

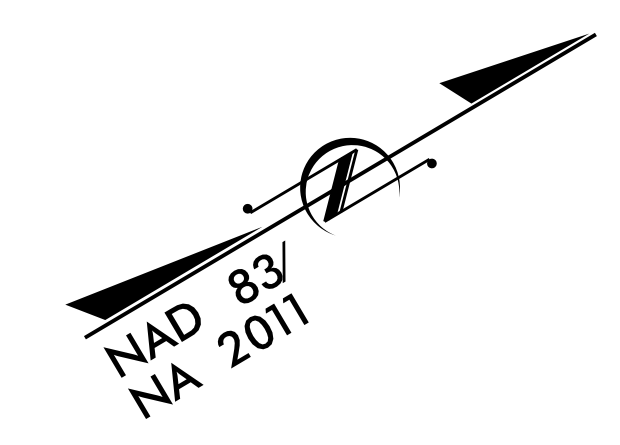
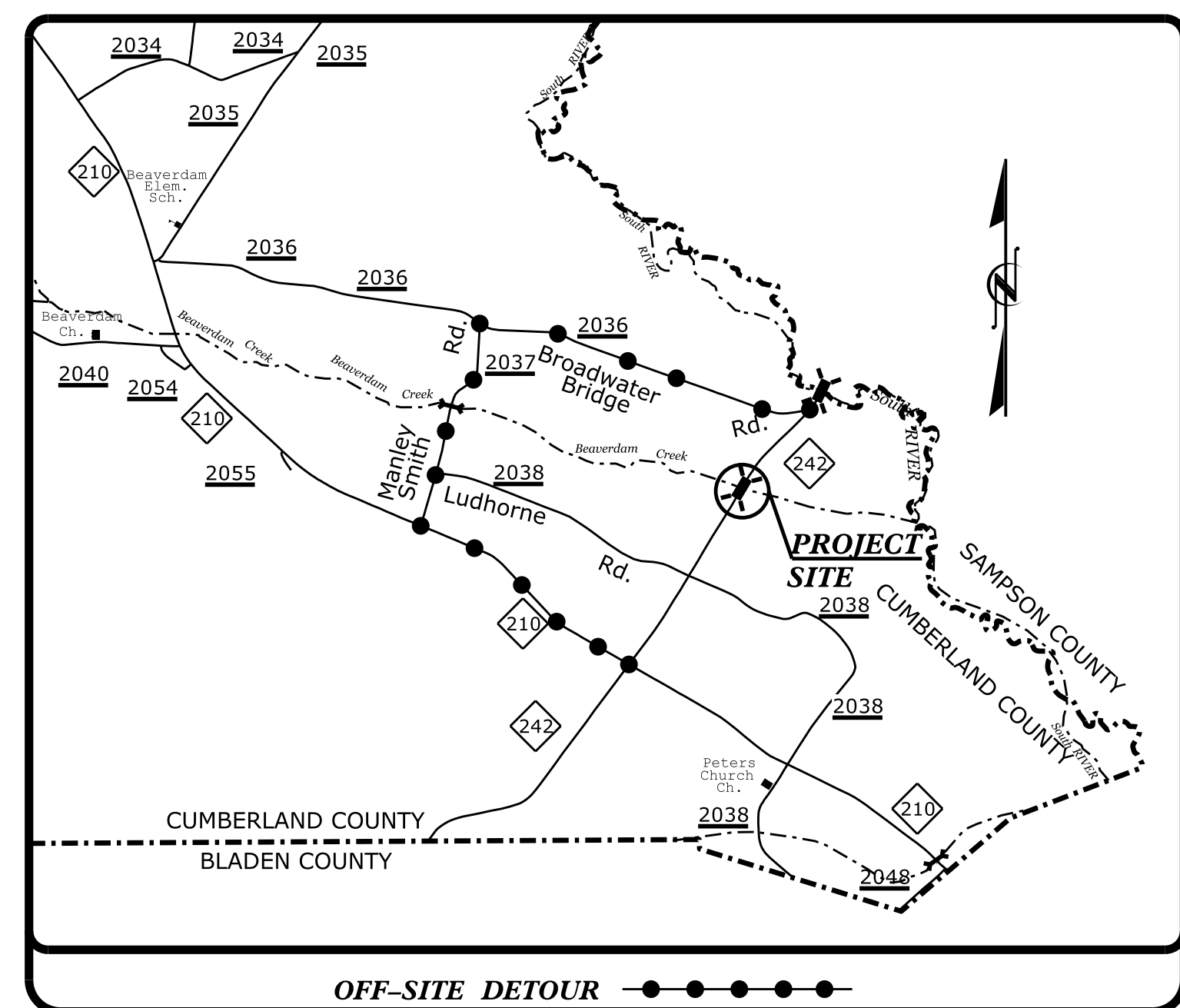
STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	BR-0014	RW01	2

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

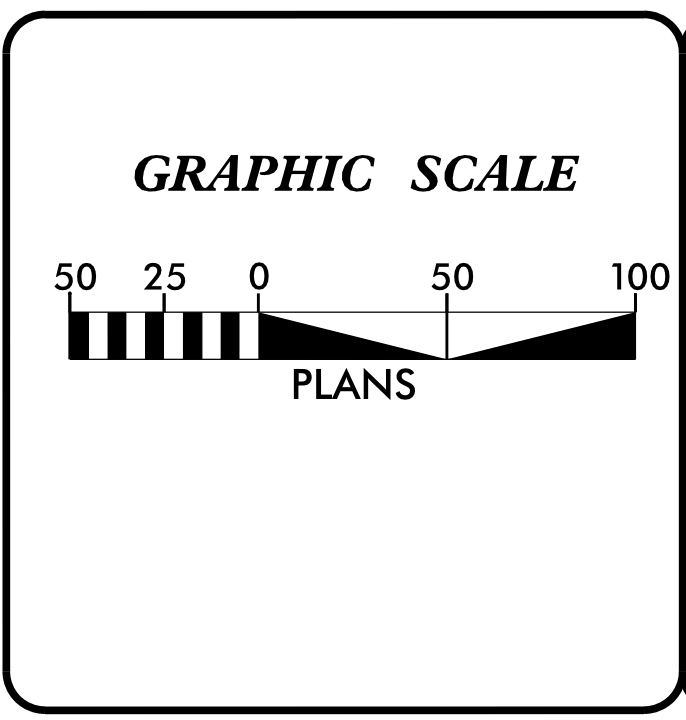
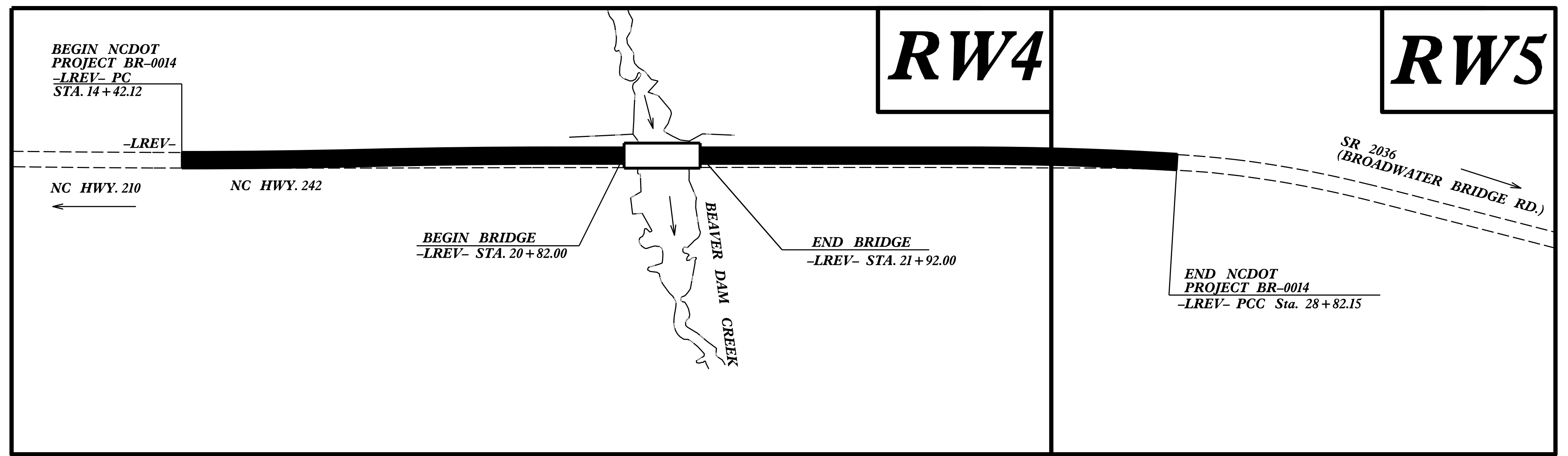
SURVEY CONTROL, EXISTING CENTERLINES,
RIGHT OF WAY, EASEMENTS AND PROPERTY TIES

CUMBERLAND COUNTY

See Sheet 1-A For Index of Sheets
See Sheet 1-B For Conventional Symbols
See Sheet 1C-1 TO 1C-2 For Survey Control Sheets



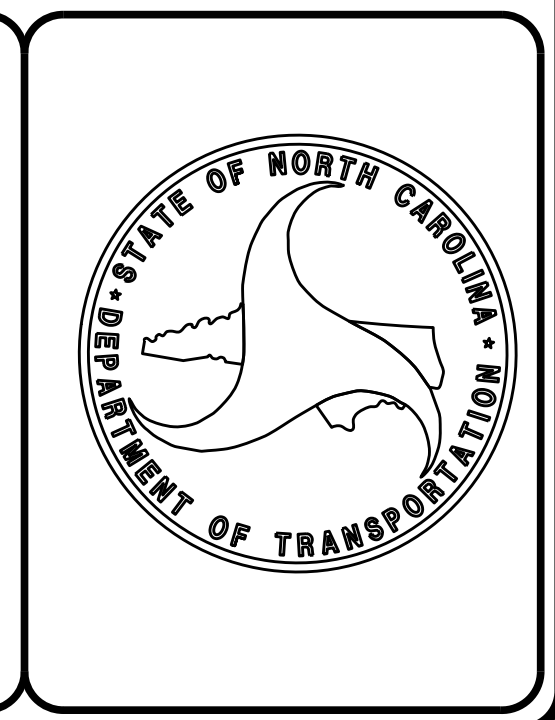
TIP PROJECT: BR-0014



DATUM DESCRIPTION
THE LOCALIZED COORDINATE SYSTEM DEVELOPED FOR THIS PROJECT IS BASED ON THE STATE PLANE COORDINATES ESTABLISHED BY NCDOT FOR MONUMENT "BR-0014 GPS-101" WITH NAD 83/NSRS 2011 STATE PLANE GRID COORDINATES OF NORTHING: 407010.5241(ft) EASTING: 2139063.5597(ft) ELEVATION: 109.19(ft)
THE AVERAGE COMBINED GRID FACTOR USED ON THIS PROJECT (GROUND TO GRID) IS: 0.999894932 (1/X= 1.000105079)
THE N.C. LAMBERT GRID BEARING AND LOCALIZED HORIZONTAL GROUND DISTANCE FROM "BR-0014 GPS101" TO L- STATION 10+00 IS S 59-43'3.51" E 17.16(ft)
ALL LINEAR DIMENSIONS ARE LOCALIZED HORIZONTAL DISTANCES
VERTICAL DATUM USED IS NAVD 88

Prepared in the Office of:
LOCATION & SURVEY
DIVISION 6
2018 STANDARD SPECIFICATIONS
RIGHT OF WAY DATE: **APRIL 10, 2019**
LETTING DATE: **APRIL 21, 2020**

PROFESSIONAL LAND SURVEYOR
Seal of John E. Karkola, Jr., License No. L-3999
Date: 1/22/2020



\$\$\$\$\$ SYSTEM \$\$\$\$\$\$
\$\$\$\$\$ DGN \$\$\$\$\$\$
\$\$\$\$\$ USERNAME \$\$\$\$\$\$

PROJECT REFERENCE NO.	SHEET NO.
BR-0014	RW02C-1
Location and Surveys	
NCDOT L&S DIVISON 6	

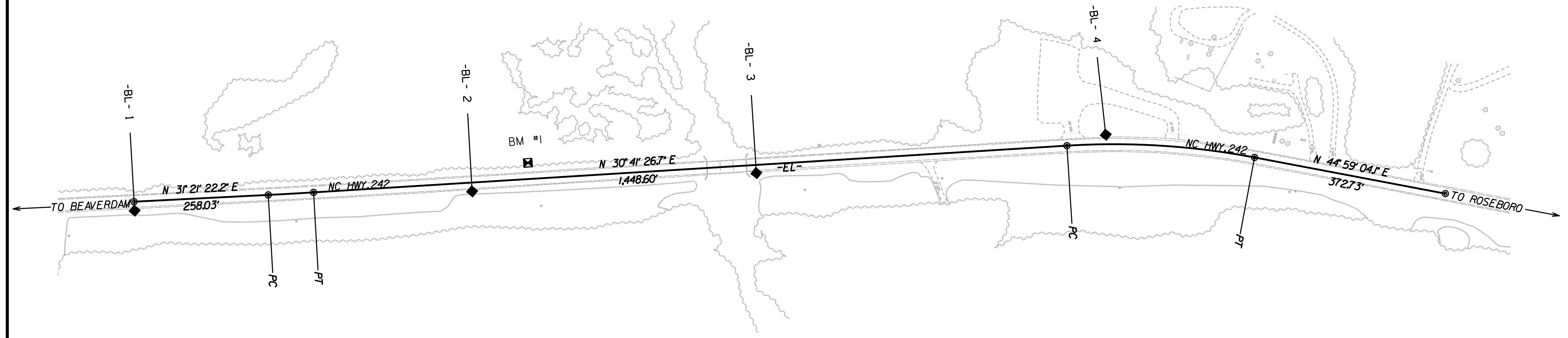
SURVEY CONTROL SHEET

W/ EXISTING CENTERLINE ALIGNMENTS PRIOR TO CONSTRUCTION



6/2/99

REVISIONS



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.

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SURVEY CONTROL SHEET

W/ EXISTING CENTERLINE ALIGNMENTS PRIOR TO CONSTRUCTION

CONTROL

BL	POINT	DESC.	NORTH	EAST	ELEVATION
1		BR0014 BL -1	409344.9050	2140473.0710	90.92
2		BR0014 BL -2	409901.1450	2140807.0280	80.29
3		BR0014 BL -3	410371.8500	2141084.9520	79.12
4		BR0014 BL -4	410967.5924	2141401.4309	91.82

 BM1 ELEVATION = 77.50
 N 410021 E 2140822
 NO DESCRIPTION

EXISTING CENTERLINE ALIGNMENTS

EL	POINT	N	E	BEARING	DIST	DELTA	D	L	T	R
POT		409353.558	2140458.252							
LINE				N 31°21'22.2" E	258.03					
PC		409573.900	2140592.518							
CURVE				N 31°01'24.4" E	87.10	00°39'55.5"(LT)	00°45'50.2"	87.10	43.55	7500.00
PT		409648.544	2140637.410							
LINE				N 30°41'26.7" E	1448.60					
PC		410894.243	2141376.780							
CURVE				N 37°50'15.4" E	360.80	14°17'37.5"(RT)	03°57'05.2"	361.74	181.81	1450.00
PT		411179.184	2141598.103							
LINE				N 44°59'04.1" E	372.73					
POT		411442.813	2141861.589							

NOTES:

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

PROPOSED ALIGNMENT CONTROL SHEET

REVISIONS

LREV									
POINT	N	E	BEARING	DIST	DELTA	D	L	T	R
POT	409353.558	2140458.252							
LINE			N 31°21'22.2" E	258.03					
PC	409573.900	2140592.518							
CURVE			N 31°01'24.4" E	87.10	00°39'55.5"(LT)	00°45'50.2"	87.10	43.55	7500.00
PT	409648.544	2140637.410							
LINE			N 30°41'26.7" E	96.99					
PC	409731.948	2140686.914							
CURVE			N 29°59'37.2" E	270.08	01°23'38.9"(LT)	00°30'58.2"	270.09	135.05	11100.00
PCC	409965.860	2140821.928							
CURVE			N 29°59'37.2" E	270.08	01°23'38.9"(RT)	00°30'58.2"	270.09	135.05	11100.00
PT	410199.772	2140956.943							
LINE			N 30°41'26.7" E	595.58					
PC	410711.934	2141260.931							
CURVE			N 32°26'02.9" E	304.23	03°29'12.4"(RT)	01°08'45.3"	304.28	152.19	5000.00
PCC	410968.707	2141424.098							
CURVE			N 39°34'51.6" E	273.09	10°48'25.1"(RT)	03°57'05.2"	273.49	137.15	1450.00
PT	411179.184	2141598.103							
LINE			N 44°59'04.1" E	372.73					
POT	411442.813	2141861.589							


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6/2/99

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PERMANENT EASEMENT CONTROL SHEET

PROJECT REFERENCE NO. BR-0014	SHEET NO. RW03E-1
Location and Surveys	
NCDOT L&S DIVISION 6	
 <small>DocuSigned by: John E. Kaukola, Jr. F30958AF7884E2</small>	
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	

REVISIONS

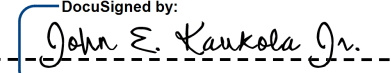
ROW MARKER PERMANENT EASEMENT-E					
ALIGN	STATION	OFFSET	NORTH	EAST	REMARKS
L	20+47.00	-43.43	410277.5802	2140952.6230	NOT SET
L	20+47.00	-55.00	410283.4863	2140942.6723	NOT SET
L	20+67.00	-55.00	410300.6850	2140952.8803	NOT SET
L	20+67.00	-43.43	410294.7789	2140962.8311	NOT SET

HIGH WATER |

I, John E Kaukola, JR, 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 12th day of August, 2019.

DocuSigned by:

 Professional Land Surveyor

L-3999
PLS #

Seal

NOTES:

1. PROJECT CONTROL WAS ESTABLISHED USING GNSS, THE GLOBAL NAVIGATION SATELLITE SYSTEM.
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6/2/19

Location and Surveys

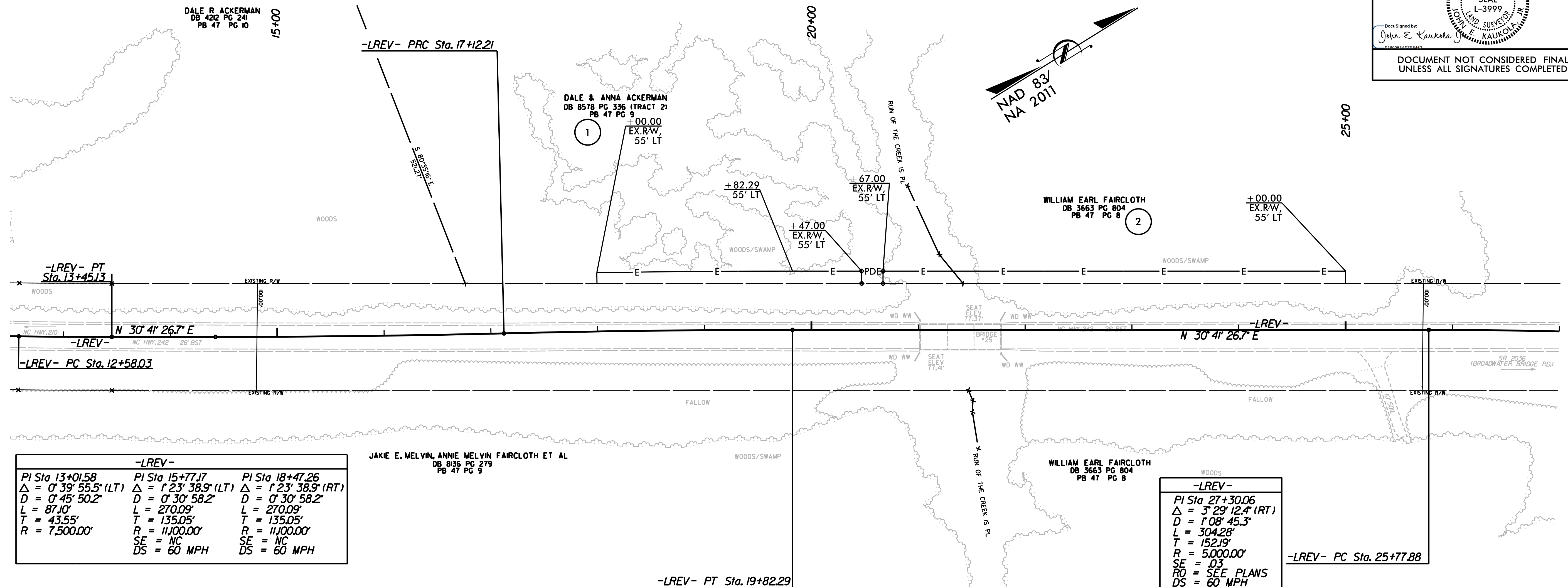
NCDOT L&S DIVISION 6

PROJECT SURVEYOR



DocuSigned by: John E. Kaukola Jr.

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED



-LREV-		
PI Sta 13+01.58	PI Sta 15+77.77	PI Sta 18+47.26
$\Delta = 0^\circ 39' 55.5''$ (LT)	$\Delta = 1^\circ 23' 38.9''$ (LT)	$\Delta = 1^\circ 23' 38.9''$ (RT)
$D = 0^\circ 45' 50.2''$	$D = 0^\circ 30' 58.2''$	$D = 0^\circ 30' 58.2''$
$L = 87.10'$	$L = 270.09'$	$L = 270.09'$
$T = 43.55'$	$T = 135.05'$	$T = 135.05'$
$R = 7,500.00'$	$R = 11,000.00'$	$R = 11,000.00'$
SE = NC	SE = NC	SE = NC
DS = 60 MPH	DS = 60 MPH	DS = 60 MPH

-LREV-
PI Sta 27+30.06
$\Delta = 3^\circ 29' 12.4''$ (RT)
$D = 1^\circ 08' 45.3''$
$L = 304.28'$
$T = 152.19'$
$R = 5,000.00'$
SE = 03
RO = SEE PLANS
DS = 60 MPH

REVISIONS

I, John E. Kaukola, 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 1st day of October, 2019.

DocuSigned by:

 Professional Land Surveyor

L-3999
 PLS #

Seal

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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6/2/2019

Location and Surveys

NCDOT L&S DIVISION 6

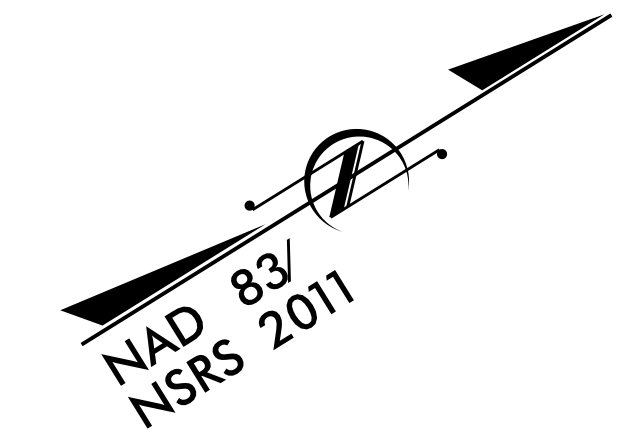
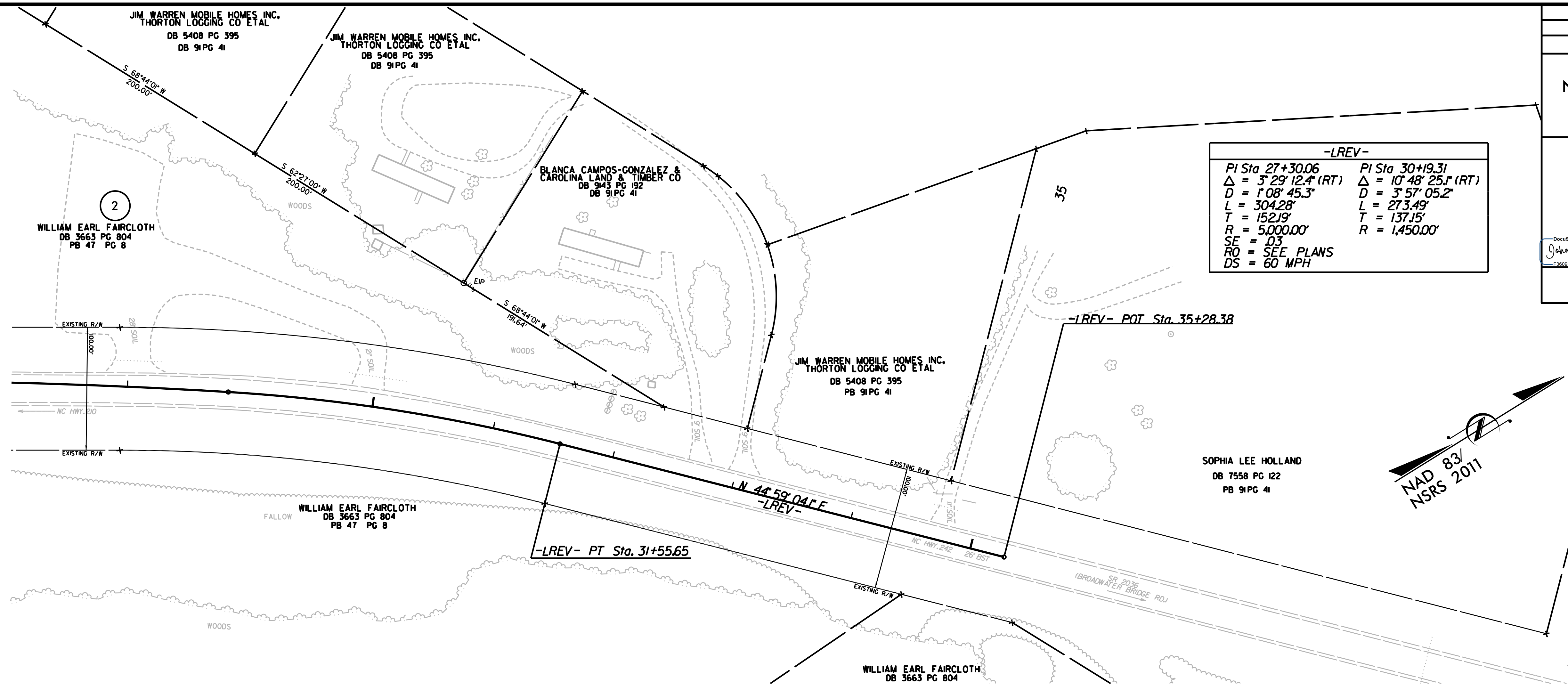
PROJECT SURVEYOR



DocuSigned by:
John E. Kaukola Jr.
F360958AF7B842

DOCUMENT NOT CONSIDERED FINAL
UNLESS ALL SIGNATURES COMPLETED

-LREV-	
PI Sta 27+30.06	PI Sta 30+19.31
$\Delta = 3^{\circ} 29' 12.4''$ (RT)	$\Delta = 10^{\circ} 48' 25.1''$ (RT)
D = 1' 08' 45.3"	D = 3' 57' 05.2"
L = 304.28'	L = 273.49'
T = 152.19'	T = 137.15'
R = 5,000.00'	R = 1,450.00'
SE = 0.3	
RO = SEE PLANS	
DS = 60 MPH	



REVISIONS

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DocuSigned by:
John E. Kaukola Jr.
F360958AF7B842
Professional Land Surveyor

L-3999
PLS #

Seal

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