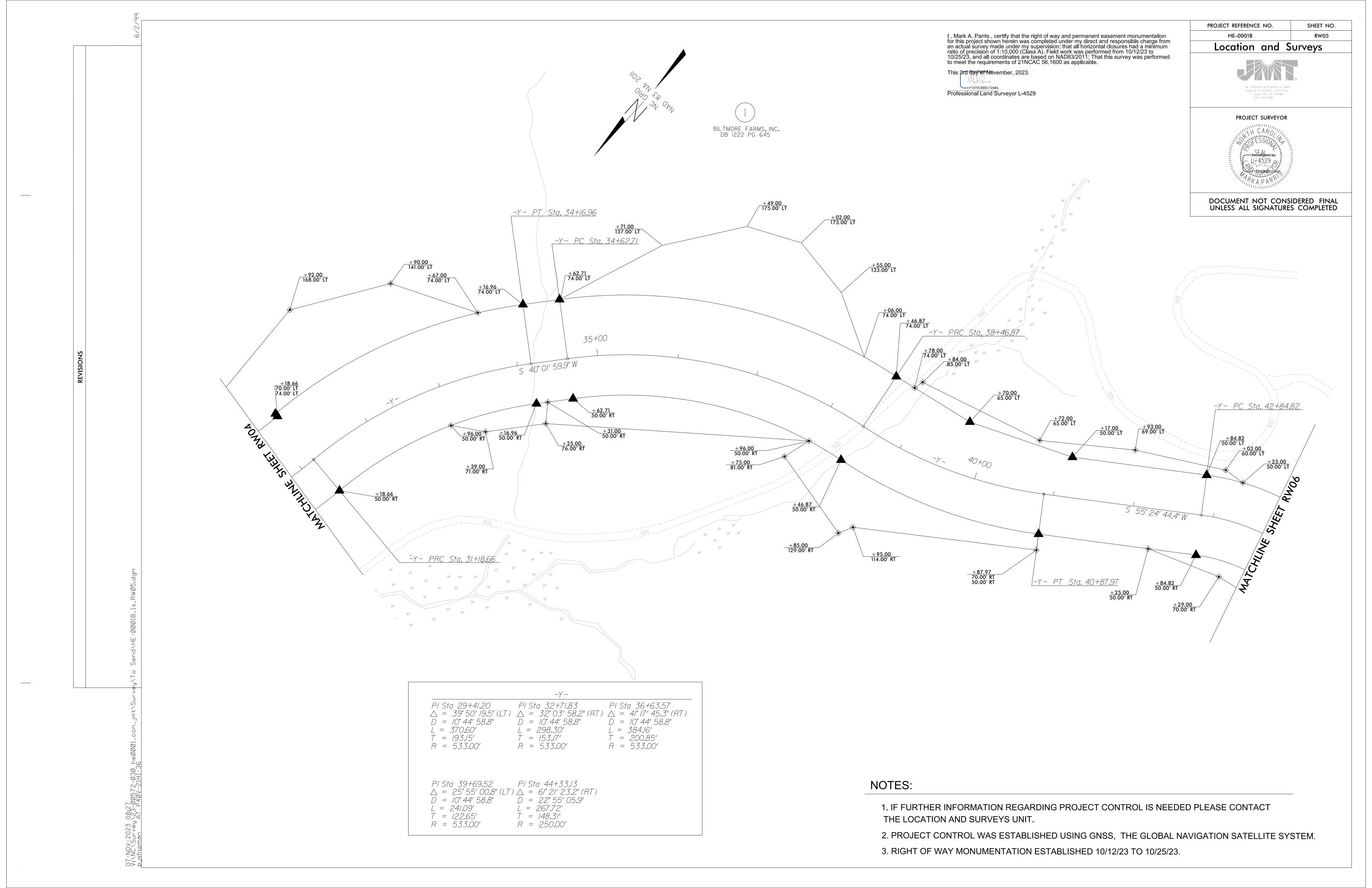
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

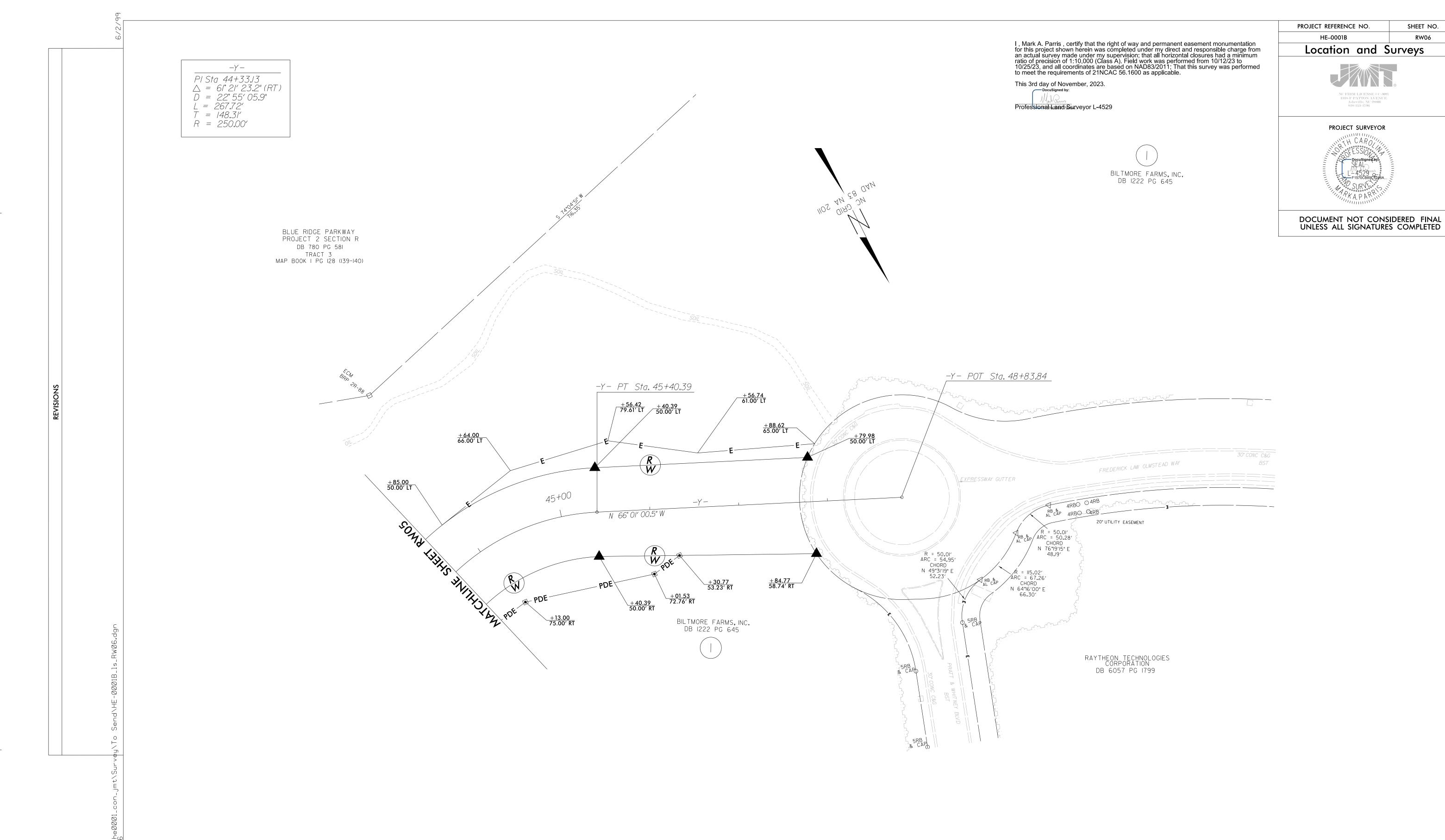
	ROW M	ARKER IRAN I	PIN AND CAP-E		
ALIGN	STATION	OFFSET	NORTH	EAST	
Y	19+13.41	70.00	658362.7348	936655.2394	
Υ	19+13.41	-42.00	658251.9181	936639.0019	
Υ	19+48.00	150.00	658446.8885	936622.8020	
Υ	20+73.00	-38.00	658255.2515	936491.9241	
Y	22+24.00	-32.00	658219.9728	936355.6790	
Y	23+83.47	70.00	658212.8517	936162.8210	
Υ	23+83.47	-30.00	658138.7644	936229.9854	
Υ	26+95.00	-30.00	657929.5246	935999.1784	
Υ	27+48.06	70.00	657967.9774	935892.7064	
Υ	28+23.04	70.00	657906.7746	935834.0650	
Υ	29+12.81	-70.00	657753.3983	935897.1245	
Y	29+14.34	50.00	657812.1252	935792.4661	
Υ	31+18.66	-70.00	657585.4047	935839.1769	SPIKE IN BASE OF 8" PINE
Y	31+18.66	50.00	657602.0373	935720.3352	
Y	31+18.66	-74.00	657584.8503	935843.1383	
Y	34+16.96	-74.00	657278.5412	935706.7593	
Y	34+16.96	50.00	657358.3021	935611.8161	
Υ	34+62.71	50.00	657323.2681	935582.3844	
Y	34+62.71	-74.00	657243.5072	935677.3276	
Y	38+46.87	50.00	657156.4699	935285.3810	
Y	38+46.87	-74.00	657033.8871	935304.0748	
Y	39+70.00	-65.00	657014.3409	935198.6654	
Y	40+87.97	50.00	657060.0928	935042.3226	
Y	41+17.00	-50.00	656961.2870	935075.1891	
Y	42+84.82	-50.00	656866.0200	934937.0281	
Y	42+84.82	50.00	656948.3459	934880.2615	
Y	45+40.39	-50.00	656838.8982	934644.7875	
Y	45+40.39	50.00	656930.2647	934685.4344	
Υ	47+79.98	-50.00	656936.2848	934425.8810	
Υ	47+84.77	58.74	657037.5864	934465.6982	

	ROW MAF	RKER PERMANI	ENT EASEMENT-E	_ - -
ALIGN	STATION	OFFSET	NORTH	EAST
Υ	19+13.41	-264.00	658032.2633	936606.8186
Υ	22+64.00	-175.00	658078.1470	936392.3412
Υ	23+53.00	-130.00	658079.6527	936314.6491
Υ	25+39.00	-74.00	658001.7027	936144.3071
Y	25+94.00	70.00	658071.4481	936006.8422
Υ	26+28.00	94.00	658066.3931	935965.5330
Y	26+34.00	128.00	658087.5530	935938.2519
Y	26+66.00	100.00	658045.3159	935933.3500
Y	26+66.00	122.00	658061.6151	935918.5738
Υ	27+45.00	-90.00	657851.4900	936002.4334
Υ	27+45.00	- 45.97	657884.1086	935972.8627
Υ	27+95.00	-58.44	657843.4173	935949.2847
Y	28+35.00	85.00	657905.6040	935813.7854
Υ	28+45.00	-77.00	657798.0972	935935.3809
Υ	29+90.00	50.00	657737.7160	935756.3919
Y	30+57.00	-132.00	657622.2791	935909.6484
Υ	31+92.00	-168.00	657477.5153	935916.3421
Y	32+90.00	-141.00	657369.4508	935845.7821
Y	32+96.00	50.00	657449.4762	935672.2362
Y	33+39.00	71.00	657426.5383	935635.2711
Y	33+67.00	-74.00	657323.7542	935741.2624
Υ	34+25.00	76.00	657368.8693	935586.7364
Υ	34+31.00	50.00	657347.5513	935602.7845
Υ	37+75.00	81.00	657200.3331	935340.1615
Υ	37+96.00	50.00	657165.5829	935330.5554
Υ	38+78.00	-74.00	657029.0750	935277.7099
Υ	38+84.00	-85.00	657017.2383	935275.0735
Y	38+85.00	129.00	657225.7608	935226.9545
Υ	38+95.00	114.00	657208.3379	935218.4571
Y	40+72.00	-65.00	656973.2035	935119.2650
Y	40+87.97	70.00	657076.5580	935030.9692
Υ	41+93.00	-69.00	656902.5024	935023.4071
Υ	42+25.00	50.00	656982.3049	934929.5105
Υ	43+03.00	-60.00	656845.6775	934923.6994
Υ	43+23.00	-50.00	656842.9885	934897.4763
Υ	43+29.00	70.00	656949.1562	934841.2667
Y	44+13.00	75.00	656938.7210	934782.6237
Υ	46+01.53	72.76	656975.9155	934638.8199
Y	46+30.77	53.23	656969.9552	934604.1699

- 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 10/12/23 TO 10/25/23.







- 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 10/12/23 TO 10/25/23.