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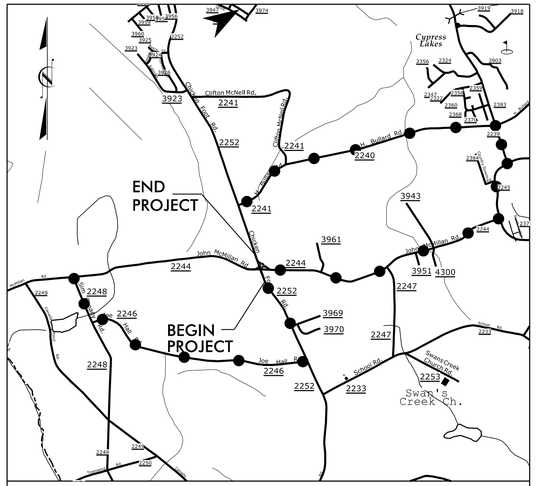
09/08/49

TIP PROJECT: W-5706O

CONTRACT: DF00428

See Sheet 1-A For Index of Sheets
See Sheet 1-B For Symbology Sheet



VICINITY MAP
(NOT TO SCALE)

DENOTES DETOUR ROUTE

STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	W-5706O	1	

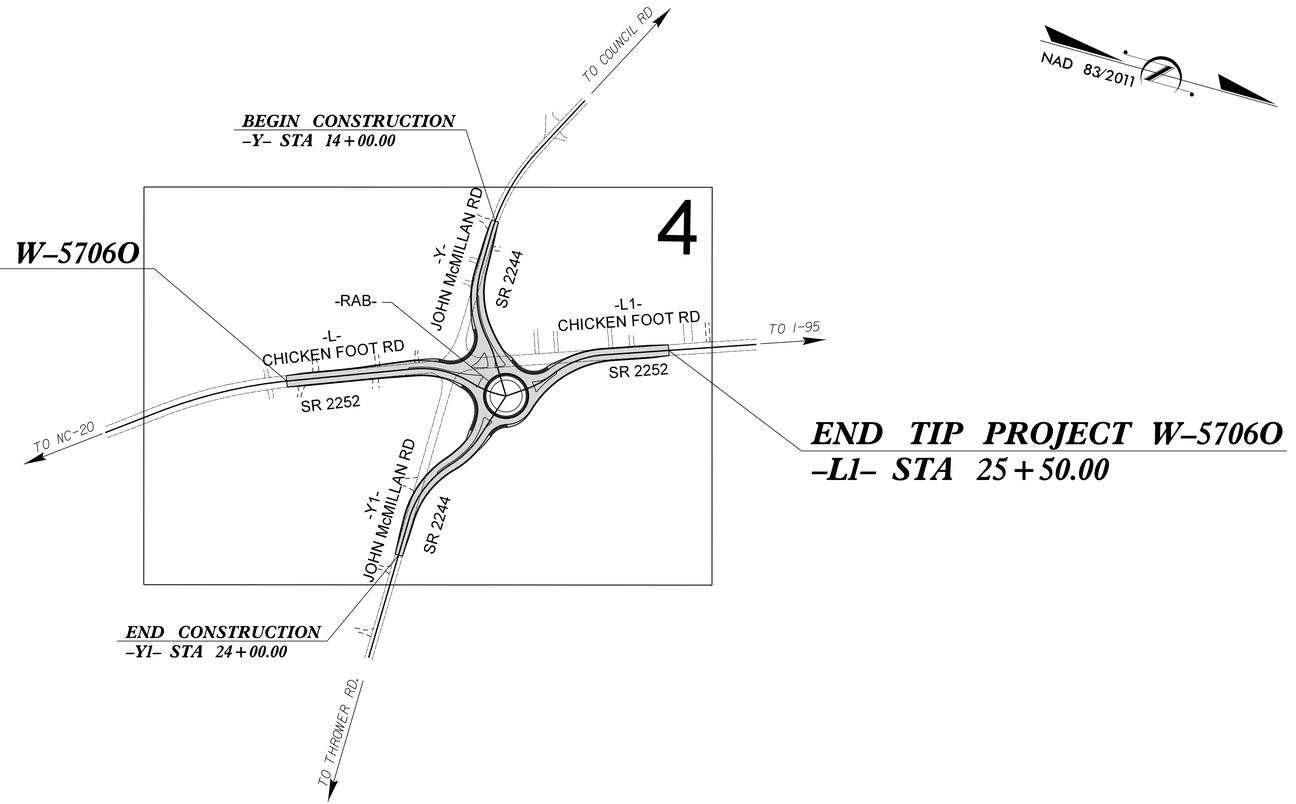
STATE PROJ. NO.	F. A. PROJ. NO.	DESCRIPTION
44852.1.15	HSIP – 2244(022)	PE
44852.2.15	HSIP – 2244(022)	ROW
44852.2.30	HSIP – 2244(022)	UTIL
44852.3.15	HSIP – 2244(022)	CONST

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

CUMBERLAND COUNTY

LOCATION: ROUNDABOUT AT INTERSECTION OF SR 2244 (JOHN McMILLAN ROAD) AND SR 2252 (CHICKENFOOT ROAD)

TYPE OF WORK: GRADING, DRAINAGE, PAVING, SIGNING & PAVEMENT MARKINGS



BEGIN TIP PROJECT W-5706O
-L- STA 15+00.00

END TIP PROJECT W-5706O
-L1- STA 25+50.00

NAD 83/2011

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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 = 3,830
ADT 2045 = >4,000

V = 60 MPH

FUNC CLASS =
RURAL MAJOR COLLECTOR
REGIONAL TIER

PROJECT LENGTH

LENGTH ROADWAY TIP PROJECT W-5706O = 0.199 MILES
TOTAL LENGTH TIP PROJECT W-5706O = 0.199 MILES

PLANS PREPARED FOR THE NCDOT BY:

MOTT MACDONALD
PO Box 700
Fuquay-Varina, NC 27526
(919) 552-2253
(919) 552-2254 (Fax)
www.mottmac.com/americas
LICENSE NO. F-0669

McKIM&CREED
NC LICENSE #P-1202
243 NORTH FRONT STREET
WILMINGTON, NORTH CAROLINA 28401
TEL: (910) 343-1048 FAX: (910) 790-8282

2018 STANDARD SPECIFICATIONS

RIGHT OF WAY DATE:
OCTOBER 29, 2021

LETTING DATE:
MAY 17, 2023

DAVID WALLER, PE
PROJECT ENGINEER
PEF ENGINEER

VICTORIA RIEGE, PE
PROJECT DESIGN ENGINEER
PEF ENGINEER

JOHN GAUTHIER
NCDOT CONTACT
NCDOT DIVISION 6

HYDRAULICS ENGINEER

DocuSigned by: Rick Moore 2653A515699F491... 4/26/2023
SIGNATURE:

NORTH CAROLINA PROFESSIONAL SEAL 025503 ENGINEER RICHARD A. MOORE

ROADWAY DESIGN ENGINEER

DocuSigned by: David C. Waller 653418F2ECED4C0... 4/26/2023
SIGNATURE:

NORTH CAROLINA PROFESSIONAL SEAL 22606 ENGINEER DAVID C. WALLER

STATE OF NORTH CAROLINA • DEPARTMENT OF TRANSPORTATION •

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WAL78449

8/17/99

PROJECT REFERENCE NO.	SHEET NO.
W-57060	1A

ROADWAY DESIGN ENGINEER

NORTH CAROLINA PROFESSIONAL SEAL 22606 ENGINEER

DocuSigned by: Daniel E. Walters 653F6A2E1B0A4AC... DANIEL E. WALTERS

1/20/2021

MOTT MACDONALD I & E, LLC LICENSE NO. F-0669

Prepared in the Office of: MOTT MACDONALD

Mott MacDonald I & E, LLC
7621 Parfay Road, Suite 115
Fuquay-Varina, NC 27526
www.mottmac.com
NC License No. F-0669

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GENERAL NOTES: 2018 SPECIFICATIONS
EFFECTIVE: 01-16-2018
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

SUBSURFACE DRAINS:

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

DRIVEWAYS:

DRIVEWAYS SHALL BE CONSTRUCTED IN ACCORDANCE WITH STD. 848.03 AT LOCATIONS SHOWN ON PLANS OR AS DIRECTED BY THE ENGINEER.

UTILITIES:

UTILITY OWNERS ON THIS PROJECT ARE

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 OTHERS.

EFF. 01-16-2018
REV.

2018 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, 2018 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	
815.02	Subsurface Drain
840.18	Concrete Grated Drop Inlet Type 'B' - 12" thru 36" Pipe
840.19	Concrete Grated Drop Inlet Type 'D' - 12" thru 36" Pipe
840.24	Frames and Narrow Slot Sag Grates
840.29	Frames and Narrow Slot Flat Grates
840.36	Traffic Bearing Grated Drop Inlet - for Steel (840.37) Double Frame and Grates
840.37	Steel Grate and Frame
846.01	Concrete Curb, Gutter and Curb & Gutter
852.01	Concrete Islands
852.06	Method for Placement of Drop Inlets in Concrete Islands
876.02	Guide for Rip Rap at Pipe Outlets

INDEX OF SHEETS

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WALTERS 78443

9/10/2021

PROJECT REFERENCE NO.	SHEET NO.
W-57060	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.

6/2/99

PAVEMENT SCHEDULE

A1	12″ PORTLAND CONCRETE TRUCK APRON WITH 4X4 W5.5 x W5.5 OR 6x6 W8.5 X W8.5 OR HEAVIER WELDED WIRE MESH	R1	5″ MONOLITHIC CONCRETE ISLAND (KEYED IN)
C1	PROP. APPROX. 1½″ ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5B, AT AN AVERAGE RATE OF 165 LBS. PER SQ. YD.	R2	EXPRESSWAY GUTTER
C2	PROP. APPROX. 3″ ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5B, AT AN AVERAGE RATE OF 165 LBS. PER SQ. YD. IN EACH OF TWO LAYERS	R3	9″x18″ CONCRETE CURB
C3	PROP. VAR. DEPTH ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5B, AN AVERAGE RATE OF 110 LBS. PER SQ. YD. PER 1″ DEPTH. TO BE PLACED IN LAYERS NOT TO EXCEED 3″ IN DEPTH	R4	4″ CONCRETE COVER
D1	PROP. APPROX. 4″ ASPHALT CONCRETE BINDER COURSE. TYPE I19.0C, AT AN AVERAGE RATE OF 456 LBS. PER SQ. YD.	T	EARTH MATERIAL
D2	PROP. VAR. DEPTH ASPHALT CONCRETE BINDER 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.	U	EXISTING PAVEMENT
E1	PROP. APPROX. 4″ ASPHALT CONCRETE BASE COURSE, TYPE B25.0C, AT AN AVERAGE RATE OF 456 LBS. PER SQ. YD.	V	VAR. DEPTH MILLING
E2	PROP. APPROX. 5″ ASPHALT CONCRETE BASE COURSE, TYPE B25.0C, AT AN AVERAGE RATE OF 570 LBS. PER SQ. YD.	W	WEDGING (SEE DETAIL SHOWING METHOD OF WEDGING ON THIS SHEET.)
E3	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.		

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

PROJECT REFERENCE NO.	SHEET NO.
W-57060	2A-1

ROADWAY DESIGN ENGINEER

NORTH CAROLINA PROFESSIONAL SEAL 22606 ENGINEER DAVID C. WALLER

DocuSigned by: David C. Waller 65D...

1/20/2023

PAVEMENT DESIGN ENGINEER

NORTH CAROLINA PROFESSIONAL SEAL 039779 ENGINEER KEVIN T. HANNA

DocuSigned by: Kevin T. Hanna 4C2...

1/20/2023

MOTT MACDONALD I & E, LLC
LICENSE NO. F-0669

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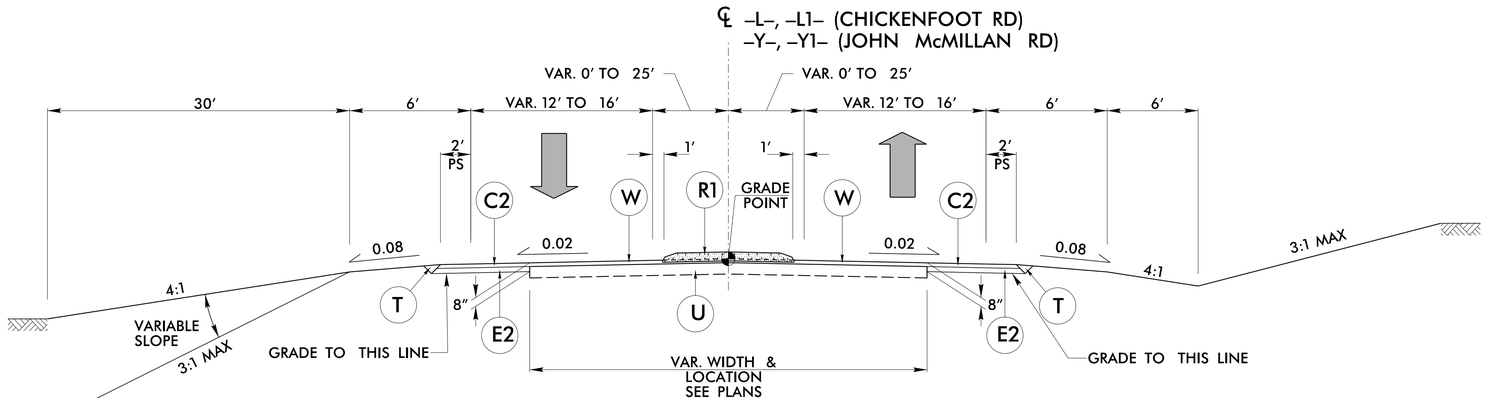


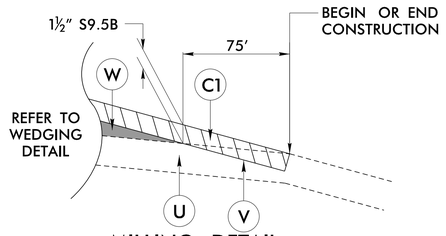
TYPICAL SECTION NO. 1

TRANSITION FROM EXISTING TO TYPICAL SECTION NO. 1

–L– STA. 15+00.00 TO 15+50.00
–L1– STA. 25+00.00 TO 25+50.00
–Y– STA. 14+00.00 TO 14+50.00
–Y1– STA. 23+50.00 TO 24+00.00

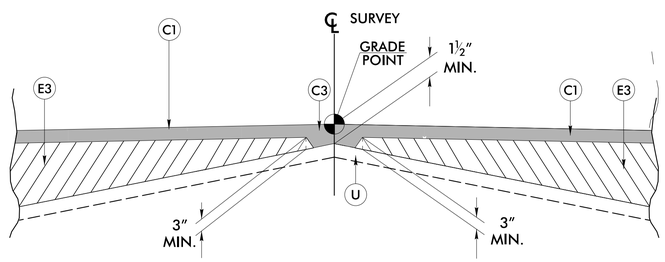
USE TYPICAL SECTION NO. 1

–L– STA. 15+50.00 TO 19+53.40
–L1– STA. 22+94.52 TO 25+50.00
–Y– STA. 14+00.00 TO 16+03.59
–Y1– STA. 22+26.26 TO 24+00.00



MILLING DETAIL

DETAIL SHOWING PROFILE VIEW



W: Detail Showing Method of Wedging

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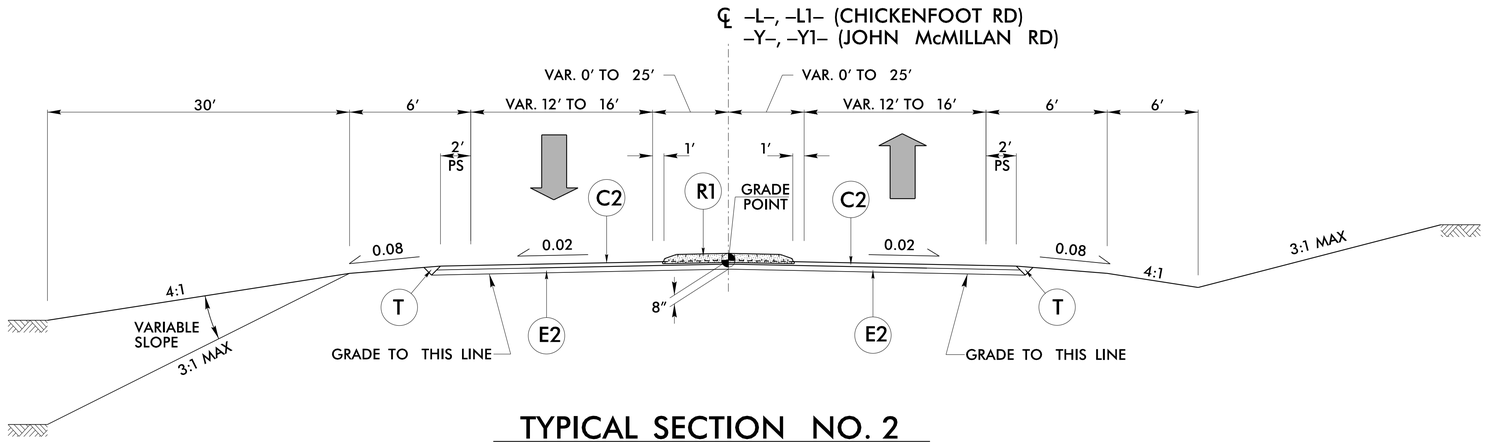
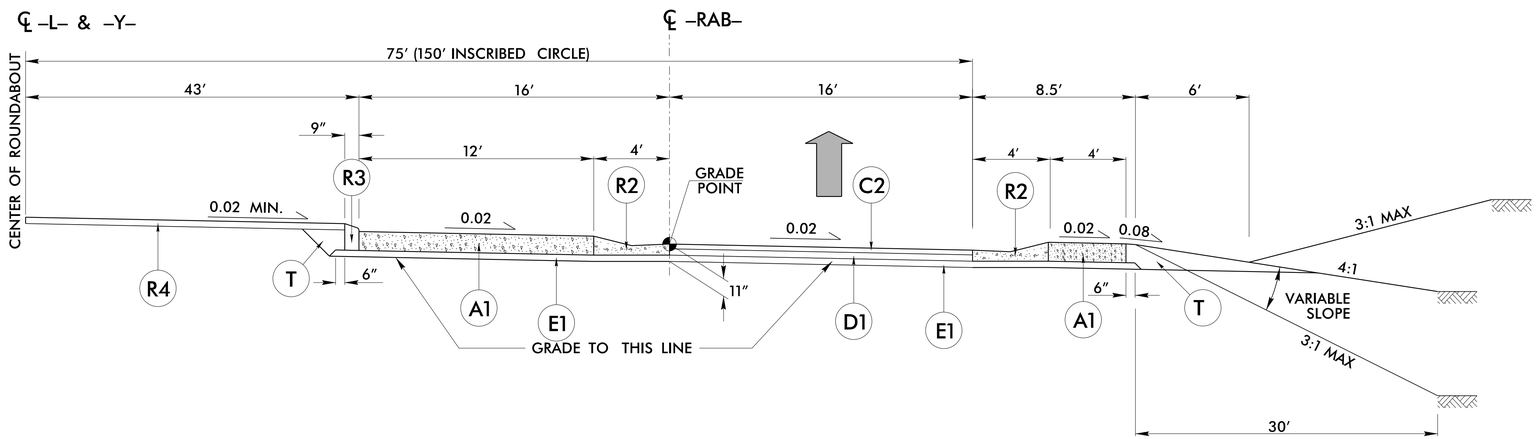


TYPICAL SECTION NO. 2

USE TYPICAL SECTION NO. 2
–L– STA. 19+53.40 TO 20+19.65
–L1– STA. 21+69.60 TO 22+94.52
–Y– STA. 16+03.59 TO 18+05.52
–Y1– STA. 19+55.52 TO 22+26.26



TYPICAL SECTION NO. 3

USE TYPICAL SECTION NO. 3
–RAB– STA. 10+00.00 TO 13+70.71

PROJECT REFERENCE NO.	SHEET NO.
W-57060	2A-2

ROADWAY DESIGN ENGINEER
NORTH CAROLINA PROFESSIONAL SEAL 22606 ENGINEER DAVID C. WALLER
DocuSigned by: David C. Waller 653A1B5B4F2...
1/20/2023

PAVEMENT DESIGN ENGINEER
NORTH CAROLINA PROFESSIONAL SEAL 039779 ENGINEER BENJAMIN S. HAMM
DocuSigned by: Benjamin Hamm 8E4C2B8B4F2...
1/20/2023

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Prepared in the Office of:
MOTT MACDONALD
PO Box 700
Fuquay-Varina, NC 27526
www.mottmac.com/americas

PAVEMENT SCHEDULE

A1	CONC. TRUCK APRON
C2	3" S9.5B
D1	4" I19.0C
E1	4" B25.0C
E2	5" B25.0C
R1	5" MONO. CONC. ISLAND
R2	EXPRESSWAY GUTTER
R3	9"x18" CONC. CURB
R4	4" CONC. COVER
T	EARTH MATERIAL

1/20/2023
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WA 78449

8/17/99

PROJECT REFERENCE NO.	SHEET NO.
W-57060	2B-1
R/W SHEET NO.	

ROADWAY DESIGN ENGINEER

NORTH CAROLINA PROFESSIONAL SEAL 22606 ENGINEER DAVID C. WALLER

DocuSigned by: David C. Waller 6534F5A0D4D4C...

1/20/2023

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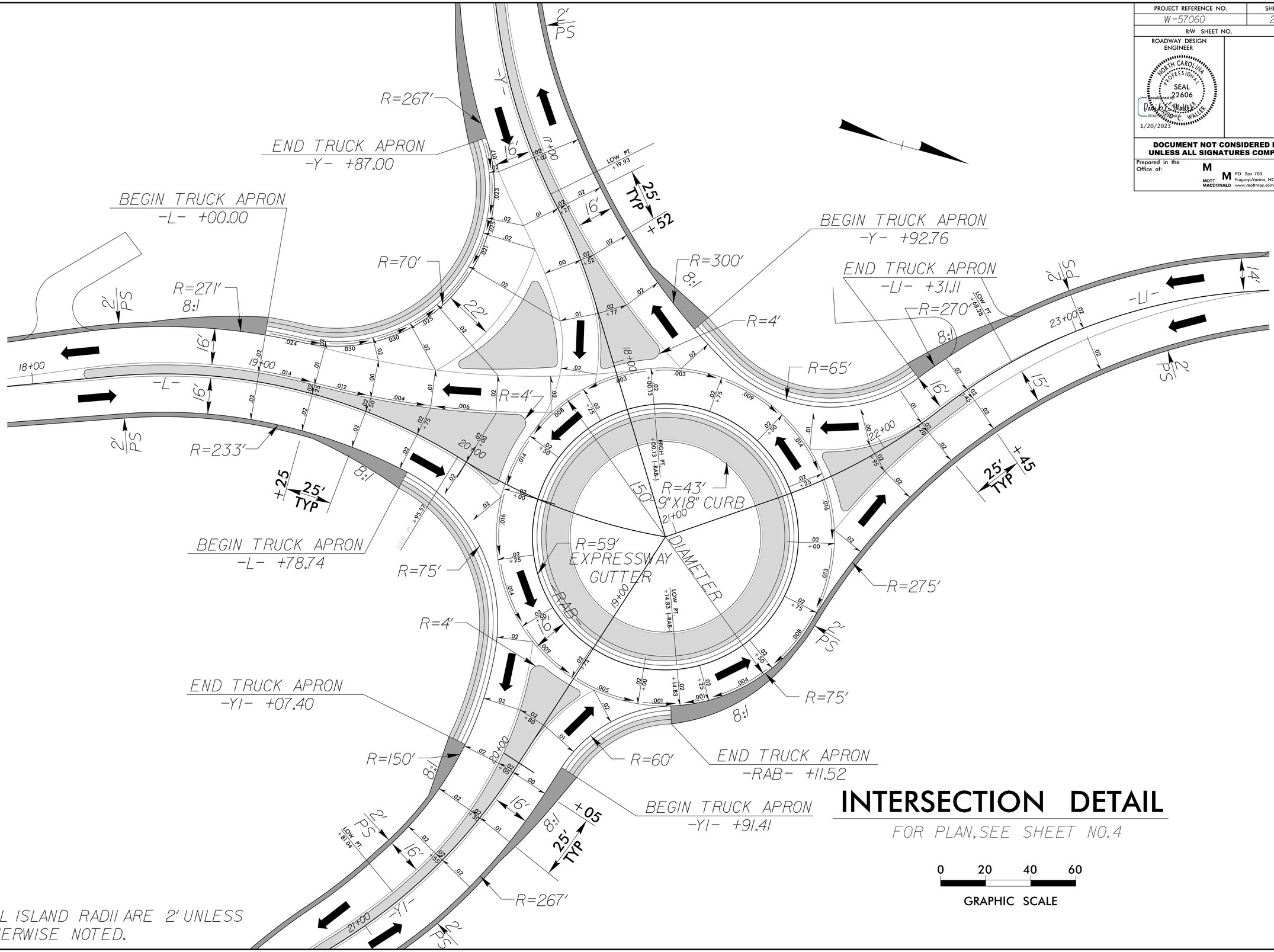

INTERSECTION DETAIL

FOR PLAN, SEE SHEET NO. 4

0 20 40 60

GRAPHIC SCALE

* ALL ISLAND RADII ARE 2' UNLESS OTHERWISE NOTED.

5:06:55 PM
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WALLER
8/17/99

6/21/00

COMPUTED BY: VJR DATE: 8/27/21
CHECKED BY: DCW DATE: 12/16/22

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

PROJECT REFERENCE NO.	SHEET NO.
W-57060	3B-1

SUMMARY OF EARTHWORK

STATION	STATION	UNCL. EXCAV.	EMBANK. +%	BORROW	WASTE
–L– 15+00.00	–L– 20+19.65	470	101		369
–L1– 21+69.96	–L1– 25+50.00	549	539		10
–Y– 14+00.00	–Y– 18+04.35	713	94		619
–Y1– 19+55.52	–Y1– 26+81.98	798	314		484
–RAB– 10+00.00	–RAB– 13+70.71	382	2811	2429	
PROJECT TOTALS:		2912	3859	2429	1482
LOSS DUE TO CLEARING AND GRUBBING		–500		500	
ADDITIONAL UNDERCUT					400
WASTE IN LIEU OF BORROW				–1482	–1482
5% TO REPLACE BORROW				73	
GRAND TOTALS:		2412		1520	400
SAY:		2600		1600	

EST. DDE = 80 CY
EST. SHALLOW UNDERCUT = 100 CY
CLASS IV SUBGRADE STABILIZATION = 200 TONS
PER GEOTECH RECOMMENDATIONS, ESTIMATED 400 CY OF UNDERCUT TO BE USED AT THE DISCRETION OF THE RESIDENT ENGINEER.

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."

EXISTING ASPHALT PAVEMENT REMOVAL SUMMARY

SURVEY LINE	STATION	STATION	LOCATION LT/RT/CL	YD^2
–Y–	16+56	17+15	RT	185.73
–Y1–	19+55	22+10	RT	534.30
–L1–	21+59	22+54	LT	192.28
–L1–	22+74	22+78	LT	21.25
			TOTAL:	933.55
			SAY:	940

6/21/00

COMPUTED BY: R. MOORE DATE: 01/15/2023
CHECKED BY: _____ DATE: _____

PROJECT REFERENCE NO.	SHEET NO.
W-57060	3D-1

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

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

SUB–REGIONAL & REGIONAL
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	DRAINAGE PIPE (RCP, CSP, CAAP, HDPE, or PVC) SIZE: 4" PVC Conduit	15"	18"	24"	30"	36"	42"	48"	DO NOT USE RCP	DO NOT USE CSP	DO NOT USE CAAP	DO NOT USE HDPE
–Y1–23+33	LT	0404																	
–L– 19+28	LT	0407	0405		170.00	169.22				72							X		
–Y1– 20+81	RT	0406	0410		168.05	167.85				36							X		
–Y1– 20+81	CL	0410		171.30															
		0410	0413		167.85	167.66				32							X		
–L– 20+18	RT	0411		172.72															
		0411	0408		169.10	168.82				24							X		
–Y1– 19+98	RT	0412		171.30															
		0412	0409		168.47	168.43				16							X		
–L– 19+93	LT	0415		173.60															
		0415	0414		170.32	169.60				40							X		
–Y– 17+46	LT	0414		172.90															
		0414	0417		169.60	169.20				48							X		
–Y– 17+20	CL	0417		173.52															
		0417	0420		169.20	169.00				40							X		
–Y– 14+80	LT	0419																	
–L1– 21+93	LT	0422		173.14															
		0422	0429		169.50	169.33				16							X		
–L1– 22+21	LT	0430	0421		168.40	168.10					48						X		
–L1– 22+59	LT	0421		170.3															
		0421	0423		168.10	167.50					32						X		
–L1– 22+85	LT	0423		170.3															
		0423	0424		167.50	168.20						136					X		
		0423	0425		167.50	167.20						88					X		
–L1– 24+12	LT	0424		170.9															
		0424	0431		168.20	169.50											X		
–L1– 25+39	LT	0427	0428		169.00	168.13													
SHEET TOTAL										184	220	224							

STATION	LOCATION (LT,RT, OR CL)	STRUCTURE NO. FROM	STRUCTURE NO. TO	TOP ELEVATION	INVERT ELEVATION	INVERT ELEVATION	SLOPE CRITICAL	C.S. PIPE SIZE: 12"	15"	18"	24"	36"	42"	48"	R.C. PIPE (CLASS III) 15"	18"	24"	30"	36"	42"	48"	R.C. PIPE (CLASS IV) 12"	15"	18"	24"	30"	36"	42"	48"
–Y1–23+33	LT	0404																											
–L– 19+28	LT	0407	0405		170.00	169.22																							
–Y1– 20+81	RT	0406	0410		168.05	167.85																							
–Y1– 20+81	CL	0410		171.30																									
		0410	0413		167.85	167.66																							
–L– 20+18	RT	0411		172.72																									
		0411	0408		169.10	168.82																							
–Y1– 19+98	RT	0412		171.30																									
		0412	0409		168.47	168.43																							
–L– 19+93	LT	0415		173.60																									
		0415	0414		170.32	169.60																							
–Y– 17+46	LT	0414		172.90																									
		0414	0417		169.60	169.20																							
–Y– 17+20	CL	0417		173.52																									
		0417	0420		169.20	169.00																							
–Y– 14+80	LT	0419																											
–L1– 21+93	LT	0422		173.14																									
		0422	0429		169.50	169.33																							
–L1– 22+21	LT	0430	0421		168.40	168.10																							
–L1– 22+59	LT	0421		170.3																									
		0421	0423		168.10	167.50																							
–L1– 22+85	LT	0423		170.3																									
		0423	0424		167.50	168.20																							
		0423	0425		167.50	167.20																							
–L1– 24+12	LT	0424		170.9																									
		0424	0431		168.20	169.50											120												
–L1– 25+39	LT	0427	0428		169.00	168.13											72												
SHEET TOTAL																	192												

STATION	LOCATION (LT,RT, OR CL)	STRUCTURE NO. FROM	STRUCTURE NO. TO	TOP ELEVATION	INVERT ELEVATION	INVERT ELEVATION	SLOPE CRITICAL	ENDWALLS: STD. 838.01, STD. 838.11 OR STD. 838.80 (UNLESS NOTED OTHERWISE) CU. YDS. 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') LIN. FT. PER EACH (0' THRU 5.0')	5.0' THRU 10.0'	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	CONCRETE TRANSITIONAL SECTION CATCH BASIN	DROP INLET
–Y1–23+33	LT	0404																
–L– 19+28	LT	0407	0405		170.00	169.22												
–Y1– 20+81	RT	0406	0410		168.05	167.85												
–Y1– 20+81	CL	0410		171.30						1								
		0410	0413		167.85	167.66												
–L– 20+18	RT	0411		172.72						1								
		0411	0408		169.10	168.82												
–Y1– 19+98	RT	0412		171.30						1								
		0412	0409		168.47	168.43												
–L– 19+93	LT	0415		173.60						1								
		0415	0414		170.32	169.60												
–Y– 17+46	LT	0414		172.90						1								
		0414	0417		169.60	169.20												
–Y– 17+20	CL	0417		173.52						1								
		0417	0420		169.20	169.00												
–Y– 14+80	LT	0419							24									
–L1– 21+93	LT	0422		173.14						1								
		0422	0429		169.50	169.33												
–L1– 22+21	LT	0430	0421		168.40	168.10												
–L1– 22+59	LT	0421		170.3						1								
		0421	0423		168.10	167.50												
–L1– 22+85	LT	0423		170.3						1								
		0423	0424		167.50	168.20												
		0423	0425		167.50	167.20				1								
–L1– 24+12	LT	0424		170.9														
		0424	0431		168.20	169.50												
–L1– 25+39	LT	0427	0428		169.00	168.13												
SHEET TOTAL								24	24	10							3	3

STATION	LOCATION (LT,RT, OR CL)	STRUCTURE NO. FROM	STRUCTURE NO. TO	TOP ELEVATION	INVERT ELEVATION	INVERT ELEVATION	SLOPE CRITICAL	CONC. DI TYPE B 840.18	CONC. DI TYPE D 840.19	T.B.D.I. DI WITH STEEL FRAME AND GRATE STD. 840.36	FRAMES AND NARROW SLOT SAG GRATES 840.29	G.D.I. (N.S.) FRAME WITH GRATE STD. 840.24	STEEL GRATE AND FRAME 840.37			PIPE REMOVAL LIN.FT.	REMARKS
–Y1–23+33	LT	0404														21	DRIVEWAY PIPE
–L– 19+28	LT	0407	0405		170.00	169.22											
–Y1– 20+81	RT	0406	0410		168.05	167.85											
–Y1– 20+81	CL	0410		171.30				1				1					
		0410	0413		167.85	167.66											
–L– 20+18	RT	0411		172.72						1			1				
		0411	0408		169.10	168.82											
–Y1– 19+98	RT	0412		171.30						1			1				
		0412	0409		168.47	168.43											
–L– 19+93	LT	0415		173.60				1				1					
		0415	0414		170.32	169.60											
–Y– 17+46	LT	0414		172.90						1			1				
		0414	0417		169.60	169.20											
–Y– 17+20	CL	0417		173.52				1				1					
		0417	0420		169.20	169.00											
–Y– 14+80	LT	0419														17	DRIVEWAY PIPE
–L1– 21+93	LT	0422		173.14						1			1				
		0422	0429		169.50	169.33											
–L1– 22+21	LT	0430	0421		168.40	168.10										22	DRIVEWAY PIPE
–L1– 22+59	LT	0421		170.3					1		1						
		0421	0423		168.10	167.50										21	DRIVEWAY PIPE
–L1– 22+85	LT	0423		170.3					1		1						
		0423	0424		167.50	168.20										21	DRIVEWAY PIPE
		0423	0425		167.50	167.20										55	CROSSS PIPE
–L1– 24+12	LT	0424		170.9					1		1						
		0424	0431		168.20	169.50										21	DRIVEWAY PIPE
–L1– 25+39	LT	0427	0428		169.00	168.13											
SHEET TOTAL								3	3	4	3	3	4			155	

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.)	GRATED DROP INLET (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

COMPUTED BY: Stephen Crockett, PE DATE: 2/14/2022
CHECKED BY: Jeremy R. Hamm, PE DATE: 2/14/2022

(12-17-19)

PROJECT NO.	SHEET NO.
W-5706O	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	450
				TOTAL LF:	450

***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 Soil Stabilization SY	Stabilizer Aggregate TONS	Class IV Aggregate Stabilization TONS
CONTINGENCY			ASU(1)	18	100	200	200		
				TOTAL CY/TONS/SY:	100	200**	200**	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 Soil 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.**

8/17/99

PROJECT REFERENCE NO.	SHEET NO.
W-57060	4
R/W SHEET NO.	

ROADWAY DESIGN ENGINEER — NORTH CAROLINA PROFESSIONAL SEAL 22606 — DANIEL C. MILLER — 1/20/2023
HYDRAULICS ENGINEER — NORTH CAROLINA PROFESSIONAL SEAL 025503 — RICHARD A. MOORE — 1/26/2023
Docusigned by: — MOTT MACDONALD CAROLINAS, PA, E, LLC LICENSE NO. F-0669

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

Prepared in the Office of: MOTT MACDONALD — PO Box 700, Fuquay-Varina, NC 27526, www.mottmac.com/americas

MCKIM & CREED — NC LICENSURE #F-0102 — 243 NORTH FRONT STREET, WILMINGTON, NORTH CAROLINA 28401 — TEL. (910) 343-1048 FAX. (910) 790-8282

–L1–

PI Sta 21+89.21
△ = 18° 52' 01.8" (LT)
D = 22° 55' 05.9"
L = 82.32'
T = 41.54'
R = 250.00'

PI Sta 23+06.58
△ = 34° 03' 53.0" (RT)
D = 22° 55' 05.9"
L = 148.64'
T = 76.59'
R = 250.00'

–RAB–

PI Sta 10+44.08
△ = 73° 31' 31.5" (LT)
D = 97° 06' 41.4"
L = 75.71'
T = 44.08'
R = 59.00'

PI Sta 12+47.80
△ = 142° 09' 07.4" (LT)
D = 97° 06' 41.4"
L = 146.38'
T = 172.09'
R = 59.00'

PI Sta 12+78.56
△ = 87° 29' 23.6" (LT)
D = 97° 06' 41.4"
L = 90.09'
T = 56.47'
R = 59.00'

PI Sta 13+44.11
△ = 56° 49' 57.5" (LT)
D = 97° 06' 41.4"
L = 58.52'
T = 31.92'
R = 59.00'

–Y1–

PI Sta 20+61.09
△ = 25° 28' 35.2" (RT)
D = 22° 55' 05.9"
L = 111.16'
T = 56.52'
R = 250.00'

PI Sta 22+12.24
△ = 42° 12' 59.0" (LT)
D = 22° 55' 05.9"
L = 184.20'
T = 96.51'
R = 250.00'

–L–

PI Sta 13+29.45
△ = 15° 44' 40.5" (RT)
D = 4° 24' 26.5"
L = 357.23'
T = 179.75'
R = 1,300.00'

PI Sta 19+18.89
△ = 37° 31' 14.0" (RT)
D = 22° 55' 05.9"
L = 163.71'
T = 84.91'
R = 250.00'

PI Sta 20+45.39
△ = 21° 36' 02.3" (LT)
D = 22° 55' 05.9"
L = 94.25'
T = 47.69'
R = 250.00'

–Y–

PI Sta 13+11.68
△ = 27° 05' 59.6" (LT)
D = 10° 54' 48.5"
L = 248.32'
T = 126.53'
R = 525.00'

PI Sta 16+35.21
△ = 43° 07' 07.8" (LT)
D = 22° 55' 05.9"
L = 188.14'
T = 98.78'
R = 250.00'

PI Sta 17+47.83
△ = 10° 37' 48.2" (RT)
D = 22° 55' 05.9"
L = 46.38'
T = 23.26'
R = 250.00'

DETAIL F
FALSE SUMP
(Not to Scale)
Outside Ditch Traffic Flow — 10:1 — 20:1 — 2.0' — 0.5' Min. 1.0' Max — GI etc. — S — ℄ Proposed Ditch
S = Ditch Slope
STA. 22+83–L1–RT

DETAIL D
STANDARD 'V' TAIL DITCH
(Not to Scale)
Natural Ground — 3:1 — D — 3:1 — Natural Ground — Min. D= 1 Ft.
FROM STA. 21+95 TO STA. 22+05–L1–LT

BEGIN CONSTRUCTION –Y– POC STA. 14+00.00

BEGIN TIP PROJECT W-5706O –L– POC STA. 15+00.00

END CONSTRUCTION –Y1– POT STA. 26+81.98

END TIP PROJECT W-5706O –L1– POT STA. 25+50.00

NAD 83/2011

EDGAR H CANADY JR DB 5672 PG 55 (THIRD TRACT)
EDGAR H CANADY
DB 3381PG 389
LEE WENDELL DB 9344–PG 717 PB 133 PG 42
LAWRENCE CANADY DB 2214 PG 243
JESSIE HERMAN CANADY JR HEIRS DB 8058 PG 395 PB 11230 PG 170
SHERMAN D DAVIS JR DB 1020 PG 620 PB 90 PG 193
SHERMAN D DAVIS JR DB 1330 PG 42 PB 102 PG 193
SHERMAN D DAVIS JR DB 900 PG 193 PB 102 PG 193
EDGAR CANADY DB 2475 PG 142
MELANIE P HARPER DB 1029 PG 184
RICKY BLACKWELL DB 4408 PG 579
RICHARD L MARTIN JR DB 7768 PG 819
CHRISTOPHER JONES DB 8635 PG 520
KENNETH J CURRIE DB 4515 PG 747
DONNA G IRWIN DB 2636 PG 833
MARCIA SELPH DB 4049 PG 69
GERALD MICHAEL BLACK
S.R.E.M.C. DB 3338 PG 242
INA HALL CANADY DB 3891PG 443
WILLIAM ROSS III DB 10193 PG 570 PB 125 PG 191
RONALD TYLER DB 4245 PG 427 PB 84 PG 189
CANADY ACRES LLC DB 11135 PG 004
JENITA COMPTON DB 8283 PG 437 PB 84 PG 189

SPECIAL LATERAL DITCH SEE DETAIL A
SPECIAL LATERAL DITCH SEE DETAIL B
SPECIAL LATERAL DITCH SEE DETAIL D
SPECIAL LATERAL BASE DITCH SEE DETAIL E
FALSE SUMP SEE DETAIL F
TAIL DITCH 71.60 –50 LF @ 1.40% 62'(EX.RW) SEE DETAIL D
TAIL BASE DITCH 200 LF @ 0.59% SEE DETAIL C

–Y– PT Sta. 14+33.47
–Y– PC Sta. 15+36.43
–Y– PRC Sta. 17+24.57
–Y– POT Sta. 18+21.52
–RAB– PCC Sta. 13+12.18=
–RAB– PC Sta. 10+00.00
–RAB– PT Sta. 13+70.71=
–L– POC Sta. 20+35.80
–Y– PT Sta. 17+70.96
–L– PC Sta. 18+33.98
–L– PRC Sta. 19+97.70
–L– PT Sta. 20+91.95
–Y1– PC Sta. 20+04.57
–Y1– PRC Sta. 21+15.73
–L– PC Sta. 11+49.70
–L– PT Sta. 15+06.93
–L1– PT Sta. 23+78.63
–L1– PRC Sta. 22+30.00
–RAB– PCC Sta. 12+22.09=
–L1– POC Sta. 21+53.94
–L1– PC Sta. 21+47.67
–L– POT Sta. 20+94.94=
–L1– POT Sta. 20+94.94=
–Y– POT Sta. 18+80.52=
–Y1– POT Sta. 18+80.52
–RAB– PCC Sta. 10+75.71=
–Y1– POT Sta. 19+39.52
–Y1– PT Sta. 22+99.94
–Y1– POT Sta. 26+81.98
MATCHLINE –Y1– STA. 24+60.00 SEE THIS SHEET

CL B RIP–RAP EST. 5 TONS EST. 14 SY GEOTEXTILE
CL B RIP–RAP EST. 3 TONS EST. 10 SY GEOTEXTILE
CL B RIP–RAP EST. 5 TONS EST. 14 SY GEOTEXTILE

DETAIL E
SPECIAL LATERAL BASE DITCH
(Not to Scale)
Natural Ground — 3:1 — D — 3:1 or Flatter — Fill Slope — B — Min. D=2 Ft. B=2 Ft.
FROM STA. 22+88 TO 25+00–L1–RT

DETAIL C
STANDARD BASE TAIL DITCH
(Not to Scale)
Natural Ground — 3:1 — D — 3:1 — Natural Ground — Min. D= 2 Ft. B= 2 Ft.
FROM STA. 22+88 TO 23+91–L1–RT

DETAIL A
SPECIAL LATERAL 'V' DITCH
(Not to Scale)
Natural Ground — 3:1 — D — 3:1 or Flatter — Fill Slope — Min. D= 1.0 Ft.
FROM STA. 13+75 TO 18+00–L–LT
FROM STA. 19+35 TO 19+60–L–LT
FROM STA. 18+75 TO 19+35–L–RT
FROM STA. 14+00 TO 15+78–Y–LT
FROM STA. 15+78 TO 17+19–Y–LT
FROM STA. 15+78 TO 17+50–Y–RT
FROM STA. 19+83 TO 20+81–Y1–LT
FROM STA. 20+81 TO 21+50–Y1–RT

DETAIL B
SPECIAL LATERAL 'V' DITCH
(Not to Scale)
Natural Ground — 3:1 — D — 3:1 or Flatter — Fill Slope — Min. D= 1.5 Ft.
FROM STA. 19+35 TO 20+00–L–RT
FROM STA. 21+64 TO 22+12–L1–LT
FROM STA. 17+19 TO 17+75–Y–LT
FROM STA. 19+41 TO 20+81–Y1–RT
FROM STA. 22+34 TO 23+55–Y1–RT
FROM STA. 20+81 TO 26+82–Y1–LT

DETAIL G
SPECIAL LATERAL BASE DITCH
(Not to Scale)
Natural Ground — 2:1 — d — D — 3:1 or Flatter — Fill Slope — B — Min. D= 1 Ft. Max. d= 1 Ft. B= 1 Ft.
Type of Liner = PSRM
FROM STA. TO STA.
FROM STA. 25+40 TO 25+88–L1–LT

EST. 2023 TRAFFIC VOLUMES
–Y– JOHN McMILLAN RD SR 2244 — 1330 — 310 — 510 — 5200 –L– CHICKENFOOT RD SR 2252 — 5920 –L– CHICKENFOOT RD SR 2252 — 210 — 720 — 1430 — –Y– JOHN McMILLAN RD SR 2244

PAVEMENT REMOVAL

NOTE: FOR –L–, –Y–, AND –RAB– PROFILES SEE SHEETS 5 & 6

NOTE: FOR INTERSECTION DETAIL, SEE SHEET 2B–1

1/19/2023
R:\Projects\Roadway\Proj\w5706o_rdy_psh04.dgn
WAI 78449

5/28/99

PROJECT REFERENCE NO.	SHEET NO.
W-57060	5

ROADWAY DESIGN ENGINEER

NORTH CAROLINA PROFESSIONAL SEAL 22606 ENGINEER RICHARD C. WALLER

1/20/2023

HYDRAULICS ENGINEER

NORTH CAROLINA PROFESSIONAL SEAL 025503 ENGINEER RICHARD A. MOORE

1/26/2023

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Prepared in the Office of:

MOTT MACDONALD — PO Box 700, Fuquay-Varina, NC 27526, www.mottmac.com/americas

McKIM & CREED — NC LICENSE #1-135, 243 NORTH FRONT STREET, WILMINGTON, NORTH CAROLINA 28401, TEL: (910) 343-1048 FAX: (910) 790-8282

PIPE HYDRAULIC DATA
18" STA. 19+35 -L-

DRAINAGE AREA	=	0.5	AC
DESIGN FREQUENCY	=	25	YRS
DESIGN DISCHARGE	=	1.9	CFS
DESIGN HW ELEVATION	=	170.7	FT
100 YEAR DISCHARGE	=	2.2	CFS
100 YEAR HW ELEVATION	=	170.8	FT
OVERTOPPING FREQUENCY	=	>500	YRS
OVERTOPPING DISCHARGE	=	17	CFS
OVERTOPPING ELEVATION	=	174.0	FT

PIPE HYDRAULIC DATA
24" STA. 22+68 -L1-

DRAINAGE AREA	=	32.1	AC
DESIGN FREQUENCY	=	25	YRS
DESIGN DISCHARGE	=	18.1	CFS
DESIGN HW ELEVATION	=	171.5	FT
100 YEAR DISCHARGE	=	18.4	CFS
100 YEAR HW ELEVATION	=	171.5	FT
OVERTOPPING FREQUENCY	=	>100, <500	YRS
OVERTOPPING DISCHARGE	=	19.2	CFS
OVERTOPPING ELEVATION	=	171.6	FT

PIPE HYDRAULIC DATA
24" HP STA. 25+00 -L1-

DRAINAGE AREA	=	32.1	AC
DESIGN FREQUENCY	=	25	YRS
DESIGN DISCHARGE	=	18.1	CFS
DESIGN HW ELEVATION	=	171.5	FT
100 YEAR DISCHARGE	=	18.4	CFS
100 YEAR HW ELEVATION	=	171.5	FT
OVERTOPPING FREQUENCY	=	>100, <500	YRS
OVERTOPPING DISCHARGE	=	19.2	CFS
OVERTOPPING ELEVATION	=	171.6	FT

-L-

BEGIN GRADE
-L- STA. 15+00.00
EL = 174.14'

PI = 15+50.00
EL = 174.64'
VC = 100'
K = 219
V = 65 MPH

PI = 18+00.00
EL = 176.00'
VC = 190'
K = 96
V = 55 MPH

PI = 19+80.00
EL = 173.40'
VC = 70'
K = 35
V = 30 MPH

END GRADE
-L- STA. 20+19.65 =
-RAB- STA. 13+68.81, 16' RT.
EL = 173.62

BEGIN DITCH GRADE LT
-L- STA. 19+35
EL=170.00'

END DITCH GRADE LT
-L- STA. 19+60
EL=170.33'

BEGIN DITCH GRADE RT
-L- STA. 18+75
EL=171.00'

PI DITCH RT
-L- STA. 19+35
EL=169.22'

18" PIPE
INV.=169.59'
S = 1.10%

END DITCH GRADE RT
-L- STA. 20+00
EL=168.85'

(+)1.0000%
(+)0.5440%
(-)1.4444%
(+)0.5549%
(+)1.7337%
(-)3.00%
(+)1.53%
(-)0.67%

-L1-

BEGIN GRADE
-L1- STA. 21+69.60 =
-RAB- STA. 12+22.80, 16' RT.
EL = 173.44'

PI = 22+50.00
EL = 172.58'
VC = 120'
K = 73
V = 40 MPH

PI = 23+50.00
EL = 173.15'
VC = 80'
K = 320
V = 75 MPH

END GRADE
-L1- STA. 25+50.00
EL = 173.79'

BEGIN DITCH GRADE LT
-L- STA. 21+64
EL=168.68'

24" PIPE
INV.=167.58'
S = 0.98%

END DITCH GRADE LT
-L1- STA. 22+12
EL=168.4'

BEGIN DITCH GRADE RT
-L1- STA. 22+88
EL=167.17'

BEGIN DITCH GRADE LT
-L- STA. 25+31.85
EL=169.50'

24" PIPE
INV.=168.47'
S = 1.13%

END DITCH GRADE RT
-L1- STA. 25+00
EL=168.13'

END DITCH GRADE LT
-L1- STA. 25+88
EL=171.33'

(-)1.9796%
(-)1.0697%
(+)0.5700%
(-)0.58%
(+)0.45%
(+)0.3200%
(+)3.26%

BM #1
ELEVATION = 172.11'
N 417973 E 2029486
-Y- STATION 12+52.20
37.10' RT
RR SPIKE INBASE OF 42" PINE TREE

-Y-

BEGIN GRADE
-Y- STA. 14+00.00
EL = 173.32'

PI = 14+40.00
EL = 173.84'
VC = 80'
K = 178
V = 60 MPH

PI = 16+00.00
EL = 175.20'
VC = 120'
K = 46
V = 40 MPH

PI = 17+10.00
EL = 173.25'
VC = 80'
K = 28
V = 25 MPH

END GRADE
-Y- STA. 18+05.52 =
-RAB- STA. 13+12.18, 16' RT.
EL = 174.27'

BEGIN DITCH GRADE RT
-Y- STA. 15+78
EL=173.00'

END DITCH GRADE RT
-Y- STA. 17+50
EL=170.33'

BEGIN DITCH GRADE RT
-Y1- STA. 19+41
EL=168.85'

PI DITCH LT
-Y- STA. 15+78
EL=173.15'

BEGIN DITCH GRADE LT
-Y- STA. 14+00
EL=171.99'

END DITCH GRADE LT
-Y- STA. 17+75
EL=168.64'

PI GRADE LT
-Y- STA. 17+19
EL=169.00'

BEGIN DITCH GRADE LT
-Y1- STA. 19+83
EL=168.54'

(+)1.3000%
(+)0.8500%
(+)0.65%
(-)1.7727%
(-)1.55%
(-)2.93%
(+)1.0678%
(+)2.0000%
(-)0.63%

-Y1-

BEGIN GRADE
-Y1- STA. 19+55.52 =
-RAB- STA. 10+75.71, 16' RT.
EL = 172.35'

PI = 20+80.00
EL = 170.96'
VC = 120'
K = 55
V = 35 MPH

PI = 22+20.00
EL = 172.47'
VC = 160'
K = 81
V = 45 MPH

END GRADE
-Y- STA. 24+00.00
EL = 170.85'

PI DITCH RT
-Y1- STA. 20+81
EL=168.05'

END DITCH GRADE RT
-Y1- STA. 21+50
EL=170.00'

18" PIPE
INV.=167.85'
S = 0.58%

BEGIN DITCH GRADE RT
-Y1- STA. 22+34
EL=169.04'

PI DITCH LT
-Y1- STA. 20+81
EL=167.66'

END DITCH GRADE RT
-Y1- STA. 23+55
EL=168.37'

END DITCH GRADE LT
-Y1- STA. 26+82
EL=166.40'

(-)2.0000%
(-)1.1160%
(-)0.57%
(-)0.67%
(+)1.0780%
(+)2.8%
(-)0.56%
(-)0.9000%
(-)0.21%

FOR PLAN SEE SHEET 4

5:02:38 PM
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WAI 78445

5/28/99

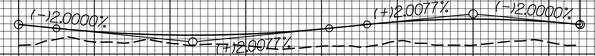
–RAB–

BEGIN GRADE
–RAB– STA. 10+00.00
EL = 173.90'

END GRADE
–RAB– STA. 13+70.71
EL = 173.90'

PI = 11+15.00
EL = 171.60'
VC = 180'
K = 45
V = 30 MPH

PI = 13+00.00
EL = 175.31'
VC = 140'
K = 35
V = 35 MPH



180
170
160
150

10 11 12 13

PROJECT REFERENCE NO.	SHEET NO.
W-57060	6

ROADWAY DESIGN ENGINEER

NORTH CAROLINA PROFESSIONAL SEAL 22606 ENGINEER

Docusigned by: [illegible] 6531...

1/20/2023

HYDRAULICS ENGINEER

NORTH CAROLINA PROFESSIONAL SEAL 025503 ENGINEER

Docusigned by: [illegible] 2653...

1/26/2023

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

Prepared in the Office of:

MOTT MACDONALD
PO Box 700
Fuquay-Varina, NC 27526
www.mottmac.com/americas

McKIM & CREED
ENGINEERING PLLC
243 NORTH FRONT STREET
WILMINGTON, NORTH CAROLINA 28401
TEL: (910) 343-1048 FAX: (910) 790-8282

FOR PLAN SEE SHEET 4

5:32:39 PM
R:\Projects\w5706-rdy-jf1.PSH.dgn
WAL 78445

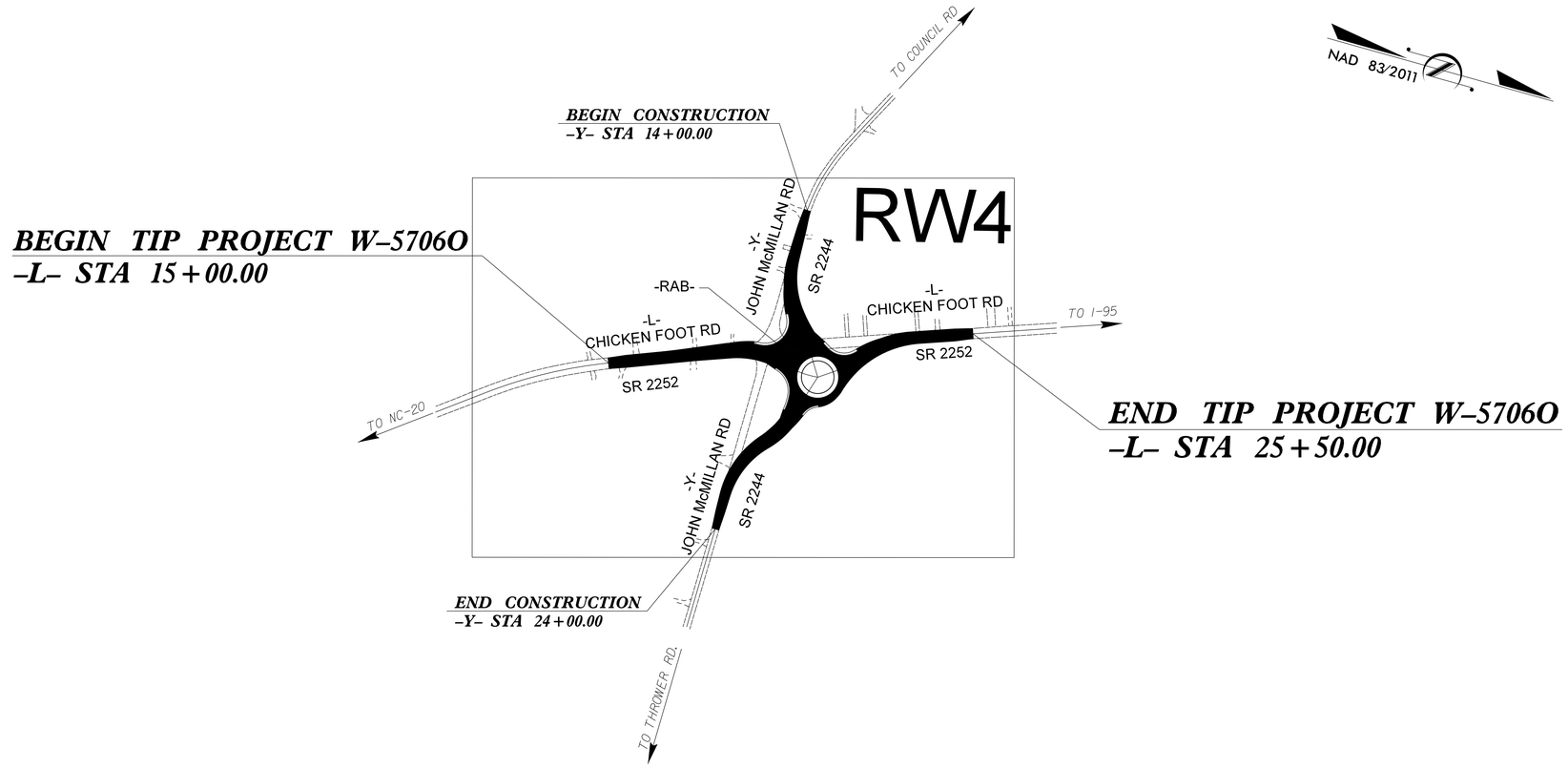
STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	W-5706O	RW01	06

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

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

CUMBERLAND COUNTY

TIP PROJECT: W-5706O



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
NCDOT FOR MONUMENT "W5706O GPS-101"
WITH NAD 83/NA 2011 STATE PLANE GRID COORDINATES OF
NORTHING: 419032.4846(ft) EASTING: 2029687.5789(ft)
ELEVATION: 173.63(ft)
THE AVERAGE COMBINED GRID FACTOR USED ON THIS PROJECT
(GROUND TO GRID) IS: 0.999890012 (1/X=1.000110000)
THE N.C. LAMBERT GRID BEARING AND
LOCALIZED HORIZONTAL GROUND DISTANCE FROM
"W5706O GPS-101" TO -L- STATION 10+00.00 IS
S 22° 06' 25.79" E 2,046.9630(ft)
ALL LINEAR DIMENSIONS ARE LOCALIZED HORIZONTAL DISTANCES
VERTICAL DATUM USED IS NAVD 88

Prepared in the Office of:

NCDOT DIVISION 6
LOCATION AND SURVEYS
4834 US HWY 301 S
HOPE MILLS, NC 28348

2018 STANDARD SPECIFICATIONS

RIGHT OF WAY DATE:	*LETTING DATE:*
10/29/2021	*03/01/2023*

PROFESSIONAL LAND SURVEYOR

NORTH CAROLINA PROFESSIONAL SEAL L-4169 LAND SURVEYOR KEITH E. HONEYCUTT

DocuSigned by: Keith E. Honeycutt
SIGNATURE: 1B1788EBEF3D4DF
10/10/2022
Date:

STATE OF NORTH CAROLINA • DEPARTMENT OF TRANSPORTATION •

09/08/99

14-SEP-2022 14:24
S:\Units\Div06\HOPE_MILLS_PROJECTS\ControlSheets\w5706o\RW-Series\w5706o_ls_rw01.dgn
wiwilson AT DIV06-31442

6/2/99

SURVEY CONTROL SHEET

W/ EXISTING CENTERLINE ALIGNMENTS PRIOR TO CONSTRUCTION

PROJECT REFERENCE NO.	SHEET NO.
W-5706O	RW02C-1

Location and Surveys

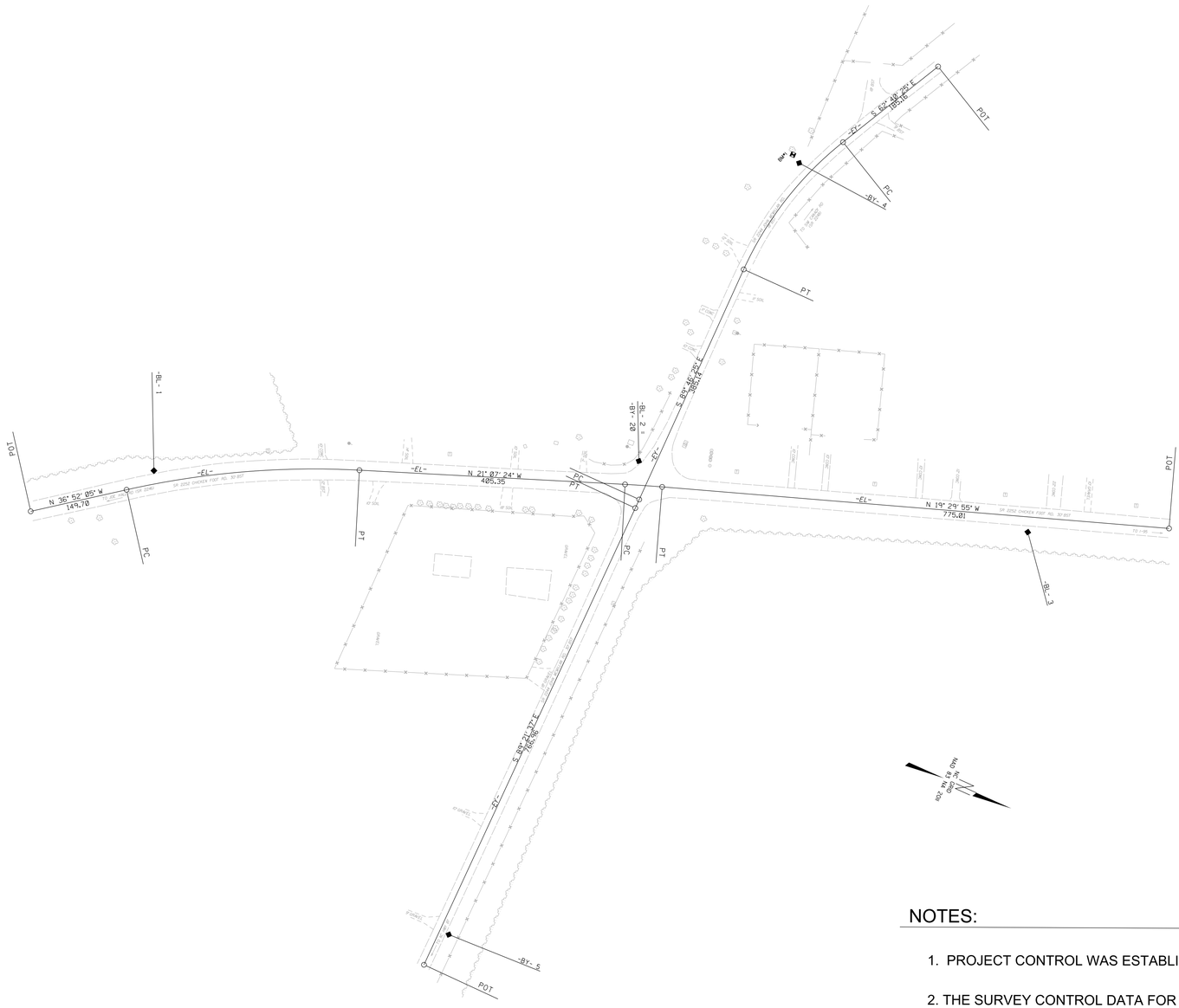
NCDOT DIVISION 6
LOCATION AND SURVEYS
4834 US HWY 301 S
HOPE MILLS, NC 28348

PROJECT SURVEYOR

DocuSigned by:
John E. Kaukola Jr.
F360958AF7B8462...

NORTH CAROLINA PROFESSIONAL SEAL L-3999 LAND SURVEYOR JOHN E. KAUKOLA, JR.

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED



I, John E. Kaukola, Jr., PLS, certify that the Project Control was performed 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: Static
Dates of survey: August 2017
Datum/Epoch: NAD83/NA2011
Published/Fixed-control use: N/A
Localized around: W5706O GPS-101
Northing: 419032.4846
Easting: 2029687.5789
Combined grid factor: 0.999890012
Geoid model: NC12B
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 in August 2017, and all coordinates are based on NAD 83/2011 and all elevations are based on NAVD 88; that this survey was performed to meet the requirements of 21NCAC 56.1600 as applicable.

This 28th day of October, 2021.

DocuSigned by:
John E. Kaukola Jr.
F360958AF7B8462...

Professional Land Surveyor L-3999

NORTH CAROLINA PROFESSIONAL SEAL L-3999 LAND SURVEYOR JOHN E. KAUKOLA, JR.

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.

27-OCT-2021 11:57
C:\Projects\Control Sheets\w5706o\w5706o_ls_rw02c-1.dgn
wlwilson AT DIV06-314142

6/2/99

REVISIONS

SURVEY CONTROL SHEET

W/ EXISTING CENTERLINE ALIGNMENTS PRIOR TO CONSTRUCTION

BL

POINT	DESC.		NORTH	EAST	ELEVATION
1	W5706O	BL-1	417281.9307	2030324.4920	171.78
2	W5706O	BL-2	417949.9672	2030008.3410	173.95
3	W5706O	BL-3	418535.0281	2029864.3418	173.09

BY

POINT	DESC.		NORTH	EAST	ELEVATION
4	W5706O	BY-4	417986.7802	2029493.8694	170.85
20	W5706O	BL-2	417949.9672	2030008.3410	173.95
5	W5706O	BY-5	417981.4875	2030785.4159	168.85

****
BM1 ELEVATION = 172.11
N 417973 E 2029486
RR SPIKE IN BASE OF 42" PINE TREE
****

EL

POINT	N	E	BEARING	DIST	DELTA	D	L	T	R
POT	417136.011	2030457.933							
LINE			N 36°52'04.8" W	149.70					
PC	417255.772	2030368.118							
CURVE			N 28°59'44.5" W	356.11	15°44'40.5"(RT)	04°24'26.5"	357.23	179.75	1300.00
PT	417567.247	2030195.496							
LINE			N 21°07'24.2" W	405.35					
PC	417945.364	2030049.415							
CURVE			N 20°18'39.8" W	56.71	01°37'28.8"(RT)	02°51'53.2"	56.71	28.36	2000.00
PT	417998.548	2030029.730							
LINE			N 19°29'55.4" W	775.01					
POT	418729.106	2029771.045							

EY

POINT	N	E	BEARING	DIST	DELTA	D	L	T	R
POT	418119.628	2029272.986							
LINE			S 62°40'25.4" E	185.16					
PC	418034.631	2029437.480							
CURVE			S 76°13'25.2" E	246.01	27°05'59.6"(LT)	10°54'48.5"	248.32	126.53	525.00
PT	417976.049	2029676.410							
LINE			S 89°46'25.0" E	385.14					
PC	417974.527	2030061.544							
CURVE			S 89°34'01.2" E	14.43	00°24'47.7"(RT)	02°51'53.2"	14.43	7.21	2000.00
PT	417974.418	2030075.969							
LINE			S 89°21'37.3" E	766.96					
POT	417965.856	2030842.886							

PROJECT REFERENCE NO.	SHEET NO.
W-5706O	RW02C-2

Location and Surveys

NCDOT DIVISION 6
LOCATION AND SURVEYS
4834 US HWY 301 S
HOPE MILLS, NC 28348

PROJECT SURVEYOR

DocuSigned by: John E. Kaukola Jr. F360958AF7B8462...

NORTH CAROLINA PROFESSIONAL SEAL L-3999 LAND SURVEYOR JOHN E. KAUKOLA JR

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

I, John E. Kaukola Jr., PLS, certify that the Project Control was performed 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: Static
Dates of survey: August 2017
Datum/Epoch: NAD83/NA2011
Published/Fixed-control use: N/A
Localized around: W5706O GPS-101
Northing: 419032.4846
Easting: 2029687.5789
Combined grid factor: 0.999890012
Geoid model: NC12B
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 in August 2017, and all coordinates are based on NAD 83/2011 and all elevations are based on NAVD 88; that this survey was performed to meet the requirements of 21NCAC 56.1600 as applicable.

This 28th day of October, 2021.

DocuSigned by: John E. Kaukola Jr. F360958AF7B8462...

Professional Land Surveyor L-3999

NORTH CAROLINA PROFESSIONAL SEAL L-3999 LAND SURVEYOR JOHN E. KAUKOLA JR

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.

27-OCT-2021 11:42
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wilson AT DIV06-314142

PROPOSED ALIGNMENT CONTROL SHEET

L

TYPE	STATION	NORTH	EAST
POT	10+00.00	417136.0110	2030457.9332
PC	11+49.70	417255.7724	2030368.1184
PT	15+06.93	417567.2466	2030195.4960
PC	18+33.98	417872.3210	2030077.6345
PRC	19+97.70	418032.9889	2030071.0041
PT	20+91.95	418126.2356	2030080.1418
POT	20+94.94	418129.2133	2030079.8707

Y

TYPE	STATION	NORTH	EAST
POT	10+00.00	418119.6284	2029272.9857
PC	11+85.16	418034.6313	2029437.4795
PT	14+33.47	417976.0490	2029676.4101
PC	15+36.43	417975.6422	2029779.3693
PRC	17+24.57	418042.4821	2029950.5131
PT	17+70.96	418070.7270	2029987.2199
POT	18+80.52	418129.2133	2030079.8707

L1

TYPE	STATION	NORTH	EAST
POT	20+94.94	418129.2133	2030079.8707
PC	21+47.67	418172.5724	2030049.8516
PRC	22+30.00	418231.3946	2029992.7894
PT	23+78.63	418349.0769	2029905.6103
POT	27+81.78	418729.1058	2029771.0445

Y1

TYPE	STATION	NORTH	EAST
POT	18+80.52	418129.2133	2030079.8707
PC	20+04.57	418092.1597	2030198.2569
PRC	21+15.73	418036.8392	2030293.6214
PT	22+99.94	417970.1211	2030460.8701
POT	26+81.98	417965.8561	2030842.8859

RAB

TYPE	STATION	NORTH	EAST
PC	10+00.00	418070.2207	2030078.9388
PCC	10+75.71	418111.5900	2030136.1771
PCC	12+22.09	418177.6773	2030046.2218
PCC	13+12.18	418097.7193	2030029.9795
PT	13+70.71	418070.2207	2030078.9388

PROJECT REFERENCE NO.	SHEET NO.
W-5706O	RW02D-1

Location and Surveys

NCDOT DIVISION 6
LOCATION AND SURVEYS
4834 US HWY 301 S
HOPE MILLS, NC 28348

PROJECT SURVEYOR

NORTH CAROLINA PROFESSIONAL SEAL L-4169 LAND SURVEYOR KEITH E. HONEYCUTT

DocuSigned by:
Keith E. Honeycutt
SEAL L-4169 STATE NC 1EF3D4DF...

10/10/2022

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

I, Keith E. Honeycutt, PLS, certify that the data compiled came from available surveys/mapping performed by others and provided to me by NCDOT and do not certify to the accuracy or quality of the individual data sources.

This 6th day of October, 2022.

DocuSigned by:
Keith E. Honeycutt
1EF3D4DF1D0A4F...

Professional Land Surveyor L-4169

NOTES:

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

2. THE PROPOSED ALIGNMENT CONTROL DATA FOR THIS PROJECT HAS BEEN COMPILED FROM VARIOUS SOURCES. IF FURTHER INFORMATION REGARDING PROJECT CONTROL IS NEEDED, PLEASE CONTACT THE LOCATION AND SURVEYS UNIT.

REVISIONS

6/2/99

05-OCT-2022 08:08
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cmblackmon
AT_DIV06-31634

RIGHT OF WAY CONTROL SHEET

PROJECT REFERENCE NO.	SHEET NO.
W-5706O	RW03E-1

Location and Surveys

NCDOT DIVISION 6
LOCATION AND SURVEYS
4834 US HWY 301 S
HOPE MILLS, NC 28348

PROJECT SURVEYOR

I, Keith E. Honeycutt, certify that the right of way and permanent easement monumentation for this project shown herein was completed under my direct and responsible charge from an actual survey made under my supervision; that all horizontal closures had a minimum ratio of precision of 1:10,000 (Class A). Field work was performed from 10/04/2022 to 11/15/2022, and all coordinates are based on NAD83/2011; That this survey was performed to meet the requirements of 21NCAC 56.1600 as applicable.

This 9th day of December, 2022.

DocuSigned by:
Keith E. Honeycutt
Professional Land Surveyor L-4169

NORTH CAROLINA PROFESSIONAL SEAL L-4169 LAND SURVEYOR KEITH E. HONEYCUTT

DocuSigned by:
Keith E. Honeycutt
8C71B4AEF3D4DF...

12/05/2022

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

ROW MARKER IRON PIN AND CAP-E

ALIGN	STATION	OFFSET	NORTH	EAST
L	17+09.00	-39.98	417741.3284	2030085.3843
L	19+12.79	-66.00	417945.5414	2029995.2869

ROW MARKER IRON PIN AND CAP-E

ALIGN	STATION	OFFSET	NORTH	EAST	
L1	22+15.00	60.00	418268.1790	2030043.0456	
L1	23+07.00	55.00	418318.1379	2029983.3454	
L1	24+00.00	55.00	418387.5778	2029950.3236	
L1	25+00.00	55.00	418481.8427	2029916.9450	
L1	25+26.50	-29.49	418478.6230	2029828.4508	EIP
L1	25+26.56	-35.36	418476.7169	2029822.9074	
L1	25+50.00	30.00	418520.6305	2029876.6895	
L1	25+50.00	40.00	418523.9684	2029886.1160	
L1	25+50.00	-35.00	418498.9344	2029815.4173	
L1	25+50.00	-29.48	418500.7767	2029820.6202	

ROW MARKER IRON PIN AND CAP-E

ALIGN	STATION	OFFSET	NORTH	EAST
RAB	11+50.00	60.00	418226.4083	2030148.5302

ROW MARKER IRON PIN AND CAP-E

ALIGN	STATION	OFFSET	NORTH	EAST
Y	14+33.47	-30.00	418006.0487	2029676.5286
Y	15+50.00	-40.00	418015.9060	2029790.9203
Y	16+50.00	-50.00	418045.5788	2029867.4082
Y	17+71.60	-62.00	418123.5010	2029954.6725

ROW MARKER IRON PIN AND CAP-E

ALIGN	STATION	OFFSET	NORTH	EAST
Y1	20+00.00	-65.00	418155.5577	2030213.3097
Y1	20+70.00	-55.00	418111.1651	2030286.8952
Y1	21+50.00	-55.00	418060.3761	2030351.8060
Y1	22+50.00	-55.00	418029.4266	2030422.8373
Y1	24+00.00	-30.00	417999.0021	2030561.2616
Y1	24+00.00	-50.00	418019.0009	2030561.4849

ROW MARKER PERMANENT EASEMENT-E

ALIGN	STATION	OFFSET	NORTH	EAST
L1	22+15.00	70.00	418275.8537	2030049.4566
L1	23+07.00	65.00	418324.0039	2029991.4442
L1	24+00.00	65.00	418390.9157	2029959.7500

ROW MARKER PERMANENT EASEMENT-E

ALIGN	STATION	OFFSET	NORTH	EAST
RAB	11+50.00	70.00	418234.5760	2030154.2999

ROW MARKER PERMANENT EASEMENT-E

ALIGN	STATION	OFFSET	NORTH	EAST
Y1	20+23.76	-59.01	418140.5255	2030238.2271

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.
3. RIGHT OF WAY MONUMENTATION ESTABLISHED 10/04/2022 TO 11/15/2022.

REVISIONS 6/2/99

22-NOV-2022 08:04
S:\Units\DIV06\HOPE MILLS_PROJECTS\Control Sheets\w5706oVE & RW revisions_221109\work\w5706o_ls_rw03e-1.dgn
jhorris
AT&T LS-329501

PROJECT REFERENCE NO.	SHEET NO.
W-5706O	RW04

Location and Surveys

NCDOT DIVISION 6
LOCATION AND SURVEYS
4834 US HWY 301 S
HOPE MILLS, NC 28348

PROJECT SURVEYOR

NORTH CAROLINA PROFESSIONAL LAND SURVEYOR SEAL L-4169 KEITH E. HONEYCUTT

Certified signed by: DocuSigned by: SEAL Keith E. Honeycutt L-4169 SIGNATURE: 3EF3D4DF...

12/05/2022

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

–L1–

PI Sta 21+89.21	PI Sta 23+06.58
△ = 18° 52' 01.8" (LT)	△ = 34° 03' 53.0" (RT)
D = 22° 55' 05.9"	D = 22° 55' 05.9"
L = 82.32'	L = 148.64'
T = 41.54'	T = 76.59'
R = 250.00'	R = 250.00'

–Y1–

PI Sta 20+61.09	PI Sta 22+12.24
△ = 25° 28' 35.2" (RT)	△ = 42° 12' 59.0" (LT)
D = 22° 55' 05.9"	D = 22° 55' 05.9"
L = 111.16'	L = 184.20'
T = 56.52'	T = 96.51'
R = 250.00'	R = 250.00'

–RAB–

PI Sta 10+44.08	PI Sta 12+47.80	PI Sta 12+78.56	PI Sta 13+44.11
△ = 73° 31' 31.5" (LT)	△ = 142° 09' 07.4" (LT)	△ = 87° 29' 23.6" (LT)	△ = 56° 49' 57.5" (LT)
D = 97° 06' 41.4"	D = 97° 06' 41.4"	D = 97° 06' 41.4"	D = 97° 06' 41.4"
L = 75.71'	L = 146.38'	L = 90.09'	L = 58.52'
T = 44.08'	T = 172.09'	T = 56.47'	T = 31.92'
R = 59.00'	R = 59.00'	R = 59.00'	R = 59.00'

–L–

PI Sta 13+29.45	PI Sta 19+18.89	PI Sta 20+45.39
△ = 15° 44' 40.5" (RT)	△ = 37° 31' 14.0" (RT)	△ = 21° 36' 02.3" (LT)
D = 4° 24' 26.5"	D = 22° 55' 05.9"	D = 22° 55' 05.9"
L = 357.23'	L = 163.71'	L = 94.25'
T = 179.75'	T = 84.91'	T = 47.69'
R = 1,300.00'	R = 250.00'	R = 250.00'

–Y–

PI Sta 13+11.68	PI Sta 16+35.21	PI Sta 17+47.83
△ = 27° 05' 59.6" (LT)	△ = 43° 07' 07.8" (LT)	△ = 10° 37' 48.2" (RT)
D = 10° 54' 48.5"	D = 22° 55' 05.9"	D = 22° 55' 05.9"
L = 248.32'	L = 188.14'	L = 46.38'
T = 126.53'	T = 98.78'	T = 23.26'
R = 525.00'	R = 250.00'	R = 250.00'

NAD 83/2011

EDGAR H CANADY JR
DB 5672 PG 55
(THIRD TRACT)

EDGAR H CANADY

DB 3381PG 389

LEE WENDELL
DB 9344 PG 717
PB 133 PG 42

LAWRENCE CANADY
DB 2214 PG 243

JESSIE HERMAN CANADY JR HEIRS
DB 8058 PG 395
PB 11230 PG 170

SHERMAN D DAVIS JR
DB 900 PG 193
PB 102 PG 193

SHERMAN D DAVIS JR
DB 1330 PG 42
PB 102 PG 193

SHERMAN D DAVIS JR
DB 1020 PG 620
PB 90 PG 193

EDGAR CANADY
DB 2475 PG 142

MELANIE P HARPER
DB 1029 PG 184

RICKY BLACKWELL
DB 4408 PG 579

KENNETH J CURRIE
DB 4515 PG 747

DONNA G IRWIN
DB 2636 PG 833

MARCIA SELPH
DB 4049 PG 69

RICHARD L MARTIN JR
DB 7768 PG 819

CHRISTOPHER JONES
DB 8635 PG 520

S.R.E.M.C.
DB 3338 PG 242

INA HALL CANADY
DB 3891PG 443

WILLIAM ROSS III
DB 10193 PG 570
PB 125 PG 191

RONALD TYLER
DB 4245 PG 427
PB 84 PG 189

CANADY ACRES LLC
DB 11135 PG 004

JENITA COMPTON
DB 8283 PG 437
PB 84 PG 189

-L- PT Sta. 15+06.93

-L- POC Sta.13+00.00
BEGIN CONSTRUCTION

-L- PC Sta. 11+49.70

-L- PC Sta. 18+33.98

-L- PRC Sta. 19+97.70

-L- PT Sta. 20+91.95

-Y1- PC Sta. 20+04.57

-Y1- PRC Sta. 21+15.73

-Y1- PT Sta. 22+99.94

-Y1- POT Sta. 26+81.98

-Y- PT Sta. 14+33.47

-Y- PC Sta. 15+36.43

-Y- PRC Sta. 17+24.57

-Y- PT Sta. 17+70.96

-RAB- PC Sta. 10+00.00

-RAB- PT Sta. 13+70.71=
-L- POC Sta. 20+35.80

-RAB- PCC Sta. 13+12.18=
-Y- POT Sta. 18+21.52

-L- PC Sta. 18+33.98

-L- PRC Sta. 19+97.70

-L- PT Sta. 20+91.95

-Y1- PC Sta. 20+04.57

-Y1- PRC Sta. 21+15.73

-Y1- PT Sta. 22+99.94

-LI- PT Sta. 23+78.63

-LI- PRC Sta. 22+30.00

-RAB- PCC Sta. 12+22.09=
-LI- POC Sta. 21+53.94

-LI- PC Sta. 21+47.67

-L- POT Sta. 20+94.94=
-LI- POT Sta. 20+94.94=
-Y- POT Sta. 18+80.52=
-Y1- POT Sta. 18+80.52

-RAB- PCC Sta. 10+75.71=
-Y1- POT Sta. 19+39.52

MATCHLINE –Y1– STA. 24+60.00
SEE THIS SHEET

MATCHLINE –Y1– STA. 24+60.00
SEE THIS SHEET

I, Keith E. Honeycutt, certify that the right of way and permanent easement monumentation for this project shown herein was completed under my direct and responsible charge from an actual survey made under my supervision; that all horizontal closures had a minimum ratio of precision of 1:10,000 (Class A). Field work was performed from 10/04/2022 to 11/15/2022, and all coordinates are based on NAD83/2011; That this survey was performed to meet the requirements of 21NCAC 56.1600 as applicable.

This 9th day of December, 2022.

DocuSigned by: Keith E. Honeycutt
Professional Land Surveyor L-4169

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.
3. RIGHT OF WAY MONUMENTATION ESTABLISHED 10/04/2022 TO 11/15/2022.

REVISIONS

6/2/99

22-NOV-2022 08:15
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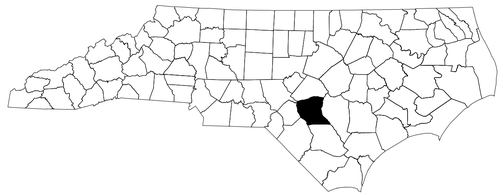
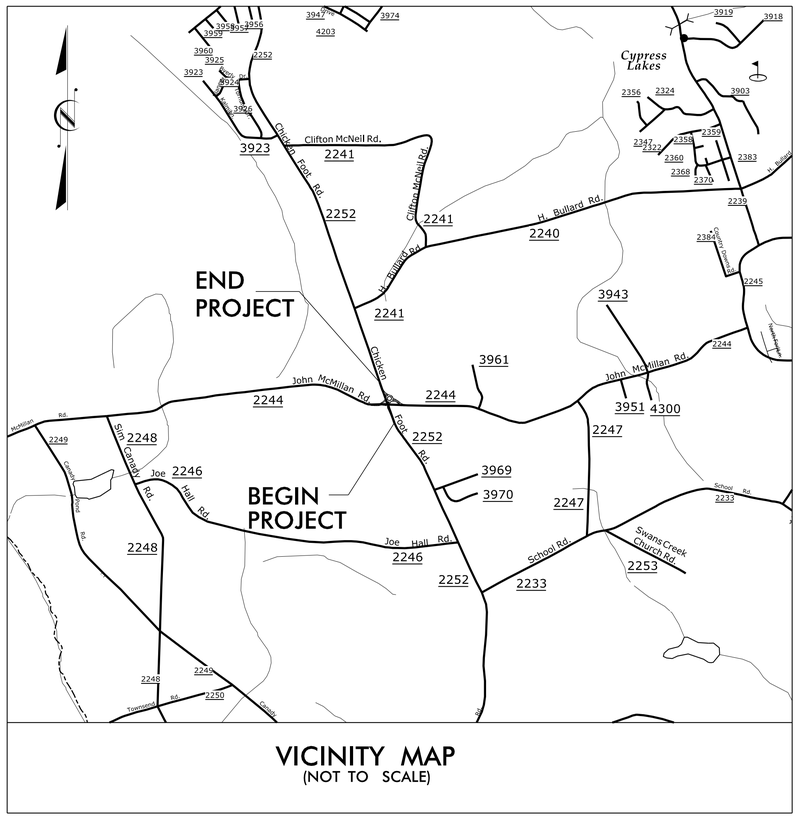
lbnorris

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

TRANSPORTATION MANAGEMENT PLAN

CUMBERLAND COUNTY





VICINITY MAP
(NOT TO SCALE)

LOCATION:
ROUNDABOUT AT INTERSECTION OF SR 2244 (JOHN McMILLAN ROAD) AND SR 2252 (CHICKENFOOT ROAD)

TYPE OF WORK:
GRADING, DRAINAGE, PAVING, SIGNING & PAVEMENT MARKINGS

INDEX OF SHEETS

SHEET NO.	TITLE
TMP-1	TITLE SHEET, VICINITY MAP, AND INDEX OF SHEETS
TMP-1A	ROADWAY STANDARD DRAWINGS AND LEGEND
TMP-1B - 1C	TRANSPORTATION OPERATIONS PLAN: (MANAGEMENT STRATEGIES, GENERAL NOTES, AND LOCAL NOTE)
TMP-2 - 2A	TEMPOARY TRAFFIC CONTROL ROADWAY STANDARD SHEETS DRAWING 1101.02 SHEETS 15 & 16 OF 20
TMP-2B	OFF-SITE TRUCK DETOUR ROUTE
TMP-2C	SPECIAL SIGN DESIGN
TMP-3	TEMPORARY TRAFFIC CONTROL PHASING
TMP-4	TEMPORARY TRAFFIC CONTROL PHASE I DETAIL
TMP-5	TEMPORARY TRAFFIC CONTROL PHASE II DETAIL
TMP-6	TEMPORARY TRAFFIC CONTROL PHASE III DETAIL

SHEET NO.
TMP-1

W-5706O

TIP PROJECT:

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

PLANS PREPARED FOR THE NCDOT BY:

MOTT MACDONALD

MOTT MACDONALD I & E, LLC
1101 HAYNES STREET, SUITE 101
RALEIGH, NC 27604
NC LICENSE NO. F-0669

LORI D STOUCHKO, PE
PRINCIPAL PROJECT ENGINEER

NCDOT CONTACTS:

JOHN GAUTHIER
NCDOT CONTACT
NCDOT DIVISION 6

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

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

APPROVED: DocuSigned by: Lori D. Stouchko FF586C7590C645A...

DATE: 1/24/2023

SEAL

NORTH CAROLINA PROFESSIONAL SEAL 034437 ENGINEER LORI D STOUCHKO

ROADWAY STANDARD DRAWINGS

THE FOLLOWING ROADWAY STANDARDS AS SHOWN IN "ROADWAY STANDARD DRAWINGS" - N.C. DEPARTMENT OF TRANSPORTATION - RALEIGH, N.C., DATED JANUARY 2018 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 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
1130.01	DRUM
1135.01	CONES
1145.01	BARRICADES
1150.01	FLAGGING DEVICES
1165.01	WORK VEHICLE LIGHTING SYSTEMS AND TMA DELINEATION
1180.01	SKINNY-DRUM
1205.01	PAVEMENT MARKINGS - LINE TYPES AND OFFSETS
1205.04	PAVEMENT MARKINGS - INTERSECTIONS
1205.07	PAVEMENT MARKINGS - PEDESTRIAN CROSSWALKS
1205.08	PAVEMENT MARKINGS - SYMBOLS AND WORD MESSAGES
1205.09	PAVEMENT MARKINGS - PAINTED ISLANDS
1250.01	RAISED PAVEMENT MARKERS - INSTALLATION SPACING
1251.01	RAISED PAVEMENT MARKERS - PERMANENT AND TEMPORARY

PROJ. REFERENCE NO.	SHEET NO.
W-57060	TMP-1A

PLANS PREPARED FOR THE NCDOT BY:

MOTT MACDONALD I & E, LLC
1101 HAYNES STREET, SUITE 101
RALEIGH, NC 27604
NC LICENSE NO. F-0669

LEGEND

GENERAL

- DIRECTION OF TRAFFIC FLOW
- DIRECTION OF PEDESTRIAN TRAFFIC FLOW
- EXIST. PVMT.
- NORTH ARROW
- PROPOSED PVMT.
- TEMP. SHORING (LOCATION PURPOSES ONLY)
- WORK AREA
- REMOVAL
- USER DEFINED (IF NEEDED)
- USER DEFINED (IF NEEDED)

SIGNALS

EXISTING PROPOSED TEMPORARY (T E M P)

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

SYMBOL	DESCRIPTION
	PAINT (4")
P1	WHITE EDGELINE
P4	3 FT.-9 FT./SP WHITE MINISKIP
P5	2 FT.-6 FT./SP WHITE MINISKIP
P10	YELLOW EDGELINE
P13	YELLOW DOUBLE CENTER
	PAINT (8")
P40	WHITE GORE LINE
P42	YELLOW DIAGONAL
P45	3 FT.-3 FT./SP WHITE MINISKIP
	PAINT (24")
P61	WHITE STOPBAR
	PAINT MARKING SYMBOLS
P71	RIGHT TURN ARROW
P103	24" YIELD LINE TRIANGLE

APPROVED: DocuSigned by: Lori D. Stouchko FF586C7596C645A...

DATE: 1/24/2023

SEAL

NORTH CAROLINA PROFESSIONAL SEAL 034437 ENGINEER LORI D. STOUCHKO

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

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

ROADWAY STANDARD DRAWINGS & LEGEND

PROJ. REFERENCE NO.	SHEET NO.
W-57060	TMP-1B

PLANS PREPARED FOR THE NCDOT BY:
MOTT MACDONALD I & E, LLC
1101 HAYNES STREET, SUITE 101
RALEIGH, NC 27604
NC LICENSE NO. F-0669

MANAGEMENT STRATEGIES

SHOULDER CLOSURE
ONE-LANE, TWO WAY OPERATION (FLAGGING)
WORK HOUR RESTRICTIONS FOR PEAK TRAVEL
TRUCK OFF-SITE DETOUR / USE OF ALTERNATIVE ROUTE

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
-L- (CHICKEN FOOT RD)	MONDAY THROUGH FRIDAY
-L1-(CHICKEN FOOT RD)	6:00 AM TO 9:00 AM
	4:00 PM TO 7:00 PM
-Y- (JOHN MCMILLAN RD)	MONDAY THROUGH FRIDAY
-Y1-(JOHN MCMILLAN RD)	6:00 AM TO 9:00 AM
	4:00 PM TO 7:00 PM

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

ROAD NAME
-L- (CHICKEN FOOT RD)
-Y- (JOHN MCMILLAN 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 AND 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 6:00AM THURSDAY AND 7:00 PM MONDAY.
4. FOR MEMORIAL DAY, BETWEEN THE HOURS OF 6:00 AM FRIDAY AND 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.

LANE AND SHOULDER CLOSURE REQUIREMENTS

C) 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.

D) 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.

E) 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. 1101.02 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. 1101.02 UNLESS THE WORK AREA IS PROTECTED BY BARRIER OR GUARDRAIL.

F) WHEN PERSONNEL AND/OR EQUIPMENT ARE WORKING WITHIN A LANE OF TRAVEL OF AN UNDIVIDED OR DIVIDED FACILITY, CLOSE THE LANE ACCORDING TO THE TRANSPORTATION MANAGEMENT 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.

G) 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.

H) DO NOT INSTALL MORE THAN ONE LANE CLOSURE IN ANY ONE DIRECTION ON ANY ROAD.

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) (500 FEET) 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) PROVIDE SIGNING AND DEVICES REQUIRED TO CLOSE THE ROAD ACCORDING TO THE ROADWAY STANDARD DRAWINGS AND TRANSPORTATION MANAGEMENT PLANS.

PROVIDE SIGNING REQUIRED FOR THE OFF-SITE DETOUR ROUTE AS SHOWN IN THE TRANSPORTATION MANAGEMENT PLANS.

N) COVER OR REMOVE ALL SIGNS AND DEVICES REQUIRED TO CLOSE THE ROAD WHEN ROAD CLOSURE IS NOT IN OPERATION.

COVER OR REMOVE ALL SIGNS REQUIRED FOR THE OFF-SITE DETOUR WHEN THE DETOUR IS NOT IN OPERATION.

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

P) INSTALL BLACK ON ORANGE "DIP" SIGNS (W8-2) AND/OR "BUMP" SIGNS (W8-1) (500 FEET) IN ADVANCE OF THE UNEVEN AREA, OR AS DIRECTED BY THE ENGINEER.

TRAFFIC CONTROL DEVICES

Q) WHEN LANE CLOSURES ARE NOT IN EFFECT SPACE CHANNELIZING DEVICES IN WORK AREAS NO GREATER IN FEET THAN TWICE THE POSTED SPEED LIMIT (MPH) EXCEPT, 10 FT ON-CENTER IN RADII, AND 3 FT OFF THE EDGE OF AN OPEN TRAVELWAY. REFER TO STANDARD SPECIFICATIONS FOR ROADS AND STRUCTURES SECTIONS 1130 (DRUMS), 1135 (CONES) AND 1180 (SKINNY DRUMS) FOR ADDITIONAL REQUIREMENTS.

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

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

APPROVED: DocuSigned by: Lori D. Stouchko FF586C7596C545A...
DATE: 1/24/2023
SEAL
NORTH CAROLINA PROFESSIONAL SEAL 034437 ENGINEER LORI D. STOUCHKO

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

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

TRANSPORTATION OPERATIONS PLAN

PROJ. REFERENCE NO.	SHEET NO.
W-5601FO	TMP-1C

PLANS PREPARED FOR THE NCDOT BY:
MOTT MACDONALD
MOTT MACDONALD I & E, LLC
1101 HAYNES STREET, SUITE 101
RALEIGH, NC 27604
NC LICENSE NO. F-0669

GENERAL NOTES

PAVEMENT MARKINGS AND MARKERS

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

ROAD NAME	MARKING	MARKER
ALL ROADS	PAINT	TEMPORARY RAISED

U) 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.

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

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

X) TRACE THE PROPOSED MONOLITHIC ISLAND LOCATIONS WITH PROPER COLOR PAVEMENT MARKINGS PRIOR TO INSTALLATION. PLACE DRUMS TO DELINEATE ANY MONOLITHIC ISLANDS BEFORE INSTALLATION.

MISCELLANEOUS

Y) LAW ENFORCEMENT MAY BE USED TO MAINTAIN TRAFFIC THROUGH THE WORK AREA AND/OR INTERSECTIONS AS DIRECTED BY THE ENGINEER.

Z) 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 THE ENGINEER. PLACE BLACK ON ORANGE "LOOSE GRAVEL" SIGNS (W8-7) AND BLACK ON ORANGE "PAVEMENT ENDS" SIGNS (W8-3) (500 FEET) AND (1000 FEET) RESPECTIVELY IN ADVANCE OF THE UNEVEN AREAS. USE DRUMS TO DELINEATE THE EDGE OF ROADWAY ALONG UNPAVED AREAS.

LOCAL NOTE

1) COORDINATE TRUCK DETOUR WITH ENGINEER THIRTY (30) DAYS PRIOR TO PHASE II TRAFFIC PATTERN.

APPROVED: DocuSigned by: Lori D. Stouchko FF586C7596C545A...
DATE: 1/24/2023
SEAL
NORTH CAROLINA PROFESSIONAL SEAL 034437 ENGINEER LORI D. STOUCHKO

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

TRANSPORTATION OPERATIONS PLAN

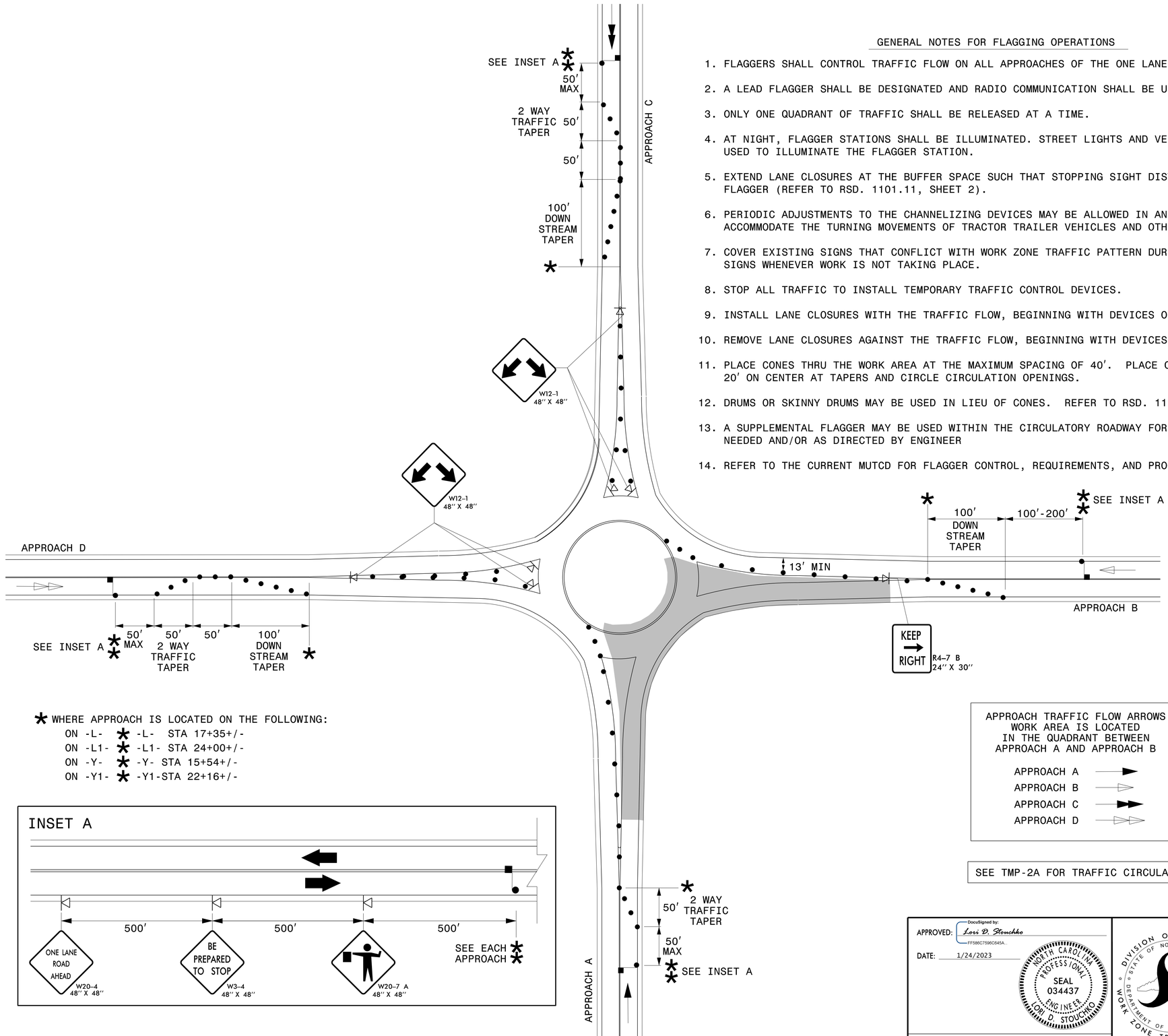
PROJ. REFERENCE NO.	SHEET NO.
W-57060	TMP-2

PLANS PREPARED FOR THE NCDOT BY:

MOTT MACDONALD I & E, LLC
1101 HAYNES STREET, SUITE 101
RALEIGH, NC 27604
NC LICENSE NO. F-0669

GENERAL NOTES FOR FLAGGING OPERATIONS

1. FLAGGERS SHALL CONTROL TRAFFIC FLOW ON ALL APPROACHES OF THE ONE LANE ROUNDABOUT.
2. A LEAD FLAGGER SHALL BE DESIGNATED AND RADIO COMMUNICATION SHALL BE USED BY THE FLAGGER.
3. ONLY ONE QUADRANT OF TRAFFIC SHALL BE RELEASED AT A TIME.
4. AT NIGHT, FLAGGER STATIONS SHALL BE ILLUMINATED. STREET LIGHTS AND VEHICLE HEADLIGHTS SHALL NOT BE USED TO ILLUMINATE THE FLAGGER STATION.
5. EXTEND LANE CLOSURES AT THE BUFFER SPACE SUCH THAT STOPPING SIGHT DISTANCE IS PROVIDED TO THE FLAGGER (REFER TO RSD. 1101.11, SHEET 2).
6. PERIODIC ADJUSTMENTS TO THE CHANNELIZING DEVICES MAY BE ALLOWED IN AN ACTIVE WORK ZONE TO ACCOMMODATE THE TURNING MOVEMENTS OF TRACTOR TRAILER VEHICLES AND OTHER LARGE VEHICLES.
7. COVER EXISTING SIGNS THAT CONFLICT WITH WORK ZONE TRAFFIC PATTERN DURING ACTIVE WORK HOURS. UNCOVER SIGNS WHENEVER WORK IS NOT TAKING PLACE.
8. STOP ALL TRAFFIC TO INSTALL TEMPORARY TRAFFIC CONTROL DEVICES.
9. INSTALL LANE CLOSURES WITH THE TRAFFIC FLOW, BEGINNING WITH DEVICES ON THE UPSTREAM SIDE OF TRAFFIC.
10. REMOVE LANE CLOSURES AGAINST THE TRAFFIC FLOW, BEGINNING WITH DEVICES ON THE DOWNSTREAM SIDE OF TRAFFIC.
11. PLACE CONES THRU THE WORK AREA AT THE MAXIMUM SPACING OF 40′. PLACE CONES AT A MAXIMUM SPACING OF 20′ ON CENTER AT TAPERS AND CIRCLE CIRCULATION OPENINGS.
12. DRUMS OR SKINNY DRUMS MAY BE USED IN LIEU OF CONES. REFER TO RSD. 1180.01 FOR SKINNY DRUM REQUIREMENTS.
13. A SUPPLEMENTAL FLAGGER MAY BE USED WITHIN THE CIRCULATORY ROADWAY FOR ADDITIONAL GUIDANCE FOR TRAFFIC AS NEEDED AND/OR AS DIRECTED BY ENGINEER
14. REFER TO THE CURRENT MUTCD FOR FLAGGER CONTROL, REQUIREMENTS, AND PROCEDURES.



✱ WHERE APPROACH IS LOCATED ON THE FOLLOWING:

ON -L- ✱ -L- STA 17+35+/-
ON -L1- ✱ -L1- STA 24+00+/-
ON -Y- ✱ -Y- STA 15+54+/-
ON -Y1- ✱ -Y1-STA 22+16+/-

APPROACH TRAFFIC FLOW ARROWS
WORK AREA IS LOCATED
IN THE QUADRANT BETWEEN
APPROACH A AND APPROACH B

APPROACH A →
APPROACH B →
APPROACH C →
APPROACH D →

SEE TMP-2A FOR TRAFFIC CIRCULATION DIAGRAMS

APPROVED: DocuSigned by: Lori D. Stouchko FF586C7596C645A...
DATE: 1/24/2023

NORTH CAROLINA PROFESSIONAL SEAL 034437 ENGINEER LORI D STOUCHKO

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

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

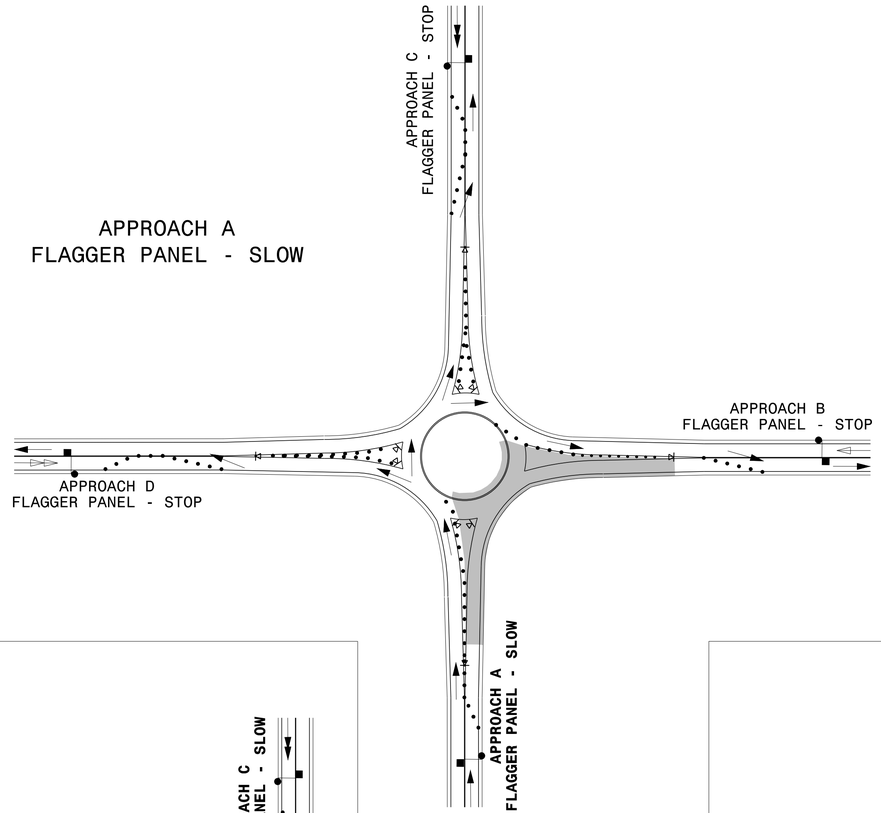
TEMPORARY TRAFFIC CONTROL ROUNDABOUT FLAGGING OPERATION

PROJ. REFERENCE NO.	SHEET NO.
W-57060	TMP-2A

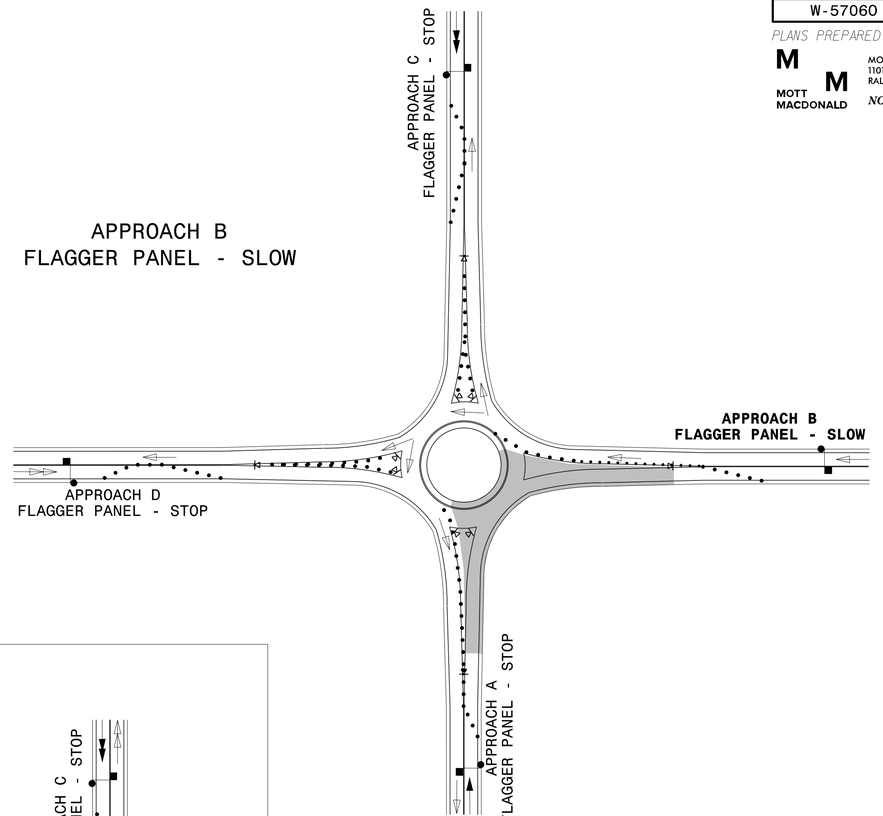
PLANS PREPARED FOR THE NCDOT BY:

MOTT MACDONALD
MOTT MACDONALD I & E, LLC
1101 HAYNES STREET, SUITE 101
RALEIGH, NC 27604
NC LICENSE NO. F-0669

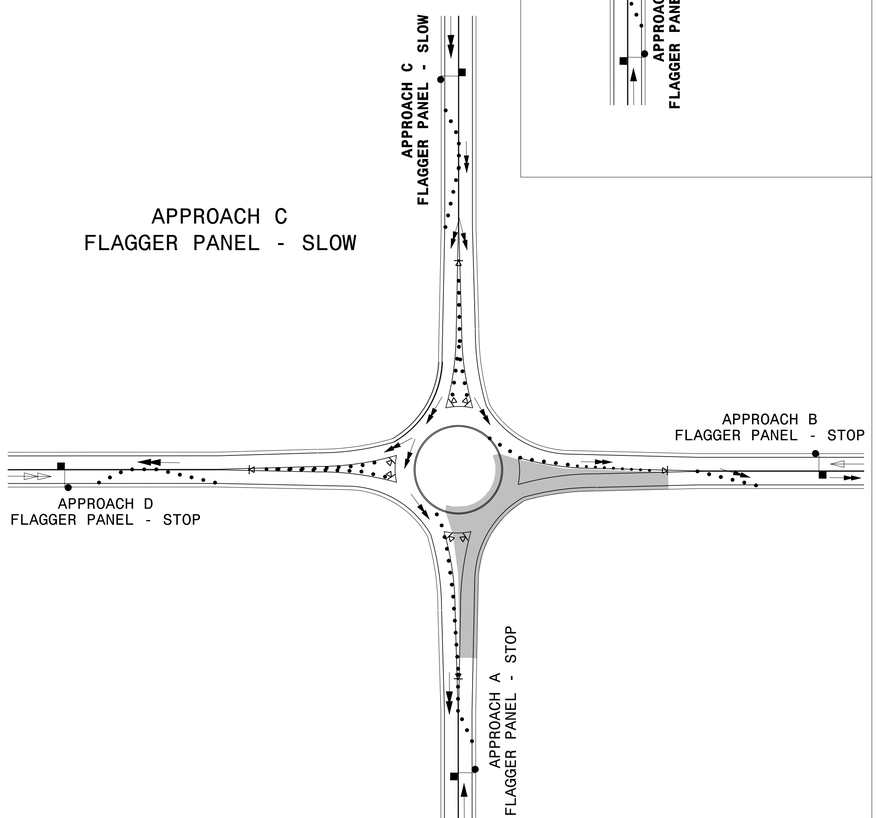
APPROACH A
FLAGGER PANEL - SLOW



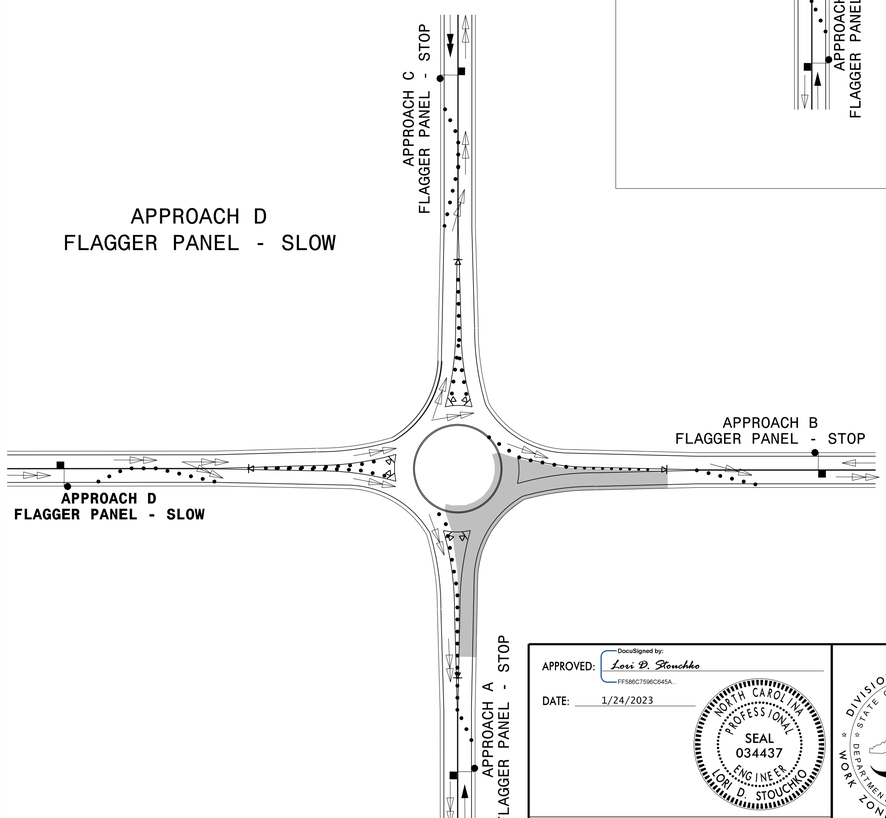
APPROACH B
FLAGGER PANEL - SLOW



APPROACH C
FLAGGER PANEL - SLOW



APPROACH D
FLAGGER PANEL - SLOW



APPROACH TRAFFIC FLOW ARROWS
WORK AREA IS LOCATED
IN THE QUADRANT BETWEEN
APPROACH A AND APPROACH B

- APPROACH A
- APPROACH B
- APPROACH C
- APPROACH D

APPROVED: DocuSigned by: Lori D. Stouchko FF586C7596C645A...

DATE: 1/24/2023

NORTH CAROLINA PROFESSIONAL SEAL 034437 ENGINEER LORI D. STOUCHKO

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

TEMPORARY TRAFFIC CONTROL ROUNDABOUT FLAGGING OPERATION

1/23/2023
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User:STO86227

PROJ. REFERENCE NO.	SHEET NO.
W-57060	TMP-2B

PLANS PREPARED FOR THE NCDOT BY:

MOTT MACDONALD
MOTT MACDONALD I & E, LLC
1101 HAYNES STREET, SUITE 101
RALEIGH, NC 27604
NC LICENSE NO. F-0669

CHICKEN FOOT RD

H BULLARD RD

2370

2239

2241

2240

THROWER RD

87

2241

2245

NORTH FORK LN

2244

JOHN MCMILLAN RD

2235

Grays Creek Church Rd.

2261

2244

2252

KING HIRAM RD

2247

ALDERMAN RD

JOE HALL RD

2246

SCHOOL RD

SWANS CREEK CHURCH RD

2233

2251

YARBOROUGH RD

1	TRUCK	M4-4 24″ X 12″	2	TRUCK	M4-4 24″ X 12″	3	TRUCK	M4-4 24″ X 12″
	DETOUR	M4-8 24″ X 12″		DETOUR	M4-8 24″ X 12″		DETOUR	M4-8 24″ X 12″
	CHICKEN FOOT RD	SP-1 36″ X 36″		CHICKEN FOOT RD	SP-1 36″ X 36″		CHICKEN FOOT RD	SP-1 36″ X 36″
	←	M6-1 L 21″ X 15″		→	M6-1 R 21″ X 15″		↰	M5-1 21″ X 15″
4	END DETOUR	M4-8 A 24″ X 18″						

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DATE: 1/24/2023

NORTH CAROLINA PROFESSIONAL SEAL 034437 ENGINEER LORI D. STOUCHKO

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

TEMPORARY TRAFFIC CONTROL PHASE II CHICKEN FOOT RD TEMPORARY TRUCK DETOUR

1/23/2023
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User:STO86227

PROJ. REFERENCE NO.	SHEET NO.
W-57060	TMP-2C

PLANS PREPARED FOR THE NCDOT BY:

MOTT MACDONALD I & E, LLC
1101 HAYNES STREET, SUITE 101
RALEIGH, NC 27604
NC LICENSE NO. F-0669

SIGN NUMBER: SP-1 BACKG COLOR: Fluorescent Orange
TYPE: STATIONARY COPY COLOR: Black
QUANTITY: SEE PLANS

SYMBOL	X	Y	WID	HT

SIGN WIDTH: 3'-0"
HEIGHT: 3'-0"
TOTAL AREA: 9.0 Sq.Ft.

BORDER TYPE: INSET
RECESS: 0.38"
WIDTH: 0.63"
RADII: 1.5"

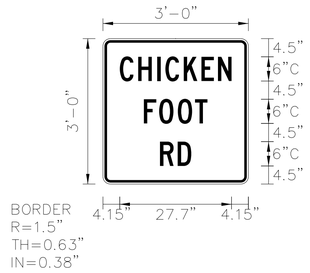
NO. Z BARS:
LENGTH:

MAT'L: 0.080" (2.0 mm) ALUMINUM

USE NOTES: 1,2

1. Legend and border shall be direct applied black non-reflective sheeting.
2. Background shall be NC GRADE B fluorescent orange retroreflective sheeting.

DESIGN BY: S COLEMAN CHECKED BY: Sep 27, 2022
PROJECT ID: W-57060 LOCATION: GRAYS CREEK, NC DIV: 6



Spacing Factor is 1 unless specified otherwise

LETTER POSITIONS

Letter spacings are to start of next letter

																									Series/Size Text Length
		C	H	I	C	K	E	N																	C 2000
	4.2	4.6	4.7	2	4.6	4.4	4.1	3.4	4.2																27.7
		F	O	O	T																				C 2000
	10.1	3.8	4.6	4.3	3.1	10.1																			15.7
		R	D																						C 2000
	14.1	4.4	3.4	14.1																					7.7

FILENAME: W-57060_WZTC_SignDesign

NORTH CAROLINA D.O.T. SIGN DETAIL

APPROVED: DocuSigned by: Lori D. Stouchko FF586C7596C545A...
DATE: 1/24/2023

NORTH CAROLINA PROFESSIONAL SEAL 034437 ENGINEER LORI D. STOUCHKO

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

TEMPORARY TRAFFIC CONTROL
SPECIAL SIGN DESIGN

PROJ. REFERENCE NO.	SHEET NO.
W-57060	TMP-3

PLANS PREPARED FOR THE NCDOT BY:
MOTT MACDONALD
MOTT MACDONALD I & E, LLC
1101 HAYNES STREET, SUITE 101
RALEIGH, NC 27604
NC LICENSE NO. F-0669

PHASING

NOTES:
INSTALL WORK ZONE ADVANCE WARNING SIGNS USING RSD 1101.01, SHEET 3 OF 3 PRIOR TO BEGINNING ANY WORK

MAINTAIN VEHICULAR ACCESS TO ALL RESIDENCES AND BUSINESSES

COMPLETE ANY PROPOSED WIDENING IN SUCH A MANNER THAT NO PONDING OF WATER WILL OCCUR WITHIN THE TRAVEL LANE

COMPLETE PAVING UP TO, BUT NOT INCLUDING FINAL LAYER OF SURFACE COURSE, UNTIL STATED TO PLACE FINAL LAYER IN WRITTEN PHASING OR AS DIRECTED BY ENGINEER

PHASE I - SEE SHEET TMP-4

STEP 1

USING RSD 1101.01, SHEET 3 OF 3, INSTALL WORK ZONE ADVANCE WARNING SIGNS ON -L-, -L1-, -Y- AND -Y1-

STEP 2

USING RSD 1101.02, SHEET 1 OF 14 AND FLAGGERS AS NEEDED, REPLACE EXISTING CENTER LINES WITH A TEMPORARY YELLOW DOUBLE CENTER PAVEMENT MARKINGS ON -L1- AND -Y1- AS SHOWN

STEP 3

USING RSD 1101.02, SHEET 1 OF 14 AND FLAGGERS AS NEEDED, CONSTRUCT THE FOLLOWING:
(NOTE: REPLACE EXISTING PAVEMENT MARKINGS BY THE END OF EACH DAY'S OPERATION AFTER WEDGING EXISTING PAVEMENT)
* RIGHT SIDE OF -L- FROM STA 15+00+/- TO EXISTING -Y1- AS SHOWN, WEDGE EXISTING AS NEEDED TO MAINTAIN TRAFFIC
* -L- FROM EXISTING -Y1- TO -RAB- AND -RAB- ON THE RIGHT SIDE OF EXISTING -L- AS SHOWN, WEDGE EXISTING AS NEEDED TO MAINTAIN EXISTING TRAFFIC AND PROVIDE TRANSITION TO -RAB-
* RIGHT SIDE OF -L1- FROM -RAB- TO STA 23+66+/- AS SHOWN
* -L1- FROM STA 23+66+/- TO STA 25+50+/- INCLUDING PROPOSED MONOLITHIC ISLAND AND WEDGING OF EXISTING -L1-
* -Y- FROM STA 14+00+/- TO STA 15+85+/- INCLUDING WEDGING OF EXISTING -Y-
* -Y- FROM STA 15+85+/-TO THE LEFT SIDE OF EXISTING -L1- AS SHOWN, PROPOSED MONOLITHIC ISLAND FROM STA 16+25+/- TO STA 17+51+/-, AND WEDGING OF EXISTING ROADWAY FROM THE LEFT SIDE OF EXISTING -L1- TO -RAB-
* -Y1- FROM -RAB- TO STA 21+81+/- INCLUDING PROPOSED MONOLITHIC ISLAND
* LEFT SIDE OF -Y1- FROM STA 21+81+/- TO STA 22+48+/- INCLUDING WEDGING OF EXISTING ROADWAY AS NEEDED TO MAINTAIN TRAFFIC
* -Y1- FROM STA 22+48+/- TO 24+00+/- INCLUDING WEDGING OF EXISTING ROADWAY

STEP 4

AWAY FROM TRAFFIC:
* PLACE FINAL SIGNING IN CENTER OF ROUNDABOUT AND AT THE ENTRANCES OF THE ROUNDABOUT AT -L-, -Y1-, AND -L1- (SEE FINAL SIGNING PLANS)
* BEGIN PLACEMENT OF TEMPORARY PAVEMENT MARKINGS ON -L-, -L1-, -Y1-, AND -RAB- AS SHOWN ON TMP-5

USING TMP-2B, PLACE TEMPORARY TRUCK DETOUR SIGNING AND COVER. SEE LOCAL NOTE 1.

PHASE II - SEE SHEET TMP-5

STEP 1

UNCOVER TRUCK DETOUR SIGNING SHOWN ON TMP-2B

STEP 2

USING RSD 1101.02, SHEET 1 OF 14 AND FLAGGERS AND LAW ENFORCEMENT AS NEEDED, PLACE TEMPORARY PAVEMENT MARKINGS AND TEMPORARY TRAFFIC CONTROL DEVICES AS SHOWN ON TMP-5 AND SHIFT TRAFFIC TO NEW TEMPORARY PATTERN

STEP 3

USING RSD 1101.02, SHEET 1 OF 14, TMP-2, TMP-2A AND FLAGGERS AS NEEDED, CONSTRUCT THE FOLLOWING:
* LEFT SIDE OF -L- FROM STA 15+00+/- TO -Y- AS SHOWN
* LEFT SIDE OF -L1- FROM -Y- TO STA 23+66+/- AS SHOWN
* LEFT SIDE OF -Y- FROM STA 17+60+- TO -L1- AS SHOWN
* RIGHT SIDE OF -Y- FROM STA 15+85+/- TO -L- AS SHOWN
* RIGHT SIDE OF -Y1- FROM STA 21+81+/- TO STA 22+48+/- AS SHOWN
* REMOVE EXISTING JOHN MCMILLAN RD AND CHICKEN FOOT RD AS SHOWN

PHASE III - SEE SHEET TMP-6

STEP 1

USING TMP-2 AND TMP-2A, FLAGGERS AND LAW ENFORCEMENT AS NEEDED, PLACE TEMPORARY PAVEMENT MARKINGS AS SHOWN AND SHIFT TRAFFIC INTO NEW TEMPORARY PATTERN

REMOVE TEMPORARY TRUCK DETOUR SIGNING

STEP 2

CLOSE RIGHT TURN LANE ON -Y- AND CONSRUCT MONOLITHIC ISLAND NO. 2, RETURN TRAFFIC TO RIGHT TURN LANE AT THE END OF EACH WORK DAY

STEP 3

USING TMP-2 AND TMP-2A AND FLAGGERS AS NEEDED, CONSTRUCT MONOLITHIC ISLANDS NO. 1A AND 1B

STEP 4

USING TMP-2 AND TMP-2A AND FLAGGERS AS NEEDED, CONSTRUCT MONOLITHIC ISLAND NO. 3

STEP 5

USING TMP-2 AND TMP-2A AND FLAGGERS AS NEEDED, PLACE FINAL LAYER OF SURFACE COURSE AND FINAL PAVEMENT MARKINGS

STEP 6

REMOVE TEMPORARY TRAFFIC CONTROL DEVICES

APPROVED: DocuSigned by: Lori D. Stouchko FF586C7596C645A...
DATE: 1/24/2023
NORTH CAROLINA PROFESSIONAL SEAL 034437 ENGINEER LORI D. STOUCHKO
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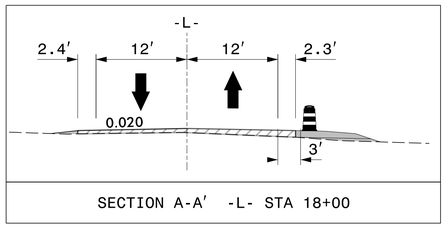
DIVISION OF HIGHWAYS STATE OF NORTH CAROLINA DEPARTMENT OF TRANSPORTATION WORK ZONE TRAFFIC CONTROL

TEMPORARY TRAFFIC CONTROL PHASING

PROJ. REFERENCE NO.	SHEET NO.
W-57060	TMP-4

PLANS PREPARED FOR THE NCDOT BY:

MOTT MACDONALD I & E, LLC
1101 HAYNES STREET, SUITE 101
RALEIGH, NC 27604
NC LICENSE NO. F-0669



SECTION A-A' -L- STA 18+00

✱ NOTE: PLACE FINAL SIGNING IN CENTER OF -RAB-
PLACE FINAL SIGNING ON -Y1- AT -RAB-
PLACE FINAL SINGING ON ISLAND OF -L1- AT -RAB-
PLACE FINAL YIELD SIGN ON -L- AT -RAB-
SEE FINAL SIGNING PLANS

✱✱ NOTE: MAINTAIN ADVANCE WARNING STOP AHEAD SIGNS ON ALL FOUR APPROACHES PRIOR TO TRAFFIC SHIFT. INSTALL PROPOSED ADVANCE ROUNDABOUT AND YIELD WARNING SIGNS AND COVER (SEE SIGNING PLANS).

-Y- STA 14+00 +/-

WEDGE EXISTING TO PROPOSED ELEVATION (MINUS SURFACE COURSE) AND PROVIDE TRANSITION TO EXISTING PAVEMENT TO MAINTAIN EXISTING TRAFFIC

-Y- SR 2244 JOHN MCMILLAN RD

-Y- STA 15+40+/-

15

-Y- STA 15+85+/-

-Y- STA 16+25 +/-

PLACE DRUMS AT SPACING 20' ON CENTER
ON NORTH SIDE OF EXISTING SR 2244
* FROM -Y1- STA 21+81+/- TO -Y1- STA 22+70+/-
* FROM -Y- STA 15+40+/- TO -Y- STA 16+47+/-
ON BOTH SIDES OF EXISTING SR 2252 AT -Y-
ON EAST SIDE OF EXISTING SR 2252 FROM
-L1- STA 22+57+/- TO STA 23+66+/-
FOR OTHERS, SEE GENERAL NOTES FOR TYPICAL DRUM SPACING

-Y- STA 16+47+/-

PROPOSED EOT

-Y- STA 17+55 +/-

20

-Y- STA 17+82 +/-

-L1- STA 23+66 +/-

25

-L1- SR 2252 CHICKEN FOOT RD

P13

-Y- STA 18+13 +/-

15

-L- SR 2252 CHICKEN FOOT RD

A

A'

-L1- STA 23+63 +/-

WEDGE EXISTING TO PROPOSED ELEVATION (MINUS SURFACE COURSE) AND PROVIDE TRANSITION TO EXISTING PAVEMENT TO MAINTAIN EXISTING TRAFFIC

-L1- STA 25+50 +/-

WEDGE EXISTING AS NEEDED TO MAINTAIN EXISTING TRAFFIC AND TIE TO PROPOSED -RAB-

-L- STA 15+00 +/-

PROPOSED EOT

-L- STA 19+52 +/-

-L1- STA 22+57 +/-

-RAB- STA 12+22.09=
-L1- STA 21+53.94

-RAB- STA 13+12.18=
-Y- STA 18+21.52

-L- STA 20+94.94=
-L1- STA 20+94.94=
-Y- STA 18+80.52=
-Y1- STA 18+80.52

-Y1- STA 21+71 +/-

20

-RAB- STA 10+00.00
-RAB- STA 13+70.71=
-L- STA 20+35.80

-RAB- PCC STA 10+75.71=
-Y1- POT STA 19+39.52

-Y1- STA 22+48 +/-

-Y1- STA 21+81 +/-

-Y1- SR 2244 JOHN MCMILLAN RD

WEDGE EXISTING TO PROPOSED ELEVATION (MINUS SURFACE COURSE) AND PROVIDE TRANSITION TO EXISTING PAVEMENT TO MAINTAIN EXISTING TRAFFIC

-Y1- STA 22+70 +/-

-Y1- STA 24+00 +/-

1 TYPE III BARRICADE

2 STOP ALL WAY

3

NOTE: MAINTAIN EXISTING STOP SIGNS AND ADVANCED WARNING SIGNS FOR THE ALL-WAY STOP CONTROLLED INTERSECTION

APPROVED: DocuSigned by: Lori D. Stouchko FF586C7596C645A...

DATE: 1/24/2023

NORTH CAROLINA PROFESSIONAL SEAL 034437 ENGINEER LORI D. STOUCHKO

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

TEMPORARY TRAFFIC CONTROL PHASE I DETAIL

PROJ. REFERENCE NO.	SHEET NO.
W-57060	TMP-5

PLANS PREPARED FOR THE NCDOT BY:

MOTT MACDONALD I & E, LLC
1101 HAYNES STREET, SUITE 101
RALEIGH, NC 27604
NC LICENSE NO. F-0669

* NOTE: COVER/REMOVE ADVANCE WARNING STOP AHEAD SIGNS ON ALL FOUR APPROACHES DURING TRAFFIC SHIFT.
UNCOVER PROPOSED ADVANCE ROUNDABOUT AND YIELD WARNING SIGNS DURING TRAFFIC SHIFT

-L- SR 2252 CHICKEN FOOT RD

-L- STA 15+00+/-

-L- STA 17+35+/-

-L- STA 18+42+/-

-L- STA 18+30+/-

-L- STA 18+59+/-
5'+/- RT

-L- STA 19+45+/-
6.5'+/- LT

-L- STA 19+79+/-
5'+/- RT

-L- STA 20+22+/-
10'+/- RT

-L- STA 19+70+/-
29.3'+/- LT

-L- STA 19+38+/-
20.7'+/- LT

-RAB- STA 10+00.00
-RAB- STA 13+70.71=
-L- STA 20+35.80

-Y- SR 2244 JOHN MCMILLAN RD

-Y- STA 14+00+/-

-Y- STA 15+35+/-

-Y- STA 15+54+/-

-Y- STA 16+05 +/-

-Y- STA 15+85+/-

-Y- STA 16+25 +/-

-Y- STA 16+75+/-

-Y- STA 16+87 +/-

-Y- STA 16+44 +/-

-Y- STA 17+49 +/-

-Y- STA 17+55 +/-

-Y- STA 17+60+/-

-Y- STA 18+02.6+/-
11.9'+/- LT

-Y- STA 18+06.5+/-
8.3'+/- RT

-Y- STA 18+11+/-
28.1'+/- LT

-Y- STA 18+16+/-
46.3'+/- LT

-L1- SR 2252 CHICKEN FOOT RD

-L1- STA 23+66 +/-

-L1- STA 25+50+/-

-L1- STA 24+00+/-

-L1- STA 23+28+/-
1'+/- LT

-L1- STA 22+60+/-
1'+/- LT

-L1- STA 22+31+/-

-L1- STA 22+31+/-
15'+/- LT

-RAB- STA 12+22.09=
-L1- STA 21+53.94

-RAB- STA 13+12.18=
-Y- STA 18+21.52

-L- STA 20+94.94=
-L1- STA 20+94.94=
-Y- STA 18+80.52=
-Y1- STA 18+80.52

-L- STA 20+22+/-
36.5'+/- LT

-L- STA 20+20.4+/-
26.3'+/- LT

-RAB- STA 10+75.71=
-Y1- STA 19+39.52

-Y1- SR 2244 JOHN MCMILLAN RD

-Y1- STA 21+80 +/-

-Y1- STA 22+41+/-

-Y1- STA 22+48 +/-

-Y1- STA 21+55+/-

-Y1- STA 22+16+/-

-Y1- STA 24+00+/-

R60' R460' R1300' R410' R245' R376' R150' R67' R280.5'

15 20 25

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

2 R11-2 48" x 30"
ROAD CLOSED
W1-6L 48" x 24"
TYPE III BARRICADE

NOTE: INSTALL PROPOSED SIGNS ON THE ROUNDABOUT APPROACH -Y1-, CENTER OF -RAB- AND COMPLETED ISLANDS ON -L- (SEE SIGNING PLANS)

3 YIELD
R1-2
48" x 48" x 48"

APPROVED: DocuSigned by: Lori D. Stouchko FF586C7596C645A...
DATE: 1/24/2023

NORTH CAROLINA PROFESSIONAL SEAL 034437 ENGINEER LORI D. STOUCHKO

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

TEMPORARY TRAFFIC CONTROL PHASE II DETAIL

1/23/2023
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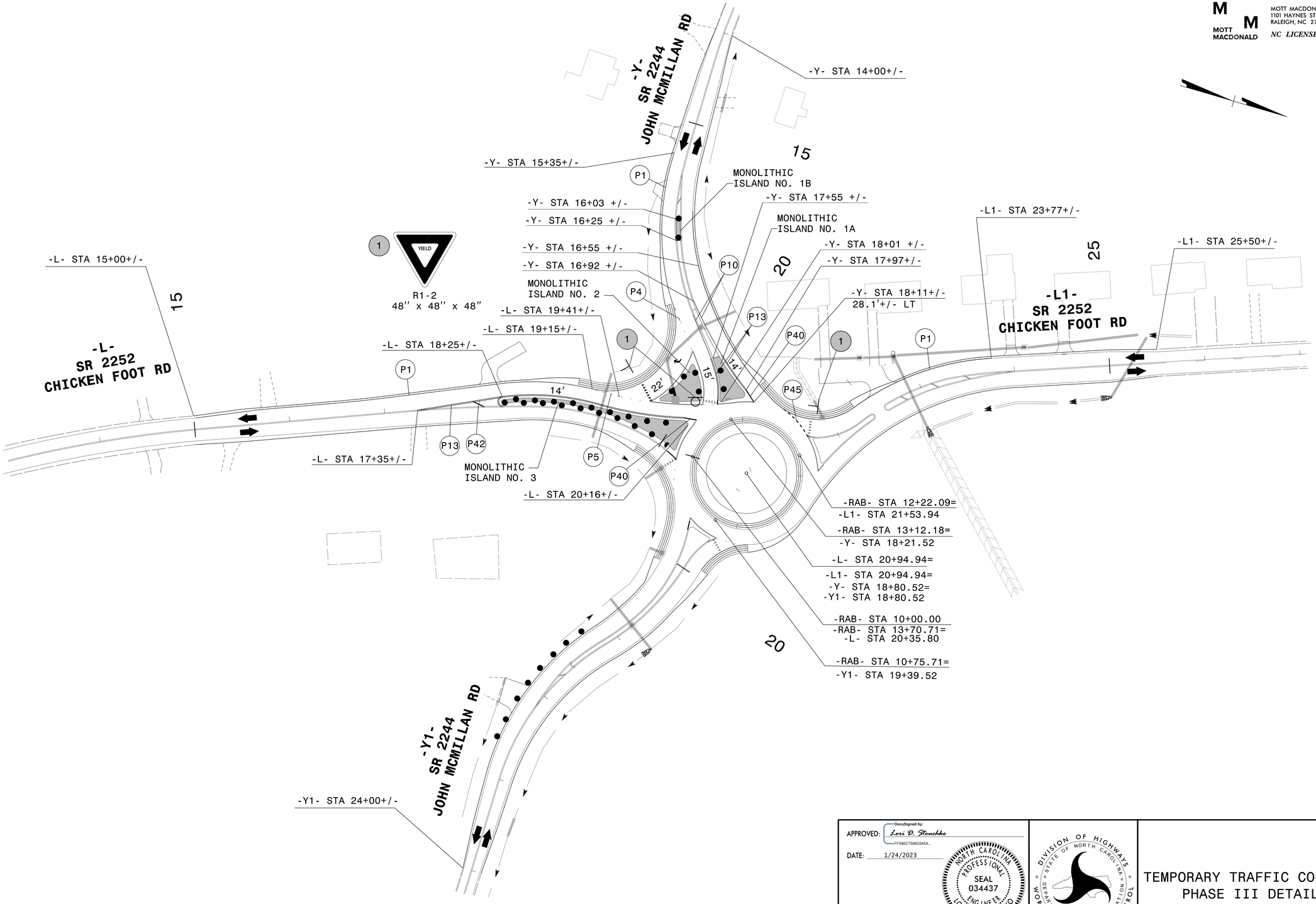
PROJ. REFERENCE NO.	SHEET NO.
W-57060	TMP-6

PLANS PREPARED FOR THE NCDOT BY:

MOTT MACDONALD I & E, LLC
1101 HAYNES STREET, SUITE 101
RALEIGH, NC 27604
NC LICENSE NO. F-0669



APPROVED: DocuSigned by: Lori D. Stouchko FF586C7596C645A...

DATE: 1/24/2023

NORTH CAROLINA PROFESSIONAL SEAL 034437 ENGINEER LORI D. STOUCHKO

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

1/23/2023
G:\362624_East-DOC-2015\Proj\W-57060\Traffic\Traffic Control\TCP\200_060_W-57060_TC_TMP_6.dgn
User:STO86227

W-5601FO

CONTRACT:

1/12/2023
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User:CDLess14

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION

PLANS PREPARED FOR THE NCDOT BY:
MOTT MACDONALD
MOTT MACDONALD I & E, LLC
1101 HAYNES STREET, SUITE 101
RALEIGH, NC 27604
NC LICENSE NO. F-0669

TIP NO.	SHEET NO.
W-57060	PMP-1

APPROVED: DocuSigned by: Samuel Coleman 99375A81AF3C490...

DATE: 1/12/2023

SEAL

NORTH CAROLINA PROFESSIONAL SEAL 043765 ENGINEER SAMUEL D COLEMAN

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

PAVEMENT MARKING PLAN

CUMBERLAND COUNTY

LOCATION: SR 2252 (CHICKEN FOOT RD) AT SR 2244 (JOHN MCMILLAN RD) SOUTH OF HOPE MILLS

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 2018 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 MULTILANE ROADWAYS
1205.07		PAVEMENT MARKINGS - PEDESTRIAN CROSSWALKS
1205.08		PAVEMENT MARKINGS - SYMBOLS AND WORD MESSAGES
1205.14		PAVEMENT MARKINGS - ROUNDABOUTS
1250.01		RAISED PAVEMENT MARKERS - INSTALLATION SPACING
1251.01		RAISED PAVEMENT MARKERS - PERMANENT AND TEMPORARY
1253.01		RAISED PAVEMENT MARKERS - SNOWPLOWABLE

PAVEMENT MARKING SCHEDULE

THERMOPLASTIC

Symbol	Description
T1	WHITE EDGELINE (4", 90 MIL)
T10	YELLOW EDGELINE (4", 90 MIL)
T13	YELLOW DOUBLE CENTER (4", 90 MIL)
T40	WHITE GORELINE (8", 90 MIL)
T45	3 FT. - 3 FT./SP WHITE MINISKIP (8", 90 MIL) (Roundabouts only)
T103	24" YIELD LINE TRIANGLE (90 MIL)

PAVEMENT MARKERS

Symbol	Description	Color
MA	PERMANENT RAISED MARKER	Yellow & Yellow
MB	PERMANENT RAISED MARKER	Crystal & Red

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	PERMANENT RAISED

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 STOP BARS, SYMBOLS, CHARACTERS AND DIAGONALS. IF HEATED-IN-PLACE IS USED, IT SHALL BE PAID FOR USING THE EXTRUDED THERMOPLASTIC PAY ITEM.

E) SEE ROADWAY PLANS FOR ALTERNATE CURB RAMP DESIGNS WHEN INDICATED ON PAVEMENT MARKING DETAIL SHEETS.

A. I. ALQUDWAH, PE SIGNING & DELINEATION REGIONAL ENGINEER

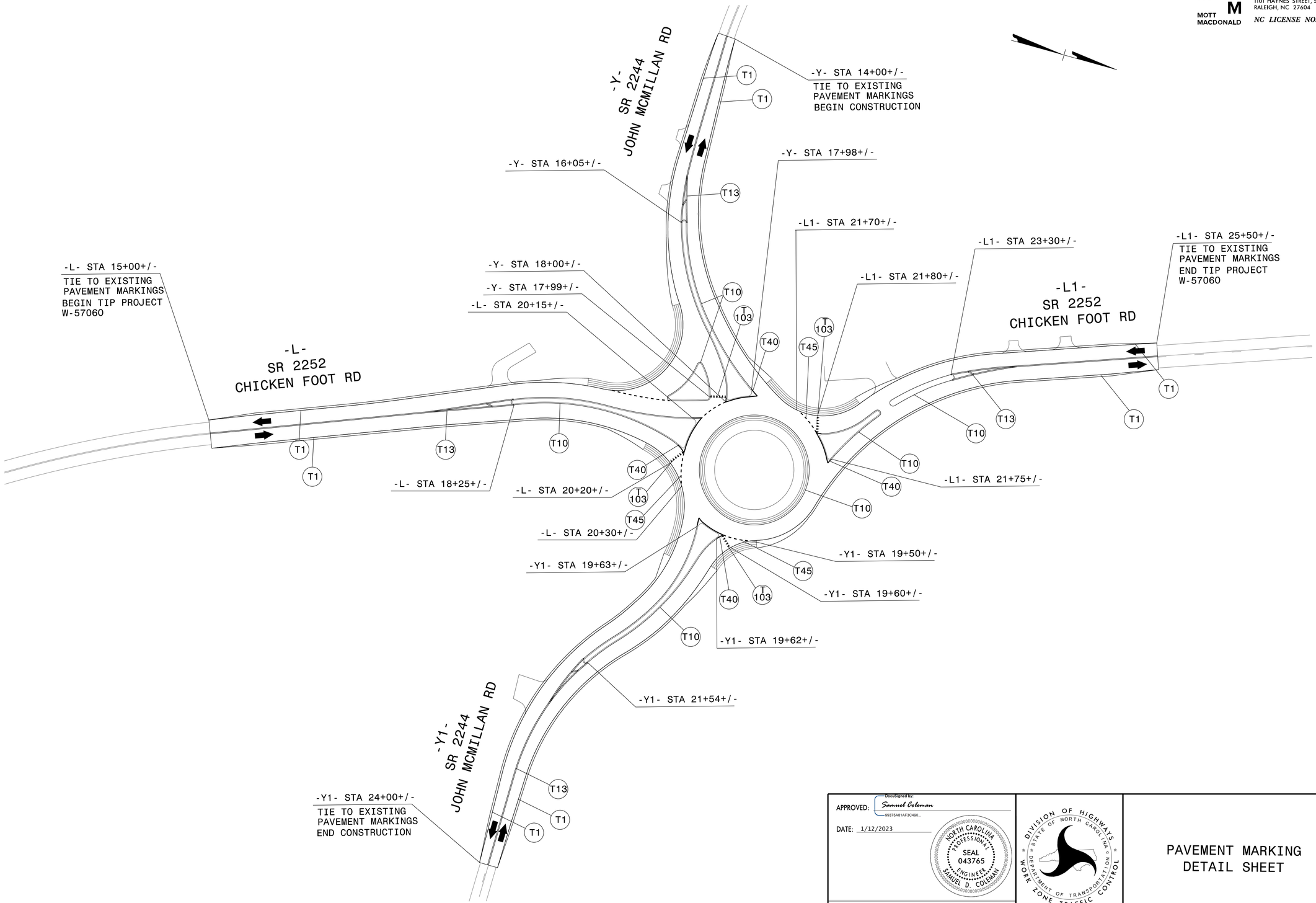
D. M. EATON, PE SIGNING & DELINEATION PROJECT DESIGN ENGINEER

INDEX

PROJ. REFERENCE NO.	SHEET NO.
W-57060	PMP-2

PLANS PREPARED FOR THE NCDOT BY:

MOTT MACDONALD I & E, LLC
1101 HAYNES STREET, SUITE 101
RALEIGH, NC 27604
NC LICENSE NO. F-0669



APPROVED: DocuSigned by: Samuel Coleman 99375A81AF3C490...

DATE: 1/12/2023

NORTH CAROLINA PROFESSIONAL SEAL 043765 ENGINEER SAMUEL D. COLEMAN

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

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

PAVEMENT MARKING DETAIL SHEET

1/12/2023
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User:COL85144

PROJECT: W-5706O

TIP P

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

PLAN FOR PROPOSED
HIGHWAY EROSION CONTROL

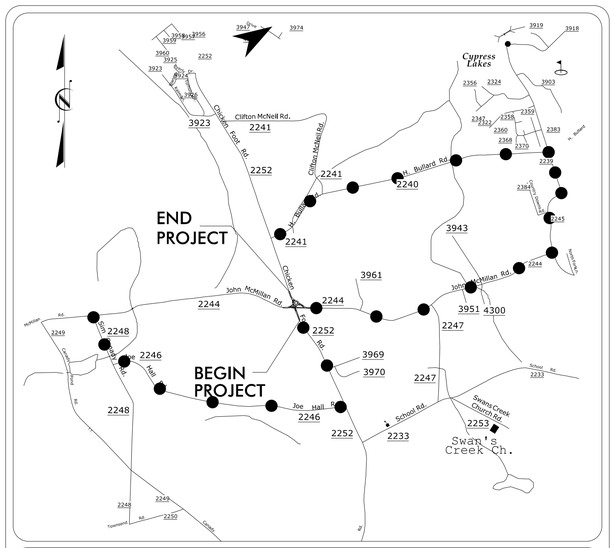
CUMBERLAND COUNTY

LOCATION: ROUNDABOUT AT INTERSECTION OF SR 2244 (JOHN McMILLAN ROAD) AND SR 2252 (CHICKENFOOT ROAD)

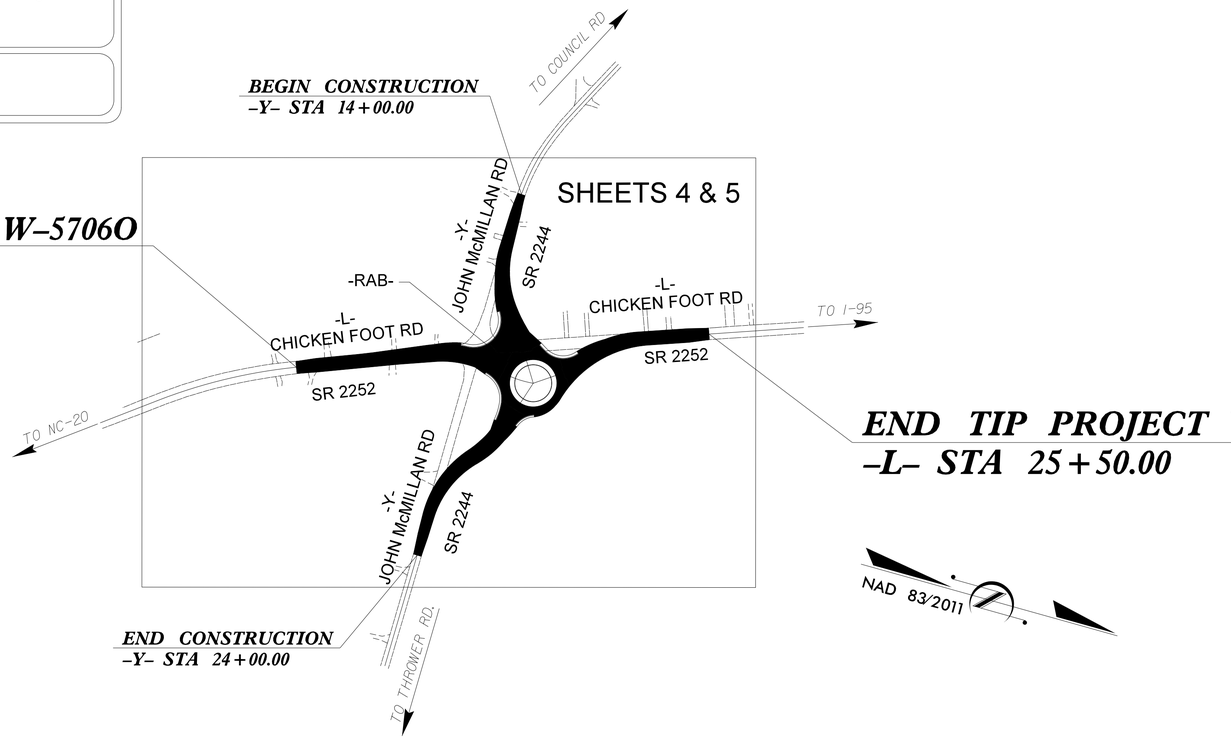
TYPE OF WORK: GRADING, DRAINAGE, PAVING, SIGNING & PAVEMENT MARKINGS

STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	W-5706O	EC-1	

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



VICINITY MAP
NOT TO SCALE



BEGIN TIP PROJECT W-5706O
–L– STA 15+00.00

END TIP PROJECT W-5706O
–L– STA 25+50.00

NAD 83/2011

EROSION AND SEDIMENT CONTROL MEASURES

Std. #	Description	Symbol
1630.03	Temporary Silt Ditch	TSD
1630.05	Temporary Diversion	TD
1605.01	Temporary Silt Fence	
1606.01	Special Sediment Control Fence	
1622.01	Temporary Berms and Slope Drains	
1630.02	Silt Basin Type B	
1633.01	Temporary Rock Silt Check Type-A	
	Temporary Rock Silt Check Type-A with Matting and Polyacrylamide (PAM)	
1633.02	Temporary Rock Silt Check Type-B	
	Wattle / Coir Fiber Wattle	EW CFW
	Wattle / Coir Fiber Wattle with Polyacrylamide (PAM)	
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	
1635.02	Rock Pipe Inlet Sediment Trap Type-B	
1630.04	Stilling Basin	
1630.06	Special Stilling Basin	
	Rock Inlet Sediment Trap:	
1632.01	Type A	A
1632.02	Type B	B
1632.03	Type C	C
	Skimmer Basin	SK
	Tiered Skimmer Basin	SK
	Infiltration Basin	

THIS PROJECT CONTAINS EROSION CONTROL PLANS FOR CLEARING AND GRUBBING PHASE OF CONSTRUCTION.

GRAPHIC SCALE

50 25 0 50 100

PLANS

THESE EROSION AND SEDIMENT CONTROL PLANS COMPLY WITH THE APPLICABLE REGULATIONS SET FORTH BY THE NCG-010000 GENERAL CONSTRUCTION PERMIT EFFECTIVE APRIL 1, 2019 AND ISSUED BY THE NORTH CAROLINA DEPARTMENT OF ENVIRONMENTAL QUALITY DIVISION OF WATER RESOURCES.

McKIM & CREED
243 North Front Street
Wilmington, North Carolina 28401
Phone: (910)343-1048, Fax: (910)251-8282
License: F-1222

Prepared in the Office of:

McKIM AND CREED, INC.
243 N. FRONT STEEET
WILMINGTON, NC 28401

Designed by:

Richard A. Moore, PE ***3957***
NAME *LEVEL III CERTIFICATION NO.*

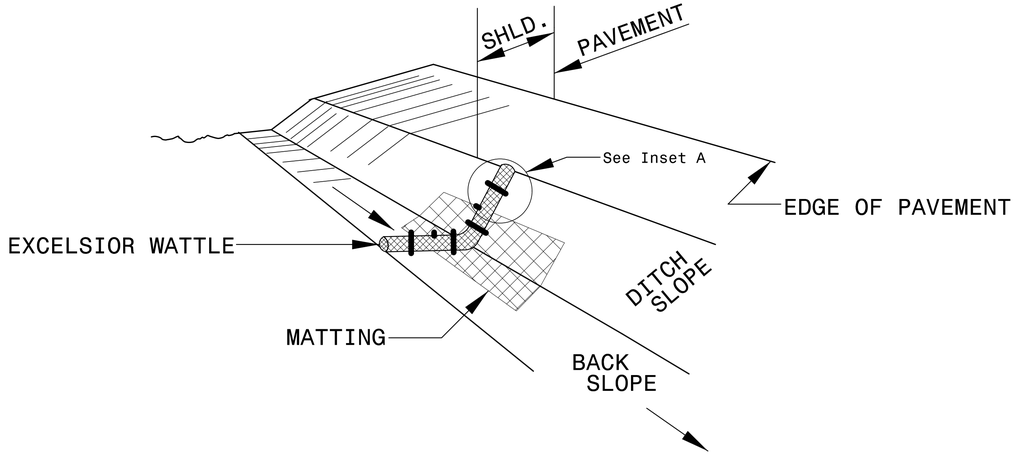
Roadway Standard Drawings

The following roadway english standards as appear in "Roadway Standard Drawings"– Roadway Design Unit – N. C. Department of Transportation – Raleigh, N. C., dated January 2018 and the latest revison thereto are applicable to this project and by reference hereby are considered a part of these plans.

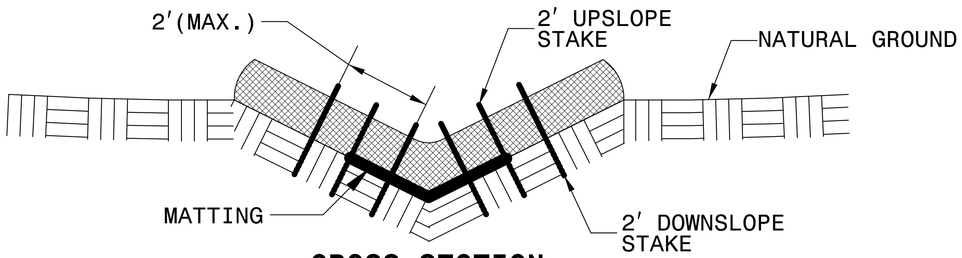
1604.01	Railroad Erosion Control Detail	1632.01	Rock Inlet Sediment Trap Type A
1605.01	Temporary Silt Fence	1632.02	Rock Inlet Sediment Trap Type B
1606.01	Special Sediment Control Fence	1632.03	Rock Inlet Sediment Trap Type C
1607.01	Gravel Construction Entrance	1633.01	Temporary Rock Silt Check Type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

PROJECT REFERENCE NO.	SHEET NO.
W-57060	EC-2
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

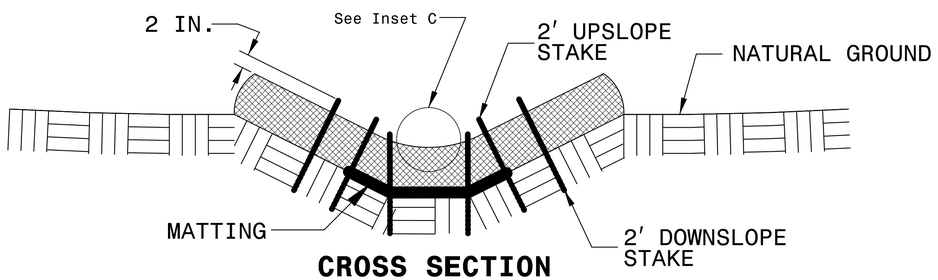
WATTLE WITH POLYACRYLAMIDE (PAM) DETAIL



ISOMETRIC VIEW



CROSS SECTION VEE DITCH



CROSS SECTION TRAPEZOIDAL DITCH

NOTES:

USE MINIMUM 12 IN. DIAMETER EXCELSIOR WATTLE.

USE 2 FT. WOODEN STAKES WITH A 2 IN. BY 2 IN. NOMINAL CROSS SECTION.

ONLY INSTALL WATTLE(S) TO A HEIGHT IN DITCH SO FLOW WILL NOT WASH AROUND WATTLE AND SCOUR DITCH SLOPES AND AS DIRECTED.

INSTALL A MINIMUM OF 2 UPSLOPE STAKES AND 4 DOWNSLOPE STAKES AT AN ANGLE TO WEDGE WATTLE TO BOTTOM OF DITCH.

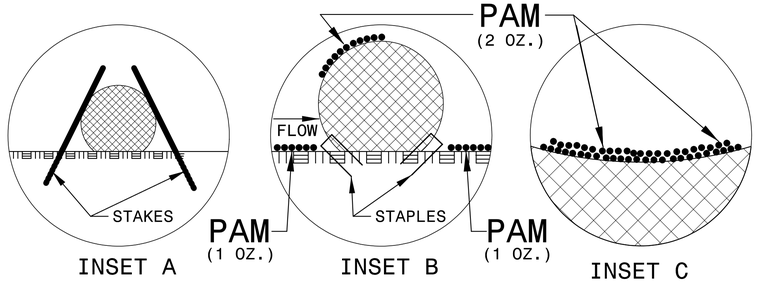
PROVIDE STAPLES MADE OF 0.125 IN. DIAMETER STEEL WIRE FORMED INTO A U SHAPE NOT LESS THAN 12″ IN LENGTH.

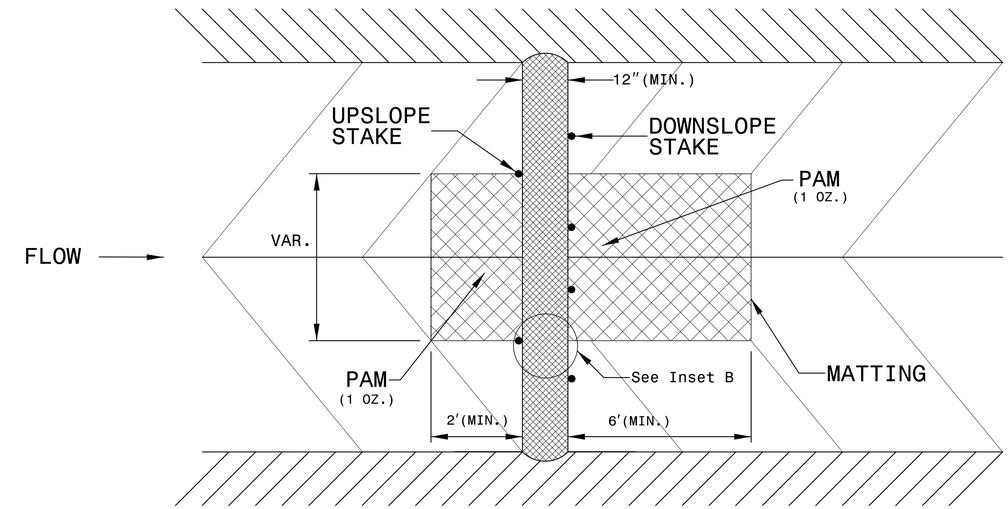
INSTALL STAPLES APPROXIMATELY EVERY 1 LINEAR FOOT ON BOTH SIDES OF WATTLE AND AT EACH END TO SECURE IT TO THE SOIL.

INSTALL MATTING IN ACCORDANCE WITH SECTION 1631 OF THE STANDARD SPECIFICATIONS.

PRIOR TO POLYACRYLAMIDE (PAM) APPLICATION, OBTAIN A SOIL SAMPLE FROM PROJECT LOCATION, AND FROM OFFSITE MATERIAL, AND ANALYZE FOR APPROPRIATE PAM FLOCCULANT TO BE APPLIED TO EACH WATTLE.

INITIALLY APPLY 2 OUNCES OF ANIONIC OR NEUTRALLY CHARGED PAM OVER WATTLE WHERE WATER WILL FLOW AND 1 OUNCE OF PAM ON MATTING ON EACH SIDE OF WATTLE. REAPPLY PAM AFTER EVERY RAINFALL EVENT THAT IS EQUAL TO OR EXCEEDS 0.50 IN.





TOP VIEW

PROJECT REFERENCE NO.	SHEET NO.
W-57060	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 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-5706o	EC-3A

DIVISION OF HIGHWAYS
STATE OF NORTH CAROLINA

SOIL STABILIZATION SUMMARY SHEET

MATTING FOR EROSION CONTROL

CONST SHEET NO.	LINE	FROM STATION	TO STATION	SIDE	ESTIMATE (SY)
4	-L-	1935	1960	LT	80
4	-L-	1875	1935	RT	130
4	-L1-	2288	2391	RT	355
4	-L1-DET E	2400	2550	RT	270
4	-RAB-	1025	1050	RT	50
4	-Y-	1400	1578	LT	205
4	-Y-	1578	1719	LT	235
4	-Y-	1578	1750	RT	360
4	-Y1-	1983	2081	LT	105
4	-Y1-	2081	2150	RT	110
				SUBTOTAL	1,900
MISCELLANEOUS MATTING TO BE INSTALLED AS DIRECTED BY THE ENGINEER					7,500
				TOTAL	9,400
				SAY	9,500

PERMANENT SOIL REINFORCEMENT MAT

CONST SHEET NO.	LINE	FROM STATION	TO STATION	SIDE	ESTIMATE (SY)
4					
				SUBTOTAL	
		ADDITIONAL PSRM TO BE INSTALLED			
				TOTAL	
				SAY	

8/17/99

PROJECT REFERENCE NO.	SHEET NO.
W-57060	EC-4/CONST 4
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION

–L1–

PI Sta 21+89.21
△ = 18° 52' 01.8" (LT)
D = 22° 55' 05.9"
L = 82.32'
T = 41.54'
R = 250.00'

PI Sta 23+06.58
△ = 34° 03' 53.0" (RT)
D = 22° 55' 05.9"
L = 148.64'
T = 76.59'
R = 250.00'

–Y1–

PI Sta 20+61.09
△ = 25° 28' 35.2" (RT)
D = 22° 55' 05.9"
L = 111.16'
T = 56.52'
R = 250.00'

PI Sta 22+12.24
△ = 42° 12' 59.0" (LT)
D = 22° 55' 05.9"
L = 184.20'
T = 96.51'
R = 250.00'

–RAB–

PI Sta 10+44.08
△ = 73° 31' 31.5" (LT)
D = 97° 06' 41.4"
L = 75.71'
T = 44.08'
R = 59.00'

PI Sta 12+47.80
△ = 142° 09' 07.4" (LT)
D = 97° 06' 41.4"
L = 146.38'
T = 172.09'
R = 59.00'

PI Sta 12+78.56
△ = 87° 29' 23.6" (LT)
D = 97° 06' 41.4"
L = 90.09'
T = 56.47'
R = 59.00'

PI Sta 13+44.11
△ = 56° 49' 57.5" (LT)
D = 97° 06' 41.4"
L = 58.52'
T = 31.92'
R = 59.00'

–L–

PI Sta 13+29.45
△ = 15° 44' 40.5" (RT)
D = 4° 24' 26.5"
L = 357.23'
T = 179.75'
R = 1,300.00'

PI Sta 19+18.89
△ = 37° 31' 14.0" (RT)
D = 22° 55' 05.9"
L = 163.71'
T = 84.91'
R = 250.00'

PI Sta 20+45.39
△ = 21° 36' 02.3" (LT)
D = 22° 55' 05.9"
L = 94.25'
T = 47.69'
R = 250.00'

–Y–

PI Sta 13+11.68
△ = 27° 05' 59.6" (LT)
D = 10° 54' 48.5"
L = 248.32'
T = 126.53'
R = 525.00'

PI Sta 16+35.21
△ = 43° 07' 07.8" (LT)
D = 22° 55' 05.9"
L = 188.14'
T = 98.78'
R = 250.00'

PI Sta 17+47.83
△ = 10° 37' 48.2" (RT)
D = 22° 55' 05.9"
L = 46.38'
T = 23.26'
R = 250.00'

NAD 83/2011

BEGIN CONSTRUCTION
–Y– POC STA. 14+00.00

–Y– PT Sta. 14+33.47

–Y– PC Sta. 15+36.43

–Y– PRC Sta. 17+24.57

–Y– POT Sta. 18+21.52

–L– PC Sta. 18+33.98

–L– PRC Sta. 19+97.70

–L– PT Sta. 20+99.95

–Y1– PC Sta. 20+04.57

–Y1– PRC Sta. 21+15.73

–L– PT Sta. 15+06.93

–L– PC Sta. 11+49.70

BEGIN CONSTRUCTION
–L– POC Sta. 13+00.00
BEGIN TIP PROJECT W-5706O
–L– POC STA. 15+00.00

–RAB– PC Sta. 10+00.00
–RAB– PT Sta. 13+70.71=
–L– PRC Sta. 20+35.80

–L– PC Sta. 13+12.18

–Y– PT Sta. 17+79.96

–Y– POT Sta. 18+21.52

–L– PT Sta. 22+99.94

END CONSTRUCTION
–Y1– POT STA. 24+00.00

END TIP PROJECT W-5706O
–L1– POT STA. 25+50.00

–L1– PRC Sta. 22+30.00
–RAB– PCC Sta. 12+22.09=
–L1– POC Sta. 21+53.94
–L1– PC Sta. 21+47.67
–L– POT Sta. 20+94.94=
–L1– POT Sta. 20+94.94=
–Y– POT Sta. 18+80.52=
–Y1– POT Sta. 18+80.52

–L1– PT Sta. 23+78.63

–RAB– PCC Sta. 10+75.71=
–Y1– POT Sta. 19+39.52

MATCHLINE –Y1– STA. 24+60.00
SEE THIS SHEET

EDGAR H CANADY JR
DB 5672 PG 55
(THIRD TRACT)

EDGAR H CANADY
DB 3381PG 389

LEE WENDELL
DB 9344 PG 217
PB 133 PG 96

LAWRENCE CANADY
DB 2214 PG 243

EDGAR CANADY
DB 2475 PG 142

SHERMAN D DAVIS JR
DB 900 PG 193
PB 102 PG 193

SHERMAN D DAVIS JR
DB 1330 PG 42
PB 102 PG 193

SHERMAN D
DAVIS JR
DB 1020 PG 620
PB 90 PG 193

JESSIE HERMAN CANADY JR HEIRS
DB 8058 PG 395
PB 11230 PG 170

WILLIAM ROSS III
DB 10193 PG 570
PB 125 PG 191

INA HALL CANADY
DB 3891PG 443

S.R.E.M.C.
DB 3338 PG 242

JENITA COMPTON
DB 8283 PG 437
PB 84 PG 189

RONALD TYLER
DB 4245 PG 427
PB 84 PG 189

DOROTHY JANE CANADY
DB 3694 PG 598

MELANIE P HARPER
DB 1029 PG 184

RICKY BLACKWELL
DB 4408 PG 579

RICHARD L MARTIN JR
DB 0.000 ACRES

CHRISTOPHER JONES
DB 8635 PG 520

KENNETH J CURRIE
DB 2615 PG 147

DONNA G IRWIN
DB 2636 PG 833

MARCIA SELPH
DB 4049 PG 69

GERALD MIC

SR 2252 CHICKEN FOOT RD (SR 2246)

TO JOE HALL RD (SR 2246)

SPECIAL LATERAL DITCH
SEE DETAIL A

SPECIAL LATERAL DITCH
SEE DETAIL B

SPECIAL LATERAL BASE DITCH
SEE DETAIL E

REMOVE OTCB
TAIL DITCH
50 LF @ 1.40%
SEE DETAIL D

TAIL BASE DITCH
200 LF @ 0.59%
SEE DETAIL C

FALSE SUMP
SEE DETAIL

TIE TO EXISTING GRADE

SPECIAL LATERAL DITCH
SEE DETAIL B
TIE TO EXISTING DITCH
AT STA. 26+82–Y1–LT

CLEARING AND GRUBBING
EROSION CONTROL FOR
CONSTRUCTION SHEET 4

NOTE:
PLACE TEMPORARY ROCK SEDIMENT DAMS TYPE – B AND TEMPORARY ROCK SILT CHECKS TYPE – B AT DRAINAGE OUTLETS.

PAVEMENT REMOVAL

NOTE: FOR –L–, –Y–, AND –RAB– PROFILES SEE SHEETS 6 & 7

NOTE: FOR INTERSECTION DETAIL, SEE SHEET 2B–1

8/17/99

EROSION CONTROL PLAN
FINAL GRADE

PROJECT REFERENCE NO.	SHEET NO.
W-57060	EC-5/CONST 4
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION

NAD 83/2011

–L1–

PI Sta 21+89.21
△ = 18° 52' 01.8" (LT)
D = 22° 55' 05.9"
L = 82.32'
T = 41.54'
R = 250.00'

PI Sta 23+06.58
△ = 34° 03' 53.0" (RT)
D = 22° 55' 05.9"
L = 148.64'
T = 76.59'
R = 250.00'

–Y1–

PI Sta 20+61.09
△ = 25° 28' 35.2" (RT)
D = 22° 55' 05.9"
L = 111.16'
T = 56.52'
R = 250.00'

PI Sta 22+12.24
△ = 42° 12' 59.0" (LT)
D = 22° 55' 05.9"
L = 184.20'
T = 96.51'
R = 250.00'

–RAB–

PI Sta 10+44.08
△ = 73° 31' 31.5" (LT)
D = 97° 06' 41.4"
L = 75.71'
T = 44.08'
R = 59.00'

PI Sta 12+47.80
△ = 142° 09' 07.4" (LT)
D = 97° 06' 41.4"
L = 146.38'
T = 172.09'
R = 59.00'

PI Sta 12+78.56
△ = 87° 29' 23.6" (LT)
D = 97° 06' 41.4"
L = 90.09'
T = 56.47'
R = 59.00'

PI Sta 13+44.11
△ = 56° 49' 57.5" (LT)
D = 97° 06' 41.4"
L = 58.52'
T = 31.92'
R = 59.00'

–L–

PI Sta 13+29.45
△ = 15° 44' 40.5" (RT)
D = 4° 24' 26.5"
L = 357.23'
T = 179.75'
R = 1,300.00'

PI Sta 19+18.89
△ = 37° 31' 14.0" (RT)
D = 22° 55' 05.9"
L = 163.71'
T = 84.91'
R = 250.00'

PI Sta 20+45.39
△ = 21° 36' 02.3" (LT)
D = 22° 55' 05.9"
L = 94.25'
T = 47.69'
R = 250.00'

–Y–

PI Sta 13+11.68
△ = 27° 05' 59.6" (LT)
D = 10° 54' 48.5"
L = 248.32'
T = 126.53'
R = 525.00'

PI Sta 16+35.21
△ = 43° 07' 07.8" (LT)
D = 22° 55' 05.9"
L = 188.14'
T = 98.78'
R = 250.00'

PI Sta 17+47.83
△ = 10° 37' 48.2" (RT)
D = 22° 55' 05.9"
L = 46.38'
T = 23.26'
R = 250.00'

DETAIL F
FALSE SUMP
(Not to Scale)
Outside Ditch Traffic Flow
10:1
20:1
2.0'
0.5' Min. 1.0' Max
GI etc.
S = Ditch Slope
℄ Proposed Ditch
STA. 22 + 83–L1–RT

BEGIN CONSTRUCTION
–Y– POC STA. 14+00.00

END TIP PROJECT W–5706O
–LI– POT STA. 25+50.00

BEGIN CONSTRUCTION
–L– POC Sta.13+00.00

BEGIN TIP PROJECT W–5706O
–L– POC STA. 15+00.00

END CONSTRUCTION
–Y1– POT STA. 24+00.00

EDGAR H CANADY JR DB 5672 PG 55 (THIRD TRACT)
EDGAR H CANADY
DB 3381PG 389
LEE WENDELL DB 9344 PG 717 PB 133 PG 42
LAWRENCE CANADY DB 2214 PG 243
SHERMAN D DAVIS JR DB 900 PG 193 PB 102 PG 193
EDGAR CANADY DB 2475 PG 142
SHERMAN D DAVIS JR DB 1330 PG 42 PB 102 PG 193
SHERMAN D DAVIS JR DB 1020 PG 620 PB 90 PG 193
JESSIE HERMAN CANADY JR HEIRS DB 8058 PG 395 PB 11230 PG 170
MELANIE P HARPER DB 1029 PG 184
RICKY BLACKWELL DB 4408 PG 579
KENNETH J CURRIE DB 4515 PG 747
DONNA G IRWIN DB 2636 PG 833
MARCIA SELPH DB 4049 PG 69
RICHARD L MARTIN JR
CHRISTOPHER JONES DB 8635 PG 520
GERALD MIC
S.R.E.M.C. DB 3338 PG 242
POWER SUBSTATION
JENITA COMPTON DB 8283 PG 437 PB 84 PG 189
DOROTHY JANE CANADY DB 3694 PG 598
INA HALL CANADY DB 3891PG 443
WILLIAM ROSS III DB 10193 PG 570 PB 125 PG 191
RONALD TYLER DB 4245 PG 427 PB 84 PG 189
SR 2252 CHICKEN FOOT RD. 30' BST
TO JOE HALL RD (SR 2246)
TO NC HWY 87
TO I-95

DA = 0.49 ACRES
DA = 0.56 ACRES
DA = 1.15 ACRES
DA = 25.12 ACRES
DA = 0.63 ACRES
DA = 2.02 ACRES
DA = 0.31 ACRES

–Y– PT Sta. 14+33.47
–Y– PC Sta. 15+36.43
–Y– PRC Sta. 17+24.57
–Y– PC Sta. 13+12.18=
–Y– POT Sta. 18+21.52
–RAB– PC Sta. 10+00.00
–RAB– PT Sta. 13+70.71=
–L– POC Sta. 20+35.80
–Y– PT Sta. 17+70.96
–L– PC Sta. 18+33.98
–L– PRC Sta. 19+97.70
–L– PT Sta. 20+91.95
–Y1– PC Sta. 20+04.57
–Y1– PRC Sta. 21+15.73
–L– PC Sta. 11+49.70
–L– PT Sta. 15+06.93
–LI– PRC Sta. 22+30.00
–RAB– PCC Sta. 12+22.09=
–LI– POC Sta. 21+53.94
–LI– PC Sta. 21+47.67
–L– POT Sta. 20+94.80
–LI– POT Sta. 20+94.94=
–Y– POT Sta. 18+80.52=
–Y1– POT Sta. 18+80.52
–RAB– PCC Sta. 10+75.71=
–Y1– POT Sta. 19+39.52
–Y1– PT Sta. 22+99.94

SPECIAL LATERAL DITCH SEE DETAIL A
SPECIAL LATERAL DITCH SEE DETAIL B
SPECIAL LATERAL DITCH SEE DETAIL E
REMOVE OTCB
TAIL DITCH 50 LF @ 1.40% SEE DETAIL D
TAIL BASE DITCH 200 LF @ 0.59% SEE DETAIL C
TIE TO EXISTING GRADE
TIE TO EXISTING DITCH AT STA. 26+82–Y1–LT
FALSE SUMP SEE DETAIL
CL B RIP-RAP
RETAIN
REMOVE
PUE
50' TAPER TO EXIST
30' TAPER TO EXIST
275' TAPER LT & RT
GRADE TO DRAIN
TDE
MATCHLINE –Y1– STA. 24+60.00 SEE THIS SHEET

PAVEMENT REMOVAL

NOTE: FOR –L–, –Y–, AND –RAB– PROFILES SEE SHEETS 6 & 7

NOTE: FOR INTERSECTION DETAIL, SEE SHEET 2B–1

T.I.P.: W-5706O

CONTRACT:

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION

PROJECT REFERENCE NO.	SHEET NO.
W-57060	SIGN-1

APPROVED: DocuSigned by: Samuel Coleman 99375A81AF3C490...

DATE: 1/12/2023

SEAL

NORTH CAROLINA PROFESSIONAL SEAL 043765 ENGINEER SAMUEL D. COLEMAN

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

SIGNING PLAN
CUMBERLAND COUNTY

LOCATION: SR 2252 (CHICKEN FOOT RD) AT SR 2244 (JOHN MCMILLAN RD) SOUTH OF HOPE MILLS

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 2018 ARE APPLICABLE TO THIS PROJECT AND BY REFERENCE HEREBY ARE CONSIDERED A PART OF THESE PLANS:

STD. NO.	TITLE
903.10	GROUND MOUNTED SIGN SUPPORTS
903.20	WOOD SIGN SUPPORTS
904.10	ORIENTATION OF GROUND MOUNTED SIGNS
904.50	MOUNTING OF TYPE 'D', 'E' AND 'F' SIGNS ON 'U' CHANNEL POSTS
910.40	SINGLE/TWO LANE ROUNDABOUT WITH PEDESTRIAN

GENERAL NOTES

. SIGNS FURNISHED BY STATE

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

. ALL TYPE 'D' SIGNS SHALL BE MOUNTED ON TWO U-CHANNEL POSTS UNLESS OTHERWISE INDICATED ON THE PLANS.

. 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 NOT STATIONED OR DIMENSIONED ON PLANS, ALL 'E' AND 'F' SIGNS SHALL BE FIELD LOCATED BY THE ENGINEER

. ALL EXISTING SIGNS ON "U" CHANNEL POST 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 & F SIGNS SHALL BE TYPE C REFLECTIVE SHEETING.

. DO NOT BEGIN FABRICATION FOR TYPES A & B SIGNS MOUNTED ON OVERHEAD STRUCTURES OR STEEL SUPPORTS UNTIL "S" DIMENSIONS HAVE BEEN FIELD VERIFIED.

. SEE ROADWAY PLANS FOR GUARD/GUIDE RAIL DETAILS.

PLAN REVIEWED BY: N.C.D.O.T. SIGNING AND DELINEATION UNIT

AYMAN ALQUDWAH, P.E. SIGNING & DELINEATION REGIONAL ENGINEER

MITCH EATON, P.E. SIGNING & DELINEATION PROJECT DESIGN ENGINEER

STATE OF NORTH CAROLINA DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES

ITEM NO.		ITEM DESCRIPTION	QUANTITY	UNIT
DESC. NO.	SECT. NO.			
4072000000	903	SUPPORTS, 3 LB. STEEL U-CHANNEL	265	L.F.
4102000000	904	SIGN ERECTION, TYPE E	17	EA.
4108000000	904	SIGN ERECTION, TYPE F	2	EA.
4155000000	907	DISPOSAL OF SIGN SYSTEM, U-CHANNEL	14	EA.

PROJECT NOTES

1 DISPOSAL OF SIGN SYSTEM, U-CHANNEL

INDEX

1/12/2023
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User:DLBelt

PROJ. REFERENCE NO.	SHEET NO.
W-57060	SIGN-2

PLANS PREPARED FOR THE NCDOT BY:

MOTT MACDONALD
MOTT MACDONALD I & E, LLC
1101 HAYNES STREET, SUITE 101
RALEIGH, NC 27604
NC LICENSE NO. F-0669

401 QUANTITY REQ'D 4

30" X 30"
W2-6

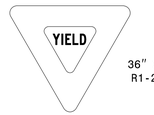
ONE "U" POST PER SIGN

402 QUANTITY REQ'D 4

30" X 24"
R6-4

ONE "U" POST PER SIGN

403 QUANTITY REQ'D 5



36" X 36" X 36"
R1-2

ONE "U" POST PER SIGN

404 QUANTITY REQ'D 4

30" X 30"
W3-2

ONE "U" POST PER SIGN

501

1 - 24" x 12"

1 - 24" x 24"

1 - 30" x 24"

1 - 21" x 15"

ONE "U" POST PER SIGN

502

1 - 24" x 12"

1 - 24" x 24"

1 - 21" x 15"

ONE "U" POST PER SIGN

APPROVED: DocuSigned by: Samuel Coleman 99375A81AF3C490...

DATE: 1/12/2023

NORTH CAROLINA PROFESSIONAL SEAL 043765 ENGINEER SAMUEL D. COLEMAN

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

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

TYPE 'E' AND 'F' SIGNS

1/12/2023
G:\36624_East-DOC-2015\Proj\W-57060\Traffic\Signing\CADD\Signing Layout Plans\W-57060_Sgn_SIGN_2.dgn
User:COL85144

PROJ. REFERENCE NO.	SHEET NO.
W-57060	SIGN-3

PLANS PREPARED FOR THE NCDOT BY:

MOTT MACDONALD I & E, LLC
1101 HAYNES STREET, SUITE 101
RALEIGH, NC 27604
NC LICENSE NO. F-0669

BEGIN TOIP PROECT W-57060
-L- STA 14+90

BEGIN CONSTRUCTION
-Y- STA 13+90

END TIP PROJECT W-57060
-L- 25+50

END CONSTRUCTION
-Y- STA 23+60

JOHN McMILLAN RD

CHICKEN FOOT RD

BREAKLINE A

BREAKLINE B

BREAKLINE C

-L- STA 12+35

-L- STA 15+70

-Y- STA 10+73

-Y- STA 14+33

-L1- STA 27+38

-L1- STA 24+12

-Y1- STA 23+00

-Y1- STA 26+25

2 SIGNS

4 SIGNS

APPROVED: DocuSigned by: Samuel Coleman 99375A81AF3C490...

DATE: 1/12/2023

NORTH CAROLINA PROFESSIONAL SEAL 043765 ENGINEER SAMUEL D COLEMAN

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

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

PROPOSED
SIGNING DETAIL SHEET

1/12/2023
G:\362624_East-DOC-2015\Proj\W-57060\Traffic\Signing\CADD\Signing Layout Plans\W-57060_Sgn_SIGN_3.dgn
User:COL85144

PROJ. REFERENCE NO.	SHEET NO.
W-57060	SIGN-3A

PLANS PREPARED FOR THE NCDOT BY:

MOTT MACDONALD I & E, LLC
1101 HAYNES STREET, SUITE 101
RALEIGH, NC 27604
NC LICENSE NO. F-0669

BEGIN CONSTRUCTION
-Y- STA 13+90

BEGIN TOIP PROECT W-57060
-L- STA 14+90

END CONSTRUCTION
-Y- STA 23+60

END TIP PROJECT W-57060
-L- 25+50

JOHN McMILLAN RD

CHICKEN FOOT RD

BREAKLINE A

BREAKLINE B

BREAKLINE C

SEE NOTE 1

2 SIGNS

STOP

APPROVED: DocuSigned by: Samuel Coleman 99375A81AF3C490...

DATE: 1/12/2023

NORTH CAROLINA PROFESSIONAL SEAL 043765 ENGINEER SAMUEL D. COLEMAN

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

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

EXISTING SIGNING DETAIL SHEET

1/12/2023
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User:COL85144

6/2/99

PROJECT REFERENCE NO.	SHEET NO.
W-57060	X-A

0 5 10

W-5706O
ROUNDABOUT AT INTERSECTION OF SR 2244 (JOHN McMILLAN ROAD) AND SR 2252 (CHICKENFOOT ROAD)

INDEX OF SHEETS

Approximate quantities only. Unclassified excavation, fine grading, clearing and grubbing, and removal of existing pavement will be paid for at the lump sum price for "Grading".

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WOLFE449

6/23/16

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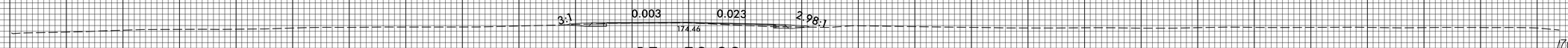
180
170
160

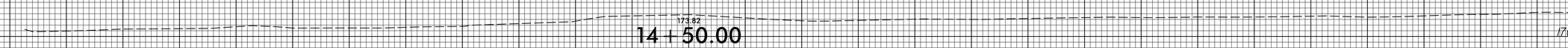
16 + 50.00

16 + 00.00



15 + 50.00

15 + 00.00



14 + 50.00

6/23/16

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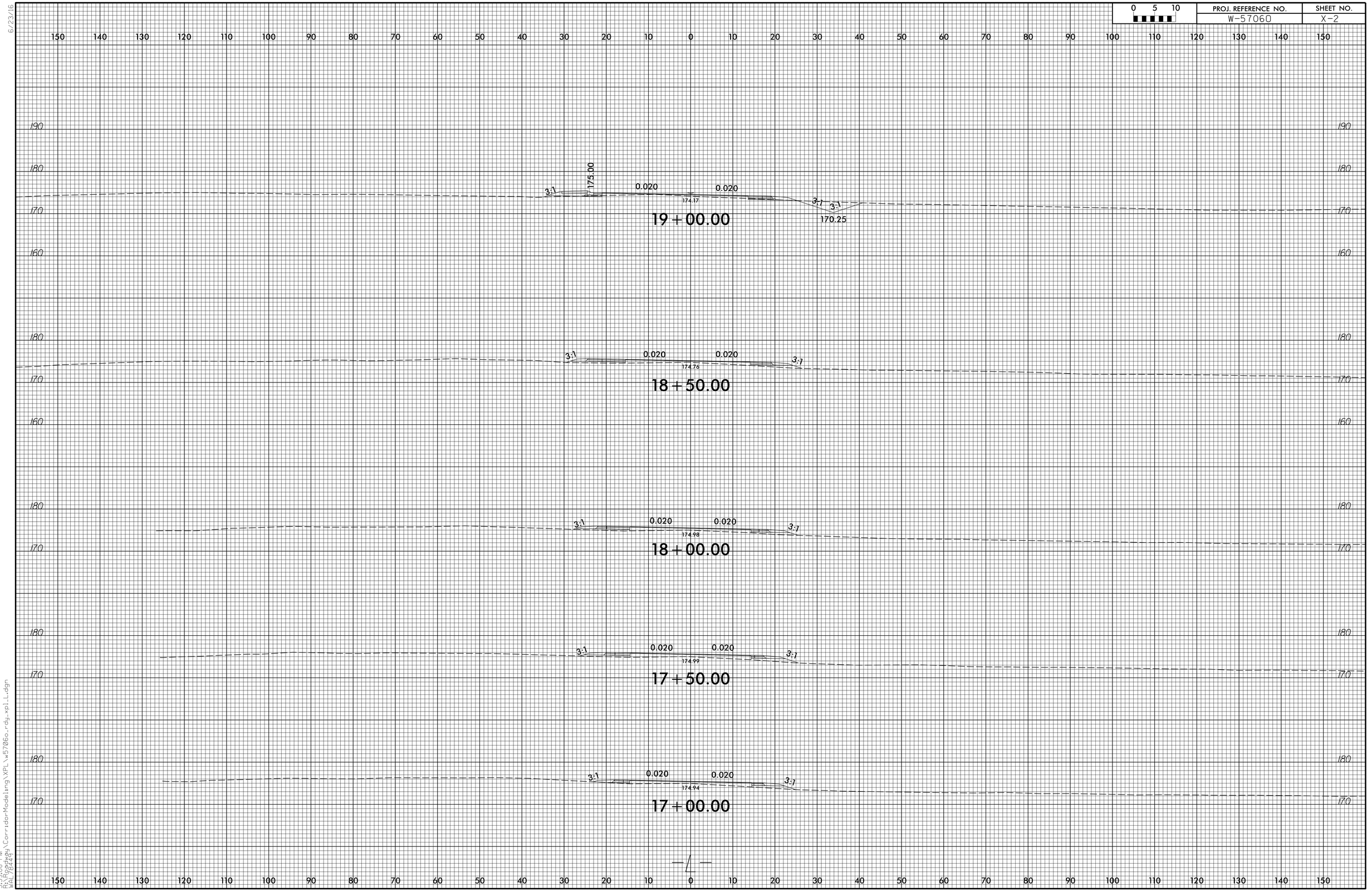

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6/23/16

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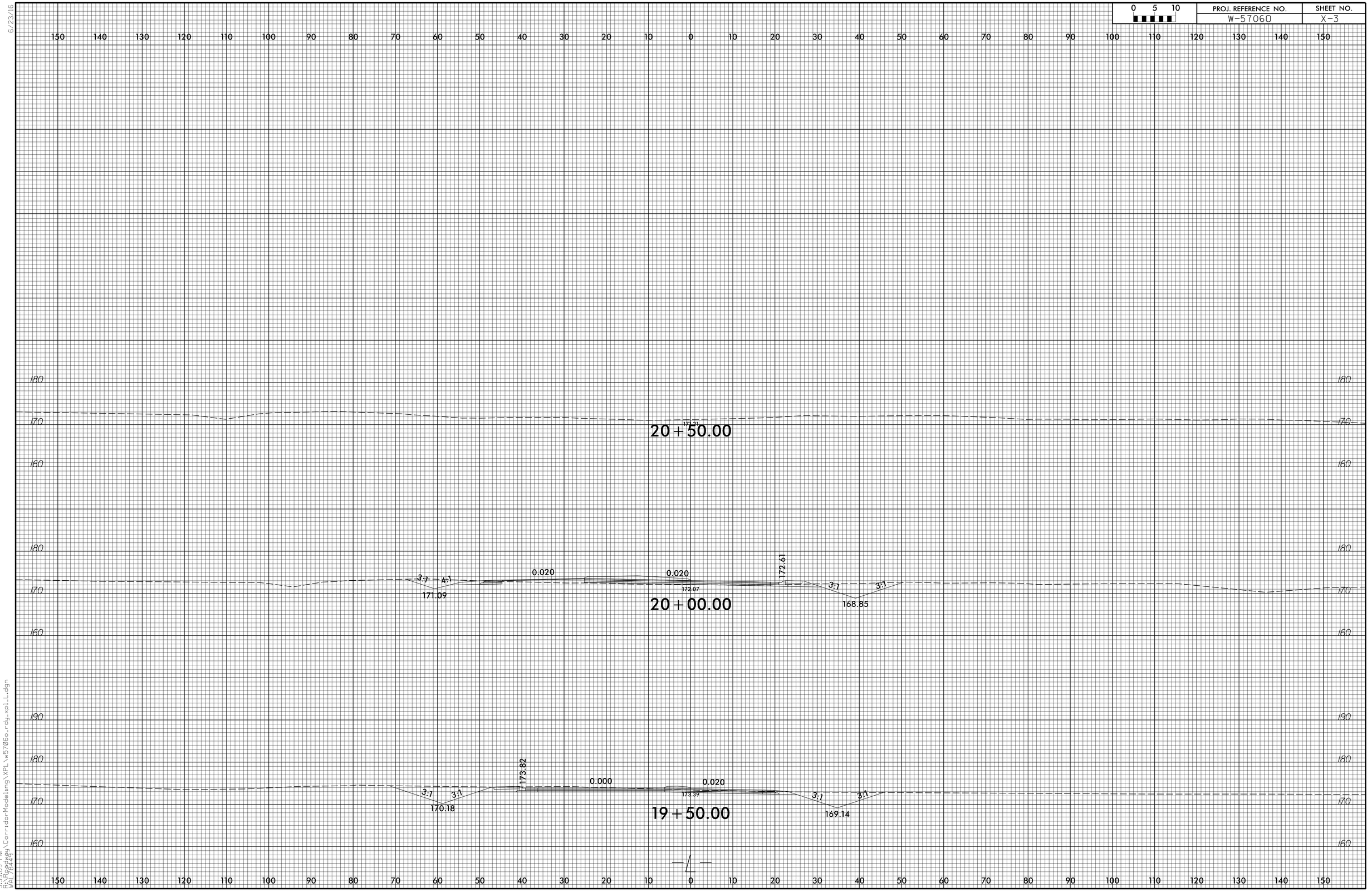

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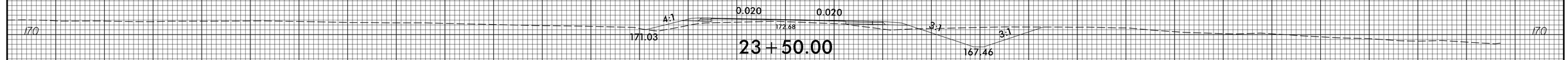
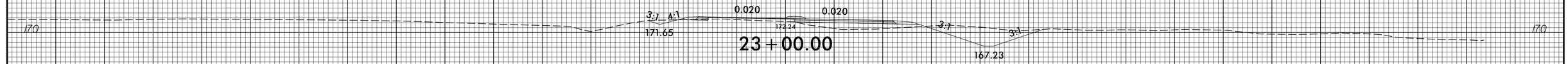
180 / 170 / 160



23+50.00



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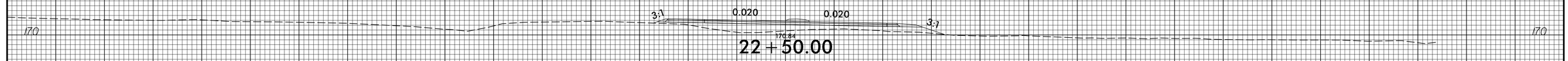
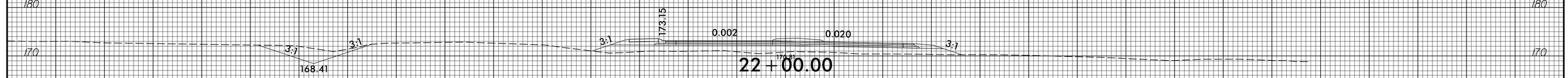


22+50.00



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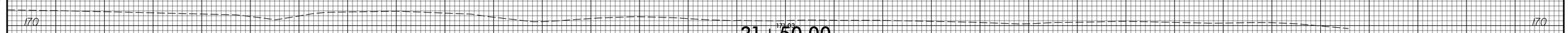

21+50.00

—//—

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180 / 170 / 160

26+00.00

17.05

180 / 170 / 160

25+50.00

3:1 3:1 0.029 0.028 3:1 3:1

173.79

170.24 171.43

180 / 170 / 160

25+00.00

VAR. 0.023 0.023 3:1 3:1

173.44

168.13

180 / 170 / 160

24+50.00

DRIVEWAY 0.014 0.020 3:1 3:1

173.09

167.91

180 / 170 / 160

24+00.00

DRIVEWAY 0.003 0.020 3:1 3:1

172.82

167.68

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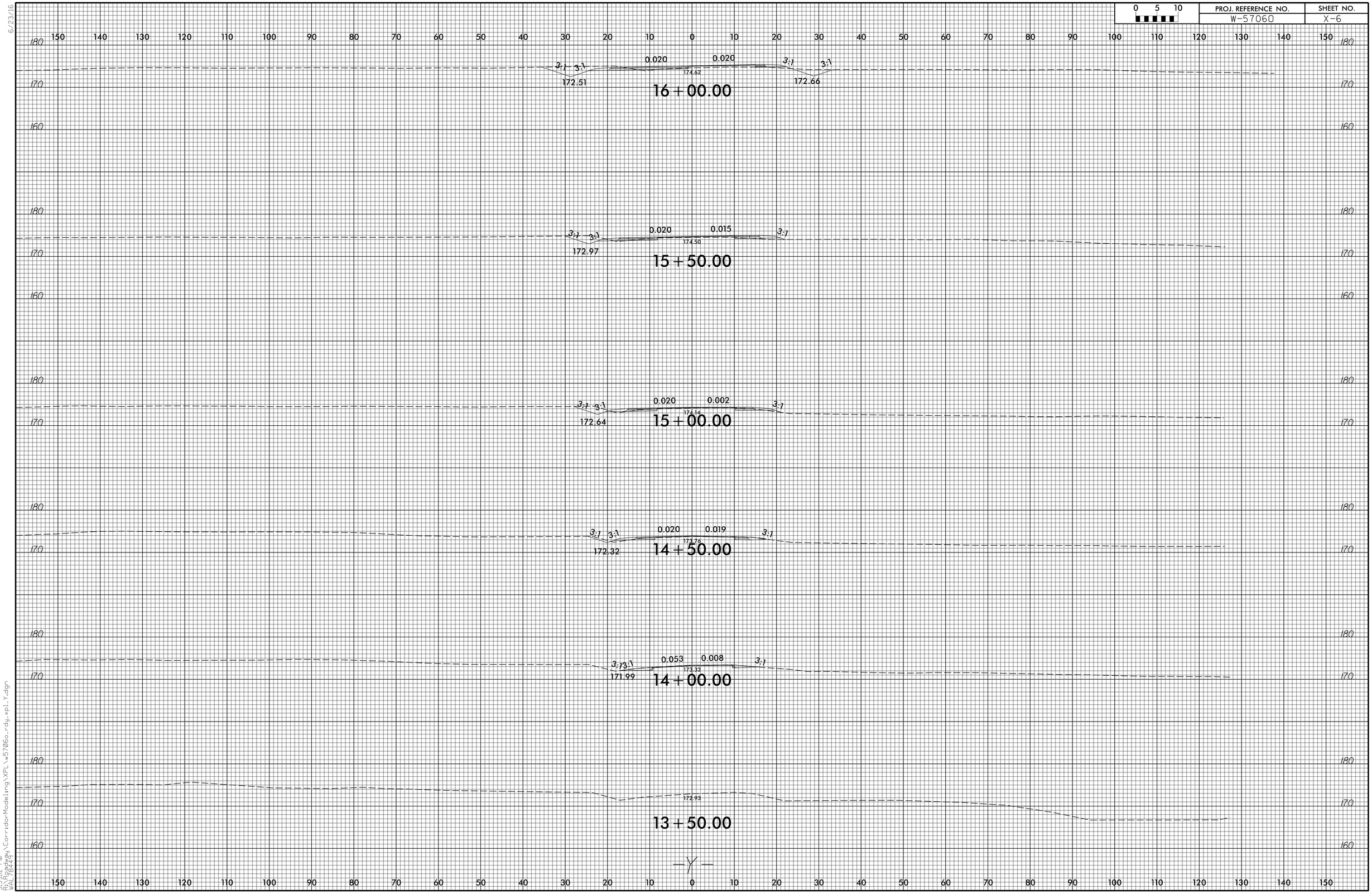

6/23/16

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Walter Bailey

6/23/16

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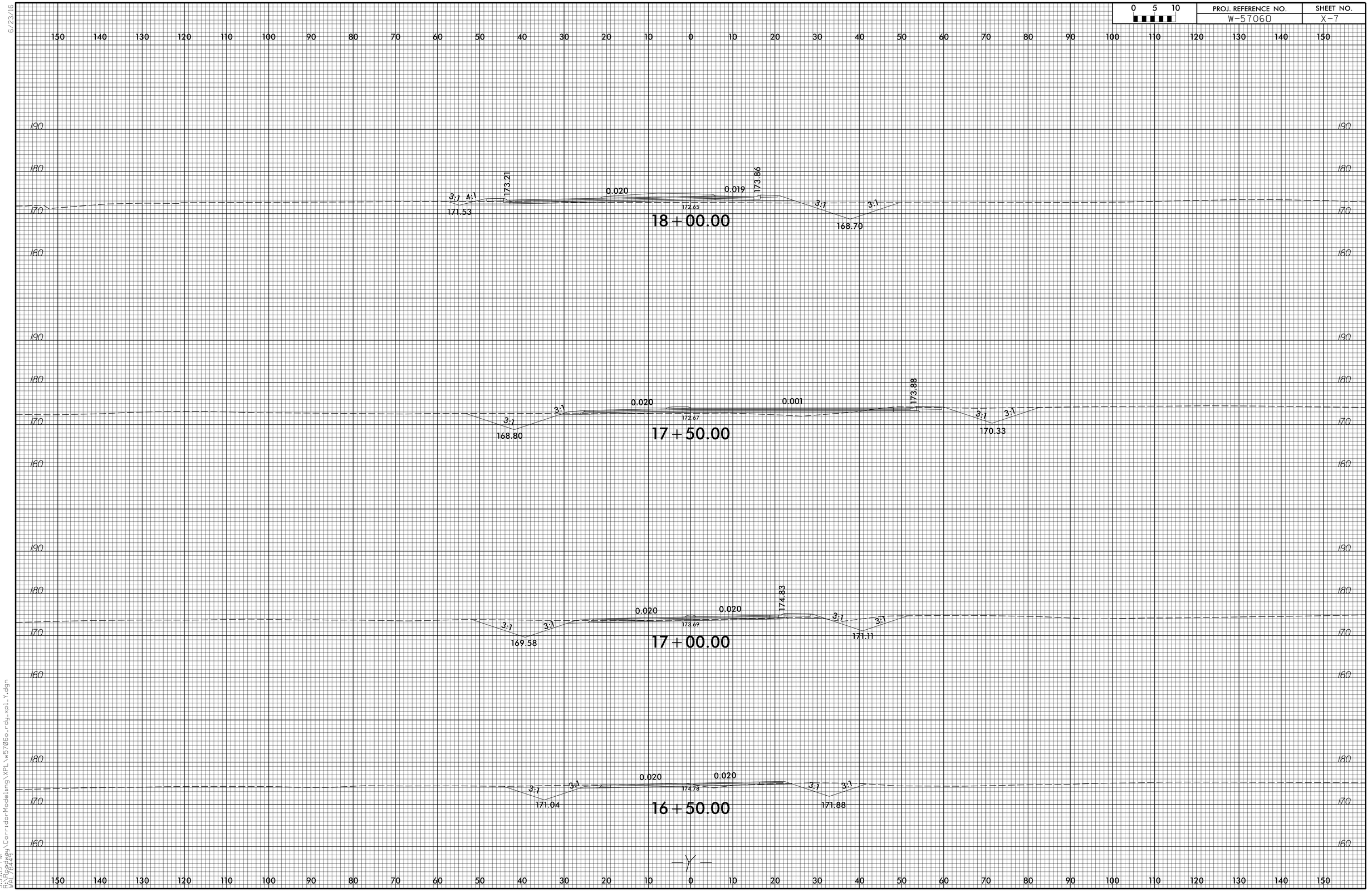

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WALTON
91459

6/23/16

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180

170

160

171.24

18+50.00

180

170

160

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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Roadway
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6/23/16

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180 / 170 / 160

3:1 3:1 0.012 0.012 3:1 3:1
167.52 170.00
21+50.00

180 / 170 / 160

3:1 3:1 0.005 0.005 3:1 3:1
167.62 168.58
21+00.00

180 / 170 / 160

3:1 3:1 0.018 0.020 3:1 3:1
167.94 168.22
20+50.00

180 / 170 / 160

3:1 3:1 0.002 0.020 171.29 3:1 3:1
168.39 168.51
20+00.00

180 / 170 / 160

19+50.00

—Y1—

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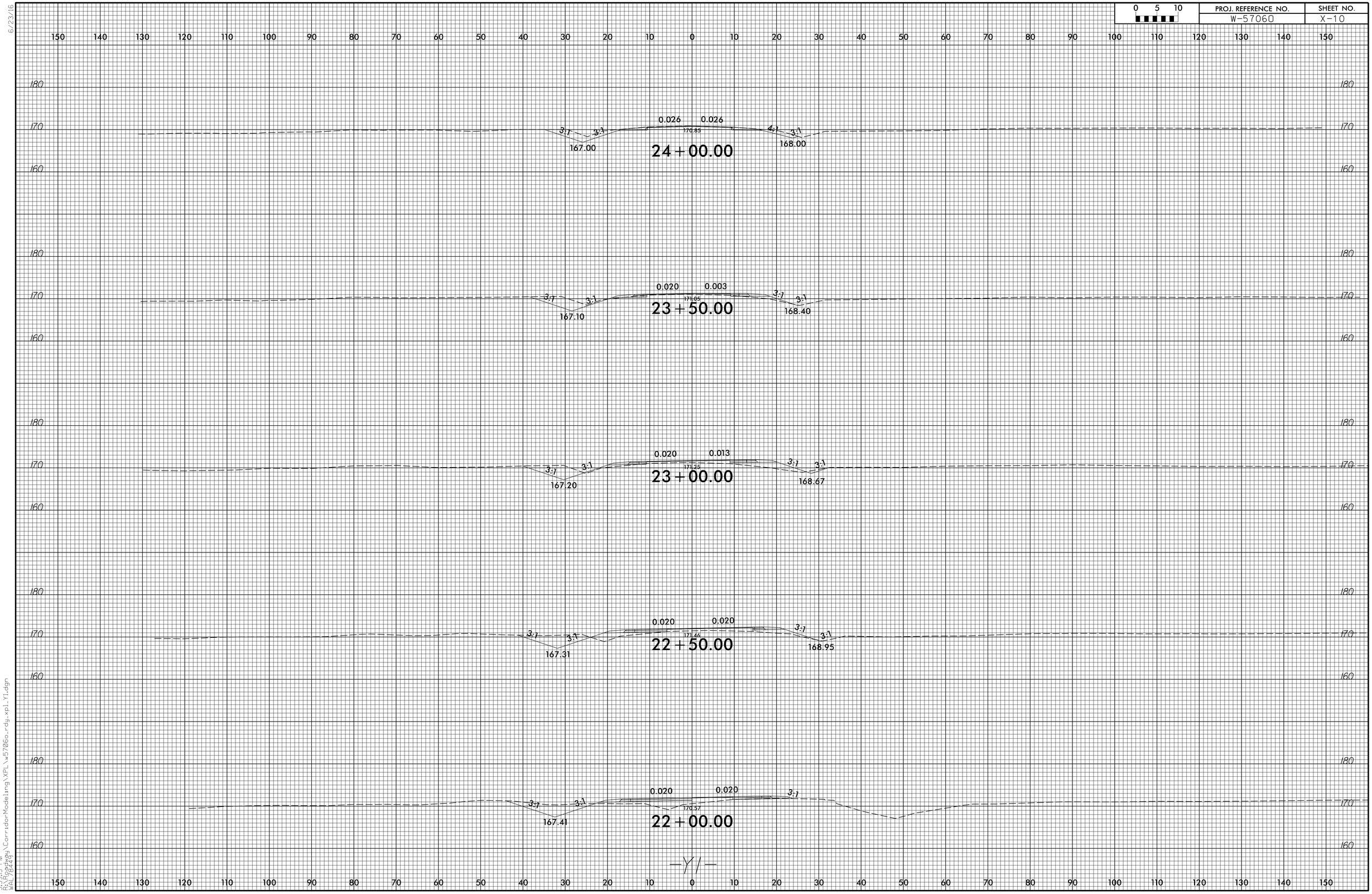

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	W-57060	X-11

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180

170

160

3:1 3:1

166.89

170.83

24+50.00

—Y1—

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

3:50:15 PM
RLRobertson
W:\57060\Survey\CorridorModeling\XPL\w57060_rdy_xpl_Y1.dgn

6/23/16

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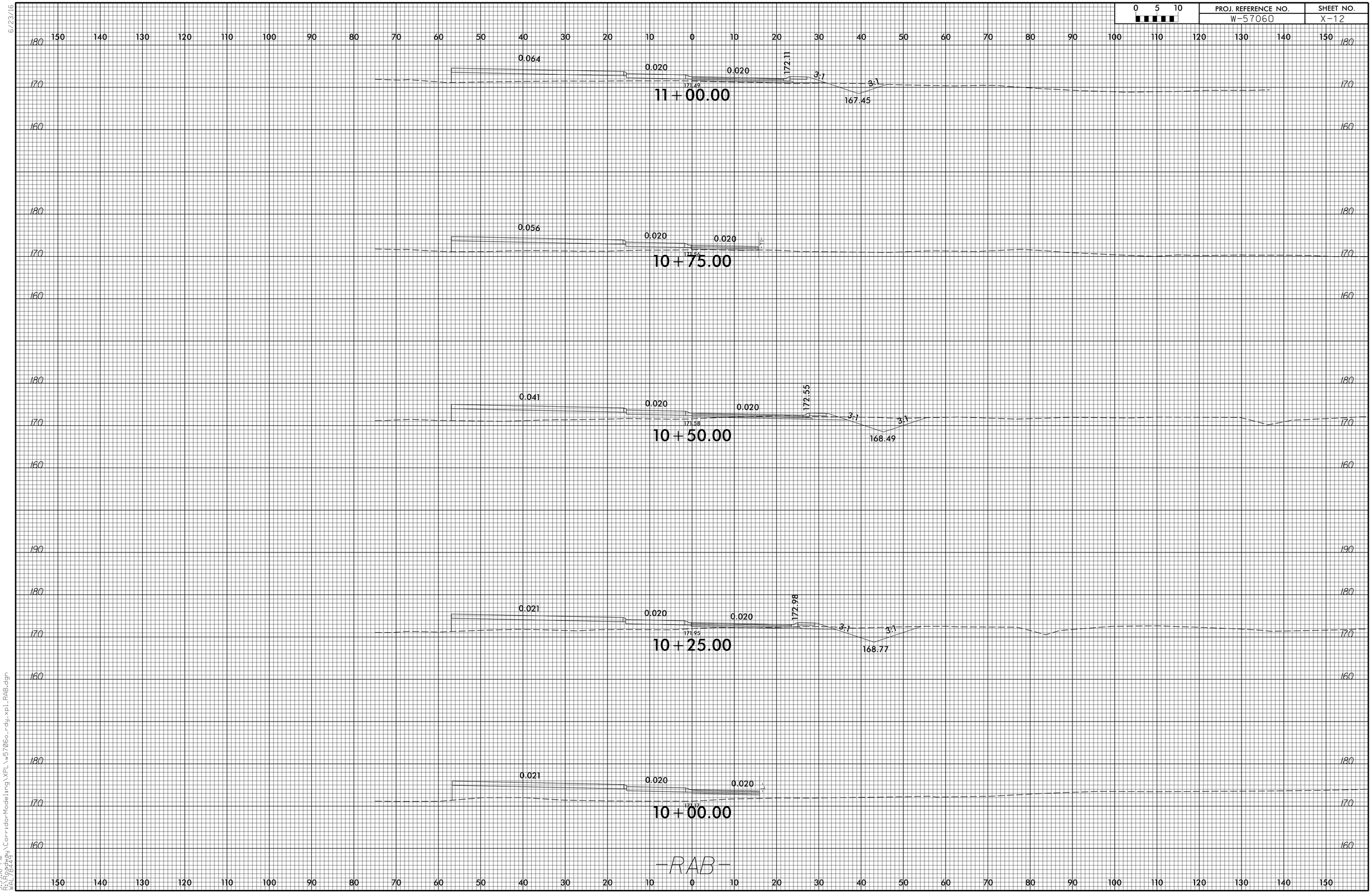

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WALTER GRAY

6/23/16

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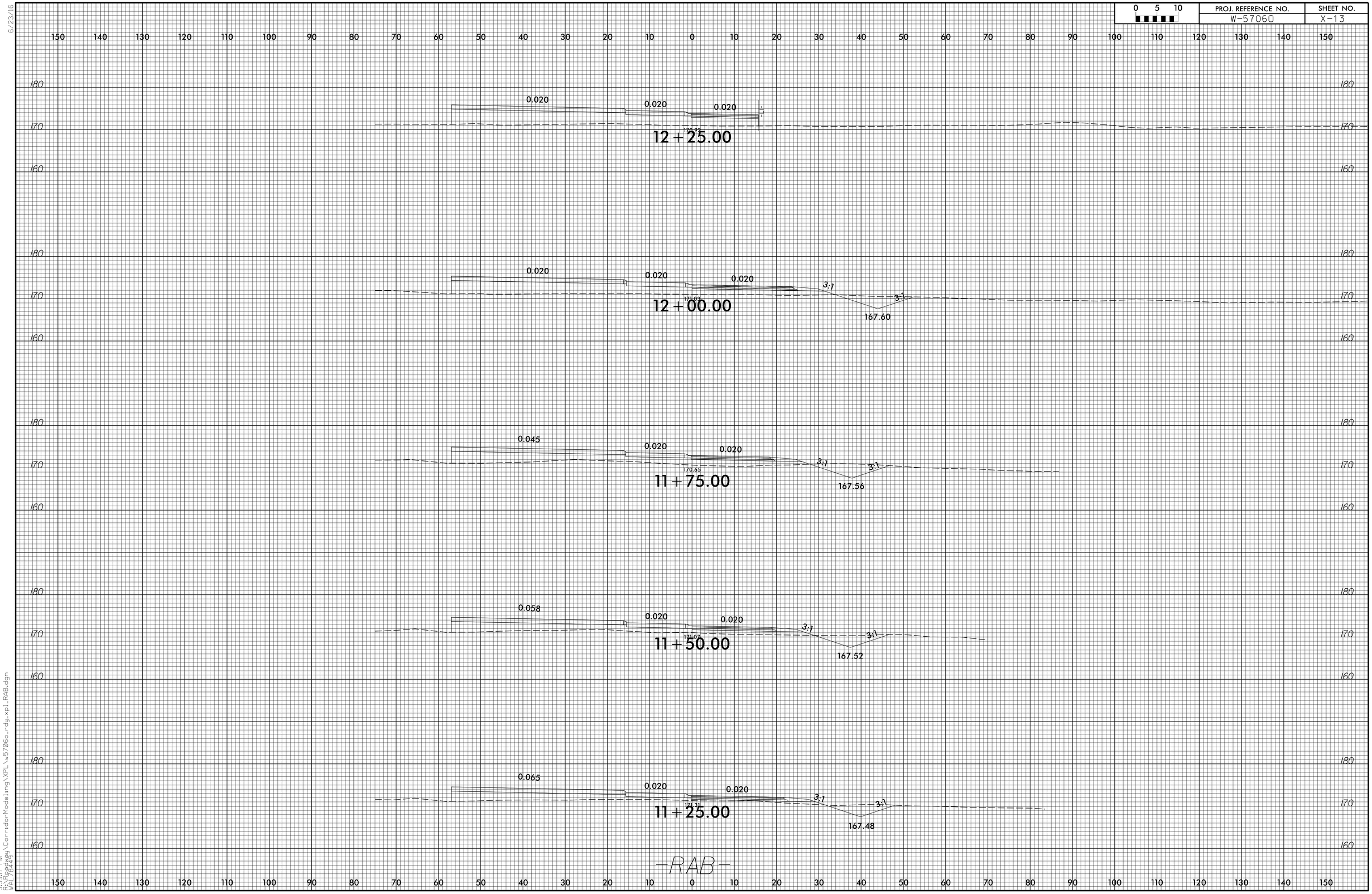

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180
170
160

0.020 0.020 0.020

171.71

13+25.00

180
170
160

0.020 0.020 0.020

171.37

13+00.00

190
180
170
160

0.020 0.020 0.020 174.10 3:1

171.78

12+75.00

3:1 3:1 168.75

190
180
170
160

0.020 0.020 0.020 173.84 3:1

171.71

12+50.00

-RAB-

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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RAB
Wal79449

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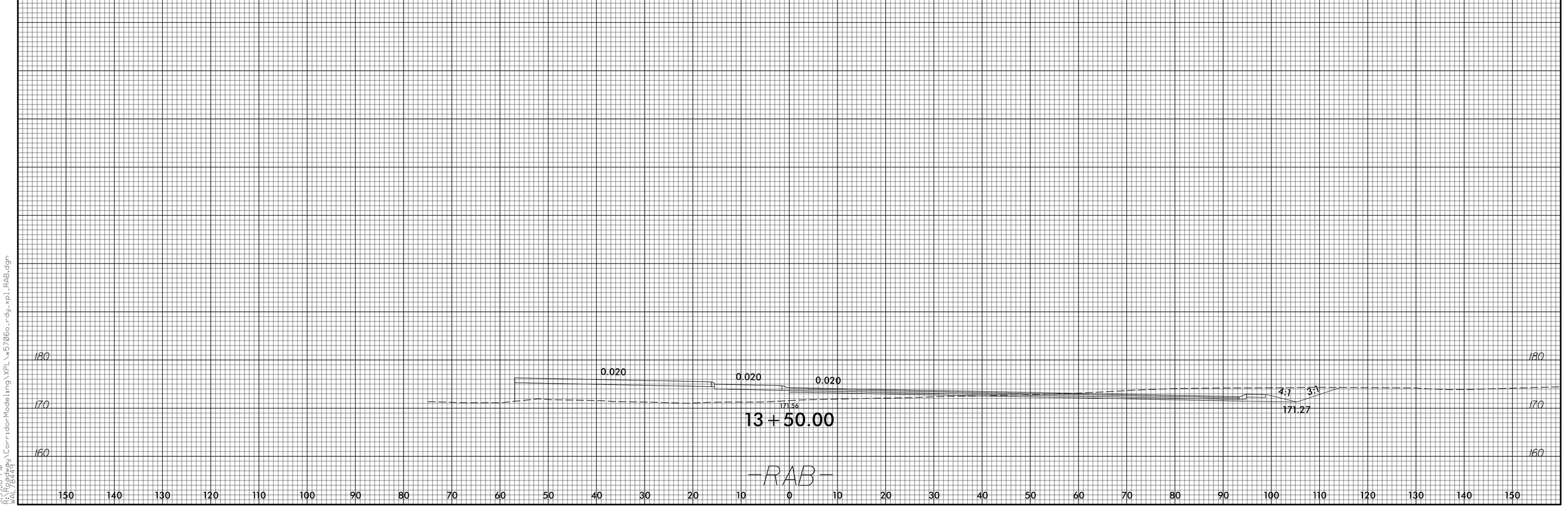
	W-57060	X-15



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WALTER GRAY