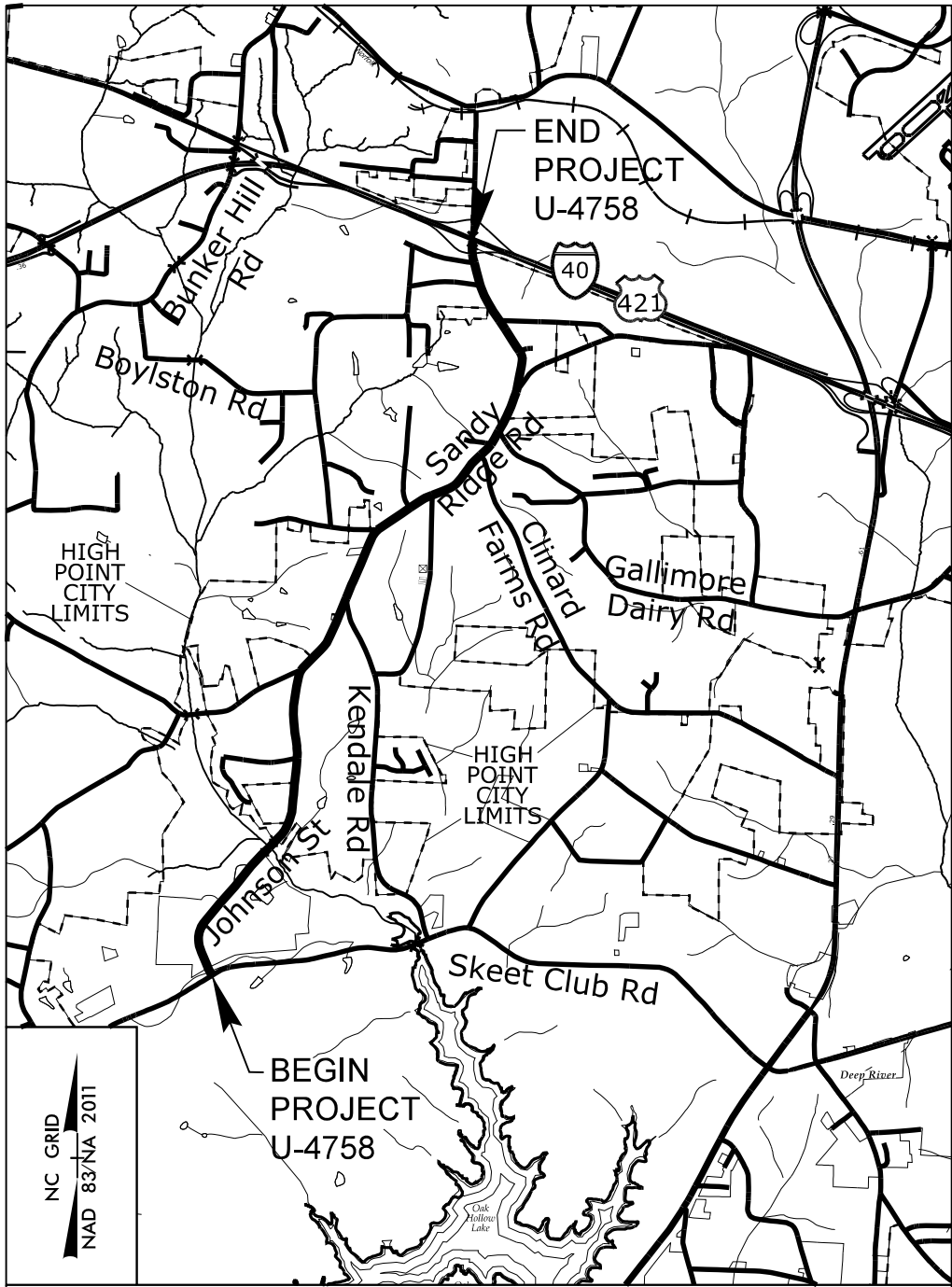


See Sheet 1A For Index of Sheets  
See Sheet 1B For Conventional Symbols



VICINITY MAP

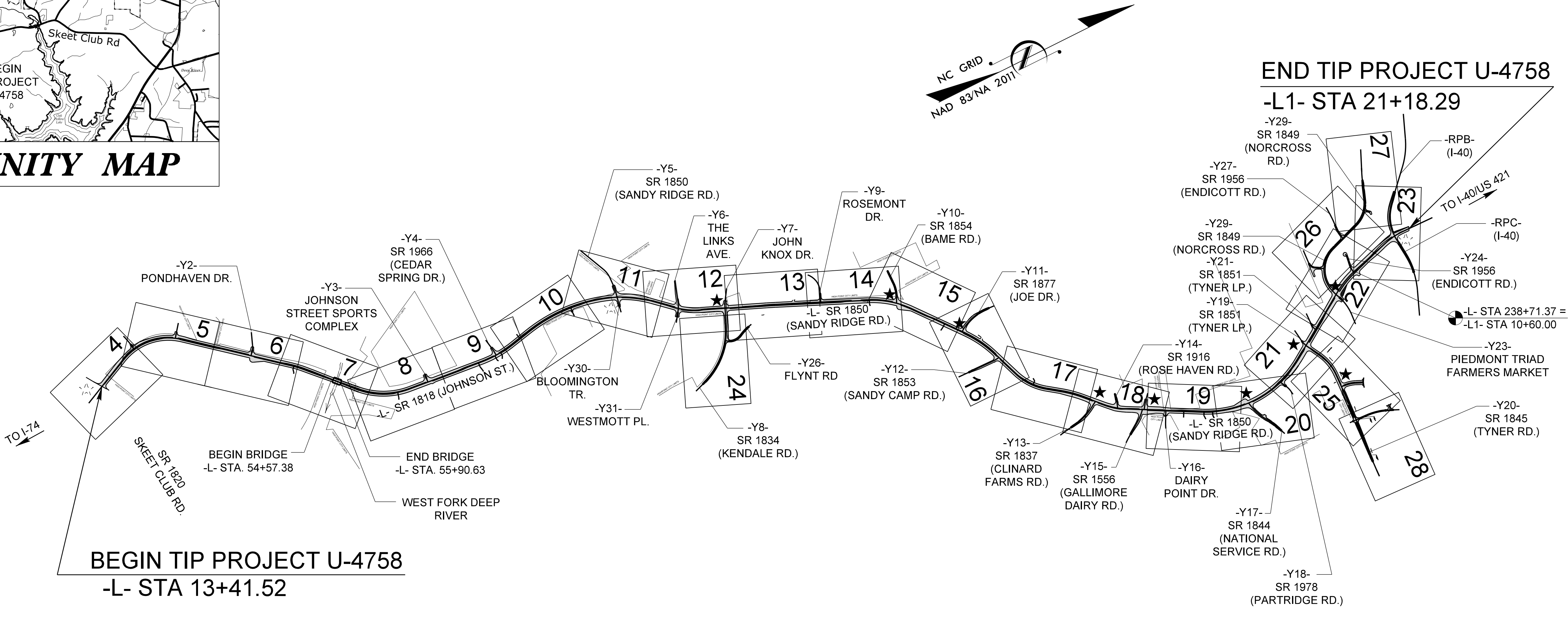
STATE OF NORTH CAROLINA  
DIVISION OF HIGHWAYS

GUILFORD COUNTY

LOCATION: SR 1818 (JOHNSON STREET) /SR 1850 (SANDY RIDGE ROAD) FROM  
SR 1820 (SKEET CLUB ROAD) TO SOUTH OF I-40 IN HIGH POINT

TYPE OF WORK: GRADING, DRAINAGE, PAVING, WIDENING, RESURFACING, SIGNALS,  
AND STRUCTURE

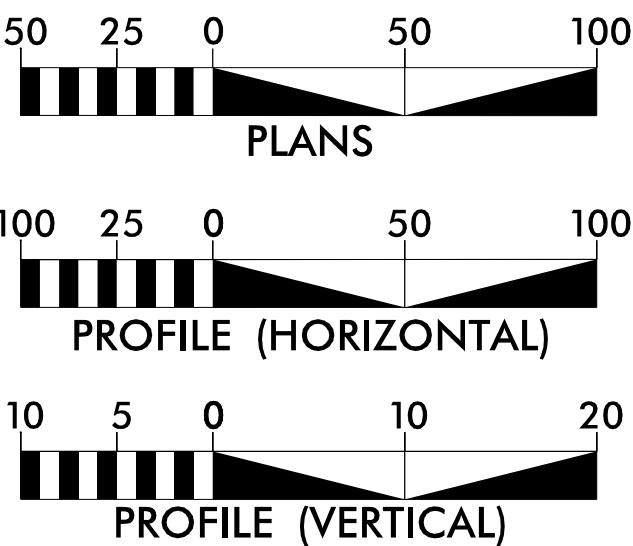
| STATE           | STATE PROJECT REFERENCE NO. | SHEET NO.    | TOTAL SHEETS |
|-----------------|-----------------------------|--------------|--------------|
| N.C.            | U-4758                      | 1            |              |
| STATE PROJ. NO. | F.A. PROJ. NO.              | DESCRIPTION  |              |
| 40251.1.1       | 0710025/0710027             | PE           |              |
| 40251.2.1       | 0710027                     | RW           |              |
| 40251.2.2       | 0710027                     | UTILITIES    |              |
| 40251.3.1       | 0710027                     | CONSTRUCTION |              |
|                 |                             |              |              |
|                 |                             |              |              |
|                 |                             |              |              |



EXISTING SIGNAL  
★ PROPOSED SIGNAL

DOCUMENT NOT CONSIDERED FINAL  
UNLESS ALL SIGNATURES COMPLETED

GRAPHIC SCALES



DESIGN DATA

ADT 2025 = 20,200  
ADT 2050 = 27,100  
K = 11 %  
D = 60 %  
T = 9 %\*  
V = 50 MPH  
\*TTST = 4% DUAL = 5%  
FUNC CLASS =  
URBAN ARTERIAL  
REGIONAL TIER

PROJECT LENGTH

LENGTH ROADWAY TIP PROJECT U-4758 = 4.442 MILES  
LENGTH STRUCTURES TIP PROJECT U-4758 = 0.025 MILES  
TOTAL LENGTH TIP PROJECT U-4758 = 4.467 MILES

NCDOT CONTACT: BRYAN KEY, P.E

Prepared in the Office of:  
**AtkinsRéalis**  
1616 EAST WILBROOK ROAD, SUITE 160  
RALEIGH, NORTH CAROLINA 27609  
(919) 876-6888 NCBEES #F-0326  
SUNGATE DESIGN GROUP, P.A.  
100 JONES FRANKLIN ROAD  
RALEIGH, NORTH CAROLINA 27609  
(919) 883-2414  
ENG. 1700 LICENSE NO. 0490

2024 STANDARD SPECIFICATIONS

RIGHT OF WAY DATE:  
DECEMBER 17, 2021

LETTING DATE:  
AUGUST 19, 2025

BRUCE B. PAYNE, JR., P.E.  
PROJECT ENGINEER

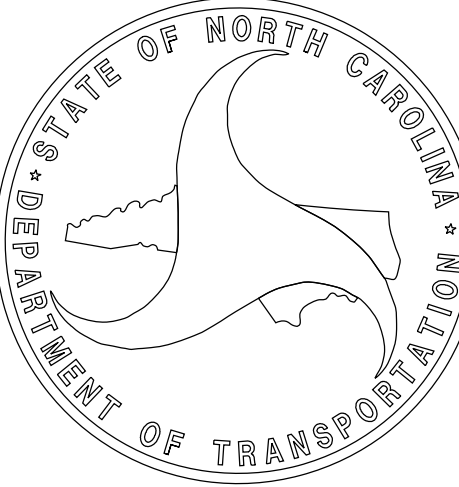
SEAN PEREIRA, P.E.  
PROJECT DESIGN ENGINEER

HYDRAULICS ENGINEER  
5/28/2025

Signed by:  
J. Payne, D. H. Payne  
1080AD86148944G3  
P.E.  
SIGNATURE:

ROADWAY DESIGN  
ENGINEER 5/23/2025

Signed by:  
Bruce Payne  
020A450200A4495  
P.E.  
SIGNATURE:





CONVENTIONAL PLAN SHEET SYMBOLS

Note: Not to Scale

BOUNDARIES AND PROPERTY:

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

BUILDINGS AND OTHER CULTURE:

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

HYDROLOGY:

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

RAILROADS:

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

RIGHT OF WAY & PROJECT CONTROL:

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

ROADS AND RELATED FEATURES:

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

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

EXISTING STRUCTURES:

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

UTILITIES:

\* SUE – Subsurface Utility Engineering  
LOS – Level of Service – A,B,C or D (Accuracy)

|                                         |  |
|-----------------------------------------|--|
| POWER:                                  |  |
| Existing Power Pole                     |  |
| Proposed Power Pole                     |  |
| Existing Joint Use Pole                 |  |
| Proposed Joint Use Pole                 |  |
| Power Manhole                           |  |
| Power Line Tower                        |  |
| Power Transformer                       |  |
| U/G Power Cable Hand Hole               |  |
| H-Frame Pole                            |  |
| U/G Power Line Test Hole (SUE – LOS A)* |  |
| U/G Power Line (SUE – LOS B)*           |  |
| U/G Power Line (SUE – LOS C)*           |  |
| U/G Power Line (SUE – LOS D)*           |  |

TELEPHONE:

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

WATER:

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

TV:

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

GAS:

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

SANITARY SEWER:

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

MISCELLANEOUS:

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

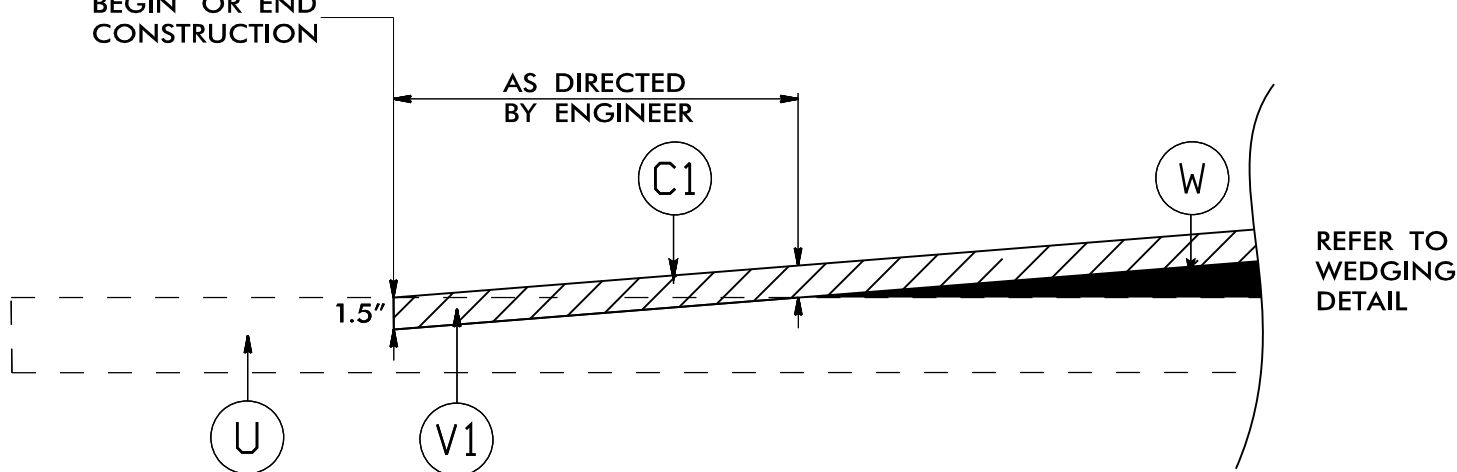
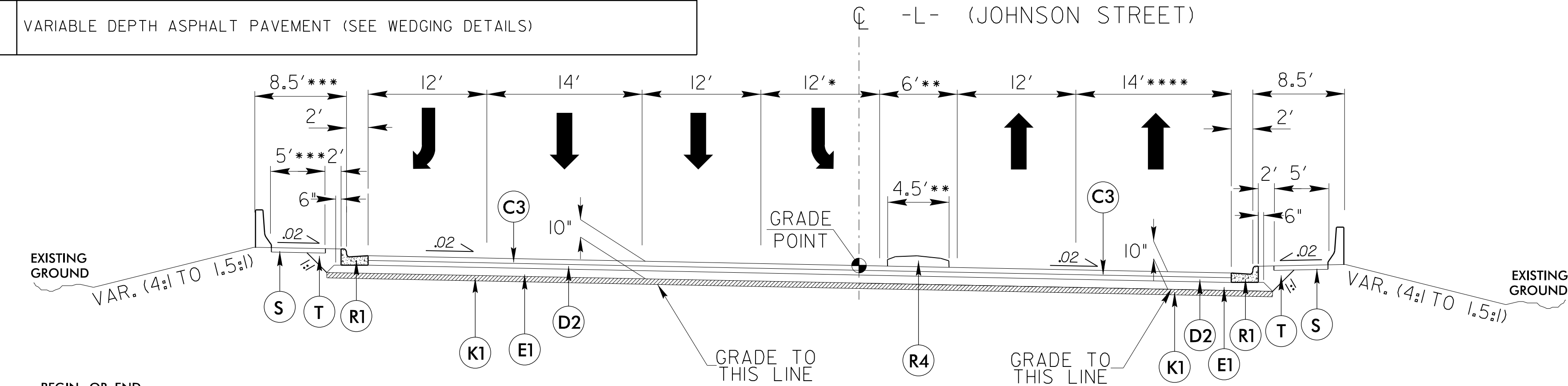
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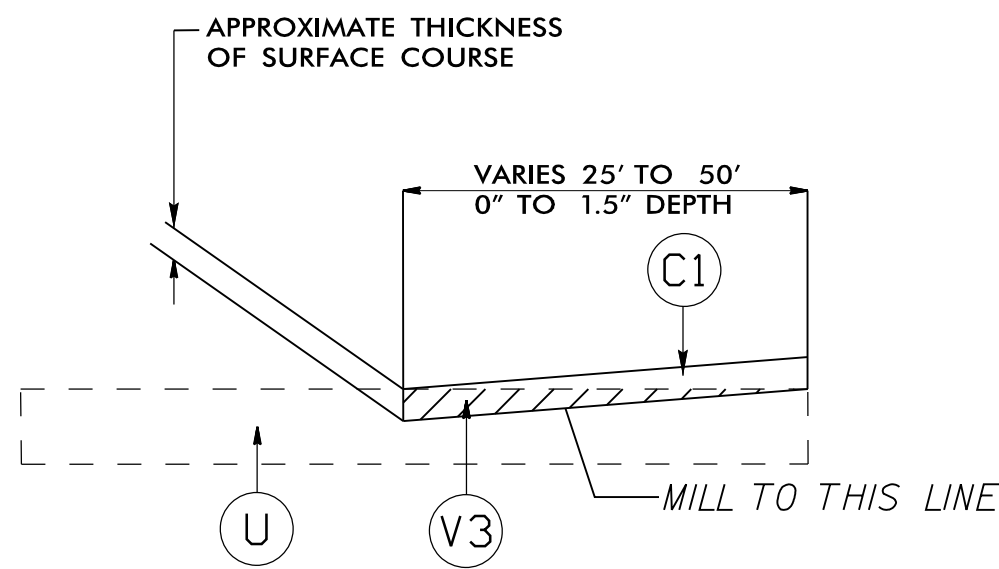
| FINAL PAVEMENT SCHEDULE |                                                                                                                                                                                                                                                 |
|-------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| A1                      | 6" PORTLAND CEMENT CONCRETE PAVEMENT (CONCRETE DRIVEWAY)                                                                                                                                                                                        |
| C1                      | PROP. APPROX. 1 1/2" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5C, AT AN AVERAGE RATE OF 168 LBS. PER SQ. YD.                                                                                                                                    |
| C2                      | PROP. APPROX. 1 1/2" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5B, AT AN AVERAGE RATE OF 165 LBS. PER SQ. YD.                                                                                                                                    |
| 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. 3" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5B, AT AN AVERAGE RATE OF 165 LBS. PER SQ. YD. IN EACH OF TWO LAYERS.                                                                                                                 |
| C5                      | 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 LESS THAN 1 1/2" OR GREATER THAN 1 1/2" IN DEPTH.                                              |
| C6                      | 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 LESS THAN 1 1/2" OR GREATER THAN 2" IN DEPTH.                                                  |
| C7                      | PROP. APPROX. 2 1/2" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5B, AT AN AVERAGE RATE OF 137.5 LBS. PER SQ. YD. IN EACH OF TWO LAYERS.                                                                                                           |
| D1                      | PROP. APPROX. 2 1/2" ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE I19.0C, AT AN AVERAGE RATE OF 285 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 1/2" OR GREATER THAN 4" IN DEPTH.                                            |
| E1                      | PROP. APPROX. 3" ASPHALT CONCRETE BASE COURSE, TYPE B25.0C, AT AN AVERAGE RATE OF 342 LBS. PER SQ. YD.                                                                                                                                          |
| E2                      | PROP. APPROX. 4" ASPHALT CONCRETE BASE COURSE, TYPE B25.0C, AT AN AVERAGE RATE OF 456 LBS. PER SQ. YD.                                                                                                                                          |
| E3                      | PROP. APPROX. 4 1/2" ASPHALT CONCRETE BASE COURSE, TYPE B25.0C, AT AN AVERAGE RATE OF 513 LBS. PER SQ. YD.                                                                                                                                      |
| E4                      | PROP. APPROX. 5" ASPHALT CONCRETE BASE COURSE, TYPE B25.0C, AT AN AVERAGE RATE OF 570 LBS. PER SQ. YD.                                                                                                                                          |
| E5                      | PROP. APPROX. 5 1/2" ASPHALT CONCRETE BASE COURSE, TYPE B25.0C, AT AN AVERAGE RATE OF 627 LBS. PER SQ. YD.                                                                                                                                      |
| E6                      | PROP. APPROX. 7" ASPHALT CONCRETE BASE COURSE, TYPE B25.0C, AT AN AVERAGE RATE OF 456 LBS. PER SQ. YD. PER 1" DEPTH TO BE PLACED IN FIRST 4" LAYER AND AN AVERAGE RATE OF 342 LBS. PER SQ. YD. PER 1" DEPTH TO BE PLACED IN REMAINING 3" LAYER. |
| E7                      | 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" OR GREATER THAN 5 1/2" IN DEPTH.                                                    |
| J1                      | PROP. 4" AGGREGATE BASE COURSE                                                                                                                                                                                                                  |
| J2                      | PROP. 8" AGGREGATE BASE COURSE                                                                                                                                                                                                                  |
| K1                      | PROP. 8" LIME STABILIZATION (METHOD-SLURRY) AT A RATE OF 24 LBS. PER SQ. YD. OR 7" CEMENT STABILIZATION AT A RATE OF 56 LBS. PER SQ. YD. 50/50 SPLIT TO BE USED AT THE DISCRETION OF THE ENGINEER.                                              |
| K2                      | PROP. 12" CLASS IV SUBGRADE STABILIZATION                                                                                                                                                                                                       |
| N                       | GEOTEXTILE FOR SUBGRADE STABILIZATION                                                                                                                                                                                                           |
| R1                      | 2'-6" CONCRETE CURB AND GUTTER                                                                                                                                                                                                                  |
| R2                      | 1'-6" CONCRETE CURB AND GUTTER                                                                                                                                                                                                                  |
| R3                      | 2'-9" CONCRETE CURB AND GUTTER                                                                                                                                                                                                                  |

NOTE: PAVEMENT EDGE SLOPES ARE 1:1 UNLESS SHOWN OTHERWISE.  
@ BARRIER DESIGN TO BE DETERMINED BY STRUCTURES MANAGEMENT UNIT

|    |                                                       |
|----|-------------------------------------------------------|
| R4 | 5" MONOLITHIC CONCRETE ISLAND                         |
| S  | 4" CONCRETE SIDEWALK                                  |
| T  | EARTH MATERIAL                                        |
| U  | EXISTING PAVEMENT                                     |
| V1 | 1.5" MILLING                                          |
| V2 | 2.5" MILLING                                          |
| V3 | INCIDENTAL MILLING                                    |
| W  | VARIABLE DEPTH ASPHALT PAVEMENT (SEE WEDGING DETAILS) |

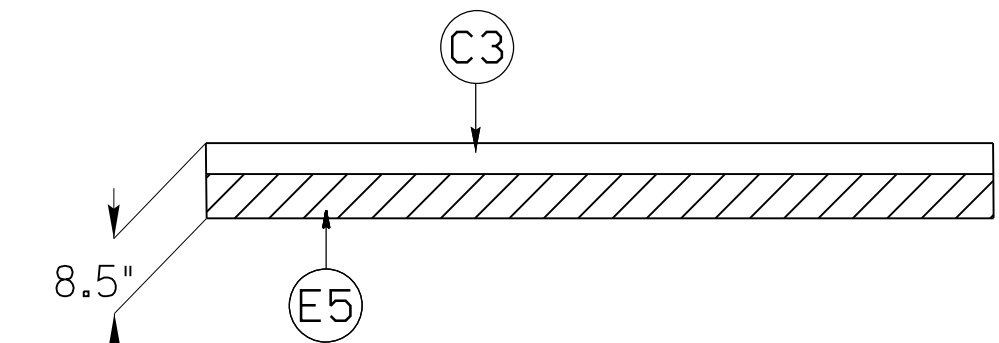


MILLING DETAIL  
DETAIL SHOWING PROFILE VIEW

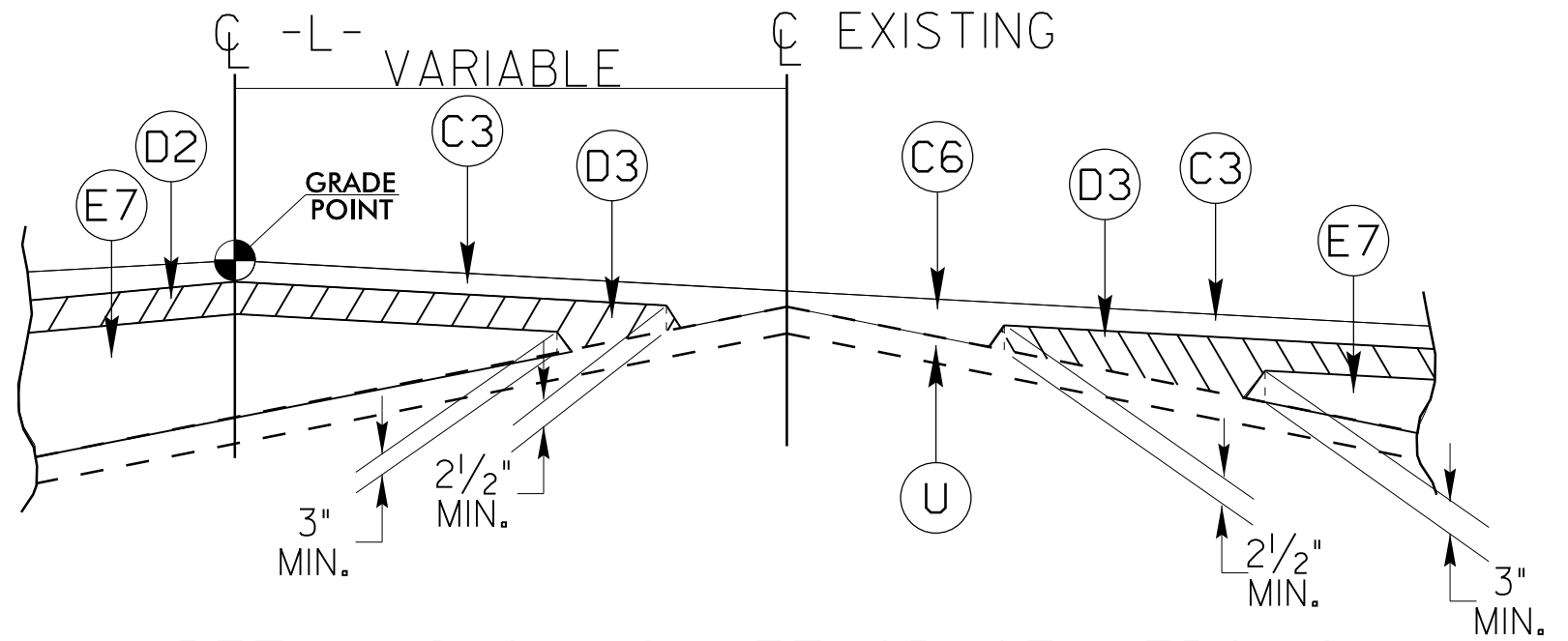


DETAIL FOR INCIDENTAL MILLING  
USE MILLING DETAIL AT RESURFACING TIES

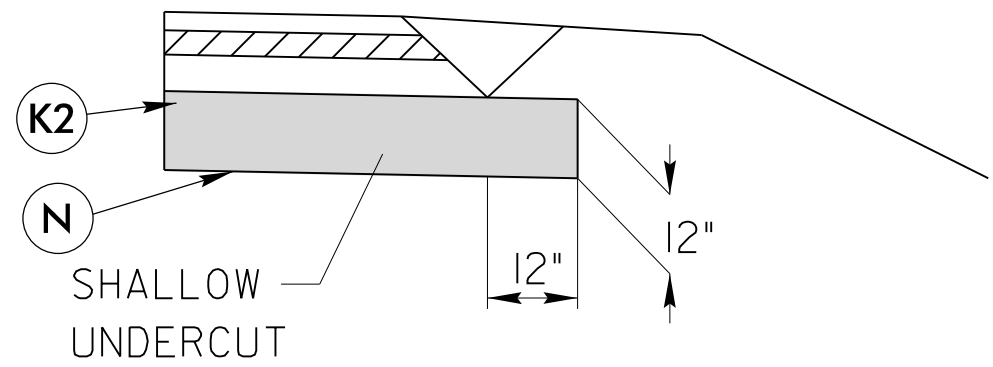
NOTE: A TEMPORARY ASPHALT WEDGE WILL BE REQUIRED IMMEDIATELY AFTER MILLING TO ENSURE SMOOTH TRAVEL IF THE FINAL LAYER OF SURFACE COURSE IS NOT PLACED ON THE SAME DAY AS MILLING.



TEMPORARY PAVEMENT  
TEMPORARY PAVEMENT SECTION  
ONLY FOR USE DURING TMP

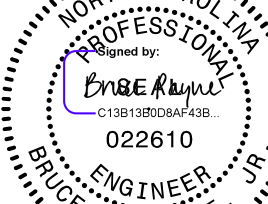


DETAIL SHOWING METHOD OF WEDGING

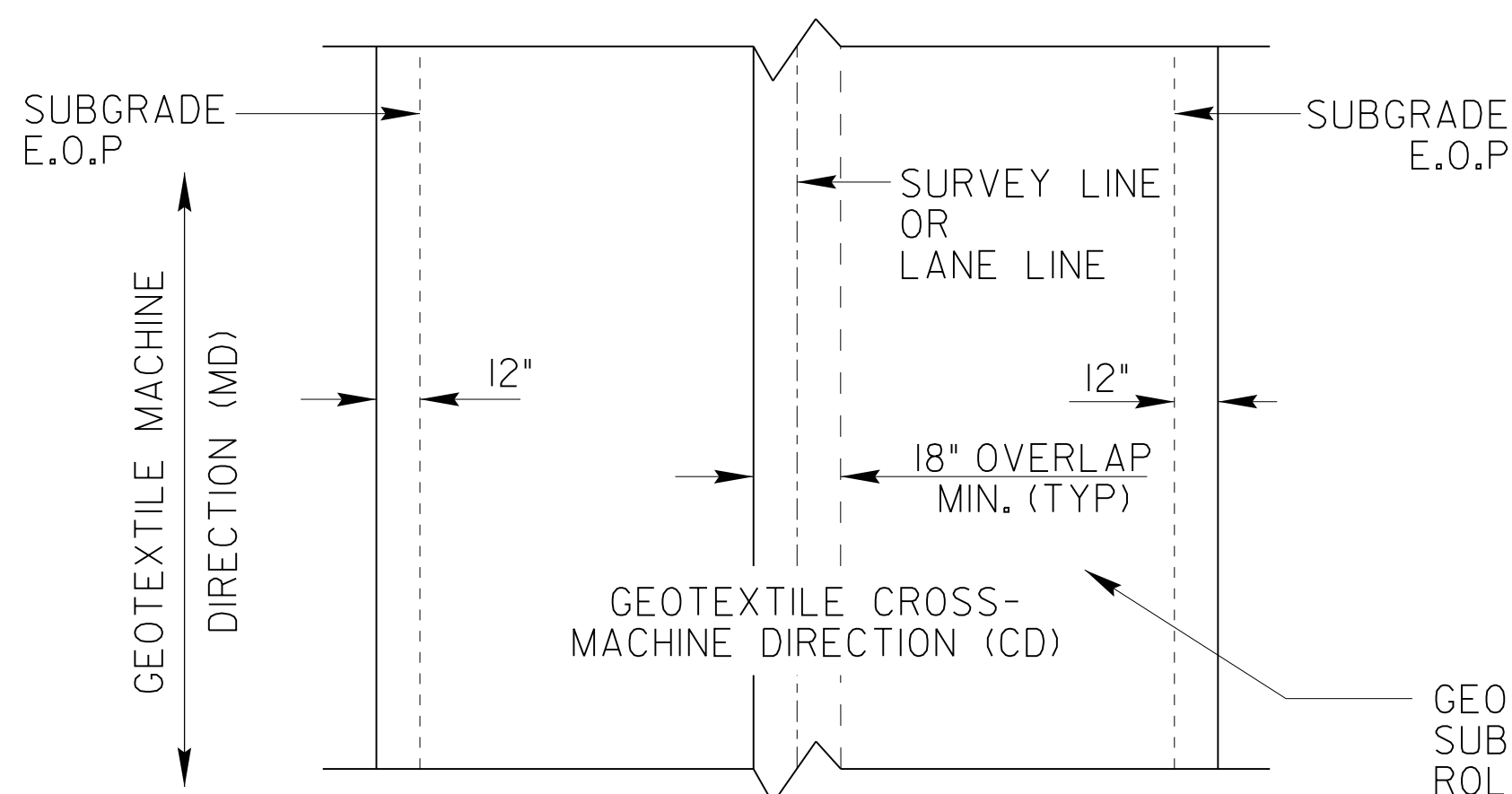


DETAIL OF SHALLOW UNDERCUT

- Y5- STATION 14+75+/- TO 16+75+/-
- Y12- STATION 13+25+/- TO 15+25+/-
- Y13- STATION 10+75+/- TO 16+25+/-
- Y17- STATION 13+25+/- TO 14+25+/-

| PROJECT REFERENCE NO.                                                               |                                                                                     | SHEET NO.                |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------|
| U-4758                                                                              |                                                                                     | 2A-1                     |
| R/W SHEET NO.                                                                       |                                                                                     |                          |
| ROADWAY DESIGN ENGINEER                                                             |                                                                                     | PAVEMENT DESIGN ENGINEER |
|  |  |                          |
| DOCUMENT NOT CONSIDERED FINAL<br>UNLESS ALL SIGNATURES COMPLETED                    |                                                                                     |                          |

**AtkinsRéalis** 1616 EAST MILLBROOK ROAD, SUITE 160  
RALEIGH, NORTH CAROLINA 27609  
(919) 876-6888 NCBEES #F-0326

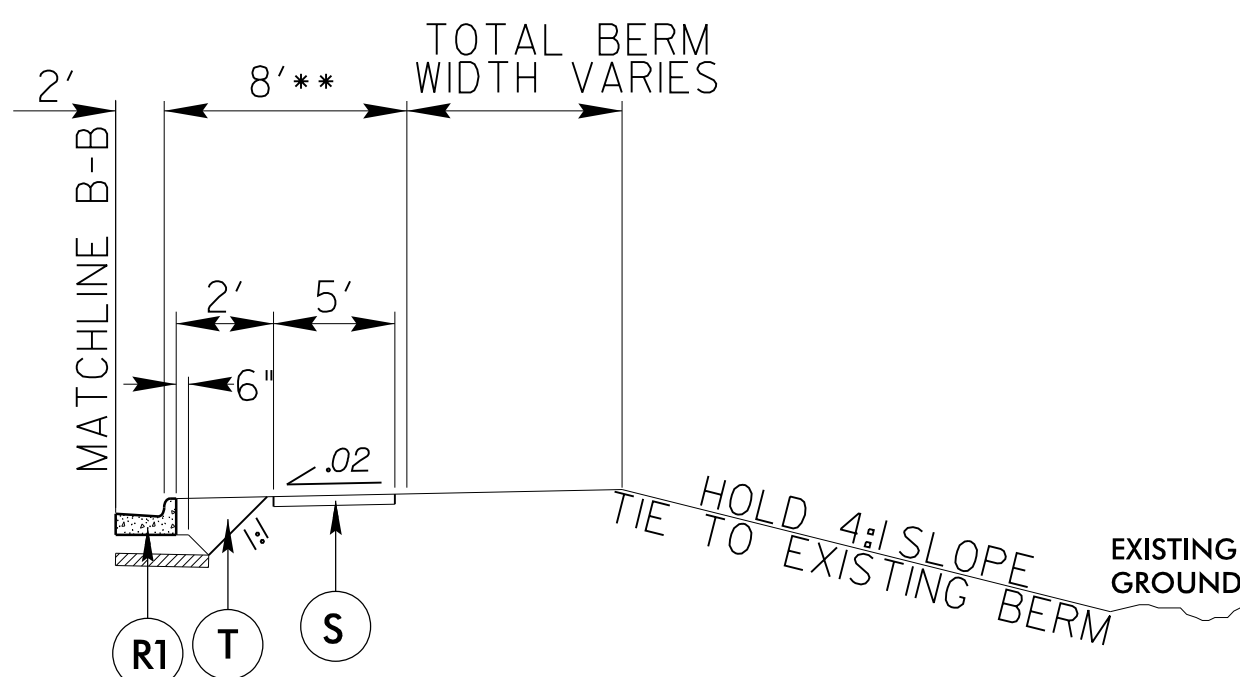


## (100% COVERAGE REQUIRED)

\*INSTALL GEOTEXTILE FOR SUBGRADE STABILIZATION WITH MINIMUM ROLL WIDTH UNDER ROADWAY EDGES AND SHOULDERS ADJACENT TO FILL SLOPES

-L- STA. 36+16.00 TO -L- STA. 43+05.00  
 -L- STA. 111+88.00 TO -L- STA. 117+82.00  
 -L- STA. 144+54.00 TO -L- STA. 146+95.00  
 -L- STA. 154+61.00 TO -L- STA. 155+45.00

NOTE: \* WIDEN BERM 2' FOR GUARDRAIL  
 \*\* WIDEN BERM 6' FOR GUARDRAIL  
 SEE PLANS FOR MEDIAN AND  
 LEFT TURN DETAILS AT INTERSECTIONS  
 SEE PLANS FOR 1'-6" C&G  
 AND 2'-9" C&G LOCATIONS



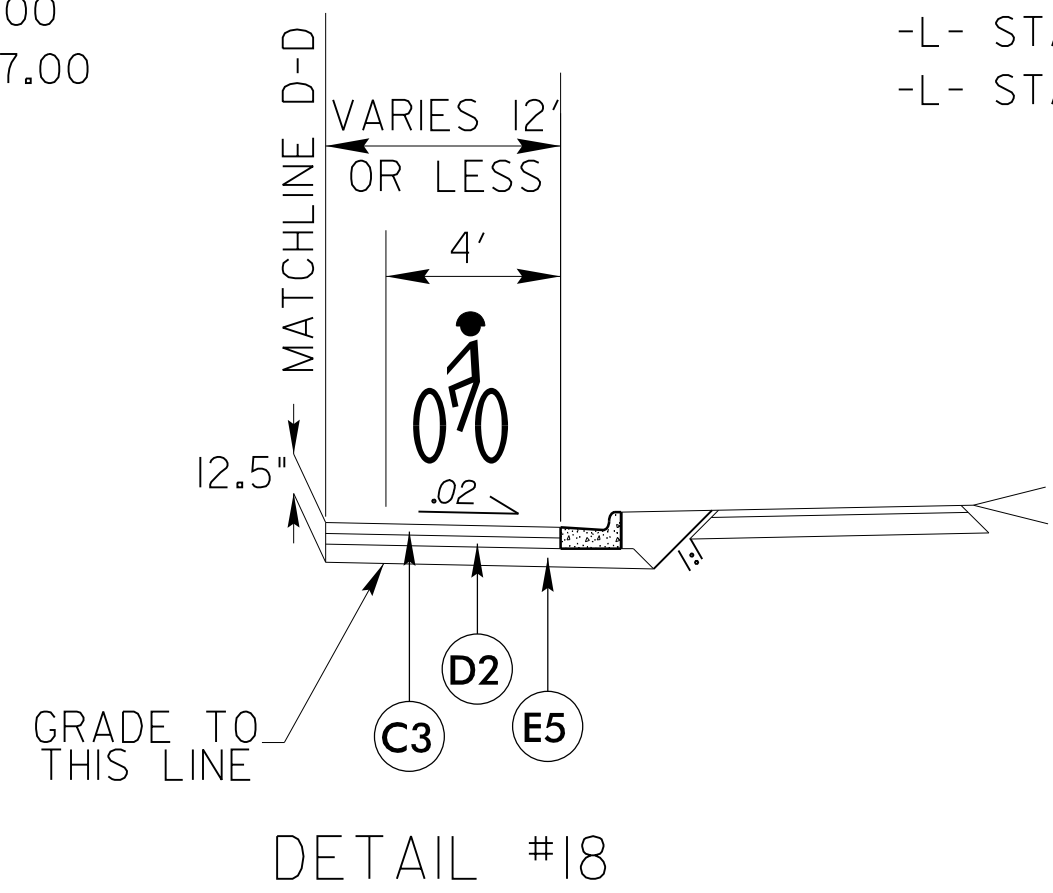
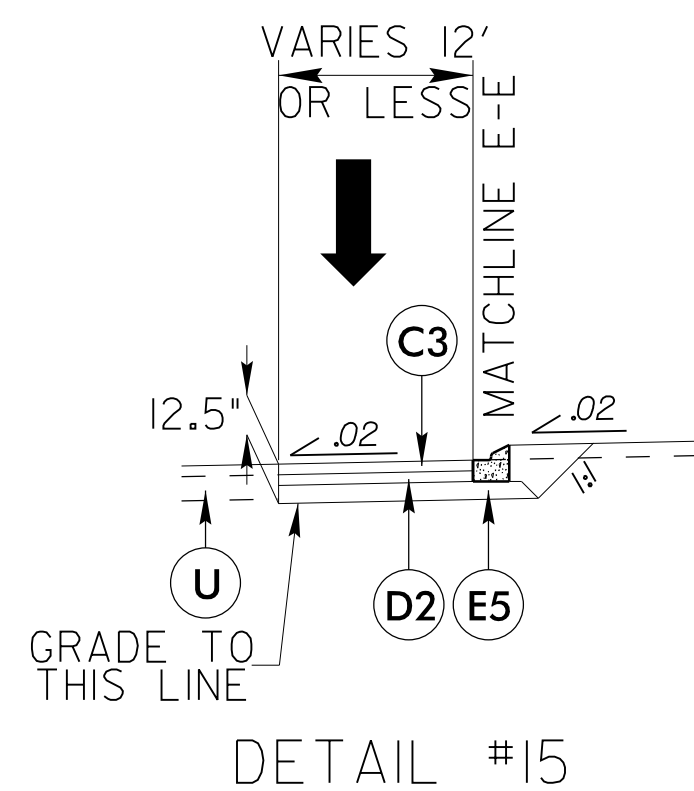
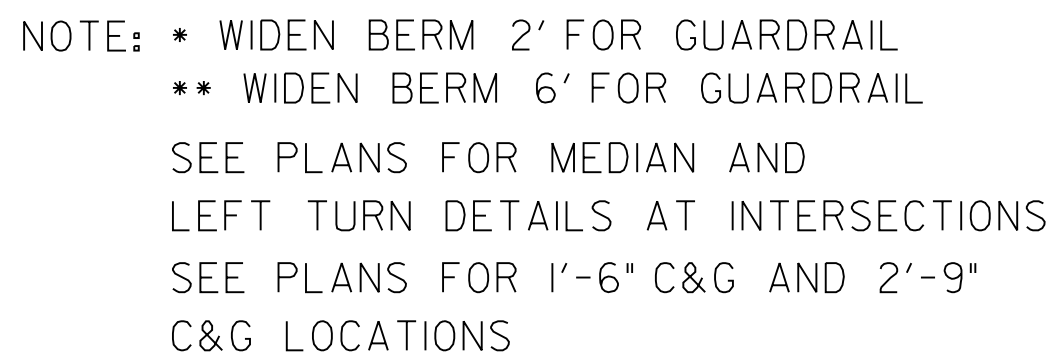
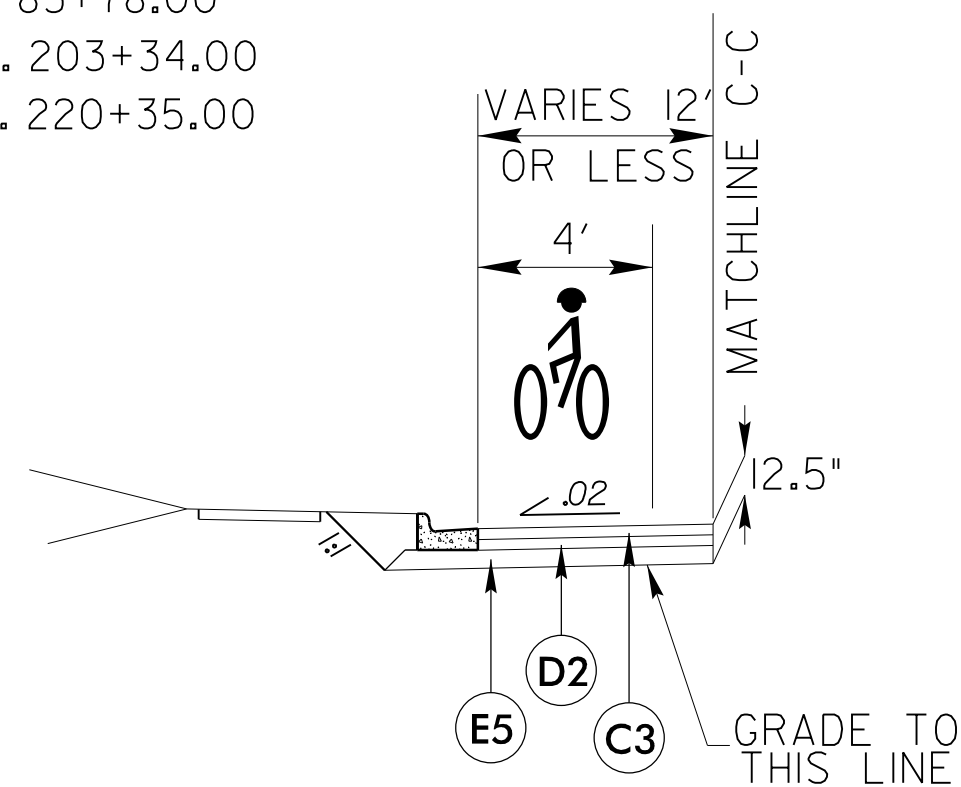
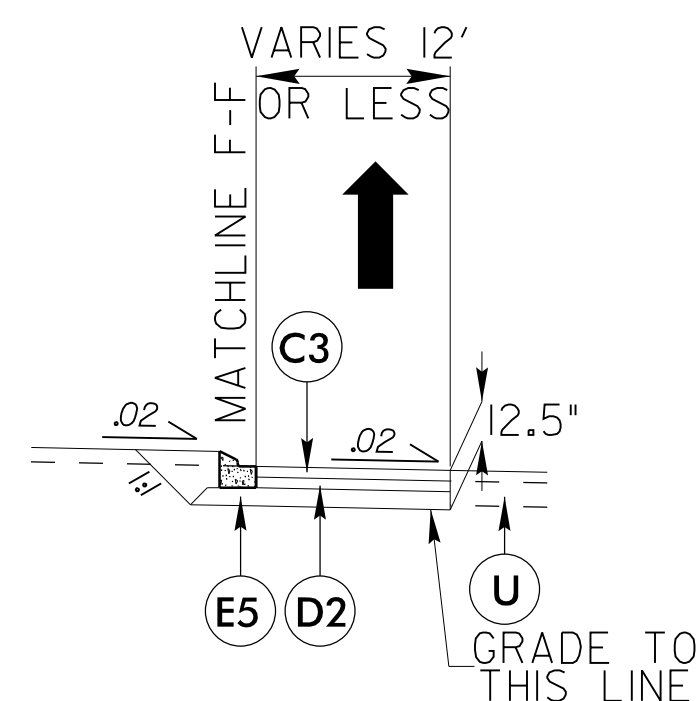
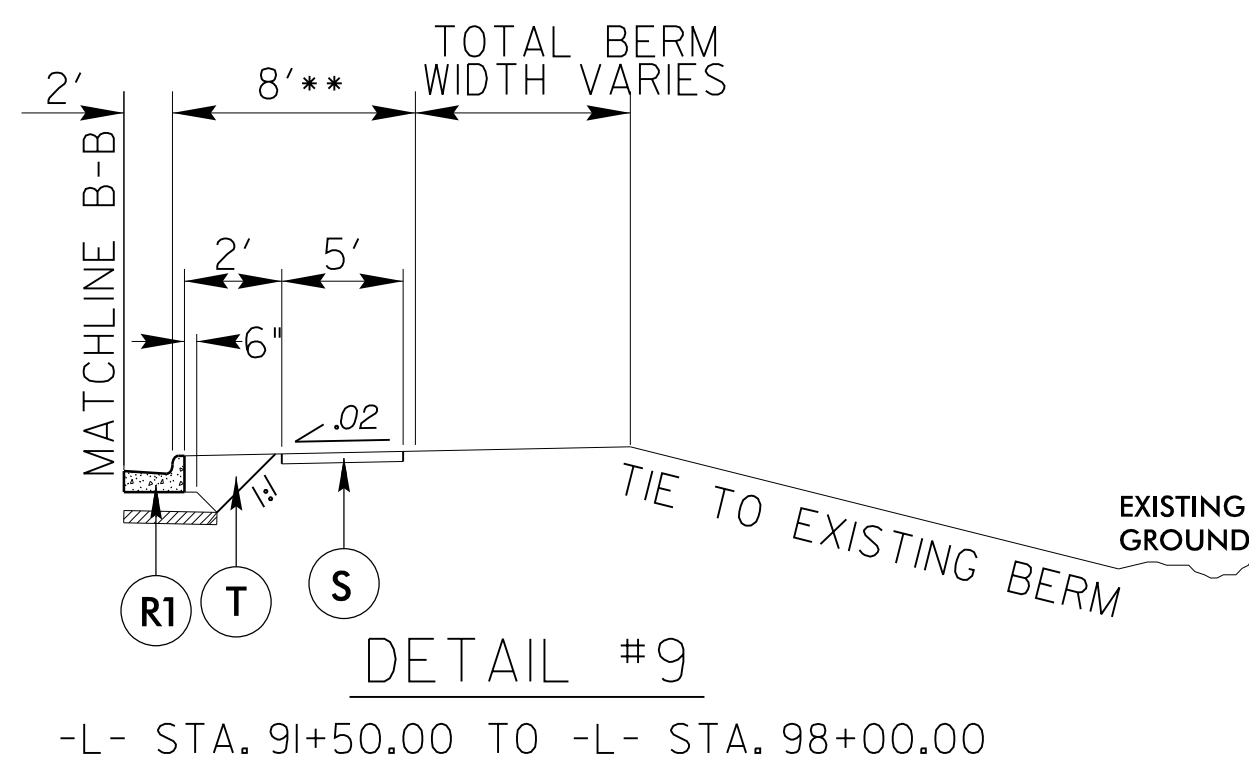
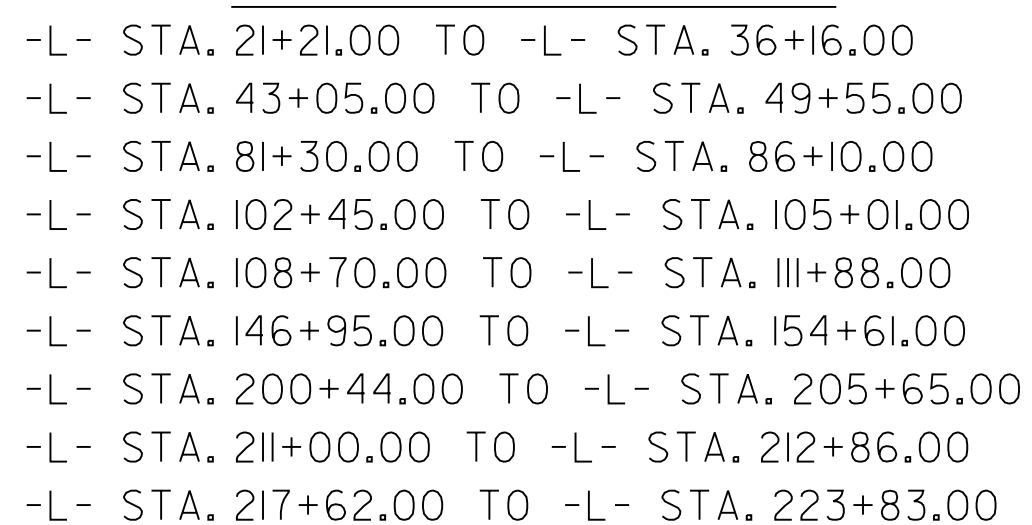
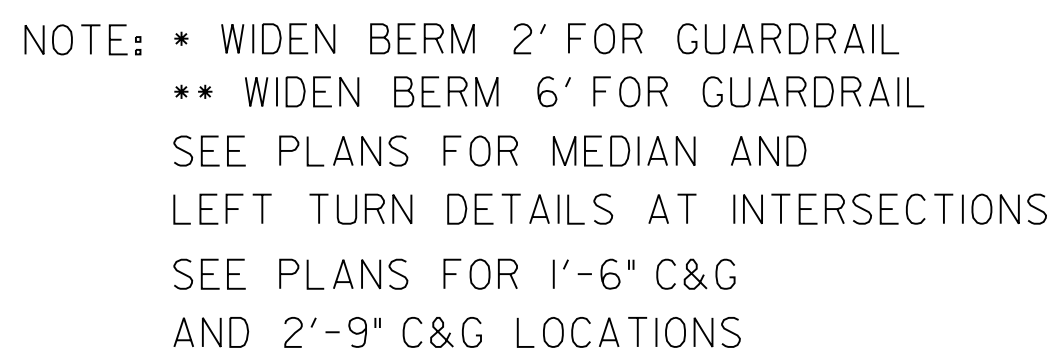
USE FOR NARROW WIDENING

|                       |                    |
|-----------------------|--------------------|
| -L- STA. 88+24.00 TO  | -L- STA. 95+05.00  |
| -L- STA. 98+49.00 TO  | -L- STA. 100+23.00 |
| -L- STA. 116+45.00 TO | -L- STA. 138+22.00 |
| -L- STA. 157+14.00 TO | -L- STA. 159+75.00 |
| -L- STA. 170+72.00 TO | -L- STA. 173+39.00 |
| -L- STA. 175+54.00 TO | -L- STA. 180+00.00 |
| -L- STA. 185+69.00 TO | -L- STA. 192+07.00 |

NOTE: THERE IS MUP THROUGH THIS STATION RANGE  
-L- STA.196+44.00 TO -L- STA.198+94.00

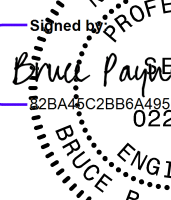
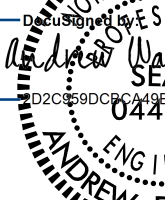
| PAVEMENT SCHEDULE |                        |
|-------------------|------------------------|
| C1                | 1½" S9.5C              |
| C3                | 3" S9.5C               |
| D2                | 4" I19.0C              |
| E1                | 3" B25.0C              |
| E5                | 5½" B25.0C             |
| J1                | 4" ABC                 |
| K1                | CHEMICAL STABILIZATION |
| R1                | 2'-6" C&G              |
| R2                | 1'-6" C&G              |
| R3                | 2'-9" C&G              |
| S                 | 4" CONCRETE SIDEWALK   |
| T                 | EARTH MATERIAL         |
| U                 | EXISTING PAVEMENT      |

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| PAVEMENT SCHEDULE |                        |
|-------------------|------------------------|
| C1                | 1½" S9.5C              |
| C3                | 3" S9.5C               |
| D2                | 4" I19.0C              |
| E1                | 3" B25.0C              |
| E5                | 5½" B25.0C             |
| J1                | 4" ABC                 |
| K1                | CHEMICAL STABILIZATION |
| R1                | 2'-6" C&G              |
| R2                | 1'-6" C&G              |
| R3                | 2'-9" C&G              |
| S                 | 4" CONCRETE SIDEWALK   |
| T                 | EARTH MATERIAL         |
| U                 | EXISTING PAVEMENT      |

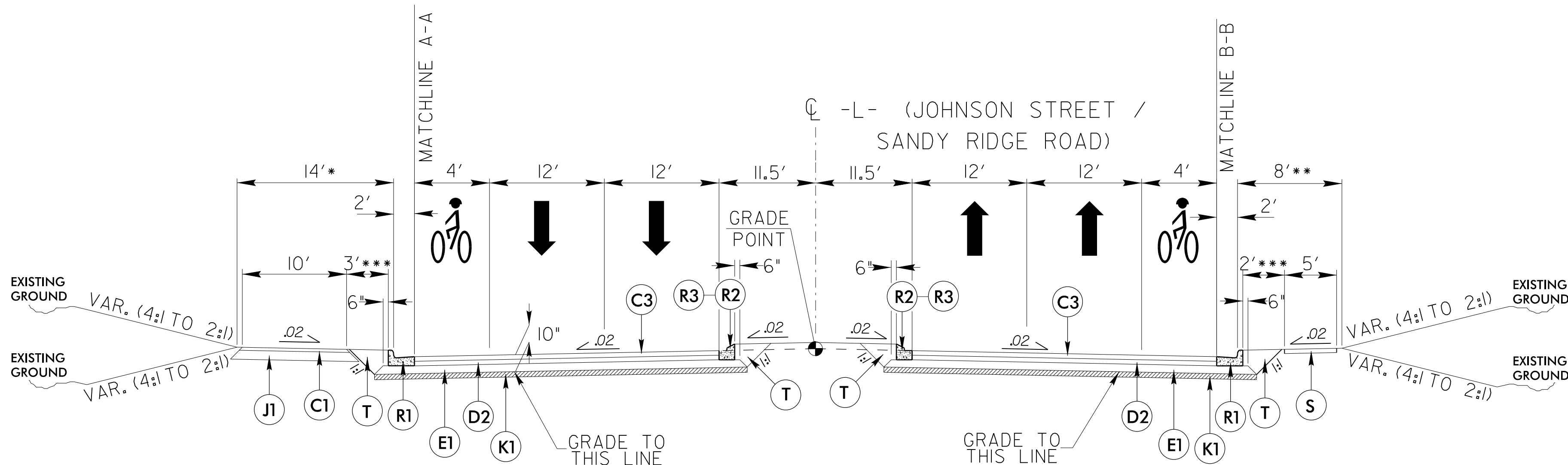
**AtkinsRéalis** 1616 EAST MILLBROOK ROAD, SUITE 160  
RALEIGH, NORTH CAROLINA 27609  
(919) 876-6888 NCBEES #F-0326

|                                                                                                |                                                                                     |
|------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| PROJECT REFERENCE NO.                                                                          | SHEET NO.                                                                           |
| U-4758                                                                                         | 2A-3                                                                                |
| RW SHEET NO.                                                                                   |                                                                                     |
| ROADWAY DESIGN ENGINEER                                                                        | PAVEMENT DESIGN ENGINEER                                                            |
|             |  |
| 5/30/2025                                                                                      | 5/30/2025                                                                           |
| <p align="center"><b>DOCUMENT NOT CONSIDERED FINAL<br/>UNLESS ALL SIGNATURES COMPLETED</b></p> |                                                                                     |

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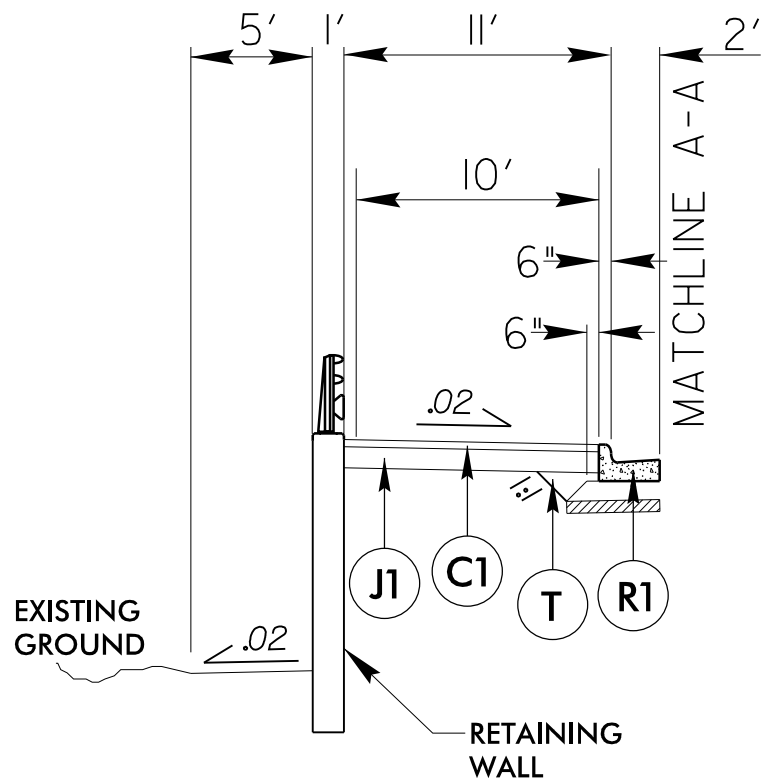
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### TYPICAL SECTION 5

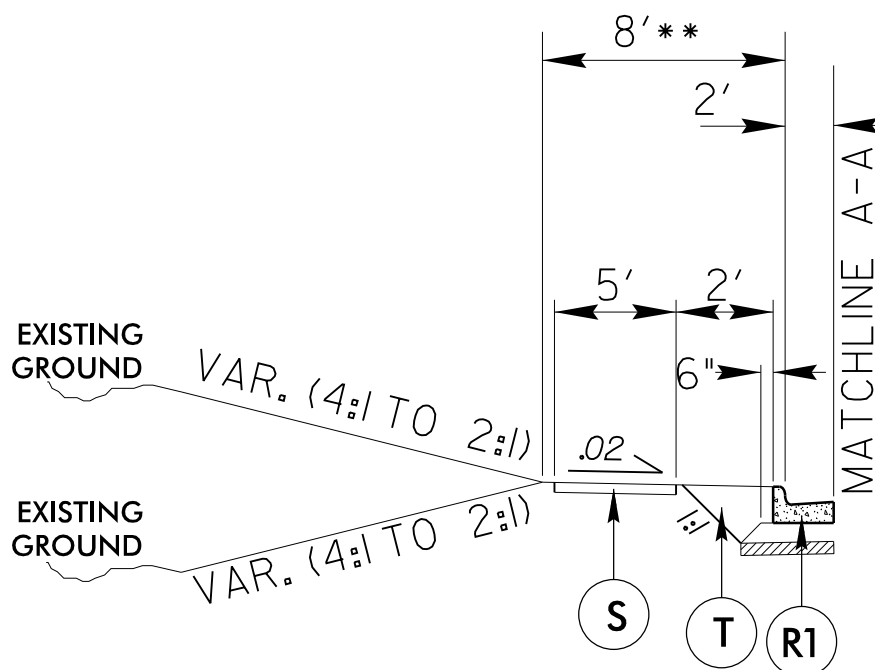
-L- STA. 49+55.00 TO -L- STA. 54+57.38 (BEGIN BRIDGE)  
-L- STA. 55+90.63 (END BRIDGE) TO -L- STA. 81+30.00  
-L- STA. 105+01.00 TO -L- STA. 108+70.00  
-L- STA. 161+90.00 TO -L- STA. 166+80.00  
-L- STA. 205+65.00 TO -L- STA. 211+00.00

NOTE: \* WIDEN BERM 2' FOR GUARDRAIL  
\*\* WIDEN BERM 6' FOR GUARDRAIL  
\*\*\* PLANTING STRIP WIDTHS VARY  
APPROACHING AND LEAVING THE BRIDGE  
SEE PLANS FOR DETAILS.  
SEE PLANS FOR MEDIAN AND  
LEFT TURN DETAILS AT INTERSECTIONS  
SEE PLANS FOR 1'-6\"/>



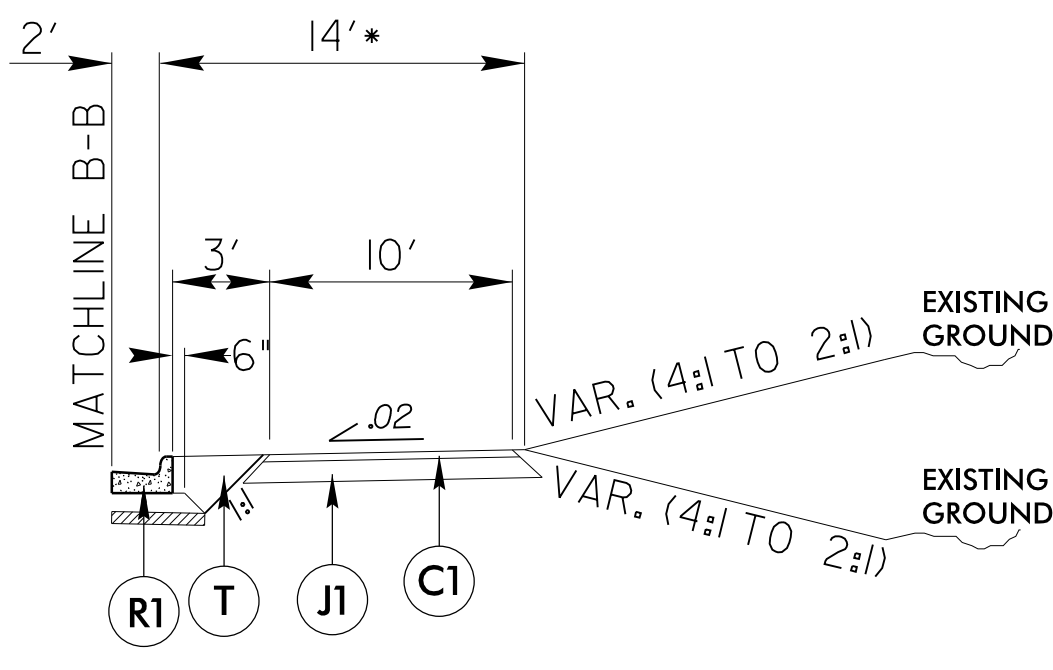
### DETAIL #2

-L- STA. 55+89.00 TO -L- STA. 58+85.00



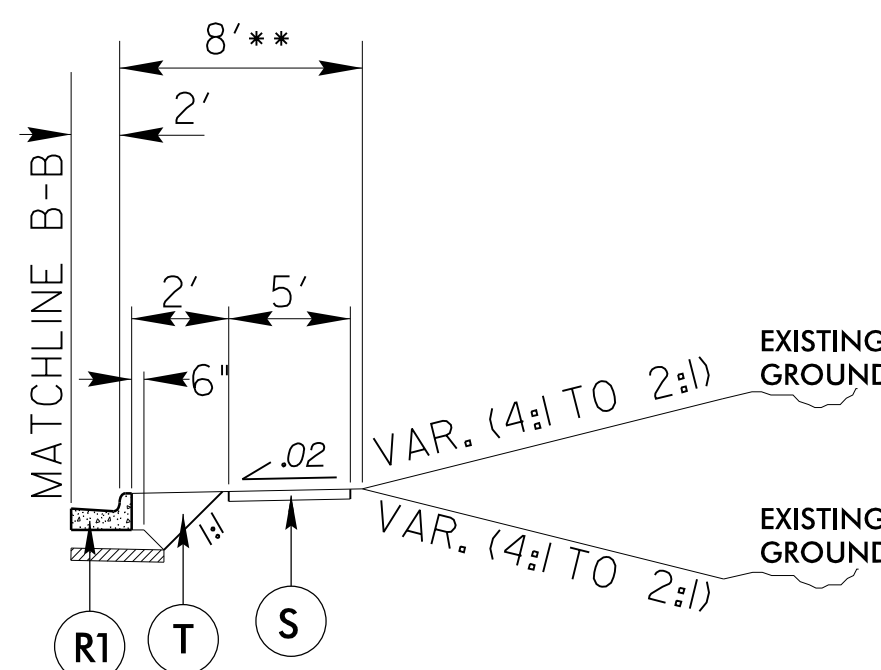
### DETAIL #5

-L- STA. 193+13.00 TO -L- STA. 223+83.00



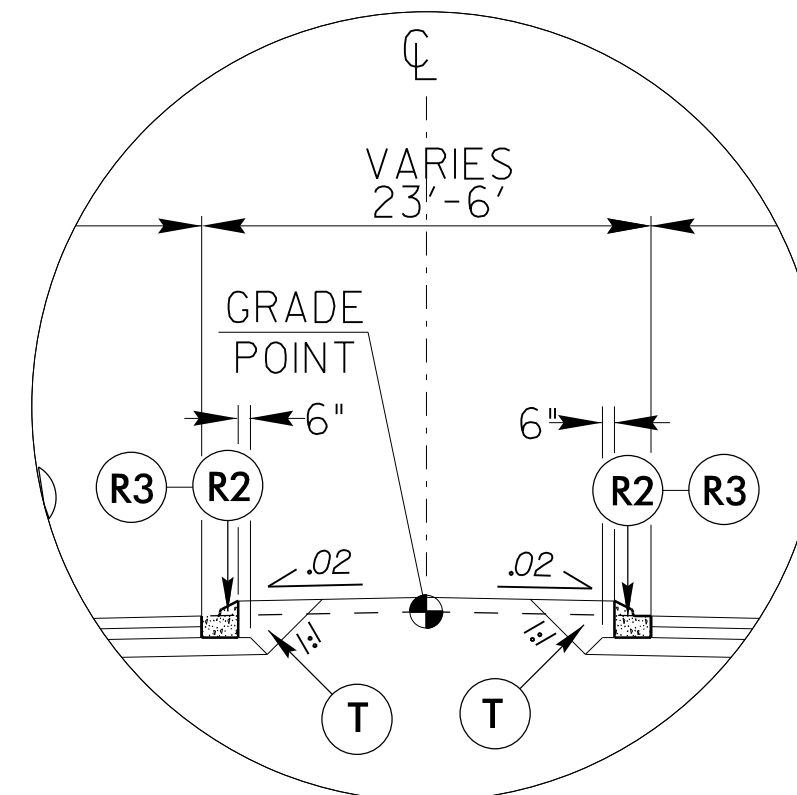
### DETAIL #6

-L- STA. 192+50.00 TO -L- STA. 223+83.00



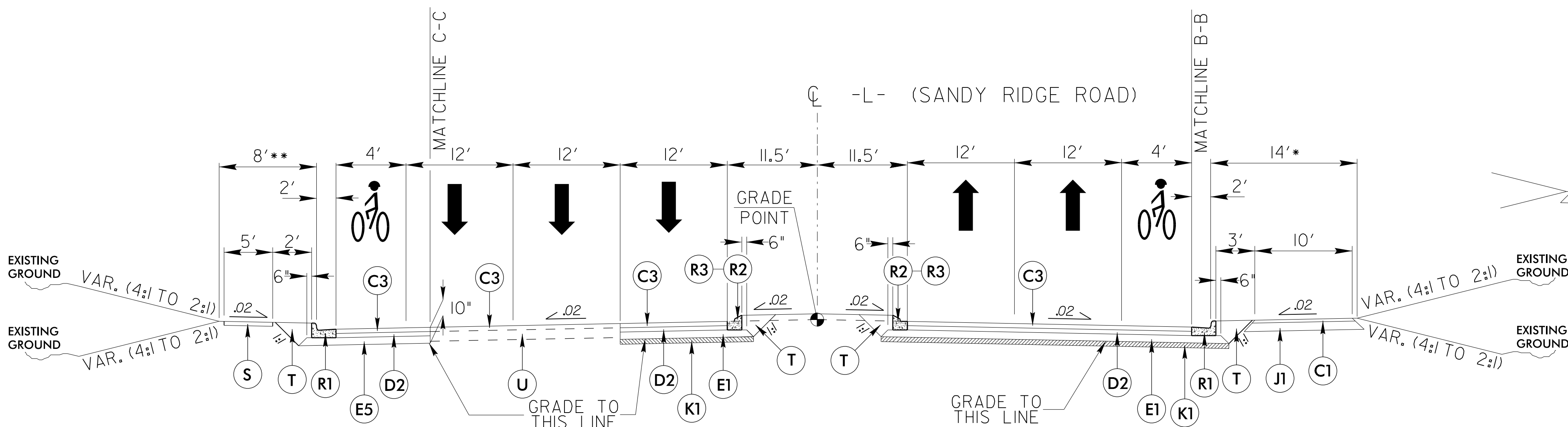
### DETAIL #7

-L- STA. 232+68.00 TO -L- STA. 236+82.00



### INSET #1 USE WITH TYPICAL SECTION 5

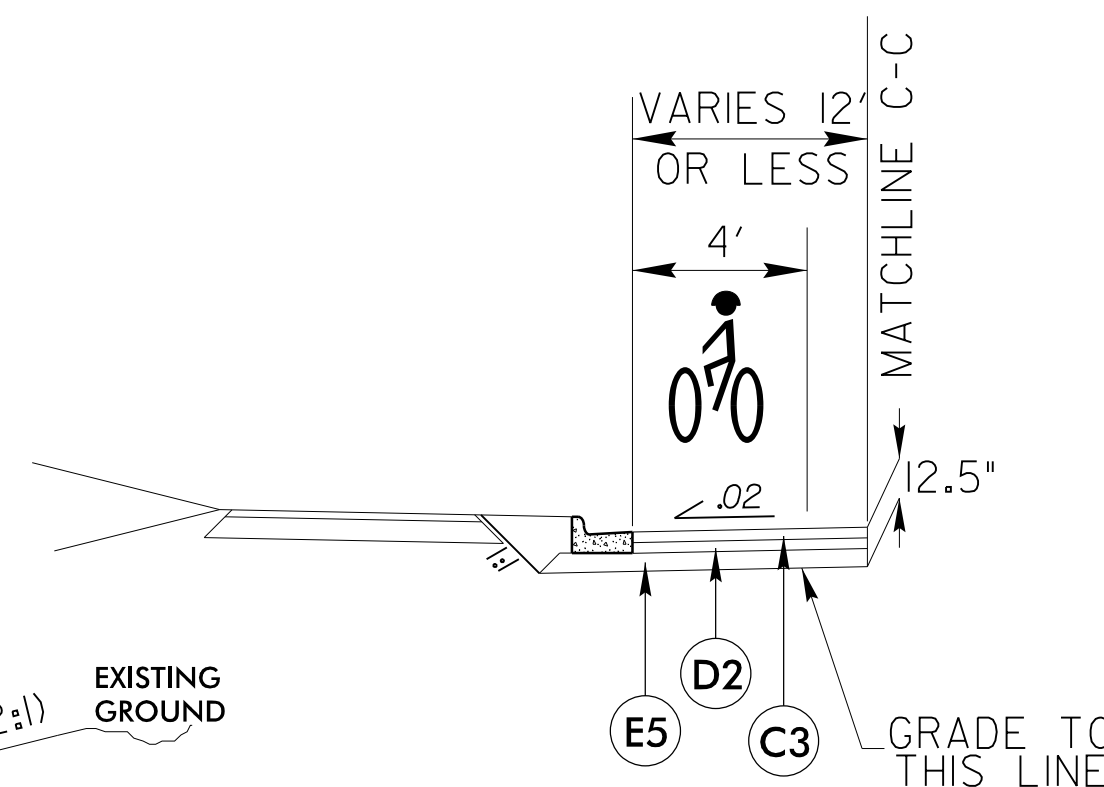
FROM -L- STA. 51+33.92 TO -L- STA. 59+13.32  
THE MEDIAN WIDTH VARIES FROM 23' TO 6' AND  
THE MEDIAN CURB AND GUTTER CHANGES TO A  
MONOLITHIC CONCRETE ISLAND. SEE PLANS FOR  
TRANSITION DETAILS.



### TYPICAL SECTION 6

-L- STA. 223+83.00 TO -L- STA. 236+82.00

NOTE: \* WIDEN BERM 2' FOR GUARDRAIL  
\*\* WIDEN BERM 6' FOR GUARDRAIL  
SEE PLANS FOR MEDIAN AND  
LEFT TURN DETAILS AT INTERSECTIONS  
SEE PLANS FOR 1'-6\"/>



### DETAIL #19

USE FOR NARROW WIDENING  
-L- STA. 234+09.00 TO  
-L- STA. 235+04.00

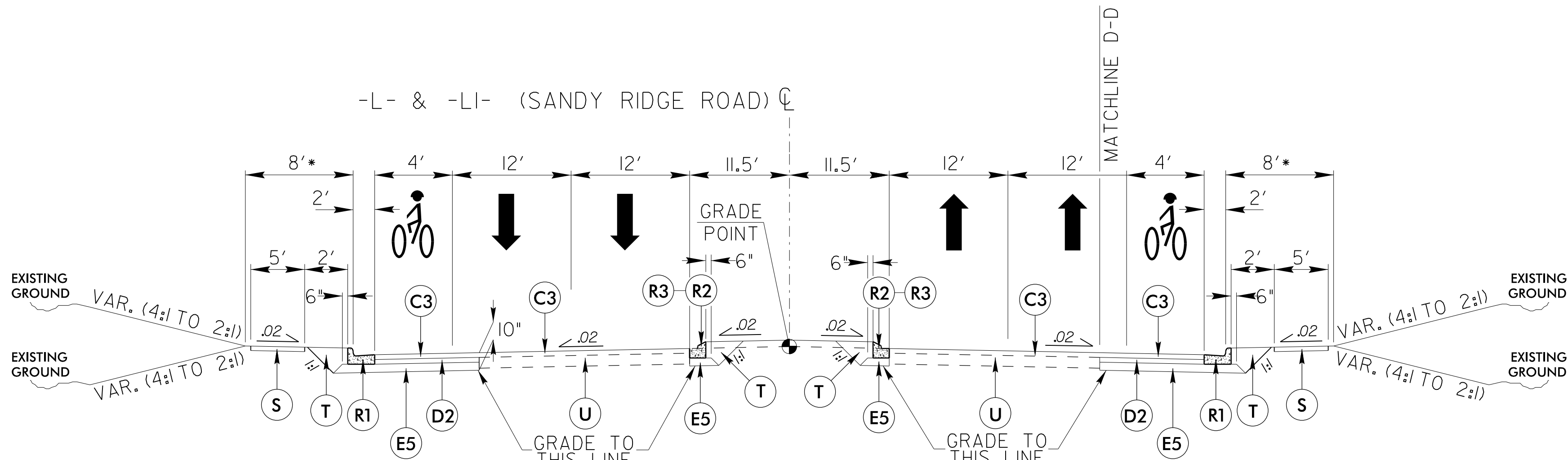
### PAVEMENT SCHEDULE

|    |                        |
|----|------------------------|
| C1 | 1 1/2" S9.5C           |
| C3 | 3" S9.5C               |
| D2 | 4" II9.0C              |
| E1 | 3" B25.0C              |
| E5 | 5 1/2" B25.0C          |
| J1 | 4" ABC                 |
| K1 | CHEMICAL STABILIZATION |
| R1 | 2'-6" C&G              |
| R2 | 1'-6" C&G              |
| R3 | 2'-9" C&G              |
| S  | 4" CONCRETE SIDEWALK   |
| T  | EARTH MATERIAL         |
| U  | EXISTING PAVEMENT      |

8/17/99

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\$\$\$\$\$USERNAME\$\$\$\$\$

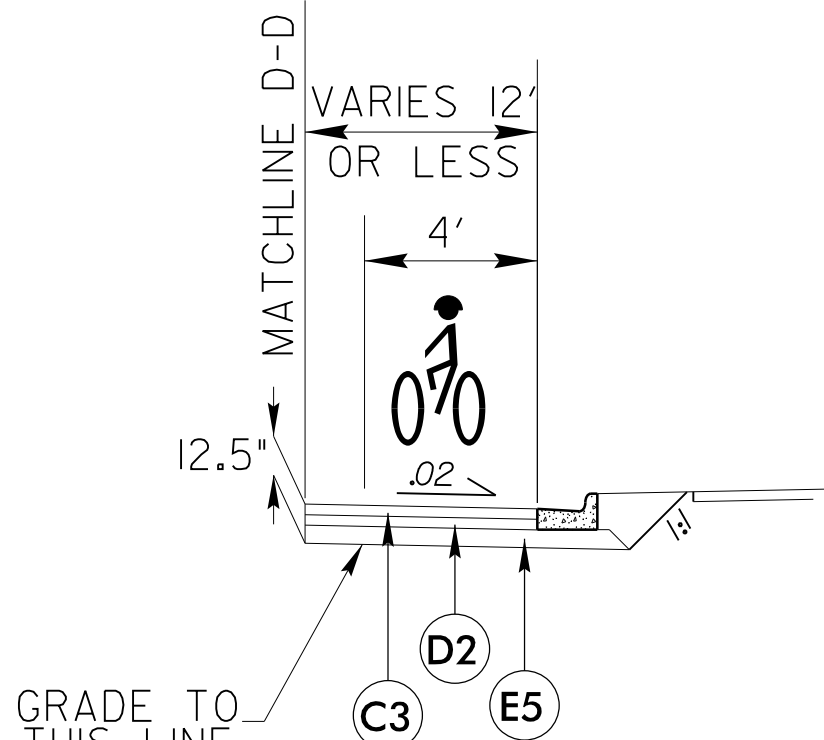


NOTE: \* WIDEN BERM 6' FOR GUARDRAIL

SEE PLANS FOR MEDIAN AND  
LEFT TURN DETAILS AT INTERSECTIONS  
SEE PLANS FOR 1'-6" C&G AND 2'-9" C&G LOCATIONS

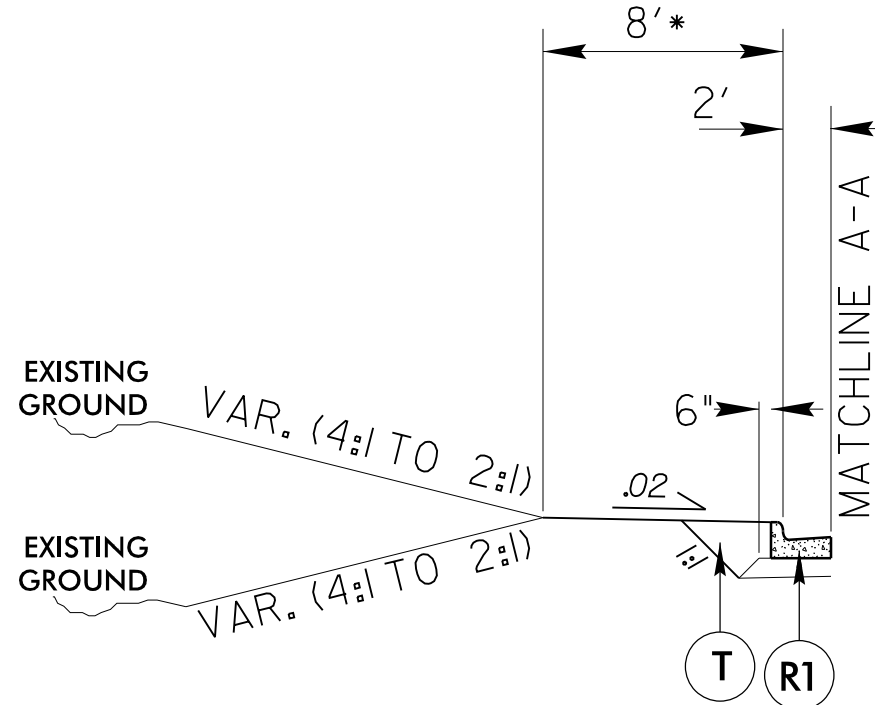
### TYPICAL SECTION 7

-L- STA. 236+82.00 TO -L- STA. 238+71.37  
-LI- STA. 10+60.00 TO -LI- STA. 18+75.00



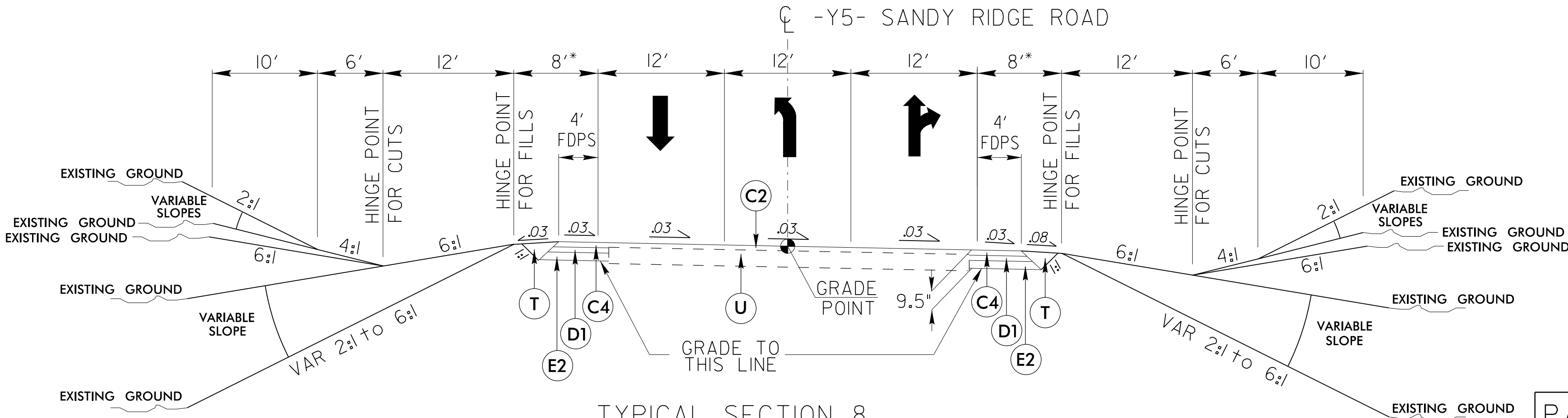
### DETAIL #20

USE FOR NARROW WIDENING  
-LI- STA. 16+56.00 TO -LI- STA. 17+88.00



### DETAIL #10

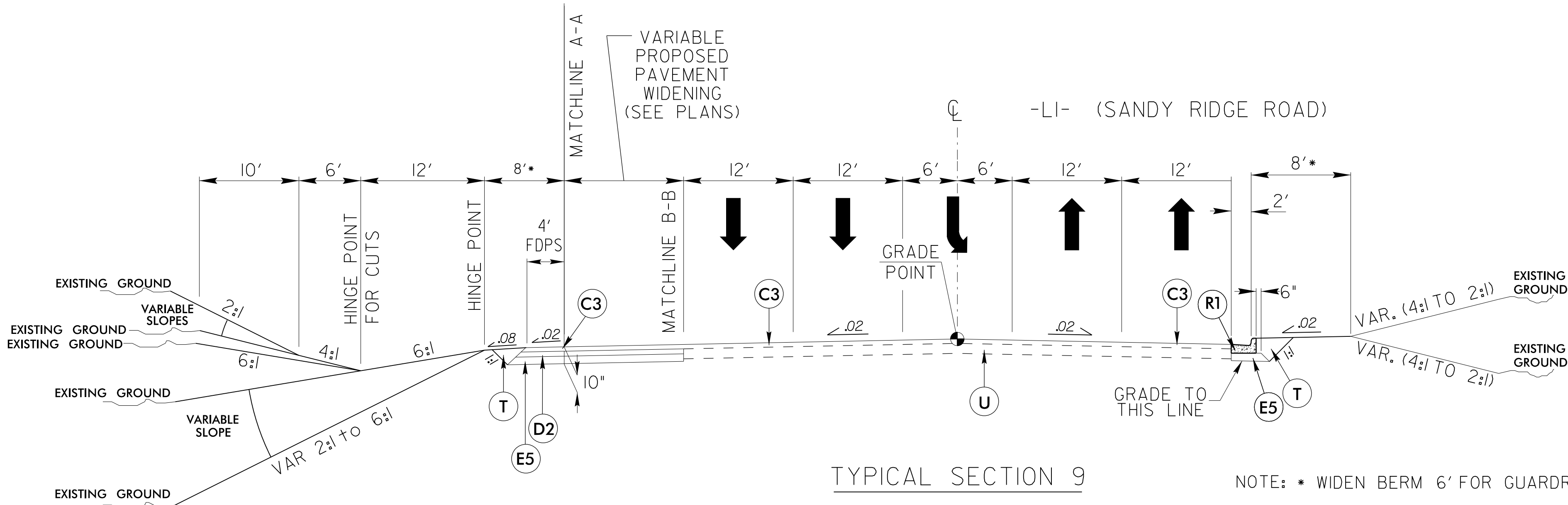
-LI- STA. 18+75.00 TO -LI- STA. 19+07.56



NOTE: \*WIDEN SHOULDER 3' FOR GUARDRAIL

### TYPICAL SECTION 8

-Y5- STA. 17+80.00 TO -Y5- STA. 19+18.80

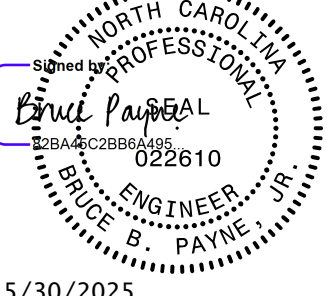
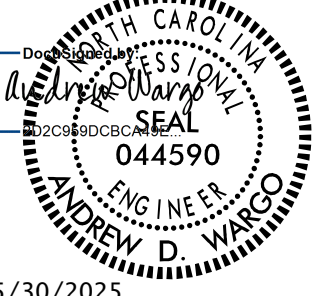


### TYPICAL SECTION 9

-LI- STA. 18+75.00 TO -LI- STA. 21+18.29

NOTE: \* WIDEN BERM 6' FOR GUARDRAIL

SEE PLANS FOR MEDIAN AND  
LEFT TURN DETAILS AT INTERSECTIONS  
SEE PLANS FOR VARIABLE SHOULDER WIDTH

| PROJECT REFERENCE NO.                                                               | SHEET NO.                                                                           |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| U-4758                                                                              | 2A-5                                                                                |
| RW SHEET NO.                                                                        |                                                                                     |
| ROADWAY DESIGN ENGINEER                                                             | PAVEMENT DESIGN ENGINEER                                                            |
|  |  |
| 5/30/2025                                                                           | 5/30/2025                                                                           |
| DOCUMENT NOT CONSIDERED FINAL<br>UNLESS ALL SIGNATURES COMPLETED                    |                                                                                     |

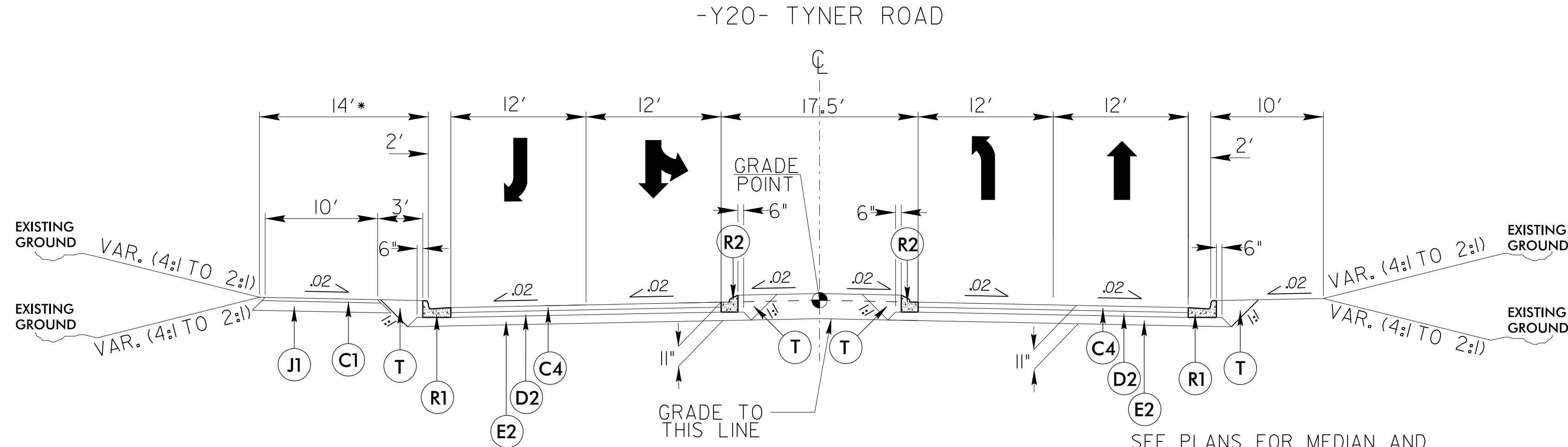
**AtkinsRéalis** 1616 EAST WILLBROOK ROAD, SUITE 160  
RALEIGH, NORTH CAROLINA 27609  
(919) 876-6888 NCBEES #F-0326

| PAVEMENT SCHEDULE |                        |
|-------------------|------------------------|
| C2                | 1 1/2" S9.5C           |
| C3                | 3" S9.5C               |
| C4                | 3" S9.5B               |
| D1                | 2 1/2" 119.0C          |
| D2                | 4" 119.0C              |
| E2                | 4" B25.0C              |
| E5                | 5 1/2" B25.0C          |
| K1                | CHEMICAL STABILIZATION |
| R1                | 2'-6" C&G              |
| R2                | 1'-6" C&G              |
| R3                | 2'-9" C&G              |
| S                 | 4" CONCRETE SIDEWALK   |
| T                 | EARTH MATERIAL         |
| U                 | EXISTING PAVEMENT      |

8/17/99

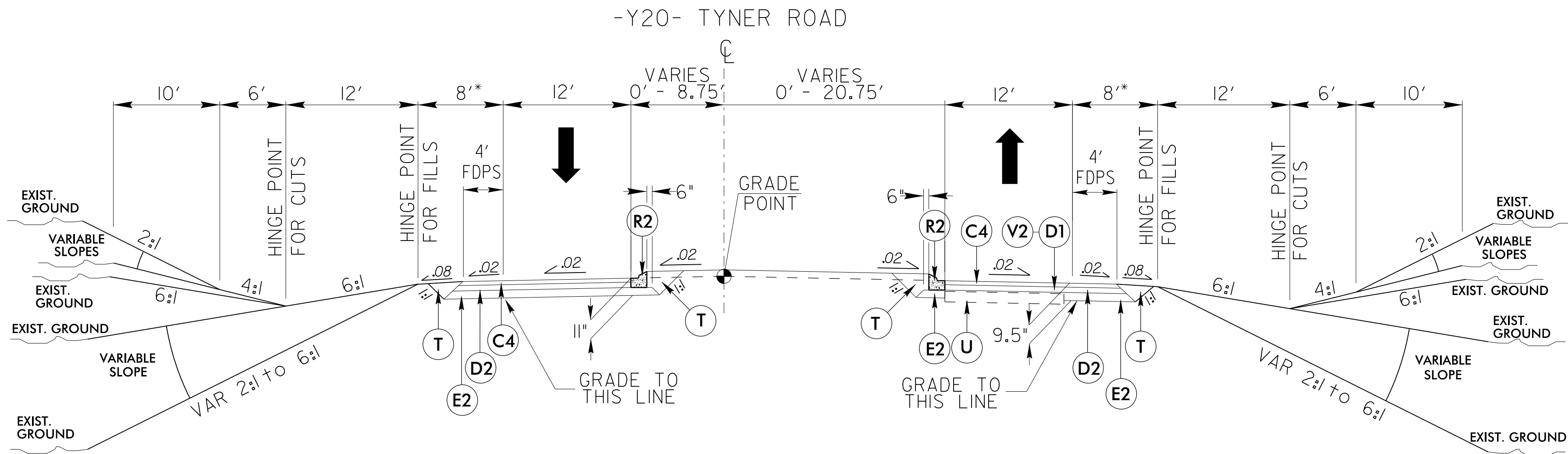
REVISIONS

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\$\$\$\$\$USERNAME\$\$\$\$\$



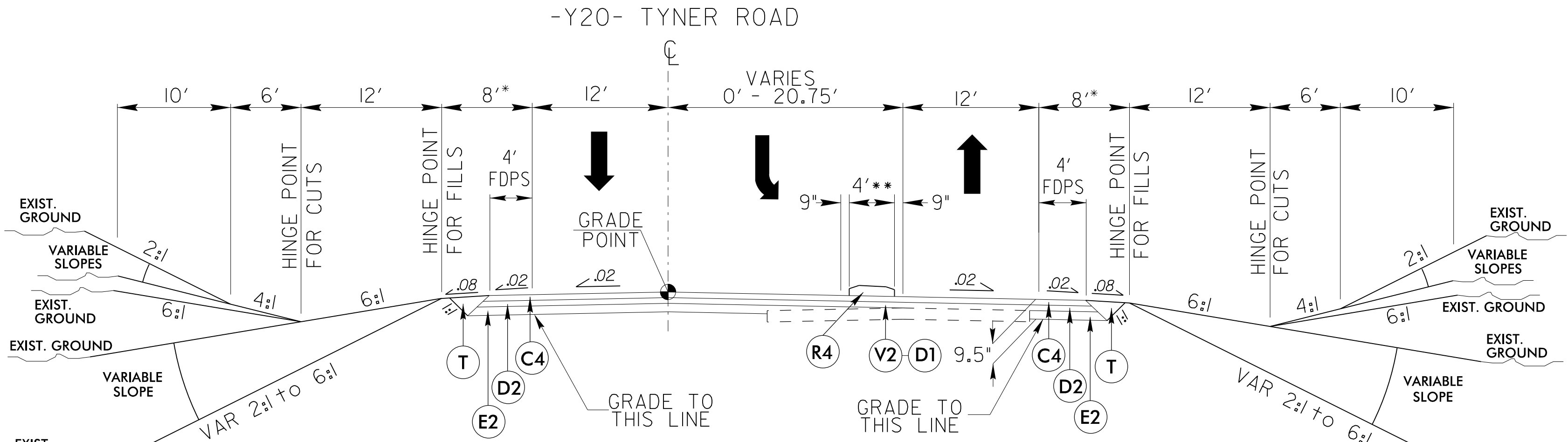
TYPICAL SECTION 10  
-Y20- STA. 10+51.62 TO -Y20- STA. 18+94.00

NOTE: \*WIDEN BERM 2' FOR GUARDRAIL  
\*\*MONOLITHIC ISLAND WIDTH VARIES 4'-10'  
AND TRANSITIONS FROM MONOLITHIC ISLAND  
TO CURB AND GUTTER. SEE PLAN VIEW  
FOR DETAILS.

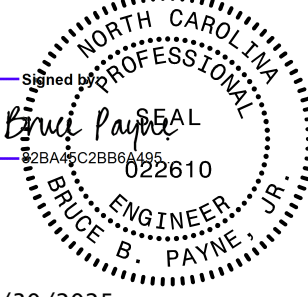
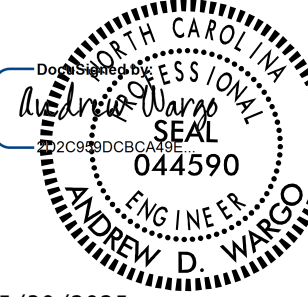


TYPICAL SECTION 11  
-Y20- STA. 18+94.00 TO -Y20- STA. 22+20.00

NOTE: \*WIDEN SHOULDER 3' FOR GUARDRAIL



TYPICAL SECTION 12  
-Y20- STA. 22+20.00 TO -Y20- STA. 32+00.00

| PROJECT REFERENCE NO.                                                               | SHEET NO.                                                                           |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| U-4758                                                                              | 2A-6                                                                                |
| R/W SHEET NO.                                                                       |                                                                                     |
| ROADWAY DESIGN ENGINEER                                                             | PAVEMENT DESIGN ENGINEER                                                            |
|  |  |
| 5/30/2025                                                                           | 5/30/2025                                                                           |
| DOCUMENT NOT CONSIDERED FINAL<br>UNLESS ALL SIGNATURES COMPLETED                    |                                                                                     |

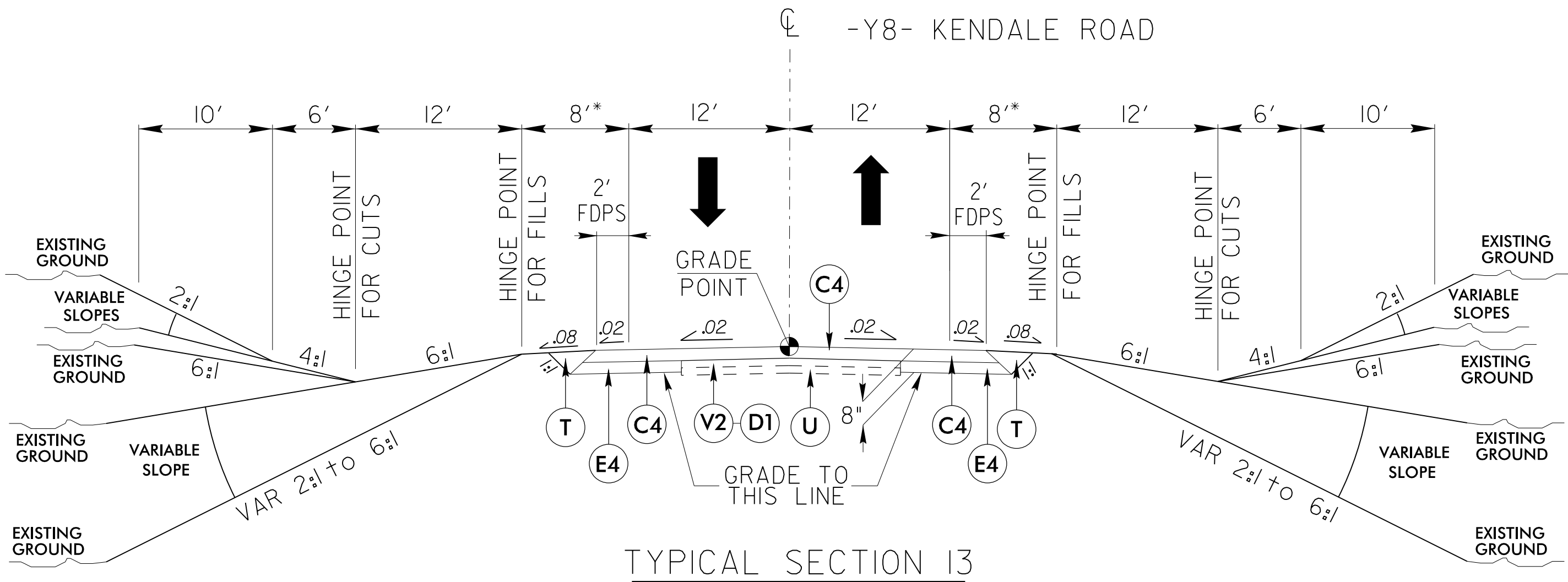
**AtkinsRéalis** 1616 EAST MILLBROOK ROAD, SUITE 160  
RALEIGH, NORTH CAROLINA 27609  
(919) 876-6888 NCBEES #F-0326

| PAVEMENT SCHEDULE |                                |
|-------------------|--------------------------------|
| C1                | 1 1/2" S9.5B                   |
| C4                | 3" S9.5B                       |
| D1                | 2 1/2" I19.0C                  |
| D2                | 4" I19.0C                      |
| E2                | 4" B25.0C                      |
| J1                | PROP. 4" AGGREGATE BASE COURSE |
| R1                | 2'-6" CONCRETE CURB AND GUTTER |
| R2                | 1'-6" CONCRETE CURB AND GUTTER |
| R4                | 5" MONOLITHIC CONCRETE ISLAND  |
| T                 | EARTH MATERIAL                 |
| U                 | EXISTING PAVEMENT              |
| V2                | 2.5" MILLING                   |

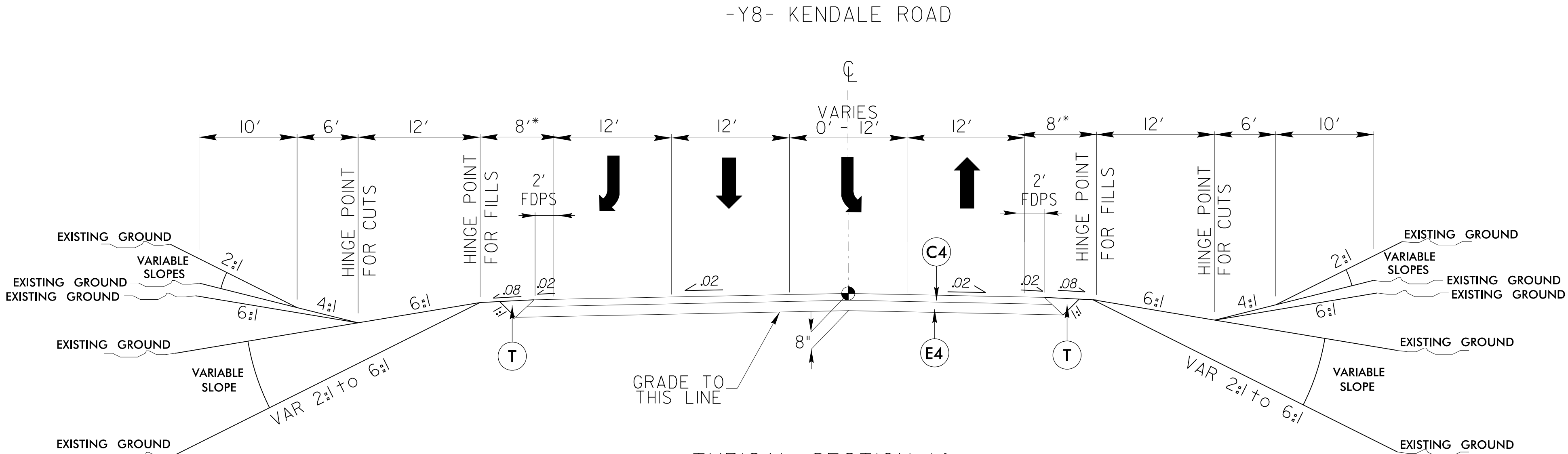
8/17/99

REVISIONS

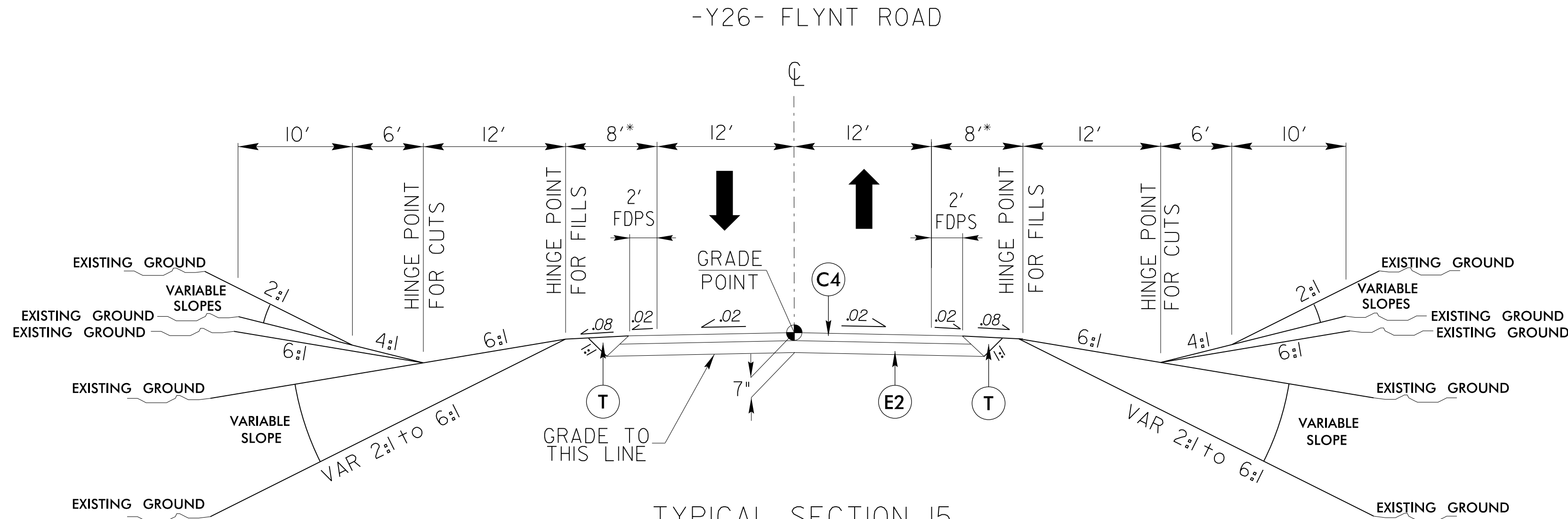
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-Y8- STA. 15+21.88 TO -Y8- STA. 23+30.00  
NOTE: \*WIDEN SHOULDER 3' FOR GUARDRAIL

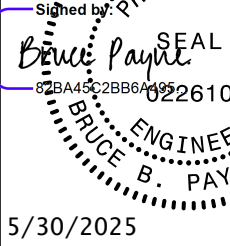
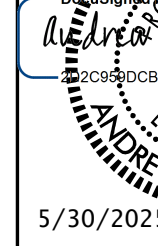


-Y8- STA. 10+39.50 TO -Y8- STA. 15+21.88  
NOTE: \*WIDEN SHOULDER 3' FOR GUARDRAIL



-Y26- STA. 10+12.00 TO -Y26- STA. 11+71.15  
NOTE: \*WIDEN SHOULDER 3' FOR GUARDRAIL

| PAVEMENT SCHEDULE |                   |
|-------------------|-------------------|
| C4                | 3" S9.5B          |
| D1                | 2½" I19.0C        |
| E2                | 4" B25.0C         |
| E4                | 5" B25.0C         |
| T                 | EARTH MATERIAL    |
| U                 | EXISTING PAVEMENT |
| V2                | 2.5" MILLING      |

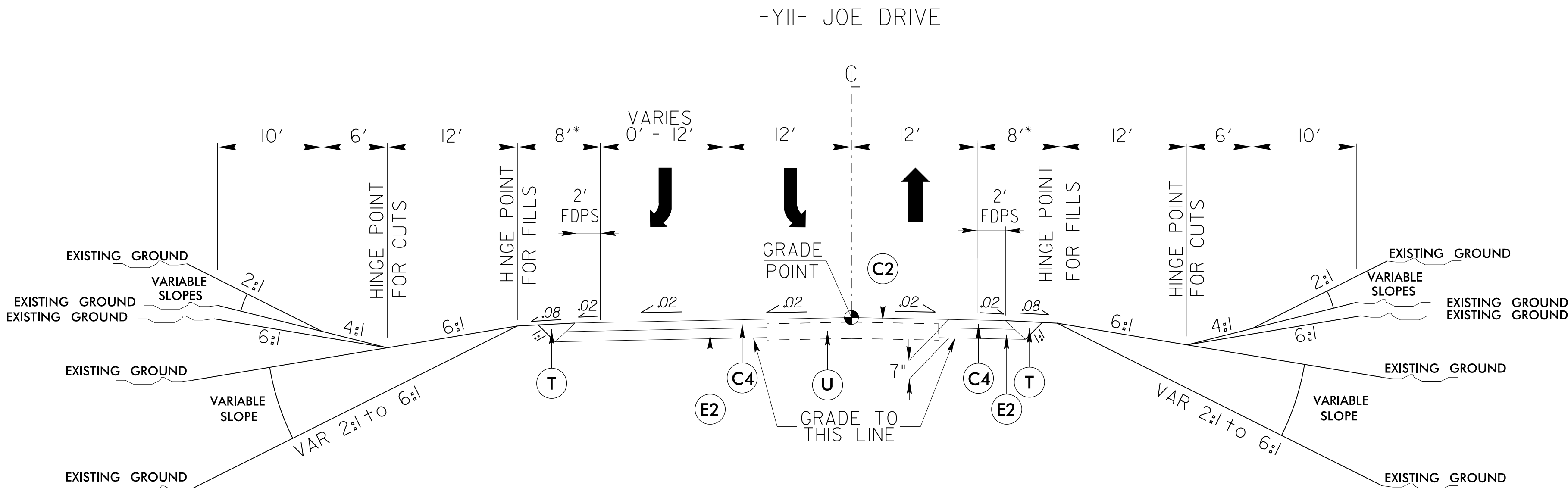
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| U-4758                                                                              |  | 2A-7                                                                                |  |
| R/W SHEET NO.                                                                       |  |                                                                                     |  |
| ROADWAY DESIGN ENGINEER                                                             |  | PAVEMENT DESIGN ENGINEER                                                            |  |
|  |  |  |  |
| DOCUMENT NOT CONSIDERED FINAL<br>UNLESS ALL SIGNATURES COMPLETED                    |  |                                                                                     |  |

**AtkinsRéalis** 1616 EAST MILLBROOK ROAD, SUITE 160  
RALEIGH, NORTH CAROLINA 27609  
(919) 876-6888 NCBEES #F-0326

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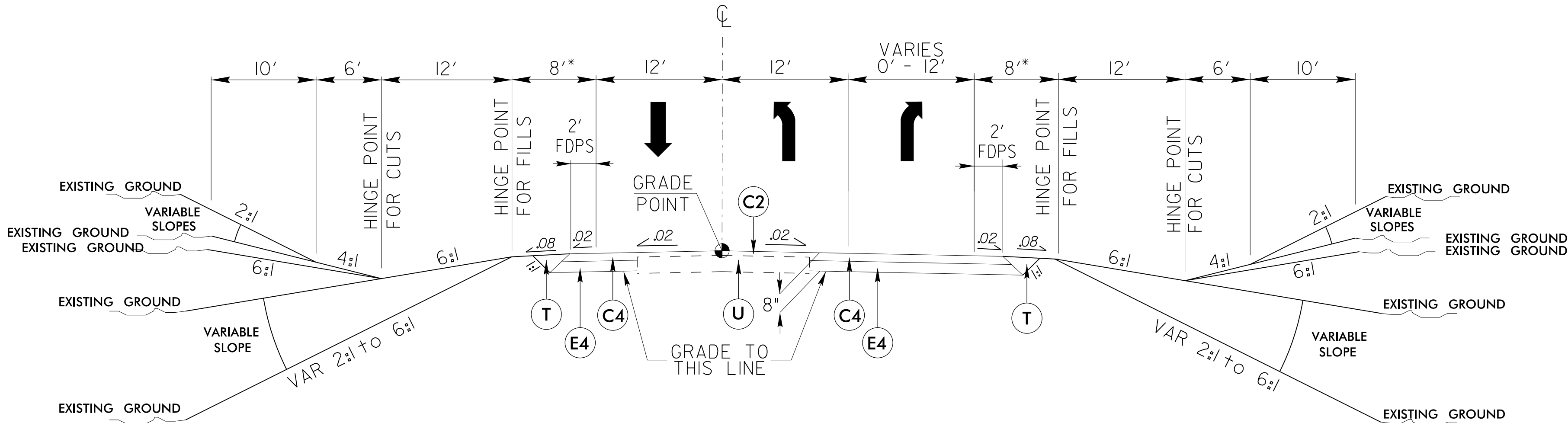
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NOTE: \*WIDEN SHOULDER 3' FOR GUARDRAIL

-YII- STA. 10+39.57 TO -YII- STA. 16+00.00

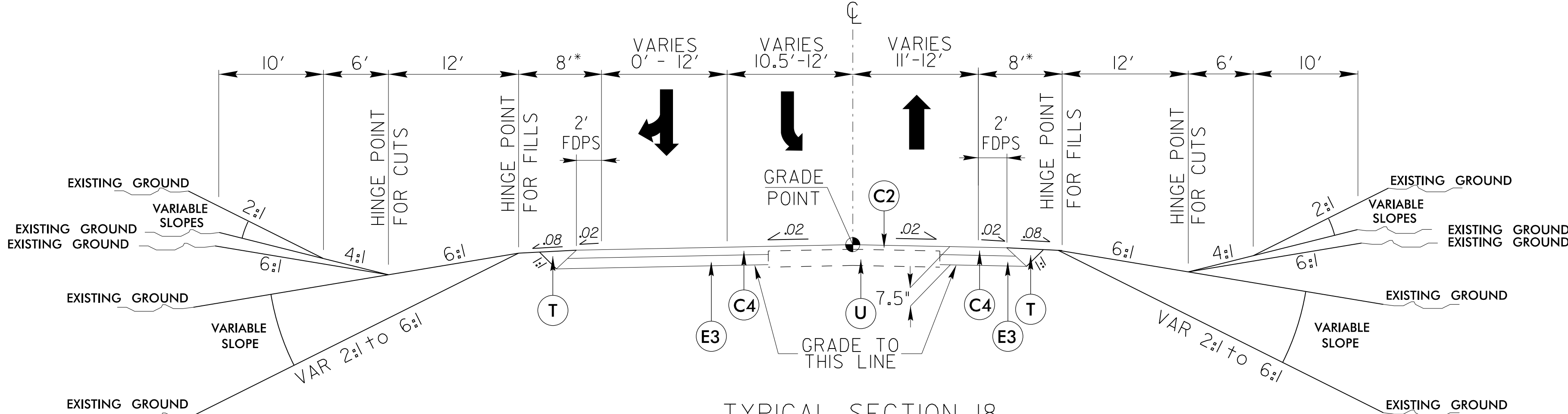
-YI3- CLINARD FARM ROAD



NOTE: \*WIDEN SHOULDER 3' FOR GUARDRAIL

-YI3- STA. 10+55.00 TO -YI3- STA. 16+00.95

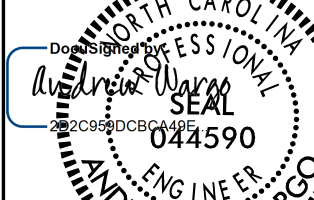
-YI5- GALLIMORE DAIRY ROAD



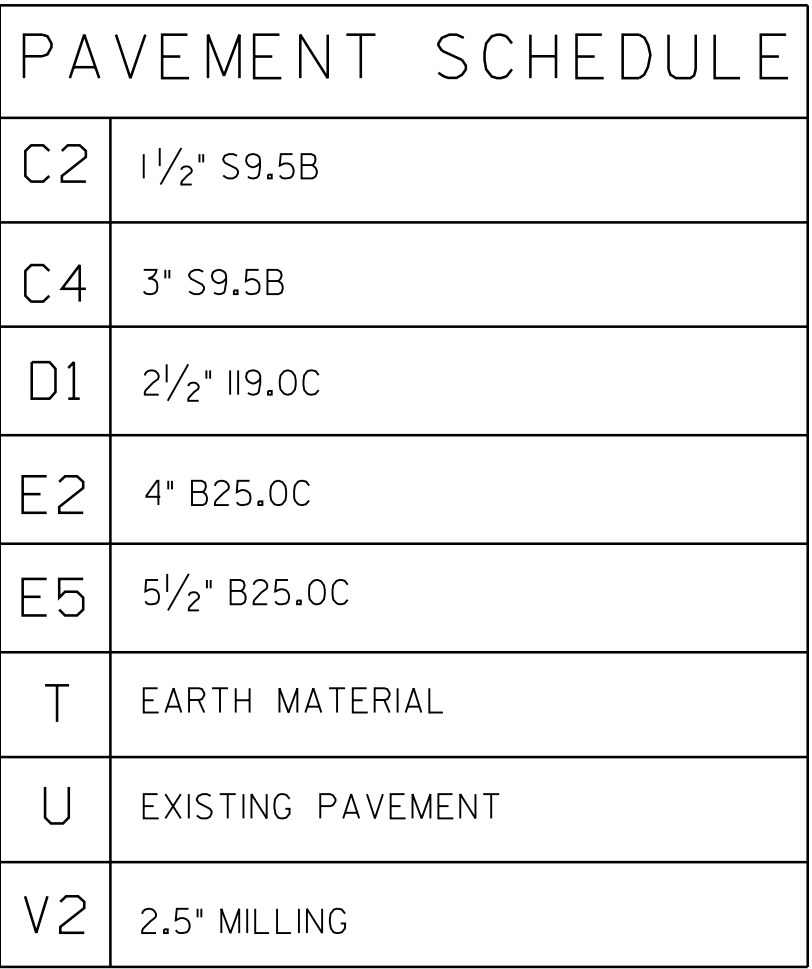
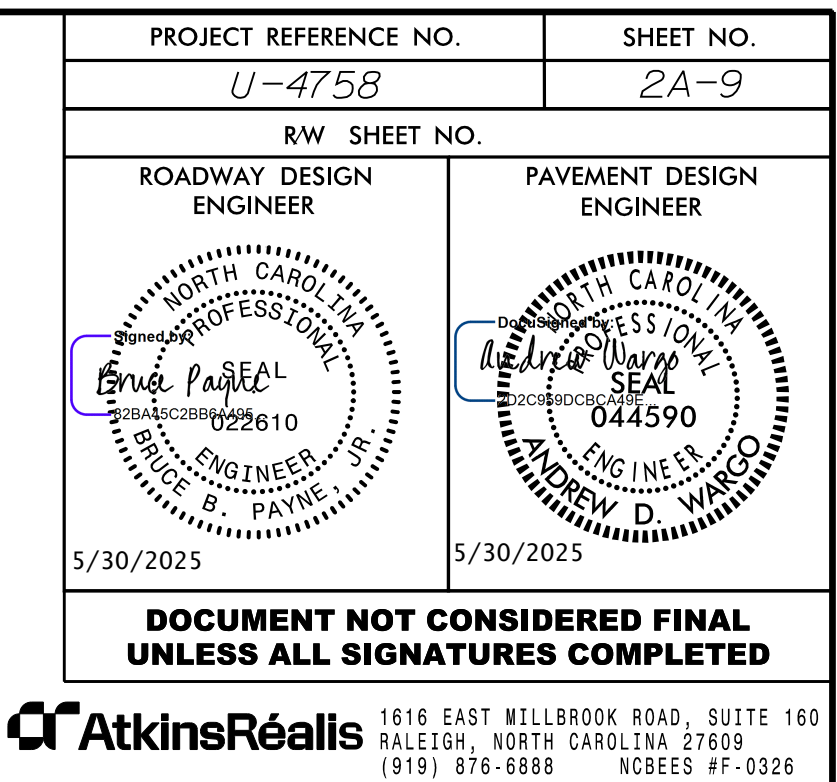
-YI5- STA. 10+53.33 TO -YI5- STA. 14+50.00

NOTE: \*WIDEN SHOULDER 3' FOR GUARDRAIL

| PAVEMENT SCHEDULE |                   |
|-------------------|-------------------|
| C2                | 1 1/2" S9.5B      |
| C4                | 3" S9.5B          |
| E2                | 4" B25.0C         |
| E3                | 4 1/2" B25.0C     |
| E4                | 5" B25.0C         |
| T                 | EARTH MATERIAL    |
| U                 | EXISTING PAVEMENT |

| PROJECT REFERENCE NO.                                                               |  | SHEET NO.                                                                           |  |
|-------------------------------------------------------------------------------------|--|-------------------------------------------------------------------------------------|--|
| U-4758                                                                              |  | 2A-8                                                                                |  |
| RW SHEET NO.                                                                        |  |                                                                                     |  |
| ROADWAY DESIGN ENGINEER                                                             |  | PAVEMENT DESIGN ENGINEER                                                            |  |
|  |  |  |  |
| DOCUMENT NOT CONSIDERED FINAL<br>UNLESS ALL SIGNATURES COMPLETED                    |  |                                                                                     |  |

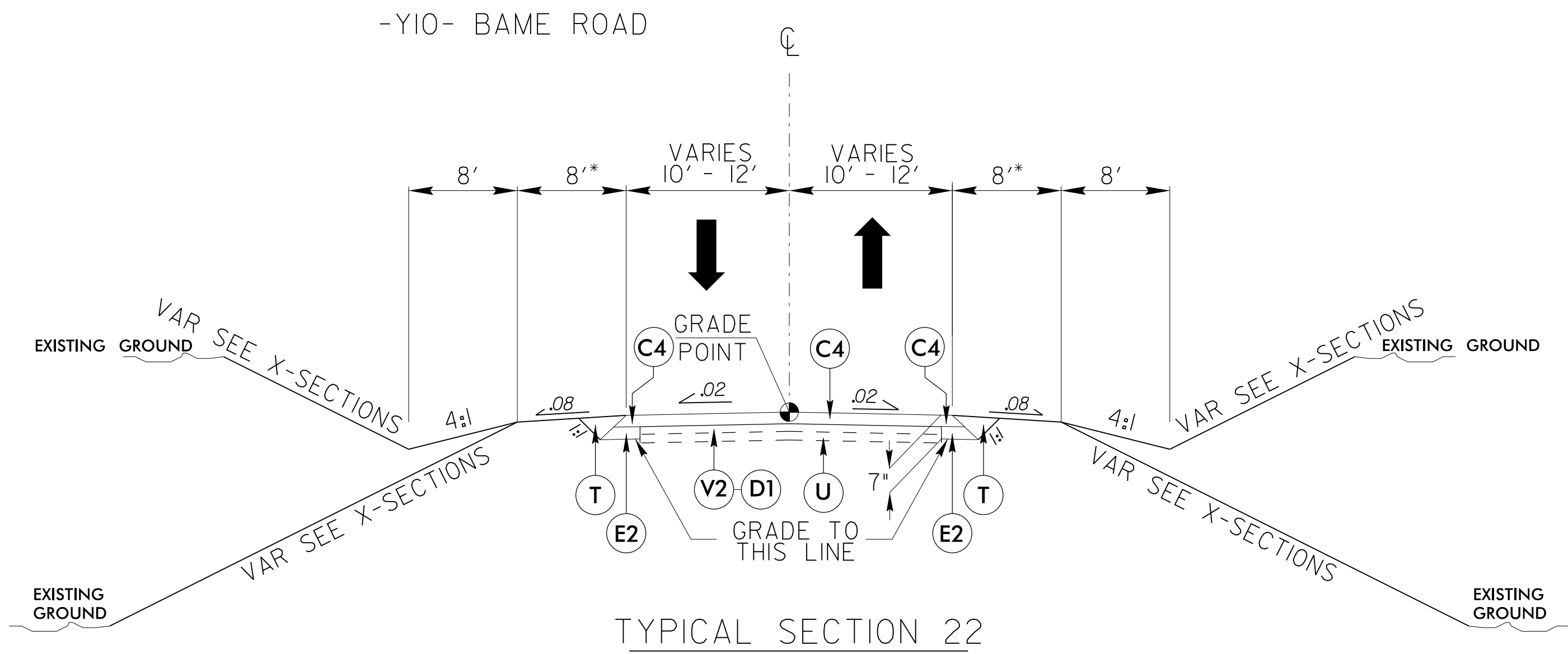
**AtkinsRéalis** 1616 EAST MILLBROOK ROAD, SUITE 160  
RALEIGH, NORTH CAROLINA 27609  
(919) 876-6888 NCBEES #F-0326



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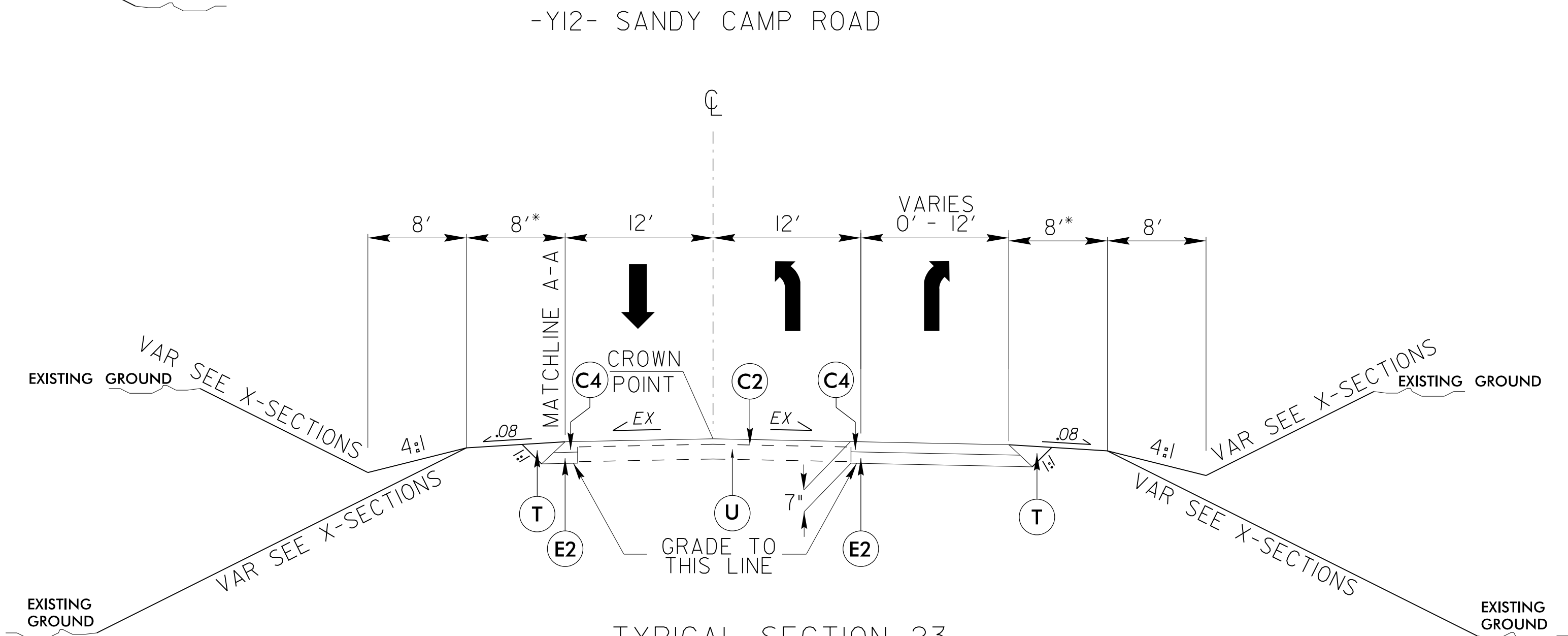
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TYPICAL SECTION 22

-Y10- STA. 10+00.00 TO -Y10- STA. 14+85.00

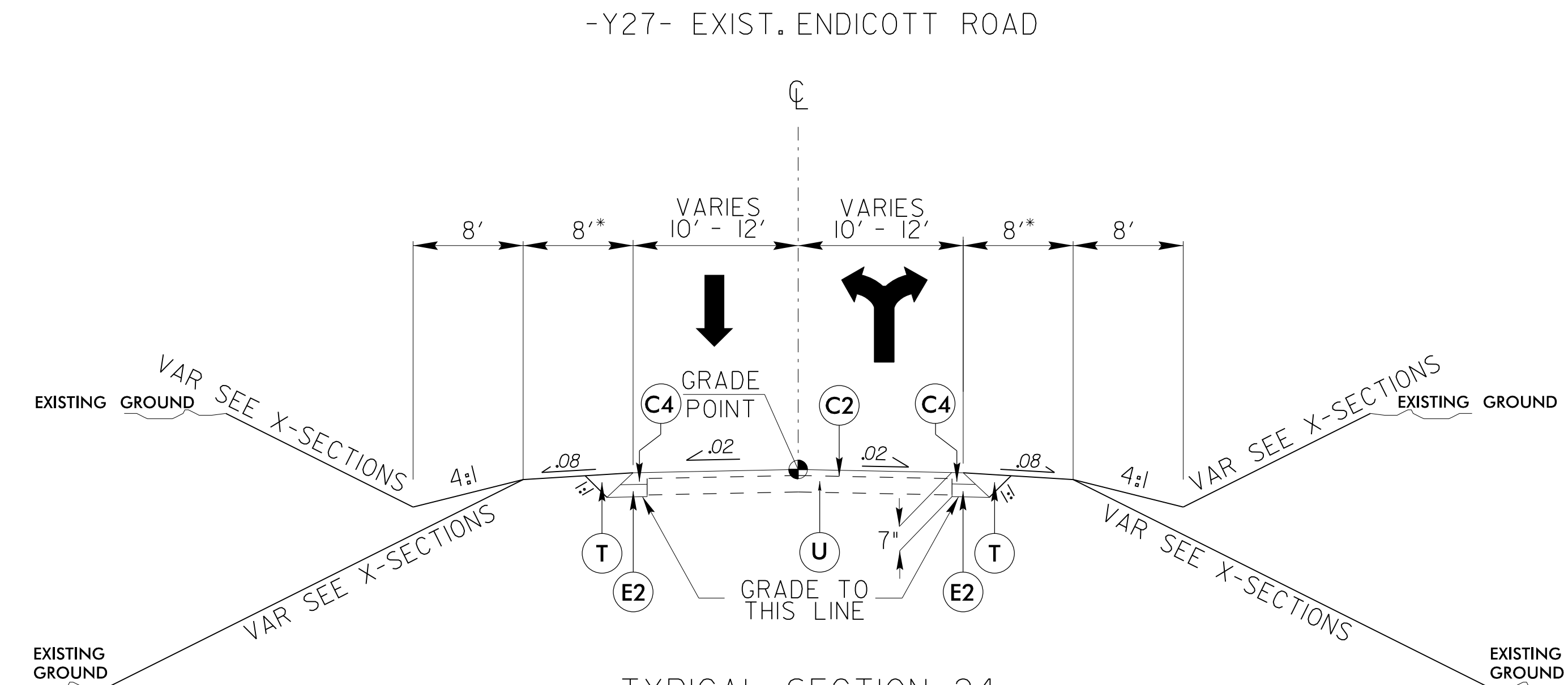
NOTE: \*WIDEN SHOULDER 3' FOR GUARDRAIL



TYPICAL SECTION 23

-Y12- STA. 11+75.00 TO -Y12- STA. 16+78.94

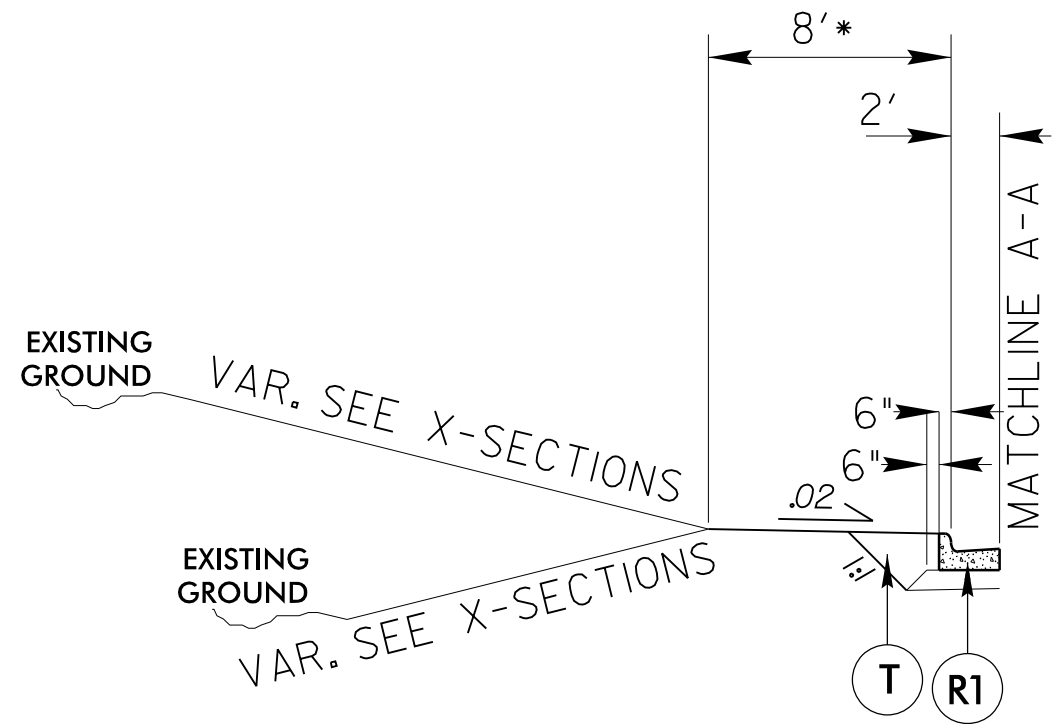
NOTE: \*WIDEN SHOULDER 3' FOR GUARDRAIL



TYPICAL SECTION 24

-Y27- STA. 13+15.00 TO -Y27- STA. 15+56.71

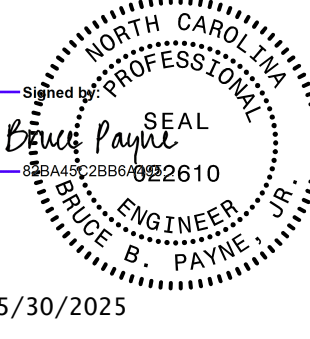
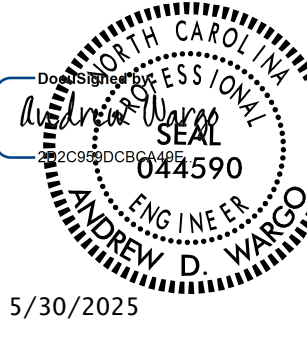
NOTE: \*WIDEN SHOULDER 3' FOR GUARDRAIL



DETAIL #11

-Y12- STA. 12+54.22 TO -Y12- STA. 16+78.94

| PAVEMENT SCHEDULE |                   |
|-------------------|-------------------|
| C2                | 1 1/2" S9.5B      |
| C4                | 3" S9.5B          |
| D1                | 2 1/2" 119.0C     |
| E2                | 4" B25.0C         |
| R1                | 2'-6" C&G         |
| T                 | EARTH MATERIAL    |
| U                 | EXISTING PAVEMENT |
| V2                | 2.5" MILLING      |

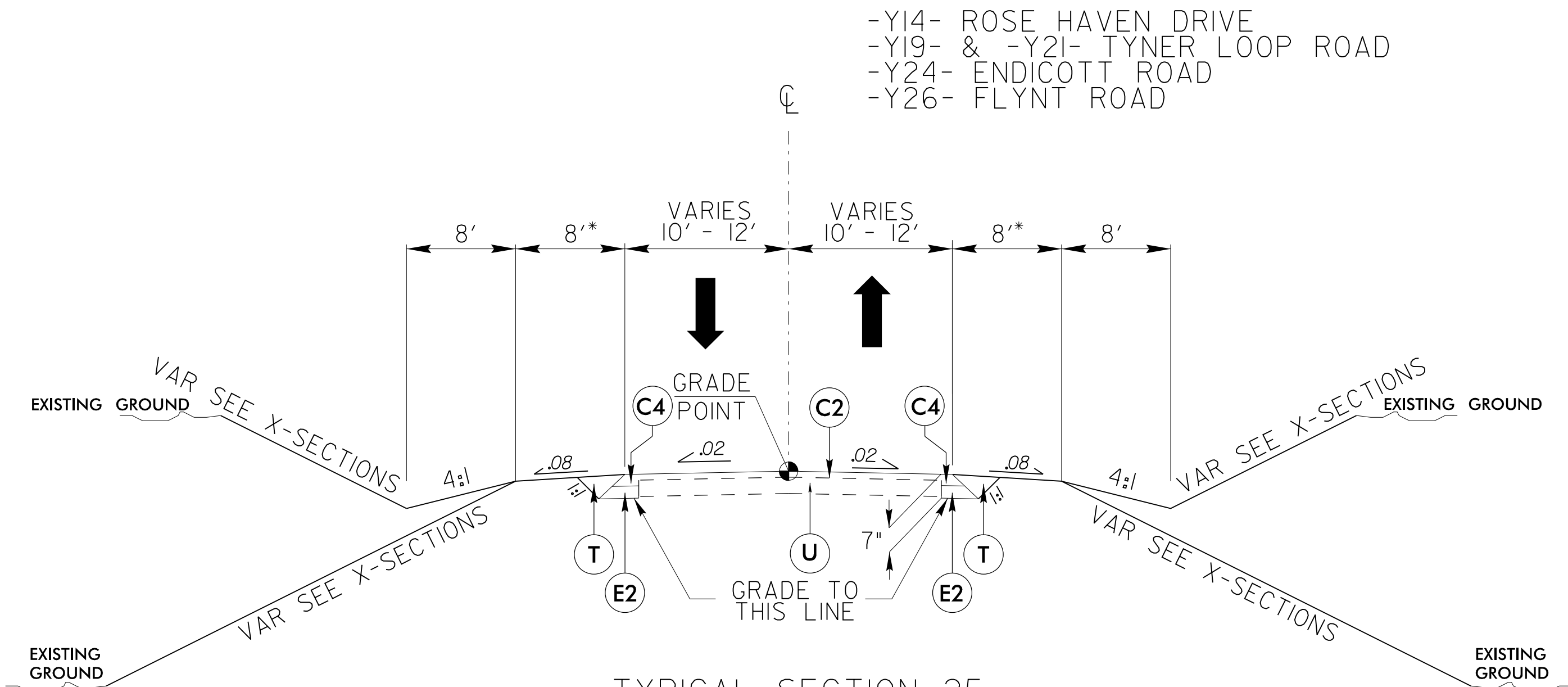
| PROJECT REFERENCE NO.                                                               |                                                                                     | SHEET NO.                |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------|
| U-4758                                                                              |                                                                                     | 2A-10                    |
| R/W SHEET NO.                                                                       |                                                                                     |                          |
| ROADWAY DESIGN ENGINEER                                                             |                                                                                     | PAVEMENT DESIGN ENGINEER |
|  |  |                          |
| DOCUMENT NOT CONSIDERED FINAL<br>UNLESS ALL SIGNATURES COMPLETED                    |                                                                                     |                          |

**AtkinsRéalis** 1616 EAST MILLBROOK ROAD, SUITE 160  
RALEIGH, NORTH CAROLINA 27609  
(919) 876-6888 NCBEES #F-0326

8/17/99

REVISIONS

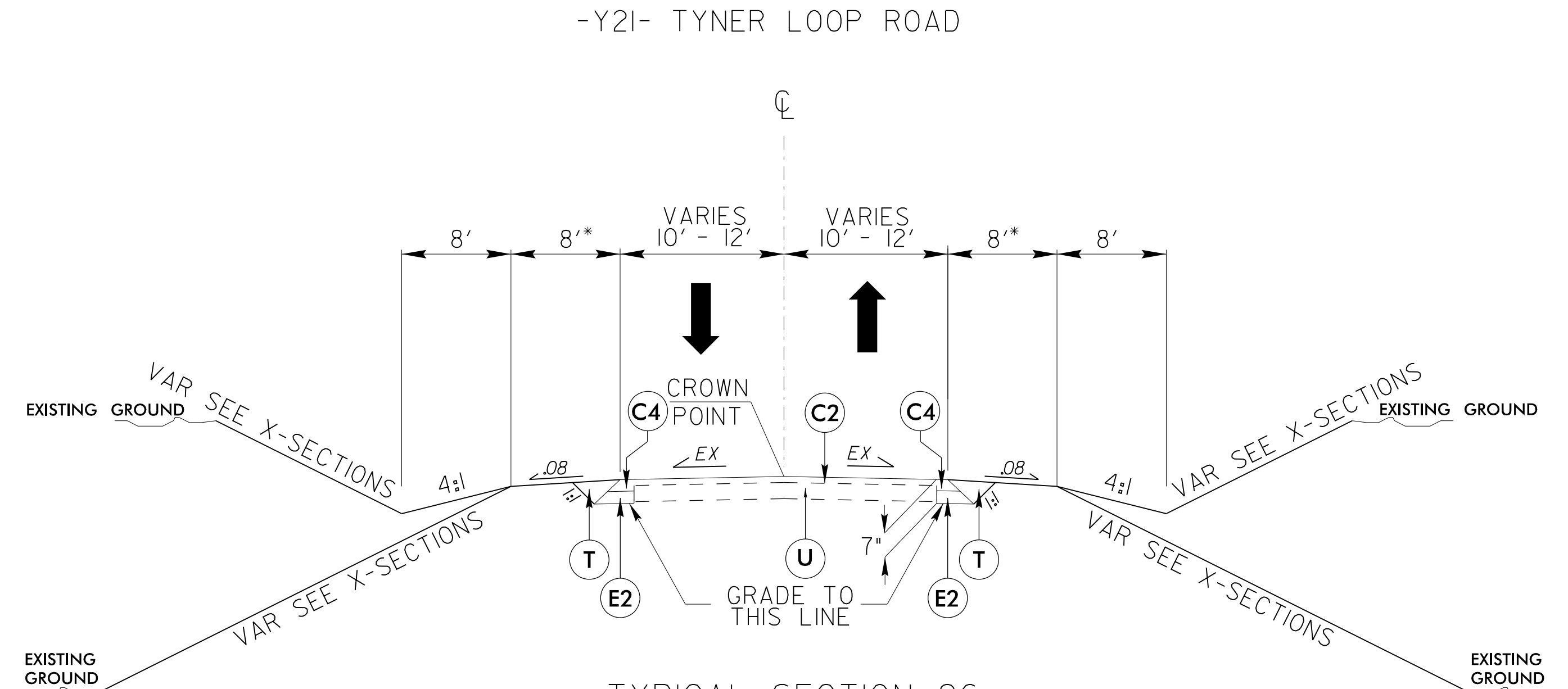
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\$\$\$\$\$USERNAME\$\$\$\$\$



TYPICAL SECTION 25

-Y14- STA. 10+00.00 TO -Y14- STA. 11+98.22  
-Y19- STA. 12+00.00 TO -Y19- STA. 12+62.97  
-Y21- STA. 12+47.50 TO -Y21- STA. 12+58.40  
-Y24- STA. 10+00.00 TO -Y24- STA. 12+25.00  
-Y26- STA. 11+71.15 TO -Y26- STA. 14+70.00

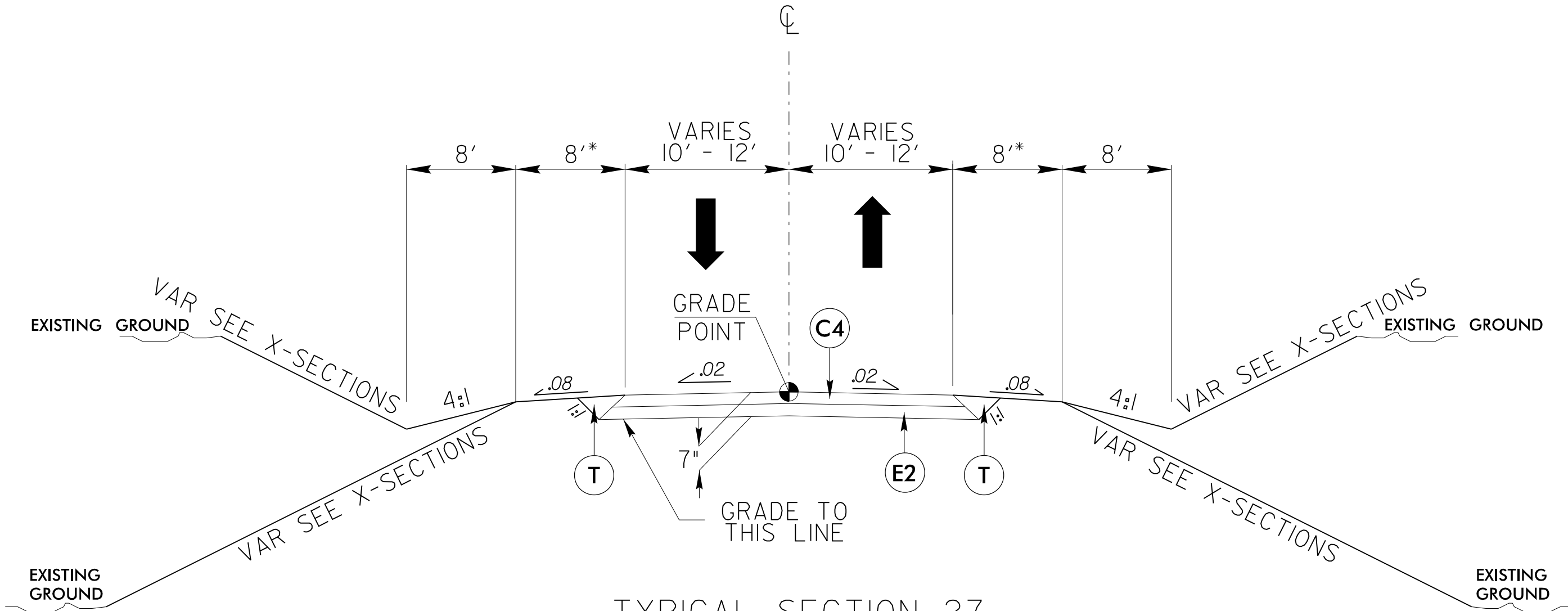
NOTE: \*WIDEN SHOULDER 3' FOR GUARDRAIL



TYPICAL SECTION 26

-Y21- STA. 11+80.00 TO -Y21- STA. 12+47.50

NOTE: \*WIDEN SHOULDER 3' FOR GUARDRAIL

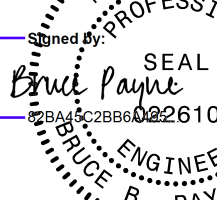


TYPICAL SECTION 27

-Y24- STA. 12+25.00 TO -Y24- STA. 12+76.30

NOTE: \*WIDEN SHOULDER 3' FOR GUARDRAIL

| PAVEMENT SCHEDULE |                   |
|-------------------|-------------------|
| C2                | 1 1/2" S9.5B      |
| C4                | 3" S9.5B          |
| E2                | 4" B25.0C         |
| T                 | EARTH MATERIAL    |
| U                 | EXISTING PAVEMENT |

| PROJECT REFERENCE NO.                                                               |  | SHEET NO.                                                                           |  |
|-------------------------------------------------------------------------------------|--|-------------------------------------------------------------------------------------|--|
| U-4758                                                                              |  | 2A-11                                                                               |  |
| R/W SHEET NO.                                                                       |  |                                                                                     |  |
| ROADWAY DESIGN ENGINEER                                                             |  | PAVEMENT DESIGN ENGINEER                                                            |  |
|  |  |  |  |
| 5/30/2025                                                                           |  | 5/30/2025                                                                           |  |
| DOCUMENT NOT CONSIDERED FINAL<br>UNLESS ALL SIGNATURES COMPLETED                    |  |                                                                                     |  |

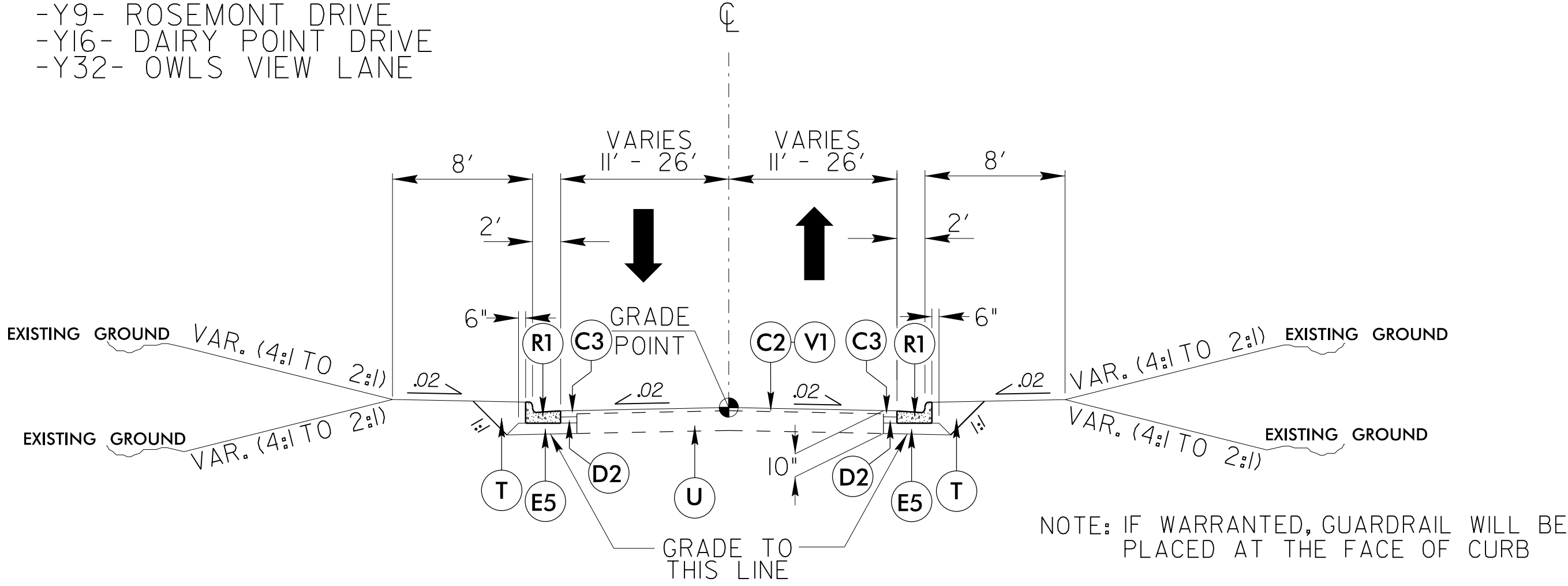
**AtkinsRéalis** 1616 EAST MILLBROOK ROAD, SUITE 160  
RALEIGH, NORTH CAROLINA 27609  
(919) 876-6888 NCBEES #F-0326

8/17/99

REVISIONS

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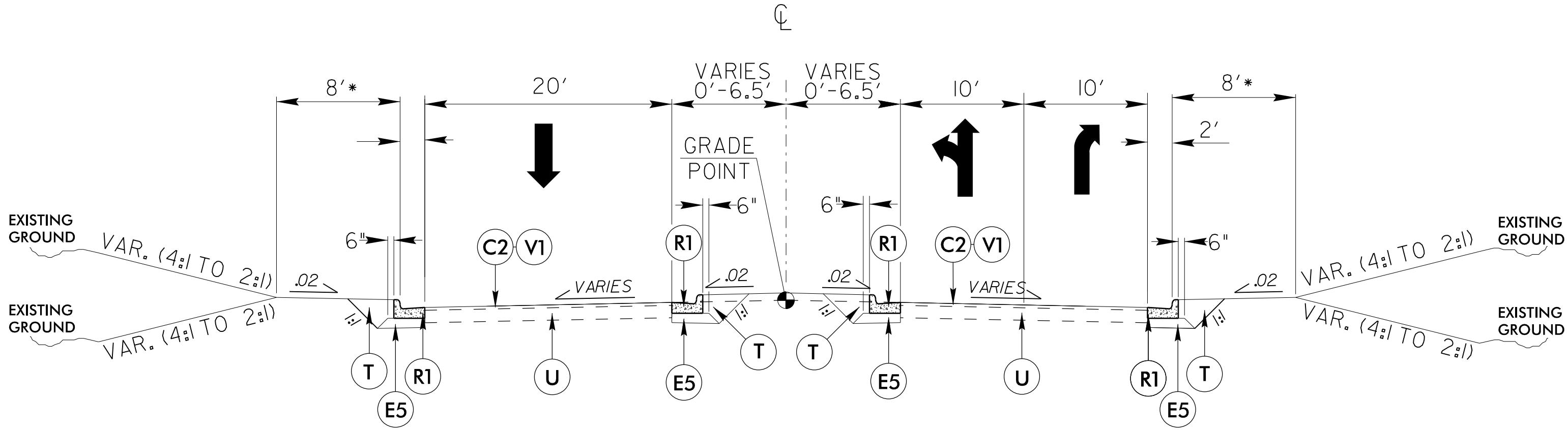
- Y2- POND HAVEN DRIVE
- Y9- ROSEMONT DRIVE
- Y16- DAIRY POINT DRIVE
- Y32- OWLS VIEW LANE



TYPICAL SECTION 28

-Y2- STA. 12+36.00 TO -Y2- STA. 13+41.86  
-Y9- STA. 13+60.00 TO -Y9- STA. 14+75.10  
-Y16- STA. 10+39.51 TO -Y16- STA. 10+97.00  
-Y32- STA. 10+39.50 TO -Y32- STA. 10+80.00

-Y7- WESTMOTT PLACE

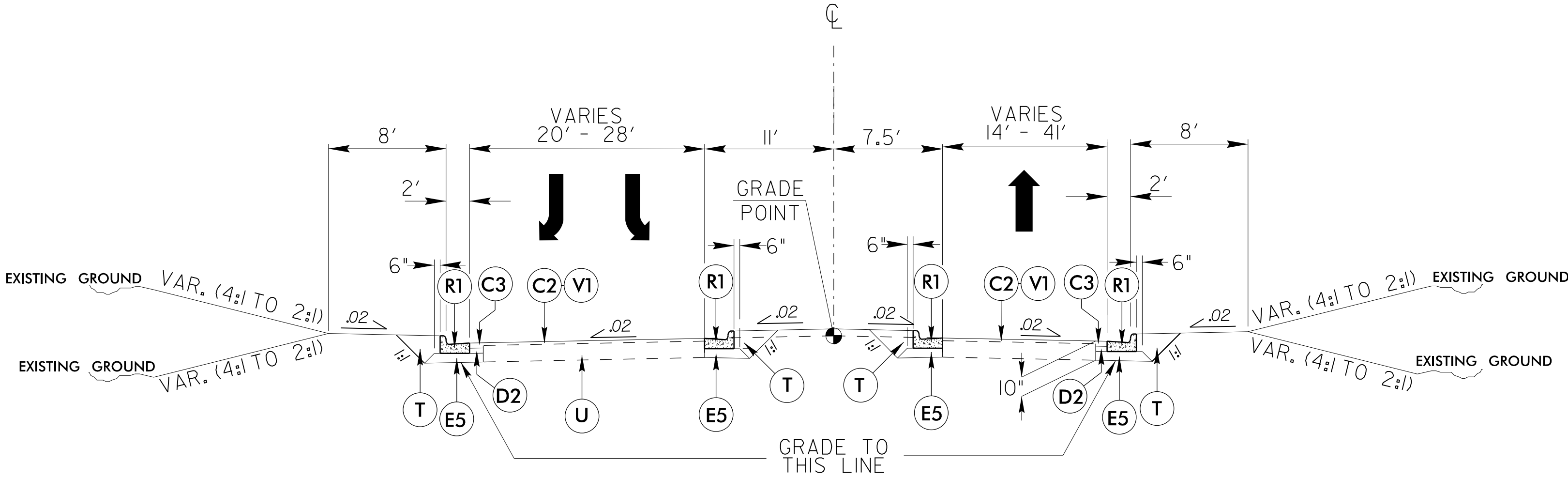


TYPICAL SECTION 29

-Y7- STA. 12+00.00 TO -Y7- STA. 12+81.32

NOTE: \* WIDEN BERM 6' FOR GUARDRAIL

-Y3- JOHNSON STREET SPORTS COMPLEX



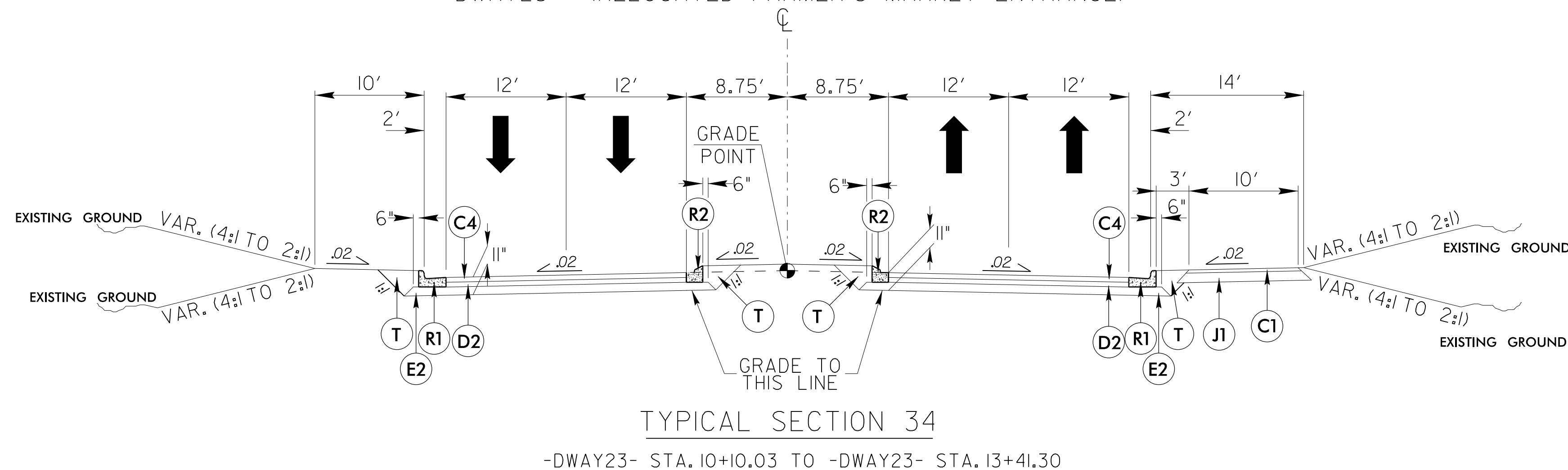
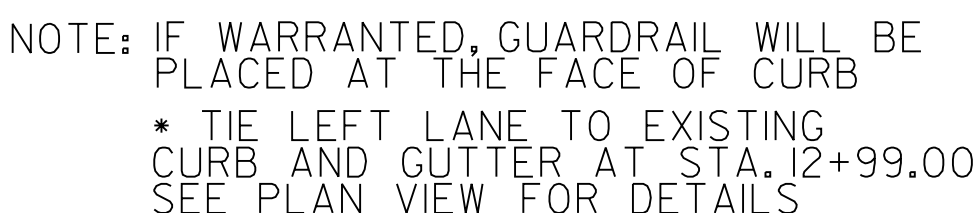
TYPICAL SECTION 30

-Y3- STA. 10+62.50 TO -Y3- STA. 11+30.00

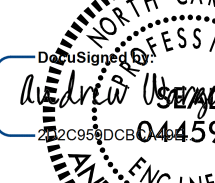
| PAVEMENT SCHEDULE |                   |
|-------------------|-------------------|
| C2                | 1 1/2" S9.5B      |
| C3                | 3" S9.5C          |
| D2                | 4" 119.0C         |
| E5                | 5 1/2" B25.0C     |
| R1                | 2'-6" C&G         |
| T                 | EARTH MATERIAL    |
| U                 | EXISTING PAVEMENT |
| V1                | 1.5" MILLING      |

|                                                                  |                          |                    |
|------------------------------------------------------------------|--------------------------|--------------------|
| PROJECT REFERENCE NO.<br>U-4758                                  |                          | SHEET NO.<br>2A-12 |
| R/W SHEET NO.                                                    |                          |                    |
| ROADWAY DESIGN ENGINEER                                          | PAVEMENT DESIGN ENGINEER |                    |
|                                                                  |                          |                    |
| 5/30/2025                                                        | 5/30/2025                |                    |
| DOCUMENT NOT CONSIDERED FINAL<br>UNLESS ALL SIGNATURES COMPLETED |                          |                    |

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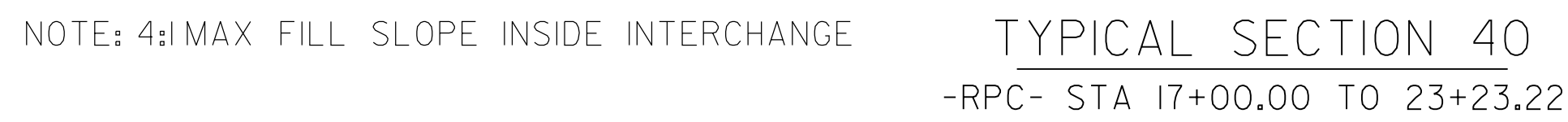


| PAVEMENT SCHEDULE |                                |
|-------------------|--------------------------------|
| C1                | 1½" S9.5C                      |
| C2                | 1½" S9.5B                      |
| C4                | 3" S9.5B                       |
| D1                | 2½" I19.0C                     |
| D2                | 4" I19.0C                      |
| E2                | 4" B25.0C                      |
| E5                | 5½" B25.0C                     |
| J1                | PROP. 4" AGGREGATE BASE COURSE |
| R1                | 2'-6" C&G                      |
| R2                | 1'-6" C&G                      |
| T                 | EARTH MATERIAL                 |
| U                 | EXISTING PAVEMENT              |
| V1                | 1.5" MILLING                   |
| V2                | 2.5" MILLING                   |
| W                 | WEDGING                        |

|                                                                                                                   |                                                                                                                    |
|-------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------|
| PROJECT REFERENCE NO.<br><i>U-4758</i>                                                                            | SHEET NO.<br><i>2A-13</i>                                                                                          |
| RW SHEET NO.                                                                                                      |                                                                                                                    |
| ROADWAY DESIGN<br>ENGINEER<br> | PAVEMENT DESIGN<br>ENGINEER<br> |
| 5/30/2025                                                                                                         | 5/30/2025                                                                                                          |
| <b>DOCUMENT NOT CONSIDERED FINAL<br/>UNLESS ALL SIGNATURES COMPLETED</b>                                          |                                                                                                                    |

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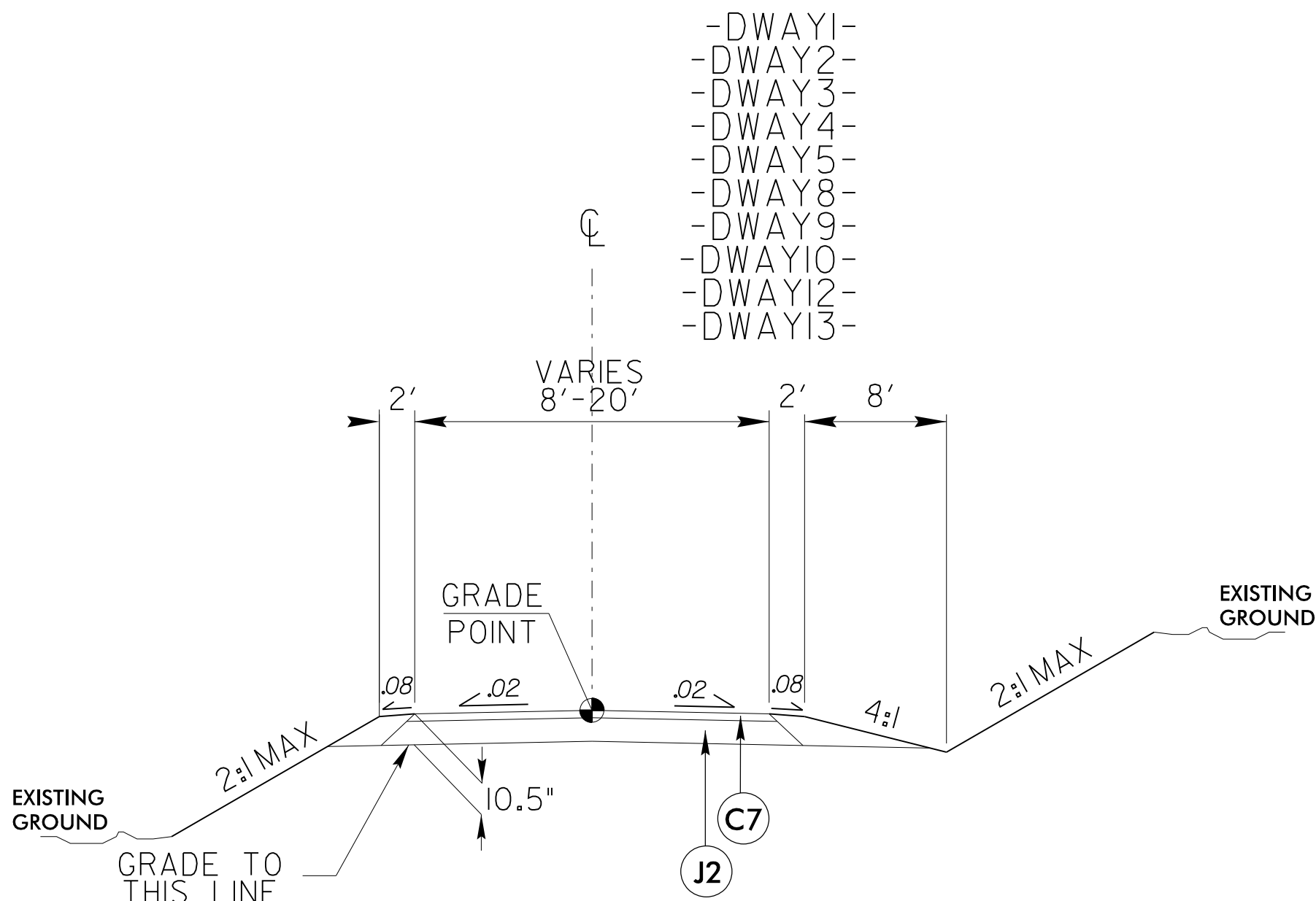


| PAVEMENT SCHEDULE |                   |
|-------------------|-------------------|
| C3                | 3" S9.5C          |
| D2                | 4" 119.0C         |
| E5                | 5½" B25.0C        |
| E6                | 7" B25.0C         |
| R1                | 2'-6" C&G         |
| T                 | EARTH MATERIAL    |
| U                 | EXISTING PAVEMENT |
| W                 | WEDGING           |

|                                                                                                |                             |
|------------------------------------------------------------------------------------------------|-----------------------------|
| PROJECT REFERENCE NO.                                                                          | SHEET NO.                   |
| U-4758                                                                                         | 2A-15                       |
| RW SHEET NO.                                                                                   |                             |
| ROADWAY DESIGN<br>ENGINEER                                                                     | PAVEMENT DESIGN<br>ENGINEER |
|                                                                                                |                             |
| 5/30/2025                                                                                      | 5/30/2025                   |
| <p align="center"><b>DOCUMENT NOT CONSIDERED FINAL<br/>UNLESS ALL SIGNATURES COMPLETED</b></p> |                             |

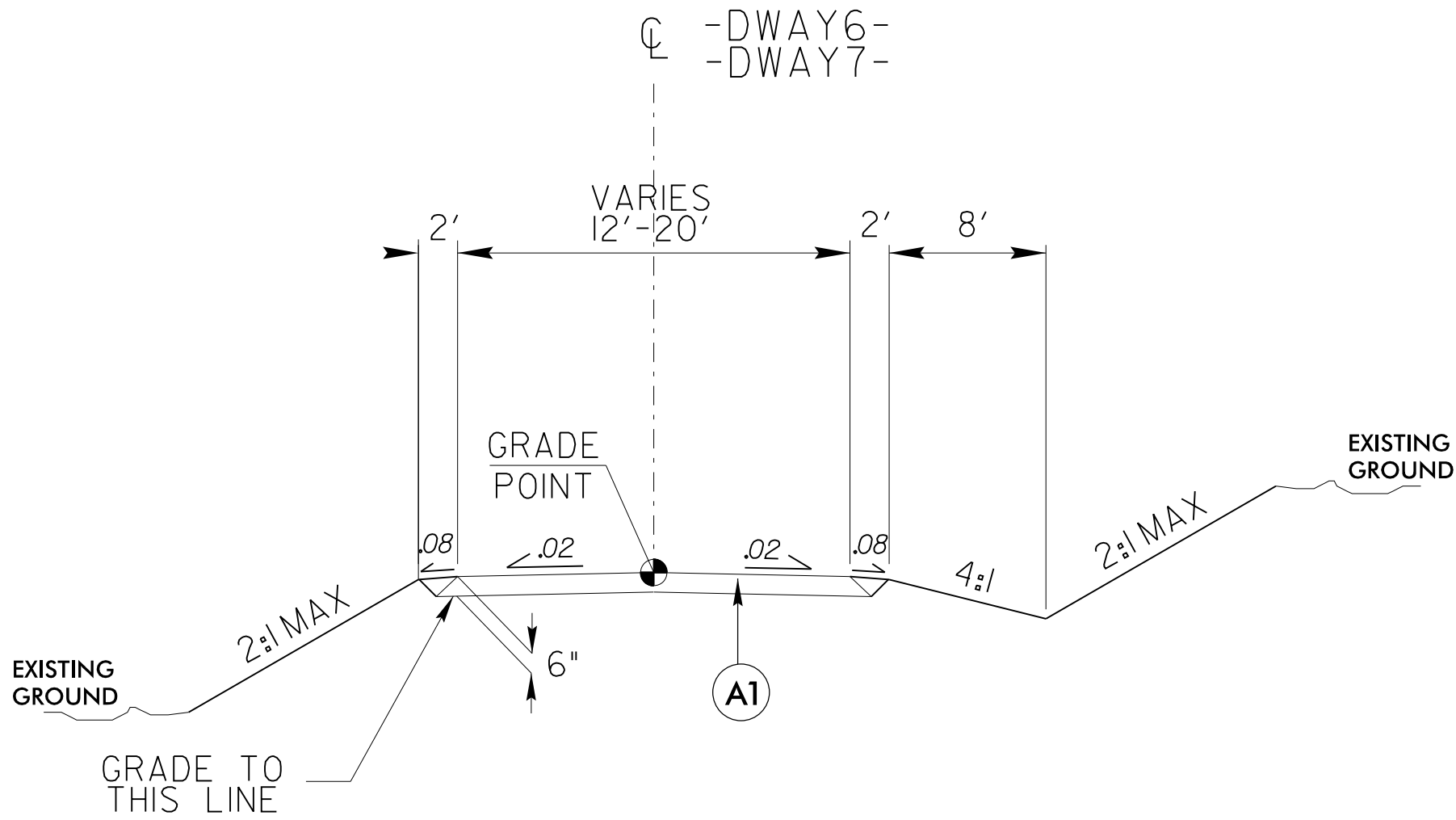
**AtkinsRéalis** 1616 EAST MILLBROOK ROAD, SUITE 160  
RALEIGH, NORTH CAROLINA 27609  
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8/17/99



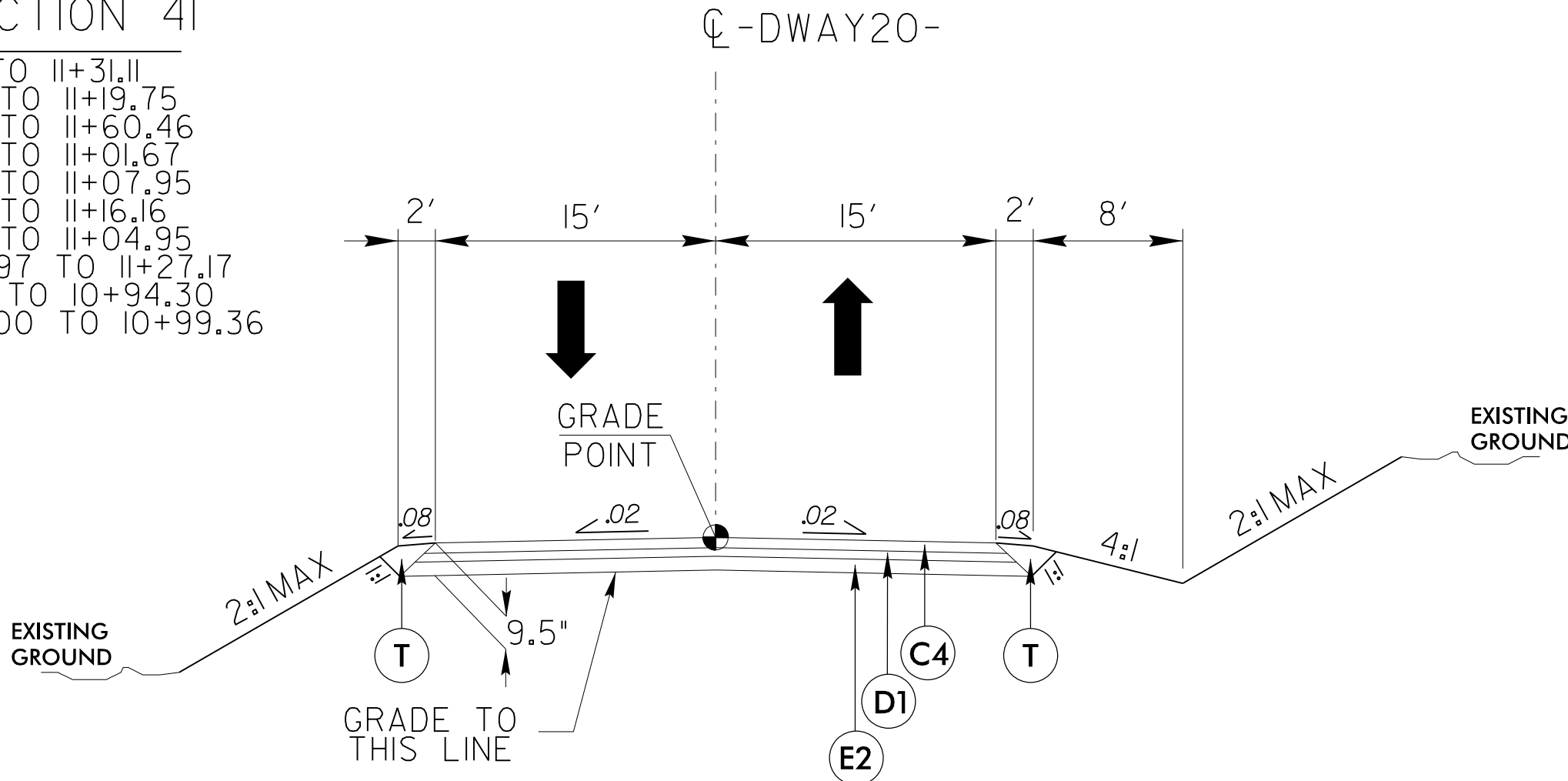
TYPICAL SECTION 41

-DWAY1- 10+00 TO 11+31.11  
-DWAY2- 10+00 TO 11+19.75  
-DWAY3- 10+00 TO 11+60.46  
-DWAY4- 10+00 TO 11+01.67  
-DWAY5- 10+00 TO 11+07.95  
-DWAY8- 10+00 TO 11+16.16  
-DWAY9- 10+00 TO 11+04.95  
-DWAY10- 10+54.97 TO 11+27.17  
-DWAY12- 10+00 TO 10+94.30  
-DWAY13- 10+55.00 TO 10+99.36



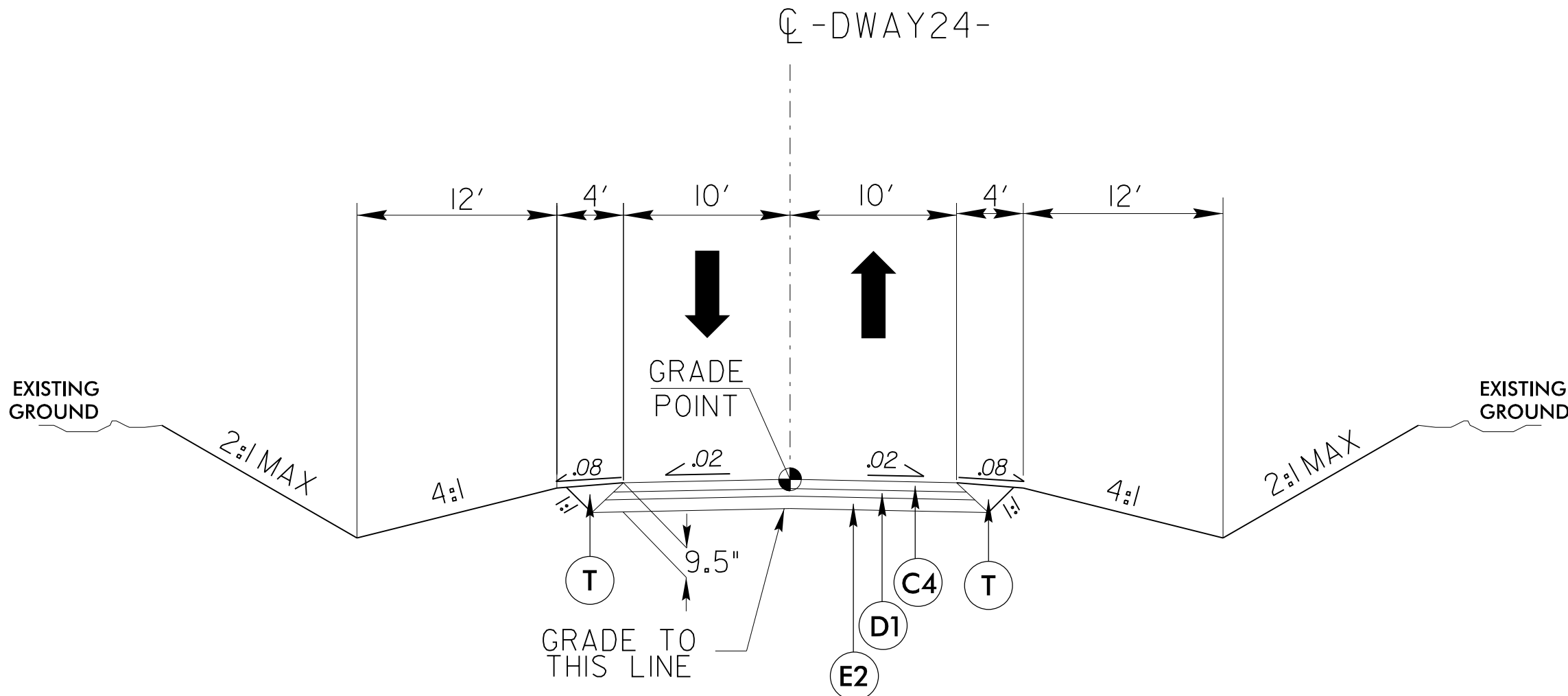
TYPICAL SECTION 42

-DWAY6- 10+00 TO 10+86.27  
-DWAY7- 10+00 TO 11+20.88



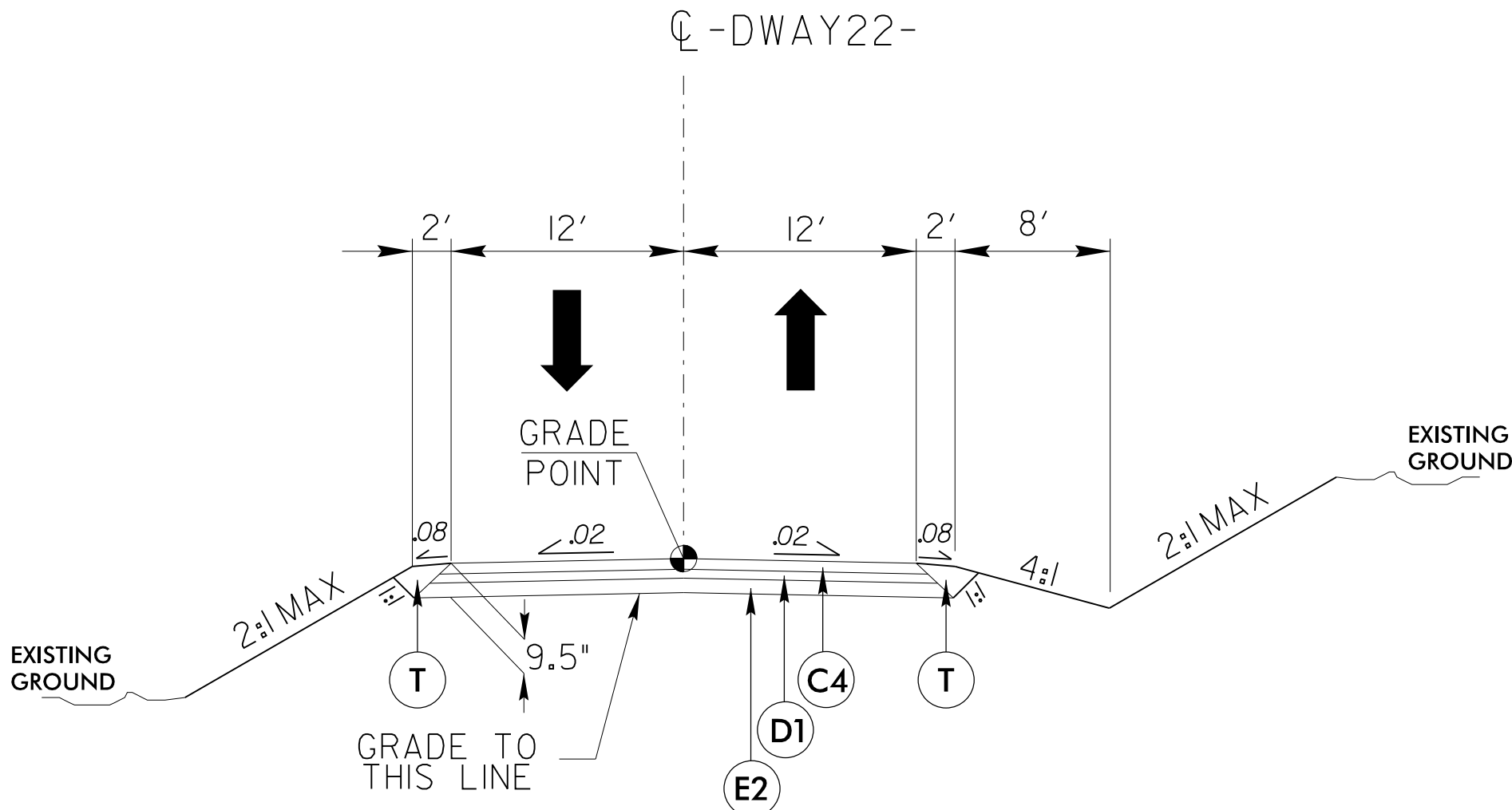
TYPICAL SECTION 43

-DWAY20- 10+00 TO 14+05.59



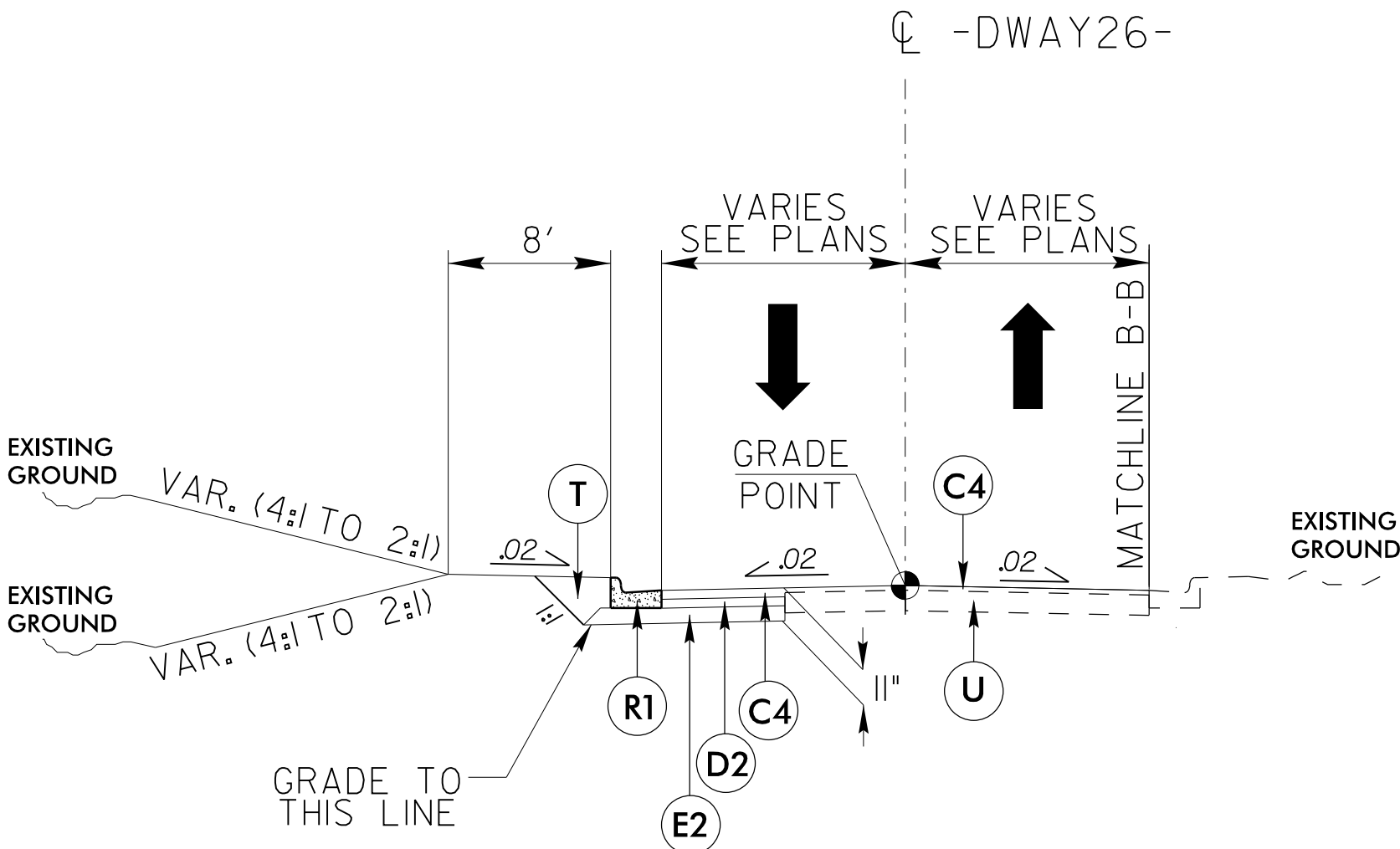
TYPICAL SECTION 44

-DWAY24- 10+90.00 TO 17+09.66



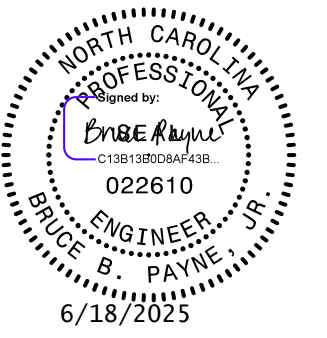
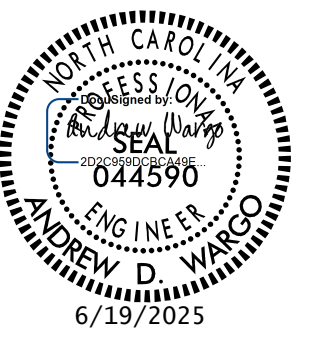
TYPICAL SECTION 45

-DWAY22- 10+00 TO 11+04.64



TYPICAL SECTION 46

-DWAY26- 10+10.00 TO 10+86.29

| PROJECT REFERENCE NO.                                                               |                                                                                     | SHEET NO. |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-----------|
| U-4758                                                                              |                                                                                     | 2A-16     |
| R/W SHEET NO.                                                                       |                                                                                     |           |
| ROADWAY DESIGN<br>ENGINEER                                                          | PAVEMENT DESIGN<br>ENGINEER                                                         |           |
|  |  |           |
| <b>DOCUMENT NOT CONSIDERED FINAL<br/>UNLESS ALL SIGNATURES COMPLETED</b>            |                                                                                     |           |

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RALEIGH, NORTH CAROLINA 27609  
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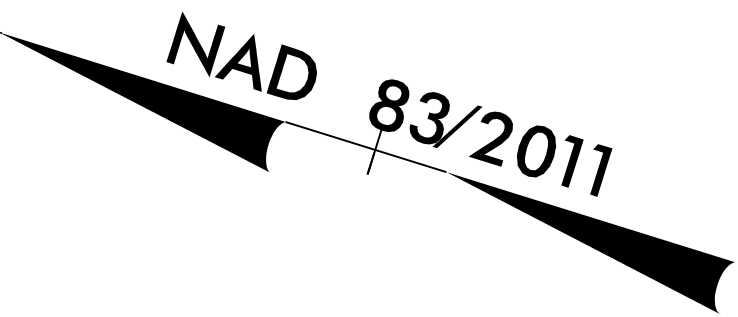
| PAVEMENT SCHEDULE |                                |
|-------------------|--------------------------------|
| A1                | 6" PCC (CONCRETE DRIVEWAY)     |
| C4                | 3" S9.5B                       |
| C7                | 2 1/2" S9.5B                   |
| D1                | 2 1/2" 119.0C                  |
| D2                | 4" 119.0C                      |
| E2                | 4" B25.0C                      |
| J2                | PROP. 8" AGGREGATE BASE COURSE |
| R1                | 2'-6" C&G                      |
| T                 | EARTH MATERIAL                 |
| U                 | EXISTING PAVEMENT              |

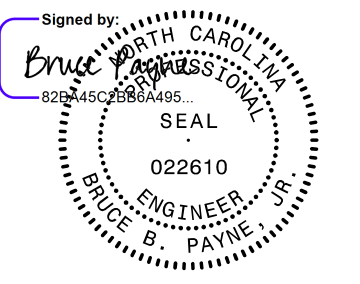
8/17/99

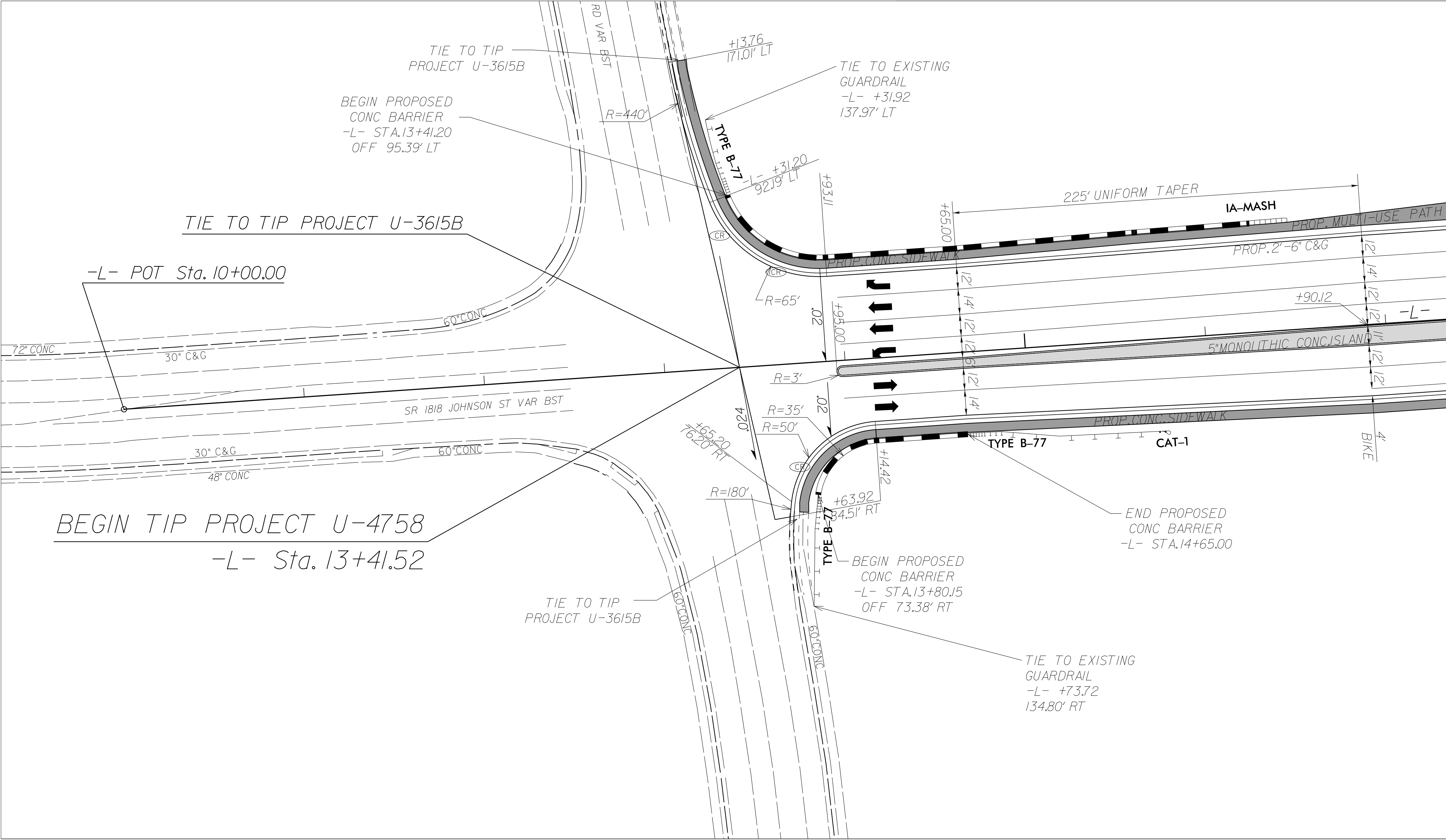
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# INTERSECTION DETAILS

NOT TO SCALE



|                                                                                                          |                     |
|----------------------------------------------------------------------------------------------------------|---------------------|
| PROJECT REFERENCE NO.                                                                                    | SHEET NO.           |
| U-4758                                                                                                   | 2B-1                |
| RW SHEET NO.                                                                                             |                     |
| ROADWAY DESIGN ENGINEER                                                                                  | HYDRAULICS ENGINEER |
| Signed by:  5/30/2025 |                     |
| DOCUMENT NOT CONSIDERED FINAL<br>UNLESS ALL SIGNATURES COMPLETED                                         |                     |



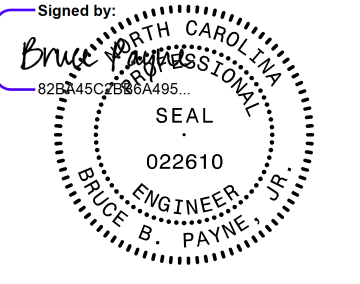
INTERSECTION OF  
JOHNSON STREET (-L-)  
SKEET CLUB ROAD  
(SEE PLAN SHEET 4)

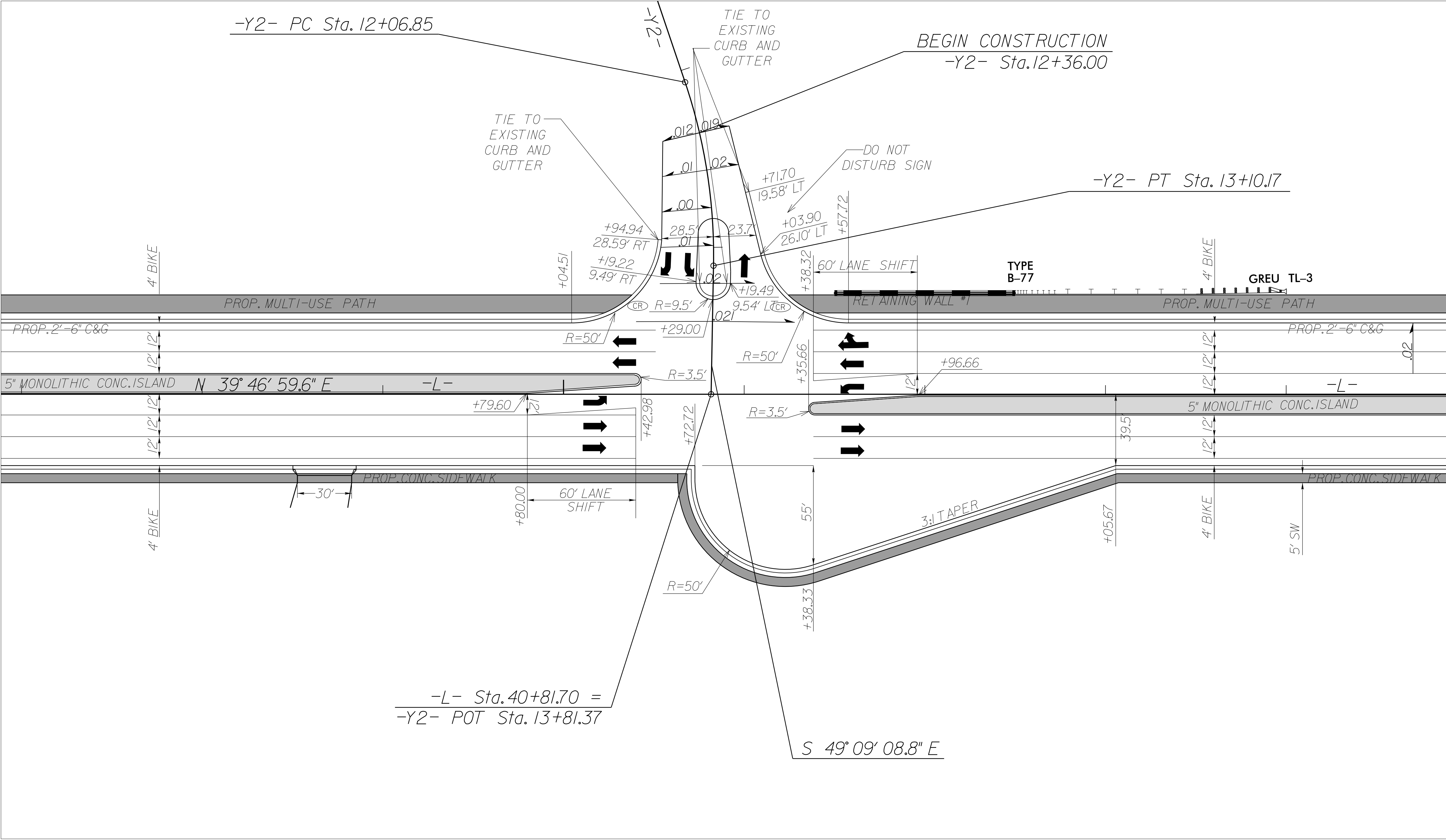
NOTE: SEE PMP PLANS FOR WHEEL CHAIR RAMP  
AND PAVEMENT MARKING LOCATIONS

8/17/99

NAD 83/2011

INTERSECTION DETAILS  
NOT TO SCALE

|                                                                                                          |                     |
|----------------------------------------------------------------------------------------------------------|---------------------|
| PROJECT REFERENCE NO.                                                                                    | SHEET NO.           |
| U-4758                                                                                                   | 2B-2                |
| RW SHEET NO.                                                                                             |                     |
| ROADWAY DESIGN ENGINEER                                                                                  | HYDRAULICS ENGINEER |
| SIGNED BY:  5/30/2025 |                     |
| DOCUMENT NOT CONSIDERED FINAL<br>UNLESS ALL SIGNATURES COMPLETED                                         |                     |

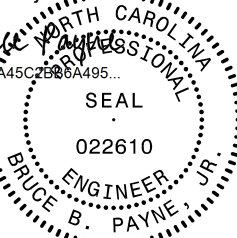


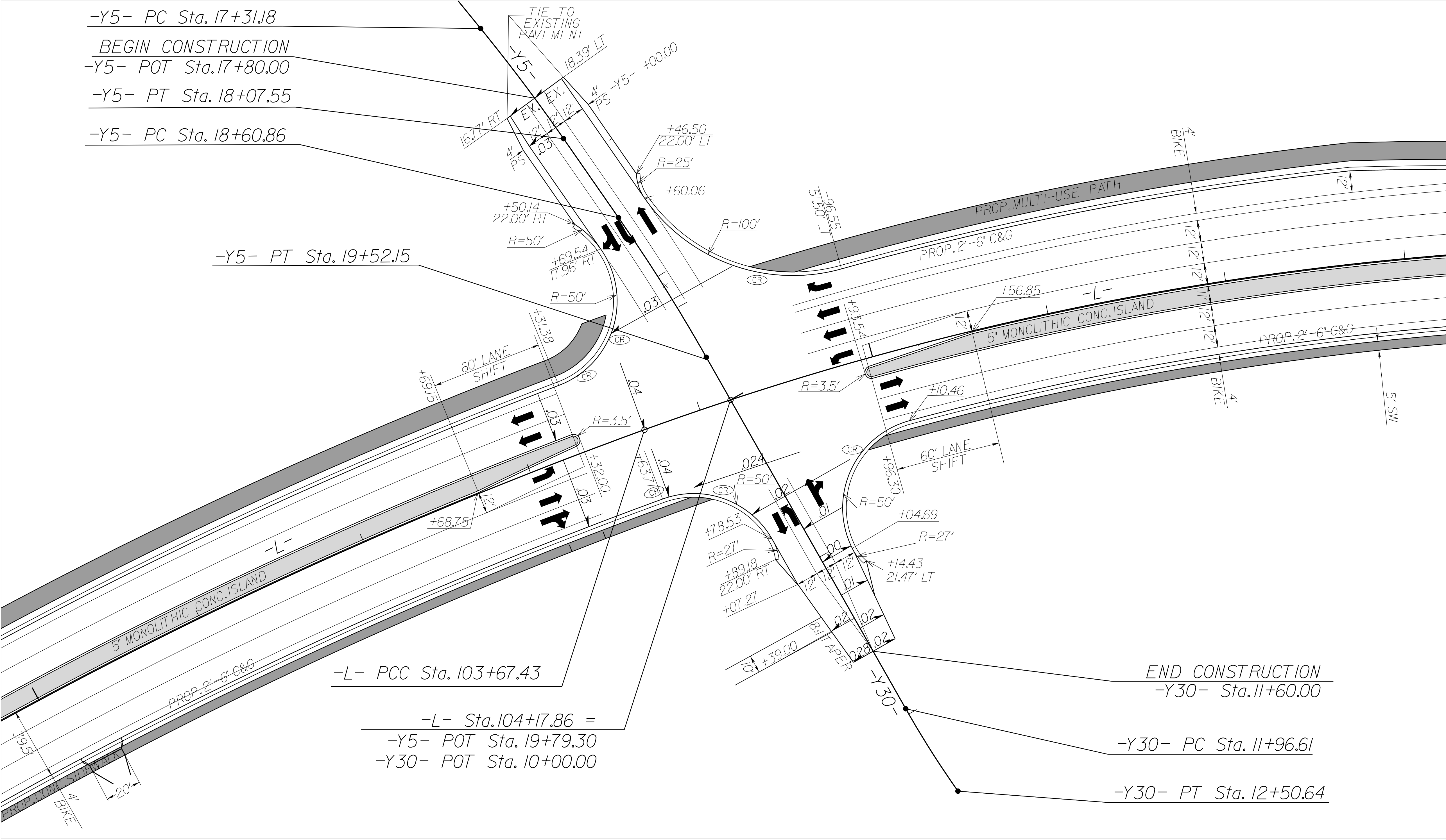
INTERSECTION OF  
JOHNSON STREET (-L-)  
PONDHAVEN DRIVE (-Y2-)  
(SEE PLAN SHEET 6)

NOTE: SEE PMP PLANS FOR WHEEL CHAIR RAMP  
AND PAVEMENT MARKING LOCATIONS

**NOT TO SCALE**

NAD 83/2011

|                                                                                                                                                                                           |                        |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------|
| PROJECT REFERENCE NO.                                                                                                                                                                     | SHEET NO.              |
| U-4758                                                                                                                                                                                    | 2B-3                   |
| RW SHEET NO.                                                                                                                                                                              |                        |
| ROADWAY DESIGN<br>ENGINEER                                                                                                                                                                | HYDRAULICS<br>ENGINEER |
| <p>Signed by:</p>   |                        |
| 5/30/2025                                                                                                                                                                                 |                        |
| <p align="center"><b>DOCUMENT NOT CONSIDERED FINAL<br/>UNLESS ALL SIGNATURES COMPLETED</b></p>                                                                                            |                        |



**INTERSECTION OF  
JOHNSON STREET (-L-) AND  
SANDY RIDGE ROAD (-Y5-) AND  
FUTURE PIEDMONT PARKWAY EXTENSION (-Y30-)  
(SEE PLAN SHEET II)**

**NOTE: SEE PMP PLANS FOR WHEEL CHAIR RAMP  
AND PAVEMENT MARKING LOCATIONS**

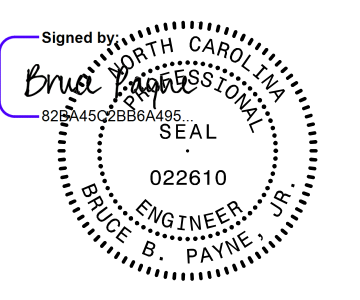
8/17/99

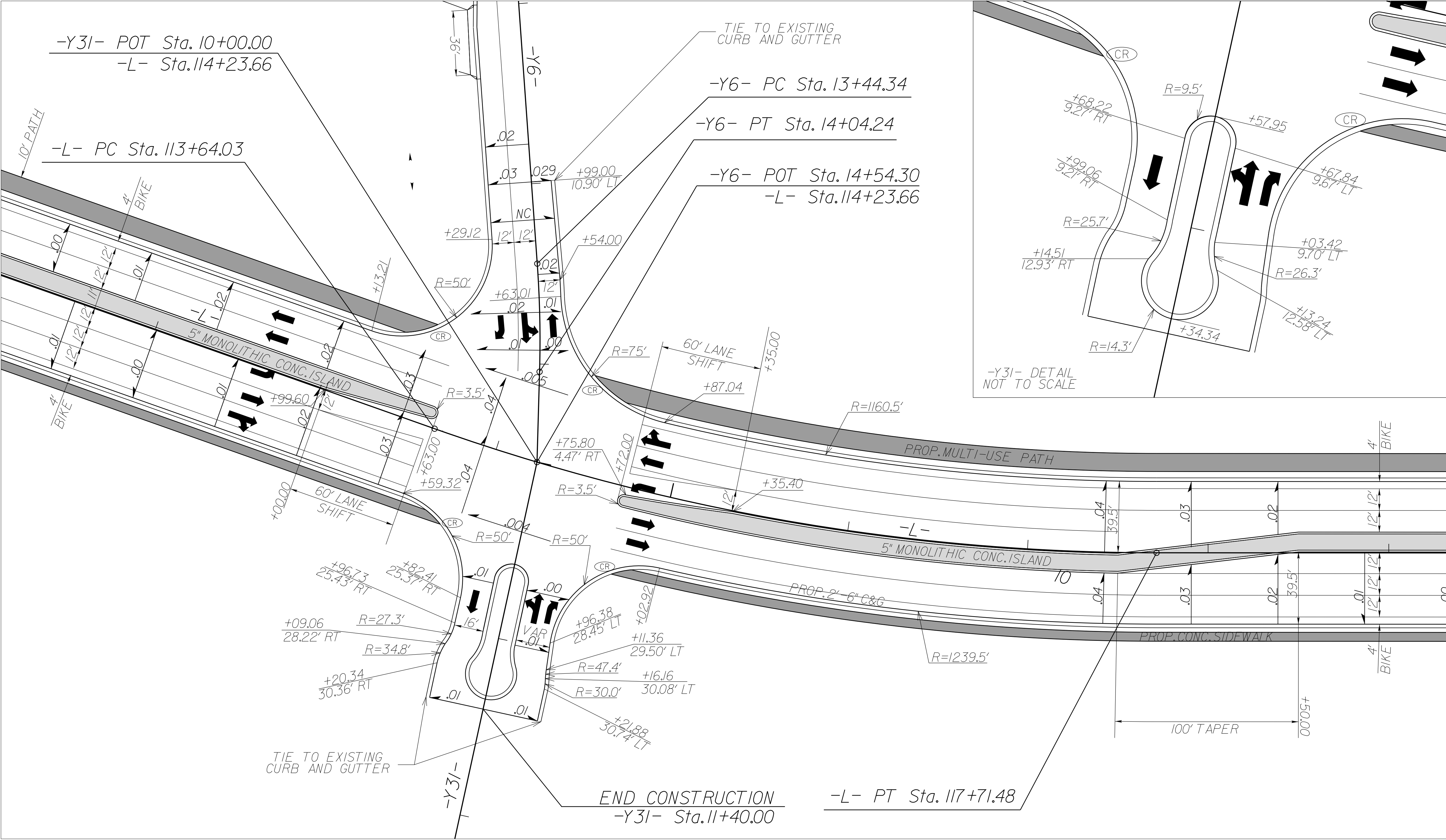
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# INTERSECTION DETAILS

NOT TO SCALE

NAD 83/2011

|                                                                                                                                     |                     |
|-------------------------------------------------------------------------------------------------------------------------------------|---------------------|
| PROJECT REFERENCE NO.                                                                                                               | SHEET NO.           |
| U-4758                                                                                                                              | 2B-4                |
| RW SHEET NO.                                                                                                                        |                     |
| ROADWAY DESIGN ENGINEER                                                                                                             | HYDRAULICS ENGINEER |
| Signed by:  022610<br>ENGINEER<br>BRUCE R. PRYOR |                     |
| 5/30/2025                                                                                                                           |                     |
| DOCUMENT NOT CONSIDERED FINAL<br>UNLESS ALL SIGNATURES COMPLETED                                                                    |                     |



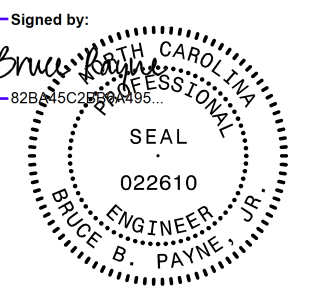
8/17/99

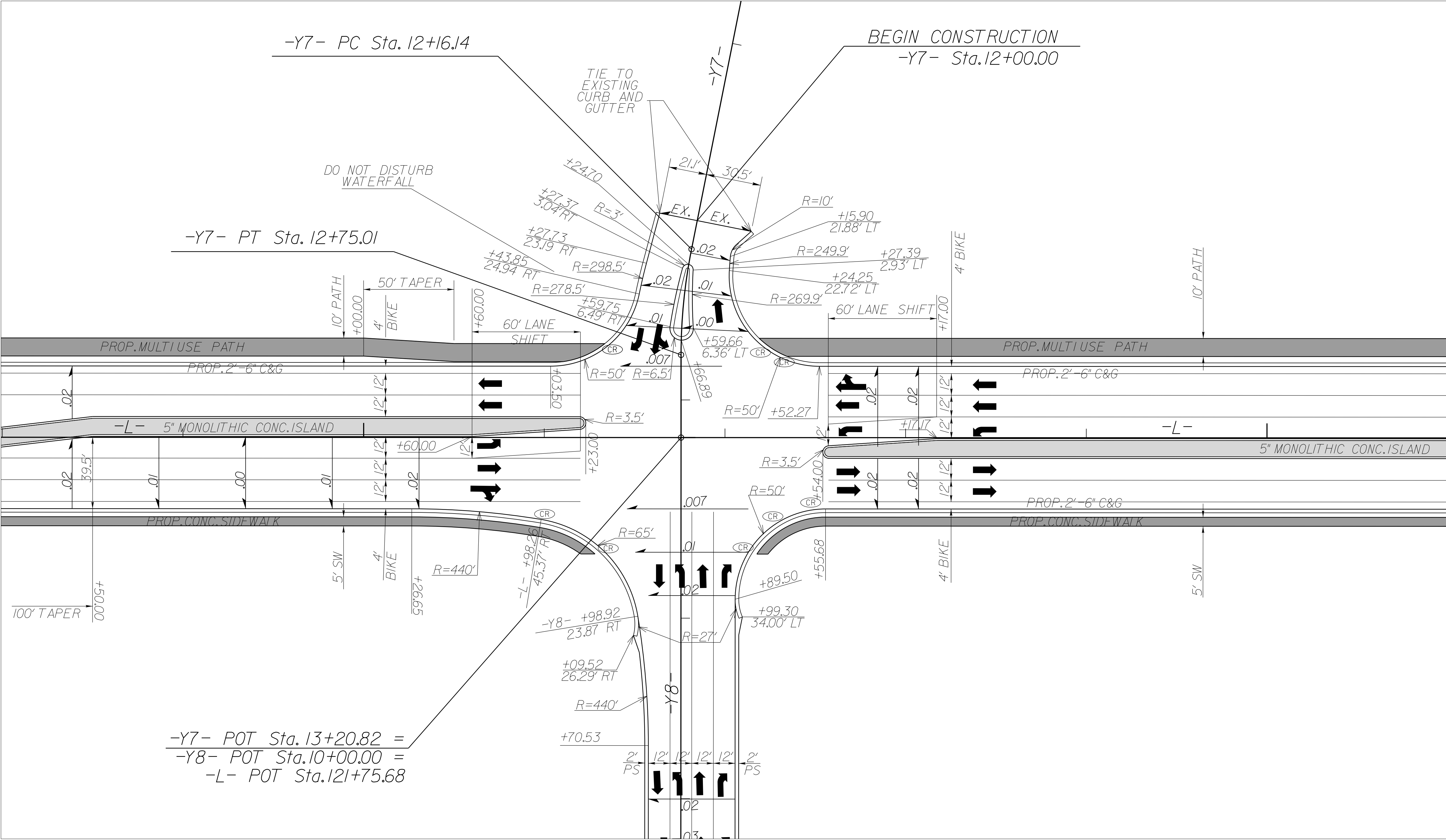
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# INTERSECTION DETAILS

NOT TO SCALE

NAD 83/2011

|                                                                                                                |                     |
|----------------------------------------------------------------------------------------------------------------|---------------------|
| PROJECT REFERENCE NO.                                                                                          | SHEET NO.           |
| U-4758                                                                                                         | 2B-5                |
| RW SHEET NO.                                                                                                   |                     |
| ROADWAY DESIGN ENGINEER                                                                                        | HYDRAULICS ENGINEER |
| Signed by:<br><br>5/30/2025 |                     |
| DOCUMENT NOT CONSIDERED FINAL<br>UNLESS ALL SIGNATURES COMPLETED                                               |                     |



INTERSECTION OF  
SANDY RIDGE ROAD (-L-)  
JOHN KNOX DRIVE (-Y7-) AND  
KENDALE ROAD (-Y8-)  
(SEE PLAN SHEET 12)

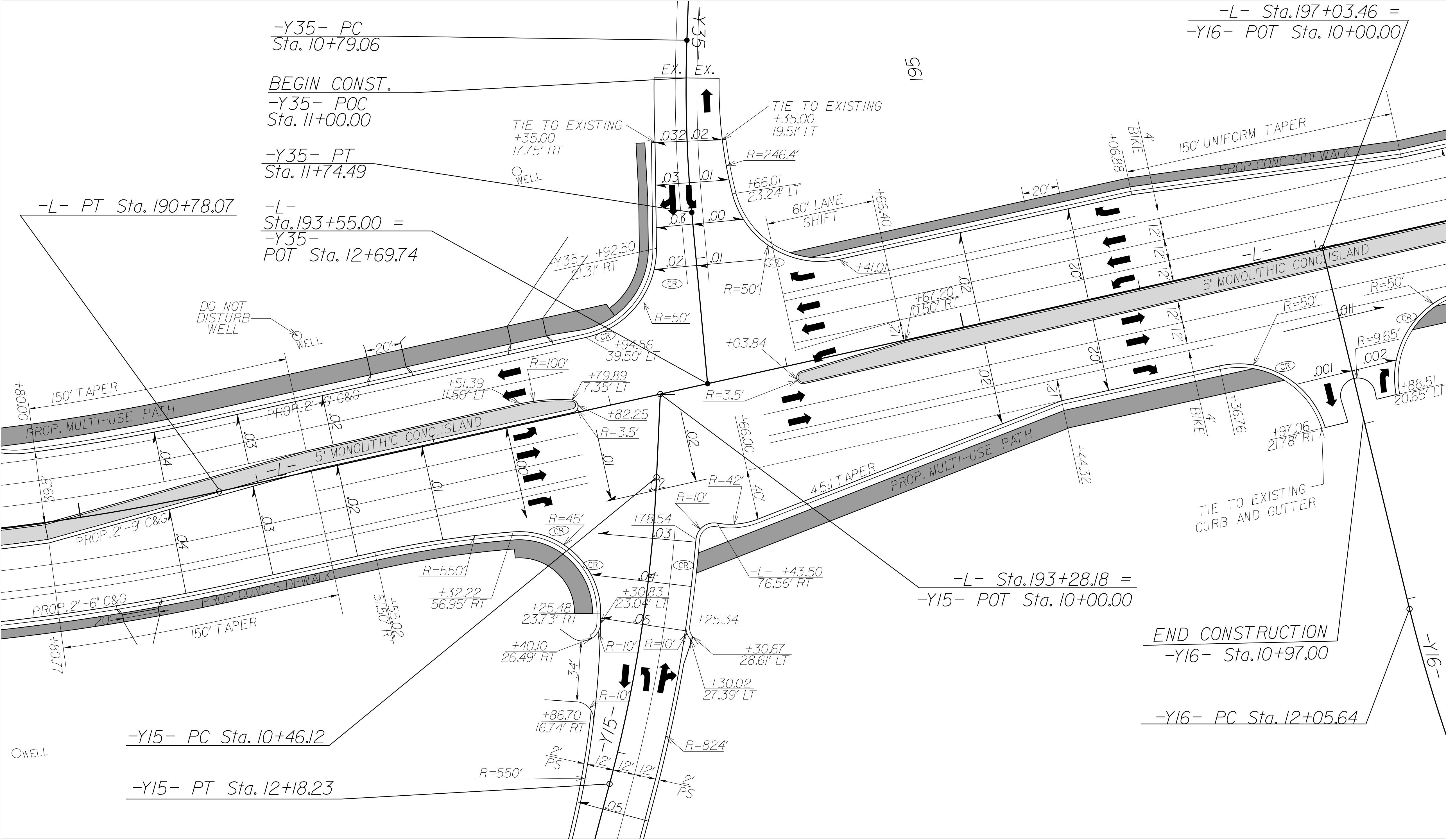
NOTE: SEE PMP PLANS FOR WHEEL CHAIR RAMP  
AND PAVEMENT MARKING LOCATIONS

8/17/99

NAD 83/2011

INTERSECTION DETAILS  
NOT TO SCALE

|                                                               |                     |
|---------------------------------------------------------------|---------------------|
| PROJECT REFERENCE NO.                                         | SHEET NO.           |
| U-4758                                                        | 2B-6                |
| RW SHEET NO.                                                  |                     |
| ROADWAY DESIGN ENGINEER                                       | HYDRAULICS ENGINEER |
| Signed: [Signature] 022610 ENGINEER S. PAMPH 5/30/2025        |                     |
| DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED |                     |



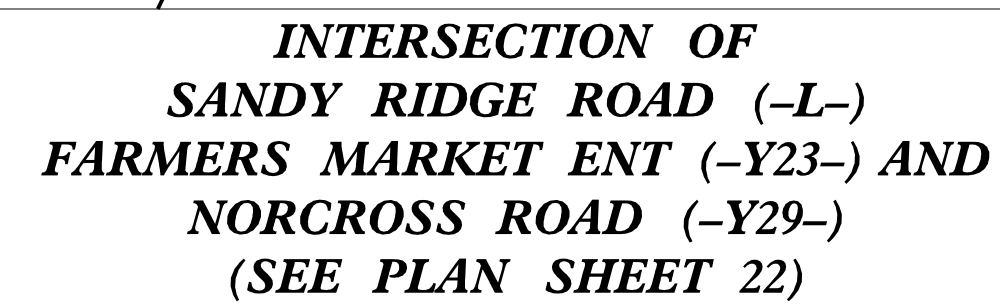
INTERSECTION OF  
SANDY RIDGE ROAD (-L-)  
GALLIMORE DAIRY ROAD (-Y15-) AND (-Y35-)  
(SEE PLAN SHEET 18)

NOTE: SEE PMP PLANS FOR WHEEL CHAIR RAMP  
AND PAVEMENT MARKING LOCATIONS

04-MAR-2025 08:48  
R:\Roadway\Projects\U4758\rdy\_psh\_2B-6.dgn  
SUSAN NAME

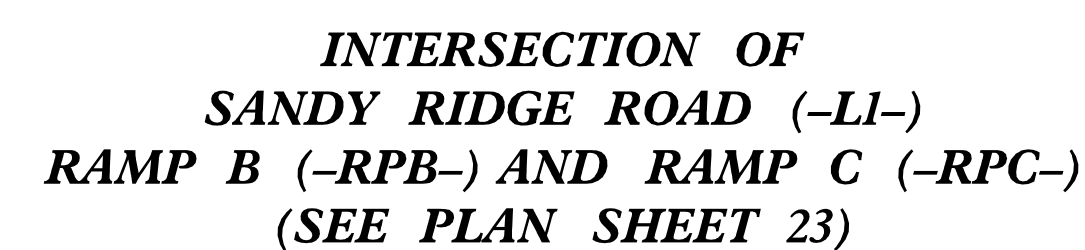
**NOT TO SCALE**

Signed by: *Bruce Payne*  
82B045C2600495...  
NORTH CAROLINA PROFESSIONAL  
SEAL  
022610  
ENGINEER  
BRUCE B. PAYNE, JR.

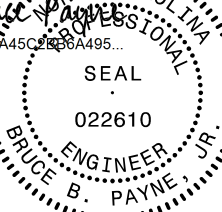


NOTE: SEE PMP PLANS FOR WHEEL CHAIR RAMP  
AND PAVEMENT MARKING LOCATIONS

**NOT TO SCALE**

R:\Roadway\Proj\U4758\_rdy\_psh\_2B-8.dgn  
\$\$\$\$\$ISERNAM\$\$\$\$\$

**NOTE: SEE PMP PLANS FOR WHEEL CHAIR RAMP  
AND PAVEMENT MARKING LOCATIONS**

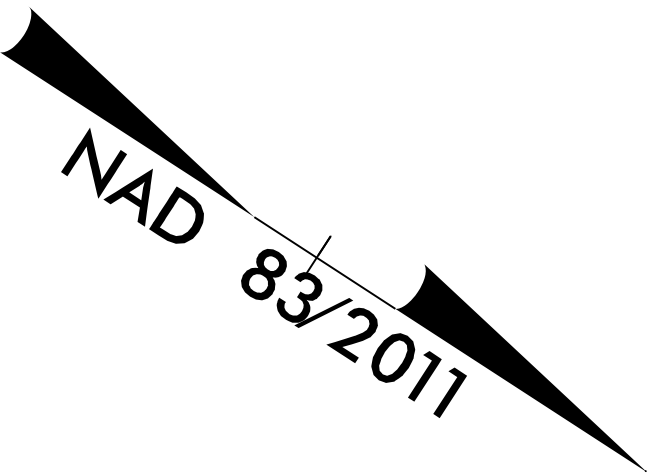
|                                                                                                                                                                                                                         |                        |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------|
| PROJECT REFERENCE NO.                                                                                                                                                                                                   | SHEET NO.              |
| U-4758                                                                                                                                                                                                                  | 2B-8                   |
| RW SHEET NO.                                                                                                                                                                                                            |                        |
| ROADWAY DESIGN<br>ENGINEER                                                                                                                                                                                              | HYDRAULICS<br>ENGINEER |
| <p>Signed by:</p>  <p>BRUCE A. PAYNE 0004495</p>  |                        |
| 5/30/2025                                                                                                                                                                                                               |                        |
| <p><b>DOCUMENT NOT CONSIDERED FINAL<br/>UNLESS ALL SIGNATURES COMPLETED</b></p>                                                                                                                                         |                        |

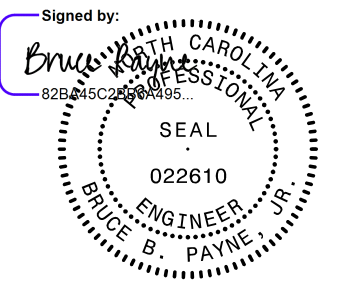
8/17/99

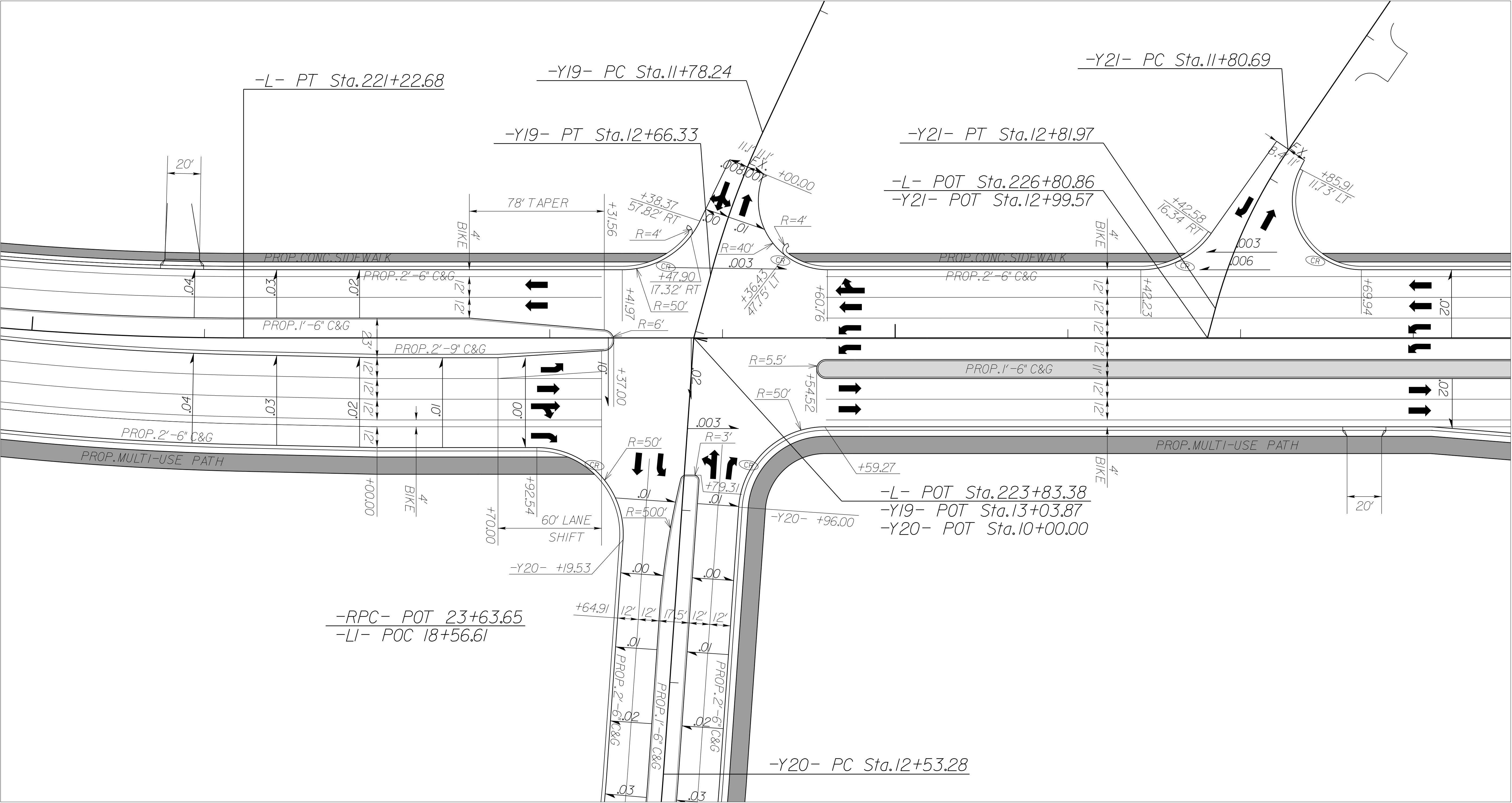
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R:\Roadway\Projects\U4758\rdy\_psh\_2B-9.dgn  
USER:RDM

# INTERSECTION DETAILS

NOT TO SCALE



|                                                                                                          |                     |
|----------------------------------------------------------------------------------------------------------|---------------------|
| PROJECT REFERENCE NO.                                                                                    | SHEET NO.           |
| U-4758                                                                                                   | 2B-9                |
| RW SHEET NO.                                                                                             |                     |
| ROADWAY DESIGN ENGINEER                                                                                  | HYDRAULICS ENGINEER |
| Signed by:  5/30/2025 |                     |
| DOCUMENT NOT CONSIDERED FINAL<br>UNLESS ALL SIGNATURES COMPLETED                                         |                     |



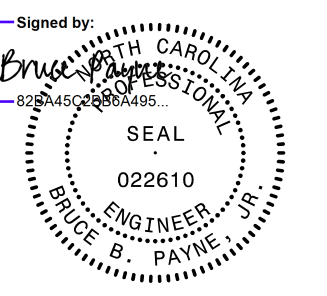
INTERSECTION OF  
SANDY RIDGE ROAD (-L-)  
TYNER LOOP (-Y19-) AND TYNER ROAD (-Y20-)  
(SEE PLAN SHEET 25)

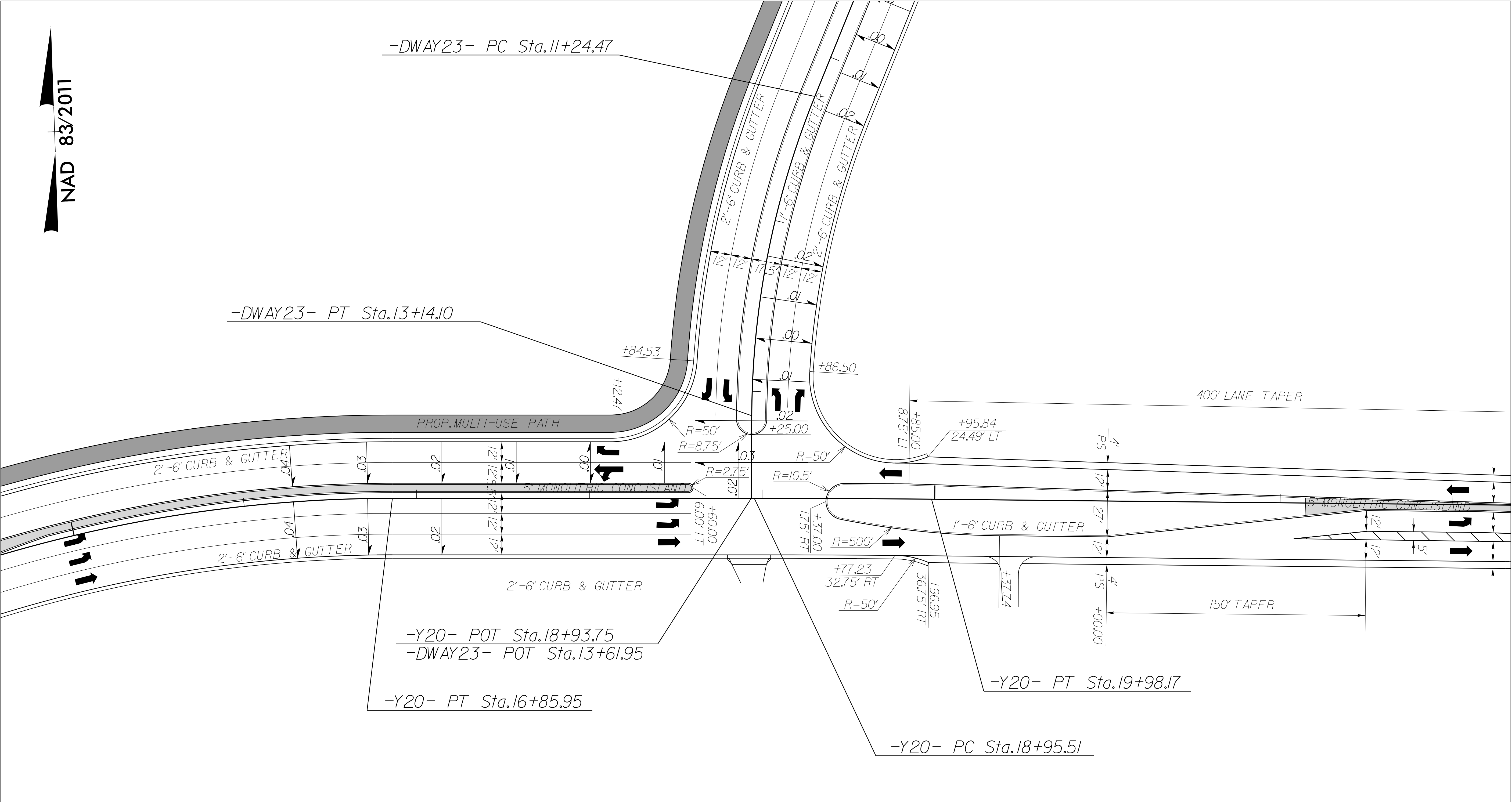
NOTE: SEE PMP PLANS FOR WHEEL CHAIR RAMP  
AND PAVEMENT MARKING LOCATIONS

8/17/99

# INTERSECTION DETAILS

NOT TO SCALE

|                                                                                                          |                     |
|----------------------------------------------------------------------------------------------------------|---------------------|
| PROJECT REFERENCE NO.                                                                                    | SHEET NO.           |
| U-4758                                                                                                   | 2B-10               |
| RW SHEET NO.                                                                                             |                     |
| ROADWAY DESIGN ENGINEER                                                                                  | HYDRAULICS ENGINEER |
| Signed by:  5/30/2025 |                     |
| DOCUMENT NOT CONSIDERED FINAL<br>UNLESS ALL SIGNATURES COMPLETED                                         |                     |



INTERSECTION OF  
TYNER ROAD (-Y20-)  
FARMER'S MARKET ENTRANCE (DWAY 23)  
(SEE PLAN SHEET 25)

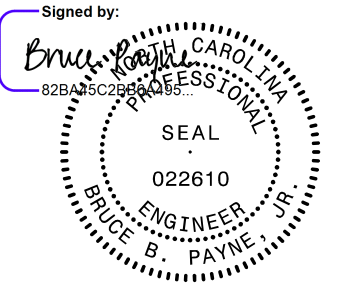
NOTE: SEE PMP PLANS FOR WHEEL CHAIR RAMP  
AND PAVEMENT MARKING LOCATIONS

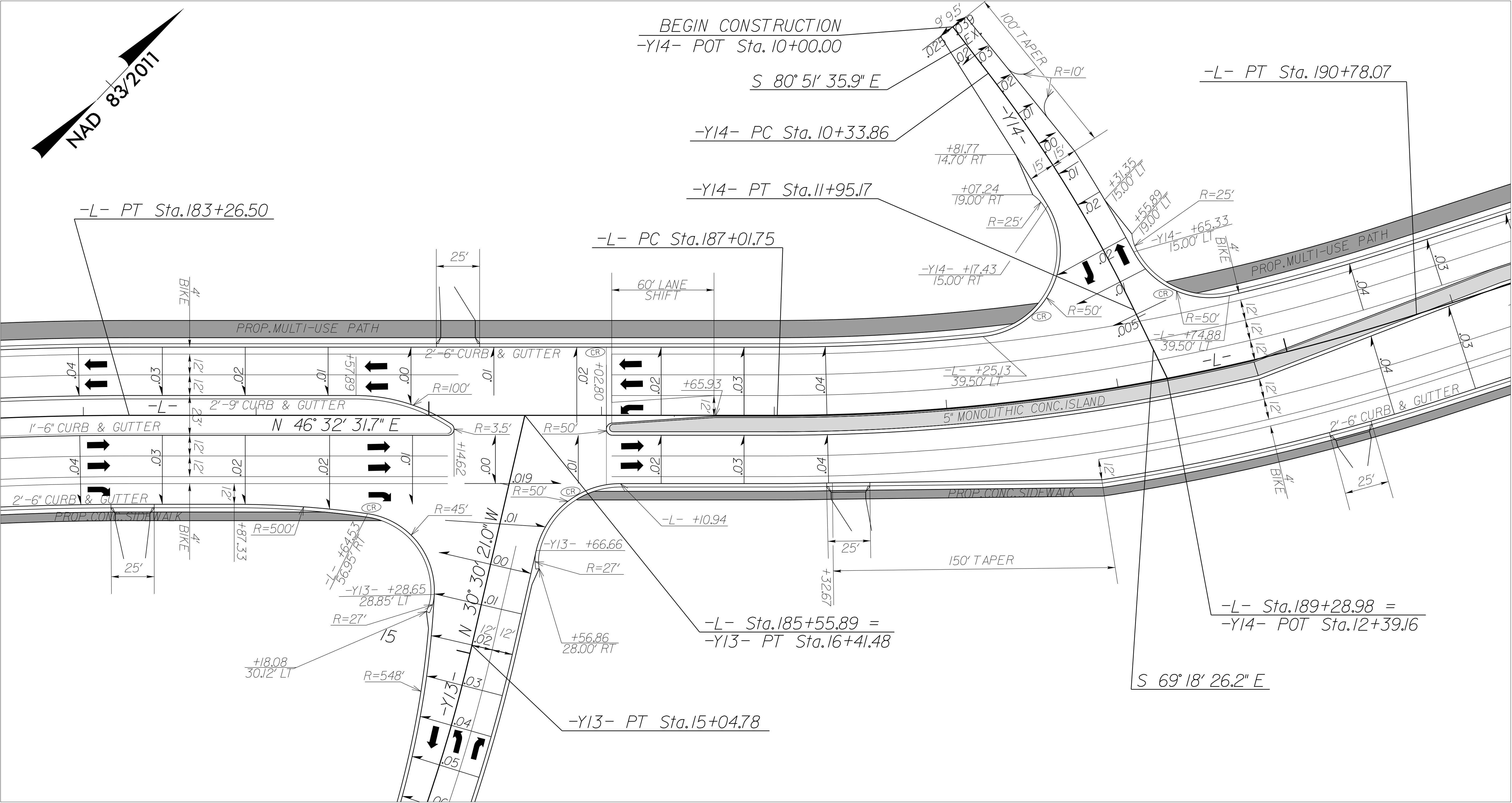
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USER:DAVIDJ.CARTER

8/17/99

# INTERSECTION DETAILS

NOT TO SCALE

|                                                                                                   |                     |
|---------------------------------------------------------------------------------------------------|---------------------|
| PROJECT REFERENCE NO.                                                                             | SHEET NO.           |
| U-4758                                                                                            | 2B-II               |
| R/W SHEET NO.                                                                                     |                     |
| ROADWAY DESIGN ENGINEER                                                                           | HYDRAULICS ENGINEER |
| Signed by:<br> |                     |
| 5/30/2025                                                                                         |                     |
| DOCUMENT NOT CONSIDERED FINAL<br>UNLESS ALL SIGNATURES COMPLETED                                  |                     |



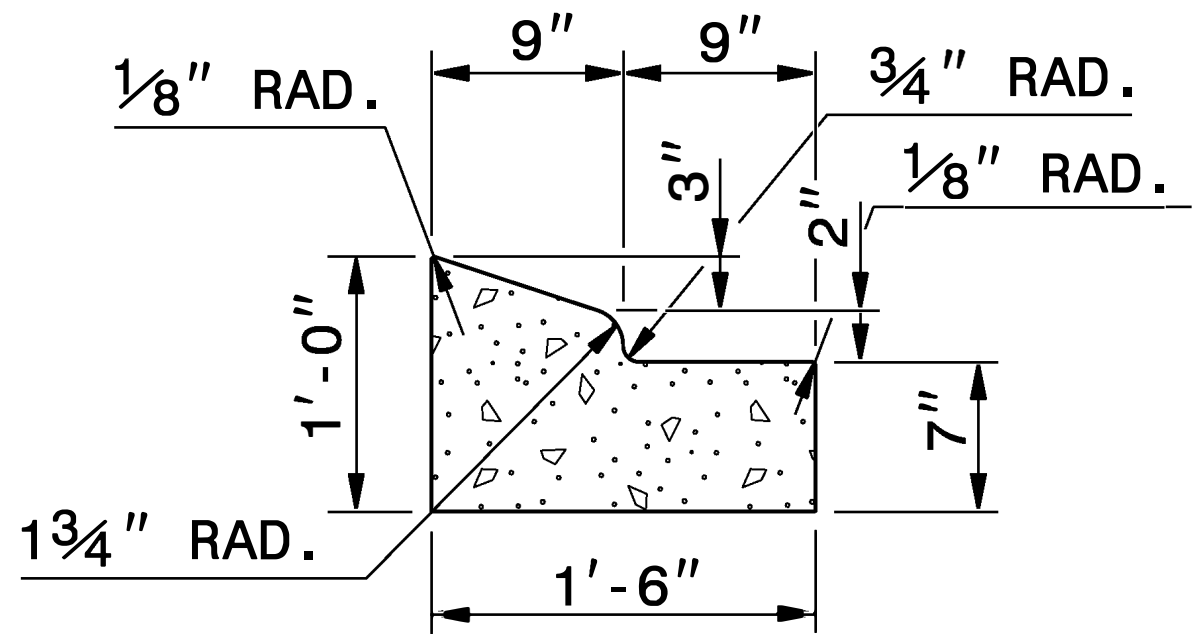
INTERSECTION OF  
CLINARD FARMS ROAD (-Y13-)  
ROSE HAVEN ROAD (-Y14-)  
(SEE PLAN SHEET 18)

NOTE: SEE PMP PLANS FOR WHEEL CHAIR RAMP  
AND PAVEMENT MARKING LOCATIONS

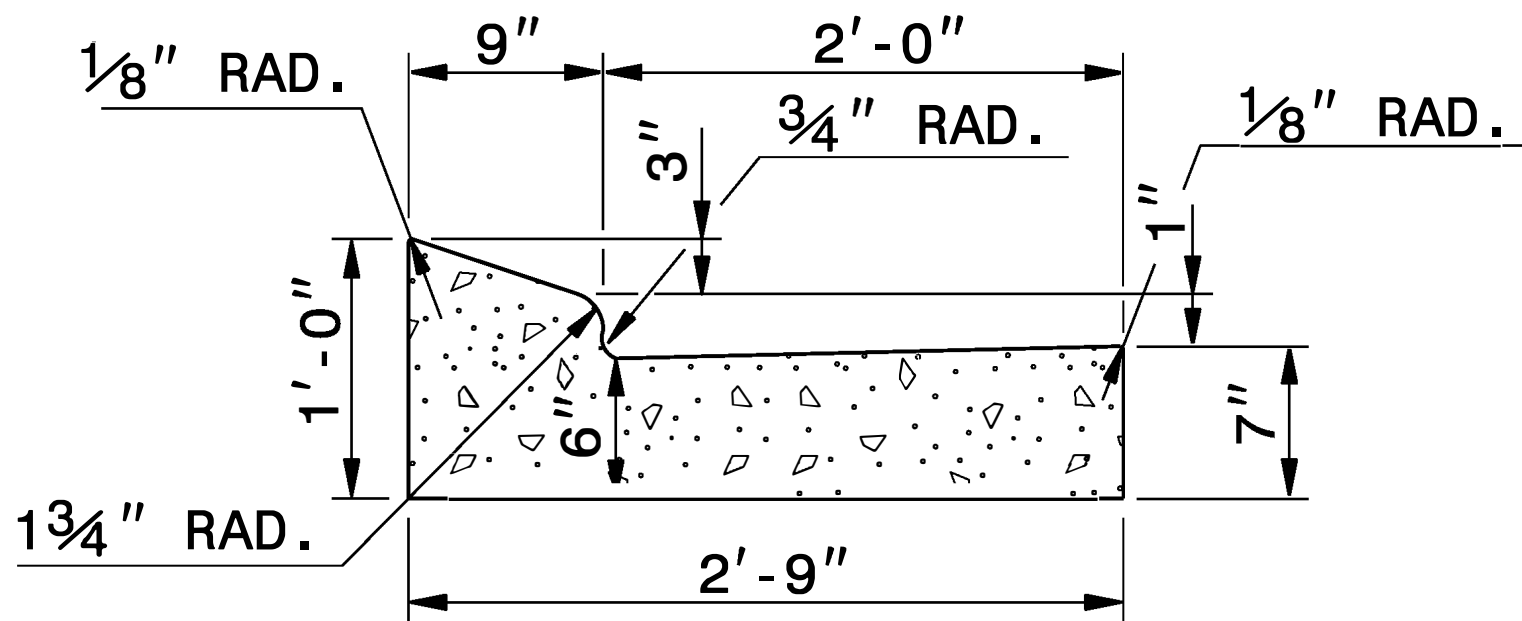
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EJS:JUS:RAME:333

5/14/99

| PROJECT REFERENCE NO. | SHEET NO. |
|-----------------------|-----------|
| U-4758                | 2C-1      |



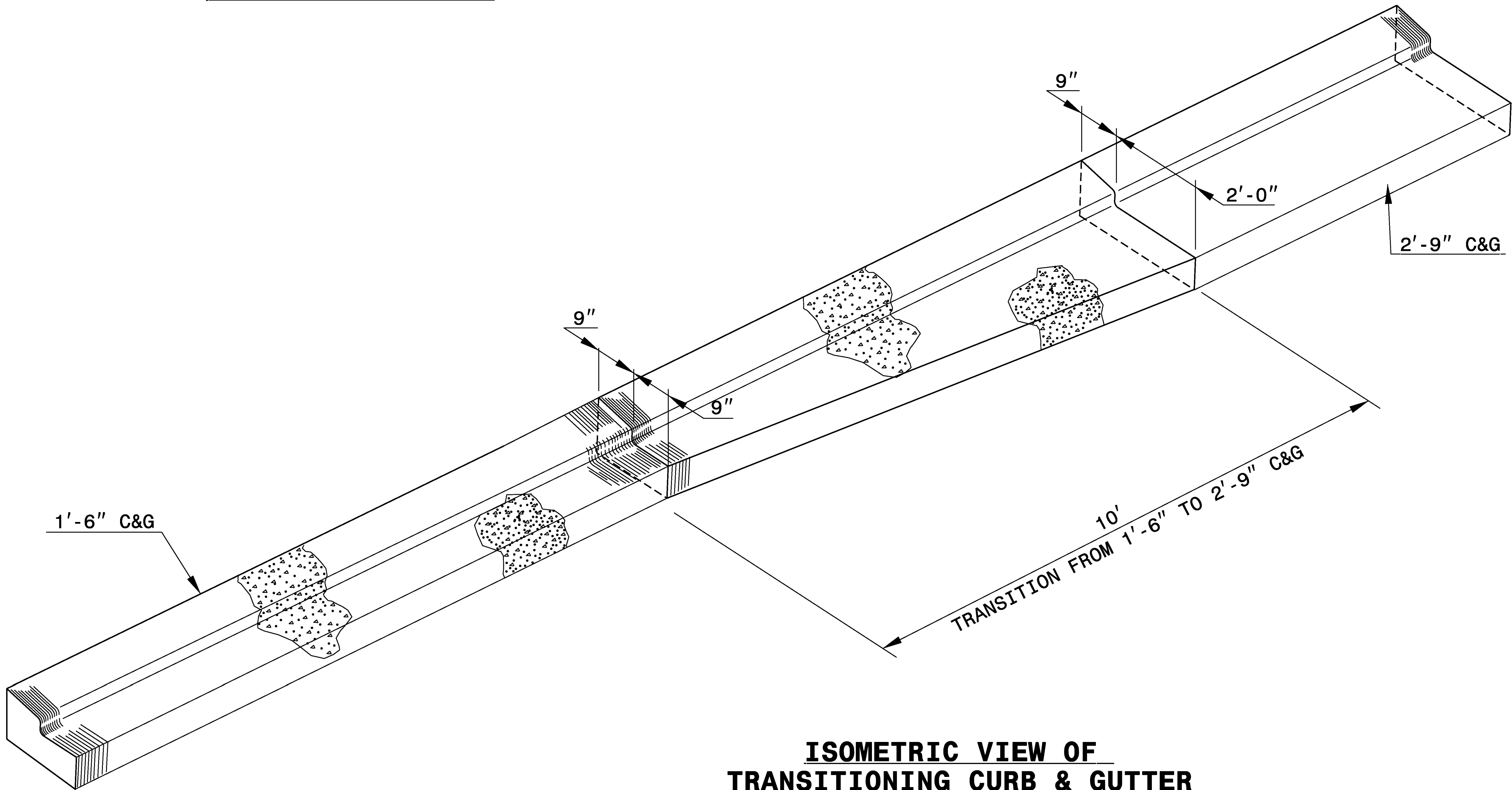
1'-6" CURB AND GUTTER



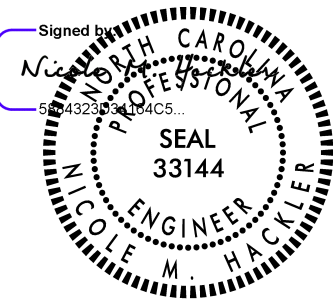
2'-9" CURB AND GUTTER

NOTE: SEE STD. DWG. 846.01 FOR ADDITIONAL CURB AND GUTTER INFORMATION.

SEE ROADWAY PLANS FOR LOCATION OF CURB TRANSITION.



ISOMETRIC VIEW OF  
TRANSITIONING CURB & GUTTER



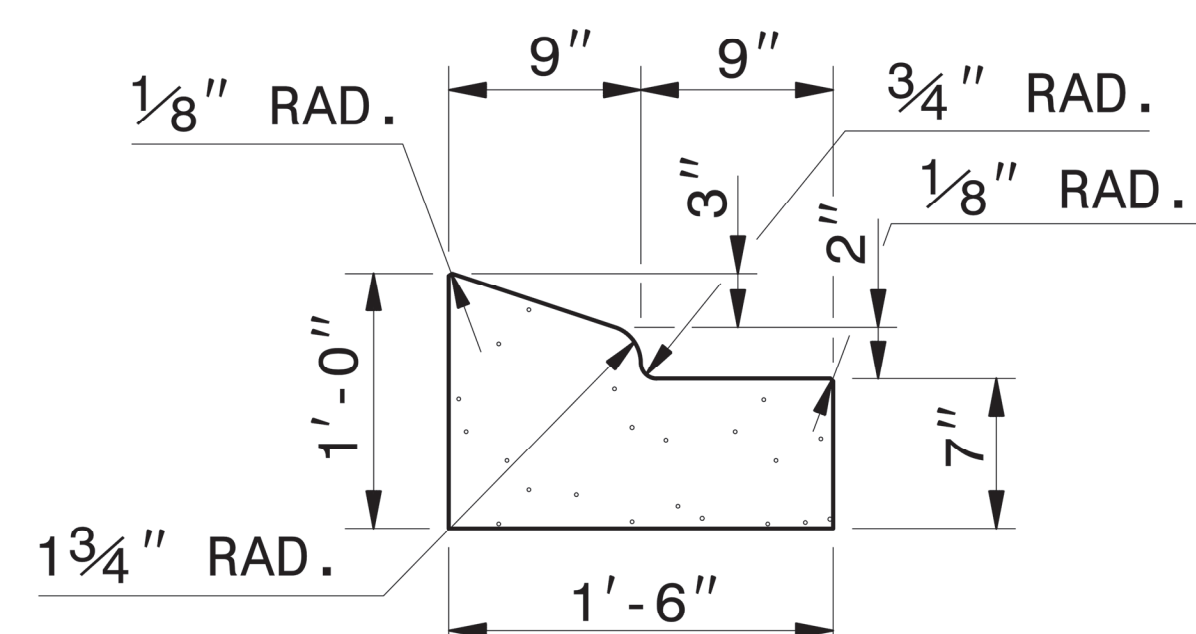
5/22/2025

DOCUMENT NOT CONSIDERED FINAL  
UNLESS ALL SIGNATURES COMPLETED

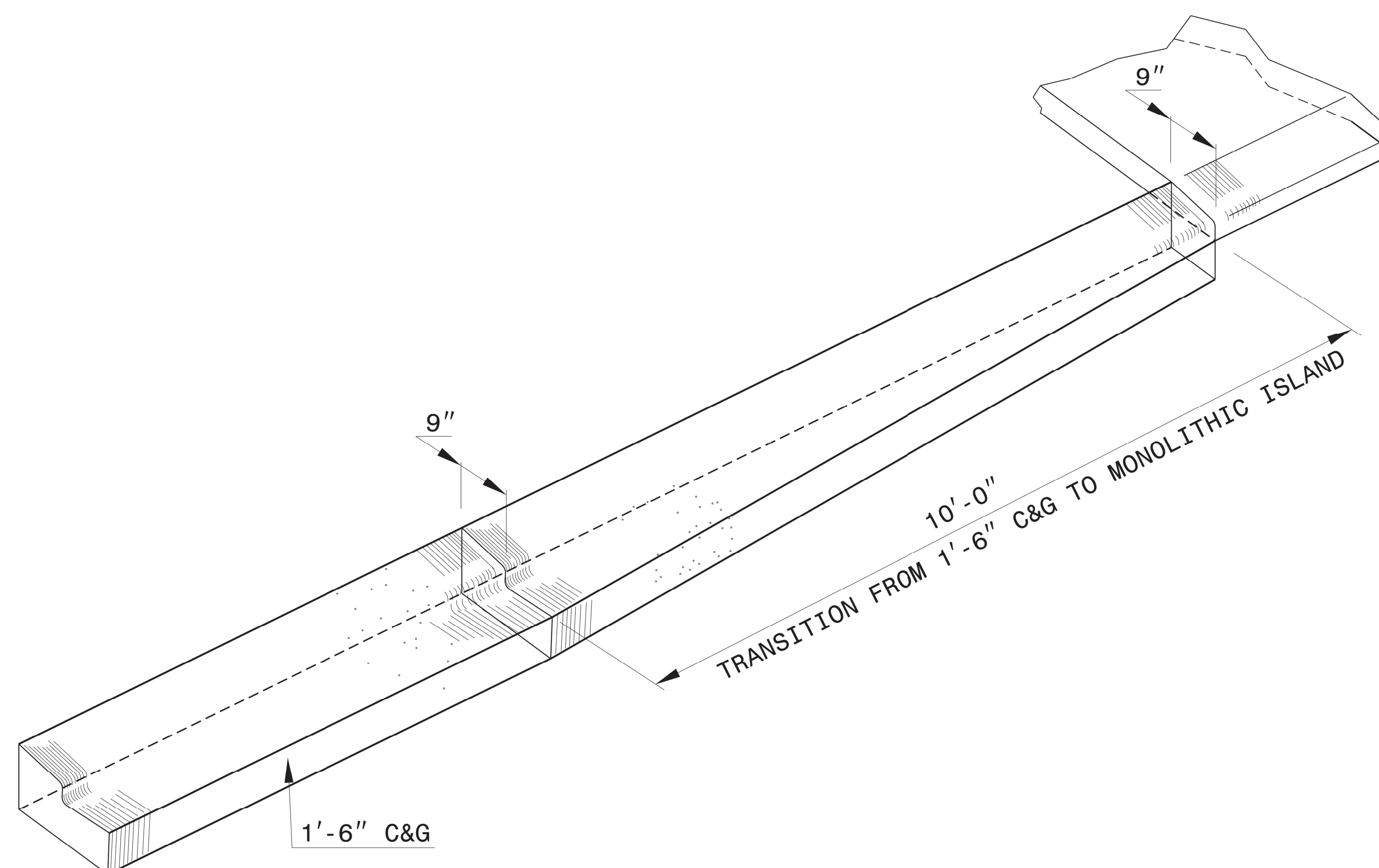
|                                                                                            |                     |
|--------------------------------------------------------------------------------------------|---------------------|
| <b>CONTRACT STANDARDS<br/>AND DEVELOPMENT UNIT</b><br>Office 919-707-6950 FAX 919-250-4119 |                     |
| <b>DETAIL OF 1'-6"<br/>TO 2'-9" CURB &amp; GUTTER<br/>TRANSITION SECTION</b>               |                     |
| ORIGINAL BY: T.S.SPELL                                                                     | DATE: NOV. 26, 2001 |
| MODIFIED BY: T.S.SPELL                                                                     | DATE: JAN. 23, 2007 |
| CHECKED BY:                                                                                | DATE:               |
| FILE SPEC.: DS174:/usr/details/stand/cqtransit.dgn                                         |                     |

NOTE: SEE STD. DWG. 846.01 FOR ADDITIONAL  
CURB AND GUTTER INFORMATION.

SEE ROADWAY PLANS FOR LOCATION OF  
CURB TRANSITION.



### 1'-6" CURB AND GUTTER



### ISOMETRIC VIEW OF TRANSITIONING CURB & GUTTER

Signed by:  
*Nicole*  
5884326-3444055



The seal is circular with a double-lined border. The outer ring contains the text "NORTH CAROLINA" at the top and "NICOLE M. HACKLER" at the bottom. The inner ring contains the text "PROFESSIONAL ENGINEER". In the center, it says "SEAL 33144".

5/22/2025

**DOCUMENT NOT CONSIDERED FINAL  
UNLESS ALL SIGNATURES COMPLETED**

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

**DETAIL OF 1'-6"**  
**CURB & GUTTER**  
**TRANSITION SECTION**

ORIGINAL BY: \_\_\_\_\_ DATE: \_\_\_\_\_  
MODIFIED BY: KKEMPF \_\_\_\_\_ DATE: 09-24-14  
CHECKED BY: \_\_\_\_\_ DATE: \_\_\_\_\_  
FILE SPEC.: kkempf/english/curb\_gutter\_transition.dgn

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

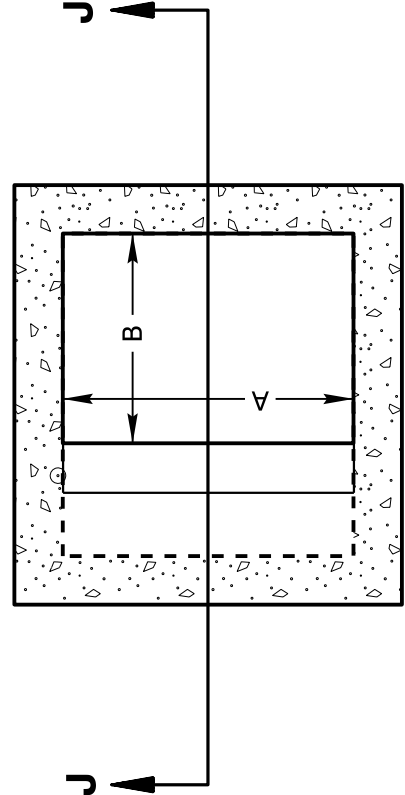
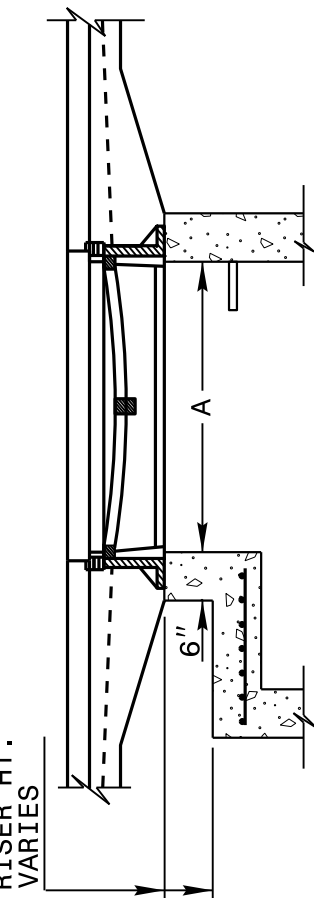
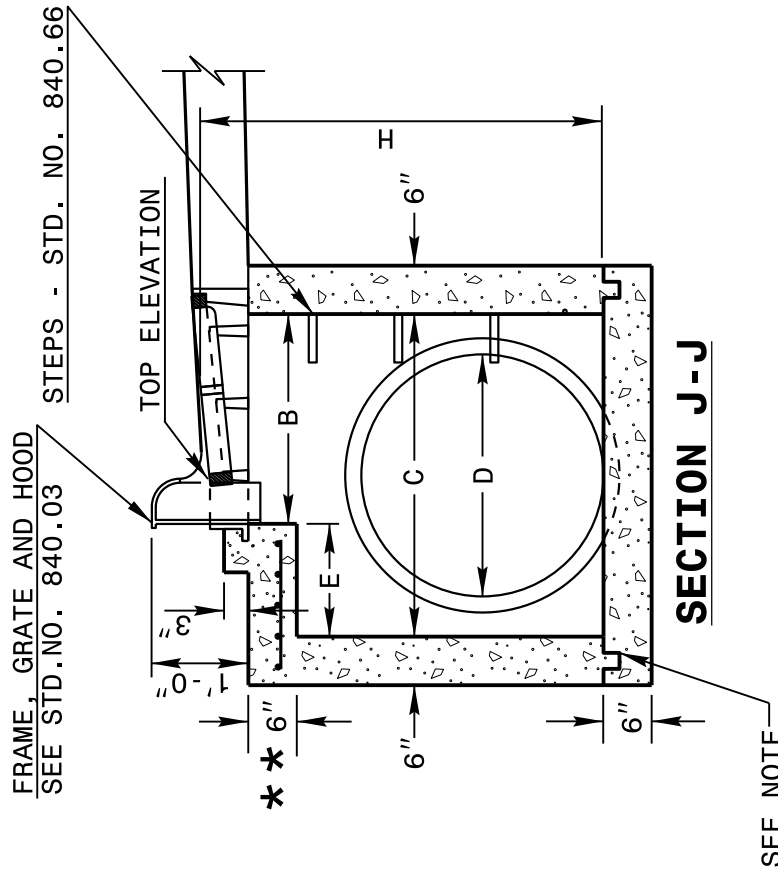
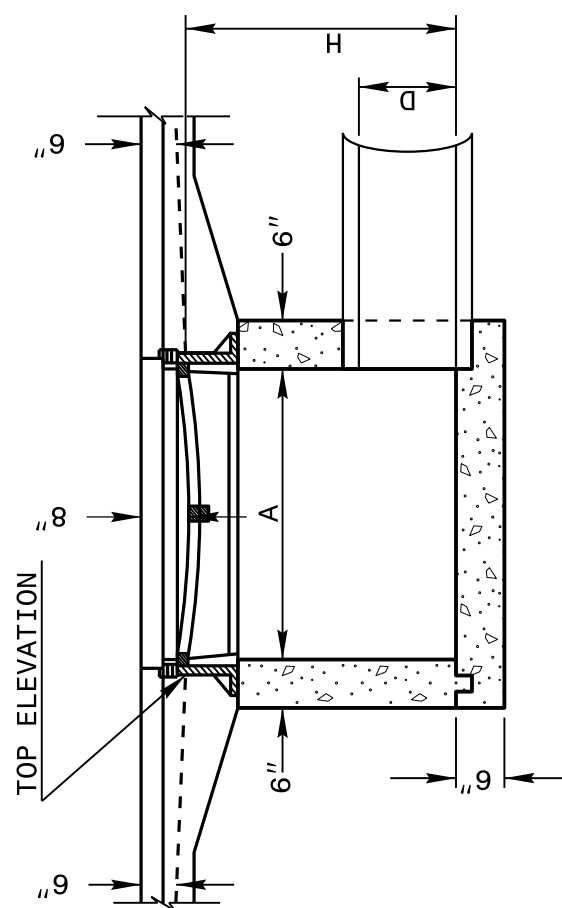
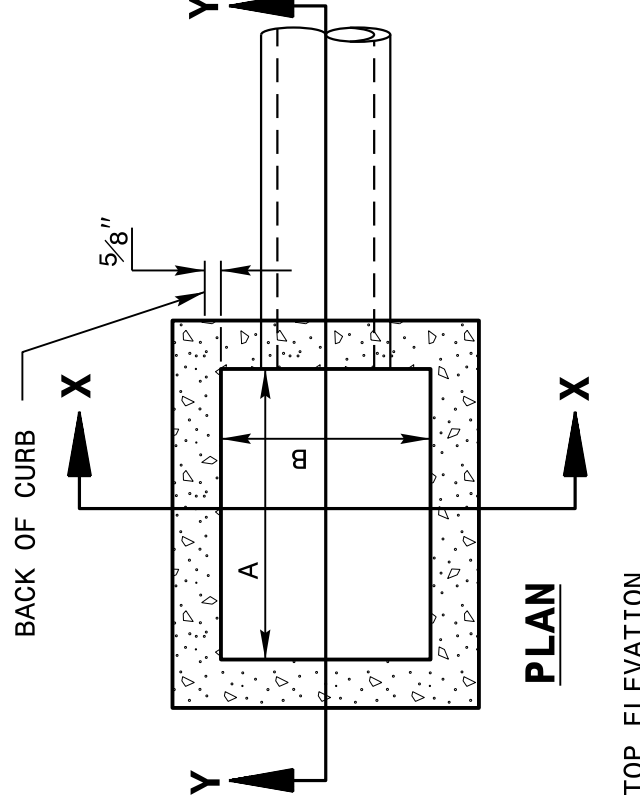
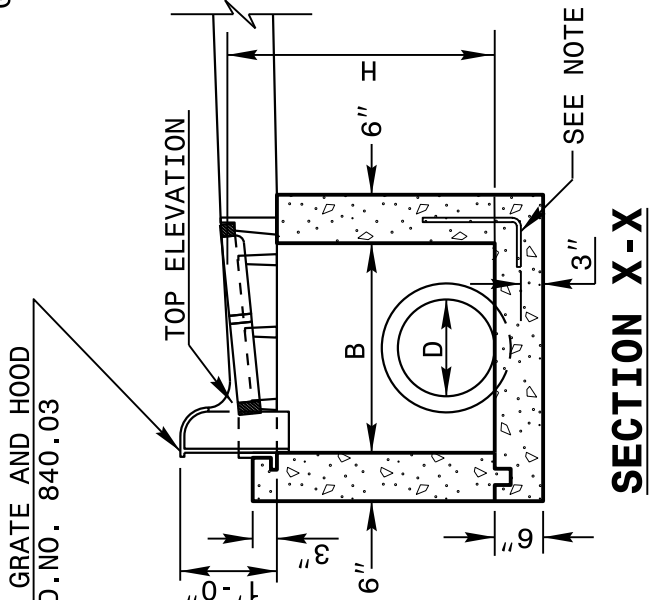
ENGLISH DETAIL DRAWING FOR  
**MINIMUM DEPTH  
CONCRETE CATCH BASIN**  
12" THRU 84" PIPE

SHEET 1 OF 2

**840D02**

GENERAL NOTES:

- USE CLASS "B" CONCRETE THROUGHOUT.
- PROVIDE ALL CATCH BASINS OVER 3'-6" IN DEPTH WITH STEPS 12" ON CENTER. USE STEPS WHICH COMPLY WITH STD. DRAWING 840.66.
- OPTIONAL CONSTRUCTION - MONOLITHIC FOUR, 2" KEYWAY, OR #4 BAR DOWELS AT 12" CENTERS AS DIRECTED BY THE ENGINEER.
- USE FORMS FOR THE CONSTRUCTION OF THE BOTTOM SLAB.
- IF REINFORCED CONCRETE PIPE IS SET IN BOTTOM SLAB OF BOX, ADD TO SLAB AS SHOWN ON STD. NO. 840.00.
- USE TYPE "E", "F" AND "G" GRATES UNLESS OTHERWISE INDICATED.
- FOR 8'-0" IN HEIGHT OR LESS USE 6" WALLS AND BOTTOM SLAB. OVER 8'-0" TO 16'-0" IN HEIGHT USE 8" WALLS AND BOTTOM SLAB. ADJUST QUANTITIES ACCORDINGLY.
- CONSTRUCT WITH PIPE CROWNS MATCHING.
- CHAMFER ALL EXPOSED CORNERS 1".
- \*\* FOR STRUCTURES WITH PIPE LARGER THAN 54", MAKE THE TOP SLAB 8" THICK.



DETAIL SHOWING METHOD  
OF RISER CONSTRUCTION

PLAN

PLAN

SHEET 1 OF 2  
**840D02**

ENGLISH DETAIL DRAWING FOR  
**MINIMUM DEPTH  
CONCRETE CATCH BASIN**  
12" THRU 84" PIPE

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

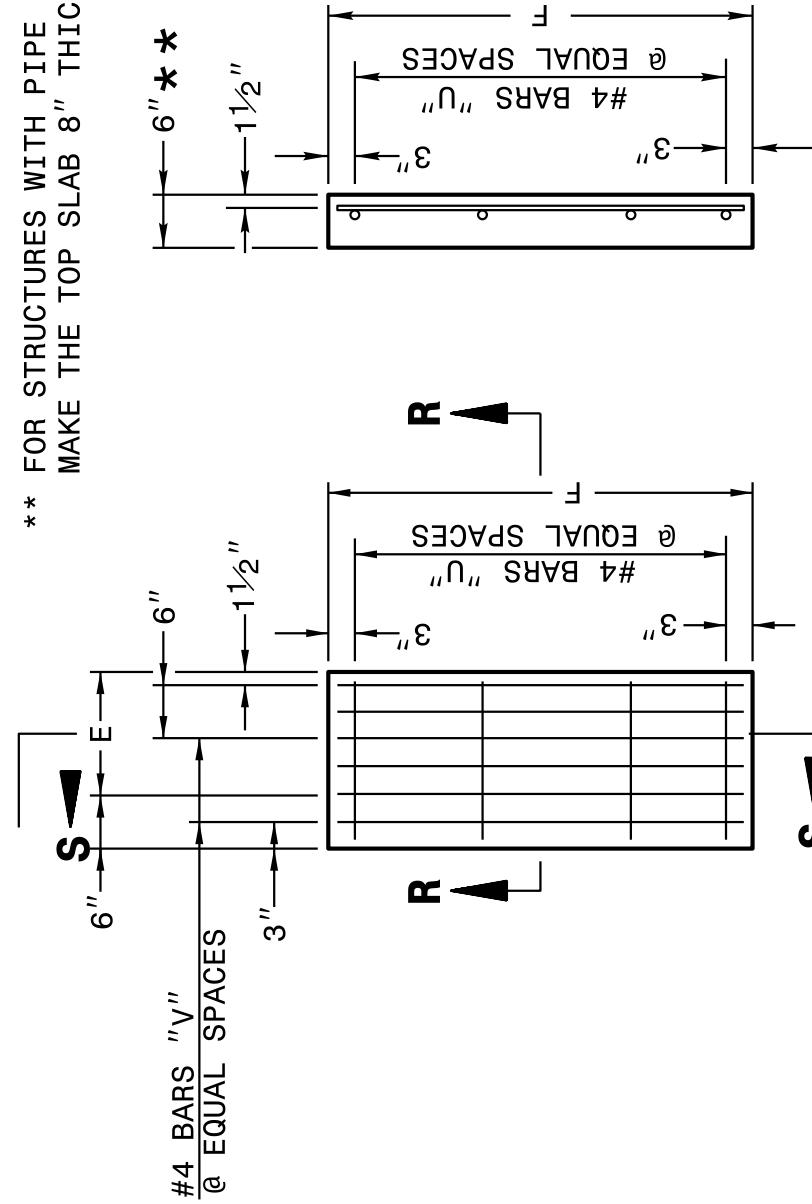
STATE OF  
NORTH CAROLINA  
DEPT. OF TRANSPORTATION  
DIVISION OF HIGHWAYS  
RALEIGH, N.C.

ENGLISH DETAIL DRAWING FOR  
**MINIMUM DEPTH  
CONCRETE CATCH BASIN**  
12" THRU 84" PIPE

SHEET 2 OF 2

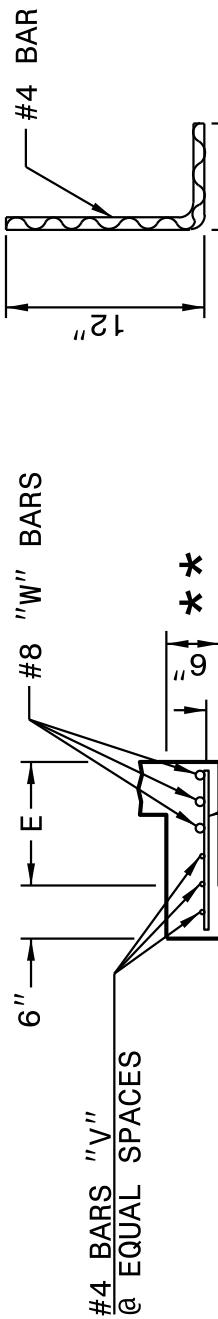
**840D02**

\*\* FOR STRUCTURES WITH PIPE LARGER THAN 54",  
MAKE THE TOP SLAB 8" THICK.



PLAN OF TOP SLAB

SECTION S-S

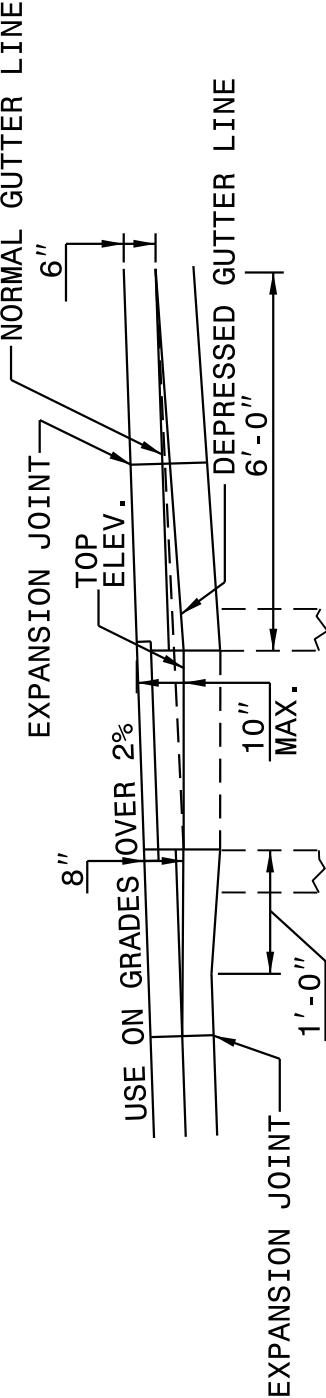


SECTION R-R

DOWEL

ELEVATION

NORMAL CURB AND GUTTER ON LIGHT GRADES

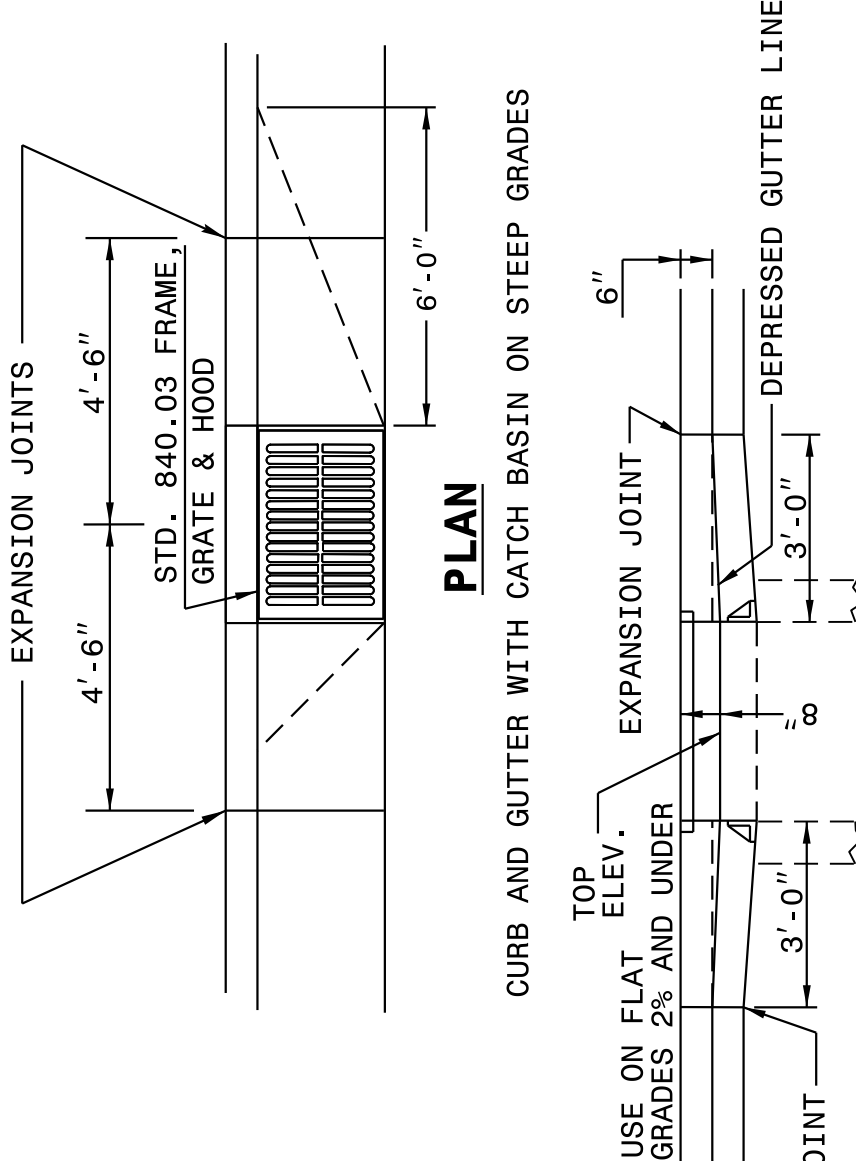


ELEVATION

NORMAL CURB AND GUTTER ON STEEP GRADES

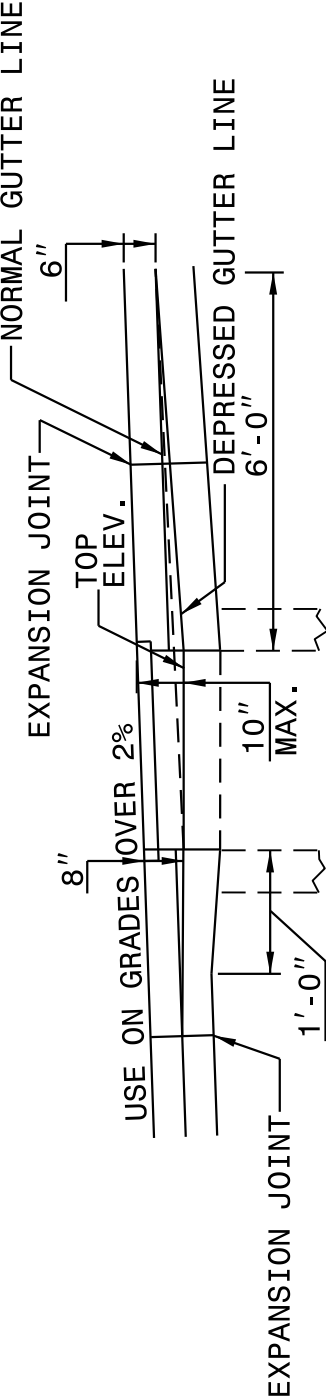
| MINIMUM DIMENSIONS AND QUANTITIES FOR CONCRETE CATCH BASIN (BASED ON MIN. HEIGHT, H, WITH NO RISER) * |       |       |       |             |                 |        |        |                 |             |
|-------------------------------------------------------------------------------------------------------|-------|-------|-------|-------------|-----------------|--------|--------|-----------------|-------------|
| DIMENSIONS OF BOX AND PIPE                                                                            |       |       |       |             | COVER           |        |        |                 |             |
| PIPE D.                                                                                               | SPAN  | WIDTH | DEPTH | MIN. HEIGHT | COVER DIMENSION | MIN.   | HEIGHT | COVER DIMENSION | MIN. HEIGHT |
| 12"                                                                                                   | 3'-0" | 2'-2" | 2'-2" | 2'-0"       | 2'-0"           | 2'-0"  | 2'-0"  | 2'-0"           | 2'-0"       |
| 15"                                                                                                   | 3'-0" | 2'-2" | 2'-2" | 2'-3"       | 2'-3"           | 2'-3"  | 2'-3"  | 2'-3"           | 2'-3"       |
| 18"                                                                                                   | 3'-0" | 2'-2" | 2'-2" | 3'-1"       | 3'-1"           | 3'-1"  | 3'-1"  | 3'-1"           | 3'-1"       |
| 24"                                                                                                   | 3'-0" | 2'-2" | 2'-2" | 3'-4"       | 3'-4"           | 3'-4"  | 3'-4"  | 3'-4"           | 3'-4"       |
| 30"                                                                                                   | 3'-0" | 2'-2" | 2'-2" | 3'-10"      | 3'-10"          | 3'-10" | 3'-10" | 3'-10"          | 3'-10"      |
| 36"                                                                                                   | 3'-0" | 2'-2" | 2'-2" | 4'-6"       | 4'-6"           | 4'-6"  | 4'-6"  | 4'-6"           | 4'-6"       |
| 42"                                                                                                   | 3'-0" | 2'-2" | 2'-2" | 4'-11"      | 4'-11"          | 4'-11" | 4'-11" | 4'-11"          | 4'-11"      |
| 48"                                                                                                   | 3'-0" | 2'-2" | 2'-2" | 5'-6"       | 5'-6"           | 5'-6"  | 5'-6"  | 5'-6"           | 5'-6"       |
| 54"                                                                                                   | 3'-0" | 2'-2" | 2'-2" | 6'-0"       | 6'-0"           | 6'-0"  | 6'-0"  | 6'-0"           | 6'-0"       |
| 60"                                                                                                   | 3'-0" | 2'-2" | 2'-2" | 6'-3"       | 6'-3"           | 6'-3"  | 6'-3"  | 6'-3"           | 6'-3"       |
| 66"                                                                                                   | 3'-0" | 2'-2" | 2'-2" | 6'-11"      | 6'-11"          | 6'-11" | 6'-11" | 6'-11"          | 6'-11"      |
| 72"                                                                                                   | 3'-0" | 2'-2" | 2'-2" | 7'-6"       | 7'-6"           | 7'-6"  | 7'-6"  | 7'-6"           | 7'-6"       |
| 78"                                                                                                   | 3'-0" | 2'-2" | 2'-2" | 8'-1"       | 8'-1"           | 8'-1"  | 8'-1"  | 8'-1"           | 8'-1"       |
| 84"                                                                                                   | 3'-0" | 2'-2" | 2'-2" | 8'-9"       | 8'-9"           | 8'-9"  | 8'-9"  | 8'-9"           | 8'-9"       |

\* RISER HAS .228 CUBIC YARDS OF CONCRETE PER FOOT HEIGHT



ELEVATION

NORMAL CURB AND GUTTER ON LIGHT GRADES



ELEVATION

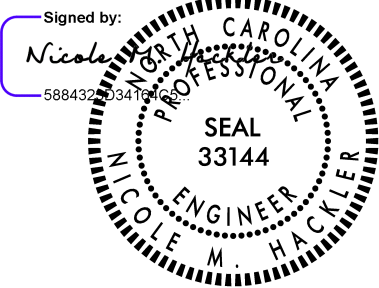
NORMAL CURB AND GUTTER ON STEEP GRADES

ORIGINAL BY: 2002 Std.840.01 DATE:   
MODIFIED BY: E.E. WARD DATE: 3-1-02  
CHECKED BY: DATE:   
FILE SPEC.: s:Special Details/jhowerton/840d02.dgn

**SEE PLATE FOR TITLE**

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

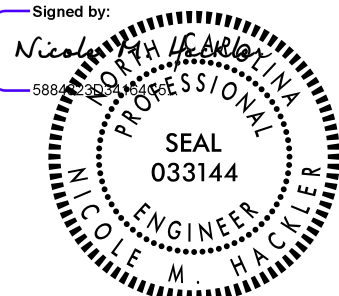
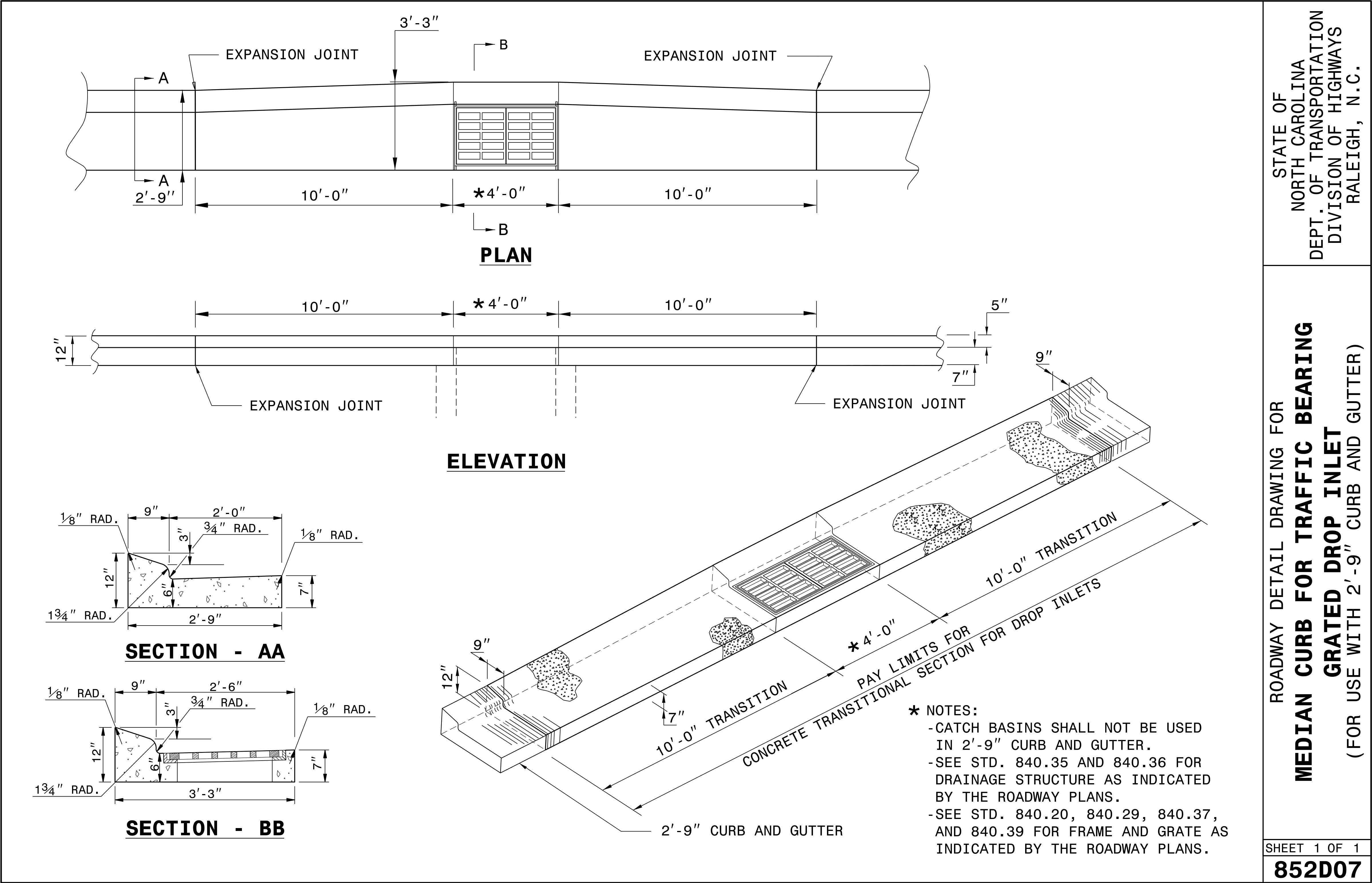
5/22/2025



DOCUMENT NOT CONSIDERED FINAL  
UNLESS ALL SIGNATURES COMPLETED



|                       |           |
|-----------------------|-----------|
| PROJECT REFERENCE NO. | SHEET NO. |
| U-4758                | 2C-5      |



5/22/2025

DOCUMENT NOT CONSIDERED FINAL  
UNLESS ALL SIGNATURES COMPLETED

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

**SEE TITLE BLOCK**

ORIGINAL BY: K.A. KEMPf DATE: 7-20-23  
MODIFIED BY: DATE:  
CHECKED BY: DATE:  
FILE SPEC.: 2024 details in lieu\852D0701.dgn

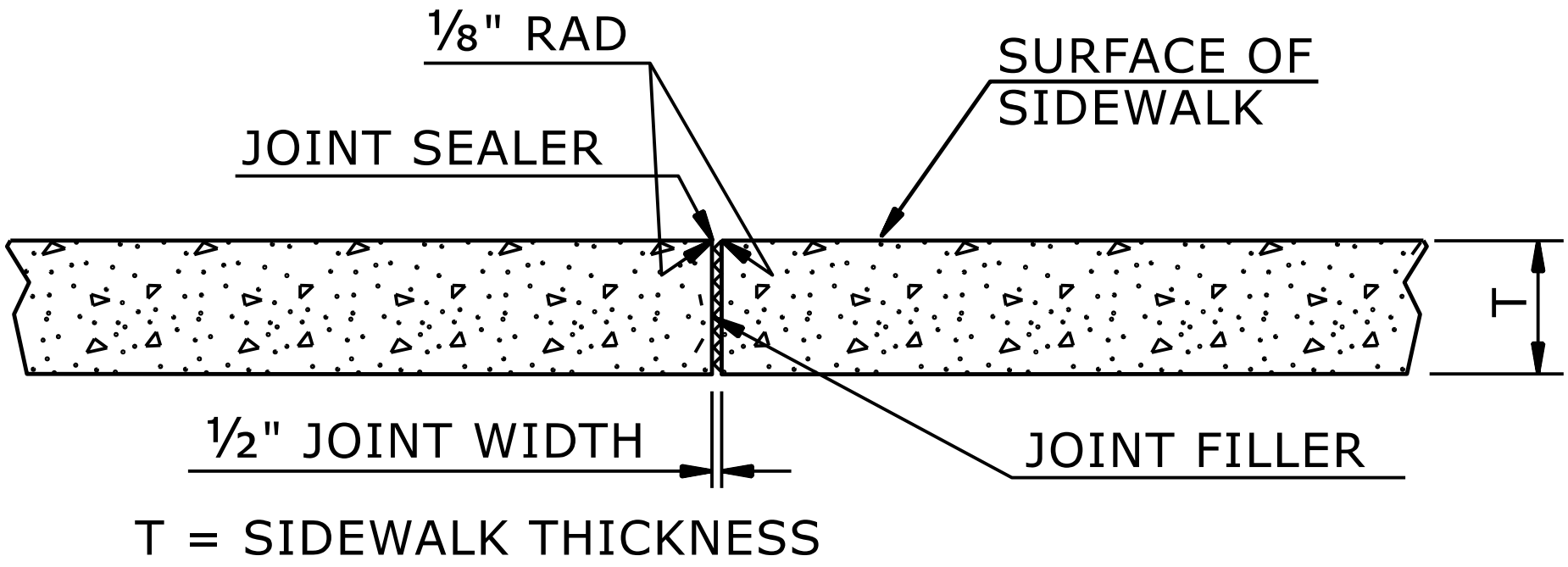
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|-----------------------|-----------|
| U-4758                | 2C-6      |

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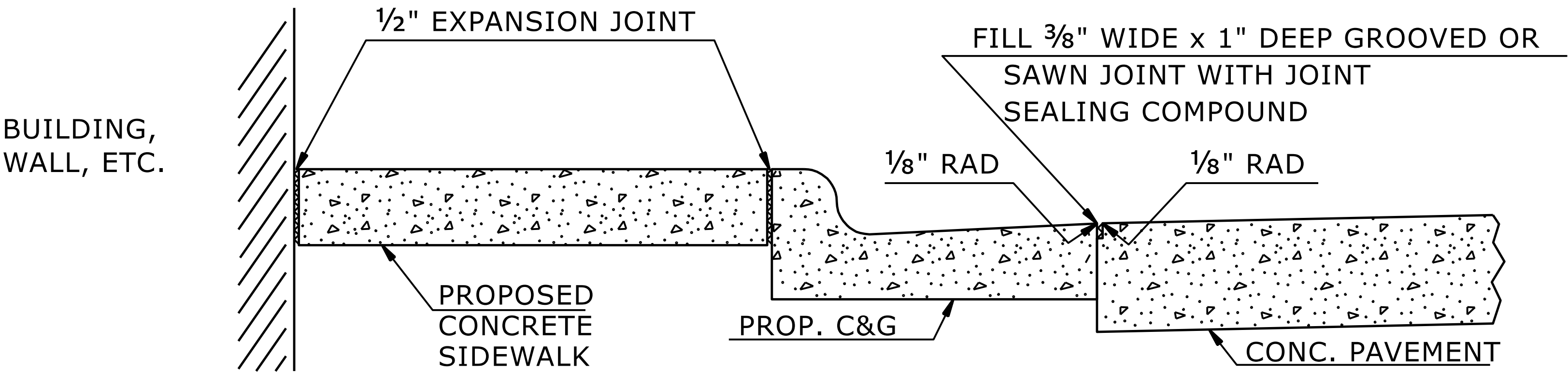
CONSTRUCT STANDARD SIDEWALK 5' WIDE AND 4" THICK UNLESS OTHERWISE DENOTED ON PLANS.

PLACE A GROOVE JOINT 1" DEEP WITH 1/8" RADII IN THE CONCRETE SIDEWALK AT 5' INTERVALS. ONE 1/2" EXPANSION JOINT WILL BE REQUIRED AT 50' INTERVALS. A 1/2" EXPANSION JOINT WILL BE REQUIRED WHERE THE SIDEWALK JOINS ANY RIGID STRUCTURE.

SEE STD. DWG. 848.06 FOR CURB RAMP LOCATION REQUIREMENTS AND CONSTRUCTION GUIDELINES.



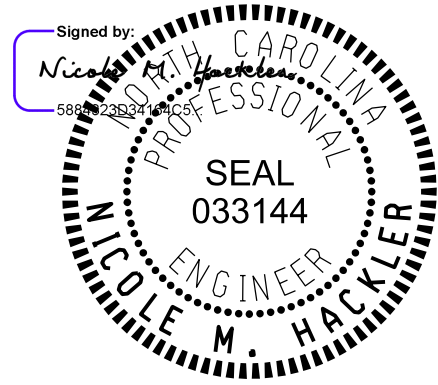
TRANSVERSE EXPANSION JOINT  
IN SIDEWALK



DETAILS SHOWING JOINTS IN CONCRETE SIDEWALK

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

ROADWAY DETAIL DRAWING FOR  
**CONCRETE SIDEWALK**



5/22/2025

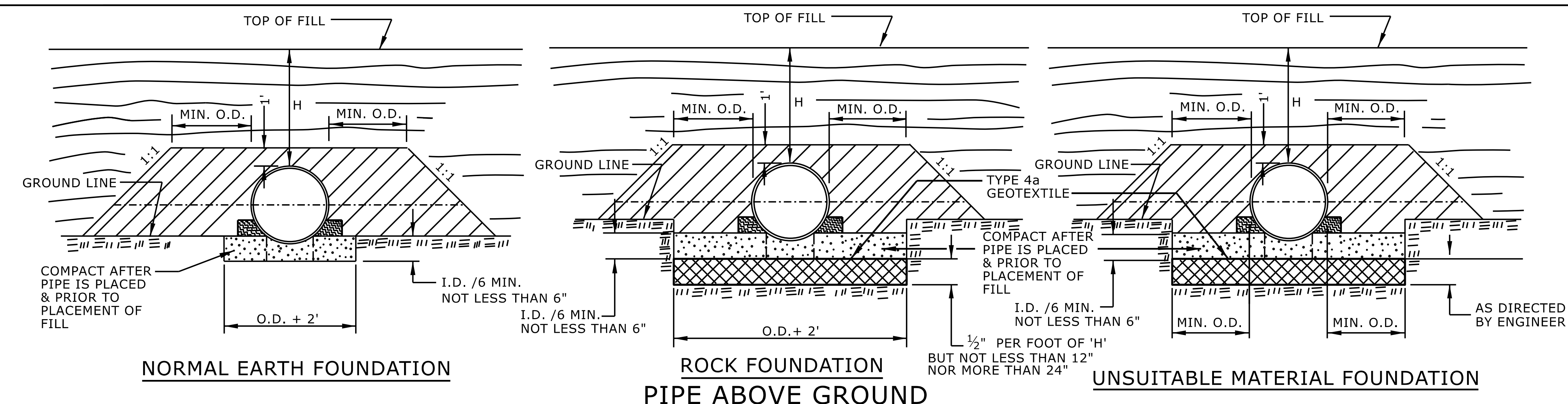
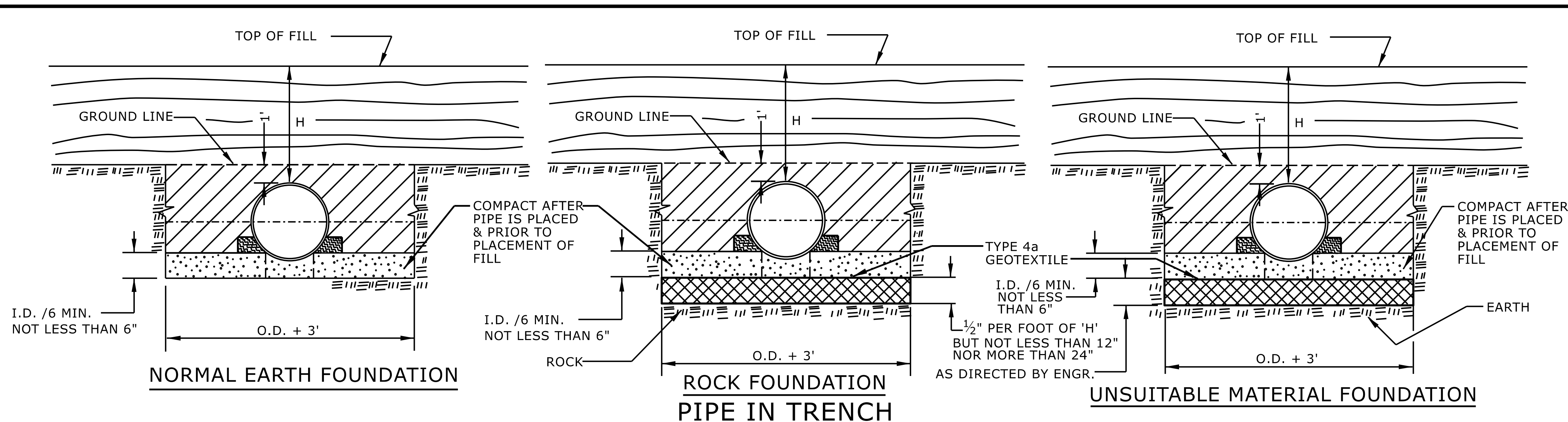
SHEET 1 OF 1  
**848D01**

DOCUMENT NOT CONSIDERED FINAL  
UNLESS ALL SIGNATURES COMPLETED

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

**SEE TITLE BLOCK**

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



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.

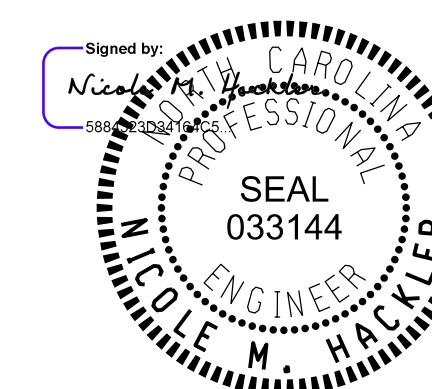
REFER TO NCDOT PIPE MATERIAL SELECTION GUIDE AND STANDARD SPECIFICATIONS  
FOR ALLOWABLE PIPE FILL HEIGHTS AND PIPE SPECIFICATIONS.

|                                                                                       |                                                                                                                             |
|---------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------|
|  | 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. |

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DIVISION OF HIGHWAYS  
RALEIGH, N.C.

# ROADWAY DETAIL DRAWING FOR METHOD OF PIPE INSTALLATION FLEXIBLE PIPE

SHEET 1 OF 2  
**300.01**



5/22/2025

DOCUMENT NOT CONSIDERED FINAL  
UNLESS ALL SIGNATURES COMPLETED

**CONTRACTS STANDARDS  
AND DEVELOPMENT UNIT**  
919-707-6950 FAX 919-250-4

**SEE TITLE BLOCK**

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



| PROJECT REFERENCE NO. | SHEET NO. |
|-----------------------|-----------|
| U-4758                | 2C-9      |

★ - WHERE CLEAR SPACE IS CONSTRAINED ON TWO OR MORE SIDES, THE CLEAR SPACE SHALL BE 4' MINIMUM X 5' MINIMUM, WITH 5' PROVIDED IN THE DIRECTION OF THE PEDESTRIAN STREET CROSSING.

**TYPE 3**

NOTES:  
DETECTABLE WARNING SURFACE SHALL COVER 2'-0" LENGTH AND FULL WIDTH OF THE RAMP FLOOR AS SHOWN ON THE DETAILS.  
DETECTABLE WARNING SURFACE SHALL CONTRAST VISIBLY WITH ADJOINING SURFACE, EITHER LIGHT-ON-DARK, OR DARK-ON-LIGHT SEQUENCE COVERING THE ENTIRE RAMP.

**DETECTABLE WARNING SURFACE**

**TYPE 3 MODIFIED  
INSTALLATION IN A RADIUS**

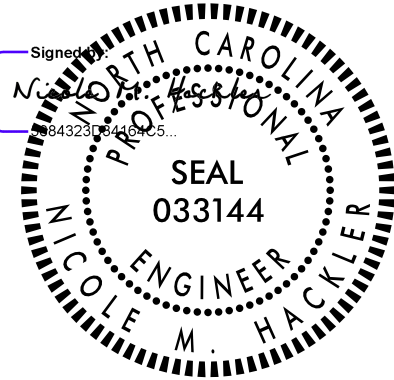
1 8.33% (12:1) MAX RAMP SLOPE  
2 CROSS SLOPE: 2.00%  
3 MAXIMUM CROSS SLOPE AND LONGITUDINAL SLOPE OF 2.00%.

PAY LIMITS FOR 1 CURB RAMP

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DIVISION OF HIGHWAYS  
RALEIGH, N.C.

ROADWAY DETAIL DRAWING FOR  
**CURB RAMP**  
PARALLEL RAMP

SHEET 9 OF 13  
**848D06**



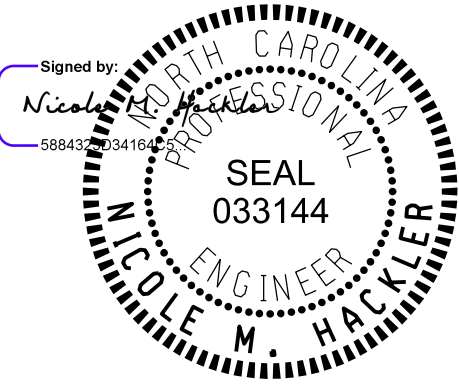
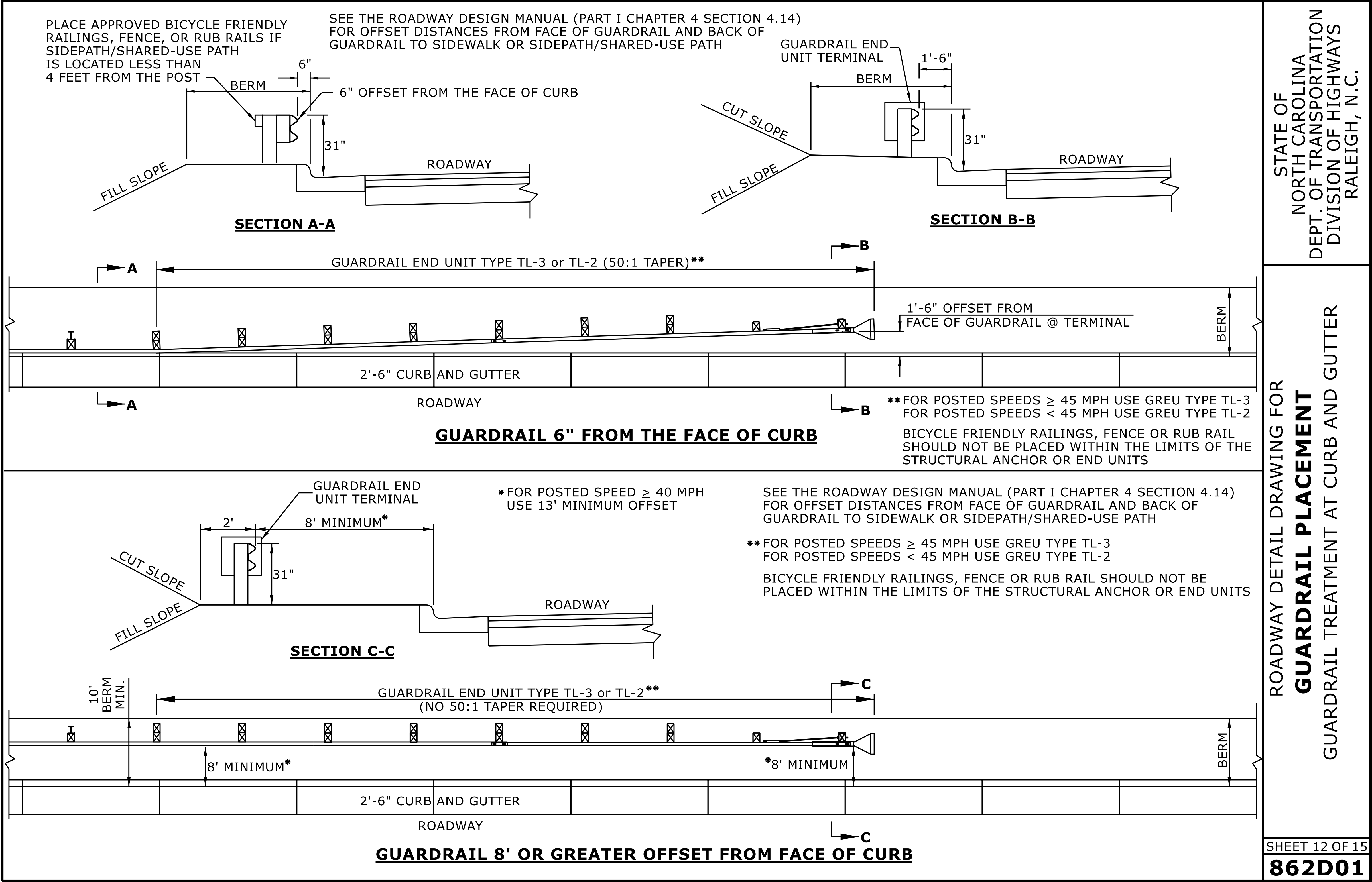
5/22/2025

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ORIGINAL BY: S.CALHOUN DATE: 12-22-2023  
MODIFIED BY: DATE:  
CHECKED BY: DATE:  
FILE SPEC.: special\_details\nmhackler\DO609.dgn



5/22/2025

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UNLESS ALL SIGNATURES COMPLETED

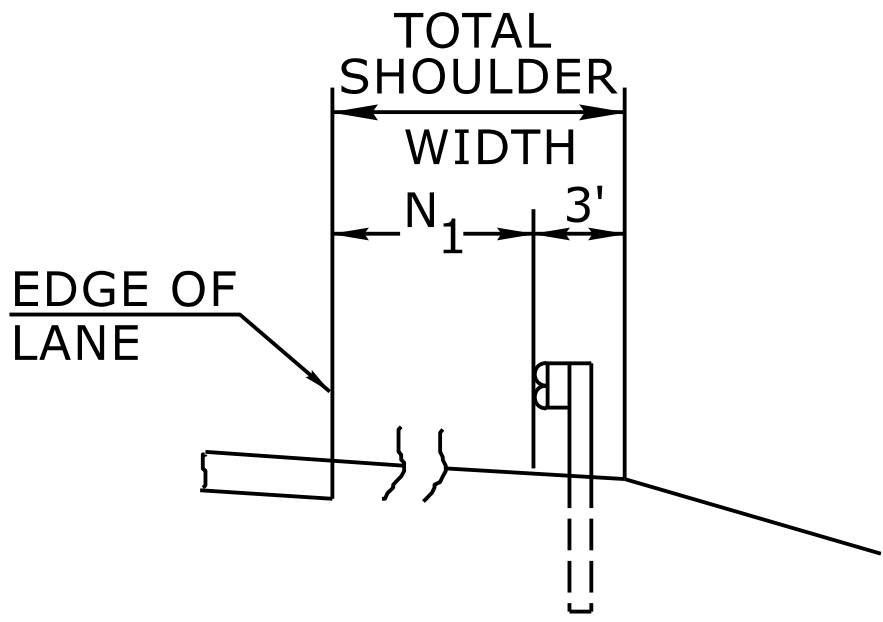
CONTRACTS STANDARDS  
AND DEVELOPMENT UNIT

Office 919-707-6950 FAX 919-250-4119

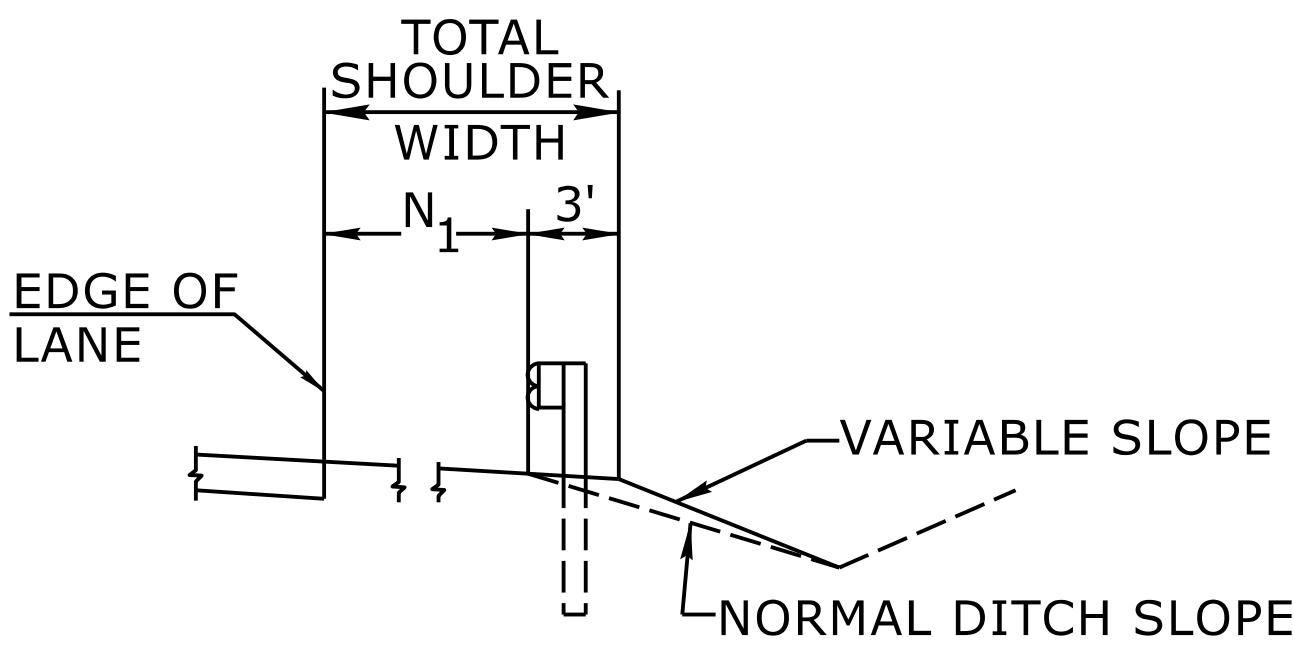
SEE TITLE BLOCK

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

| PROJECT REFERENCE NO. | SHEET NO. |
|-----------------------|-----------|
| U-4758                | 2C-11     |

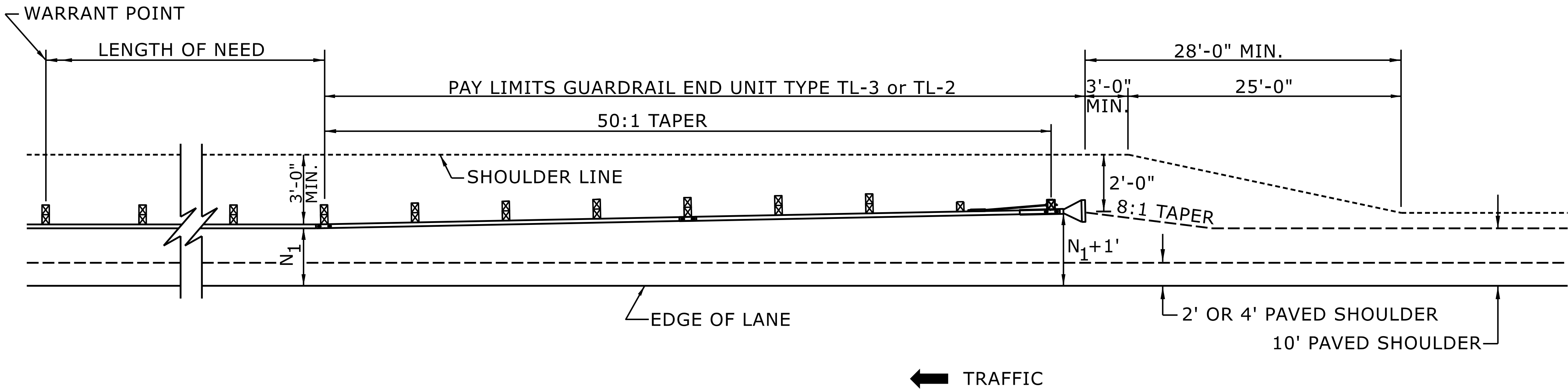


FILL SECTION



CUT SECTION

"N<sub>1</sub>"= DISTANCE FROM EDGE OF LANE TO FACE OF GUARDRAIL WHERE GUARDRAIL IS PARALLEL TO LANE.



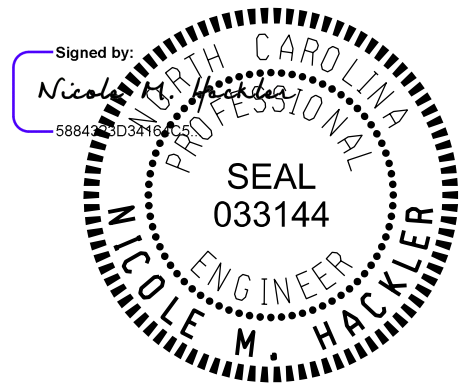
FOR POSTED SPEEDS ≥ 45mph USE GREU TYPE TL-3  
FOR POSTED SPEEDS < 45mph USE GREU TYPE TL-2

DETAIL OF BEGINNING OF GUARDRAIL IN CUT OR FILL SECTION

ROADWAY DETAIL DRAWING FOR  
**GUARDRAIL PLACEMENT**

SHEET 6 OF 15  
**862D01**

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DIVISION OF HIGHWAYS  
RALEIGH, N.C.



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**CONTRACTS STANDARDS  
AND DEVELOPMENT UNIT**

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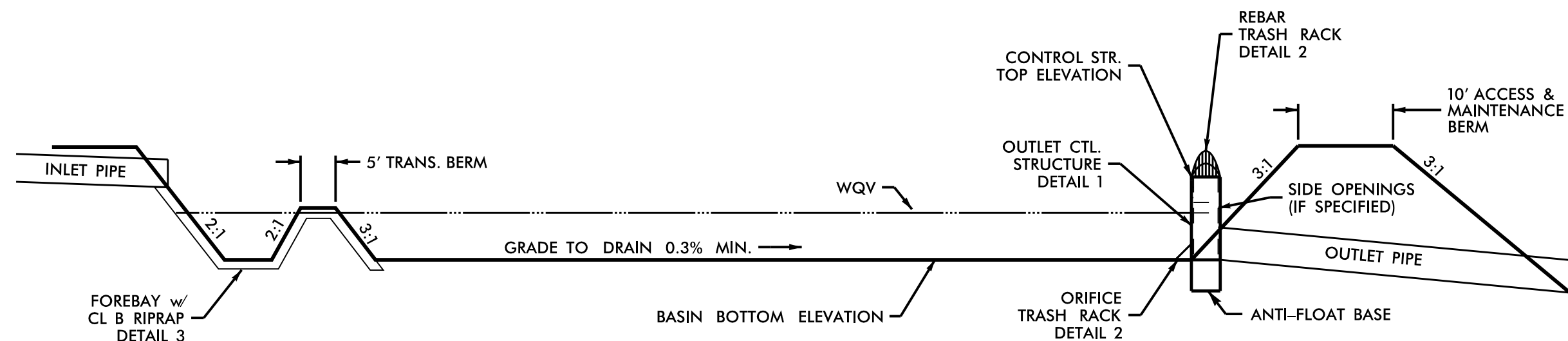
**SEE TITLE BLOCK**

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



8/17/99

## DRY DETENTION BASIN TYPICAL SECTION



PROJECT REFERENCE NO. \_\_\_\_\_

U-4758

SHEET NO.

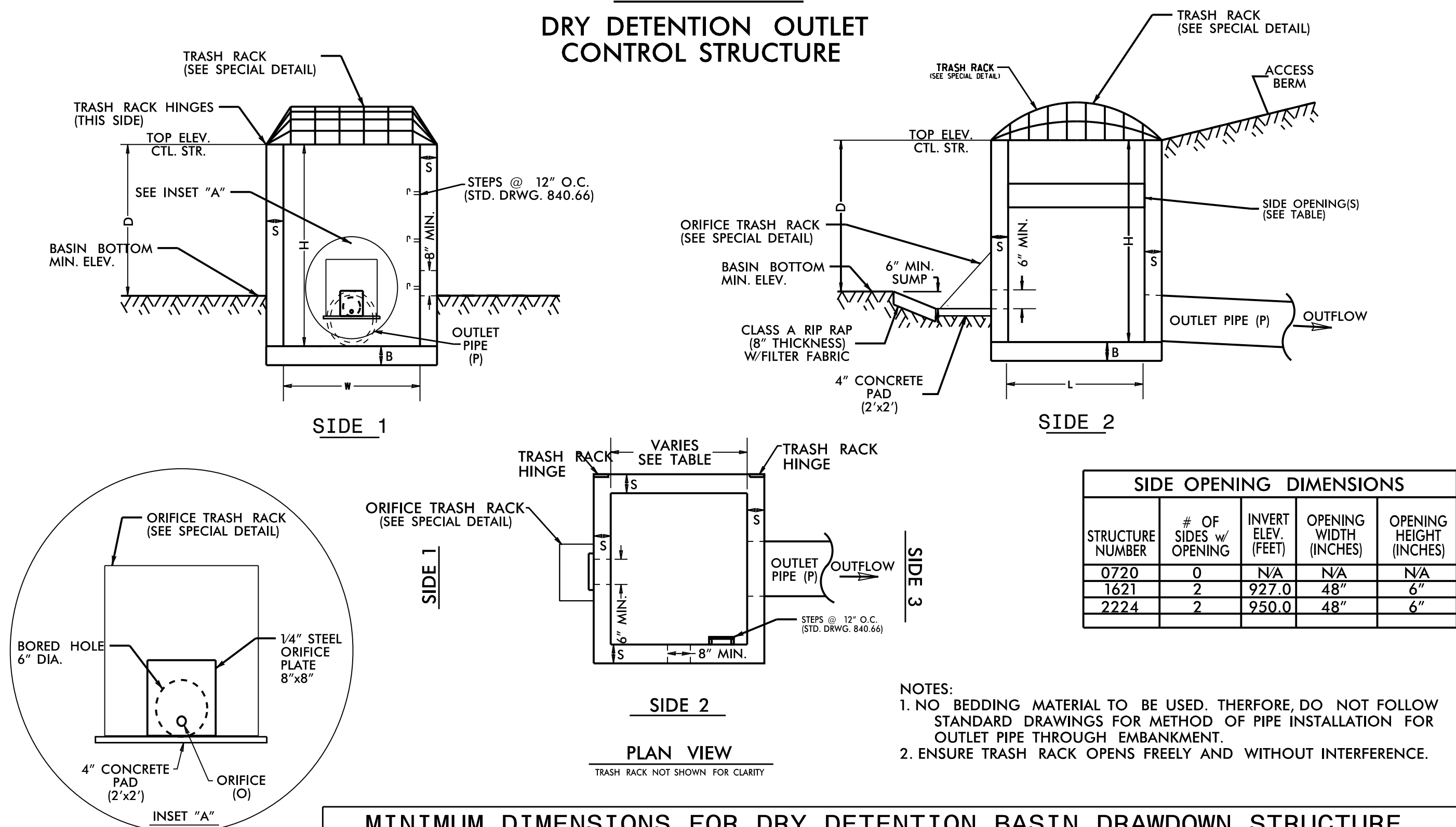
2D-

HYDRAULIC DESIGN  
ENGINEER

**DOCUMENT NOT CONSIDERED FINAL  
UNLESS ALL SIGNATURES COMPLETE**

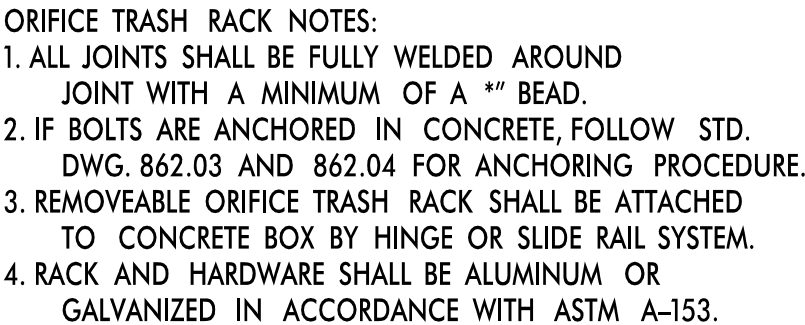
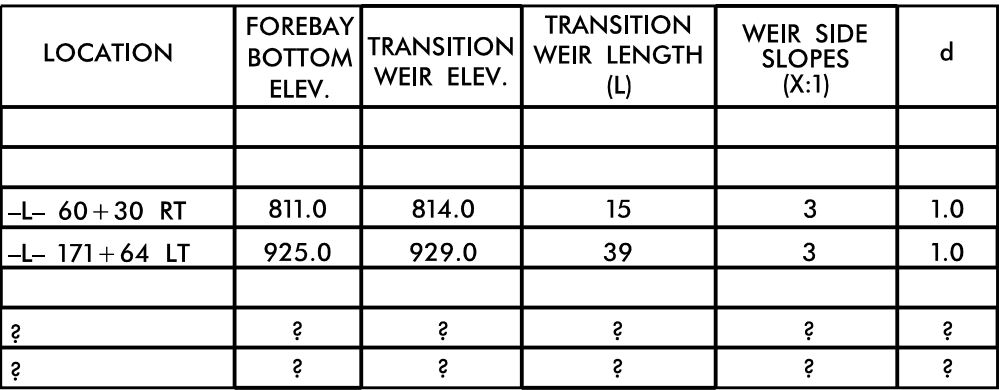
### DETAIL 1

DRY DETENTION OUTLET  
CONTROL STRUCTURE



| SIDE OPENING DIMENSIONS |                       |                     |                        |                         |
|-------------------------|-----------------------|---------------------|------------------------|-------------------------|
| STRUCTURE NUMBER        | # OF SIDES w/ OPENING | INVERT ELEV. (FEET) | OPENING WIDTH (INCHES) | OPENING HEIGHT (INCHES) |
| 0720                    | 0                     | N/A                 | N/A                    | N/A                     |
| 1621                    | 2                     | 927.0               | 48"                    | 6"                      |
| 2224                    | 2                     | 950.0               | 48"                    | 6"                      |

[illegible]



1. PLACE GEOTEXTILE FOR EMBANKMENT STABILIZATION PERPENDICULAR TO THE CENTERLINE AS SHOWN ON THE CROSS SECTION A-A' AND CORRESPONDING PLAN VIEW.
2. PLACE GEOTEXTILE WITHOUT ANY WRINKLES OR CREASES.
3. NO SEAMS OR JOINTS ARE ALLOWED IN THE MACHINE DIRECTION OF GEOTEXTILE.
4. GEOTEXTILE FOR EMBANKMENT STABILIZATION SHEETS MUST HAVE A CONTINUOUS LENGTH AS SHOWN ON THE CROSS SECTION A-A'.
5. THE TERMS ROLL AND MACHINE DIRECTION ARE USED INTERCHANGEABLY.
6. ALL JOINTS IN THE CROSS MACHINE DIRECTION MUST BE OVERLAPPED A MINIMUM OF 18 INCHES.
7. FOR GEOTEXTILE FOR EMBANKMENT STABILIZATION, SEE GEOTEXTILE FOR EMBANKMENT STABILIZATION SPECIAL PROVISION.

PROJECT REFERENCE NO.

U-4758

SHEET NO.

2G-1

GEOTECHNICAL ENGINEER

SEAL

030944

ENGINEER

DocuSigned by

Matt Moler

6/27/2022

ENGINEER

SIGNATURE

DATE

DOCUMENT NOT CONSIDERED FINAL

UNLESS ALL SIGNATURES COMPLETED

AREA OF HIGH STRENGTH GEOTEXTILE

AREA OF GEOTEXTILE FOR SIDE SLOPE STABILIZATION - MACHINE DIRECTION PERPENDICULAR TO CENTERLINE

AREA WHERE THE ABOVE 2 OVERLAP

PLAN VIEW FOR LIMITS OF GEOTEXTILE

|                          |               |
|--------------------------|---------------|
| PREPARED BY: J. SWARTLEY | DATE: 03/2019 |
| REVIEWED BY: M. MOLER    | DATE: 03/2019 |

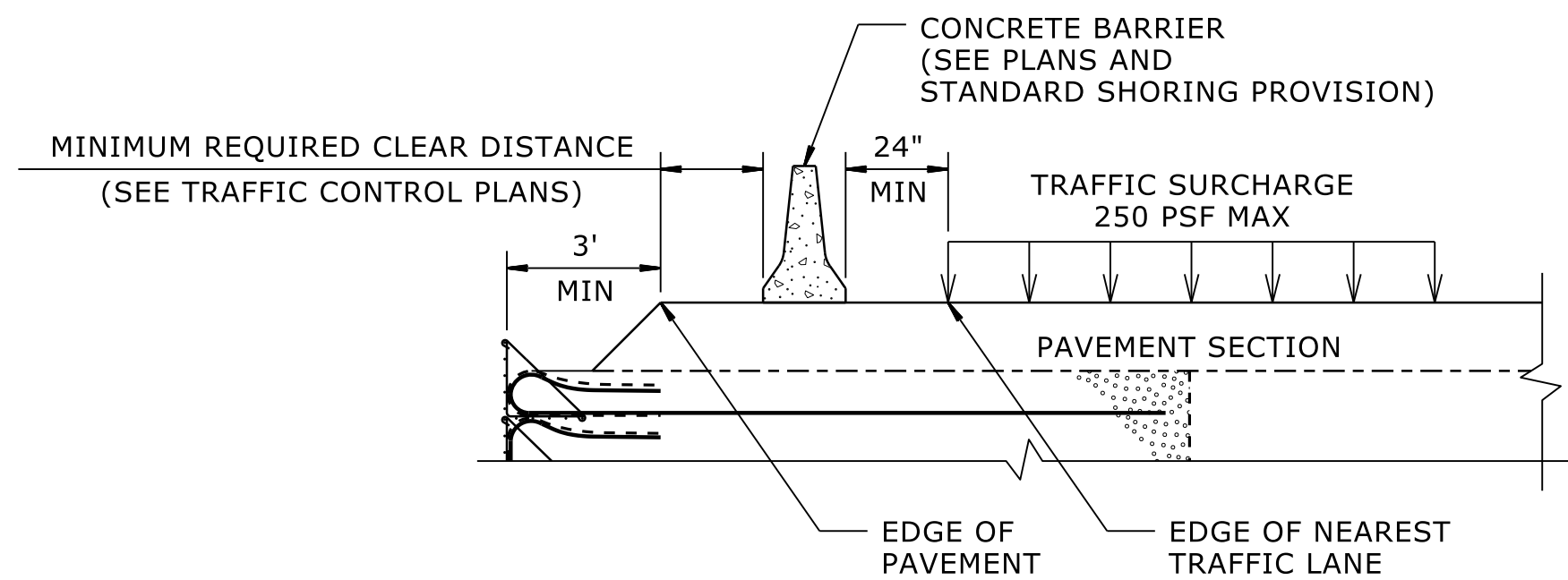
3201 SPRING FOREST ROAD  
RALEIGH, NC 27616  
(919) 872-2660

**NORTH CAROLINA**  
**DEPARTMENT OF TRANSPORTATION**  
**DIVISION OF HIGHWAYS**

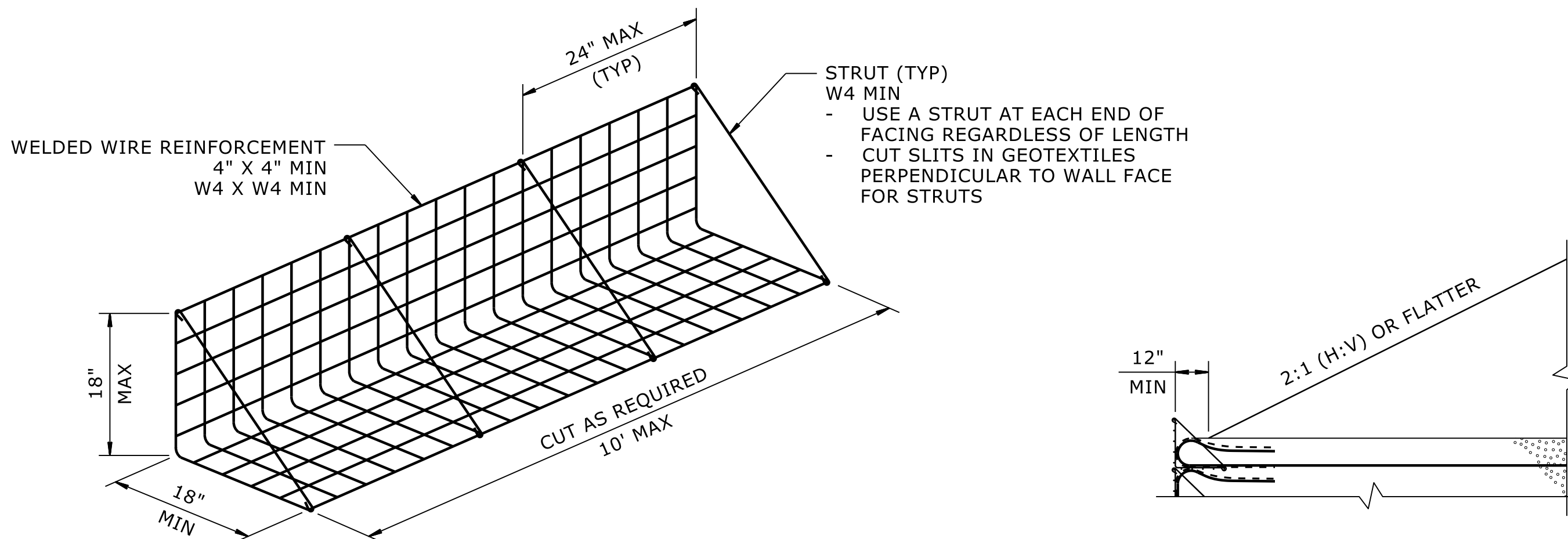
**GEOTECHNICAL**  
**ENGINEERING UNIT**

GEOTEXTILE FOR EMBANKMENT  
STABILIZATION DETAILS  
(-L- 55+89 - 57+00)

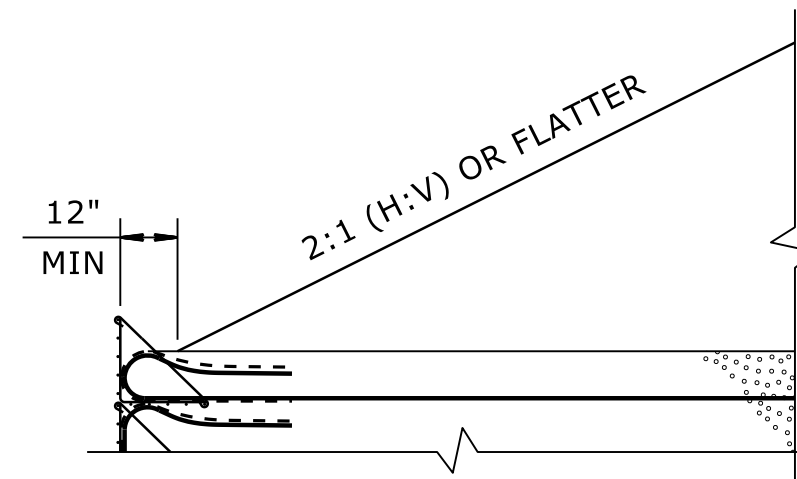
| REVISIONS |    |      |     |    |      |
|-----------|----|------|-----|----|------|
| NO.       | BY | DATE | NO. | BY | DATE |
| 1         |    |      | 3   |    |      |
| 2         |    |      | 4   |    |      |



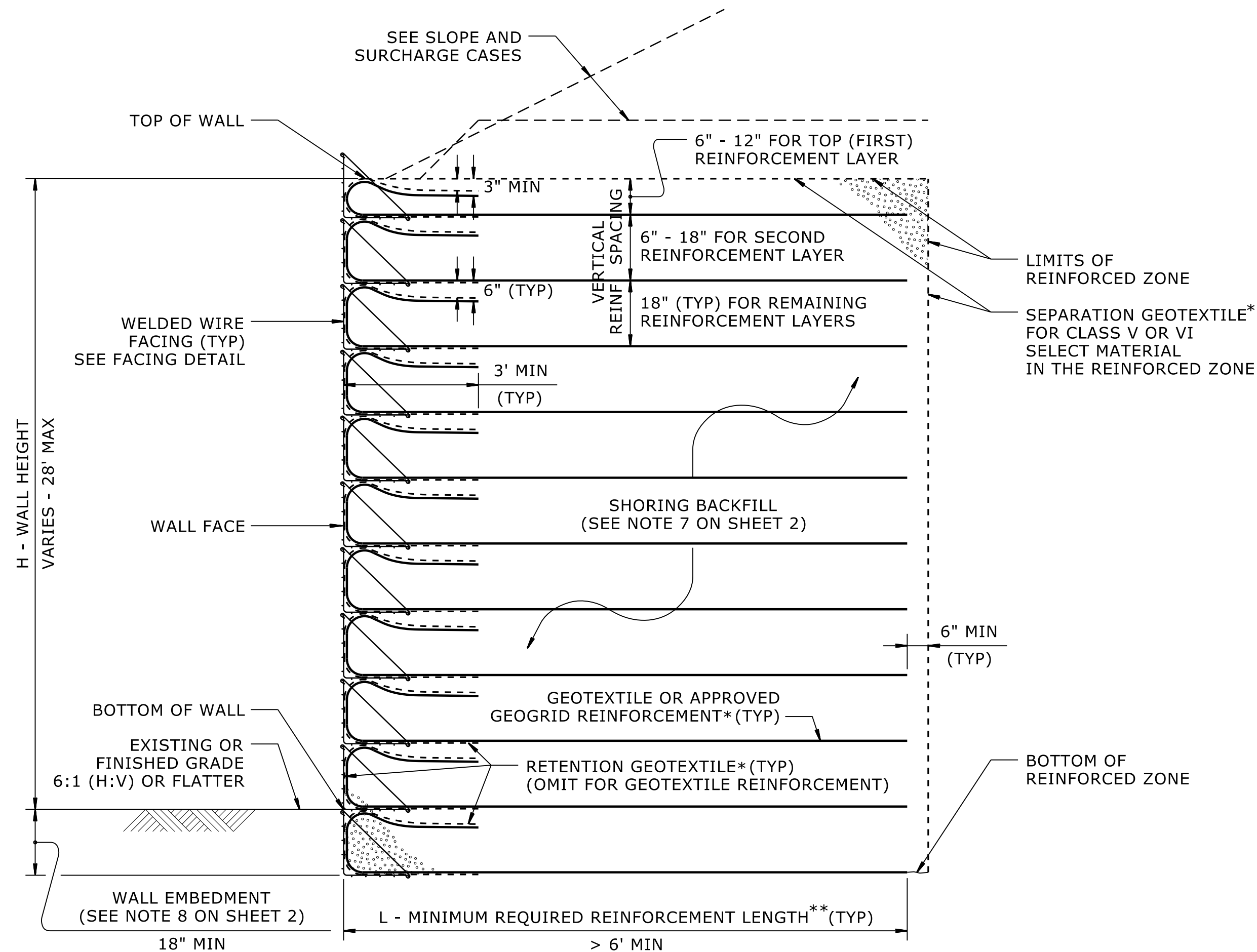
**SURCHARGE CASE**



**FACING DETAIL**



**SLOPE CASE**

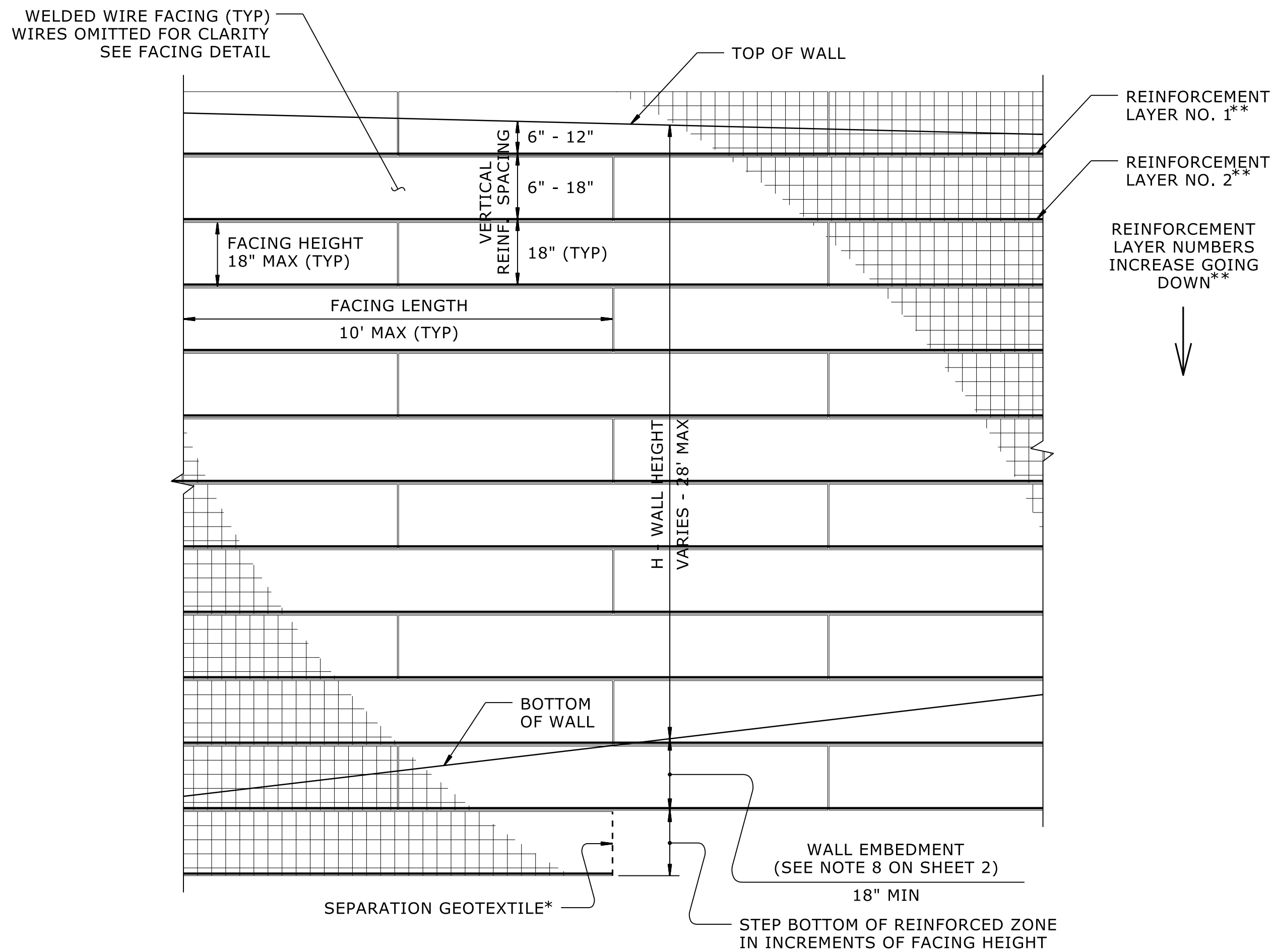


**STANDARD TEMPORARY WALL**

(FOR STANDARD TEMPORARY WALLS ON STRUCTURES,  
SEE TEMPORARY WALL ON STRUCTURE DETAIL ON SHEET 2.)

\*SEE GEOSYNTHETIC PLACEMENT DETAILS ON SHEET 2.

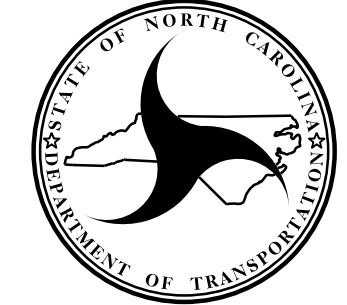
\*\*SEE REINFORCEMENT TABLES ON SHEET 3.

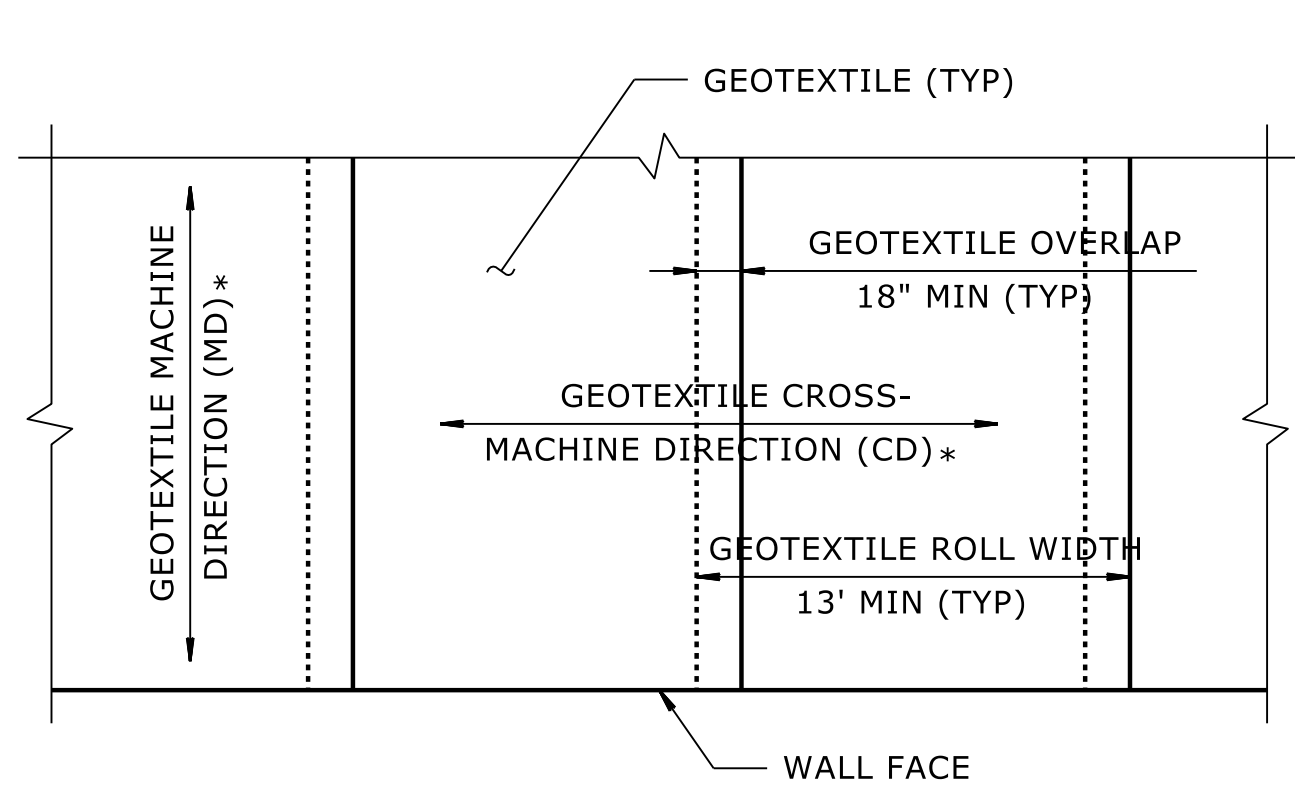


**STANDARD TEMPORARY WALL - PARTIAL ELEVATION**

\*SEE GEOSYNTHETIC PLACEMENT DETAILS ON SHEET 2.

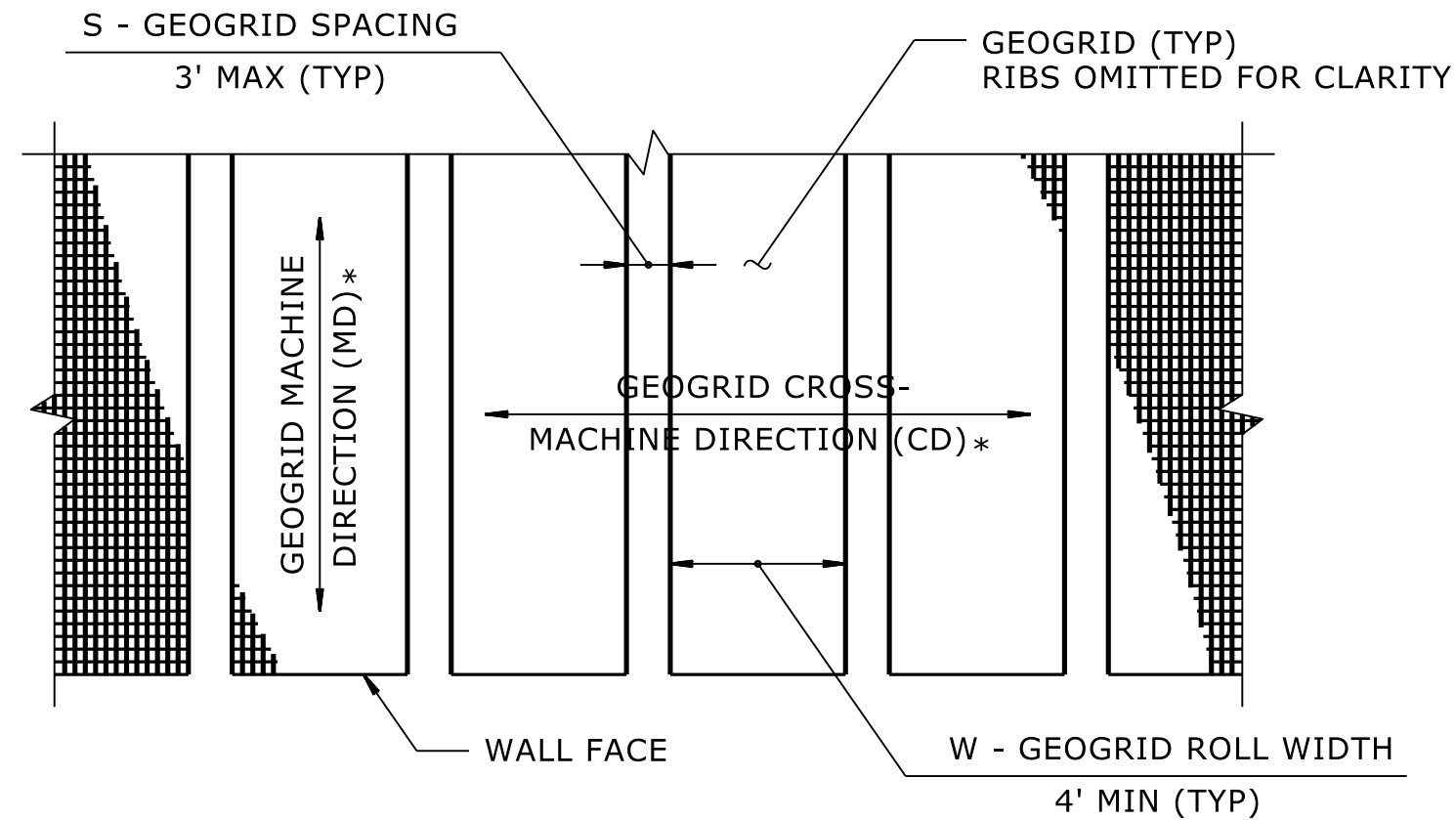
\*\*SEE REINFORCEMENT TABLES ON SHEET 3.





GEOTEXTILE PLACEMENT

(100% COVERAGE MIN FOR GEOTEXTILE REINFORCEMENT)

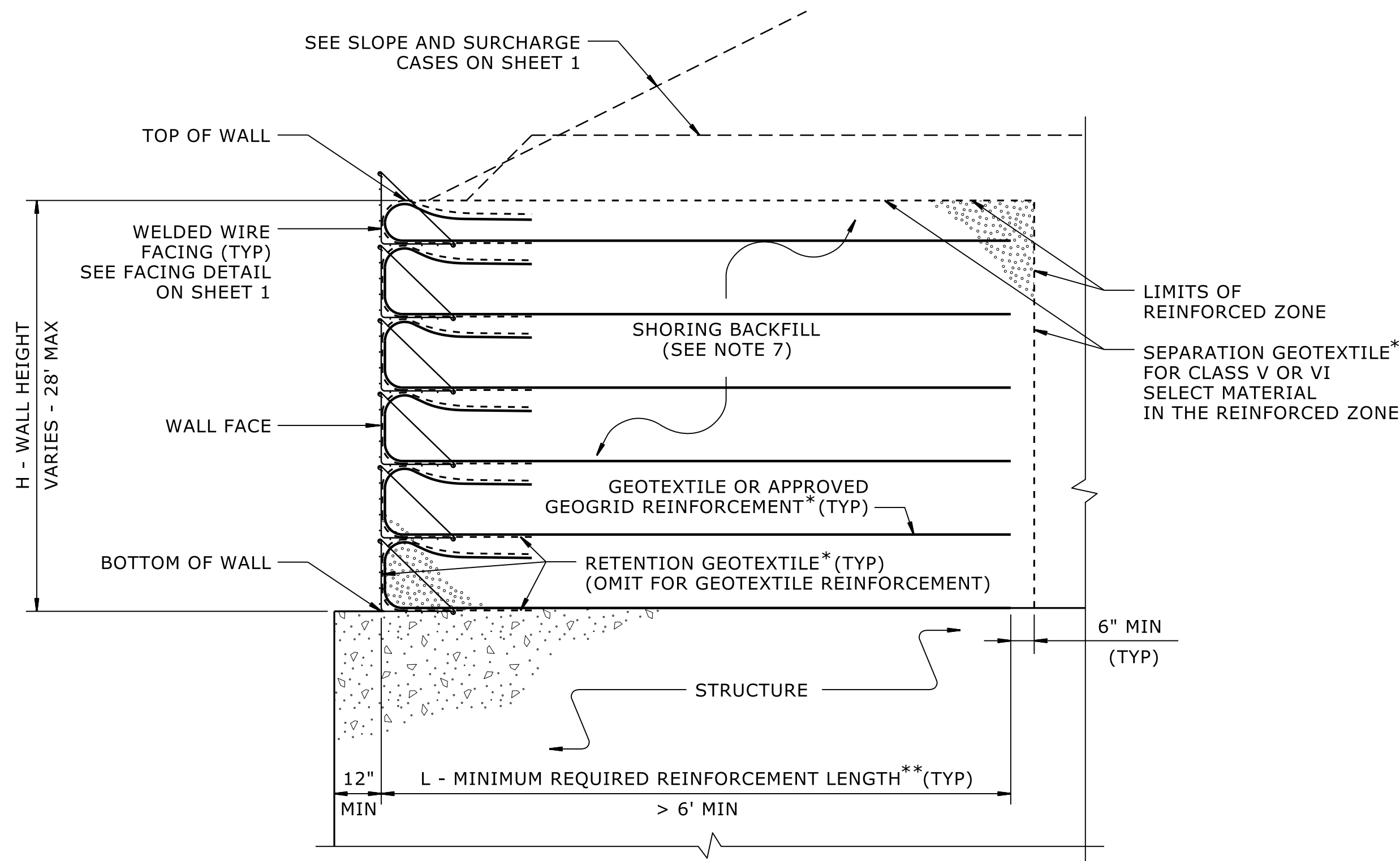


GEOGRID PLACEMENT

(80% COVERAGE MIN FOR GEOGRID REINFORCEMENT -  $\frac{W}{W+S} \times 100 \geq 80\%$ , SEE NOTE 11)

GEOSYNTHETIC PLACEMENT DETAILS

(PLAN VIEW)  
\*SEE NOTE 12.



TEMPORARY WALL ON STRUCTURE DETAIL

\*SEE GEOSYNTHETIC PLACEMENT DETAILS.  
\*\*SEE REINFORCEMENT TABLES ON SHEET 3.

NOTES:

1. AT THE CONTRACTOR'S OPTION, USE STANDARD TEMPORARY WALLS AS NOTED IN THE PLANS.
2. FOR STANDARD TEMPORARY WALLS, SEE STANDARD SHORING PROVISION.
3. STANDARD TEMPORARY WALLS ARE BASED ON THE FOLLOWING IN-SITU ASSUMED SOIL PARAMETERS:  
UNIT WEIGHT,  $\gamma = 120$  PCF  
FRICTION ANGLE,  $\phi = 30$  DEGREES  
COHESION,  $c = 0$  PSF
4. DO NOT USE STANDARD TEMPORARY WALLS IF ASSUMED SOIL PARAMETERS ARE NOT APPLICABLE.
5. DO NOT USE STANDARD TEMPORARY WALLS WHEN VERY LOOSE OR SOFT SOIL OR MUCK IS BELOW TEMPORARY WALLS.
6. USE GROUNDWATER ELEVATION NOTED IN THE PLANS. IF NO GROUNDWATER ELEVATION IS SHOWN IN THE PLANS, ASSUME GROUNDWATER DEPTH IS LESS THAN 7' BELOW BOTTOM OF REINFORCED ZONE. DO NOT USE STANDARD TEMPORARY WALLS IF GROUNDWATER OR FLOOD ELEVATION IS ABOVE BOTTOM OF REINFORCED ZONE.
7. DO NOT USE A-2-4 SOIL FOR STANDARD TEMPORARY WALLS AROUND CULVERTS OR IN THE REINFORCED ZONE OF STANDARD TEMPORARY WALLS FOR SLOPE CASES. DO NOT USE CLASS VI SELECT MATERIAL IN THE REINFORCED ZONE OF STANDARD TEMPORARY WALLS WITH GEOTEXTILE REINFORCEMENT.
8. WALL EMBEDMENT IS NOT REQUIRED FOR STANDARD TEMPORARY WALLS ON STRUCTURES OR ROCK AS DETERMINED BY THE ENGINEER.
9. DO NOT USE MORE THAN 4 DIFFERENT REINFORCEMENT STRENGTHS FOR EACH STANDARD TEMPORARY WALL.
10. GEOGRIDS FOR GEOGRID REINFORCEMENT ARE APPROVED FOR SHORT TERM DESIGN STRENGTHS (3-YEAR DESIGN LIFE) IN THE MD AND CD BASED ON MATERIAL TYPE. THE LIST OF APPROVED GEOGRIDS WITH DESIGN STRENGTHS IS AVAILABLE FROM: [connect.ncdot.gov/resources/Geological/Pages/Products.aspx](http://connect.ncdot.gov/resources/Geological/Pages/Products.aspx)  
DEFINE MATERIAL TYPE FROM THE WEBSITE ABOVE FOR SHORING BACKFILL AS FOLLOWS:

| MATERIAL TYPE    | SHORING BACKFILL                              |
|------------------|-----------------------------------------------|
| BORROW           | A-2-4 SOIL                                    |
| FINE AGGREGATE   | CLASS II, TYPE 1 OR CLASS III SELECT MATERIAL |
| COARSE AGGREGATE | CLASS V OR VI SELECT MATERIAL                 |

11. FOR GEOGRID REINFORCEMENT WITH LESS THAN 100% COVERAGE, STAGGER REINFORCEMENT SO GEOGRIDS ARE CENTERED OVER GAPS IN THE REINFORCEMENT LAYER BELOW.
12. AT THE CONTRACTOR'S OPTION, REINFORCEMENT MAY BE INSTALLED WITH THE MD PARALLEL TO THE WALL FACE IF BOTH OF THE FOLLOWING CONDITIONS OCCUR:  
- W (REINFORCEMENT ROLL WIDTH) > (MINIMUM REQUIRED REINFORCEMENT LENGTH) + 4.5' AND  
- REINFORCEMENT STRENGTH IN CD > MINIMUM REQUIRED REINFORCEMENT STRENGTH IN MD.
13. SUBMIT A "STANDARD TEMPORARY WALL SELECTION FORM" AT LEAST 7 DAYS BEFORE STARTING TEMPORARY WALL CONSTRUCTION. STANDARD SHORING SELECTION FORMS ARE AVAILABLE FROM: [connect.ncdot.gov/resources/Geological/Pages/Geotech\\_Forms\\_Details.aspx](http://connect.ncdot.gov/resources/Geological/Pages/Geotech_Forms_Details.aspx)
14. DO NOT PLACE SHORING BACKFILL OR REINFORCEMENT UNTIL EXCAVATION DIMENSIONS AND FOUNDATION MATERIAL ARE APPROVED.
15. FOR STANDARD TEMPORARY WALLS WITH PILE FOUNDATIONS IN THE REINFORCED ZONE, DRIVE PILES THROUGH REINFORCEMENT AFTER CONSTRUCTING TEMPORARY WALLS.
16. DO NOT SPLICE OR OVERLAP REINFORCEMENT SO SEAMS ARE PARALLEL TO THE WALL FACE.
17. CONTACT THE ENGINEER WHEN EXISTING OR FUTURE OBSTRUCTIONS SUCH AS FOUNDATIONS, PAVEMENTS, PIPES, INLETS OR UTILITIES WILL INTERFERE WITH REINFORCEMENT.
18. FOR STANDARD TEMPORARY WALLS WITH INTERIOR ANGLES LESS THAN 90 DEGREES, WRAP GEOSYNTHETICS AT ACUTE CORNERS AS DIRECTED BY THE ENGINEER.
19. FOR STANDARD TEMPORARY WALLS WITH TOP OF WALL WITHIN 5' OF FINISHED GRADE, REMOVE TOP FACING AND INCORPORATE TOP REINFORCEMENT LAYER INTO FILL WHEN PLACING FILL IN FRONT OF WALL.

U-4758

2G-3 -

NORTH CAROLINA  
DEPARTMENT  
OF TRANSPORTATION

GEOTECHNICAL  
ENGINEERING UNIT

GEOTECHNICAL  
ENGINEER  
DocuSigned by: 03/12/2025  
  
SEAL  
022246  
SCOTT A. HIDDEL  
ENGINEER

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STANDARD  
DETAIL NO. 1801.02

GEOTECHNICAL STANDARD DETAIL FOR  
TEMPORARY WALL (SHEET 2 OF 3)

| SLOPE OR SURCHARGE CASE | GROUNDWATER DEPTH BELOW BOTTOM OF REINFORCED ZONE (SEE NOTE 6 ON SHEET 2) (FT) | SHORING BACKFILL TYPE IN THE REINFORCED ZONE (SEE NOTE 7 ON SHEET 2) | H - WALL HEIGHT (FT) |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |  |  |  |
|-------------------------|--------------------------------------------------------------------------------|----------------------------------------------------------------------|----------------------|---|---|---|---|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|--|--|--|
|                         |                                                                                |                                                                      | < 4                  | 5 | 6 | 7 | 8 | 9  | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 |  |  |  |
| SLOPE CASE              | > 0                                                                            | CLASS II, TYPE 1, CLASS III, CLASS V OR CLASS VI SELECT MATERIAL     | 6                    | 6 | 7 | 8 | 9 | 11 | 12 | 13 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 24 | 25 | 26 | 27 | 27 |  |  |  |
| SURCHARGE CASE          | > 0 TO 7 FOR H < 20'<br>> 0 TO 10 FOR H > 20'                                  | ALL SHORING BACKFILL TYPES                                           | 6                    | 7 | 7 | 8 | 8 | 9  | 9  | 10 | 11 | 11 | 12 | 12 | 13 | 14 | 14 | 15 | 16 | 17 | 17 | 18 | 19 | 19 | 20 | 21 | 22 |  |  |  |
|                         | > 7 FOR H < 20'<br>> 10 FOR H > 20'                                            | A-2-4 SOIL                                                           | 6                    | 6 | 7 | 8 | 8 | 9  | 9  | 10 | 11 | 11 | 12 | 12 | 13 | 14 | 14 | 15 | 16 | 16 | 17 | 18 | 18 | 19 | 20 | 20 | 21 |  |  |  |
|                         |                                                                                | CLASS II, TYPE 1 OR CLASS III SELECT MATERIAL                        | 6                    | 6 | 7 | 7 | 8 | 8  | 9  | 10 | 10 | 11 | 11 | 12 | 12 | 13 | 14 | 15 | 15 | 16 | 16 | 17 | 17 | 18 | 18 | 19 | 20 |  |  |  |
|                         |                                                                                | CLASS V OR CLASS VI SELECT MATERIAL                                  | 6                    | 6 | 7 | 7 | 7 | 8  | 8  | 9  | 9  | 10 | 10 | 11 | 12 | 13 | 13 | 14 | 14 | 15 | 15 | 16 | 17 | 17 | 18 | 19 | 19 |  |  |  |

L - MINIMUM REQUIRED REINFORCEMENT LENGTH (FT)  
(FOR ALL REINFORCEMENT TYPES)

| WALL HEIGHT (H) + WALL EMBEDMENT (FT) | NUMBER OF REINFORCEMENT LAYERS* |
|---------------------------------------|---------------------------------|
| 2.5 - 4                               | 3                               |
| 4 - 5.5                               | 4                               |
| 5.5 - 7                               | 5                               |
| 7 - 8.5                               | 6                               |
| 8.5 - 10                              | 7                               |
| 10 - 11.5                             | 8                               |
| 11.5 - 13                             | 9                               |
| 13 - 14.5                             | 10                              |
| 14.5 - 16                             | 11                              |
| 16 - 17.5                             | 12                              |
| 17.5 - 19                             | 13                              |
| 19 - 20.5                             | 14                              |
| 20.5 - 22                             | 15                              |
| 22 - 23.5                             | 16                              |
| 23.5 - 25                             | 17                              |
| 25 - 26.5                             | 18                              |
| 26.5 - 28                             | 19                              |
| 28 - 29.5                             | 20                              |

\*BASED ON VERTICAL REINFORCEMENT SPACING SHOWN ON SHEET 1.

| REINFORCEMENT LAYER NUMBER * | SHORING BACKFILL TYPE IN THE REINFORCED ZONE (SEE NOTE 7 ON SHEET 2) |                         |                |                                               |                         |
|------------------------------|----------------------------------------------------------------------|-------------------------|----------------|-----------------------------------------------|-------------------------|
|                              | SLOPE CASE                                                           |                         | SURCHARGE CASE |                                               |                         |
|                              | CLASS II, TYPE 1 OR CLASS III SELECT MATERIAL                        | CLASS V SELECT MATERIAL | A-2-4 SOIL     | CLASS II, TYPE 1 OR CLASS III SELECT MATERIAL | CLASS V SELECT MATERIAL |
| 1                            | 2400                                                                 | 2400                    | 2400           | 2400                                          | 2400                    |
| 2                            | 2400                                                                 | 2400                    | 2400           | 2400                                          | 2400                    |
| 3                            | 2400                                                                 | 2400                    | 2400           | 2400                                          | 2400                    |
| 4                            | 2400                                                                 | 2400                    | 2500           | 2400                                          | 2400                    |
| 5                            | 2500                                                                 | 2400                    | 3000           | 2400                                          | 2400                    |
| 6                            | 3000                                                                 | 2400                    | 3500           | 2800                                          | 2400                    |
| 7                            | 3500                                                                 | 2700                    | 4000           | 3200                                          | 2600                    |
| 8                            | 4000                                                                 | 3100                    | 4500           | 3600                                          | 2900                    |
| 9                            | 4500                                                                 | 3500                    | 5000           | 4000                                          | 3200                    |
| 10                           | 5000                                                                 | 3900                    | 5500           | 4400                                          | 3500                    |
| 11                           | 5500                                                                 | 4300                    | 6000           | 4800                                          | 3800                    |
| 12                           | 6000                                                                 | 4700                    | 6500           | 5200                                          | 4100                    |
| 13                           | 6500                                                                 | 5100                    | 7000           | 5600                                          | 4400                    |
| 14                           | 7000                                                                 | 5400                    | 7500           | 6000                                          | 4700                    |
| 15                           | 7500                                                                 | 5800                    | 8000           | 6400                                          | 5000                    |
| 16                           | 8000                                                                 | 6200                    | 8500           | 6800                                          | 5300                    |
| 17                           | 8500                                                                 | 6600                    | 9000           | 7200                                          | 5600                    |
| 18                           | 9000                                                                 | 7000                    | 9500           | 7600                                          | 5900                    |
| 19                           | 9500                                                                 | 7400                    | 10000          | 8000                                          | 6200                    |
| 20                           | 10000                                                                | 7800                    | 10500          | 8400                                          | 6500                    |

GEOTEXTILE REINFORCEMENT  
ULTIMATE TENSILE STRENGTH (LB/FT)

MINIMUM REQUIRED REINFORCEMENT STRENGTH IN MD

(SEE NOTE 9 ON SHEET 2.)  
\*SEE PARTIAL ELEVATION ON SHEET 1  
FOR REINFORCEMENT LAYER NUMBERING.

| REINFORCEMENT LAYER NUMBER * | SHORING BACKFILL TYPE IN THE REINFORCED ZONE (SEE NOTE 7 ON SHEET 2) |                                     |                |                                               |                                     |
|------------------------------|----------------------------------------------------------------------|-------------------------------------|----------------|-----------------------------------------------|-------------------------------------|
|                              | SLOPE CASE                                                           |                                     | SURCHARGE CASE |                                               |                                     |
|                              | CLASS II, TYPE 1 OR CLASS III SELECT MATERIAL                        | CLASS V OR CLASS VI SELECT MATERIAL | A-2-4 SOIL     | CLASS II, TYPE 1 OR CLASS III SELECT MATERIAL | CLASS V OR CLASS VI SELECT MATERIAL |
| 1                            | 240                                                                  | 200                                 | 340            | 290                                           | 240                                 |
| 2                            | 380                                                                  | 310                                 | 520            | 430                                           | 350                                 |
| 3                            | 530                                                                  | 420                                 | 700            | 570                                           | 460                                 |
| 4                            | 690                                                                  | 550                                 | 870            | 720                                           | 570                                 |
| 5                            | 860                                                                  | 690                                 | 1050           | 860                                           | 680                                 |
| 6                            | 1030                                                                 | 830                                 | 1220           | 1000                                          | 790                                 |
| 7                            | 1200                                                                 | 970                                 | 1400           | 1150                                          | 900                                 |
| 8                            | 1370                                                                 | 1110                                | 1580           | 1290                                          | 1010                                |
| 9                            | 1550                                                                 | 1240                                | 1750           | 1430                                          | 1120                                |
| 10                           | 1720                                                                 | 1380                                | 1930           | 1580                                          | 1230                                |
| 11                           | 1890                                                                 | 1520                                | 2100           | 1720                                          | 1340                                |
| 12                           | 2060                                                                 | 1660                                | 2280           | 1860                                          | 1450                                |
| 13                           | 2240                                                                 | 1800                                | 2450           | 2010                                          | 1560                                |
| 14                           | 2410                                                                 | 1940                                | 2630           | 2150                                          | 1670                                |
| 15                           | 2580                                                                 | 2080                                | 2800           | 2290                                          | 1780                                |
| 16                           | 2750                                                                 | 2220                                | 2980           | 2440                                          | 1890                                |
| 17                           | 2930                                                                 | 2360                                | 3160           | 2580                                          | 2000                                |
| 18                           | 3100                                                                 | 2500                                | 3330           | 2720                                          | 2110                                |
| 19                           | 3270                                                                 | 2640                                | 3510           | 2860                                          | 2220                                |
| 20                           | 3440                                                                 | 2780                                | 3690           | 3000                                          | 2330                                |

GEOGRID REINFORCEMENT  
SHORT-TERM DESIGN STRENGTH (LB/FT)

(SEE NOTE 10 ON SHEET 2.)

U-4758

2G-4

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NORTH CAROLINA  
DEPARTMENT  
OF TRANSPORTATION



GEOTECHNICAL  
ENGINEERING UNIT

GEOTECHNICAL  
ENGINEER

DocuSigned by:  
*Scott A. Hiden* 03/12/2025



DOCUMENT NOT CONSIDERED FINAL  
UNLESS ALL SIGNATURES COMPLETED

STANDARD  
DETAIL NO. 1801.02

GEOTECHNICAL STANDARD DETAIL FOR

TEMPORARY WALL (SHEET 3 OF 3)

DATE: 02-18-2025

12/06/07

|                          |                |
|--------------------------|----------------|
| COMPUTED BY: C. RESTREPO | DATE: 05/07/25 |
| CHECKED BY: B. PAYNE     | DATE: 05/08/25 |

STATE OF NORTH CAROLINA  
DIVISION OF HIGHWAYS

|                       |           |
|-----------------------|-----------|
| PROJECT REFERENCE NO. | SHEET NO. |
| U-4758                | 3B-1      |

SUMMARY OF EARTHWORK  
(UTILITY AREA I)

| STATION                             | STATION               | LOCATION | UNCL. EXCAV. | UNDERCUT EXCAV. | EMBANK. + % | BORROW | WASTE  |
|-------------------------------------|-----------------------|----------|--------------|-----------------|-------------|--------|--------|
| -L- Sta. 13 + 50.00                 | -L- Sta. 22 + 50.00   | LT       | 1,331        | 0               | 6,949       | 5,618  | 0      |
| -L- Sta. 100 + 75.00                | -L- Sta. 116 + 50.00  | LT, RT   | 4,270        | 0               | 2,410       | 0      | 1,860  |
| -Y30- Sta. 10 + 50.00               | -Y30- Sta. 11 + 50.00 |          | 218          | 0               | 38          | 0      | 180    |
| -Y31- Sta. 10 + 50.00               | -Y31- Sta. 11 + 00.00 |          | 16           | 0               | 198         | 182    | 0      |
| WZTC PHASE I SUBTOTALS:             |                       |          | 5,835        | 0               | 9,595       | 5,800  | 2,040  |
| -L- Sta. 13 + 50.00                 | -L- Sta. 34 + 00.00   | RT       | 3,605        | 900             | 9,106       | 5,501  | 900    |
| -L- Sta. 34 + 00.00                 | -L- Sta. 54 + 50.00   | RT       | 11,916       | 0               | 11,119      | 0      | 797    |
| -L- Sta. 56 + 00.00                 | -L- Sta. 88 + 00.00   | RT       | 597          | 0               | 43,164      | 42,567 | 0      |
| WZTC PHASE II SUBTOTALS:            |                       |          | 16,118       | 900             | 63,389      | 48,068 | 1,697  |
| -L- Sta. 22 + 50.00                 | -L- Sta. 54 + 50.00   | LT       | 2,495        | 0               | 16,705      | 14,210 | 0      |
| -L- Sta. 56 + 00.00                 | -L- Sta. 88 + 00.00   | LT       | 2,419        | 0               | 10,145      | 7,726  | 0      |
| -L- Sta. 88 + 00.00                 | -L- Sta. 120 + 00.00  | LT       | 4,728        | 175             | 11,587      | 6,859  | 175    |
| -Y2- Sta. 12 + 50.00                | -Y2- Sta. 13 + 00.00  |          | 83           | 0               | 12          | 0      | 71     |
| -Y3- Sta. 10 + 00.00                | -Y3- Sta. 11 + 00.00  |          | 117          | 0               | 17          | 0      | 99     |
| -Y4- Sta. 11 + 50.00                | -Y4- Sta. 12 + 50.00  |          | 186          | 0               | 7           | 0      | 179    |
| -Y5- Sta. 18 + 00.00                | -Y5- Sta. 19 + 00.00  |          | 360          | 150             | 31          | 0      | 479    |
| -Y6- Sta. 10 + 50.00                | -Y6- Sta. 14 + 00.00  |          | 571          | 0               | 1           | 0      | 570    |
| WZTC PHASE III SUBTOTALS:           |                       |          | 10,959       | 325             | 38,506      | 28,795 | 1,573  |
| -L- Sta. 18 + 50.00                 | -L- Sta. 26 + 50.00   | MED      | 12           | 0               | 911         | 899    | 0      |
| -L- Sta. 29 + 00.00                 | -L- Sta. 36 + 00.00   | MED      | 4            | 0               | 1,192       | 1,188  | 0      |
| -L- Sta. 45 + 50.00                 | -L- Sta. 54 + 00.00   | MED      | 7            | 0               | 1,405       | 1,398  | 0      |
| -L- Sta. 56 + 50.00                 | -L- Sta. 65 + 50.00   | MED      | 49           | 0               | 1,763       | 1,714  | 0      |
| -L- Sta. 75 + 50.00                 | -L- Sta. 78 + 00.00   | MED      | 0            | 0               | 614         | 614    | 0      |
| -L- Sta. 83 + 00.00                 | -L- Sta. 100 + 75.00  | RT, MED  | 685          | 0               | 4,013       | 3,328  | 0      |
| -L- Sta. 116 + 50.00                | -L- Sta. 120 + 00.00  | RT       | 128          | 0               | 410         | 282    | 0      |
| WZTC PHASE IV SUBTOTALS:            |                       |          | 885          | 0               | 10,308      | 9,423  | 0      |
| WZTC PHASING SUBTOTAL               |                       |          | 33,797       | 1,225           | 121,797     | 92,086 | 5,309  |
| WASTE IN LIEU OF BORROW             |                       |          |              |                 |             | -4,084 | -4,084 |
| TOTALS:                             |                       |          | 33,797       | 1,225           | 121,798     | 88,002 | 1,225  |
| REPLACE TOP SOIL ON BORROW PIT (5%) |                       |          |              |                 |             | 4,400  |        |
| UTILITY AREA I SUBTOTALS:           |                       |          | 33,797       | 1,225           | 121,798     | 92,402 | 1,225  |
| UTILITY AREA I SAY:                 |                       |          | 33,800       | 1,225           |             | 92,500 |        |

SUMMARY OF EARTHWORK  
(UTILITY AREA II)

| STATION                             | STATION               | LOCATION | UNCL. EXCAV. | UNDERCUT EXCAV. | EMBANK. + % | BORROW  | WASTE   |
|-------------------------------------|-----------------------|----------|--------------|-----------------|-------------|---------|---------|
| -L- Sta. 138 + 00.00                | -L- Sta. 156 + 50.00  | RT       | 867          | 0               | 3,018       | 2,151   | 0       |
| WZTC PHASE I SUBTOTALS:             |                       |          | 867          | 0               | 3,018       | 2,151   | 0       |
| -L- Sta. 120 + 00.00                | -L- Sta. 143 + 50.00  | LT       | 6,162        | 125             | 1,030       | 0       | 5,257   |
| -L- Sta. 143 + 50.00                | -L- Sta. 167 + 00.00  | LT       | 1,419        | 0               | 8,338       | 6,919   | 0       |
| -L- Sta. 167 + 00.00                | -L- Sta. 191 + 00.00  | LT       | 5,025        | 0               | 12,812      | 7,787   | 0       |
| -Y7- Sta. 12 + 00.00                | -Y7- Sta. 12 + 50.00  |          | 51           | 0               | 4           | 0       | 47      |
| -Y9- Sta. 14 + 00.00                | -Y9- Sta. 14 + 50.00  |          | 43           | 0               | 0           | 0       | 43      |
| -Y10- Sta. 10 + 00.00               | -Y10- Sta. 15 + 00.00 |          | 234          | 0               | 908         | 674     | 0       |
| -Y11- Sta. 10 + 50.00               | -Y11- Sta. 16 + 00.00 |          | 1,739        | 0               | 654         | 0       | 1,085   |
| -Y14- Sta. 10 + 00.00               | -Y14- Sta. 11 + 50.00 |          | 394          | 0               | 144         | 0       | 250     |
| WZTC PHASE III SUBTOTALS:           |                       |          | 15,067       | 125             | 23,890      | 15,380  | 6,683   |
| -L- Sta. 120 + 00.00                | -L- Sta. 141 + 00.00  | RT, MED  | 793          | 0               | 3,294       | 2,501   | 0       |
| -L- Sta. 144 + 00.00                | -L- Sta. 145 + 50.00  | MED      | 9            | 0               | 102         | 93      | 0       |
| -L- Sta. 155 + 50.00                | -L- Sta. 173 + 50.00  | RT, MED  | 1,966        | 0               | 4,466       | 2,500   | 0       |
| -L- Sta. 173 + 50.00                | -L- Sta. 191 + 00.00  | RT, MED  | 2,030        | 0               | 1,823       | 0       | 207     |
| -Y8- Sta. 10 + 50.00                | -Y8- Sta. 23 + 00.00  |          | 4,304        | 300             | 1,928       | 0       | 2,676   |
| -Y12- Sta. 12 + 00.00               | -Y12- Sta. 16 + 50.00 |          | 657          | 0               | 148         | 0       | 509     |
| -Y13- Sta. 11 + 00.00               | -Y13- Sta. 16 + 00.00 |          | 1,853        | 0               | 671         | 0       | 1,182   |
| -Y26- Sta. 10 + 50.00               | -Y26- Sta. 14 + 50.00 |          | 1,073        | 0               | 5,202       | 4,129   | 0       |
| WZTC PHASE IV SUBTOTALS:            |                       |          | 12,685       | 300             | 17,634      | 9,223   | 4,574   |
| WZTC PHASING SUBTOTAL               |                       |          | 28,619       | 425             | 44,542      | 26,755  | 11,257  |
| UNSUITABLE EXCAVATION               |                       |          | 2,210        |                 |             |         | 2,210   |
| WASTE IN LIEU OF BORROW             |                       |          |              |                 |             | -10,832 | -10,832 |
| TOTALS:                             |                       |          | 30,829       | 425             | 44,542      | 15,923  | 2,635   |
| REPLACE TOP SOIL ON BORROW PIT (5%) |                       |          |              |                 |             | 796     |         |
| UTILITY AREA II SUBTOTALS:          |                       |          | 30,829       | 425             | 44,542      | 16,719  | 2,635   |
| UTILITY AREA II SAY:                |                       |          | 30,900       | 425             |             | 16,800  |         |

Earthwork quantities are calculated by the roadway designer. These earthwork quantities are based in part on subsurface data provided by the Geotechnical Engineering Unit

SUMMARY OF EARTHWORK  
(UTILITY AREA III)

| STATION                             | STATION                  | LOCATION | UNCL. EXCAV. | UNDERCUT EXCAV. | EMBANK. + % | BORROW  | WASTE   |
|-------------------------------------|--------------------------|----------|--------------|-----------------|-------------|---------|---------|
| -L- Sta. 212 + 50.00                | -L- Sta. 218 + 50.00     | LT       | 261          | 0               | 892         | 631     | 0       |
| WZTC PHASE I SUBTOTALS:             |                          |          | 261          | 0               | 892         | 631     | 0       |
| -L- Sta. 199 + 00.00                | -L- Sta. 218 + 50.00     | RT       | 1,362        | 0               | 8,846       | 7,484   | 0       |
| -L- Sta. 218 + 50.00                | -L- Sta. 238 + 70.00     | RT       | 6,805        | 2,400           | 1,631       | 0       | 7,574   |
| -L1- Sta. 10 + 60.00                | -L1- Sta. 21 + 00.00     | RT       | 202          | 0               | 3,163       | 2,961   | 0       |
| -RPC- Sta. 17 + 00.00               | -RPC- Sta. 22 + 99.00    |          | 148          | 0               | 1,753       | 1,605   | 0       |
| -Y17- Sta. 10 + 00.00               | -Y17- Sta. 17 + 50.00    |          | 2,002        | 1,500           | 899         | 0       | 2,603   |
| -Y18- Sta. 10 + 00.00               | -Y18- Sta. 12 + 50.00    |          | 228          | 0               | 56          | 0       | 172     |
| -Y20- Sta. 11 + 00.00               | -Y20- Sta. 31 + 50.00    |          | 1,736        | 0               | 8,772       | 7,036   | 0       |
| -Y23- Sta. 11 + 00.00               | -Y23- Sta. 11 + 50.00    |          | 544          | 0               | 0           | 0       | 544     |
| -DWAY23- Sta. 10 + 00.00            | -DWAY23- Sta. 13 + 50.00 |          | 4,118        | 0               | 0           | 0       | 4,118   |
| -DWAY24- Sta. 11 + 00.00            | -DWAY24- Sta. 17 + 00.00 |          | 227          | 0               | 3,745       | 3,518   | 0       |
| WZTC PHASE II SUBTOTALS:            |                          |          | 17,372       | 3,900           | 28,866      | 22,605  | 15,011  |
| -L- Sta. 191 + 00.00                | -L- Sta. 212 + 50.00     | LT       | 3,648        | 0               | 1,202       | 0       | 2,446   |
| -L- Sta. 218 + 50.00                | -L- Sta. 238 + 70.00     | LT       | 581          | 0               | 2,222       | 1,641   | 0       |
| -L1- Sta. 10 + 60.00                | -L1- Sta. 21 + 00.00     | LT       | 933          | 0               | 5,371       | 4,438   | 0       |
| -RPB- Sta. 22 + 72.00               | -RPB- Sta. 29 + 46.00    |          | 1,521        | 0               | 2,724       | 1,203   | 0       |
| -Y19- Sta. 12 + 00.00               | -Y19- Sta. 12 + 50.00    |          | 80           | 0               | 0           | 0       | 80      |
| -Y21- Sta. 12 + 00.00               | -Y21- Sta. 12 + 50.00    |          | 62           | 0               | 0           | 0       | 62      |
| -Y24- Sta. 10 + 00.00               | -Y24- Sta. 12 + 50.00    |          | 993          | 0               | 98          | 0       | 895     |
| -Y27- Sta. 12 + 50.00               | -Y27- Sta. 15 + 50.00    |          | 1,392        | 0               | 188         | 0       | 1,204   |
| -Y29- Sta. 15 + 00.00               | -Y29- Sta. 35 + 50.00    |          | 12,311       | 350             | 5,065       | 0       | 7,596   |
| -Y35- Sta. 11 + 50.00               | -Y35- Sta. 12 + 00.00    |          | 22           | 0               | 1           | 0       | 21      |
| -DWAY20- Sta. 11 + 50.00            | -DWAY20- Sta. 12 + 75.00 |          | 90           | 0               | 52          | 0       | 38      |
| -DWAY22- Sta. 10 + 25.00            | -DWAY22- Sta. 10 + 75.00 |          | 43           | 0               | 8           | 0       | 35      |
| WZTC PHASE III SUBTOTALS:           |                          |          | 21,676       | 350             | 16,933      | 7,283   | 12,375  |
| -L- Sta. 191 + 00.00                | -L- Sta. 205 + 50.00     | RT, MED  | 632          | 0               | 1,562       | 930     | 0       |
| -L- Sta. 216 + 50.00                | -L- Sta. 219 + 50.00     | MED      | 0            | 0               | 426         | 426     | 0       |
| -L1- Sta. 10 + 60.00                | -L1- Sta. 18 + 00.00     | MED      | 6            | 0               | 908         | 902     | 0       |
| -Y15- Sta. 11 + 00.00               | -Y15- Sta. 14 + 50.00    |          | 1,856        | 0               | 154         | 0       | 1,702   |
| WZTC PHASE IV SUBTOTALS:            |                          |          | 2,494        | 0               | 3,050       | 2,259   | 1,702   |
| WZTC PHASING SUBTOTAL               |                          |          | 41,803       | 4,250           | 49,741      | 32,777  | 29,089  |
| UNSUITABLE EXCAVATION               |                          |          | 1,490        |                 |             |         | 1,490   |
| WASTE IN LIEU OF BORROW             |                          |          |              |                 |             | -24,839 | -24,839 |
| TOTALS:                             |                          |          | 43,293       | 4,250           | 49,741      | 7,938   | 5,740   |
| REPLACE TOP SOIL ON BORROW PIT (5%) |                          |          |              |                 |             | 397     |         |
| UTILITY AREA III SUBTOTALS:         |                          |          | 43,293       | 4,250           | 49,741      | 8,335   | 5,740   |
| UTILITY AREA III SAY:               |                          |          | 43,300       | 4,250           |             | 8,400   |         |
| UTILITY AREA I SUBTOTAL             |                          |          | 33,800       | 1,225           | 121,798     | 92,500  | 1,225   |
| UTILITY AREA II SUBTOTAL            |                          |          | 30,900       | 425             | 44,542      | 16,800  | 2,635   |
| UTILITY AREA III SUBTOTAL           |                          |          | 43,300       | 4,250           | 49,741      | 8,400   | 5,740   |
| LOSS DUE TO CLEARING & GRUBBING     |                          |          | -24,500      |                 |             | 24,500  |         |
| ADDITIONAL UNDERCUT EXCAVATION      |                          |          |              | 1,700           | 2,040       | 2,040   | 1,700   |
| PDI UNDERCUT CONTINGENCY            |                          |          |              | 9,000           | 10,800      | 10,800  | 9,000   |
| GRAND TOTAL                         |                          |          | 83,500       | 16,600          | 228,921     | 155,040 | 20,300  |
| SAY TOTAL                           |                          |          | 83,500       | 16,600          |             | 155,100 |         |

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## ***SUMMARY OF CHAIN LINK FENCE 48" FABRIC***

| SURVEY LINE | STATION | STATION | LOCATION LT/RT/CL | SINGLE FACED/<br>DOUBLE FACED | LENGTH |
|-------------|---------|---------|-------------------|-------------------------------|--------|
| -L-         | 13 + 40 | 16 + 28 | LT                | SF                            | 304'   |
| -L-         | 13 + 78 | 14 + 65 | RT                | SF                            | 99'    |
| -L-         | 41 + 50 | 42 + 50 | LT                | SF                            | 100'   |
| -L-         | 55 + 90 | 58 + 85 | LT                | SF                            | 295'   |
|             |         |         |                   |                               |        |
|             |         |         |                   |                               |        |
|             |         |         |                   |                               |        |
|             |         |         |                   |                               |        |
|             |         |         |                   |                               |        |
|             |         |         |                   |                               |        |
|             |         |         |                   | TOTAL:                        | 798'   |
|             |         |         |                   | SAY:                          | 800'   |

| SURVEY LINE                                                                    | STATION  | STATION  | LOCATION LT/RT/CL | YD <sup>2</sup> |
|--------------------------------------------------------------------------------|----------|----------|-------------------|-----------------|
| -L-                                                                            | 42 + 97  | 48 + 12  | LT                | 109             |
| -L-                                                                            | 60 + 12  | 75 + 62  | LT                | 2,324           |
| -L-                                                                            | 107 + 07 | 119 + 68 | LTRT              | 178             |
| -L-                                                                            | 127 + 92 | 129 + 48 | RT                | 368             |
| -L-                                                                            | 206 + 24 | 208 + 74 | LT                | 445             |
| -L-                                                                            | 231 + 74 | 232 + 33 | LT                | 89              |
| -L1-                                                                           | 16 + 25  | 17 + 25  | LT                | 602             |
| -Y8-                                                                           | 15 + 54  | 18 + 81  | LT                | 802             |
| -Y10-                                                                          | 13 + 54  | 15 + 19  | LT                | 378             |
| -Y17-                                                                          | 10 + 07  | 12 + 46  | RT                | 505             |
| -Y20-                                                                          | 10 + 56  | 13 + 57  | LT                | 875             |
| -Y29-                                                                          | 17 + 38  | 26 + 90  | LT                | 601             |
| SEE TRAFFIC CONTROL PLANS FOR SPECIFIC LOCATIONS OF TEMPORARY PAVEMENT REMOVAL |          |          |                   |                 |
| -L-                                                                            | 20 + 10  | 218 + 67 | CL                | 1,307           |
|                                                                                |          |          |                   |                 |
|                                                                                |          |          |                   |                 |
|                                                                                |          |          |                   |                 |
| TOTAL:                                                                         |          |          |                   | 8,584           |
| SAY:                                                                           |          |          |                   | 9,100           |

| SURVEY LINE                | STATION  | STATION  | FABRIC LF | LINE POSTS EA | TERMINAL POSTS EA | FABRIC, BLACK VINYL COATED LF | LINE POSTS, BLACK VINYL COATED EA | TERMINAL POSTS, BLACK VINYL COATED EA |
|----------------------------|----------|----------|-----------|---------------|-------------------|-------------------------------|-----------------------------------|---------------------------------------|
| -L-                        | 58 + 65  | 60 + 83  |           |               |                   | 582                           | 50                                | 11                                    |
| -L-                        | 170 + 44 | 172 + 67 |           |               |                   | 744                           | 63                                | 10                                    |
| -Y29-                      | 31 + 42  | 35 + 21  |           |               |                   | 726                           | 62                                | 13                                    |
| -RPB-                      | 22 + 72  | 29 + 78  | 860       | 73            | 7                 |                               |                                   |                                       |
|                            |          |          |           |               |                   |                               |                                   |                                       |
|                            |          |          |           |               |                   |                               |                                   |                                       |
|                            |          |          |           |               |                   |                               |                                   |                                       |
|                            |          |          |           |               |                   |                               |                                   |                                       |
|                            |          |          |           |               |                   |                               |                                   |                                       |
|                            |          |          |           |               |                   |                               |                                   |                                       |
|                            |          |          |           |               |                   |                               |                                   |                                       |
| SUBTOTAL:                  |          |          | 860       | 73            | 7                 | 2,052                         | 175                               | 34                                    |
| LESS TERMINAL ANCHOR UNITS |          |          |           |               |                   |                               |                                   |                                       |
| GRAND TOTALS:              |          |          | 860       | 73            | 7                 | 2,052                         | 175                               | 34                                    |
| SAY:                       |          |          | 860       | 73            | 7                 | 2,052                         | 175                               | 34                                    |

| LINE<br>SURVEY             | STATION | STATION | FABRIC<br>LF | LINE POSTS<br>EA | TERMINAL POSTS<br>EA |
|----------------------------|---------|---------|--------------|------------------|----------------------|
| -Y20-                      | 13 + 37 | 30 + 95 | 1,716        | 148              | 41                   |
|                            |         |         |              |                  |                      |
| SUBTOTAL:                  |         |         | 1,716        | 148              | 41                   |
| LESS TERMINAL ANCHOR UNITS |         |         |              |                  |                      |
| GRAND TOTALS:              |         |         | 1,716        | 148              | 41                   |
|                            |         |         |              |                  |                      |
| SAY:                       |         |         | 1,716        | 148              | 41                   |

G = GATING IMPACT ATTENUATOR TYPE 350  
NG = NON-GATING IMPACT ATTENUATOR TYPE 350

NOTE: QUANTITIES ARE APPROXIMATE ONLY. THE RESIDENT ENGINEER WILL USE METHODS INCLUDING BUT NOT LIMITED TO RE-CROSS-SECTIONING, TRUCK MEASUREMENTS, AND AERIAL SURVEYS TO COMPUTE FINAL QUANTITIES WHICH THE CONTRACTOR WILL BE PAID

| SURVEY<br>LINE                | BEG. STA.   | END STA.    | LOCATION | LENGTH    |                |                 | WARRANT POINT   |                 | "N"<br>DIST.<br>FROM<br>E.O.L. | TOTAL<br>SHOUL.<br>WIDTH | FLARE LENGTH    |                 | W         |    | ANCHORS     |      |      |       |      |          |      |    | IMPACT<br>ATTENUATOR<br>MASH<br>TYPE TL-3 |    |   | SINGLE<br>FACED<br>GUARDRAIL | REMOVE<br>EXISTING<br>GUARDRAIL | REMOVE<br>AND<br>STOCKPILE<br>EXISTING<br>GUARDRAIL | REMARKS |        |                                                  |                                |  |
|-------------------------------|-------------|-------------|----------|-----------|----------------|-----------------|-----------------|-----------------|--------------------------------|--------------------------|-----------------|-----------------|-----------|----|-------------|------|------|-------|------|----------|------|----|-------------------------------------------|----|---|------------------------------|---------------------------------|-----------------------------------------------------|---------|--------|--------------------------------------------------|--------------------------------|--|
|                               |             |             |          | STRAIGHT  | SHOP<br>CURVED | DOUBLE<br>FACED | APPROACH<br>END | TRAILING<br>END |                                |                          | APPROACH<br>END | TRAILING<br>END | XI<br>MOD | XI | GREU<br>350 | B-77 | TL-2 | CAT-1 | TL-3 | TYPE III | AT-1 | EA | G                                         | NG |   |                              |                                 |                                                     |         |        |                                                  |                                |  |
|                               |             |             |          |           |                |                 |                 |                 |                                |                          |                 |                 |           |    |             |      |      |       |      |          |      |    |                                           |    |   |                              |                                 |                                                     |         |        |                                                  |                                |  |
| -L-                           | 13 + 31.92  | 13 + 41.20  | LT       | 72'       |                |                 |                 |                 |                                |                          |                 |                 |           |    |             |      |      |       |      | 1        |      |    |                                           |    |   |                              |                                 | 25'                                                 |         |        |                                                  |                                |  |
| -L-                           | 13 + 32.00  | 16 + 05.00  | LT       |           |                |                 |                 |                 |                                |                          |                 |                 |           |    |             |      |      |       |      |          |      |    |                                           |    |   |                              |                                 | 333'                                                |         |        | REMOVE EXISTING GUARDRAIL                        |                                |  |
| -L-                           | 13 + 73.72  | 13 + 80.15  | RT       | 90.125'   |                |                 |                 |                 |                                |                          |                 |                 |           |    |             |      |      |       |      | 1        |      |    |                                           |    |   |                              |                                 | 50'                                                 |         |        |                                                  |                                |  |
| -L-                           | 13 + 74.00  | 15 + 06.00  | RT       |           |                |                 |                 |                 |                                |                          |                 |                 |           |    |             |      |      |       |      |          |      |    |                                           |    |   |                              |                                 | 214'                                                |         |        | REMOVE EXISTING GUARDRAIL                        |                                |  |
| -L-                           | 14 + 65.06  | 15 + 77.16  | RT       | 112.375'  |                |                 |                 |                 | 14'                            |                          | 32.25'          |                 | 4.64'     |    |             |      |      |       |      | 1        |      | 1  |                                           |    |   |                              |                                 | 87.5'                                               |         |        |                                                  |                                |  |
| -L-                           | 16 + 28.36  |             | LT       |           |                |                 |                 |                 |                                |                          |                 |                 |           |    |             |      |      |       |      |          |      |    |                                           | 1  |   |                              |                                 |                                                     |         |        | IA-MASH TYPE TL-3 PLACED AT END OF CONC. BARRIER |                                |  |
| -L-                           | 42 + 50.00  | 44 + 00.00  | LT       | 150'      |                |                 |                 |                 | 16'                            |                          |                 |                 |           |    |             |      |      |       |      | 1        |      |    | 1                                         |    |   |                              |                                 | 87.5'                                               |         |        | B-77 PLACED AT END OF CONC. BARRIER              |                                |  |
| -L-                           | 52 + 25.96  | 54 + 57.38  | LT       | 234.25'   |                |                 |                 |                 | 14'                            |                          |                 |                 |           |    |             |      |      |       |      |          |      |    | 1                                         |    | 1 |                              |                                 | 212.5'                                              | 90'     |        | REMOVE EXISTING GUARDRAIL                        |                                |  |
| -L-                           | 52 + 25.31  | 54 + 57.38  | RT       | 233.875'  |                |                 |                 |                 | 10.5'                          |                          |                 |                 |           |    |             |      |      |       |      |          |      |    |                                           |    | 1 | 1                            |                                 | 150'                                                | 90'     |        | REMOVE EXISTING GUARDRAIL                        |                                |  |
| -L-                           | 55 + 80.00  | 56 + 70.00  | LT       |           |                |                 |                 |                 |                                |                          |                 |                 |           |    |             |      |      |       |      |          |      |    |                                           |    |   |                              |                                 | 90'                                                 |         |        | REMOVE EXISTING GUARDRAIL                        |                                |  |
| -L-                           | 55 + 90.63  | 58 + 20.00  | RT       | 231.50'   |                |                 |                 |                 | 14'                            |                          |                 |                 |           |    |             |      |      |       |      |          |      |    | 1                                         |    | 1 |                              |                                 | 212.5'                                              | 90'     |        | REMOVE EXISTING GUARDRAIL                        |                                |  |
| -L-                           | 58 + 85.00  | 61 + 20.00  | LT       | 224.125'  |                |                 |                 |                 | 16'                            |                          |                 |                 |           |    |             |      |      |       |      |          |      |    |                                           |    |   | 1                            | 1                               |                                                     | 162.5'  |        |                                                  |                                |  |
| -L-                           | 169 + 14.46 | 171 + 84.47 | LT       | 270'      |                |                 |                 |                 | 15.5'                          |                          |                 |                 |           |    |             |      |      |       |      |          |      |    | 1                                         | 1  |   |                              |                                 | 212.5'                                              |         |        |                                                  |                                |  |
| -LI-                          | 17 + 00.00  | 18 + 22.00  | LT       |           |                |                 |                 |                 |                                |                          |                 |                 |           |    |             |      |      |       |      |          |      |    |                                           |    |   |                              |                                 |                                                     | 135'    |        |                                                  | REMOVE EXISTING GUARDRAIL      |  |
| -LI-                          | 19 + 00.00  | 21 + 30.00  | LT       |           |                |                 |                 |                 |                                |                          |                 |                 |           |    |             |      |      |       |      |          |      |    |                                           |    |   |                              |                                 |                                                     | 242'    |        |                                                  | REMOVE EXISTING GUARDRAIL      |  |
| -LI-                          | 19 + 68.41  | 21 + 05.23  | RT       | 135.375'  |                |                 |                 |                 | 19.5'                          |                          |                 |                 |           |    |             |      |      |       |      |          |      |    |                                           |    |   |                              |                                 | 112.5'                                              | 247'    |        | REMOVE EXISTING GUARDRAIL                        |                                |  |
| -RPB-                         | 27 + 75.00  | 29 + 54.00  | RT       |           |                |                 |                 |                 |                                |                          |                 |                 |           |    |             |      |      |       |      |          |      |    |                                           |    |   |                              |                                 |                                                     | 192'    |        |                                                  | REMOVE EXISTING GUARDRAIL      |  |
| -RPB-                         | 28 + 18.00  | 29 + 43.00  | LT       |           |                |                 |                 |                 |                                |                          |                 |                 |           |    |             |      |      |       |      |          |      |    |                                           |    |   |                              |                                 |                                                     | 122'    |        |                                                  | REMOVE EXISTING GUARDRAIL      |  |
| -RPC-                         | 17 + 00.00  | 18 + 14.34  | LT       | 112.50'   |                |                 |                 |                 | 7.5'                           |                          |                 |                 |           |    |             |      |      |       |      |          |      |    |                                           |    |   |                              |                                 | 62.5'                                               |         |        |                                                  |                                |  |
| SUBTOTAL                      |             |             |          | 1866.125' |                |                 |                 |                 |                                |                          |                 |                 |           |    |             |      |      |       |      |          | 4    | 1  | 4                                         |    | 5 | 4                            |                                 | 1                                                   |         |        | 1,845'                                           |                                |  |
| LESS 4 B-77 @ 22.875' EACH    |             |             |          | 91.5'     |                |                 |                 |                 |                                |                          |                 |                 |           |    |             |      |      |       |      |          |      |    |                                           |    |   |                              |                                 |                                                     |         |        |                                                  |                                |  |
| LESS 1 GREU TL-2 @ 25' EACH   |             |             |          | 25'       |                |                 |                 |                 |                                |                          |                 |                 |           |    |             |      |      |       |      |          |      |    |                                           |    |   |                              |                                 |                                                     |         |        |                                                  |                                |  |
| LESS 5 GREU TL-3 @ 50' EACH   |             |             |          | 250'      |                |                 |                 |                 |                                |                          |                 |                 |           |    |             |      |      |       |      |          |      |    |                                           |    |   |                              |                                 |                                                     |         |        |                                                  |                                |  |
| LESS 4 CAT-1 @ 6.25' EACH     |             |             |          | 25'       |                |                 |                 |                 |                                |                          |                 |                 |           |    |             |      |      |       |      |          |      |    |                                           |    |   |                              |                                 |                                                     |         |        |                                                  |                                |  |
| LESS 4 TYPE III @ 18.75' EACH |             |             |          | 75'       |                |                 |                 |                 |                                |                          |                 |                 |           |    |             |      |      |       |      |          |      |    |                                           |    |   |                              |                                 |                                                     |         |        |                                                  |                                |  |
| PROJECT TOTALS                |             |             |          | 1399.625' |                |                 |                 |                 |                                |                          |                 |                 |           |    |             |      |      |       |      |          | 4    | 1  | 4                                         |    | 5 | 4                            |                                 | 1                                                   |         |        |                                                  | ADDITIONAL GUARDRAIL POSTS = 5 |  |
| SAY                           |             |             |          | 1400'     |                |                 |                 |                 |                                |                          |                 |                 |           |    |             |      |      |       |      | 4        | 1    | 4  |                                           | 5  | 4 |                              | 1                               |                                                     |         | 1,850' |                                                  |                                |  |













































8/17/99

REVISIONS

COMPUTED BY: J.B. Barfield    DATE: 3/28/2025

CHECKED BY: \_\_\_\_\_    DATE: \_\_\_\_\_

(9-17-24)

STATE OF NORTH CAROLINA

DIVISION OF HIGHWAYS

SUMMARY OF SUBSURFACE DRAINAGE

| LINE | Station | Station | Location<br>LT/RT/CL | Drain Type*<br>UD/BD/SD | LF  |
|------|---------|---------|----------------------|-------------------------|-----|
|      |         |         |                      |                         |     |
|      |         |         |                      |                         |     |
|      |         |         |                      |                         |     |
|      |         |         |                      | SD                      | 500 |
|      |         |         |                      |                         |     |
|      |         |         |                      | TOTAL LF:               | 500 |

\*UD = Underdrain

\*BD = Blind Drain

\*SD = Subsurface Drain

SUMMARY OF AGGREGATE SUBGRADE/STABILIZATION

| LINE  | Station | Station | Aggregate<br>Type*<br>ASU(1/2)/<br>AST | Aggregate<br>Thickness<br>INCHES<br>[8" for<br>ASU(2)] | Shallow<br>Undercut<br>CY | Class IV<br>Subgrade<br>Stabilization<br>TONS | Geotextile for<br>Subgrade<br>Stabilization<br>SY | Stabilizer<br>Aggregate<br>TONS | Class IV<br>Aggregate<br>Stabilization<br>TONS |
|-------|---------|---------|----------------------------------------|--------------------------------------------------------|---------------------------|-----------------------------------------------|---------------------------------------------------|---------------------------------|------------------------------------------------|
| -L-   | 14+00   | 16+00   | ASU(2)                                 | 8                                                      |                           | 912                                           | 2085                                              |                                 |                                                |
| -L-   | 42+50   | 47+00   | ASU(2)                                 | 8                                                      |                           | 984                                           | 2250                                              |                                 |                                                |
| -L-   | 52+00   | 53+00   | ASU(2)                                 | 8                                                      |                           | 170                                           | 389                                               |                                 |                                                |
| -L-   | 53+00   | 55+00   | ASU(2)                                 | 8                                                      |                           | 763                                           | 1744                                              |                                 |                                                |
| -L-   | 56+00   | 58+00   | ASU(2)                                 | 8                                                      |                           | 336                                           | 769                                               |                                 |                                                |
| -L-   | 61+50   | 65+00   | ASU(2)                                 | 8                                                      |                           | 595                                           | 1361                                              |                                 |                                                |
| -L-   | 66+50   | 69+50   | ASU(2)                                 | 8                                                      |                           | 685                                           | 1567                                              |                                 |                                                |
| -L-   | 74+50   | 79+00   | ASU(2)                                 | 8                                                      |                           | 823                                           | 1883                                              |                                 |                                                |
| -L-   | 81+50   | 82+00   | ASU(2)                                 | 8                                                      |                           | 119                                           | 272                                               |                                 |                                                |
| -L-   | 164+50  | 167+00  | ASU(2)                                 | 8                                                      |                           | 425                                           | 972                                               |                                 |                                                |
| -L-   | 169+50  | 171+50  | ASU(2)                                 | 8                                                      |                           | 457                                           | 1044                                              |                                 |                                                |
| -Y26- | 10+50   | 12+50   | ASU(2)                                 | 8                                                      |                           | 427                                           | 978                                               |                                 |                                                |
| -Y29- | 31+50   | 34+50   | ASU(2)                                 | 8                                                      |                           | 831                                           | 1900                                              |                                 |                                                |
|       |         |         | CONTINGENCY<br>AST                     | 3                                                      |                           |                                               |                                                   | 500                             |                                                |
|       |         |         | CONTINGENCY<br>ASU(2)                  | 8                                                      |                           | 17700                                         | 40500                                             |                                 |                                                |
|       |         |         |                                        |                                                        |                           |                                               |                                                   |                                 |                                                |
| -Y15- | 14+75   | 16+75   | ASU(1)                                 | 12                                                     | 20                        | 470                                           | 910                                               |                                 |                                                |
| -Y12- | 13+25   | 15+25   | ASU(1)                                 | 12                                                     | 115                       | 195                                           | 375                                               |                                 |                                                |
| -Y13- | 10+75   | 16+25   | ASU(1)                                 | 12                                                     | 365                       | 625                                           | 1210                                              |                                 |                                                |
| -Y17- | 13+25   | 14+25   | ASU(1)                                 | 12                                                     | 100                       | 210                                           | 405                                               |                                 |                                                |
|       |         |         |                                        |                                                        |                           |                                               |                                                   |                                 |                                                |
|       |         |         |                                        |                                                        |                           |                                               |                                                   |                                 |                                                |
|       |         |         | CONTINGENCY<br>ASU(1)                  | 12                                                     | 500                       | 1000                                          | 1500                                              |                                 |                                                |
|       |         |         |                                        |                                                        |                           |                                               |                                                   |                                 |                                                |
|       |         |         | TOTAL CY/TONS/SY:                      |                                                        | 1100                      | 27727**                                       | 62114**                                           | 500                             | 0                                              |

\*ASU(1/2) = Aggregate Subgrade (Type 1 or 2)

\*AST = Aggregate Stabilization

\*\*Total tons of "Class IV Subgrade Stabilization" and total square yards of "Geotextile for Subgrade Stabilization" are only the estimated quantities for ASU(1/2)/AST and may only represent a portion of the subgrade stabilization and geotextile quantities shown in the Item Sheets of the Proposal.

SUMMARY OF SURCHARGES  
AND SURCHARGE WAITING PERIODS

| LINE | Station | Station | Surcharge<br>Height<br>FT | MONTHS |
|------|---------|---------|---------------------------|--------|
| -L-  | 55+89   | 57+00   | 5                         | 1      |
|      |         |         |                           |        |
|      |         |         |                           |        |

SUMMARY OF EMBANKMENT  
WAITING PERIODS

| LINE | Station | Station | MONTHS |
|------|---------|---------|--------|
| -L-  | 55+89   | 57+00   | 1      |
|      |         |         |        |
|      |         |         |        |

SUMMARY OF SETTLEMENT GAUGES

| Gauge<br>No. | LINE<br>and<br>Station | Offset         |                    |
|--------------|------------------------|----------------|--------------------|
|              |                        | Distance<br>FT | Direction<br>LT/RT |
| 1            | -L- 55+95              | 25             | RT                 |
| 2            | -L- 56+45              | 25             | RT                 |
| 3            | -L- 56+95              | 25             | RT                 |
|              |                        |                |                    |
|              | TOTAL GAUGES (EACH):   |                | 3                  |

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STATE OF NORTH CAROLINA

DIVISION OF HIGHWAYS

PARCEL INDEX

| PARCEL NO. | SHEET NO. | PROPERTY OWNER NAME                                  |
|------------|-----------|------------------------------------------------------|
| 1          | 4,5       | LEOTERRA JOHNSON STREET LLC                          |
| 2          | 4         | LEE VARRICK MOORE, JR. & ROBIN MICHELLE LONG         |
| 3          | 4,5       | HOWARD L REGAN & TAMARA K REGAN                      |
|            |           |                                                      |
| 5          | 5         | MARTIN F SCHLAEPPI & CATHERINE D. SCHLAEPPI          |
| 6          | 5,6       | MARTIN F SCHLAEPPI & CATHERINE D. SCHLAEPPI          |
| 7          | 5         | BILLY C HIATT & CAROL H HIATT                        |
| 8          | 5         | BILLY C HIATT                                        |
| 9          | 5         | UNKNOWN HEIRS OF MARIA C HIATT                       |
| 10         | 5         | UNKNOWN HEIRS OF MARIA C HIATT                       |
| 11         | 5,6       | UNKNOWN HEIRS OF MARIA C HIATT                       |
| 12         | 6         | MEADOW CREEK HOA INC                                 |
| 13         | 6         | MEADOW CREEK LLC                                     |
| 14         | 6         | IRENE B BARR & RICHARD L BARR                        |
| 15         | 6         | ALANNA ZAMBRANO, ANDRE ZAMBRANO, & ROBERT BRANDWOOD  |
| 16         | 6         | GRACEE A M QUIBOLY & PEDRO P QUIBOLOY                |
| 17         | 6,7       | MEADOW CREEK SUBDIVISION OWNERS' ASSOC INC           |
| 18         | 6,7       | ALANNA A ZAMBRANO & ROBERT BRANDWOOD                 |
| 19         | 7,8       | CITY OF HIGH POINT                                   |
| 20         | 7,8       | MICHAEL E O'BRIEN & PARALEE O'BRIEN                  |
| 21         | 8,9       | CITY OF HIGH POINT                                   |
| 22         | 8         | MILTON L KIRKLAND & JANICE J KIRKLAND                |
| 23         | 8         | RASHEED ALNAGAR                                      |
| 24         | 8,9       | GARNET D IDOL & BETTY K IDOL                         |
| 25         | 9         | ALEXANDER ALLEY, LARRY M ALLEY, & PHYLLIS A GRIFFITH |
| 26         | 9         | JOHN W ALLEY                                         |
| 27         | 9         | ROBERT C LOPEZ & KODY E LOPEZ                        |
| 28         | 9         | DAVID L HOOKER & DEBORAH H HOOKER                    |
| 29         | 9,10      | LINDA M GOLDEN                                       |
| 30         | 9,10      | DOUGLAS R OWENS & REBECCA O OWENS                    |
| 31         | 10        | DORTHY MARTIN, TRUSTEE                               |
| 32         | 10        | JOSEPH M SIPE & NANCY W SIPE                         |
| 33         | 10,11     | ROYAL HOMES OF NC, LLC                               |
| 34         | 10,11     | WESLEYAN EDUCATION CENTER                            |
| 35         | 11        | RANDY L SHIELDS & TIMOTHY F DWYER                    |
| 35A        | 11        | RANDY L SHIELDS & TIMOTHY F DWYER                    |
| 36         | 11        | THAIVAN HOANG & LIEN TK PHAM                         |
| 37         | 11        | NAINA ASSOCIATES LLC                                 |
|            |           |                                                      |
|            |           |                                                      |
|            |           |                                                      |
|            |           |                                                      |
| 43         | 11,12     | THE LANDING AT WESTMOTT, LLC                         |
| 43A        | 12,24     | THE LOFTS AT WESTMOTT, LLC                           |
| 45         | 11,12     | JAMES C STAFFORD & WANDA D STAFFORD                  |
| 46         | 12        | PIEDMONT TRIAD AMBULANCE & RESCUE INC                |
| 48         | 12,13     | THE PRESBYTERIAN HOMES INC                           |
| 48A        | 13        | THE PRESBYTERIAN HOMES INC                           |
| 49         | 12,13     | NANCY W SIPE & JOSEPH M SIPE                         |
| 50         | 12,13,24  | THE LOFTS AT WESTMOTT LLC                            |
| 52         | 24        | L C BAME JR & CHRISTINE G BAME                       |
| 55         | 24        | VIRGINIA I KNUCKLES                                  |
| 56         | 24        | ROBERT S MINNICH & ROBIN D MINNICH                   |
| 57         | 13,24     | LADONNA M DEAN                                       |
| 58         | 13        | LADONNA M DEAN                                       |
|            |           |                                                      |
| 60         | 13        | ROGER S ALVAREZ MONSALVE & FATIMA D JAUREGUI HIDALGO |
| 61         | 13        | JEFFERSON W CARTER & MELISSA L CARTER                |
| 62         | 13        | DIANA DE JESUS GARCIA JASSO                          |
| 63         | 13        | THE PRESBYTERIAN HOMES INC                           |
| 64         | 13,14     | CYNTHIA M BOLEJACK                                   |
|            |           |                                                      |
|            |           |                                                      |
|            |           |                                                      |

PARCEL INDEX

| PARCEL NO. | SHEET NO. | PROPERTY OWNER NAME                                       |
|------------|-----------|-----------------------------------------------------------|
| 65         | 13,14     | SADDLE BROOK FLATS HOA INC                                |
| 66         | 13,14     | SADDLE BROOK HOA INC                                      |
| 67         | 14        | ANTHONY, BEVERLY, CHARLES, WILMETTE MORGAN & JOANN WALKER |
| 68         | 14        | MICHAEL E SCOTT & JANE W SCOTT                            |
|            |           |                                                           |
|            |           |                                                           |
| 72         | 14        | SADDLE BROOK FLATS HOA INC                                |
| 73         | 14        | ANTHONY, BEVERLY, CHARLES, WILMETTE MORGAN & JOANN WALKER |
| 74         | 14        | ANTHONY, BEVERLY, CHARLES, WILMETTE MORGAN & JOANN WALKER |
| 75         | 14        | CITY OF HIGH POINT                                        |
|            |           |                                                           |
| 77         | 14        | MAX A COLTRANE & DIANA W COLTRANE                         |
|            |           |                                                           |
| 79         | 14,15     | MAX A COLTRANE & DIANA W COLTRANE                         |
|            |           |                                                           |
| 81         | 14,15     | SADDLE BROOK FLATS HOA INC                                |
| 82         | 15        | MAX A COLTRANE & MARY COLTRANE MORGAN                     |
| 83         | 15        | MICHAEL S CARRICK                                         |
| 84         | 15        | TAMARA C EDWARDS                                          |
| 85         | 15        | RICHARD DICKERSON & CAROL DICKERSON                       |
| 86         | 15        | TAMARA C EDWARDS                                          |
| 87         | 15        | KENNETH A RUSH & AMY L RUSH                               |
| 88         | 15        | STEPHEN G DILLON & STEPHANIE A DILLON                     |
| 89         | 15,16     | STEPHEN C PROCO & MELISSA A PROCO                         |
| 90         | 15        | STEPHANIE S DILLON                                        |
| 91         | 15,16     | STEPHEN C PROCO                                           |
| 92         | 15,16     | KATHY A NEWSOM                                            |
| 93         | 16        | C&S PROPERTIES INC                                        |
| 94         | 16        | HOWARD J HOLYOAK                                          |
| 95         | 16        | 350 SOUTH LAND HOLDING LLC                                |
| 96         | 16        | TERRY W FRAZIER                                           |
| 97         | 16        | SANDY RIDGE METHODIST CHURCH                              |
| 98         | 16        | SANDY RIDGE METHODIST CHURCH                              |
| 99         | 16,17     | 350 SOUTH LAND HOLDING LLC                                |
| 100        | 16,17     | JIMMY C FLOWERS & BECKY T FLOWERS                         |
| 101        | 16        | MARK A BAKER & IVY R BAKER                                |
| 102        | 16        | MARK A BAKER & IVY R BAKER                                |
| 102A       | 16        | WANDA DEAN & ERIC N HUTCHENS                              |
| 103        | 16,17     | NADINE S MARLOR                                           |
| 104        | 17        | JOE W FRAZIER JR & JOANN W FRAZIER TRUST                  |
| 105        | 17        | JOHN K STERLING & KAY H STERLING                          |
| 106        | 17        | JOE W FRAZIER JR & JOANN W FRAZIER TRUST                  |
| 107        | 17        | MICHELLE R SOTO                                           |
| 108        | 17,18     | KEITH FRAZIER                                             |
| 109        | 17,18     | TRAVIS R NICKELSTON                                       |
| 110        | 18        | SAKTI LLC                                                 |
| 111        | 17,18     | JEAN, DAVID ROBERTSON, JANET RANDALL, & DONNA THOMPSON    |
| 112        | 17,18     | KEITH W PENDRY                                            |
| 113        | 18        | SUSAN CHU & MICHAEL CHU                                   |
| 114        | 18        | VIENGNAKHONE MIXAYKHAM                                    |
| 115        | 18        | MICHAEL B BUTNER & JAMES W GRIFFIN                        |
| 116        | 18        | CHRISTOPHER B SOUTHER & JUANITA A SOUTHER                 |
| 117        | 18        | GARY S BOOHER & WILMA J BOOHER                            |
| 118        | 18        | FRANCISCO BATZIN & ESLEY LOPEZ                            |
|            |           |                                                           |
| 120        | 18        | BRADLEY C PENNY & ANGELA R PENNY                          |
| 121        | 18        | TRIAD MUSLIM COMMUNITY CENTER INC                         |
| 122        | 18        | BILLY G DILLON & JEANETTE B DILLON TRUSTEES               |
| 123        | 18        | LARRY C ROBERSON                                          |
| 124        | 18        | POLARIS HOLDINGS II LLC                                   |
| 125        | 18        | MONICA HARRINGTON-YOUNG                                   |
|            |           |                                                           |
| 127        | 18,19     | LUIS M CASAS & PATRICIA L CASAS                           |

PARCEL INDEX

| PARCEL NO. | SHEET NO.   | PROPERTY OWNER NAME                              |
|------------|-------------|--------------------------------------------------|
| 129        | 19          | ROY L BEAGLE & YVETTE L BEAGLE                   |
|            |             |                                                  |
| 131        | 19          | ANTHONY D WHIGHAM & VIRGINIA A WHIGHAM           |
| 132        | 19          | 350 SOUTH LAND HOLDING LLC                       |
| 133        | 19          | SANDY RIDGE DEVELOPMENT PARTNERS LLC             |
| 134        | 19          | SANDY RIDGE DEVELOPMENT PARTNERS LLC             |
| 135        | 19          | SANDY RIDGE DEVELOPMENT PARTNERS LLC             |
| 136        | 19          | VB SIX LLC                                       |
| 137        | 19          | WILLIAM V DILLON                                 |
| 137A       | 19          | BILLY G DILLON                                   |
| 138        | 19,20       | WILLIAM V DILLON                                 |
| 139        | 20          | JASON L ROBINSON & MELISSA B ROBINSON            |
| 140        | 20          | STRATTON OAKMONT PROPERTIES                      |
| 141        | 20          | GENE B PITTS & OMA L PITTS                       |
| 142        | 20          | EDDIE W BATES & SHARON T BATES                   |
| 143        | 20          | JOSE M MARTINEZ-GUEVARA & ELBA N GRANADOS        |
| 144        | 20          | KEITH D PEEDEN                                   |
| 145        | 20          | SCR PROPERTIES LLC                               |
| 146        | 20          | DENNIS W ROBINSON & TERESA M ROBINSON            |
| 147        | 20,21       | HERBERT N SAMPSON JR                             |
|            |             |                                                  |
| 149        | 20,21       | CLARENCE S LONG JR                               |
| 150        | 21          | DANIEL N SAMPSON & TRINA P SAMPSON               |
| 151        | 21          | CLARENCE S LONG JR                               |
| 152        | 21          | MELANIE A CRUMP & SCOTT W CRUMP                  |
| 153        | 21          | SMITH GROVE BAPTIST CHURCH                       |
| 154        | 21          | SMITH GROVE BAPTIST CHURCH                       |
| 155        | 21          | CHARLES R NUCKLES & MATTIE W NUCKLES             |
| 156        | 21,25       | STATE OF NORTH CAROLINA DEPT OF JUSTICE          |
| 157        | 25          | EDDIE W BATES & SHARON K BATES                   |
| 158        | 25          | CLINTON L BATES                                  |
| 158A       | 25          | FRANCES D SHIELDS                                |
| 159        | 21,22,25    | STATE OF NORTH CAROLINA DEPT OF JUSTICE          |
|            |             |                                                  |
| 161        | 21,22       | ERNESTINE W QUICK, ERNSTINE W QUICK FAMILY TRUST |
| 162        | 21          | SMITH GROVE BAPTIST CHURCH                       |
| 163        | 21,22       | TRUSTEES OF ZION HILL UNITED METHODIST           |
| 164        | 21,22       | ERNESTINE W QUICK, ERNSTINE W QUICK FAMILY TRUST |
| 165        | 22,26       | PIEDMONT CHEERWINE BOTTLING CO                   |
| 165A       | 22          | EPHRAIM PROPERTIES LLC                           |
| 166        | 22          | BESSEMER IMPROVEMENT CO                          |
| 167        | 22,26       | POND COUNTRY COLFAX LLC                          |
| 168        | 22          | BESSEMER IMPROVEMENT CO                          |
| 169        | 22,26       | JOE PHAGAN                                       |
| 170        | 26          | GLENDA A G FOUST & PATRICIA A GEORGE             |
| 171        | 26          | GLENDA A G FOUST & PATRICIA GEORGE               |
| 172        | 22,23       | KEVIN A ROBINSON                                 |
| 173        | 22,23       | BESSEMER IMPROVEMENT COMPANY                     |
| 174        | 22,23,26,27 | KEVIN A ROBINSON                                 |
| 175        | 23          | BESSEMER IMPROVEMENT COMPANY                     |
| 176        | 23,27       | CIRCLE K STORES INC                              |
| 177        | 27          | LEAP YEAR INVESTMENTS LLC                        |
| 178        | 27          | ATLANTIC EMERGENCY GROUP-GREENSBORO LLC          |
| 179        | 27          | 8424 NORCROSS LLC                                |
| 180        | 7,8         | CITY OF HIGH POINT                               |
|            |             |                                                  |
| 182        | 26          | KEVIN A ROBINSON                                 |
| 183        | 26          | EMILY M LAMPKIN & SARAH E LAMPKIN                |
| 184        | 9           | AMY L RUSH & KENNETH A RUSH                      |
|            |             |                                                  |
| 187        | 15          | NEW DAY THE CHURCH AT HIGH POINT, INC            |
| 191        | 19,20       | DENNIS W ROBINSON & TERESA M ROBINSON            |
|            |             |                                                  |

NOTE: PARCELS 4, 38, 39, 40, 41, 42, 44, 47, 51, 53, 54, 59, 69, 70, 71, 76, 78, 80, 119, 126, 128, 130, 160, 181, 185, 186 HAVE BEEN REMOVED FROM ACQUISITION OR COMBINED WITH OTHER PARCELS AND ARE NOT SHOWN ON THIS SHEET FOR THAT REASON.