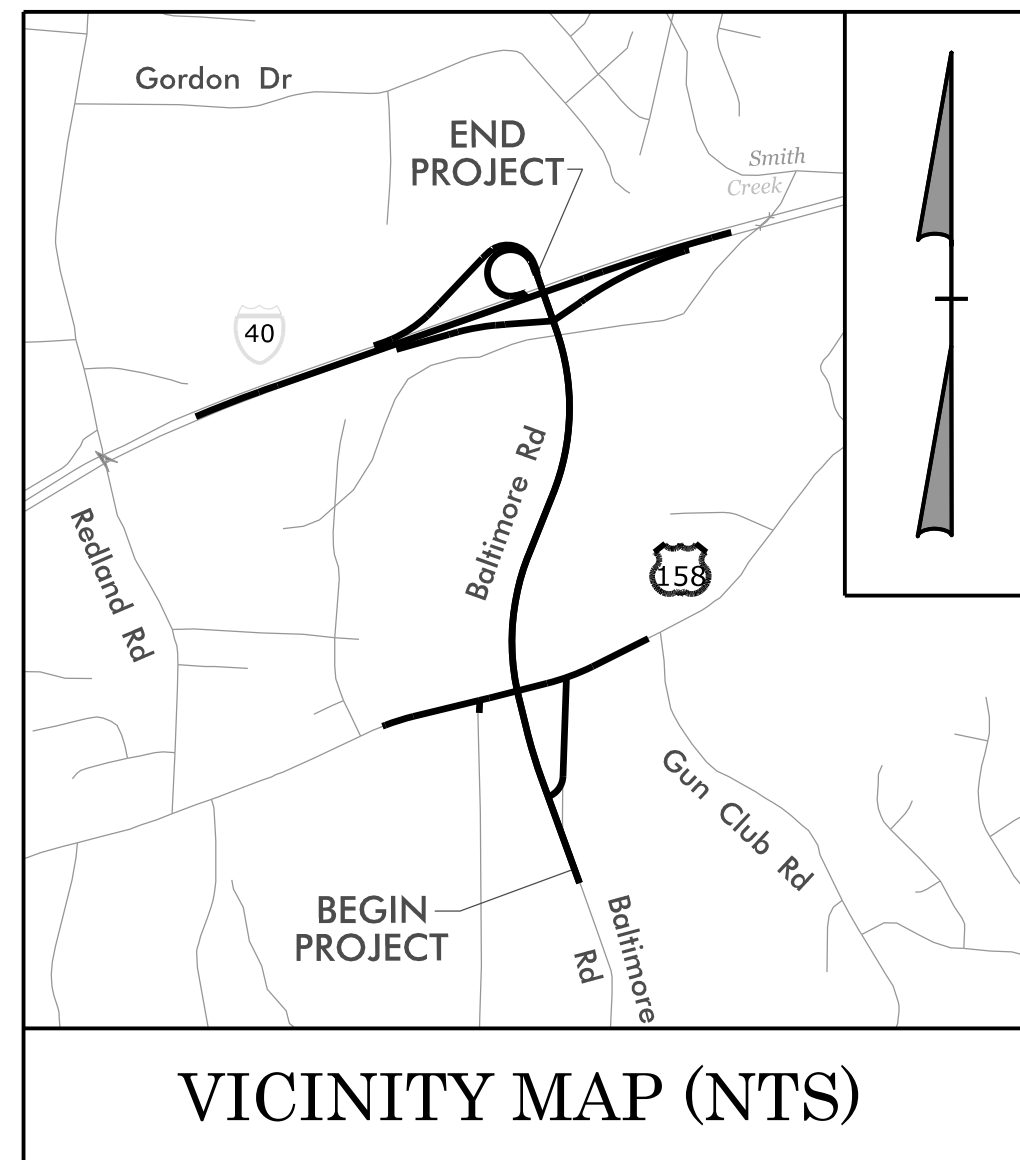


09/08/09

TIP PROJECT: U-6187

CONTRACT: TBD

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



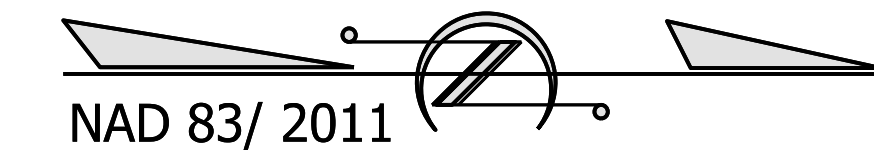
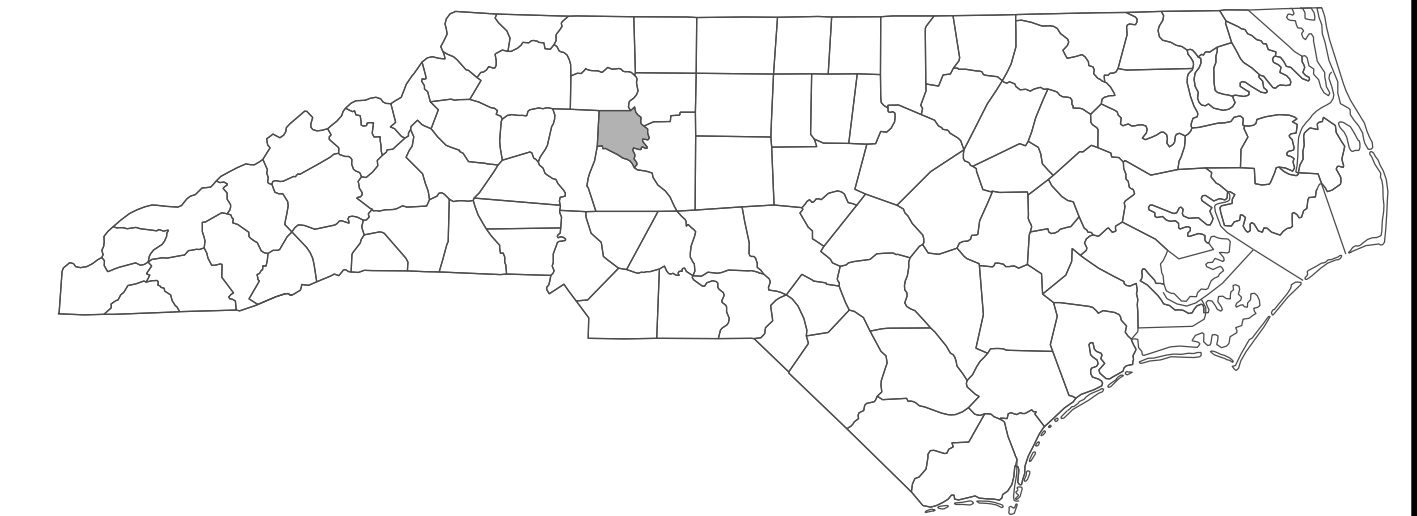
# STATE OF NORTH CAROLINA DIVISION OF HIGHWAYS

## DAVIE COUNTY

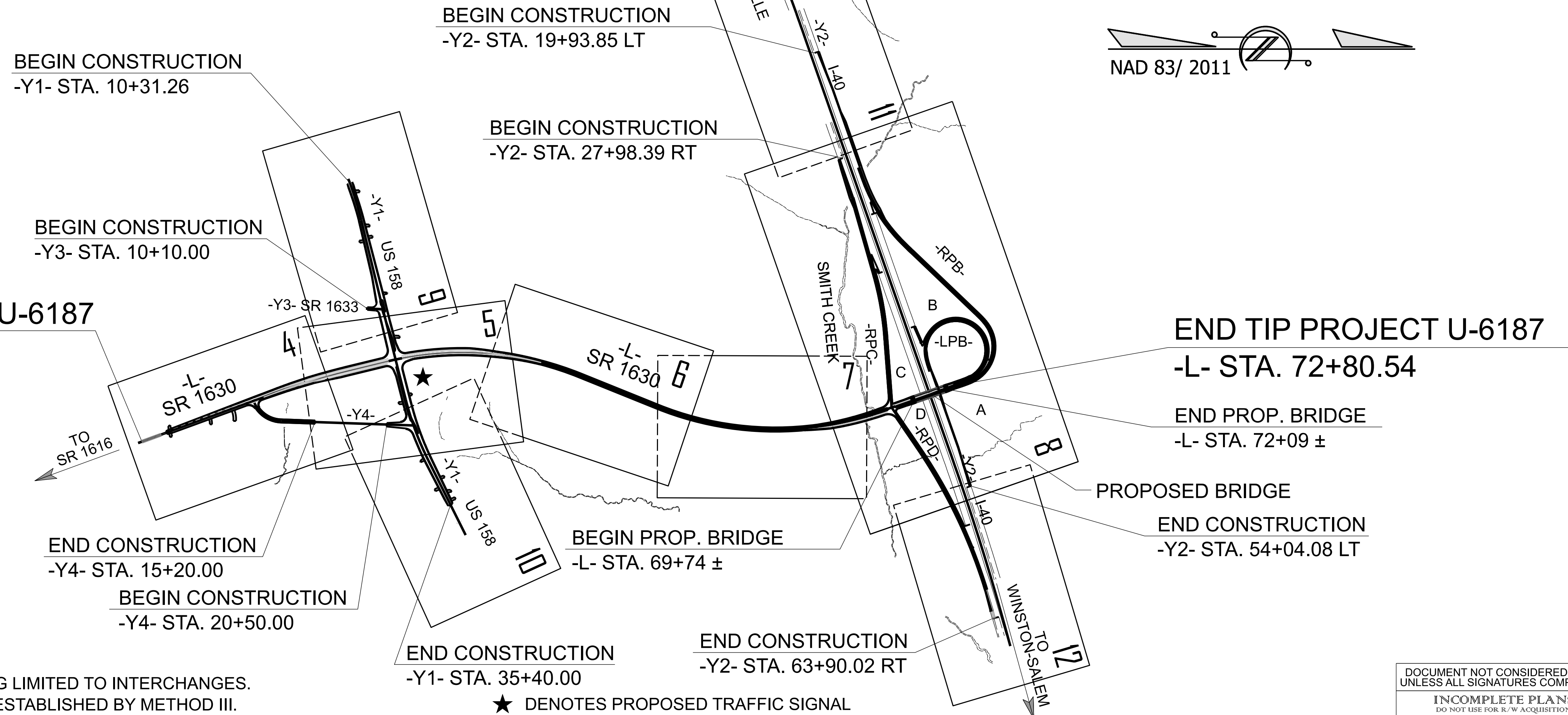
LOCATION: *REALIGNMENT AND EXTENSION OF SR 1630  
(BALTIMORE ROAD) FROM SOUTH OF US 158  
TO A NEW INTERCHANGE AT I-40*

TYPE OF WORK: *GRADING, PAVING, DRAINAGE, AND STRUCTURES*

STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	U-6187	1	
STATE PROJ. NO.	F. A. PROJ. NO.	DESCRIPTION	
48647.1.1		PE	



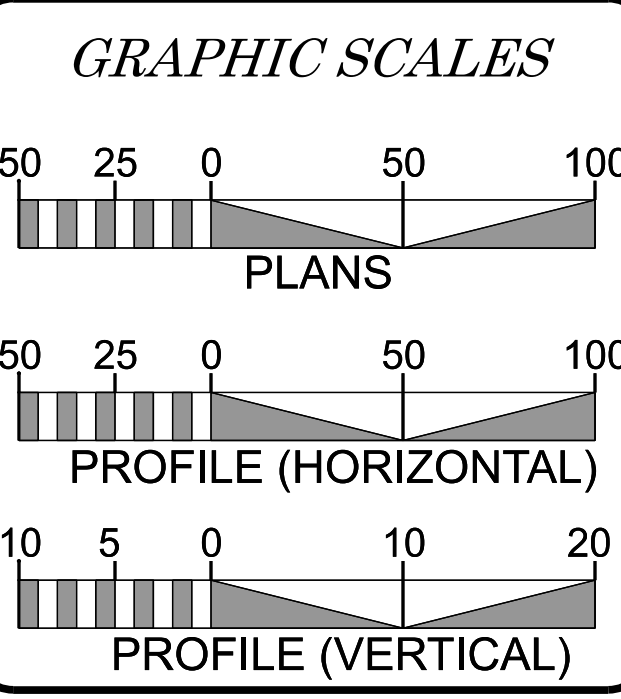
DESIGN RECOMMENDATION PLANS  
(PLANS DEVELOPED USING  
OPENROADS DESIGNER)



**U-6187 Concurrence  
Point 4B Plans  
VHB - Reid Robol, PE &  
Courtney Carpenter, PE  
1/31/2024**

THIS PROJECT IS NOT WITHIN A MUNICIPAL BOUNDARY.  
THIS IS A CONTROL OF ACCESS PROJECT WITH ACCESS TO I-40 BEING LIMITED TO INTERCHANGES.  
CLEARING ON THIS PROJECT SHALL BE PERFORMED TO THE LIMITS ESTABLISHED BY METHOD III.

DOCUMENT NOT CONSIDERED FINAL  
UNLESS ALL SIGNATURES COMPLETED  
INCOMPLETE PLANS  
DO NOT USE FOR R/W ACQUISITION



DESIGN DATA

ADT 2025 =	8,100
ADT 2045 =	21,200
K =	10 %
D =	55 %
T =	8 % *
V =	60 MPH
* TTST =6% DUAL 2%	
FUNC CLASS = MAJOR COLLECTOR STATE WIDE TIER	

PROJECT LENGTH

PROJECT LENGTHS FOR TIP PROJECT U-6187:	
LENGTH ROADWAY TIP PROJECT U-6187 =	1.139 MILES
LENGTH STRUCTURES TIP PROJECT U-6187 =	0.045 MILES
TOTAL LENGTH TIP PROJECT U-6187 =	1.184 MILES

NCDOT Contact: RYAN C. NEWCOMB, PE  
Prepared in the Office of:

2024 STANDARD SPECIFICATIONS

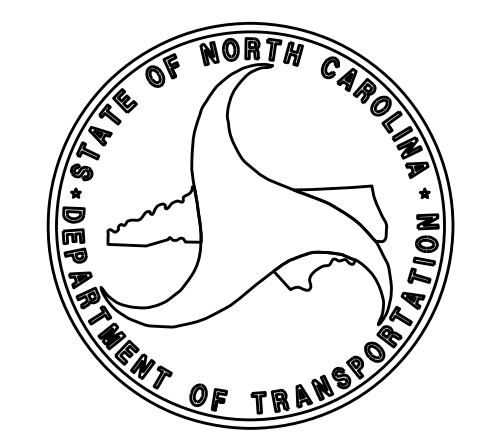
RIGHT OF WAY DATE: MAY 31, 2024	JONATHAN P. SOIKA, P.E. PROJECT ENGINEER
LETTING DATE: JUNE 17, 2025	JERRY B. JAVELLANA, P.E. PROJECT DESIGN ENGINEER

HYDRAULICS ENGINEER

ROADWAY DESIGN ENGINEER

SIGNATURE: \_\_\_\_\_ P.E.

SIGNATURE: \_\_\_\_\_ P.E.



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

Note: Not to Scale

### BOUNDARIES AND PROPERTY:

State Line	-----
County Line	-----
Township Line	-----
City Line	-----
Reservation Line	-----
Property Line	-----
Existing Iron Pin (EIP)	○ EIP
Computed Property Corner	✕
Existing Concrete Monument (ECM)	□ ECM
Parcel / Sequence Number	②③
Existing Fence Line	-x-x-x-
Proposed Woven Wire Fence	○
Proposed Chain Link Fence	□
Proposed Barbed Wire Fence	◇
Existing Wetland Boundary	---MLB---
Proposed Wetland Boundary	MLB
Existing Endangered Animal Boundary	---EAB---
Existing Endangered Plant Boundary	---EPB---
Existing Historic Property Boundary	---HPB---
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	---JS---
Buffer Zone 1	---BZ 1---
Buffer Zone 2	---BZ 2---
Flow Arrow	←
Disappearing Stream	→
Spring	○
Wetland	⊕
Proposed Lateral, Tail, Head Ditch	▬
False Sump	▽

### RAILROADS:

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

### RIGHT OF WAY & PROJECT CONTROL:

Primary Horiz Control Point	○
Primary Horiz and Vert Control Point	●
Secondary Horiz and Vert Control Point	◆
Vertical Benchmark	⊕
Existing Right of Way Monument	△
Proposed Right of Way Monument (Rebar and Cap)	▲
Proposed Right of Way Monument (Concrete)	●
Existing Permanent Easement Monument	◇
Proposed Permanent Easement Monument (Rebar and Cap)	◆
Existing C/A Monument	▲
Proposed C/A Monument (Rebar and Cap)	▲
Proposed C/A Monument (Concrete)	●
Existing Right of Way Line	-----
Proposed Right of Way Line	-----
Existing Control of Access Line	-----
Proposed Control of Access Line	-----
Proposed ROW and CA Line	-----
Existing Easement Line	-----
Proposed Temporary Construction Easement	-----
Proposed Temporary Drainage Easement	-----
Proposed Permanent Drainage Easement	-----
Proposed Permanent Drainage/Utility Easement	-----
Proposed Permanent Utility Easement	-----
Proposed Temporary Utility Easement	-----
Proposed Aerial Utility Easement	-----

### ROADS AND RELATED FEATURES:

Existing Edge of Pavement	-----
Existing Curb	-----
Proposed Slope Stakes Cut	---C---
Proposed Slope Stakes Fill	---F---
Proposed Curb Ramp	○ CR
Existing Metal Guardrail	-----
Proposed Guardrail	-----
Existing Cable Guiderail	-----
Proposed Cable Guiderail	-----
Equality Symbol	⊕
Pavement Removal	-----
VEGETATION:	
Single Tree	⊕
Single Shrub	⊕
Hedge	-----

Woods Line	-----
Orchard	-----
Vineyard	-----

### 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:

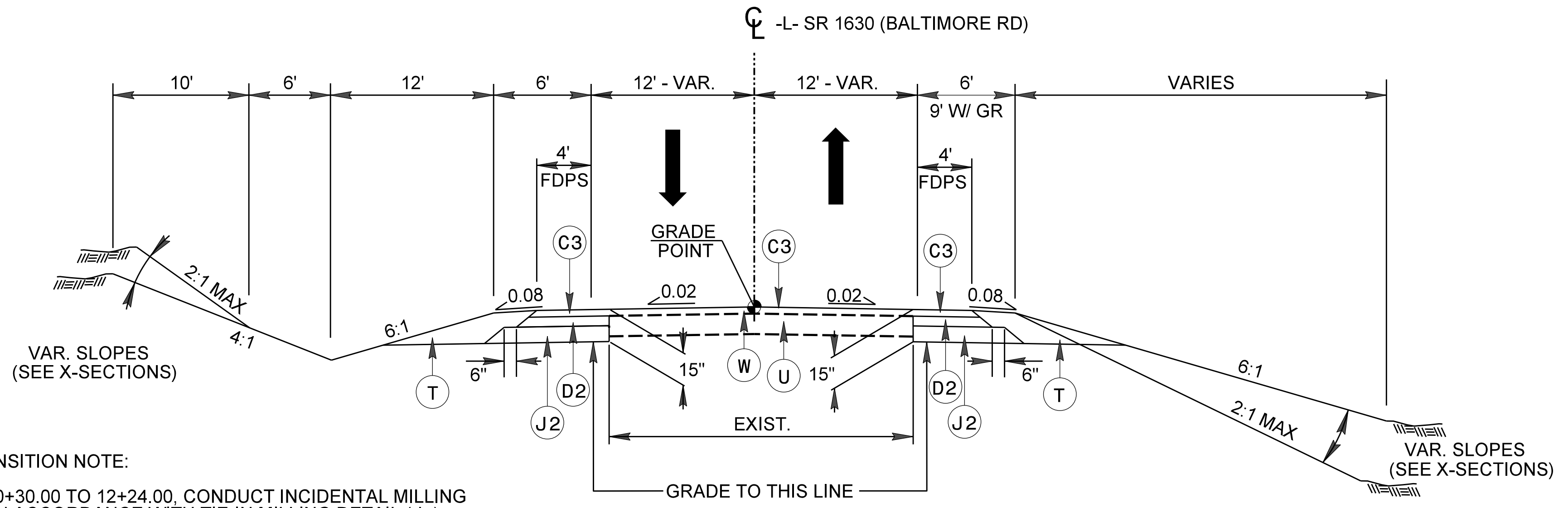
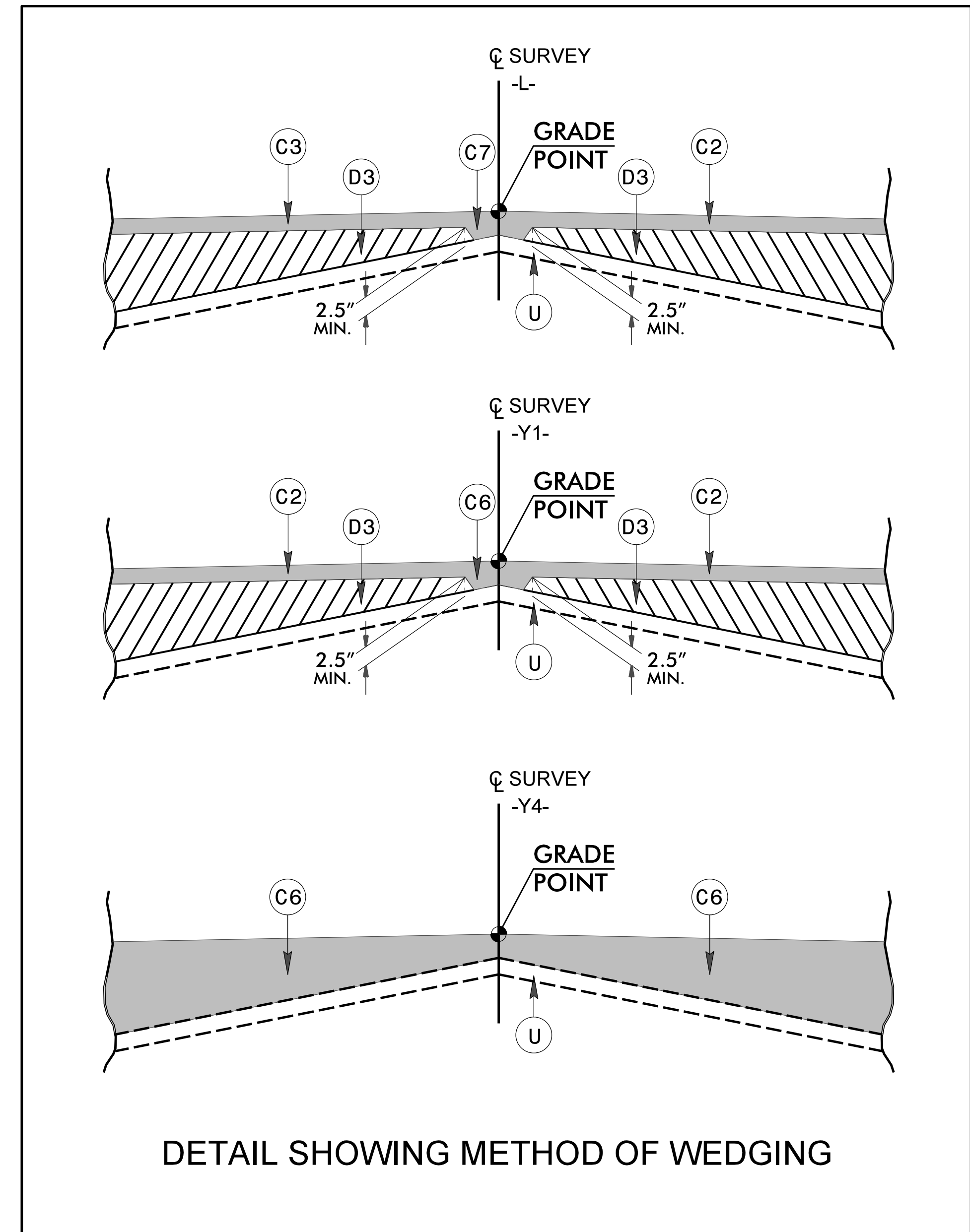
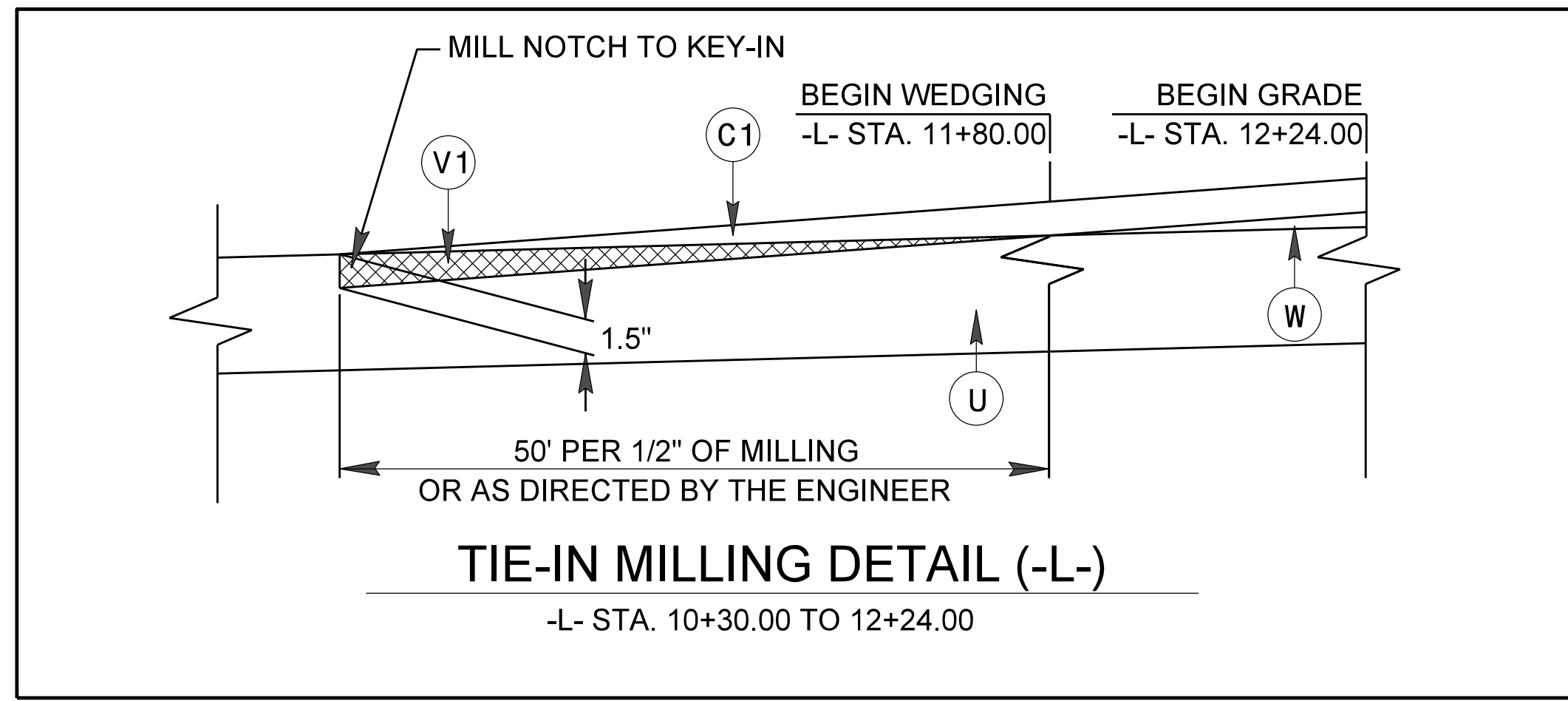
Existing Telephone Pole	-----
Proposed Telephone Pole	-----
Telephone Manhole	-----
Telephone Pedestal	-----
Telephone Cell Tower	-----
U/G Telephone Cable Hand Hole	-----
U/G Telephone Test Hole (SUE - LOS A)*	-----
U/G Telephone Cable (SUE - LOS B)*	-----
U/G Telephone Cable (SUE - LOS C)*	-----
U/G 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	-----
End of Information	-----

**PRELIMINARY PAVEMENT SCHEDULE**  
(NOVEMBER 2023)

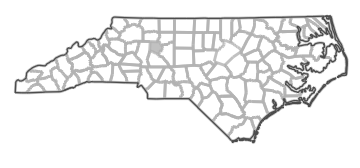
C1	PROP. APPROX. 1.5" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5B, AT AN AVERAGE RATE OF 165 LBS. PER SQ. YD.
C2	PROP. APPROX. 3" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5B, AT AN AVERAGE RATE OF 165 LBS. PER SQ. YD. IN EACH OF TWO LAYERS.
C3	PROP. APPROX. 3" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5C, AT AN AVERAGE RATE OF 168 LBS. PER SQ. YD. IN EACH OF TWO LAYERS.
C4	PROP. APPROX. 1.5" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5D, AT AN AVERAGE RATE OF 168 LBS. PER SQ. YD.
C5	PROP. APPROX. 3" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5D, AT AN AVERAGE RATE OF 168 LBS. PER SQ. YD. IN EACH OF TWO LAYERS.
C6	PROP. VAR. DEPTH ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5B, AT AN AVERAGE RATE OF 110 LBS. PER SQ. YD. PER 1" DEPTH. TO BE PLACED IN LAYERS NOT TO EXCEED 1.5" IN DEPTH.
C7	PROP. VAR. DEPTH ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5C, AT AN AVERAGE RATE OF 112 LBS. PER SQ. YD. PER 1" DEPTH. TO BE PLACED IN LAYERS NOT TO EXCEED 1.5" IN DEPTH.
D1	PROP. APPROX. 3.5" ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE I19.0C, AT AN AVERAGE RATE OF 399 LBS. PER SQ. YD.
D2	PROP. APPROX. 4" ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE I19.0C, AT AN AVERAGE RATE OF 456 LBS. PER SQ. YD.
D3	PROP. VAR. DEPTH ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE I19.0C, AT AN AVERAGE RATE OF 114 LBS. PER SQ. YD. PER 1" DEPTH, TO BE PLACED IN LAYERS NOT LESS THAN 2.5" IN DEPTH OR GREATER THAN 4" IN DEPTH.
E1	PROP. APPROX. 7" ASPHALT CONCRETE BASE COURSE, TYPE B25.0C, AT AN AVERAGE RATE OF 798 LBS. PER SQ. YD.
E2	PROP. VAR. DEPTH ASPHALT CONCRETE BASE COURSE, TYPE B25.0C, AT AN AVERAGE RATE OF 114 LBS. PER SQ. YD. PER 1" DEPTH, TO BE PLACED IN LAYERS NOT LESS THAN 3" IN DEPTH OR GREATER THAN 5.5" IN DEPTH.
J1	PROP. 6" AGGREGATE BASE COURSE.
J2	PROP. 8" AGGREGATE BASE COURSE.
J3	PROP. 10" AGGREGATE BASE COURSE.
P	PRIME COAT AT AN AVERAGE RATE OF 0.35 GAL. PER SQ. YD.
R1	2' - 6" CONCRETE CURB AND GUTTER.
R2	5" MONOLITHIC CONCRETE ISLAND (KEYED IN)
T	EARTH MATERIAL
U	EXISTING PAVEMENT
V1	INCIDENTAL MILLING
V2	MILLING ASPHALT PAVEMENT 1.5" DEPTH
W	VARIABLE DEPTH ASPHALT PAVEMENT (SEE WEDGING DETAIL)
Y	MILLED RUMBLE STRIPS

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



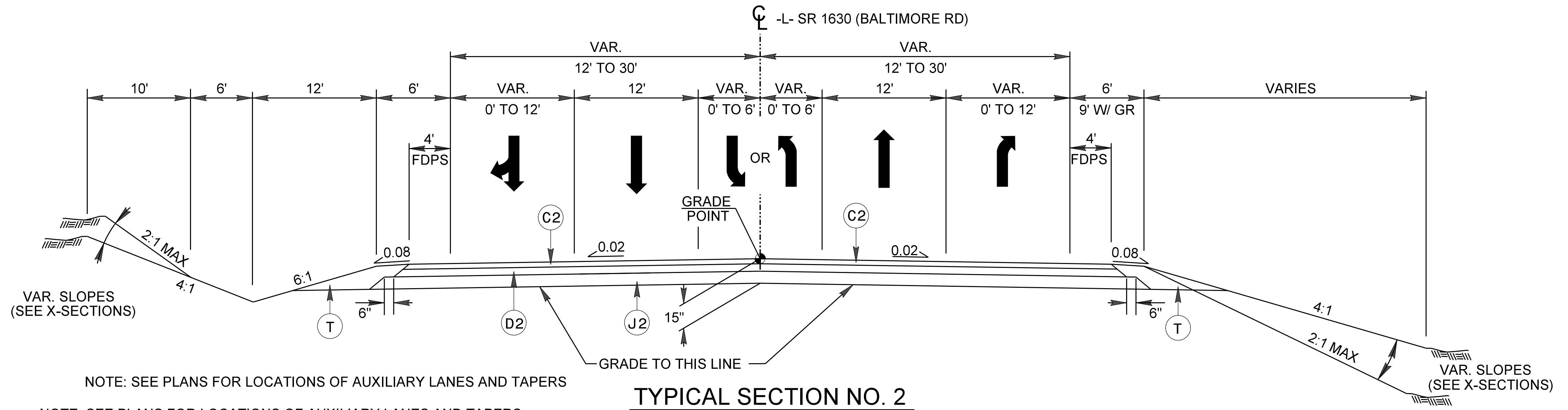
**PAVEMENT TRANSITION NOTE:**

FROM -L- STA. 10+30.00 TO 12+24.00, CONDUCT INCIDENTAL MILLING AND WEDGING IN ACCORDANCE WITH TIE-IN MILLING DETAIL (-L-) TO TRANSITION FROM EXISTING PAVEMENT SURFACE TO TYPICAL SECTION NO. 1.



PAVEMENT SCHEDULE (PRELIMINARY)	
C1	1.5" TYPE S9.5B
C2	3" TYPE S9.5B
C3	3" TYPE S9.5C
C4	1.5" TYPE S9.5D
C5	3" TYPE S9.5D
C6	VAR. DEPTH S9.5B
C7	VAR. DEPTH S9.5C
D1	3.5" TYPE I9.0C
D2	4" TYPE I9.0C
D3	VAR. DEPTH I9.0C
E1	7" TYPE B25.0C
E2	VAR. DEPTH B25.0C
J1	6" ABC W/ PRIME COAT
J2	8" ABC
J3	10" ABC
P	PRIME COAT
R1	2'-6" C&G
R2	5" CONC. ISLAND
T	EARTH MATERIAL
U	EXISTING PAVEMENT
V1	INC. MILLING
V2	MILLING 3" DEPTH
W	WEDGING
Y	RUMBLE STRIPS

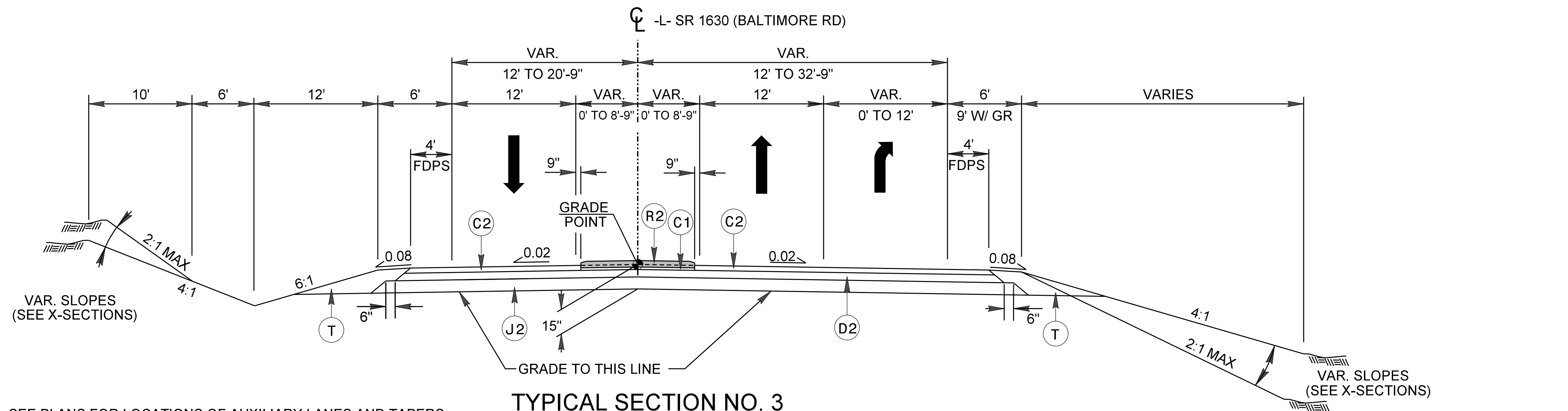
NOTE: PAVEMENT EDGE SLOPES ARE 1:1 UNLESS SHOWN OTHERWISE



NOTE: SEE PLANS FOR LOCATIONS OF AUXILIARY LANES AND TAPERS

**TYPICAL SECTION NO. 2**

-L- STA. 14+30.00 TO 29+83.27  
-L- STA. 30+36.81 TO 65+10.00



NOTE: SEE PLANS FOR LOCATIONS OF AUXILIARY LANES AND TAPERS

**TYPICAL SECTION NO. 3**

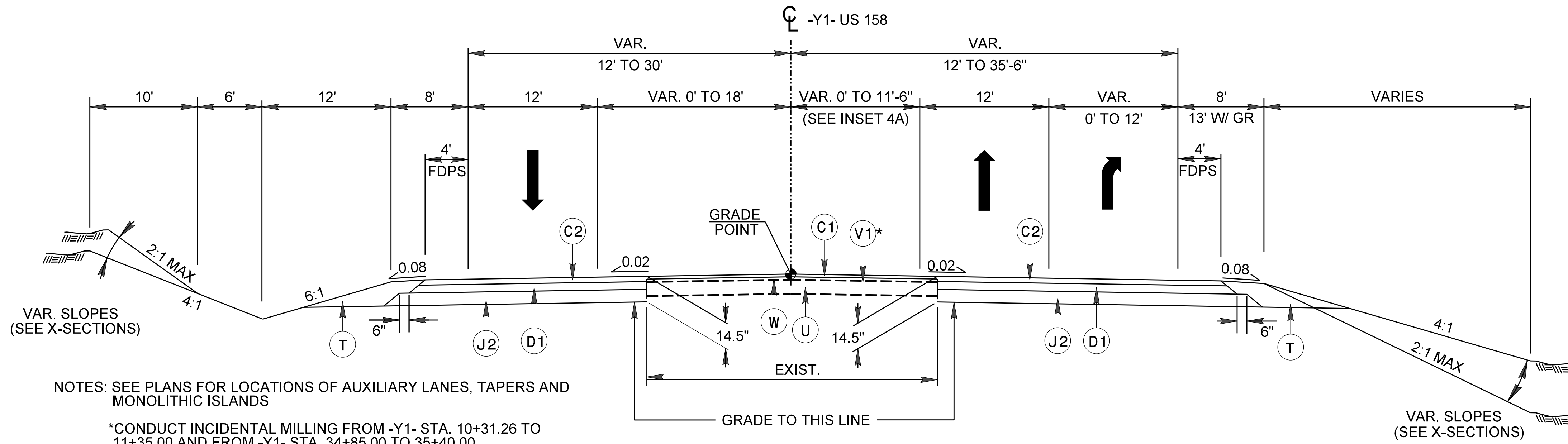
-L- STA. 65+10.00 TO 69+74.34 +/- (BEGIN BRIDGE)  
-L- STA. 72+09.34 +/- (END BRIDGE) TO 72+80.54



**PAVEMENT SCHEDULE**  
(PRELIMINARY)

C1	1.5" TYPE S9.5B
C2	3" TYPE S9.5B
C3	3" TYPE S9.5C
C4	1.5" TYPE S9.5D
C5	3" TYPE S9.5D
C6	VAR. DEPTH S9.5B
C7	VAR. DEPTH S9.5C
D1	3.5" TYPE I9.0C
D2	4" TYPE I9.0C
D3	VAR. DEPTH I9.0C
E1	7" TYPE B25.0C
E2	VAR. DEPTH B25.0C
J1	6" ABC W/ PRIME COAT
J2	8" ABC
J3	10" ABC
P	PRIME COAT
R1	2'-6" C&G
R2	5" CONC. ISLAND
T	EARTH MATERIAL
U	EXISTING PAVEMENT
V1	INC. MILLING
V2	MILLING 3" DEPTH
W	WEDGING
Y	RUMBLE STRIPS

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



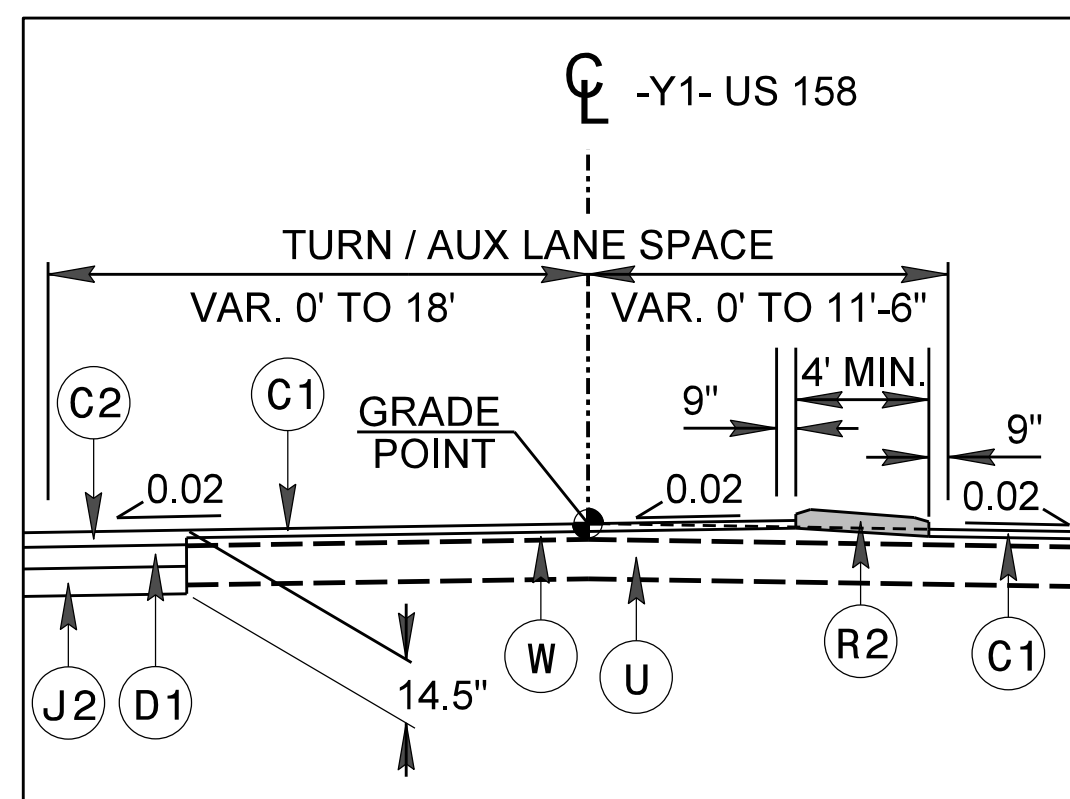
NOTES: SEE PLANS FOR LOCATIONS OF AUXILIARY LANES, TAPERS AND MONOLITHIC ISLANDS

\*CONDUCT INCIDENTAL MILLING FROM -Y1- STA. 10+31.26 TO 11+35.00 AND FROM -Y1- STA. 34+85.00 TO 35+40.00

**TYPICAL SECTION NO. 4**

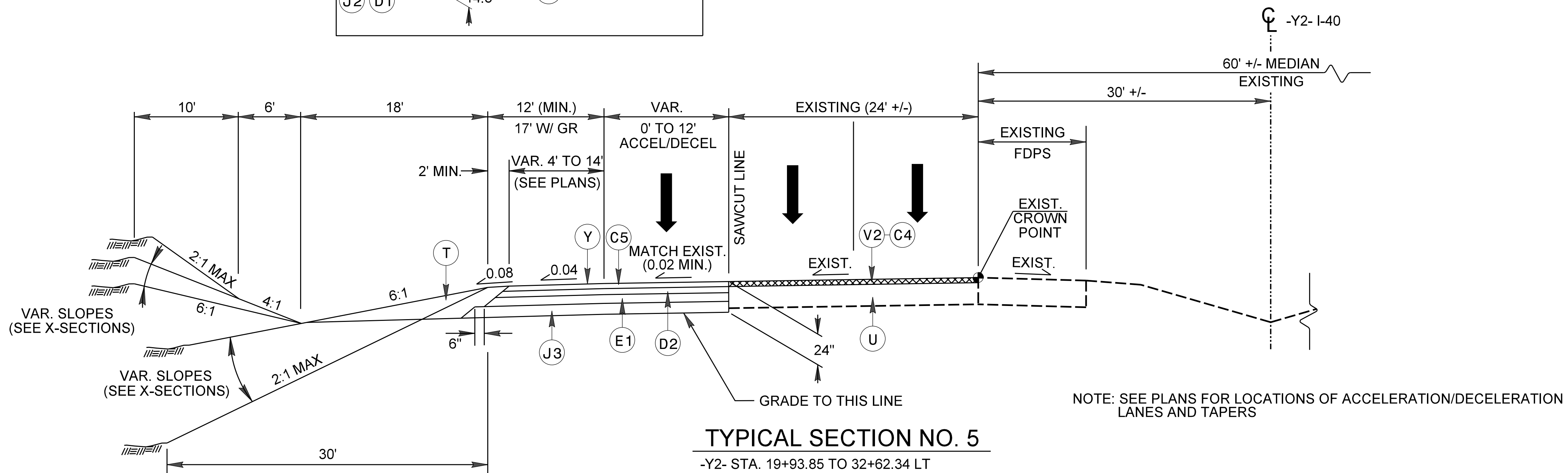
-Y1- STA. 10+31.26 TO 35+40.00

**INSET 4A**



**USE INSET 4A IN CONJUNCTION WITH TYPICAL SECTION NO. 4 FROM -Y1- STA. 19+65.00 TO 29+58.41**

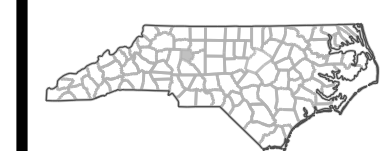
SEE PLANS FOR ISLAND LIMITS AND DIMENSIONS



**TYPICAL SECTION NO. 5**

-Y2- STA. 19+93.85 TO 32+62.34 LT  
 -Y2- STA. 27+98.39 TO 36+90.87 RT (MIRROR)  
 -Y2- STA. 41+50.62 TO 46+09.28 LT  
 -Y2- STA. 47+12.78 TO 54+04.08 LT  
 -Y2- STA. 56+71.73 TO 63+90.02 RT (MIRROR)

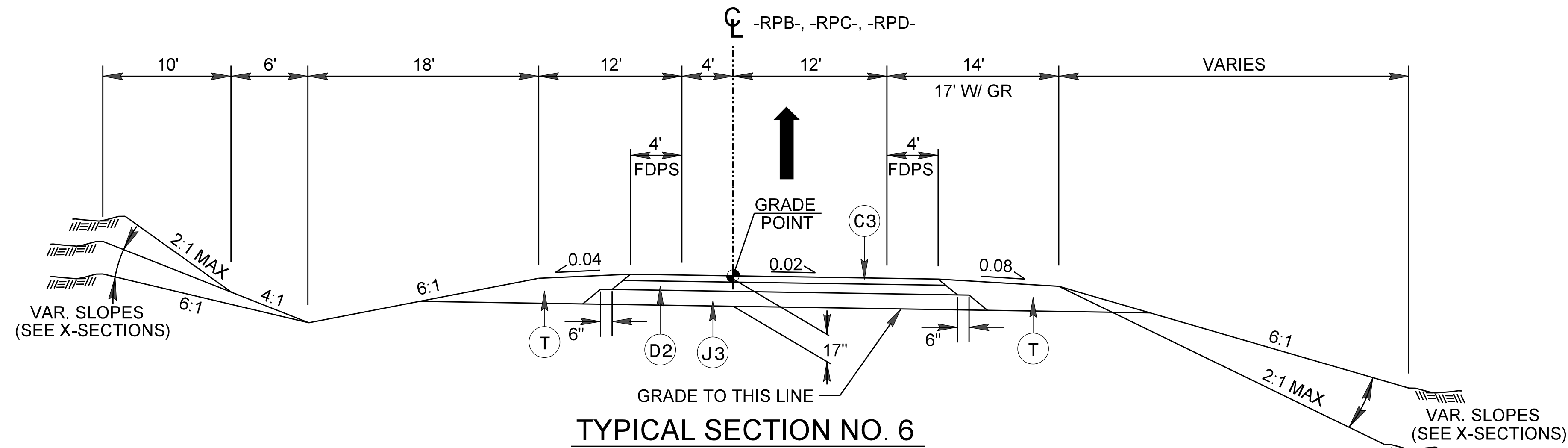
NOTE: SEE PLANS FOR LOCATIONS OF ACCELERATION/DECELERATION LANES AND TAPERS



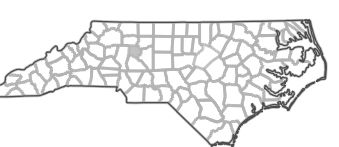
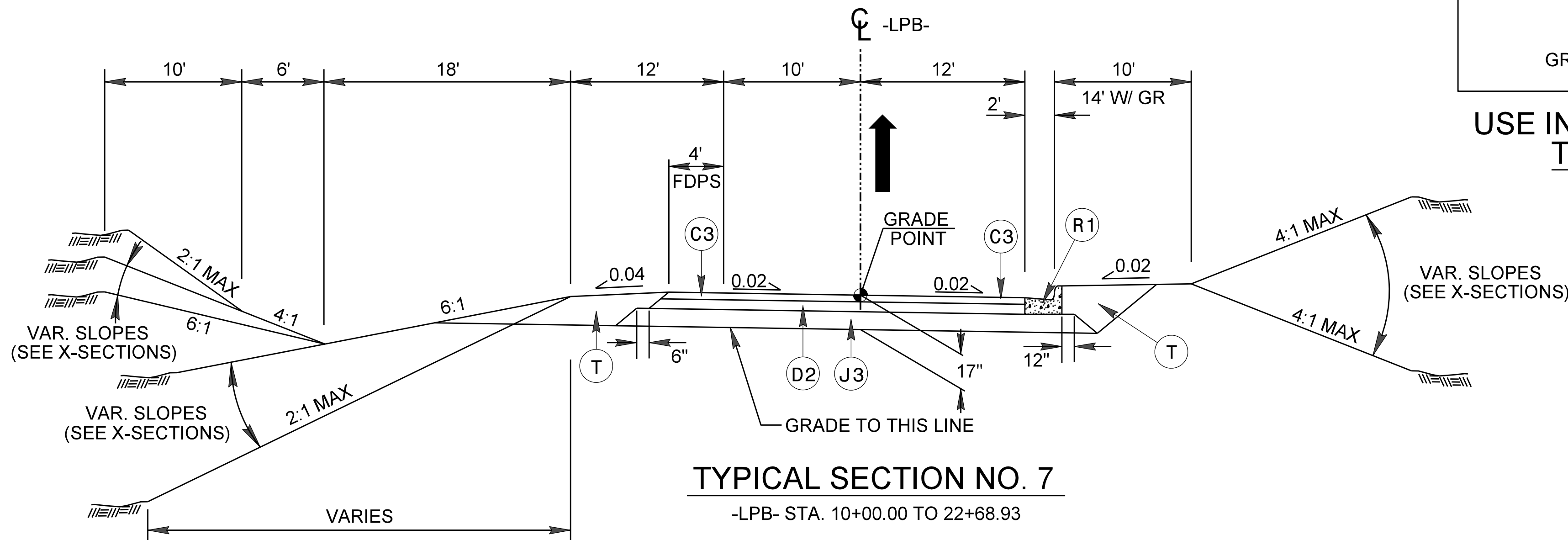
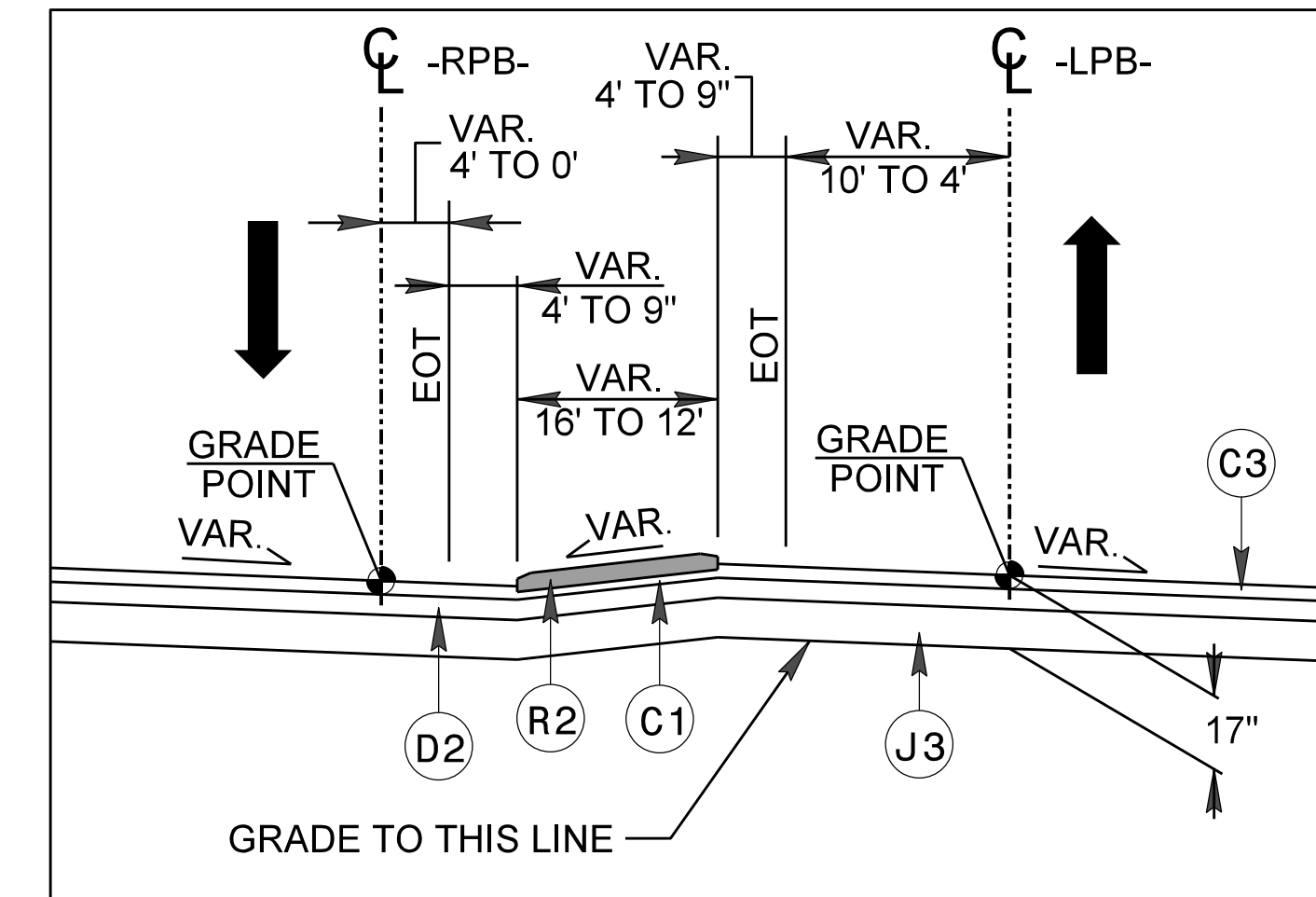
**PAVEMENT SCHEDULE**  
(PRELIMINARY)

C1	1.5" TYPE S9.5B
C2	3" TYPE S9.5B
C3	3" TYPE S9.5C
C4	1.5" TYPE S9.5D
C5	3" TYPE S9.5D
C6	VAR. DEPTH S9.5B
C7	VAR. DEPTH S9.5C
D1	3.5" TYPE I9.0C
D2	4" TYPE I9.0C
D3	VAR. DEPTH I9.0C
E1	7" TYPE B25.0C
E2	VAR. DEPTH B25.0C
J1	6" ABC W/ PRIME COAT
J2	8" ABC
J3	10" ABC
P	PRIME COAT
R1	2'-6" C&G
R2	5" CONC. ISLAND
T	EARTH MATERIAL
U	EXISTING PAVEMENT
V1	INC. MILLING
V2	MILLING 3" DEPTH
W	WEDGING
Y	RUMBLE STRIPS

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



**INSET 6-7**



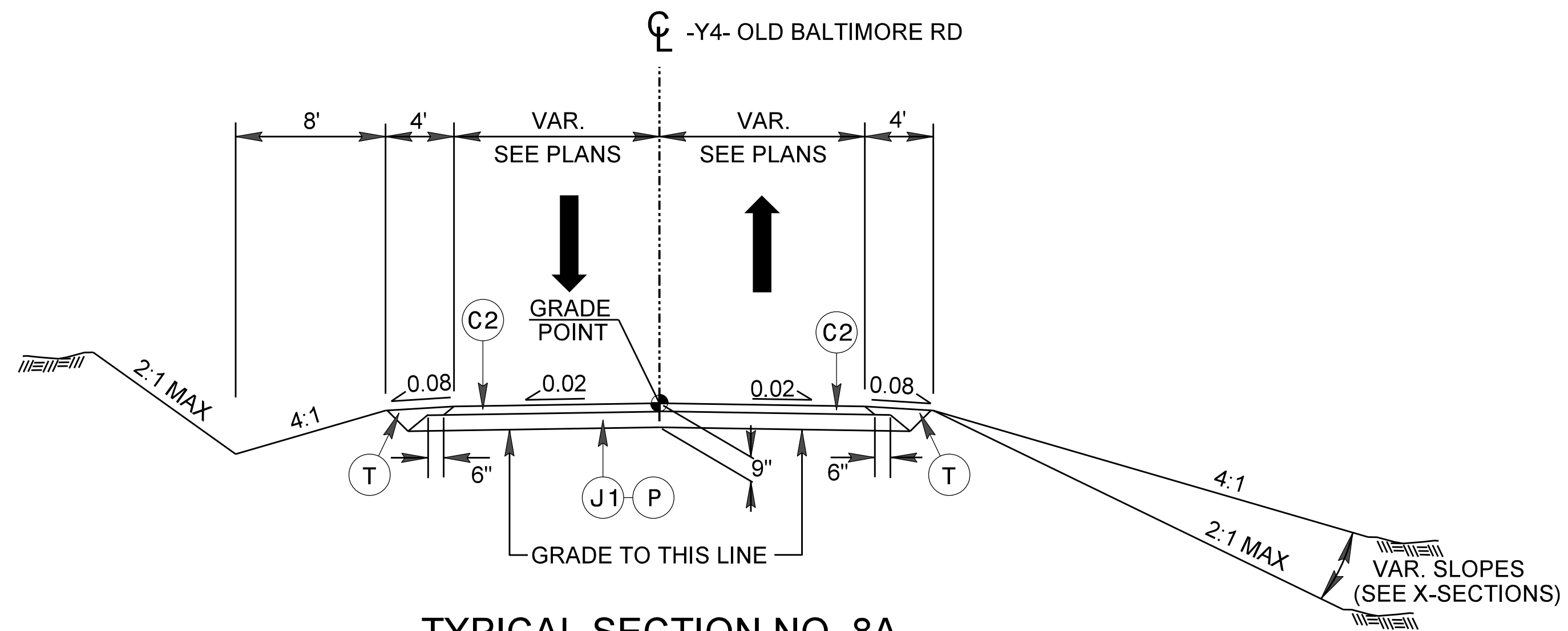
**PAVEMENT SCHEDULE**  
(PRELIMINARY)

C1	1.5" TYPE S9.5B
C2	3" TYPE S9.5B
C3	3" TYPE S9.5C
C4	1.5" TYPE S9.5D
C5	3" TYPE S9.5D
C6	VAR. DEPTH S9.5B
C7	VAR. DEPTH S9.5C
D1	3.5" TYPE I9.0C
D2	4" TYPE I9.0C
D3	VAR. DEPTH I9.0C
E1	7" TYPE B25.0C
E2	VAR. DEPTH B25.0C
J1	6" ABC W/ PRIME COAT
J2	8" ABC
J3	10" ABC
P	PRIME COAT
R1	2'-6" C&G
R2	5" CONC. ISLAND
T	EARTH MATERIAL
U	EXISTING PAVEMENT
V1	INC. MILLING
V2	MILLING 3" DEPTH
W	WEDGING
Y	RUMBLE STRIPS

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

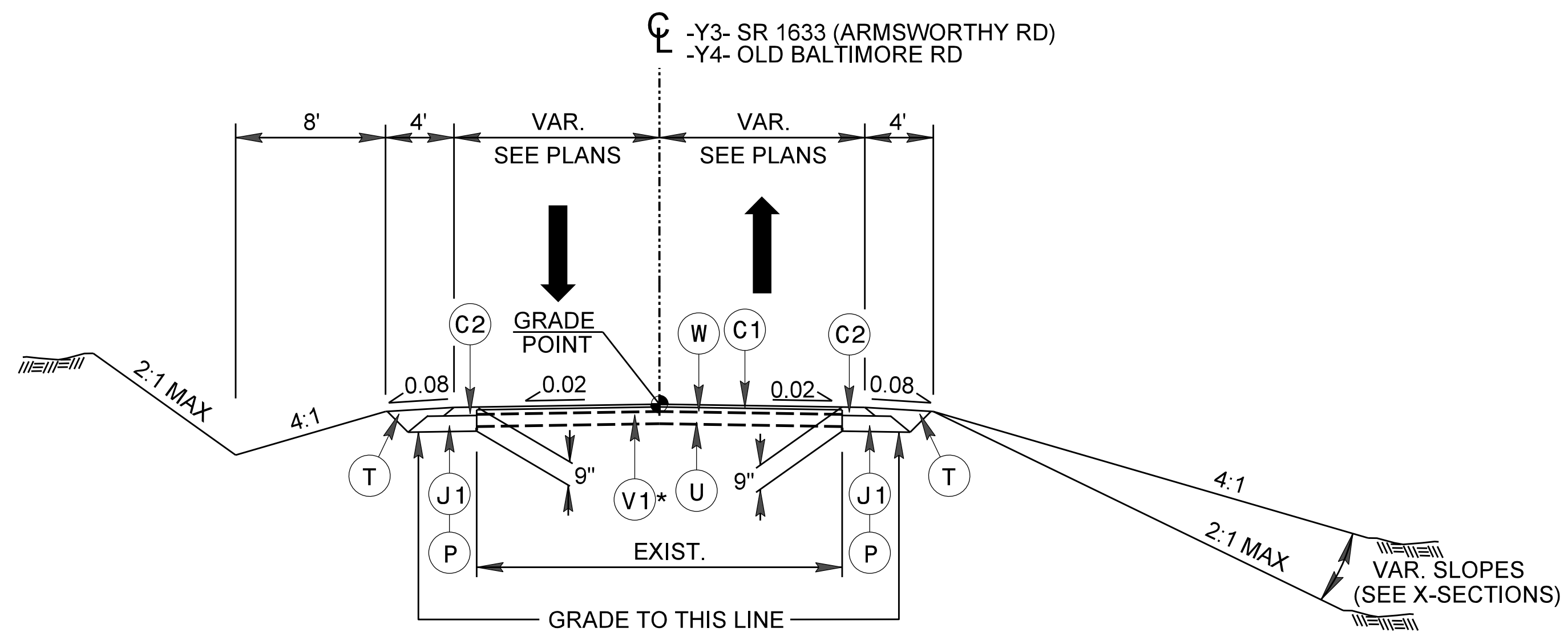
NOTES: SEE PLANS FOR LOCATIONS OF MONOLITHIC ISLANDS

\*CONDUCT INCIDENTAL MILLING FROM -Y4- STA. 14+15.00 TO 15+20.00 AND FROM -Y4- STA. 20+50.00 TO 20+70.00



**TYPICAL SECTION NO. 8A**

-Y4- STA. 10+12.00 TO 13+75.00



**TYPICAL SECTION NO. 8B**

-Y3- STA. 10+00.00 TO 11+26.47  
-Y4- STA. 13+75.00 TO 15+20.00  
-Y4- STA. 20+50.00 TO 22+23.69



5/26/20

**PAVEMENT SCHEDULE**  
(PRELIMINARY)

C1	1.5" TYPE S9.5B
C2	3" TYPE S9.5B
C3	3" TYPE S9.5C
C4	1.5" TYPE S9.5D
C5	3" TYPE S9.5D
C6	VAR. DEPTH S9.5B
C7	VAR. DEPTH S9.5C
D1	3.5" TYPE I9.0C
D2	4" TYPE I9.0C
D3	VAR. DEPTH I9.0C
E1	7" TYPE B25.0C
E2	VAR. DEPTH B25.0C
J1	6" ABC W/ PRIME COAT
J2	8" ABC
J3	10" ABC
P	PRIME COAT
R1	2'-6" C&G
R2	5" CONC. ISLAND
T	EARTH MATERIAL
U	EXISTING PAVEMENT
V1	INC. MILLING
V2	MILLING 3" DEPTH
W	WEDGING
Y	RUMBLE STRIPS

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

U-6187

2RD1 2A-6

NORTH CAROLINA  
DEPARTMENT OF TRANSPORTATION  
DAVIE COUNTY



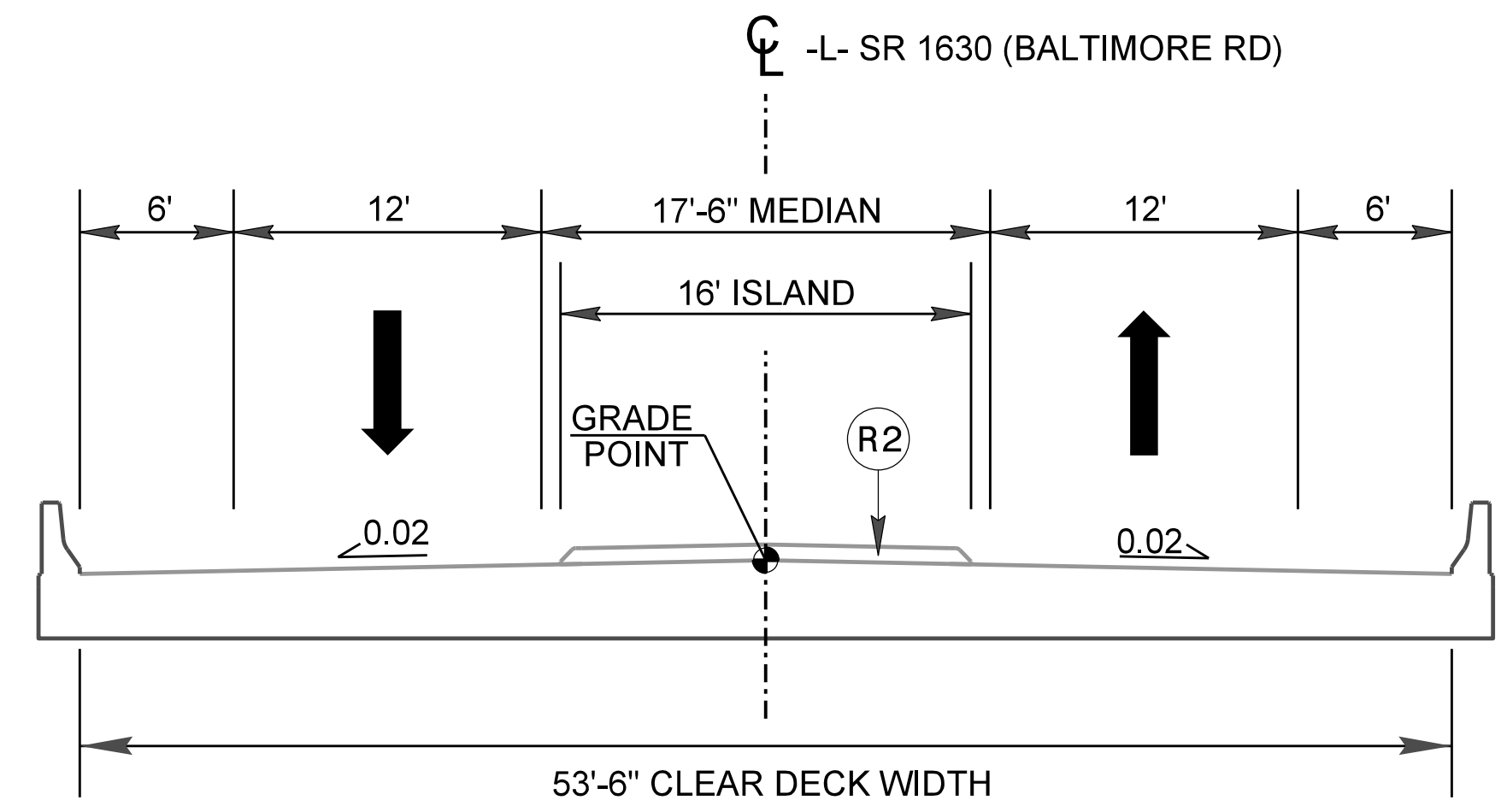
ROADWAY DESIGN UNIT  
ROADWAY DESIGN ENGINEER

PAVEMENT DESIGN ENGINEER

PREPARED BY



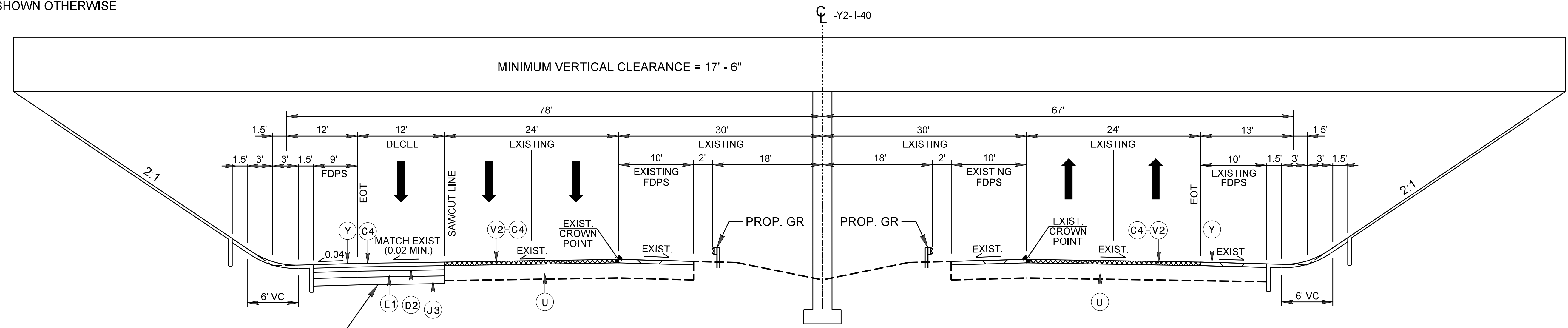
DOCUMENT NOT CONSIDERED FINAL  
UNLESS ALL SIGNATURES COMPLETED  
INCOMPLETE PLANS  
DATE: 05/26/20



**TYPICAL SECTION ON STRUCTURE**

-L- STA. 69+74.34 +/- TO 72+09.34

NOTE: BRIDGE SUPERSTRUCTURE TO BE DETERMINED

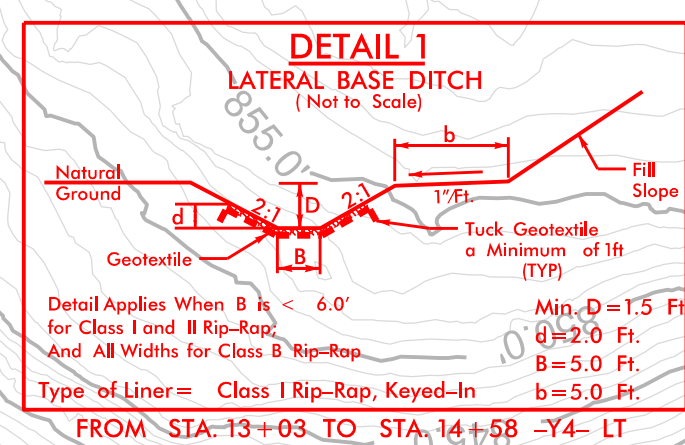
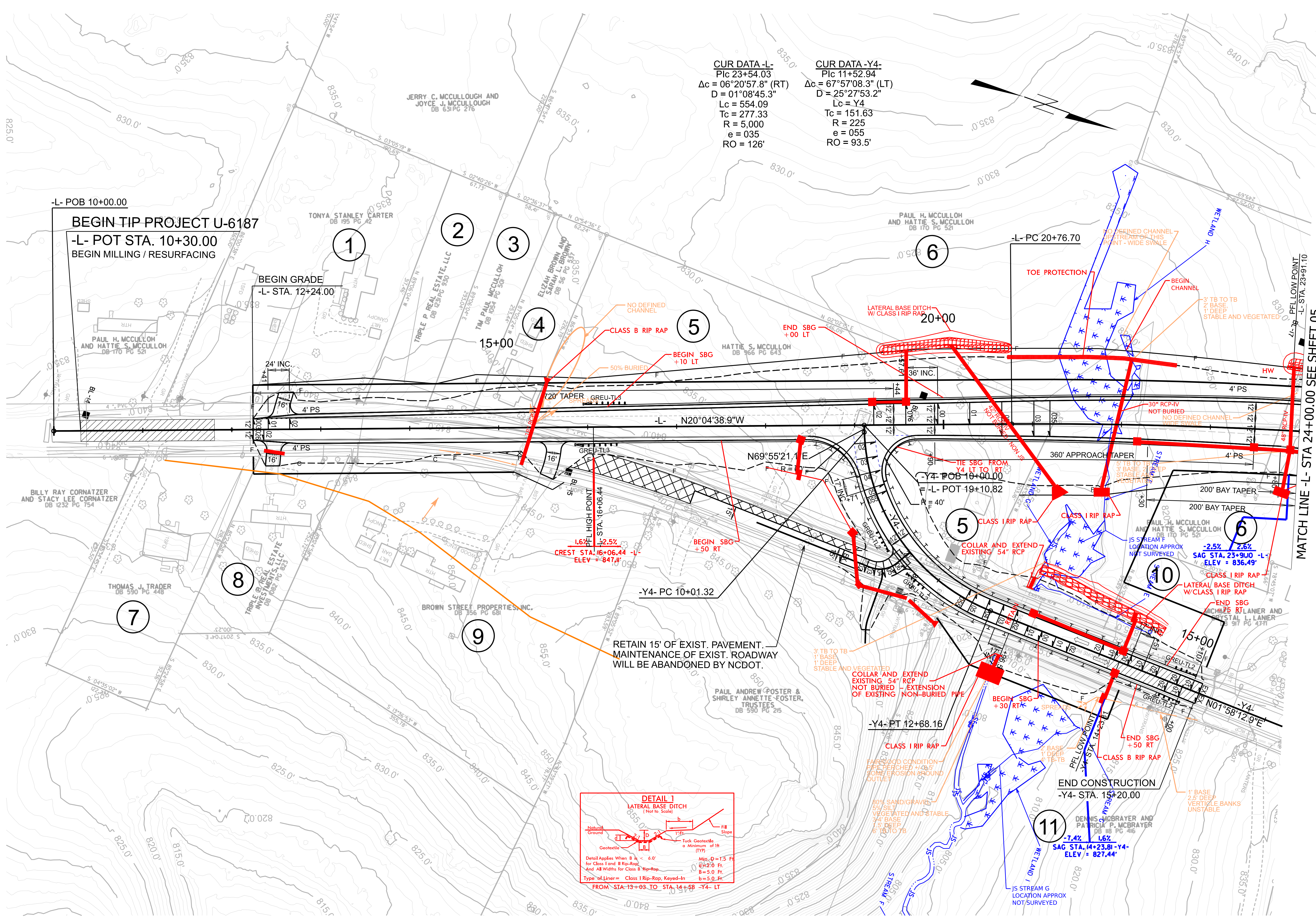
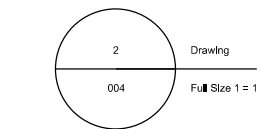
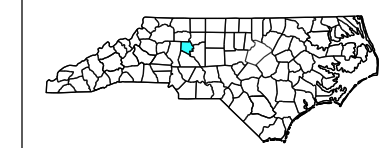


**TYPICAL SECTION ON ROADWAY UNDER STRUCTURE**

-Y2- STA. 46+09.28 +/- TO 47+12.78

NOTE: SEE STD. DWG. 610.03 FOR SLOPE PROTECTION DETAIL





MATCH LINE -L- STA 24+00.00 SEE SHEET 05

-L- POB 10+00.00  
BEGIN TIP PROJECT U-6187  
-L- POT STA. 10+30.00  
BEGIN MILLING / RESURFACING

BEGIN GRADE  
-L- STA. 12+24.00

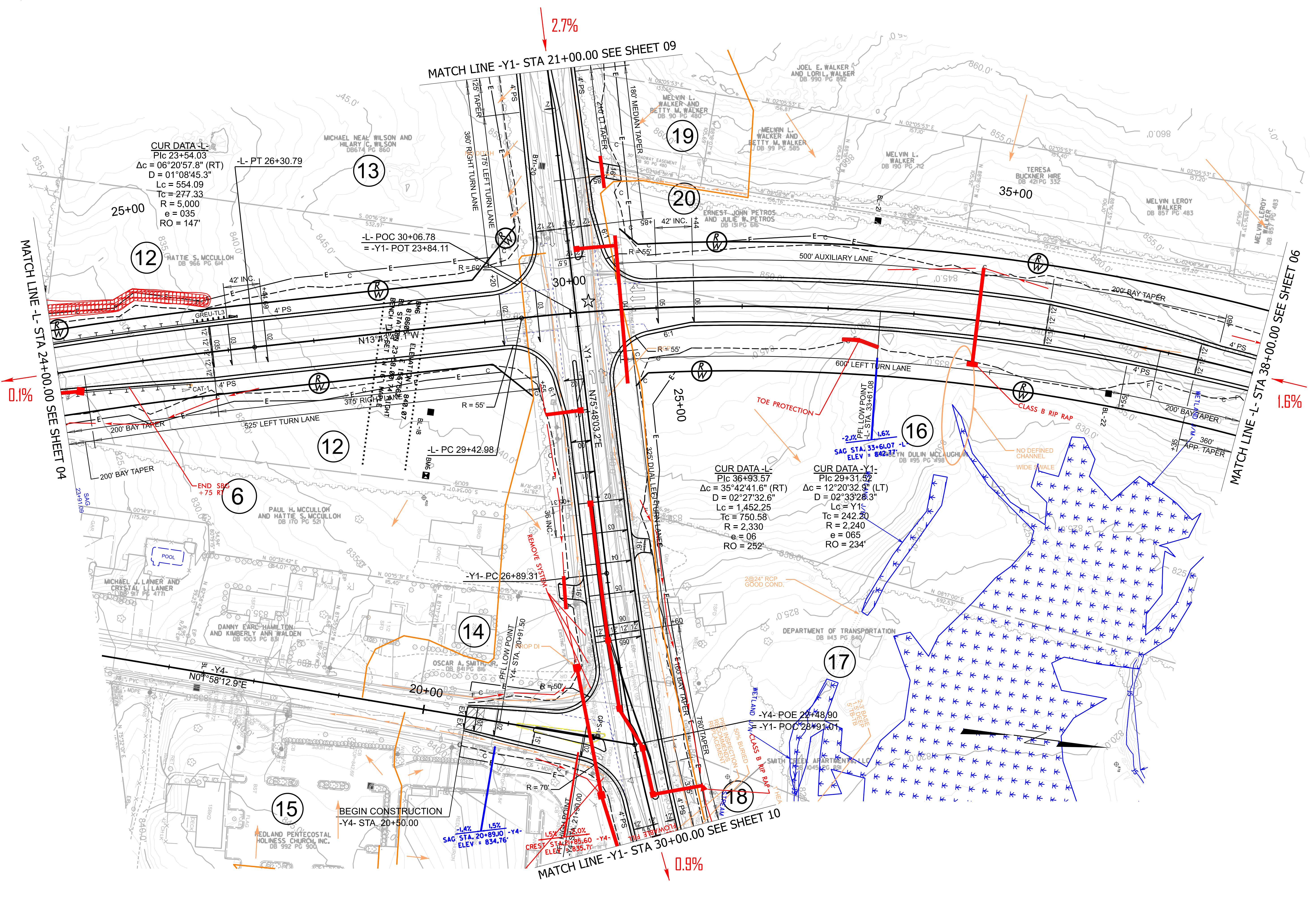
RETAIN 15' OF EXIST. PAVEMENT.  
MAINTENANCE OF EXIST. ROADWAY  
WILL BE ABANDONED BY NCDOT.

END CONSTRUCTION  
-Y4- STA. 15+20.00

**CUR DATA -L-**  
Plc 23+54.03  
 $\Delta c = 06^{\circ}20'57.8''$  (RT)  
 $D = 01^{\circ}08'45.3''$   
Lc = 554.09  
Tc = 277.33  
R = 5,000  
e = 035  
RO = 126'

**CUR DATA -Y4-**  
Plc 11+52.94  
 $\Delta c = 67^{\circ}57'08.3''$  (LT)  
 $D = 25^{\circ}27'53.2''$   
Lc = Y4  
Tc = 151.63  
R = 225  
e = 055  
RO = 93.5'

0.1%



**CUR DATA -L-**  
Plc 23+54.03  
Δc = 06°20'57.8" (RT)  
D = 01°08'45.3"  
Lc = 554.09  
Tc = 277.33  
R = 5,000  
e = 035  
RO = 147'

-L- POC 30+06.78  
=-Y1- POT 23+84.11

**CUR DATA -L-**  
Plc 36+93.57  
Δc = 35°42'41.6" (RT)  
D = 02°27'32.6"  
Lc = 1,452.25  
Tc = 750.58  
R = 2,330  
e = 06  
RO = 252'

**CUR DATA -Y1-**  
Plc 29+31.52  
Δc = 12°20'32.9" (LT)  
D = 02°33'25.3"  
Lc = Y1  
Tc = 242.20  
R = 2,240  
e = 065  
RO = 234'

MATCH LINE -Y1- STA 30+00.00 SEE SHEET 10

MATCH LINE -L- STA 24+00.00 SEE SHEET 04

MATCH LINE -L- STA 38+00.00 SEE SHEET 06

MATCH LINE -Y1- STA 21+00.00 SEE SHEET 09

BEGIN CONSTRUCTION  
-Y4- STA. 20+50.00

-1.4% 1.5%  
SAG STA. 20+89.00 -Y4-  
ELEV. = 834.76'

1.5% 1.0%  
CREST STA. 21+85.60 -Y4-  
ELEV. = 835.71'

END SBG  
+75 RT

TOE PROTECTION

CLASS B RIP RAP

NO DEFINED CHANNEL  
WIDE WALE

26"24" RCP  
GOOD COND.

WELAND  
INSPECTORS  
REPLACEMENT

50% BURIED

CLASS B RIP RAP

7.5' BASE  
5' THICK

CUR DATA -L-  
Plc 23+54.03

-L- PT 26+30.79

-L- PC 29+42.98

-Y1- PC 26+89.31

-Y4- STA. 20+91.50

-Y4- POE 22+48.90

-Y1- POC 28+91.01

25+00

13

12

12

6

15

14

19

20

16

17

18

35+00

0.1%

1.6%

0.9%

JOEL E. WALKER  
AND LORI WALKER  
DB 990 PG 892

MELVIN L.  
WALKER AND  
BETTY M. WALKER  
DB 90 PG 480

MELVIN L.  
WALKER AND  
BETTY M. WALKER  
DB 99 PG 585

MELVIN L.  
WALKER  
DB 190 PG 72

TERESA  
BUCKNER HIRE  
DB 421 PG 332

MELVIN LEROY  
WALKER  
DB 857 PG 483

MELVIN LEROY  
WALKER  
DB 857 PG 483

ERNEST JOHN PETROS  
AND JULIE W. PETROS  
DB 131 PG 616

MICHAEL NEAL WILSON AND  
HILARY C. WILSON  
DB 674 PG 860

PAUL H. MCCULLOH  
AND HATTIE S. MCCULLOH  
DB 170 PG 521

MICHAEL J. LANIER AND  
CRYSTAL L. LANIER  
DB 917 PG 4771

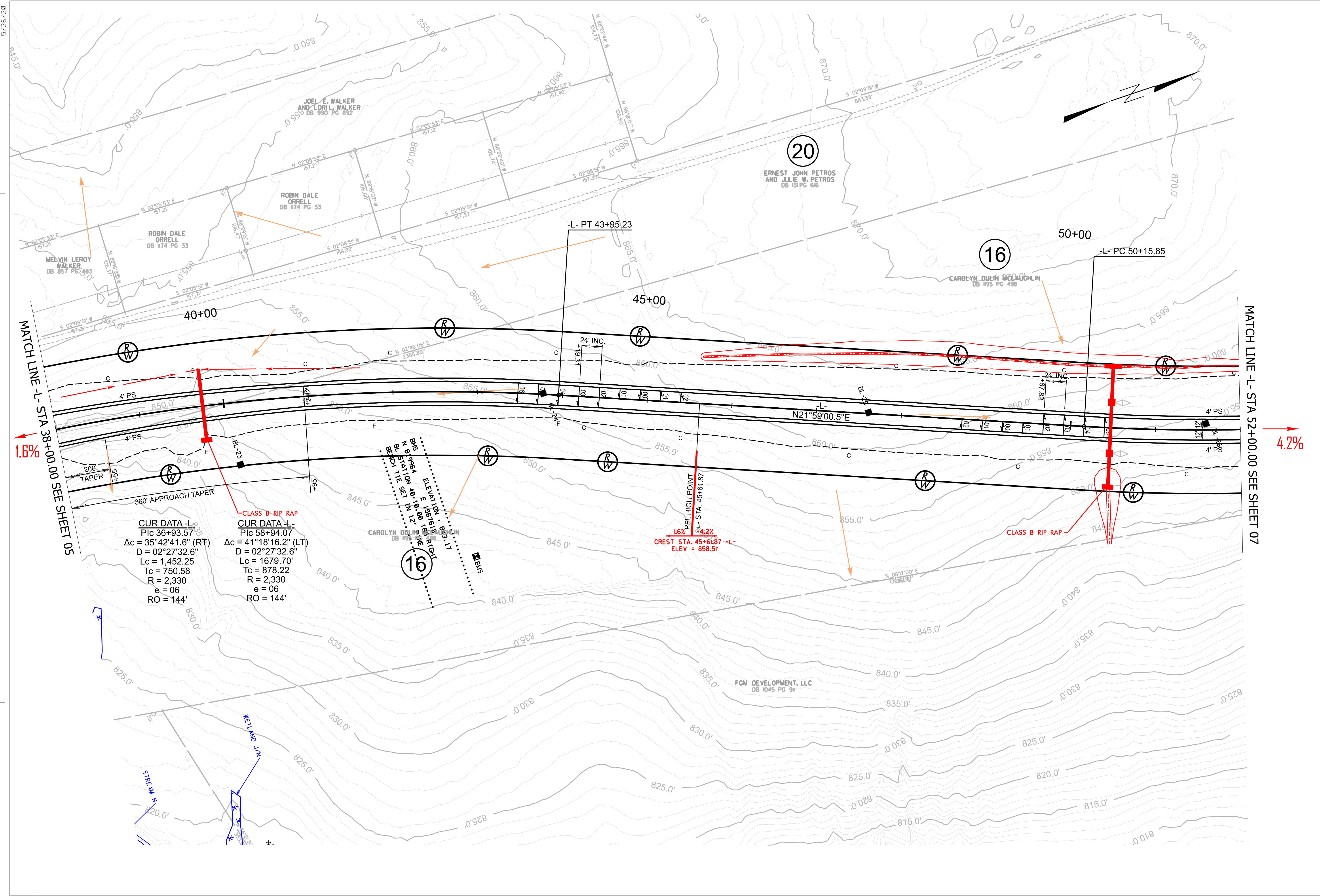
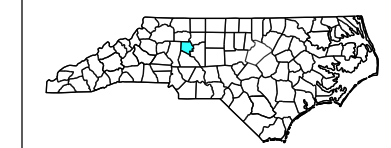
DANNY EARL HAMILTON  
AND KIMBERLY ANN WALDEN  
DB 1005 PG 831

OSCAR A. SMITH  
DB 841 PG 816

DEPARTMENT OF TRANSPORTATION  
DB 143 PG 840

SMITH FEEB APARTMENTS, LLC  
DB 1042 PG 831

REDLAND PENTECOSTAL  
HOLINESS CHURCH, INC.  
DB 992 PG 900



CLASS B RIP RAP

CUR DATA -L-  
P/c 36+93.57  
Δc = 35°42'41.6" (RT)  
D = 02°27'32.6"  
Lc = 1,452.25  
Tc = 750.58  
R = 2,330  
e = 06  
RO = 144'

CUR DATA -L-  
P/c 58+94.07  
Δc = 41°18'16.2" (LT)  
D = 02°27'32.6"  
Lc = 1,679.70'  
Tc = 878.22  
R = 2,330  
e = 06  
RO = 144'

1.6% 4.2%  
PEL HIGH POINT  
-L- STA. 45+61.87  
CREST STA. 45+61.87 -L-  
ELEV = 858.51'

MATCH LINE -L- STA 52+00.00 SEE SHEET 07

MATCH LINE -L- STA 38+00.00 SEE SHEET 05

4.2%

1.6%

5/26/20



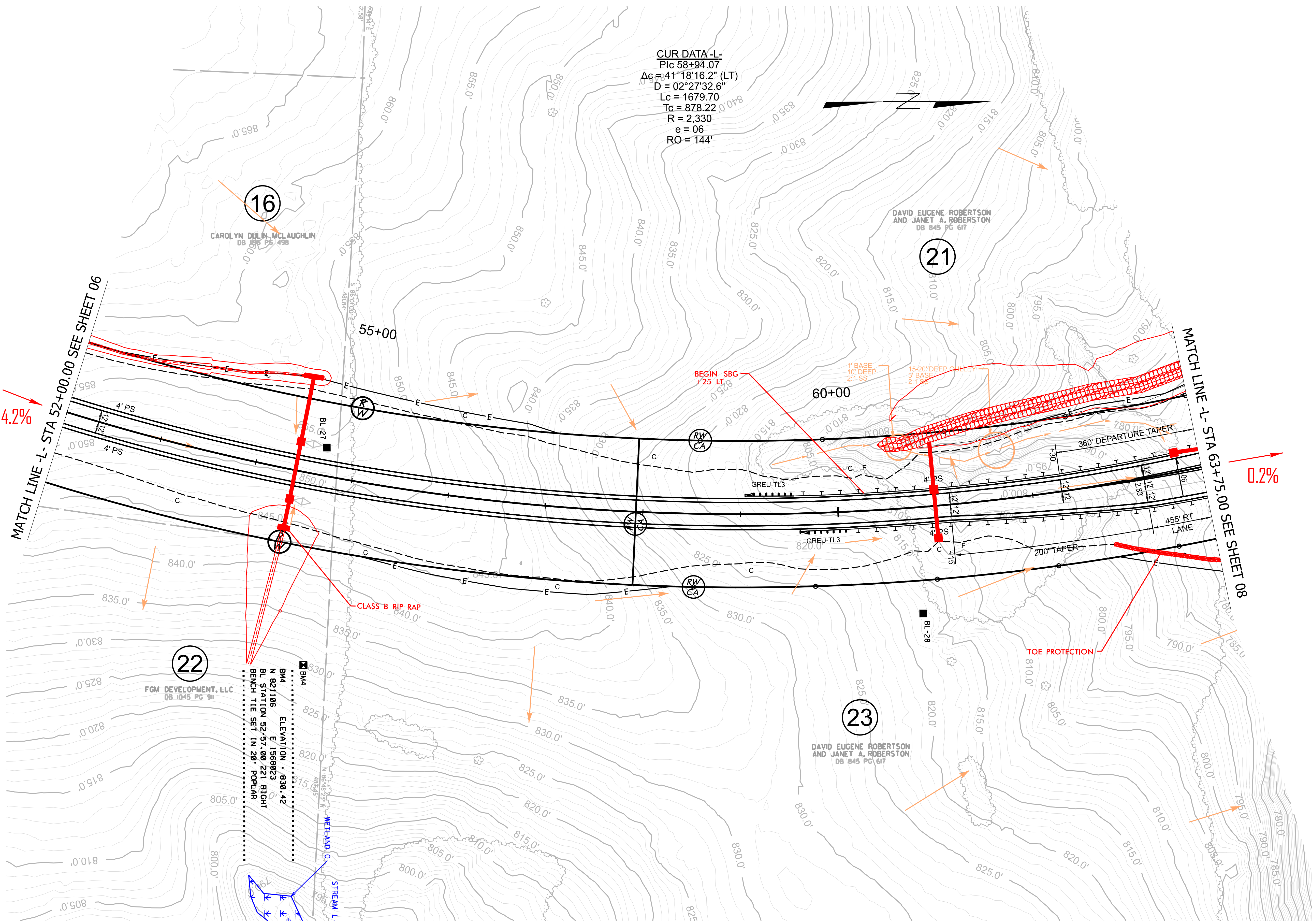
**CUR DATA -L-**  
P/c 58+94.07  
 $\Delta c = 41^\circ 18' 16.2''$  (LT)  
 $D = 02^\circ 27' 32.6''$   
 $L_c = 1679.70$   
 $T_c = 878.22$   
 $R = 2,330$   
 $e = 06$   
 $RO = 144'$

DAVID EUGENE ROBERTSON  
AND JANET A. ROBERTSON  
DB 845 PG 617

CAROLYN DULIN MCLAUGHLIN  
DB 856 PG 498

FCM DEVELOPMENT, LLC  
DB 1045 PG 911

BENCH TIE SET IN 20' POPLAR  
BL STATION 52+57.00 221 RIGHT  
ELEVATION: 830.42  
N 821106  
E 1569823



4.2%

0.2%

MATCH LINE -L- STA 52+00.00 SEE SHEET 06

MATCH LINE -L- STA 63+75.00 SEE SHEET 08

16

21

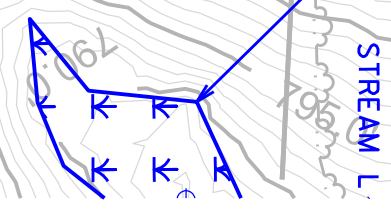
22

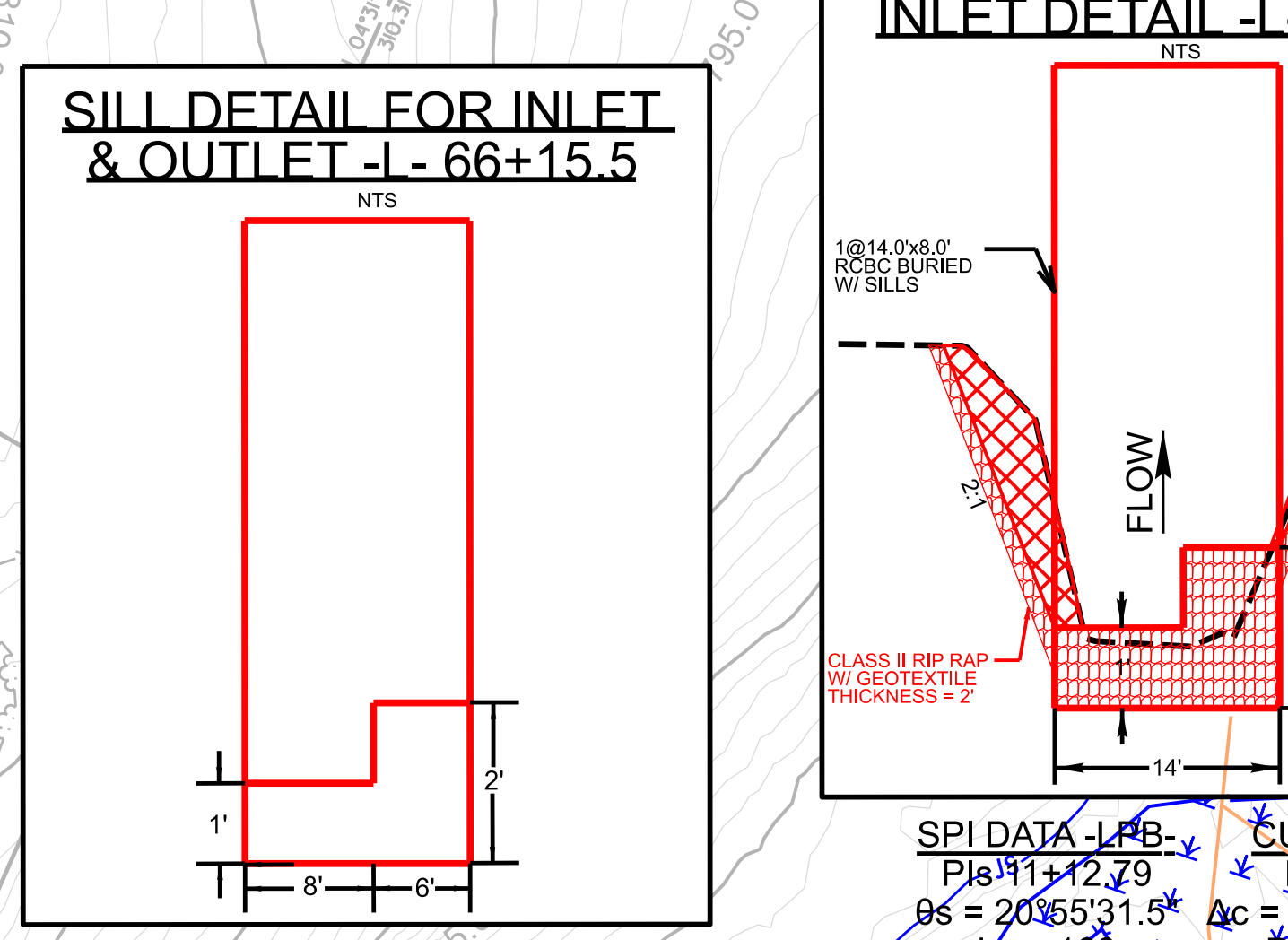
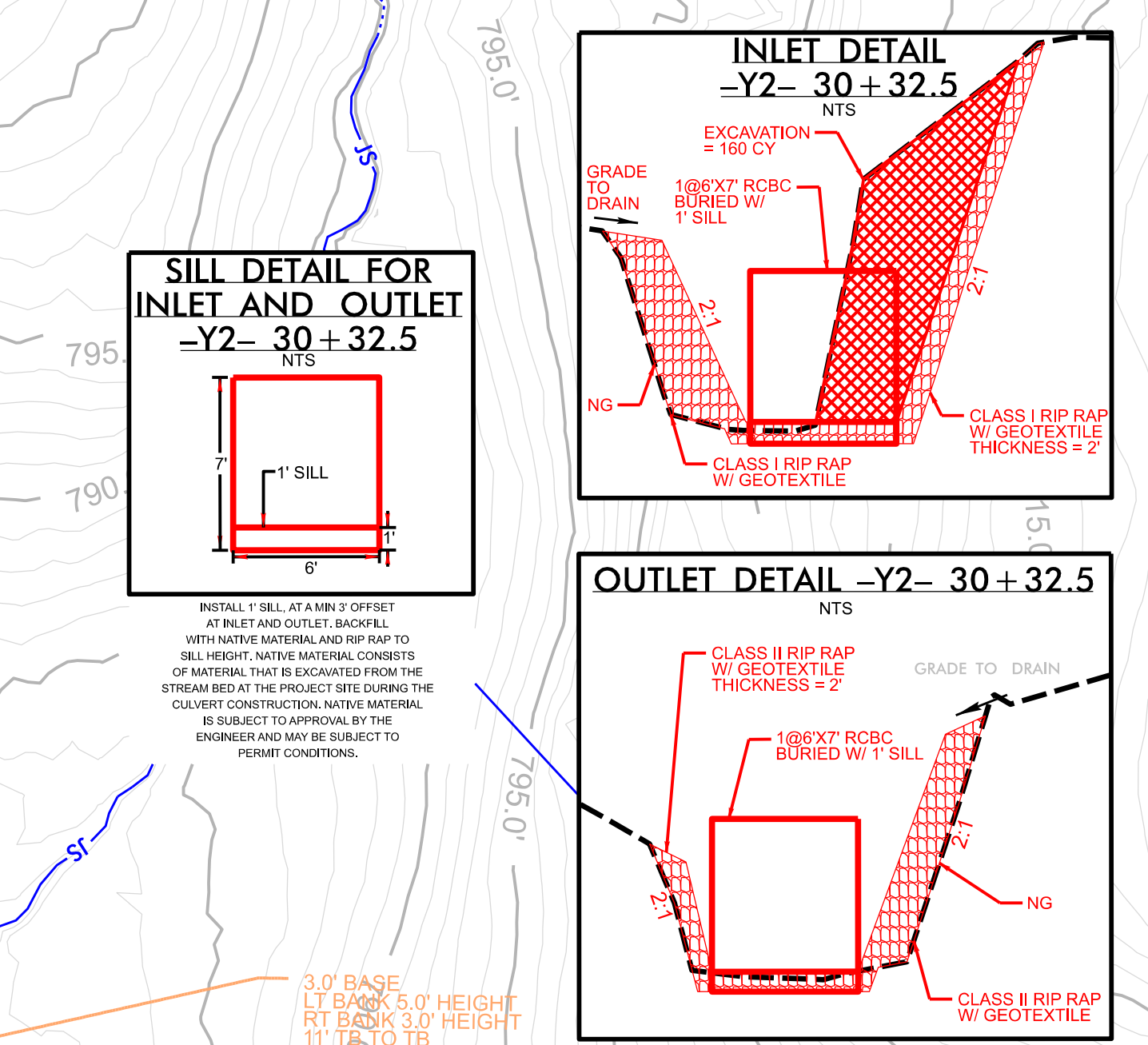
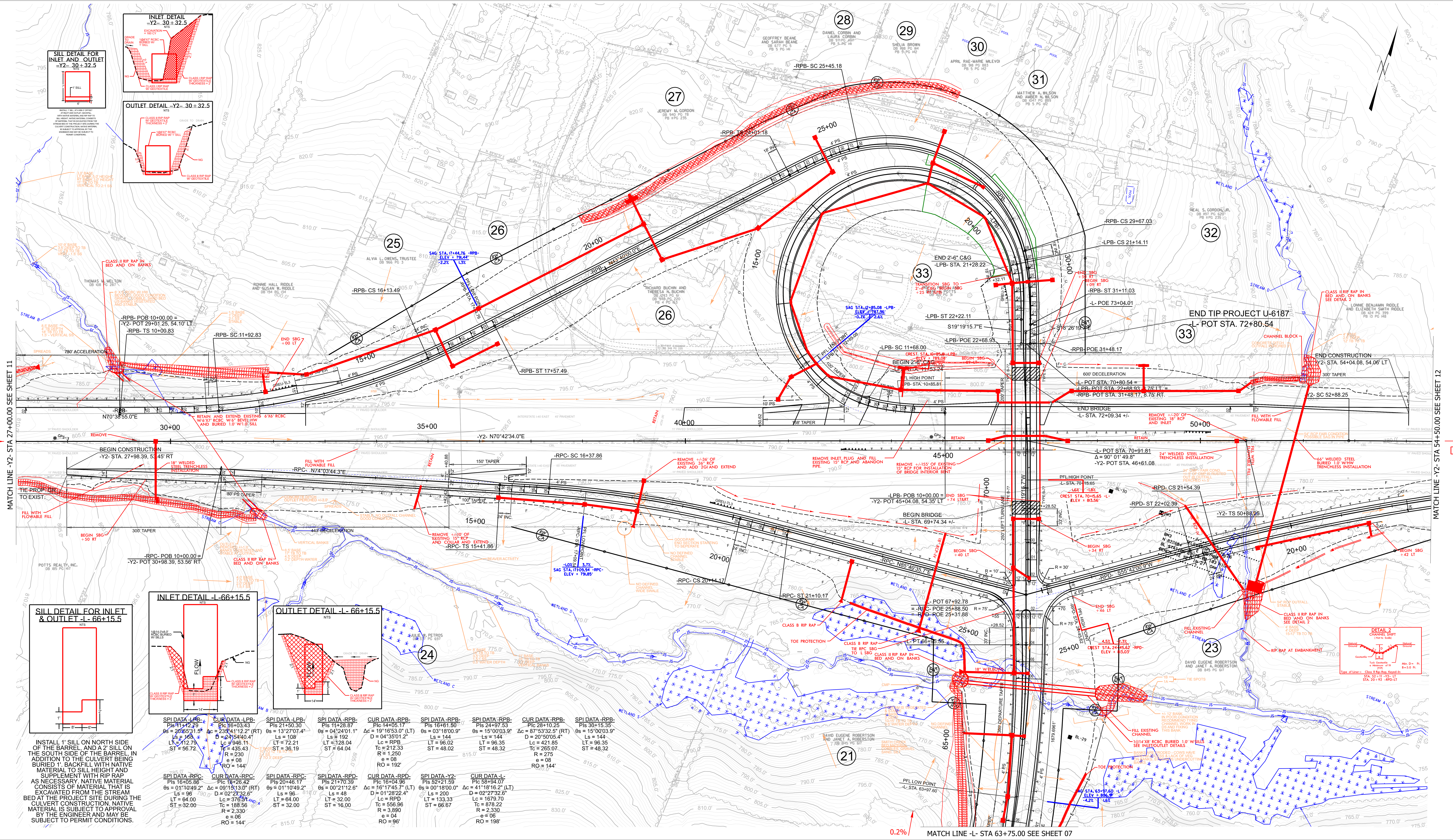
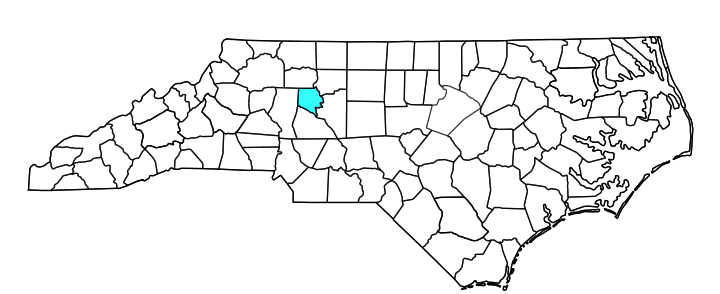
23

55+00

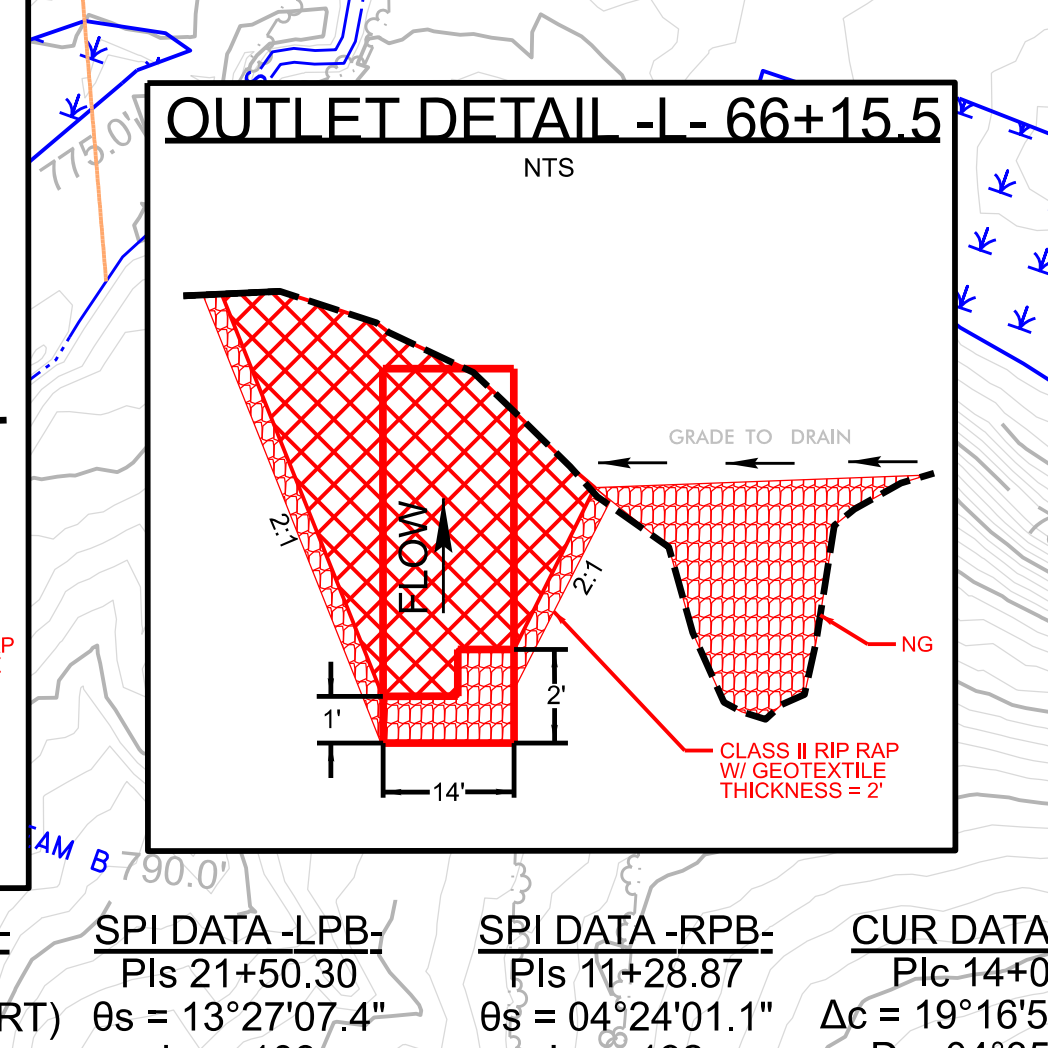
60+00

455' RT  
LANE





INSTALL 1' SILL ON NORTH SIDE OF THE BARREL AND A 2' SILL ON THE SOUTH SIDE OF THE BARREL IN ADDITION TO THE CULVERT BEING BURIED 1' BACKFILL WITH NATIVE MATERIAL TO SILL HEIGHT AND SUPPLEMENT WITH RIP RAP AS NECESSARY. NATIVE MATERIAL CONSISTS OF MATERIAL THAT IS EXCAVATED FROM THE STREAM BED AT THE PROJECT SITE DURING THE CULVERT CONSTRUCTION. NATIVE MATERIAL IS SUBJECT TO APPROVAL BY THE ENGINEER AND MAY BE SUBJECT TO PERMIT CONDITIONS.



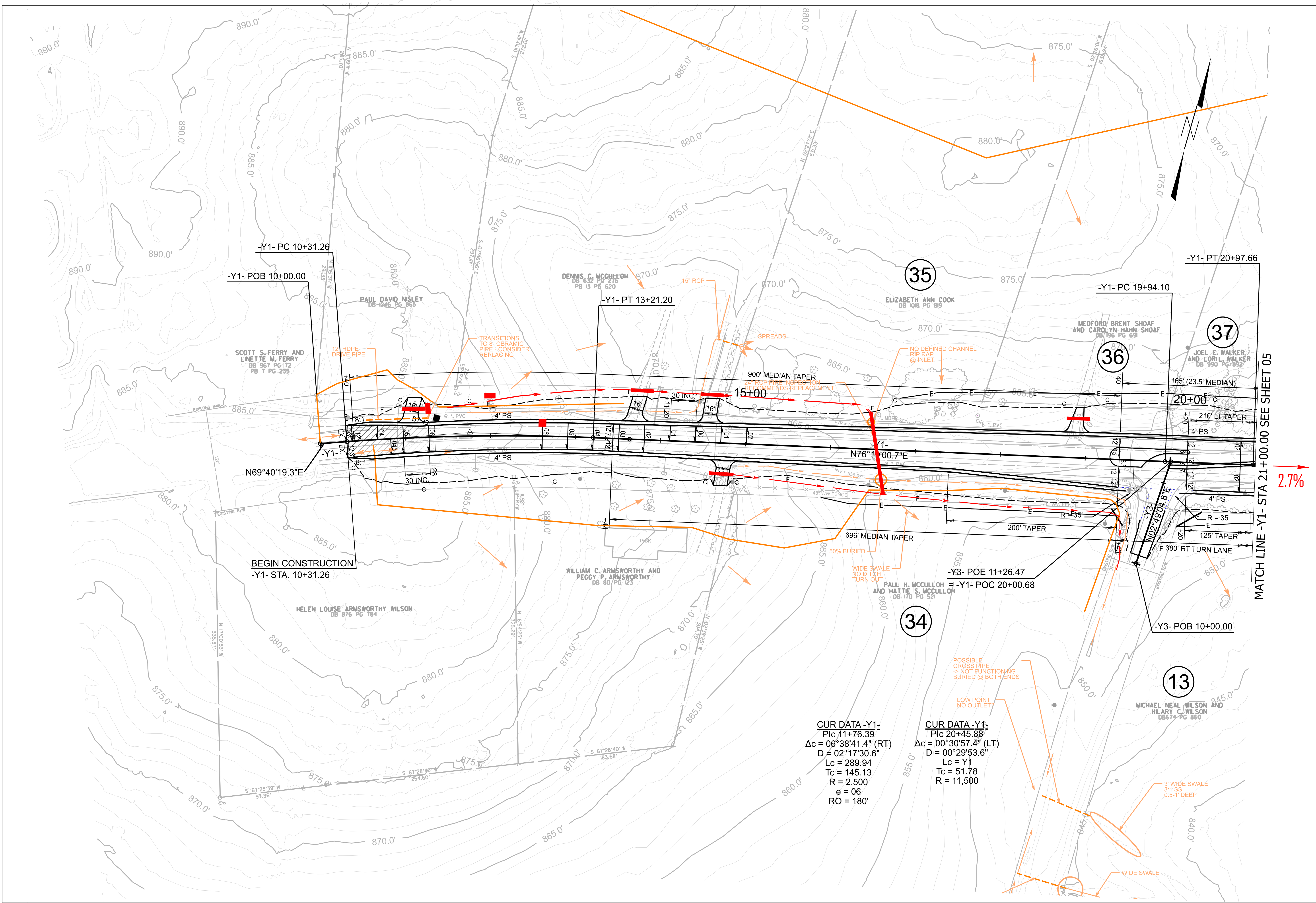
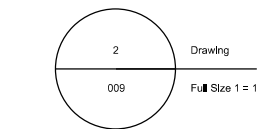
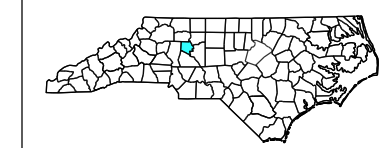
INSTALL 1' SILL ON NORTH SIDE OF THE BARREL AND A 2' SILL ON THE SOUTH SIDE OF THE BARREL IN ADDITION TO THE CULVERT BEING BURIED 1' BACKFILL WITH NATIVE MATERIAL TO SILL HEIGHT AND SUPPLEMENT WITH RIP RAP AS NECESSARY. NATIVE MATERIAL CONSISTS OF MATERIAL THAT IS EXCAVATED FROM THE STREAM BED AT THE PROJECT SITE DURING THE CULVERT CONSTRUCTION. NATIVE MATERIAL IS SUBJECT TO APPROVAL BY THE ENGINEER AND MAY BE SUBJECT TO PERMIT CONDITIONS.

SPI DATA -L-PB-	CUR DATA -L-PB-	SPI DATA -L-PB-	SPI DATA -L-PB-	CUR DATA -L-PB-	SPI DATA -L-PB-	SPI DATA -L-PB-	CUR DATA -L-PB-	SPI DATA -L-PB-	CUR DATA -L-PB-	SPI DATA -L-PB-	CUR DATA -L-PB-
Pic 11+23.29 0s = 2065.31.5 Ls = 165 LT = 112.79 ST = 56.72 e = 08 RO = 144'	Pic 16+03.43 0s = 2354.11.2 (RT) D = 229.5440.41 Lc = 946.11 LT = 435.43 R = 230 ST = 32.00 e = 06 RO = 144'	Pic 21+50.30 0s = 13270.74 Ls = 109 LT = 72.21 ST = 36.19 e = 08 RO = 144'	Pic 14+05.17 0s = 04240.11 Ls = 152 LT = 128.04 ST = 64.04 e = 08 RO = 192'	Pic 24+97.53 0s = 031800.9 Ls = 144 LT = 96.35 ST = 48.32 e = 08 RO = 144'	Pic 16+61.50 0s = 031800.9 Ls = 144 LT = 96.35 ST = 48.32 e = 08 RO = 144'	Pic 28+10.25 0s = 150003.9 Ls = 144 LT = 96.35 ST = 48.32 e = 08 RO = 144'	Pic 28+10.25 0s = 875332.5 (RT) D = 205005.4 Lc = 421.85 LT = 96.35 ST = 48.32 e = 08 RO = 144'	Pic 30+15.35 0s = 150003.9 Ls = 144 LT = 96.35 ST = 48.32 e = 08 RO = 144'	Pic 52+17.59 0s = 0021800.0 Ls = 200 LT = 133.33 ST = 66.67 e = 08 RO = 198'	Pic 52+17.59 0s = 0021800.0 Ls = 200 LT = 133.33 ST = 66.67 e = 08 RO = 198'	Pic 58+94.07 0s = 411816.2 (LT) Ls = 200 LT = 1679.70 ST = 878.22 R = 2.330 e = 06 RO = 198'

MATCH LINE -Y2- STA 54+50.00 SEE SHEET 12

MATCH LINE -Y2- STA 27+00.00 SEE SHEET 11

MATCH LINE -L- STA 63+75.00 SEE SHEET 07

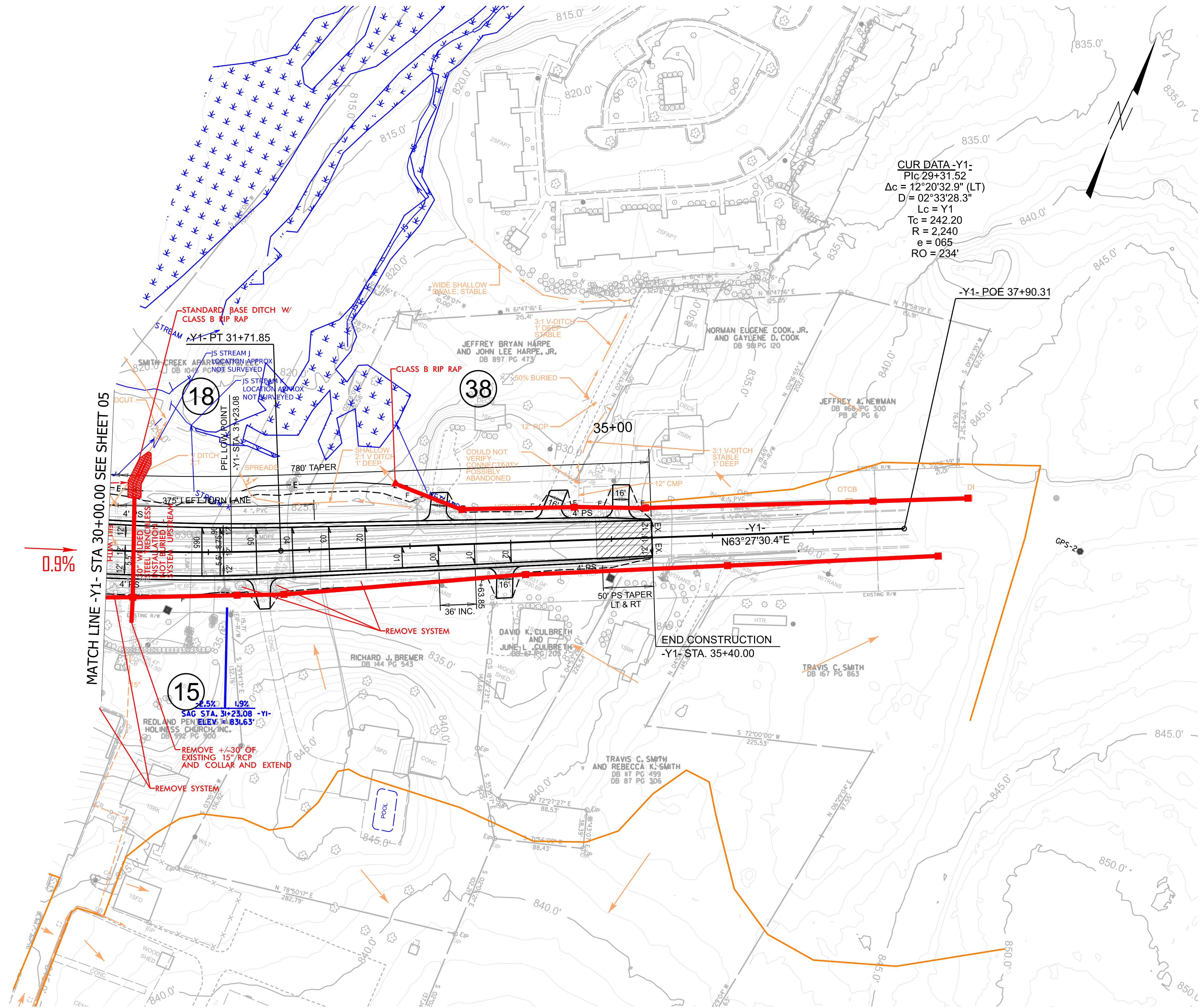
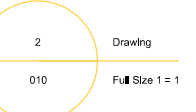
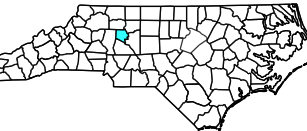


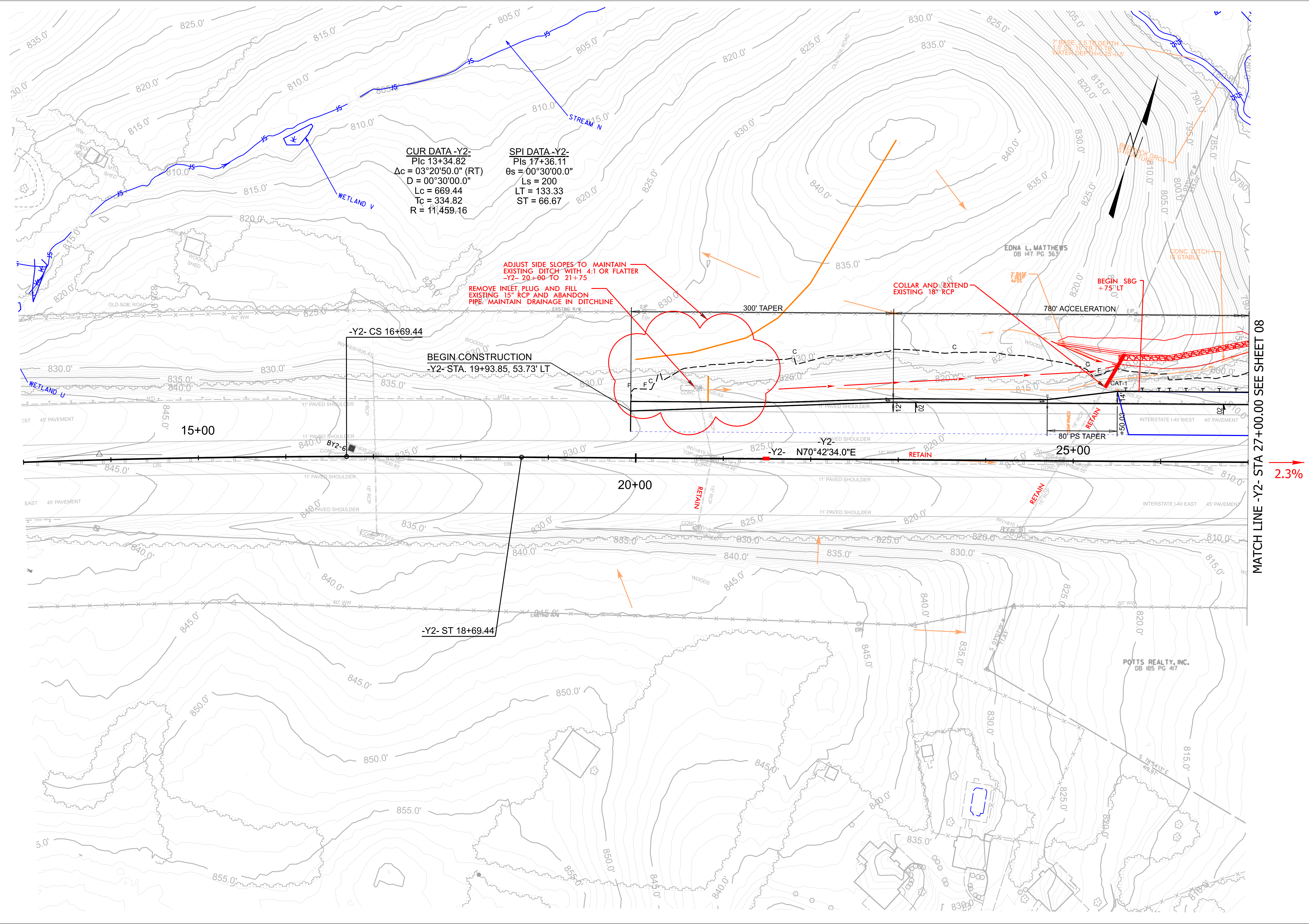
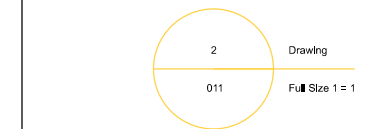
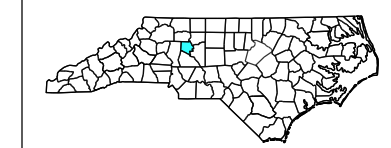
MATCH LINE -Y1- STA 21+00.00 SEE SHEET 05

CUR DATA -Y1-  
Pc 11+76.39  
 $\Delta c = 06^{\circ}38'41.4''$  (RT)  
D =  $02^{\circ}17'30.6''$   
Lc = 289.94  
Tc = 145.13  
R = 2,500  
e = 06  
RO = 180'

CUR DATA -Y1-  
Pc 20+45.88  
 $\Delta c = 00^{\circ}30'57.4''$  (LT)  
D =  $00^{\circ}29'53.6''$   
Lc = Y1  
Tc = 51.78  
R = 11,500

2.7%





CUR DATA -Y2-  
Plc 13+34.82  
Δc = 03°20'50.0" (RT)  
D = 00°30'00.0"  
Lc = 669.44  
Tc = 334.82  
R = 11,459.16

SPI DATA -Y2-  
Pls 17+36.11  
θs = 00°30'00.0"  
Ls = 200  
LT = 133.33  
ST = 66.67

ADJUST SIDE SLOPES TO MAINTAIN EXISTING DITCH WITH 4:1 OR FLATTER -Y2- 20+00 TO 21+75  
REMOVE INLET, PLUG AND FILL EXISTING 15" RCP AND ABANDON PIPE. MAINTAIN DRAINAGE IN DITCHLINE

BEGIN CONSTRUCTION -Y2- STA. 19+93.85, 53.73' LT

COLLAR AND EXTEND EXISTING 18" RCP

BEGIN SBG +75' LT

780' ACCELERATION

300' TAPER

80' PS TAPER

25+00

20+00

15+00

-Y2- ST 18+69.44

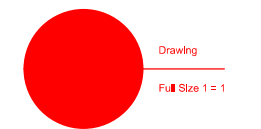
-Y2- CS 16+69.44

-Y2- N70°42'34.0"E

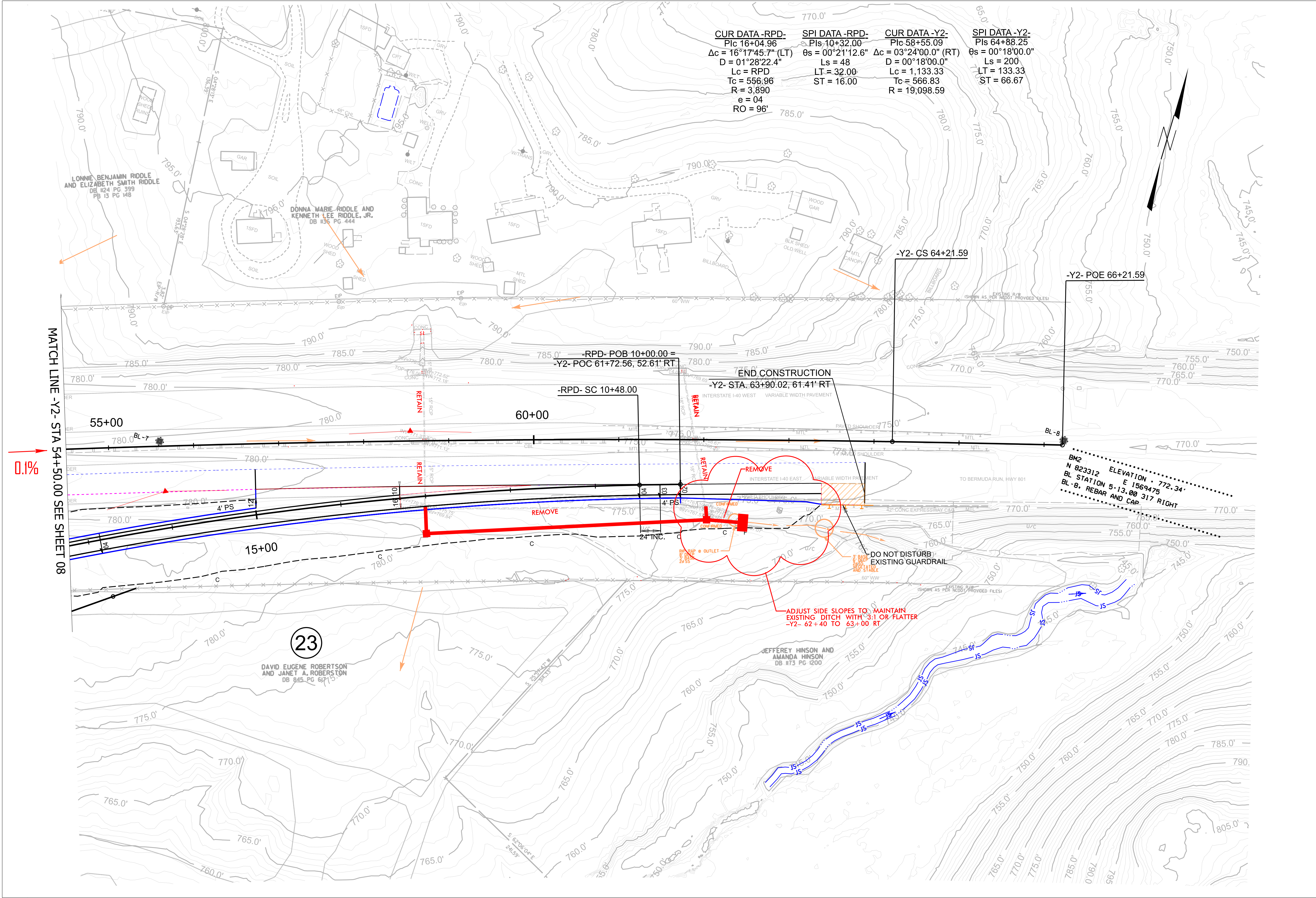
MATCH LINE -Y2- STA 27+00.00 SEE SHEET 08

2.3%





CUR DATA -RPD-	SPI DATA -RPD-	CUR DATA -Y2-	SPI DATA -Y2-
Pic 16+04.96	Pis 10+32.00	Pic 58+55.09	Pis 64+88.25
$\Delta c = 16^{\circ}17'45.7''$ (LT)	$\theta_s = 00^{\circ}21'12.6''$	$\Delta c = 03^{\circ}24'00.0''$ (RT)	$\theta_s = 00^{\circ}18'00.0''$
D = $01^{\circ}28'22.4''$	Ls = 48	D = $00^{\circ}18'00.0''$	Ls = 200
Lc = RPD	LT = 32.00	Lc = 1,133.33	LT = 133.33
Tc = 556.96	ST = 16.00	Tc = 566.83	ST = 66.67
R = 3,890		R = 19,098.59	
e = 04			
RO = 96'			



0.1%