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T.I.P.: HN-0031

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION

**PAVEMENT MARKING PLAN
TRANSYLVANIA COUNTY**

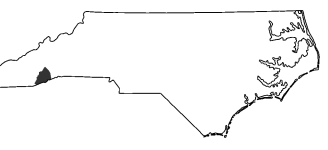
LOCATION: *US 276 AT SR 1536 (CASCADE LAKE RD)*

TYPE OF WORK: *GRADING, PAVING, DRAINAGE, & CULVERT*

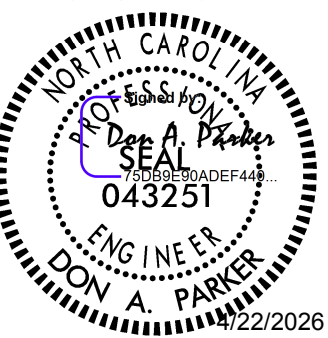
HN-0031

PMP-1

NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
WAKE COUNTY

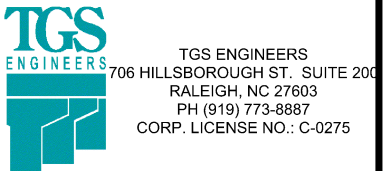


PROJECT ENGINEER



DOCUMENT NOT CONSIDERED FINAL
UNLESS ALL SIGNATURES COMPLETED

PREPARED BY



TGS ENGINEERS
706 HILLSBOROUGH ST., SUITE 200
RALEIGH, NC 27603
PH (919) 773-8887
CORP. LICENSE NO.: C-0275

INDEX

SHEET NO.	DESCRIPTION
PMP-1	PAVEMENT MARKING PLAN TITLE, SCHEDULE SHEET, INDEX OF SHEETS, LIST OF APPLICABLE ROADWAY STANDARD DRAWINGS, GENERAL NOTES, AND FINAL PAVEMENT MARKING SCHEDULE
PMP-1A	REVISED ROADWAY STANDARD DRAWING (1205D01)
PMP-1B	REVISED ROADWAY STANDARD DRAWING (1250D01)
PMP-2	PAVEMENT MARKING DETAIL

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
-L- US 276 (GREENVILLE HWY)	THERMOPLASTIC	POLYCARBONATE H-SHAPED
-Y- SR 1536 (CASCADE LAKE RD)	THERMOPLASTIC	NONE

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

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

D) PASSING ZONES WILL BE DETERMINED IN THE FIELD AND MUST BE APPROVED BY THE ENGINEER.

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

FINAL PAVEMENT MARKING SCHEDULE

SYMBOL	DESCRIPTION
PAVEMENT MARKINGS	
THERMOPLASTIC (4",90 MILS)	
T1	(4") WHITE EDGELINE
T10	(4") YELLOW EDGELINE
T13	(4") YELLOW DOUBLE CENTER
THERMOPLASTIC (8",90 MILS)	
T40	(8") WHITE GORELINE
T42	(8") YELLOW DIAGONALS
T45	(8") 3 FT. - 3 FT./SP WHITE MINISKIP
THERMOPLASTIC SYMBOLS	
T73	COMBO. LEFT/STRAIGHT ARROW
GENERIC PAVEMENT MARKING ITEM (SEE SPECIAL PROVISION)	
T103	YIELD LINE THERMOPLASTIC PAVEMENT MARKING, 24", 90 MIL
PAVEMENT MARKERS (POLYCARBONATE H-SHAPED)	
ME	YELLOW & YELLOW

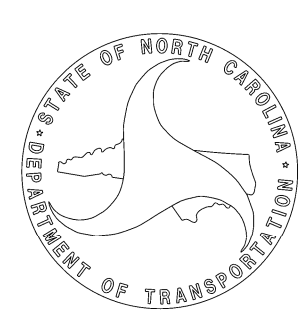
ROADWAY STANDARD DRAWING

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

STD. NO.	TITLE
1205.01	PAVEMENT MARKINGS - LINE TYPES AND OFFSETS
1205.02	PAVEMENT MARKINGS - TWO-LANE AND MULTILANE ROADWAYS
1205.04	PAVEMENT MARKINGS - INTERSECTIONS
1205.08	PAVEMENT MARKINGS - SYMBOLS AND WORD MESSAGES
1205.09	PAVEMENT MARKINGS - PAINTED ISLANDS
1205.14	PAVEMENT MARKINGS - ROUNDABOUTS
1250.01	RAISED PAVEMENT MARKERS - INSTALLATION SPACING
1251.01	RAISED PAVEMENT MARKERS - PERMANENT AND TEMPORARY

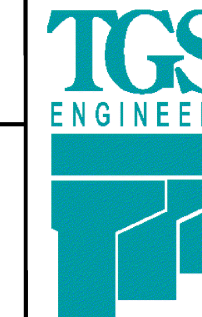
PLAN SUBMITTED TO: NCDOT

BARRY MOSTELLER SENIOR PROJECT MANAGER



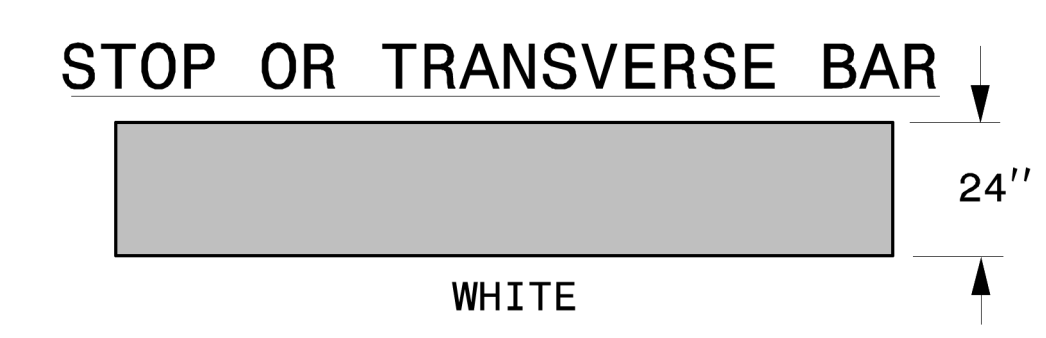
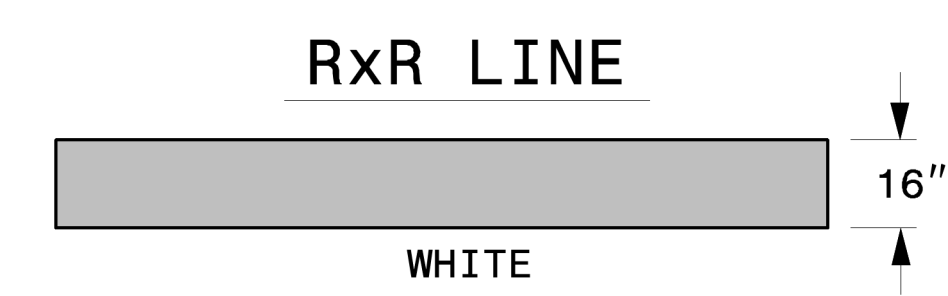
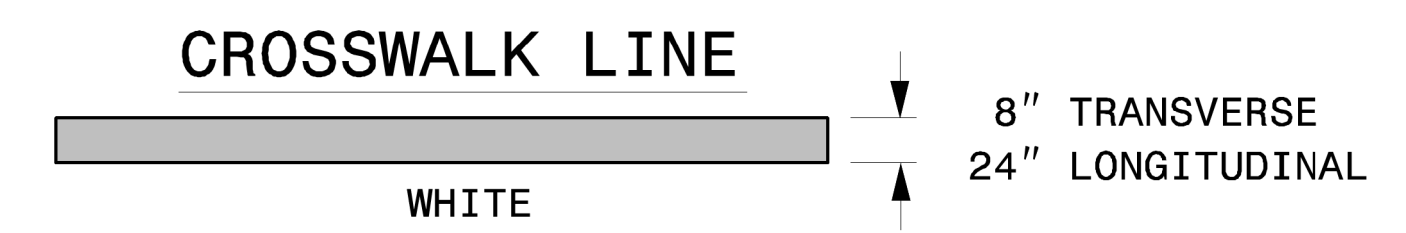
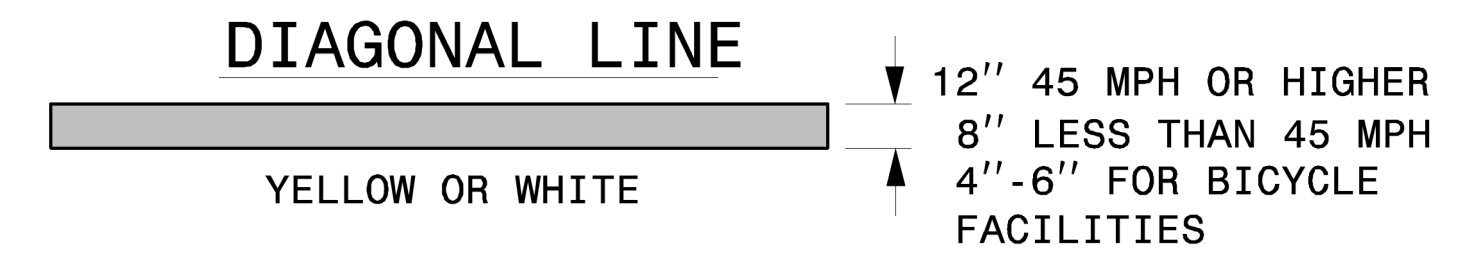
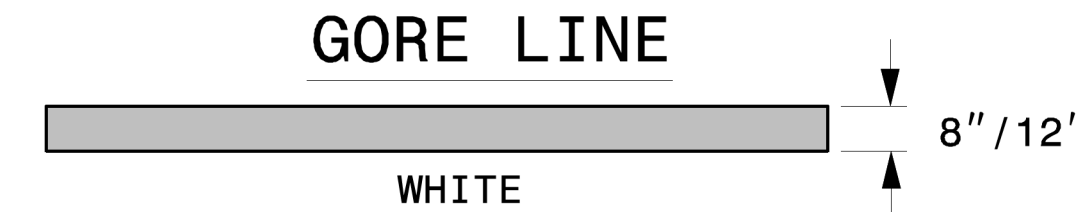
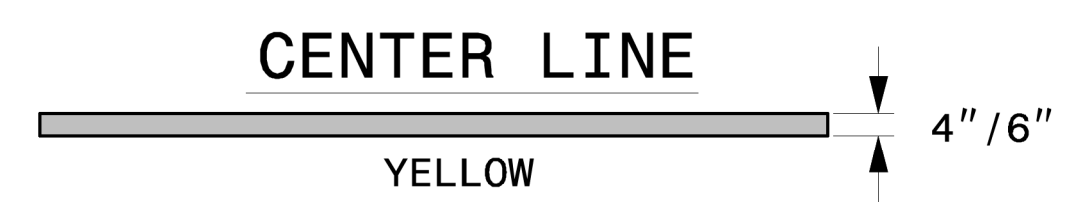
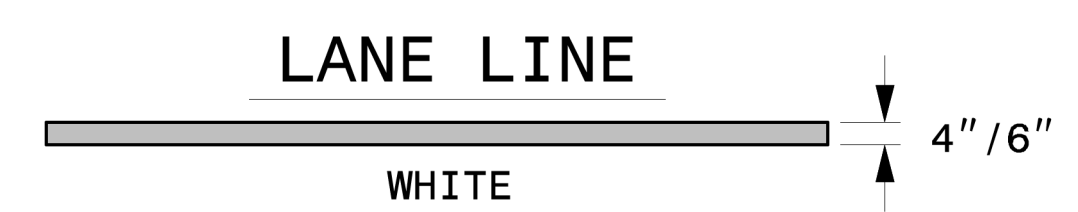
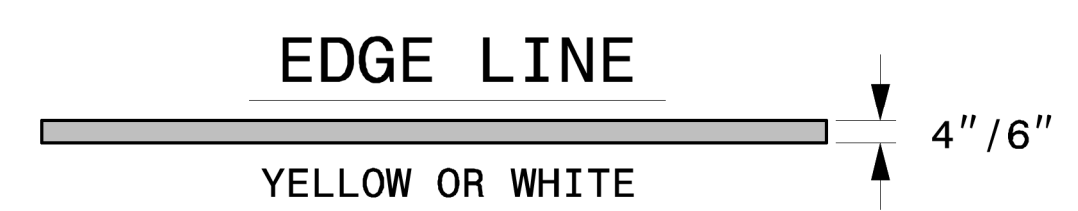
PLAN PREPARED BY: TGS ENGINEERS

DON A. PARKER, P.E. PROJECT ENGINEER
CODA BRANNAN, E.I. DESIGN ENGINEER

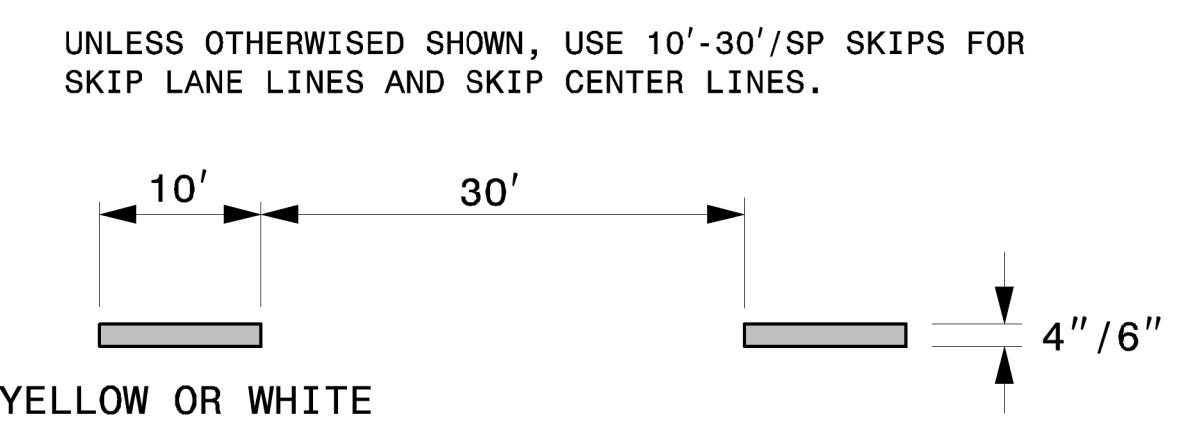


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CORP. LICENSE NO.: C-0275

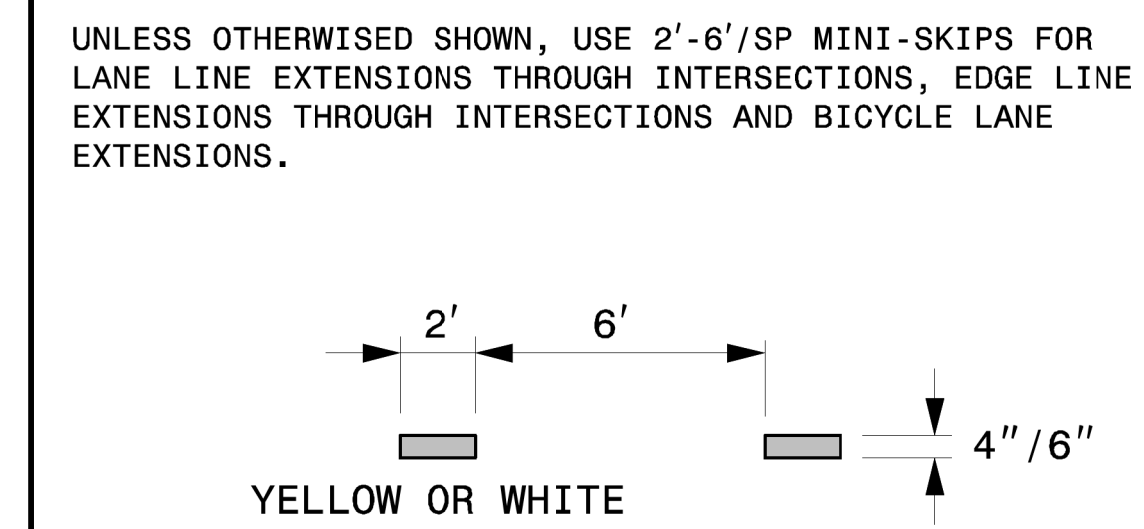
CONTINUOUS LINES



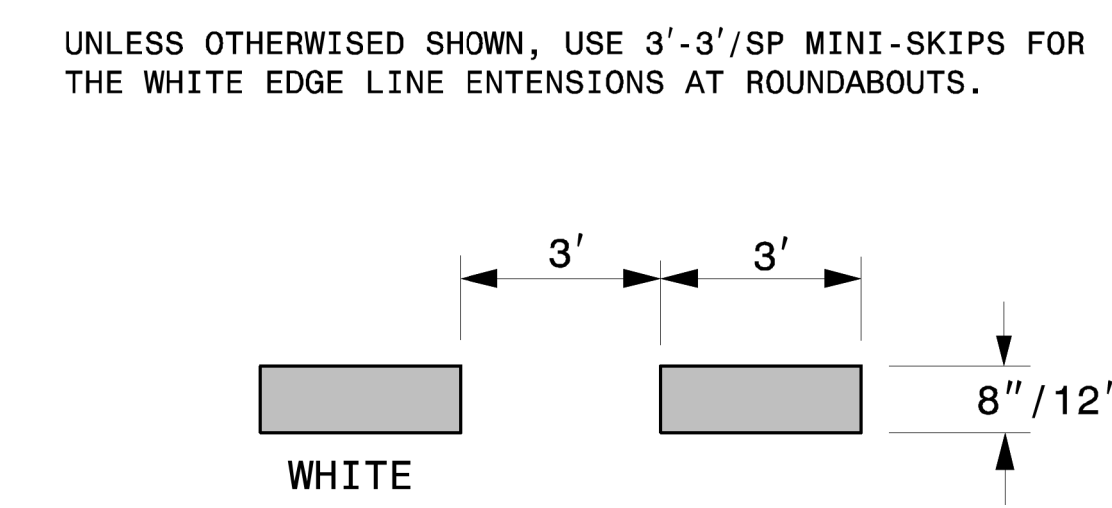
10'-30'/SP SKIP LINE



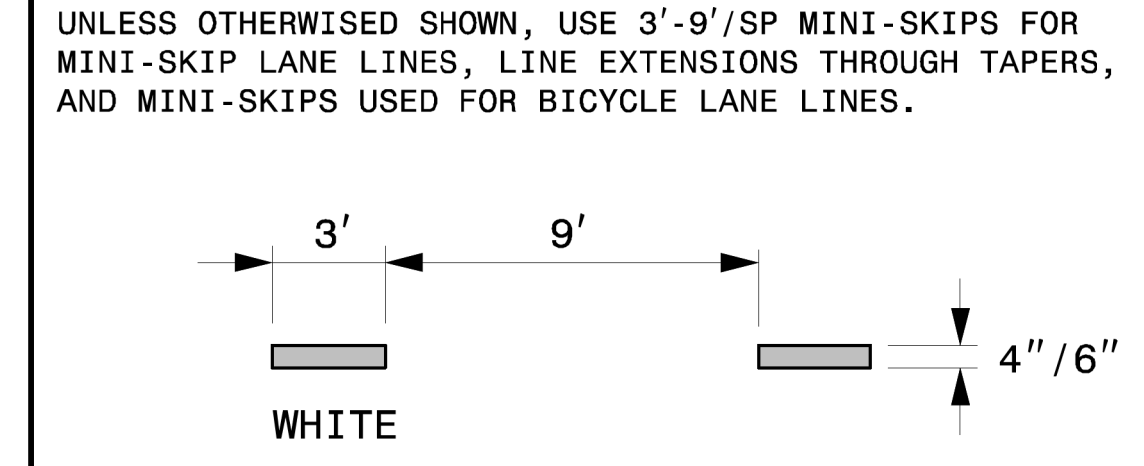
2'-6'/SP MINI-SKIP LINE



3'-3'/SP MINI-SKIP LINE



3'-9'/SP MINI-SKIP LINE

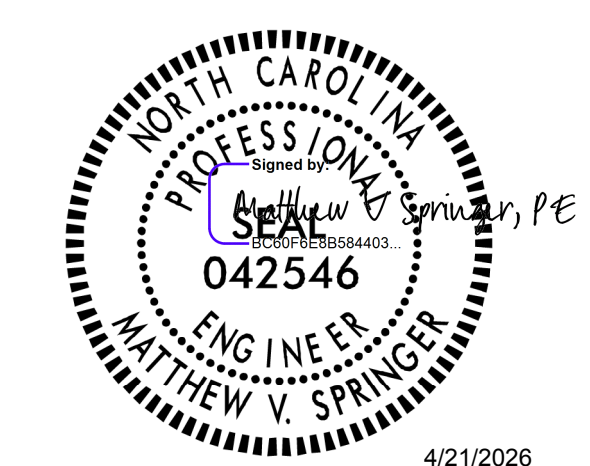


- GENERAL NOTES:
- 1- USE 6" LANE, EDGE, AND CENTER LINES ON ALL FULL CONTROL OF ACCESS FACILITIES AND OTHER ROUTES AS DIRECTED BY THE ENGINEER.
 - 2- LANE LINES INDICATED AS "WIDE" ON THE ROADWAY STANDARD DRAWINGS SHALL BE AT LEAST TWICE THE WIDTH OF THE NORMAL LINE.
 - 3- GORE LINES SHALL BE TWICE THE WIDTH OF THE NORMAL LINE.

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

ROADWAY DETAIL DRAWING FOR
PAVEMENT MARKINGS
LINE TYPES AND OFFSETS

SHEET 1 OF 2
1205D01

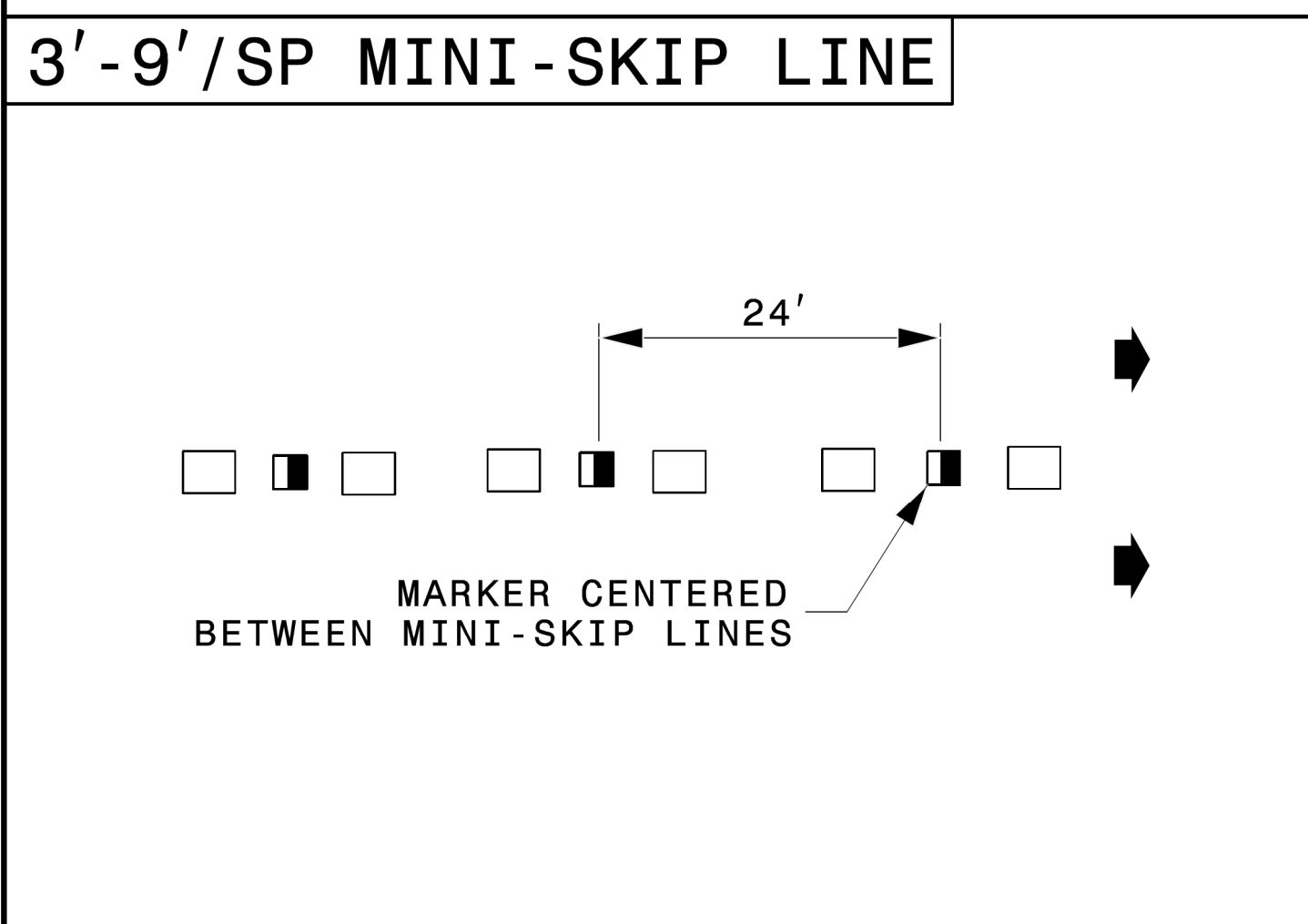
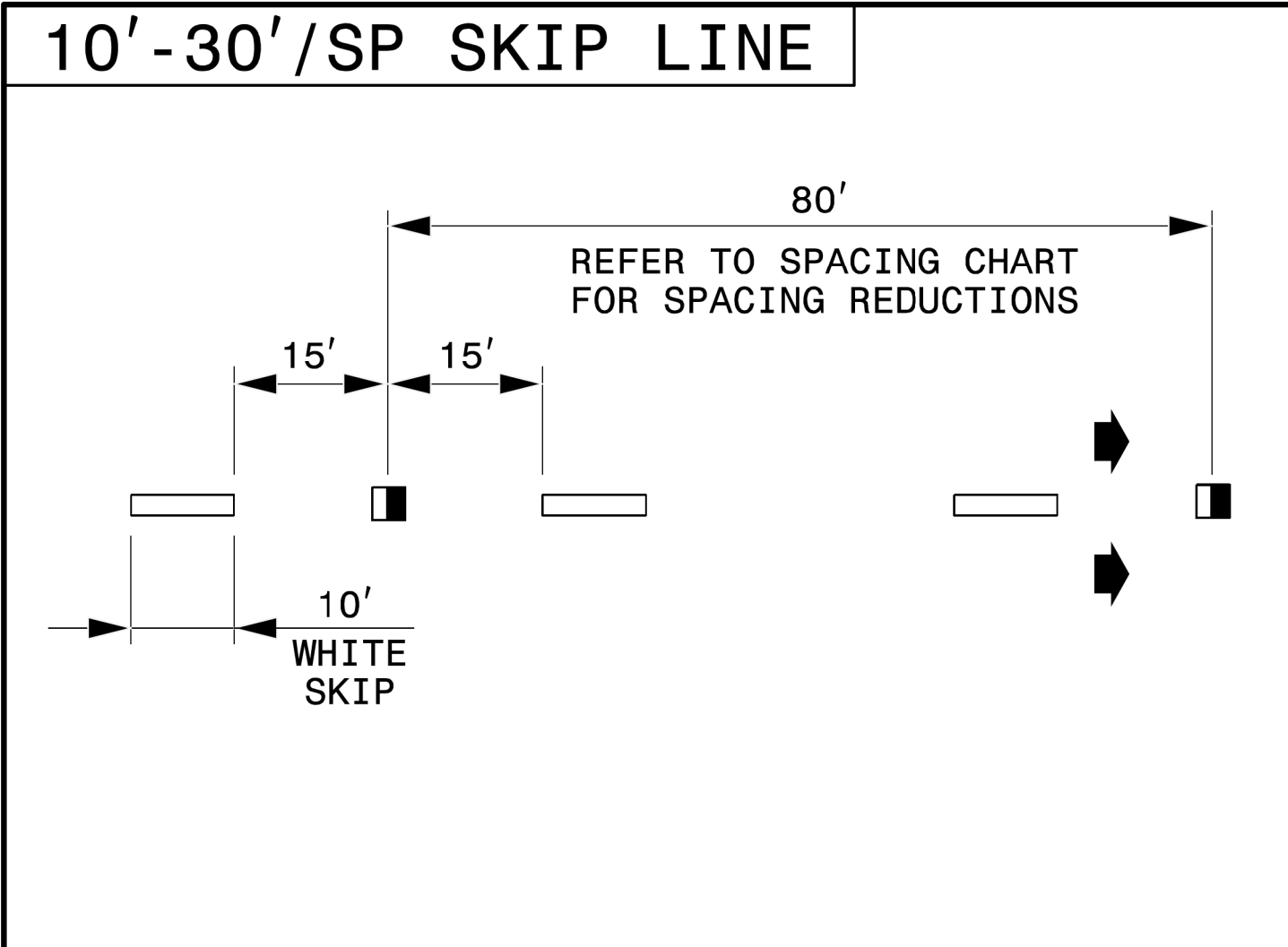


4/21/2026

CONTRACTS STANDARDS AND DEVELOPMENT UNIT
Office 919-707-8950 FAX 919-250-4119

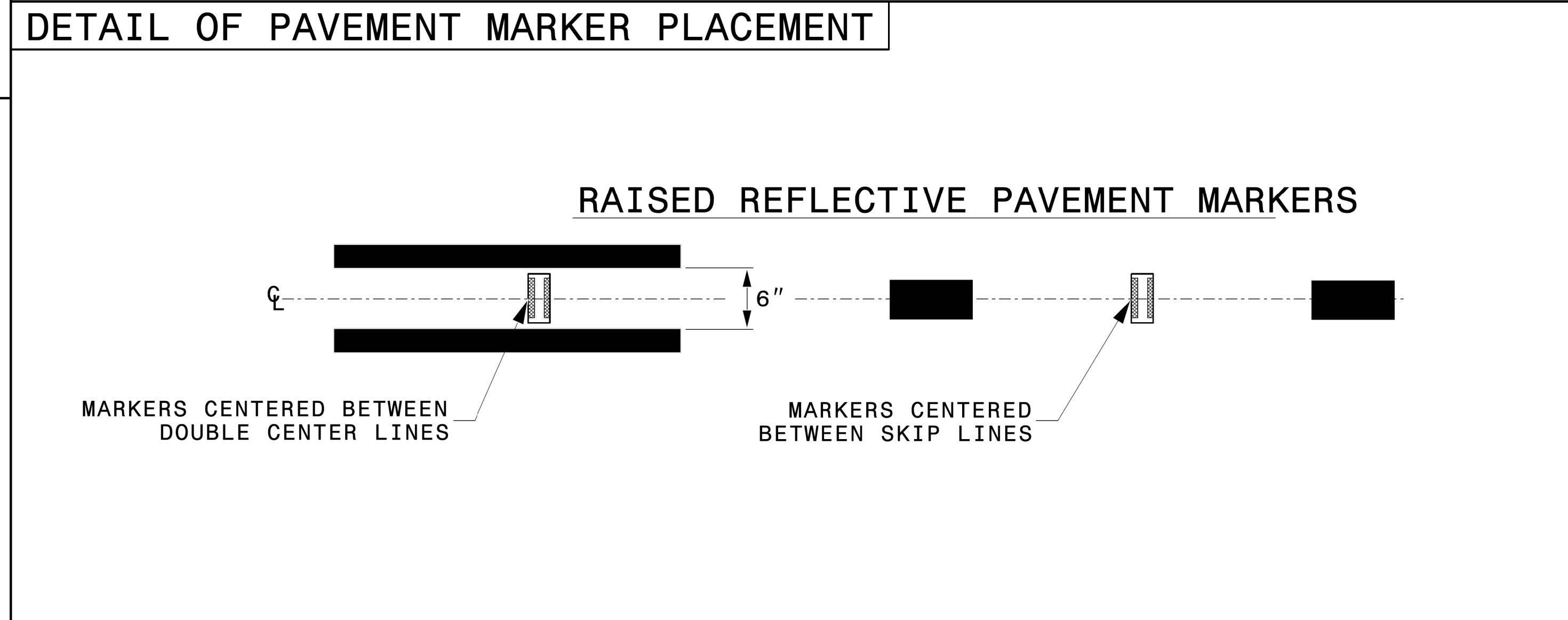
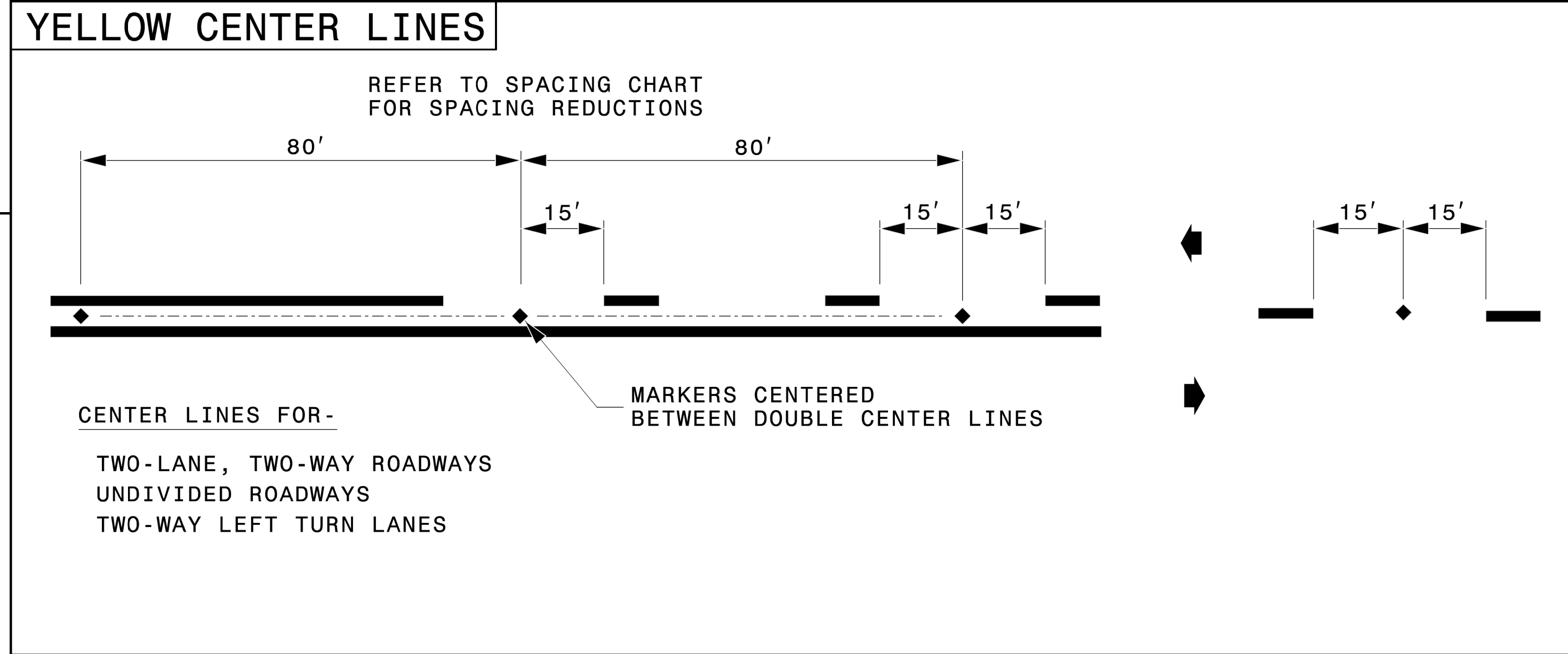
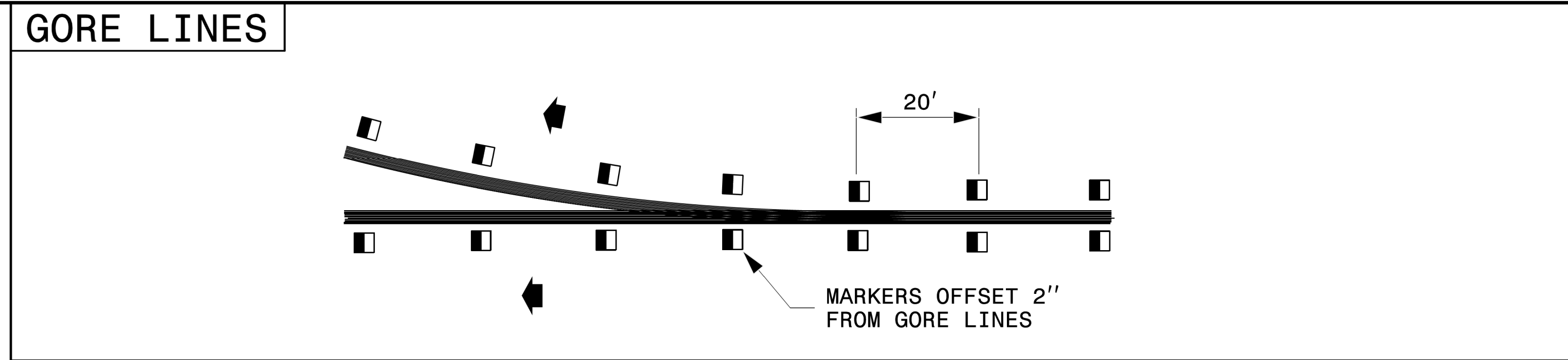
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ORIGINAL BY: M.V. SPRINGER DATE: 2-15-24
MODIFIED BY: _____ DATE: _____
CHECKED BY: _____ DATE: _____
FILE SPEC.: _____



LEGEND

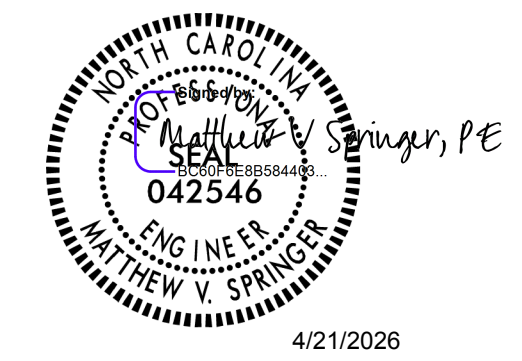
	CRYSTAL/RED PAVEMENT MARKER
	YELLOW/YELLOW PAVEMENT MARKER
	DIRECTION OF TRAFFIC FLOW



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

ROADWAY DETAIL DRAWING FOR
RAISED PAVEMENT MARKERS
INSTALLATION SPACING

SHEET 2 OF 3
1250D01

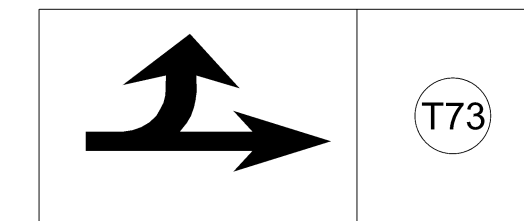


CONTRACTS STANDARDS AND DEVELOPMENT UNIT
Office 919-707-8950 FAX 919-250-4119

SEE TITLE BLOCK

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MODIFIED BY:	DATE:
CHECKED BY:	DATE:
FILE SPEC.:	

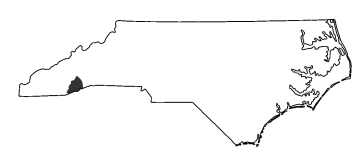
NOTE: FOR INSTALLATION SPACING OF PAVEMENT MARKERS, SEE RSD 1250.01 SHEET 1 OF 3.



HN-0031

PMP-2

NORTH CAROLINA DEPARTMENT OF TRANSPORTATION WAKE COUNTY



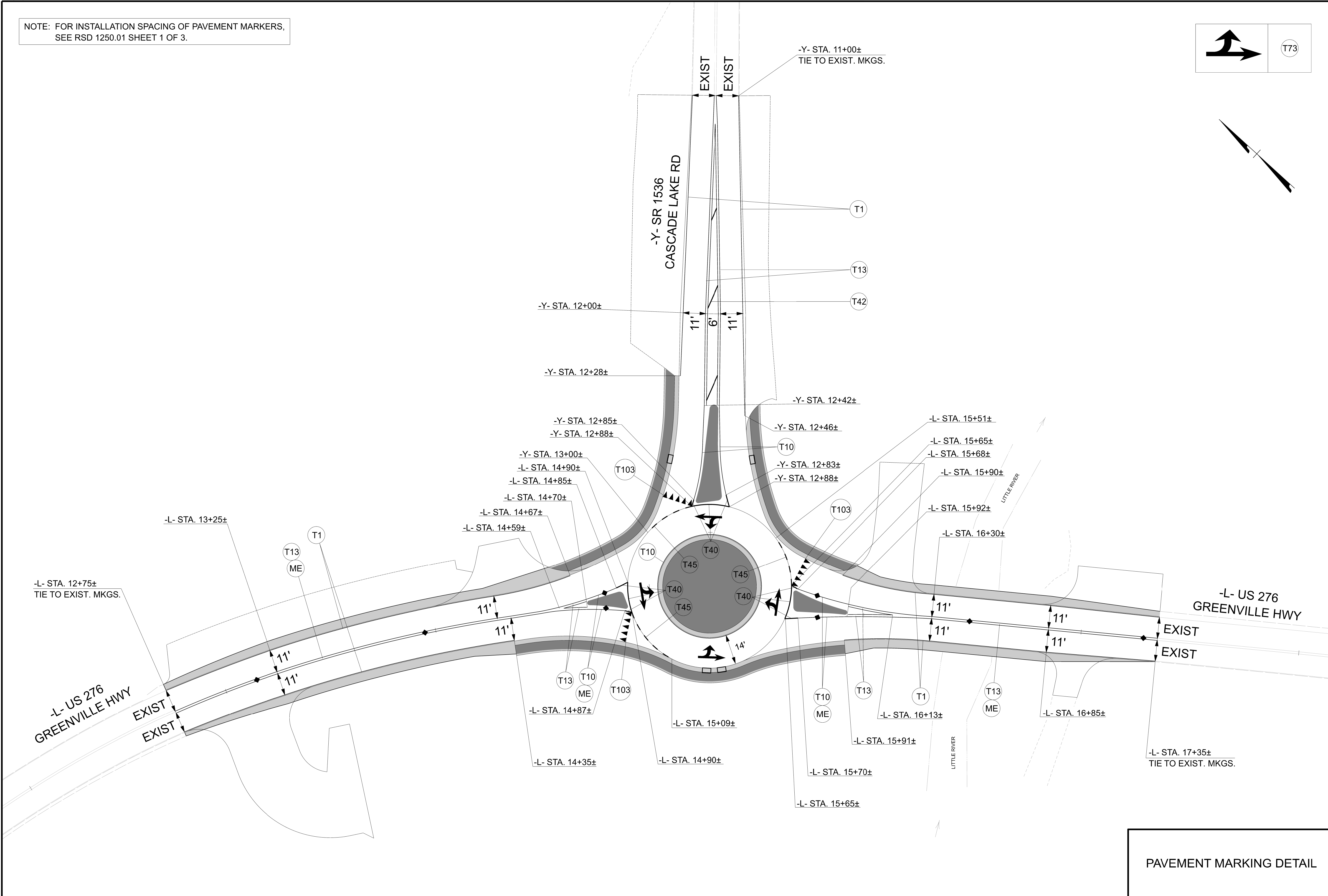
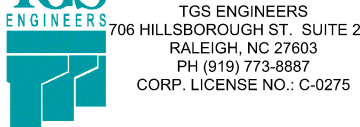
PROJECT ENGINEER



4/22/2026

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PAVEMENT MARKING DETAIL

DIVISION OF HIGHWAYS STATE OF NORTH CAROLINA

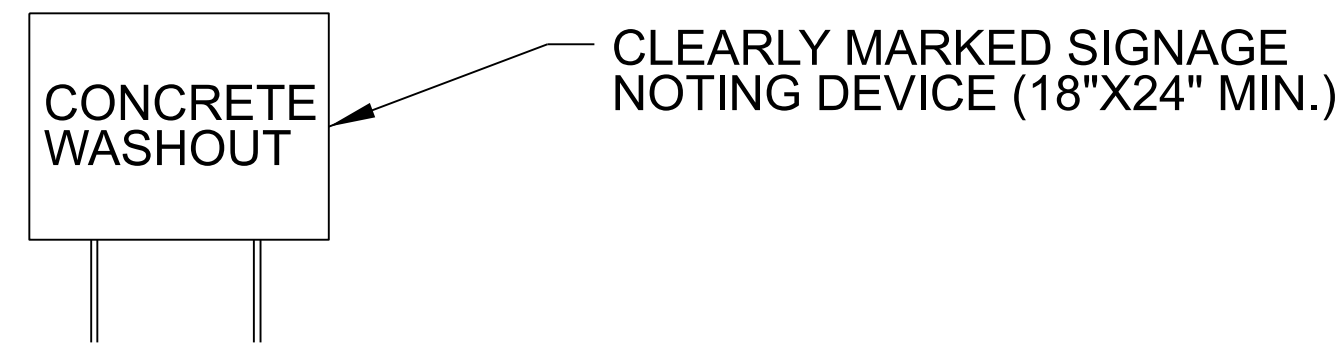
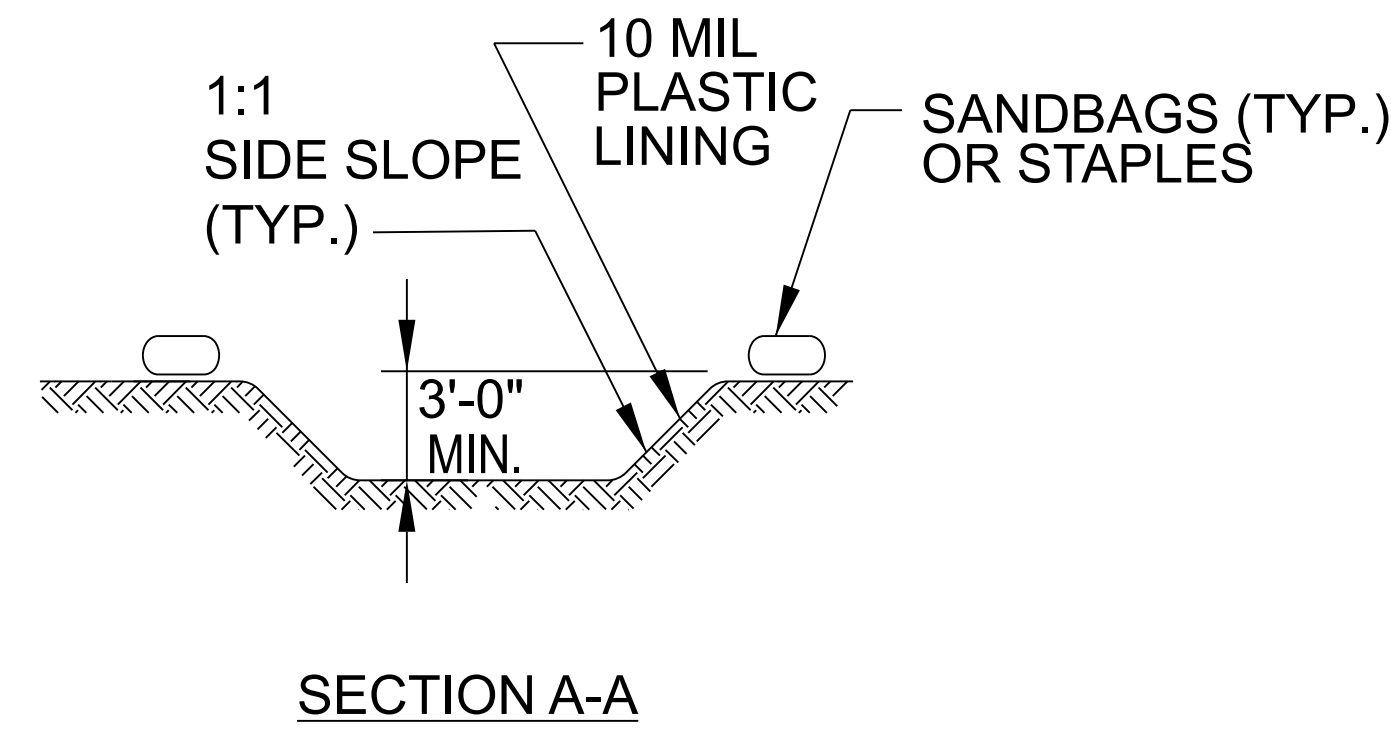
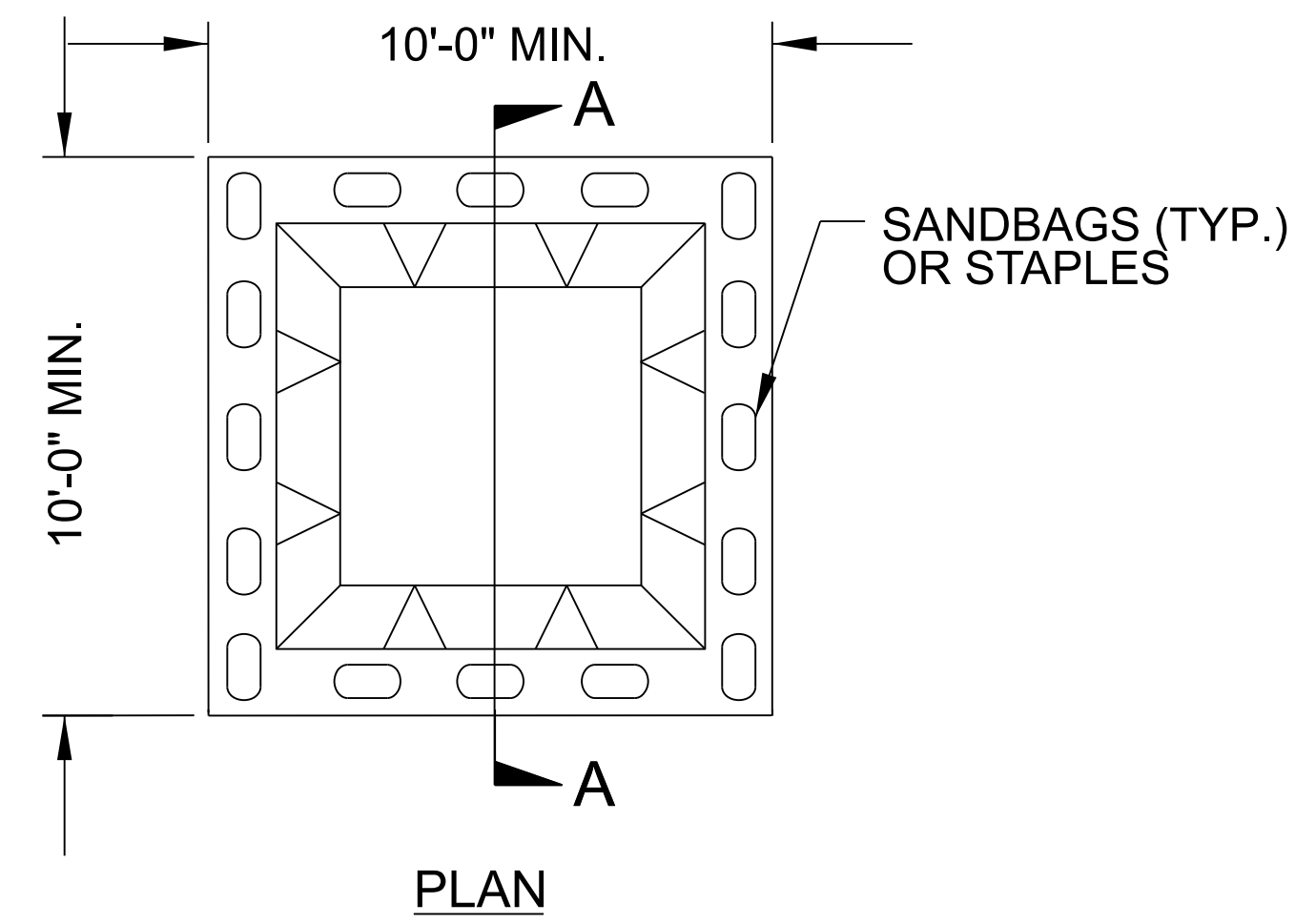
PROJECT REFERENCE NO. HN-0031	SHEET NO. EC-02
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

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	A	1636.03	Excelsior Wattle Barrier	
1632.02	Type B	B	1636.03	Coir Fiber Wattle Barrier	
1632.03	Type C	C			

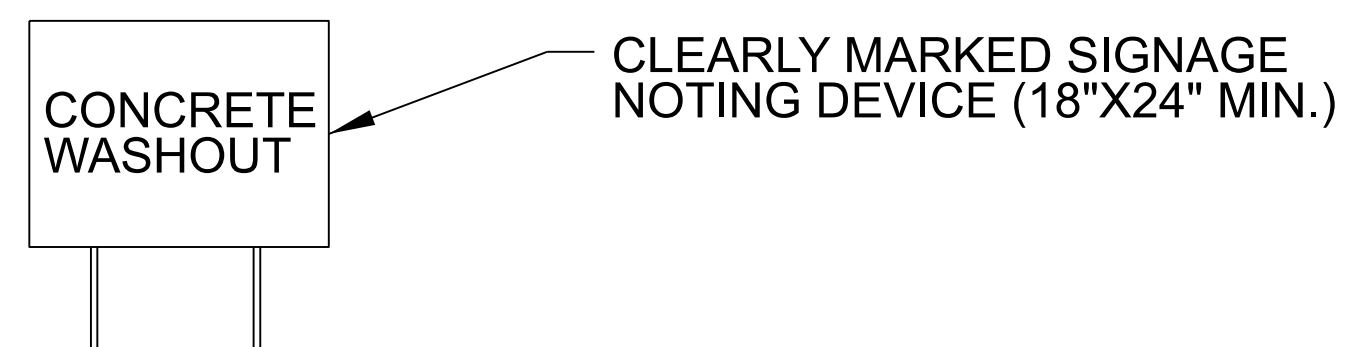
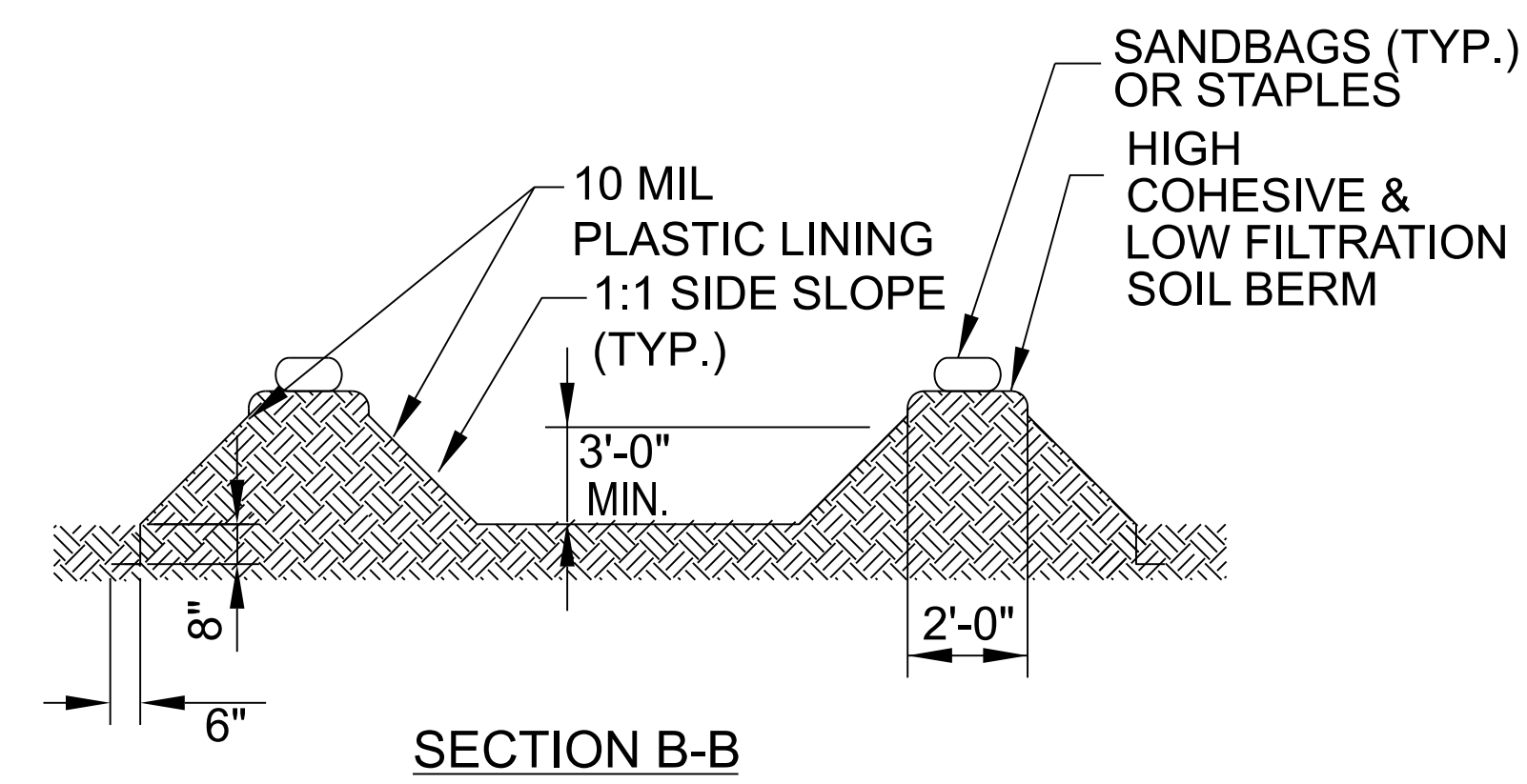
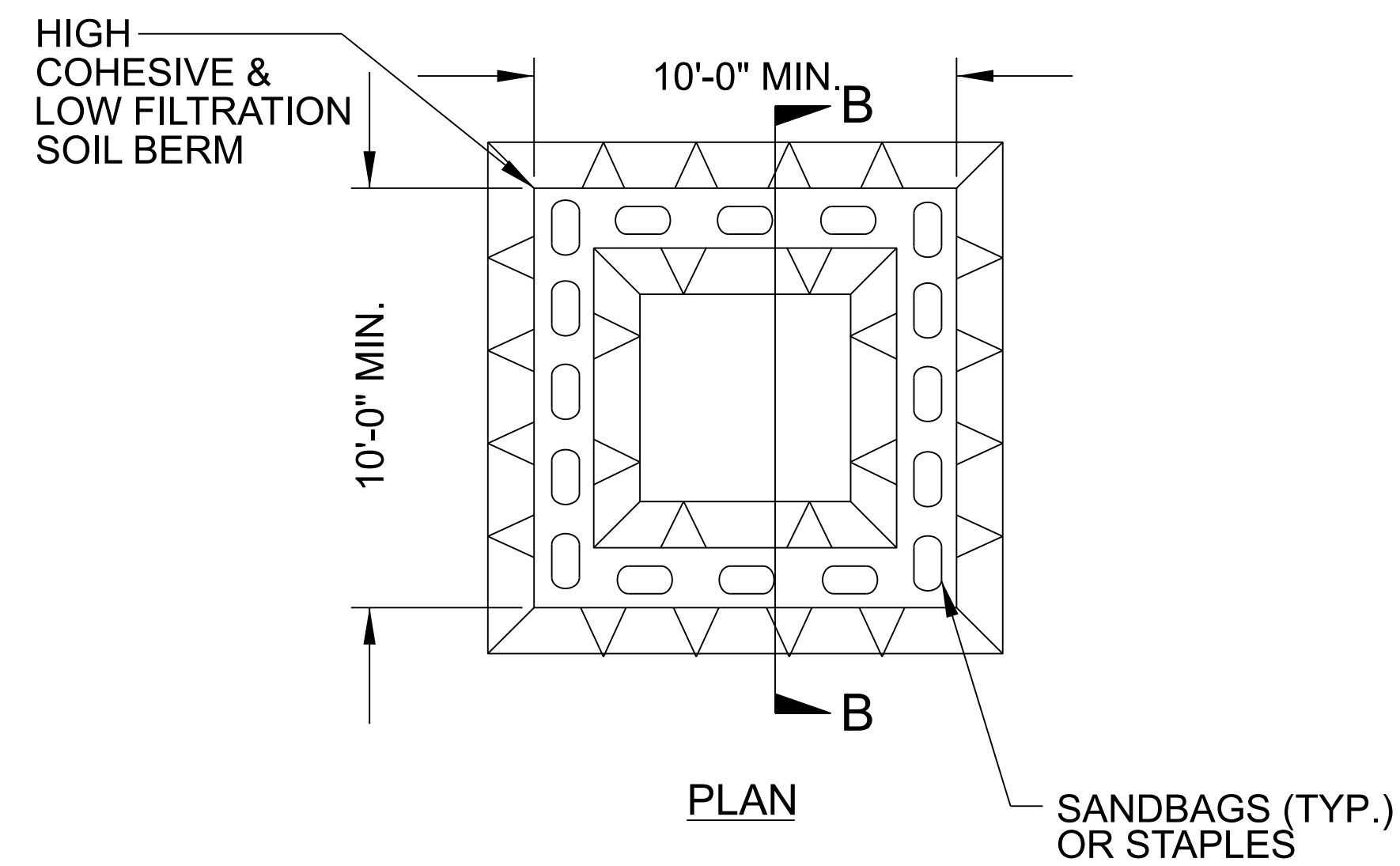
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HN-0031	EC-02A
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

ONSITE CONCRETE WASHOUT STRUCTURE WITH LINER



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.



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. HN-0031	SHEET NO. EC-03
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

SOIL STABILIZATION TIMEFRAMES

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

CULVERT CONSTRUCTION SEQUENCE STA. 16 + 45 -L-

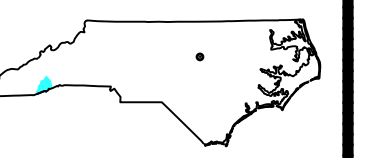
1. INSTALL PROPOSED DRAINAGE SYSTEM 401 THRU 405.
2. INSTALL PROPOSED DRAINAGE SYSTEM 406 THRU 408.
3. SHIFT TRAFFIC TO THE LEFT LANE OF -L- ACCORDING TO TRAFFIC CONTROL PLANS.
4. INSTALL 15" TEMPORARY PIPE #1.
5. INSTALL IMPERVIOUS DIKES #1 & #2, DIRECTING FLOW THRU EXISTING CULVERT E3.
6. DEWATER WORK SITE AS NEEDED INTO SPECIAL STILLING BASIN(S).
7. CONSTRUCT UPSTREAM PORTION OF P1A & P2A.

1. REMOVE IMPERVIOUS DIKES #1 & #2.
2. INSTALL 24" TEMPORARY PIPE #2.
3. INSTALL IMPERVIOUS DIKES #3 & #4, DIRECTING FLOW THRU EXISTING CULVERT E1 & E2.
4. DEWATER WORK SITE AS NEEDED INTO SPECIAL STILLING BASIN(S).
5. CONSTRUCT UPSTREAM PORTION OF P3A.
6. CONSTRUCT RIGHT LANE OF -L-.

HN-0031

EC-04A

NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
TRANSYLVANIA COUNTY

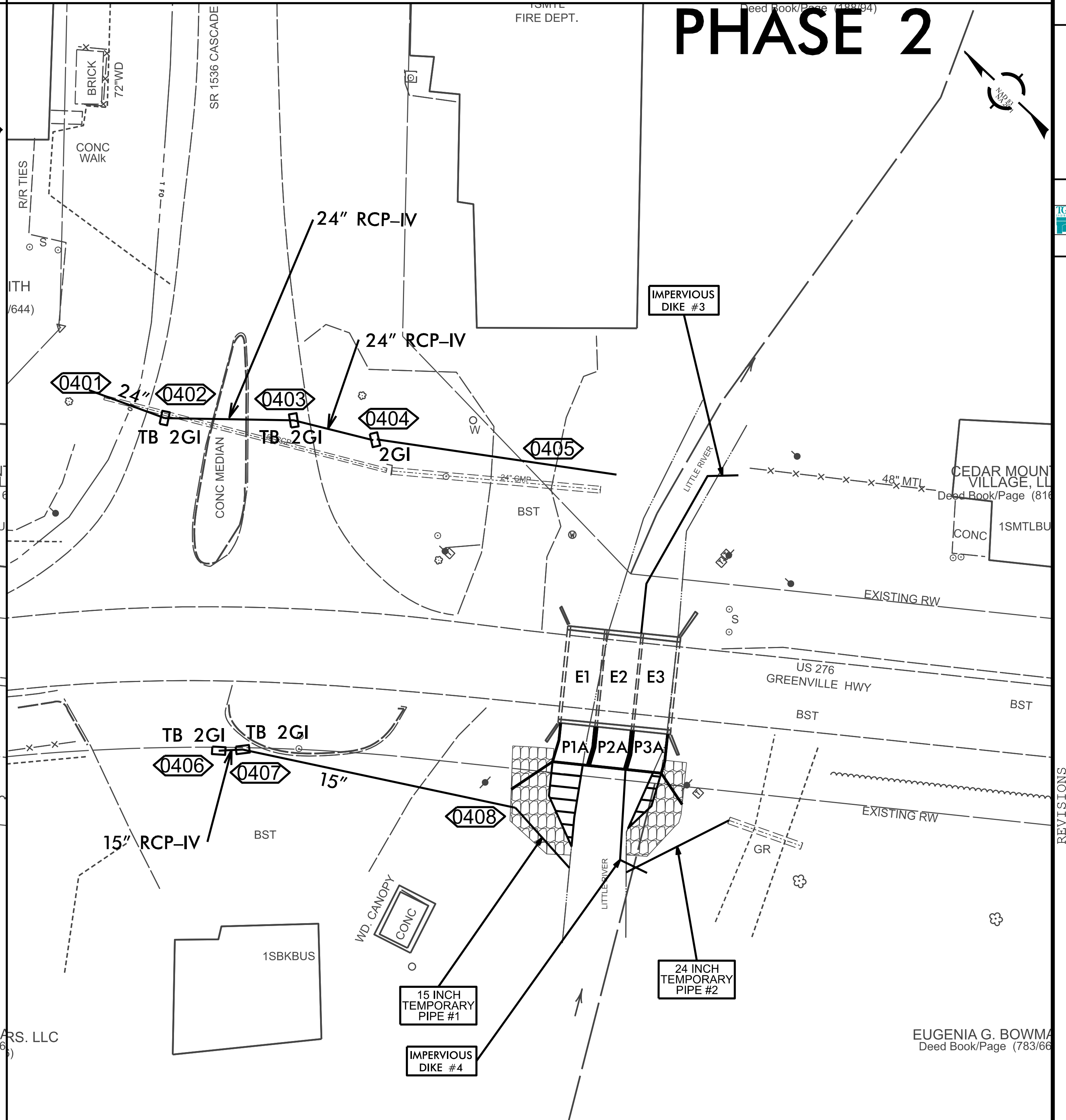
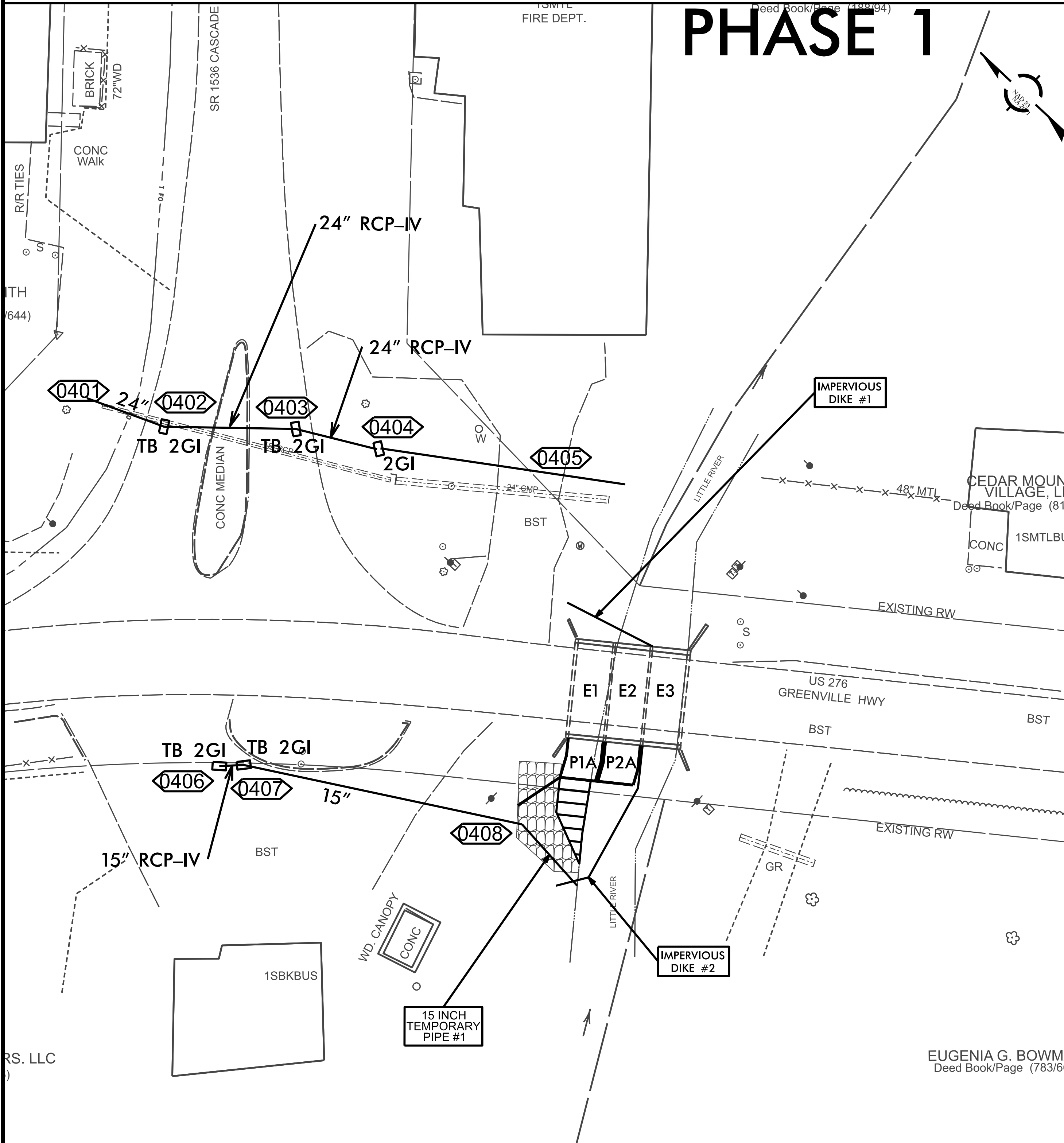


ROADWAY DESIGN UNIT
ROADWAY DESIGN
ENGINEER

HYDRAULICS
ENGINEER

PREPARED BY

TGS ENGINEERS
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SHELBY, NC 28150
PH: 704.476.2800
CORP. LICENSE NO.: C-02729



REVISIONS

CULVERT CONSTRUCTION SEQUENCE STA. 16+45 -L-

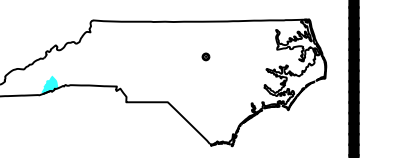
1. SHIFT TRAFFIC TO THE RIGHT LANE OF -L- ACCORDING TO TRAFFIC CONTROL PLANS.
2. CONSTRUCT DOWNSTREAM PORTION OF P3B.

1. REMOVE 24" TEMPORARY PIPE #2 AND IMPERVIOUS DIKES #3 & #4.
2. INSTALL 24" TEMPORARY PIPE #3.
3. INSTALL IMPERVIOUS DIKES #5 & #6, DIRECTING FLOW THRU CULVERT P3.
4. DEWATER WORK SITE AS NEEDED INTO SPECIAL STILLING BASIN(S).
5. CONSTRUCT DOWNSTREAM PORTION OF P1B & P2B.
6. CONSTRUCT LEFT LANE OF -L-.
7. REMOVE TEMPORARY PIPES, IMPERVIOUS DIKES, AND ANY REMAINING SPECIAL STILLING BASINS.
8. REESTABLISH STREAM ACCORDING TO CONST. PLANS. AND COMPLETE ROADWAY CONSTRUCTION.

HN-0031

EC-04B

NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
TRANSYLVANIA COUNTY

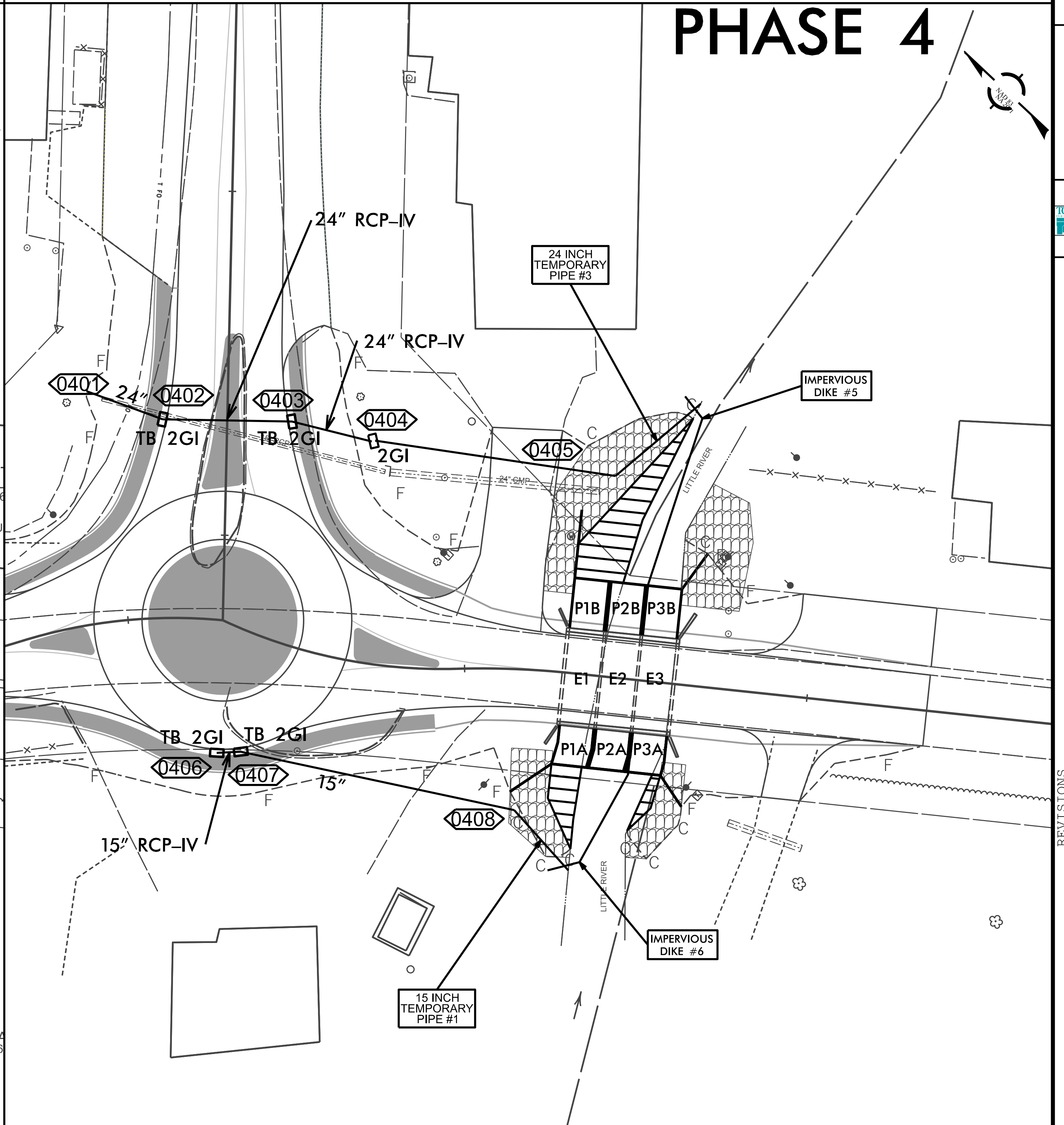
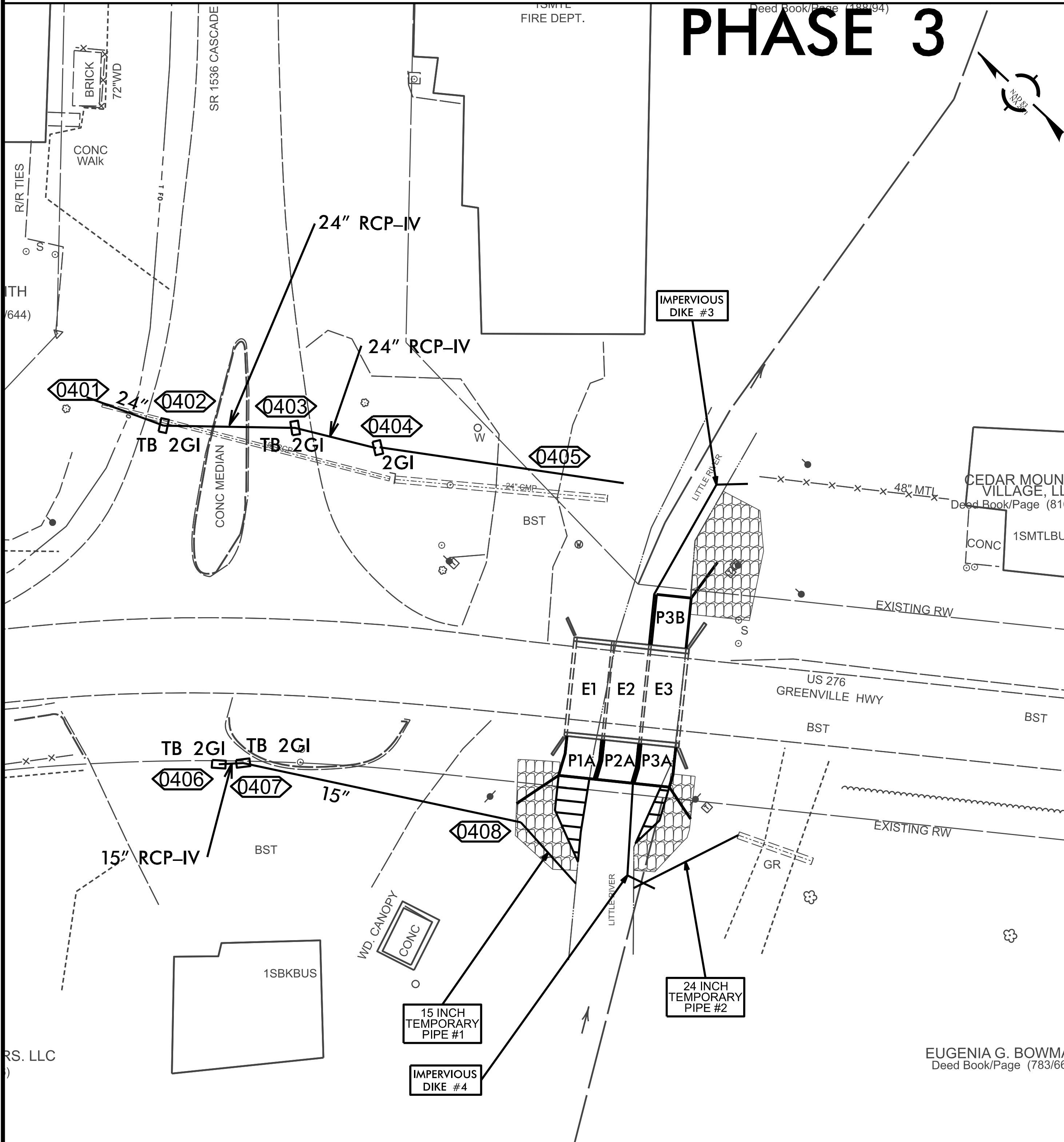


ROADWAY DESIGN UNIT
ROADWAY DESIGN
ENGINEER

HYDRAULICS
ENGINEER

PREPARED BY

TGS ENGINEERS
201 W. MAIN ST. 3RD FLOOR
SHELBY, NC 28150
PH: 704.476.2800
CORP. LICENSE NO.: C-02729



REVISIONS

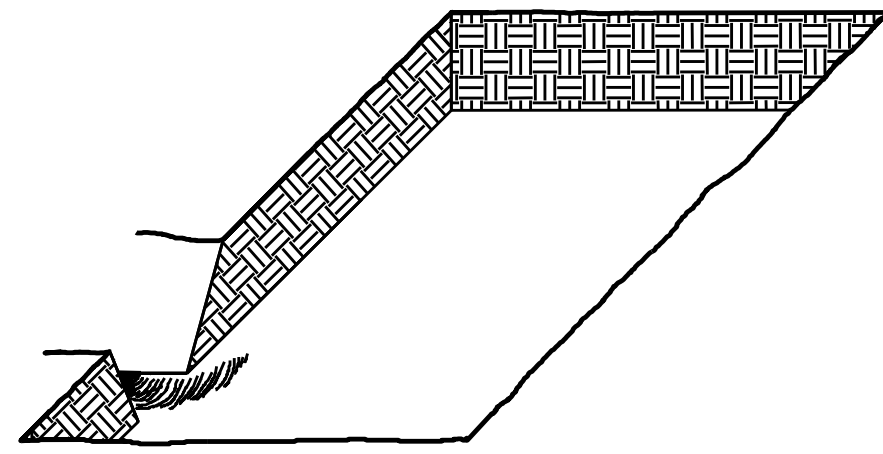
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N.C.	HN-0031	RF-1	
STATE PROJ. NO.	F. A. PROJ. NO.	DESCRIPTION	

PLANTING DETAILS

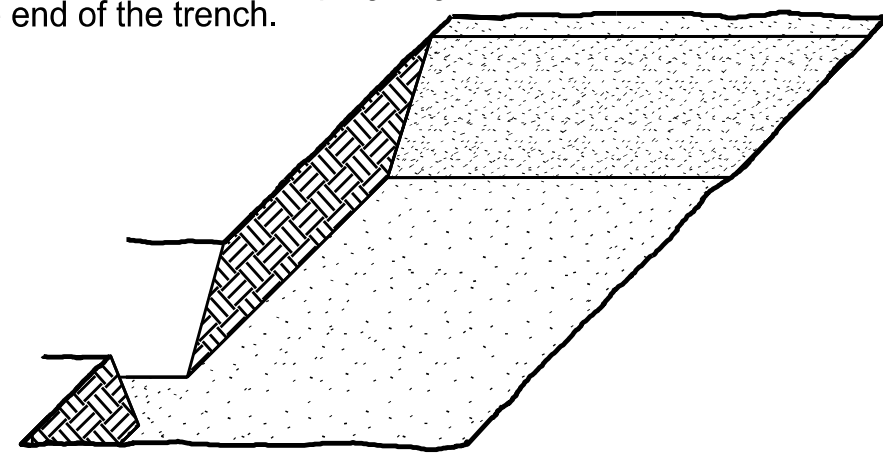
SEEDLING / LINER BAREROOT PLANTING DETAIL

HEALING IN

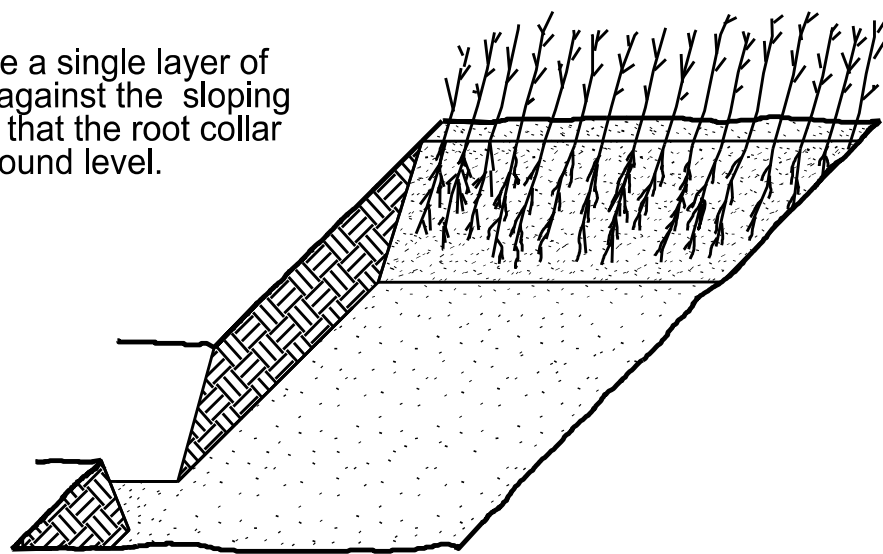
1. Locate a healing-in site in a shady, well protected area.
2. Excavate a flat bottom trench 12 inches deep and provide drainage.



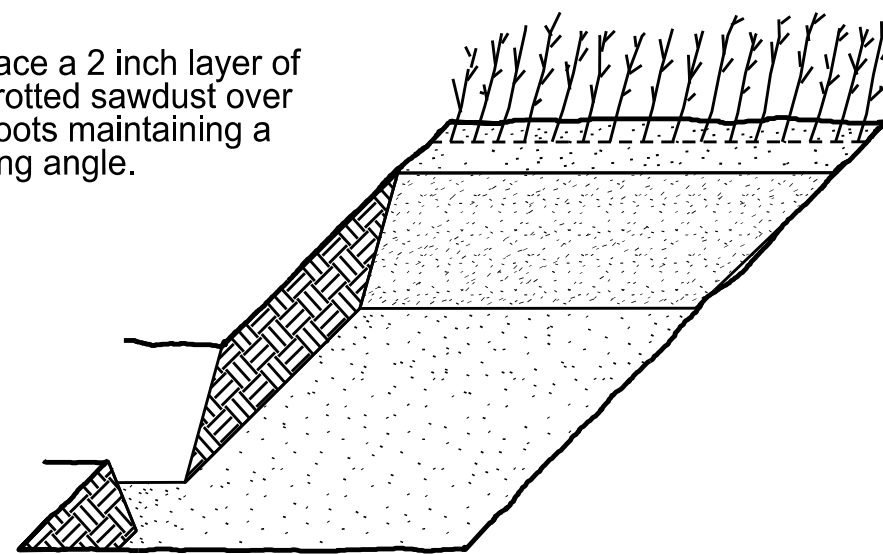
3. Backfill the trench with 2 inches well rotted sawdust. Place a 2 inch layer of well rotted sawdust at a sloping angle at one end of the trench.



4. Place a single layer of plants against the sloping end so that the root collar is at ground level.

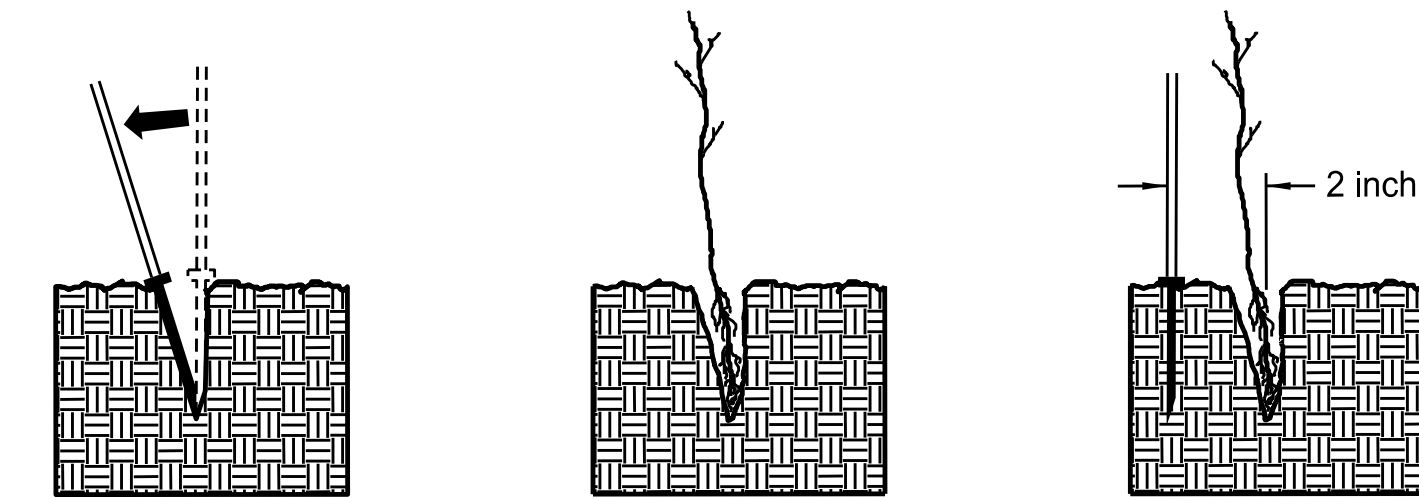


5. Place a 2 inch layer of well rotted sawdust over the roots maintaining a sloping angle.

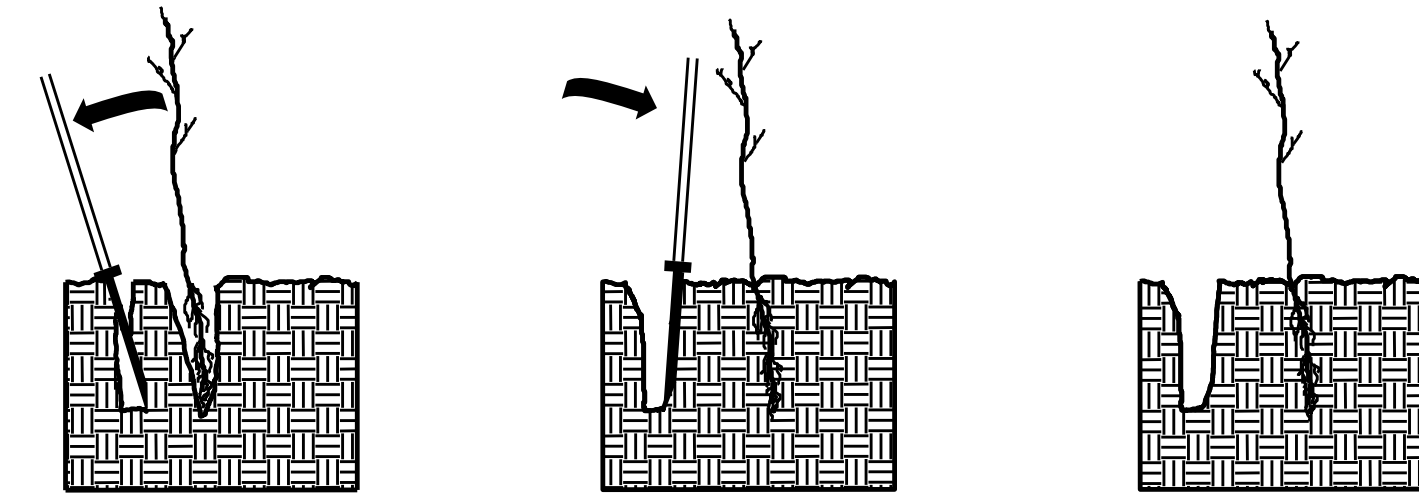


6. Repeat layers of plants and sawdust as necessary and water thoroughly.

DIBBLE PLANTING METHOD USING THE KBC PLANTING BAR



1. Insert planting bar as shown and pull handle toward planter.
2. Remove planting bar and place seedling at correct depth.
3. Insert planting bar 2 inches lower planter from seedling.



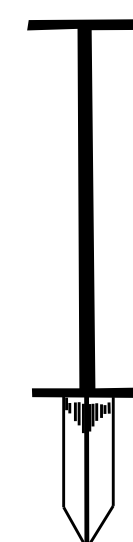
4. Pull handle of bar toward planter, firming soil at bottom.
5. Push handle forward firming soil at top.
6. Leave compaction hole open. Water thoroughly.

PLANTING NOTES:

PLANTING BAG
During planting, seedlings shall be kept in a moist canvas bag or similar container to prevent the root systems from drying.



KBC PLANTING BAR
Planting bar shall have a blade with a triangular cross section, and shall be 12 inches long, 4 inches wide and 1 inch thick at center.



ROOT PRUNING
All seedlings shall be root pruned, if necessary, so that no roots extend more than 10 inches below the root collar.

REFORESTATION

- TREE REFORESTATION SHALL BE PLANTED 6 FT. TO 10 FT. ON CENTER, RANDOM SPACING, AVERAGING 8 FT. ON CENTER, APPROXIMATELY 680 PLANTS PER ACRE.

REFORESTATION

MIXTURE, TYPE, SIZE, AND FURNISH SHALL CONFORM TO THE FOLLOWING:

25% LIRIODENDRON TULIPIFERA	TULIP POPLAR	12 in - 18 in BR
25% PLATANUS OCCIDENTALIS	SYCAMORE	12 in - 18 in BR
25% BETULA NIGRA	RIVER BIRCH	12 in - 18 in BR
25% NYSSA SYLVATICA	BLACK GUM	12 in - 18 in BR

REFORESTATION DETAIL SHEET

N.C.D.O.T. - ROADSIDE ENVIRONMENTAL UNIT

T.I.P.: HN-0031

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION

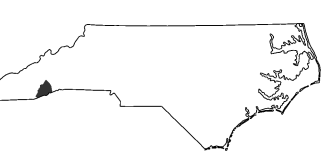
SIGNING PLAN
TRANSYLVANIA COUNTY

LOCATION: *US 276 AT SR 1536 (CASCADE LAKE RD)*
TYPE OF WORK: *GRADING, PAVING, DRAINAGE, & CULVERT*

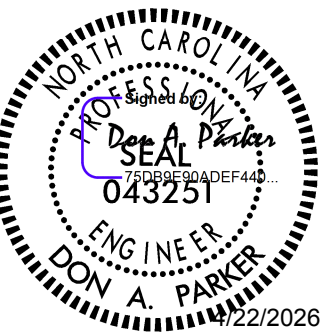
HN-0031

SIGN-1

NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
WAKE COUNTY



PROJECT ENGINEER



DOCUMENT NOT CONSIDERED FINAL
UNLESS ALL SIGNATURES COMPLETED

PREPARED BY



ROADWAY STANDARD DRAWING

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

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

GENERAL NOTES

- . SIGNS FURNISHED BY STATE
- . CONFIRM IN WRITING AT LEAST 4 MONTHS IN ADVANCE, THE ACTUAL DATE THE DEPARTMENT FURNISHED SIGNS WILL BE REQUIRED.
- . ALL TYPE 'D' SIGNS SHALL BE MOUNTED ON TWO U-CHANNEL POSTS UNLESS OTHERWISE INDICATED ON THE PLANS.
- . IF REMOVAL OR RELOCATION OF SIGNS ON PRIVATE STREET (NON-STATE MAINTAINED) IS REQUIRED DUE TO CONSTRUCTION, THE CONTRACTOR SHALL INFORM THE ENGINEER. THE WORK WILL BE COMPLETED BY OTHERS.
- . WHEN NOT STATIONED OR DIMENSIONED ON PLANS, ALL 'E' AND 'F' SIGNS SHALL BE FIELD LOCATED BY THE ENGINEER
- . ALL EXISTING SIGNS ON "U" CHANNEL POST WITHIN THE PROJECT LIMITS SHALL BE REMOVED AND DISPOSED OF UNLESS OTHERWISE NOTED ON PLANS.
- . THE BACKGROUND FOR TYPE E & F SIGNS SHALL BE TYPE C REFLECTIVE SHEETING.

SUMMARY OF QUANTITIES

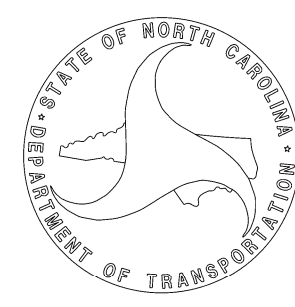
ITEM NO.		ITEM DESCRIPTION	QUANTITY	UNIT
DESC. NO.	SECT. NO.			
4072000000	903	SUPPORTS, 3 LB STEEL U-CHANNEL	375	L.F.
4096000000	904	SIGN ERECTION, TYPE D	2	EA.
4102000000	904	SIGN ERECTION, TYPE E	22	EA.
4108000000	904	SIGN ERECTION, TYPE F	8	EA.
4116100000	904	SIGN ERECTION, RELOCATE SIGN TYPE B (GROUND MOUNTED)	1	EA.
4151000000	907	STOCKPILE SIGN SYSTEM, STEEL BEAM	1	EA.
4155000000	907	DISPOSAL OF SIGN SYSTEM, U-CHANNEL	15	EA.

INDEX

SHEET NO.	DESCRIPTION
SIGN-1	TITLE SHEET
SIGN-1A	REVISED ROADWAY STANDARD DRAWING (910D40)
SIGN-2	SIGN DESIGNS
SIGN-3	TYPE "E" AND "F" SIGNS
SIGN-4	EXISTING SIGNS
SIGN-5	PROPOSED SIGNS

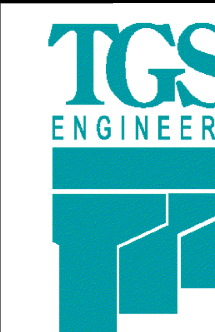
PLAN SUBMITTED TO: NCDOT

BARRY MOSTELLER NCDOT CONTACT



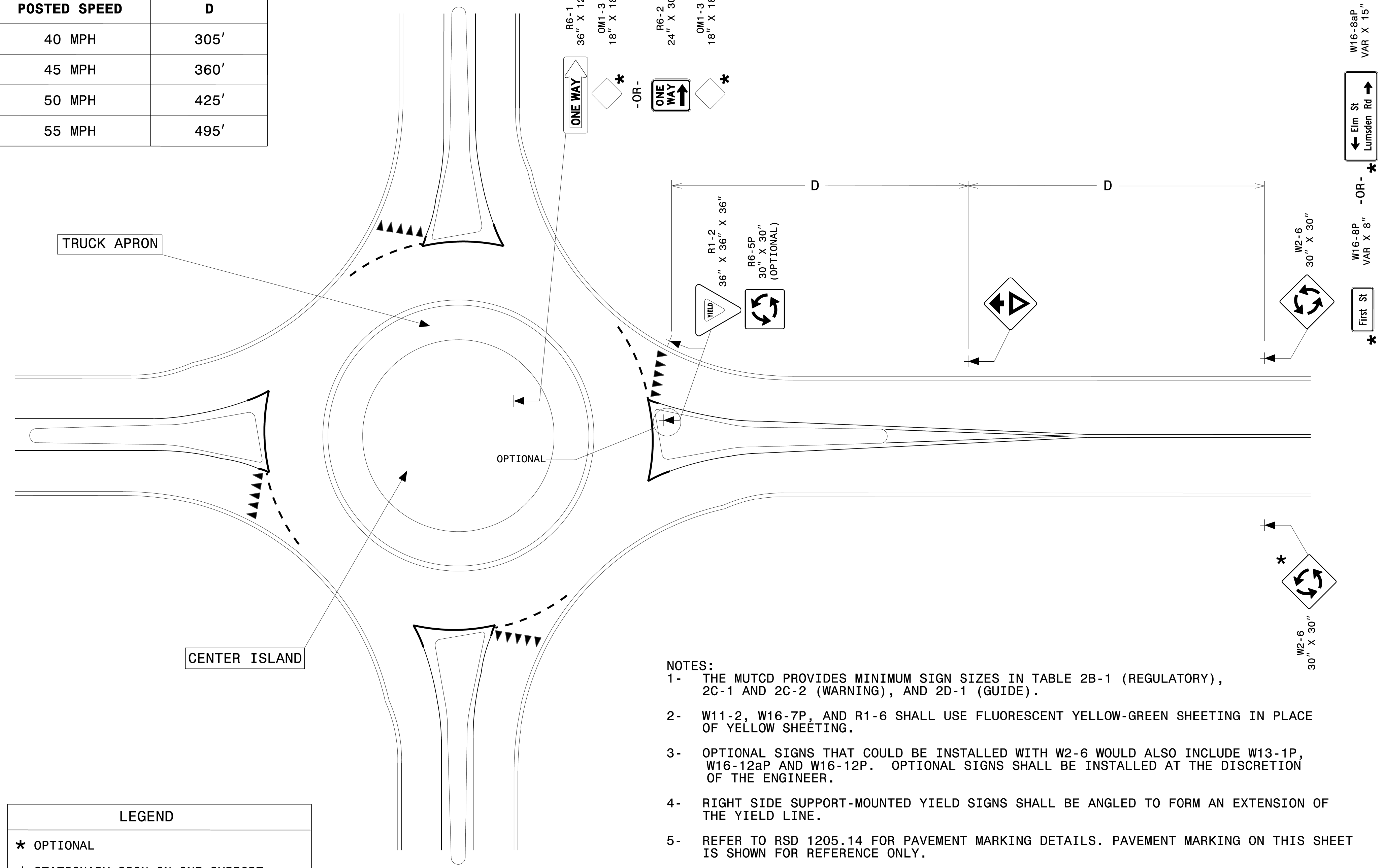
PLAN PREPARED BY: TGS ENGINEERS

DON A. PARKER, P.E. PROJECT ENGINEER
CODA BRANNAN, E.I. DESIGN ENGINEER



TGS ENGINEERS
706 HILLSBOROUGH ST. SUITE 200
RALEIGH, NC 27603
PH (919) 773-8887
CORP. LICENSE NO.: C-0275

POSTED SPEED	D
40 MPH	305'
45 MPH	360'
50 MPH	425'
55 MPH	495'



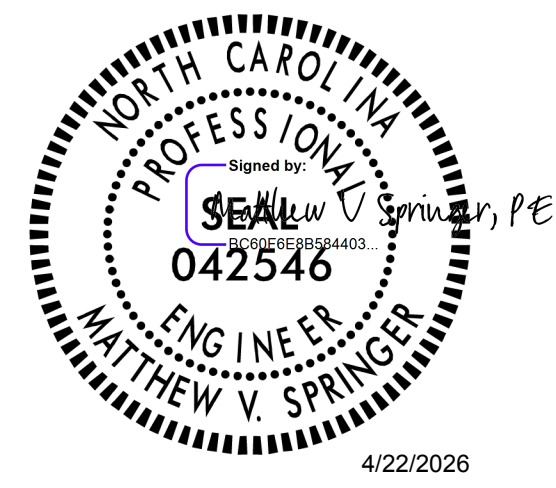
LEGEND	
★	OPTIONAL
⊥	STATIONARY SIGN ON ONE SUPPORT
⊥	STATIONARY SIGN ON TWO SUPPORTS

- NOTES:
- 1- THE MUTCD PROVIDES MINIMUM SIGN SIZES IN TABLE 2B-1 (REGULATORY), 2C-1 AND 2C-2 (WARNING), AND 2D-1 (GUIDE).
 - 2- W11-2, W16-7P, AND R1-6 SHALL USE FLUORESCENT YELLOW-GREEN SHEETING IN PLACE OF YELLOW SHEETING.
 - 3- OPTIONAL SIGNS THAT COULD BE INSTALLED WITH W2-6 WOULD ALSO INCLUDE W13-1P, W16-12aP AND W16-12P. OPTIONAL SIGNS SHALL BE INSTALLED AT THE DISCRETION OF THE ENGINEER.
 - 4- RIGHT SIDE SUPPORT-MOUNTED YIELD SIGNS SHALL BE ANGLED TO FORM AN EXTENSION OF THE YIELD LINE.
 - 5- REFER TO RSD 1205.14 FOR PAVEMENT MARKING DETAILS. PAVEMENT MARKING ON THIS SHEET IS SHOWN FOR REFERENCE ONLY.
 - 6- REFER TO MUTCD FIGURES 2A-4, 2B-22, AND 2D-12 FOR ADDITIONAL SIGNING GUIDANCE.
 - 7- THE MUTCD PROVIDES GUIDANCE FOR DIMENSION "D" IN TABLE 2C-3 AND SHOULD BE APPLIED WITH ENGINEERING JUDGEMENT.

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

ROADWAY DETAIL DRAWING FOR
**SINGLE LANE RURAL ROUNDABOUT
SIGNING**

SHEET 1A OF 2
910D40



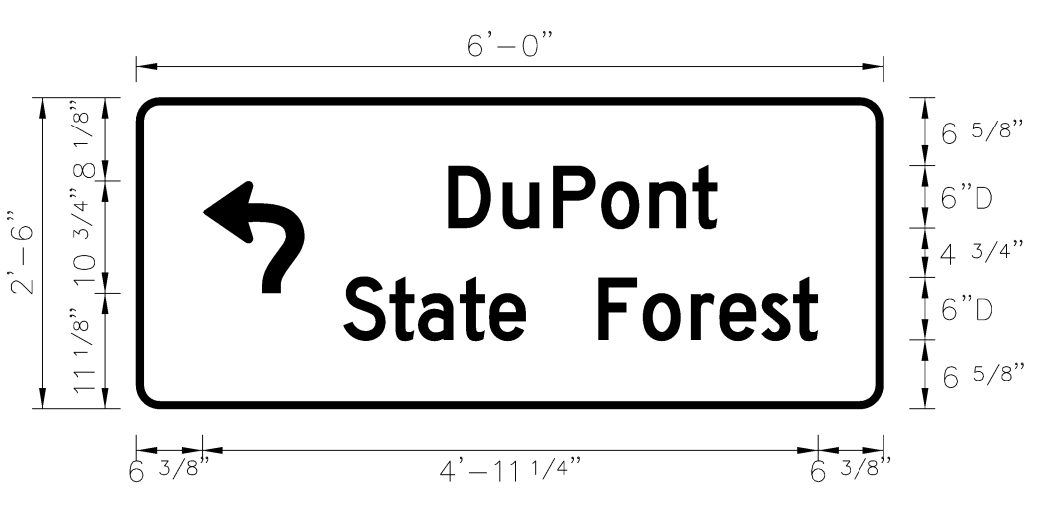
CONTRACTS STANDARDS AND DEVELOPMENT UNIT
Office 919-707-8950 FAX 919-250-4119

SEE TITLE BLOCK

ORIGINAL BY: R. S. GALLO	DATE: 02-29-2024
MODIFIED BY:	DATE:
CHECKED BY:	DATE:
FILE SPEC.:	

SIGN NUMBER: 301	BACKG COLOR: Brown
TYPE: D	COPY COLOR: White
QUANTITY: 1	
SIGN WIDTH: 6'-0"	
HEIGHT: 2'-6"	
TOTAL AREA: 15 Sq.Ft.	
BORDER TYPE: FLUSH	
RECESS: WIDTH: 0-3/4" RADI: 2-1/4"	
NO. Z BARS: LENGTH:	MAT'L: 0.063" (1.6 mm) ALUMINUM 0.080" (2.0 mm) ALUMINUM 0.125" (3.2 mm) ALUMINUM

DESIGN BY: CMB
PROJECT ID: HN-0031
CHECKED BY: DAP
LOCATION: TRANSYLVANIA CO.
Feb 09, 2026
DIV: 14



BORDER
R=2 1/4"
TH=0 3/4"
Spacing Factor is 1 unless specified otherwise

- USE NOTES:
- Legend and border(except those that are colored black) shall be direct applied Grade C sheeting.
 - Background shall be Grade C reflective sheeting.

LETTER POSITIONS

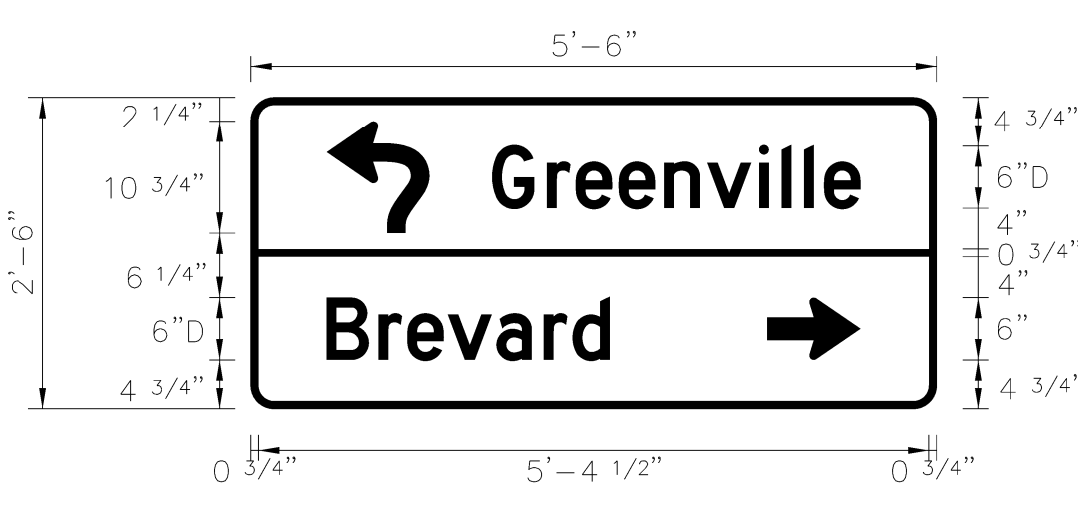
Letter locations are panel edge to lower left corner											Series/Size Text Length	
D	u	P	o	n	t							D 2000
2'-6 1/8"	2'-11 1/4"	3'-4 1/8"	3'-8 3/4"	4'-1 3/8"	4'-5 1/2"							2'-11 7/8"
S	t	a	t	e		F	o	r	e	s	t	D 2000
1'-8"	2'-0 3/8"	2'-3 1/8"	2'-7 1/4"	2'-10"	3'-1 3/4"	3'-8 1/2"	4'-0 3/4"	4'-5 3/8"	4'-8 1/8"	5'-0 1/8"	5'-3 1/4"	3'-9 5/8"

HN-0031_Sign_Designs

NORTH CAROLINA D.O.T. SIGN DETAIL

SIGN NUMBER: 302	BACKG COLOR: Green
TYPE: D	COPY COLOR: White
QUANTITY: 1	
SIGN WIDTH: 5'-6"	
HEIGHT: 2'-6"	
TOTAL AREA: 13.75 Sq.Ft.	
BORDER TYPE: FLUSH	
RECESS: WIDTH: 0-3/4" RADI: 2-1/4"	
NO. Z BARS: LENGTH:	MAT'L: 0.063" (1.6 mm) ALUMINUM 0.080" (2.0 mm) ALUMINUM 0.125" (3.2 mm) ALUMINUM

DESIGN BY: CMB
PROJECT ID: HN-0031
CHECKED BY: DAP
LOCATION: TRANSYLVANIA CO.
Feb 09, 2026
DIV: 14



BORDER
R=2 1/4"
TH=0 3/4"
Spacing Factor is 1 unless specified otherwise

- USE NOTES:
- Legend and border(except those that are colored black) shall be direct applied Grade C sheeting.
 - Background shall be Grade C reflective sheeting.

LETTER POSITIONS

Letter locations are panel edge to lower left corner											Series/Size Text Length	
G	r	e	e	n	v	i	l	i	e			D 2000
1'-11 1/2"	2'-4 1/2"	2'-7 1/2"	2'-11 3/8"	3'-3 3/4"	3'-8"	4'-1"	4'-3 1/8"	4'-5 1/4"	4'-7 1/8"			2'-11 1/2"
B	r	e	v	a	r	d						D 2000
7 1/4"	1'-0 1/4"	1'-3"	1'-7"	1'-11 5/8"	2'-4 1/8"	2'-7"						2'-3 1/4"

HN-0031_Sign_Designs

NORTH CAROLINA D.O.T. SIGN DETAIL

HN-0031
SIGN-2
NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
WAKE COUNTY

PROJECT ENGINEER
TGS ENGINEERS
4/22/2026
DOCUMENT NOT CONSIDERED FINAL
UNLESS ALL SIGNATURES COMPLETED
PREPARED BY

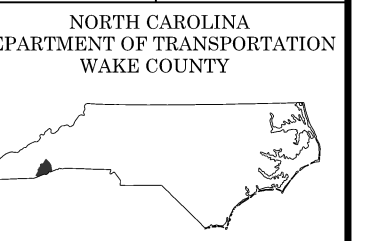
TYPE "D" SIGN DESIGNS

TYPE "E" SIGNS

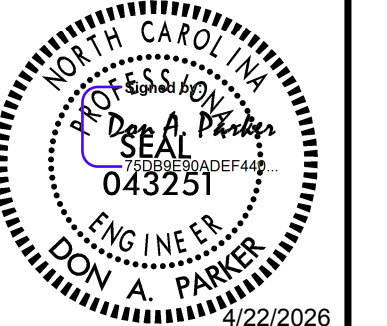
TYPE "F" SIGNS

HN-0031

SIGN-3

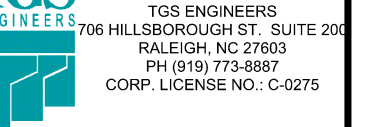


PROJECT ENGINEER

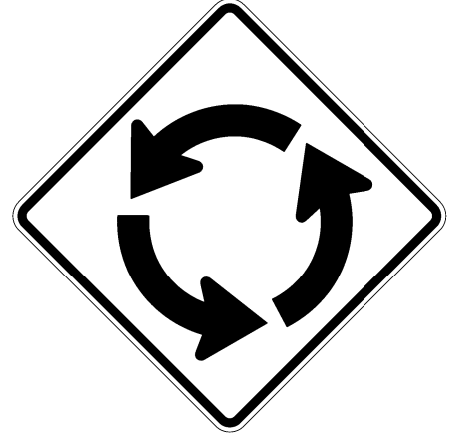


DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

PREPARED BY



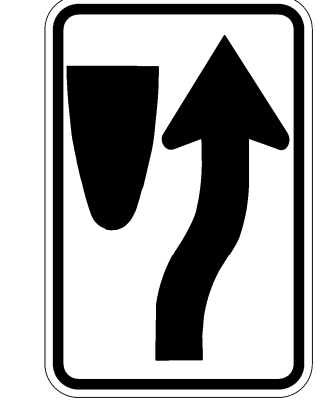
401 QUANTITY REQ'D 3



30" X 30"
W2-6

ONE "U" POST PER SIGN


406 QUANTITY REQ'D 3



24" X 30"
R4-7

ONE "U" POST PER SIGN

501




24" X 12"
M3-3P

30" X 24"
M1-4

21" X 15"
M6-3P

ONE "U" POST PER SIGN

504



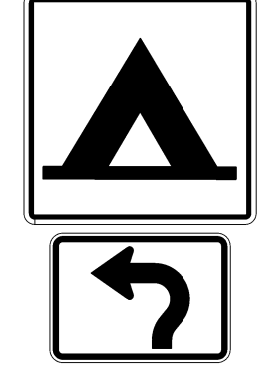
24" X 12"
M3-1P

30" X 24"
M1-4

21" X 15"
M6-3P

ONE "U" POST PER SIGN

507

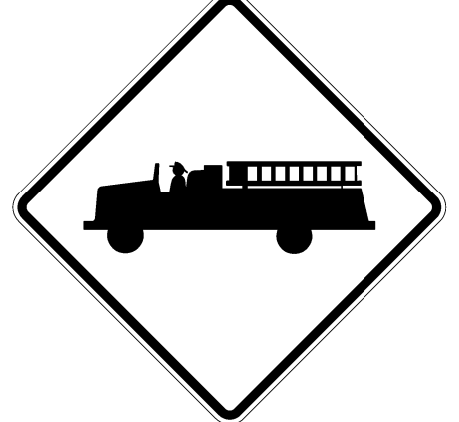


24" X 24"
D9-3

21" X 15"
M5-3P

MOUNT BELOW SIGN 302 IN 1 INSTALLATION

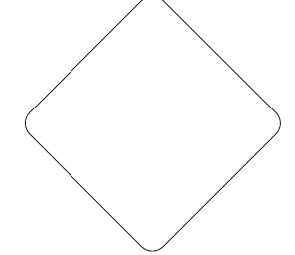
402 QUANTITY REQ'D 2



30" X 30"
W11-8

ONE "U" POST PER SIGN

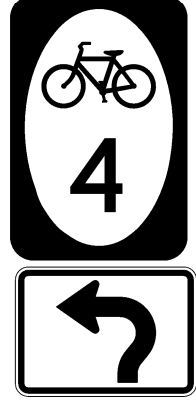
407 QUANTITY REQ'D 3



18" X 18"
OM1-3

MOUNT BELOW SIGN 406 IN 3 INSTALLATIONS

502




18" X 24"
M1-8

12" X 9"
M5-3P

ONE "U" POST PER SIGN

505




24" X 12"
M3-1P

30" X 24"
M1-4

21" X 15"
M6-2P

ONE "U" POST PER SIGN

508

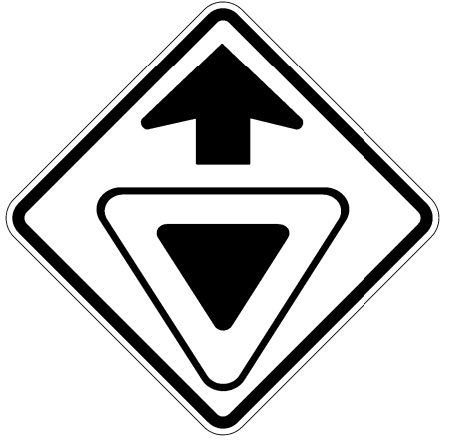


24" X 24"
D9-7

21" X 15"
M6-1P

MOUNT BELOW SIGN 302 IN 1 INSTALLATION


403 QUANTITY REQ'D 3



30" X 30"
W3-2

ONE "U" POST PER SIGN

408 QUANTITY REQ'D 2




30" X 14"
W3-2

MOUNT BELOW SIGN 401 IN 2 INSTALLATIONS

SEE SHEET SIGN-2A FOR SIGN DESIGN

503



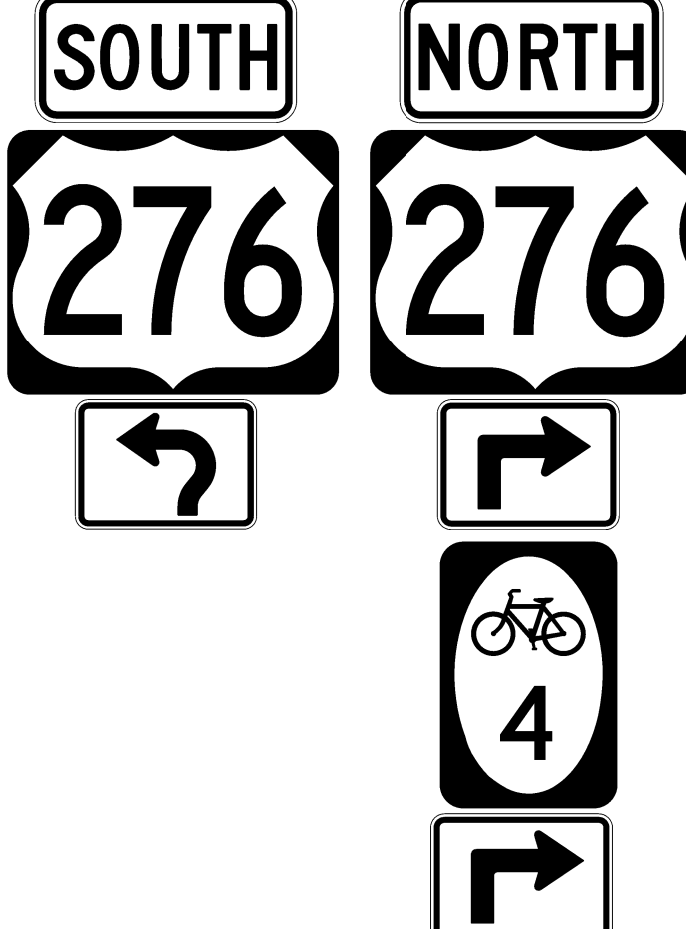
24" X 12"
M3-3P

30" X 24"
M1-4

21" X 15"
M6-2P

ONE "U" POST PER SIGN

506



24" X 12"
M3-3P

24" X 12"
M3-1P

30" X 24"
M1-4

30" X 24"
M1-4

21" X 15"
M5-3P


21" X 15"
M5-1P R

18" X 24"
M1-8

12" X 9"
M5-1P R

TWO "U" POSTS PER SIGN


404 QUANTITY REQ'D 3



36" X 36" X 36"
R1-2

ONE "U" POST PER SIGN

405 QUANTITY REQ'D 3



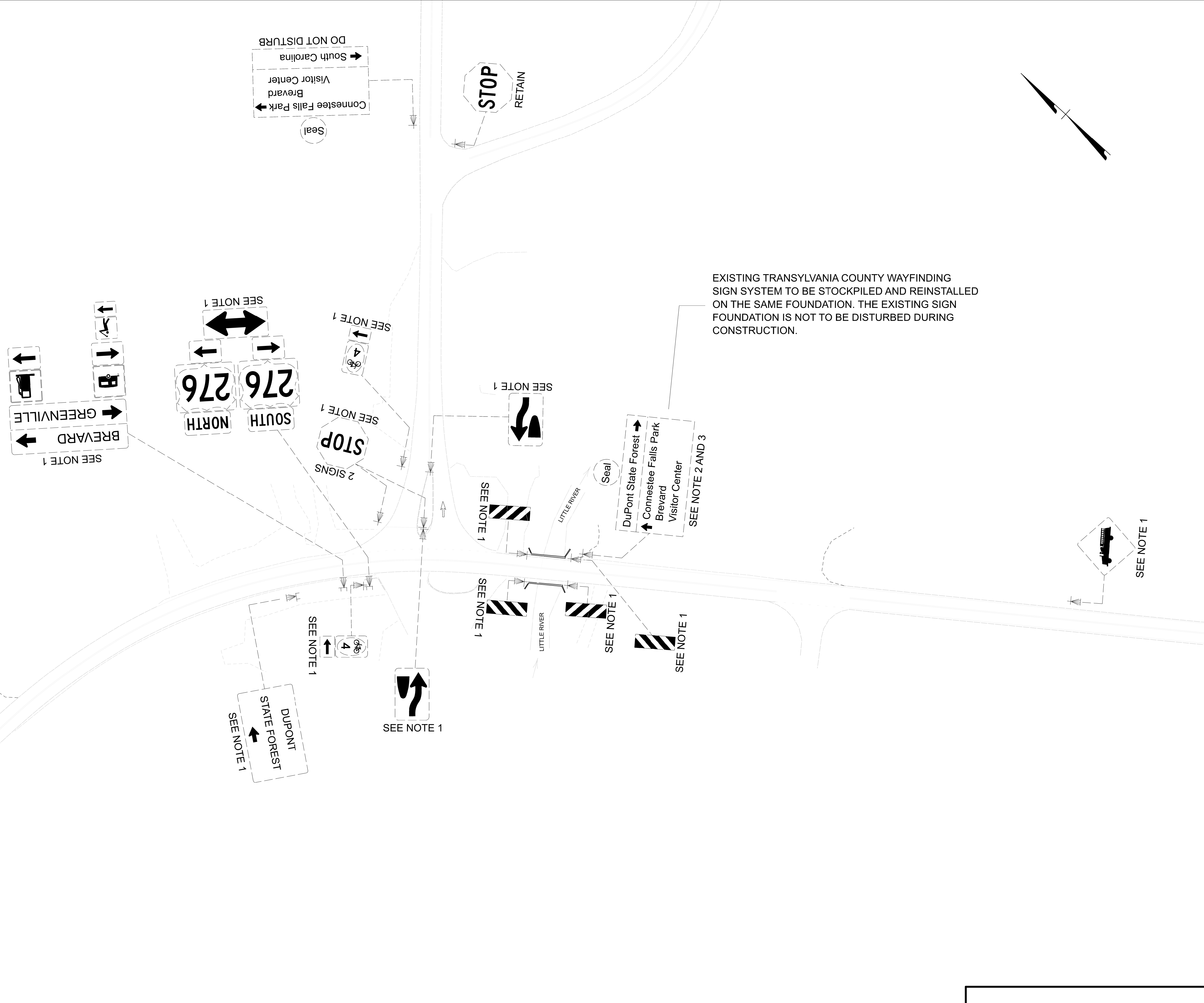
30" X 30"
R6-5P

MOUNT BELOW SIGN 404 IN 3 INSTALLATIONS

TYPE "E" AND "F" SIGNS

PROJECT NOTES

1. DISPOSAL OF SIGN SYSTEM, U-CHANNEL
2. STOCKPILE SIGN SYSTEM, STEEL BEAM
3. SIGN ERECTION, RELOCATE TYPE B (GROUND MOUNTED)



EXISTING SIGNS

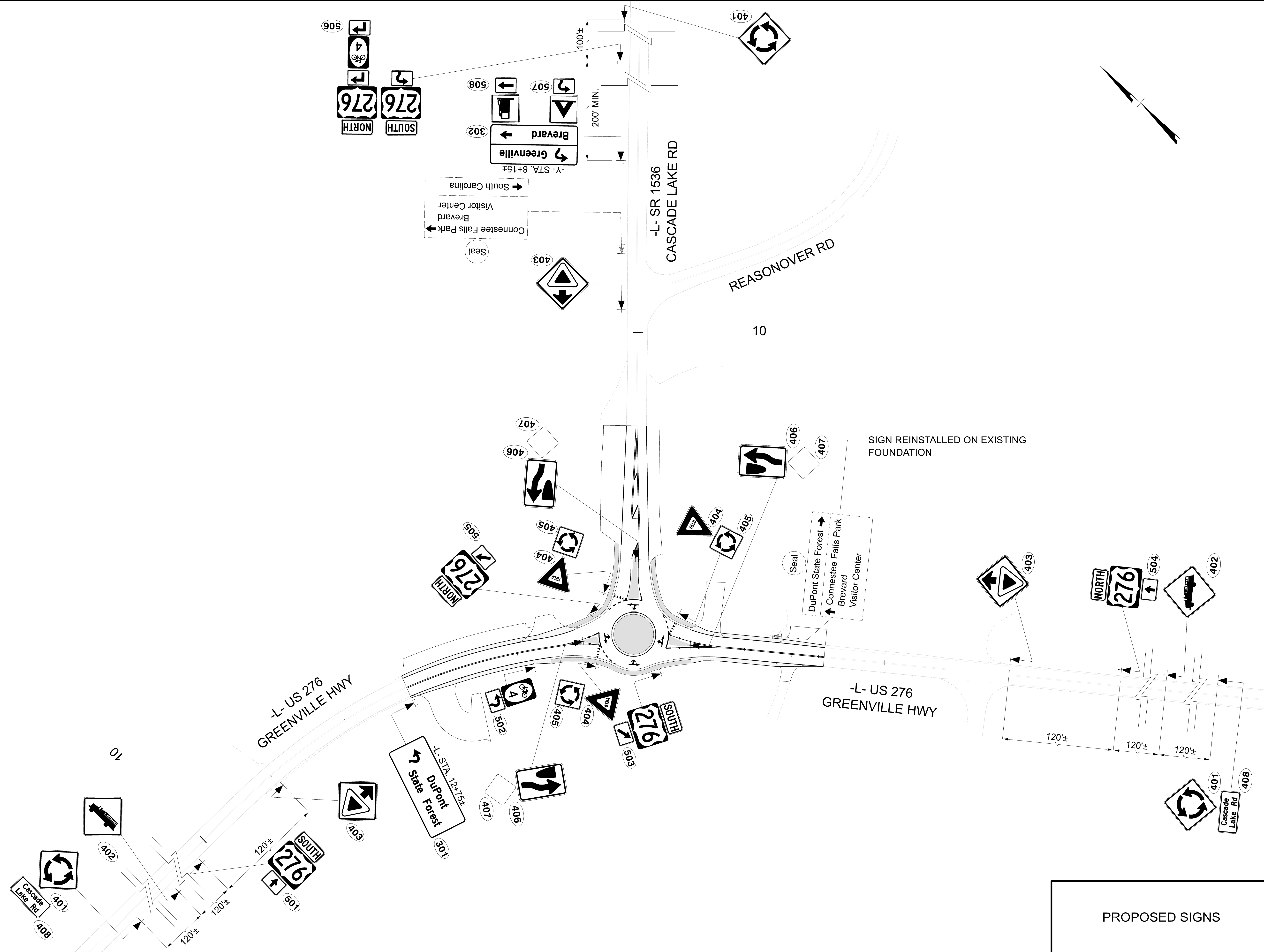
HN-0031
SIGN-4

NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
WAKE COUNTY

PROJECT ENGINEER
Seal of Ron A. Parker
Professional Engineer
043251
11/14/2023

DOCUMENT NOT CONSIDERED FINAL
UNLESS ALL SIGNATURES COMPLETED

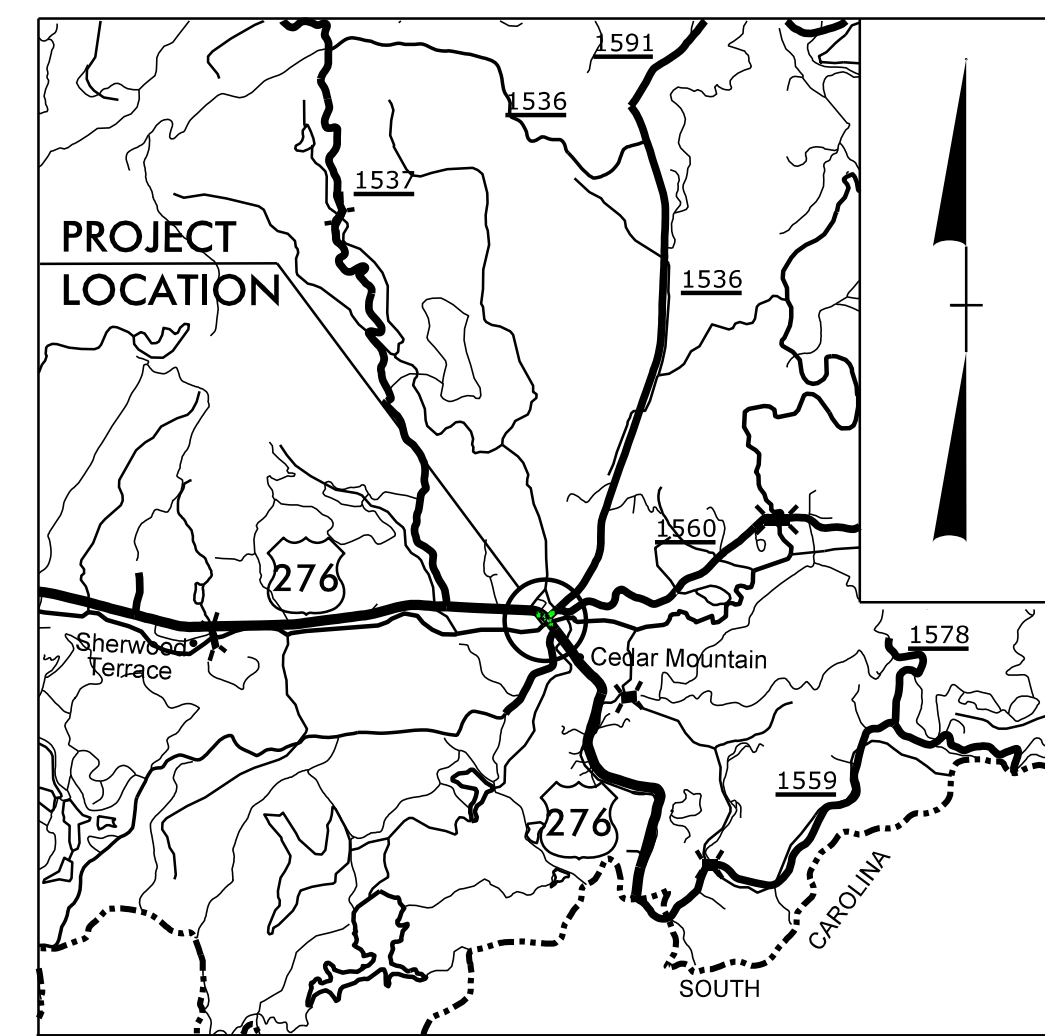
PREPARED BY
TGS ENGINEERS
100 HILLSBOROUGH ST., SUITE 200
RALEIGH, NC 27603
PH (919) 733-8897
CORP. LICENSE NO.: C-0275



PROPOSED SIGNS

TIP PROJECT: HN-0031

See Sheet 1A For Index of Sheets



VICINITY MAP (NTS)

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

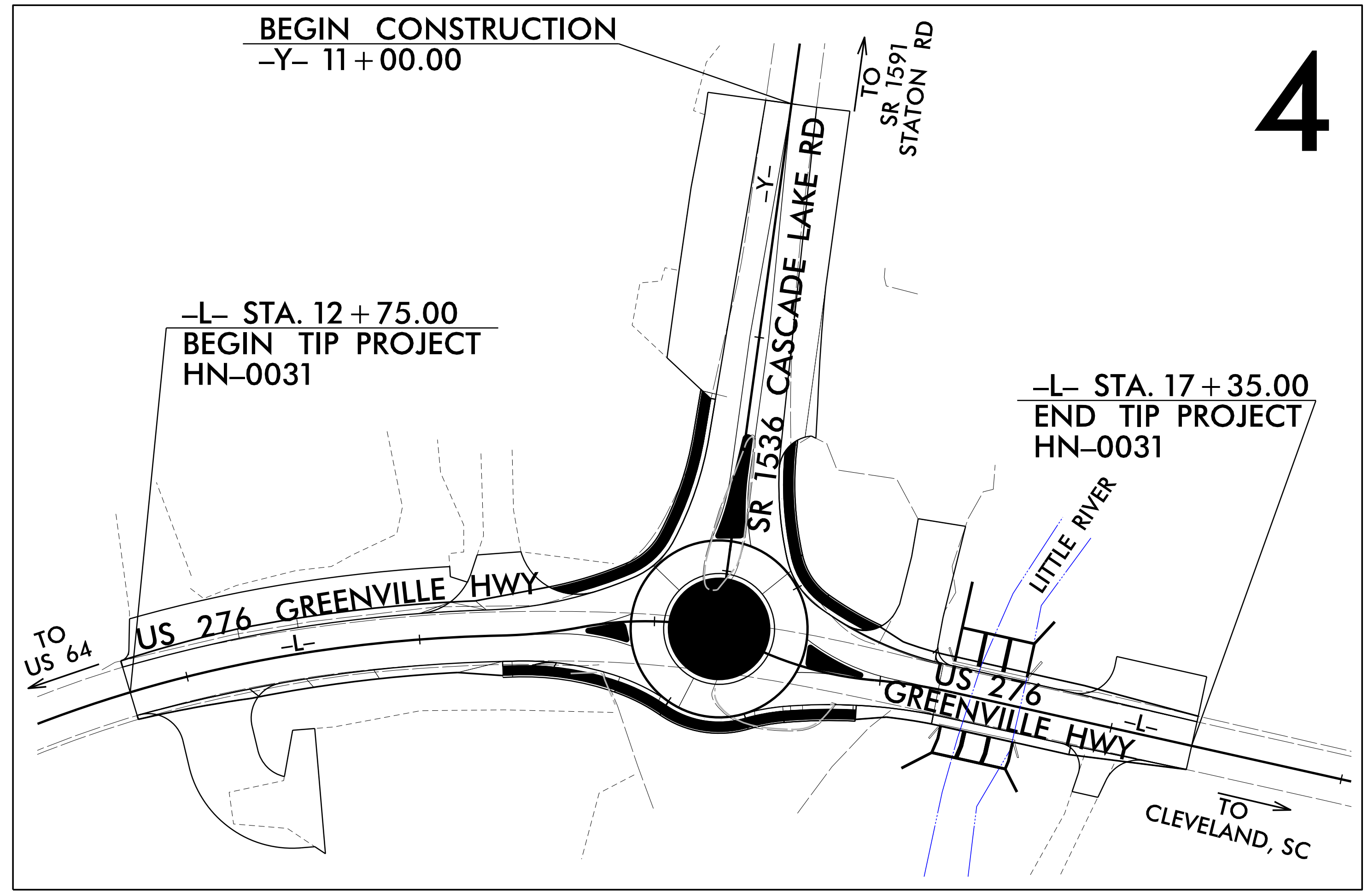
**UTILITIES BY OTHERS PLANS
TRANSYLVANIA COUNTY**

LOCATION: US 276 AT SR 1536 (CASCADE LAKE RD)

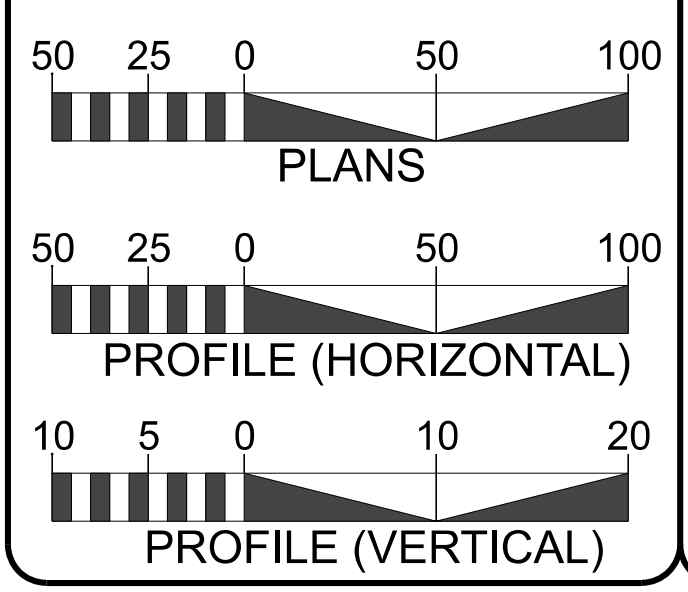
TYPE OF WORK: COMMUNICATIONS

T.I.P. NO.	SHEET NO.
HN-0031	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.



GRAPHIC SCALES



INDEX OF SHEETS

SHEET NO.:	DESCRIPTION:
UO-1	TITLE SHEET
UO-2	UBO PLAN SHEET

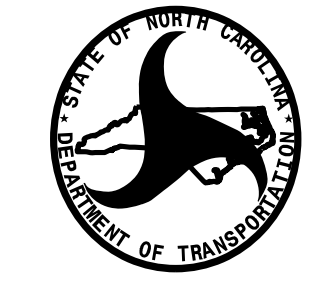
UTILITY OWNERS WITH CONFLICTS

(A) COMMUNICATIONS - COMPORIUM

PREPARED IN THE OFFICE OF



TELICS
119 BROOKSTOWN AVE.
SUITE 305
WINSTON SALEM, NC 27103
(336) 705 - 8844



DIVISION OF HIGHWAYS
DIVISION 14
253 WEBSTER RD.
SYLVA, NC 28779
PHONE (828) 331-5200
FAX (828) 321-5201

CORY WOOD UTILITY PROJECT MANAGER
CORY WOOD UTILITY COORDINATOR

ROBERT DYER DIVISION UTILITIES ENGINEER
ASST. DIVISION UTILITIES ENGINEER

02/02/22

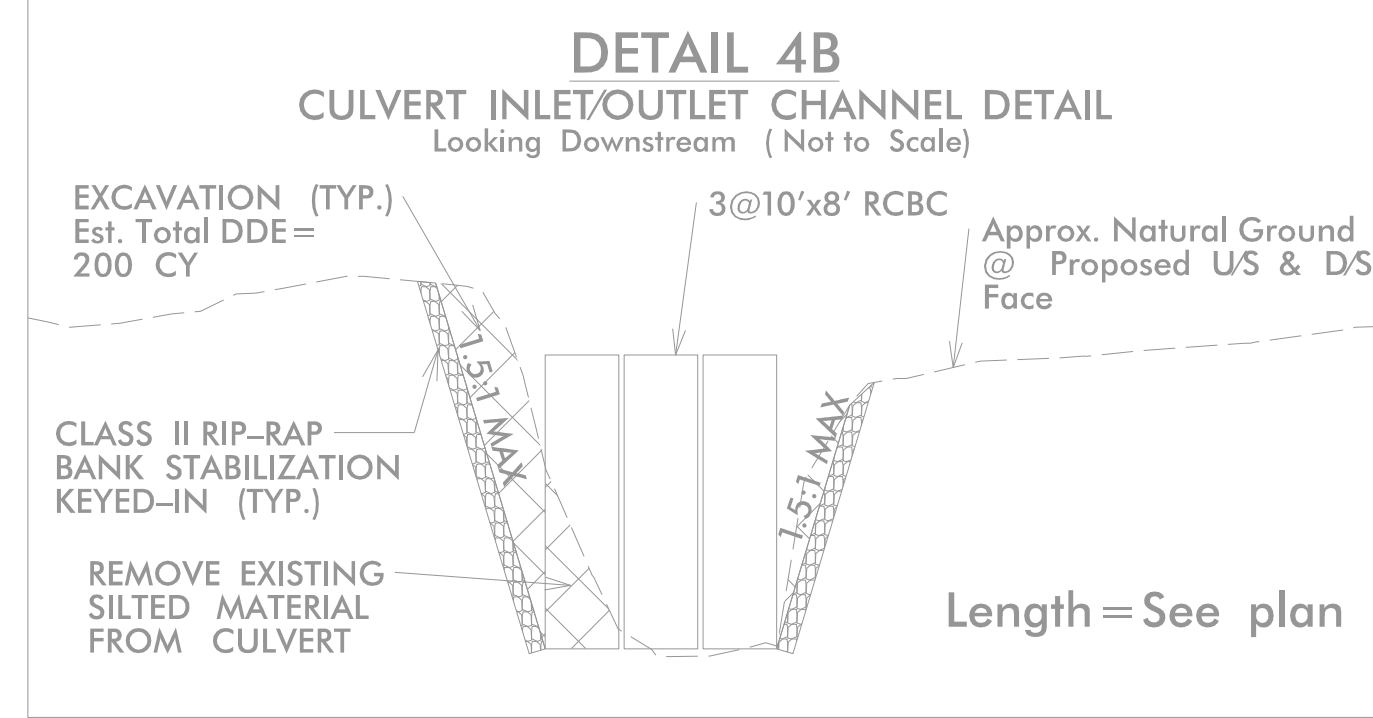
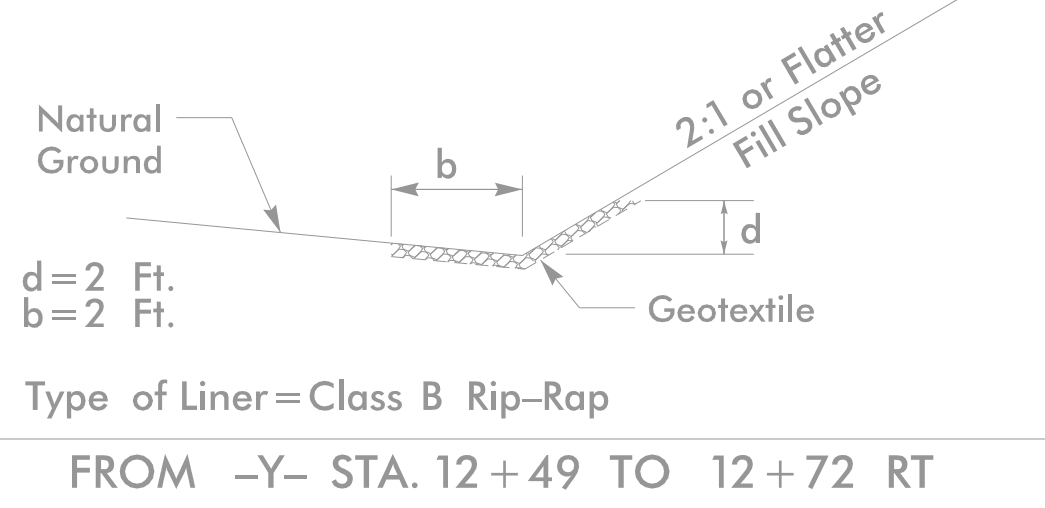
CUR DATA -L-		
Plc 12+17.86	Plc 13+92.45	Plc 14+51.60
$\Delta c = 27^{\circ}48'24.0"$ (RT)	$\Delta c = 07^{\circ}44'29.1"$ (RT)	$\Delta c = 09^{\circ}31'13.7"$ (LT)
D = 10°19'24.8"	D = 09°05'40.4"	D = 28°38'52.4"
Lc = 269.35	Lc = 85.12	Lc = 33.23
Tc = 137.38	Tc = 42.63	Tc = 16.65
R = 555	R = 630	R = 200
SE = EXIST.	SE = 07	SE = - 02
	DS = 45 mph	DS = 25 mph

CUR DATA -L-		
Plc 14+98.28	Plc 15+63.28	Plc 16+14.49
$\Delta c = 22^{\circ}41'43.1"$ (RT)	$\Delta c = 26^{\circ}45'41.9"$ (LT)	$\Delta c = 07^{\circ}42'12.6"$ (RT)
D = 38°11'49.9"	D = 38°11'49.9"	D = 22°55'05.9"
Lc = 59.42	Lc = 70.06	Lc = 33.61
Tc = 30.10	Tc = 35.68	Tc = 16.83
R = 150	R = 150	R = 250
	SE = See Plans	DS = 25 mph

BEGIN CONSTRUCTION

-Y- STA. 11+00.00

DETAIL 4A TOE PROTECTION (Not to Scale)



CUR DATA -DRWY 1-	
Plc 10+63.18	
$\Delta c = 81^{\circ}30'23.3"$ (LT)	
D = 190°59'09.4"	
Lc = 42.68	
Tc = 25.85	
R = 30	
SE=0.01	

BEGIN PROJECT HN-0031

-L- STA. 12+75.00

END CONSTRUCTION

-DRWY1- STA. 10+90.00

UTILITIES BY OTHERS

HN-0031
UO-2

NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
TRANSYLVANIA COUNTY

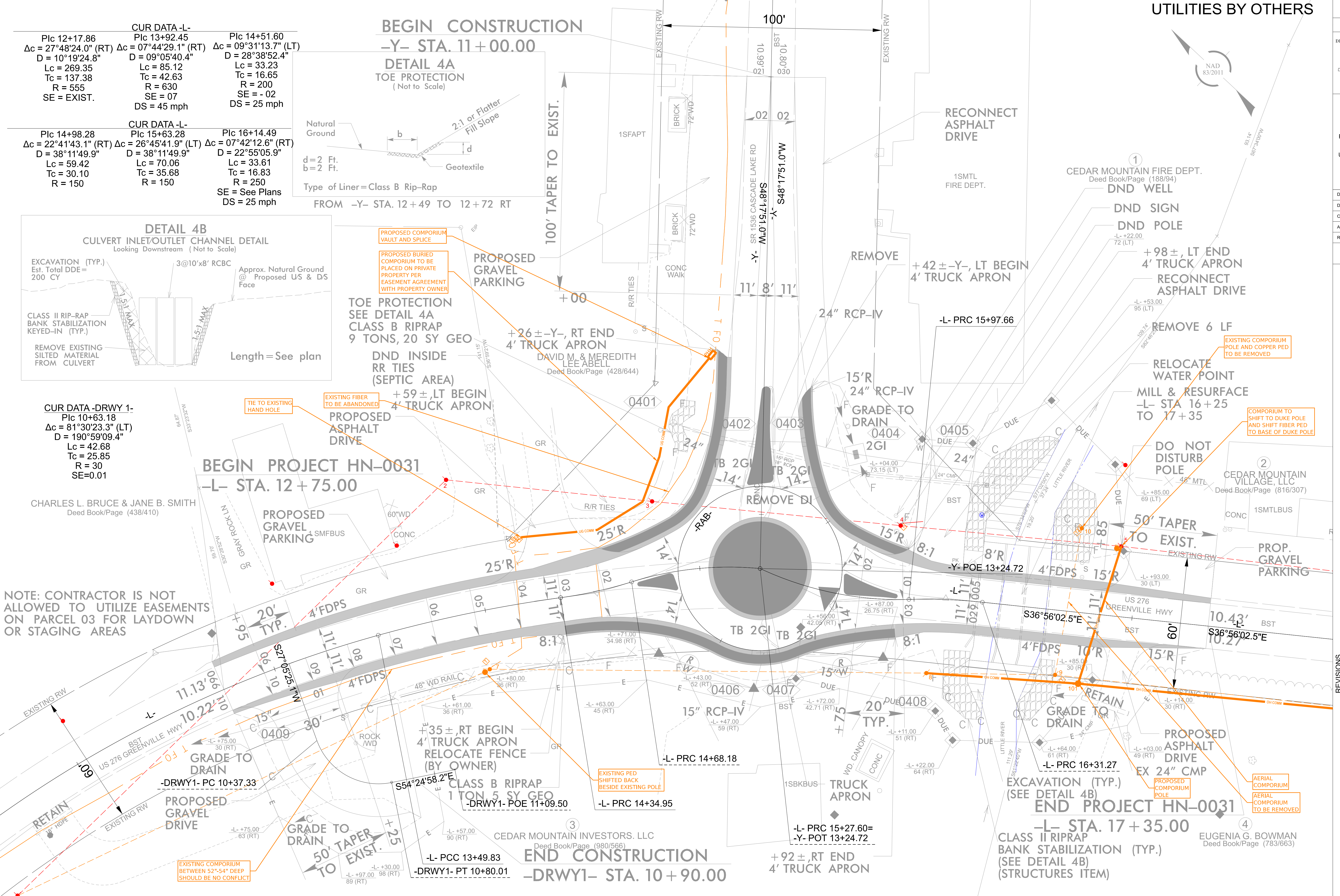
UTILITY DESIGN UNIT
UTILITY CONSTRUCTION
PLANS ONLY

ALL PROPOSED 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.

DESIGNED BY:
DRAWN BY:
CHECKED BY:
APPROVED BY:
REVISED:

YELICS
119 BROOKTOWN AVE.
SUITE 305
WINSTON SALEM, NC 27101
PHONE (336)705-8844

NOTE: CONTRACTOR IS NOT ALLOWED TO UTILIZE EASEMENTS ON PARCEL 03 FOR LAYDOWN OR STAGING AREAS



REVISIONS