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09\_08/2019

See Sheet 1A For Index of Sheets  
See Sheet 1-B For Conventional Symbols  
See Sheet RW02C-1-RW02C-6 For Survey Control Sheets

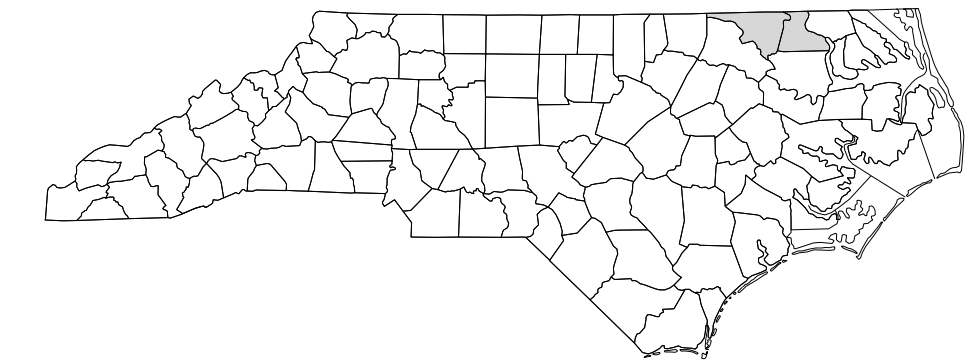
# STATE OF NORTH CAROLINA DIVISION OF HIGHWAYS

## NORTHAMPTON AND HERTFORD COUNTIES

LOCATION: US 158 FROM WEST OF US 258 TO  
EAST OF NC 11

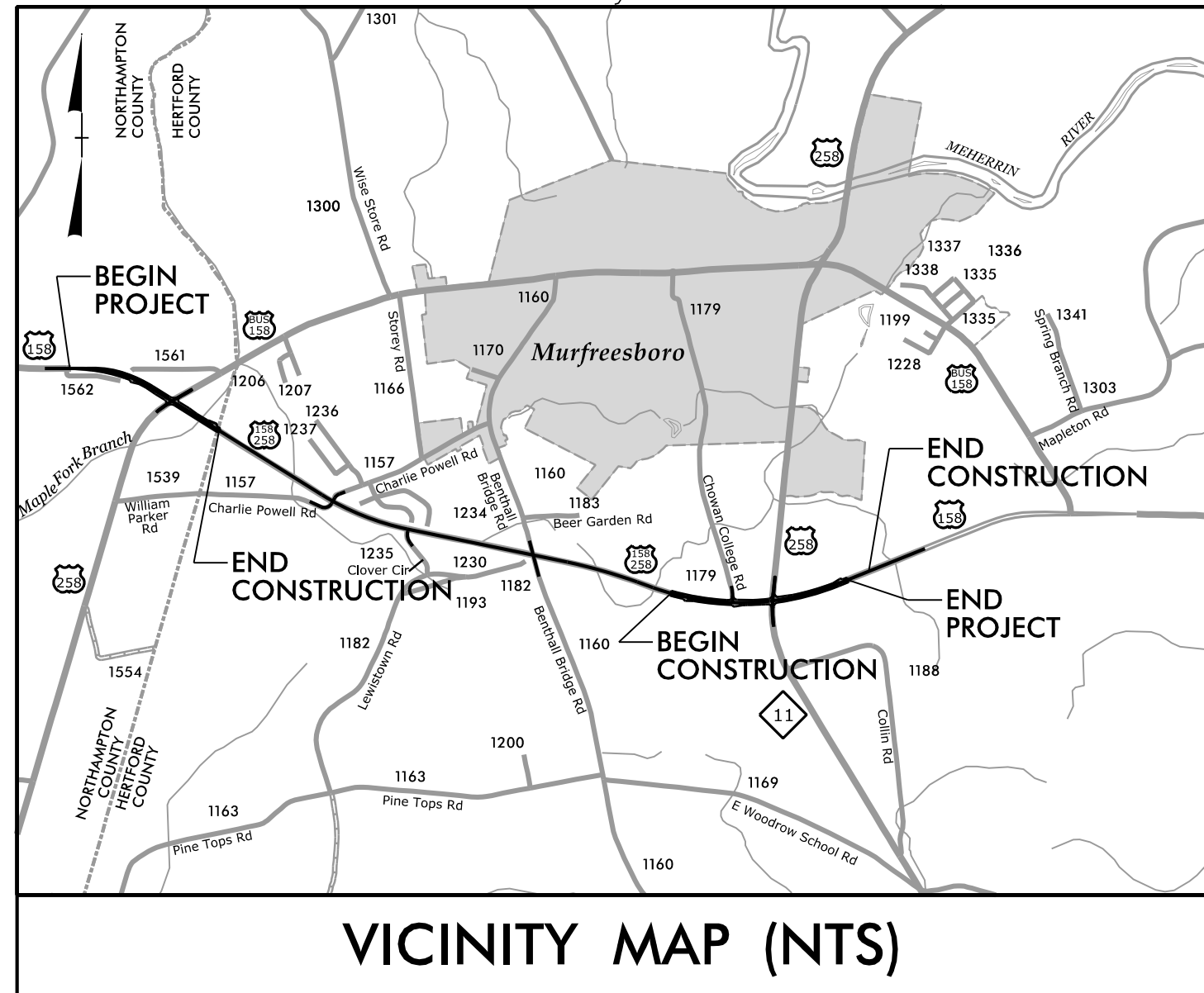
TYPE OF WORK: GRADING, DRAINAGE, PAVING

STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	W-5701B	1	
STATE PROJ. NO.	F.A. PROJ. NO.	DESCRIPTION	
44847.1.2	HSIP-0158(074)	PE	
44847.3.2	HSIP-0158(074)	CONST.	

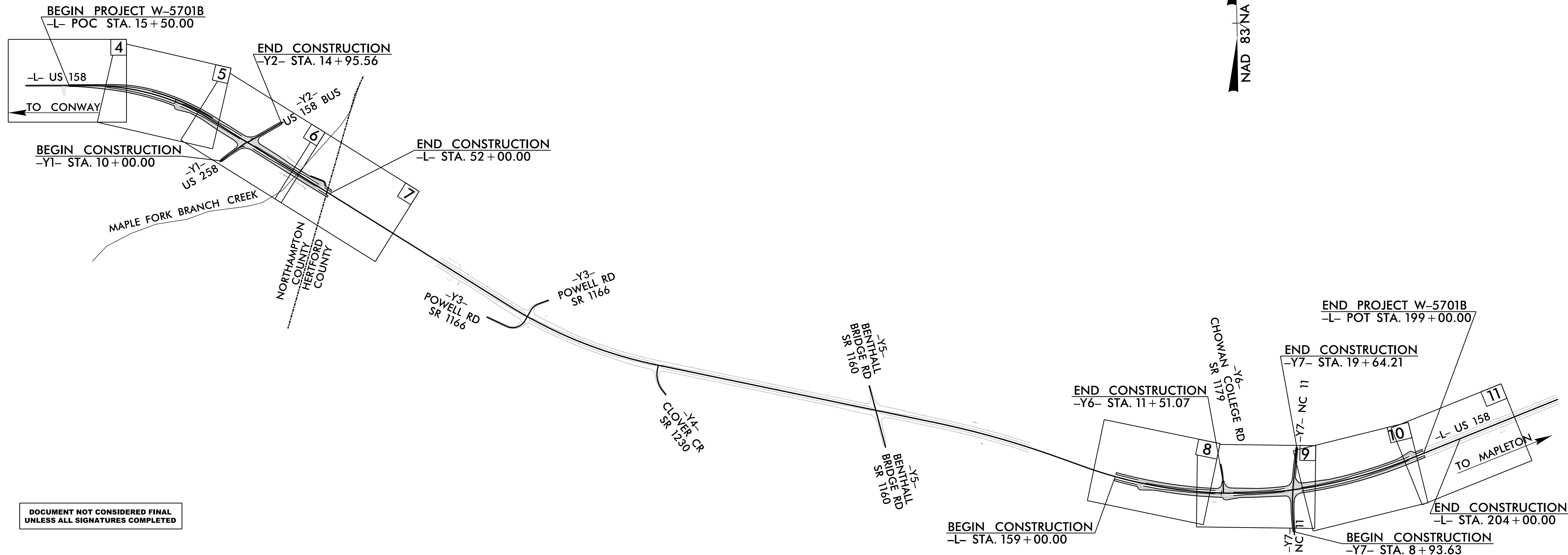


TIP PROJECT: W-5701B

CONTRACT: C204782

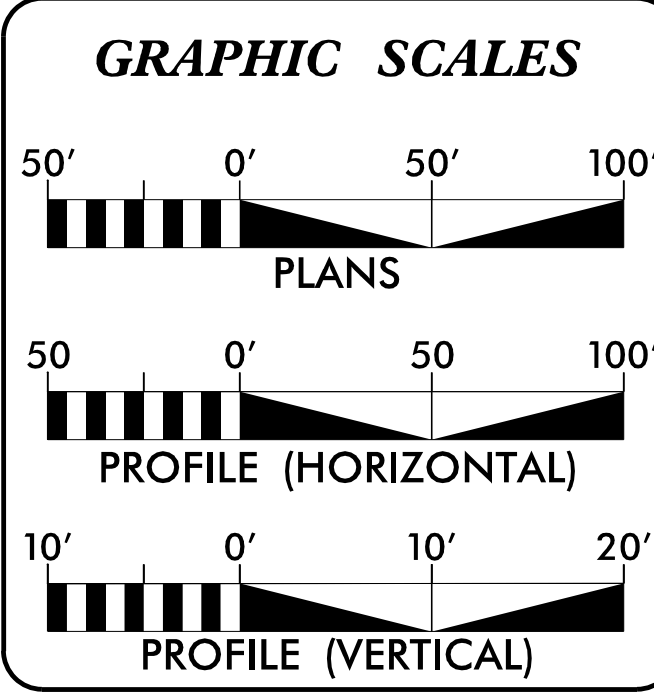


VICINITY MAP (NTS)



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NAD 83/NA 2011



**DESIGN DATA**

ADT 2023 =	4,656
ADT 2040 =	5,100
K =	10 %
D =	60 %
T =	19 % *
V =	70 MPH
* TTST = 5% DUAL 14% FUNC CLASS = PRINCIPAL RURAL ARTERIAL STATEWIDE TIER	

**PROJECT LENGTH**

LENGTH ROADWAY TIP PROJECT W-5701B.....	1.449 mi
LENGTH CULVERT TIP PROJECT W-5701B.....	0.000 mi
TOTAL LENGTH TIP PROJECT W-5701B.....	1.449 mi

**NCDOT CONTACT**

John S. Abel, Jr.  
PROJECT ENGINEER - DIVISION 1

**PLANS PREPARED BY:**

**RK&K**  
RUMMEL, KLEPPER & KAHL, LLP  
8601 Six Forks Road, Forum 1, SUITE 700  
RALEIGH, NORTH CAROLINA 27615-3960  
NC LICENSE NO. F-0112

2018 STANDARD SPECIFICATIONS

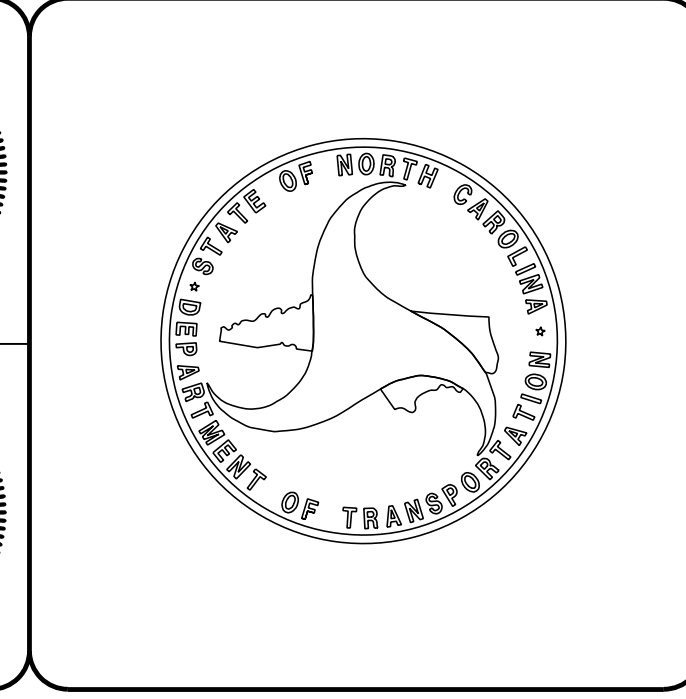
<b>RIGHT OF WAY DATE:</b> N/A	<b>Scott D. Blevins, P.E.</b> PROJECT ENGINEER RK&K, LLP
<b>LETTING DATE:</b> February 21, 2023	<b>Andy Hefler</b> PROJECT DESIGN ENGINEER RK&K, LLP

**HYDRAULICS ENGINEER**

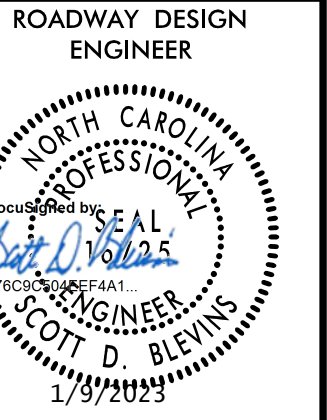
DocuSigned by:  
Robert B. Huskey  
SIGNATURE: \_\_\_\_\_

**ROADWAY DESIGN ENGINEER**

DocuSigned by:  
Scott D. Blevins  
SIGNATURE: \_\_\_\_\_



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# INDEX of SHEETS, GENERAL NOTES, and LIST of STANDARDS

SHEET NUMBER	SHEET
1	TITLE SHEET
1A	INDEX OF SHEETS, GENERAL NOTES, AND STANDARD DRAWINGS
1B	CONVENTIONAL SYMBOLS
2A-1	PAVEMENT SCHEDULE AND TYPICAL SECTIONS
2B-1 THRU 2B-5	ROADWAY DETAILS
2C-1 THRU 2C-5	SPECIAL DETAILS
2D-1	DRAINAGE DETAILS
3B-1	ROADWAY SUMMARIES
3D-1 THRU 3D-3	DRAINAGE SUMMARIES
3G-1	GEOTECHNICAL SUMMARIES
4 THRU 12	PLAN AND PROFILE SHEET
RW02C-1 THRU RW02C-6	SURVEY CONTROL SHEETS
TMP-1 THRU TMP-23	TRAFFIC MANAGEMENT PLANS
PMP-1 THRU PMP-10	PAVEMENT MARKING PLANS
EC-1 THRU EC-19	EROSION CONTROL PLANS
SIGN-1 THRU SIGN-11	SIGNING PLANS
X-0 THRU X-1A	CROSS-SECTION SUMMARY SHEET
X-1 THRU X-29	CROSS-SECTIONS

GENERAL NOTES: 2018 SPECIFICATIONS  
EFFECTIVE: 01-16-2018  
REVISED:

GRADING AND SURFACING OR RESURFACING AND WIDENING:  
THE GRADE LINES SHOWN DENOTE THE FINISHED ELEVATION OF THE PROPOSED SURFACING AT GRADE POINTS SHOWN ON THE TYPICAL SECTIONS. WHERE NO GRADE LINES ARE SHOWN, THE PROFILES SHOWN DENOTE THE TOP ELEVATION OF THE EXISTING PAVEMENT ALONG THE CENTER LINE OF SURVEY ON WHICH THE PROPOSED RESURFACING WILL BE PLACED. GRADE LINES MAY BE ADJUSTED BY THE ENGINEER IN ORDER TO SECURE A PROPER TIE-IN.

CLEARING:  
CLEARING ON THIS PROJECT SHALL BE PERFORMED TO THE LIMITS ESTABLISHED BY METHOD III.

SUPERELEVATION:  
ALL CURVES ON THIS PROJECT SHALL BE SUPERELEVATED IN ACCORDANCE WITH STD. NO. 225.04 AND 225.05 USING THE RATE OF SUPERELEVATION AND RUNOFF SHOWN ON THE PLANS. SUPERELEVATION IS TO BE REVOLVED ABOUT THE GRADE POINTS SHOWN ON THE TYPICAL SECTIONS.

SHOULDER CONSTRUCTION:  
ASPHALT, EARTH, AND CONCRETE SHOULDER CONSTRUCTION ON THE HIGH SIDE OF SUPERELEVATED CURVES SHALL BE IN ACCORDANCE WITH STD. NO. 560.01 AND 560.02

SIDE ROADS:  
THE CONTRACTOR WILL BE REQUIRED TO DO ALL NECESSARY WORK TO PROVIDE SUITABLE CONNECTIONS WITH ALL ROADS, STREETS, AND DRIVES ENTERING THIS PROJECT. THIS WORK WILL BE PAID FOR AT THE CONTRACT UNIT PRICE FOR THE PARTICULAR ITEMS INVOLVED.

SUBSURFACE DRAINS:  
SUBSURFACE DRAINS SHALL BE CONSTRUCTED IN ACCORDANCE WITH STD. NO. 815.02 AT LOCATIONS DIRECTED BY THE ENGINEER.

STREET TURNOUT:  
STREET RETURNS SHALL BE CONSTRUCTED IN ACCORDANCE WITH STD. NO. 848.04 USING THE RADII NOTED ON PLANS.

GUARDRAIL:  
THE GUARDRAIL LOCATIONS SHOWN ON THE PLANS MAY BE ADJUSTED DURING CONSTRUCTION AS DIRECTED BY THE ENGINEER. THE CONTRACTOR SHOULD CONSULT WITH THE ENGINEER PRIOR TO ORDERING GUARDRAIL MATERIAL.

TEMPORARY SHORING:  
SHORING REQUIRED FOR THE MAINTENANCE OF TRAFFIC WILL BE PAID FOR AS "EXTRA WORK" IN ACCORDANCE WITH SECTION 104-7.

2018 ROADWAY ENGLISH STANDARD DRAWINGS

The following Roadway Standards as appear in "Roadway Standard Drawings" Highway Design Branch - N. C. Department of Transportation - Raleigh, N. C., Dated January, 2018 are applicable to this project and by reference hereby are considered a part of these plans:

STD. NO.	TITLE
DIVISION 2 - EARTHWORK	
200.03	Method of Clearing - Method III
225.01	Guide for Grading Subgrade - Interstate and Freeway
225.02	Guide for Grading Subgrade - Secondary and Local
225.04	Method of Obtaining Superelevation - Two Lane Pavement
225.05	Method of Obtaining Superelevation - Divided Highways
225.06	Method of Grading Sight Distance at Intersections
DIVISION 3 - PIPE CULVERTS	
300.01	Method of Pipe Installation
DIVISION 5 - SUBGRADE, BASES AND SHOULDERS	
560.01	Method of Shoulder Construction - High Side of Superelevated Curve - Method I
560.02	Method of Shoulder Construction - High Side of Superelevated Curve - Method II
DIVISION 6 - ASPHALT BASES AND PAVEMENTS	
654.01	Pavement Repairs
665.01	Asphalt Shoulders - Milled Rumble Strips
DIVISION 8 - INCIDENTALS	
815.02	Subsurface Drain
840.00	Concrete Base Pad for Drainage Structures
840.18	Concrete Grated Drop Inlet Type 'B' - 12" thru 36" Pipe
840.19	Concrete Grated Drop Inlet Type 'D' - 12" thru 36" Pipe
840.24	Frames and Narrow Slot Sag Grates
840.25	Anchorages for Frames - Brick or Concrete or Precast
840.27	Brick Grated Drop Inlet Type 'B' - 12" thru 36" Pipe
840.28	Brick Grated Drop Inlet Type 'D' - 12" thru 36" Pipe
840.29	Frames and Narrow Slot Flat Grates
840.31	Concrete Junction Box - 12" thru 66" Pipe
840.32	Brick Junction Box - 12" thru 66" Pipe
840.34	Traffic Bearing Junction Box - for Use with Pipes 42" and Under
840.36	Traffic Bearing Grated Drop Inlet - for Steel (840.37) Double Frame and Grates
840.37	Steel Grate and Frame
840.45	Precast Drainage Structure
840.46	Traffic Bearing Precast Drainage Structure
840.54	Manhole Frame and Cover
840.66	Drainage Structure Steps
846.01	Concrete Curb, Gutter and Curb & Gutter
852.01	Concrete Islands
862.01	Guardrail Placement
862.02	Guardrail Installation
876.04	Drainage Ditches with Class 'B' Rip Rap

EFF. 01-16-2018  
REV.

STATE OF NORTH CAROLINA, DIVISION OF HIGHWAYS

CONVENTIONAL PLAN SHEET SYMBOLS

Note: Not to Scale

BOUNDARIES AND PROPERTY:

Table listing symbols for 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:

Table listing symbols for 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:

Table listing symbols for 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:

Table listing symbols for railroads: Standard Gauge, RR Signal Milepost, Switch, RR Abandoned, RR Dismantled.

RIGHT OF WAY & PROJECT CONTROL:

Table listing symbols for right of way and 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 CA Monument, Proposed CA Monument (Rebar and Cap), Proposed CA 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:

Table listing symbols for 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.

Table listing symbols for woods, orchard, and vineyard: Woods Line, Orchard, Vineyard.

EXISTING STRUCTURES:

Table listing symbols for existing structures: Bridge, Tunnel or Box Culvert, Bridge Wing Wall, Head Wall and End Wall, 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)

Table listing symbols for utilities: 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:

Table listing symbols for 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:

Table listing symbols for 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:

Table listing symbols for 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:

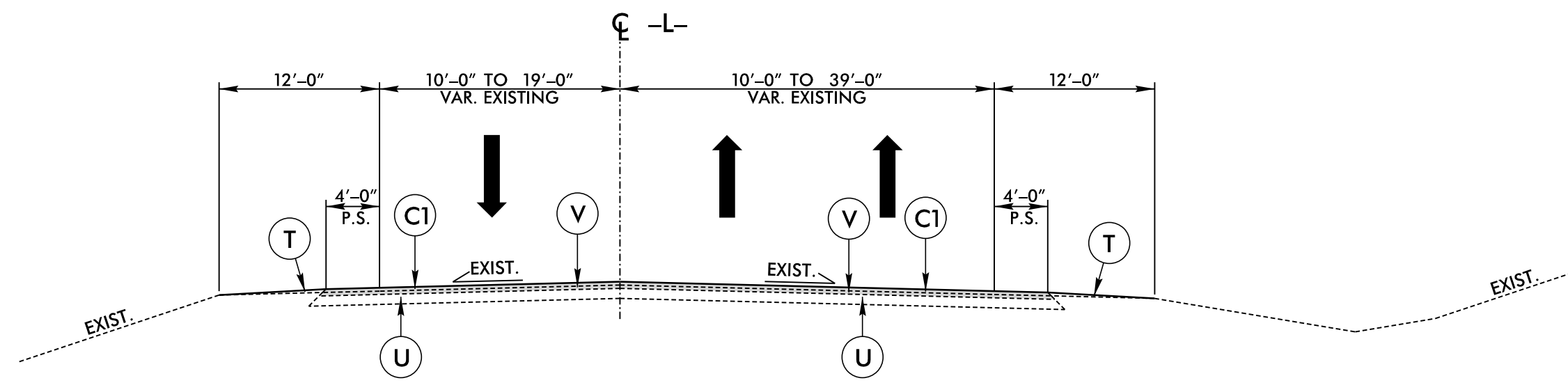
Table listing symbols for miscellaneous: Utility Pole, Utility Pole with Base, Utility Located Object, Utility Traffic Signal Box, Utility Unknown U/G Line (SUE - LOS B)\*, U/G Tank; Water, Gas, Oil, Underground Storage Tank, Approx. Loc., A/G Tank; Water, Gas, Oil, Geoenvironmental Boring, Abandoned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

5/14/99

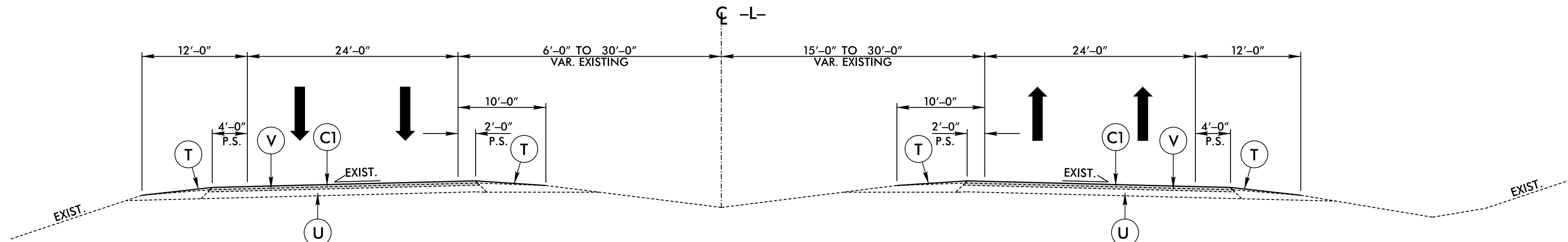
FINAL PAVEMENT SCHEDULE	
C1	PROP. APPROX. 1.5" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5C, AT AN AVERAGE RATE OF 168 LBS PER SQ. YARD.
C2	PROP. VAR. DEPTH ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5C, AT AN AVERAGE RATE OF 112 LBS. PER SQ. YD. PER 1" DEPTH TO BE PLACED IN LAYERS NOT LESS THAN 1.5" OR GREATER THAN 2.0" IN DEPTH.
D1	PROP. APPROX. 4" ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE I19.0C, AT AN AVERAGE RATE OF 456 LBS PER SQ. YARD.
D2	PROP. VAR. DEPTH ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE I19.0C, AT AN AVERAGE RATE OF 114 LBS. PER SQ. YD. PER 1" DEPTH TO BE PLACED IN LAYERS NOT LESS THAN 2.5" IN DEPTH OR GREATER THAN 4" IN DEPTH.
E1	PROP. APPROX. 4" ASPHALT CONCRETE BASE COURSE, TYPE B25.0C, AT AN AVERAGE RATE OF 456 LBS. PER SQ. YARD.
E2	PROP. VAR. DEPTH ASPHALT CONCRETE BASE COURSE, TYPE B25.0C, AT AN AVERAGE RATE OF 114 LBS. PER SQ. YD. PER 1" DEPTH TO BE PLACED IN LAYERS NOT LESS THAN 3" IN DEPTH OR GREATER THAN 5.5" IN DEPTH.
R1	5' MONOLITHIC CONCRETE ISLAND (KEYED IN)
R2	SHOULDER BERM GUTTER
T	EARTH MATERIAL
U	EXISTING PAVEMENT
V	MILLING 1.5" DEPTH
W	WEDGING

NOTES: ALL PAVEMENT EDGE SLOPES ARE 1:1 UNLESS OTHERWISE NOTED. SEE PLANS FOR LOCATION OF AUXILIARY LANES, CONCRETE ISLANDS, AND TAPERS.

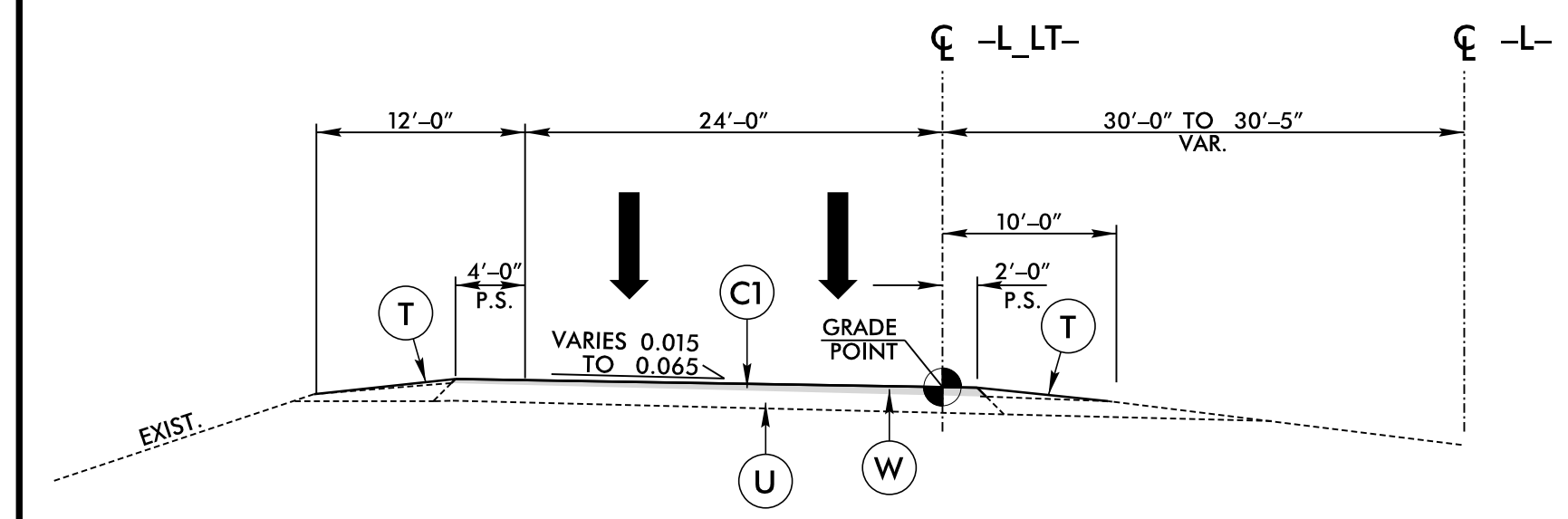
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RW SHEET NO.	
ROADWAY DESIGN ENGINEER	PAVEMENT DESIGN ENGINEER
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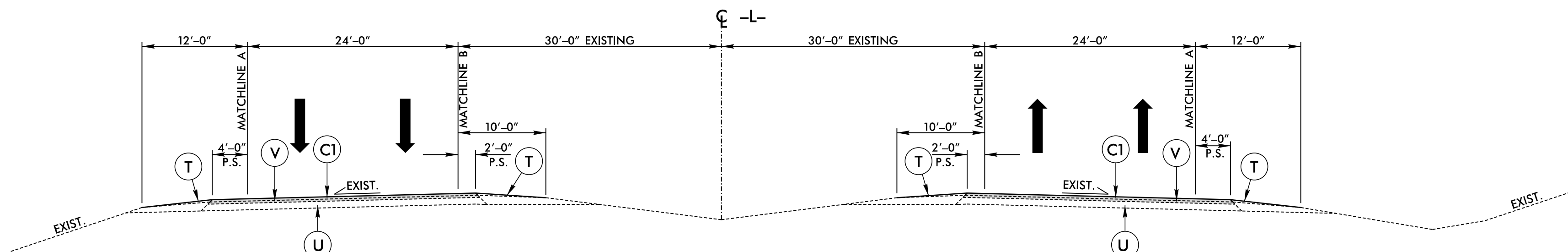
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USE TYPICAL SECTION NO. 1  
-L- STA. 15+50.00 TO 20+28.61



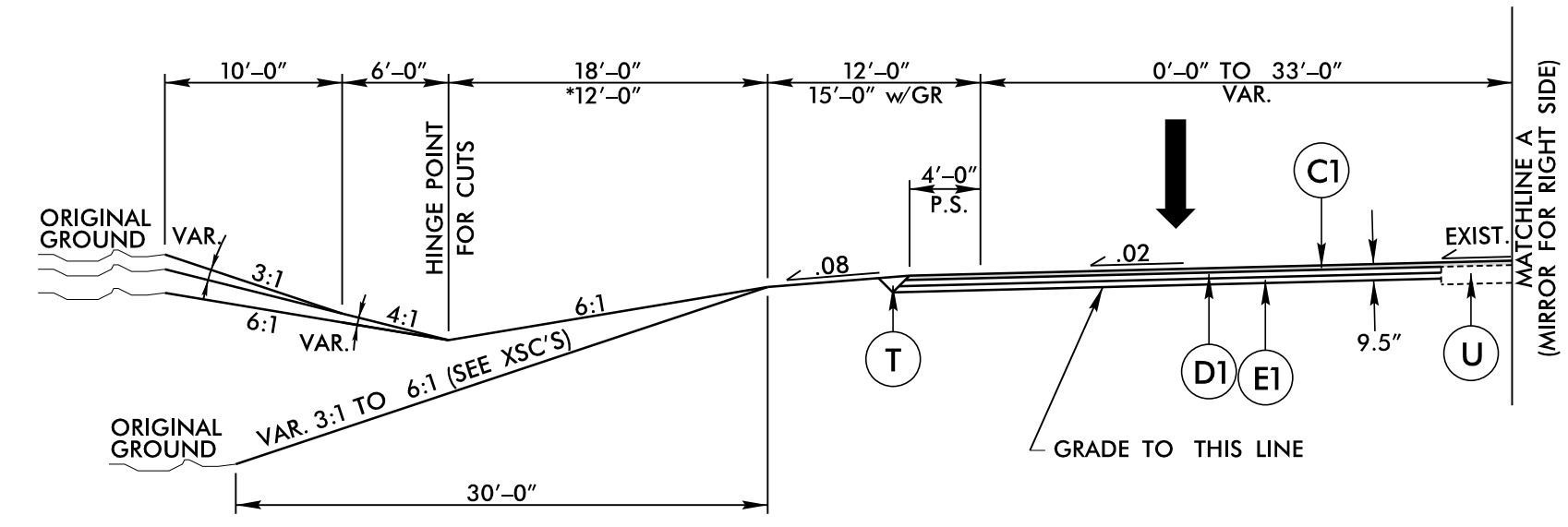
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-L- STA. 20+28.61 TO 28+00.00



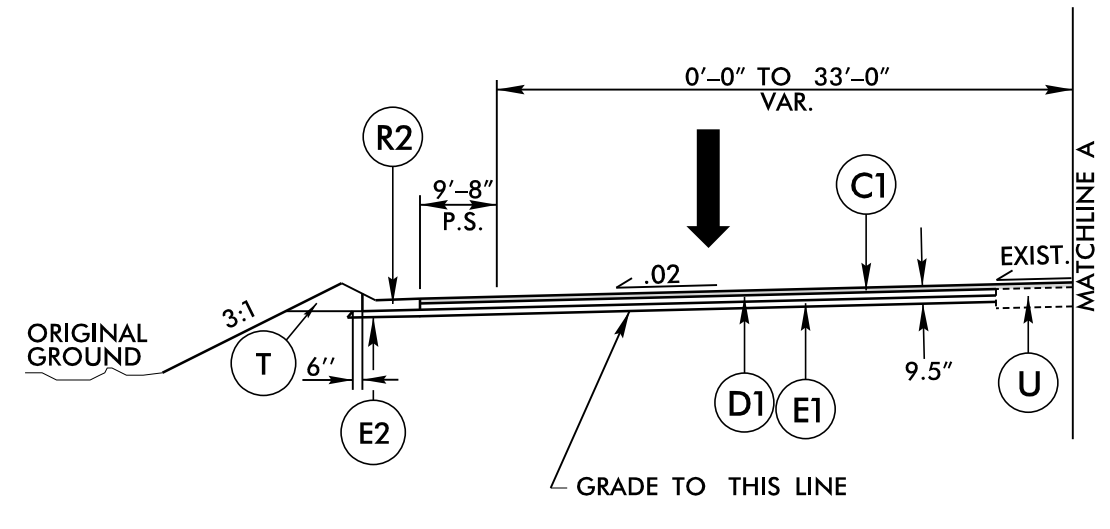
**TYPICAL SECTION NO. 2-A**  
USE IN CONJUNCTION WITH TYPICAL SECTION NO. 2 & 3  
-L- STA. 26+50.00 TO 31+90.00 LT.



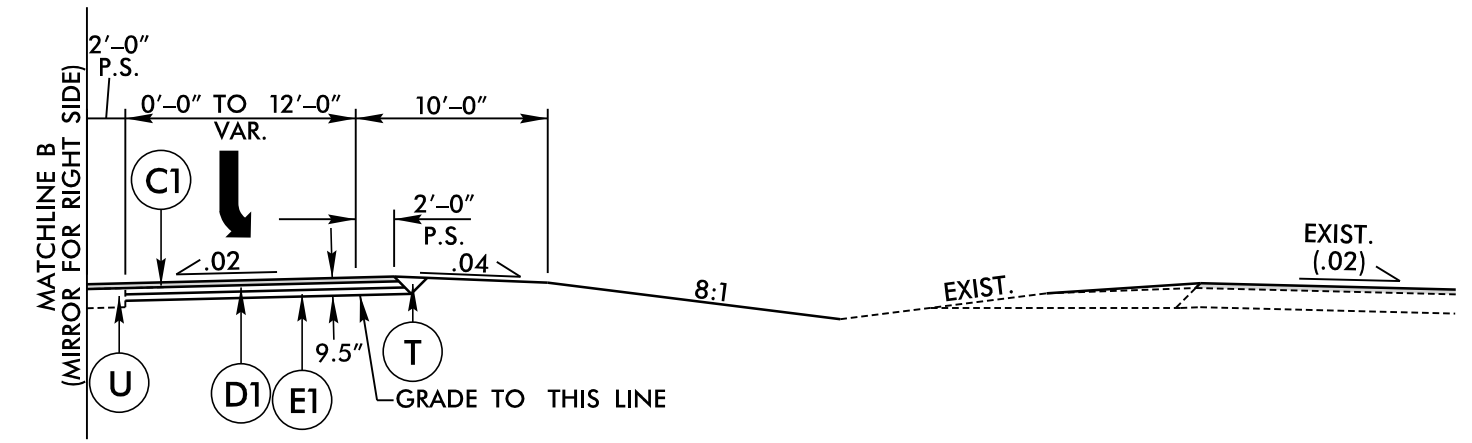
**TYPICAL SECTION NO. 3**  
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-L- STA. 28+00.00 TO 52+00.00  
-L- STA. 159+00.00 TO 199+00.00



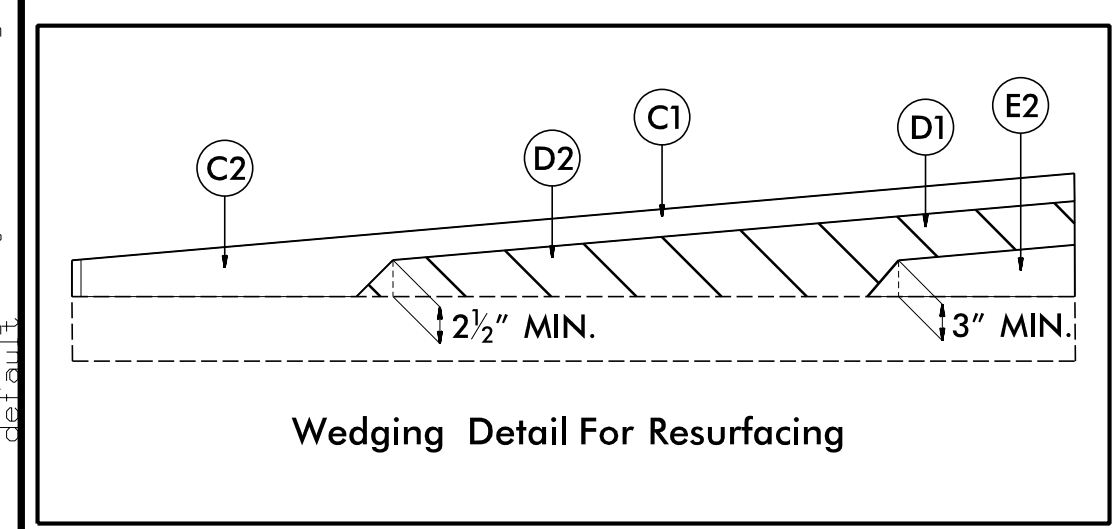
**TYPICAL SECTION NO. 3-A**  
USE IN CONJUNCTION WITH TYPICAL SECTION NO. 3  
\* -L- STA. 29+30.11 TO 31+54.22 RT.  
\* -L- STA. 162+06.99 TO 164+30.00 RT.  
\* -L- STA. 172+84.09 TO 175+07.10 RT.  
\* -L- STA. 195+65.00 TO 197+88.37 LT.



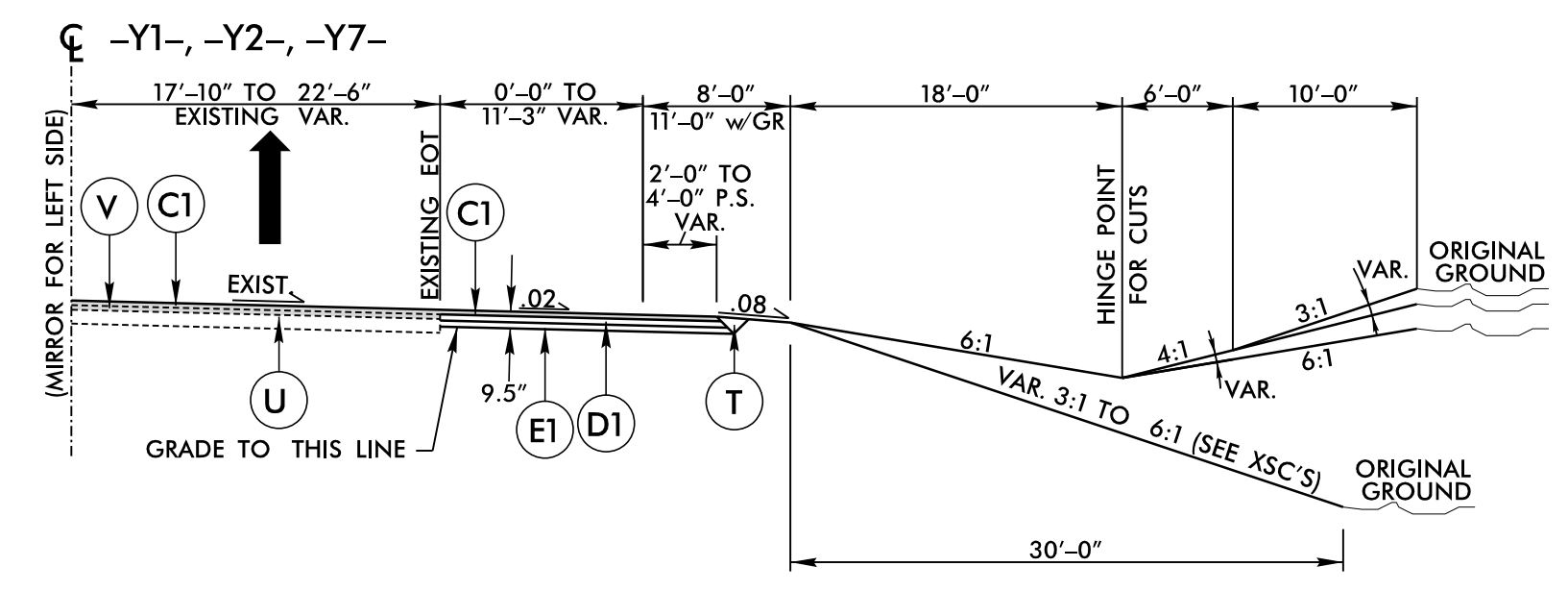
**TYPICAL SECTION NO. 3-B**  
USE IN CONJUNCTION WITH TYPICAL SECTION NO. 3  
-L- STA. 48+69.22 TO 51+76.36 LT.



**TYPICAL SECTION NO. 3-C**  
USE IN CONJUNCTION WITH TYPICAL SECTION NO. 3  
-L- STA. 30+24.22 TO 37+24.22 LT.  
-L- STA. 31+70.20 TO 38+70.20 RT.  
-L- STA. 40+76.70 TO 47+76.70 LT.  
-L- STA. 42+49.22 TO 49+49.22 RT.  
-L- STA. 163+00.00 TO 170+00.00 LT.  
-L- STA. 164+87.10 TO 171+87.10 RT.  
-L- STA. 173+97.10 TO 180+67.10 LT.  
-L- STA. 174+19.13 TO 180+69.13 RT.  
-L- STA. 182+79.13 TO 189+79.13 LT.  
-L- STA. 189+95.00 TO 196+95.00 RT.



Wedging Detail For Resurfacing



**TYPICAL SECTION NO. 4**  
USE TYPICAL SECTION NO. 4  
-Y1- STA. 12+55.61 TO 13+87.59 RT.  
-Y2- STA. 10+11.10 TO 11+31.86 LT.  
-Y7- STA. 12+61.63 TO 13+85.99 RT.


USE C1 AT ALL Y LINE RESURFACING LOCATION  
-Y1- STA. 10+00.00 TO 12+55.61  
-Y2- STA. 11+31.86 TO 14+95.56  
-Y6- STA. 10+65.57 TO 11+51.07  
-Y7- STA. 8+93.63 TO 12+61.63  
-Y7- STA. 14+81.04 TO 19+64.21

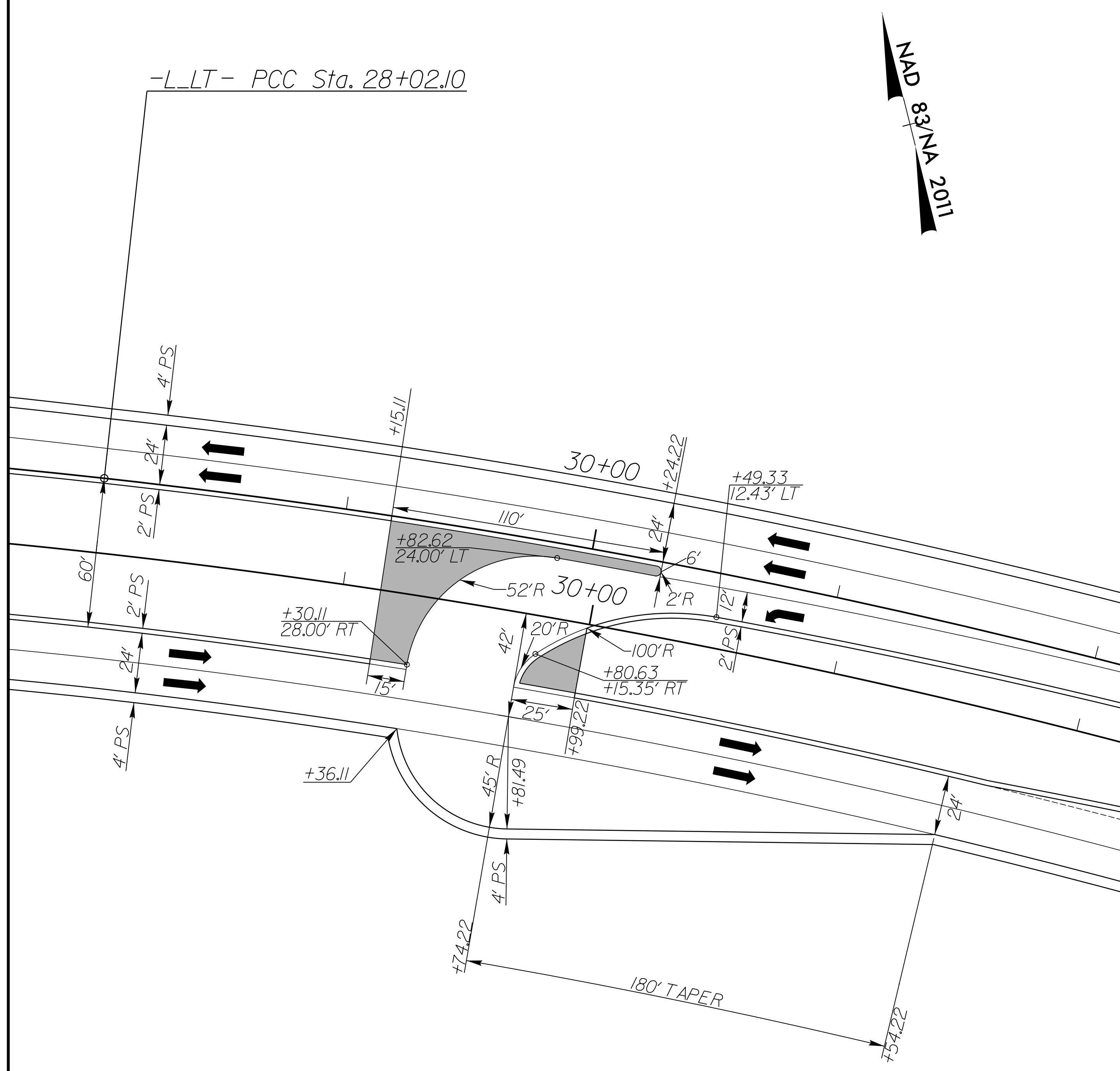
**RK&K**  
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8601 Six Forks Road, Forum 1, Suite 700  
Raleigh, North Carolina 27615-3960  
NC License No. F-0112  
Engineers | Construction Managers | Planners | Scientists  
www.rkk.com  
Responsive People | Creative Solutions

I:\9\2023\Pro-J\W5701B\_Rdy\_tjup.dgn

6/2/09

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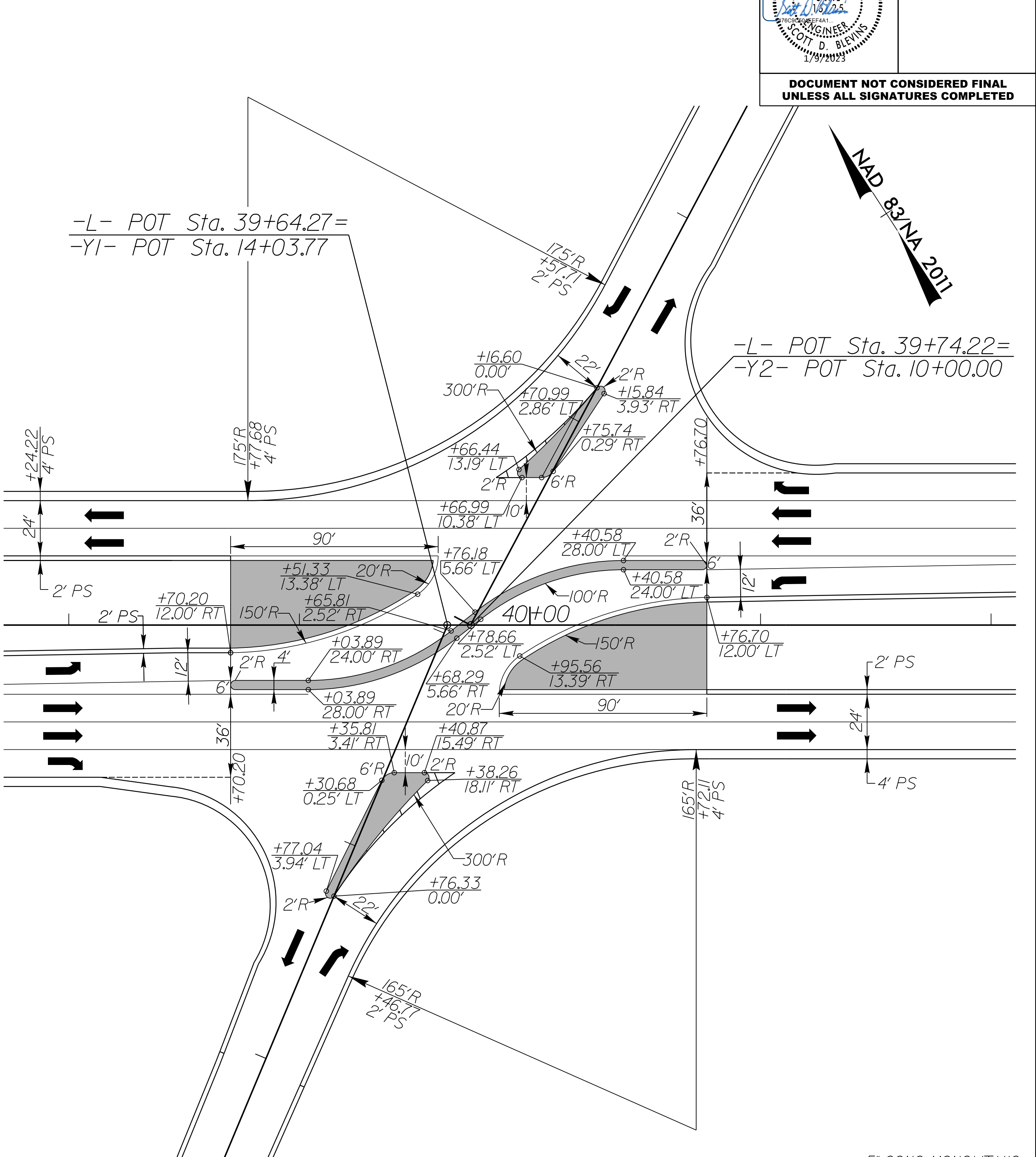
PROJECT REFERENCE NO. W-5701B	SHEET NO. 2B-1
ROADWAY DESIGN ENGINEER	
	
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**DETAIL SHOWING**  
INTERSECTION OF -L- US 158 AT U-TURN BULB  
Scale 1" = 30"

SEE SHEET 5 FOR ROADWAY PLAN VIEW


5" CONC. MONOLITHIC ISLAND KEYED-IN



**DETAIL SHOWING**  
INTERSECTION OF -L- US 158 AT -Y1- US 258  
& -Y2- US 158 BUS.  
Scale 1" = 30'

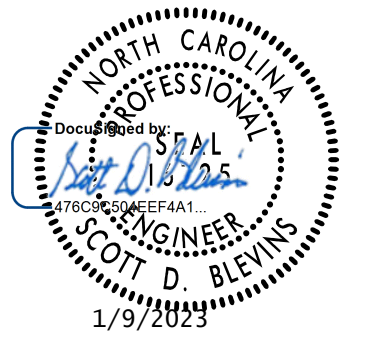
SEE SHEET 6 FOR ROADWAY PLAN VIEW

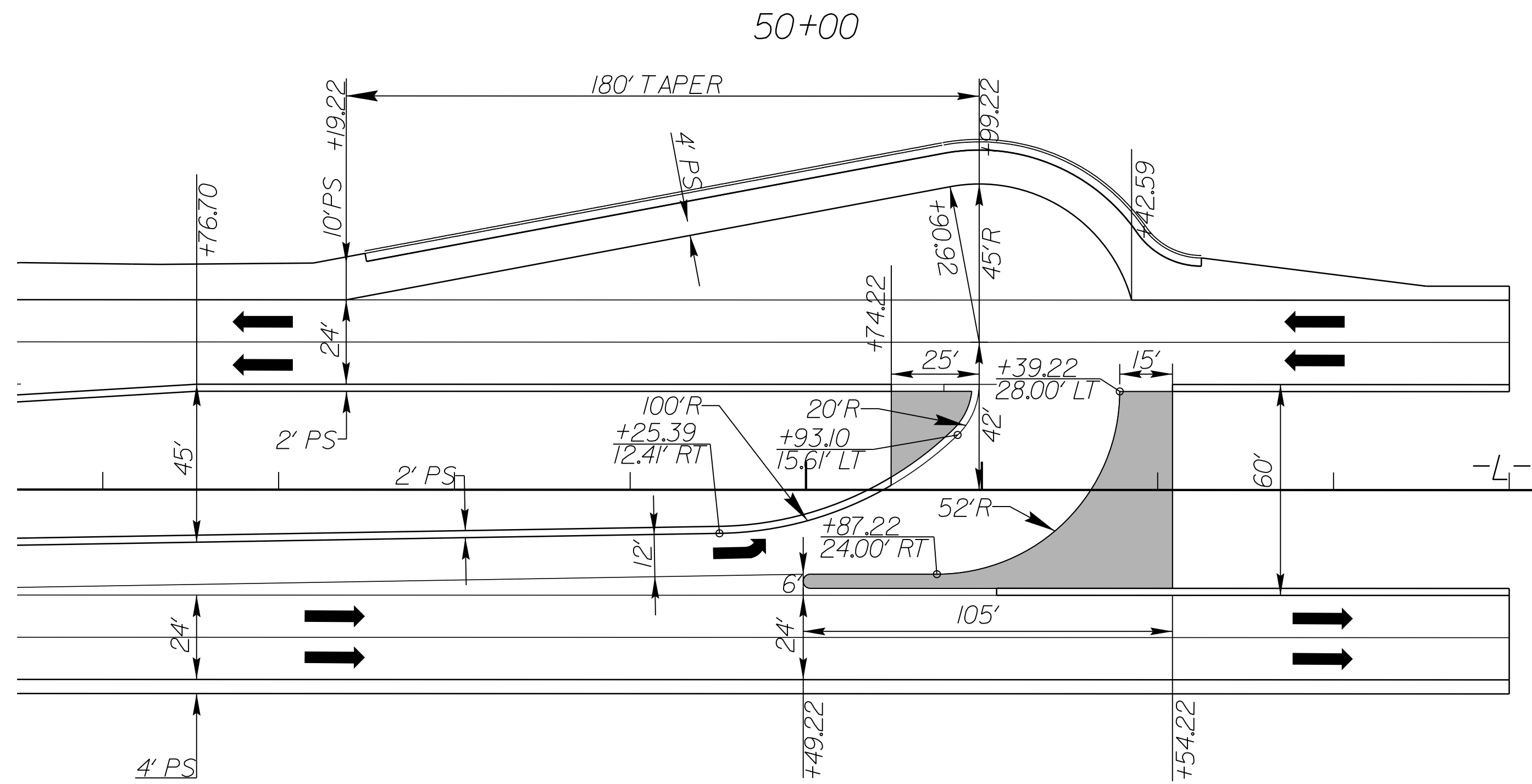
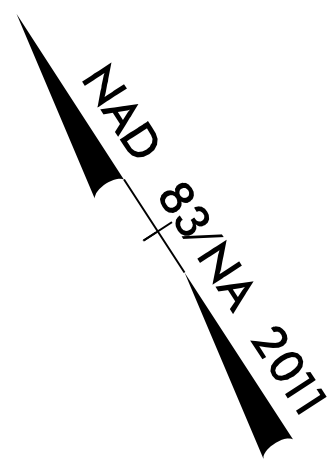
5" CONC. MONOLITHIC ISLAND KEYED-IN



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 8601 Six Forks Road, Forum 1, Suite 700  
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 NC License No. F-0112  
 Engineers | Construction Managers | Planners | Scientists  
 www.rkk.com  
 Responsive People | Creative Solutions

8/17/99

PROJECT REFERENCE NO. W-5701B	SHEET NO. 2B-2
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	
	
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DETAIL SHOWING  
INTERSECTION OF -L- US 158 AT U-TURN BULB  
Scale 1" = 30'

SEE SHEET 7 FOR ROADWAY PLAN VIEW

5" CONC. MONOLITHIC ISLAND KEYED-IN

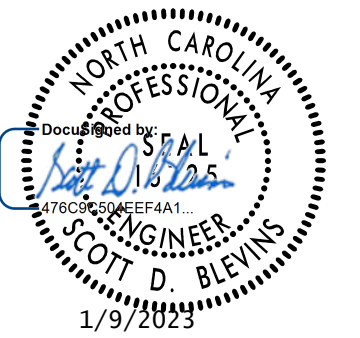


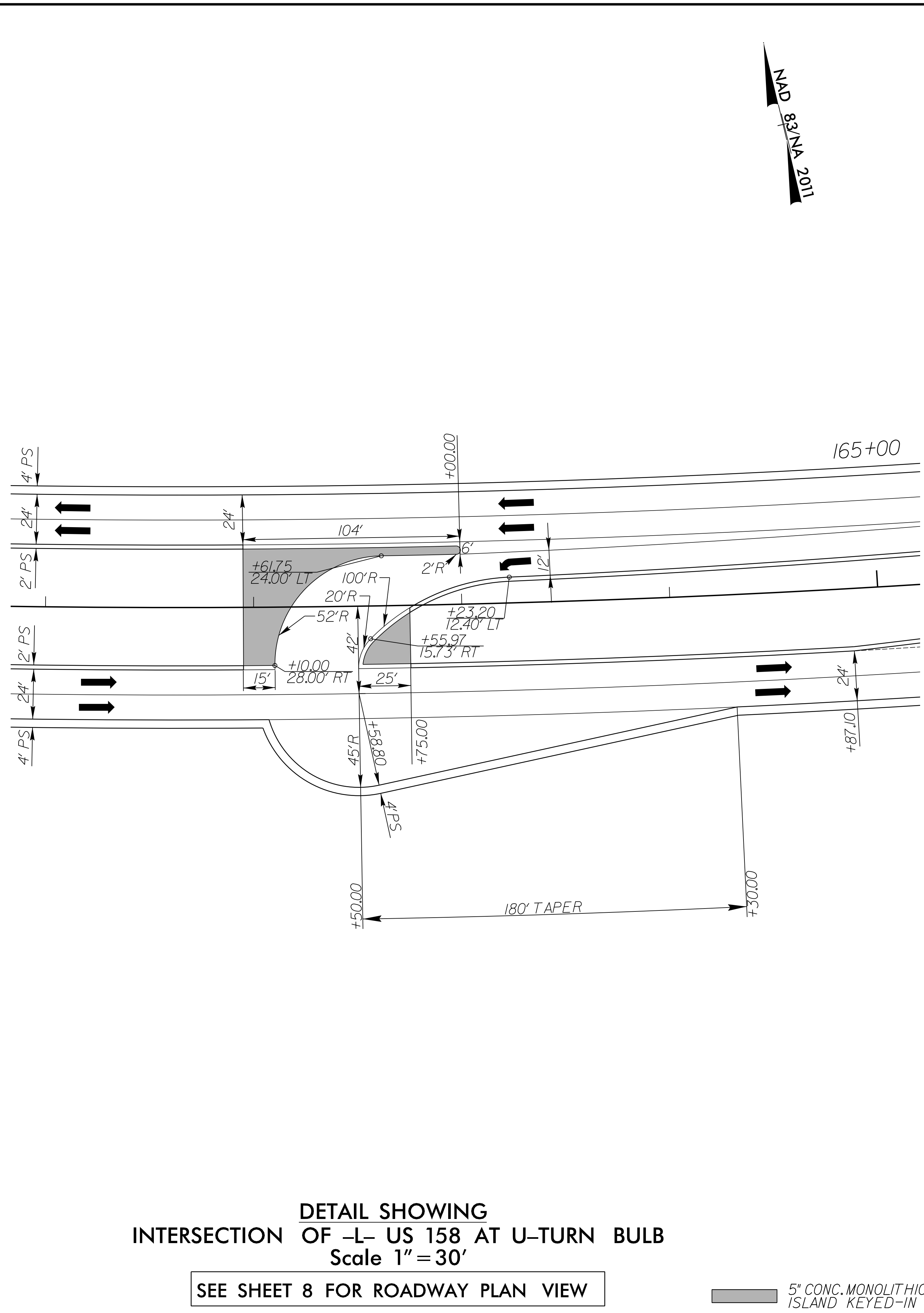
P: (919) 878-9560  
8601 Six Forks Road, Forum 1, Suite 700  
Raleigh, North Carolina 27615-3960  
NC License No. F-0112

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I:\9\2023  
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 08/17/2023

8/17/99  
 1/9/2023  
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 08/17/2023

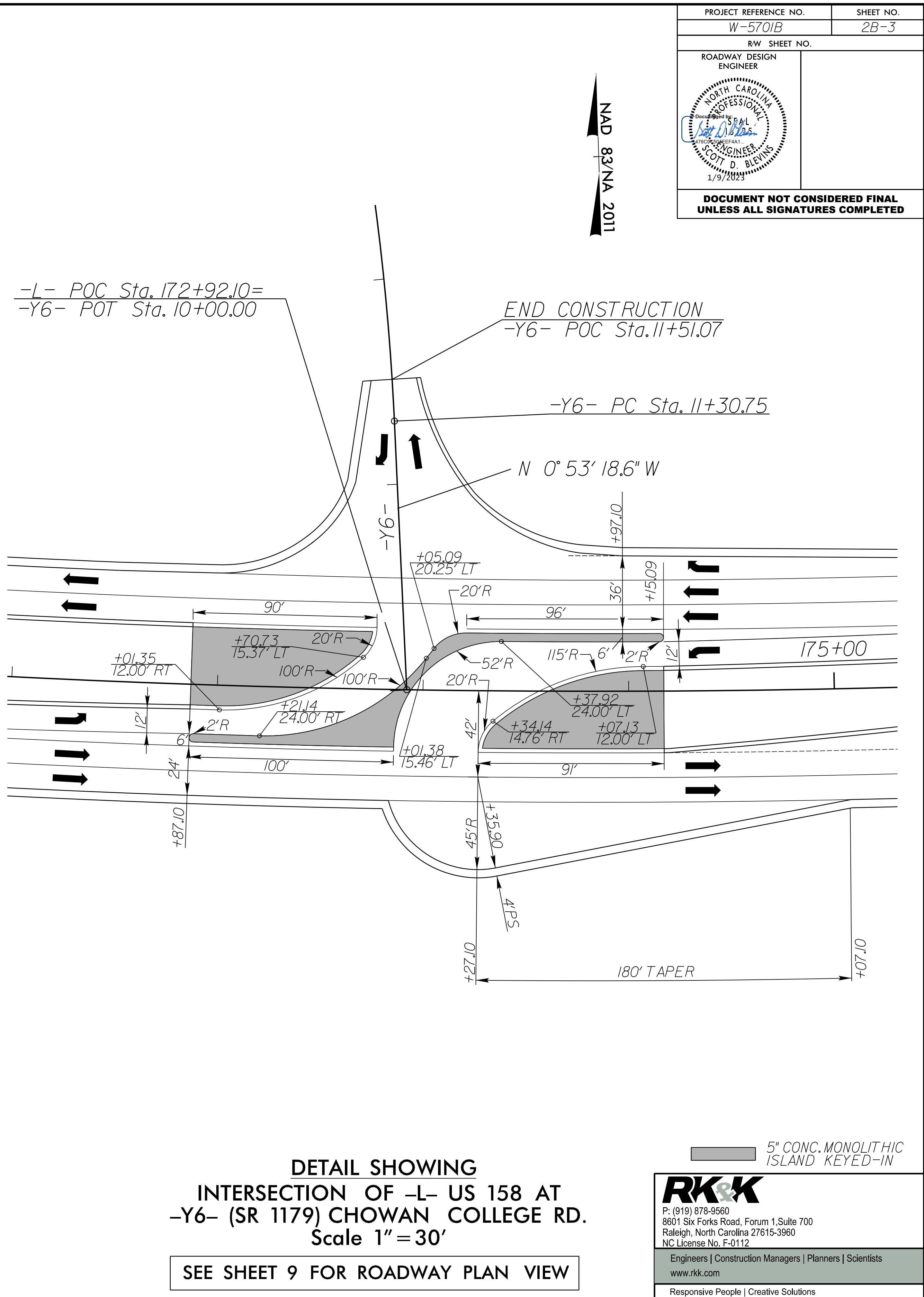
PROJECT REFERENCE NO. W-5701B	SHEET NO. 2B-3
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	
	
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	



**DETAIL SHOWING**  
**INTERSECTION OF -L- US 158 AT U-TURN BULB**  
 Scale 1" = 30'


SEE SHEET 8 FOR ROADWAY PLAN VIEW

 5" CONC. MONOLITHIC ISLAND KEYED-IN



**DETAIL SHOWING**  
**INTERSECTION OF -L- US 158 AT**  
**-Y6- (SR 1179) CHOWAN COLLEGE RD.**  
 Scale 1" = 30'

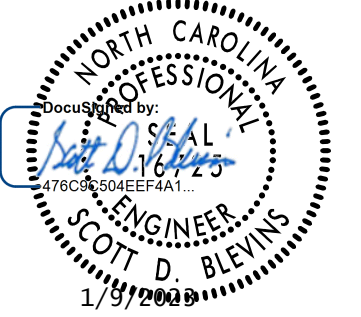
SEE SHEET 9 FOR ROADWAY PLAN VIEW

 5" CONC. MONOLITHIC ISLAND KEYED-IN

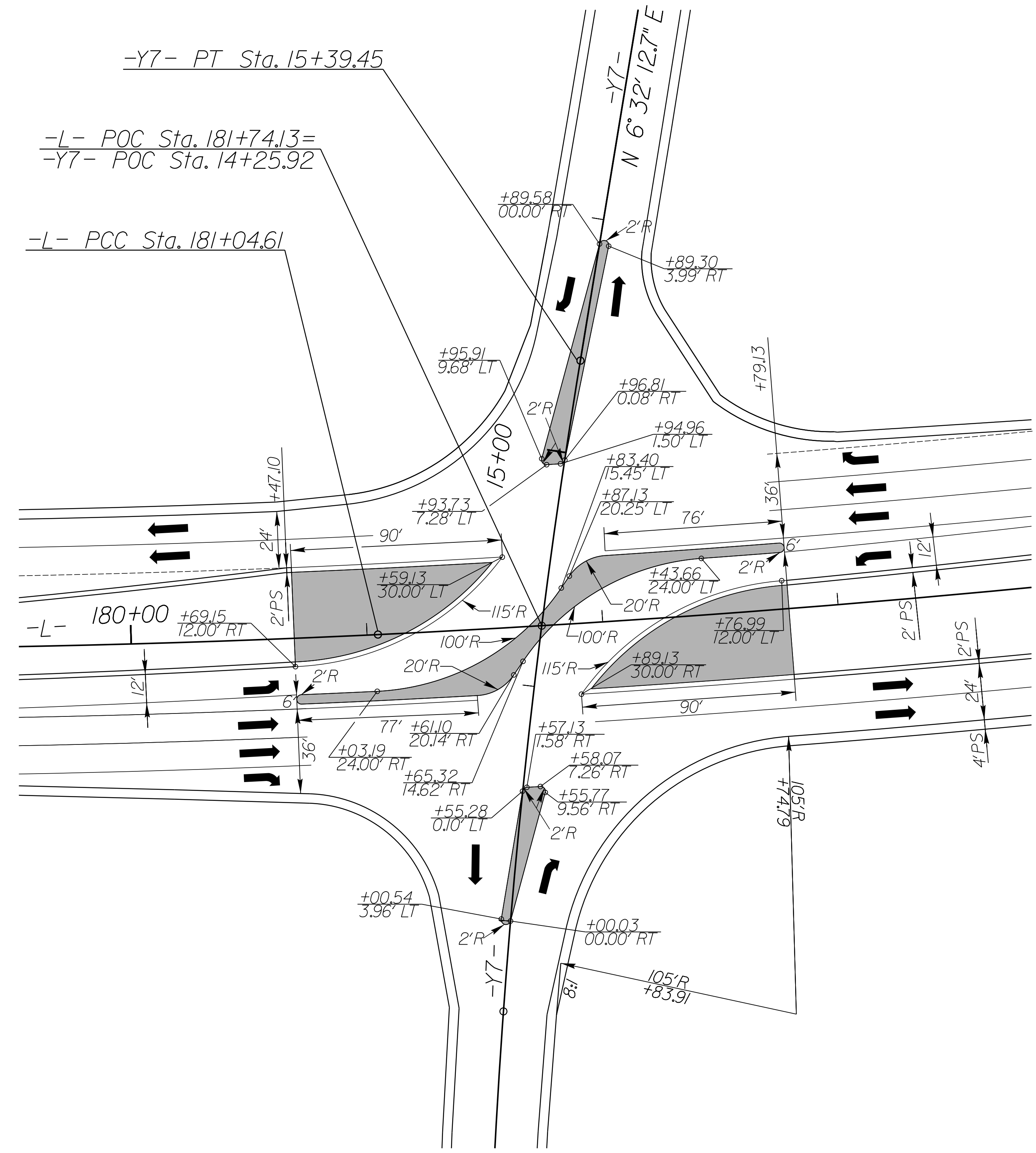
**RK&K**  
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 Raleigh, North Carolina 27615-3960  
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PROJECT REFERENCE NO. W-5701B	SHEET NO. 2B-4
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	
	
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NAD 83/NA 2011



**DETAIL SHOWING  
INTERSECTION OF -L- US 158 AT  
-Y7- NC HWY. 11  
Scale 1" = 30'**

SEE SHEET 9 FOR ROADWAY PLAN VIEW

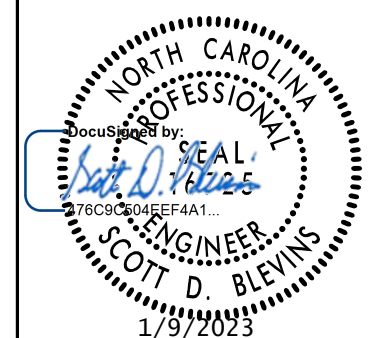
**5' CONC. MONOLITHIC ISLAND KEYED-IN**

**RK&K**  
 P: (919) 878-9560  
 8601 Six Forks Road, Forum 1, Suite 700  
 Raleigh, North Carolina 27615-3960  
 NC License No. F-0112

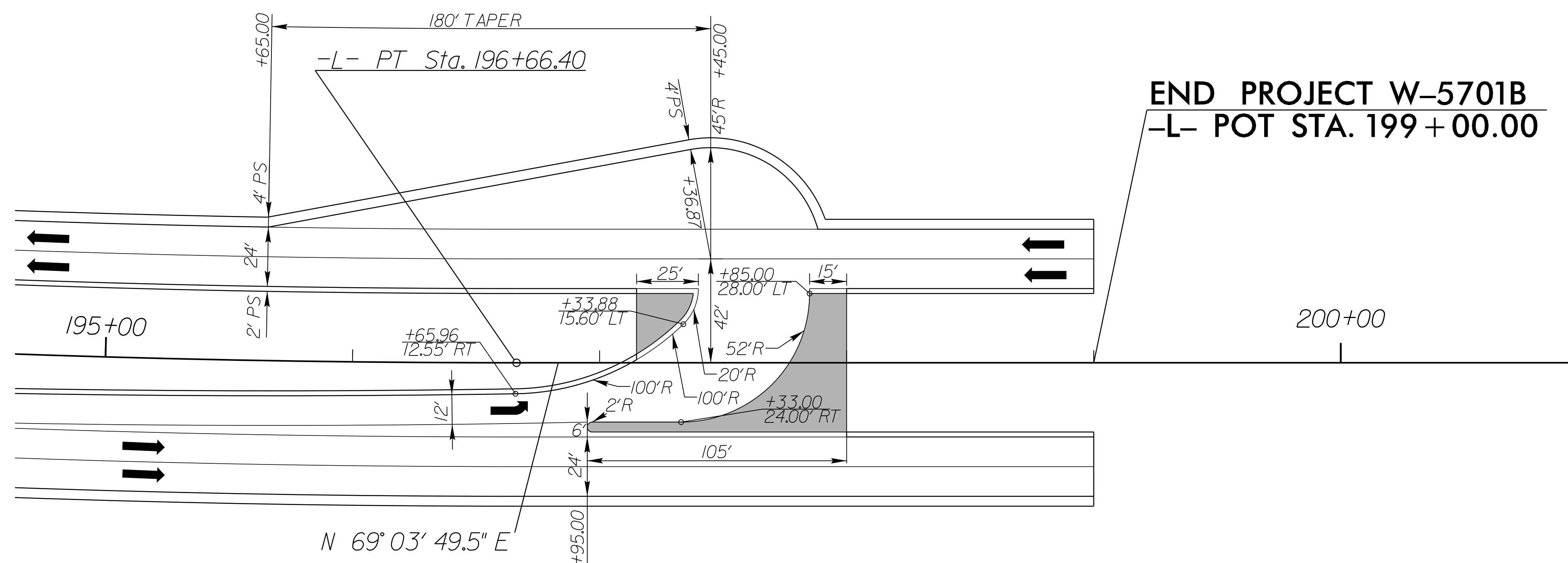
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I:\9\2007\13\Facilities\Proj\W5701B\_Rdwy.dwg 2B-4.dgn

8/17/99

PROJECT REFERENCE NO. <i>W-5701B</i>	SHEET NO. <i>2B-5</i>
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	
	
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	

NAD 83/NA 2011



END PROJECT W-5701B  
-L- POT STA. 199 + 00.00

DETAIL SHOWING  
INTERSECTION OF -L- US 158  
AT U-TURN BULB  
Scale 1" = 30'

SEE SHEETS 10 & 11 FOR ROADWAY PLAN VIEW

5" CONC. MONOLITHIC ISLAND KEYED-IN



P: (919) 878-9560  
8601 Six Forks Road, Forum 1, Suite 700  
Raleigh, North Carolina 27615-3960  
NC License No. F-0112

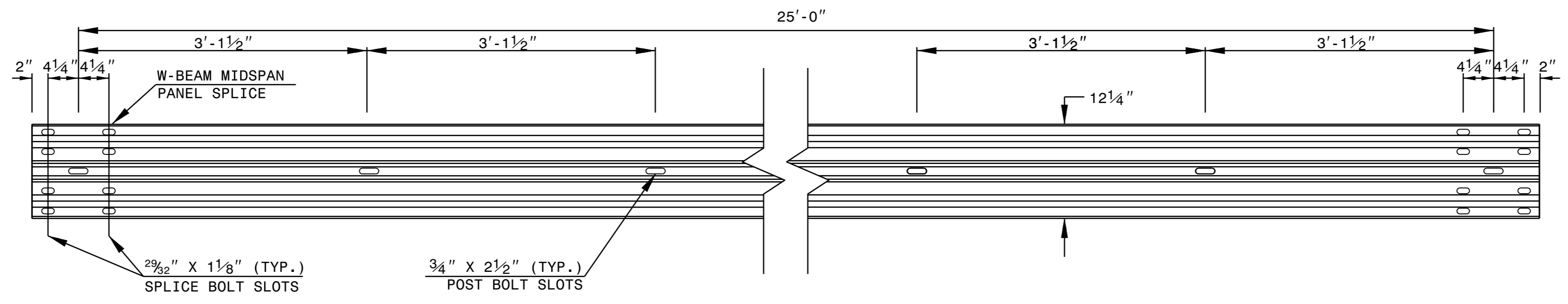
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I:\9\2023\13\Facility\Proc\W5701B\_Rdwy\_dtl\_2B-5.dgn

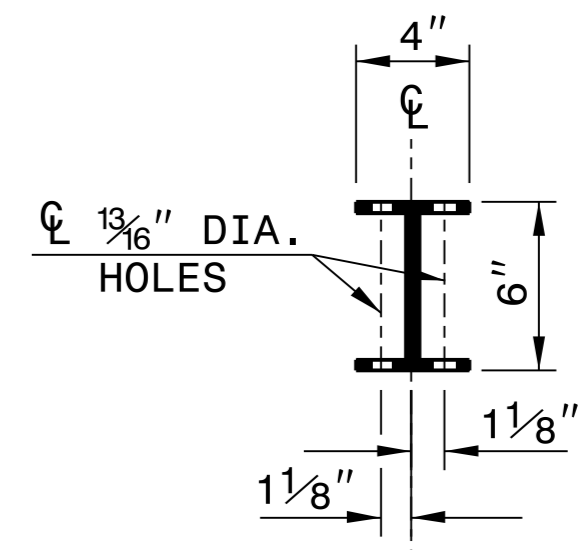
STATE OF NORTH CAROLINA  
DEPT. OF TRANSPORTATION  
DIVISION OF HIGHWAYS  
RALEIGH, N.C.

ROADWAY DETAIL DRAWING FOR  
**GUARDRAIL INSTALLATION**

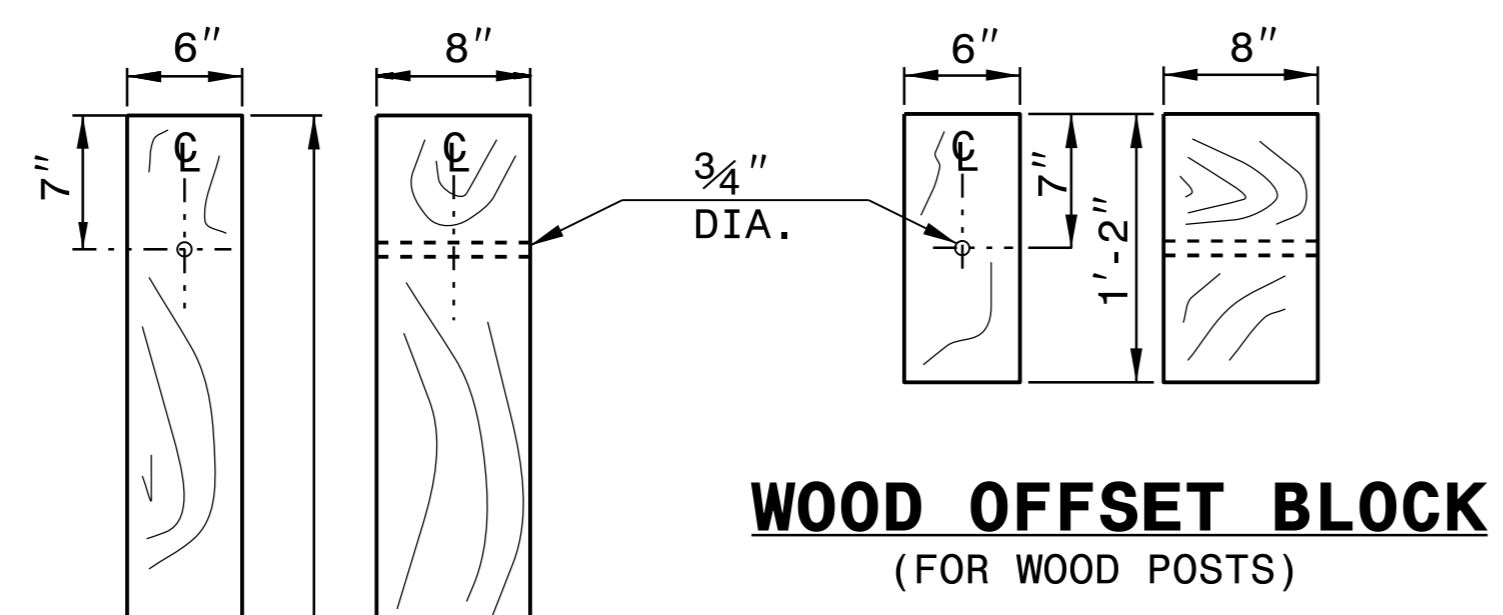
SHEET 6 OF 8  
**862D02**



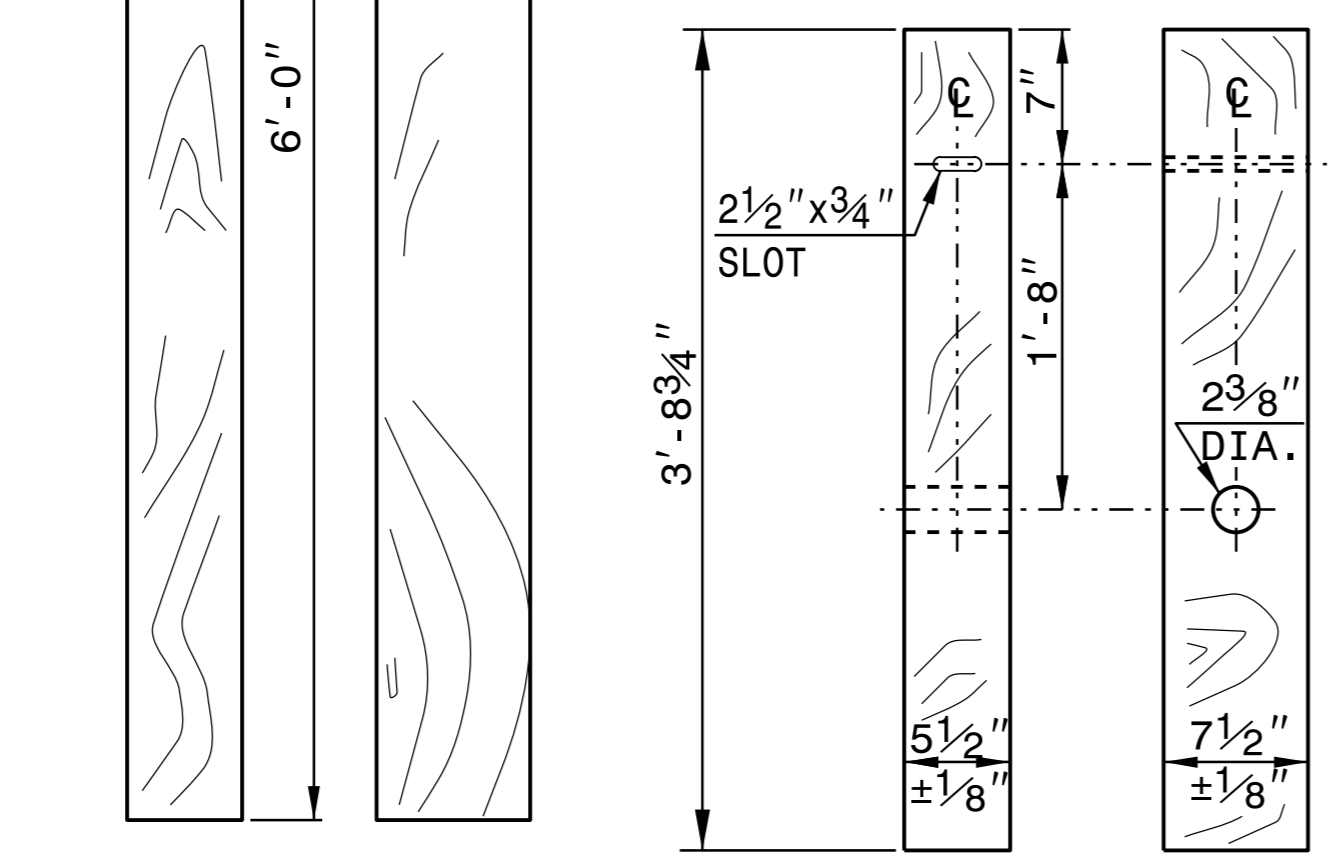
**STANDARD W-BEAM GUARDRAIL**



**PLAN**

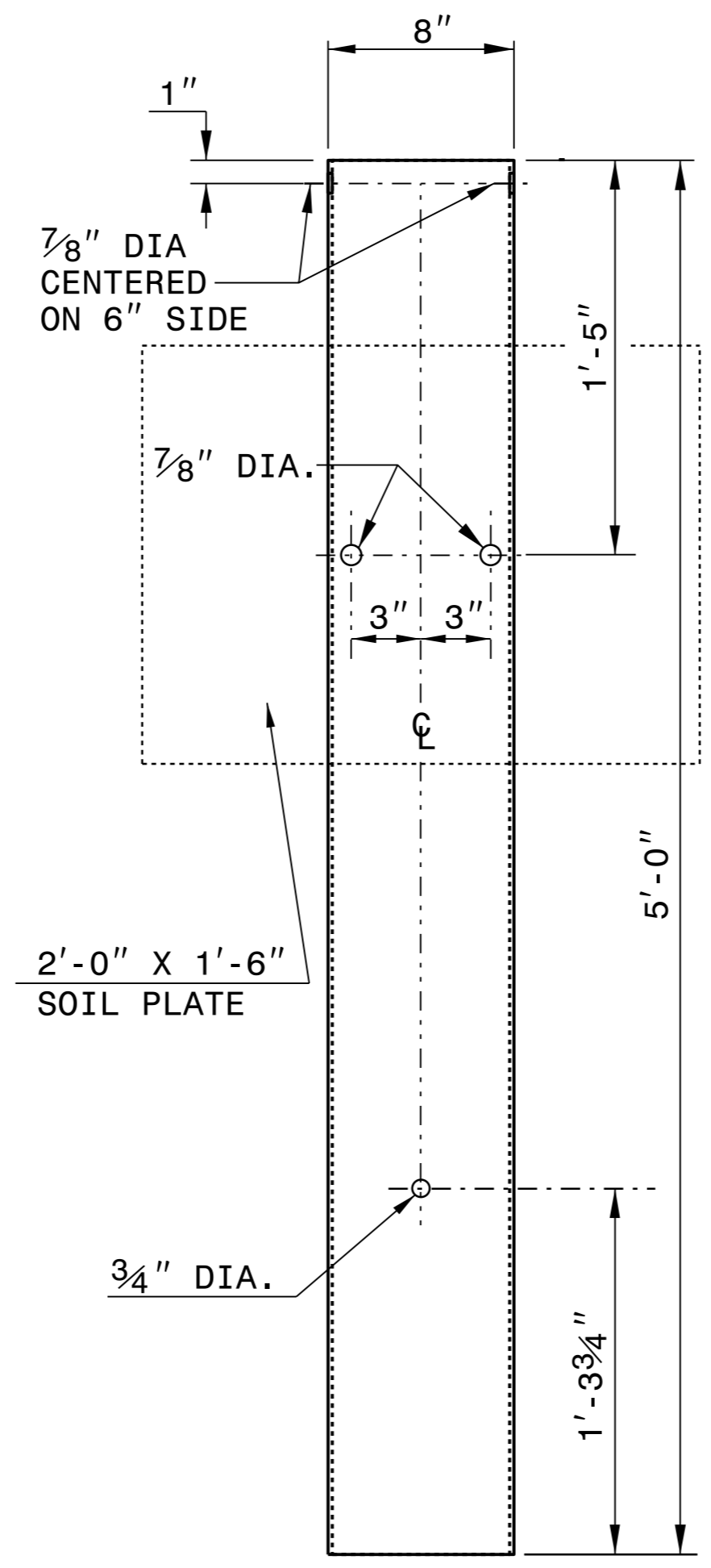


**WOOD OFFSET BLOCK  
(FOR WOOD POSTS)**

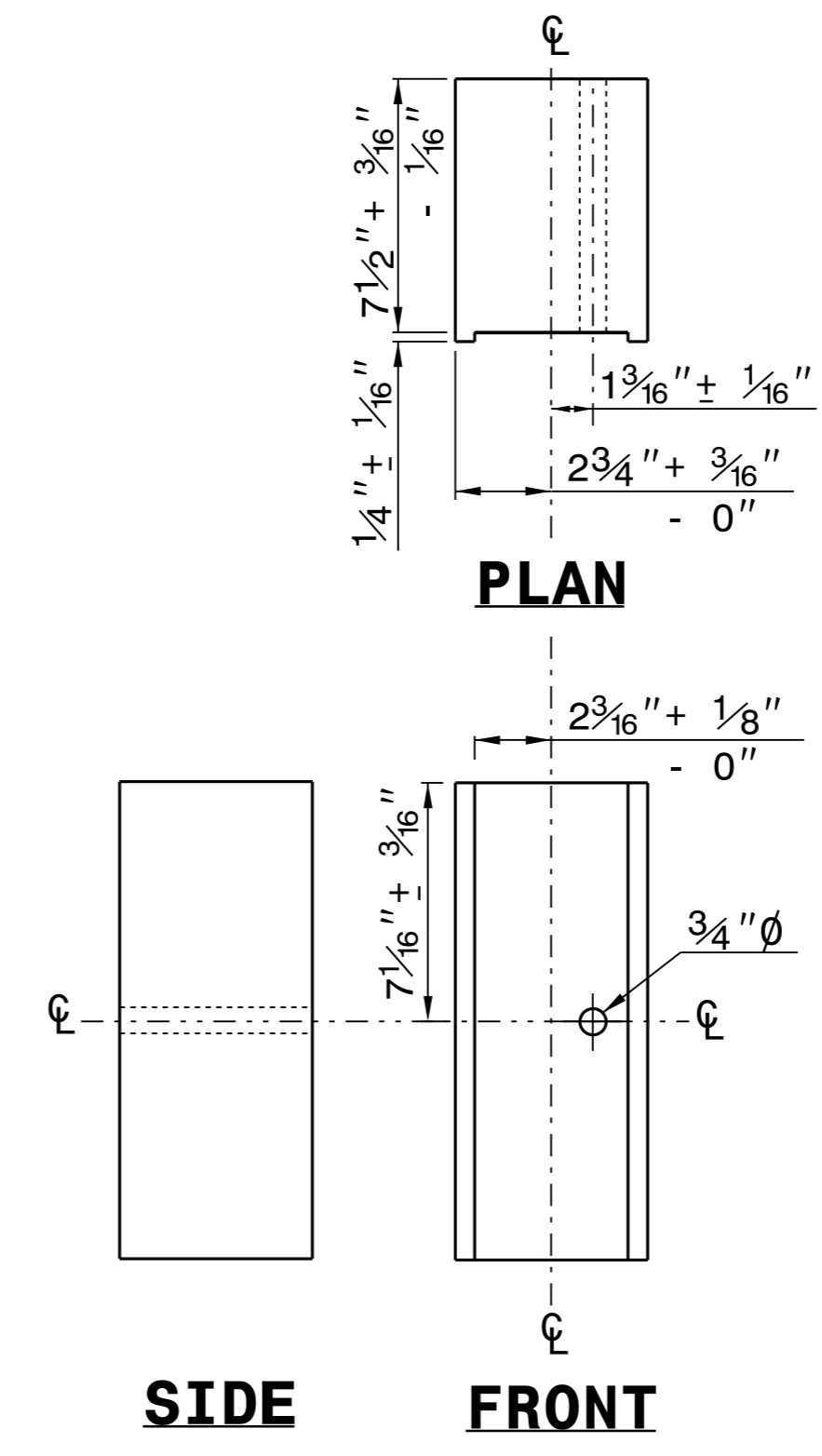


**STANDARD  
LINE POST**

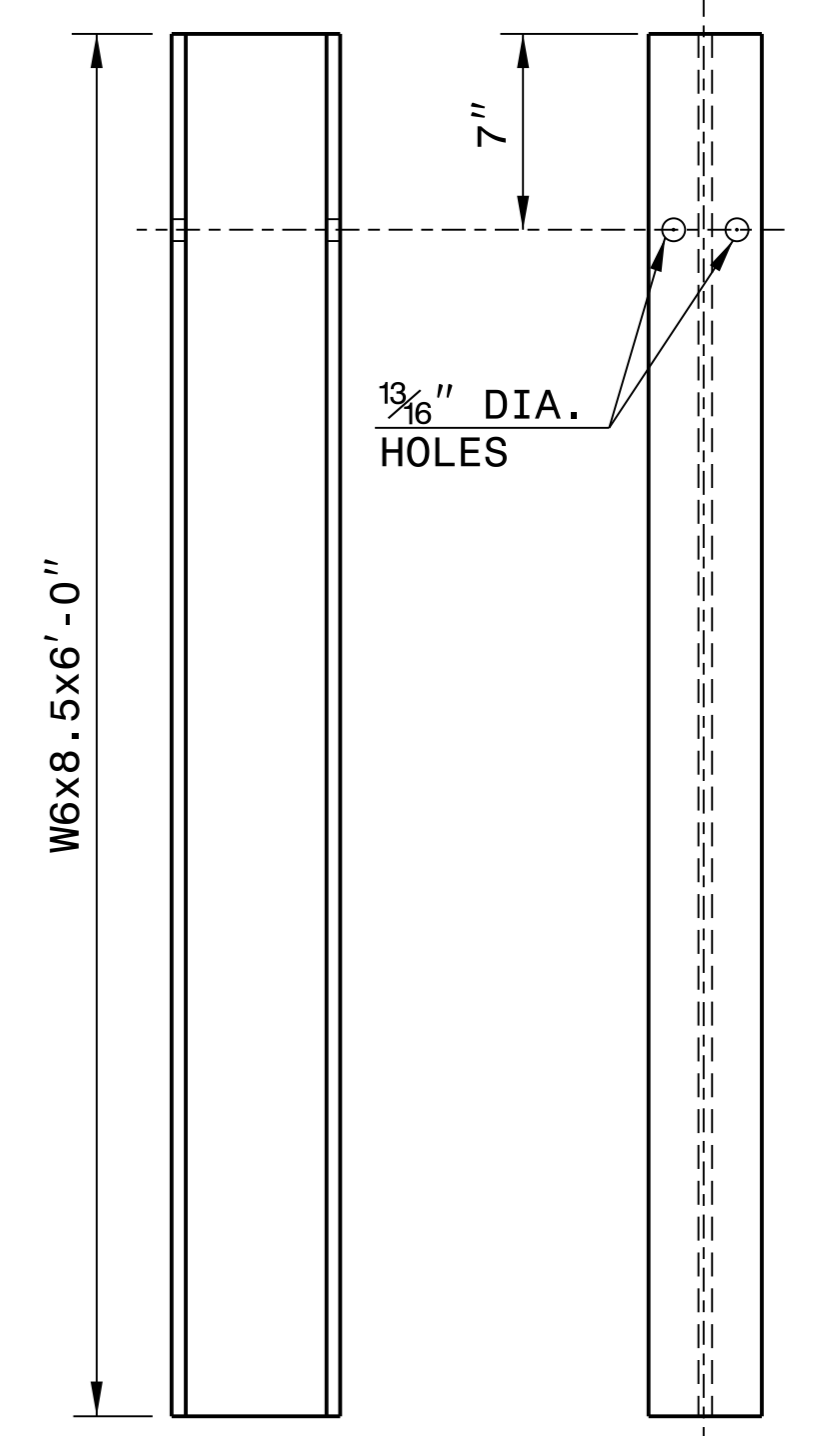
**SHORT WOOD  
BREAKAWAY POST**



**STEEL TUBE  
TS 6"x8"x0.1875"**



**ROUTED  
OFFSET BLOCK**



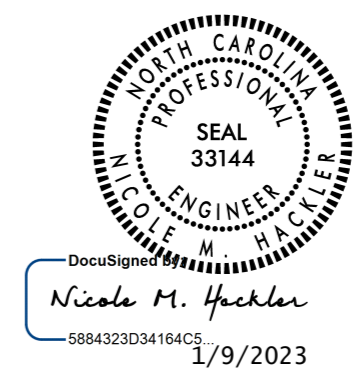
**W6" STEEL POST**

**SYSTEM PARTS**

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

ROADWAY DETAIL DRAWING FOR  
**GUARDRAIL INSTALLATION**

SHEET 6 OF 8  
**862D02**



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

**SEE TITLE BLOCK**

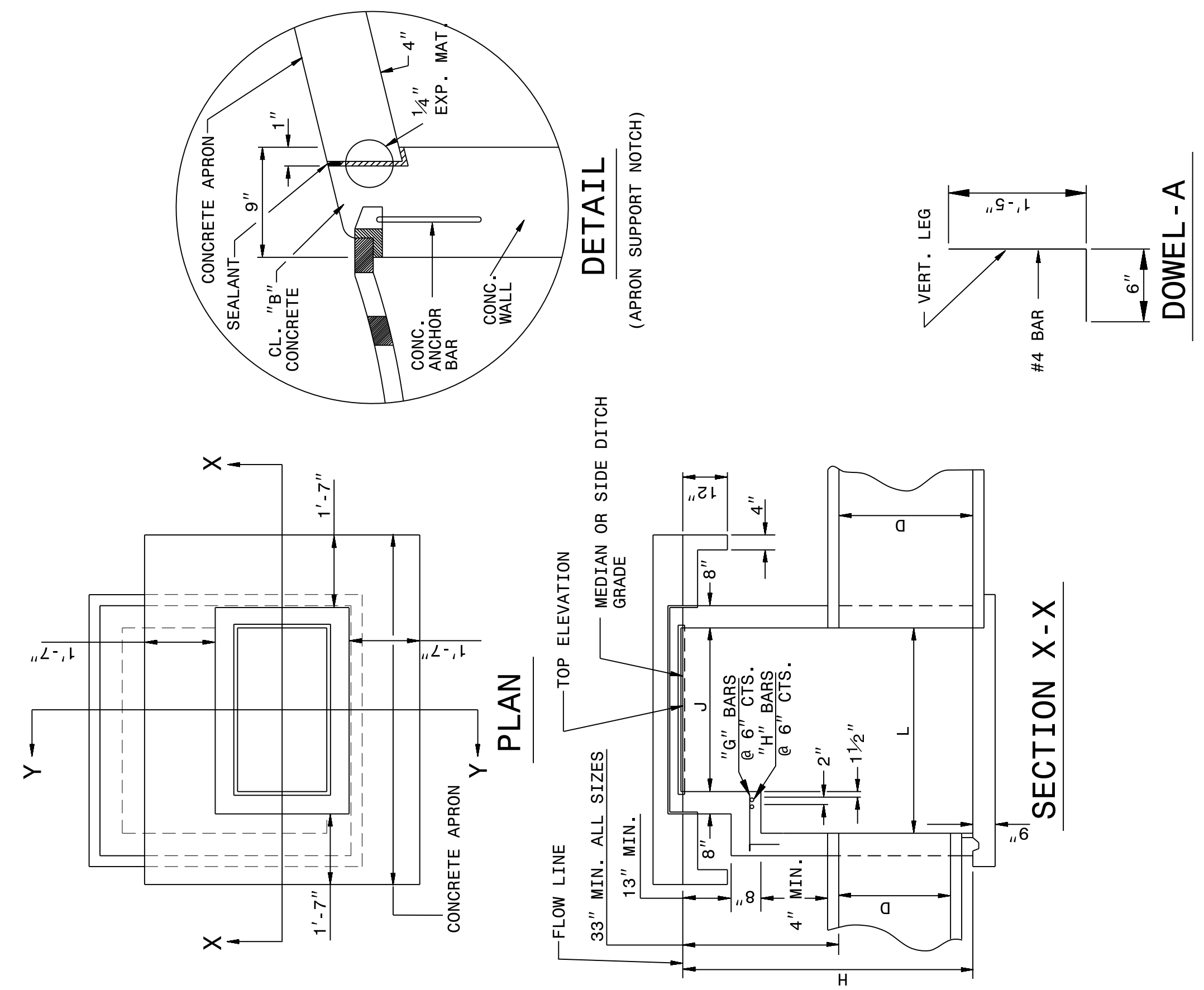
ORIGINAL BY: J. HOWERTON	DATE: 3-7-2018
MODIFIED BY:	DATE:
CHECKED BY:	DATE:
FILE SPEC.:	

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

ENGLISH DETAIL DRAWING FOR  
**CONCRETE MEDIAN DROP INLET TYPE 'A'**  
EXTRA DEPTH OVER 12' TO 25'  
12" THRU 72" PIPE

SHEET 1 OF 2  
**840D17**

**GENERAL NOTES:**  
USE CLASS "B" CONCRETE THROUGHOUT.  
PROVIDE DROP INLETS WITH STEPS 12" ON CENTER. USE STEPS WHICH COMPLY WITH STD. DRAWING 840.66.  
OPTIONAL CONSTRUCTION - MONOLITHIC POUR, 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.  
WHEN PAYMENT FOR THE DROP INLET IS MADE ON A PER EACH BASIS, THE CONCRETE APRON WILL BE CONSIDERED PART OF THE DROP INLET.  
CONSTRUCT WITH PIPE CROWNS MATCHING.  
USE STANDARD FRAMES AND GRATES 840.22 (SHOWN), 840.24 (SHOWN), 840.20, 840.29, AND 840.33.  
SEE STANDARD DRAWING 840.25 FOR ATTACHMENT OF FRAMES AND GRATES NOT SHOWN.  
CHAMFER ALL EXPOSED CORNERS 1".  
DRAWING NOT TO SCALE.  
MAX. DEPTH OF THIS STRUCTURE FROM TOP OF BOTTOM SLAB TO TOP ELEVATION IS 25 FEET.



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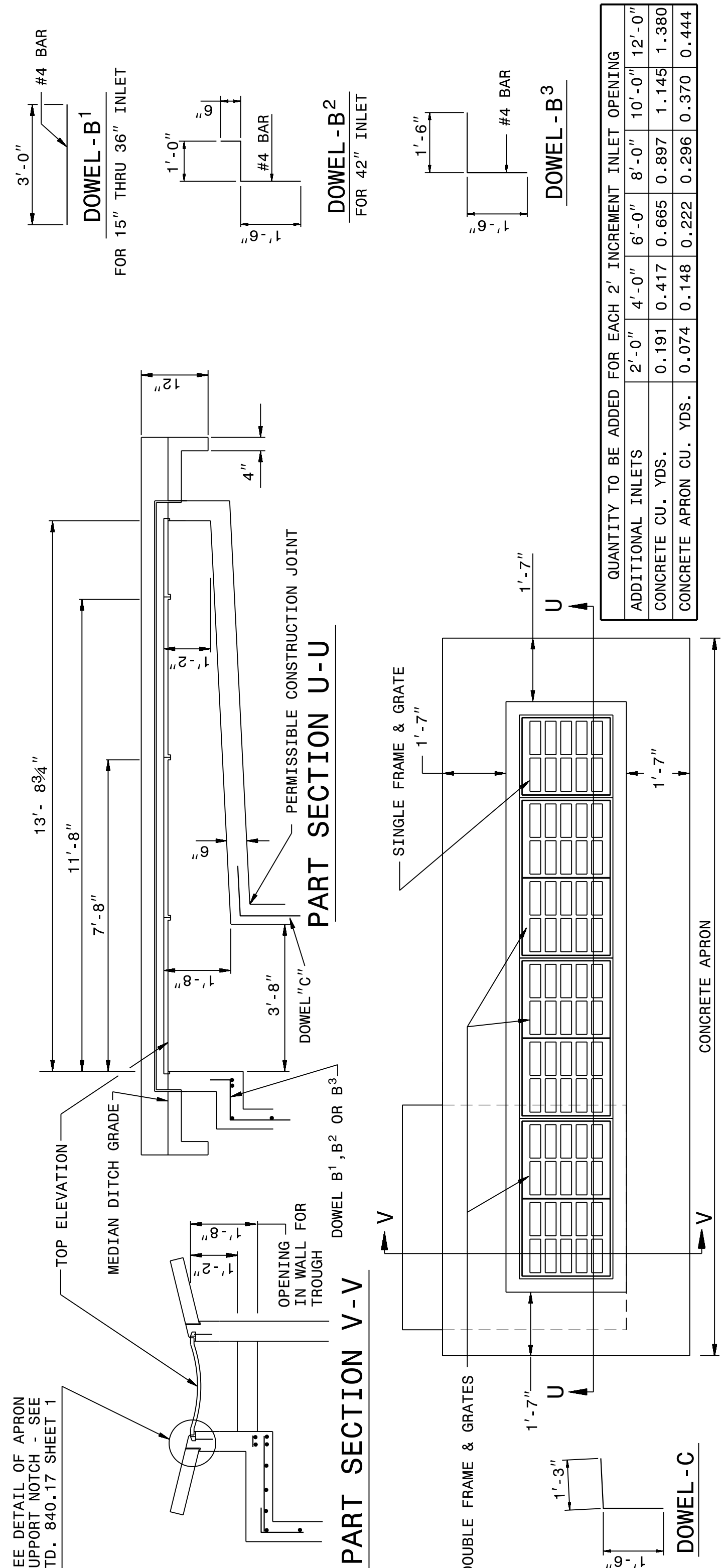
ENGLISH DETAIL DRAWING FOR  
**CONCRETE MEDIAN DROP INLET TYPE 'A'**  
EXTRA DEPTH OVER 12' TO 25'  
12" THRU 72" PIPE

SHEET 1 OF 2  
**840D17**

STATE OF NORTH CAROLINA  
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RALEIGH, N.C.

ENGLISH DETAIL DRAWING FOR  
**CONCRETE MEDIAN DROP INLET TYPE 'A'**  
EXTRA DEPTH OVER 12' TO 25'  
12" THRU 72" PIPE

SHEET 2 OF 2  
**840D17**



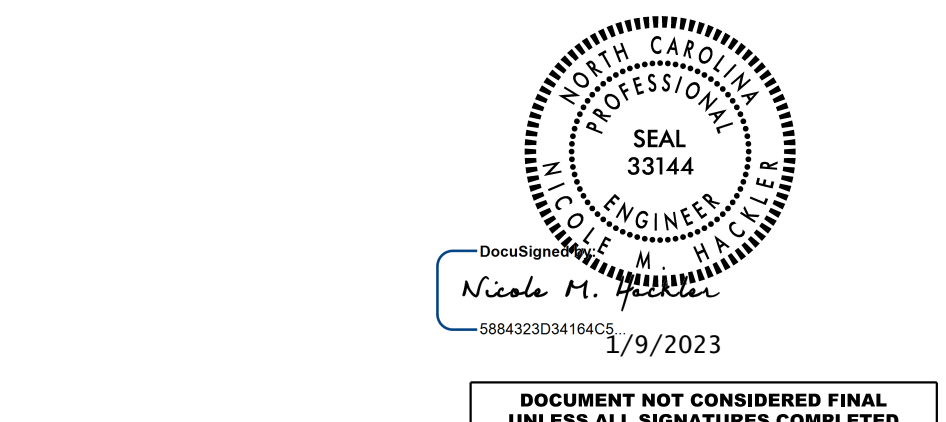
STATE OF NORTH CAROLINA  
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ENGLISH DETAIL DRAWING FOR  
**CONCRETE MEDIAN DROP INLET TYPE 'A'**  
EXTRA DEPTH OVER 12' TO 25'  
12" THRU 72" PIPE

SHEET 2 OF 2  
**840D17**

DIMENSIONS OF BOX AND PIPE		REINFORCING STEEL - NO. 4 BARS										CU YDS CONC. IN BOX		DEDUCTIONS FOR ONE PIPE			
PIPE	SPAN	WIDTH	SPAN	WIDTH	HEIGHT	BARS E	BARS F	BARS G	BARS H	TOTAL	BOTTOM SLAB	H PER FT	H PER FT	APRON	TOTAL	C.S.	R.C.
12"	3'-8"	2'-0"	3'-8"	2'-0"	3'-9"	—	—	—	—	—	0.362	0.926	0.247	0.395	1.683	0.015	0.024
15"	3'-8"	2'-0"	3'-8"	2'-0"	4'-0"	—	—	—	—	—	0.362	0.988	0.247	0.395	1.745	0.023	0.036
18"	—	—	—	—	4'-3"	—	—	—	—	—	0.362	1.050	0.247	—	1.807	0.033	0.049
24"	—	—	—	—	4'-9"	8	6	4'-9"	—	—	0.444	1.362	0.278	—	2.201	0.059	0.085
30"	—	—	—	—	5'-3"	8	7	4'-9"	—	—	0.502	1.644	0.288	—	2.541	0.092	0.127
36"	—	—	—	—	5'-9"	8	8	4'-11"	4	0'-9"	0.560	1.931	0.321	—	2.920	0.132	0.178
42"	—	—	—	—	6'-3"	10	9	5'-7"	3	5'-7"	0.704	2.500	0.370	—	3.677	0.180	0.243
48"	—	—	—	—	6'-9"	11	10	6'-1"	4	6'-1"	0.823	3.013	0.407	—	4.315	0.235	0.317
54"	—	—	—	—	7'-3"	12	11	6'-7"	5	6'-7"	0.951	3.589	0.444	—	5.072	0.297	0.401
60"	—	—	—	—	7'-9"	13	12	7'-3"	6	7'-3"	1.311	4.539	0.494	—	6.170	0.367	0.495
66"	—	—	—	—	8'-3"	14	14	7'-10"	7	7'-10"	1.136	5.061	0.537	—	6.901	0.444	0.599
72"	—	—	—	—	8'-9"	15	15	8'-5"	8	8'-5"	1.500	5.860	0.560	—	7.868	0.528	0.713

MIN. DIMENSIONS AND QUANTITIES FOR CONCRETE GRATED DROP INLET (BASED ON MIN. HEIGHT, H)



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

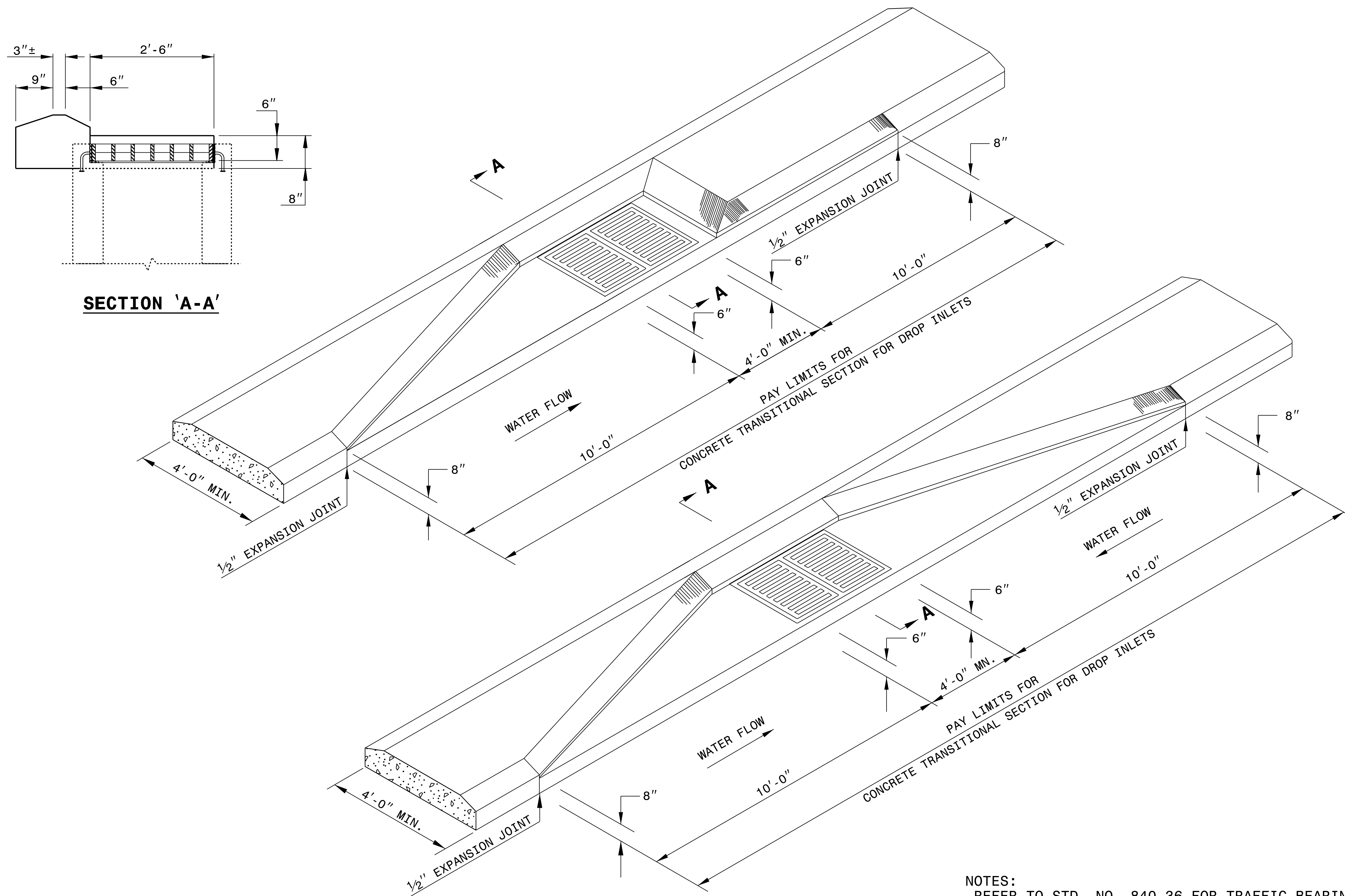
**SEE PLATE FOR TITLE**

ORIGINAL BY: 2002 STD.840.17 DATE: \_\_\_\_\_  
MODIFIED BY: K.A. KEMPF DATE: 07-06-09  
CHECKED BY: \_\_\_\_\_ DATE: \_\_\_\_\_  
FILE SPEC.: /stand/840d17 Extra Depth 2GI.dgn

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

ENGLISH DETAIL DRAWING FOR  
**METHOD FOR PLACEMENT OF  
DROP INLETS IN CONCRETE ISLANDS**

SHEET 1 OF 1  
**852D06**



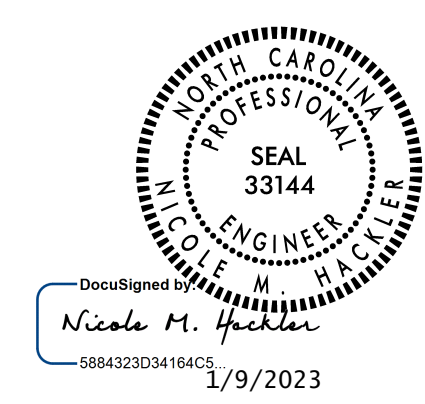
NOTES:  
-REFER TO STD. NO. 840.36 FOR TRAFFIC BEARING DRAINAGE STRUCTURE.  
-REFER TO STD. NO. 840.37 FOR STEEL GRATE AND FRAME.

STATE OF  
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DIVISION OF HIGHWAYS  
RALEIGH, N.C.

ENGLISH DETAIL DRAWING FOR  
**METHOD FOR PLACEMENT OF  
DROP INLETS IN CONCRETE ISLANDS**

SHEET 1 OF 1  
**852D06**

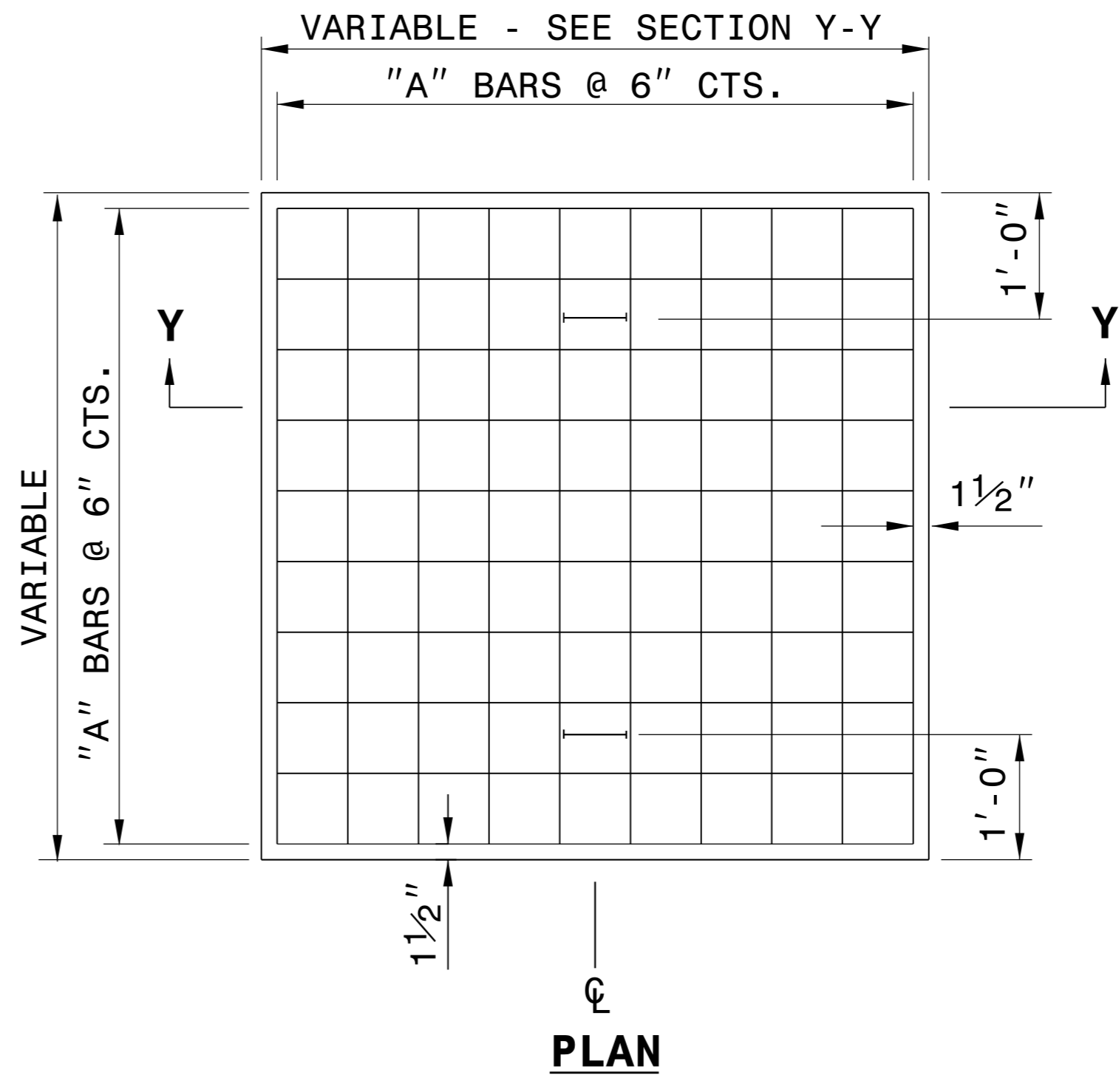
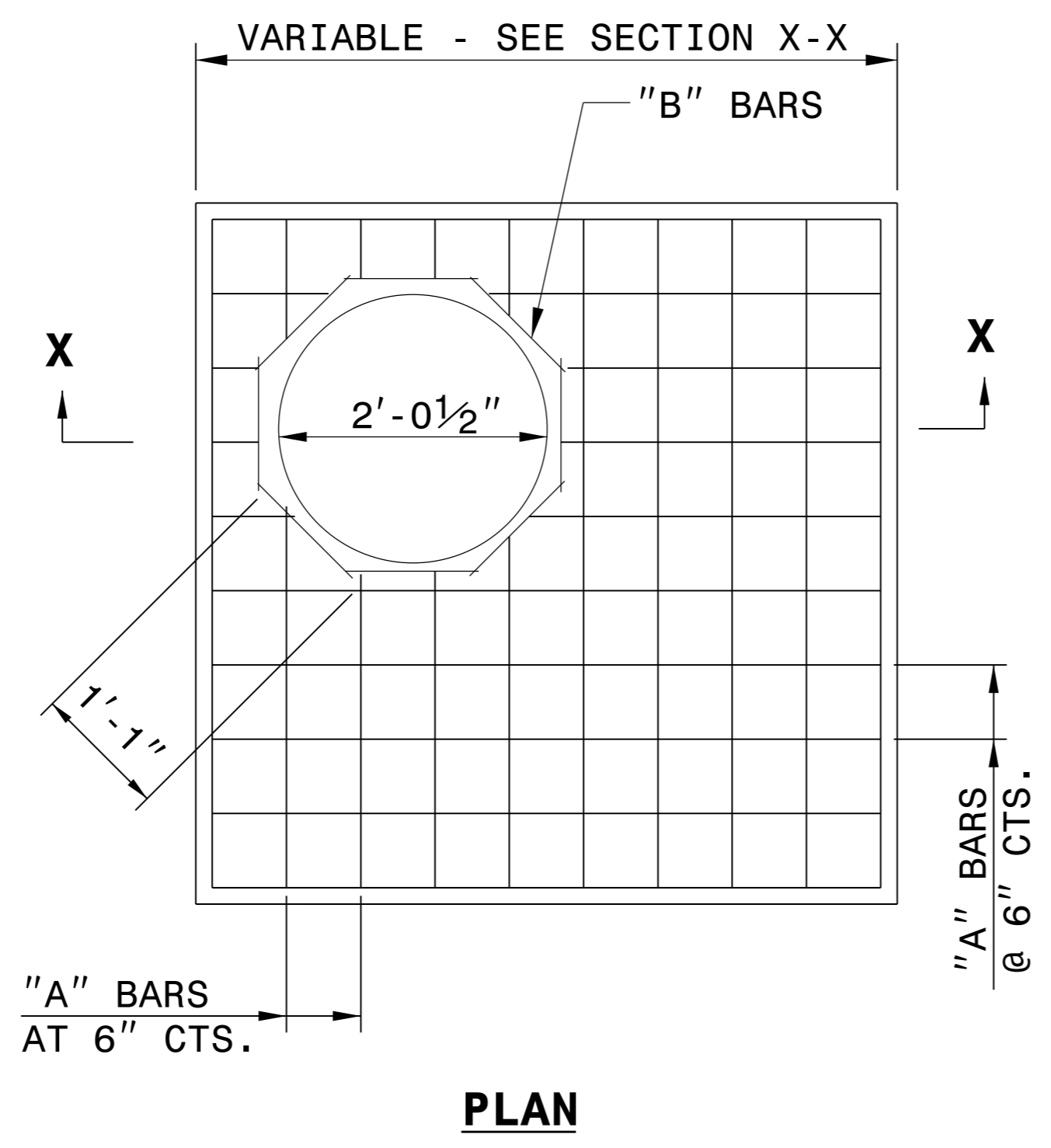
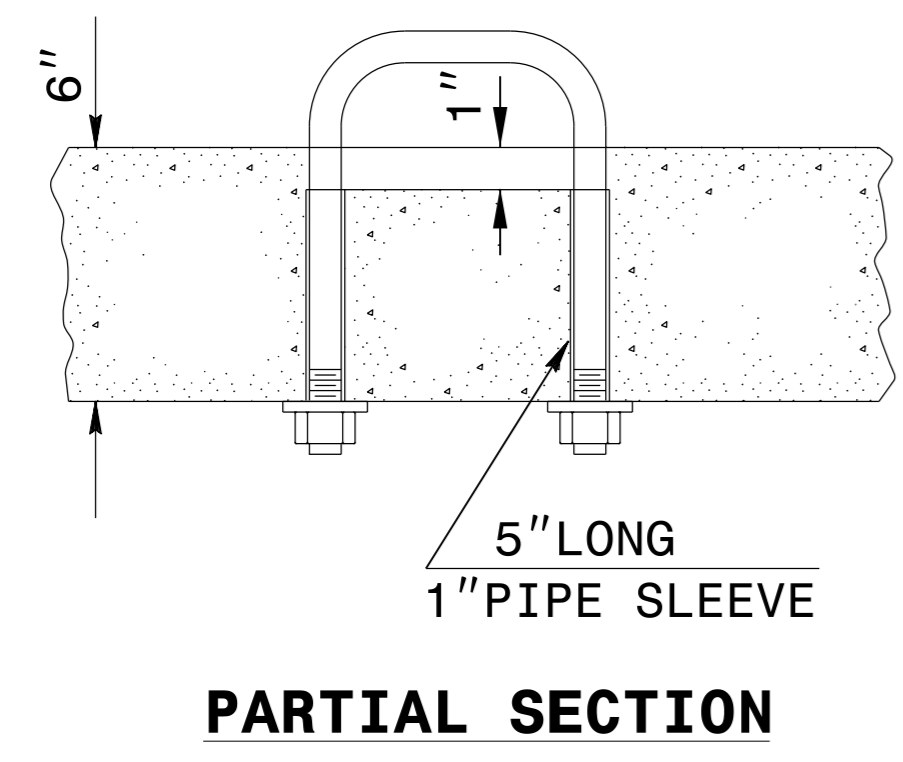
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Jpower ton AT\_CSD-252595



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**SEE TITLE PLATE**

ORIGINAL BY: KKEMPF DATE: 8/2/10  
MODIFIED BY: DATE:  
CHECKED BY: DATE:  
FILE SPEC.: KKEMPF\ENGLISH\852D0601.DGN



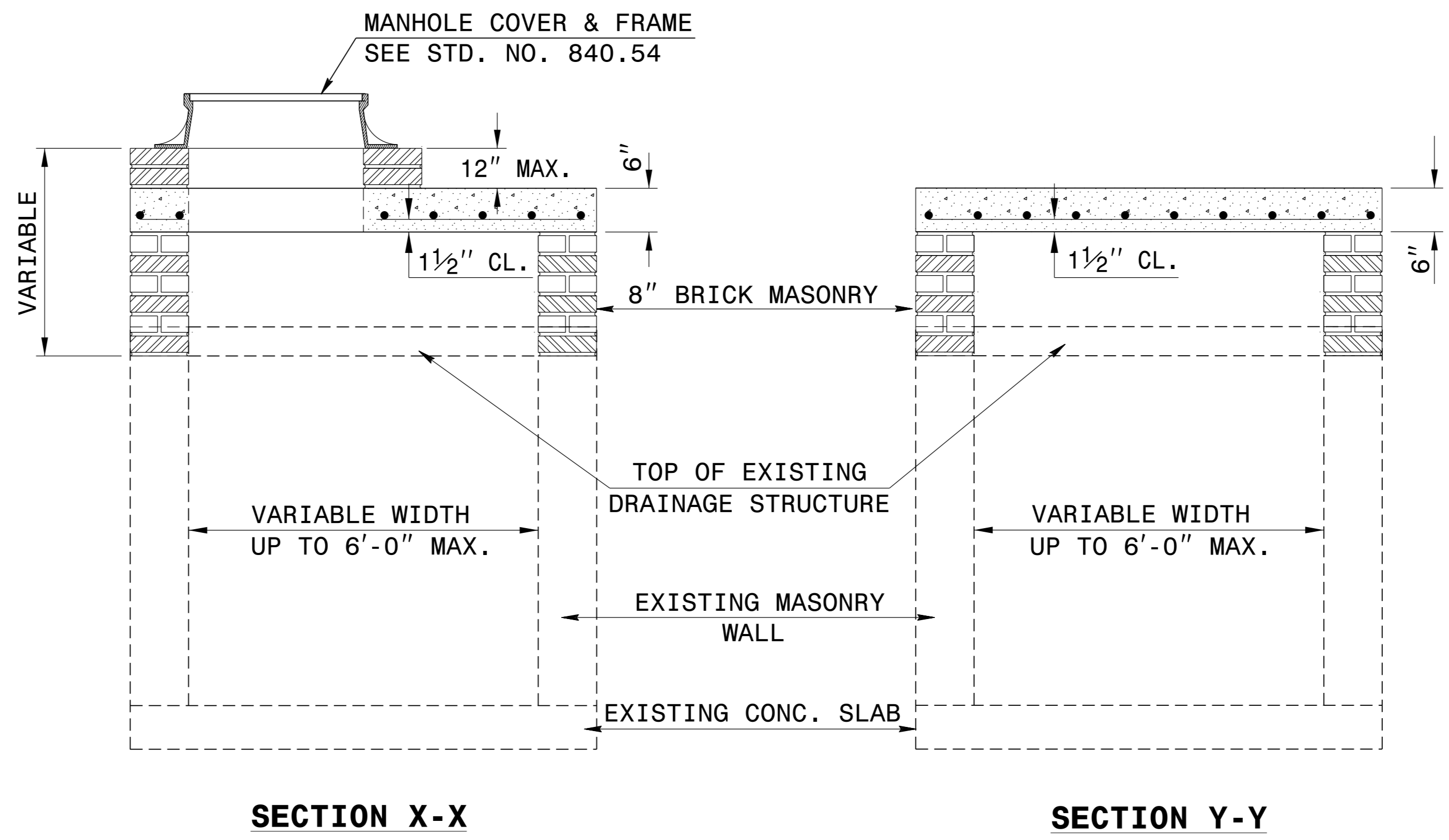
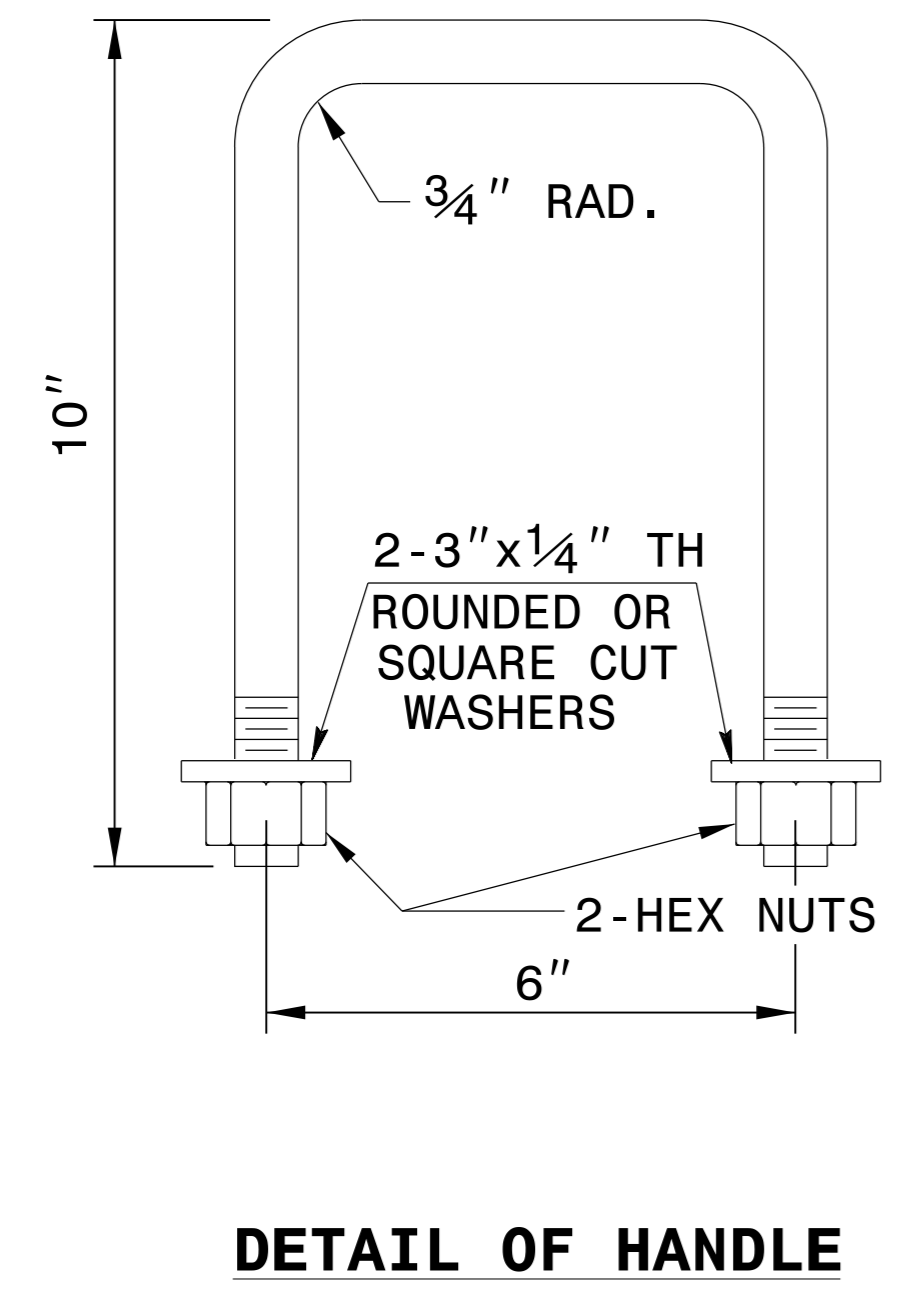
**GENERAL NOTES:**

CONSTRUCT IN ACCORDANCE WITH SECTION 859 OF THE STANDARD SPECIFICATIONS.

THE DIMENSIONS FOR THE EXISTING BOXES ARE APPROXIMATE AND MAY VARY SLIGHTLY.

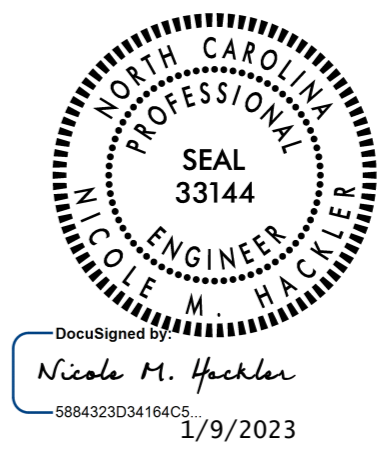
DETAIL INTENDED FOR NON-TRAFFIC BEARING DRAINAGE STRUCTURES.

<b>BILL OF MATERIALS</b>				
<b>REINFORCING STEEL</b>				
CODE	SIZE	QTY.	LENGTH	REINF. STEEL LBS.
A	#4	20	4'-6"	60.12
B	#4	8	1'-1"	5.79
<b>TOTAL</b>				<b>65.91 *</b>
<b>MASONRY</b>				<b>CU YDS</b>
TOP SLAB CONCRETE CLASS "B"				.4326 *
BRICK MASONRY PER FT HT (MIN)				.4111



**\* NOTE:**  
QUANTITIES BASED ON 3'-6" X 3'-6" DRAINAGE STRUCTURE. ADJUST QUANTITIES FOR LARGER STRUCTURES AND MANHOLE CONSTRUCTION.

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

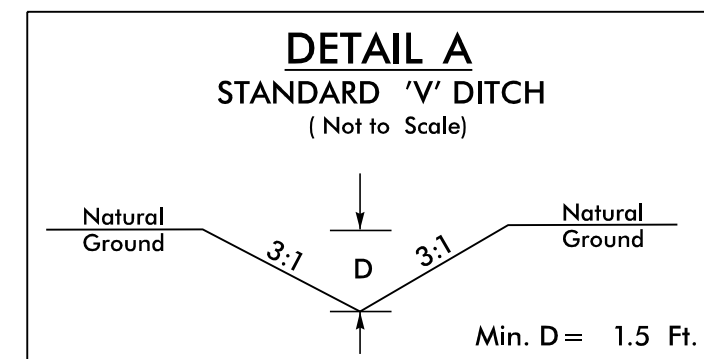


<b>CONTRACT STANDARDS AND DEVELOPMENT UNIT</b>			
Office 919-707-6950		FAX 919-250-4119	
<b>DETAIL TO CONVERT EXISTING DI, CB, OTCB or GI TO JUNCTION BOX (MANHOLE OPTIONAL)</b>			
ORIGINAL BY: T.S.S.	DATE: NOV. 1997		
MODIFIED BY: T.S.S.	DATE: FEB. 2000		
CHECKED BY:	DATE:		
FILE SPEC.: ds174:/usr/details/stand/boxtojbe.dgn			

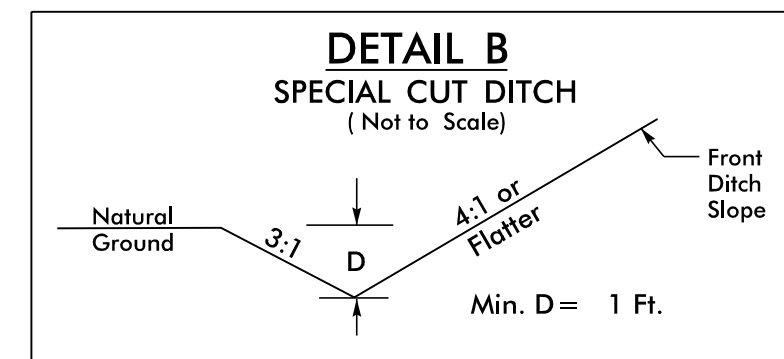
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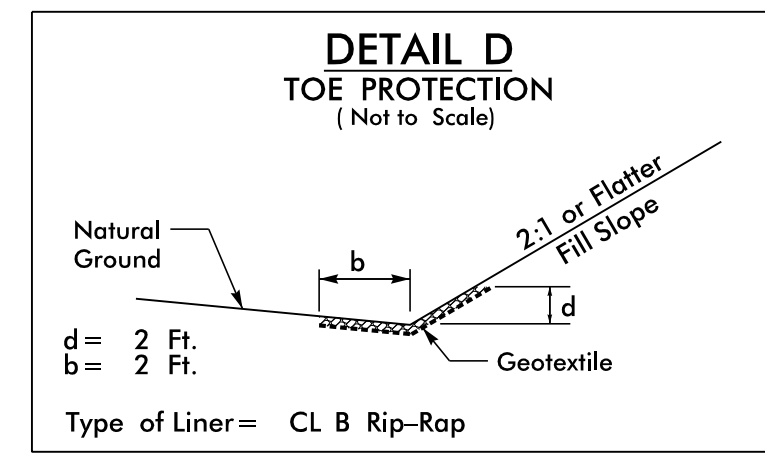
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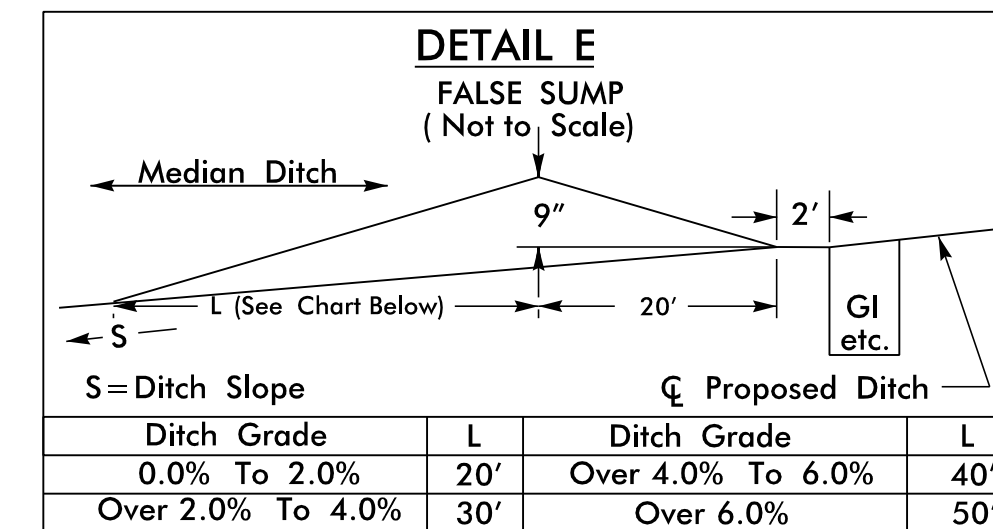
-L- FROM STA. 202+35 TO STA. 204+00 RT,  
BEG. EL=77.00', END EL=76.02', S=0.6%



-L- FROM STA. 162+00 TO STA. 162+50 RT,  
BEG. EL=75.05', END EL=78.37', S=6.6%  
-L- FROM STA. 195+50 TO STA. 198+00 LT,  
BEG. EL=85.11', END EL=82.84', S=0.9%



-L- FROM STA. 29+00 TO STA. 31+30 RT  
-L- FROM STA. 48+00 TO STA. 50+25 LT  
-L- FROM STA. 163+60 TO STA. 164+50 RT  
-L- FROM STA. 172+50 TO STA. 175+50 RT



-L- STA. 165+67 RT



STATE OF NORTH CAROLINA  
DIVISION OF HIGHWAYS

## GUARDRAIL SUMMARY

SURVEY LINE	BEG. STA.	END STA.	LOCATION	LENGTH			WARRANT POINT		"N" DIST. FROM E.O.L.	TOTAL SHOULDER WIDTH	FLARE LENGTH		W		ANCHORS						IMPACT ATTENUATOR TYPE 350		REMOVE EXISTING GUARDRAIL	REMARKS		
				STRAIGHT	SHOP CURVED	DOUBLE FACED	APPR. END	TRAIL. END			APPROACH END	TRAILING END	APPROACH END	TRAILING END	GREU TL-3	GREU TL-2	TYPE III	CAT-1	AT-1	B-77	G	NG				
Y1	12+56.60	13+77.97	RT	25	125																				134.3	
L	48+25.13	50+61.56	LT	175	87.5																				241.5	
SHEET 1 TOTALS				200.00	212.5																				375.7	
LESS ANCHOR DEDUCTIONS																										
			QUANTITY	LF PER EA	TOTAL LF																					
			GREU TL-3	50																						
			CAT-1	6.25																						
			AT-1	6.25																						
			GREU TL-2	1	25	25.00																				
			B-77	22.875																						
TOTAL GUARDRAIL (LF)					175.00	212.50																			375.7	
SAY (LF)					175.00	212.50																			380.00	

## SUMMARY OF EARTHWORK IN CUBIC YARDS

Station	Station	Uncl. Excav.	Undercut	Embank.	Borrow	Waste
-L- 26+50.00	51+00.00	994	340	4,878	3,884	340
-L- 159+00.00	198+50.00	2,242		5,300	3,058	
-Y1- 8+93.00	13+65.00	21				21
<b>SUBTOTALS:</b>		3,257	340	10,177	6,942	361
ADDITIONAL UNDERCUT			500	625	625	500
UNSUITABLE MATERIAL		30				30
SELECT GRANULAR MATERIAL IN LIEU OF BORROW				-925	-925	
WASTE IN LIEU OF BORROW					-21	-21
<b>PROJECT TOTALS:</b>		3,287	840	9,877	6,621	870
EST. 5% TO REPLACE TOP SOIL ON BORROW PIT					331	
<b>GRAND TOTALS:</b>		3,287	840	9,877	6,952	870
<b>SAY:</b>		<b>3,300</b>	<b>840</b>		<b>7,000</b>	

## ASPHALT PAVEMENT REMOVAL

LINE	STATION	STATION	LOCATION	LENGTH OR AREA	WIDTH	SQUARE YARDS
L-LT	48+00	50+50		1845.26		205.03
L-LT	195+65	197+92		935.35		103.93
L-RT	29+27	31+50		831.00		92.33
L-RT	162+00	175+00		1927.59		214.18
					<b>TOTAL</b>	<b>615.47</b>
					<b>SAY</b>	<b>620</b>







(12-17-19)  
 STATE OF NORTH CAROLINA  
 DIVISION OF HIGHWAYS

**SUMMARY OF AGGREGATE SUBGRADE/STABILIZATION**

LINE	Station	Station	Aggregate Type* ASU/AST	Aggregate Thickness INCHES	Shallow Undercut CY	Class IV Subgrade Stabilization TONS	Geotextile for Soil Stabilization SY	Stabilizer Aggregate TONS	Class IV Aggregate Stabilization TONS
-L-	48+25	50+75	ASU	12	300	1,100	1,650		
-L-	198+25	199+00	ASU	12	70	240	360		
CONTINGENCY			ASU	12	200	500	500		
<b>TOTAL CY/TONS/SY:</b>					570	1840**	2510**	0	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 Soil 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 SUBSURFACE DRAINAGE**

LINE	Station	Station	Location LT/RT/CL	Drain Type* UD/BD/SD	LF
-L-	162+25	165+25	CL & RT	SD	425
-L-	164+25	165+25	CL	SD	125
-L-	198+25	199+00	RT	SD	75
CONTINGENCY					200
<b>TOTAL LF:</b>					825

\*UD = Underdrain

\*BD = Blind Drain

\*SD = Subsurface Drain

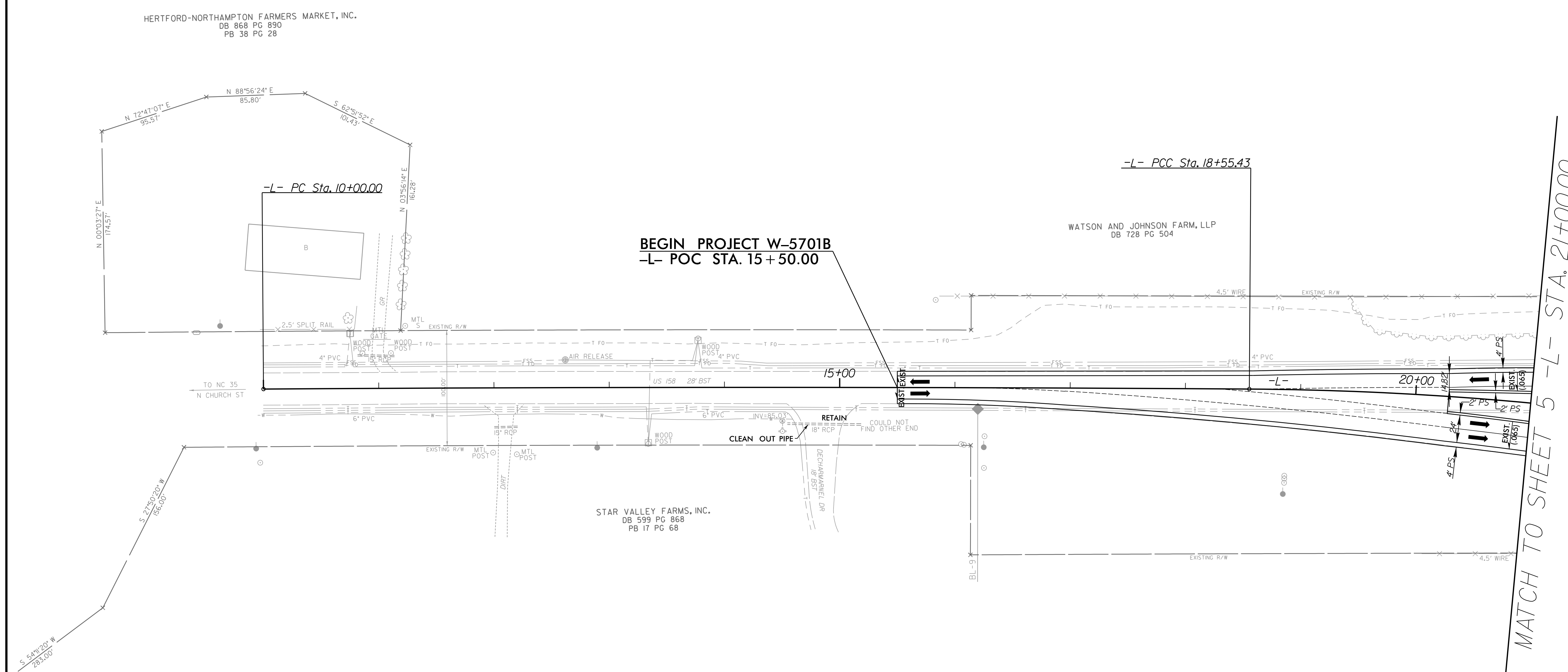
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5/14/99

PROJECT REFERENCE NO. W-5701B	SHEET NO. 4
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
<b>DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED</b>	

-L-  
 PI Sta 14+27.72      PI Sta 26+66.49  
 $\Delta = 0^{\circ} 47' 25.9''$  (RT)     $\Delta = 31^{\circ} 36' 47.0''$  (RT)  
 $D = 0^{\circ} 05' 32.7''$        $D = 1^{\circ} 59' 59.5''$   
 $L = 855.43'$        $L = 1,580.77'$   
 $T = 427.72'$        $T = 811.07'$   
 $R = 62,000.00'$        $R = 2,865.00'$   
 SE = EXIST.      SE = EXIST.



**BEGIN PROJECT W-5701B**  
**-L- POC STA. 15+50.00**

-L- PCC Sta. 18+55.43

MATCH TO SHEET 5 -L- STA. 21+00.00

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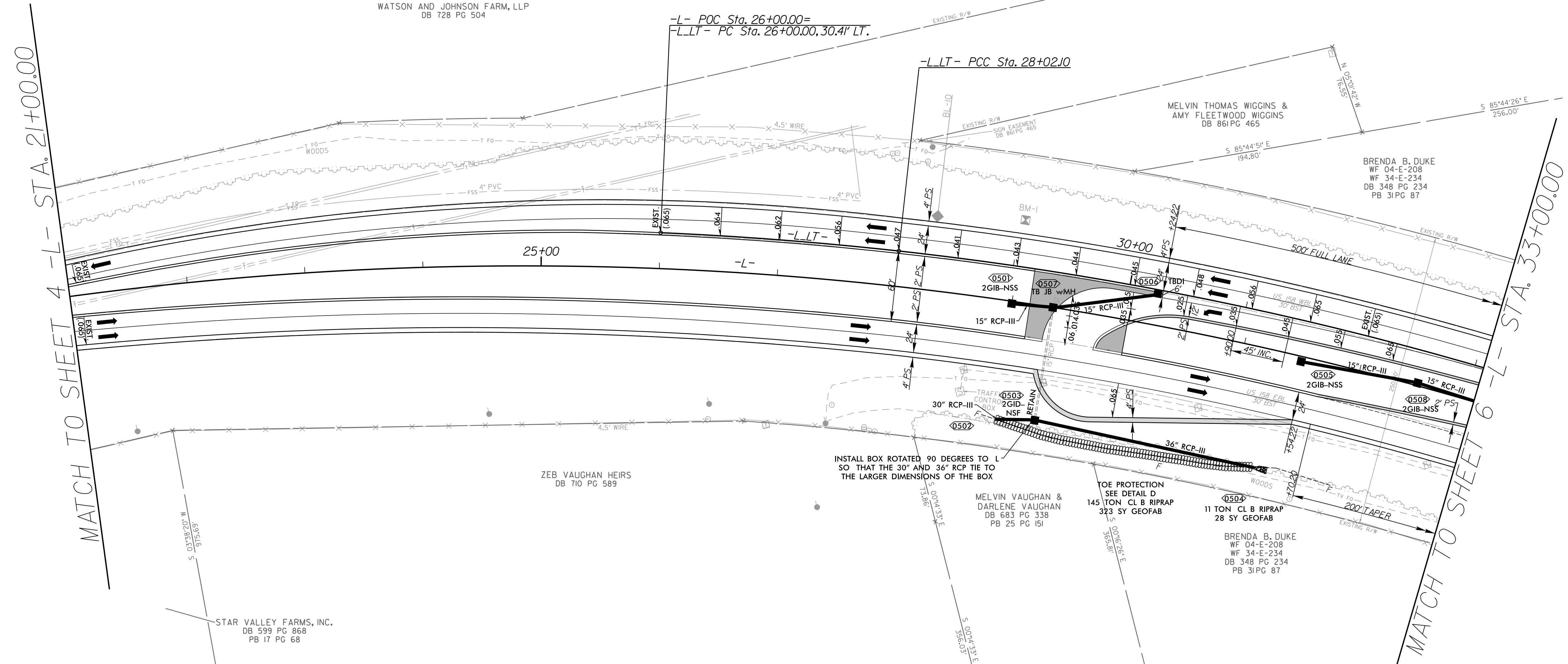
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-L LT-		-L-	
PI Sta 27+01.09	PI Sta 31+24.86	PI Sta 26+66.49	
$\Delta = 3' 46' 07.9" (RT)$	$\Delta = 12' 43' 22.8" (RT)$	$\Delta = 3' 36' 47.0" (RT)$	
$D = 1' 51' 53.3"$	$D = 1' 58' 44.9"$	$D = 1' 59' 59.5"$	
$L = 202.10'$	$L = 642.86'$	$L = 1,580.77'$	
$T = 101.09'$	$T = 322.76'$	$T = 811.07'$	
$R = 3,072.47'$	$R = 2,895.00'$	$R = 2,865.00'$	
SE = EXIST.	SE = EXIST.	SE = EXIST.	

PROJECT REFERENCE NO. W-5701B	SHEET NO. 5
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
<b>DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED</b>	

NAD 83/NA 2011



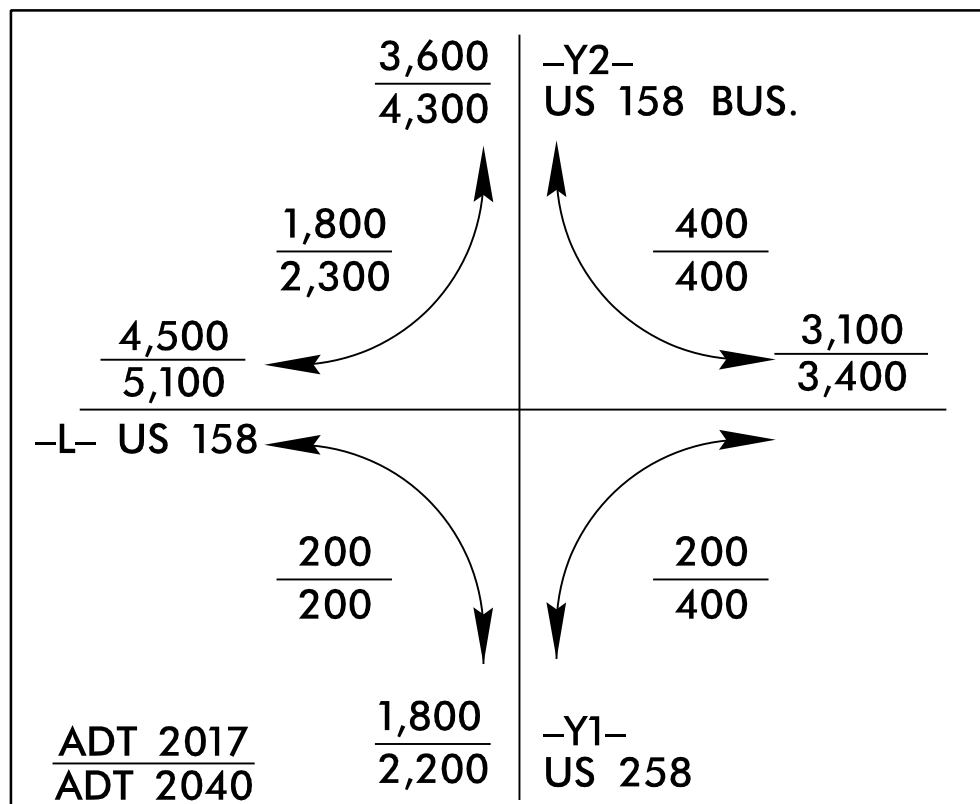
MATCH TO SHEET 4 -L- STA. 21+00.00

MATCH TO SHEET 6 -L- STA. 33+00.00

SEE SHEET 12 FOR -L LT- PROFILE  
SEE SHEET 2B-1 FOR INTERSECTION DETAIL

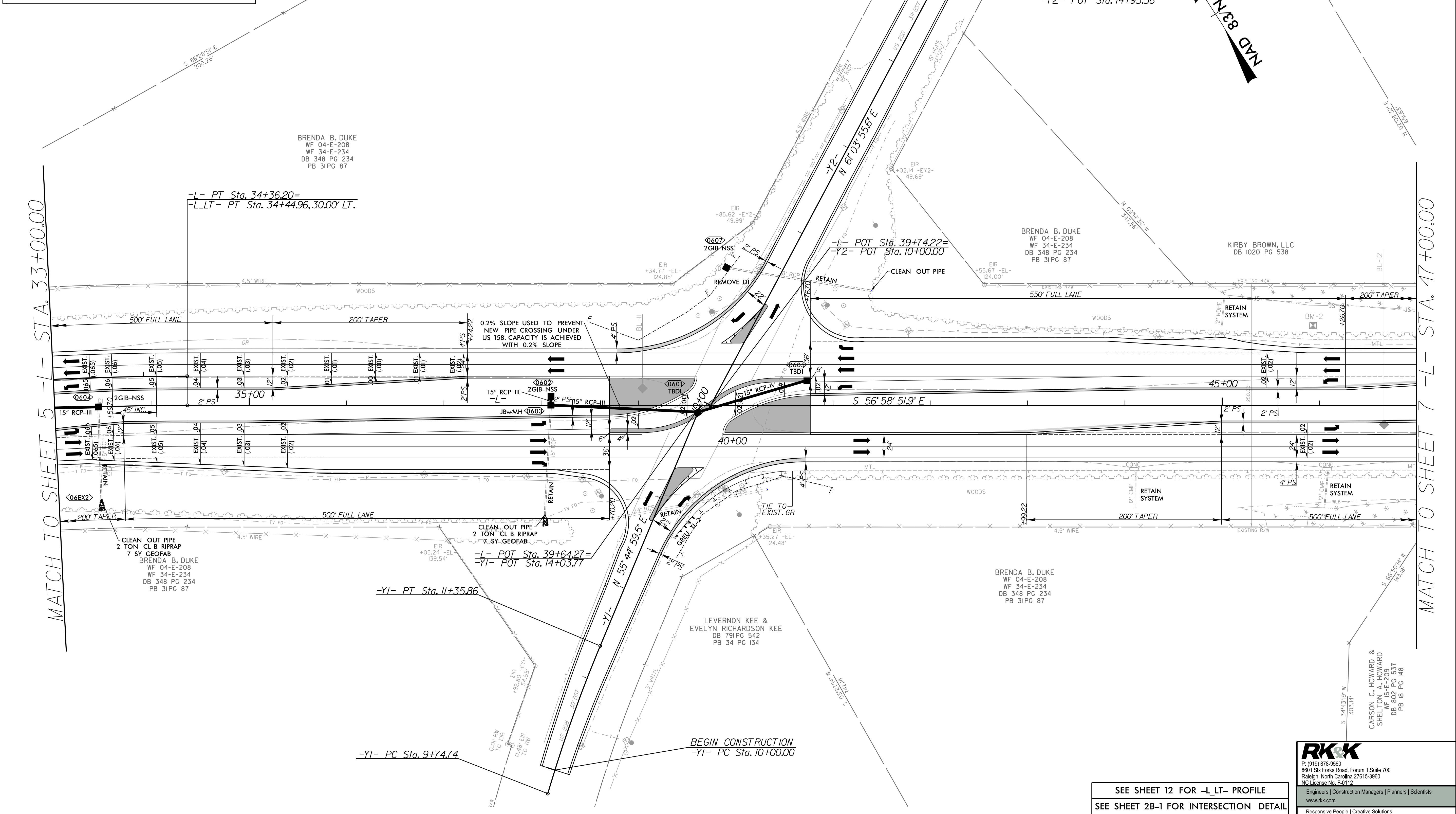
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5/14/2017  
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 1/9/2017



-L-	-Y1-
PI Sta 26+66.49	PI Sta 10+55.38
$\Delta = 31^{\circ}36'47.0''$ (RT)	$\Delta = 6^{\circ}21'59.4''$ (RT)
$D = 1^{\circ}59'59.5''$	$D = 3^{\circ}57'05.2''$
$L = 1,580.77'$	$L = 1611.2'$
$T = 811.07'$	$T = 80.64'$
$R = 2,865.00'$	$R = 1,450.00'$
SE = EXIST.	SE = EXIST.

PROJECT REFERENCE NO. W-5701B	SHEET NO. 6
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
<b>DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED</b>	





SEE SHEET 12 FOR -L\_LT- PROFILE  
 SEE SHEET 2B-1 FOR INTERSECTION DETAIL

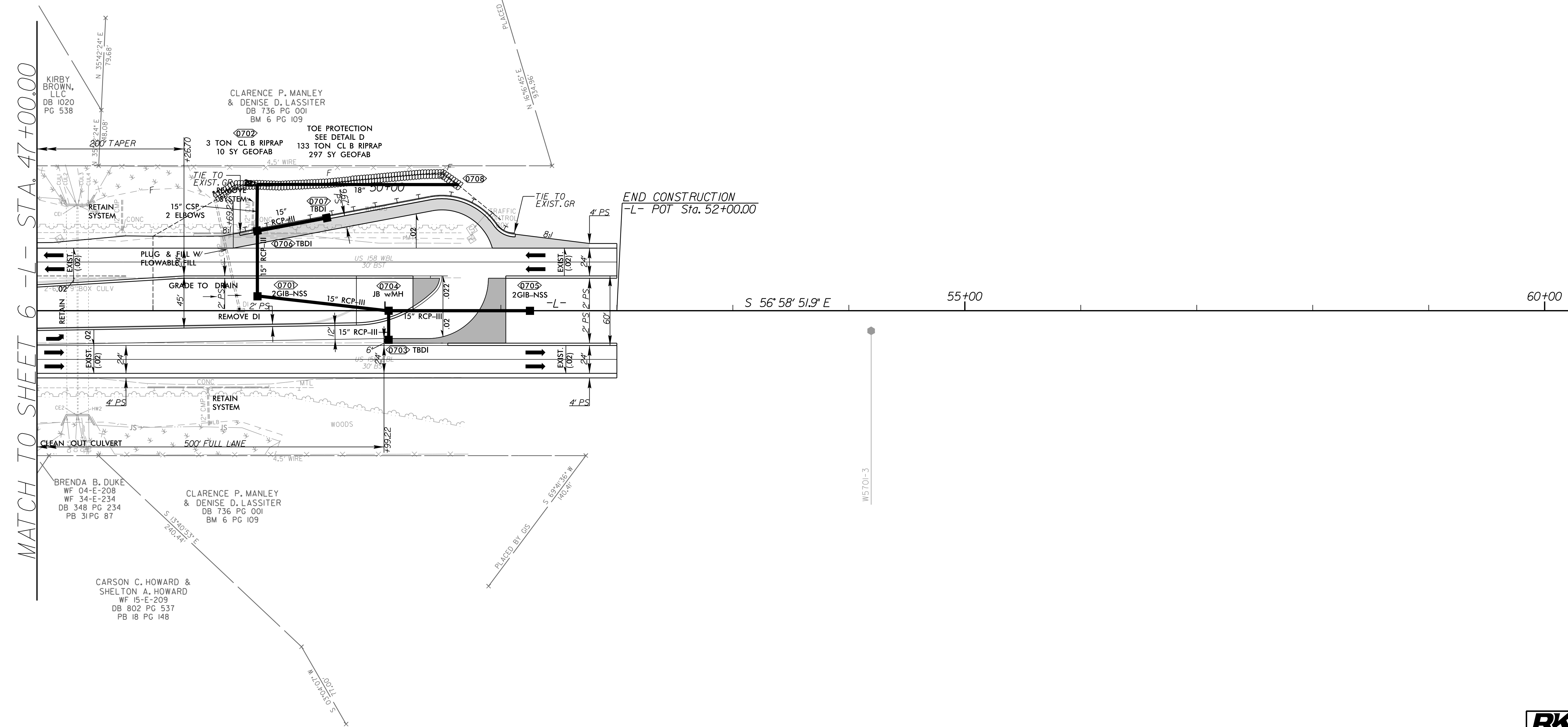
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PROJECT REFERENCE NO. W-5701B	SHEET NO. 7
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
	
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MAD 8/31/08 CMM



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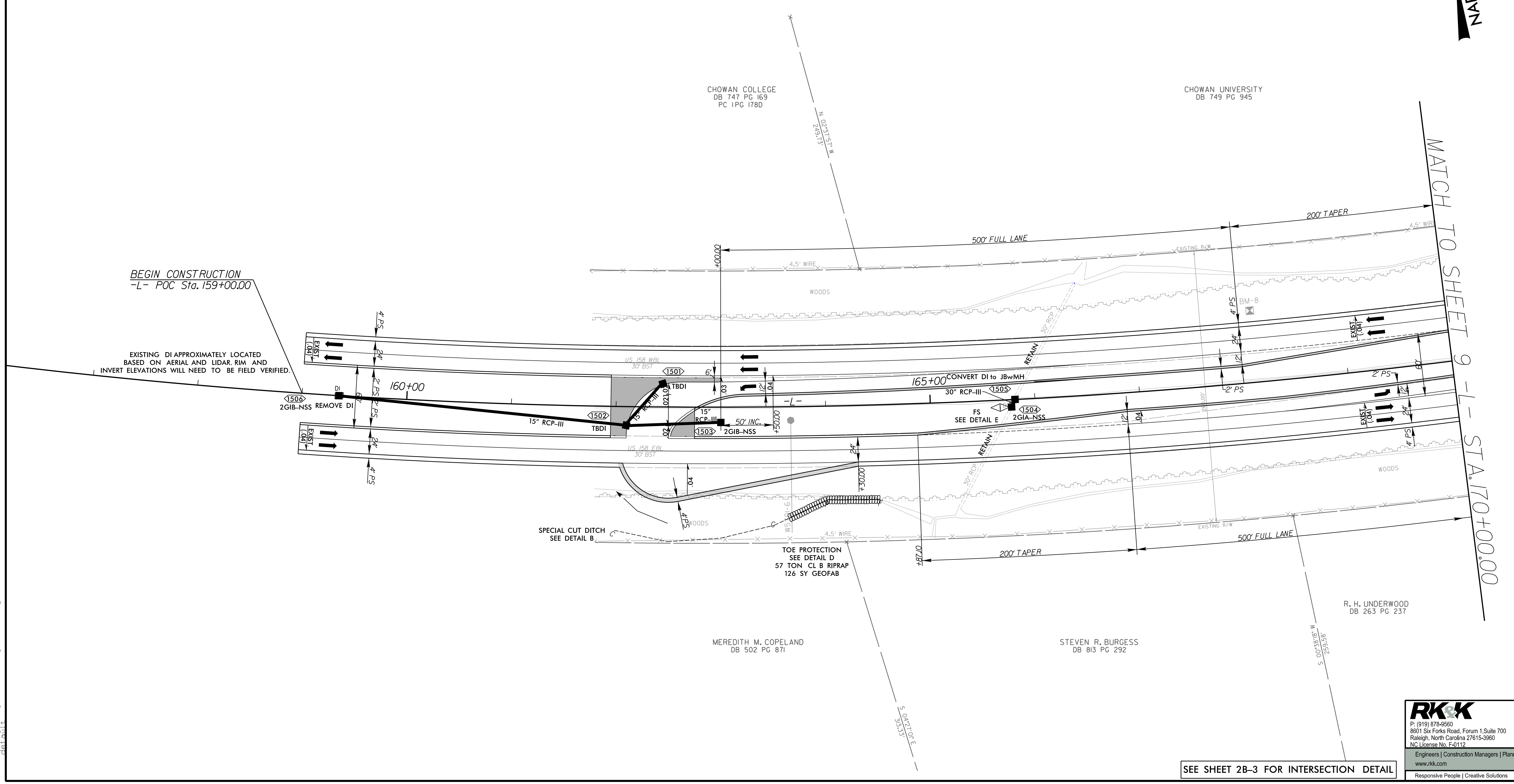
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-L-

PI Sta 165+43.38  
 $\Delta = 20^{\circ}53'20.9"$  (LT)  
 $D = 1'00'18.7"$   
 $L = 2,078.13'$   
 $T = 1,050.73'$   
 $R = 5,700.00'$   
 SE = EXIST.

PROJECT REFERENCE NO. W-5701B		SHEET NO. 8
RW SHEET NO.		
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER	
<b>DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED</b>		

1102 AN/88 NAD



BEGIN CONSTRUCTION  
 -L- POC Sta. 159+00.00

EXISTING DI APPROXIMATELY LOCATED  
 BASED ON AERIAL AND LIDAR. RIM AND  
 INVERT ELEVATIONS WILL NEED TO BE FIELD VERIFIED.

SEE SHEET 2B-3 FOR INTERSECTION DETAIL

R. H. UNDERWOOD  
 DB 263 PG 237

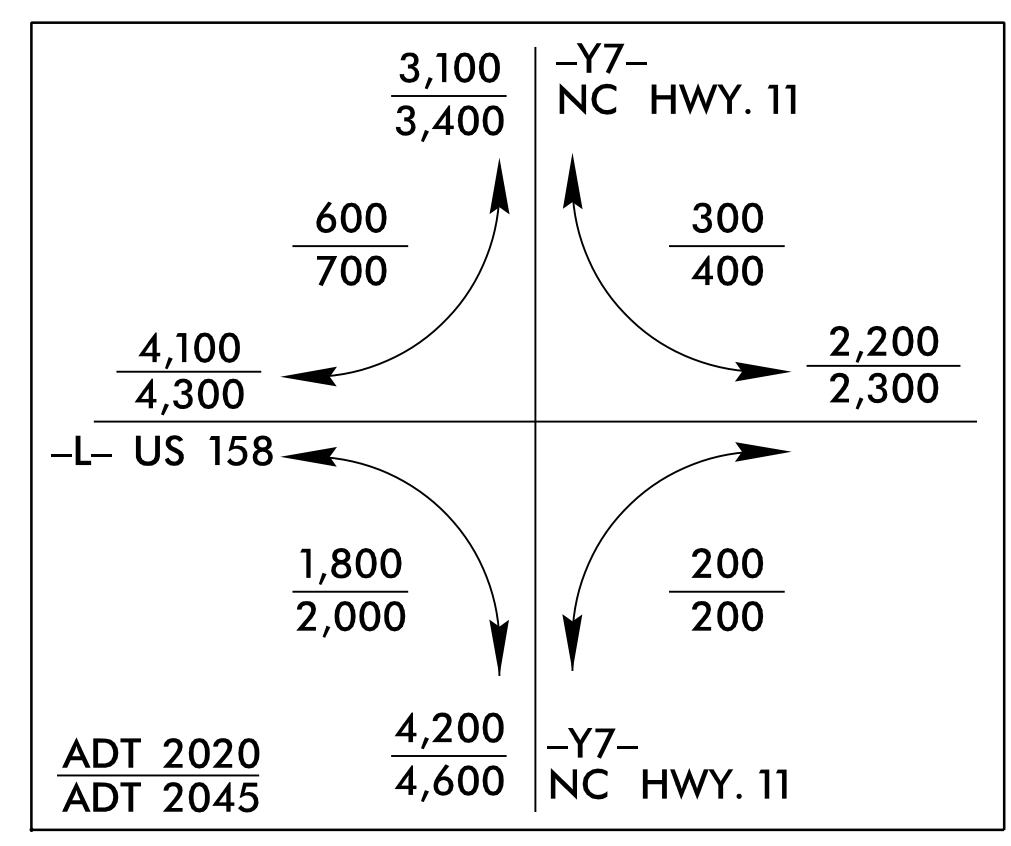
MEREDITH M. COPELAND  
 DB 502 PG 871

STEVEN R. BURGESS  
 DB 813 PG 292

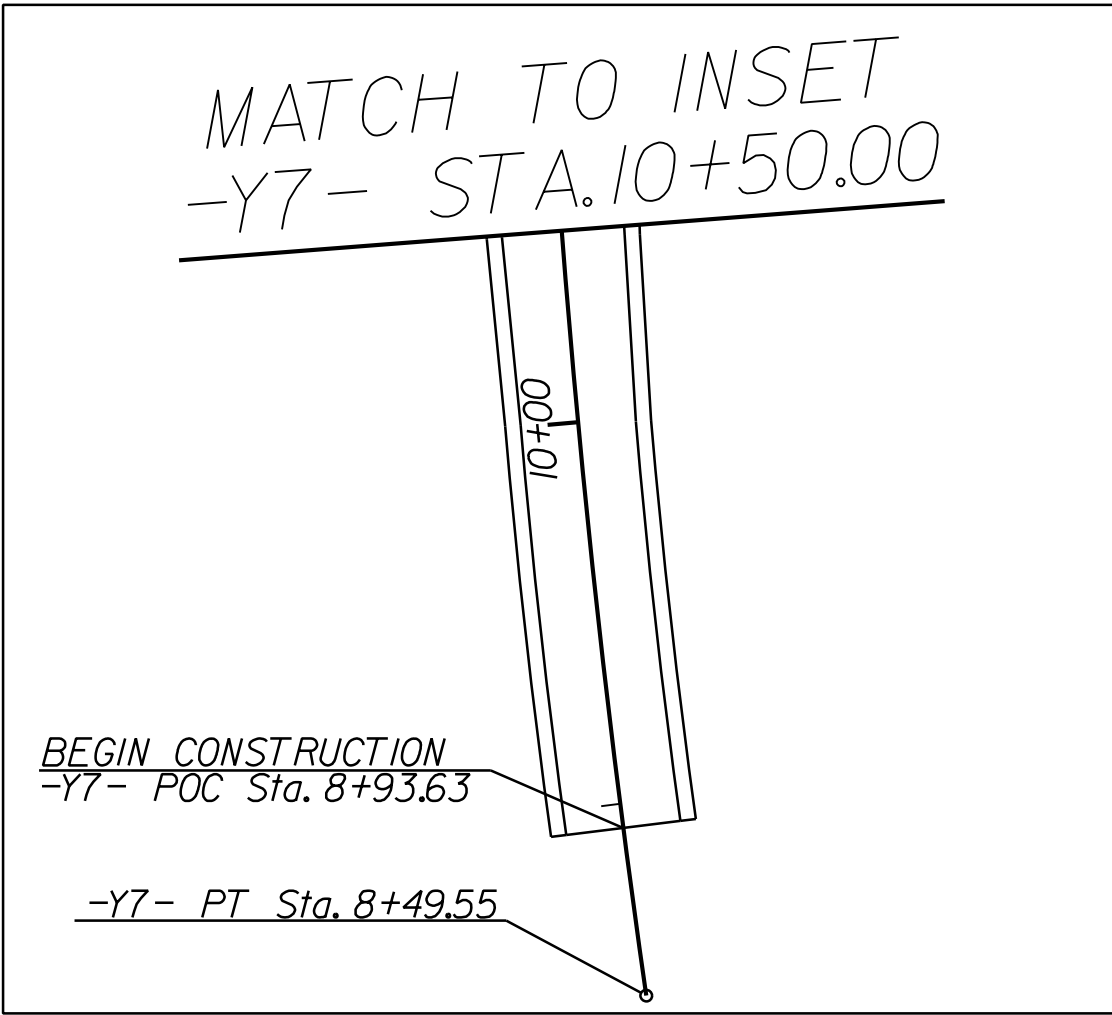
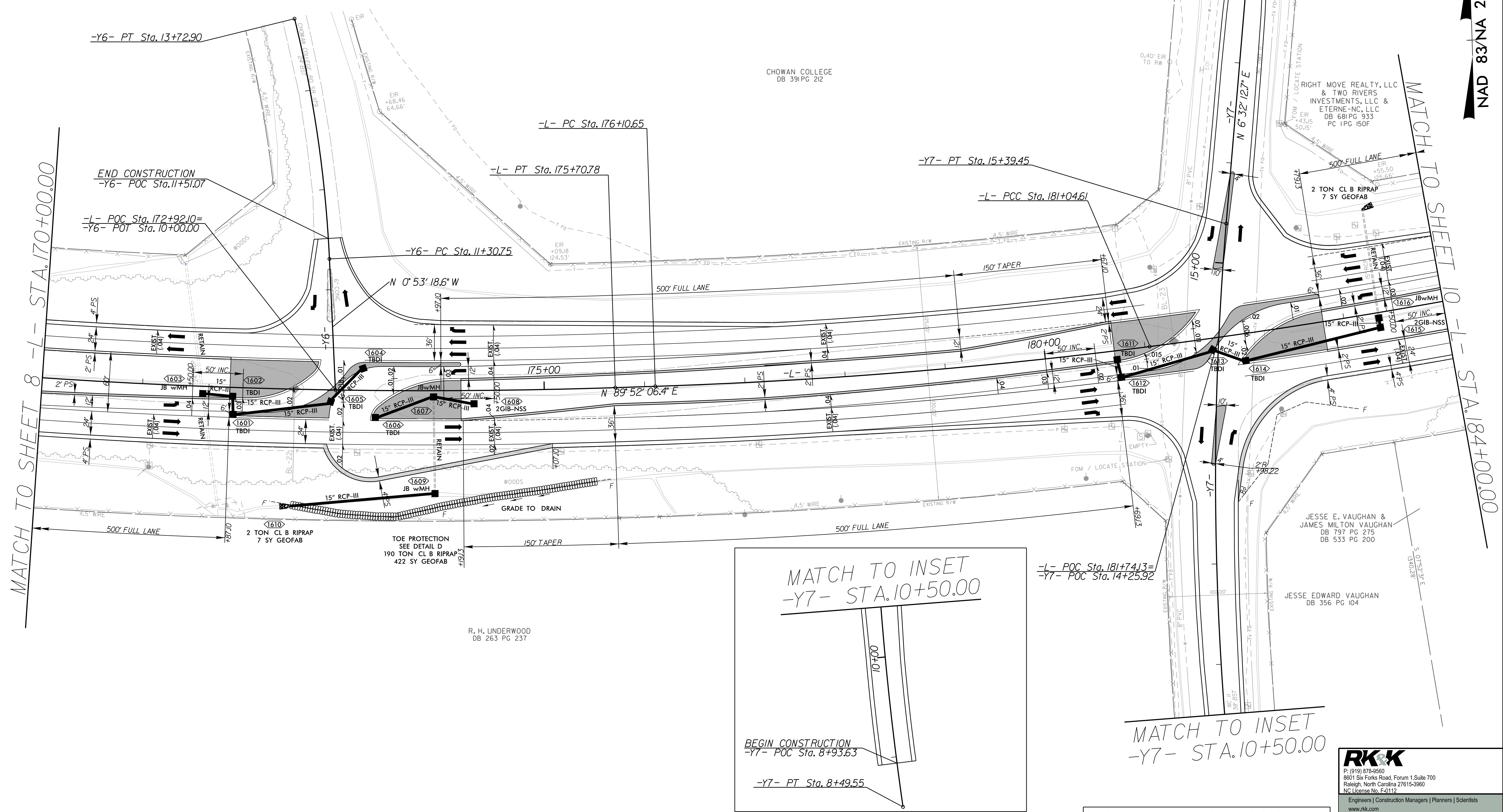
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-L-		-Y6-		-Y7-	
PI Sta 165+43.38	PI Sta 178+57.82	PI Sta 188+90.22	PI Sta 12+52.21	PI Sta 11+95.99	
$\Delta = 20^{\circ} 53' 20.9" (LT)$	$\Delta = 5^{\circ} 26' 33.8" (LT)$	$\Delta = 15^{\circ} 21' 43.2" (LT)$	$\Delta = 11^{\circ} 14' 58.8" (LT)$	$\Delta = 12^{\circ} 58' 52.7" (RT)$	
D = 1'00'18.7"	D = 1'06'06.6"	D = 0'59'01.0"	D = 4'38'44.6"	D = 1'52'53.9"	
L = 2,078.13'	L = 493.97'	L = 1,561.78'	L = 242.15'	L = 689.90'	
T = 1,050.73'	T = 247.17'	T = 785.60'	T = 121.47'	T = 346.43'	
R = 5,700.00'	R = 5,200.00'	R = 5,825.00'	R = 1,233.30'	R = 3,045.00'	
SE = EXIST.	SE = EXIST.	SE = EXIST.	SE = EXIST.	SE = EXIST.	





PROJECT REFERENCE NO. W-5701B	SHEET NO. 9
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	



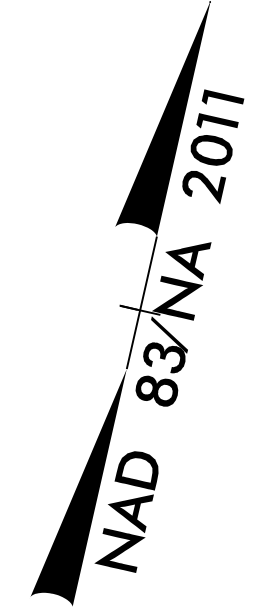
SEE SHEET 2B-3 & 2B-4 FOR INTERSECTION DETAIL

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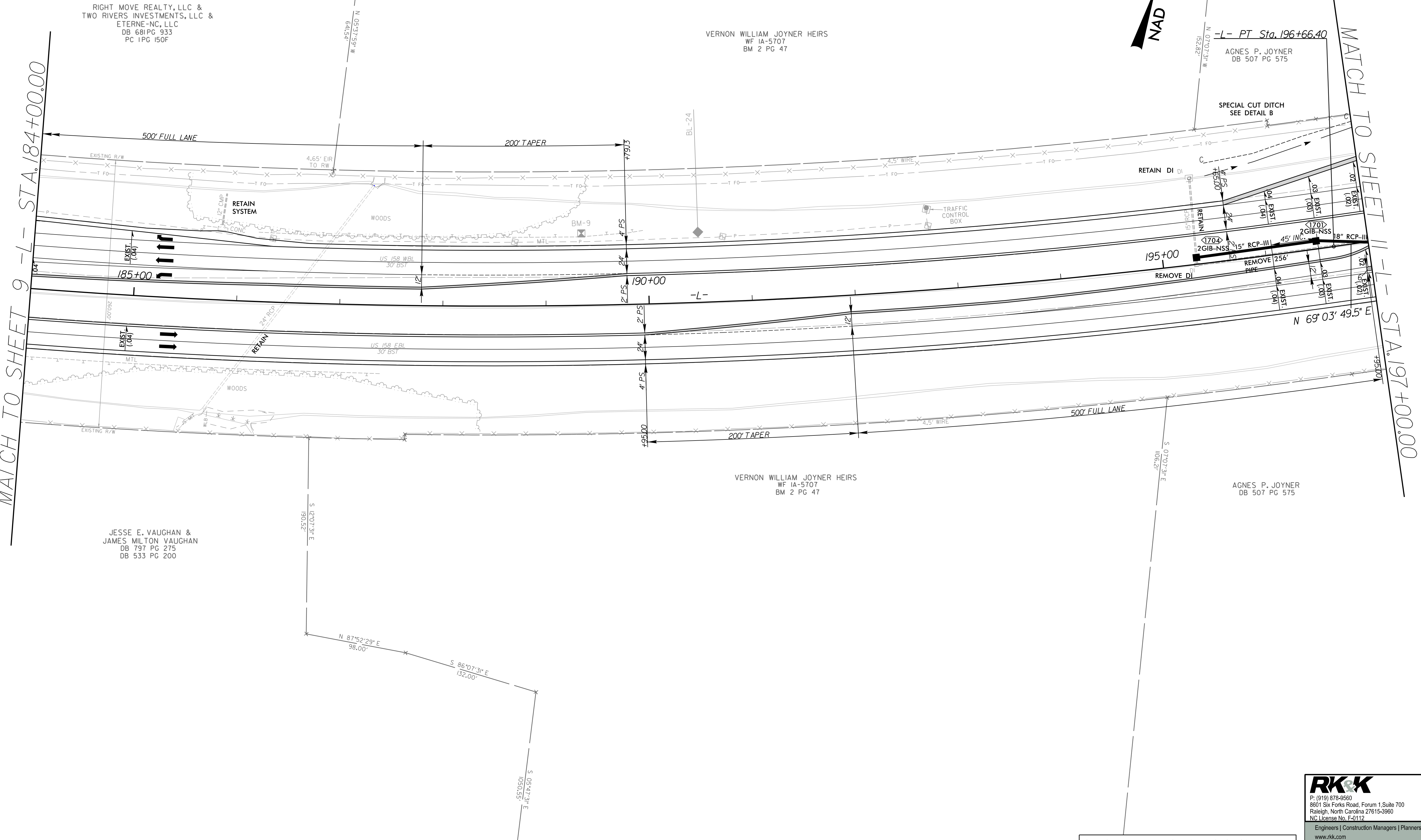
PROJECT REFERENCE NO. W-5701B		SHEET NO. 10	
RW SHEET NO.			
ROADWAY DESIGN ENGINEER		HYDRAULICS ENGINEER	
			
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED			

-L-  
 PI Sta 188+90.22  
 $\Delta = 15^\circ 21' 43.2''$  (LT)  
 $D = 0^\circ 59' 01.0''$   
 $L = 1,561.78'$   
 $T = 785.60'$   
 $R = 5,825.00'$   
 SE = EXIST.



MATCH TO SHEET 9 -L- STA. 184+00.00

MATCH TO SHEET 11 -L- STA. 197+00.00



RIGHT MOVE REALTY, LLC &  
 TWO RIVERS INVESTMENTS, LLC &  
 ETERNE-NC, LLC  
 DB 681PG 933  
 PC 1PG 150F

VERNON WILLIAM JOYNER HEIRS  
 WF IA-5707  
 BM 2 PG 47

AGNES P. JOYNER  
 DB 507 PG 575

JESSE E. VAUGHAN &  
 JAMES MILTON VAUGHAN  
 DB 797 PG 275  
 DB 533 PG 200

VERNON WILLIAM JOYNER HEIRS  
 WF IA-5707  
 BM 2 PG 47

AGNES P. JOYNER  
 DB 507 PG 575

SEE SHEET 2B-5 FOR INTERSECTION DETAIL

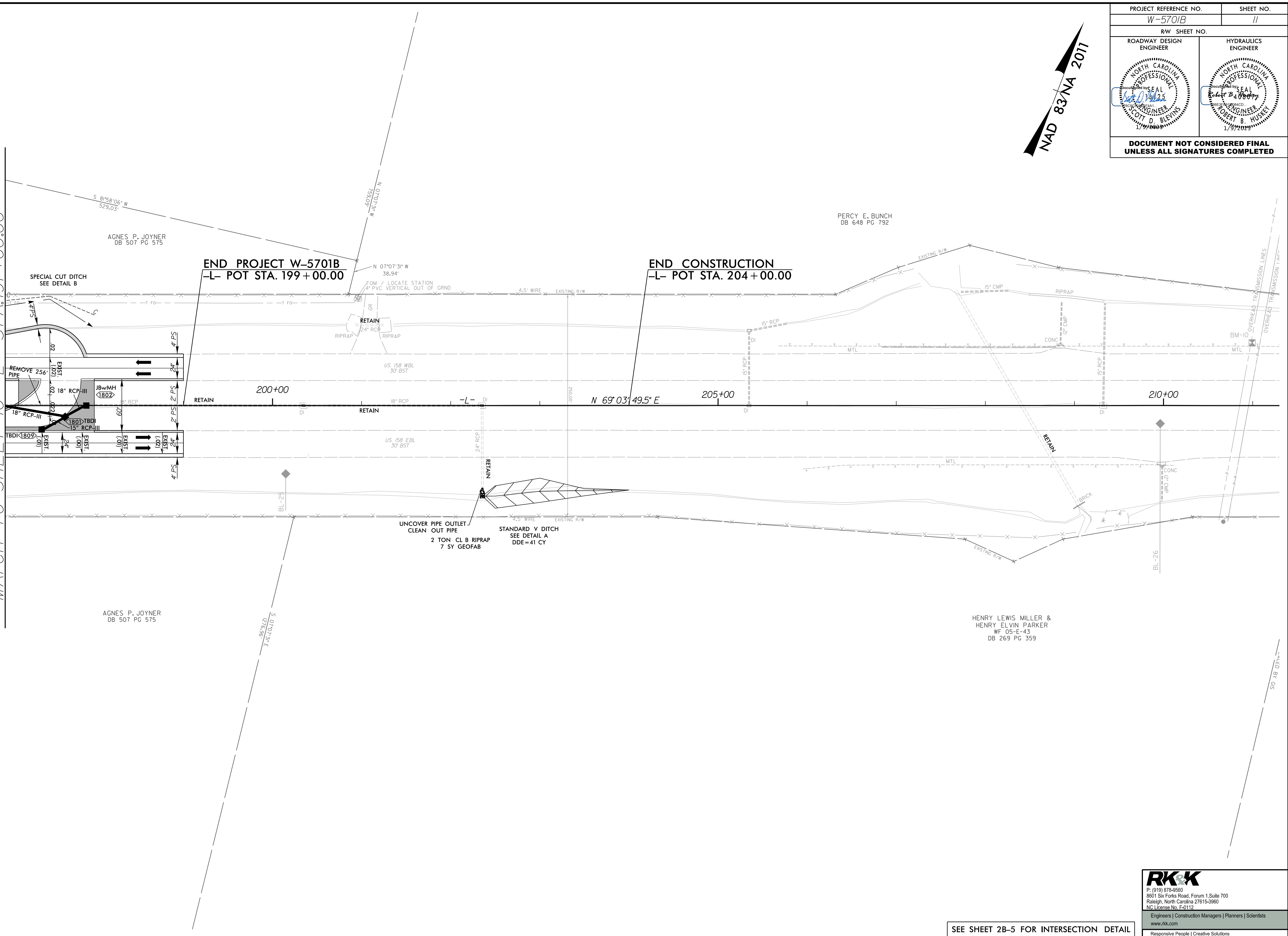
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PROJECT REFERENCE NO. W-5701B	SHEET NO. 11
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	

NAD 83 NA 2011

MATCH TO SHEET 10 -L- STA. 197+00.00



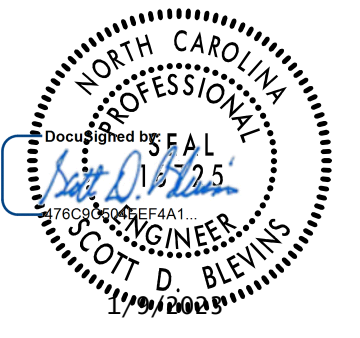
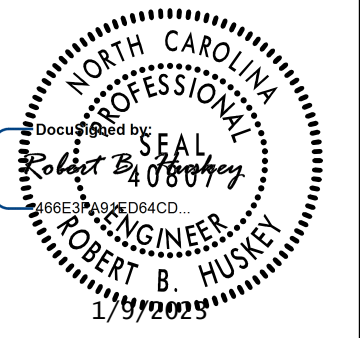
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SEE SHEET 2B-5 FOR INTERSECTION DETAIL

5/28/99

-L\_LT-

PROJECT REFERENCE NO. W-5701B	SHEET NO. 12
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
	
<b>DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED</b>	

END 3" RESURFACING GRADE  
 BEGIN WEDGING GRADE W-5701B  
 -L\_LT- STA. 26+50.00  
 EL = 82.20'

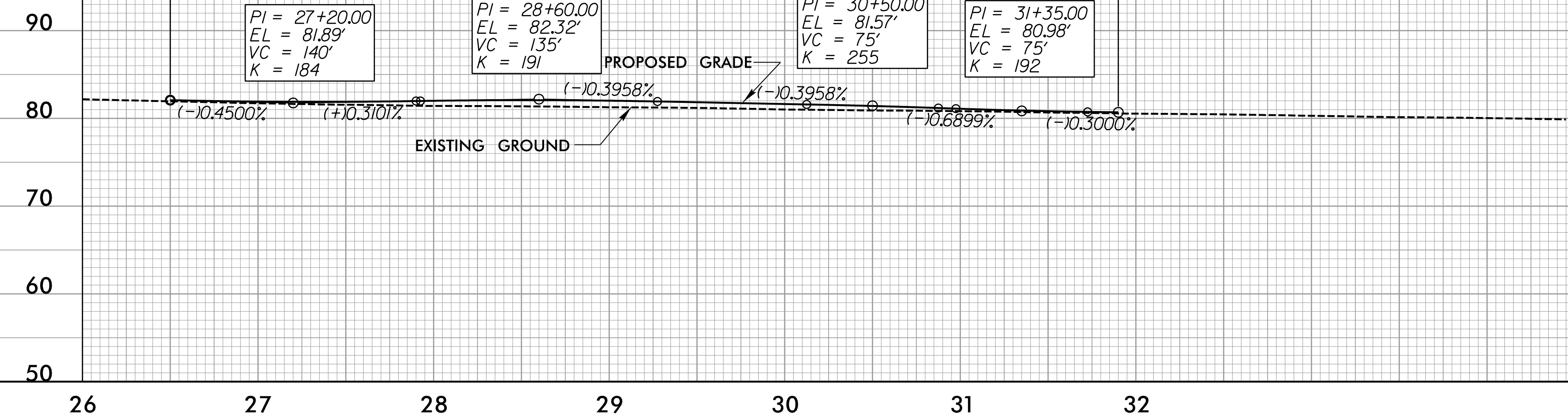
PI = 27+20.00  
 EL = 81.89'  
 VC = 140'  
 K = 184

PI = 28+60.00  
 EL = 82.32'  
 VC = 135'  
 K = 191

PI = 30+50.00  
 EL = 81.57'  
 VC = 75'  
 K = 255

PI = 31+35.00  
 EL = 80.98'  
 VC = 75'  
 K = 192

END WEDGING GRADE W-5701B  
 BEGIN 3" RESURFACING GRADE  
 -L\_LT- STA. 31+90.00  
 EL = 80.82'



FOR -L- PLAN SEE SHTS. 5-6

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