

09/05/19

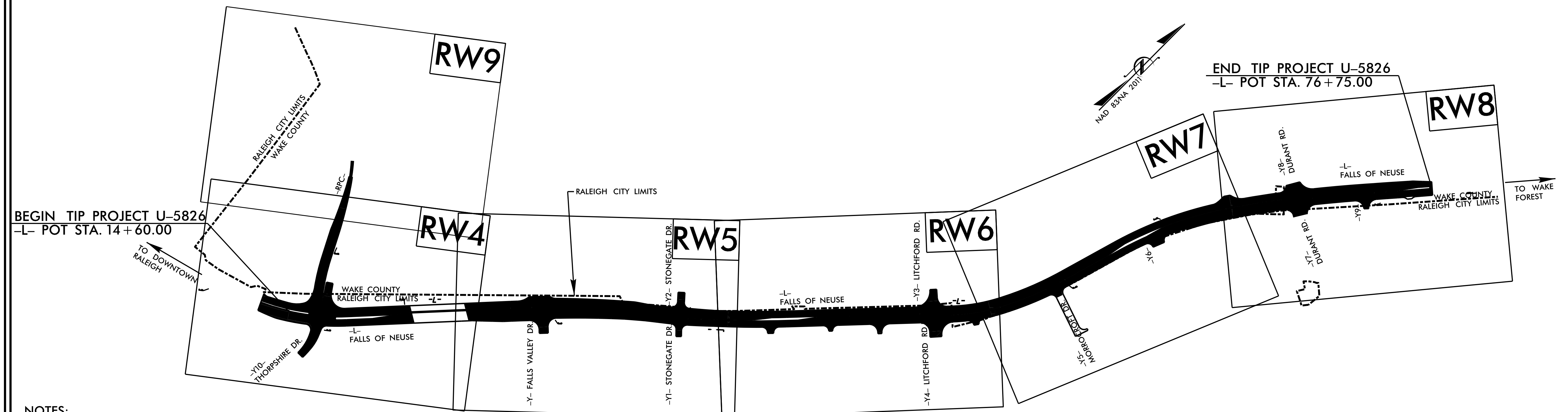
TIP PROJECT: U-5826

STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	U-5826	RW01	

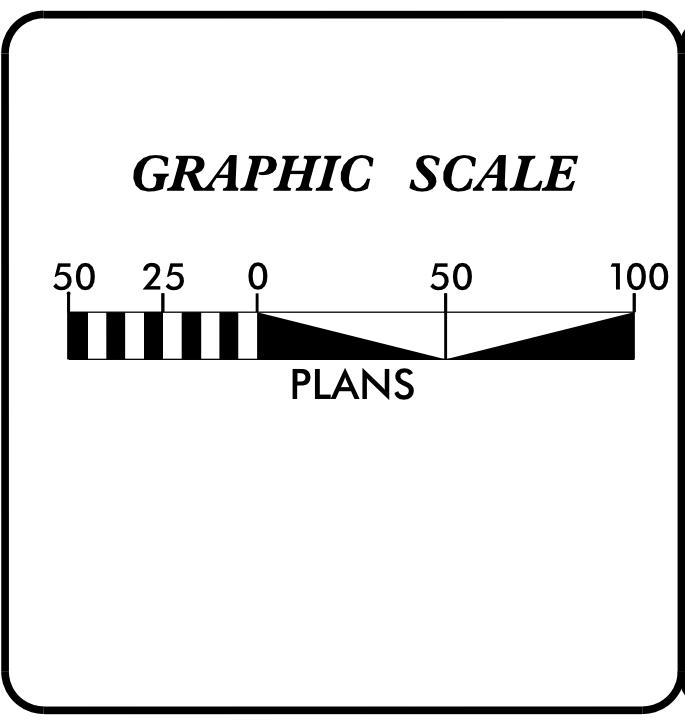
STATE OF NORTH CAROLINA
 DIVISION OF HIGHWAYS

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

WAKE COUNTY



- NOTES:
1. THIS PROJECT IS WITHIN THE MUNICIPAL BOUNDARIES OF THE CITY OF RALEIGH.
 2. CLEARING ON THIS PROJECT SHALL BE PERFORMED TO THE LIMITS ESTABLISHED BY METHOD II.
 3. ACCESS WILL BE CONTROLLED IN THE AREA OF THE INTERCHANGE.



DATUM DESCRIPTION

THE LOCALIZED COORDINATE SYSTEM DEVELOPED FOR THIS PROJECT IS BASED ON THE STATE PLANE COORDINATES ESTABLISHED BY NCGS FOR MONUMENT "I-5710 (FN1)" WITH NAD 83/NSRS 2011 STATE PLANE GRID COORDINATES OF NORTHING: 782598.847(ft) EASTING: 2115475.569(ft) ELEVATION: 437.542(ft)

THE AVERAGE COMBINED GRID FACTOR USED ON THIS PROJECT (GROUND TO GRID) IS: 0.99992221

THE N.C. LAMBERT GRID BEARING AND LOCALIZED HORIZONTAL GROUND DISTANCE FROM "I-5710 (FN1)" TO -L- STATION 27+03.02 IS S 48-03°01.3" E 477.60(ft)

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

Prepared in the Office of:

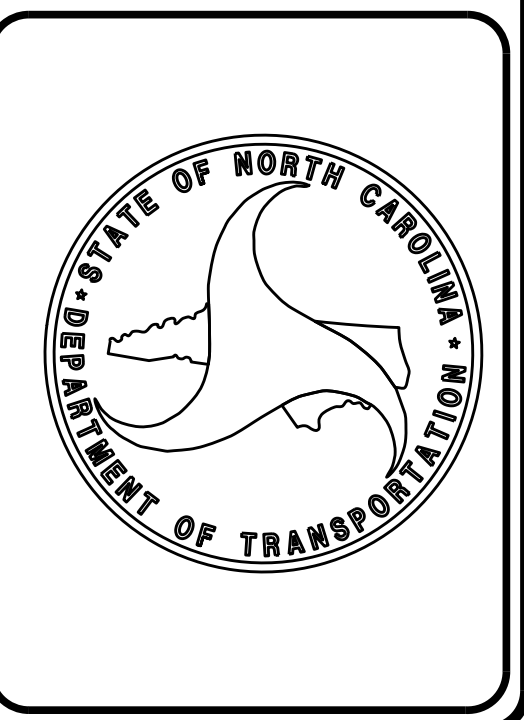
ESP ASSOCIATES, INC.
 2200 GATEWAY CENTRE BLVD SUITE 216
 MORRISVILLE, NC 27560

2018 STANDARD SPECIFICATIONS

RIGHT OF WAY DATE: _____ LETTING DATE: _____

PROFESSIONAL LAND SURVEYOR

Taynia Gibbs
 10/31/2019
 SIGNATURE: _____ Date: _____



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

6/2/09

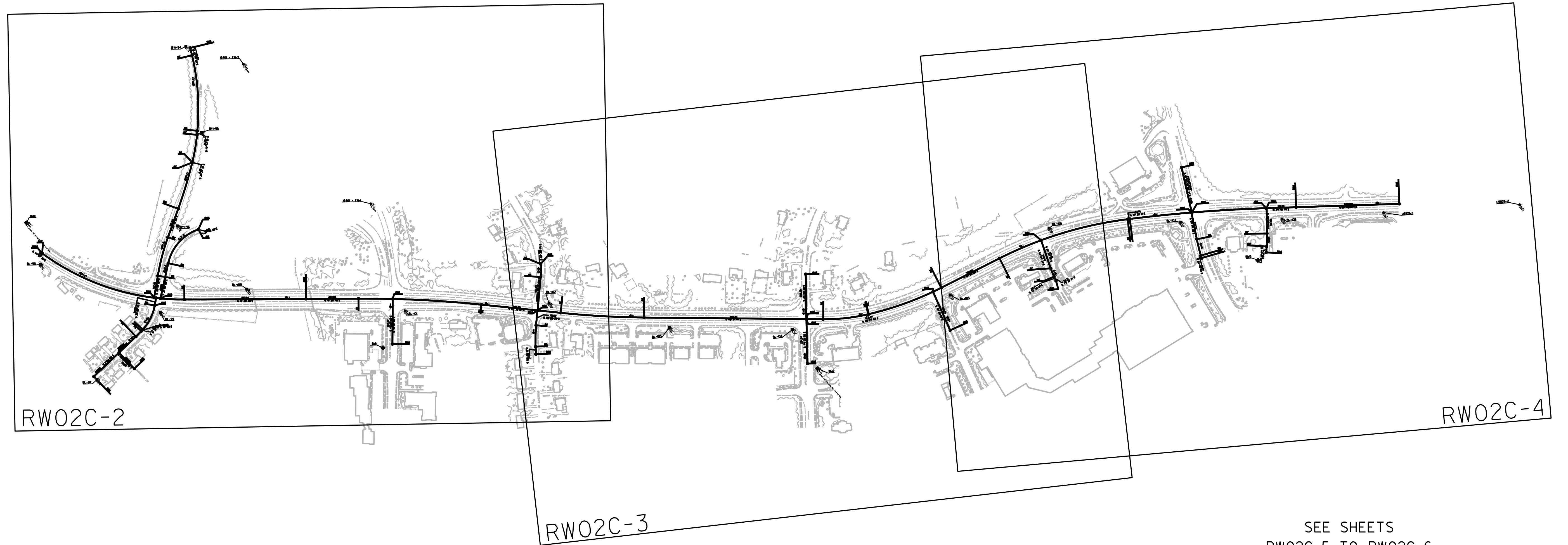
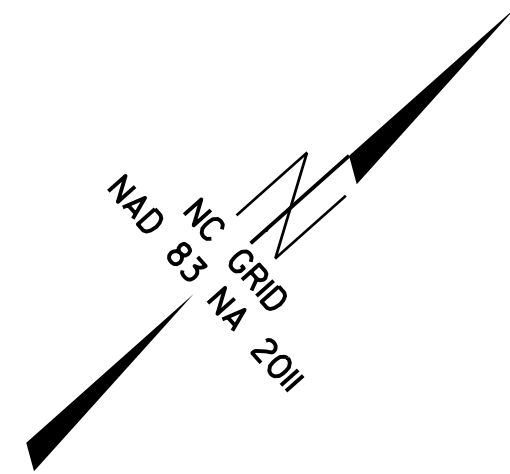
REVISIONS

I:\DEC-2008\4452
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C:\ESB\040514
Control Sheets\Final\181207\5826.ls_rw02c-1.181206.dgn

SURVEY CONTROL SHEET

W/ EXISTING CENTERLINE ALIGNMENTS PRIOR TO CONSTRUCTION

PROJECT REFERENCE NO.	SHEET NO.
U-5726	RW02C-1
Location and Surveys	
ESP ASSOCIATES, INC 2200 GATEWAY CENTRE BLVD, SUITE 216 MORRISVILLE, NC 27560	



SEE SHEETS
RW02C-5 TO RW02C-6
FOR FURTHER
ALIGNMENT DETAILS

NOTES:

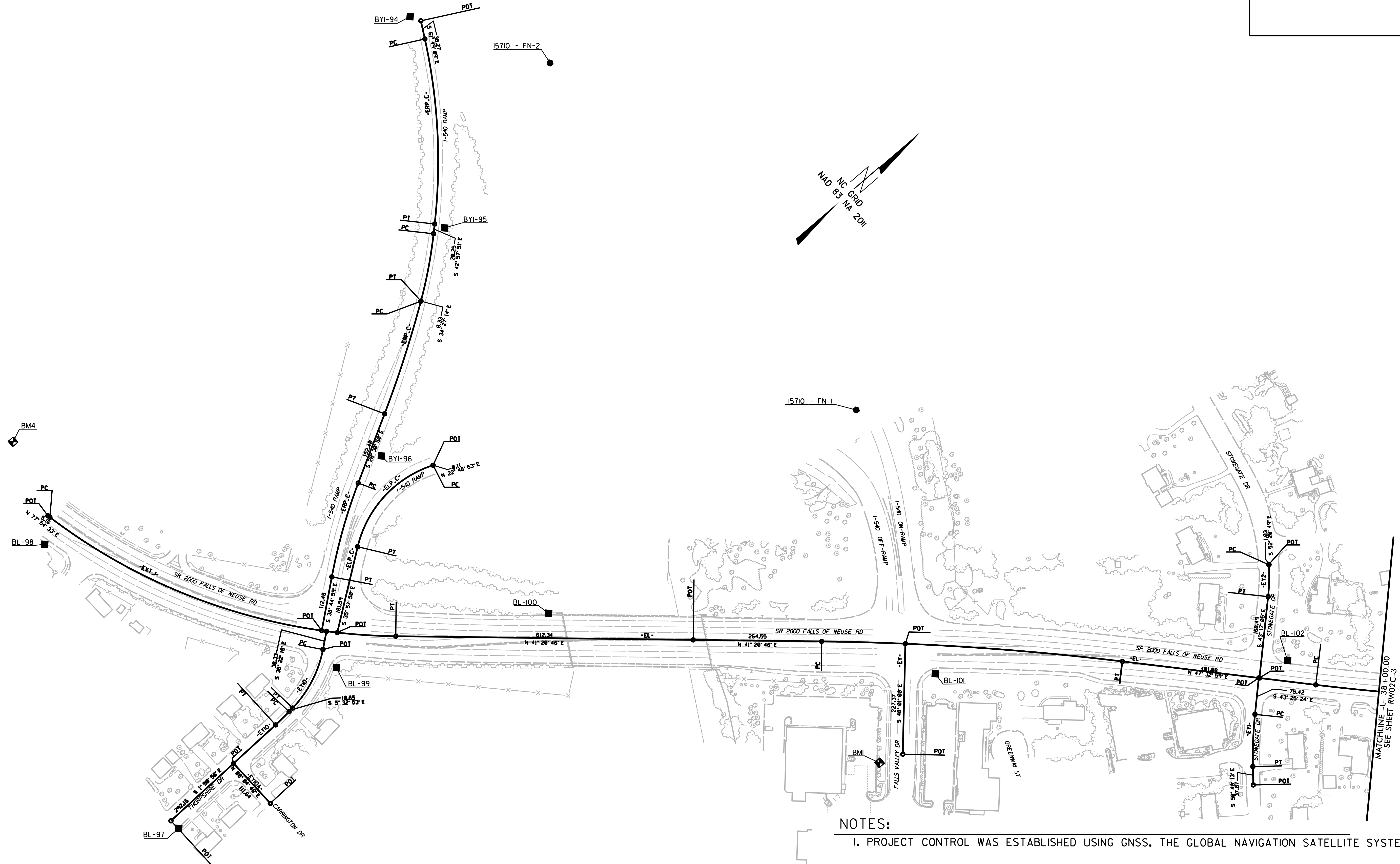
1. PROJECT CONTROL WAS ESTABLISHED USING GNSS, THE GLOBAL NAVIGATION SATELLITE SYSTEM.
2. THE SURVEY CONTROL DATA FOR THIS PROJECT HAS BEEN COMPILED FROM VARIOUS SOURCES. IF FURTHER INFORMATION REGARDING PROJECT CONTROL IS NEEDED, PLEASE CONTACT THE LOCATION AND SURVEYS UNIT.

PROJECT REFERENCE NO.	SHEET NO.
U-5826	RW02C-2
Location and Surveys	
ESP ASSOCIATES, INC 2200 GATEWAY CENTRE BLVD, SUITE 216 MORRISVILLE, NC 27560	

SURVEY CONTROL SHEET

W/ EXISTING CENTERLINE ALIGNMENTS PRIOR TO CONSTRUCTION

REVISIONS



NOTES:

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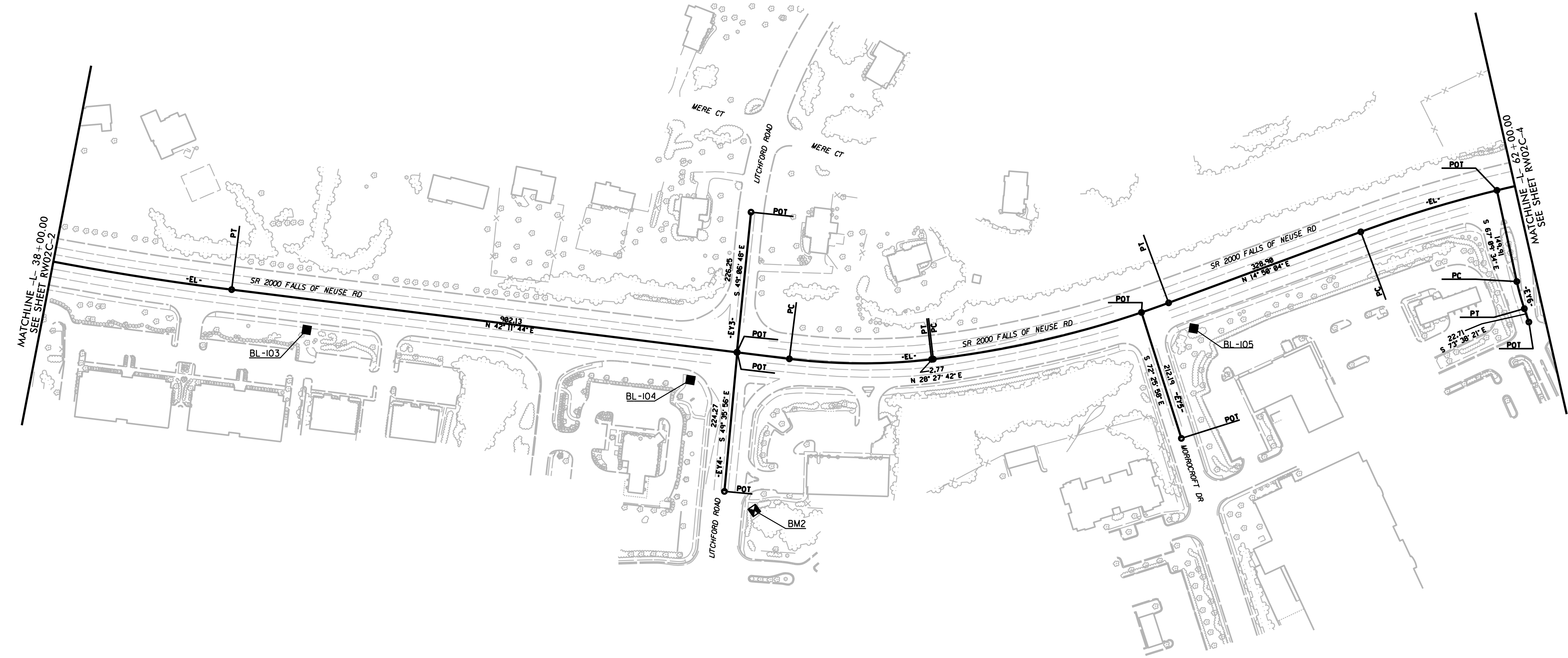
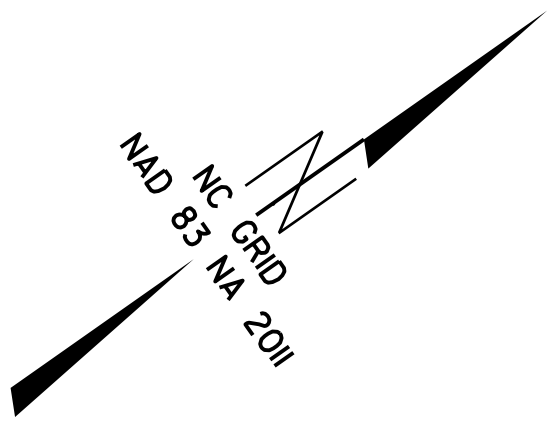
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 pptrucal AT ESP201517

MATCHLINE -L- 38+00.00
 SEE SHEET RW02C-3

PROJECT REFERENCE NO.	SHEET NO.
U-5826	RW02C-3
Location and Surveys	
ESP ASSOCIATES, INC 2200 GATEWAY CENTRE BLVD, SUITE 216 MORRISVILLE, NC 27560	

SURVEY CONTROL SHEET

W/ EXISTING CENTERLINE ALIGNMENTS PRIOR TO CONSTRUCTION



REVISIONS

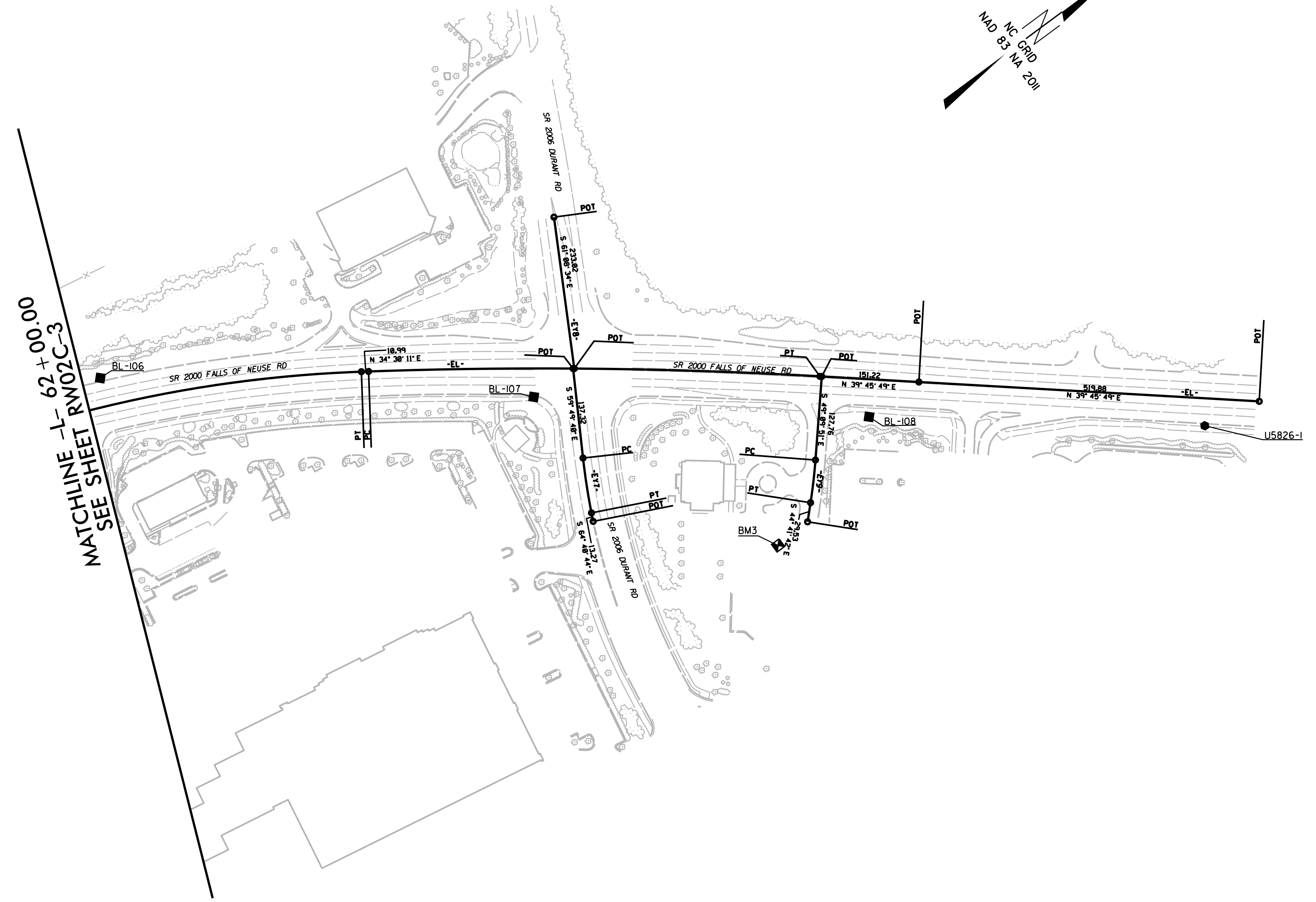
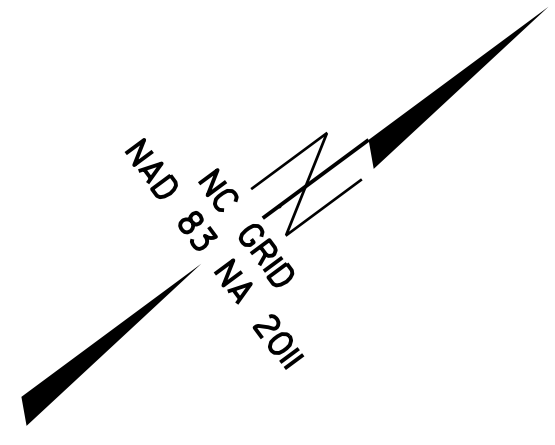
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- NOTES:**
- PROJECT CONTROL WAS ESTABLISHED USING GNSS, THE GLOBAL NAVIGATION SATELLITE SYSTEM.
 - THE SURVEY CONTROL DATA FOR THIS PROJECT HAS BEEN COMPILED FROM VARIOUS SOURCES. IF FURTHER INFORMATION REGARDING PROJECT CONTROL IS NEEDED, PLEASE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

PROJECT REFERENCE NO.	SHEET NO.
U-5826	RW02C-4
Location and Surveys	
ESP ASSOCIATES, INC 2200 GATEWAY CENTRE BLVD, SUITE 216 MORRISVILLE, NC 27560	

SURVEY CONTROL SHEET

W/ EXISTING CENTERLINE ALIGNMENTS PRIOR TO CONSTRUCTION



MATCHLINE -L- 62+00.00
SEE SHEET RW02C-3

NOTES:

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REVISIONS

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 6/2/09

PROJECT REFERENCE NO.	SHEET NO.
U-5826	RW02C-6
Location and Surveys	
ESP ASSOCIATES, INC 2200 GATEWAY CENTRE BLVD, SUITE 216 MORRISVILLE, NC 27560	

SURVEY CONTROL SHEET

W/ EXISTING CENTERLINE ALIGNMENTS PRIOR TO CONSTRUCTION

BL POINT	DESC.	NORTH	EAST	ELEVATION
202	FN2 (15710)	782585.8250	2114523.0610	426.53
201	FN1 (15710)	782598.8470	2115475.5690	437.54
101	BL101	782368.4558	2115993.2260	448.81
102	BL102	782936.2965	2116445.0890	453.16
103	BL103	783307.0469	2116939.4530	438.73
104	BL104	783764.6781	2117359.7410	440.84
105	BL105	784472.9957	2117756.6480	437.77
106	BL106	785069.0392	2117836.5690	442.01
107	BL107	785583.1912	2118253.0340	435.25
108	BL108	785976.2073	2118581.6560	433.51
1	U5826-1	786379.7189	2118897.2870	440.17
2	U5826-2	786918.7350	2119322.6960	430.59

.....
 BM1 ELEVATION = 439.59
 N 782162 E 2116058
 EL STATION 27+75.00 247 RIGHT
 BM1 BENCH TIE W/YELLOW TAG IN 9IN BIRCH

.....
 BM2 ELEVATION = 446.84
 N 783728 E 2117590
 EL STATION 49+66.00 249 RIGHT
 BM2 BENCH TIE W/YELLOW TAG IN 19IN OAK

BLA POINT	DESC.	NORTH	EAST	ELEVATION
98	BL-98	781151.0716	2114597.1132	456.13
99	BL-99	781441.4168	2115180.8778	448.93
100	BL-100	781845.5602	2115380.4432	450.49
301		782368.4558	2115993.2260	448.81

.....
 BM3 ELEVATION = 438.99
 N 785748 E 2118657
 EL STATION 72+69.00 261 RIGHT
 BM3 BENCH TIE W/YELLOW TAG IN 9IN MAPLE

BY1 POINT	DESC.	NORTH	EAST	ELEVATION
94	BY1-94	782429.2847	2114262.8283	417.33
95	BY1-95	782199.8206	2114639.0438	426.99
96	BY1-96	781795.4127	2114910.3272	435.50
299		781441.4168	2115180.8780	448.93

.....
 BM4 ELEVATION = 450.81
 N 781239 E 2114394
 EL STATION 10+00.00
 N 74+33'51.1" W DIST 168.40
 BM4 BENCH TIE W/YELLOW TAG IN 15IN OAK

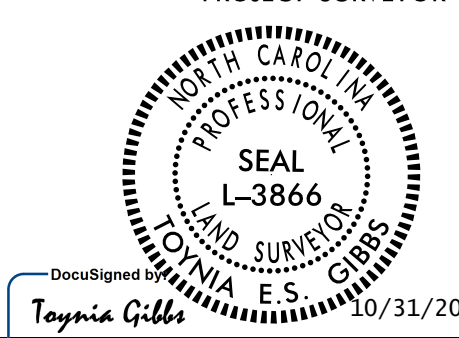
BY2 POINT	DESC.	NORTH	EAST	ELEVATION
199		781441.4168	2115180.8780	448.93
97	BY2-97	780979.4300	2115220.4471	454.31

NOTES:

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REVISIONS

RIGHT OF WAY CONTROL SHEET

PROJECT REFERENCE NO. U-5826	SHEET NO. RW03E-1
Location and Surveys	
ESP ASSOCIATES, INC. 2200 GATEWAY CENTRE BLVD. SUITE 216 MORRISVILLE, NC 27560	
PROJECT SURVEYOR	
	
DocuSigned by: <i>Toyia Gibbs</i> 10/31/2019 2E2F35A49E34DA	
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	

I, Toyia E.S. Gibbs, a Professional Land Surveyor in the state of North Carolina hereby certify to the best of my knowledge and belief that the following work item(s) (R/W Staking) performed under my responsible charge meet NCDOT Survey Standards as directed in the NCDOT Location & Surveys guidelines and procedures.

I further certify that the right of way and permanent easement points shown herein and outlined in the tables shown hereon (localized coordinates, station/offset) have been checked and are accurate representations of the right of way and permanent easement points depicted on the corresponding highway plans. I also certify that the right of way and permanent easement points shown herein have been field monumented under my supervision from existing survey control provided by others; that the depicted property data shown herein were surveyed by others; and these monuments denote the right of way and easement boundaries at the time of staking which may be subject to change due to right of way revisions (See deeds for final determination).

Witness my original signature, registration number and seal this date 10/31/2019

DocuSigned by:
Toyia Gibbs
 Professional Land Surveyor L-3866
 PLS # Seal

ROW MARKER IRON PIN AND CAP-E

ALIGN	STATION	OFFSET	NORTH	EAST
L	29+65.03	63.45	782425.8413	2116055.5209
L	30+55.20	61.65	782490.1612	2116117.3414
L	31+33.43	60.09	782545.1529	2116171.7772
L	31+80.56	59.15	782577.8589	2116204.9345
L	32+50.23	57.75	782625.6481	2116254.5286
L	33+62.73	57.75	782699.6688	2116337.5129
L	34+31.16	59.12	782742.7237	2116389.6801
L	35+07.11	60.65	782791.5661	2116448.9170
L	35+99.04	60.33	782853.5597	2116518.2705
L	37+27.74	57.75	782943.9888	2116611.9821
L	41+13.93	57.75	783223.7938	2116884.3961
L	48+24.68	57.75	783751.6317	2117360.3710
L	48+48.86	65.83	783764.1804	2117382.5680
L	50+68.06	57.75	783937.6095	2117524.0166
L	52+55.09	57.75	784104.9300	2117629.4126
L	56+29.10	57.75	784465.1657	2117766.1688
L	59+51.90	57.75	784777.2038	2117848.8062
L	65+71.33	57.75	785325.7922	2118089.7036
L	68+79.88	57.75	785577.5534	2118261.7525
L	35+79.82	-56.43	782927.4514	2116425.8457
L	35+90.24	-56.43	782934.3398	2116433.5077
L	37+27.98	-53.75	783024.9327	2116535.3019
L	41+54.39	-53.29	783328.2060	2116829.0277
L	63+48.38	-53.75	785186.4459	2117883.4625
L	65+71.33	-53.75	785385.8325	2117995.7493
L	68+43.66	-53.75	785613.6199	2118150.2075
L	72+11.31	-53.75	785907.7787	2118375.7187
L	76+73.93	-50.21	786259.4955	2118677.4710
L	76+73.93	-56.64	786263.5836	2118672.5287
L	74+95.91	-55.55	786128.4074	2118558.7380
L	74+22.28	65.27	785993.7260	2118602.0180
L	76+70.09	64.52	786183.1081	2118763.1793
L	17+70.00	97.00	781515.2415	2115287.0220
L	18+40.00	96.89	781567.8846	2115333.1700
L	47+84.42	-53.72	783796.3783	2117250.6293
L	48+42.95	-80.74	783857.9492	2117269.7556
L	48+69.99	-132.45	783912.6513	2117249.4645
L	32+27.96	-64.94	782701.0399	2116155.2083
L	33+00.23	-64.75	782750.0916	2116209.5481
L	34+00.75	-54.51	782809.4243	2116292.7941
L	35+00.44	-56.44	782880.6933	2116372.9773
L	15+73.20	84.38	781377.2561	2115126.7737
L	16+41.28	97.00	781415.8812	2115190.2540
L	16+58.00	97.00	781428.1956	2115203.4570
L	55+26.03	57.75	784363.1730	2117735.9978
L	55+34.88	69.38	784368.2936	2117749.8871
L	55+97.64	57.75	784433.8583	2117757.5754

ROW MARKER IRON PIN AND CAP-E

ALIGN	STATION	OFFSET	NORTH	EAST
RPC	16+96.60	122.00	781905.3092	2114680.0471
RPC	19+00.00	115.00	781737.5415	2114783.0730
RPC	21+20.00	95.00	781548.2289	2114919.5316
RPC	21+50.00	84.79	781528.2392	2114946.9935

ROW MARKER IRON PIN AND CAP-E

ALIGN	STATION	OFFSET	NORTH	EAST
Y10	12+25.20	30.02	781268.6530	2115158.7880
Y10	12+31.90	29.71	781261.9654	2115159.3206

NOTES:

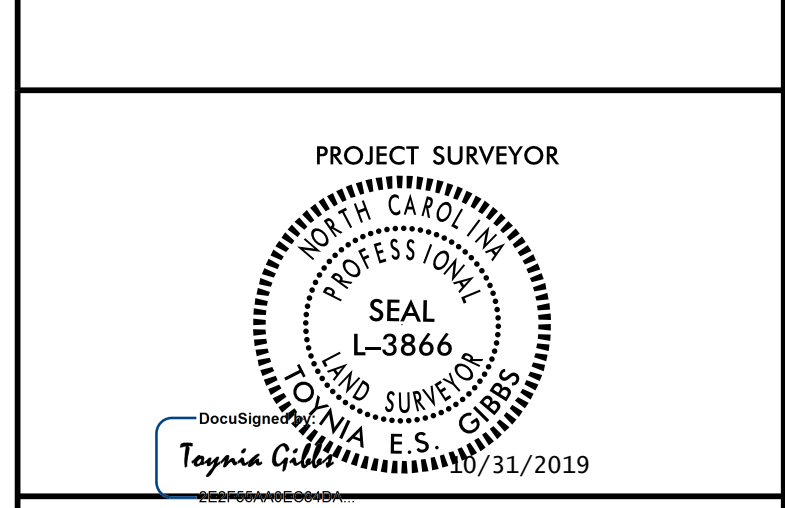
- IF FURTHER INFORMATION REGARDING PROJECT CONTROL IS NEEDED, PLEASE CONTACT THE LOCATION AND SURVEYS UNIT.
- PROJECT CONTROL WAS ESTABLISHED USING GNSS, THE GLOBAL NAVIGATION SATELLITE SYSTEM.

REVISIONS

3:\01-2019-09-18-18\RS2\HM01\037.001_U5826.con_es#6_RoFW_Re-Staking_Submit\10-31-19_Project_Redlines\U5826.ls_r-w03e-1.191031.dgn
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Location and Surveys

ESP ASSOCIATES, INC.
2200 GATEWAY CENTRE BLVD, SUITE 216
MORRISVILLE, NC 27560



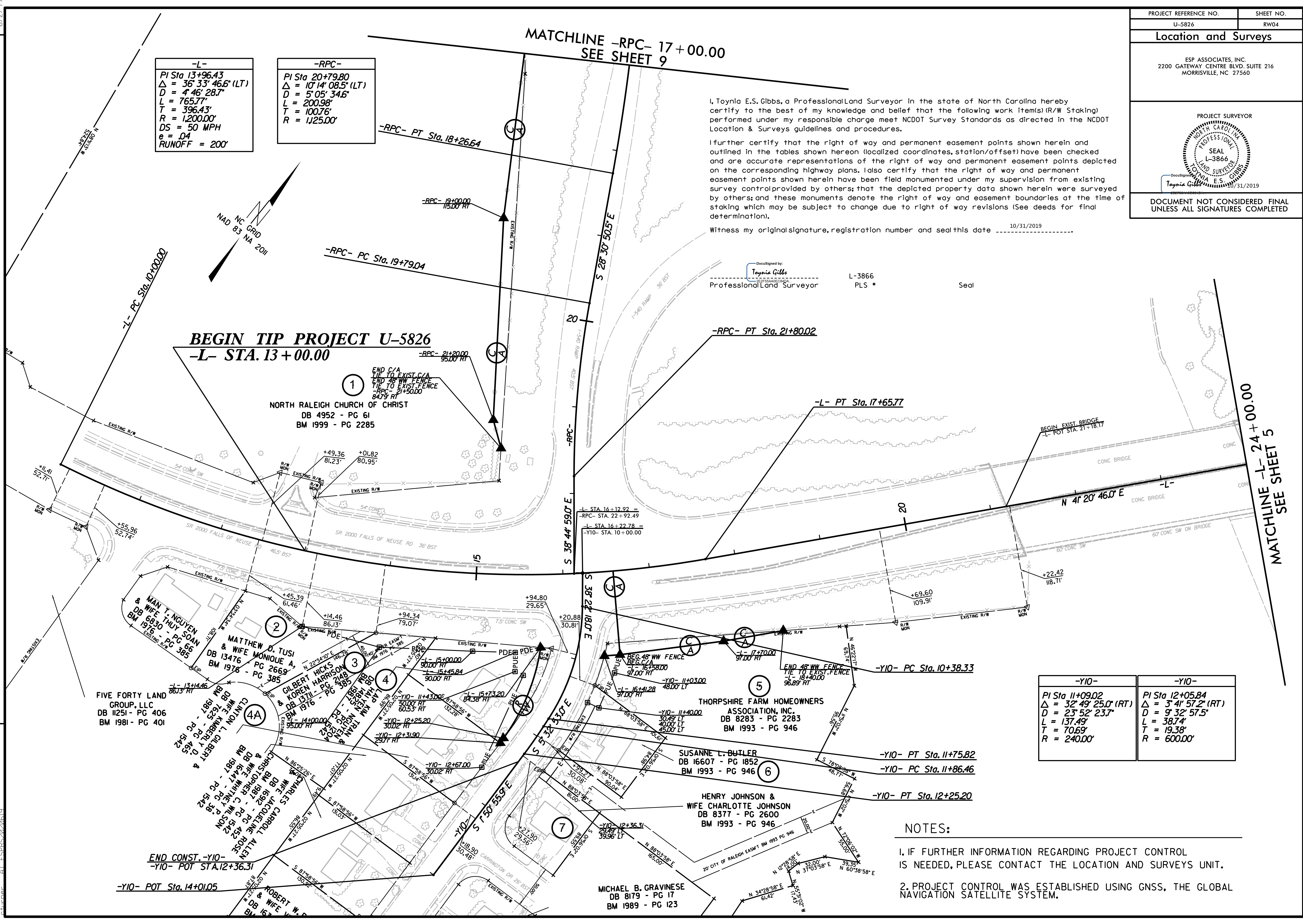
DOCUMENT NOT CONSIDERED FINAL
UNLESS ALL SIGNATURES COMPLETED

I, Taysia E.S. Gibbs, a Professional Land Surveyor in the state of North Carolina hereby certify to the best of my knowledge and belief that the following work item(s) (R/W Staking) performed under my responsible charge meet NCDOT Survey Standards as directed in the NCDOT Location & Surveys guidelines and procedures.

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Witness my original signature, registration number and seal this date 10/31/2019

DocuSigned by:
Taysia Gibbs
Professional Land Surveyor L-3866
PLS # Seal



-L-
PI Sta 13+96.43
Δ = 36° 33' 46.6" (LT)
D = 4' 46" 28.7"
L = 765.77'
T = 396.43'
R = 1,200.00'
DS = 50 MPH
e = .04
RUNOFF = 200'

-RPC-
PI Sta 20+79.80
Δ = 10° 14' 08.5" (LT)
D = 5' 05" 34.6"
L = 200.98'
T = 100.76'
R = 1,125.00'

BEGIN TIP PROJECT U-5826
-L- STA. 13+00.00

1

NORTH RALEIGH CHURCH OF CHRIST
DB 4952 - PG 61
BM 1999 - PG 2285

2
MAN T. NGUYEN & WIFE HUY SOAN
DB 6930 - PG 66
BM 1976 - PG 385

3
MATTHEW D. TUSI & WIFE MONIQUE A.
DB 13476 - PG 2669
BM 1976 - PG 385

4
GILBERT HICKS & KOREN HARRISON
DB 15711 - PG 2148
BM 1976 - PG 385

5
THORPSHIRE FARM HOMEOWNERS
ASSOCIATION, INC.
DB 8283 - PG 2283
BM 1993 - PG 946

6
SUSANNE L. BUTLER
DB 16607 - PG 1852
BM 1993 - PG 946

7
HENRY JOHNSON & WIFE CHARLOTTE JOHNSON
DB 8377 - PG 2600
BM 1993 - PG 946

-Y10-	-Y10-
PI Sta 11+09.02	PI Sta 12+05.84
Δ = 32° 49' 25.0" (RT)	Δ = 3° 41' 57.2" (RT)
D = 23' 52" 23.7"	D = 9' 32" 57.5"
L = 137.49'	L = 38.74'
T = 70.69'	T = 19.38'
R = 240.00'	R = 600.00'

NOTES:

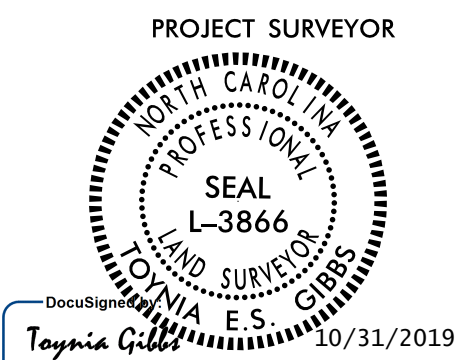
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2. PROJECT CONTROL WAS ESTABLISHED USING GNSS, THE GLOBAL NAVIGATION SATELLITE SYSTEM.

REVISIONS

6/2/2019 09:52:52 AR52\HM01\037.001 U5826.com.esi6 RofW Re-Staking\Submit\10-31-19 Project Redlines\U5826.ls_rw03e-4_191031.dgn
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6/2/2019

PROJECT REFERENCE NO.	SHEET NO.
U-5826	RW05
Location and Surveys	
ESP ASSOCIATES, INC. 2200 GATEWAY CENTRE BLVD, SUITE 216 MORRISVILLE, NC 27560	
PROJECT SURVEYOR 	
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	

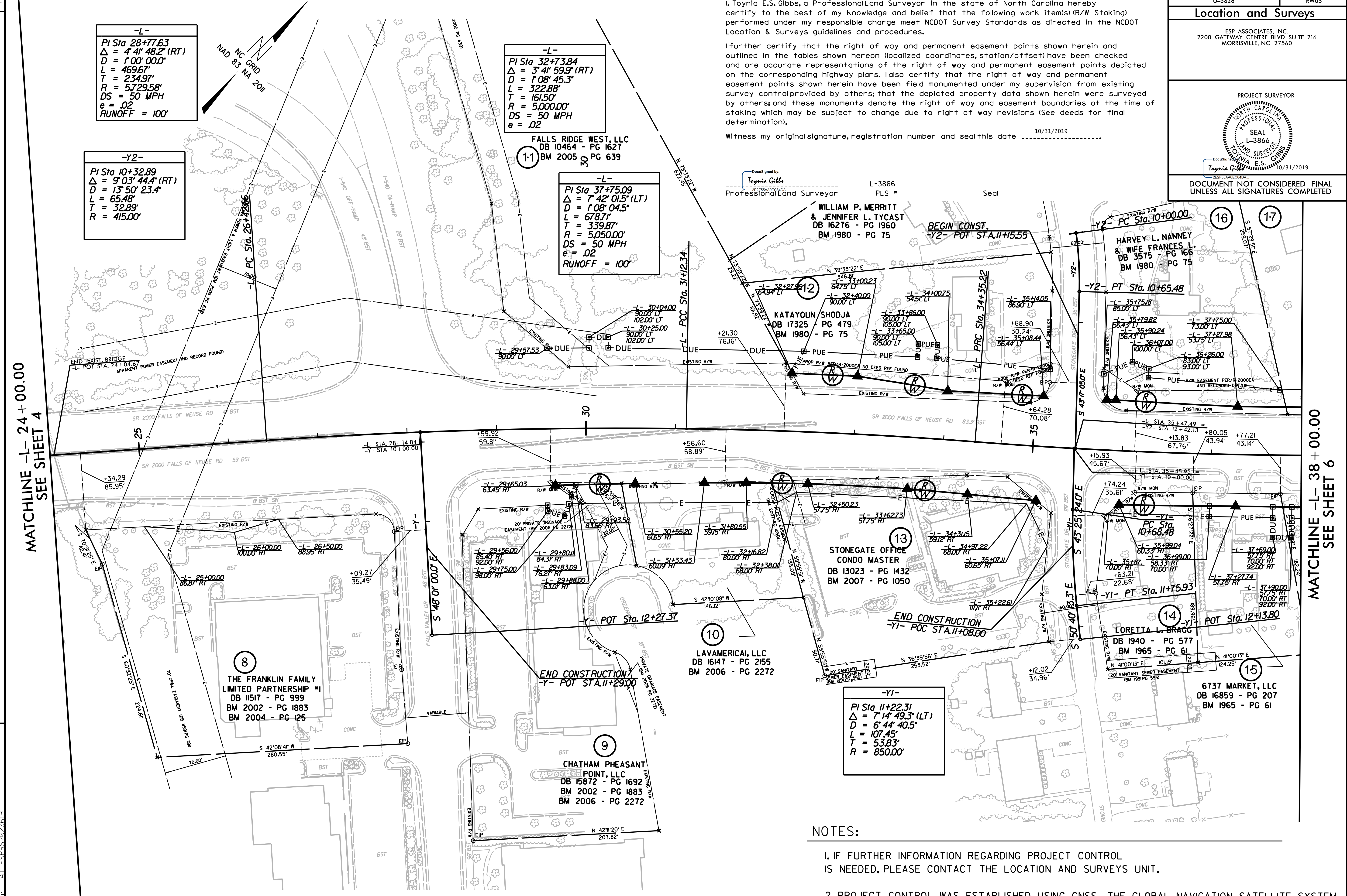
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10/31/2019

Witness my original signature, registration number and seal this date _____

DocuSigned by:
Toyia Gibbs
Professional Land Surveyor L-3866
PLS # _____ Seal



-L-
PI Sta 28+77.63
 $\Delta = 4' 41'' 48.2''$ (RT)
D = 1'00' 00.0"
L = 469.67'
T = 234.97'
R = 5729.58'
DS = 50 MPH
e = .02
RUNOFF = 100'

-Y2-
PI Sta 10+32.89
 $\Delta = 9' 03'' 44.4''$ (RT)
D = 13' 50' 23.4"
L = 65.48'
T = 32.89'
R = 415.00'

-L-
PI Sta 32+73.84
 $\Delta = 3' 41'' 59.9''$ (RT)
D = 1'08' 45.3"
L = 322.88'
T = 161.50'
R = 5000.00'
DS = 50 MPH
e = .02

-L-
PI Sta 37+75.09
 $\Delta = 7' 42'' 01.5''$ (LT)
D = 1'08' 04.5"
L = 678.71'
T = 339.87'
R = 5050.00'
DS = 50 MPH
e = .02
RUNOFF = 100'

-Y1-
PI Sta 11+22.31
 $\Delta = 7' 14'' 49.3''$ (LT)
D = 6' 44' 40.5"
L = 107.45'
T = 53.83'
R = 850.00'

REVISIONS

MATCHLINE -L- 24+00.00
SEE SHEET 4

MATCHLINE -L- 38+00.00
SEE SHEET 6

- 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.

10/31/2019 09:56:58
 P:\Projects\U5826\U5826_HM01_037_001_U5826\U5826_1s_rw05e-5_191031.dgn
 Project: Redlines\U5826_1s_rw05e-5_191031.dgn
 User: Toyia Gibbs
 Date: 10/31/2019 9:56:58 AM
 File: P:\Projects\U5826\U5826_HM01_037_001_U5826\U5826_1s_rw05e-5_191031.dgn

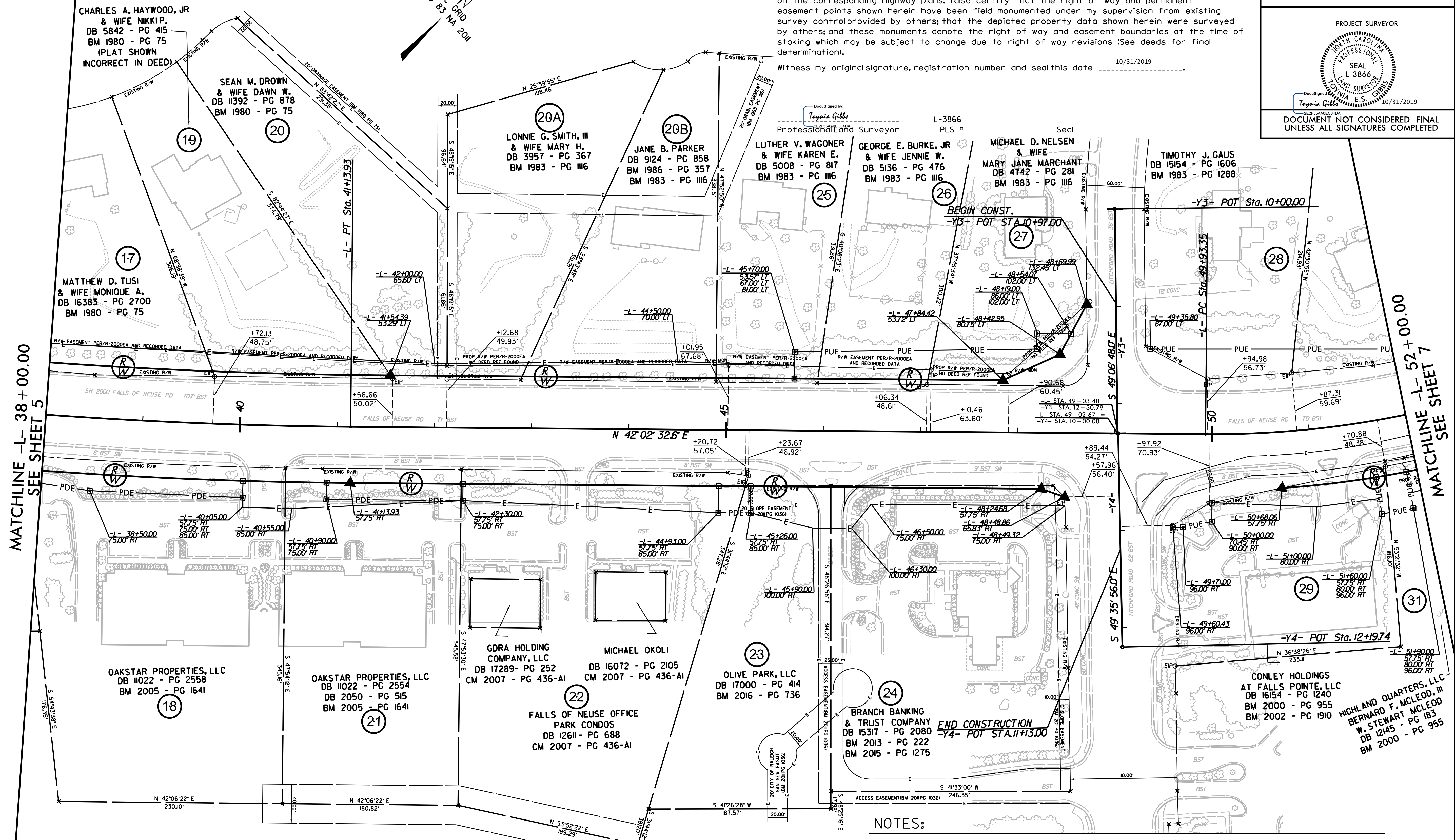
PROJECT REFERENCE NO.	SHEET NO.
U-5826	RW06
Location and Surveys	
ESP ASSOCIATES, INC. 2200 GATEWAY CENTRE BLVD, SUITE 216 MORRISVILLE, NC 27560	
PROJECT SURVEYOR	
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	

I, Tonyia E.S. Gibbs, a Professional Land Surveyor in the state of North Carolina hereby certify to the best of my knowledge and belief that the following work item(s) (R/W Staking) performed under my responsible charge meet NCDOT Survey Standards as directed in the NCDOT Location & Surveys guidelines and procedures.

I further certify that the right of way and permanent easement points shown herein and outlined in the tables shown hereon (localized coordinates, station/offset) have been checked and are accurate representations of the right of way and permanent easement points depicted on the corresponding highway plans. I also certify that the right of way and permanent easement points shown herein have been field monumented under my supervision from existing survey control provided by others; that the depicted property data shown herein were surveyed by others; and these monuments denote the right of way and easement boundaries at the time of staking which may be subject to change due to right of way revisions (See deeds for final determination).

Witness my original signature, registration number and seal this date 10/31/2019

DocuSigned by:
Tonyia Gibbs
Professional Land Surveyor L-3866
PLS # _____ Seal



REVISIONS

MATCHLINE -L- 38 + 00.00
SEE SHEET 5

MATCHLINE -L- 52 + 00.00
SEE SHEET 7

NOTES:

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

3:08:21-2019 09:53:53 ARS2\HM01\037.001 U5826.com.esi6 RoFW Re-Staking\Submits\10-31-19 Project Redlines\U5826.ls_rw03e-6.191031.dgn
 3:08:21-2019 09:53:53 ARS2\HM01\037.001 U5826.com.esi6 RoFW Re-Staking\Submits\10-31-19 Project Redlines\U5826.ls_rw03e-6.191031.dgn
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Location and Surveys

ESP ASSOCIATES, INC.
2200 GATEWAY CENTRE BLVD, SUITE 216
MORRISVILLE, NC 27560

PROJECT SURVEYOR

DOCUMENT NOT CONSIDERED FINAL
UNLESS ALL SIGNATURES COMPLETED

I, Toyonia E.S. Gibbs, a Professional Land Surveyor in the state of North Carolina hereby certify to the best of my knowledge and belief that the following work items (R/W Staking) performed under my responsible charge meet NCDOT Survey Standards as directed in the NCDOT Location & Surveys guidelines and procedures.

I further certify that the right of way and permanent easement points shown herein and outlined in the tables shown hereon (localized coordinates, station/offset) have been checked and are accurate representations of the right of way and permanent easement points depicted on the corresponding highway plans. I also certify that the right of way and permanent easement points shown herein have been field monumented under my supervision from existing survey control provided by others; that the depicted property data shown herein were surveyed by others; and these monuments denote the right of way and easement boundaries at the time of staking which may be subject to change due to right of way revisions (See deeds for final determination).

Witness my original signature, registration number and seal this date 10/31/2019

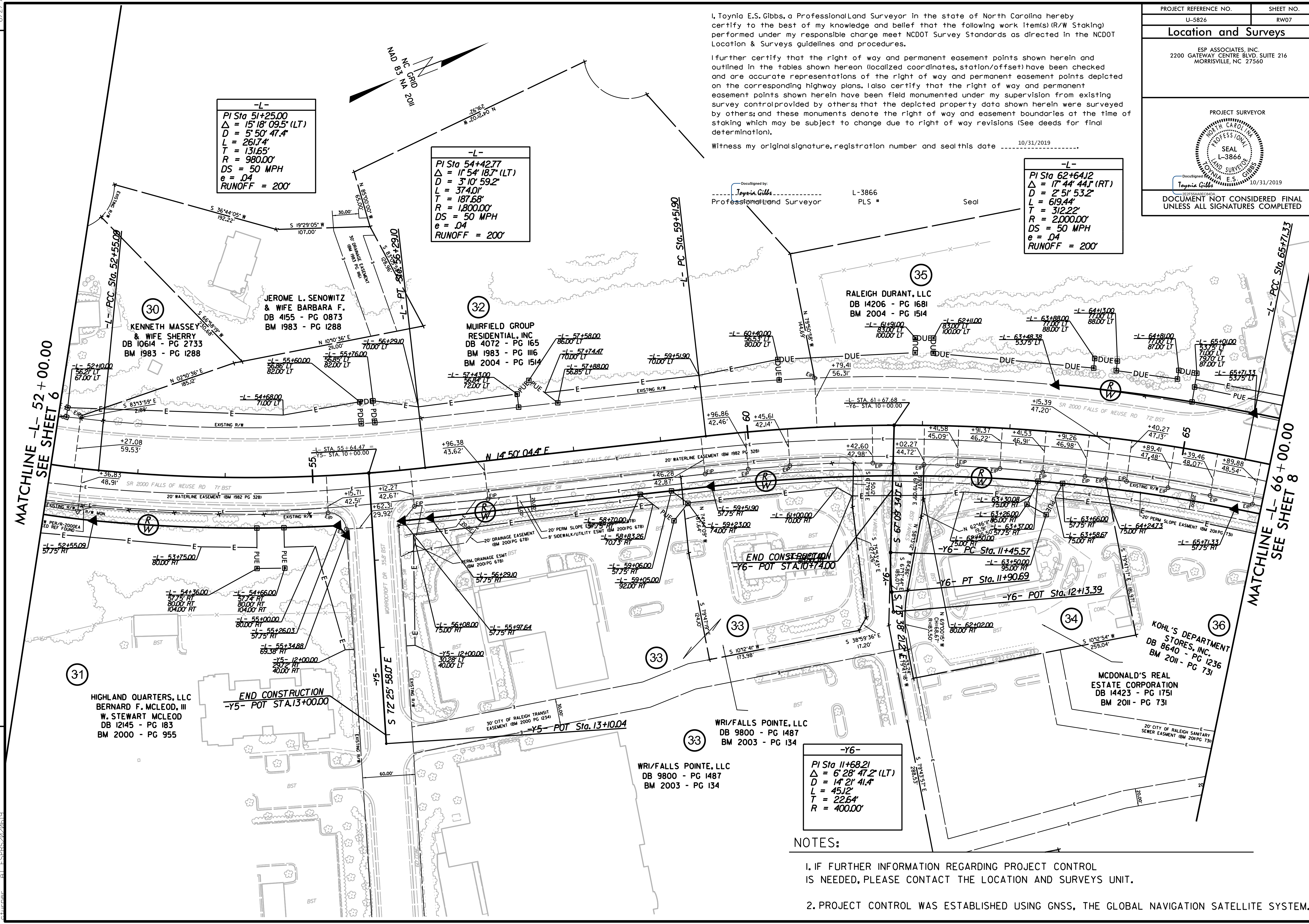
DocuSigned by:
Toyonia Gibbs
Professional Land Surveyor L-3866 PLS # Seal

-L-
PI Sta 51+25.00
Δ = 15° 18' 09.5" (LT)
D = 5° 50' 47.4"
L = 261.74'
T = 131.65'
R = 980.00'
DS = 50 MPH
e = .04
RUNOFF = 200'

-L-
PI Sta 54+42.77
Δ = 11° 54' 18.7" (LT)
D = 3° 10' 59.2"
L = 374.01'
T = 187.68'
R = 1,800.00'
DS = 50 MPH
e = .04
RUNOFF = 200'

-L-
PI Sta 62+64.12
Δ = 17° 44' 44.1" (RT)
D = 2° 51' 53.2"
L = 619.44'
T = 312.22'
R = 2,000.00'
DS = 50 MPH
e = .04
RUNOFF = 200'

-Y6-
PI Sta 11+68.21
Δ = 6° 28' 47.2" (LT)
D = 14° 21' 41.4"
L = 451.2'
T = 22.64'
R = 400.00'



MATCHLINE -L- 52+00.00
SEE SHEET 6

MATCHLINE -L- 66+00.00
SEE SHEET 8

NOTES:

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

REVISIONS

31 OCT 2019 09:55
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PROJECT REFERENCE NO.	SHEET NO.
U-5826	RW08
Location and Surveys	
ESP ASSOCIATES, INC. 2200 GATEWAY CENTRE BLVD, SUITE 216 MORRISVILLE, NC 27560	
PROJECT SURVEYOR	
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	

I, Toinia E.S. Gibbs, a Professional Land Surveyor in the state of North Carolina hereby certify to the best of my knowledge and belief that the following work item(s) (R/W Staking) performed under my responsible charge meet NCDOT Survey Standards as directed in the NCDOT Location & Surveys guidelines and procedures.

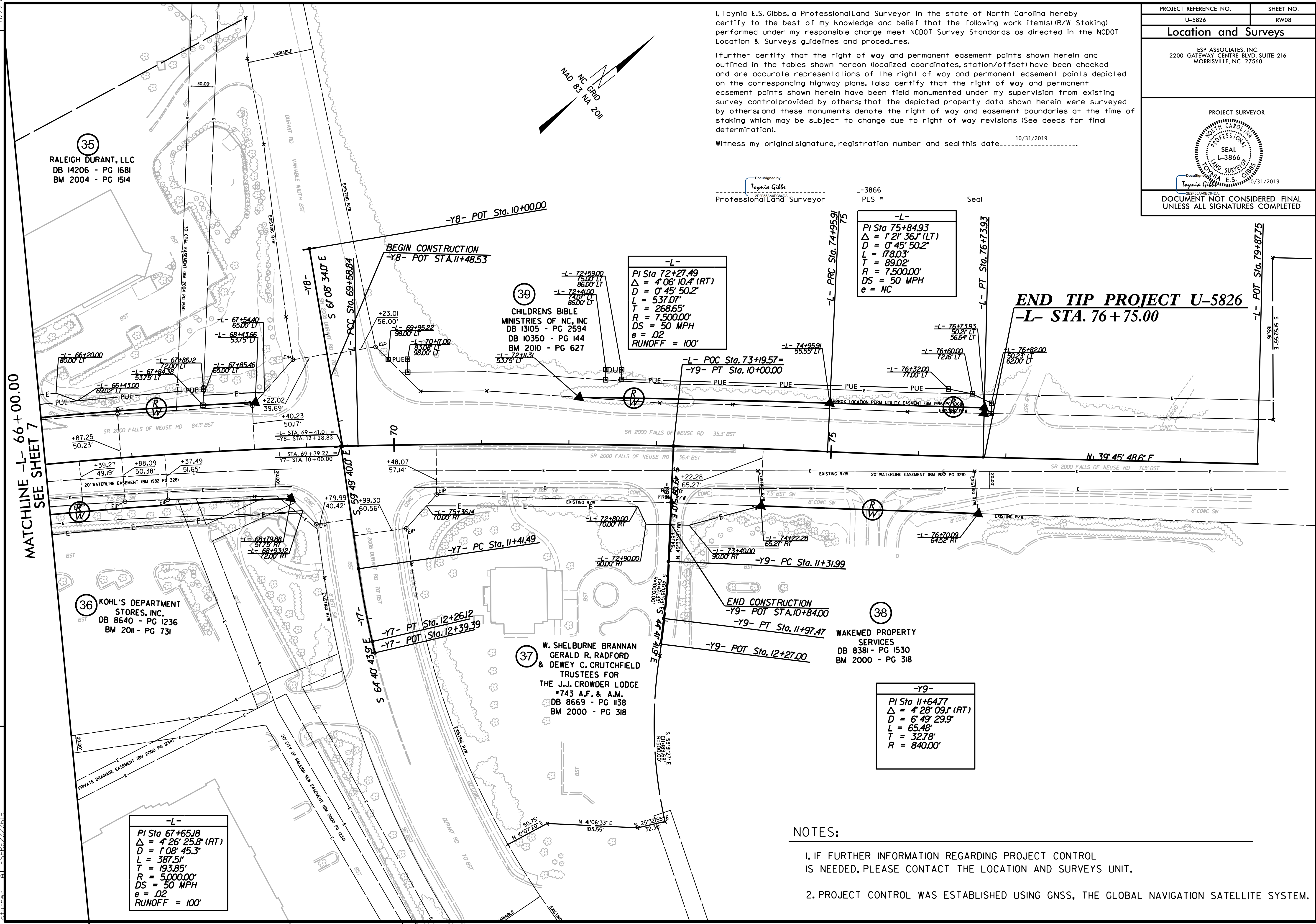
I further certify that the right of way and permanent easement points shown herein and outlined in the tables shown hereon (localized coordinates, station/offset) have been checked and are accurate representations of the right of way and permanent easement points depicted on the corresponding highway plans. I also certify that the right of way and permanent easement points shown herein have been field monumented under my supervision from existing survey control provided by others; that the depicted property data shown herein were surveyed by others; and these monuments denote the right of way and easement boundaries at the time of staking which may be subject to change due to right of way revisions (See deeds for final determination).

Witness my original signature, registration number and seal this date 10/31/2019

Witness my original signature, registration number and seal this date 10/31/2019

DocuSigned by:
Toinia Gibbs
Professional Land Surveyor

L-3866
PLS # Seal



35
RALEIGH DURANT, LLC
DB 14206 - PG 1681
BM 2004 - PG 1514

39
CHILDRENS BIBLE
MINISTRIES OF NC, INC
DB 13105 - PG 2594
DB 10350 - PG 144
BM 2010 - PG 627

36
KOHL'S DEPARTMENT
STORES, INC.
DB 8640 - PG 1236
BM 2011 - PG 731

37
W. SHELburne BRANNAN
GERALD R. RADFORD
& DEWEY C. CRUTCHFIELD
TRUSTEES FOR
THE J.J. CROWDER LODGE
#743 A.F. & A.M.
DB 8669 - PG 1138
BM 2000 - PG 318

38
WAKEMED PROPERTY
SERVICES
DB 8381 - PG 1530
BM 2000 - PG 318

-L-
PI Sta 67+65.18
Δ = 4' 26' 25.8" (RT)
D = 1' 08' 45.3"
L = 387.5'
T = 193.85'
R = 5,000.00'
DS = 50 MPH
e = .02
RUNOFF = 100'

-L-
PI Sta 72+27.49
Δ = 4' 06' 10.4" (RT)
D = 0' 45' 50.2"
L = 537.07'
T = 268.65'
R = 7,500.00'
DS = 50 MPH
e = .02
RUNOFF = 100'

-L-
PI Sta 75+84.93
Δ = 1' 21' 36.1" (LT)
D = 0' 45' 50.2"
L = 178.03'
T = 89.02'
R = 7,500.00'
DS = 50 MPH
e = NC

-Y9-
PI Sta 11+64.77
Δ = 4' 28' 09.1" (RT)
D = 6' 49' 29.9"
L = 65.48'
T = 32.78'
R = 840.00'

NOTES:

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

REVISIONS

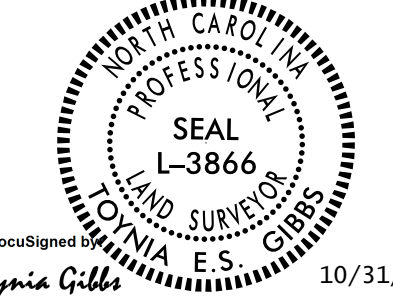
MATCHLINE -L- 66+00.00
SEE SHEET 7

3/10/2019 09:56:56, I:\52\HM\01\037\001_U5826-con.esi\6_RoFW_Re-Staking\Submitt\10-31-19_Project_Redlines\U5826.ls_rw03e-8.191031.dgn

Location and Surveys

ESP ASSOCIATES, INC.
2200 GATEWAY CENTRE BLVD, SUITE 216
MORRISVILLE, NC 27560

PROJECT SURVEYOR



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Witness my original signature, registration number and seal this date 10/31/2019

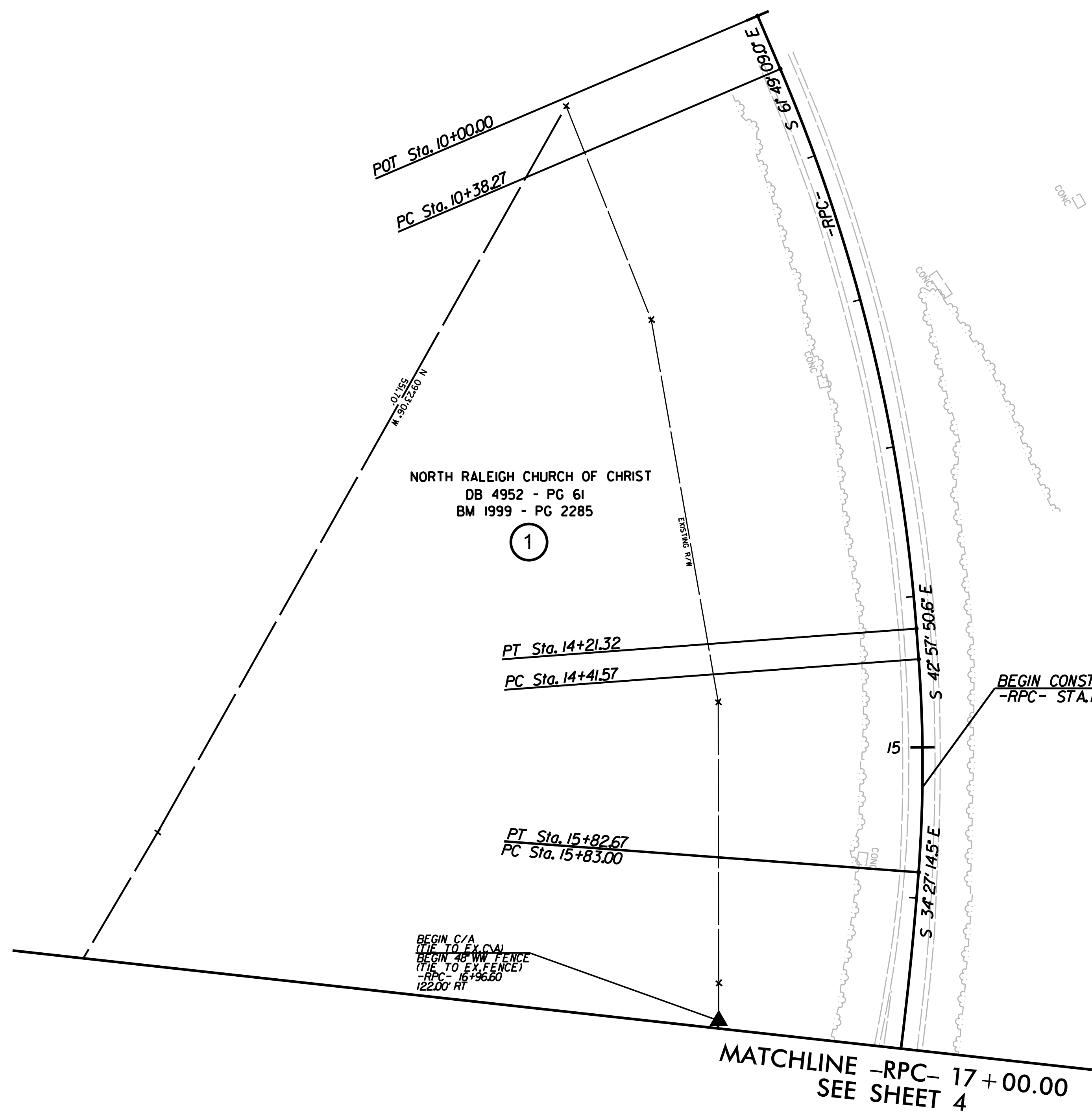
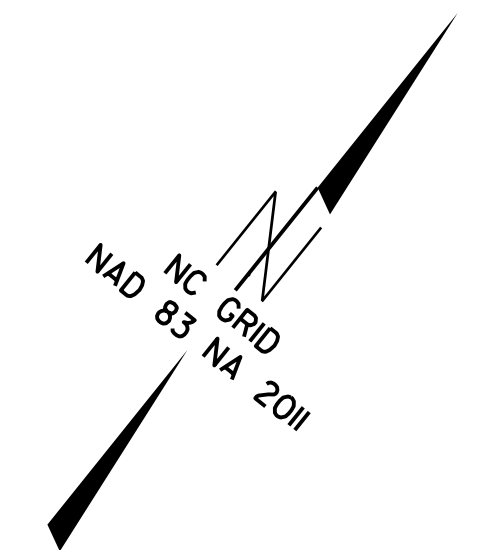
DocuSigned by:
Toynia Gibbs
Professional Land Surveyor

L-3866
PLS #

Seal

REVISIONS

3:\01-2019\0957\Projects\5826\HM01\037.001_U5826.com.es#6_RoFW_Re-Staking\Submitt\10-31-19_Project_Redlines\U5826.ls_rw03e-9_191031.dgn



-RPC-
 PI Sta 12+31.54
 $\Delta = 18^{\circ} 51' 18.3'' (RT)$
 $D = 4^{\circ} 55' 20.0''$
 $L = 383.05'$
 $T = 193.27'$
 $R = 1,164.00'$

-RPC-
 PI Sta 15+12.25
 $\Delta = 8^{\circ} 30' 36.2'' (RT)$
 $D = 6^{\circ} 01' 52.1''$
 $L = 141.0'$
 $T = 70.68'$
 $R = 950.00'$

-RPC-
 PI Sta 17+04.93
 $\Delta = 5^{\circ} 56' 24.0'' (RT)$
 $D = 2^{\circ} 26' 17.2''$
 $L = 243.63'$
 $T = 121.92'$
 $R = 2,350.00'$

NOTES:

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