

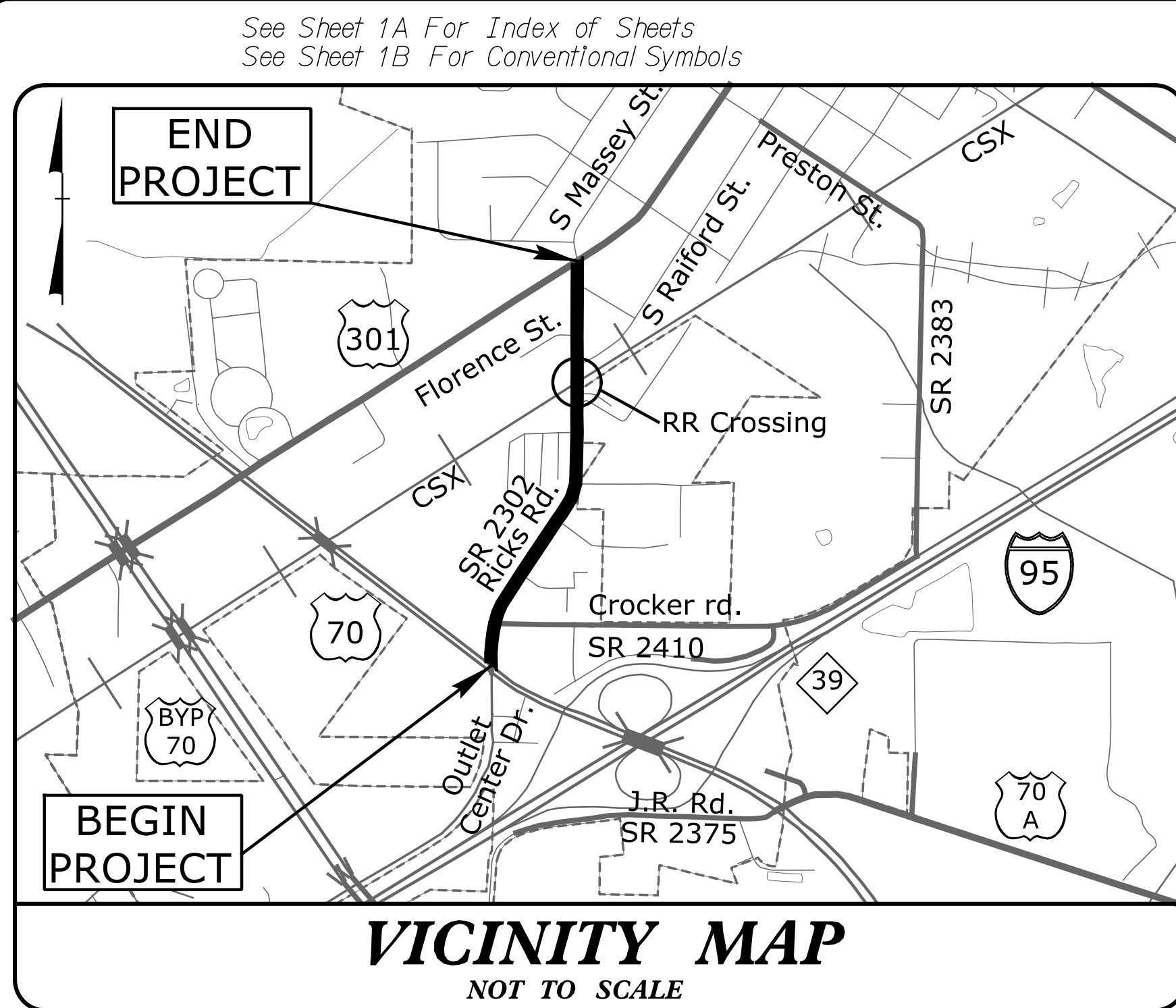
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TIP PROJECT: U-5795

CONTRACT: C204057



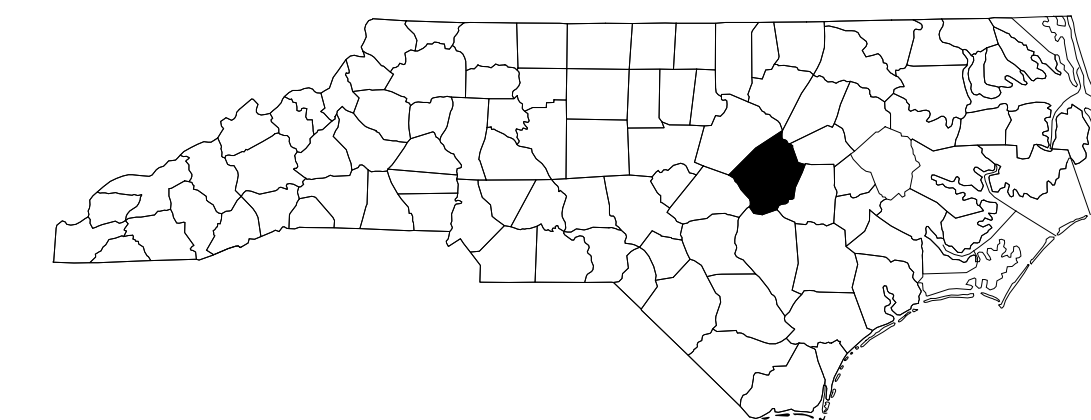
STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

JOHNSTON COUNTY

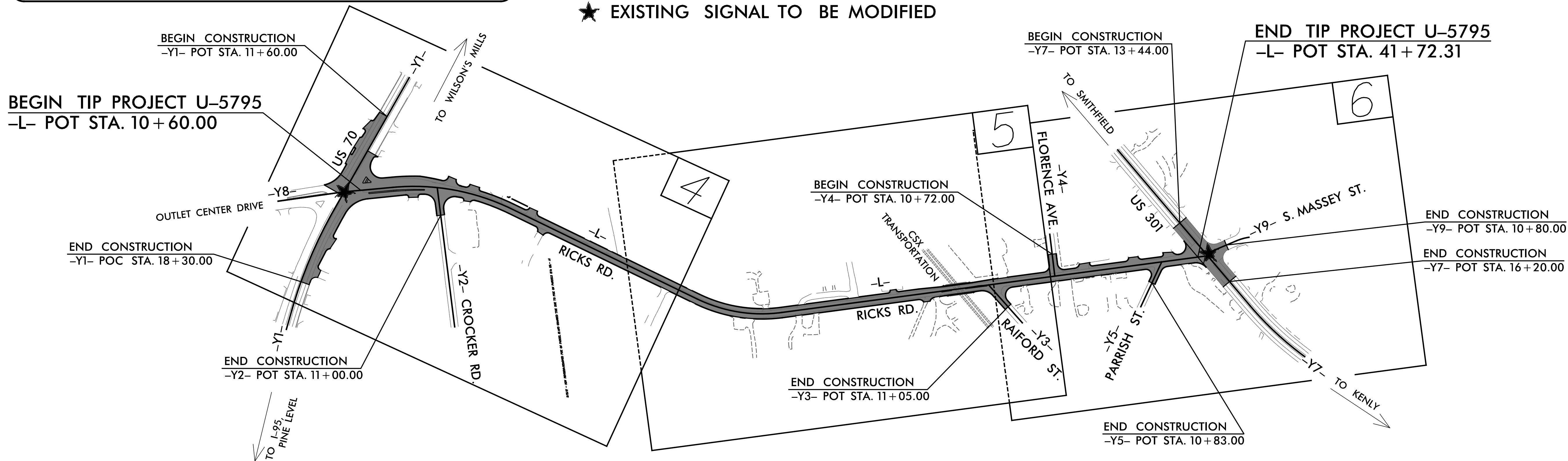
LOCATION: SR 2302 (RICKS ROAD) FROM US 70 TO US 301 IN SELMA

TYPE OF WORK: GRADING, PAVING, DRAINAGE AND SIGNALS

STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	U-5795	1	
STATE PROJ. NO.	F.A. PROJ. NO.	DESCRIPTION	
44366.1.1		PE	
44366.2.1		RW, UTIL.	
44366.3.1		CONST.	

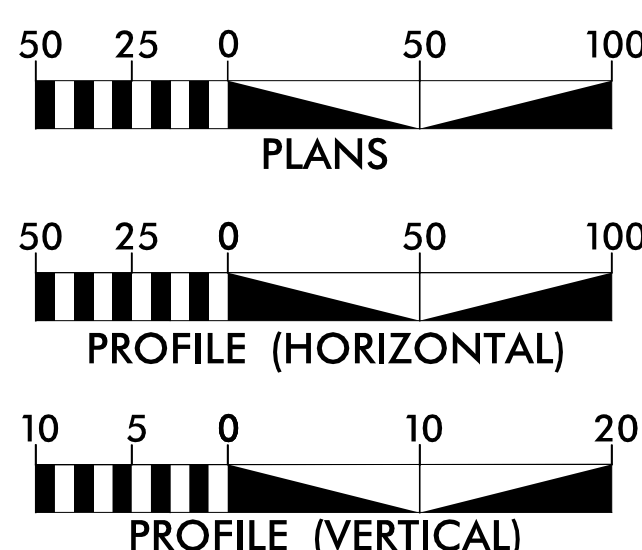


★ EXISTING SIGNAL TO BE MODIFIED



DOCUMENT NOT CONSIDERED FINAL
UNLESS ALL SIGNATURES COMPLETED

GRAPHIC SCALES



DESIGN DATA

ADT 2018 = 7000
ADT 2038 = 9000
K = 8 %
D = 55 %
T = 5 % *
V = 40 MPH
* (TTST = 3% + DUAL = 2%)
FUNC CLASS = LOCAL
REGIONAL TIER

PROJECT LENGTH

LENGTH ROADWAY TIP PROJECT U-5795 = 0.589 MI.
TOTAL LENGTH OF TIP PROJECT U-5795 = 0.589 MI.

Prepared for the North Carolina Department of Transportation
In the Office of:

vhb Venture I
940 Main Campus Drive, Suite 500
Raleigh, NC 27605
NC License No. C-5705

SUNGATE DESIGN GROUP, P.A.
1001 JONES FARM RD. #100
RALEIGH, NC 27605
TEL: 919.876.1234 FAX: 919.876.1235
LIC. #00000000000000000000000000000000

2018 STANDARD SPECIFICATIONS
RIGHT OF WAY DATE:
DECEMBER 30, 2016

LETTING DATE:
APRIL 17, 2018

NCDOT CONTACT

JIMMY GOODNIGHT, PE
PROJECT ENGINEER

JERRY JAVELLANA, PE
PROJECT DESIGN ENGINEER

MATT CLARKE, PE
DIVISION PROJECT MANAGER

HYDRAULICS ENGINEER

2/28/2018

DocuSigned by:
Justin G. Dalton
1089AD8C14994C3

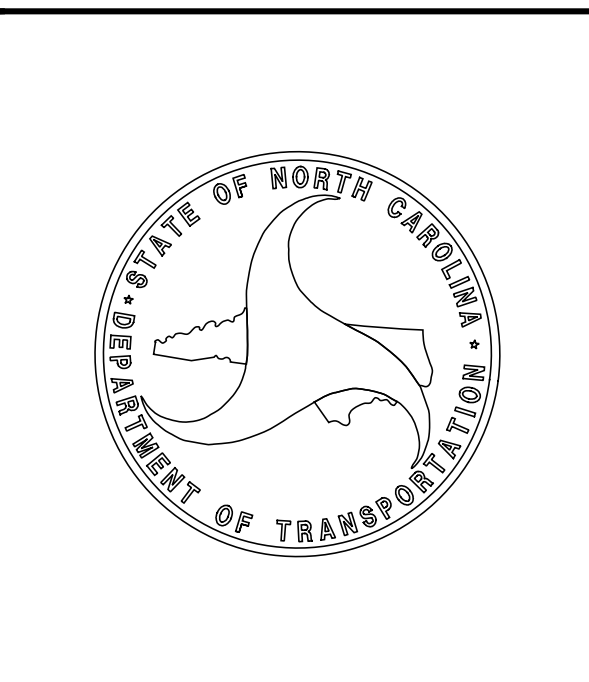
SIGNATURE:

ROADWAY DESIGN ENGINEER

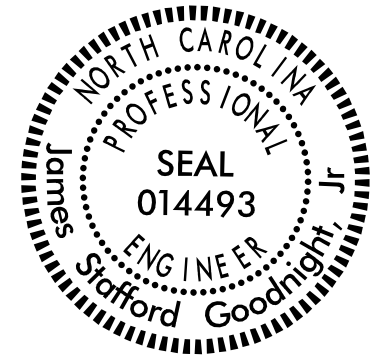
2/28/2018

DocuSigned by:
Jimmy Goodnight
88E54B202C18421

SIGNATURE:



DIVISION OF HIGHWAYS STATE OF NORTH CAROLINA



INDEX OF SHEETS

SHEET NUMBER	SHEET
1	TITLE SHEET
1A	INDEX OF SHEETS, STANDARD DRAWINGS, AND GENERAL NOTES
1B	CONVENTIONAL SYMBOLS
1C-1 THRU 1C-3	SURVEY CONTROL SHEETS
2A-1 THRU 2A-3	PAVEMENT SCHEDULE, TYPICAL SECTIONS
2C-1 THRU 2C-6	CURB RAMPS (MEDIAN OR TURN LANE ISLANDS), METHOD FOR PLACEMENT OF DROP INLETS IN ISLANDS, BRICK & CONCRETE NARROW DROP INLET, NARROW DROP INLET FRAME AND GRATE, MINIMUM DEPTH CONCRETE CATCH BASIN, DETAIL TO CONVERT EXISTING TRAFFIC BEARING DROP INLET OR CATCH BASIN TO TRAFFIC BEARING JUNCTION BOX, CONVERSION OF EXISTING DRAINAGE BOX TO CATCH BASIN
2H-1	STOCKPILE CONTAINMENT DETAIL
3B-1	EARTHWORK SUMMARY
3D-1 THRU 3D-5	DRAINAGE SUMMARY
3G-1	SUMMARY OF AGGREGATE SUBGRADE/STABILIZATION
3P-1	PARCEL INDEX
4 THRU 6	PLAN SHEETS
7 THRU 9	PROFILE SHEETS
TMP-1 THRU TMP-9	TRAFFIC MANAGEMENT PLANS
PMP-1 THRU PMP-4	PAVEMENT MARKING PLANS
EC-1 THRU EC-09	EROSION CONTROL PLANS
SIGN-1 THRU SIGN-5	SIGNING PLANS
SIG-1 THRU SIG-7	SIGNAL PLANS
SIG M1 THRU SIG M8	METAL POLE STANDARDS
SCP 1 THRU SCP 3	CABLE ROUTING PLANS
UC-1 THRU UC-7	UTILITY CONSTRUCTION PLANS
UO-1 THRU UO-4	UTILITIES BY OTHERS PLANS
X-1A	CROSS-SECTION SUMMARY
X-1 THRU X-22	CROSS-SECTIONS

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:

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 SUPERELEVATION - TWO LANE PAVEMENT
- 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

DIVISION 6 - ASPHALT BASES AND PAVEMENTS

- 654.01 PAVEMENT REPAIRS

DIVISION 8 - INCIDENTALS

- 838.01 CONCRETE ENDWALL FOR SINGLE AND DOUBLE PIPE CULVERTS - 15" THRU 48" PIPE 90 SKEW
- 838.11 BRICK ENDWALL FOR SINGLE AND DOUBLE PIPE CULVERTS - 15" THRU 48" 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
- 840.14 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
- 840.17 CONCRETE GRATED DROP INLET TYPE 'A' - 12" THRU 72" PIPE
- 840.19 CONCRETE GRATED DROP INLET TYPE 'D' - 12" THRU 36" PIPE
- 840.24 FRAMES AND NARROW SLOT SAG GRATES
- 840.28 BRICK GRATED DROP INLET TYPE 'D' - 12" THRU 36" PIPE
- 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
- 840.54 MANHOLE FRAME AND COVER
- 840.66 DRAINAGE STRUCTURE STEPS
- 840.72 PIPE COLLAR
- 846.01 CONCRETE CURB, GUTTER AND CURB & GUTTER
- 848.01 CONCRETE SIDEWALK
- 848.02 DRIVEWAY TURNOUT - RADIUS TYPE
- 848.04 STREET TURNOUT
- 848.05 CURB RAMP - PROPOSED CURB & GUTTER
- 852.01 CONCRETE ISLANDS
- 852.06 METHOD FOR PLACEMENT OF DROP INLETS IN CONCRETE ISLANDS
- 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 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. SUPERELEVATIONS 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.

DRIVEWAYS:

DRIVEWAYS SHALL BE CONSTRUCTED IN ACCORDANCE WITH STD. 848.02 USING 3 FOOT RADII OR RADII AS SHOWN ON THE PLANS. LOCATIONS OF DRIVES WILL BE AS SHOWN ON THE PLANS OR AS DIRECTED BY THE ENGINEER.

STREET TURNOUT:

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

TEMPORARY SHORING:

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

SUBSURFACE PLANS:

NO SUBSURFACE PLANS ARE AVAILABLE ON THIS PROJECT. THE CONTRACTOR SHOULD MAKE HIS OWN INVESTIGATION AS TO THE SUBSURFACE CONDITIONS.

UTILITIES:

UTILITY OWNERS ON THIS PROJECT ARE DUKE ENERGY, TOWN OF SELMA - POWER, AT&T, CHARTER CABLE, TOWN OF SELMA - WATER & SEWER, JOHNSTON COUNTY - WATER & SEWER, PIEDMONT NATURAL GAS.

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 OTHERS.

CURB RAMPS

CURB RAMPS ARE SHOWN ON THE PLANS AT APPROXIMATE LOCATIONS. CONSTRUCT ALL CURB RAMPS IN ACCORDANCE WITH STD 848.05 and/or 848.06.

STATE OF NORTH CAROLINA, DIVISION OF HIGHWAYS

CONVENTIONAL PLAN SHEET SYMBOLS

12/2/2016

BOUNDARIES AND PROPERTY:

State Line	_____
County Line	_____
Township Line	_____
City Line	_____
Reservation Line	_____
Property Line	_____
Existing Iron Pin	○ EIP
Computed Property Corner	_____ X
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-S-
Potential Contamination Area: Soil	-S-S-
Known Contamination Area: Water	-W-W-
Potential Contamination Area: Water	-W-W-
Contaminated Site: Known or Potential	☠ ?

BUILDINGS AND OTHER CULTURE:

Gas Pump Vent or U/G Tank Cap	○
Sign	○ 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	_____
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	_____
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	○

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	_____

SURVEY CONTROL SHEET U-5795

BL POINT	DESC.	NORTH	EAST	ELEVATION	L STATION	OFFSET
1	U5795-1	644270.4410	2210122.0390	168.68	OUTSIDE PROJECT LIMITS	
2	U5795-2	645102.4200	2210302.8420	175.12	OUTSIDE PROJECT LIMITS	
60	BL-1	645450.3127	2210229.6234	175.92	11+64.12	43.82 LT
61	BL-2	645781.3406	2210331.1008	172.95	14+98.92	23.21 LT
64	BL-3	646081.2457	2210526.1046	170.62	18+53.72	19.51 LT
65	BL-4	646336.6984	2210762.2883	171.31	21+97.35	34.92 RT
67	BL-5	646685.0383	2210929.5800	174.84	25+74.95	27.91 RT
68	BL-6	647075.2320	2210886.2619	172.62	29+60.64	25.39 LT
69	BL-7	647463.4369	2210932.9045	175.67	33+49.07	19.38 RT
70	BL-8	647762.6167	2210939.1047	174.07	36+48.27	24.13 RT
72	BL-9	648029.9772	2210933.0090	173.71	39+15.60	16.74 RT
3	U5795-3	648284.6520	2210954.8890	174.21	41+70.38	37.38 RT

BY1 POINT	DESC.	NORTH	EAST	ELEVATION	Y1 STATION	OFFSET
51	BY1-1	645507.3656	2210043.0235	176.48	11+58.55	41.05 LT
2	U5795-2	645102.4200	2210302.8420	175.12	16+06.56	123.20 RT
56	BY1-3	645066.6800	2210692.3490	177.76	19+55.00	36.93 LT

BY2 POINT	DESC.	NORTH	EAST	ELEVATION	Y2 STATION	OFFSET
60	BL-1	645450.3127	2210229.6234	175.92	11+64.12	43.82 LT
83	BY2-2	645635.6816	2210510.0425	173.17	12+13.18	21.22 LT
82	BY2-3	645592.0417	2210744.6160	173.74	14+48.30	19.38 RT

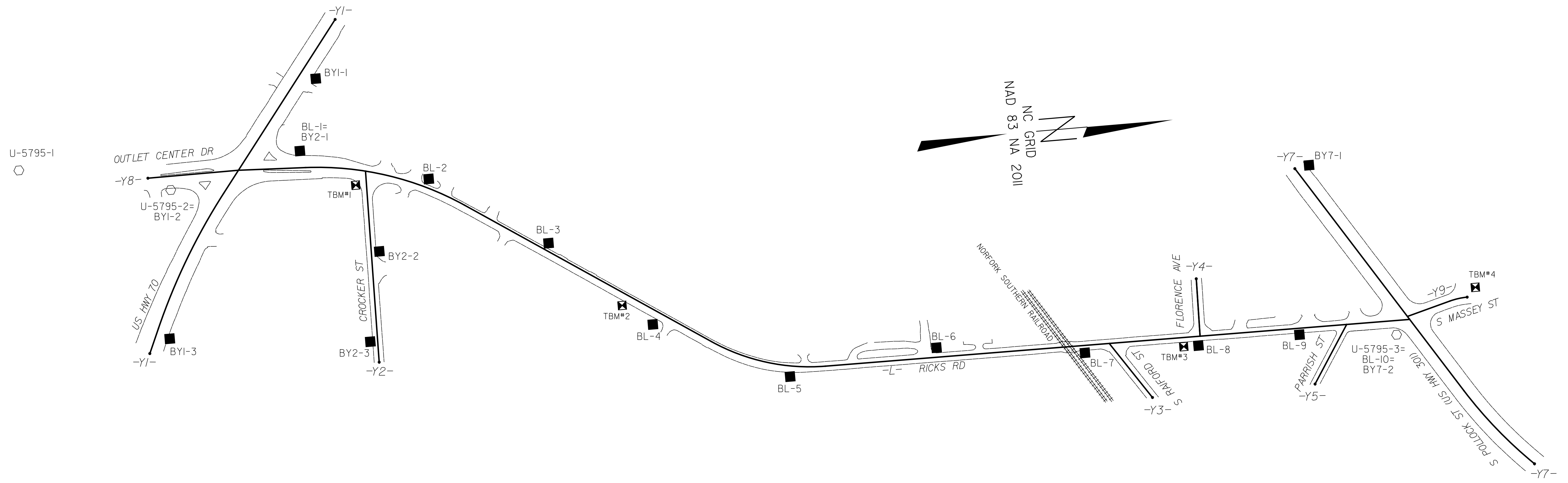
BY7 POINT	DESC.	NORTH	EAST	ELEVATION	Y7 STATION	OFFSET
77	BY7-1	648092.6395	2210490.8661	176.11	10+15.28	35.22 LT
3	U5795-3	648284.6520	2210954.8890	174.21	15+09.87	51.78 RT
4	U5795-4	648741.4200	2211480.9080	174.23	OUTSIDE PROJECT LIMITS	

TBM#1 ELEVATION = 177.06
 N 645588 E 2210331
 L STATION 13+14.00 40 RIGHT
 TOP OF BONNET BOLT WITH "X" MARK
 ON FIRE HYDRANT

TBM#2 ELEVATION = 171.48
 N 646260 E 2210706
 L STATION 21+03.00 31 RIGHT
 TOP OF BONNET BOLT WITH "X" MARK
 ON FIRE HYDRANT

TBM#3 ELEVATION = 176.89
 N 647724 E 2210939
 L STATION 36+09.00 24 RIGHT
 TOP OF BONNET BOLT WITH "X" MARK
 ON FIRE HYDRANT

TBM#4 ELEVATION = 177.08
 N 648502 E 2210848
 TOP OF BONNET BOLT WITH "X" MARK
 ON FIRE HYDRANT (DO NOT USE DAMAGED)
 OUT OF LIMITS



U-5795-1
 N. 648741.4200
 E. 2211480.9080
 ELEV. 174.2295'

DATUM DESCRIPTION

THE LOCALIZED COORDINATE SYSTEM DEVELOPED FOR THIS PROJECT IS BASED ON THE STATE PLANE COORDINATES ESTABLISHED BY NCDOT FOR MONUMENT "U5795GPS2"
 WITH NAD 83/NA 2011 STATE PLANE GRID COORDINATES OF
 NORTHING: 645102.420(ft) EASTING: 2210302.842(ft)
 ELEVATION: 175.115(ft)
 THE AVERAGE COMBINED GRID FACTOR USED ON THIS PROJECT (GROUND TO GRID) IS: 0.999881005
 THE N.C. LAMBERT GRID BEARING AND LOCALIZED HORIZONTAL GROUND DISTANCE FROM "U5795GPS2" TO -L- STATION 10+00 IS
 N11°26'04.68"W 185.66
 ALL LINEAR DIMENSIONS ARE LOCALIZED HORIZONTAL DISTANCES
 VERTICAL DATUM USED IS NAVD 88

NOTES:

1. THE CONTROL DATA FOR THIS PROJECT CAN BE FOUND ELECTRONICALLY BY SELECTING PROJECT CONTROL DATA AT:
[HTTPS://CONNECT.NCDOT.GOV/RESOURCES/LOCATION/](https://connect.ncdot.gov/resources/location/)
 THE FILES TO BE FOUND ARE AS FOLLOWS:
 U5795_LS_CONTROL.TXT

SITE CALIBRATION INFORMATION HAS NOT BEEN PROVIDED FOR THIS PROJECT. IF FURTHER INFORMATION IS NEEDED, PLEASE CONTACT THE LOCATION AND SURVEYS UNIT.

○ INDICATES GEODETIC CONTROL MONUMENTS USED OR SET FOR HORIZONTAL PROJECT CONTROL BY THE NCDOT LOCATION AND SURVEYS UNIT.
 PROJECT CONTROL ESTABLISHED USING GLOBAL POSITIONING SYSTEM.

NOTE: DRAWING NOT TO SCALE

6/27/99
 9/5/2017
 U5795-1C-1.dgn
 localiser

SURVEY CONTROL SHEET U-5795

FINAL

ROW MARKER PERMANENT EASEMENT

Table with 5 columns: ALIGN, STATION, OFFSET, NORTH, EAST. Contains 50 rows of survey data.

ROW MARKER PERMANENT EASEMENT

Table with 5 columns: ALIGN, STATION, OFFSET, NORTH, EAST. Contains 50 rows of survey data.

ROW MARKER PERMANENT EASEMENT

Table with 5 columns: ALIGN, STATION, OFFSET, NORTH, EAST. Contains 1 row of survey data.

ROW MARKER PERMANENT EASEMENT

Table with 5 columns: ALIGN, STATION, OFFSET, NORTH, EAST. Contains 1 row of survey data.

ROW MARKER PERMANENT EASEMENT

Table with 5 columns: ALIGN, STATION, OFFSET, NORTH, EAST. Contains 5 rows of survey data.

ROW MARKER PERMANENT EASEMENT

Table with 5 columns: ALIGN, STATION, OFFSET, NORTH, EAST. Contains 5 rows of survey data.

ROW MARKER IRON PIN AND CAP

Table with 5 columns: ALIGN, STATION, OFFSET, NORTH, EAST. Contains 9 rows of survey data.

ROW MARKER IRON PIN AND CAP

Table with 5 columns: ALIGN, STATION, OFFSET, NORTH, EAST. Contains 2 rows of survey data.

ROW MARKER IRON PIN AND CAP

Table with 5 columns: ALIGN, STATION, OFFSET, NORTH, EAST. Contains 2 rows of survey data.

DATUM DESCRIPTION THE LOCALIZED COORDINATE SYSTEM DEVELOPED FOR THIS PROJECT IS BASED ON THE STATE PLANE COORDINATES ESTABLISHED BY NCDOT FOR MONUMENT "GPS B4771-1" WITH NAD 83/NA 2011 STATE PLANE GRID COORDINATES OF NORTHING: 580950.125(ft) EASTING: 2233926.594(ft) ELEVATION: 84.31(ft) THE AVERAGE COMBINED GRID FACTOR USED ON THIS PROJECT (GROUND TO GRID) IS: 0.99987525 THE N.C. LAMBERT GRID BEARING AND LOCALIZED HORIZONTAL GROUND DISTANCE FROM "GPS B4771-1" TO L- STATION 10+00 IS S 21°30'13.53"W 1362.33 ALL LINEAR DIMENSIONS ARE LOCALIZED HORIZONTAL DISTANCES VERTICAL DATUM USED IS NAVD 88

6/2/09

PROJECT REFERENCE NO.	SHEET NO.
U-5795	1C-3
Location and Surveys	

SURVEY CONTROL SHEET U-5795

FINAL

L

TYPE	STATION	NORTH	EAST
POT	10+00.00	645284.3901	2210266.0359
PC	11+76.60	645460.8093	2210273.9575
PT	16+12.01	645869.4373	2210408.0150
PC	23+54.13	646486.4569	2210820.3714
PT	26+65.56	646780.0322	2210910.2175
POT	42+07.90	648322.3575	2210917.6890

Y1

TYPE	STATION	NORTH	EAST
POT	10+00.00	645571.3543	2209892.2619
PC	15+44.00	645240.0738	2210323.7584
PT	19+39.00	645039.3215	2210662.8358
POT	20+09.00	645011.1399	2210726.9123

Y2

TYPE	STATION	NORTH	EAST
POT	10+00.00	645617.2280	2210296.6092
POT	15+03.89	645610.6958	2210800.4534

Y3

TYPE	STATION	NORTH	EAST
POT	10+00.00	647529.2614	2210913.8470
POT	11+81.95	647630.5214	2211065.0182

Y4

TYPE	STATION	NORTH	EAST
POT	10+00.00	647771.7416	2210763.5798
POT	11+51.45	647768.8855	2210915.0078

Y5

TYPE	STATION	NORTH	EAST
POT	10+00.00	648155.9379	2210916.8828
POT	11+77.33	648059.8914	2211065.9456

Y7

TYPE	STATION	NORTH	EAST
POT	10+00.00	648054.7195	2210496.8694
PC	17+34.77	648449.0380	2211116.8745
PT	20+02.24	648617.4937	2211323.8440

Y8

TYPE	STATION	NORTH	EAST
POT	10+00.00	645045.1464	2210266.7471
POT	12+39.24	645284.3901	2210266.0359

Y9

TYPE	STATION	NORTH	EAST
POT	10+00.00	648317.1073	2210909.4338
PC	11+18.67	648431.6801	2210878.5202
PT	11+65.60	648478.0297	2210871.9565

DATUM DESCRIPTION

THE LOCALIZED COORDINATE SYSTEM DEVELOPED FOR THIS PROJECT IS BASED ON THE STATE PLANE COORDINATES ESTABLISHED BY NCDOT FOR MONUMENT "GPS B4771-1"
 WITH NAD 83/NA 2011 STATE PLANE GRID COORDINATES OF
 NORTHING: 580950.125(ft) EASTING: 2233926.594(ft)
 ELEVATION: 84.31(ft)
 THE AVERAGE COMBINED GRID FACTOR USED ON THIS PROJECT (GROUND TO GRID) IS: 0.99987525
 THE N.C. LAMBERT GRID BEARING AND LOCALIZED HORIZONTAL GROUND DISTANCE FROM "GPS B4771-1" TO -L- STATION 10+00 IS
 S 21°30'13.53"W 1362.33
 ALL LINEAR DIMENSIONS ARE LOCALIZED HORIZONTAL DISTANCES
 VERTICAL DATUM USED IS NAVD 88

NOTES:

1. THE CONTROL DATA FOR THIS PROJECT CAN BE FOUND ELECTRONICALLY BY SELECTING PROJECT CONTROL DATA AT:
[HTTPS://CONNECT.NCDOT.GOV/RESOURCES/LOCATION](https://connect.ncdot.gov/resources/location)

THE FILES TO BE FOUND ARE AS FOLLOWS:
 B4771_LS_CONTROL.TXT

SITE CALIBRATION INFORMATION HAS NOT BEEN PROVIDED FOR THIS PROJECT. IF FURTHER INFORMATION IS NEEDED, PLEASE CONTACT THE LOCATION AND SURVEYS UNIT.

● INDICATES GEODETIC CONTROL MONUMENTS USED OR SET FOR HORIZONTAL PROJECT CONTROL BY THE NCDOT LOCATION AND SURVEYS UNIT.
 PROJECT CONTROL ESTABLISHED USING GLOBAL POSITIONING SYSTEM.

NOTE: DRAWING NOT TO SCALE

1/16/2017 10:33:00 AM localuser

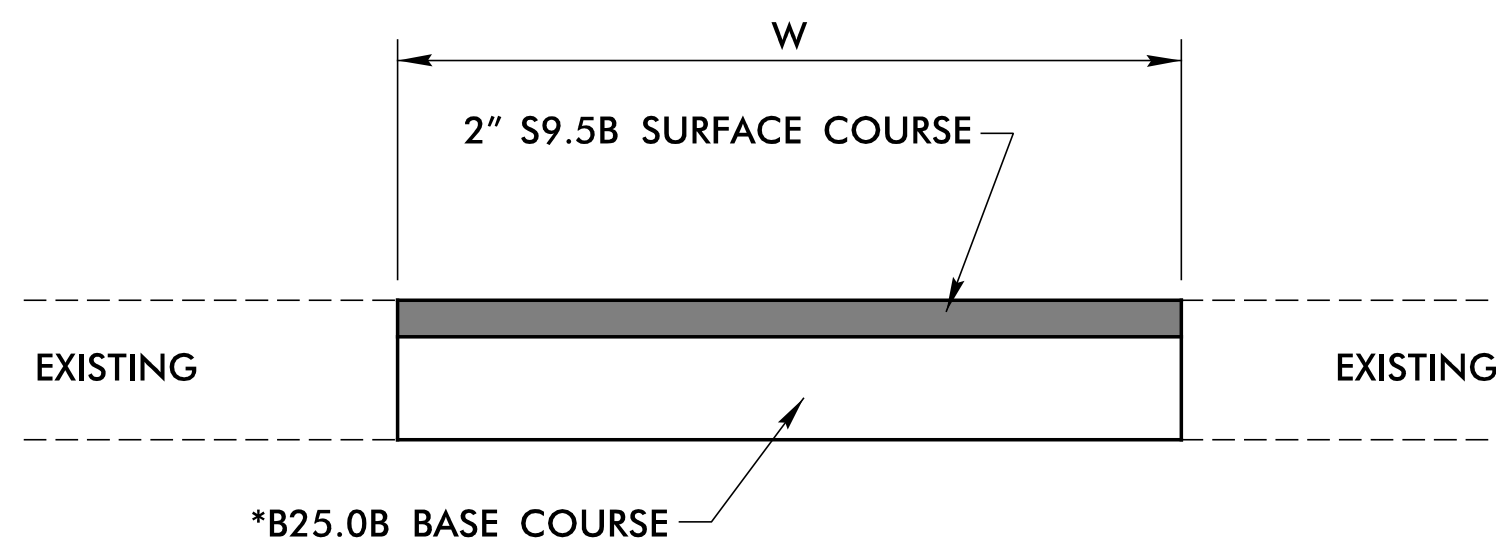
6/2/2017

FINAL PAVEMENT SCHEDULE

C1	PROP. APPROX. 1 1/2" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5B, AT AN AVERAGE RATE OF 168 LBS. PER SQ. YD.
C1A	PROP. APPROX. 1 1/2" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5C, AT AN AVERAGE RATE OF 168 LBS. PER SQ. YD.
C2	PROP. APPROX. 3" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5B, AT AN AVERAGE RATE OF 168 LBS. PER SQ. YD. IN EACH OF TWO LAYERS
C2A	PROP. APPROX. 3" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5C, AT AN AVERAGE RATE OF 168 LBS. PER SQ. YD. IN EACH OF TWO LAYERS
C3	PROP. VAR. DEPTH ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5B, AT AN AVERAGE RATE OF 112 LBS. PER SQ. YD. PER 1" DEPTH, TO BE PLACED IN LAYERS NOT TO EXCEED 2" IN DEPTH
D1	PROP. APPROX. 4" ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE I19.0B, AT AN AVERAGE RATE OF 456 LBS. PER SQ. YD.
D1A	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 I19.0B, AT AN AVERAGE RATE OF 114 LBS. PER SQ. YD. PER 1" DEPTH, TO BE PLACED IN LAYERS NOT LESS THAN 2 1/2" IN DEPTH OR GREATER THAN 4" IN DEPTH
E1	PROP. APPROX. 4" ASPHALT CONCRETE BASE COURSE, TYPE B25.0B, AT AN AVERAGE RATE OF 456 LBS. PER SQ. YD.
E2	PROP. VAR. DEPTH ASPHALT CONCRETE BASE COURSE, TYPE B25.0B, 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 1/2" IN DEPTH
R1	2'-6" CONCRETE CURB AND GUTTER
R2	9"X12" CONCRETE CURB
R3	5" MONOLITHIC CONCRETE ISLAND (KEYED IN)
S	4" CONCRETE SIDEWALK
T	EARTH MATERIAL
U	EXISTING PAVEMENT
V	MILLING BITUMINOUS PAVEMENT 1.5"
V1	MILLING BITUMINOUS PAVEMENT, 0" TO 1.5"
W	VARIABLE DEPTH ASPHALT PAVEMENT (SEE WEDGING DETAIL)

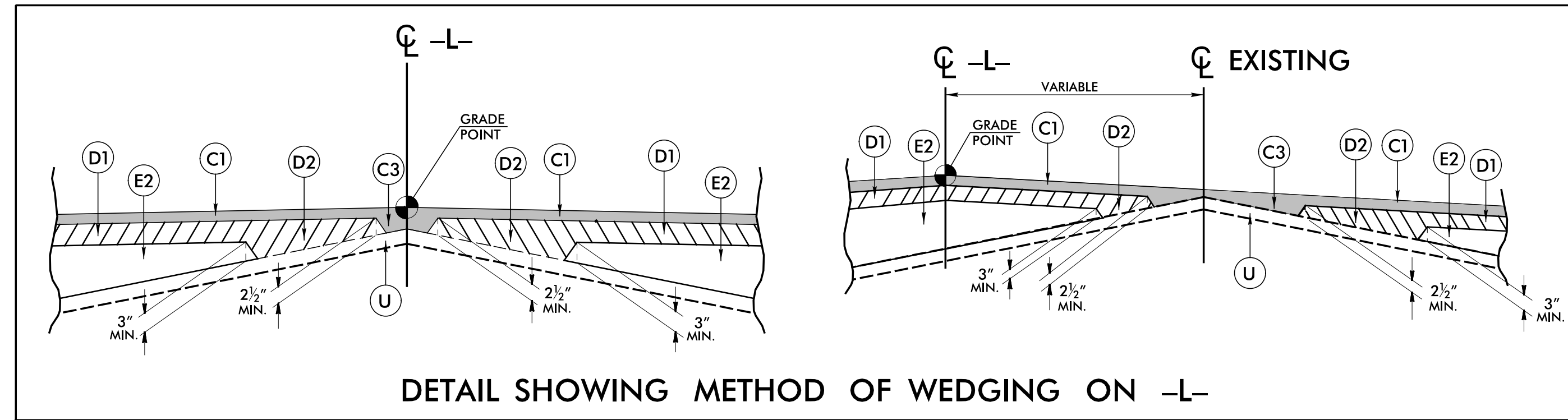
NOTE: PAVEMENT EDGE SLOPES ARE 1:1 UNLESS SHOWN OTHERWISE.

DETAIL OF PAVEMENT REPAIRS

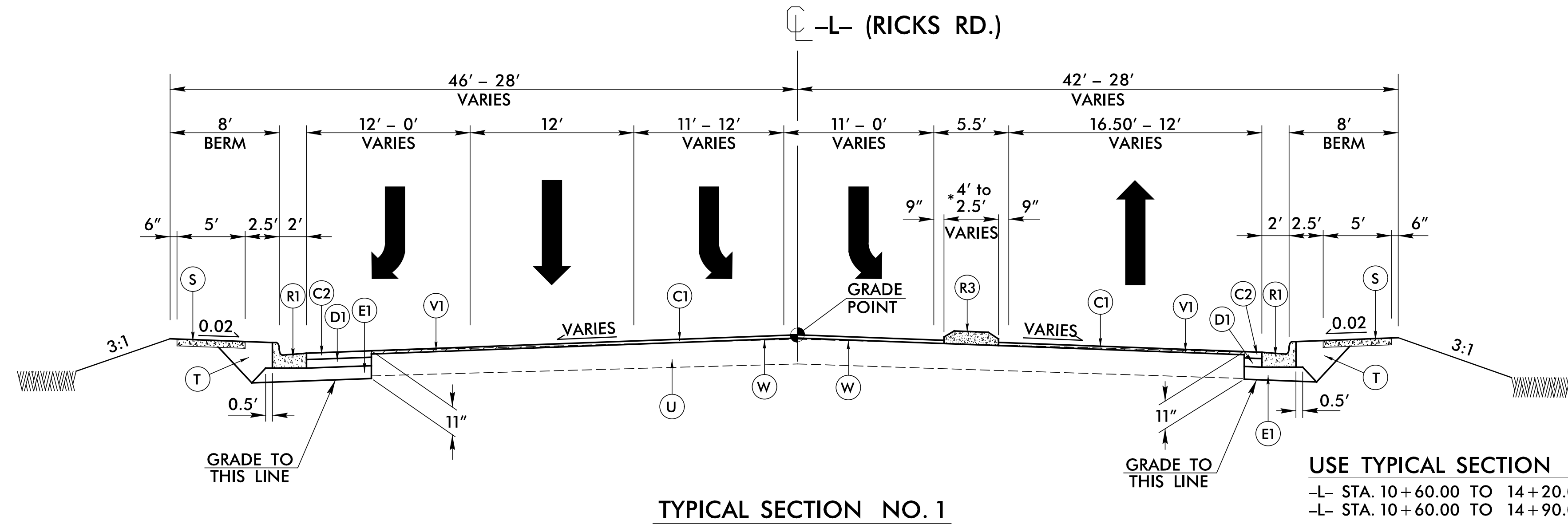


* Overall Pavement depth should match Existing Pavement Depth. Use 5.5" minimum thickness of Base Course if Existing Pavement depth is less than 7.5".

NOTE: SEE ROADWAY STD. DRAWING 654.01 FOR VALUES OF "W".



DETAIL SHOWING METHOD OF WEDGING ON -L-



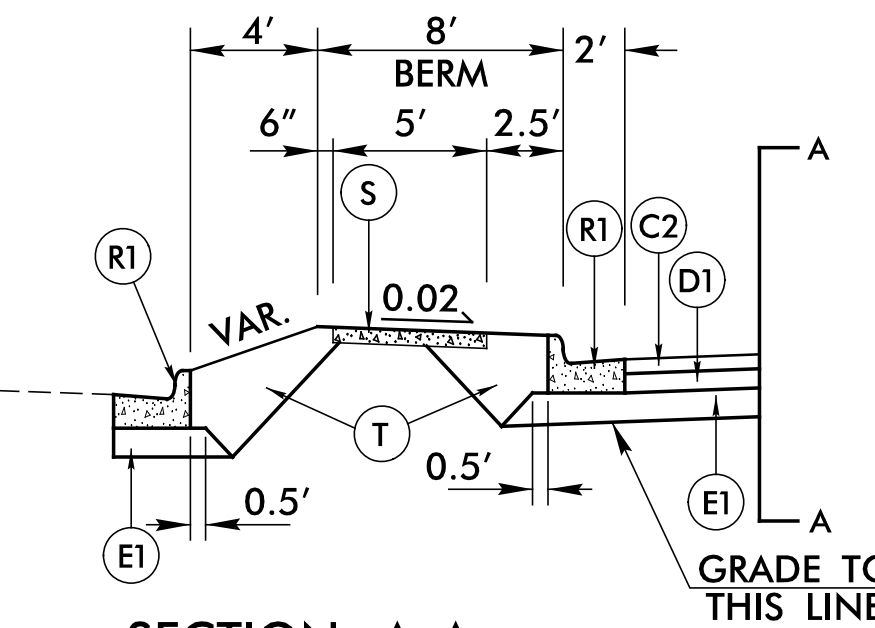
TYPICAL SECTION NO. 1

USE TYPICAL SECTION NO. 1

-L- STA. 10+60.00 TO 14+20.00 LT
-L- STA. 10+60.00 TO 14+90.00 RT

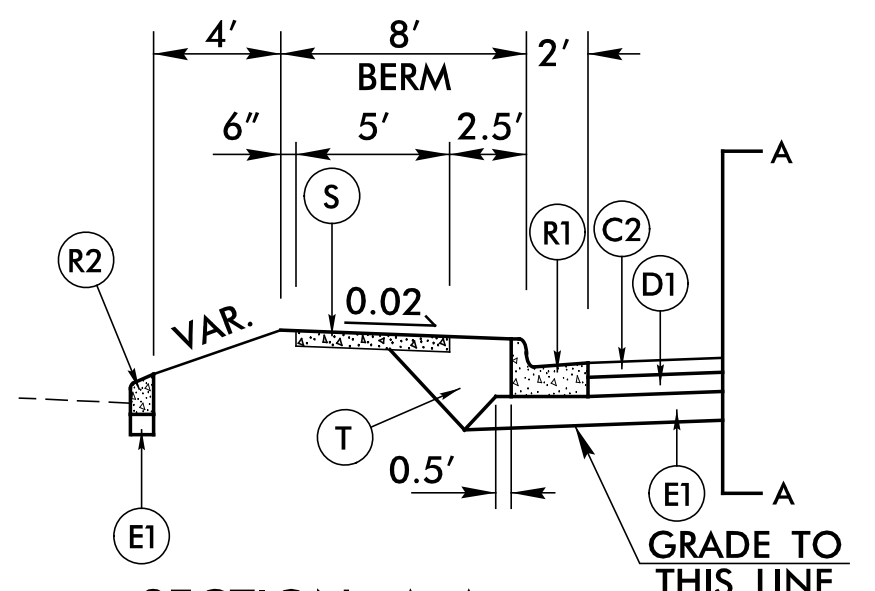
* LIMITS OF CONCRETE ISLAND
-L- STA. 10+87.00 TO 12+90.00

SEE PLANS FOR LOCATIONS OF AUXILIARY LANES AND TAPERS



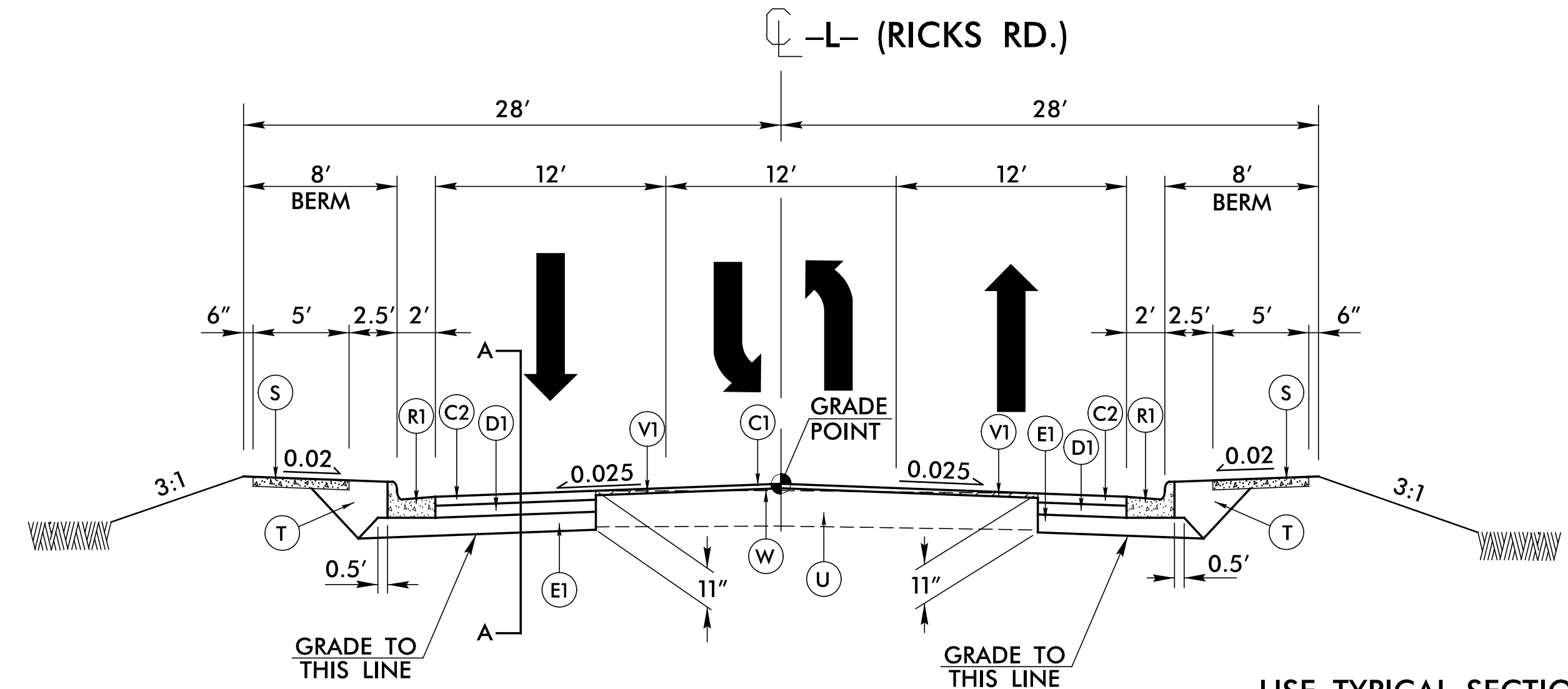
SECTION A-A

TO BE USED IN CONJUNCTION WITH TYPICAL SECTION NO. 2
-L- STA. 15+81.80 TO 15+91.90 LT
-L- STA. 15+98.64 TO 16+62.29 LT



SECTION A-A

TO BE USED IN CONJUNCTION WITH TYPICAL SECTION NO. 2
-L- STA. 15+19.89 TO 15+72.01 LT
-L- STA. 30+32.49 TO 30+60.16 LT
-L- STA. 30+85.66 TO 31+08.18 LT



TYPICAL SECTION NO. 2

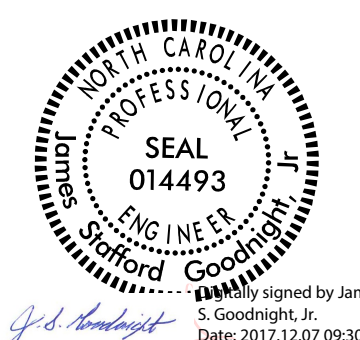
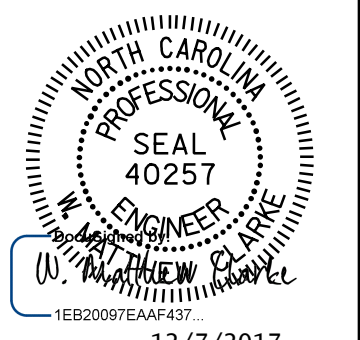

USE TYPICAL SECTION NO. 2

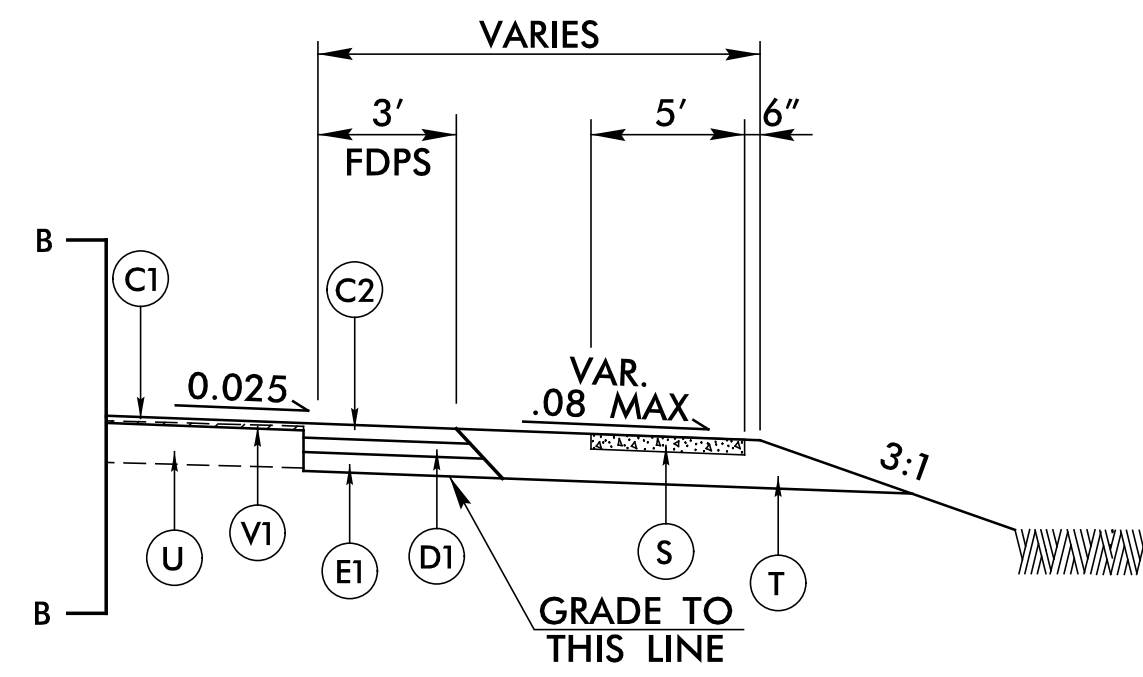
-L- STA. 14+20.00 TO 32+44.00 LT
-L- STA. 14+90.00 TO 32+44.00 RT
-L- STA. 34+10.00 TO 41+72.31

PROJECT REFERENCE NO. U-5795	SHEET NO. 2A-1
ROADWAY DESIGN ENGINEER James S. Goodright, Jr. SEAL 014493 11/29/2017	PAVEMENT DESIGN ENGINEER James S. Goodright, Jr. SEAL 40257 11/29/2017
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	
Prepared by vhb Venture 1 940 Main Campus Drive, Suite 500 Raleigh, NC 27606 NC License No. C-3705	

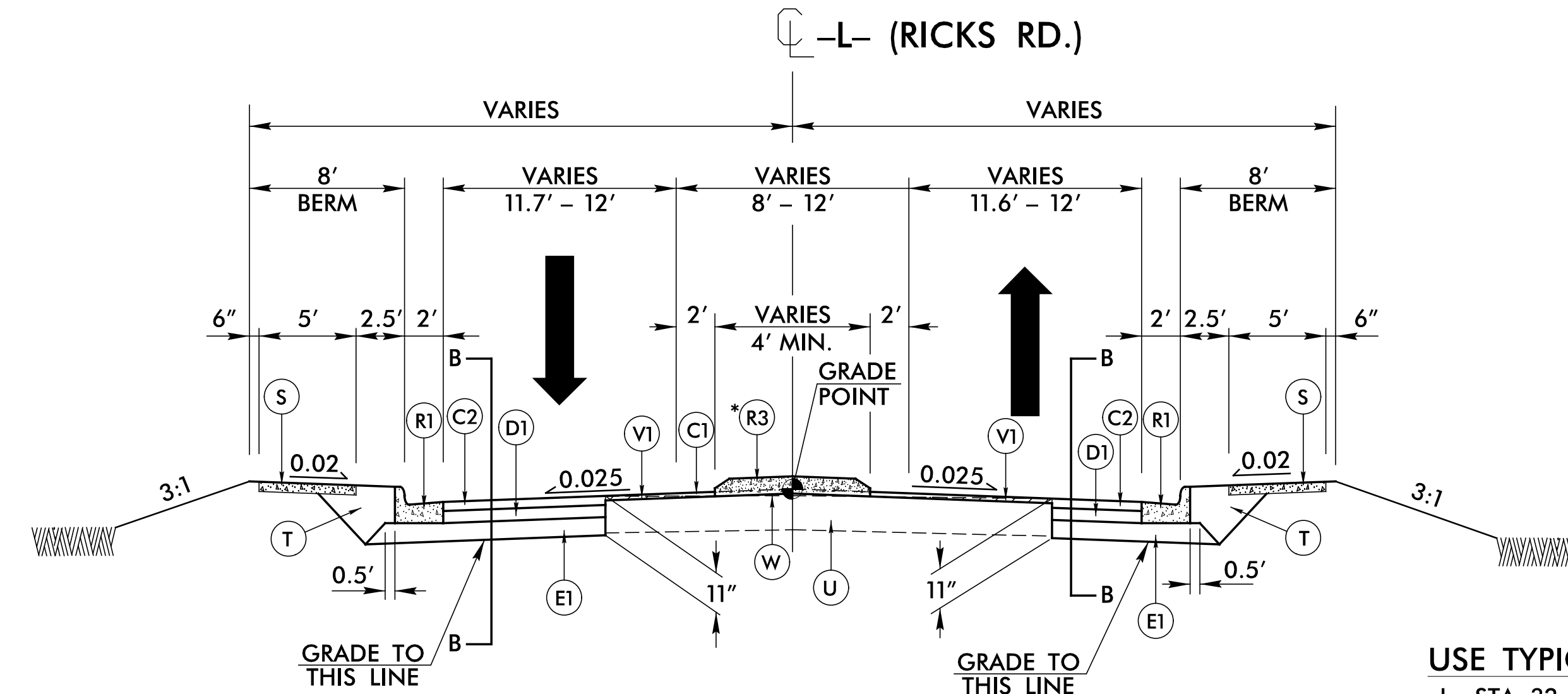
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6/2/2017

PROJECT REFERENCE NO. U-5795	SHEET NO. 2A-2
ROADWAY DESIGN ENGINEER 	PAVEMENT DESIGN ENGINEER 
<p>DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED</p> <p>Prepared by  Venture 1 940 Main Campus Drive, Suite 500 Raleigh, NC 27606 NC License No. C-3705</p>	



SECTION B-B (LEFT & RIGHT SIDE)
TO BE USED IN CONJUNCTION WITH
TYPICAL SECTION NO. 3
-L- STA. 32+55.00 TO 33+46.00 LT
-L- STA. 32+66.03 TO 33+56.00 RT

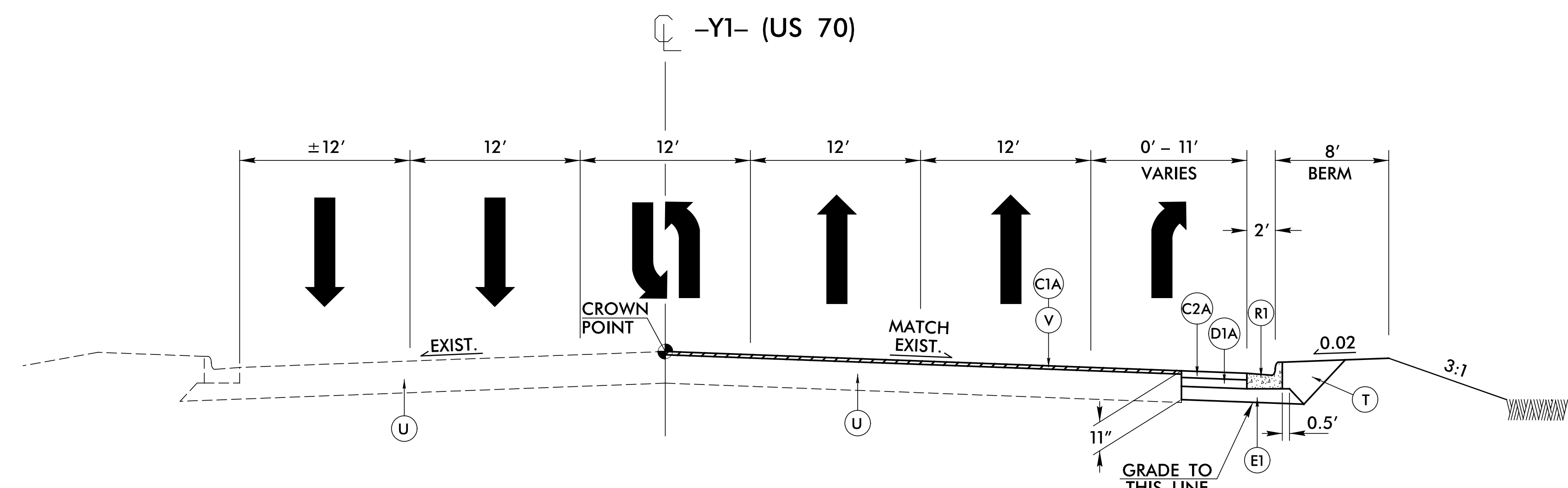


TYPICAL SECTION NO. 3
AT RAILROAD CROSSING

USE TYPICAL SECTION NO. 3
-L- STA. 32+44.00 TO 34+09.57
* LIMITS OF CONCRETE ISLAND
-L- STA. 32+44.00 TO 32+81.84
-L- STA. 33+29.82 TO 34+09.57

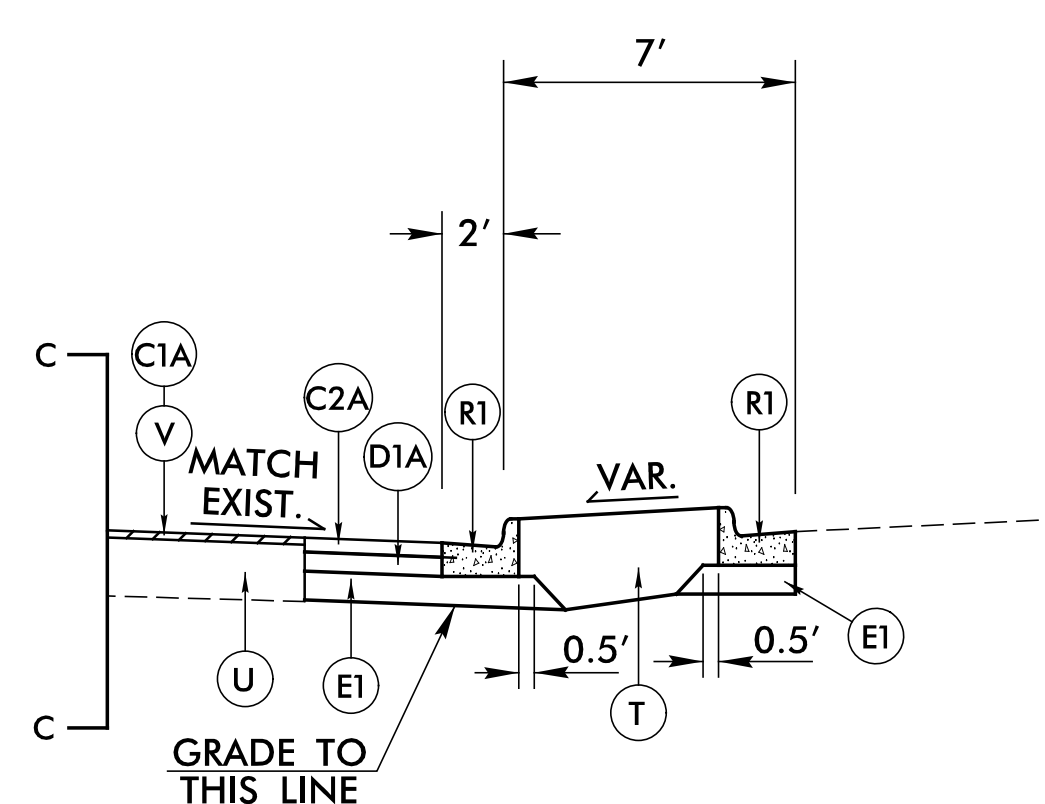
PAVEMENT SCHEDULE

C1	1 1/2" TYPE S9.5B
C1A	1 1/2" TYPE S9.5C
C2	3" TYPE S9.5B
C2A	3" TYPE S9.5C
D1	4" TYPE I19.0B
D1A	4" TYPE I19.0C
E1	4" TYPE B25.0B
R1	2'-6" C&G
R3	5" CONCRETE ISLAND (KEYED IN)
S	4" CONC. SIDEWALK
T	EARTH MATERIAL
U	EXISTING PAVEMENT
V	1.5" MILLING
V1	VAR. DEPTH MILLING
W	WEDGING

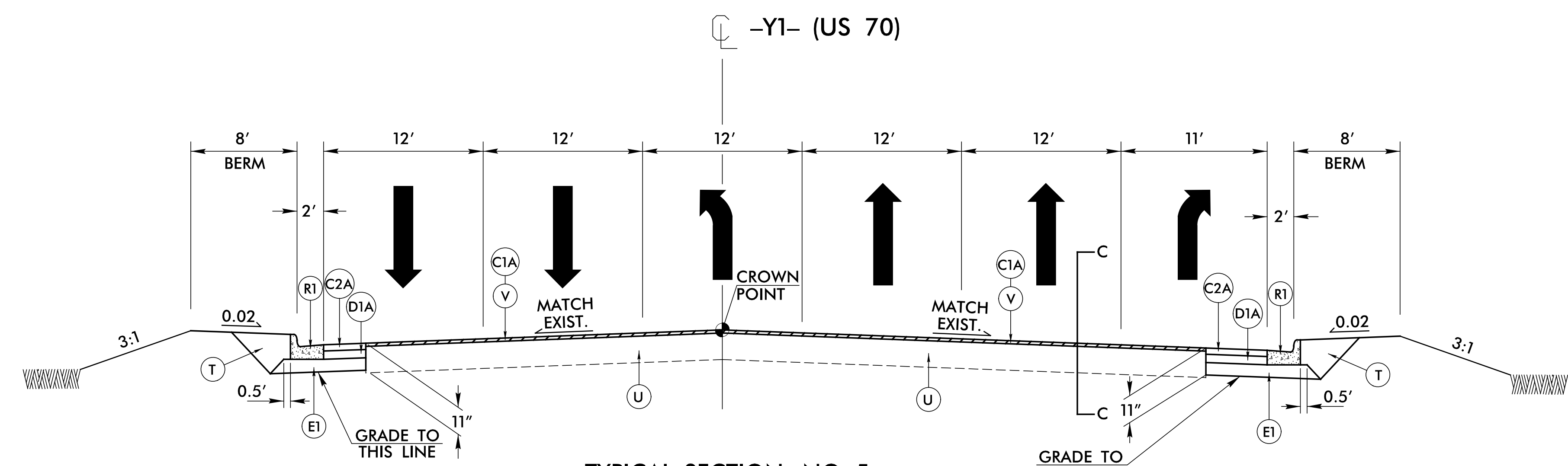


TYPICAL SECTION NO. 4

USE TYPICAL SECTION NO. 4
-Y1- STA. 11+60.00 TO 13+01.54



SECTION C-C
TO BE USED IN CONJUNCTION WITH
TYPICAL SECTION NO. 5
-Y1- STA. 13+18.47 TO 13+37.88 RT

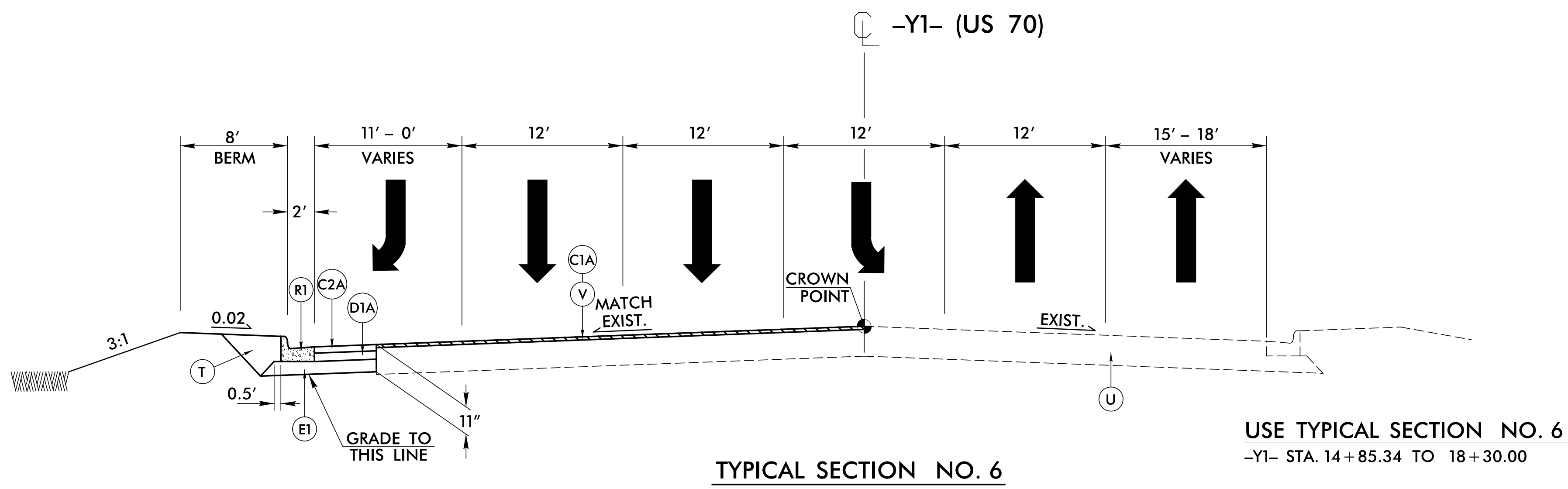


TYPICAL SECTION NO. 5

USE TYPICAL SECTION NO. 5
-Y1- STA. 13+01.54 TO 14+85.34

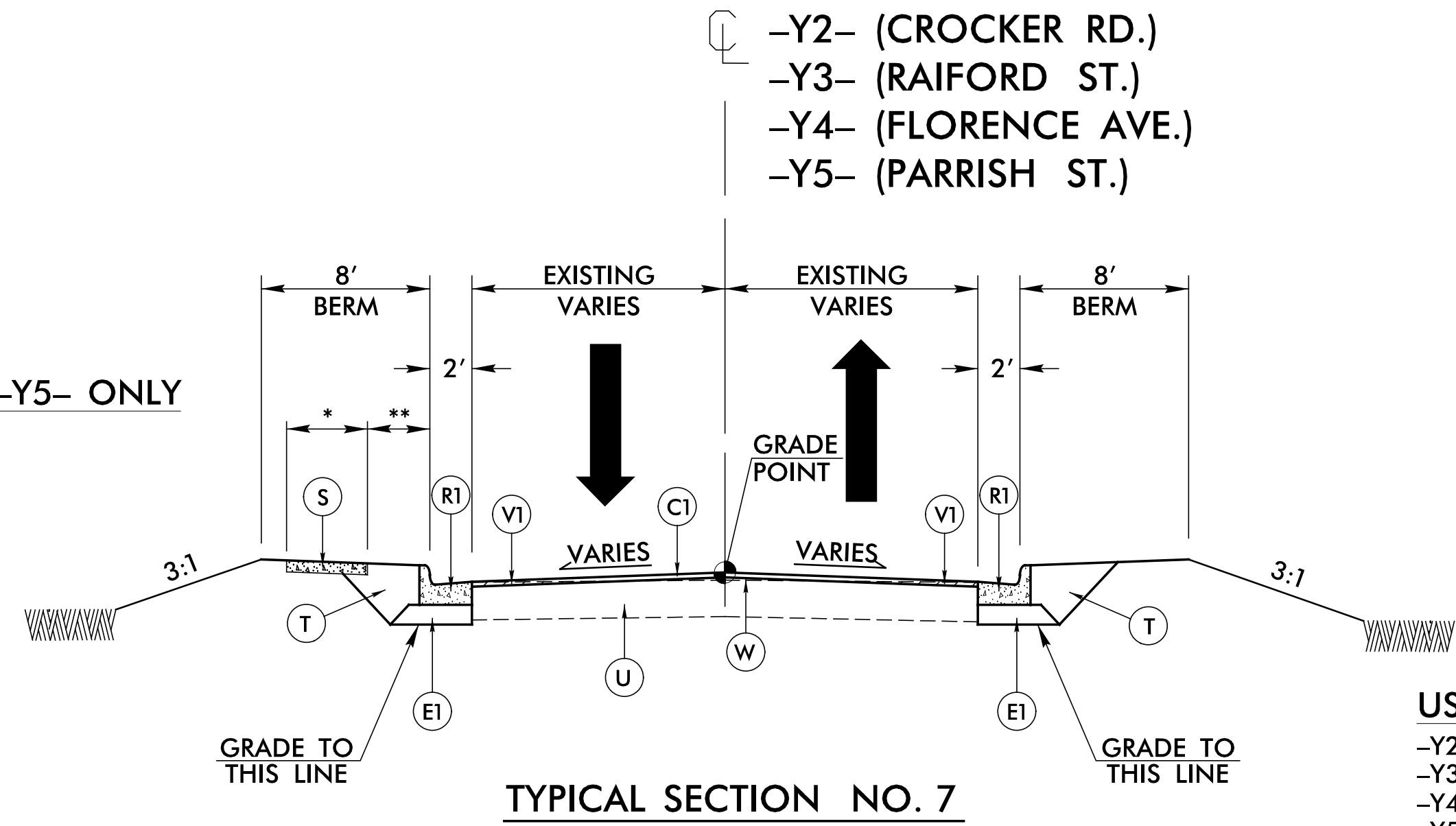
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6/2/2017

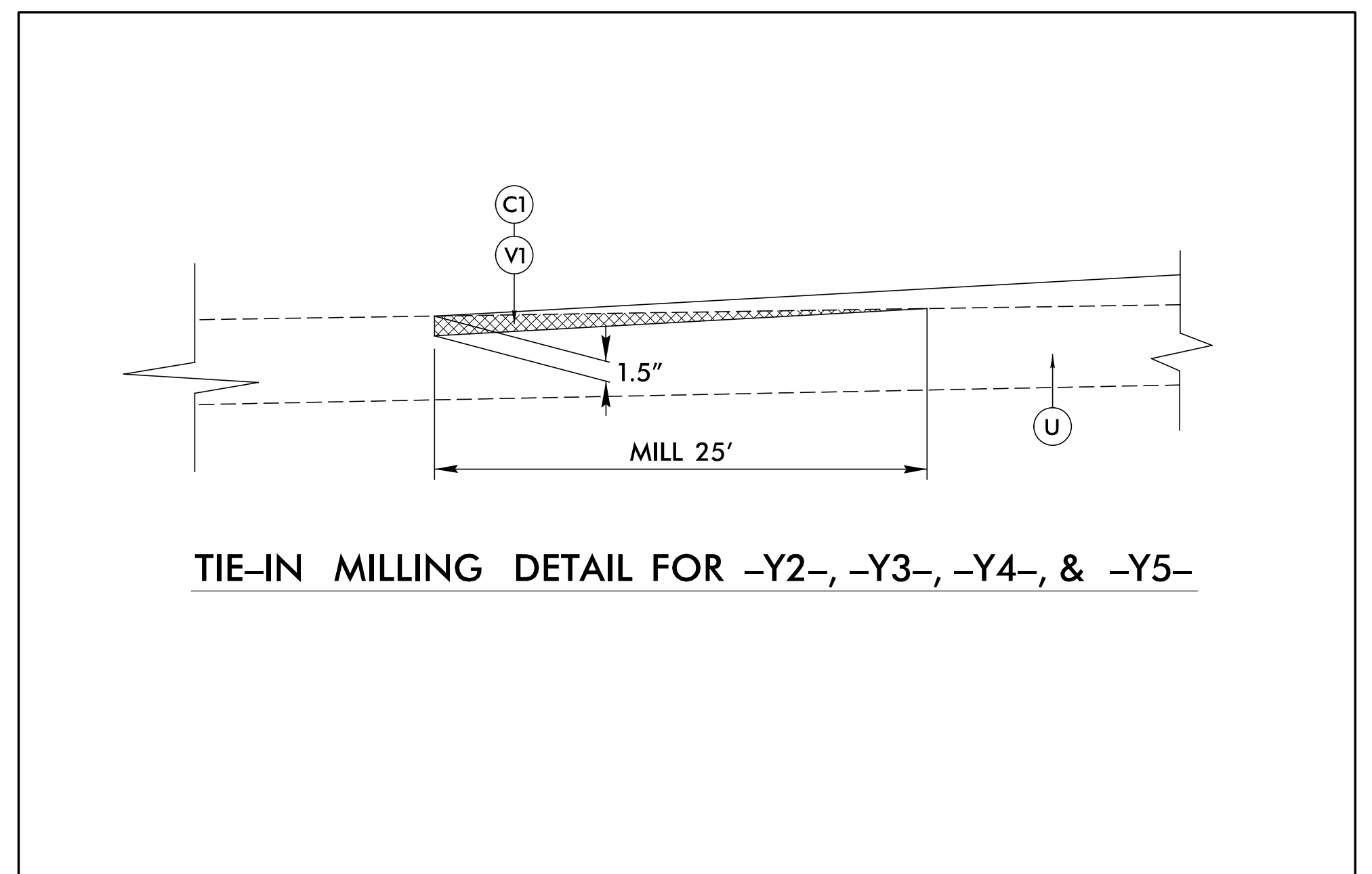
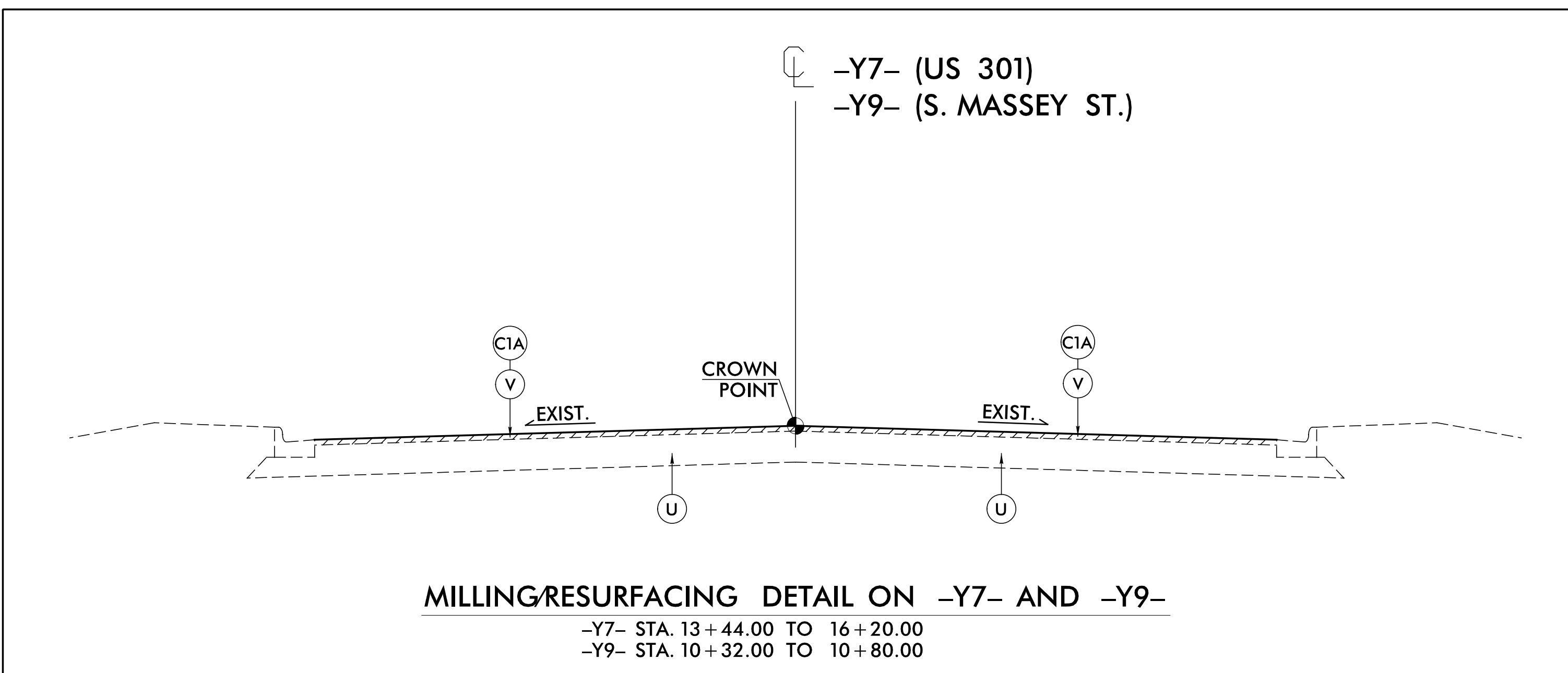


USE TYPICAL SECTION NO. 6
 -Y1- STA. 14+85.34 TO 18+30.00

SIDEWALK FOR -Y3- & -Y5- ONLY
 * -Y3- 3.5', -Y5- 3.3'
 ** -Y3- 3.8', -Y5- 0.5'

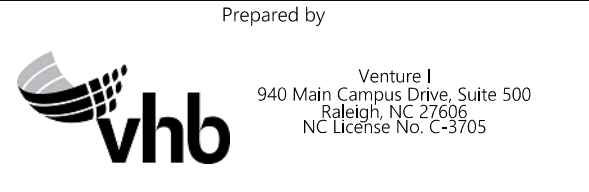


USE TYPICAL SECTION NO. 7
 -Y2- STA. 10+25.03 TO 11+00.00
 -Y3- STA. 10+21.74 TO 11+05.00
 -Y4- STA. 10+72.00 TO 11+33.45
 -Y5- STA. 10+21.35 TO 10+83.00



PROJECT REFERENCE NO. U-5795	SHEET NO. 2A-3
ROADWAY DESIGN ENGINEER SEAL 014493 ENG. LINE 13 Storford Gooding	PAVEMENT DESIGN ENGINEER SEAL A0257 ENG. LINE 13 STEFAN C. STORFORD
11/29/2017	

DOCUMENT NOT CONSIDERED FINAL
 UNLESS ALL SIGNATURES COMPLETED




PAVEMENT SCHEDULE

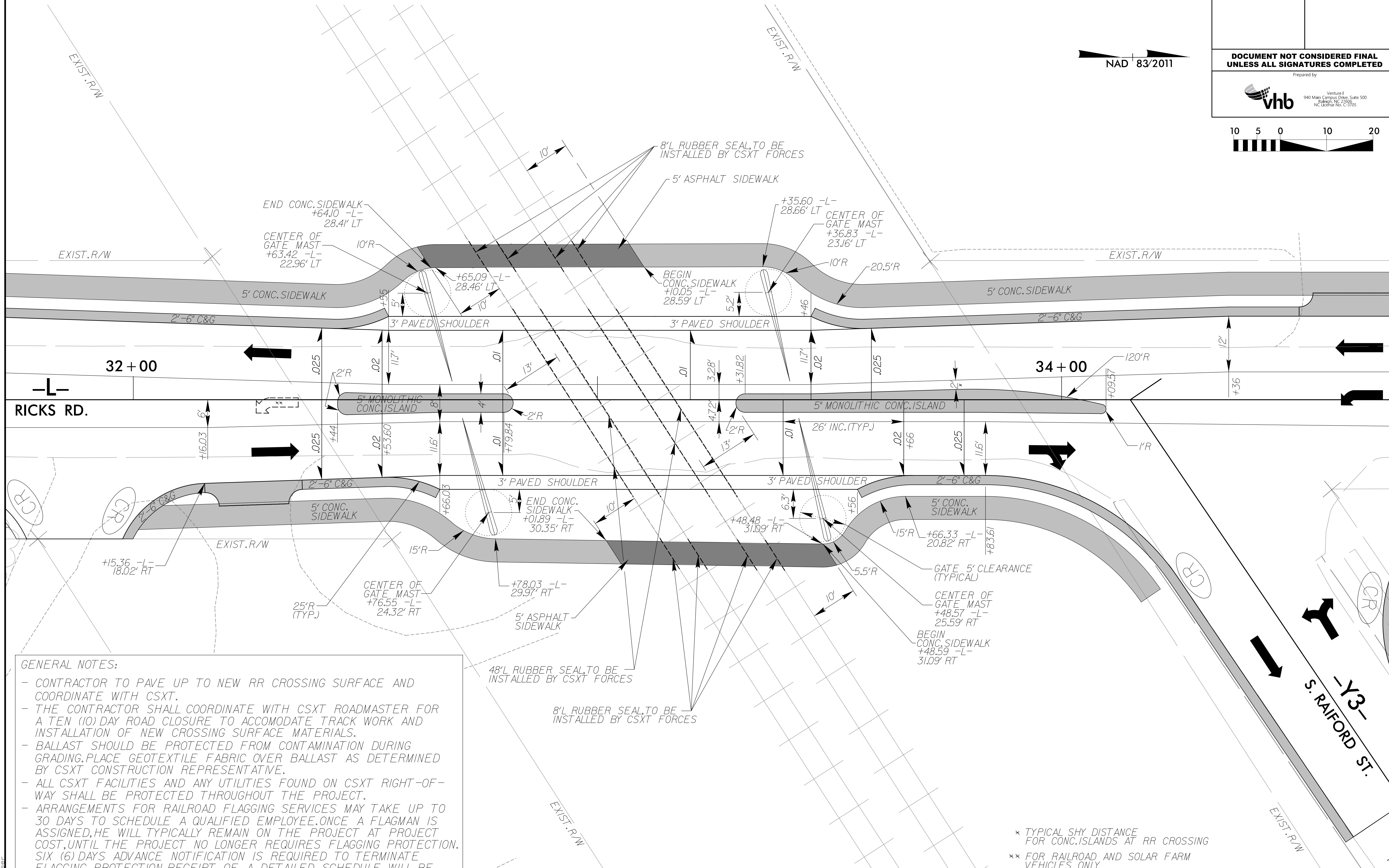
C1	1 1/2" TYPE S9.5B
C1A	1 1/2" TYPE S9.5C
C2	3" TYPE S9.5B
C2A	3" TYPE S9.5C
D1	4" TYPE I19.0B
D1A	4" TYPE I19.0C
E1	4" TYPE B25.0B
R1	2'-6" C&G
S	4" CONC. SIDEWALK
T	EARTH MATERIAL
U	EXISTING PAVEMENT
V	1.5" MILLING
V1	VAR. DEPTH MILLING
W	WEDGING

1/28/2017 15:56:56 du-tyr.dgn local user

RICKS ROAD / RAILROAD INTERSECTION DETAIL

PROJECT REFERENCE NO. U-5795	SHEET NO. 2B-1
ROADWAY DESIGN ENGINEER	
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	
Prepared by  Venture I 940 Main Campus Drive, Suite 500 Raleigh, NC 27606 NC License No. C-3705	

NAD 83/2011



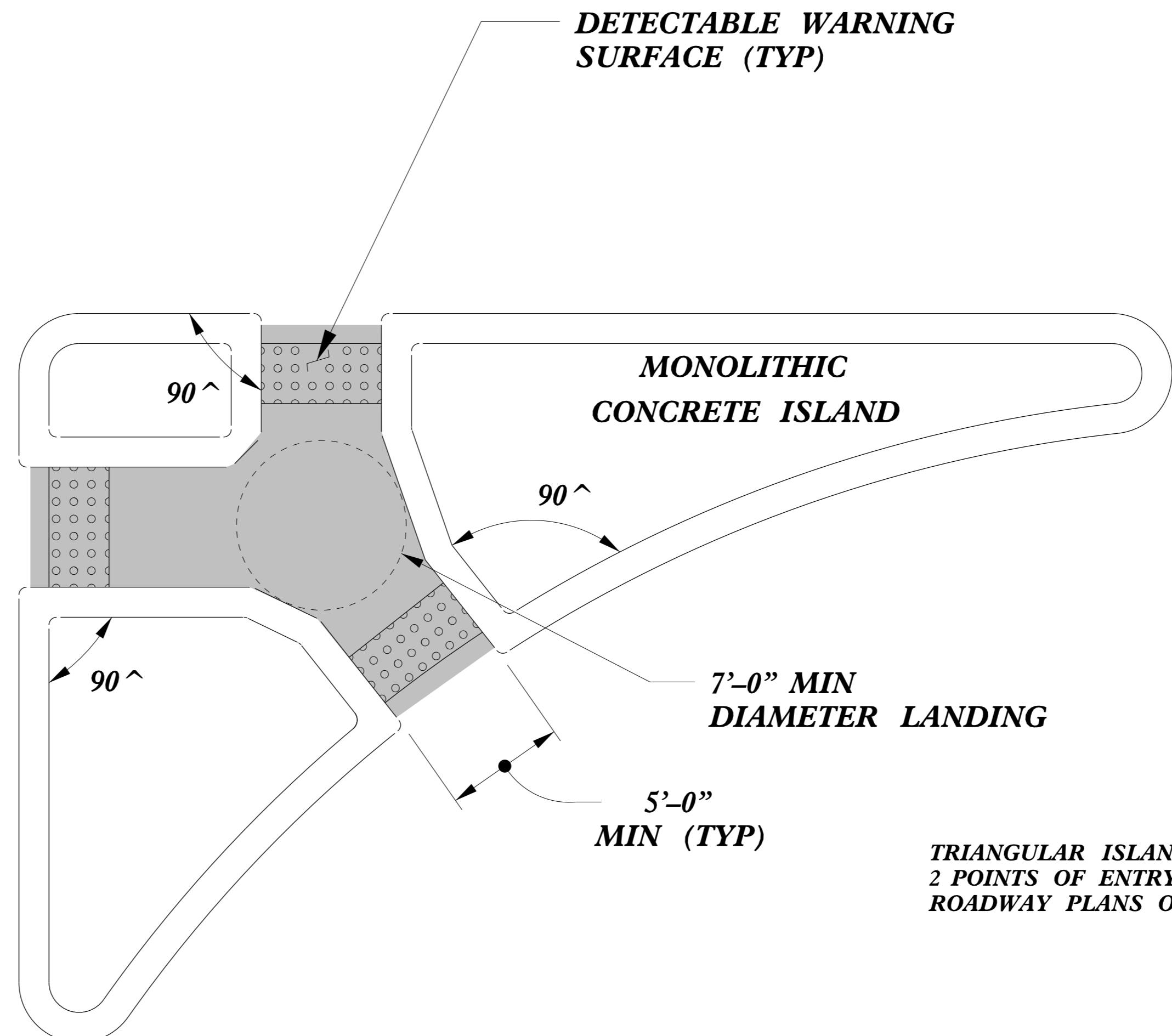
GENERAL NOTES:

- CONTRACTOR TO PAVE UP TO NEW RR CROSSING SURFACE AND COORDINATE WITH CSXT.
- THE CONTRACTOR SHALL COORDINATE WITH CSXT ROADMASTER FOR A TEN (10) DAY ROAD CLOSURE TO ACCOMMODATE TRACK WORK AND INSTALLATION OF NEW CROSSING SURFACE MATERIALS.
- BALLAST SHOULD BE PROTECTED FROM CONTAMINATION DURING GRADING. PLACE GEOTEXTILE FABRIC OVER BALLAST AS DETERMINED BY CSXT CONSTRUCTION REPRESENTATIVE.
- ALL CSXT FACILITIES AND ANY UTILITIES FOUND ON CSXT RIGHT-OF-WAY SHALL BE PROTECTED THROUGHOUT THE PROJECT.
- ARRANGEMENTS FOR RAILROAD FLAGGING SERVICES MAY TAKE UP TO 30 DAYS TO SCHEDULE A QUALIFIED EMPLOYEE. ONCE A FLAGMAN IS ASSIGNED, HE WILL TYPICALLY REMAIN ON THE PROJECT AT PROJECT COST, UNTIL THE PROJECT NO LONGER REQUIRES FLAGGING PROTECTION. SIX (6) DAYS ADVANCE NOTIFICATION IS REQUIRED TO TERMINATE FLAGGING PROTECTION. RECEIPT OF A DETAILED SCHEDULE WILL BE REQUIRED AT THE BEGINNING OF THE CONSTRUCTION PHASE.

* TYPICAL SHY DISTANCE FOR CONC. ISLANDS AT RR CROSSING
 ** FOR RAILROAD AND SOLAR FARM VEHICLES ONLY

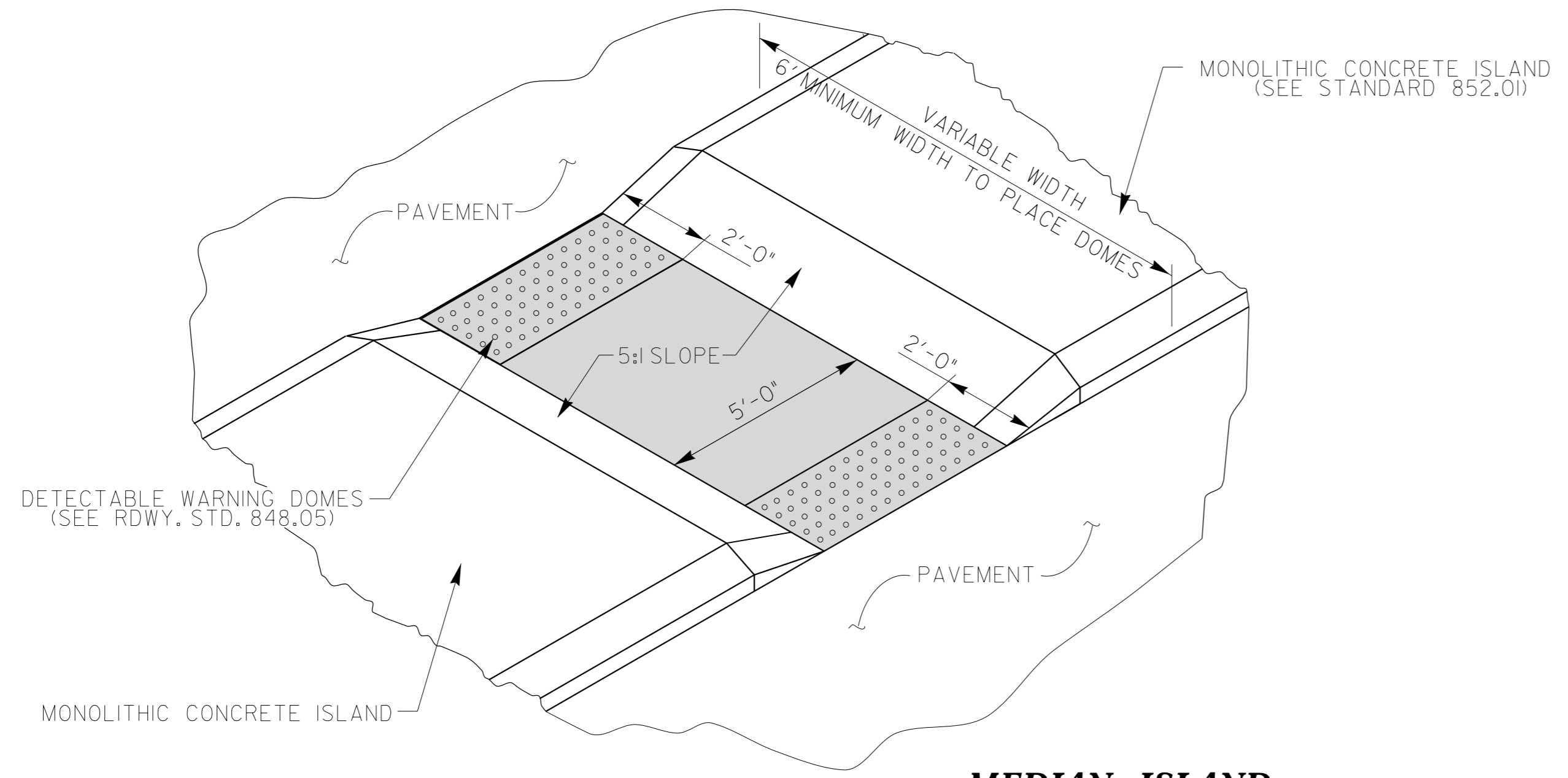
6/2/09 1/15/2016 1:59:55 du_detail2B-1.dgn localuser

PAY LIMITS FOR 2 OR 3 CURB RAMPS (CALCULATE BASED ON NUMBER OF SETS OF TRUNCATED DOMES)

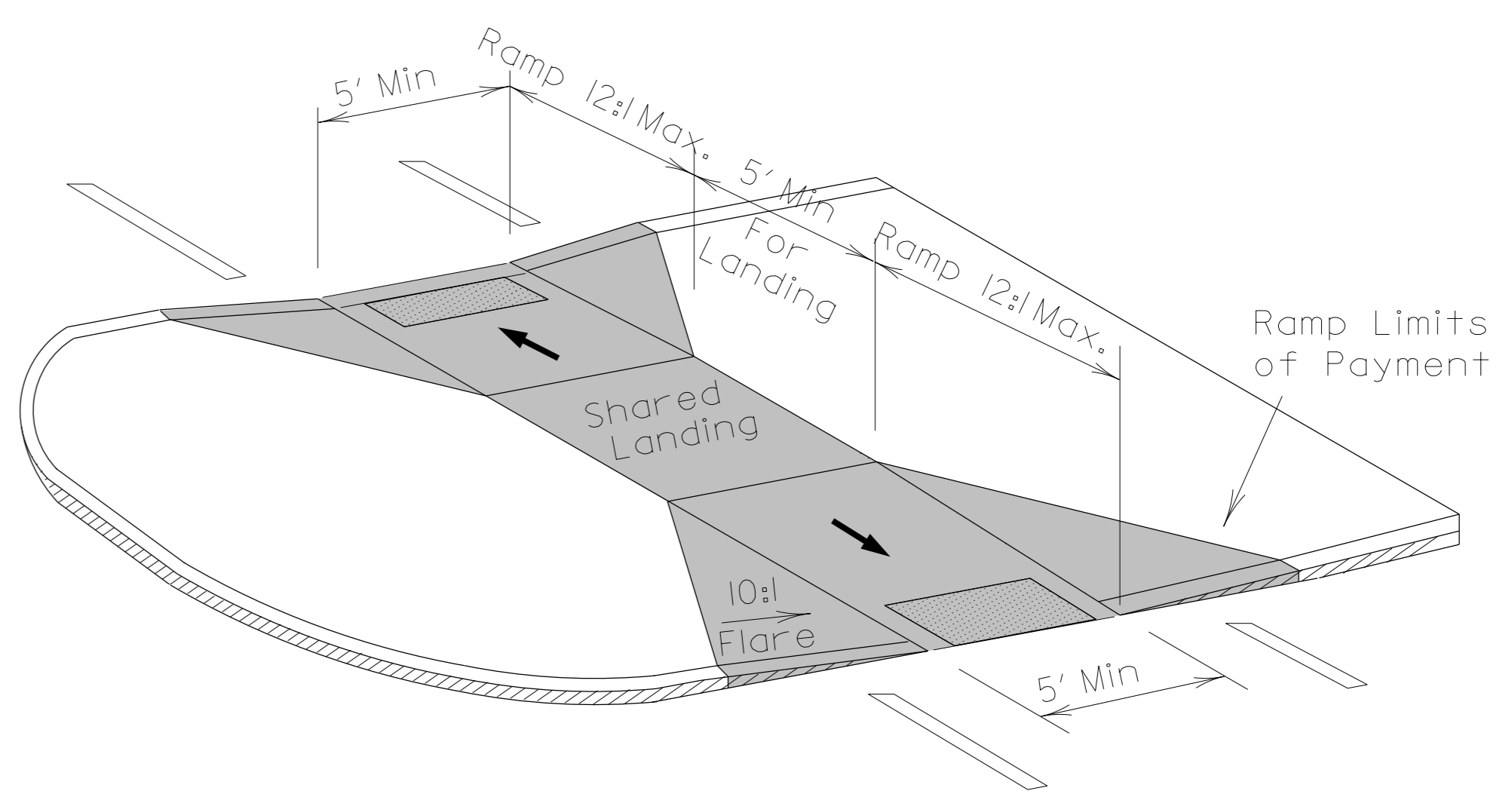


TRIANGULAR ISLANDS MAY BE CONSTRUCTED WITH ONLY 2 POINTS OF ENTRY AND EXIT AS SHOWN IN THE ROADWAY PLANS OR AS DIRECTED BY THE ENGINEER.

TRIANGULAR ISLAND WITH CUT THROUGH



MEDIAN ISLAND WITH CUT THROUGH



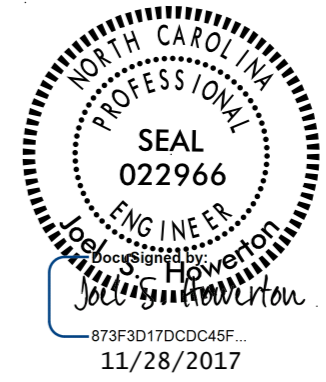
MEDIAN ISLAND CURB RAMPS

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

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

CURB RAMPS
Median or Turn Lane Islands

ORIGINAL BY: J.S. HOWERTON DATE: 7/7/11
MODIFIED BY: DATE:
CHECKED BY: DATE:
FILE SPEC.: stds/2012CurbRamp/CurbRampDetails.dgn



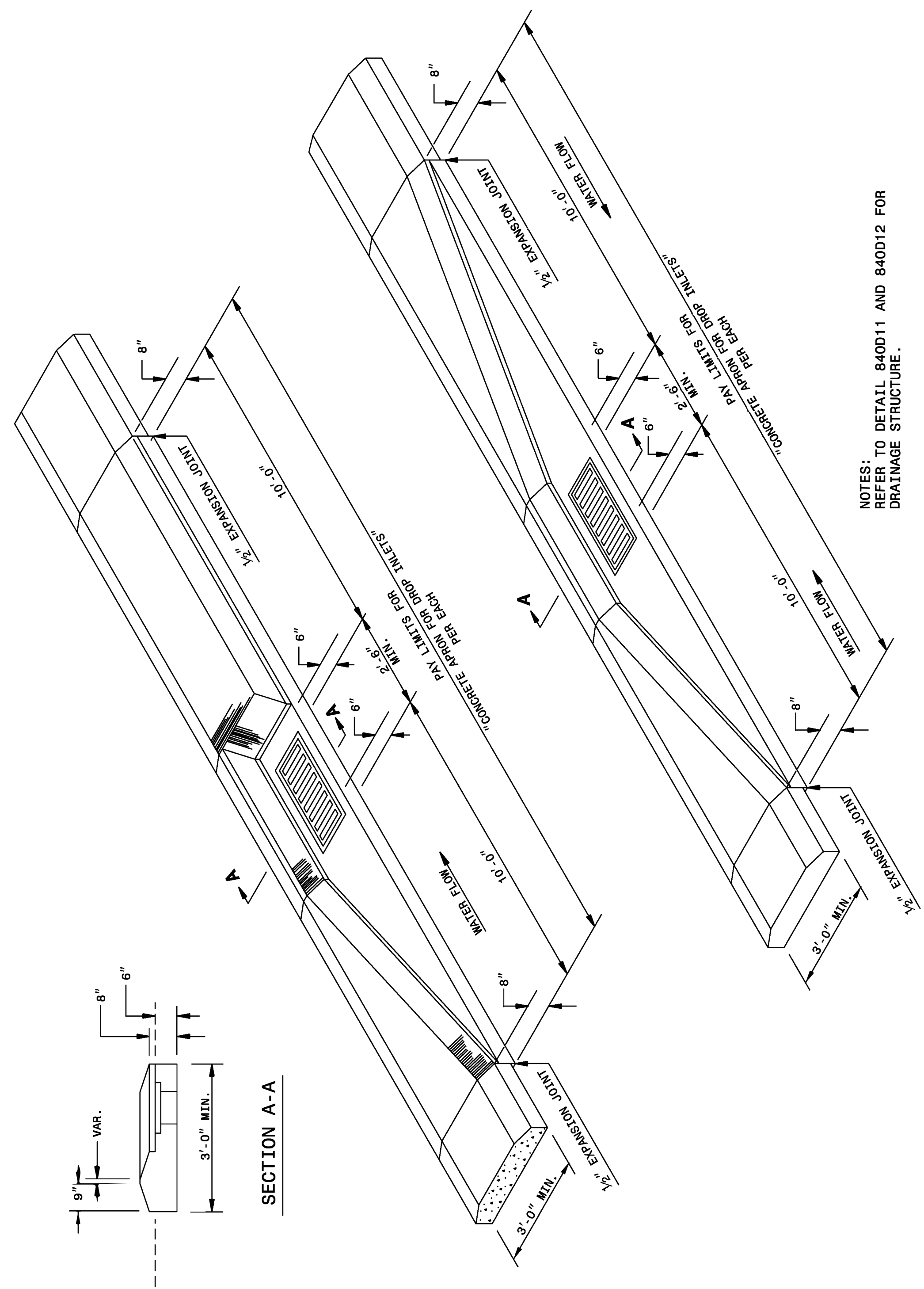
5/14/99

C:\P\PROJECTS\2012\STDS\2012CURBRAMP\CURBRAMPDETAILS.DGN

852D03 SHEET 1 OF 1

ENGLISH DETAIL DRAWING FOR
DROP INLETS IN ISLANDS

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

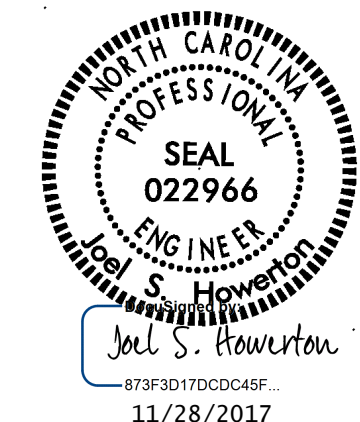


NOTES:
REFER TO DETAIL 840D11 AND 840D12 FOR
DRAINAGE STRUCTURE.

852D03 SHEET 1 OF 1

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

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



DOCUMENT NOT CONSIDERED FINAL
UNLESS ALL SIGNATURES COMPLETED

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

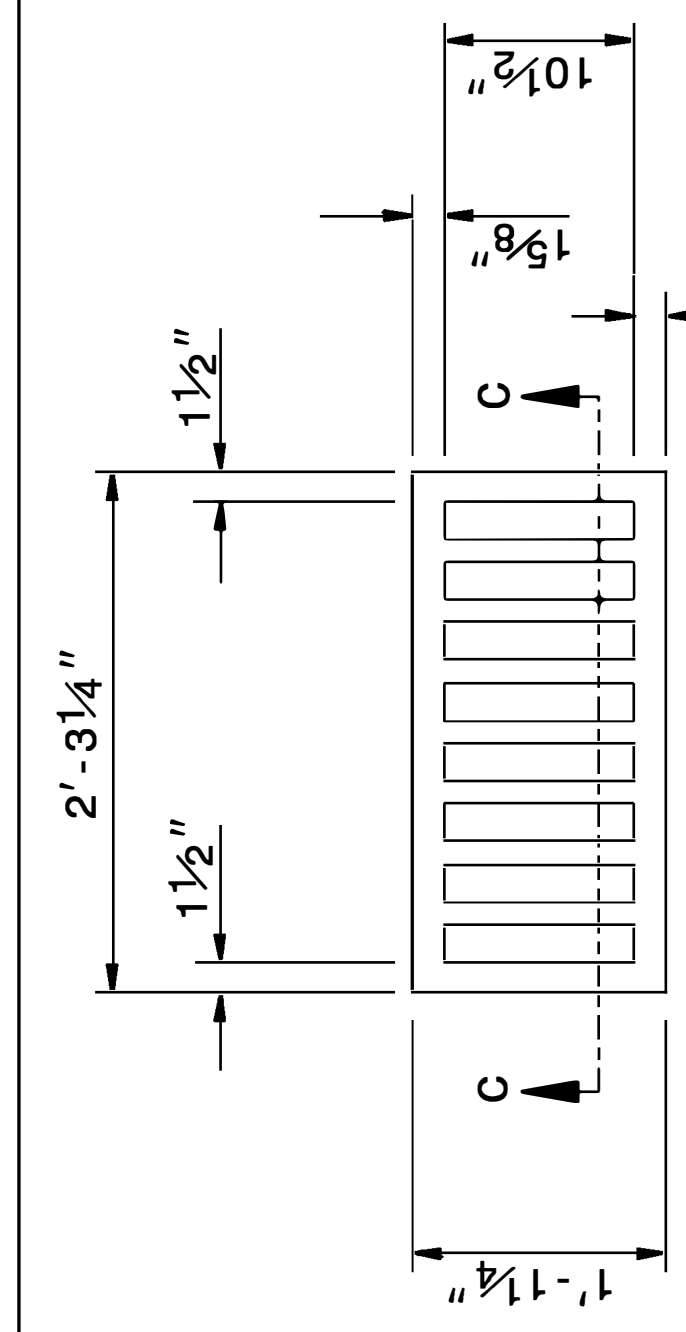
SEE PLATE FOR TITLE

ORIGINAL BY: 1998 STDS DATE:
MODIFIED BY: E.E. WARD DATE: 3-21-02
CHECKED BY: DATE:
FILE SPEC.: /usr/details/stand/840stds/840d11.d.g

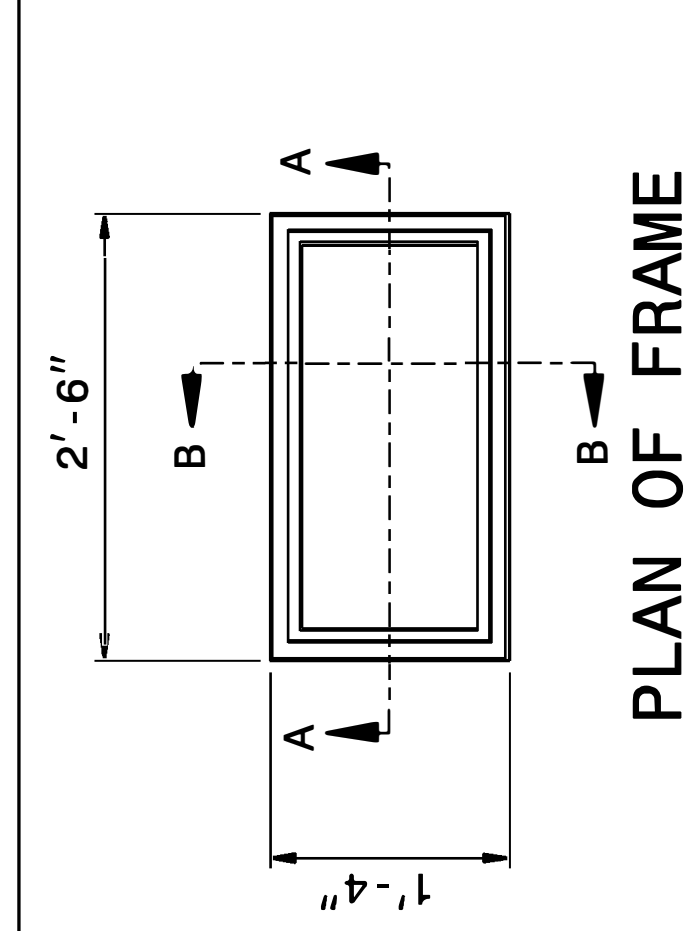
840D13 SHEET 1 OF 1

ENGLISH DETAIL DRAWING FOR
NARROW DROP INLET FRAME AND GRATE
FOR USE WITH DETAIL 840D11 & 840D12

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

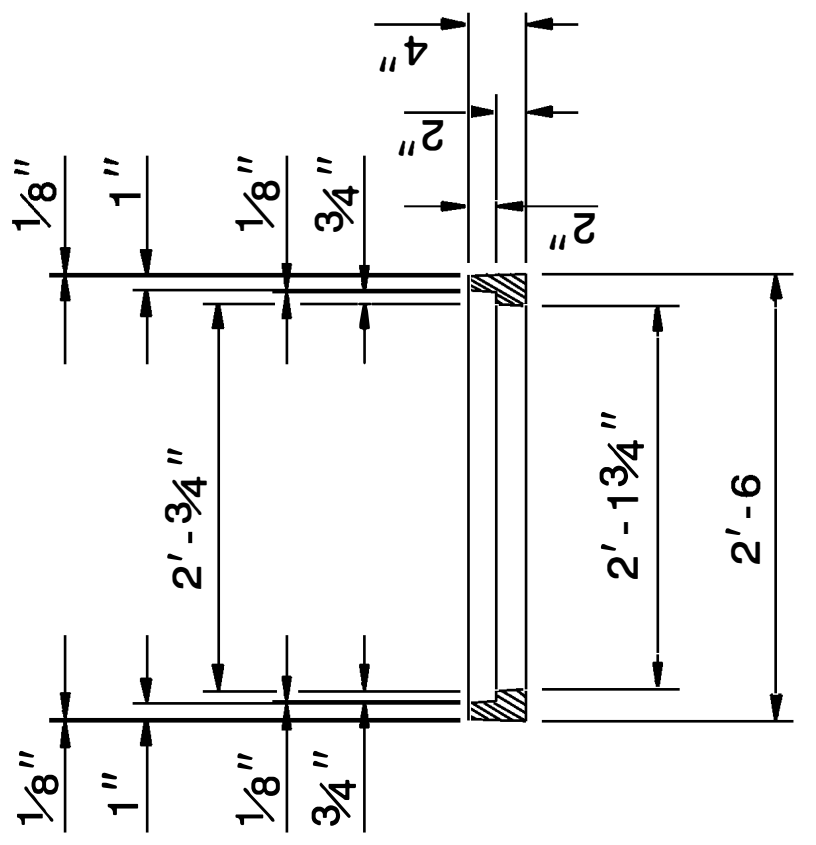


PLAN OF GRATING

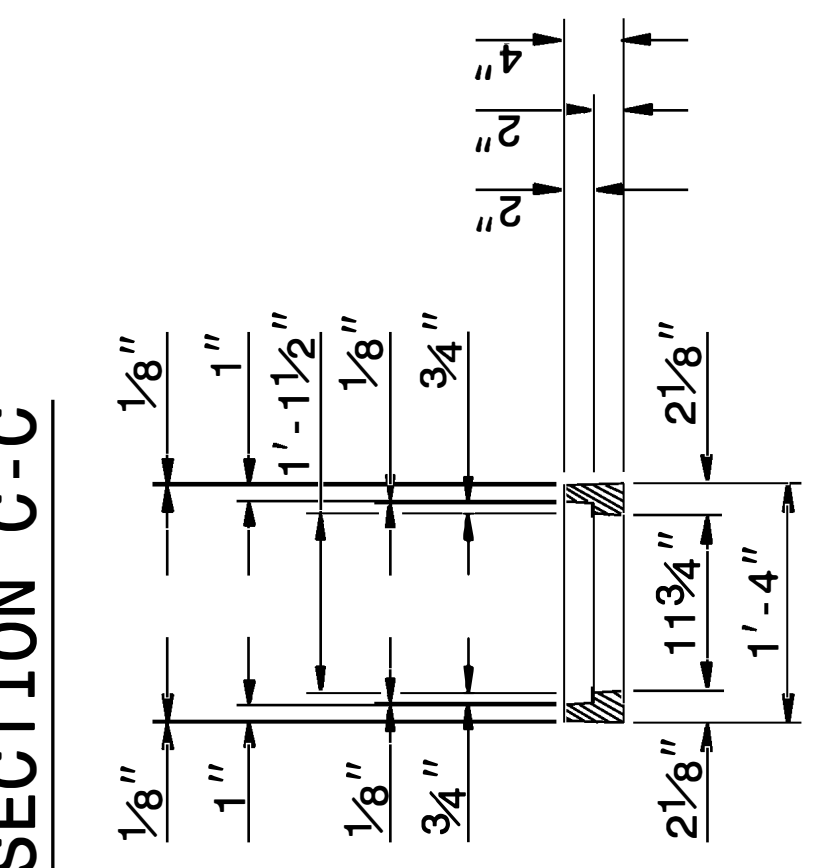


PLAN OF FRAME

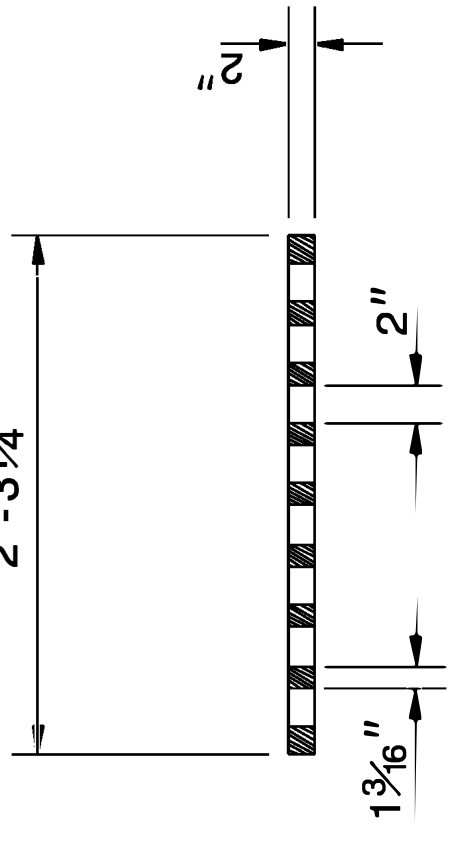
SECTION A-A



SECTION B-B



SECTION C-C



ENGLISH DETAIL DRAWING FOR
NARROW DROP INLET FRAME AND GRATE
FOR USE WITH DETAIL 840D11 & 840D12

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

840D13 SHEET 1 OF 1

5/14/99
I3-OCT-2017 12:44
S:\Contracts\Special Details\Vericard\usr\details\stand\840stds\840d11.dgn
Howerton AT C50-292595

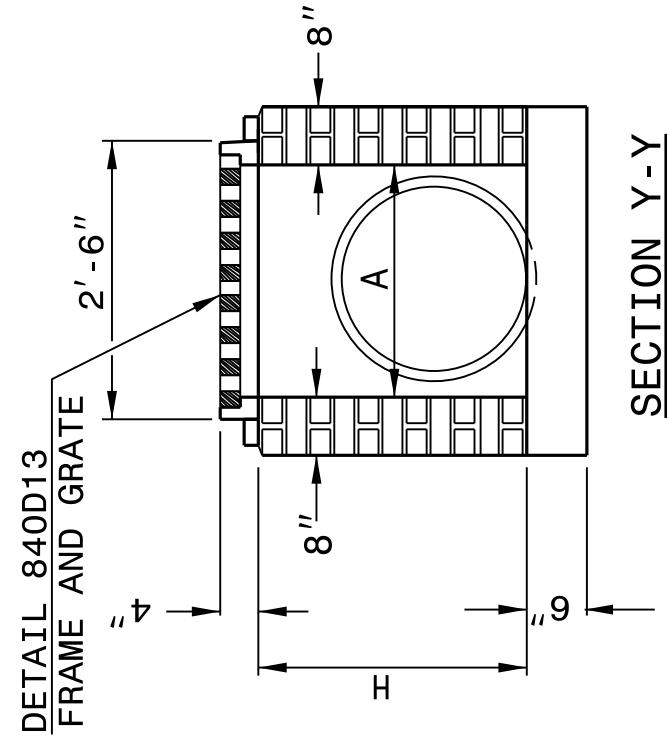
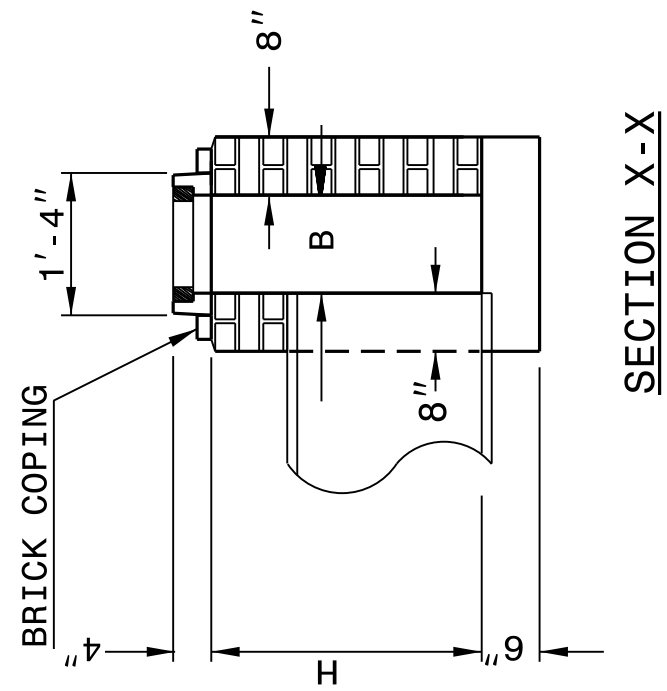
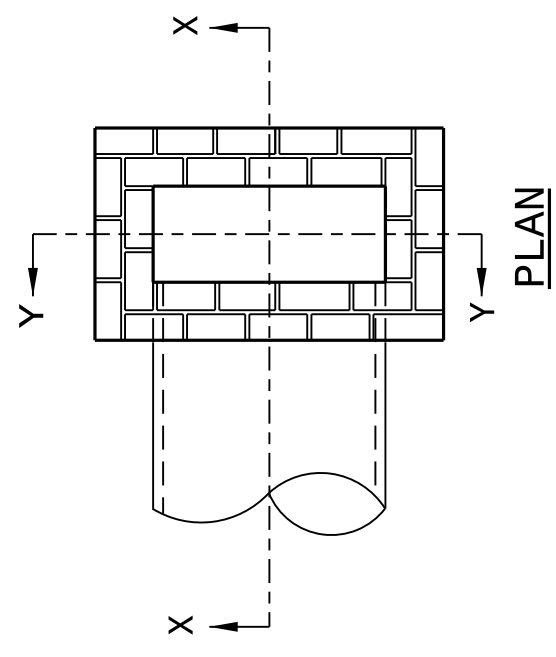
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S:\Contracts\Special Details\ericward\usr\details\stand\840stds\840d11.dgn
Jhower-ton AT USD-252595

5/14/99

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

GENERAL NOTES:

CLASS 'B' CONCRETE TO BE USED.
ALL MORTAR JOINTS ARE 1/2" ± 1/8".
FORMS ARE TO BE USED FOR THE CONSTRUCTION OF THE BOTTOM SLAB.
BRICK MASONRY DROP INLET NOT TO BE USED IN LOCATIONS SUBJECT TO TRAFFIC.
JUNO BRICK WILL BE PERMITTED. CONCRETE BRICK OR 4" SOLID CONCRETE BLOCKS MAY BE USED IN LIEU OF CLAY BRICK.
IF REINFORCED CONCRETE PIPE IS SET IN BASE SLAB OF BOX, ADD TO BASE AS SHOWN ON STANDARD 840.00.
FOR 8'-0" IN HEIGHT OR LESS, USE 8" WALL. OVER 8'-0" IN HEIGHT USE 12" WALL TO 6'-0" FROM TOP OF WALL, AND 8" WALL FOR THE REMAINING 6'-0". QUANTITIES TO BE ADJUSTED ACCORDINGLY.



ENGLISH DETAIL DRAWING FOR
BRICK NARROW DROP INLET
12" THRU 24" PIPE

SHEET 1 OF 1
840D12

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

ENGLISH DETAIL DRAWING FOR
BRICK NARROW DROP INLET
12" THRU 24" PIPE

SHEET 1 OF 1
840D12

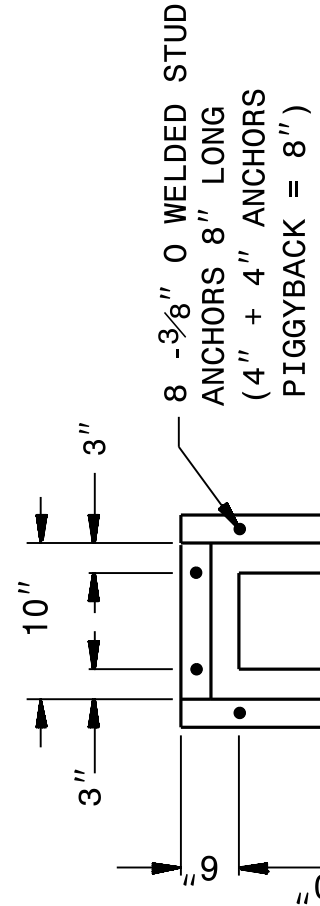
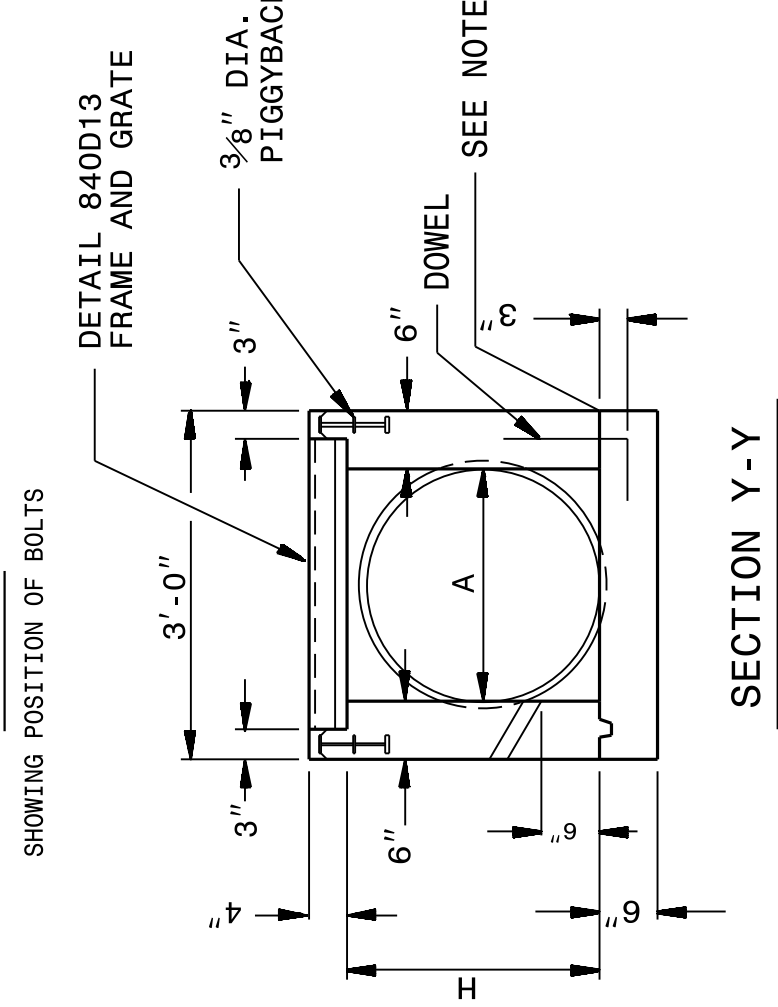
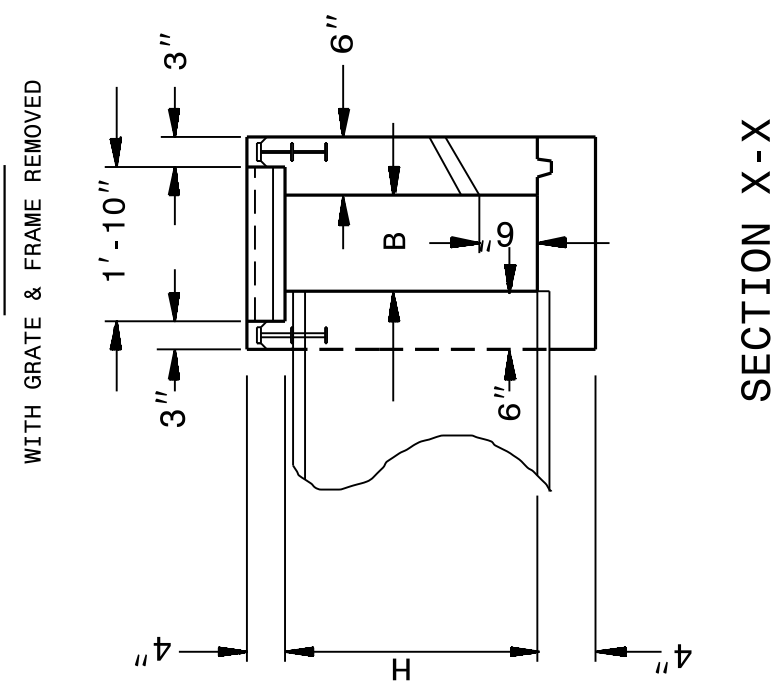
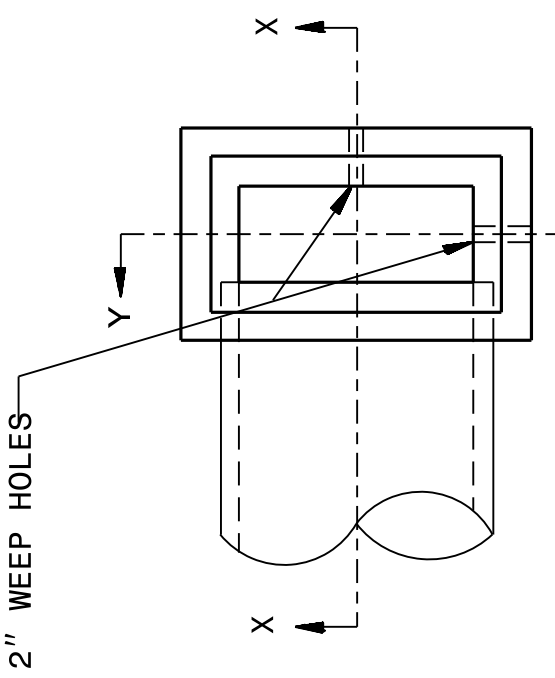
DIMENSIONS AND QUANTITIES FOR DROP INLET

PIPE	DIMENSIONS OF BOX & PIPE		CONC. IN BASE	TOTAL BRICK MASONRY			DEDUCTIONS FOR ONE PIPE		
	SPAN	WIDTH		HEIGHT	PER FT. HEIGHT	BRICK COPING	MIN. H	C.M.	R.C.
D	A	B	H (MIN.)	CY. YDS.	0.206	0.025	0.574	0.020	0.032
12"	2'-0"	0'-10"	2'-8"	0.133	0.206	0.025	0.643	0.031	0.047
15"	2'-0"	0'-10"	3'-0"	0.133	0.206	0.025	0.729	0.044	0.065
18"	2'-0"	0'-10"	3'-5"	0.133	0.206	0.025	0.849	0.078	0.113
24"	2'-0"	0'-10"	4'-0"	0.133	0.206	0.025			

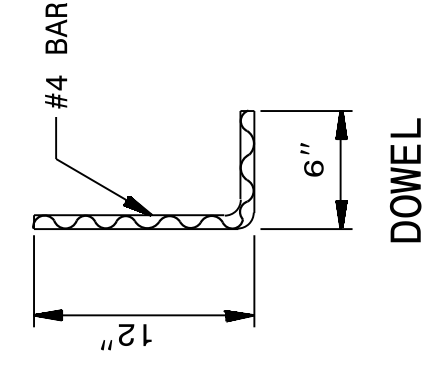
STATE OF NORTH CAROLINA
DEPT. OF TRANSPORTATION
DIVISION OF HIGHWAYS
RALEIGH, N.C.

ENGLISH DETAIL DRAWING FOR
CONCRETE NARROW DROP INLET
12" THRU 24" PIPE

SHEET 1 OF 1
840D11



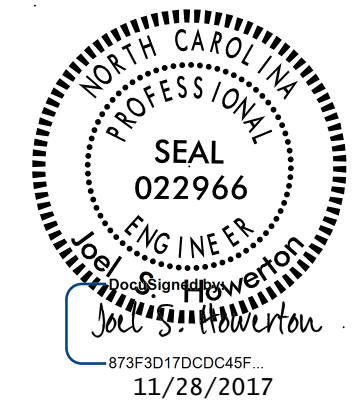
GENERAL NOTES:
CLASS "B" CONCRETE TO BE USED THROUGHOUT.
OPTIONAL CONSTRUCTION - MONOLITHIC POUR, 2" KEYWAY, OR #4 BAR DOWELS AT 12" CENTER, AS DIRECTED BY ENGINEER.
TWO 2" PIPE WEEP HOLES TO BE PLACED AS DIRECTED BY ENGINEER.
FORMS ARE TO BE USED FOR THE CONSTRUCTION OF THE BOTTOM SLAB.
IF REINFORCED CONCRETE PIPE IS SET IN BASE SLAB OF BOX, ADD TO BASE AS SHOWN ON STANDARD 840.00.
A STONE DRAIN CONSISTING OF 1 CUBIC FOOT OF NO. 78M STONE CONTAINED IN A BAG OF POROUS FABRIC SHALL BE PLACED AT EACH WEEP HOLE.



DIMENSIONS AND QUANTITIES FOR DROP INLET

PIPE	DIMENSIONS OF BOX & PIPE		CUBIC YARDS IN BOX	TOTAL QUAN. BOX & COVER	DEDUCTIONS FOR ONE PIPE		
	SPAN	WIDTH			CU. YDS. MIN.	CU. YDS. H	C.M.	R.C.
D	A	B	FLOOR & WALL PER COPING FT. H <td>CU. YDS. MIN. H <td>C.M. <td>R.C. </td></td></td>	CU. YDS. MIN. H <td>C.M. <td>R.C. </td></td>	C.M. <td>R.C. </td>	R.C.	
12"	2'-0"	0'-10"	0.129	0.142	0.507	0.015	0.024
15"	2'-0"	0'-10"	0.129	0.142	0.555	0.023	0.036
18"	2'-0"	0'-10"	0.129	0.142	0.614	0.033	0.049
24"	2'-0"	0'-10"	0.129	0.142	0.697	0.059	0.085

DIMENSIONS FOR CHANNELS			
NO.	SIZE	LENGTH	TOTAL LIN. FT.
2	3" X 4.1#	2'-6"	5'-0"
2	3" X 4.1#	1'-10"	3'-8"



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

SEE PLATE FOR TITLE

ORIGINAL BY: 1998 STDS DATE:
MODIFIED BY: E.E. WARD DATE: 3-21-02
CHECKED BY: DATE:
FILE SPEC.: /usr/details/stand/840stds/840d11.dgn

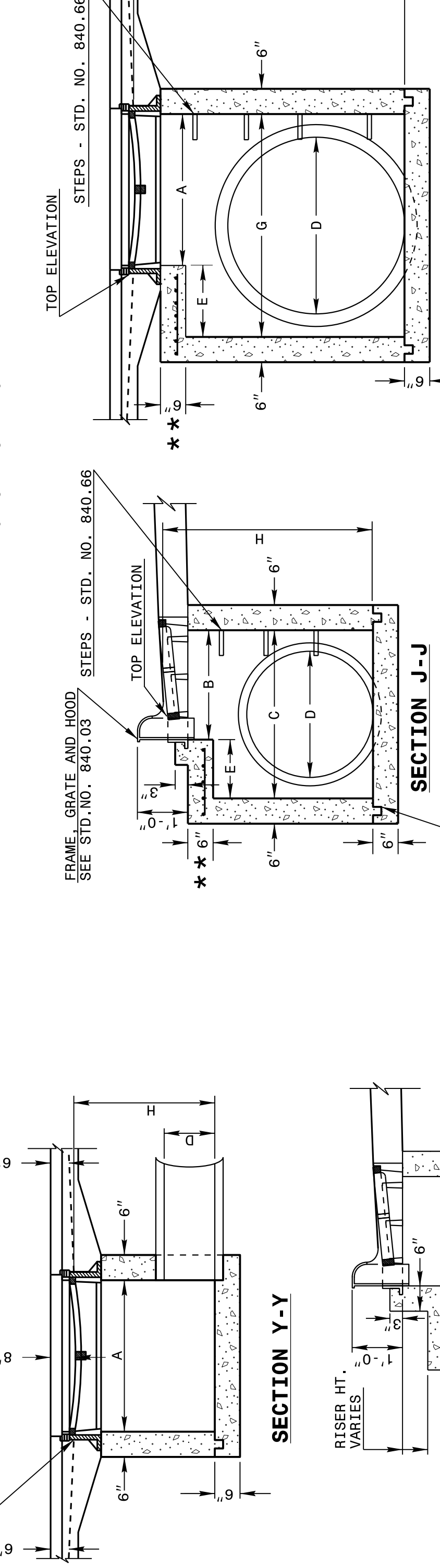
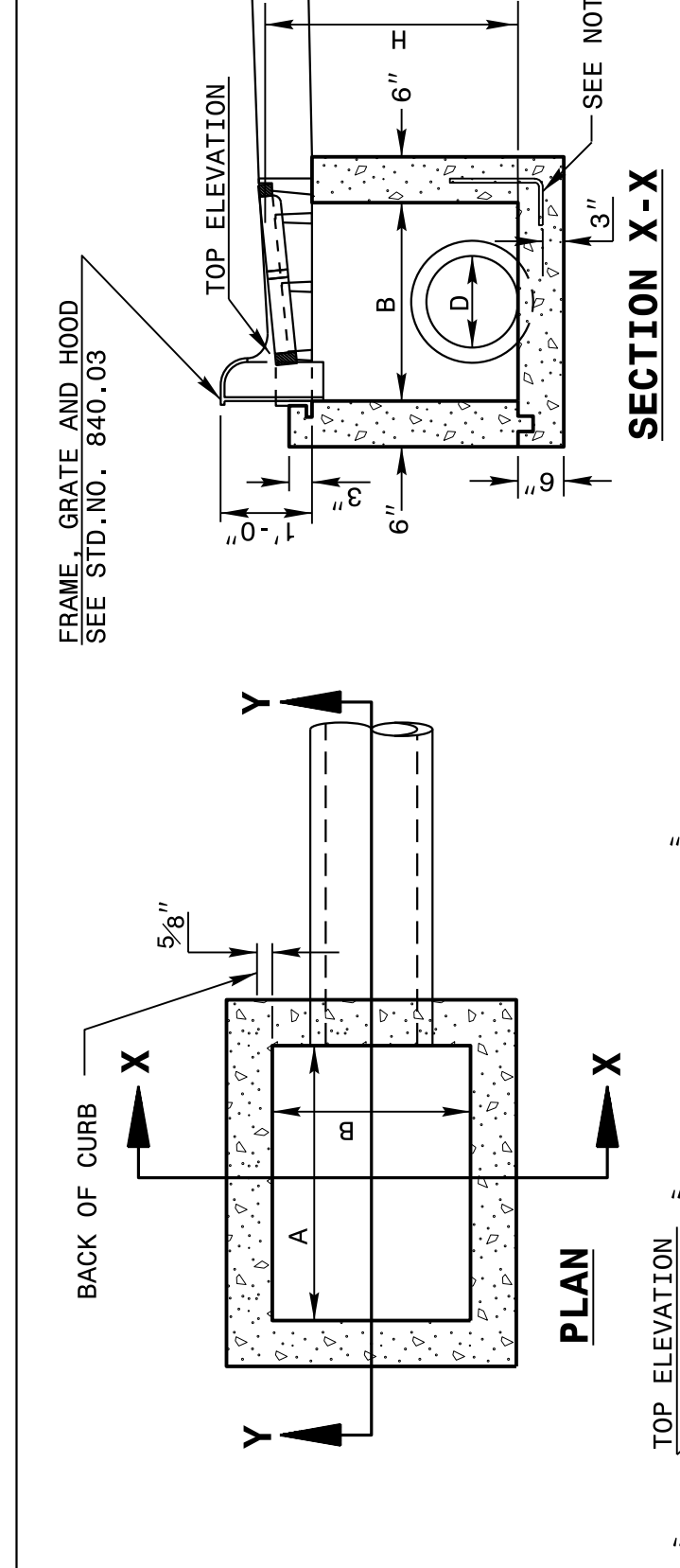
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

STATE OF
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 DIVISION OF HIGHWAYS
 RALEIGH, N.C.

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

SHEET 1 OF 2
840D02

GENERAL NOTES:
 USE CLASS "B" CONCRETE THROUGHOUT.
 PROVIDE ALL CATCH BASINS OVER 3'-6" IN DEPTH WITH STEPS 12" ON CENTER. USE STEPS WHICH COMPLY WITH STD. DRAWING 840.66.
 OPTIONAL CONSTRUCTION - MONOLITHIC 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.
 USE TYPE "E", "F" AND "G" GRATES UNLESS OTHERWISE INDICATED.
 FOR 8'-0" IN HEIGHT OR LESS USE 6" WALLS AND BOTTOM SLAB. OVER 8'-0" TO 16'-0" IN HEIGHT USE 8" WALLS AND BOTTOM SLAB. ADJUST QUANTITIES ACCORDINGLY.
 CONSTRUCT WITH PIPE CROWNS MATCHING.
 CHAMFER ALL EXPOSED CORNERS 1".
 ** FOR STRUCTURES WITH PIPE LARGER THAN 54", MAKE THE TOP SLAB 8" THICK.



STATE OF
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 DIVISION OF HIGHWAYS
 RALEIGH, N.C.

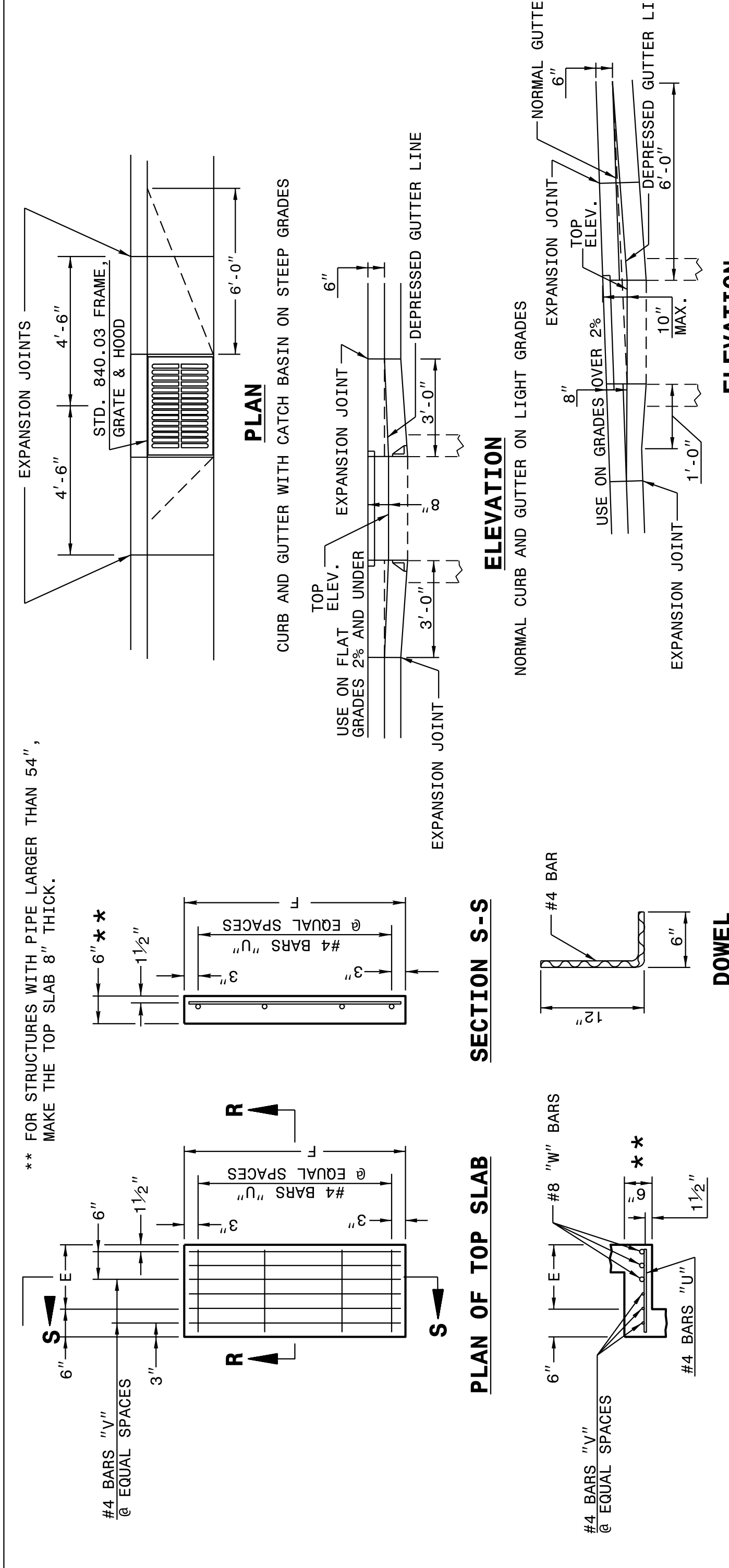
ENGLISH DETAIL DRAWING FOR
**MINIMUM DEPTH
 CONCRETE CATCH BASIN**
 12" THRU 84" PIPE

SHEET 1 OF 2
840D02

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

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

SHEET 2 OF 2
840D02



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

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

SHEET 2 OF 2
840D02

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

PIPE D.	DIMENSIONS OF BOX AND PIPE			COVER DIMENSION			BARS-U			BARS-V			BARS-W			TOTAL LBS.	CU. YDS. CONC. IN BOX	DEDUCTIONS		
	SPAN	WIDTH	HEIGHT	E	F	H	NO.	LENGTH	NO.	LENGTH	NO.	LENGTH	NO.	LENGTH	TOP SLAB			BOTTOM SLAB	TOT. CONC. MINIMUM HEIGHT, H	C.M.	R.C.
12"	3'-0"	2'-2"	2'-0"	..	..	2'-0"	..	..	..	..	..	..	..	..	..	..	0.235	0.772	0.015	0.026
15"	3'-0"	2'-2"	2'-3"	..	..	2'-3"	..	..	..	..	..	..	..	..	..	..	0.235	0.829	0.023	0.036
18"	3'-0"	2'-2"	3'-1"	..	..	3'-1"	..	..	..	..	..	..	..	..	..	..	0.235	0.887	0.033	0.049
24"	3'-0"	2'-2"	3'-10"	..	..	3'-10"	..	..	..	..	..	..	..	..	..	..	0.235	1.001	0.059	0.085
30"	3'-0"	2'-2"	3'-4"	..	..	3'-4"	..	..	..	..	..	..	..	..	..	..	0.123	0.347	1.433	0.092
36"	3'-0"	2'-2"	3'-10"	..	..	3'-10"	..	..	..	..	..	..	..	..	..	..	0.161	0.432	1.714	0.132
42"	3'-0"	2'-2"	4'-5"	..	..	4'-5"	..	..	..	..	..	..	..	..	..	..	0.200	0.543	1.738	0.180
48"	3'-0"	2'-2"	5'-0"	..	..	5'-0"	..	..	..	..	..	..	..	..	..	..	0.235	0.667	2.052	0.235
54"	3'-0"	2'-2"	5'-7"	..	..	5'-7"	..	..	..	..	..	..	..	..	..	..	0.289	0.802	2.387	0.297
60"	3'-0"	2'-2"	6'-3"	..	..	6'-3"	..	..	..	..	..	..	..	..	..	..	0.340	0.973	2.722	0.363
66"	3'-0"	2'-2"	6'-11"	..	..	6'-11"	..	..	..	..	..	..	..	..	..	..	0.391	1.160	3.057	0.440
72"	3'-0"	2'-2"	7'-6"	..	..	7'-6"	..	..	..	..	..	..	..	..	..	..	0.442	1.340	3.392	0.524
78"	3'-0"	2'-2"	8'-1"	..	..	8'-1"	..	..	..	..	..	..	..	..	..	..	0.493	1.530	3.727	0.615
84"	3'-0"	2'-2"	8'-9"	8'-9"	0.544	1.760	4.062	0.713

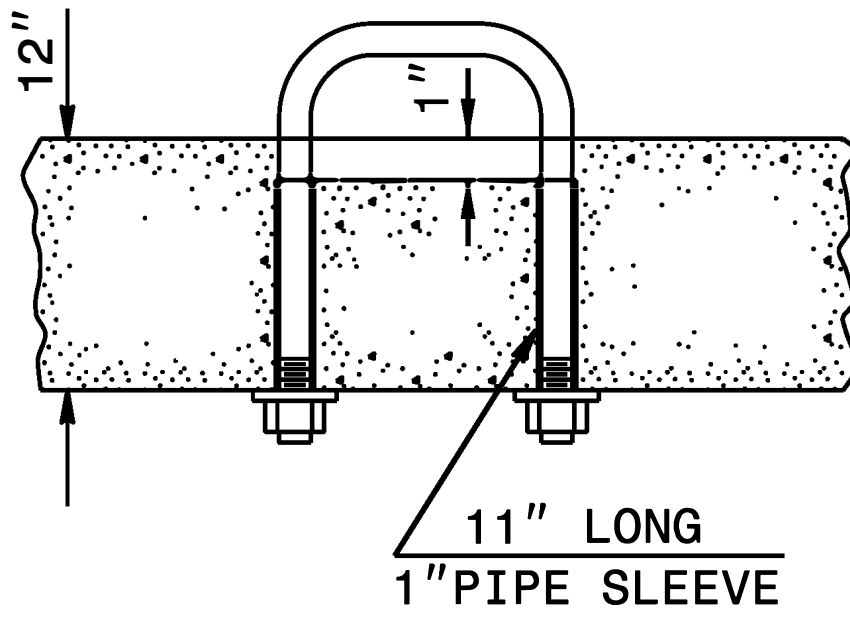
DOCUMENT NOT CONSIDERED FINAL
 UNLESS ALL SIGNATURES COMPLETED

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 AND DEVELOPMENT UNIT**
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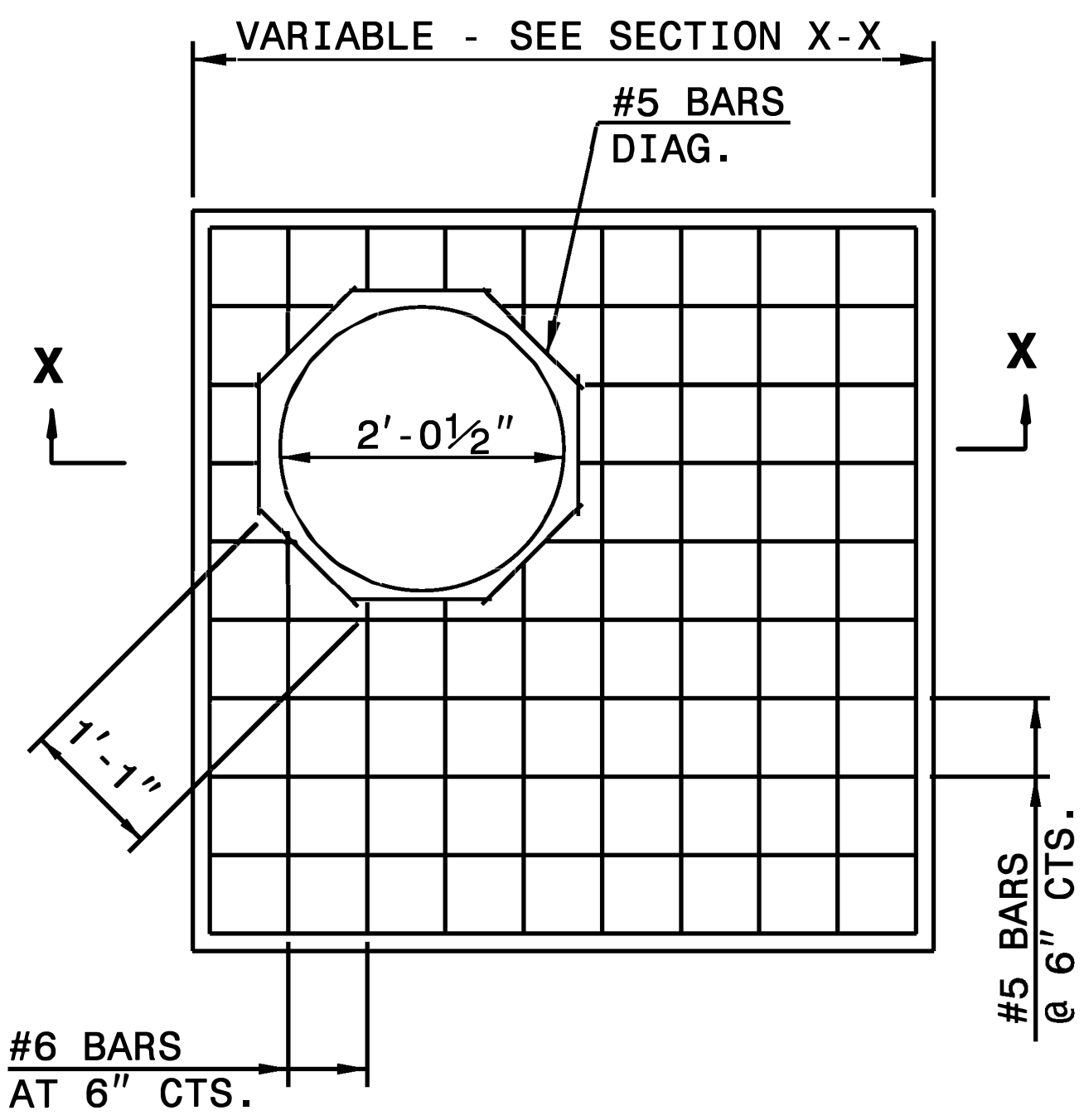
SEE PLATE FOR TITLE

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

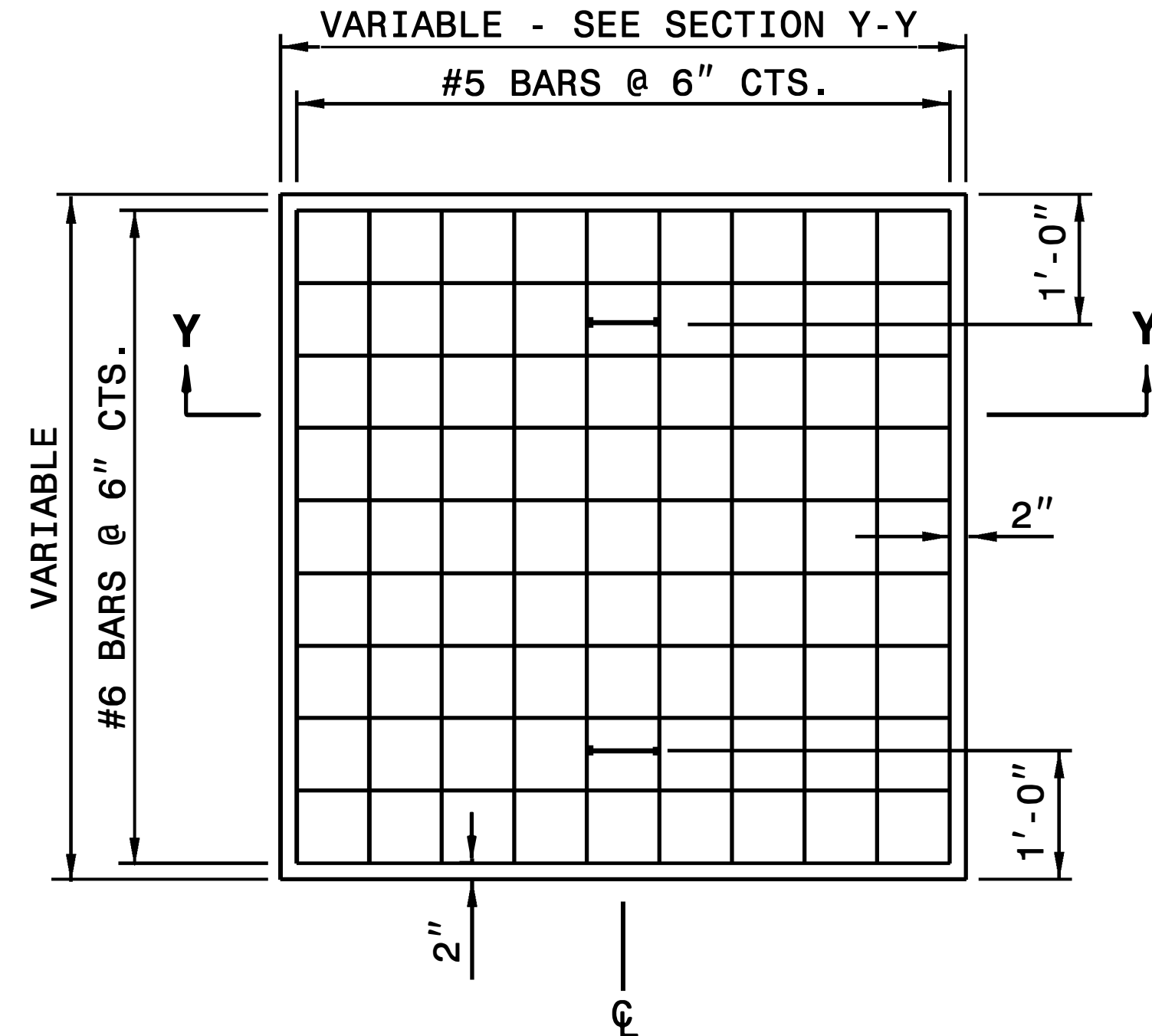




PARTIAL SECTION



PLAN

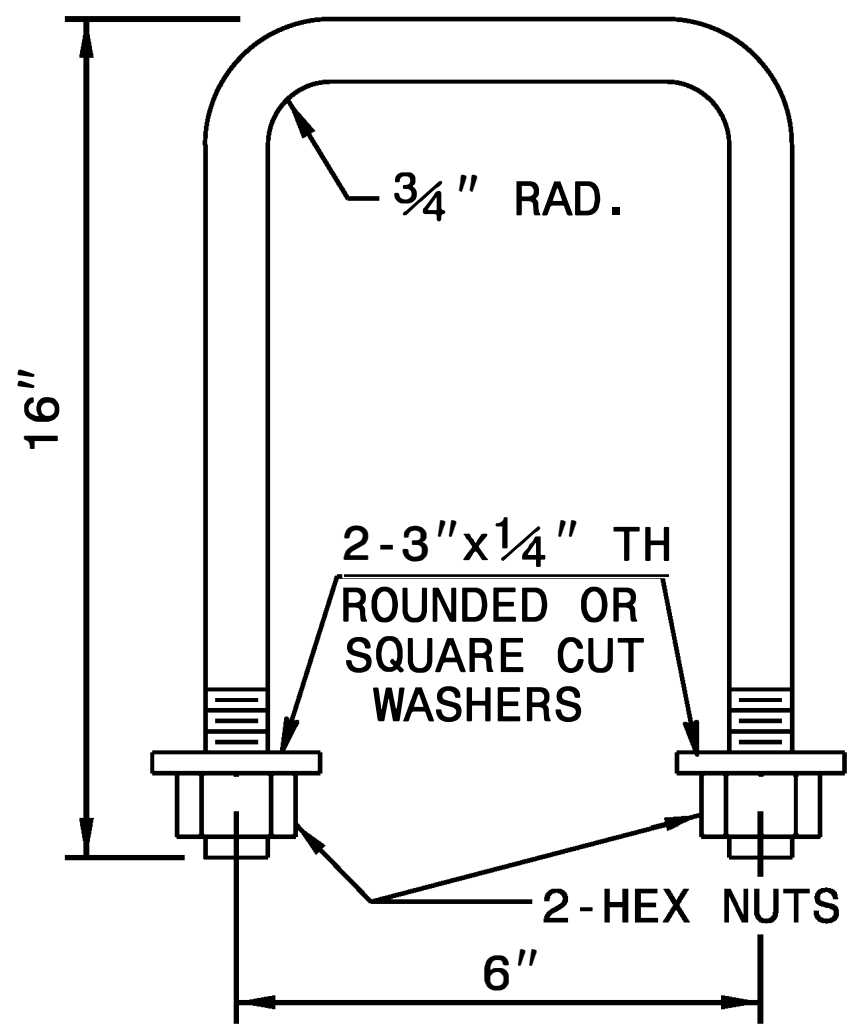


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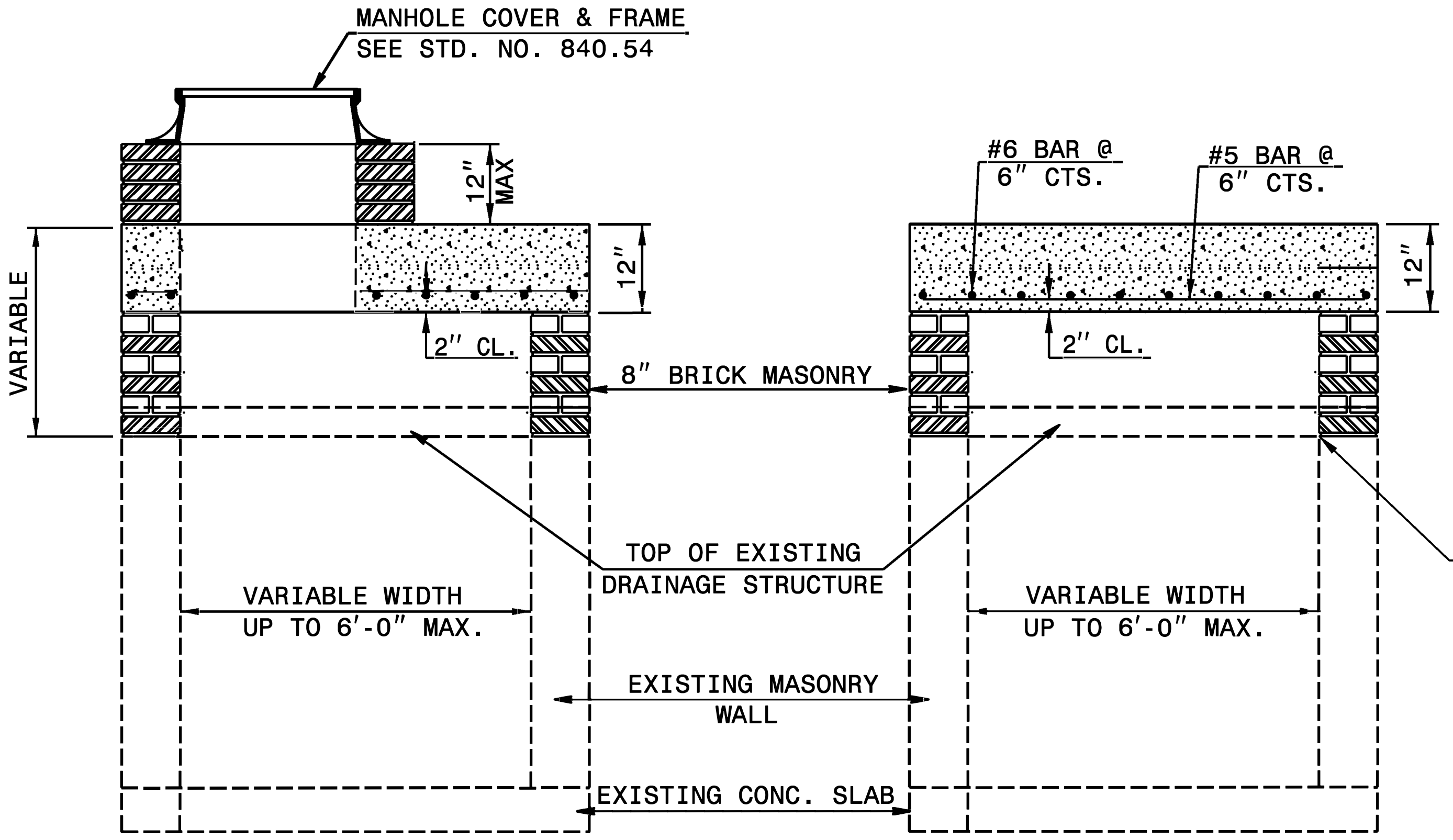
GENERAL NOTES:
 CONSTRUCT IN ACCORDANCE WITH SECTION 859 OF THE STANDARD SPECIFICATIONS.
 FIELD VERIFY THE DIMENSIONS FOR THE EXISTING BOXES.

BILL OF MATERIALS

MASONRY			
TOP SLAB CONCRETE CLASS "A"		.037YDS ³	PER FT ²
BRICK MASONRY		.025YDS ³	PER FT ²
REINFORCING STEEL		7.64LBS	PER FT ²
MANHOLE OPTION QUANTITIES			
SIZE	QTY.	LENGTH	REINF. STEEL LBS.
#5 DIAG.	8	1'-1"	9.04



DETAIL OF HANDLE



SECTION X-X

SECTION Y-Y

NOTE:
 CONCRETE AND REINFORCING STEEL QUANTITIES BASED ON SQUARE FOOT AREA OF THE PROPOSED TOP SLAB FOR THE EXISTING DRAINAGE STRUCTURE.
 BRICK MASONRY QUANTITY IS BASED ON THE TOTAL SQUARE FOOTAGE OF EXTERIOR WALL SURFACE AREA TO BE CONSTRUCTED.

ALIGN PROPOSED BRICK VERTICAL ADJUSTMENT TO INNER FACE OF WALL



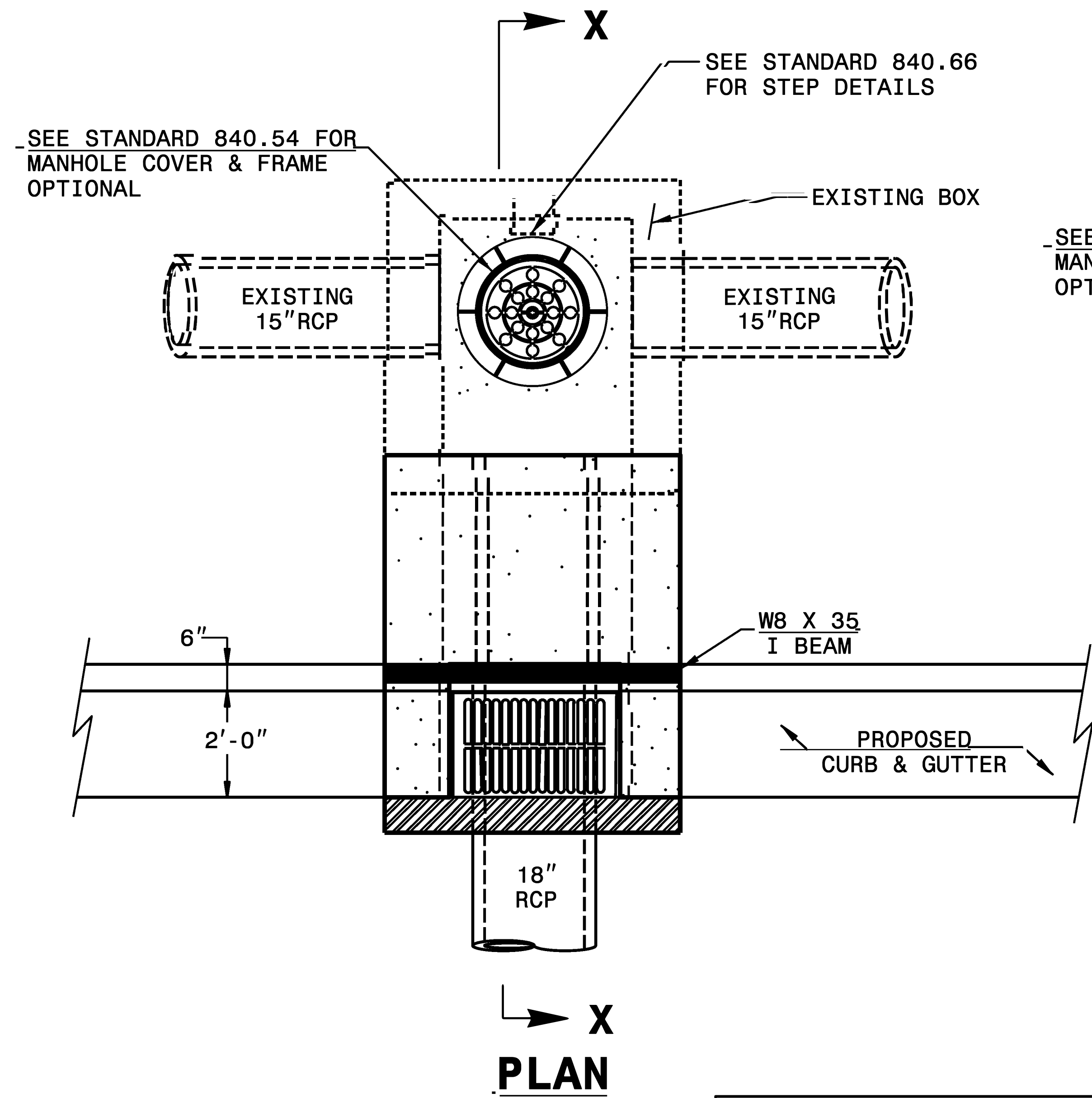
CONTRACT STANDARDS AND DEVELOPMENT UNIT
 Office 919-707-6950 FAX 919-250-4119

DETAIL TO CONVERT EXISTING TRAFFIC BEARING DROP INLET OR CATCH BASIN TO TRAFFIC BEARING JUNCTION BOX (MANHOLE OPTIONAL)

ORIGINAL BY: T.S.S. DATE: FEB. 2000
 MODIFIED BY: E.E.W. DATE: NOV. 2001
 CHECKED BY: DATE:
 FILE SPEC.: w:ericward/usr/details/stand/boxtotbje.dgn

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5/14/99
 SYSTEM: CON
 USER: EWR
 DATE: 11/28/2017



SEE STANDARD 840.66 FOR STEP DETAILS

SEE STANDARD 840.54 FOR MANHOLE COVER & FRAME OPTIONAL

EXISTING BOX

EXISTING 15" RCP

EXISTING 15" RCP

W8 X 35 I BEAM

PROPOSED CURB & GUTTER

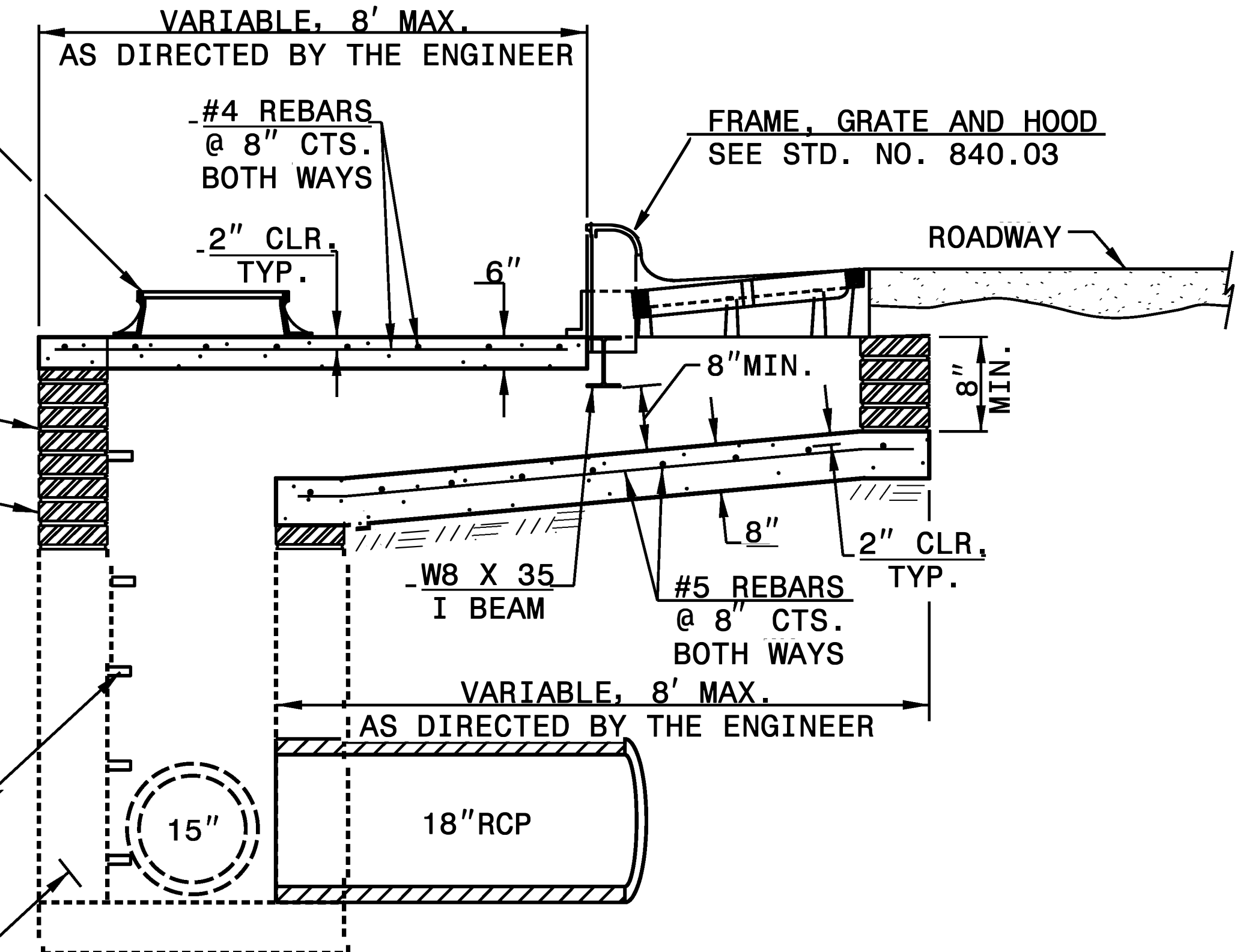
18" RCP

X
PLAN

SEE STANDARD 840.54 FOR MANHOLE COVER & FRAME OPTIONAL

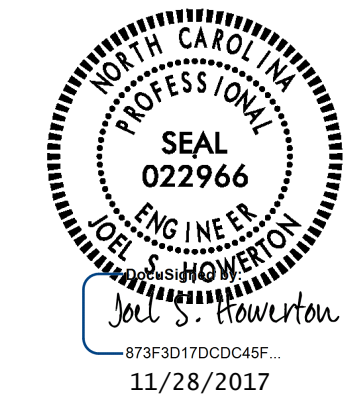
SEE STANDARD 840.66 FOR STEP DETAILS

EXISTING DRAINAGE BOX



SECTION X-X

NOTES:
MORTAR JOINTS 1/2" TO 1/4" THICK.
USE CLASS "B" CONCRETE THROUGHOUT.
USE TYPE "E", "F" AND "G" GRATES UNLESS OTHERWISE INDICATED.
USE BRICK OR CONCRETE BLOCK WHICH COMPLIES WITH THE REQUIREMENTS OF SECTION 840 OF THE STANDARD SPECIFICATIONS.
CHAMFER ALL EXPOSED CORNERS 1".
ALL CONVERSIONS SHALL BE ACCORDANCE WITH SECTION 859 OF THE STANDARD SPECIFICATIONS.
PROVIDE ALL CATCH BASINS OVER 3'-6" IN DEPTH WITH STEPS 12" ON CENTER. USE STEPS WHICH COMPLY WITH STD. DRAWING NO. 840.66.
DRAWING NOT TO SCALE.



DOCUMENT NOT CONSIDERED FINAL
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CONTRACT STANDARDS & DEVELOPMENT UNIT
STANDARDS AND SPECIAL DESIGN
Office 919-707-6950 FAX 919-250-4119

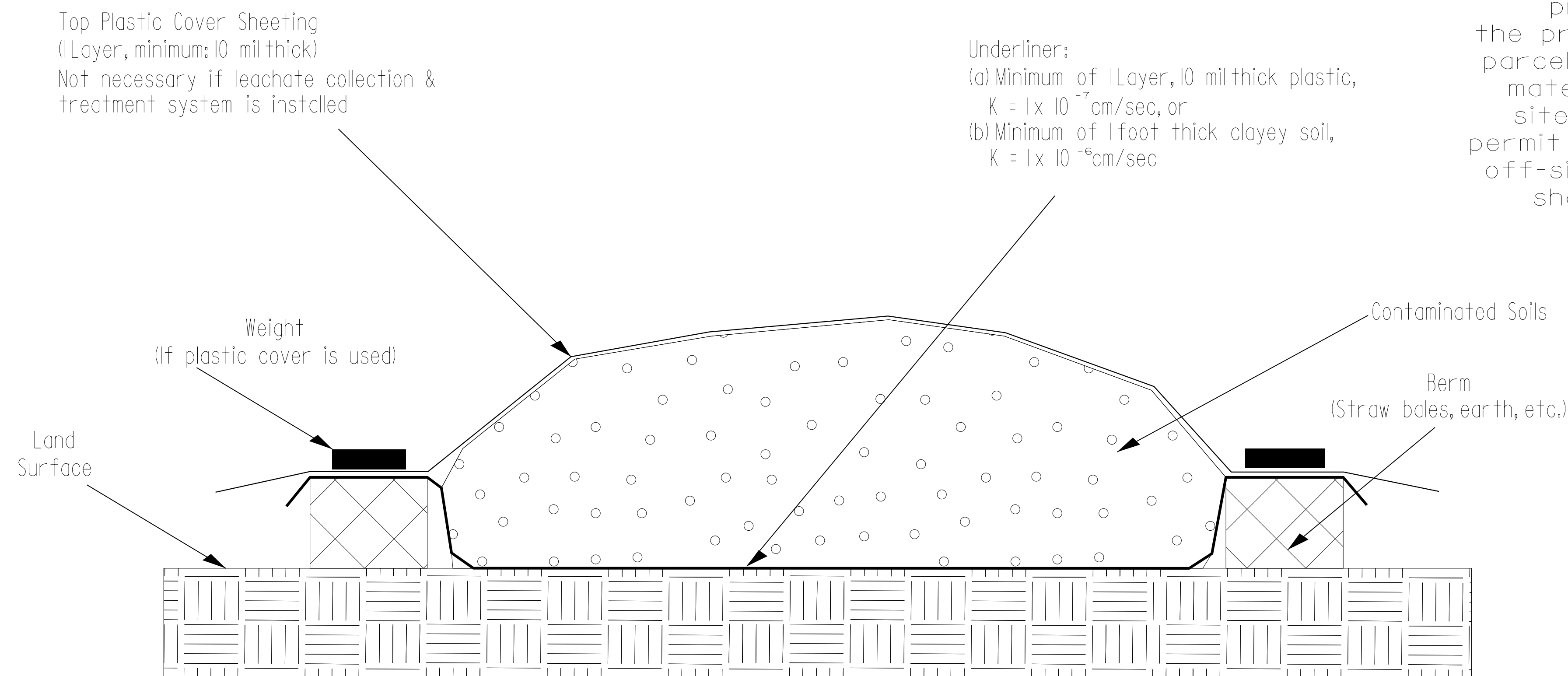
CONVERSION OF EXISTING
DRAINAGE BOX TO
CATCH BASIN

ORIGINAL BY: E.E. WARD DATE: 1-24-02
MODIFIED BY: KKEMPF DATE: 11-08-17
CHECKED BY: DATE:
FILE SPEC.: nbritt/english/hydro/edb to offsetcb.dwg

11/28/2017 11:28:17 AM
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PLOT: 11/28/2017 11:28:17 AM
PLOTTER: HP DesignJet T1100PS
PLOT SCALE: 1.0000
PLOT SHEETS: 1
PLOT STATUS: SUCCESS

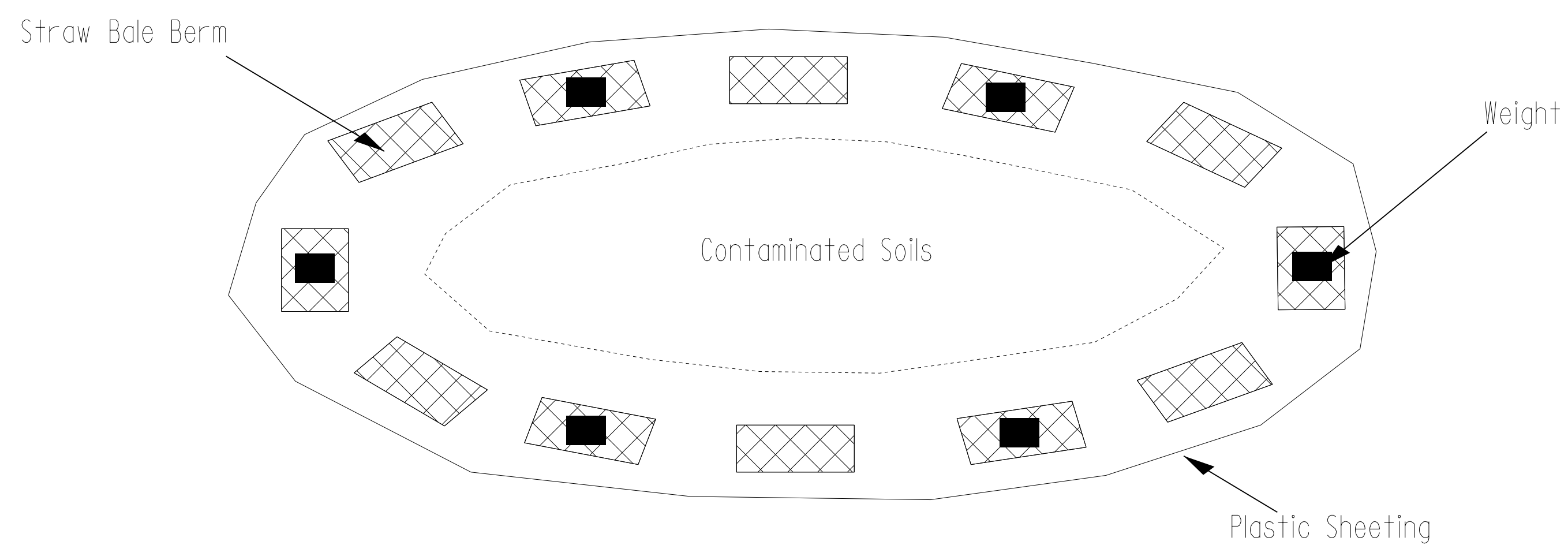
Detail for Temporary Containment of Contaminated Soil

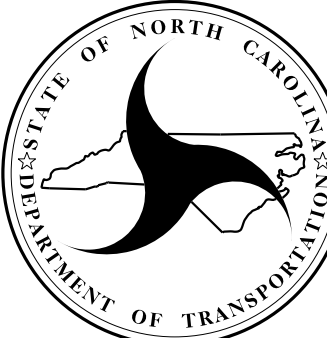
Cross-Section View



NOTE:
The Contractor shall stockpile all contaminated soil excavated from a property in a location within the property boundaries of the source parcel. If the volume of contaminated material exceeds available space on site, the Contractor shall obtain a permit from the NCDEQ UST Section for off-site temporary storage. Stockpile shall be removed within 45 days.

Map View



	GEOTECHNICAL ENGINEERING UNIT	STOCKPILE CONTAINMENT DETAIL					
	<input type="checkbox"/> EASTERN REGIONAL OFFICE <input type="checkbox"/> WESTERN REGIONAL OFFICE <input checked="" type="checkbox"/> CONTRACT OFFICE						
STATE OF NORTH CAROLINA DEPARTMENT OF TRANSPORTATION RALEIGH		REVISIONS					
		NO.	BY	DATE	NO.	BY	DATE
		1			3		
		2			4		

PREPARED BY:	DATE:
REVIEWED BY:	DATE:

DIVISION OF HIGHWAYS
 STATE OF NORTH CAROLINA

SUMMARY OF EARTHWORK
 IN CUBIC YARDS

STATION	STATION	UNCLASSIFIED EXCAVATION	UNDERCUT	EMBT +%	BORROW	WASTE
-L- 10+60.00	41+72.31	742		3,031	2,289	
	SUBTOTAL	742		3,031	2,289	
-Y1- 11+60.00	18+30.00	221		24		197
-Y2- 10+25.03	11+00.00	16		14		2
-Y3- 10+21.74	11+05.00	34		14		20
-Y4- 10+72.00	11+33.45	13		25	12	
-Y5- 10+21.35	10+83.00	19		11		8
	SUBTOTAL	303		88	12	227
	TOTAL	1,045		3,119	2,301	227
MATERIAL FOR SHOULDER CONSTRUCTION				39	39	
LOSS DUE TO CLEARING & GRUBBING		-13			13	
WASTE IN LIEU OF BORROW					-227	-227
	PROJECT TOTAL	1,032		3,158	2,126	0
EST. 5% TO REPLACE TOP SOIL ON BORROW PIT					106	
	GRAND TOTAL	1,032		3,158	2,232	
	SAY	1,100			2,300	
EST DDE = 20 CY						
EST. SHALLOW UNDERCUT = 1000 CY (PER GEOTECH RECOMMENDATIONS)						
PER GEOTECH RECOMMENDATION, EST. 250 CY OF UNDERCUT TO BE USED IN THE DISCRETION OF THE RESIDENT ENGINEER.						
PER GEOTECH RECOMMENDATION, EST. 100 CY OF UNSUITABLE UNCLASSIFIED EXCAVATION TO BE USED IN THE DISCRETION OF THE RESIDENT ENGINEER.						

NOTE: Approximate quantities only, Unclassified Excavation, Borrow Excavation, Fine Grading, and Clearing and Grubbing will be paid for at the contract lump sum price for "Grading".

5/9/2017

1/10/2017 localuser

RHOWARD

COMPUTED BY: Randal C. Howard, PE DATE: 11/8/2017
CHECKED BY: Joshua G. Dalton, PE DATE: 11/8/2017

PROJECT NO. SHEET NO.
U-5795 3D-1

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 48 INCHES & UNDER)

Table with columns: LINE & STATION, OFFSET, STRUCTURE NUMBER, RCP, CSP, CAAP, HDPE, or PVC, R.C. PIPE CLASS III, IV, V, ENDWALLS, QUANTITIES FOR DRAINAGE STRUCTURES, FRAME, GRATES, AND HOOD, CONCRETE TRANSITIONAL SECTION, GRADE TYPE, FLOWABLE FILL, CONCRETE COLLARS, PIPE REMOVAL, ABBREVIATIONS, REMARKS.

RHOWARD

COMPUTED BY: Randal C. Howard, PE DATE: 11/8/2017
CHECKED BY: Joshua G. Dalton, PE DATE: 11/8/2017

PROJECT NO. SHEET NO.
U-5795 3D-2

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 48 INCHES & UNDER)

Table with columns for Line & Station, Offset, Structure Number, Invert Elevation, Minimum Required Slope, Drainage Pipe (RCP, CSP, CAAP, HDPE, or PVC), R.C. Pipe Class III, IV, V, Quantities for Drainage Structures, Frame, Grates, and Hood, Concrete Transitional Section, and Abbreviations. Includes a SHEET TOTALS row at the bottom.

RHOWARD

COMPUTED BY: Randal C. Howard, PE DATE: 11/8/2017
CHECKED BY: Joshua G. Dalton, PE DATE: 11/8/2017

NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

PROJECT NO. SHEET NO.
U-5795 3D-3

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 for Line & Station, Offset, Structure Number, Invert Elevation, Minimum Required Slope, Drainage Pipe (RCP, CSP, CAAP, HDPE, or PVC), R.C. Pipe Class III, IV, V, Quantities for Drainage Structures, Frame, Grates, and Hood, Concrete Transitional Section, and Remarks. Includes a SHEET TOTALS row at the bottom.

ABBREVIATIONS table listing materials like C.A.A. CORRUGATED ALUMINIUM ALLOY, C.B. CATCH BASIN, C.S. CORRUGATED STEEL, etc.

REMARKS

Z7644

COMPUTED BY: Randal C. Howard, PE DATE: 11/16/2017
CHECKED BY: Joshua G. Dalton, PE DATE: 11/16/2017

PROJECT NO. U-5795 SHEET NO. 3D-4

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 48 INCHES & UNDER)

Main data table with columns for Line & Station, Structure Number, Invert Elevation, Drainage Pipe, R.C. Pipe Class III/V, Quantities for Drainage Structures, Frame/Grates, and Remarks. Includes a SHEET TOTALS row at the bottom.

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

HOWARD

COMPUTED BY: Randal C. Howard, PE DATE: 11/16/2017
CHECKED BY: Joshua G. Dalton, PE DATE: 11/16/2017

PROJECT NO. U-5795 SHEET NO. 3D-5

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 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, IV, V, Quantities for Drainage Structures, Endwalls, Frame, Grates, and Hood, Concrete Transitional Section, Grate Type, Flowable Fill, Concrete Collars, and Pipe Removal. Includes a grid for recording quantities and elevations.

ABBREVIATIONS table listing materials like C.A.A. CORRUGATED ALUMINIUM ALLOY, C.B. CATCH BASIN, C.S. CORRUGATED STEEL, D.I. DROP INLET, G.D.I. GRATED DROP INLET, H.D.P.E. HIGH DENSITY POLYETHYLENE, J.B. JUNCTION BOX, M.H. MANHOLE, N.S. NARROW SLOT, P.V.C. POLYVINYL CHLORIDE, R.C. REINFORCED CONCRETE, T.B.D.I. TRAFFIC BEARING DROP INLET, T.B.J.B. TRAFFIC BEARING JUNCTION BOX, W.S. WIDE SLOT.

SHEET TOTALS and PROJECT TOTALS summary rows at the bottom of the page.

(1-16-18)

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
			CONTINGENCY	ASU	12	200	100	200	
			CONTINGENCY	ASU	12	800	1600	2400	
			CONTINGENCY	AST	3				250
TOTAL CY/TONS/SY:						1000	1700**	2600**	250

*ASU = Aggregate Subgrade

*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/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
CONTINGENCY				SD	500
TOTAL LF:					500

*UD = Underdrain

*BD = Blind Drain

*SD = Subsurface Drain

5/9/2017

1/29/2017 15:45 rdu...sum-geotech.dgn jrcaluser

12/06/07

COMPUTED BY: JSG DATE: 7/12017
CHECKED BY: FM DATE: 7/12017

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

PROJECT REFERENCE NO. SHEET NO.
U-5795 3P-1

PARCEL INDEX

PARCEL NUMBER	SHEET NUMBER	PROPERTY OWNER NAME
1	4	DEVSHYAM CORP.
2	4	CLARKS CHILDREN'S FAMILY, LLC
3	4	FRANCHISE REALTY INT.
4	4	MCDONALDS REAL ESTATE COMPANY
5	4	ST. MARYS DEVELOPMENT, LLC
6	4	JACKSON, CURTIS B.
7	4 & 5	JACKSON, CURTIS B.
8	4	PERRY BROTHERS PROP.
9	4	GOLD FAMILY TRUST
10	4	COOK OUT-SELMA, INC.
11	4 & 5	HOI LIMITED PARTNERSHIP OF SELMA
12	5	HINES, FLOSSIE REED
13	5	RICKS, JUDY BATSON
14	5	SELLERS, ALLEN L.

PARCEL NUMBER	SHEET NUMBER	PROPERTY OWNER NAME
15	5	HOWARD, PAUL, ET AL
16	5 & 6	EDWARDS, RICKY
17	4 & 5	JACKSON, CURTIS B.
18	5	KELLY, ROY S.
19	5	RICKS PROPERTIES, LLC
20	5	FAITH BAPTIST CHURCH
21	5	STANCIL, RALPH L.
22	5 & 6	STANCIL, RALPH L.
23	6	STANCIL, RALPH L.
24	6	MONROY, LAURENTINO V.
25	6	DJ'S PROPERTIES, INC.
26	6	DJ'S PROPERTIES, INC.
27	6	BARTHOLOMEW, W.T., TRUST
28	6	WEBSTER, LINDA CAROL

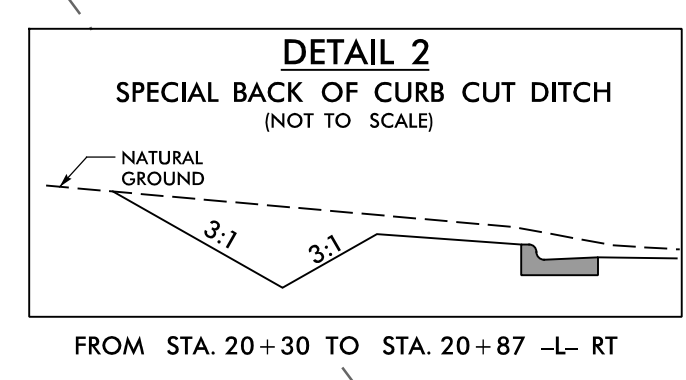
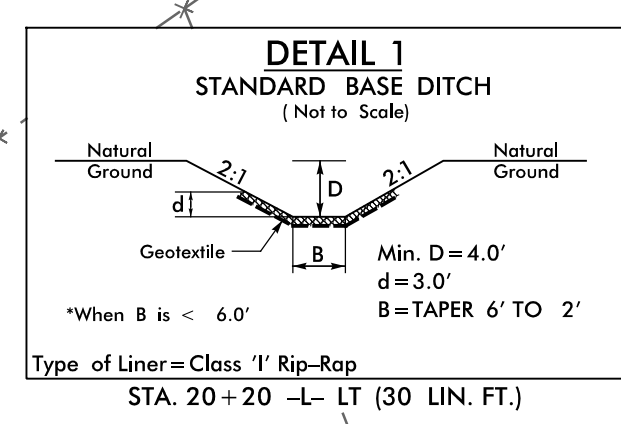
10/24/2017 10:57:36 am local user
U-5795.dwg psh_03P-1.dgn

★ EXISTING SIGNAL TO BE MODIFIED

NOTE: ALL CONCRETE ISLAND RADII ARE 2' UNLESS OTHERWISE LABELED.

CURVE DATA

-L-	-Y1-
PI Sta 13+99.84	PI Sta 17+42.46
$\Delta = 31^{\circ} 11' 02.3" (RT)$	$\Delta = 13^{\circ} 46' 28.9" (LT)$
$D = 7^{\circ} 09' 43.1"$	$D = 3^{\circ} 29' 14.2"$
$L = 435.41'$	$L = 395.00'$
$T = 223.24'$	$T = 198.46'$
$R = 800.00'$	$R = 1,643.00'$
$SE = 0.035$	
$RO = 9'$	

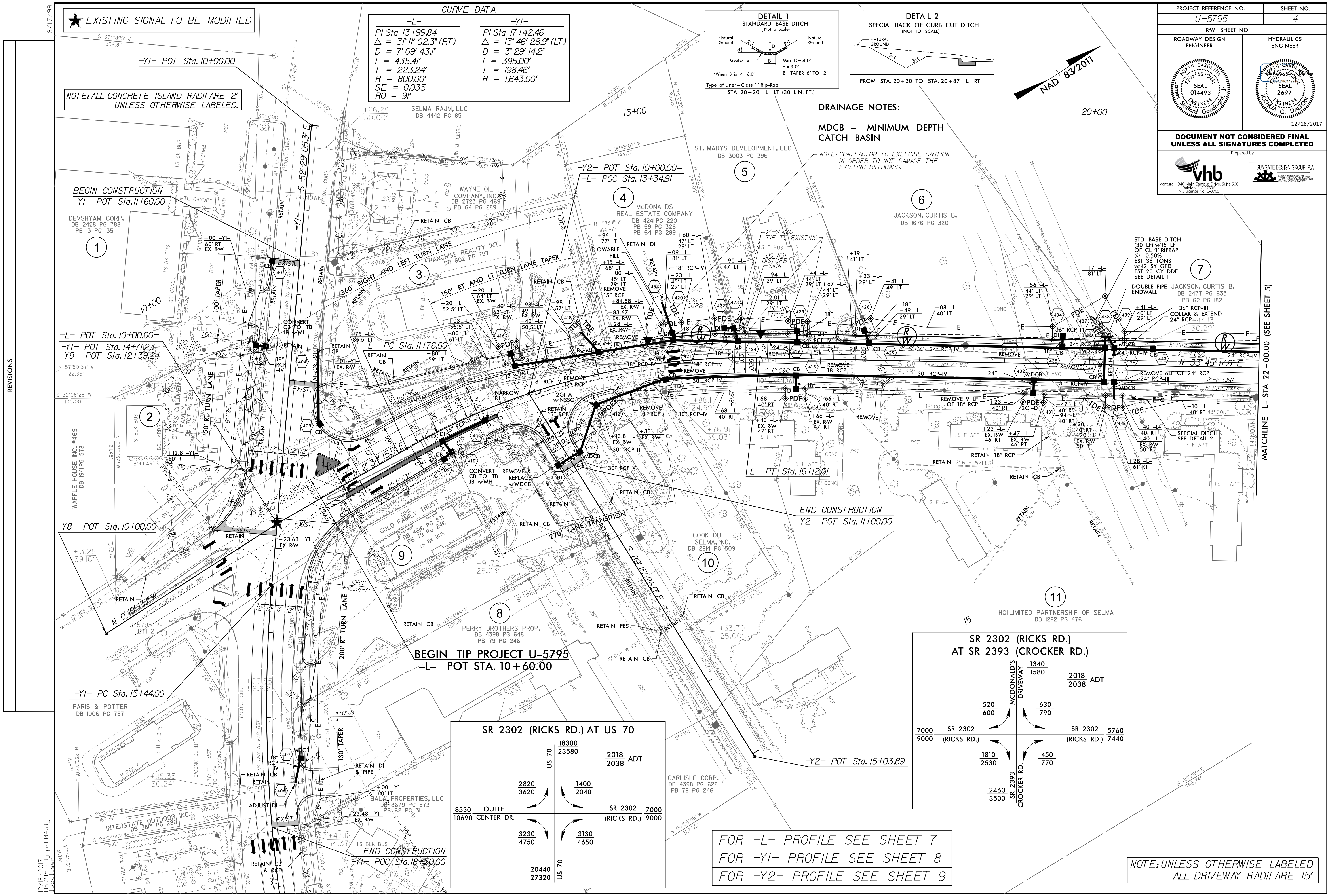


DRAINAGE NOTES:
MDCB = MINIMUM DEPTH CATCH BASIN

NOTE: CONTRACTOR TO EXERCISE CAUTION IN ORDER TO NOT DAMAGE THE EXISTING BILLBOARD.



PROJECT REFERENCE NO. U-5795	SHEET NO. 4
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
SEAL 014493 ENGINEER Shirley Goodwin	SEAL 26971 ENGINEER JONATHAN G. DARTON
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	
Prepared by vhb Venture I, 940 Main Campus Drive, Suite 900 Raleigh, NC 27608 NC License No. C-3705	
SUNGATE DESIGN GROUP, P.A.	



BEGIN CONSTRUCTION
-Y1- POT Sta. 11+60.00

-L- POT Sta. 10+00.00
-Y1- POT Sta. 14+71.23
-Y8- POT Sta. 12+39.24

-Y8- POT Sta. 10+00.00

-Y1- PC Sta. 15+44.00

BEGIN TIP PROJECT U-5795
-L- POT STA. 10+60.00

END CONSTRUCTION
-Y2- POT Sta. 11+00.00

-Y2- POT Sta. 15+03.89

SR 2302 (RICKS RD.) AT US 70

70	18300	2018	7000
	23580	2038	(RICKS RD.) 9000
		ADT	
2820	1400		
3620	2040		
8530	3130		
10690	4650		
10690	20440		
10690	27320		

SR 2302 (RICKS RD.) AT SR 2393 (CROCKER RD.)

	1340	2018	5760
	1580	2038	(RICKS RD.) 7440
		ADT	
520	630		
600	790		
7000	1810		
9000	2530		
	450		
	770		
	2460		
	3500		

FOR -L- PROFILE SEE SHEET 7
FOR -Y1- PROFILE SEE SHEET 8
FOR -Y2- PROFILE SEE SHEET 9

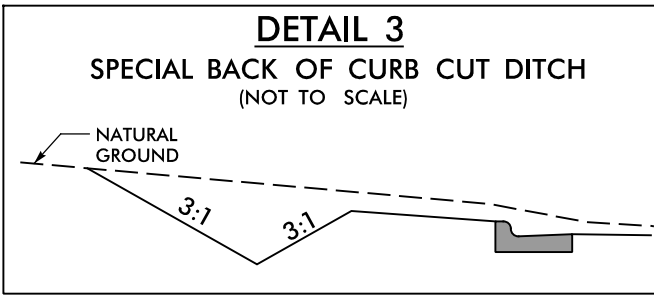
NOTE: UNLESS OTHERWISE LABELED ALL DRIVEWAY RADII ARE 15'

REVISIONS

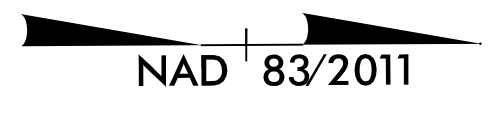
MATCHLINE -L- STA. 22+00.00 (SEE SHEET 5)

8.17.19

-L- CURVE DATA
 PI Sta 25+14.43
 $\Delta = 33^\circ 28' 38.6" (LT)$
 $D = 10^\circ 44' 58.8"$
 $L = 311.43'$
 $T = 160.30'$
 $R = 533.00'$
 $SE = 0.040$
 $RO = 104'$



NOTE: ALL CONCRETE ISLAND RADII ARE 2' UNLESS OTHERWISE LABELED.



FROM STA. 23+60 TO STA. 24+50 -L- RT
 FROM STA. 29+00 TO STA. 30+50 -L- RT

DRAINAGE NOTES:

MDCB = MINIMUM DEPTH CATCH BASIN

PROJECT REFERENCE NO. U-5795	SHEET NO. 5
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

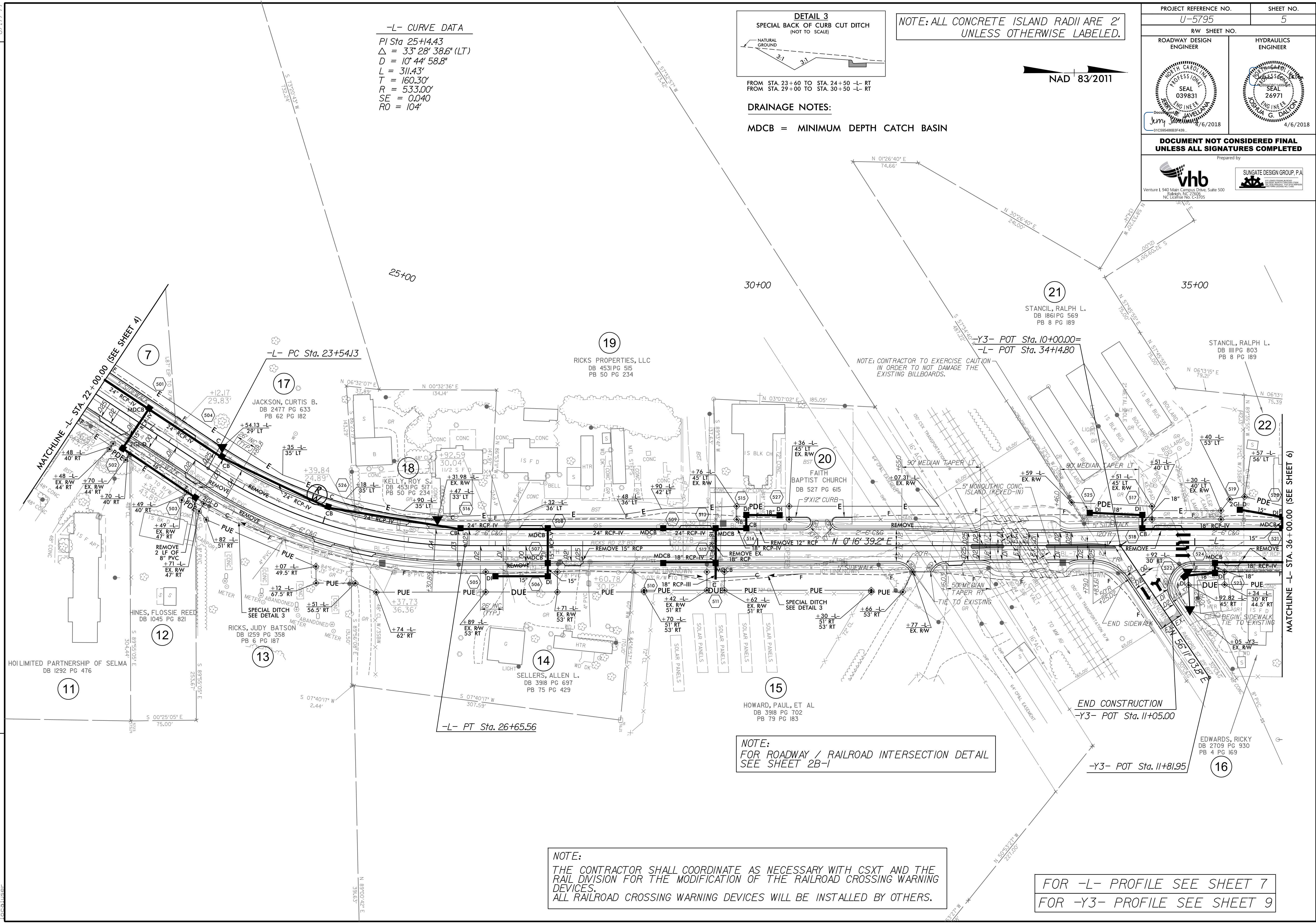
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

Prepared by

vhb
 Venture I, 940 Main Campus Drive, Suite 900
 Raleigh, NC 27608
 NC License No. C-3705

SUNGATE DESIGN GROUP, P.A.
 10100 Sunset Blvd, Suite 100
 Raleigh, NC 27615
 NC License No. C-3705

REVISIONS



NOTE: CONTRACTOR TO EXERCISE CAUTION IN ORDER TO NOT DAMAGE THE EXISTING BILLBOARDS.

NOTE:
 FOR ROADWAY / RAILROAD INTERSECTION DETAIL SEE SHEET 2B-1

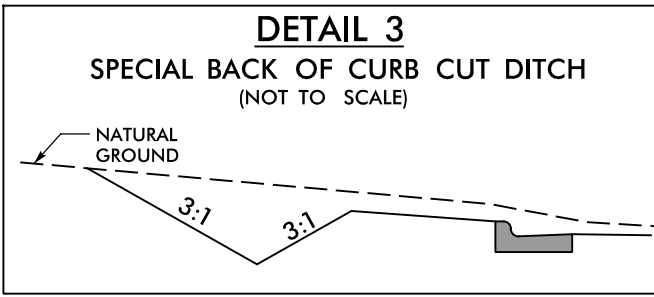
NOTE:
 THE CONTRACTOR SHALL COORDINATE AS NECESSARY WITH CSXT AND THE RAIL DIVISION FOR THE MODIFICATION OF THE RAILROAD CROSSING WARNING DEVICES.
 ALL RAILROAD CROSSING WARNING DEVICES WILL BE INSTALLED BY OTHERS.

FOR -L- PROFILE SEE SHEET 7
 FOR -Y3- PROFILE SEE SHEET 9

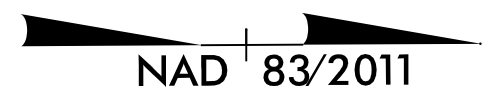
15/2018
 15/2018
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8/17/99

-L- CURVE DATA
 PI Sta 25+14.43
 $\Delta = 33^{\circ} 28' 38.6" (LT)$
 $D = 10^{\circ} 44' 58.8"$
 $L = 311.43'$
 $T = 160.30'$
 $R = 533.00'$
 $SE = 0.040$
 $RO = 104'$



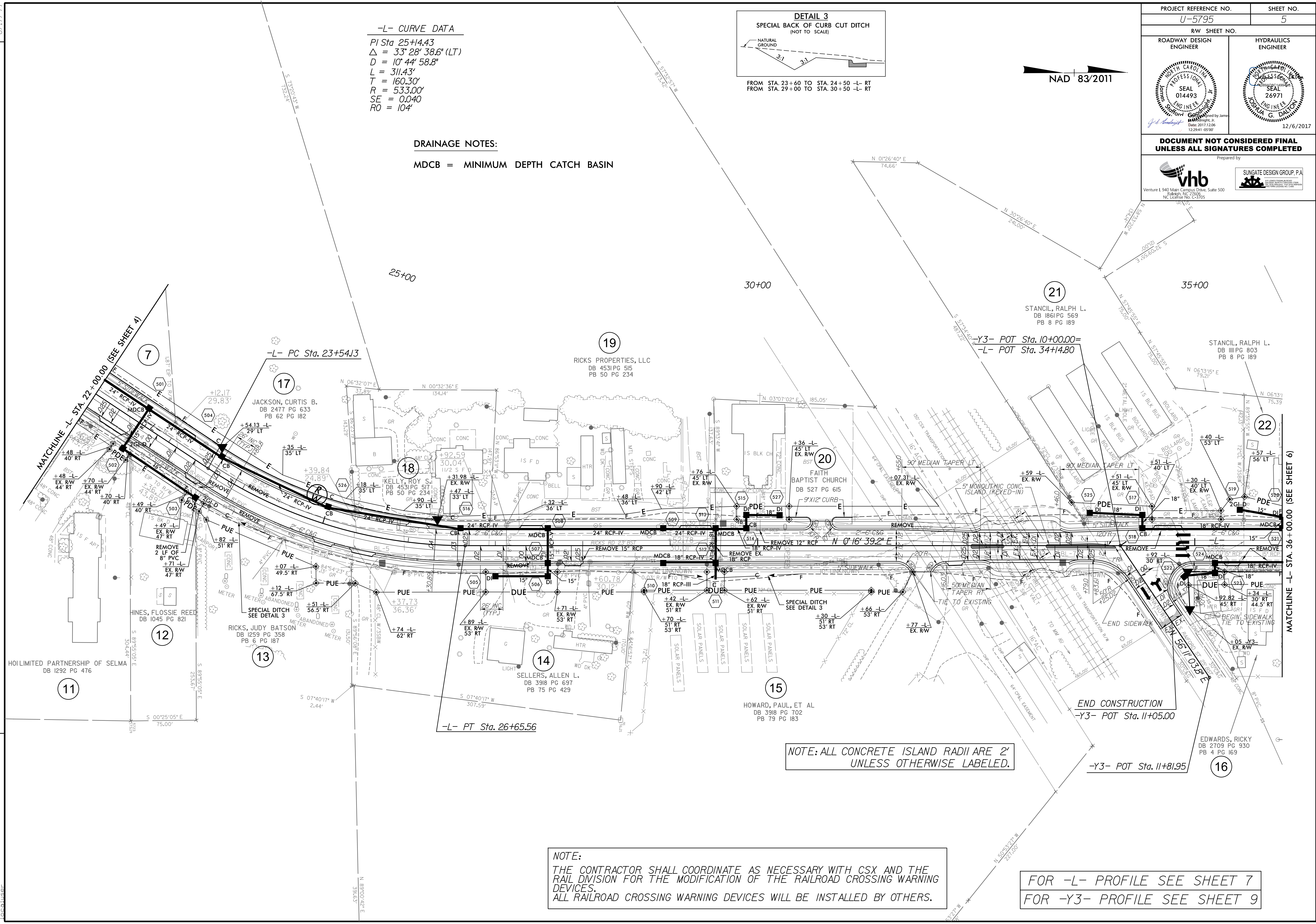
FROM STA. 23+60 TO STA. 24+50 -L- RT
 FROM STA. 29+00 TO STA. 30+50 -L- RT



PROJECT REFERENCE NO. U-5795		SHEET NO. 5	
RW SHEET NO.		HYDRAULICS ENGINEER	
ROADWAY DESIGN ENGINEER		ENGINEER	
<p>DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED</p>			
<p>Prepared by </p>			
<p>VENTURE I 940 MAIN CAMPUS DRIVE, SUITE 500 RALEIGH, NC 27608 NC LICENSE NO. C-3705</p>			

DRAINAGE NOTES:
 MDCB = MINIMUM DEPTH CATCH BASIN

REVISIONS

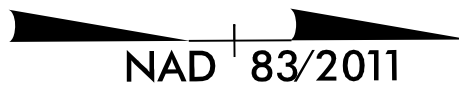


NOTE:
 THE CONTRACTOR SHALL COORDINATE AS NECESSARY WITH CSX AND THE RAIL DIVISION FOR THE MODIFICATION OF THE RAILROAD CROSSING WARNING DEVICES.
 ALL RAILROAD CROSSING WARNING DEVICES WILL BE INSTALLED BY OTHERS.

FOR -L- PROFILE SEE SHEET 7
 FOR -Y3- PROFILE SEE SHEET 9

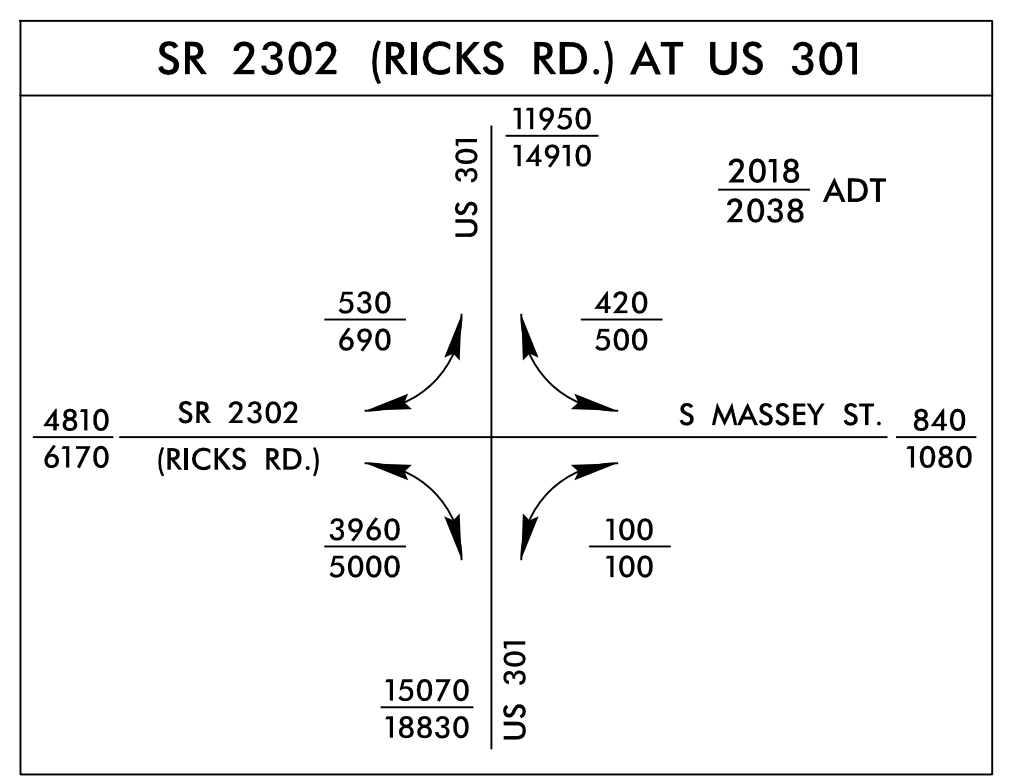
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PROJECT REFERENCE NO. U-5795	SHEET NO. 6
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	
Prepared by 	
Venture I, 940 Main Campus Drive, Suite 900 Raleigh, NC 27606 NC License No. C-3705	

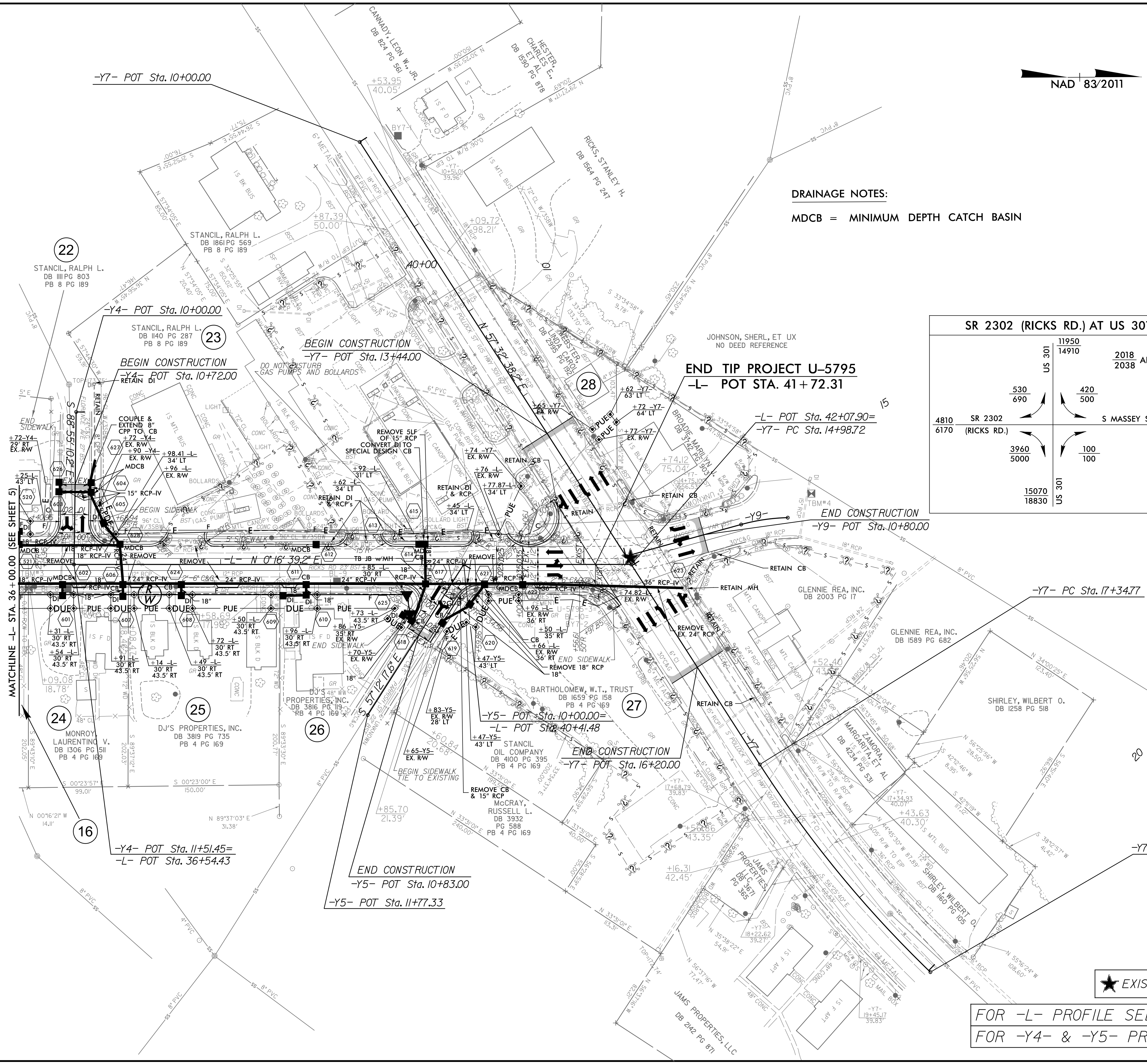


DRAINAGE NOTES:

MDCB = MINIMUM DEPTH CATCH BASIN



-Y7- CURVE DATA
 PI Sta 18+69.12
 $\Delta = 13^{\circ} 22' 23.6"$ (LT)
 $D = 459.59.9'$
 $L = 267.47'$
 $T = 134.34'$
 $R = 1,145.92'$



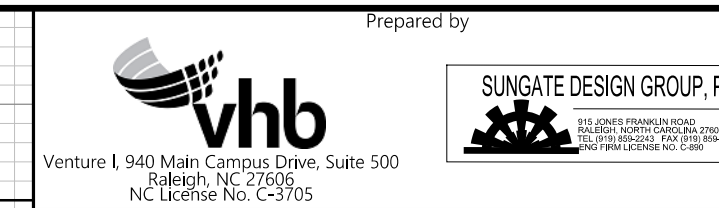
★ EXISTING SIGNAL TO BE MODIFIED

FOR -L- PROFILE SEE SHEET 8
 FOR -Y4- & -Y5- PROFILES SEE SHEET 9

REVISIONS

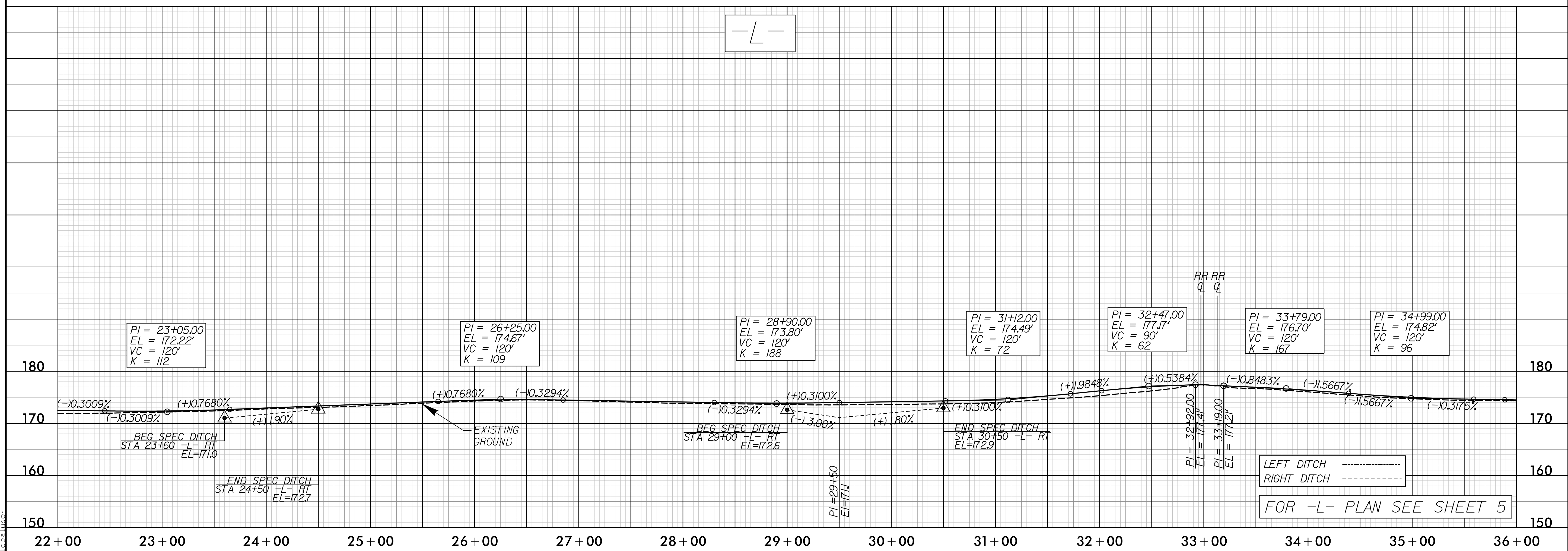
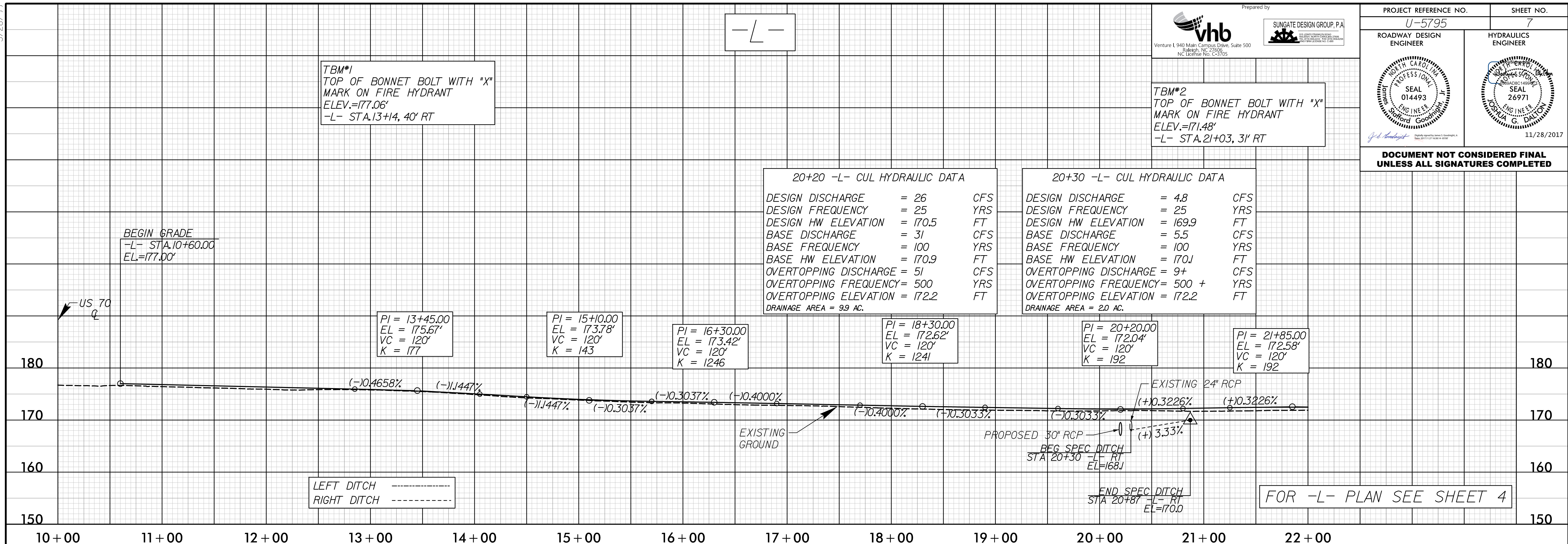
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5/28/99



PROJECT REFERENCE NO. U-5795	SHEET NO. 7
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
11/28/2017	

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED



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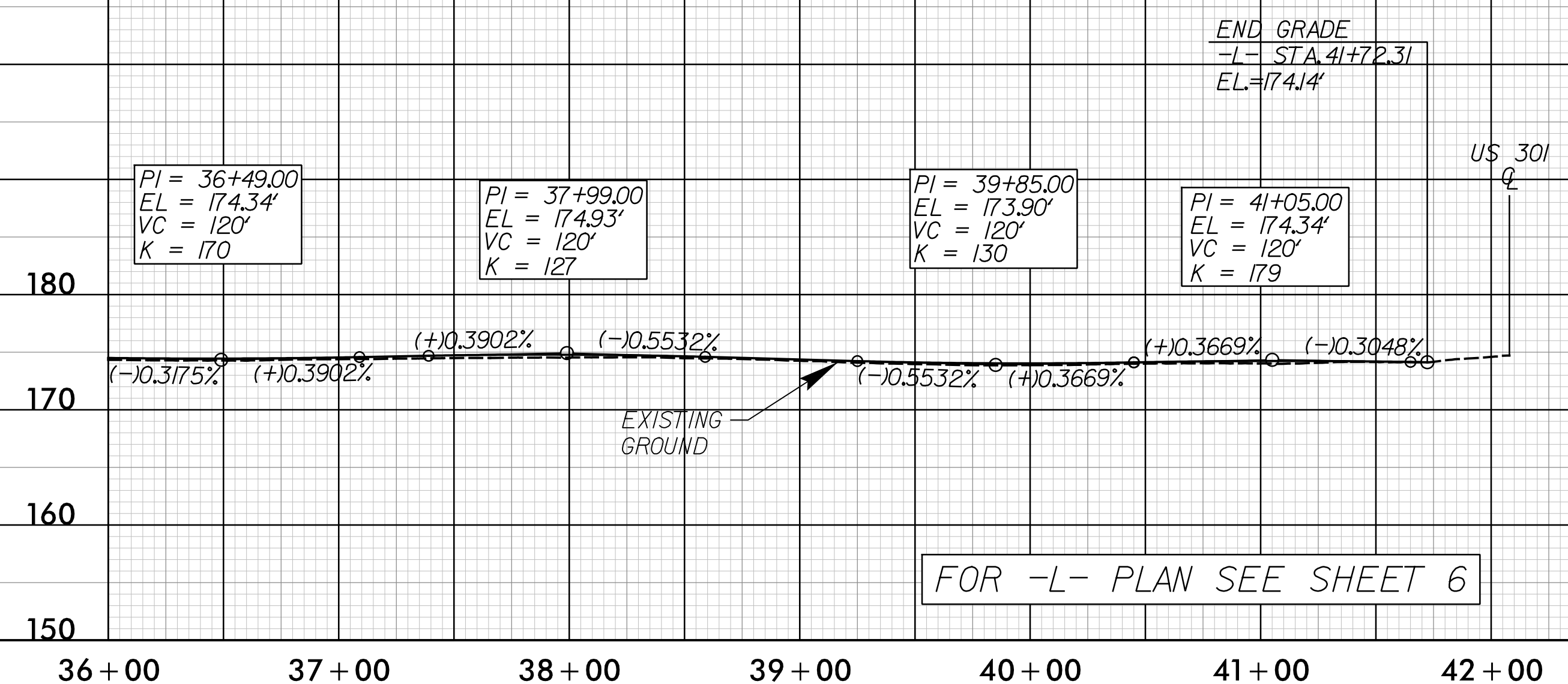
5/28/99

-L-

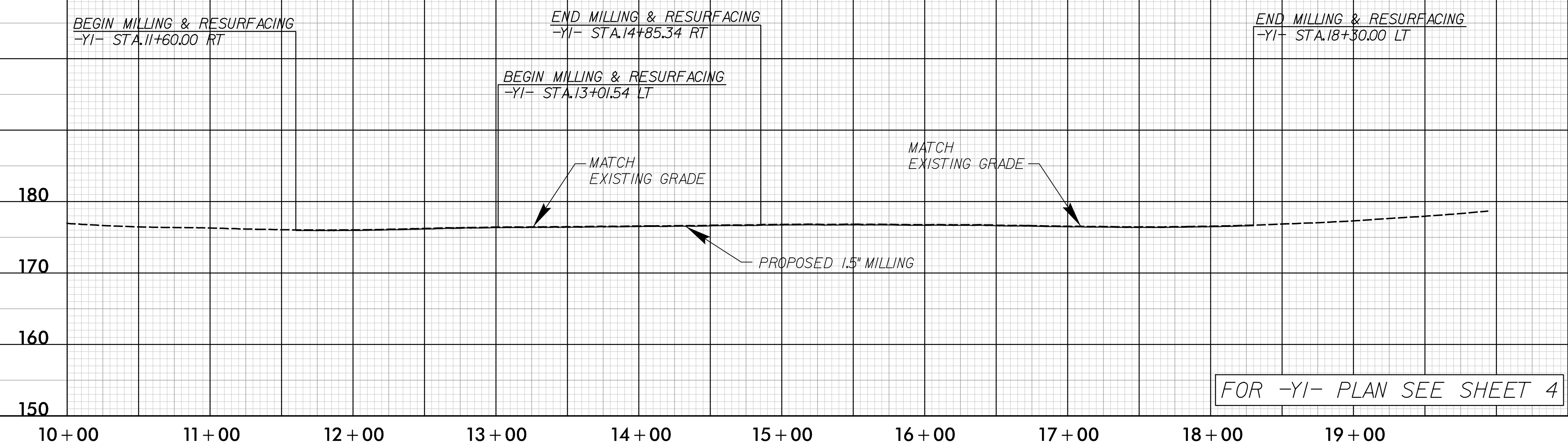
TBM*3
TOP OF BONNET BOLT WITH "X"
MARK ON FIRE HYDRANT
ELEV.=176.89'
-L- STA.36+09, 24' RT



PROJECT REFERENCE NO. U-5795	SHEET NO. 8
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
<p>DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED</p>	



-YI-



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5/28/99

-Y2-

BEGIN GRADE
-Y2- STA.10+25.03=
-L- STA.13+40.79, 24.36'RT
EL=174.75'

END GRADE
-Y2- STA.11+00.00
EL=173.58'

PI = 10+58.00
EL = 174.07'
VC = 60'
K = 74


180
170
160
150

(-)-3.58%
(-)-2.0549% (-)-1.2448%


FOR -Y2- PLAN SEE SHEET 4


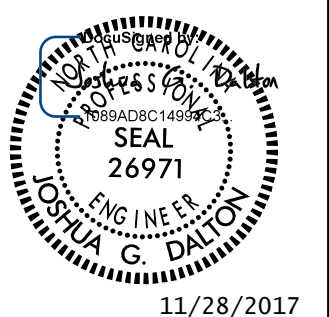
10+00 11+00

Prepared by



Venture L 940 Main Campus Drive, Suite 500
Raleigh, NC 27606
NC License No. C-3705



PROJECT REFERENCE NO. U-5795	SHEET NO. 9
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
	
11/28/2017	

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

-Y3-

BEGIN GRADE
-Y3- STA.10+21.74=
-L- STA.34+26.98, 18'RT
EL=175.49'

END GRADE
-Y3- STA.11+05.00
EL=174.54'

PI = 10+64.00
EL = 174.84'
VC = 60'
K = 73

180
170
160
150

(-)-2.89%
(-)-1.5476% (-)-10.7252%

FOR -Y3- PLAN SEE SHEET 5

10+00 11+00

-Y4-

BEGIN GRADE
-Y4- STA.10+72.00
EL=173.30'

END GRADE
-Y4- STA.11+33.45=
-L- STA.36+54.68, 18'LT
EL=174.00'

PI = 10+98.00
EL = 173.20'
VC = 52'
K = 20
DS = 20mph

180
170
160
150

(+)-2.5%
(-)-10.3821% (+)-2.2649%

FOR -Y4- PLAN SEE SHEET 6

10+00 11+00

-Y5-

BEGIN GRADE
-Y5- STA.10+21.35=
-L- STA.40+30.01, 18'RT
EL=173.62'

END GRADE
-Y5- STA.10+83.00
EL=173.49'

PI = 10+48.00
EL = 173.39'
VC = 50'
K = 42

180
170
160
150

26%
(-)-10.8957% (+)-10.3028%

FOR -Y5- PLAN SEE SHEET 6

10+00 11+00

10/23/2017 8:49:36 AM local user