

TIP PROJECT: R-2824


STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

PLAN FOR PROPOSED
HIGHWAY EROSION CONTROL

BURKE COUNTY

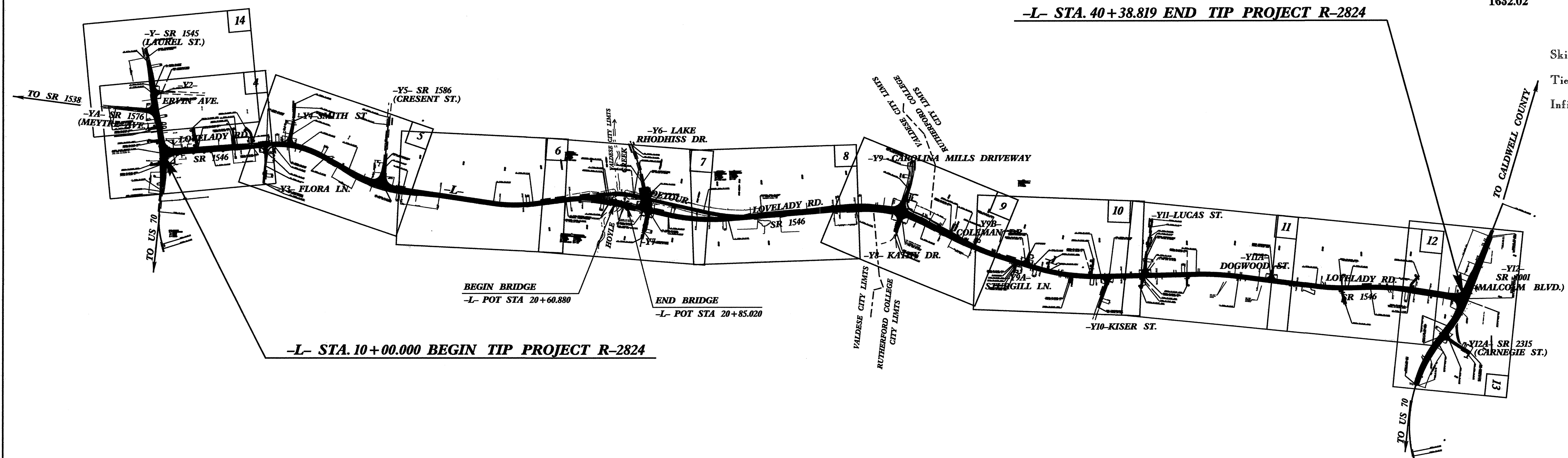
**LOCATION: SR 1546 (LOVELADY ROAD) FROM SR 1545 (LAUREL ST.)
TO SR 1001 (MALCOLM BLVD.)**

**TYPE OF WORK: GRADING, DRAINAGE, PAVING, STRUCTURE,
AND SIGNALS**



ALL DIMENSIONS IN THESE PLANS ARE IN METERS UNLESS OTHERWISE SHOWN

STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	R-2824	EC-1	
STATE PROJ. NO.	F.A. PROJ. NO.	DESCRIPTION	



EROSION AND SEDIMENT CONTROL MEASURES

Std. #	Description	Symbol
1630.03	Temporary Silt Ditch	TD
1630.05	Temporary Diversion	TD
	Temporary Silt Fence	III III III
	Special Sediment Control Fence	XXXXXX
1622.01	Temporary Berms and Slope Drains	—
1630.01	Riser Basin	⊙
	Silt Basin Type B	▨
1633.01	Temporary Rock Silt Check Type-A	▩
1633.02	Temporary Rock Silt Check Type-B	▶
	Wattle	⌒
1634.01	Temporary Rock Sediment Dam Type-A	▩
1634.02	Temporary Rock Sediment Dam Type-B	⊓
1635.01	Rock Pipe Inlet Sediment Trap Type-A	⊓
1635.02	Rock Pipe Inlet Sediment Trap Type-B	⊓
1630.04	Stilling Basin	▭
	Rock Inlet Sediment Trap:	
1632.01	Type A	A
1632.02	Type B	B
	Type C	C
	Skimmer Basin	▭
	Tiered Skimmer Basin	▭
	Infiltration Basin	▭

**THIS PROJECT CONTAINS
EROSION CONTROL PLANS
FOR CLEARING AND
GRUBBING PHASE OF
CONSTRUCTION.**

**ENVIRONMENTALLY
SENSITIVE AREA(S) EXIST
ON THIS PROJECT**

*Refer To E. C. Special Provisions
for Special Considerations.*

GRAPHIC SCALE

0
PLANS

0
PROFILE (HORIZONTAL)

0
PROFILE (VERTICAL)

ROADSIDE ENVIRONMENTAL UNIT
DIVISION OF HIGHWAYS
STATE OF NORTH CAROLINA

Prepared In the Office of:
ROADSIDE ENVIRONMENTAL UNIT
1 South Wilmington St.
Raleigh, NC 27611

2006 STANDARD SPECIFICATIONS

Roadway Standard Drawings

The following roadway metric standards as appear in "Roadway Standard Drawings"- Roadway Design Unit - N. C. Department of Transportation - Raleigh, N. C., dated July 2006 and the latest revision thereto are applicable to this project and by reference hereby are considered a part of these plans.

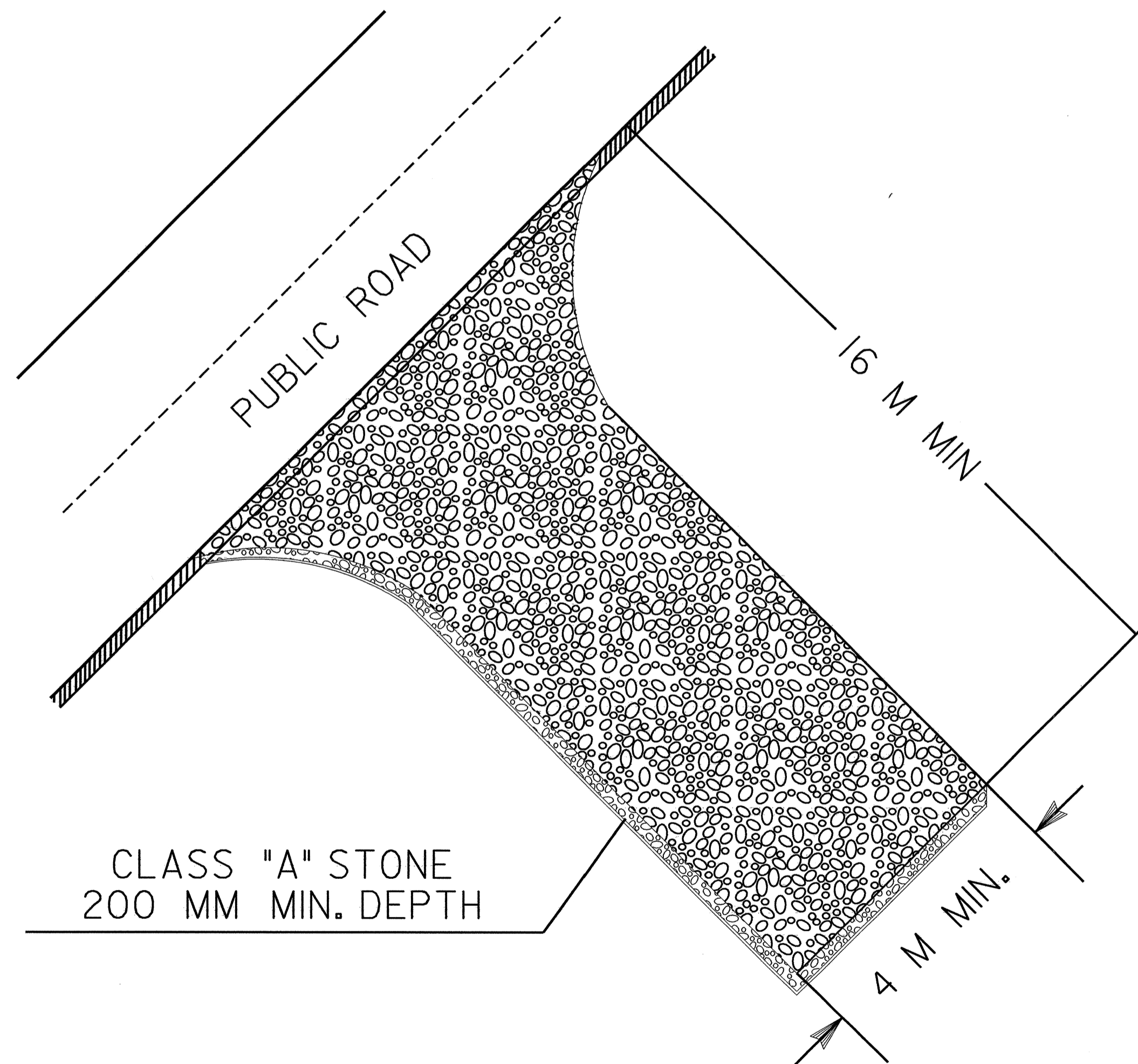
1622.01 Temporary Berms and Slope Drains	1632.02 Rock Inlet Sediment Trap Type B
1630.03 Temporary Silt Ditch	1633.01 Temporary Rock Silt Check Type A
1630.05 Temporary Diversion	1633.02 Temporary Rock Silt Check Type B
	1634.02 Temporary Rock Sediment Dam Type B
	1635.01 Rock Pipe Inlet Sediment Trap Type A
	1635.02 Rock Pipe Inlet Sediment Trap Type B

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REV 2/2002



PROJECT REFERENCE NO. R-2824	SHEET NO. EC-2
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

TEMPORARY GRAVEL CONSTRUCTION ENTRANCE



NOTES:

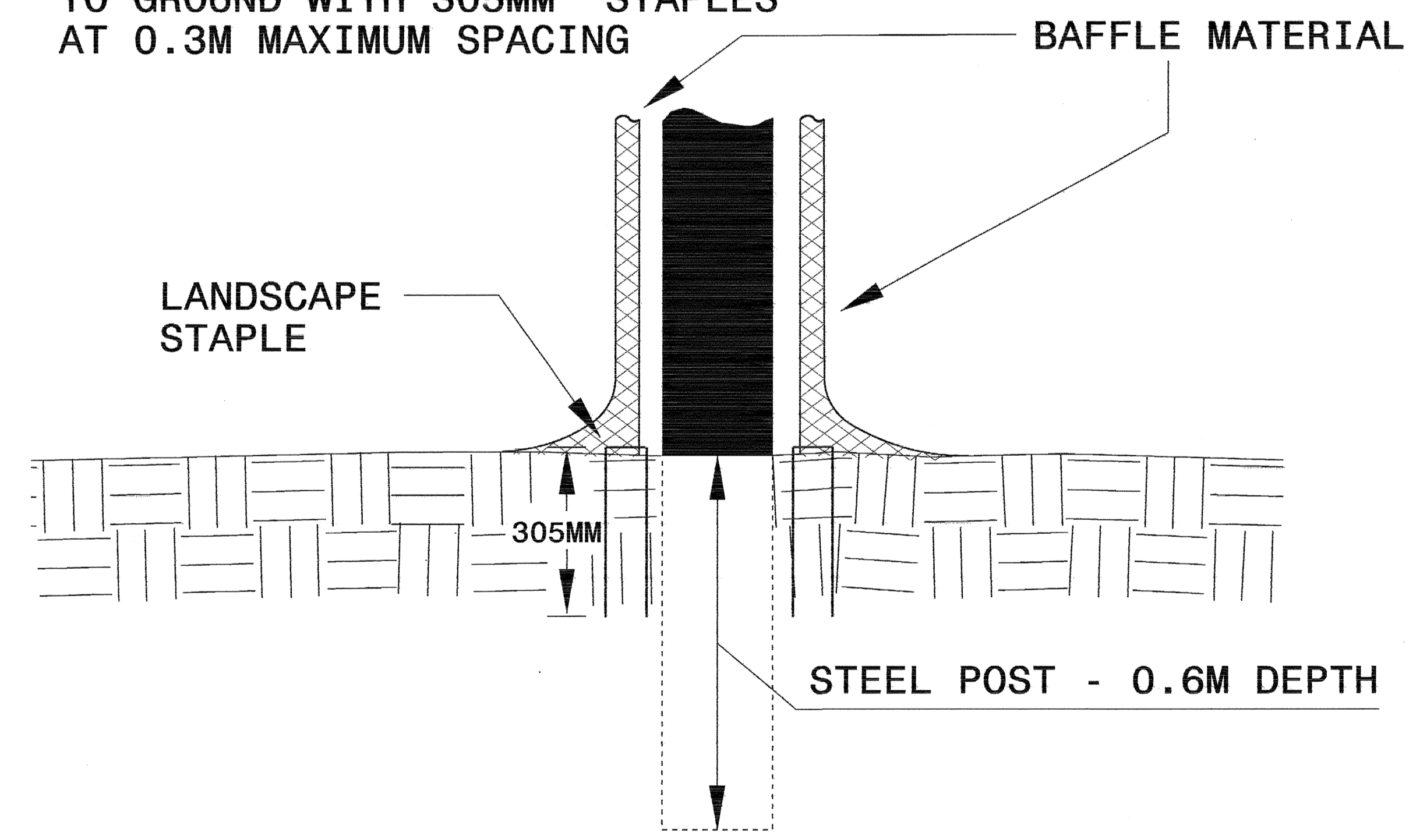
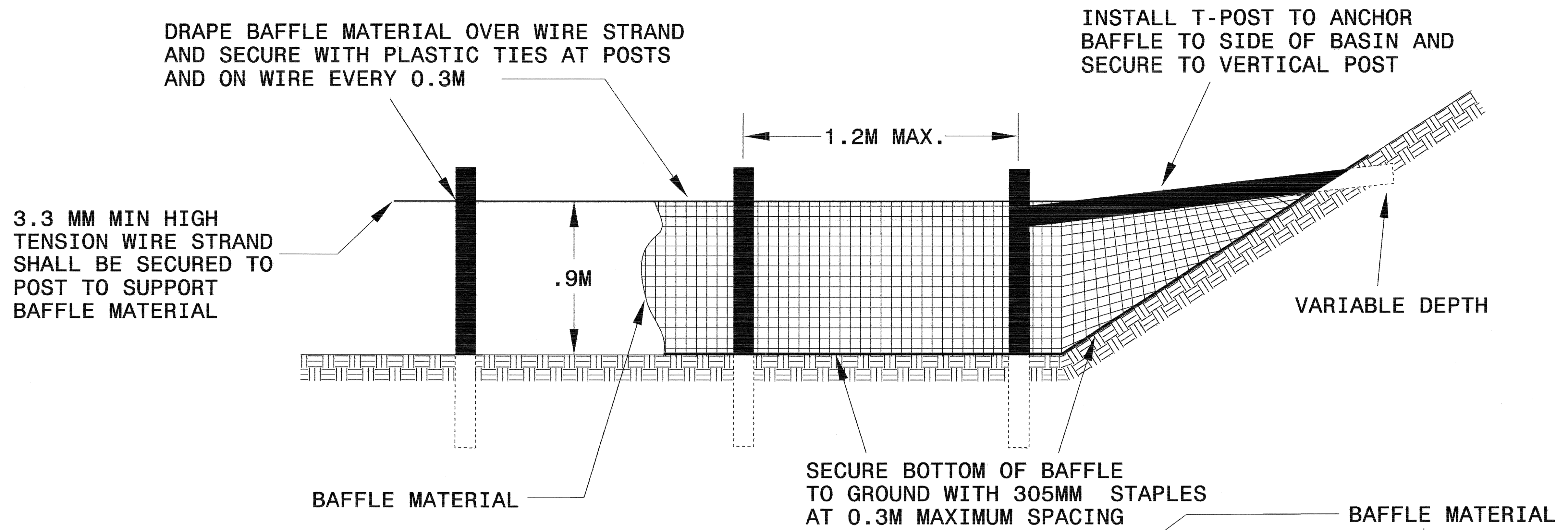
1. TURNING RADIUS SUFFICIENT TO ACCOMODATE LARGE TRUCKS SHALL BE PROVIDED.
2. ENTRANCE(S) SHOULD BE LOCATED TO PROVIDE FOR UTILIZATION BY ALL CONSTRUCTION VEHICLES.
3. MUST BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR DIRECT FLOW OF MUD ONTO STREETS. PERIODIC TOPDRESSING WITH STONE WILL BE NECESSARY.
4. ANY MATERIAL TRACKED ONTO THE ROADWAY MUST BE CLEANED UP IMMEDIATELY.
5. GRAVEL CONSTRUCTION ENTRANCE SHALL BE LOCATED AT ALL POINTS OF INGRESS AND EGRESS UNTIL SITE IS STABILIZED. FREQUENT CHECKS OF THE DEVICE AND TIMELY MAINTENANCE MUST BE PROVIDED.
6. NUMBER AND LOCATION OF CONSTRUCTION ENTRANCES TO BE DETERMINED BY THE ENGINEER

NOTE: FILTER FABRIC TO BE PLACED BENEATH STONE

COIR FIBER BAFFLE DETAIL



PROJECT REFERENCE NO. R-2824	SHEET NO. EC-2A
R / W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

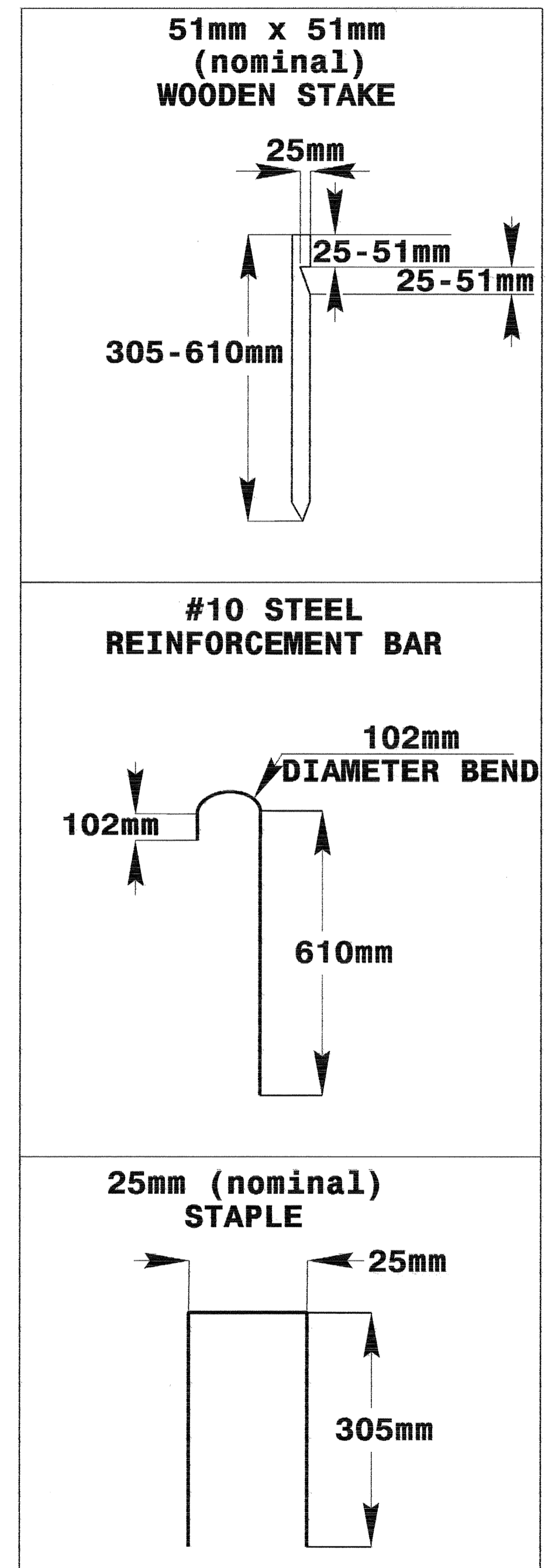
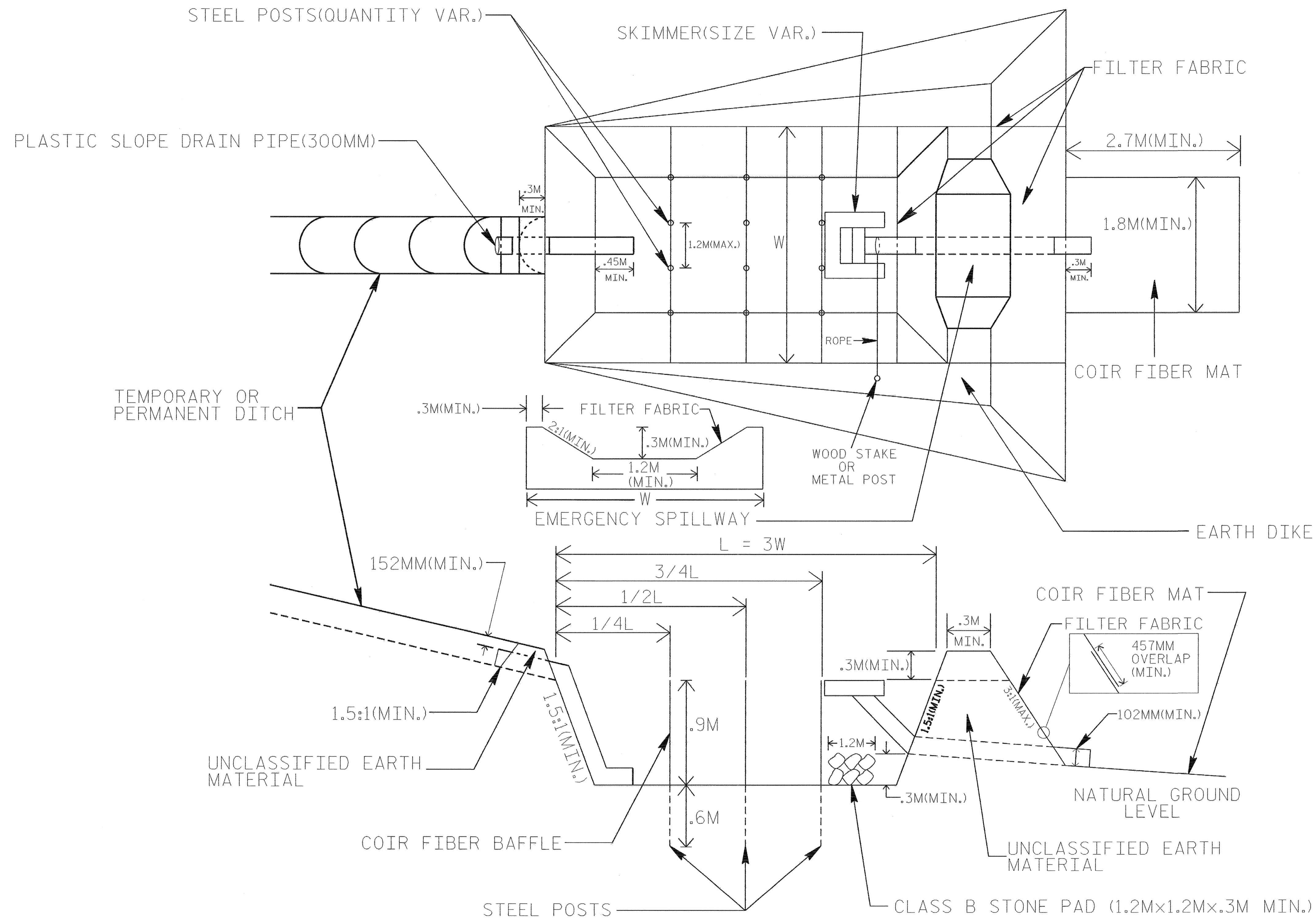


1. INSTALL THREE(3) COIR FIBER BAFFLES IN SILT BASINS AND SEDIMENT DAMS AT DRAINAGE OUTLETS WITH A SPACING OF $\frac{1}{4}$ THE BASIN LENGTH.
2. TWO(2) COIR FIBER BAFFLES CAN BE INSTALLED IN SILT BASINS AND DAMS LESS THAN 6 M IN LENGTH WITH A SPACING OF $\frac{1}{3}$ THE BASIN LENGTH.
3. TOP HEIGHT OF COIR FIBER BAFFLES SHALL NOT BE BELOW BASE OF EMERGENCY SPILLWAY ELEVATION.

BAFFLE MATERIAL SHALL BE SECURED TO THE BOTTOM AND SIDES OF BASIN USING 305MM LANDSCAPE STAPLES

SKIMMER BASIN WITH BAFFLES DETAIL

PROJECT REFERENCE NO. R-2824		SHEET NO. EC-2B
R/W SHEET NO.		
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER	



COIR FIBER MAT ANCHOR OPTIONS

NOTES

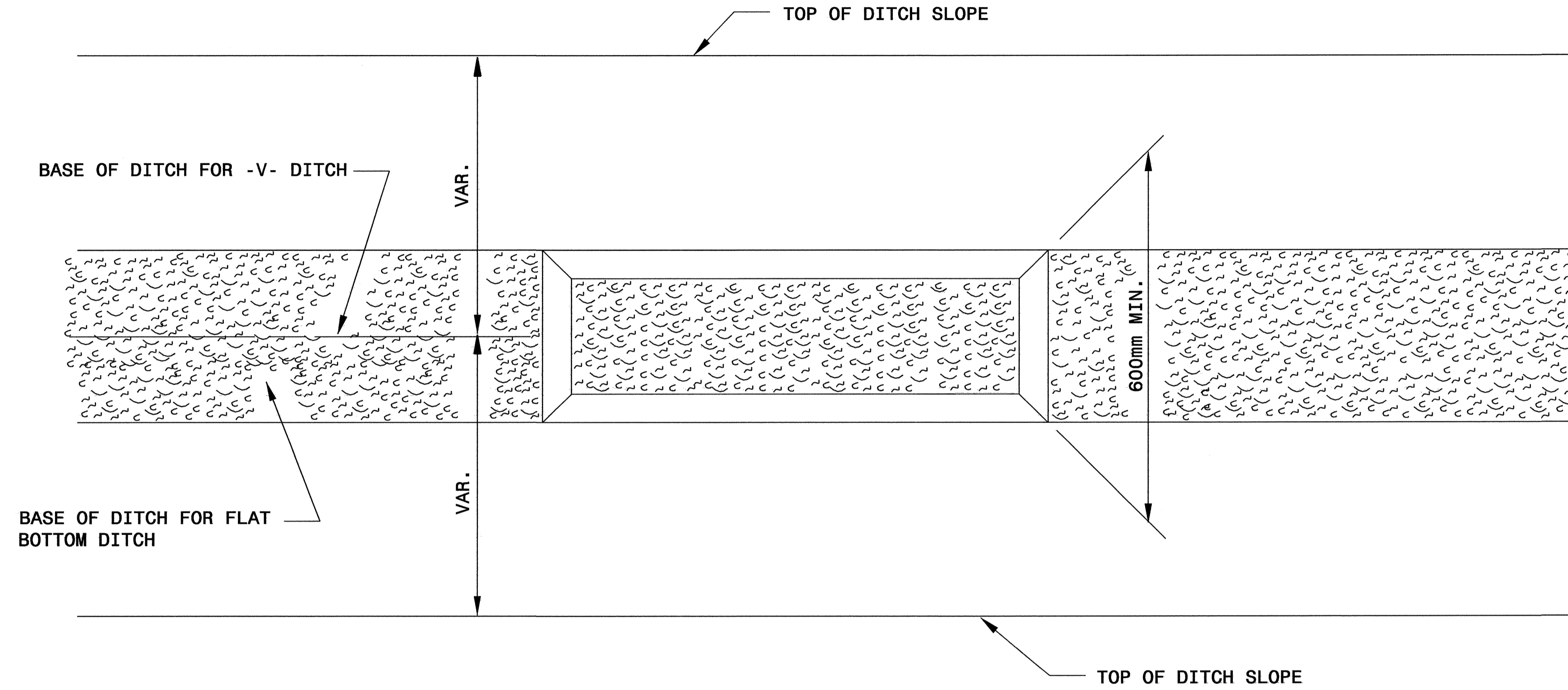
1. SEED AND PLACE MATTING FOR EROSION CONTROL ON INTERIOR AND EXTERIOR SIDESLOPES.
2. LIMIT EARTH DIKE HEIGHT TO 1.5M.
3. FOR BASIN DEPTH OF 1M, MINIMUM BASIN WIDTH SHALL BE 3M.
4. DETERMINE EMERGENCY SPILLWAY LENGTH (M) USING $Q/0.074$, WHERE Q IS FLOW RATE (CMS) INTO BASIN.
5. PLASTIC SLOPE DRAIN PIPE AT INLET OF BASIN MAY BE REPLACED BY FILTER FABRIC AS DIRECTED.
6. FILTER FABRIC FOR EMERGENCY SPILLWAY SHALL BE ONE CONTINUOUS PIECE OF MATERIAL OR OVERLAPPED 457MM (MIN.) AS SHOWN.

NOT TO SCALE

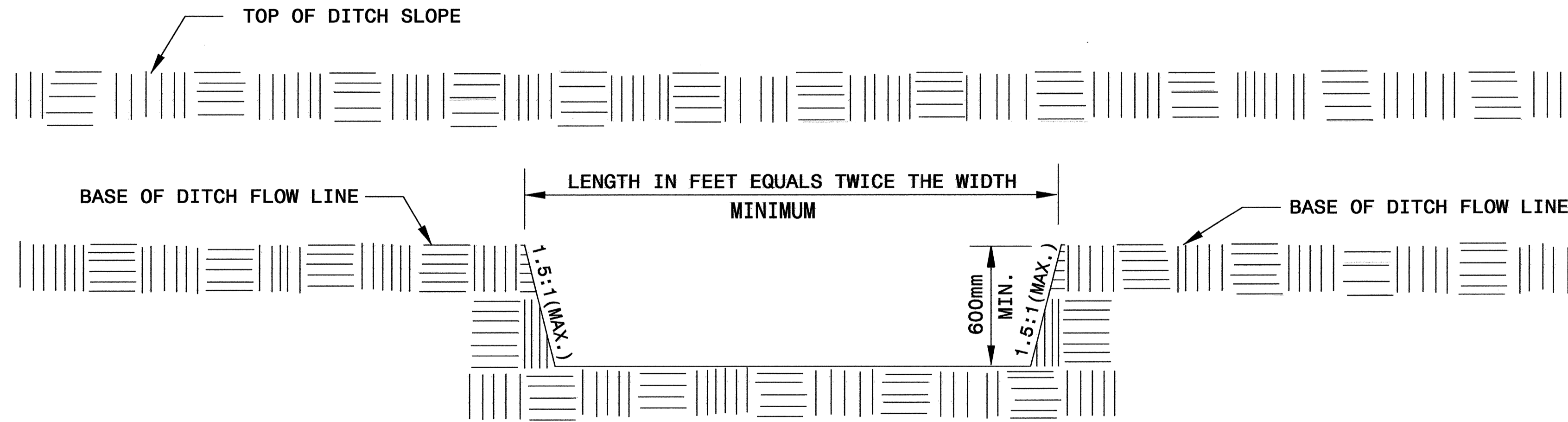


PROJECT REFERENCE NO. <i>R-2824</i>	SHEET NO. <i>EC-2C</i>
R / W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

SILT BASIN 'B' DETAIL



PLAN

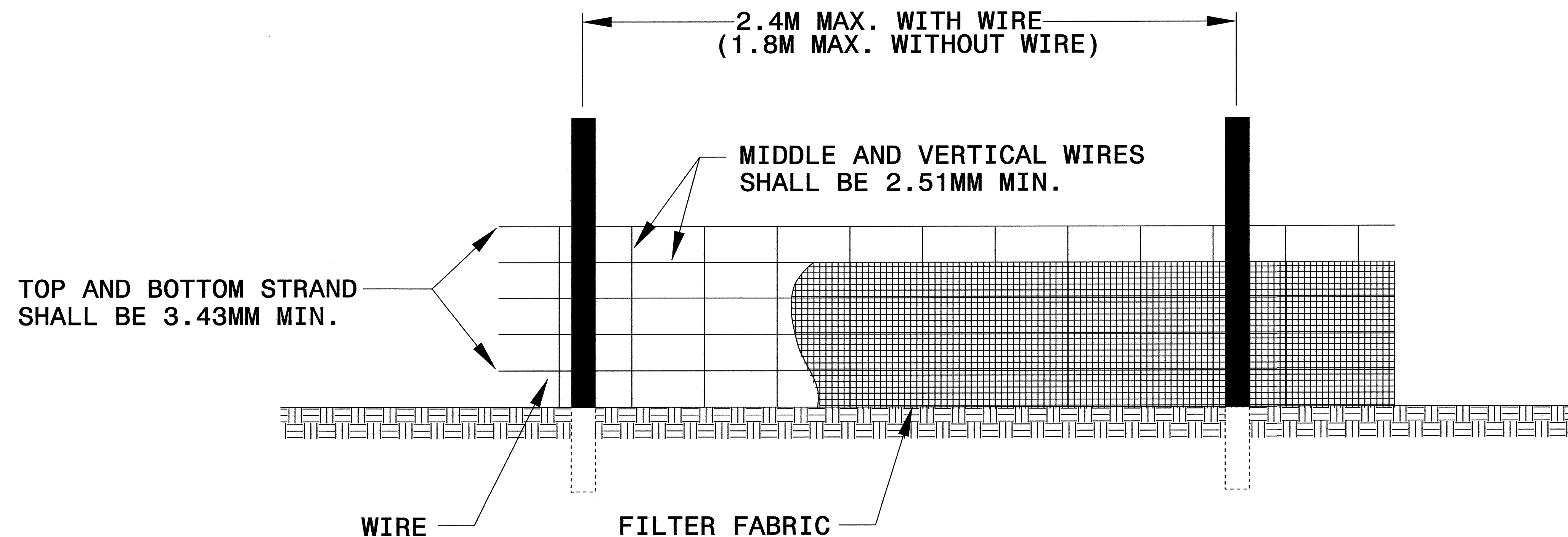


ELEVATION



PROJECT REFERENCE NO. R-2824	SHEET NO. EC-2D
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

TEMPORARY SILT FENCE DETAIL

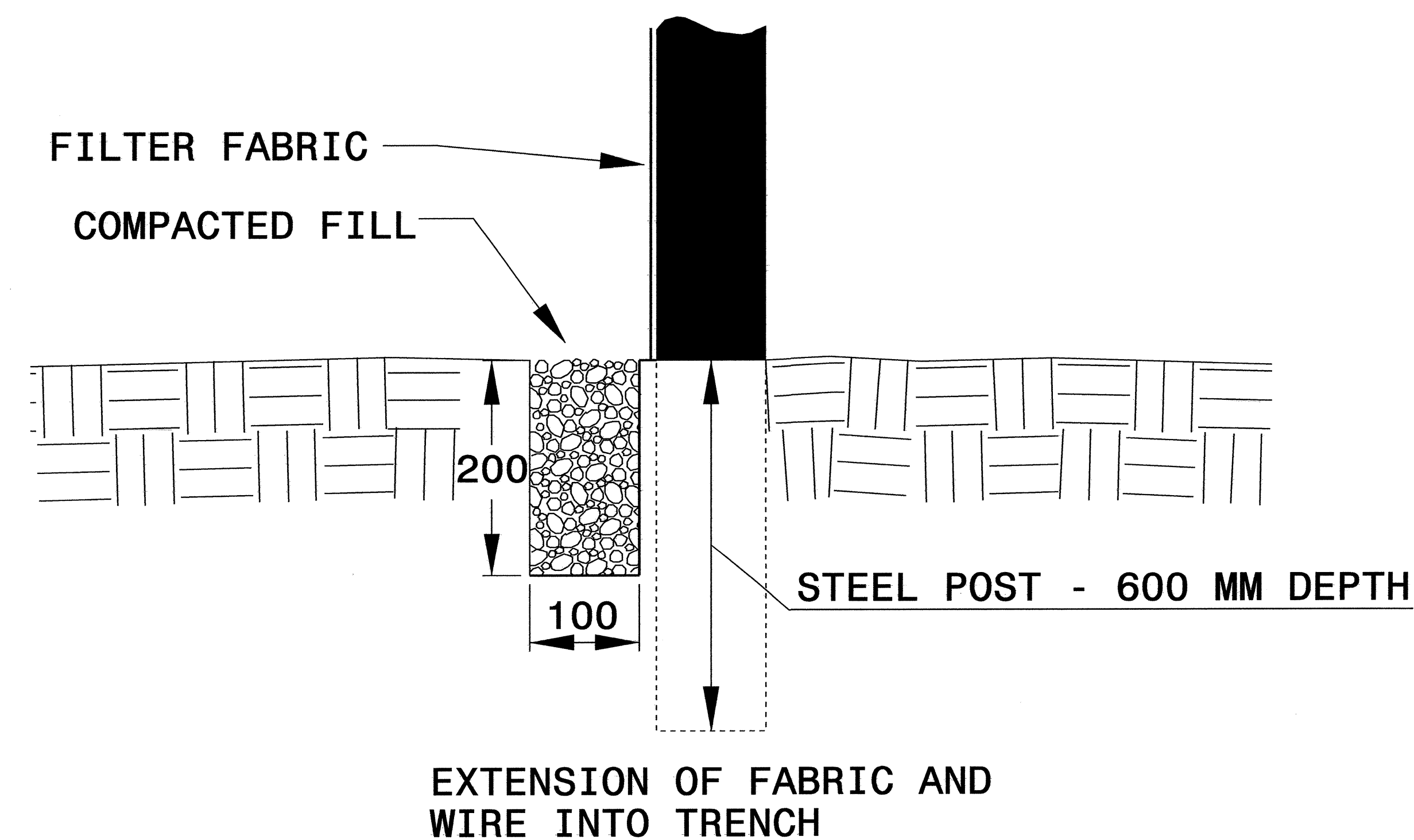


NOTES

USE WIRE A MINIMUM OF 800MM IN WIDTH AND WITH A MINIMUM OF 6 LINE WIRES WITH 300MM STAY SPACING.

USE FILTER FABRIC A MINIMUM OF 900MM IN WIDTH AND FASTEN ADEQUATELY TO THE WIRE AS DIRECTED BY THE ENGINEER.

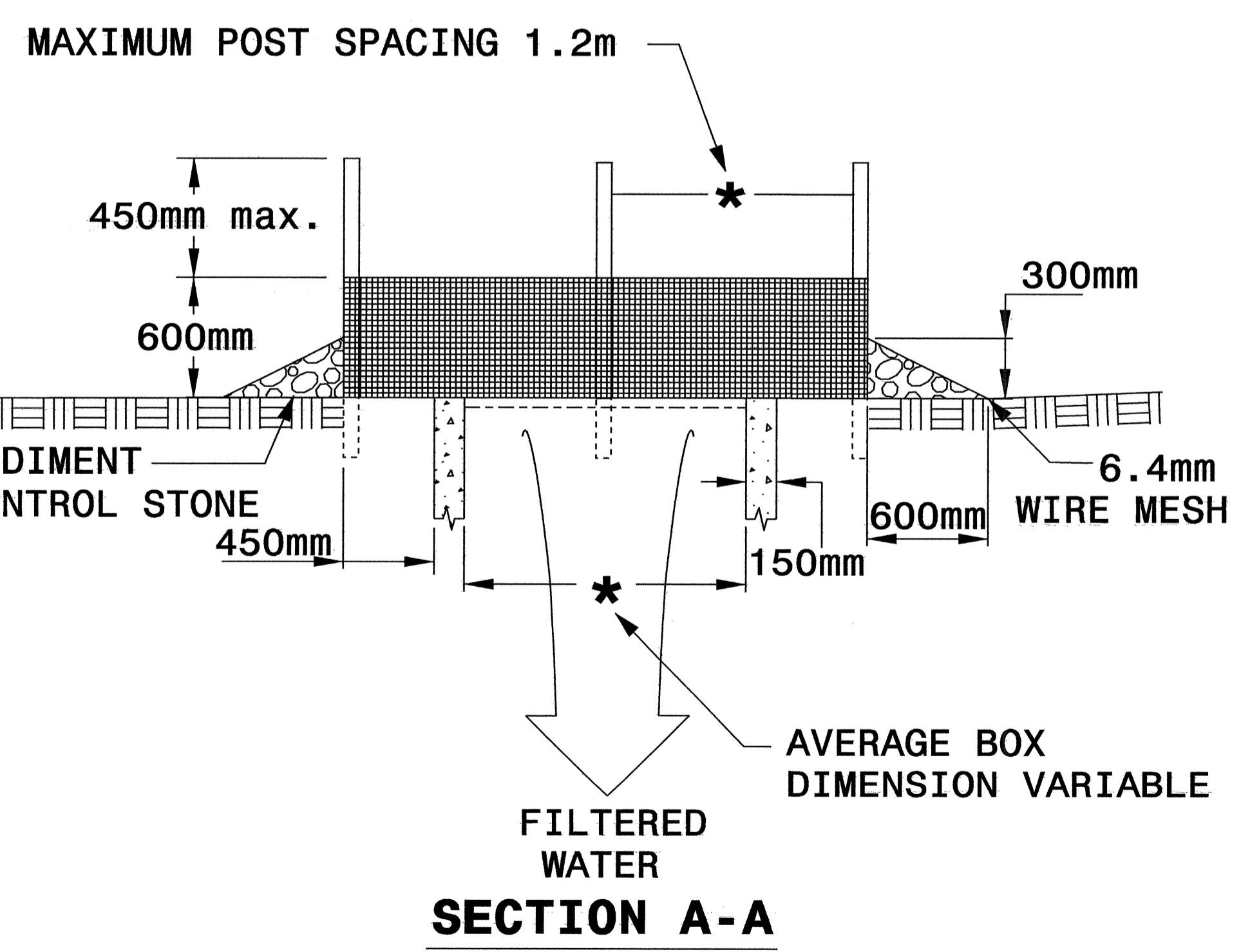
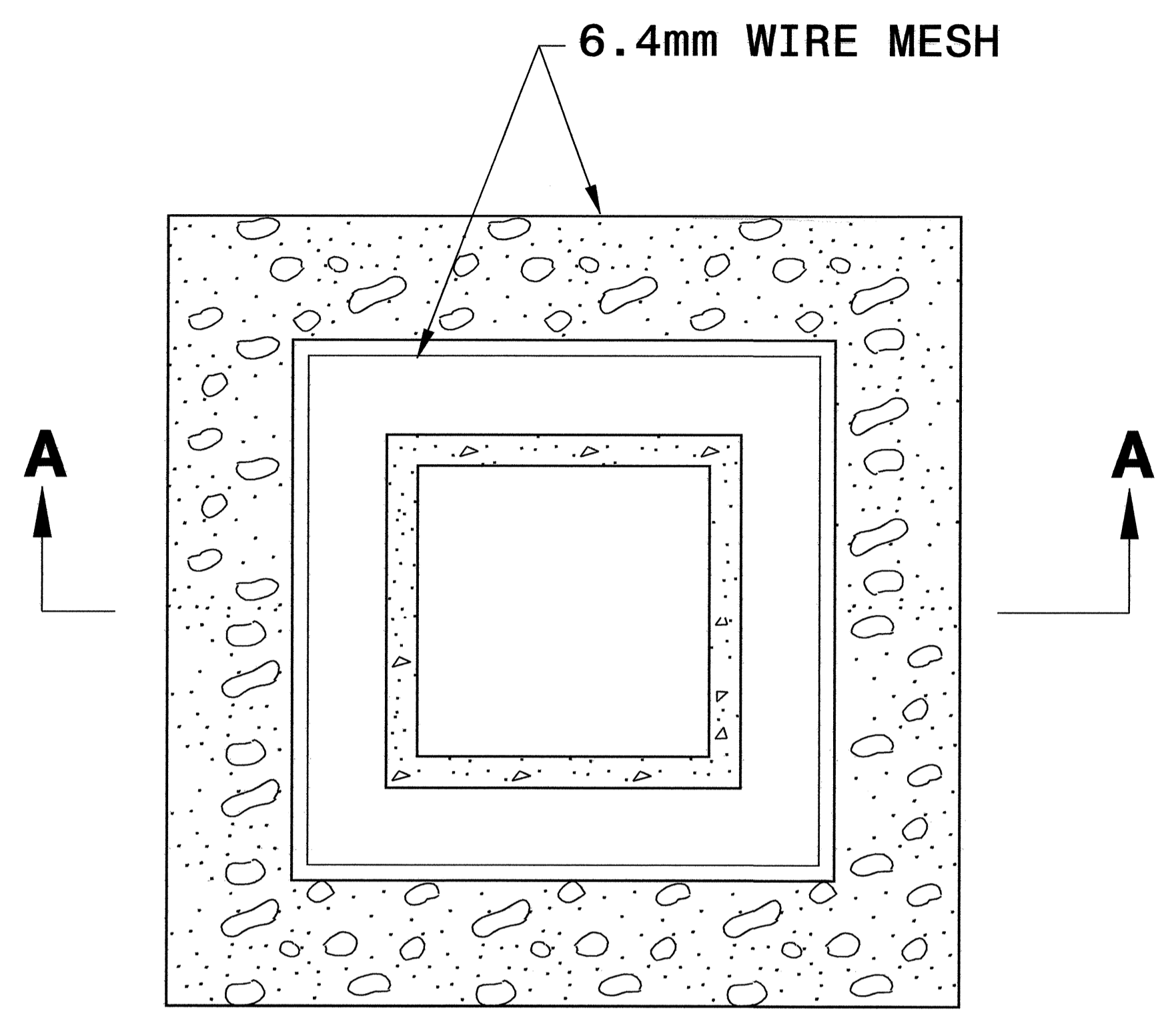
PROVIDE 1.5M STEEL POST OF THE SELF-FASTENER ANGLE STEEL TYPE. ANGLE STEEL TYPE.





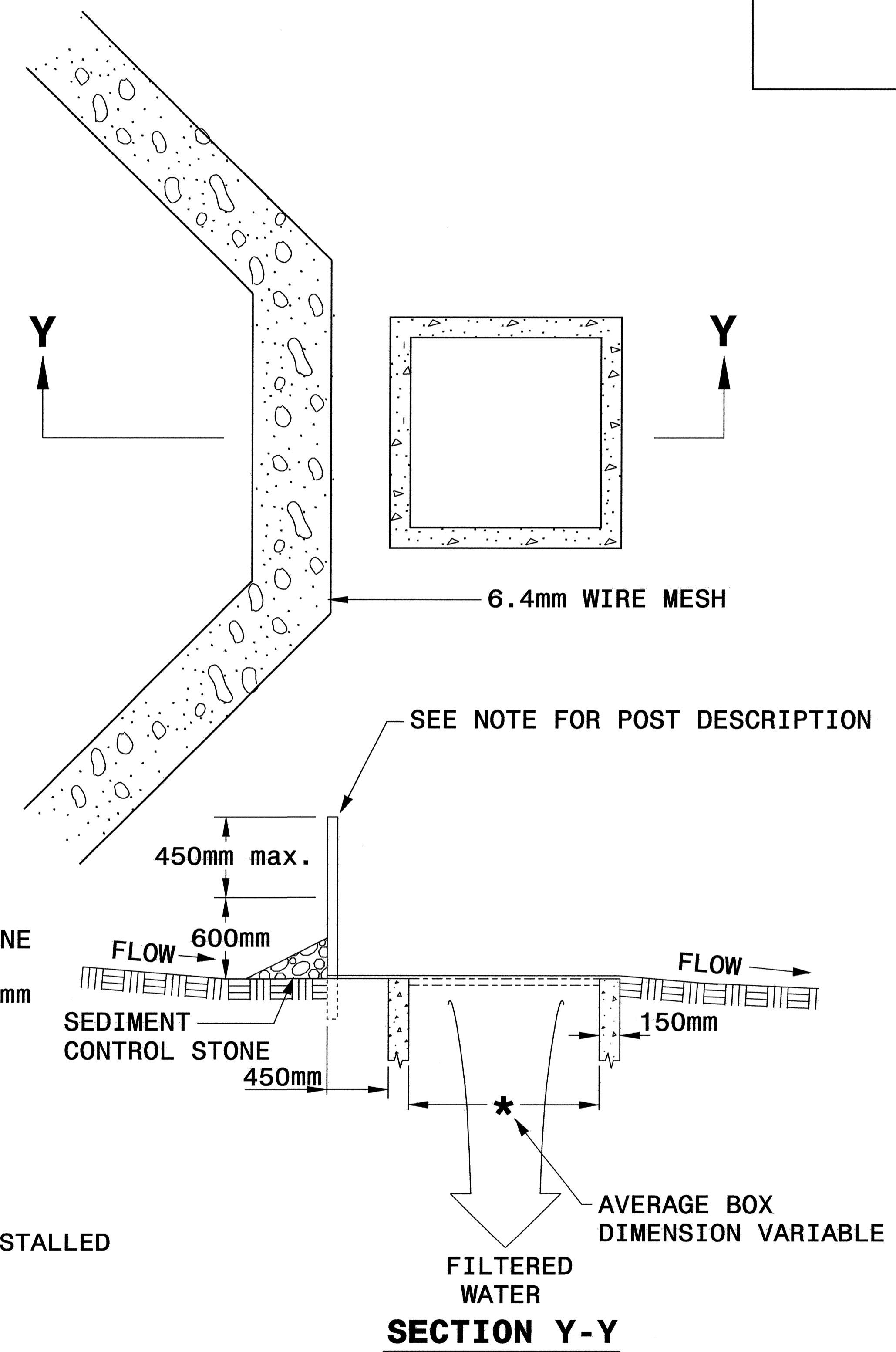
PROJECT REFERENCE NO. R-2824	SHEET NO. EC-2E
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

ROCK INLET SEDIMENT TRAP TYPE 'C' DETAIL



MULTI-DIRECTIONAL FLOW

NOTE
 USE NO. 5 OR NO. 57 STONE FOR SEDIMENT CONTROL.
 USE HARDWARE CLOTH 0.65mm WIRE MESH WITH 6.4mm MESH OPENINGS.
 PLACE TOP OF WIRE MESH A MINIMUM OF 300mm BELOW THE SHOULDER OR ANY DIVERSION POINT.
 INSTALL WIRE MESH UNDER SEDIMENT CONTROL STONE.
 USE 1.5m STEEL POST, INSTALLED 450mm DEEP MINIMUM, AND OF THE SELF-FASTENER ANGLE STEEL TYPE.
 SPACE POST A MAXIMUM OF 1.2m.

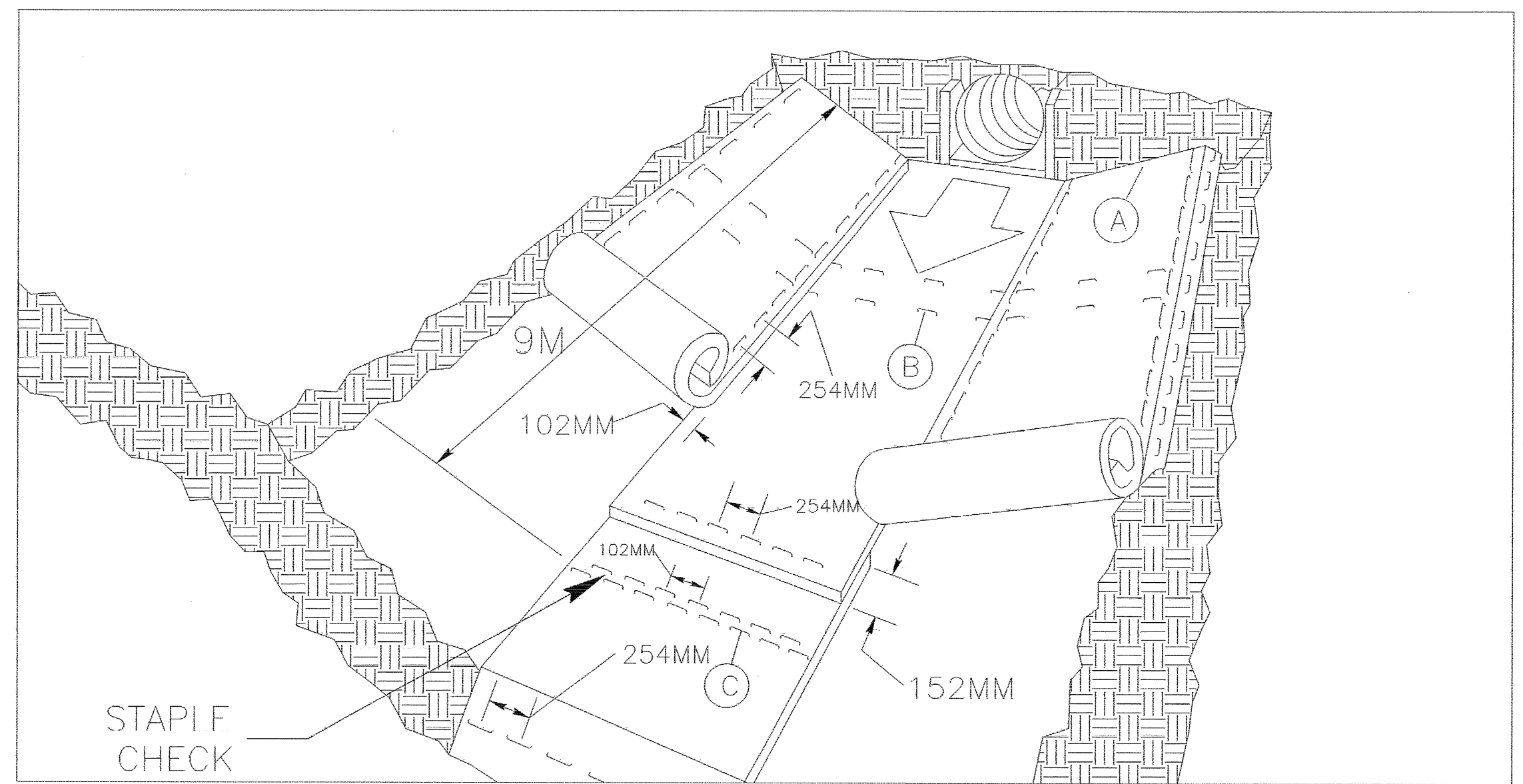


SINGLE-DIRECTIONAL FLOW



PROJECT REFERENCE NO. R-2824	SHEET NO. EC-2F
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

MATTING INSTALLATION DETAIL



MATTING IN DITCHES

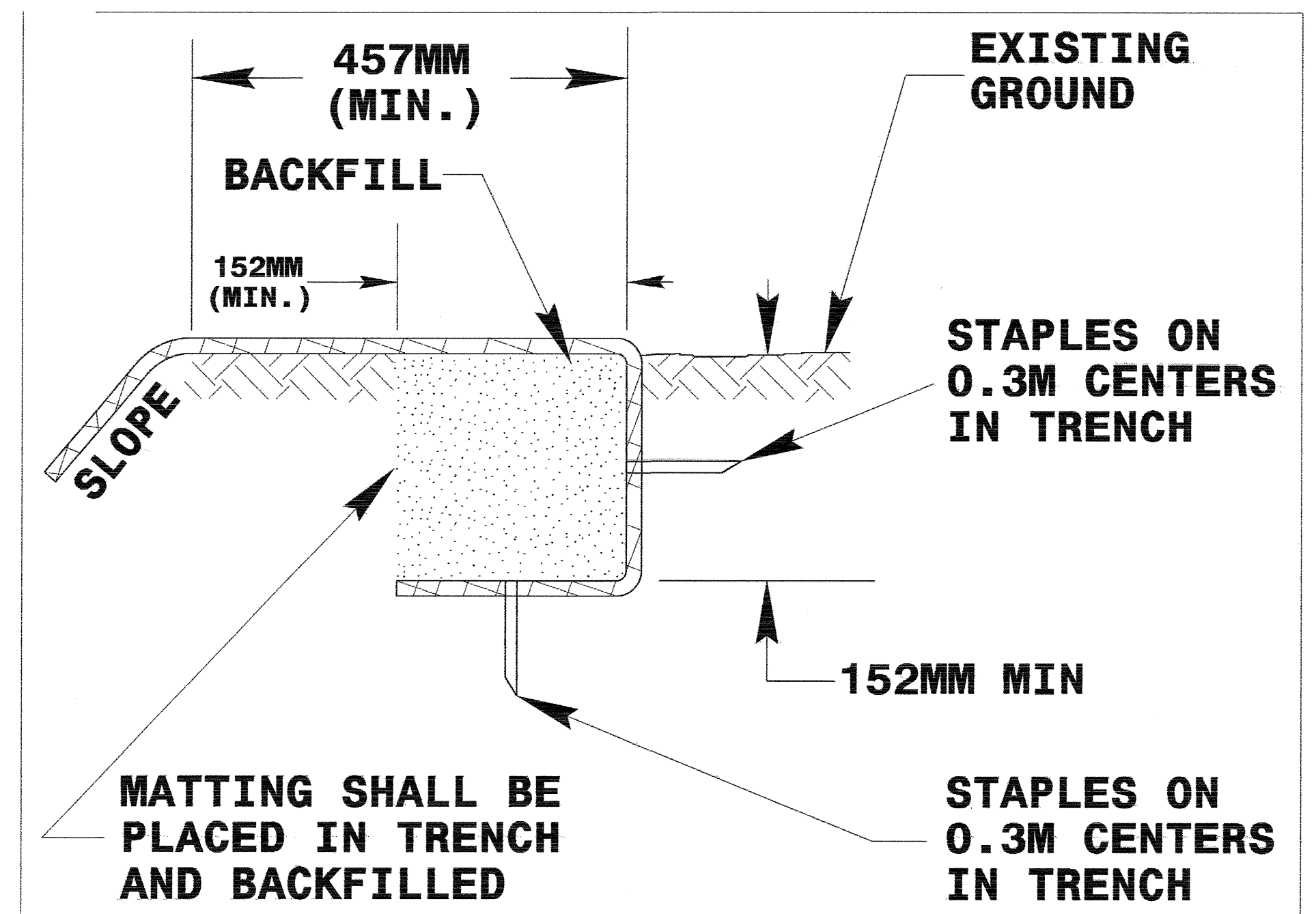
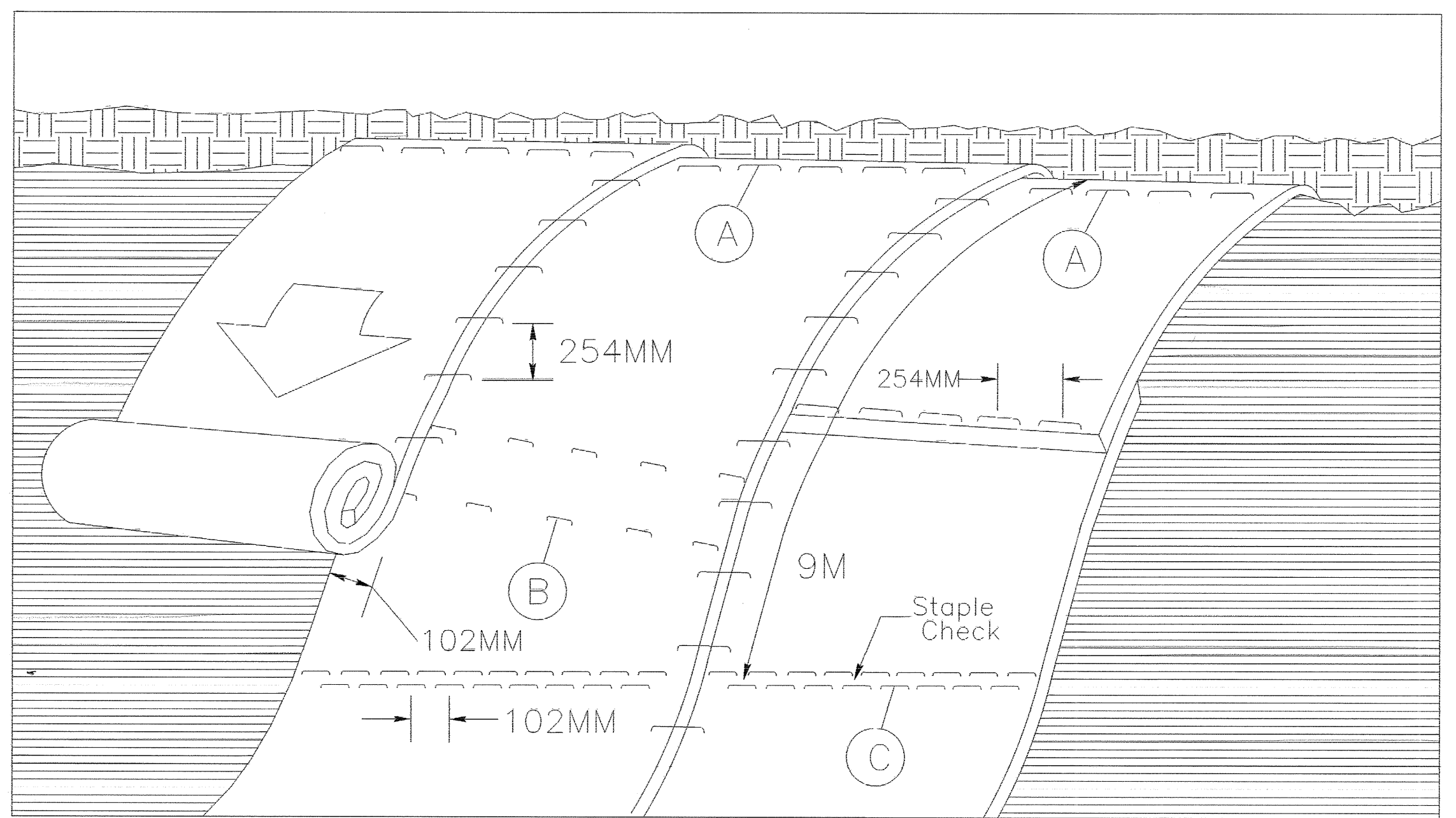


DIAGRAM (A)



MATTING ON SLOPES

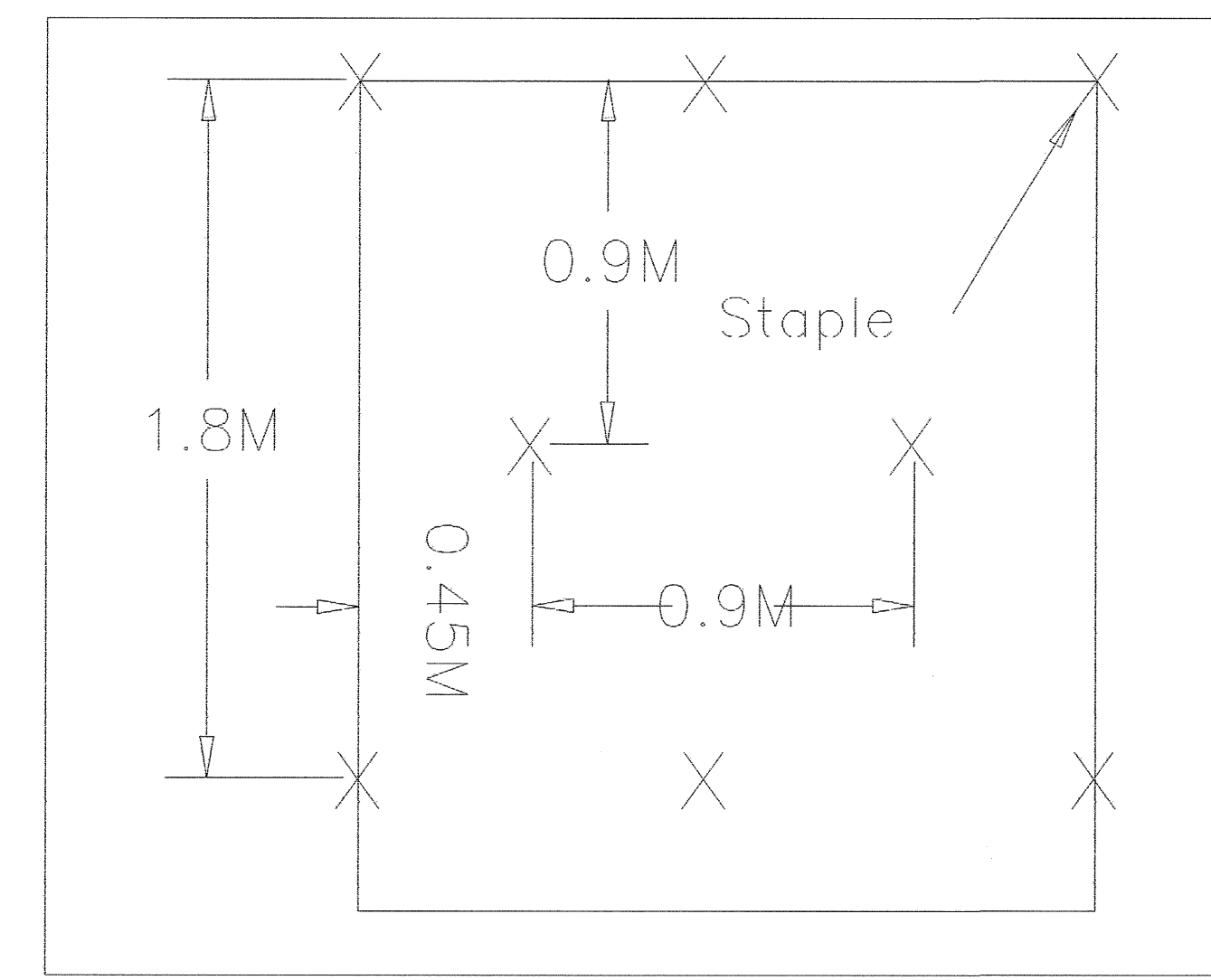


DIAGRAM (B)

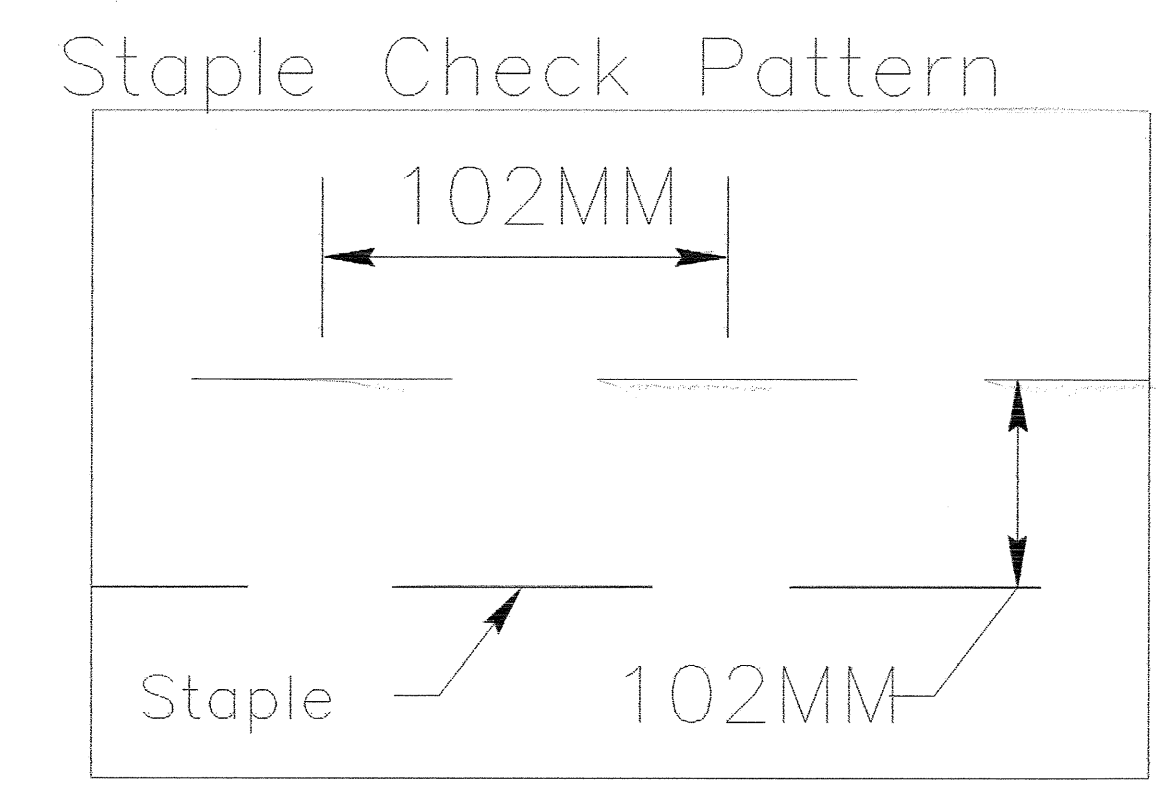


DIAGRAM (C)

NOTES:

THIS DETAIL APPLIES TO STRAW, EXCELSIOR, AND PERMANENT SOIL REINFORCEMENT MAT (PSRM) INSTALLATION.

STAPLES SHALL BE NO. 11 GAUGE STEEL WIRE FORMED INTO A "U" SHAPE WITH A MINIMUM THROAT WIDTH OF 25MM AND NOT LESS THAN 152MM IN LENGTH.

NOT TO SCALE

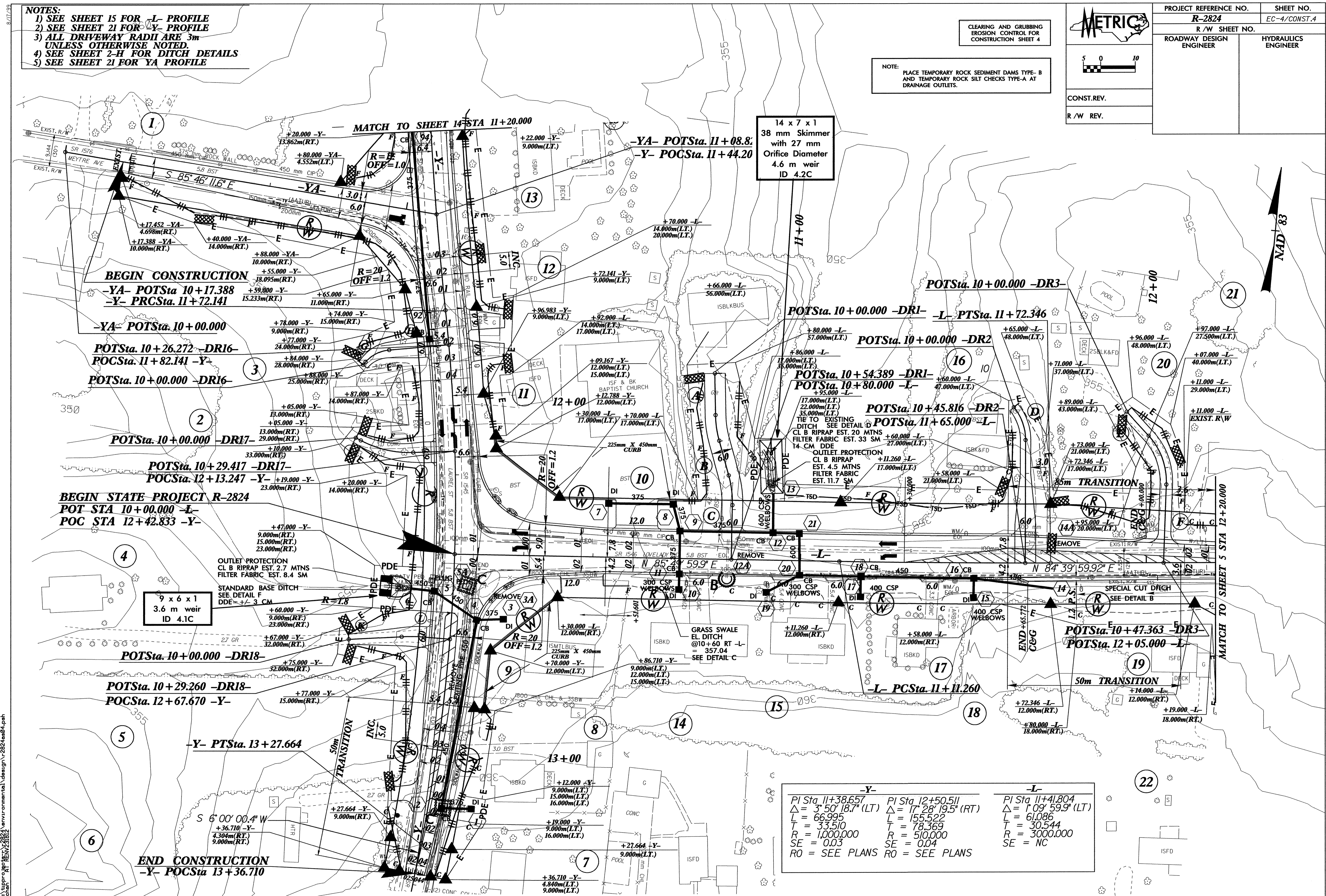
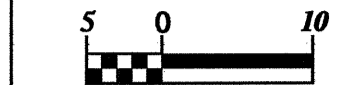
- NOTES:**
- 1) SEE SHEET 15 FOR -L- PROFILE
 - 2) SEE SHEET 21 FOR -Y- PROFILE
 - 3) ALL DRIVEWAY RADII ARE 3m UNLESS OTHERWISE NOTED.
 - 4) SEE SHEET 2-H FOR DITCH DETAILS
 - 5) SEE SHEET 21 FOR YA PROFILE

CLEARING AND GRUBBING
EROSION CONTROL FOR
CONSTRUCTION SHEET 4



PROJECT REFERENCE NO. R-2824	SHEET NO. EC-4/CONST.4
R/W SHEET NO.	HYDRAULICS ENGINEER
ROADWAY DESIGN ENGINEER	
CONST. REV.	
R/W REV.	

NOTE:
PLACE TEMPORARY ROCK SEDIMENT DAMS TYPE-B
AND TEMPORARY ROCK SILT CHECKS TYPE-A AT
DRAINAGE OUTLETS.



14 x 7 x 1
38 mm Skimmer
with 27 mm
Orifice Diameter
4.6 m weir
ID 4.2C

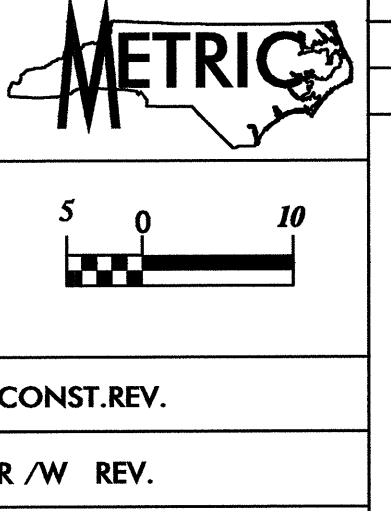
9 x 6 x 1
3.6 m weir
ID 4.1C

-Y-	-L-	-L-
PI Sta 11+38.657	PI Sta 12+50.511	PI Sta 11+41.804
$\Delta = 3^{\circ} 50' 18.7''$ (LT)	$\Delta = 17^{\circ} 28' 19.5''$ (RT)	$\Delta = 1^{\circ} 09' 59.9''$ (LT)
L = 66.995	L = 155.522	L = 61.086
T = 33.510	T = 78.369	T = 30.544
R = 1,000.000	R = 510.000	R = 3,000.000
SE = 0.03	SE = 0.04	SE = NC
RO = SEE PLANS	RO = SEE PLANS	

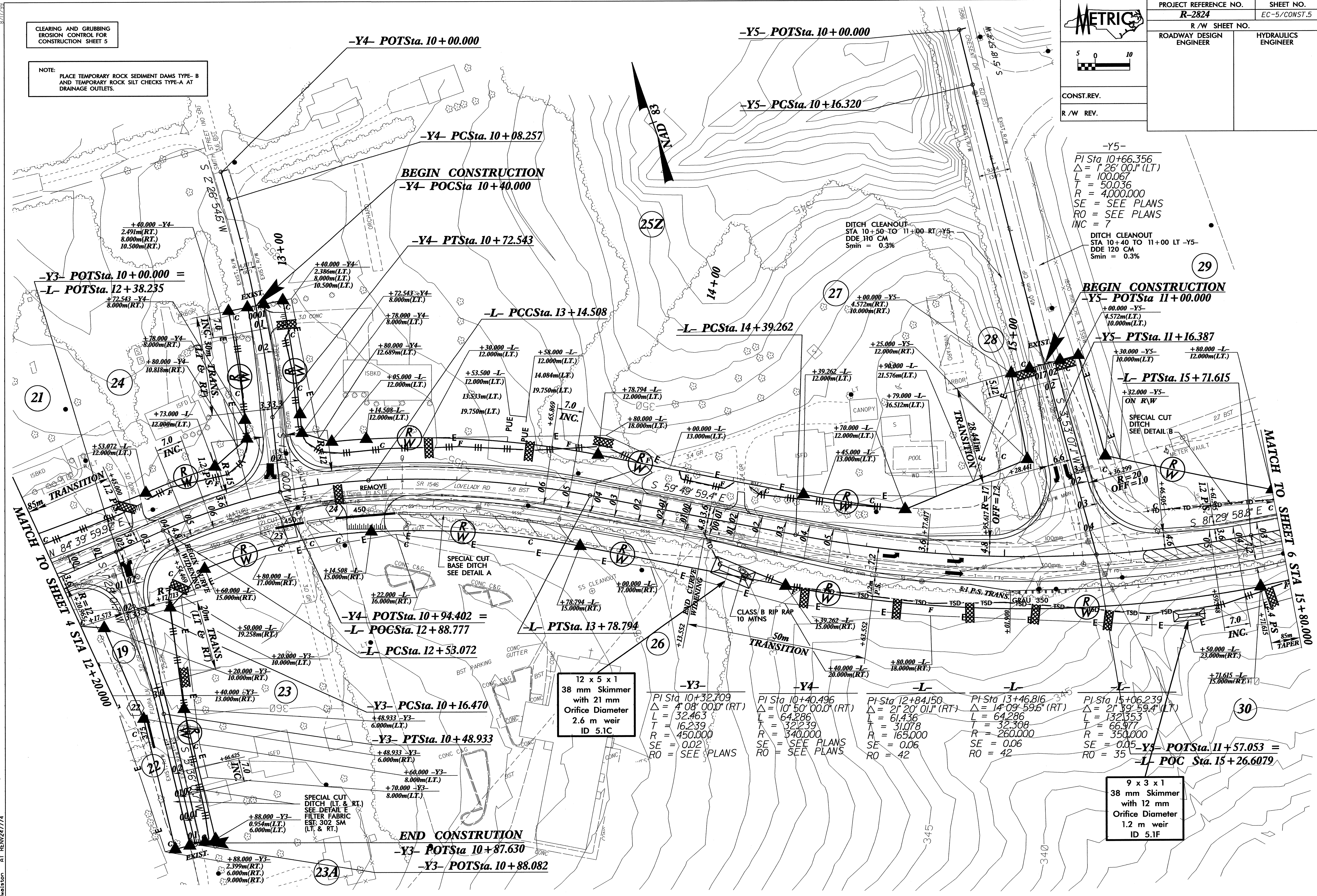
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CLEARING AND GRUBBING
EROSION CONTROL FOR
CONSTRUCTION SHEET 5

NOTE:
PLACE TEMPORARY ROCK SEDIMENT DAMS TYPE-B
AND TEMPORARY ROCK SILT CHECKS TYPE-A AT
DRAINAGE OUTLETS.



PROJECT REFERENCE NO. R-2824	SHEET NO. EC-5/CONST.5
R/W SHEET NO.	HYDRAULICS ENGINEER
ROADWAY DESIGN ENGINEER	



BEGIN CONSTRUCTION
-Y5- POTSta 11+00.000
+00.000 -Y5-
4.572m(LT)
10.000m(LT)
-Y5- PTSta. 11+16.387
+30.000 -Y5-
12.000m(LT) +80.000 -Y5-
12.000m(LT)
-L- PTSta. 15+71.615
+32.000 -Y5-
ON RW
SPECIAL CUT
DITCH
SEE DETAIL B
METER VAULT

12 x 5 x 1
38 mm Skimmer
with 21 mm
Orifice Diameter
2.6 m weir
ID 5.1C

9 x 3 x 1
38 mm Skimmer
with 12 mm
Orifice Diameter
1.2 m weir
ID 5.1F

-Y3-
PI Sta 10+32.709
 $\Delta = 4' 08.00''$ (RT)
L = 32.463
T = 16.239
R = 450,000
SE = 0.02
RO = SEE PLANS

-Y4-
PI Sta 10+40.496
 $\Delta = 10' 50.00''$ (RT)
L = 64.286
T = 32.239
R = 340,000
SE = SEE PLANS
RO = SEE PLANS

-L-
PI Sta 12+84.150
 $\Delta = 21' 20.01''$ (RT)
L = 61.436
T = 31.078
R = 165,000
SE = 0.06
RO = 42

-L-
PI Sta 13+46.816
 $\Delta = 14' 09.59.6''$ (RT)
L = 64.286
T = 32.308
R = 260,000
SE = 0.06
RO = 42

-L-
PI Sta 15+06.239
 $\Delta = 21' 39.59.4''$ (LT)
L = 132.353
T = 66.977
R = 350,000
SE = 0.05
RO = 35

-Y3- POTSta. 11+57.053 =
-L- POC Sta. 15+26.6079

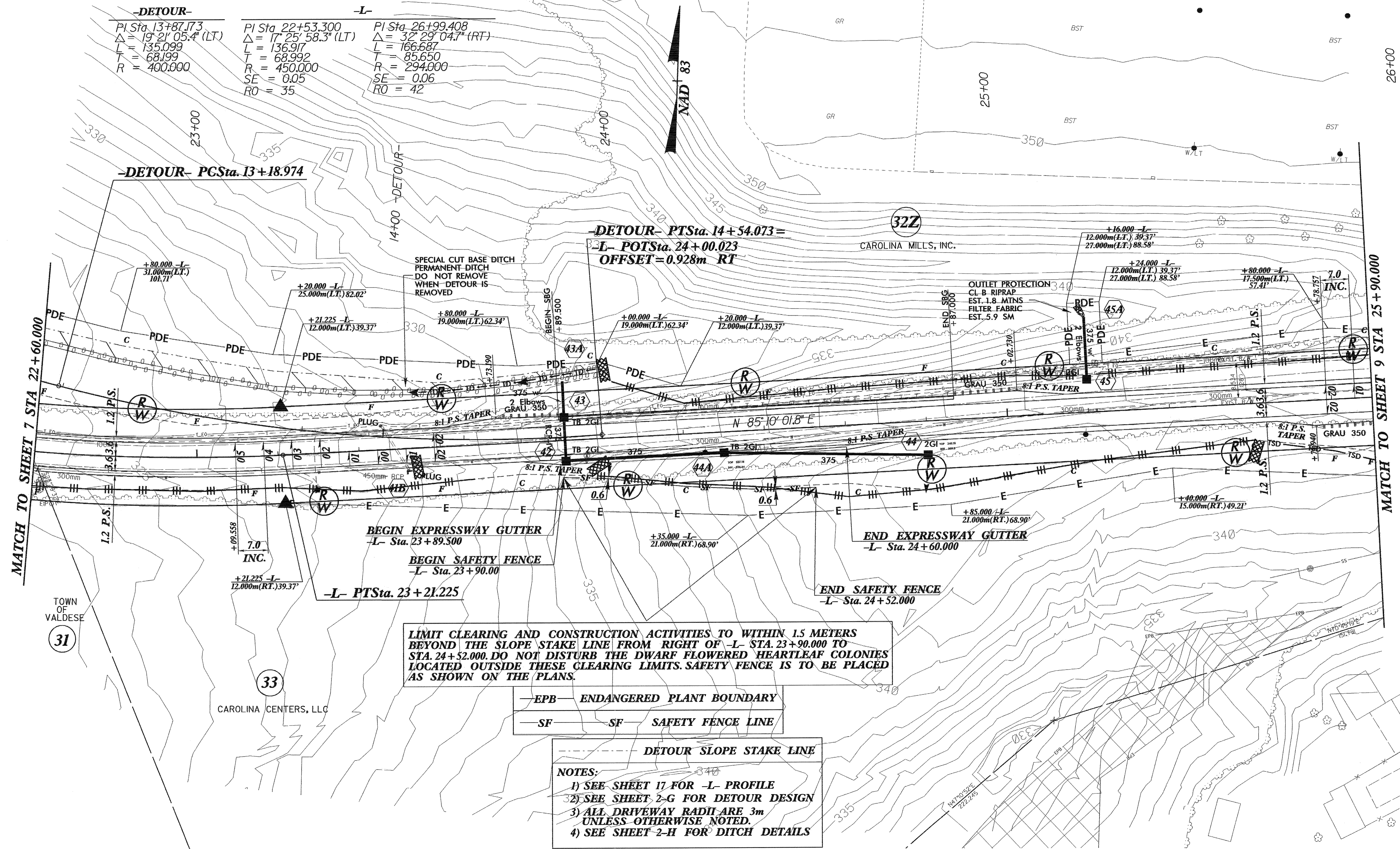
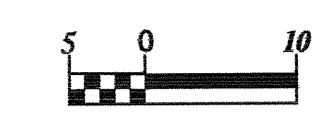
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CLEARING AND GRUBBING
EROSION CONTROL FOR
CONSTRUCTION SHEET 8



PROJECT REFERENCE NO.	SHEET NO.
R-2824	EC-B/CONST.8
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
CONST. REV.	
R/W REV.	

NOTE:
PLACE TEMPORARY ROCK SEDIMENT DAMS TYPE-B
AND TEMPORARY ROCK SILT CHECKS TYPE-A AT
DRAINAGE OUTLETS.



**LIMIT CLEARING AND CONSTRUCTION ACTIVITIES TO WITHIN 1.5 METERS
BEYOND THE SLOPE STAKE LINE FROM RIGHT OF -L- STA. 23+90.000 TO
STA. 24+52.000. DO NOT DISTURB THE DWARF FLOWERED HEARTLEAF COLONIES
LOCATED OUTSIDE THESE CLEARING LIMITS. SAFETY FENCE IS TO BE PLACED
AS SHOWN ON THE PLANS.**

—EPB— ENDANGERED PLANT BOUNDARY
—SF— SF SAFETY FENCE LINE

--- DETOUR SLOPE STAKE LINE

NOTES:
1) SEE SHEET 17 FOR -L- PROFILE
2) SEE SHEET 2-G FOR DETOUR DESIGN
3) ALL DRIVEWAY RADII ARE 3m
UNLESS OTHERWISE NOTED.
4) SEE SHEET 2-H FOR DITCH DETAILS

8/17/2014
 21 JAN-2010 15:07
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METRIC

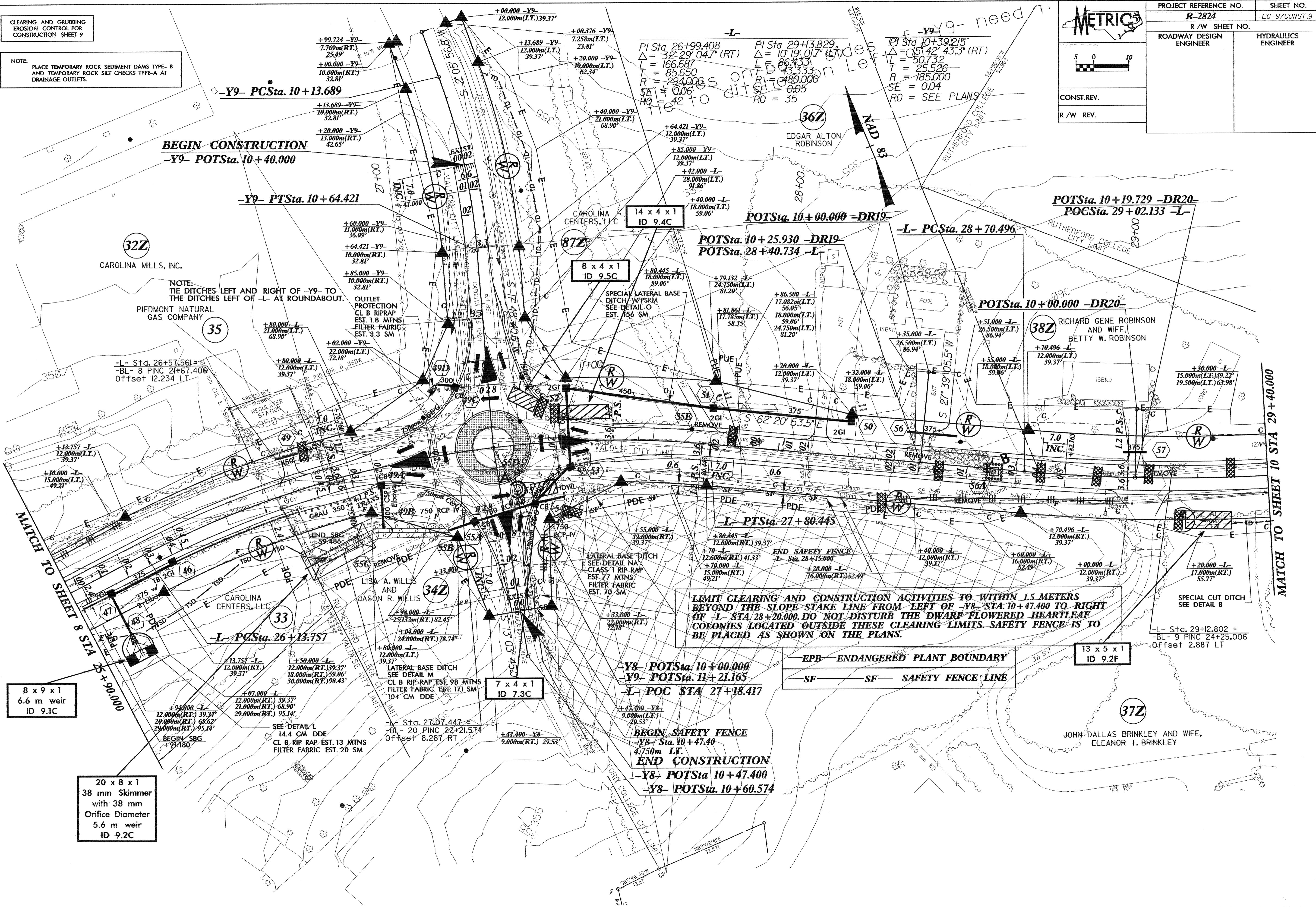
CONST. REV.
R/W REV.

PROJECT REFERENCE NO.	SHEET NO.
R-2824	EC-9/CONST.9
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

CLEARING AND GRUBBING EROSION CONTROL FOR CONSTRUCTION SHEET 9

NOTE: PLACE TEMPORARY ROCK SEDIMENT DAMS TYPE-B AND TEMPORARY ROCK SILT CHECKS TYPE-A AT DRAINAGE OUTLETS.

3-29-05 KMD RIGHT OF WAY REVISION: PROPERTY OWNER NAME HAS BEEN CHANGED ON PARCEL 34.



8 x 9 x 1
6.6 m weir
ID 9.1C

20 x 8 x 1
38 mm Skimmer
with 38 mm
Orifice Diameter
5.6 m weir
ID 9.2C

PI Sta. 26+99.408
 $\Delta = 32.29.047^\circ$ (RT)
 $L = 166.687$
 $R = 85.650$
 $SA = 0.06$
 $AO = 42$

PI Sta. 29+13.829
 $\Delta = 10.19.017^\circ$ (LT)
 $L = 86.433$
 $R = 43.333$
 $SA = 0.05$
 $RO = 35$

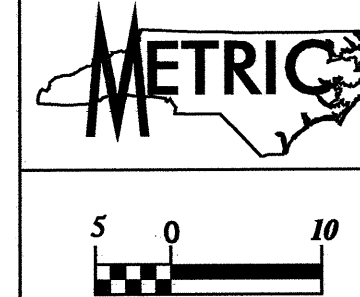
PI Sta. 10+39.215
 $\Delta = 05.42.43.3^\circ$ (RT)
 $L = 50.732$
 $T = 25.526$
 $R = 185.000$
 $SE = 0.04$
 $RO = \text{SEE PLANS}$

LIMIT CLEARING AND CONSTRUCTION ACTIVITIES TO WITHIN 1.5 METERS BEYOND THE SLOPE STAKE LINE FROM LEFT OF -Y8- STA. 10+47.400 TO RIGHT OF -L- STA. 28+20.000. DO NOT DISTURB THE DWARF FLOWERED HEARTLEAF COLONIES LOCATED OUTSIDE THESE CLEARING LIMITS. SAFETY FENCE IS TO BE PLACED AS SHOWN ON THE PLANS.

—EPB— ENDANGERED PLANT BOUNDARY
—SF— SF SAFETY FENCE LINE

-Y8- POTSta. 10+00.000
-Y9- POTSta. 11+21.165
-L- POC STA 27+18.417

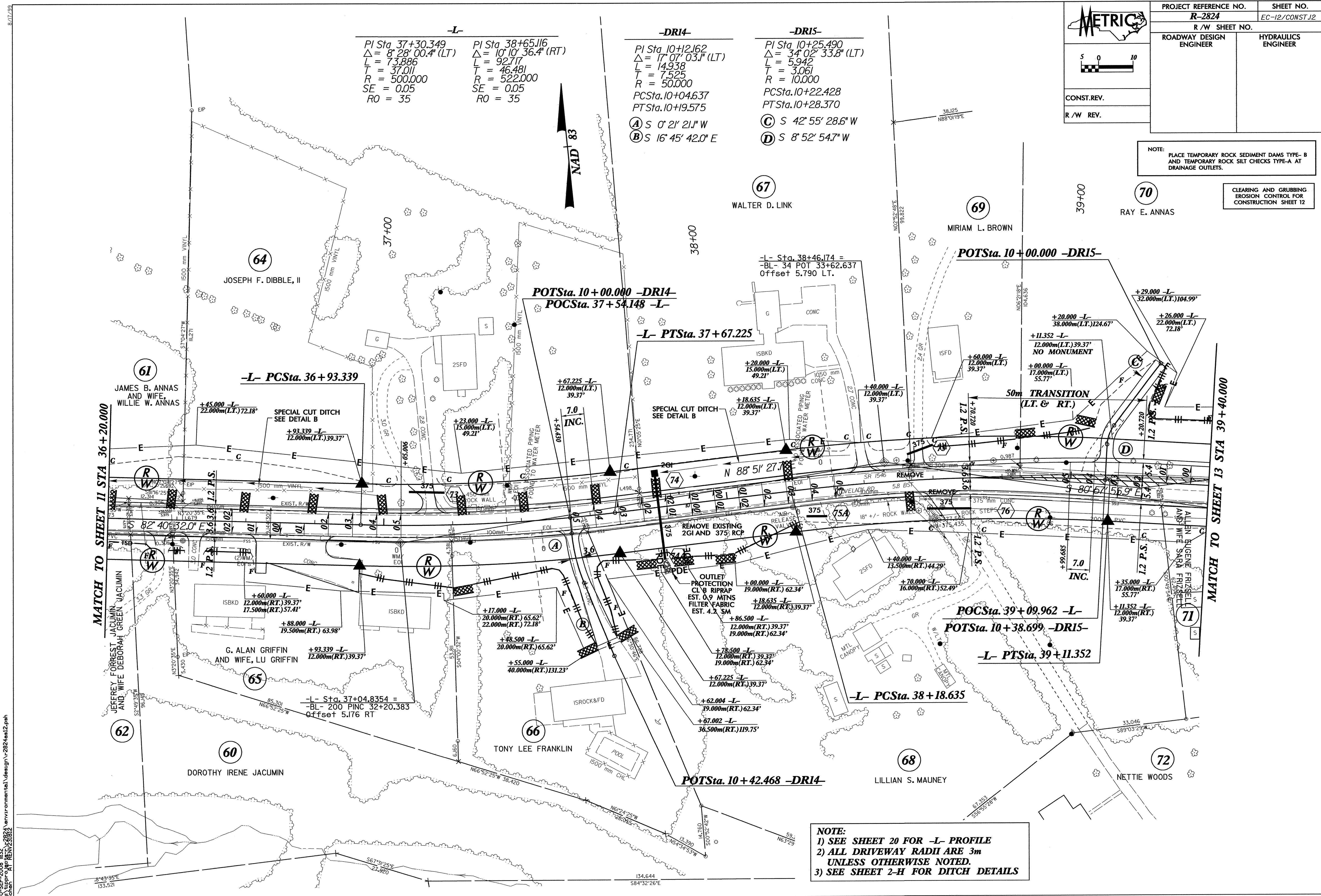
BEGIN SAFETY FENCE
-Y8- Sta. 10+47.40
4.750m LT.
END CONSTRUCTION
-Y8- POTSta. 10+47.400
-Y8- POTSta. 10+60.574



PROJECT REFERENCE NO. R-2824	SHEET NO. EC-12/CONST.12
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
CONST.REV.	
R/W REV.	

NOTE: PLACE TEMPORARY ROCK SEDIMENT DAMS TYPE-B AND TEMPORARY ROCK SILT CHECKS TYPE-A AT DRAINAGE OUTLETS.

CLEARING AND GRUBBING EROSION CONTROL FOR CONSTRUCTION SHEET 12



-L-
 PI Sta. 37+30.349 PI Sta. 38+65.116
 $\Delta = 8' 28' 00.4''$ (LT) $\Delta = 10' 10' 36.4''$ (RT)
 $L = 73.886$ $L = 92.717$
 $T = 37.011$ $T = 46.481$
 $R = 500.000$ $R = 522.000$
 $SE = 0.05$ $SE = 0.05$
 $RO = 35$ $RO = 35$

-DR14-
 PI Sta. 10+12.162
 $\Delta = 17' 07' 03.1''$ (LT)
 $L = 14.938$
 $T = 7.525$
 $R = 50.000$
 PCSta. 10+04.637
 PTSta. 10+19.575
(A) S 0° 21' 21.1'' W
(B) S 16° 45' 42.0'' E

-DR15-
 PI Sta. 10+25.490
 $\Delta = 34' 02' 33.8''$ (LT)
 $L = 5.942$
 $T = 3.061$
 $R = 10.000$
 PCSta. 10+22.428
 PTSta. 10+28.370
(C) S 42° 55' 28.6'' W
(D) S 8° 52' 54.7'' W

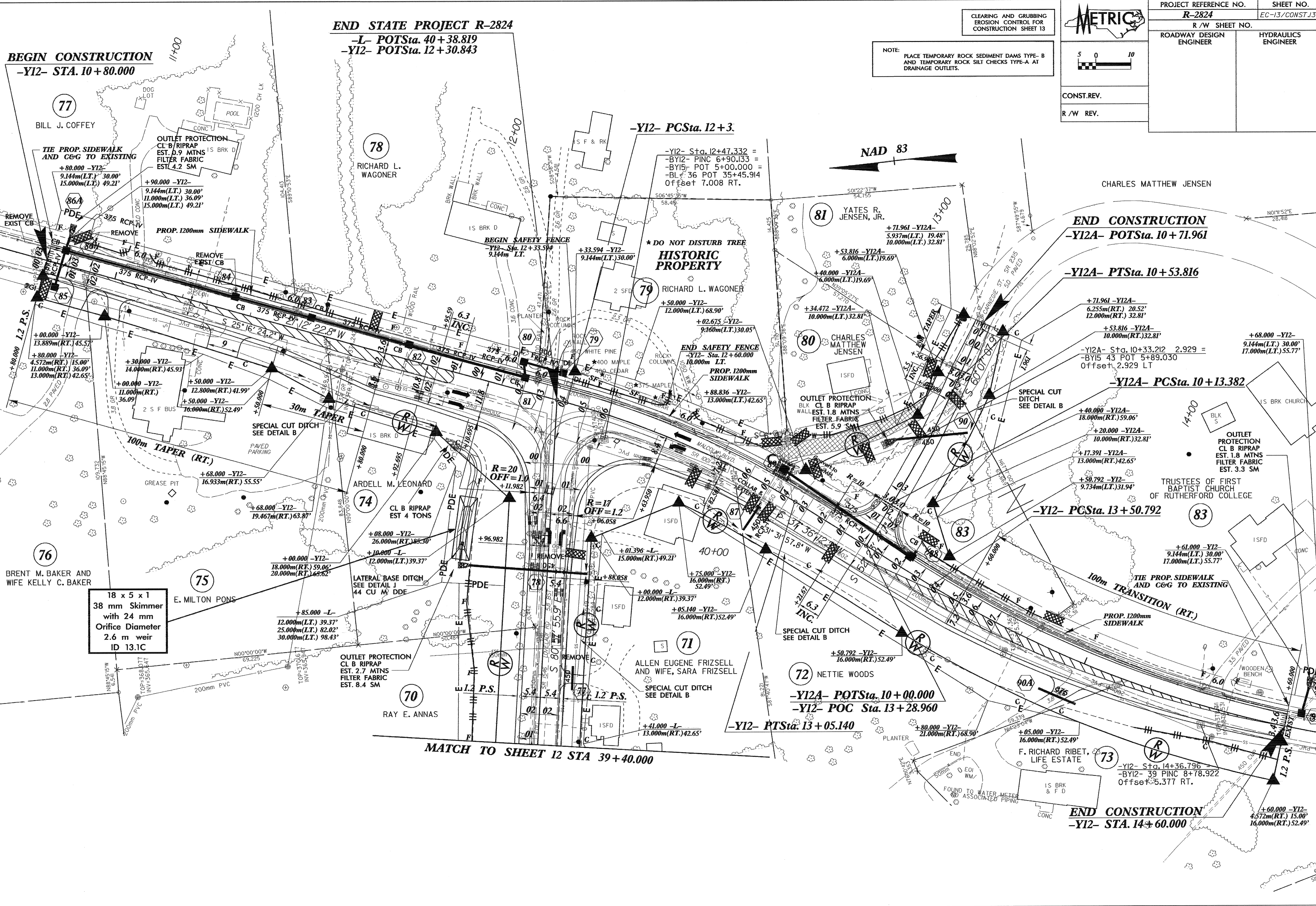
MATCH TO SHEET 11 STA 36 + 20.000

MATCH TO SHEET 13 STA 39 + 40.000

NOTE:
 1) SEE SHEET 20 FOR -L- PROFILE
 2) ALL DRIVEWAY RADII ARE 3m UNLESS OTHERWISE NOTED.
 3) SEE SHEET 2-H FOR DITCH DETAILS

30-SEP-2008 11:32 AM
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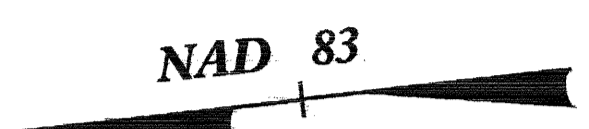
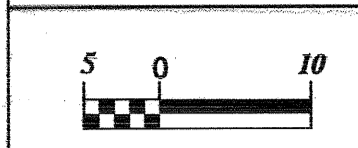


END STATE PROJECT R-282
-L- POTSta. 40+38.819
-Y12- POTSta. 12+30.843

CLEARING AND GRUBBING
EROSION CONTROL FOR
CONSTRUCTION SHEET 13

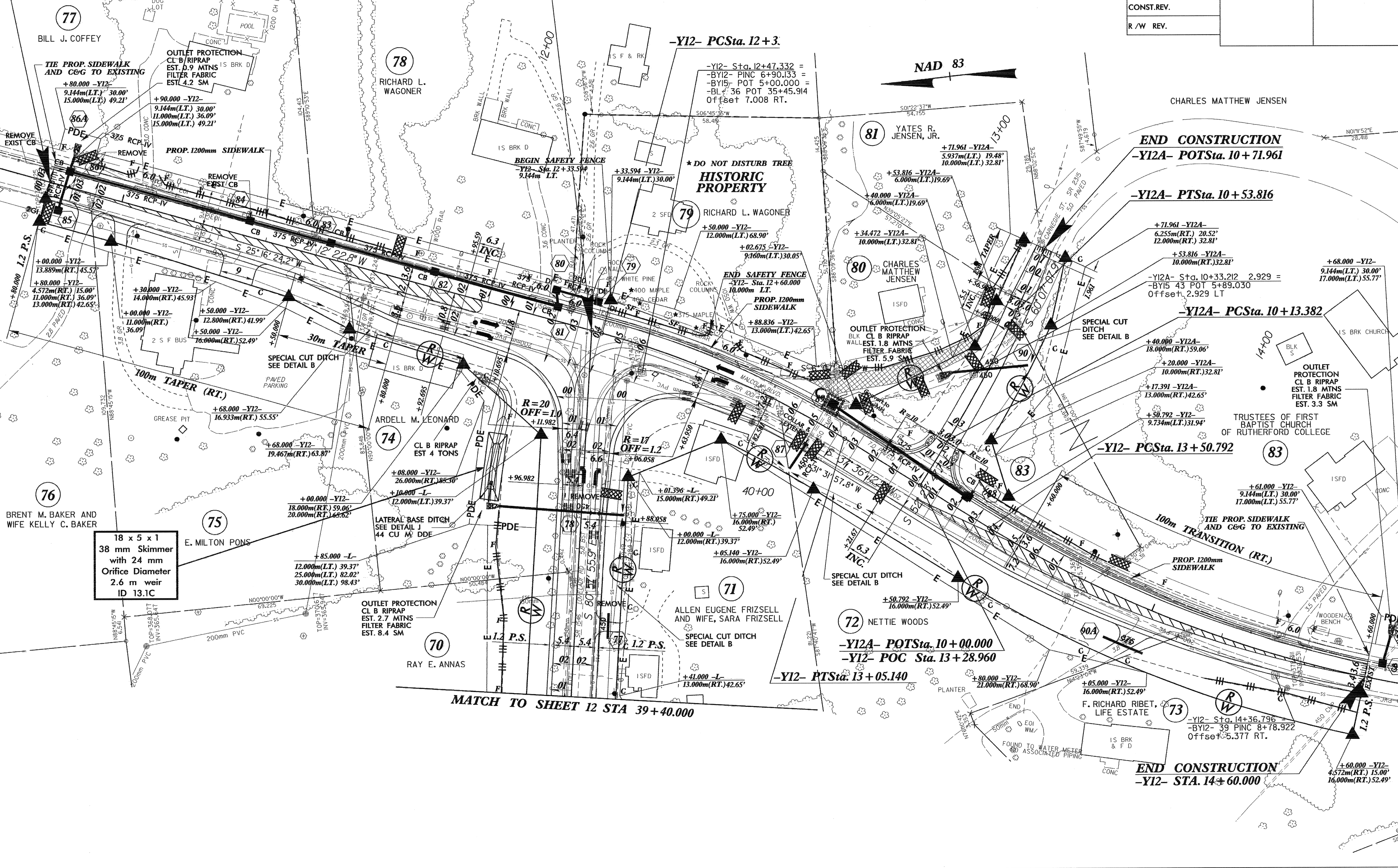
PROJECT REFERENCE NO.		SHEET NO.	
R-282		EC-13/CONST.13	
R /W SHEET NO.			
ROADWAY DESIGN ENGINEER		HYDRAULICS ENGINEER	
CONST.REV.			
R /W REV.			

NOTE: PLACE TEMPORARY ROCK SEDIMENT DAMS TYPE-B AND TEMPORARY ROCK SILT CHECKS TYPE-A AT DRAINAGE OUTLETS.



BEGIN CONSTRUCTION
-Y12- STA. 10+80.000

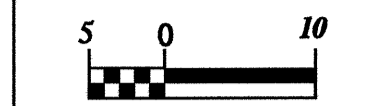
END CONSTRUCTION
-Y12A- POTSta. 10+71.961



18 x 5 x 1
38 mm Skimmer
with 24 mm
Orifice Diameter
2.6 m weir
ID 13.1C

MATCH TO SHEET 12 STA 39+40.000

END CONSTRUCTION
-Y12- STA. 14+60.000



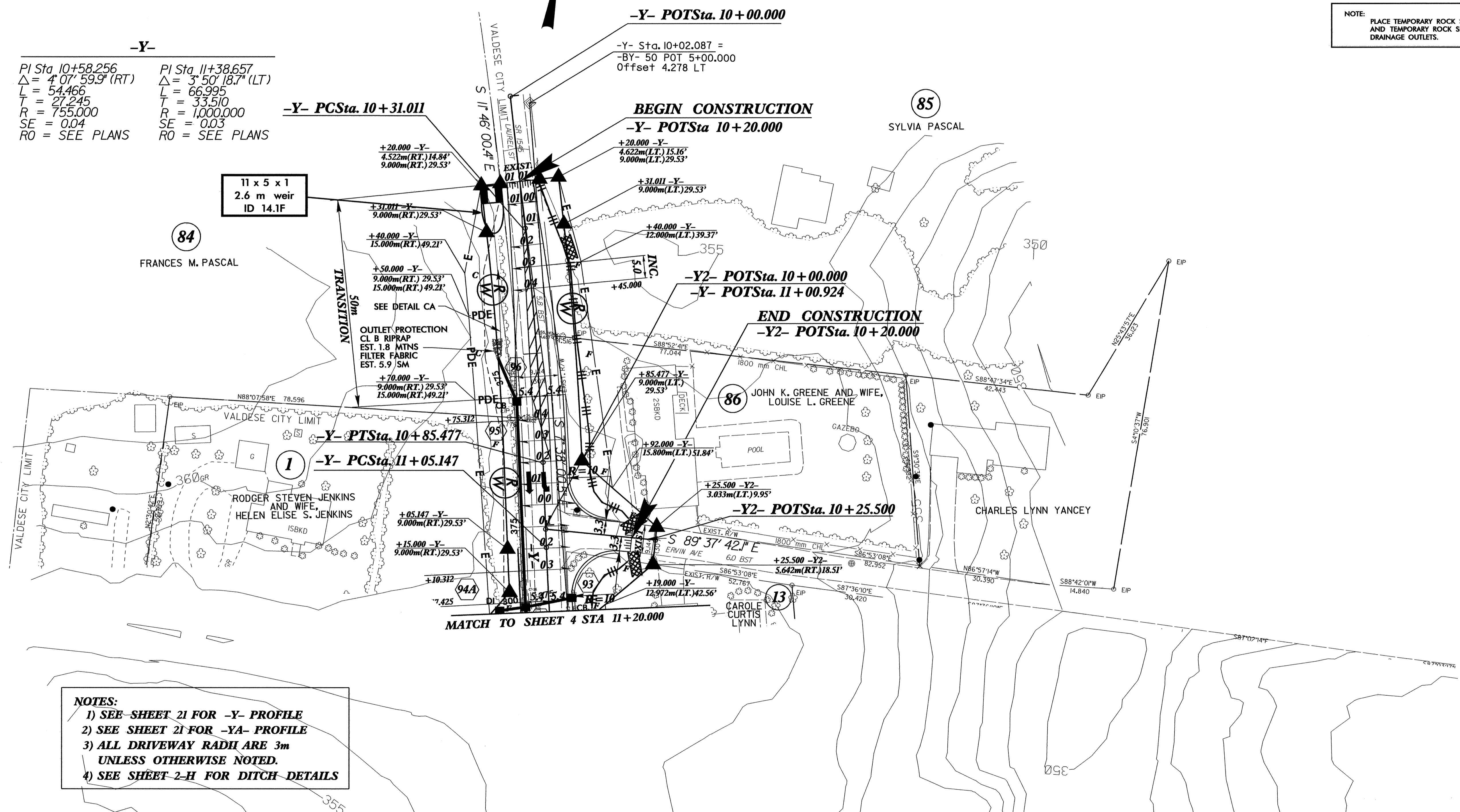
CONST.REV.

R/W REV.

PROJECT REFERENCE NO. R-2824	SHEET NO. EC-14/CONST.14
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

CLEARING AND GRUBBING
EROSION CONTROL FOR
CONSTRUCTION SHEET 14

NOTE:
PLACE TEMPORARY ROCK SEDIMENT DAMS TYPE-B
AND TEMPORARY ROCK SILT CHECKS TYPE-A AT
DRAINAGE OUTLETS.



-Y-

PI Sta 10+58.256	PI Sta 11+38.657
$\Delta = 4^{\circ} 07' 59.9''$ (RT)	$\Delta = 3^{\circ} 50' 18.7''$ (LT)
L = 54.466	L = 66.995
T = 27.245	T = 33.510
R = 755.000	R = 1,000.000
SE = 0.04	SE = 0.03
RO = SEE PLANS	RO = SEE PLANS

84
FRANCES M. PASCAL

86
JOHN K. GREENE AND WIFE,
LOUISE L. GREENE

CHARLES LYNN YANCEY

13
CAROLE CURTIS
LYNN

NOTES:

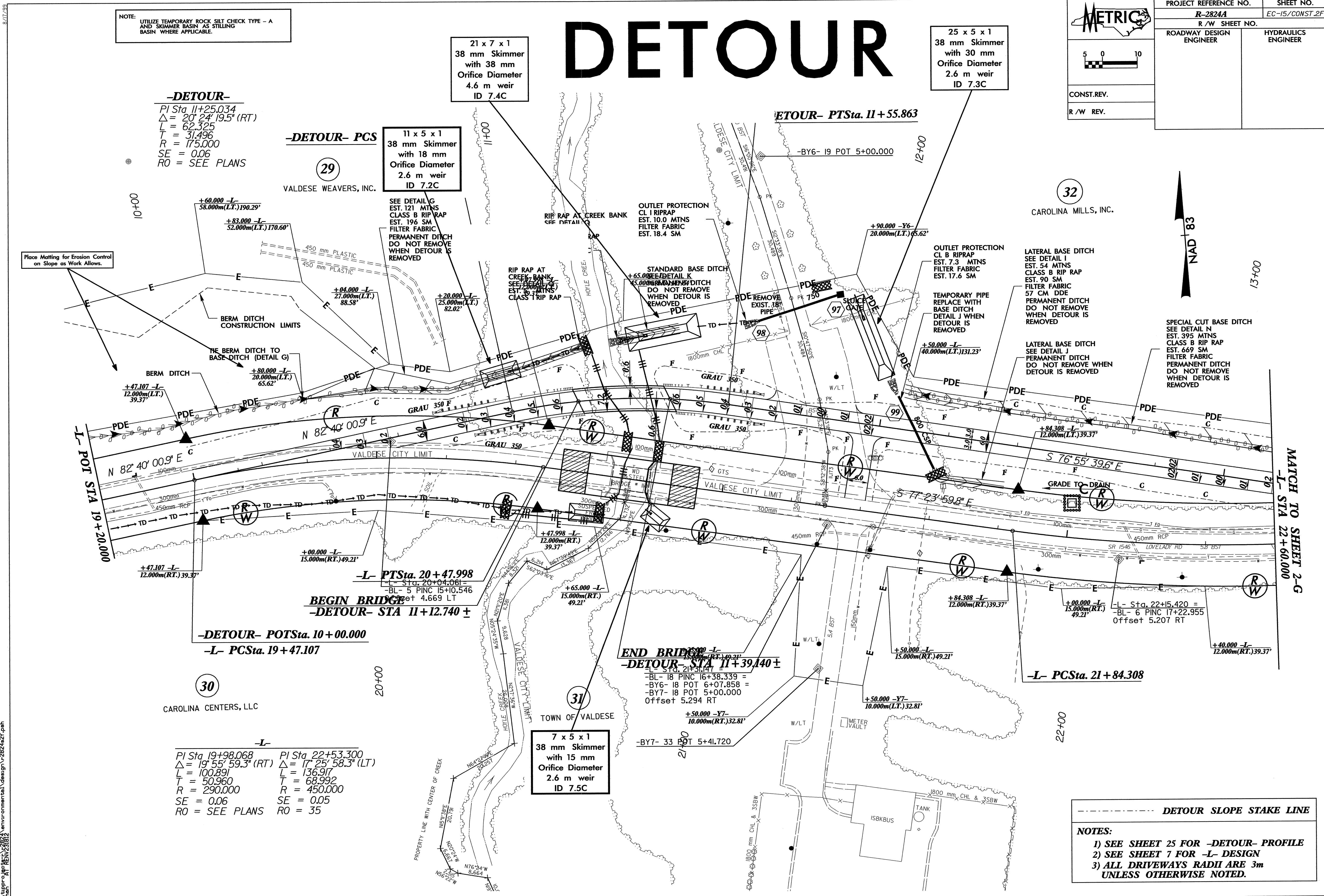
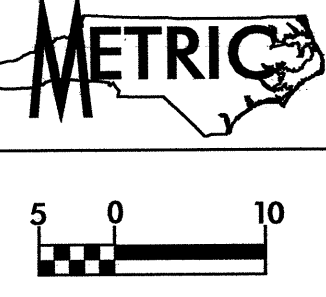
- 1) SEE SHEET 21 FOR -Y- PROFILE
- 2) SEE SHEET 21 FOR -YA- PROFILE
- 3) ALL DRIVEWAY RADII ARE 3m UNLESS OTHERWISE NOTED.
- 4) SEE SHEET 2-H FOR DITCH DETAILS

30-SEP-2008 12:47
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DETOUR

PROJECT REFERENCE NO. R-2824A		SHEET NO. EC-15/CONST.2F
R/W SHEET NO.		
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER	
CONST. REV.		
R/W REV.		

NOTE: UTILIZE TEMPORARY ROCK SILT CHECK TYPE - A AND SKIMMER BASIN AS STILLING BASIN WHERE APPLICABLE.



-DETOUR-
 PI Sta 11+25.034
 $\Delta = 20^\circ 24' 19.5''$ (RT)
 $L = 62.325$
 $T = 31.496$
 $R = 175.000$
 $SE = 0.06$
 $RO = \text{SEE PLANS}$

-DETOUR- PCS
 29
 VALDESE WEAVERS, INC.
 11 x 5 x 1
 38 mm Skimmer
 with 18 mm
 Orifice Diameter
 2.6 m weir
 ID 7.2C

SEE DETAIL G
 EST. 121 MTNS
 CLASS B RIP RAP
 EST. 196 SM
 FILTER FABRIC
 PERMANENT DITCH
 DO NOT REMOVE
 WHEN DETOUR IS
 REMOVED

21 x 7 x 1
 38 mm Skimmer
 with 38 mm
 Orifice Diameter
 4.6 m weir
 ID 7.4C

25 x 5 x 1
 38 mm Skimmer
 with 30 mm
 Orifice Diameter
 2.6 m weir
 ID 7.3C

ETOUR- PTSta. 11 + 55.863

32
 CAROLINA MILLS, INC.

Place Matting for Erosion Control
 on Slope as Work Allows.

-L- POT STA 19 + 20.000

-L- PTSta. 20 + 47.998

BEGIN BRIDGE
-DETOUR- STA 11 + 12.740 +

-DETOUR- POTSta. 10 + 00.000
-L- PCSta. 19 + 47.107

30
 CAROLINA CENTERS, LLC

-L-
 PI Sta 19+98.068 PI Sta 22+53.300
 $\Delta = 19^\circ 55' 59.3''$ (RT) $\Delta = 17^\circ 25' 58.3''$ (LT)
 $L = 100.891$ $L = 136.917$
 $T = 50.960$ $T = 68.992$
 $R = 290.000$ $R = 450.000$
 $SE = 0.06$ $SE = 0.05$
 $RO = \text{SEE PLANS}$ $RO = 35$

7 x 5 x 1
 38 mm Skimmer
 with 15 mm
 Orifice Diameter
 2.6 m weir
 ID 7.5C

END BRIDGE
-DETOUR- STA 11 + 39.140 ±


-L- POT 21 + 31.147
 -BL- 18 PINC 16+38.339 =
 -BY6- 18 POT 6+07.858 =
 -BY7- 18 POT 5+00.000
 Offset 5.294 RT

-L- PCSta. 21 + 84.308

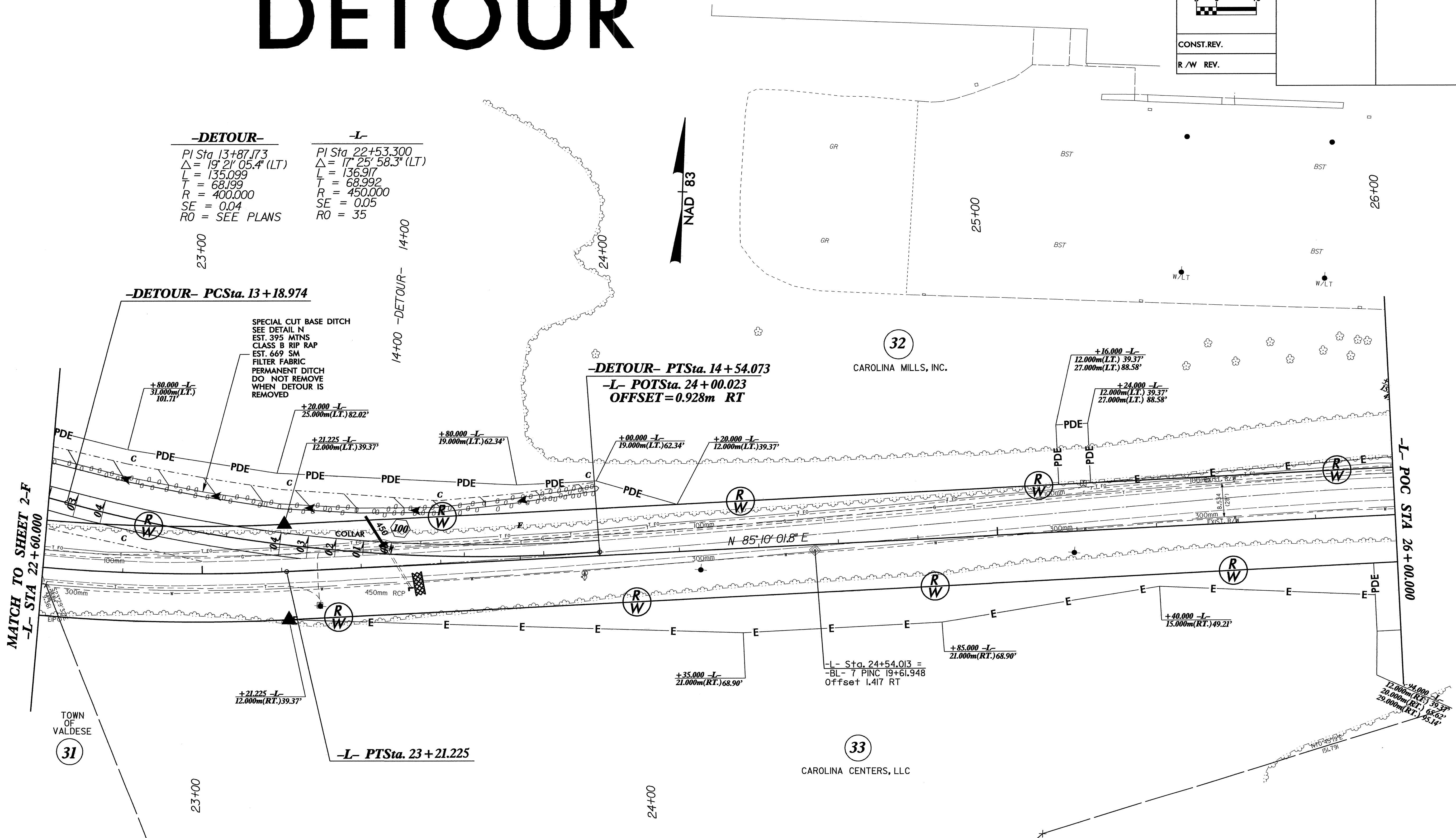
NOTES:
 1) SEE SHEET 25 FOR -DETOUR- PROFILE
 2) SEE SHEET 7 FOR -L- DESIGN
 3) ALL DRIVEWAYS RADII ARE 3m
 UNLESS OTHERWISE NOTED.

8/17/2018
 20-SEP-2008 12:49
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DETOUR

 5 0 10 CONST.REV. R/W REV.	PROJECT REFERENCE NO.	SHEET NO.
	R-28244	EC-16/CONST.26
ROADWAY DESIGN ENGINEER	R/W SHEET NO.	
HYDRAULICS ENGINEER		

-DETOUR-	-L-
PI Sta 13+87.173	PI Sta 22+53.300
$\Delta = 19^{\circ} 21' 05.4" (LT)$	$\Delta = 17^{\circ} 25' 58.3" (LT)$
L = 135.099	L = 136.917
T = 68.199	T = 68.992
R = 400.000	R = 450.000
SE = 0.04	SE = 0.05
RO = SEE PLANS	RO = 35




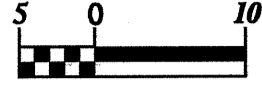
MATCH TO SHEET 2-F
-L- STA 22+60.000

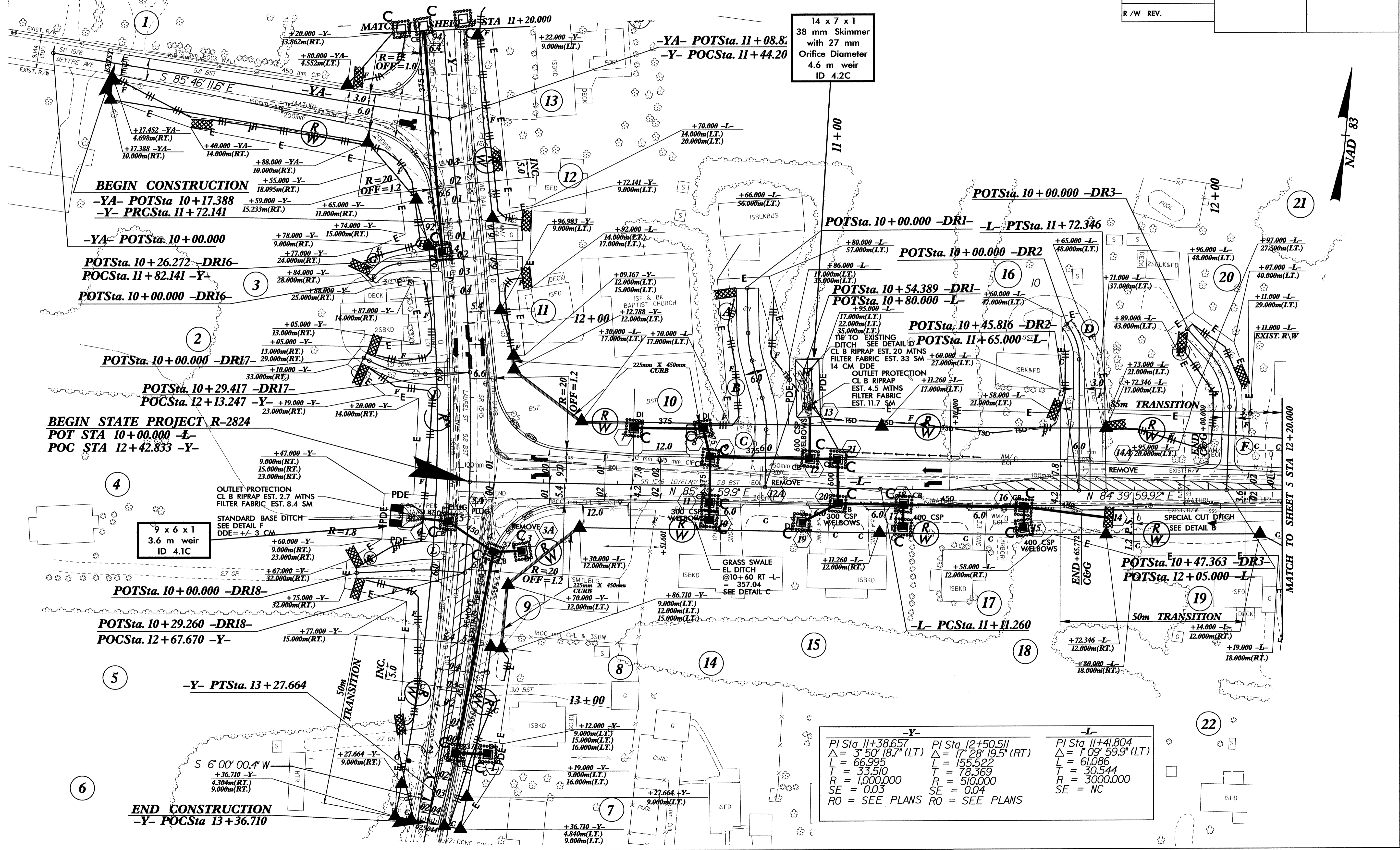
-L- POC STA 26+00.000

- DETOUR SLOPE STAKE LINE
- NOTES:**
- 1) SEE SHEET 25 FOR -DETOUR- PROFILE
 - 2) SEE SHEET 8 FOR -L- DESIGN
 - 3) ALL DRIVEWAY RADII ARE 3m UNLESS OTHERWISE NOTED.

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- NOTES:**
- 1) SEE SHEET 15 FOR -L- PROFILE
 - 2) SEE SHEET 21 FOR -Y- PROFILE
 - 3) ALL DRIVEWAY RADII ARE 3m UNLESS OTHERWISE NOTED.
 - 4) SEE SHEET 2-H FOR DITCH DETAILS
 - 5) SEE SHEET 21 FOR YA PROFILE

	PROJECT REFERENCE NO.	SHEET NO.
	R-2824	EC-17/CONST.4
	R/W SHEET NO.	
	ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
CONST. REV.		
R/W REV.		



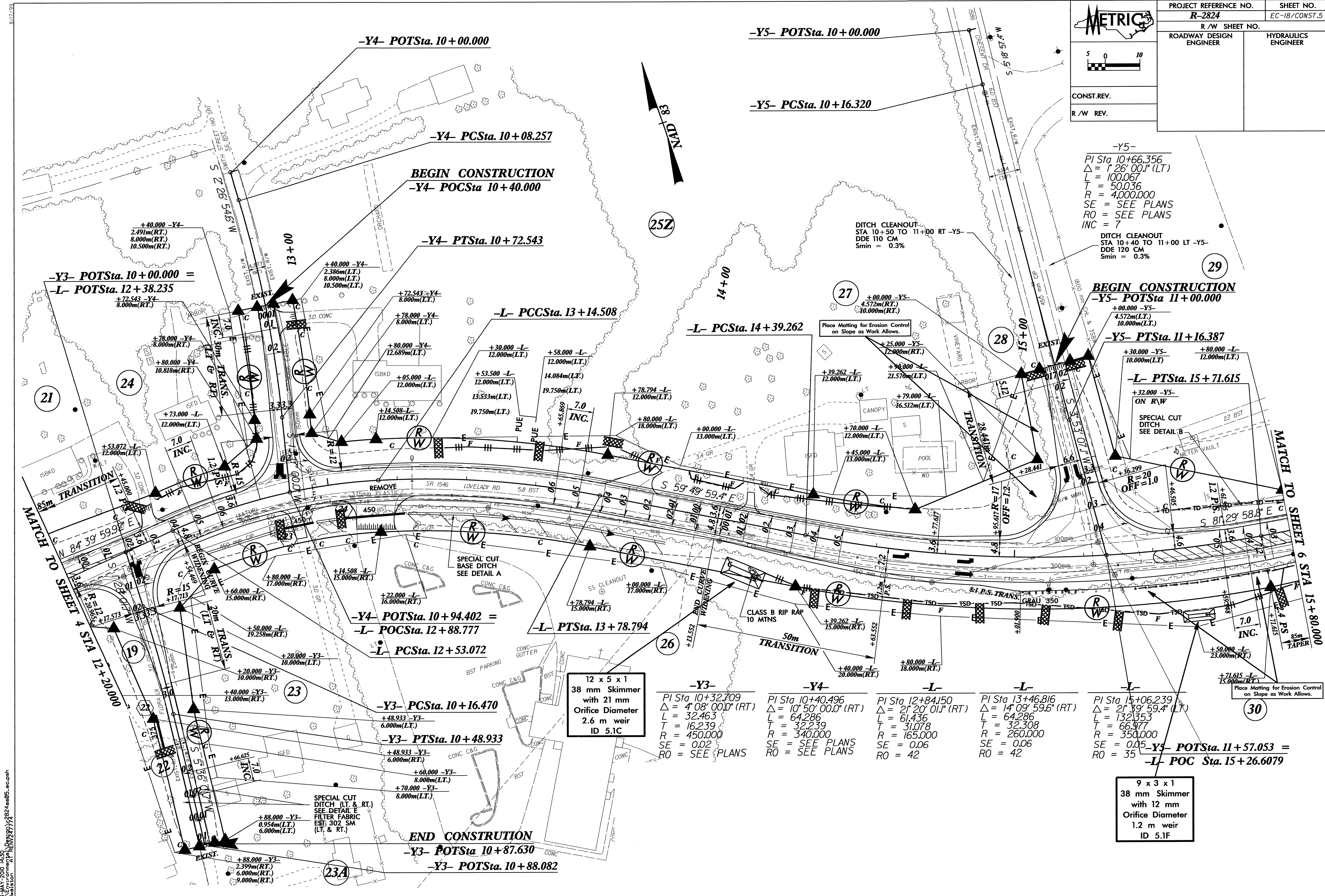
-Y-		-L-	
PI Sta. 11+38.657	PI Sta. 12+50.511	PI Sta. 11+41.804	
$\Delta = 3' 50'' 18.7''$ (LT)	$\Delta = 17' 28'' 19.5''$ (RT)	$\Delta = 1' 09'' 59.9''$ (LT)	
L = 66.995	L = 155.522	L = 61.086	
T = 33.510	T = 78.369	T = 30.544	
R = 1,000.000	R = 510.000	R = 3000.000	
SE = 0.03	SE = 0.04	SE = NC	
RO = SEE PLANS	RO = SEE PLANS		

15 SEP 2008 10:55
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METRIC

CONST. REV.
R/W REV.

PROJECT REFERENCE NO. R-2824	SHEET NO. EC-18/CONST.5
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER



-Y5-
 PI Sta 10+66.356
 $\Delta = 1' 26' 00"$ (LT)
 L = 100.067
 T = 50.036
 R = 4,000,000
 SE = SEE PLANS
 RO = SEE PLANS
 INC = 7

DITCH CLEANOUT
 STA 10+40 TO 11+00 RT -Y5-
 DDE 110 CM
 Smin = 0.3%

BEGIN CONSTRUCTION
 -Y5- POTSta 11+00.000

-Y5- PTSta. 11+16.387

-L- PTSta. 15+71.615

SPECIAL CUT DITCH
 SEE DETAIL B

-Y3-
 PI Sta 10+32.709
 $\Delta = 4' 08' 00"$ (RT)
 L = 32.463
 T = 16.239
 R = 450,000
 SE = 0.02
 RO = SEE PLANS

-Y4-
 PI Sta 10+40.496
 $\Delta = 10' 50' 00."$ (RT)
 L = 64.286
 T = 32.239
 R = 340,000
 SE = SEE PLANS
 RO = SEE PLANS

-L-
 PI Sta 12+84.150
 $\Delta = 21' 20' 01"$ (RT)
 L = 61.436
 T = 31.078
 R = 165,000
 SE = 0.06
 RO = 42


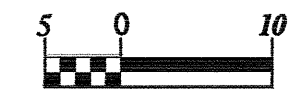
-L-
 PI Sta 13+46.816
 $\Delta = 14' 09' 59."$ (RT)
 L = 64.286
 T = 32.308
 R = 260,000
 SE = 0.06
 RO = 42

-L-
 PI Sta 15+06.239
 $\Delta = 21' 39' 59."$ (LT)
 L = 132.353
 T = 66.977
 R = 350,000
 SE = 0.05
 RO = 35

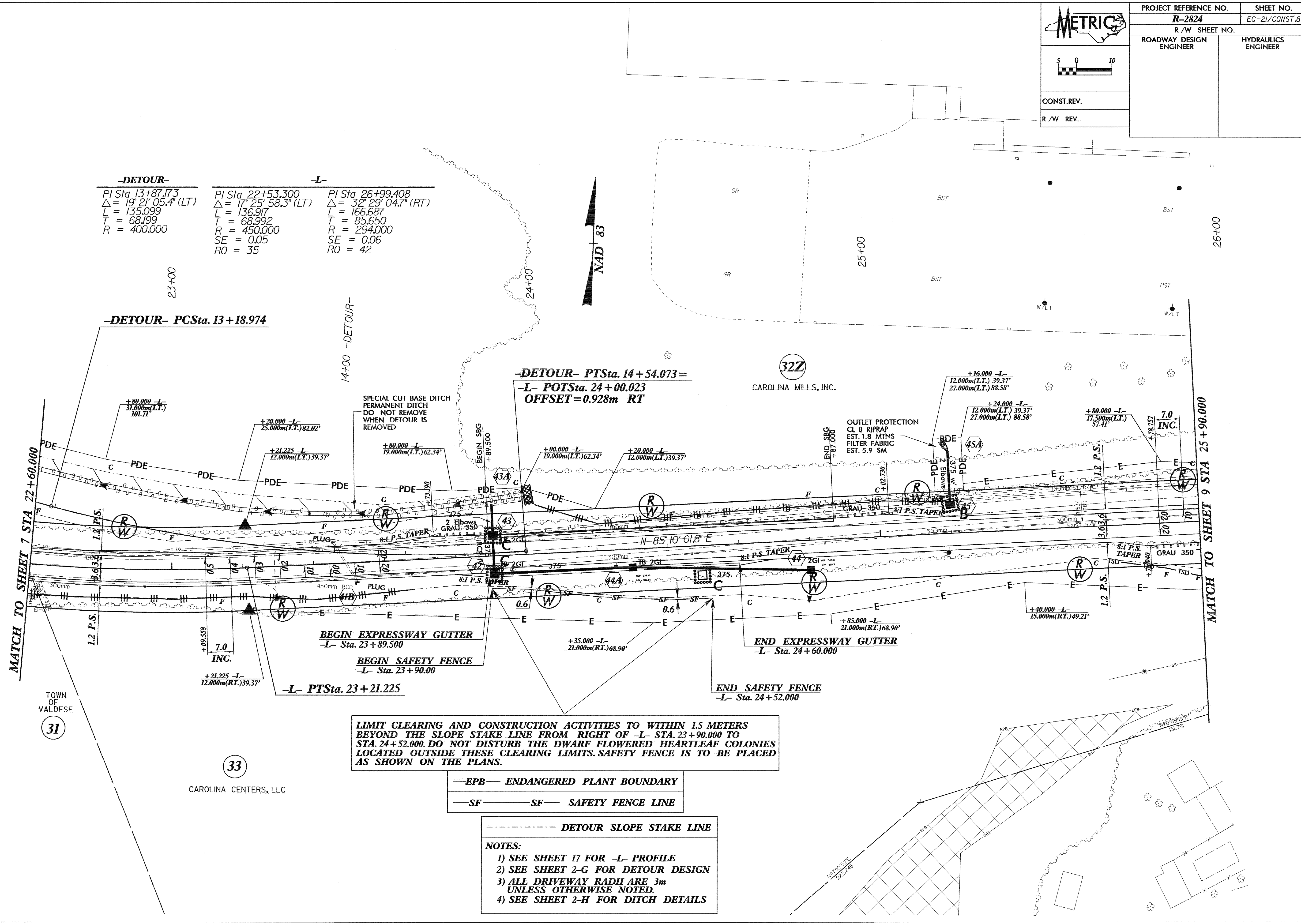
12 x 5 x 1
 38 mm Skimmer
 with 21 mm
 Orifice Diameter
 2.6 m weir
 ID 5.1C

9 x 3 x 1
 38 mm Skimmer
 with 12 mm
 Orifice Diameter
 1.2 m weir
 ID 5.1F

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 8/17/99

  CONST. REV. R/W REV.	PROJECT REFERENCE NO. R-2824	SHEET NO. EC-21/CONST.8
	ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

-DETOUR-	-L-	-L-
PI Sta 13+87.73	PI Sta 22+53.300	PI Sta 26+99.408
$\Delta = 19^\circ 21' 05.4''$ (LT)	$\Delta = 17^\circ 25' 58.3''$ (LT)	$\Delta = 32^\circ 29' 04.7''$ (RT)
L = 135.099	L = 136.917	L = 166.687
T = 68.199	T = 68.992	T = 85.650
R = 400.000	R = 450.000	R = 294.000
	SE = 0.05	SE = 0.06
	RO = 35	RO = 42



LIMIT CLEARING AND CONSTRUCTION ACTIVITIES TO WITHIN 1.5 METERS BEYOND THE SLOPE STAKE LINE FROM RIGHT OF -L- STA. 23+90.000 TO STA. 24+52.000. DO NOT DISTURB THE DWARF FLOWERED HEARTLEAF COLONIES LOCATED OUTSIDE THESE CLEARING LIMITS. SAFETY FENCE IS TO BE PLACED AS SHOWN ON THE PLANS.

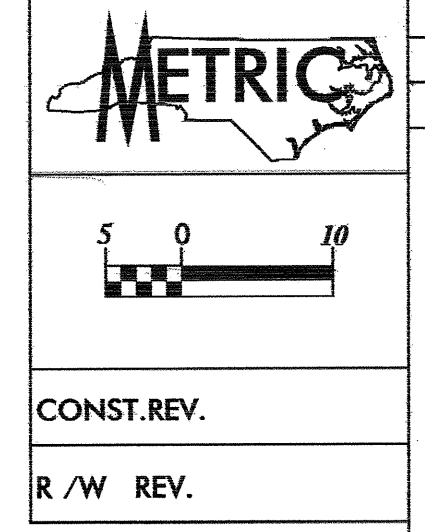
- EPB- ENDANGERED PLANT BOUNDARY
- SF- SAFETY FENCE LINE
- - - - - DETOUR SLOPE STAKE LINE

NOTES:

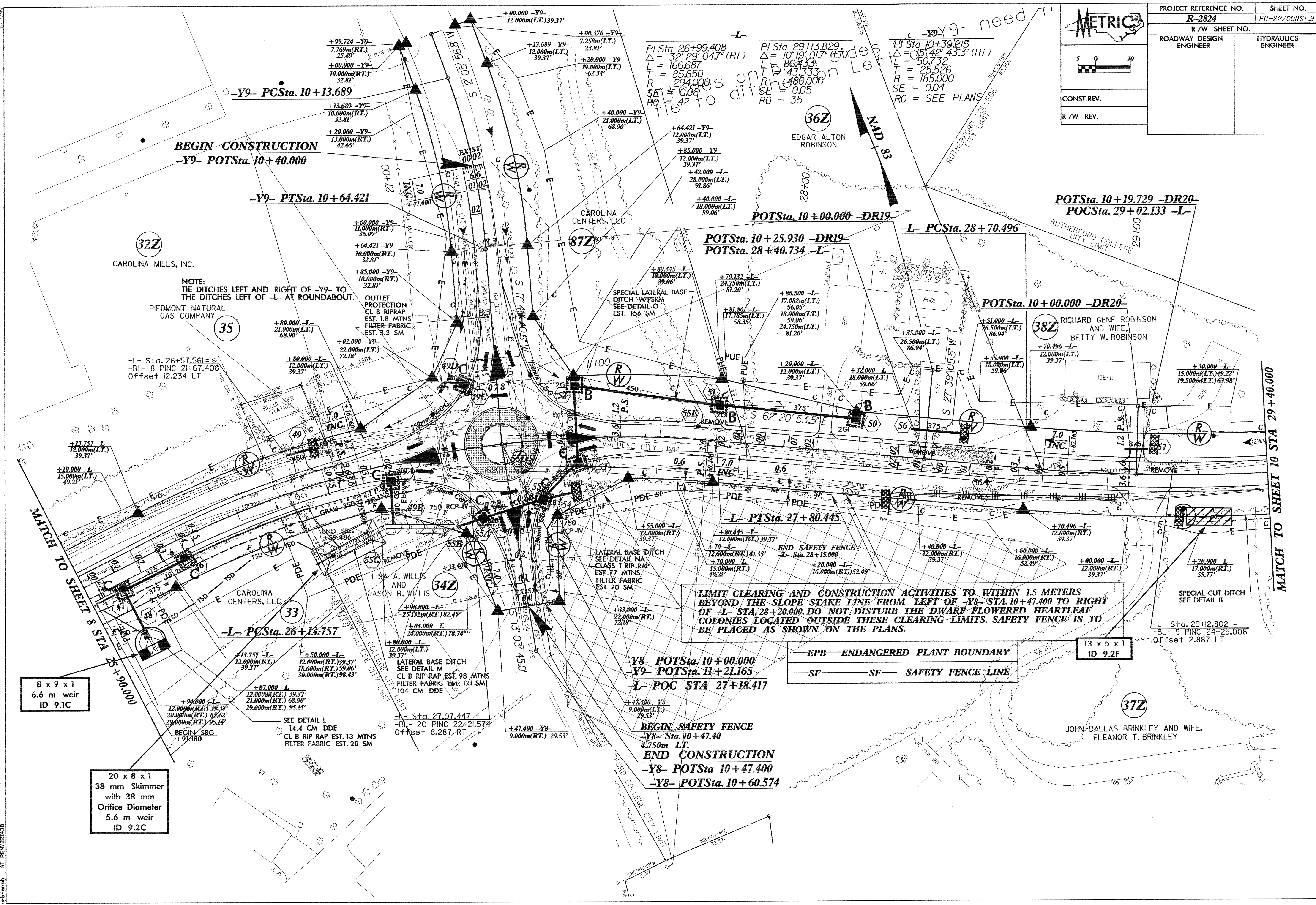
- 1) SEE SHEET 17 FOR -L- PROFILE
- 2) SEE SHEET 2-G FOR DETOUR DESIGN
- 3) ALL DRIVEWAY RADII ARE 3m UNLESS OTHERWISE NOTED.
- 4) SEE SHEET 2-H FOR DITCH DETAILS

8/17/23
 27 JAN 2010 15:50
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PROJECT REFERENCE NO. R-2824		SHEET NO. EC-22/CONST.9	
R/W SHEET NO.			
ROADWAY DESIGN ENGINEER		HYDRAULICS ENGINEER	
CONST. REV.		R/W REV.	



3-29-05 KMD RIGHT OF WAY REVISION: PROPERTY OWNER NAME HAS BEEN CHANGED ON PARCEL 34.



8 x 9 x 1
6.6 m weir
ID 9.1C

20 x 8 x 1
38 mm Skimmer
with 38 mm
Orifice Diameter
5.6 m weir
ID 9.2C

LIMIT CLEARING AND CONSTRUCTION ACTIVITIES TO WITHIN 1.5 METERS BEYOND THE SLOPE STAKE LINE FROM LEFT OF -Y8- STA. 10+47.400 TO RIGHT OF -L- STA. 28+20.000. DO NOT DISTURB THE DWARF FLOWERED HEARTLEAF COLONIES LOCATED OUTSIDE THESE CLEARING LIMITS. SAFETY FENCE IS TO BE PLACED AS SHOWN ON THE PLANS.

EPB — ENDANGERED PLANT BOUNDARY
SF — SF — SAFETY FENCE LINE

-Y8- POTSta. 10+00.000
-Y9- POTSta. 11+21.165
-L- POC STA 27+18.417
BEGIN SAFETY FENCE
-Y8- Sta. 10+47.40
4.750m LT.
END CONSTRUCTION
-Y8- POTSta 10+47.400
-Y8- POTSta. 10+60.574

BEGIN CONSTRUCTION
-Y9- POTSta. 10+40.000

-Y9- PTSta. 10+64.421

POTSta. 10+25.930 -DR19-
POTSta. 28+40.734 -L-

POTSta. 10+19.729 -DR20-
POCSta. 29+02.133 -L-

POTSta. 10+00.000 -DR20-

-L- PCSta. 26+13.757

-L- PTSta. 27+80.445

-L- Sta. 29+12.802 =
-BL- 9 PINC 24+25.006
Offset 2.887 LT

NOTE:
TIE DITCHES LEFT AND RIGHT OF -Y9- TO
THE DITCHES LEFT OF -L- AT ROUNDABOUT.

-L- Sta. 26+57.561 =
-BL- 8 PINC 21+67.406
Offset 12.234 LT

-L- Sta. 27.07.447 =
-BL- 20 PINC 22+21.574
Offset 8.287 RT

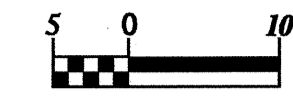
8/17/05

MATCH TO SHEET 10 STA 29+40.000

MATCH TO SHEET 8 STA 25+90.000



PROJECT REFERENCE NO. R-2824		SHEET NO. EC-23/CONST.10
R/W SHEET NO.		
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER	
CONST. REV.		
R/W REV.		



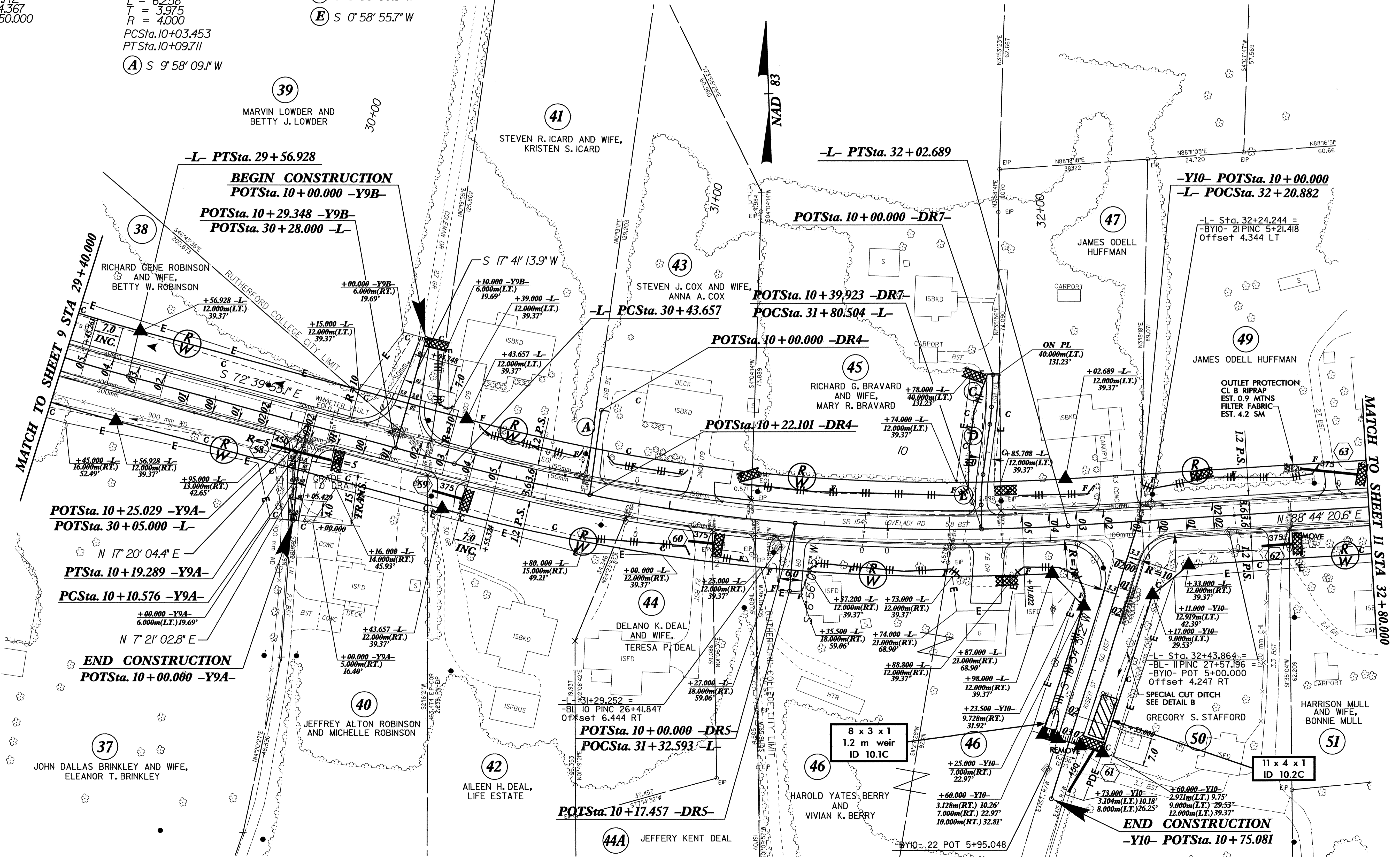
-L-
 PI Sta 29+13.829 Δ = 10°19'01.7" (LT) L = 86.433 T = 43.333 R = 480.000 SE = 0.05 RO = 35
 PI Sta 31+23.879 Δ = 18°35'44.3" (LT) L = 159.032 T = 80.221 R = 490.000 SE = 0.05 RO = 35

-DR7-
 PI Sta 10+10.544 Δ = 5°12'25.0" (RT) L = 4.544 T = 2.274 R = 50.000 PCSta.10+08.271 PTSta.10+12.815
 PI Sta 10+29.829 Δ = 8°57'04.5" (LT) L = 7.811 T = 3.914 R = 50.000 PCSta.10+25.916 PTSta.10+33.727

-Y9A-
 PI Sta 10+14.943 Δ = 9°59'01.6" (RT) L = 8.712 T = 4.367 R = 50.000

-DR4-
 PI Sta 10+07.428 Δ = 89°38'26.3" (LT) L = 6.258 T = 3.975 R = 4.000
 PCSta.10+03.453 PTSta.10+09.711
 (A) S 9°58'09.1" W

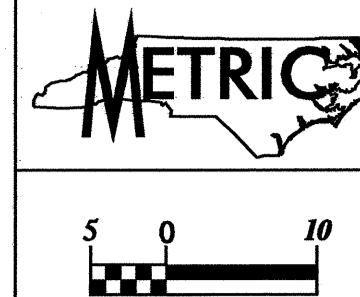
(C) S 4°43'35.3" W
 (D) S 9°56'00.3" W
 (E) S 0°58'55.7" W



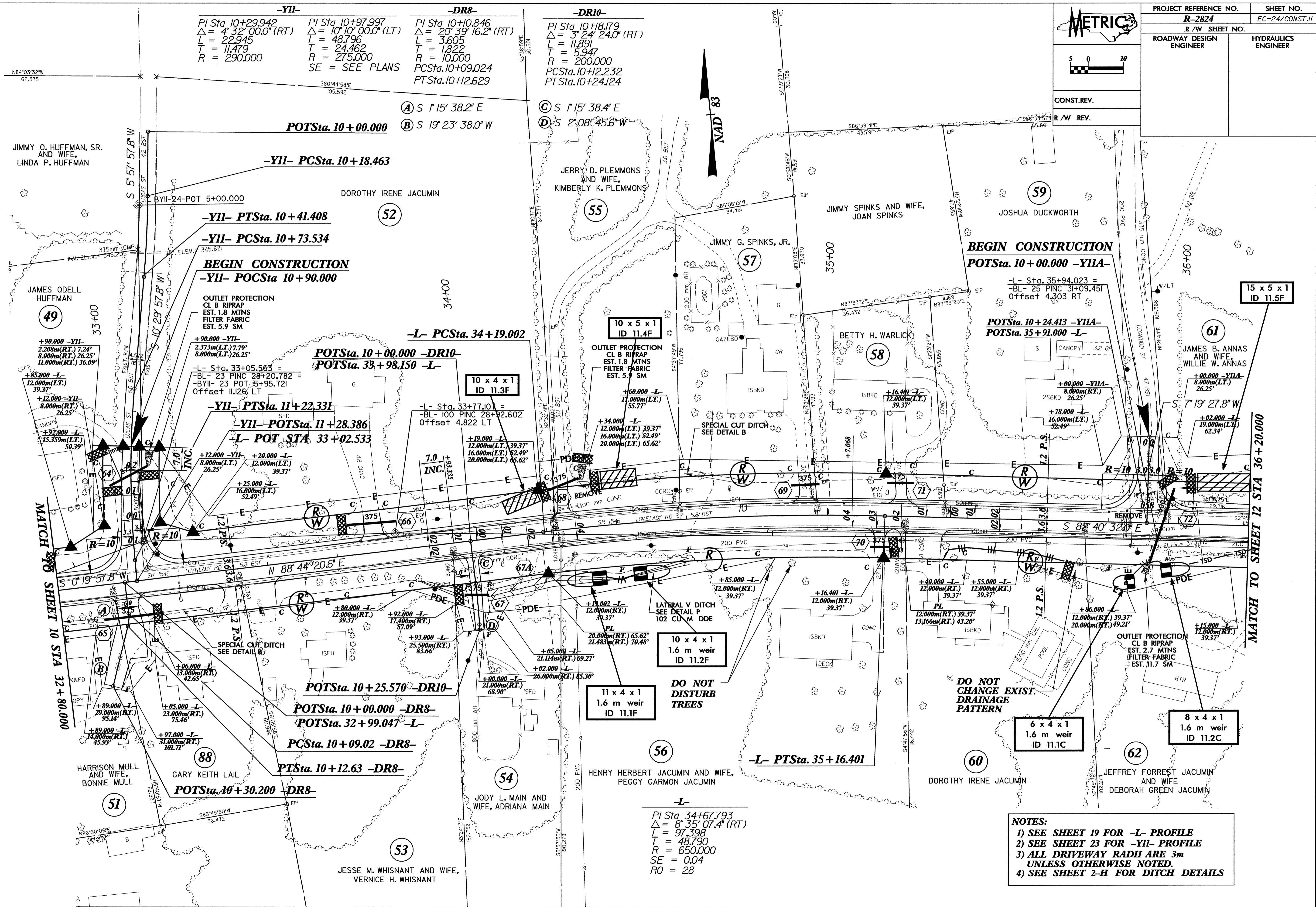
MATCH TO SHEET 9 STA 29+40.000

MATCH TO SHEET 11 STA 32+80.000

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 Plotter: AT-RN-VZ-38812



PROJECT REFERENCE NO. R-2824		SHEET NO. EC-24/CONST.II	
R/W SHEET NO.			
ROADWAY DESIGN ENGINEER		HYDRAULICS ENGINEER	



-YII-
 PI Sta. 10+29.942
 $\Delta = 4^{\circ} 32' 00.0''$ (RT)
 L = 22.945
 T = 11.479
 R = 290.000

-YII-
 PI Sta. 10+97.997
 $\Delta = 10^{\circ} 10' 00.0''$ (LT)
 L = 48.796
 T = 24.462
 R = 275.000
 SE = SEE PLANS

-DR8-
 PI Sta. 10+10.846
 $\Delta = 20^{\circ} 39' 16.2''$ (RT)
 L = 3.605
 T = 1.822
 R = 10.000
 PCSta. 10+09.024
 PTSta. 10+12.629

-DR10-
 PI Sta. 10+18.179
 $\Delta = 3^{\circ} 24' 24.0''$ (RT)
 L = 11.891
 T = 5.947
 R = 200.000
 PCSta. 10+12.232
 PTSta. 10+24.124

JIMMY O. HUFFMAN, SR. AND WIFE, LINDA P. HUFFMAN

JERRY D. PLEMMONS AND WIFE, KIMBERLY K. PLEMMONS

JIMMY SPINKS AND WIFE, JOAN SPINKS

JOSHUA DUCKWORTH

JAMES ODELL HUFFMAN

OUTLET PROTECTION
 CL B RIPRAP
 EST. 1.8 MTNS
 FILTER FABRIC
 EST. 5.9 SM

OUTLET PROTECTION
 CL B RIPRAP
 EST. 1.8 MTNS
 FILTER FABRIC
 EST. 5.9 SM

OUTLET PROTECTION
 CL B RIPRAP
 EST. 2.7 MTNS
 FILTER FABRIC
 EST. 11.7 SM

MATCH TO SHEET 10 STA 32+80.000

MATCH TO SHEET 12 STA 36+20.000

HARRISON MULL AND WIFE, BONNIE MULL

GARY KEITH LAIL

JODY L. MAIN AND WIFE, ADRIANA MAIN

HENRY HERBERT JACUMIN AND WIFE, PEGGY GARMON JACUMIN

DOROTHY IRENE JACUMIN

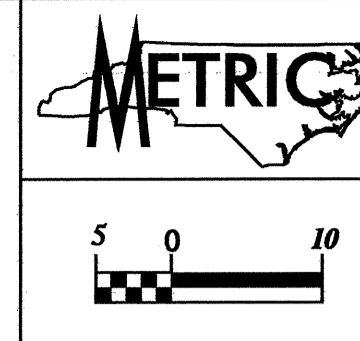
JEFFREY FORREST JACUMIN AND WIFE, DEBORAH GREEN JACUMIN

JESSE M. WHISNANT AND WIFE, VERNICE H. WHISNANT

-L-
 PI Sta. 34+67.793
 $\Delta = 8^{\circ} 35' 07.4''$ (RT)
 L = 97.398
 T = 48.790
 R = 650.000
 SE = 0.04
 RO = 28

- NOTES:**
- 1) SEE SHEET 19 FOR -L- PROFILE
 - 2) SEE SHEET 23 FOR -YII- PROFILE
 - 3) ALL DRIVEWAY RADII ARE 3m UNLESS OTHERWISE NOTED
 - 4) SEE SHEET 2-H FOR DITCH DETAILS

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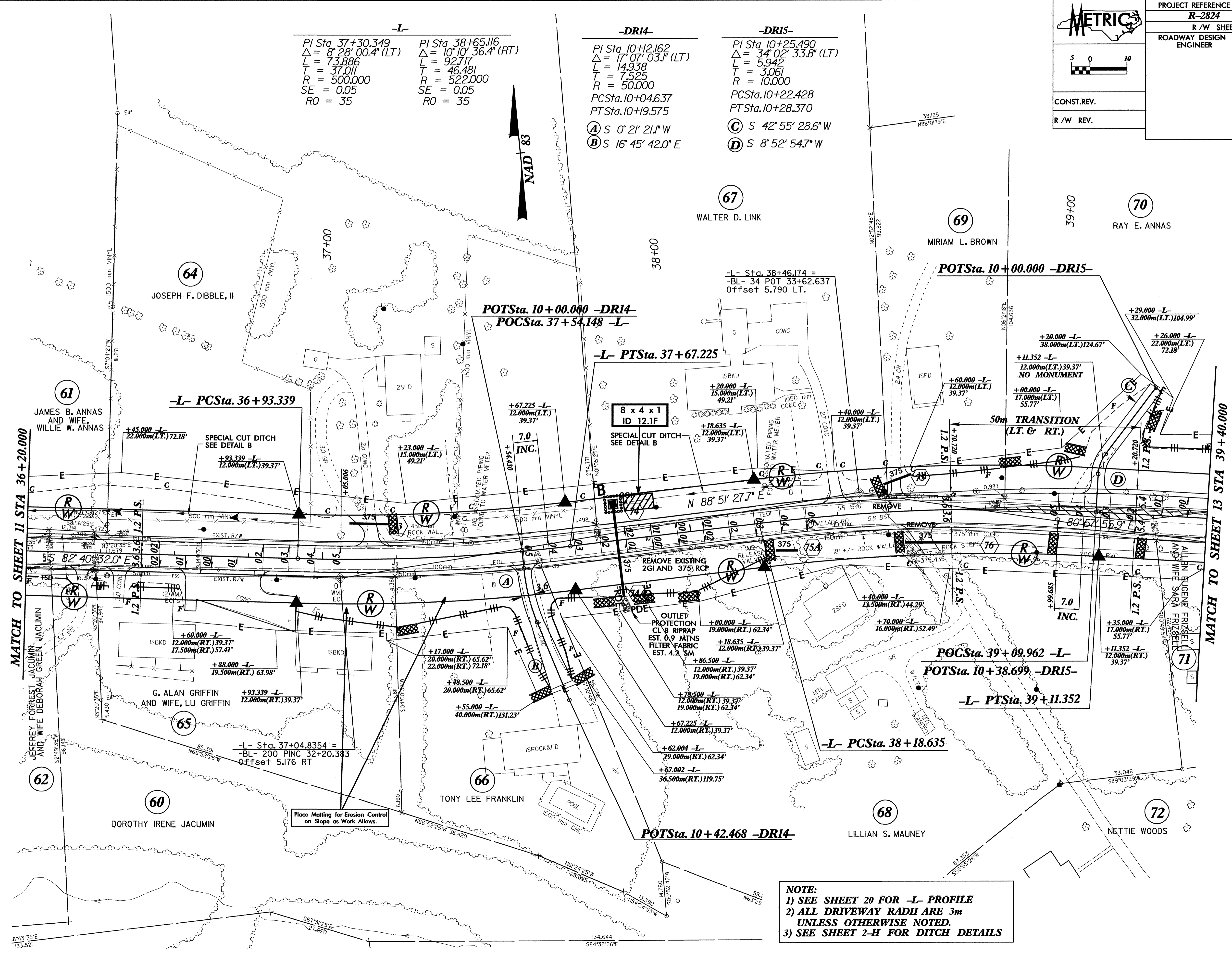


PROJECT REFERENCE NO.	SHEET NO.
R-2824	EC-25/CONST.12
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
CONST. REV.	
R/W REV.	


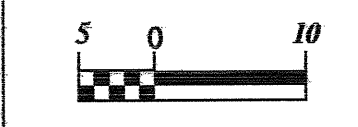
-L-
 PI Sta. 37+30.349 PI Sta. 38+65.116
 $\Delta = 8' 28' 00.4" (LT)$ $\Delta = 10' 10' 36.4" (RT)$
 $L = 73.886$ $L = 92.117$
 $T = 37.011$ $T = 46.481$
 $R = 500.000$ $R = 522.000$
 $SE = 0.05$ $SE = 0.05$
 $RO = 35$ $RO = 35$

-DR14-
 PI Sta. 10+12.162
 $\Delta = 17' 07' 03.1" (LT)$
 $L = 14.938$
 $T = 7.525$
 $R = 50.000$
 PCSta. 10+04.637
 PTSta. 10+9.575
(A) S 0° 21' 21.1" W
(B) S 16° 45' 42.0" E

-DR15-
 PI Sta. 10+25.490
 $\Delta = 34' 02' 33.8" (LT)$
 $L = 5.942$
 $T = 3.061$
 $R = 10.000$
 PCSta. 10+22.428
 PTSta. 10+28.370
(C) S 42° 55' 28.6" W
(D) S 8° 52' 54.7" W



20-SEP-2008 11:32
 C:\Users\jacob\Documents\2824\envr\commentarial\design\2824\sheet2.dwg
 Plotter: AT-RV23812

	PROJECT REFERENCE NO.	SHEET NO.
	R-2824	EC-26/CONST.J3
	R/W SHEET NO.	
	ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
CONST. REV.		
R/W REV.		

END STATE PROJECT R-2824

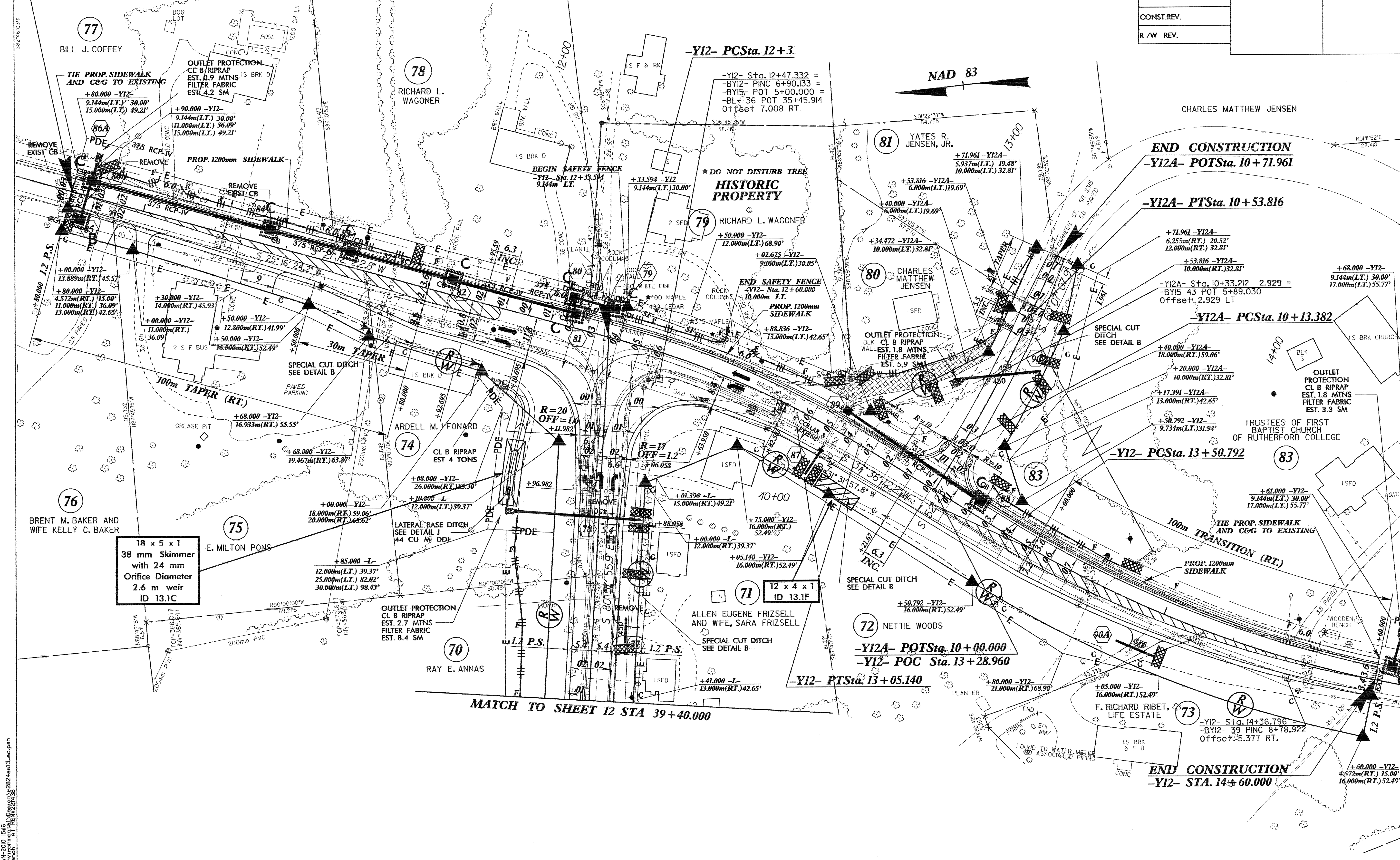
-L- POTSta. 40 + 38.819
 -Y12- POTSta. 12 + 30.843

BEGIN CONSTRUCTION

-Y12- STA. 10 + 80.000

END CONSTRUCTION

-Y12A- POTSta. 10 + 71.961



18 x 5 x 1
 38 mm Skimmer
 with 24 mm
 Orifice Diameter
 2.6 m weir
 ID 13.1C

12 x 4 x 1
 ID 13.1F

MATCH TO SHEET 12 STA 39 + 40.000

END CONSTRUCTION

-Y12- STA. 14 + 60.000

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