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

BUILDINGS AND OTHER CULTURE:

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

HYDROLOGY:

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

RAILROADS:

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

RIGHT OF WAY & PROJECT CONTROL:

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

ROADS AND RELATED FEATURES:

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

VEGETATION:

Single Tree	○
Single Shrub	○

Note: Not to Scale *S.U.E. = *Subsurface Utility Engineering*

Hedge	-----
Woods Line	-----
Orchard	-----
Vineyard	----- Vineyard

EXISTING STRUCTURES:

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

UTILITIES:

POWER:	
Existing Power Pole	●
Proposed Power Pole	○
Existing Joint Use Pole	●
Proposed Joint Use Pole	○
Power Manhole	⊕
Power Line Tower	⊠
Power Transformer	⊠
U/G Power Cable Hand Hole	-----
H-Frame Pole	●
U/G Power Line LOS B (S.U.E.*)	----- P
U/G Power Line LOS C (S.U.E.*)	----- P
U/G Power Line LOS D (S.U.E.*)	----- P

TELEPHONE:

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

WATER:

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

TV:

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

GAS:

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

SANITARY SEWER:

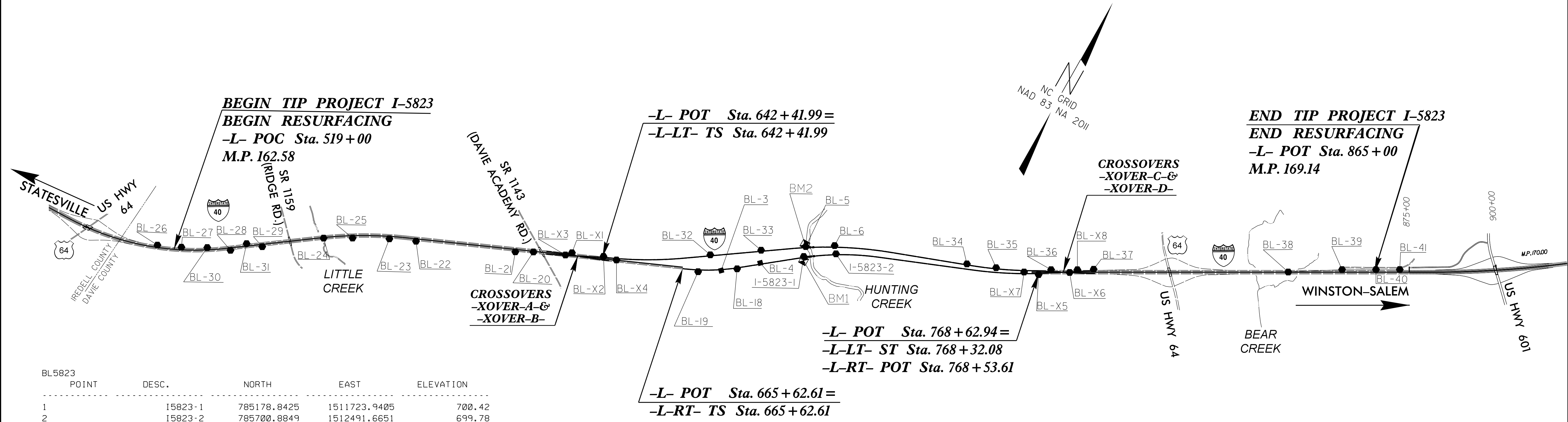
Sanitary Sewer Manhole	⊕
Sanitary Sewer Cleanout	⊕
U/G Sanitary Sewer Line	----- SS
Above Ground Sanitary Sewer	----- A/G Sanitary Sewer
SS Forced Main Line LOS B (S.U.E.*)	----- FSS
SS Forced Main Line LOS C (S.U.E.*)	----- FSS
SS Forced Main Line LOS D (S.U.E.*)	----- FSS

MISCELLANEOUS:

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

SURVEY CONTROL SHEET I-5823

PROJECT REFERENCE NO.	SHEET NO.
I-5823	1C-1
Division 9 DDC	



BL5823 POINT	DESC.	NORTH	EAST	ELEVATION
1	15823-1	785178.8425	1511723.9405	700.42
2	15823-2	785700.8849	1512491.6651	699.78
3	BL-3	783661.0630	1509859.0300	719.52
4	BL-4	784402.8170	1510728.9430	708.06
5	BL-5	785454.7450	1511634.2490	700.78
6	BL-6	785887.4140	1512340.7460	697.67
18	BL-18	783929.0255	1510233.7000	714.22
19	BL-19	783306.0840	1509300.7230	735.38
20	BL-20	781471.0560	1504908.8500	820.52
21	BL-21	781218.6810	1504454.5830	814.84
22	BL-22	780078.5445	1501825.0216	779.82
23	BL-23	779762.0855	1501126.1080	780.27
24	BL-24	778849.3940	1499473.5940	797.53
25	BL-25	779260.2935	1500194.9640	789.89
26	BL-26	776325.7533	1495422.0901	766.77
27	BL-27	776612.4920	1496050.6600	757.97
28	BL-28	777229.1465	1497319.8680	777.68
29	BL-29	777768.6035	1498061.9210	791.10
30	BL-30	776969.6995	1496700.7240	767.93
31	BL-31	777622.9170	1497628.4090	784.59
32	BL-32	783898.9425	1509366.6350	723.75
33	BL-33	784732.6015	1510571.0820	703.97
34	BL-34	787300.4175	1515903.3020	716.40
35	BL-35	787618.4175	1516686.2770	730.49
36	BL-36	788346.3860	1518087.7630	756.91
37	BL-37	788958.0875	1519144.2340	776.81
38	BL-38	791640.8920	1524043.6720	737.60
39	BL-39	792461.7250	1525352.6140	767.82
40	BL-40	792940.3695	1526199.9930	794.75
41	BL-41	793278.4120	1526793.2830	813.08
X1	BL-X1	781995.1030	1505882.6550	817.12
X2	BL-X2	782350.7780	1506721.2210	801.59
X3	BL-X3	781847.6270	1505751.2820	818.97
X4	BL-X4	782444.2470	1507095.6980	790.61
X5	BL-X5	788046.6240	1517845.2230	751.20
X6	BL-X6	788539.3230	1518590.4050	765.69
X7	BL-X7	787906.3270	1517446.1000	743.18
X8	BL-X8	788717.0150	1518744.9410	769.58

-L- POT Sta. 665 + 62.61 =
-L-RT- TS Sta. 665 + 62.61

-L- POT Sta. 768 + 62.94 =
-L-LT- ST Sta. 768 + 32.08
-L-RT- POT Sta. 768 + 53.61

-L- POT Sta. 642 + 41.99 =
-L-LT- TS Sta. 642 + 41.99

END TIP PROJECT I-5823
END RESURFACING
-L- POT Sta. 865 + 00
M.P. 169.14

BEGIN TIP PROJECT I-5823
BEGIN RESURFACING
-L- POC Sta. 519 + 00
M.P. 162.58

DATUM DESCRIPTION

THE LOCALIZED COORDINATE SYSTEM DEVELOPED FOR THIS PROJECT IS BASED ON THE STATE PLANE COORDINATES ESTABLISHED BY NCDOT FOR MONUMENT "15823-1" WITH NAD 83/NSRS 2011 STATE PLANE GRID COORDINATES OF NORTHING: 785178.8425(±) EASTING: 1511723.9405(±) ELEVATION: 700.42(±)

THE AVERAGE COMBINED GRID FACTOR USED ON THIS PROJECT (GROUND TO GRID) IS: 0.999907320

THE N.C. LAMBERT GRID BEARING AND LOCALIZED HORIZONTAL GROUND DISTANCE FROM TO -L- STATION 519+00.00 IS S 61° 08' 21.77" W, 18,073.96 feet

ALL LINEAR DIMENSIONS ARE LOCALIZED HORIZONTAL DISTANCES VERTICAL DATUM USED IS NAVD 88

BENCHMARKS (NAVD 88)

BM1 ELEVATION = 689.84
 N 785073 E 1511778
 L-RT STA 700+55.43 93' RIGHT
 RAILROAD SPIKE SET VERTICALLY IN 24" RIVER BIRCH

BM2 ELEVATION = 687.92
 N 785495 E 1511586
 L-LT STA 700+81.30 89' LEFT
 RAILROAD SPIKE SET IN 22" SYCAMORE

NOTES:

NOTE: DRAWING NOT TO SCALE

PROJECT CONTROL ESTABLISHED USING GLOBAL POSITIONING SYSTEM.

I:\NOV-2018\15823-140-Davie\Surveys\I-5823-dde-1C-1.dgn
 pment\15823-140-Davie\Surveys\I-5823-dde-1C-1.dgn

PROPOSED ALIGNMENT CONTROL SHEET

EOT1

TYPE	STATION	NORTH	EAST
PC	528+00.00	776927.7935	1496658.1307
PCC	533+02.69	777206.0120	1497076.6957
PT	534+21.26	777275.1687	1497173.0077
POT	538+96.10	777553.2685	1497557.8943

L

TYPE	STATION	NORTH	EAST
POT	480+00.00	775726.6988	1492099.3088
TS	486+38.22	775740.6215	1492737.3798
SC	488+38.22	775745.8569	1492937.3098
CS	532+51.56	777130.4370	1497063.4138
ST	534+51.56	777246.8607	1497226.0327
TS	559+98.69	778738.6289	1499290.6204
SC	561+98.69	778855.2895	1499453.0705
CS	584+78.69	779981.3469	1501431.2686
ST	586+78.69	780061.4698	1501614.5172
POT	665+62.61	783198.8646	1508847.2854

XOA

TYPE	STATION	NORTH	EAST
PC	5+00.00	777159.8850	1497042.7059
PRC	5+48.52	777187.9117	1497082.3148
PRC	13+85.63	777648.3826	1497781.1804
PT	22+99.91	778153.8337	1498542.7401

EOT2

TYPE	STATION	NORTH	EAST
POT	557+00.00	778519.9262	1499080.1416
PC	560+96.65	778752.2277	1499401.6438
PT	568+96.23	779197.4232	1500065.6262

XOB

TYPE	STATION	NORTH	EAST
PC	5+00.00	777100.9890	1497084.1217
PCC	9+17.80	777350.4069	1497419.2361
PRC	13+71.61	777638.1274	1497770.1447
PT	23+00.88	778212.1935	1498500.5722

EOT3

TYPE	STATION	NORTH	EAST
PC	582+00.00	779815.4228	1501201.5162
PCC	585+24.12	779949.9805	1501496.3772
PT	586+39.76	779996.2436	1501602.3574
POT	589+98.18	780138.8769	1501931.1759

L-LT

TYPE	STATION	NORTH	EAST
TS	642+41.99	782313.9087	1506701.6180
SC	644+41.99	782394.0315	1506884.8667
CS	664+69.55	783376.3145	1508655.5742
ST	666+69.55	783489.3684	1508820.5547
TS	695+63.88	785132.3903	1511203.3359
SC	697+63.88	785245.4442	1511368.3164
CS	724+41.44	786474.6029	1513740.2220
ST	726+41.44	786544.2080	1513927.7183
POT	726+45.61	786545.6451	1513931.6243

XOC

TYPE	STATION	NORTH	EAST
PC	5+00.00	781666.8979	1505225.1143
PRC	14+10.18	781995.6992	1506073.5775
PT	23+20.37	782324.5004	1506922.0406

EOT4

TYPE	STATION	NORTH	EAST
POT	620+00.00	781333.6402	1504683.0010
POT	624+50.00	781512.7171	1505095.8345

XOD

TYPE	STATION	NORTH	EAST
PC	5+00.00	781600.8446	1505253.7666
PRC	14+10.18	781995.6992	1506073.5775
PT	23+20.37	782390.5537	1506893.3883

EOT5

TYPE	STATION	NORTH	EAST
POT	634+00.00	781989.8483	1505924.3934
POT	643+00.00	782348.0021	1506750.0603

L-LT2

TYPE	STATION	NORTH	EAST
POT	726+50.64	786545.6451	1513931.6243
TS	747+68.74	787277.0226	1515919.4500
SC	749+68.74	787346.6277	1516106.9463
CS	766+32.08	788045.2396	1517614.8472
ST	768+32.08	788143.2679	1517789.1750

XOE

TYPE	STATION	NORTH	EAST
PC	5+00.00	788063.2738	1517659.5234
PRC	13+60.51	788455.3446	1518425.3020
PT	22+72.61	788872.7280	1519236.0324

EOT6

TYPE	STATION	NORTH	EAST
POT	635+00.00	781930.5632	1506059.1126
POT	640+00.00	782129.5375	1506517.8164

L2

TYPE	STATION	NORTH	EAST
POT	768+62.94	788106.7762	1517809.8350
POT	865+00.00	792854.1439	1526196.4578

XOF

TYPE	STATION	NORTH	EAST
PC	5+00.00	787976.9235	1517653.5185
PRC	14+10.18	788456.1546	1518427.0413
PT	23+20.37	788935.3858	1519200.5640

EOT7

TYPE	STATION	NORTH	EAST
PC	652+00.00	782735.0378	1507561.3479
PT	658+99.27	783079.2142	1508169.9241

L-RT

TYPE	STATION	NORTH	EAST
TS	665+62.61	783161.2550	1508863.6121
SC	667+62.61	783241.9235	1509046.6190
CS	680+59.45	783907.2298	1510156.5704
ST	682+59.45	784030.6062	1510313.9781
TS	698+77.06	785035.8839	1511581.2903
SC	700+77.06	785159.4898	1511738.5194
CS	720+96.76	786169.4074	1513480.7986
ST	722+96.76	786244.4091	1513666.2013
POT	723+05.62	786247.6968	1513674.4315

XOG

TYPE	STATION	NORTH	EAST
PC	5+00.00	791891.1446	1524422.1596
PRC	14+10.18	792307.7180	1525231.1507
PT	23+20.37	792724.2914	1526040.1418

EOT8

TYPE	STATION	NORTH	EAST
POT	652+00.00	782607.6263	1507618.4669
POT	656+00.00	782766.8057	1507985.4300

L-RT2

TYPE	STATION	NORTH	EAST
POT	723+09.72	786247.6968	1513674.4315
TS	748+61.49	787194.3064	1516044.1227
SC	750+61.49	787269.0387	1516229.6350
CS	764+13.15	787853.8875	1517447.3530
ST	766+13.15	787951.9666	1517621.6523
POT	768+53.18	788070.2845	1517830.4950

XOH

TYPE	STATION	NORTH	EAST
PC	5+00.00	791828.4868	1524457.6279
PRC	14+10.18	792307.7180	1525231.1507
PT	23+20.37	792786.9492	1526004.6735

EOT9

TYPE	STATION	NORTH	EAST
POT	673+00.00	783857.1341	1509332.7653
POT	687+00.00	784651.8699	1510485.3255

EOT10

TYPE	STATION	NORTH	EAST
PC	668+00.00	783268.4036	1509075.5652
PCC	681+22.11	783956.7341	1510200.9057
PT	682+53.03	784037.7872	1510303.7215
POT	683+97.15	784127.3539	1510416.6346

EOT11

TYPE	STATION	NORTH	EAST
POT	747+00.00	787264.5474	1515850.7908
PC	748+44.31	787314.3765	1515986.2224
PCC	750+05.01	787370.7629	1516136.7061
PT	756+99.13	787637.6835	1516777.3378

EOT12

TYPE	STATION	NORTH	EAST
POT	771+00.00	788270.5490	1517989.5344
POT	783+50.00	788886.3187	1519077.3431

NOTES:


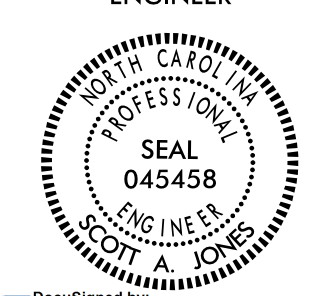
- PROJECT CONTROL WAS ESTABLISHED USING GNSS, THE GLOBAL NAVIGATION SATELLITE SYSTEM.
- THE PROPOSED ALIGNMENT CONTROL DATA FOR THIS PROJECT HAS BEEN COMPILED FROM VARIOUS SOURCES.

8/17/99
 REVISIONS
 I5-NOV-2016 I5r04
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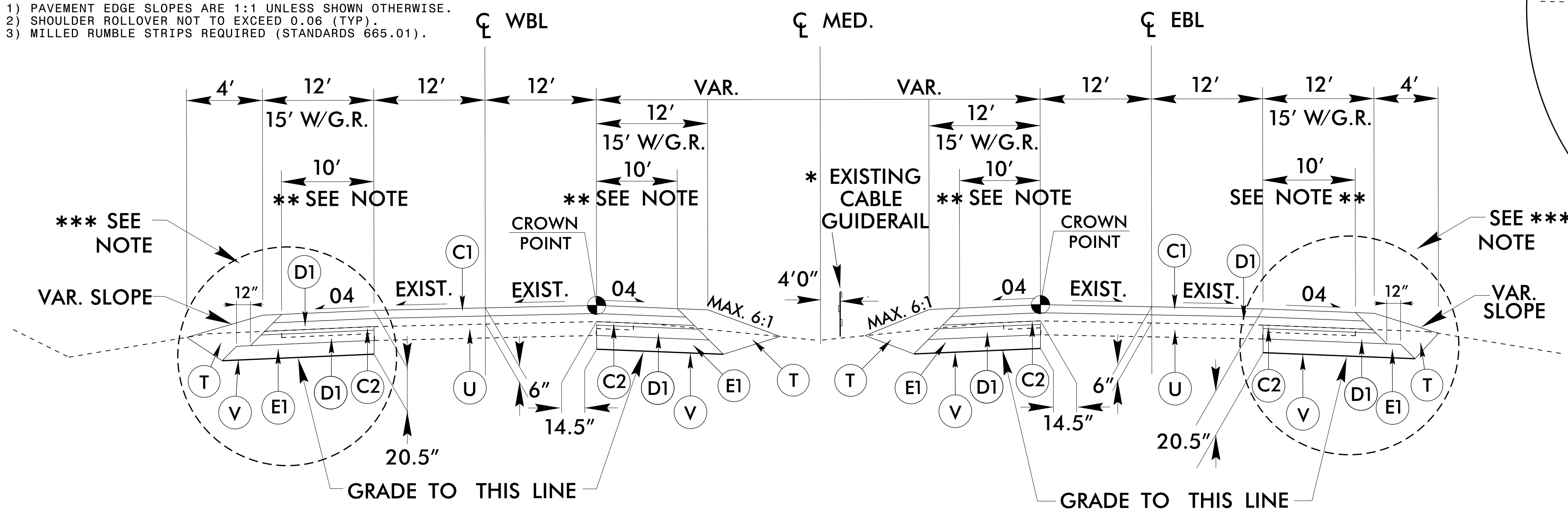
5/14/99
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PAVEMENT SCHEDULE

C1	PROP. APPROX. 3" ASPHALT CONCRETE SURFACE COURSE TYPE S9.5D, AT AN AVERAGE RATE OF 168 LBS. PER SQ. YD. IN EACH OF TWO LAYERS.	E3	PROP. APPROX. 7" ASPHALT CONCRETE BASE COURSE, TYPE B25.0C, AT AN AVERAGE RATE OF 399 LBS. PER SQ. YD. IN EACH OF TWO LAYERS.	V	GEOTEXTILE FOR SOIL STABILIZATION
C2	PROP. APPROX. 1½" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5C, AT AN AVERAGE RATE OF 168 LBS. PER SQ. YD.	R	SHOULDER BERM GUTTER		
C3	PROP. VAR. DEPTH ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5C, AT AN AVERAGE RATE OF 112 LBS. PER SQ. YD. PER 1" DEPTH, TO BE PLACED IN LAYERS NOT LESS THAN 1½" IN DEPTH OR GREATER THAN 2" IN DEPTH.	R1	REPAIR OF CONTINUOUSLY REINFORCED CONCRETE PAVEMENT (SEE SPECIAL DETAIL 2C-1)		
D1	PROP. APPROX. 3" ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE I19.0C, AT AN AVERAGE RATE OF 342 LBS. PER SQ. YD.	R2	10" CONCRETE SLEEPER SLAB (SEE DETAIL SHEET 2C-3)		
D2	PROP. VAR. DEPTH ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE I19.0C, AT AN AVERAGE RATE OF 114 LBS. PER SQ. YD. PER 1" DEPTH, TO BE PLACED IN LAYERS NOT LESS THAN 2.5" IN DEPTH OR GREATER THAN 4" IN DEPTH.	R3	EXPRESSWAY GUTTER		
E1	PROP. APPROX. 10" ASPHALT CONCRETE BASE COURSE, TYPE B25.0C, AT AN AVERAGE RATE OF 570 LBS. PER SQ. YD. IN EACH OF TWO LAYERS.	T	EARTH MATERIAL.		
E2	PROP. VAR. DEPTH ASPHALT CONCRETE BASE COURSE, TYPE B25.0C, AT AN AVERAGE RATE OF 114 LBS. PER SQ. YD. PER 1" DEPTH, TO BE PLACED IN LAYERS NOT LESS THAN 3" IN DEPTH OR GREATER THAN 5½" IN DEPTH.	U	EXISTING PAVEMENT.		

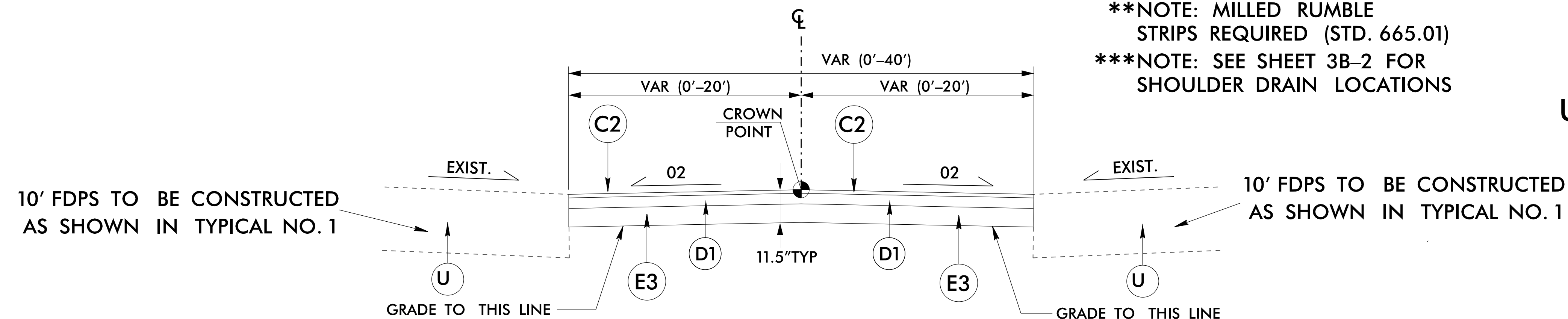
PROJECT REFERENCE NO. 1-5823	SHEET NO. 2A-1
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	PAVEMENT DESIGN ENGINEER
 Scott A. Jones 12/12/2018	 Scott A. Jones 12/12/2018
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	

NOTES:
 1) PAVEMENT EDGE SLOPES ARE 1:1 UNLESS SHOWN OTHERWISE.
 2) SHOULDER ROLLOVER NOT TO EXCEED 0.06 (TYP).
 3) MILLED RUMBLE STRIPS REQUIRED (STANDARDS 665.01).

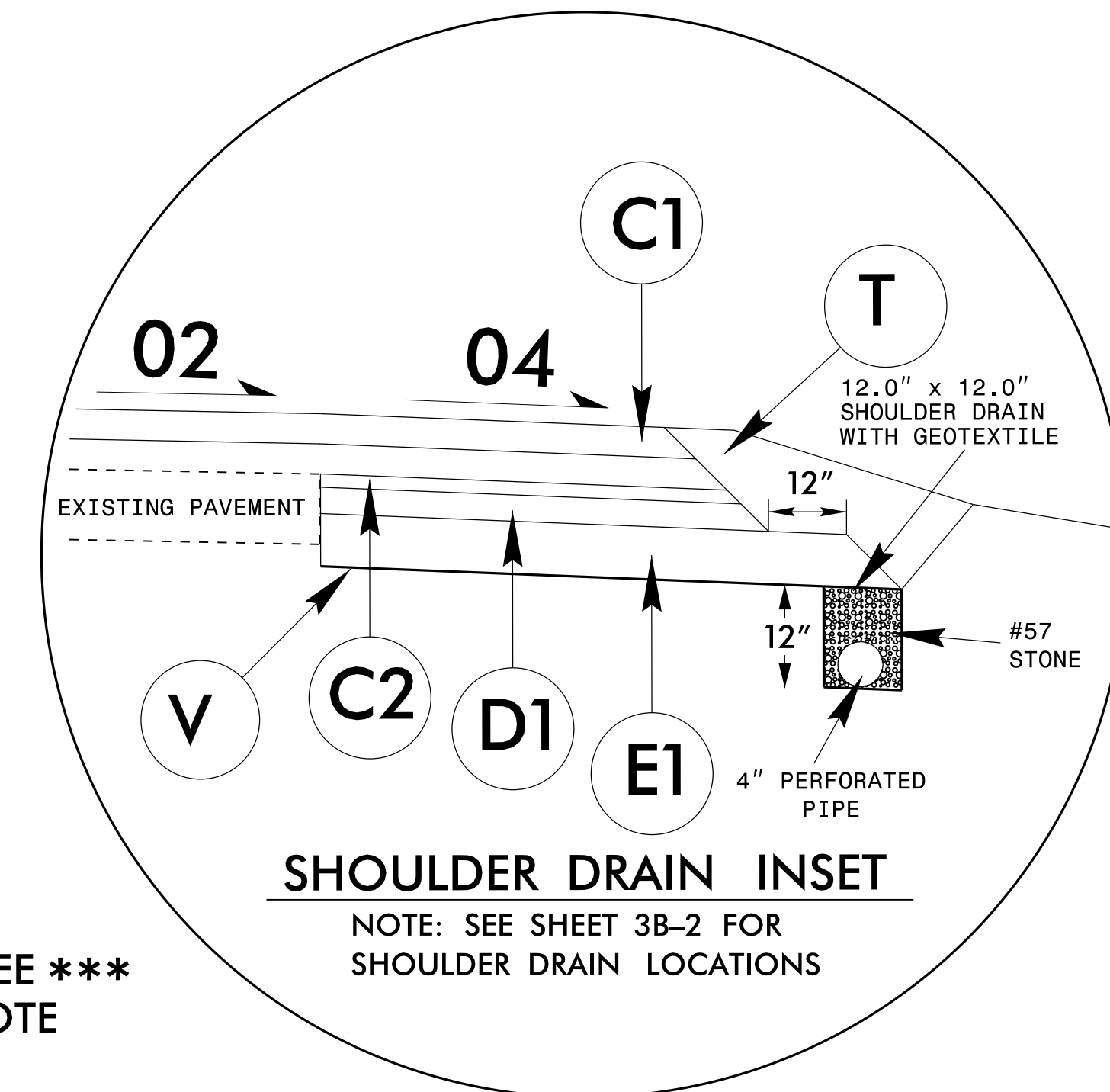


TYPICAL SECTION NO. 1

- * NOTE: DO NOT DISTURB EXISTING CABLE GUIDERAIL
- **NOTE: MILLED RUMBLE STRIPS REQUIRED (STD. 665.01)
- ***NOTE: SEE SHEET 3B-2 FOR SHOULDER DRAIN LOCATIONS



CROSSOVER TYPICAL SECTION

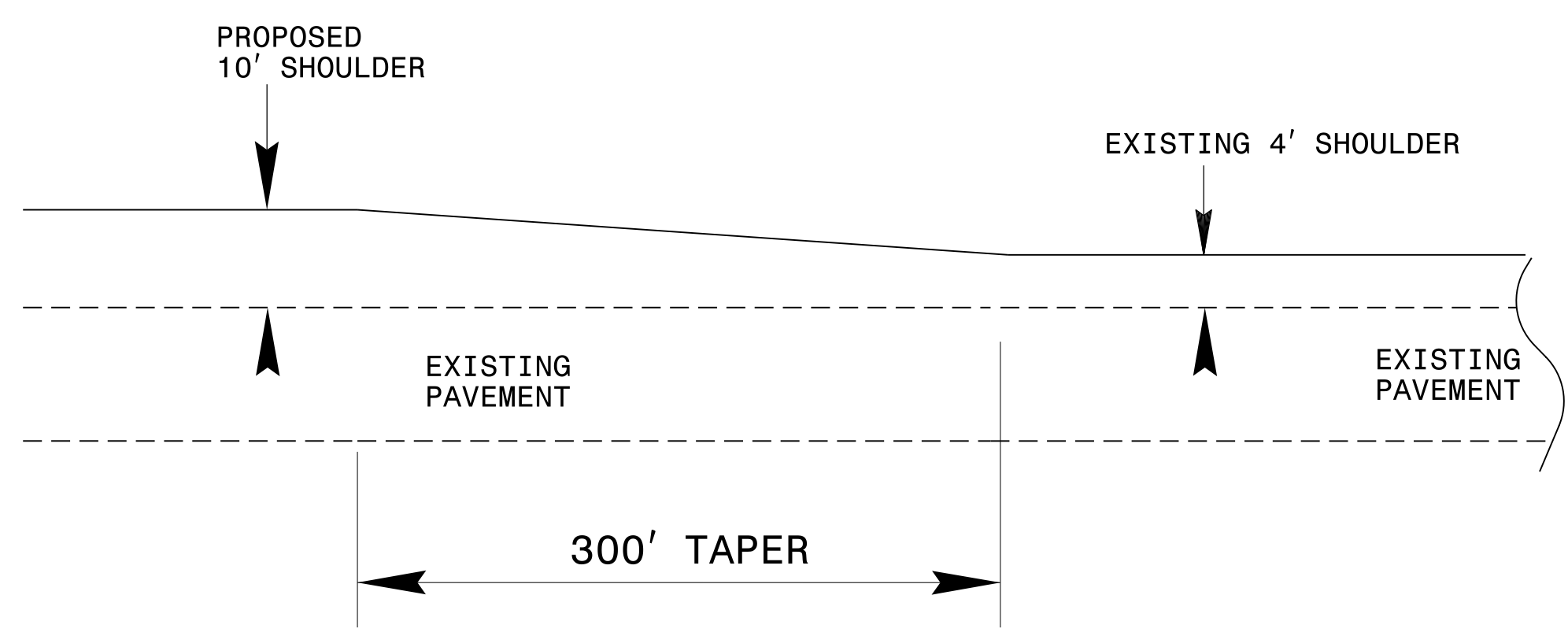


USE TYPICAL SECTION NO. 1

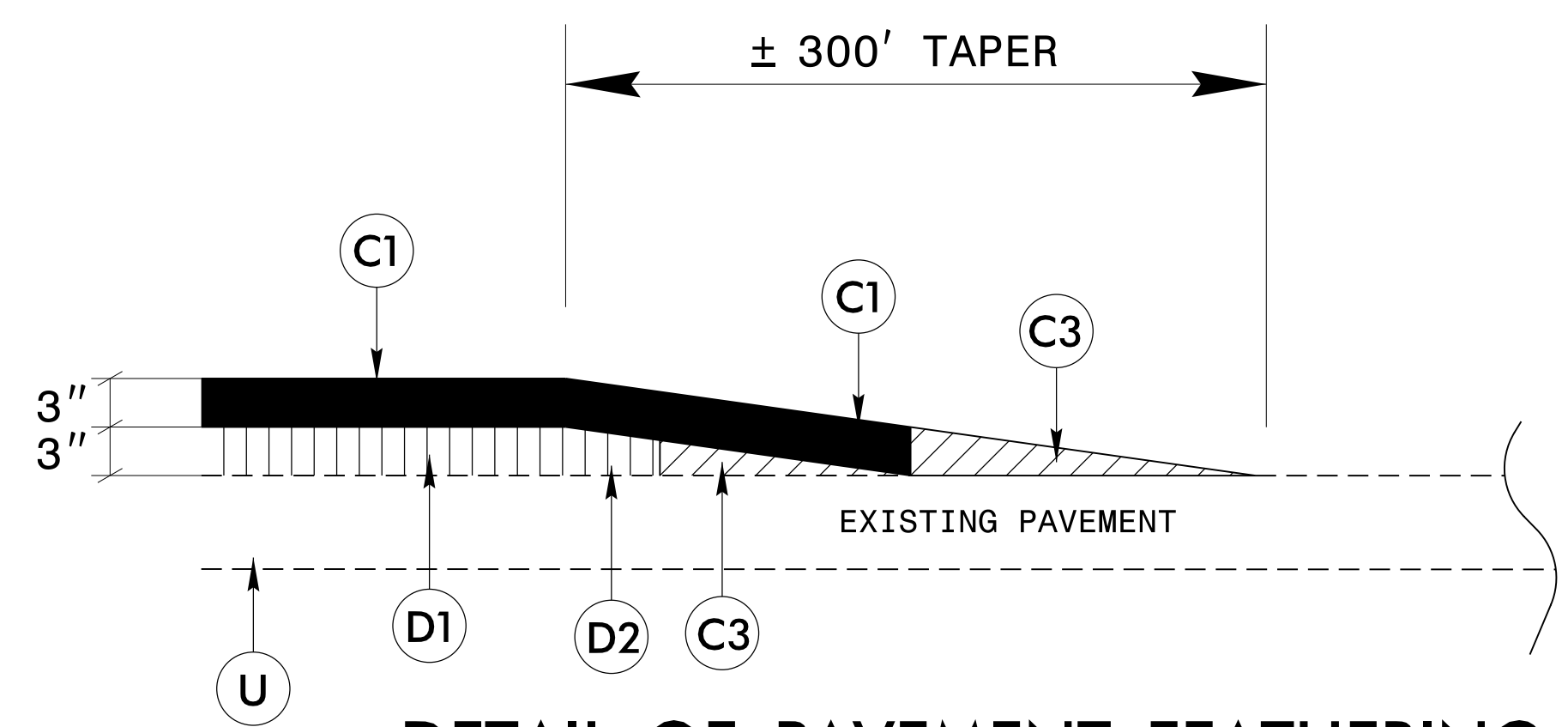
- L- STA. 519+00 TO 642+41.99 (+/-)
- L- STA. 768+62.94 TO 865+00 (+/-)
- LEFT SIDE ONLY:
- L-LT- STA. 642+41.99 TO 700+65.00 (+/-)
- L-LT- STA. 703+05.00 TO 768+32.08 (+/-)
- RIGHT SIDE ONLY:
- L- STA. 642+41.99 TO 665+62.61 (+/-)
- RIGHT SIDE ONLY:
- L-RT- STA. 665+62.61 TO 701+62.00 (+/-)
- L-RT- STA. 704+02.01 TO 768+53.61 (+/-)

USE CROSSOVER TYPICAL SECTION

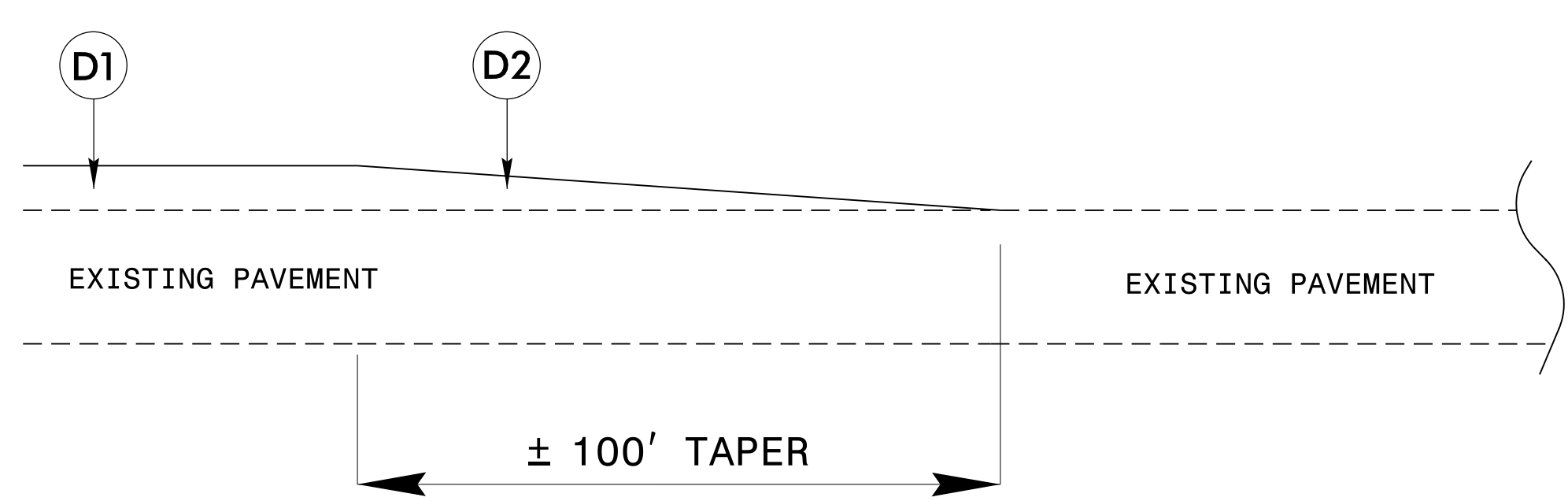
- XOVER-A- 5+00 TO 22+99.91 (+/-)
- XOVER-B- 5+00 TO 23+00.88 (+/-)
- XOVER-C- 5+00 TO 23+20.37 (+/-)
- XOVER-D- 5+00 TO 23+20.37 (+/-)
- XOVER-E- 5+00 TO 22+72.61 (+/-)
- XOVER-F- 5+00 TO 23+20.37 (+/-)
- XOVER-G- 5+00 TO 23+20.37 (+/-)
- XOVER-H- 5+00 TO 23+20.37 (+/-)



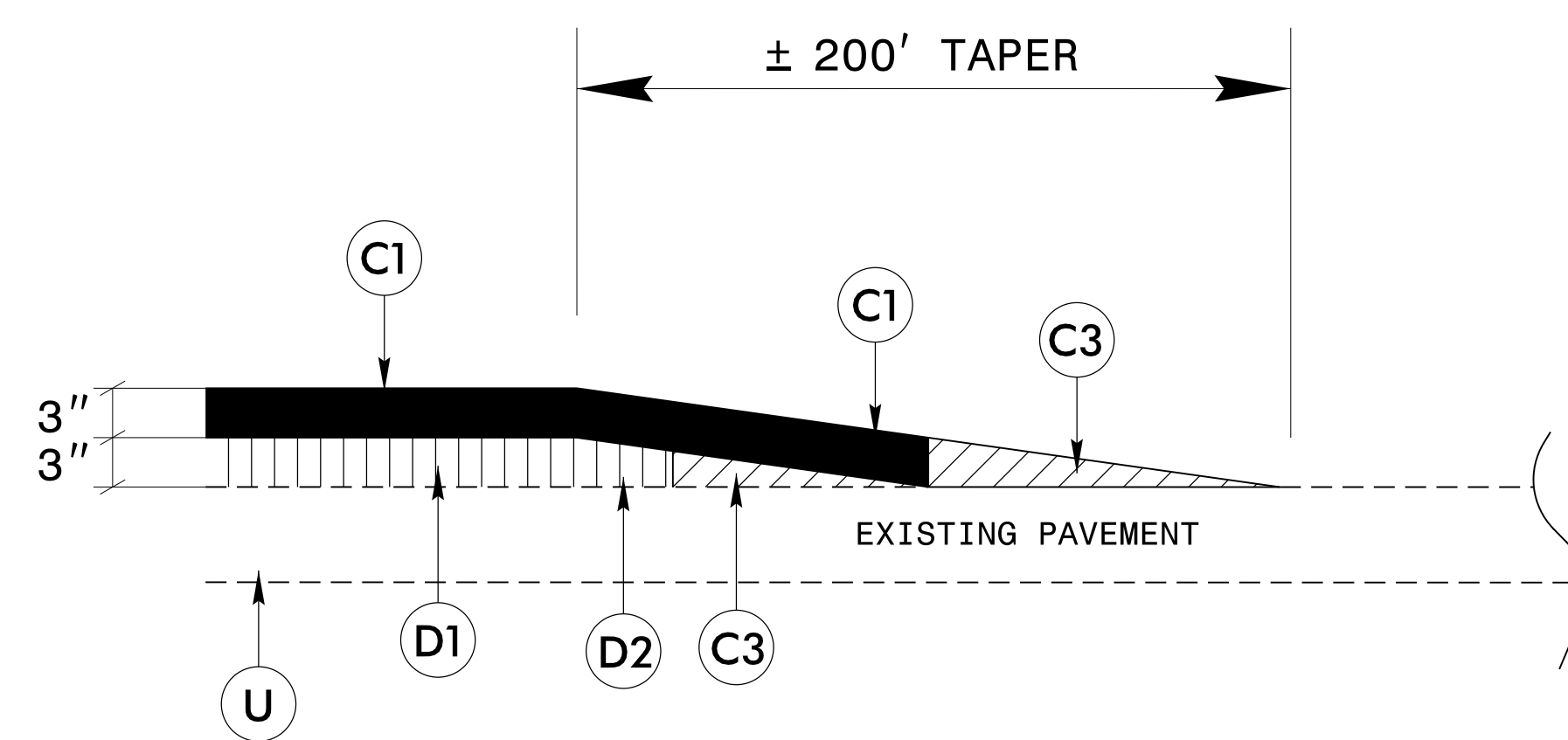
**DETAIL FOR SHOULDER TIE
AT BEGINNING OF PROJECT**
-L- STA 519+00 TO 522+00



**DETAIL OF PAVEMENT FEATHERING
AT BEGINNING OF PROJECT**
-L- STA 519+00 TO 522+00

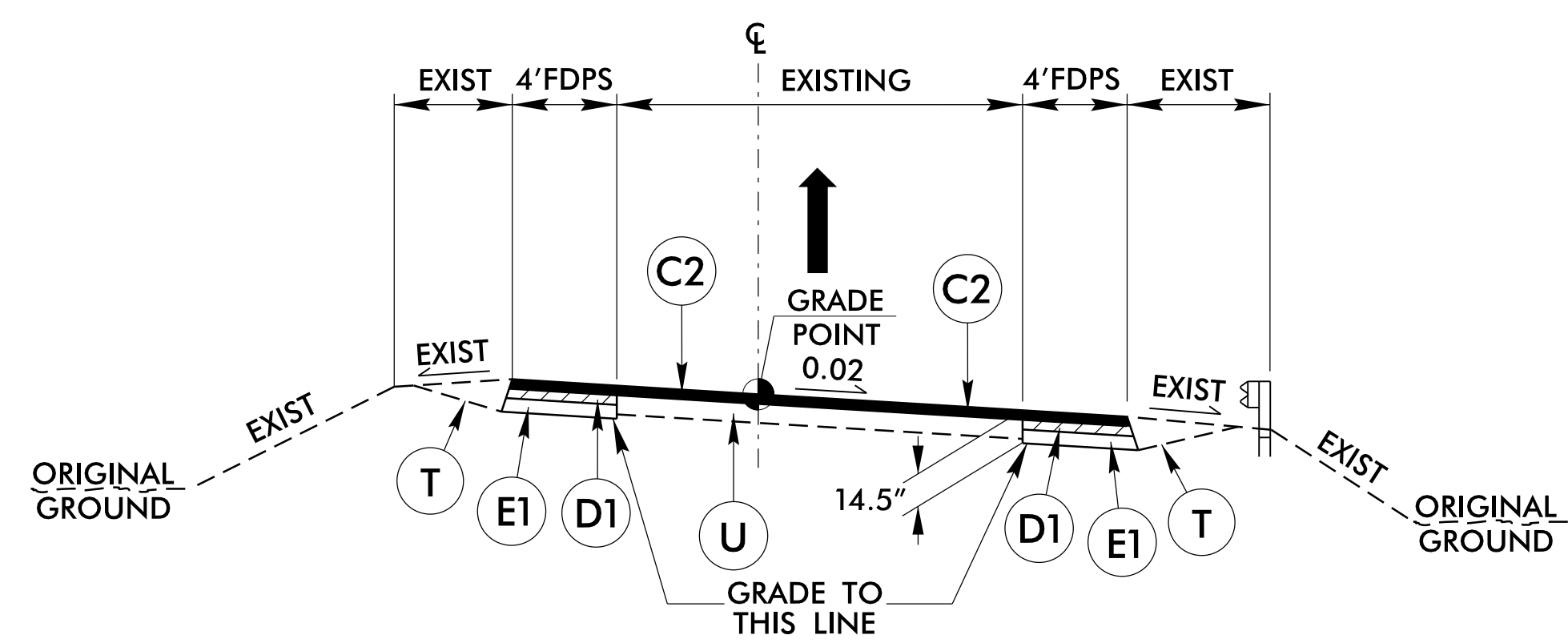


**DETAIL SHOWING TEMPORARY TAPERING
AND TIE-INS DURING CONSTRUCTION**



DETAIL OF PAVEMENT FEATHERING
NOTE : TIE RAMPS IN AT THE BACK OF GORE

PAVEMENT SCHEDULE	
C1	3" S9.5D
C2	1½" S9.5C
C3	VAR. DEPTH S9.5C
D1	3" I19.0C
D2	VAR. DEPTH I19.0C
E1	10" B25.0C
E2	VAR. DEPTH B25.0C
E3	7" B25.0C
R	SHOULDER BERM GUTTER
R1	REPAIR OF CONTINUOUSLY REINFORCED CONC. PAVEMENT (SEE SPECIAL DETAIL 2C-1)
R2	10" CONCRETE SLEEPER SLAB
R3	EXPRESSWAY GUTTER
T	EARTH MATERIAL
U	EXISTING PAVEMENT
V	GEOTEXTILE FOR SOIL STABILIZATION



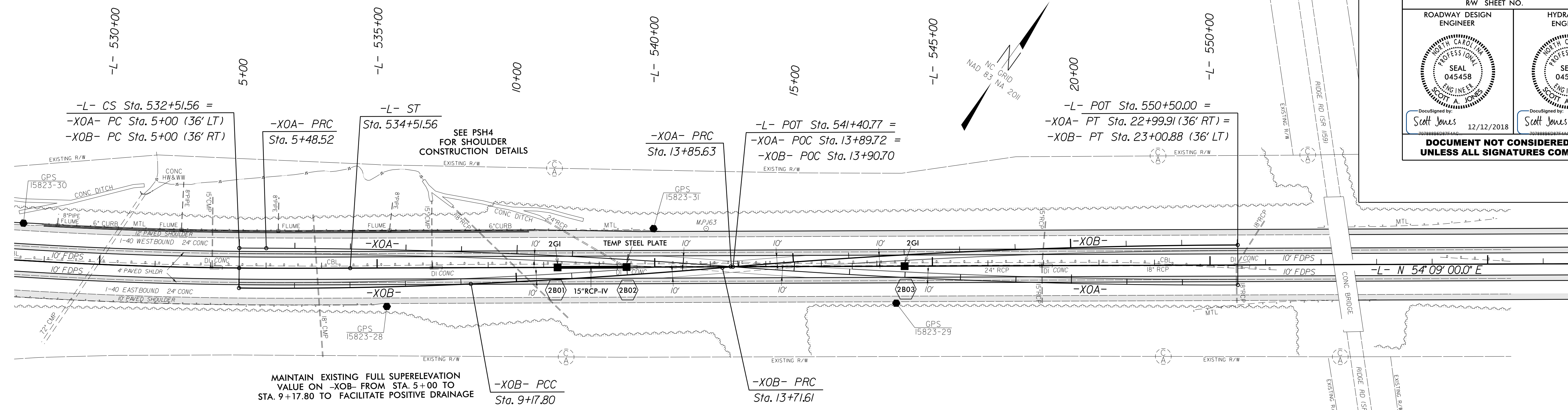
RAMP TYPICAL SECTION

* NOTE: APPLY TYPICAL TO HWY 64 RAMPS (EXIT 168)

5/14/99

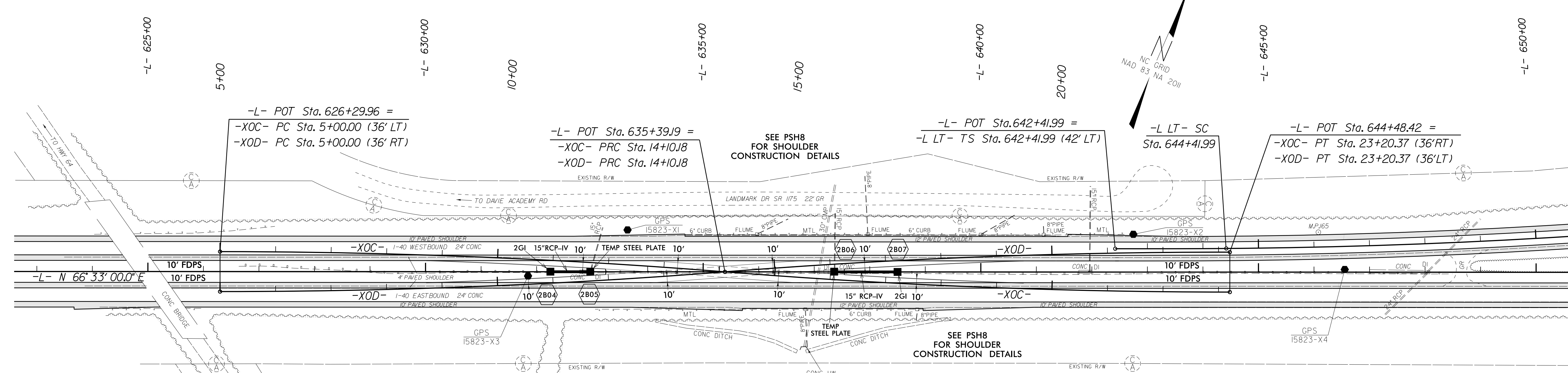
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 15823

PROJECT REFERENCE NO. 1-5823	SHEET NO. 2B-1
RW SHEET NO.	
ROADWAY DESIGN ENGINEER SCOTT A. JONES	HYDRAULICS ENGINEER SCOTT A. JONES
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	



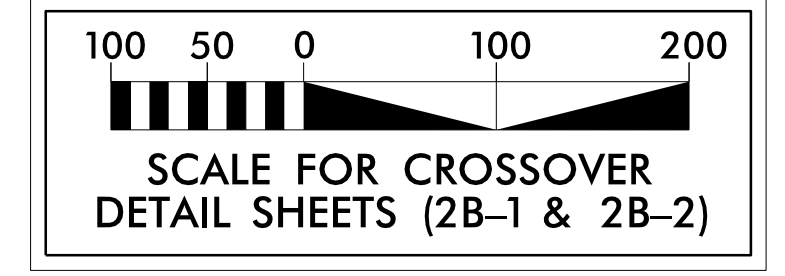
DETAIL OF CROSSOVERS -XOA- & -XOB-

-L-	-XOA-	-XOB-	-XOA-	-XOB-	-XOA-	-XOB-
PI Sta 533+18.22	PI Sta 5+24.26	PI Sta 9+67.26	PI Sta 18+43.01	PI Sta 7+08.95	PI Sta 11+44.73	PI Sta 18+36.50
Fs = 0° 45' 00.0"	Δ = 0° 21' 56.3" (LT)	Δ = 4° 10' 14.5" (RT)	Δ = 4° 33' 18.5" (LT)	Δ = 3° 07' 07.6" (LT)	Δ = 2° 15' 39.6" (LT)	Δ = 4° 37' 47.5" (RT)
Ls = 200.00'	D = 0° 45' 12.8"	D = 0° 29' 53.6"	D = 0° 29' 53.6"	D = 0° 44' 47.3"	D = 0° 29' 53.6"	D = 0° 29' 53.6"
LT = 133.33'	L = 48.52'	L = 837.11'	L = 914.27'	L = 417.80'	L = 453.81'	L = 929.27'
ST = 66.67'	T = 24.26'	T = 418.74'	T = 457.38'	T = 208.95'	T = 226.94'	T = 464.89'
	R = 7,603.44'	R = 11,500.00'	R = 11,500.00'	R = 7,675.44'	R = 11,500.00'	R = 11,500.00'



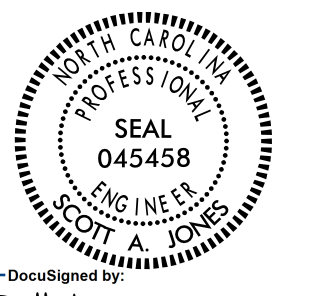
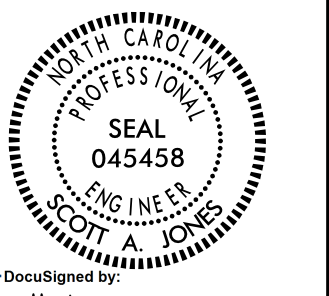
DETAIL OF CROSSOVERS -XOC- & -XOD-

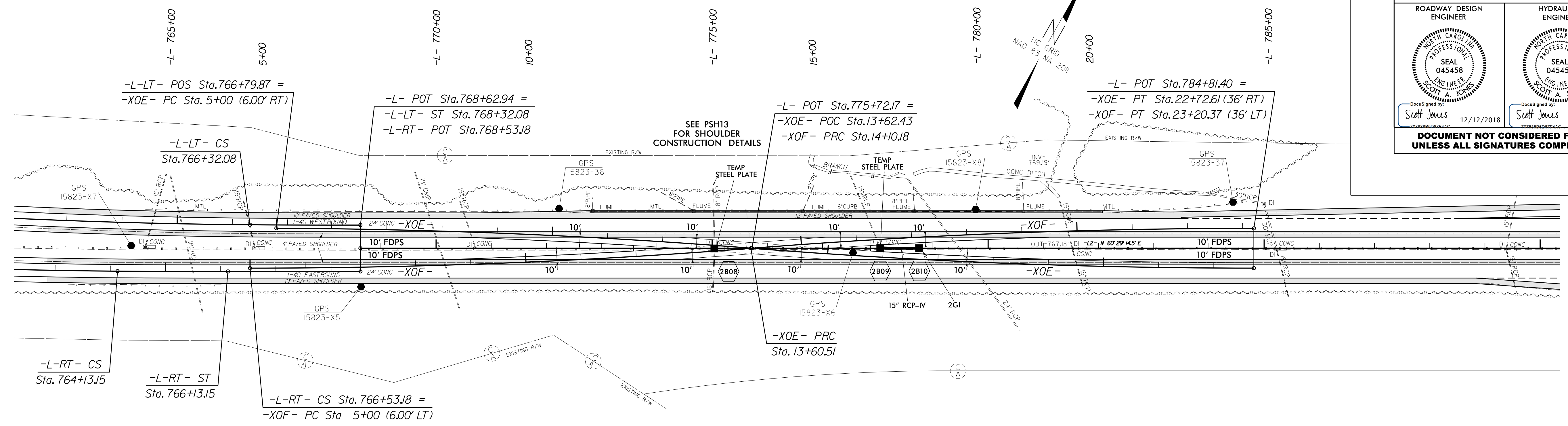
-XOC-	-XOD-	-XOC-	-XOD-
PI Sta 9+55.33	PI Sta 18+65.51	PI Sta 9+55.33	PI Sta 18+65.51
Δ = 4° 32' 05.1" (RT)	Δ = 4° 32' 05.1" (LT)	Δ = 4° 32' 05.1" (LT)	Δ = 4° 32' 05.1" (RT)
D = 0° 29' 53.6"	D = 0° 29' 53.6"	D = 0° 29' 53.6"	D = 0° 29' 53.6"
L = 910.18'	L = 910.18'	L = 910.18'	L = 910.18'
T = 455.33'	T = 455.33'	T = 455.33'	T = 455.33'
R = 11,500.00'	R = 11,500.00'	R = 11,500.00'	R = 11,500.00'



REVISIONS

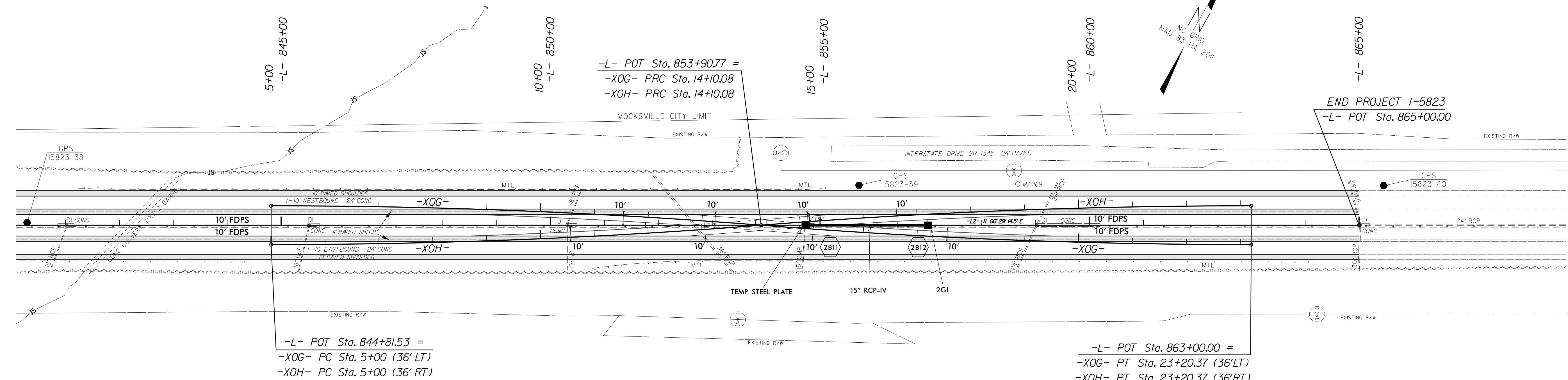
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PROJECT REFERENCE NO. 1-5823	SHEET NO. 2B-2
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
 Scott A. Jones 12/12/2018	 Scott A. Jones 12/12/2018
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	



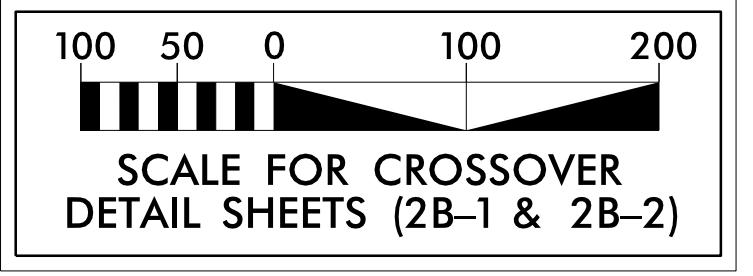
DETAIL OF CROSSOVERS -XOE- & -XOF-

-XOE-		-XOF-	
PI Sta 9+30.46	PI Sta 18+16.80	PI Sta 9+55.33	PI Sta 18+65.51
$\Delta = 4' 17'' 14.2''$ (RT)	$\Delta = 4' 32'' 39.5''$ (LT)	$\Delta = 4' 32'' 05.1''$ (LT)	$\Delta = 4' 32'' 05.1''$ (RT)
$D = 0' 29'' 53.6''$	$D = 0' 29'' 53.6''$	$D = 0' 29'' 53.6''$	$D = 0' 29'' 53.6''$
$L = 860.5'$	$L = 912.10'$	$L = 910.18'$	$L = 910.18'$
$T = 430.46'$	$T = 456.29'$	$T = 455.33'$	$T = 455.33'$
$R = 11,500.00'$	$R = 11,500.00'$	$R = 11,500.00'$	$R = 11,500.00'$



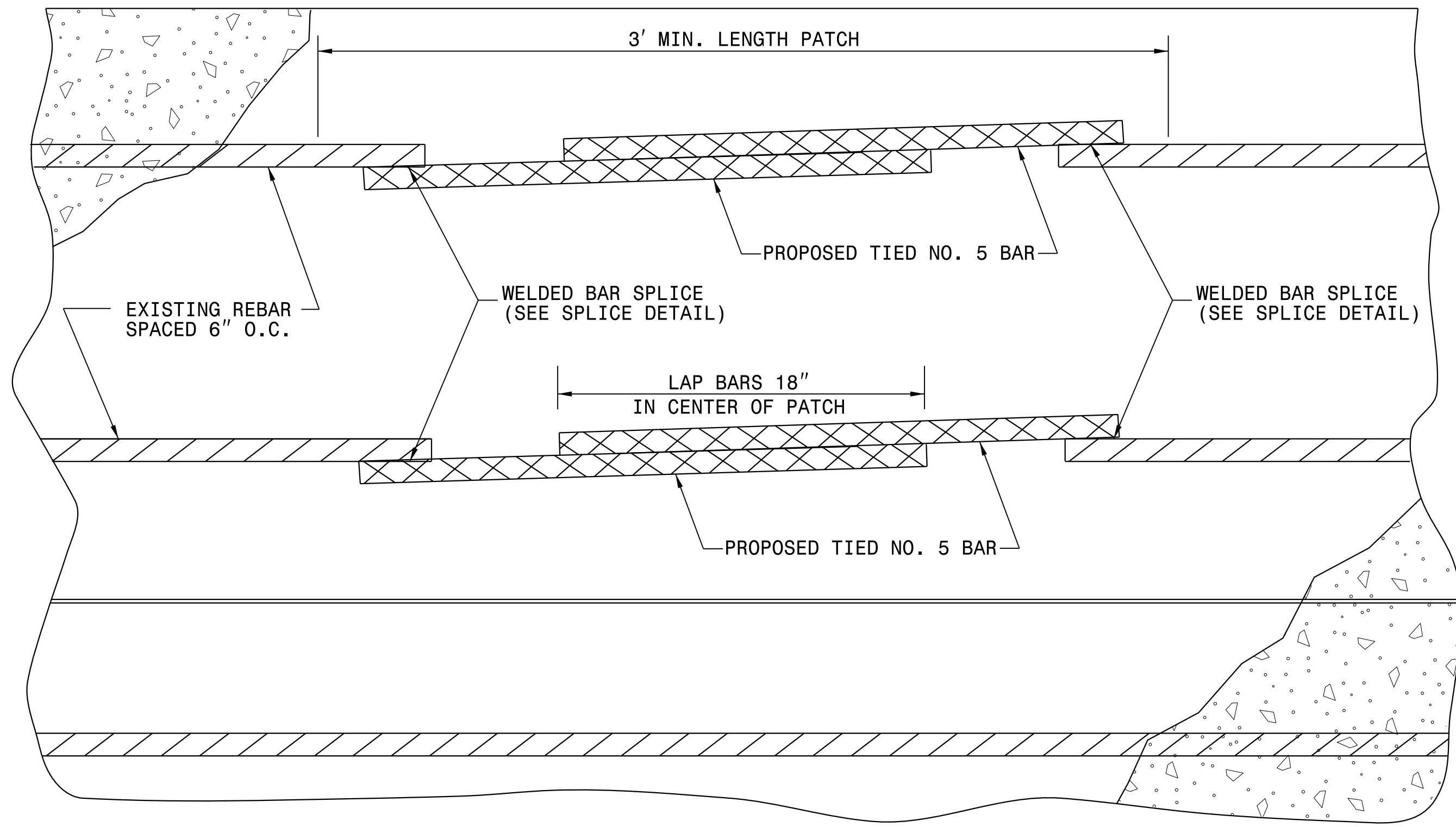
DETAIL OF CROSSOVERS -XOG- & -XOH-

-XOG-		-XOH-	
PI Sta 9+55.33	PI Sta 18+65.51	PI Sta 9+55.33	PI Sta 18+65.51
$\Delta = 4' 32'' 05.1''$ (RT)	$\Delta = 4' 32'' 05.1''$ (LT)	$\Delta = 4' 32'' 05.1''$ (LT)	$\Delta = 4' 32'' 05.1''$ (RT)
$D = 0' 29'' 53.6''$	$D = 0' 29'' 53.6''$	$D = 0' 29'' 53.6''$	$D = 0' 29'' 53.6''$
$L = 910.18'$	$L = 910.18'$	$L = 910.18'$	$L = 910.18'$
$T = 455.33'$	$T = 455.33'$	$T = 455.33'$	$T = 455.33'$
$R = 11,500.00'$	$R = 11,500.00'$	$R = 11,500.00'$	$R = 11,500.00'$

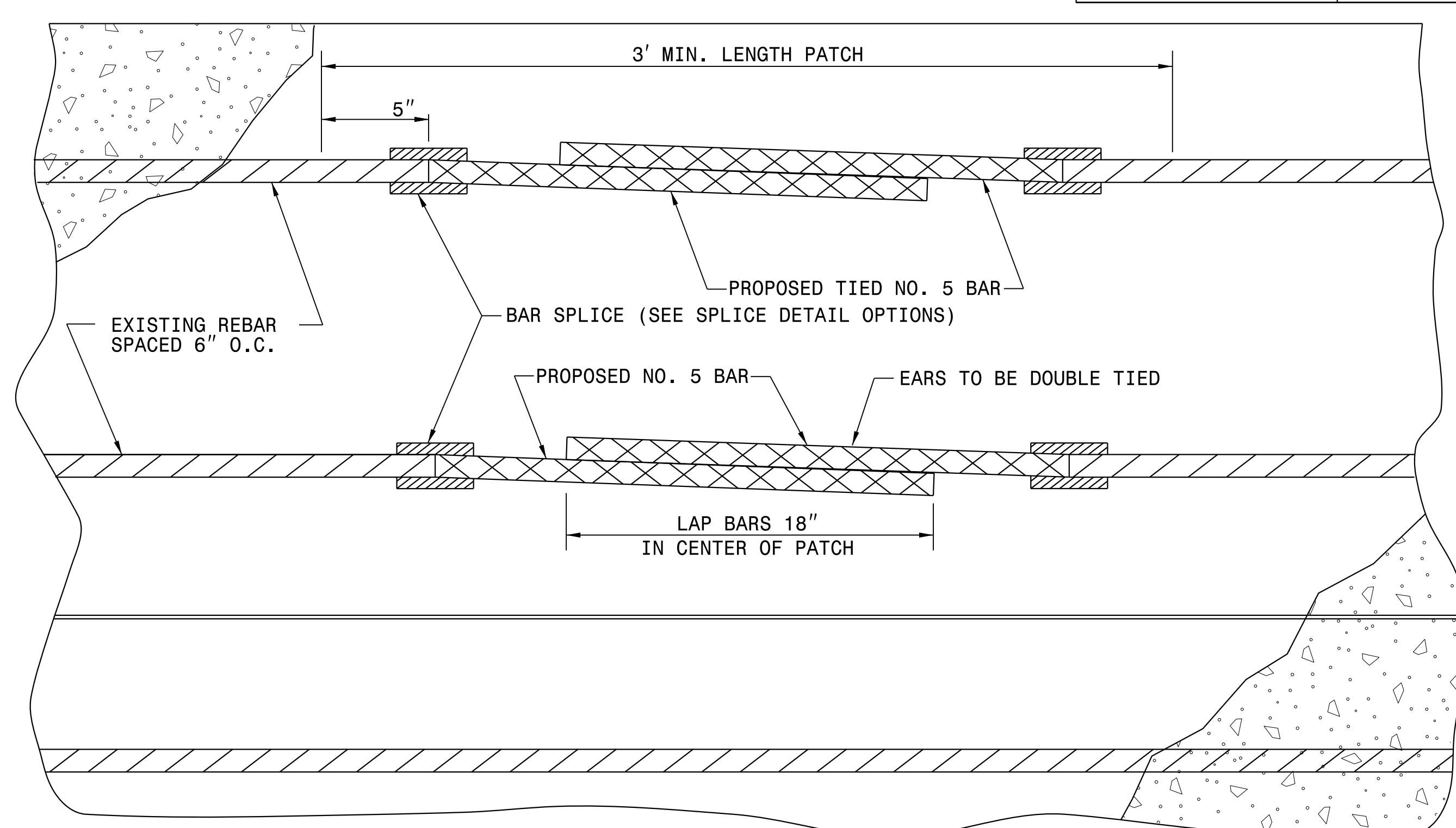


8/17/99
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 Scott A. Jones

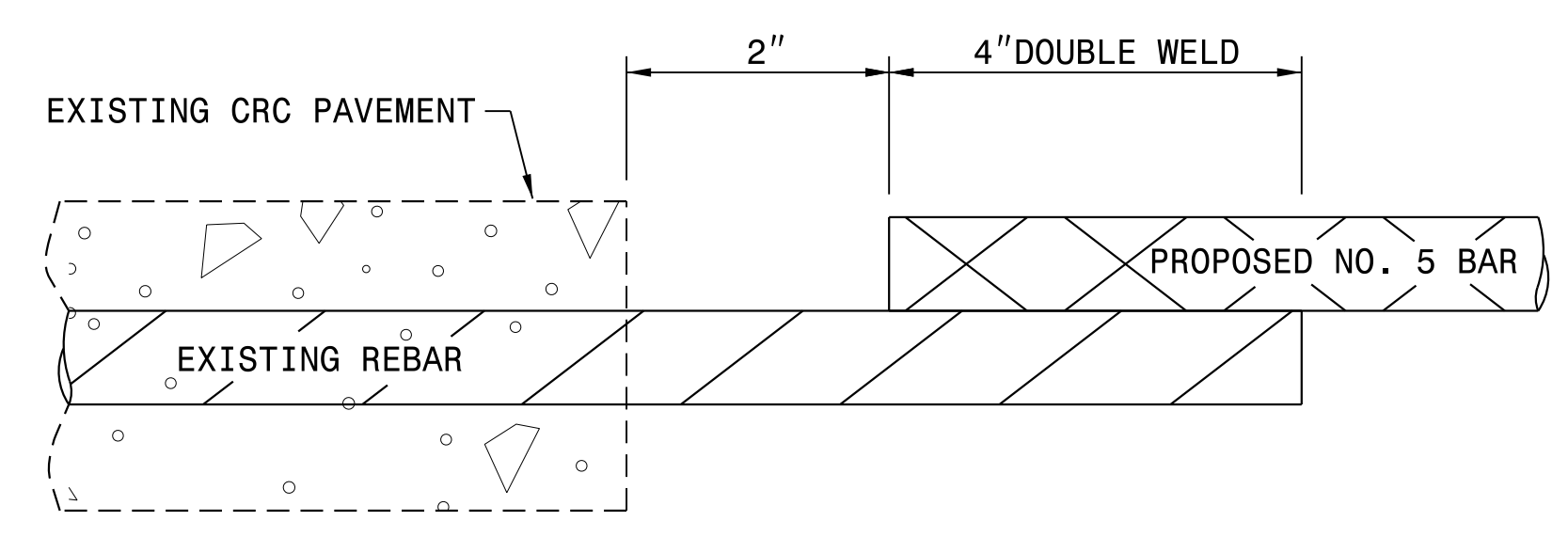
5/14/99



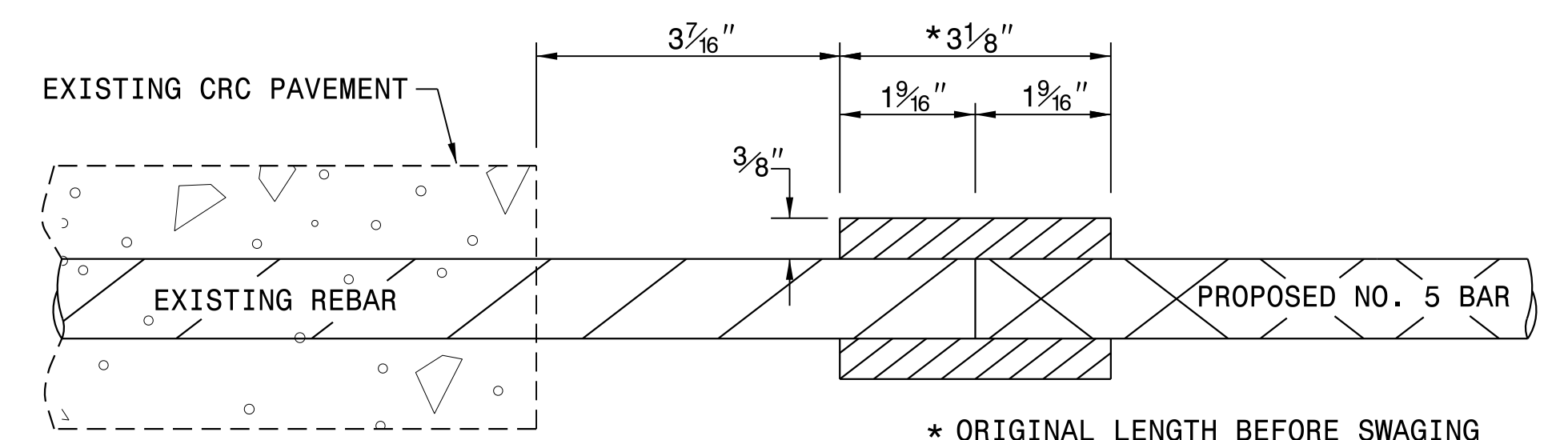
PLAN



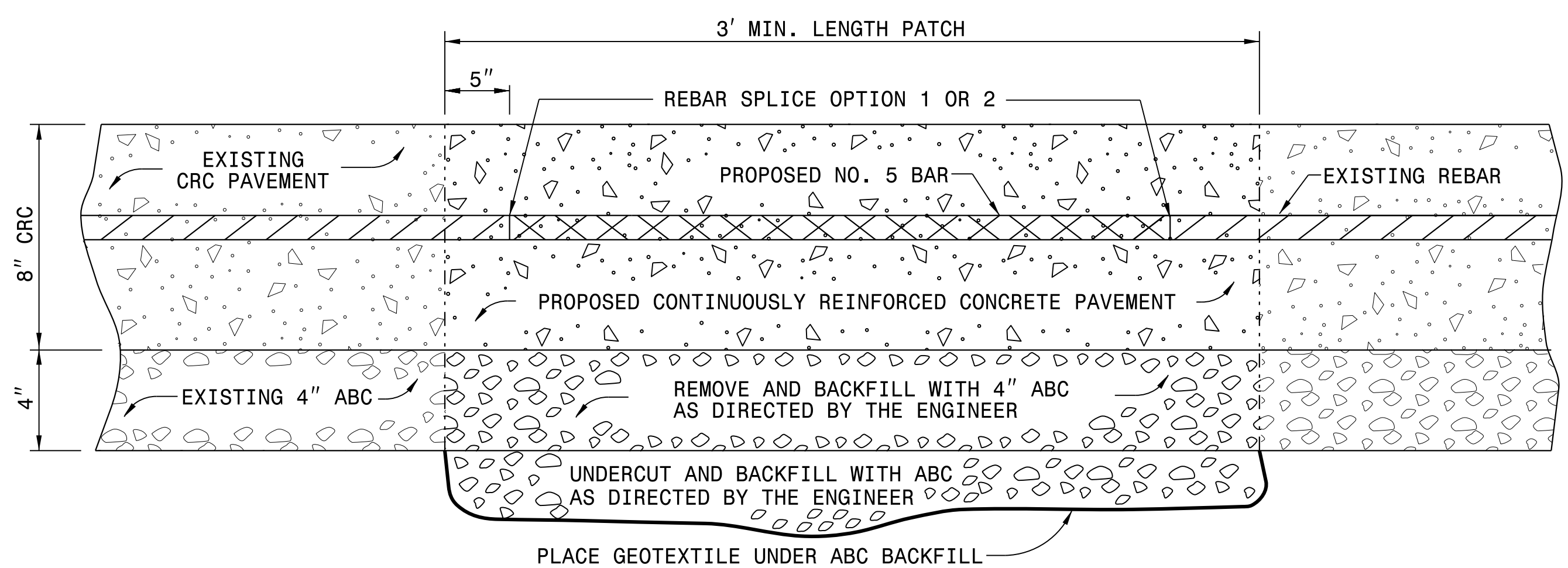
PLAN



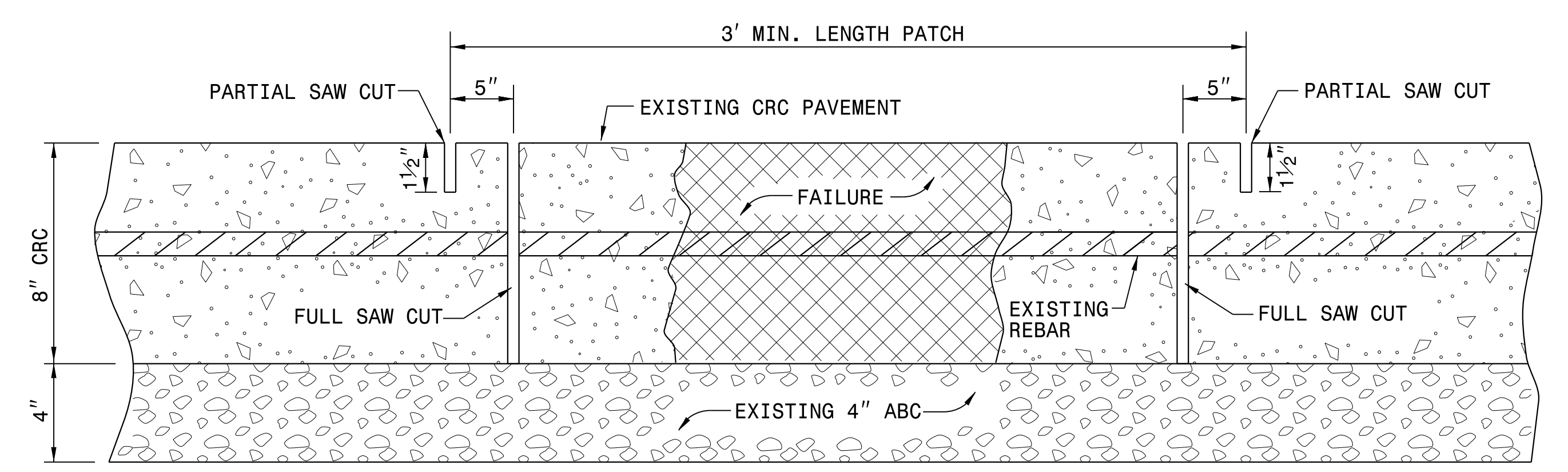
OPTION 1 - DETAIL OF WELDED SPLICE



OPTION 2 - DETAIL OF MECHANICAL SPLICE

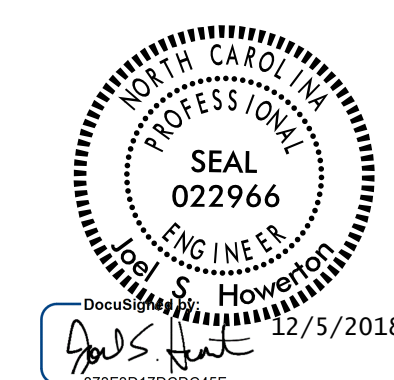


DETAIL OF CONCRETE PAVEMENT REMOVAL AND REPLACEMENT

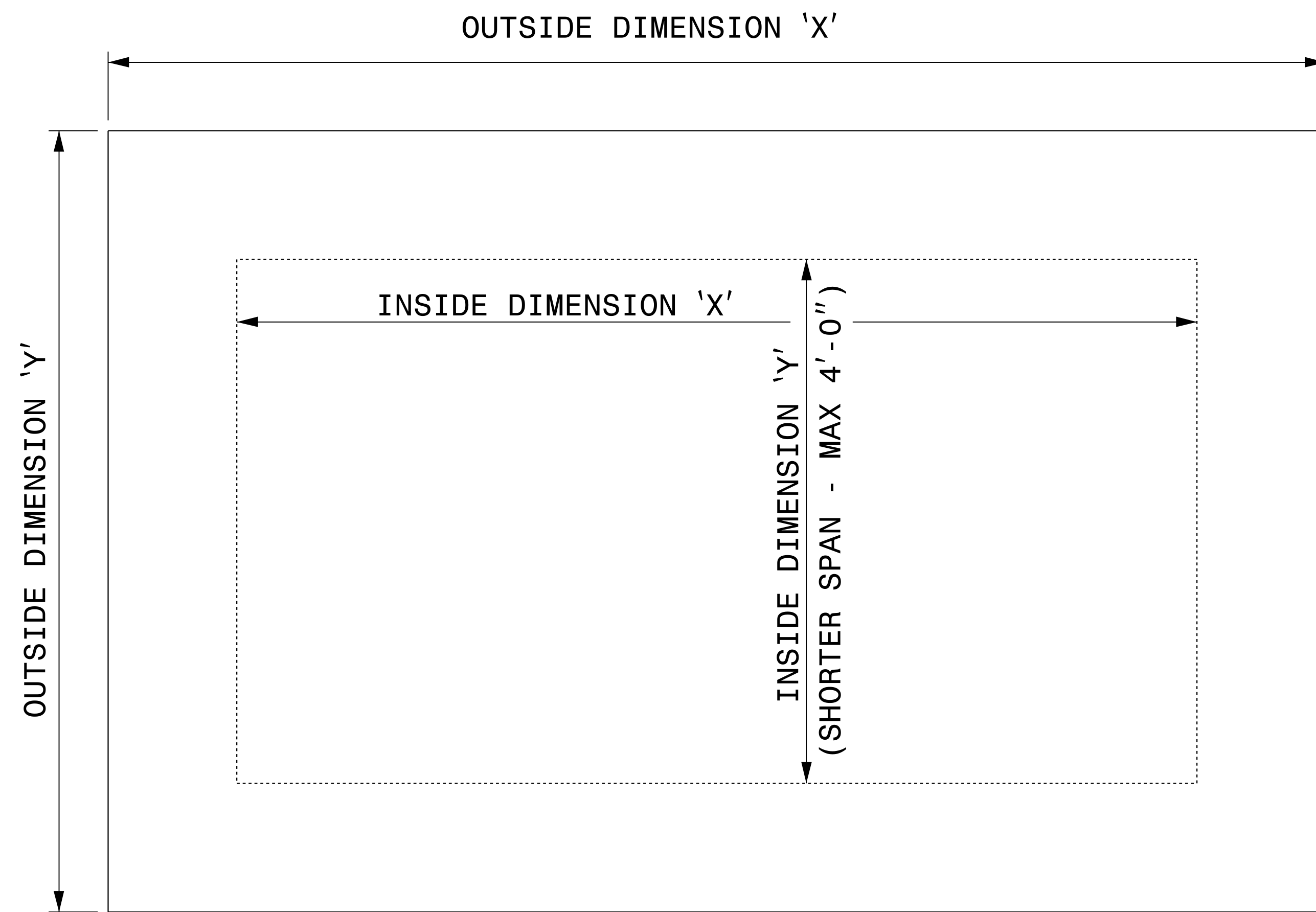


DETAIL OF SAW CUTS

PLACE BAR SUPPORTS ON 5' CENTERS FOR PATCHES GREATER THAN 10' IN LENGTH AND AT CENTER OF PATCH FOR REPAIRS LESS THAN 10'. HEIGHT OF SUPPORTS DETERMINED BY THE CONTRACTOR.

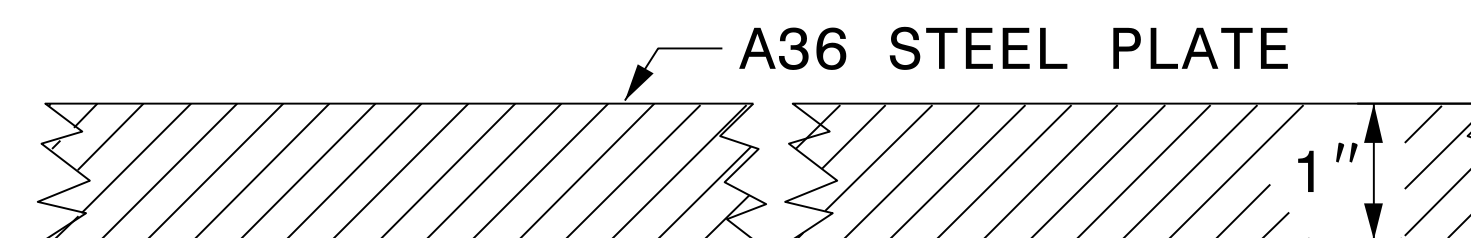


CONTRACT STANDARDS AND DEVELOPMENT UNIT	
Office 919-707-6950	FAX 919-250-4119
DETAIL FOR REPAIR OF CONTINUOUSLY REINFORCED CONCRETE PAVEMENT	
ORIGINAL BY: E.E. WARD	DATE: 4-98
MODIFIED BY: JSH	DATE: 6-13
CHECKED BY:	DATE:
FILE SPEC.: usr/details/stand/crcrepair.dgn	



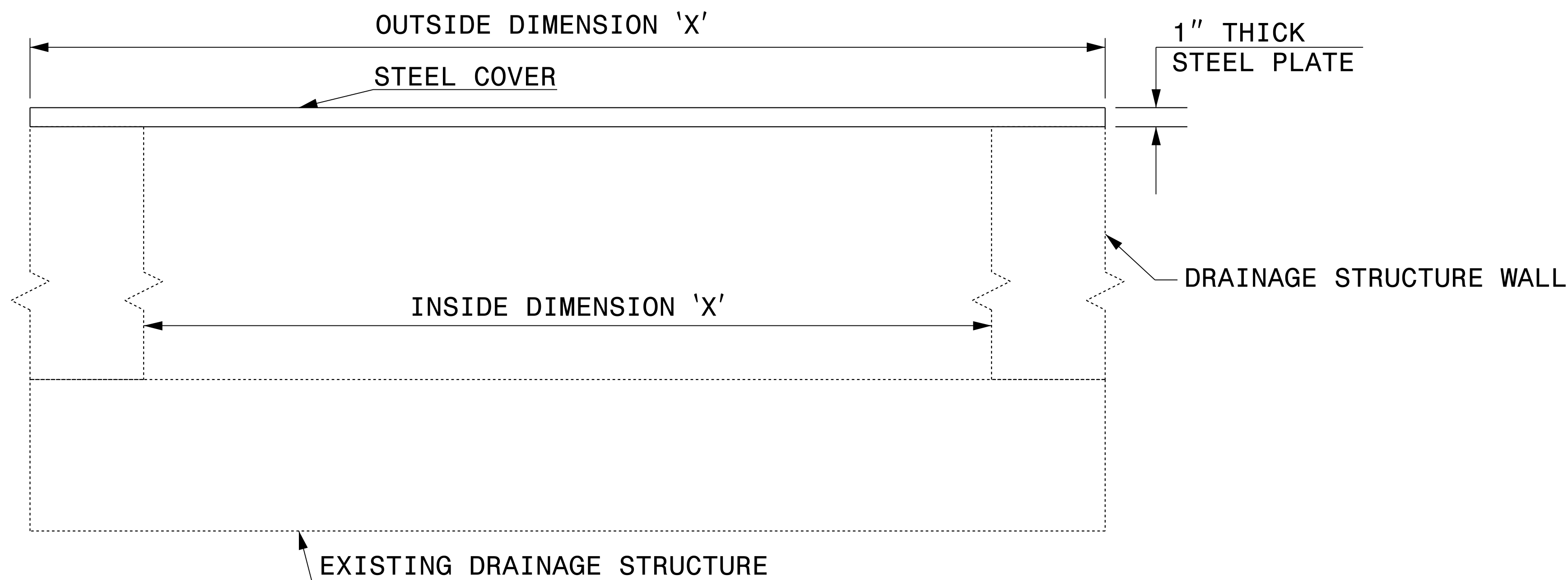
GENERAL NOTES:

- USE GRADE A36 STEEL
- STEEL COVERS ARE FOR TEMPORARY USE DURING PHASE CONSTRUCTION.
- FILL SHALL BE PLACED DIRECTLY OVER THE STEEL PLATES.
- SEE ROADWAY PLANS AND PROVISIONS FOR LOCATIONS
- QUANTITIES TO BE PAID FOR AT THE UNIT PRICE BID PER EACH.



SECTION VIEW OF STEEL TOP PLATE

PLAN VIEWS



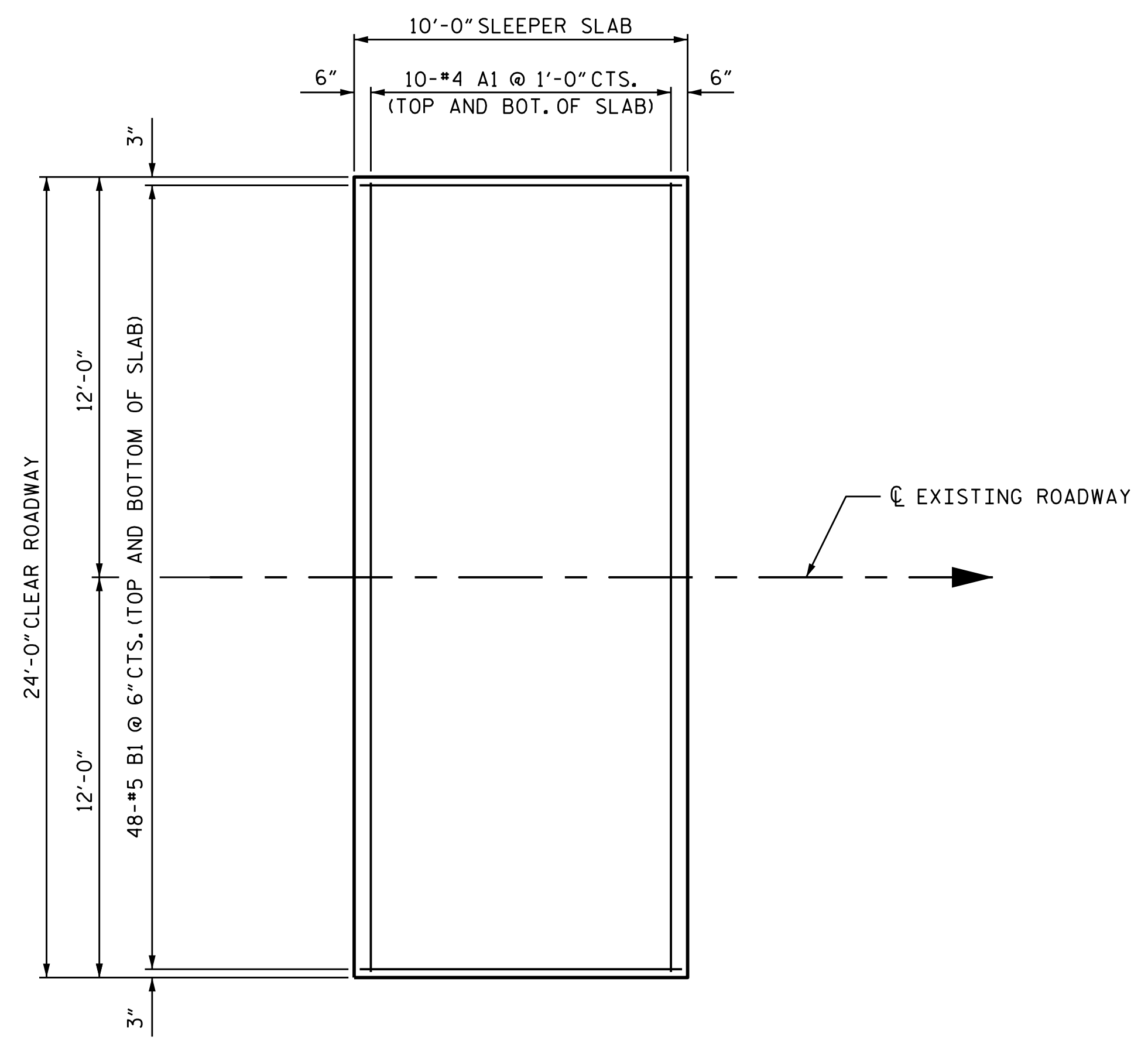
ELEVATION VIEWS



DocuSigned by:
Joseph S. Howerton
12/5/2018

DOCUMENT NOT CONSIDERED FINAL
UNLESS ALL SIGNATURES COMPLETED

CONTRACT STANDARDS AND DEVELOPMENT UNIT	
Office 919-707-6950	FAX 919-250-4119
DETAIL OF TEMPORARY 1" STEEL COVER OVER DRAINAGE STRUCTURE	
ORIGINAL BY: E.E. WARD	DATE: 2-2-98
MODIFIED BY:	DATE:
CHECKED BY:	DATE:
FILE SPEC.: eric:/usr/details/metric/stand/stlcvr2.dgn	



PLAN OF SLEEPER SLAB

NOTES

FOR 10" CONCRETE SLEEPER SLAB, SEE SPECIAL PROVISIONS.

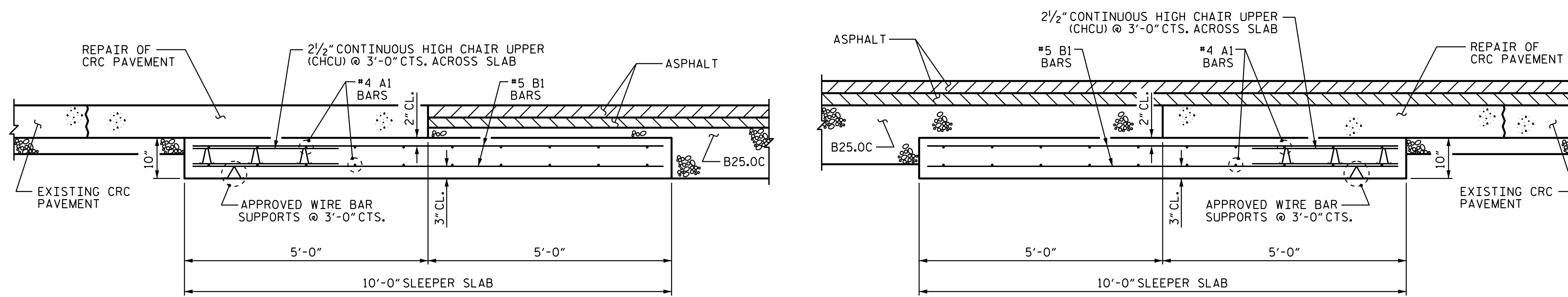
BILL OF MATERIAL

FOR ONE SLEEPER SLAB
(10 REQ'D)

BAR	NO.	SIZE	TYPE	LENGTH	WEIGHT
A1	20	#4	STR	23'-8"	316
B1	96	#5	STR	9'-8"	968

REINFORCING STEEL 1284 LBS.

CLASS AA CONCRETE 7.4 C.Y.



SECTION THRU SLAB

SEE SHEET 2B-1 FOR PAVEMENT SCHEDULE

PROJECT NO. I-5823
DAVIE COUNTY
 STATION: 519+00.00 -L-
TO 865+00.00 -L-



DocuSigned by:
 T.H. Carroll, III
 11/27/2018

STATE OF NORTH CAROLINA
 DEPARTMENT OF TRANSPORTATION
 RALEIGH

**10" CONCRETE
 SLEEPER SLAB**

DRAWN BY : M.A. ALLEN DATE : 11/2018
 CHECKED BY : T.H. CARROLL DATE : 11/2018

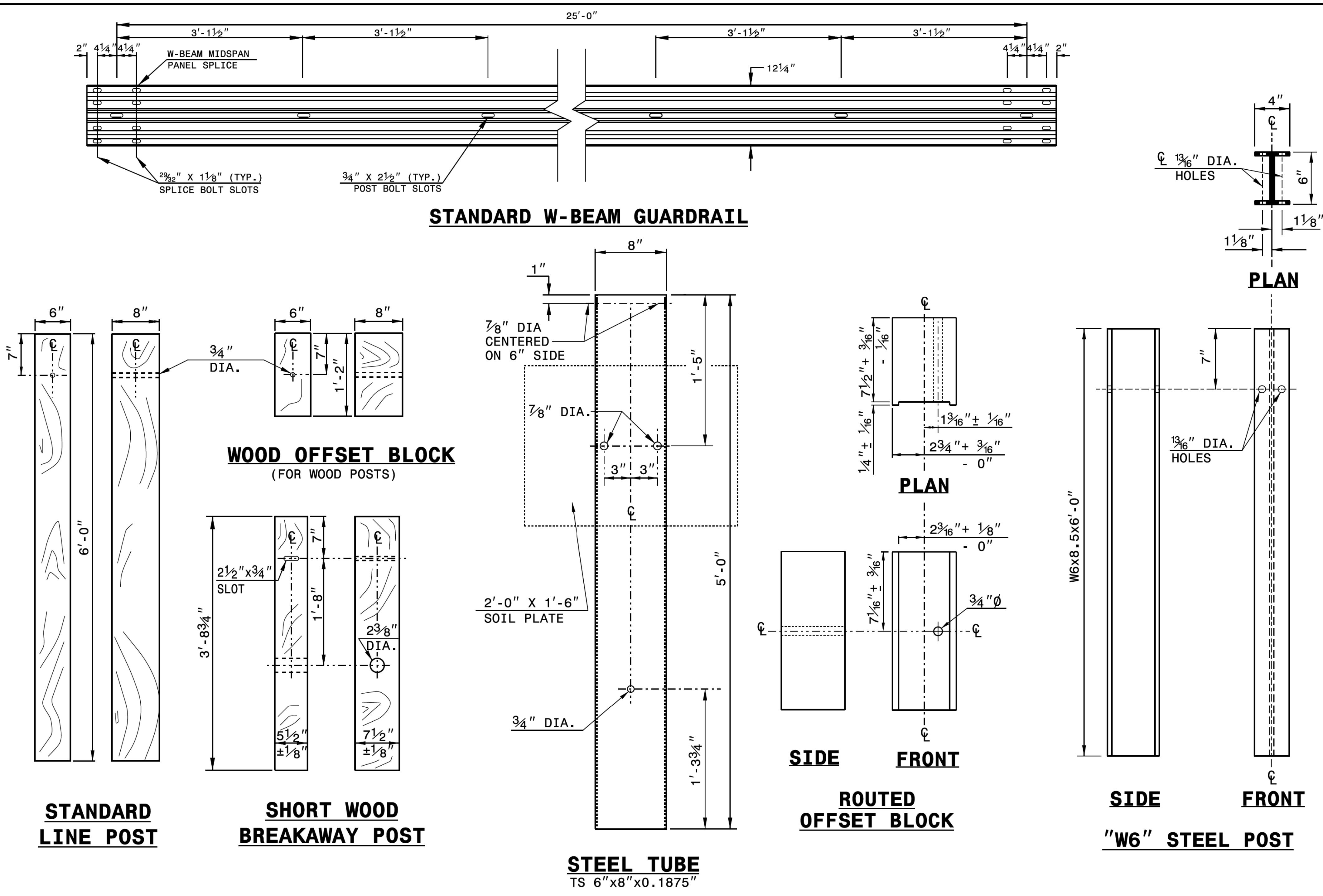
DOCUMENT NOT CONSIDERED
 FINAL UNLESS ALL
 SIGNATURES COMPLETED

REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	2C-3
1			3			
2			4			

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

ROADWAY DETAIL DRAWING FOR
GUARDRAIL INSTALLATION

SHEET 6 OF 8
862D02

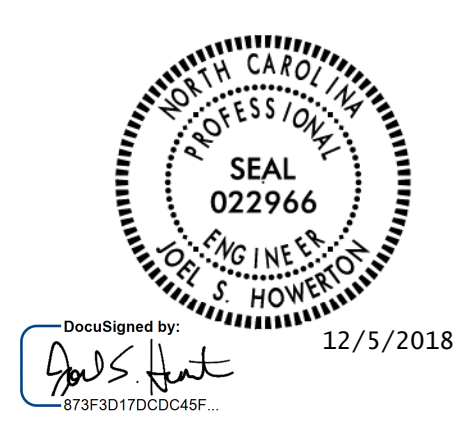


STATE OF
NORTH CAROLINA
DEPT. OF TRANSPORTATION
DIVISION OF HIGHWAYS
RALEIGH, N.C.

ROADWAY DETAIL DRAWING FOR
GUARDRAIL INSTALLATION

SHEET 6 OF 8
862D02

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 5/14/99



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

SEE TITLE BLOCK

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

SUMMARY OF CONTINUOUSLY REINFORCED CONCRETE PAVEMENT REPAIR

IN SQUARE YARDS (SY)

LOCATION	MILEPOST	MILEPOST	LANE (LTRT)	YD ²	NO. # OF PUNCHOUT	TOTAL REPAIRS AND REMOVAL (SY)
EBL	162.00	163.00	LT	10.67	3	32
			RT	10.67	23	245.33
EBL	163.00	164.00	LT	10.67	10	106.67
			RT	10.67	18	192
EBL	164.00	165.00	LT	10.67	9	96
			RT	10.67	22	160
EBL	165.00	166.00	LT	10.67	15	160
			RT	10.67	40	426.67
EBL	166.00	167.00	LT	10.67	15	160
			RT	10.67	15	160
EBL	167.00	168.00	LT	10.67	4	42.67
			RT	10.67	23	245.33
EBL	168.00	169.00	LT	10.67	4	42.67
			RT	10.67	23	245.33
EBL	169.00	170.00	LT	10.67	6	64
			RT	10.67	9	96
WBL	162.00	163.00	LT	10.67	9	96
			RT	10.67	21	224
WBL	163.00	164.00	LT	10.67	2	21.33
			RT	10.67	28	298.67
WBL	164.00	165.00	LT	10.67	3	32
			RT	10.67	14	149.33
WBL	165.00	166.00	LT	10.67	0	0
			RT	10.67	15	160
WBL	166.00	167.00	LT	10.67	0	0
			RT	10.67	1	10.67
WBL	167.00	168.00	LT	10.67	0	0
			RT	10.67	2	21.33
WBL	168.00	169.00	LT	10.67	6	64
			RT	10.67	2	21.33
TOTAL:						3654.66
SAY:					350	3660

*LTRT LANE LOCATION IS RELATIVE TO DIRECTION OF TRAVEL.

SUMMARY OF ASPHALT PAVEMENT REMOVAL

IN SQUARE YARDS

LINE	STA TO STA	LOCATION	SQ. YDS.
L	519+00 TO 642+48	OUTSIDE	27,440
L	519+00 TO 642+48	MEDIAN	10,976
L-LT	642+48 TO 768+54	OUTSIDE	13982.22
	642+48 TO 768+54	MEDIAN	5592.89
L-RT	665+71 TO 768+54	OUTSIDE	13721.11
	665+71 TO 768+54	MEDIAN	4570.22
L	768+54 TO 865+00	OUTSIDE	21435.56
L	768+54 TO 865+00	MEDIAN	8574.22
XOVER AB		MEDIAN	2777.78
XOVER CD		MEDIAN	2777.78
XOVER EF		MEDIAN	2777.78
XOVER GH		MEDIAN	2777.78
TOTAL			117,403.33
SAY			117,410

STATE OF NORTH CAROLINA DIVISION OF HIGHWAYS

SUMMARY OF CONCRETE PAVEMENT SLAB REMOVAL

IN SQUARE YARDS

LINE	STA TO STA	LOCATION	SQ. YDS.
L-LT	697+41 TO 701+14	WB	995
L-LT	703+35 TO 706+30	WB	787
L-RT	698+38 TO 701+68	EB	880
L-RT	703+90 TO 707+26	EB	896
TOTAL			3558
SAY			3560

SUMMARY OF EARTHWORK

IN CUBIC YARDS

LOCATION	UNCLASSIFIED EXCAVATION	UNDERCUT	EMBANKMENT (+%)	BORROW	WASTE
LEFT					
-L- 519+00 TO 665+71	7,180				7,180
-L-LT- 642+48 TO 768+32	13,842				13,842
-L-RT- 665+71 TO 768+54	11,311				11,311
-L- 768+54 TO 865+00	5,609				5,609
MEDIAN					
-L- 519+00 TO 665+71	12,805				12,805
-L- 768+54 TO 865+00	10,003				10,003
RIGHT					
-L- 519+00 TO 665+71	7,180				7,180
-L-LT- 642+48 TO 768+32	7,318				7,318
-L-RT- 665+71 TO 768+54	5,980				5,980
-L- 768+54 TO 865+00	5,609				5,609
CROSSOVERS*					
	16,200		18,630	18,630	16,200
SHOULDER MATERIAL					
-L- 519+00 TO 665+71			19,112		19,112
-L-LT- 642+48 TO 768+32			13,807		13,807
-L-RT- 665+71 TO 768+54			12,283		12,283
-L- 768+54 TO 865+00			14,932		14,932
EXPRESSWAY GUTTER AND MEDIAN BORROW AREAS NOT INCLUDED ABOVE					
EOT 1			599	599	
EOT 2			539	539	
EOT 3			271	271	
EOT 4			367	367	
EOT 5			323	323	
EOT 6			268	268	
EOT 7			623	623	
EOT 8			89	89	
EOT 9			4,635	4,635	
EOT 10			4,433	4,433	
EOT 11			1,512	1,512	
EOT 12			1,396	1,396	
SUBTOTAL					
	103,037	93,827	93,827	103,037	
<small>AS PER DIVISION ESTIMATED 50% OF UNCLASSIFIED EXCAVATION SUITABLE FOR SHOULDER CONSTRUCTION TO BE USED IN LIEU OF SHOULDER MATERIAL</small>					
				-51,519	-51,519
SUBTOTAL					
	103,037	93,827	42,308	51,518	
+5% TO REPLACE TOPSOIL AT BORROW PIT					
				2115	
GRAND TOTAL					
	103,037	93,827	44,423	51,518	
SAY					
	103,100		44,500		
ESTIMATED SHALLOW UNDERCUT = 12,900 CY (SEE SHEET 3G-1)					

*NOTE: QUANTITIES FOR EXCAVATION AND WASTE COVER THE REMOVAL OF THE CROSSOVERS ONCE CONSTRUCTION IS COMPLETE.

CONTINGENCY ITEM: ESTIMATED DDE = 914 CY

GUARDRAIL SUMMARY

SURVEY LINE	BEG. STATION	END STATION	LOCATION	LENGTH		ANCHORS (MASH APPROVED)			RELAP GUARDRAIL	REMOVE EXISTING GUARDRAIL	TEMPORARY GUARDRAIL	REMARKS
				STRAIGHT	SHOP CURVED	GREU TL-3	CAT-1	B-77				
L	519+00	521+00	LT.	200		1				200		REMOVE & REPLACE TIE INTO EXISTING
L	519+00	520+00	RT. MED	100			1			100		REMOVE & REPLACE TIE INTO EXISTING
L	519+00	520+00	LT. MED	100		1				100		REMOVE & REPLACE TIE INTO EXISTING
L	525+94	534+94	RT.	907		1	1			907		REMOVE & REPLACE AT EXISTING LOCATION
L	528+93	539+83	LT.	1087		1	1			1087		REMOVE & REPLACE AT EXISTING LOCATION
L	549+69	553+00	RT.	331		1	1			331		REMOVE & REPLACE AT EXISTING LOCATION
L	551+94	555+17	LT.	324		1	1			324		REMOVE & REPLACE AT EXISTING LOCATION
L	555+58	570+27	RT.	1471		1	1			1471		REMOVE & REPLACE AT EXISTING LOCATION
L	557+58	570+17	LT.	1264		1	1			1264		REMOVE & REPLACE AT EXISTING LOCATION
L	581+50	588+70	RT.	718		1	1			718		REMOVE & REPLACE AT EXISTING LOCATION
L	596+32	604+09	LT.	777		1	1			777		REMOVE & REPLACE AT EXISTING LOCATION
L	617+92	625+96	RT.	805		1	1			805		REMOVE & REPLACE AT EXISTING LOCATION
L	624+03	627+29	LT.	326		1	1			326		REMOVE & REPLACE AT EXISTING LOCATION
L	633+05	639+01	RT.	595		1	1			595		REMOVE & REPLACE AT EXISTING LOCATION
L-LT	634+67	642+58	LT.	791		1	1			791		REMOVE & REPLACE AT EXISTING LOCATION
L	650+71	655+10	RT. MED	440		2			440	440		REMOVE & REPLACE AT EXISTING LOCATION
L	651+45	655+03	RT.	359		1	1			359		REMOVE & REPLACE AT EXISTING LOCATION
L-LT	652+69	660+07	LT.	738		1	1			738		REMOVE & REPLACE AT EXISTING LOCATION
L-LT	653+08	657+75	RT.	469		2			469	469		REMOVE & REPLACE AT EXISTING LOCATION
L-RT	667+12	683+29	LT.	1612		2			1612	1612		REMOVE & REPLACE AT EXISTING LOCATION
L-RT	672+69	680+96	RT.	832		1	1			832		REMOVE & REPLACE AT EXISTING LOCATION
L-LT	673+48	687+95	RT.	1447		2			1447	1447		REMOVE & REPLACE AT EXISTING LOCATION
L-LT	673+70	688+08	LT.	1438		1	1			1438		REMOVE & REPLACE AT EXISTING LOCATION
L-RT	692+66	701+62	LT.	897		1		1	897	905		REMOVE & REPLACE/TIE TO BRIDGE
L-LT	699+07	700+65	RT.	152		1		1	152	203		REMOVE & REPLACE/TIE TO BRIDGE
L-LT	699+07	700+65	LT.	157			1	1		204		REMOVE & REPLACE/TIE TO BRIDGE
L-RT	698+62	701+62	RT.	300		1		1		203		REMOVE /REPLACE /EXTEND & TIE TO BRIDGE
L-LT	703+05	706+04	RT.	302		1		1	302	166		REMOVE /REPLACE /EXTEND & TIE TO BRIDGE
L-LT	703+05	706+06	LT.	300		1		1		315		REMOVE & REPLACE/TIE TO BRIDGE
L-RT	704+02	709+00	LT.	500		1		1	500	513		REMOVE & REPLACE/TIE TO BRIDGE
L-RT	704+02	705+81	RT.	178			1	1		153		REMOVE /REPLACE /EXTEND & TIE TO BRIDGE
L-RT	729+23	732+01	LT.	278		2			278	278		REMOVE & REPLACE AT EXISTING LOCATION
L-LT	730+05	733+34	RT.	330		2			330	330		REMOVE & REPLACE AT EXISTING LOCATION
L-RT	742+90	758+90	RT.	1600		1	1			1600		REMOVE & REPLACE AT EXISTING LOCATION
L-LT	747+96	758+22	LT.	1026		1	1			1026		REMOVE & REPLACE AT EXISTING LOCATION
L-RT	763+23	766+01	RT.	279		1	1			279		REMOVE & REPLACE AT EXISTING LOCATION
L2-LT	764+42	784+70	LT.	2028		1	1			2028		REMOVE & REPLACE AT EXISTING LOCATION
L2	804+56	807+96	LT.	340		1	1			340		REMOVE & REPLACE AT EXISTING LOCATION
L2	804+67	806+93	RT.	225		1	1			225		REMOVE & REPLACE AT EXISTING LOCATION
L2	825+35	835+49	RT.	1016		1	1			1016		REMOVE & REPLACE AT EXISTING LOCATION
L2	828+01	836+21	LT.	820		1	1			820		REMOVE & REPLACE AT EXISTING LOCATION
L2	837+83	844+45	RT.	662		1	1			662		REMOVE & REPLACE AT EXISTING LOCATION
L2	841+23	855+12	LT.	1389		1	1			1389		REMOVE & REPLACE AT EXISTING LOCATION
L2	850+61	864+19	RT.	1358		1	1			1358		REMOVE & REPLACE AT EXISTING LOCATION
SUBTOTAL				31,268		47	30	8	6,427	31,144	4,000	
ANCHOR DEDUCTIONS												
GREU, TL-3 (47 x 50.0')				-2350.0								
CAT-1 (30 x 6.25')				-187.50								
B-77 (8 x 22.875')				-183.0								
TOTAL				28,547.50		47	30	8		31,144	4,000	
SAY				28,550		47	30	8	6,427	31,144	4,000	

SHOULDER DRAIN SUMMARY

SURVEY LINE	STA. TO STA.	LOCATION	4" PERFOR. PIPE (FT.)	SHOULDER DRAINS (FT.)	OUTLET STRUCTURE		
					4" PIPE (FT.)	DRAINAGE STRUCTURE	CONCRETE PAD
-L1-	551+00 TO 563+00	OUTSIDE, LT	1200	1200			
	551+00				24	DI	
	554+00				24		1
	557+00				24		1
	560+00				24	DI	
-L1-	583+00 TO 591+00	OUTSIDE, LT	800	800			
	586+00				24		1
	589+00				24		1
-L1-	623+00 TO 634+00	OUTSIDE, LT	1100	1100			
	623+00				24		1
	625+00				24	DI	
	628+00				24		1
	630+50				24		1
	633+00				24	DI	
	634+00				24		1
-L1-	680+00 TO 698+00	OUTSIDE, LT	1800	1800			
	683+00				24	DI	
	686+00				24		1
	689+00				24		1
	692+00				24		1
	695+00				24		1
-L1-	723+00 TO 740+00	OUTSIDE, LT	1700	1700			
	726+00				24		1
	729+00				24		1
	732+00				24		1
	735+00				24		1
	738+00				24		1
-L1-	794+00 TO 814+00	OUTSIDE, LT	2000	2000			
	794+00				24		1
	797+00				24	DI	
	800+00				24	DI	
	803+00				24		1
	806+00				24		1
	809+00				24		1
	810+00				24	DI	
	813+00				24	DI	
	814+00				24	DI	
-L1-	830+00 TO 850+00	OUTSIDE, LT	2000	2000			
	833+00				24		1
	835+00				24	DI	
	838+00				24	DI	
	841+00				24	DI	
	844+00				24		1
	845+50				24	DI	
	848+50				24		1
-L1-	551+00 TO 590+50	OUTSIDE, RT	3950	3950			
	551+00				24	DI	
	554+00				24		1
	557+00				24		1
	560+00				24	DI	
	563+00				24		1
	564+50				24	DI	
	566+00				24		1
	568+00				24	DI	
	571+00				24	DI	
	574+00				24		1
	576+00				24	DI	
	578+00				24		1
	580+00				24	DI	
	583+50				24	DI	
	586+00				24		1
	587+50				24		1
	590+50				24	DI	
-L1-	623+00 TO 634+00	OUTSIDE, RT	1100	1100			
	623+00				24		1
	625+00				24	DI	
	628+00				24		1
	630+50				24		1
	633+00				24	DI	
	634+00				24		1
-L1-	676+50 TO 740+00	OUTSIDE, RT	6350	6350			
	679+50				24		1
	682+50				24		1
	684+50				24	DI	
	687+50				24		1
	690+50				24		1
	693+50				24		1
	696+50				24		1
	699+50				24		1

SURVEY LINE	STA. TO STA.	LOCATION	4" PERFOR. PIPE (FT.)	SHOULDER DRAINS (FT.)	OUTLET STRUCTURE		
					4" PIPE (FT.)	DRAINAGE STRUCTURE	CONCRETE PAD
	701+50				24		1
	704+00				24		1
	707+00				24		1
	710+00				24		1
	713+00				24		1
	716+00				24		1
	719+00				24		1
	722+00				24		1
	725+00				24		1
	728+00				24		1
	731+00				24		1
	734+00				24		1
	737+00				24		1
	738+50				24		1
	740+00				24		1
-L1-	793+00 TO 814+00	OUTSIDE, RT	2100	2100			
	793+00				24	DI	
	795+00				24		1
	797+00				24	DI	
	800+00				24	DI	
	803+00				24		1
	806+00				24		1
	808+00				24		1
	810+00				24	DI	
	813+00				24	DI	
	814+00				24	DI	
-L1-	835+00 TO 850+00	OUTSIDE, RT	1500	1500			
	838+00				24	DI	
	841+00				24	DI	
	844+00				24		1
	845+50				24	DI	
	848+50				24		1
-L1-	563+00 TO 586+00	MEDIAN, LT	2300	2300			
	568+00				24	DI	
	571+00				24	DI	
	573+50				24		1
	576+00				24	DI	
	578+00				24		1
	580+00				24	DI	
	583+00				24		1
	586+00				24		1
-L1-	698+00 TO 723+00	MEDIAN, LT	2500	2500			
	701+50				24		1
	704+00				24		1
	706+50				24		1
	709+00				24		1
	711+50				24		1
	714+00				24		1
	716+50				24		1
	719+00				24		1
	721+00				24		1
	723+00				24		1
TOTALS			30400	30400	2808		78
SAY			30400	30400	2810		80

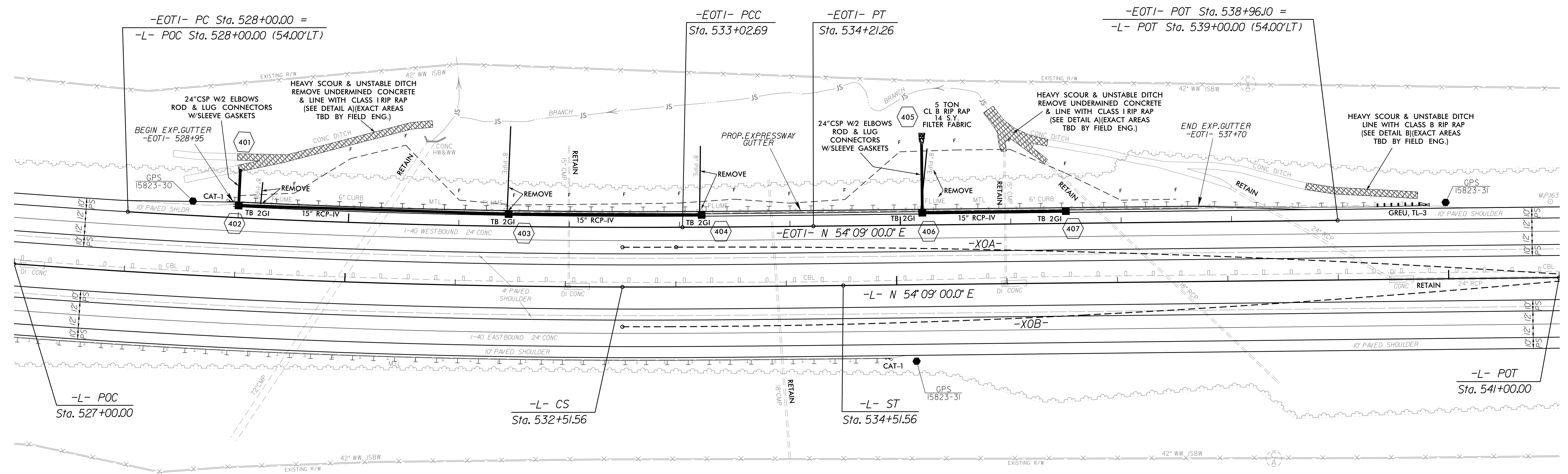
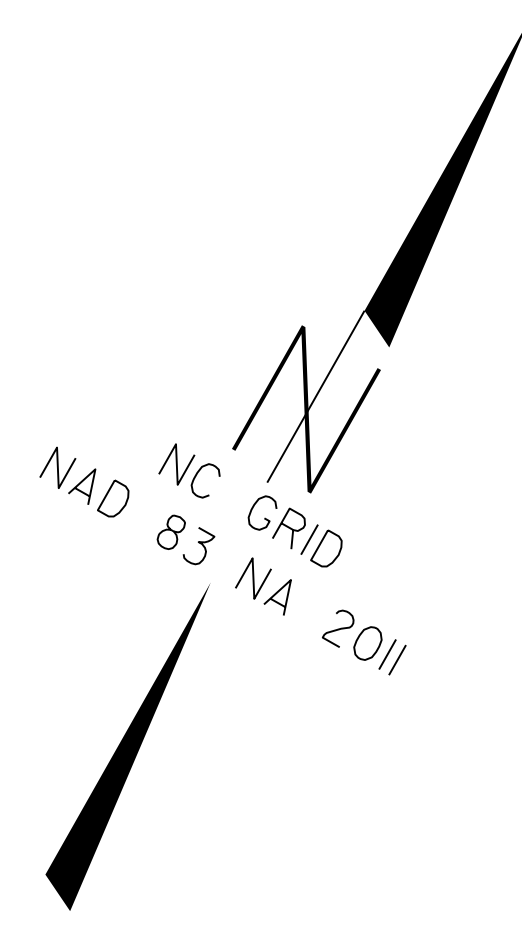
STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

SUMMARY OF AGGREGATE SUBGRADE/STABILIZATION

SURVEY LINE	BEG. STATION	END STATION	AGGREGATE TYPE ASU/AST	AGGREGATE THICKNESS (INCHES)	SHALLOW UNDERCUT (CUBIC YARDS)	CLASS IV SUBGRADE STABILIZATION (TONS)	GEOTEXTILE FOR SOIL STABILIZATION (SQ. YARDS)	STABILIZER AGGREGATE (TONS)	CLASS IV AGGREGATE STABILIZATION (TONS)
			ASU		12,900	17,200	26,300		
			AST					500	
			TOTALS		12,900	17,200	26,300	500	

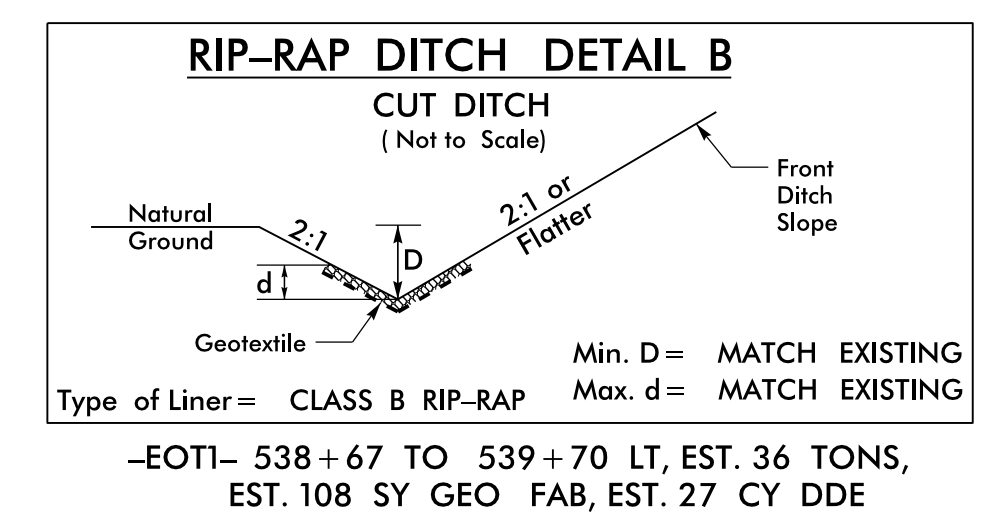
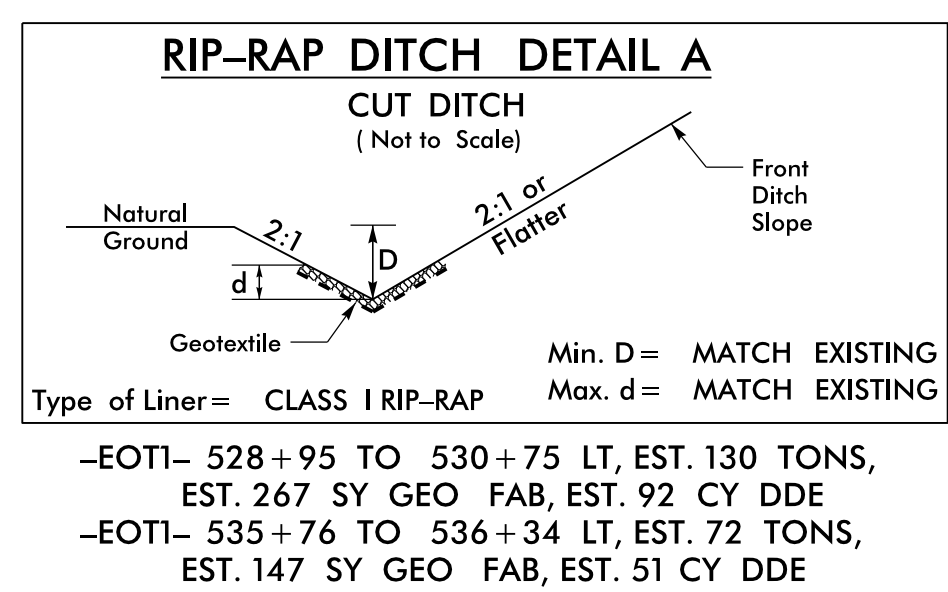
*ASU = AGGREGATE SUBGRADE
 *AST = AGGREGATE STABILIZATION
 **TOTAL SQUARE YARDS OF "GEOTEXTILE FOR SOIL STABILIZATION" IS ONLY THE ESTIMATED QUANTITY FOR ASU/AST AND MAY ONLY REPRESENT A PORTION OF THE GEOTEXTILE QUANTITY SHOWN IN THE ITEM SHEETS OF THE PROPOSAL
 NOTE: UNDERCUT QUANTITY APPROXIMATES 1' DEPTH OF MATERIAL REMOVAL BELOW EXISTING DITCH LINE

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**FOR CROSSOVER
ALIGNMENTS AND
DETAILS SEE SHEET 2B-1**

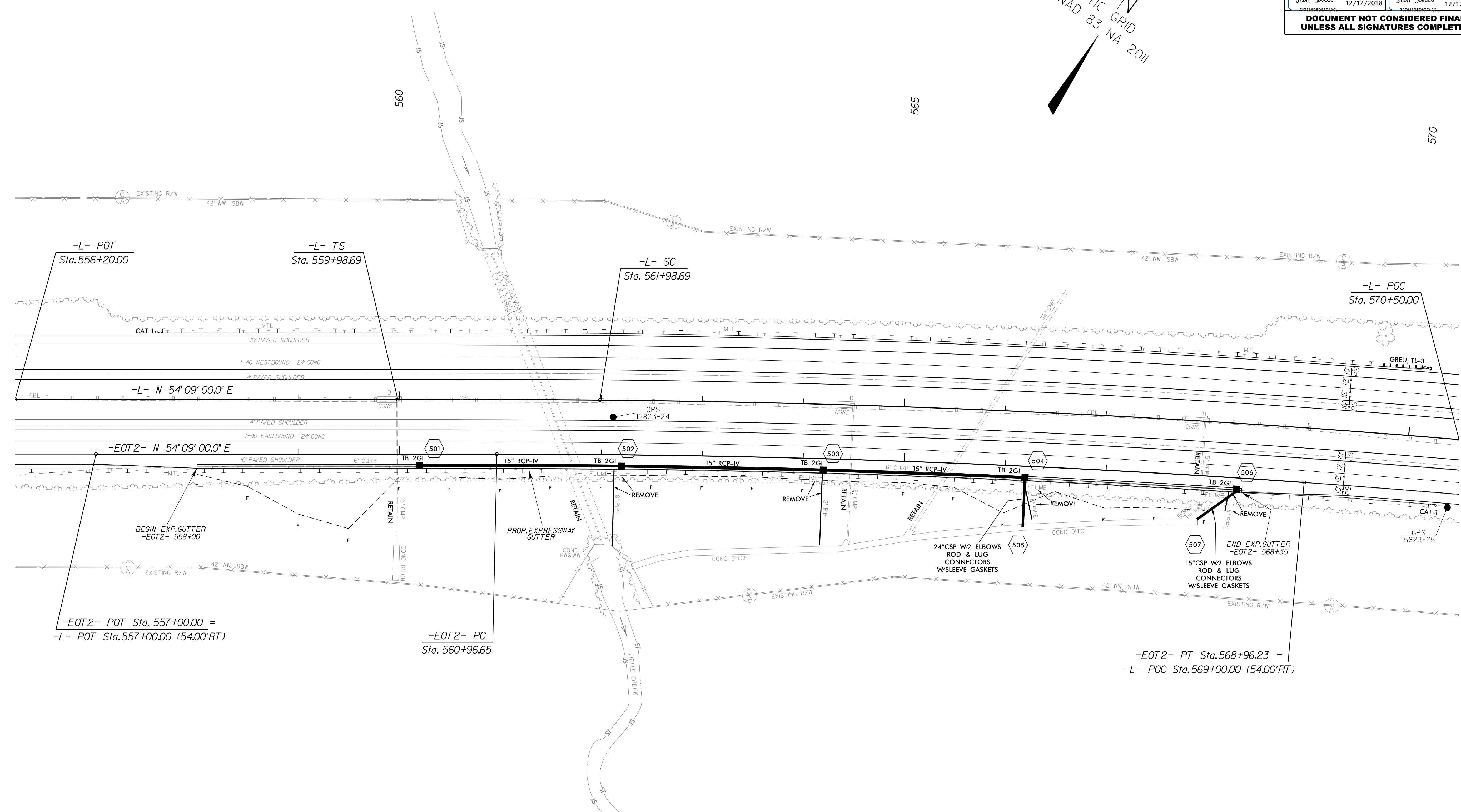
-L-		-EOTI-	
PI Sta 511+08.38	PIs Sta 533+18.22	PI Sta 530+51.44	PI Sta 533+61.97
$\Delta = 33^\circ 06' 00.0''$ (LT)	$F_s = 0^\circ 45' 00.0''$	$\Delta = 3^\circ 47' 49.2''$ (LT)	$\Delta = 0^\circ 20' 22.8''$ (LT)
$D = 0^\circ 45' 00.0''$	$L_s = 200.00'$	$D = 0^\circ 45' 19.2''$	$D = 0^\circ 17' 11.3''$
$L = 4,413.33'$	$LT = 133.33'$	$L = 502.69'$	$L = 118.57'$
$T = 2,270.16'$	$ST = 66.67'$	$T = 251.44'$	$T = 59.28'$
$R = 7,639.44'$		$R = 7,585.44'$	$R = 20,000.00'$



NOTE:
SEE SHEET X-1 TO X-8
FOR CROSS SECTIONS

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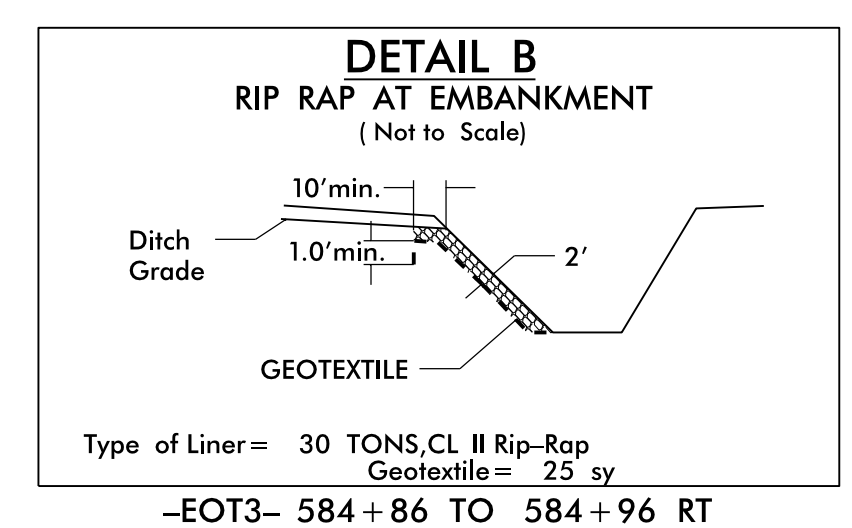
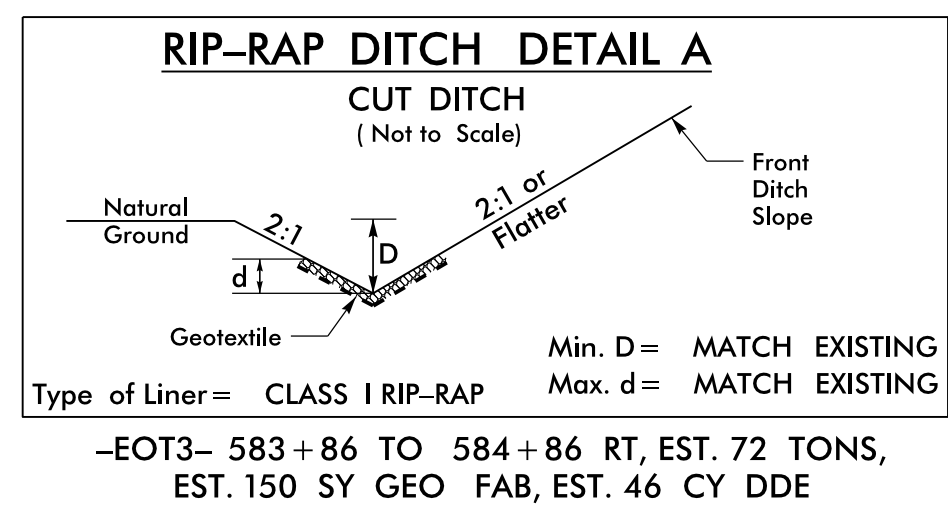
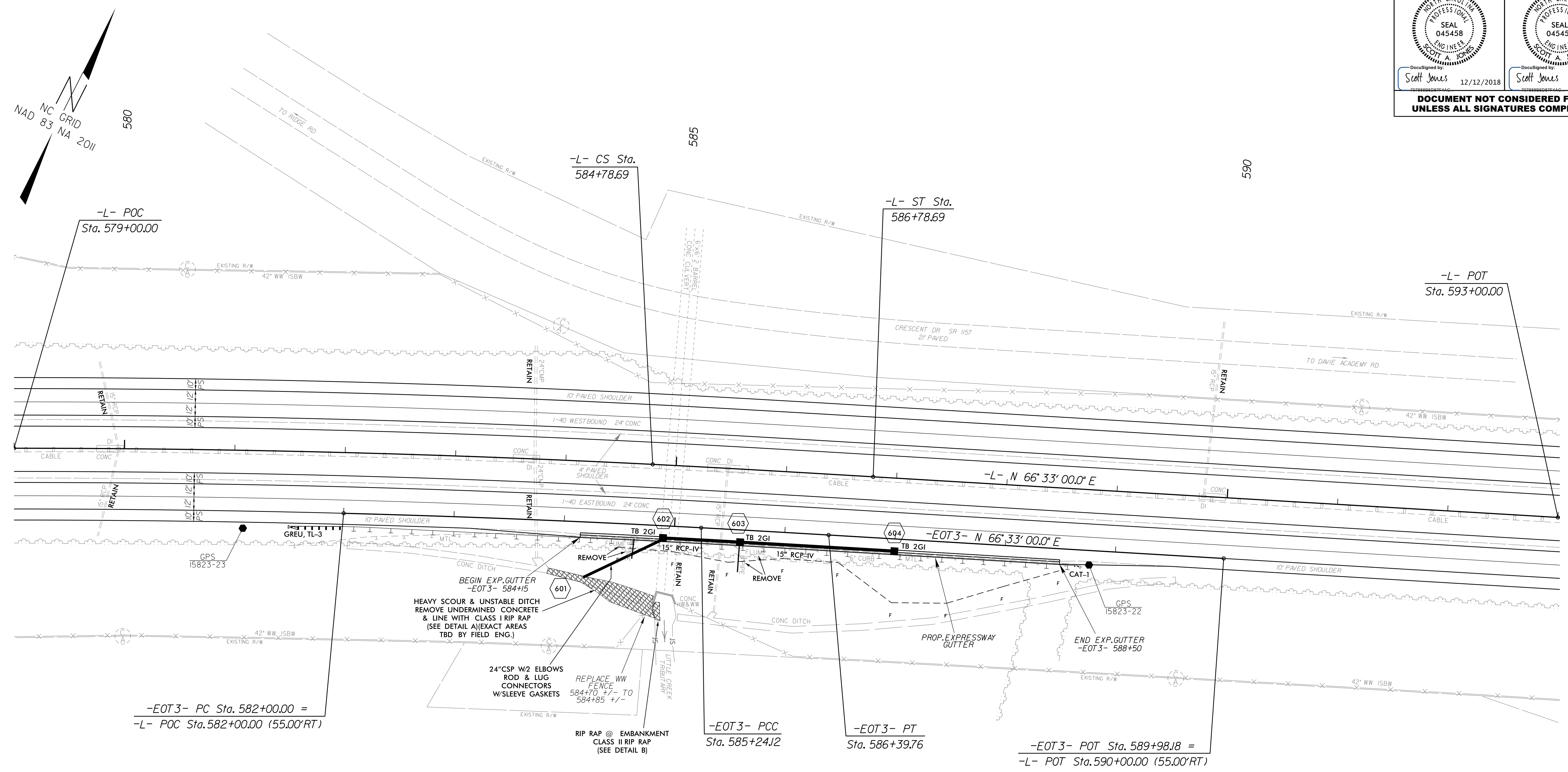
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RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
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-L-		-EOT2-	
PIs Sta 561+32.02	PI Sta = 573+42.47	PI Sta 12+96.60	PI Sta = 12+96.60
$\Theta s = 0^\circ 30' 00.0''$	$\Delta = 11^\circ 24' 00.00''$ (RT)	$\Delta = 4^\circ 01' 00.6''$ (RT)	$\Delta = 4^\circ 01' 00.6''$ (RT)
Ls = 200.00'	D = 0' 30' 00.00"	D = 0' 30' 08.5"	D = 0' 30' 08.5"
LT = 133.33'	L = 2,280.00	L = 799.58'	L = 799.58'
ST = 66.67'	T = 1,143.78	T = 399.96'	T = 399.96'
	R = 11,459.16	R = 11,405.16'	R = 11,405.16'

NOTE:
SEE SHEET X-9 TO X-18
FOR CROSS SECTIONS

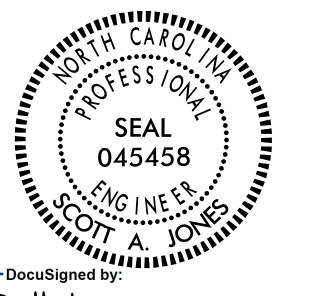
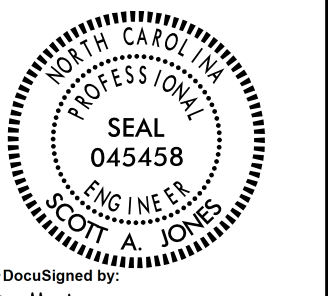
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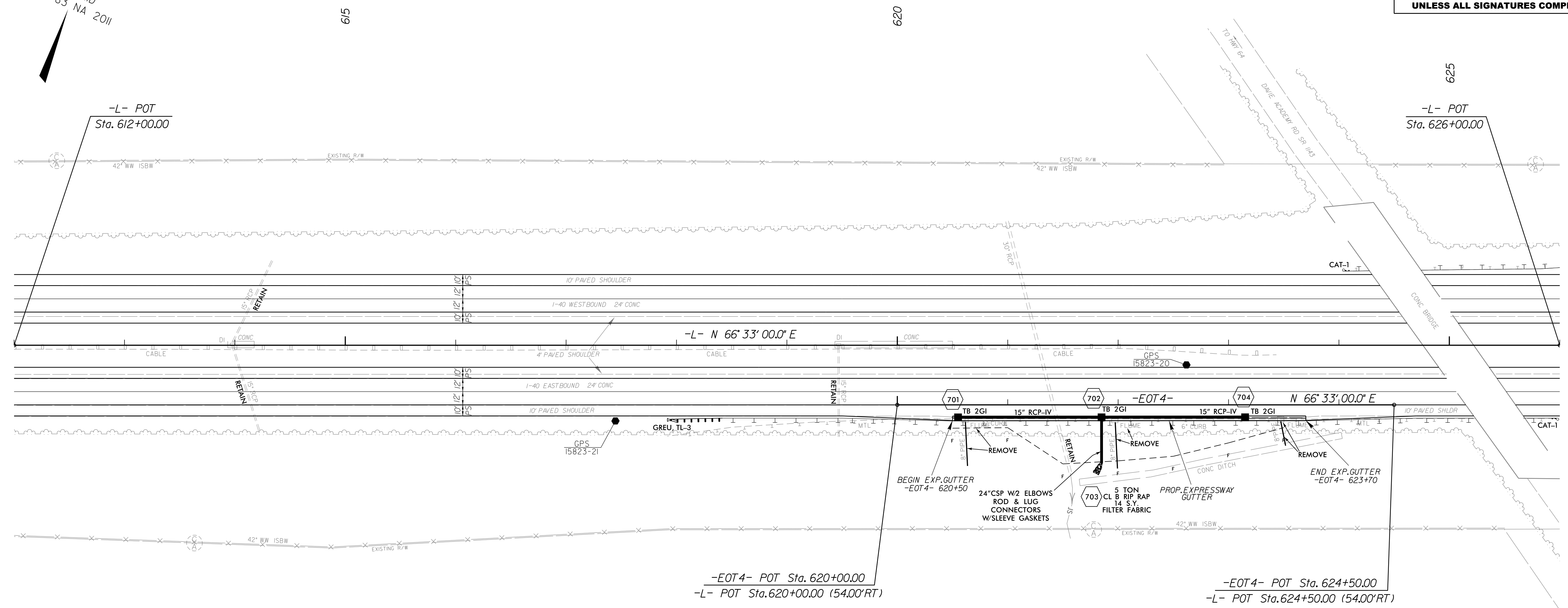
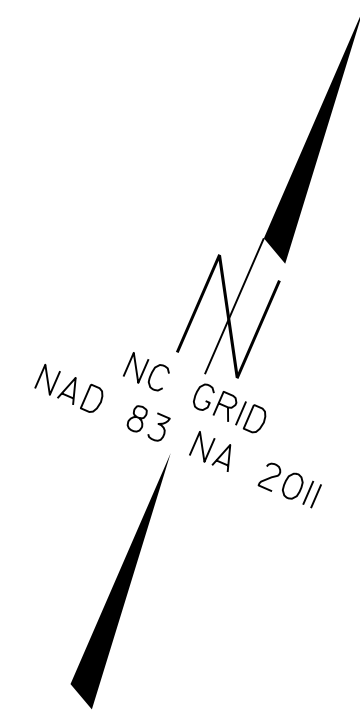


-L-		-EOT2-	
PI Sta = 573+42.47	PIs Sta 585+45.36	PI Sta 583+62.07	PI Sta 585+81.94
$\Delta = 1^\circ 24' 00.00''$ (RT)	$\Theta_s = 0^\circ 30' 00.00''$	$\Delta = 1^\circ 37' 42.4''$ (RT)	$\Delta = 0^\circ 15' 54.1''$ (RT)
D = 0' 30' 00.00"	Ls = 200.00'	D = 0' 30' 08.7"	D = 0' 13' 45.1"
L = 2,280.00	LT = 133.33'	L = 324.12'	L = 115.64'
T = 1,143.78	ST = 66.67'	T = 162.07'	T = 57.82'
R = 11,459.16		R = 11,404.16'	R = 25,000.00'

NOTE:
SEE SHEET X-19 TO X-22
FOR CROSS SECTIONS

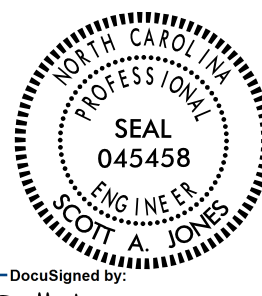
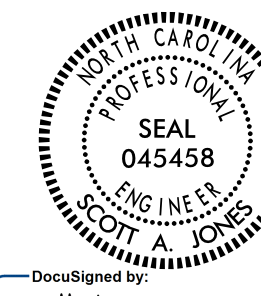
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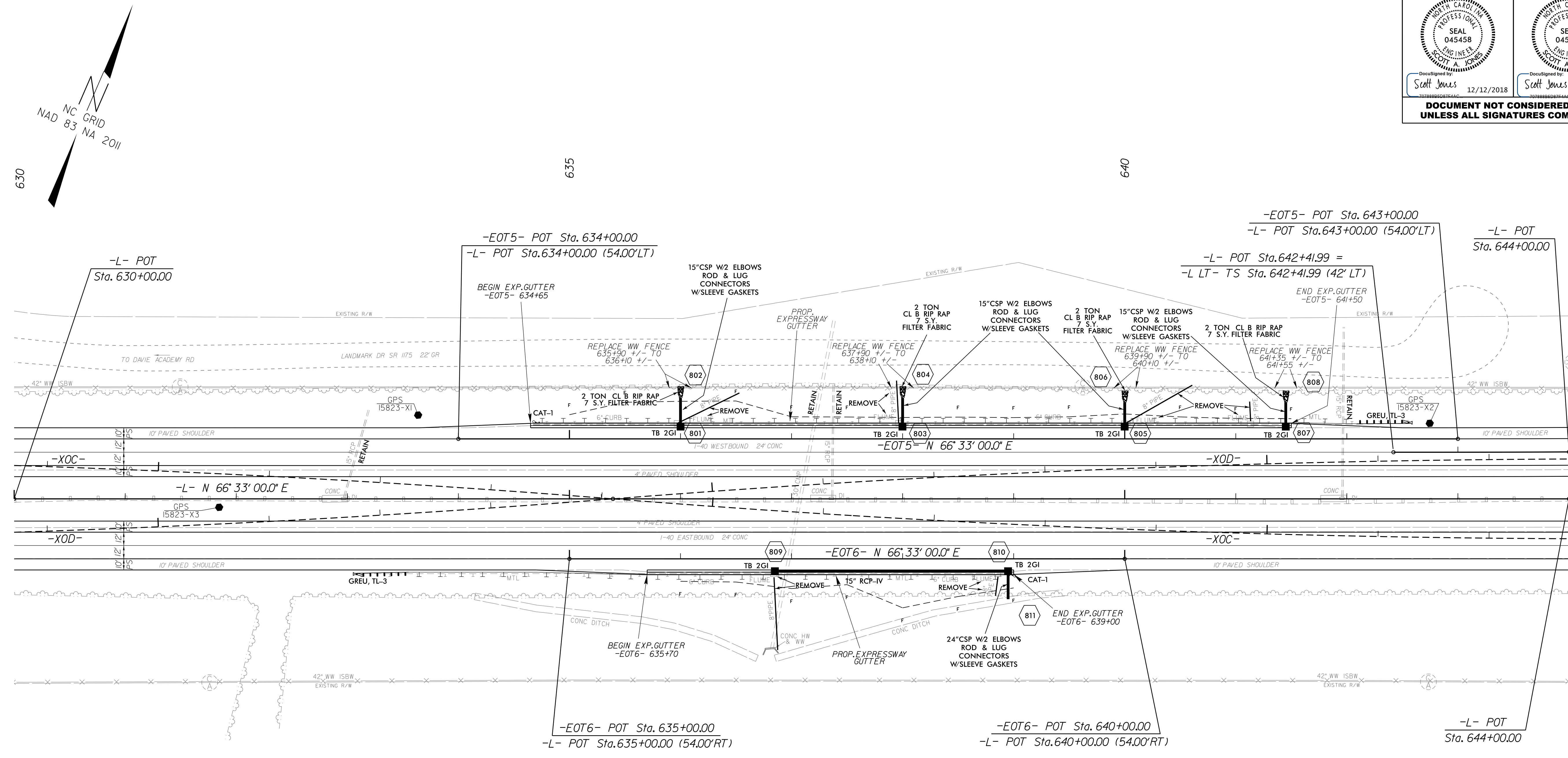
PROJECT REFERENCE NO. 1-5823	SHEET NO. 7
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
	
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NOTE:
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FOR CROSS SECTIONS

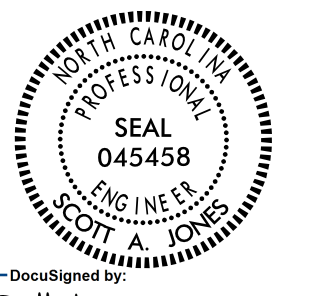
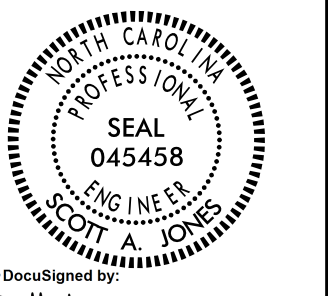
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RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
	
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**FOR CROSSOVER
ALIGNMENTS AND
DETAILS SEE SHEET 2B-1**

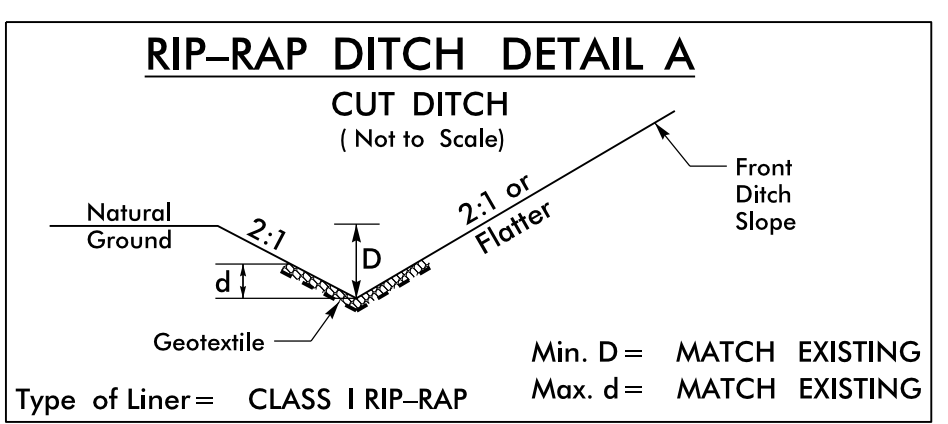
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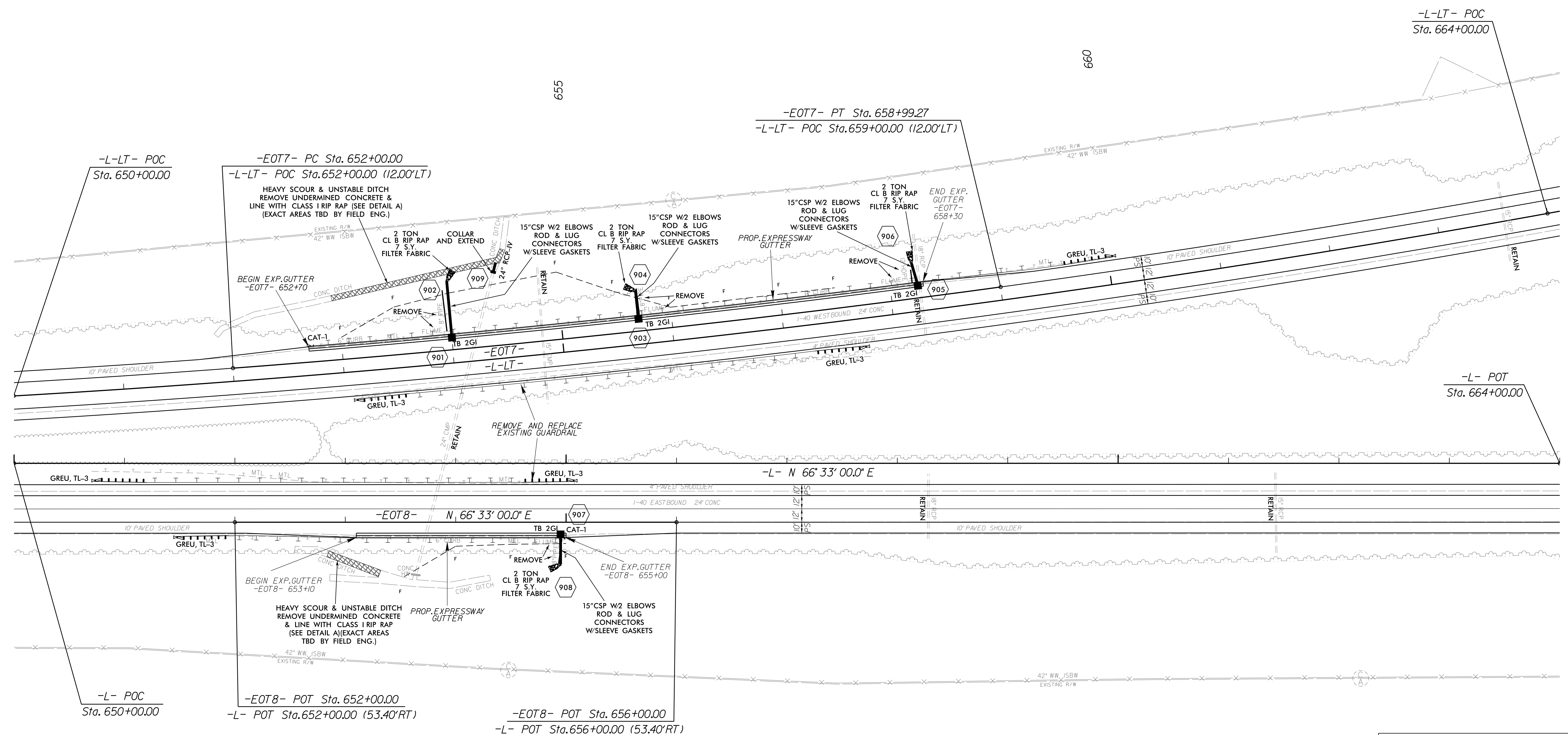
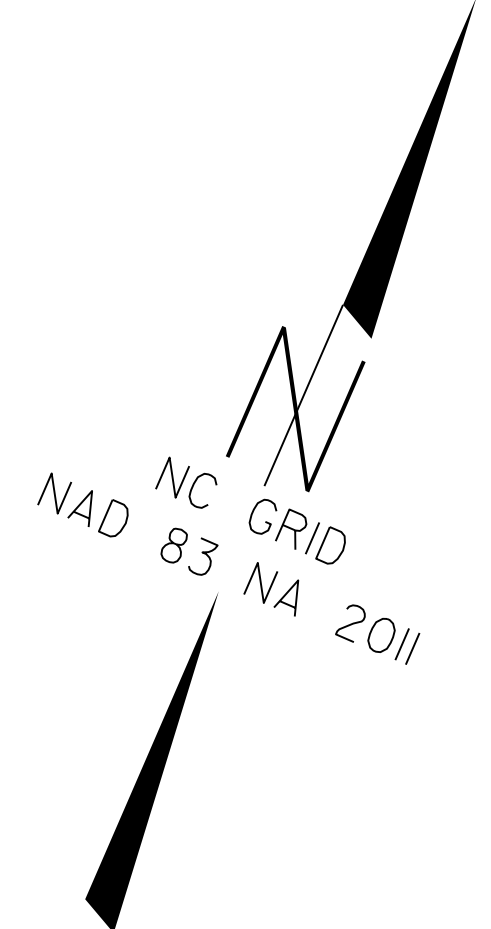
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RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
 Scott Jones 12/12/2018	 Scott Jones 12/12/2018
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	

-L-LT-
 PI Sta 654+58.42
 $\Delta = 10^{\circ} 08' 16.1''$ (LT)
 $D = 0^{\circ} 30' 00.0''$
 $L = 2,027.56'$
 $T = 1,016.43'$
 $R = 11,459.16'$

-EOT7-
 PI Sta 655+49.74
 $\Delta = 3^{\circ} 30' 00.0''$ (LT)
 $D = 0^{\circ} 30' 01.9''$
 $L = 699.27'$
 $T = 349.74'$
 $R = 11,447.16'$

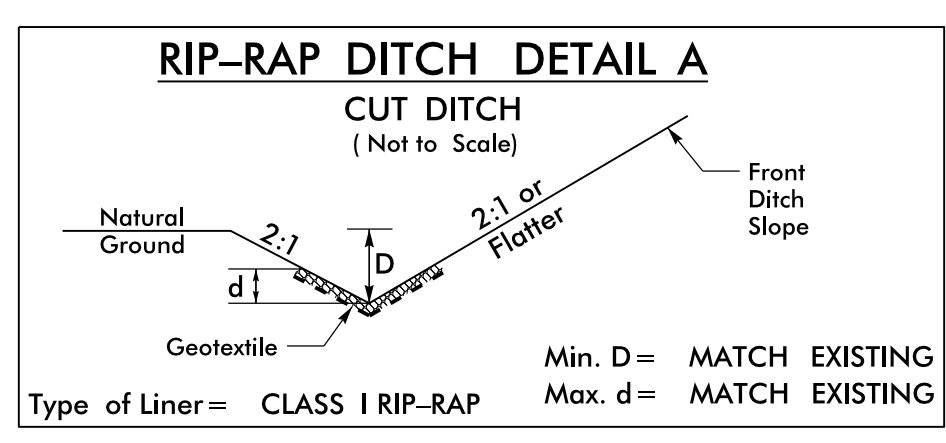
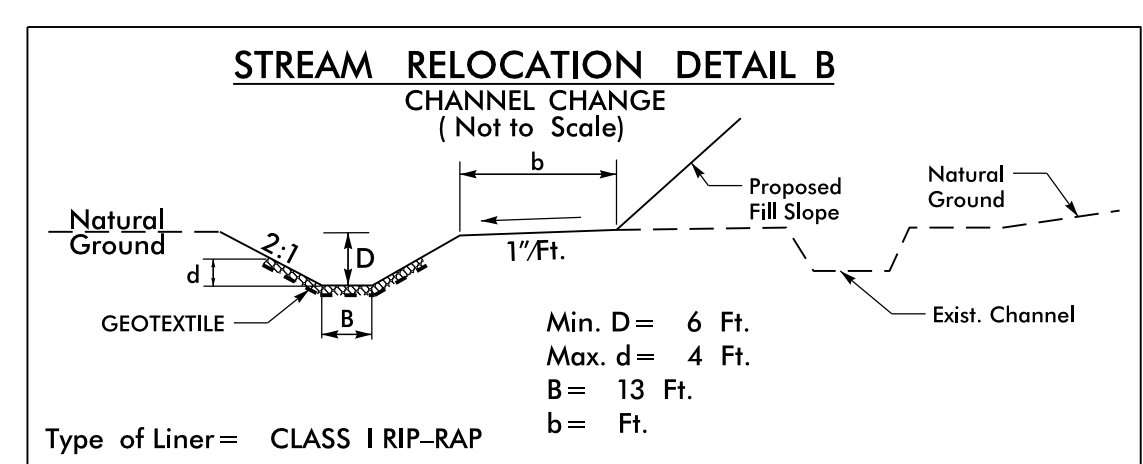
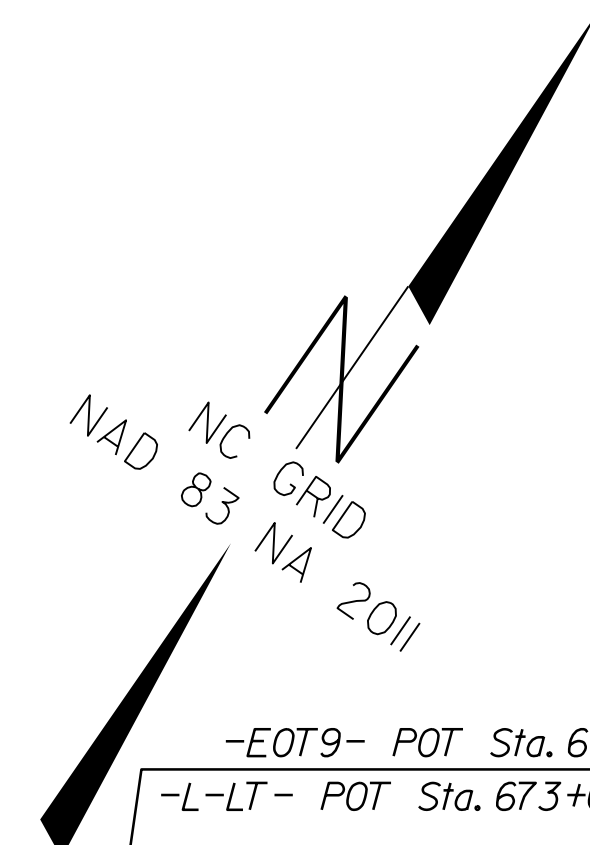


-EOT7- 652+94 TO 654+56 LT, EST. 108 TONS,
 EST. 220 SY GEO FAB, EST. 76 CY DDE
 -EOT8- 652+83 TO 653+32 RT, EST. 33 TONS,
 EST. 67 SY GEO FAB, EST. 23 CY DDE



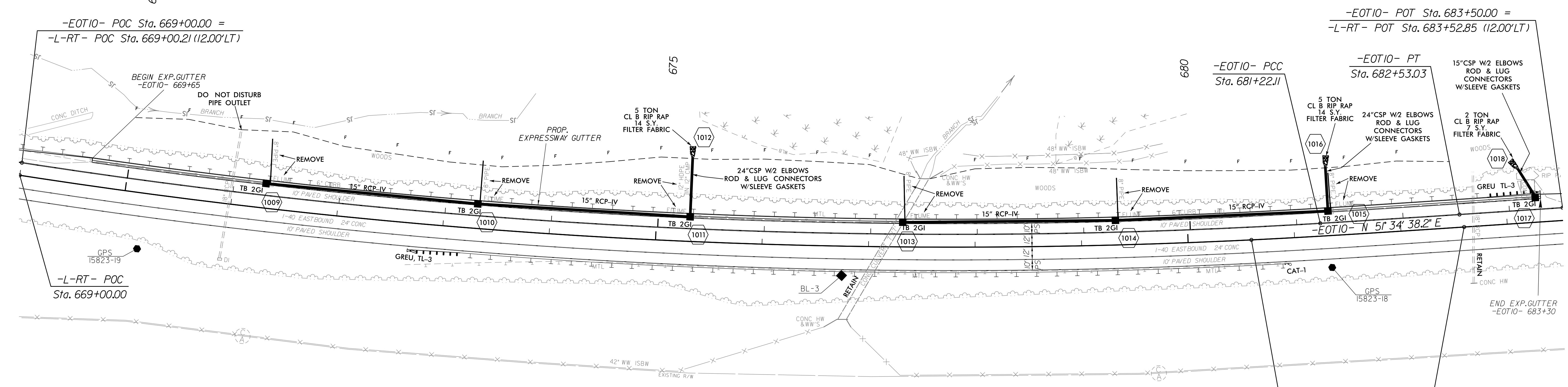
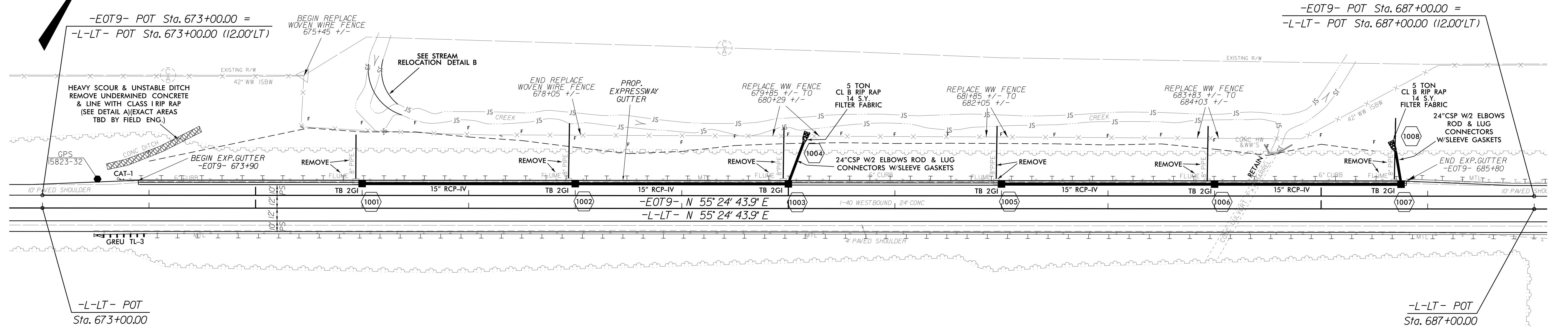
NOTE:
 SEE SHEET X-31 TO X-35
 FOR CROSS SECTIONS

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 I:\Projects\Development\TIP_Projects\1-5823-40-Davie\Roadway\DesignFiles\5823_ddd_psh9.dgn



-EOT9- STA 676+00 TO 677+00 LT, EST. 142 TONS,
EST. 325 SY GEO FAB, EST. 202 CY DDE



-EOT9- 673+60 TO 674+50 LT, EST. 62 TONS,
EST. 127 SY GEO FAB, EST. 44 CY DDE

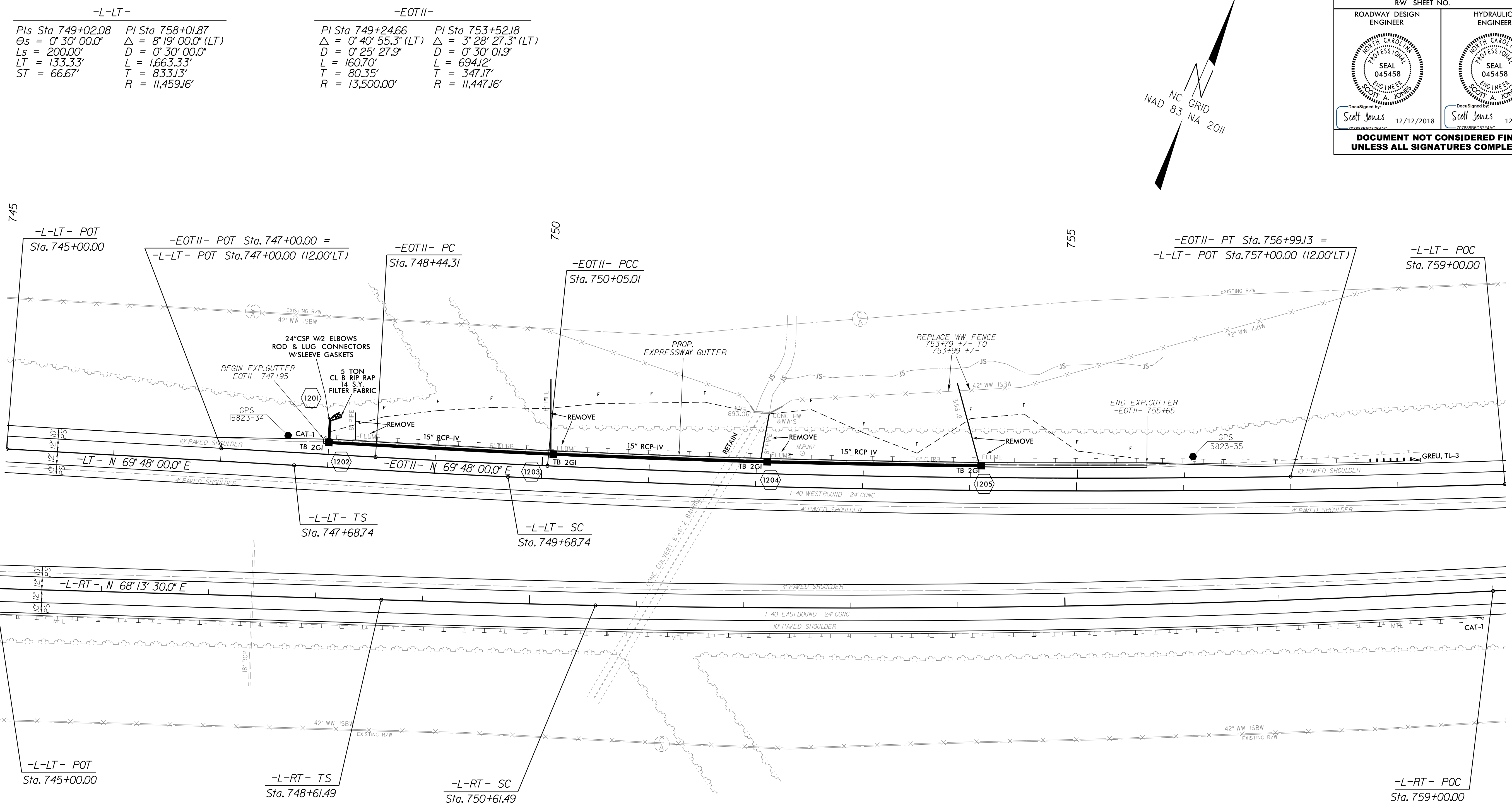
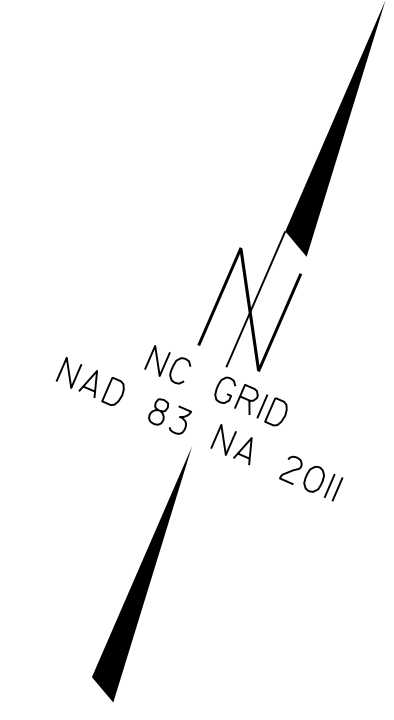


-L-RT-		-EOT10-	
PI Sta 674+13.81	PIs Sta 681+26.12	PI Sta 674+64.01	PI Sta 681+87.57
$\Delta = 12' 58'' 06.2''$ (LT)	$\Theta_s = 1' 00'' 00.0''$	$\Delta = 13' 14'' 55.7''$ (LT)	$\Delta = 0' 20'' 44.5''$ (LT)
D = 1' 00'' 00.0''	Ls = 200.00'	D = 1' 00'' 07.6''	D = 0' 15'' 50.5''
L = 1,296.84'	LT = 133.34'	L = 1,322.11'	L = 130.92'
T = 651.20'	ST = 66.67'	T = 664.01'	T = 65.46'
R = 5,729.58'		R = 5,717.58'	R = 21,700.00'

NOTE:
SEE SHEET X-36 TO X-56
FOR CROSS SECTIONS

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 I:\Development\TIP_Projects\1-5823-40-Davie\Roadway\DesignFiles\5823_ddc_psh10.dgn

PROJECT REFERENCE NO. 1-5823	SHEET NO. 12
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
	
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-L-LT-
 PIs Sta 749+02.08 PI Sta 758+01.87
 $\Theta_s = 0^\circ 30' 00.0''$ $\Delta = 8^\circ 19' 00.0''$ (LT)
 $L_s = 200.00'$ $D = 0^\circ 30' 00.0''$
 $LT = 133.33'$ $L = 1,663.33'$
 $ST = 66.67'$ $R = 11,459.16'$

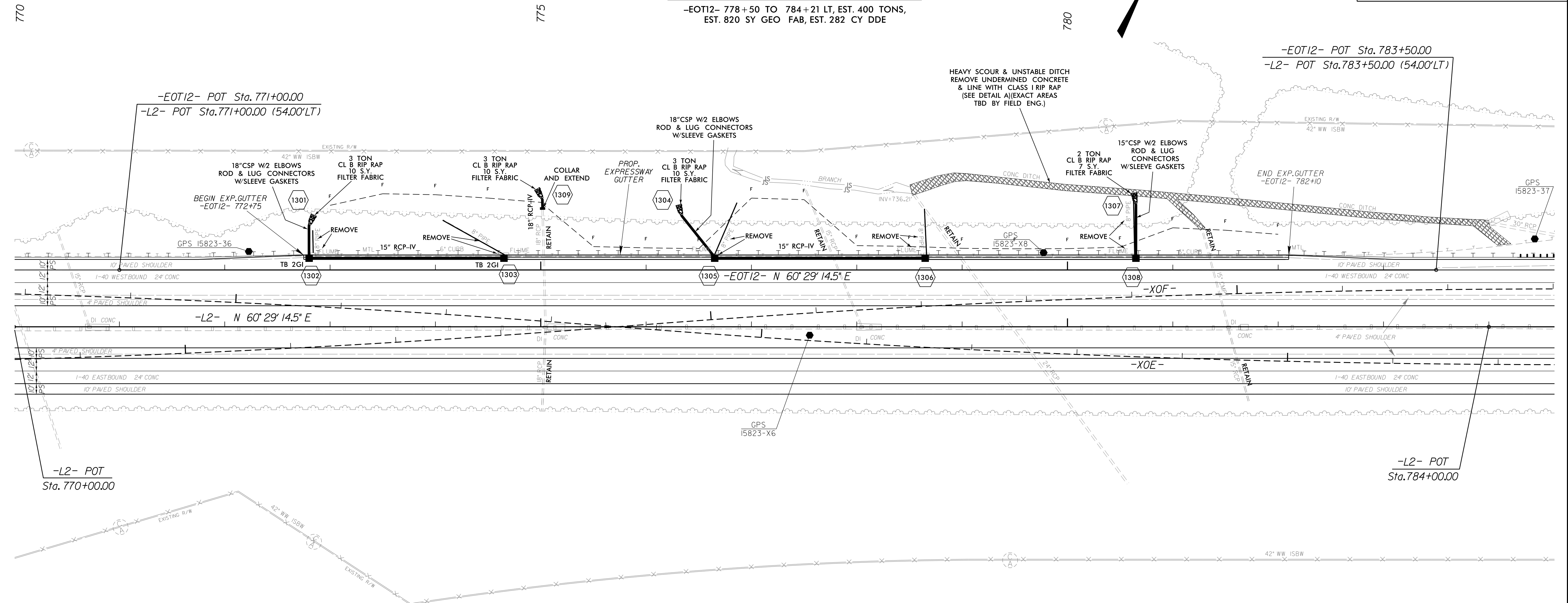
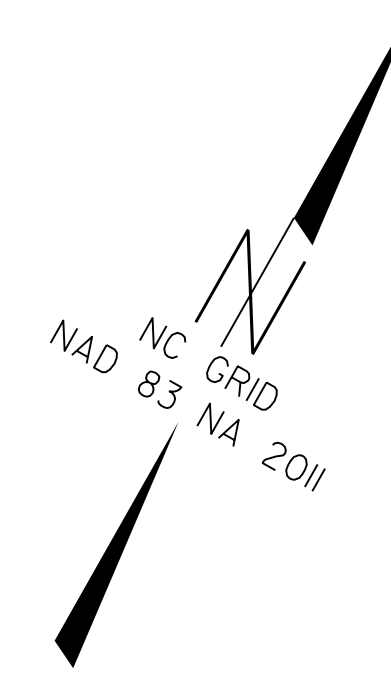
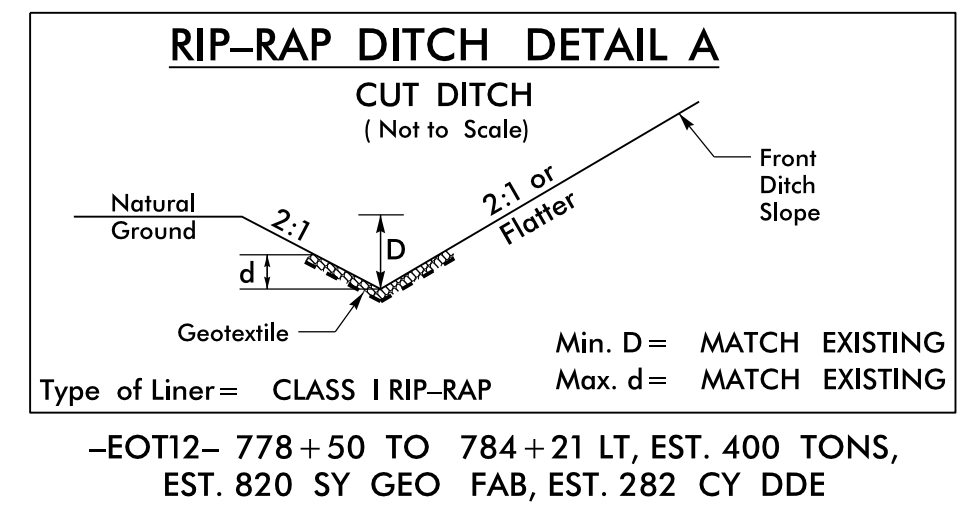
-EOTII-
 PI Sta 749+24.66 PI Sta 753+52.18
 $\Delta = 0^\circ 40' 55.3''$ (LT) $\Delta = 3^\circ 28' 27.3''$ (LT)
 $D = 0^\circ 25' 27.9''$ $D = 0^\circ 30' 01.9''$
 $L = 160.70'$ $L = 694.12'$
 $T = 80.35'$ $T = 347.17'$
 $R = 13,500.00'$ $R = 11,447.16'$

-L-RT-
 PIs Sta 749+94.82 PI Sta 757+38.10
 $\Theta_s = 0^\circ 30' 00.0''$ $\Delta = 6^\circ 45' 30.0''$ (LT)
 $L_s = 200.00'$ $D = 0^\circ 30' 00.0''$
 $LT = 133.33'$ $L = 1,351.67'$
 $ST = 66.67'$ $R = 676.62'$
 $R = 11,459.16'$

NOTE:
SEE SHEET X-57 TO X-63
FOR CROSS SECTIONS

12-DEC-2018 14:25
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PROJECT REFERENCE NO. 1-5823	SHEET NO. 13
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
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DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	



FOR CROSSOVER
ALIGNMENTS AND
DETAILS SEE SHEET 2B-2

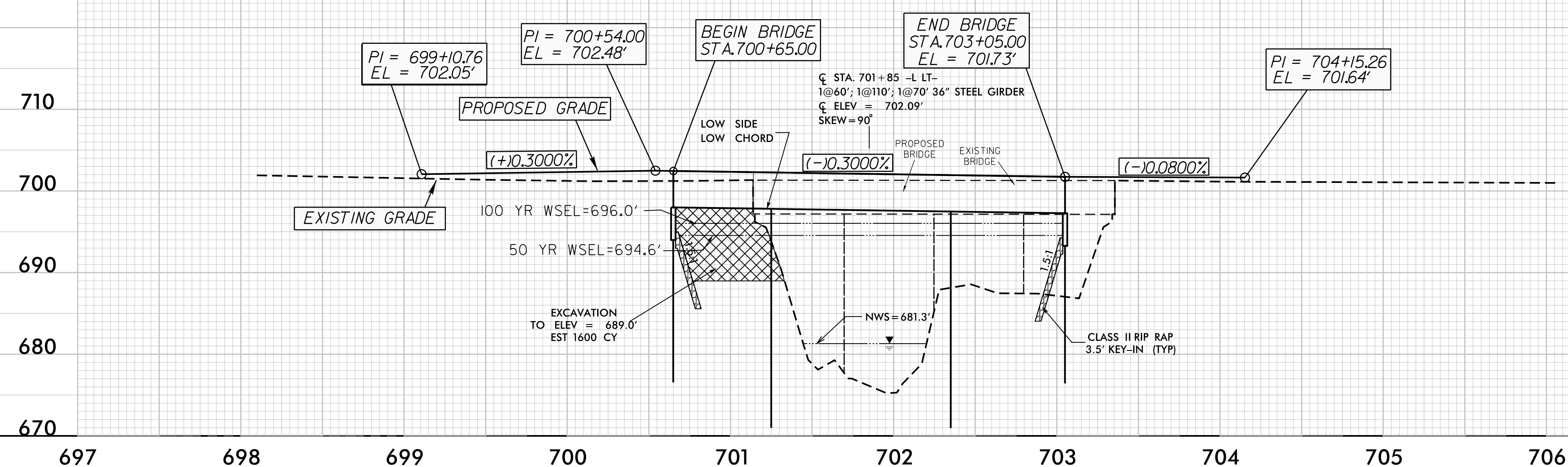
NOTE:
SEE SHEET X-64 TO X-72
FOR CROSS SECTIONS

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 \$\$\$\$

L-LT

BRIDGE HYDRAULIC DATA

DESIGN DISCHARGE	= 16,800	CFS
DESIGN FREQUENCY	= 50	YRS
DESIGN HW ELEVATION	= N/A	FT
BASE DISCHARGE	= N/A	CFS
BASE FREQUENCY	= 100	YRS
BASE HW ELEVATION	= N/A	FT
OVERTOPPING DISCHARGE	= N/A	CFS
OVERTOPPING FREQUENCY	= N/A	YRS
OVERTOPPING ELEVATION	= N/A	FT

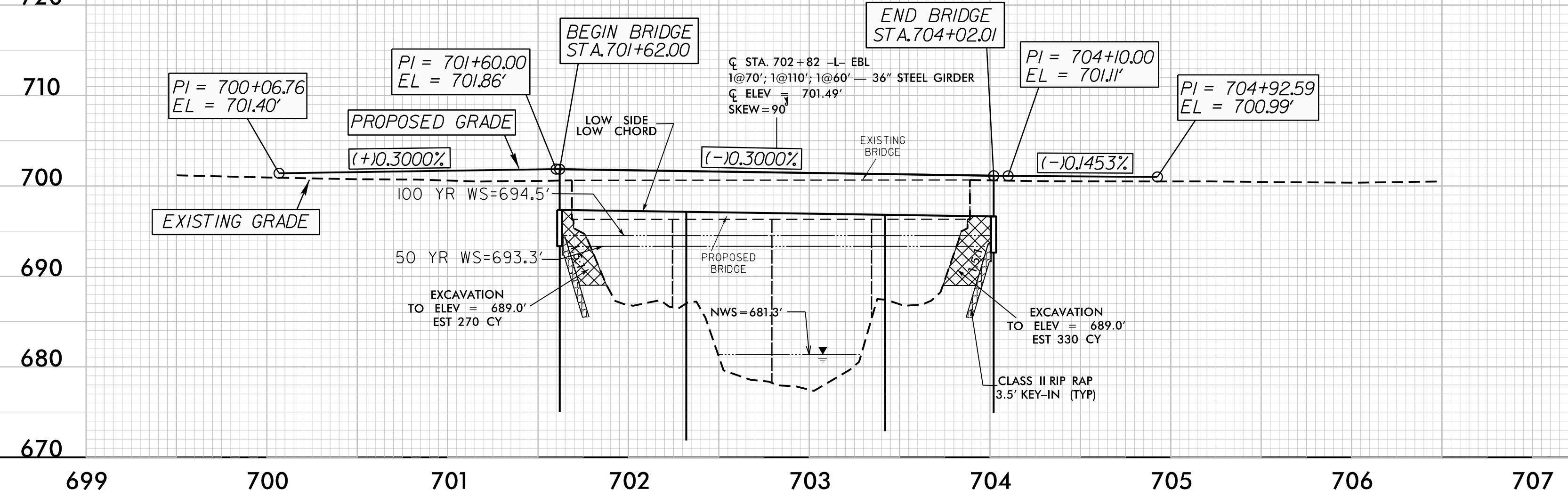


FOR -L-LT- PLAN
SEE SHEET II

L-RT

BRIDGE HYDRAULIC DATA

DESIGN DISCHARGE	= 16,800	CFS
DESIGN FREQUENCY	= 50	YRS
DESIGN HW ELEVATION	= N/A	FT
BASE DISCHARGE	= 20,089	CFS
BASE FREQUENCY	= 100	YRS
BASE HW ELEVATION	= N/A	FT
OVERTOPPING DISCHARGE	= N/A	CFS
OVERTOPPING FREQUENCY	= 500	YRS
OVERTOPPING ELEVATION	= 700.9	FT



FOR -L-RT- PLAN
SEE SHEET II

5/28/19
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