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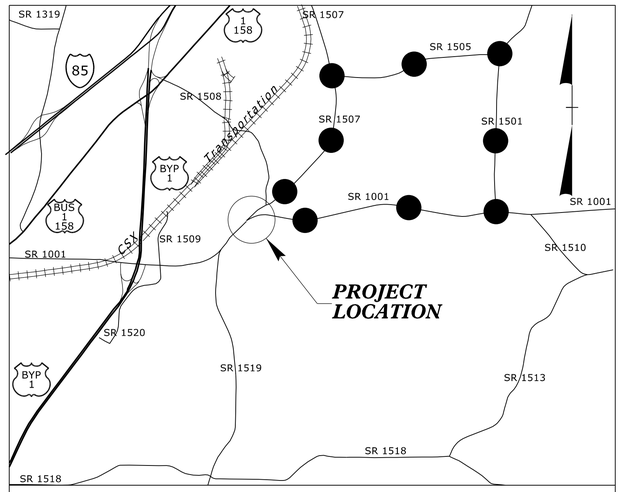
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This file or an individual page shall not be considered a certified document.

09/08/99

TIP PROJECT: W-5705G

CONTRACT: DE00406

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



VICINITY MAP

OFF-SITE DETOUR

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

VANCE COUNTY

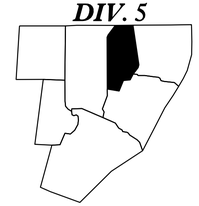
STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	W-5705G	1	

STATE PROJ. NO.	F. A. PROJ. NO.	DESCRIPTION
44851.1.7	HSIP – 1001(075)	PE
44851.2.7	HSIP – 1001(075)	R/W. UTIL.
44851.3.7	HSIP – 1001(075)	CONSTR.

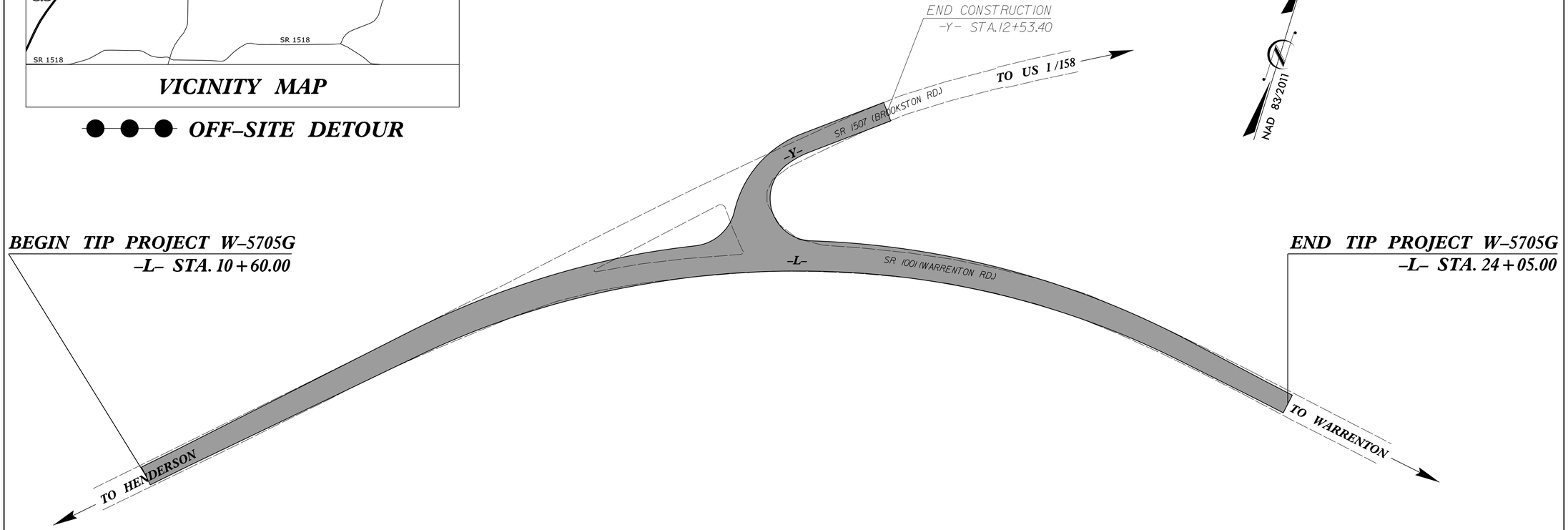
LOCATION: SR 1001 (WARRENTON RD) AT SR 1507 (BROOKSTON RD)

TYPE OF WORK: DRAINAGE, GRADING & PAVING

DIV. 5







DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

GRAPHIC SCALES

50 25 0 50 100
PLANS

50 25 0 50 100
PROFILE (HORIZONTAL)

10 5 0 10 20
PROFILE (VERTICAL)

DESIGN DATA

ADT 2023 = 7,500
ADT 2043 = 9,200

V = 50 MPH

FUNC CLASS =
MAJOR COLLECTOR
SUBREGIONAL TIER

PROJECT LENGTH

LENGTH ROADWAY T.I.P. PROJECT W-5705G = 0.255 MI

Prepared in the Office of:
DIVISION OF HIGHWAYS
815 STADIUM DRIVE DURHAM NC, 27704

2024 STANDARD SPECIFICATIONS

RIGHT OF WAY DATE:
N/A

LETTING DATE:
JANUARY 14, 2026

MATTHEW NOLFO, PE
PROJECT ENGINEER

THOMAS R. MEADOWS
PROJECT DESIGN ENGINEER

DIVISION FIVE DESIGN ENGINEER

NORTH CAROLINA PROFESSIONAL SEAL 058695 ENGINEER MATTHEW J NOLFO

Signed by: Matthew Nolfo, PE
5F55005727BF42E...

SIGNATURE: ***P.E.*** 11/24/2025

DIVISION OF HIGHWAYS
STATE OF NORTH CAROLINA
FIFTH DIVISION
BECCA GALLAS, P.E.
DIVISION ENGINEER

DIVISION OF HIGHWAYS · DIVISION FIVE · STATE OF NORTH CAROLINA · DEPARTMENT OF TRANSPORTATION · DIVISION DESIGN UNIT

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8/17/99

PROJECT REFERENCE NO.	SHEET NO.
W-5705G	1A

DIVISION FIVE DESIGN ENGINEER

NORTH CAROLINA PROFESSIONAL SEAL 058695 ENGINEER MATTHEW J. NOLTE

Signed by: Matthew Nolte, PE
5F55005727BF42E...

11/24/2025

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

INDEX OF SHEETS

SHEET NUMBER	SHEET
1	TITLE SHEET
1A	INDEX OF SHEETS, GENERAL NOTES, AND STANDARD DRAWINGS
1B	CONVENTIONAL SYMBOLS
1C	SURVEY CONTROL SHEET
2A-1	PAVEMENT SCHEDULE AND TYPICAL SECTIONS
3B-1	ROADWAY SUMMARIES
4 AND 5	PLAN AND PROFILE SHEET
TMP-1 THRU TMP-2	TRANSPORTATION MANAGEMENT PLANS
PMP-1 AND PMP-2	PAVEMENT MARKING PLANS
EC-1 THRU EC-5	EROSION CONTROL PLANS
SIGN-1 AND SIGN-2	SIGNING PLANS
X-1 THRU X-17	CROSS-SECTIONS

GENERAL NOTES:

2024 SPECIFICATIONS
EFFECTIVE: 01-16-2024
REVISED:

GRADING AND SURFACING OR RESURFACING AND WIDENING:

THE GRADE LINES SHOWN DENOTE THE FINISHED ELEVATION OF THE PROPOSED SURFACING AT GRADE POINTS SHOWN ON THE TYPICAL SECTIONS. WHERE NO GRADE LINES ARE SHOWN, THE PROFILES SHOWN DENOTE THE TOP ELEVATION OF THE EXISTING PAVEMENT ALONG THE CENTER LINE OF SURVEY ON WHICH THE PROPOSED RESURFACING WILL BE PLACED. GRADE LINES MAY BE ADJUSTED BY THE ENGINEER IN ORDER TO SECURE A PROPER TIE-IN.

CLEARING:

CLEARING ON THIS PROJECT SHALL BE PERFORMED TO THE LIMITS ESTABLISHED BY METHOD II.

SUPERELEVATION:

ALL CURVES ON THIS PROJECT SHALL BE SUPERELEVATED IN ACCORDANCE WITH STD. NO. 225.04 USING THE RATE OF SUPERELEVATION AND RUNOFF SHOWN ON THE PLANS. SUPERELEVATION IS TO BE REVOLVED ABOUT THE GRADE POINTS SHOWN ON THE TYPICAL SECTIONS.

SHOULDER CONSTRUCTION:

ASPHALT, EARTH, AND CONCRETE SHOULDER CONSTRUCTION ON THE HIGH SIDE OF SUPERELEVATED CURVES SHALL BE IN ACCORDANCE WITH STD. NO. 560.01

SIDE ROADS:

THE CONTRACTOR WILL BE REQUIRED TO DO ALL NECESSARY WORK TO PROVIDE SUITABLE CONNECTIONS WITH ALL ROADS, STREETS, AND DRIVES ENTERING THIS PROJECT. THIS WORK WILL BE PAID FOR AT THE CONTRACT UNIT PRICE FOR THE PARTICULAR ITEMS INVOLVED.

TEMPORARY SHORING:

SHORING REQUIRED FOR THE MAINTENANCE OF TRAFFIC WILL BE PAID FOR AS "EXTRA WORK" IN ACCORDANCE WITH SECTION 104-7.

SUBSURFACE PLANS:

NO SUBSURFACE PLANS ARE AVAILABLE ON THIS PROJECT. THE CONTRACTOR SHOULD MAKE HIS OWN INVESTIGATION AS TO THE SUBSURFACE CONDITIONS.

UTILITIES:

UTILITY OWNERS ON THIS PROJECT ARE CENTURY LINK, TIME WARNER CABLE-CHARTER AND VANCE COUNTY WATER DISTRICT

ANY RELOCATION OF EXISTING UTILITIES WILL BE ACCOMPLISHED BY OTHERS, EXCEPT AS SHOWN ON THE PLANS.

EFF. 01-16-2024
REV.

2024 ROADWAY ENGLISH STANDARD DRAWINGS

The following Roadway Standards as appear in "Roadway Standard Drawings" Contracts Standards and Development Unit - N. C. Department of Transportation - Raleigh, N. C., Dated January 16, 2024 are applicable to this project and by reference hereby are considered a part of these plans:

STD.NO.	TITLE
DIVISION 2 - EARTHWORK	
200.02	Method of Clearing - Method II
225.02	Guide for Grading Subgrade - Secondary and Local
225.04	Method of Obtaining Superelevation - Two Lane Pavement
DIVISION 3 - PIPE CULVERTS	
300.01	Method of Pipe Installation
310.10	Driveway Pipe Construction
DIVISION 5 - SUBGRADE, BASES AND SHOULDERS	
560.01	Method of Shoulder Construction - High Side of Superelevated Curve - Method I
DIVISION 6 - ASPHALT BASES AND PAVEMENTS	
654.01	Pavement Repairs
DIVISION 8 - INCIDENTALS	
852.01	Concrete Islands
876.02	Guide for Rip Rap at Pipe Outlets

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6/2/99

PROJECT REFERENCE NO.	SHEET NO.
W-5705G	1C
Location and Surveys	

SURVEY CONTROL SHEET W5705G

W/ EXISTING CENTERLINE ALIGNMENTS PRIOR TO CONSTRUCTION

BASELINE DATA

BL

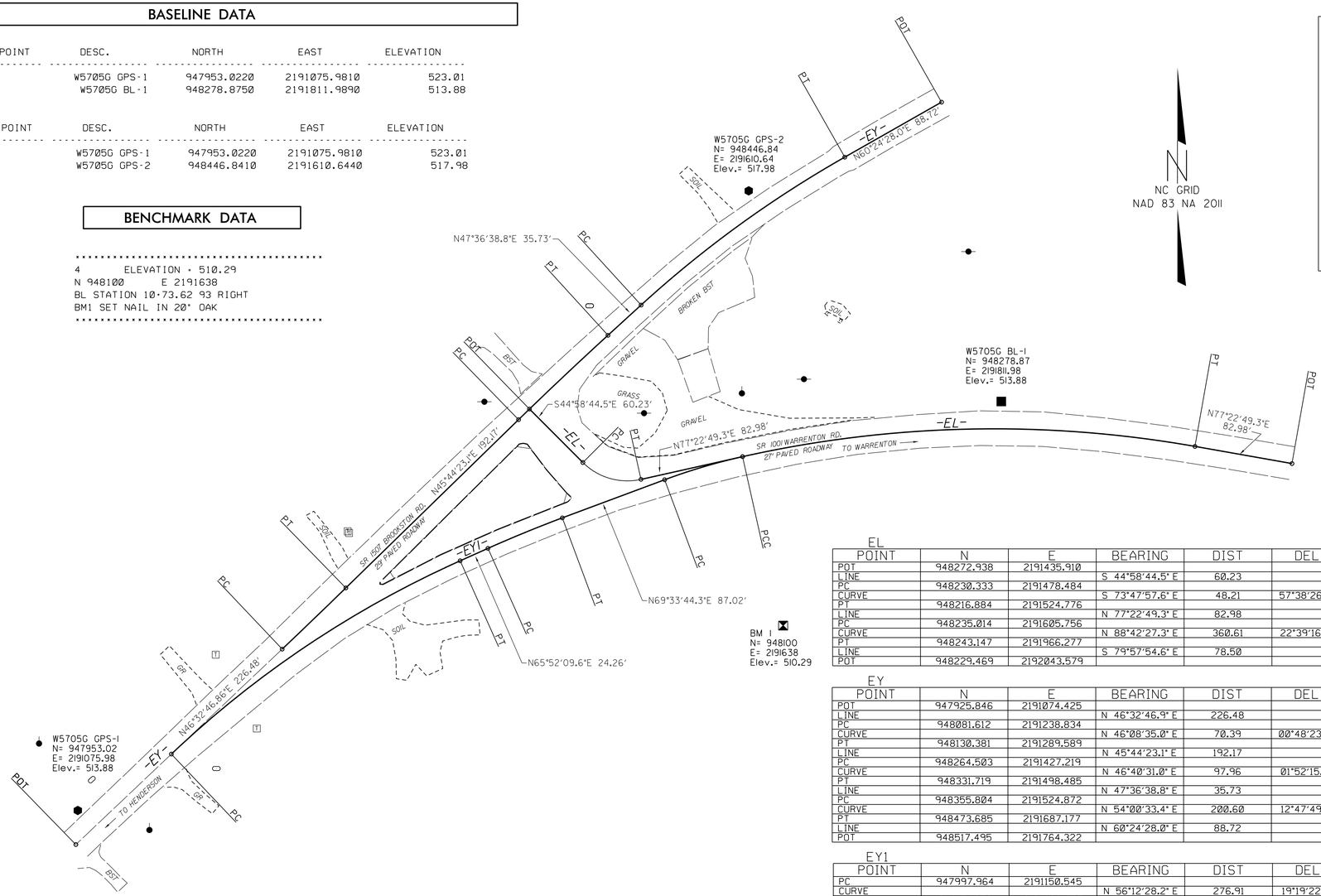
POINT	DESC.	NORTH	EAST	ELEVATION
1	W5705G GPS-1	947953.0220	2191075.9810	523.01
3	W5705G BL-1	948278.8750	2191811.9890	513.88

BY

POINT	DESC.	NORTH	EAST	ELEVATION
1	W5705G GPS-1	947953.0220	2191075.9810	523.01
2	W5705G GPS-2	948446.8410	2191610.6440	517.98

BENCHMARK DATA

```
*****************************************
4       ELEVATION = 510.29
N 948100      E 2191638
BL STATION 10+73.62 93 RIGHT
BM1 SET NAIL IN 20" OAK
*****************************************
```



DATUM DESCRIPTION

THE LOCALIZED COORDINATE SYSTEM DEVELOPED FOR THIS PROJECT IS BASED ON THE STATE PLANE COORDINATES ESTABLISHED BY NCDOT FOR MONUMENT "W5705G GPS-1" WITH NAD 83/NA 2011 STATE PLANE GRID COORDINATES OF NORTHING: 947953.022(ft) EASTING: 2191075.981(ft) ELEVATION: 523.015(ft)
THE AVERAGE COMBINED GRID FACTOR USED ON THIS PROJECT (GROUND TO GRID) IS: 0.9999625609
THE N.C. LAMBERT GRID BEARING AND LOCALIZED HORIZONTAL GROUND DISTANCE FROM "W5705G GPS-1" TO -L- STATION IS

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

EL

POINT	N	E	BEARING	DIST	DELTA	D	L	T	R
POT	948272.938	2191435.910							
LINE			S 44°58'44.5" E	60.23					
PC	948230.333	2191478.484							
CURVE			S 73°47'57.6" E	48.21	57°38'26.3"(LT)	114°35'29.6"	50.30	27.51	50.00
PT	948216.884	2191524.776							
LINE			N 77°22'49.3" E	82.98					
PC	948235.014	2191605.756							
CURVE			N 88°42'27.3" E	360.61	22°39'16.2"(RT)	06°14'28.9"	362.97	183.89	918.00
PT	948243.147	2191966.277							
LINE			S 79°57'54.6" E	78.50					
POT	948229.469	2192043.579							

EY

POINT	N	E	BEARING	DIST	DELTA	D	L	T	R
POT	947925.846	2191074.425							
LINE			N 46°32'46.9" E	226.48					
PC	948081.612	2191238.834							
CURVE			N 46°08'35.0" E	70.39	00°48'23.8"(LT)	01°08'45.3"	70.39	35.20	5000.00
PT	948130.381	2191289.589							
LINE			N 45°44'23.1" E	192.17					
PC	948264.503	2191427.219							
CURVE			N 46°40'31.0" E	97.96	01°52'15.8"(RT)	01°54'35.5"	97.97	48.99	3000.00
PT	948331.719	2191498.485							
LINE			N 47°36'38.8" E	35.73					
PC	948355.804	2191524.872							
CURVE			N 54°00'33.4" E	200.60	12°47'49.1"(RT)	06°21'58.3"	201.01	100.93	900.00
PT	948473.685	2191687.177							
LINE			N 60°24'28.0" E	88.72					
POT	948517.495	2191764.322							

EY1

POINT	N	E	BEARING	DIST	DELTA	D	L	T	R
PC	947997.964	2191150.545							
CURVE			N 56°12'28.2" E	276.91	19°19'22.8"(RT)	06°56'41.8"	278.23	140.45	825.00
PT	948151.979	2191380.677							
LINE			N 65°52'09.6" E	24.26					
PC	948161.895	2191402.813							
CURVE			N 67°42'52.2" E	64.07	03°41'25.1"(RT)	05°45'30.1"	64.09	32.05	995.00
PT	948186.193	2191462.102							
LINE			N 69°33'44.3" E	87.02					
PC	948216.581	2191543.647							
CURVE			N 73°28'12.0" E	64.79	07°49'14.6"(RT)	12°03'44.2"	64.84	32.47	475.00
PT	948216.581	2191543.647							

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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6/2/99

PROJECT REFERENCE NO.	SHEET NO.
W-5705G	2A-1

NORTH CAROLINA PROFESSIONAL SEAL 058695 ENGINEER MATTHEW J. DILLY

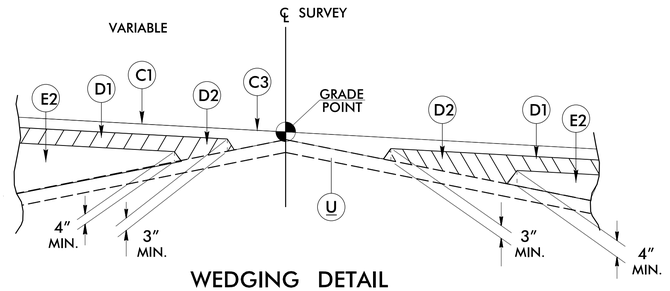
Signed by: Matthew Dilly, PE
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11/24/2025

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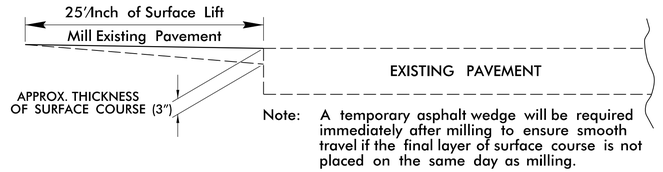
PAVEMENT SCHEDULE

C1	PROP. APPROX. 1½" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5C, AT AN AVERAGE RATE OF 168 LBS. PER SQ. YD.
C2	PROP. APPROX. 3" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5C, AT AN AVERAGE RATE OF 168 LBS. PER SQ. YD. IN EACH OF TWO LAYERS.
C3	PROP. VAR. DEPTH ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5C, AT AN AVERAGE RATE OF 112 LBS. PER SQ. YD. PER 1" DEPTH. TO BE PLACED IN LAYERS NOT TO EXCEED 2" IN DEPTH.
D1	PROP. APPROX. 3" ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE I19.0C, AT AN AVERAGE RATE OF 342 LBS. PER SQ. YD.
D2	PROP. VAR. DEPTH ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE I19.0C, AT AN AVERAGE RATE OF 114 LBS. PER SQ. YD. PER 1" DEPTH, TO BE PLACED IN LAYERS NOT LESS THAN 2½" IN DEPTH OR GREATER THAN 4" IN DEPTH.
E1	PROP. APPROX. 4" ASPHALT CONCRETE BASE COURSE, TYPE B25.0C, AT AN AVERAGE RATE OF 456 LBS. PER SQ. YD.
E2	PROP. VAR. DEPTH ASPHALT CONCRETE BASE COURSE, TYPE B25.0C, AT AN AVERAGE RATE OF 114 LBS. PER SQ. YD. PER 1" DEPTH. TO BE PLACED IN LAYERS NOT LESS THAN 3" IN DEPTH OR GREATER THAN 5½" IN DEPTH.
R	5" MONO. CONC. ISLAND (KEYED-IN)
T	EARTH MATERIAL.
U	EXISTING PAVEMENT.
W	WEDGING (SEE DETAIL)

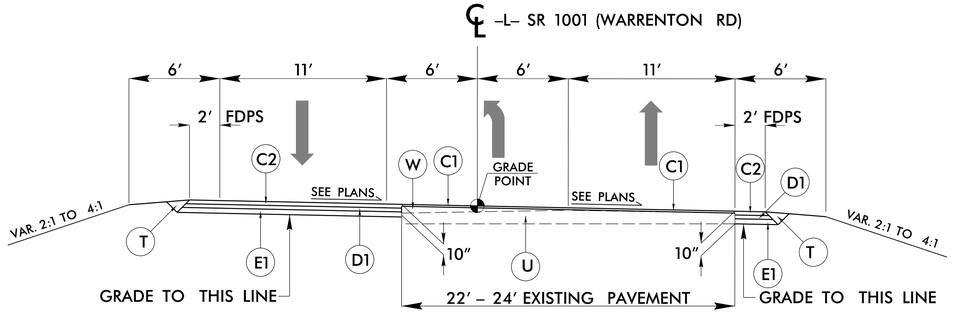
NOTE: PAVEMENT EDGE SLOPES ARE 1:1 UNLESS SHOWN OTHERWISE.



WEDGING DETAIL

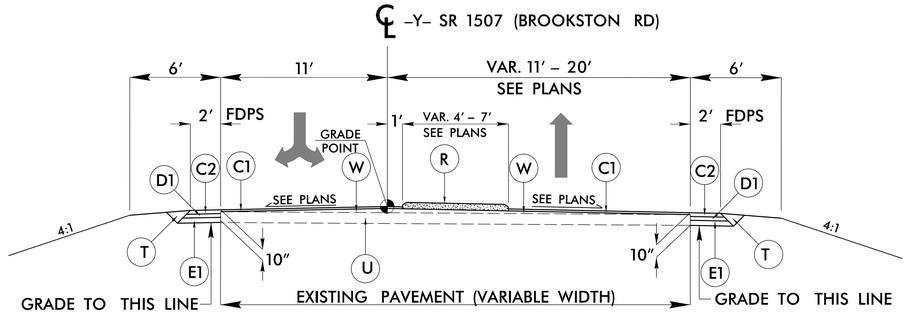


INCIDENTAL MILLING PAVEMENT KEY–IN DETAIL (TIE–IN)



TYPICAL SECTION 1

USE TYPICAL SECTION NO. 1
–L– STA. 10+60.00 TO STA. 24+05.00



TYPICAL SECTION 2

USE TYPICAL SECTION NO. 2
–Y– STA. 10+17.00 TO STA. 12+53.40

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4/04/06

COMPUTED BY: TRM DATE: 7/22/24
CHECKED BY: LC DATE: 11/12/25

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

PROJECT REFERENCE NO.	SHEET NO.
W-5705G	3B-1

PAVEMENT REMOVAL SUMMARY

SURVEY LINE	STATION	STATION	LOCATION LT/RT/CL	YD³
–Y–, –L–	–Y– 13+14.88	–L– 11+41.25	RT	497.66
			TOTAL:	497.66
			SAY:	500

SUMMARY OF MILLING

SURVEY LINE	STATION	STATION	LOCATION LT/RT/CL	INCIDENTAL YD³
–L–	10+60.00	10+97.50	CL	111.19
–L–	23+67.50	24+05.00	CL	111.87
–Y–	12+15.90	12+53.40	CL	89.41
			TOTAL:	312.47
			SAY:	320

SUMMARY OF EARTHWORK

STATION	STATION	UNCL. EXCAV.	EMBANK. +%	BORROW	WASTE
–L– LT 10+60.00	–L– LT 24+05.00	20	529	509	0
–Y– 10+17.00	–Y– 12+53.40	10	305	295	0
SUBTOTALS NO. 1:		30	834	804	0
–L– RT 10+60.00	–L– RT 24+05.00	36	300	264	0
SUBTOTALS NO.2:		36	300	264	0
PROJECT SUBTOTALS:		66	1,134	1,068	0
REPLACE TOP SOIL IN BORROW PIT				53	
PROJECT GRAND TOTALS		66		1,121	
SAY		100		1,200	

SHALLOW UNDERCUT 25 CY

CLASS IV STABILIZATION 50 TONS

Note: Approximate quantities only. Unclassified Excavation, Borrow Excavation, Shoulder Borrow, Fine Grading, Clearing and Grubbing, Breaking of Existing Pavement, and Removal of Existing Pavement will be paid for at the contract lump sum price for "Grading."

Note: Earthwork quantities are calculated by the Roadway Design Unit. These earthwork quantities are based in part on subsurface data provided by the Geotechnical Engineering Unit.

LIST OF PIPES, ENDWALLS, ETC. (FOR PIPES 48" & UNDER)

| STATION | LOCATION (LT,RT, OR CL) | STRUCTURE NO. FROM | STRUCTURE NO. TO | TOP ELEVATION | INVERT ELEVATION | INVERT ELEVATION | SLOPE CRITICAL | CLASS III R.C. PIPE (UNLESS NOTED OTHERWISE) 12" | 15" | 18" | 24" | 30" | 36" | 42" | 48" | BITUMINOUS COATED C.S. PIPE TYPE B (UNLESS NOTED OTHERWISE) 12" | 15" | 18" | 24" | 30" | 36" | 42" | 48" | CLASS IV R.C. PIPE 12" | 15" | 18" | 24" | 30" | 36" | 42" | 48" | 15" SIDE DRAIN PIPE | 18" SIDE DRAIN PIPE | 24" SIDE DRAIN PIPE | ENDWALLS STD. 838.01, STD. 838.11 OR STD. 838.80 (UNLESS NOTED OTHERWISE) CU. YDS. R.C.P. | CU. YDS. C.S.P. | QUANTITIES FOR DRAINAGE STRUCTURES * TOTAL L.F. FOR PAY QUANTITY SHALL BE COL. 'A' + (1.3 X COL.'B') PER EACH (0' THRU 5.0') | LIN. *FT. A 5.0' THRU 10.0' | LIN. *FT. B 10.0' AND ABOVE | C.B. STD. 840.01 OR STD. 840.02 | FRAME, GRATES AND HOOD STANDARD 840.03 TYPE OF GRATE E | F | G | D.I. STD. 840.14 OR STD. 840.15 | D.I. FRAME & GRATE STD. 840.16 | G.D.I. TYPE "A" STD. 840.17 OR 840.26 | G.D.I. TYPE "B" STD. 840.18 OR 840.27 | G.D.I. TYPE "D" STD. 840.19 OR 840.28 | G.D.I. FRAME WITH GRATE STD. 840.22 | G.D.I. FRAME WITH TWO GRATES STD. 840.22 | G.D.I. (N.S.) FRAME WITH GRATE STD. 840.24 | G.D.I. (N.S.) FRAME WITH TWO GRATES STD. 840.24 | J.B. STD. 840.31 OR 840.32 | CORR. STEEL ELBOWS NO. & SIZE | CONC. COLLARS CL. "B" C.Y. STD 840.72 | CONC. & BRICK PIPE PLUG, C.Y. STD. 840.71 | PIPE REMOVAL LIN.FT. | REMARKS |
|---|---|---|---|---|---

PROJECT REFERENCE NO.	SHEET NO.
W-5705G	4
R/W SHEET NO.	___

ROADWAY DESIGN ENGINEER

NORTH CAROLINA PROFESSIONAL SEAL 058695 ENGINEER MATTHEW D. TILLEY

Signed by: Matthew Tilley, PE
5F5500572781F42E...

11/24/2025

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

8/17/99

BEGIN TIP PROJECT W-5705G
-L- STA. 10+60.00

-L- PC Sta. 13+90.00

-Y- PC Sta. 10+17.28

-Y- PT Sta. 11+56.15

-Y- PC Sta. 12+53.40

-Y- PT Sta. 13+88.62

END CONSTRUCTION
-Y- STA. 12+53.40

-L- PT Sta. 22+76.88

END TIP PROJECT W-5705G
-L- STA. 24+05.00

-L- POT Sta. 10+00.00

-Y- POT Sta. 10+00.00
-L- POC Sta. 17+70.00

-L- POT Sta. 26+36.88

15+00

20+00

25+00

N 46°32' 46.9" E

TO HENDERSON

N 20°32' 07.9" W

S 79° 57' 54.7" E

N 51° 48' 00.2" E

ADJUST VALVE BOX TO GRADE

REMOVE

100' TAPER

550' TRANSITION

CL B RIP RAP ◇402
3 TONS
11 SY GEOTEXTILE

W5705G GPS-1

W5705G GPS-2

EXISTING R/W

18.89' EIP TO R/W

KATHARINE L SAUNDERS STOWELL
DB 1237 PG 202

RALPH ELLINGTON
DB 316 PG 101
DB 93 PG 149
PB 1 PG 29

EVELYN WATKINS
DB 316 PG 101
DB 93 PG 149
PB 1 PG 29

EVELYN E. WATKINS
DB 93 PG 149
PB 1 PG 29

EVELYN WATKINS
DB 316 PG 101
DB 93 PG 149

EVELYN E. WATKINS
DB 316 PG 101
PB 1 PG 29

ANTHONY MURPHY
DB 1267 PG 862

ANTHONY KEITH CREECH
DB 1315 PG 468
PB M PG 25

BOBBY & LORETTA GILL
DB 574 PG 615
PB M PG 25

EVELYN E. WATKINS
DB 574 PG 615

EVELYN WATKINS
DB 316 PG 101
DB 93 PG 149
PB 1 PG 29

SR 1549 (BRIGHTON RD)
29' PAVED ROADWAY

SMU (ABANDONED)

GRAVEL

BROKEN BST

CONC PAD

CONC PIPES

N 48°31'54" E
261.89'

N 39°58'06" E
111.04'

N 45°58'55" E
145.00'

N 38°40'50" W
263.49'

S 38°40'50" E
210.92'

N 38°31'05" W
222.07'

N 46°30'14" E
192.44'

N 46°37'46" E
150.05'

S 43°23'55" E
181.10'

S 43°24'52" E
181.32'

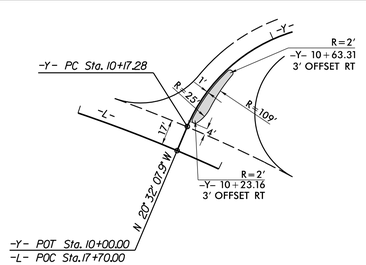
N 20°32'07.9" W
214.45'

N 20°32'07.9" W
342.35'

S 67°28'42" E

****
4 ELEVATION = 510.29
N 948100 E 2191638
BL STATION 10+73.62 93 RIGHT
BM1 SET NAIL IN 20" OAK
****

MONOLITHIC CONCRETE ISLAND DETAIL



-L-
PI Sta 18+68.72
Δ = 53° 29' 18.5" (RT)
D = 6° 01' 52.1"
L = 886.87'
T = 478.72'
R = 950.00'

-Y-	
PI Sta 10+97.69	PI Sta 13+21.14
Δ = 72° 20' 08.1" (RT)	Δ = 8° 36' 29.6" (RT)
D = 52° 05' 13.5"	D = 6° 21' 58.3"
L = 138.87'	L = 135.22'
T = 80.41'	T = 67.74'
R = 110.00'	R = 900.00'

MONO. CONC. ISLAND

PAVEMENT REMOVAL

SEE SHEET 5 FOR -L- & -Y- PROFILE

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5/28/99

PROJECT REFERENCE NO.	SHEET NO.
W-5705G	5

ROADWAY DESIGN ENGINEER

NORTH CAROLINA PROFESSIONAL SEAL 058695 ENGINEER MATTHEW J WOLFE

Signed by: Matthew Wolfe, P.E. 06/13/2025

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

–L– SR 1001 (WARRENTON RD.)

BEGIN GRADE
–L– STA. 10+60.00
ELEV. = 523.81'

PI = 13+00.00
EL = 525.47'
K = 260
VC = 480'
V_{des} = 55MPH

(+)0.6917%
(–)11.1570%

–L– 17+70.00
–Y– 10+00.00

PI = 19+75.00
EL = 517.66'
K = 870
VC = 780'
V_{des} > 55MPH

(–)11.1570%
(–)12.0535%

PROPOSED 24" RCP

END GRADE
–L– STA. 24+05.00
ELEV. = 508.83'

530 520 510 500 490 480

11 12 13 14 15 16 17 18 19 20 21 22 23 24

SEE SHEET 4 FOR PLAN VIEW

–Y– SR 1507 (BROOKSTON RD.)

BEGIN GRADE
–Y– STA. 10+17.00
ELEV. = 520.86'

PI = 10+50.00
EL = 521.52'
K = 14
VC = 66'
V_{des} = 20MPH

(–)2.7600%
(+)0.9907%
(+)2.0000%
(–)0.6598%

END GRADE
–Y– STA. 12+53.40
ELEV. = 518.25'

PI = 11+25.00
EL = 519.45'
K = 48
VC = 84'
V_{des} = 30MPH

PI = 12+33.00
EL = 518.38'
K = 121
VC = 40'
V_{des} = 50MPH

520 510 500 490 480

10 11 12 13

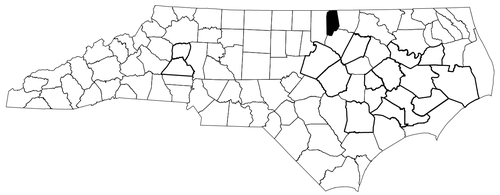
SEE SHEET 4 FOR PLAN VIEW

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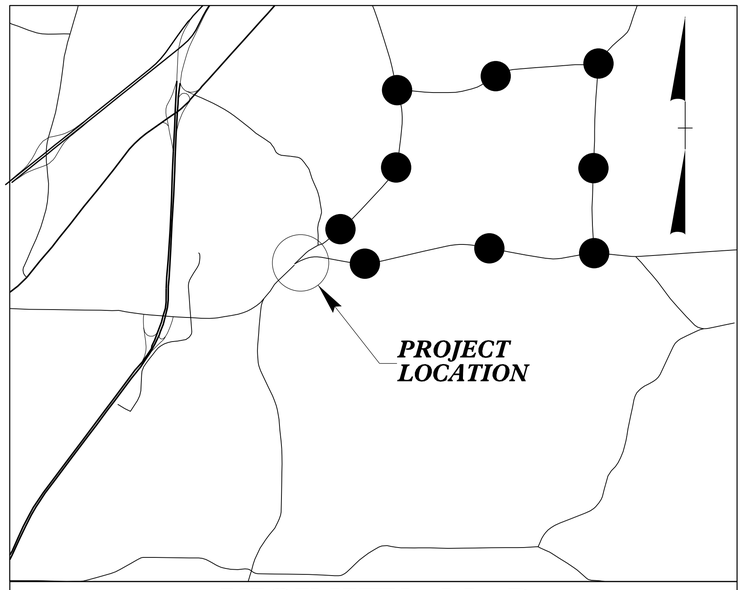
STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

TRANSPORTATION MANAGEMENT PLAN

VANCE COUNTY



LOCATION: SR 1001 (WARRENTON RD) AT SR 1507 (BROOKSTON RD)



VICINITY MAP

OFF-SITE DETOUR

INDEX OF SHEETS

SHEET NO.	TITLE
TMP-1	TITLE SHEET, VICINITY MAP AND INDEX OF SHEETS APPICABLE ROADWAY STANDARD DRAWINGS, AND LEGEND
TMP-1A	TRANSPORTATION OPERATIONS PLAN: (MANAGEMENT STRATEGIES, GENERAL NOTES AND LOCAL NOTES)
TMP-2	TEMPORARY TRAFFIC CONTROL DETAIL AND PHASING

ROADWAY STANDARD DRAWINGS

THE FOLLOWING ROADWAY STANDARDS AS SHOWN IN "ROADWAY STANDARD DRAWINGS" - PROJECT SERVICES UNIT - N.C. DEPARTMENT OF TRANSPORTATION - RALEIGH, N.C., DATED JANUARY 2024 ARE APPLICABLE TO THIS PROJECT AND BY REFERENCE HEREBY ARE CONSIDERED A PART OF THESE PLANS:

STD. NO.	TITLE
1101.03	TEMPORARY ROAD CLOSURES
1101.11	TRAFFIC CONTROL DESIGN TABLES
1110.01	STATIONARY WORK ZONE SIGNS
1145.01	BARRICADES
1205.01	PAVEMENT MARKINGS - LINE TYPE AND OFFSETS
1205.02	PAVEMENT MARKINGS - TWO LANE AND MULTILANE ROADWAYS
1205.04	PAVEMENT MARKINGS - INTERSECTIONS
1205.05	PAVEMENT MARKINGS - TURN LANES
1205.08	PAVEMENT MARKINGS - SYMBOLS AND WORD MESSAGES
1205.09	PAVEMENT MARKINGS - PAINTED ISLANDS

LEGEND

GENERAL

- DIRECTION OF TRAFFIC FLOW
- EXIST. PVMT.
- NORTH ARROW
- PROPOSED PVMT.
- REMOVAL

TRAFFIC CONTROL DEVICES

- BARRICADE (TYPE III)

TEMPORARY SIGNING

- STATIONARY SIGN



WORK ZONE SAFETY & MOBILITY
"from the MOUNTAINS to the COAST"

N.C.D.O.T. WORK ZONE TRAFFIC CONTROL
1561 MAIL SERVICE CENTER (MSC) RALEIGH, NC 27699-1561
750 N. GREENFIELD PARKWAY, GARNER, NC 27529 (DELIVERY)
PHONE: (919) 773-2800 FAX: (919) 771-2745

_____	STATE TRAFFIC MANAGEMENT ENGINEER
_____	TRAFFIC CONTROL PROJECT ENGINEER
MATTHEW NOLFO, PE	TRAFFIC CONTROL PROJECT DESIGN ENGINEER
THOMAS R MEADOWS	TRAFFIC CONTROL DESIGN ENGINEER

DIVISION OF HIGHWAYS · STATE OF NORTH CAROLINA · DEPARTMENT OF TRANSPORTATION · WORK ZONE TRAFFIC CONTROL

DIVISION OF HIGHWAYS · DIVISION FIVE · STATE OF NORTH CAROLINA · DEPARTMENT OF TRANSPORTATION · DIVISION DESIGN UNIT

APPROVED: _____

DATE: _____

NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 058695 MATTHEW NOLFO

Signed by: Matthew Nolfo, PE
5F5500572784F42E...
11/24/2025

SHEET NO.
TMP-1

W-5705G

TIP PROJECT:

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PROJ. REFERENCE NO.	SHEET NO.
W-5705G	TMP-1A

MANAGEMENT STRATEGIES

TRAFFIC WILL BE MAINTAINED OFFSITE DURING CONSTRUCTION. TRAFFIC WILL FOLLOW SR 1501, SR 1505 AND SR 1507.

GENERAL NOTES

CHANGES MAY BE REQUIRED WHEN PHYSICAL DIMENSIONS IN THE DETAIL DRAWINGS, STANDARD DETAILS, AND ROADWAY DETAILS ARE NOT ATTAINABLE TO MEET FIELD CONDITIONS OR RESULT IN DUPLICATE OR UNDESIRED OVERLAPPING OF DEVICES. MODIFICATION MAY INCLUDE: MOVING, SUPPLEMENTING, COVERING, OR REMOVAL OF DEVICES AS DIRECTED BY THE ENGINEER.

THE FOLLOWING GENERAL NOTES APPLY AT ALL TIMES FOR THE DURATION OF THE CONSTRUCTION PROJECT EXCEPT WHEN OTHERWISE NOTED IN THE PLAN OR DIRECTED BY THE ENGINEER.

TRAFFIC PATTERN ALTERATIONS

A) NOTIFY THE ENGINEER THIRTY (30) CALENDAR DAYS PRIOR TO ANY TRAFFIC PATTERN ALTERATION.

SIGNING

B) PROVIDE PERMANENT SIGNING.

C) PROVIDE SIGNING AND DEVICES REQUIRED TO CLOSE THE ROAD ACCORDING THE ROADWAY STANDARD DRAWINGS AND TRAFFIC CONTROL PLANS AND PROVIDE SIGNING REQUIRED FOR THE OFF-SITE DETOUR ROUTE AS SHOWN IN THE TRAFFIC CONTROL PLANS.

D) COVER OR REMOVE ALL SIGNS AND DEVICES REQUIRED TO CLOSE THE ROAD WHEN ROAD CLOSURE IS NOT IN OPERATION AND COVER OR REMOVE ALL SIGNS REQUIRED FOR THE OFF-SITE DETOUR WHEN THE DETOUR IS NOT IN OPERATION.

E) ENSURE ALL NECESSARY SIGNING IS IN PLACE PRIOR TO ALTERING ANY TRAFFIC PATTERN.

TRAFFIC CONTROL DEVICES

F) PLACE TYPE III BARRICADES, WITH "ROAD CLOSED" SIGN R11-2 ATTACHED, OF SUFFICIENT LENGTH TO CLOSE ENTIRE ROADWAY.

PAVEMENT MARKINGS AND MARKERS

G) INSTALL PAVEMENT MARKINGS ON THE FINAL SURFACE AS SHOWN IN THE FINAL PAVEMENT MARKING PLAN.

H) TIE PROPOSED PAVEMENT MARKING LINES TO EXISTING PAVEMENT MARKING LINES.

APPROVED:_____ DATE:_____

NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 058695

Signed by: Matthew Miller, PE

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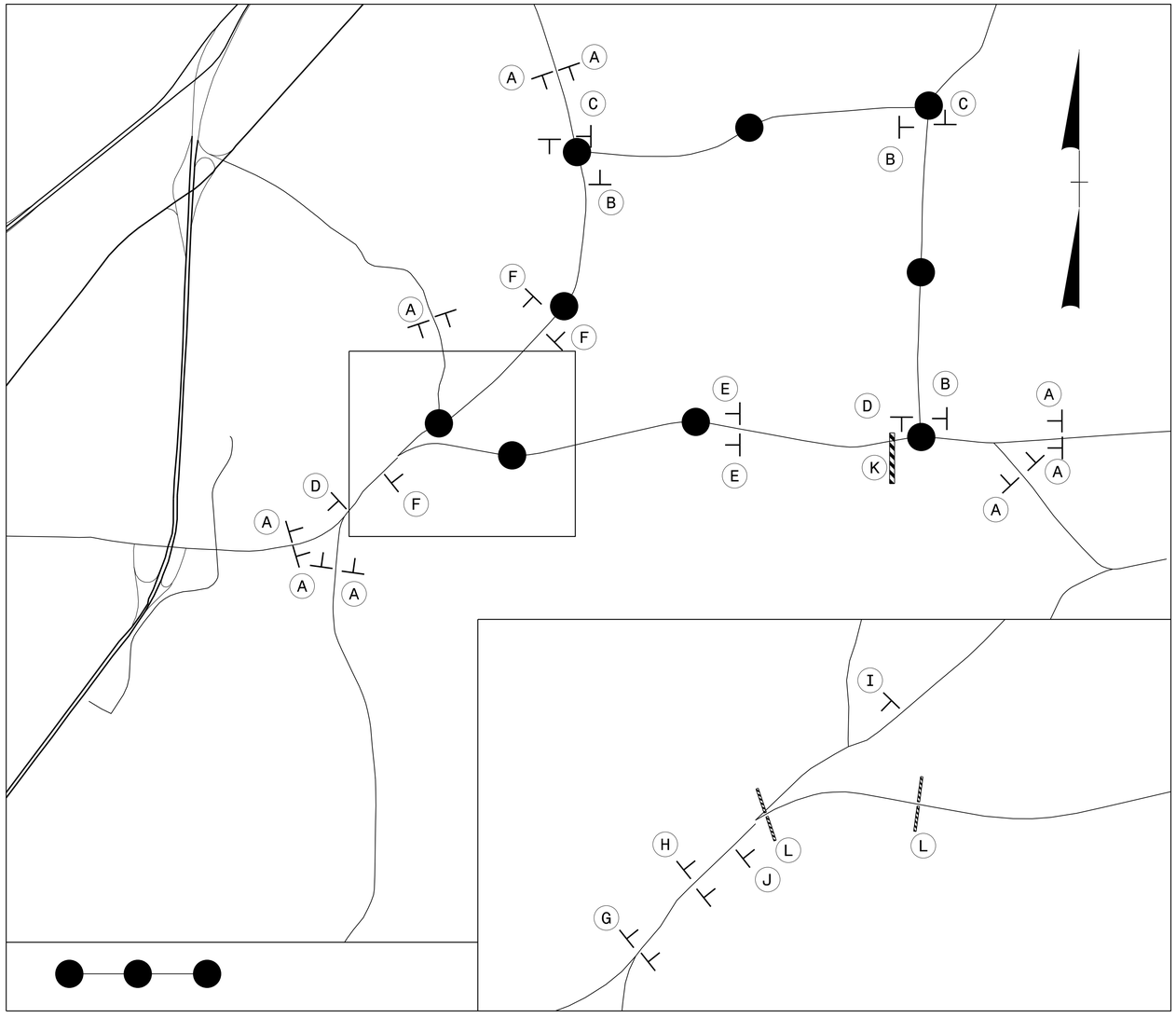
11/24/2025

DIVISION OF HIGHWAYS · DIVISION FIVE · STATE OF NORTH CAROLINA · DEPARTMENT OF TRANSPORTATION · DIVISION DESIGN UNIT

TRANSPORTATION OPERSTIONS PLAN

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PROJ. REFERENCE NO.	SHEET NO.
W-5705G	TMP-2



DETOUR AHEAD
W20-2
48" X 48"
A

DETOUR
M4-8
24" X 12"
M6-1 R
21" X 15"
B

DETOUR
M4-8
24" X 12"
M6-1 L
21" X 15"
C

END DETOUR
M4-8 A
24" X 18"
D

ROAD CLOSED AHEAD
W20-3
48" X 48"
E

DETOUR
M4-8
24" X 12"
M6-3
21" X 15"
F

ROAD CLOSED 1000 FT
W20-3
48" X 48"
G

ROAD CLOSED 500 FT
W20-3
48" X 48"
H

ROAD CLOSED
W20-3
48" X 48"
NEXT LEFT
SP-4L
42" X 12"
I

ROAD CLOSED
W20-3
48" X 48"
NEXT RIGHT
SP-4R
42" X 12"
J

R11-4
60" x 30"
ROAD CLOSED TO THRU TRAFFIC
DETOUR
M4-10R
48" x 18"
TYPE III BARRICADE
K

R11-2
48" x 30"
ROAD CLOSED
TYPE III BARRICADE
L

PHASING

STEP 1

INSTALL OFFSITE DETOUR SIGNS AND ROAD CLOSURE SIGNING AS SHOWN ON TMP-2 NO MORE THAN 3 DAYS PRIOR TO ROAD CLOSURE. IF ROAD IS NOT CLOSED WITHIN THE SAME WORKING PERIOD AS SIGN INSTALLATION, COVER ALL SIGNING.

STEP 2

UNCOVER SIGNING. THEN USING TMP-02 DETOUR TRAFFIC OFFSITE AND CLOSE -L- (SR 1001 WARRENTON RD). BEHIND ROAD CLOSURE, CONSTRUCT -L- UP TO BUT NOT INCLUDING THE FINAL LIFT OF SURFACE COURSE.

STEP 3

PLACE THE FINAL LIFT OF SURFACE COURSE, PAVEMENT MARKINGS, AND MARKERS (SEE PAVEMENT MARKING PLAN).

STEP 4

REMOVE ALL TRAFFIC CONTROL DEVICES, ROAD CLOSURE SIGNING, AND OPEN -L- TO TRAFFIC. REMOVE ALL OFFSITE DETOUR SIGNING.

APPROVED:_____ DATE:_____

NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 058695 VOID

Signed by: Matthew Wally, PE
5F550057278F42E...
11/24/2025

DIVISION OF HIGHWAYS · DIVISION FIVE · STATE OF NORTH CAROLINA · DEPARTMENT OF TRANSPORTATION · DIVISION DESIGN UNIT

OFFSITE DETOUR AND PHASING

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09/08/99

TIP PROJECT: W-5705G

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION

PROJECT REFERENCE NO.	SHEET NO.
W-5705G	PMP-1

DIVISION FIVE DESIGN ENGINEER

NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 058695 MATTHEW WILLY NOTTO

Signed by: Matthew Willy PE
5F550057278F42E...

11/24/2025

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

PAVEMENT MARKING PLAN
VANCE COUNTY
LOCATION: SR 1001 (WARRENTON RD) AT SR 1507 (BROOKSTON RD)

INDEX

SHEET NO.	DESCRIPTION
PMP-1	PAVEMENT MARKING PLAN TITLE AND SCHEDULE SHEET
PMP-2	PAVEMENT MARKING DETAIL SHEET

ROADWAY STANDARD DRAWINGS

THE FOLLOWING ROADWAY STANDARDS AS APPEAR IN "ROADWAY STANDARD DRAWINGS" - PROJECT SERVICES UNIT - N.C. DEPARTMENT OF TRANSPORTATION - RALEIGH, N.C., DATED JANUARY 2024 ARE APPLICABLE TO THIS PROJECT AND BY REFERENCE HEREBY ARE CONSIDERED A PART OF THESE PLANS:

STD. NO.	TITLE
1205.01	PAVEMENT MARKINGS - LINE TYPES & OFFSETS
1205.02	PAVEMENT MARKINGS - 2 LANE & MULTILANE ROADWAYS
1205.04	PAVEMENT MARKINGS - INTERSECTIONS
1205.05	PAVEMENT MARKINGS - TURN LANES
1205.08	PAVEMENT MARKINGS - SYMBOLS AND MESSAGES
1205.09	PAVEMENT MARKINGS - PAINTED ISLANDS

GENERAL NOTES

THE FOLLOWING GENERAL NOTES APPLY AT ALL TIMES FOR THE DURATION OF THE CONSTRUCTION PROJECT, EXCEPT WHEN OTHERWISE NOTED IN THE PLAN, OR DIRECTED BY THE ENGINEER.

A) INSTALL PAVEMENT MARKINGS AND PAVEMENT MARKERS ON THE FINAL SURFACE AS FOLLOWS:

ROAD NAME	MARKING	MARKER
ALL ROADS	THERMOPLASTIC	NONE

B) TIE PROPOSED PAVEMENT MARKING LINES TO EXISTING PAVEMENT MARKING LINES.
C) REMOVE/REPLACE ANY CONFLICTING/DAMAGED PAVEMENT MARKINGS AND MARKERS.
D) UNLESS OTHERWISE SPECIFIED, HEATED-IN-PLACE THERMOPLASTIC MAY BE USED IN LIEU OF EXTRUDED THERMOPLASTIC FOR SYMBOLS.

FINAL PAVEMENT MARKING SCHEDULE

SYMBOL	DESCRIPTION	PAY ITEM	
T1	WHITE EDGE LINE	(4",90 MILS)	THERMOPLASTIC
T2	WHITE SOLID LANE LINE	(4",90 MILS)	THERMOPLASTIC
T4	3FT - 9FT/SP WHITE MINISKIP	(4",90 MILS)	THERMOPLASTIC
T10	YELLOW EDGE LINE	(4",90 MILS)	THERMOPLASTIC
T13	YELLOW DOUBLE CENTER	(6",90 MILS)	THERMOPLASTIC
T52	YELLOW DIAGONAL	(12",90 MILS)	THERMOPLASTIC
T61	WHITE STOPBAR	(24",90 MILS)	THERMOPLASTIC
T70	LEFT TURN ARROW	(90 MIL)	THERMOPLASTIC
T75	COMBO LEFT/ RIGHT ARROW	(90 MIL)	THERMOPLASTIC

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PROJECT REFERENCE NO.	SHEET NO.
W-5705G	PMP-2

DIVISION FIVE DESIGN ENGINEER

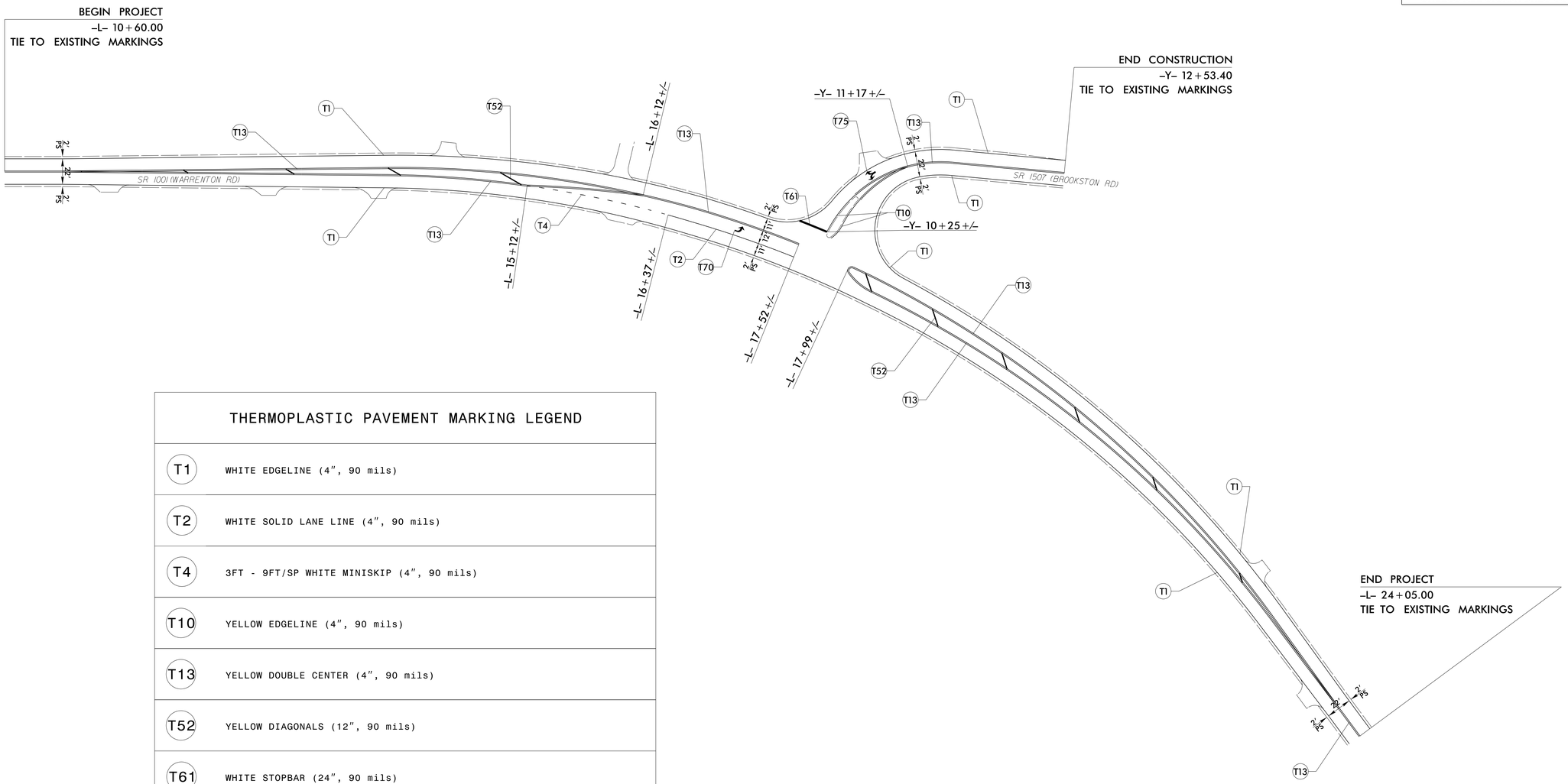
NORTH CAROLINA PROFESSIONAL SEAL 058695 ENGINEER MATTHEW J. NOTTO

Signed by: Matthew Notto, PE
5F550057278F42E...
09/29/2025

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

PAVEMENT MARKING DETAIL

ENGINEER TO APPROVE LOCATION OF ALL UNSIGNALIZED STOP BARS



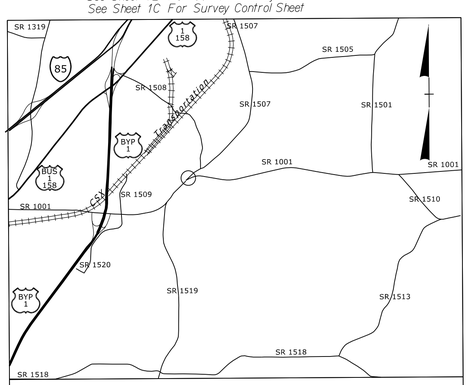
THERMOPLASTIC PAVEMENT MARKING LEGEND

T1	WHITE EDGELINE (4", 90 mils)
T2	WHITE SOLID LANE LINE (4", 90 mils)
T4	3FT - 9FT/SP WHITE MINISKIP (4", 90 mils)
T10	YELLOW EDGELINE (4", 90 mils)
T13	YELLOW DOUBLE CENTER (4", 90 mils)
T52	YELLOW DIAGONALS (12", 90 mils)
T61	WHITE STOPBAR (24", 90 mils)
T70	LEFT TURN ARROW (90 mils)
T75	COMBO LEFT/RIGHT ARROW (90 mils)

3/12/2025
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User:tmeadows

TIP # W-5705G PROJECT: W-5705G

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



VICINITY MAP

OFF-SITE DETOUR

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

PLAN FOR PROPOSED
EROSION CONTROL

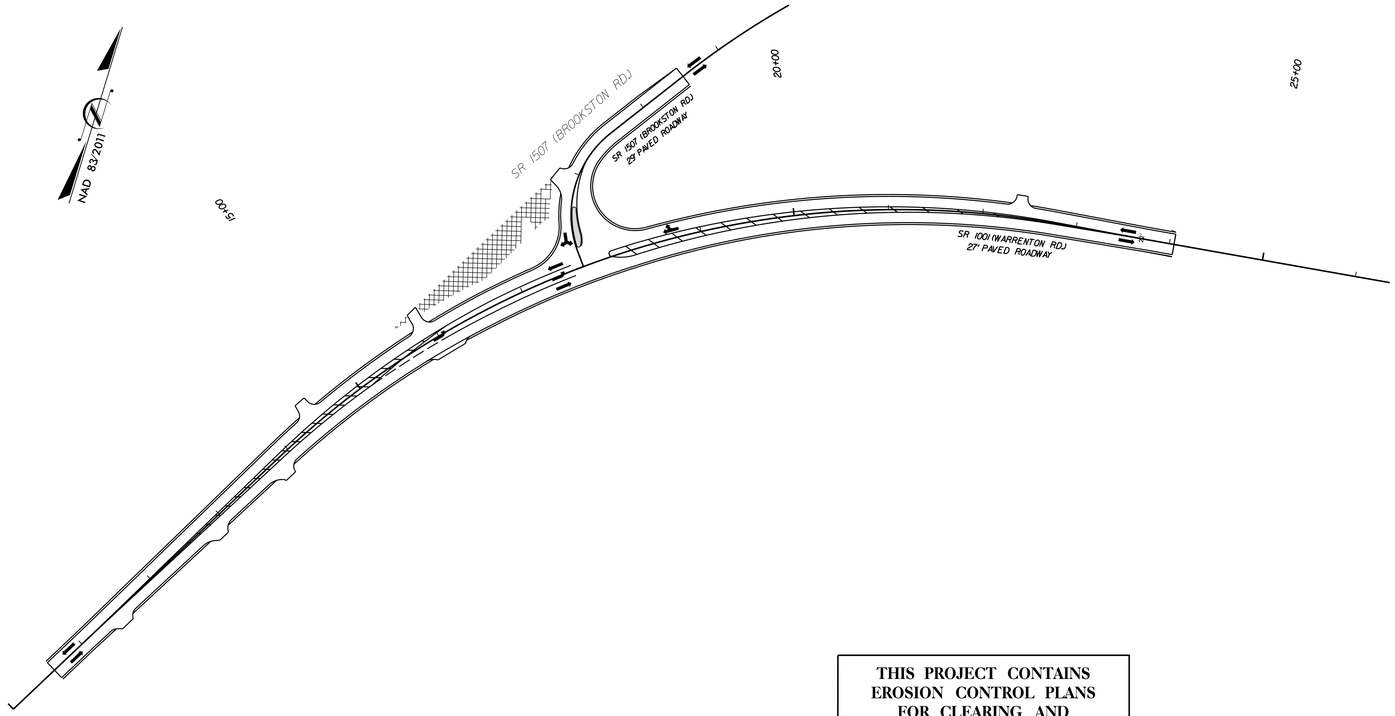
VANCE COUNTY

LOCATION: SR 1001 (WARRENTON RD.) AT SR 1507 (BROOKSTON RD.)

TYPE OF WORK: GRADING & PAVING

STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	W-5705G	EC-1	4

STATE PROJ. NO.	F. A. PROJ. NO.	DESCRIPTION



THIS PROJECT CONTAINS EROSION CONTROL PLANS FOR CLEARING AND GRU3.3ING PHASE OF CONSTRUCTION.

GRAPHIC SCALE

0
PLANS
0
PROFILE (HORIZONTAL)
0
PROFILE (VERTICAL)

THESE EROSION AND SEDIMENT CONTROL PLANS COMPLY WITH THE REGULATIONS SET FORTH BY THE NCG-010000 GENERAL STORMWATER CONSTRUCTION PERMIT ISSUED BY THE NORTH CAROLINA DEPARTMENT OF ENVIRONMENTAL QUALITY DIVISION OF ENERGY, MINERAL, AND LAND RESOURCES.

Prepared in the Office of:

ROADSIDE ENVIRONMENTAL UNIT
1 South Wilmington St.
Raleigh, NC 27611

2024 STANDARD SPECIFICATIONS

Designed by:

David Davis ***3553***
NAME *LEVEL III CERTIFICATION NO.*

Roadway Standard Drawings

The following roadway english standards as appear in "Roadway Standard Drawings"– Roadway Design Unit – N. C. Department of Transportation – Raleigh, N. C., dated January 2024 and the latest revison thereto are applicable to this project and by reference hereby are considered a part of these plans.

1604.01	Railroad Erosion Control Detail	1632.01	Rock Inlet Sediment Trap Type A
1605.01	Temporary Silt Fence	1632.02	Rock Inlet Sediment Trap Type .3
1606.01	Special Sediment Control Fence	1632.03	Rock Inlet Sediment Trap Type C
1607.01	Gravel Construction Entrance	1633.01	Temporary Rock Silt Check Type A
1622.01	Temporary .3erms and Slope Drains	1633.02	Temporary Rock Silt Check Type .3
1630.01	Riser .3asin	1634.01	Temporary Rock Sediment Dam Type A
1630.02	Silt .3asin Type .3	1634.02	Temporary Rock Sediment Dam Type .3
1630.03	Temporary Silt Ditch	1635.01	Rock Pipe Inlet Sediment Trap Type A
1630.04	Stilling .3asin	1635.02	Rock Pipe Inlet Sediment Trap Type .3
1630.05	Temporary Diversion	1640.01	Coir Fiber .3affle
1630.06	Special Stilling .3asin	1645.01	Temporary Stream Crossing
1631.01	Matting Installation		

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PROJECT REFERENCE NO.	SHEET NO.
W-5705G	EC-02
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

DIVISION OF HIGHWAYS
STATE OF NORTH CAROLINA

EROSION & SEDIMENT CONTROL LEGEND

Std. #	Description	Symbol
1605.01	Temporary Silt Fence	
1606.01	Special Sediment Control Fence	
1622.01	Temporary Berms and Slope Drains	
1630.02	Silt Basin Type B	
1630.03	Temporary Silt Ditch	TSD
1630.04	Stilling Basin	
1630.05	Temporary Diversion	TD
1630.06	Special Stilling Basin	
1630.07	Skimmer Basin	
1630.08	Tiered Skimmer Basin	
1630.09	Earthen Dam with Skimmer	
	Infiltration Basin	
	Rock Inlet Sediment Trap:	
1632.01	Type A	A
1632.02	Type B	B
1632.03	Type C	C

Std. #	Description	Symbol
1633.01	Temporary Rock Silt Check Type A	
1633.02	Temporary Rock Silt Check Type B	
1633.03	Temporary Rock Silt Check Type A with Excelsior Matting and Flocculant	
1634.01	Temporary Rock Sediment Dam Type A	
1634.02	Temporary Rock Sediment Dam Type B	
1635.01	Rock Pipe Inlet Sediment Trap Type A	A
1635.02	Rock Pipe Inlet Sediment Trap Type B	B
1636.01	Excelsior Wattle Check	
1636.01	Excelsior Wattle Check with Flocculant	
1636.01	Coir Fiber Wattle Check	
1636.01	Coir Fiber Wattle Check with Flocculant	
1636.02	Silt Fence Excelsior Wattle Break	EW
	Silt Fence Coir Fiber Wattle Break	CFW
1636.03	Excelsior Wattle Barrier	—EW—EW—EW—
1636.03	Coir Fiber Wattle Barrier	—CFW—CFW—CFW—

PROJECT REFERENCE NO.	SHEET NO.
W-5705G	EC-3B
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

DIVISION OF HIGHWAYS
STATE OF NORTH CAROLINA

SOIL STABILIZATION TIMEFRAMES

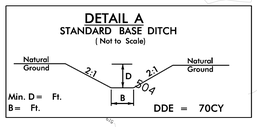
SITE DESCRIPTION	*STABILIZATION TIME*	*TIMEFRAME EXCEPTIONS*
PERIMETER DIKES, SWALES, DITCHES AND SLOPES	7 DAYS	NONE
HIGH QUALITY WATER (HQW) ZONES	7 DAYS	NONE
SLOPES STEEPER THAN 3:1	7 DAYS	IF SLOPES ARE 10' OR LESS IN LENGTH AND ARE NOT STEEPER THAN 2:1, 14 DAYS ARE ALLOWED.
SLOPES 3:1 OR FLATTER	14 DAYS	7 DAYS FOR SLOPES GREATER THAN 50' IN LENGTH.
ALL OTHER AREAS WITH SLOPES FLATTER THAN 4:1	14 DAYS	NONE, EXCEPT FOR PERIMETERS AND HQW ZONES.

PROJECT REFERENCE NO.	SHEET NO.
W-5705G	EC-4
R/W SHEET NO.	

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CLEARING & GRUBBING PHASE

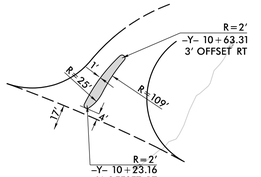
DETAIL A
STANDARD BASE DITCH
(Not to Scale)



DDE = 70CY

-L- PC Sta. 13+90.00
-Y- PC Sta. 10+17.28
-Y- PC Sta. 11+56.15
-Y- PC Sta. 12+53.40
-Y- PT Sta. 13+88.62
-L- PT Sta. 22+76.88
-L- POT Sta. 10+00.00
-Y- POT Sta. 10+00.00
-L- POC Sta. 17+70.00
-L- POT Sta. 26+36.88
N 46° 32' 46.9" E
TO HENDERSON
N 51° 48' 00.2" E
N 20° 32' 01.9" W
S 79° 57' 54.7" E
15+00
20+00
25+00
040 REMOVE 15"
EXISTING R/W
151 RCP
65'
SOIL
GRASS
GRAVEL
CONC
ISMT (ABANDONED)
CONC PIPS
SR 1501 (BRICKTON RD.) 29' PAVED ROADWAY
SR 1501 (MIDDLEFORK RD.) 22' PAVED ROADWAY
EXISTING R/W
SEDIMENT CONTROL FENCE APPROX 1' BEHIND TOE OF SLOPE
TEST HOLE #1
-EL- 13+77.46 (-L- 20+95.81)
offset 22.86' RT (-L- 23.0436' RT)
CL 8 RIP RAP 040
23 TON
11 SY GEOTEXTILE
POND
10' WARRENTON
NC GRID NAD 83 NA 2011

MONOLITHIC CONCRETE ISLAND DETAIL



-L-
PI Sta 18+68.72
Δ = 53° 29' 18.5" (RT)
D = 6° 01' 52.1"
L = 886.87'
T = 478.72'
R = 950.00'

-Y-	
PI Sta 10+97.69	PI Sta 13+21.14
Δ = 72° 20' 08.1" (RT)	Δ = 8° 36' 29.6" (RT)
D = 52° 05' 13.5"	D = 6° 21' 58.3"
L = 138.87'	L = 135.22'
T = 80.41'	T = 67.74'
R = 110.00'	R = 900.00'

MONO. CONC. ISLAND

PAVEMENT REMOVAL

SEE SHEET 5 FOR -L- & -Y- PROFILE

8/17/99

PROJECT REFERENCE NO.	SHEET NO.
W-5705G	EC-5
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

FINAL PHASE

SEED AND MULCH HATCHED AREA IN ACCORDANCE WITH SECTION 1660 OF NCDOT STANDARD SPECIFICATIONS

-L- PC Sta. 13+90.00

-Y- PC Sta. 12+53.40

-Y- PT Sta. 11+56.15

-Y- PC Sta. 10+17.28

N 51° 48' 00.2" E

-Y- PT Sta. 13+88.62

N 46° 32' 46.9" E
TO HENDERSON

-L- POT Sta. 10+00.00

-Y- POT Sta. 10+00.00
-L- POC Sta. 17+70.00

N 20° 38' 07.5" W

-L- PT Sta. 22+76.88

-L- POT Sta. 26+36.88

S 79° 57' 54.7" E
TO WARRENTON

040 REMOVE 15" RCP

W5705G GPS-1

W5705G GPS-2

EXISTING R/W

15" RCP

18" RCP

24" RCP

SOIL

GRAVEL

GRASS

CONC

(ABANDONED)

CONC PAD W/ PIPES

CONC PIPES

SR 1507 (BROOKSTON RD.) 29' PAVED ROADWAY

SR 1001 (NURSERY LN. RD.) 27' PAVED ROADWAY

20+00

SEDIMENT CONTROL FENCE APPROX 1' BEHIND TOE OF SLOPE •

TEST HOLE #1
23+97.46 (-L- 20+95.81)
2340.46' RT (-L- 23.0436' RT)

CL B RIP RAP CLASS II
23' TOP WIDTH
28' ST GF

DETAIL A
STANDARD BASE DITCH
(Not to Scale)

Natural Ground — 2:1 — D — 2:1 — Natural Ground
Min. D = Ft.
B = Ft.
B
DDE = 70CY

-L- 21+23.62

POND

4 ELEVATION • 510.29
N 948100 E 2191638
BL STATION 10+73.62 93 RIGHT
BMI SET NAIL IN 20" OAK

NC GRID NAD 83 NA 2011

25+00

-L-
PI Sta 18+68.72
Δ = 53° 29' 18.5" (RT)
D = 6° 01' 52.1"
L = 886.87'
T = 478.72'
R = 950.00'

-Y-	
PI Sta 10+97.69	PI Sta 13+21.14
Δ = 72° 20' 08.1" (RT)	Δ = 8° 36' 29.8" (RT)
D = 52° 05' 13.5"	D = 6° 21' 58.3"
L = 138.87'	L = 135.22'
T = 80.41'	T = 67.74'
R = 110.00'	R = 900.00'

MONO. CONC. ISLAND

PAVEMENT REMOVAL

SEE SHEET 5 FOR -L- & -Y- PROFILE

SYSTINE
DESIGN
TERRAME

6/23/16

0 2.5 5	PROJ. REFERENCE NO.	SHEET NO.
	W-5705G	X-1

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530 525 520 515

0.020 0.020

3:1 4:1

523.90

11+25.00

530 525 520 515

0.029 0.020

3:1

523.81

11+00.00

530 525 520 515

0.039 0.020

3:1 4:1

523.73

10+75.00

530 525 520 515

0.045 0.020

523.82

10+60.00

525 520 515

523.75

10+50.00

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6/23/16

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	W-5705G	X-2

12+25.00

3:1 0.020 0.020 3:1

524.16

524.15

12+00.00

3:1 0.020 0.020 3:1

524.08

11+75.00

3:1 0.020 0.020 2% DRIVEWAY

524.00

11+50.00

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6/23/16

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	W-5705G	X-3

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530 525 520 515

0.014 0.020

2:1

523.92

13+25.00

530 525 520 515

0.004 0.020 DRIVEWAY

2:1 2%

524.04

13+00.00

530 525 520 515

0.006 0.020

2:1

524.12

12+75.00

530 525 520 515

0.016 0.020

2:1

524.17

12+50.00

510

75 70 65 60 55 50 45 40 35 30 25 20 15 10 5 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75

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6/23/16

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	W-5705G	X-4

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530 525 520 515 510

0.054 0.054 2:1 4:1 523.08

14+25.00

0.044 0.044 2:1 4:1 523.35

14+00.00

0.034 0.034 2:1 DRIVEWAY 2% 523.57

13+75.00

0.024 0.024 2:1 4:1 523.77

13+50.00

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6/23/16

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	W-5705G	X-5

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530 525 520 515

4:1 0.060 0.060 2:1 521.83

15+25.00

530 525 520 515

3:1 0.060 0.060 3:1 522.13

15+00.00

510 530 525 520 515

2:1 0.060 0.060 4:1 522.49

14+75.00

510 530 525 520 515

DRIVEWAY 18% 2% 24% 0.060 0.060 4:1 522.82

14+50.00

510

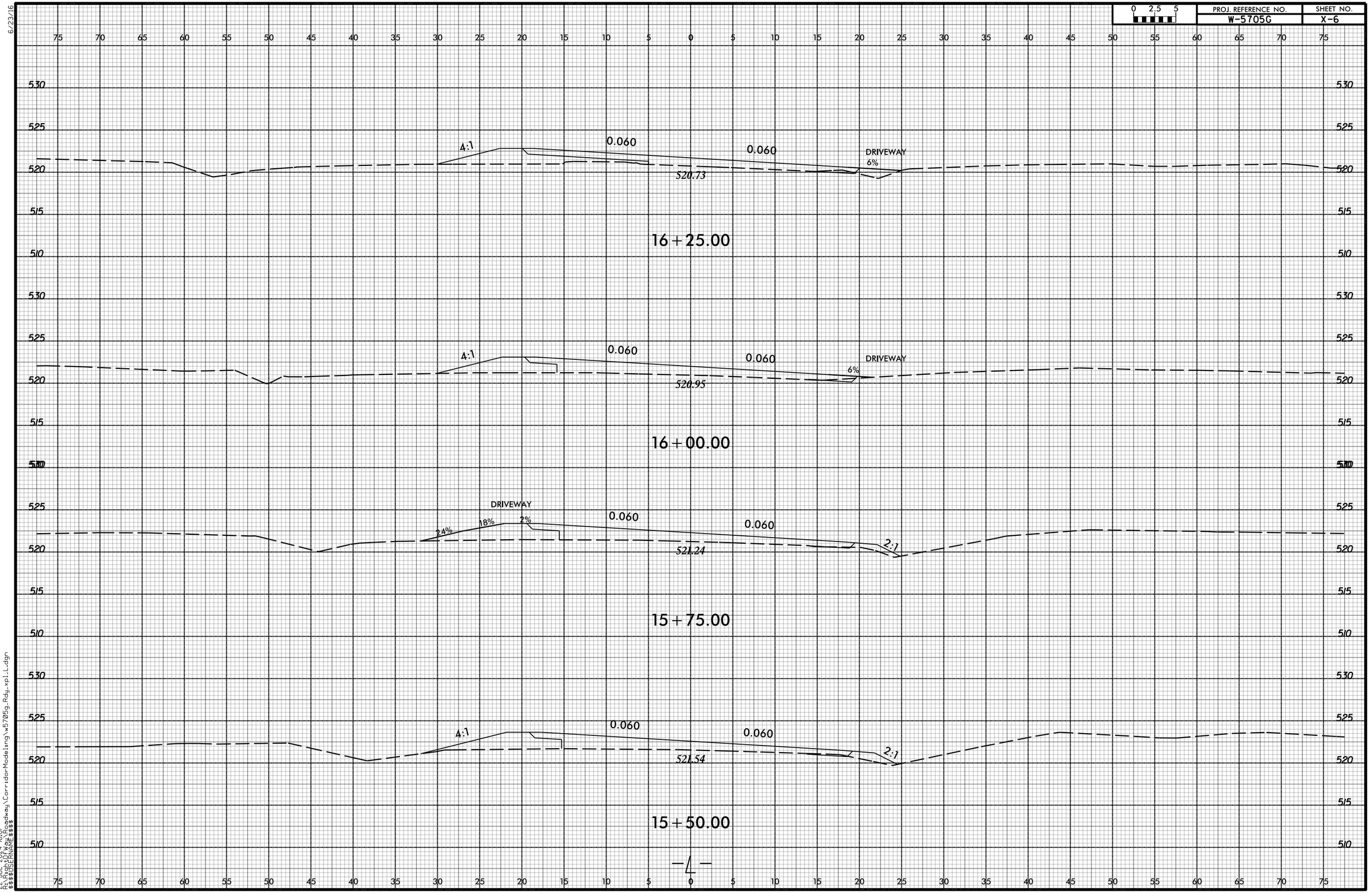
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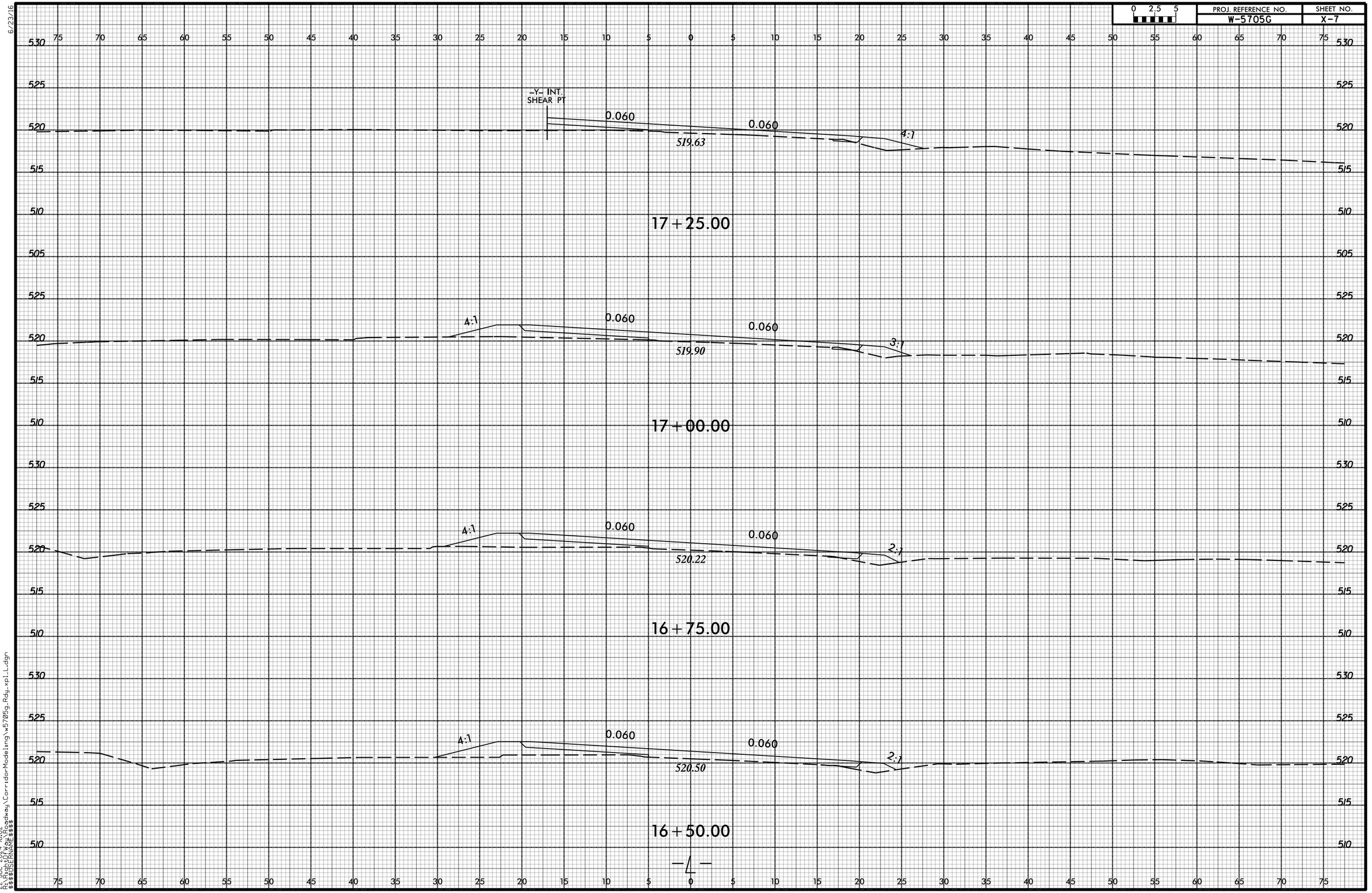
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6/23/16

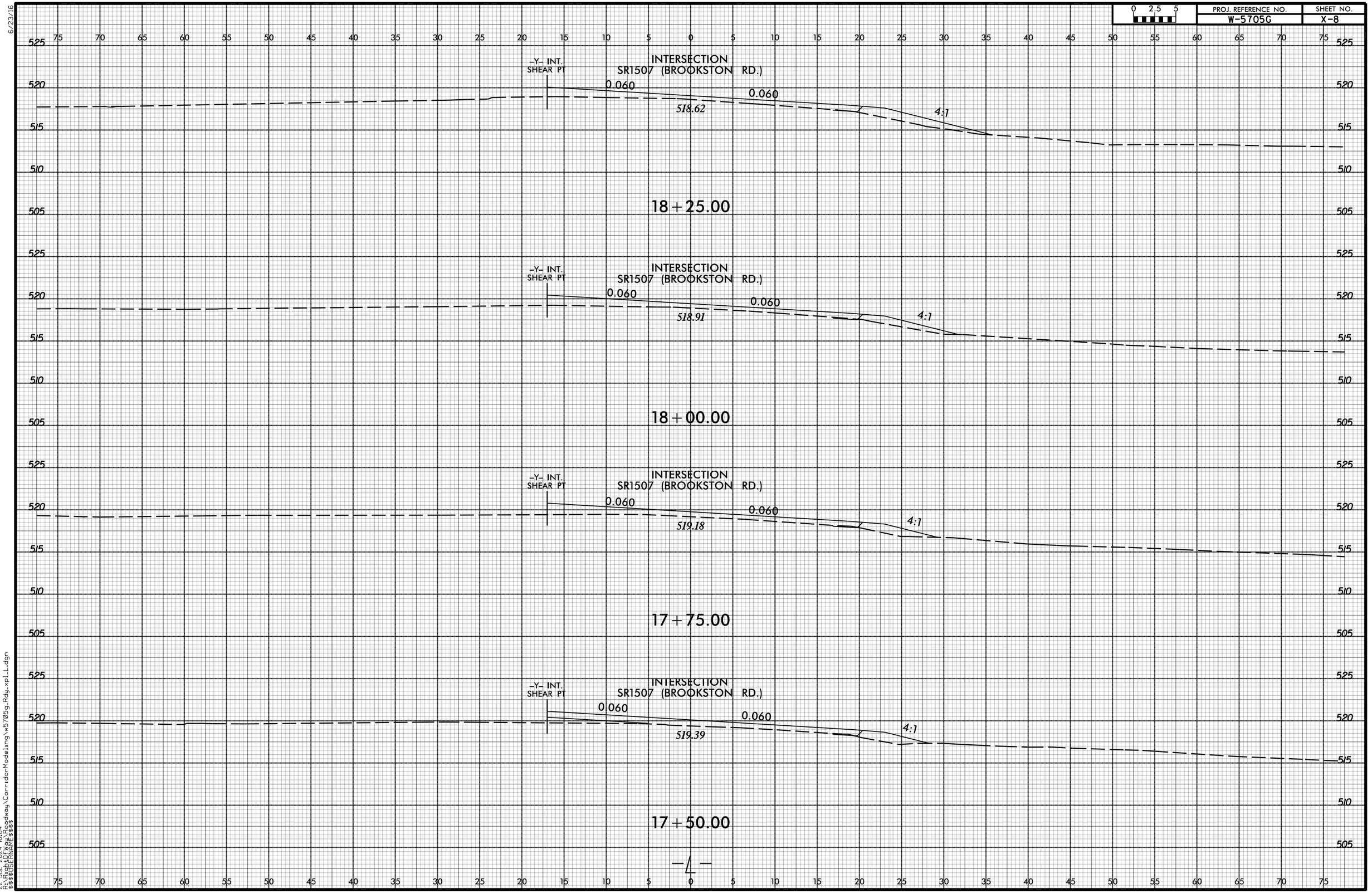
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6/23/16

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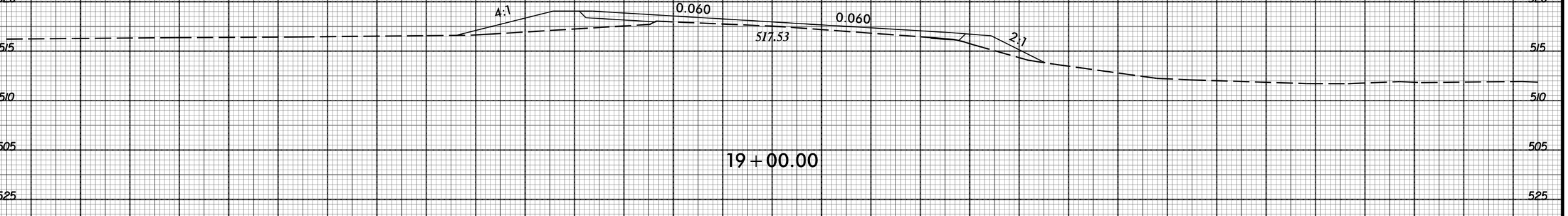
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6/23/16

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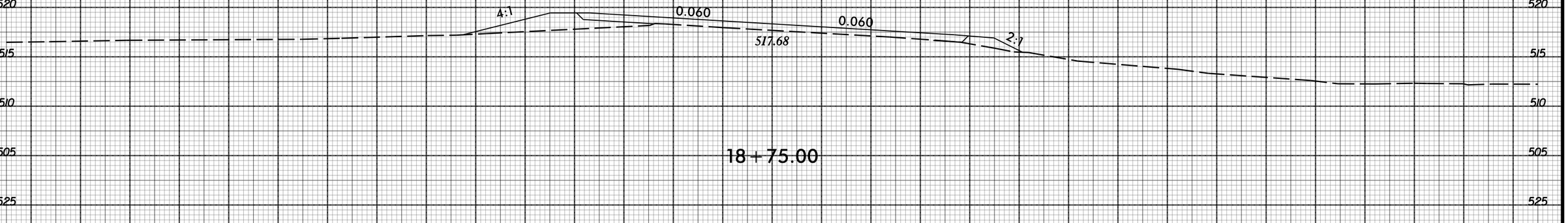
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525 520 515 510 505



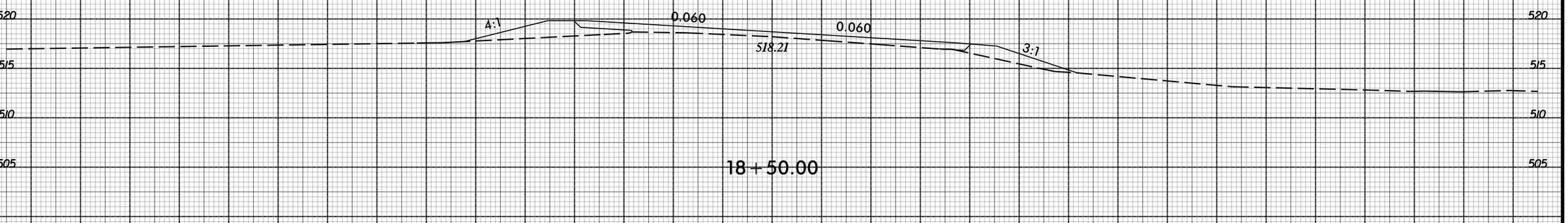
19+00.00

525 520 515 510 505



18+75.00

525 520 515 510 505



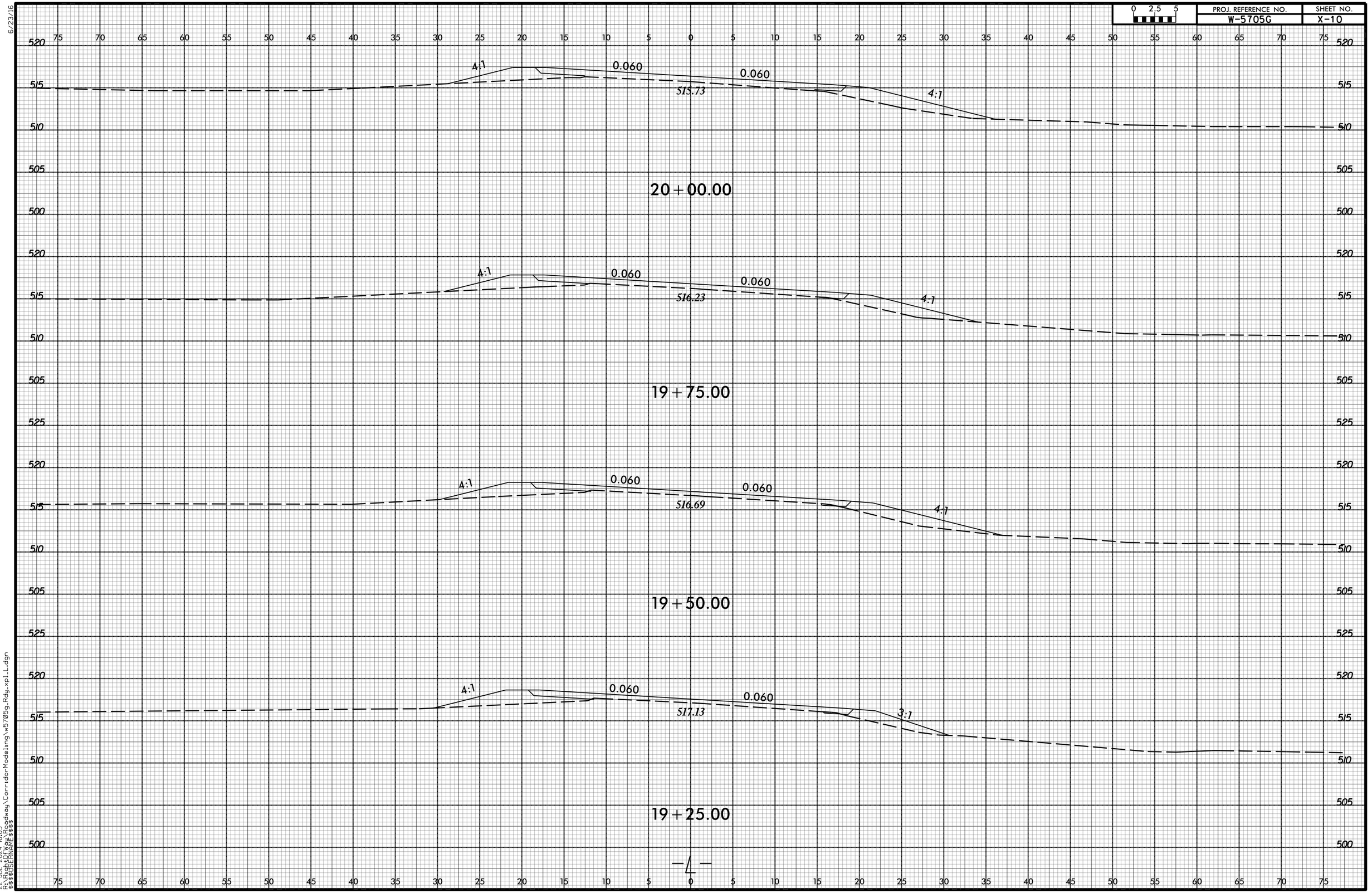
18+50.00

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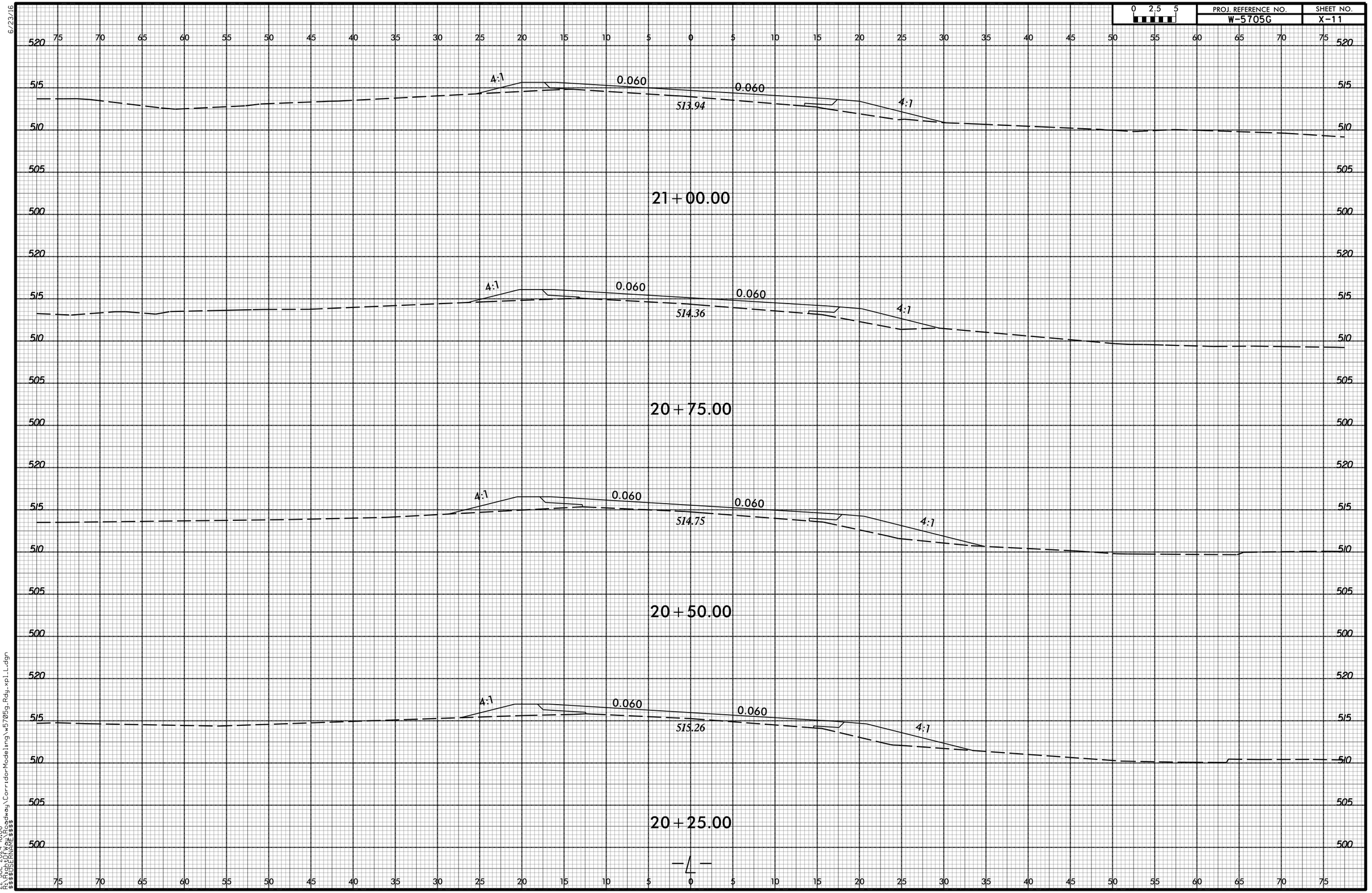
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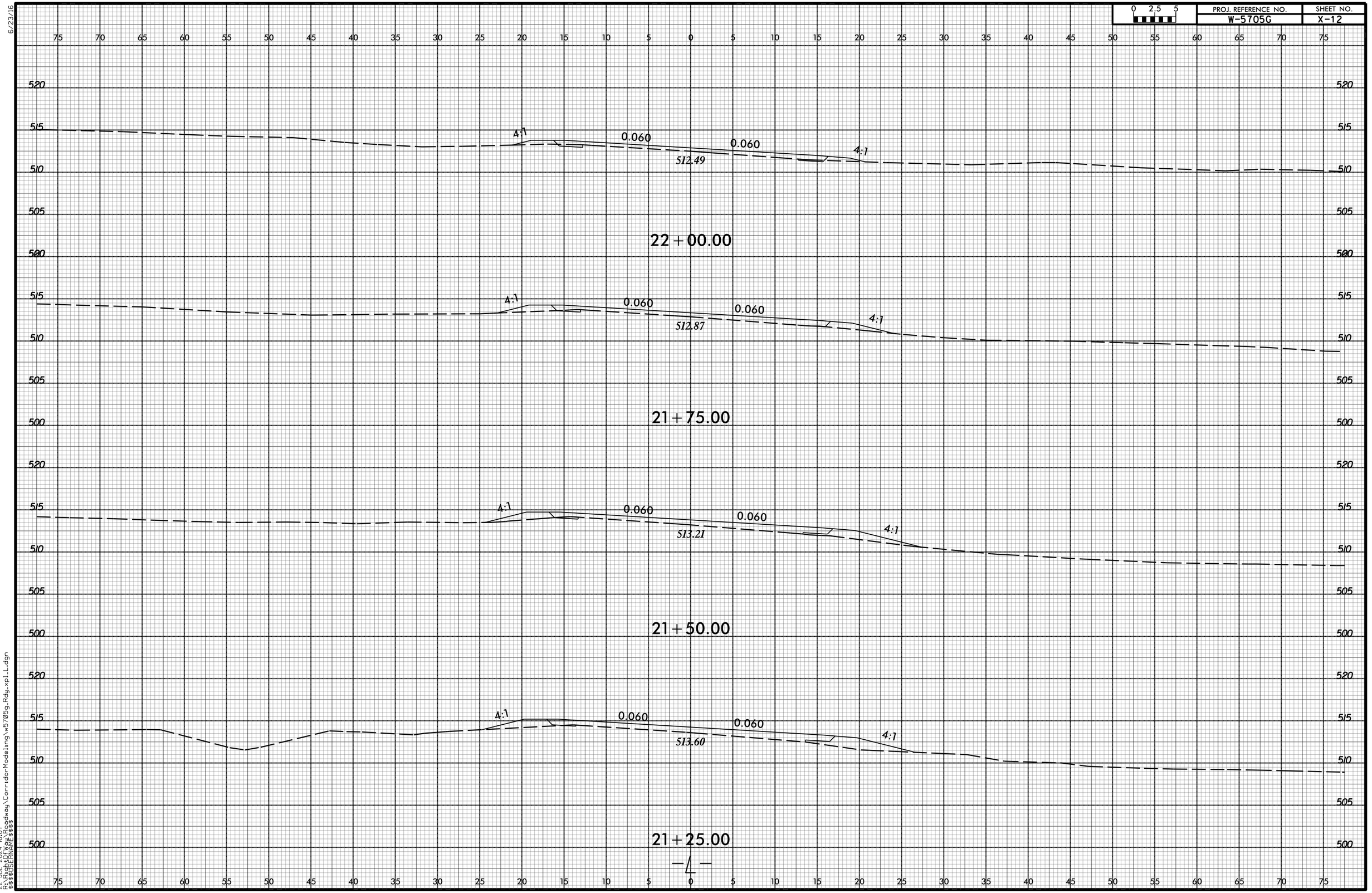
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	W-5705G	X-13

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520 515 510 505 500

4:1 0.031 0.031 4:1

510.74

23+00.00

520 515 510 505

4:1 0.041 0.041 4:1

511.23

22+75.00

520 515 510 505

DRIVEWAY DRIVEWAY

9% 2% 0.051 0.051 4:1

511.70

22+50.00

520 515 510 505

DRIVEWAY DRIVEWAY

9% 2% 0.060 0.060 4:1

512.11

22+25.00

520 515 510 505 500

75 70 65 60 55 50 45 40 35 30 25 20 15 10 5 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75

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6/23/16

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	W-5705G	X-14

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515 510 505 500 520 515 510 505

0.012 0.028 4:1

508.89

24+00.00

4:1 0.020 0.020 4:1

509.36

23+75.00

4:1 0.020 0.020 4:1

509.83

23+50.00

4:1 0.021 0.021 4:1

510.28

23+25.00

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6/23/16

0 2.5 5	PROJ. REFERENCE NO.	SHEET NO.
	W-5705G	X-15

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515
510
505
515
510
505
500

508.39

24+25.00

0.010 0.030

508.79

24+05.00

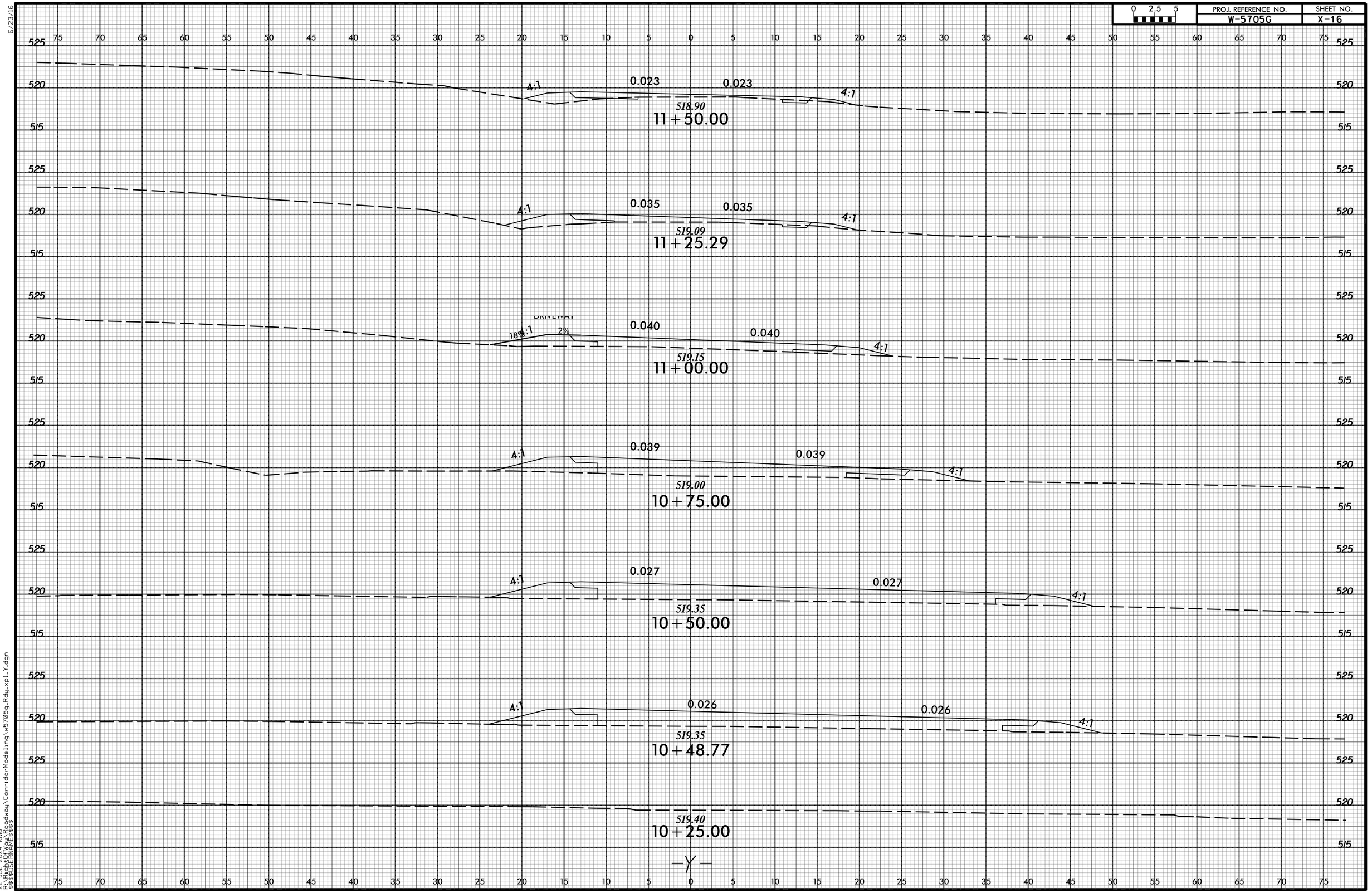
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6/23/16

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6/23/16

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	W-5705G	X-17

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525 520 515

518.13
12+75.00

525 520 515

0.010 0.040
518.25
12+53.40

525 520 515

4:1 0.010 0.038 4:1
518.27
12+50.00

525 520 515

4:1 0.010 0.026 4:1
518.44
12+25.00

525 520 515

4:1 0.010 0.020 4:1
518.59
12+00.00

525 520 515

4:1 0.011 0.020 4:1
518.72
11+75.00
–Y–

525 520 515

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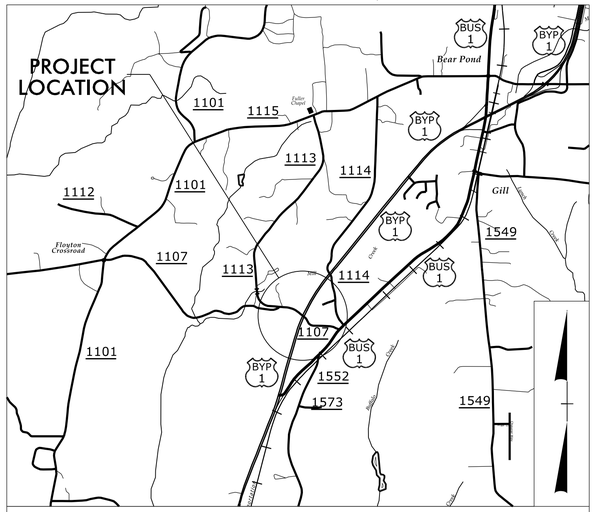
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09/08/99

TIP PROJECT: W-5805G

CONTRACT: DE00406

See Sheet 1A For Index of Sheets
See Sheet 1B For Conventional Symbols



VICINITY MAP

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

VANCE COUNTY

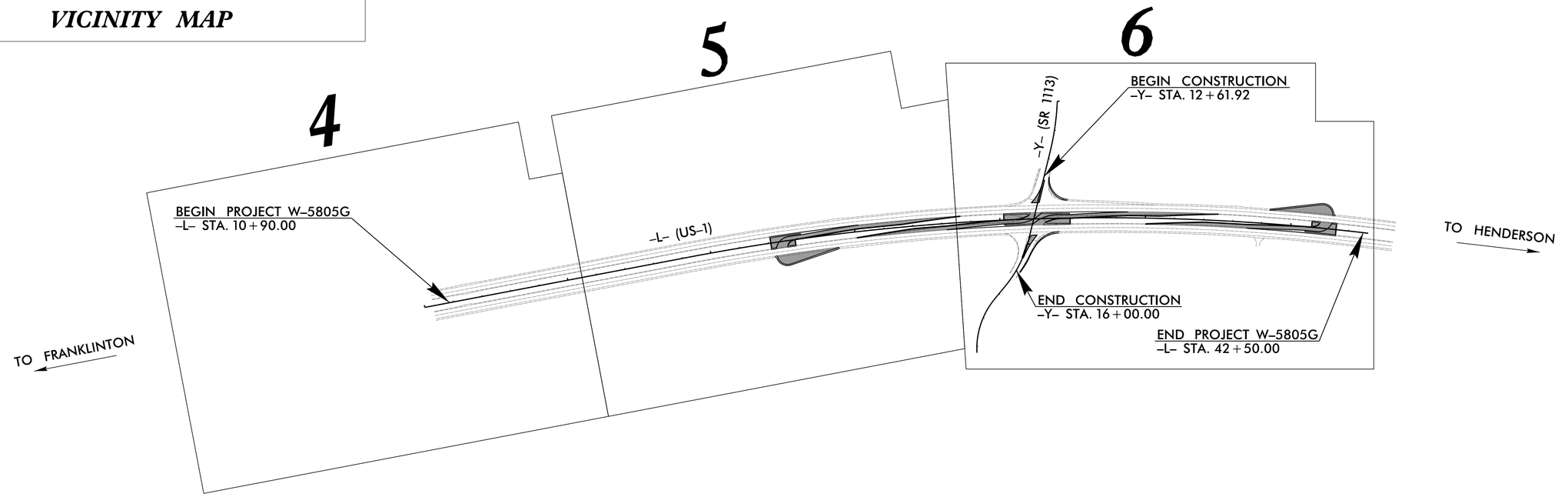
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N.C.	W-5805G	1	

STATE PROJ. NO.	F. A. PROJ. NO.	DESCRIPTION
48950.1.8	0001155	PE
48950.2.8	0001155	ROW
48950.2.9		UTIL.
48950.3.8	0001155	CONST.

LOCATION: INTERSECTION OF US 1 AT SR 1113 (S LAKE LODGE RD.)
TYPE OF WORK: GRADING, DRAINAGE, & PAVING

100% PLAN SET

NAD 83/2011



DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

GRAPHIC SCALES

50 25 0 50 100
PLANS

50 25 0 50 100
PROFILE (HORIZONTAL)

10 5 0 10 20
PROFILE (VERTICAL)

DESIGN DATA

ADT 2025 = 12,400 VPD
ADT 2045 = 14,400 VPD
V = 60 MPH

FUNC CLASS = PRINCIPAL ARTERIAL REGIONAL TIER

PROJECT LENGTH

LENGTH ROADWAY TIP PROJECT W-5805G = 0.599 MILES

TOTAL LENGTH TIP PROJECT W-5805G = 0.599 MILES

NCDOT CONTACT: MATTHEW NOLFO, PE
DIVISION 5

Prepared in the Office of:
SUMMIT
DESIGN AND ENGINEERING SERVICES
FIRM NO. P-0339
320 Executive Ct.
Hillsborough, NC 27278-8551
Voice: (919) 732-3883
Fax: (919) 732-6776
www.summitde.com

2024 STANDARD SPECIFICATIONS

RIGHT OF WAY DATE: JULY 22, 2024

LETTING DATE: JANUARY 14, 2026

SPENCER MERRITT, PE
PROJECT ENGINEER

JOSHUA JERNIGAN, PE
PROJECT DESIGN ENGINEER

HYDRAULICS ENGINEER
NORTH CAROLINA PROFESSIONAL SEAL 054713 ENGINEER HE YANG
Signed by: 12/4/2025 *P.E.*
SIGNATURE:

ROADWAY DESIGN ENGINEER
NORTH CAROLINA PROFESSIONAL SEAL 053483 ENGINEER SPENCER W MERRITT
Signed by: 12/4/2025 *P.E.*
SIGNATURE:

DIVISION OF HIGHWAYS · DIVISION FIVE · STATE OF NORTH CAROLINA · DEPARTMENT OF TRANSPORTATION · DESIGN UNIT

04-DEC-2025 10:42
W-5805G_Rdy_tsh.dgn
zoe.zwack

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8/17/99

PROJECT REFERENCE NO.	SHEET NO.
W-5805G	1A

ROADWAY DESIGN ENGINEER

12/4/2025

NORTH CAROLINA PROFESSIONAL SEAL 053483 ENGINEER SPENCER W. MERRITT

Signed by:

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

Prepared in the Office of:
SUMMIT DESIGN AND ENGINEERING SERVICES
NC FIRM LICENSE No: P-0339
320 Executive Ct.
Hillsborough, NC 27278
(919) 732-3883
(919) 732-6676 (FAX)

INDEX OF SHEETS

SHEET NUMBER	SHEET
1	TITLE SHEET
1A	INDEX OF SHEETS, GENERAL NOTES, AND STANDARD DRAWINGS
1B	CONVENTIONAL SYMBOLS
2A-1	PAVEMENT SCHEDULE AND TYPICAL SECTIONS
2B-1 THRU 2B-3	ROADWAY DETAILS
2C-1 THRU 2C-3	SPECIAL DETAILS
3B-1	ROADWAY SUMMARIES
3D-1	DRAINAGE SUMMARIES
3G-1	GEOTECHNICAL SUMMARIES
3P-1	PARCEL INDEX SHEET
4 THRU 8	PLAN AND PROFILE SHEETS
RW01 THRU RW04	SURVEY CONTROL SHEET
TMP-1 THRU TMP-15	TRANSPORTATION MANAGEMENT PLANS
PMP-1 THRU PMP-3	PAVEMENT MARKING PLANS
EC-1 THRU EC-9	EROSION CONTROL PLANS
SIGN-1 THRU SIGN-7	SIGNING PLANS
X-1	CROSS-SECTION INDEX
X-1A	CROSS-SECTION SUMMARY SHEET
X-2 THRU X-15	CROSS-SECTIONS

EFF. 01-16-2024
REV.

2024 ROADWAY ENGLISH STANDARD DRAWINGS

The following Roadway Standards as appear in "Roadway Standard Drawings" Contracts Standards and Development Unit - N. C. Department of Transportation - Raleigh, N. C., Dated January 16, 2024 are applicable to this project and by reference hereby are considered a part of these plans:

STD.NO.	TITLE
DIVISION 2 - EARTHWORK	
200.02	Method of Clearing - Method II
DIVISION 3 - PIPE CULVERTS	
300.01	Method of Pipe Installation (Use Details in Lieu of Standards for Sheets 1 and 2 of 2)
310.03	Cross Pipe End Section - Precast Concrete Section for 18" to 30" Pipe
310.10	Driveway Pipe Construction
DIVISION 5 - SUBGRADE, BASES AND SHOULDERS	
560.01	Method of Shoulder Construction - High Side of Superelevated Curve - Method I
DIVISION 6 - ASPHALT BASES AND PAVEMENTS	
654.01	Pavement Repairs
DIVISION 8 - INCIDENTALS	
815.02	Subsurface Drain
840.14	Concrete Drop Inlet - 12" thru 30" Pipe
840.16	Drop Inlet Frame and Grates - for use with Std. Dwg 840.14 and 840.15
840.17	Concrete Grated Drop Inlet Type 'A' - 12" thru 72" Pipe
840.18	Concrete Grated Drop Inlet Type 'B' - 12" thru 36" Pipe
840.20	Frames and Wide Slot Flat Grates
840.22	Frames and Wide Slot Sag Grates
840.72	Pipe Collar
852.01	Concrete Islands
852.06	Method for Placement of Drop Inlets in Concrete Islands
862.01	Guardrail Placement (Use Details in Lieu of Standards for Sheets 4, 6, 12, and 14 of 15)
862.02	Guardrail Installation
865.01	Cable Guiderail
876.02	Guide for Rip Rap at Pipe Outlets
876.04	Drainage Ditches with Class 'B' Rip Rap

GENERAL NOTES:

2024 SPECIFICATIONS
EFFECTIVE: 01-16-2024
REVISED:

GRADING AND SURFACING OR RESURFACING AND WIDENING:

THE GRADE LINES SHOWN DENOTE THE FINISHED ELEVATION OF THE PROPOSED SURFACING AT GRADE POINTS SHOWN ON THE TYPICAL SECTIONS. WHERE NO GRADE LINES ARE SHOWN, THE PROFILES SHOWN DENOTE THE TOP ELEVATION OF THE EXISTING PAVEMENT ALONG THE CENTER LINE OF SURVEY ON WHICH THE PROPOSED RESURFACING WILL BE PLACED. GRADE LINES MAY BE ADJUSTED BY THE ENGINEER IN ORDER TO SECURE A PROPER TIE-IN.

CLEARING:

CLEARING ON THIS PROJECT SHALL BE PERFORMED TO THE LIMITS ESTABLISHED BY METHOD II.

SHOULDER CONSTRUCTION:

ASPHALT, EARTH, AND CONCRETE SHOULDER CONSTRUCTION ON THE HIGH SIDE OF SUPERELEVATED CURVES SHALL BE IN ACCORDANCE WITH STD. NO. 560.01

SUBSURFACE DRAINS:

SUBSURFACE DRAINS SHALL BE CONSTRUCTED IN ACCORDANCE WITH STD. NO. 815.02 AT LOCATIONS DIRECTED BY THE ENGINEER.

GUARDRAIL:

THE GUARDRAIL LOCATIONS SHOWN ON THE PLANS MAY BE ADJUSTED DURING CONSTRUCTION AS DIRECTED BY THE ENGINEER. THE CONTRACTOR SHOULD CONSULT WITH THE ENGINEER PRIOR TO ORDERING GUARDRAIL MATERIAL.

TEMPORARY SHORING:

SHORING REQUIRED FOR THE MAINTENANCE OF TRAFFIC WILL BE PAID FOR AS "EXTRA WORK" IN ACCORDANCE WITH SECTION 104-7.

UTILITIES:

UTILITY OWNERS ON THIS PROJECT ARE AT&T AND VANCE COUNTY.

RIGHT-OF-WAY MARKERS:

ALL RIGHT-OF-WAY MARKERS ON THIS PROJECT SHALL BE PLACED BY OTHERS.

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9/10/2021

PROJECT REFERENCE NO.	SHEET NO.
W-5805G	1B

STATE OF NORTH CAROLINA, DIVISION OF HIGHWAYS

CONVENTIONAL PLAN SHEET SYMBOLS

Note: Not to Scale

BOUNDARIES AND PROPERTY:

- State Line
- County Line
- Township Line
- City Line
- Reservation Line
- Property Line
- Existing Iron Pin (EIP) — EIP
- Computed Property Corner
- Existing Concrete Monument (ECM) — ECM
- Parcel/Sequence Number — 123
- Existing Fence Line
- Proposed Woven Wire Fence
- Proposed Chain Link Fence
- Proposed Barbed Wire Fence
- Existing Wetland Boundary — WLB
- Proposed Wetland Boundary — WLB
- Existing Endangered Animal Boundary — EAB
- Existing Endangered Plant Boundary — EPB
- Existing Historic Property Boundary — HPB
- Known Contamination Area: Soil — S
- Potential Contamination Area: Soil — S
- Known Contamination Area: Water — W
- Potential Contamination Area: Water — W
- Contaminated Site: Known or Potential

BUILDINGS AND OTHER CULTURE:

- Gas Pump Vent or U/G Tank Cap
- Sign — S
- Well — W
- Small Mine
- Foundation
- Area Outline
- Cemetery
- Building
- School
- Church
- Dam

HYDROLOGY:

- Stream or Body of Water
- Hydro, Pool or Reservoir
- Jurisdictional Stream — JS
- Buffer Zone 1 — BZ 1
- Buffer Zone 2 — BZ 2
- Flow Arrow
- Disappearing Stream
- Spring
- Wetland
- Proposed Lateral, Tail, Head Ditch — FLOW
- False Sump

RAILROADS:

- Standard Gauge — CSX TRANSPORTATION
- RR Signal Milepost — MILEPOST 35
- Switch — SWITCH
- RR Abandoned
- RR Dismantled

RIGHT OF WAY & PROJECT CONTROL:

- Primary Horiz Control Point
- Primary Horiz and Vert Control Point
- Secondary Horiz and Vert Control Point
- Vertical Benchmark
- Existing Right of Way Monument
- Proposed Right of Way Monument (Rebar and Cap)
- Proposed Right of Way Monument (Concrete)
- Existing Permanent Easement Monument
- Proposed Permanent Easement Monument (Rebar and Cap)
- Existing C/A Monument
- Proposed C/A Monument (Rebar and Cap)
- Proposed C/A Monument (Concrete)
- Existing Right of Way Line
- Proposed Right of Way Line — RW
- Existing Control of Access Line — CA
- Proposed Control of Access Line — CA
- Proposed ROW and CA Line — RW CA
- Existing Easement Line — E
- Proposed Temporary Construction Easement — E
- Proposed Temporary Drainage Easement — TDE
- Proposed Permanent Drainage Easement — PDE
- Proposed Permanent Drainage/Utility Easement — DUE
- Proposed Permanent Utility Easement — PUE
- Proposed Temporary Utility Easement — TUE
- Proposed Aerial Utility Easement — AUE

ROADS AND RELATED FEATURES:

- Existing Edge of Pavement
- Existing Curb
- Proposed Slope Stakes Cut — C
- Proposed Slope Stakes Fill — F
- Proposed Curb Ramp — CR
- Existing Metal Guardrail
- Proposed Guardrail
- Existing Cable Guiderail
- Proposed Cable Guiderail
- Equality Symbol
- Pavement Removal

VEGETATION:

- Single Tree
- Single Shrub
- Hedge
- Woods Line
- Orchard
- Vineyard — Vineyard

EXISTING STRUCTURES:

MAJOR:

- Bridge, Tunnel or Box Culvert — CONC
- Bridge Wing Wall, Head Wall and End Wall — CONC WW

MINOR:

- Head and End Wall — CONC HW
- Pipe Culvert
- Footbridge
- Drainage Box: Catch Basin, DI or JB — CB
- Paved Ditch Gutter
- Storm Sewer Manhole — S
- Storm Sewer — S

UTILITIES:

** SUE – Subsurface Utility Engineering*
LOS – Level of Service – A,B,C or D (Accuracy)

POWER:

- Existing Power Pole
- Proposed Power Pole
- Existing Joint Use Pole
- Proposed Joint Use Pole
- Power Manhole — P
- Power Line Tower
- Power Transformer
- U/G Power Cable Hand Hole — HH
- H–Frame Pole
- U/G Power Line Test Hole (SUE – LOS A)*
- U/G Power Line (SUE – LOS B)* — P
- U/G Power Line (SUE – LOS C)* — P
- U/G Power Line (SUE – LOS D)* — P

TELEPHONE:

- Existing Telephone Pole
- Proposed Telephone Pole
- Telephone Manhole — T
- Telephone Pedestal — T
- Telephone Cell Tower
- U/G Telephone Cable Hand Hole — HH
- U/G Telephone Test Hole (SUE – LOS A)*
- U/G Telephone Cable (SUE – LOS B)* — T
- U/G Telephone Cable (SUE – LOS C)* — T
- U/G Telephone Cable (SUE – LOS D)* — T
- U/G Telephone Conduit (SUE – LOS B)* — TC
- U/G Telephone Conduit (SUE – LOS C)* — TC
- U/G Telephone Conduit (SUE – LOS D)* — TC
- U/G Fiber Optics Cable (SUE – LOS B)* — T FO
- U/G Fiber Optics Cable (SUE – LOS C)* — T FO
- U/G Fiber Optics Cable (SUE – LOS D)* — T FO

WATER:

- Water Manhole — W
- Water Meter
- Water Valve
- Water Hydrant
- U/G Water Line Test Hole (SUE – LOS A)*
- U/G Water Line (SUE – LOS B)* — W
- U/G Water Line (SUE – LOS C)* — W
- U/G Water Line (SUE – LOS D)* — W
- Above Ground Water Line — A/G Water

TV:

- TV Pedestal — C
- TV Tower
- U/G TV Cable Hand Hole — HH
- U/G TV Test Hole (SUE – LOS A)*
- U/G TV Cable (SUE – LOS B)* — TV
- U/G TV Cable (SUE – LOS C)* — TV
- U/G TV Cable (SUE – LOS D)* — TV
- U/G Fiber Optic Cable (SUE – LOS B)* — TV FO
- U/G Fiber Optic Cable (SUE – LOS C)* — TV FO
- U/G Fiber Optic Cable (SUE – LOS D)* — TV FO

GAS:

- Gas Valve
- Gas Meter
- U/G Gas Line Test Hole (SUE – LOS A)*
- U/G Gas Line (SUE – LOS B)* — G
- U/G Gas Line (SUE – LOS C)* — G
- U/G Gas Line (SUE – LOS D)* — G
- Above Ground Gas Line — A/G Gas

SANITARY SEWER:

- Sanitary Sewer Manhole
- Sanitary Sewer Cleanout
- U/G Sanitary Sewer Line — SS
- Above Ground Sanitary Sewer — A/G Sanitary Sewer
- SS Force Main Line Test Hole (SUE – LOS A)*
- SS Force Main Line (SUE – LOS B)* — FSS
- SS Force Main Line (SUE – LOS C)* — FSS
- SS Force Main Line (SUE – LOS D)* — FSS

MISCELLANEOUS:

- Utility Pole
- Utility Pole with Base
- Utility Located Object
- Utility Traffic Signal Box — S
- Utility Unknown U/G Line (SUE – LOS B)* — ?UTL
- U/G Tank; Water, Gas, Oil
- Underground Storage Tank, Approx. Loc. — UST
- A/G Tank; Water, Gas, Oil
- Geoenvironmental Boring
- Abandoned According to Utility Records — AATUR
- End of Information — E.O.I.

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6/2/99

PAVEMENT SCHEDULE

(FINAL PAVEMENT DESIGN)

C1	PROP. APPROX. 1½" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5C, AT AN AVERAGE RATE OF 168 LBS. PER SQ. YD.	T	EARTH MATERIAL.
C2	PROP. APPROX. 3" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5C, AT AN AVERAGE RATE OF 168 LBS. PER SQ. YD. IN EACH OF TWO LAYERS	U	EXISTING PAVEMENT
D1	PROP. APPROX. 4" ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE I19.0C, AT AN AVERAGE RATE OF 456 LBS. PER SQ. YD.	V	MILLING ASPHALT PAVEMENT, DEPTH 1½"
E1	PROP. APPROX. 5½" ASPHALT CONCRETE BASE COURSE, TYPE B25.0C, AT AN AVERAGE RATE OF 627 LBS. PER SQ. YD.	NOTE: PAVEMENT EDGE SLOPES ARE 1:1 UNLESS SHOWN OTHERWISE.	
R1	5" MONOLITHIC CONCRETE ISLAND (SURFACE MOUNTED)		

PROJECT REFERENCE NO.	SHEET NO.
W-5805G	2A-1

ROADWAY DESIGN ENGINEER

9/26/2025

NORTH CAROLINA PROFESSIONAL SEAL 053483 ENGINEER SPENCER W. MERRELL

Signed by: Spencer W. Merrell

230953376258448...

PAVEMENT DESIGN ENGINEER

9/26/2025

NORTH CAROLINA PROFESSIONAL SEAL 044590 ENGINEER ANDREW D. WARGO

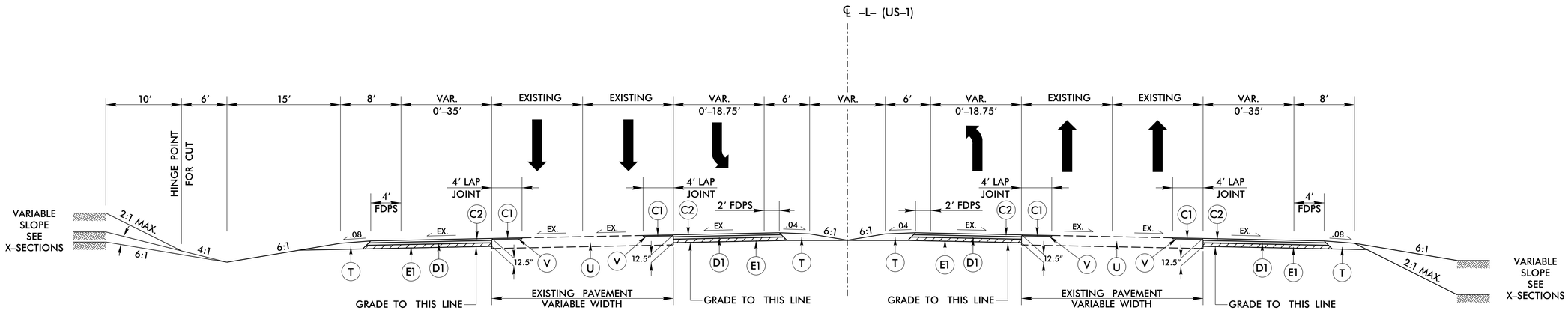
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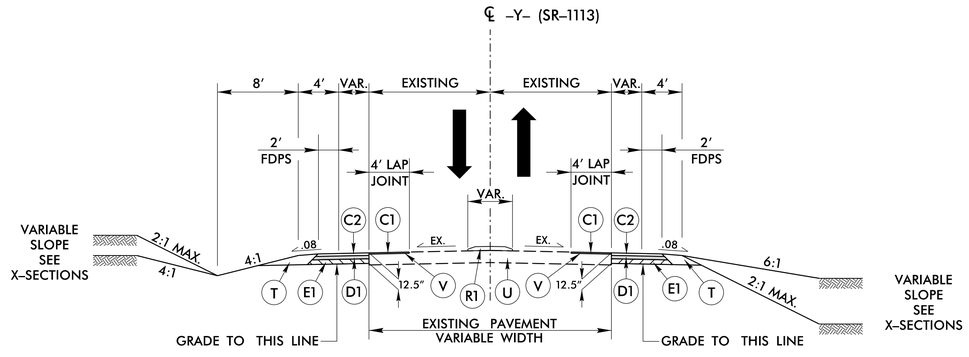
SUMMIT DESIGN AND ENGINEERING SERVICES
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320 Executive Ct.
Hillsborough, NC 27278
(919) 732-3883
(919) 732-6676 (FAX)



TYPICAL SECTION NO. 1

*–L– STA. 10+90.00 TO 12+25.00
–L– STA. 21+90.00 TO 42+50.00

*ONLY MEDIAN GRADING FOR CROSSING REMOVAL AND GUIDERAIL INSTALLATION REQUIRED AT THIS STATION RANGE.



TYPICAL SECTION NO. 2

–Y– STA. 12+61.92 TO 13+55.30
–Y– STA. 14+69.15 TO 16+00.00

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INTERSECTION DETAIL (–L–/–Y–)

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W-5805G	2B-1
R/W SHEET NO.	

ROADWAY DESIGN ENGINEER
9/26/2025
NORTH CAROLINA PROFESSIONAL SEAL 053483 ENGINEER SPENCER W. MERRILL
Signed by:
2308000000000...

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NAD 83

20 10 0 20 40

REVISIONS 8/17/99

–L– 30+00

–Y– +77.00
2.25' LT

–Y–

5'

+83.83

5.75'

+61.92

+75.00

R=150.75'
OS=.75'

R=150'

–Y– +56.87
16.34' RT

–Y– +51.84
2.25' LT

R=70'

–L– +32.55

–L– +97.20
15.69' LT

–L– +38.00
14.69' LT

–L– +17.00
15.83' LT
2.80' LT

+53.95

10'

28'

+15.00

90'

OS=4'

40'

95'

OS=4'

8.75'

+40.00

R=20'

R=5'

R=18'
OS=2'

R=125.75'
OS=.75'

R=125'

12'

OS=2'

–L–

R=123'
OS=2'

R=125'

R=125.75'
OS=.75'

R=18'
OS=2'

R=123'
OS=2'

R=20'

R=5'

OS=2'

95'

40'

90'

+15.00

8.75'

OS=4'

OS=4'

+40.00

20'

10'

+69.15

–L– +59.97
15.34' RT

–L– +38.00
4.06' RT
15.65' RT

–L– +17.00
15.95' RT

R=150'

R=149.25'
OS=.75'

16'

–Y– +67.80
19.90' LT

–Y– +71.41
7.12' LT

–L– +03.90

+10.63

R=300.75'
OS=.75'
R=300'

R=100'

–Y– +50.00
0.00' RT

+52.00

16'

+48.80

R=284'

–Y–

–Y– 15+00

EX

+00.00

5" MONOLITHIC ISLAND (SURFACE MOUNTED)

ALL ISLAND RADII ARE 2' UNLESS DIMENSIONED OTHERWISE

FOR PLAN VIEW SEE SHEETS 5 & 6

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8/17/99

REVISIONS

U–TURN BULB DETAIL (–L– 22+25)

PROJECT REFERENCE NO.	SHEET NO.
W-5805G	2B-2
R/W SHEET NO.	

ROADWAY DESIGN ENGINEER
9/26/2025

NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 053483 SPENCER W. MERRIT

Signed for:

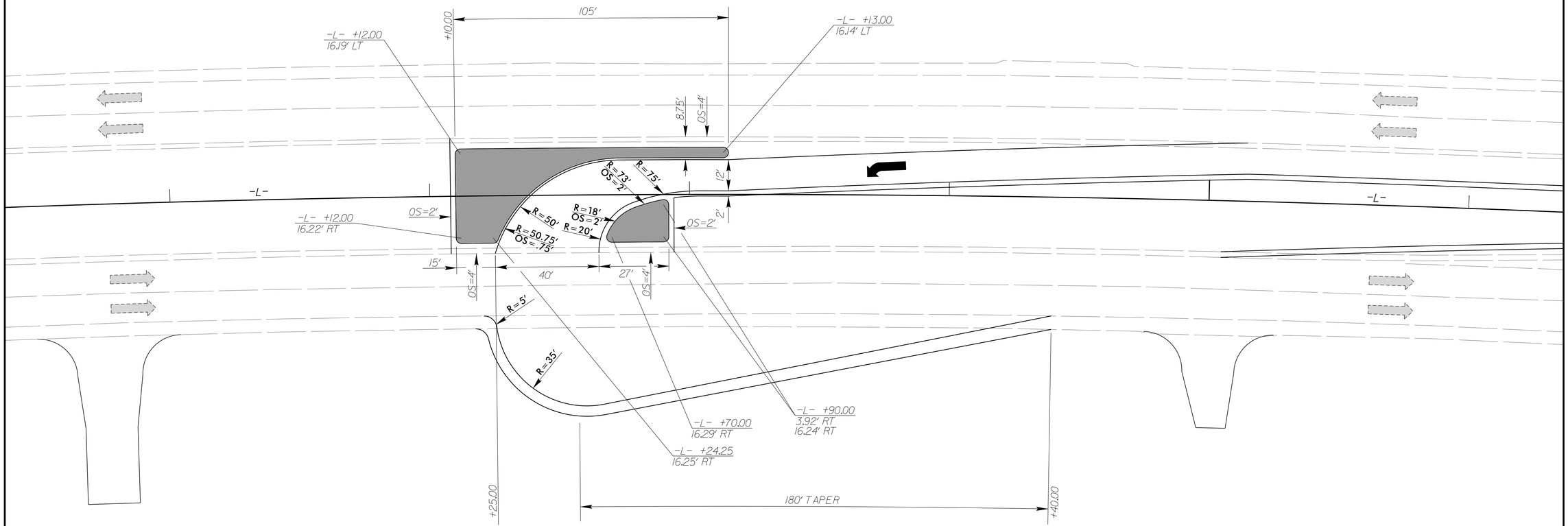
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Hillsborough, NC 27278
(919) 732-3883
(919) 732-6676 (FAX)

NAD 83

–L– 25+00

20 10 0 20 40



5" MONOLITHIC ISLAND (SURFACE MOUNTED)

ALL ISLAND RADII ARE 2′ UNLESS DIMENSIONED OTHERWISE

FOR PLAN VIEW SEE SHEET 5

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U–TURN BULB DETAIL (–L– 41+00)

PROJECT REFERENCE NO.	SHEET NO.
W-5805G	2B-3
R/W SHEET NO.	

ROADWAY DESIGN ENGINEER
9/26/2025

NORTH CAROLINA PROFESSIONAL SEAL 053483 ENGINEER SPENCER W. MERRILL

Signed for:

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(919) 732-3883
(919) 732-6676 (FAX)

NAD 83

20 10 0 20 40

REVISIONS
8/17/99

–L– 40+00

180' TAPER
+25.00
+40.00
–L– +40.69
16.28' LT
–L– +94.31
16.22' LT
–L– +75.00
16.25' LT
5.17' LT
R=35'
R=5'
OS=4'
27'
40'
OS=4'
15'
2'
OS=2'
R=20'
OS=.75'
R=50.75'
R=18'
OS=2'
–L–
–L–
12'
R=75'
R=73'
OS=2'
R=50'
OS=2'
8.75'
OS=4'
–L– +52.00
15.32' RT
105'
+55.00
–L– +53.00
16.23' LT
15.49' RT

5" MONOLITHIC ISLAND (SURFACE MOUNTED)

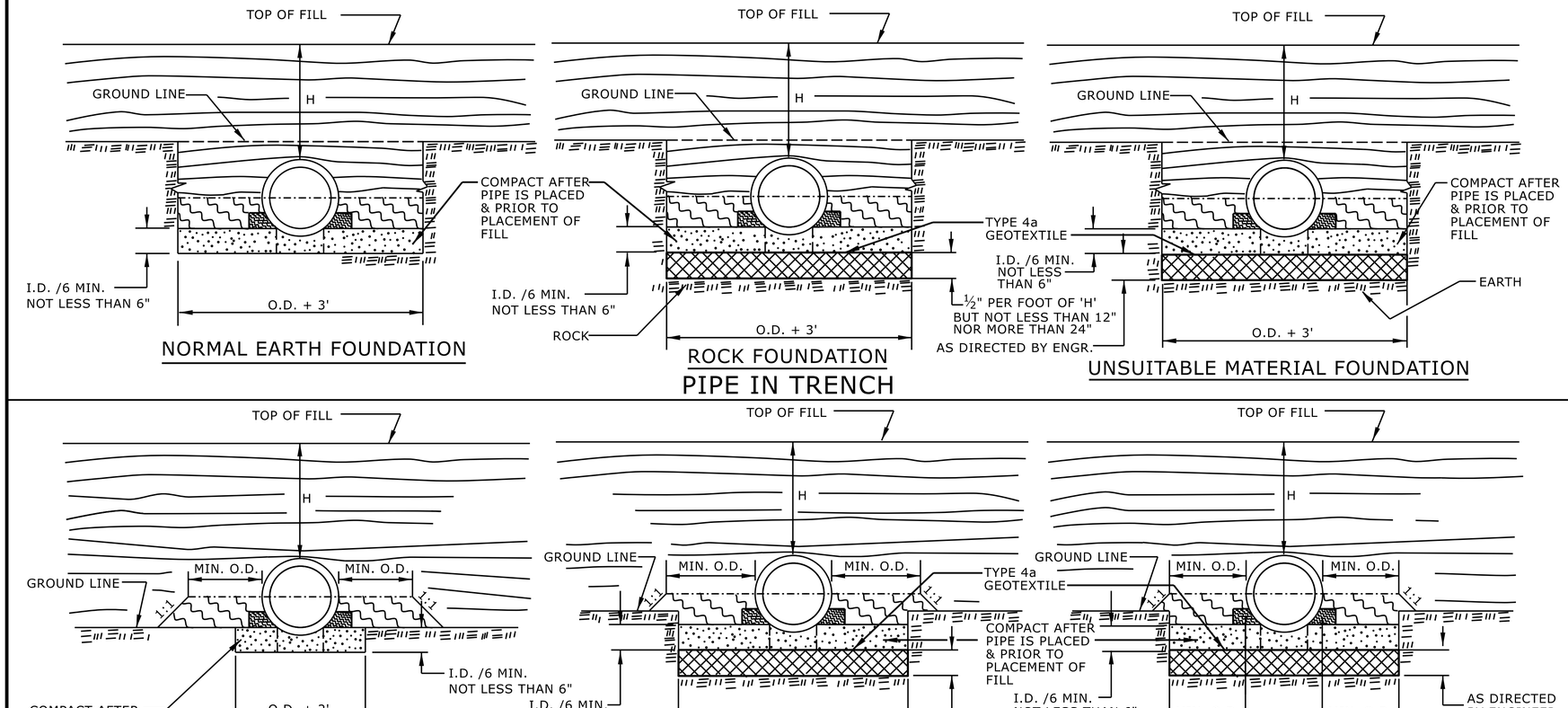
ALL ISLAND RADII ARE 2' UNLESS DIMENSIONED OTHERWISE

FOR PLAN VIEW SEE SHEET 6

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W-5805G	2C-1



GENERAL NOTES:

I.D. = THE MAXIMUM HORIZONTAL INSIDE DIAMETER DIMENSION.

O.D. = THE MAXIMUM HORIZONTAL OUTSIDE DIAMETER DIMENSION.

H = THE FILL HEIGHT MEASURED VERTICALLY AT ANY POINT ALONG THE PIPE FROM THE TOP OF THE PIPE TO THE TOP OF THE EMBANKMENT AT THAT POINT.

APPROVED SUITABLE LOCAL MATERIAL.

TAKE CARE TO FULLY COMPACT HAUNCH ZONE OF PIPE BACKFILL.

LOOSELY PLACED SELECT MATERIAL CLASS III OR CLASS II, TYPE 1 FOR PIPE BEDDING. LEAVE SECTION DIRECTLY BENEATH PIPE UNCOMPACTED AS PIPE SEATING AND BACKFILL WILL ACCOMPLISH COMPACTION.

DO NOT OPERATE HEAVY EQUIPMENT OVER ANY PIPE CULVERT UNTIL THE PIPE CULVERT HAS BEEN PROPERLY BACKFILLED AND COVERED WITH AT LEAST 3 FEET OF APPROVED MATERIAL.

REFER TO NCDOT PIPE MATERIAL SELECTION GUIDE AND STANDARD SPECIFICATIONS FOR ALLOWABLE PIPE FILL HEIGHTS AND PIPE SPECIFICATIONS.

SPRINGLINE OF PIPE

SELECT BACKFILL MATERIAL CLASS III OR CLASS II, BELOW SPRINGLINE.

UNDISTURBED EARTH MATERIAL

SELECT MATERIAL CLASS V OR VI FOR FOUNDATION CONDITIONING. ENCAPSULATE WITH TYPE IV GEOTEXTILE AS DIRECTED BY THE ENGINEER.

STATE OF
NORTH CAROLINA
DEPT. OF TRANSPORTATION
DIVISION OF HIGHWAYS
RALEIGH, N.C.

ROADWAY DETAIL DRAWING FOR

METHOD OF PIPE INSTALLATION

RIGID PIPE

SHEET 2 OF 2

300.01

Signed by: Nicole M. Hackler 9/26/2025
5884329

NORTH CAROLINA PROFESSIONAL SEAL 033144 ENGINEER NICOLE M. HACKLER

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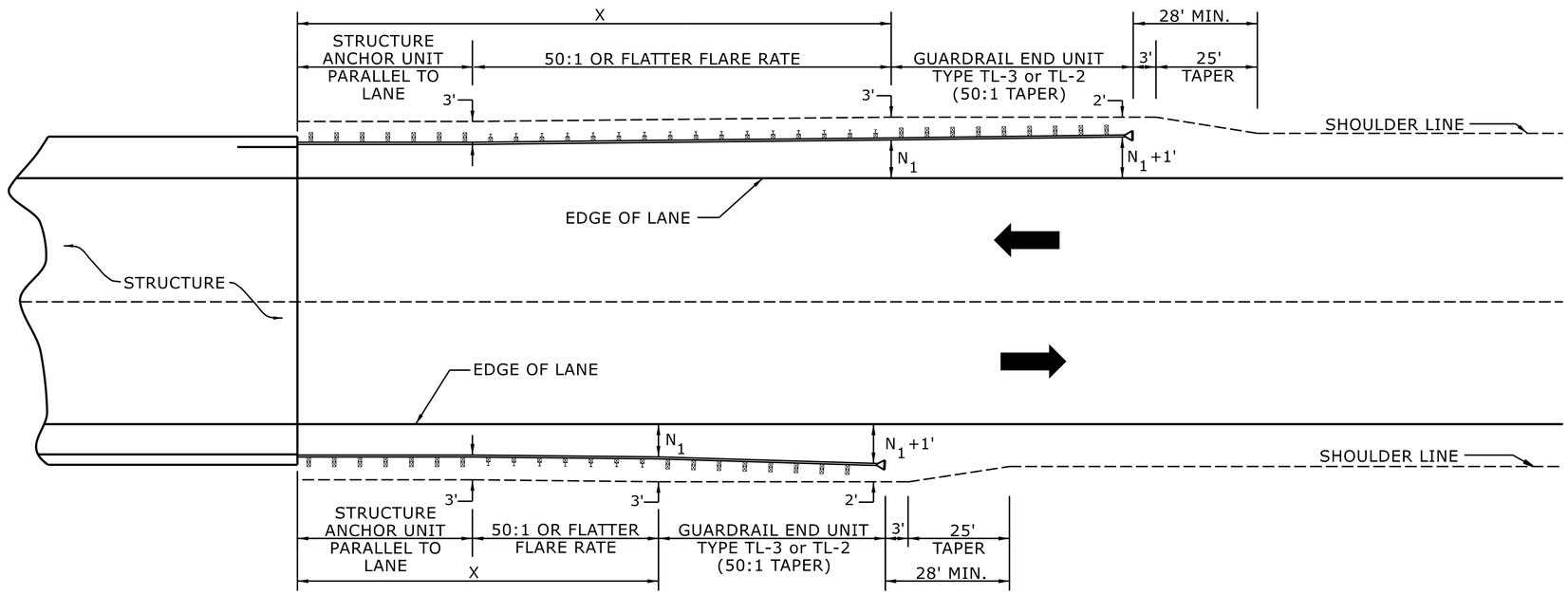
CONTRACTS STANDARDS AND DEVELOPMENT UNIT
Office 919-707-6950 FAX 919-250-4119

SEE TITLE BLOCK

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MODIFIED BY: _____ DATE: _____
CHECKED BY: _____ DATE: _____
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PROJECT REFERENCE NO.	SHEET NO.
W-5805G	2C-2



USE FLARE RATE AS THE CONTROL IF THE "N_1" DISTANCE IS NOT OBTAINED.
("N_1" IS BASED ON SHOULDER WIDTHS IN THE ROADWAY DESIGN MANUAL)

SEE STD. 862.03 FOR STRUCTURE ANCHOR UNITS

FOR POSTED SPEEDS ≥ 45MPH USE GREU TYPE TL-3
FOR POSTED SPEEDS < 45MPH USE GREU TYPE TL-2

GUARDRAIL LENGTH OF NEED (X) IS CALCULATED BASED ON THE AASHTO ROADSIDE DESIGN GUIDE.

LENGTHS AND OFFSETS FOR PROPOSED GUARDRAIL AT TWO LANE - TWO WAY LOCATIONS

STATE OF
NORTH CAROLINA
DEPT. OF TRANSPORTATION
DIVISION OF HIGHWAYS
RALEIGH, N.C.

ROADWAY DETAIL DRAWING FOR
GUARDRAIL PLACEMENT

SHEET 4 OF 15

862D01

Signed by: Nicole M. Hackler 9/26/2025
5884323E

NORTH CAROLINA PROFESSIONAL SEAL 033144 ENGINEER NICOLE M. HACKLER

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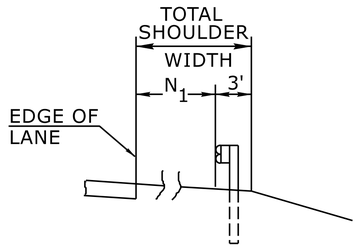
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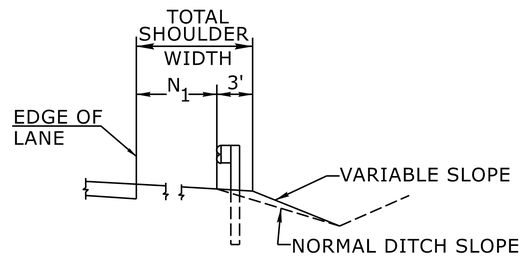
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FILE SPEC.: _____

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PROJECT REFERENCE NO.	SHEET NO.
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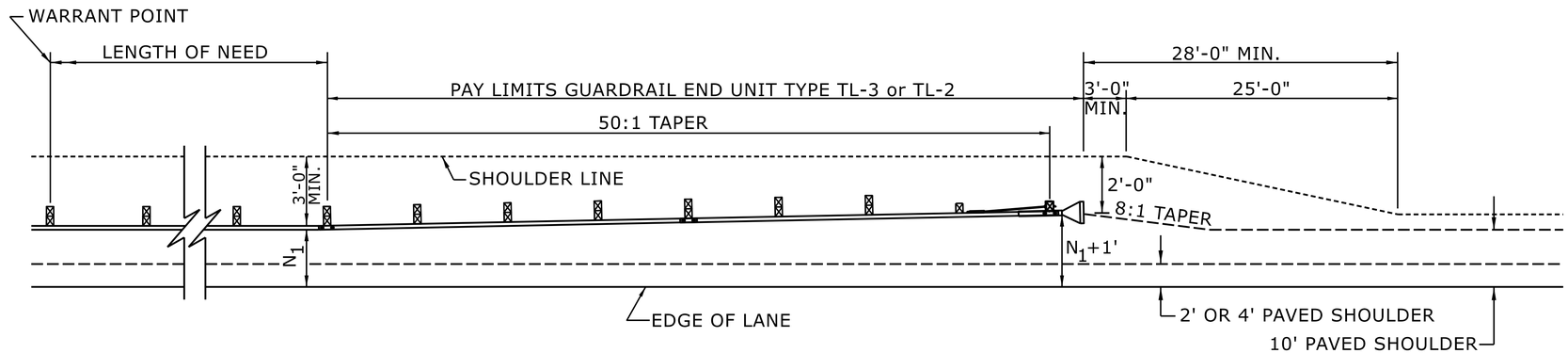


FILL SECTION



CUT SECTION

"N_1"= DISTANCE FROM EDGE OF LANE TO FACE OF GUARDRAIL WHERE GUARDRAIL IS PARALLEL TO LANE.



FOR POSTED SPEEDS ≥ 45mph USE GREU TYPE TL-3
FOR POSTED SPEEDS < 45mph USE GREU TYPE TL-2

DETAIL OF BEGINNING OF GUARDRAIL IN CUT OR FILL SECTION

STATE OF
NORTH CAROLINA
DEPT. OF TRANSPORTATION
DIVISION OF HIGHWAYS
RALEIGH, N.C.

ROADWAY DETAIL DRAWING FOR
GUARDRAIL PLACEMENT

SHEET 6 OF 15

862D01

Signed by:
Nicole M. Hackler 8/26/2025
588432D02A...

NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 033144 NICOLE M. HACKLER

DOCUMENT NOT CONSIDERED FINAL
UNLESS ALL SIGNATURES COMPLETED

CONTRACTS STANDARDS
AND DEVELOPMENT UNIT
Office 919-707-6950 FAX 919-250-4119

SEE TITLE BLOCK

ORIGINAL BY: S.CALHOUN DATE: 7-25-2024
MODIFIED BY: _____ DATE: _____
CHECKED BY: _____ DATE: _____
FILE SPEC.: _____

12/06/07

COMPUTED BY: JLJ DATE: 03/31/2025
CHECKED BY: SWM DATE: 03/31/2025

PROJECT REFERENCE NO.	SHEET NO.
W-5805G	3B-1

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

"N" = DISTANCE FROM EDGE OF LANE TO FACE OF GUARDRAIL.
TOTAL SHOULDER WIDTH = DISTANCE FROM EDGE OF TRAVEL LANE TO SHOULDER BREAK POINT.
FLARE LENGTH = DISTANCE FROM LAST SECTION OF PARALLEL GUARDRAIL TO END OF GUARDRAIL.
W = TOTAL WIDTH OF FLARE FROM BEGINNING OF TAPER TO END OF GUARDRAIL.
G = GATING IMPACT ATTENUATOR TYPE 350
NG = NON-GATING IMPACT ATTENUATOR TYPE 350

GUARDRAIL SUMMARY

SURVEY LINE	BEG. STA.	END STA.	LOCATION	LENGTH			WARRANT POINT		"N" DIST. FROM E.O.L.	TOTAL SHOUL. WIDTH	FLARE LENGTH		W		ANCHORS								IMPACT ATTENUATOR TYPE 350			SINGLE FACED GUARDRAIL	REMOVE EXISTING GUARDRAIL	REMOVE AND STOCKPILE EXISTING GUARDRAIL	REMARKS
				STRAIGHT	SHOP CURVED	DOUBLE FACED	APPROACH END	TRAILING END			APPROACH END	TRAILING END	APPROACH END	TRAILING END	XI MOD	XI	GREU TL-3	M-350	XIII	CAT-1	VI MOD	BIC	AT-1	EA	G	NG				
-L-	41+50.00	42+00.00	LT						EX.	EX.		50'		1'			1										267'		TERMINATE EXISTING GUARDRAIL
PROJECT TOTALS:																	1										267'		

SUMMARY OF EARTHWORK
IN CUBIC YARDS

NOTE: EARTHWORK QUANTITIES ARE CALCULATED BY THE ROADWAY DESIGNER. THESE EARTHWORK QUANTITIES ARE BASED IN PART ON SUBSURFACE DATA PROVIDED BY THE GEOTECHNICAL ENGINEERING UNIT.

CHAIN	BEGINNING STATION	ENDING STATION	UNCL. EXCA. C.Y.	UNDERCUT C.Y.	EMBANK.+% C.Y.	BORROW C.Y.	WASTE C.Y.
-L- (MED)	11+00.00	12+00.00	12				12
-L- (MED)	22+10.00	30+76.21	245		295	50	
-L- (MED)	31+52.26	41+57.00	163		844	681	
SUBTOTAL			420		1,139	731	12
-L- (RT)	22+00.00	25+50.00	4,171				4,171
SUBTOTAL			4,171				4,171
-L- (LT)	39+25.00	42+50.00	227		1,561	1,334	
SUBTOTAL			227		1,561	1,334	
-Y-	12+61.92	13+24.24	9				9
-Y-	14+34.00	16+00.00	14				14
SUBTOTAL			23				23
SHEET TOTALS			4,841		2,700	2,065	4,206
EARTH WASTE IN LIEU OF BORROW						(-2,065)	(-2,065)
GRAND TOTALS			4,841		2,700		2,141
SAY			4,850				

SHOULDER BORROW = 580 CY
DRAINAGE DITCH EXCAVATION = 25 CY
UNDERCUT EXCAVATION (CONTINGENCY) = 200 CY
SELECT GRANULAR MATERIAL (CONTINGENCY) = 200 CY
GEOTEXTILE FOR SOIL STABILIZATION (CONTINGENCY) = 200 SY

APPROXIMATE QUANTITIES ONLY. UNCLASSIFIED EXCAVATION, FINE GRADING, AND CLEARING AND GRUBBING, WILL BE PAID FOR AT THE LUMP SUM PRICE FOR "GRADING".

CABLE GUIDERAIL SUMMARY

SURVEY LINE	STATION	STATION	LENGTH	END ANCHOR UNIT	INTERMEDIATE ANCHOR UNIT	REMOVAL OF EXISTING GUIDERAIL	COMMENTS
-L-	10+90.00	12+25.00	135		2		
-L-	21+90.00	21+90.00	N/A	1			TERMINATE EX. GUIDERAIL
-L-	41+75.00	41+75.00	N/A	1			TERMINATE EX. GUIDERAIL
-L-	21+65.00	29+01.00	N/A			737	
-L-	35+25.44	42+00.00	N/A			675	
SUBTOTAL:			135			1412	
LESS TERMINAL ANCHOR UNITS			50				
GRAND TOTALS:			85	2	2		
SAY:			85	2	2	1412	

MILLING SUMMARY
(1.5" DEPTH)

SURVEY LINE	STATION	STATION	LOCATION LT/RT/CL	YD^2
-L-	22+08	22+94	RT	38.12
-L-	22+08	28+65	LT	430.44
-L-	22+17	24+40	RT	98.55
-L-	25+05	38+80	CL	287.40
-L-	31+48	37+50	CL	311.60
-L-	35+00	41+57	RT	291.22
-L-	39+25	41+48	LT	99.00
-L-	40+71	41+57	LT	38.34
-Y-	12+59	13+24	LT	55.48
-Y-	14+35	16+00	LT	92.46
		TOTAL:		1742.61
		SAY:		1745

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COMPUTED BY: HY DATE: 2/20/2024

CHECKED BY: PMH DATE: 2/20/2024

PROJECT NO.	SHEET NO.
W-5805G	3D-1

NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

Note: Invert Elevations indicated are for Bid Purposes only and shall not be used for project construction stakeout.
See "Standard Specifications For Roads and Structures, Section 300-5".

LIST OF PIPES, ENDWALLS, ETC. (FOR PIPES 48 INCHES & UNDER)

| LINE & STATION | OFFSET | | STRUCTURE NUMBER FROM | STRUCTURE NUMBER TO | TOP ELEVATION FT. | INVERT ELEVATION FT. | INVERT ELEVATION FT. | MINIMUM REQUIRED SLOPE % | Drainage Pipe (RCP, CSP, CAAP, HDPE, PVC, or PP PIPE) SIZE 12 | 15 | 18 | 24 | 30 | 36 | 42 | 48 | | R. C. PIPE CLASS IV SIZE 12 | 15 | 18 | 24 | 30 | 36 | 42 | 48 | ENDWALLS STD. 838.11, 838.13 OR 838.14 (UNLESS NOTED OTHERWISE) CY | REINFORCED ENDWALLS CY | DRAINAGE STRUCTURE MASONRY CY | QUANTITIES FOR DRAINAGE STRUCTURES NOTE: TOTAL LIN. FT. FOR PAY QUANTITY SHALL BE A + (1.3 X B) A 0' THRU 5' EACH | A 5' THRU 10' LIN. FT. | B 10' AND ABOVE LIN. FT. | C.B. STD. 840.01 OR STD. 840.02 | FRAME, GRATES, AND HOOD STD. 840.03 GRATE TYPE E | F | G | CONCRETE TRANSITIONAL SECTION D.I. STD. 852.04 OR STD. 852.06 | C.B. STD. 852.05 | OPEN THROAT C.B. STD. 840.04 OR STD. 840.05 | CONCRETE BRIDGE APPROACH D.I. STD. 840.13 | D.I. STD. 840.14 OR STD. 840.15 | D.I. FRAME AND GRATES STD. 840.16 | G.D.I. TYPE "A" STD. 840.17 OR STD. 840.26 | G.D.I. TYPE "B" STD. 840.18 OR STD. 840.27 | G.D.I. TYPE "D" STD. 840.19 OR STD. 840.28 | G.D.I. (W.S. FLAT) FRAME WITH GRATE STD. 840.20 | G.D.I. (W.S. FLAT) FRAME W/ 2 GRATES STD. 840.20 | G.D.I. (W.S. SAG) FRAME W/ GRATE STD. 840.22 | G.D.I. (W.S. SAG) FRAME W/ 2 GRATES STD. 840.22 | G.D.I. (N.S. SAG) FRAME W/ GRATE STD. 840.24 | G.D.I. (N.S. SAG) FRAME W/ 2 GRATES STD. 840.24 | G.D.I. (N.S. FLAT) FRAME W/ GRATE STD. 840.29 | G.D.I. (N.S. FLAT) FRAME W/ 2 GRATES STD. 840.29 | DRIVEWAY D.I. STD. 840.30 | FRAME W/ GRATE FOR DRIVEWAY STD. 840.30 | J.B. STD. 840.31 OR STD. 840.32 | ANGLED VANE GRATES AND FRAMES STD. 840.33 | T.B.J.B. STD. 840.34 | T.B.D.I. STD. 840.35 | T.B.D.I. FOR STEEL GRATES STD. 840.36 | STEEL FRAME WITH TWO GRATES STD. 840.37 | TEMP STEEL PLATE COVER MASONRY DRAINAGE | SPRING BOX STD. 840.41 | M.H. STD. 840.51, STD. 840.52, OR STD. 840.53 | M.H. FRAME AND COVER STD. 840.54 | CONVERT EXISTING C.B. TO J.B. | CONVERT EXISTING C.B. TO D.I. | CONVERT EXISTING D.I. TO J.B. | CONVERT EXISTING J.B. TO D.I. | ADJUST C.B. | ADJUST D.I. | 15" C.S. ELBOW | 18" C.S. ELBOW | 24" C.S. ELBOW | 30" C.S. ELBOW | 36" C.S. ELBOW | BERM DITCH OUTLET STD. 850.10 (PER EACH) | BERM DITCH OUTLET STD. 850.11 (PER EACH) | MODIFIED CONC. FLUME | PREFORMED SCOUR HOLE (PER EACH) | ENERGY DISSIPATION BASIN | FLOWABLE FILL CY | CONCRETE COLLARS CL. "B" STD. 840.72 CY | CONCRETE AND BRICK PIPE PLUG STD. 840.71 CY | PIPE REMOVAL LIN. FT. | REMARKS |
|---|---|---

COMPUTED BY: Alex Jones DATE: 8/8/23
CHECKED BY: Jinyoung Park DATE: 8/8/23

(2-3-23)

PROJECT NO.	SHEET NO.
W-5805G	3G-1

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

SUMMARY OF SUBSURFACE DRAINAGE

LINE	Station	Station	Location LT/RT/CL	Drain Type* UD/BD/SD	LF
CONTINGENCY				SD	100
				TOTAL LF:	100

*UD = Underdrain
*BD = Blind Drain
*SD = Subsurface Drain

SUMMARY OF AGGREGATE SUBGRADE/STABILIZATION

LINE	Station	Station	Aggregate Type* ASU(1/2)/ AST	Aggregate Thickness INCHES [8" for ASU(2)]	Shallow Undercut CY	Class IV Subgrade Stabilization TONS	Geotextile for Subgrade Stabilization SY	Stabilizer Aggregate TONS	Class IV Aggregate Stabilization TONS
CONTINGENCY			ASU(1)	12"	100	200	300		
			TOTAL CY/TONS/SY:		100	200**	300**	0	0

*ASU(1/2) = Aggregate Subgrade (Type 1 or 2)
*AST = Aggregate Stabilization

**Total tons of "Class IV Subgrade Stabilization" and total square yards of "Geotextile for Subgrade Stabilization" are only the estimated quantities for ASU(1/2)/AST and may only represent a portion of the subgrade stabilization and geotextile quantities shown in the Item Sheets of the Proposal.

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PROJ. REFERENCE NO.	SHEET NO.
W-5805G	3P-1

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

PARCEL INDEX SHEET

PARCEL No.	SHEET No.	PROPERTY OWNER NAME
1	5	CHARLES Q. BROWN
2	6	FRIDA OWENS EAVIE OWENS
3	6	DANIEL A. MEKA, CHRISTIANA A. MEKA

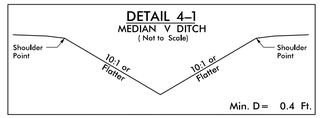
PARCEL No.	SHEET No.	PROPERTY OWNER NAME

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8/17/99

REVISIONS

DETAIL 4-1
MEDIAN V DITCH
(Not to Scale)



FROM STA. 11+00 TO STA. 12+00 -L- MED

PROJECT REFERENCE NO.	SHEET NO.
W-5805G	4
R/W SHEET NO.	

ROADWAY DESIGN ENGINEER
12/4/2025
NORTH CAROLINA PROFESSIONAL SEAL 053483 ENGINEER SPENCER W. MERRILL
Signed by: Spencer W. Merrill
2209533D7D0B4B4...

HYDRAULICS ENGINEER
12/4/2025
NORTH CAROLINA PROFESSIONAL SEAL 054713 ENGINEER HE YANG
Signed by: He Yang
DocuSigned by: 5A0E0...

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

Prepared in the Office of:
SUMMIT DESIGN AND ENGINEERING SERVICES
NC FIRM LICENSE No: P-0339
320 Executive Ct.
Hillsborough, NC 27278
(919) 732-3883
(919) 732-6676 (FAX)

NAD 83/2011

DURWOOD RAY GARNER HEIRS
DB 841PG 390

JAMIE C. GAY
TRACEY GAY
DB 901PG 518

JAMES C. GAY
NO DEED REFERENCE

LINE FROM GIS

TIE TO EXISTING GUIDERAIL
-L- STA. 10+90.00

CABLE GUIDERAIL
INTERMEDIATE ANCHOR UNIT
-L- STA. 11+40.00

TIE TO EXISTING GUIDERAIL
-L- STA. 12+25.00

EXISTING R/W

WOODS

MTL GR

GRAVEL

Level 3 Communications LLC (2)
Century Link

TO FRANKLINTON

US-1 SBL 3F PAVED ROADWAY

CABLE GR

W5805G-2

US-1 NBL 3F PAVED ROADWAY

CITY OF HENDERSON

238.00'

30' R/W

RETAIN

POSSIBLE JB

EXIST. E.V.E.

N 15° 28' 07.7" E

MATCHLINE -L- Sta. 15+50.00
(SEE SHEET 5)

POT -L- Sta. 10+00.00

REMOVE EXISTING
MEDIAN CROSSOVER

MEDIAN V DITCH
SEE DETAIL 4-1

DO NOT DISTURB
EXISTING WATERLINE.

EXISTING NCDOT
PERMANENT DRAINAGE EASEMENT
(PER PLANS)

BLOW OFF VALVE

GEORGE N. DICKERSON JR.
DB 659 PG 636

BEGIN PROJECT W-5805G
-L- Sta. 10+90.00

3 DRP INVESTMENTS LLC
DB 1375 PG 1170

REMOVAL OF EXISTING
PAVEMENT/GRAVEL

SEE SHEET 7 FOR PROFILE VIEW

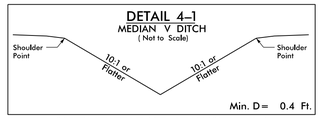
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8/17/99

REVISIONS

DETAIL 4-1
MEDIAN V DITCH
(Not to Scale)



FROM STA. 11+00 TO STA. 12+00 -L- MED

PROJECT REFERENCE NO.	SHEET NO.
W-5805G	4
R/W SHEET NO.	

ROADWAY DESIGN ENGINEER
12/4/2025
NORTH CAROLINA PROFESSIONAL SEAL 053483 ENGINEER SPENCER W. MERRILL
Signed by: Spencer W. Merrill
2209533D7D0B4B4...

HYDRAULICS ENGINEER
12/4/2025
NORTH CAROLINA PROFESSIONAL SEAL 054713 ENGINEER HE YANG
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NAD 83/2011

DURWOOD RAY GARNER HEIRS
DB 841PG 390

JAMIE C. GAY
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DB 901PG 518

JAMES C. GAY
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-L- STA. 10+90.00

CABLE GUIDERAIL
INTERMEDIATE ANCHOR UNIT
-L- STA. 11+40.00

TIE TO EXISTING GUIDERAIL
-L- STA. 12+25.00

EXISTING R/W

WOODS

MTL GR

GRAVEL

Level 3 Communications LLC (2)
Century Link

TO FRANKLINTON

US-1 SBL 3F PAVED ROADWAY

CABLE GR

W5805G-2

US-1 NBL 3F PAVED ROADWAY

CITY OF HENDERSON

238.00'

30' R/W

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POSSIBLE JB

EXIST. E.V.E.

N 15° 28' 07.7" E

MATCHLINE -L- Sta. 15+50.00
(SEE SHEET 5)

POT -L- Sta. 10+00.00

REMOVE EXISTING
MEDIAN CROSSOVER

MEDIAN V DITCH
SEE DETAIL 4-1

DO NOT DISTURB
EXISTING WATERLINE.

EXISTING NCDOT
PERMANENT DRAINAGE EASEMENT
(PER PLANS)

BLOW OFF VALVE

GEORGE N. DICKERSON JR.
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REMOVAL OF EXISTING
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SEE SHEET 7 FOR PROFILE VIEW

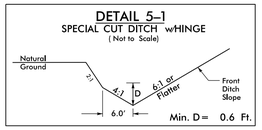
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ORIZACK

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8/17/99

REVISIONS

DETAIL 5-1
SPECIAL CUT DITCH wHINGE
(Not to Scale)



FROM STA. 22+00 TO STA. 25+50 -L- RT

-L-
PI Sta 31+06.43
△ = 17° 31' 22.7" (RT)
D = 0° 44' 55.4"
L = 2,340.37'
T = 1,179.39'
R = 7,652.44'
SE = EX
RO = EX

NAD 83/2011

PROJECT REFERENCE NO.	SHEET NO.
W-5805G	5
R/W SHEET NO.	

ROADWAY DESIGN ENGINEER
12/4/2025
NORTH CAROLINA PROFESSIONAL SEAL 053483 ENGINEER SPENCER W. MERRITT
Signed by: Spencer W. Merritt
2209532D7D0B4B6...

HYDRAULICS ENGINEER
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20

25

JAMES C. GAY
NO DEED REFERENCE

CHARLES O. BROWN
DB 1249 PG 441
PB T PG 866

REDEEMER PROPERTIES
DB 1273 PG 106

CAROLYN S. PARHAM
DB 1009 PG 256
PB U PG 484

MATCHLINE -L- STA. 15+50.00 (SEE SHEET 4)

MATCHLINE -L- Sta. 28+50.00 (SEE SHEET 6)

PC -L- Sta. 19+27.04

CABLE GUIDERAIL ANCHOR UNIT
-L- STA. 21+90.00

N 15° 28' 07.7" E

BL-100

EXISTING R/W

US-1 SBL 31' PAVED ROADWAY

US-1 NBL 31' PAVED ROADWAY

CABLE GR

MTL GR

GRAVEL

WOODS

LINE FROM OS

RETAIN

REMOVE EX. DI

REMOVE 15" RCP

PIPE CLEANOUT

600' TURN LANE

200' TAPER

50'

REMOVE EXISTING CABLE GUIDERAIL

REMOVE EX. DI

EXISTING NCDOT PERMANENT DRAINAGE EASEMENT (PER PLANS)

15" RCP-IV

18" RCP-IV

18" RCP

15" CMP

18" CMP

2 FDPS

4 FDPS

2GI

DI

0501 0502 0503 0504 0505 0506

R=15' TYP.

R=35'

R=15'

25'

20'

15"

86'+/- RT

DO NOT DISTURB EXISTING WATERLINE.

-L- +50.00
123.00' RT
EX. R/W

-L- +00.00
123.00' RT
EX. R/W

-L- +00.00
EX. R/W

-L- +50.00
157.00' RT

-L- +25.00
148.00' RT

-L- +65.00
EX. R/W

180' TAPER

+40.00

+25.00

+00.00

+65.00

SPECIAL CUT DITCH W/HINGE SEE DETAIL 5-1

1

CHARLES O. BROWN
DB 1249 PG 441
PB T PG 866

3 DRP INVESTMENTS LLC
DB 1375 PG 1170

S 86°56'25" W
551.86'

DANNY BRACY STANTON
DB 1209 PG 1089
PB U PG 484

N 87°17'48" E
218.43'

S 87°11'08" W
192.26'

WILLIAM J. STANTON
DB 943 PG 152
PB U PG 581

S 13°16'19" E
243.53'

GREATER RANSOM WAY OF THE CROSS TEMPLE

S 13°24'57" E
139.24'

ISBKD

2SBKD

150' R/W TO EIP

174' R/W TO EIP

FOR U-TURN BULB DETAILS SEE SHEET 2B-2

5" MONOLITHIC ISLAND (SURFACE MOUNTED)

SEE SHEET 7 FOR PROFILE VIEW

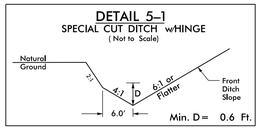
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8/17/99

REVISIONS

DETAIL 5-1
SPECIAL CUT DITCH wHINGE
(Not to Scale)



FROM STA. 22+00 TO STA. 25+50 -L- RT

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RO = EX

NAD 83/2011

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W-5805G	5
R/W SHEET NO.	

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12/4/2025
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NORTH CAROLINA PROFESSIONAL SEAL 054713 ENGINEER HE YANG
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MATCHLINE -L- Sta. 28+50.00 (SEE SHEET 6)

PC -L- Sta. 19+27.04

CABLE GUIDERAIL ANCHOR UNIT
-L- STA. 21+90.00

N 15° 28' 07.7" E

BL-100

EXISTING R/W

US-1 SBL 31' PAVED ROADWAY

US-1 NBL 31' PAVED ROADWAY

CABLE GR

MTL GR

GRAVEL

WOODS

LINE FROM OS

RETAIN

REMOVE EX. DI

REMOVE 15" RCP

PIPE CLEANOUT

600' TURN LANE

200' TAPER

50'

REMOVE EXISTING CABLE GUIDERAIL

REMOVE EX. DI

EXISTING NCDOT PERMANENT DRAINAGE EASEMENT (PER PLANS)

15" RCP-IV

18" RCP-IV

18" RCP

15" CMP

18" CMP

2 FDPS

4 FDPS

2GI

DI

0501 0502 0503 0504 0505 0506

R=15' TYP.

R=35'

R=15'

25'

20'

15"

86'+/- RT

DO NOT DISTURB EXISTING WATERLINE.

-L- +50.00
123.00' RT
EX. R/W

-L- +00.00
123.00' RT
EX. R/W

-L- +00.00
EX. R/W

-L- +50.00
157.00' RT

-L- +25.00
148.00' RT

-L- +65.00
EX. R/W

180' TAPER

+40.00

+25.00

+00.00

+65.00

SPECIAL CUT DITCH W/HINGE SEE DETAIL 5-1

1

CHARLES O. BROWN
DB 1249 PG 441
PB T PG 866

3 DRP INVESTMENTS LLC
DB 1375 PG 1170

S 86°56'25" W
551.86'

DANNY BRACY STANTON
DB 1209 PG 1089
PB U PG 484

N 87°17'48" E
218.43'

S 87°11'08" W
192.26'

WILLIAM J. STANTON
DB 943 PG 152
PB U PG 581

S 13°16'19" E
243.53'

GREATER RANSOM WAY OF THE CROSS TEMPLE

S 13°24'57" E
139.24'

ISBKD

2SBKD

150' R/W TO EIP

174' R/W TO EIP

FOR U-TURN BULB DETAILS SEE SHEET 2B-2

5" MONOLITHIC ISLAND (SURFACE MOUNTED)

SEE SHEET 7 FOR PROFILE VIEW

18-NOV-2025 10:25
W-5805G_Sht5.dgn
$cdsheet

Docusign Envelope ID: 65265D3C-F605-44E1-B9ED-ECD22F6A67B6

8/17/99

REVISIONS

-L-	-Y-
PI Sta 31+06.43	PI Sta 10+87.72
△ = 17° 31' 22.7" (RT)	△ = 11° 21' 59.6" (RT)
D = 0° 44' 55.4"	D = 6° 30' 00.0"
L = 2,340.37'	L = 174.87'
T = 1,179.39'	T = 87.72'
R = 7,652.44'	R = 881.47'
SE = EX	SE = EX
RO = EX	RO = EX

PROJECT REFERENCE NO.	SHEET NO.
W-5805G	6
R/W SHEET NO.	

ROADWAY DESIGN ENGINEER
12/4/2025
NORTH CAROLINA PROFESSIONAL SEAL 053483 ENGINEER SPENCER W. MERRIT
Signed by: Spencer W. Merrit
220F6533D1B04B0...

HYDRAULICS ENGINEER
12/4/2025
NORTH CAROLINA PROFESSIONAL SEAL 054713 ENGINEER HE YANG
Signed by: He Yang
DocuSigned by: 2A0F5...

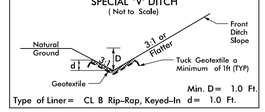
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

Prepared in the Office of: SUMMIT DESIGN AND ENGINEERING SERVICES
NC FIRM LICENSE No: P-0339
320 Executive Ct.
Hillsborough, NC 27278
(919) 732-3883
(919) 732-6676 (FAX)

NAD 83/2011

PC -Y- Sta. 10+00.00

DETAIL 6-1
SPECIAL 'V' DITCH
(Not to Scale)



Type of Liner= CL B Rip-Rap, Keyed-In d= 1.0 Ft.
FROM STA. 39+78.33 TO STA. 42+50 -L- LT

PT -Y- Sta. 11+74.87
S 50° 01' 22.9" E (AH)

-L- Sta. 31+16.36 =
-Y- Sta. 14+12.78

BEGIN CONSTRUCTION
-Y- Sta. 12+61.92

DONNA P. DIEMER
FRANCIS J. DIEMER
DB 1307 PG 478
PB V PG 728

S 13°36'17" E
640.54'

FRIDA OWENS
EAVIE OWENS
DB 638 PG 98

2 TONS CL B RIP RAP
7 SY GEOTEXTILE

-L- +00.00
150.00' LT

TERMINATE EXISTING GUARDRAIL
WITH GREU TL-3 -L- STA. 42+00

-L- +00.00
140.00' LT

-L- +75.00
EX. R/W

SPECIAL 'V' DITCH
SEE DETAIL 6-1
102 TONS CL B RIPRAP
226 SY GEOTEXTILE

-L- +65.00
125.00' LT
EX. R/W

CAROLYN S. PARHAM
DB 1009 PG 256
PB U PG 484

MATCHLINE -L- Sta. 28+50.00
(SEE SHEET 5)

600' TURN LANE
200' TAPER
180' TAPER
+65.00
+61.92
+50.00
+40.00
+25.00
+15.00
+00.00

48" CONC C&G
FAYARDVILLE-MIDWAY-HENDERSON
TO ALVINBANK RD
TO RALEIGH RD.
R/W WIDTH VARIES
EXISTING R/W
WOODS
BILLBOARD
GRAVEL
SOD
CONC MONOLITHIC ISLAND
5" MONOLITHIC ISLAND
(SURFACE MOUNTED)
R=70
R=35
R=50
50' TAPER
8" MBL SIGN
R/W MON
R/W MON (NO CAP)
R/W MON (IND CAP)
GUY(2)
EX.
REMOVE EX. DI
REMOVE EXISTING CABLE GUIDERAIL
RETAIN
PIPE AND DITCH CLEANOUT
DO NOT DISTURB EXISTING WATERLINE.
CABLE GUIDERAIL ANCHOR UNIT
-L- STA. 41+75.00
PDE
4' FDPS
2' FDRS
2' EX.
EX. 12"
18" RCP
15" RCP-IV
2GI
DI
CONC
CABLE GR
ASPHALT
MTL GR
8" CONC HW
BLOW OFF VALVE
CITY OF HENDERSON
US-1 SBL 3% PAVED ROADWAY
US-1 NBL 3% PAVED ROADWAY
SBL-103
NBL-103
0601
0602
0603
0604
0605
0606
0607
0608
0609
0611
0612
0613
0614
0615
0616
0617

3
DANIEL A. MEKA
CHRISTIANA A. MEKA
DB 1266 PG 1045
PB Y PG 324

15

-Y- +20.00
EX. R/W

PC -Y- Sta. 14+86.06
S 50° 01' 22.9" E (BK)

BM1 ELEVATION - 411.13
N 909983 E 2167452
BL STATION 37+38.00 198 RIGHT
BENCH TIE SET IN 22 INCH PINE

END CONSTRUCTION
-Y- Sta. 16+00.00

-Y- +25.00
50.00' LT
EX. R/W

PT -Y- Sta. 16+62.44
S 24° 26' 53.2" E (AH)

PC -Y- Sta. 17+24.98

PT -Y- Sta. 19+22.11

WILLIAM J. STANTON
DB 943 PG 152
PB U PG 581

GREATER RANSOM WAY OF THE CROSS TEMPLE
DB 646 PG 463

DANIEL A. MEKA
CHRISTIANA A. MEKA
DB 1375 PG 1181

DAVID ARNER
ELIZABETH ARNER HEIRS
DB 911 PG 163

CLAUDINE A. WINSTON
LAWRENCE WINSTON
DB 873 PG 386

DAVADA C. LOUGHLIN JR.
DB 585 PG 621

END PROJECT W-5805G
-L- Sta. 42+50.00

PT -L- Sta. 42+67.41

-Y-	
PI Sta 15+75.74	PI Sta 18+28.30
△ = 25° 34' 29.7" (RT)	△ = 42° 22' 55.9" (LT)
D = 14° 30' 00.0"	D = 21° 30' 00.0"
L = 176.38'	L = 197.13'
T = 89.68'	T = 103.32'
R = 395.14'	R = 266.49'
SE = EX	SE = EX
RO = EX	RO = EX

FOR INTERSECTION AND U-TURN BULB DETAILS SEE SHEET 2B-1 AND 2B-3.

5" MONOLITHIC ISLAND (SURFACE MOUNTED)

SEE SHEETS 7 & 8 FOR PROFILE VIEW

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cjy-ss56
2024/2025

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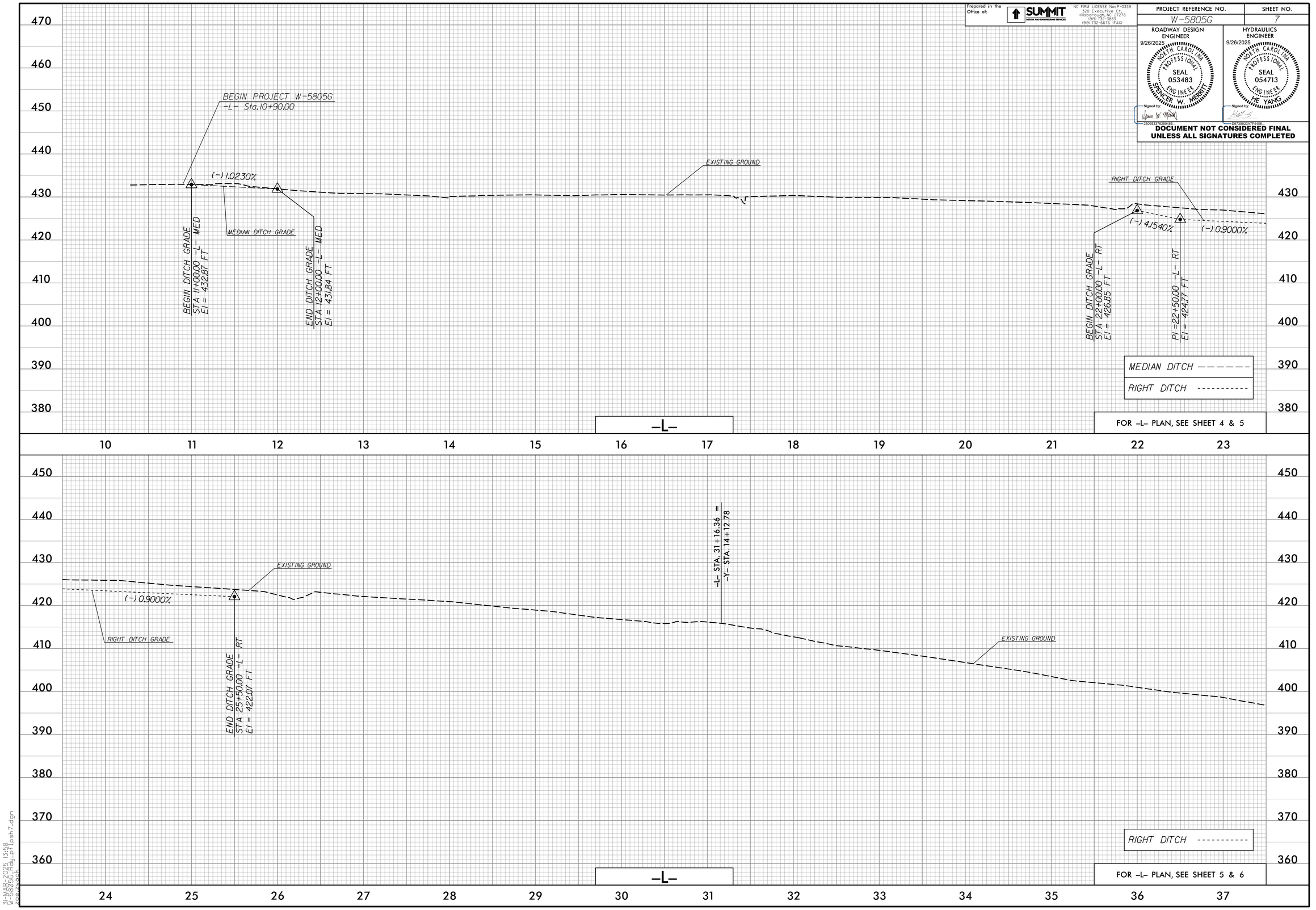
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SUMMIT DESIGN AND ENGINEERING SERVICES
NC FIRM LICENSE No: P-0339
320 Executive Ct.
Hillsborough, NC 27278
(919) 732-3883
(919) 732-6676 (FAX)

PROJECT REFERENCE NO.	SHEET NO.
W-5805G	7

ROADWAY DESIGN ENGINEER
9/26/2025
NORTH CAROLINA PROFESSIONAL SEAL 053483 ENGINEER SPENCER W. MERRITT
Signed by: 23D6533762E9485...

HYDRAULICS ENGINEER
9/26/2025
NORTH CAROLINA PROFESSIONAL SEAL 054713 ENGINEER HE YANG
Signed by: D6739B23A7F4406...

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED



31-MAR-2025 13:58
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jgrayson

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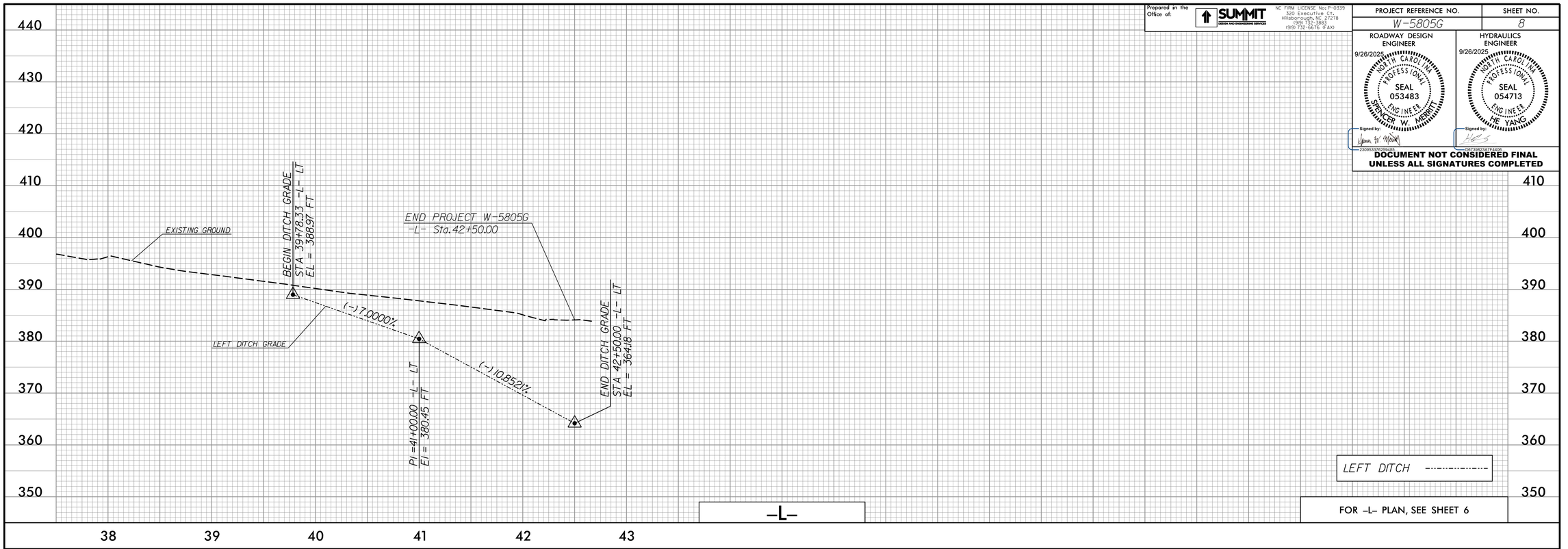
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(919) 732-3883
(919) 732-6676 (FAX)

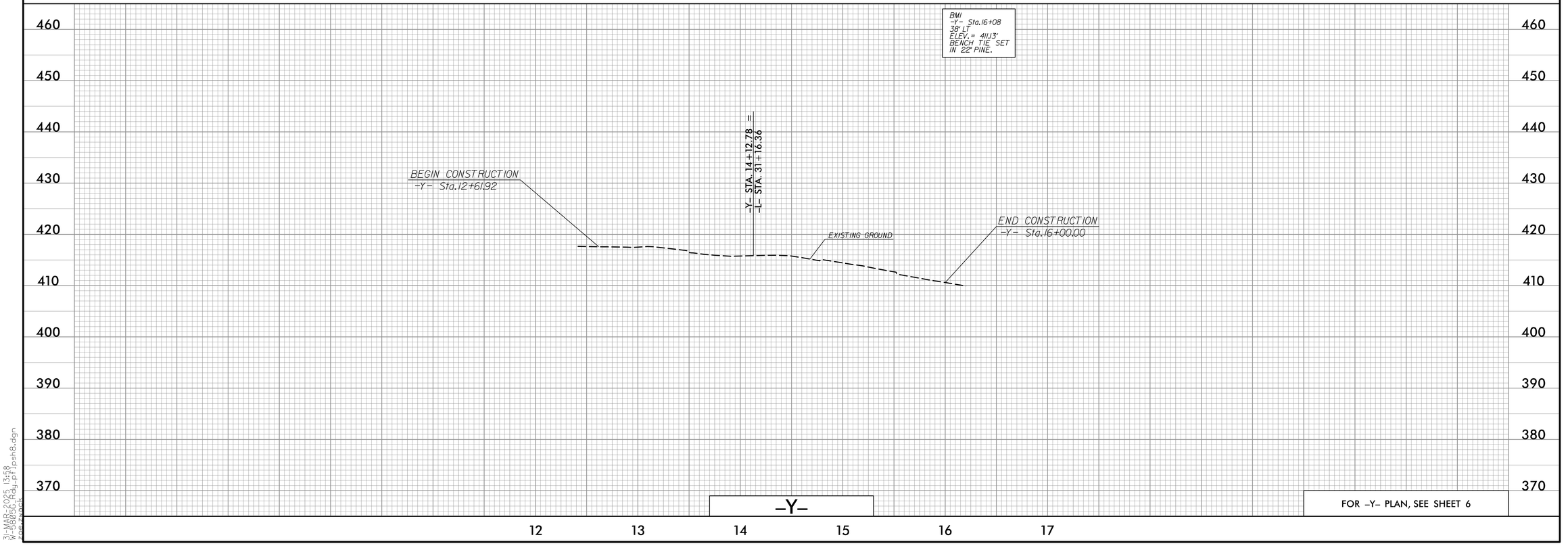
PROJECT REFERENCE NO.	SHEET NO.
W-5805G	8

ROADWAY DESIGN ENGINEER
9/26/2025
NORTH CAROLINA PROFESSIONAL SEAL 053483 ENGINEER SPENCER W. MERRITT
Signed by: 23056337629A485...

HYDRAULICS ENGINEER
9/26/2025
NORTH CAROLINA PROFESSIONAL SEAL 054713 ENGINEER HE YANG
Signed by: DE736B23A7F4406...

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED





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roe.work

09/29/25

TIP PROJECT: W-5805G

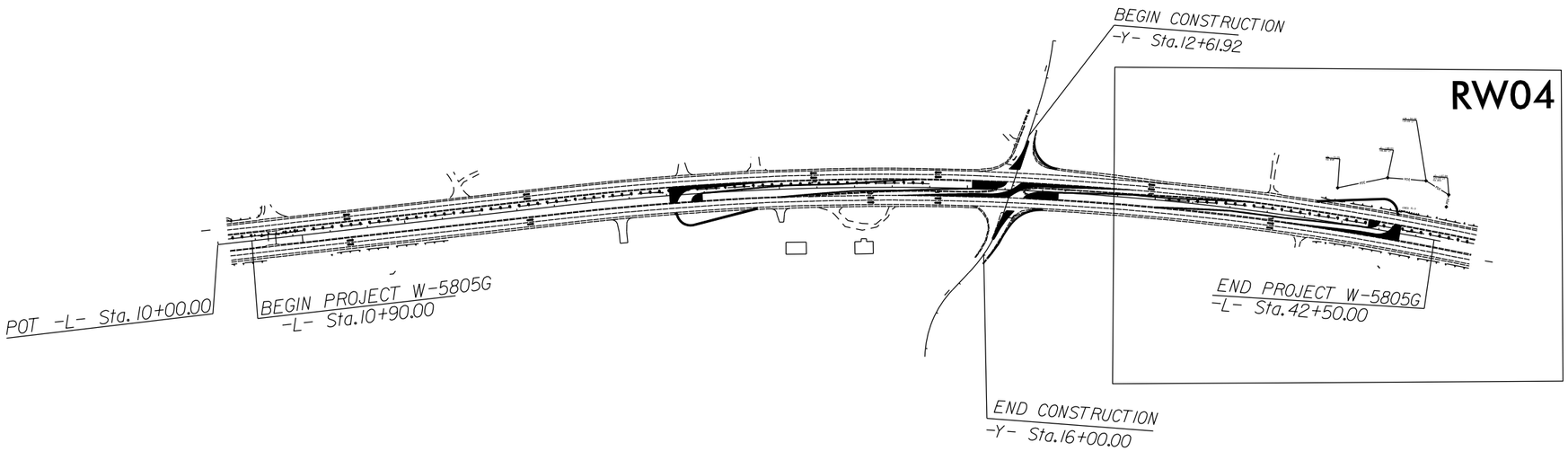
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N.C.	W-5805G	RW01	03

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

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

VANCE COUNTY

NAD 83/
NSRS 2011



GRAPHIC SCALE

50 25 0 50 100
PLANS

DATUM DESCRIPTION

THE LOCALIZED COORDINATE SYSTEM DEVELOPED FOR THIS PROJECT
IS BASED ON THE STATE PLANE COORDINATES ESTABLISHED BY
NCGS FOR MONUMENT "W5805G-1"
WITH NAD 83/NSRS 2011 STATE PLANE GRID COORDINATES OF
NORTHING: 906978.089(ft) EASTING: 2166335.621(ft)
ELEVATION: 443.16(ft)
THE AVERAGE COMBINED GRID FACTOR USED ON THIS PROJECT
(GROUND TO GRID) IS: 0.99999458
THE N.C. LAMBERT GRID BEARING AND
LOCALIZED HORIZONTAL GROUND DISTANCE FROM
"W5805G-1" TO -L- STATION 10+90.00 IS
N 14-56'52.8" E 1,241.17(ft)
ALL LINEAR DIMENSIONS ARE LOCALIZED HORIZONTAL DISTANCES
VERTICAL DATUM USED IS NAVD 88

Prepared in the Office of:

LOCATION & SURVEYS
DIVISION 5
3301 JONES SAUSAGE RD.
GARNER, NC 27529
984-920-8940

2018 STANDARD SPECIFICATIONS

RIGHT OF WAY DATE:	*LETTING DATE:*
July 22, 2024	*December 10, 2025*

PROFESSIONAL LAND SURVEYOR

NORTH CAROLINA PROFESSIONAL SEAL L-5590 LAND SURVEYOR MASON K HURT

DocuSigned by:
Mason K. Hurt 10/08/2025
SIGNATURE: 6AF0B421... Date:

STATE OF NORTH CAROLINA • DEPARTMENT OF TRANSPORTATION •

6/2/99

REVISIONS

SURVEY CONTROL SHEET

W/ EXISTING CENTERLINE ALIGNMENTS PRIOR TO CONSTRUCTION

PROJECT REFERENCE NO.	SHEET NO.
W-5805G	RW02C-1

Location and Surveys

Location and Surveys
DIVISION 5
200 ROSCOE TRAIL
RALEIGH, NC 27607
(919) 858-4834

PROJECT SURVEYOR

NORTH CAROLINA PROFESSIONAL SEAL L-4363 LAND SURVEYOR MICHAEL R. JACKSON

DocuSigned by: 1AB7677107514 67...

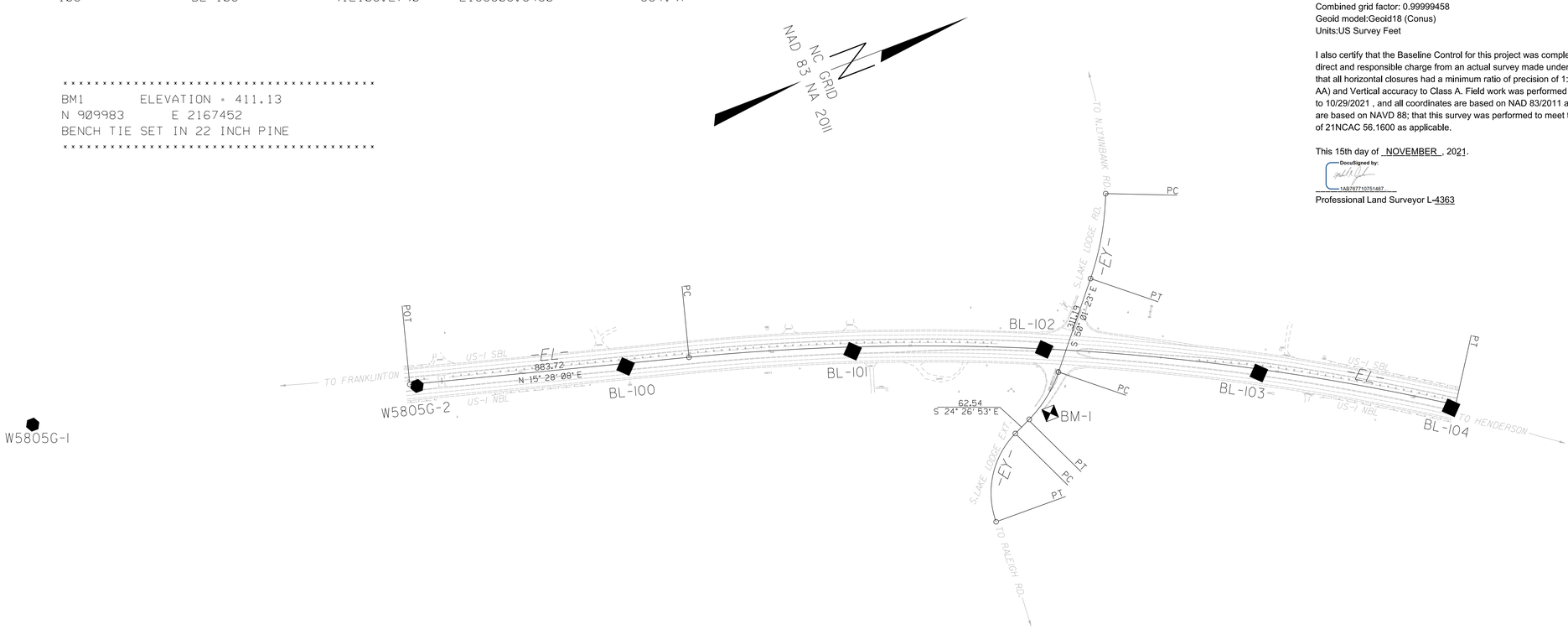
11/15/2021

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BL

POINT	DESC.	NORTH	EAST	ELEVATION
1	W5805G-1	906978.0890	2166335.6210	443.16
2	W5805G-2	908151.9060	2166656.3660	433.29
100	BL-100	908787.0790	2166834.5380	431.56
101	BL-101	909471.9910	2167046.0410	427.26
102	BL-102	910037.2150	2167257.0620	416.30
103	BL-103	910642.1170	2167569.0650	399.65
104	BL-104	911167.9540	2167888.3260	383.09
105	BL-105	912106.2790	2168605.5430	384.97

```
*****************************************
BM1       ELEVATION = 411.13
N 909983      E 2167452
BENCH TIE SET IN 22 INCH PINE
*****************************************
```



I, MICHAEL R. JACKSON , PLS, certify that the Project Control was [performed/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: NC-VRS-RTN
Dates of survey: October 2021
Datum/Epoch:NAD 83/NA 2011
Published/Fixed-control use: [Project Control if applicable, N/A for RTN]
Localized around: W5805G-1
Northing:906978.089
Easting:2166335.621
Combined grid factor: 0.99999458
Geoid model:Geoid18 (Conus)
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 10/04/2021 to 10/29/2021 , 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 15th day of NOVEMBER , 2021.

DocuSigned by: 1AB7677107514 67...

Professional Land Surveyor L-4363

EL

POINT	N	E	BEARING	DIST	DELTA	D	L	T	R
POT	908132.253	2166643.319							
LINE			N 15°28'07.7" E	883.72					
PC	908983.962	2166879.020							
CURVE			N 24°33'57.6" E	2419.86	18°11'40.0"(RT)	00°44'55.4"	2430.05	1225.34	7652.44
PT	911184.780	2167885.054							

EY

POINT	N	E	BEARING	DIST	DELTA	D	L	T	R
PC	910394.219	2166868.946							
CURVE			S 58°53'15.1" E	271.67	17°43'44.2"(RT)	06°30'00.0"	272.75	137.48	881.47
PT	910253.844	2167101.534							
LINE			S 50°01'22.9" E	311.19					
PC	910053.910	2167340.000							
CURVE			S 37°14'08.1" E	174.92	25°34'29.7"(RT)	14°30'00.0"	176.38	89.68	395.14
PT	909914.649	2167445.842							
LINE			S 24°26'53.2" E	62.54					
PC	909857.716	2167471.725							
CURVE			S 56°41'53.2" E	284.41	64°30'00.0"(LT)	21°30'00.0"	300.00	168.14	266.49
PT	909701.562	2167709.430							

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.

15-NOV-2021 12:46
C:\Projects\Division\W-5805-G\05-21-037 (Full Surveys)\FINAL\w5805g_ls-rw02c-1.dgn
mr_jackson1 AT LSDS-311649

9/29/25

REVISIONS

RIGHT OF WAY CONTROL SHEET

PROJECT REFERENCE NO.	SHEET NO.
W-5805G	RW03E-1

Location and Surveys

LOCATION & SURVEYS
DIVISION 5
3301 JONES SAUSAGE RD.
GARNER, NC 27529
984-920-8940

PROJECT SURVEYOR

NORTH CAROLINA PROFESSIONAL SEAL L-5590 LAND SURVEYOR MASON K. HURT

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

I ,Mason K Hurt, 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 on September 24, and all coordinates are based on NAD83/2011; That this survey was performed to meet the requirements of 21NCAC 56.1600 as applicable.

This 30 day of September, 2025.

DocuSigned by:
Mason K. Hurt
[illegible]

Professional Land Surveyor L-5590

PERMANENT EASMENT MARKER-IRON PIN AND CAP
UNLESS OTHERWISE NOTED, L

ALIGN	STATION	OFFSET	NORTH	EAST
L	39+75.00	92.00	910908.7176	2167602.2596
L	41+00.00	140.00	911042.0918	2167627.1015
L	42+00.00	150.00	911133.7123	2167672.7971
L	42+65.00	125.00	911175.8571	2167729.6036
L	42+65.00	92.00	911157.8967	2167757.2879

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.

9/26/25

REVISIONS

I , Mason K Hurt , 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 on September 24, 2025, and all coordinates are based on NAD83/2011; That this survey was performed to meet the requirements of 21NCAC 56.1600 as applicable.

This 30 day of September, 2025.

DocuSigned by:
Mason K. Hurt
Professional Land Surveyor L-5590

2

FRIDA OWENS
EAVIE OWENS
DB 638 PG 98

PROJECT REFERENCE NO.	SHEET NO.
W-5805G	RW04

Location and Surveys

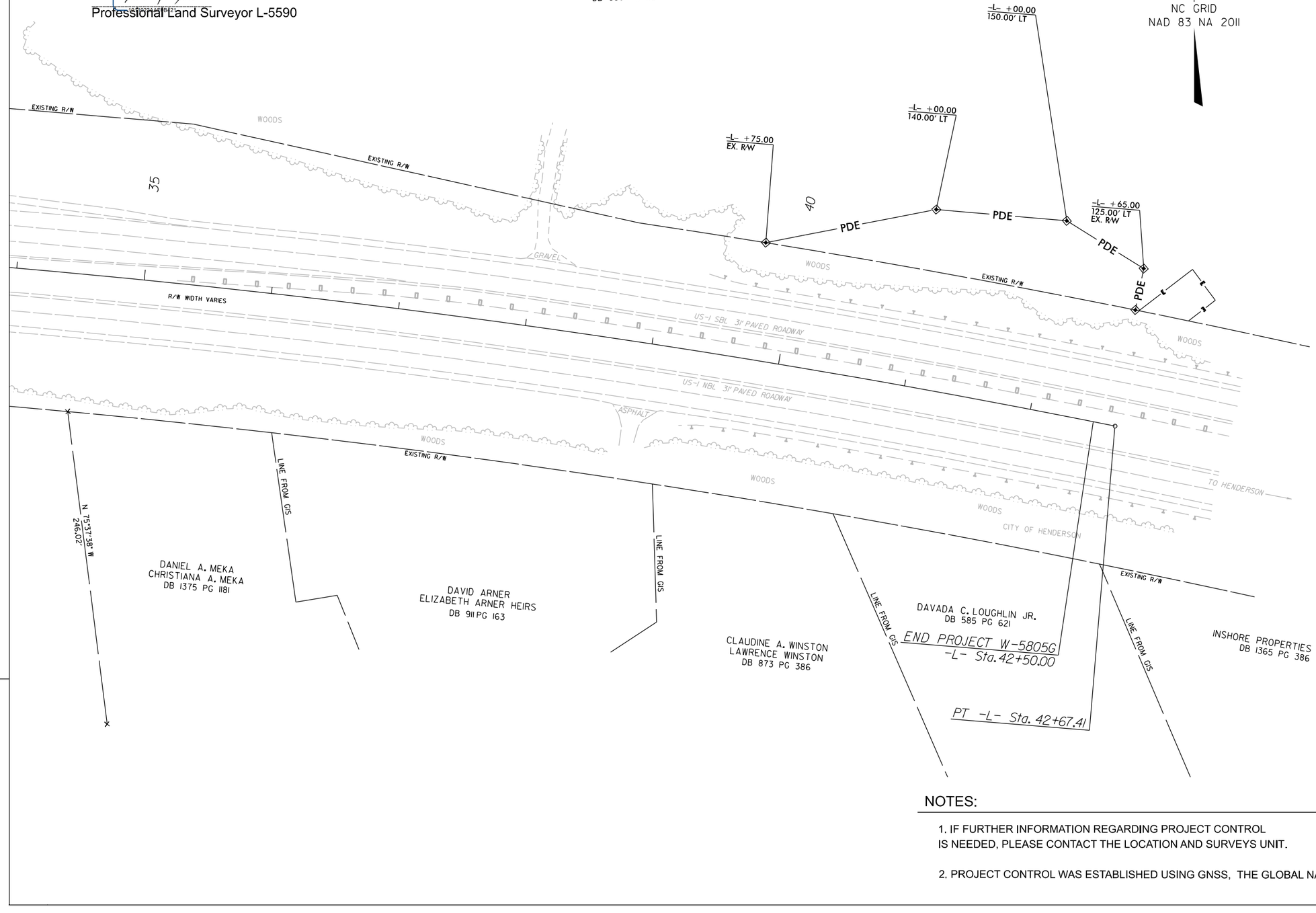
LOCATION & SURVEYS
DIVISION 5
3301 JONES SAUSAGE RD.
GARNER, NC 27529
984-920-8940

PROJECT SURVEYOR

NORTH CAROLINA PROFESSIONAL SEAL L-5590 LAND SURVEYOR MASON K. HURT

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

NC GRID
NAD 83 NA 2011



NOTES:

1. IF FURTHER INFORMATION REGARDING PROJECT CONTROL IS NEEDED, PLEASE CONTACT THE LOCATION AND SURVEYS UNIT.

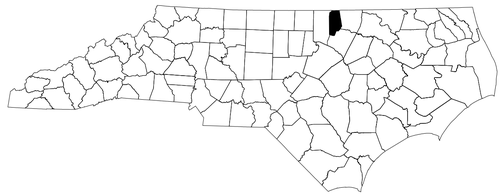
2. PROJECT CONTROL WAS ESTABLISHED USING GNSS, THE GLOBAL NAVIGATION SATELLITE SYSTEM.

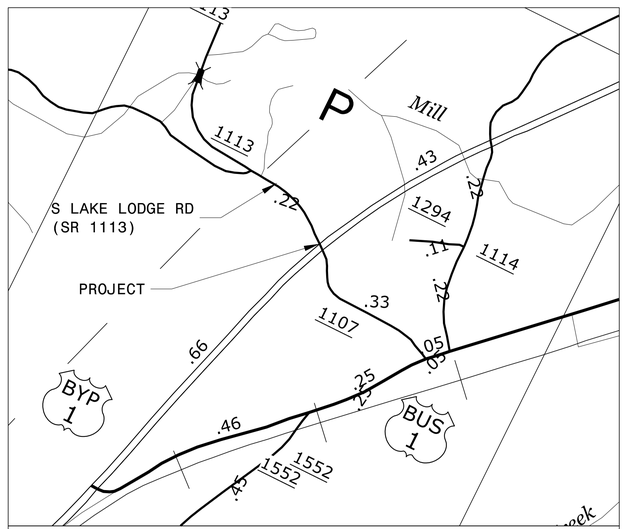
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STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

TRANSPORTATION MANAGEMENT PLAN

VANCE COUNTY





VICINITY MAP

NOTE: THIS PROJECT DOES NOT FALL WITHIN ANY MUNICIPAL BOUNDARIES.

LOCATION: INTERSECTION OF US 1 AT SR 1113 (S LAKE LODGE RD)

TYPE OF WORK: GRADING, DRAINAGE & PAVING



WORK ZONE SAFETY & MOBILITY
"from the MOUNTAINS to the COAST"

PLANS PREPARED BY:

J. S. BOURNE, PE

DIVYA PAPPU, PE

NCDOT CONTACTS:

MATTHEW NOLFO, PE
PROJECT MANAGER

MARK CRAIG, PE
DIVISION CONSTRUCTION ENGINEER

DIVISION OF HIGHWAYS · STATE OF NORTH CAROLINA · DEPARTMENT OF TRANSPORTATION · WORK ZONE TRAFFIC CONTROL

INDEX OF SHEETS

SHEET NO.	TITLE
TMP-01	TITLE SHEET, VICINITY MAP, INDEX OF SHEETS, AND TRAFFIC MANAGEMENT STRATEGIES
TMP-1B	GENERAL NOTES
TMP-02	ROADWAY STANDARD DRAWING AND LEGEND
TMP-03	TEMPORARY TRAFFIC CONTROL PHASING
TMP-04 TO TMP-06	TEMPORARY TRAFFIC CONTROL PHASE I DETAILS
TMP-07 TO TMP-09	TEMPORARY TRAFFIC CONTROL PHASE IIA DETAILS
TMP-10 TO TMP-12	TEMPORARY TRAFFIC CONTROL PHASE IIB DETAILS
TMP-13 TO TMP-15	TEMPORARY TRAFFIC CONTROL PHASE III DETAILS

TRAFFIC MANAGEMENT STRATEGIES

- TRAFFIC WILL BE MAINTAINED DURING CONSTRUCTION USING A SERIES OF DAILY LANE CLOSURES ON US 1
- FLAGGERS WILL BE USED ON SR 1113 TO CONSTRUCT WIDENING AND MONOLITHIC ISLANDS

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

ICE of CAROLINAS, PLLC
ICE of Carolinas, PLLC
4505 Falls of Neuse Road, Suite 110
Raleigh, North Carolina 27609
Phone: 803-822-0333
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APPROVED: DocuSigned by: J. Stuart Bourne E8E4063CCA254AC...

DATE: 12/4/2025

SEAL

NORTH CAROLINA PROFESSIONAL SEAL 19680 ENGINEER J. STUART BOURNE

SHEET NO.
TMP-01

TIP PROJECT: W-5805G

12/4/2025
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User:stuart.bourne

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PROJ. REFERENCE NO.	SHEET NO.
W-5805G	TMP-1B

CHANGES MAY BE REQUIRED WHEN PHYSICAL DIMENSIONS IN THE DETAIL DRAWINGS, STANDARD DETAILS, AND ROADWAY DETAILS ARE NOT ATTAINABLE TO MEET FIELD CONDITIONS OR RESULT IN DUPLICATE OR UNDESIRED OVERLAPPING OF DEVICES. MODIFICATION MAY INCLUDE: MOVING, SUPPLEMENTING, COVERING, OR REMOVAL OF DEVICES AS DIRECTED BY THE ENGINEER.

THE FOLLOWING GENERAL NOTES APPLY AT ALL TIMES FOR THE DURATION OF THE CONSTRUCTION PROJECT EXCEPT WHEN OTHERWISE NOTED IN THE PLAN OR DIRECTED BY THE ENGINEER.

A) DO NOT CLOSE OR NARROW TRAVEL LANES AS FOLLOWS:

ROAD NAME	DAY AND TIME RESTRICTIONS
US 1 LAKE LODGE RD	MONDAY THRU FRIDAY 6:00 AM - 9:00 AM AND 4:00 PM - 7:00 PM

B) DO NOT CLOSE OR NARROW TRAVEL LANES DURING HOLIDAYS AND SPECIAL EVENTS AS FOLLOWS:

ROAD NAME

US 1
LAKE LODGE RD

HOLIDAY

1. FOR ANY UNEXPECTED OCCURRENCE THAT CREATES UNUSUALLY HIGH TRAFFIC VOLUMES, AS DIRECTED BY THE ENGINEER.

2. FOR NEW YEAR'S, BETWEEN THE HOURS OF 6:00 AM DECEMBER 31st TO 7:00 PM JANUARY 2ND. IF NEW YEAR'S DAY IS ON A FRIDAY, SATURDAY, SUNDAY, OR MONDAY THEN UNTIL 7:00 PM THE FOLLOWING TUESDAY.

3. FOR EASTER, BETWEEN THE HOURS OF 6:00 AM THURSDAY AND 7:00 PM MONDAY.

4. FOR MEMORIAL DAY, BETWEEN THE HOURS OF 6:00 AM FRIDAY TO 7:00 PM TUESDAY.

5. FOR INDEPENDENCE DAY, BETWEEN THE HOURS OF 6:00 AM THE DAY BEFORE INDEPENDENCE DAY AND 7:00 PM THE DAY AFTER INDEPENDENCE DAY.

   IF INDEPENDENCE DAY IS ON A FRIDAY, SATURDAY, SUNDAY OR MONDAY THEN BETWEEN THE HOURS OF 6:00 AM THE THURSDAY BEFORE INDEPENDENCE DAY AND 7:00 PM THE TUESDAY AFTER INDEPENDENCE DAY.

6. FOR LABOR DAY, BETWEEN THE HOURS OF 6:00 AM FRIDAY AND 7:00 PM TUESDAY.

7. FOR THANKSGIVING DAY, BETWEEN THE HOURS OF 6:00 AM TUESDAY TO 7:00 PM MONDAY.

8. FOR CHRISTMAS, BETWEEN THE HOURS OF 6:00 AM THE FRIDAY BEFORE THE WEEK OF CHRISTMAS DAY AND 7:00 PM THE FOLLOWING TUESDAY AFTER THE WEEK OF CHRISTMAS.

C) DO NOT CONDUCT ANY HAULING OPERATIONS AGAINST THE FLOW OF TRAFFIC OF AN OPEN TRAVELWAY UNLESS THE HAULING OPERATION IS PROTECTED BY BARRIER OR GUARDRAIL OR AS DIRECTED BY THE ENGINEER.

LANE AND SHOULDER CLOSURE REQUIREMENTS

D) REMOVE LANE CLOSURE DEVICES FROM THE LANE WHEN WORK IS NOT BEING PERFORMED BEHIND THE LANE CLOSURE OR WHEN A LANE CLOSURE IS NO LONGER NEEDED OR AS DIRECTED BY THE ENGINEER.

E) WHEN PERSONNEL AND/OR EQUIPMENT ARE WORKING WITHIN 15 FT OF AN OPEN TRAVEL LANE, CLOSE THE NEAREST OPEN SHOULDER USING ROADWAY STANDARD DRAWING NO. 1101.04 UNLESS THE WORK AREA IS PROTECTED BY BARRIER OR GUARDRAIL OR A LANE CLOSURE IS INSTALLED.

F) WHEN PERSONNEL AND/OR EQUIPMENT ARE WORKING WITHIN 5 FT OF AN OPEN TRAVEL LANE ON AN UNDIVIDED FACILITY, CLOSE THE NEAREST OPEN TRAVEL LANE USING ROADWAY STANDARD DRAWING NO. 1101.02 UNLESS THE WORK AREA IS PROTECTED BY BARRIER OR GUARDRAIL.

   WHEN PERSONNEL AND/OR EQUIPMENT ARE WORKING WITHIN 10 FT OF OPEN TRAVEL LANE ON A DIVIDED FACILITY, CLOSE THE NEAREST OPEN TRAVEL LANE USING ROADWAY STANDARD DRAWING NO. 1101.02 UNLESS THE WORK AREA IS PROTECTED BY BARRIER OR GUARDRAIL.

G) WHEN PERSONNEL AND/OR EQUIPMENT ARE WORKING WITHIN A LANE OF TRAVEL OF AN UNDIVIDED OR DIVIDED FACILITY, CLOSE THE LANE ACCORDING TO THE TRAFFIC CONTROL PLANS, ROADWAY STANDARD DRAWINGS, OR AS DIRECTED BY THE ENGINEER. CONDUCT THE WORK SO THAT ALL PERSONNEL AND/OR EQUIPMENT REMAIN WITHIN THE CLOSED TRAVEL LANE.

H) DO NOT WORK SIMULTANEOUSLY WITHIN 15 FT ON BOTH SIDES OF AN OPEN TRAVELWAY, RAMP, OR LOOP WITHIN THE SAME LOCATION UNLESS PROTECTED WITH GUARDRAIL OR BARRIER.

PAVEMENT EDGE DROP OFF REQUIREMENTS

I) BACKFILL AT A 6:1 SLOPE UP TO THE EDGE AND ELEVATION OF EXISTING PAVEMENT IN AREAS ADJACENT TO AN OPENED TRAVEL LANE THAT HAS AN EDGE OF PAVEMENT DROP-OFF AS FOLLOWS:

   BACKFILL DROP-OFFS THAT EXCEED 2 INCHES ON ROADWAYS WITH POSTED SPEED LIMITS OF 45 MPH OR GREATER.

   BACKFILL DROP-OFFS THAT EXCEED 3 INCHES ON ROADWAYS WITH POSTED SPEED LIMITS LESS THAN 45 MPH.

   BACKFILL WITH SUITABLE COMPACTED MATERIAL, AS APPROVED BY THE ENGINEER, AT NO EXPENSE TO THE DEPARTMENT.

J) DO NOT EXCEED A DIFFERENCE OF 2 INCHES IN ELEVATION BETWEEN OPEN LANES OF TRAFFIC FOR NOMINAL LIFTS OF 1.5 INCHES. INSTALL ADVANCE WARNING "UNEVEN LANES" SIGNS (W8-11) IN ADVANCE AND A MINIMUM OF EVERY HALF MILE THROUGHOUT THE UNEVEN AREA.

TRAFFIC PATTERN ALTERATIONS

K) NOTIFY THE ENGINEER THIRTY (30) CALENDAR DAYS PRIOR TO ANY TRAFFIC PATTERN ALTERATION.

SIGNING

L) INSTALL ADVANCE WORK ZONE WARNING SIGNS WHEN WORK IS WITHIN 40 FT FROM THE EDGE OF TRAVEL LANE AND NO MORE THAN THREE (3) DAYS PRIOR TO THE BEGINNING OF CONSTRUCTION.

M) ENSURE ALL NECESSARY SIGNING IS IN PLACE PRIOR TO ALTERING ANY TRAFFIC PATTERN.

N) INSTALL BLACK ON ORANGE "DIP" SIGNS (W8-2) AND/OR "BUMP" SIGNS (W8-1) IN ADVANCE OF THE UNEVEN AREA, OR AS DIRECTED BY THE ENGINEER.

PAVEMENT MARKINGS AND MARKERS

O) INSTALL TEMPORARY PAVEMENT MARKINGS AND TEMPORARY PAVEMENT MARKERS ON INTERIM LAYERS OF PAVEMENT AS FOLLOWS:

ROAD NAME	MARKING	MARKER
ASPHALT PAVEMENT: US 1 LAKE LODGE ROAD	PAINT	TEMP RAISED

P) PLACE ONE APPLICATION OF PAINT FOR TEMPORARY TRAFFIC PATTERNS. PLACE A SECOND APPLICATION OF PAINT SIX (6) MONTHS AFTER THE INITIAL APPLICATION AND EVERY SIX MONTHS AS DIRECTED BY THE ENGINEER.

Q) TIE PROPOSED PAVEMENT MARKING LINES TO EXISTING PAVEMENT MARKING LINES.

R) REMOVE/REPLACE ANY CONFLICTING/DAMAGED PAVEMENT MARKINGS AND MARKERS BY THE END OF EACH DAY'S OPERATION.

S) TRACE THE 5 MONOLITHIC ISLAND LOCATIONS WITH PROPER COLOR PAVEMENT MARKINGS PRIOR TO FINAL SURFACE COURSE PLACE PAINT TO DELINEATE MONOLITHIC ISLANDS

TRAFFIC CONTROL DEVICES

T) WHEN LANE CLOSURES ARE NOT IN EFFECT, SPACE CHANNELIZING DEVICES IN WORK AREAS 10 FT OFF ECNTER IN ROAD, AND 3 FT OFF THE EDGE OF AN OPEN TRAVELWAY. REFER TO STANDARD SPECIFICATIONS FOR ROADS AND STRUCTURES SECTIONS 1130 (DRUMS), 1135 (CONES), 1180 (SKINNY DRUMS) FOR ADDITIONAL REQUIREMENTS.

U) PLACE TYPE III BARRICADES WITH "ROAD CLOSED" SIGNS R11-2 ATTACHED OF SUFFICIENT LENGTH TO CLOSE THE ENTIRE ROADWAY.

V) PLACE ADDITIONAL SETS OF THREE CHANNELIZING DEVICES PERPENDICULAR TO THE EDGE OF THE TRAVELWAY ON 500 FT CENTERS WHEN UNOPENED LANES ARE CLOSED TO TRAFFIC.

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DATE: 12/4/2025

SEAL

NORTH CAROLINA PROFESSIONAL SEAL 19680 ENGINEER J. STUART BOURNE

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

DIVISION OF HIGHWAYS · STATE OF NORTH CAROLINA · DEPARTMENT OF TRANSPORTATION · WORK ZONE TRAFFIC CONTROL

GENERAL NOTES

12/4/2025
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PROJ. REFERENCE NO.	SHEET NO.
W-5805G	TMP-02

ROADWAY STANDARD DRAWINGS

THE FOLLOWING ROADWAY STANDARDS AS SHOWN IN "ROADWAY STANDARD DRAWINGS" - N.C. DEPARTMENT OF TRANSPORTATION - RALEIGH, N.C., DATED JANUARY 2024 ARE APPLICABLE TO THIS PROJECT AND BY REFERENCE HEREBY ARE CONSIDERED A PART OF THESE PLANS:

STD. NO.	TITLE
1101.01	WORK ZONE WARNING SIGNS
1101.02	TEMPORARY LANE CLOSURES
1101.03	TEMPORARY ROAD CLOSURES
1101.04	TEMPORARY SHOULDER CLOSURES
1101.05	WORK ZONE VEHICLE ACCESSES
1101.11	TRAFFIC CONTROL DESIGN TABLES
1110.01	STATIONARY WORK ZONE SIGNS
1110.02	PORTABLE WORK ZONE SIGNS
1115.01	FLASHING ARROW BOARDS
1130.01	DRUMS
1135.01	CONES
1145.01	BARRICADES
1150.01	FLAGGING DEVICES
1160.01	TEMPORARY CRASH CUSHION
1165.01	TRUCK MOUNTED ATTENUATOR
1170.01	PORTABLE CONCRETE BARRIER - MASH APPROVED F-SHAPE K-WALL
1180.01	SKINNY - DRUMS
1205.01	PAVEMENT MARKINGS - LINE TYPES AND OFFSETS
1205.02	PAVEMENT MARKINGS - TWO LANE AND MULTILANE ROADWAYS
1205.03	PAVEMENT MARKINGS - EXITS AND ENTRANCE RAMPS
1205.04	PAVEMENT MARKINGS - INTERSECTIONS
1205.05	PAVEMENT MARKINGS - TURN LANES
1205.06	PAVEMENT MARKINGS - LANE DROPS
1205.08	PAVEMENT MARKINGS - SYMBOLS AND WORD MESSAGES
1205.09	PAVEMENT MARKINGS - PAINTED ISLANDS
1205.12	PAVEMENT MARKINGS - BRIDGES
1205.13	PAVEMENT MARKINGS - LANE REDUCTIONS
1250.01	RAISED PAVEMENT MARKERS - INSTALLATION SPACING
1251.01	RAISED PAVEMENT MARKERS - (PERMANENT AND TEMPORARY)
1261.01	GUARDRAIL AND BARRIER DELINEATORS - INSTALLATION SPACING
1261.02	GUARDRAIL AND BARRIER DELINEATORS - TYPES AND MOUNTING
1262.01	GUARDRAIL END DELINEATION
1264.01	OBJECT MARKERS - TYPES
1264.02	OBJECT MARKERS - INSTALLATION

LEGEND

GENERAL

- DIRECTION OF TRAFFIC FLOW
- DIRECTION OF PEDESTRIAN TRAFFIC FLOW
- EXIST. PVMT.
- NORTH ARROW
- PROPOSED PVMT.
- TEMP. SHORING (LOCATION PURPOSES ONLY)
- NEW CONSTRUCTION AREAS
- TEMPORARY PAVEMENT
- ON-GOING CONSTRUCTION
- MILLING/WEDGING/OVERLAY
- USER DEFINED (IF NEEDED)

SIGNALS

EXISTING · PROPOSED · TEMP TEMPORARY · PORT PORTABLE

PAVEMENT MARKINGS

- EXISTING LINES
- TEMPORARY LINES

TRAFFIC CONTROL DEVICES

- BARRICADE (TYPE III)
- CONE
- DRUM · SKINNY DRUM · TUBULAR MARKER
- TEMPORARY CRASH CUSHION
- FLASHING ARROW BOARD
- FLAGGER
- LAW ENFORCEMENT
- TRUCK MOUNTED ATTENUATOR (TMA)
- CHANGEABLE MESSAGE SIGN

TEMPORARY SIGNING

- PORTABLE SIGN
- STATIONARY SIGN
- STATIONARY OR PORTABLE SIGN

PAVEMENT MARKERS

- CRYSTAL/CRYSTAL
- CRYSTAL/RED
- YELLOW/YELLOW

PAVEMENT MARKING SYMBOLS

PAVEMENT MARKING SYMBOLS

TEMPORARY PAVEMENT MARKING

4" PAINT		24" PAINT	
P1	WHITE EDGELINE	P61	24" STOP BAR
P2	WHITE SOLID LANE LINE		
P3	10' WHITE SKIP	RAISED MARKERS	
P5	2FT.-6FT./WHITE MINI-SKIP	MH	TEMP. RAISED MARKER YELLOW/YELLOW
P10	YELLOW EDGELINE	MI	TEMP. RAISED MARKER CRYSTAL/RED
P13	DOUBLE YELLOW CENTER LINE		

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SEAL

NORTH CAROLINA PROFESSIONAL SEAL 19680 ENGINEER J. STUART BOURNE

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DIVISION OF HIGHWAYS · STATE OF NORTH CAROLINA · DEPARTMENT OF TRANSPORTATION · WORK ZONE TRAFFIC CONTROL

ROADWAY STANDARD DRAWINGS & LEGEND

12/4/2025
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PROJ. REFERENCE NO.	SHEET NO.
W-5805G	TMP-03

PHASING

PHASE I

STEP 1)

USING ROADWAY STANDARD DRAWING 1101.01 SHEET 2 OF 3, ERECT WORK ZONE ADVANCED WARNING SIGNS ON US 1 AND SR 1113.

STEP 2)

USING ROADWAY STANDARD DRAWING 1101.02 SHEET 3 OF 19, CLOSE THE RIGHT LANE FOR BOTH NB AND SB US 1 USING DAILY LANE CLOSURES AND CONSTRUCT OUTSIDE WIDENING UP TO BUT NOT INCLUDING THE FINAL SURFACE COURSE.

ALSO, USING FLAGGERS AND ROADWAY STANDARD DRAWING 1101.02 SHEET 1 OF 19, REMOVE EXISTING ISLANDS AND CONSTRUCT THE OUTSIDE WIDENING ON -Y-(SR 1113). SEE SHEET TMP-06.

PHASE IIA

DURING THIS PHASE, THE CONTRACTOR WILL MAINTAIN ALL TRAFFIC MOVEMENTS TO AND FROM US 1 AT THE INTERSECTION OF US 1 AND S. LAKE LODGE ROAD (SR 1113). SEE SHEET TMP-09.

USING ROADWAY STANDARD DRAWING NUMBER 1101.02 SHEET 3 OF 19, CLOSE THE LEFT LANE FOR BOTH NB AND SB US 1 USING DAILY LANE CLOSURES AND CONSTRUCT ALL MEDIAN DRAINAGE.

ALSO CONSTRUCT U-TURNS AND MEDIAN WORK FROM -L- STA 21+00 +/- TO STA 30+00 +/- AND FROM -L- STA 32+75 +/- TO STA 42+00 +/- UP TO BUT NOT INCLUDING THE FINAL SURFACE COURSE. THIS IS INCLUDING THE PROPOSED SIGNING AND TEMPORARY PAVEMENT MARKING.

DURING PHASE IIB, THE CONTRACTOR WILL MAINTAIN ALL TRAFFIC MOVE-MENTS TO AND FROM US 1 AT THE INTERSECTION OF US 1 AND S. LAKE LODGE RD (SR 1113) VIA THE U-TURNS CONSTRUCTED IN PHASE I STEP 2 AND PHASE IIA STEP 2. SEE SHEET TMP-11 AND TMP-12.

PHASE IIB

WHILE MAINTAINING THE DAILY LEFT LANE CLOSURE INSTALLED IN PHASE IIA, OPEN THE U-TURNS CONSTRUCTED EARLIER TO TRAFFIC.

CLOSE THE MEDIAN TO ALL TRAFFIC MOVEMENTS FROM -L- STA 30+00 +/- TO STA 32+75 +/-. SEE SHEET TMP-12.

COMPLETE MEDIAN CONSTRUCTION FROM STA 30+00 +/- TO STA 32+75 +/-. SEE SHEET TMP-12.

CLOSE EXISTING MEDIAN ACCESS AT STA 11+50 +/- INSTALL NEW GUARDRAIL ANCHORS.

ALSO, USING FLAGGERS AND ROADWAY STANDARD DRAWING 1101.02 SHEET 1 OF 15, CONSTRUCT MONOLITHIC ISLANDS ON -Y- (SR 1113). SEE SHEET TMP-12.

PHASE III

STEP 1)

USING ROADWAY STANDARD DRAWING NUMBER 1101.02 SHEET 3 OF 19, CLOSE THE LEFT/RIGHT TURN LANE USING DAILY LANE CLOSURES AND COMPLETE THE REMAINING PAVING AND PAVEMENT MARKING.

STEP 2)

REMOVE ALL WORK ZONE SIGNS AND DEVICES AND OPEN TRAFFIC TO PROPOSED TRAFFIC PATTERN.

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SEAL

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PHASING

9/29/2025
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PROJ. REFERENCE NO.	SHEET NO.
W-5805G	TMP-04

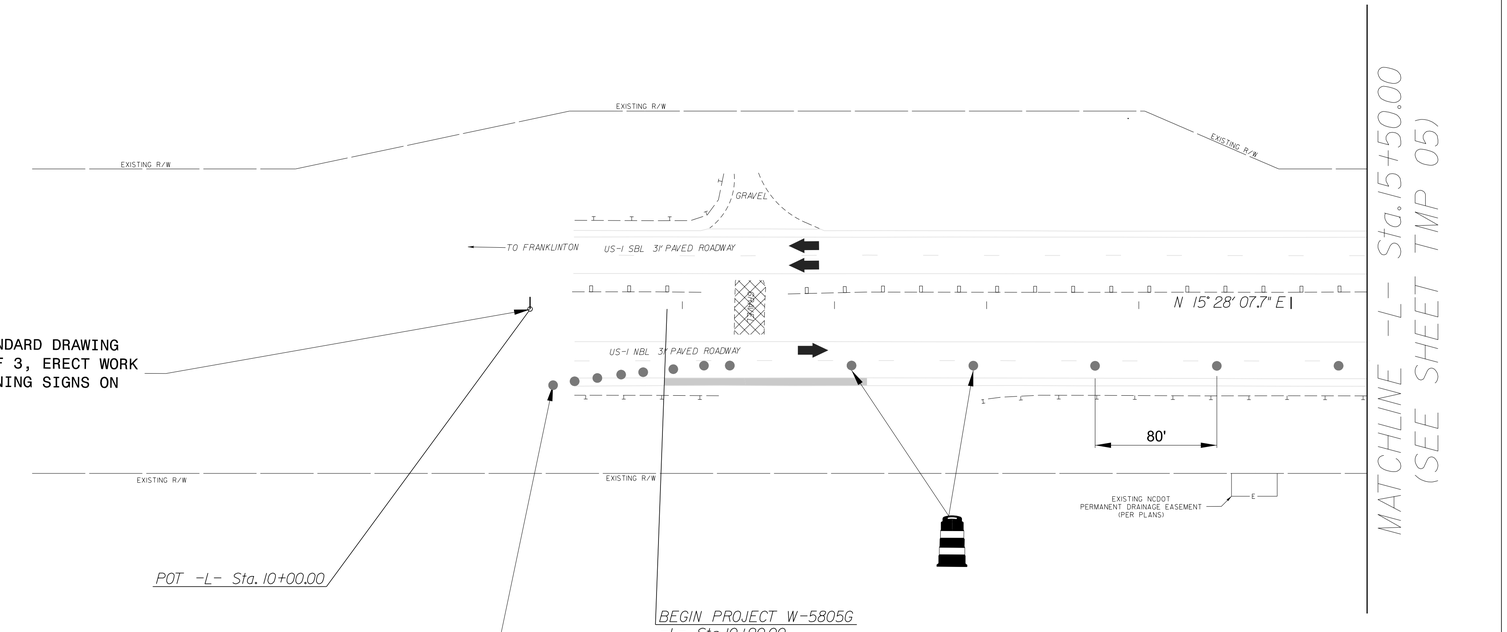
NAD 83/2011

8/17/99

REVISIONS

10

15



LEGEND

- NEW TEMPORARY MARKINGS
- EXISTING MARKINGS (GRAY)
- NEW CONSTRUCTION AREAS

NOTE: MAINTAIN DRIVEWAY ACCESS WHILE UNDER CONSTRUCTION.

NOTE: ALL LANE WIDTHS ARE 12' UNLESS OTHERWISE SHOWN.

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DATE: 12/4/2025

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DIVISION OF HIGHWAYS · STATE OF NORTH CAROLINA · DEPARTMENT OF TRANSPORTATION · WORK ZONE TRAFFIC CONTROL

TEMPORARY TRAFFIC CONTROL PHASE I DETAIL

12/4/2025
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PROJ. REFERENCE NO.	SHEET NO.
W-5805G	TMP-05

NAD 83/2011

8/17/95

REVISIONS

20

25

MATCHLINE -L- Sta.15+50.00
(SEE SHEET TMP 04)

EXISTING R/W

200.00'

GRAVEL

N 15° 28' 07.7" E

80'

EXISTING NCDOT
PERMANENT DRAINAGE EASEMENT
(PER PLANS)

MATCHLINE -L- Sta.28+00.00
(SEE SHEET TMP 06)

LEGEND

- NEW TEMPORARY MARKINGS
- EXISTING MARKINGS (GRAY)
- NEW CONSTRUCTION AREAS

NOTE: MAINTAIN DRIVEWAY ACCESS WHILE UNDER CONSTRUCTION.

NOTE: ALL LANE WIDTHS ARE 12' UNLESS OTHERWISE SHOWN.

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License #: P-0999

APPROVED: Signed by: Divya Pappu 0ABF89E820D8438...

DATE: 2/5/2025

SEAL

NORTH CAROLINA PROFESSIONAL SEAL 056172 ENGINEER DIVYA PAPPU

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DIVISION OF HIGHWAYS * STATE OF NORTH CAROLINA * DEPARTMENT OF TRANSPORTATION * WORK ZONE TRAFFIC CONTROL

TEMPORARY TRAFFIC CONTROL PHASE I DETAIL

1/27/2025
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PROJ. REFERENCE NO.	SHEET NO.
W-5805G	TMP-06

NAD 83/2011

8/17/95

REVISIONS

MATCHLINE -L- Sta. 28+50.00
(SEE SHEET TMP 05)

10

35

40

-Y-

S 50° 01' 22.9" E (AH)

30

-L- Sta. 31+16.36 =
-Y- Sta. 14+12.78

R/W MON

-Y- Sta. 12+61.92

R/W WIDTH VARIES

EXISTING R/W

45° CONC C&G

GRAVEL

EXISTING R/W

EXISTING R/W

R/W MON

EXISTING R/W

REMOVE EXISTING ISLANDS USING FLAGGERS AND ROADWAY STANDARD DRAWING 1101.02 SHEET 1 OF 19.

EXISTING R/W

EXISTING R/W

30'

80'

USING ROADWAY STANDARD DRAWING 1101.02 SHEET 3 OF 15, CLOSE THE RIGHT LANE FOR SB US 1.

GRAVEL

80'

EXISTING R/W

R/W WIDTH VARIES

30'

EXISTING R/W

R/W MON

REMOVE EXISTING ISLANDS USING FLAGGERS AND ROADWAY STANDARD DRAWING 1101.02 SHEET 1 OF 19.

EXISTING R/W

EXISTING R/W

R/W MON (NO CAP)

15

S 50° 01' 22.9" E (BK)

END PROJECT
-L- STA. 42+50.00

EXISTING R/W

R/W WIDTH VARIES

EXISTING R/W

-Y- Sta. 16+00.00

S 24° 26' 53.2" E (AH)

-Y-

R/W MON (NO CAP)

LEGEND

- NEW TEMPORARY MARKINGS
- EXISTING MARKINGS (GRAY)
- NEW CONSTRUCTION AREAS

NOTE: MAINTAIN DRIVEWAY ACCESS WHILE UNDER CONSTRUCTION.

NOTE: ALL LANE WIDTHS ARE 12' UNLESS OTHERWISE SHOWN.

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SEAL

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DIVISION OF HIGHWAYS · STATE OF NORTH CAROLINA · DEPARTMENT OF TRANSPORTATION · WORK ZONE TRAFFIC CONTROL

TEMPORARY TRAFFIC CONTROL PHASE I DETAIL

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PROJ. REFERENCE NO.	SHEET NO.
W-5805G	TMP-07

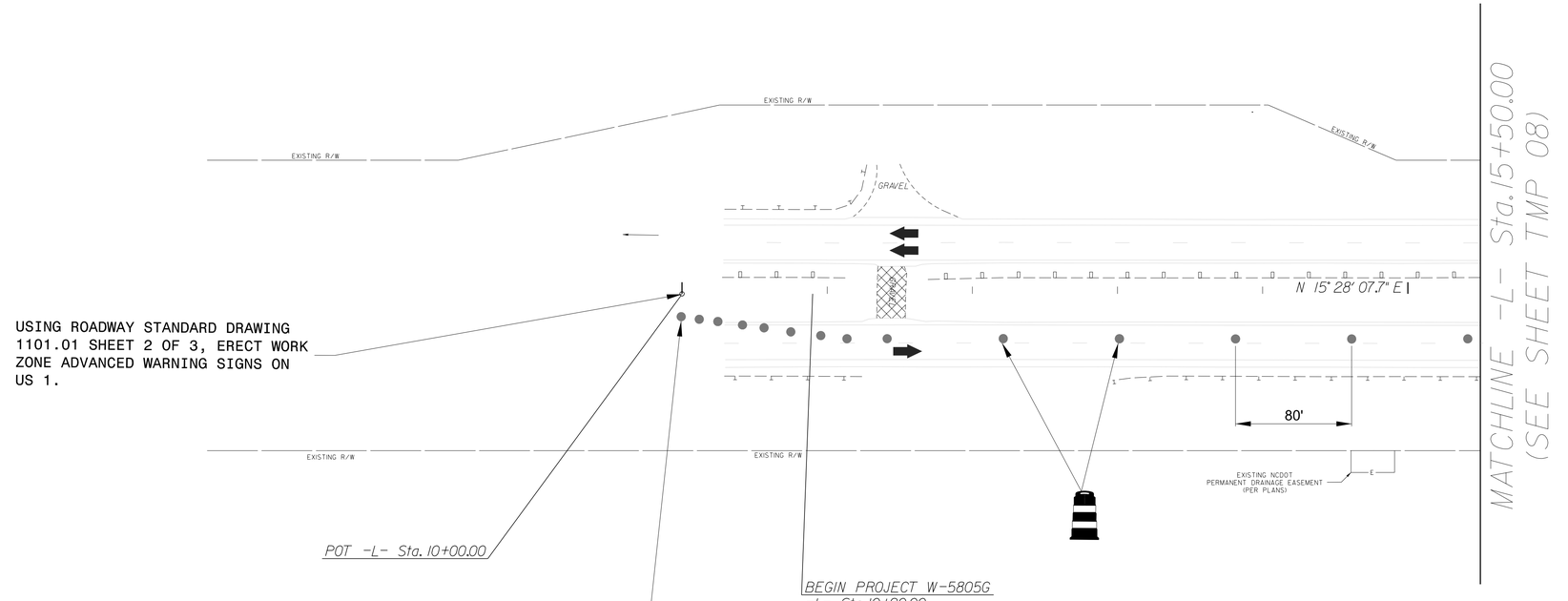
NAD 83/2011

REVISIONS

8/17/95

10

15



LEGEND

- NEW TEMPORARY MARKINGS
- EXISTING MARKINGS (GRAY)

NOTE: MAINTAIN DRIVEWAY ACCESS WHILE UNDER CONSTRUCTION.

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DIVISION OF HIGHWAYS * STATE OF NORTH CAROLINA * DEPARTMENT OF TRANSPORTATION * WORK ZONE TRAFFIC CONTROL

TEMPORARY TRAFFIC CONTROL PHASE IIA DETAIL

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PROJ. REFERENCE NO.	SHEET NO.
W-5805G	TMP-08

NAD 83/2011

8/17/99

20

25

REVISIONS

MATCHLINE -L- Sta.15+50.00
(SEE SHEET TMP 07)

EXISTING R/W

GRAVEL

EXISTING NCDOT
PERMANENT DRAINAGE EASEMENT
(PER PLANS)

15" RCP-IV

DI

2GI

18" RCP-IV

N 15° 28' 07.7" E

80'

30'

EXISTING PAVEMENT MARKING

NEW MINI-SKIP LINE

NEW EDGE LINE

MATCHLINE -L- Sta.28+50.00
(SEE SHEET TMP 09)

LEGEND

- NEW TEMPORARY MARKINGS
- EXISTING MARKINGS (GRAY)
- NEW CONSTRUCTION AREAS

NOTE: MAINTAIN DRIVEWAY ACCESS WHILE UNDER CONSTRUCTION.

NOTE: ALL LANE WIDTHS ARE 12' UNLESS OTHERWISE SHOWN.

ICE of CAROLINAS, PLLC
ICE of Carolinas, PLLC
4505 Falls of Neuse Road, Suite 110
Raleigh, North Carolina 27609
Phone: 803-822-0333
License #: P-0999

APPROVED: Divya Pappu
DATE: 2/5/2025
SEAL

NORTH CAROLINA PROFESSIONAL SEAL 056172 ENGINEER DIVYA PAPPU

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

DIVISION OF HIGHWAYS · STATE OF NORTH CAROLINA · DEPARTMENT OF TRANSPORTATION · WORK ZONE TRAFFIC CONTROL

TEMPORARY TRAFFIC CONTROL PHASE IIA DETAIL

1/27/2025
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User:dlvya.pappu

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PROJ. REFERENCE NO.	SHEET NO.
W-5805G	TMP-09

8/17/95

REVISIONS

NAD 83/2011

10

-Y-

35

40

S 50° 01' 22.9" E (AH)

30

-L- Sta. 31+16.36 =
-Y- Sta. 14+12.78

-Y- Sta. 12+61.92

USING ROADWAY STANDARD DRAWING
1101.02 SHEET 3 OF 19, CLOSE
THE LEFT LANE FOR SB US 1.

NEW MINI-SKIP LINE

NEW EDGE LINE

MATCHLINE -L- Sta. 28+50.00
(SEE SHEET TMP 08)

15" RCP-IV

15" RCP-IV

15" RCP-IV

15" RCP-IV

15" RCP-IV

15" RCP-IV

15" RCP-IV

15" RCP-IV

15" RCP-IV

15" RCP-IV

30'

30'

30'

80'

NEW EDGE LINE

GREU TL-3

15

S 50° 01' 22.9" E (BK)

-Y- Sta. 16+00.00

S 24° 26' 53.2" E (AH)

END PROJECT W-5805G
-L- STA 42+50.00

LEGEND

- NEW TEMPORARY MARKINGS
- EXISTING MARKINGS (GRAY)
- NEW CONSTRUCTION AREAS

NOTE: MAINTAIN DRIVEWAY ACCESS WHILE UNDER CONSTRUCTION.

NOTE: ALL LANE WIDTHS ARE 12' UNLESS OTHERWISE SHOWN.

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License #: P-0999

APPROVED: DocuSigned by: J. Stuart Bourne E8E4063CCA254AC...

DATE: 9/29/2025

SEAL

NORTH CAROLINA PROFESSIONAL SEAL 19680 ENGINEER J. STUART BOURNE

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DIVISION OF HIGHWAYS · STATE OF NORTH CAROLINA · DEPARTMENT OF TRANSPORTATION · WORK ZONE TRAFFIC CONTROL

TEMPORARY TRAFFIC CONTROL PHASE IIA DETAIL

9/29/2025
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User:kashuman1mcz

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PROJ. REFERENCE NO.	SHEET NO.
W-5805G	TMP-10

NAD 83/2011

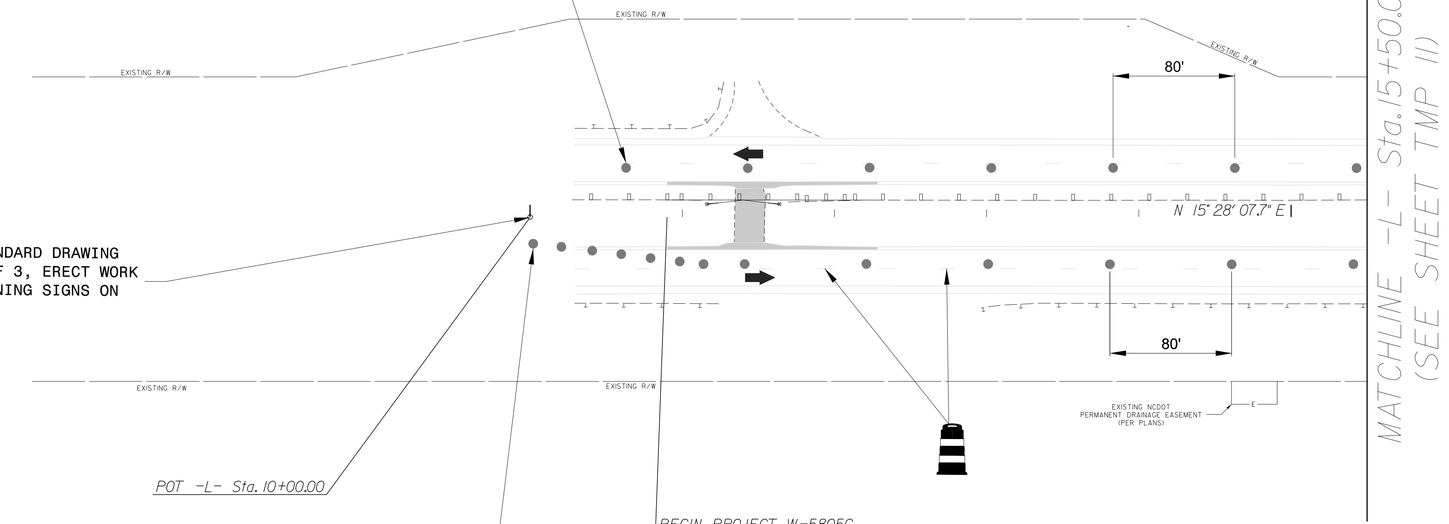
8/17/95

REVISIONS

10

15

USING ROADWAY STANDARD DRAWING
1101.02 SHEET 3 OF 19,CLOSE THE
LEFT LANE FOR SB US 1.



USING ROADWAY STANDARD DRAWING
1101.01 SHEET 2 OF 3, ERECT WORK
ZONE ADVANCED WARNING SIGNS ON
US 1.

POT -L- Sta. 10+00.00

BEGIN PROJECT W-5805G
-L- Sta.10+90.00

USING ROADWAY STANDARD DRAWING
1101.02 SHEET 3 OF 19,CLOSE THE
LEFT LANE FOR NB US 1.

LEGEND

- NEW TEMPORARY MARKINGS
- EXISTING MARKINGS (GRAY)
- NEW CONSTRUCTION AREAS

NOTE: MAINTAIN DRIVEWAY ACCESS WHILE UNDER CONSTRUCTION.

NOTE: ALL LANE WIDTHS ARE 12' UNLESS OTHERWISE SHOWN.

ICE of CAROLINAS, PLLC
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License #: P-0999

APPROVED: DocuSigned by: J. Stuart Bourne E8E4063CCA254AC...

DATE: 12/4/2025

SEAL

NORTH CAROLINA PROFESSIONAL SEAL 19680 ENGINEER J. STUART BOURNE

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DIVISION OF HIGHWAYS · STATE OF NORTH CAROLINA · DEPARTMENT OF TRANSPORTATION · WORK ZONE TRAFFIC CONTROL

TEMPORARY TRAFFIC CONTROL PHASE IIB DETAIL

12/4/2025
R:\Projects\23-070.0\W-5805G\Updated Files\Roadway\W-5805G_Rdy_psh4 TCP IIB.dgn
User:kassy.martinez

Docusign Envelope ID: 0E8493C9-895E-49EF-A171-91A3F871EC46

PROJ. REFERENCE NO.	SHEET NO.
W-5805G	TMP-11

NAD 83/2011

REVISIONS

8/17/95

20

25

USING ROADWAY STANDARD DRAWING
1101.02 SHEET 3 OF 15, CLOSE
THE LEFT LANE FOR US 1 SB.

W12-1
48" X 48"

NORTH
M3-1
24" X 12"
1
M1-4
24" X 24"

NEW LANE LINE AND
U-TURN SYMBOLS

NEW GORE LINES
WITH CHEVRONS

EXISTING NCDOT
PERMANENT DRAINAGE EASEMENT
(PER PLANS)

MATCHLINE -L- Sta.15+50.00
(SEE SHEET TMP 10)

MATCHLINE -L- Sta.28+50.00
(SEE SHEET TMP 12)

EXISTING R/W

GRAVEL

80'

30'

N 15° 28' 07.7" E

EXISTING PAVEMENT MARKING

R6-1 L
36" X 12"
ONE WAY

NEW EDGE LINE

NEW MINI-SKIP LINE

40'

12/4/2025
R:\Projects\23-070.0\W-5805G\Updated Files\Roadway\W-5805G_Rdy_psh5 TCP IIB.dgn
User:kassy.martinez

LEGEND

- NEW TEMPORARY MARKINGS
- EXISTING MARKINGS (GRAY)
- NEW CONSTRUCTION AREAS
- 5" MONOLITHIC ISLAND (SURFACE MOUNTED)

NOTE: USE ROADWAY STANDARD DRAWING 1205.15 SHEET 1 OF 2 FOR PLACEMENT OF PAVEMENT MARKING.

NOTE: MAINTAIN DRIVEWAY ACCESS WHILE UNDER CONSTRUCTION.

NOTE: ALL LANE WIDTHS ARE 12' UNLESS OTHERWISE SHOWN.

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License #: P-0999

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DATE: 12/4/2025

SEAL

NORTH CAROLINA PROFESSIONAL SEAL 19680 ENGINEER J. STUART BOURNE

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DIVISION OF HIGHWAYS · STATE OF NORTH CAROLINA · DEPARTMENT OF TRANSPORTATION · WORK ZONE TRAFFIC CONTROL

TEMPORARY TRAFFIC CONTROL PHASE IIB DETAIL

Docusign Envelope ID: 7DAD2AC1-6C63-4B31-8A0B-B13AA2DE7FD5

PROJ. REFERENCE NO.	SHEET NO.
W-5805G	TMP-12

8/17/95

REVISIONS

NAD 83/2011

USING FLAGGERS AND ROADWAY STANDARD DRAWING 1101.02 SHEET 1 OF 19, CONSTRUCT MONOLITHIC ISLAND.

ROAD CLOSED TO THRU TRAFFIC
R11-4
60" X 30"

TYPE III BARRICADE

USING ROADWAY STANDARD DRAWING 1101.02 SHEET 3 OF 19, CLOSE THE LEFT LANE FOR SB US 1.

NEW MINI-SKIP LINE

NEW EDGE LINE

ONE WAY
R6-1 L
36" X 12"

GREU TL-3

STOP
R1-1

ONE WAY
R6-1 R
36" X 12"

MATCHLINE -L- Sta. 28+50.00
(SEE SHEET TMP 11)

80'

40'

40'

30'

30'

10'

NEW GORE LINE AND CHEVRONS

NEW LANE LINE AND U-TURN SYMBOL

ONE WAY
R6-1 R
36" X 12"

STOP
R1-1

NEW STOP BAR AND RIGHT-TURN SYMBOL

SOUTH
1
M3-3
24" X 12"
M1-4
24" X 24"

W12-1
48" X 48"

END PROJECT W-5805G
-L- STA. 42+50.00

USING FLAGGERS AND ROADWAY STANDARD DRAWING 1101.02 SHEET 1 OF 19, CONSTRUCT MONOLITHIC ISLAND.

LEGEND

- NEW TEMPORARY MARKINGS
- EXISTING MARKINGS (GRAY)
- NEW CONSTRUCTION AREAS
- 5" MONOLITHIC ISLAND – (SURFACE MOUNTED)

NOTE: USE ROADWAY STANDARD DRAWING 1205.15 SHEET 1 OF 2 FOR PLACEMENT OF PAVEMENT MARKING.

NOTE: MAINTAIN DRIVEWAY ACCESS WHILE UNDER CONSTRUCTION.

NOTE: ALL LANE WIDTHS ARE 12' UNLESS OTHERWISE SHOWN.

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License #: P-0999

APPROVED: DocuSigned by: J. Stuart Bourne E8E4063CCA254AC...

DATE: 9/29/2025

SEAL

NORTH CAROLINA PROFESSIONAL SEAL 19680 ENGINEER J. STUART BOURNE

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DIVISION OF HIGHWAYS · STATE OF NORTH CAROLINA · DEPARTMENT OF TRANSPORTATION · WORK ZONE TRAFFIC CONTROL

TEMPORARY TRAFFIC CONTROL PHASE IIB DETAIL

9/29/2025
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User:kbaumgartner

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PROJ. REFERENCE NO.	SHEET NO.
W-5805G	TMP-13

NAD 83/2011

Min. D= 0.4 Ft.

10

15

EXISTING R/W

EXISTING R/W

EXISTING R/W

N 15° 28' 07.7" E

EXISTING R/W

EXISTING R/W

EXISTING NCDOT
PERMANENT DRAINAGE EASEMENT
(PER PLANS)

POT -L- Sta. 10+00.00

BEGIN PROJECT W-5805G
-L- Sta.10+90.00

MATCHLINE -L- Sta.15+50.00
(SEE SHEET TMP 14)

REVISIONS

8/17/99

5/28/2024
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User:divya.pappu

LEGEND

- NEW TEMPORARY MARKINGS
- EXISTING MARKINGS (GRAY)

NOTE: USING ROADWAY STANDARD DRAWING 1101.02 SHEET 3 OF 15, ALTERNATELY CLOSE THE LEFT/RIGHT LANE AS NEEDED TO COMPLETE THE FINAL PAVING AND PAVEMENT MARKING.

NOTE: MAINTAIN DRIVEWAY ACCESS WHILE UNDER CONSTRUCTION.

NOTE: ALL LANE WIDTHS ARE _12'_ UNLESS OTHERWISE SHOWN.

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License #: P-0999

APPROVED: Divya Pappu
9A8F89E820D8438...

DATE: 2/5/2025

NORTH CAROLINA PROFESSIONAL SEAL 056172 ENGINEER DIVYA PAPPU

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DIVISION OF HIGHWAYS · STATE OF NORTH CAROLINA · DEPARTMENT OF TRANSPORTATION · WORK ZONE TRAFFIC CONTROL

TEMPORARY TRAFFIC CONTROL PHASE III DETAIL

Docusign Envelope ID: 5A4A55FD-73EC-4A0F-BE59-C0856462CE2B

PROJ. REFERENCE NO.	SHEET NO.
W-5805G	TMP-14

NAD 83/2011

8/17/95

REVISIONS

20

25

MATCHLINE -L- Sta.15+50.00
(SEE SHEET TMP 13)

N 15° 28' 07.7" E

EXISTING R/W

GRAVEL

EXISTING PAVEMENT MARKING

NEW GORE LINE
AND CHEVRONS

NEW LANE LINE AND
U-TURN SYMBOL

EXISTING NCDOT
PERMANENT DRAINAGE EASEMENT
(PER PLANS)

NEW EDGE LINE

NEW LANE LINE AND
LEFT TURN SYMBOL

NEW MINI-SKIP LINE

MATCHLINE -L- Sta.28+50.00
(SEE SHEET TMP 15)

LEGEND

- NEW TEMPORARY MARKINGS
- EXISTING MARKINGS (GRAY)
- 5" MONOLITHIC ISLAND (SURFACE MOUNTED)

NOTE: USE ROADWAY STANDARD DRAWING 1205.15 SHEET 1 OF 2 FOR PLACEMENT OF PAVEMENT MARKING.

NOTE: USING ROADWAY STANDARD DRAWING 1101.02 SHEET 3 OF 15, ALTERNATELY CLOSE THE LEFT/RIGHT LANE AS NEEDED TO COMPLETE THE FINAL PAVING AND PAVEMENT MARKING.

NOTE: MAINTAIN DRIVEWAY ACCESS WHILE UNDER CONSTRUCTION.

NOTE: ALL LANE WIDTHS ARE 12' UNLESS OTHERWISE SHOWN.

ICE of CAROLINAS, PLLC
ICE of Carolinas, PLLC
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Phone: 803-822-0333
License #: P-0999

APPROVED: Divya Pappu
DATE: 2/5/2025

NORTH CAROLINA PROFESSIONAL SEAL 056172 ENGINEER DIVYA PAPPU

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

DIVISION OF HIGHWAYS · STATE OF NORTH CAROLINA · DEPARTMENT OF TRANSPORTATION · WORK ZONE TRAFFIC CONTROL

TEMPORARY TRAFFIC CONTROL PHASE III DETAIL

5/28/2024
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PROJ. REFERENCE NO.	SHEET NO.
W-5805G	TMP-15

NAD 83/2011

REVISIONS

MATCHLINE -L- Sta. 28+50.00 (SEE SHEET 14)

10

35

40

30

15

-Y-

S 50° 01' 22.9" E (AH)

-L- Sta. 31+16.36 =
-Y- Sta. 14+12.78

-Y- Sta. 12+61.92

R/W MON

EXISTING R/W

R/W WIDTH VARES

45° CONC C&G

GRAVEL

NEW LEFT TURN SYMBOL

NEW LANE LINE AND
LEFT TURN SYMBOL

NEW MINI-SKIP LINE

NEW EDGE LINE

NEW GORE LINE
AND CHEVRONS

NEW EDGE LINE

NEW MINI-SKIP LINE

GREU TL-3

NEW GORE LINE
AND CHEVRONS

NEW EDGE LINE

NEW STOP BAR AND
RIGHT TURN SYMBOL

NEW LANE LINE AND
U-TURN SYMBOL

EXISTING PAVEMENT MARKING

NEW GORE LINE
AND CHEVRONS

END PROJECT W-5805G
-L- STA. 42+50.00

S 50° 01' 22.9" E (BK)

-Y- Sta. 16+00.00

S 24° 26' 53.2" E (AH)

R/W MON (NO CAP)

LEGEND

- NEW TEMPORARY MARKINGS
- EXISTING MARKINGS (GRAY)
- 5" MONOLITHIC ISLAND (SURFACE MOUNTED)

NOTE: USE ROADWAY STANDARD DRAWING 1205.15 SHEET 1 OF 2 FOR PLACEMENT OF PAVEMENT MARKING.

NOTE: USING ROADWAY STANDARD DRAWING 1101.02 SHEET 3 OF 15, ALTERNATELY CLOSE THE LEFT/RIGHT LANE AS NEEDED TO COMPLETE THE FINAL PAVING AND PAVEMENT MARKING.

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NOTE: ALL LANE WIDTHS ARE 12' UNLESS OTHERWISE SHOWN.

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Raleigh, North Carolina 27609
Phone: 803-822-0333
License #: P-0999

APPROVED: Divya Pappu
DATE: 2/5/2025

NORTH CAROLINA PROFESSIONAL SEAL 056172 ENGINEER DIVYA PAPPU

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DIVISION OF HIGHWAYS · STATE OF NORTH CAROLINA · DEPARTMENT OF TRANSPORTATION · WORK ZONE TRAFFIC CONTROL

TEMPORARY TRAFFIC CONTROL PHASE III DETAIL

5/28/2024
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Docusign Envelope ID: 65265D3C-F605-44E1-B9ED-ECD22F6A67B6

PROJECT: W-5805G

CONTRACT: DE00406

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

VANCE COUNTY

LOCATION: INTERSECTION OF US-1 AT SR 1113 (S LAKE LODGE RD)
TYPE OF WORK: GRADING, DRAINAGE, & PAVING

TIP NO.	SHEET NO.
W-5805G	PMP-1

APPROVED: Signed by: Spencer W. Merritt 230953376259485...

DATE: 12/4/2025

SEAL

NORTH CAROLINA PROFESSIONAL SEAL 053483 ENGINEER SPENCER W. MERRITT

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GENERAL NOTES

THE FOLLOWING GENERAL NOTES APPLY AT ALL TIMES FOR THE DURATION OF THE CONSTRUCTION PROJECT, EXCEPT WHEN OTHERWISE NOTED IN THE PLAN OR DIRECTED BY THE ENGINEER.

A) INSTALL PAVEMENT MARKINGS AND PAVEMENT MARKERS ON THE FINAL SURFACE AS FOLLOWS:

ROAD NAME	MARKING	MARKER
ALL ROADS	THERMOPLASTIC	POLYCARBONATE H-SHAPED MARKER

B) TIE PROPOSED PAVEMENT MARKING LINES TO EXISTING PAVEMENT MARKING LINES.

C) REMOVE/REPLACE ANY CONFLICTING/DAMAGED PAVEMENT MARKINGS AND MARKERS.

D) STOP BAR LOCATION AT NON-SIGNALIZED INTERSECTIONS MAY BE ADJUSTED AS DIRECTED BY THE ENGINEER.

E) UNLESS OTHERWISE SPECIFIED, HEATED-IN-PLACE THERMOPLASTIC MAY BE USED IN LIEU OF EXTRUDED THERMOPLASTIC FOR STOP BARS, SYMBOLS, CHARACTERS AND DIAGONALS. IF HEATED-IN-PLACE IS USED, IT SHALL BE PAID FOR USING THE EXTRUDED THERMOPLASTIC PAY ITEM.

ROADWAY STANDARD DRAWING

THE FOLLOWING ROADWAY STANDARDS AS APPEAR IN "ROADWAY STANDARD DRAWINGS" - PROJECT SERVICES UNIT - N.C. DEPARTMENT OF TRANSPORTATION - RALEIGH, N.C., DATED JANUARY 2024 ARE APPLICABLE TO THIS PROJECT AND BY REFERENCE HEREBY ARE CONSIDERED A PART OF THESE PLANS:

STD. NO.	TITLE
1205.01	PAVEMENT MARKINGS - LINE TYPES AND OFFSETS
1205.02	PAVEMENT MARKINGS - TWO-LANE AND MULTI-LANE ROADWAYS
1205.04	PAVEMENT MARKINGS - INTERSECTIONS
1205.05	PAVEMENT MARKINGS - TURN LANES
1205.08	PAVEMENT MARKINGS - SYMBOLS AND WORD MESSAGES
1205.09	PAVEMENT MARKINGS - PAINTED ISLANDS
1205.15	PAVEMENT MARKINGS - REDUCED CONFLICT INTERSECTIONS
1250.01	RAISED PAVEMENT MARKERS - INSTALLATION SPACING

PROJECT W-5805G FINAL PAVEMENT MARKING SCHEDULE

SYMBOL	DESCRIPTION
THERMOPLASTIC (4″, 90 MIL)	
T1	WHITE EDGELINE
T4	3 FT - 9 FT/SP WHITE MINI SKIP
T5	2 FT - 6 FT/SP WHITE MINI SKIP
T10	YELLOW EDGELINE
T14	2FT - 6FT/SP YELLOW MINI SKIP
THERMOPLASTIC (8″, 90 MIL)	
T40	WHITE GORELINE
THERMOPLASTIC (12″, 90 MIL)	
T51	WHITE DIAGONAL
THERMOPLASTIC (24″, 90 MIL)	
T61	WHITE STOPBAR
THERMOPLASTIC - PAVEMENT MARKING SYMBOLS	
T70	LEFT ARROW
T71	RIGHT ARROW
T77	U-TURN ARROW
PAVEMENT MARKER SYMBOLS	
MF	SNOWPLOWABLE (POLYCARBONATE H-SHAPED) MARKER CRYSTAL & RED

Prepared in the Office of:
SUMMIT DESIGN AND ENGINEERING SERVICES
NC FIRM LICENSE No: P-0339
320 Executive Ct.
Hillsborough, NC 27278
(919) 732-3883
(919) 732-6676 (FAX)

SPENCER W. MERRITT, PE — *PROJECT ENGINEER*

JOSHUA L. JERNIGAN, PE — *PROJECT DESIGN ENGINEER*

STATE OF NORTH CAROLINA • DEPARTMENT OF TRANSPORTATION •

INDEX

PMP-1	PAVEMENT MARKING PLAN TITLE, SCHEDULE, NOTES, AND STANDARDS
PMP-2-3	PAVEMENT MARKING DETAIL SHEETS

18-NOV-2025 10:32
W-5805G_PMP1.dgn
zoe.zwack

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8/17/99

TIP NO.	SHEET NO.
W-5805G	PMP-2

APPROVED: Signed by: 2309533376259485...

DATE: 9/26/2025

SEAL

NORTH CAROLINA PROFESSIONAL SEAL 053483 ENGINEER SPENCER W. MERRITT

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Hillsborough, NC 27278
(919) 732-3883
(919) 732-6676 (FAX)

NAD 83/2011

-L- 20+00

-L- 25+00

TIE TO EX. MARKINGS
-L- STA. 22+08+/-

TIE TO EX. MARKINGS
-L- STA. 22+08+/-

TIE TO EX. MARKINGS
-L- STA. 22+20+/-

TIE TO EX. MARKINGS
-L- STA. 22+94+/-

TIE TO EX. MARKINGS
-L- STA. 24+40+/-

TIE TO EX. MARKINGS
-L- STA. 25+05+/-

55' SPACING

-L- +00±

-L- +79±

-L- +65±

-L- +05±

+15

+25

+65

EX. 12'

12'

-L- US-1 SBL

-L- US-1 NBL

T1 T4 T5 T10 T14 T40 T51 T70 T77 MF

MATCHLINE -L- Sta. 28+50.00
(SEE SHEET PMP-3)

19-APR-2025 20:22
W-5805G_PMP2.dgn
Spencer.Merritt

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8/17/99

TIP NO.	SHEET NO.
W-5805G	PMP-3

APPROVED: Signed by: 230953376259485...

DATE: 9/26/2025

SEAL

NORTH CAROLINA PROFESSIONAL SEAL 053483 ENGINEER SPENCER W. MERRITT

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(919) 732-3883
(919) 732-6676 (FAX)

NAD 83/2011

MATCHLINE -L- Sta. 28+50.00 (SEE SHEET PMP-2)

-L- 30+00 | -Y- 10+00 | -L- 35+00 | -L- 40+00

-Y- S.LAKE LODGE RD.

TIE TO EX. MARKINGS -L- STA. 30+13+/-

TIE TO EX. MARKINGS -L- STA. 28+65+/-

TIE TO EX. MARKINGS -Y- STA. 12+62+/-

TIE TO EX. MARKINGS -L- STA. 32+33+/-

TIE TO EX. MARKINGS -L- STA. 37+50+/-

TIE TO EX. MARKINGS -L- STA. 39+25+/-

TIE TO EX. MARKINGS -L- STA. 40+71+/-

TIE TO EX. MARKINGS -L- STA. 41+45+/-

TIE TO EX. MARKINGS -L- STA. 41+57+/-

TIE TO EX. MARKINGS -L- STA. 32+42+/-

TIE TO EX. MARKINGS -L- STA. 32+04+/-

TIE TO EX. MARKINGS -L- STA. 35+00+/-

TIE TO EX. MARKINGS -Y- STA. 16+00+/-

-L- US-1 SBL

-L- US-1 NBL

EX. 12′

55′ SPACING

-Y- 15+00

STOP BAR LOCATIONS MARKED WITH WHITE 24″ PAVEMENT MARKING LINES (T61).
(1) -Y- STA. 13+50.00, 15.88′ RT TO -Y- STA. 13+50.00, 34.73′ RT
(2) -Y- STA. 14+70.00, 21.90′ LT TO -Y- STA. 14+75.00, 39.00′ LT

25-SEP-2025 09:30
W-5805G PMP-3.dgn
zeerzook

PROJECT REFERENCE NO.	SHEET NO.
W-5805G	EC-2
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

DIVISION OF HIGHWAYS
STATE OF NORTH CAROLINA

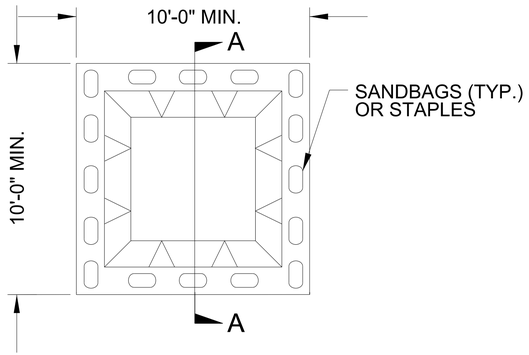
EROSION & SEDIMENT CONTROL LEGEND

Std. #	Description	Symbol
1605.01	Temporary Silt Fence	
1606.01	Special Sediment Control Fence	
1622.01	Temporary Berms and Slope Drains	
1630.02	Silt Basin Type B	
1630.03	Temporary Silt Ditch	TSD
1630.04	Stilling Basin	
1630.05	Temporary Diversion	TD
1630.06	Special Stilling Basin	
1630.07	Skimmer Basin	
1630.08	Tiered Skimmer Basin	
1630.09	Earthen Dam with Skimmer	
	Infiltration Basin	
	Rock Inlet Sediment Trap:	
1632.01	Type A	A
1632.02	Type B	B
1632.03	Type C	C

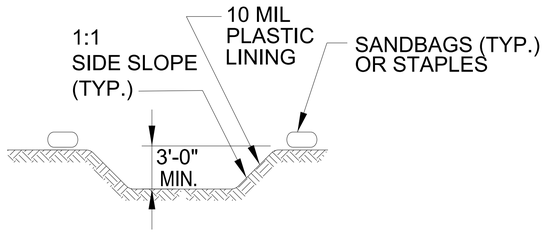
Std. #	Description	Symbol
1633.01	Temporary Rock Silt Check Type A	
1633.02	Temporary Rock Silt Check Type B	
1633.03	Temporary Rock Silt Check Type A with Excelsior Matting and Flocculant	
1634.01	Temporary Rock Sediment Dam Type A	
1634.02	Temporary Rock Sediment Dam Type B	
1635.01	Rock Pipe Inlet Sediment Trap Type A	A
1635.02	Rock Pipe Inlet Sediment Trap Type B	B
1636.01	Excelsior Wattle Check	
1636.01	Excelsior Wattle Check with Flocculant	
1636.01	Coir Fiber Wattle Check	
1636.01	Coir Fiber Wattle Check with Flocculant	
1636.02	Silt Fence Excelsior Wattle Break	EW
	Silt Fence Coir Fiber Wattle Break	CFW
1636.03	Excelsior Wattle Barrier	EW EW EW
1636.03	Coir Fiber Wattle Barrier	CFW CFW CFW

PROJECT REFERENCE NO.	SHEET NO.
W-5805G	EC-2A
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

ONSITE CONCRETE WASHOUT STRUCTURE WITH LINER



PLAN



SECTION A-A



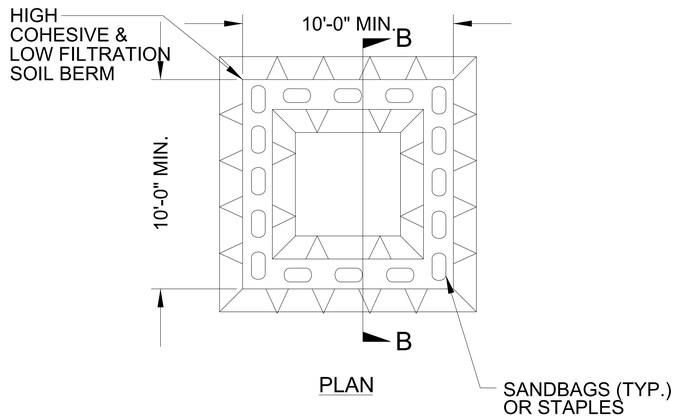
NOTES:
1. ACTUAL LOCATION DETERMINED IN FIELD

2. THE CONCRETE WASHOUT STRUCTURES SHALL BE MAINTAINED WHEN THE LIQUID AND/OR SOLID REACHES 75% OF THE STRUCTURES CAPACITY TO PROVIDE ADEQUATE HOLDING CAPACITY WITH A MINIMUM 12 INCHES OF FREEBOARD.

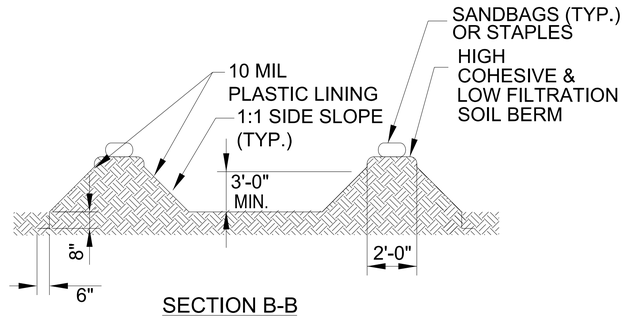
3.CONCRETE WASHOUT STRUCTURE NEEDS TO BE CLEARY MARKED WITH SIGNAGE NOTING DEVICE.

BELOW GRADE WASHOUT STRUCTURE

NOT TO SCALE



PLAN



SECTION B-B



NOTES:
1. ACTUAL LOCATION DETERMINED IN FIELD

2. THE CONCRETE WASHOUT STRUCTURES SHALL BE MAINTAINED WHEN THE LIQUID AND/OR SOLID REACHES 75% OF THE STRUCTURES CAPACITY TO PROVIDE ADEQUATE HOLDING CAPACITY WITH A MINIMUM 12 INCHES OF FREEBOARD.

3.CONCRETE WASHOUT STRUCTURE NEEDS TO BE CLEARY MARKED WITH SIGNAGE NOTING DEVICE.

ABOVE GRADE WASHOUT STRUCTURE

NOT TO SCALE

PROJECT REFERENCE NO.	SHEET NO.
W-5805G	EC-3
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

DIVISION OF HIGHWAYS
STATE OF NORTH CAROLINA

SOIL STABILIZATION TIMEFRAMES

SITE DESCRIPTION	STABILIZATION TIME	TIMEFRAME EXCEPTIONS
PERIMETER DIKES, SWALES, DITCHES AND SLOPES	7 DAYS	NONE
HIGH QUALITY WATER (HQW) ZONES	7 DAYS	NONE
SLOPES STEEPER THAN 3:1	7 DAYS	IF SLOPES ARE 10' OR LESS IN LENGTH AND ARE NOT STEEPER THAN 2:1, 14 DAYS ARE ALLOWED.
SLOPES 3:1 TO 4:1	14 DAYS	7 DAYS FOR SLOPES GREATER THAN 50' IN LENGTH WITH SLOPES STEEPER THAN 4:1. 7 DAYS FOR PERIMETER DIKES, SWALES, DITCHES PERIMETER SLOPES, AND HQW ZONES
ALL OTHER AREAS WITH SLOPES FLATTER THAN 4:1	14 DAYS	7 DAYS FOR PERIMETER DIKES, SWALES, DITCHES PERIMETER SLOPES, AND HQW ZONES

PROJECT REFERENCE NO.	SHEET NO.
W-5805G	EC-3A
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

DIVISION OF HIGHWAYS
STATE OF NORTH CAROLINA

SOIL STABILIZATION SUMMARY SHEET

DITCH MATTING FOR EROSION CONTROL

CONST SHEET NO.	LINE	FROM STATION	TO STATION	SIDE	ESTIMATE (SY)
UTILIZE	STRAW MATERIAL	FOR DITCH MATTING			
4	-L-	11+00	12+00	MED	100
5	-L-	22+00	25+50	RT	265
5/6	-L-	23+50	30+00	MED	1020
6	-L-	32+50	40+50	MED	1465
				SUBTOTAL	2850

SLOPE MATTING FOR EROSION CONTROL

CONST SHEET NO.	LINE	FROM STATION	TO STATION	SIDE	ESTIMATE (SY)
5	-L-	22+00	25+00	RT	1000
				SUBTOTAL	1000
MISCELLANEOUS MATTING TO BE INSTALLED AS DIRECTED BY THE ENGINEER					7605
				TOTAL	11455
				SAY	11500

PROJECT REFERENCE NO.	SHEET NO.
W-5805G	EC-3B
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

DIVISION OF HIGHWAYS
STATE OF NORTH CAROLINA

SOIL STABILIZATION SUMMARY SHEET

PERMANENT SOIL REINFORCEMNT MAT

CONST SHEET NO.	LINE	FROM STATION	TO STATION	SIDE	ESTIMATE (SY)
6	-L-	39+78	42+50	LT	230
				SUBTOTAL	230
	ADDITIONAL PSRM TO BE INSTALLED				0
				TOTAL	230
				SAY	230

PERMANENT SOIL REINFORCEMENT MAT

CONST SHEET NO.	LINE	FROM STATION	TO STATION	SIDE	ESTIMATE (SY)

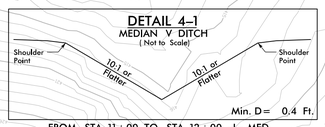
PROJECT REFERENCE NO.	SHEET NO.
W-5805G	EC-4/CONST.4
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

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Prepared in the Office of: SUMMIT DESIGN AND ENGINEERING SERVICES
NC FIRM LICENSE Nos P-0339
320 Executive Ct.
Hillsborough, NC 27278
(919) 732-3883
(919) 732-6676 (FAX)

REVISIONS 8/17/99

DETAIL 4-I
MEDIAN V DITCH
(Not to Scale)



Min. D= 0.4 Ft.

FROM STA. 11+00 TO STA. 12+00 -L- MED

NAD 83/2011

DURWOOD RAY CARNER HEIRS
DB 841PG 390

JAMIE C. GAY
TRACEY GAY
DB 901PG 518

JAMES C. GAY
NO DEED REFERENCE

CABLE GUIDERAIL
INTERMEDIATE ANCHOR UNIT
-L- STA. 11+40.00

TIE TO EXISTING GUIDERAIL
-L- STA. 10+90.00

TIE TO EXISTING GUIDERAIL
-L- STA. 12+25.00

RETAIN

RETAIN

POSSIBLE JB

W5805G-2

N 10°28'07.7" W

POT -L- Sta. 10+00.00

BEGIN PROJECT W-5805G
-L- Sta. 10+90.00

REMOVE EXISTING MEDIAN CROSSOVER

MEDIAN V DITCH SEE DETAIL 4-I

DO NOT DISTURB EXISTING WATERLINE.

EXISTING NCDOT PERMANENT DRAINAGE EASEMENT (PER PLANS)

BLOW OFF VALVE

GEORGE N. DICKERSON JR.
DB 659 PG 636

3 DRP INVESTMENTS LLC
DB 1375 PG 1170

Level 3 Communications LLC (2)
Century Link

TO FRANKLINTON

US-1 SBL 3I PAVED ROADWAY

US-1 NBL 3I PAVED ROADWAY

CITY OF HENDERSON

EXISTING R/W

WOODS

MTL GR

GRAVEL

CABLE GR

LINE FROM GIS

INV=405.71

INV=403.04

INV OUT=425.85

TOP=427.85

15" DIP

15" RCP

EX.E.W.

MATCHLINE -L- Sta. 15+50.00
(SEE SHEET 5)

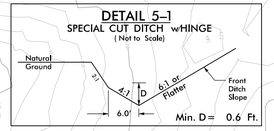
CLEARING AND GRUBBING
EROSION CONTROL FOR
CONSTRUCTION SHEET 4

REMOVAL OF EXISTING PAVEMENT/GRAVEL

03-APR-2025 08:27
W-5805G_EC_psh_4.dgn
rgarlock

8/17/99

REVISIONS



FROM STA. 22+00 TO STA. 25+50 -L- RT

-L-
PI Sta 31+06.43
△ = 17° 31' 22.7" (RT)
D = 0° 44' 55.4"
L = 2,340.37'
T = 1,179.39'
R = 7,652.44'
SE = EX
RO = EX

NAD 83/2011

PROJECT REFERENCE NO.	SHEET NO.
W-5805G	EC-5/CONST.5
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

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NC FIRM LICENSE Nos P-0339
320 Executive Ct.
Hillsborough, NC 27278
(919) 732-3883
(919) 732-6676 (FAX)

MATCHLINE -L- Sta.15+50.00 (SEE SHEET 4)

MATCHLINE -L- Sta.28+50.00 (SEE SHEET 6)

JAMES C. GAY
NO DEED REFERENCE

CHARLES O. BROWN
DB 1249 PG 441
PB T PG 866

REDEEMER PROPERTIES
DB 1273 PG 106

CAROLYN S. PARHAM
DB 1009 PG 256
PB U PG 484

PC -L- Sta. 19+27.04

CABLE GUIDERAIL ANCHOR UNIT
-L- STA. 21+90.00

N 15° 28' 37.7" E

US-1 SBL 31' PAVED ROADWAY

US-1 NBL 31' PAVED ROADWAY

EXISTING R/W

LINE FROM OPS

WOODS

GRAVEL

CABLE GR

BL-100

RETAIN

REMOVE EX. DI

REMOVE 15" RCP

REMOVE EXISTING CABLE GUIDERAIL

REMOVE EX. DI

REMOVE EX. CMP

PIPE CLEANOUT

15" RCP-IV

18" RCP-IV

2GI

2' FDPS

4' FDPS

DI

EX.

R=15' TYP.

86'+/- RT

25'

15"

20'

DO NOT DISTURB EXISTING WATERLINE.

-L- +50.00
123.00' RT
EX. R/W

-L- +00.00
EX. R/W

-L- +00.00
123.00' RT
EX. R/W

-L- +50.00
157.00' RT

-L- +25.00
148.00' RT

-L- +65.00
EX. R/W

SPECIAL CUT DITCH
W/HINGE
SEE DETAIL 5-1

50'

200' TAPER

600' TURN LANE

180' TAPER

EXISTING NCDOT PERMANENT DRAINAGE EASEMENT (PER PLANS)

INV=410.8'

INV=418.8'

ISBKD

2SBKD

150' R/W TO EP

CONC

GRAVEL

EIP

1

CHARLES O. BROWN
DB 1249 PG 441
PB T PG 866

3 DRP INVESTMENTS LLC
DB 1375 PG 1170

DANNY BRACY STANTON
DB 1209 PG 1089
PB U PG 484

WILLIAM J. STANTON
DB 943 PG 152
PB U PG 581

GREATER RANSOM WAY
OF THE CROSS TEMPLE

CLEARING AND GRUBBING
EROSION CONTROL FOR
CONSTRUCTION SHEET 5

5" MONOLITHIC ISLAND
(SURFACE MOUNTED)

03-APR-2025 08:28
W-5805G_EC_psh_5.dgn
ppeacock

8/17/99

REVISIONS

-L-	-Y-
PI Sta 31+06.43	PI Sta 10+87.72
△ = 17° 31' 22.7" (RT)	△ = 11° 21' 59.6" (RT)
D = 0° 44' 55.4"	D = 6° 30' 00.0"
L = 2,340.37'	L = 174.87'
T = 1,179.39'	T = 87.72'
R = 7,652.44'	R = 881.47'
SE = EX	SE = EX
RO = EX	RO = EX

PROJECT REFERENCE NO.	SHEET NO.
W-5805G	EC-6/CONST.6
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

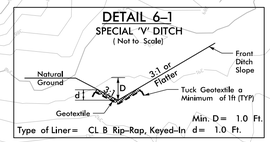
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

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NAD 83/2011

PC -Y- Sta. 10+00.00

DETAIL 6-1
SPECIAL 'V' DITCH
(Not to Scale)



Type of Liner= CL B Rip-Rap, Keyed-In d= 1.0 Ft.

FROM STA. 39+78.33 TO STA. 42+50 -L- LT

PT -Y- Sta. 11+74.87
S 50° 01' 22.9" E (AH)

-L- Sta. 31+16.36 =
-Y- Sta.14+12.78

BEGIN CONSTRUCTION
-Y- Sta.12+61.92

MATCHLINE -L- Sta. 28+50.00 (SEE SHEET 5)

DONNA P. DIEMER
FRANCIS J. DIEMER
DB 1307 PG 478
PB V PG 728

FRIDA OWENS
EAVIE OWENS
DB 638 PG 98

CAROLYN S. PARHAM
DB 1009 PG 256
PB U PG 484

WILLIAM J. STANTON
DB 943 PG 152
PB U PG 581

GREATER RANSOM WAY
OF THE CROSS TEMPLE
DB 646 PG 463

DANIEL A. MEKA
CHRISTIANA A. MEKA
DB 1266 PG 1045
PB Y PG 324

DANIEL A. MEKA
CHRISTIANA A. MEKA
DB 1375 PG 1181

DAVID ARNER
ELIZABETH ARNER HEIRS
DB 911 PG 163

CLAUDINE A. WINSTON
LAWRENCE WINSTON
DB 873 PG 386

DAVADA C. LOUGHLIN JR.
DB 585 PG 621

CITY OF HENDERSON

600' TURN LANE
200' TAPER
180' TAPER
50' TAPER
50'
+65.00
+61.92
+50.00
+40.00
+25.00
+00.00
R=70'
R=35'
5% MAX.
4' FDPS
2' FDPS
8' MBL SIGN
2 TONS CL B RIP RAP
7 SY GEOTEXTILE
-L- +00.00
150.00' LT
-L- +00.00
140.00' LT
-L- +75.00
EX. R/W
-L- +65.00
125.00' LT
EX. R/W
-Y- +20.00
EX. R/W
-Y- +25.00
50.00' LT
EX. R/W
TERMINATE EXISTING GUARDRAIL
WITH GREU TL-3 -L- STA. 42+00
SPECIAL 'V' DITCH
SEE DETAIL 6-1
102 TONS CL B RIPRAP
226 SY GEOTEXTILE
GREU TL-3
CABLE GUIDERAIL ANCHOR UNIT
-L- STA. 41+75.00
REMOVE EX. DI
REMOVE EXISTING
CABLE GUIDERAIL
RETAIN
PDE
DO NOT DISTURB
EXISTING WATERLINE.
PIPE AND
DITCH CLEANOUT
BLOW OFF VALVE
CABLE GR
CABLE UG
WOODS
BILLBOARD
GRAVEL
EXISTING R/W
R/W MON.
R/W WIDTH VARIES
US-1 SBL 3F PAVED ROADWAY
US-1 NBL 3F PAVED ROADWAY
TO RALEIGH RD.
TO ALLYNDENK RD.
S. LAKE GOODE RD.
CONC. CRS
YARNABY LANE
8" CONC. HW
15" RCP-IV
18" RCP-IV
2GI
DI
C
E
F
B
BM1 ELEVATION = 411.13
N 909983 E 2167452
BL STATION 37+38.00 198 RIGHT
BENCH TIE SET IN 22 INCH PINE

END CONSTRUCTION
-Y- Sta.16+00.00

PT -Y- Sta. 16+62.44
S 24° 26' 53.2" E (AH)

PC -Y- Sta. 17+24.98

PT -Y- Sta. 19+22.11

END PROJECT W-5805G
-L- Sta.42+50.00

PT -L- Sta. 42+67.41

-Y-	
PI Sta 15+75.74	PI Sta 18+28.30
△ = 25° 34' 29.7" (RT)	△ = 42° 22' 55.9" (LT)
D = 14° 30' 00.0"	D = 21° 30' 00.0"
L = 176.38'	L = 197.13'
T = 89.68'	T = 103.32'
R = 395.14'	R = 266.49'
SE = EX	SE = EX
RO = EX	RO = EX

CLEARING AND GRUBBING
EROSION CONTROL FOR
CONSTRUCTION SHEET 6

FOR INTERSECTION AND U-TURN
BULB DETAILS SEE SHEET 2B-1 AND 2B-3.

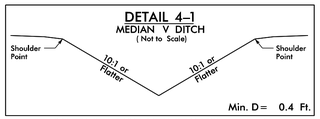
5" MONOLITHIC ISLAND
(SURFACE MOUNTED)

03-APR-2025 08:28
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8/17/99

REVISIONS

DETAIL 4-1
MEDIAN V DITCH
(Not to Scale)



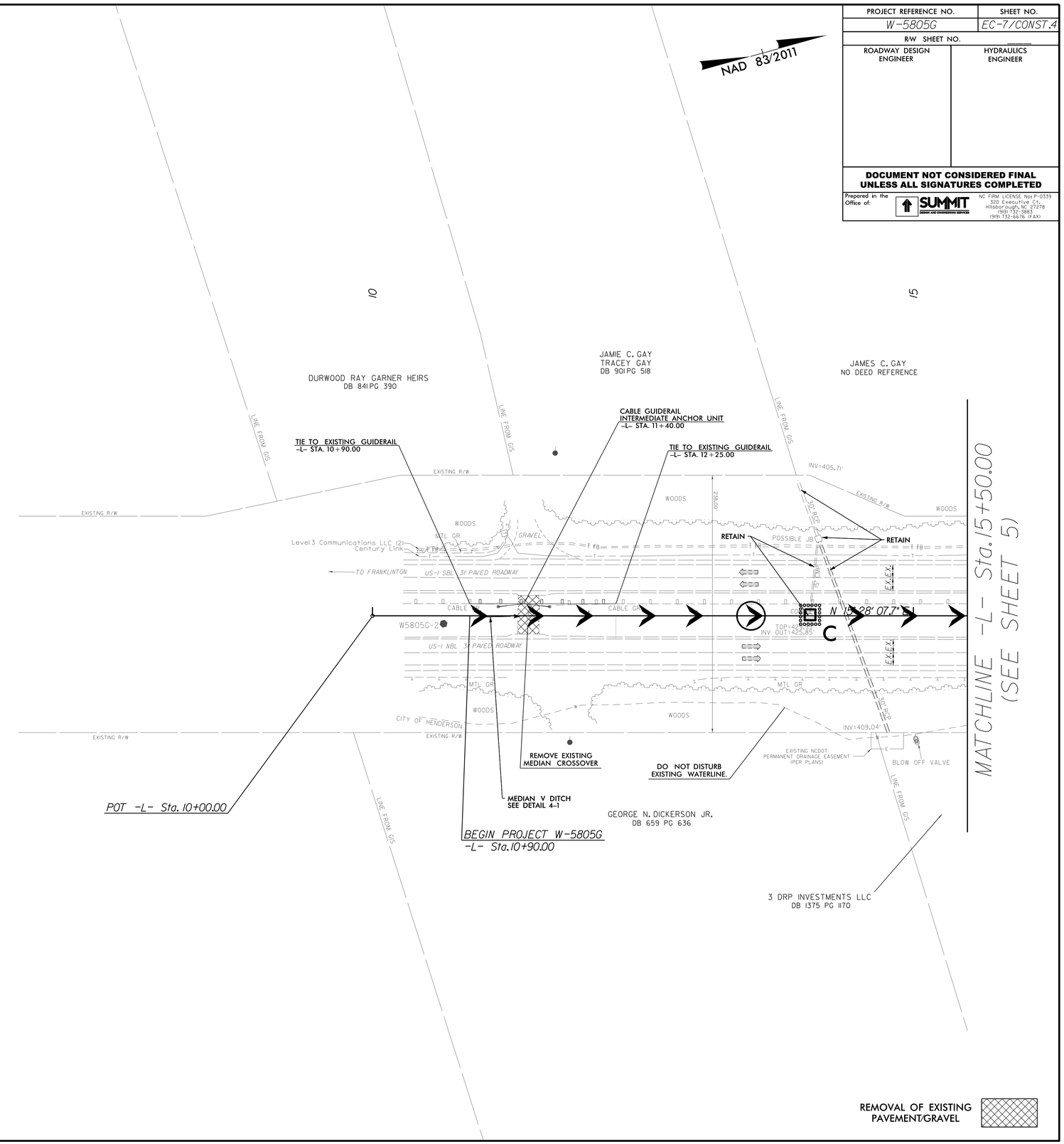
FROM STA. 11+00 TO STA. 12+00 -L- MED

PROJECT REFERENCE NO.	SHEET NO.
W-5805G	EC-7/CONST.4
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

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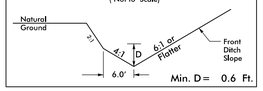
REMOVAL OF EXISTING PAVEMENT/GRAVEL

03-APR-2025 08:28
W-5805G_EC_psh_7.dgn
ppeacock

8/17/99

REVISIONS

DETAIL 5-1
SPECIAL CUT DITCH w/HINGE
(Not to Scale)



FROM STA. 22+00 TO STA. 25+50 -L- RT

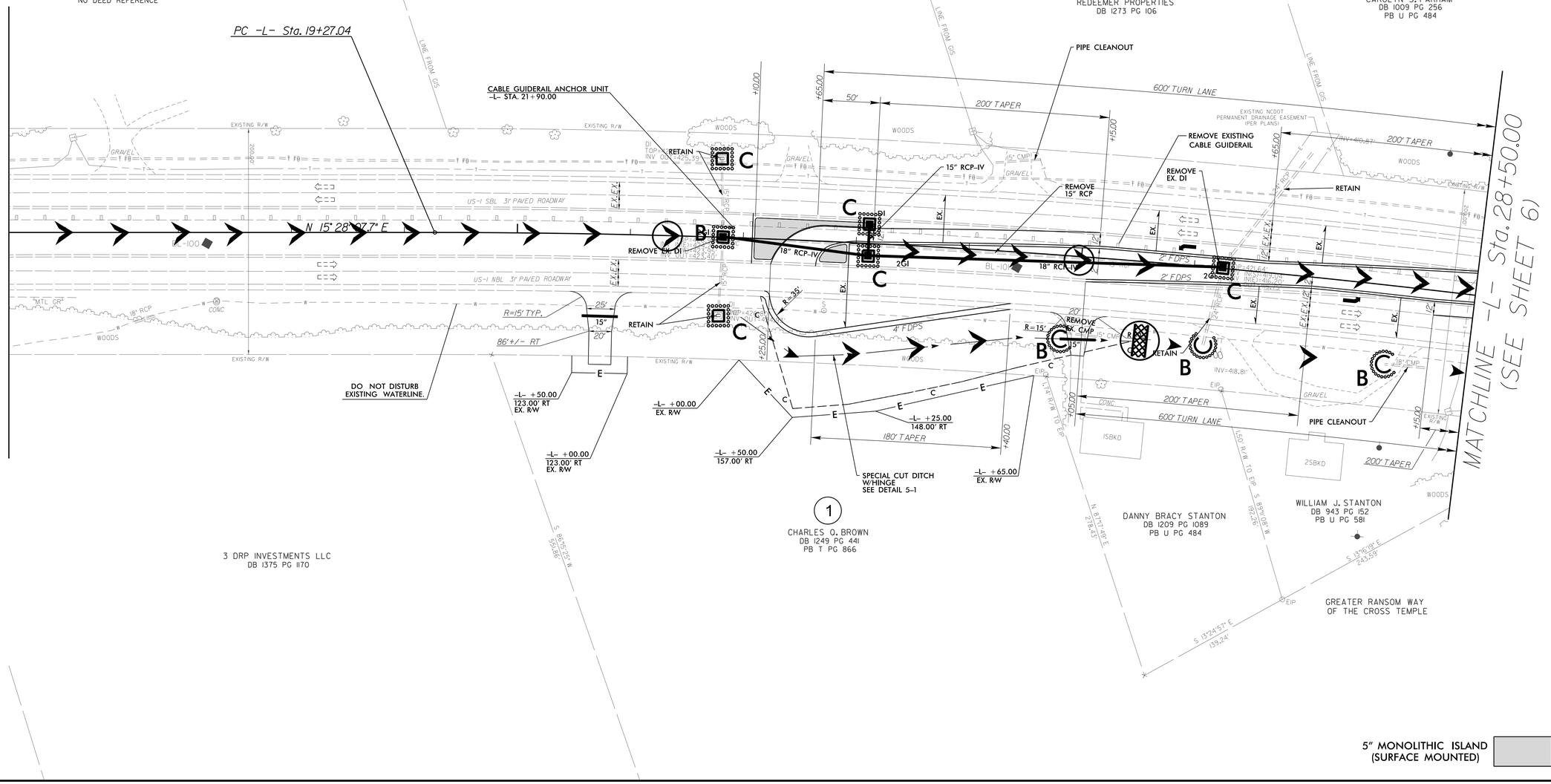
-L-
PI Sta 31+06.43
Δ = 17° 31' 22.7" (RT)
D = 0° 44' 55.4"
L = 2,340.37'
T = 1,179.39'
R = 7,652.44'
SE = EX
RO = EX

NAD 83/2011

PROJECT REFERENCE NO.	SHEET NO.
W-5805G	EC-8/CONST.5
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

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(919) 732-6676 (FAX)



03-APR-2025 08:29
W-5805G_EC_psh_8.dgn
psharpe

-L-	-Y-
PI Sta 31+06.43	PI Sta 10+87.72
△ = 17° 31' 22.7" (RT)	△ = 11° 21' 59.6" (RT)
D = 0° 44' 55.4"	D = 6° 30' 00.0"
L = 2,340.37'	L = 174.87'
T = 1,179.39'	T = 87.72'
R = 7,652.44'	R = 881.47'
SE = EX	SE = EX
RO = EX	RO = EX

PROJECT REFERENCE NO.	SHEET NO.
W-5805G	EC-9/CONST.6
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

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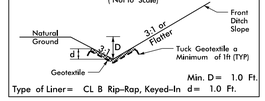
REVISIONS

8/17/99

PC -Y- Sta. 10+00.00

NAD 83/2011

DETAIL 6-1
SPECIAL 'V' DITCH
(Not to Scale)



Type of Liner= CL B Rip-Rap, Keyed-In d= 1.0 Ft.

FROM STA. 39+78.33 TO STA. 42+50 -L- LT

PT -Y- Sta. 11+74.87
S 50° 01' 22.9" E (AH)

-L- Sta. 31+16.36 =
-Y- Sta. 14+12.78

BEGIN CONSTRUCTION
-Y- Sta. 12+61.92

DONNA P. DIEMER
FRANCIS J. DIEMER
DB 1307 PG 478
PB V PG 728

S 13°36'17" E
640.54'

2

FRIDA OWENS
EAVIE OWENS
DB 638 PG 98

MATCHLINE -L- Sta. 28+50.00 (SEE SHEET 5)

CAROLYN S. PARHAM
DB 1009 PG 256
PB U PG 484

600' TURN LANE
200' TAPER
+65.00
+61.92
GRAVEL
EX.
48" CONC CAP
VARIABLE SLOPE PIPE
CONC MONASTIC ISLAND
TO ALLYNDALE RD.
R/W WIDTH VARIES
EXISTING R/W
R/W MON
+50.00
+40.00
WOODS
BILLBOARD
200' TAPER
600' TURN LANE
+50.00
+40.00
WOODS
EXISTING R/W
REMOVE EX. DI
REMOVE EXISTING CABLE GUIDERAIL
RETAIN
TOP=396.69'
INV IN=389.29'
INV OUT=389.29'
+25.00
180' TAPER
-L- +75.00
EX. R/W
SPECIAL 'V' DITCH
SEE DETAIL 6-1
102 TONS CL B RIPRAP
226 SY GEOTEXTILE
-L- +00.00
140.00' LT
PDE
-L- +65.00
125.00' LT
EX. R/W
2 TONS CL B RIP RAP
7 SY GEOTEXTILE
-L- +00.00
150.00' LT
TERMINATE EXISTING GUARDRAIL
WITH GREU TL-3 -L- STA. 42+00
15" RCP-IV
2GI
DI
2' EX.
EX.
US-1 SBL 3F PAVED ROADWAY
US-1 NBL 3F PAVED ROADWAY
18" RCP
4' FDPS
GREU TL-3
R=35'
Level 3 Communications
CABLE
TOP=395.42'
INV IN=391.42'
INV OUT=393.44'
TOP=396.13'
INV IN=391.13'
INV OUT=391.13'
TOP=396.25'
INV IN=392.25'
INV OUT=392.25'
INV=38.13'
INV=36.25'
8" CONC HW
BLOW OFF VALVE
CITY OF HENDERSON
CABLE GUIDERAIL ANCHOR UNIT
-L- STA. 41+75.00
DAVADA C. LOUGHLIN JR.
DB 585 PG 621
END PROJECT W-5805G
-L- Sta. 42+50.00
PT -L- Sta. 42+67.41

RETAIN
PIPE AND DITCH CLEANOUT
INV=400.00
+15.00
200' TAPER
8' MB SIGN
N 87°03'51" W
400.00'
600' TURN LANE
2 TONS CL B RIP RAP
7 SY GEOTEXTILE
WILLIAM J. STANTON
DB 943 PG 152
PB U PG 581
GREATER RANSOM WAY
OF THE CROSS TEMPLE
DB 646 PG 463
D RALEIGH RD.
-Y-
R/W MON
GUY(2)
DSP MONA
CONC MONASTIC ISLAND
S.W. CORNER OF CONC MONASTIC ISLAND
R/W WIDTH VARIES
EXISTING R/W
WOODS
+50.00
50' TAPER
+00.00
-Y- +20.00
EX. R/W
PC -Y- Sta. 14+86.06
S 50° 01' 22.9" E (BK)
3
DANIEL A. MEKA
CHRISTIANA A. MEKA
DB 1266 PG 1045
PB Y PG 324
DO NOT DISTURB
EXISTING WATERLINE.
15
BM1 ELEVATION = 411.13
N 909983 E 2167452
BL STATION 37+38.00 198 RIGHT
BENCH TIE SET IN 22 INCH PINE
END CONSTRUCTION
-Y- Sta. 16+00.00
-Y- +25.00
50.00' LT
EX. R/W
PT -Y- Sta. 16+62.44
S 24° 26' 53.2" E (AH)
PC -Y- Sta. 17+24.98
PT -Y- Sta. 19+22.11
N 75°37'35" W
246.02'
LINE FROM GIS
DANIEL A. MEKA
CHRISTIANA A. MEKA
DB 1375 PG 1181
DAVID ARNER
ELIZABETH ARNER HEIRS
DB 911 PG 163
CLAUDINE A. WINSTON
LAWRENCE WINSTON
DB 873 PG 386

-Y-	
PI Sta 15+75.74	PI Sta 18+28.30
△ = 25° 34' 29.7" (RT)	△ = 42° 22' 55.9" (LT)
D = 14° 30' 00.0"	D = 21° 30' 00.0"
L = 176.38'	L = 197.13'
T = 89.68'	T = 103.32'
R = 395.14'	R = 266.49'
SE = EX	SE = EX
RO = EX	RO = EX

FOR INTERSECTION AND U-TURN BULB DETAILS SEE SHEET 2B-1 AND 2B-3.

5" MONOLITHIC ISLAND (SURFACE MOUNTED)

03-APR-2025 08:29
W-5805G_EC_psh-4.dgn
psh4work

Docusign Envelope ID: 65265D3C-F605-44E1-B9ED-ECD22F6A67B6

TIP PROJECT: W-5805G

CONTRACT: DE00406

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

SIGNING PLAN
VANCE COUNTY

LOCATION: INTERSECTION OF US 1 AT SR 1113 (S LAKE LODGE RD.)
TYPE OF WORK: GRADING, DRAINAGE, & PAVING

TIP PROJECT NO.	SHEET NO.
W-5805G	SIGN-1

APPROVED: Signed by: 2309533762594B5... (12/4/2025)

DATE: 12/4/2025

SEAL

NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 053483 SPENCER W. MERRITT

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

Prepared in the Office of: SUMMIT DESIGN AND ENGINEERING SERVICES FIRM NO. P-0339
NC FIRM LICENSE No: P-0339
320 Executive Ct.
Hillsborough, NC 27278
(919) 732-3883
(919) 732-6676 (FAX)

GENERAL NOTES

. SIGNS FURNISHED BY STATE

. WHEN NOT STATIONED OR DIMENSIONED ON PLANS, ALL SIGNS SHALL BE FIELD LOCATED BY THE ENGINEER.

. IF REMOVAL OR RELOCATION OF SIGNS ON PRIVATE STREET (NON-STATE MAINTAINED) IS REQUIRED DUE TO CONSTRUCTION, THE CONTRACTOR SHALL INFORM THE ENGINEER. THE WORK WILL BE COMPLETED BY OTHERS.

. WHEN EXISTING SIGNS ARE REMOVED AND INSTALLED ON NEW SUPPORTS, THE RE-ERECTION SHALL IMMEDIATELY FOLLOW THE REMOVAL.

. THE BACKGROUND FOR TYPE 'D' AND 'E' SIGNS SHALL BE TYPE 'C' REFLECTIVE SHEETING.

. CONFIRM IN WRITING AT LEAST 4 MONTHS IN ADVANCE THE ACTUAL DATE THE DEPARTMENT SIGNS WILL BE REQUIRED.

. SEE ROADWAY PLANS FOR GUARD/GUIDE RAIL DETAILS.

ROADWAY STANDARD DRAWING

THE FOLLOWING ROADWAY STANDARDS AS APPEAR IN "ROADWAY STANDARD DRAWINGS" - PROJECT SERVICES UNIT - N.C. DEPARTMENT OF TRANSPORTATION - RALEIGH, N.C., DATED JANUARY 2024 ARE APPLICABLE TO THIS PROJECT AND BY REFERENCE HEREBY ARE CONSIDERED A PART OF THESE PLANS:

STD. NO.	TITLE
904.10	ORIENTATION OF GROUND MOUNTED SIGNS
904.50	MOUNTING OF TYPE 'D', 'E' AND 'F' SIGNS ON 'U' CHANNEL SUPPORTS
910.30	SIGNING UNSIGNALIZED REDUCED CONFLICT INTERSECTION

SUMMARY OF QUANTITIES

ITEM NO. DESC. NO.	ITEM NO. SECT. NO.	ITEM DESCRIPTION	QUANTITY	UNIT
4072000000-E	901	SUPPORTS, 3-LB STEEL U-CHANNEL	460	LF
4102000000-N	904	SIGN ERECTION, TYPE E	16	EA
4108000000-N	904	SIGN ERECTION, TYPE F	14	EA
4116100000-N	904	SIGN ERECTION, RELOCATE TYPE E (GROUND MOUNTED)	1	EA
4116100000-N	904	SIGN ERECTION, RELOCATE TYPE F (GROUND MOUNTED)	2	EA
4155000000-N	907	DISPOSAL OF SIGN SYSTEM, U-CHANNEL	10	EA
4192000000-N	907	DISPOSAL OF SIGN SUPPORT, U-CHANNEL	2	EA

PROJECT NOTES

1 DISPOSAL OF SIGN SYSTEM, U-CHANNEL
2 SIGN ERECTION, RELOCATE SIGN TYPE E (GROUND MOUNTED)
3 SIGN ERECTION, RELOCATE SIGN TYPE F (GROUND MOUNTED)
4 SIGN ERECTION, TYPE E (GROUND MOUNTED)
5 SIGN ERECTION, TYPE F (GROUND MOUNTED)
6 RETAIN EXISTING

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(919) 732-6676 (FAX)

DEVON HOYLE, EI — *PROJECT DESIGNER*

SPENCER MERRITT, PE — *PROJECT DESIGN ENGINEER*

PLAN SUBMITTED TO:

MATTHEW NOLFO, PE — *NCDOT - DIVISION 5 DESIGN ENGINEER*

STATE OF NORTH CAROLINA DEPARTMENT OF TRANSPORTATION

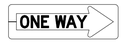
INDEX

SHEET NO.	DESCRIPTION
SIGN-1	TITLE SHEET
SIGN-2	TYPE E SIGNS
SIGN-3	TYPE F SIGNS
SIGN-4	SPECIAL SIGN DESIGN
SIGN-5 THRU 7	EXISTING AND PROPOSED SIGNS

18-NOV-2025 16:20
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zoe.zwack

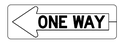
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401 QUANTITY REQ'D: 2



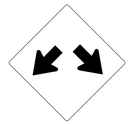
R6-1R
48" X 18"
MOUNTED IN CONJUNCTION WITH SIGN 406

402 QUANTITY REQ'D: 2



R6-1L
48" X 18"
TWO "U" POSTS PER SIGN

403 QUANTITY REQ'D: 4



W12-1
36" X 36"
ONE "U" POST PER SIGN

404 QUANTITY REQ'D: 4



R3-4
36" X 36"
ONE "U" POST PER SIGN

405 QUANTITY REQ'D: 2



R1-1
36" X 36"
ONE "U" POSTS PER SIGN

406 QUANTITY REQ'D: 2



R1-1
36" X 36"
TWO "U" POSTS PER SIGN

TIP NO.	SHEET NO.
W-5805G	SIGN-2

APPROVED: Signed by: 230953376259485...

DATE: 9/26/2025

SEAL

NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 053483 SPENCER W. MERRITT

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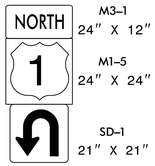
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TYPE "E" SIGNS

4/2/2025
N:\2022\22-0282.005 Div 5_W-5805G\Transportation\Design\Traffic\Signing\CADD\Signing Layout Plans\W-5805G_SIGN_2.dgn
User:zoez.mck

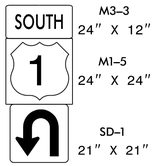
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501 QUANTITY REQ'D: 2



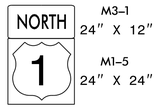
ONE "U' POST PER SIGN SYSTEM

502 QUANTITY REQ'D: 2



ONE "U' POST PER SIGN SYSTEM

503 QUANTITY REQ'D: 1



ONE "U' POST PER SIGN SYSTEM

TIP NO.	SHEET NO.
W-5805G	SIGN-3

APPROVED: Signed by: Spencer W. Merritt 230953376259485...

DATE: 9/29/2025

SEAL

NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 053483 SPENCER W. MERRITT

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TYPE "F" SIGNS

29-SEP-2025 17:48
W-5805G_SIGN_3.dgn
Spencer.Merritt

Docusign Envelope ID: 627DE86C-D5D4-42F3-9FF1-95EFE62B880D

TIP NO.	SHEET NO.
W-5805G	SIGN-5

APPROVED: Signed by: Spencer W. Merritt 230953376259485...

DATE: 9/26/2025

SEAL

NORTH CAROLINA PROFESSIONAL SEAL 053483 ENGINEER SPENCER W. MERRITT

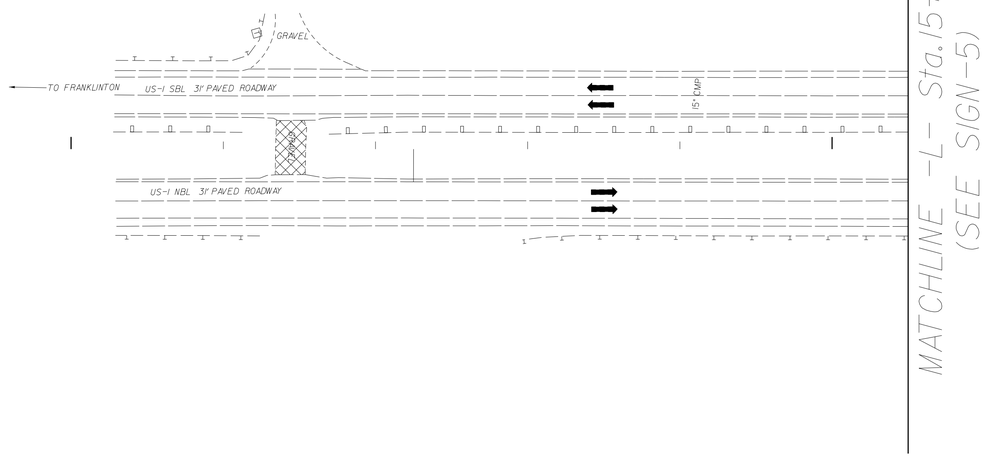
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(919) 732-3883
(919) 732-6676 (FAX)

NAD 83/2011

10

15



EXISTING AND PROPOSED SIGNS

Docusign Envelope ID: 65265D3C-F605-44E1-B9ED-ECD22F6A67B6

TIP NO.	SHEET NO.
W-5805G	SIGN-6

APPROVED: Signed by: 230953376259485...

DATE: 12/4/2025

SEAL

NORTH CAROLINA PROFESSIONAL SEAL 053483 ENGINEER SPENCER W. MERRITT

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Prepared in the Office of: SUMMIT HIGHWAY AND STORMWATER DIVISION

NC FIRM LICENSE No: P-0339
320 Executive Ct.
Hillsborough, NC 27278
(919) 732-3883
(919) 732-6676 (FAX)

NAD 83/2011

20

25

MATCHLINE -L- Sta.15+50.00
(SEE SIGN-4)

MATCHLINE -L- Sta.28+50.00
(SEE SIGN-6)

US-1 SBL 31' PAVED ROADWAY

US-1 NBL 31' PAVED ROADWAY

RELOCATED FROM SIGN-6
SEE NOTE 3
STA.20+96+/-

1
SOUTH

403

INSTALL
SEE NOTE 4
-L- STA.23+13+/-

INSTALL
SEE NOTE 5
-L- STA.28+32+/-

501
NORTH
1

402
ONE WAY

INSTALL
SEE NOTE 4
-L- STA.22+37+/-

INSTALL
SEE NOTE 4
-L- STA.25+05+/-

404

501
NORTH
1

INSTALL
SEE NOTE 5
-L- STA.28+32+/-

REMOVE
SEE NOTE 1

EXISTING AND PROPOSED SIGNS

Docusign Envelope ID: 65265D3C-F605-44E1-B9ED-ECD22F6A67B6

TIP NO.	SHEET NO.
W-5805G	SIGN-7

APPROVED: Signed by: 230953376259485...

DATE: 12/4/2025

SEAL

NORTH CAROLINA PROFESSIONAL SEAL 053483 ENGINEER SPENCER W. MERRITT

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NC FIRM LICENSE No: P-0339
320 Executive Ct.
Hillsborough, NC 27278
(919) 732-3883
(919) 732-6676 (FAX)

NAD 83/2011

MATCHLINE -L- STA.28+50.00 (SEE SIGN-5)

RELOCATED TO SIGN-5 SEE NOTE 3

1 SOUTH 30

INSTALL SEE NOTE 4 -L- STA.30+27+/-

404

401 ONE WAY

406 STOP

INSTALL SEE NOTE 4 -Y- STA.13+33+/-

REMOVE SEE NOTE 1

STOP

INSTALL SEE NOTE 4 -Y- STA.13+48+/-

405 STOP

DO NOT ENTER

RELOCATE SEE NOTE 2 -L- STA.32+42+/-

35

403

INSTALL SEE NOTE 4 -L- STA.32+37+/-

WRONG WAY

RETAIN SEE NOTE 1 SEE NOTE 6

WRONG WAY

REMOVE SEE NOTE 1 SEE NOTE 6

40

REMOVE SEE NOTE 1

404

INSTALL SEE NOTE 4 -L- STA.37+50+/-

INSTALL SEE NOTE 4 -L- STA.41+24+/-

ONE WAY

402

TO KLYNEBANK RD.

VARIABLE WIDTH PAVED SHOULDER

US-1 SBL 31' PAVED ROADWAY

US-1 NBL 31' PAVED ROADWAY

ASPHALT

WRONG WAY

REMOVE SEE NOTE 1

RETAIN SEE NOTE 6

SLAKE CHURCH RD. PAVED ROADWAY

N. RALEIGH RD.

ONE WAY

REMOVE SEE NOTE 1

403

INSTALL SEE NOTE 4 -L- STA.30+20+/-

RETAIN SEE NOTE 6

DO NOT ENTER

STOP

REMOVE SEE NOTE 1

401 ONE WAY

STOP

406

INSTALL SEE NOTE 4 -Y- STA.14+95+/-

STOP

405

INSTALL SEE NOTE 4 -Y- STA.14+71+/-

REMOVE SEE NOTE 1

404

INSTALL SEE NOTE 4 -L- STA.32+31+/-

502

1 SOUTH

INSTALL SEE NOTE 5 -L- STA.35+00+/-

502

1 SOUTH

INSTALL SEE NOTE 5 -L- STA.35+00+/-

403

INSTALL SEE NOTE 4 -L- STA.40+52+/-

1 NORTH

503

INSTALL SEE NOTE 5 -L- STA.41+99+/-

EXISTING AND PROPOSED SIGNS

8/17/99

PROJECT REFERENCE NO.	SHEET NO.
W-5805G	X-1

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CROSS SECTION INDEX SHEET

CHAIN	BEGIN STA.	END STA.	SHEET NO.
–L–	10+50.00	42+50.00	X–2 THRU X–13
–Y–	12+50.00	16+00.00	X–14 THRU X–15

3-MAR-2025 13:58
W-5805G_Proj_X1.dgn
$$$$work

PROJ. REFERENCE NO.	SHEET NO.
W-5805G	X-1A

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

CROSS-SECTION SUMMARY

NOTE: EMBANKMENT COLUMN INCLUDES BACKFILL FOR UNDERCUT

Station L (MED)	Uncl. Exc. (cu. yd.)	Embt (cu. yd.)
11+00.00	0	0
11+50.00	6	0
12+00.00	6	0

Station L (MED)	Uncl. Exc. (cu. yd.)	Embt (cu. yd.)
22+10.00	0	0
22+50.00	19	21
23+00.00	19	19
23+50.00	11	16
24+00.00	9	20
24+50.00	9	22
25+00.00	9	21
25+50.00	13	23
26+00.00	17	35
26+50.00	19	28
27+00.00	19	13
27+50.00	17	12
28+00.00	18	7
28+50.00	19	3
29+00.00	16	0
29+50.00	10	0
30+00.00	9	1
30+50.00	9	4
30+76.21	2	1

Station L (MED)	Uncl. Exc. (cu. yd.)	Embt (cu. yd.)
31+52.26	0	0
32+00.00	10	2
32+50.00	13	6
33+00.00	6	9
33+50.00	6	8
34+00.00	6	8
34+50.00	6	8
35+00.00	6	8
35+50.00	8	19
36+00.00	11	34
36+50.00	12	42
37+00.00	9	45
37+50.00	6	54
38+00.00	6	50
38+50.00	6	46
39+00.00	6	58
39+50.00	6	66
40+00.00	6	69
40+50.00	6	70
41+00.00	10	56
41+50.00	16	40
41+57.00	2	5

Station L (RT)	Uncl. Exc. (cu. yd.)	Embt (cu. yd.)
22+00.00	0	0
22+50.00	676	0
23+00.00	1269	0
23+50.00	988	0
24+00.00	648	0
24+50.00	366	0
25+50.00	224	0

Station L (LT)	Uncl. Exc. (cu. yd.)	Embt (cu. yd.)
39+25.00	0	0
39+50.00	2	0
40+00.00	14	45
40+50.00	21	181
41+00.00	29	396
41+50.00	48	318
42+00.00	72	209
42+50.00	41	152

Station Y	Uncl. Exc. (cu. yd.)	Embt (cu. yd.)
12+61.92	0	0
13+00.00	6	0
13+24.24	4	0

Station Y	Uncl. Exc. (cu. yd.)	Embt (cu. yd.)
14+34.00	0	0
15+00.00	6	0
15+50.00	6	0
16+00.00	2	0

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Hillsborough, NC 27278
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0 5 10

PROJ. REFERENCE NO.	SHEET NO.
W-5805G	X-2

440 150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 440

430

430.78

13+00.00

440

430

431.10

12+50.00

440

430

431.89

12+00.00

420

440

10:1 10:1

430 432.36

433.09

11+50.00

440

430

432.89

11+00.00

420

450

440

BEGIN PROJECT –L– STA 10+90.00

430

432.85

10+50.00

420

Note: Approximate quantities only. Unclassified Excavation, Fine Grading, and Clearing and Grubbing will be paid for at the contract lump sum price for "Grading."

–L–

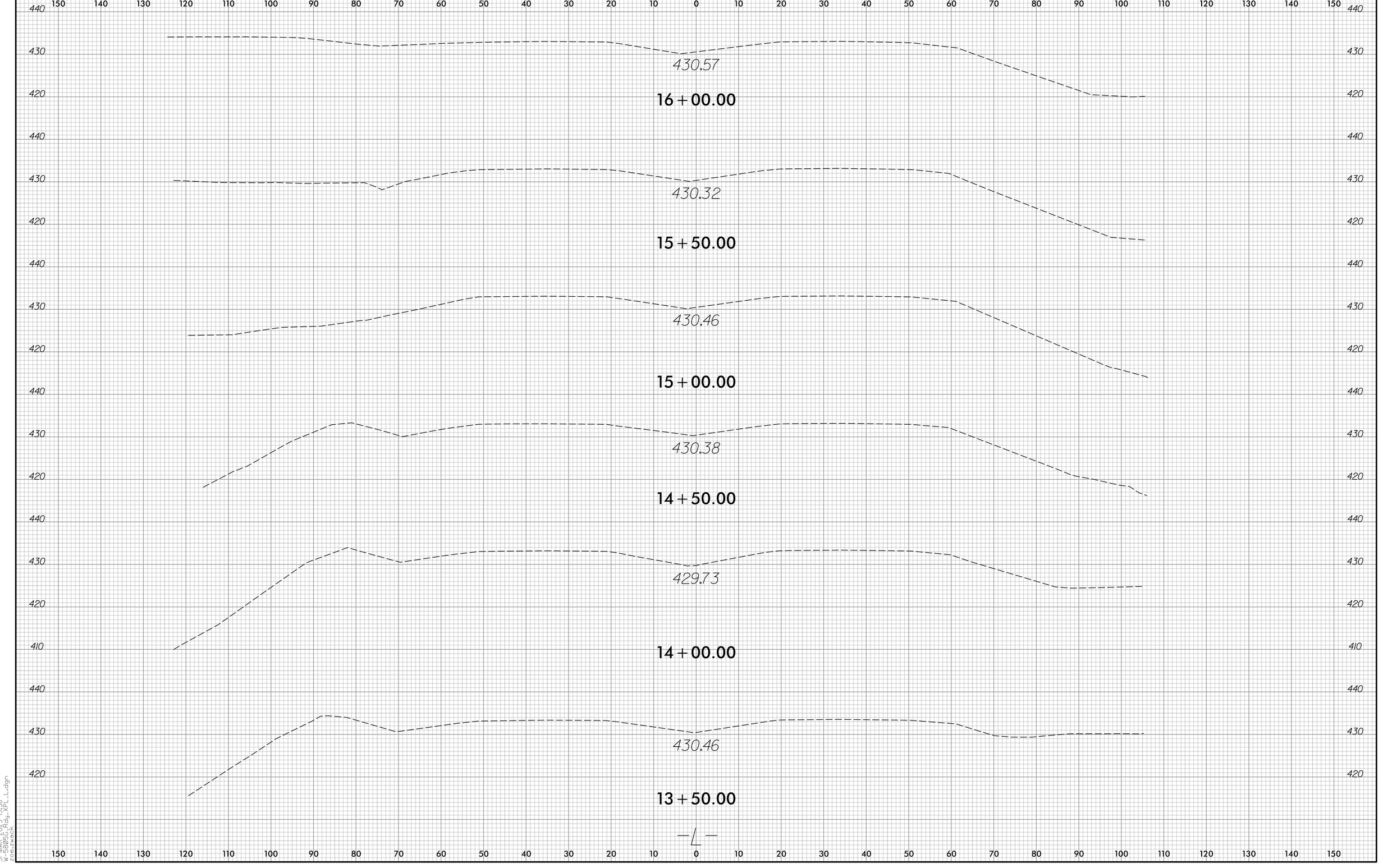
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31-MAR-2025 13:58
W-5805G_Rdy_XPL_L.dgn
zoe.zwack

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NC FIRM LICENSE No: P-0339
320 Executive Ct.
Hillsborough, NC 27278
(919) 732-3883
(919) 732-6676 (FAX)

0 5 10

PROJ. REFERENCE NO.	SHEET NO.
W-5805G	X-3



31-MAR-2025 13:58
W-5805G_Rdy_XPL_L.dgn
zoe.zwack

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SUMMIT DESIGN AND ENGINEERING SERVICES
NC FIRM LICENSE No: P-0339
320 Executive Ct.
Hillsborough, NC 27278
(919) 732-3883
(919) 732-6676 (FAX)

0 5 10

PROJ. REFERENCE NO.	SHEET NO.
W-5805G	X-4

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

450
440
430

429.89
19+00.00

450
440
430

429.94
18+50.00

450
440
430

430.34
18+00.00

450
440
430

430.07
17+50.00

440
430

430.49
17+00.00

440
430

430.44
16+50.00

—L—

31-MAR-2025 13:58
W-5805G_Proj_XPL_L.dgn
zoe.zwack

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PROJ. REFERENCE NO.	SHEET NO.
W-5805G	X-5

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

450
440
430

427.88
21+50.00

428.48
21+00.00

DRIVEWAY
-L- STA. 20+75
5%
16%
25%

428.87
20+50.00

429.15
20+00.00

429.49
19+50.00

-L-

31-MAR-2025 13:58
W-5805G_Dig_XPL_L.dgn
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0 5 10

PROJ. REFERENCE NO.	SHEET NO.
W-5805G	X-6

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

440
430
450

EX.
6:1
425.87
24+00.00
EX.
6:1
4:1
2:1
423.42

440
430
450

EX.
6:1
426.08
23+50.00
EX.
6:1
4:1
2:1
423.87

440
430
450

EX.
6:1
426.94
23+00.00
EX.
6:1
4:1
2:1
424.32

440
430
450

EX.
EX.
427.47
22+50.00
EX.
6:1
4:1
2:1
424.79

440
430
450

428.40
22+00.00
—L—

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

31-MAR-2025 13:58
W-5805G_Cty_XFL_L.dgn
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0 5 10

PROJ. REFERENCE NO.	SHEET NO.
W-5805G	X-6

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

440
430
450

EX.
6:1
425.87
24+00.00
EX.
6:1
4:1
2:1
423.42

440
430
450

EX.
6:1
426.08
23+50.00
EX.
6:1
4:1
2:1
423.87

440
430
450

EX.
6:1
426.94
23+00.00
EX.
6:1
4:1
2:1
424.32

440
430
450

EX.
EX.
427.47
22+50.00
EX.
6:1
4:1
2:1
424.79

440
430
450

428.40
22+00.00
—L—

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

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0 5 10

PROJ. REFERENCE NO.	SHEET NO.
W-5805G	X-7

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

430
420

EX. 6:1 6:1 EX.

422.11

27+00.00

430
420

EX. 6:1 6:1 EX.

423.08

26+50.00

430
420

EX. 6:1 6:1 EX.

422.46

26+00.00

430
420

EX. 6:1 6:1 EX.

423.74

25+50.00

440
430
420

EX. 6:1

424.40

25+00.00

440
430
420

EX. 6:1 6:1 2:1 4:1

422.97

425.22

24+50.00

31-MAR-2025 13:58
W-5805G_Rdy_XP_L_dgn
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0 5 10

PROJ. REFERENCE NO.	SHEET NO.
W-5805G	X-10

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

420
410
400
430

EX. 6:1 6:1 EX.

402.07
35+50.00

420
410
400
430

EX. 6:1

403.50
35+00.00

420
410
400
430

EX. 6:1

405.25
34+50.00

420
410
400
430

EX. 6:1

406.75
34+00.00

420
410
400
430

EX. 6:1

408.24
33+50.00

—L—

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

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0 5 10

PROJ. REFERENCE NO.	SHEET NO.
W-5805G	X-11

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

410
400
390

6:1 EX.

394.29
38+50.00

410
400

6:1 EX.

396.30
38+00.00

410
400

6:1 EX.

396.80
37+50.00

410
400
420

6:1 EX.

398.62
37+00.00

410
400

EX. 6:1 6:1 EX.

399.65
36+50.00

420
410
400

EX. 6:1 6:1 EX.

400.98
36+00.00

—L—

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

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0 5 10

PROJ. REFERENCE NO.	SHEET NO.
W-5805G	X-12

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

400
390
380
370

EX.
3:1
3:1
380.45
EX.
387.79

41+00.00

400
390
380

EX.
3:1
3:1
383.95
6:1
EX.
388.89

40+50.00

400
390
380

EX.
3:1
3:1
387.45
6:1
EX.
390.17

40+00.00

400
390

EX.
3:1
6:1
EX.
391.54

39+50.00

400
390

6:1
EX.
392.84

39+00.00

—L—

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

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W-5805G_Rdy_XPL_L.dgn
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0 5 10

PROJ. REFERENCE NO.	SHEET NO.
W-5805G	X-13

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

400
390
380
370

END PROJECT –L– STA 42+50.00

384.11

42+50.00

385.08

42+00.00

EX.

386.59

41+50.00

–L–

4:1
3:1
369.60

4:1
3:1
375.03

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

31-MAR-2025 13:59
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0 2.5 5

PROJ. REFERENCE NO.	SHEET NO.
W-5805G	X-14

75 70 65 60 55 50 45 40 35 30 25 20 15 10 5 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75

420
415

3:1
EX.

414.44
15+00.00

420
415

415.77
14+50.00

420
415

415.78
14+00.00

420
415

416.45
13+50.00

420
415

3:1
EX.

417.51
13+00.00

425
420
415

BEGIN CONSTRUCTION –Y– STA 12+61.92

417.63
12+50.00

–Y–

75 70 65 60 55 50 45 40 35 30 25 20 15 10 5 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75

31-MAR-2025 13:59
W-5805G_Rdy_XPL_Y.dgn
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0 2.5 5

PROJ. REFERENCE NO.	SHEET NO.
W-5805G	X-15

75 70 65 60 55 50 45 40 35 30 25 20 15 10 5 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75

420
415
410

END CONSTRUCTION –Y– STA 16+00.00

410.61
16+00.00

420
415
410

3:1
EX.

412.70
15+50.00

–Y–

75 70 65 60 55 50 45 40 35 30 25 20 15 10 5 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75

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W-5805G_Rdy_XPL_Y.dgn
zoe.zwack

STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	W-5805G	1	7

REFERENCE: W-5805G

PROJECT: 48950

CONTENTS

PLAN	LOGS
4	5-6

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
GEOTECHNICAL ENGINEERING UNIT

ROADWAY SUBSURFACE INVESTIGATION

COUNTY VANCE

PROJECT DESCRIPTION US 1 AT SR 1113 (LAKE LODGE ROAD) INTERSECTION

INVENTORY

CAUTION NOTICE

THE SUBSURFACE INFORMATION AND THE SUBSURFACE INVESTIGATION ON WHICH IT IS BASED WERE MADE FOR THE PURPOSE OF STUDY, PLANNING AND DESIGN, AND NOT FOR CONSTRUCTION OR PAY PURPOSES. THE VARIOUS FIELD BORING LOGS, ROCK CORES AND SOIL TEST DATA AVAILABLE MAY BE REVIEWED OR INSPECTED IN RALEIGH BY CONTACTING THE N. C. DEPARTMENT OF TRANSPORTATION, GEOTECHNICAL ENGINEERING UNIT AT (919) 707-6850. THE SUBSURFACE PLANS AND REPORTS, FIELD BORING LOGS, ROCK CORES AND SOIL TEST DATA ARE NOT PART OF THE CONTRACT.

GENERAL SOIL AND ROCK STRATA DESCRIPTIONS AND INDICATED BOUNDARIES ARE BASED ON A GEOTECHNICAL INTERPRETATION OF ALL AVAILABLE SUBSURFACE DATA AND MAY NOT NECESSARILY REFLECT THE ACTUAL SUBSURFACE CONDITIONS BETWEEN BORINGS OR BETWEEN SAMPLED STRATA WITHIN THE BOREHOLE. THE LABORATORY SAMPLE DATA AND THE IN SITU (IN-PLACE) TEST DATA CAN BE RELIED ON ONLY TO THE DEGREE OF RELIABILITY INHERENT IN THE STANDARD TEST METHOD. THE OBSERVED WATER LEVELS OR SOIL MOISTURE CONDITIONS INDICATED IN THE SUBSURFACE INVESTIGATIONS ARE AS RECORDED AT THE TIME OF THE INVESTIGATION. THESE WATER LEVELS OR SOIL MOISTURE CONDITIONS MAY VARY CONSIDERABLY WITH TIME ACCORDING TO CLIMATIC CONDITIONS INCLUDING TEMPERATURES, PRECIPITATION AND WIND, AS WELL AS OTHER NON-CLIMATIC FACTORS.

THE BIDDER OR CONTRACTOR IS CAUTIONED THAT DETAILS SHOWN ON THE SUBSURFACE PLANS ARE PRELIMINARY ONLY AND IN MANY CASES THE FINAL DESIGN DETAILS ARE DIFFERENT. FOR BIDDING AND CONSTRUCTION PURPOSES, REFER TO THE CONSTRUCTION PLANS AND DOCUMENTS FOR FINAL DESIGN INFORMATION ON THIS PROJECT. THE DEPARTMENT DOES NOT WARRANT OR GUARANTEE THE SUFFICIENCY OR ACCURACY OF THE INVESTIGATION MADE, NOR THE INTERPRETATIONS MADE, OR OPINION OF THE DEPARTMENT AS TO THE TYPE OF MATERIALS AND CONDITIONS TO BE ENCOUNTERED. THE BIDDER OR CONTRACTOR IS CAUTIONED TO PERFORM INDEPENDENT SUBSURFACE INVESTIGATIONS AND MAKE INTERPRETATIONS AS NECESSARY TO CONFIRM CONDITIONS ENCOUNTERED ON THE PROJECT. THE CONTRACTOR SHALL HAVE NO CLAIM FOR ADDITIONAL COMPENSATION OR FOR AN EXTENSION OF TIME FOR ANY REASON RESULTING FROM THE ACTUAL CONDITIONS ENCOUNTERED AT THE SITE DIFFERING FROM THOSE INDICATED IN THE SUBSURFACE INFORMATION.

NOTES:
1. THE INFORMATION CONTAINED HEREIN IS NOT IMPLIED OR GUARANTEED BY THE N. C. DEPARTMENT OF TRANSPORTATION AS ACCURATE NOR IS IT CONSIDERED PART OF THE PLANS, SPECIFICATIONS OR CONTRACT FOR THE PROJECT.
2. BY HAVING REQUESTED THIS INFORMATION, THE CONTRACTOR SPECIFICALLY WAIVES ANY CLAIMS FOR INCREASED COMPENSATION OR EXTENSION OF TIME BASED ON DIFFERENCES BETWEEN THE CONDITIONS INDICATED HEREIN AND THE ACTUAL CONDITIONS AT THE PROJECT SITE.

PERSONNEL

A. N. JONES

N. O. MOORE

INVESTIGATED BY A. N. JONES

DRAWN BY A. N. JONES

CHECKED BY N. T. ROBERSON

SUBMITTED BY N. T. ROBERSON

DATE JULY 2023

NORTH CAROLINA LICENSED SEAL 2730 GEOLOGIST ALEXANDRIA NICOLE JONES

DocuSigned by:
Alexandria Jones 08/08/2023
4349EF40DD60478...
SIGNATURE DATE

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

PROJECT REFERENCE NO.	SHEET NO.
W-5805G	2

NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
GEOTECHNICAL ENGINEERING UNIT

SUBSURFACE INVESTIGATION

SOIL AND ROCK LEGEND, TERMS, SYMBOLS, AND ABBREVIATIONS

SOIL DESCRIPTION

SOIL IS CONSIDERED UNCONSOLIDATED, SEMI-CONSOLIDATED, OR WEATHERED EARTH MATERIALS THAT CAN BE PENETRATED WITH A CONTINUOUS FLIGHT POWER AUGER AND YIELD LESS THAN 100 BLOWS PER FOOT ACCORDING TO THE STANDARD PENETRATION TEST (AASHTO T 206, ASTM D1586). SOIL CLASSIFICATION IS BASED ON THE AASHTO SYSTEM. BASIC DESCRIPTIONS GENERALLY INCLUDE THE FOLLOWING: CONSISTENCY, COLOR, TEXTURE, MOISTURE, AASHTO CLASSIFICATION, AND OTHER PERTINENT FACTORS SUCH AS MINERALOGICAL COMPOSITION, ANGULARITY, STRUCTURE, PLASTICITY, ETC. FOR EXAMPLE,
VERY STIFF, GRAY, SILTY CLAY, MOIST WITH INTERBEDDED FINE SAND LAYERS, HIGHLY PLASTIC, A-7-6

SOIL LEGEND AND AASHTO CLASSIFICATION

GENERAL CLASS.	GRANULAR MATERIALS (≤ 35% PASSING #200)							SILT-CLAY MATERIALS (> 35% PASSING #200)				ORGANIC MATERIALS		
GROUP CLASS.	A-1		A-3	A-2				A-4	A-5	A-6	A-7	A-1, A-2 A-3	A-4, A-5 A-6, A-7	
	A-1-a	A-1-b		A-2-4	A-2-5	A-2-6	A-2-7				A-7-5, A-7-6			
SYMBOL														
% PASSING #10 #40 #200	50 MX 30 MX 15 MX		50 MX 25 MX	51 MN 10 MX	35 MX	35 MX	35 MX	35 MX	36 MN	36 MN	36 MN	36 MN	GRANULAR SOILS	SILT-CLAY SOILS	MUCK, PEAT
MATERIAL PASSING #40 LL PI	— 6 MX			— NP	40 MX 10 MX	41 MN 10 MX	40 MX 11 MN	41 MN 11 MN	40 MX 10 MX	41 MN 10 MX	40 MX 11 MN	41 MN 11 MN	SOILS WITH LITTLE OR MODERATE AMOUNTS OF ORGANIC MATTER		HIGHLY ORGANIC SOILS
GROUP INDEX	0			0	0		4 MX		8 MX	12 MX	16 MX	NO MX			
USUAL TYPES OF MAJOR MATERIALS	STONE FRAGS. GRAVEL, AND SAND		FINE SAND	SILTY OR CLAYEY GRAVEL AND SAND					SILTY SOILS		CLAYEY SOILS				
GEN. RATING AS SUBGRADE	EXCELLENT TO GOOD								FAIR TO POOR				FAIR TO POOR	POOR	UNSUITABLE

PI OF A-7-5 SUBGROUP IS ≤ LL - 30 ; PI OF A-7-6 SUBGROUP IS > LL - 30

CONSISTENCY OR DENSENESS

PRIMARY SOIL TYPE	COMPACTNESS OR CONSISTENCY	RANGE OF STANDARD PENETRATION RESISTENCE (N-VALUE)	RANGE OF UNCONFINED COMPRESSIVE STRENGTH ($TONS/FT^2$)
GENERALLY GRANULAR MATERIAL (NON-COHESIVE)	VERY LOOSE LOOSE MEDIUM DENSE DENSE VERY DENSE	< 4 4 TO 10 10 TO 30 30 TO 50 > 50	N/A
GENERALLY SILT-CLAY MATERIAL (COHESIVE)	VERY SOFT SOFT MEDIUM STIFF STIFF VERY STIFF HARD	< 2 2 TO 4 4 TO 8 8 TO 15 15 TO 30 > 30	< 0.25 0.25 TO 0.5 0.5 TO 1.0 1 TO 2 2 TO 4 > 4

TEXTURE OR GRAIN SIZE

U.S. STD. SIEVE SIZE	4	10	40	60	200	270
OPENING (MM)	4.76	2.00	0.42	0.25	0.075	0.053

BOULDER (BLDR.)	COBBLE (COB.)	GRAVEL (GR.)	COARSE SAND (CSE. SD.)	FINE SAND (F SD.)	SILT (SL.)	CLAY (CL.)

GRAIN SIZE	MM	305	75	2.0	0.25	0.05	0.005
	IN.	12	3				

SOIL MOISTURE - CORRELATION OF TERMS

SOIL MOISTURE SCALE (ATTERBERG LIMITS)	FIELD MOISTURE DESCRIPTION	GUIDE FOR FIELD MOISTURE DESCRIPTION
	- SATURATED - (SAT.)	USUALLY LIQUID; VERY WET, USUALLY FROM BELOW THE GROUND WATER TABLE
LL — LIQUID LIMIT		
PLASTIC RANGE (PI)	- WET - (W)	SEMISOLID; REQUIRES DRYING TO ATTAIN OPTIMUM MOISTURE
PL — PLASTIC LIMIT		
OM — OPTIMUM MOISTURE SL — SHRINKAGE LIMIT	- MOIST - (M)	SOLID; AT OR NEAR OPTIMUM MOISTURE
	- DRY - (D)	REQUIRES ADDITIONAL WATER TO ATTAIN OPTIMUM MOISTURE

PLASTICITY

	PLASTICITY INDEX (PI)	DRY STRENGTH
NON PLASTIC	0-5	VERY LOW
SLIGHTLY PLASTIC	6-15	SLIGHT
MODERATELY PLASTIC	16-25	MEDIUM
HIGHLY PLASTIC	26 OR MORE	HIGH

COLOR

DESCRIPTIONS MAY INCLUDE COLOR OR COLOR COMBINATIONS (TAN, RED, YELLOW-BROWN, BLUE-GRAY). MODIFIERS SUCH AS LIGHT, DARK, STREAKED, ETC. ARE USED TO DESCRIBE APPEARANCE.

GRADATION

WELL GRADED - INDICATES A GOOD REPRESENTATION OF PARTICLE SIZES FROM FINE TO COARSE.
UNIFORMLY GRADED - INDICATES THAT SOIL PARTICLES ARE ALL APPROXIMATELY THE SAME SIZE.
GAP-GRADED - INDICATES A MIXTURE OF UNIFORM PARTICLE SIZES OF TWO OR MORE SIZES.

ANGULARITY OF GRAINS

THE ANGULARITY OR ROUNDNESS OF SOIL GRAINS IS DESIGNATED BY THE TERMS: ANGULAR, SUBANGULAR, SUBROUNDED, OR ROUNDED.

MINERALOGICAL COMPOSITION

MINERAL NAMES SUCH AS QUARTZ, FELDSPAR, MICA, TALC, KAOLIN, ETC. ARE USED IN DESCRIPTIONS WHEN THEY ARE CONSIDERED OF SIGNIFICANCE.

COMPRESSIBILITY

SLIGHTLY COMPRESSIBLE	LL < 31
MODERATELY COMPRESSIBLE	LL = 31 - 50
HIGHLY COMPRESSIBLE	LL > 50

PERCENTAGE OF MATERIAL

ORGANIC MATERIAL	GRANULAR SOILS	SILT - CLAY SOILS	OTHER MATERIAL	
TRACE OF ORGANIC MATTER	2 - 3%	3 - 5%	TRACE	1 - 10%
LITTLE ORGANIC MATTER	3 - 5%	5 - 12%	LITTLE	10 - 20%
MODERATELY ORGANIC	5 - 10%	12 - 20%	SOME	20 - 35%
HIGHLY ORGANIC	> 10%	> 20%	HIGHLY	35% AND ABOVE

GROUND WATER

- WATER LEVEL IN BORE HOLE IMMEDIATELY AFTER DRILLING
- STATIC WATER LEVEL AFTER 24 HOURS
- PW — PERCHED WATER, SATURATED ZONE, OR WATER BEARING STRATA
- SPRING OR SEEP

MISCELLANEOUS SYMBOLS

- ROADWAY EMBANKMENT (RE) WITH SOIL DESCRIPTION
- SOIL SYMBOL
- ARTIFICIAL FILL (AF) OTHER THAN ROADWAY EMBANKMENT
- INFERRED SOIL BOUNDARY
- INFERRED ROCK LINE
- ALLUVIAL SOIL BOUNDARY
- 25/025 — DIP & DIP DIRECTION OF ROCK STRUCTURES
- SPT, DPT, DMT, VST, PMT — TEST BORING
- AUGER BORING
- CORE BORING
- MW — MONITORING WELL
- PIEZOMETER INSTALLATION
- SLOPE INDICATOR INSTALLATION
- CONE PENETROMETER TEST
- SOUNDING ROD
- TEST BORING WITH CORE
- SPT N-VALUE

RECOMMENDATION SYMBOLS

- UNDERCUT
- SHALLOW UNDERCUT
- UNCLASSIFIED EXCAVATION - UNSUITABLE WASTE
- UNCLASSIFIED EXCAVATION - ACCEPTABLE DEGRADABLE ROCK
- UNCLASSIFIED EXCAVATION - ACCEPTABLE, BUT NOT TO BE USED IN THE TOP 3 FEET OF EMBANKMENT OR BACKFILL

ABBREVIATIONS

AR - AUGER REFUSAL
BT - BORING TERMINATED
CL. - CLAY
CPT - CONE PENETRATION TEST
CSE. - COARSE
DMT - DILATOMETER TEST
DPT - DYNAMIC PENETRATION TEST
e - VOID RATIO
F - FINE
FOSS. - FOSSILIFEROUS
FRAC. - FRACTURED, FRACTURES
FRAGS. - FRAGMENTS
HI. - HIGHLY
MED. - MEDIUM
MICA. - MICACEOUS
MOD. - MODERATELY
NP - NON PLASTIC
ORG. - ORGANIC
PMT - PRESSUREMETER TEST
SAP. - SAPROLITIC
SD. - SAND, SANDY
SL. - SILT, SILTY
SLI. - SLIGHTLY
TCR - TRICONE REFUSAL
w - MOISTURE CONTENT
V - VERY
VST - VANE SHEAR TEST
WEA. - WEATHERED
γ - UNIT WEIGHT
γ_d - DRY UNIT WEIGHT

SAMPLE ABBREVIATIONS

S - BULK
SS - SPLIT SPOON
ST - SHELBY TUBE
RS - ROCK
RT - RECOMPACTED TRIAXIAL
CBR - CALIFORNIA BEARING RATIO

EQUIPMENT USED ON SUBJECT PROJECT

DRILL UNITS:
- ☐ CME-45C
- ☐ CME-55
- ☐ CME-550
- ☐ VANE SHEAR TEST
- ☐ PORTABLE HOIST
- ☐ _____
- ☐ _____

ADVANCING TOOLS:
- ☐ CLAY BITS
- ☐ 6" CONTINUOUS FLIGHT AUGER
- ☐ 8" HOLLOW AUGERS
- ☐ HARD FACED FINGER BITS
- ☐ TUNG.-CARBIDE INSERTS
- ☐ CASING ☐ W/ ADVANCER
- ☐ TRICONE _____" STEEL TEETH
- ☐ TRICONE _____" TUNG.-CARB.
- ☐ CORE BIT
- ☐ _____

HAMMER TYPE:
- ☐ AUTOMATIC ☐ MANUAL

CORE SIZE:
- ☐ -B _____ ☐ -H _____
- ☐ -N _____

HAND TOOLS:
- ☐ POST HOLE DIGGER
- ☒ HAND AUGER
- ☐ SOUNDING ROD
- ☐ VANE SHEAR TEST
- ☐ _____

ROCK DESCRIPTION

HARD ROCK IS NON-COASTAL PLAIN MATERIAL THAT WOULD YIELD SPT REFUSAL IF TESTED. AN INFERRED ROCK LINE INDICATES THE LEVEL AT WHICH NON-COASTAL PLAIN MATERIAL WOULD YIELD SPT REFUSAL. SPT REFUSAL IS PENETRATION BY A SPLIT SPOON SAMPLER EQUAL TO OR LESS THAN 0.1 FOOT PER 60 BLOWS IN NON-COASTAL PLAIN MATERIAL, THE TRANSITION BETWEEN SOIL AND ROCK IS OFTEN REPRESENTED BY A ZONE OF WEATHERED ROCK.
ROCK MATERIALS ARE TYPICALLY DIVIDED AS FOLLOWS:

WEATHERED ROCK (WR)	NON-COASTAL PLAIN MATERIAL THAT WOULD YIELD SPT N VALUES > 100 BLOWS PER FOOT IF TESTED.
CRYSTALLINE ROCK (CR)	FINE TO COARSE GRAIN IGNEOUS AND METAMORPHIC ROCK THAT WOULD YIELD SPT REFUSAL IF TESTED. ROCK TYPE INCLUDES GRANITE, GNEISS, GABBRO, SCHIST, ETC.
NON-CRYSTALLINE ROCK (NCR)	FINE TO COARSE GRAIN METAMORPHIC AND NON-COASTAL PLAIN SEDIMENTARY ROCK THAT WOULD YEILD SPT REFUSAL IF TESTED. ROCK TYPE INCLUDES PHYLLITE, SLATE, SANDSTONE, ETC.
COASTAL PLAIN SEDIMENTARY ROCK (CP)	COASTAL PLAIN SEDIMENTS CEMENTED INTO ROCK, BUT MAY NOT YIELD SPT REFUSAL. ROCK TYPE INCLUDES LIMESTONE, SANDSTONE, CEMENTED SHELL BEDS, ETC.

WEATHERING

FRESH	ROCK FRESH, CRYSTALS BRIGHT, FEW JOINTS MAY SHOW SLIGHT STAINING. ROCK RINGS UNDER HAMMER IF CRYSTALLINE.
VERY SLIGHT (V SLI.)	ROCK GENERALLY FRESH, JOINTS STAINED, SOME JOINTS MAY SHOW THIN CLAY COATINGS IF OPEN, CRYSTALS ON A BROKEN SPECIMEN FACE SHINE BRIGHTLY. ROCK RINGS UNDER HAMMER BLOWS IF OF A CRYSTALLINE NATURE.
SLIGHT (SLI.)	ROCK GENERALLY FRESH, JOINTS STAINED AND DISCOLORATION EXTENDS INTO ROCK UP TO 1 INCH. OPEN JOINTS MAY CONTAIN CLAY. IN GRANITOID ROCKS SOME OCCASIONAL FELDSPAR CRYSTALS ARE DULL AND DISCOLORED. CRYSTALLINE ROCKS RING UNDER HAMMER BLOWS.
MODERATE (MOD.)	SIGNIFICANT PORTIONS OF ROCK SHOW DISCOLORATION AND WEATHERING EFFECTS. IN GRANITOID ROCKS, MOST FELDSPARS ARE DULL AND DISCOLORED, SOME SHOW CLAY. ROCK HAS DULL SOUND UNDER HAMMER BLOWS AND SHOWS SIGNIFICANT LOSS OF STRENGTH AS COMPARED WITH FRESH ROCK.
MODERATELY SEVERE (MOD. SEV.)	ALL ROCK EXCEPT QUARTZ DISCOLORED OR STAINED. IN GRANITOID ROCKS, ALL FELDSPARS DULL AND DISCOLORED AND A MAJORITY SHOW KAOLINIZATION. ROCK SHOWS SEVERE LOSS OF STRENGTH AND CAN BE EXCAVATED WITH A GEOLOGIST'S PICK. ROCK GIVES "CLUNK" SOUND WHEN STRUCK. *IF TESTED, WOULD YIELD SPT REFUSAL*
SEVERE (SEV.)	ALL ROCK EXCEPT QUARTZ DISCOLORED OR STAINED. ROCK FABRIC CLEAR AND EVIDENT BUT REDUCED IN STRENGTH TO STRONG SOIL. IN GRANITOID ROCKS ALL FELDSPARS ARE KAOLINIZED TO SOME EXTENT. SOME FRAGMENTS OF STRONG ROCK USUALLY REMAIN. *IF TESTED, WOULD YIELD SPT N VALUES > 100 BPF*
VERY SEVERE (V SEV.)	ALL ROCK EXCEPT QUARTZ DISCOLORED OR STAINED. ROCK FABRIC ELEMENTS ARE DISCERNIBLE BUT MASS IS EFFECTIVELY REDUCED TO SOIL STATUS, WITH ONLY FRAGMENTS OF STRONG ROCK REMAINING. SAPROLITE IS AN EXAMPLE OF ROCK WEATHERED TO A DEGREE THAT ONLY MINOR VESTIGES OF ORIGINAL ROCK FABRIC REMAIN. *IF TESTED, WOULD YIELD SPT N VALUES < 100 BPF*
COMPLETE	ROCK REDUCED TO SOIL. ROCK FABRIC NOT DISCERNIBLE, OR DISCERNIBLE ONLY IN SMALL AND SCATTERED CONCENTRATIONS. QUARTZ MAY BE PRESENT AS DIKES OR STRINGERS. SAPROLITE IS ALSO AN EXAMPLE.

ROCK HARDNESS

VERY HARD	CANNOT BE SCRATCHED BY KNIFE OR SHARP PICK. BREAKING OF HAND SPECIMENS REQUIRES SEVERAL HARD BLOWS OF THE GEOLOGIST'S PICK.
HARD	CAN BE SCRATCHED BY KNIFE OR PICK ONLY WITH DIFFICULTY. HARD HAMMER BLOWS REQUIRED TO DETACH HAND SPECIMEN.
MODERATELY HARD	CAN BE SCRATCHED BY KNIFE OR PICK. GOUGES OR GROOVES TO 0.25 INCHES DEEP CAN BE EXCAVATED BY HARD BLOW OF A GEOLOGIST'S PICK. HAND SPECIMENS CAN BE DETACHED BY MODERATE BLOWS.
MEDIUM HARD	CAN BE GROOVED OR GOUGED 0.05 INCHES DEEP BY FIRM PRESSURE OF KNIFE OR PICK POINT. CAN BE EXCAVATED IN SMALL CHIPS TO PEICES 1 INCH MAXIMUM SIZE BY HARD BLOWS OF THE POINT OF A GEOLOGIST'S PICK.
SOFT	CAN BE GROVED OR GOUGED READILY BY KNIFE OR PICK. CAN BE EXCAVATED IN FRAGMENTS FROM CHIPS TO SEVERAL INCHES IN SIZE BY MODERATE BLOWS OF A PICK POINT. SMALL, THIN PIECES CAN BE BROKEN BY FINGER PRESSURE.
VERY SOFT	CAN BE CARVED WITH KNIFE. CAN BE EXCAVATED READILY WITH POINT OF PICK. PIECES 1 INCH OR MORE IN THICKNESS CAN BE BROKEN BY FINGER PRESSURE. CAN BE SCRATCHED READILY BY FINGERNAIL.

FRACTURE SPACING

TERM	SPACING
VERY WIDE	MORE THAN 10 FEET
WIDE	3 TO 10 FEET
MODERATELY CLOSE	1 TO 3 FEET
CLOSE	0.16 TO 1 FOOT
VERY CLOSE	LESS THAN 0.16 FEET

BEDDING

TERM	THICKNESS
VERY THICKLY BEDDED	4 FEET
THICKLY BEDDED	1.5 - 4 FEET
THINLY BEDDED	0.16 - 1.5 FEET
VERY THINLY BEDDED	0.03 - 0.16 FEET
THICKLY LAMINATED	0.008 - 0.03 FEET
THINLY LAMINATED	< 0.008 FEET

INDURATION

FOR SEDIMENTARY ROCKS, INDURATION IS THE HARDENING OF MATERIAL BY CEMENTING, HEAT, PRESSURE, ETC.

FRIABLE	RUBBING WITH FINGER FREES NUMEROUS GRAINS; GENTLE BLOW BY HAMMER DISINTEGRATES SAMPLE.
MODERATELY INDURATED	GRAINS CAN BE SEPARATED FROM SAMPLE WITH STEEL PROBE; BREAKS EASILY WHEN HIT WITH HAMMER.
INDURATED	GRAINS ARE DIFFICULT TO SEPARATE WITH STEEL PROBE; DIFFICULT TO BREAK WITH HAMMER.
EXTREMELY INDURATED	SHARP HAMMER BLOWS REQUIRED TO BREAK SAMPLE; SAMPLE BREAKS ACROSS GRAINS.

TERMS AND DEFINITIONS

ALLUVIUM (ALLUV.) - SOILS THAT HAVE BEEN TRANSPORTED BY WATER.

AQUIFER - A WATER BEARING FORMATION OR STRATA.

ARENACEOUS - APPLIED TO ROCKS THAT HAVE BEEN DERIVED FROM SAND OR THAT CONTAIN SAND.

ARGILLACEOUS - APPLIED TO ALL ROCKS OR SUBSTANCES COMPOSED OF CLAY MINERALS, OR HAVING A NOTABLE PROPORTION OF CLAY IN THEIR COMPOSITION, SUCH AS SHALE, SLATE, ETC.

ARTESIAN - GROUND WATER THAT IS UNDER SUFFICIENT PRESSURE TO RISE ABOVE THE LEVEL AT WHICH IT IS ENCOUNTERED, BUT WHICH DOES NOT NECESSARILY RISE TO OR ABOVE THE GROUND SURFACE.

CALCAREOUS (CALC.) - SOILS THAT CONTAIN APPRECIABLE AMOUNTS OF CALCIUM CARBONATE.

COLLUVIUM - ROCK FRAGMENTS MIXED WITH SOIL DEPOSITED BY GRAVITY ON SLOPE OR AT BOTTOM OF SLOPE.

CORE RECOVERY (REC.) - TOTAL LENGTH OF ALL MATERIAL RECOVERED IN THE CORE BARREL DIVIDED BY TOTAL LENGTH OF CORE RUN AND EXPRESSED AS A PERCENTAGE.

DIKE - A TABULAR BODY OF IGNEOUS ROCK THAT CUTS ACROSS THE STRUCTURE OF ADJACENT ROCKS OR CUTS MASSIVE ROCK.

DIP - THE ANGLE AT WHICH A STRATUM OR ANY PLANAR FEATURE IS INCLINED FROM THE HORIZONTAL.

DIP DIRECTION (DIP AZIMUTH) - THE DIRECTION OR BEARING OF THE HORIZONTAL TRACE OF THE LINE OF DIP, MEASURED CLOCKWISE FROM NORTH.

FAULT - A FRACTURE OR FRACTURE ZONE ALONG WHICH THERE HAS BEEN DISPLACEMENT OF THE SIDES RELATIVE TO ONE ANOTHER PARALLEL TO THE FRACTURE.

FISSILE - A PROPERTY OF SPLITTING ALONG CLOSELY SPACED PARALLEL PLANES.

FLOAT - ROCK FRAGMENTS ON SURFACE NEAR THEIR ORIGINAL POSITION AND DISLODGED FROM PARENT MATERIAL.

FLOOD PLAIN (FP) - LAND BORDERING A STREAM, BUILT OF SEDIMENTS DEPOSITED BY THE STREAM.

FORMATION (FM.) - A MAPPABLE GEOLOGIC UNIT THAT CAN BE RECOGNIZED AND TRACED IN THE FIELD.

JOINT - FRACTURE IN ROCK ALONG WHICH NO APPRECIABLE MOVEMENT HAS OCCURRED.

LEDGE - A SHELF-LIKE RIDGE OR PROJECTION OF ROCK WHOSE THICKNESS IS SMALL COMPARED TO ITS LATERAL EXTENT.

LENS - A BODY OF SOIL OR ROCK THAT THINS OUT IN ONE OR MORE DIRECTIONS.

MOTTLED (MOT.) - IRREGULARLY MARKED WITH SPOTS OF DIFFERENT COLORS. MOTTLING IN SOILS USUALLY INDICATES POOR AERATION AND LACK OF GOOD DRAINAGE.

PERCHED WATER - WATER MAINTAINED ABOVE THE NORMAL GROUND WATER LEVEL BY THE PRESENCE OF AN INTERVENING IMPERVIOUS STRATUM.

RESIDUAL (RES.) SOIL - SOIL FORMED IN PLACE BY THE WEATHERING OF ROCK.

ROCK QUALITY DESIGNATION (RQD) - A MEASURE OF ROCK QUALITY DESCRIBED BY TOTAL LENGTH OF ROCK SEGMENTS EQUAL TO OR GREATER THAN 4 INCHES DIVIDED BY THE TOTAL LENGTH OF CORE RUN AND EXPRESSED AS A PERCENTAGE.

SAPROLITE (SAP.) - RESIDUAL SOIL THAT RETAINS THE RELIC STRUCTURE OR FABRIC OF THE PARENT ROCK.

SILL - AN INTRUSIVE BODY OF IGNEOUS ROCK OF APPROXIMATELY UNIFORM THICKNESS AND RELATIVELY THIN COMPARED WITH ITS LATERAL EXTENT, THAT HAS BEEN EMPLACED PARALLEL TO THE BEDDING OR SCHISTOSITY OF THE INTRUDED ROCKS.

SLICKENSIDE - POLISHED AND STRIATED SURFACE THAT RESULTS FROM FRICTION ALONG A FAULT OR SLIP PLANE.

STANDARD PENETRATION TEST (PENETRATION RESISTANCE) (SPT) - NUMBER OF BLOWS (N OR BPF) OF A 140 LB. HAMMER FALLING 30 INCHES REQUIRED TO PRODUCE A PENETRATION OF 1 FOOT INTO SOIL WITH A 2 INCH OUTSIDE DIAMETER SPLIT SPOON SAMPLER. SPT REFUSAL IS PENETRATION EQUAL TO OR LESS THAN 0.1 FOOT PER 60 BLOWS.

STRATA CORE RECOVERY (SREC.) - TOTAL LENGTH OF STRATA MATERIAL RECOVERED DIVIDED BY TOTAL LENGTH OF STRATUM AND EXPRESSED AS A PERCENTAGE.

STRATA ROCK QUALITY DESIGNATION (SRQD) - A MEASURE OF ROCK QUALITY DESCRIBED BY TOTAL LENGTH OF ROCK SEGMENTS WITHIN A STRATUM EQUAL TO OR GREATER THAN 4 INCHES DIVIDED BY THE TOTAL LENGTH OF STRATA AND EXPRESSED AS A PERCENTAGE.

TOPSOIL (TS.) - SURFACE SOILS USUALLY CONTAINING ORGANIC MATTER.

BENCH MARK: N/A

ELEVATION: N/A FEET

NOTES:

BOREHOLE ELEVATIONS TAKEN FROM w5805_ls_tin.tin FILE DATED 04/24/2023.

DATE: 8-15-14

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION

ROY COOPER
GOVERNOR

J. ERIC BOYETTE
SECRETARY

July 25, 2023

STATE PROJECT: 48950.1.8 (W-5805G)
FEDERAL PROJECT: N/A
COUNTY: VANCE

DESCRIPTION: US 1 AT SR 1113 (LAKE LODGE ROAD) INTERSECTION

SUBJECT: Geotechnical Report – Inventory

The Geotechnical Engineering Unit has completed a subsurface investigation for this project and presents the following inventory.

Project Description

This project consists of creating a superstreet intersection at us 1 and SR 1113 (Lake Lodge Road).

A geotechnical investigation was conducted during June of 2023. Four hand auger borings were performed by the Geotechnical Engineering Unit. Representative soil samples were collected for visual classification in the field and selected samples were submitted for laboratory analysis by the Materials and Tests Unit.

The alignment, totaling 0.378 miles, was investigated.

Physiography and Geology

The project is located approximately 4 miles south of Henderson city limits and within the intrusive suite of the Eastern Slate Belt of North Carolina. Residual soils in this area are derived from the underlying granitic rock. The topography is rolling hills. The widening project consists of a mixture of residential and wooded areas.

Soils Properties

Soils encountered during this investigation are Roadway Embankment and Residual.

Roadway Embankment soils are found throughout the project area. These soils primarily consist of tan, orange, gray, and brown, moist, soft to medium stiff, silty clay (A-7) and loose to medium dense, coarse sand and silty sand (A-1-b, A-2-4). The sample results for this soil yielded plastic indices of less than 19.

Residual soils are found throughout the entire project. These soils primarily consist of tan, gray, and brown, moist, soft to medium stiff, silty clay (A-7) and loose to medium dense, saprolitic, silty sand (A-2-4). The sample results for this soil yielded plastic indices of less than 16.

Groundwater

Groundwater measurements were taken during June of 2023 during average rainfall conditions. Groundwater was not present in any borings and is not expected to cause any problems during construction.

Mailing Address:
NC DEPARTMENT OF TRANSPORTATION
GEOTECHNICAL ENGINEERING UNIT
1589 MAIL SERVICE CENTER
RALEIGH NC 27699-1589

Telephone: 984-920-8900
Customer Service: 1-877-368-4968

Website: www.ncdot.gov

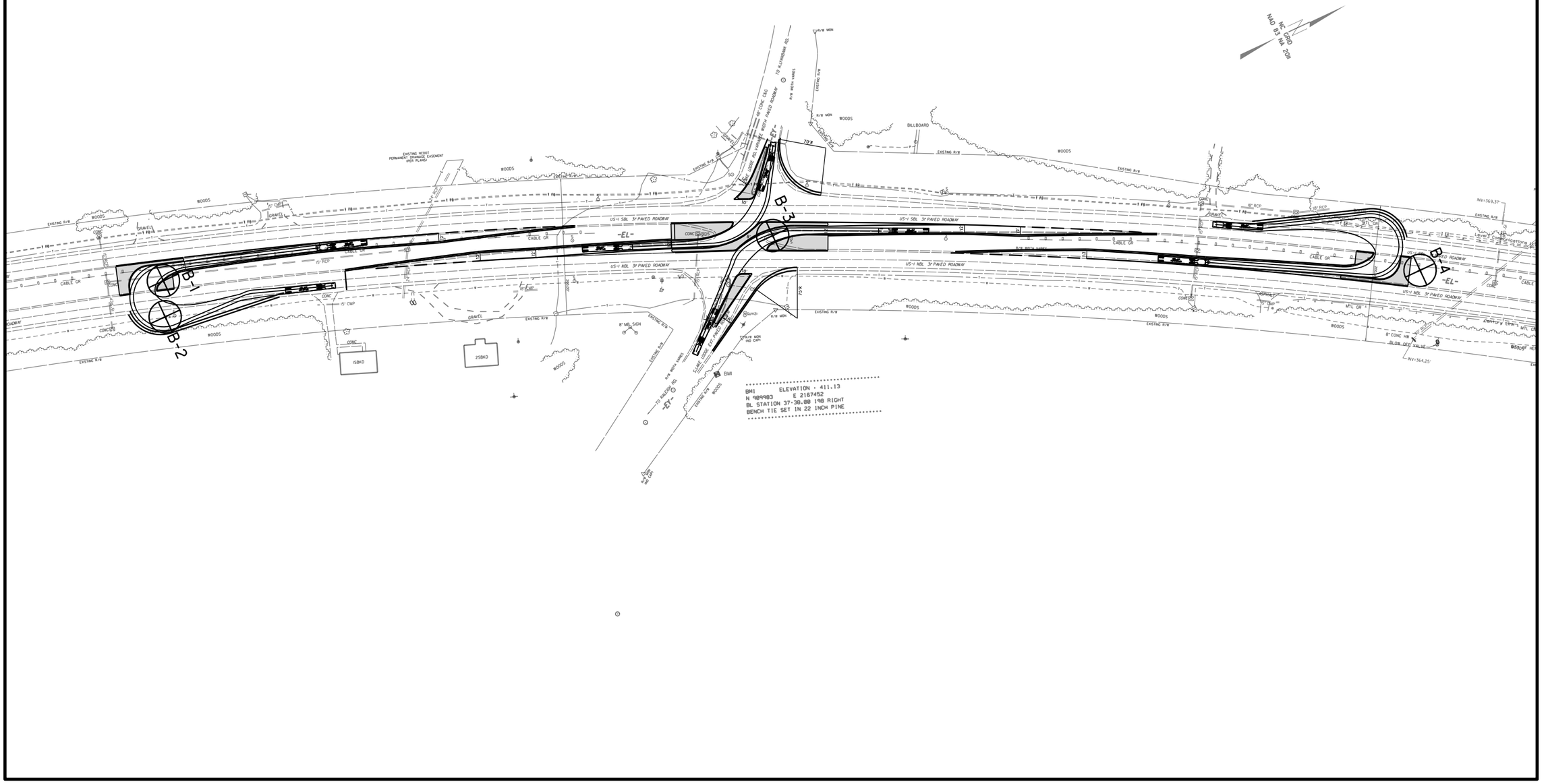
Location:
3301 JONES SAUSAGE RD. SUITE 100
GARNER, NC 27529

PROJECT REFERENCE NO.	SHEET NO.
W-5805G	4

SITE PLAN

0 150 300

FEET



GEOTECHNICAL BORING REPORT
BORE LOG

WBS 48950.1.8	**TIP** W-5805G	**COUNTY** VANCE	**GEOLOGIST** Jones, A. N.	
SITE DESCRIPTION US 1 AT SR 1113 (LAKE LODGE ROAD) INTERSECTION				**GROUND WTR (ft)**
BORING NO. B-1	**STATION** N/A	**OFFSET** N/A	**ALIGNMENT** N/A	**0 HR.** Dry
COLLAR ELEV. 428.3 ft	**TOTAL DEPTH** 3.2 ft	**NORTHING** 909,304	**EASTING** 2,166,984	**24 HR.** Dry
DRILL RIG/HAMMER EFF./DATE N/A		**DRILL METHOD** Hand Auger		**HAMMER TYPE** Automatic
DRILLER Moore, N. O.	**START DATE** 05/22/23	**COMP. DATE** 05/22/23	**SURFACE WATER DEPTH** N/A	

ELEV (ft)	DRIVE ELEV (ft)	DEPTH (ft)	BLOW COUNT 0.5ft	0.5ft	0.5ft	BLOWS PER FOOT 0 25 50 75 100	SAMP. NO.	MOI	LOG	SOIL AND ROCK DESCRIPTION	ELEV. (ft)	DEPTH (ft)
430										GROUND SURFACE	428.3	0.0
							S-4	M		**ROADWAY EMBANKMENT** ORANGE-TAN, SOFT TO MEDIUM STIFF, SILTY CLAY	425.1	3.2
										Boring Terminated BY AUGER REFUSAL at Elevation 425.1 ft IN ROADWAY EMBANKMENT (SILTY CLAY)		

WBS 48950.1.8	**TIP** W-5805G	**COUNTY** VANCE	**GEOLOGIST** Jones, A. N.	
SITE DESCRIPTION US 1 AT SR 1113 (LAKE LODGE ROAD) INTERSECTION				**GROUND WTR (ft)**
BORING NO. B-2	**STATION** N/A	**OFFSET** N/A	**ALIGNMENT** N/A	**0 HR.** Dry
COLLAR ELEV. 427.9 ft	**TOTAL DEPTH** 5.0 ft	**NORTHING** 909,284	**EASTING** 2,167,033	**24 HR.** Dry
DRILL RIG/HAMMER EFF./DATE N/A		**DRILL METHOD** Hand Auger		**HAMMER TYPE** Automatic
DRILLER Moore, N. O.	**START DATE** 05/22/23	**COMP. DATE** 05/22/23	**SURFACE WATER DEPTH** N/A	

ELEV (ft)	DRIVE ELEV (ft)	DEPTH (ft)	BLOW COUNT 0.5ft	0.5ft	0.5ft	BLOWS PER FOOT 0 25 50 75 100	SAMP. NO.	MOI	LOG	SOIL AND ROCK DESCRIPTION	ELEV. (ft)	DEPTH (ft)
430										GROUND SURFACE	427.9	0.0
							S-5	M		**ROADWAY EMBANKMENT** ORANGE-TAN, LOOSE TO MEDIUM DENSE, SILTY SAND	425.6	2.3
425							S-6	M		**RESIDUAL** TAN-BROWN, SOFT TO MEDIUM STIFF, SAPROLITIC, SILTY CLAY	422.9	5.0
										Boring Terminated at Elevation 422.9 ft IN RESIDUAL (SILTY CLAY)		

NCDOT BORE DOUBLE W5805G_GEO_BH.GPJ NC_DOT.GDT 7/24/23

GEOTECHNICAL BORING REPORT
BORE LOG

WBS 48950.1.8	**TIP** W-5805G	**COUNTY** VANCE	**GEOLOGIST** Jones, A. N.	
SITE DESCRIPTION US 1 AT SR 1113 (LAKE LODGE ROAD) INTERSECTION				**GROUND WTR (ft)**
BORING NO. B-3	**STATION** N/A	**OFFSET** N/A	**ALIGNMENT** N/A	**0 HR.** Dry
COLLAR ELEV. 414.6 ft	**TOTAL DEPTH** 3.0 ft	**NORTHING** 910,143	**EASTING** 2,167,302	**24 HR.** Dry
DRILL RIG/HAMMER EFF./DATE N/A		**DRILL METHOD** Hand Auger		**HAMMER TYPE** Automatic
DRILLER Moore, N. O.	**START DATE** 05/22/23	**COMP. DATE** 05/22/23	**SURFACE WATER DEPTH** N/A	

ELEV (ft)	DRIVE ELEV (ft)	DEPTH (ft)	BLOW COUNT 0.5ft	0.5ft	0.5ft	BLOWS PER FOOT 0 25 50 75 100	SAMP. NO.	MOI	LOG	SOIL AND ROCK DESCRIPTION	ELEV. (ft)	DEPTH (ft)
415											414.6	0.0
							S-1	M		**ROADWAY EMBANKMENT** GRAY-BROWN, MEDIUM DENSE TO DENSE, COARSE SAND WITH TRACE GRAVEL	412.6	2.0
							S-2	M		GRAY-BROWN, LOOSE TO MEDIUM DENSE, SILTY SAND	411.6	3.0
										Boring Terminated BY AUGER REFUSAL at Elevation 411.6 ft IN ROADWAY EMBANKMENT (SILTY SAND)		

WBS 48950.1.8	**TIP** W-5805G	**COUNTY** VANCE	**GEOLOGIST** Jones, A. N.	
SITE DESCRIPTION US 1 AT SR 1113 (LAKE LODGE ROAD) INTERSECTION				**GROUND WTR (ft)**
BORING NO. B-4	**STATION** N/A	**OFFSET** N/A	**ALIGNMENT** N/A	**0 HR.** Dry
COLLAR ELEV. 388.1 ft	**TOTAL DEPTH** 5.0 ft	**NORTHING** 910,983	**EASTING** 2,167,750	**24 HR.** Dry
DRILL RIG/HAMMER EFF./DATE N/A		**DRILL METHOD** Hand Auger		**HAMMER TYPE** Automatic
DRILLER Moore, N. O.	**START DATE** 05/22/23	**COMP. DATE** 05/22/23	**SURFACE WATER DEPTH** N/A	

ELEV (ft)	DRIVE ELEV (ft)	DEPTH (ft)	BLOW COUNT 0.5ft	0.5ft	0.5ft	BLOWS PER FOOT 0 25 50 75 100	SAMP. NO.	MOI	LOG	SOIL AND ROCK DESCRIPTION	ELEV. (ft)	DEPTH (ft)
390											388.1	0.0
							S-3	M		**ROADWAY EMBANKMENT** BROWN, LOOSE TO MEDIUM DENSE, SILTY SAND WITH TRACE GRAVEL		
385											383.1	5.0
										Boring Terminated at Elevation 383.1 ft IN ROADWAY EMBANKMENT (SILTY SAND)		

NCDOT BORE DOUBLE W5805G_GEO_BH.GPJ NC_DOT.GDT 7/24/23

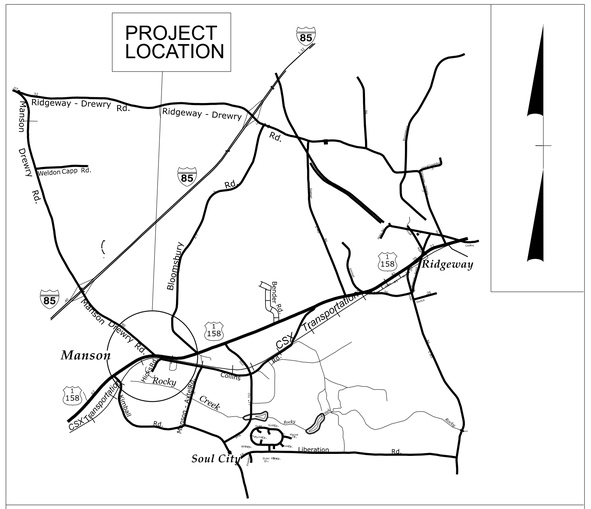
SOIL TEST RESULTS

SAMPLE NO.	BORING NO.	NORTHING	EASTING	DEPTH INTERVAL	AASHTO CLASS.	L.L.	P.I.	% BY WEIGHT				% PASSING (SIEVES)			% MOISTURE	% ORGANIC
								C.SAND	F.SAND	SILT	CLAY	10	40	200		
S-1	B-3	910143	2167302	0.5-1.0	A-1-a(0)	-	NP	45.6	29.3	11.0	14.1	44	30	13	-	-
S-2	B-3	910143	2167302	2.5-3.0	A-2-4(0)	33	10	37.2	24.5	14.2	24.1	80	59	34	-	-
S-3	B-4	910983	2167750	0.5-1.0	A-2-4(0)	29	6	40.2	27.1	14.6	18.1	86	62	32	-	-
S-4	B-1	909304	2166984	1.5-2.0	A-7-6(7)	46	19	31.2	19.3	13.4	36.2	97	74	52	-	-
S-5	B-2	909284	2167033	1.0-1.5	A-2-4(0)	33	2	48.6	24.3	15.0	12.1	100	62	33	-	-
S-6	B-2	909284	2167033	2.5-3.0	A-7-6(3)	44	16	35.8	21.1	21.0	22.1	89	65	43	-	-

09/08/99

TIP PROJECT: HS-2005O

CONTRACT: DE00406



VICINITY MAP (NTS)

See Sheet 1-B for Conventional Symbols

See Sheet 1-A For Index of Sheets

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

WARREN COUNTY

LOCATION: ***US 1–158 AT SR 1237 (MANSON DREWRY ROAD)***

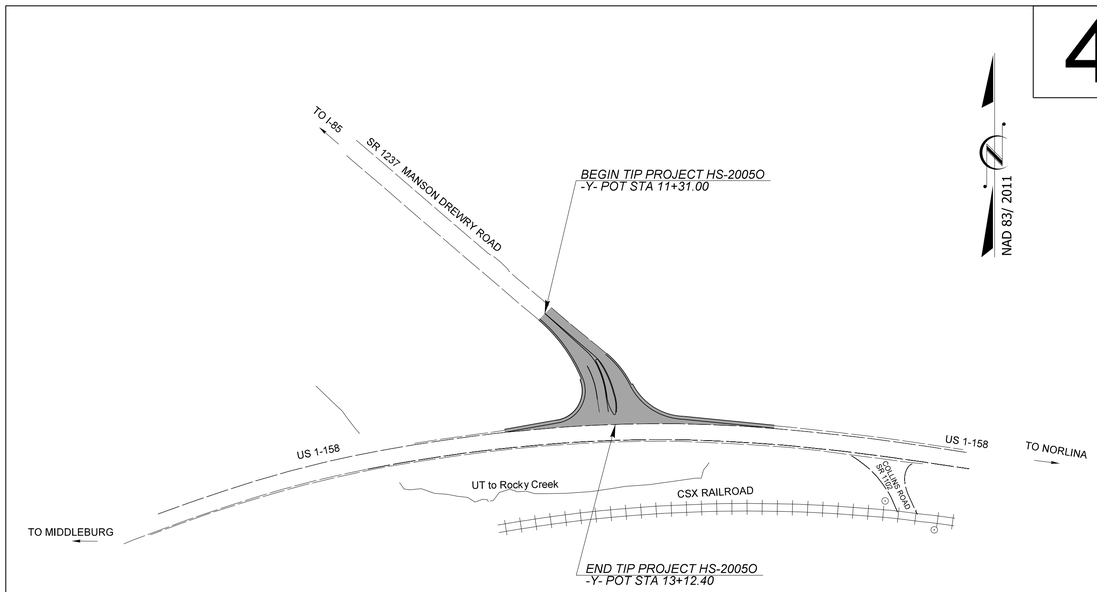
TYPE OF WORK: ***DRAINAGE, GRADING, AND PAVING***

STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	HS-2005O	1	

STATE PROJ. NO.	F. A. PROJ. NO.	DESCRIPTION
49309.1.16	4930901	P E
49309.2.16	4930901	ROW
49309.2.17	4930901	UTILITY
49309.3.16	4930901	CONSTRUCTION



4



NOTE:

NONE OF THIS PROJECT IS WITHIN THE MUNICIPAL BOUNDARIES OF TOWN OR CITY

THIS IS A PARTIAL CONTROLLED ACCESS PROJECT WITH ACCESS LIMITED TO POINTS SHOWN ON THE PLANS.

GRAPHIC SCALES

PLANS: 40 20 0 40 80

PROFILE (HORIZONTAL): 20 10 0 20 40

PROFILE (VERTICAL): 10 5 0 10 20

DESIGN DATA

ADT 2024 = 3,132
ADT 2043 = 4,580
K = 10 %
D = 55 %
T = 4 % *
V = 50 MPH
* TTST =2% DUAL 2%
FUNC CLASS = LOCAL SECONDARY ROAD

PROJECT LENGTH

LENGTH ROADWAY PROJECT HS-2005O = 0.0343 MILES

TOTAL PROJECT HS-2005O = 0.0343 MILES

Prepared in the Office of:
DIVISION OF HIGHWAYS
1000 Birch Ridge Dr., Raleigh NC, 27610

2024 STANDARD SPECIFICATIONS

RIGHT OF WAY DATE: OCTOBER 17, 2024

LETTING DATE: DECEMBER 10, 2025

VICTOR M CHAVEZ, PE
PROJECT ENGINEER

JOHN H. BRAXTON, JR
DS. STIP MANAGER

HYDRAULICS ENGINEER

NORTH CAROLINA PROFESSIONAL SEAL 048034 ENGINEER ERIK F. SEILER

DocuSigned by: Erik Seiler P.E.

SIGNATURE: 914DF6C33CF245D...

ROADWAY DESIGN ENGINEER

11/13/2025

NORTH CAROLINA PROFESSIONAL SEAL 018204 ENGINEER VICTOR M CHAVEZ

DocuSigned by: Victor Chavez P.E.

SIGNATURE: 7CD1F54298E940A...

DIVISION OF HIGHWAYS
STATE OF NORTH CAROLINA
FIFTH DIVISION
BECCA J. GALLAS, P. E.
DIVISION ENGINEER

DIVISION OF HIGHWAYS · STATE OF NORTH CAROLINA · DEPARTMENT OF TRANSPORTATION · DIVISION FIVE DESIGN UNITS

5/26/20

INDEX OF SHEETS

SHEET NUMBER	SHEET
1	TITLE SHEET
1–A	INDEX OF SHEETS, GENERAL NOTES, AND STANDARD DRAWINGS
1– B	CONVENTIONAL SYMBOLS
2A–1	PAVEMENT SCHEDULE AND TYPICAL SECTIONS
2B–1	MONOLITHIC CONCRETE ISLAND DETAIL
2B–2	EXPRESSWAY GUTTER TRANSITION DETAIL
2C–1	STANDARD DRAWING No 300.01 – RIGID PIPE INSTALLATION
3B–1	ROADWAY SUMMARIES (EARTHWORK & MILLING)
3D–1	DRAINAGE SUMMARY
3G–1	GEOTECHNICAL SUMMARIES
4 THRU 5	PLAN AND PROFILE SHEET
R/W 2C–1 THRU R/W 2C–2	SURVEY CONTROL SHEETS
TMP–1 THRU TMP–3	TRANSPORTATION MANAGMENT PLANS
PMP–1 THRU PMP–2	PAVEMENT MARKING PLANS
EC–1 THRU EC–5	EROSION CONTROL PLANS
SIGN–1 THRU SIGN–3	SIGNING PLANS
X–1 THRU X–4	CROSS SECTIONS

EFF. 01–16–2024
REV.

2024 ROADWAY ENGLISH STANDARD DRAWINGS

The following Roadway Standards as appear in "Roadway Standard Drawings" Highway Design Branch – N. C. Department of Transportation – Raleigh, N. C., Dated January 16, 2024 are applicable to this project and by reference hereby are considered a part of these plans:

STD.NO.	TITLE
DIVISION 2 – EARTHWORK	
200.03	Method of Clearing – Method III
225.02	Guide for Grading Subgrade – Secondary and Local
225.04	Method of Obtaining Superelevation – Two Lane Pavement
DIVISION 3 – PIPE CULVERTS	
300.01	Method of Pipe Installation
DIVISION 6 – ASPHALT, BASES, AND PAVEMENTS	
654.01	Pavement Repairs
DIVISION 8 – INCIDENTALS	
806.01	Concrete Right–of–Way Marker
840.00	Concrete Base Pad for Drainage Structures
840.29	Frames and Narrow Slot Flat Grates
840.31	Concrete Junction Box – 12" thru 66" pipe
840.32	Brick Junction Box – 12" thru 66" pipe
840.35	Traffic Bearing Grated Drop Inlet for double frame and grates
840.54	Manhole Frame and Cover
840.72	Pipe Collar
846.01	Concrete Curb, Gutter And Curb & Gutter
846.02	Drop inlet installation in Expressway Gutter
852.01	Concrete Islands
852.06	Method for Placement of Drop Inlets in Concrete Islands

GENERAL NOTES: 2024 SPECIFICATIONS

EFFECTIVE: 01–16–2024
REVISED:

GRADING AND SURFACING OR RESURFACING AND WIDENING:

THE GRADE LINES SHOWN DENOTE THE FINISHED ELEVATION OF THE PROPOSED SURFACING AT CONTROL POINTS SHOWN ON THE TYPICAL SECTIONS. WHERE NO GRADE LINES ARE SHOWN, THE PROFILES SHOWN DENOTE THE TOP ELEVATION OF THE EXISTING PAVEMENT ALONG THE CENTER LINE OF SURVEY ON WHICH THE PROPOSED RESURFACING WILL BE PLACED. GRADE LINES MAY BE ADJUSTED BY THE ENGINEER IN ORDER TO SECURE A PROPER TIE–IN.

CLEARING:

CLEARING ON THIS PROJECT SHALL BE PERFORMED TO THE LIMITS ESTABLISHED BY METHOD III.

SUPERELEVATION:

ALL CURVES ON THIS PROJECT SHALL BE SUPERELEVATED IN ACCORDANCE WITH STD. NO. 225.04 USING THE RATE OF SUPERELEVATION AND RUNOFF SHOWN ON THE PLANS. SUPERELEVATION IS TO BE REVOLVED ABOUT THE CONTROL POINTS SHOWN ON THE TYPICAL SECTIONS.

SUBSURFACE PLANS

NO SUBSURFACE PLANS ARE AVAILABLE ON THIS PROJECT. THE CONTRACTOR SHOULD MAKE HIS OWN INVESTIGATION AS TO THE SUBSURFACE CONDITIONS.

UTILITIES:

UTILITY OWNER ON THIS PROJECT ARE : DISTRIBUTION–DUKE ENERGY, CITY OF HENDERSON, WARREN COUNTY PUBLIC UTILITIES, FRONTIER NATURAL GAS, SPECTRUM, BRIGHTSPEED, LUMEN, AND VERIZON.

ANY RELOCATION OF EXISTING UTILITIES WILL BE ACCOMPLISHED BY OTHERS.

RIGHT–OF–WAY MARKERS:

ALL RIGHT–OF–WAY MARKERS ON THIS PROJECT SHALL BE PLACED BY CONTRACT.

HS-20050
SHEET 1-A
ROADWAY ENGINEER

NORTH CAROLINA PROFESSIONAL SEAL 018204 ENGINEER

1/17/2024
DocuSigned by:
Victor Chavez
7CD15543085040A...

5/26/20

STATE OF NORTH CAROLINA, DIVISION OF HIGHWAYS

CONVENTIONAL PLAN SHEET SYMBOLS

HS-20050 | SHEET 1-B

Note: Not to Scale

BOUNDARIES AND PROPERTY:

- State Line
- County Line
- Township Line
- City Line
- Reservation Line
- Property Line
- Existing Iron Pin (EIP) — EIP
- Computed Property Corner
- Existing Concrete Monument (ECM) — ECM
- Parcel / Sequence Number — 123
- Existing Fence Line
- Proposed Woven Wire Fence
- Proposed Chain Link Fence
- Proposed Barbed Wire Fence
- Existing Wetland Boundary — WLB
- Proposed Wetland Boundary — WLB
- Existing Endangered Animal Boundary — EAB
- Existing Endangered Plant Boundary — EPB
- Existing Historic Property Boundary — HPB
- Known Contamination Area: Soil
- Potential Contamination Area: Soil
- Known Contamination Area: Water
- Potential Contamination Area: Water
- Contaminated Site: Known or Potential

BUILDINGS AND OTHER CULTURE:

- Gas Pump Vent or U/G Tank Cap
- Sign — S
- Well — W
- Small Mine
- Foundation
- Area Outline
- Cemetery
- Building
- School
- Church
- Dam

HYDROLOGY:

- Stream or Body of Water
- Hydro, Pool or Reservoir
- Jurisdictional Stream — JS
- Buffer Zone 1 — BZ 1
- Buffer Zone 2 — BZ 2
- Flow Arrow
- Disappearing Stream
- Spring
- Wetland
- Proposed Lateral, Tail, Head Ditch — FLOW
- False Sump

RAILROADS:

- Standard Gauge — CSX TRANSPORTATION
- RR Signal Milepost — MILEPOST 35
- Switch — SWITCH
- RR Abandoned
- RR Dismantled

RIGHT OF WAY & PROJECT CONTROL:

- Primary Horiz Control Point
- Primary Horiz and Vert Control Point
- Secondary Horiz and Vert Control Point
- Vertical Benchmark
- Existing Right of Way Monument
- Proposed Right of Way Monument (Rebar and Cap)
- Proposed Right of Way Monument (Concrete)
- Existing Permanent Easement Monument
- Proposed Permanent Easement Monument (Rebar and Cap)
- Existing C/A Monument
- Proposed C/A Monument (Rebar and Cap)
- Proposed C/A Monument (Concrete)
- Existing Right of Way Line
- Proposed Right of Way Line — RW
- Existing Control of Access Line — CA
- Proposed Control of Access Line — CA
- Proposed ROW and CA Line — RW CA
- Existing Easement Line — E
- Proposed Temporary Construction Easement — E
- Proposed Temporary Drainage Easement — TDE
- Proposed Permanent Drainage Easement — PDE
- Proposed Permanent Drainage/Utility Easement — DUE
- Proposed Permanent Utility Easement — PUE
- Proposed Temporary Utility Easement — TUE
- Proposed Aerial Utility Easement — AUE

ROADS AND RELATED FEATURES:

- Existing Edge of Pavement
- Existing Curb
- Proposed Slope Stakes Cut — C
- Proposed Slope Stakes Fill — F
- Proposed Curb Ramp — CR
- Existing Metal Guardrail
- Proposed Guardrail
- Existing Cable Guiderail
- Proposed Cable Guiderail
- Equality Symbol
- Pavement Removal

VEGETATION:

- Single Tree
- Single Shrub
- Hedge
- Woods Line
- Orchard
- Vineyard — Vineyard

EXISTING STRUCTURES:

MAJOR:

- Bridge, Tunnel or Box Culvert — CONC
- Bridge Wing Wall, Head Wall and End Wall — CONC WW

MINOR:

- Head and End Wall — CONC HW
- Pipe Culvert
- Footbridge
- Drainage Box: Catch Basin, DI or JB — CB
- Paved Ditch Gutter
- Storm Sewer Manhole — S
- Storm Sewer — S

UTILITIES:

** SUE - Subsurface Utility Engineering*
LOS - Level of Service - A,B,C or D (Accuracy)

POWER:

- Existing Power Pole
- Proposed Power Pole
- Existing Joint Use Pole
- Proposed Joint Use Pole
- Power Manhole — P
- Power Line Tower
- Power Transformer
- U/G Power Cable Hand Hole — HH
- H-Frame Pole
- U/G Power Line Test Hole (SUE - LOS A)*
- U/G Power Line (SUE - LOS B)* — P
- U/G Power Line (SUE - LOS C)* — P
- U/G Power Line (SUE - LOS D)* — P

TELEPHONE:

- Existing Telephone Pole
- Proposed Telephone Pole
- Telephone Manhole — T
- Telephone Pedestal — T
- Telephone Cell Tower
- U/G Telephone Cable Hand Hole — HH
- U/G Telephone Test Hole (SUE - LOS A)*
- U/G Telephone Cable (SUE - LOS B)* — T
- U/G Telephone Cable (SUE - LOS C)* — T
- U/G Telephone Cable (SUE - LOS D)* — T
- U/G Telephone Conduit (SUE - LOS B)* — TC
- U/G Telephone Conduit (SUE - LOS C)* — TC
- U/G Telephone Conduit (SUE - LOS D)* — TC
- U/G Fiber Optics Cable (SUE - LOS B)* — T FO
- U/G Fiber Optics Cable (SUE - LOS C)* — T FO
- U/G Fiber Optics Cable (SUE - LOS D)* — T FO

WATER:

- Water Manhole — W
- Water Meter
- Water Valve
- Water Hydrant
- U/G Water Line Test Hole (SUE - LOS A)*
- U/G Water Line (SUE - LOS B)* — W
- U/G Water Line (SUE - LOS C)* — W
- U/G Water Line (SUE - LOS D)* — W
- Above Ground Water Line — A/G Water

TV:

- TV Pedestal — C
- TV Tower
- U/G TV Cable Hand Hole — HH
- U/G TV Test Hole (SUE - LOS A)*
- U/G TV Cable (SUE - LOS B)* — TV
- U/G TV Cable (SUE - LOS C)* — TV
- U/G TV Cable (SUE - LOS D)* — TV
- U/G Fiber Optic Cable (SUE - LOS B)* — TV FO
- U/G Fiber Optic Cable (SUE - LOS C)* — TV FO
- U/G Fiber Optic Cable (SUE - LOS D)* — TV FO

GAS:

- Gas Valve
- Gas Meter
- U/G Gas Line Test Hole (SUE - LOS A)*
- U/G Gas Line (SUE - LOS B)* — G
- U/G Gas Line (SUE - LOS C)* — G
- U/G Gas Line (SUE - LOS D)* — G
- Above Ground Gas Line — A/G Gas

SANITARY SEWER:

- Sanitary Sewer Manhole
- Sanitary Sewer Cleanout
- U/G Sanitary Sewer Line — SS
- Above Ground Sanitary Sewer — A/G Sanitary Sewer
- SS Force Main Line Test Hole (SUE - LOS A)*
- SS Force Main Line (SUE - LOS B)* — FSS
- SS Force Main Line (SUE - LOS C)* — FSS
- SS Force Main Line (SUE - LOS D)* — FSS

MISCELLANEOUS:

- Utility Pole
- Utility Pole with Base
- Utility Located Object
- Utility Traffic Signal Box — S
- Utility Unknown U/G Line (SUE - LOS B)* — PUTL
- U/G Tank; Water, Gas, Oil
- Underground Storage Tank, Approx. Loc. — UST
- A/G Tank; Water, Gas, Oil
- Geoenvironmental Boring
- Abandoned According to Utility Records — AATUR
- End of Information — E.O.I.

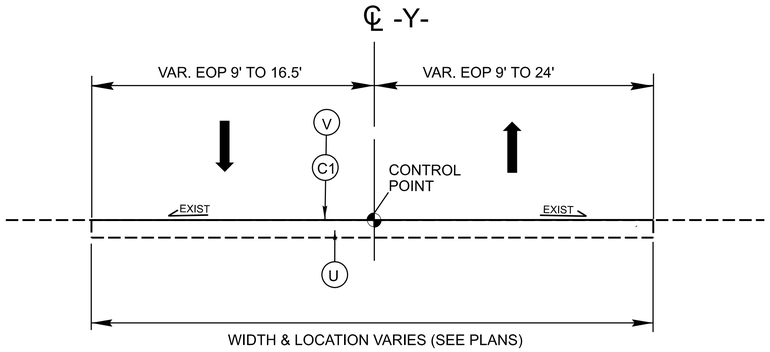
5/26/20

PAVEMENT SCHEDULE

FINAL PAVEMENT DESIGN

C1	PROP. APPROX. 1.5" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5C, AT AN AVERAGE RATE OF 168 LBS. PER SQ. YD.	T	EARTH MATERIAL.
C2	PROP. APPROX. 3" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5C, AT AN AVERAGE RATE OF 168 LBS. PER SQ. YD. IN EACH OF TWO LAYERS	U	EXISTING PAVEMENT.
D1	PROP. APPROX. 4" ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE I19.0C, AT AN AVERAGE RATE OF 456 LBS. PER SQ. YD.	V	MILLING, 1.5" DEPTH
E1	PROP. APPROX. 4.0" ASPHALT CONCRETE BASE COURSE, TYPE B25.0C, AT AN AVERAGE RATE OF 456 LBS. PER SQ. YD.	R	5" MONOLITHIC CONCRETE ISLAND - SURFACE MOUNTED
		R1	7" EXPRESSWAY GUTTER

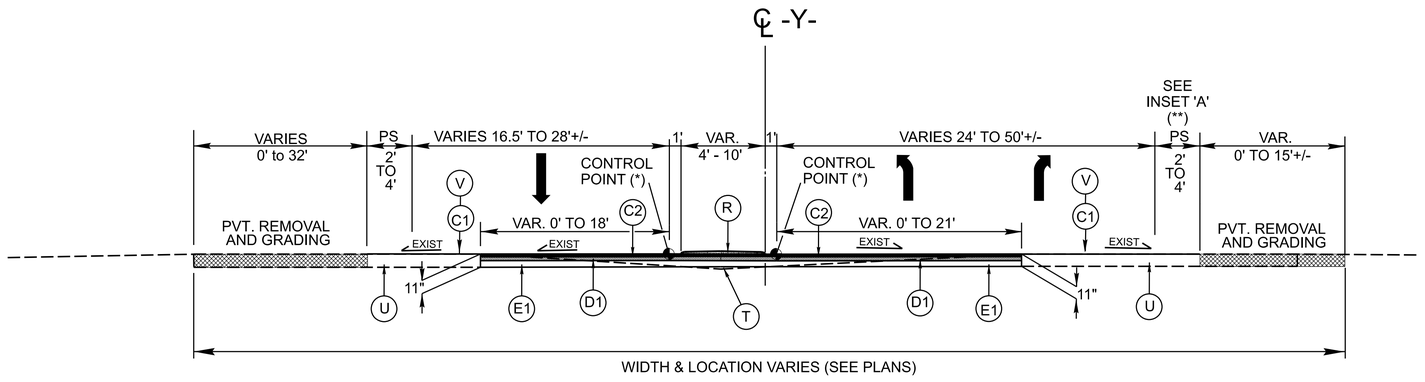
NOTE: PAVEMENT EDGE SLOPES ARE 1:1 UNLESS SHOWN OTHERWISE



TYPICAL SECTION No. 1

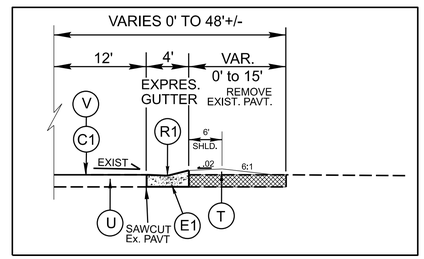
USE TYPICAL SECTION NO. 1

–Y– STA. 11+31.00 TO STA. 12+24.00



TYPICAL SECTION No. 2

(**) USE INSET 'A' IN CONJUNCTION WITH TYPICAL SECTION NO. 2. FOR EXPRESSWAY GUTTER LIMITS



USE TYPICAL SECTION NO. 2

–Y– STA. 12+24.00 TO STA. 13+12.40

(*) = SEE X–SECT. FOR CONTROL POINT ELEV.

HS-20050

SHEET 2A-1

NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
WAKE COUNTY



DIVISION OF HIGHWAYS - 5

ROADWAY DESIGN ENGINEER

NORTH CAROLINA PROFESSIONAL SEAL 018204 ENGINEER VICTOR M CHAVEZ JR

09/18/2025

DocuSigned by:
Victor Chavez
7CD1F54298E940A...

PAVEMENT ENGINEER

NORTH CAROLINA PROFESSIONAL SEAL 018204 ENGINEER VICTOR M CHAVEZ JR

09/18/2025

DocuSigned by:
Victor Chavez
7CD1F54298E940A...

REVISIONS

5" MONO. CONC. ISLAND DETAIL

Scale: 1"= 20'

HS-20050
SHEET| 2B-1

ROADWAY ENGINEER
NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 018204
09/18/2025
Docusigned by: Victor Chavez
7CD1E54298E940A...

NAD 83/ 2011

SR 1237 MANSON DREWRY RD.

-Y- PC 11+90.32

2' PAV. SHLD.

2' R

-Y-

12'

TIE IN

+24.21
4.14' LT. -Y-

5" MONO. CONC. ISLAND

2' PAV. SHLD.

12' 12'

+24

+24.00
0.36' RT. -Y-

1'

1'

125' R

80' R

+35.91
25.3' RT. -Y-

EXPRESSWAY GUTTER (EG)

BEG(EG)
+50 -Y-

205' R

+76.68
5.74' LT. -Y-

+66.46
29.2' LT. -Y-

4' PAV. SHLD.

80' R

12'

-Y- PT 12+68.55

43' R

+75.14
5.09' RT. -Y-

50' R

50' R

+93.00
3.56' LT. -Y-

+98.00
2.00' LT. -Y-

END(EG)
+85 -Y-

70'

+94.45

+94.45
3.09' RT. -Y-

+98.00
2.00' RT. -Y-

+55.19
15.7' LT. -L-

+22.74
16.8' LT. -L-

+85.19

4' PAV. SHLD.

6'

1.5' R

12'

6'

-Y-

-L-

13

US 1 - 158

14

TIE IN

12

US 1 - 158

S 13°32'52.7"E

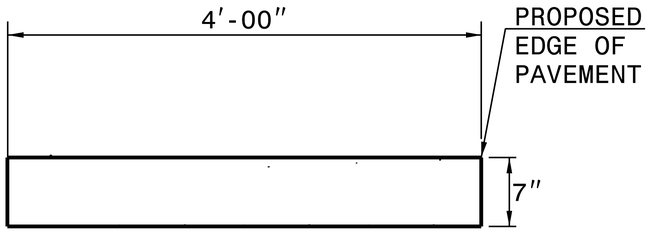
-Y- POT 13+23.14

-L- POC 13+37.64

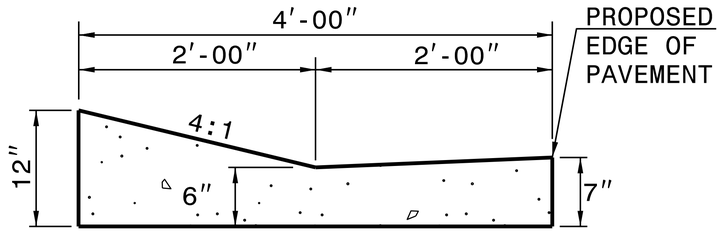
FOR -Y- PLAN VIEW SEE SHEET 4

FOR EXPRESSWAY GUTTER TRANSITION DETAIL SEE SHEET 2B-2

NORTH CAROLINA
Designed By:
Victor Chavez
018204
VICTOR M. CHAVEZ
09/18/2024
Roadway Engineer



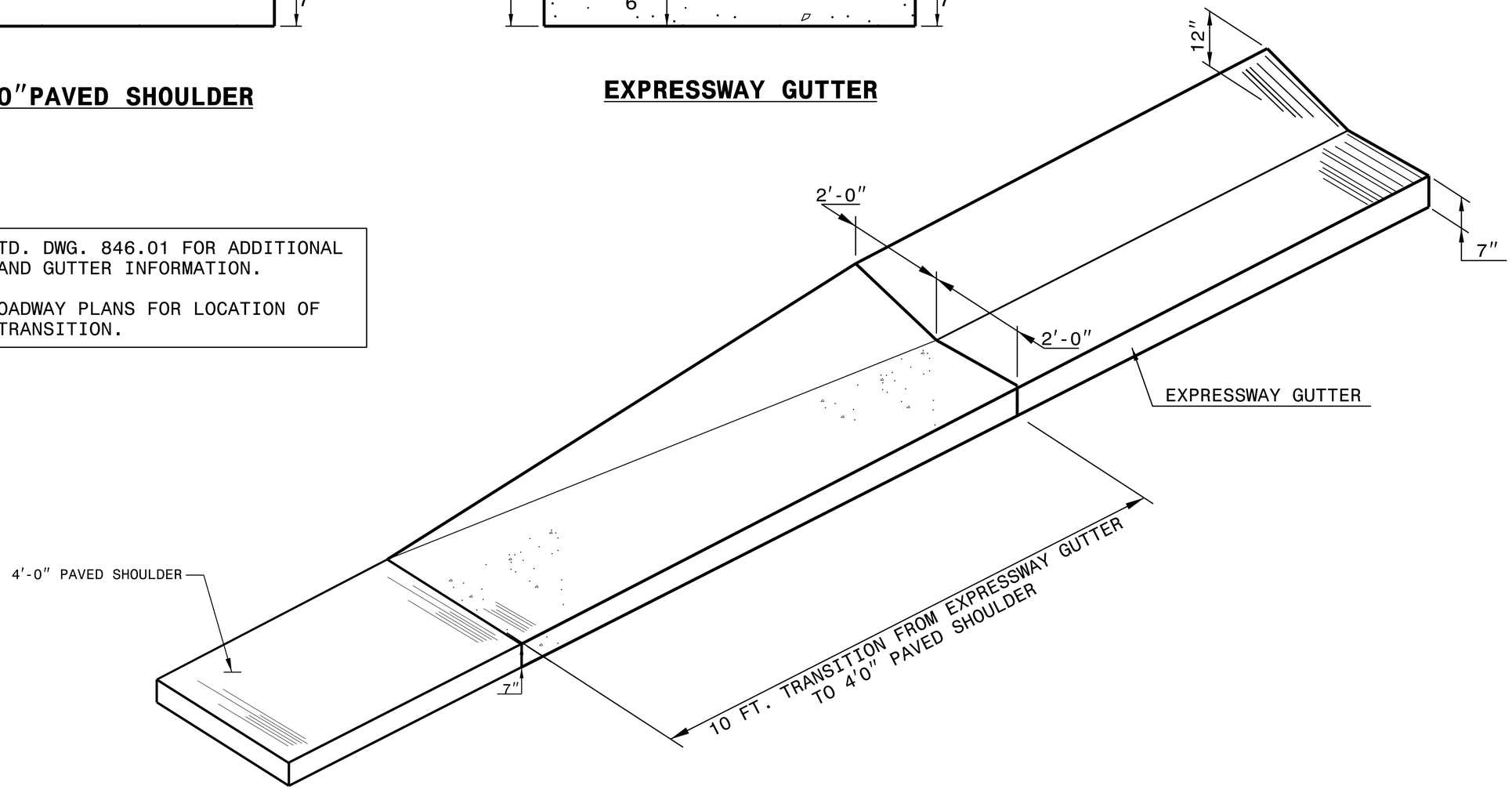
4'-00" PAVED SHOULDER



EXPRESSWAY GUTTER

NOTE: SEE STD. DWG. 846.01 FOR ADDITIONAL CURB AND GUTTER INFORMATION.

SEE ROADWAY PLANS FOR LOCATION OF CURB TRANSITION.



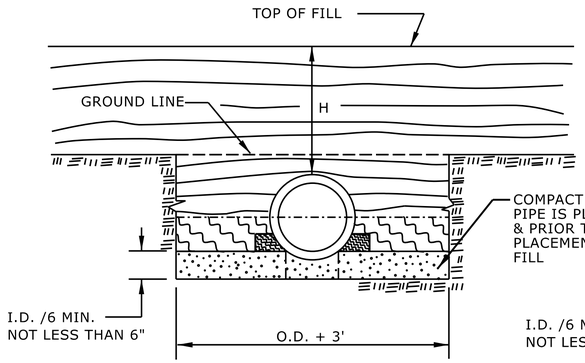
ISOMETRIC VIEW OF TRANSITION

DESIGN SERVICES UNIT
STANDARDS AND SPECIAL DESIGN
Office 919-707-6950 FAX 919-250-4119

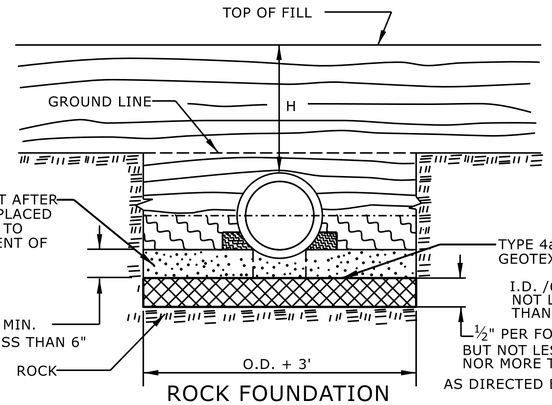
DETAIL OF EXPRESS GUTTER TO 4'-00" PAVED SHOULDER TRANSITION SECTION

ORIGINAL BY: V.M.CHAVEZ, PE DATE: 1-25-24
MODIFIED BY: _____ DATE: _____
CHECKED BY: _____ DATE: _____
FILE SPEC.: w:usr/details/stand/cgtransit.dgn

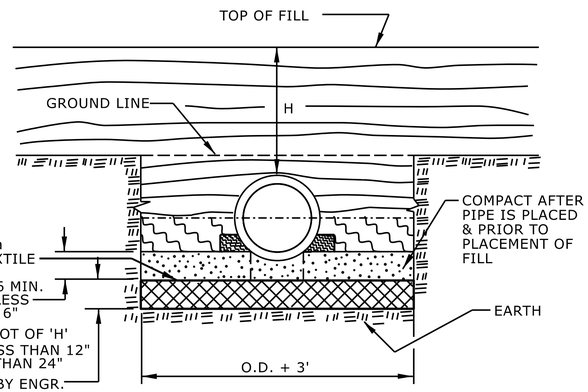
PROJECT REFERENCE NO.	SHEET NO.
HS-2005O	2C-1



NORMAL EARTH FOUNDATION

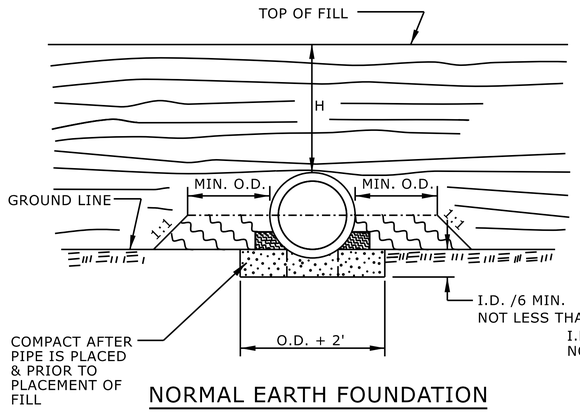


ROCK FOUNDATION

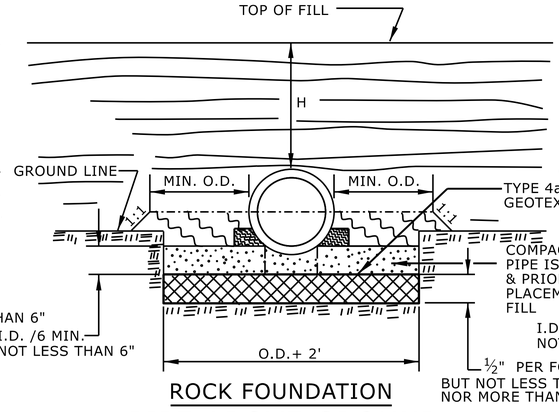


UNSUITABLE MATERIAL FOUNDATION

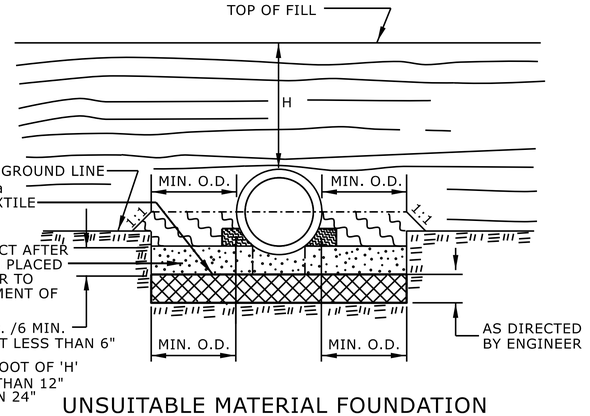
PIPE IN TRENCH



NORMAL EARTH FOUNDATION



ROCK FOUNDATION



UNSUITABLE MATERIAL FOUNDATION

PIPE ABOVE GROUND

GENERAL NOTES:

I.D. = THE MAXIMUM HORIZONTAL INSIDE DIAMETER DIMENSION.

O.D. = THE MAXIMUM HORIZONTAL OUTSIDE DIAMETER DIMENSION.

H = THE FILL HEIGHT MEASURED VERTICALLY AT ANY POINT ALONG THE PIPE FROM THE TOP OF THE PIPE TO THE TOP OF THE EMBANKMENT AT THAT POINT.

APPROVED SUITABLE LOCAL MATERIAL.

TAKE CARE TO FULLY COMPACT HAUNCH ZONE OF PIPE BACKFILL.

LOOSELY PLACED SELECT MATERIAL CLASS III OR CLASS II, TYPE 1 FOR PIPE BEDDING. LEAVE SECTION DIRECTLY BENEATH PIPE UNCOMPACTED AS PIPE SEATING AND BACKFILL WILL ACCOMPLISH COMPACTION.

DO NOT OPERATE HEAVY EQUIPMENT OVER ANY PIPE CULVERT UNTIL THE PIPE CULVERT HAS BEEN PROPERLY BACKFILLED AND COVERED WITH AT LEAST 3 FEET OF APPROVED MATERIAL.

REFER TO NCDOT PIPE MATERIAL SELECTION GUIDE AND STANDARD SPECIFICATIONS FOR ALLOWABLE PIPE FILL HEIGHTS AND PIPE SPECIFICATIONS.

SPRINGLINE OF PIPE

SELECT BACKFILL MATERIAL CLASS III OR CLASS II, BELOW SPRINGLINE.

UNDISTURBED EARTH MATERIAL

SELECT MATERIAL CLASS V OR VI FOR FOUNDATION CONDITIONING. ENCAPSULATE WITH TYPE IV GEOTEXTILE AS DIRECTED BY THE ENGINEER.

STATE OF
NORTH CAROLINA
DEPT. OF TRANSPORTATION
DIVISION OF HIGHWAYS
RALEIGH, N.C.

ROADWAY DETAIL DRAWING FOR

METHOD OF PIPE INSTALLATION

RIGID PIPE

SHEET 2 OF 2

300.01

NORTH CAROLINA PROFESSIONAL SEAL 033144 ENGINEER NICOLE M. HACKLER

Signed by:
Nicole M Hackler
588432303416 4C5...

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

CONTRACTS STANDARDS AND DEVELOPMENT UNIT
Office 919-707-6950 FAX 919-250-4119

SEE TITLE BLOCK

ORIGINAL BY: S.CALHOUN DATE: 7-25-2024
MODIFIED BY: _____ DATE: _____
CHECKED BY: _____ DATE: _____
FILE SPEC.: _____

DIVISION OF HIGHWAYS
STATE OF NORTH CAROLINA

SUMMARY OF MILLING

IN SQUARE YARDS

SURVEY LINE	STATION	STATION	LOCATION LT/RT/CL	PLAN. AREA SQ. FT.	WIDTH FT.	SQ. YDS.
–Y–	11+31.00	–Y– 13+07.00	CL	9160	VARIES	1020
			TOTAL:			1020
			SAY:			1050

SUMMARY OF EARTHWORK

IN CUBIC YARDS

LOCATION	UNCLASSIFIED EXCAVATION	EMBT+%	BORROW EXCAVATION	WASTE
–Y– 11+37.00 CL TO –Y– 13+07.00 CL	80	0	80	80
				0
SUBTOTALS No. 1	80	0	80	80
SUBTOTALS No. 2	0	0	0	0
PROJECT SUBTOTALS	80	0	80	80
WASTE IN LIEU OF BORROW				
PROJECT TOTALS	80	0	80	80
REPLACE TOP SOIL BORROW PITS				
GRAND TOTALS	80		80	
SAY	90		100	

SHALLOW UNDERCUT: 100 CY
CLASS IV STABILIZATION: 200 TONS
GEOTEXTILE FOR SUBGRADE STABILIZATION: 300 SY

Note: Approximate quantities only. Unclassified Excavation, Borrow Excavation, Shoulder Borrow, Fine Grading, Clearing and Grubbing, Breaking of Existing Pavement, and Removal of Existing Pavement will be paid for at the contract lump sum price for "Grading."

COMPUTED BY: EPS DATE 12/14/2023

CHECKED BY: VC DATE 12/15/2023

NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

PROJECT NO.	SHEET NO.
HS-2005O	3D-1

Note: Invert Elevations indicated are for Bid Purposes only and shall not be used for project construction stakeout.
See "Standard Specifications For Roads and Structures, Section 300-5".

LIST OF PIPES, ENDWALLS, ETC. (FOR PIPES 48 INCHES & UNDER)

STATION	LOCATION (LT, RT, OR CL)*	STRUCTURE NO. FROM	STRUCTURE NO. TO	TOP ELEVATION	INVERT ELEVATION	INVERT ELEVATION	SLOPE CRITICAL	DRAINAGE PIPE (RCP, CSP, CAAP, HDPE, or PVC) SIZE 12"	15"	18"	24"	30"	36"	42"	48"	DO NOT USE RCP	DO NOT USE CSP	DO NOT USE CAAP	DO NOT USE HDPE
-Y- STA 12+74	39' RT	401	402	424.4	420.9	420.4			40										
-Y- STA 12+83	2' RT	402	403	424.8	420.4	420.4			4										
-Y- STA 12+84	7' LT	403			420.3														

C.S. PIPE THICKNESS OR GAUGE 12"	15"	18"	24"	30"	36"	42"	48"	R.C. PIPE CLASS III 12"	15"	18"	24"	30"	36"	42"	48"	R.C. PIPE CLASS IV 12"	15"	18"	24"	30"	36"	42"	48"
.064	.064	.064	.064	.079	.079	.109	.109																

** " R.C. PIPE (CLASS V)	*** RC PIPE CULVERTS, CONTRACTOR DESIGN	**** RC PIPE CULVERTS, CONTRACTOR DESIGN	15" SIDE DRAIN PIPE	18" SIDE DRAIN PIPE	ENDWALLS STD. 838.01 838.11 OR STD. 838.80 (UNLESS NOTED OTHERWISE) CU. YARDS R.C.P.	C.S.P.	QUANTITIES FOR DRAINAGE STRUCTURES *TOTAL L.F. FOR PAY QUANTITY SHALL BE COL. "A" + (1.3 X COL.'B') PER EACH (0' THRU 5.0')	LIN. FT. 5.0' THRU 10.0' A	10.0' AND ABOVE B	C.B. STD. 840.01 OR STD. 840.02	FRAME, GRATES, AND HOOD STANDARD 840.03 TYPE OF GRATE E	F	G	CONCRETE TRANSITIONAL SECTION DROP INLET	CATCH BASIN
							1										
							1										

D.I. STD. 840.14 OR STD. 840.15	D.I. FRAME W/ TWO GRATES STD. 840.16	J.B. STD. 840.31 OR 840.32	G.D.I. TYPE "S" STD. 840.18 OR 840.27	G.D.I. TYPE "D" STD. 840.19 OR 840.28	G.D.I. FRAME WITH GRATE STD. 840.20	G.D.I. FRAME WITH TWO GRATES STD. 840.22	G.D.I. (N.S.) FRAME WITH GRATE STD. 840.24	G.D.I. (N.S.) FRAME WITH TWO GRATES STD. 840.24	TB J.B. STD. 840.34 OR STD. 840.46	G.D.I. FRAME (N.S. FLAT) W/2 GRATES STD. 840.29	T.B.D.I. STD. 840.35	J.B. STD. 840.31 OR STD. 840.32	MANHOLE FRAME AND COVER STD. 840.54	SIDE DRAIN PIPE ELBOWS NO. & SIZE	CONC. & BRICK PIPE PLUG, C.Y. STD. 840.71	CONC. COLLARS CL. "B" C.Y. STD. 840.72	PIPE REMOVAL LIN. FT.
											1	1					
													1	1		0.399	

ABBREVIATIONS

C.B.	CATCH BASIN
N.D.I.	NARROW DROP INLET
D.I.	DROP INLET
G.D.I.	GRATED DROP INLET
G.D.I.(N.S.)	(NARROW SLOT)
J.B.	JUNCTION BOX
M.H.	MANHOLE
T.B.D.I.	TRAFFIC BEARING DROP INLET
T.B.J.B.	TRAFFIC BEARING JUNCTION BOX

REMARKS
COLLAR FROM EXISTING 15"

SHEET TOTALS	44	2	1	1	1	1	0.399

COMPUTED BY: Neil T. Roberson DATE: 9/3/2024
CHECKED BY: Jinyoung Park DATE: 9/5/2024

(2-3-23)

PROJECT NO.	SHEET NO.
HS-2005O	3G-1

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

SUMMARY OF AGGREGATE SUBGRADE/STABILIZATION

LINE	Station	Station	Aggregate Type* ASU(1/2)/ AST	Aggregate Thickness INCHES [8" for ASU(2)]	Shallow Undercut CY	Class IV Subgrade Stabilization TONS	Geotextile for Subgrade Stabilization SY	Stabilizer Aggregate TONS	Class IV Aggregate Stabilization TONS
CONTINGENCY			ASU(1)	12"	100	200	300		
			TOTAL CY/TONS/SY:		100	200**	300**	0	0

*ASU(1/2) = Aggregate Subgrade (Type 1 or 2)
*AST = Aggregate Stabilization
**Total tons of "Class IV Subgrade Stabilization" and total square yards of "Geotextile for Subgrade Stabilization" are only the estimated quantities for ASU(1/2)/AST and may only represent a portion of the subgrade stabilization and geotextile quantities shown in the Item Sheets of the Proposal.

5/26/20

HS-20050
SHEET 004

ROADWAY ENGINEER
NORTH CAROLINA PROFESSIONAL SEAL 018204 ENGINEER VICTOR OMAR CHAVEZ
5/15/2025
Victor Chavez
7CD4E542985040A...

HYDRAULICS ENGINEER
NORTH CAROLINA PROFESSIONAL SEAL 048034 ENGINEER ERIK PETER SELLE
Erik Selle

TO I-85

MANSON DREWRY ROAD

SR 1237

Warren County Public Utilities, 6" PVC
WOODED
EXISTING R/W
Warren County Public Utilities, 8" PVC
JACOBS WELL OUTREACH MINISTRIES
DB 743 PG 364
PB 202 PG 10
60' R/W
Exist R/W
WOODED
GATE
N49°35'52"W
35.00'
KENNETH DAEKE
DB 936 PG 277
DB 81 PG 106
PB 179 PG 5
PB 287 PG 7
ROANOKE AVENUE (UNOPENED STREET)
DB 81 PG 106
PB 179 PG 5
SATTERWHITE STREET (UNOPENED STREET)
DB 81 PG 106
PB 179 PG 5
N12°19'28"E
340.07'
N12°19'28"E
324.61'
S12°09'06"W
283.40'
KENNETH DAEKE
DB 936 PG 322

BEGIN TIP PROJECT HS-2005O
BEGIN CONSTRUCTION
-Y- POT STA 11+31.00

NC GRID
NAD 83 NA 2011

CUR DATA -Y-
PIc 12+30.76
Δc = 35°51'32.9" (RT)
D = 45°50'11.8"
Lc = 78.23'
Tc = 40.45'
R = 125'
e = Exist

-Y4- POT 10+00.00

EIP
1.68' EIP TO R/W
COTTON GIN
S49°24'25.6"E
-Y-
205' R
TIE IN
JAMES PETTAWAY SR
DB 923 PG 697
N00°40'06"W
224.69'
WOODED
1
10
0.07' R/W TO EIP
Exist R/W
205' R
WINISTRIES
WOODED
ING R/W
TO MIDDLEBURG
US 1 - 158
TAPER 70'
-Y- PT 12+68.55
-L-
TV FO
T FO
-L- POT 10+00.00
N02°15'41"E
28.67'
UT to Rocky Creek
APPX
WOODED
M&M AUTO PARK LLC
DB 1037 PG 151
DB 570 PG 408
VERNON FLEMING
DB 955 PG 315
EXISTING R/W
WOODED
EXISTING RR R/W
UT to Rocky Creek
-L- PC 13+63.71
-L- PT 13+74.80
-Y- POT 13+23.14 =
-L- POT 13+37.64
BURNELL YANCY HEIRS
DB 461 PG 307
EXISTING RR R/W
WOODED
City of Henderson, 20", UNK

S82°21'54"E
240.00'
WILLIAM EVANS
DB 910 PG 686
N12°08'06"E
127.47'
MONO CONC ISLAND
WOODED
REMOVE EX. DI
1 S BK BUS (ABAND)
WOODED
1 S BK BUS
+39.91
25.3' RT -Y-
D RCP
43' R
12" RCP
12" RCP
12" RCP
12" RCP
TIE IN
205' R
18" RCP
RETAIN PIPE
Exist R/W
TAPER 120'
15
COLLAR AND EXTEND
+/-4' of 15" RCP-IV
TB 26
EXPRESSWAY GUTTER (E.G.)
+22.74
16.8' LT -L-
S13°23'54.1"E
N90°00'00.0"E
WATER JUNCTION BOX
ANTENNA
72" CHL 3SBW
WOODED
CSX RAILROAD
CSX RAILROAD
EXISTING RR R/W
-L- POT 19+75.74

EIP S12°08'06"W
27.60'
S83°36'54"E
78.50'
EIP
VERNON FLEMING
DB 955 PG 315
LYNN STONE
DB 610 PG 78
PB 42 PG 5
EIP
WOODED
N12°23'06"E
89.18'
S78°15'23"E
105.66'
DELLA FLEMING
DB 951 PG 88
S78°15'17"E
89.18'
DELLA FLEMING
DB 951 PG 88
EIP
N12°08'06"E
436.60'
1 S BK BUS POST OFFICE
CONC
CONC
MAILBOX
BST PARKING
1 S BLK BUS (ABAND)
CONC GAS ISLAND (ABAND)
GRASS
N12°23'06"E
76.58'
72" CHL
N15°17'27"E
79.43'
EIP
EXISTING R/W
Warren County Public Utilities, 6", PVC
Dominion Energy Natural Gas, 4", Plastic
GRASS
EIP
US 1 - 158
-L-
TO NORLINA
EIP
S81°01'08.9"E
GRASS
RR SWITCH BOX
EXISTING RR R/W
RR CROSSING BAR
-L- PT 17+16.86
RR CROSSING BAR
EXISTING RR R/W
VARIABLE
EXISTING R/W
HARRIETT ALLEN
DB 754 PG 549

END TIP PROJECT HS-2005O
END CONSTRUCTION
-Y- POT STA 13+12.40

APPROXIMATE LINE PLACED BY GIS

CUR DATA -L-
PIc 11+83.16
Δc = 11°22'09.3" (RT)
D = 03°06'50.0"
Lc = 365.11'
Tc = 183.16'
R = 1,840'

CUR DATA -L-
PIc 15+46.22
Δc = 09°30'49.9" (RT)
D = 02°46'52.9"
Lc = 342.06'
Tc = 171.42'
R = 2,060'

PAVEMENT REMOVAL

FOR -Y- PROFILE, SEE SHEET 5

FOR 5" MONO. CONC. ISLAND DETAIL, SEE SHEET 2B-1

5/26/20

HS-20050

SHEET 5

ROADWAY ENGINEER

NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 018104

11/13/2025

DocuSigned by:
Victoria Chavez
7CD1F54298E940A...

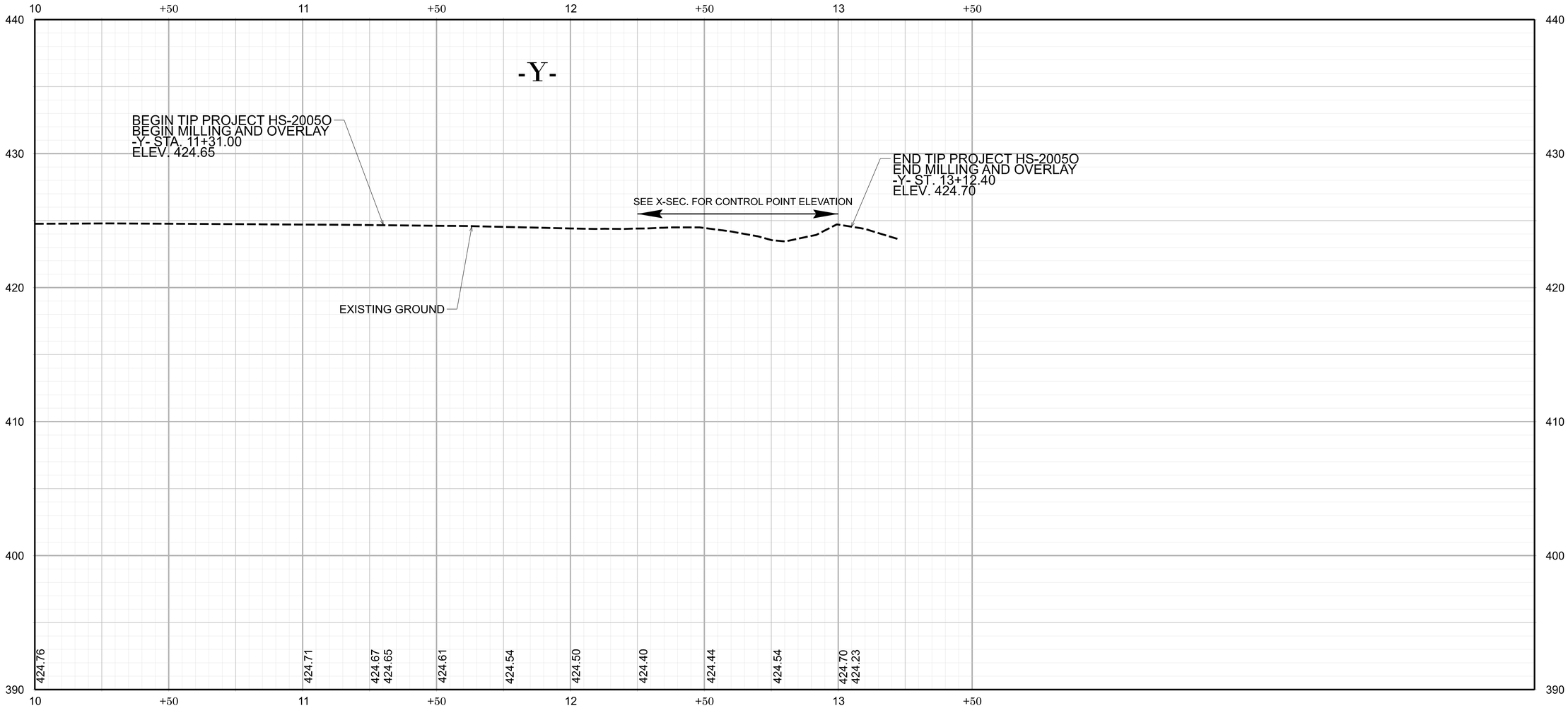
-Y-

BEGIN TIP PROJECT HS-2005O
BEGIN MILLING AND OVERLAY
-Y- STA. 11+31.00
ELEV. 424.65

END TIP PROJECT HS-2005O
END MILLING AND OVERLAY
-Y- ST. 13+12.40
ELEV. 424.70

SEE X-SEC. FOR CONTROL POINT ELEVATION

EXISTING GROUND



FOR -Y- PLAN, SEE SHEET 4

5/26/20

SURVEY CONTROL SHEET

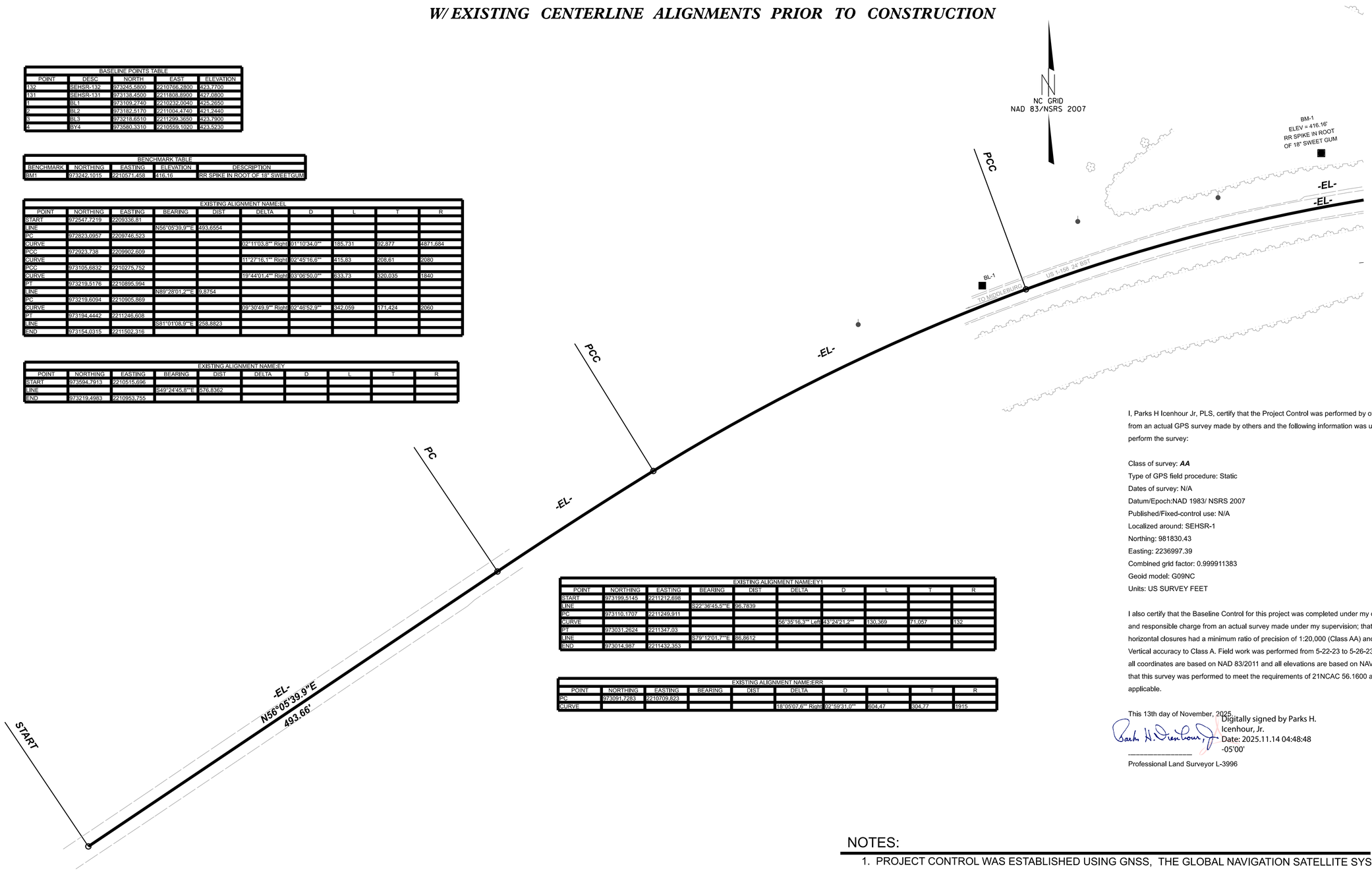
W/ EXISTING CENTERLINE ALIGNMENTS PRIOR TO CONSTRUCTION

BASELINE POINTS TABLE				
POINT	DESC	NORTH	EAST	ELEVATION
132	SEHSR-132	973245.5800	2210766.2800	423.7700
131	SEHSR-131	973138.4500	2211808.8900	427.0800
1	BL1	973109.2740	2210232.0040	425.2650
2	BL2	973182.5170	2211004.4740	421.2440
3	BL3	973218.6510	2211299.3650	423.7900
4	BY4	973580.3310	2210559.1020	423.5230

BENCHMARK TABLE				
BENCHMARK	NORTHING	EASTING	ELEVATION	DESCRIPTION
BM1	973242.1015	2210571.458	416.16	RR SPIKE IN ROOT OF 18" SWEETGUM

EXISTING ALIGNMENT NAME:EL									
POINT	NORTHING	EASTING	BEARING	DIST	DELTA	D	L	T	R
START	972847.7219	2209336.81							
LINE			N56°05'39.9"E	493.6554					
PC	972823.0957	2209746.523							
CURVE					02°11'03.8"" Right	01°10'34.0""	185.731	92.877	4871.684
PCC	972923.738	2209902.609							
CURVE					11°27'16.1"" Right	02°45'16.6""	415.83	208.61	2080
PCC	973105.6832	2210275.752							
CURVE					19°44'01.4"" Right	03°06'50.0""	633.73	320.035	1840
PT	973219.5178	2210895.994							
LINE			N89°28'01.2""E	9.8754					
PC	973219.6094	2210905.869							
CURVE					09°30'49.9"" Right	02°46'52.9""	342.059	171.424	2060
PT	973194.4442	2211246.608							
LINE			S81°01'08.9""E	258.8823					
END	973154.0315	2211502.316							

EXISTING ALIGNMENT NAME:EY									
POINT	NORTHING	EASTING	BEARING	DIST	DELTA	D	L	T	R
START	973594.7913	2210515.696							
LINE			S49°24'45.8""E	576.8362					
END	973219.4983	2210953.755							



EXISTING ALIGNMENT NAME:EY1									
POINT	NORTHING	EASTING	BEARING	DIST	DELTA	D	L	T	R
START	973199.5145	2211212.698							
LINE			S22°36'45.5""E	86.7839					
PC	973110.1707	2211249.911							
CURVE					56°35'16.3"" Left	43°24'21.2""	130.369	71.057	132
PT	973031.2624	2211347.03							
LINE			S79°12'01.7""E	86.8612					
END	973014.587	2211432.353							

EXISTING ALIGNMENT NAME:ERR									
POINT	NORTHING	EASTING	BEARING	DIST	DELTA	D	L	T	R
PC	973091.7283	2210709.823							
CURVE					18°05'07.6"" Right	02°59'31.0""	604.47	304.77	1915

I, Parks H Icenhour Jr, PLS, certify that the Project Control was performed by others from an actual GPS survey made by others and the following information was used to perform the survey:

Class of survey: ***AA***
Type of GPS field procedure: Static
Dates of survey: N/A
Datum/Epoch:NAD 1983/ NSRS 2007
Published/Fixed-control use: N/A
Localized around: SEHSR-1
Northing: 981830.43
Easting: 2236997.39
Combined grid factor: 0.999911383
Geoid model: G09NC
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 5-22-23 to 5-26-23 , 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 13th day of November, 2025

Digitally signed by Parks H. Icenhour, Jr.
Date: 2025.11.14 04:48:48 -05'00'

_____
Professional Land Surveyor L-3996

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.

HS2005O
R/W 02C-1

NORTH CAROLINA DEPARTMENT OF TRANSPORTATION

PROFESSIONAL LAND SURVEYOR

NORTH CAROLINA PROFESSIONAL SEAL L-3996 LAND SURVEYOR PARKS H. ICENHOUR JR.

GEL ENGINEERING OF NC, INC. NO. C-1938 CERTIFICATE OF AUTHORIZATION

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES ARE COMPLETED

2024 STANDARD SPECIFICATIONS

TIP PROJECT: HS2005O
County: WARREN

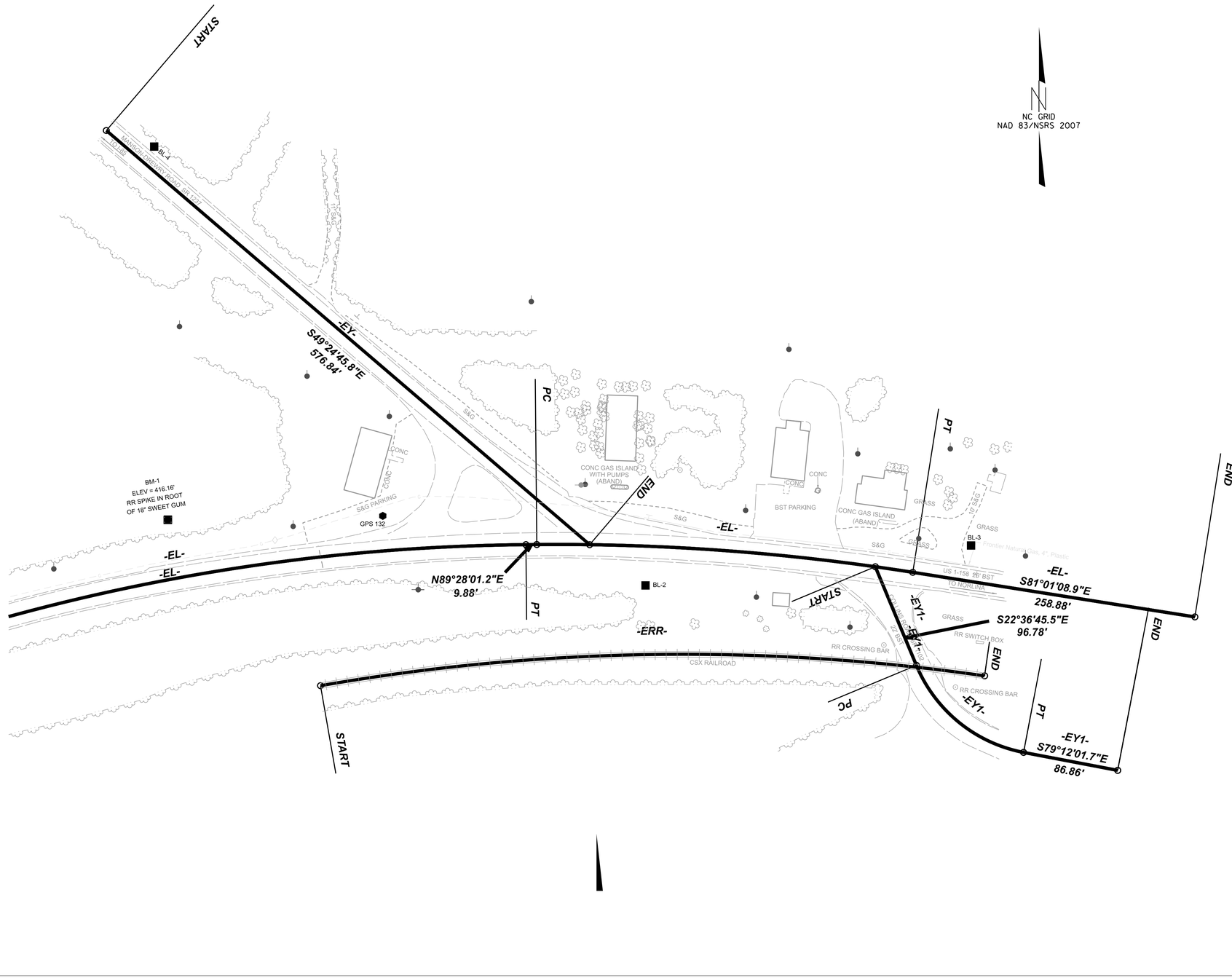
PREPARED FOR

LOCATION AND SURVEYS UNIT

PREPARED BY

GEL Engineering of NC, Inc. C1938
GEL SOLUTIONS
an Affiliate of THE GEL GROUP, INC.
111 CREEK RIDGE ROAD
SUITE C
GREENSBORO,NC 27406
(336) 516-9840
WWW.GEL-SOLUTIONS.COM

5/26/20



NC GRID
NAD 83/NSRS 2007

I, Parks H Icenhour Jr, PLS, certify that the Project Control was performed by others from an actual GPS survey made by others and the following information was used to perform the survey:

Class of survey: ***AA***
Type of GPS field procedure: Static
Dates of survey: N/A
Datum/Epoch:NAD83/NSRS2007
Published/Fixed-control use: N/A
Localized around: SEHSR-1
Northing: 981830.43
Easting: 2236997.39
Combined grid factor: 0.999911383
Geoid model: G09NC
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 5-22-2023 to 5-26-2023 , 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 13th day of November, 2025.

Digitally signed by Parks H. Icenhour, Jr.
Date: 2025.11.14 04:48:15 -05'00'

Professional Land Surveyor L-3996

HS2005O
R/W 02C-2

NORTH CAROLINA DEPARTMENT OF TRANSPORTATION

PROFESSIONAL LAND SURVEYOR

NORTH CAROLINA PROFESSIONAL SEAL L-3996 LAND SURVEYOR PARKS H. ICENHOUR JR.

GEL ENGINEERING OF NC, INC NO. C-1938 CERTIFICATE OF AUTHORIZATION

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES ARE COMPLETED

2024 STANDARD SPECIFICATIONS

TIP PROJECT: HS2005O

County: WARREN

PREPARED FOR

LOCATION AND SURVEYS UNIT

PREPARED BY

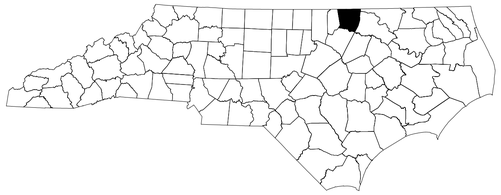
GEL Engineering of NC, Inc. DBA
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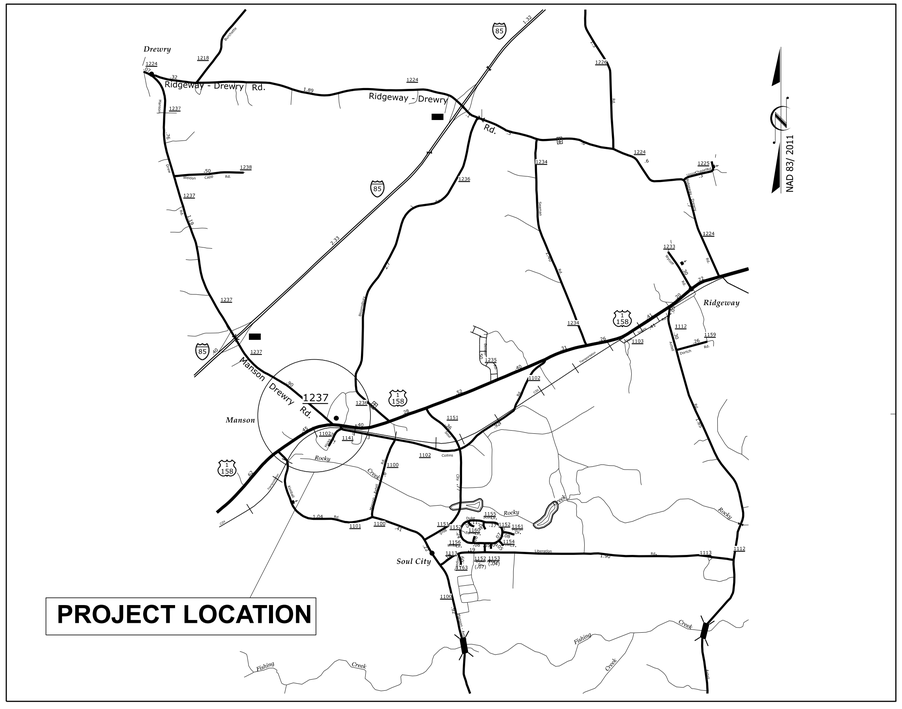
PROJECT SURVEYOR

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

TRANSPORTATION MANAGEMENT PLAN

WARREN COUNTY





VICINITY MAP



WORK ZONE SAFETY & MOBILITY
"from the MOUNTAINS to the COAST"

PLANS PREPARED BY:

VICTOR M CHAVEZ, PE

DIVISION FIVE TMP ENGINEER

NCDOT CONTACTS:

VICTOR M. CHAVEZ, PE
PROJECT ENGINEER

VICTOR M. CHAVEZ, PE
PROJECT DESIGN ENGINEER

DIVISION OF HIGHWAYS · STATE OF NORTH CAROLINA · DEPARTMENT OF TRANSPORTATION · WORK ZONE TRAFFIC CONTROL

INDEX OF SHEETS

SHEET NO.	TITLE
TMP-1	TITLE SHEET, VICINITY MAP, LEGEND AND INDEX OF SHEETS
TMP-1A	LIST OF APPLICABLE ROADWAY STANDARD DRAWINGS, AND GENERAL NOTES
TMP-2 & 3	PHASING DETAIL

LEGEND

GENERAL

- DIRECTION OF TRAFFIC FLOW
- DIRECTION OF PEDESTRIAN TRAFFIC FLOW
- EXIST. PVMT.
- NORTH ARROW
- PROPOSED PVMT.
- WORK AREA
- REMOVAL

SIGNALS

EXISTING · PROPOSED · TEMP TEMPORARY

TRAFFIC CONTROL DEVICES

- BARRICADE (TYPE III)
- CONE
- DRUM · SKINNY DRUM · TUBULAR MARKER
- TEMPORARY CRASH CUSHION
- FLASHING ARROW BOARD
- FLAGGER
- LAW ENFORCEMENT
- TRUCK MOUNTED ATTENUATOR (TMA)
- CHANGEABLE MESSAGE SIGN

TEMPORARY SIGNING

- PORTABLE SIGN
- STATIONARY SIGN
- STATIONARY OR PORTABLE SIGN

PAVEMENT MARKERS

- CRYSTAL/CRYSTAL
- CRYSTAL/RED
- YELLOW/YELLOW

PAVEMENT MARKING SYMBOLS

PAVEMENT MARKING SYMBOLS

APPROVED:

DATE: 09/18/2025

DocuSigned by:
Victor Chavez
7CD1F54298E940A...

NORTH CAROLINA PROFESSIONAL SEAL 018204 ENGINEER VICTOR M CHAVEZ

SHEET NO.
TMP-1

HS-2005O

TIP PROJECT:

9/17/2025
S:\DOCUMENT3\Warren\FUNDED TIP\HS-2005O\Roadway\Proj\ORD\HS2005O_TMP.dgn
User:vmchavez1

PROJ. REFERENCE NO.	SHEET NO.
HS-20050	TMP-1A

ROADWAY STANDARD DRAWINGS

THE FOLLOWING ROADWAY STANDARDS AS SHOWN IN "ROADWAY STANDARD DRAWINGS" - PROJECT SERVICES UNIT - N.C. DEPARTMENT OF TRANSPORTATION - RALEIGH, N.C., DATED JANUARY 2024 ARE APPLICABLE TO THIS PROJECT AND BY REFERENCE HEREBY ARE CONSIDERED A PART OF THESE PLANS:

STD. NO.	TITLE
1101.01	WORK ZONE ADVANCE WARNING SIGNS
1101.02	TEMPORARY LANE CLOSURE
1101.11	TRAFFIC CONTROL DESIGN TABLES
1110.02	PORTABLE WORK ZONE SIGNS
1115.01	FLASHING ARROW BOARD
1130.01	DRUMS
1135.01	CONES
1150.01	FLAGGERS
1180.01	SKINNY DRUMS

GENERAL NOTES

CHANGES MAY BE REQUIRED WHEN PHYSICAL DIMENSIONS IN THE DETAIL DRAWINGS, STANDARD DETAILS, AND ROADWAY DETAILS ARE NOT ATTAINABLE TO MEET FIELD CONDITIONS OR RESULT IN DUPLICATE OR UNDESIRED OVERLAPPING OF DEVICES. MODIFICATION MAY INCLUDE: MOVING, SUPPLEMENTING, COVERING, OR REMOVAL OF DEVICES AS DIRECTED BY THE ENGINEER.

THE FOLLOWING GENERAL NOTES APPLY AT ALL TIMES FOR THE DURATION OF THE CONSTRUCTION PROJECT EXCEPT WHEN OTHERWISE NOTED IN THE PLAN OR DIRECTED BY THE ENGINEER.

TIME RESTRICTIONS

A) DO NOT CLOSE OR NARROW TRAVEL LANES AS FOLLOWS:

ROAD NAME	DAY AND TIME RESTRICTIONS
SR 1237 (MANSON DREWRY RD	6:00 AM TO 9:00 AM AND 4:00PM TO 7:00PM (MON. - FRIDAY)
US 1 - 158	6:00 AM TO 9:00 AM AND 4:00PM TO 7:00PM (MON. - FRIDAY)

LANE AND SHOULDER CLOSURE REQUIREMENTS

B) REMOVE LANE CLOSURE DEVICES FROM THE LANE WHEN WORK IS NOT BEING PERFORMED BEHIND THE LANE CLOSURE OR WHEN A LANE CLOSURE IS NO LONGER NEEDED OR AS DIRECTED BY THE ENGINEER.

C) WHEN PERSONNEL AND/OR EQUIPMENT ARE WORKING ON THE SHOULDER ADJACENT TO AN UNDIVIDED FACILITY AND WITHIN 5 FT OF AN OPEN TRAVEL LANE, CLOSE THE NEAREST OPEN TRAVEL LANE USING ROADWAY STANDARD DRAWING NO. 1101.04 UNLESS THE WORK AREA IS PROTECTED BY BARRIER OR GUARDRAIL.

WHEN PERSONNEL AND/OR EQUIPMENT ARE WORKING ON THE SHOULDER ADJACENT TO A DIVIDED FACILITY AND WITHIN 10 FT OF AN OPEN TRAVEL LANE, CLOSE THE NEAREST OPEN TRAVEL LANE USING ROADWAY STANDARD DRAWING NO. 1101.04 UNLESS THE WORK AREA IS PROTECTED BY BARRIER OR GUARDRAIL.

D) WHEN PERSONNEL AND/OR EQUIPMENT ARE WORKING WITHIN A LANE OF TRAVEL OF AN UNDIVIDED OR DIVIDED FACILITY, CLOSE THE LANE ACCORDING TO THE TRAFFIC CONTROL PLANS, ROADWAY STANDARD DRAWINGS, OR AS DIRECTED BY THE ENGINEER. CONDUCT THE WORK SO THAT ALL PERSONNEL AND/OR EQUIPMENT REMAIN WITHIN THE CLOSED TRAVEL LANE.

E) PROVIDE TRAFFIC CONTROL FOR APPROPRIATE LANE CLOSURES FOR SURVEYING DONE BY THE DEPARTMENT.

GENERAL NOTES

PAVEMENT EDGE DROP OFF REQUIREMENTS

F) BACKFILL AT A 6:1 SLOPE UP TO THE EDGE AND ELEVATION OF EXISTING PAVEMENT IN AREAS ADJACENT TO AN OPENED TRAVEL LANE THAT HAS AN EDGE OF PAVEMENT DROP-OFF AS FOLLOWS:

BACKFILL DROP-OFFS THAT EXCEED 3 INCHES ON ROADWAYS WITH POSTED SPEED LIMITS LESS THAN 45 MPH.

BACKFILL WITH SUITABLE COMPACTED MATERIAL, AS APPROVED BY THE ENGINEER, AT NO EXPENSE TO THE DEPARTMENT.

TRAFFIC PATTERN ALTERATIONS

G) NOTIFY THE ENGINEER THIRTY (30) CALENDAR DAYS PRIOR TO ANY TRAFFIC PATTERN ALTERATION.

SIGNING

H) INSTALL ADVANCE WORK ZONE WARNING SIGNS WHEN WORK IS WITHIN 40 FT FROM THE EDGE OF TRAVEL LANE AND NO MORE THAN THREE (3) DAYS PRIOR TO THE BEGINNING OF CONSTRUCTION.

I) ENSURE ALL NECESSARY SIGNING IS IN PLACE PRIOR TO ALTERING ANY TRAFFIC PATTERN.

J) INSTALL BLACK ON ORANGE "DIP" SIGNS (W8-2) AND/OR "BUMP" SIGNS (W8-1) 50FT IN ADVANCE OF THE UNEVEN AREA, OR AS DIRECTED BY THE ENGINEER.

TRAFFIC CONTROL DEVICES

K) PLACE ADDITIONAL SETS OF THREE CHANNELIZING, DRUMS, PERPENDICULAR TO THE EDGE OF TRAVELWAY ON 50 FT CENTERS WHEN UNOPENED LANES ARE CLOSE TO TRAFFIC.

PAVEMENT MARKINGS AND MARKERS

L) TIE PROPOSED PAVEMENT MARKING LINES TO EXISTING PAVEMENT MARKING LINES.

M) REMOVE/REPLACE ANY CONFLICTING/DAMAGED PAVEMENT MARKINGS AND MARKERS BY THE END OF EACH DAY'S OPERATION.

MISCELLANEOUS

O) IN THE EVENT A TIE-IN CANNOT BE MADE IN ONE DAY'S TIME, BRING THE TIE-IN AREA TO AN APPROPRIATE ROADWAY ELEVATION AS DETERMINED BY AND BLACK ON ORANGE "PAVEMENT ENDS" SIGNS (W8-3) 100FT AND 150FT RESPECTIVELY IN ADVANCE OF THE UNEVEN AREAS. USE DRUMS TO DELINEATE THE EDGE OF ROADWAY ALONG UNPAVED AREAS.

P) PLACE DRUMS TO DELINEATE EXISTING AND PROPOSED ISLANDS BEFORE INSTALLATION.

APPROVED: _____

DATE: _____

09/18/2025

DocuSigned by:
Victor Chavez
7CD1F54298E940A...

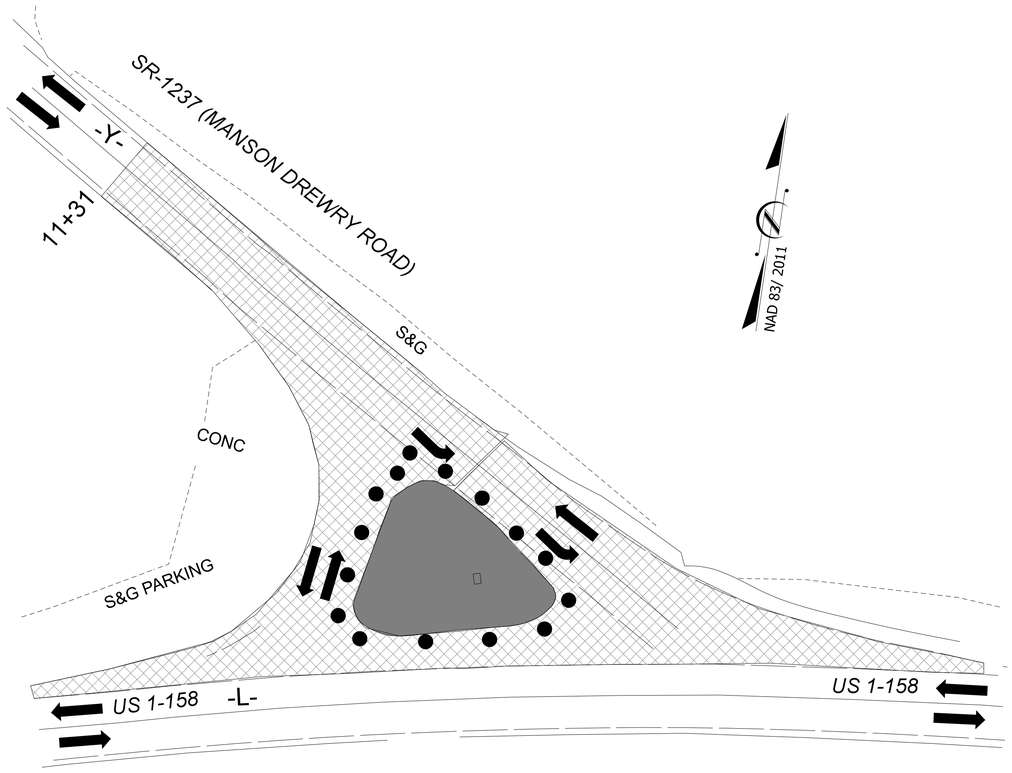
NORTH CAROLINA PROFESSIONAL SEAL 018204 ENGINEER VICTOR M CHAVEZ

DIVISION OF HIGHWAYS * STATE OF NORTH CAROLINA * DEPARTMENT OF TRANSPORTATION * WORK ZONE TRAFFIC CONTROL

TRANSPORTATION OPERATIONS PLAN

$$$$$$$SYSTIME$$$$$
$$$$$$$

PROJ. REFERENCE NO.	SHEET NO.
HS-20050	TMP-2



PHASE I:

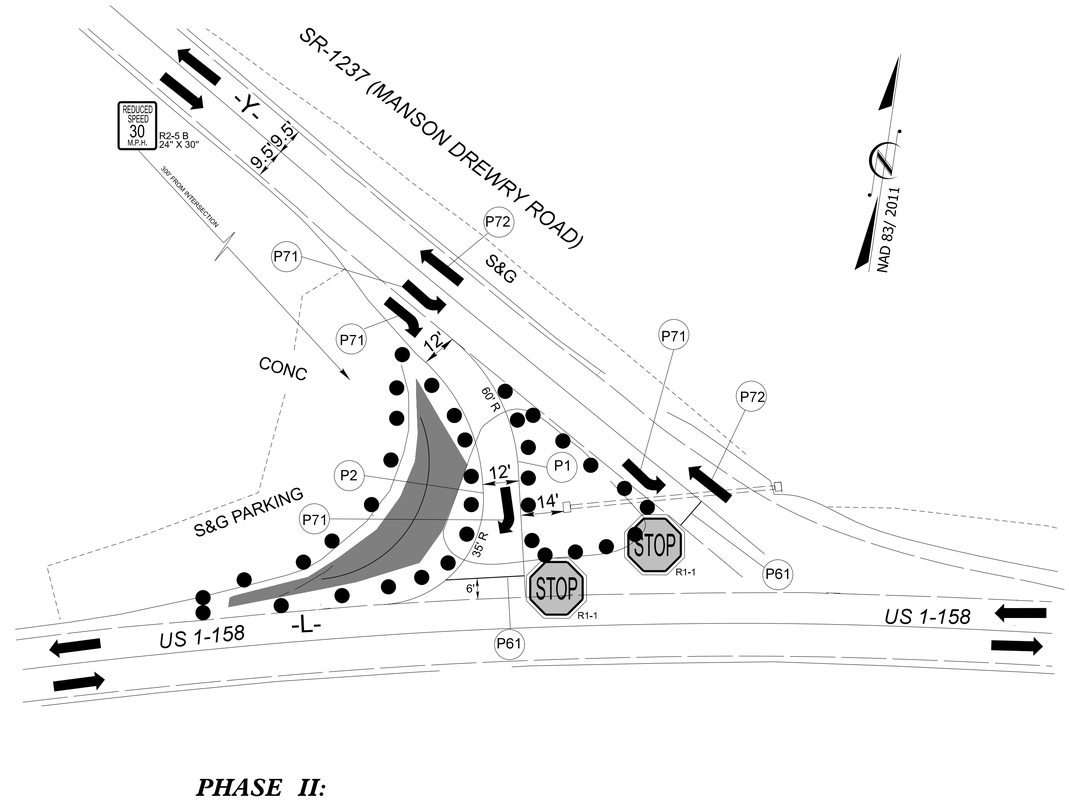
STEP 1 - INSTALL ALL ADVANCE WORK ZONE MARKING SIGNS PER RSD 1101.01, ON SR1237 (MANSON DREWRY ROAD) AND US 1-158. KEEP EXISTING TRAFFIC PATTERN.

STEP 2 - USING RSD 1101.02 , SHEET 1 OF 19, CONSTRUCT DRAINAGE, PIPE AND WIDENING, OF -Y- SR 1237 (MANSON DREWRY ROAD) AT US 1-158 FROM STA 12+28 TO STA 13+00.00 +/-, UP TO BUT NOT INCLUDING FINAL LAYER OF SURFACE COURSE, AWAY FROM TRAFFIC. CONSTRUCT MILLING ON -Y-, FROM STA 11+31 TO STA 13+12.40+/-.

ALL STEPS ABOVE SHOULD COMPLETED BEFORE MOVING TO NEXT PHASE.

PROPOSED MILLING

PROPOSED PAVEMENT



PHASE II:

STEP 3 - USING RSD 1101.02 , SHEET 1 OF 19, RELOCATE EASTHBOUND LANE, RIGHT TURN, ON SR 1237 FROM STA 11+90.00 +/- TO STA 13+00 +/- RIGHT SIDE, AWAY FROM TRAFFIC.

STEP 4 - USING RSD 1101.02 , SHEET 1 OF 19, CONSTRUCT DRAINAGE, PIPE, EXPRESSWAY GUTTER, AND WIDENING, OF -Y- SR 1237 (MASON DREWRY ROAD), RIGHT SIDE UP TO BUT NOT INCLUDING FINAL LAYER OF SURFACE COURSE.

ALL STEPS ABOVE SHOULD COMPLETED BEFORE MOVING TO NEXT PHASE.

PROPOSED PAVEMENT

APPROVED: _____

DATE: 11/13/2025

NORTH CAROLINA PROFESSIONAL SEAL 018204 ENGINEER VICTOR M CHAVEZ

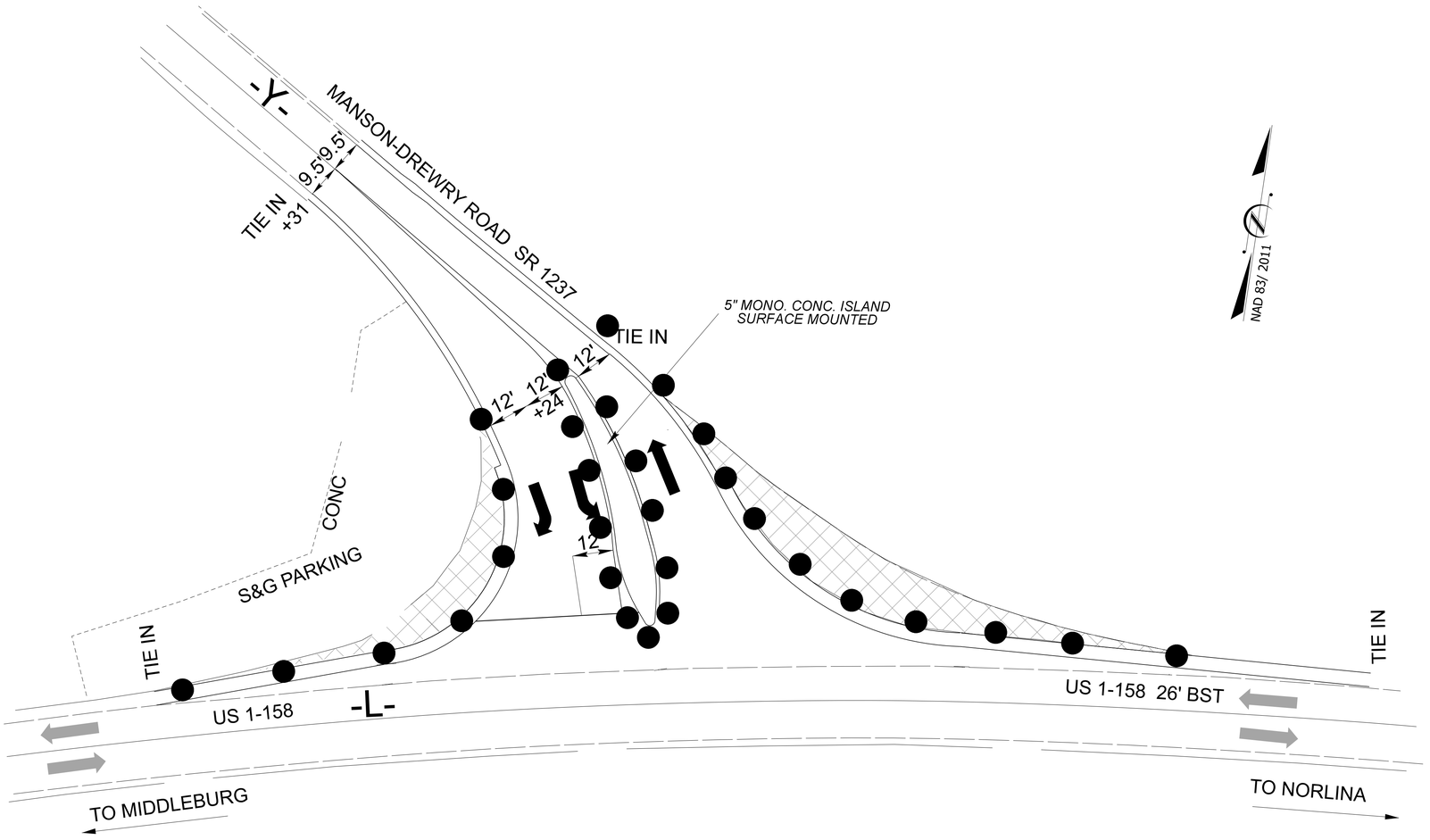
DocuSigned by: Victor Chavez 7CD1F54298E940A...

DIVISION OF HIGHWAYS · STATE OF NORTH CAROLINA · DEPARTMENT OF TRANSPORTATION · WORK ZONE TRAFFIC CONTROL

PHASING DETAIL

11/13/2025
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User:vmchavez1

PROJ. REFERENCE NO.	SHEET NO.
HS-20050	TMP-3



PHASE III:

STEP 5 - USING RSD 1101.02 , SHEET 1 OF 19,
AND/OR RDS 1101.02 SHEET 2 OF 19
PLACE FINAL SURFACE COURSE LAYER ON:
-Y-, FROM STA 11+31 TO STA 13+12.4 +/-
AWAY FROM TRAFFIC.
CONSTRUCT CONCRETE ISLAND.

STEP 6 - INSTALL FINAL SIGNING.

STEP 7 - INSTALL FINAL PAVEMENT MARKING.

STEP 8 - REMOVE EXISTING PAVEMENT AND GRADE AS SHOWN.

PAVEMENT REMOVAL

APPROVED: _____

DATE: _____

09/18/2025

DocuSigned by:
Victor Chavez
7CD1F54298E940A...

NORTH CAROLINA PROFESSIONAL SEAL 018204 ENGINEER VICTOR M CHAVEZ

DIVISION OF HIGHWAYS
STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
WORK ZONE TRAFFIC CONTROL

PHASING DETAIL

9/17/2025
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User:vmchavez

PROJECT REFERENCE NO.	SHEET NO.
HS-2005O	PMP-1

11/13/2025

DocuSigned by: VICTOR M CHAVEZ
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STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

PAVEMENT MARKING PLAN

WARREN COUNTY

LOCATION: US 1 – 158 AT SR-1237 (MANSON DREWRY ROAD)

TIP PROJECT: HS-2005O

INDEX

SHEET NO.	DESCRIPTION
PMP-1	PAVEMENT MARKINGS PLAN TITLE AND SCHEDULE SHEET
PMP-2	PAVEMENT MARKINGS DETAIL SHEET

GENERAL NOTES

THE FOLLOWING GENERAL NOTES APPLY AT ALL TIMES FOR THE DURATION OF THE CONSTRUCTION PROJECT, EXCEPT WHEN OTHERWISE NOTED IN THE PLAN, OR DIRECTED BY THE ENGINEER.

A) INSTALL PAVEMENT MARKINGS AND PAVEMENT MARKERS ON THE FINAL SURFACE AS FOLLOWS:

ROAD NAME	MARKING	MARKER
SR1237 (MANSON DREWRY ROAD)	THERMOPLASTIC	NONE

B) TIE PROPOSED PAVEMENT MARKING LINES TO EXISTING PAVEMENT MARKING LINES.
C) REMOVE/REPLACE ANY CONFLICTING/DAMAGED PAVEMENT MARKINGS AND MARKERS.
D) UNLESS OTHERWISE SPECIFIED, HEATED-IN-PLACE THERMOPLASTIC MAY BE USED IN LIEU OF EXTRUDED THERMOPLASTIC FOR SYMBOLS.

PAVEMENT MARKING SCHEDULE

SYMB	DESCRIPTION AND TYPE	PAY ITEM QUANTITY
T1	WHITE EDGE LINE (4", 90 MILS)	160 LF
T2	WHITE SOLID LANE LINE (4", 90 MILS)	80 LF
T5	2FT - 6FT/ SP. WHITE MINI SKIP (4", 90 MILS)	50 LF
T11	YELLOW SINGLE CENTER (4", 90 MILS)	180 LF
T61	WHITE STOP BAR (24", 90 MILS)	60 LF
T70	LEFT TURN ARROW (90 MILS)	1 EA
T71	RIGHT TURN (90 MILS)	1 EA
T72	STRAIGHT ARROW (90 MILS)	1 EA

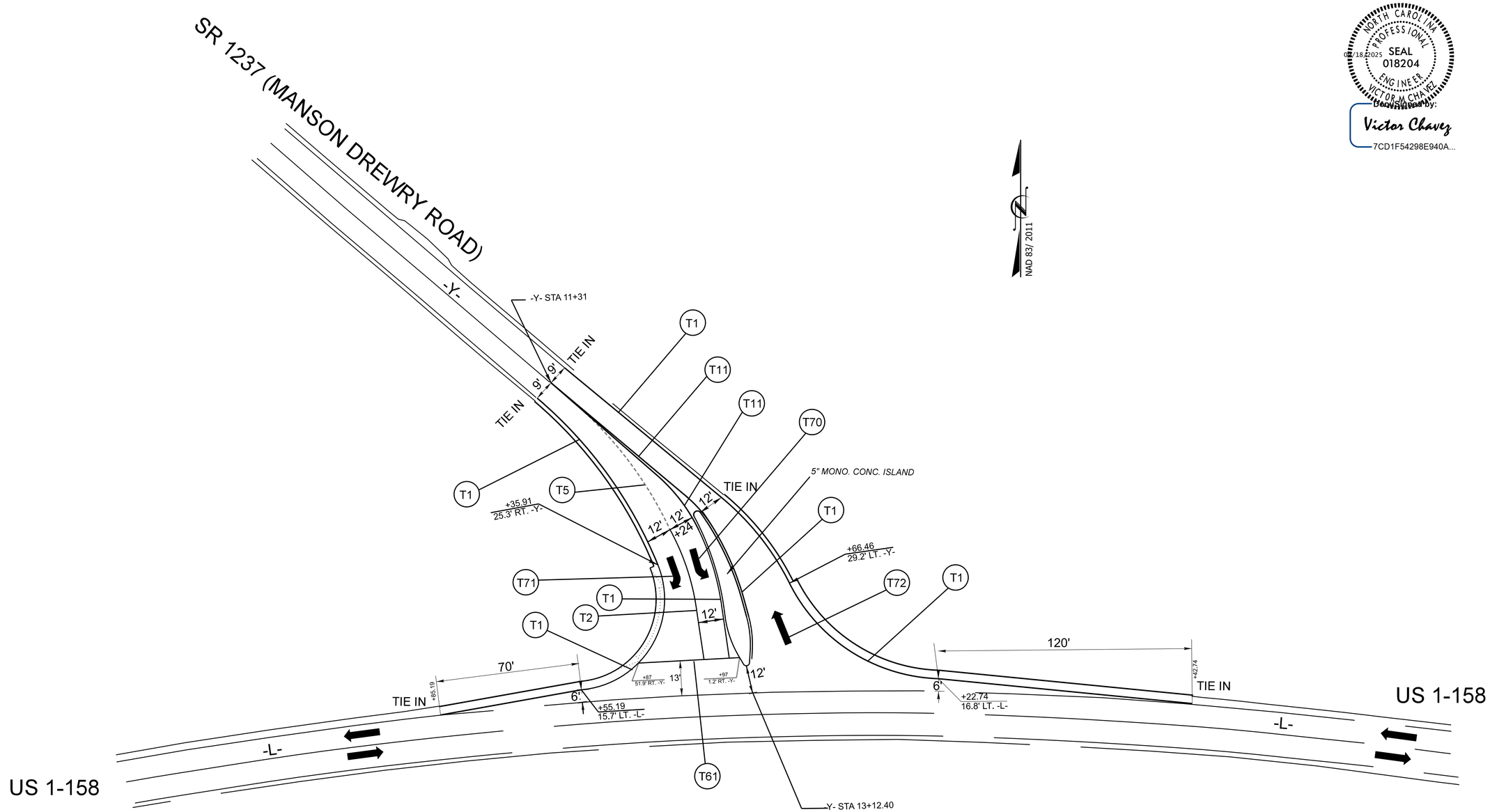
ROADWAY STANDARD DRAWINGS

THE FOLLOWING ROADWAY STANDARDS AS APPEAR IN "ROADWAY STANDARD DRAWINGS" - PROJECT SERVICES UNIT - N.C. DEPARTMENT OF TRANSPORTATION - RALEIGH, N.C., DATED JANUARY 2024 ARE APPLICABLE TO THIS PROJECT AND BY REFERENCE HEREBY ARE CONSIDERED A PART OF THESE PLANS:

STD. NO.	TITLE
1205.01	PAVEMENT MARKINGS - LINE TYPES & OFFSETS
1205.02	PAVEMENT MARKINGS - 2 LANE & MULTILANE ROADWAYS
1205.04	PAVEMENT MARKINGS - INTERSECTIONS
1205.05	PAVEMENT MARKINGS - TURN LANES
1205.08	PAVEMENT MARKINGS - SYMBOLS AND WORD MESSAGES
1205.09	PAVEMENT MARKINGS - PAINTED ISLANDS

11/3/2025
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User:vmchavez1

PROJECT REFERENCE NO.	SHEET NO.
HS-20050	PMP-2



NORTH CAROLINA PROFESSIONAL SEAL 018204 ENGINEER VICTOR M CHAVEZ

10/18/2025

Docusigned by:
Victor Chavez
7CD1F54298E940A...

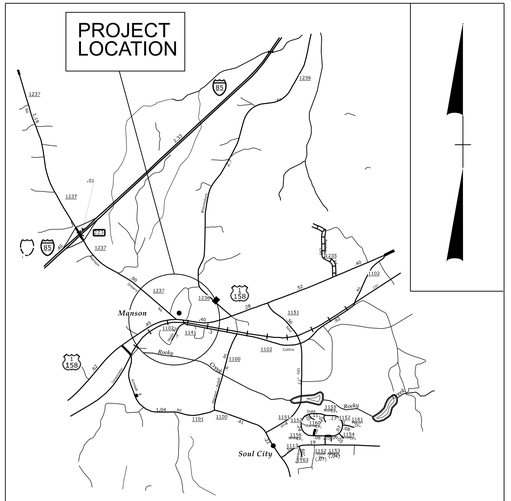
6/2/99

CSYSTIME $$ $$ $$

09/08/99

TIP PROJECT: **HS-2005O**

CONTRACT: DE00406



PROJECT REFERENCE NO.	SHEET NO.
HS-2005O	EC-02
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

DIVISION OF HIGHWAYS
STATE OF NORTH CAROLINA

EROSION & SEDIMENT CONTROL LEGEND

Std. #	Description	Symbol
1605.01	Temporary Silt Fence	
1606.01	Special Sediment Control Fence	
1622.01	Temporary Berms and Slope Drains	
1630.02	Silt Basin Type B	
1630.03	Temporary Silt Ditch	TSD
1630.04	Stilling Basin	
1630.05	Temporary Diversion	TD
1630.06	Special Stilling Basin	
1630.07	Skimmer Basin	
1630.08	Tiered Skimmer Basin	
1630.09	Earthen Dam with Skimmer	
	Infiltration Basin	
	Rock Inlet Sediment Trap:	
1632.01	Type A	A
1632.02	Type B	B
1632.03	Type C	C

Std. #	Description	Symbol
1633.01	Temporary Rock Silt Check Type A	
1633.02	Temporary Rock Silt Check Type B	
1633.03	Temporary Rock Silt Check Type A with Excelsior Matting and Flocculant	
1634.01	Temporary Rock Sediment Dam Type A	
1634.02	Temporary Rock Sediment Dam Type B	
1635.01	Rock Pipe Inlet Sediment Trap Type A	A
1635.02	Rock Pipe Inlet Sediment Trap Type B	B
1636.01	Excelsior Wattle Check	
1636.01	Excelsior Wattle Check with Flocculant	
1636.01	Coir Fiber Wattle Check	
1636.01	Coir Fiber Wattle Check with Flocculant	
1636.02	Silt Fence Excelsior Wattle Break	EW
	Silt Fence Coir Fiber Wattle Break	CFW
1636.03	Excelsior Wattle Barrier	EW EW EW
1636.03	Coir Fiber Wattle Barrier	CFW CFW CFW

PROJECT REFERENCE NO.	SHEET NO.
HS-2005O	EC-02
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

DIVISION OF HIGHWAYS
STATE OF NORTH CAROLINA

EROSION & SEDIMENT CONTROL LEGEND

Std. #	Description	Symbol
1605.01	Temporary Silt Fence	
1606.01	Special Sediment Control Fence	
1622.01	Temporary Berms and Slope Drains	
1630.02	Silt Basin Type B	
1630.03	Temporary Silt Ditch	TSD
1630.04	Stilling Basin	
1630.05	Temporary Diversion	TD
1630.06	Special Stilling Basin	
1630.07	Skimmer Basin	
1630.08	Tiered Skimmer Basin	
1630.09	Earthen Dam with Skimmer	
	Infiltration Basin	
	Rock Inlet Sediment Trap:	
1632.01	Type A	A
1632.02	Type B	B
1632.03	Type C	C

Std. #	Description	Symbol
1633.01	Temporary Rock Silt Check Type A	
1633.02	Temporary Rock Silt Check Type B	
1633.03	Temporary Rock Silt Check Type A with Excelsior Matting and Flocculant	
1634.01	Temporary Rock Sediment Dam Type A	
1634.02	Temporary Rock Sediment Dam Type B	
1635.01	Rock Pipe Inlet Sediment Trap Type A	A
1635.02	Rock Pipe Inlet Sediment Trap Type B	B
1636.01	Excelsior Wattle Check	
1636.01	Excelsior Wattle Check with Flocculant	
1636.01	Coir Fiber Wattle Check	
1636.01	Coir Fiber Wattle Check with Flocculant	
1636.02	Silt Fence Excelsior Wattle Break	EW
	Silt Fence Coir Fiber Wattle Break	CFW
1636.03	Excelsior Wattle Barrier	EW EW EW
1636.03	Coir Fiber Wattle Barrier	CFW CFW CFW

PROJECT REFERENCE NO.	SHEET NO.
HS-20050	EC-3B
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

DIVISION OF HIGHWAYS
STATE OF NORTH CAROLINA

SOIL STABILIZATION TIMEFRAMES

SITE DESCRIPTION	STABILIZATION TIME	TIMEFRAME EXCEPTIONS
PERIMETER DIKES, SWALES, DITCHES AND SLOPES	7 DAYS	NONE
HIGH QUALITY WATER (HQW) ZONES	7 DAYS	NONE
SLOPES STEEPER THAN 3:1	7 DAYS	IF SLOPES ARE 10' OR LESS IN LENGTH AND ARE NOT STEEPER THAN 2:1, 14 DAYS ARE ALLOWED.
SLOPES 3:1 OR FLATTER	14 DAYS	7 DAYS FOR SLOPES GREATER THAN 50' IN LENGTH.
ALL OTHER AREAS WITH SLOPES FLATTER THAN 4:1	14 DAYS	NONE, EXCEPT FOR PERIMETERS AND HQW ZONES.

5/26/20

HS-20050
EC4

CLEARING & GRUBBING PHASE

BEGIN TIP PROJECT HS-2005O
BEGIN CONSTRUCTION
-Y- POT STA 11+31.00

NAD 83/ 2011

CUR DATA -Y-
PIc 12+30.76
Δc = 35°51'32.9" (RT)
D = 45°50'11.8"
Lc = 78.23'
Tc = 40.45'
R = 125'

-Y- POT 10+00.00

INSTALL COIR FIBER WATTLE BARRIER BETWEEN REMOVED PAVEMENT AND EXISTING S & G PARKING

SEED, AND MULCH HATCHED AREAS IN ACCORDANCE WITH SECTION 1660 OF NCDOT STANDARD SPECIFICATIONS

MANSON-DREWRY ROAD SR 1237

TO I-85

Spectrum, FO
Spectrum, COAX
EXISTING RW

Warren County Public Utilities, 8" PVC

GATE

18" RCP

S49°24'25.6"E

-EY-

S&G

5' MONO. CONC. ISLAND

1 S BK BUS (ABAND)

CONC GAS ISLAND WITH PUMPS (ABAND)

1 S BK BUS POST OFFICE

CONC

MAILBOX

BST PARKING

1 S BLK BUS (ABAND)

CONC GAS ISLAND (ABAND)

GRASS

EIP

72" CHL

EXISTING RW

-Y- PC 11+90.00

-Y- PT 12+68.16

CONC CURB & GUTTER

CONC CURB RAMP

S&G PARKING

EXPRESSWAY GUTTER

S13°32'52.7"E

N90°00'00.0"E

-L- PT 13+65.11

-L- PC 13+74.80

-ERR-

WATER JUNCTION BOX

ANTENNA

72" CHL 3SBW

EOI

-L- POT 10+00.00

-Y- POT 13+23.14

-L- POC 13+37.64

EXISTING RW

EXISTING RR RW

US 1-158 24' BST

US 1-158 26' BST

TO NORLINA

S81°01'08.9"E

-EL-

-L-

GRASS

EXISTING RR RW

98.08' CONC CURB & GUTTER

-L- POT 19+75.74

2'X2' CONC BOX CULVERT

City of Henderson, 20", UNK

HICKS ROAD

MARABLE

EXISTING RW

END TIP PROJECT HS-2005O
END CONSTRUCTION
-Y- POT STA 13+10.00

CUR DATA -L-
PIc 11+83.16
Δc = 11°22'09.3" (RT)
D = 03°06'50.0"
Lc = 365.11'
Tc = 183.16'
R = 1,840'

CUR DATA -L-
PIc 15+46.22
Δc = 09°30'49.9" (RT)
D = 02°46'52.9"
Lc = 342.06'
Tc = 171.42'
R = 2,060'

PAVEMENT REMOVAL

5/26/20

HS-20050
EC5

FINAL PHASE

BEGIN TIP PROJECT HS-2005O
BEGIN CONSTRUCTION
-Y- POT STA 11+31.00

NAD 83/ 2011

CUR DATA -Y-
PIc 12+30.76
Δc = 35°51'32.9" (RT)
D = 45°50'11.8"
Lc = 78.23'
Tc = 40.45'
R = 125'

-Y- POT 10+00.00

INSTALL COIR FIBER WATTLE BARRIER BETWEEN REMOVED PAVEMENT AND EXISTING S & G PARKING

SEED, AND MULCH HATCHED AREAS IN ACCORDANCE WITH SECTION 1660 OF NCDOT STANDARD SPECIFICATIONS

MANSON-DREWRY ROAD SR 1237

TO I-85

Spectrum, FO
Spectrum, COAX
EXISTING RW

Warren County Public Utilities, 8" PVC

GATE

18" RCP

-EY-

S49°24'25.6"E

S&G

6" MONO. CONC. ISLAND

1 S BK BUS (ABAND)

1 S BK BUS POST OFFICE

CONC

MAILBOX

BST PARKING

1 S BLK BUS (ABAND)

GRASS

CONC GAS ISLAND (ABAND)

CONC GAS ISLAND WITH PUMPS (ABAND)

1 S BK BUS

CONC

W/D RAMP

S&G PARKING

-Y- PC 12+69.16

-L- PC 11+90.00

-Y- POT 12+00.00

EXPRESSWAY GUTTER

S13°32'52.7"E

N90°00'00.0"E

EOI

EIP

72" CHL

CHL

EXISTING RW

US 1-158 26' BST

TO NORLINA

-EL-

-L-

S81°01'08.9"E

-L- POT 19+75.74

-L- POT 10+00.00

-L- POT 13+23.14

-L- POC 13+37.64

-L- PT 13+65.11

-L- PC 13+74.80

-L- PT 14+08.98

-ERR-

WATER JUNCTION BOX

ANTENNA

75' CHL 3SBW

EXISTING RR RW

2'X2' CONC BOX CULVERT

City of Henderson, 20", UNK

HICKS ROAD

VARIABLE

END TIP PROJECT HS-2005O
END CONSTRUCTION
-Y- POT STA 13+10.00

CUR DATA -L-
PIc 11+83.16
Δc = 11°22'09.3" (RT)
D = 03°06'50.0"
Lc = 365.11'
Tc = 183.16'
R = 1,840'

CUR DATA -L-
PIc 15+46.22
Δc = 09°30'49.9" (RT)
D = 02°46'52.9"
Lc = 342.06'
Tc = 171.42'
R = 2,060'

PAVEMENT REMOVAL

STATE	STATE PROJECT REFERENCE NO.	SHEET NO.
N.C.	HS–2005O	SIGN–1

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

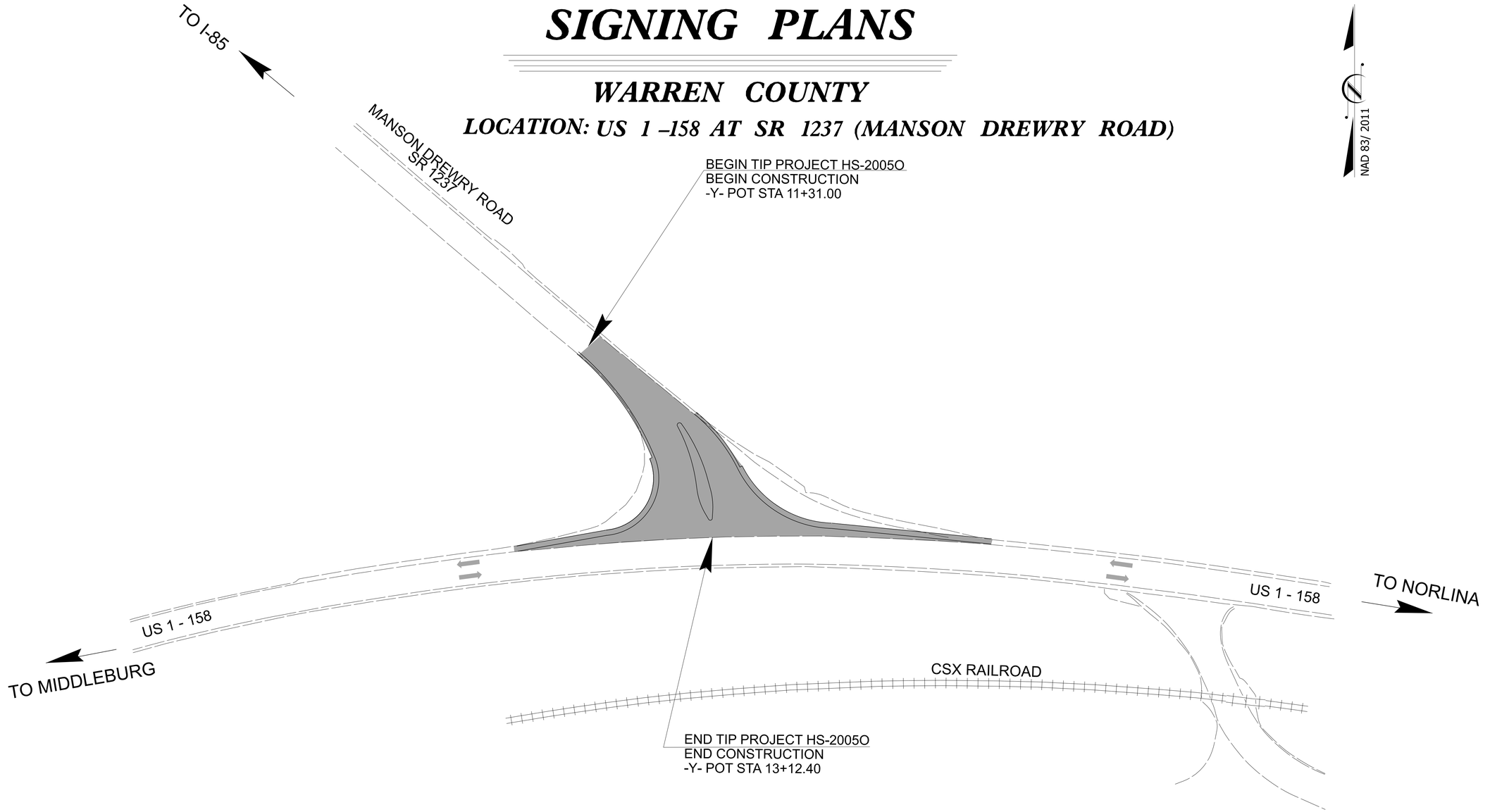
SIGNING PLANS

WARREN COUNTY

LOCATION: US 1 –158 AT SR 1237 (MANSON DREWRY ROAD)

TIP PROJECT: HS–2005O

CONTRACT: DE00406



NAD 83/ 2011

INDEX OF SHEETS

SHEET NO.	DESCRIPTION
1	TITLE SHEET
2	TYPE E AND F SIGN DESIGNS
3	SIGN ROADWAY SHEET

Prepared in the Office of:
DIVISION DESIGN & CONSTRUCTION
815 Stadium Dr., Durham NC, 27704

2024 STANDARD SPECIFICATIONS

VICTOR M. CHAVEZ, PE
PROJECT ENGINEER

VICTOR M. CHAVEZ, PE
PROJECT DESIGN ENGINEER

DIVISION FIVE DESIGN & CONSTRUCTION ENGINEER

NORTH CAROLINA PROFESSIONAL SEAL 018204 ENGINEER VICTOR M CHAVEZ
09/18/2025

Docusigned by:
Victor Chavez
7CD1F54298E940A...
SIGNATURE: P.E.

DIVISION OF HIGHWAYS
STATE OF NORTH CAROLINA
FIFTH DIVISION
B.J. GALLAS, P.E.
DIVISION ENGINEER

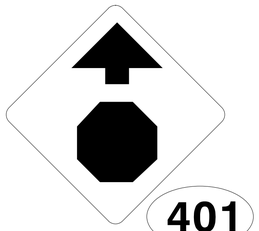
DIVISION OF HIGHWAYS · DIVISION FIVE · STATE OF NORTH CAROLINA · DEPARTMENT OF TRANSPORTATION · DIVISION DESIGN UNIT

09/18/2025
9/17/2025
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User:vmchavez1

8/17/99

TYPE "E" SIGNS

2 - 30" X 30"
W3-1



401

MOUNTED ON ONE "U" CHANNEL POST EACH

1 - 30" X 30"
R1-1



402

MOUNTED ON ONE "U" CHANNEL POST EACH

2 - 30" X 30"
R5-1



403

MOUNTED ON ONE "U" CHANNEL POST

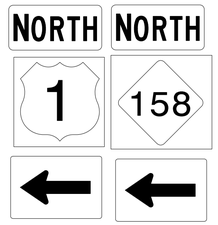
2 - 30" X 30"
R4-8



404

MOUNTED ON ONE "U" CHANNEL POST EACH

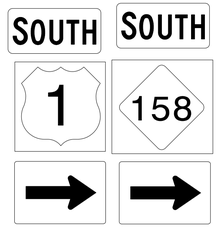
TYPE "F" SIGNS



2-24" X 12"
2-24" X 24"
2-21" X 15"

501

MOUNTED ON TWO "U" CHANNEL POST



2-24" X 12"
2-24" X 24"
2-21" X 15"

502

MOUNTED ON TWO "U" CHANNEL POST

PROJECT REFERENCE NO.	SHEET NO.
HS-2005O	SIGN-2

DIVISION FIVE DESIGN ENGINEER

NORTH CAROLINA PROFESSIONAL SEAL 018204 ENGINEER VICTOR M. CHAVEZ P.E.

9/18/2025

DocuSigned by:
Victor Chavez
7CD1E54298E940A...
SIGNATURE:

9/17/2025
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User:mchavez

TYPE "E" & "F" SIGNS

8/17/99

PROJECT REFERENCE NO.	SHEET NO.
HS–2005O	SIGN–3

DIVISION FIVE DESIGN ENGINEER

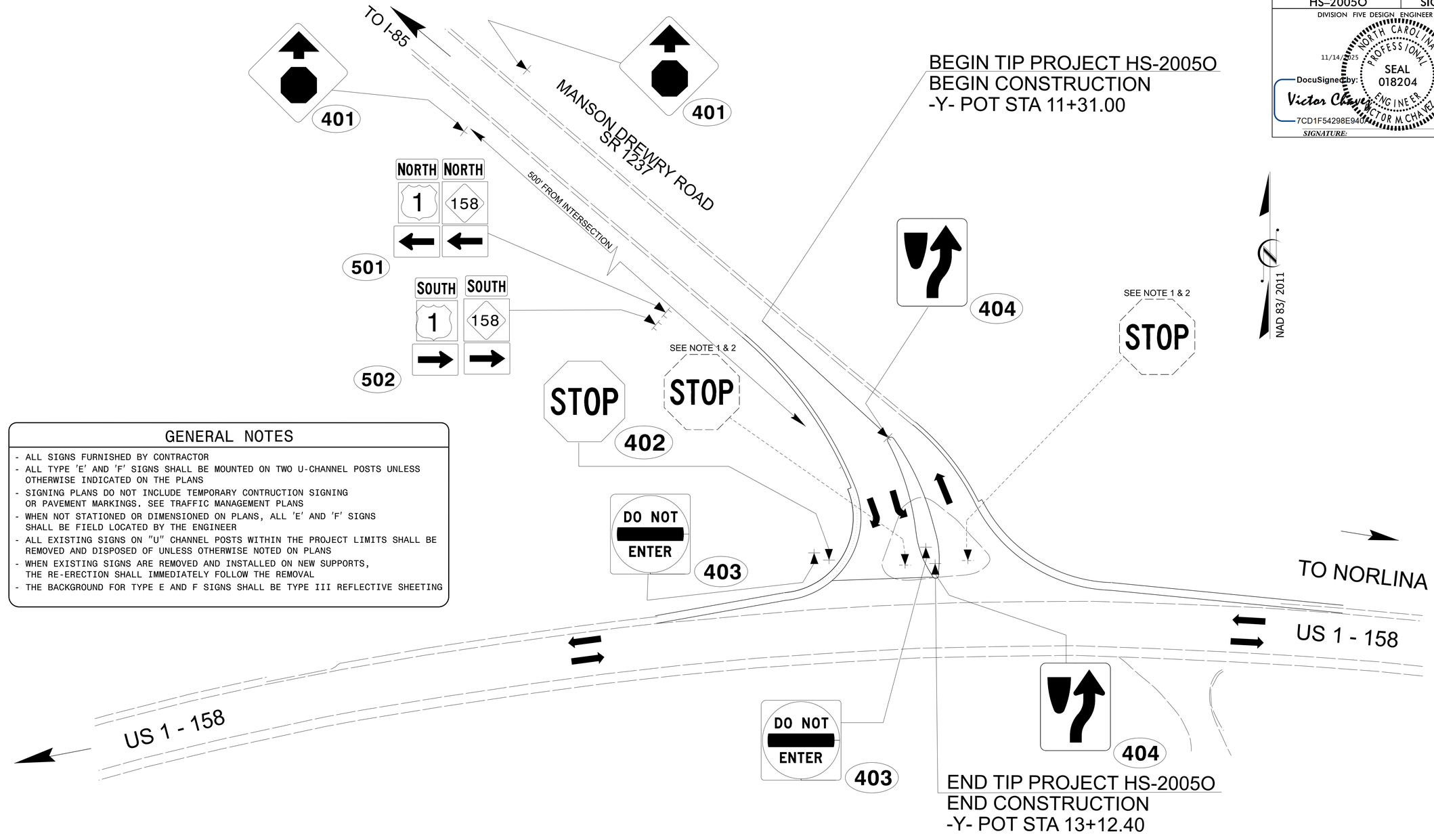
11/14/2025

DocuSigned by: Victor Chavez

7CD1F54298E940F...

SIGNATURE:

NORTH CAROLINA PROFESSIONAL SEAL 018204 ENGINEER VICTOR M. CHAVEZ P.E.



BEGIN TIP PROJECT HS-2005O
BEGIN CONSTRUCTION
-Y- POT STA 11+31.00

END TIP PROJECT HS-2005O
END CONSTRUCTION
-Y- POT STA 13+12.40

GENERAL NOTES

- ALL SIGNS FURNISHED BY CONTRACTOR
- ALL TYPE 'E' AND 'F' SIGNS SHALL BE MOUNTED ON TWO U-CHANNEL POSTS UNLESS OTHERWISE INDICATED ON THE PLANS
- SIGNING PLANS DO NOT INCLUDE TEMPORARY CONTRUCTION SIGNING OR PAVEMENT MARKINGS. SEE TRAFFIC MANAGEMENT PLANS
- WHEN NOT STATIONED OR DIMENSIONED ON PLANS, ALL 'E' AND 'F' SIGNS SHALL BE FIELD LOCATED BY THE ENGINEER
- ALL EXISTING SIGNS ON "U" CHANNEL POSTS WITHIN THE PROJECT LIMITS SHALL BE REMOVED AND DISPOSED OF UNLESS OTHERWISE NOTED ON PLANS
- WHEN EXISTING SIGNS ARE REMOVED AND INSTALLED ON NEW SUPPORTS, THE RE-ERECTION SHALL IMMEDIATELY FOLLOW THE REMOVAL
- THE BACKGROUND FOR TYPE E AND F SIGNS SHALL BE TYPE III REFLECTIVE SHEETING

ITEM NO. DESC. NO.	ITEM NO. SECT. NO.	ITEM DESCRIPTION	QUANTITY	UNIT
4072000000	903	SUPPORTS, 3 LB STEEL U-CHANNEL.....	140	LF
4102000000	904	SIGN ERECTION, TYPE E.....	7	EA
4108000000	904	SIGN ERECTION, TYPE F.....	4	EA
4155000000	907	DISPOSAL OF SIGN SYSTEM,U-CHANNEL..	2	EA

PAY ITEM NOTES

1	DISPOSAL OF SUPPORT, U-CHANNEL
2	DISPOSAL OF SIGN, D, E OR F

ROADWAY STANDARD DRAWINGS

THE FOLLOWING ROADWAY STANDARDS AS APPEAR IN "ROADWAY STANDARD DRAWINGS" - PROJECT SERVICES UNIT - N.C. DEPARTMENT OF TRANSPORTATION - RALEIGH, N.C., DATED JANUARY 2024 ARE APPLICABLE TO THIS PROJECT AND BY REFERENCE HEREBY ARE CONSIDERED A PART OF THESE PLANS:

STD. NO.

904.10 ORIENTATION OF GROUND MOUNTED SIGNS
904.50 MOUNTING OF "D", "E", 'F" SIGNS ON "U" CHANNEL POSTS

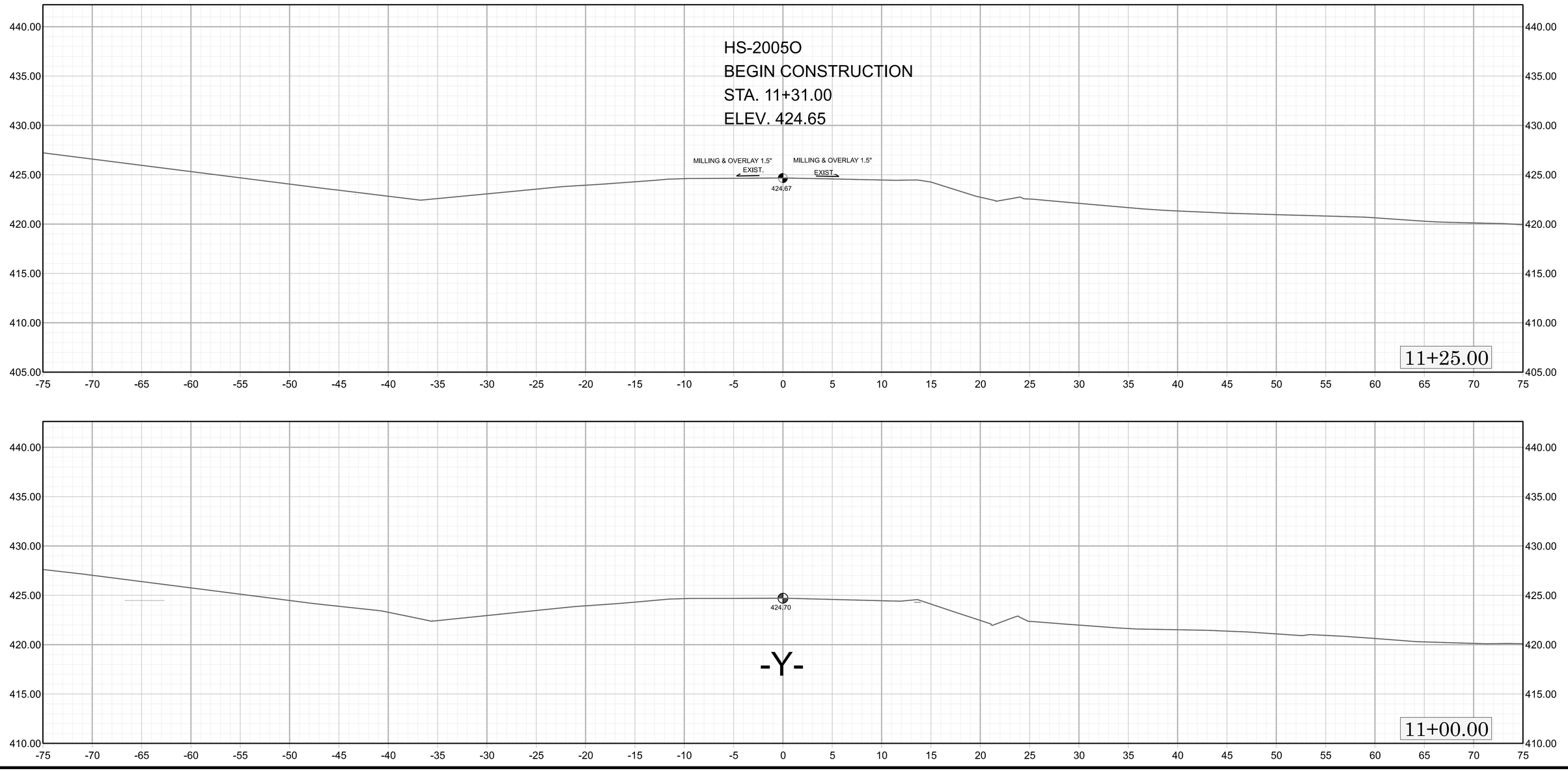
EXISTING and PROPOSED SIGNS
SR–1237 (MANSON DREWRY RD) AT US 1–158

11/14/2025
S:\DOCD\Dist3\Warren\FUNDED TIP\HS-2005O\Roadway\Proj\ORD\HS2005O_sgn_SIGN1.dgn
USER:mmoxley

5/26/20

0 5 10

HS-20050
SHEET | X-1

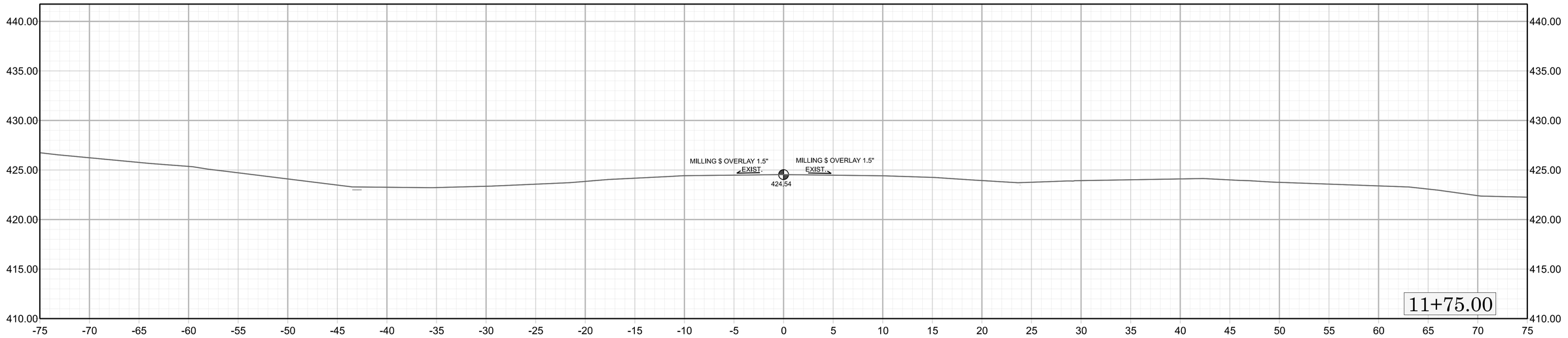


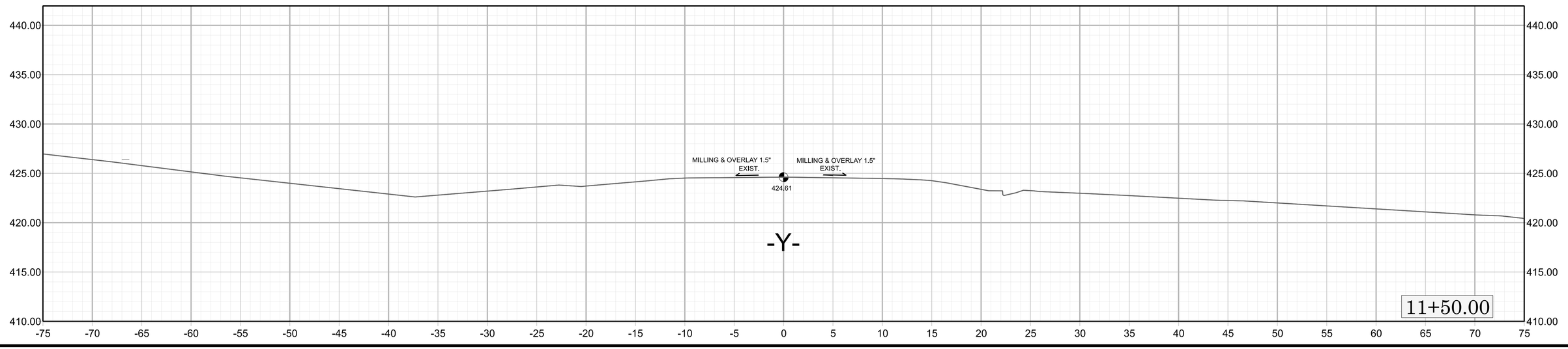
5/26/20

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HS-20050

SHEET | X - 2





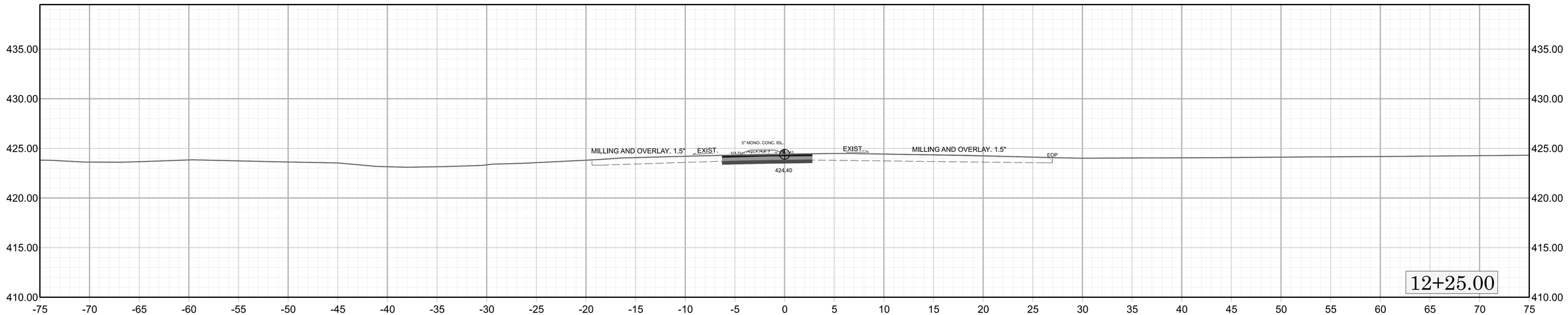
-Y-

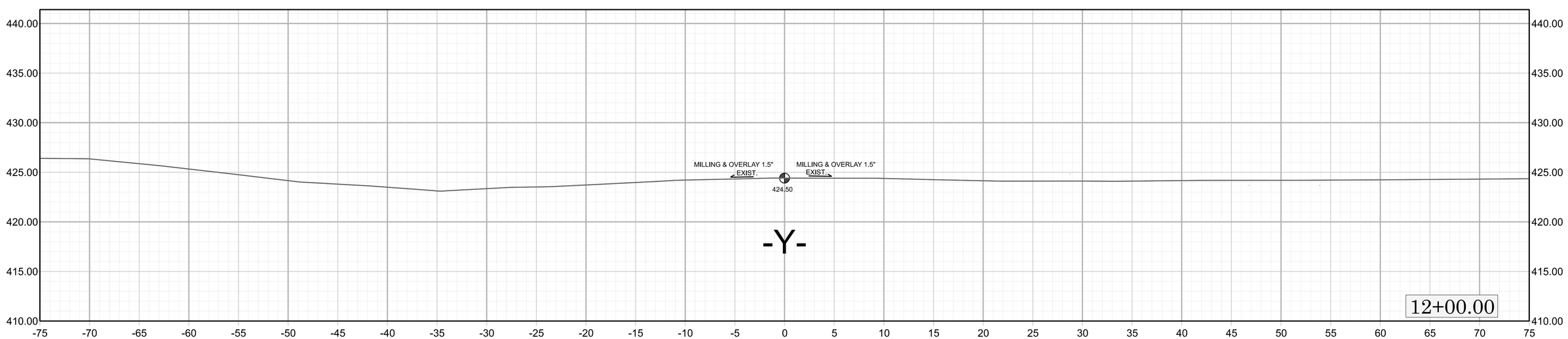
5/26/20

0 5 10

HS-20050

SHEET | X - 3





5/26/20

0 5 10

HS-2005O
SHEET | X - 4

HS-2005O
END CONSTRUCTION
STA. 13+12.40.00
ELEV. 424.70

