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09_08/2019

See Sheet 1A For Index of Sheets

STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	B-5765	1	37
WBS PROJ. NO.	F.A. PROJ. NO.	DESCRIPTION	
45721.1.1	N/A	PE	
45721.2.1	N/A	R/W,UTL	
45721.3.1	N/A	CONSTRUCTION	

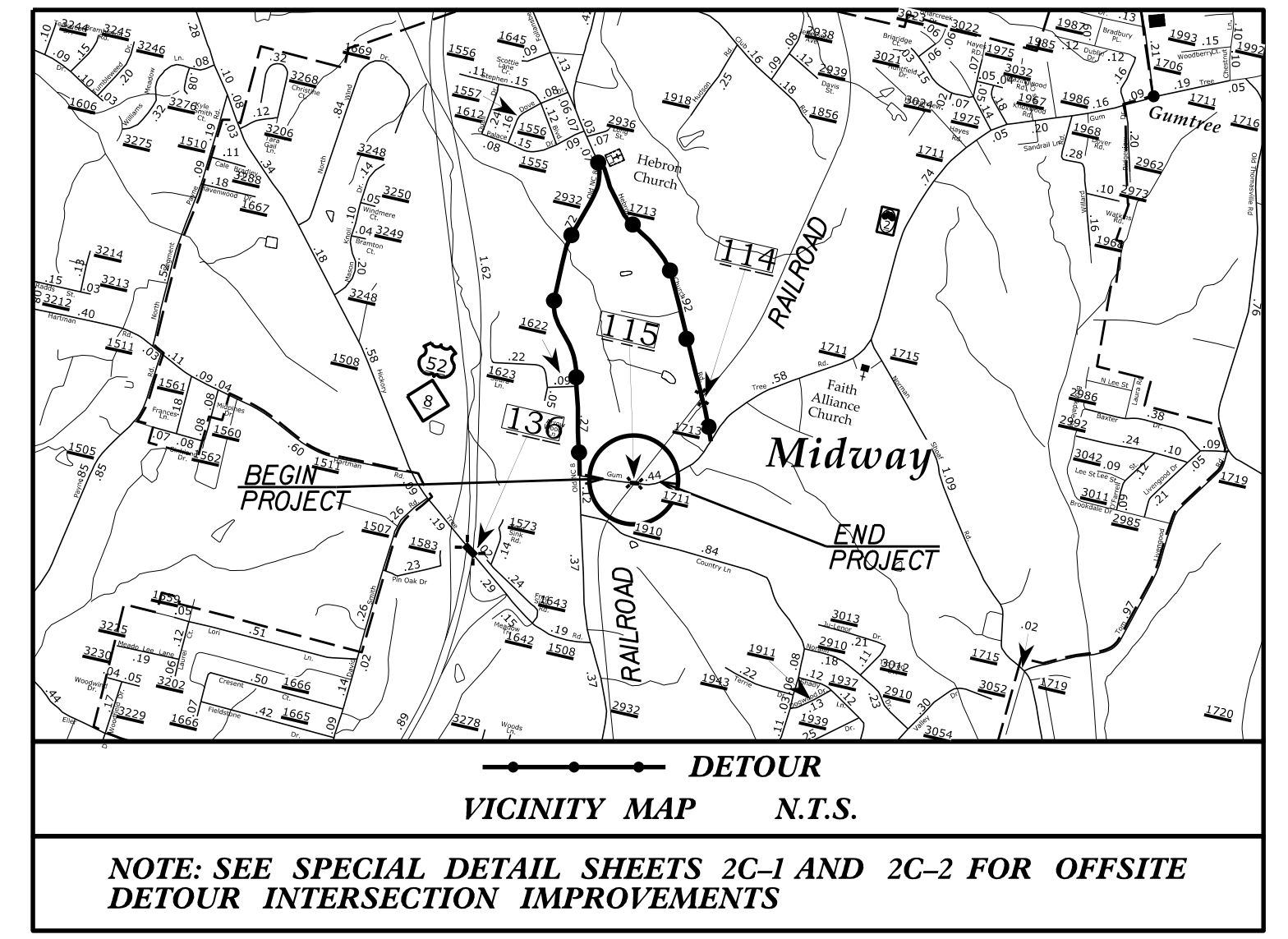
STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS
DAVIDSON COUNTY

**LOCATION: REPLACE BRIDGE NO. 115 ON SR 1711 (GUMTREE ROAD)
OVER WINSTON-SALEM SOUTHBOUND RAILROAD**

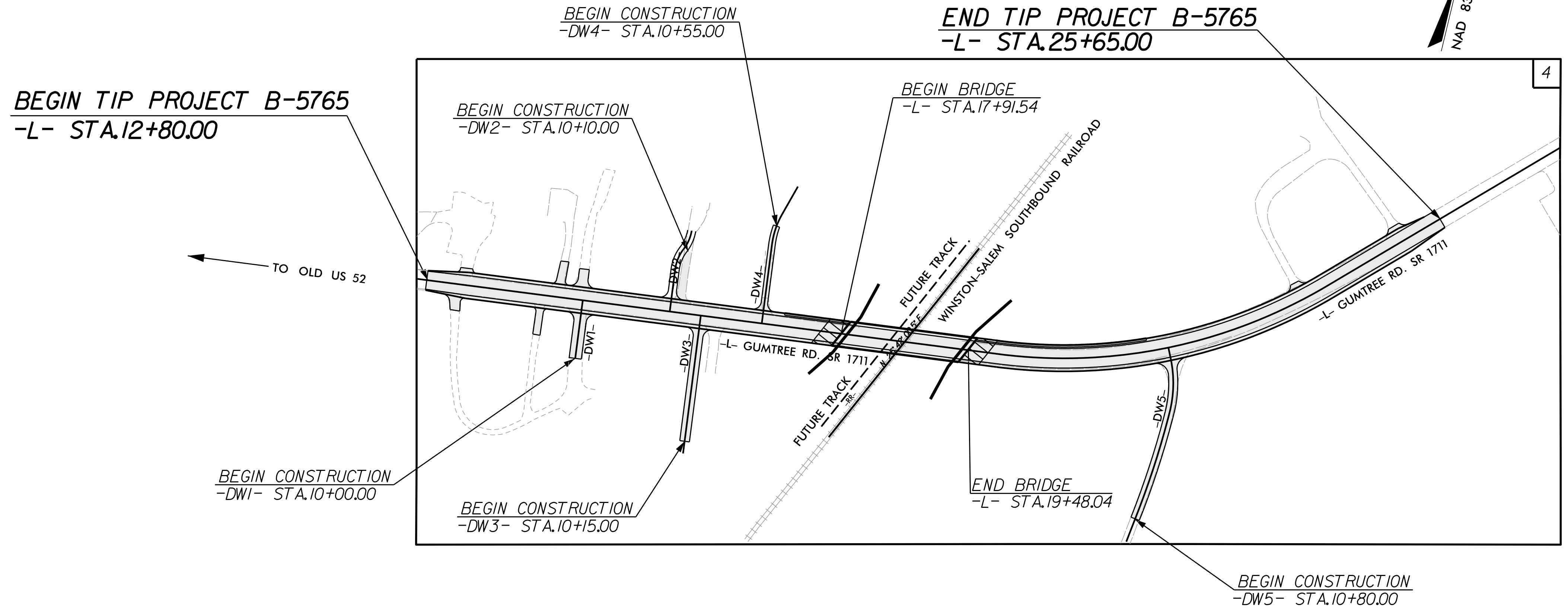
TYPE OF WORK: GRADING, DRAINAGE, PAVING AND STRUCTURE

TIP PROJECT: B-5765

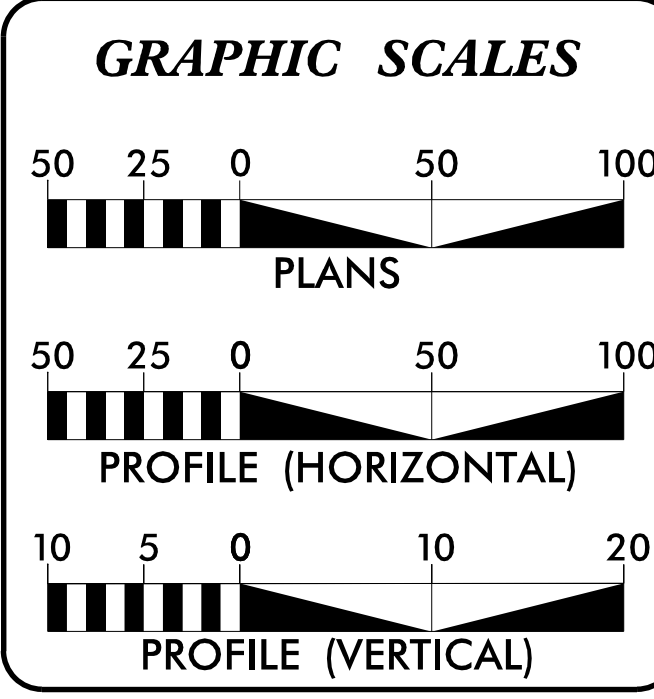
CONTRACT: C204385



NOTE: SEE SPECIAL DETAIL SHEETS 2C-1 AND 2C-2 FOR OFFSITE
DETOUR INTERSECTION IMPROVEMENTS



DOCUMENT NOT CONSIDERED FINAL
UNLESS ALL SIGNATURES COMPLETED



DESIGN DATA

ADT 2022 =	6110
ADT 2042 =	8655
K =	10 %
D =	60 %
T =	6 % *
V =	40 MPH
* TTST =	1% DUAL 5%
FUNC CLASS =	MINOR COLLECTOR REGIONAL TIER

PROJECT LENGTH

LENGTH ROADWAY TIP PROJECT B-5765 =	0.213 MILES
LENGTH STRUCTURE TIP PROJECT B-5765 =	0.030 MILES
TOTAL LENGTH TIP PROJECT B-5765 =	0.243 MILES

Prepared In the Office of:

PARRISH & PARTNERS
2018 STANDARD SPECIFICATIONS
11325 N COMMUNITY HOUSE RD
SUITE 260
CHARLOTTE, NC 28277

RIGHT OF WAY DATE:
NOVEMBER 6, 2019

LETTING DATE:
DECEMBER 20, 2022

DAVID STUTTS, PE
NCDOT CONTACT

CHAD ROGERS, PE
PROJECT ENGINEER

CURTIS HALL, PE
PROJECT DESIGN ENGINEER

HYDRAULICS ENGINEER

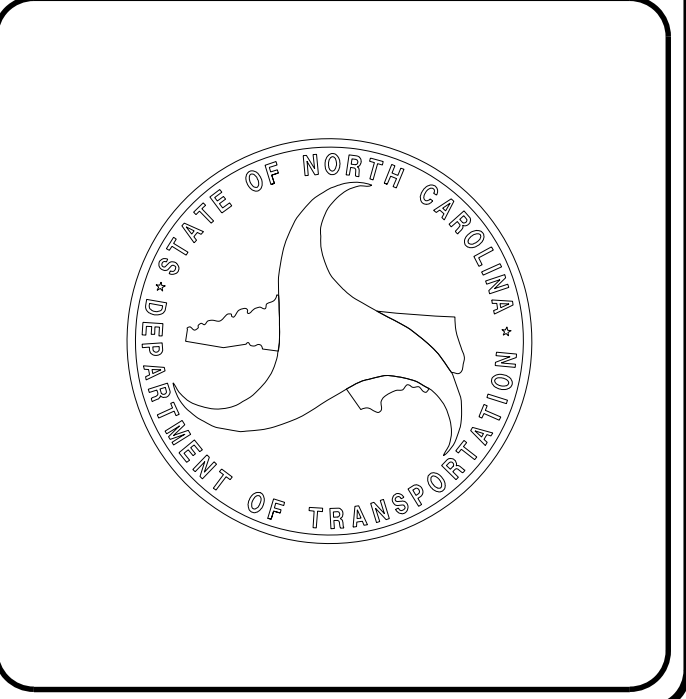
DocuSigned by:
Kevin Higgs
11/3/2022

SEAL 035700
P. E.

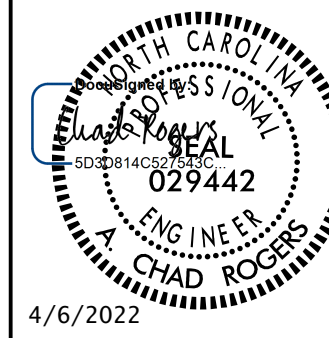

ROADWAY DESIGN ENGINEER

DocuSigned by:
Chad Rogers
11/3/2022

SEAL 029442
P. E.



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PROJECT REFERENCE NO. <i>B-5765</i>	SHEET NO. <i>1A</i>
ROADWAY DESIGN ENGINEER	
	
4/6/2022	
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	
 PARRISH & PARTNERS 11325 N COMMUNITY HOUSE RD SUITE 200 CHARLOTTE, NC 28277	

SHEET NUMBER	SHEET
1	TITLE SHEET
1A	INDEX OF SHEETS, GENERAL NOTES, AND STANDARD DRAWINGS
1B	CONVENTIONAL SYMBOLS
2A-1 THRU 2A-2	PAVEMENT SCHEDULE AND TYPICAL SECTIONS
2B-1 THRU 2B-2	SPECIAL DETAIL FOR OFFSITE DETOUR INTERSECTION IMPROVEMENTS
2C-1	REINFORCED BRIDGE APPROACH FILL TYPE III DETAIL
2C-2	STRUCTURE ANCHOR UNITS DETAIL
2C-3 THRU 2C-4	GUARDRAIL INSTALLATION DETAIL
2D-1	DRAINAGE DITCH DETAILS
3B-1	ROADWAY SUMMARIES
3D-1	DRAINAGE SUMMARIES
3G-1	GEOTECH SUMMARY SHEET
3P-1	PARCEL INDEX SHEET
4 THRU 6	PLAN AND PROFILE SHEETS
RW01 THRU RW06	R/W PLAN SHEETS
TMP-1 THRU TMP-3	TRAFFIC MANAGEMENT PLANS
PMP-1 THRU PMP-4	PAVEMENT MARKING PLANS
EC-1 THRU EC-12	EROSION CONTROL PLANS
SIGN-1 THRU SIGN-5	SIGNING PLANS
UC-1 THRU UC-8	UTILITY CONSTRUCTION PLANS
UO-1 THRU UO-4	UTILITIES BY OTHERS PLANS
X-1A THRU X-1B	CROSS-SECTION INDEX & SUMMARY SHEET
X-1 THRU X-16	CROSS-SECTIONS
S-1 THRU S-34	STRUCTURE PLANS

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 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. 560.02

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 RADIUS 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.

END BENTS:

THE ENGINEER SHALL CHECK THE STRUCTURE END BENT PLANS, DETAILS, AND CROSS-SECTION PRIOR TO SETTING OF THE SLOPE STAKES FOR THE EMBANKMENT OR EXCAVATION APPROACHING A BRIDGE.

UTILITIES:

UTILITY OWNERS ON THIS PROJECT ARE Duke Energy, Spectrum, AT&T, PNC, and Davidson County

ANY RELOCATION OF EXISTING UTILITIES WILL BE ACCOMPLISHED BY OTHERS, EXCEPT AS SHOWN ON THE PLANS.

RIGHT-OF-WAY MARKERS:

ALL RIGHT-OF-WAY MARKERS ON THIS PROJECT SHALL BE PLACED BY CONTRACT.

EFF. 01-16-2018
REV.

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
225.02 Guide for Grading Subgrade - Secondary and Local
225.04 Method of Obtaining Super-elevation - Two Lane Pavement

DIVISION 3 - PIPE CULVERTS

300.01 Method of Pipe Installation
310.10 Driveway Pipe Construction

DIVISION 5 - SUBGRADE, BASES AND SHOULDERS

560.01 Method of Shoulder Construction - High Side of Super-elevated Curve - Method I

DIVISION 6 - ASPHALT BASES AND PAVEMENTS

654.01 Pavement Repairs

DIVISION 8 - INCIDENTALS

806.01 Concrete Right-of-Way Marker
806.02 Granite Right-of-Way Marker
815.02 Subsurface Drain
840.00 Concrete Base Pad for Drainage Structures
840.14 Concrete Drop Inlet - 12" thru 30" Pipe
840.15 Brick Drop Inlet - 12" thru 30" Pipe
840.16 Drop Inlet Frame and Grates - for use with Std. Dwg. 840.14 and 840.15
840.18 Concrete Grated Drop Inlet Type 'B' - 12" thru 36" Pipe
840.24 Frames and Narrow Slot Sag Grates
840.25 Anchorage for Frames - Brick or Concrete or Precast
840.27 Brick Grated Drop Inlet Type 'B' - 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
840.35 Traffic Bearing Grated Drop Inlet - for Cast Iron Double Frame and Grates
840.45 Precast Drainage Structure
840.46 Traffic Bearing Precast Drainage Structure
840.54 Manhole Frame and Cover
840.56 Drainage Structure Steps
840.71 Concrete and Brick Pipe Plug
840.72 Pipe Collar
846.01 Concrete Curb, Gutter and Curb & Gutter
846.04 Drop Inlet Installation in Shoulder Berm Gutter
862.01 Guardrail Placement
862.02 Guardrail Installation
862.03 Structure Anchor Units
876.02 Guide for Rip Rap at Pipe Outlets
876.04 Drainage Ditches with Class 'B' Rip Rap

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

BOUNDARIES AND PROPERTY:

State Line	-----
County Line	-----
Township Line	-----
City Line	-----
Reservation Line	-----
Property Line	-----
Existing Iron Pin	○ EIP
Computed Property Corner	-----
Property Monument	□ ECM
Parcel/Sequence Number	①23
Existing Fence Line	-x-x-x-
Proposed Woven Wire Fence	○
Proposed Chain Link Fence	□
Proposed Barbed Wire Fence	◇
Existing Wetland Boundary	----- WLB
Proposed Wetland Boundary	----- WLB
Existing Endangered Animal Boundary	----- EAB
Existing Endangered Plant Boundary	----- EPB
Existing Historic Property Boundary	----- HPB
Known Contamination Area: Soil	☠-S-☠
Potential Contamination Area: Soil	☠-S-☠
Known Contamination Area: Water	☠-W-☠
Potential Contamination Area: Water	☠-W-☠
Contaminated Site: Known or Potential	☠?

BUILDINGS AND OTHER CULTURE:

Gas Pump Vent or U/G Tank Cap	○
Sign	○ S
Well	○ W
Small Mine	⊗
Foundation	□
Area Outline	□
Cemetery	□
Building	□
School	□
Church	□
Dam	□

HYDROLOGY:

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

RAILROADS:

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

RIGHT OF WAY & PROJECT CONTROL:

Secondary Horiz and Vert Control Point	◆
Primary Horiz Control Point	○
Primary Horiz and Vert Control Point	◆
Exist Permanent Easement Pin and Cap	◇
New Permanent Easement Pin and Cap	◆
Vertical Benchmark	⊠
Existing Right of Way Marker	△
Existing Right of Way Line	-----
New Right of Way Line	○ R W
New Right of Way Line with Pin and Cap	○ R W ▲
New Right of Way Line with Concrete or Granite R/W Marker	▲ R W
New Control of Access Line with Concrete C/A Marker	△ C A
Existing Control of Access	△ C A
New Control of Access	△ C A
Existing Easement Line	----- E
New Temporary Construction Easement	----- E
New Temporary Drainage Easement	----- TDE
New Permanent Drainage Easement	----- PDE
New Permanent Drainage / Utility Easement	----- DUE
New Permanent Utility Easement	----- PUE
New Temporary Utility Easement	----- TUE
New Aerial Utility Easement	----- AUE

ROADS AND RELATED FEATURES:

Existing Edge of Pavement	-----
Existing Curb	-----
Proposed Slope Stakes Cut	----- C
Proposed Slope Stakes Fill	----- F
Proposed Curb Ramp	----- CR
Existing Metal Guardrail	-----
Proposed Guardrail	-----
Existing Cable Guiderail	-----
Proposed Cable Guiderail	-----
Equality Symbol	⊕
Pavement Removal	⊗

VEGETATION:

Single Tree	☀
Single Shrub	☁

Note: Not to Scale

*S.U.E. = Subsurface Utility Engineering

Hedge	-----
Woods Line	-----
Orchard	☀ ☀ ☀ ☀
Vineyard	□ Vineyard

EXISTING STRUCTURES:

MAJOR:	
Bridge, Tunnel or Box Culvert	CONC
Bridge Wing Wall, Head Wall and End Wall	CONC WW
MINOR:	
Head and End Wall	CONC HW
Pipe Culvert	-----
Footbridge	-----
Drainage Box: Catch Basin, DI or JB	□ CB
Paved Ditch Gutter	-----
Storm Sewer Manhole	○ S
Storm Sewer	----- S

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 LOS B (S.U.E.*)	----- P
U/G Power Line LOS C (S.U.E.*)	----- P
U/G Power Line LOS D (S.U.E.*)	----- P

TELEPHONE:

Existing Telephone Pole	●
Proposed Telephone Pole	○
Telephone Manhole	⊕
Telephone Pedestal	⊞
Telephone Cell Tower	⊠
U/G Telephone Cable Hand Hole	●
U/G Telephone Cable LOS B (S.U.E.*)	----- T
U/G Telephone Cable LOS C (S.U.E.*)	----- T
U/G Telephone Cable LOS D (S.U.E.*)	----- T
U/G Telephone Conduit LOS B (S.U.E.*)	----- TC
U/G Telephone Conduit LOS C (S.U.E.*)	----- TC
U/G Telephone Conduit LOS D (S.U.E.*)	----- TC
U/G Fiber Optics Cable LOS B (S.U.E.*)	----- T FO
U/G Fiber Optics Cable LOS C (S.U.E.*)	----- T FO
U/G Fiber Optics Cable LOS D (S.U.E.*)	----- T FO

WATER:

Water Manhole	⊕
Water Meter	○
Water Valve	⊗
Water Hydrant	⊕
U/G Water Line LOS B (S.U.E.*)	----- W
U/G Water Line LOS C (S.U.E.*)	----- W
U/G Water Line LOS D (S.U.E.*)	----- W
Above Ground Water Line	----- A/G Water

TV:

TV Pedestal	⊞
TV Tower	⊗
U/G TV Cable Hand Hole	●
U/G TV Cable LOS B (S.U.E.*)	----- TV
U/G TV Cable LOS C (S.U.E.*)	----- TV
U/G TV Cable LOS D (S.U.E.*)	----- TV
U/G Fiber Optic Cable LOS B (S.U.E.*)	----- TV FO
U/G Fiber Optic Cable LOS C (S.U.E.*)	----- TV FO
U/G Fiber Optic Cable LOS D (S.U.E.*)	----- TV FO

GAS:

Gas Valve	◇
Gas Meter	⊕
U/G Gas Line LOS B (S.U.E.*)	----- G
U/G Gas Line LOS C (S.U.E.*)	----- G
U/G Gas Line LOS D (S.U.E.*)	----- G
Above Ground Gas Line	----- A/G Gas

SANITARY SEWER:

Sanitary Sewer Manhole	⊕
Sanitary Sewer Cleanout	⊕
U/G Sanitary Sewer Line	----- SS
Above Ground Sanitary Sewer	----- A/G Sanitary Sewer
SS Forced Main Line LOS B (S.U.E.*)	----- FSS
SS Forced Main Line LOS C (S.U.E.*)	----- FSS
SS Forced Main Line LOS D (S.U.E.*)	----- FSS

MISCELLANEOUS:

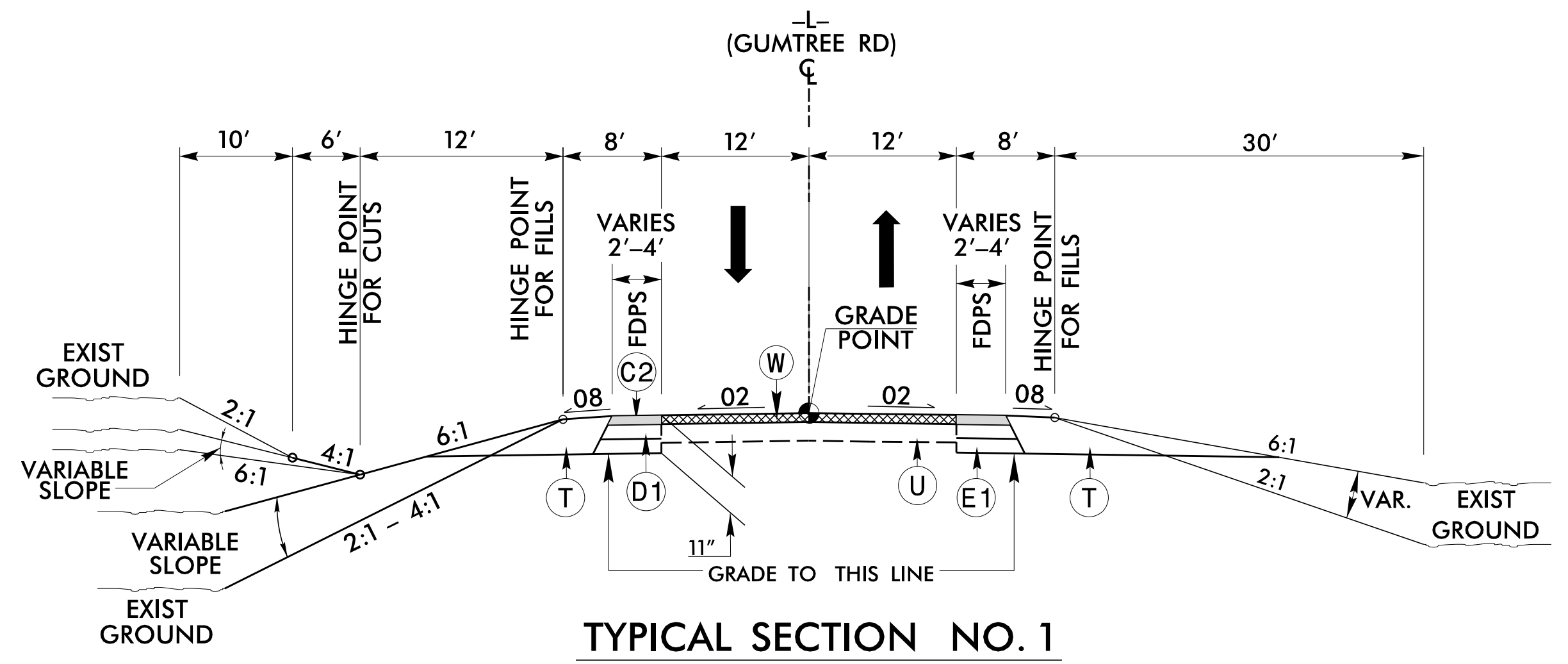
Utility Pole	●
Utility Pole with Base	□
Utility Located Object	○
Utility Traffic Signal Box	⊞
Utility Unknown U/G Line LOS B (S.U.E.*)	----- 7U/L
U/G Tank; Water, Gas, Oil	□
Underground Storage Tank, Approx. Loc.	⊞
A/G Tank; Water, Gas, Oil	□
Geoenvironmental Boring	⊗
U/G Test Hole LOS A (S.U.E.*)	●
Abandoned According to Utility Records	AATUR
End of Information	E.O.I.

6/2/2022

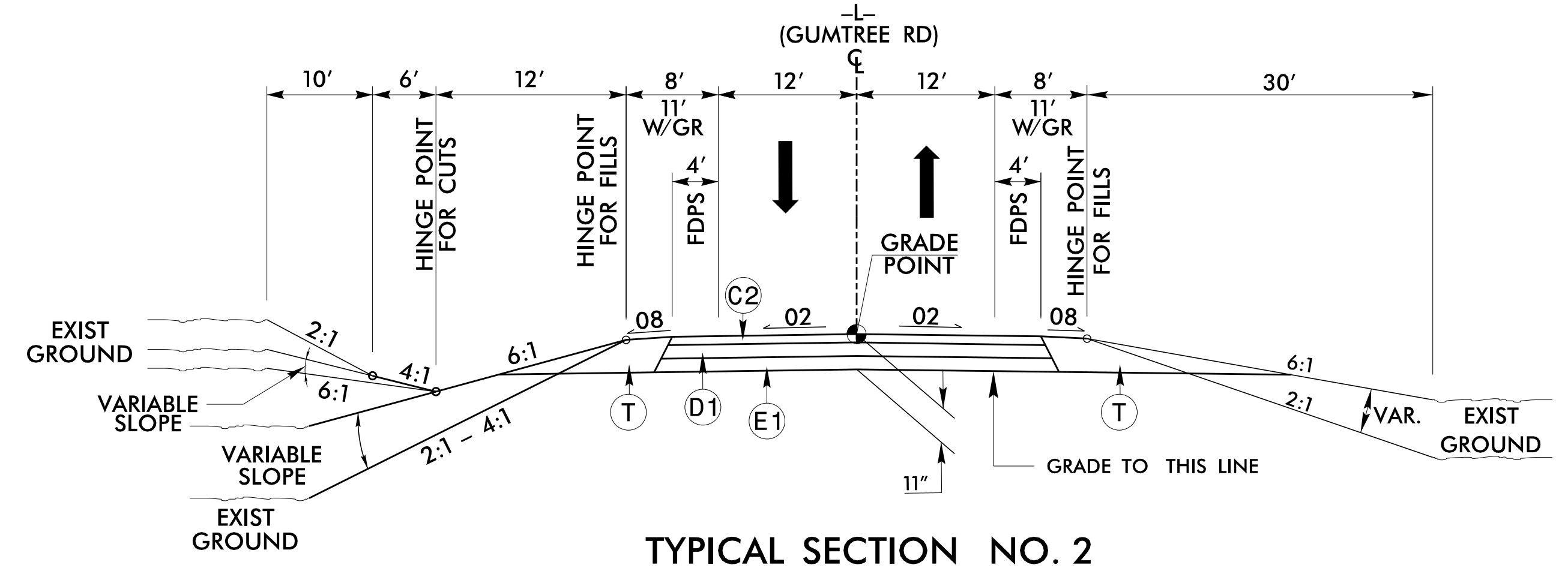
FINAL PAVEMENT SCHEDULE

A	6" JOINTED CONCRETE REINFORCED WITH 4x4 W3xW3 WELDED WIRE MESH.
C1	PROP. APPROX. 2" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5B, AT AN AVERAGE RATE OF 220 LBS. PER SQ. YD.
C2	PROP. APPROX. 3" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5B, AT AN AVERAGE RATE OF 165 LBS. PER SQ. YD. IN EACH OF THE TWO LAYERS.
C3	PROP. VAR. DEPTH ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5B, AT AN AVERAGE RATE OF 110 LBS. PER SQ. YARD PER 1" DEPTH TO BE PLACED IN LAYERS NOT TO EXCEED 2" IN DEPTH.
D1	PROP. APPROX. 4" ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE I19.0C, AT AN AVERAGE RATE OF 456 LBS. PER SQ. YD.
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 1/2" 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. YD.
J	PROP. 8" AGGREGATE BASE COURSE.
R1	SHOULDER BERM GUTTER
T	EARTH MATERIAL
U	EXISTING PAVEMENT
W	VARIABLE DEPTH ASPHALT PAVEMENT (SEE WEDGING DETAIL)

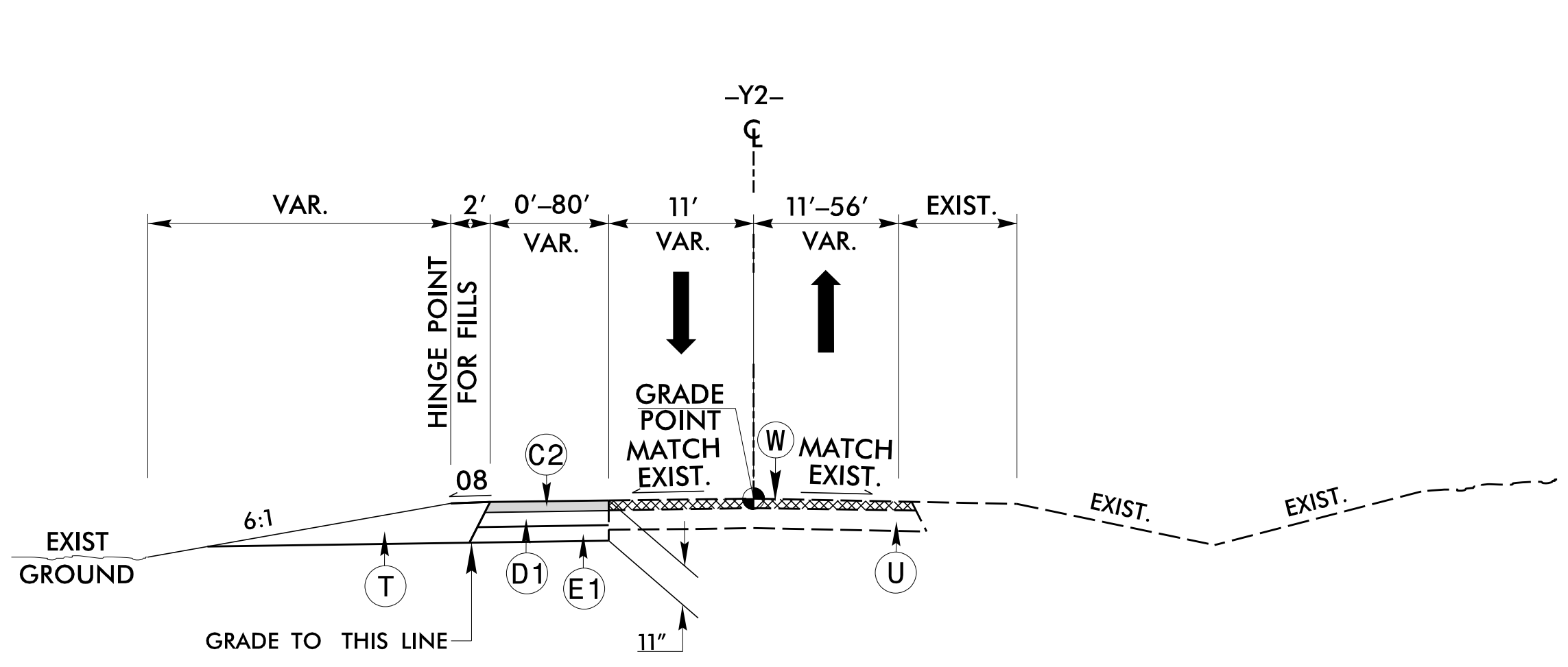
NOTE: PAVEMENT EDGE SLOPES ARE 1:1 UNLESS SHOWN OTHERWISE.



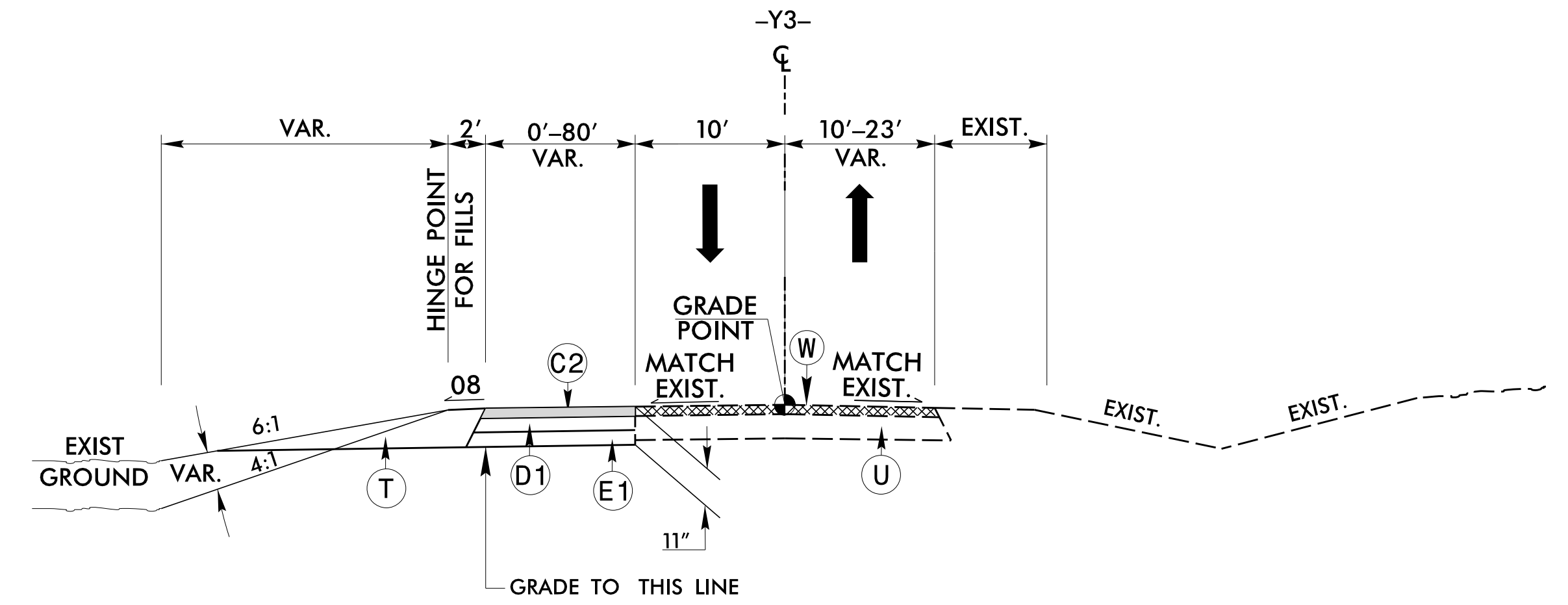
TYPICAL SECTION NO. 1
 -L-
 -L- STA. 12+80.00 TO 13+50.00
 -L- STA. 22+50.00 TO 25+65.00



TYPICAL SECTION NO. 2
 -L-
 -L- STA. 13+50.00 TO 17+91.54
 -L- STA. 19+48.04 TO 22+50.00



TYPICAL SECTION NO. 3
 -Y2-
 -Y2- STA. 11+83.00 TO 14+17.20



TYPICAL SECTION NO. 4
 -Y3-
 -Y3- STA. 11+02.00 TO 13+29.59

PROJECT REFERENCE NO. B-5765	SHEET NO. 2A-1
ROADWAY DESIGN ENGINEER CHAD ROBERTSON Professional Engineer License No. 029442 11/3/2022	PAVEMENT DESIGN ENGINEER CLARK S. MORRISON Professional Engineer License No. 022896 11/4/2022
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	
 11325 N COMMUNITY HOUSE RD SUITE 250 CHARLOTTE, NC 28277	

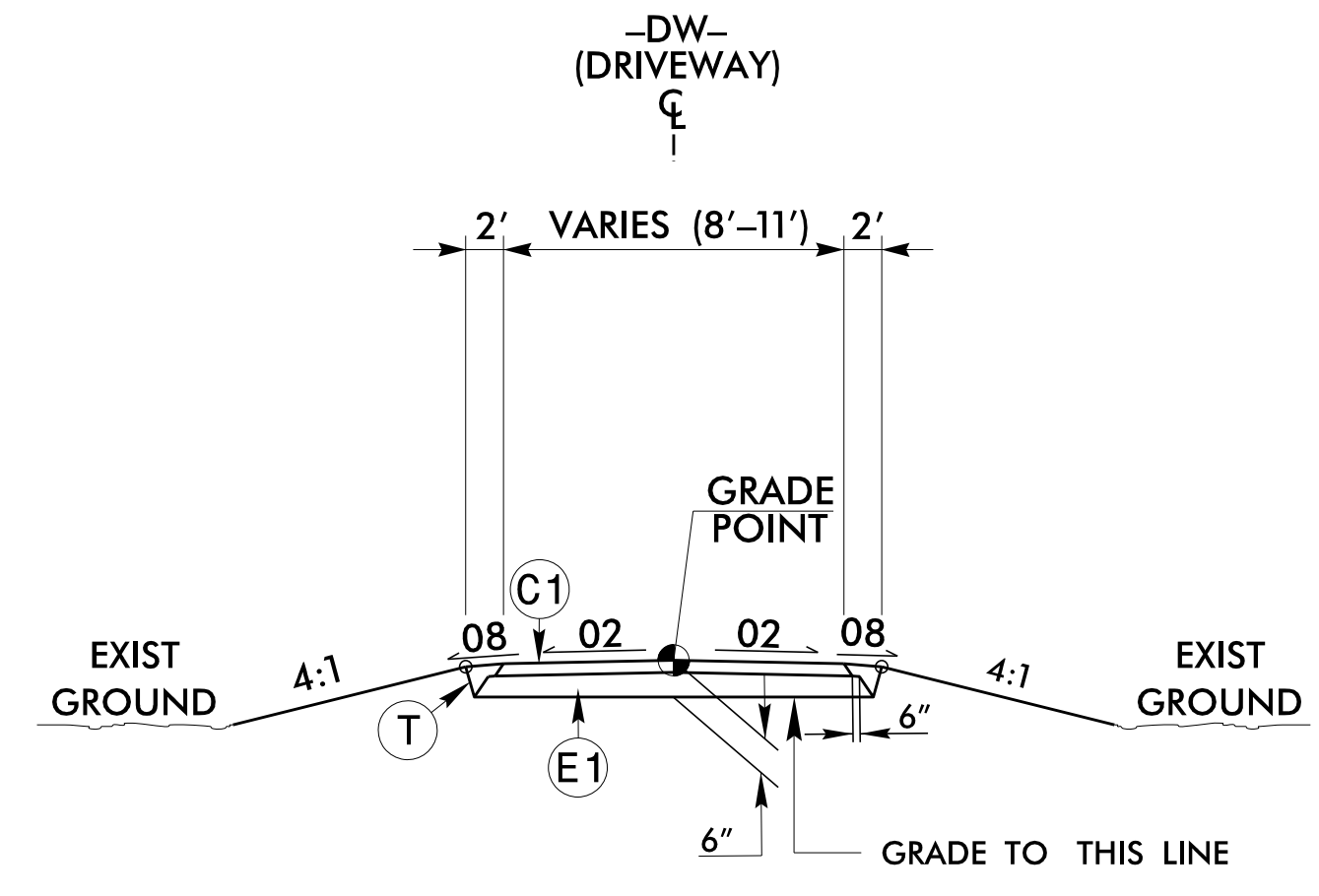
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6/2/2019

FINAL PAVEMENT SCHEDULE

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T	EARTH MATERIAL
U	EXISTING PAVEMENT
W	VARIABLE DEPTH ASPHALT PAVEMENT (SEE WEDGING DETAIL)

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

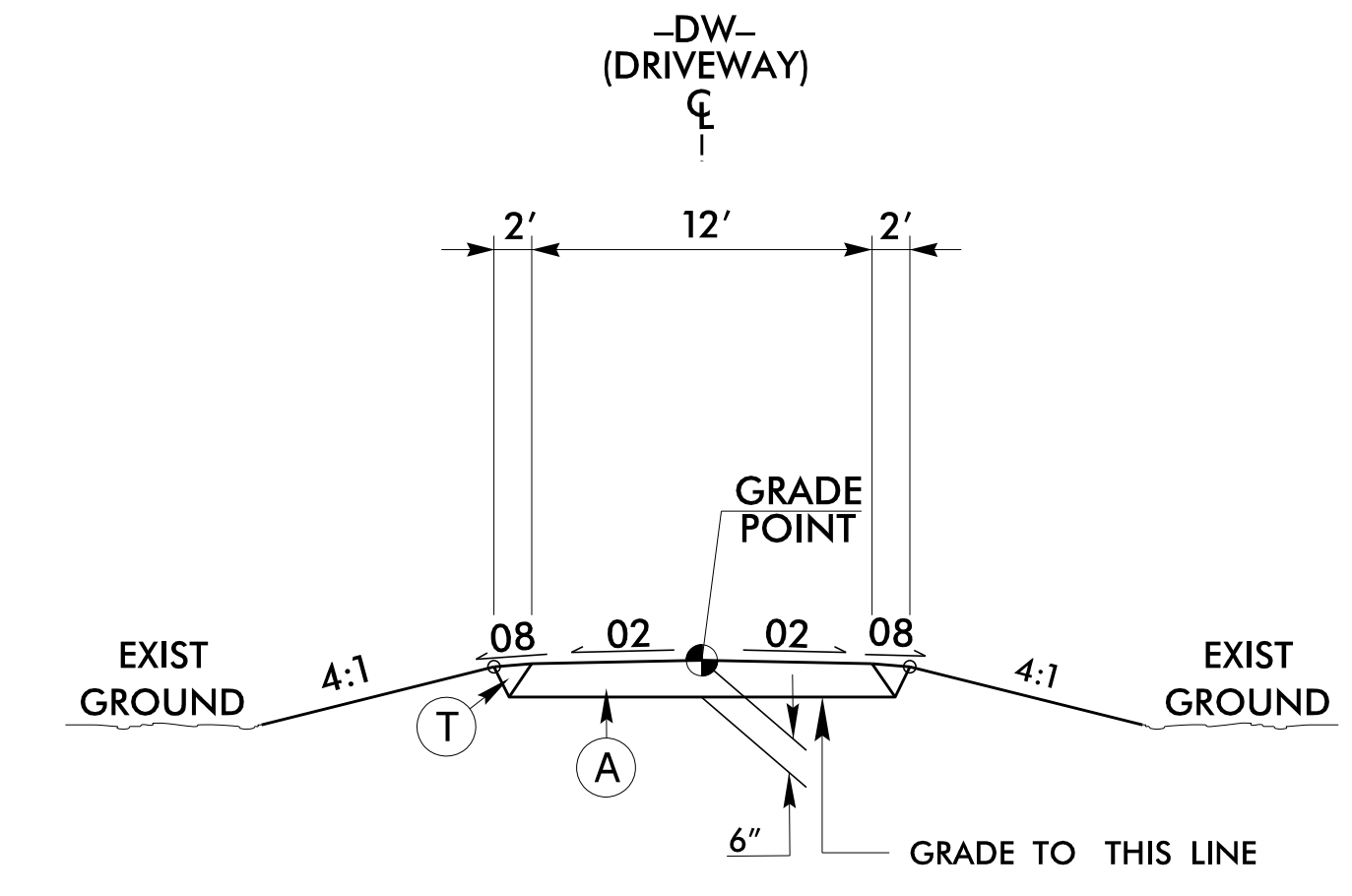


TYPICAL SECTION NO. 5

-DW-

(FOR ASPHALT DRIVEWAYS)

- DW2- STA. 10+00.00 TO 11+04.09
- DW4- STA. 10+55.00 TO 25+65.00
- DW5- STA. 10+80.00 TO 12+97.18

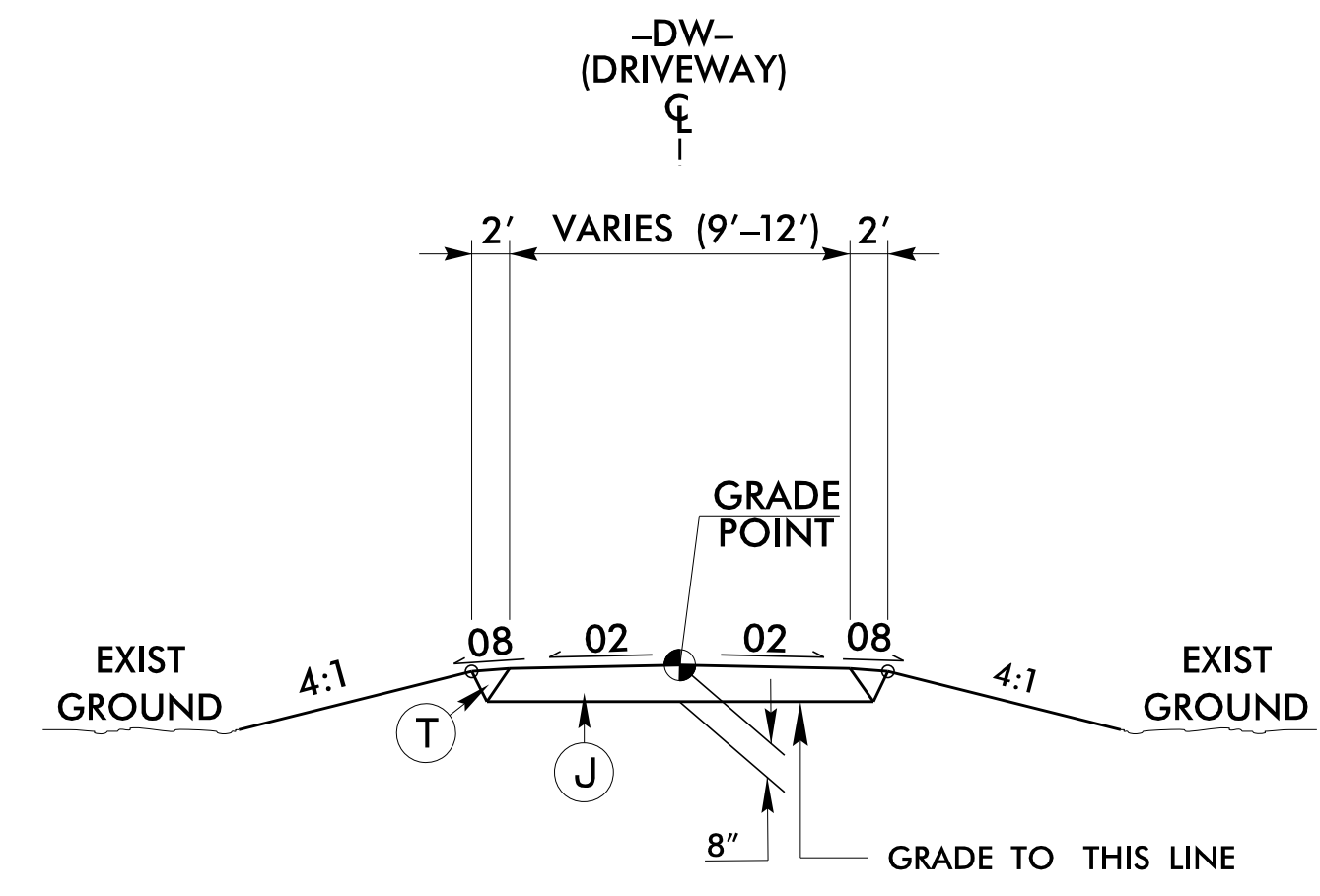


TYPICAL SECTION NO. 6

-DW-

(FOR CONCRETE DRIVEWAYS)

- DW3- STA. 10+15.00 TO 11+70.00

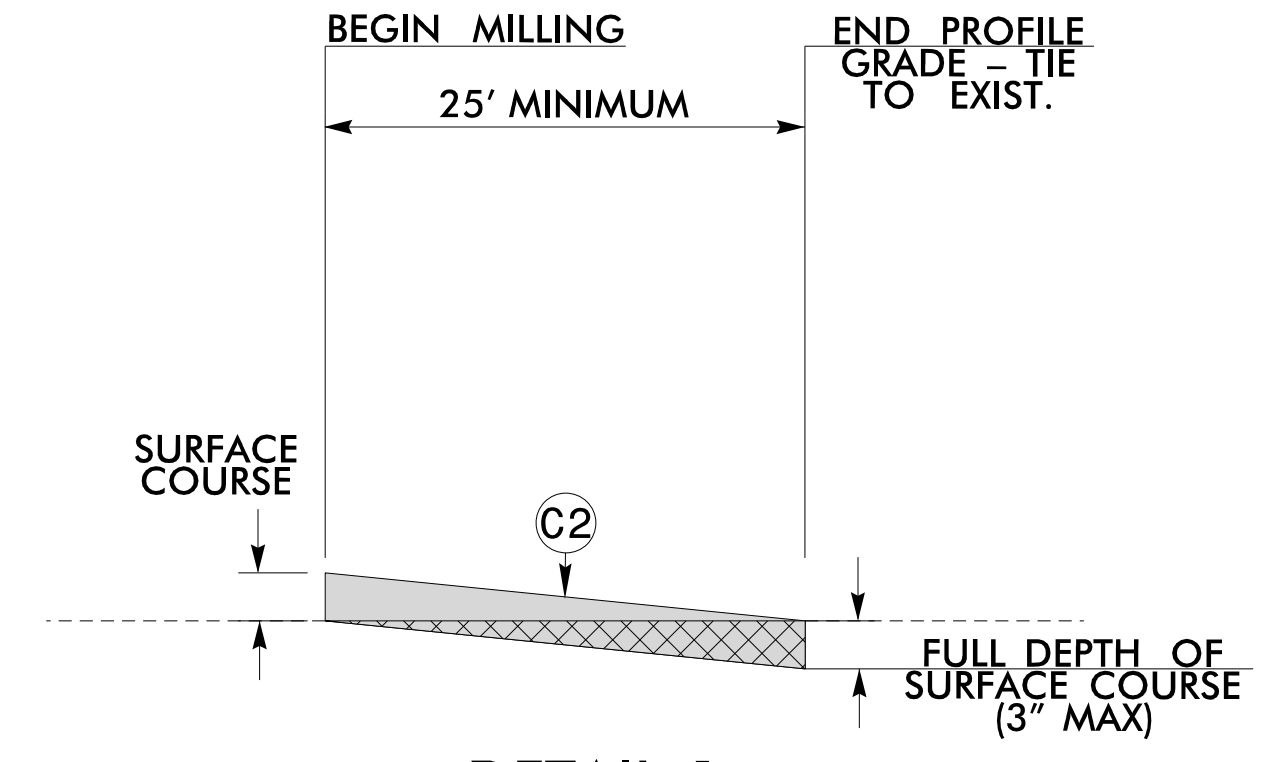


TYPICAL SECTION NO. 7

-DW-

(FOR GRAVEL DRIVEWAYS)

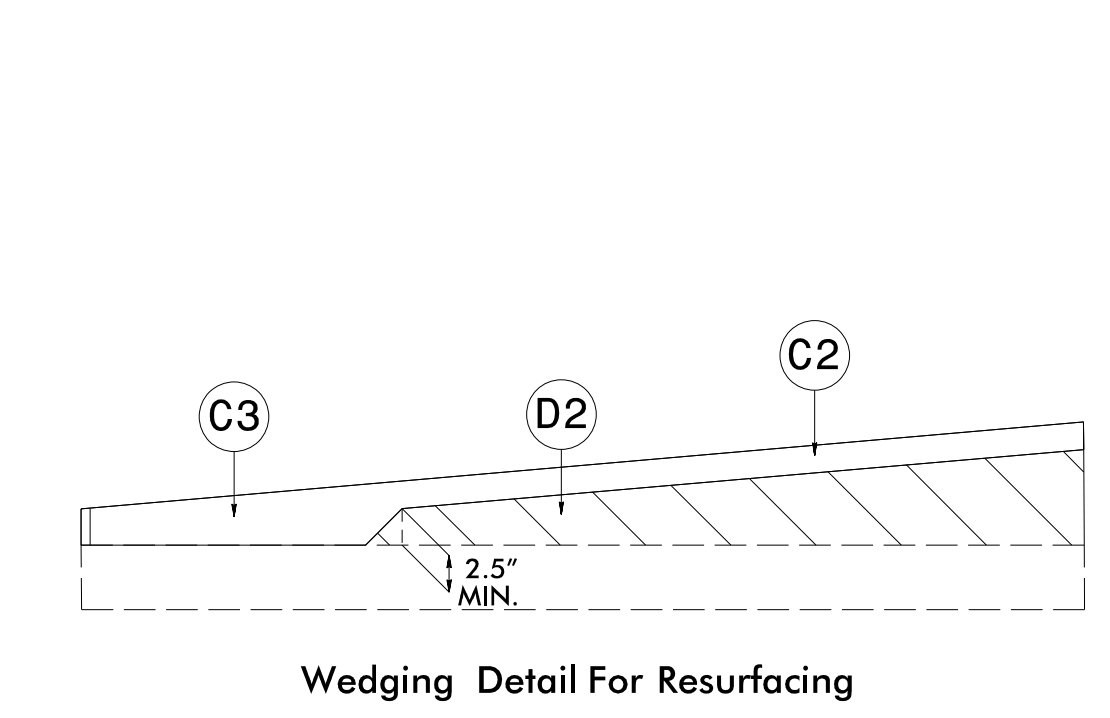
- DW1- STA. 10+00.00 TO 10+71.66



DETAIL 1

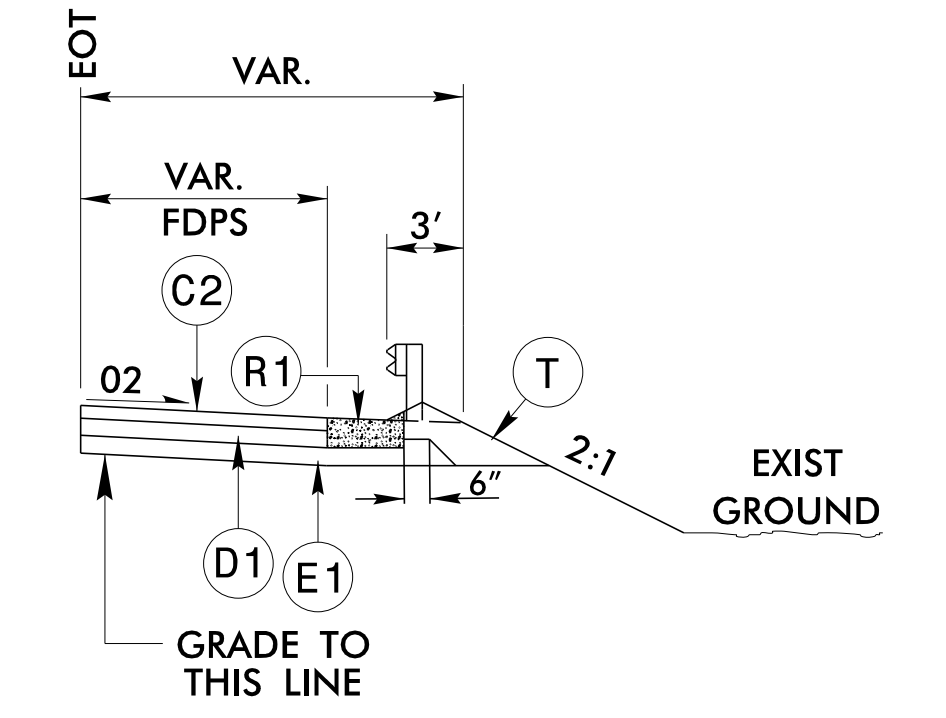
INCIDENTAL MILLING DETAIL
SEE PROFILE FOR LIMITS

- L- STA. 12+80.00 TO 13+50.00
- L- STA. 22+50.00 TO 25+65.00
- Y2- STA. 11+83.00 TO 12+80.00
- Y3- STA. 11+02.00 TO 13+29.59



DETAIL 2

Wedging Detail For Resurfacing



DETAIL NO. 3

SHOULDER BERM GUTTER

- L- STA. 17+20.00 TO 17+76.24 LT
- L- STA. 19+82.74 TO 21+70.00 LT

PROJECT REFERENCE NO. B-5765	SHEET NO. 2A-2
ROADWAY DESIGN ENGINEER 	PAVEMENT DESIGN ENGINEER
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	
 PARRISH & PARTNERS 11325 N COMMUNITY HOUSE RD SUITE 250 CHARLOTTE, NC 28277	

11/3/2022 11:34:33 AM B-5765.RDY_TYP.dgn

8/17/99

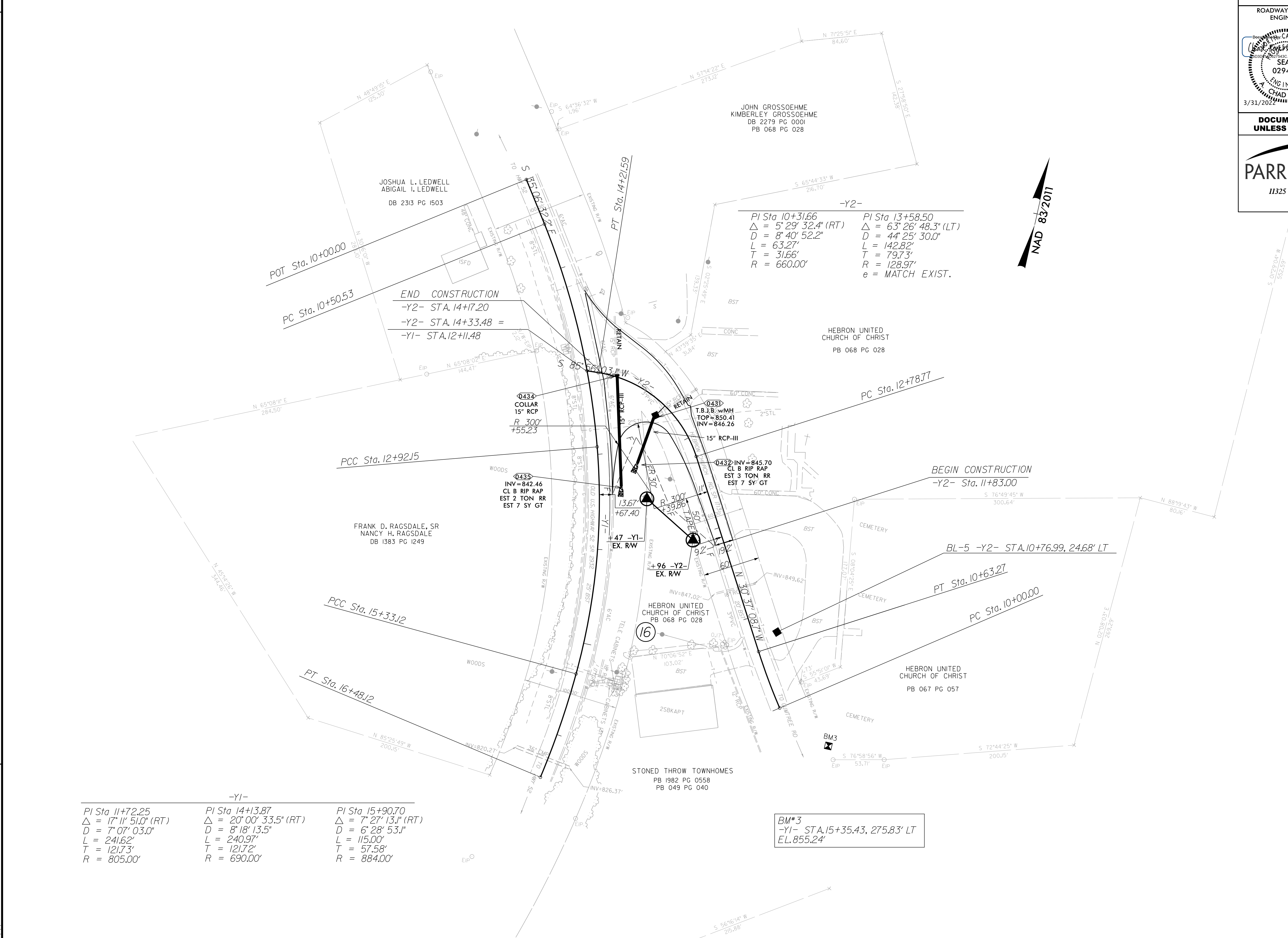
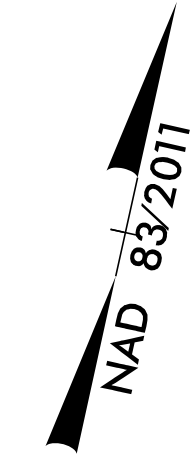
OFFSITE DETOUR IMPROVEMENTS TO THE INTERSECTION OF OLD US 52 AND SR 1713 (HEBRON CHURCH ROAD)

PROJECT REFERENCE NO. B-5765	SHEET NO. 2B-1
RW SHEET NO.	
ROADWAY DESIGN ENGINEER A. CHAD ROGERS SEAL 029442 3/31/2022	HYDRAULICS ENGINEER MAYN P. HIGSON SEAL 035700 3/31/2022
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	
<p>PARRISH & PARTNERS 11325 N COMMUNITY HOUSE RD SUITE 260 CHARLOTTE, NC 28277</p>	

REVISIONS

-Y1-		
PI Sta 11+72.25	PI Sta 14+13.87	PI Sta 15+90.70
$\Delta = 17^{\circ} 11' 51.0"$ (RT)	$\Delta = 20^{\circ} 00' 33.5"$ (RT)	$\Delta = 7^{\circ} 27' 13.1"$ (RT)
D = 7' 07' 03.0"	D = 8' 18' 13.5"	D = 6' 28' 53.1"
L = 241.62'	L = 240.97'	L = 115.00'
T = 121.73'	T = 121.72'	T = 57.58'
R = 805.00'	R = 690.00'	R = 884.00'

-Y2-	
PI Sta 10+31.66	PI Sta 13+58.50
$\Delta = 5^{\circ} 29' 32.4"$ (RT)	$\Delta = 63^{\circ} 26' 48.3"$ (LT)
D = 8' 40' 52.2"	D = 44' 25' 30.0"
L = 63.27'	L = 142.82'
T = 31.66'	T = 79.73'
R = 660.00'	R = 128.97'
e = MATCH EXIST.	



BM*3
-Y1- STA. 15+35.43, 275.83' LT
E.L. 855.24'

NOTES:
SEE SHEET 6 FOR -Y2- PROFILE

3/22/2022
1:34:50 PM
PARRISH & PARTNERS
AB-5765-RDY-2B-1.dgn

8/17/99

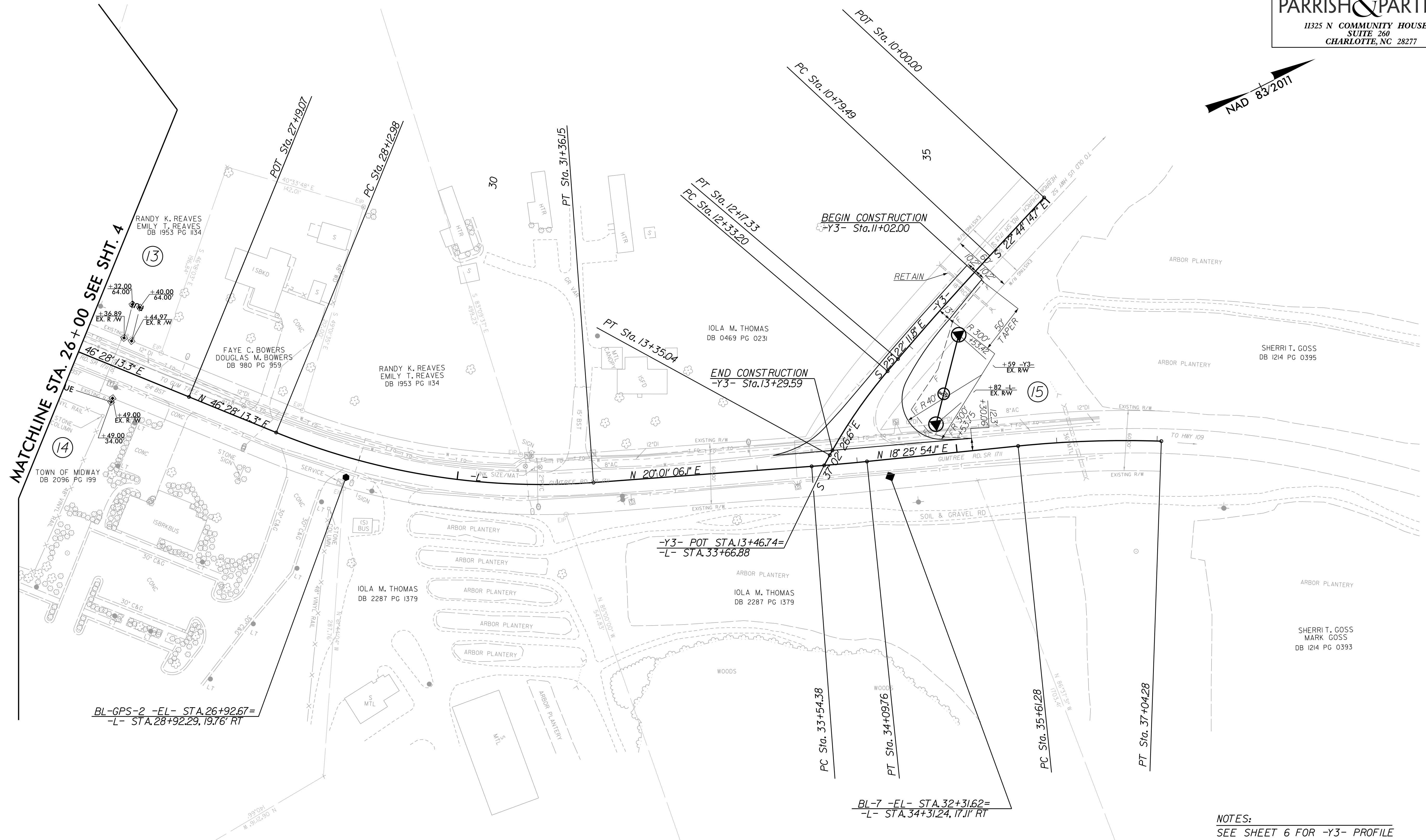
OFFSITE DETOUR IMPROVEMENTS TO THE INTERSECTION OF SR 1711 (GUMTREE ROAD) AND SR 1713 (HEBRON CHURCH ROAD)

PROJECT REFERENCE NO. B-5765	SHEET NO. 2B-2
RW SHEET NO.	
ROADWAY DESIGN ENGINEER SEAL 029442 A. CHAD ROGERS 3/31/2022	HYDRAULICS ENGINEER SEAL 035700 KATHY P. HIGGINS 3/31/2022
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	
<p>PARRISH & PARTNERS 11325 N COMMUNITY HOUSE RD SUITE 260 CHARLOTTE, NC 28277</p>	

-L-		
PI Sta 29+77.49	PI Sta 33+82.07	PI Sta 36+32.89
$\Delta = 26' 27".072"$ (LT)	$\Delta = 1' 35".120"$ (LT)	$\Delta = 7' 48".113"$ (RT)
D = 8' 11".064"	D = 2' 51".532"	D = 5' 27".243"
L = 323.17'	L = 55.39'	L = 143.00'
T = 164.52'	T = 27.69'	T = 71.61'
R = 700.00'	R = 2,000.00'	R = 1,050.00'

-Y3-	
PI Sta 11+48.42	PI Sta 12+84.30
$\Delta = 2' 37".571"$ (LT)	$\Delta = 11' 40".148"$ (LT)
D = 1' 54".355"	D = 11' 27".330"
L = 137.84'	L = 101.85'
T = 68.93'	T = 51.10'
R = 3,000.00'	R = 500.00'
e = MATCH EXIST.	e = MATCH EXIST.

REVISIONS



MATCHLINE STA. 26+00 SEE SHT. 4

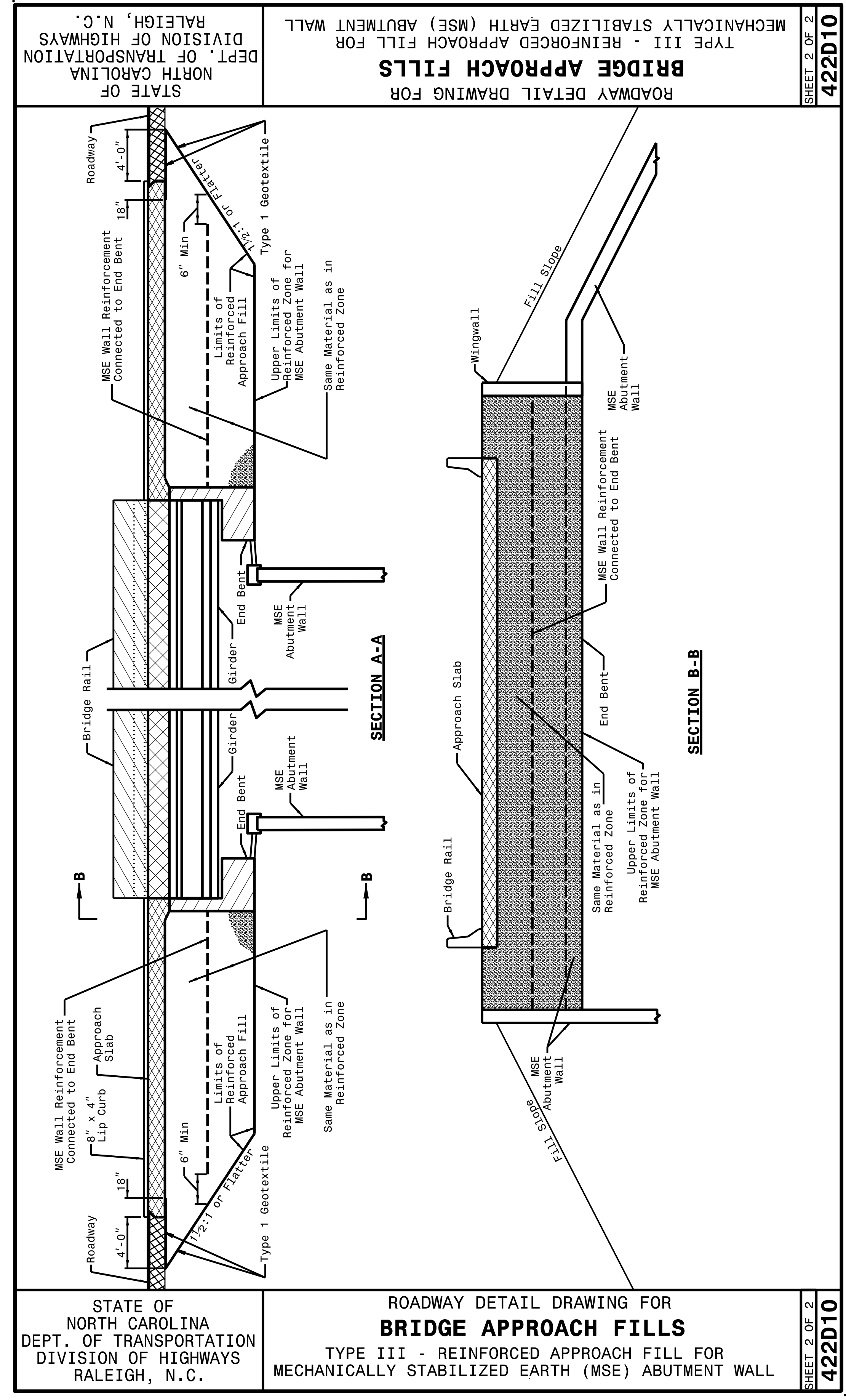
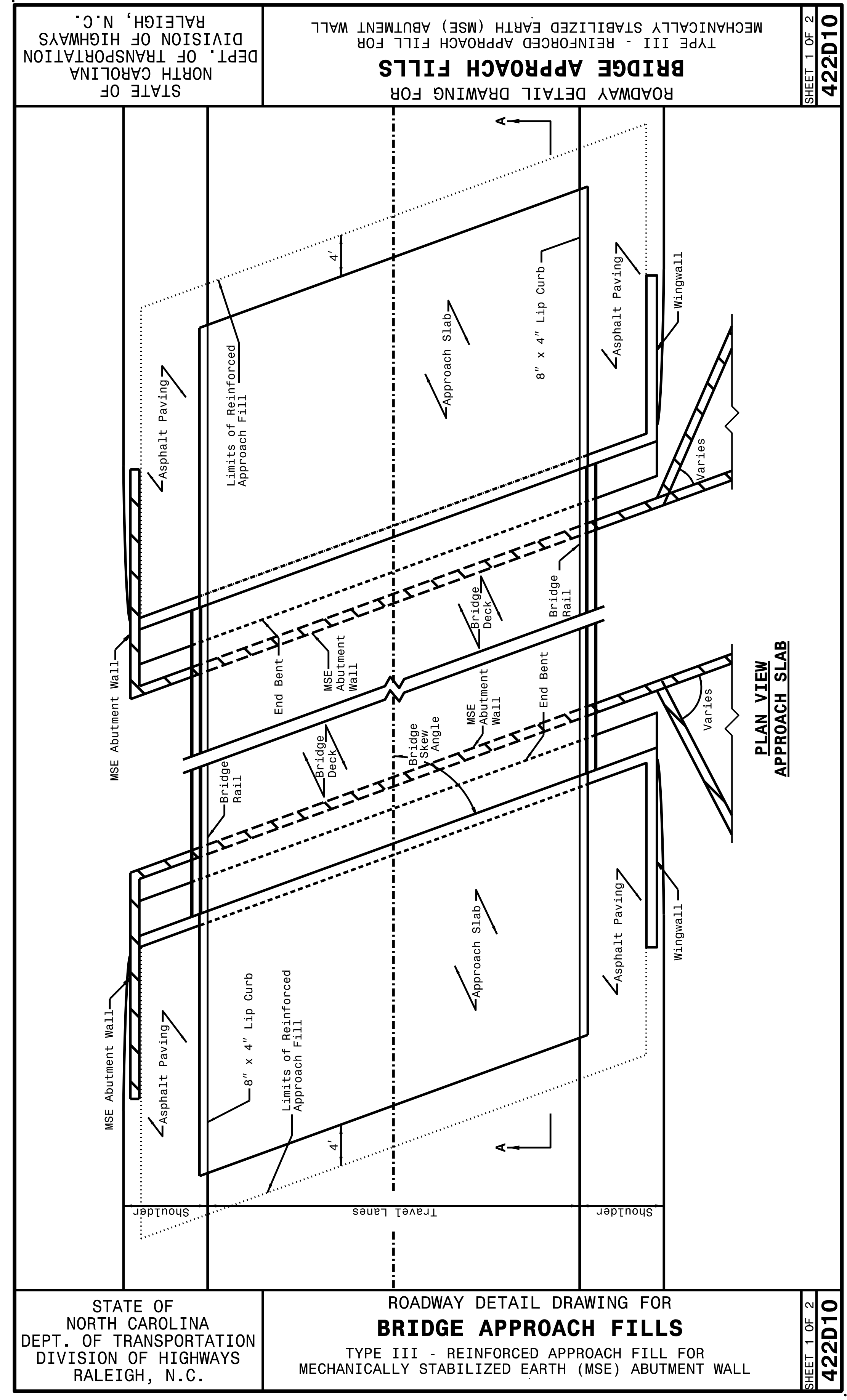
BL-GPS-2 -EL- STA. 26+92.67=
-L- STA. 28+92.29, 19.76' RT

-Y3- POT STA. 13+46.74=
-L- STA. 33+66.88

BL-7 -EL- STA. 32+31.62=
-L- STA. 34+31.24, 17.11' RT

NOTES:
SEE SHEET 6 FOR -Y3- PROFILE

3/22/2022
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1:38:05 PM



3/31/2022

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

**TYPE III
REINFORCED
APPROACH FILLS**

ORIGINAL BY: K. A. KEMPF DATE: JULY 2017
 MODIFIED BY: DATE:
 CHECKED BY: DATE:
 FILE SPEC.: 2018 standard drawings\division 422d10.dgn

I4-DEC-2017 10:36
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 Jhowerton AT: USD-292595

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

ROADWAY DETAIL DRAWING FOR
STRUCTURE ANCHOR UNITS
GUARDRAIL ANCHOR UNIT, TYPE III
FOR ATTACHMENT TO RAIL ON BRIDGE

SHEET 1 OF 7
862D03

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

**ROADWAY DETAIL DRAWING FOR
STRUCTURE ANCHOR UNITS
GUARDRAIL ANCHOR UNIT, TYPE III
FOR ATTACHMENT TO RAIL ON BRIDGE**

ELEVATION

PLAN VIEW

NOTE:

- **POST NOT REQUIRED FOR SKEW ANGLES GREATER THAN 150° OR LESS THAN 30° UNLESS OTHERWISE DIRECTED BY THE ENGINEER.
- *THE DISTANCE FROM END OF BRIDGE RAIL TO CENTER LINE OF THE FIRST POST SHOULD BE 11½" IF CONCRETE BACKWALL IS NOT PRESENT.
- SHOULDER BERM GUTTER MUST BE INSTALLED TO THE LIMITS 8" x 4" LIP CURB IS SHOWN IF ANCHOR UNIT IS NOT ADJACENT TO AN APPROACH SLAB.
- MEASURE GUARDRAIL HEIGHT FROM THE TOP OF ADJACENT SURFACE (SHOULDER, BERM, OR GUTTER).
- LAP JOINTS IN THE DIRECTION OF TRAFFIC FLOW.
- SEE SHEET 3 FOR POST SECTIONS 1 THRU 9.

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

ROADWAY DETAIL DRAWING FOR
STRUCTURE ANCHOR UNITS
GUARDRAIL ANCHOR UNIT, TYPE III FOR ATTACHMENT TO
RAIL ON BRIDGE - SUB REGIONAL TIER

SHEET 1 OF 7
862D03

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

**ROADWAY DETAIL DRAWING FOR
STRUCTURE ANCHOR UNITS
GUARDRAIL ANCHOR UNIT, TYPE III FOR ATTACHMENT TO
RAIL ON BRIDGE - SUB REGIONAL TIER**

ELEVATION

PLAN VIEW

NOTE:

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- SHOULDER BERM GUTTER MUST BE INSTALLED TO THE LIMITS 8" x 4" LIP CURB IS SHOWN IF ANCHOR UNIT IS NOT ADJACENT TO AN APPROACH SLAB.
- MEASURE GUARDRAIL HEIGHT FROM THE TOP OF ADJACENT SURFACE (SHOULDER, BERM, OR GUTTER).
- LAP JOINTS IN THE DIRECTION OF TRAFFIC FLOW.
- SEE SHEET 3 FOR POST SECTIONS 1 THRU 9.

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

SEE TITLE BLOCK

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DATE: 06-22-12

MODIFIED BY:

DATE:

CHECKED BY:

DATE:

FILE SPEC.:

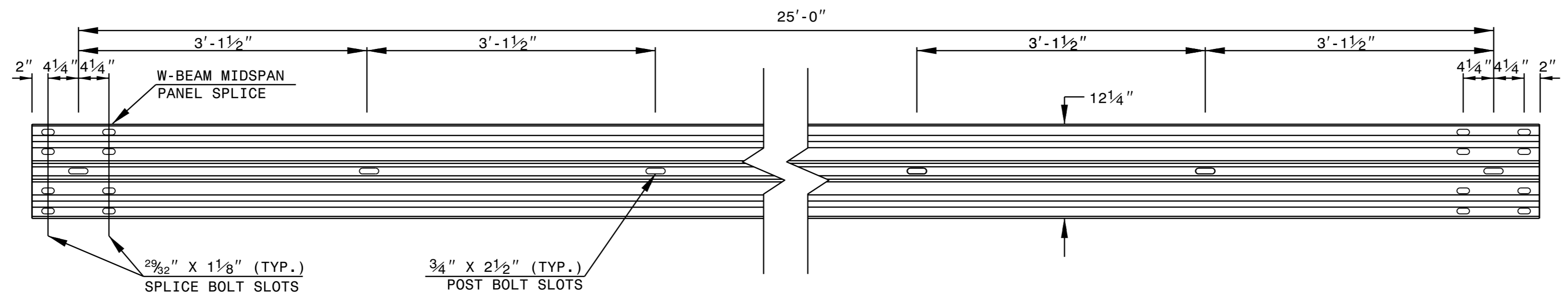
3/31/2022

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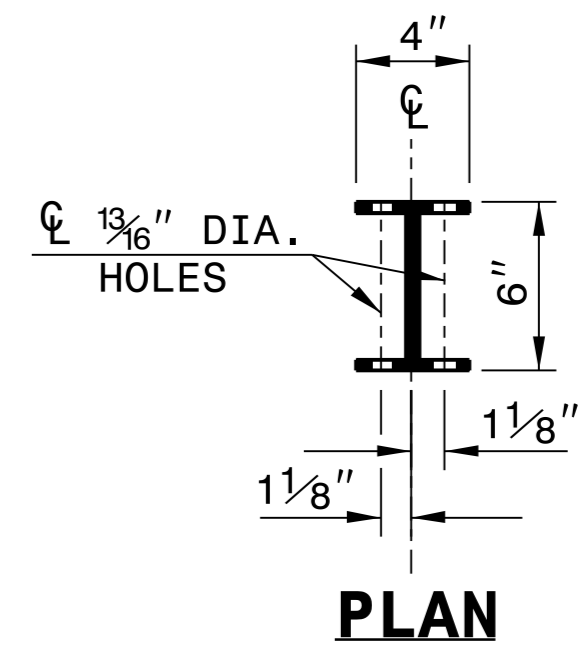
STATE OF NORTH CAROLINA
DEPT. OF TRANSPORTATION
DIVISION OF HIGHWAYS
RALEIGH, N.C.

ROADWAY DETAIL DRAWING FOR
GUARDRAIL INSTALLATION

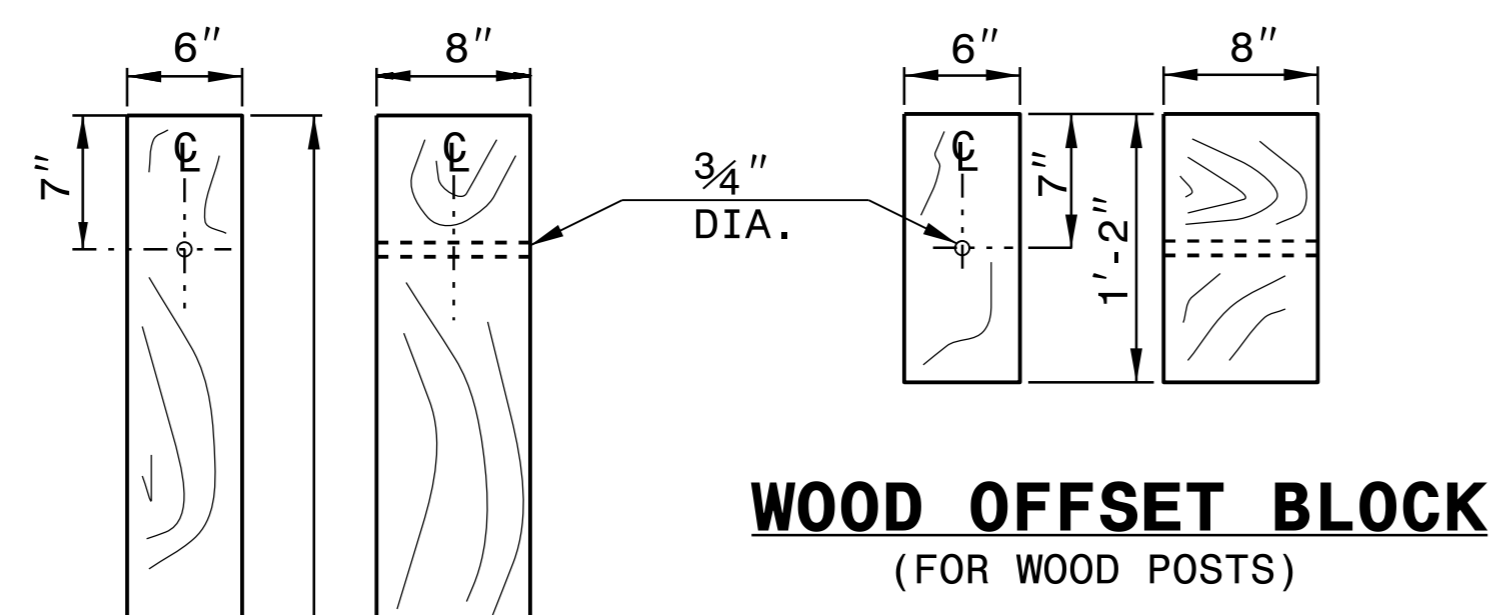
SHEET 6 OF 8
862D02



STANDARD W-BEAM GUARDRAIL



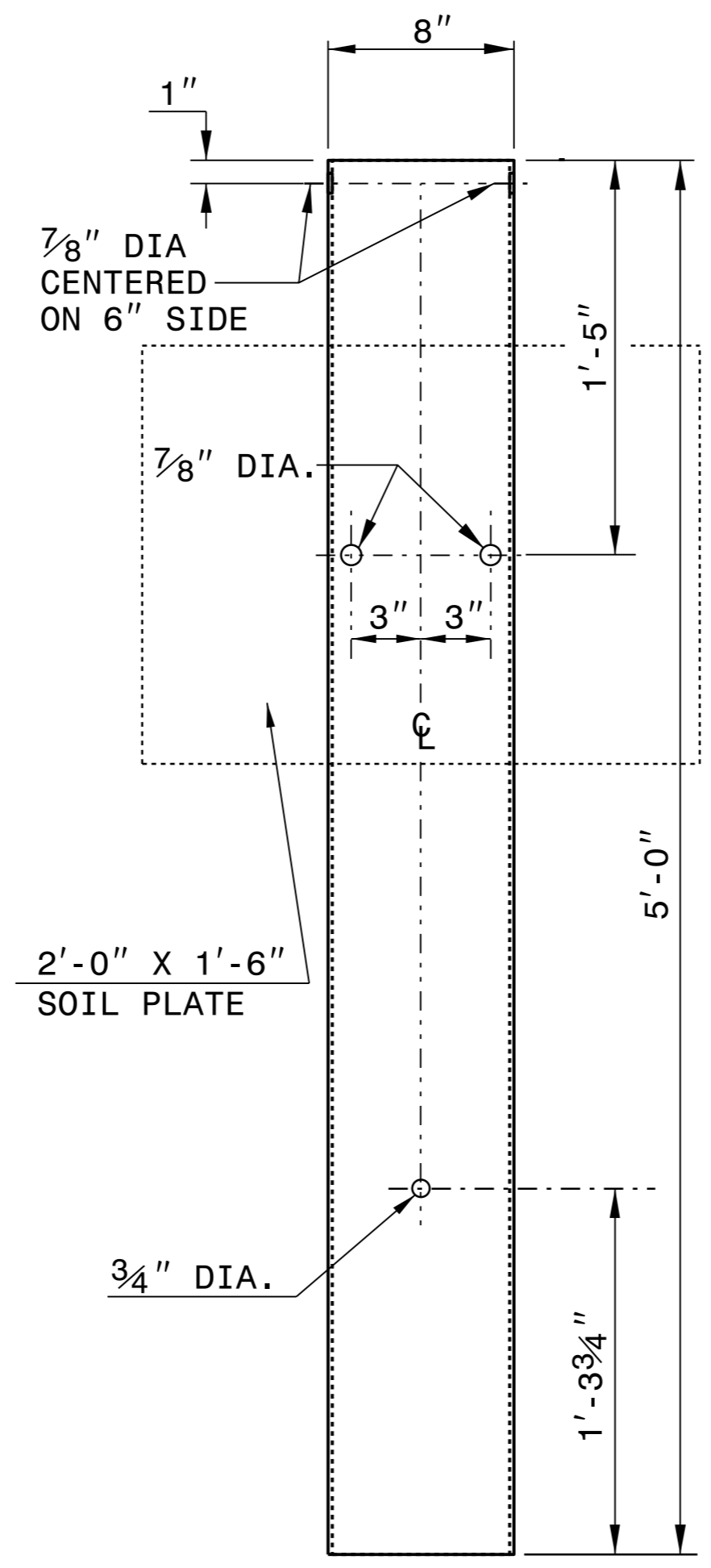
PLAN



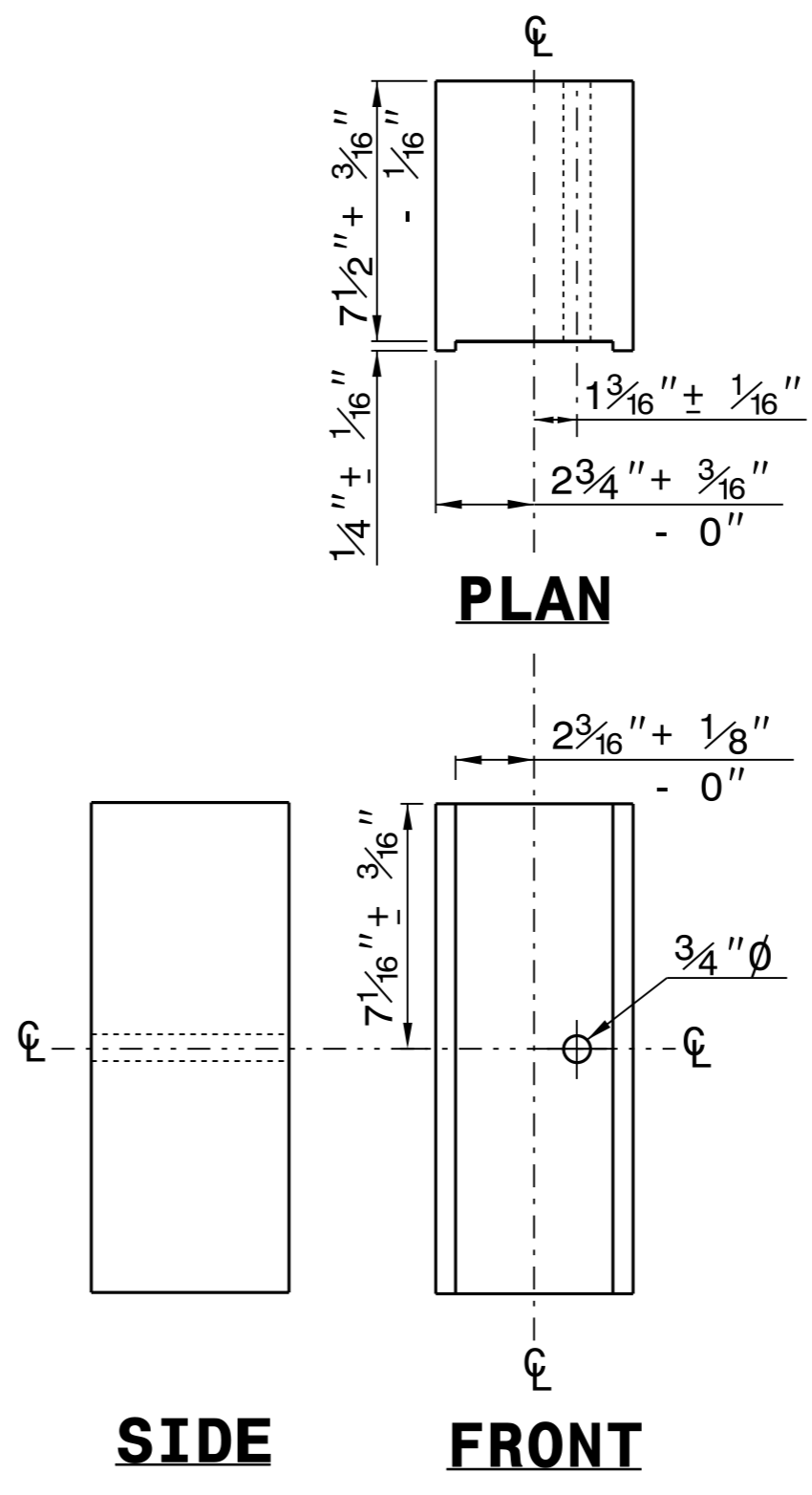
**WOOD OFFSET BLOCK
(FOR WOOD POSTS)**

**STANDARD
LINE POST**

**SHORT WOOD
BREAKAWAY POST**



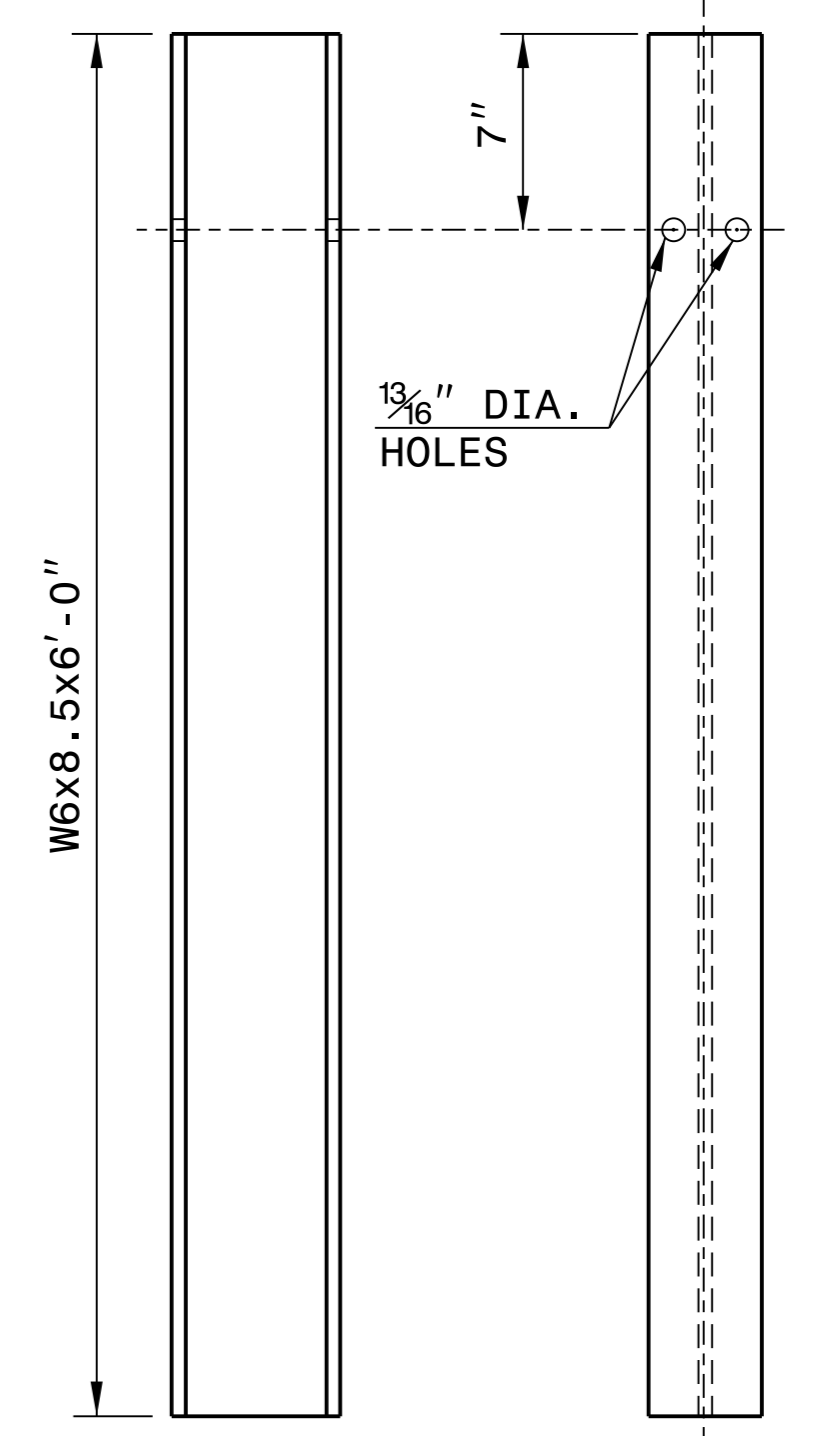
**STEEL TUBE
TS 6"x8"x0.1875"**



SIDE

FRONT

**ROUTED
OFFSET BLOCK**



SIDE

FRONT

"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



3/31/2022

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

SEE TITLE BLOCK

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

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

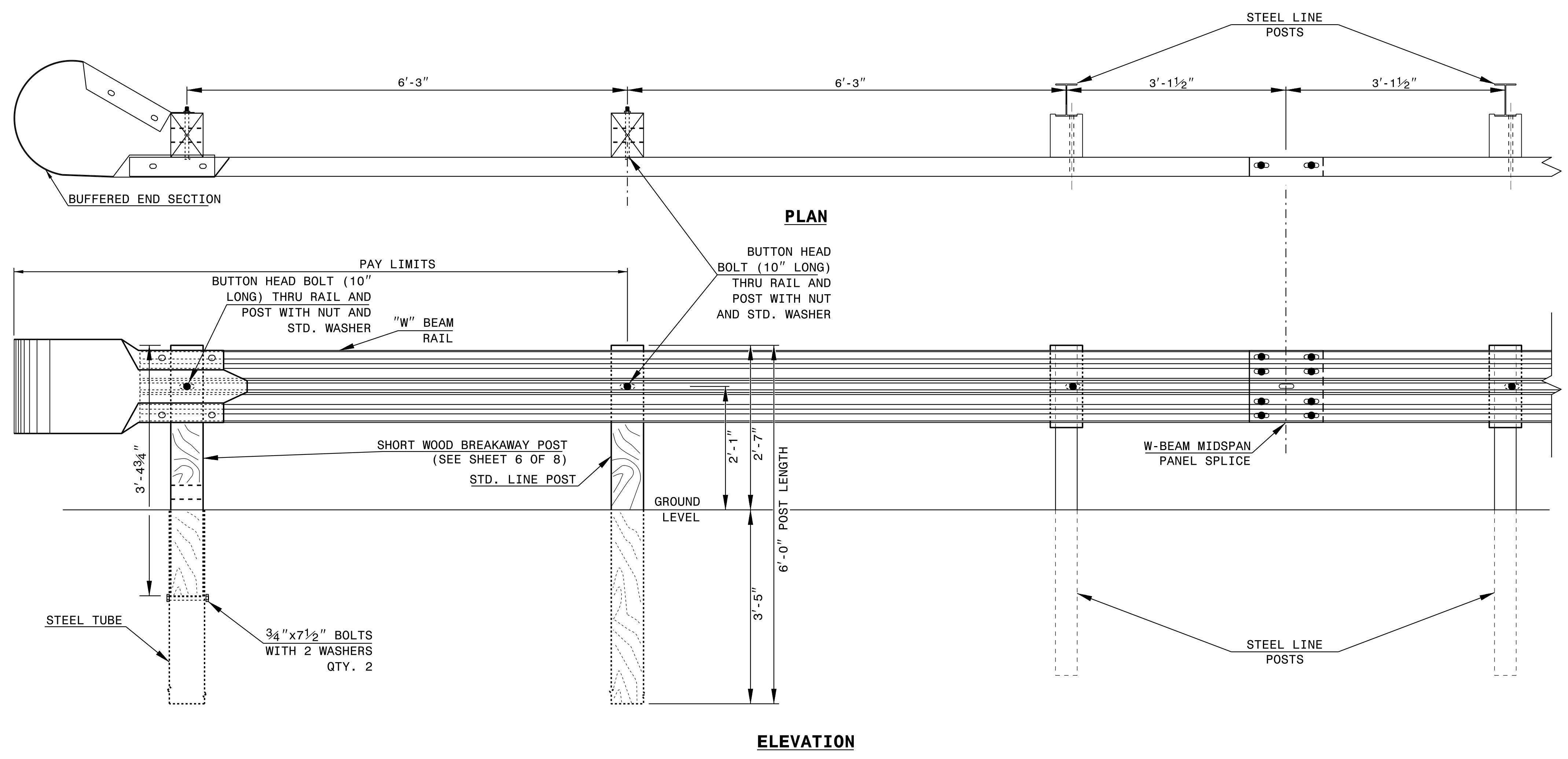
ROADWAY DETAIL DRAWING FOR
GUARDRAIL INSTALLATION

SHEET OF

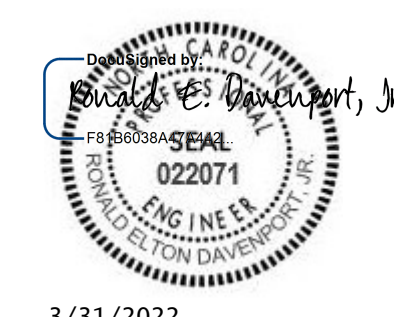
STATE OF
NORTH CAROLINA
DEPT. OF TRANSPORTATION
DIVISION OF HIGHWAYS
RALEIGH, N.C.

ROADWAY DETAIL DRAWING FOR
GUARDRAIL INSTALLATION

SHEET OF



TRAILING END UNIT ASSEMBLY
A.T. - 1 SYSTEM



3/31/2022

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**CONTRACTS STANDARDS
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A.T. - 1 SYSTEM

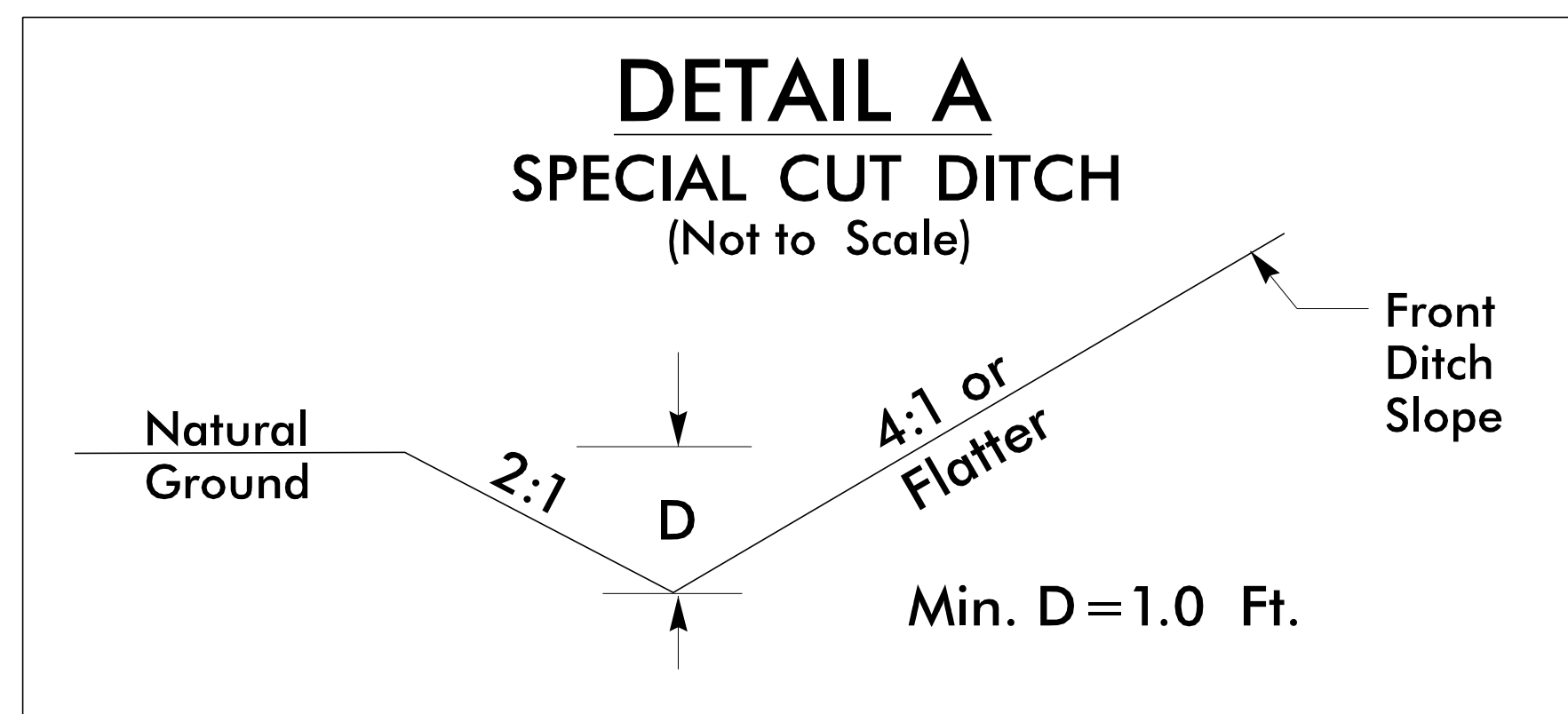
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5/14/19

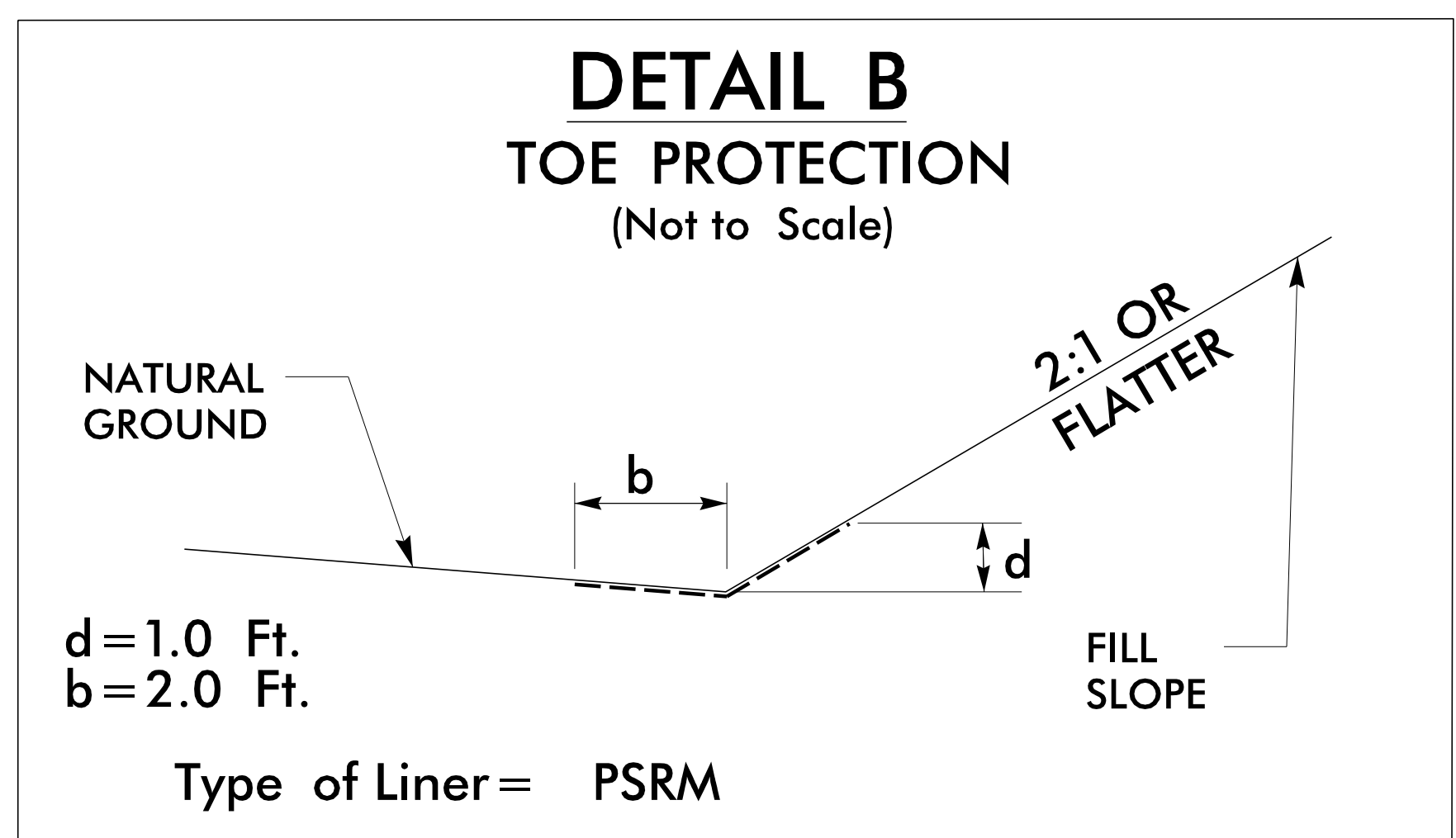
COMPUTED BY: T. KONSO DATE: 01/28/2020
CHECKED BY: K. HIGGINS DATE: 01/28/2020

PROJECT REFERENCE NO.	SHEET NO.
B-5765	2D-1
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	
11325 N COMMUNITY HOUSE RD SUITE 260 CHARLOTTE, NC 28277	

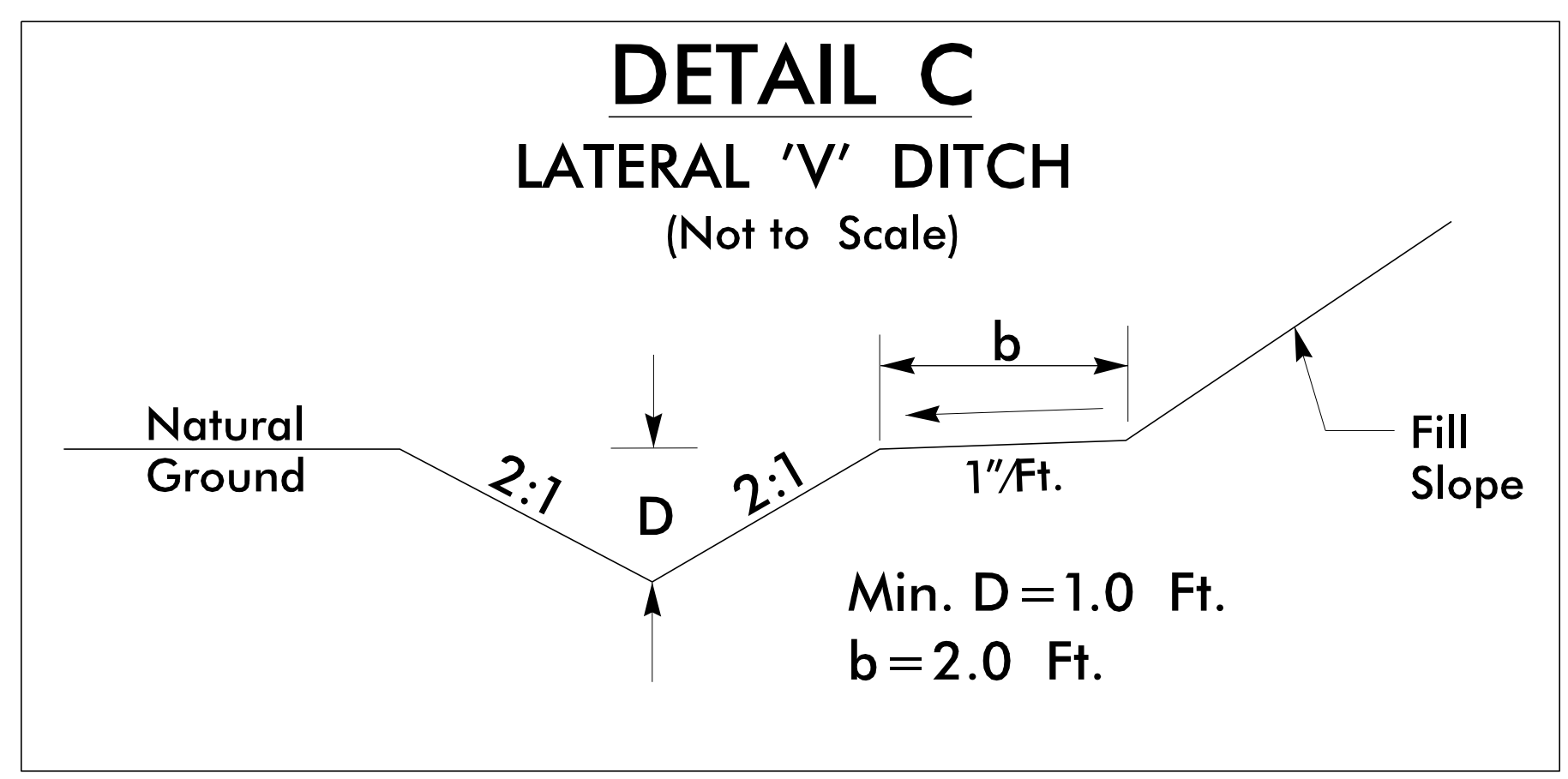
DITCH DETAILS



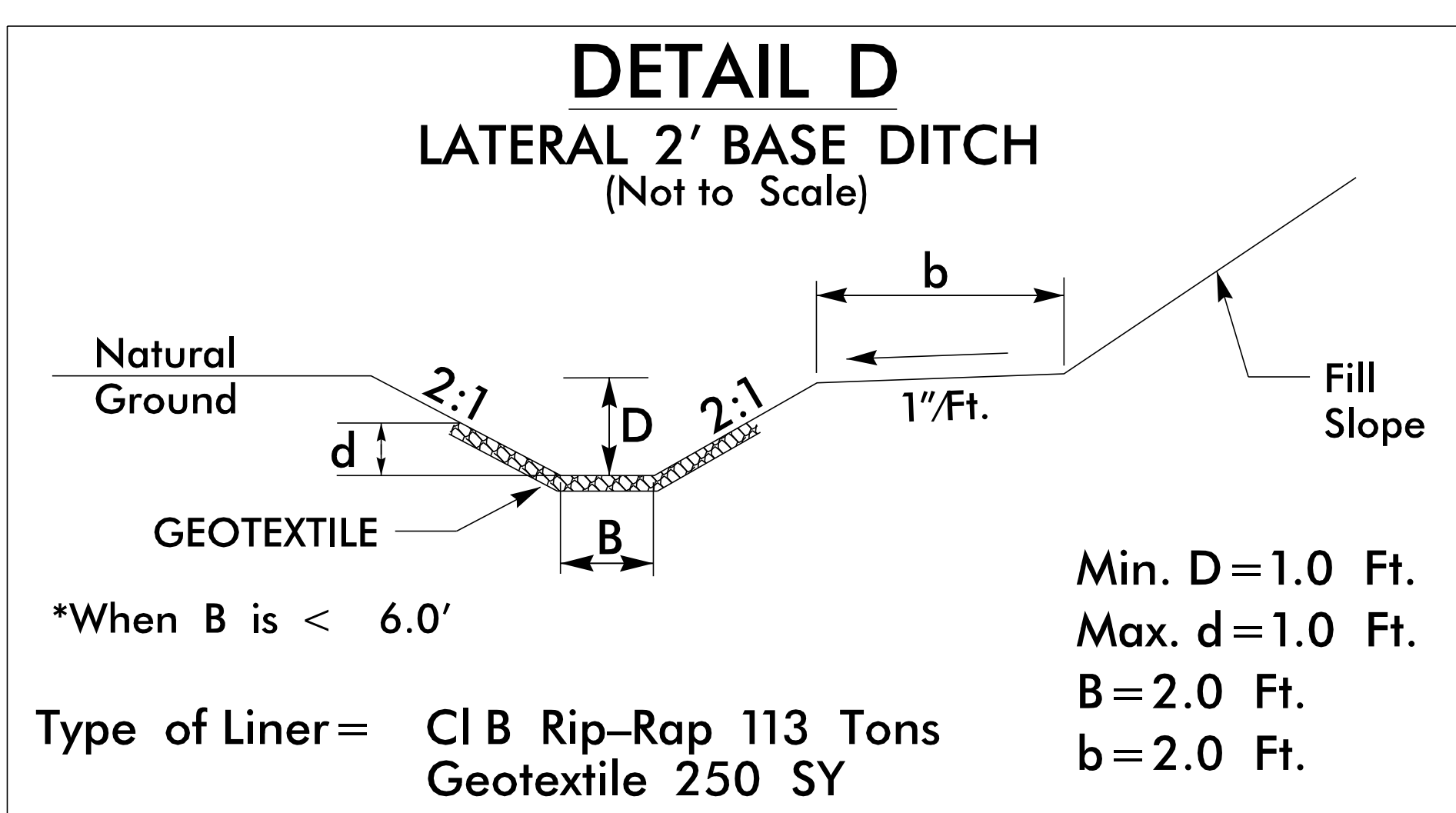
FROM STA. 13+00 TO STA. 14+35 -L- LT
 FROM STA. 16+10 TO STA. 16+75 -L- LT
 FROM STA. 13+50 TO STA. 14+10 -L- RT
 FROM STA. 15+00 TO STA. 15+60 -L- RT



Type of Liner = PSRM
 FROM STA. 14+84 TO STA. 15+65 -L- LT (PSRM 36 SY)
 FROM STA. 20+25 TO STA. 21+25 -L- RT (PSRM 45 SY)

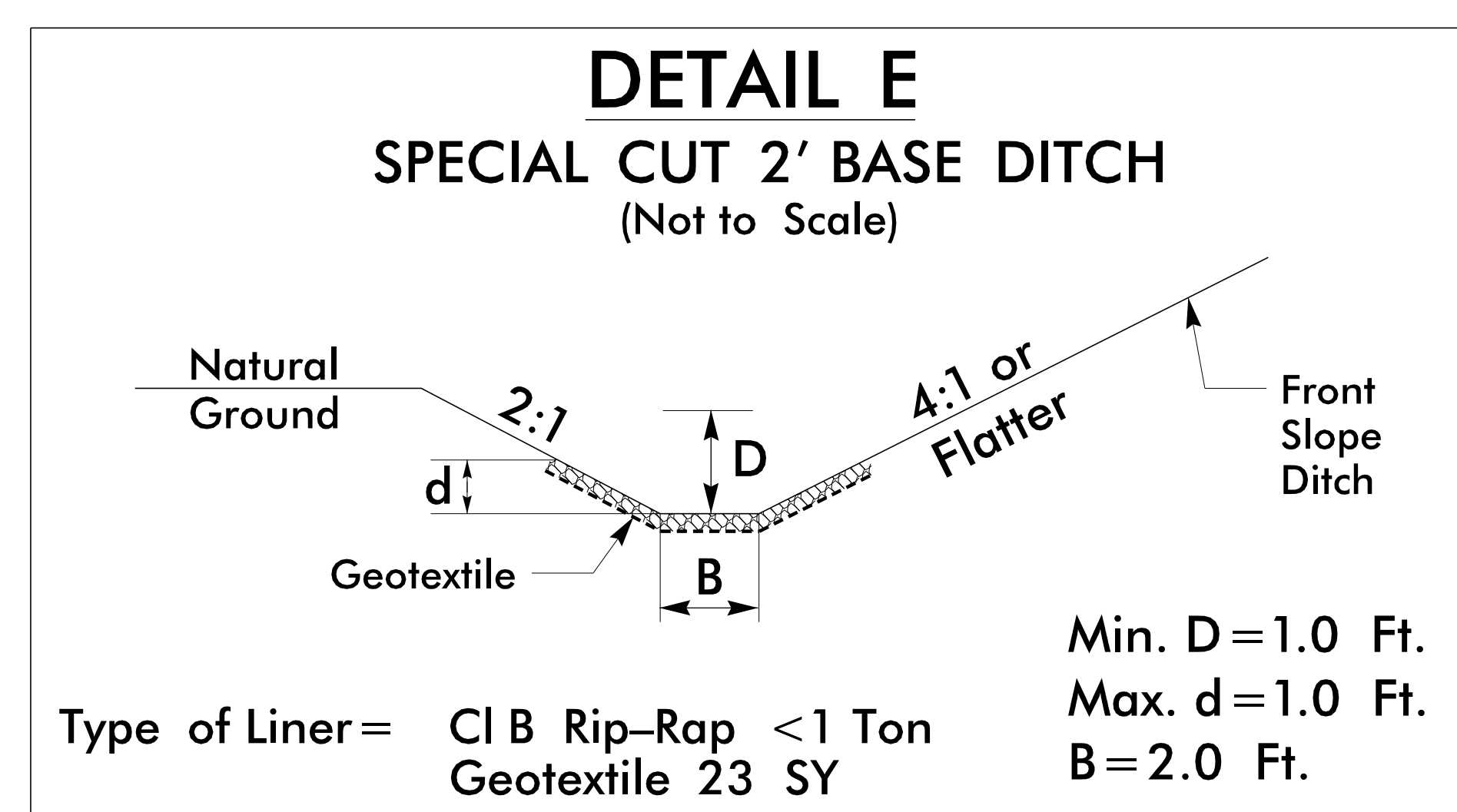


FROM STA. 16+50 TO STA. 17+00 -L- RT



*When B is < 6.0'
 Min. D=1.0 Ft.
 Max. d=1.0 Ft.
 B=2.0 Ft.
 b=2.0 Ft.
 Type of Liner = Cl B Rip-Rap 113 Tons
 Geotextile 250 SY

FROM STA.19+50 TO STA.22+98 -L- LT



Type of Liner = Cl B Rip-Rap <1 Ton
 Geotextile 23 SY
 Min. D=1.0 Ft.
 Max. d=1.0 Ft.
 B=2.0 Ft.

FROM STA. 23+26 TO STA.23+50 -L- LT

3/22/2022 3:51:05 PM \\SHEETS\B-5765_HYD_Details.dgn

5/28/99

COMPUTED BY: C. HALL	DATE: 2/24/20
CHECKED BY: C. ROGERS	DATE: 2/24/20

PROJECT NO.	SHEET NO.
B-5765	36-1

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

SUMMARY OF SUBSURFACE DRAINAGE

LINE	Station	Station	Location LT/RT/CL	Drain Type* UD/BD/SD	LF
CONTINGENCY				SD	200
				TOTAL LF:	200

*UD = Underdrain
*BD = Blind Drain
*SD = Subsurface Drain

SUMMARY OF AGGREGATE SUBGRADE/STABILIZATION

LINE	Station	Station	Aggregate Type* ASU(1/2)/AST	Aggregate Thickness INCHES [8" for ASU(2)]	Shallow Undercut CY	Class IV Subgrade Stabilization TONS	Geotextile for Soil Stabilization SY	Stabilizer Aggregate TONS	Class IV Aggregate Stabilization TONS
CONTINGENCY			ASU	18	100	200	600		
			TOTAL CY/TONS/SY:		100	200**	600**	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.

8/30/2021 10:39:05 AM C:\B-5765_Geo_rdy_summary_table_SHEET.dgn

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

PARCEL INDEX SHEET

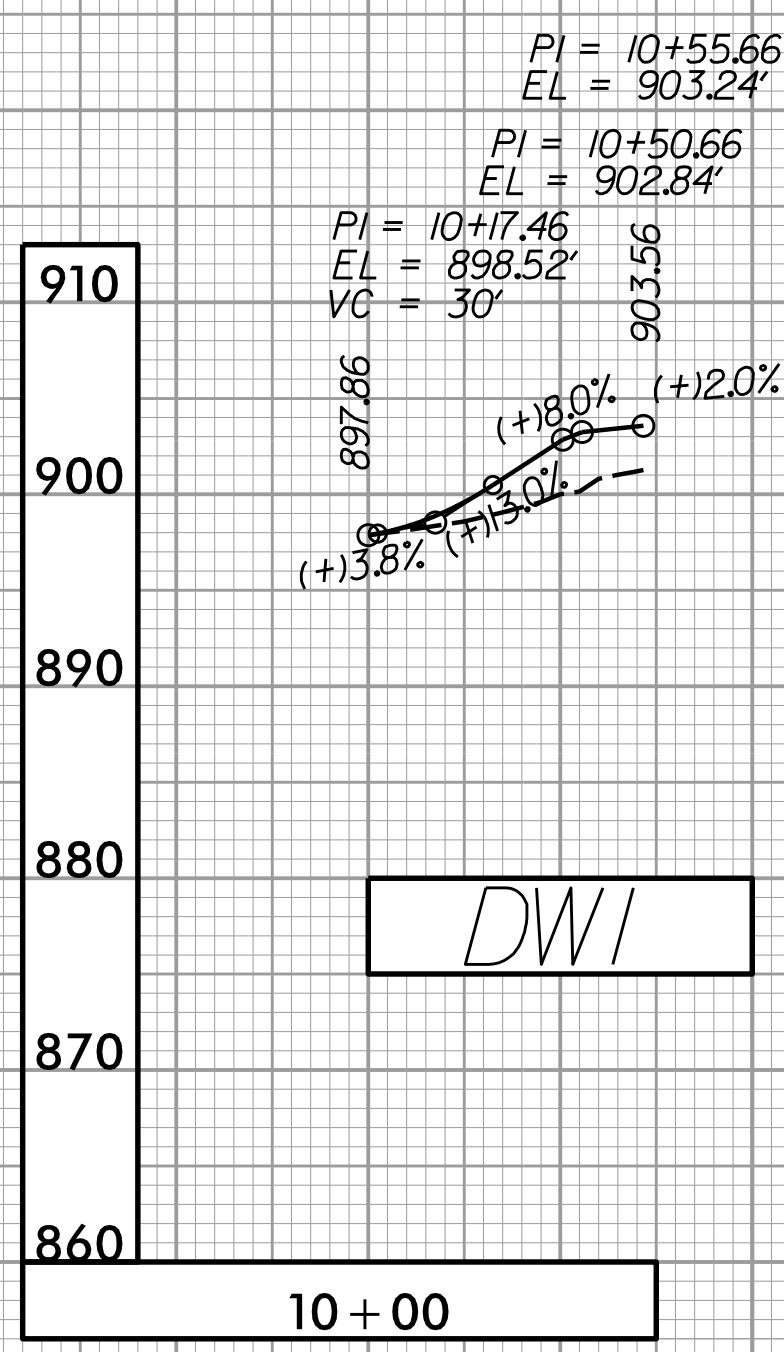
PARCEL No.	SHEET No.	PROPERTY OWNER NAME
1	4	CHRISTIAN MICHAEL SMALL
2	4	SOUTHERN ROOST CREATIONS
3	4	CHRISTIAN MICHAEL SMALL
4	4	SOUTHERN ROOST CREATIONS
5	4	PHYLLIS LYNETTE RAY
6	4	SOUTHERN ROOST CREATIONS
7	4	JAMES W. JORDAN, TRUDY M. JORDAN
8	4	ROBERT S. TEAGE, JEFFREY D. TEAGUE & WIFE, TERESA ANN HEARD TEAGUE
9	4	RANDY K. REAVES, EMILY T. REAVES
10	4	IOLA M. THOMAS
11	4	JAMES W. JORDAN, TRUDY M. JORDAN
12	4	TOWN OF MIDWAY
13	4,2C-2	RANDY K. REAVES, EMILY T. REAVES
14	4,2C-2	TOWN OF MIDWAY
15	2C-2	SHERRI T. GOSS
16	2C-1	HEBRON UNITED CHURCH OF CHRIST
17	4	JERRY D. SINK

5/14/99

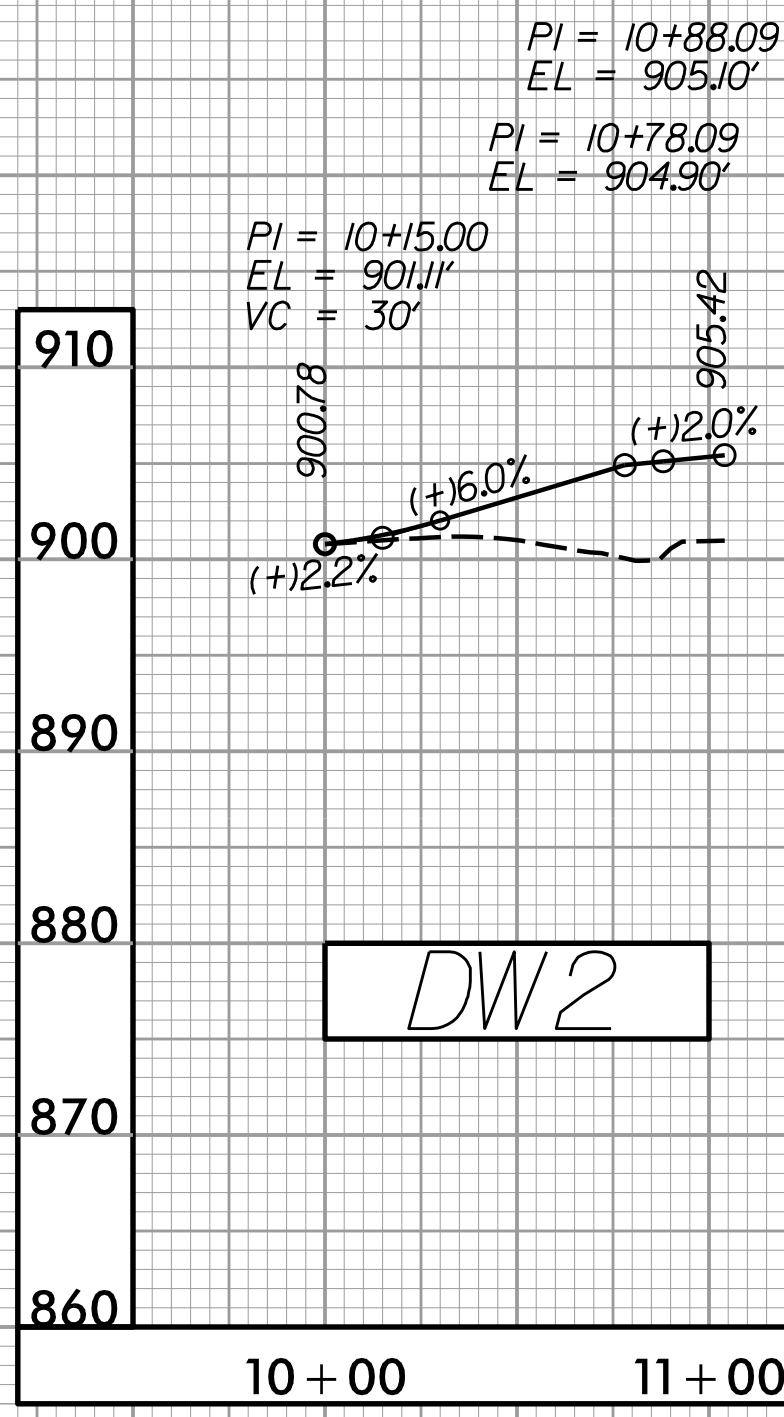
PROJECT REFERENCE NO. B-5765	SHEET NO. 5
ROADWAY DESIGN ENGINEER CHAD ROBERTSON SEAL 029442 3/31/2022	HYDRAULICS ENGINEER KEVIN P. HIGGINS SEAL 035700 3/31/2022

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

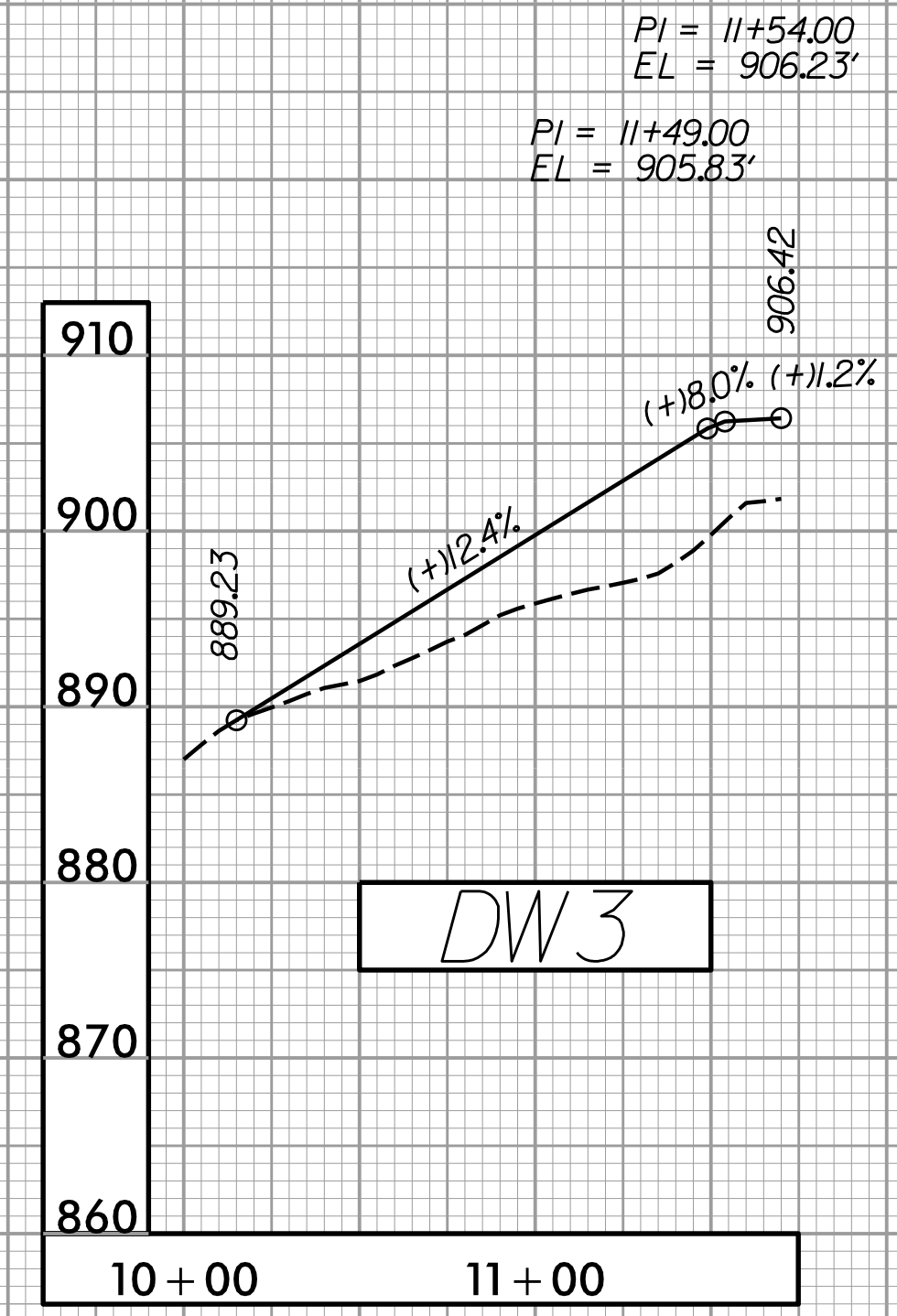
PARRISH & PARTNERS
11325 N COMMUNITY HOUSE RD
SUITE 260
CHARLOTTE, NC 28277



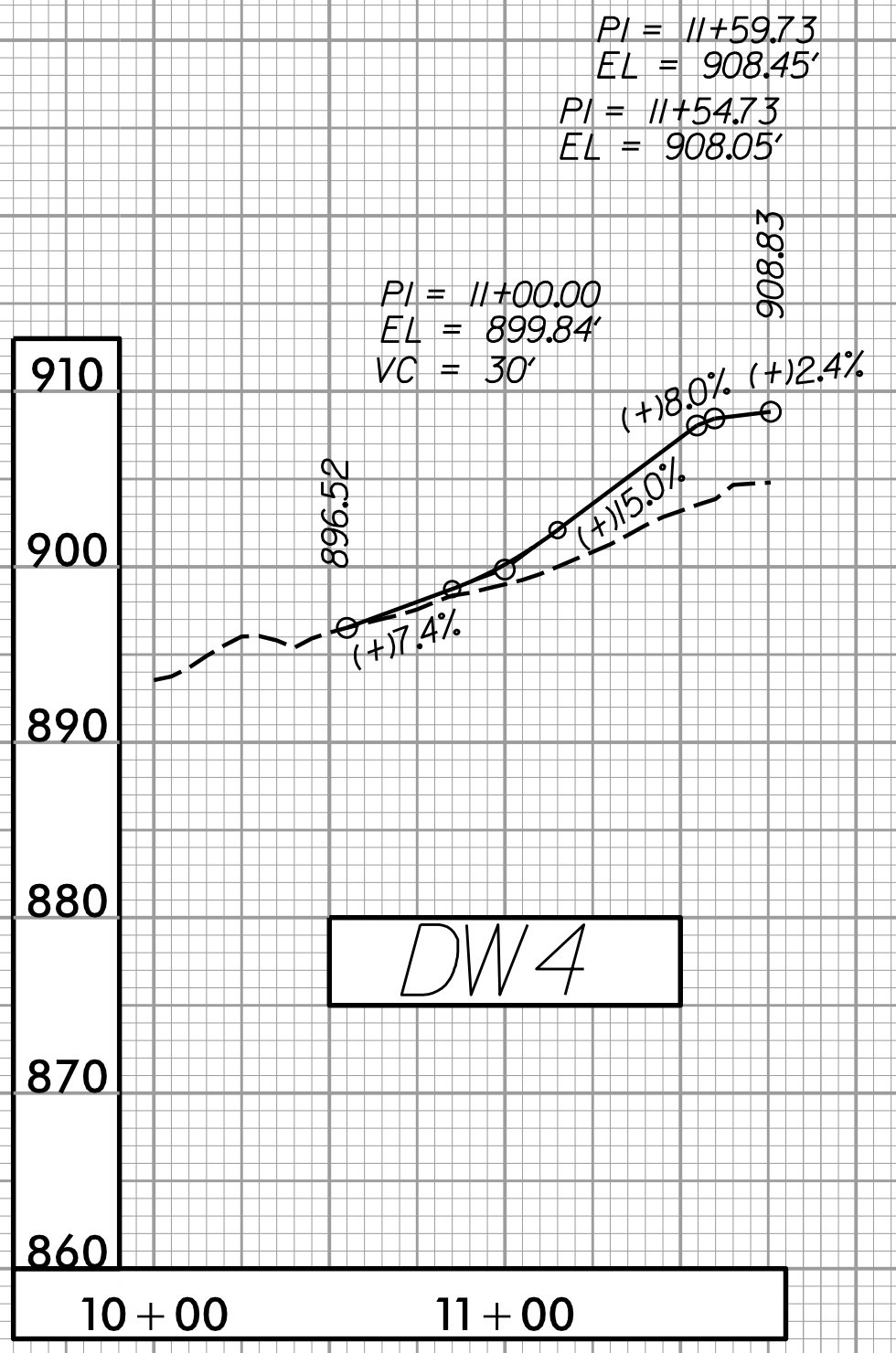
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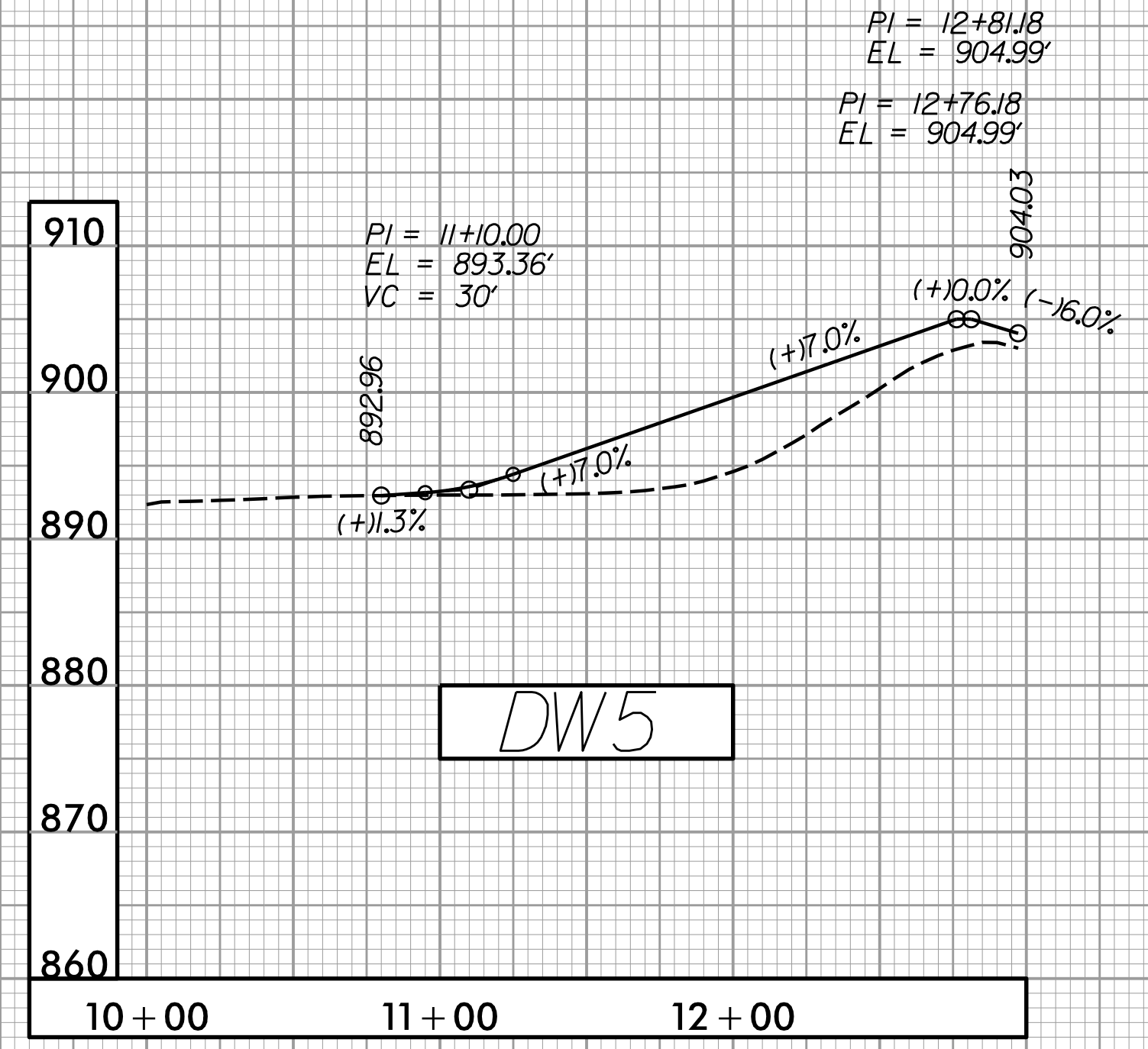
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DW3



DW4

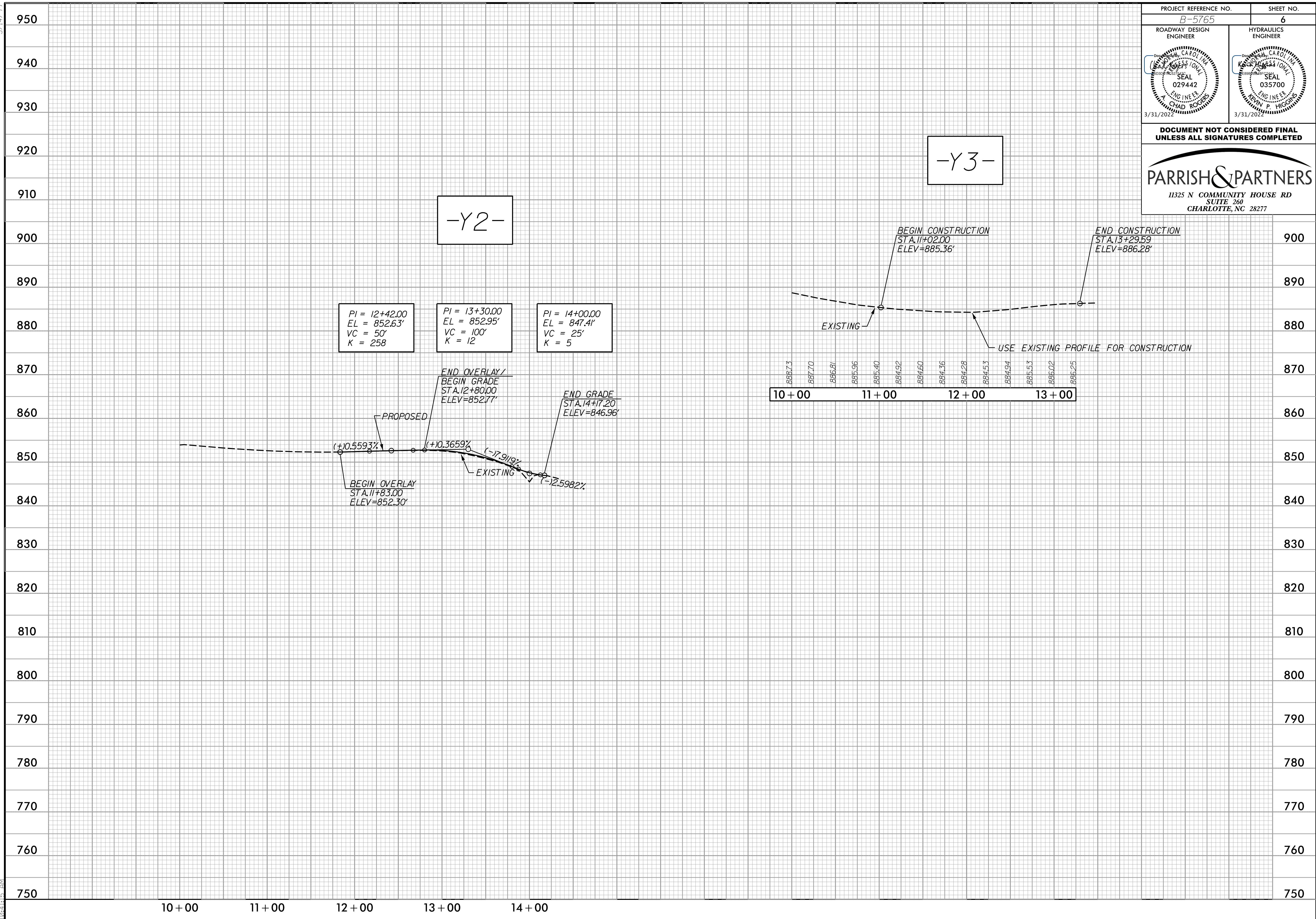


DW5

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5/14/99

PROJECT REFERENCE NO. B-5765	SHEET NO. 6
ROADWAY DESIGN ENGINEER CHAD ROBERTS SEAL 029442 3/31/2022	HYDRAULICS ENGINEER KEVIN P. HIGGINS SEAL 035700 3/31/2022
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	
 11325 N COMMUNITY HOUSE RD SUITE 260 CHARLOTTE, NC 28277	



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