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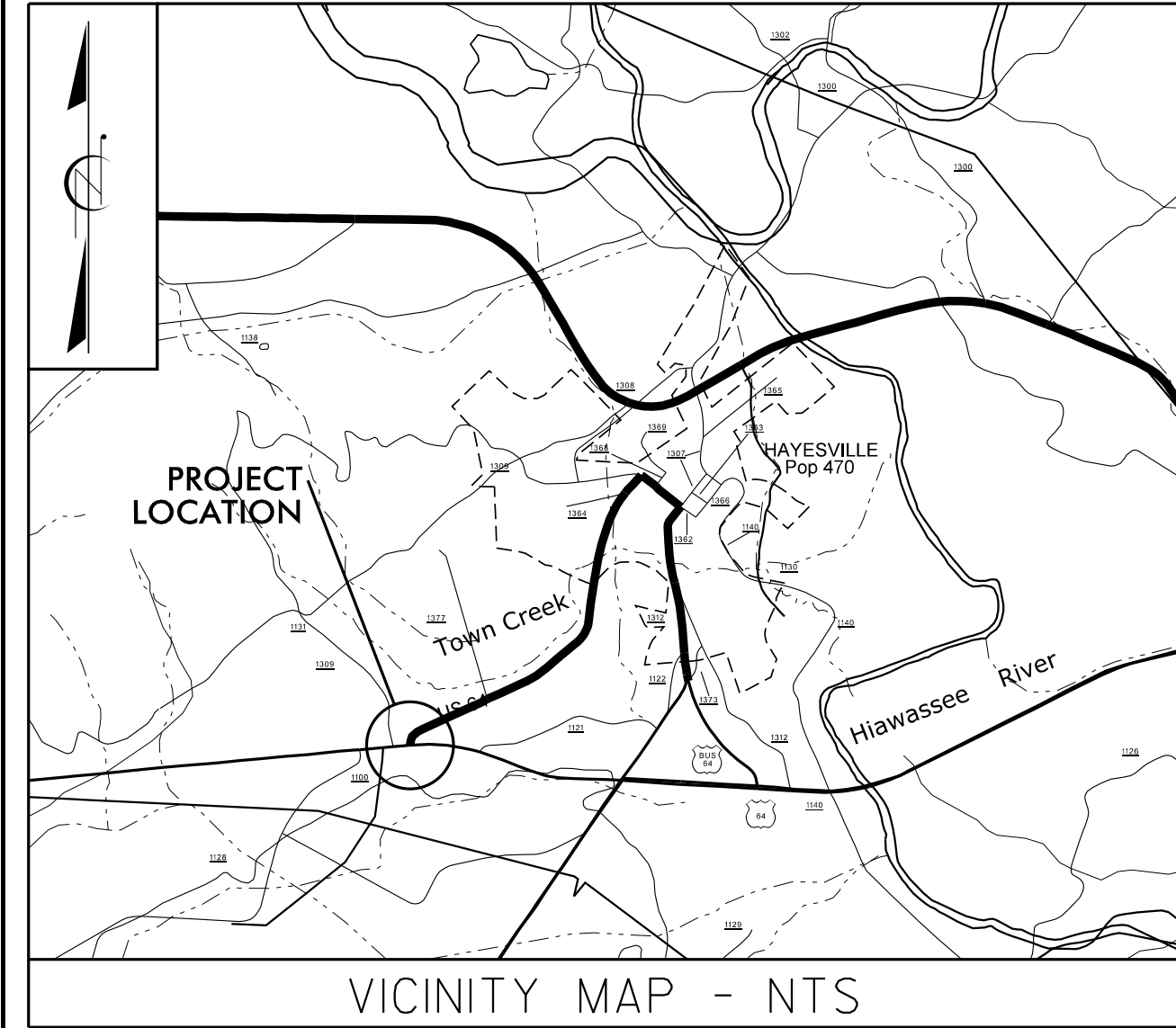
**This file or an individual page
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08/22/13

PROJECT: R-5863A

CONTRACT: DN01072

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



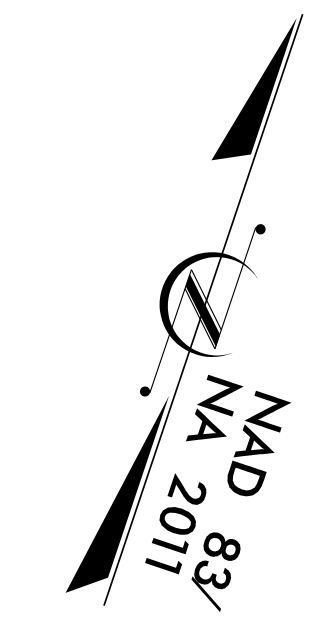
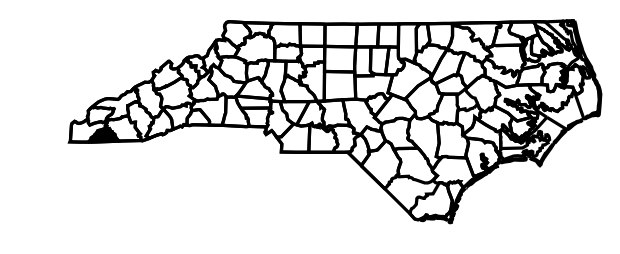
VICINITY MAP - NTS

STATE OF NORTH CAROLINA DIVISION OF HIGHWAYS **CLAY COUNTY**

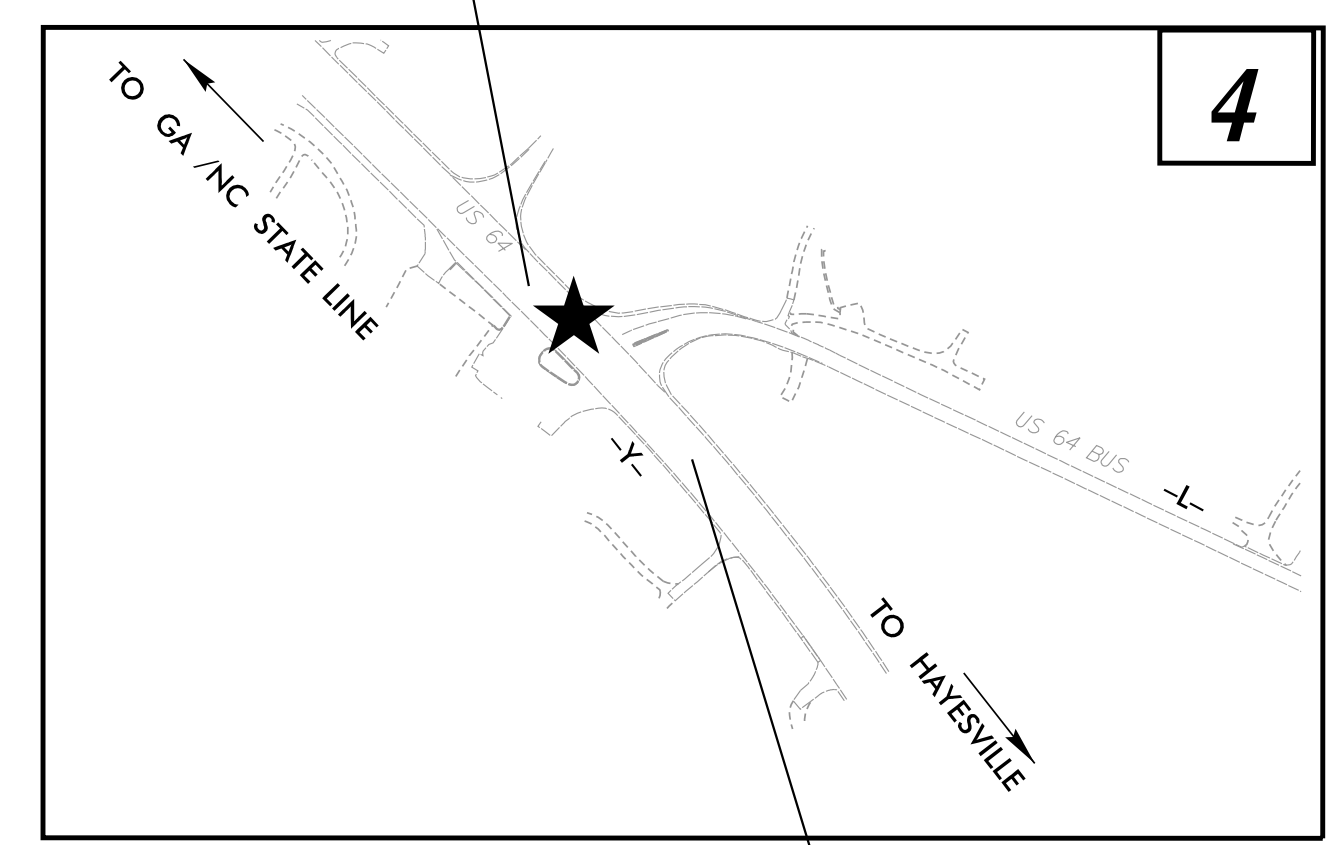
LOCATION: US 64/US 64 BUSINESS INTERSECTION AT HAYESVILLE
TYPE OF WORK: ISLAND AND SIGNAL

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N.C.	R-5863A	1	
STATE PROJ. NO.	F.A. PROJ. NO.	DESCRIPTION	
47516.1.2	N/A	PE	
47516.3.2	N/A	CONST.	

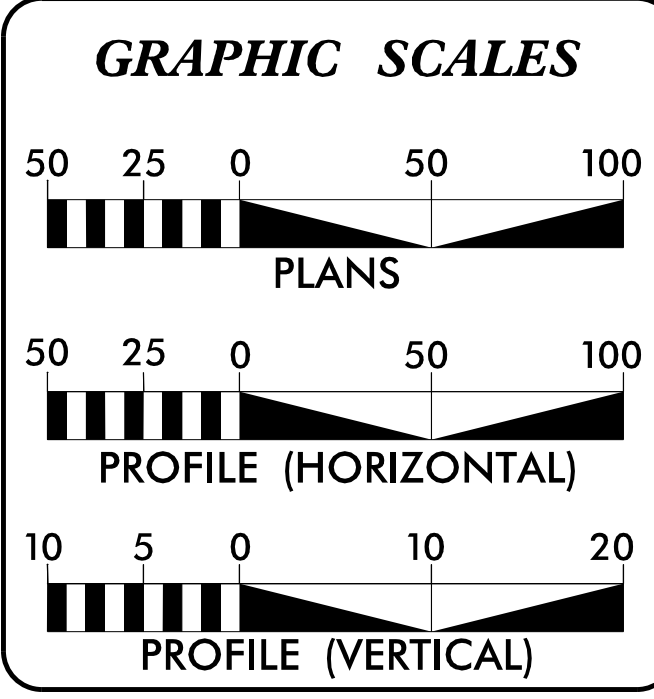
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BEGIN PROJECT TIP R-5863A
-Y- POT STA. 11+00.00



END PROJECT TIP R-5863A
-Y- POT STA. 16+20.00



DESIGN DATA

ADT 2022 = 11,500

V = 50 MPH

FUNCT. CLASS = MINOR ARTERIAL

REGIONAL TIER

PROJECT LENGTH

LENGTH ROADWAY PROJECT R-5863A = 0.099 MI

TOTAL LENGTH OF PROJECT R-5863A = 0.099 MI

PROJECT LENGTH BASED ON -Y-

NCDOT CONTACT: JARED BOND, PE
DIVISION 14

Prepared in the Office of:
JMT
Johnson, Mirman, & Thompson Inc.
4700 Falls of Neuse Rd, Suite 100,
Raleigh, NC, 27605
License No. C-3097

FOR THE NORTH CAROLINA DIVISION OF HIGHWAYS
2024 STANDARD SPECIFICATIONS

RIGHT OF WAY DATE: BRETT ABERNATHY, PE, PLS
PROJECT ENGINEER

LETTING DATE: JOHN LANSFORD, PE
PROJECT DESIGN ENGINEER
DECEMBER 10, 2024

HYDRAULICS ENGINEER

DocuSigned by:
R. B. Case
3BE8028EB76D44D

11/12/2024

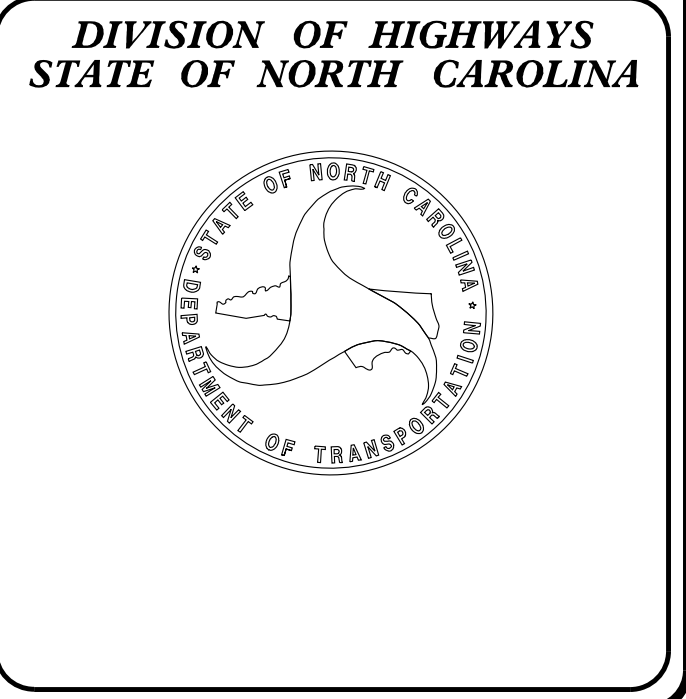
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ROADWAY DESIGN ENGINEER

DocuSigned by:
John C. Lansford
2CAD75F27A348E

11/12/2024

SIGNATURE: _____ P.E.



V&M PROJECT # 31333-01
TRANSPORTATION\31333-01\RDY\PROJECT\BUNCG222TSH.DGN



PROJECT REFERENCE NO.	SHEET NO.
R-5863A	1A
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	

INDEX OF SHEETS

SHEET NUMBER	SHEET
1	TITLE SHEET
1A	INDEX OF SHEETS, GENERAL NOTES, AND STANDARD DRAWINGS
1B	CONVENTIONAL SYMBOLS
2B-1 THRU 2B-2	PIPE INSTALLATION DETAILS
3D-1	DRAINAGE SUMMARY SHEET
4 THRU 5	PLAN AND PROFILE SHEETS
TMP-1 THRU TMP-4	TRANSPORTATION MANAGEMENT PLANS
PMP-1 THRU PMP-2	PAVEMENT MARKING PLANS
EC-1 THRU EC-5	EROSION CONTROL PLANS
SIG-1 THRU SIG-2.2	SIGNAL PLANS
UO-1 THRU UO-4	UTILITIES BY OTHERS

GENERAL NOTES: 2024 SPECIFICATIONS
EFFECTIVE: 01-16-2024
REVISED:

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

UTILITIES:
UTILITY OWNERS ON THIS PROJECT ARE CLAY COUNTY WATER AND SEWER DISTRICT, BLUE RIDGE MOUNTAIN EMC, FRONTIER, & WINDSTREAM
ANY RELOCATION OF EXISTING UTILITIES WILL BE ACCOMPLISHED BY OTHERS, EXCEPT AS SHOWN ON THE PLANS.

EFF. 01-16-2024
REV.

2024 ROADWAY ENGLISH STANDARD DRAWINGS

The following Roadway Standards as appear in "Roadway Standard Drawings" 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 3 - PIPE CULVERTS	
310.10	Driveway Pipe Construction
DIVISION 6 - ASPHALT BASES AND PAVEMENTS	
654.01	Pavement Repairs
DIVISION 8 - INCIDENTALS	
840.00	Concrete Base Pad for Drainage Structures
840.24	Frames and Narrow Slot Flat Grates
840.31	Concrete Junction Box - 12" thru 66" Pipe
840.32	Brick Junction Box - 12" thru 66" Pipe
840.35	Traffic Bearing Grated Drop Inlet - for Cast Iron Double Frame and Grates
840.45	Precast Drainage Structure
840.46	Traffic Bearing Precast Drainage Structure
840.54	Manhole Frame and Cover
840.66	Drainage Structure Steps
846.01	Concrete Curb, Gutter, and Curb and 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

Note: Not to Scale

STATE OF NORTH CAROLINA, DIVISION OF HIGHWAYS CONVENTIONAL PLAN SHEET SYMBOLS

R-5863A
0018

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	(123)
Existing Fence Line	-x-x-x-
Proposed Woven Wire Fence	○
Proposed Chain Link Fence	□
Proposed Barbed Wire Fence	◇
Existing Wetland Boundary	-w-l-b-
Proposed Wetland Boundary	-w-l-b-
Existing Endangered Animal Boundary	-e-a-b-
Existing Endangered Plant Boundary	-e-p-b-
Existing Historic Property Boundary	-h-p-b-
Known Contamination Area: Soil	-s-s-
Potential Contamination Area: Soil	-s-s-
Known Contamination Area: Water	-w-w-
Potential Contamination Area: Water	-w-w-
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	-j-s-
Buffer Zone 1	-b-z-1-
Buffer Zone 2	-b-z-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	-e-
Proposed Temporary Drainage Easement	-t-d-e-
Proposed Permanent Drainage Easement	-p-d-e-
Proposed Permanent Drainage/Utility Easement	-d-u-e-
Proposed Permanent Utility Easement	-p-u-e-
Proposed Temporary Utility Easement	-t-u-e-
Proposed Aerial Utility Easement	-a-u-e-

ROADS AND RELATED FEATURES:

Existing Edge of Pavement	-----
Existing Curb	-----
Proposed Slope Stakes Cut	-c-
Proposed Slope Stakes Fill	-f-
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:

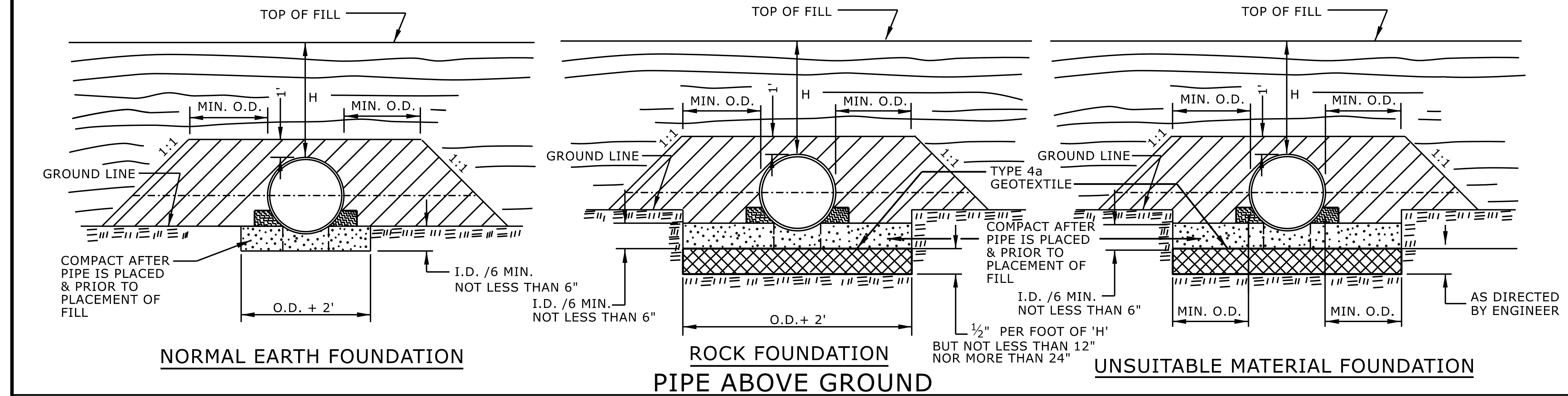
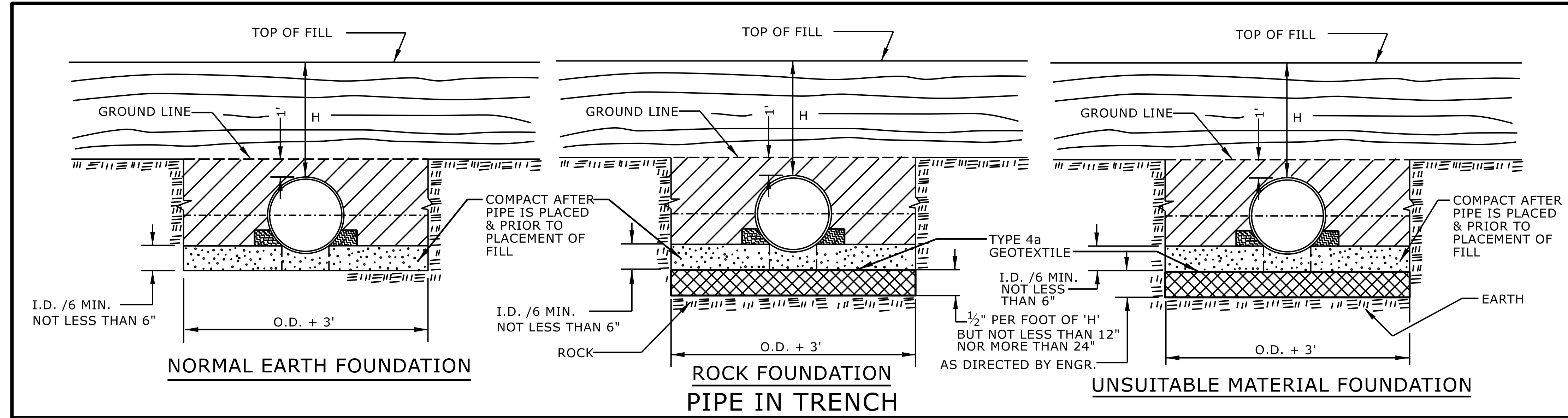
Gas Valve	◇
Gas Meter	⊕
U/G Gas Line Test Hole (SUE - LOS A)*	⊕
U/G Gas Line (SUE - LOS B)*	-----
U/G Gas Line (SUE - LOS C)*	-----
U/G Gas Line (SUE - LOS D)*	-----
Above Ground Gas Line	-----

SANITARY SEWER:



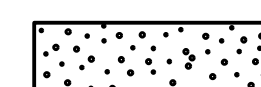
Sanitary Sewer Manhole	⊕
Sanitary Sewer Cleanout	⊕
U/G Sanitary Sewer Line	-----
Above Ground Sanitary Sewer	-----
SS Force Main Line Test Hole (SUE - LOS A)*	⊕
SS Force Main Line (SUE - LOS B)*	-----
SS Force Main Line (SUE - LOS C)*	-----
SS Force Main Line (SUE - LOS D)*	-----

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.

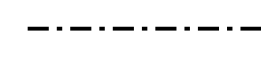
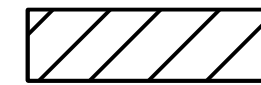
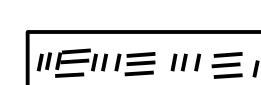



GENERAL NOTES:
 I.D. = THE MAXIMUM HORIZONTAL INSIDE DIAMETER DIMENSION.
 O.D. = THE MAXIMUM HORIZONTAL OUTSIDE DIAMETER DIMENSION.
 H = THE FILL HEIGHT MEASURED VERTICALLY AT ANY POINT ALONG THE PIPE FROM THE TOP OF THE PIPE TO THE TOP OF THE EMBANKMENT AT THAT POINT.

-  APPROVED SUITABLE LOCAL MATERIAL.
-  TAKE CARE TO FULLY COMPACT HAUNCH ZONE OF PIPE BACKFILL.
-  LOOSELY PLACED SELECT MATERIAL CLASS III OR CLASS II, TYPE 1 FOR PIPE BEDDING. LEAVE SECTION DIRECTLY BENEATH PIPE UNCOMPACTED AS PIPE SEATING AND BACKFILL WILL ACCOMPLISH COMPACTION.

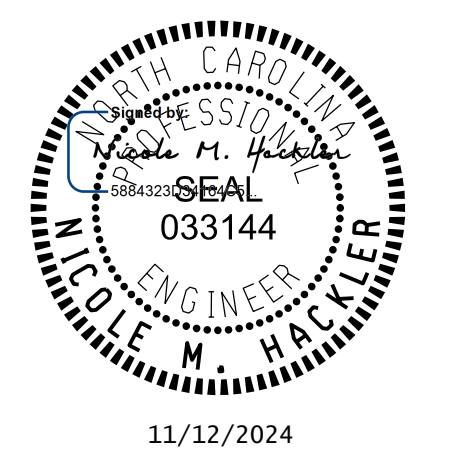
DO NOT OPERATE HEAVY EQUIPMENT OVER ANY PIPE CULVERT UNTIL THE PIPE CULVERT HAS BEEN PROPERLY BACKFILLED AND COVERED WITH AT LEAST 3 FEET OF APPROVED MATERIAL.

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

-  SPRINGLINE OF PIPE
-  SELECT BACKFILL MATERIAL CLASS III OR CLASS II, TYPE 1 ABOVE AND BELOW SPRINGLINE.
-  UNDISTURBED EARTH MATERIAL
-  SELECT MATERIAL CLASS V OR VI FOR FOUNDATION CONDITIONING. ENCAPSULATE WITH TYPE IV GEOTEXTILE AS DIRECTED BY THE ENGINEER.

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

ROADWAY DETAIL DRAWING FOR
METHOD OF PIPE INSTALLATION
 FLEXIBLE PIPE



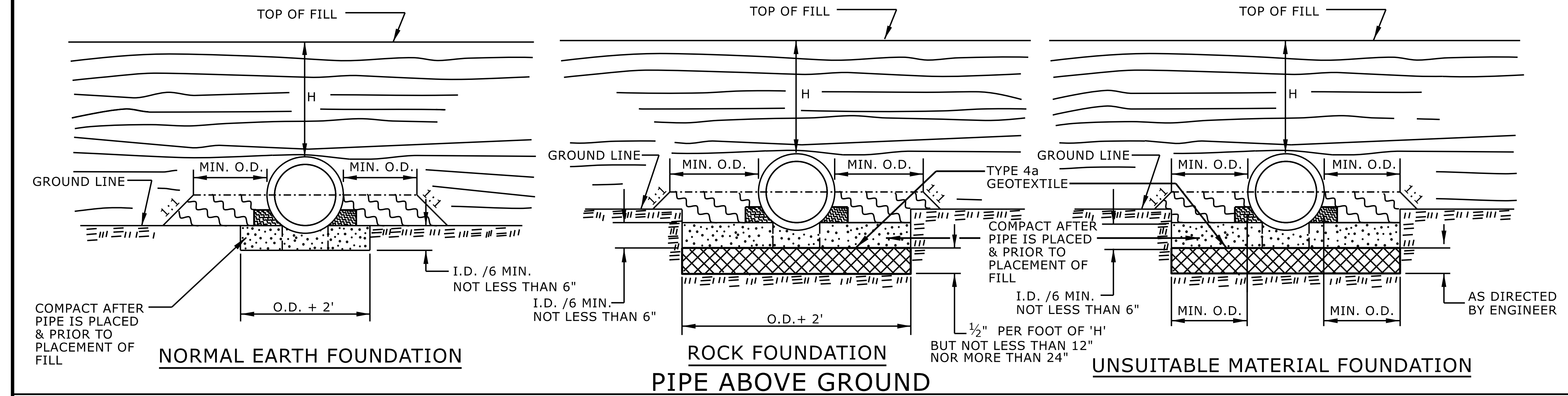
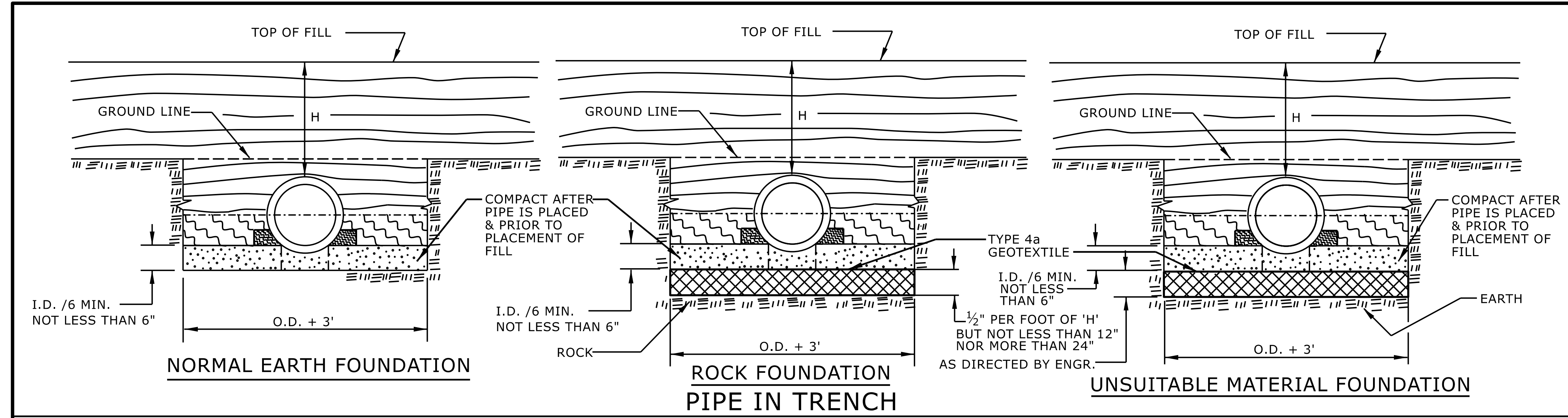
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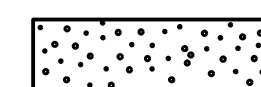
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 AND DEVELOPMENT UNIT
 Office 919-707-6950 FAX 919-250-4119

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 CHECKED BY: _____ DATE: _____
 FILE SPEC.: _____

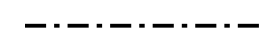

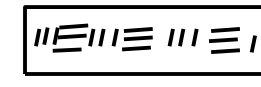



GENERAL NOTES:
 I.D. = THE MAXIMUM HORIZONTAL INSIDE DIAMETER DIMENSION.
 O.D. = THE MAXIMUM HORIZONTAL OUTSIDE DIAMETER DIMENSION.
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STATE OF NORTH CAROLINA
 DEPT. OF TRANSPORTATION
 DIVISION OF HIGHWAYS
 RALEIGH, N.C.

ROADWAY DETAIL DRAWING FOR
METHOD OF PIPE INSTALLATION
 RIGID PIPE



SHEET 2 OF 2
300.01

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

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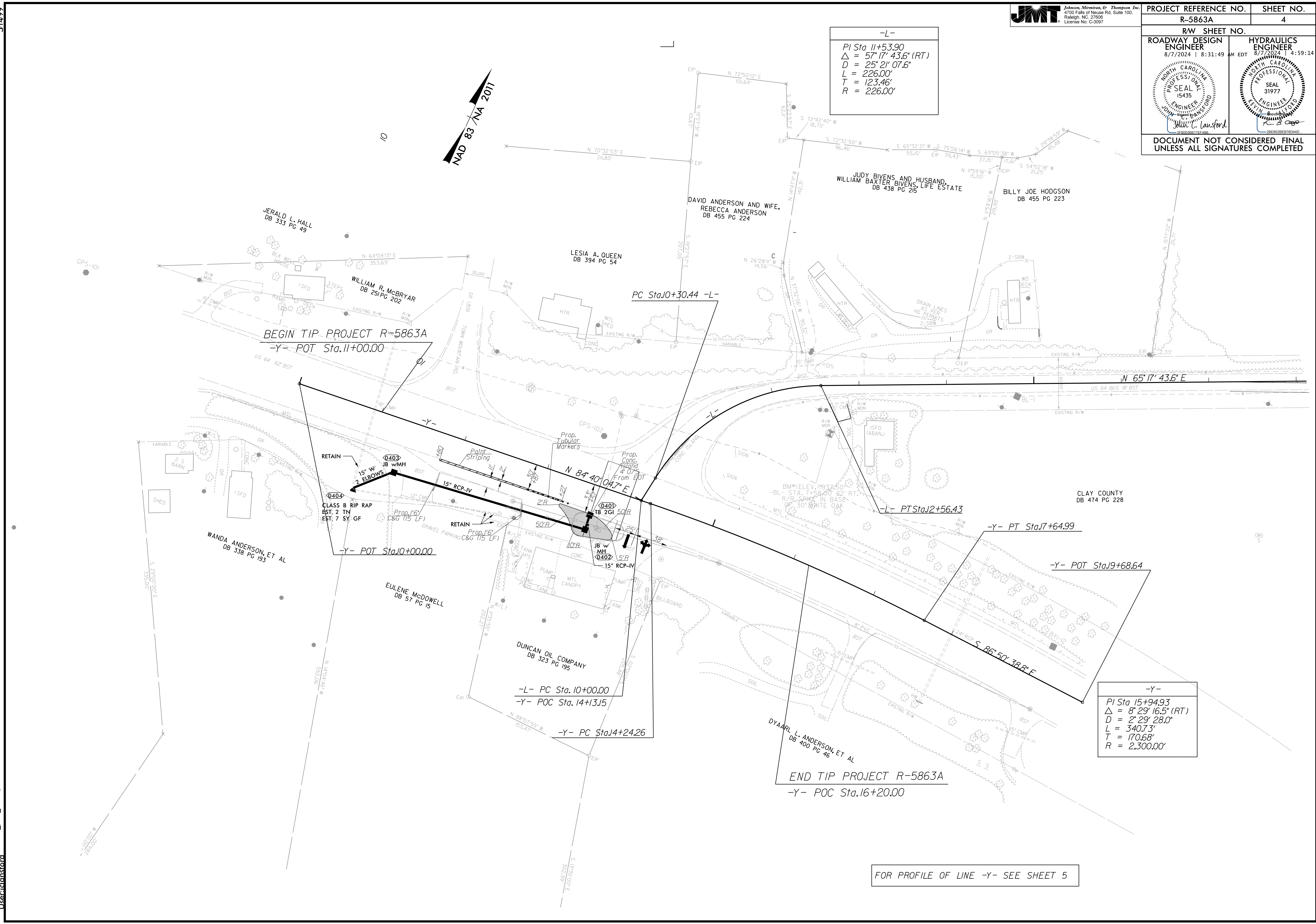
ORIGINAL BY: S.CALHOUN DATE: 7-25-2024
 MODIFIED BY: DATE:
 CHECKED BY: DATE:
 FILE SPEC.:



Roadway Design Engineer and Hydraulics Engineer information including dates, times, and professional seals for Kevin L. Lunsford and Kevin F. Ford.

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

-L-
PI Sta 11+53.90
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D = 25' 2' 07.6"
L = 226.00'
T = 123.46'
R = 226.00'

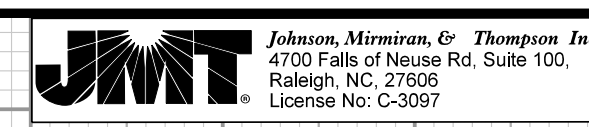


-Y-
PI Sta 15+94.93
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D = 2' 29' 28.0"
L = 340.73'
T = 170.68'
R = 2,300.00'

END TIP PROJECT R-5863A
-Y- POC Sta.16+20.00

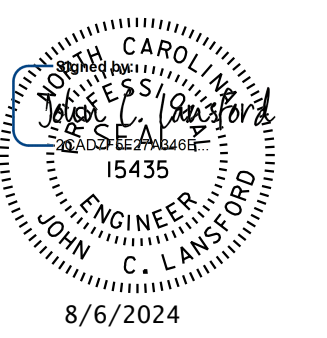
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5/14/99

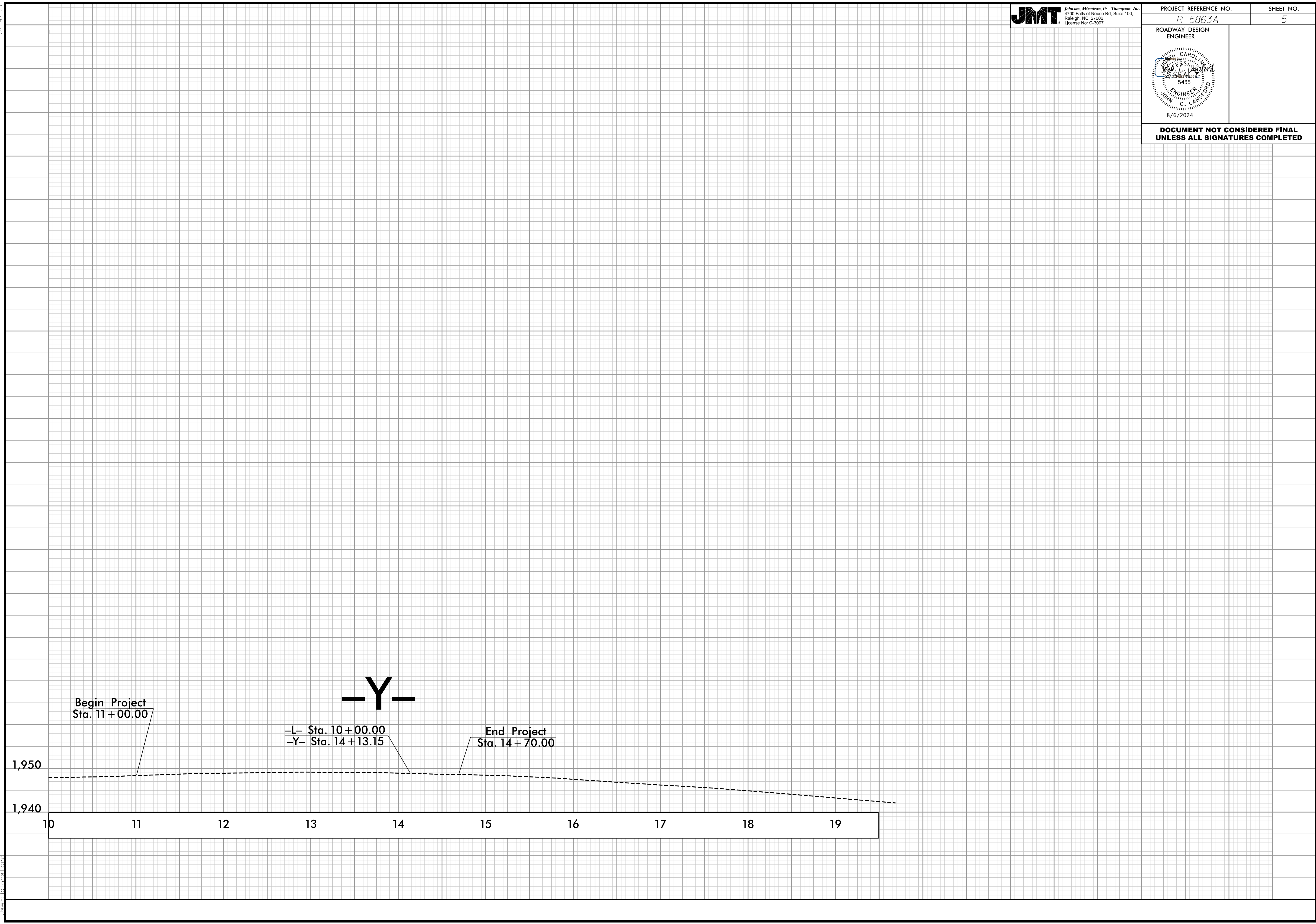


PROJECT REFERENCE NO. R-5863A SHEET NO. 5

ROADWAY DESIGN ENGINEER



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Begin Project
Sta. 11+00.00

-Y-

-L- Sta. 10+00.00
-Y- Sta. 14+13.15

End Project
Sta. 14+70.00

1,950

1,940

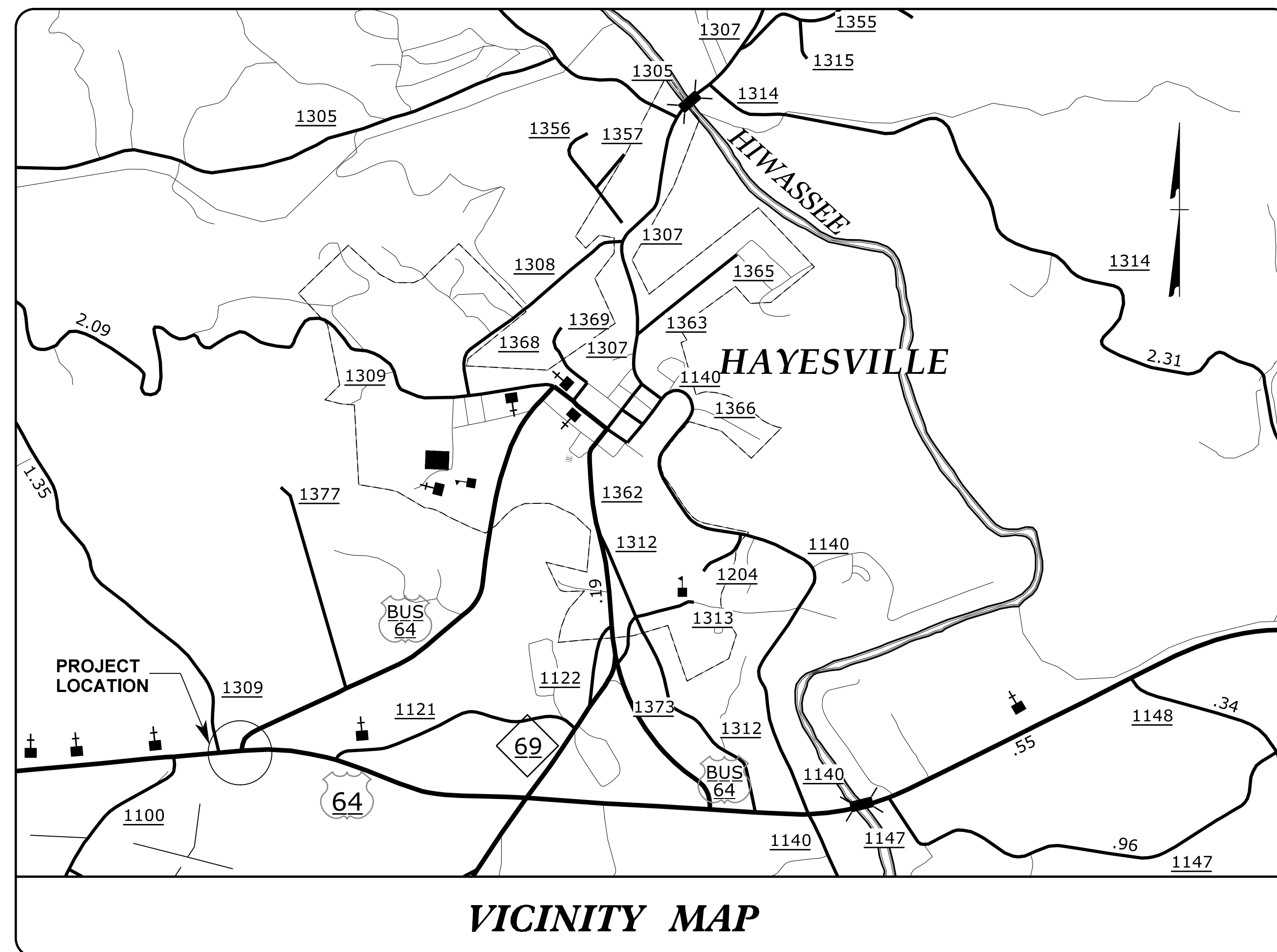
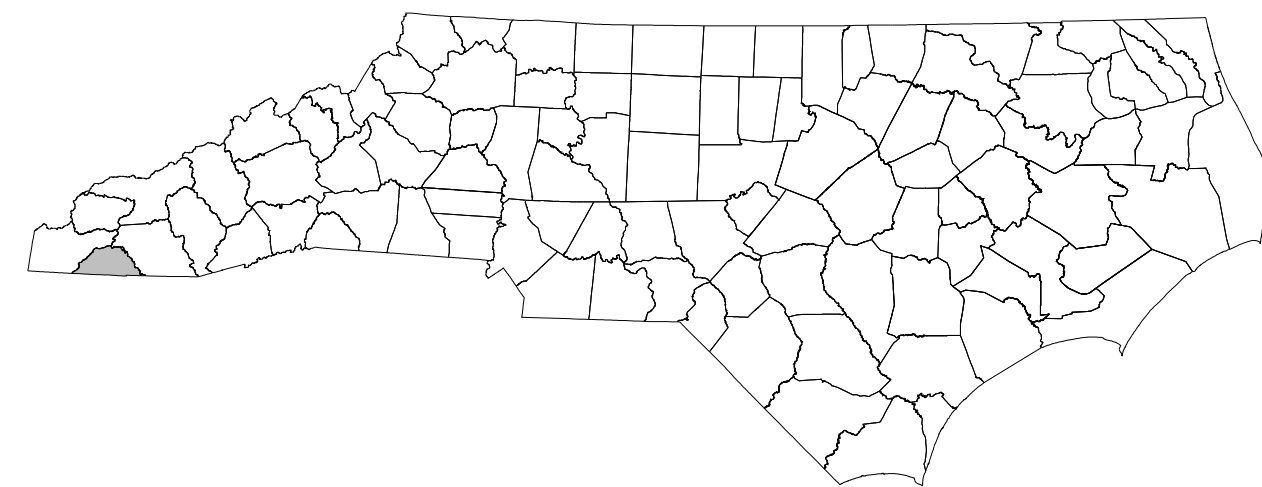
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STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

TRANSPORTATION MANAGEMENT PLAN

CLAY COUNTY



VICINITY MAP

INDEX OF SHEETS

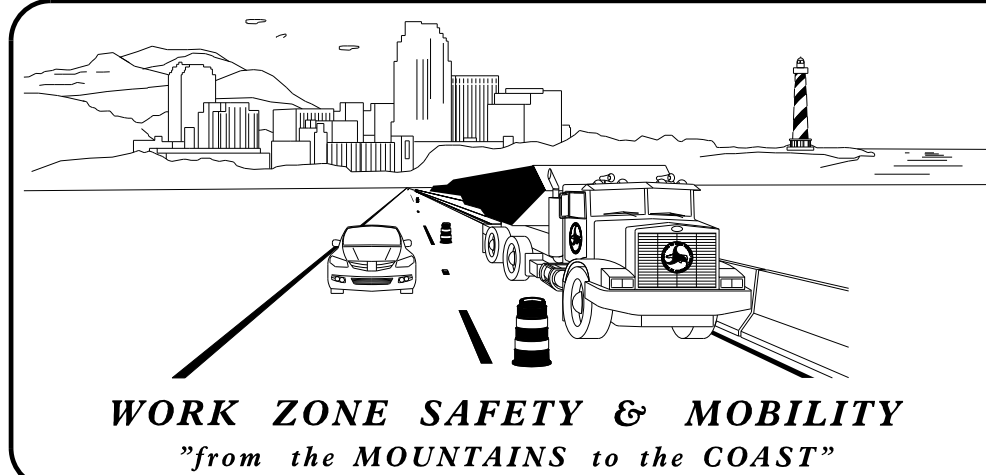
SHEET NO.	TITLE
TMP-1	TITLE SHEET, VICINITY MAP, AND INDEX OF SHEETS
TMP-2	LIST OF APPLICABLE ROADWAY STANDARD DRAWINGS, & LEGEND
TMP-3	TRANSPORTATION OPERATIONS PLAN
TMP-4	TRAFFIC CONTROL DETAIL

SHEET NO.
TMP-1

R-5863A

TIP PROJECT: DN01072

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PLANS PREPARED BY:

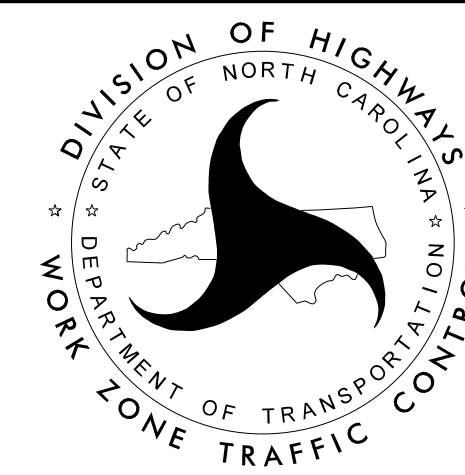
Colton M. Riddle, PE
PROJECT ENGINEER

Dane Fredde
PROJECT DESIGN ENGINEER

NCDOT CONTACTS:

Zachary Clark, PE
PROJECT ENGINEER

Sheena Green
PROJECT DESIGN ENGINEER



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Prepared in the Office of:
JOHNSON, MIRMIRAN, & THOMPSON, INC.
1318 Patton Avenue, Suite F,
Asheville NC, 28806

APPROVED: *Colton M. Riddle*
Signed by: 522696EA0B3F467

DATE: 11/12/2024



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 ADVANCE WARNING SIGNS
1101.02	TEMPORARY LANE CLOSURES
1101.04	TEMPORARY SHOULDER CLOSURES
1101.11	TRAFFIC CONTROL DESIGN TABLES
1110.01	STATIONARY WORK ZONE SIGNS
1110.02	PORTABLE WORK ZONE SIGNS
1130.01	DRUMS
1135.01	CONES
1145.01	BARRICADES
1180.01	SKINNY - DRUMS

LEGEND

GENERAL

- DIRECTION OF TRAFFIC FLOW
- DIRECTION OF PEDESTRIAN TRAFFIC FLOW
- DETOUR ROUTE
- EXIST. PVMT.
- NORTH ARROW
- PROPOSED PVMT.
- TEMP. SHORING (LOCATION PURPOSES ONLY)
- WORK AREA
- REMOVAL OF EXISTING PAVEMENT

SIGNALS

- EXISTING
- PROPOSED
- DS PORT
- P PORT

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

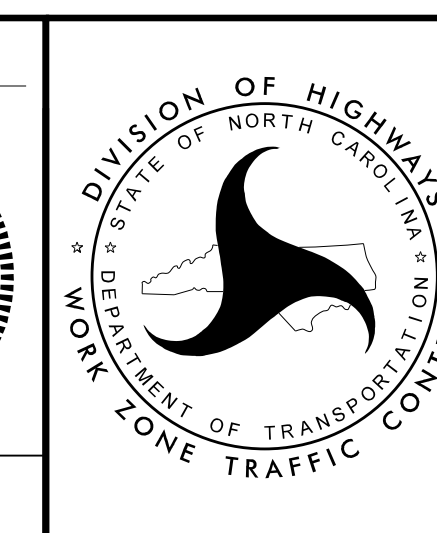
- PAVEMENT MARKING SYMBOLS

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 User:cmriddle

Prepared in the Office of:
JOHNSON, MIRMIRAN, & THOMPSON, INC.
 1318 Patton Avenue, Suite F,
 Asheville NC, 28806

APPROVED:
DocuSigned by: Colton M. Riddle
64102E906AF4AB...
 DATE: 8/1/2024

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ROADWAY STANDARD DRAWINGS, & LEGEND

MANAGEMENT STRATEGIES

CONSTRUCTION

ADDING MONOLITHIC ISLAND AT THE HOT SPOT GAS STATION ON US 64.

TMP DESIGN PARAMETERS

THIS PROJECT CONTAINS DAILY LANE, HOLIDAYS, AND SPECIAL EVENTS RESTRICTIONS.

GENERAL SEQUENCE OF CONSTRUCTION

THIS PROJECT CONSIST OF LANE CLOSURES TO CONSTRUCT PROPOSED MONOLITHIC ISLAND ON US 64.

TRAFFIC MANAGEMENT STRATEGIES

LANE SHIFTS OR CLOSURES
SHOULDER CLOSURES

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 UNDESIRE 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 DURING HOLIDAYS AND SPECIAL EVENTS, EXCEPT AS DIRECTED IN PHASING (SEE TMP-4), AS FOLLOWS:

ROAD NAME

US 64 (-Y-)

HOLIDAY

- FOR ANY UNEXPECTED OCCURENCE THAT CREATES UNUSALLY HIGH TRAFFIC VOLUMES, AS DIRECTED BY THE ENGINEER.
- 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.
- FOR EASTER, BETWEEN THE HOURS OF 7:00 A.M. THURSDAY AND 6:00 P.M. MONDAY.
- FOR MEMORIAL DAY, BETWEEN THE HOURS OF 7:00 A.M. FRIDAY TO 6:00 P.M. TUESDAY.
- 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.
- FOR LABOR DAY, BETWEEN THE HOURS OF 7:00 A.M. FRIDAY AND 6:00 P.M. TUESDAY.
- FOR THANKSGIVING DAY, BETWEEN THE HOURS OF 7:00 A.M. TUESDAY TO 6:00 P.M. MONDAY.
- 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.

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

LANE AND SHOULDER CLOSURE REQUIREMENTS

- 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 DRAWINGS 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 DRAWINGS 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 AN DIVIDED FACILITY AND WITHIN 10 FT OF AN OPEN TRAVEL LANE, CLOSE THE NEAREST OPEN TRAVEL LANE USING ROADWAY STANDARD DRAWINGS 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.

PAVEMENT EDGE DROP OFF REQUIREMENTS

- H) 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.

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

TRAFFIC PATTERN ALTERATIONS

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

SIGNING

- K) 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.

- 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) 175 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 THAN 40 FT FOR POSTED SPEED LIMITS LESS THAN 45 (MPH) AND NO GREATER THAN 80 FT FOR POSTED SPEED LIMITS GREATER THAN OR EQUAL TO 45 (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.

MISCELLANEOUS

- P) 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) 350 FT/MI AND 350 FT/MI RESPECTIVLEY IN ADVANCE OF THE UNEVEN AREAS. USE DRUMS TO DELINEATE THE EDGE OF ROADWAY ALONG PAVED AREAS.

- Q) ALL STATIONS ARE CONSIDERED +/- UNLESS OTHERWISE SHOWN ON THE PLANS.



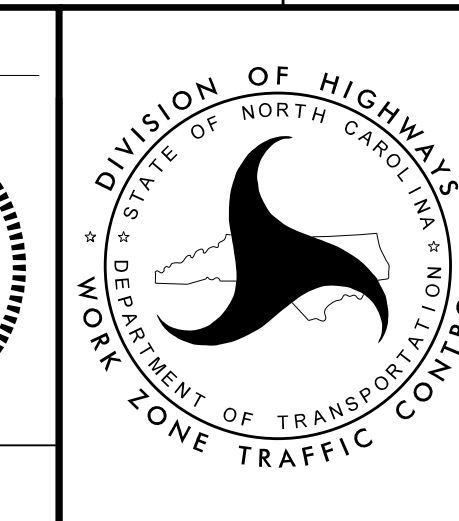
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1318 Patton Avenue, Suite F,
Asheville NC, 28806

LOCAL NOTES:

- EMERGENCY VEHICLE ACCESS MUST BE MAINTAINED AT ALL TIMES.
- NOTIFY THE FIRE DEPT, E.M.S., AND CLAY COUNTY SCHOOL BOARD 30 DAYS PRIOR TO ROAD CLOSURE.
- LOCAL ACCESS TO ALL RESIDENCES AND BUSINESSES WILL BE MAINTAINED BETWEEN CLOSURE POINTS AT ALL TIMES DURING CONSTRUCTION.

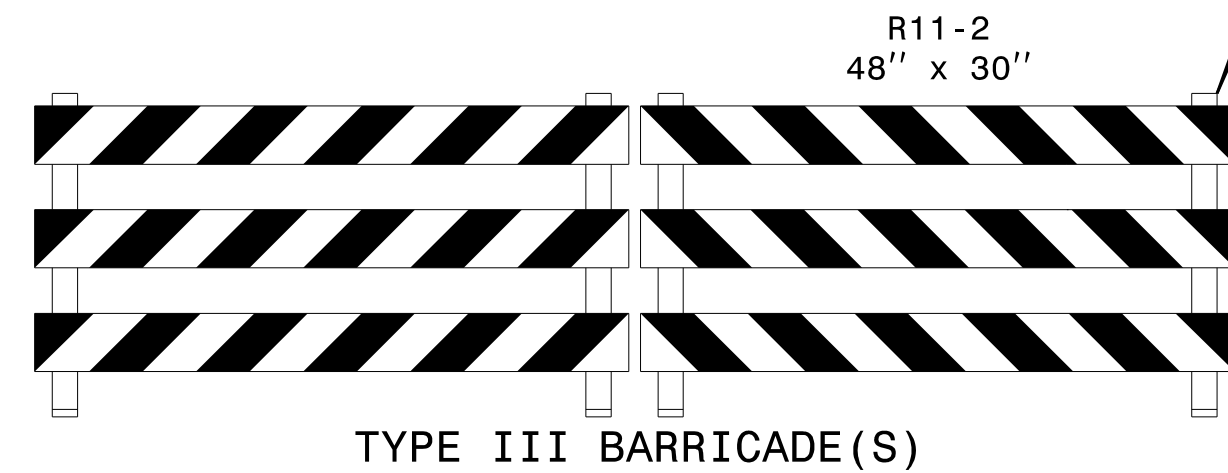
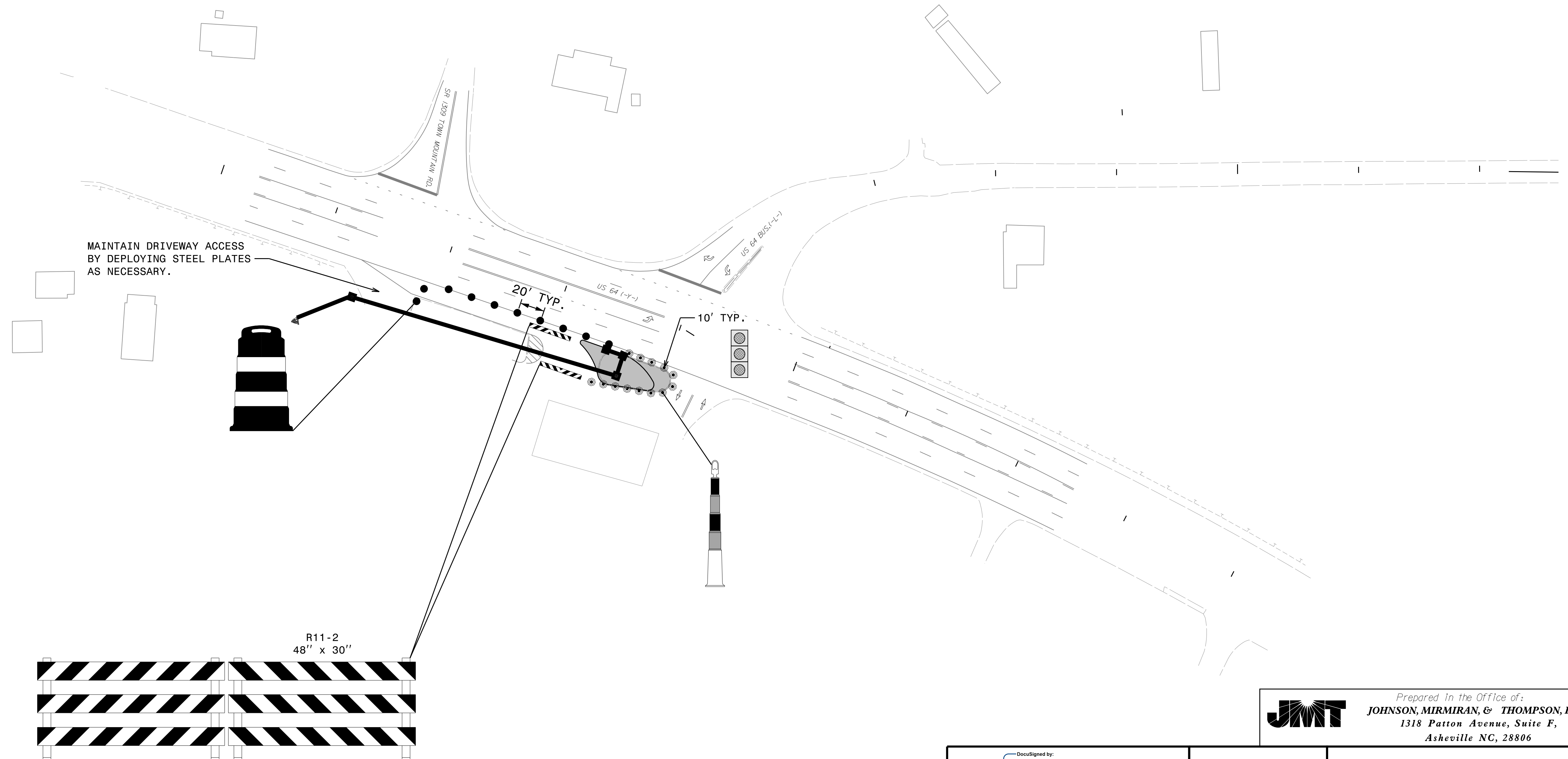
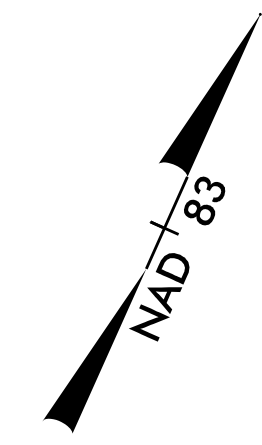
APPROVED: *Colton M. Riddle*
DATE: 8/1/2024

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UNLESS ALL SIGNATURES COMPLETED



TRANSPORTATIONS
OPERATIONS
PLAN

- STEP 1: - ERECT WORK ZONE ADVANCED WARNING SIGNS USING DETAIL DRAWINGS FOR WORK ZONE SIGNS USING ROADWAY STANDARD DRAWING NO. 1101.01, SHEET 3 OF 3.
- NOTE: STEP 2 SHALL BE COMPLETED IN A CONTINUOUS OPERATION.
- STEP 2: - USING FLAGGERS AS NECESSARY, PLACE TRAFFIC CONTROL DEVICES, AND CLOSE TURN LANE AND WESTERN ENTRANCE OF HOT SPOT GAS STATION.
- STEP 3: - USING ROADWAY STANDARD DRAWING NO. 1101.02, SHEET 3 OF 19, REMOVE EXISTING ISLAND, INSTALL PROPOSED DRAINAGE, AND INSTALL PROPOSED SIGNALS AND COVER THEM (SEE DETAILS BELOW).
- STEP 4: - USING ROADWAY STANDARD DRAWING NO. 1101.02, SHEET 3 OF 19, CONSTRUCT PROPOSED CONCRETE ISLAND, PLACE NECESSARY PAVEMENT, AND INSTALL TUBULAR MARKERS (SEE DETAILS BELOW).
- NOTE: STEP 5 SHALL BE COMPLETED IN A CONTINUOUS OPERATION.
- STEP 5: - USING ROADWAY STANDARD DRAWING NO. 1101.02, SHEET 3 OF 19, REMOVE EXISTING PAVEMENT MARKINGS AS NECESSARY, AND PLACE FINAL PAVEMENT MARKINGS (THERMOPLASTIC); PLACE TRAFFIC IN ITS FINAL TRAFFIC PATTERN; UNCOVER AND ACTIVATE NEWLY INSTALLED SIGNALS; AND REMOVE ALL REMAINING TEMPORARY TRAFFIC CONTROL DEVICES (SEE PMP AND SIGNAL PLANS).

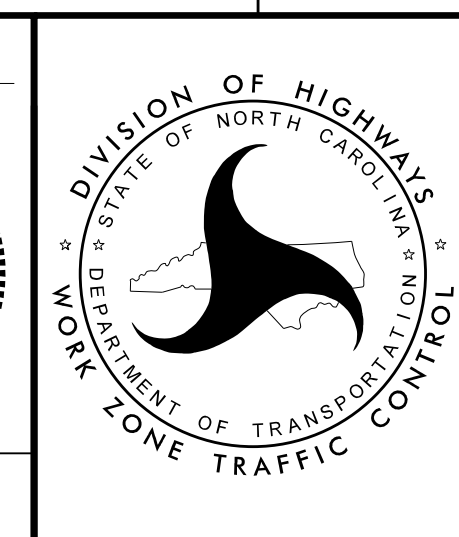


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 1318 Patton Avenue, Suite F,
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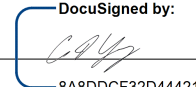
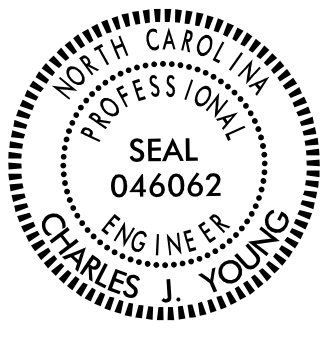
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DATE: 8/1/2024

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**TRAFFIC CONTROL
DETAIL**

TIP NO.	SHEET NO.
R-5863A	PMP-1
APPROVED: 	
DATE: 11/12/2024	
SEAL 	
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**STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION**

**PAVEMENT MARKING PLAN
CLAY COUNTY**

INDEX

SHEET NO.	DESCRIPTION
PMP-1	INDEX, ROADWAY STANDARD DRAWINGS, PAVEMENT MARKING SCHEDULE, AND GENERAL NOTES
PMP-2	PAVEMENT MARKING PLAN

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 64	THERMOPLASTIC	SNOWPLOWABLE

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

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

ROADWAY STANDARD DRAWING

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

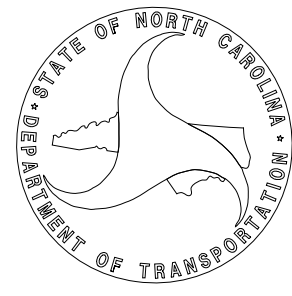
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1205.01	PAVEMENT MARKINGS - LINE TYPES AND OFFSETS
1205.04	PAVEMENT MARKINGS - INTERSECTIONS
1205.05	PAVEMENT MARKINGS - TURN LANES
1205.08	PAVEMENT MARKINGS - SYMBOLS AND WORD MESSAGES
1250.01	RAISED PAVEMENT MARKERS - INSTALLATION SPACING


ROADWAY STANDARD DRAWING

SYMBOL	DESCRIPTION
T1	WHITE EDGELINE (4", 90 MIL)
T2	WHITE SOLID LANE LINE (4", 90 MIL)
T4	3 FT.-9 FT./SP WHITE MINISKIP (4", 90 MIL)
T5	2 FT.-6 FT./SP WHITE MINISKIP (4", 90 MIL)
T13	YELLOW DOUBLE CENTER (4", 90 MIL)
T41	WHITE DIAGONAL (8", 90 MIL)
T61	WHITE STOPBAR (24", 90 MIL)
T70	LEFT TURN ARROW (90 MIL)
T72	STRAIGHT ARROW (90 MIL)
T73	COMBO. LEFT/STRAIGHT ARROW (90 MIL)
T76	COMBO. LEFT/RIGHT/STRAIGHT ARROW (90 MIL)
ME	SNOWPLOWABLE MARKER
MF	SNOWPLOWABLE MARKER

T.I.P.: R-5863A

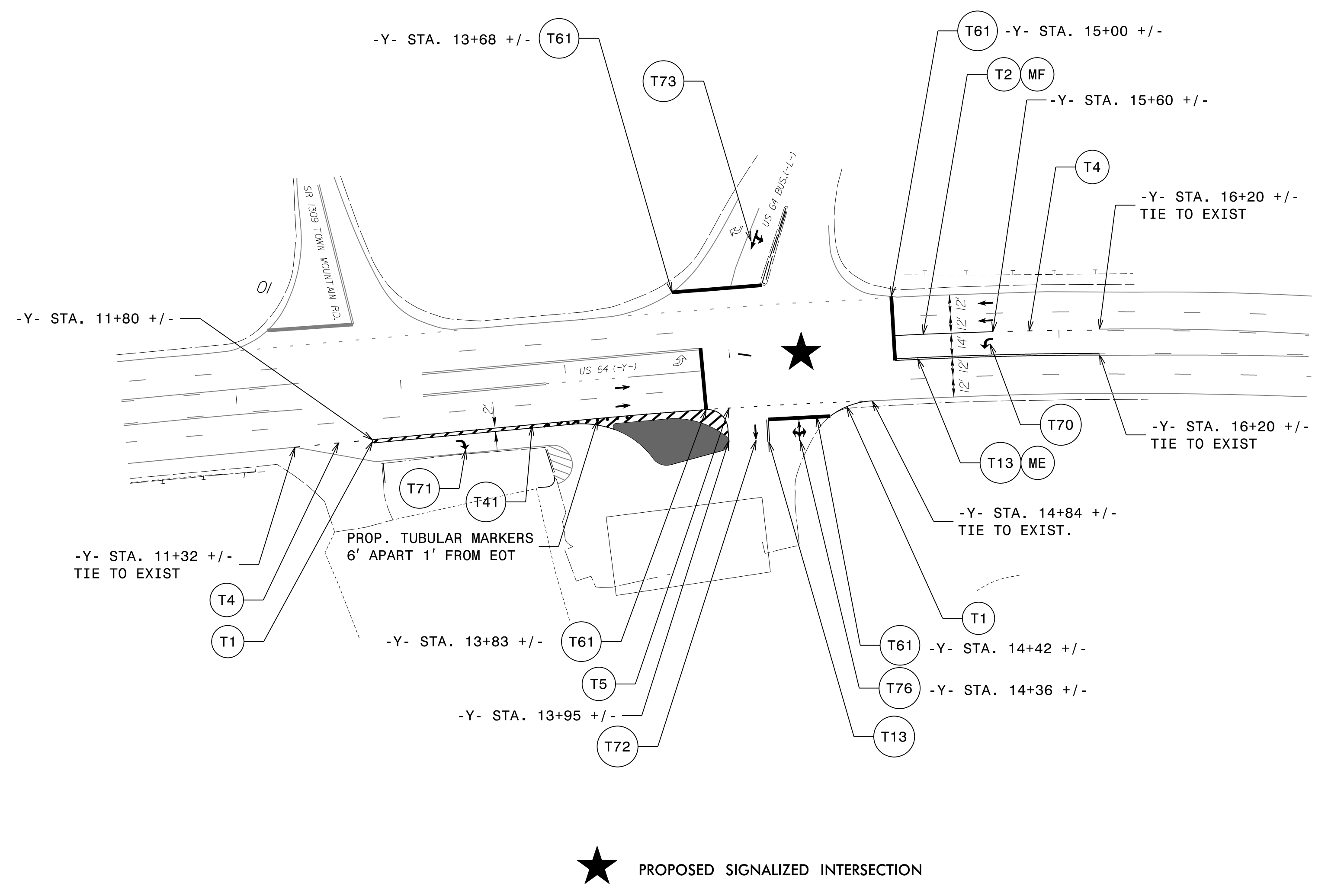
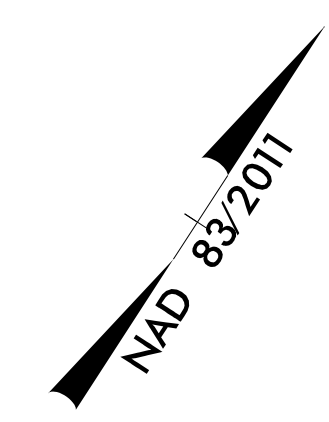
CONTRACT: DN01072

PLAN SUBMITTED TO: NCDOT DIVISION 14		
JARED BOND, PE	DIVISION PROJECT ENGINEER	

PLAN PREPARED BY:		
CHARLES YOUNG, PE	SENIOR ENGINEER	
DANE FREDDE	DESIGN ENGINEER	

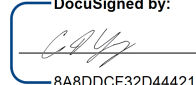
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4700 Falls of Neuse Rd, Suite 100,
Raleigh, NC 27606
License No: C-3097

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User: tsyoung2



★ PROPOSED SIGNALIZED INTERSECTION


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DATE: 8/2/2024

NORTH CAROLINA
 PROFESSIONAL
 SEAL
 046062
 ENGINEER
 CHARLES J. YOUNG

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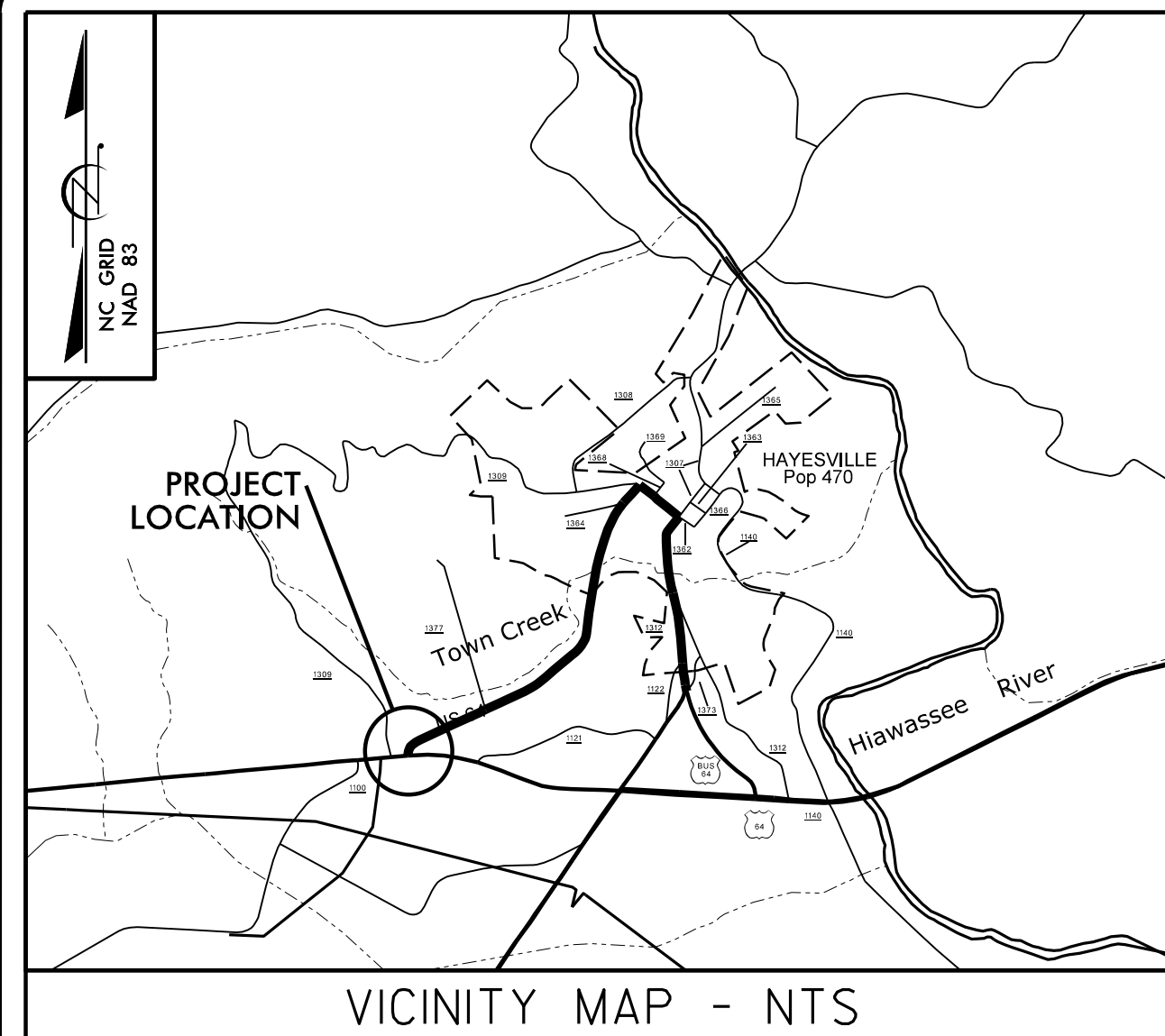


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PAVEMENT MARKING PLAN

STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	R-5863A	EC-1	
STATE PROJ. NO.	F.A. PROJ. NO.	DESCRIPTION	
47516.1.2	N/A	PE	
47516.3.2	N/A	CONST.	

TIP PROJECT: R-5863A



STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

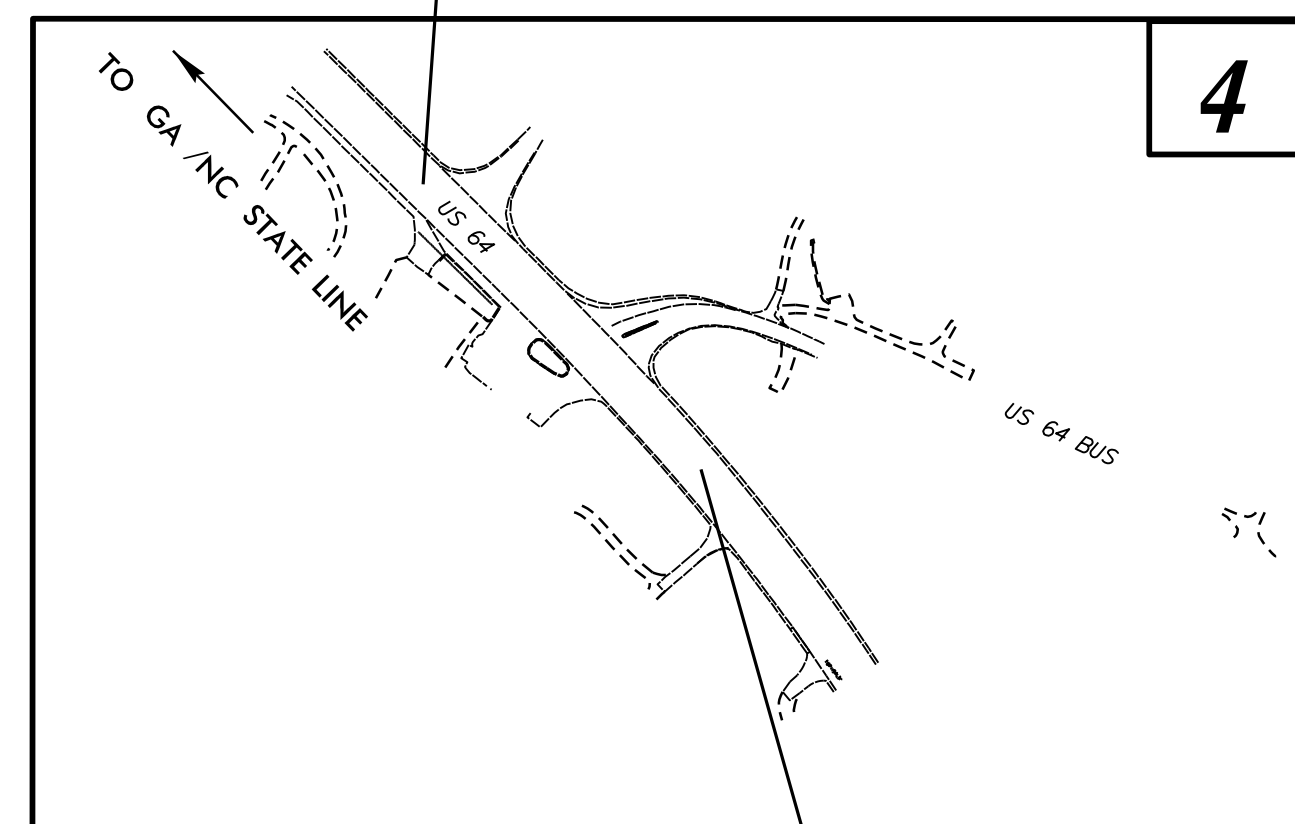
PLAN FOR PROPOSED
HIGHWAY EROSION CONTROL

CLAY COUNTY

LOCATION: US 64/US 64 BUSINESS INTERSECTION AT HAYESVILLE

TYPE OF WORK: ISLAND AND SIGNAL

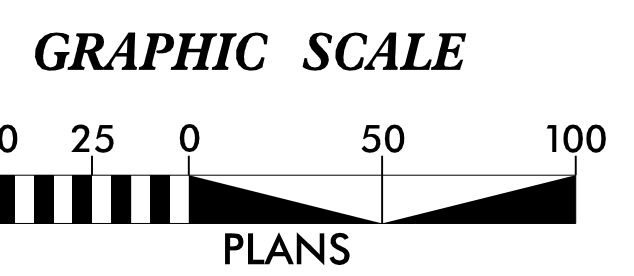
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-Y- POT STA. 11 + 00.00



END PROJECT TIP R-5863A
-Y- POT STA. 16 + 20.00

CONTRACT: DN01072

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



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



Prepared in the Office of:
WETHERILL ENGINEERING, INC.
1223 JONES FRANKLIN ROAD
RALEIGH, NC 27606

Designed by:
KEVIN B. ALFORD, PE 3531
NAME LEVEL III CERTIFICATION NO.

Roadway Standard Drawings

The "Roadway Standard Drawings"- Roadway Design Unit - N. C. Department of Transportation - Raleigh, N. C., dated January 2024 and the latest revision thereto are applicable to this project and by reference hereby are considered a part of these plans.

DIVISION OF HIGHWAYS STATE OF NORTH CAROLINA

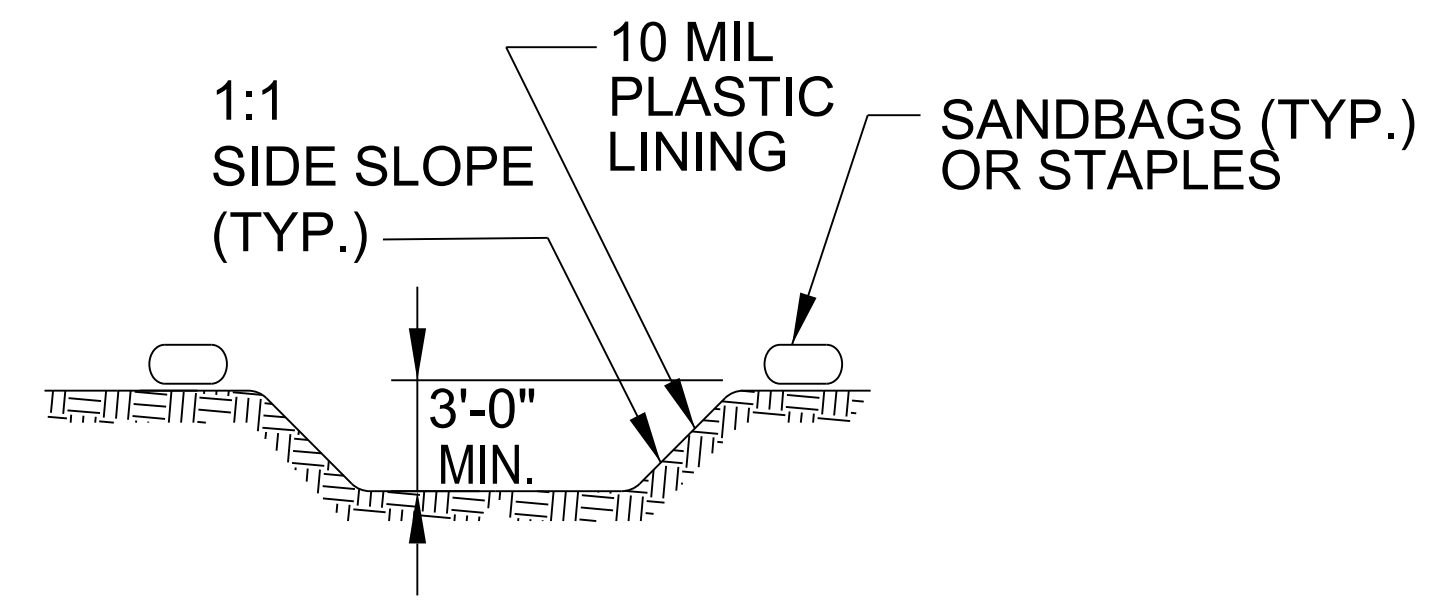
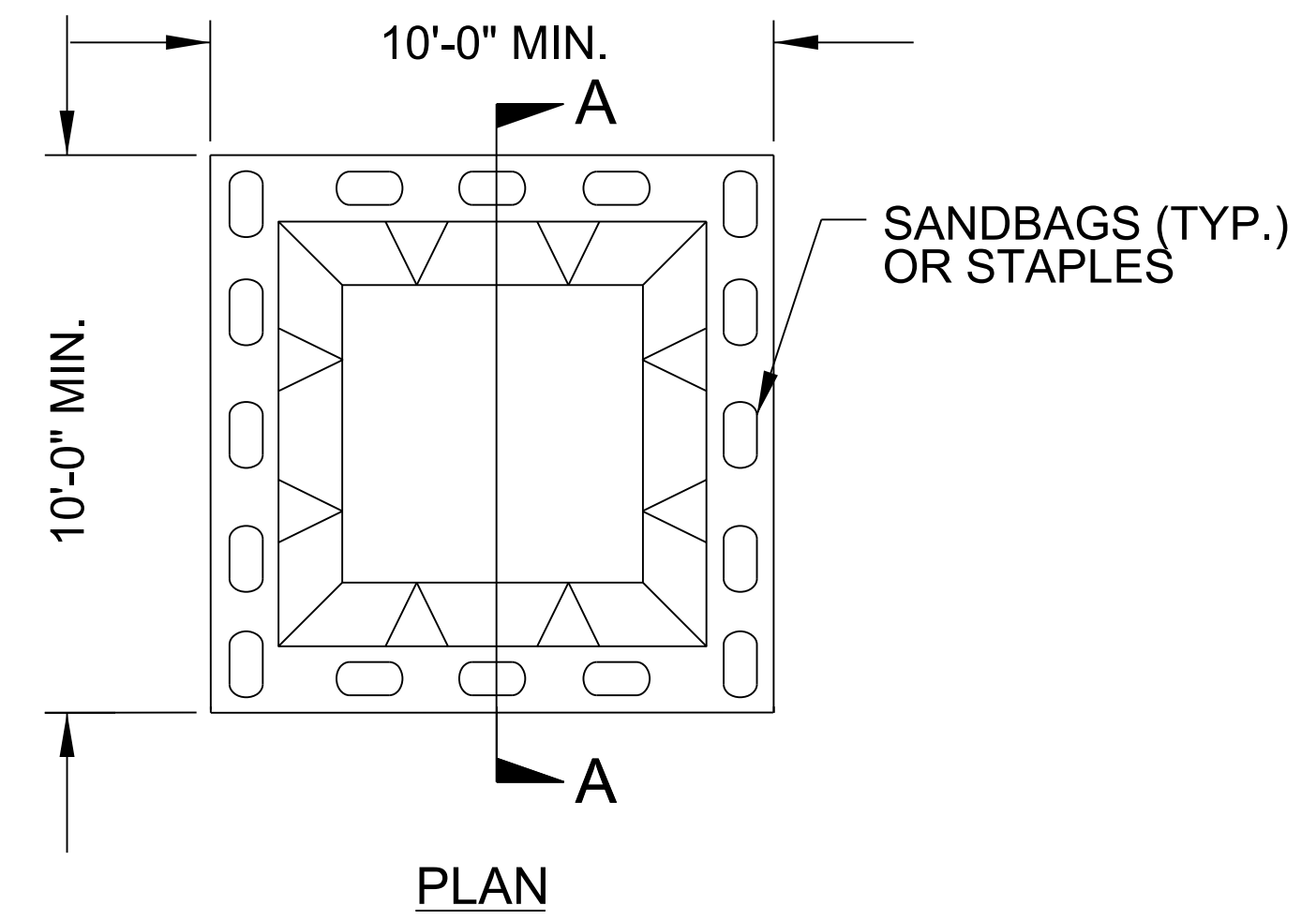
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ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

EROSION & SEDIMENT CONTROL LEGEND

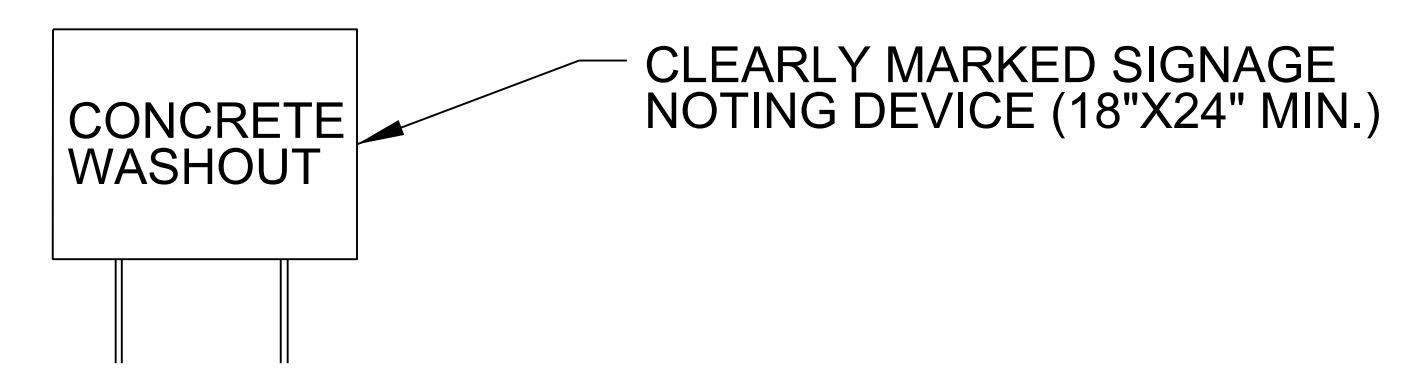
Std. #	Description	Symbol	Std. #	Description	Symbol
1605.01	Temporary Silt Fence		1633.01	Temporary Rock Silt Check Type A	
1606.01	Special Sediment Control Fence		1633.02	Temporary Rock Silt Check Type B	
1622.01	Temporary Berms and Slope Drains		1633.03	Temporary Rock Silt Check Type A with Excelsior Matting and Flocculant	
1630.02	Silt Basin Type B		1634.01	Temporary Rock Sediment Dam Type A	
1630.03	Temporary Silt Ditch		1634.02	Temporary Rock Sediment Dam Type B	
1630.04	Stilling Basin		1635.01	Rock Pipe Inlet Sediment Trap Type A	
1630.05	Temporary Diversion		1635.02	Rock Pipe Inlet Sediment Trap Type B	
1630.06	Special Stilling Basin		1636.01	Excelsior Wattle Check	
1630.07	Skimmer Basin		1636.01	Excelsior Wattle Check with Flocculant	
1630.08	Tiered Skimmer Basin		1636.01	Coir Fiber Wattle Check	
1630.09	Earthen Dam with Skimmer		1636.01	Coir Fiber Wattle Check with Flocculant	
	Infiltration Basin		1636.02	Silt Fence Excelsior Wattle Break	
	Rock Inlet Sediment Trap:			Silt Fence Coir Fiber Wattle Break	
1632.01	Type A		1636.03	Excelsior Wattle Barrier	
1632.02	Type B		1636.03	Coir Fiber Wattle Barrier	
1632.03	Type C				

PROJECT REFERENCE NO. <i>R-5863A</i>	SHEET NO. <i>EC-2A</i>
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

ONSITE CONCRETE WASHOUT STRUCTURE WITH LINER

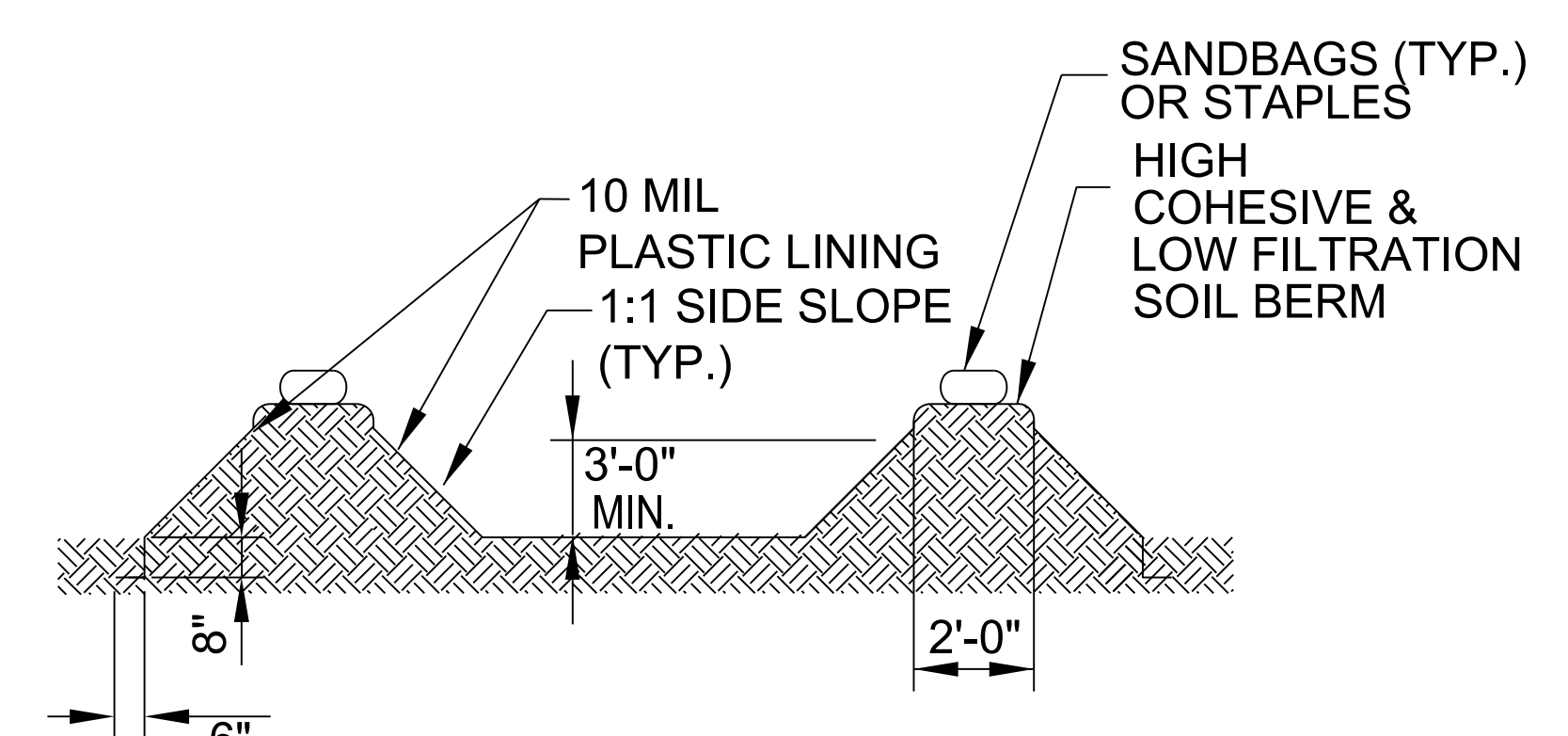
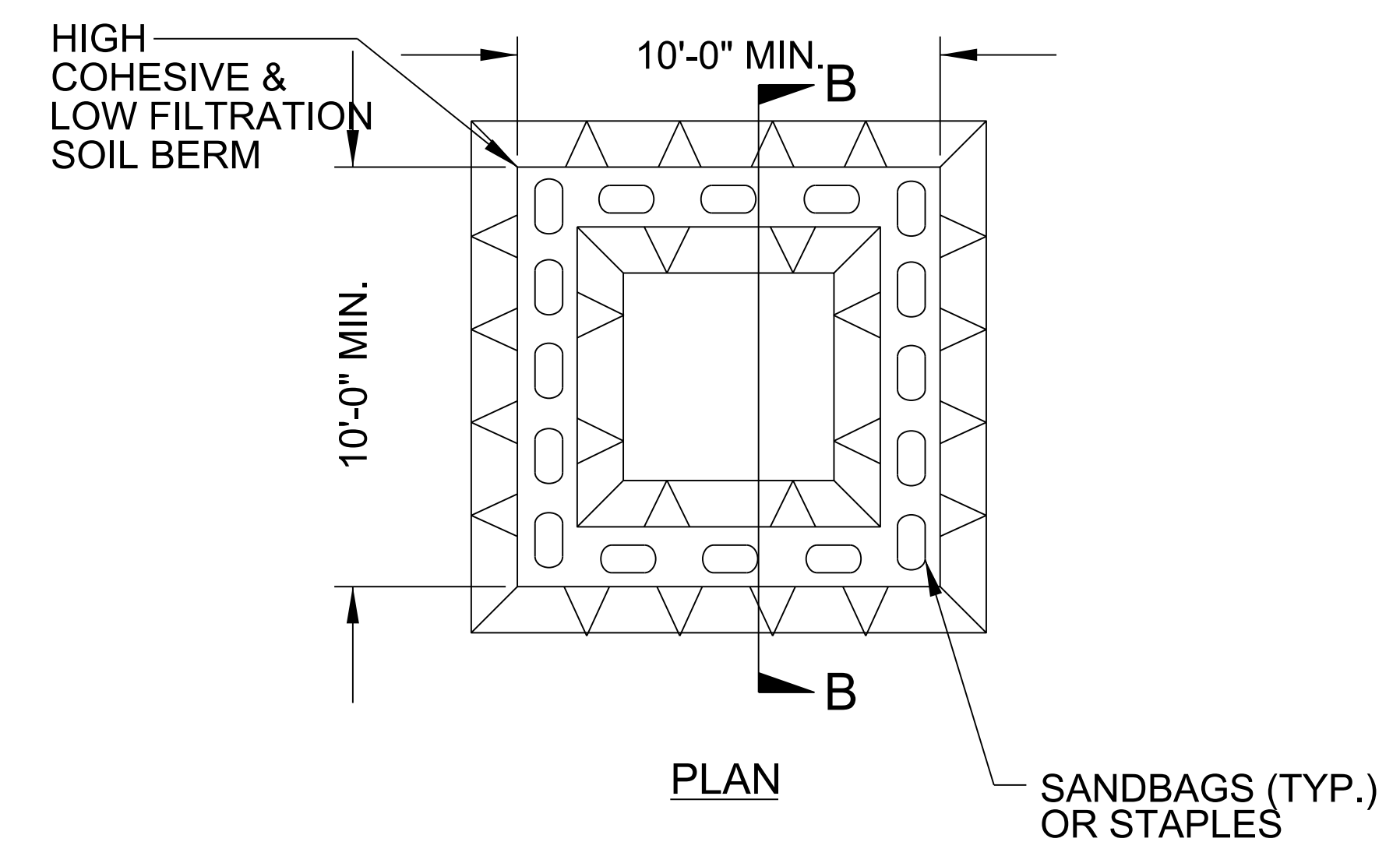


SECTION A-A

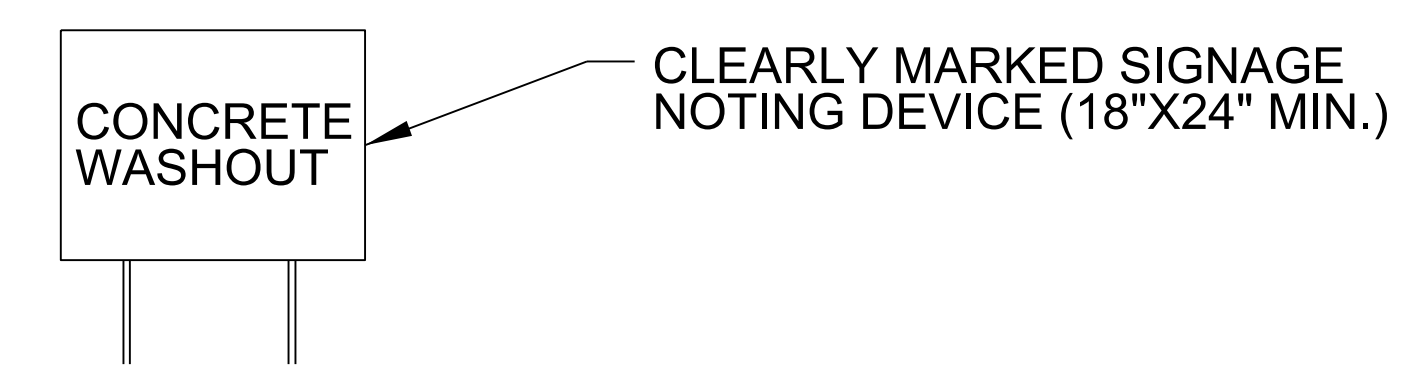


BELOW GRADE WASHOUT STRUCTURE
NOT TO SCALE

- NOTES:**
1. ACTUAL LOCATION DETERMINED IN FIELD
 2. THE CONCRETE WASHOUT STRUCTURES SHALL BE MAINTAINED WHEN THE LIQUID AND/OR SOLID REACHES 75% OF THE STRUCTURES CAPACITY TO PROVIDE ADEQUATE HOLDING CAPACITY WITH A MINIMUM 12 INCHES OF FREEBOARD.
 3. CONCRETE WASHOUT STRUCTURE NEEDS TO BE CLEARLY MARKED WITH SIGNAGE NOTING DEVICE.



SECTION B-B



ABOVE GRADE WASHOUT STRUCTURE
NOT TO SCALE

- NOTES:**
1. ACTUAL LOCATION DETERMINED IN FIELD
 2. THE CONCRETE WASHOUT STRUCTURES SHALL BE MAINTAINED WHEN THE LIQUID AND/OR SOLID REACHES 75% OF THE STRUCTURES CAPACITY TO PROVIDE ADEQUATE HOLDING CAPACITY WITH A MINIMUM 12 INCHES OF FREEBOARD.
 3. CONCRETE WASHOUT STRUCTURE NEEDS TO BE CLEARLY MARKED WITH SIGNAGE NOTING DEVICE.

DIVISION OF HIGHWAYS
STATE OF NORTH CAROLINA

PROJECT REFERENCE NO. <i>R-5863A</i>	SHEET NO. <i>EC-3</i>
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

SOIL STABILIZATION TIMEFRAMES

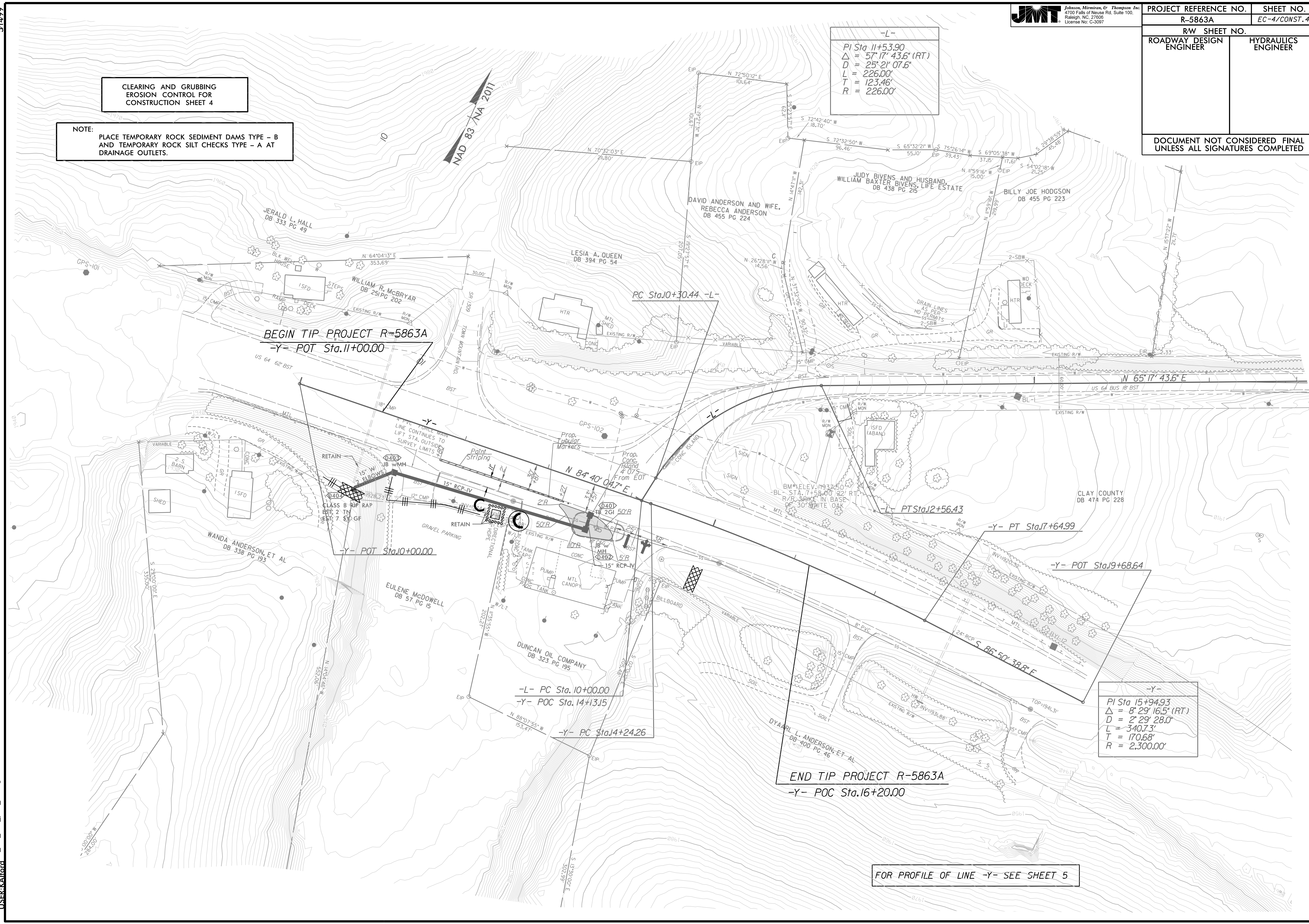
<i>SITE DESCRIPTION</i>	<i>STABILIZATION TIME</i>	<i>TIMEFRAME EXCEPTIONS</i>
PERIMETER DIKES, SWALES, DITCHES AND SLOPES	7 DAYS	NONE
HIGH QUALITY WATER (HQW) ZONES	7 DAYS	NONE
SLOPES STEEPER THAN 3:1	7 DAYS	IF SLOPES ARE 10' OR LESS IN LENGTH AND ARE NOT STEEPER THAN 2:1, 14 DAYS ARE ALLOWED.
SLOPES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

CLEARING AND GRUBBING
 EROSION CONTROL FOR
 CONSTRUCTION SHEET 4

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

-L-
 PI Sta 11+53.90
 $\Delta = 57' 17" 43.6" (RT)$
 $D = 25' 2' 07.6"$
 $L = 226.00'$
 $T = 123.46'$
 $R = 226.00'$

-Y-
 PI Sta 15+94.93
 $\Delta = 8' 29' 16.5" (RT)$
 $D = 2' 29' 28.0"$
 $L = 340.73'$
 $T = 170.68'$
 $R = 2,300.00'$



BEGIN TIP PROJECT R-5863A
 -Y- POT Sta. 11+00.00

-Y- POT Sta 10+00.00

-L- PC Sta. 10+00.00
 -Y- POC Sta. 14+13.15

-Y- PC Sta 14+24.26

PC Sta 10+30.44 -L-

END TIP PROJECT R-5863A
 -Y- POC Sta. 16+20.00

FOR PROFILE OF LINE -Y- SEE SHEET 5

RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

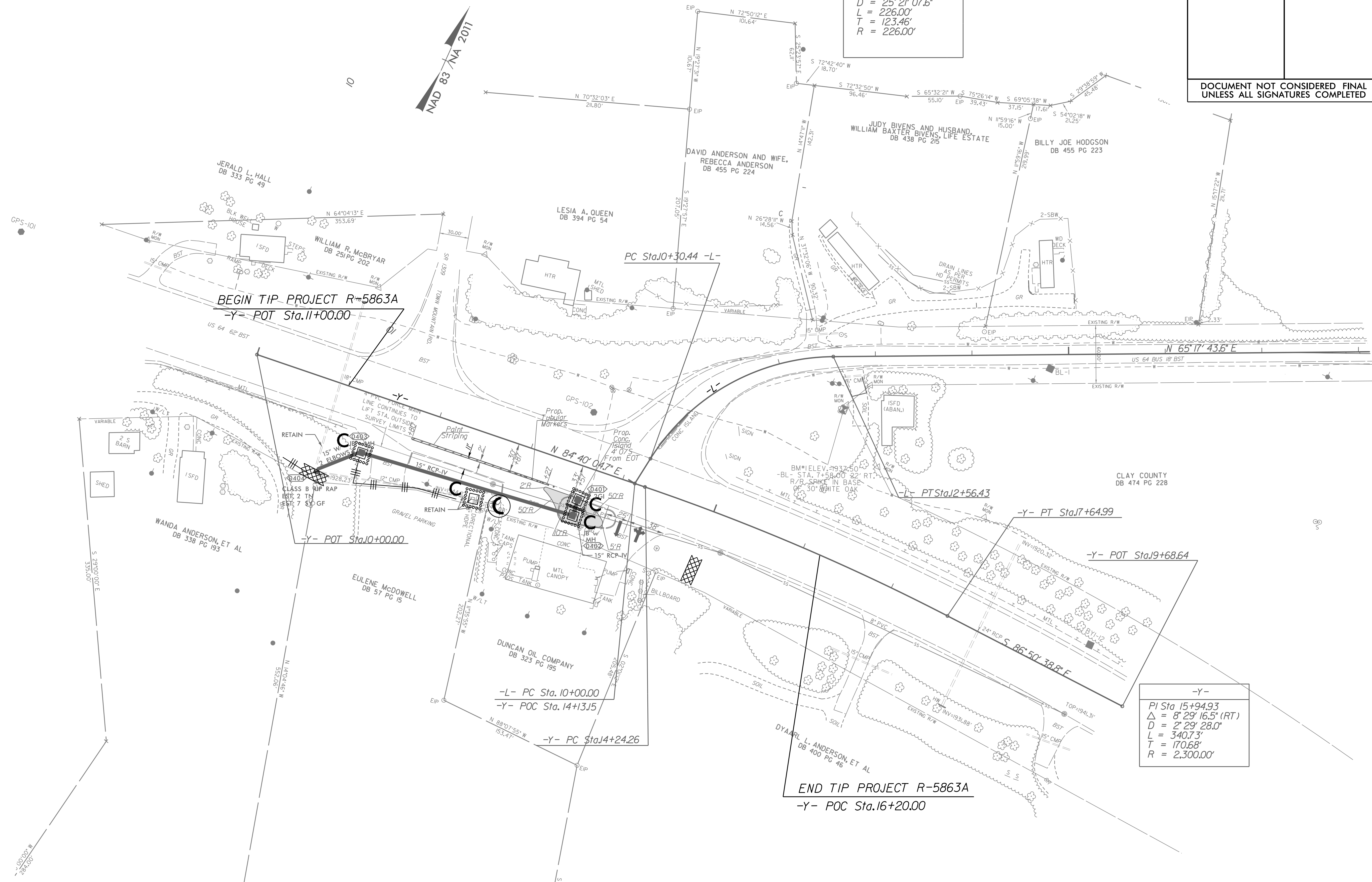
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

-L-

PI Sta 11+53.90
 $\Delta = 57' 17" 43.6" (RT)$
 $D = 25' 21" 07.6"$
 $L = 226.00'$
 $T = 123.46'$
 $R = 226.00'$

-Y-

PI Sta 15+94.93
 $\Delta = 8' 29' 16.5" (RT)$
 $D = 2' 29' 28.0"$
 $L = 340.73'$
 $T = 170.68'$
 $R = 2,300.00'$



FOR PROFILE OF LINE -Y- SEE SHEET 5

PROJECT: R-5863A

CONTRACT: DN01072

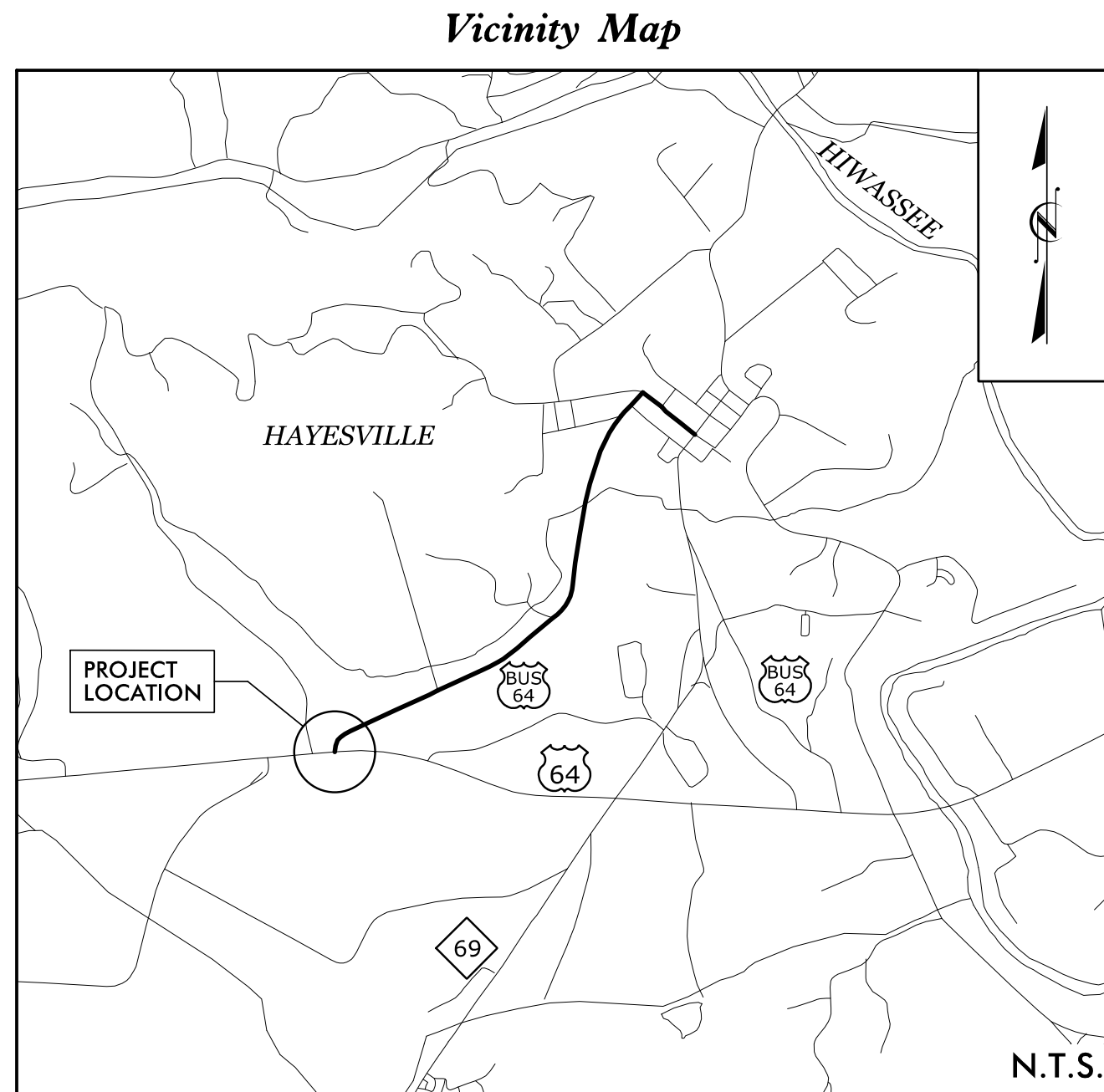
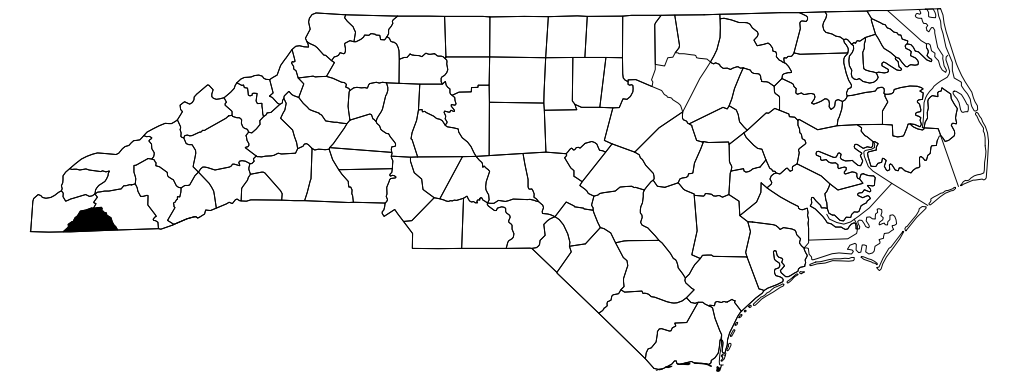
STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

Project No. R-5863A	Sheet No. Sig. 1.0
-------------------------------	------------------------------

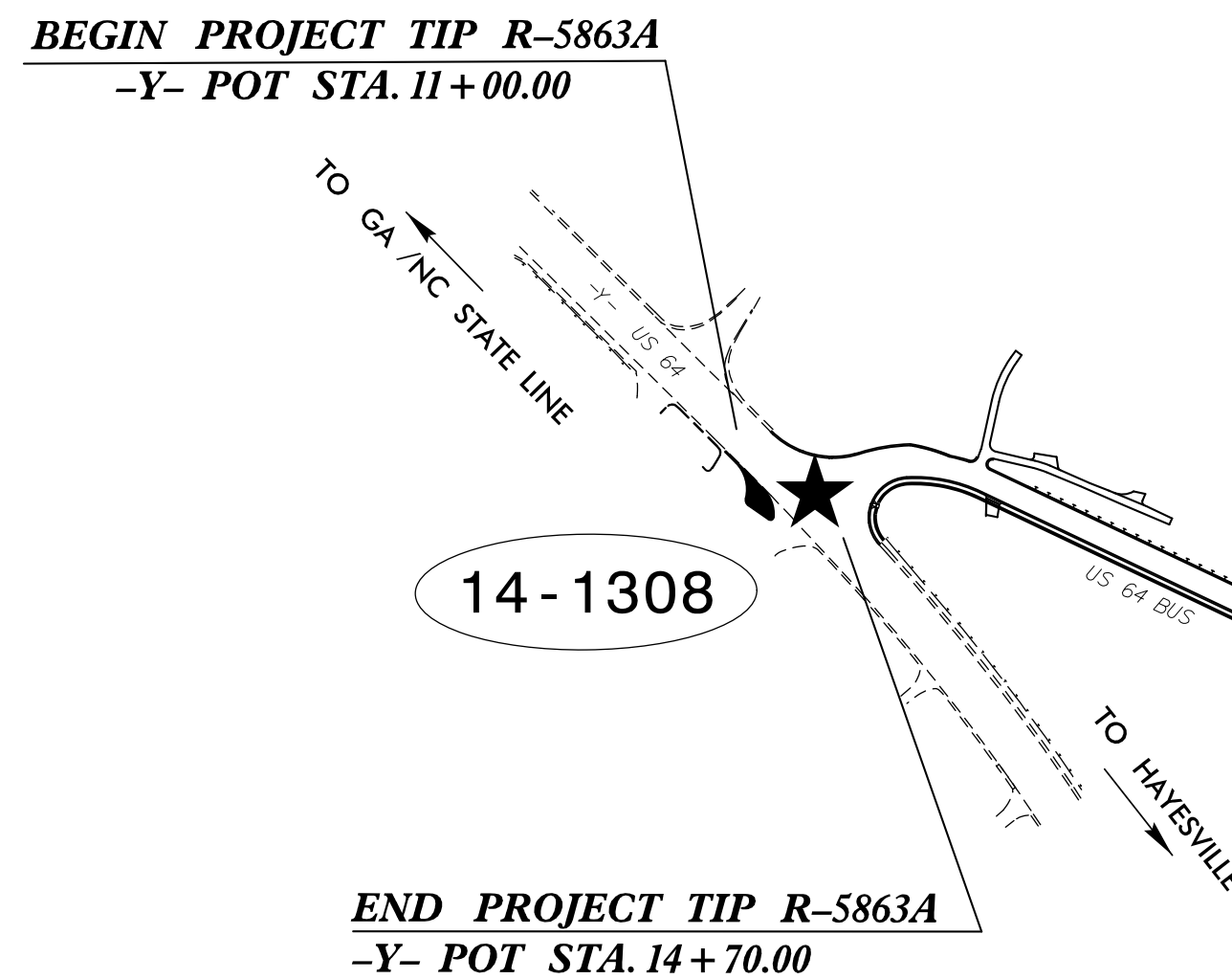
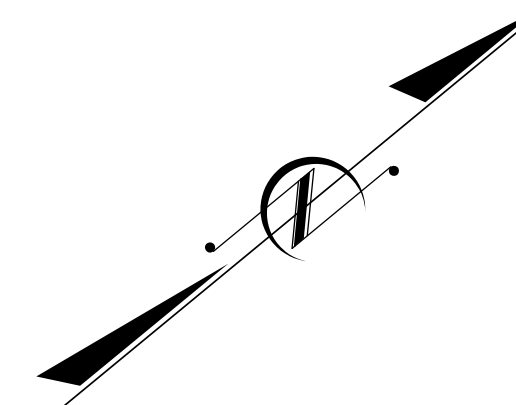
CLAY COUNTY

LOCATION: US 64/US 64 BUSINESS INTERSECTION IN HAYESVILLE

TYPE OF WORK: TRAFFIC SIGNAL



★ PROPOSED SIGNAL
 ○ XX-XXXX SIGNAL ID NUMBER



stv
 STV Engineers, Inc.
 900 West Trade St., Suite 715
 Charlotte, NC 28202
 (704) 372-1885
 NC License Number F-0991

Refer to "Roadway Standard Drawings NCDOT" dated January 2024 and "Standard Specifications for Roads and Structures" dated January 2024.

Sheet #	Reference #	Index of Plans	Location/Description
Sig. 1.0	---	Title Sheet	
Sig. 2.0-2.2	14-1308	US 64 at US 64 Business / Hot Spot Convenience Store	

**NCDOT TRANSPORTATION SYSTEMS
MANAGEMENT & OPERATIONS UNIT**
 Contacts:
R. Nicholas Zinser, P.E. – Western Region Signals Engineer
Keith M. Mims, P.E. – Signal Equipment Design Engineer

STV Engineers, Inc.
 Contacts:
Trent M. Moody, P.E. – Senior Associate – Transportation Director
Hemang M. Surti, P.E. – Senior Project Manager

DIVISION OF HIGHWAYS
 TRANSPORTATION MOBILITY AND SAFETY
 DIVISION

TRANSPORTATION MOBILITY AND SAFETY DIVISION
 TSMO UNIT
 750 N. Greenfield Parkway, Garner, NC 27529

PHASING DIAGRAM

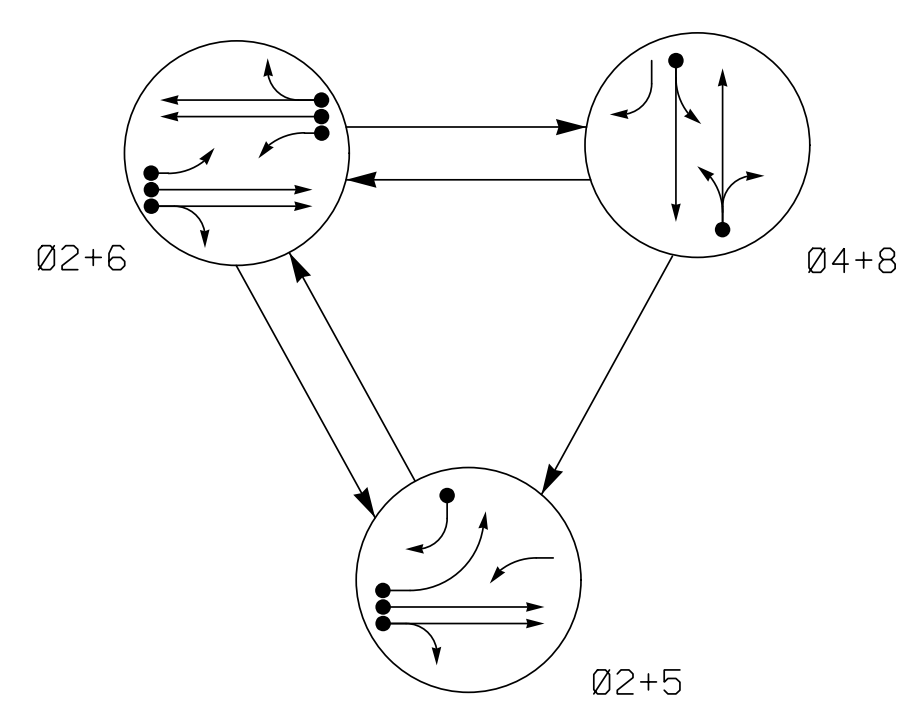
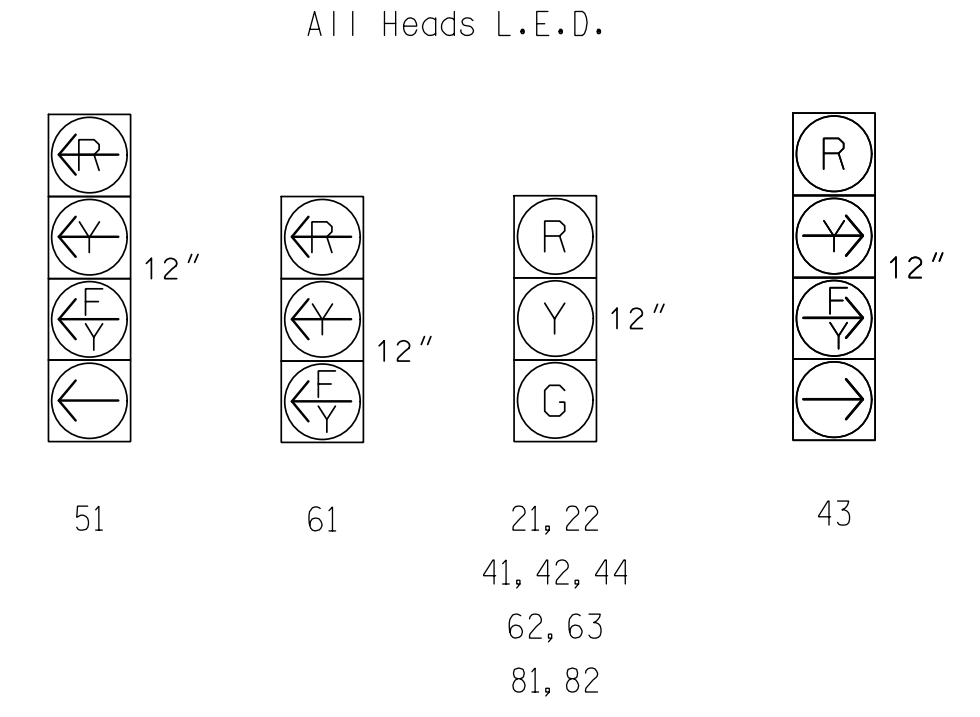


TABLE OF OPERATION

Table with columns: SIGNAL FACE, PHASE (0, 2, 4, 6, 8, F), and corresponding signal face configurations.

SIGNAL FACE I.D.



MAXTIME DETECTOR INSTALLATION CHART

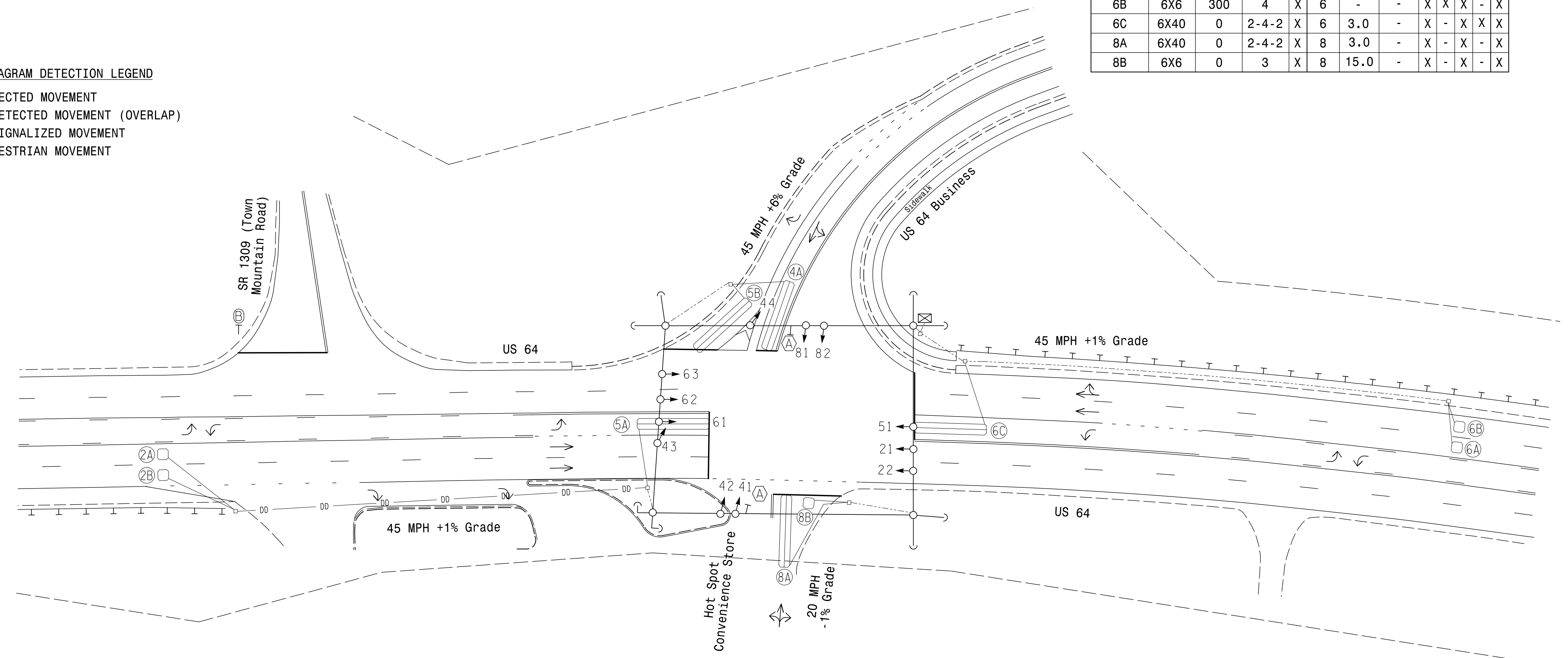
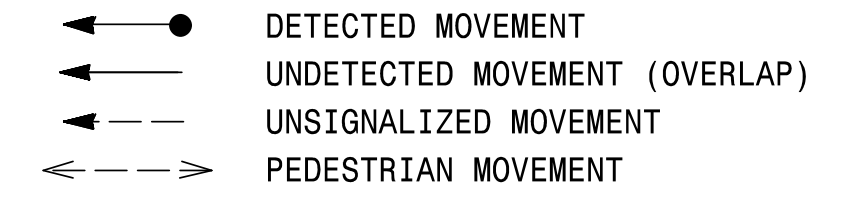
Table with columns: LOOP, SIZE (FT), DISTANCE FROM STOPBAR (FT), TURNS, NEW LOOP, CALL PHASE, DELAY TIME, EXTEND TIME, EXTEND INITIAL, CALL, DELAY DURING GREEN, NEW CARD.

3 Phase Fully Actuated Isolated

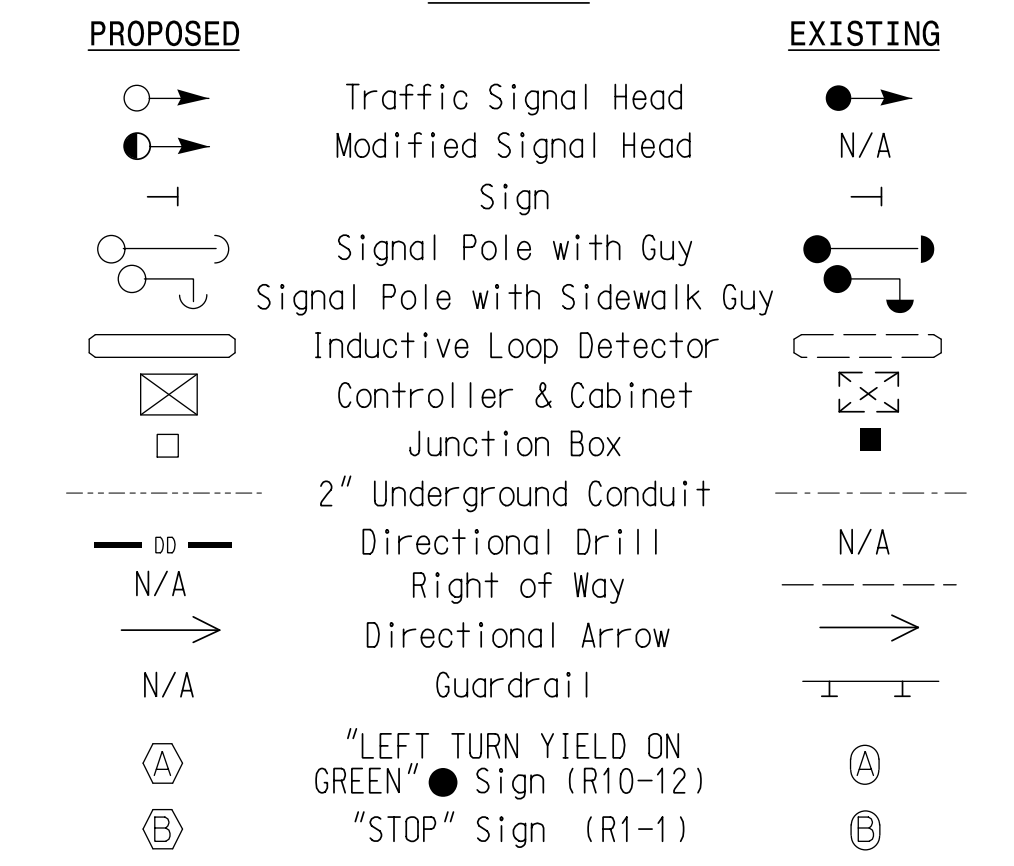
NOTES

- 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. Phase 5 may be lagged.
4. Set all detector units to presence mode.
5. Locate new cabinet so as not to obstruct sight distance of vehicles turning right on red.
6. Contractor to coordinate with Utility Company for proper overhead power line clearance conformance.

PHASING DIAGRAM DETECTION LEGEND

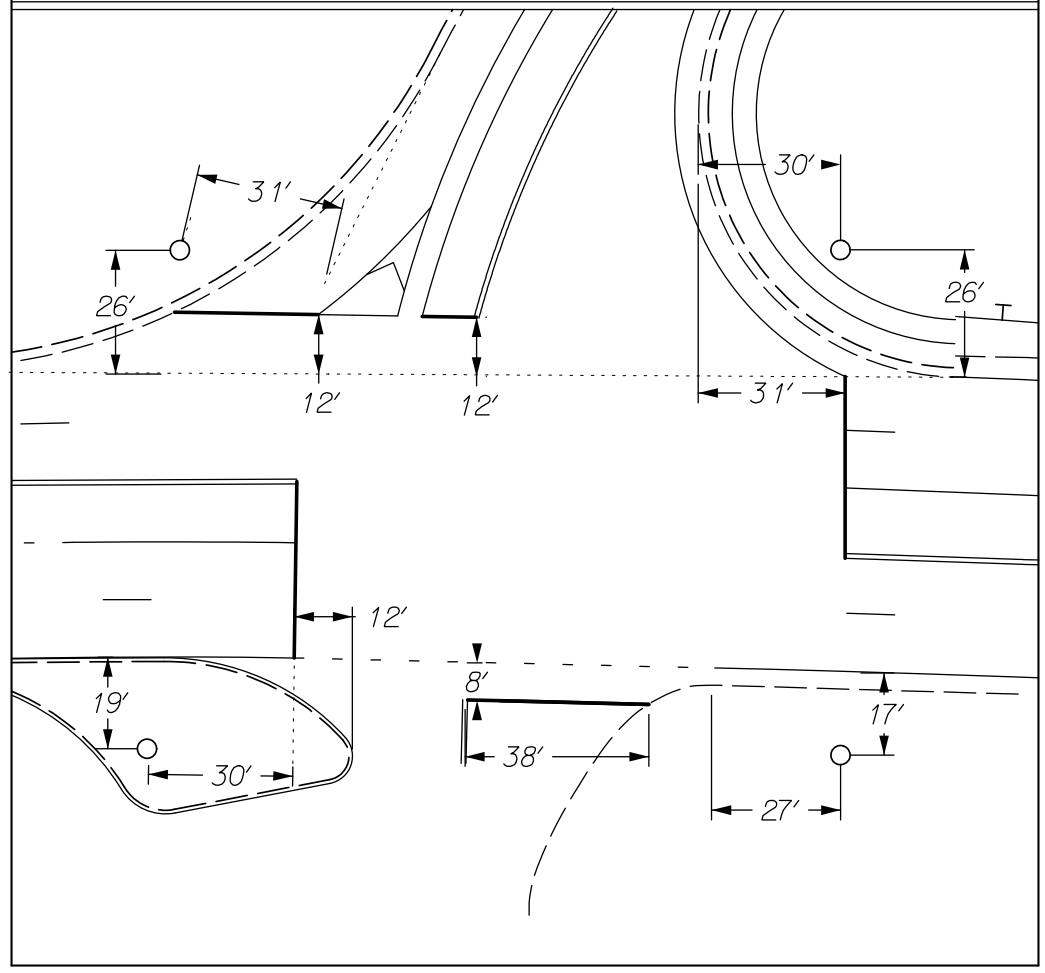


LEGEND



MAXTIME TIMING CHART table with columns: FEATURE, PHASE (2, 4, 5, 6, 8), and timing values for various features like Walk, Ped Clear, Min Green, etc.

PROPOSED STOPBAR AND POLE LOCATIONS



This plan supersedes the plan signed and sealed on 4/18/2024.

New Installation

STV Engineers, Inc. logo and address: 900 West Trade St., Suite 715, Charlotte, NC 28202.

Professional Engineer seal for Trent M. Moody, State of North Carolina, License No. 45404329.

Project information: US 64 at US 64 Business/Hot Spot Convenience Store, Division 14, Clay County, Hayesville. Prepared by: R.L. Aristondo, Reviewed by: H.M. Surti, T.M. Moody.

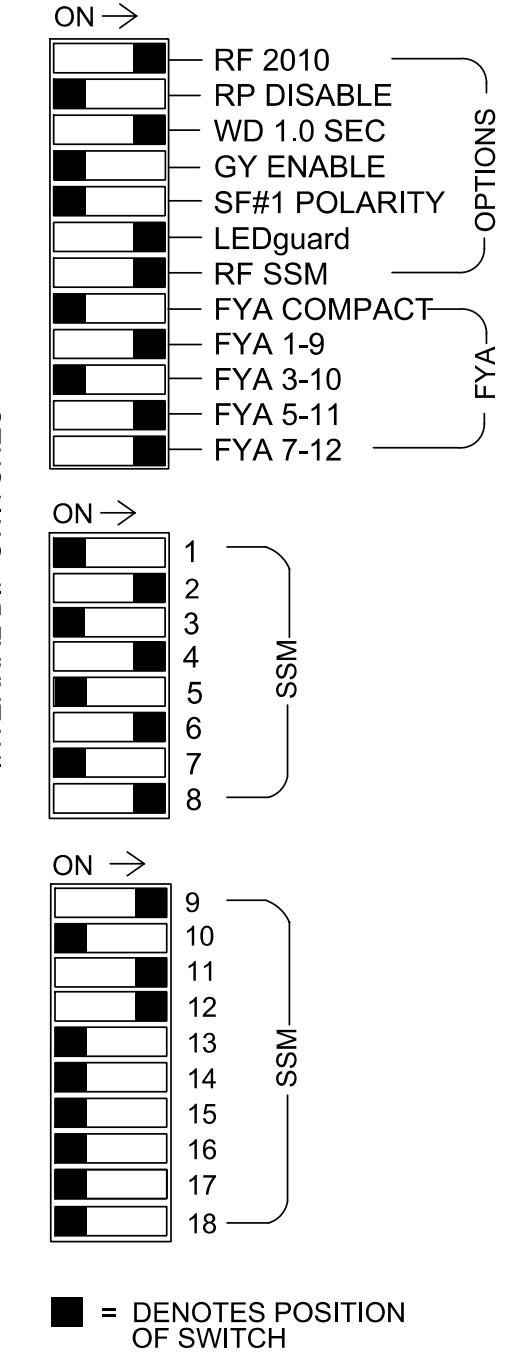
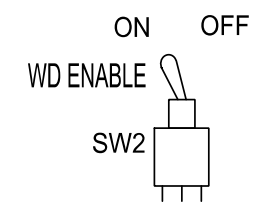
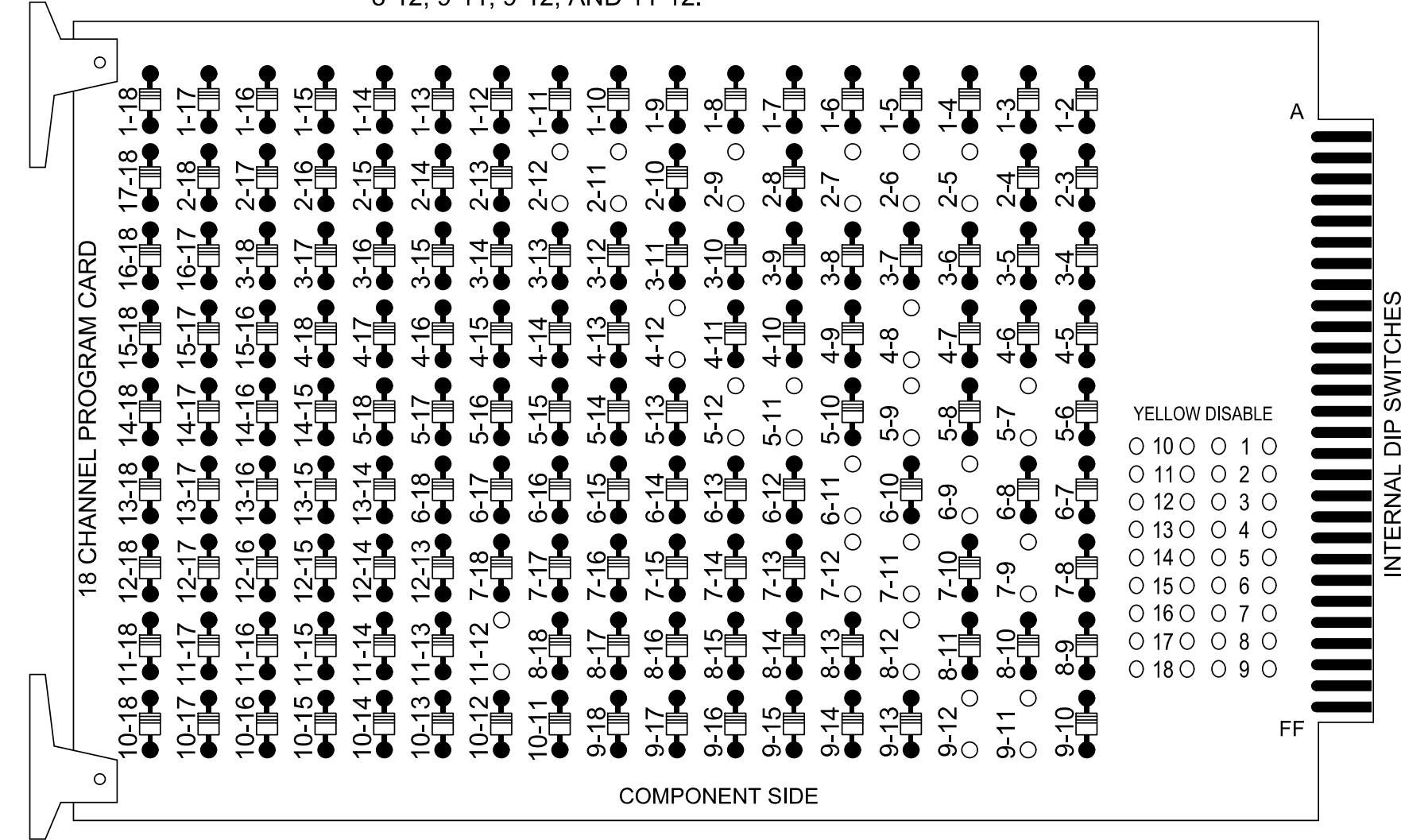
Seal and signature area for Trent M. Moody, dated 8/2/2024.

Vertical text on the left margin: 8/2/2024, DocuSign Envelope ID: 38933484-5E75-4126-87DB-6D73760CD8FC

18 CHANNEL CONFLICT MONITOR PROGRAMMING DETAIL

(remove jumpers and set switches as shown)

REMOVE DIODE JUMPERS: 2-5, 2-6, 2-7, 2-9, 2-11, 2-12, 4-8, 4-12, 5-7, 5-9, 5-11, 5-12, 6-9, 6-11, 7-9, 7-11, 7-12, 8-12, 9-11, 9-12, AND 11-12.



REMOVE JUMPERS AS SHOWN

NOTES:

- Card is provided with all diode jumpers in place. Removal of any jumper allows its channels to run concurrently.
- Ensure jumpers SEL2-SEL5 and SEL9 are present on the monitor board.
- Ensure that the Red Enable is active at all times during normal operation.
- Connect serial cable from conflict monitor to comm. port 1 of 2070 controller. Ensure conflict monitor communicates with 2070.

NOTES

- To prevent "flash-conflict" problems, insert red flash program blocks for all unused vehicle load switches in the output file. The installer shall verify that signal heads flash in accordance with the signal plan.
- Program phase 4 and phase 8 for Dual Entry.
- Program controller to start up in phase 2 Green No Walk and phase 6 Green No Walk.
- If this signal will be managed by an ATMS software, enable controller and detector logging for all detectors used at this location.

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, S5, S7, S8, S10, S11, AUX S1, AUX S4, AUX S5
 Phases Used.....2, 4, 5, 6, 8
 Overlap "1".....*
 Overlap "2".....NOT USED
 Overlap "3".....*
 Overlap "4".....*
 Overlap "7".....*

*See overlap programming detail on sheet 2

SIGNAL HEAD HOOK-UP CHART

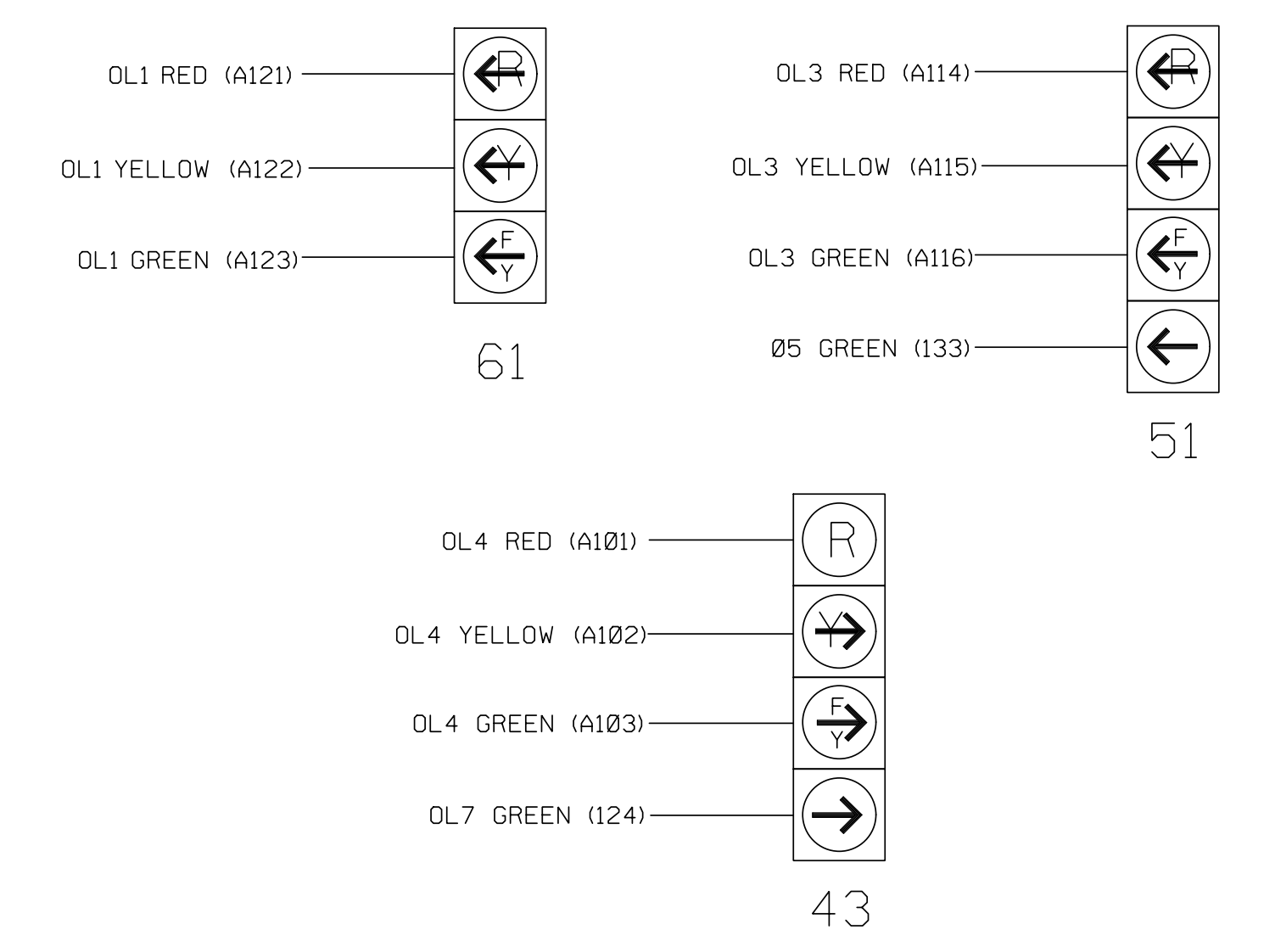
LOAD SWITCH NO.	S1	S2	S3	S4	S5	S6	S7	S8	S9	S10	S11	S12	AUX S1	AUX S2	AUX S3	AUX S4	AUX S5	AUX S6
CMU CHANNEL NO.	1	2	13	3	4	14	5	6	15	7	8	16	9	10	17	11	12	18
PHASE	1	2	2 PED	3	4	4 PED	5	6	6 PED	OL7	8	8 PED	OL1	OL2	SPARE	OL3	OL4	SPARE
SIGNAL HEAD NO.	NU	21,22	NU	NU	41,42,44	NU	51	62,63	NU	43	81,82	NU	61	NU	NU	51	43	NU
RED		128			101			134			107							A101
YELLOW		129			102		*	135		*	108							
GREEN		130			103			136			109							
RED ARROW													A121			A114		
YELLOW ARROW													A122			A115	A102	
FLASHING YELLOW ARROW													A123			A116	A103	
GREEN ARROW								133		124								

NU = Not Used

* Denotes install load resistor. See load resistor installation detail this sheet.
 * See pictorial of head wiring in detail this sheet.

FYA SIGNAL WIRING DETAIL

(wire signal heads as shown)



INPUT FILE POSITION LAYOUT

(front view)

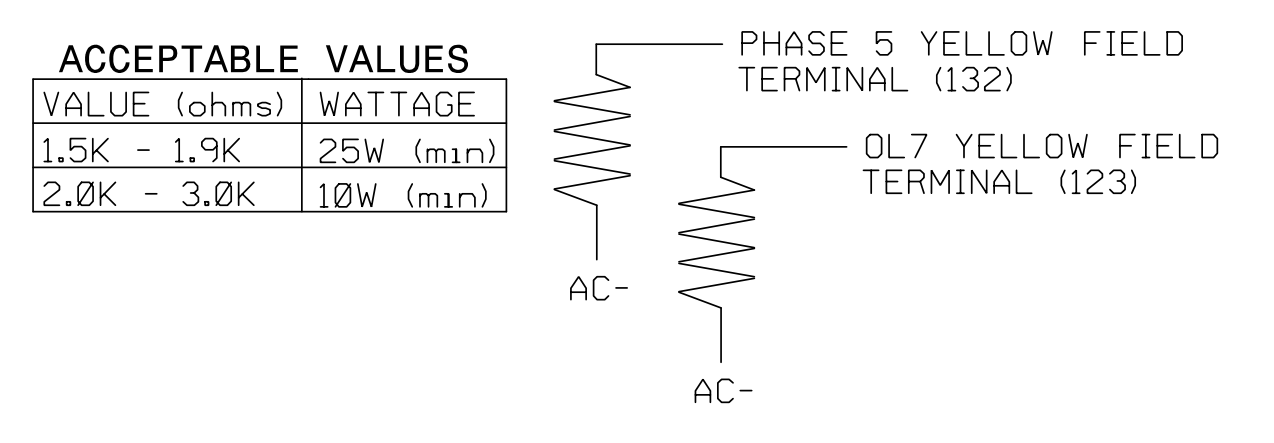
FILE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	
U	S	∅ 2	∅ 2	∅ 2	∅ 2	∅ 4	∅ 2	∅ 2	∅ 2	∅ 2	∅ 2	∅ 2	∅ 2	∅ 2	FS
L	∅ 2	2A	∅ 2	∅ 2	∅ 2	4A	∅ 2	∅ 2	∅ 2	∅ 2	∅ 2	∅ 2	∅ 2	∅ 2	DC ISOLATOR
U	∅ 5	∅ 6	∅ 6	∅ 5	∅ 5	∅ 8	∅ 2	∅ 2	∅ 2	∅ 2	∅ 2	∅ 2	∅ 2	∅ 2	ST
L	5A	6A	6C	5B	∅ 2	8A	∅ 2	∅ 2	∅ 2	∅ 2	∅ 2	∅ 2	∅ 2	∅ 2	DC ISOLATOR
	NOT USED	∅ 6	NOT USED	NOT USED	∅ 2	∅ 8	∅ 2	∅ 2	∅ 2	∅ 2	∅ 2	∅ 2	∅ 2	∅ 2	
		6B			∅ 2	8B									

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

FS = FLASH SENSE
 ST = STOP TIME
 PRE = PREEMPT

LOAD RESISTOR INSTALLATION DETAIL

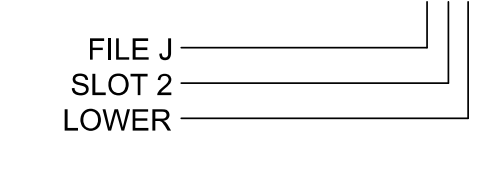
(install resistors as shown below)



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
2A	TB2-5,6	I2U	39	1	2	2				X	X	
2B	TB2-7,8	I2L	43	5	3	2			X	X	X	
4A	TB4-9,10	I6U	41	3	8	4	3.0		X		X	
5A	TB3-1,2	J1U	55	17	15	5	15.0		X		X	
				-	31	2	3.0		X		X	X
5B	TB5-1,2	J4U	48	10	20	5	15.0		X		X	
6A	TB3-5,6	J2U	40	2	16	6			X	X	X	
6B	TB3-7,8	J2L	44	6	17	6			X	X	X	
6C	TB3-9,10	J3U	64	30	18	6	3.0		X		X	X
8A	TB5-9,10	J6U	42	4	22	8	3.0		X		X	
8B	TB5-11,12	J6L	46	8	23	8	15.0		X		X	

INPUT FILE POSITION LEGEND: J2L



ELECTRICAL DETAIL SHEET 1 OF 2

STV Engineers, Inc.
 900 West Trade St., Suite 715
 Charlotte, NC 28202
 (704) 372-1885
 NC License Number F-0991

US 64 at US 64 Business/Hot Spot Convenience Store
 Division 14 Clay County Hayesville
 PLAN DATE: August 2024 REVIEWED BY: H.M. Surti
 PREPARED BY: R.L. Aristondo REVIEWED BY: T.M. Woody
 REVISIONS INIT. DATE

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED
 SEAL
 NORTH CAROLINA PROFESSIONAL ENGINEER
 SEAL 040329
 TRUST M. MOODY
 45EA14836704E0
 8/2/2024
 SIGNATURE DATE
 SIG. INVENTORY NO. 14-1308

8/2/2024 9:45:10 AM C:\Users\stvj\OneDrive\Documents\STV\Projects\4015081\4015081_0001\4015081_0001.dwg:plotted:20240802 11:30:58 AM

OUTPUT CHANNEL CONFIGURATION

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

Web Interface
Home >Controller >Advanced IO>Channels>Channels 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	Overlap	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

NOTE OL7 ASSIGNED TO CHANNEL 7 →

↑ ↑
NOTE: ALL RED FLASH

MAXTIME OVERLAP PROGRAMMING DETAIL

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

Web Interface
Home >Controller >Overlap Configuration >Overlaps

Overlap Plan 1

Overlap	1	3	4	7
Type	FYA 4 - Section	FYA 4 - Section	FYA 4 - Section	Normal
Included Phases	2	6	4	5
Modifier Phases	-	5	-	-
Modifier Overlaps	-	-	7	-
Trail Green	0	0	0	0
Trail Yellow	0.0	0.0	0.0	0.0
Trail Red	0.0	0.0	0.0	0.0

FLASHER CIRCUIT MODIFICATION DETAIL

IN ORDER TO INSURE THAT SIGNALS FLASH CONCURRENTLY ON THE SAME APPROACH, MAKE THE FOLLOWING FLASHER CIRCUIT CHANGES:

1. ON REAR OF PDA - REMOVE WIRE FROM TERM. T2-4 AND TERMINATE ON T2-2.
2. ON REAR OF PDA - REMOVE WIRE FROM TERM. T2-5 AND TERMINATE ON T2-3.
3. REMOVE FLASHER UNIT 2.

THE CHANGES LISTED ABOVE TIES ALL PHASES AND OVERLAPS TO FLASHER UNIT 1.

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.

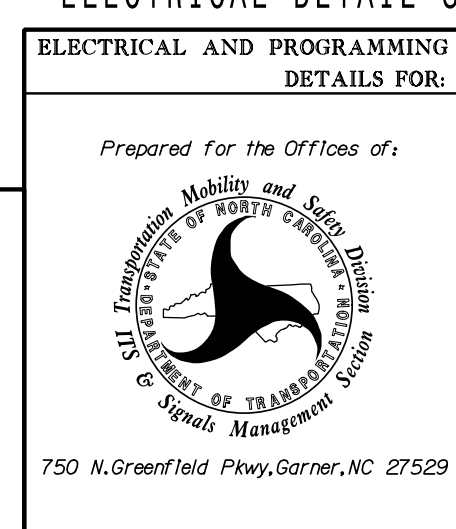
Start Up Parameters
StartUp Clearance Hold
6

Unit Flash Parameters
All Red Flash Exit Time
6

This plan supersedes the plan signed and sealed on 4/18/2024.

THIS ELECTRICAL DETAIL IS FOR THE SIGNAL DESIGN: 14-1308
DESIGNED: August 2024
SEALED: 8/2/2024
REVISED:

ELECTRICAL DETAIL SHEET 2 OF 2



US 64 at US 64 Business/Hot Spot Convenience Store	
Division 14	Clay County Hayesville
PLAN DATE: August 2024	REVIEWED BY: H.M. Surti
PREPARED BY: R.L. Aristondo	REVIEWED BY: T.M. Moody
REVISIONS	INIT. DATE

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

SEAL	DATE
45EAT04836704E0	8/2/2024
SIGNATURE	DATE
SIG. INVENTORY NO. 14-1308	

8/2/2024 9:45:10 AM C:\Users\mwoody\OneDrive\Documents\Signal Design\Projects\4019081\4019081_0001\4019081_01\sec\p1\ne_inform\tr\off\loc\sig\gnl_Design\41308_sml.ele.2024.xxxx.dgn mwoody

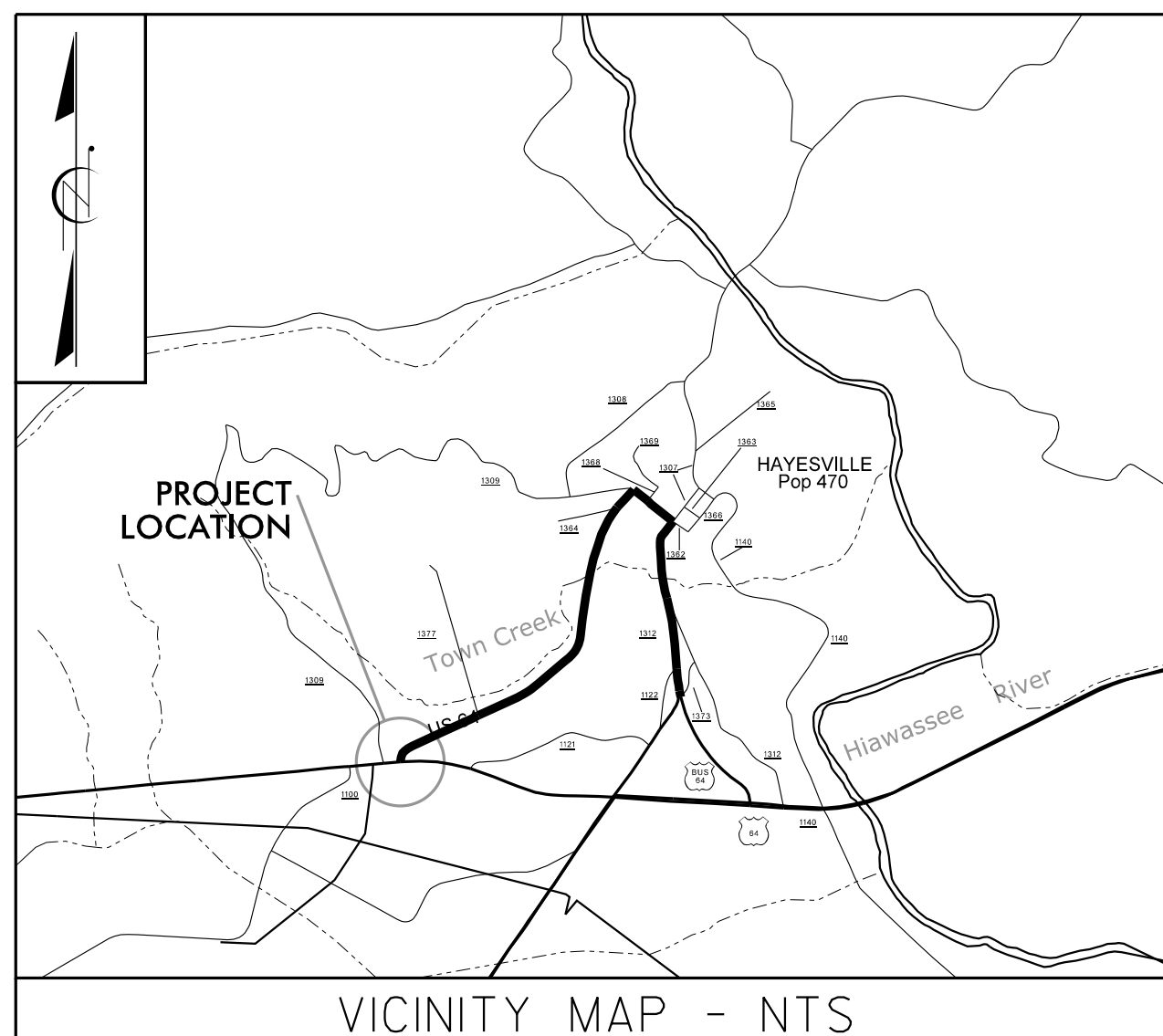
TIP PROJECT: R-5863A

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

**UTILITIES BY OTHERS PLANS
CLAY COUNTY**

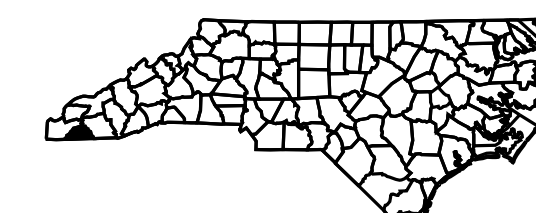
**LOCATION: US 64 US 64 BUSINESS INTERSECTION
AT HAYESVILLE**

TYPE OF WORK: RELOCATION OF POWER

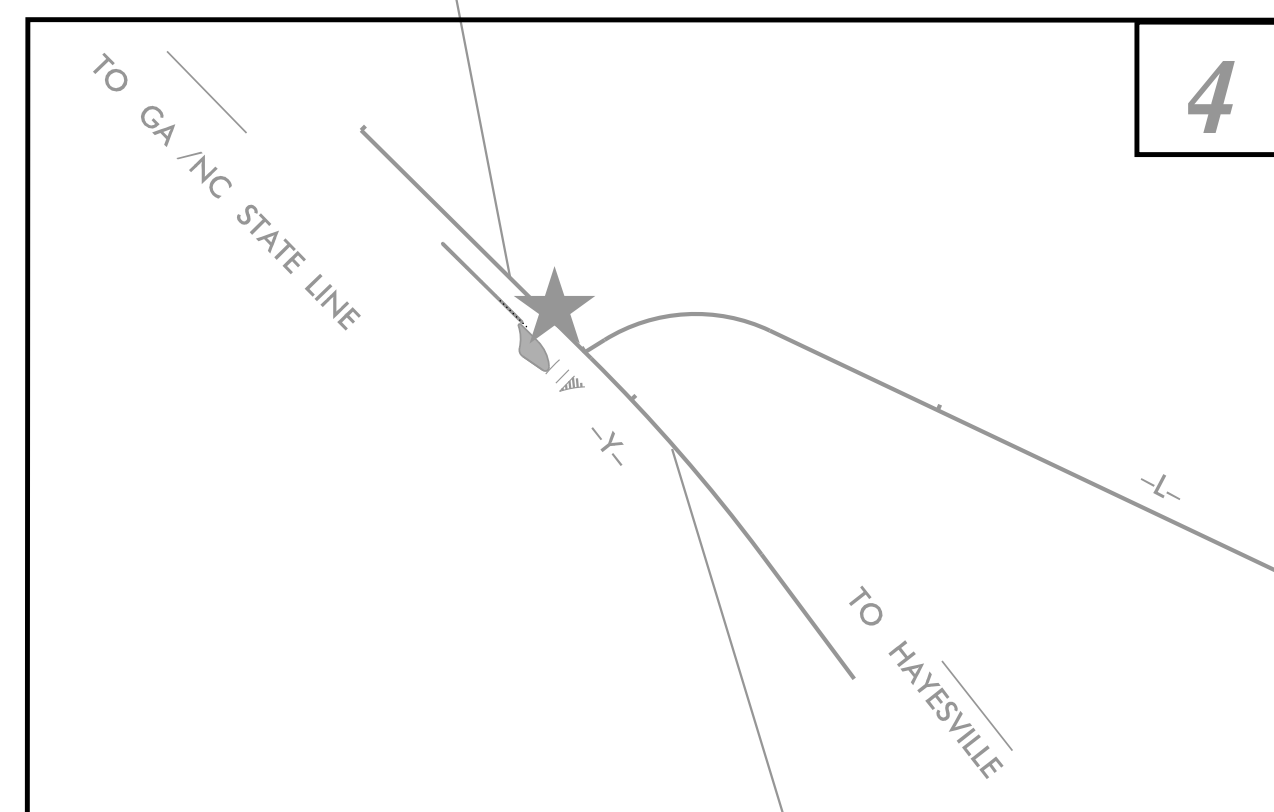


T.I.P. NO.	SHEET NO.
R-5863A	UO-1

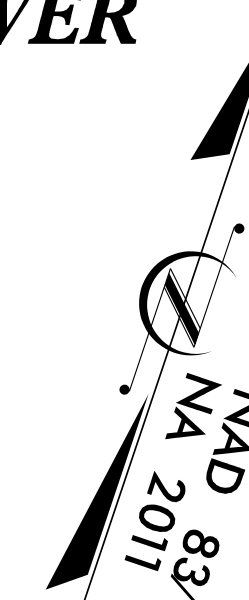
NOTE:
ALL UTILITY WORK SHOWN ON THIS SHEET WILL BE DONE BY OTHERS. NO PAYMENT WILL BE MADE TO THE CONTRACTOR FOR UTILITY WORK SHOWN ON THIS SHEET.



BEGIN PROJECT TIP R-5863A
-Y- POT STA. 11+00.00



END PROJECT TIP R-5863A
-Y- POT STA. 16+20.00



PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

GRAPHIC SCALES



INDEX OF SHEETS

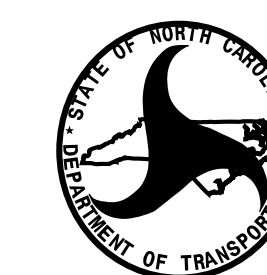
SHEET NO.:	DESCRIPTION:
UO-1	TITLE SHEET
UO-2 THRU UO-3	UBO SYMBOLOGY SHEETS
UO-4 THRU UO-9	UBO PLAN SHEETS

UTILITY OWNERS ON PROJECT

(A) POWER - BLUE RIDGE MOUNTAIN EMC

Prepared in the Office of:

Brett Abernathy, PE ROADWAY PROJECT MANAGER
Nick V. Asaro UTILITY PROJECT MANAGER
James Montgomery PROJECT UTILITY COORDINATOR



DIVISION OF HIGHWAYS
DIVISION 14













253 WEBSTER ROAD
SYLVA, NC 28779

Jared Bond DIVISION PROJECT MANAGER
Bob Golding DIV UTILITY ENGINEER
Lynn Kieselhorst DIV UTILITY COORDINATOR





STATE OF NORTH CAROLINA DIVISION OF HIGHWAYS

UTILITIES PLAN SHEET SYMBOLS









PROPOSED WATER SYMBOLS








Water Line (Sized as Shown)	
11¼ Degree Bend	
22½ Degree Bend	
45 Degree Bend	
90 Degree Bend	
Plug	
Tee	
Cross	
Reducer	
Gate Valve	
Butterfly Valve	
Tapping Valve	
Line Stop	
Line Stop with Bypass	
Blow Off	
Fire Hydrant	
Relocate Fire Hydrant	
Remove Fire Hydrant	
Water Meter	
Relocate Water Meter	
Remove Water Meter	
Water Pump Station	
RPZ Backflow Preventer	
DCV Backflow Preventer	
Relocate RPZ Backflow Preventer	
Relocate DCV Backflow Preventer	

PROPOSED SEWER SYMBOLS



















Gravity Sewer Line (Sized as Shown)	
Force Main Sewer Line (Sized as Shown)	
Manhole (Sized per Note)	
Sewer Pump Station	




















PROPOSED MISCELLANEOUS UTILITIES SYMBOLS

Power Pole	
Telephone Pole	
Joint Use Pole	
Telephone Pedestal	
Utility Line by Others (Type as Shown)	
Trenchless Installation	
Encasement by Open Cut	
Encasement	

Thrust Block	
Air Release Valve	
Utility Vault	
Concrete Pier	
Steel Pier	
Plan Note	
Pay Item Note	

EXISTING UTILITIES SYMBOLS

Power Pole	
Telephone Pole	
Joint Use Pole	
Utility Pole	
Utility Pole with Base	
H-Frame Pole	
Power Transmission Line Tower	
Water Manhole	
Power Manhole	
Telephone Manhole	
Sanitary Sewer Manhole	
Hand Hole for Cable	
Power Transformer	
Telephone Pedestal	
CATV Pedestal	
Gas Valve	
Gas Meter	
Located Miscellaneous Utility Object	
Abandoned According to Utility Records	AATUR
End of Information	E.O.I.

*Underground Power Line	
*Underground Telephone Cable	
*Underground Telephone Conduit	
*Underground Fiber Optics Telephone Cable	
*Underground TV Cable	
*Underground Fiber Optics TV Cable	
*Underground Gas Pipeline	
Aboveground Gas Pipeline	
*Underground Water Line	
Aboveground Water Line	
*Underground Gravity Sanitary Sewer Line	
Aboveground Gravity Sanitary Sewer Line	
*Underground SS Forced Main Line	
Underground Unknown Utility Line	
SUE Test Hole	
Water Meter	
Water Valve	
Fire Hydrant	
Sanitary Sewer Cleanout	

*For Existing Utilities
 Utility Line Drawn from Record W
 (Type as Shown)
 Designated Utility Line W
 (Type as Shown)

STATE OF NORTH CAROLINA, DIVISION OF HIGHWAYS

CONVENTIONAL PLAN SHEET SYMBOLS

11/08/18

BOUNDARIES AND PROPERTY:

State Line	-----
County Line	-----
Township Line	-----
City Line	-----
Reservation Line	-----
Property Line	-----
Existing Iron Pin	○ EIP
Computed Property Corner	-----
Property Monument	□ ECM
Parcel/Sequence Number	①23
Existing Fence Line	-x-x-x-
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	--- WLB ---
Proposed Lateral, Tail, Head Ditch	--- FLOW ---
False Sump	▽

RAILROADS:

Standard Gauge	-----
RR Signal Milepost	○ MILEPOST 35
Switch	□ SWITCH
RR Abandoned	-----
RR Dismantled	-----

RIGHT OF WAY & PROJECT CONTROL:

Secondary Horiz and Vert Control Point	◆
Primary Horiz Control Point	○
Primary Horiz and Vert Control Point	◆
Exist Permanent Easement Pin and Cap	◇
New Permanent Easement Pin and Cap	◆
Vertical Benchmark	⊗
Existing Right of Way Marker	△
Existing Right of Way Line	-----
New Right of Way Line	-----
New Right of Way Line with Pin and Cap	-----
New Right of Way Line with Concrete or Granite R/W Marker	-----
New Control of Access Line with Concrete C/A Marker	-----
Existing Control of Access	-----
New Control of Access	-----
Existing Easement Line	-----
New Temporary Construction Easement	-----
New Temporary Drainage Easement	-----
New Permanent Drainage Easement	-----
New Permanent Drainage / Utility Easement	-----
New Permanent Utility Easement	-----
New Temporary Utility Easement	-----
New Aerial Utility Easement	-----

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	○

Note: Not to Scale

*S.U.E. = Subsurface Utility Engineering

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	□ CB
Paved Ditch Gutter	-----
Storm Sewer Manhole	○ S
Storm Sewer	-----

UTILITIES:

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	○
H-Frame Pole	●
U/G Power Line LOS B (S.U.E.*)	-----
U/G Power Line LOS C (S.U.E.*)	-----
U/G Power Line LOS D (S.U.E.*)	-----

TELEPHONE:

Existing Telephone Pole	●
Proposed Telephone Pole	○
Telephone Manhole	○ T
Telephone Pedestal	□
Telephone Cell Tower	⊗
U/G Telephone Cable Hand Hole	○
U/G Telephone Cable LOS B (S.U.E.*)	-----
U/G Telephone Cable LOS C (S.U.E.*)	-----
U/G Telephone Cable LOS D (S.U.E.*)	-----
U/G Telephone Conduit LOS B (S.U.E.*)	-----
U/G Telephone Conduit LOS C (S.U.E.*)	-----
U/G Telephone Conduit LOS D (S.U.E.*)	-----
U/G Fiber Optics Cable LOS B (S.U.E.*)	-----
U/G Fiber Optics Cable LOS C (S.U.E.*)	-----
U/G Fiber Optics Cable LOS D (S.U.E.*)	-----

WATER:

Water Manhole	○ W
Water Meter	○
Water Valve	⊗
Water Hydrant	⊗
U/G Water Line LOS B (S.U.E.*)	-----
U/G Water Line LOS C (S.U.E.*)	-----
U/G Water Line LOS D (S.U.E.*)	-----
Above Ground Water Line	-----

TV:

TV Pedestal	□
TV Tower	⊗
U/G TV Cable Hand Hole	○
U/G TV Cable LOS B (S.U.E.*)	-----
U/G TV Cable LOS C (S.U.E.*)	-----
U/G TV Cable LOS D (S.U.E.*)	-----
U/G Fiber Optic Cable LOS B (S.U.E.*)	-----
U/G Fiber Optic Cable LOS C (S.U.E.*)	-----
U/G Fiber Optic Cable LOS D (S.U.E.*)	-----

GAS:

Gas Valve	◇
Gas Meter	◇
U/G Gas Line LOS B (S.U.E.*)	-----
U/G Gas Line LOS C (S.U.E.*)	-----
U/G Gas Line LOS D (S.U.E.*)	-----
Above Ground Gas Line	-----

SANITARY SEWER:

Sanitary Sewer Manhole	⊕
Sanitary Sewer Cleanout	⊕
U/G Sanitary Sewer Line	-----
Above Ground Sanitary Sewer	-----
SS Forced Main Line LOS B (S.U.E.*)	-----
SS Forced Main Line LOS C (S.U.E.*)	-----
SS Forced Main Line LOS D (S.U.E.*)	-----

MISCELLANEOUS:

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

UTILITIES BY OTHERS

ALL PROPOSED UTILITY WORK SHOWN ON THIS SHEET WILL BE DONE BY OTHERS. NO PAYMENT WILL BE MADE TO THE CONTRACTOR FOR PROPOSED UTILITY WORK SHOWN ON THIS SHEET.

