This electronic collection of documents is provided for the convenience of the user and is Not a Certified Document –

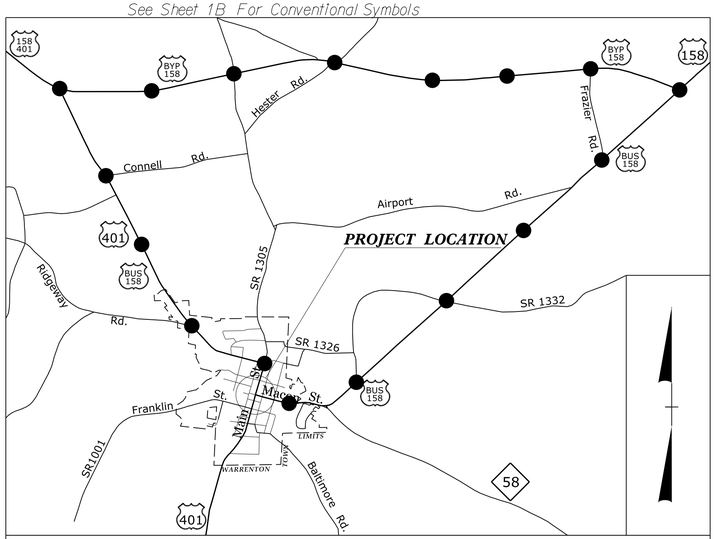
The documents contained herein were originally issued and sealed by the individuals whose names and license numbers appear on each page, on the dates appearing with their signature on that page.
This file or an individual page shall not be considered a certified document.

09/08/99

TIP PROJECT: 49916

CONTRACT: DE00404

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



VICINITY MAP

OFF–SITE DETOUR

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

WARREN COUNTY

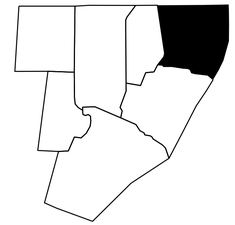
STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	49916	1	

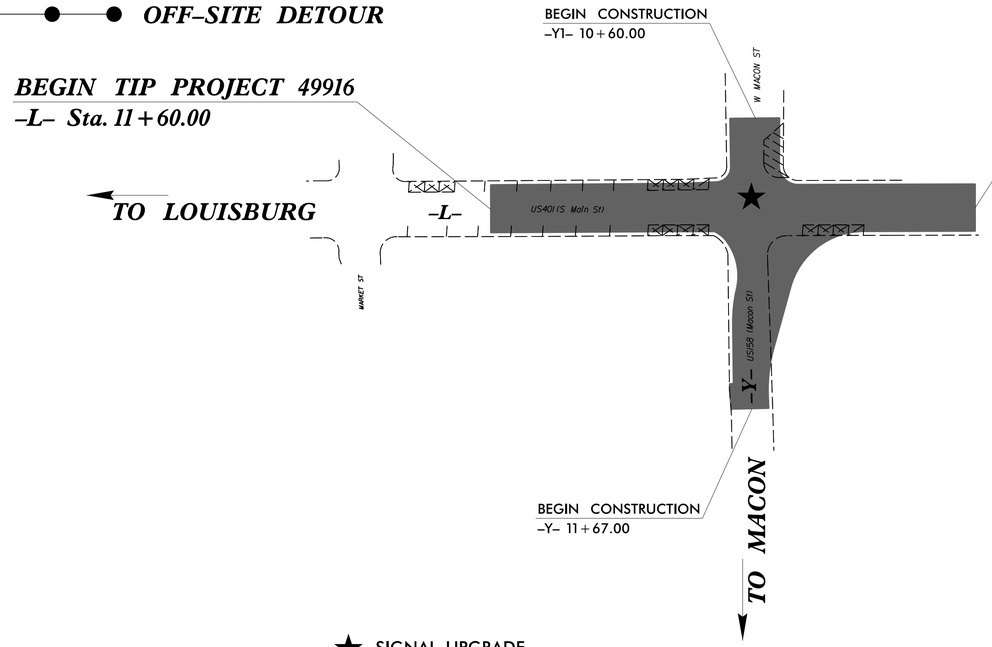
STATE PROJ. NO.	F. A. PROJ. NO.	DESCRIPTION
49916		PE
49916		R/W, UTIL.
49916		CONST.

LOCATION: US401 (MAIN ST.) AT US158 BUS. (MACON ST.)

TYPE OF WORK: GRADING, DRAINAGE, PAVING & SIGNALS

DIVISION 5





★ SIGNAL UPGRADE

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

GRAPHIC SCALES

20 10 0 20 40
PLANS

20 10 0 20 40
PROFILE (HORIZONTAL)

4 2 0 2 4
PROFILE (VERTICAL)

DESIGN DATA

ADT 2025 = 8,900
ADT 2045 = 18,100

V = 30 MPH

T = 10 % *
* TTST = 6% DUAL = 4%

FUNC CLASS =
MAJOR COLLECTOR

PROJECT LENGTH

TOTAL LENGTH ROADWAY T.I.P. PROJECT 49916 = 0.061 mi

Prepared In the Office of:
DIVISION OF HIGHWAYS
2612 N. Duke St., Durham NC, 27704

2024 STANDARD SPECIFICATIONS

RIGHT OF WAY DATE:
MARCH 29, 2024

LETTING DATE:
APRIL 23, 2025

STEPHEN R. DAVIDSON, PE
PROJECT ENGINEER

THOMAS R. MEADOWS
PROJECT DESIGN ENGINEER

MATTHEW NOLFO, PE
NCDOT CONTACT

HYDRAULICS ENGINEER

NORTH CAROLINA PROFESSIONAL SEAL 048034 ENGINEER Erik Peter Seiler

DocuSigned by: Erik Seiler 9140F6C330C... 03/04/2025
SIGNATURE: P.E.

ROADWAY DESIGN ENGINEER

NORTH CAROLINA PROFESSIONAL SEAL 046017 ENGINEER STEPHEN R. DAVIDSON

DocuSigned by: Stephen R. Davidson D2F00... 03/04/2025
SIGNATURE: P.E.

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

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

04-MAR-2025 15:34
\\Dot\dfsroot\Groups-Div5CC\DDC\Dist3\Warren\FUNDED TIP\49916 - Macon (US158B) at Main (US401)\Proj\49916_Rdy_tsh.dgn
$$$$USERNAME$$$$

8/17/99

PROJECT REFERENCE NO.	SHEET NO.
49916	1A

ROADWAY DESIGN ENGINEER

NORTH CAROLINA PROFESSIONAL SEAL 046017 ENGINEER STEPHEN R. DAVIDSON

DocuSigned by: Stephen R. Davidson D2F0075CF64C49A... 03/05/2025

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

INDEX OF SHEETS

EFF. 01-16-2024
REV.

2024 ROADWAY ENGLISH STANDARD DRAWINGS

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

STD.NO.	TITLE
DIVISION 2 - EARTHWORK	
200.02	Method of Clearing - Method II
225.02	Guide for Grading Subgrade - Secondary and Local
225.04	Method of Obtaining Superelevation - Two Lane Pavement
DIVISION 3 - PIPE CULVERTS	
300.01	Method of Pipe Installation
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	
840.01	Brick Catch Basin - 12" thru 54" Pipe
840.02	Concrete Catch Basin - 12" thru 54" Pipe
840.03	Frame, Grates and Hood - for Use on Standard Catch Basin
840.25	Anchorage for Frames - Brick or Concrete or Precast
840.34	Traffic Bearing Junction Box - for Use with Pipes 42" and Under
840.45	Precast Drainage Structure
840.54	Manhole Frame and Cover
846.01	Concrete Curb, Gutter and Curb & Gutter
848.01	Concrete Sidewalk
848.06	Curb Ramp
867.02	Steel Bollards

GENERAL NOTES:

2024 SPECIFICATIONS
EFFECTIVE: 01-16-2024
REVISED:

GRADING AND SURFACING OR RESURFACING AND WIDENING:

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

CLEARING:

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

SUPERELEVATION:

ALL CURVES ON THIS PROJECT SHALL BE SUPERELEVATED IN ACCORDANCE WITH STD. NO. 225.05 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.

UTILITIES:

UTILITY OWNERS ON THIS PROJECT ARE DUKE ENERGY (POWER)

TOWN OF WARRENTON (WATER & SEWER), CENTURYLINK (FIBER), CHARTER

COMMUNICATIONS (FIBER), FRONTIER NATURAL GAS COMPANY (GAS) & MCNC

(BROADBAND)

ANY RELOCATION OF EXISTING UTILITIES WILL BE ACCOMPLISHED BY OTHERS.

CURB RAMPS

CURB RAMPS ARE SHOWN ON THE PLANS AT APPROXIMATE LOCATIONS. CONSTRUCT ALL CURB RAMPS ACCORDANCE WITH STD 848.06.

05-MAR-2025 10:55
C:\Users\jwarren\FUNDED TIP\49916 - Macon (US158) at Main (US401)\Proj\49916_Rdy_tsh.dgn
$$$$USERNAME$$$$

9/10/2021

PROJECT REFERENCE NO.	SHEET NO.
49916	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)
- Computed Property Corner
- Existing Concrete Monument (ECM)
- Parcel/Sequence Number
- Existing Fence Line
- Proposed Woven Wire Fence
- Proposed Chain Link Fence
- Proposed Barbed Wire Fence
- Existing Wetland Boundary
- Proposed Wetland Boundary
- Existing Endangered Animal Boundary
- Existing Endangered Plant Boundary
- Existing Historic Property Boundary
- Known Contamination Area: Soil
- Potential Contamination Area: Soil
- Known Contamination Area: Water
- Potential Contamination Area: Water
- Contaminated Site: Known or Potential

BUILDINGS AND OTHER CULTURE:

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

HYDROLOGY:

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

RAILROADS:

- Standard Gauge
- RR Signal Milepost
- 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
- Existing Control of Access Line
- Proposed Control of Access Line
- Proposed ROW and CA Line
- Existing Easement Line
- Proposed Temporary Construction Easement
- Proposed Temporary Drainage Easement
- Proposed Permanent Drainage Easement
- Proposed Permanent Drainage/Utility Easement
- Proposed Permanent Utility Easement
- Proposed Temporary Utility Easement
- Proposed Aerial Utility Easement

ROADS AND RELATED FEATURES:

- Existing Edge of Pavement
- Existing Curb
- Proposed Slope Stakes Cut
- Proposed Slope Stakes Fill
- Proposed Curb Ramp
- 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

EXISTING STRUCTURES:

MAJOR:

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

MINOR:

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

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
- Power Line Tower
- Power Transformer
- U/G Power Cable Hand Hole
- H–Frame Pole
- U/G Power Line Test Hole (SUE – LOS A)*
- U/G Power Line (SUE – LOS B)*
- U/G Power Line (SUE – LOS C)*
- U/G Power Line (SUE – LOS D)*

TELEPHONE:

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

WATER:

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

TV:

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

GAS:

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

SANITARY SEWER:

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

MISCELLANEOUS:

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

ROADWAY DESIGN ENGINEER

NORTH CAROLINA PROFESSIONAL SEAL 046017 ENGINEER STEPHEN R. DAVIDSON

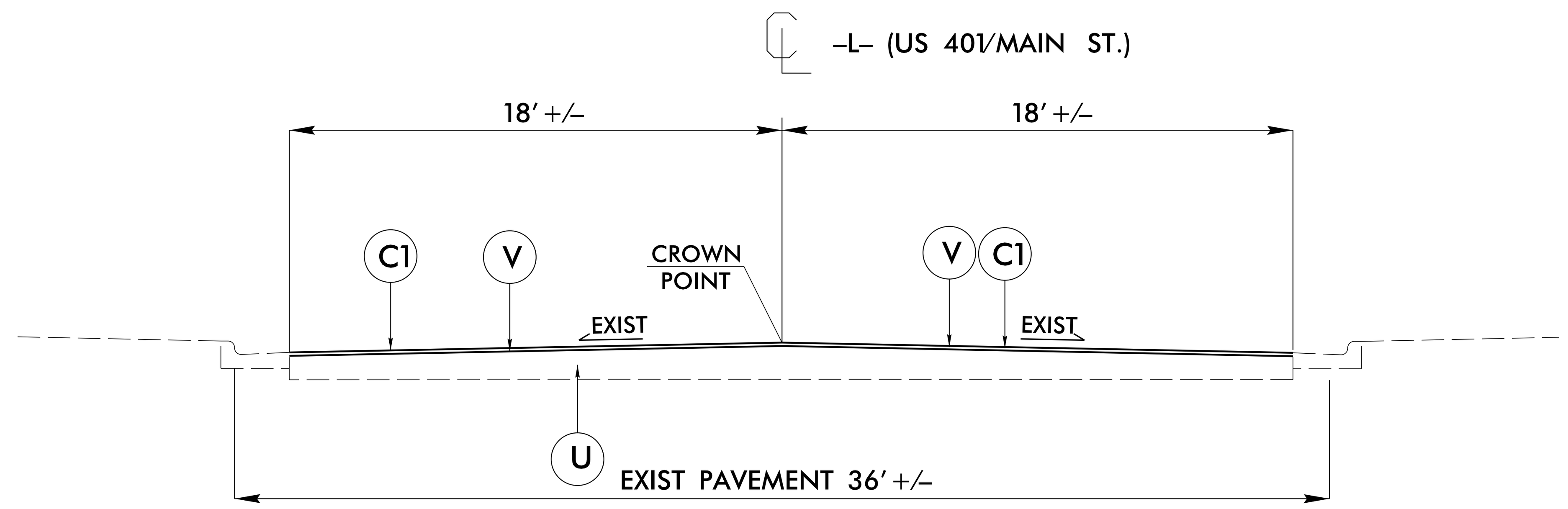
Stephen R. Davidson 02/27/2025

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

PAVEMENT SCHEDULE

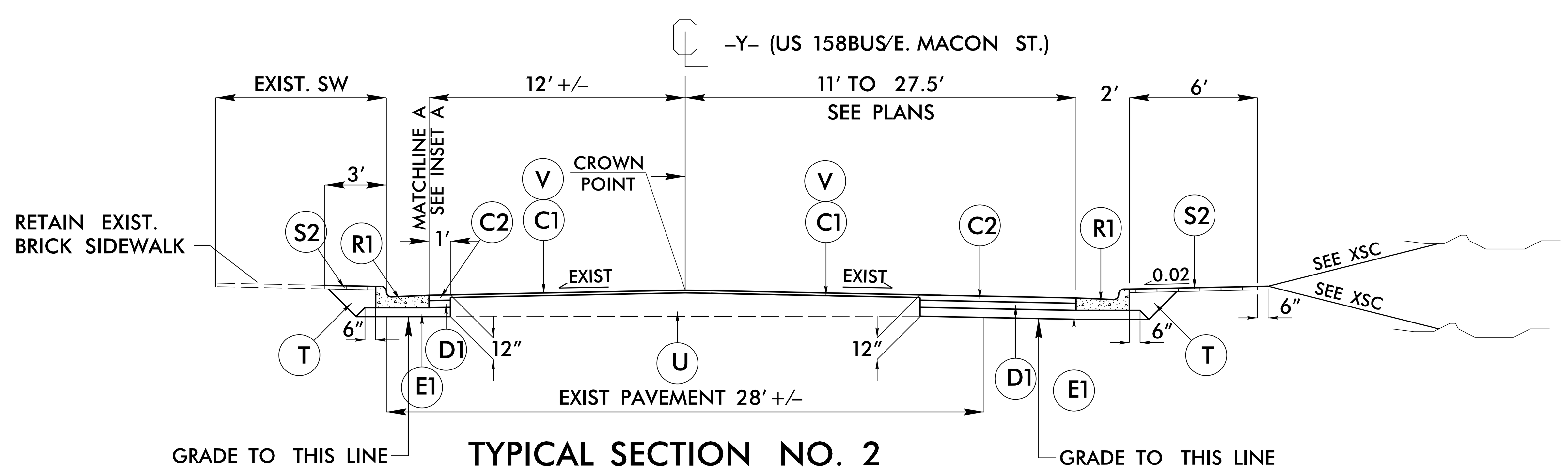
C1	PROP. APPROX. 1½" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5C, AT AN AVERAGE RATE OF 168 LBS. PER SQ. YD.	S1	4" CONCRETE SIDEWALK.
C2	PROP. APPROX. 3" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5C, AT AN AVERAGE RATE OF 168 LBS. PER SQ. YD. IN EACH OF TWO LAYERS.	S2	BRICK SIDEWALK. SEE DETAIL 1
D1	PROP. APPROX. 4" ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE I19.0C, AT AN AVERAGE RATE OF 456 LBS. PER SQ. YD.	T	EARTH MATERIAL.
E1	PROP. APPROX. 5" ASPHALT CONCRETE BASE COURSE, TYPE B25.0C, AT AN AVERAGE RATE OF 570 LBS. PER SQ. YD.	U	EXISTING PAVEMENT.
R1	2'-6" CONCRETE CURB AND GUTTER	V	MILLING BITUMINOUS PAVEMENT. 1½" DEPTH.
R2	SHOULDER BERM GUTTER		

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



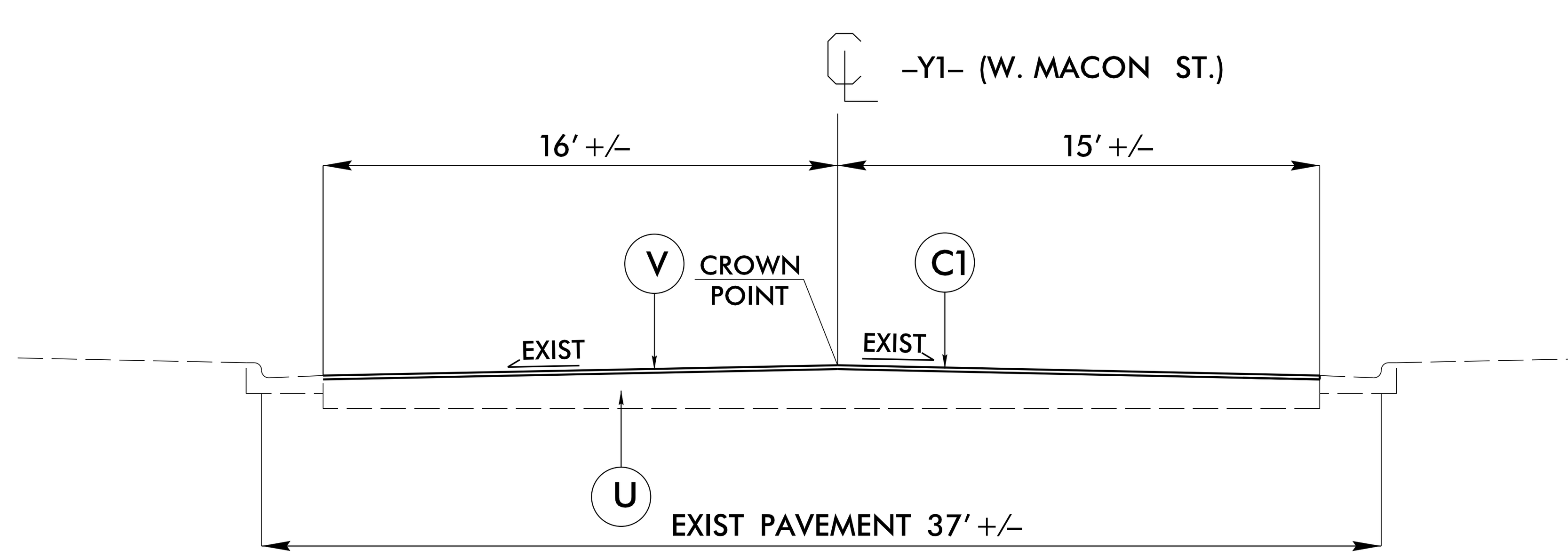
TYPICAL SECTION NO. 1

USE TYPICAL SECTION NO. 1
-L- 11+60.00 TO 14+80.00



TYPICAL SECTION NO. 2

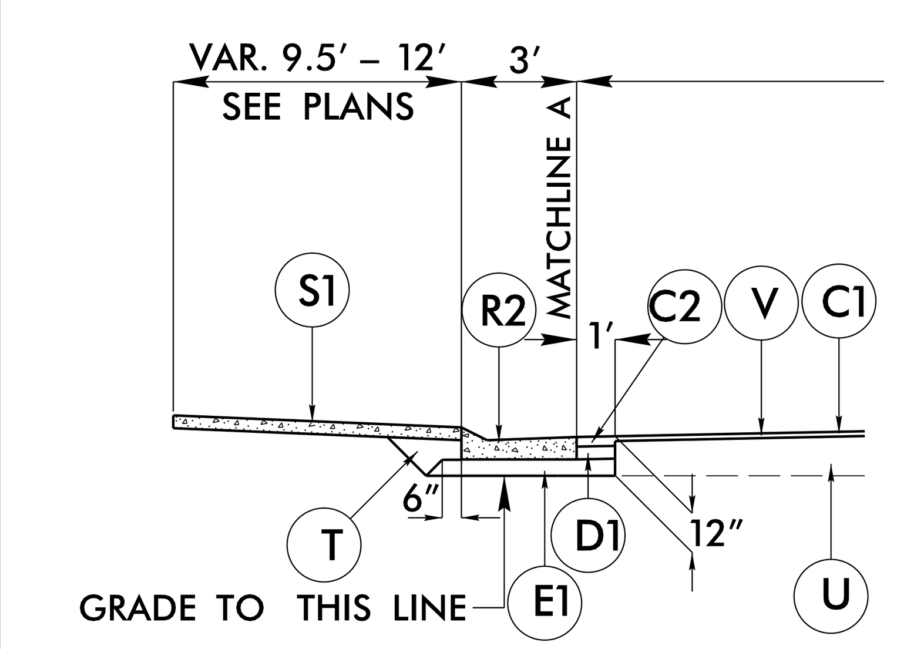
USE TYPICAL SECTION NO. 2
-Y- 11+67.00 TO 12+84.86



TYPICAL SECTION NO. 3

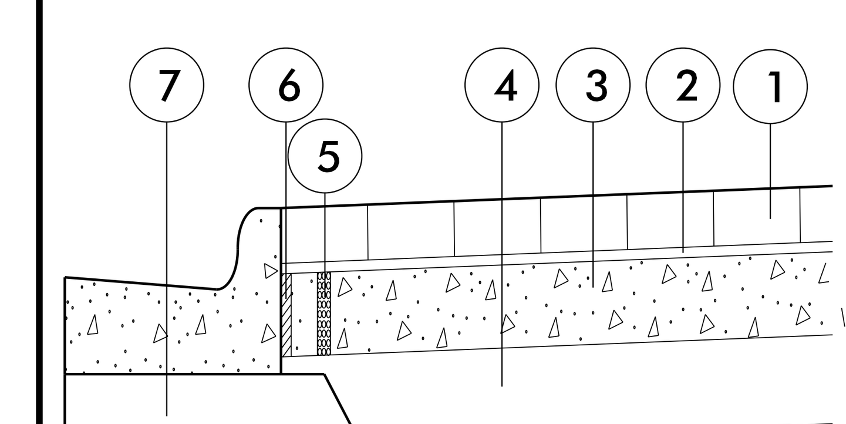
USE TYPICAL SECTION NO. 3
-Y1- 10+28.52 TO 10+60.00

INSET A



USE IN CONJUNCTION WITH T.S. #2
-Y- 12+23.42 LT TO -L- 12+99.82 RT

DETAIL 1



1. BRICK PAVER
2. 1 1/2" SETTING BED MATERIAL
3. 4" CONCRETE SLAB
4. COMPACTED ABC
5. 6 – 2" DIA DRAIN HOLES, 12" O.C. PARALLEL TO CURB – LOCATE AT LOWEST ELEV. FILL WITH PEA GRAVEL
6. EXPANSION JOINT (BETWEEN CONCRETE SUB-SLAB AND CURB)
7. ADJACENT ASPHALT ROADWAY

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

SUMMARY OF MILLING ASPHALT PAVEMENT

SURVEY LINE	STATION	STATION	LOCATION LT/RT/CL	YD²
-L-	11+60.00	14+06.50	CL	1,013
-Y-	11+84.00	12+81.39	CL	300
-Y1-	10+28.52	10+60.00	CL	172.33
			TOTAL:	1,485.33
			SAY:	1,500

SUMMARY OF EARTHWORK

STATION	STATION	UNCL. EXCAV.	EMBANK. +%	BORROW	WASTE
-L- RT 11+60.00	-L- RT 13+20.00	4	0	0	4
-Y- LT 11+60.00	-Y- LT 12+80.00	17	0	0	17
SUBTOTALS:		21	0	0	21
-L- RT 13+40.00	-L- RT 14+80.00	34	0	0	34
-Y- RT 11+60.00	-Y- RT 12+80.00	94	0	0	94
SUBTOTALS:		128	0	0	128
PROJECT TOTALS:		149	0	0	149
SAY:		200			

BACKFILL WITH INCIDENTAL STONE = 100 TONS

CONTACT ROBERT DAVIE (TOWN ADMINISTRATOR) & CYNTHIA JENKIN (PRESIDENT WARRENTON PRESERVATION) BEFORE GRADING PARCEL 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".

STATEWIDE
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	R.C. PIPE (CLASS IV) 18"	QUANTITIES FOR DRAINAGE STRUCTURES PER EACH (0' THRU 5.0')	C.B. STD. 840.01 OR STD. 840.02	TYPE OF GRATE G	T.B.J.B. STD. 840.34	M.H. FRAME & COVER STD. 840.54	FLOWABLE FILL C.Y.	CONC. & BRICK PIPE PLUG, C.Y. STD. 840.71	REMARKS
-Y- 12+69.66	RT	0401		387.20'	382.80'				1			1	1	5.3	0.13	REMOVE EXIST. CB. PLUG EX. 15" RCP
-Y- 12+49.73	RT	0402		385.60'	382.40'				1	1	1					
	RT	0401	0402					28'								
-Y- 11+89.92	RT	0403		382.00'	378.80'				1	1	1					
	RT	0402	0403					60'								
-Y- 11+70.00	RT	0404		380.9'					1	1	1					FIELD ADJUST BOX TO EX. PIPE INVERT
	RT	0403	0404					20'								REMOVE 19' EX. 15" RCP
SAY								108'	4	3	3	1	1	5.3	0.13	

Other column headings (no entries): SIZE; THICKNESS OR GAUGE; SIDE DRAIN PIPE (RCP, CSP, CAAP, HDPE, or PVC) 12" 15" 18" 24" 30" 36" 42" 48"; DO NOT USE RCP; DO NOT USE CSP; DO NOT USE CAAP; DO NOT USE HDPE; C.S. PIPE 12" 15" 18" 24" 36" 42" 48" (.064 .064 .064 .064 .079 .109 .109); R.C. PIPE (CLASS III) 15" 18" 24" 30" 36" 42" 48"; R.C. PIPE (CLASS IV) 12" 15" 24" 30" 36" 42" 48"; **" R. C. PIPE (CLASS V); **" R. C. PIPE CULVERTS, CONTRACTOR DESIGN PIPE; **" R. C. PIPE CULVERTS, CONTRACTOR DESIGN PIPE; 15" SIDE DRAIN PIPE; 18" SIDE DRAIN PIPE; ENDWALLS STD. 838.01, STD. 838.11 OR STD. 838.80 (UNLESS NOTED OTHERWISE) CU. YDS. R.C.P. C.S.P.; * TOTAL L.F. FOR PAY QUANTITY SHALL BE COL. 'A' + (1.3 X COL.'B') LIN. *FT. A 5.0' THRU 10.0', B 10.0' AND ABOVE; FRAME, GRATES AND HOOD STANDARD 840.03 TYPE OF GRATE E F; CONCRETE TRANSITIONAL SECTION CATCH BASIN, DROP INLET; CORR. STEEL ELBOWS NO. & SIZE; CONC. COLLARS CL. "B" C.Y. STD 840.72; PIPE REMOVAL LIN.FT.

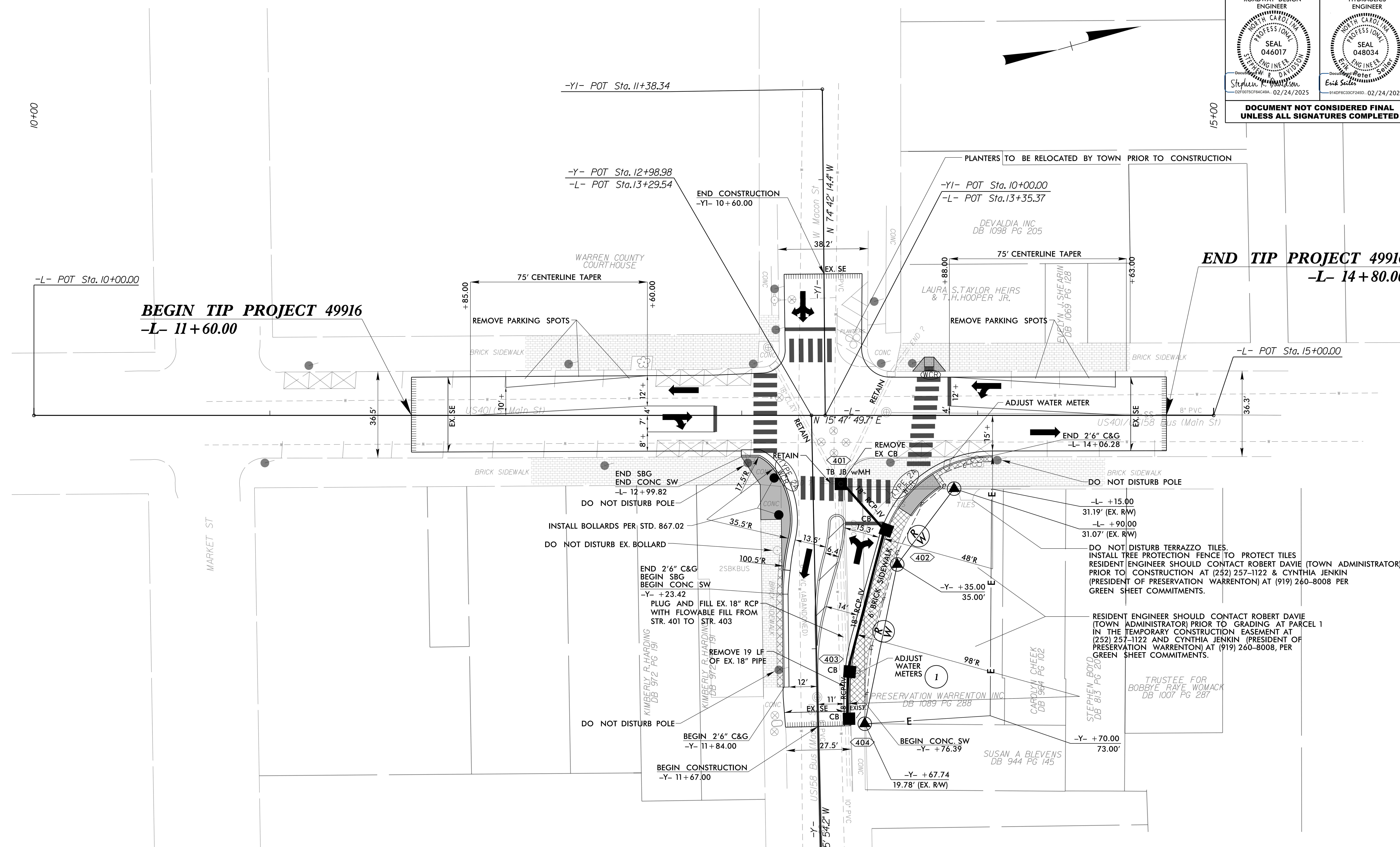
ABBREVIATIONS

- 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

PROJECT REFERENCE NO.	SHEET NO.
49916	4
R/W SHEET NO.	

ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
NORTH CAROLINA PROFESSIONAL SEAL 046017 ENGINEER STEPHEN R. DAVIDSON	NORTH CAROLINA PROFESSIONAL SEAL 048034 ENGINEER Erik Peter Seiler
Stephen R. Davidson 02/24/2025	Erik Seiler 02/24/2025

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED



8/17/99
10+00
15+00
-L- POT Sta. 10+00.00
BEGIN TIP PROJECT 49916
-L- 11+60.00
-Y1- POT Sta. 11+38.34
-Y- POT Sta. 12+98.98
-L- POT Sta.13+29.54
END CONSTRUCTION
-Y1- 10+60.00
N 74°42' 14.4" W
38.2'
EX. SE
-Y1- POT Sta. 10+00.00
-L- POT Sta.13+35.37
PLANTERS TO BE RELOCATED BY TOWN PRIOR TO CONSTRUCTION
DEVALDIA INC
DB 1098 PG 205
WARREN COUNTY COURTHOUSE
75' CENTERLINE TAPER
+85.00
+60.00
+88.00
+63.00
END TIP PROJECT 49916
-L- 14+80.00
LAURA S.TAYLOR HEIRS & T.H.HOOPER JR.
EVELYN J.SHEARIN DB 1069 PG 128
REMOVE PARKING SPOTS
BRICK SIDEWALK
CONC
-L- POT Sta. 15+00.00
36.5'
36.3'
12'
10'
7'
4'
8'
15'
EX. SE
US401/US158 Bus (Main St)
N 15°47' 49.7" E
-L-
RETAIN
ADJUST WATER METER
8" PVC
REMOVE EX CB
END 2'6" C&G
-L- 14+06.28
401
TB JB w/MH
END SBG
END CONC SW
-L- 12+99.82
DO NOT DISTURB POLE
DO NOT DISTURB POLE
-L- +15.00
31.19' (EX. R/W)
-L- +90.00
31.07' (EX. R/W)
17.5'R
35.5'R
100.5'R
13.5'
16.4'
15.3'
CB
18" RCP-IV
INSTALL BOLLARDS PER STD. 867.02
DO NOT DISTURB EX. BOLLARD
DO NOT DISTURB TERRAZZO TILES.
INSTALL TREE PROTECTION FENCE TO PROTECT TILES
RESIDENT ENGINEER SHOULD CONTACT ROBERT DAVIE (TOWN ADMINISTRATOR) PRIOR TO CONSTRUCTION AT (252) 257-1122 & CYNTHIA JENKIN (PRESIDENT OF PRESERVATION WARRENTON) AT (919) 260-8008 PER GREEN SHEET COMMITMENTS.
MARKET ST
END 2'6" C&G
BEGIN SBG
BEGIN CONC SW
-Y- +23.42
PLUG AND FILL EX. 18" RCP WITH FLOWABLE FILL FROM STR. 401 TO STR. 403
402
48'R
-Y- +35.00
35.00'
14'
6' BRICK SIDEWALK
RESIDENT ENGINEER SHOULD CONTACT ROBERT DAVIE (TOWN ADMINISTRATOR) PRIOR TO GRADING AT PARCEL 1 IN THE TEMPORARY CONSTRUCTION EASEMENT AT (252) 257-1122 AND CYNTHIA JENKIN (PRESIDENT OF PRESERVATION WARRENTON) AT (919) 260-8008, PER GREEN SHEET COMMITMENTS.
KIMBERLY R.HARDING DB 972 PG 191
REMOVE 19 LF OF EX. 18" PIPE
403
ADJUST WATER METERS
1
98'R
CAROLYN CHEEK DB 964 PG 102
STEPHEN BOYD DB 813 PG 20
TRUSTEE FOR BOBBYE RAYE WOMACK DB 1007 PG 287
PRESERVATION WARRENTON INC DB 1089 PG 288
12'
11'
EX. SE
CB
DO NOT DISTURB POLE
BEGIN 2'6" C&G
-Y- 11+84.00
404
27.5'
BEGIN CONC. SW
-Y- +76.39
-Y- +70.00
73.00'
SUSAN A BLEVENS DB 944 PG 145
BEGIN CONSTRUCTION
-Y- 11+67.00
-Y- +67.74
19.78' (EX. R/W)
US158 Bus (Macon St)
-Y-
N 15°25' 54.2" W
BRANCH BANKING & TRUST CO. DB 352 PG 124

CONCRETE SIDEWALK

BRICK SIDEWALK

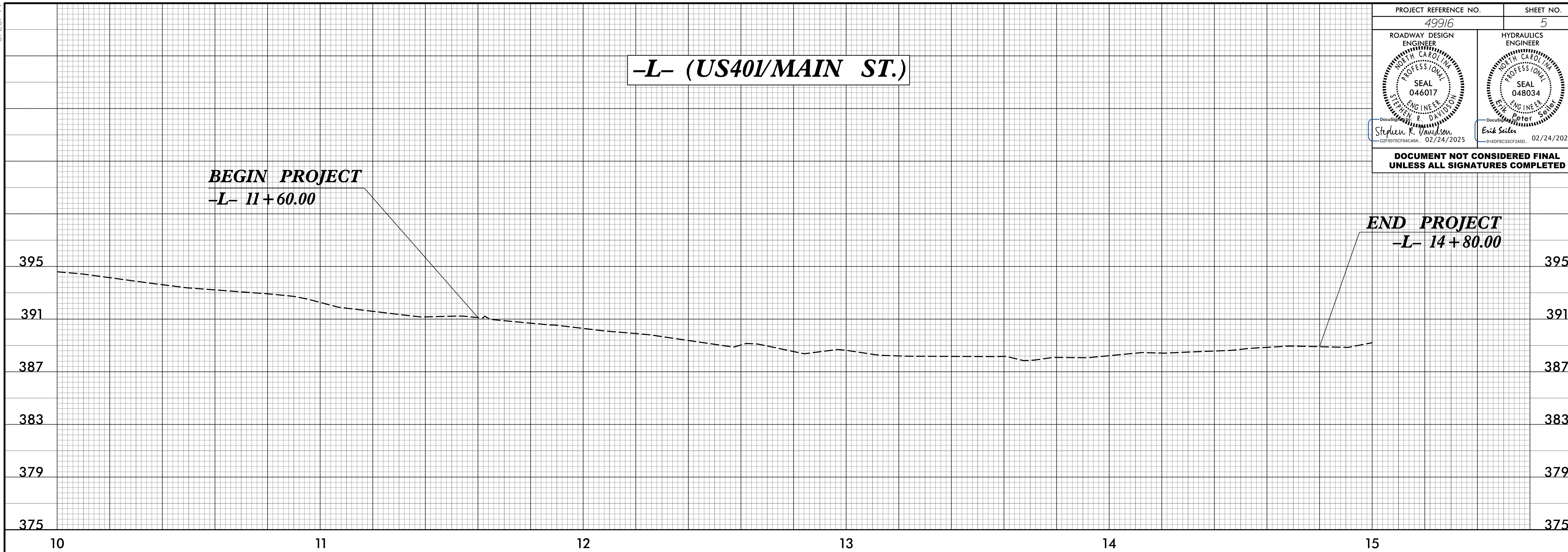
SEE SHEET 5 FOR PROFILES

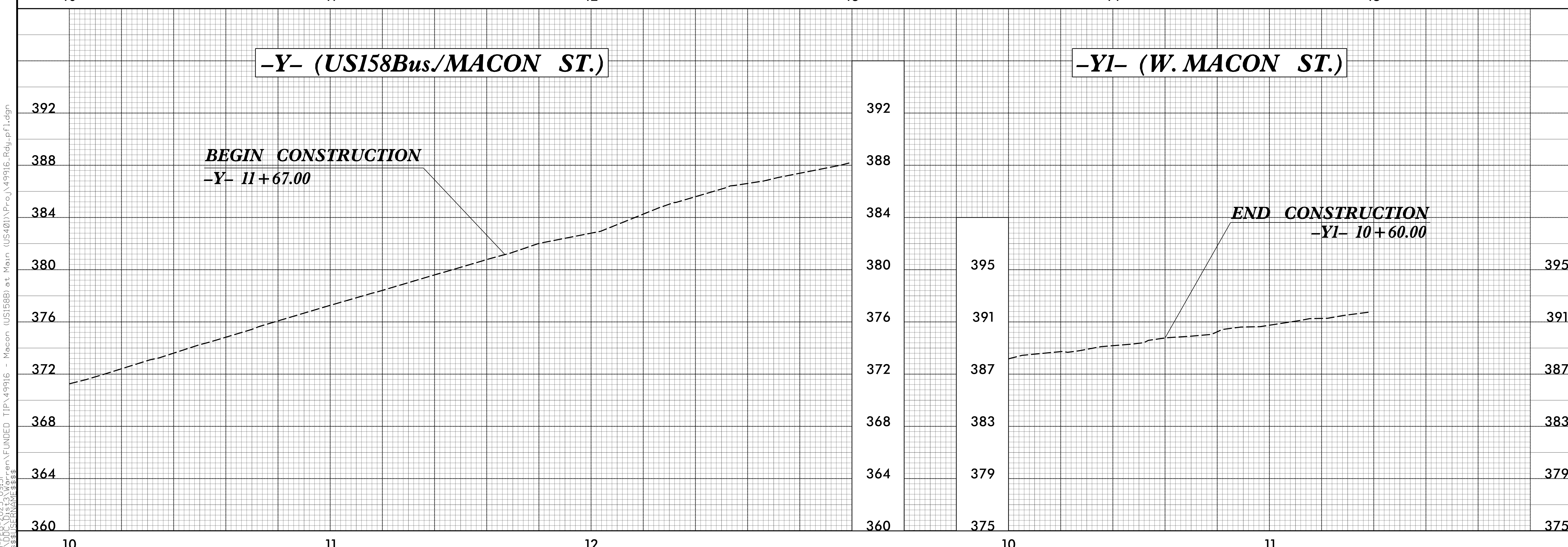
24-FEB-2025 09:48
S:\DOT\Div13\Warren\FUNDED TIP\49916 - Macon (US158B) at Main (US401)\Proj\49916_Rdy_psh.dgn
$$$$USERNAME$$$$

PROJECT REFERENCE NO.	SHEET NO.
49916	5

ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
NORTH CAROLINA PROFESSIONAL SEAL 046017 ENGINEER STEPHEN R. DAVIDSON — Stephen R. Davidson 02/24/2025	NORTH CAROLINA PROFESSIONAL SEAL 048034 ENGINEER Erik Peter Seiler — Erik Seiler 02/24/2025

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED





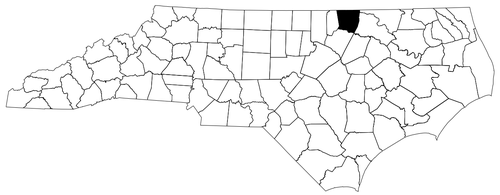
5/28/99

24-FEB-2025 09:51
S:\DOH\Dist3\Warren\FUNDED TIP\49916 - Macon (US158B) at Main (US401)\Proj\49916_Rdy_pfl.dgn
$$$$USERNAME$$$$

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

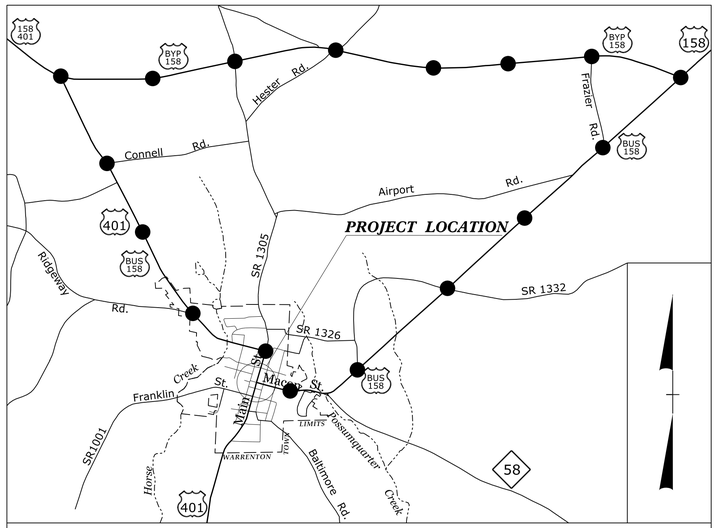
TRANSPORTATION MANAGEMENT PLAN

WARREN COUNTY



LOCATION: INSTALL INTERSECTION IMPROVEMENTS AT THE INTERSECTION OF MACON ST. & MAIN ST. IN WARRENTON

TYPE OF WORK: GRADING, DRAINAGE, PAVING & SIGNALS



VICINITY MAP

INDEX OF SHEETS

SHEET NO.	TITLE
TMP-1	TITLE SHEET, VICINITY MAP, AND INDEX OF SHEETS
TMP-1A	LIST OF APPLICABLE ROADWAY STANDARD DRAWINGS, AND LEGEND
TMP-1B	TRANSPORTATION OPERATIONS PLAN: (MANAGEMENT STRATEGIES, GENERAL NOTES, AND LOCAL NOTES)
TMP-2	TRUCK OFF-SITE DETOUR
TMP-3	TEMPORARY TRAFFIC CONTROL PHASING
TMP-4	PEDESTRIAN ACCOMMODATIONS

SHEET NO.
TMP-1

49916

TIP PROJECT:

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

PLANS PREPARED BY:

THOMAS R MEADOWS

NCDOT CONTACTS:

KENNETH C. THORNWELL, PE
PROJECT ENGINEER

PROJECT DESIGN ENGINEER

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

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

APPROVED: _____

DATE: _____

NORTH CAROLINA PROFESSIONAL SEAL 046017 ENGINEER STEPHEN R. DAVIDSON

DocuSigned by:
Stephen R. Davidson
D2F0075CF64C49A...
02/26/2025

24-FEB-2025 10:05
C:\DOT\Projects\Warren\FUNDED TIP\49916 - Macon (US158B) at Main (US401)\Proj\49916_TC_tmp.dgn
$$$$USERNAME$$$$

PROJ. REFERENCE NO.	SHEET NO.
49916	TMP-1A

ROADWAY STANDARD DRAWINGS

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

STD. NO.	TITLE
1101.01	WORK ZONE WARNING SIGNS
1101.03	TEMPORARY ROAD CLOSURES
1101.05	WORK ZONE VEHICLE ACCESSES
1101.11	TRAFFIC CONTROL DESIGN TABLES
1110.01	STATIONARY WORK ZONE SIGNS
1110.02	PORTABLE WORK ZONE SIGNS
1115.01	FLASHING ARROW BOARDS
1130.01	DRUMS
1145.01	BARRICADES
1150.01	FLAGGING DEVICES
1205.01	PAVEMENT MARKINGS - LINE TYPES AND OFFSETS
1205.02	PAVEMENT MARKINGS - TWO LANE AND MULTILANE ROADWAYS
1205.04	PAVEMENT MARKINGS - INTERSECTIONS
1205.05	PAVEMENT MARKINGS - TURN LANES
1205.07	PAVEMENT MARKINGS - PEDESTRIAN CROSSWALKS
1205.08	PAVEMENT MARKINGS - SYMBOLS AND WORD MESSAGES

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

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

APPROVED: ____________

DATE: ____________

DocuSigned by: Stephen R. Davidson
D2F0075CF64C458...
02/26/2025

NORTH CAROLINA PROFESSIONAL SEAL 046017 ENGINEER STEPHEN R. DAVIDSON

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

24-FEB-2025 10:05
S:\DDC\Dist3\Warren\FUNDED TIP\49916 - Macon (US158B) at Main (US401)\Proj\49916_TC_tmp.dgn
$$$$USERNAME$$$$

PROJ. REFERENCE NO.	SHEET NO.
49916	TMP-1B

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
US 401 (MAIN ST) BUS 158 (MACON ST)	MONDAY THROUGH FRIDAY 6:00 AM TO 9:00 AM AND 4:00 PM TO 7:00 PM SATURDAY THROUGH SUNDAY 12:00 PM TO 6:00 PM

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

ROAD NAME

US 401 (MAIN ST)
BUS 158 (MACON ST)

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 7:00 A.M. DECEMBER 31st TO 6:00 P.M. JANUARY 2ND. IF NEW YEAR'S DAY IS ON A FRIDAY, SATURDAY, SUNDAY, OR MONDAY THEN UNTIL 6:00 P.M. THE FOLLOWING TUESDAY.
3. FOR EASTER, BETWEEN THE HOURS OF 7:00 A.M. THURSDAY AND 6:00 P.M. MONDAY.
4. FOR MEMORIAL DAY, BETWEEN THE HOURS OF 7:00 A.M. FRIDAY TO 6:00 P.M. TUESDAY.
5. FOR INDEPENDENCE DAY, BETWEEN THE HOURS OF 7:00 A.M. THE DAY BEFORE INDEPENDENCE DAY AND 6:00 P.M. THE DAY AFTER INDEPENDENCE DAY.

   IF INDEPENDENCE DAY IS ON A FRIDAY, SATURDAY, SUNDAY OR MONDAY THEN BETWEEN THE HOURS OF 7:00 A.M. THE THURSDAY BEFORE INDEPENDENCE DAY AND 6:00 P.M. THE TUESDAY AFTER INDEPENDENCE DAY.
6. FOR LABOR DAY, BETWEEN THE HOURS OF 7:00 A.M. FRIDAY AND 6:00 P.M. TUESDAY.
7. FOR THANKSGIVING DAY, BETWEEN THE HOURS OF 7:00 A.M. TUESDAY TO 6:00 P.M. MONDAY.
8. FOR CHRISTMAS, BETWEEN THE HOURS OF 7:00 A.M. THE FRIDAY BEFORE THE WEEK OF CHRISTMAS DAY AND 6:00 P.M. 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 TRAFFIC CONTROL PLANS, ROADWAY STANDARD DRAWINGS, OR AS DIRECTED BY THE ENGINEER. CONDUCT THE WORK SO THAT ALL PERSONNEL AND/OR EQUIPMENT REMAIN WITHIN THE CLOSED TRAVEL LANE.

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.

TRAFFIC PATTERN ALTERATIONS

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

SIGNING

I) 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.

J) PROVIDE SIGNING AND DEVICES REQUIRED TO CLOSE THE ROAD ACCORDING TO THE ROADWAY STANDARD DRAWINGS AND TRAFFIC CONTROL PLANS.

PROVIDE SIGNING REQUIRED FOR THE OFF-SITE DETOUR ROUTE AS SHOWN IN THE TRAFFIC CONTROL PLANS.

K) 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.

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

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

TRAFFIC CONTROL DEVICES

N) 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.

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

PAVEMENT MARKINGS AND MARKERS

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

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

MANAGEMENT STRATEGIES

THE FOLLOWING LISTED WORK ZONE STRATEGIES ARE RECOMMENDED FOR INCLUSION WITHIN THIS TRANSPORTATION MANAGEMENT PLANS (TMP)

RECOMMENDED STRATEGIES:

- TRUCK OFF-SITE DETOUR/USE OF ALTERNATIVE ROUTES
- LANE SHIFTS OR CLOSURES
- SHOULDER CLOSURES
- ONE-LANE, TWO WAY OPERATION (FLAGGING)
- WORK HOUR RESTRICTIONS FOR PEAK TRAVEL
- PEDESTRIAN/BICYCLE ACCOMMODATIONS

APPROVED: _____

DATE: _____

NORTH CAROLINA PROFESSIONAL SEAL 046017 ENGINEER STEPHEN R. DAVIDSON

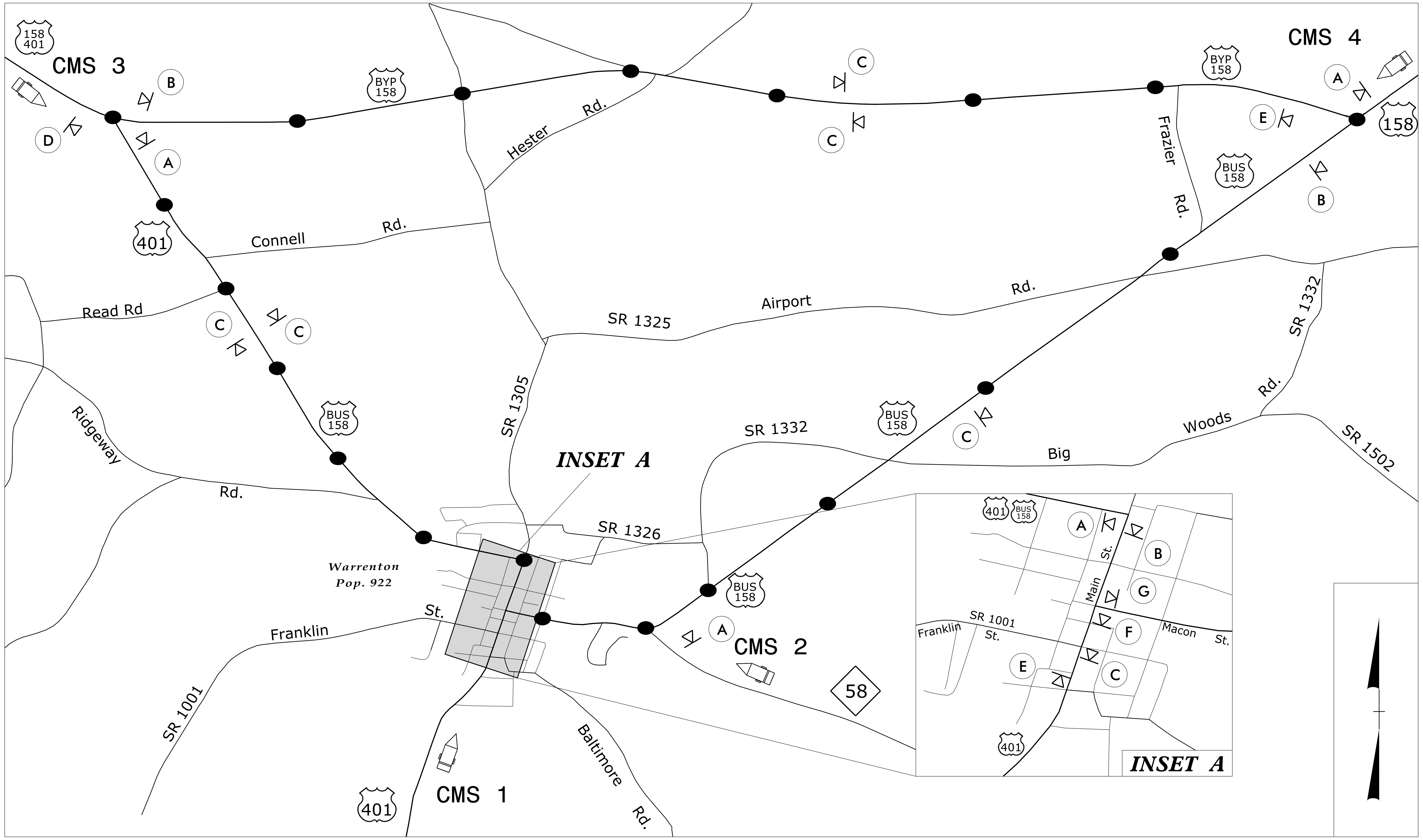
DocuSigned by: Stephen R. Davidson D2F0075CF64C49... 02/26/2025

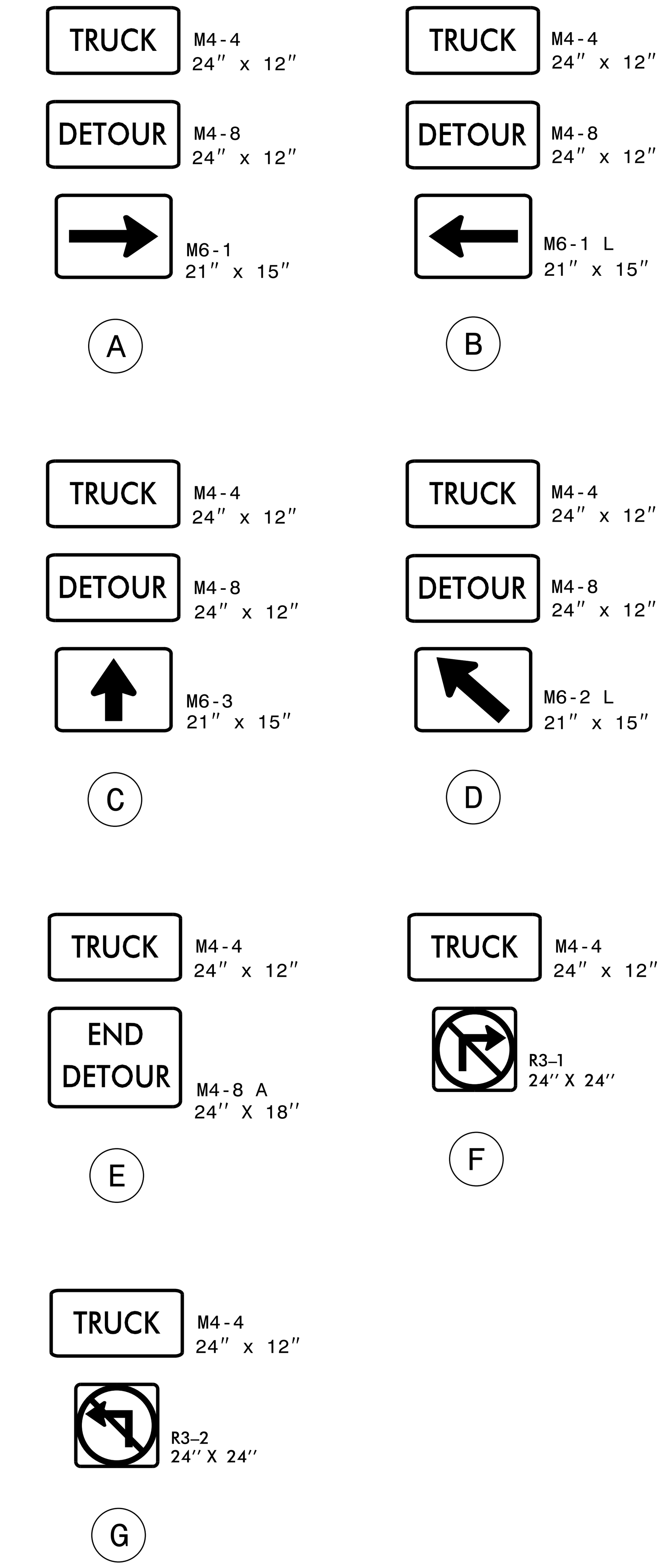
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

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

TRANSPORTATION OPERATIONS PLANS

24-FEB-2025 10:06
C:\DOCUMENTS\Warren\FUNDED TIP\49916 - Macon (US58B) at Main (US40)\Proj\49916_TC_tmp.dgn
$$$$USERNAME$$$$





CMS 1

MESSAGE NO. 1	MESSAGE NO. 2
TRUCK DETOUR BUS 158E	BEGIN DAY MM / DD

CHANGEABLE MESSAGE SIGN
(ONE WEEK PRIOR TO TRUCK DETOUR)

MESSAGE NO. 1	MESSAGE NO. 2
BUS 158E CLSD TO TRUCKS	USE 401N TO 158 BYP

CHANGEABLE MESSAGE SIGN
(DURING TRUCK DETOUR)

CMS 2

MESSAGE NO. 1	MESSAGE NO. 2
TRUCK DETOUR BUS 158W	BEGIN DAY MM / DD

CHANGEABLE MESSAGE SIGN
(ONE WEEK PRIOR TO TRUCK DETOUR)

MESSAGE NO. 1	MESSAGE NO. 2
BUS 158W CLSD TO TRUCKS	TRUCKS USE 158 BYP

CHANGEABLE MESSAGE SIGN
(DURING TRUCK DETOUR)

CMS 3

MESSAGE NO. 1	MESSAGE NO. 2
TRUCK DETOUR BUS 158E	BEGIN DAY MM / DD

CHANGEABLE MESSAGE SIGN
(ONE WEEK PRIOR TO TRUCK DETOUR)

MESSAGE NO. 1	MESSAGE NO. 2
BUS 158E CLSD TO TRUCKS	USE 158 BYP TO NC58

CHANGEABLE MESSAGE SIGN
(DURING TRUCK DETOUR)

CMS 4

MESSAGE NO. 1	MESSAGE NO. 2
TRUCK DETOUR TO 401	BEGIN DAY MM / DD

CHANGEABLE MESSAGE SIGN
(ONE WEEK PRIOR TO TRUCK DETOUR)

MESSAGE NO. 1	MESSAGE NO. 2
TRUCK DETOUR TO 401	USE 158 BYP TO 401 S

CHANGEABLE MESSAGE SIGN
(DURING TRUCK DETOUR)

● ● ● *TRUCK OFF-SITE DETOUR*

APPROVED:
DATE:
DocuSigned by: Stephen R. Davidson
02/26/2025
NORTH CAROLINA PROFESSIONAL SEAL 046017 ENGINEER STEPHEN R. DAVIDSON

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

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

TRUCK OFF-SITE DETOUR

PHASING

BEFORE BEGINNING ANY CONSTRUCTION ACTIVITIES THE CONTRACTOR SHALL INSTALL ALL ADVANCED WARNING SIGNS AND TRAFFIC CONTROL DEVICES. FIELD VERIFY LOCATIONS WITH RESIDENT ENGINEER PRIOR TO INSTALLATION.

THE CONTRACTOR SHALL MAINTAIN ACCESS TO ALL EXISTING DRIVEWAYS DURING CONSTRUCTION UNLESS OTHERWISE DIRECTED BY THE ENGINEER OR AS DIRECTED IN THE PHASING NOTES.

PRIOR TO START OF CONSTRUCTION, TOWN OF WARRNENTON WILL RELOCATE THE PLANTERS ON W. MACON ST. (-Y1-). CONTACT TOWN ADMINISTRATOR, ROBERT DAVIE FOR FURTHER GUIDANCE.

PRIOR TO START OF CONSTRUCTION, INSTALL TREE PROTECTION FENCE TO PROTECT THE TERRAZZO TILES LOCATED ON PARCEL 1. CONTACT ROBERT DAVIE (TOWN ADMINISTRATOR) AT (252) 257-1122, OR CYNTHIA JENKIN (PRESIDENT OF PRESERVATION WARRENTON) AT (919) 260-8008, FOR FURTHER GUIDANCE PER GREEN SHEET COMMITMENTS.

STEP 1:

PLACE CMS BOARDS ONE WEEK IN ADVANCE OF TRUCK OFF-SITE DETOUR.

USING RSD 1101.01, INSTALL ADVANCED WARNING SIGNS ON BUSINESS 158 (MACON ST) AND US 401 (MAIN ST) IN BOTH DIRECTIONS.

STEP 2:

USING TMP-2, INSTALL SIGNAGE AND TRAFFIC CONTROL DEVICES FOR TRUCK OFF-SITE DETOUR.

STEP 3:

WITH TRUCK OFF-SITE DETOUR IN PLACE, BEGIN FLAGGING TO CONSTRUCT INTERSECTION IMPROVEMENTS. USE LAW ENFORCEMENT AS NECESSARY TO MAINTAIN TRAFFIC.

STEP 4:

INSTALL FINAL PAVEMENT MARKINGS, REMOVE ALL TRAFFIC CONTROL DEVICES AND OPEN TRAFFIC TO FINAL PATTERN.

APPROVED:

DATE:

NORTH CAROLINA PROFESSIONAL SEAL 046017 ENGINEER STEPHEN R. DAVIDSON

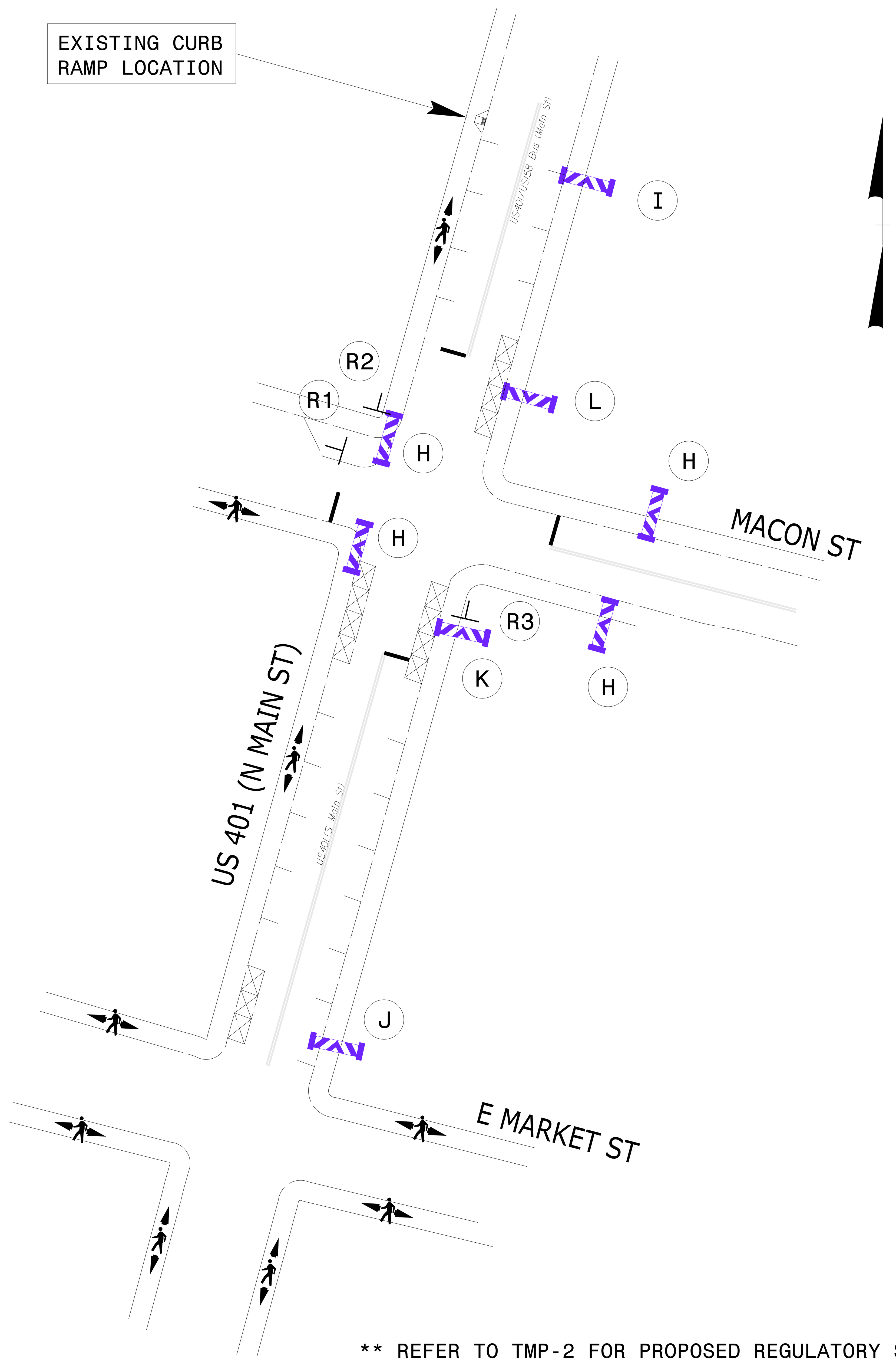
DocuSigned by: Stephen R. Davidson 02/26/2025

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

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

PHASING

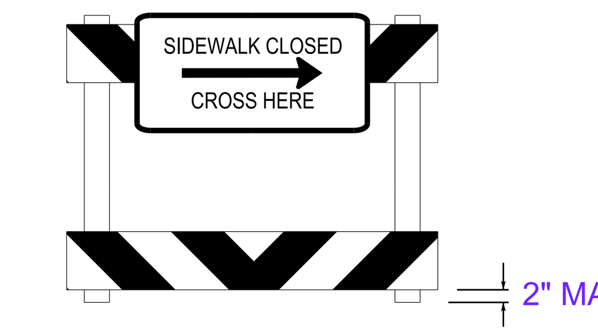
24-FEB-2025 10:07
S:\DDC\Dist3\Warren\FUNDED TIP\49916 - Macon (US158B) at Main (US401)\Proj\49916_TC_tmp.dgn
$$$$USERNAME$$$$



** REFER TO TMP-2 FOR PROPOSED REGULATORY SIGNAGE SHOWN AT THE INTERSECTION OF US 401 AND MACON ST/BUSINESS 158.

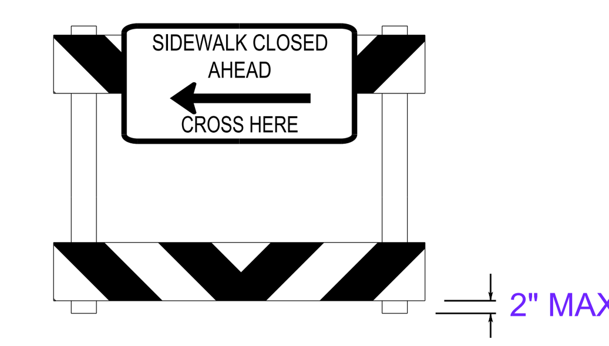
PEDESTRIAN BARRICADE
MUST BE ADA-COMPLIANT

H



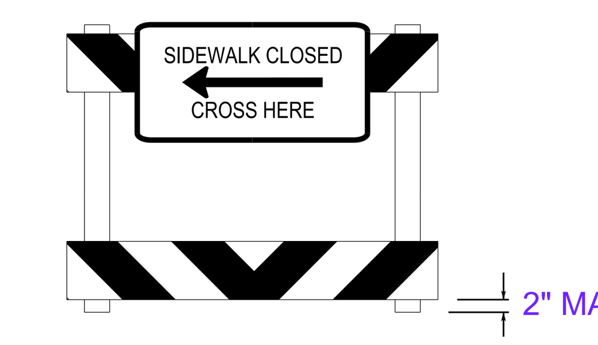
PEDESTRIAN BARRICADE
MUST BE ADA-COMPLIANT

I



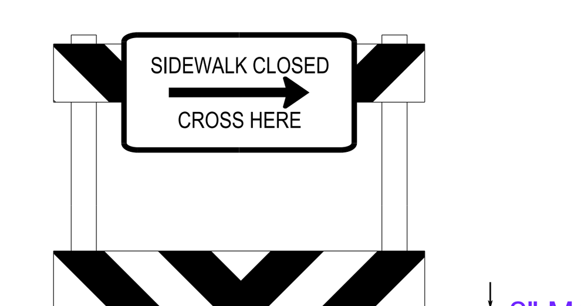
PEDESTRIAN BARRICADE
MUST BE ADA-COMPLIANT

J



PEDESTRIAN BARRICADE
MUST BE ADA-COMPLIANT

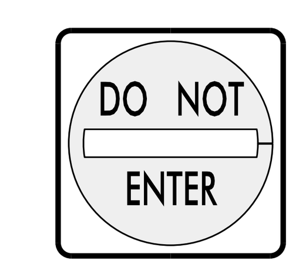
K



PEDESTRIAN BARRICADE
MUST BE ADA-COMPLIANT

L

EXISTING REGULATORY SIGNAGE

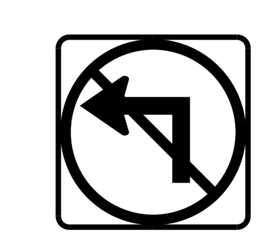


R5-1
30" X 30"

R1

R6-1 R
36" X 12"

R2



R3-2
24" X 24"

R3

NOTES:

MAINTAIN LOCAL ACCESS TO BUSINESSES AND RESIDENTS THROUGHOUT THE DURATION OF THE SIDEWALK CLOSURE.

RELOCATE ALL EXISTING REGULATORY SIGNAGE IMPACTED BY CONSTRUCTION.

APPROVED:

DATE:

NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 046017 STEPHEN R. DAVIDSON

DocuSigned by: Stephen R. Davidson
02/26/2025

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

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

SIDEWALK CLOSURE DETAIL

2/24/2025
S:\DDC\Dist3\Warren\FUNDED TIP\49916 - Macon (US158B) at Main (US401)\Proj\49916_TC_tmp.dgn
User:frmeadows

PROJECT REFERENCE NO.	SHEET NO.
49916	PMP-1

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

PAVEMENT MARKING PLAN

LOCATION: US401 (S. MAIN ST.) AT US158 BUS. (MACON ST.)

ROADWAY STANDARD DRAWINGS

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

STD. NO.	TITLE
1205.01	PAVEMENT MARKINGS - LINE TYPES & OFFSETS
1205.02	PAVEMENT MARKINGS - TWO LANE & MULTI-LANE ROADWAYS
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)

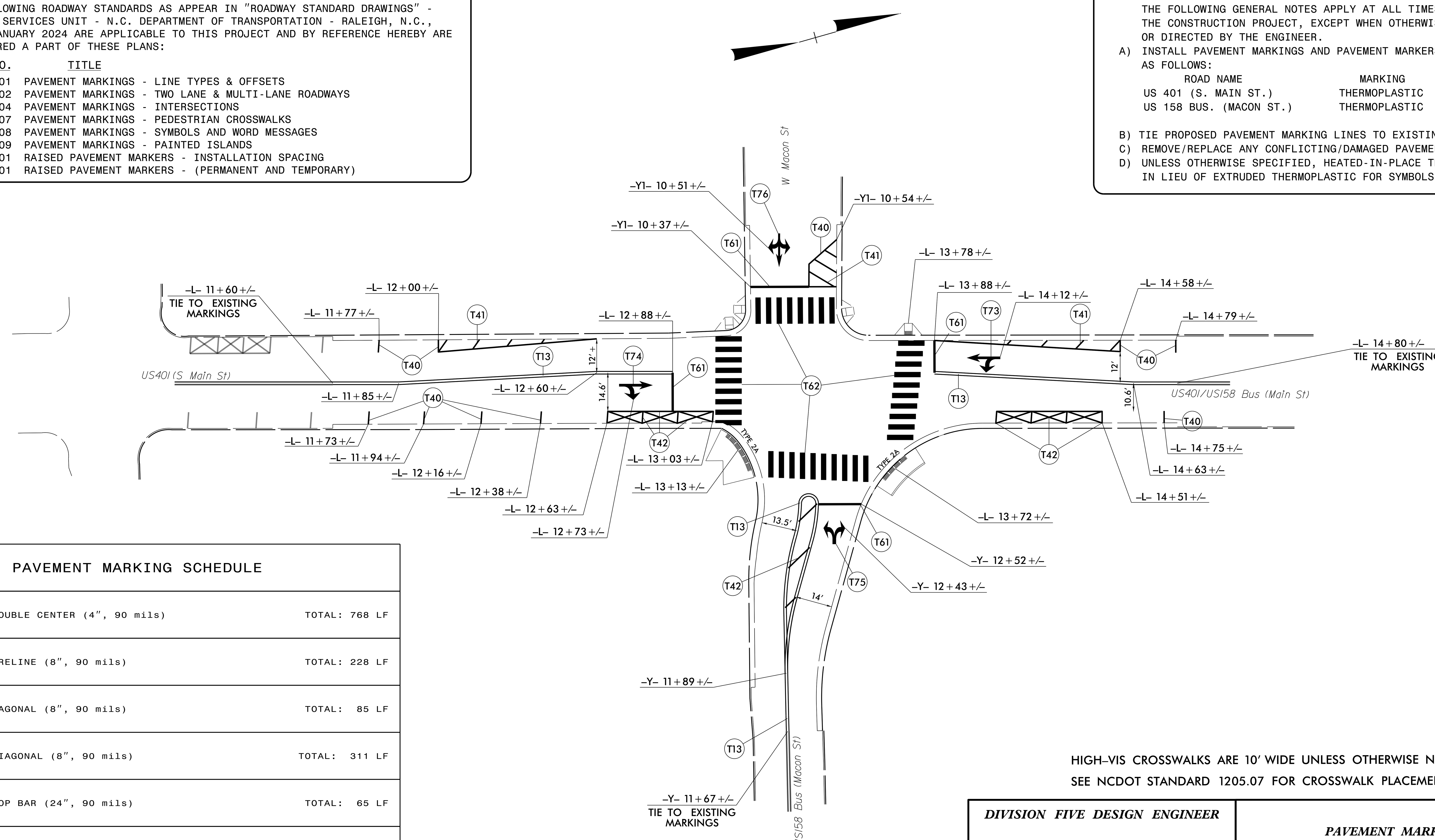
GENERAL NOTES

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
US 401 (S. MAIN ST.)	THERMOPLASTIC	SNOWPLOWABLE (OPTION 1)
US 158 BUS. (MACON ST.)	THERMOPLASTIC	SNOWPLOWABLE (OPTION 1)

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



HIGH-VIS CROSSWALKS ARE 10' WIDE UNLESS OTHERWISE NOTED
SEE NCDOT STANDARD 1205.07 FOR CROSSWALK PLACEMENT

PAVEMENT MARKING SCHEDULE		
T13	YELLOW DOUBLE CENTER (4", 90 mils)	TOTAL: 768 LF
T40	WHITE GORELINE (8", 90 mils)	TOTAL: 228 LF
T41	WHITE DIAGONAL (8", 90 mils)	TOTAL: 85 LF
T42	YELLOW DIAGONAL (8", 90 mils)	TOTAL: 311 LF
T61	WHITE STOP BAR (24", 90 mils)	TOTAL: 65 LF
T62	WHITE CROSSWALK LINE (24", 90 mils)	TOTAL: 840 LF
T73	COMBO. LEFT/ STRAIGHT ARROW (90 mils)	TOTAL: 1 EA
T74	COMBO. RIGHT/ STRAIGHT ARROW (90 mils)	TOTAL: 1 EA
T75	COMBO. LEFT/ RIGHT ARROW (90 mils)	TOTAL: 1 EA
T76	COMBO. LEFT/ RIGHT/ STRAIGHT ARROW (90 mils)	TOTAL: 1 EA

DIVISION FIVE DESIGN ENGINEER

NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 046017 STEPHEN R. DAVIDSON

DocuSigned by: S. Reid Davidson

02/24/2025 P.E.

SIGNATURE

PAVEMENT MARKING PLAN
RADIUS IMPROVEMENTS-
US 401 (S. MAIN ST.) at US158Bus. (MACON ST.)

DIVISION 05 WARREN COUNTY WARRENTON

REVISIONS	INIT.	DATE

N.C. DEPARTMENT of TRANSPORTATION
DIVISION of HIGHWAYS
DIVISION FIVE DESIGN UNIT

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

SCALE: NTS DATE: 2/5/2025
PREPARED BY: TRM
REVIEWED BY: D. BEARD
REVIEWED BY:

8/17/99

24-FEB-2025 10:05
S:\DDC\Dist3\Warren\FUNDED TIP\49916 - Macon (US158B) at Main (US401)\Proj\49916_Sgn_PMP.dgn
$$$$USERNAME$$$$

09/08/99

TIP PROJECT: 49916

CONTRACT: _____

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

PLAN FOR PROPOSED
HIGHWAY EROSION CONTROL

WARREN COUNTY

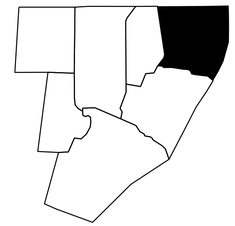
LOCATION: US401 (MAIN ST.) AT US158 BUS. (MACON ST.)

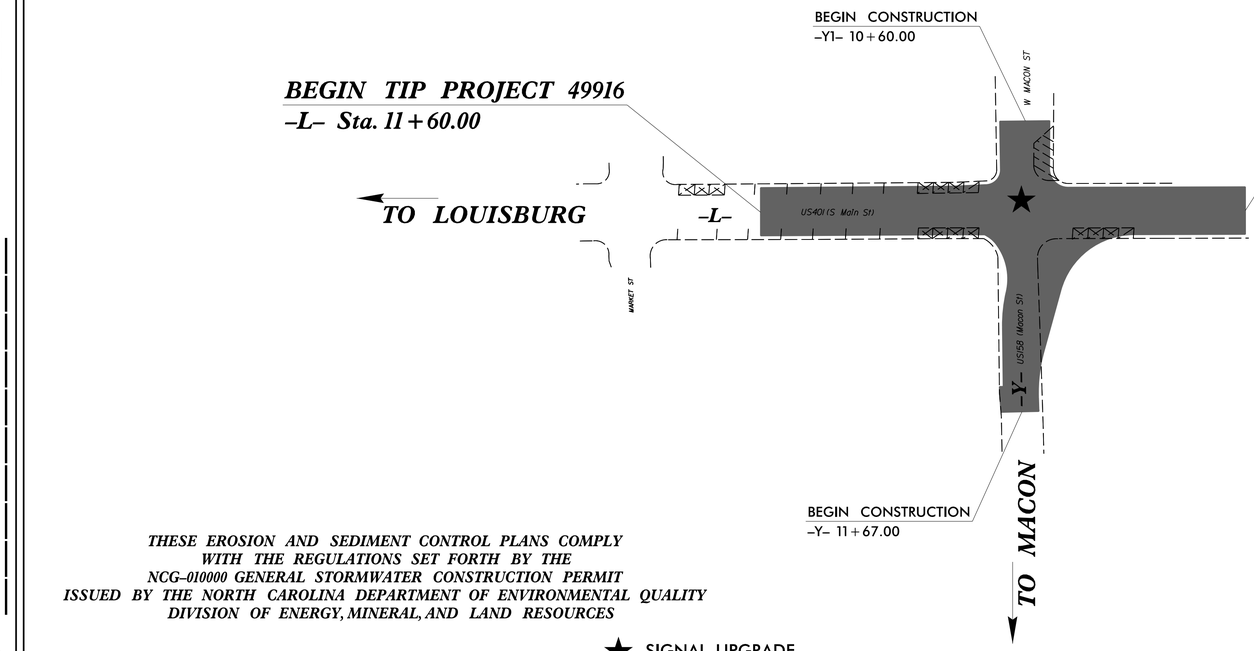
TYPE OF WORK: GRADING, DRAINAGE, PAVING & SIGNALS

STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	49916	1	4

STATE PROJ. NO.	F. A. PROJ. NO.	DESCRIPTION
49916		PE
49916		R/W, UTIL.
49916		CONST.

DIVISION 5





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

★ SIGNAL UPGRADE

GRAPHIC SCALES

20 10 0 20 40
PLANS

20 10 0 20 40
PROFILE (HORIZONTAL)

4 2 0 2 4
PROFILE (VERTICAL)

EROSION CONTROL DESIGN BY:

David Davis
LEVEL IIIA NAME

3553
LEVEL IIIA CERTIFICATION NO.

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

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

24-FEB-2025 10:31
S:\DOC\Dist3\Warren\FUNDED TIP\4996 - Macon (US158B) at Main (US401)\Erosion Control\4996_EC_dsn_TSH.dgn
$$$$USERNAME$$$$

PROJECT REFERENCE NO.	SHEET NO.
49916	EC-02
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

DIVISION OF HIGHWAYS
STATE OF NORTH CAROLINA

EROSION & SEDIMENT CONTROL LEGEND

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

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

PROJECT REFERENCE NO.	SHEET NO.
49916	EC-3B
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

DIVISION OF HIGHWAYS
STATE OF NORTH CAROLINA

SOIL STABILIZATION TIMEFRAMES

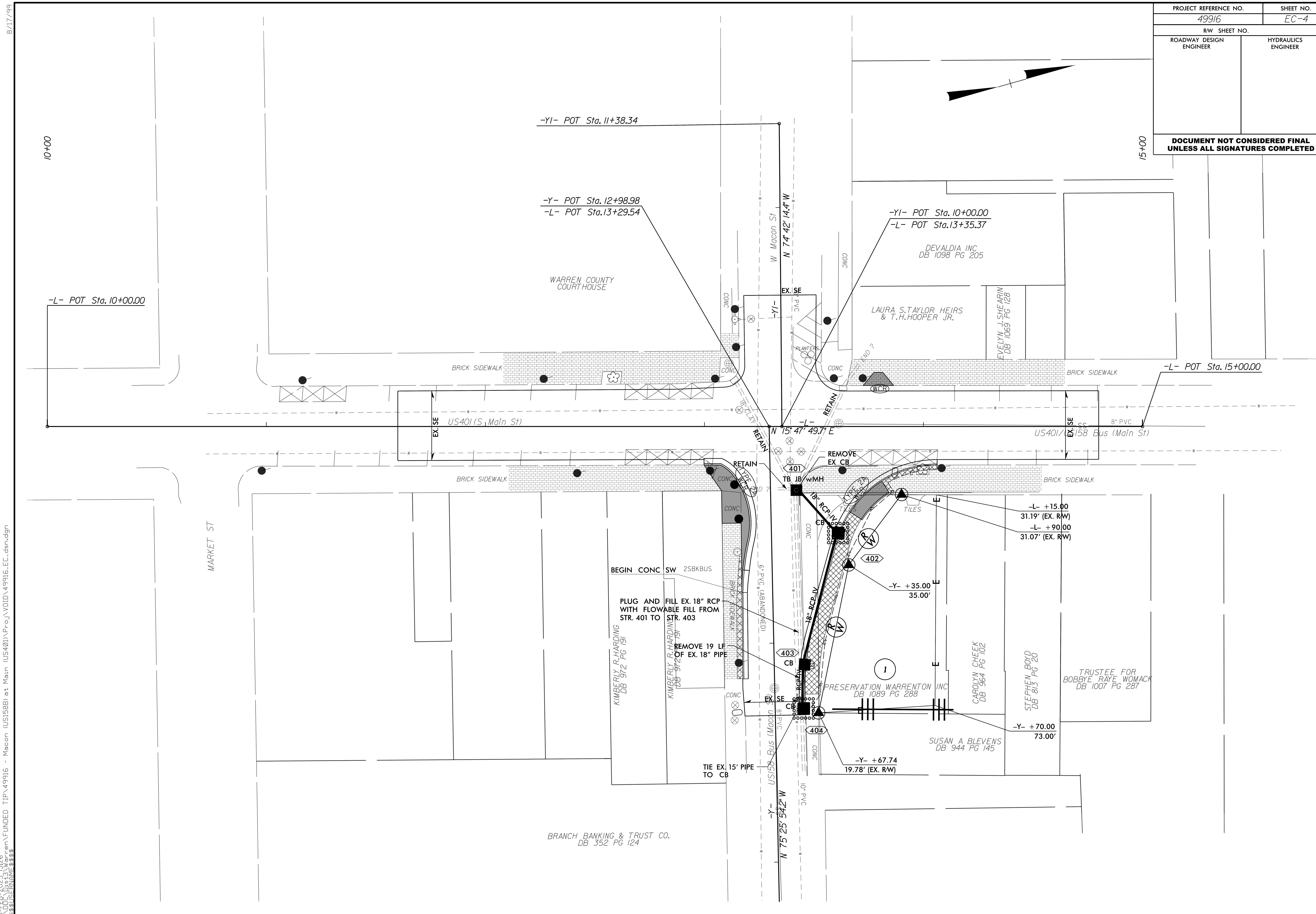
SITE DESCRIPTION	STABILIZATION TIME	TIMEFRAME EXCEPTIONS
PERIMETER DIKES, SWALES, DITCHES AND SLOPES	7 DAYS	NONE
HIGH QUALITY WATER (HQW) ZONES	7 DAYS	NONE
SLOPES STEEPER THAN 3:1	7 DAYS	IF SLOPES ARE 10' OR LESS IN LENGTH AND ARE NOT STEEPER THAN 2:1, 14 DAYS ARE ALLOWED.
SLOPES 3:1 OR FLATTER	14 DAYS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

PROJECT REFERENCE NO.	SHEET NO.
49916	EC-4

RW SHEET NO.

ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED



10+00
15+00
-Y1- POT Sta. 11+38.34
-Y- POT Sta. 12+98.98
-L- POT Sta.13+29.54
-Y1- POT Sta. 10+00.00
-L- POT Sta.13+35.37
-L- POT Sta. 10+00.00
-L- POT Sta. 15+00.00
WARREN COUNTY COURTHOUSE
DEVALDIA INC DB 1098 PG 205
LAURA S.TAYLOR HEIRS & T.H.HOOPER JR.
EVELYN J.SHEARIN DB 1069 PG 128
W Macon St
N 74°42'14.4" W
N 15°47'49.7" E
N 75°25'54.2" W
BRICK SIDEWALK
US401 (S Main St)
US401/US158 Bus (Main St)
EX. SE
RETAIN
REMOVE EX CB
TB JB wMH
401
402
403
404
18" RCP-IV
CB
MARKET ST
BEGIN CONC SW
PLUG AND FILL EX. 18" RCP WITH FLOWABLE FILL FROM STR. 401 TO STR. 403
REMOVE 19 LF OF EX. 18" PIPE
TIE EX. 15' PIPE TO CB
-L- +15.00 31.19' (EX. R/W)
-L- +90.00 31.07' (EX. R/W)
-Y- +35.00 35.00'
-Y- +70.00 73.00'
-Y- +67.74 19.78' (EX. R/W)
KIMBERLY R.HARDING DB 972 PG 191
PRESERVATION WARRENTON INC DB 1089 PG 288
CAROLYN CHEEK DB 964 PG 102
STEPHEN BOYD DB 813 PG 20
TRUSTEE FOR BOBBYE RAYE WOMACK DB 1007 PG 287
SUSAN A BLEVENS DB 944 PG 145
BRANCH BANKING & TRUST CO. DB 352 PG 124
US158 Bus (Macon St)
CONC
TILES
8" PVC

8/17/99

05-FEB-2025 15:26
S:\DOT\Div5\Warren\FUNDED TIP\49916 - Macon (US158B) at Main (US401)\Proj\VOID\49916_EC.dsn.dgn
$$$$USERNAME$$$$

TIP PROJECT: 49916

CONTRACT: DE00404

8/17/99

04-MAR-2025 15:41
C:\Documents and Settings\Groups-Div5DC\DDC\Dist3\Warren\FUNDED TIP\49916 - Macon (US158B) at Main (US401)\Proj\49916_Sgn_SGN.dgn
$$$$USERNAME$$$$

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

PROJECT REFERENCE NO.	SHEET NO.
49916	SIGN-1

NORTH CAROLINA PROFESSIONAL SEAL 046017 ENGINEER STEPHEN R. DAVIDSON

DocuSigned by: Stephen R. Davidson
03/04/2025

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

SIGNING PLAN
WARREN COUNTY

LOCATION: US 401 (MAIN ST.) AT US 158 BUS. (MACON ST.)

ROADWAY STANDARD DRAWINGS

STD. NO.	TITLE
904.10	ORIENTATION OF GROUND MOUNTED SIGNS
904.50	MOUNTING OF TYPE 'D', 'E', AND 'F' SIGNDS ON 'U' CHANNEL POSTS

PAY ITEM NOTES

1	DISPOSAL OF SUPPORT, U-CHANNEL
2	DISPOSAL OF SIGN SYSTEM, U-CHANNEL
3	DO NOT DISTURB SIGN SYSTEM

GENERAL NOTES

- SIGNS FURNISHED BY CONTRACTOR
- ALL TYPE 'D' AND 'F' SIGNS SHALL BE MOUNTED ON TWO U-CHANNEL POSTS UNLESS OTHERWISE INDICATED ON THE PLANS
- WHEN NOT STATIONED OR DIMENSIONED ON PLANS, ALL 'E' AND 'F' SIGNS SHALL BE FIELD LOCATED BY THE ENGINEER
- ALL EXISTING SIGNS ON "U" CHANNEL POSTS WITHIN THE PROJECT LIMITS SHALL BE REMOVED AND DISPOSED OF UNLESS OTHERWISE NOTED ON PLANS
- WHEN EXISTING SIGNS ARE REMOVED AND INSTALLED ON NEW SUPPORTS, THE RE-ERECTION SHALL IMMEDIATELY FOLLOW THE REMOVAL
- THE BACKGROUND FOR TYPE E AND F SIGNS SHALL BE TYPE C REFLECTIVE SHEETING

SUMMARY OF QUANTITIES

ITEM NO.		ITEM DESCRIPTION	QUANTITY	UNIT
DESC. NO.	SECT. NO.			
4072000000	903	SUPPORTS, 3 LB STEEL U-CHANNEL.....	90	LF
4102000000	904	SIGN ERECTION, TYPE E & F.....	6	EA
4155000000	907	DISPOSAL OF SIGN SYSTEM, U-CHANNEL.....	6	EA
4192000000	907	DISPOSAL OF SUPPORT, U-CHANNEL.....	6	EA
4238000000	907	DISPOSAL OF SIGN, D, E or F.....	15	EA

INDEX OF SHEETS

STEPHEN R. DAVIDSON, PE
PROJECT ENGINEER

THOMAS R MEADOWS
PROJECT DESIGN ENGINEER

STATE OF NORTH CAROLINA • DEPARTMENT OF TRANSPORTATION •

PROJECT REFERENCE NO.	SHEET NO.
49916	SIGN-2

DocuSigned by:
S. Reid Davidson
02/24/2025

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

TYPE "E" SIGNS

(401) QUANTITY REQ'D 1

24 X 24
R5-1

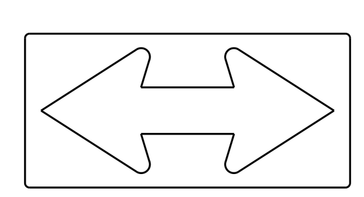
ONE "U" POST PER SIGN

(402) QUANTITY REQ'D 1

24 X 12
R6-1 (L)

ONE "U" POST PER SIGN

(403) QUANTITY REQ'D 1



24 X 12
W1-7

MOUNT ABOVE SIGN 401

(404) QUANTITY REQ'D 1

24 X 12
R6-1 (R)

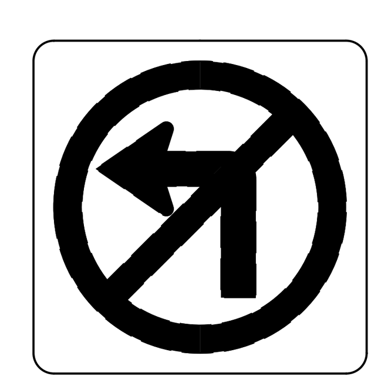
MOUNT BACK TO BACK WITH SIGN 402

(405) QUANTITY REQ'D 1

24 X 24
R3 - 3

ONE "U" POST PER SIGN

(406) QUANTITY REQ'D 1

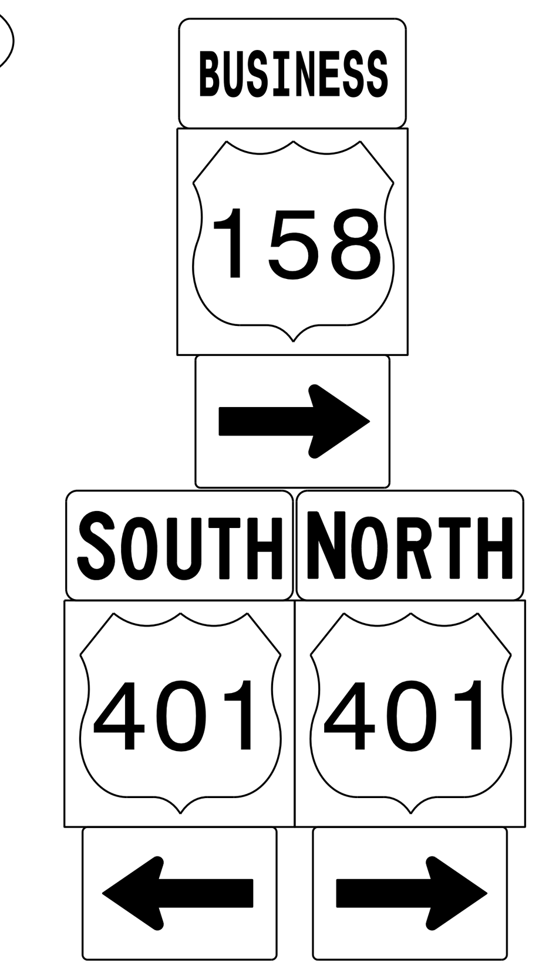


24 X 24
R3 - 2

ONE "U" POST PER SIGN

TYPE "F" SIGNS

(501)



1 - 24 x 12
1 - 24 x 24
1 - 21 x 15
2 - 24 x 12
2 - 24 x 24
2 - 21 x 15

MOUNTED IN ONE "U" POST

TYPE "E" & "F" SIGNS

8/17/99

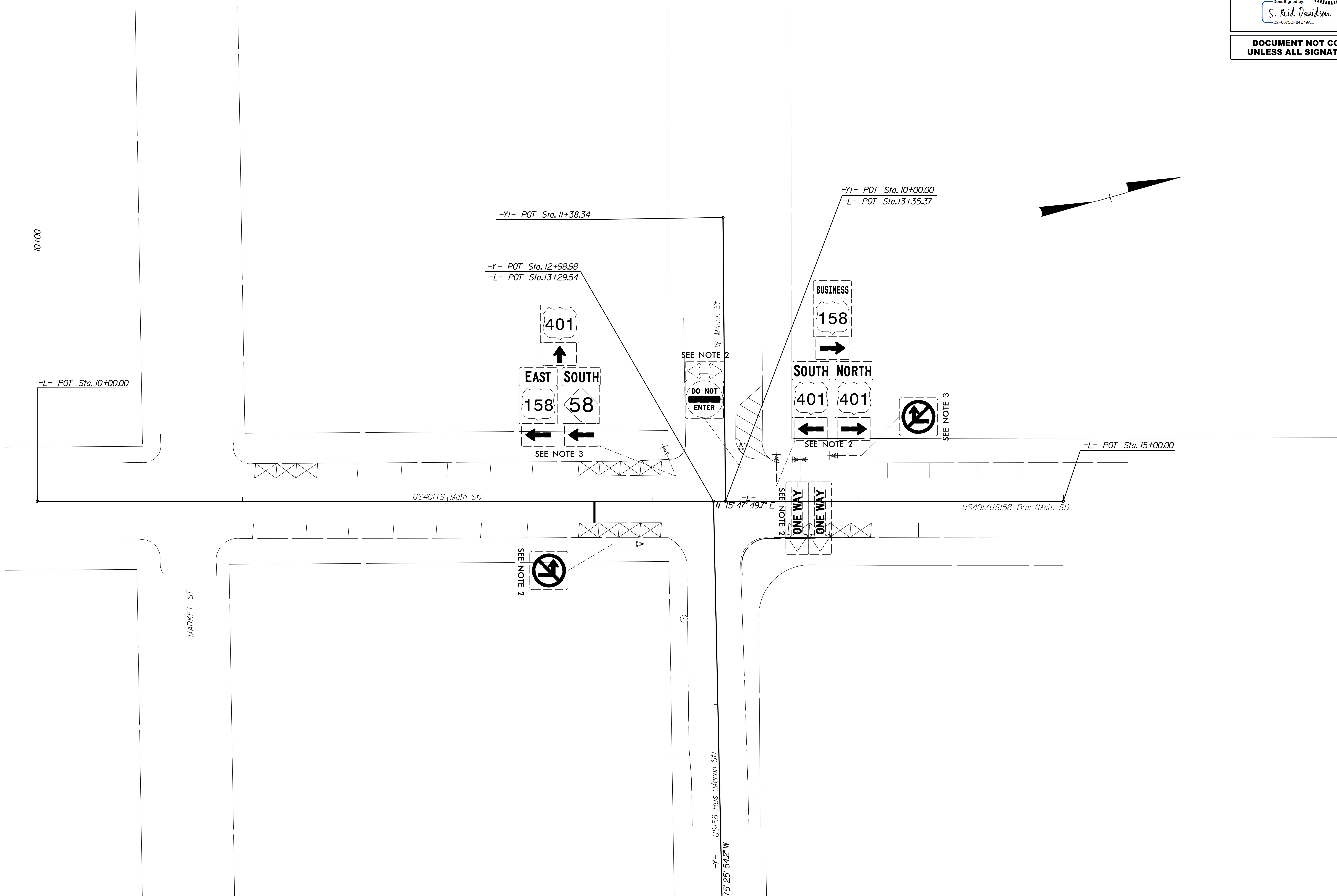
24-FEB-2025 10:24
S:\DOH\Dist3\Warren\FUNDED TIP\49916 - Macon (US158B) at Main (US401)\Proj\49916_Sgn_SGN.dgn
$$$$USERNAME$$$$

PROJECT REFERENCE NO.	SHEET NO.
49916	SIGN-3

NORTH CAROLINA PROFESSIONAL SEAL 046017 ENGINEER STEPHEN R. DAVIDSON

DocuSigned by: S. Reid Davidson 02/24/2025

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED



EXISTING SIGNS

8/17/99

24-FEB-2025 10:25
S:\DOT\Dist3\Warren\FUNDED TIP\49916 - Macon (US158B) at Main (US401)\Proj\49916_Sgn_SGN.dgn
$$$$USERNAME$$$$

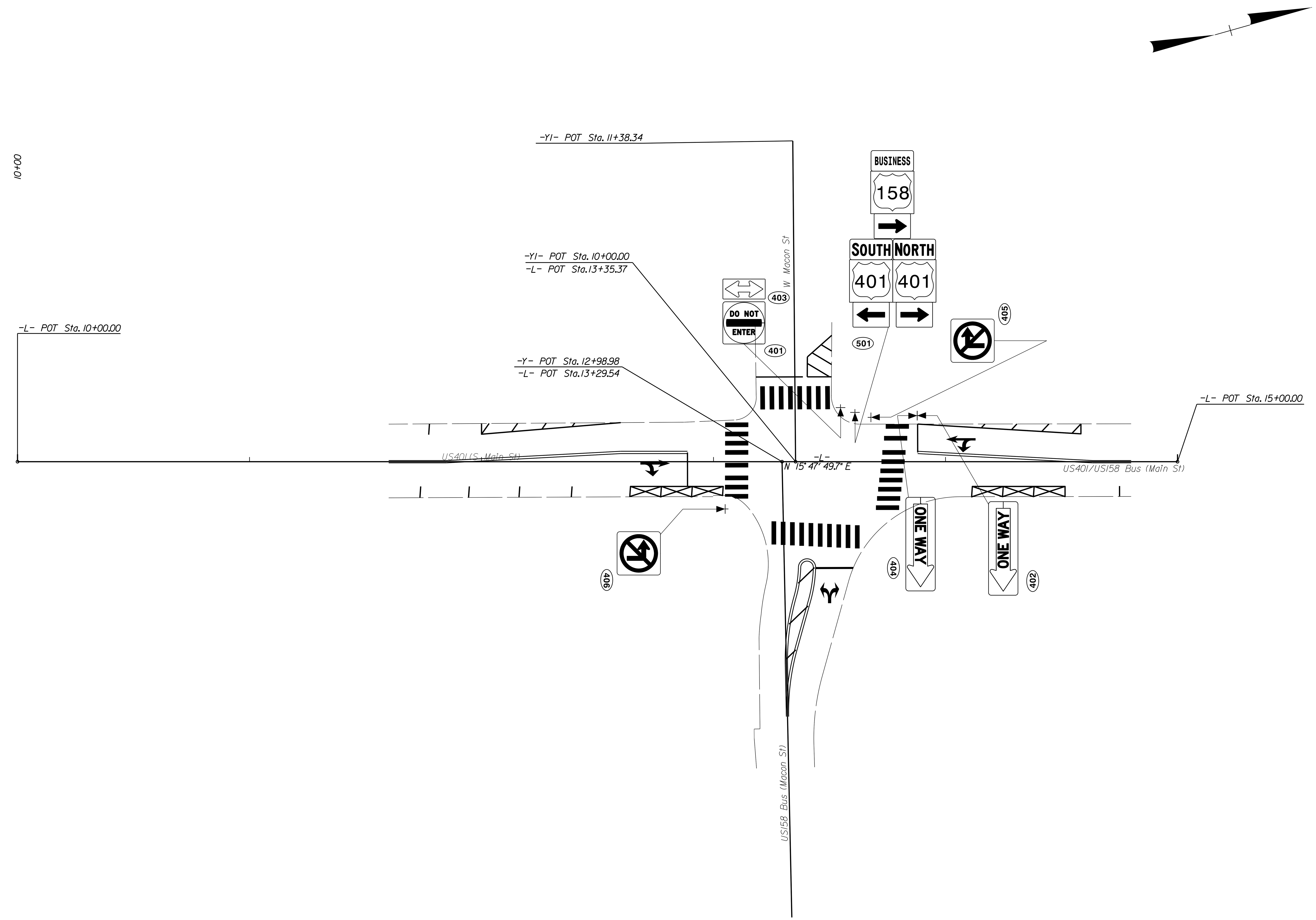
PROJECT REFERENCE NO.	SHEET NO.
49916	SIGN-4

NORTH CAROLINA PROFESSIONAL SEAL 046017 ENGINEER STEPHEN R. DAVIDSON

DocuSigned by: S. Reid Davidson D2F0075CF64C49A...

02/24/2025

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED



PROPOSED SIGNS

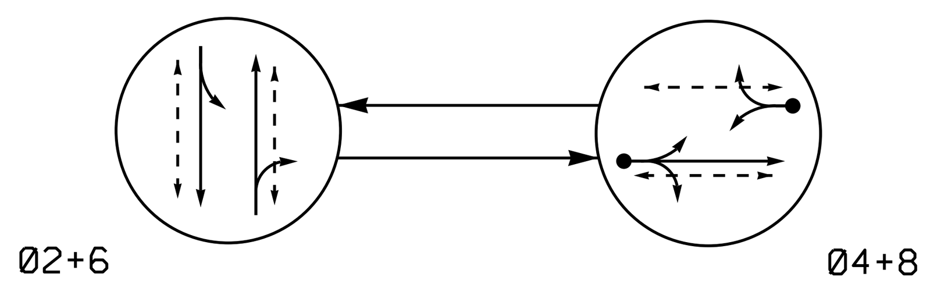
8/17/99

24-FEB-2025 10:25
S:\DOT\Dist3\Warren\FUNDED TIP\49916 - Macon (US158B) at Main (US401)\Proj\49916_Sgn_SGN.dgn
$$$$USERNAME$$$$

PROJECT REFERENCE NO.	SHEET NO.
49916	Sig.1

2 Phase
Semi-Actuated
US 158 Bus.-401 (Main St.) TBS
Signal System #: D05-42-TBS_Warrenton

PHASING DIAGRAM



PHASING DIAGRAM DETECTION LEGEND

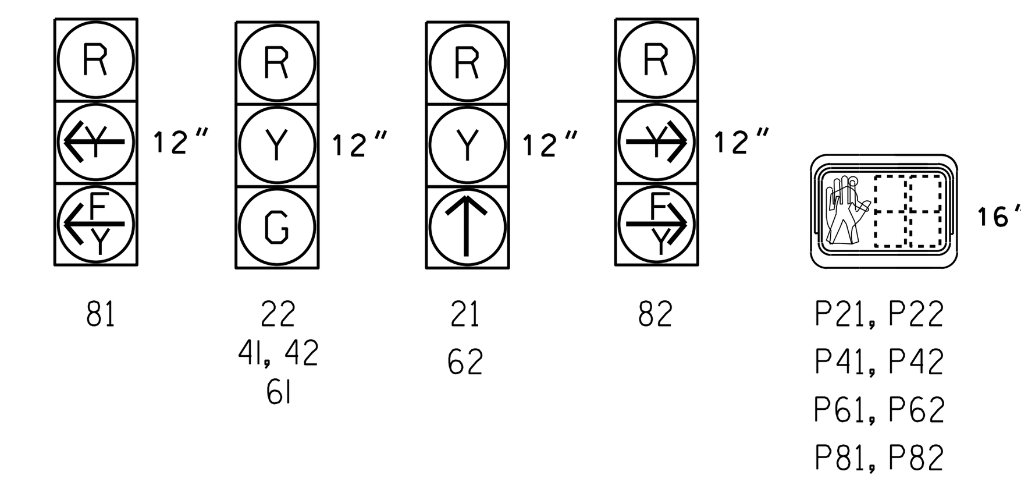
- DETECTED MOVEMENT
- UNDETECTED MOVEMENT (OVERLAP)
- UNSIGNALIZED MOVEMENT
- PEDESTRIAN MOVEMENT

TABLE OF OPERATION			
SIGNAL FACE	PHASE		
	Ø2+6	Ø4+8	FLASH
21	↑	R	R
22	G	R	R
41, 42	R	G	R
61	G	R	R
62	↑	R	R
81	R	←F/Y	R
82	R	F/Y→	R
P21,P22	W	DW	DRK
P41, P42	DW	W	DRK
P61, P62	W	DW	DRK
P81, P82	DW	W	DRK

MAXTIME DETECTOR INSTALLATION CHART												
DETECTOR					PROGRAMMING							
LOOP	SIZE (FT)	DISTANCE FROM STOPBAR (FT)	TURNS	NEW LOOP	CALL PHASE	DELAY TIME	EXTEND TIME	EXTEND	ADDED INITIAL	CALL	DELAY DURING GREEN	NEW CARD
4A	6x40	0	2-4-2	-	4	5.0	-	X	-	X	-	X
8A	6x40	0	2-4-2	X	8	-	-	X	-	X	-	X

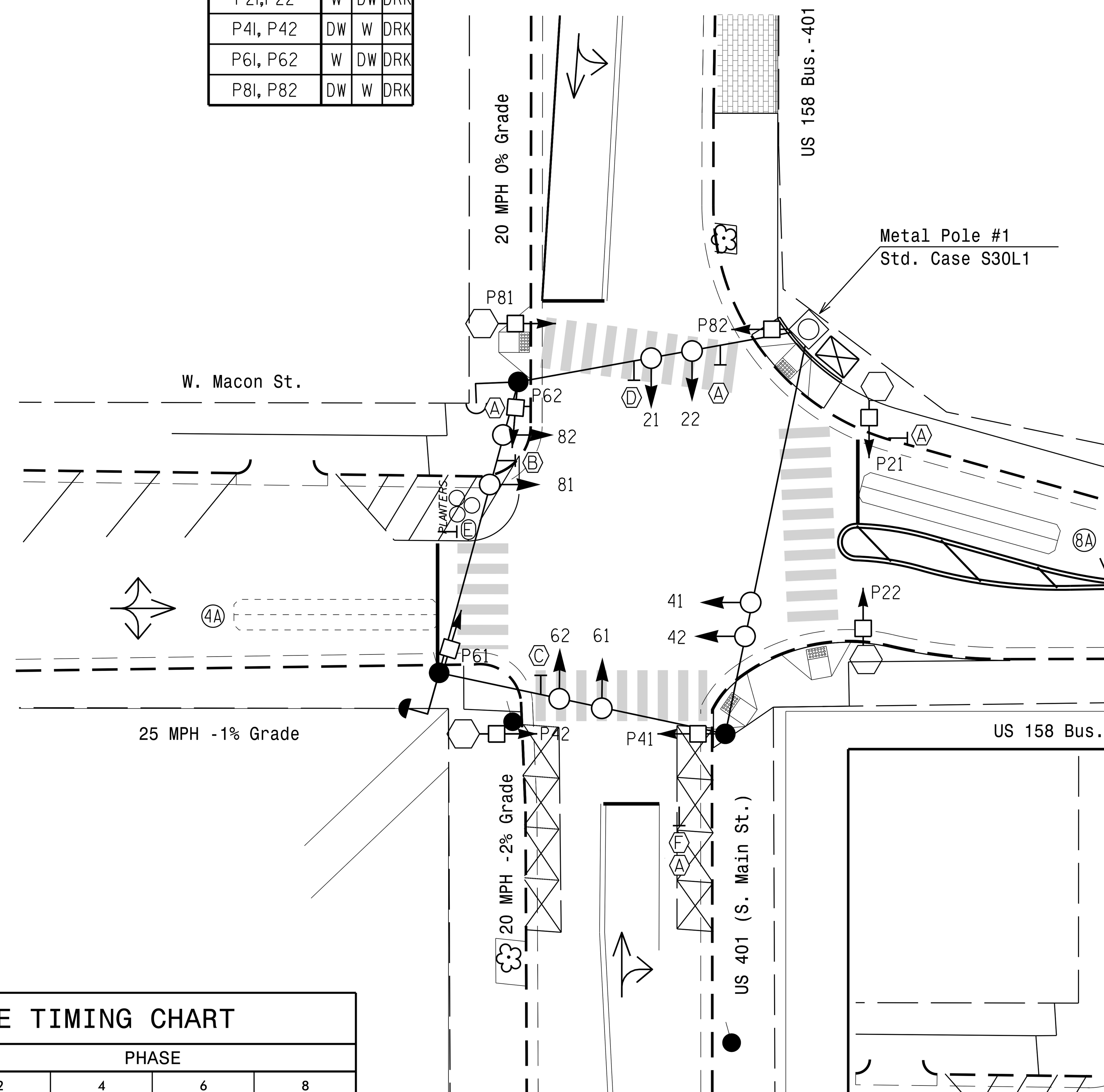
SIGNAL FACE I.D.

All Heads L.E.D.



NOTES

1. Refer to "Roadway Standard Drawings NCDOT" dated January 2024 and "Standard Specifications for Roads and Structures" dated January 2024.
2. Do not program signal for late night flashing operation unless otherwise directed by the Engineer.
3. Set all detector units to presence mode.
4. Locate new cabinet so as not to obstruct sight distance of vehicles turning right on red.
5. Omit "WALK" and flashing "DON'T WALK" with no pedestrian calls for phase 4 and 8.
6. Program pedestrian heads to countdown the flashing "Don't Walk" time only.
7. Pavement markings are existing unless otherwise.
8. Maximum times shown in timing chart are for free-run operation only. Coordinated signal system timing values supersede these values.

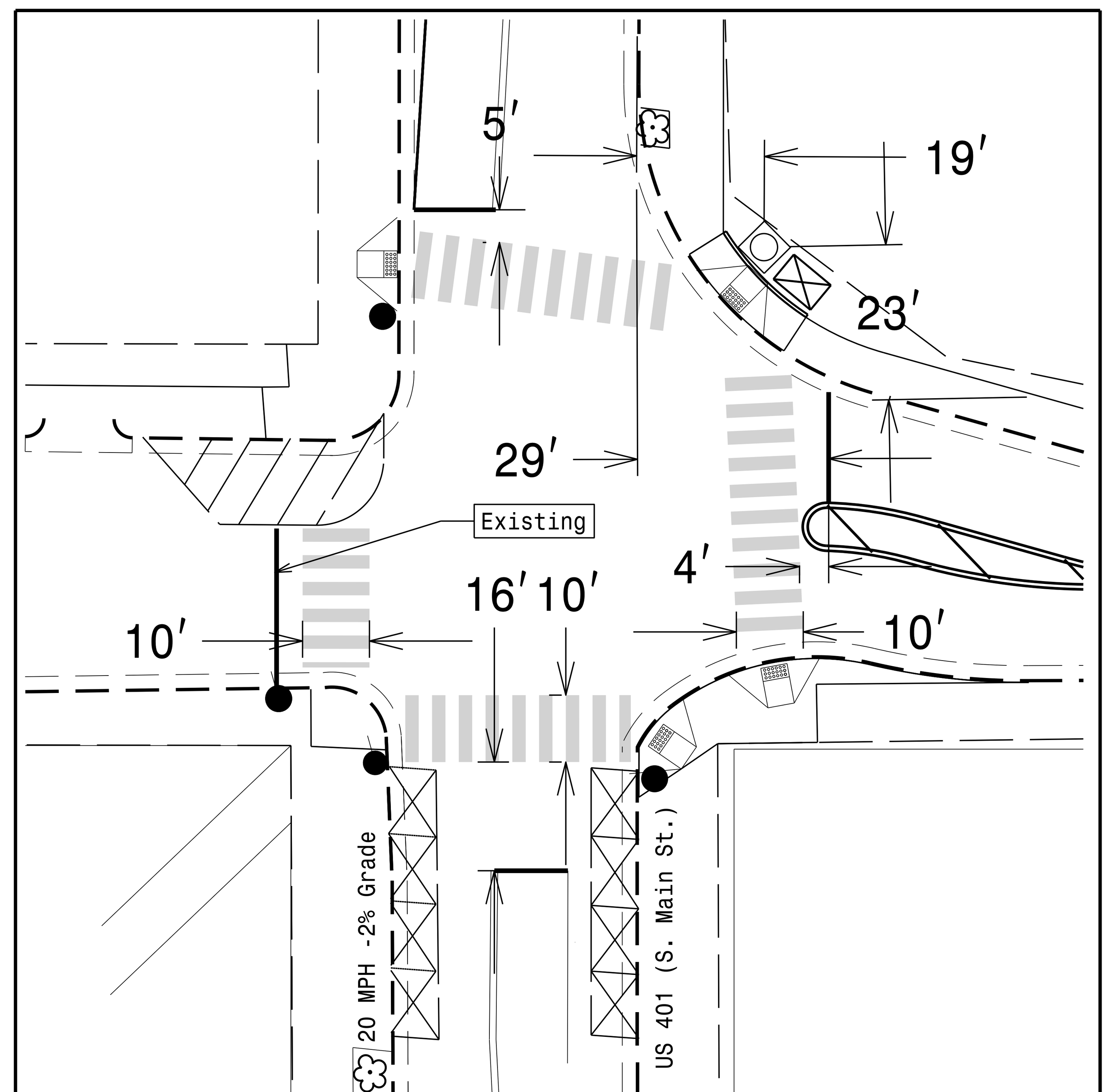


LEGEND

PROPOSED		EXISTING
	Traffic Signal Head	
	Modified Signal Head	N/A
	Sign	
	Pedestrian Signal Head With Push Button & Sign	
	Signal Pole with Guy	
	Signal Pole with Sidewalk Guy	
	Inductive Loop Detector	
	Controller & Cabinet	
	Junction Box	
	2-in Underground Conduit	
N/A	Right of Way	
	Directional Arrow	
N/A	Curb Ramp	
	Metal Strain Pole	
	Type II Signal Pedestal	
(A)	"NO TURN ON RED" Sign (R10-11)	(A)
(B)	No Straight Through Sign (R3-27)	(B)
(C)	No Right Turn Sign (R3-1)	(C)
(D)	No Left Turn Sign (R3-2)	(D)
(E)	"DO NOT ENTER" Sign (R5-1)	(E)
(F)	"STOP HERE ON RED" Sign (R10-6)	(F)

MAXTIME TIMING CHART				
FEATURE	PHASE			
	2	4	6	8
Walk *	10	10	10	10
Ped Clear	8	8	12	11
Min Green *	10	7	10	7
Passage *	–	2.0	–	2.0
Max 1 *	45	20	45	20
Yellow Change	3.0	3.2	3.0	3.2
Red Clear	2.9	2.6	2.9	2.4
Added Initial *	–	–	–	–
Maximum Initial *	–	–	–	–
Time Before Reduction *	–	–	–	–
Time To Reduce *	–	–	–	–
Minimum Gap	–	–	–	–
Advance Walk	3	3	3	3
Non Lock Detector	–	X	–	X
Vehicle Recall	MAX/PED RECALL	–	MAX/PED RECALL	–
Dual Entry	–	X	–	X
Simultaneous Start	–	X	–	X

* These values may be field adjusted. Do not adjust Min Green times for phases 2 and 6 lower than what is shown. Min Green for all other phases should not be lower than 4 seconds.



Proposed Stop Line and Metal Pole Locations

This plan supersedes the plan signed and sealed on 06/21/2022.

Signal Upgrade

Prepared in the Offices of: Transportation Mobility and Safety Division, Signal Design Section
750 N.Greenfield Pkwy.Garner,NC 27529

US 158 Bus.-401 (Main Street)
at
US 158 Bus./NC 58 (Macon Street)

Division 5 Warren County Warrenton

PLAN DATE: January 2025	REVIEWED BY:
PREPARED BY: I. O. Umozurike	REVIEWED BY:

SCALE 0 20, 1"=20'

REVISIONS	INIT.	DATE

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

SEAL
NORTH CAROLINA PROFESSIONAL SEAL 026486 ENGINEER ROBERT J. ZIEMBA

DocuSigned by: Robert J Ziemba
02/25/2025
DATE

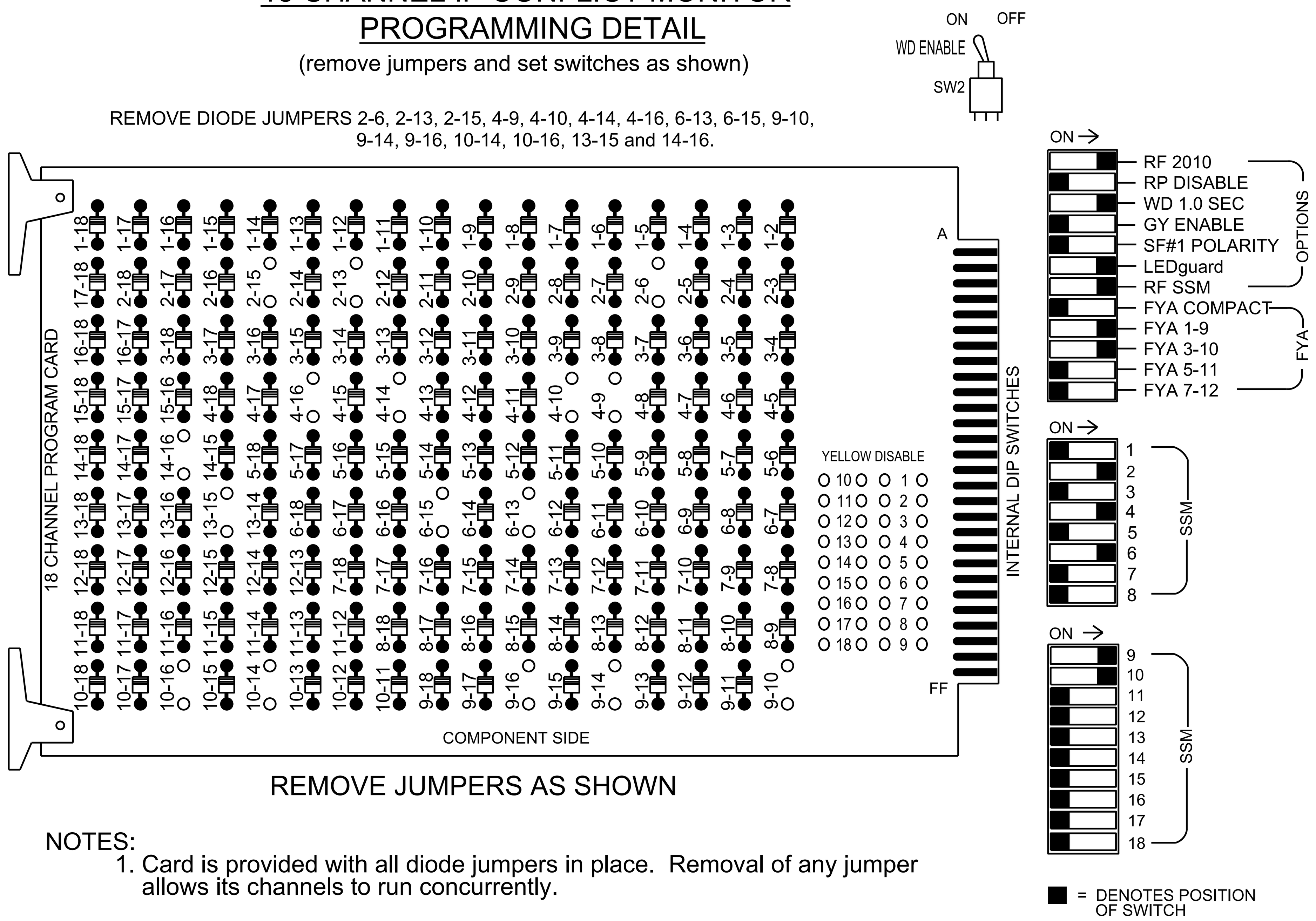
SIG. INVENTORY NO. 05-0612

26-FEB-2025 13:34
S:*ITS&SU*ITS Signals*Signal Design Section*Central Region*Div 5*05-0612*050612_sig_dsn_2025mmdd.dgn
ioumozurike

18 CHANNEL IP CONFLICT MONITOR PROGRAMMING DETAIL

(remove jumpers and set switches as shown)

REMOVE DIODE JUMPERS 2-6, 2-13, 2-15, 4-9, 4-10, 4-14, 4-16, 6-13, 6-15, 9-10, 9-14, 9-16, 10-14, 10-16, 13-15 and 14-16.



REMOVE JUMPERS AS SHOWN

NOTES:

1. Card is provided with all diode jumpers in place. Removal of any jumper allows its channels to run concurrently.
2. Ensure jumpers SEL2-SEL5 and SEL9 are present on the monitor board.
3. Ensure that the Red Enable is active at all times during normal operation.
4. Integrate monitor with Ethernet network in cabinet.

NOTES

1. To prevent "flash-conflict" problems, insert red flash program blocks for all vehicle load switches in the output file. The installer shall verify that signal heads flash in accordance with the signal plan.
2. Program phases 4 and 8 for Dual Entry.
3. Program phases 4 and 8 for Simultaneous Start.
4. Program controller to start up in phase 2 Green No Walk and 6 Green No Walk.
5. If this signal will be managed by an ATMS software, enable controller and detector logging for all detectors used at this location.
6. The cabinet and controller are part of the US 158 Bus.-401 (Main St.) TBS Signal System #: D05-42-TBS_Warrenton.

EQUIPMENT INFORMATION

Controller..2070LX
Cabinet...332 w/ Aux
Software...Q-Free MAXTIME
Cabinet Mount....................................Base
Output File Positions...........................18 With Aux. Output File
Load Switches Used............................S2, S3, S5, S6, S8, S9, S12, AUX S1, AUX S2
Phases Used.......................................2, 2PED, 4, 4PED, 6, 6PED, 8**, 8PED
Overlap "1"..*
Overlap "2"..*
Overlap "3"..Not Used
Overlap "4"..Not Used

*See overlap programming detail on sheet 2
**Phase used for timing purposes

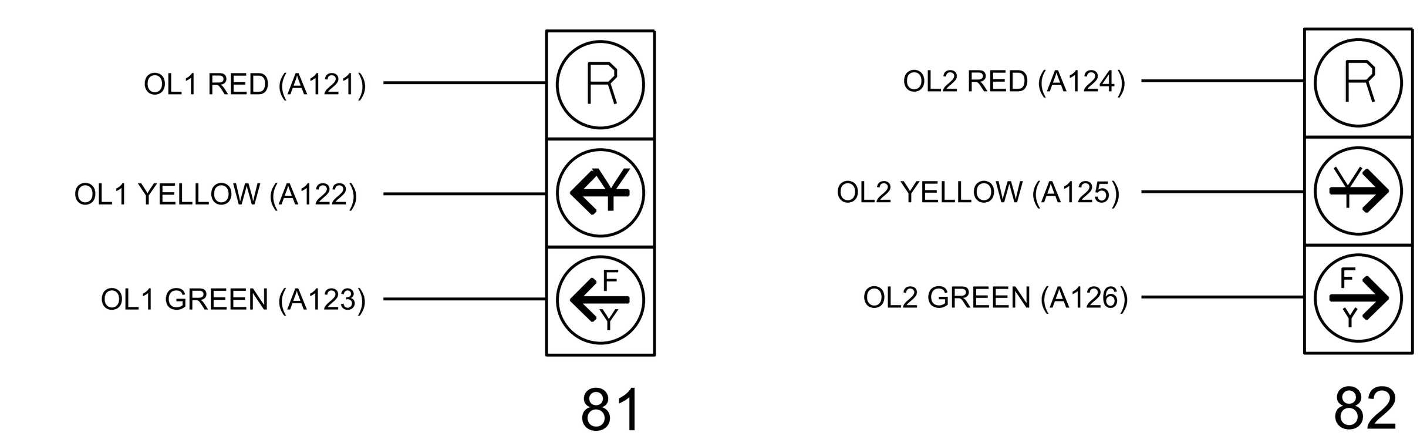
SIGNAL HEAD HOOK-UP CHART

LOAD SWITCH NO.	S1	S2		S3	S4	S5	S6	S7	S8		S9	S10	S11	S12	AUX S1	AUX S2	AUX S3	AUX S4	AUX S5	AUX S6
CMU CHANNEL NO.	1	2		13	3	4	14	5	6		15	7	8	16	9	10	17	11	12	18
PHASE	1	2		2 PED	3	4	4 PED	5	6		6 PED	7	8	8 PED	OL1	OL2	SPARE	OL3	OL4	SPARE
SIGNAL HEAD NO.	NU	21	22	P21, P22	NU	41,42	P41, P42	NU	61	62	P61, P62	NU	NC	P81, P82	81★	82★	NU	NU	NU	NU
RED		128	128			101			134	134					A121	A124				
YELLOW		129	129			102			135	135										
GREEN			130			103			136											
RED ARROW																				
YELLOW ARROW															A122	A125				
FLASHING YELLOW ARROW															A123	A126				
GREEN ARROW		130								136										
(Don't Walk hand)				113			104				119			110						
(Walk person)				115			106				121			112						

NU = Not Used
NC = No Connection
★See pictorial of head wiring in detail this sheet.

FYA SIGNAL WIRING DETAIL

(wire signal heads as shown)



INPUT FILE POSITION LAYOUT

(front view)

FILE		1	2	3	4	5	6	7	8	9	10	11	12	13	14
"I"	U	SLOT EMPTY	SLOT EMPTY	SLOT EMPTY	SLOT EMPTY	SLOT EMPTY	Ø 4 4A	SLOT EMPTY	SLOT EMPTY	SLOT EMPTY	SLOT EMPTY	SLOT EMPTY	NOT USED	NOT USED	FS DC ISOLATOR
	L						NOT USED						Ø 4 PED DC ISOLATOR	Ø 8 PED DC ISOLATOR	ST DC ISOLATOR
"J"	U	SLOT EMPTY	SLOT EMPTY	SLOT EMPTY	SLOT EMPTY	SLOT EMPTY	Ø 8 8A	SLOT EMPTY	SLOT EMPTY	SLOT EMPTY	SLOT EMPTY	SLOT EMPTY	SLOT EMPTY	SLOT EMPTY	SLOT EMPTY
	L						NOT USED								

EX.: 1A, 2A, ETC. = LOOP NO.'S

FS = FLASH SENSE
ST = STOP TIME

INPUT FILE CONNECTION & PROGRAMMING CHART

LOOP NO.	LOOP TERMINAL	INPUT FILE POS.	PIN NO.	INPUT POINT	DETECTOR NO.	CALL PHASE	DELAY TIME	EXTEND TIME	EXTEND	ADDED INITIAL	CALL	DELAY DURING GREEN
4A	TB4-9,10	I6U	41	3	8	4	5		X		X	
8A	TB5-9,10	J6U	42	4	22	8			X		X	
PED PUSH BUTTONS												
P41,P42	TB8-5,6	I12L	69	35	4	PED 4						
P81,P82	TB8-8,9	I13L	70	36	8	PED 8						

NOTE:
INSTALL DC ISOLATORS IN INPUT FILE SLOTS I12 AND I13.

INPUT FILE POSITION LEGEND: J2L

FILE J
SLOT 2
LOWER

This Plan Supersedes Electrical Detail Sealed on 6/23/2022

THIS ELECTRICAL DETAIL IS FOR
THE SIGNAL DESIGN: 05-0612
DESIGNED: January 2025
SEALED: 2/25/2025
REVISED: N/A

COUNTDOWN PEDESTRIAN SIGNAL OPERATION

Countdown Ped Signals are required to display timing only during Ped Clearance Interval. Consult Ped Signal Module user's manual for instructions on selecting this feature.

Electrical Detail - Sheet 1 of 2

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

Electrical and Programming Details For:

US 158 Bus.-401 (Main Street)
at
US 158 Bus./NC 58 (Macon Street)

Division 5 Warren County Warrenton

PLAN DATE: February 2025 REVIEWED BY:
PREPARED BY: Zarrar Zafar REVIEWED BY:

REVISIONS INIT. DATE

Prepared in the Offices of:
Transportation Mobility and Safety Division — ITS & Signals Management Section
750 N. Greenfield Pkwy, Garner, NC 27529

SEAL
NORTH CAROLINA PROFESSIONAL SEAL 031001 ENGINEER D. TODD JOYCE
DocuSigned by: D. Todd Joyce 02/26/2025
DATE

SIG. INVENTORY NO. 05-0612

PROJECT REFERENCE NO.	SHEET NO.
49916	Sig. 3

MAXTIME STARTUP AND SOFTWARE FLASH PROGRAMMING DETAIL

Front Panel
Main Menu >Controller >Unit

Web Interface
Home >Controller >Unit

Modify parameters as shown below and save changes.

Start Up Parameters

StartUp Clearance Hold
6

Unit Flash Parameters

All Red Flash Exit Time
6

OVERLAP PROGRAMMING

Front Panel
Main Menu >Controller >Overlap >Overlap Parameters/Overlap Timings

Web Interface
Home >Controller >Overlap Configuration >Overlaps

Overlap Plan 1

Overlap	1	2
Type	FYA 4 - Section	FYA 4 - Section
Included Phases	4	8
Modifier Phases	-	-
Modifier Overlaps	-	-
Trail Green	0	0
Trail Yellow	0.0	0.0
Trail Red	0.0	0.0

OUTPUT CHANNEL CONFIGURATION

Front Panel
Main Menu >Controller >More>Channels>Channels Config

Web Interface
Home >Controller >Advanced IO>Channels>Channel Configuration

Channel Configuration

Channel	Control Type	Control Source	Flash Yellow	Flash Red	Flash Alt	MMU Channel
1	Phase Vehicle	1		X	X	1
2	Phase Vehicle	2		X		2
3	Phase Vehicle	3		X	X	3
4	Phase Vehicle	4		X		4
5	Phase Vehicle	5		X		5
6	Phase Vehicle	6		X	X	6
7	Phase Vehicle	7		X		7
8	Phase Vehicle	8		X	X	8
9	Overlap	1		X	X	9
10	Overlap	2		X	X	10
11	Overlap	3		X		11
12	Overlap	4		X		12
13	Phase Ped	2				13
14	Phase Ped	4				14
15	Phase Ped	6				15
16	Phase Ped	8				16
17	Overlap	5		X	X	17
18	Overlap	6		X		18

This Plan Supersedes Electrical Detail Sealed on 6/23/2022

THIS ELECTRICAL DETAIL IS FOR
THE SIGNAL DESIGN: 05-0612
DESIGNED: January 2025
SEALED: 2/25/2025
REVISED: N/A

Electrical Detail - Sheet 2 of 2

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

Electrical and Programming Details For:

US 158 Bus.-401 (Main Street)
at
US 158 Bus./NC 58 (Macon Street)

Prepared in the Offices of:
Transportation Mobility and Safety Division
ITS & Signals Management Section
State of North Carolina Department of Transportation
750 N. Greenfield Pkwy, Garner, NC 27529

Division 5 | Warren Cointy | Warrenton

PLAN DATE: February 2025	REVIEWED BY:
PREPARED BY: Zarrar Zafar	REVIEWED BY:

REVISIONS	INIT.	DATE

SEAL
NORTH CAROLINA PROFESSIONAL SEAL 031001 ENGINEER D. TODD JOYCE

DocuSigned by: D. Todd Joyce 02/26/2025
A90CADEDBD4241D...
DATE

SIG. INVENTORY NO. 05-0612

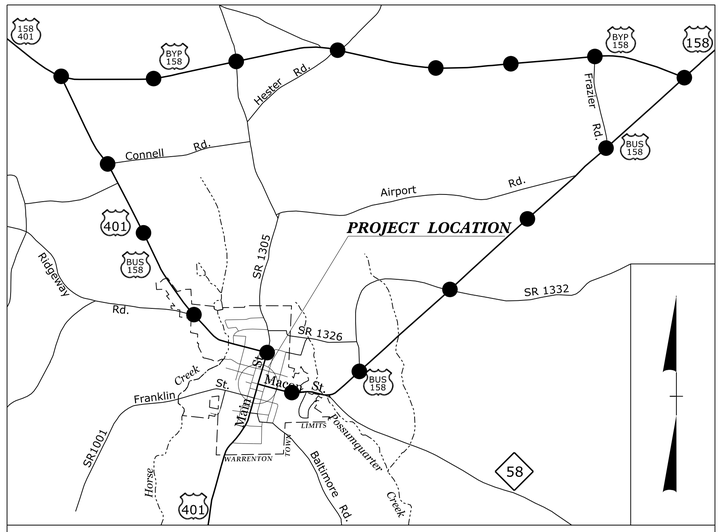
26-FEB-2025 11:31
S:*ITS&SU*ITS Signals*Workgroups*Sig Man*Zafar*Plans*Division 5*050612 new*050612_sm_ele_2025mmdd.dgn
zzafar

T.I.P. NO.	SHEET NO.
49916	UC–1

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

WARREN COUNTY
UTILITY CONSTRUCTION PLANS

TIP PROJECT: 49916

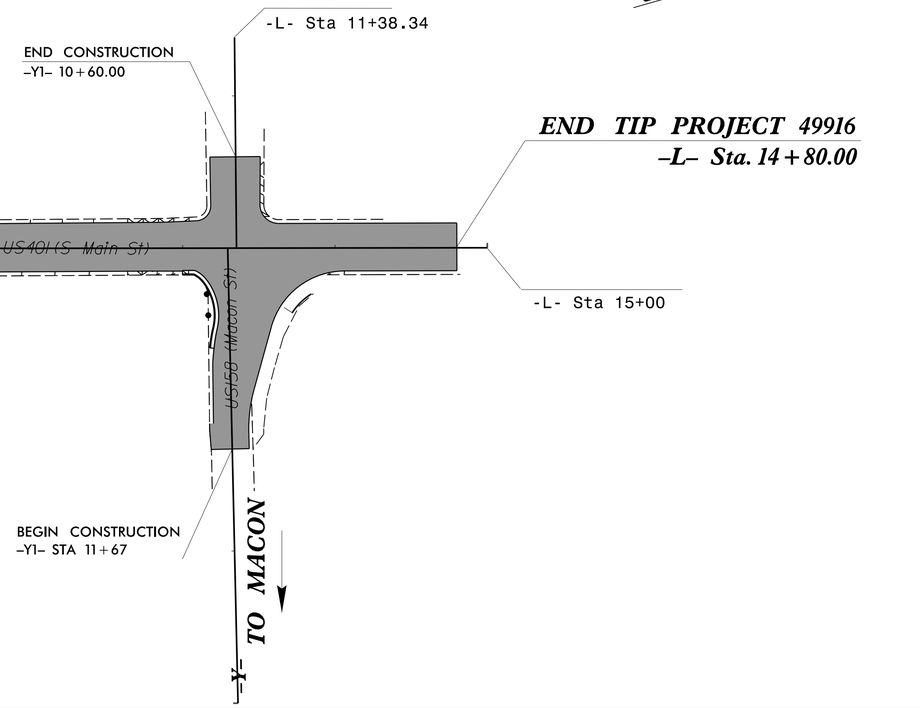


VICINITY MAP

OFF–SITE DETOUR

LOCATION: US401 (MAIN ST.) AT US158 BUS. (MACON ST.)

TYPE OF WORK: WATER RELOCATION



GRAPHIC SCALES

PLANS: 20 10 0 20 40

PROFILE (HORIZONTAL): 20 10 0 20 40

PROFILE (VERTICAL): 5 0 5 10

INDEX OF SHEETS

SHEET NO.:	DESCRIPTION:
UC–1	TITLE SHEET
UC–2	UTILITY SYMBOLOGY
UC–3	NOTES
UC–4	PLANS

WATER AND SEWER OWNERS ON PROJECT

(A) TOWN OF WARRENTON WATER

PREPARED IN THE OFFICE OF:

PENNONI ASSOCIATES INC.
5430 WADE PARK BLVD., SUITE 106,
RALEIGH, NC 27607 PHONE: 919.929.1173
FAX: 919.493.6548 NC LICENSE #F-1267

BRIAN WILES, PE	UTILITY PROJECT MANAGER
ERIC TWEED, PE	PROJECT UTILITY ENGINEER
LEVI SMITH	PROJECT UTILITY COORDINATOR

SEAL

NORTH CAROLINA PROFESSIONAL SEAL 028912 ENGINEER ERIC M TWEED

DocuSigned by: Eric Tweed 2/19/2025

DIVISION OF HIGHWAYS
DIVISION 5
PROJECT DELIVERY UNIT
2612 NORTH DUKE STREET
DURHAM NC 27704
PHONE (919) 317–4700
FAX (919) 317–4710

SUSAN LANCASTER, PE	TEAM LEAD
MATTHEW NOLFO, PE	PROJECT MANAGER
DON W PROPER	DIVISION UTILITIES ENGINEER
JAMES SWINSON	UTILITIES ENGINEER

2/10/2025
R:\Utilities\Engineering\UC\Proj\49916_uc_tsh_UC01_psh.dgn
USERNAME=

9/10/2021

PROJECT REFERENCE NO.	SHEET NO.
49916	UC-2

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)
- Computed Property Corner
- Existing Concrete Monument (ECM)
- Parcel/Sequence Number
- Existing Fence Line
- Proposed Woven Wire Fence
- Proposed Chain Link Fence
- Proposed Barbed Wire Fence
- Existing Wetland Boundary
- Proposed Wetland Boundary
- Existing Endangered Animal Boundary
- Existing Endangered Plant Boundary
- Existing Historic Property Boundary
- Known Contamination Area: Soil
- Potential Contamination Area: Soil
- Known Contamination Area: Water
- Potential Contamination Area: Water
- Contaminated Site: Known or Potential

BUILDINGS AND OTHER CULTURE:

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

HYDROLOGY:

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

RAILROADS:

- Standard Gauge
- RR Signal Milepost
- 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
- Existing Control of Access Line
- Proposed Control of Access Line
- Proposed ROW and CA Line
- Existing Easement Line
- Proposed Temporary Construction Easement
- Proposed Temporary Drainage Easement
- Proposed Permanent Drainage Easement
- Proposed Permanent Drainage/Utility Easement
- Proposed Permanent Utility Easement
- Proposed Temporary Utility Easement
- Proposed Aerial Utility Easement

ROADS AND RELATED FEATURES:

- Existing Edge of Pavement
- Existing Curb
- Proposed Slope Stakes Cut
- Proposed Slope Stakes Fill
- Proposed Curb Ramp
- 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

EXISTING STRUCTURES:

MAJOR:

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

MINOR:

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

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
- Power Line Tower
- Power Transformer
- U/G Power Cable Hand Hole
- H–Frame Pole
- U/G Power Line Test Hole (SUE – LOS A)*
- U/G Power Line (SUE – LOS B)*
- U/G Power Line (SUE – LOS C)*
- U/G Power Line (SUE – LOS D)*

TELEPHONE:

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

WATER:

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

TV:

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

GAS:

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

SANITARY SEWER:

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

MISCELLANEOUS:

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

5/14/99

UTILITY CONSTRUCTION

PROJECT REFERENCE NO.	SHEET NO.
49916	UC-3
DESIGNED BY: EMT	
DRAWN BY: LMS	
CHECKED BY:	
APPROVED BY:	
REVISED:	
NORTH CAROLINA DEPARTMENT OF TRANSPORTATION	
UTILITIES ENGINEERING SEC. PHONE:(919)707-6690 FAX:(919)250-4151	

NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 028912 ERIC M. TWEED

DocuSigned by: Eric Tweed 2/19/2025

UTILITY CONSTRUCTION PLANS ONLY

UTILITY CONSTRUCTION

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

GENERAL NOTES:

1. THE PROPOSED UTILITY CONSTRUCTION SHALL MEET THE APPLICABLE REQUIREMENTS OF THE NC DEPARTMENT OF TRANSPORTATION'S "STANDARD SPECIFICATIONS FOR ROADS AND STRUCTURES" DATED JANUARY 2024.

2. THE EXISTING UTILITIES BELONG TO WARREN COUNTY.

3. ALL WATER LINES TO BE INSTALLED WITHIN COMPLIANCE OF THE RULES AND REGULATIONS OF THE NORTH CAROLINA DEPARTMENT OF ENVIRONMENTAL QUALITY, DIVISION OF WATER RESOURCES, PUBLIC WATER SUPPLY SECTION. ALL SEWER LINES TO BE INSTALLED WITHIN COMPLIANCE OF THE RULES AND REGULATIONS OF THE NORTH CAROLINA DEPARTMENT OF ENVIRONMENT QUALITY, DIVISION OF WATER RESOURCES, WATER QUALITY SECTION. PERFORM ALL WORK IN ACCORDANCE WITH THE APPLICABLE PLUMBING CODES.

4. THE UTILITY OWNER OWNS THE EXISTING UTILITY FACILITIES AND WILL OWN THE NEW UTILITY FACILITIES AFTER ACCEPTANCE BY THE DEPARTMENT. THE DEPARTMENT OWNS THE CONSTRUCTION CONTRACT AND HAS ADMINISTRATIVE AUTHORITY. COMMUNICATIONS AND DECISIONS BETWEEN THE CONTRACTOR AND UTILITY OWNER ARE NOT BINDING UPON THE DEPARTMENT OR THIS CONTRACT UNLESS AUTHORIZED BY THE ENGINEER. AGREEMENTS BETWEEN THE UTILITY OWNER AND CONTRACTOR FOR THE WORK THAT IS NOT PART OF THIS CONTRACT OR IS SECONDARY TO THIS CONTRACT ARE ALLOWED, BUT ARE NOT BINDING UPON THE DEPARTMENT.

5. PROVIDE ACCESS FOR THE DEPARTMENT PERSONNEL AND THE OWNER'S REPRESENTATIVES TO ALL PHASES OF CONSTRUCTION. NOTIFY DEPARTMENT PERSONNEL AND THE UTILITY OWNER TWO WEEKS PRIOR TO COMMENCEMENT OF ANY WORK AND ONE WEEK PRIOR TO SERVICE INTERRUPTION. KEEP UTILITY OWNERS' REPRESENTATIVES INFORMED OF WORK PROGRESS AND PROVIDE OPPORTUNITY FOR INSPECTION OF CONSTRUCTION AND TESTING.

6. THE PLANS DEPICT THE BEST AVAILABLE INFORMATION FOR THE LOCATION, SIZE, AND TYPE OF MATERIAL FOR ALL EXISTING UTILITIES. MAKE INVESTIGATIONS FOR DETERMINING THE EXACT LOCATION, SIZE, AND TYPE MATERIAL OF THE EXISTING FACILITIES AS NECESSARY FOR THE CONSTRUCTION OF THE PROPOSED UTILITIES AND FOR AVOIDING DAMAGE TO EXISTING FACILITIES. REPAIR ANY DAMAGE INCURRED TO EXISTING FACILITIES TO THE ORIGINAL OR BETTER CONDITION AT NO ADDITIONAL COST TO THE DEPARTMENT.

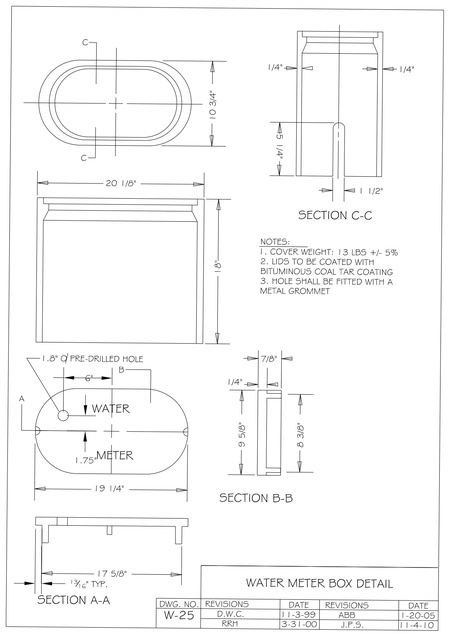
7. MAKE FINAL CONNECTIONS OF THE NEW WORK TO THE EXISTING SYSTEM WHERE INDICATED ON THE PLANS, AS REQUIRED TO FIT THE ACTUAL CONDITIONS, OR AS DIRECTED.

8. MAKE CONNECTIONS BETWEEN EXISTING AND PROPOSED UTILITIES AT TIMES MOST CONVENIENT TO THE PUBLIC, WITHOUT ENDANGERING THE UTILITY SERVICE, AND IN ACCORDANCE WITH THE UTILITY OWNER'S REQUIREMENTS. MAKE CONNECTIONS ON WEEKENDS, AT NIGHT, AND ON HOLIDAYS IF NECESSARY.

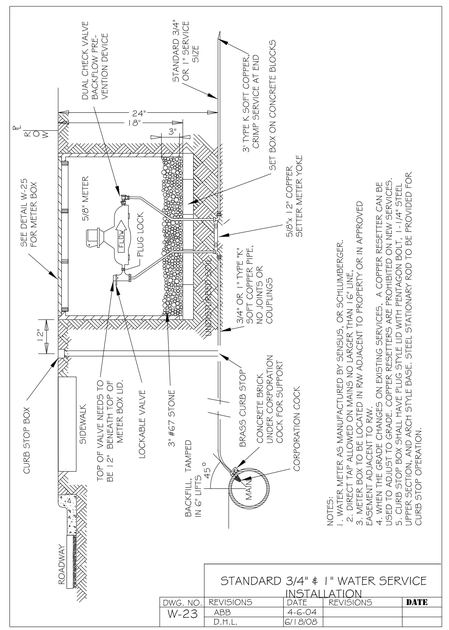
9. ALL UTILITY MATERIALS SHALL BE APPROVED PRIOR TO DELIVERY TO THE PROJECT. SEE 1500-7, " SUBMITTALS AND RECORDS" IN SECTION 1500 OF THE STANDARD SPECIFICATIONS.

PROJECT SPECIFIC NOTES:

1. CONTRACTOR'S ATTENTION IS DIRECTED TO SECTIONS 102, 107, AND 1550 OF THE STANDARD SPECIFICATIONS CONCERNING TRENCHLESS INSTALLATION. IT IS CONTRACTOR'S RESPONSIBILITY TO HAVE BORE DESIGNED AND SEALED BY A LICENSED NORTH CAROLINA PROFESSIONAL ENGINEER. NO DAMAGE IS ALLOWED TO RIVER, WETLANDS, OR BUFFER ZONES.



WATER METER BOX DETAIL				
DWG. NO.	REVISIONS	DATE	REVISIONS	DATE
W-25	D.W.C.	11-3-99	ABB	1-20-05
	RRH	3-31-00	J.P.S.	11-4-10


DUAL CHECK VALVE BACKFLOW PREVENTION DEVICE
STANDARD 3/4" OR 1" SERVICE SIZE
24"
18"
6" MIN.
SEE DETAIL W-25 FOR METER BOX
5/8" METER
PLUG LOCK
3' TYPE K SOFT COPPER, CRIMP SERVICE AT END
SET BOX ON CONCRETE BLOCKS
5/8" x 12" COPPER SETTER METER YOKE
1" MIN. COVER
1.5"
1.2"
1" MIN.
1" MIN.
1" MIN.

5/14/99

Pennoni
PENNONI ASSOCIATES INC.
5430 WADE PARK BLVD., SUITE 106,
RALEIGH, NC 27607 PHONE: 919.929.1173
FAX: 919.493.6548 NC LICENSE #F-1267

PROJECT REFERENCE NO.	SHEET NO.
49916	UC04
DESIGNED BY: EMT	
DRAWN BY: LMS	
CHECKED BY:	
APPROVED BY:	
REVISED:	
NORTH CAROLINA DEPARTMENT OF TRANSPORTATION	
UTILITIES ENGINEERING SEC. PHONE:(919)707-6690 FAX:(919)250-4151	2/19/2025 UTILITY CONSTRUCTION PLANS ONLY

NORTH CAROLINA PROFESSIONAL SEAL 028912 ENGINEER ERIC M. TWEED
DocuSigned by: Eric Tweed 2/19/2025

UTILITY CONSTRUCTION

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

10+00

-Y1- POT Sta. 11+38.34

-Y- POT Sta. 12+98.98
-L- POT Sta. 13+29.54

END CONSTRUCTION
-Y1- 10+60.00

-Y1- POT Sta. 10+00.00
-L- POT Sta. 13+35.37

-L- POT Sta. 10+00.00

BEGIN TIP PROJECT 49916
-L- 11+60.00

END TIP PROJECT 49916
-L- 14+80.00

-L- POT Sta. 15+00.00

WARREN COUNTY COURTHOUSE

75' CENTERLINE TAPER

REMOVE PARKING SPOTS

DEVALDIA INC
DB 1098 PG 205

LAURA S.TAYLOR HEIRS & T.H.HOOPER JR.

EVELYN J. SHEARIN DB 1069 PG 128

W Macon St

N 74° 42' 14.4" W

38.2'

EX. 5E

8" PVC

BRICK SIDEWALK

CONC

RETAIN

US401 (S Main St)

N 15° 47' 49.7" E

8" PVC (Main St)

END 2'6" C&G
-L- 14+06.28

REMOVE EX CB

401

TB JB w/MH

DO NOT DISTURB POLE

1 EA REMOVE WATER METER

END SBG
END CONC SW
-L- 12+99.82

DO NOT DISTURB POLE

FUTURE BOLLARDS INSTALLED BY OTHERS

MARKET ST

END 2'6" C&G
BEGIN SBG
BEGIN CONC SW
-Y- +23.42

PLUG AND FILL EX. 18" RCP WITH FLOWABLE FILL FROM STR. 401 TO STR. 403

APPROX. STRAIN POLE LOCATION

2 EA RELOCATE WATER METER

KIMBERLY R.HARDING DB 972 PG 191

REMOVE 19 LF OF EX. 18" PIPE

403

CB

98'R

PRESERVATION WARRENTON INC
DB 1089 PG 288

CAROLYN CHEEK DB 964 PG 102

STEPHEN BOYD DB 813 PG 20

TRUSTEE FOR BOBBYE RAYE WOMACK DB 1007 PG 287

DO NOT DISTURB POLE

BEGIN 2'6" C&G
-Y- 11+84.00

BEGIN CONSTRUCTION
-Y- 11+67.00

404

BEGIN CONC. SW
-Y- +76.39

SUSAN A BLEVENS
DB 944 PG 145

TIE EX. 15" PIPE TO CB

US158 Bus (Main St)

N 75° 25' 54.2" W

10" PVC

27 LF OF WATER SERVICE LINE

BRANCH BANKING & TRUST CO.
DB 352 PG 124

1/29/2025
I:\Projects\Engineering\UC\Proj\49916_ut_rdy04_uc02_psh.dgn
LMSMITH

6/23/16

PROJ. REFERENCE NO.	SHEET NO.
49916	X-1

Scale: 0 2.5 5

18-DEC-2024 10:06
S:\UDC\Dist3\Warren\FUNDED TIP\49916 - Macon (US158B) at Main (US401)\CorridorModeling\49916_Rdy_xpl_L.dgn
$$$$USERNAME$$$$

6/23/16

0 2.5 5	PROJ. REFERENCE NO.	SHEET NO.
	49916	X-2

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

395
390
385
380

EXIST EXIST

-Y- 12+70
387.328'

388.27
13+40.00

EXIST EXIST

-Y- 12+70
387.447'

388.20
13+20.00

EXIST EXIST

387.81

388.63
13+00.00

EXIST EXIST

388.54
12+80.00

EXIST EXIST

389.03
12+60.00

18-DEC-2024 10:07
S:\UDC\23\Warren\FUNDED TIP\49916 - Macon (US15BB) at Main (US401)\CorridorModeling\49916_Rdy_xpl_L.dgn
$$$$USERNAME$$$$

PROJ. REFERENCE NO.	SHEET NO.
49916	X-3

6/23/16

18-DEC-2024 10:07
S:\DOT\Dist3\Warren\FUNDED TIP\49916 - Macon (US158B) at Main (US401)\CorridorModeling\49916_Rdy_xpl_L.dgn
$$$$USERNAME$$$$

0 2.5 5	PROJ. REFERENCE NO.	SHEET NO.
	49916	X-4

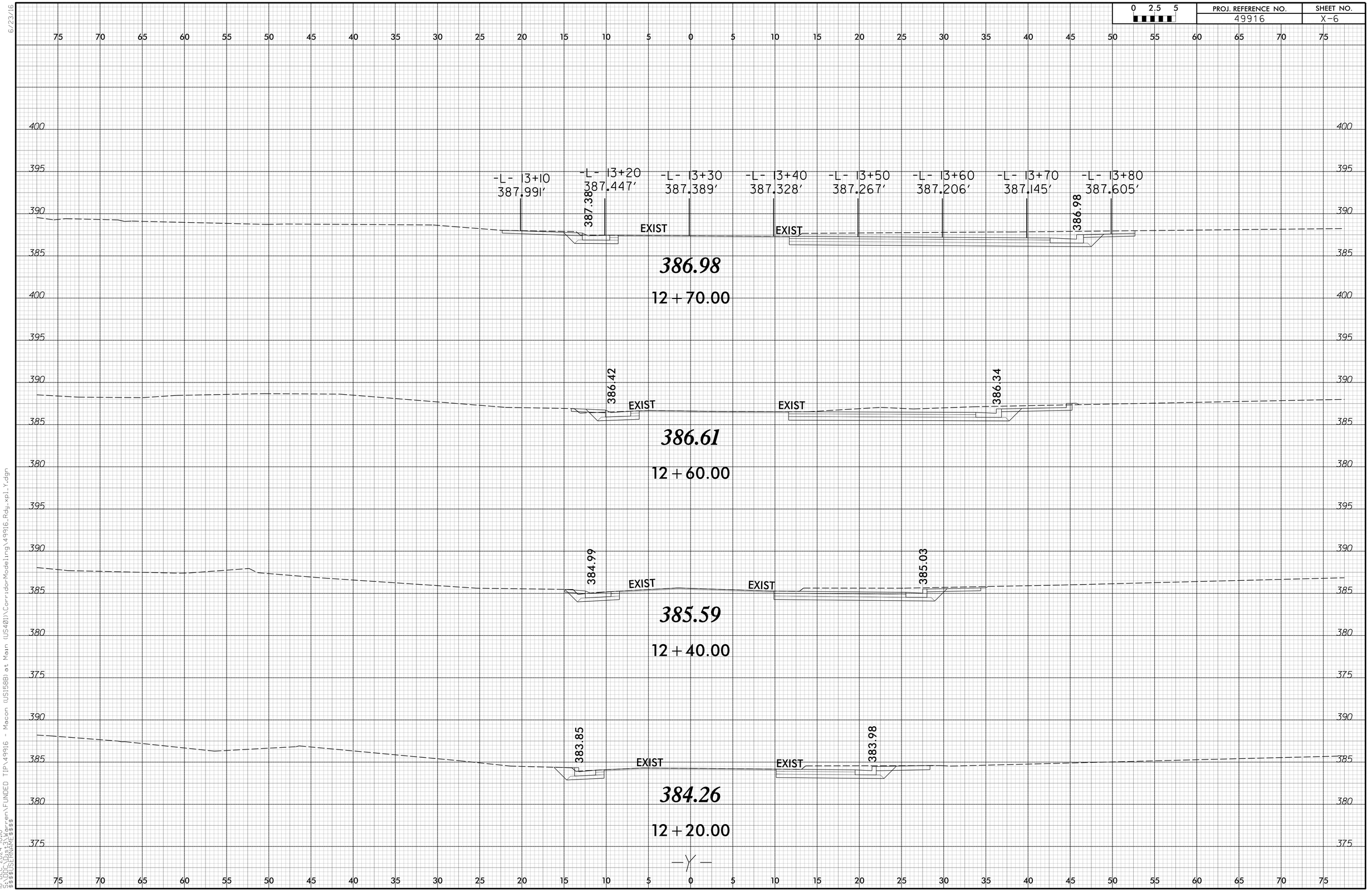
0 2.5 5	PROJ. REFERENCE NO.	SHEET NO.
	49916	X-5

6/23/16

18-DEC-2024 10:09
S:\DDC\Dist3\Warren\FUNDED TIP\49916 - Macon (US158B) at Main (US401)\CorridorModeling\49916_Rdy_xpl_Y.dgn
$$$$USERNAME$$$$

6/23/16

0 2.5 5	PROJ. REFERENCE NO.	SHEET NO.
	49916	X-6



18-DEC-2024 10:40
$$$$USERNAME$$$$
S:\NCDOT\Warren\FUNDED TIP\49916 - Macon (US158B) at Main (US401)\CorridorModeling\49916_Rdy_xpl_Y.dgn

0 2.5 5	PROJ. REFERENCE NO.	SHEET NO.
	49916	X-7

6/23/16

18-DEC-2024 10:10
S:\DOC\Dist3\Warren\FUNDED TIP\49916 - Macon (US158B) at Main (US401)\CorridorModeling\49916_Rdy_xpl_Y.dgn
$$$$USERNAME$$$$

PROJ. REFERENCE NO.	SHEET NO.
49916	X-8

6/23/16

18-DEC-2024 10:11
S:\...\FUNDED TIP\49916 - Macon (US158B) at Main (US401)\CorridorModeling\49916_Rdy_xpl_Y1.dgn
$$$$USERNAME$$$$