

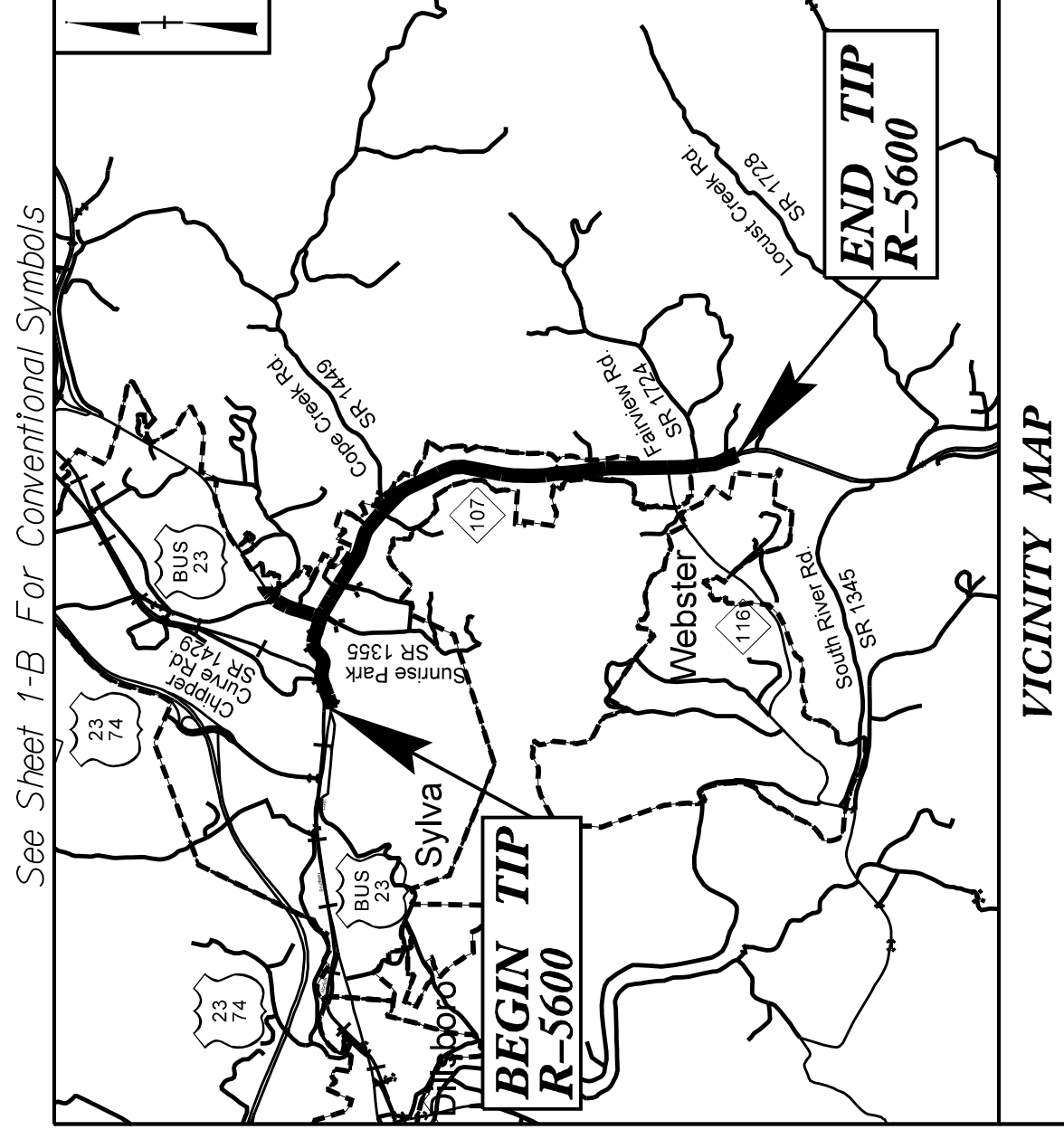
TIP PROJECT: R-5600

CONTRACT:

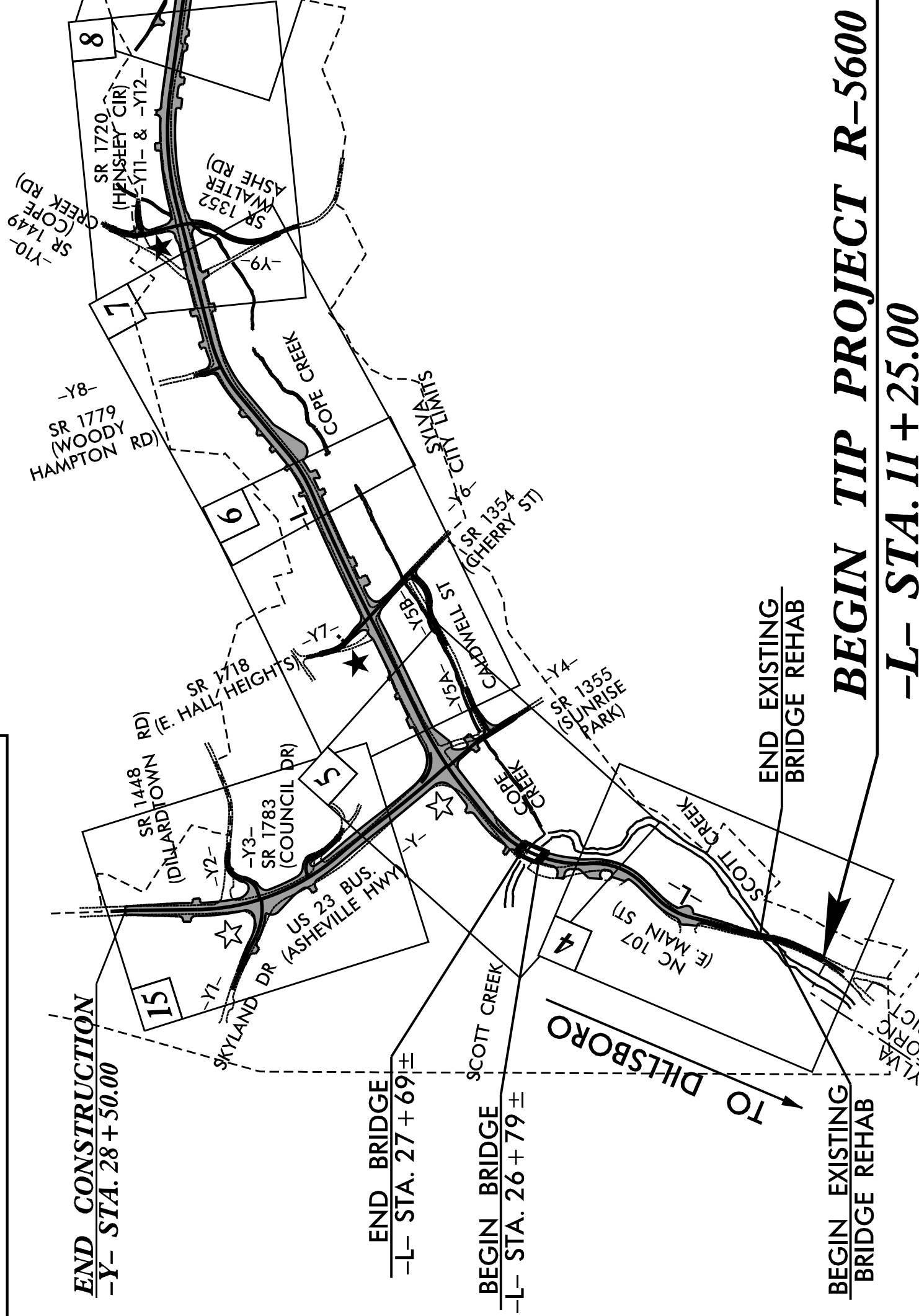
REVISIONS

10/4/2022	ROW AND EASEMENT CHANGES ON PSHs RD/RW 5, 6, & 11-13
11/5/2022	EASEMENT CHANGES ON PSHs RD/RW 9, 11, 12, & 14
11/7/2023	ROW & EASEMENT CHANGES ON PSHs RD/RW 4, 5, 7-9, 11-13; PARCEL OWNER CHANGES ON PSHs RD/RW 6-8
2/3/2023	PSH 12 & ROW 12; PARCEL 137 TCE REVISED
2/3/2023	PSH 11 & ROW 11; PARCEL 158Y ELIMINATED; COMBINED INTO 158Z
2/3/2023	EASEMENT CHANGES ON PSHs RD/RW 4, 8, 9, & 12
4/8/2023	ROW CHANGES ON PSHs RD/RW 4; EASEMENT CHANGES ON PSHs RD/RW 4, 6, & 8
8/9/2023	PSH 09 & ROW 09; PARCEL 93 ROW, PUE, & TCE REVISED; PARCEL 94 PUE, DUE, & TCE REVISED; PARCEL 95Z CREATED FOR PUE
8/30/2023	PSH 14 & ROW 14; PARCEL 152 CA REMOVED
11/5/2023	PSH 4 & ROW 4; PARCELS 5 & 6 ROW REVISED; PARCEL 5 PUE REVISED; PARCEL 09 & ROW 09 REVISED; PARCEL 93 ROW, PUE, & TCE REVISED; PARCEL 94 DUE & PDE REMOVED; PUE & TCE REVISED; PARCEL 95Z CREATED FOR ADDED ROW AND PUE & TCE REVISED

FILE: \
 USFR: ASNIDER
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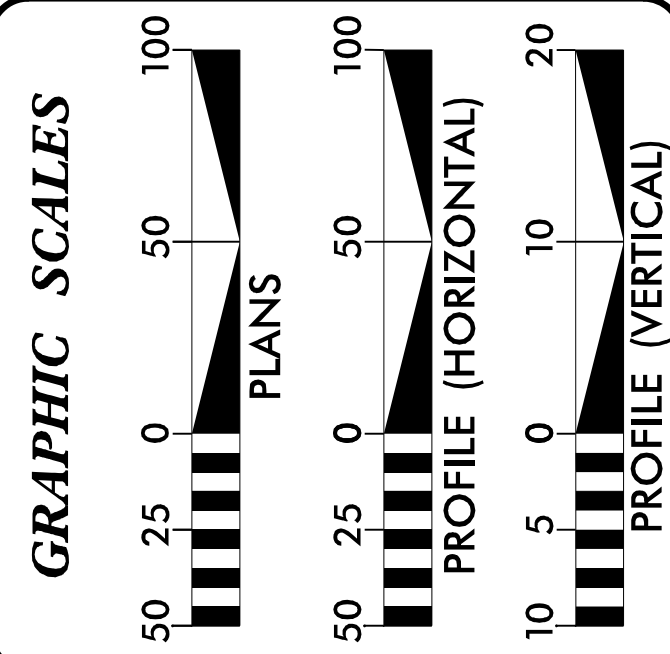


VICINITY MAP



NOTES:
 THIS PROJECT HAS PARTIALLY CONTROLLED ACCESS WITH ACCESS BEING LIMITED TO POINTS SHOWN ON THE PLANS. A PORTION OF THIS PROJECT IS WITHIN THE MUNICIPAL BOUNDARIES OF SYLVA. CLEARING ON THIS PROJECT SHOULD BE PERFORMED TO THE LIMITS ESTABLISHED BY METHOD II.
 DESIGN SPEED = 30 MPH FROM -L- STA. 11+25.00 TO 29+50.00
 DESIGN SPEED = 40 MPH FROM -L- STA. 29+50.00 TO 123+00.00
 DESIGN SPEED = 50 MPH FROM -L- STA. 123+00.00 TO 149+57.42

- ★ PROPOSED TRAFFIC SIGNAL
- ☆ UPGRADED TRAFFIC SIGNAL



DESIGN DATA

ADT 2020	=	34,300
ADT 2040	=	40,800
K	=	9 %
D	=	55 %
T	=	5 % *
V	=	30 MPH TO 50 MPH
* TTST	=	4% DUAL = 3%
FUNC CLASS	=	ARTERIAL
REGIONAL TIER	=	

PROJECT LENGTH

LENGTH ROADWAY TIP PROJECT R-5600	=	2.603 MILES
LENGTH STRUCTURES TIP PROJECT R-5600	=	0.017 MILES
TOTAL LENGTH TIP PROJECT R-5600	=	2.620 MILES

2018 STANDARD SPECIFICATIONS

RIGHT OF WAY DATE:	JULY 16, 2021
LETTING DATE:	JULY 15, 2025

Prepared in the Office of:
 HDR Engineering, Inc. of the Carolinas
 555 Fayetteville St. Suite 900 Raleigh, N.C. 27601
 N.C.B.E.L.S. License Number: F-0116

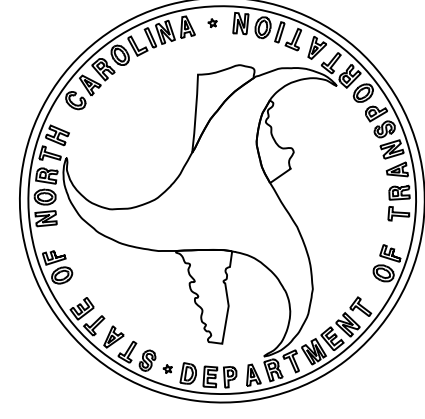
PHILLIP E. ROGERS, PE PROJECT ENGINEER
ALEXANDER D. SNIDER, PE PROJECT DESIGN ENGINEER
JEANETTE WHITE, PE NCDOT CONTACT

HYDRAULICS ENGINEER

 P.E.

ROADWAY DESIGN ENGINEER

 P.E.

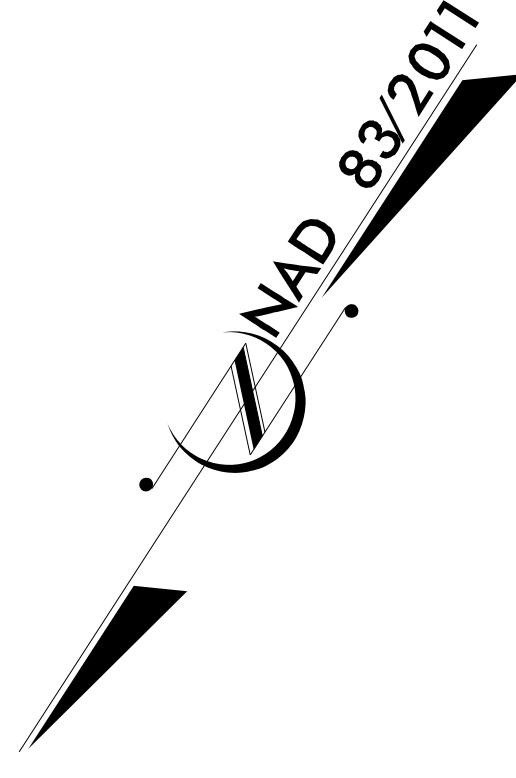
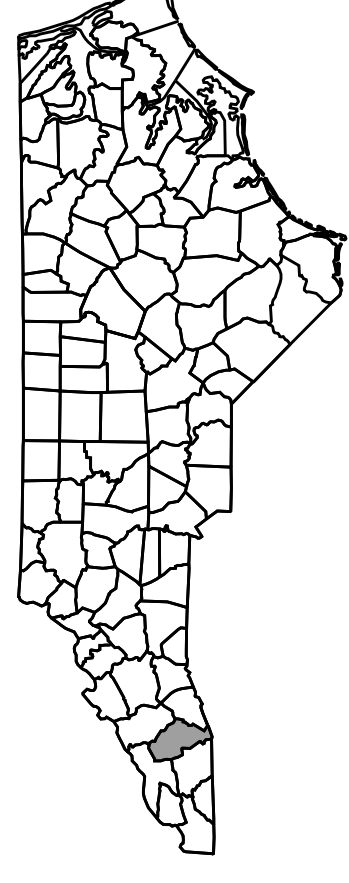


STATE OF NORTH CAROLINA
 DIVISION OF HIGHWAYS

JACKSON COUNTY

LOCATION: SYLVA - N.C. 107 FROM WEST OF U.S. 23 BUSINESS (ASHEVILLE HIGHWAY) TO SOUTH OF N.C. 116 (WEBSTER ROAD) AND U.S. 23 BUS. FROM SKYLAND DRIVE TO WEST OF MUNICIPAL DRIVE

TYPE OF WORK: GRADING, PAVING, DRAINAGE, RETAINING WALLS, STRUCTURES AND SIGNALS



STATE	N.C.	STATE PROJECT REFERENCE NO.	R-5600	SHEET NO.	1	TOTAL SHEETS	
STATE PROJ. NO.	45818.1.FRI	F.A. PROJ. NO.	STP-0107(13)	DESCRIPTION	PE		
	45818.2.1			ROW/UTIL.	CONSTRUCTION		
	45818.3.FRI						

END TIP PROJECT R-5600
-L- STA. 149 + 57.42

BEGIN TIP PROJECT R-5600
-L- STA. 11 + 25.00

END CONSTRUCTION
(R-5000) -Y4- STA. 34+18.05

DOCUMENT NOT CONSIDERED FINAL
 UNLESS ALL SIGNATURES COMPLETED

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

RAILROADS: *S.U.E. = Subsurface Utility Engineering
*Note: Not to Scale

- Standard Gauge
- RR Signal Milepost
- Switch
- RR Abandoned
- RR Dismantled

- Hedge
- Woods Line
- Orchard
- Vineyard

EXISTING STRUCTURES:

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

RIGHT OF WAY & PROJECT CONTROL:

- Secondary Horiz and Vert Control Point
- Primary Horiz Control Point
- Primary Horiz and Vert Control Point
- Exist Permanent Easment Pin and Cap
- New Permanent Easment 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 RW Marker
- New Control of Access Line with Concrete CA Marker
- Existing Control of Access
- New Control of Access
- Existing Easement Line
- New Temporary Construction Easement
- New Temporary Drainage Easement
- New Permanent 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
- Proposed Slope Stakes Fill
- Proposed Curb Ramp
- Existing Metal Guardrail
- Proposed Guardrail
- Existing Cable Guiderail
- Proposed Cable Guiderail
- Equality Symbol
- Pavement Removal

VEGETATION:

- Single Tree
- Single Shrub

BOUNDARIES AND PROPERTY:

- State Line
- County Line
- Township Line
- City Line
- Reservation Line
- Property Line
- Existing Iron Pin
- Computed Property Corner
- Property Monument
- Parcel/Sequence Number
- Existing Fence Line
- Proposed Woven Wire Fence
- Proposed Chain Link Fence
- Proposed Barbed Wire Fence
- Existing Wetland Boundary
- Proposed Wetland Boundary
- Existing Endangered Animal Boundary
- Existing Endangered Plant Boundary
- Existing Historic Property Boundary

- Known Contamination Area: Soil
- Potential Contamination Area: Soil
- Known Contamination Area: Water
- Potential Contamination Area: Water
- Contaminated Site: Known or Potential

BUILDINGS AND OTHER CULTURE:

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

HYDROLOGY:

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

WATER:

- Water Manhole
- 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*)

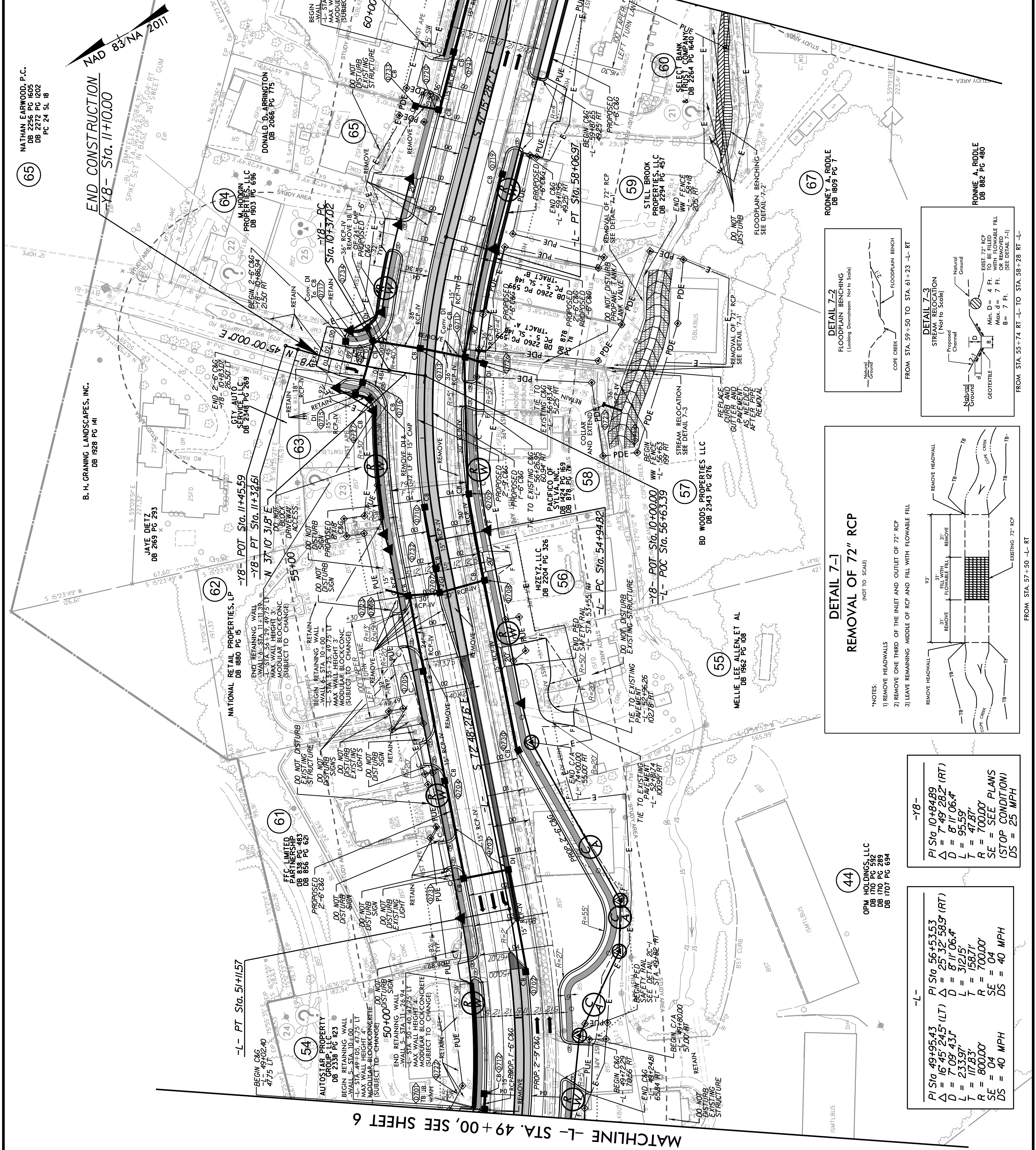
MISCELLANEOUS:

- 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
- End of Information

PROJECT REFERENCE NO.	R-5600
SHEET NO.	7
CONTRACT NO.	RW-7
ENGINEER	HYDRAULICS ENGINEER

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

HDR HDR Engineering, Inc. of the Carolinas
555 Fayetteville St. Suite 900, Raleigh, N.C. 27601
N.C.B.E.L.S. License Number: F-0116



END CONSTRUCTION
-YB- Sta. 11+00.00

REVISIONS

9/27/2021	TCE REVISED; PARCEL 58
12/29/2022	PARCELS 59 & 63 OWNER CHANGES
7/29/2022	PARCELS 65 & 66 PDE ADDED AND TCE REVISED
1/7/2023	PARCELS 57 & 63 OWNER CHANGES; PARCEL 63 TCE REVISED

DETAIL 7-1
REMOVAL OF 72" RCP
(NOT TO SCALE)

*NOTES:
1) REMOVE HEADWALLS
2) REMOVE ONE THIRD OF THE INLET AND OUTLET OF 72" RCP
3) LEAVE REMAINING MIDDLE OF RCP AND FILL WITH FLOWABLE FILL

DETAIL 7-2
FLOODPLAIN BENCHING
(Looking Downstream Not to Scale)

DETAIL 7-3
STREAM RELOCATION
(Not to Scale)

DETAIL 7-4
STREAM RELOCATION
(Not to Scale)

DETAIL 7-5
STREAM RELOCATION
(Not to Scale)

DETAIL 7-6
STREAM RELOCATION
(Not to Scale)

DETAIL 7-7
STREAM RELOCATION
(Not to Scale)

DETAIL 7-8
STREAM RELOCATION
(Not to Scale)

DETAIL 7-9
STREAM RELOCATION
(Not to Scale)

DETAIL 7-10
STREAM RELOCATION
(Not to Scale)

DETAIL 7-11
STREAM RELOCATION
(Not to Scale)

DETAIL 7-12
STREAM RELOCATION
(Not to Scale)

RADIUS 10' UNLESS OTHERWISE NOTED FOR -L- PROFILE, SEE PROFILE SHEET 17 FOR -YB- PROFILE, SEE PROFILE SHEET 26

.. HIST APE ..	APE
- STUDY AREA -	STUDY AREA
PROP CONC SIDEWALK	PROP CONC SIDEWALK
PROP MON ISLAND	PROP MON ISLAND
RAISED GRASS MEDIUM	RAISED GRASS MEDIUM

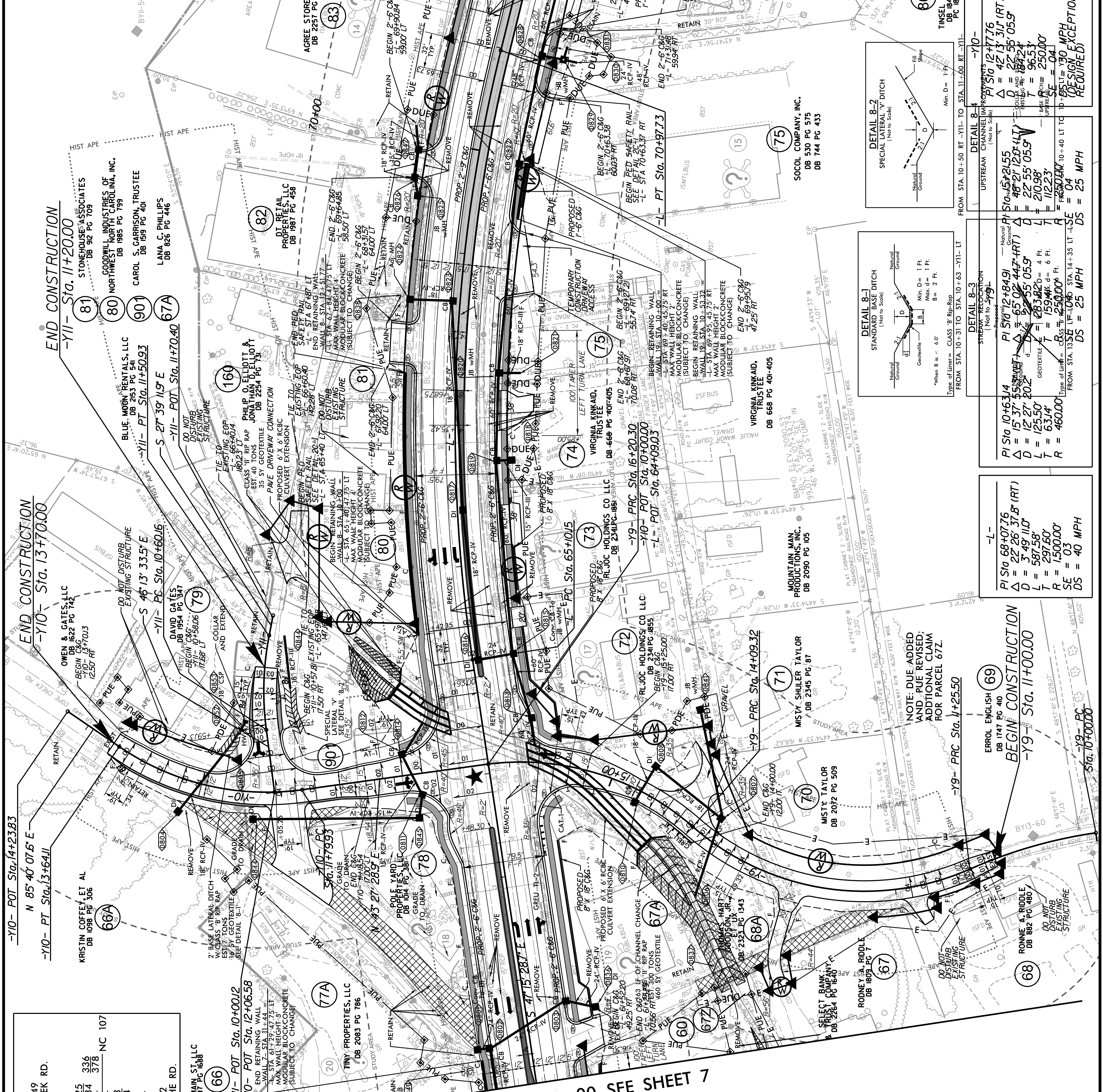
PROJECT REFERENCE NO. R-5600
 SHEET NO. 8
 RW SHEET NO. RW-8
 ROADWAY DESIGN ENGINEER
 HYDRAULICS ENGINEER

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

HDR HDR Engineering, Inc. of the Carolinas
 555 Fayetteville St., Suite 900, Raleigh, N.C. 27601
 N.C.B.E.L.S. License Number: F-0116

-Y11-
 P Sta. 11+05.95
 $\Delta = 18' 34" 216'$ (RT)
 $D = 20' 27" 460'$
 $L = 907.6'$
 $R = 45.78'$
 $SE = 28000'$
 $DS = 25$ MPH

NAD 83/NA 2011



2020 ADT	SR 1449		
2035 ADT	COPE CREEK RD.	54	78
(ADT IN 100')		29	34
		388	43
		4	5
		3	4
		9	10
NC 107	SR 1352		
	WALTER ASHE RD.		

475 E. MAIN ST. LLC
 DB 2187 PG 1688

-Y10- POT Sta. 10+00.12
 -Y10- POT Sta. 12+06.58

END RETAINING WALL
 WALL STA. 11+44
 MAX STA. 61+20
 MIN STA. 47+75
 MODULAR BLOCK/CONCRETE
 (SUBJECT TO CHANGE)

REVISIONS

72/2022: PARCELS 68A & 72 ROW REVISED; PARCEL 70 & 72 TCE REVISED; PARCEL 72 PUE REVISED AND PUE ADDED; PARCEL 71 IMPACTS REMOVED
 82/2022: PARCEL 68A OWNER NAME CHANGE; PARCEL 71 TCE ADDED; PARCELS 70 & 79 TCE REVISED
 1/17/2023: PARCELS 72-75, 84 & 85 PUE REVISED; PARCELS 72-73 TCE REVISED; PARCELS 74-75 DUE REVISED; PARCELS 76 & 79 TCE REVISED
 3/23/2023: PARCEL 74 DUE REVISED & TCE ADDED
 4/18/2023: PARCEL 60 DUE ADDED & PUE REVISED; PARCEL 67Z ADDED FOR DUE ADDED & PUE REVISED

FILE: \

USER: ASNTDR

DATE: 11/15/2023

TIME: 9:09:35 AM

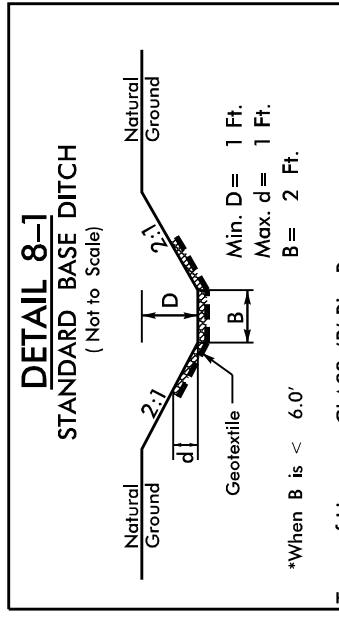
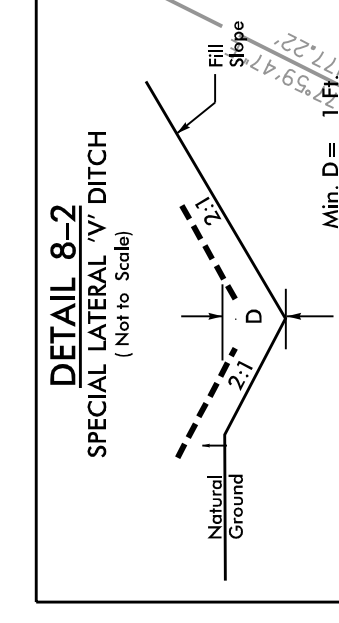
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RADII 10' UNLESS OTHERWISE NOTED
 FOR -L- PROFILE, SEE PROFILE SHEET 18
 FOR -Y9- PROFILE, SEE PROFILE SHEET 26
 FOR -Y10- PROFILE, SEE PROFILE SHEET 26
 FOR -Y11- PROFILE, SEE PROFILE SHEET 26

★ PROPOSED SIGNAL

..	HIST APE
-	STUDY AREA
▬	PROP CONC SIDEWALK
▬	PROP MON ISLAND
▬	RAISED GRASS MEDIAN
▬	PAVEMENT REMOVAL



-Y10-
 P Sta. 10+12.776
 $\Delta = 42' 13" 317'$ (RT)
 $D = 22' 55" 05.9'$
 $L = 88' 21" 120.4'$
 $T = 96.53'$
 $R = 250.00'$
 $SE = 0.4'$
 $DS = 25$ MPH
 (VELOCITY EXCEPTION REQUIRED)

-Y10-
 P Sta. 10+15.2155
 $\Delta = 42' 55" 05.9'$
 $D = 22' 55" 05.9'$
 $L = 210.98'$
 $T = 112.23'$
 $R = 250.00'$
 $SE = 0.4'$
 $DS = 25$ MPH

-L-
 P Sta. 68+07.76
 $\Delta = 22' 26" 37.8'$ (RT)
 $D = 3' 48" 11.0'$
 $L = 587.58'$
 $R = 297.60'$
 $SE = 0.3'$
 $DS = 40$ MPH

-Y9-
 P Sta. 11+25.50
 $\Delta = 15' 37" 55.8'$ (RT)
 $D = 12' 27" 20.2'$
 $L = 125.50'$
 $T = 63.14'$
 $R = 460.00'$
 $SE = 0.4'$
 $DS = 25$ MPH

-Y9-
 P Sta. 14+09.32
 $\Delta = 15' 37" 55.8'$ (RT)
 $D = 12' 27" 20.2'$
 $L = 125.50'$
 $T = 63.14'$
 $R = 460.00'$
 $SE = 0.4'$
 $DS = 25$ MPH

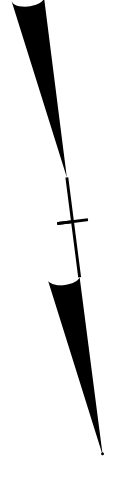
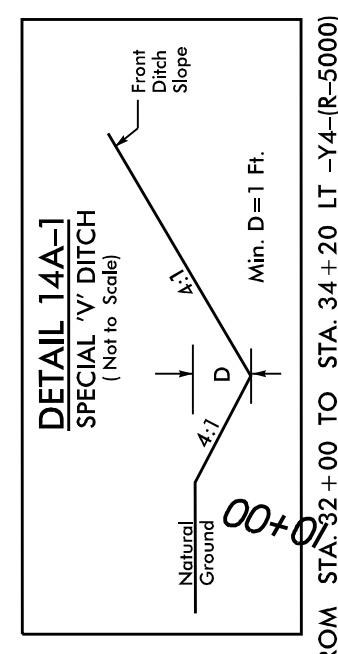
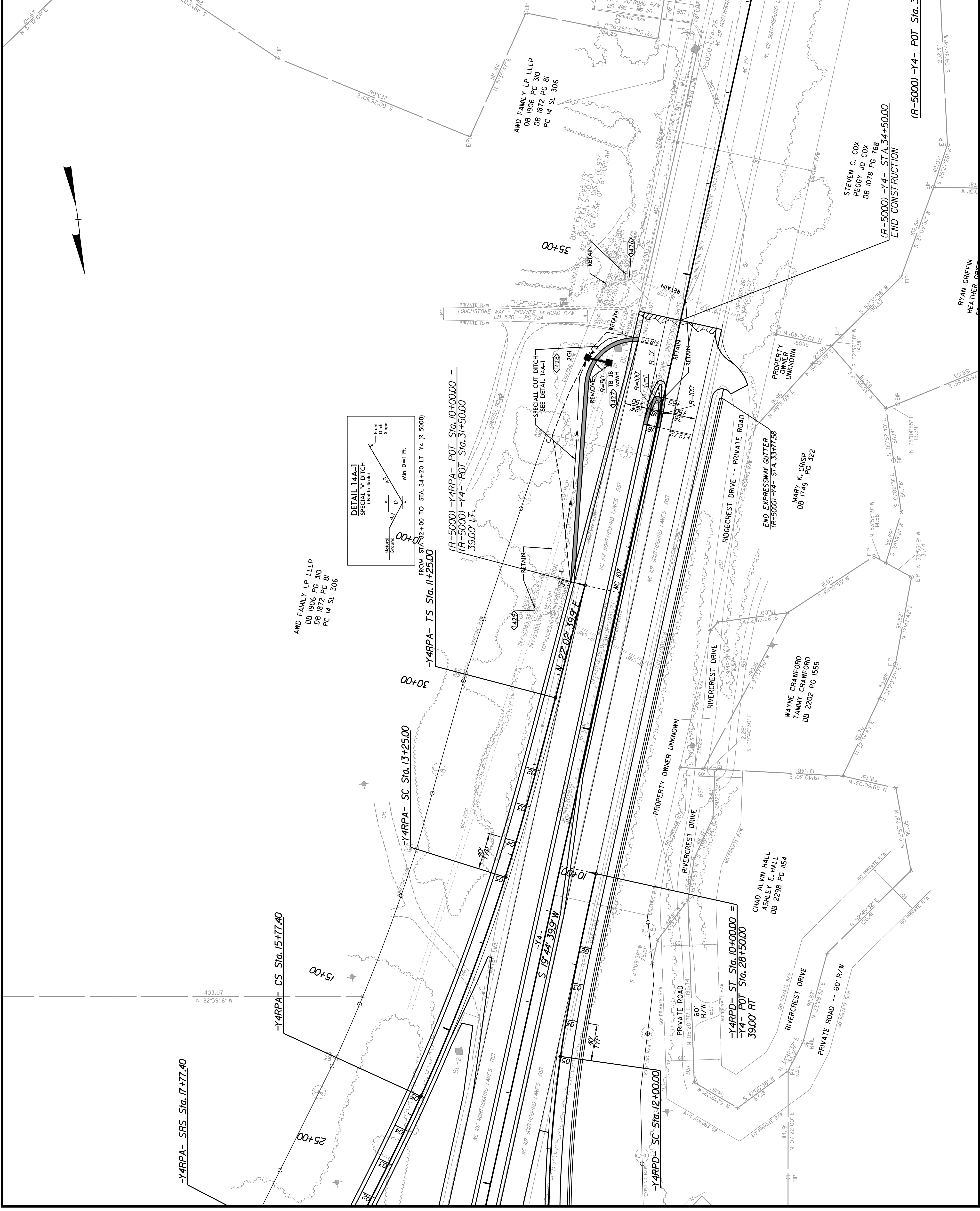
-Y9-
 P Sta. 14+25.50
 $\Delta = 15' 37" 55.8'$ (RT)
 $D = 12' 27" 20.2'$
 $L = 125.50'$
 $T = 63.14'$
 $R = 460.00'$
 $SE = 0.4'$
 $DS = 25$ MPH

-Y9-
 P Sta. 14+40.00
 $\Delta = 15' 37" 55.8'$ (RT)
 $D = 12' 27" 20.2'$
 $L = 125.50'$
 $T = 63.14'$
 $R = 460.00'$
 $SE = 0.4'$
 $DS = 25$ MPH

PROJECT REFERENCE NO.	R-5600
SHEET NO.	14A
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

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UNLESS ALL SIGNATURES COMPLETED**

HDR
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555 Fayetteville St, Suite 900, Raleigh, N.C. 27601
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RADIUS 10' UNLESS OTHERWISE NOTED
PAVED SHOULDER