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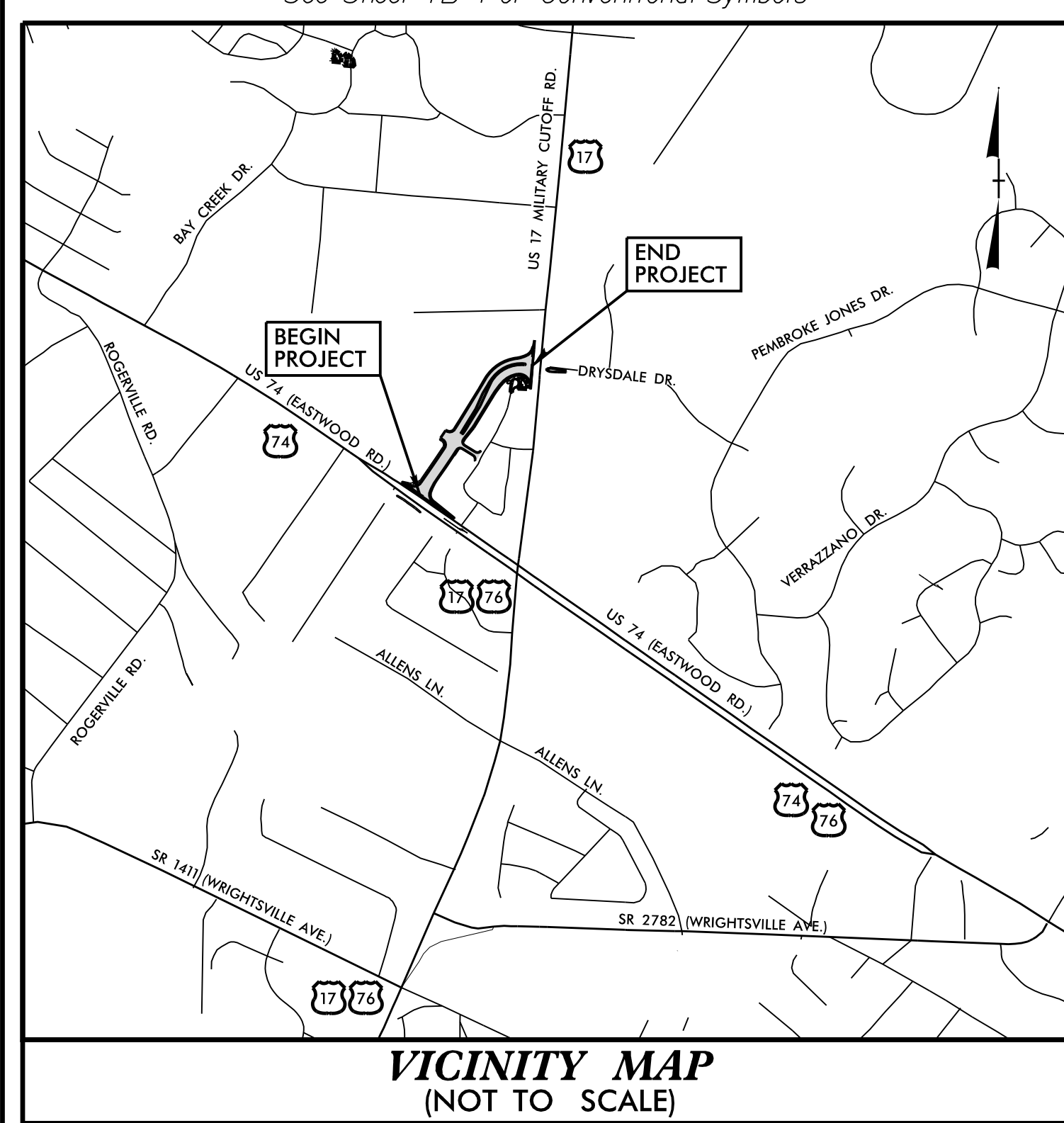
**This file or an individual page
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TIP PROJECT: U-5710A

CONTRACT: C204747

PLOT DRIVER: NCDOT_pcf_color_eng_50.plt
USER: CHARRIS
DATE: 4/19/2022
TIME: 2:58:27 PM
FILE: North_Carolina_Dept_of_Transportation\2014_16_Planning_Design\LSA\U-5710_TO_4_c\06.00_Project_Engineering_and_Design\U-5710A_Roadway\Proj\U5710A_RDY_TSH.dgn

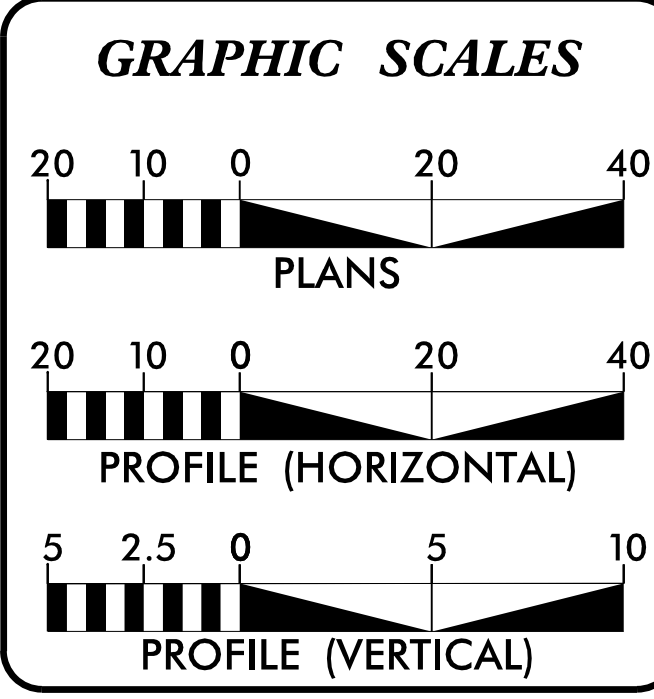
See Sheet 1B For Conventional Symbols



VICINITY MAP
(NOT TO SCALE)

BEGIN CONSTRUCTION
-Y4- STA. 26+77.62
BEGIN TIP PROJECT U-5710A
-L- STA. 10+44.11

★ MODIFIED TRAFFIC SIGNAL
★ PROPOSED TRAFFIC SIGNAL
THERE IS PARTIAL CONTROL OF ACCESS ON THIS PROJECT



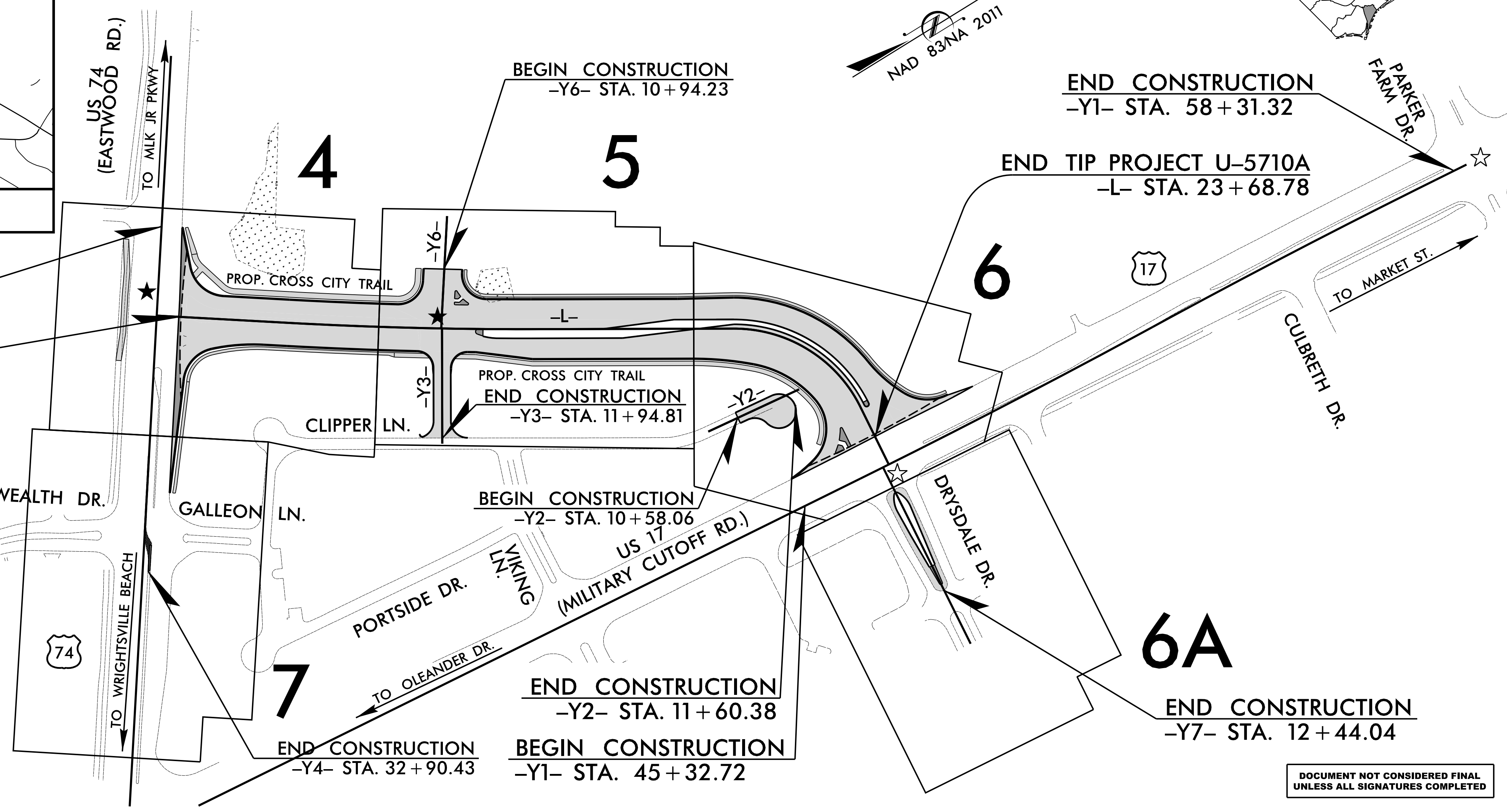
DESIGN DATA
ADT 2020 = 4,800
ADT 2040 = 24,000
V = 40 MPH
FUNC CLASS = URBAN COLLECTOR
STATEWIDE TIER

PROJECT LENGTH
LENGTH ROADWAY TIP PROJECT U-5710A = 0.251 MILES
TOTAL LENGTH TIP PROJECT U-5710A = 0.251 MILES

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

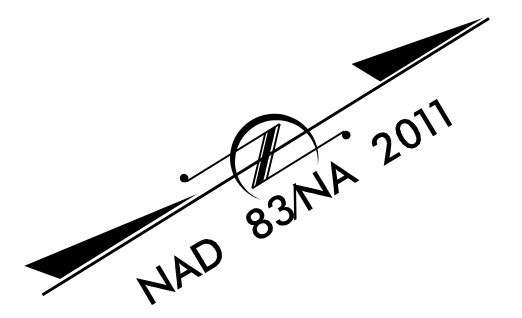
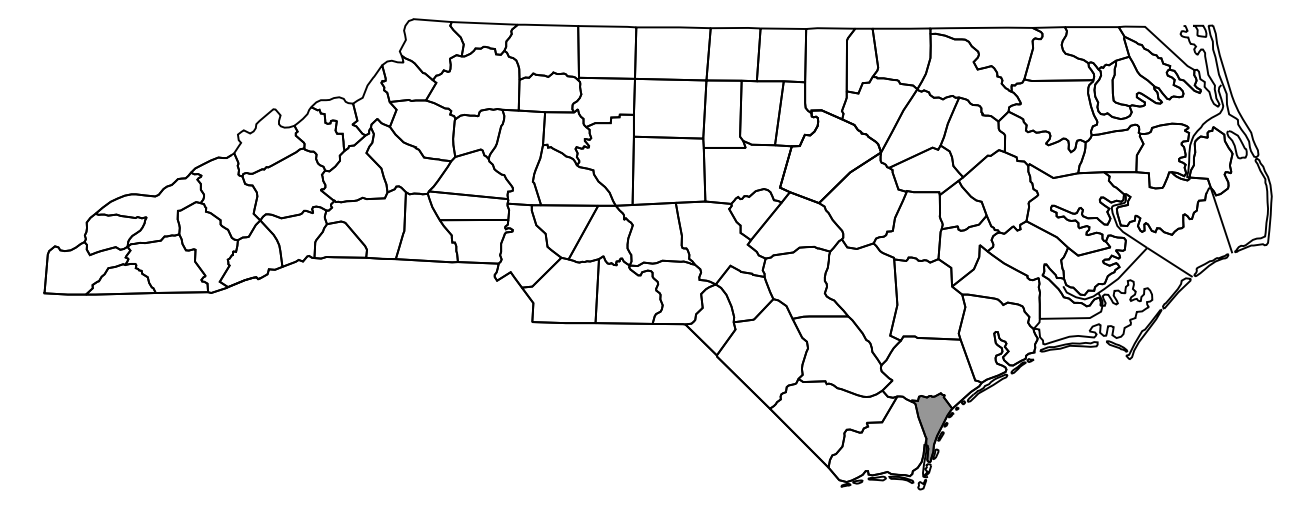
NEW HANOVER COUNTY

LOCATION: FROM US-17 (MILITARY CUTOFF ROAD) AT DRYSDALE DRIVE TO US-74 (EASTWOOD ROAD). CONSTRUCT ROADWAY ON NEW LOCATION (DRYSDALE DRIVE EXT).
TYPE OF WORK: GRADING, PAVING, DRAINAGE, SIGNALS, AND WALL



DOCUMENT NOT CONSIDERED FINAL
UNLESS ALL SIGNATURES COMPLETED

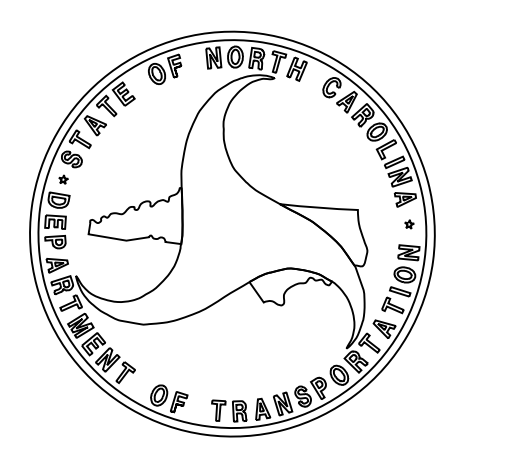
STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	U-5710A	1	
STATE PROJ. NO.	F.A. PROJ. NO.	DESCRIPTION	
50115.1.2	N/A	P.E.	
50115.2.2	N/A	ROW & UTIL.	
50115.3.3	0074232	CONSTR.	



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

RIGHT OF WAY DATE:
DECEMBER 11, 2018
LETTING DATE:
JUNE 21, 2022

HYDRAULICS ENGINEER
Johanna J. Massroche
P.E.
ROADWAY DESIGN ENGINEER
Casey E. Harris
P.E.



8/17/99

2018 ROADWAY ENGLISH STANDARD DRAWINGS

EFF. 01-16-2018
REV.

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:

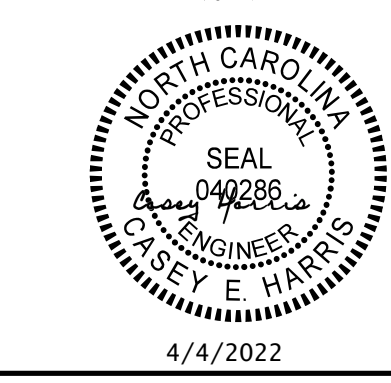

INDEX OF SHEETS

SHEET NUMBER	SHEET
1	TITLE SHEET
1A	INDEX OF SHEETS, GENERAL NOTES, AND LIST OF STANDARD DRAWINGS
1B	CONVENTIONAL SYMBOLS
1C-1	CENTERLINE COORDINATE LIST
2A-1 THRU 2A-4	PAVEMENT SCHEDULE, TYPICAL SECTIONS, AND WEDGING DETAIL
2C-1	SPECIAL VALLEY GUTTER DETAIL
2C-2	DETAIL TO CONVERT EXISTING CB TO JB
2C-3	MODIFIED METHOD OF CLEARING III DETAIL
2C-4	DETAIL SHOWING 2'-6" CURB AND GUTTER TO VALLEY GUTTER TRANSITION
2D-1 THRU 2D-5	STORMWATER POND DETAILS
3B-1	EARTHWORK AND PAVEMENT REMOVAL SUMMARIES
3D-1 THRU 3D-3	DRAINAGE SUMMARY
3G-1	GEOTECHNICAL SUMMARIES
3P-1	PARCEL INDEX SHEET
4 THRU 7	PLAN SHEETS
8 THRU 10	PROFILE SHEETS
RW01 THRU RW06-REV	RIGHT OF WAY TITLE SHEET, SURVEY CONTROL SHEETS PROPOSED ALIGNMENT CONTROL SHEETS, RIGHT OF WAY & EASEMENT CONTROL SHEETS, RIGHT OF WAY SHEETS
TMP-1 THRU TMP-7	TRANSPORTATION MANAGEMENT PLANS
PMP-1 THRU PMP-9	PAVEMENT MARKING PLANS
EC-1 THRU EC-13	EROSION CONTROL PLANS
SIGN-1 THRU SIGN-5	SIGNING PLANS
SIG-1.0 THRU SIG-7.1	SIGNAL PLANS
SIG.M1 THRU SIG.M8	STANDARD DRAWINGS FOR ALL METAL POLES
SCP-1 THRU SCP-6	SIGNAL COMMUNICATION PLANS
UC-1 THRU UC-7	UTILITY CONSTRUCTION PLANS
UO-1 THRU UO-5	UTILITIES BY OTHERS PLANS
X-0	CROSS-SECTION EARTHWORK VOLUME SUMMARY
X-1 THRU X-10	CROSS-SECTIONS
W-1	RETAINING WALL PLANS

STD.NO.	TITLE
DIVISION 2 - EARTHWORK	
200.03	Method of Clearing - Modified Method III (Use detail in Lieu of Standard)
225.02	Guide for Grading Subgrade - Secondary and Local
225.04	Method of Obtaining Superelevation - Two Lane Pavement
DIVISION 3 - PIPE CULVERTS	
300.01	Method of Pipe Installation
DIVISION 8 - INCIDENTALS	
806.01	Concrete Right-of-Way Marker
806.02	Granite Right-of-Way Marker
815.02	Subsurface Drain
838.27	Reinforced Concrete Endwall - for Single 60" Pipe 90 Skew
838.45	Notes for Reinforced Concrete Endwall - Std. Dwg 838.21 thru 838.40
838.57	Reinforced Brick Endwall - for Single 60" Pipe 90 Skew
838.75	Notes for Reinforced Brick Endwall - Std. Dwg 838.51 thru 838.70
838.80	Precast Endwalls - 12" thru 72" Pipe 90 Skew
840.00	Concrete Base Pad for Drainage Structures
840.01	Brick Catch Basin - 12" thru 54" Pipe
840.02	Concrete Catch Basin - 12" thru 54" Pipe
840.03	Frame, Grates and Hood - for Use on Standard Catch Basin
840.25	Anchorage for Frames - Brick or Concrete or Precast
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
840.45	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
848.01	Concrete Sidewalk
848.05	Curb Ramp - Proposed Curb & Gutter
848.06	Curb Ramp - Existing Curb & Gutter
852.01	Concrete Islands
852.05	Median Curb for Catch Basin - for Use with 1'-6" Curb and Gutter
866.01	Chain Link Fence - 4', 5' and 6' High Fence
876.01	Rip Rap in Channels
876.02	Guide for Rip Rap at Pipe Outlets

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 MODIFIED 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.
- 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.
- TEMPORARY SHORING:
 - SHORING REQUIRED FOR THE MAINTENANCE OF TRAFFIC WILL BE PAID FOR AS "EXTRA WORK" IN ACCORDANCE WITH SECTION 104-7.
- UTILITIES:
 - UTILITY OWNERS ON THIS PROJECT ARE DUKE ENERGY DISTRIBUTION, AT&T, PIEDMONT NATURAL GAS, SPECTRUM, CENTURYLINK & CAPE FEAR PUBLIC UTILITY AUTHORITY.
 - 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.
- CURB RAMPS
 - CURB RAMPS ARE SHOWN ON THE PLANS AT APPROXIMATE LOCATIONS. CONSTRUCT ALL CURB RAMPS ACCORDANCE WITH STD 848.05 and/or 848.06.

PROJECT REFERENCE NO. U-5710A	SHEET NO. 1A
ROADWAY DESIGN ENGINEER	
	
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	
 HDR Engineering, Inc. of the Carolinas 555 Fayetteville St, Suite 900 Raleigh, N.C. 27601 N.C.B.E.L.S. License Number: F-0116	

PLOT DRIVER: NCDOT... DATE: 4/1/2022
 USER: CHARRIS
 FILE: North_Carolina_Dept_of_Transportation\2014_16_Planning_Design_LSA\U-5710_TO_4_c\06.00_Project_Engineering_and_Design\U-5710A_Roadway\Proj\U5710A_RDY_TSH.dgn
 REVISIONS

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	○ EP
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	---WLB---
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	-----
New Right of Way Line with Pin and Cap	-----
New Right of Way Line with Concrete or Granite R/W Marker	-----
New Control of Access Line with Concrete C/A Marker	-----
Existing Control of Access	-----
New Control of Access	-----
Existing Easement Line	-----
New Temporary Construction Easement	-----
New Temporary Drainage Easement	-----
New Permanent Drainage Easement	-----
New Permanent Drainage / Utility Easement	-----
New Permanent Utility Easement	-----
New Temporary Utility Easement	-----
New Aerial Utility Easement	-----

ROADS AND RELATED FEATURES:

Existing Edge of Pavement	-----
Existing Curb	-----
Proposed Slope Stakes Cut	---C---
Proposed Slope Stakes Fill	---F---
Proposed Curb Ramp	-----
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	-----

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:

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

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.*)	-----
U/G Telephone Cable LOS C (S.U.E.*)	-----
U/G Telephone Cable LOS D (S.U.E.*)	-----
U/G Telephone Conduit LOS B (S.U.E.*)	-----
U/G Telephone Conduit LOS C (S.U.E.*)	-----
U/G Telephone Conduit LOS D (S.U.E.*)	-----
U/G Fiber Optics Cable LOS B (S.U.E.*)	-----
U/G Fiber Optics Cable LOS C (S.U.E.*)	-----
U/G Fiber Optics Cable LOS D (S.U.E.*)	-----

WATER:

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

TV:

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

GAS:

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

SANITARY SEWER:

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

MISCELLANEOUS:

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

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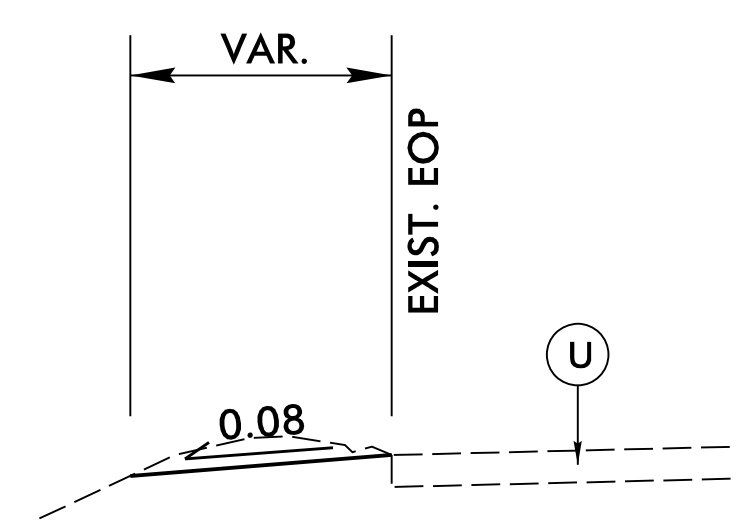
6/2/2022

PAVEMENT SCHEDULE

C1	PROP. APPROX. 1½" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5B, AT AN AVERAGE RATE OF 165 LBS. PER SQ. YD.	R1	1'-6" CONCRETE CURB AND GUTTER.
C2	PROP. APPROX. 3" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5B, AT AN AVERAGE RATE OF 165 LBS. PER SQ. YD. IN EACH OF TWO LAYERS.	R2	2'-6" CONCRETE CURB AND GUTTER.
C3	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" IN DEPTH OR GREATER THAN 1½" IN DEPTH.	R3	SPECIAL VALLEY GUTTER (SEE DETAIL 2C-1).
D1	PROP. APPROX. 4" ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE I19.0C, AT AN AVERAGE RATE OF 456 LBS. PER SQ. YD.	R4	5" MONOLITHIC CONCRETE ISLAND (KEYED IN).
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 2½" IN DEPTH OR GREATER THAN 4" IN DEPTH.	S	4" CONCRETE SIDEWALK.
E1	PROP. APPROX. 4" ASPHALT CONCRETE BASE COURSE, TYPE B25.0C, AT AN AVERAGE RATE OF 456 LBS. PER SQ. YD.	T	EARTH MATERIAL.
J1	PROP. 6" AGGREGATE BASE COURSE.	U	EXISTING PAVEMENT.
J2	PROP. 8" AGGREGATE BASE COURSE.	V1	VARIABLE DEPTH MILLING 0" TO 1½"
		W	VARIABLE DEPTH ASPHALT PAVEMENT (SEE WEDGING DETAIL).

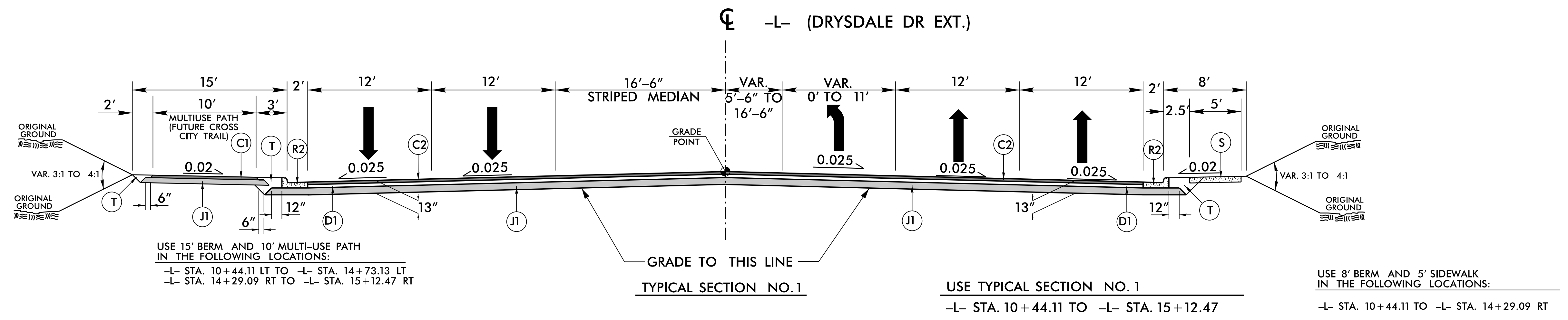
NOTE: PAVEMENT EDGE SLOPES ARE 1:1 UNLESS SHOWN OTHERWISE.

NOTE: CLEAN UP AND RE-GRADE EXISTING PAVEMENT SHOULDER EDGE FROM -Y1- STA. 48+95.67 LT TO -Y1- STA. 58+31.52 LT.



DETAIL OF SHOULDER CLEANUP
 USE SHOULDER CLEANUP DETAIL
 -Y1- STA. 48+95.64 TO -Y1- STA. 58+31.32 LT

PROJECT REFERENCE NO. U-5710A	SHEET NO. 2A-1
ROADWAY DESIGN ENGINEER <i>ANDREW D. WARR</i>	PAVEMENT DESIGN ENGINEER <i>ANDREW D. WARR</i>
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	
HDR Engineering, Inc. of the Carolinas 555 Fayetteville St. Suite 900 Raleigh, N.C. 27601 N.C.B.E.L.S. License Number: F-0116	

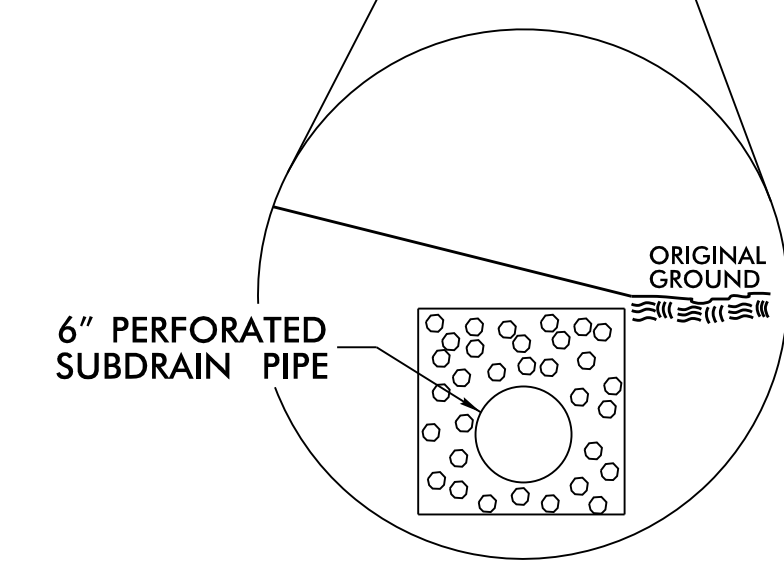
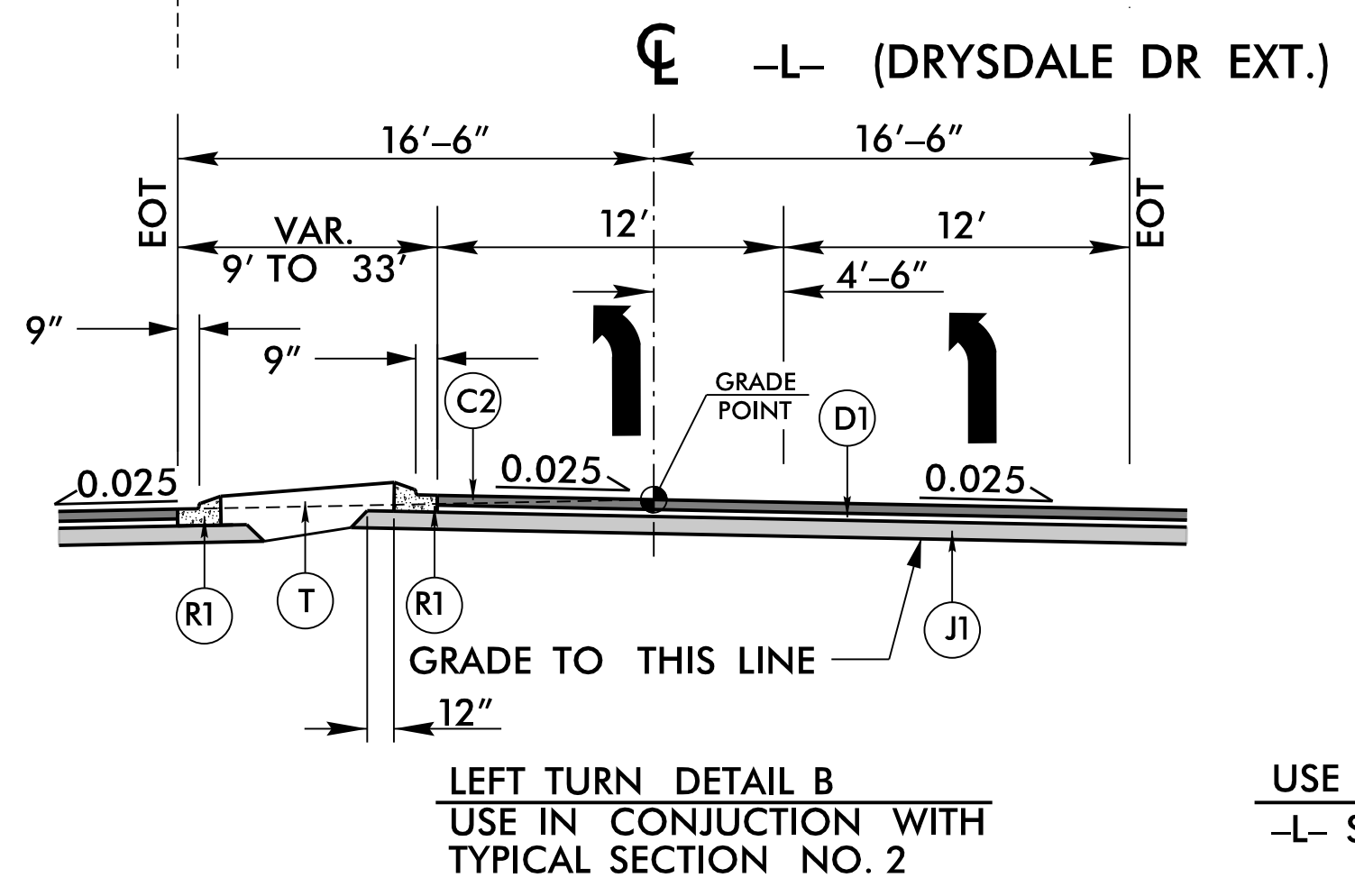
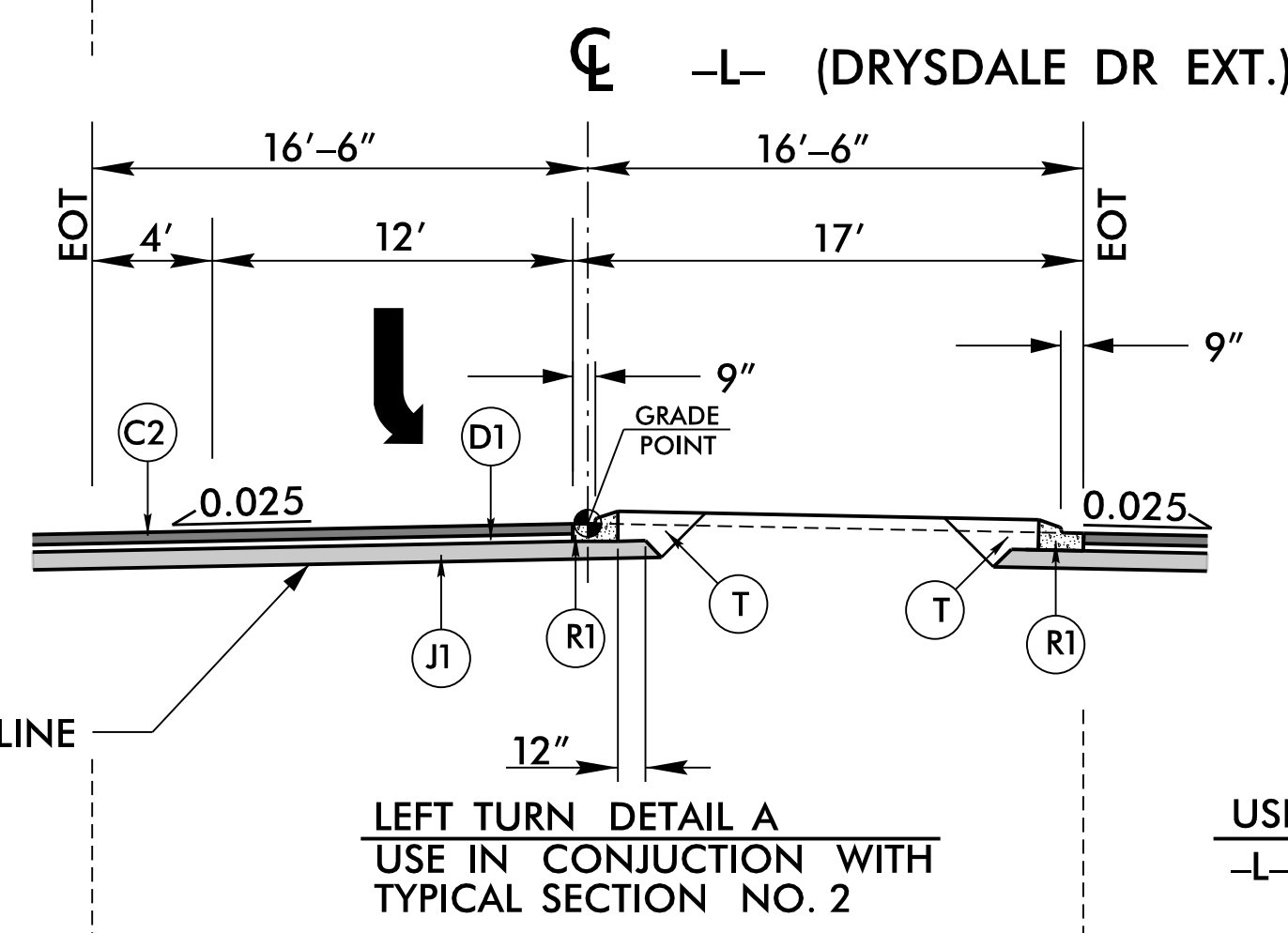
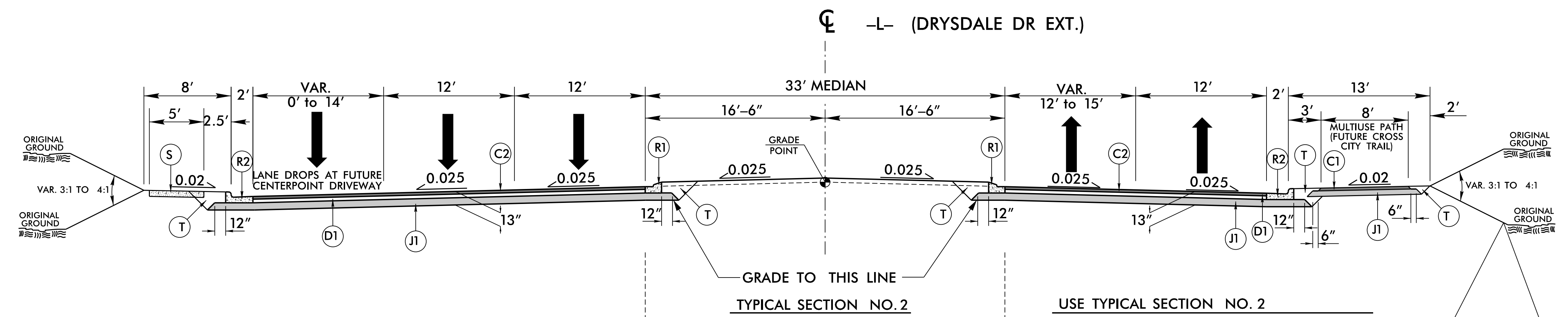


PLOT DRIVER: NCDOT_color_eng_50.plt
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REVISIONS

6/2/2019

PROJECT REFERENCE NO. U-5710A	SHEET NO. 2A-2
ROADWAY DESIGN ENGINEER 	PAVEMENT DESIGN ENGINEER
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	
HDR Engineering, Inc. of the Carolinas 555 Fayetteville St, Suite 900 Raleigh, N.C. 27601 N.C.B.E.L.S. License Number: F-0116	



NOTES: PLACE SUBDRAIN PIPE AT TOE OF SLOPE FROM
-L- STA. 16+60± TO 23+30± RT.
SEE ROADWAY STANDARD DRAWING 815.02 FOR ADDITIONAL DETAILS.

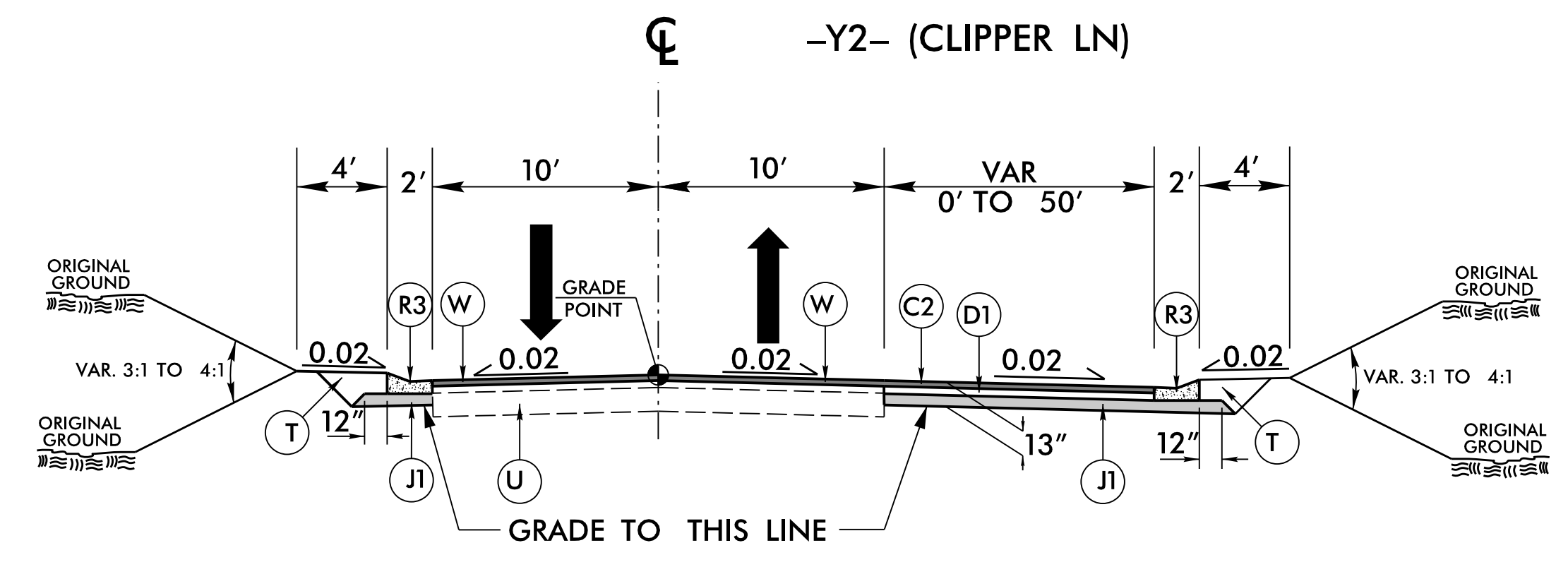
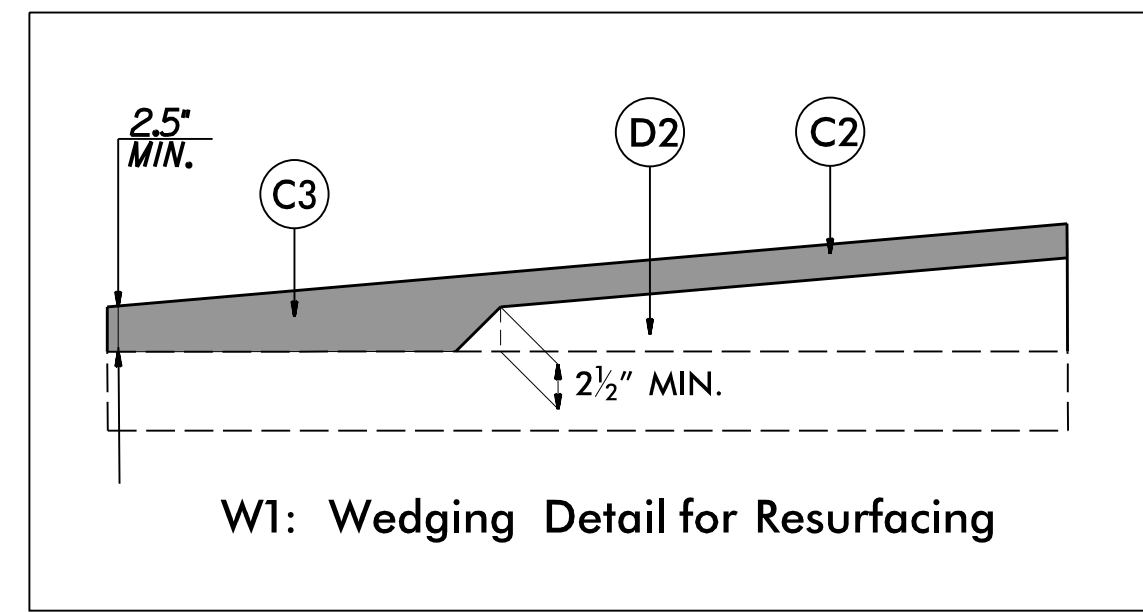
PAVEMENT SCHEDULE	
C1	1.5" S9.5B
C2	3" S9.5B
C3	VAR. S9.5B
D1	4" I19.0C
D2	VAR. I19.0C
E1	4" B25.0C
J1	6" ABC
J2	8" ABC
R1	1'-6" CURB & GUTTER
R2	2'-6" CURB & GUTTER
R3	SPECIAL VALLEY GUTTER
R4	5" MONO. CONC. ISLAND
S	4" CONC. SIDEWALK
T	EARTH MATERIAL
U	EXIST. PAVEMENT
V1	VAR. DEPTH MILLING
W	VAR. DEPTH ASPHALT

PLOT DRIVER: NCDOT_color_eng_50.plt
 USER: CHARRIS
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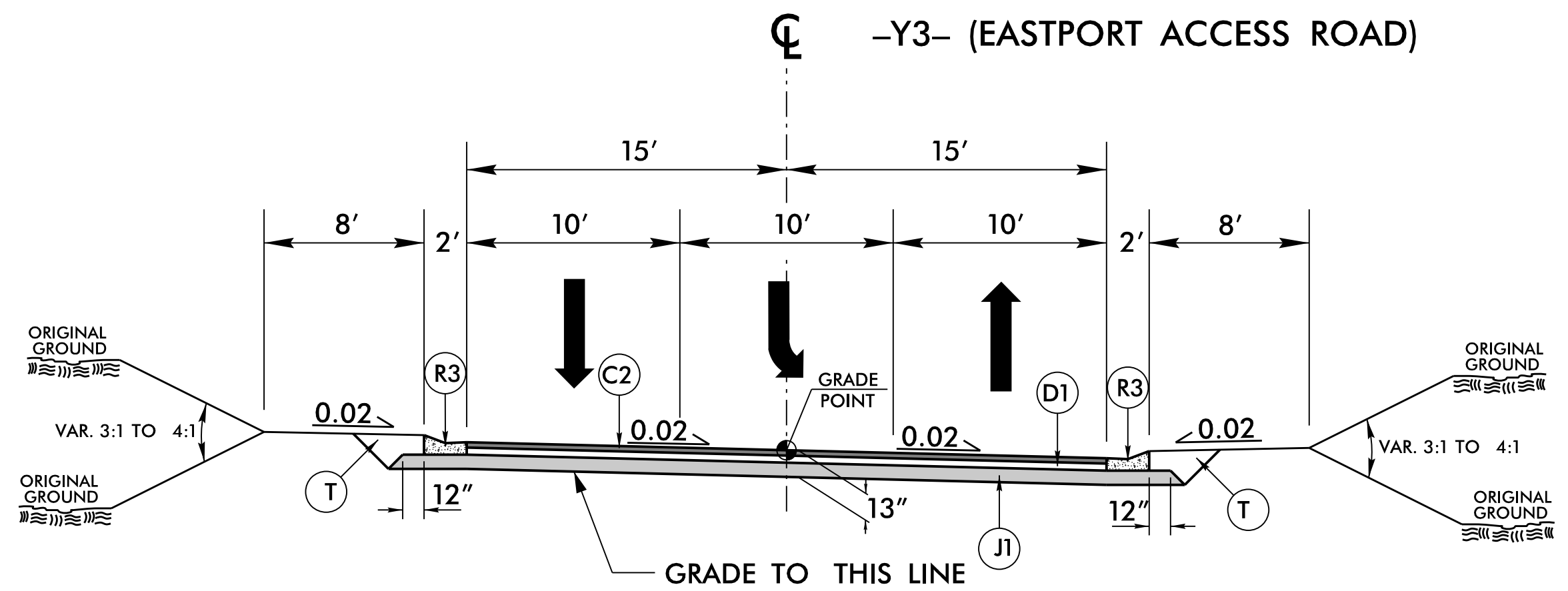
REVISIONS

6/2/2021

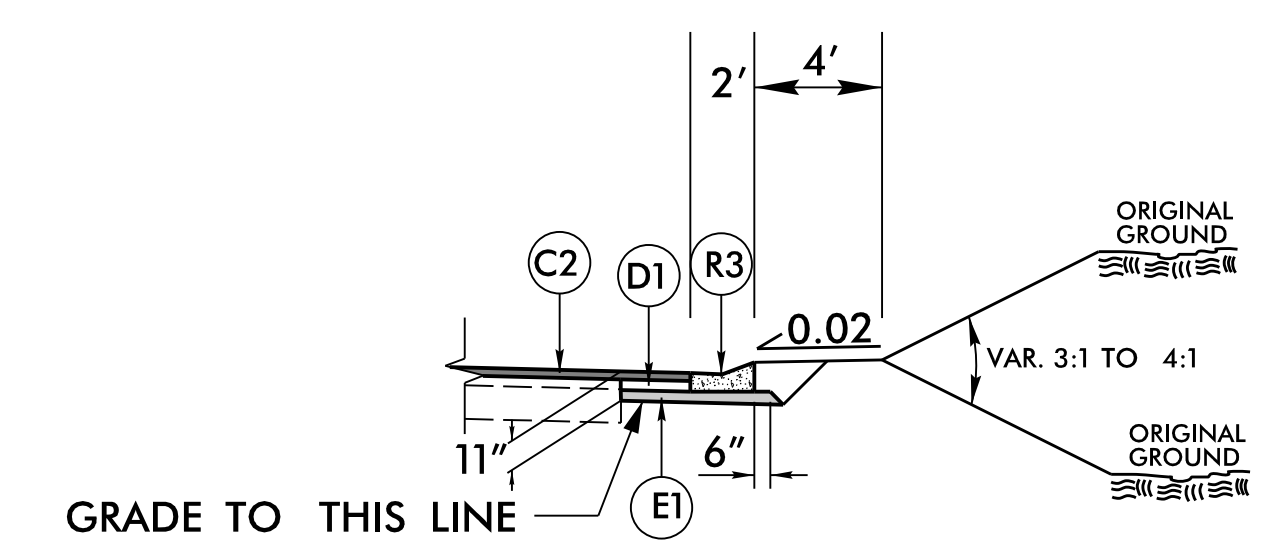
PROJECT REFERENCE NO. U-5710A	SHEET NO. 2A-3
ROADWAY DESIGN ENGINEER 	PAVEMENT DESIGN ENGINEER
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	
HDR Engineering, Inc. of the Carolinas 555 Fayetteville St. Suite 900 Raleigh, N.C. 27601 N.C.B.E.L.S. License Number: F-0116	



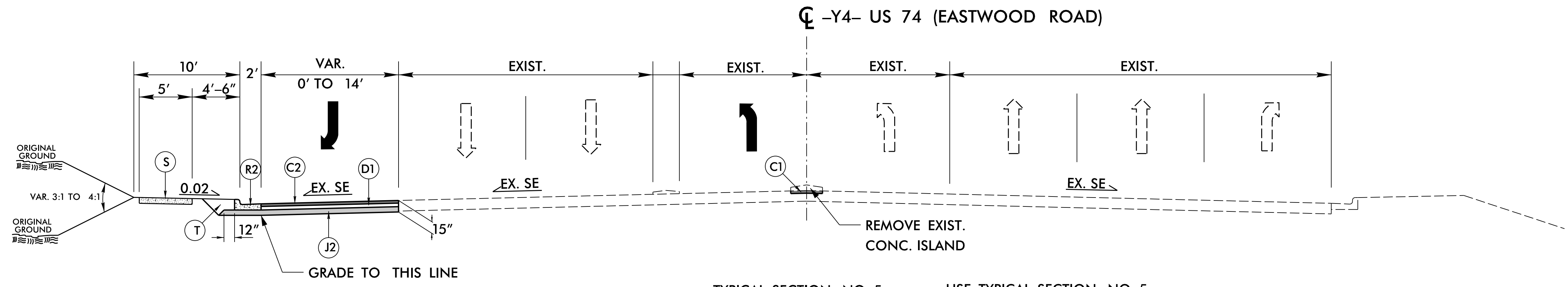
USE TYPICAL SECTION NO. 3
-Y2- STA. 10+58.06 TO -Y2- STA. 11+59.38



NOTE: TRANSITION 2'-6" C&G TO SPECIAL VALLEY GUTTER FROM -Y3- STA. 10+72.00 TO 10+82.00 LT&RT.
USE TYPICAL SECTION NO. 4
-Y3- STA. 10+40.51 TO -Y3- STA. 11+94.81



OPTIONAL 4" B25.0C TO BE USED IN LIEU OF ABC AT THE DISCRETION OF THE ENGINEER.



USE TYPICAL SECTION NO. 5
-Y4- STA. 29+50.83 TO -Y4- STA. 32+90.43

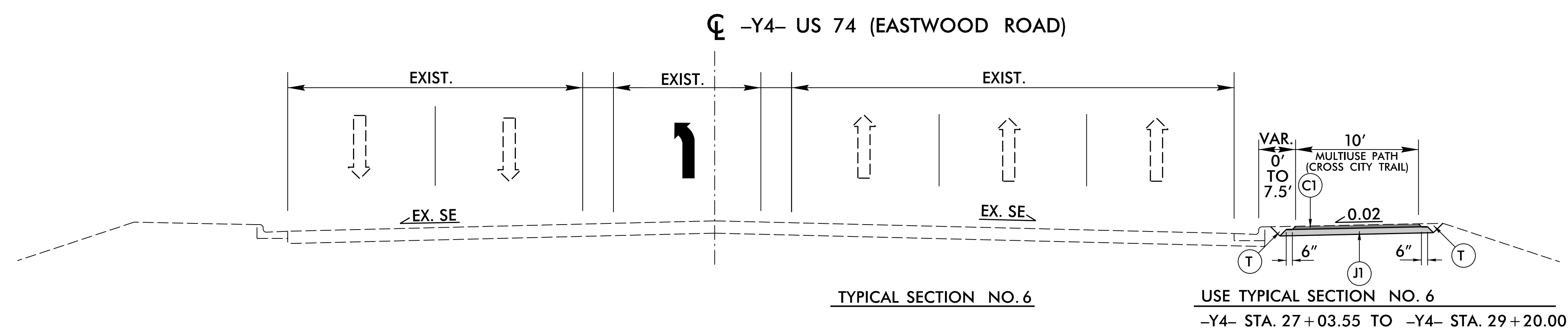
PAVEMENT SCHEDULE	
C1	1.5" S9.5B
C2	3" S9.5B
C3	VAR. S9.5B
D1	4" I19.0C
D2	VAR. I19.0C
E1	4" B25.0C
J1	6" ABC
J2	8" ABC
R1	1'-6" CURB & GUTTER
R2	2'-6" CURB & GUTTER
R3	SPECIAL VALLEY GUTTER
R4	5" MONO. CONC. ISLAND
S	4" CONC. SIDEWALK
T	EARTH MATERIAL
U	EXIST. PAVEMENT
V1	VAR. DEPTH MILLING
W	VAR. DEPTH ASPHALT

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 USER: CHARRIS
 DATE: 12/9/2021
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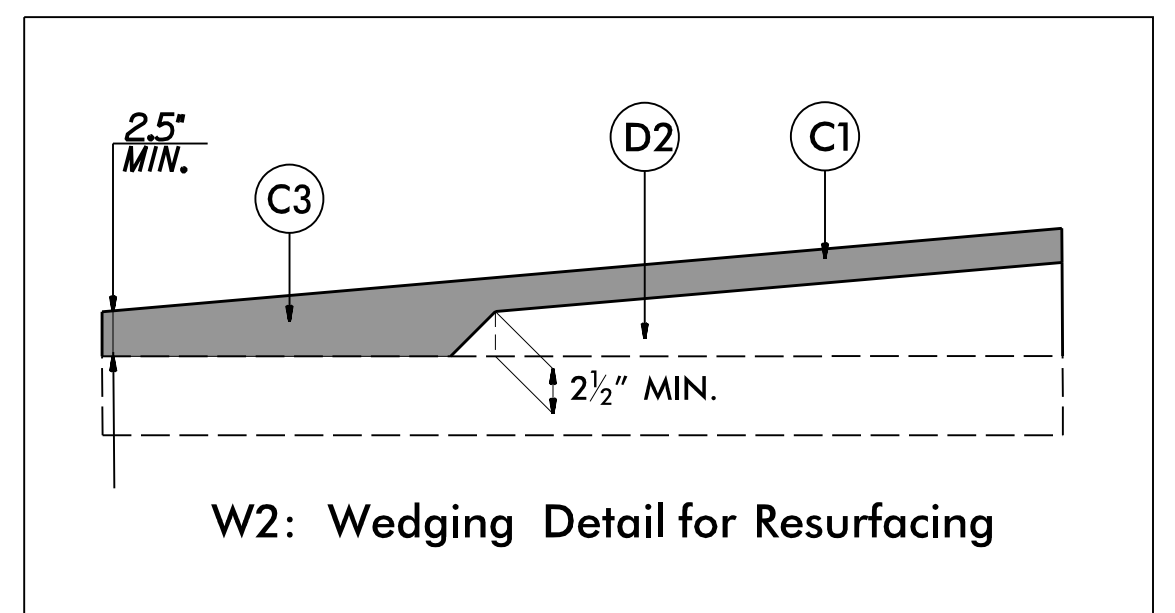
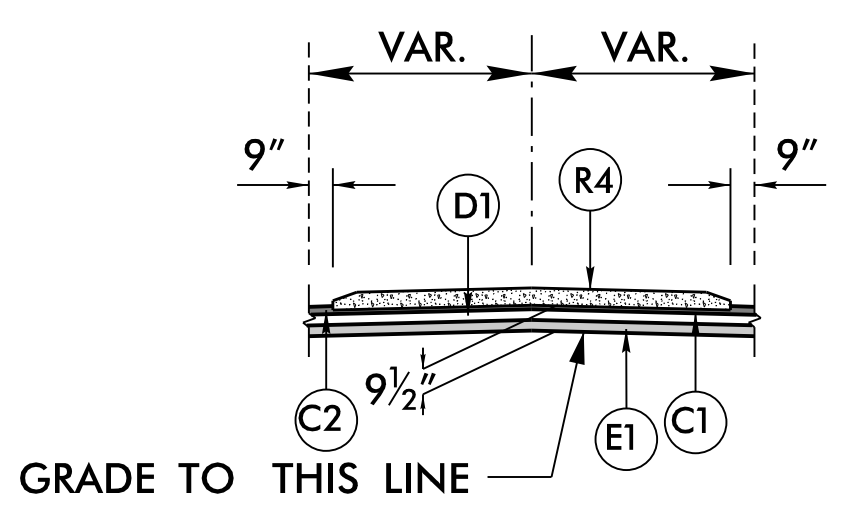
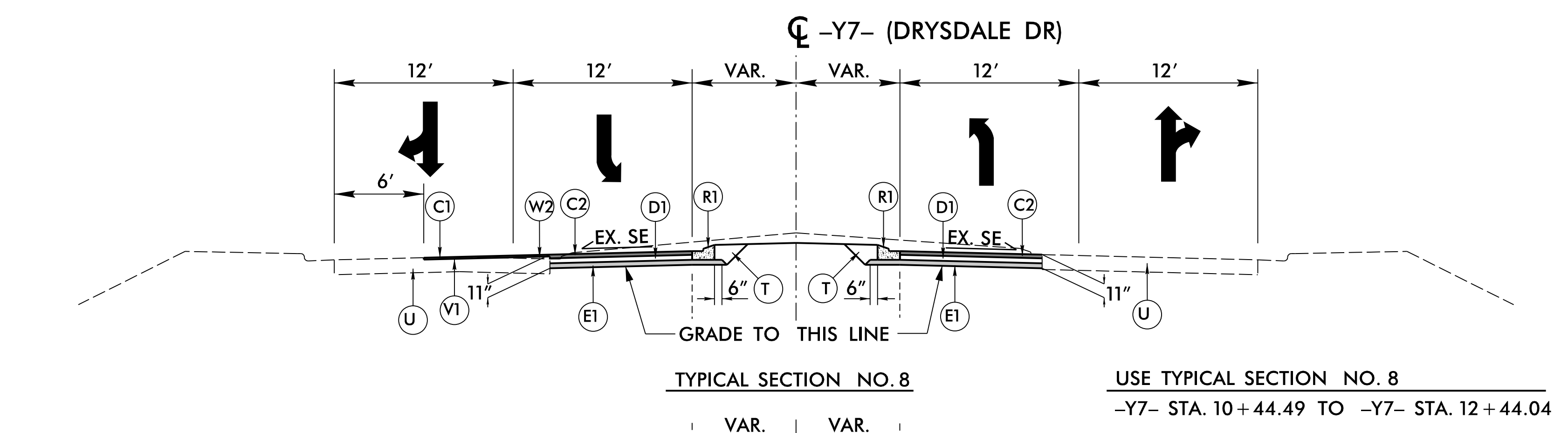
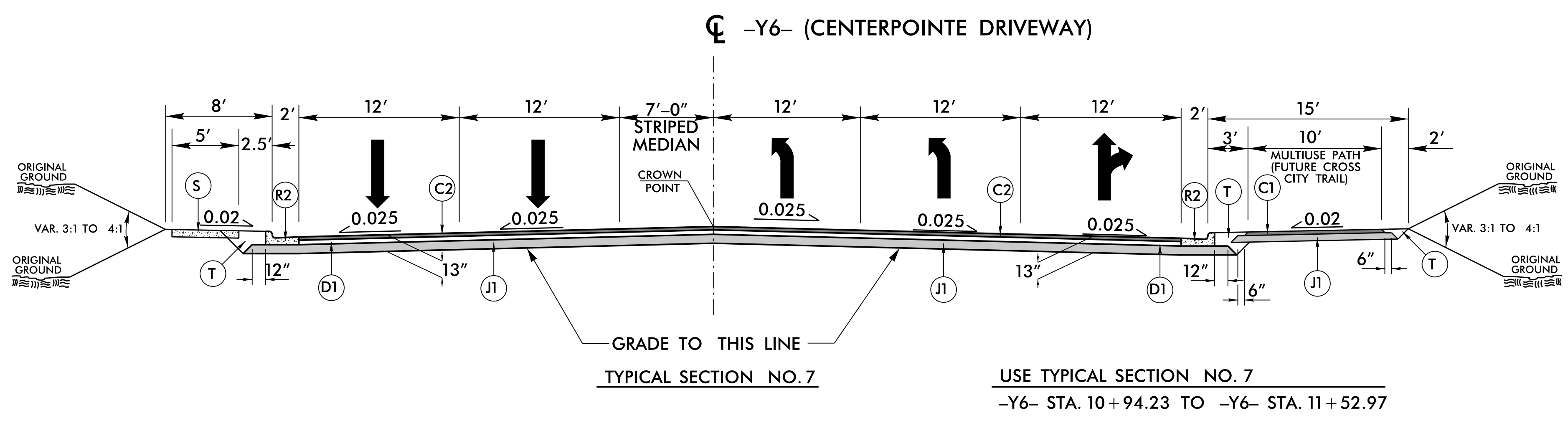
REVISIONS

6/2/2021

PROJECT REFERENCE NO. U-5710A	SHEET NO. 2A-4
ROADWAY DESIGN ENGINEER 	PAVEMENT DESIGN ENGINEER
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HDR Engineering, Inc. of the Carolinas 555 Fayetteville St. Suite 900 Raleigh, N.C. 27601 N.C.B.E.L.S. License Number: F-0116	

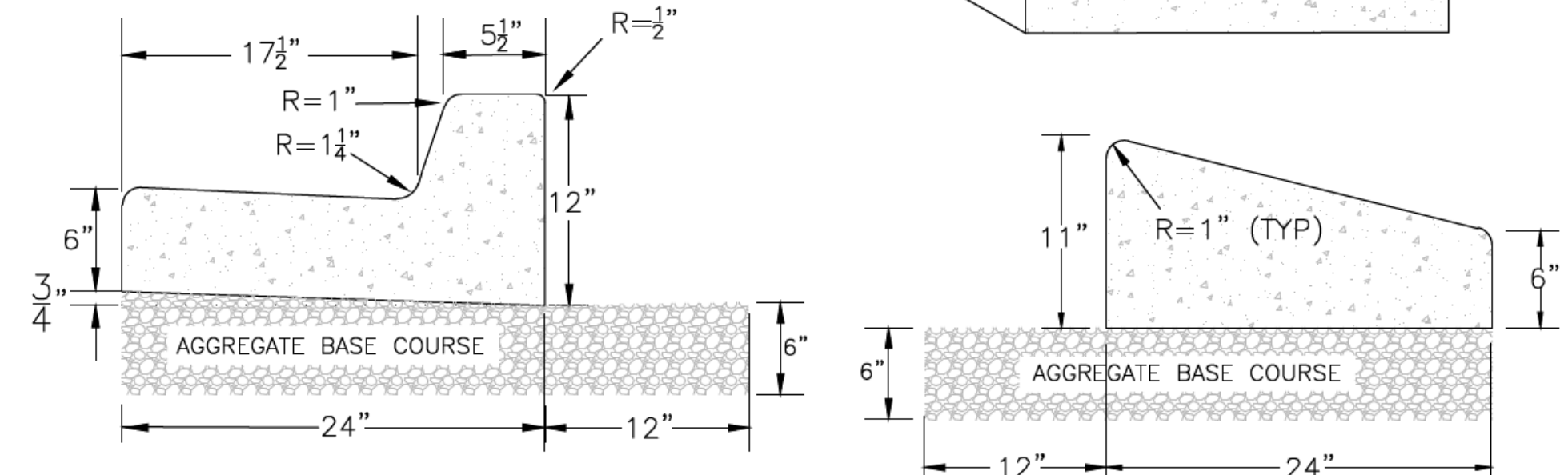
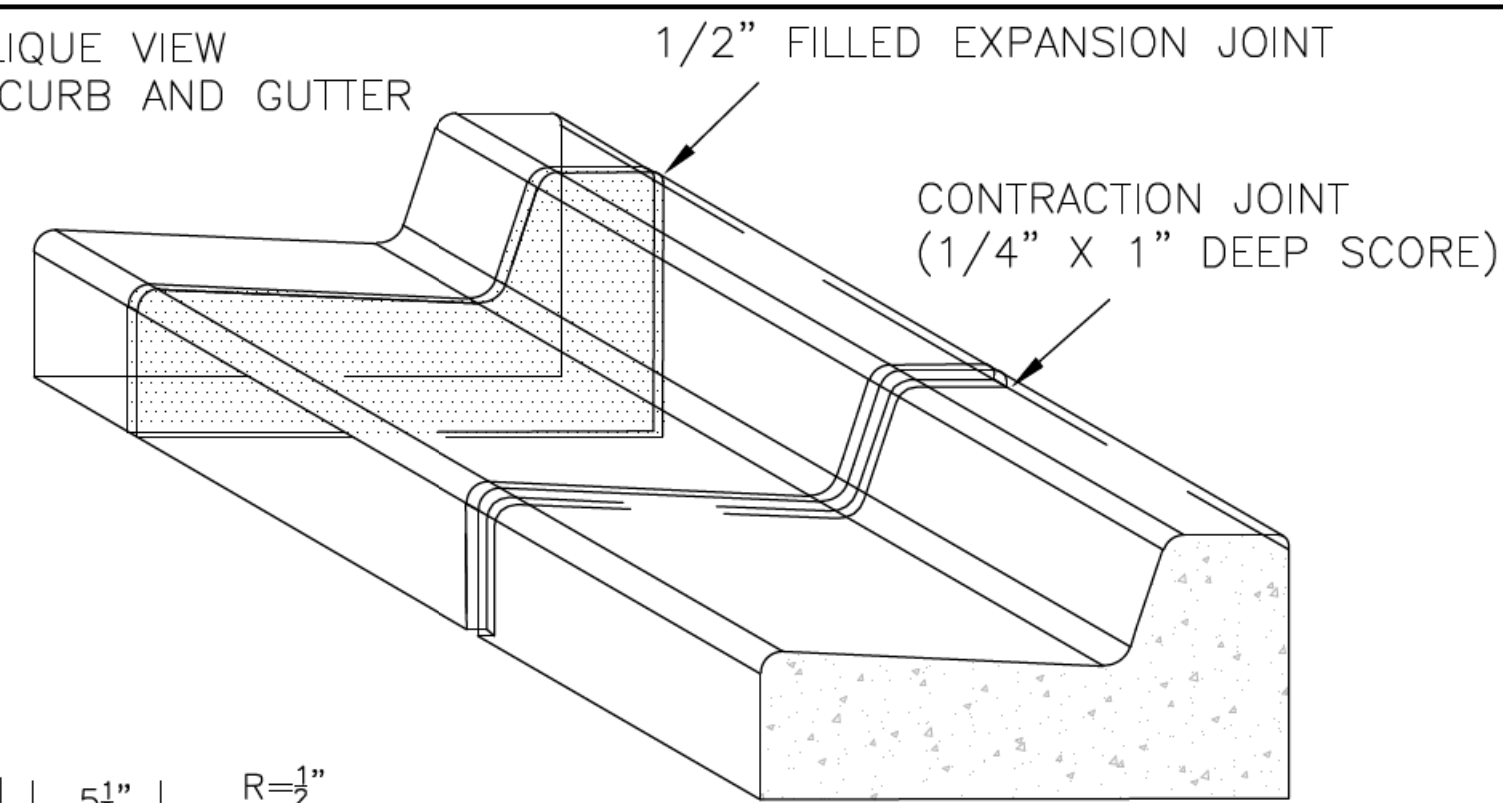


PAVEMENT SCHEDULE	
C1	1.5" S9.5B
C2	3" S9.5B
C3	VAR. S9.5B
D1	4" I19.0C
D2	VAR. I19.0C
E1	4" B25.0C
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S	4" CONC. SIDEWALK
T	EARTH MATERIAL
U	EXIST. PAVEMENT
V1	VAR. DEPTH MILLING
W	VAR. DEPTH ASPHALT

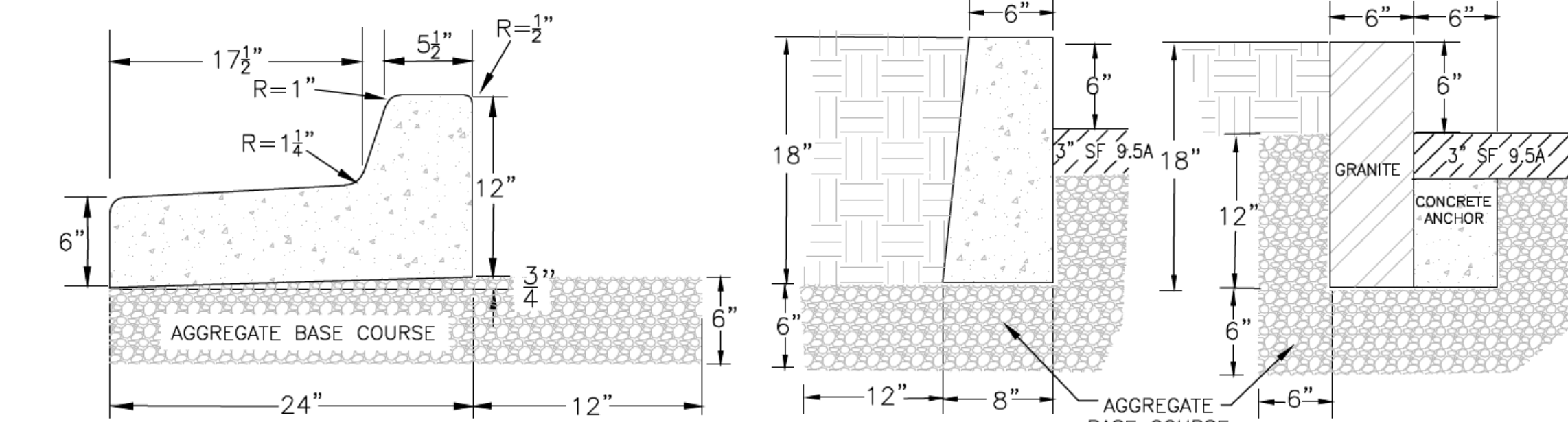


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 REVISIONS

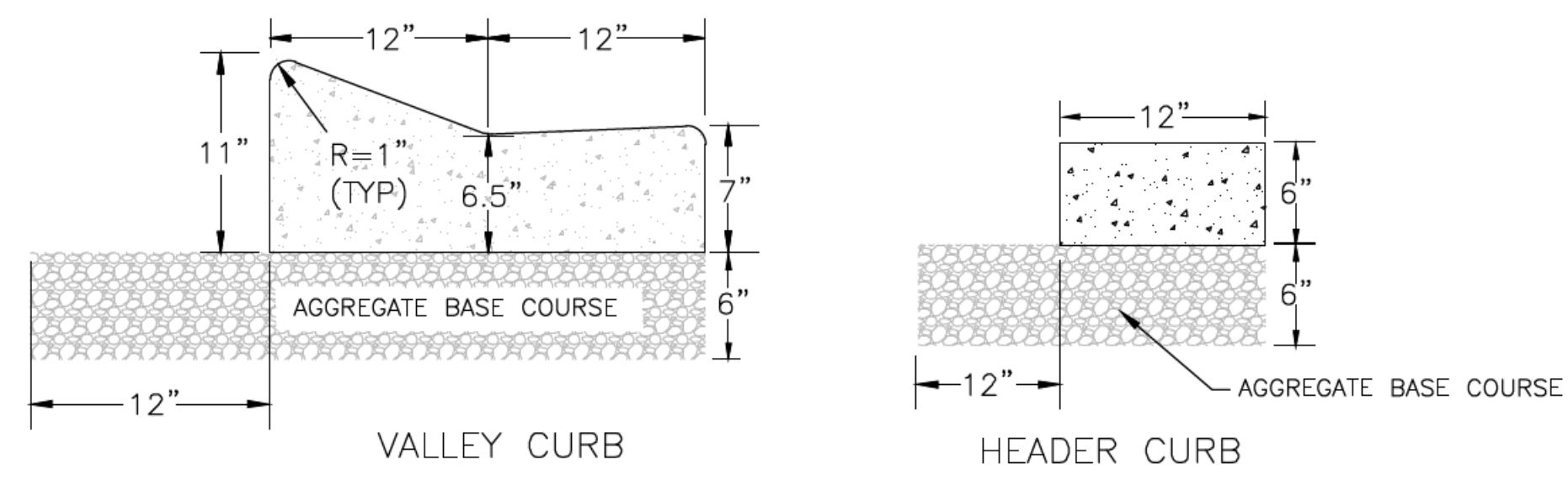
OBLIQUE VIEW
 VERTICAL CURB AND GUTTER



VERTICAL CURB AND GUTTER SLOPE CURB



MEDIAN VERTICAL CURB AND GUTTER VERTICAL CURB GRANITE CURB



VALLEY CURB HEADER CURB

- NOTES: 1. EXPANSION JOINT MATERIAL TO COMPLY WITH CURRENT NCDOT STANDARDS
 2. 50' MAX EXPANSION JOINT SPACING, 10' MAX CONTRACTION JOINT SPACING
 3. MINIMUM INSTALLATION LENGTH IS 5 FT.
 4. CONCRETE TO BE 3000 PSI MIN
 5. VERTICAL CURB AND GUTTER BASE CAN BE SLOPED 3/4" OR USE A FLAT BASE

NOTE: ONLY USE VALLEY CURB DIMENSIONS FOR PLACEMENT OF SPECIAL VALLEY GUTTER. ALL OTHER CURBS SHALL BE PLACED BY NCDOT STD. 846.01.

STANDARD DETAIL

DATE:	AUGUST, 2011
DRAWN:	PB/JSR
CHECKED:	DEC
SCALE	NOT TO SCALE

CURBING

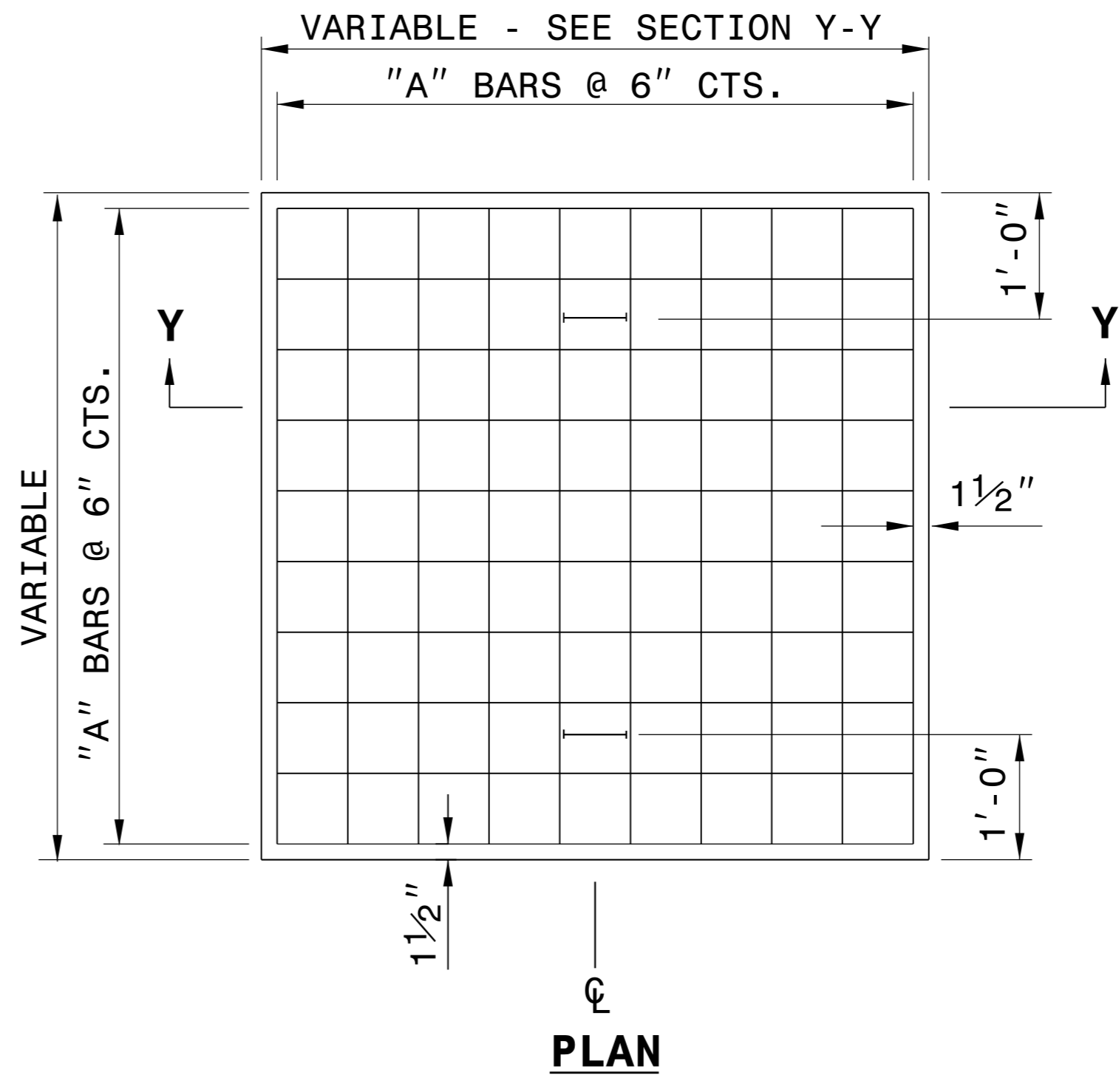
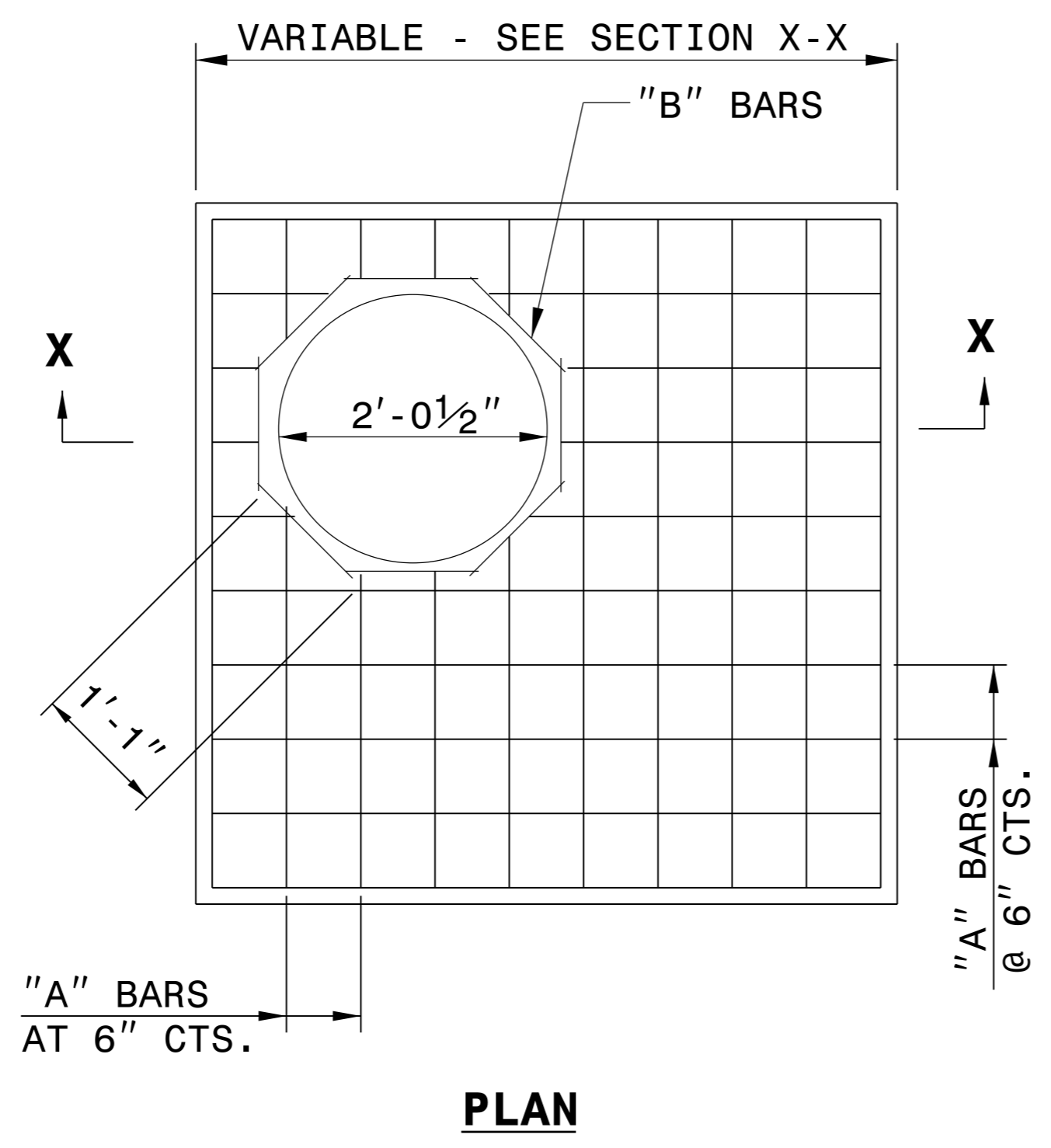
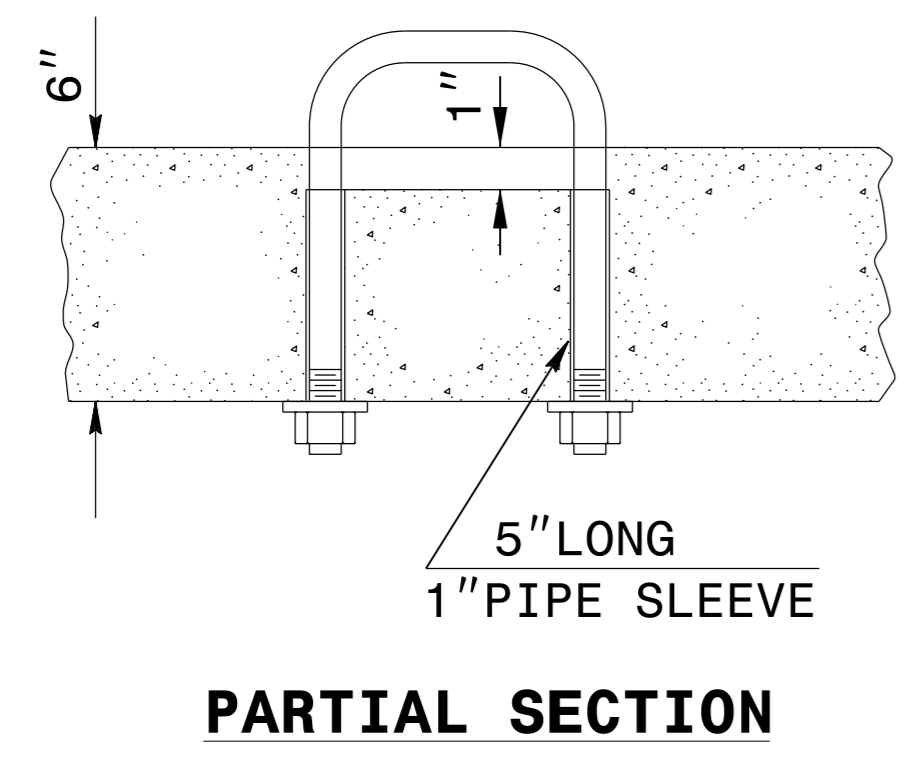


CITY OF WILMINGTON ENGINEERING
 PO BOX 1810
 WILMINGTON N.C. 28402
 (910) 341-7807

SD 3-11

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REVISIONS



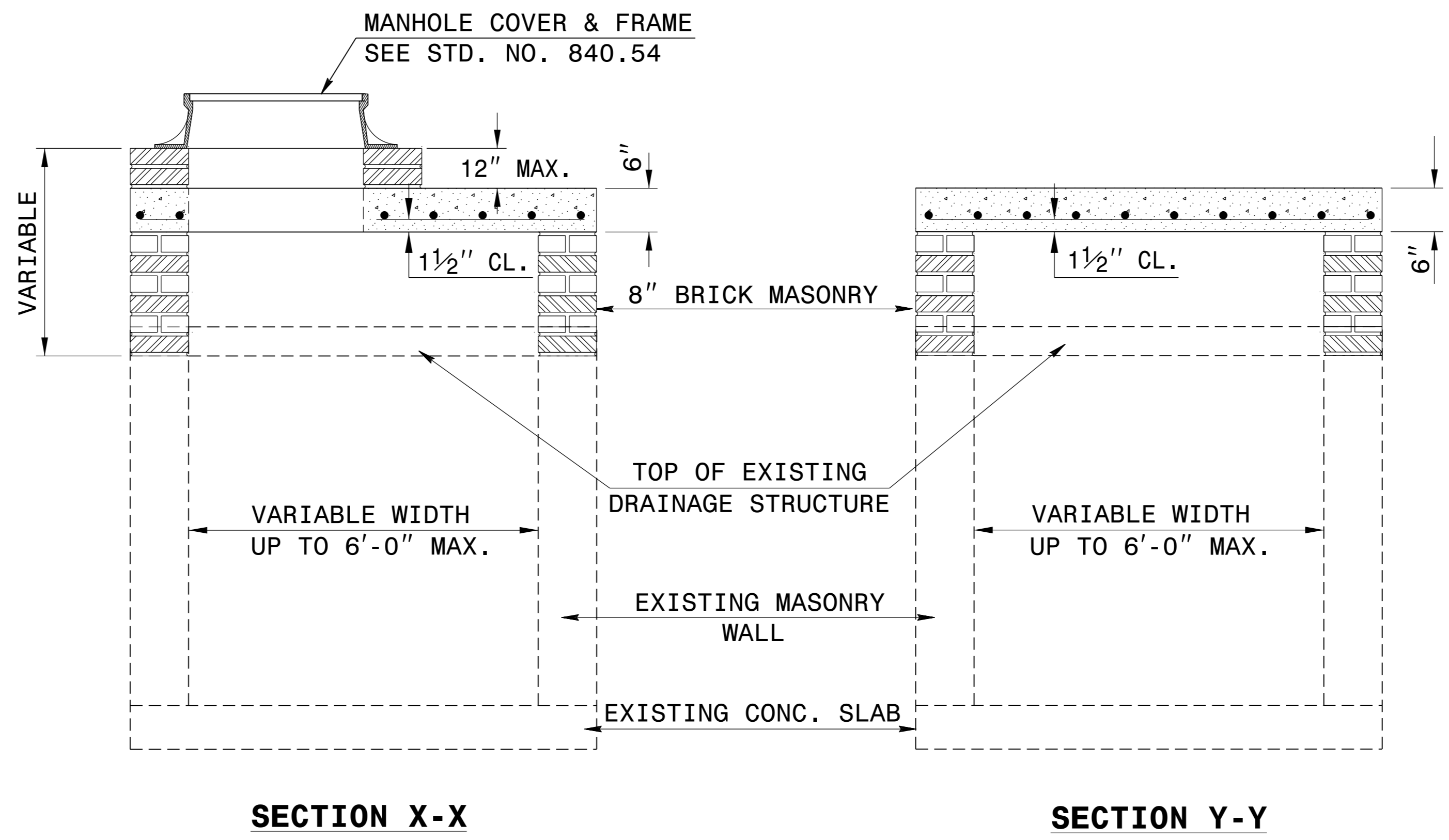
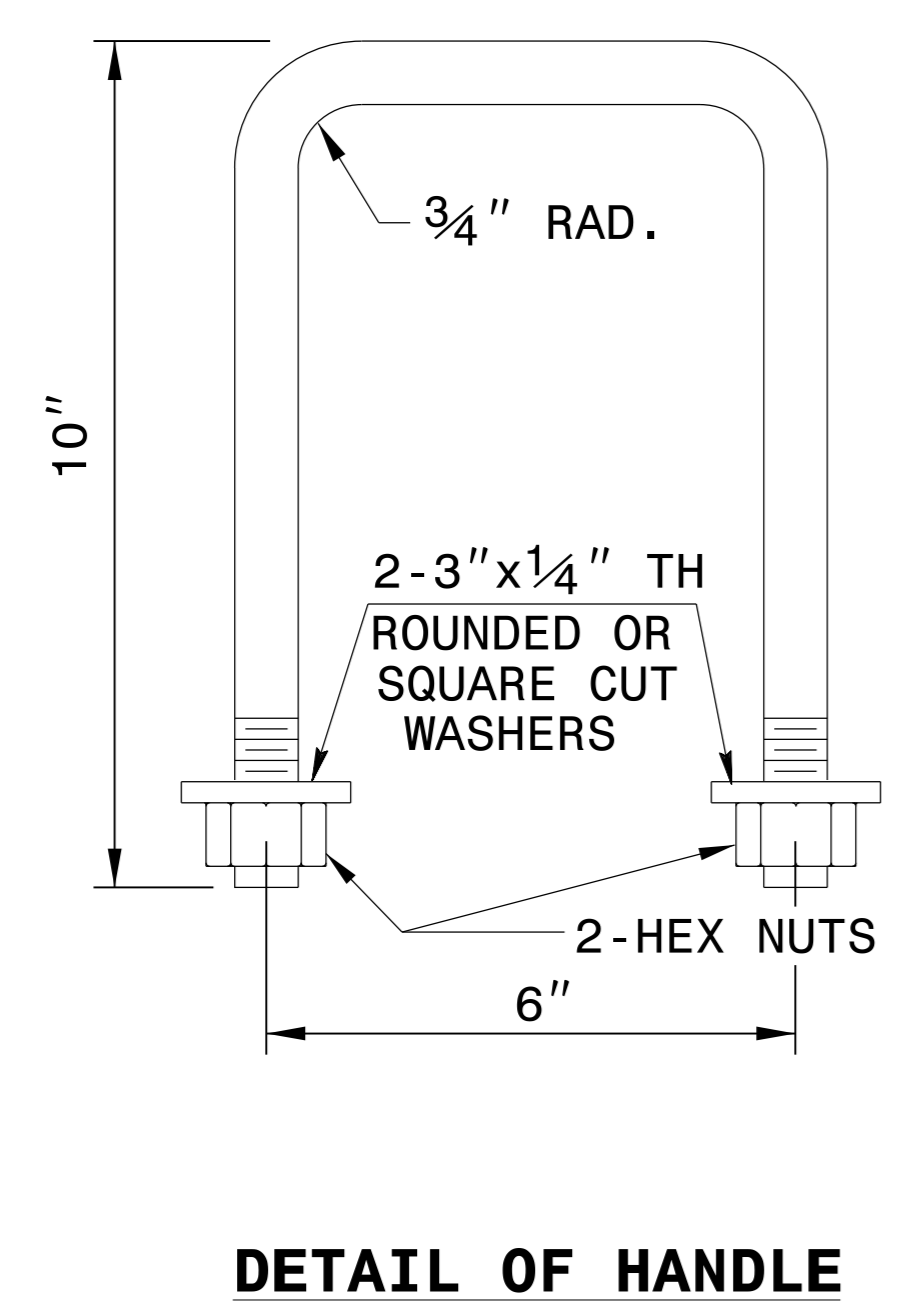
GENERAL NOTES:

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.

BILL OF MATERIALS				
REINFORCING STEEL				
CODE	SIZE	QTY.	LENGTH	REINF. STEEL LBS.
A	#4	20	4'-6"	60.12
B	#4	8	1'-1"	5.79
TOTAL				65.91 *
MASONRY				CU YDS
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

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

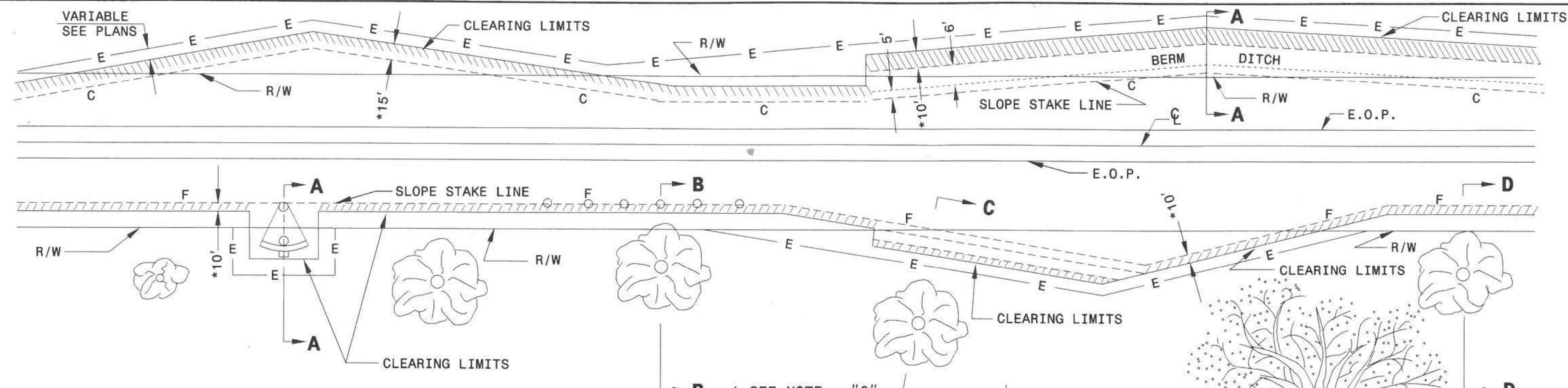
DETAIL TO CONVERT EXISTING DI, CB, OTCB or GI TO JUNCTION BOX (MANHOLE OPTIONAL)

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 MODIFIED BY: T.S.S. DATE: FEB. 2000
 CHECKED BY: DATE:
 FILE SPEC.: ds174:/usr/details/stand/boxtojbe.dgn

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

ENGLISH DETAIL DRAWING FOR METHOD OF CLEARING MODIFIED METHOD - III



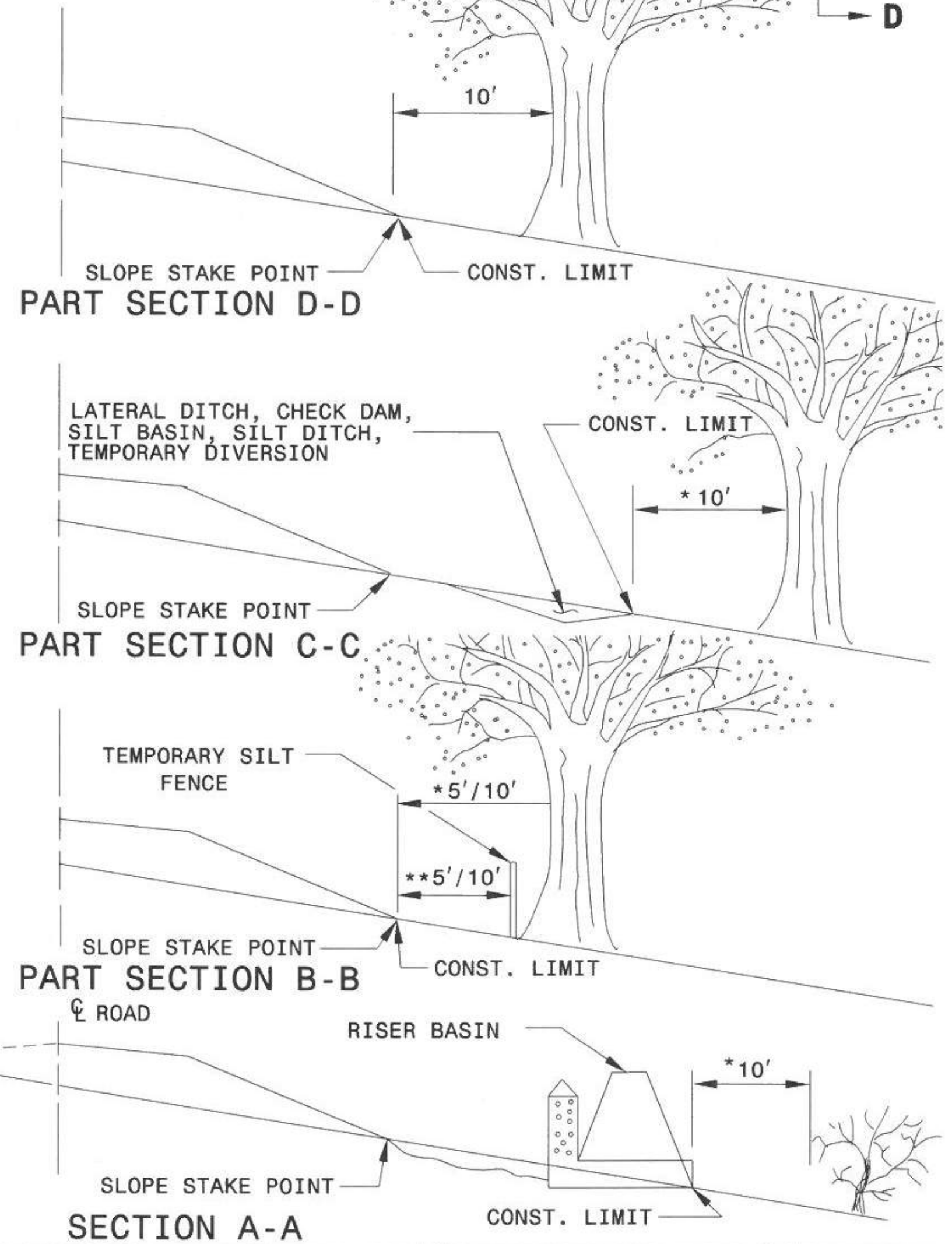
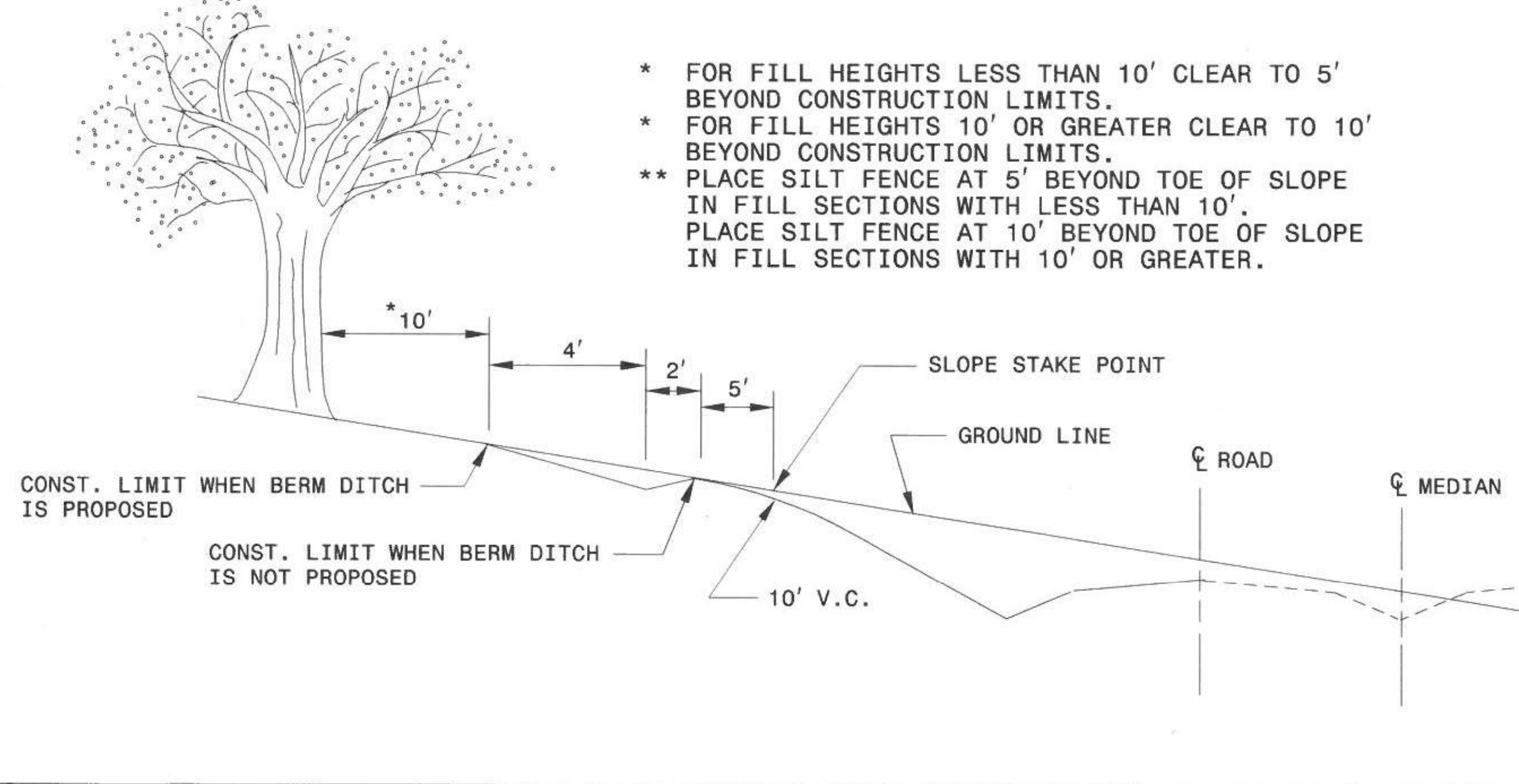
GENERAL NOTES:

- 1. REMOVE TREES OUTSIDE THE CLEARING LIMIT WHEN, IN THE OPINION OF THE ENGINEER, THE UTILITY OF A TREE WILL BE DESTROYED BY THE CONSTRUCTION OR THE CLEARING OPERATION.
2. CLEAR IN ACCORDANCE WITH THIS STANDARD EXCEPT WHERE ADDITIONAL CLEARING IS REQUIRED FOR SAFETY AS SHOWN ON THE PLANS.

METHOD III CLEARING LIMITS

- (A) CUTS -- CLEAR TO CONSTRUCTION LIMITS.
(B) FILLS - CLEAR TO 5'/10' * BEYOND CONSTRUCTION LIMITS, UNLESS SPECIFIED OTHERWISE BY WETLAND PERMIT.
(C) CUTS AND FILLS - WHEN THE CLEARING LIMITS (A AND B) EXCEED THE PROPOSED R/W OR PROPOSED CONSTRUCTION EASEMENTS, THEN CLEAR ONLY TO THE R/W OR CONSTRUCTION EASEMENT WHICHEVER IS GREATER.

- * FOR FILL HEIGHTS LESS THAN 10' CLEAR TO 5' BEYOND CONSTRUCTION LIMITS.
* FOR FILL HEIGHTS 10' OR GREATER CLEAR TO 10' BEYOND CONSTRUCTION LIMITS.
** PLACE SILT FENCE AT 5' BEYOND TOE OF SLOPE IN FILL SECTIONS WITH LESS THAN 10'. PLACE SILT FENCE AT 10' BEYOND TOE OF SLOPE IN FILL SECTIONS WITH 10' OR GREATER.



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

ENGLISH DETAIL DRAWING FOR METHOD OF CLEARING MODIFIED METHOD - III

SHEET 1 OF 1 200D03

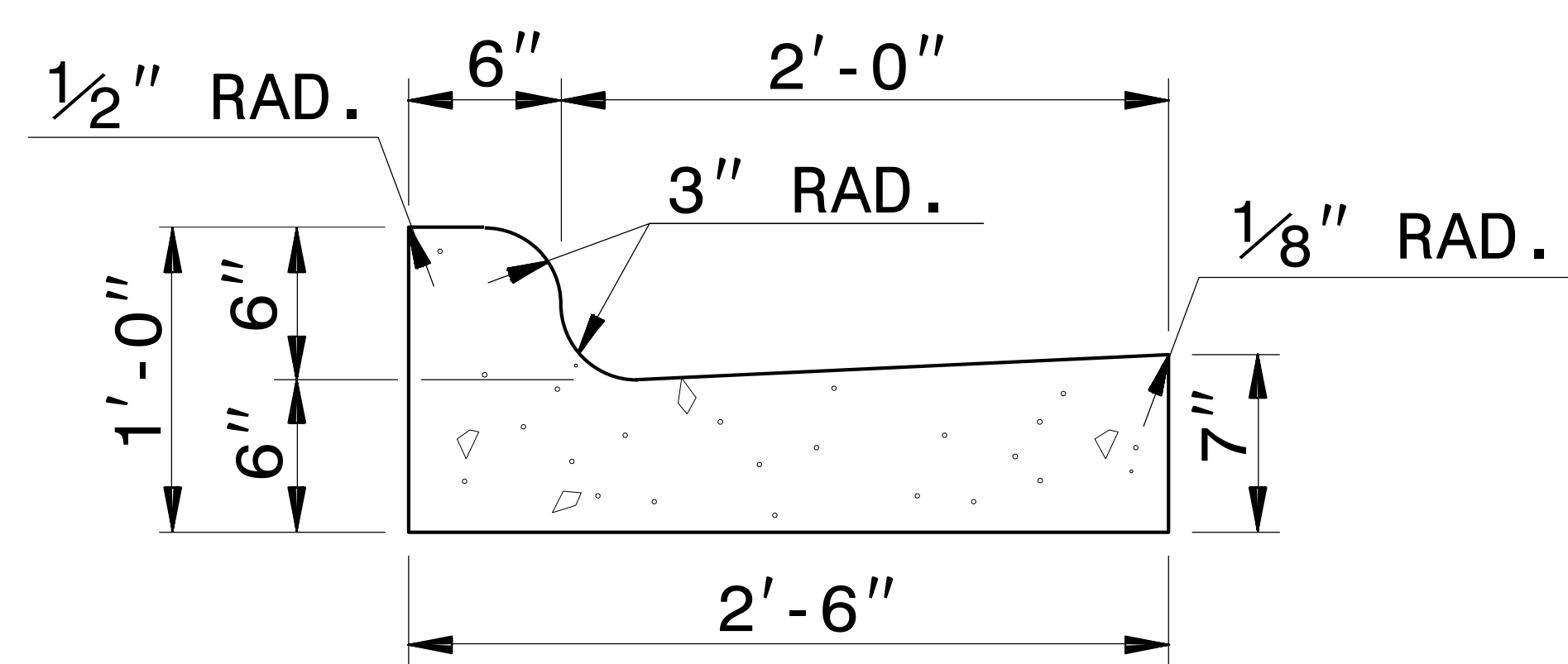
SHEET 1 OF 1 200D03



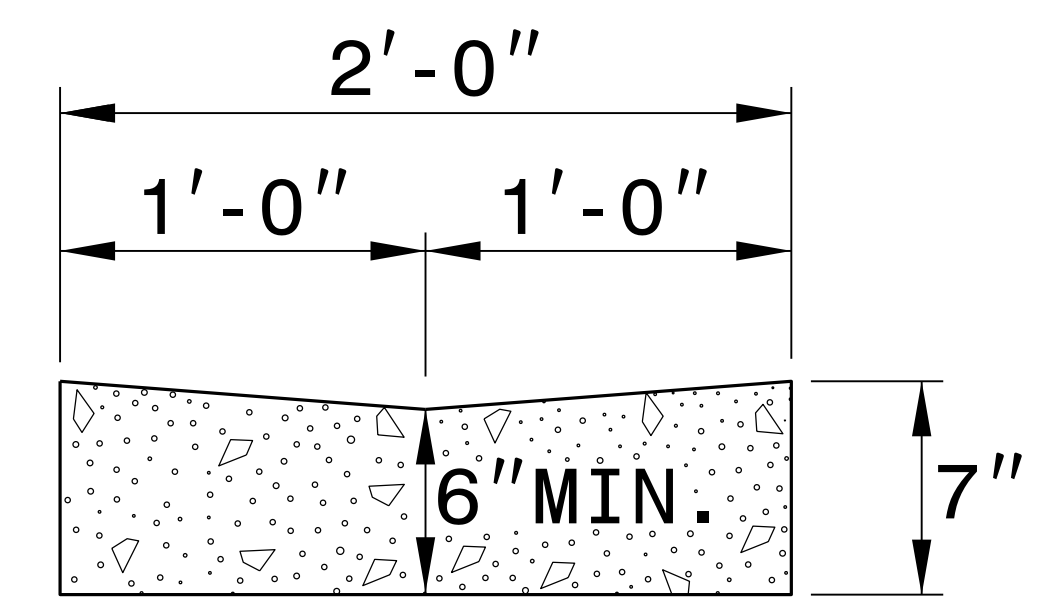
CONTRACT STANDARDS AND DEVELOPMENT UNIT
Office 919-707-6950 FAX 919-250-4119
SEE TITLE BLOCK
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CHECKED BY: DATE:
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*****SYSTEMS*****
*****USER NAME*****

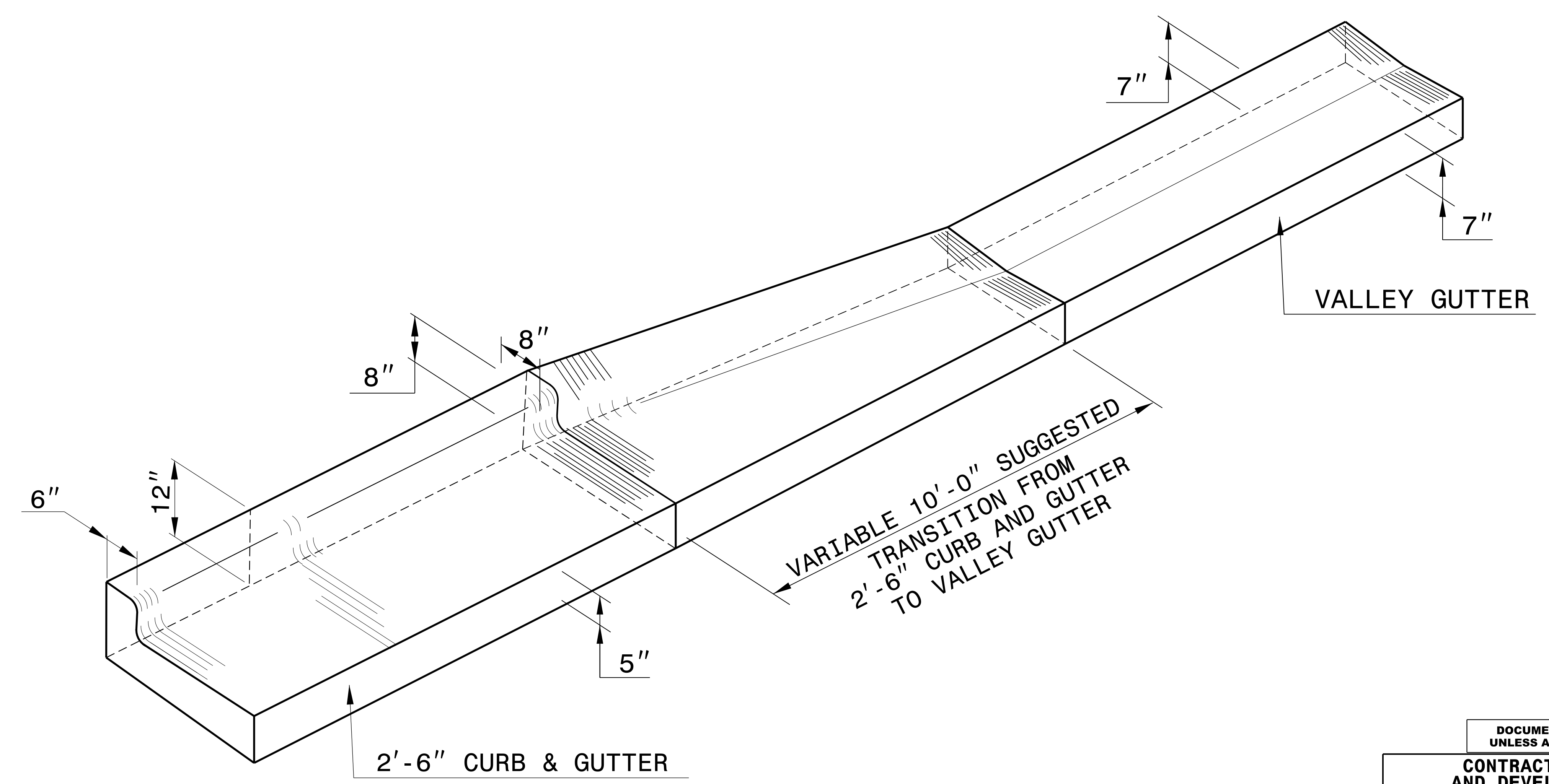
*NOTE: SEE STD. DWG. 846.01 FOR GENERAL NOTES



2'-6" CURB AND GUTTER



VALLEY GUTTER



ISOMETRIC VIEW OF TRANSITION



4/4/2022

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

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

TRANSITION FROM 2'-6" CURB AND GUTTER TO VALLEY GUTTER



ORIGINAL BY: T.S. SPELL DATE: FEB. 4, 2009
MODIFIED BY: DATE:
CHECKED BY: DATE:
FILE SPEC.: w:\usr\details\stand\cgtransit.dgn

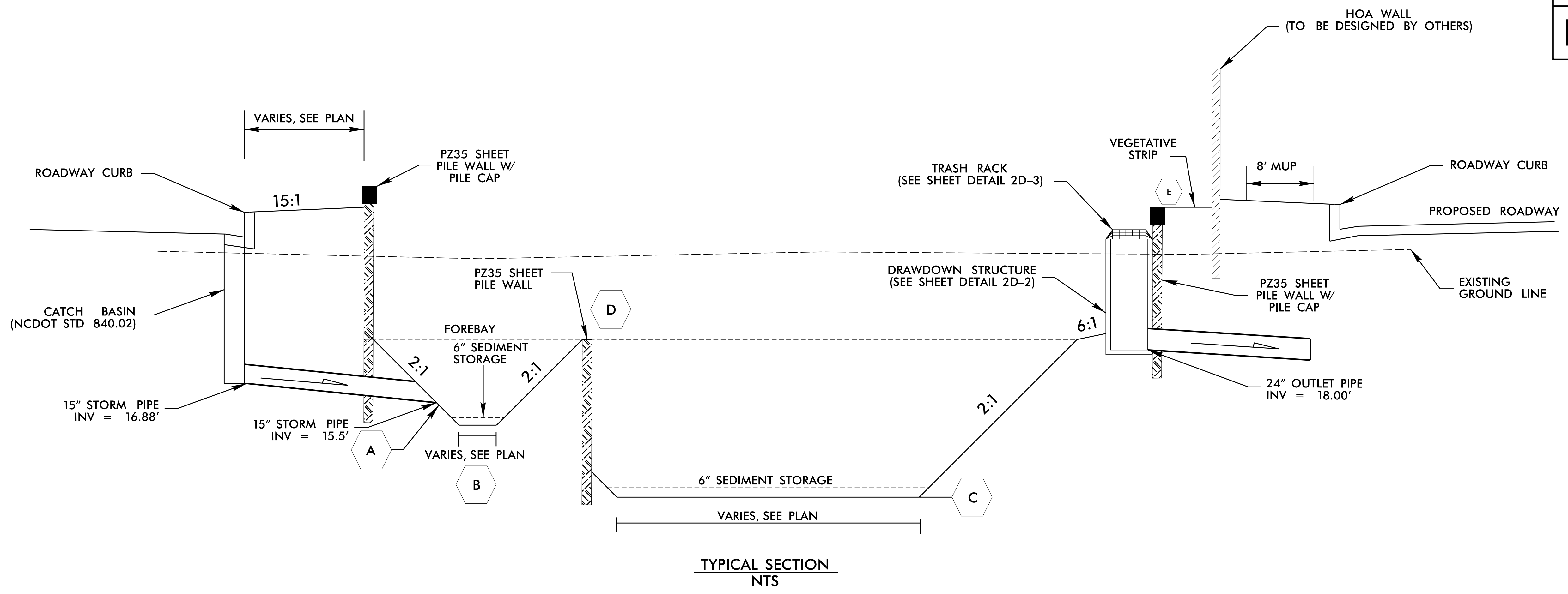
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6/2/2021

STORMWATER POND DETAIL

NOT TO SCALE

PROJECT REFERENCE NO. U-5710A	SHEET NO. 2D-1
HYDRAULICS ENGINEER  12/9/2021	
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 HDR Engineering, Inc. of the Carolinas 555 Fayetteville St, Suite 900 Raleigh, N.C. 27601 N.C.B.E.L.S. License Number: F-0116	



TYPICAL SECTION
NTS

**TABLE 1
ELEVATIONS FOR STORMWATER POND**

STATION	A (FOREBAY PIPE INVERT)	B (FOREBAY BOTTOM)	C (BOTTOM OF BASIN)	D (FOREBAY WALL)	E (TOP OF BERM)
-Y2- 11+70 RT	15.5'	14.0'	11.0'	18.5'	24.0'

- NOTES:
- SEE PLANS FOR LOCATION AND BASIN DIMENSIONS.
 - ALL DISTURBED BASIN SLOPES DRAINING INTO THE FILTRATION BASIN SHALL BE SODDED WITH BERMUDA SOD.
 - ACCESS BERM SHALL BE PROVIDED TO ACCESS CONTROL STRUCTURE ON BASIN AS SHOWN IN DETAIL.
 - FILL EMBANKMENT MATERIAL SHOULD CONSIST OF A-4, A-5, OR A-6 SOILS COMPACTED TO 95% OF AASHTO T-99 (STANDARD PROCTOR)

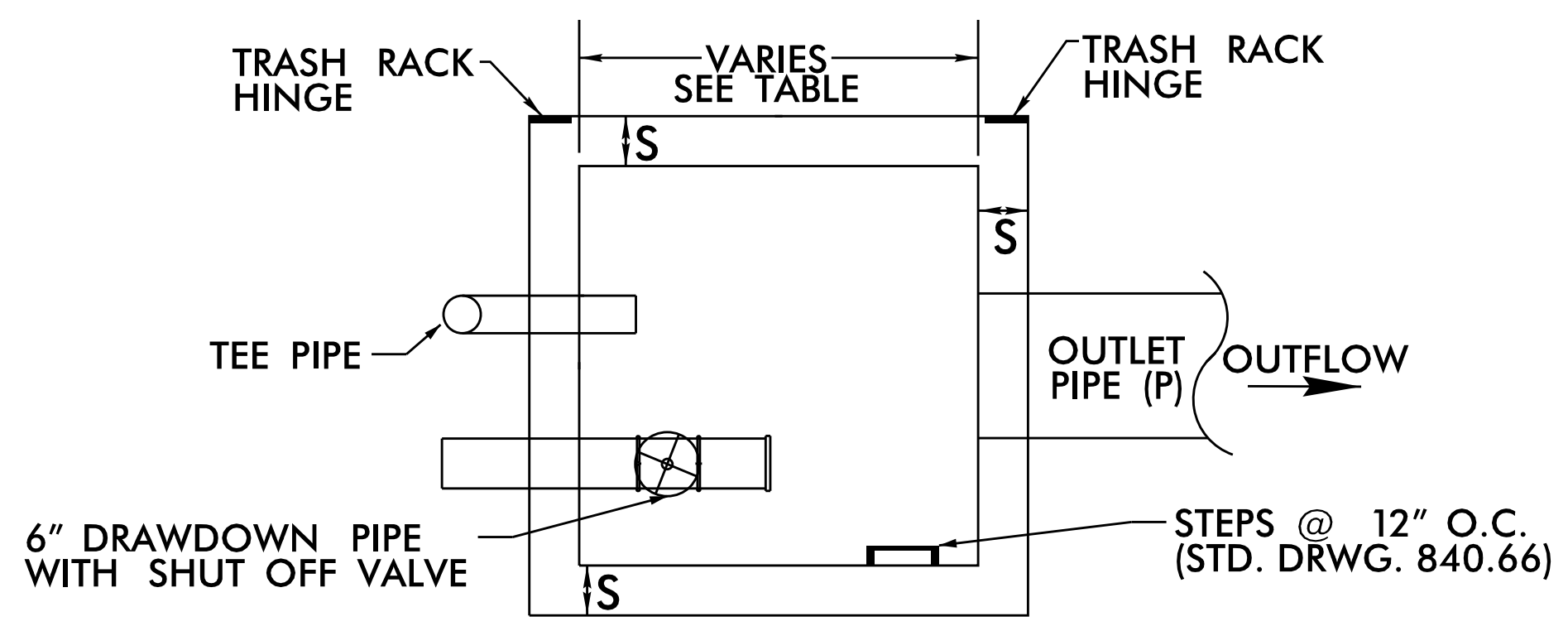
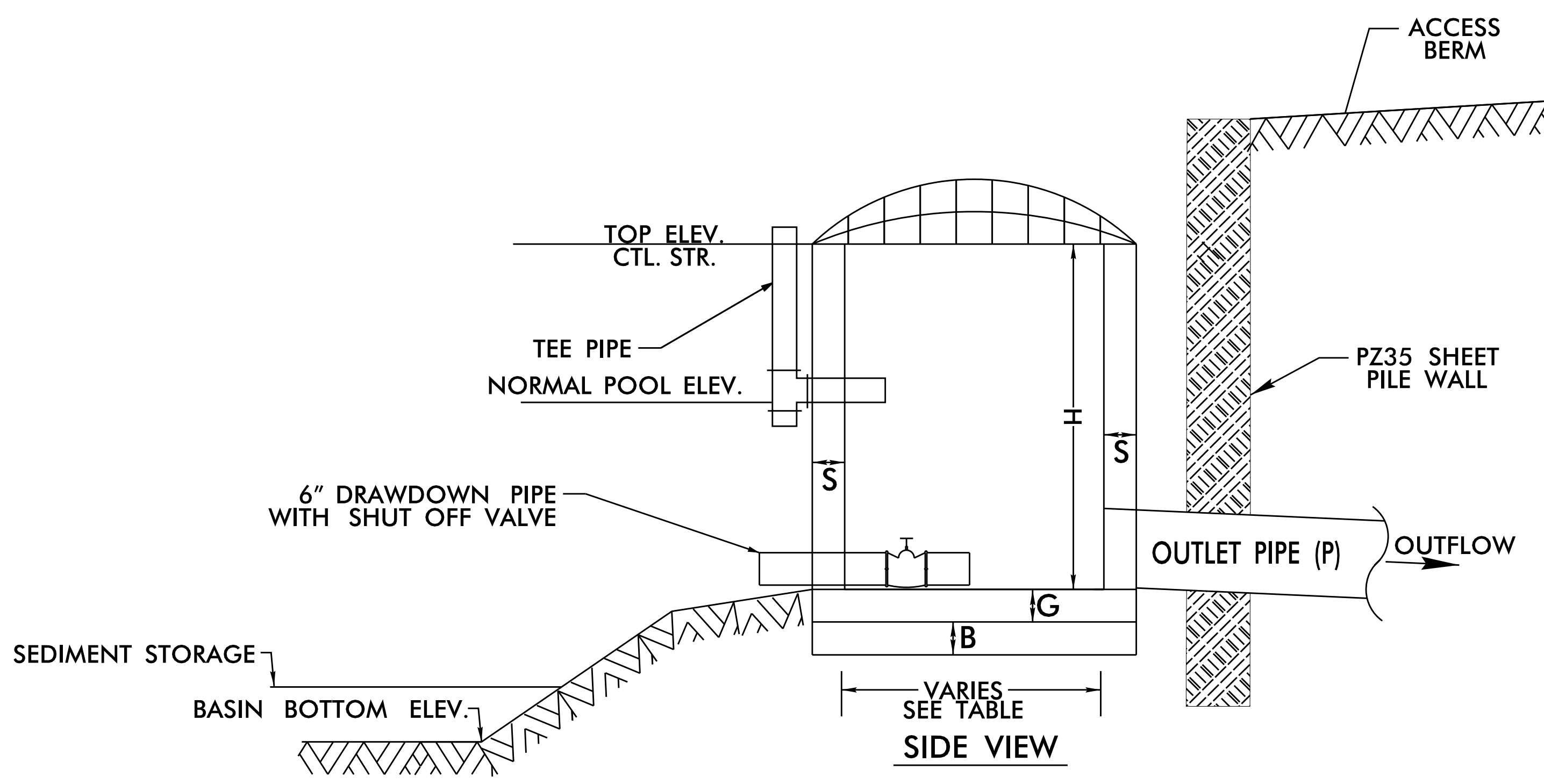
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 DATE: 12/9/2021

REVISIONS

6/2/2019

DRAWDOWN STRUCTURE DETAIL

NOT TO SCALE



TRASH RACK NOT SHOWN FOR CLARITY

NOTES

- 1) NO BEDDING MATERIAL TO BE USED. THEREFORE, DO NOT FOLLOW STANDARD DRAWINGS FOR METHOD OF PIPE INSTALLATION FOR OUTLET PIPE THROUGH EMBANKMENT.
- 2) ENSURE TRASH RACK OPENS FREELY AND WITHOUT INTERFERENCE.
- 3) SHUT OFF VALVE MAY BE A GATE VALVE, BALL VALVE, SHEAR GATE, ETC. SHUT OFF VALVE IS TO REMAIN CLOSED DURING NORMAL OPERATON.

MINIMUM DIMENSIONS FOR WET DETENTION BASIN DRAWDOWN STRUCTURE

STATION	OFFSET	STRUCTURE NUMBER	SIDE WALLS (INCHES)	BASE B (INCHES)	BASE G (INCHES)	CTL. STR. DIMENSIONS			TOP ELEVATION CONTROL STRUCTURE	BASIN BOTTOM ELEV.	TEE PIPE DIAMETER INCHES	TEE PIPE INV. ELEV. (NORMAL POOL)	DRAWDOWN PIPE INVERT	OUTLET PIPE INVERT	OUTLET PIPE DIAMETER(P) INCHES	OUTLET PIPE MATERIAL
						W	L	H								
11+72.78 -Y2-	46.14' RT	0617	10	10	12	3.5'	3.5'	3.75'	21.75'	11.00'	1.5	18.50'	18.00'	18.00'	24	CONCRETE

PROJECT REFERENCE NO. U-5710A	SHEET NO. 2D-2
HYDRAULICS ENGINEER 12/9/2021	
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 USER: CHARRIS
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REVISIONS

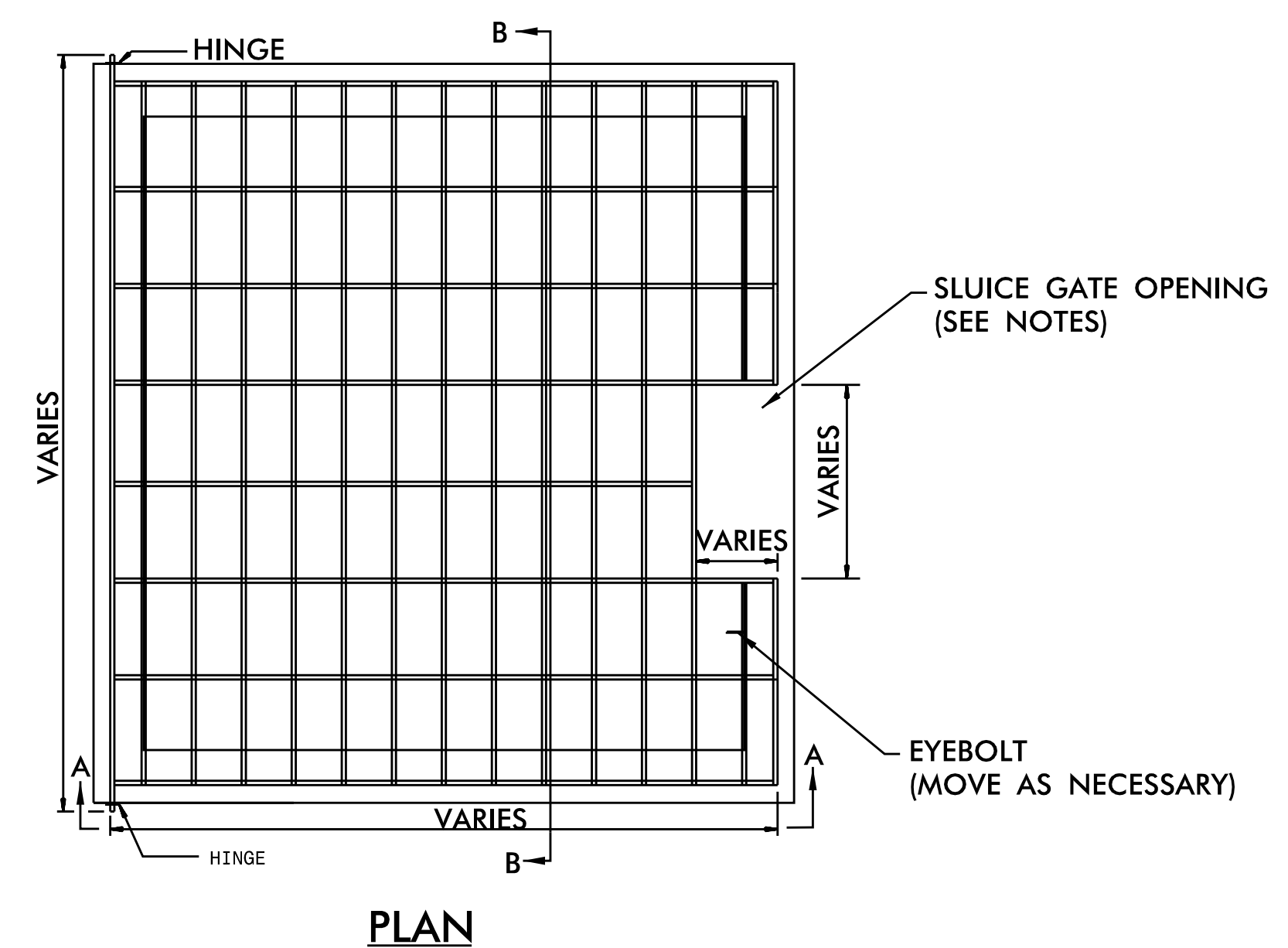
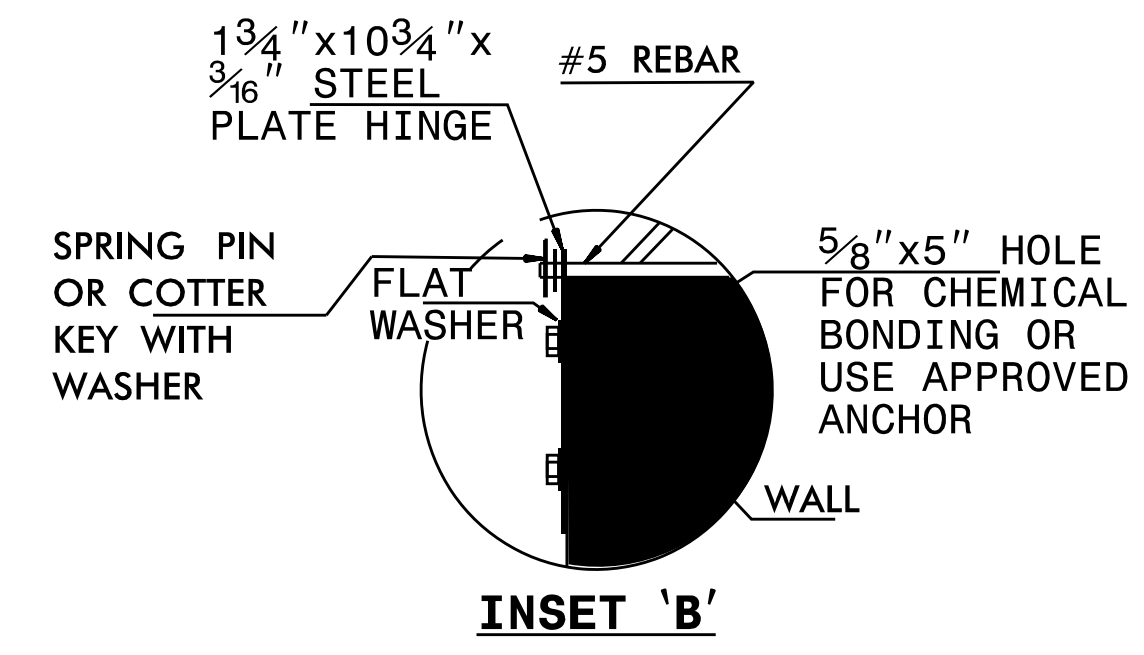
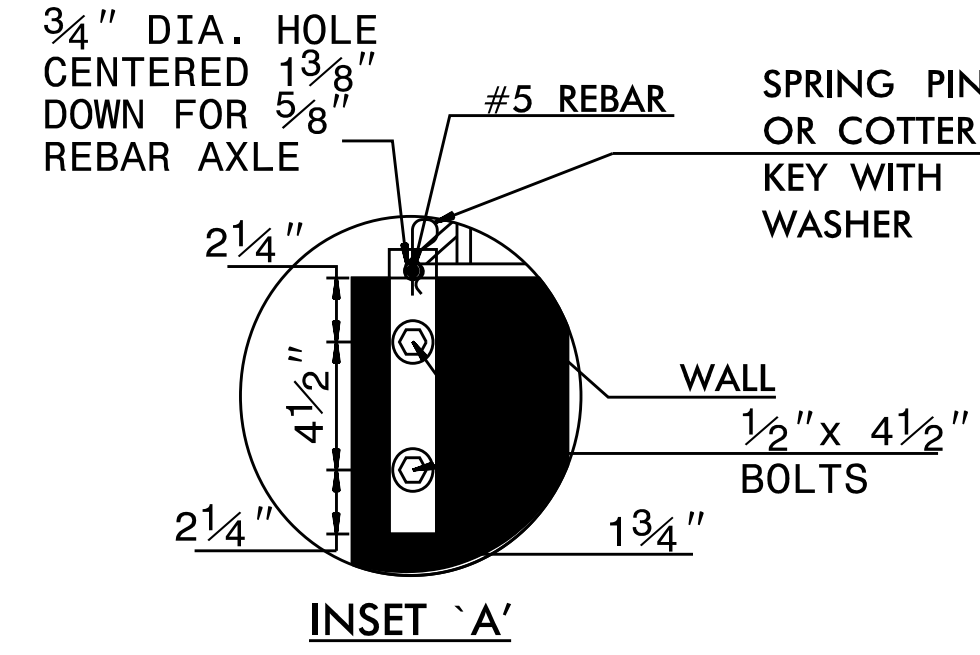
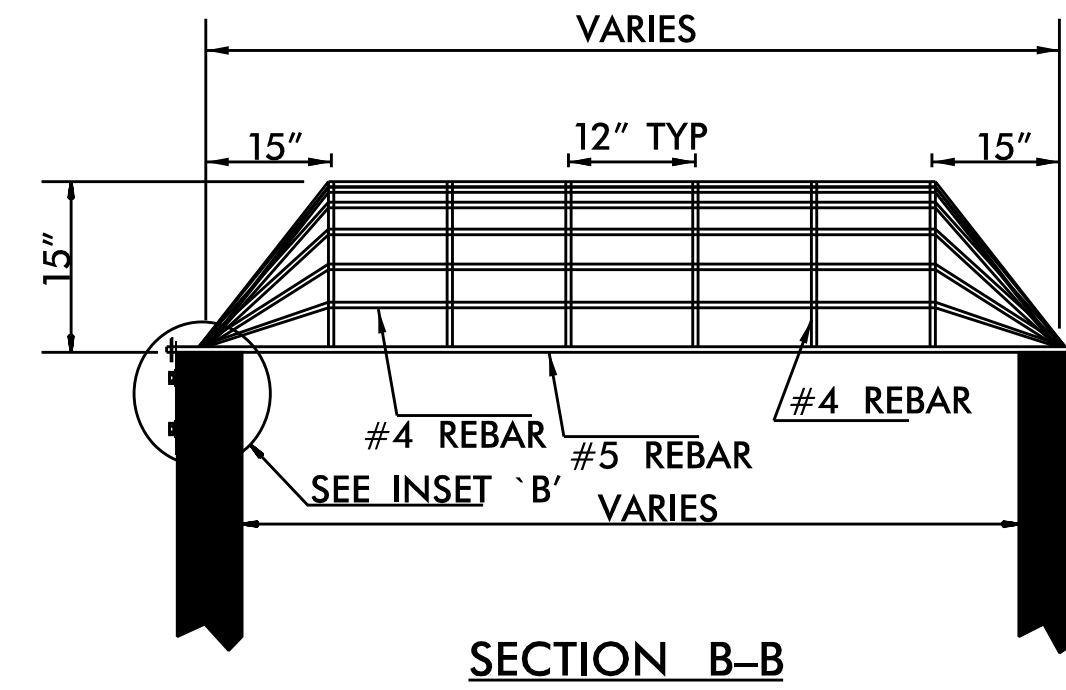
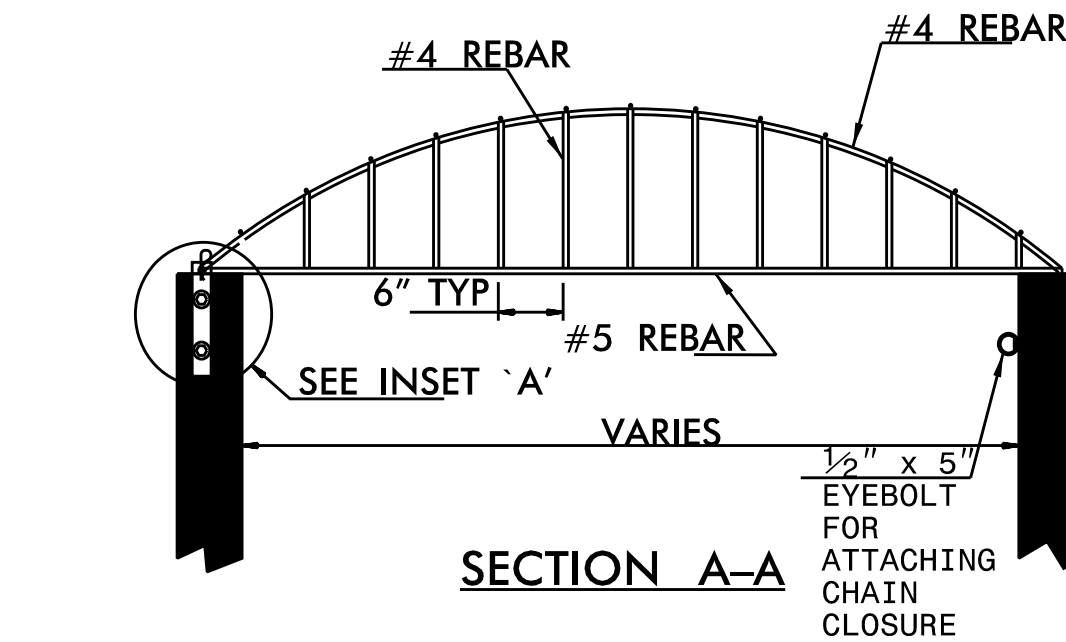
6/2/2021



TRASH RACK DETAIL

NOT TO SCALE



RISER TRASH RACK NOTES:

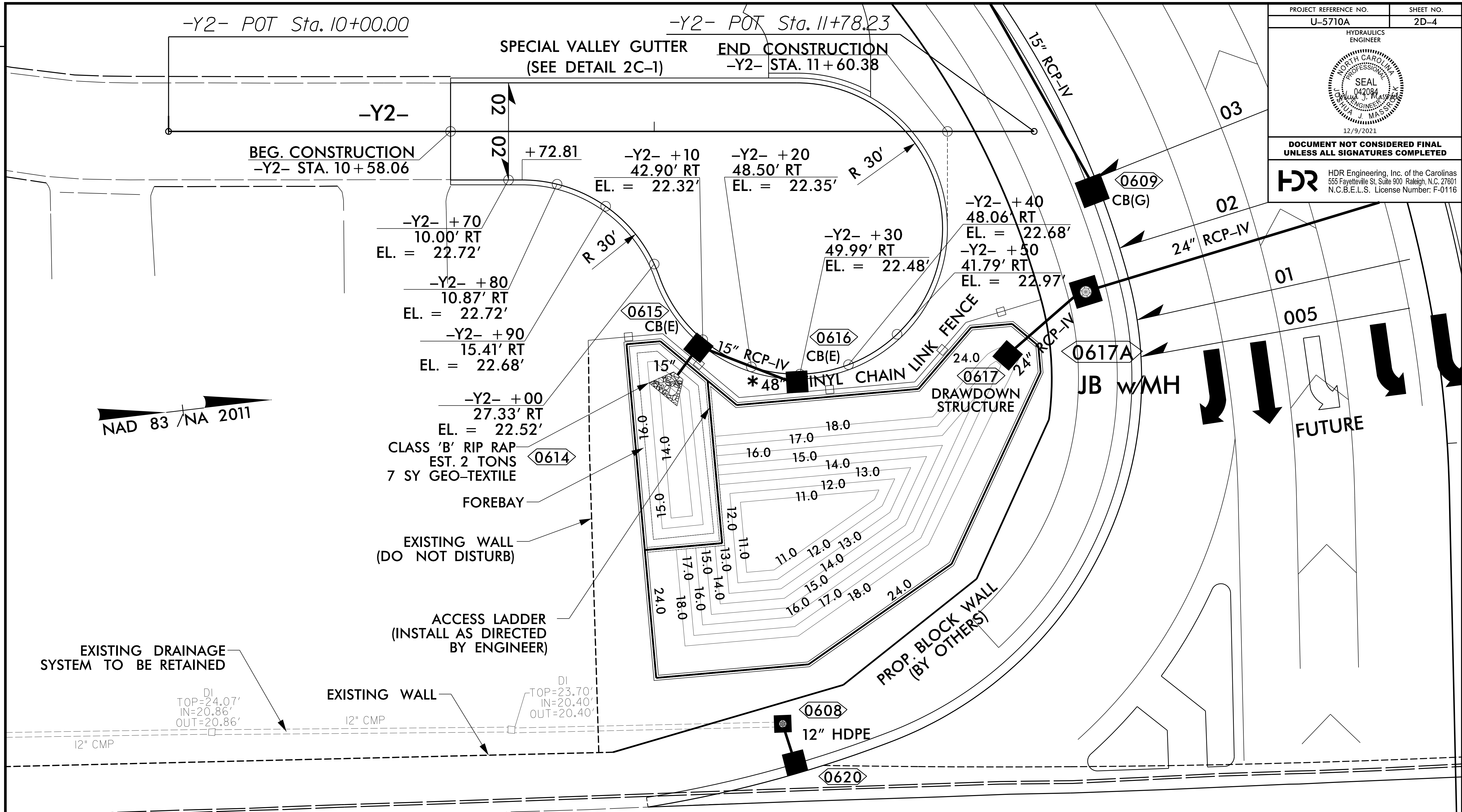
- 1) ALL JOINTS SHALL BE FULLY WELDED.
- 2) IF BOLTS ARE ANCHORED IN CONCRETE, FOLLOW STD. DWG. 862.03 AND 862.04 FOR ANCHORING PROCEDURE.
- 3) EYEBOLT FOR CHAIN CLOSURE SHALL BE INSTALLED BY THE SAME METHOD AS THE HINGE PLATE BOLTS.
- 4) RACK AND HARDWARE SHALL BE ALUMINUM OR REBAR AND GALVANIZED IN ACCORDANCE WITH ASTM A-153.
- 5) PROVIDE OPENING IN TRASH RACK TO ACCOMODATE SLUICE GATE, IF APPLICABLE, ON THE OUTLET PIPE. ENSURE TRASH RACK OPENS FREELY AND WITHOUT INTERFERENCE WITH SLUICE GATES.



PROJECT REFERENCE NO. U-5710A	SHEET NO. 2D-3
HYDRAULICS ENGINEER  12/9/2021	
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 REVISIONS

PROJECT REFERENCE NO. U-5710A	SHEET NO. 2D-4
HYDRAULICS ENGINEER	
	
12/9/2021	
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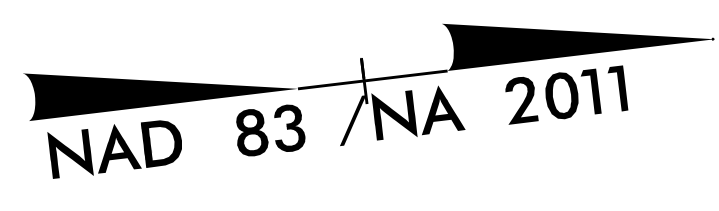
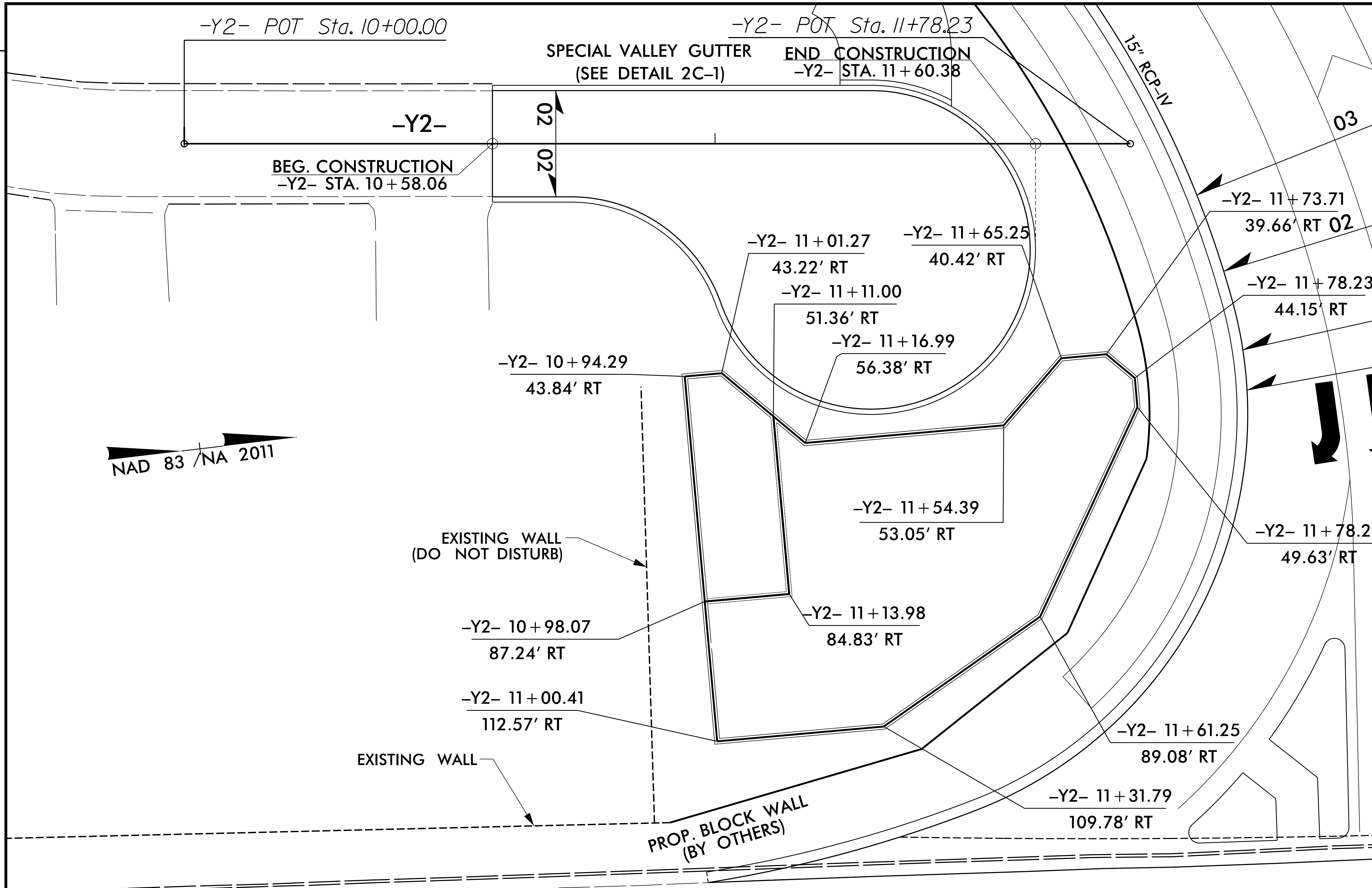
DETAIL SHOWING ELEVATIONS ON CUL-DE-SAC

SCALE 1" = 10'
 SEE SHEET 6 FOR PLAN VIEW
 SEE SHEET 10 FOR Y2 PROFILE
 SEE SHEET BASIN_W FOR WALL ENVELOPE

* NOTE: FENCE NOT TO BE PLACED UNTIL DIRECTED BY THE ENGINEER. REFER TO CONTRACT DOCUMENTS FOR ADDITIONAL INFORMATION. FENCE SHALL HAVE (2) 10' WIDE ACCESS GATES: (1) ADJACENT TO THE OUTLET STRUCTURE AND (1) ADJACENT TO THE FOREBAY. INSTALL ACCESS LADDER AS DIRECTED BY ENGINEER.

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 REVISIONS

PROJECT REFERENCE NO. U-5710A	SHEET NO. 2D-5
HYDRAULICS ENGINEER	
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DETAIL SHOWING STORMWATER POND LAYOUT

SCALE 1" = 10'
 SEE SHEET 6 FOR PLAN VIEW
 SEE SHEET 10 FOR Y2 PROFILE
 SEE SHEET BASIN_W FOR WALL ENVELOPE

PLOT DRIVER: NCDOT_color_eng_50.plt
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 DATE: 12/9/2021
 REVISIONS

**STATE OF NORTH CAROLINA
 DIVISION OF HIGHWAYS
 SUMMARY OF EARTHWORK
 IN CUBIC YARDS**

Station	Station	Uncl. Excav.	Undercut	Embank. +%	Borrow	Waste
L Sta. 10+44.11	L Sta. 23+68.78	3,355	566	8,437	5,082	566
Y2 Sta. 10+58.06	Y2 Sta. 11+60.88	135	0	16	0	119
Y3 Sta. 10+40.51	Y3 Sta. 11+94.81	310	0	8	0	301
Y4 Sta. 29+50.83	Y4 Sta. 31+50.00	105	0	0	0	105
Y7 Sta. 10+44.49	Y7 Sta. 12+44.04	398	0	0	0	398
SUBTOTALS:		4,303	566	8,461	5,082	1,489
TOTALS:		4,303	566	8,461	5,082	1,489
Additional Undercut :			400	500	500	400
Waste In Lieu of Borrow :					-923	-923
PROJECT TOTALS:		4,303	966	8,961	4,659	966
Est. 5% To Replace Top Soil on Borrow Pit					233	
GRAND TOTALS:		4,303	966	8,961	4,892	966
SAY:		4,500	1,000		5,000	

Note: Earthwork quantities are calculated by the Roadway Design Unit. These earthwork quantities are based in part on subsurface data provided by the Geotechnical Engineering Unit.

EST. DDE = 510 CY
 EST. SHALLOW UNDERCUT = 100 CY

**PAVEMENT REMOVAL SUMMARY
 IN SQUARE YARDS**

SURVEY LINE	Station	Station	LOCATION LT/RT/CL	ASPHALT REMOVAL	ASPHALT BREAKUP	CONCRETE REMOVAL	CONCRETE BREAKUP
-Y2-	11+53.06	11+78.23	CL	241.11			
TOTAL:				241.11			
SAY:				250			

COMPUTED BY: KMS DATE: 12/11/2021

CHECKED BY: JUM DATE: 12/11/2021

NORTH CAROLINA DEPARTMENT OF TRANSPORTATION DIVISION OF HIGHWAYS

PROJECT NO.

U-5710A

SHEET NO.

3D-1

Note: Invert Elevations indicated are for Bid Purposes only and shall not be used for project construction stakeout. See "Standard Specifications For Roads and Structures, Section 300-5".

LIST OF PIPES, ENDWALLS, ETC. (FOR PIPES 48 INCHES & UNDER)

Main data table with columns for Line & Station, Offset, Structure Number, Drainage Pipe (RCP, CSP, CAAP, HDPE, or PVC), R.C. PIPE Class III and IV, Endwalls, Reinforced Endwalls, Drainage Structure, Quantities for Drainage Structures, Frame, Grates, and Hood, Concrete Transitional Section, Grate Type, Adjustments, Flowable Fill, Pipe Removal, and Remarks.

SHEET TOTALS

832 440 428 28

24 5.1

22

4

8

10

3

2

2

RALZT03R103W

COMPUTED BY: KMS DATE: 3/17/2022
CHECKED BY: JUM DATE: 3/17/2022

NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

PROJECT NO. SHEET NO.
U-5710A 3D-2

Note: Invert Elevations indicated are for Bid Purposes only and shall not be used for project construction stakeout.
See "Standard Specifications For Roads and Structures, Section 300-5".

LIST OF PIPES, ENDWALLS, ETC. (FOR PIPES 48 INCHES & UNDER)

Table with columns: LINE & STATION, OFFSET, STRUCTURE NUMBER, TOP ELEVATION, INVERT ELEVATION, MINIMUM REQUIRED SLOPE, Drainage Pipe (RCP, CSP, CAAP, HDPE, or PVC), R. C. PIPE CLASS III, R. C. PIPE CLASS IV, ENDWALLS, REINFORCED ENDWALLS, MASONRY, QUANTITIES FOR DRAINAGE STRUCTURES, FRAME, GRATES, AND HOOD, CONCRETE TRANSITIONAL SECTION, GRADE TYPE, PIPE REMOVAL, and REMARKS. Includes SHEET TOTALS and PROJECT TOTALS at the bottom.

RAL-ZT03/03/W

COMPUTED BY: KMS DATE: 3/17/2022
CHECKED BY: JJM DATE: 3/17/2022

PROJECT NO. U-5710A SHEET NO. 3D-3

NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

Note: Invert Elevations indicated are for Bid Purposes only and shall not be used for project construction stakeout.
See "Standard Specifications For Roads and Structures, Section 300-5".

LIST OF PIPES, ENDWALLS, ETC. (FOR PIPES 54 INCHES & OVER)

Table with columns for Line & Station, Offset, Structure Number, Invert Elevation, Drainage Pipe, R.C. Pipe Class III, R.C. Pipe Class IV, Quantities for Drainage Structures, Frame, Grates, and Hood, and Remarks. Includes summary rows for SHEET TOTALS and PROJECT TOTALS.

ABBREVIATIONS table listing codes like C.A.A., C.B., C.S., D.I., G.D.I., H.D.P.E., J.B., M.H., N.S., P.V.C., R.C., T.B.D.I., T.B.J.B., W.S. and their corresponding material descriptions.

REMARKS

COMPUTED BY: Steven V. Hudson, LG DATE: 10/30/2018
 CHECKED BY: J. Lee Stone, LG DATE: 10/30/2018

(5-15-18)

PROJECT NO. SHEET NO.
 U-5710A 3G-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
-L-	10+44	23+68	LT/RT	SD	2700
-Y3-	10+00	11+94	LT/RT	SD	400
CONTINGENCY				SD	200
TOTAL LF:					3300

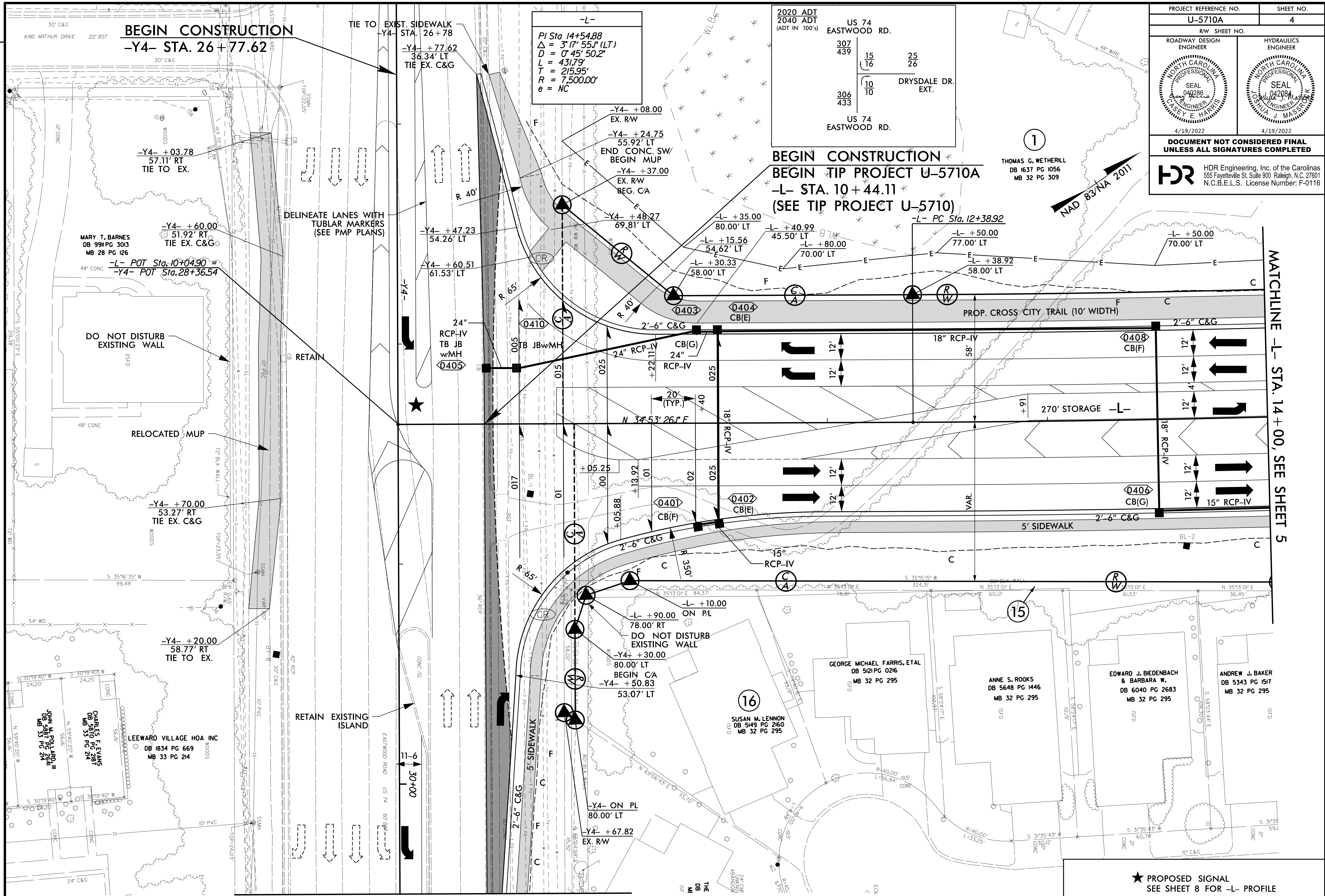
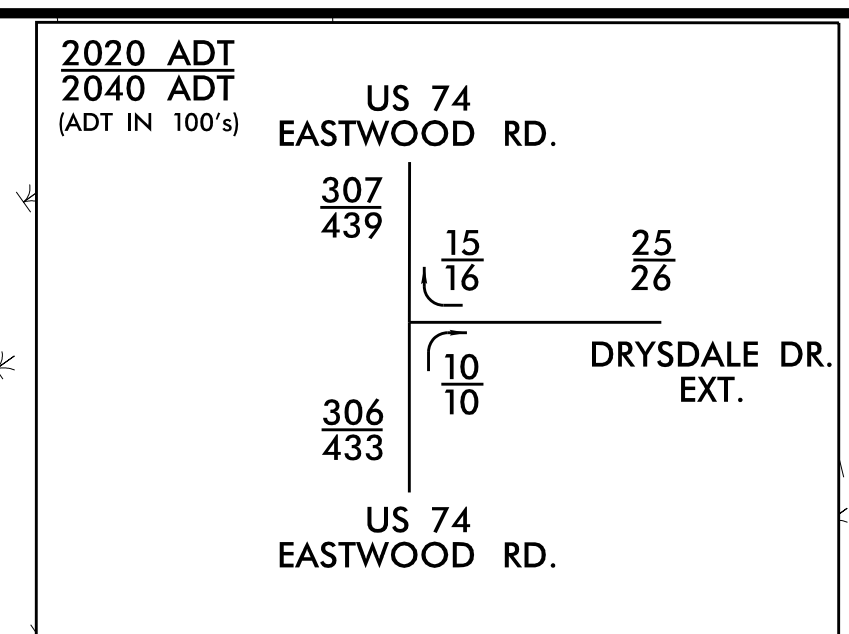
*UD = Underdrain
 *BD = Blind Drain
 *SD = Subsurface Drain

SUMMARY OF AGGREGATE SUBGRADE/STABILIZATION

LINE	Station	Station	Aggregate Type* ASU(1/2)/ AST	Aggregate Thickness INCHES	Shallow Undercut CY	Class IV Subgrade Stabilization TONS	Geotextile for Soil Stabilization SY	Stabilizer Aggregate TONS	Class IV Aggregate Stabilization TONS
-L-	Varies						600		
CONTINGENCY			ASU (1)	12"	100	190	700		
TOTAL CY/TONS/SY:					100	190**	1300**		

*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.

PROJECT REFERENCE NO. U-5710A		SHEET NO. 4	
RW SHEET NO.			
ROADWAY DESIGN ENGINEER		HYDRAULICS ENGINEER	
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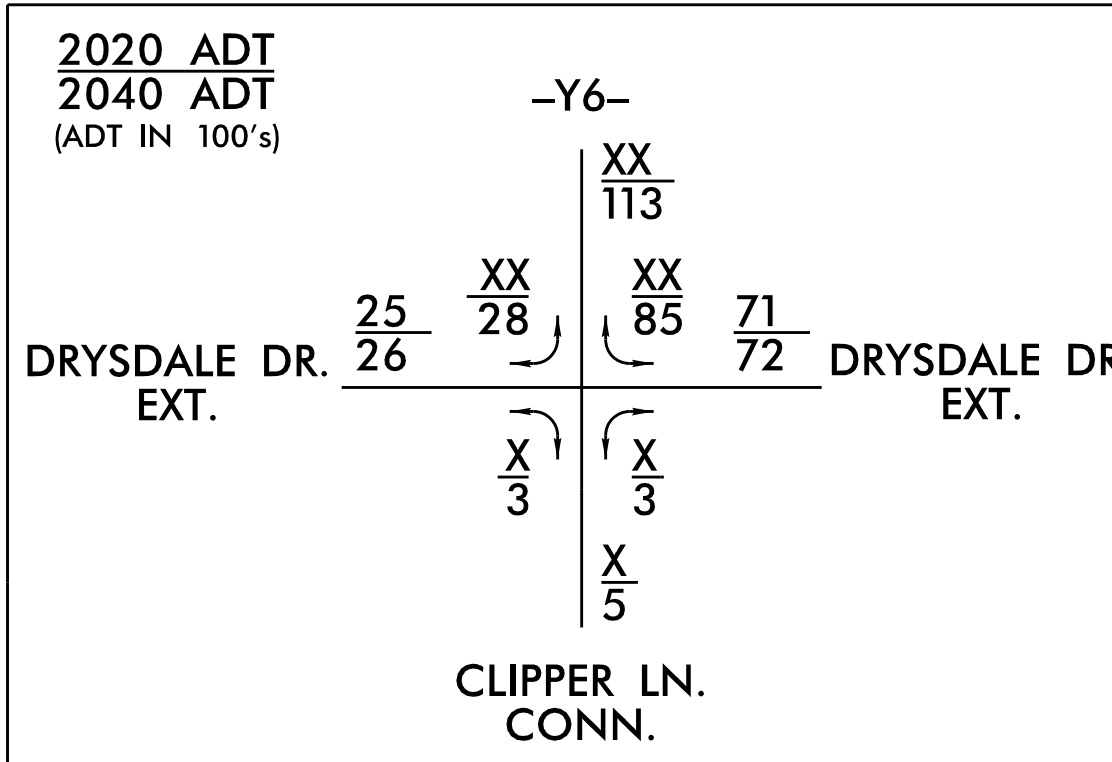
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REVISIONS

MATCHLINE -L- STA. 14+00, SEE SHEET 5

MATCHLINE -Y4- STA. 30+50, SEE SHEET 7

★ PROPOSED SIGNAL
SEE SHEET 8 FOR -L- PROFILE



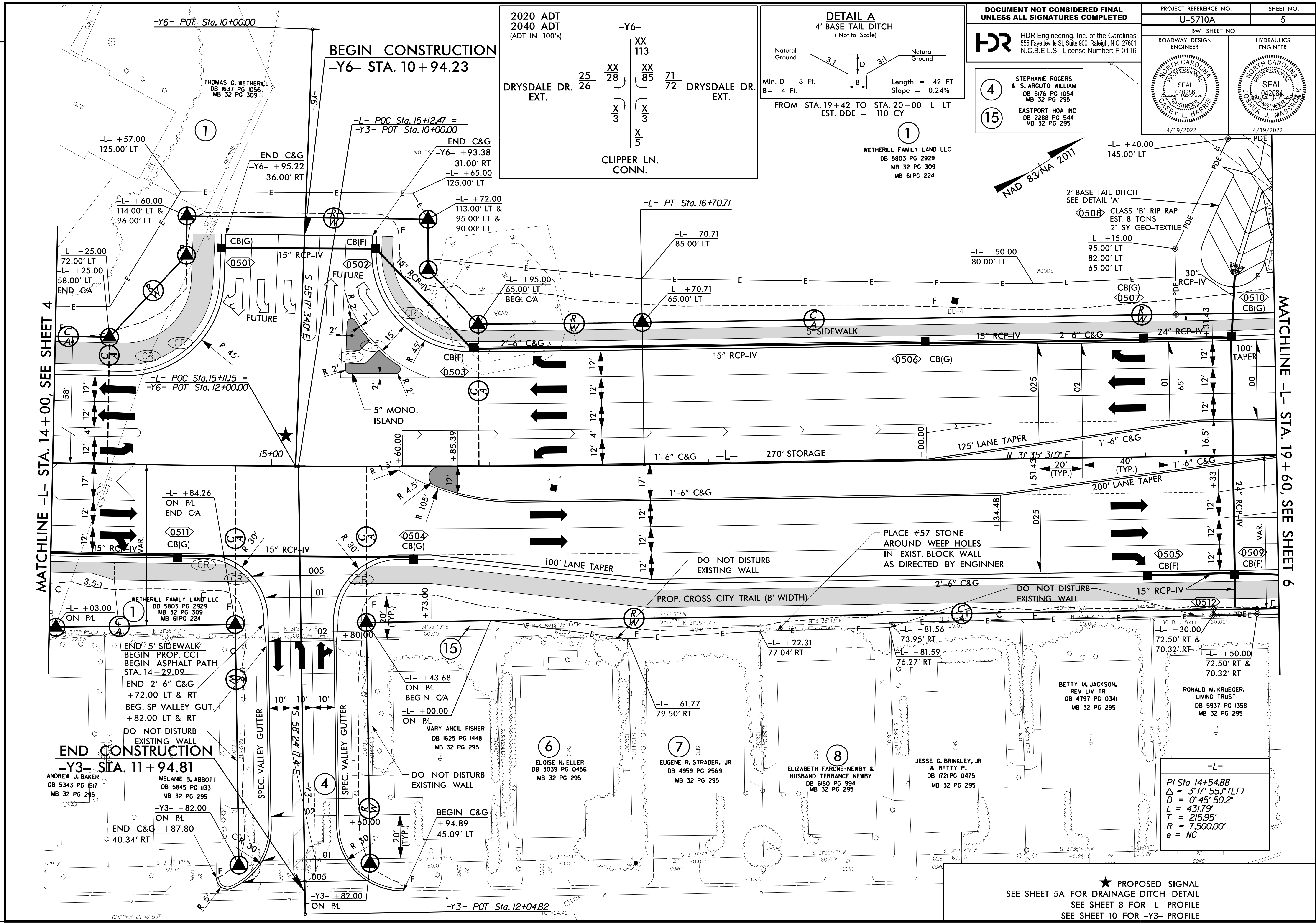
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4 STEPHANIE ROGERS & S. ARGUTO WILLIAM
DB 5176 PG 1054
MB 32 PG 295

15 EASTPORT HOA INC
DB 2288 PG 544
MB 32 PG 295

PROJECT REFERENCE NO. U-5710A	SHEET NO. 5
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
4/19/2022	4/19/2022



MATCHLINE -L- STA. 14 + 00, SEE SHEET 4

MATCHLINE -L- STA. 19 + 60, SEE SHEET 6

END CONSTRUCTION
-Y3- STA. 11 + 94.81

BEGIN CONSTRUCTION
-Y6- STA. 10 + 94.23

-Y3- POT Sta. 12 + 04.82

★ PROPOSED SIGNAL
SEE SHEET 5A FOR DRAINAGE DITCH DETAIL
SEE SHEET 8 FOR -L- PROFILE
SEE SHEET 10 FOR -Y3- PROFILE

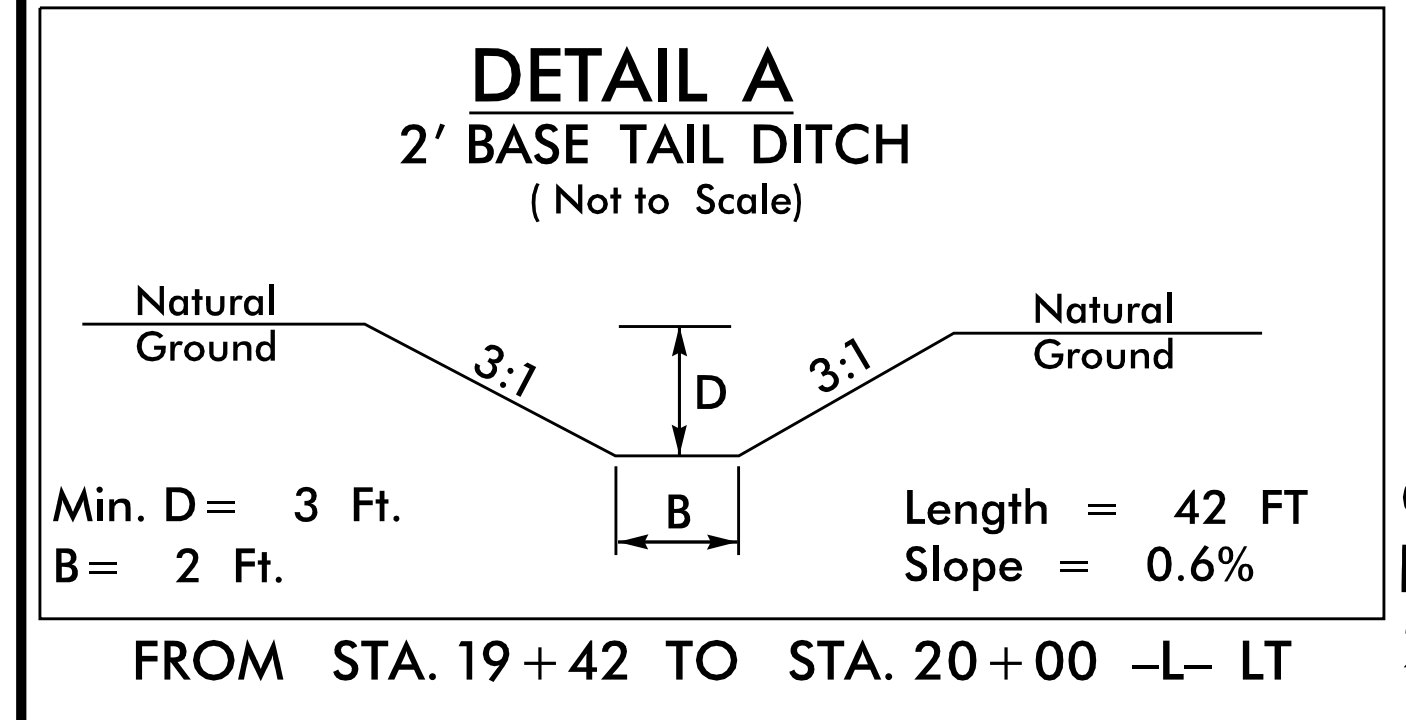
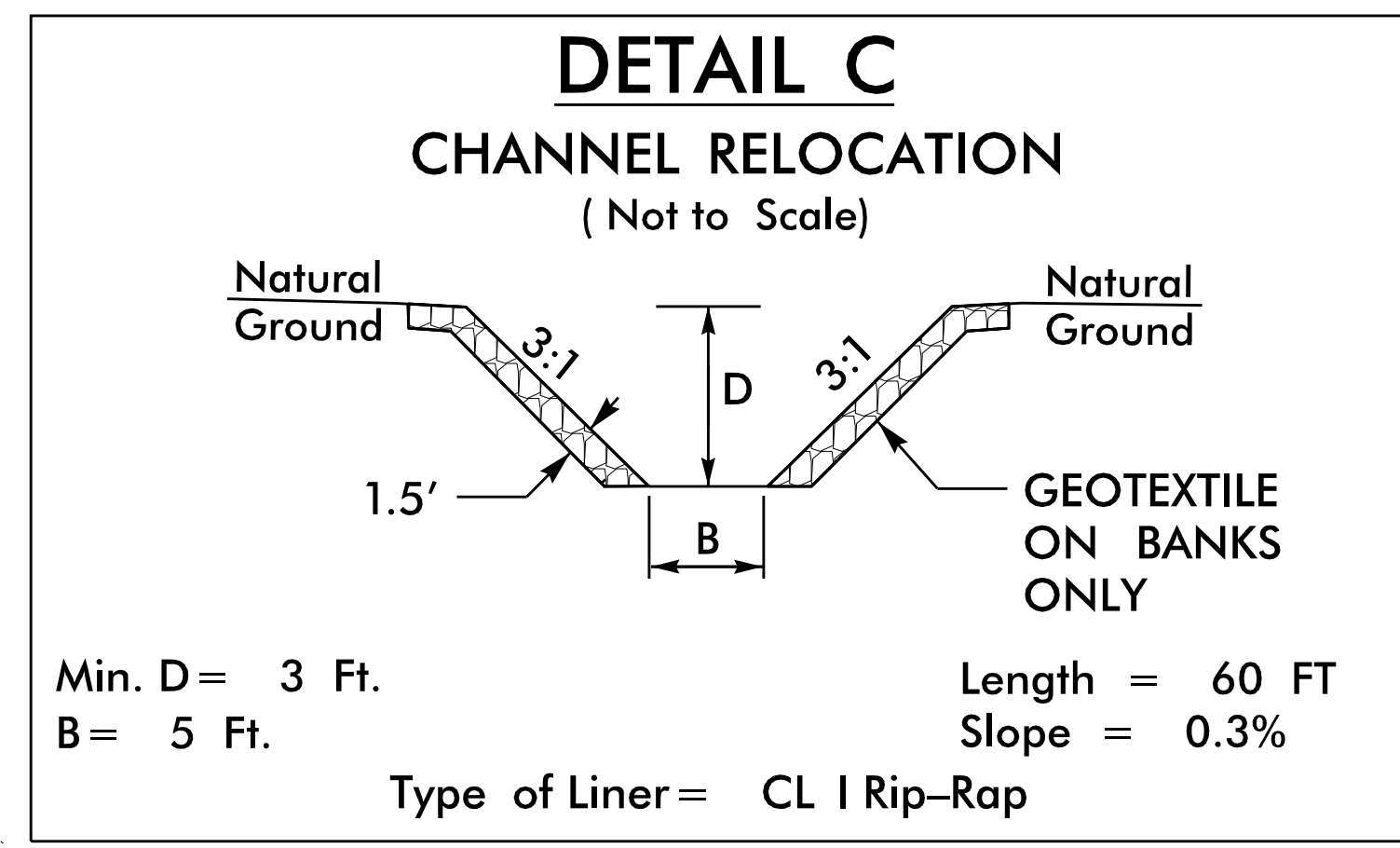
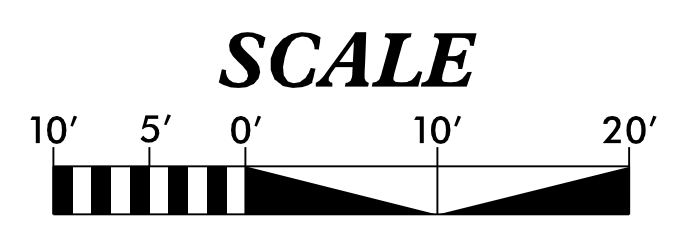
-L-
Pi Sta. 14+54.88
Δ = 3' 17" 55.7" (LT)
D = 0' 45" 50.2"
L = 431.79'
T = 215.95'
R = 7,500.00'
e = NC

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REVISIONS

PROJECT REFERENCE NO. U-5710A	SHEET NO. 5A
RW SHEET NO.	
ROADWAY DESIGN ENGINEER 	HYDRAULICS ENGINEER
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DRAINAGE DITCH DETAIL



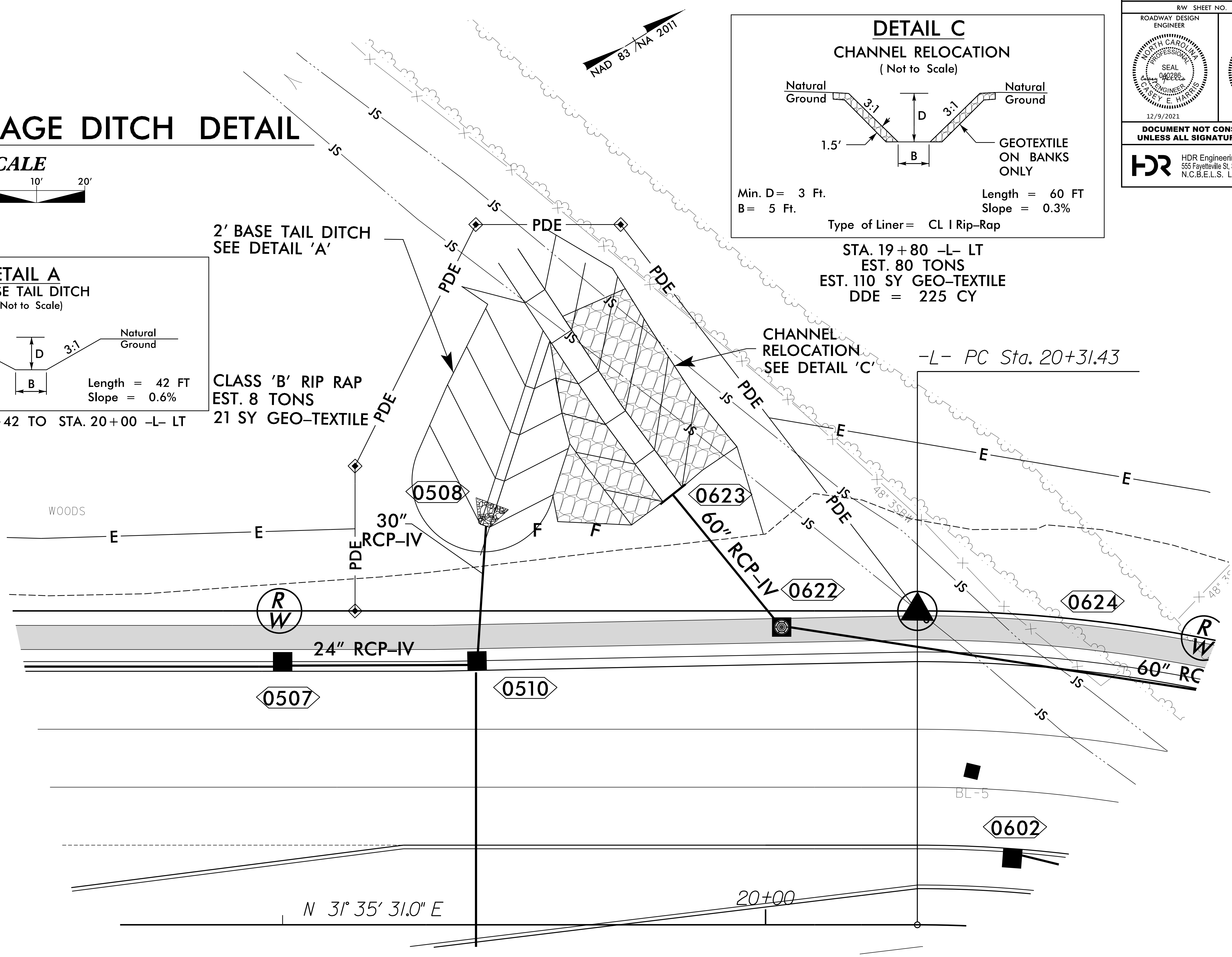
2' BASE TAIL DITCH
SEE DETAIL 'A'

CLASS 'B' RIP RAP
EST. 8 TONS
21 SY GEO-TEXTILE

STA. 19+80 -L- LT
EST. 80 TONS
EST. 110 SY GEO-TEXTILE
DDE = 225 CY

CHANNEL RELOCATION
SEE DETAIL 'C'

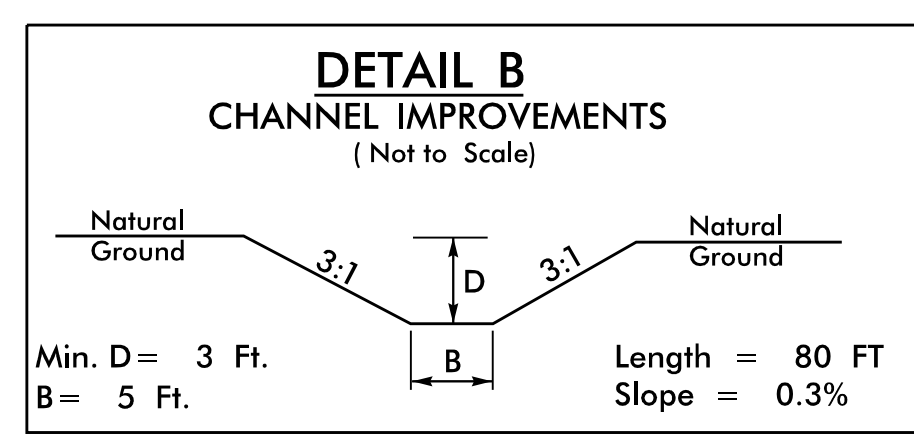
-L- PC Sta. 20+31.43



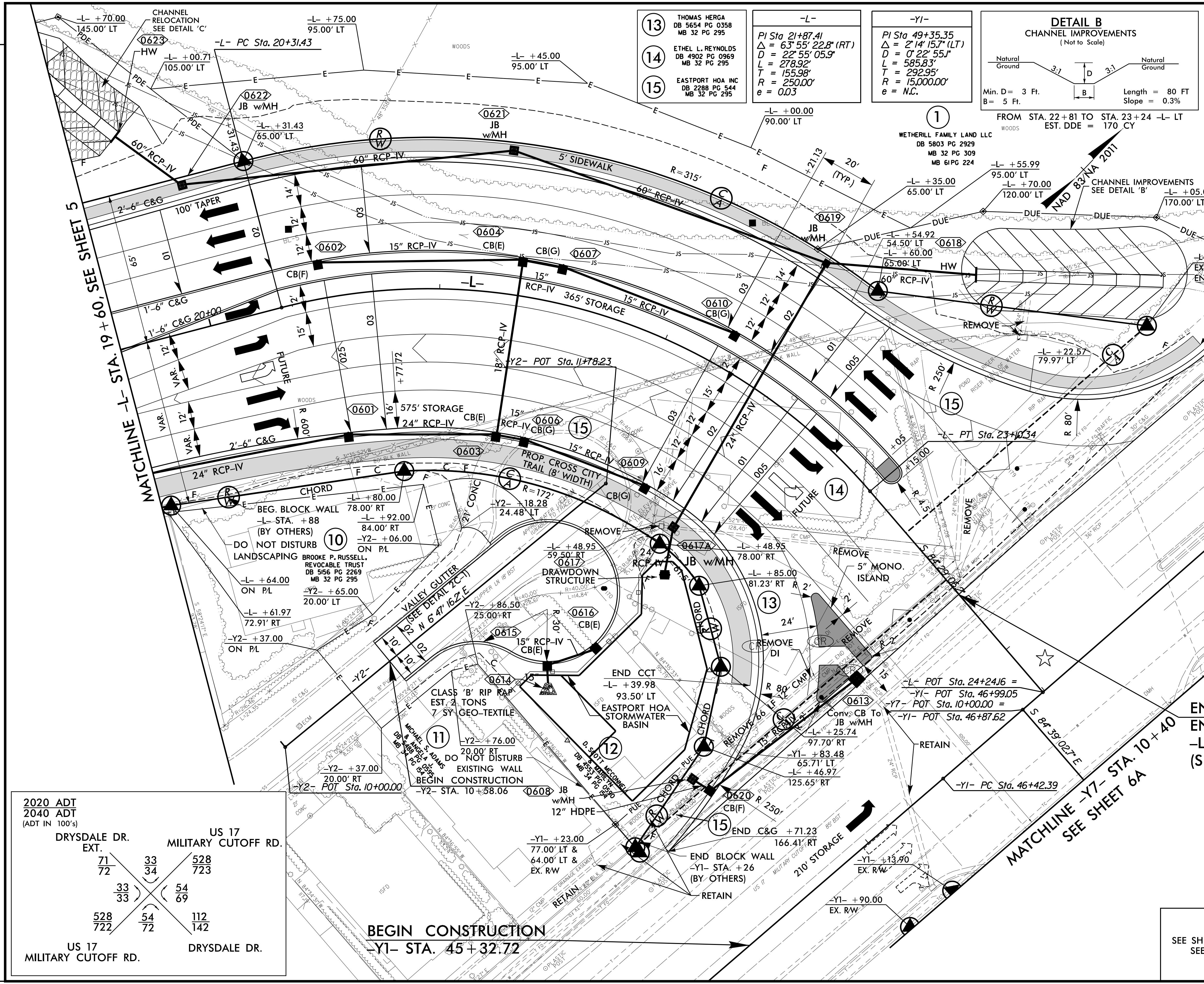
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REVISIONS

PROJECT REFERENCE NO. U-5710A	SHEET NO. 6
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
4/19/2022	4/19/2022
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	



13 THOMAS MERGA DB 5654 PG 0358 MB 32 PG 295	-L- PI Sta 21+87.41 Δ = 63° 55' 22.8" (RT) D = 22° 55' 05.9" L = 278.92' T = 155.98' R = 250.00' e = 0.03	-Y1- PI Sta 49+35.35 Δ = 2° 14' 15.7" (LT) D = 0° 22' 55.5" L = 585.83' T = 292.95' R = 15,000.00' e = N.C.
---	---	---



2020 ADT 2040 ADT (ADT IN 100'S)		US 17 MILITARY CUTOFF RD.	
71 72	33 34	528 723	
33 33	54 69		
528 722	54 72	112 142	
US 17 MILITARY CUTOFF RD.		DRYSDALE DR.	

BEGIN CONSTRUCTION
-Y1- STA. 45+32.72

END CONSTRUCTION
END TIP PROJECT U-5710A
-L- STA. 23+68.78
(SEE TIP PROJECT U-5710)

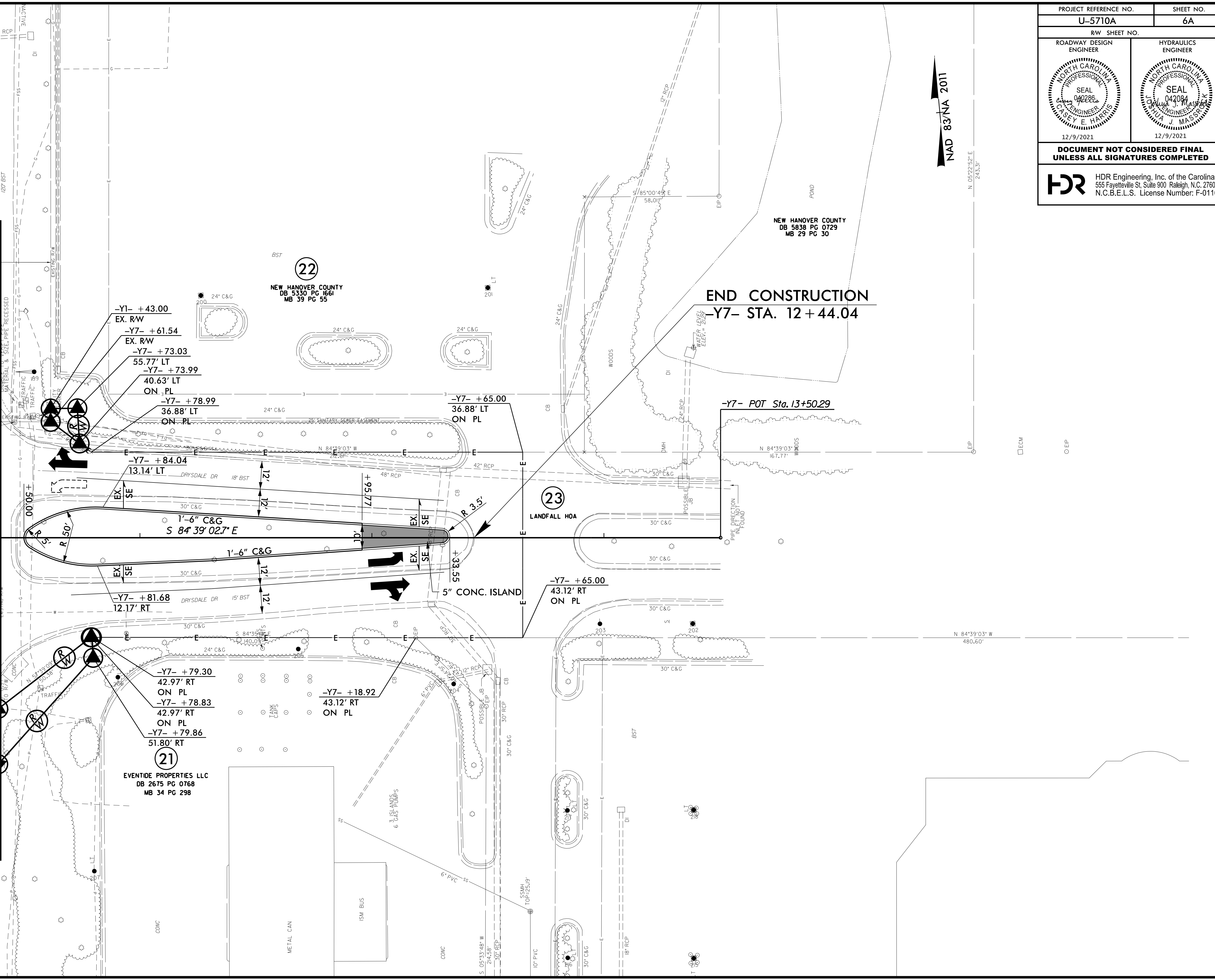
★ MODIFIED SIGNAL
SEE SHEET 2B-1 FOR CUL-DE-SAC DETAIL
SEE SHEETS 2D-1 THRU 2D-4 FOR POND DETAIL
SEE SHEET 5A FOR DRAINAGE DITCH DETAIL
SEE SHEETS 8 & 9 FOR -L- PROFILE
SEE SHEET 10 FOR -Y2- PROFILE

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 REVISIONS

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REVISIONS

MATCHLINE -Y7- STA. 10 + 40, SEE SHEET 6



PROJECT REFERENCE NO. U-5710A	SHEET NO. 6A
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
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NAD 83/NA 2011

N 05°22'57" E
243.31'

N 84°39'03" W
480.60'

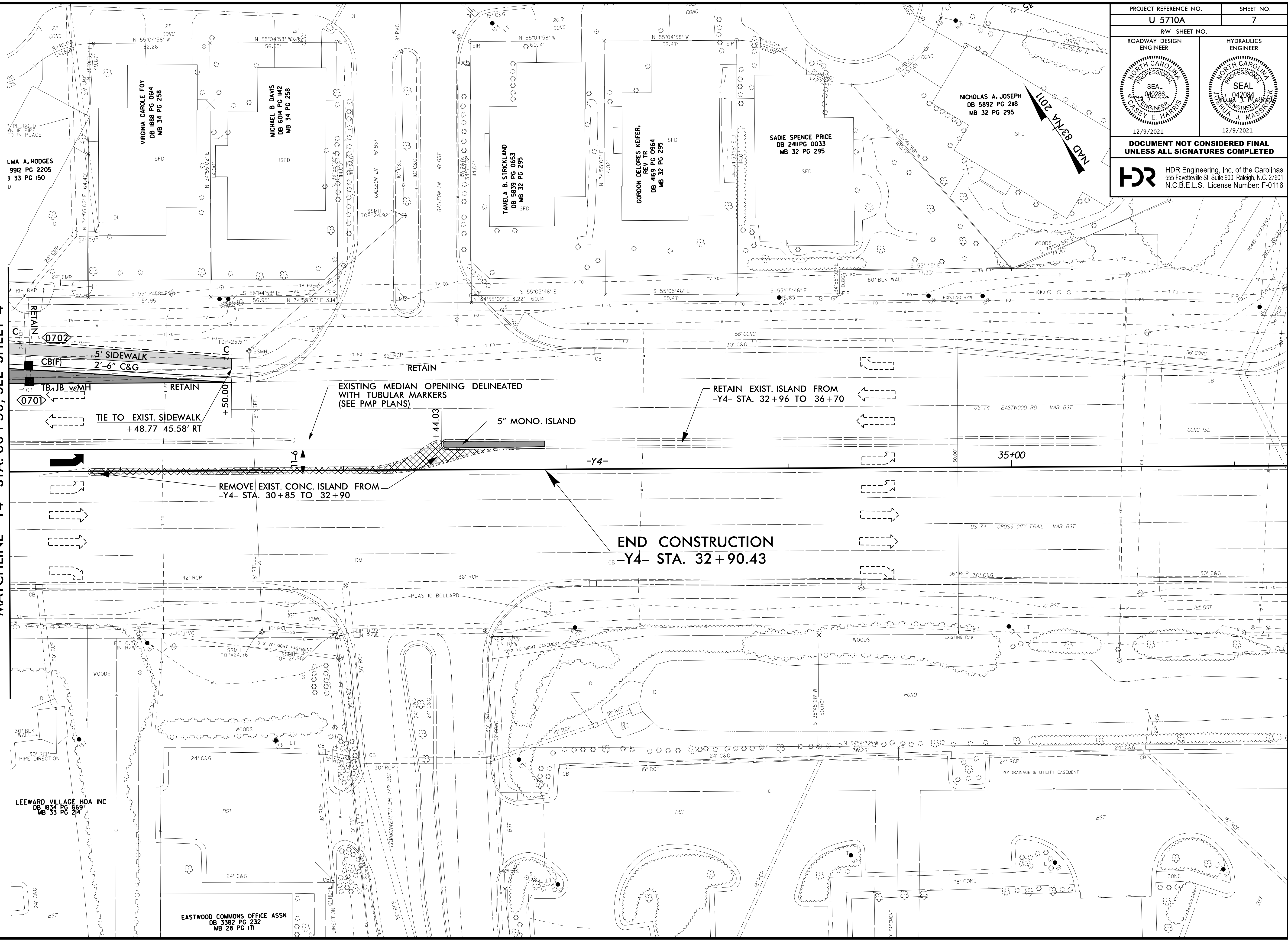
ECM

EIP

PROJECT REFERENCE NO. U-5710A	SHEET NO. 7
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
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N.C.B.E.L.S. License Number: F-0116

MATCHLINE -Y4- STA. 30 + 50, SEE SHEET 4



0702
CB(F)
5' SIDEWALK
2'-6" C&G

0701
TB, JB, WMH

TIE TO EXIST. SIDEWALK
+48.77 45.58' RT

EXISTING MEDIAN OPENING DELINEATED
WITH TUBULAR MARKERS
(SEE PMP PLANS)

5" MONO. ISLAND

RETAIN EXIST. ISLAND FROM
-Y4- STA. 32 + 96 TO 36 + 70

REMOVE EXIST. CONC. ISLAND FROM
-Y4- STA. 30 + 85 TO 32 + 90

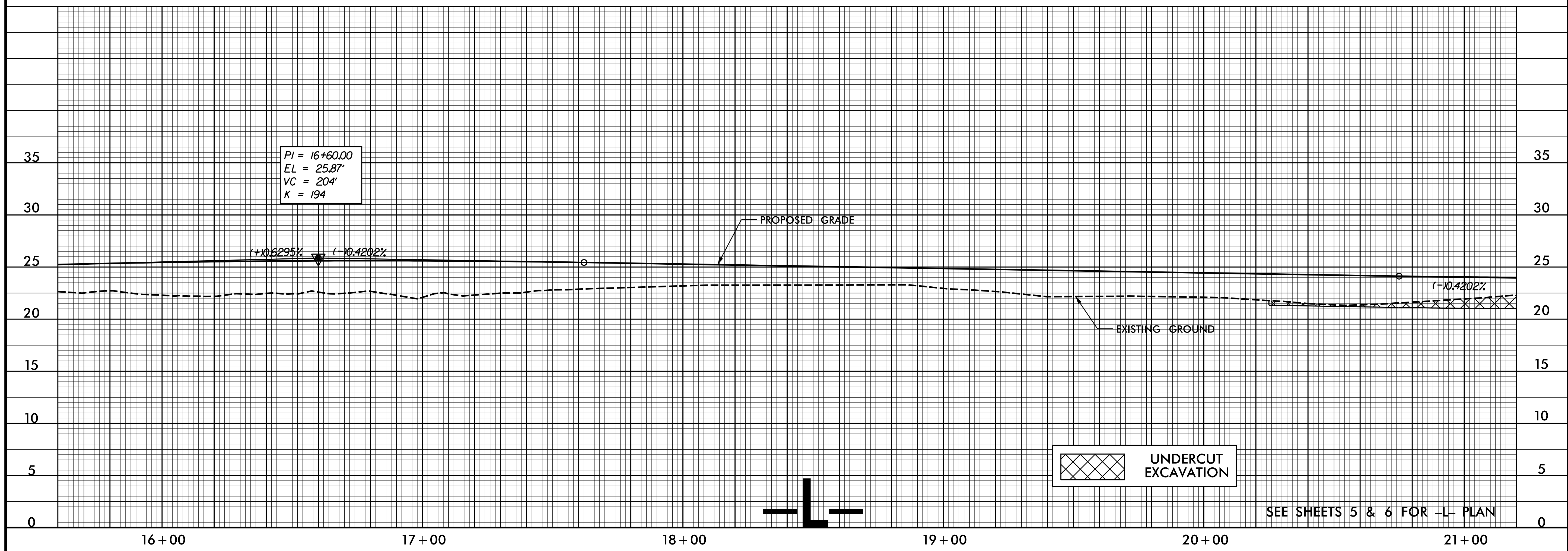
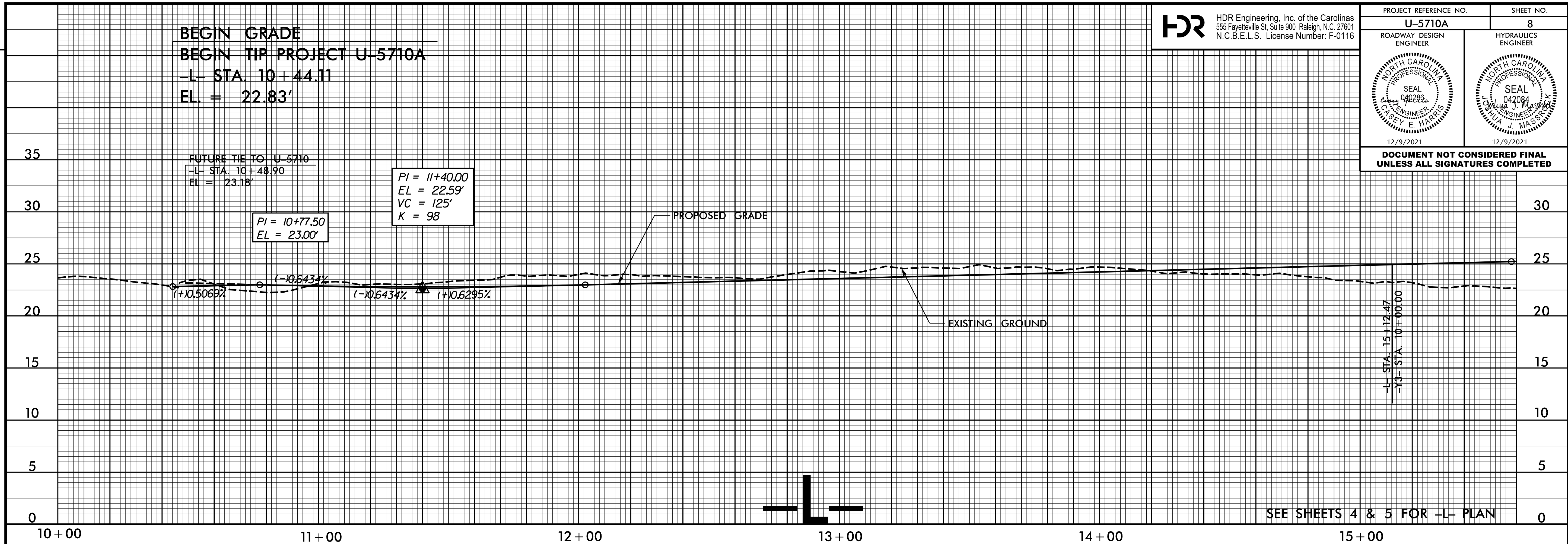
END CONSTRUCTION
-Y4- STA. 32 + 90.43

LEEWARD VILLAGE HOA INC
DB 1834 PG 669
MB 33 PG 24

EASTWOOD COMMONS OFFICE ASSN
DB 3382 PG 232
MB 28 PG 171

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REVISIONS

**DOCUMENT NOT CONSIDERED FINAL
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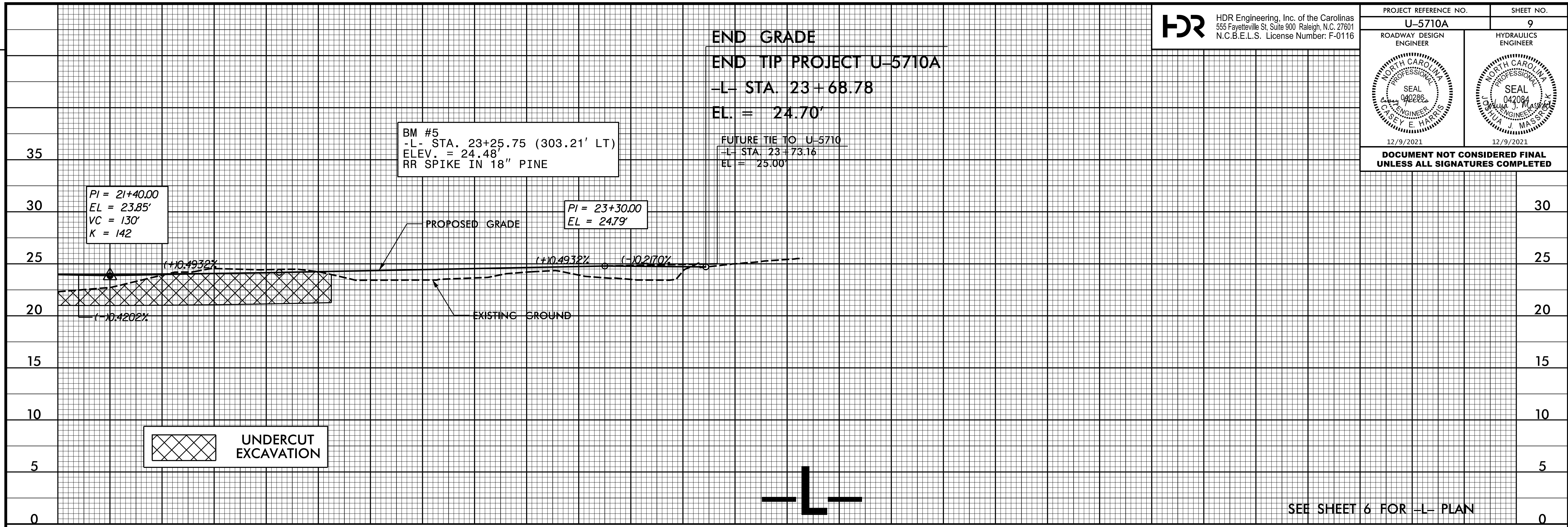


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REVISIONS

PROJECT REFERENCE NO. U-5710A	SHEET NO. 9
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
12/9/2021	12/9/2021

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SEE SHEET 6 FOR -L- PLAN

UNDERCUT EXCAVATION

END GRADE
END TIP PROJECT U-5710A
-L- STA. 23+68.78
EL. = 24.70'
FUTURE TIE TO U-5710
-L- STA. 23+73.16
EL. = 25.00'

BM #5
-L- STA. 23+25.75 (303.21' LT)
ELEV. = 24.48'
RR SPIKE IN 18" PINE

PI = 21+40.00
EL = 23.85'
VC = 130'
K = 142

PI = 23+30.00
EL = 24.79'

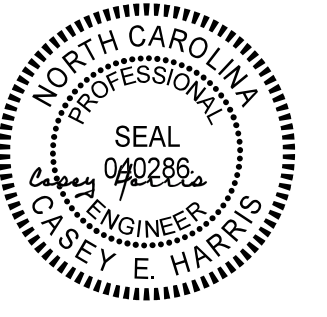

22 + 00

23 + 00

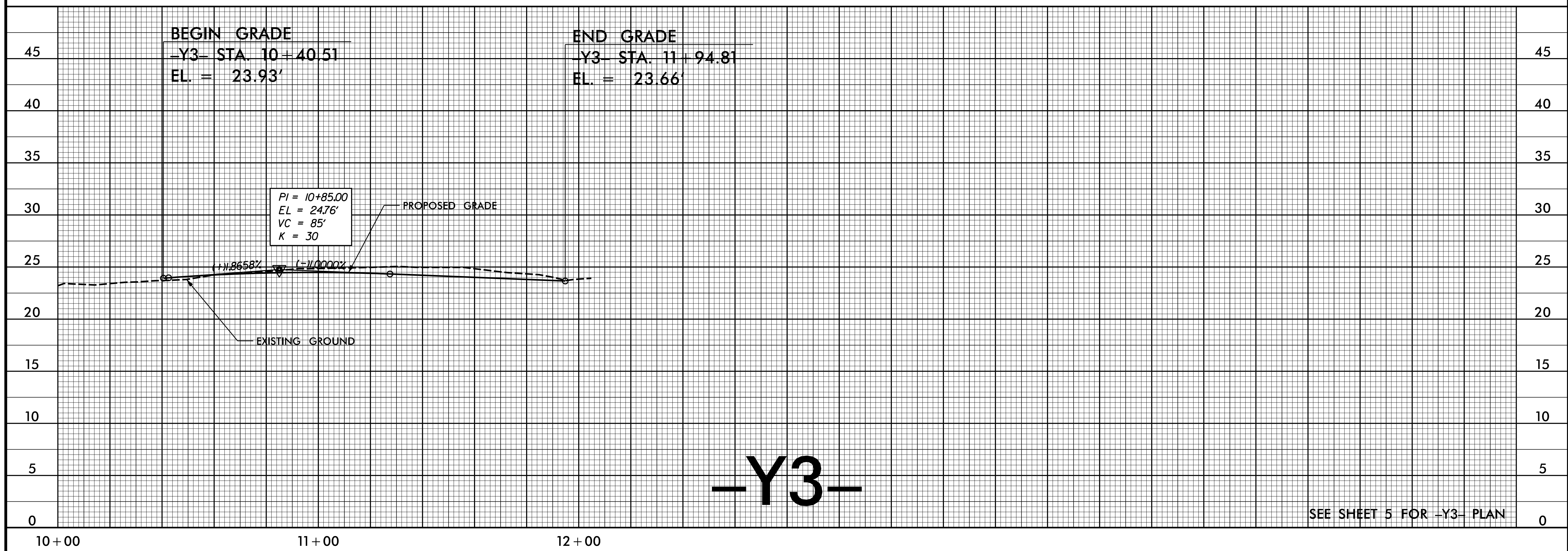
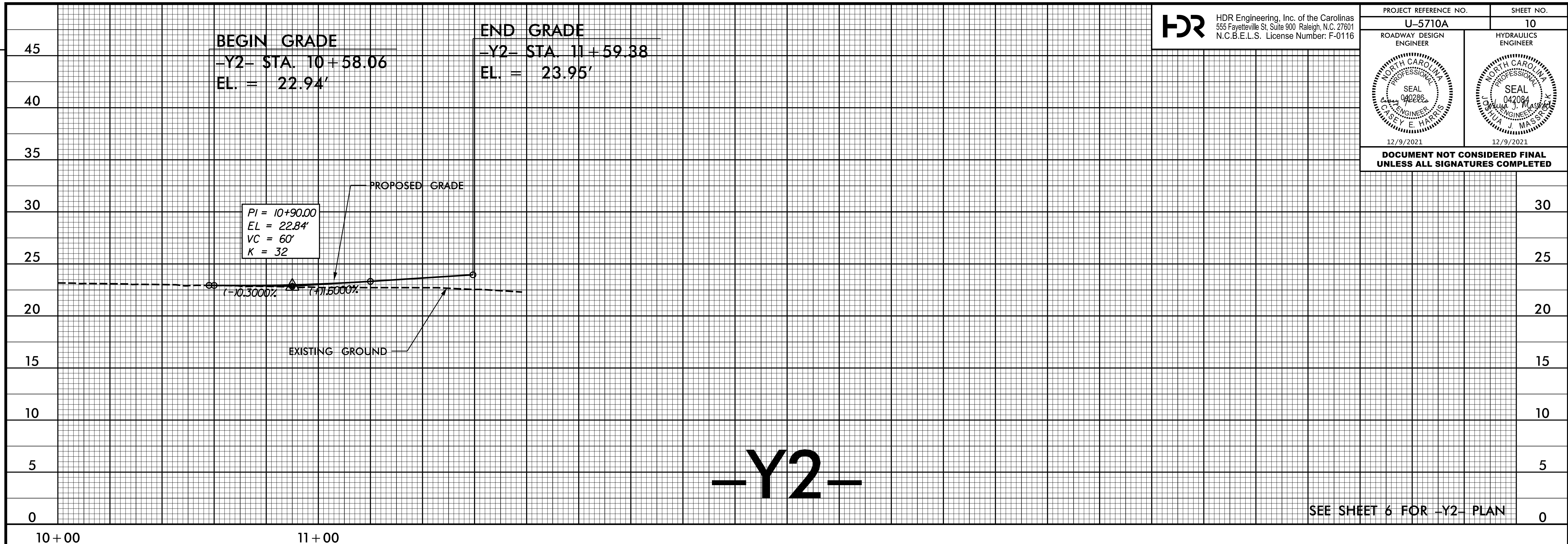
24 + 00

REVISIONS

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PROJECT REFERENCE NO. U-5710A	SHEET NO. 10
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
	
12/9/2021	12/9/2021

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



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REVISIONS