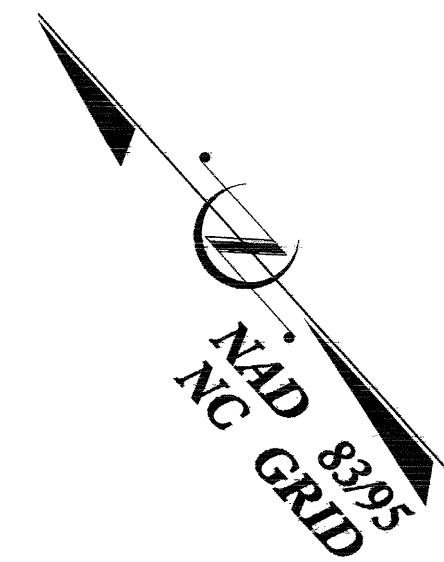


**TIP PROJECT: R-3833B**

STATE OF NORTH CAROLINA  
DIVISION OF HIGHWAYS  
  
PLAN FOR PROPOSED  
HIGHWAY EROSION CONTROL  
  
**IREDELL COUNTY**

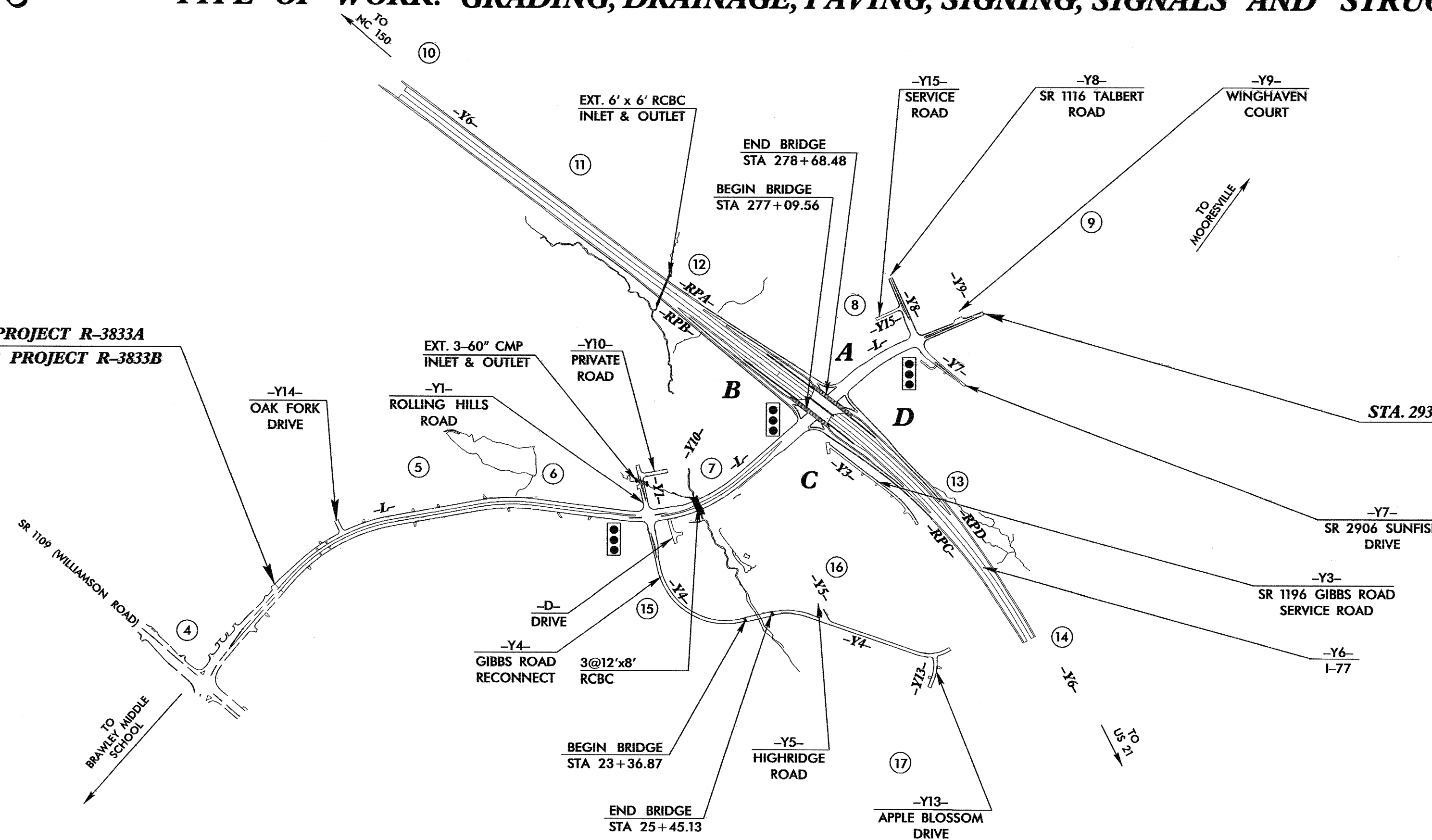
**LOCATION: SR 1100 (BRAWLEY SCHOOL ROAD) FROM EAST OF SR 1109 (WILLIAMSON ROAD) TO EAST OF WINGHAVEN COURT**

**TYPE OF WORK: GRADING, DRAINAGE, PAVING, SIGNING, SIGNALS AND STRUCTURES**



STA. 229+50.00 -L- END TIP PROJECT R-3833A  
STA. 229+50.00 -L- BEGIN TIP PROJECT R-3833B

STA. 293+00.00 -L- END TIP PROJECT R-3833B



**EROSION AND SEDIMENT CONTROL MEASURES**

Std. #	Description	Symbol
1630.03	Temporary Silt Ditch	
1630.05	Temporary Diversion	
1605.01	Temporary Silt Fence	
1606.01	Special Sediment Control Fence	
1622.01	Temporary Berms and Slope Drains	
1630.01	Riser Basin	
	Silt Basin Type B	
1633.01	Temporary Rock Silt Check Type-A	
	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	
1630.06	Special Stilling Basin	
	Rock Inlet Sediment Trap:	
1632.01	Type A	
1632.02	Type B	
1632.03	Type 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.*

**THIS PROJECT HAS BEEN DESIGNED TO SENSITIVE WATERSHED STANDARDS.**

**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**

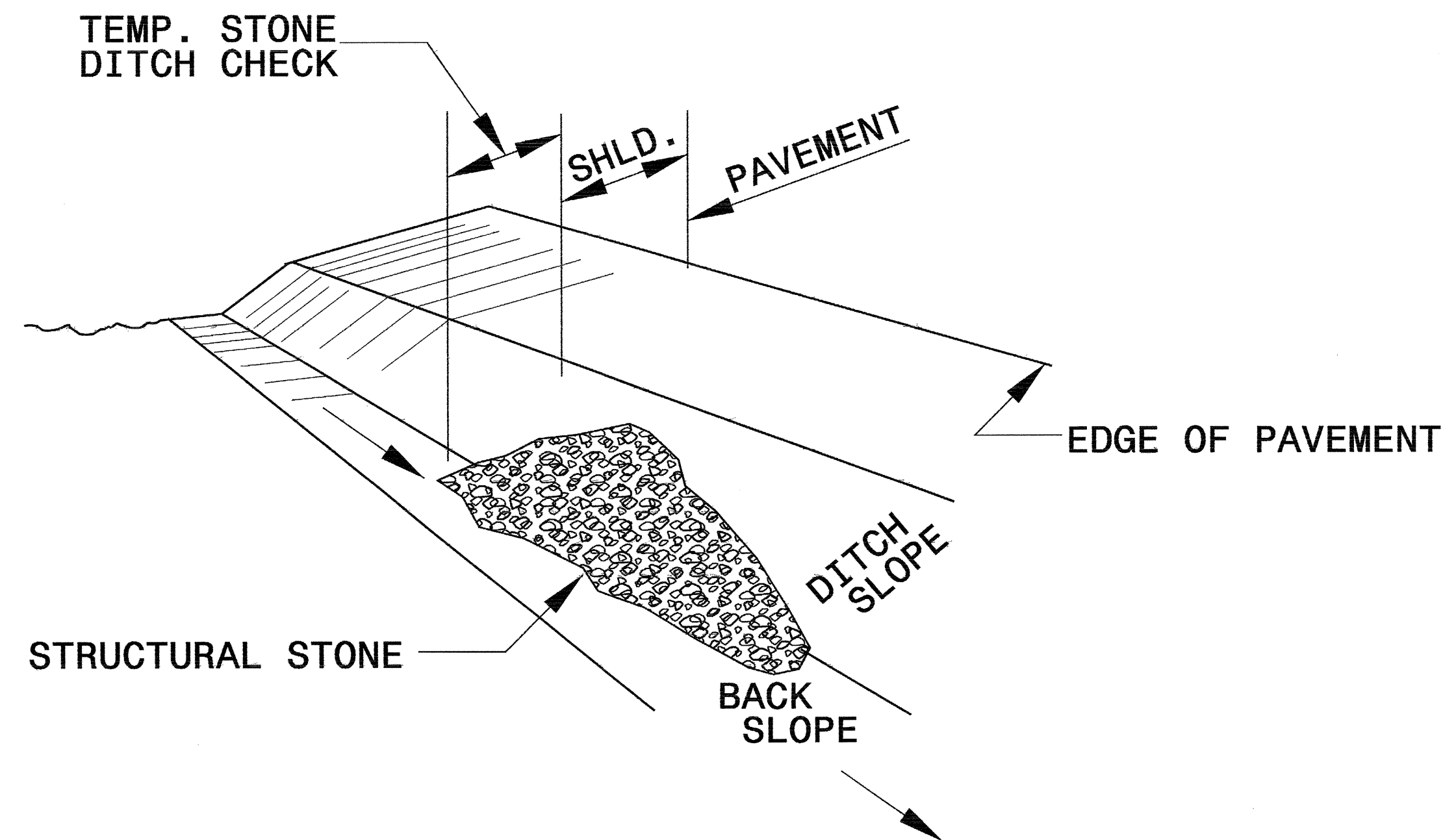
Roadway Standard Drawings

The following roadway english standards as appear in "Roadway Standard Drawings"- Roadway Design Unit - N. C. Department of Transportation - Raleigh, N. C., dated July 18, 2006 and the latest revision thereto are applicable to this project and by reference hereby are considered a part of these plans.

1605.01 Temporary Silt Fence	1632.02 Rock Inlet Sediment Trap Type B
1607.01 Gravel Construction Entrance	1632.03 Rock Inlet Sediment Trap Type C
1622.01 Temporary Berms and Slope Drains	1633.01 Temporary Rock Silt Check Type A
1630.03 Temporary Silt Ditch	1634.01 Temporary Rock Sediment Dam Type A
1630.04 Stilling Basin	1634.02 Temporary Rock Sediment Dam Type B
1630.05 Temporary Diversion	1635.01 Rock Pipe Inlet Sediment Trap Type A
1630.06 Special Stilling Basin	1635.02 Rock Pipe Inlet Sediment Trap Type B
1632.01 Rock Inlet Sediment Trap Type A	

PROJECT REFERENCE NO. <i>R-3833B</i>	SHEET NO. <i>EC-2</i>
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

# TEMPORARY ROCK SILT CHECK TYPE 'B' DETAIL

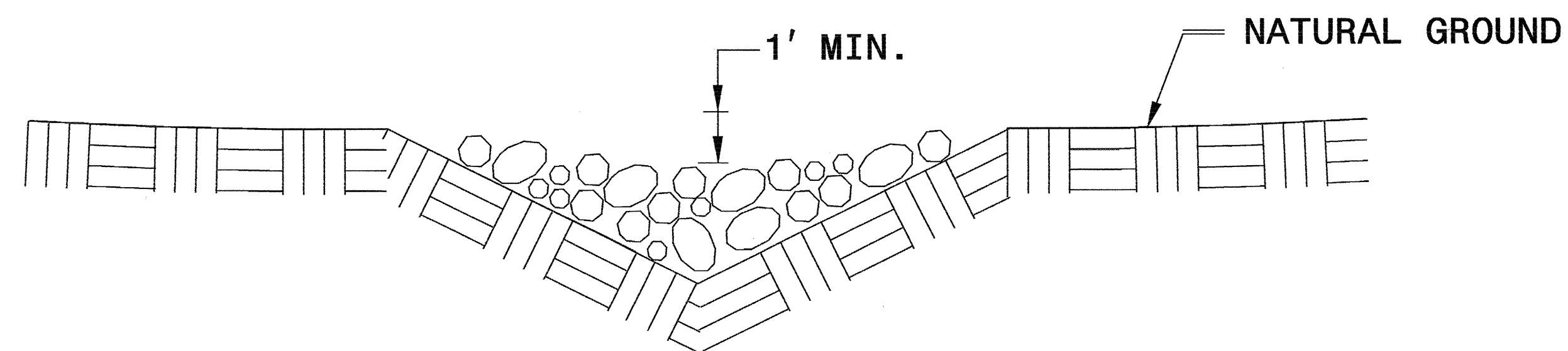


**ISOMETRIC VIEW**

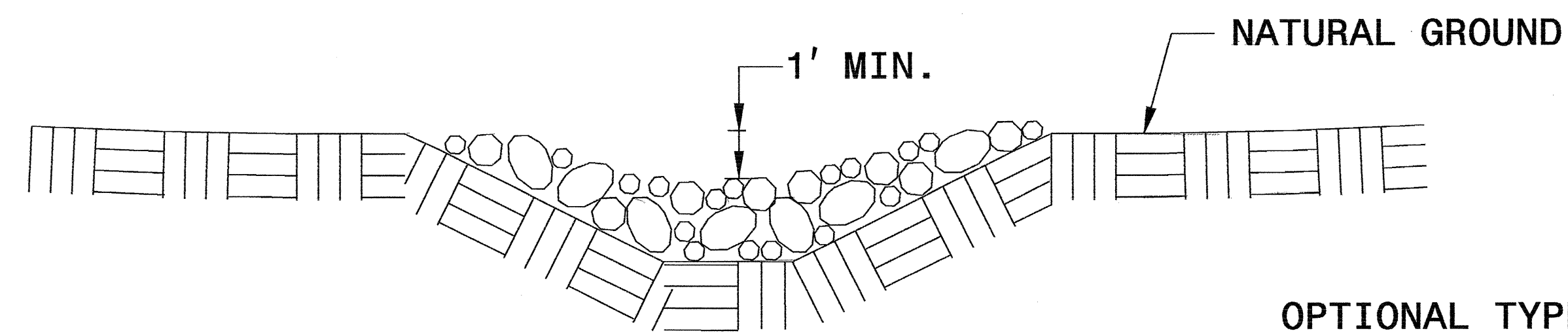
**NOTES:**

USE CLASS 'B' EROSION CONTROL STONE FOR STRUCTURAL STONE.

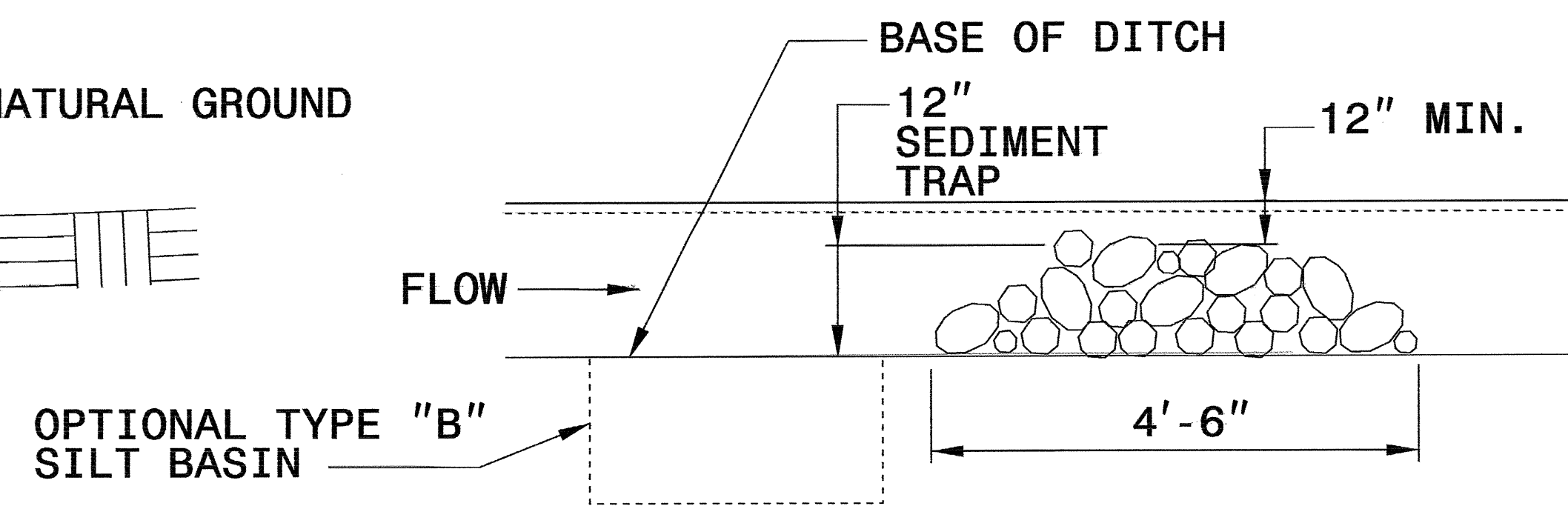
THE ENGINEER MAY DIRECT THE OPTION OF CLASS "A" STONE FOR SITES HAVING LESS THAN ONE (1) ACRE DRAINAGE AREA AND A DITCH GRADE LESS THAN 3%.



**CROSS SECTION  
VEE DITCH**



**CROSS SECTION  
TRAPEZOIDAL DITCH**

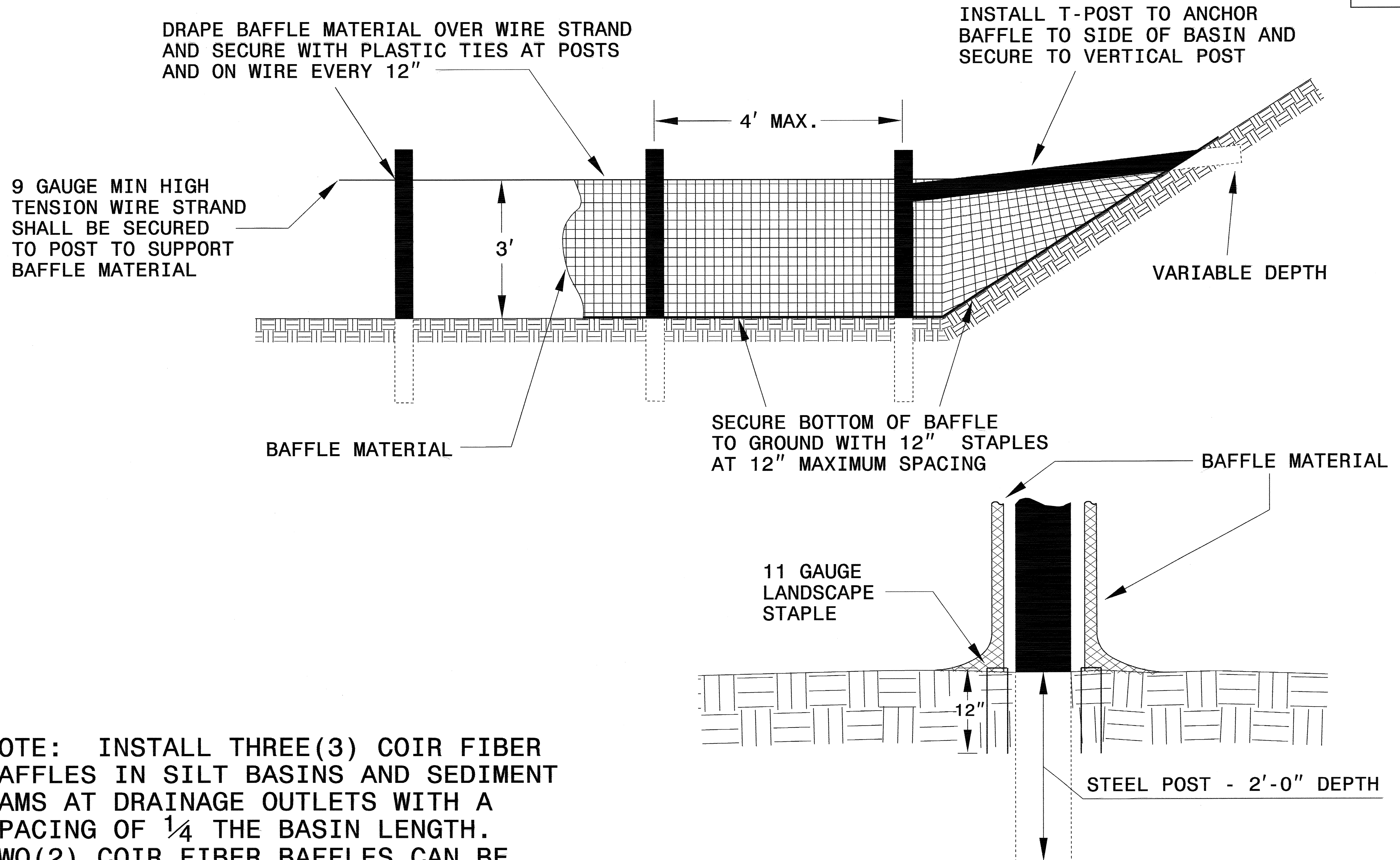


**ELEVATION VIEW**



PROJECT REFERENCE NO. R-3833B	SHEET NO. EC-2A
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

# COIR FIBER BAFFLE DETAIL

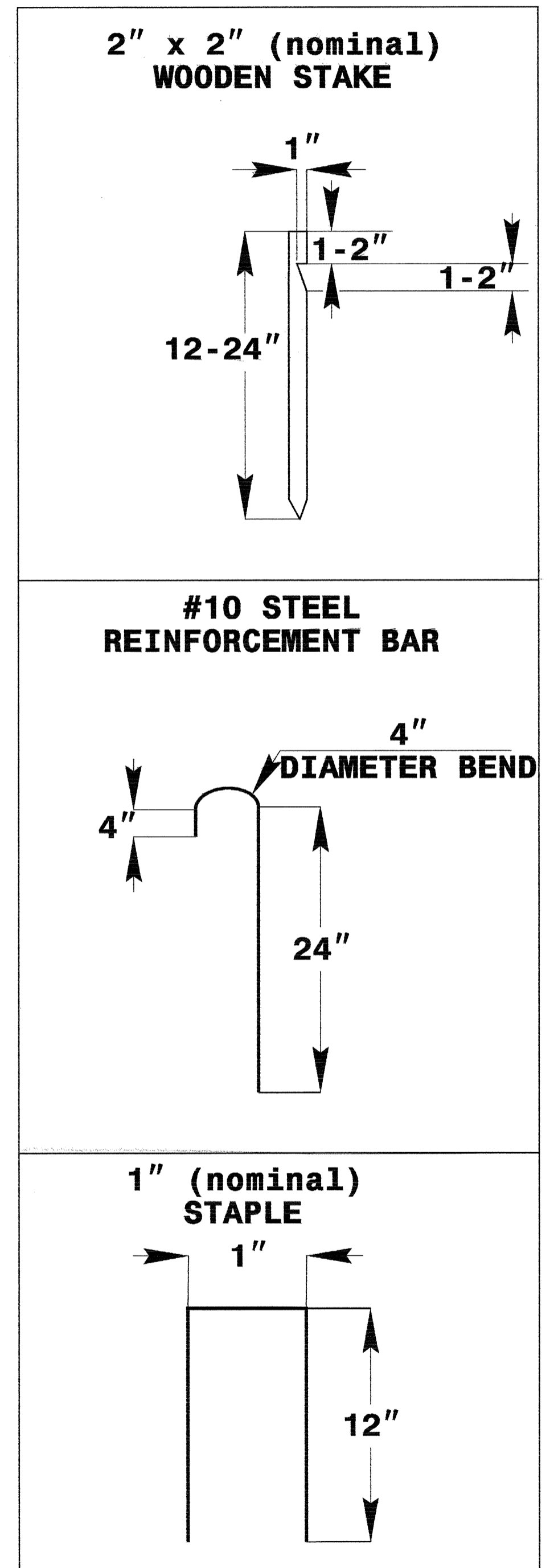
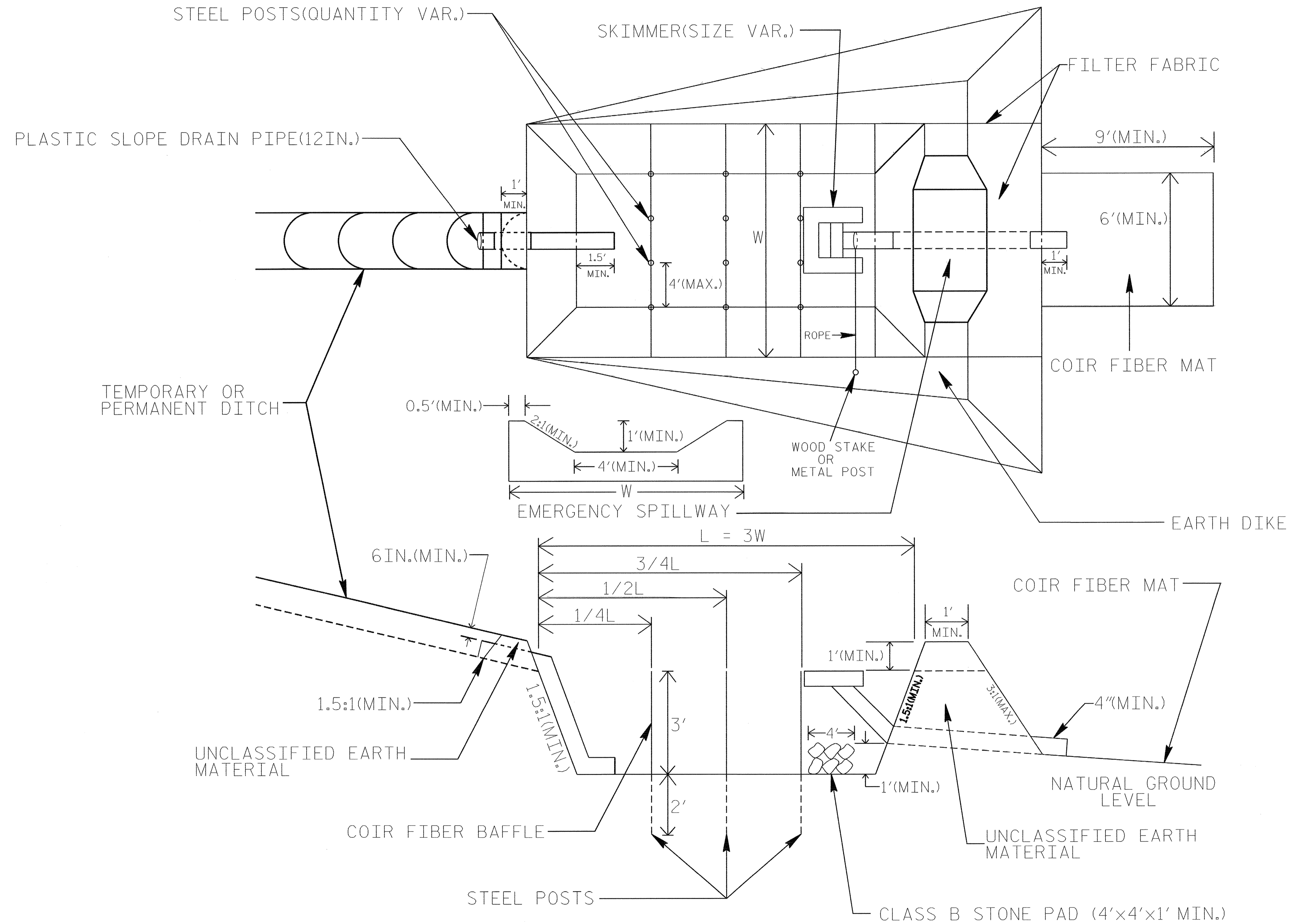


NOTE: INSTALL THREE (3) COIR FIBER BAFFLES IN SILT BASINS AND SEDIMENT DAMS AT DRAINAGE OUTLETS WITH A SPACING OF  $\frac{1}{4}$  THE BASIN LENGTH. TWO (2) COIR FIBER BAFFLES CAN BE INSTALLED IN SILT BASINS AND DAMS LESS THAN 20 FT. IN LENGTH WITH A SPACING OF  $\frac{1}{3}$  THE BASIN LENGTH.

BAFFLE MATERIAL SHALL BE SECURED TO THE BOTTOM AND SIDES OF BASIN USING 12" LANDSCAPE STAPLES

# SKIMMER BASIN WITH BAFFLES DETAIL

PROJECT REFERENCE NO. R-3833B	SHEET NO. EC-2B
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER



## COIR FIBER MAT ANCHOR OPTIONS

### NOTES

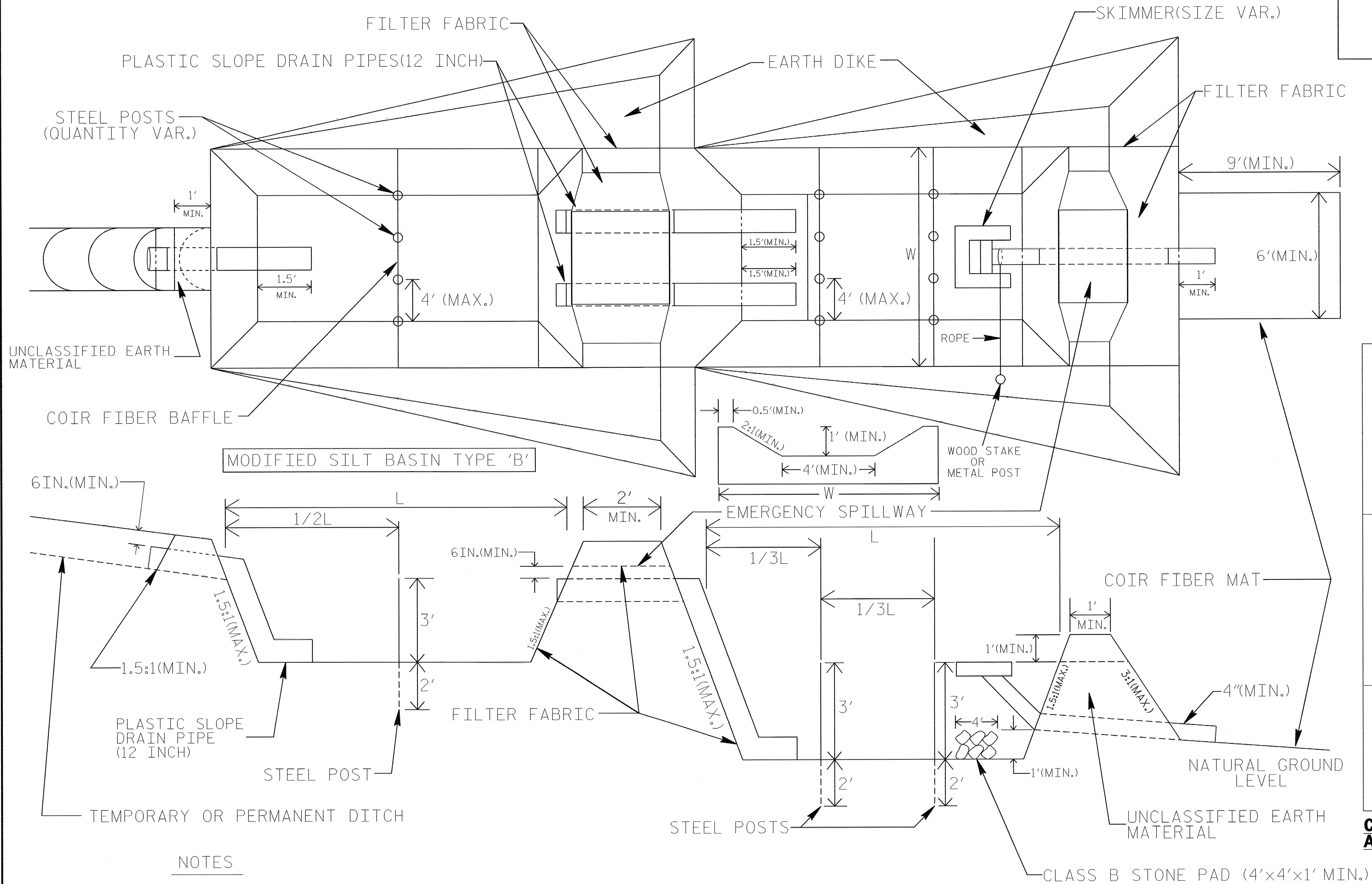
1. SEED AND PLACE MATTING FOR EROSION CONTROL ON INTERIOR SIDESLOPES.
2. LIMIT EARTH DIKE HEIGHT TO 5 FT.
3. THE MINIMUM BASIN WIDTH SHALL BE 9 FT.
4. DETERMINE EMERGENCY SPILLWAY LENGTH (FT.) USING  $Q/0.8$ , WHERE Q IS FLOW RATE (CFS) INTO BASIN.

NOT TO SCALE



# TIERED SKIMMER BASIN DETAIL

PROJECT REFERENCE NO. R-3833B	SHEET NO. EC-2C
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER



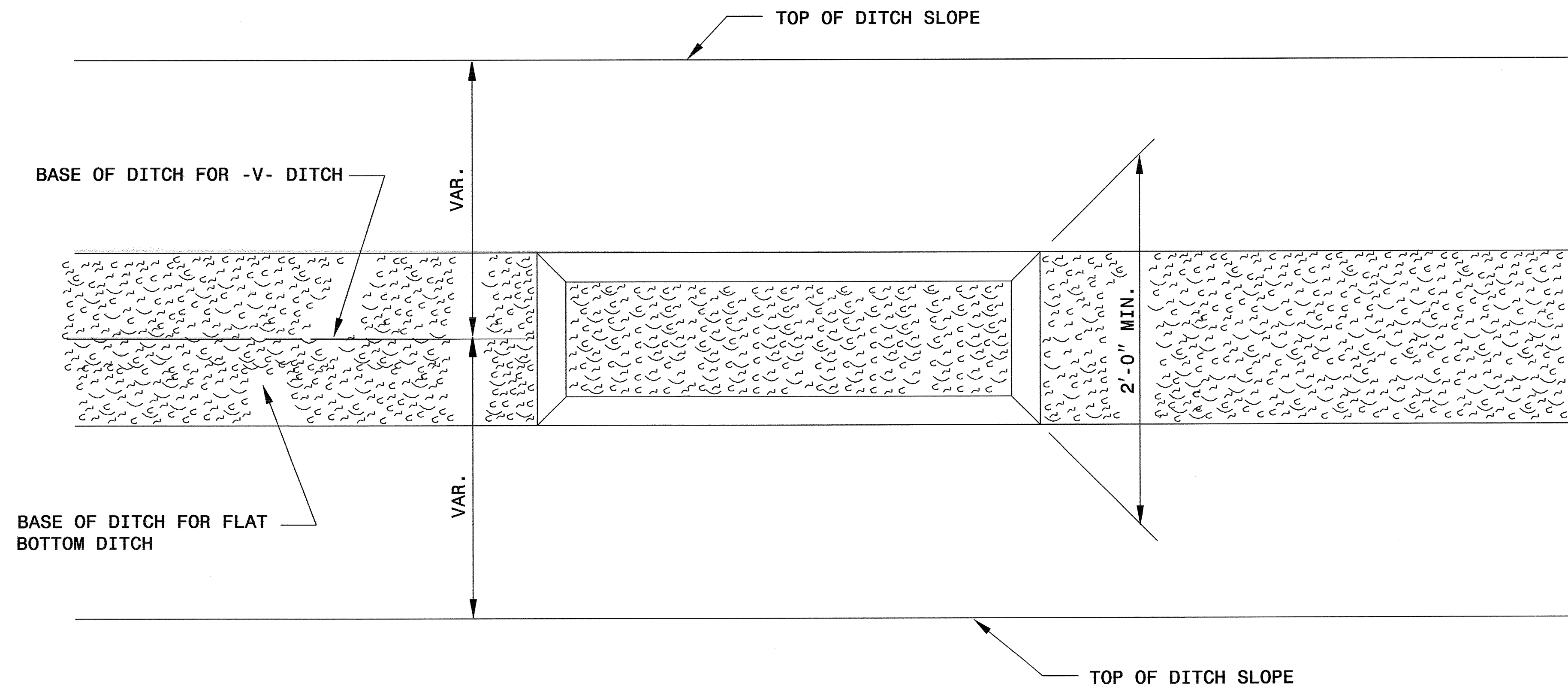
## NOTES

1. SEED AND PLACE MATTING FOR EROSION CONTROL ON INTERIOR SIDESLOPES OF BASINS.
2. LIMIT HEIGHT OF EARTH DIKES TO 5 FT.
3. ADDITIONAL MODIFIED SILT BASINS TYPE 'B' MAY BE NEEDED DEPENDING ON SLOPE.
4. THE MINIMUM BASIN WIDTHS SHALL BE 9 FT.
5. DETERMINE EMERGENCY SPILLWAY LENGTHS (FT.) USING  $Q/0.8$ , WHERE Q IS FLOW RATE (CFS) INTO UPPER BASIN.

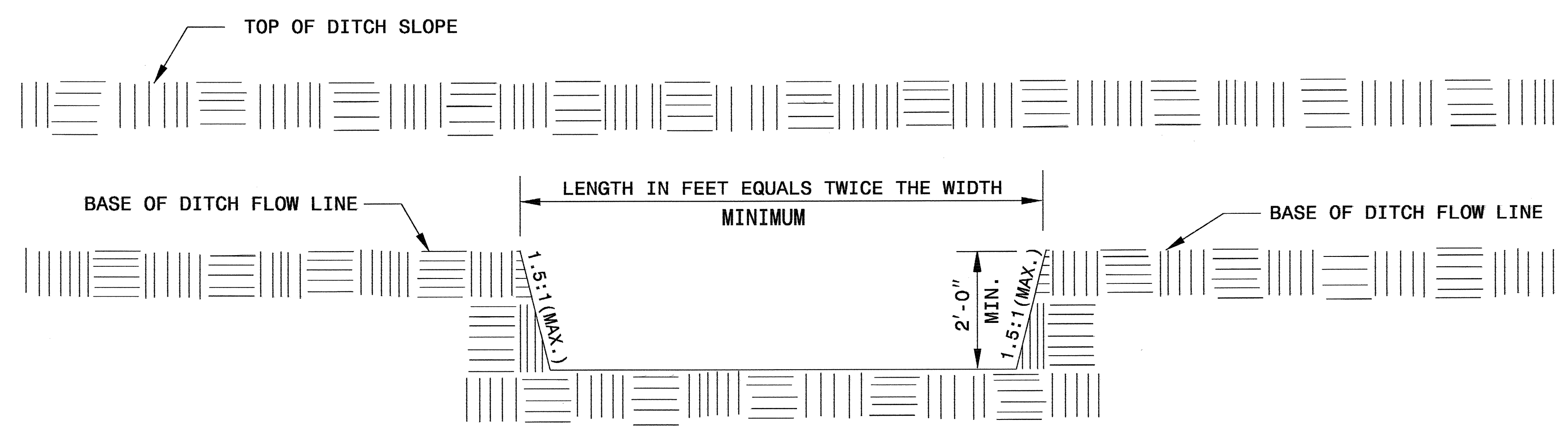
NOT TO SCALE

PROJECT REFERENCE NO. R-3833B	SHEET NO. EC-2D
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

# SILT BASIN 'B' DETAIL



**PLAN**

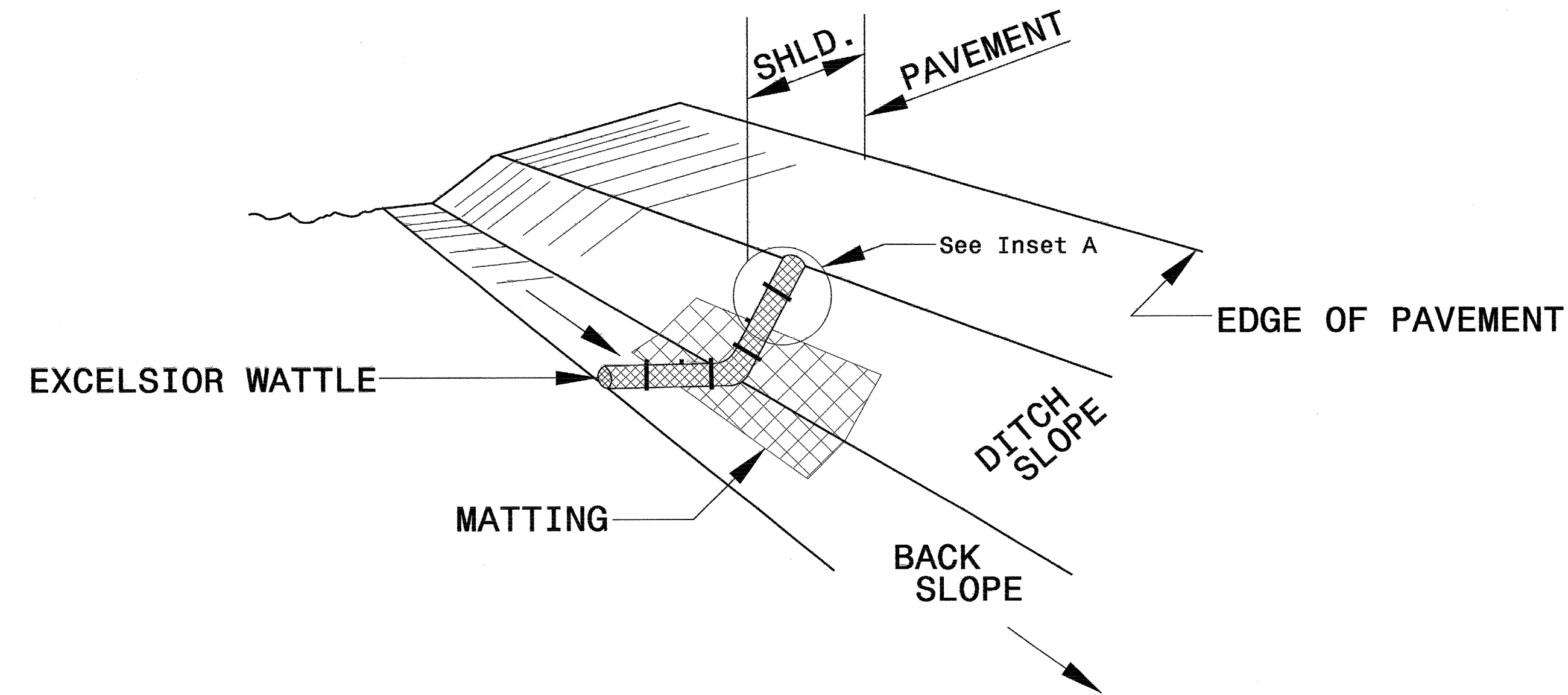


**ELEVATION**

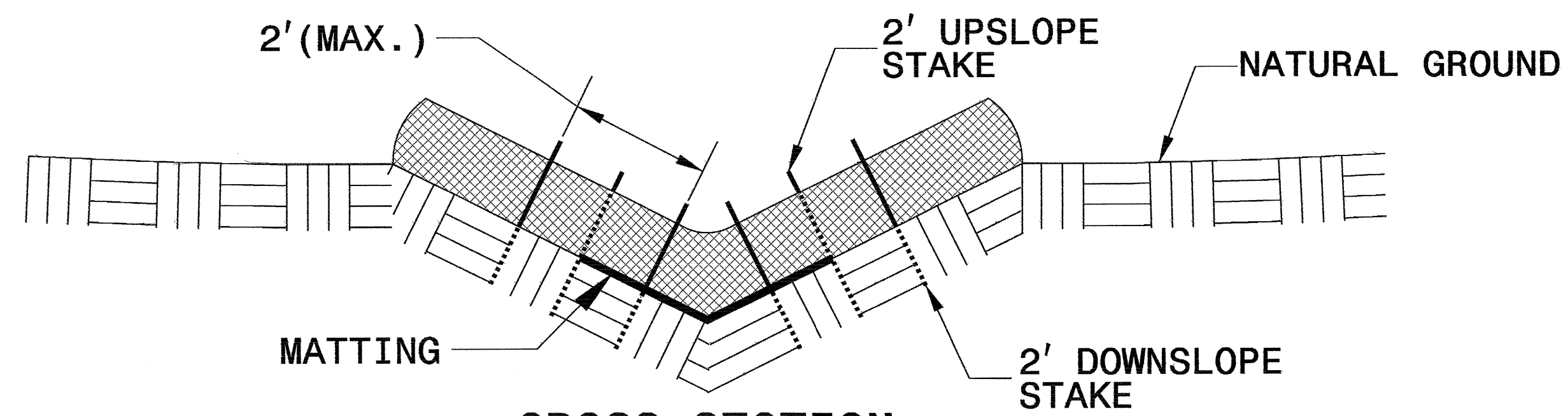


PROJECT REFERENCE NO. R-3833B	SHEET NO. EC-2E
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

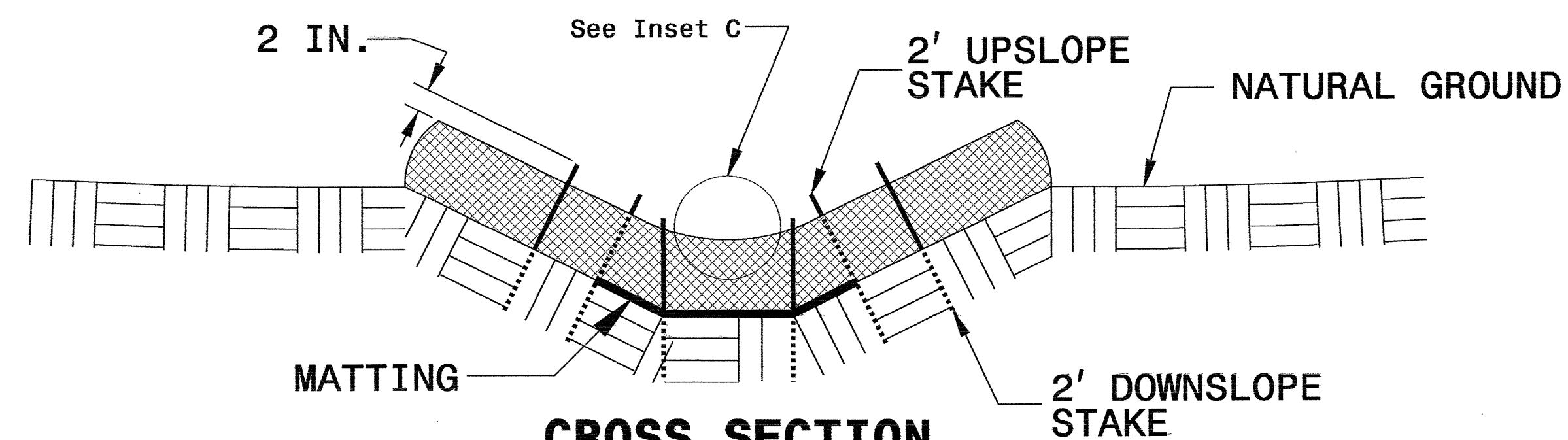
# WATTLE WITH POLYACRYLAMIDE DETAIL



**ISOMETRIC VIEW**



**CROSS SECTION  
VEE DITCH**



**CROSS SECTION  
TRAPEZOIDAL DITCH**

**NOTES:**

USE MINIMUM 12 IN. DIAMETER EXCELSIOR WATTLE.

USE 2 FT. WOODEN STAKES WITH A 2 IN. BY 2 IN. CROSS SECTION.

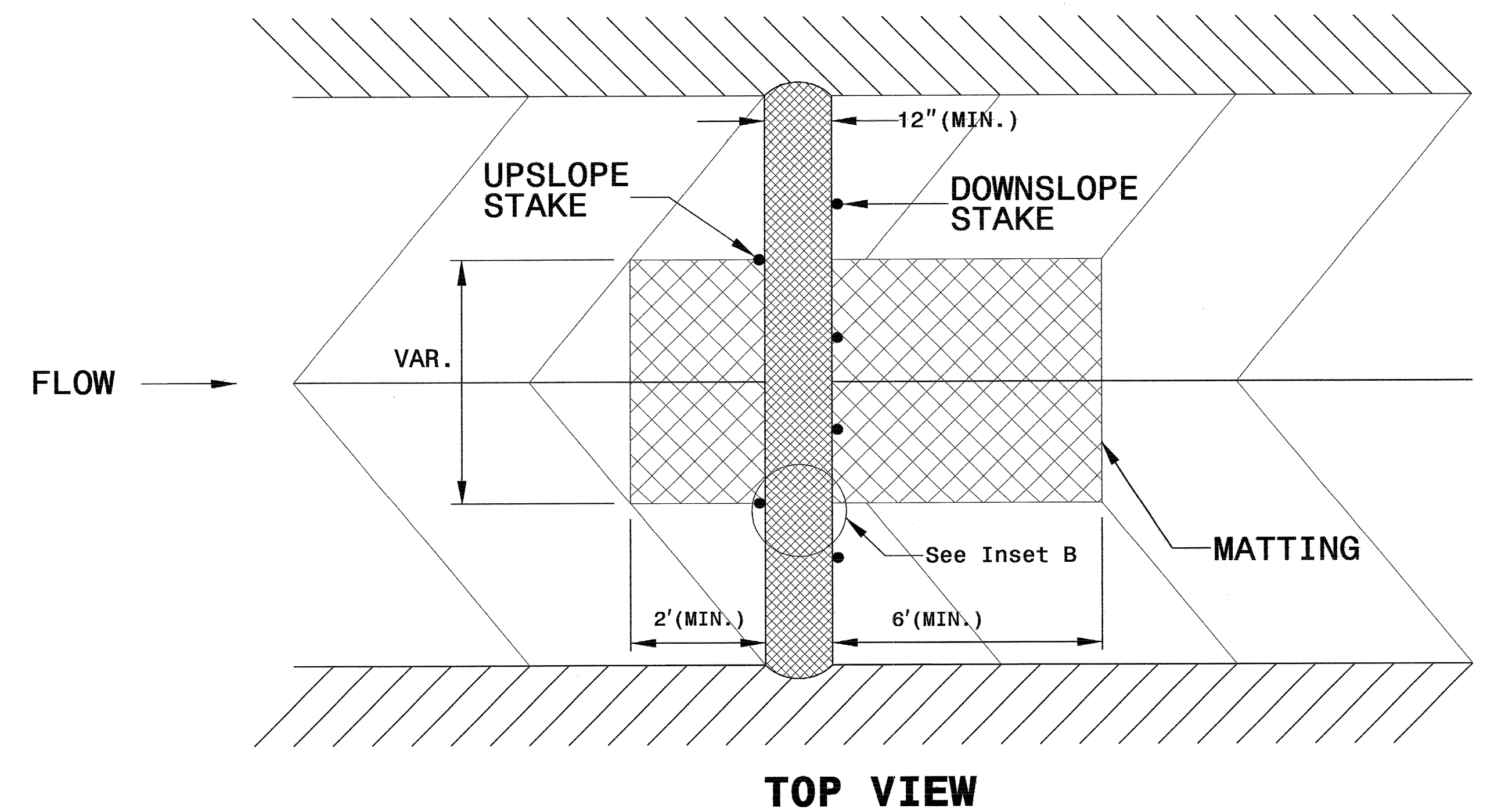
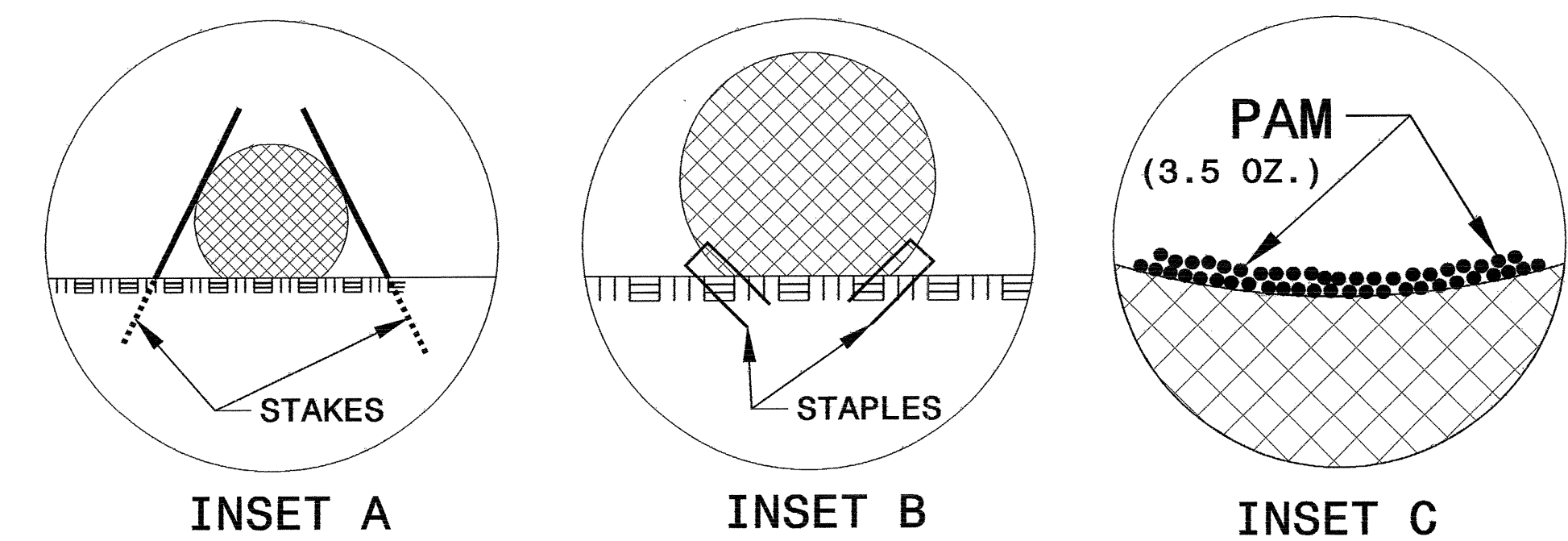
INSTALL A MINIMUM OF 2 UPSLOPE STAKES AND 4 DOWNSLOPE STAKES AT AN ANGLE TO WEDGE WATTLE TO BOTTOM OF DITCH.

PROVIDE STAPLES MADE OF 0.125 IN. DIAMETER STEEL WIRE FORMED INTO A U SHAPE NOT LESS THAN 12" IN LENGTH.

INSTALL STAPLES APPROXIMATELY EVERY 1 LINEAR FOOT ON BOTH SIDES OF WATTLE AND AT EACH END TO SECURE IT TO THE SOIL.

INSTALL MATTING IN ACCORDANCE WITH SECTION 1631 OF THE STANDARD SPECIFICATIONS.

INITIALLY APPLY 3.5 OUNCES OF ANIONIC OR NEUTRALLY CHARGED POLYACRYLAMIDE (PAM) OVER WATTLE WHERE WATER WILL FLOW AND AFTER EVERY RAINFALL EVENT THAT IS EQUAL TO OR EXCEEDS 0.25 IN.



**TOP VIEW**

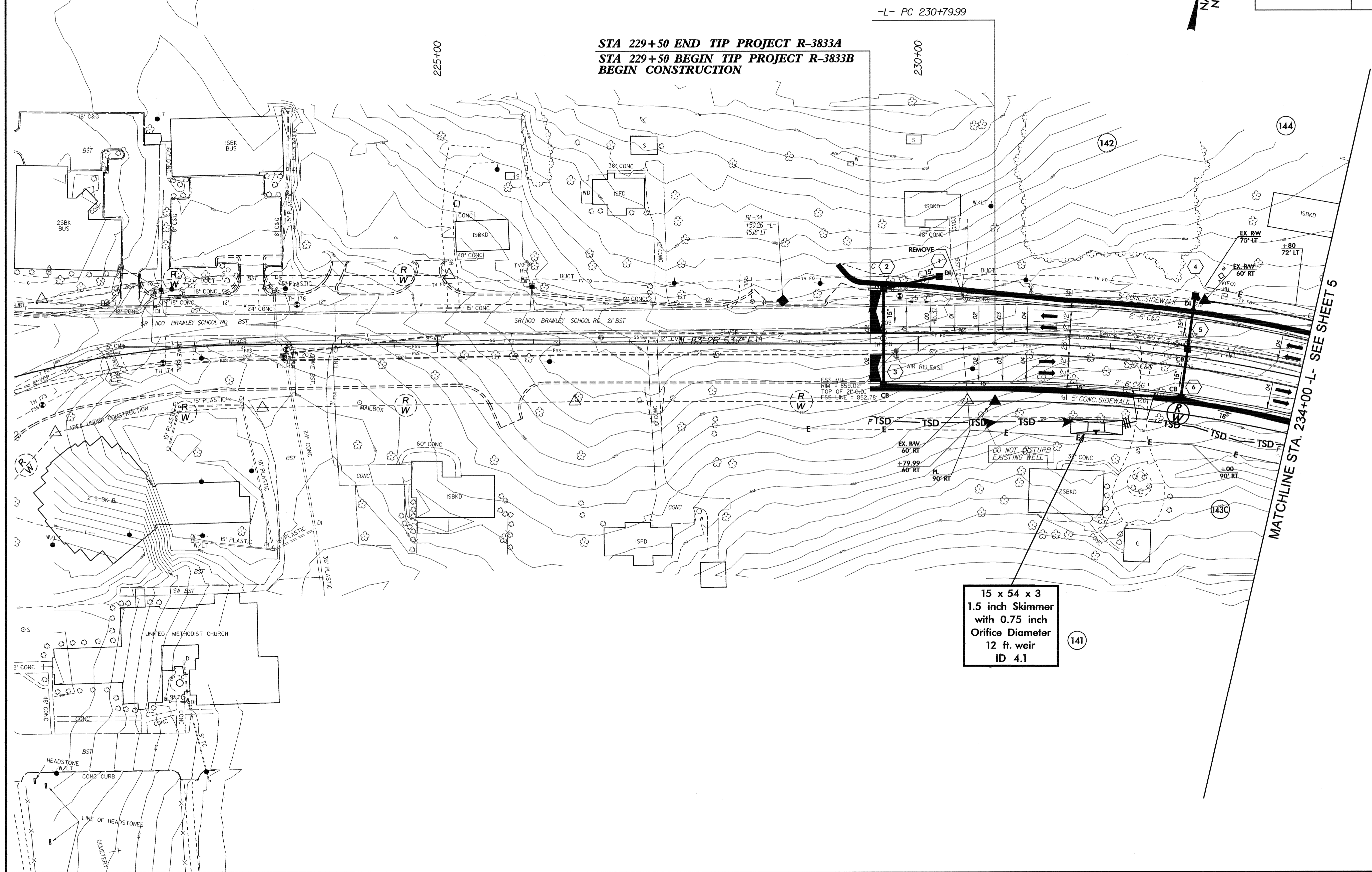
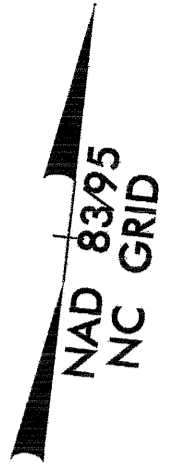




NOTE:  
PLACE TEMPORARY ROCK SEDIMENT DAMS TYPE - B  
AND TEMPORARY ROCK SILT CHECKS TYPE - A AT  
DRAINAGE OUTLETS.

CLEARING AND GRUBBING  
EROSION CONTROL FOR  
CONSTRUCTION SHEET 04

PROJECT REFERENCE NO. R-3833B	SHEET NO. EC-04/CONST.04
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER



15 x 54 x 3  
1.5 inch Skimmer  
with 0.75 inch  
Orifice Diameter  
12 ft. weir  
ID 4.1

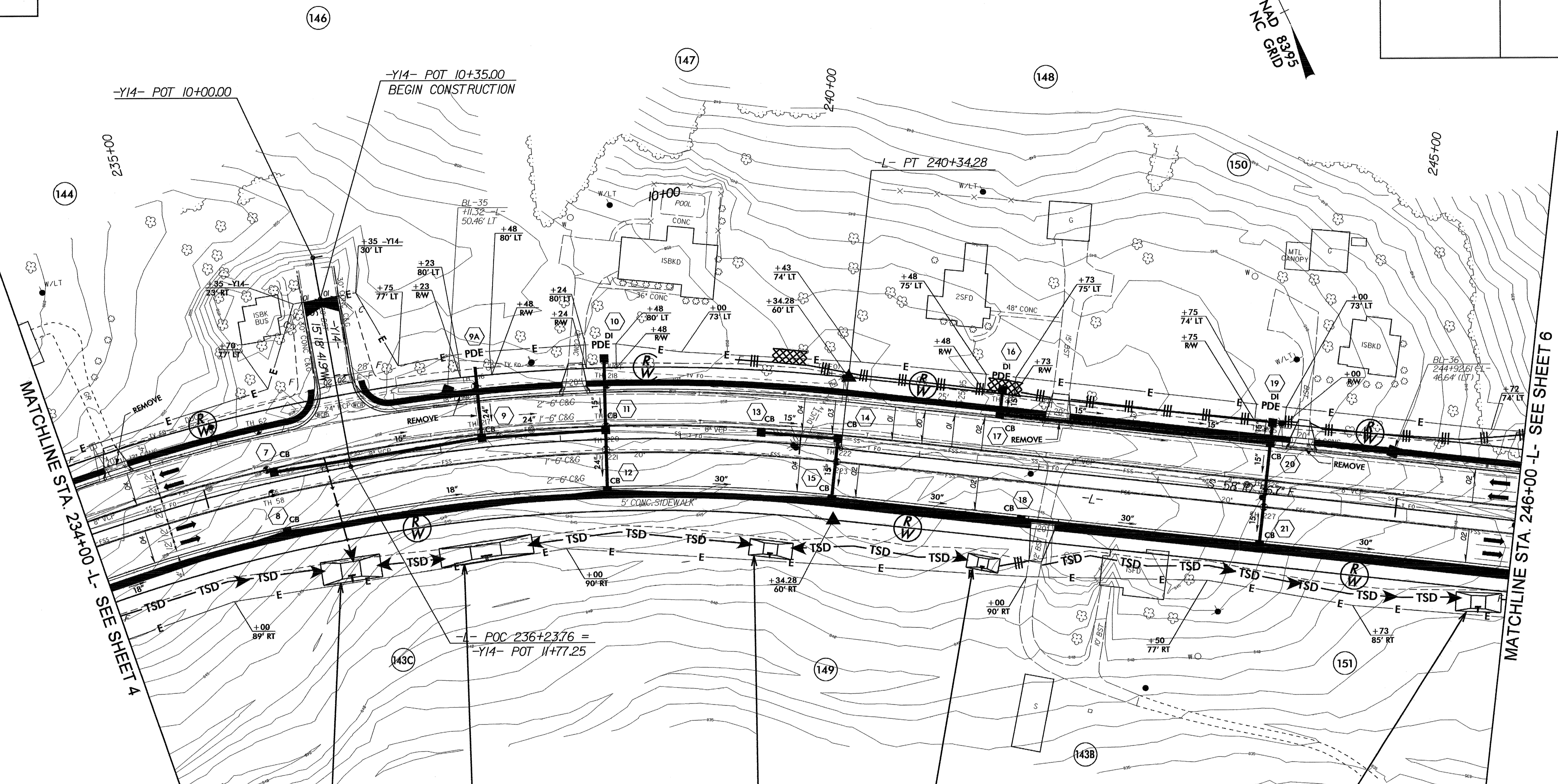
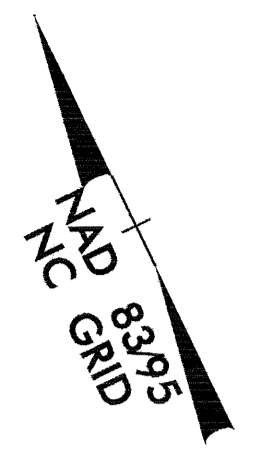
STA 229+50 END TIP PROJECT R-3833A  
STA 229+50 BEGIN TIP PROJECT R-3833B  
BEGIN CONSTRUCTION

MATCHLINE STA. 234+00 -L- SEE SHEET 5

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 05

PROJECT REFERENCE NO. R-3833B	SHEET NO. EC-05/CONST.05
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER



19 x 50 x 3  
1.5 inch Skimmer  
with 0.875 inch  
Orifice Diameter  
14 ft. weir  
ID 5.1

16 x 78 x 3  
1.5 inch Skimmer  
with 1.0 inch  
Orifice Diameter  
17 ft. weir  
ID 5.2

14 x 36 x 3  
1.5 inch Skimmer  
with 0.625 inch  
Orifice Diameter  
10 ft. weir  
ID 5.3

12 x 27 x 3  
1.5 inch Skimmer  
with 0.375 inch  
Orifice Diameter  
4 ft. weir  
ID 5.4

16 x 38 x 3  
1.5 inch Skimmer  
with 0.625 inch  
Orifice Diameter  
8 ft. weir  
ID 5.5

BMII  
-BL- STATION 238+55  
OFFSET 355.42' RIGHT  
ELEV = 830.64'

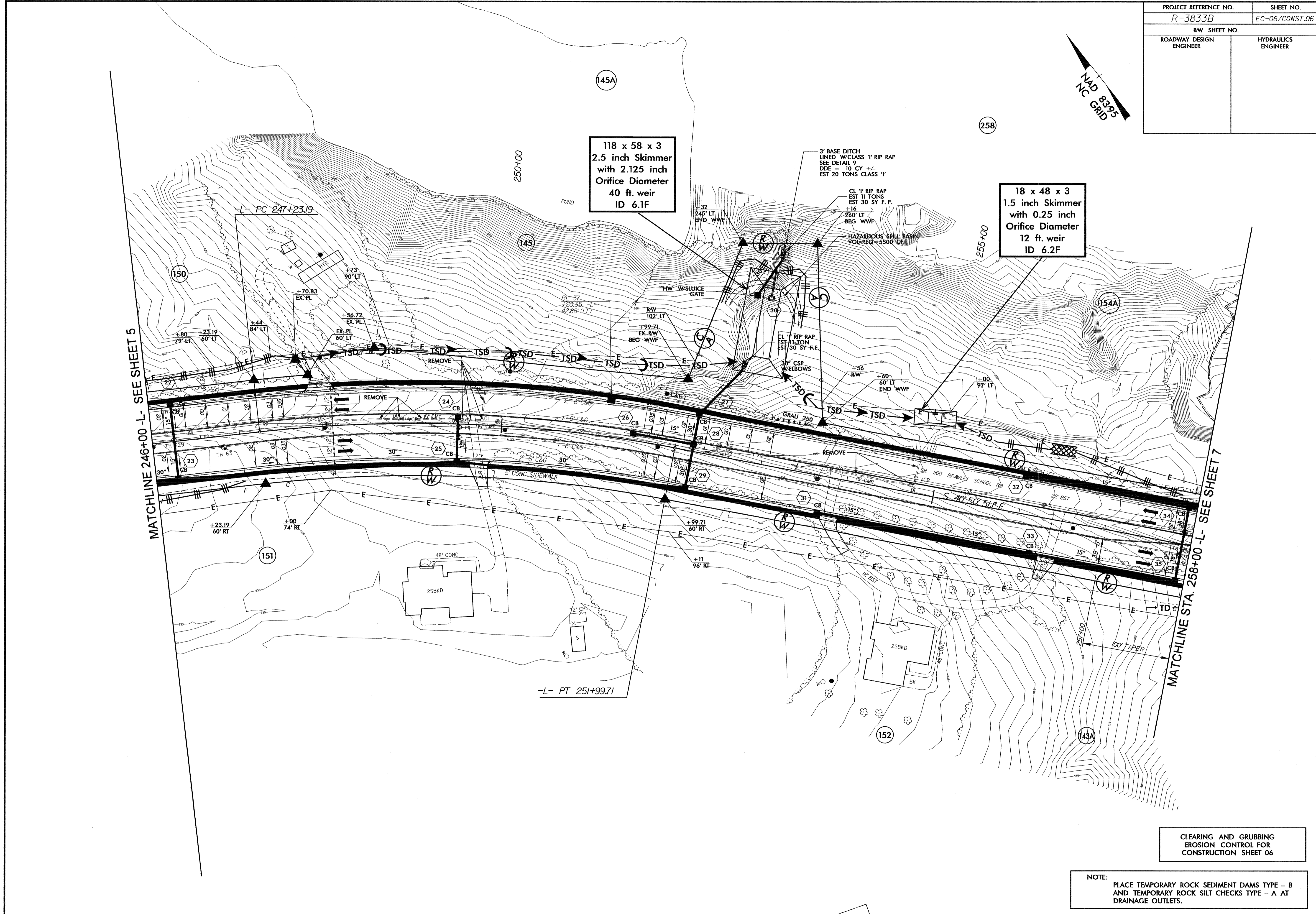
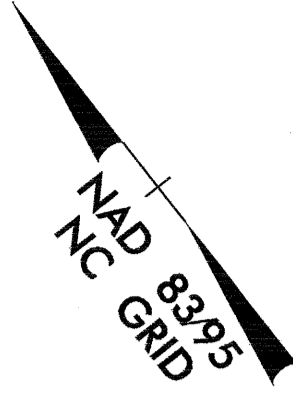
-L- POC 236+23.76 =  
-Y14- POT 11+77.25

MATCHLINE STA. 234+00 -L- SEE SHEET 4

MATCHLINE STA. 246+00 -L- SEE SHEET 6



PROJECT REFERENCE NO.		SHEET NO.	
R-3833B		EC-06/CONST.06	
RW SHEET NO.			
ROADWAY DESIGN ENGINEER		HYDRAULICS ENGINEER	



CLEARING AND GRUBBING  
EROSION CONTROL FOR  
CONSTRUCTION SHEET 06

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

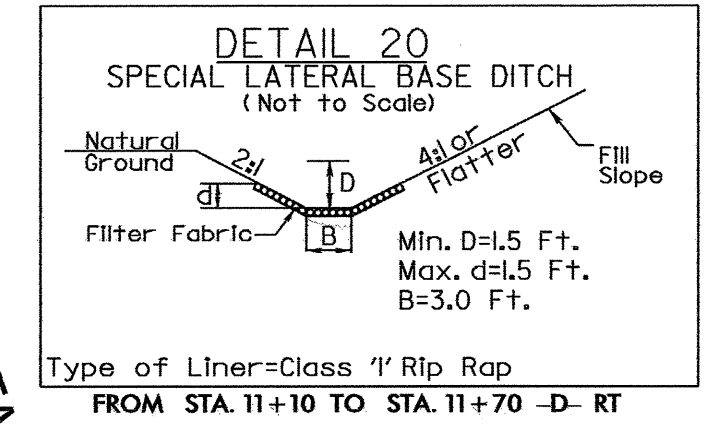
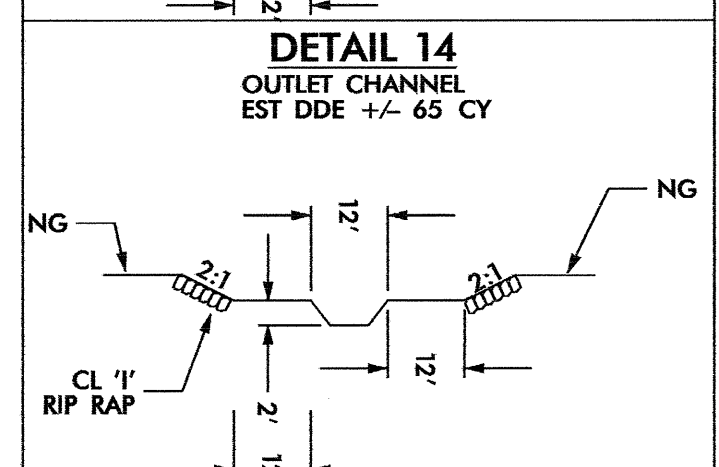
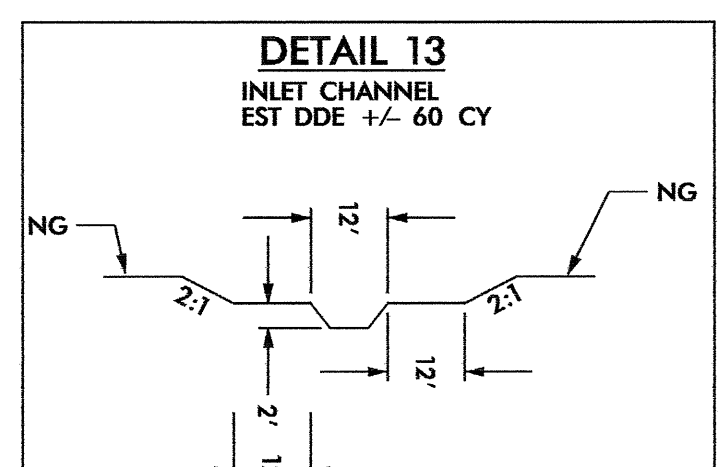
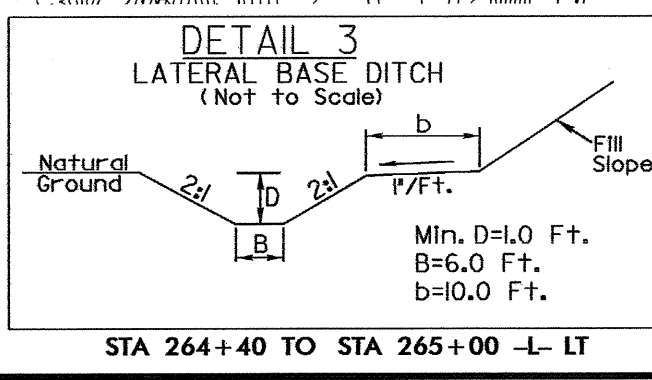
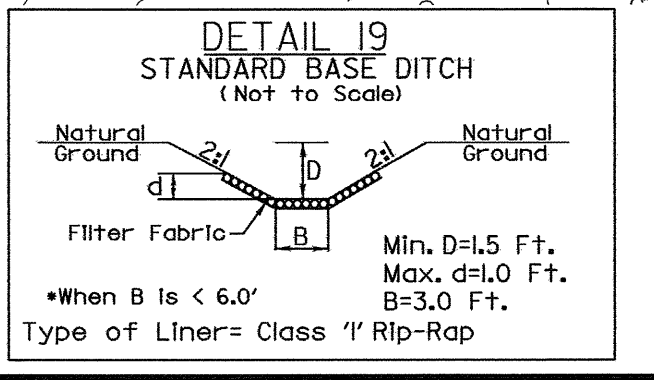
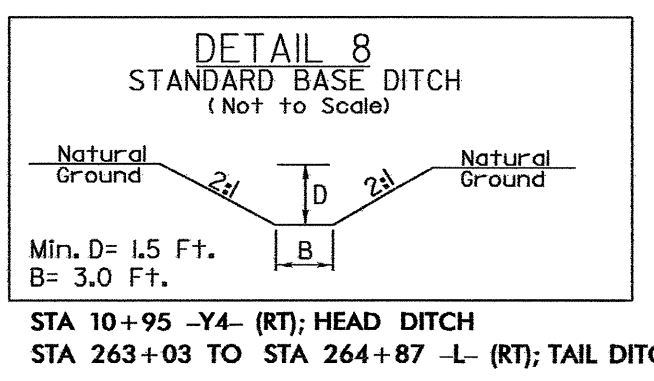
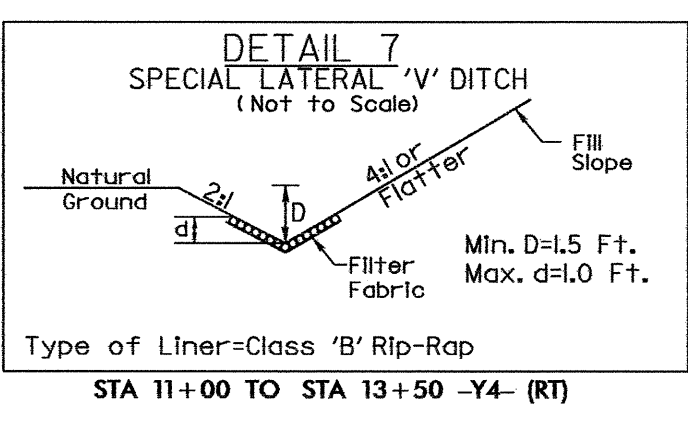
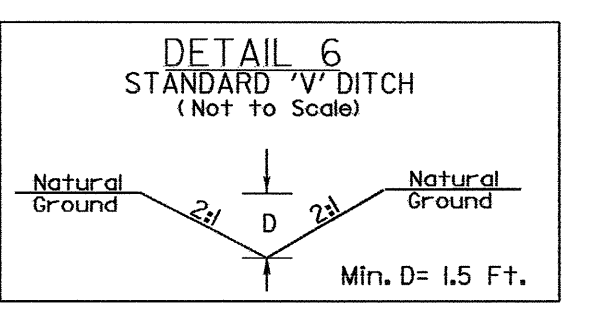
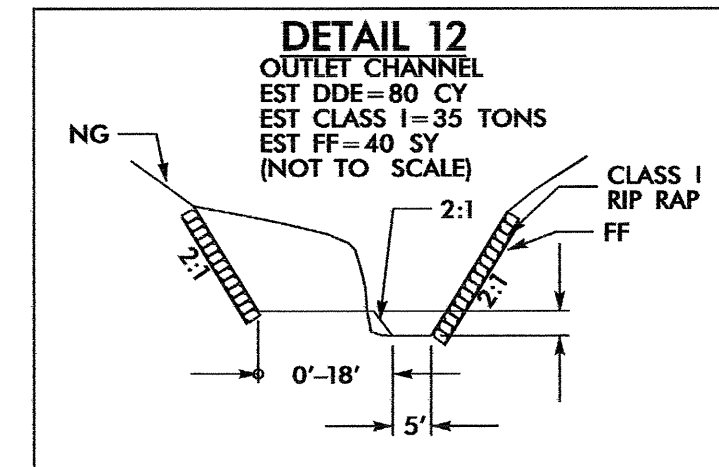
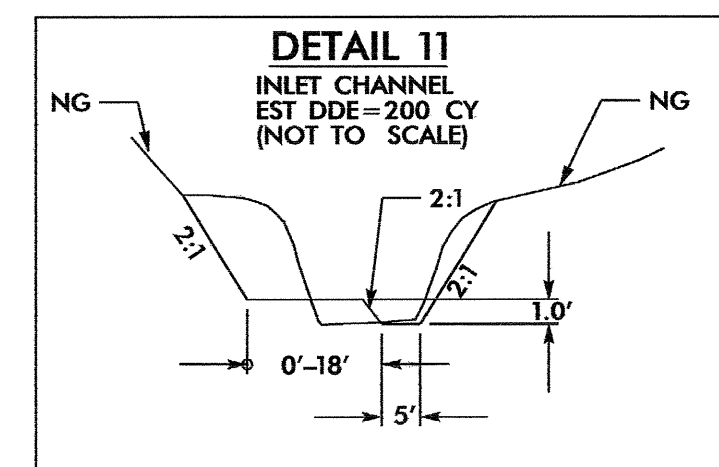


8.17/99

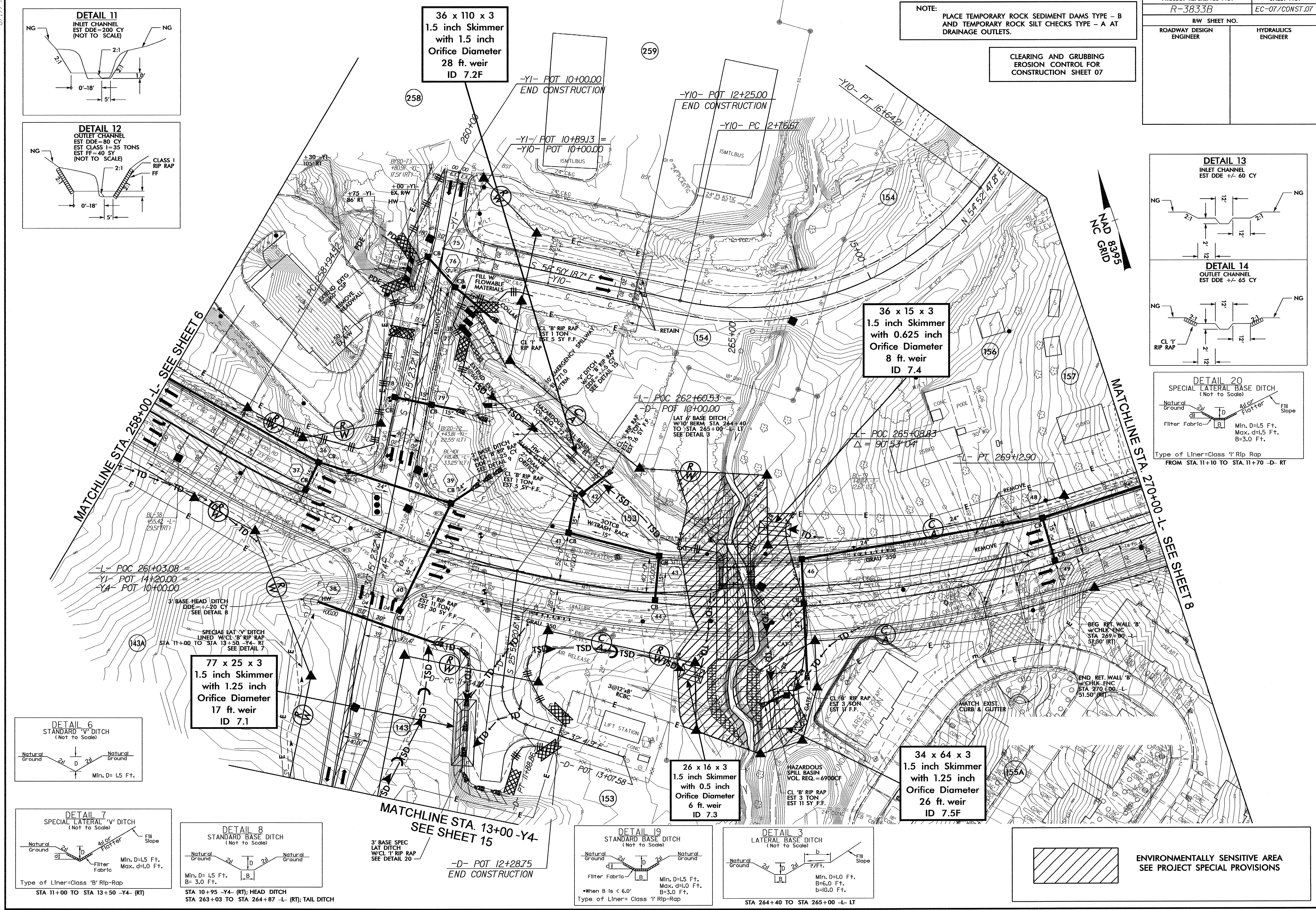
PROJECT REFERENCE NO.		SHEET NO.	
R-3833B		EC-07/CONST.07	
RW SHEET NO.			
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER		

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 07



ENVIRONMENTALLY SENSITIVE AREA SEE PROJECT SPECIAL PROVISIONS



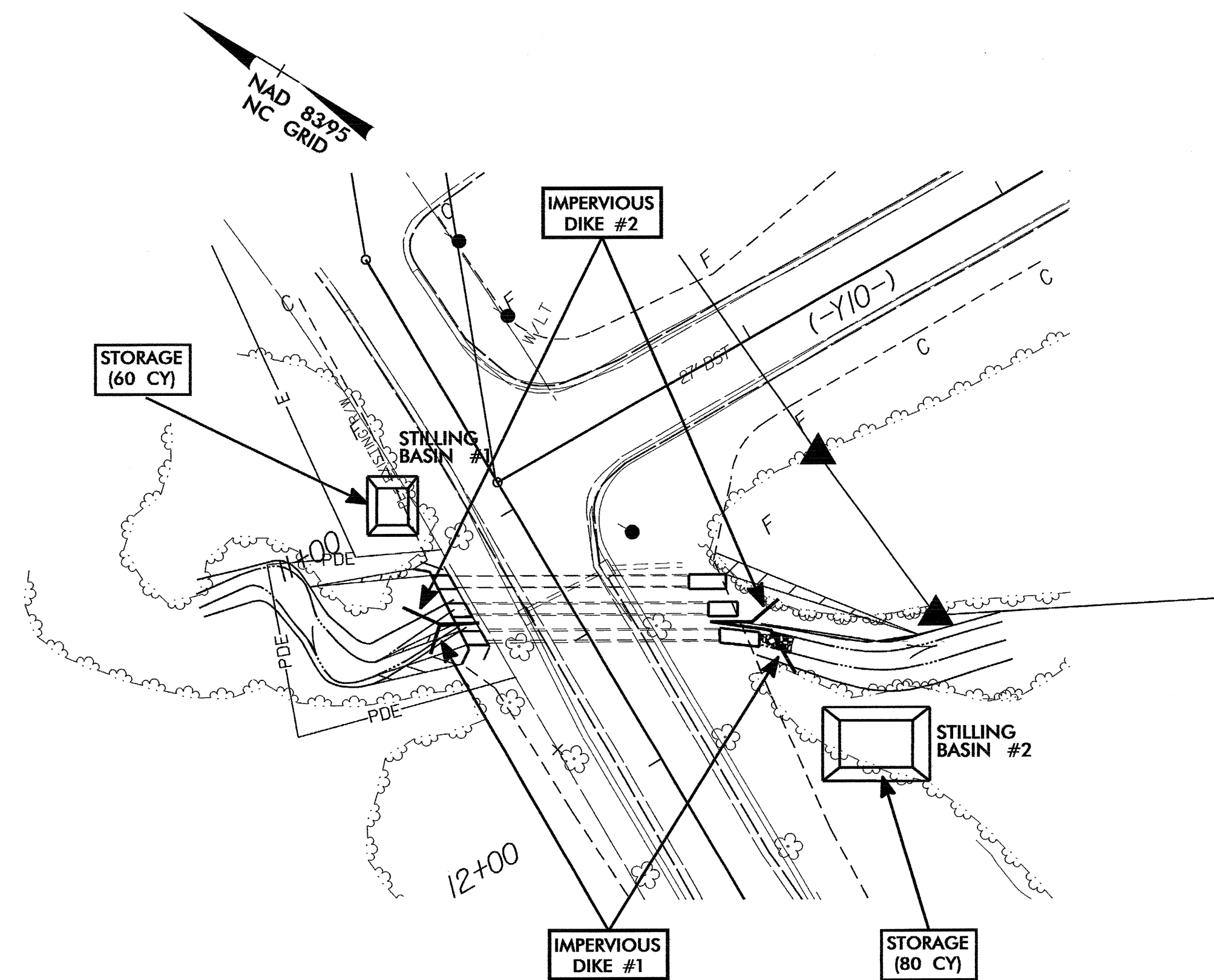




PROJECT REFERENCE NO. R-3833B	SHEET NO. EC-09/CONST.07
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

# CULVERT CONSTRUCTION SEQUENCE STA. 11+40 -Y1-

1. CONSTRUCT STILLING BASINS #1 (60 CY) AND #2 (80 CY).
2. REMOVE EXISTING HEADWALL AND CONSTRUCT IMPERVIOUS DIKES #1.
3. CONSTRUCT UPSTREAM AND DOWNSTREAM EXTENSIONS OF BARREL #1.
4. CONSTRUCT INLET CHANNEL.
5. CONSTRUCT IMPERVIOUS DIKES #2 AND REMOVE IMPERVIOUS DIKE #1 AND DIVERT WATER THROUGH BARRELL #1.
6. CONSTRUCT UPSTREAM AND DOWNSTREAM EXTENSIONS OF BARRELS #2 AND #3.
7. STABILZE OUTLET CHANNEL

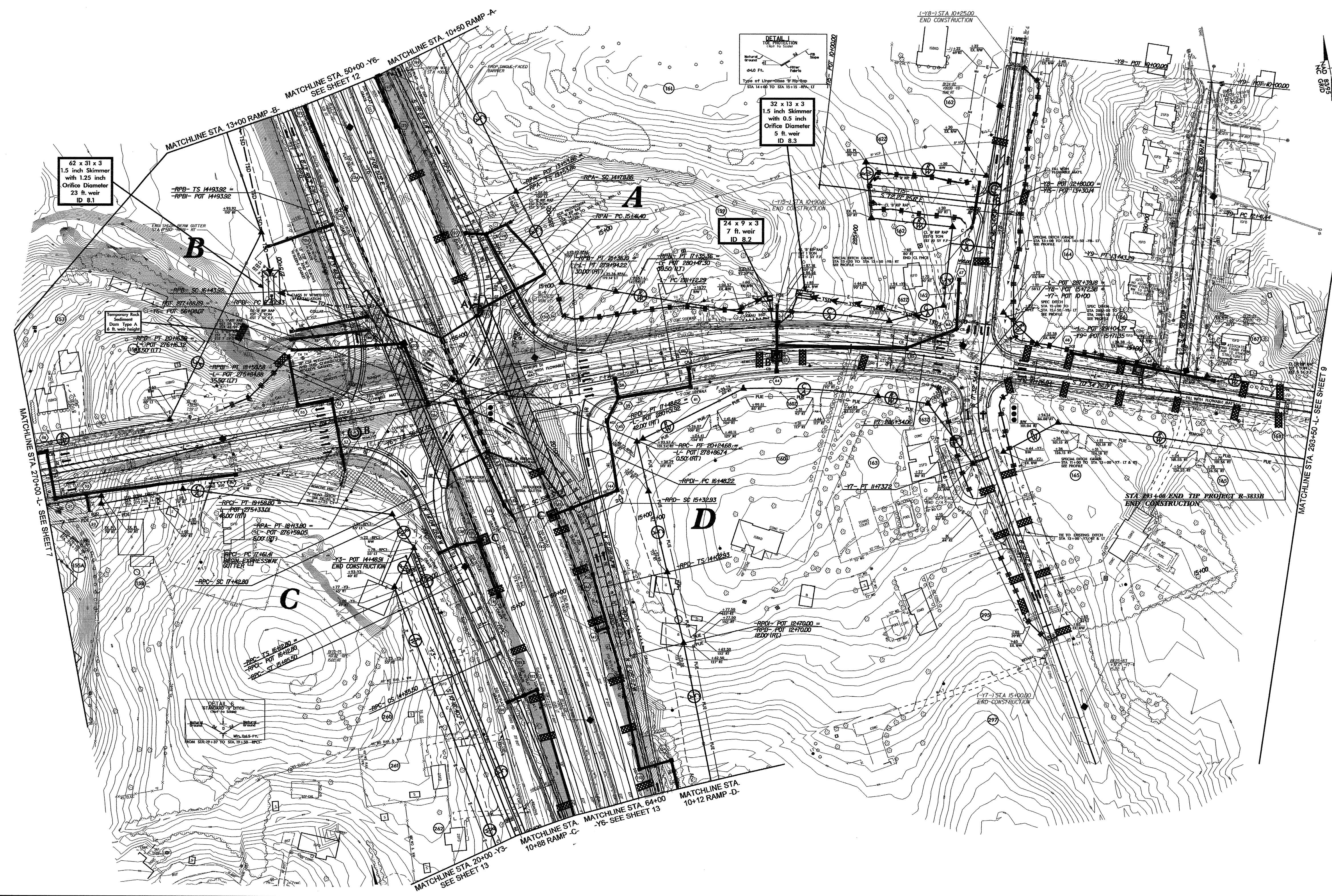




NOTE:  
 PLACE TEMPORARY ROCK SEDIMENT DAMS TYPE - B  
 AND TEMPORARY ROCK SBT CHECKS TYPE - A AT  
 DRAINAGE OUTLETS.

CLEARING AND GRUBBING  
 EROSION CONTROL FOR  
 CONSTRUCTION SHEET 8

PROJECT REFERENCE NO.	SHEET NO.
R-3833B	EC-10/CONST.8
CONTRACT NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER





PROJECT REFERENCE NO. R-3833B		SHEET NO. EC-11/CONST.10	
RW SHEET NO.			
ROADWAY DESIGN ENGINEER		HYDRAULICS ENGINEER	

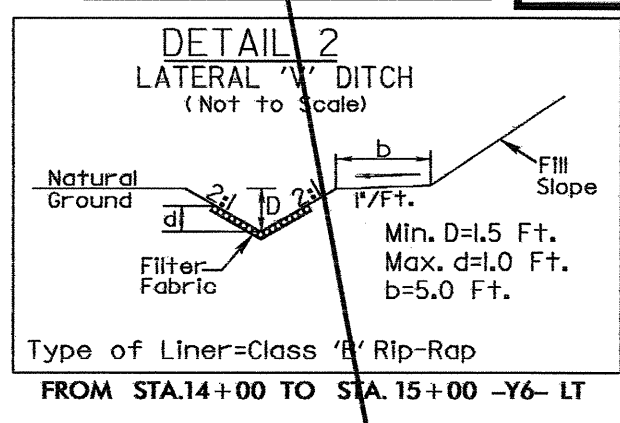
NOTE:  
PLACE TEMPORARY ROCK SEDIMENT DAMS TYPE - B AND TEMPORARY ROCK SILT CHECKS TYPE - A AT DRAINAGE OUTLETS.

CLEARING AND GRUBBING EROSION CONTROL FOR CONSTRUCTION SHEET 10

21 x 15 x 3  
1.5 inch Skimmer  
with 0.625 inch  
Orifice Diameter  
7 ft. weir  
(See Tiered Skimmer  
Basin Detail)  
ID 10.1

Modified Silt Basin  
Type 'B'  
21 x 15 x 3  
(See Tiered Skimmer  
Basin Detail)  
ID 10.1

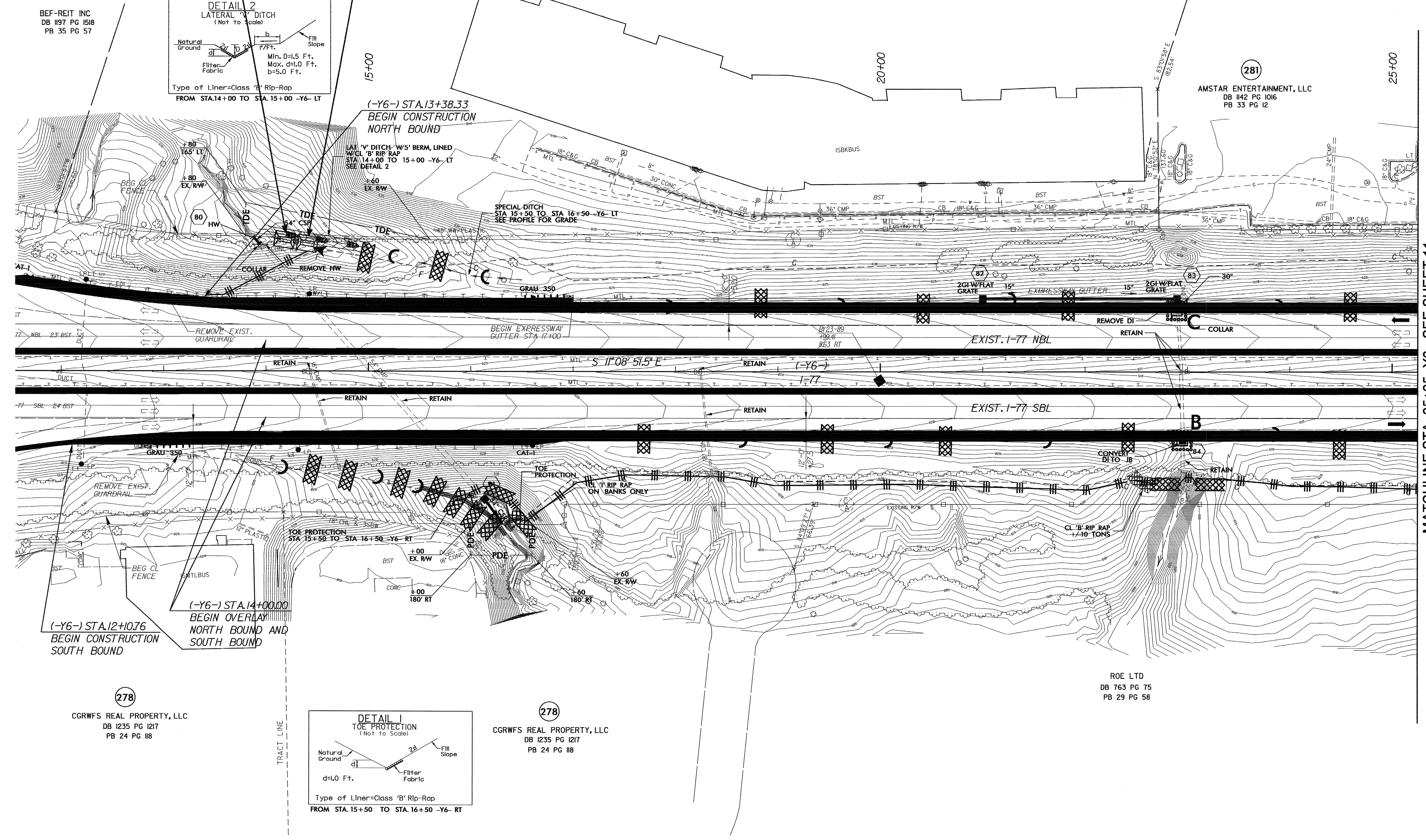
BEF-REIT INC  
DB 1197 PG 1518  
PB 35 PG 57



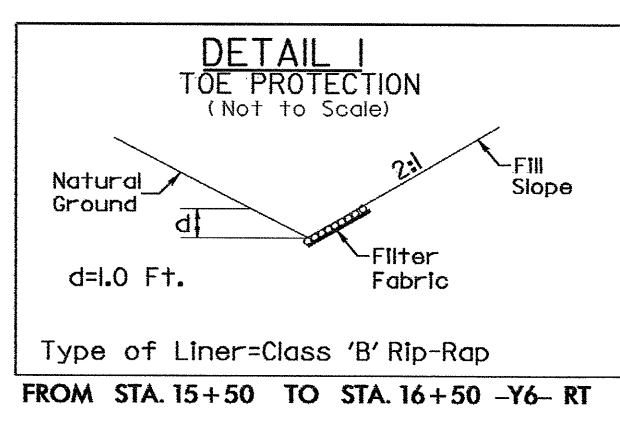
(279)  
BUFFALO MOOREVILLE, LLC  
DB 1388 PG 1191  
PB 33 PG 12  
PB 33 PG 45

NAD 8395  
NC GRID

(281)  
AMSTAR ENTERTAINMENT, LLC  
DB 1142 PG 1016  
PB 33 PG 12



(278)  
CGRWFS REAL PROPERTY, LLC  
DB 1235 PG 1217  
PB 24 PG 118



(278)  
CGRWFS REAL PROPERTY, LLC  
DB 1235 PG 1217  
PB 24 PG 118

ROE LTD  
DB 763 PG 75  
PB 29 PG 58

MATCHLINE STA. 25+25 -Y6- SEE SHEET 11

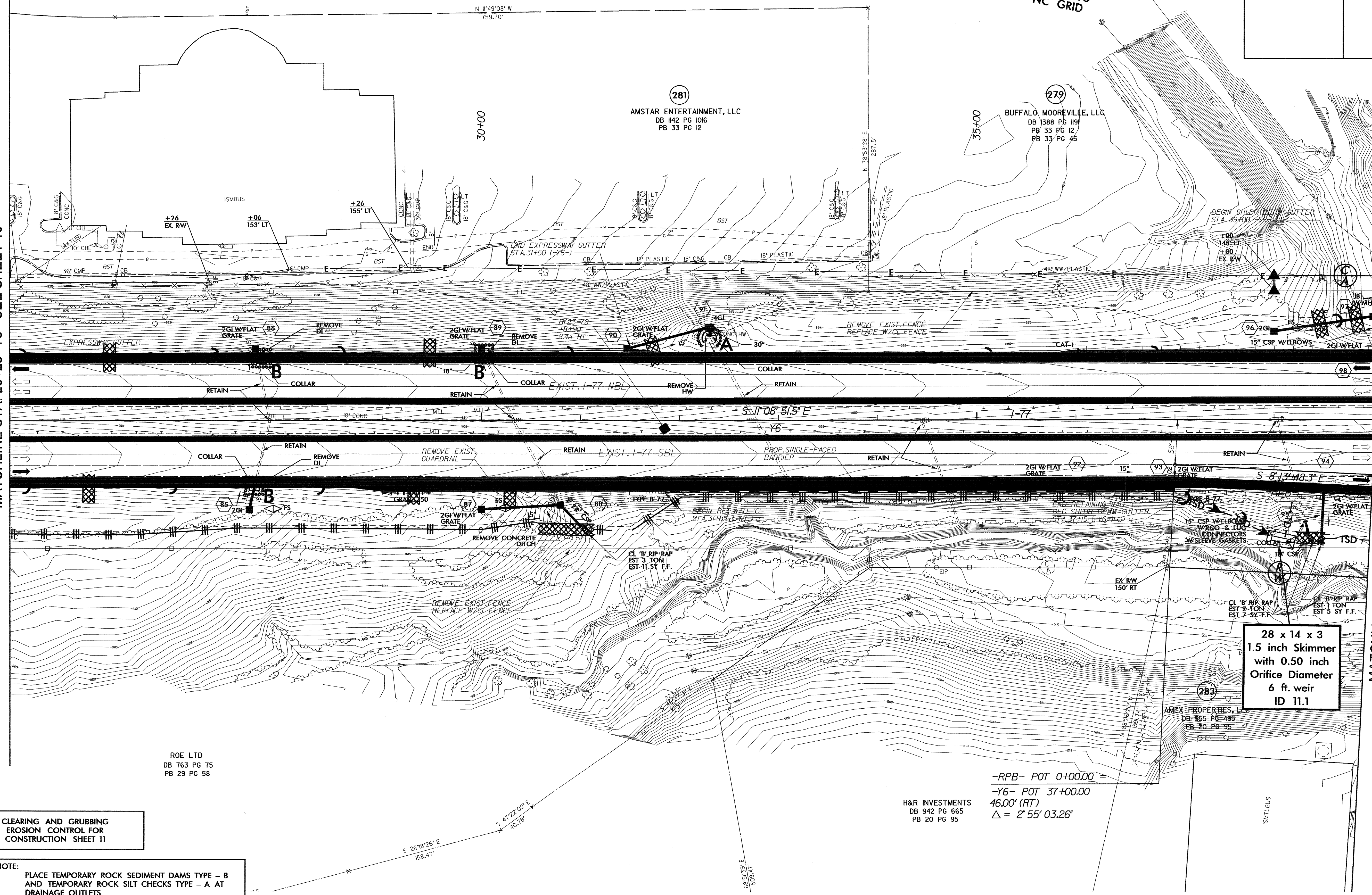


8/17/99

PROJECT REFERENCE NO. R-3833B		SHEET NO. EC-12/CONST.11	
RW SHEET NO.			
ROADWAY DESIGN ENGINEER		HYDRAULICS ENGINEER	

MATCHLINE STA. 25+25 -Y6- SEE SHEET 10

MATCHLINE STA. 39+00 -Y6- SEE SHEET 12



NAD 8395  
NC GRID

(281)  
AMSTAR ENTERTAINMENT, LLC  
DB 1142 PG 1016  
PB 33 PG 12

(279)  
BUFFALO, MOOREVILLE, LLC  
DB 1388 PG 1191  
PB 33 PG 12  
PB 33 PG 45

ROE LTD  
DB 763 PG 75  
PB 29 PG 58

H&R INVESTMENTS  
DB 942 PG 665  
PB 20 PG 95

AMEX PROPERTIES, L  
DB 955 PG 495  
PB 20 PG 95

28 x 14 x 3  
1.5 inch Skimmer  
with 0.50 inch  
Orifice Diameter  
6 ft. weir  
ID 11.1

-RPB- POT 0+00.00 =  
-Y6- POT 37+00.00  
46.00' (RT)  
Δ = 2' 55" 03.26'

CLEARING AND GRUBBING  
EROSION CONTROL FOR  
CONSTRUCTION SHEET 11

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

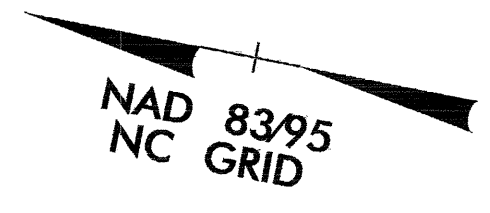
S 26°18'26" E  
158.47'

S 47°22'02" E  
40.71'

S 65°13'51" E  
30.41'

ISMTL BUS





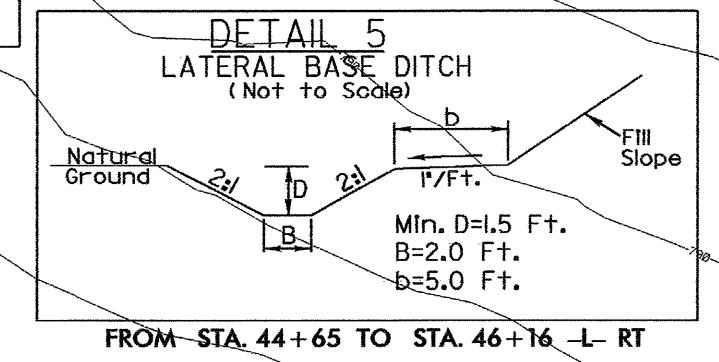
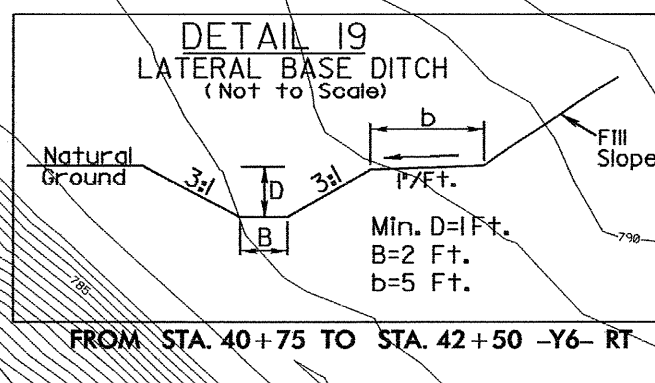
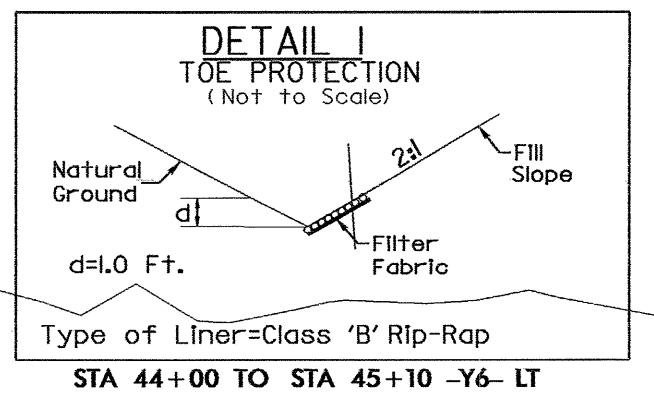
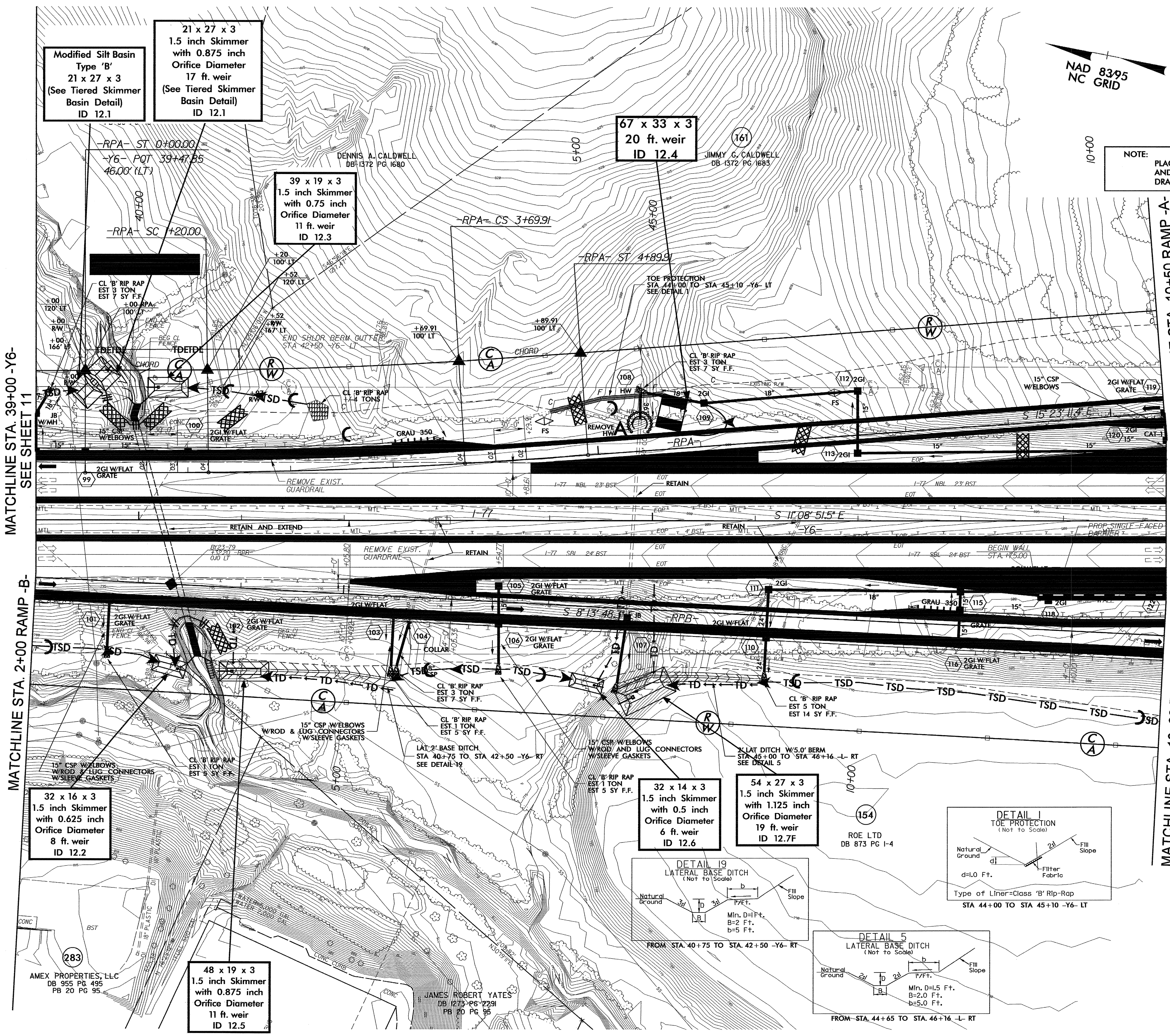
NOTE: PLACE TEMPORARY ROCK SEDIMENT DAMS TYPE - B AND TEMPORARY ROCK SILT CHECKS TYPE - A AT DRAINAGE OUTLETS.

CLEARING AND GRUBBING EROSION CONTROL FOR CONSTRUCTION SHEET 12

MATCHLINE STA. 39+00 -Y6- SEE SHEET 11

MATCHLINE STA. 2+00 RAMP -B-

MATCHLINE STA. 10+50 RAMP -A-  
MATCHLINE STA. 50+00 -Y6- SEE SHEET 8  
MATCHLINE STA. 13+00 RAMP -B-



AMX PROPERTIES, LLC  
DB 955 PG 495  
PB 20 PG 95

JAMES ROBERT YATES  
DB 1275 PG 2291  
PB 20 PG 95

Modified Silt Basin  
Type 'B'  
21 x 27 x 3  
(See Tiered Skimmer  
Basin Detail)  
ID 12.1

21 x 27 x 3  
1.5 inch Skimmer  
with 0.875 inch  
Orifice Diameter  
17 ft. weir  
(See Tiered Skimmer  
Basin Detail)  
ID 12.1

39 x 19 x 3  
1.5 inch Skimmer  
with 0.75 inch  
Orifice Diameter  
11 ft. weir  
ID 12.3

67 x 33 x 3  
20 ft. weir  
ID 12.4

32 x 16 x 3  
1.5 inch Skimmer  
with 0.625 inch  
Orifice Diameter  
8 ft. weir  
ID 12.2

48 x 19 x 3  
1.5 inch Skimmer  
with 0.875 inch  
Orifice Diameter  
11 ft. weir  
ID 12.5

32 x 14 x 3  
1.5 inch Skimmer  
with 0.5 inch  
Orifice Diameter  
6 ft. weir  
ID 12.6

54 x 27 x 3  
1.5 inch Skimmer  
with 1.125 inch  
Orifice Diameter  
19 ft. weir  
ID 12.7F

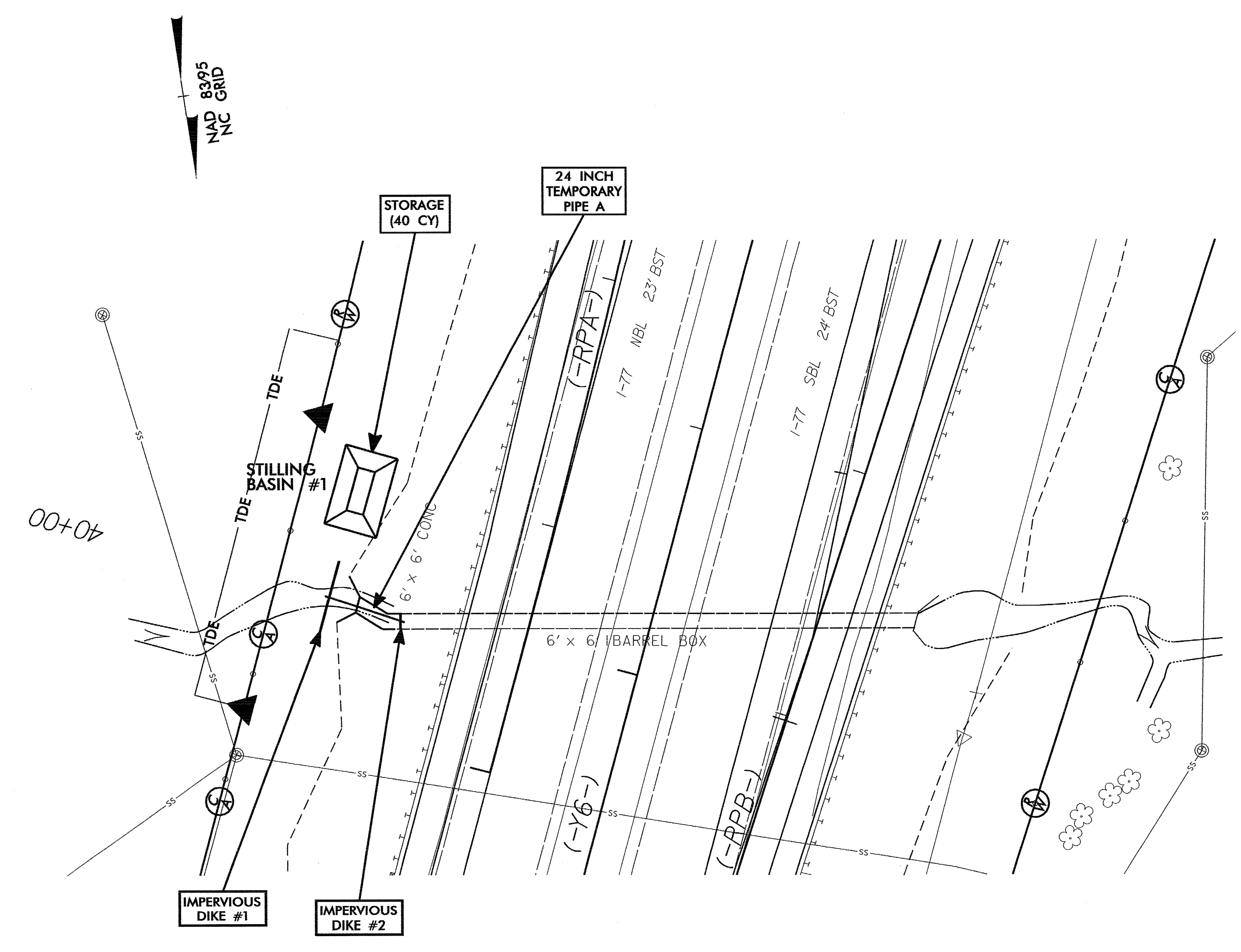


PROJECT REFERENCE NO. R-3833B	SHEET NO. EC-14/CONST.12
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

# CULVERT CONSTRUCTION SEQUENCE STA. 40+22 -Y6-

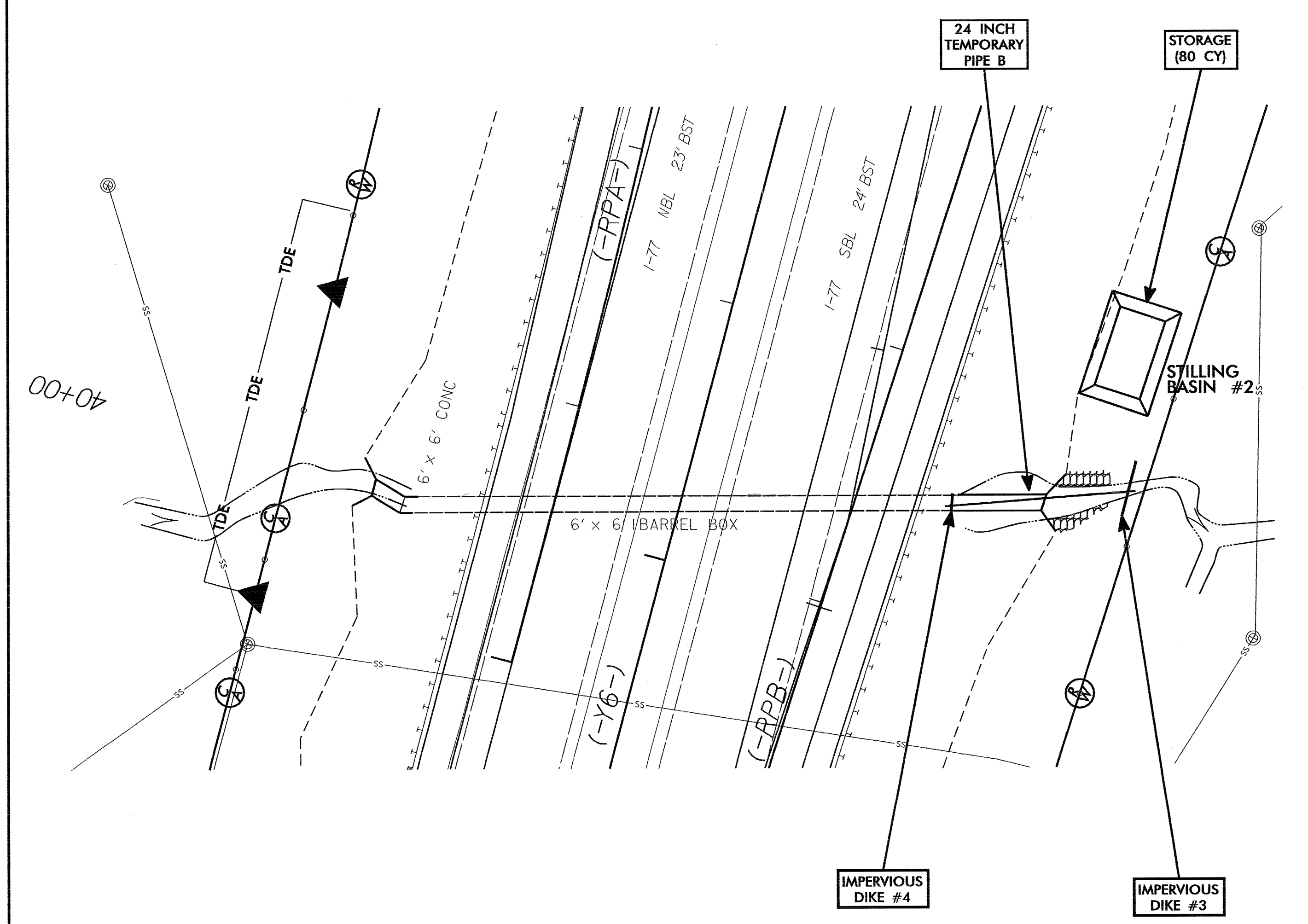
## PHASE I

1. CONSTRUCT STILLING BASIN #1 (40 CY).
2. CONSTRUCT IMPERVIOUS DIKE #1 AND #2 AND 24" TEMPORARY PIPE A.
3. DIVERTING FLOW THROUGH THE TEMPORARY PIPE 1.
4. CONSTRUCT THE INLET SIDE OF CULVERT BARREL EXTENSION..



## PHASE II

1. CONSTRUCT STILLING BASIN #2 (80 CY).
2. CONSTRUCT IMPERVIOUS DIKE #3 AND #4 AND 24" TEMPORARY PIPE B.
3. DIVERT FLOW THROUGH THE TEMPORARY PIPE B.
4. CONSTRUCT THE OUTLET SIDE OF CULVERT BARREL EXTENSION..



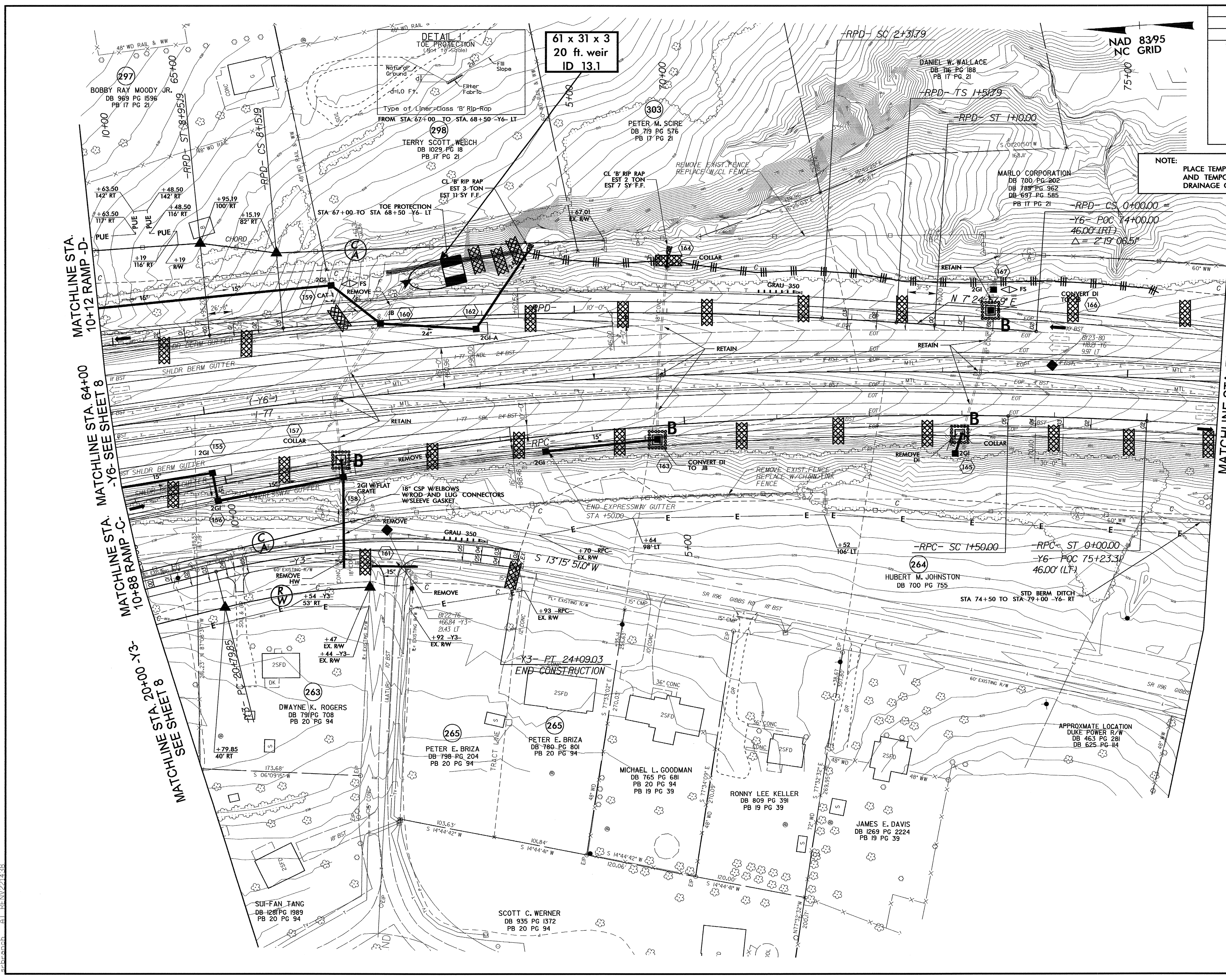


PROJECT REFERENCE NO. R-3833B	SHEET NO. EC-15/CONST.13
RW SHEET NO.	HYDRAULICS ENGINEER
ROADWAY DESIGN ENGINEER	

NAD 83/95  
NC GRID

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 13



MATCHLINE STA. 10+12 RAMP -D-

MATCHLINE STA. 64+00 -Y6- SEE SHEET 8

MATCHLINE STA. 10+88 RAMP -C-

MATCHLINE STA. 20+00 -Y3- SEE SHEET 8

MATCHLINE STA. 76+00 -Y6- SEE SHEET 14

61 x 31 x 3  
20 ft weir  
ID 13.1

DETAIL 1  
TOE PROTECTION  
(See 2-2 detail)  
Type of Liner-Class 'B' Rip-Rap  
FROM STA. 67+00 TO STA. 68+50 -Y6- LT

-Y6- POC 74+00.00  
46.00' (RT)  
 $\Delta = 2' 19" 08.5"$

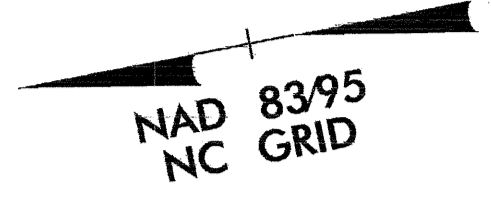
-RPC- ST 0+00.00 =  
-Y6- POC 75+23.31  
46.00' (LT)

END CONSTRUCTION



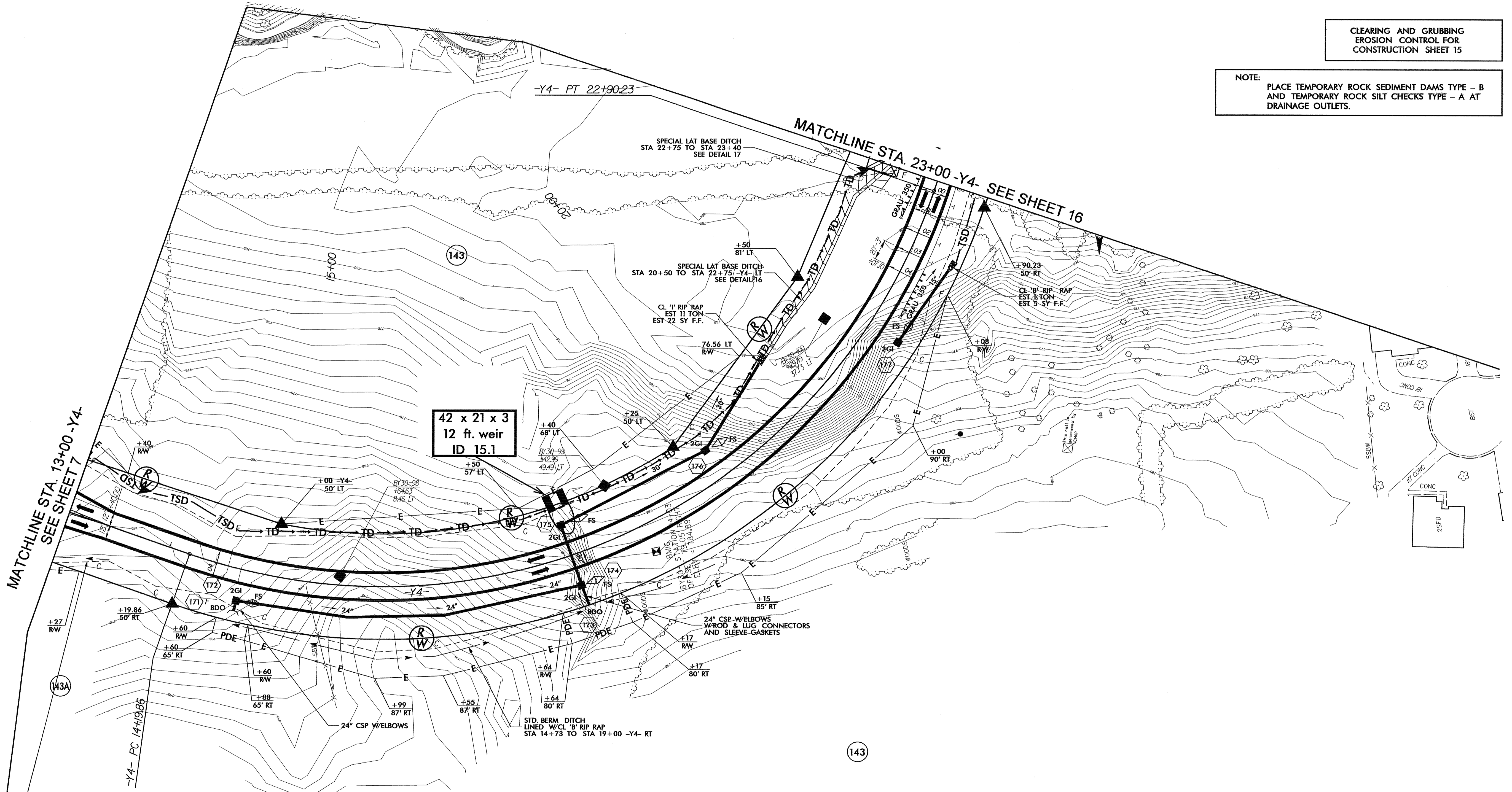


PROJECT REFERENCE NO. R-3833B	SHEET NO. EC-17/CONST.15
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER



CLEARING AND GRUBBING  
EROSION CONTROL FOR  
CONSTRUCTION SHEET 15

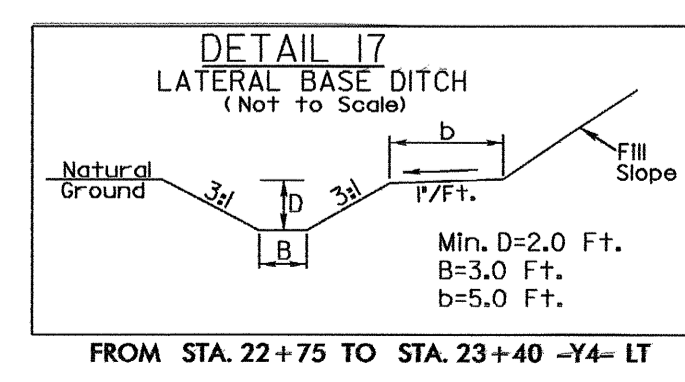
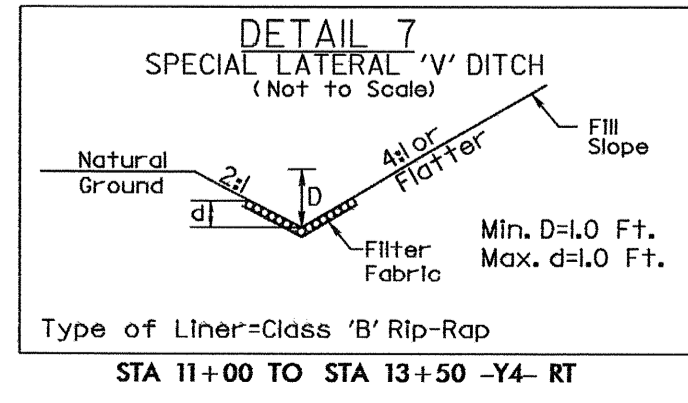
NOTE:  
PLACE TEMPORARY ROCK SEDIMENT DAMS TYPE - B  
AND TEMPORARY ROCK SILT CHECKS TYPE - A AT  
DRAINAGE OUTLETS.



MATCHLINE STA. 13+00 -Y4-  
SEE SHEET 7

MATCHLINE STA. 23+00 -Y4- SEE SHEET 16

SPECIAL LAT 'V' DITCH  
LINED W/CL 'B' RIP RAP  
STA 11+00 TO STA 13+50 -Y4- RT  
SEE DETAIL 7

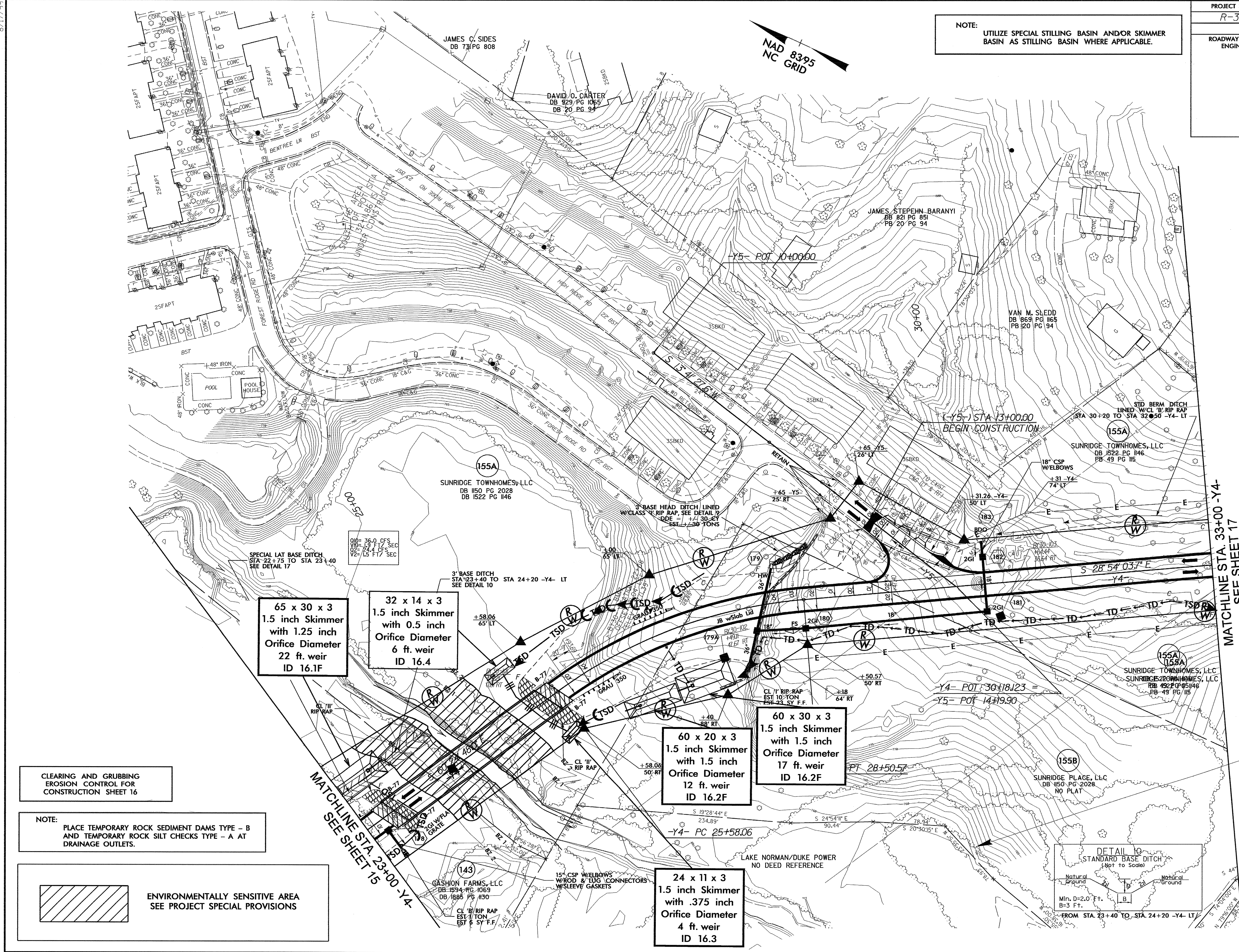
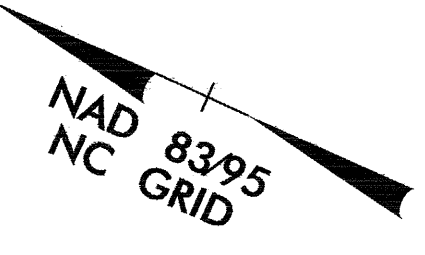




8/17/99

PROJECT REFERENCE NO. R-3833B		SHEET NO. EC-18/CONST.16	
RW SHEET NO. ROADWAY DESIGN ENGINEER		HYDRAULICS ENGINEER	

NOTE:  
UTILIZE SPECIAL STILLING BASIN AND/OR SKIMMER  
BASIN AS STILLING BASIN WHERE APPLICABLE.



65 x 30 x 3  
1.5 inch Skimmer  
with 1.25 inch  
Orifice Diameter  
22 ft. weir  
ID 16.1F

32 x 14 x 3  
1.5 inch Skimmer  
with 0.5 inch  
Orifice Diameter  
6 ft. weir  
ID 16.4

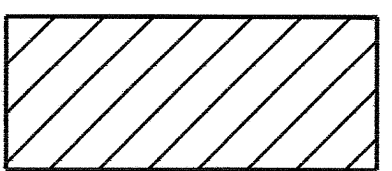
60 x 20 x 3  
1.5 inch Skimmer  
with 1.5 inch  
Orifice Diameter  
17 ft. weir  
ID 16.2F

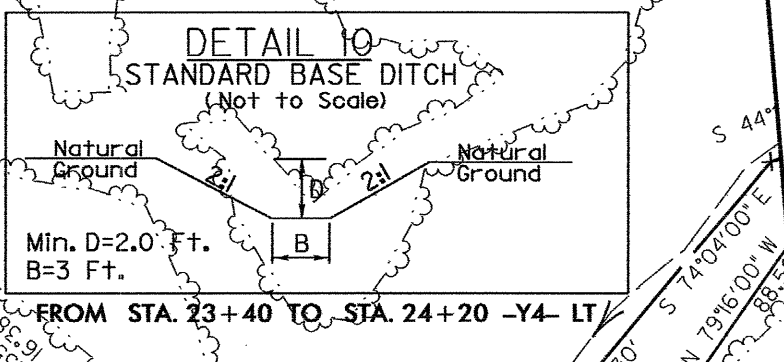
60 x 30 x 3  
1.5 inch Skimmer  
with 1.5 inch  
Orifice Diameter  
17 ft. weir  
ID 16.2F

24 x 11 x 3  
1.5 inch Skimmer  
with .375 inch  
Orifice Diameter  
4 ft. weir  
ID 16.3

CLEARING AND GRUBBING  
EROSION CONTROL FOR  
CONSTRUCTION SHEET 16

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

 ENVIRONMENTALLY SENSITIVE AREA  
SEE PROJECT SPECIAL PROVISIONS

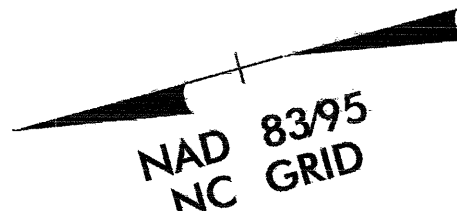


MATCHLINE STA. 33+00 -Y4-  
SEE SHEET 17

FERC BOUNDARY

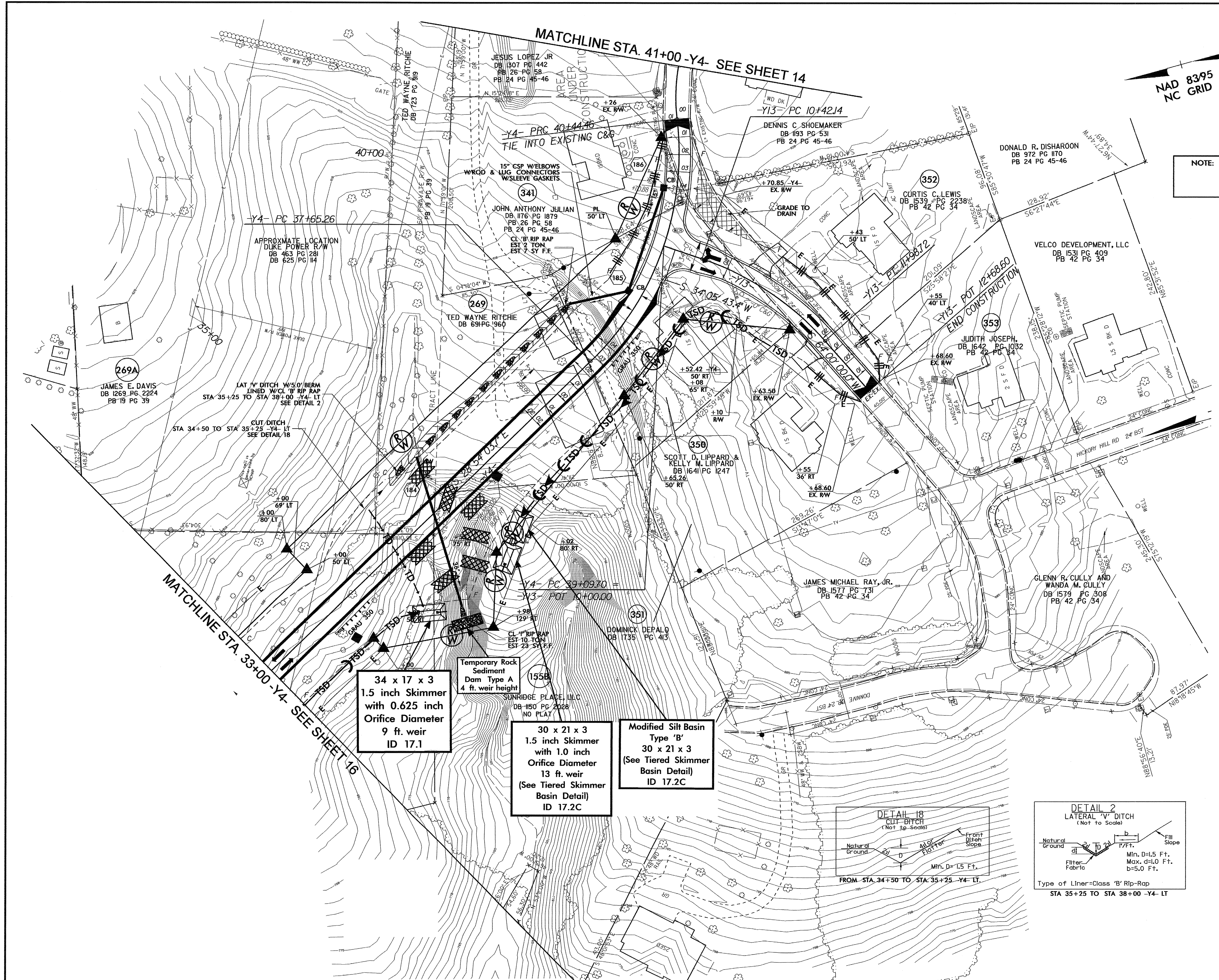


PROJECT REFERENCE NO.	SHEET NO.
R-3833B	EC-19/CONST.17
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER



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

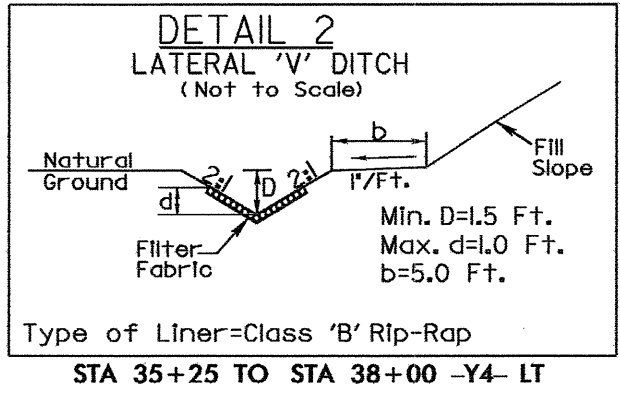
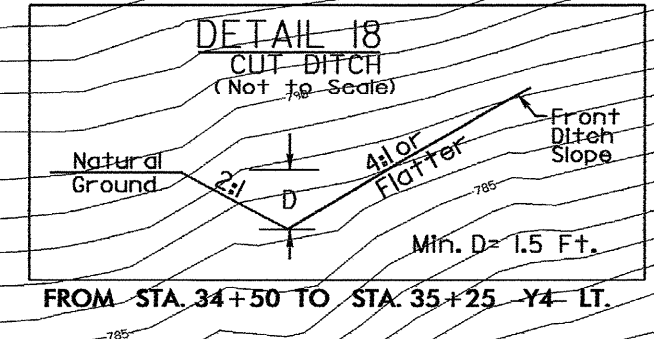
CLEARING AND GRUBBING EROSION CONTROL FOR CONSTRUCTION SHEET 17



34 x 17 x 3  
1.5 inch Skimmer  
with 0.625 inch  
Orifice Diameter  
9 ft. weir  
ID 17.1

30 x 21 x 3  
1.5 inch Skimmer  
with 1.0 inch  
Orifice Diameter  
13 ft. weir  
(See Tiered Skimmer  
Basin Detail)  
ID 17.2C

Modified Silt Basin  
Type 'B'  
30 x 21 x 3  
(See Tiered Skimmer  
Basin Detail)  
ID 17.2C

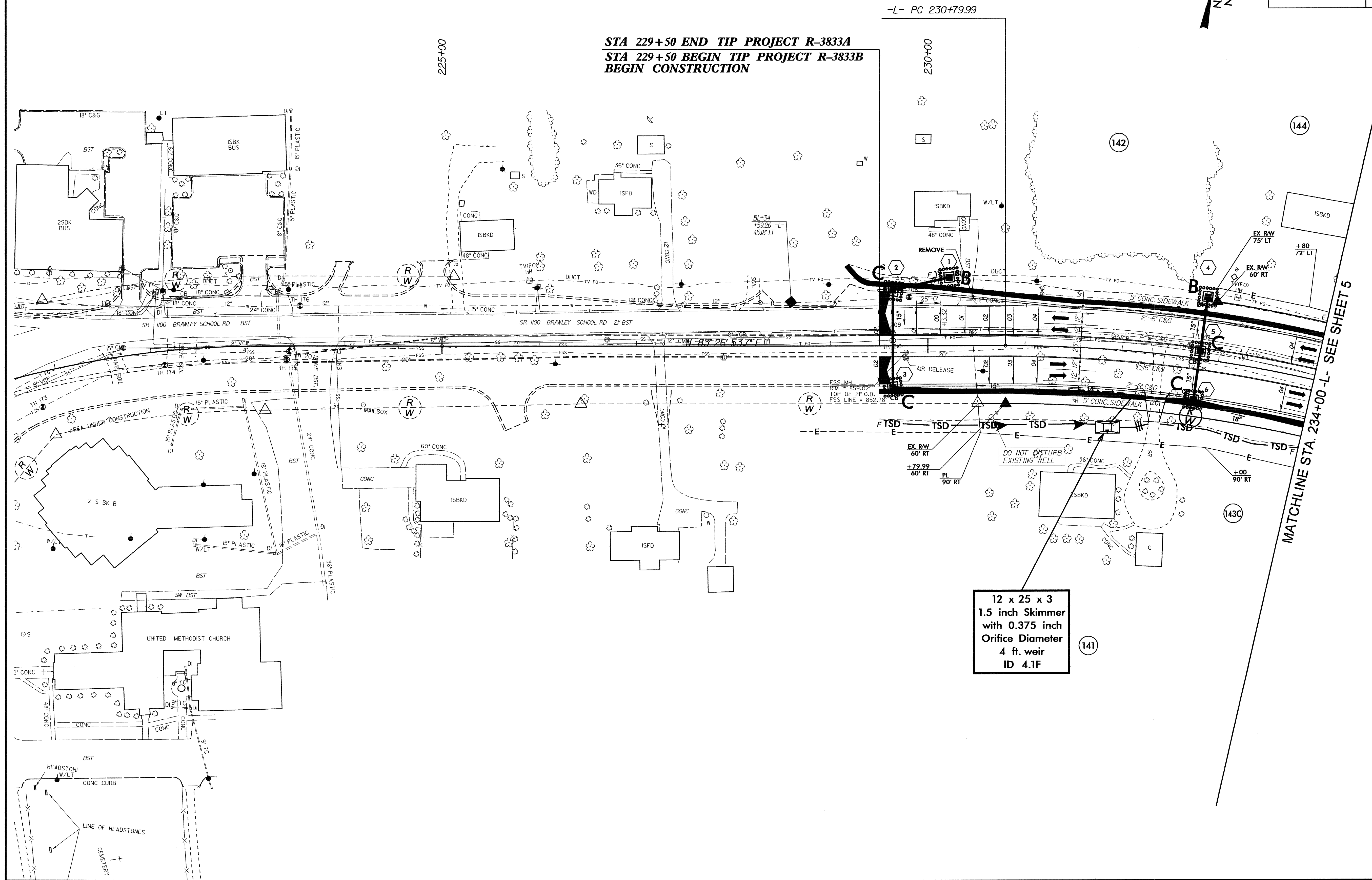




PROJECT REFERENCE NO. R-3833B	SHEET NO. EC-20/CONST.04
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER



STA 229+50 END TIP PROJECT R-3833A  
 STA 229+50 BEGIN TIP PROJECT R-3833B  
 BEGIN CONSTRUCTION

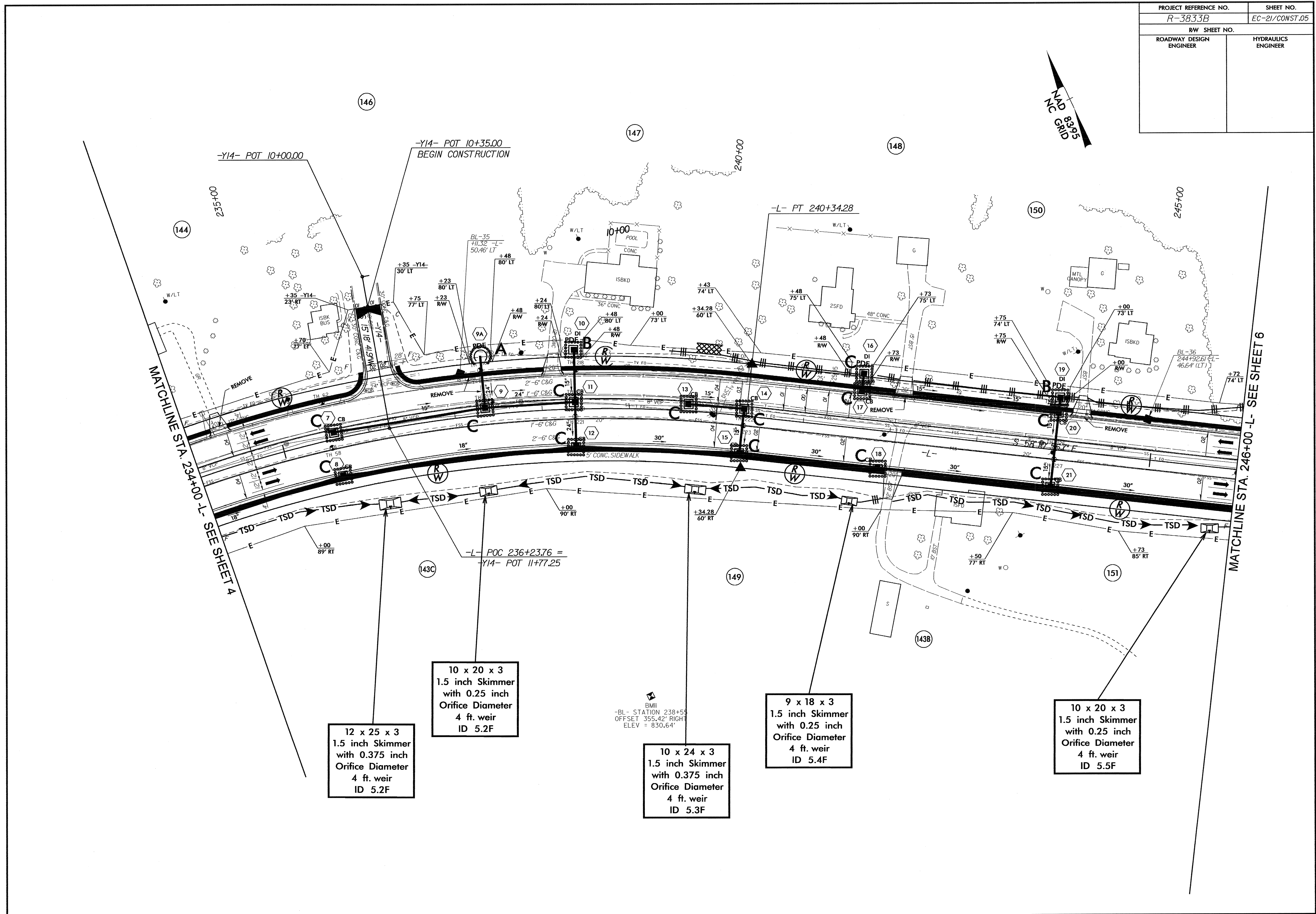
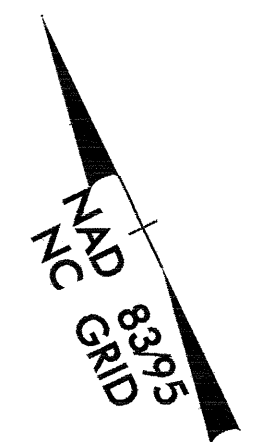


12 x 25 x 3  
 1.5 inch Skimmer  
 with 0.375 inch  
 Orifice Diameter  
 4 ft. weir  
 ID 4.1F

MATCHLINE STA. 234+00 -L- SEE SHEET 5



PROJECT REFERENCE NO. R-3833B	SHEET NO. EC-21/CONST.05
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER





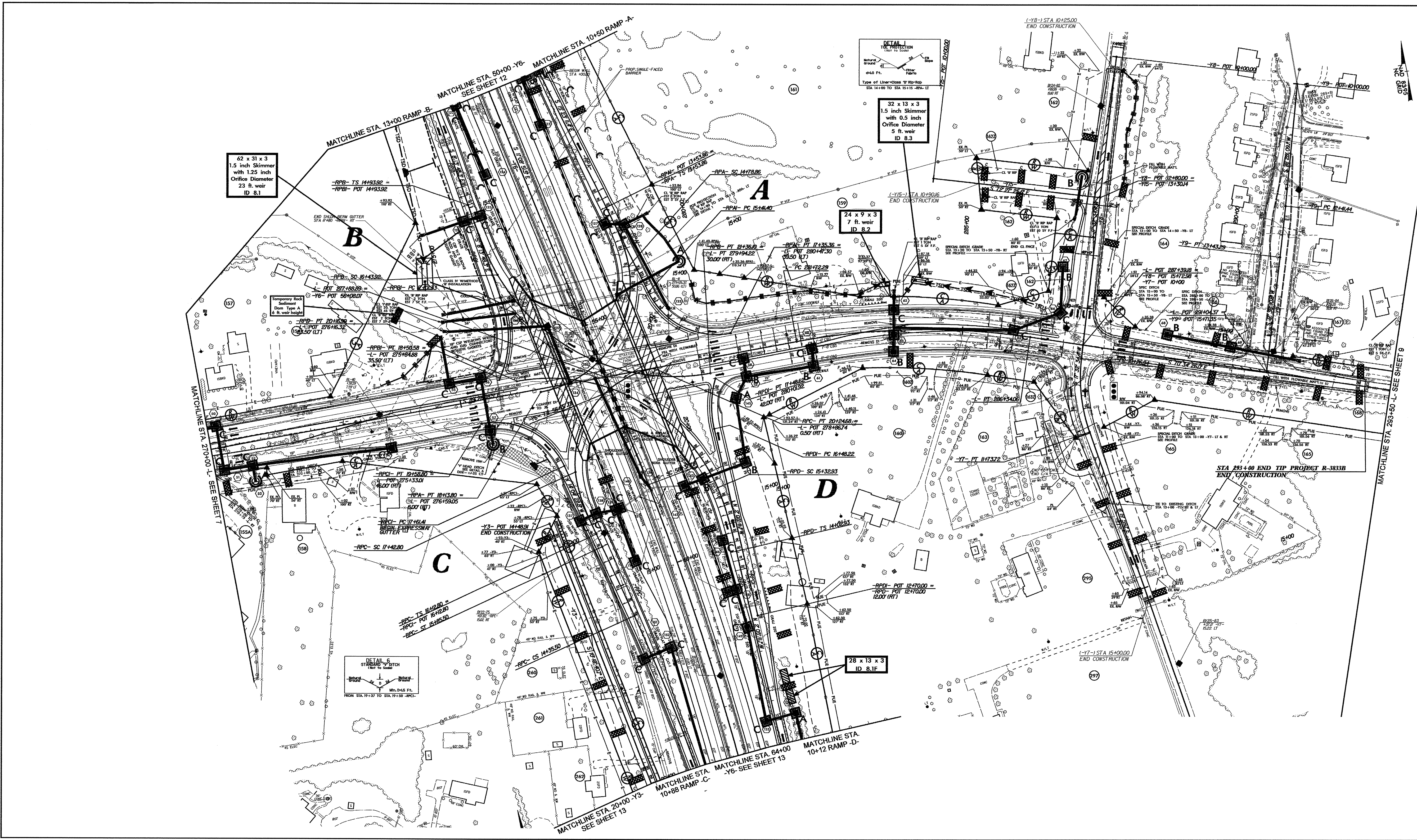








PROJECT REFERENCE NO.	SHEET NO.
R-3833B	EC-24/CONST.8
REV. SHEET NO.	PRODIGAL'S ENGINEER
ROADWAY DESIGN ENGINEER	



42 x 31 x 3  
1.5 inch Skimmer  
with 1.25 inch  
Orifice Diameter  
23 ft. weir  
ID 8.1

32 x 13 x 3  
1.5 inch Skimmer  
with 0.5 inch  
Orifice Diameter  
5 ft. weir  
ID 8.3

24 x 9 x 3  
7 ft. weir  
ID 8.2

28 x 13 x 3  
ID 8.1F

DETAIL 5  
SPECIAL DITCH  
1:1  
FROM STA. 19+17 TO STA. 19+50 -RPI-

MATCHLINE STA. 20+00 - SEE SHEET 7

MATCHLINE STA. 293+00 - SEE SHEET 8

MATCHLINE STA. 13+00 RAMP-B  
SEE SHEET 12

MATCHLINE STA. 10+50 RAMP-A

MATCHLINE STA. 20+00 Y3-  
10+88 RAMP-C  
SEE SHEET 13

MATCHLINE STA. 64+00  
Y6-10+12 RAMP-D

MATCHLINE STA. 10+12 RAMP-D

STA 293+00 END TIP PROJECT R-3833B  
END CONSTRUCTION

1-18-1 STA 10+25.00  
END CONSTRUCTION

1-15-1 STA 10+50  
END CONSTRUCTION

1-17-1 STA 15+00.00  
END CONSTRUCTION

1-3-1 POT 14+85.91  
END CONSTRUCTION

1-16-1 POT 18+28.07  
END CONSTRUCTION

1-12-1 POT 16+12.80  
END CONSTRUCTION

1-14-1 POT 14+26.33  
END CONSTRUCTION

1-11-1 POT 12+70.00  
END CONSTRUCTION

1-19-1 POT 13+43.29  
END CONSTRUCTION

1-18-2 POT 12+48.00  
END CONSTRUCTION

1-16-2 POT 13+30.14  
END CONSTRUCTION

1-15-2 POT 14+00.00  
END CONSTRUCTION

1-14-2 POT 13+30.14  
END CONSTRUCTION

1-13-2 POT 12+70.00  
END CONSTRUCTION

1-12-2 POT 12+70.00  
END CONSTRUCTION

1-11-2 POT 12+70.00  
END CONSTRUCTION

1-10-2 POT 12+70.00  
END CONSTRUCTION

1-9-2 POT 12+70.00  
END CONSTRUCTION

1-8-2 POT 12+70.00  
END CONSTRUCTION

1-7-2 POT 12+70.00  
END CONSTRUCTION

1-6-2 POT 12+70.00  
END CONSTRUCTION

1-5-2 POT 12+70.00  
END CONSTRUCTION

1-4-2 POT 12+70.00  
END CONSTRUCTION

1-3-2 POT 12+70.00  
END CONSTRUCTION

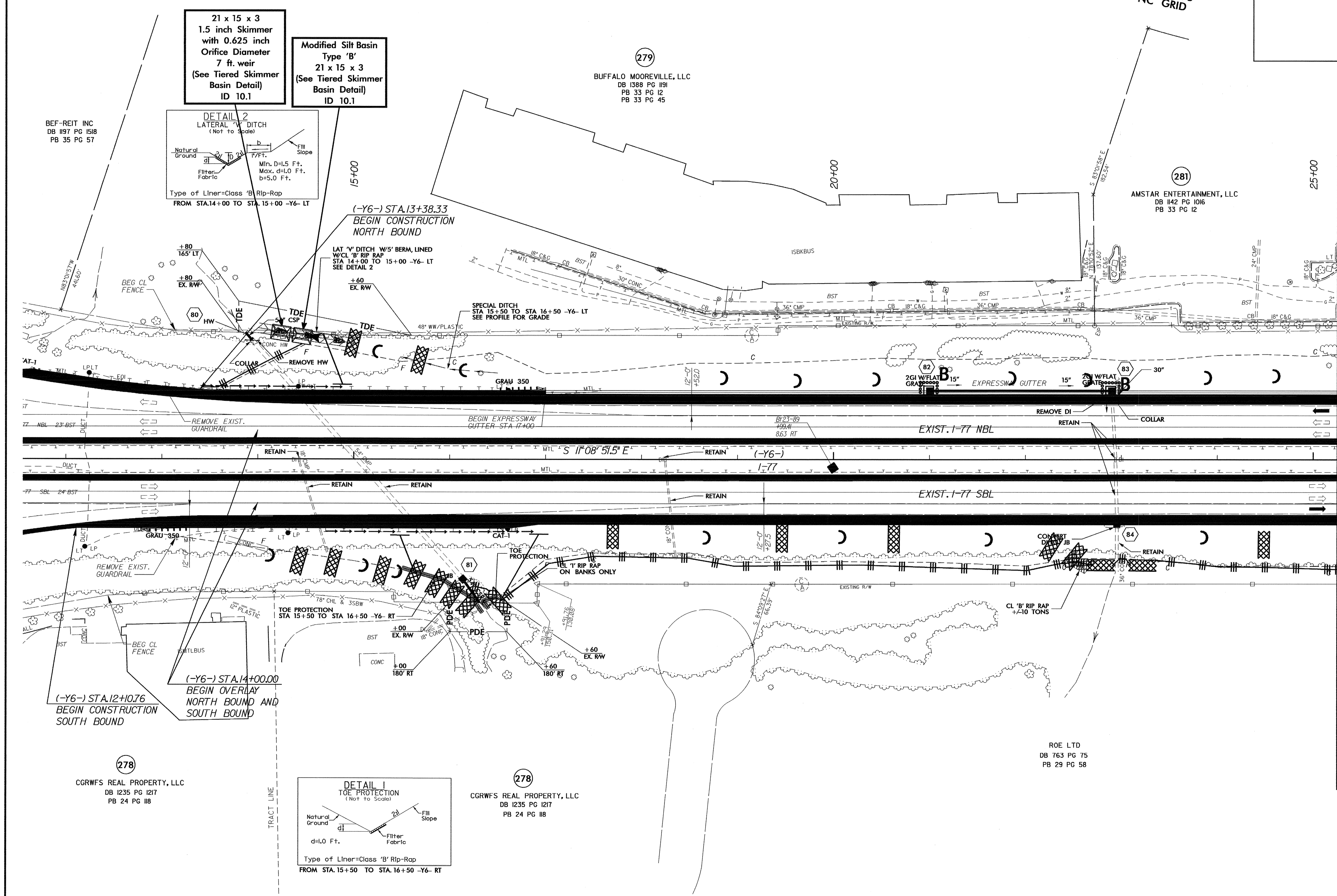
1-2-2 POT 12+70.00  
END CONSTRUCTION

1-1-2 POT 12+70.00  
END CONSTRUCTION



PROJECT REFERENCE NO.		SHEET NO.	
R-3833B		EC-25/CONST.10	
RW SHEET NO.			
ROADWAY DESIGN ENGINEER		HYDRAULICS ENGINEER	

NAD 8395  
NC GRID



21 x 15 x 3  
1.5 inch Skimmer  
with 0.625 inch  
Orifice Diameter  
7 ft. weir  
(See Tiered Skimmer  
Basin Detail)  
ID 10.1

Modified Silt Basin  
Type 'B'  
21 x 15 x 3  
(See Tiered Skimmer  
Basin Detail)  
ID 10.1

DETAIL 2  
LATERAL DITCH  
(Not to Scale)

Natural Ground  
Fill Slope  
Filter Fabric  
Min. D=1.5 Ft.  
Max. d=1.0 Ft.  
b=5.0 Ft.

Type of Liner=Class 'B' Rip-Rap  
FROM STA.14+00 TO STA.15+00 -Y6- LT

(-Y6-) STA.13+38.33  
BEGIN CONSTRUCTION  
NORTH BOUND

LAT 'V' DITCH W/5' BERM, LINED  
W/CL 'B' RIP RAP  
STA 14+00 TO 15+00 -Y6- LT  
SEE DETAIL 2

SPECIAL DITCH  
STA 15+50 TO STA 16+50 -Y6- LT  
SEE PROFILE FOR GRADE

BEF-REIT INC  
DB 1197 PG 1518  
PB 35 PG 57

(279)  
BUFFALO MOOREVILLE, LLC  
DB 1388 PG 1191  
PB 33 PG 12  
PB 33 PG 45

(281)  
AMSTAR ENTERTAINMENT, LLC  
DB 1142 PG 1016  
PB 33 PG 12

(278)  
CGRWFS REAL PROPERTY, LLC  
DB 1235 PG 1217  
PB 24 PG 118

DETAIL 1  
TOE PROTECTION  
(Not to Scale)

Natural Ground  
Fill Slope  
Filter Fabric  
d=1.0 Ft.

Type of Liner=Class 'B' Rip-Rap  
FROM STA.15+50 TO STA.16+50 -Y6- RT

(278)  
CGRWFS REAL PROPERTY, LLC  
DB 1235 PG 1217  
PB 24 PG 118

ROE LTD  
DB 763 PG 75  
PB 29 PG 58

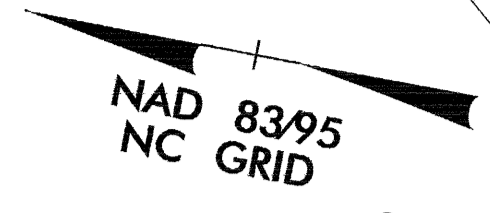
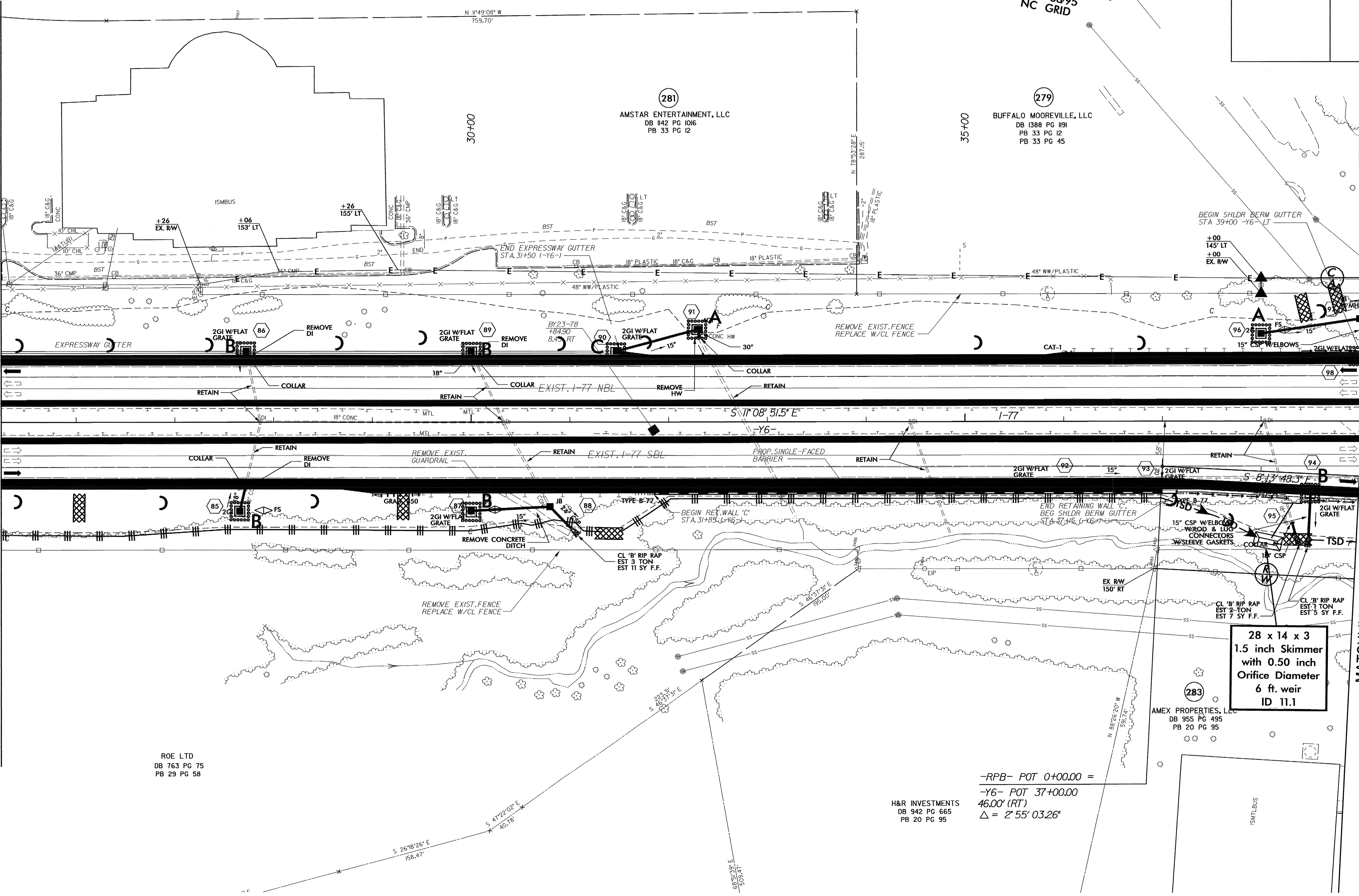
MATCHLINE STA. 25+25 -Y6- SEE SHEET 11



8/17/99

PROJECT REFERENCE NO.		SHEET NO.	
R-3833B		EC-26/CONST.II	
ROADWAY DESIGN ENGINEER		HYDRAULICS ENGINEER	
RW SHEET NO.			

MATCHLINE STA. 25+25 -Y6- SEE SHEET 10



(281)  
 AMSTAR ENTERTAINMENT, LLC  
 DB 1142 PG 1016  
 PB 33 PG 12

(279)  
 BUFFALO MOOREVILLE, LLC  
 DB 1388 PG 1191  
 PB 33 PG 12  
 PB 33 PG 45

ROE LTD  
 DB 763 PG 75  
 PB 29 PG 58

H&R INVESTMENTS  
 DB 942 PG 665  
 PB 20 PG 95

-RPB- POT 0+00.00 =  
 -Y6- POT 37+00.00  
 46.00' (RT)  
 $\Delta = 2^{\circ}55'03.26''$

28 x 14 x 3  
 1.5 inch Skimmer  
 with 0.50 inch  
 Orifice Diameter  
 6 ft. weir  
 ID 11.1

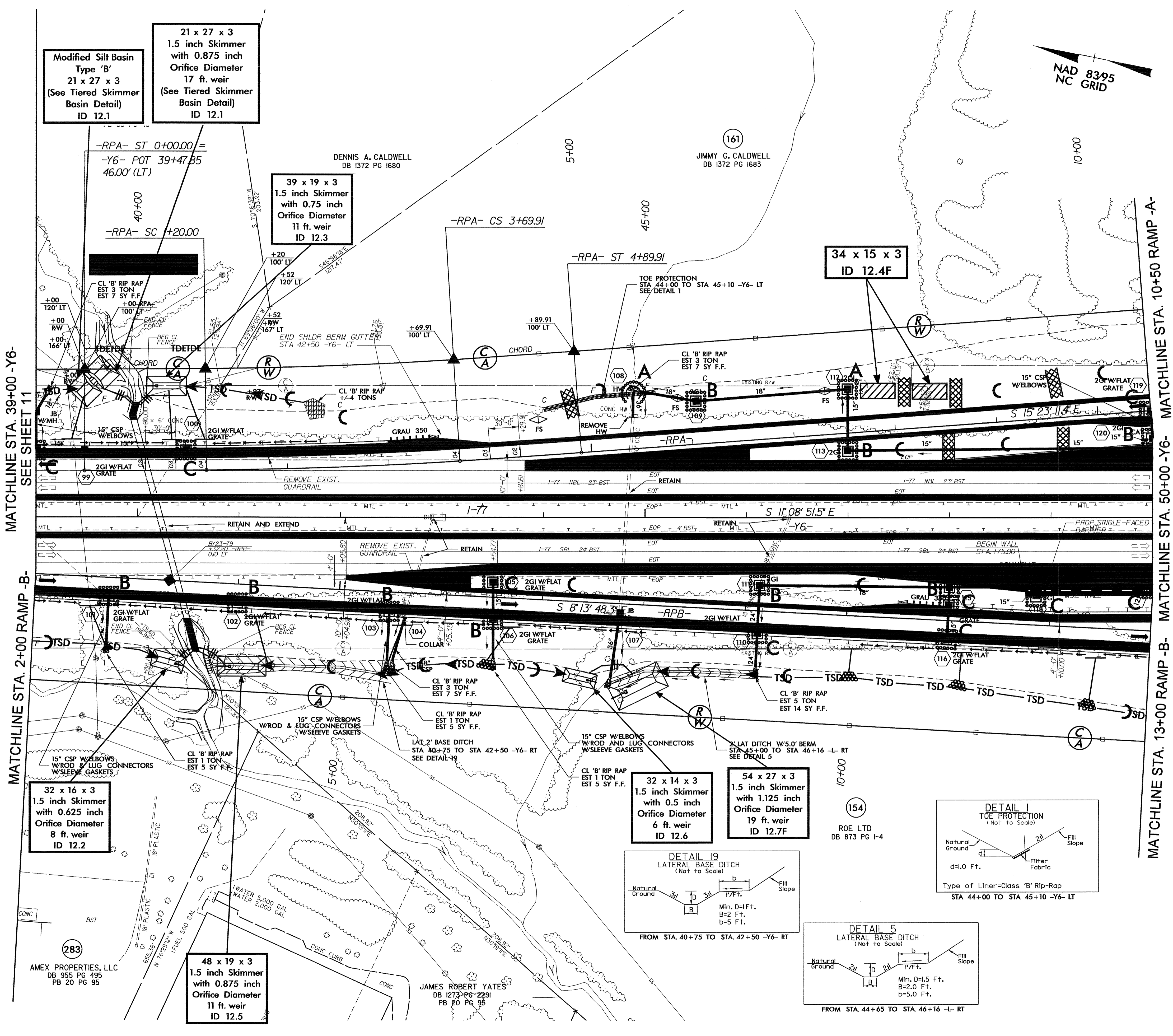
(283)  
 AMEX PROPERTIES, LLC  
 DB 955 PG 495  
 PB 20 PG 95

MATCHLINE STA. 2+00 RAMP -B- SEE SHEET 12

MATCHLINE STA. 39+00 -Y6- SEE SHEET 11



PROJECT REFERENCE NO.	SHEET NO.
R-3833B	EC-27/CONST.2
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER



MATCHLINE STA. 39+00 -Y6  
SEE SHEET 11

MATCHLINE STA. 2+00 RAMP -B

MATCHLINE STA. 10+50 RAMP -A  
MATCHLINE STA. 50+00 -Y6  
SEE SHEET 8

21 x 27 x 3  
1.5 inch Skimmer  
with 0.875 inch  
Orifice Diameter  
17 ft. weir  
(See Tiered Skimmer  
Basin Detail)  
ID 12.1

39 x 19 x 3  
1.5 inch Skimmer  
with 0.75 inch  
Orifice Diameter  
11 ft. weir  
ID 12.3

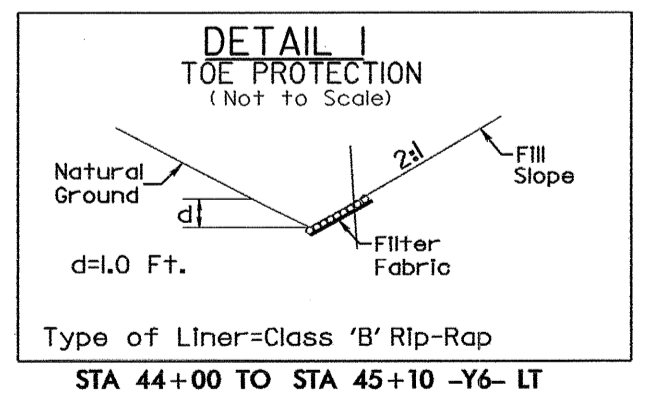
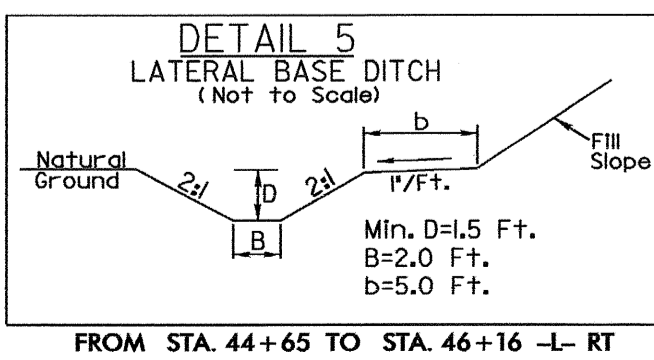
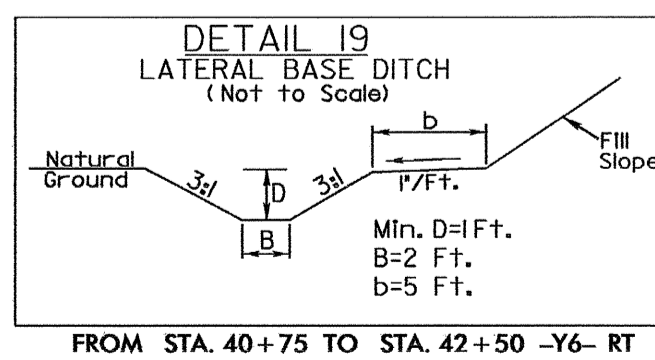
34 x 15 x 3  
ID 12.4F

32 x 16 x 3  
1.5 inch Skimmer  
with 0.625 inch  
Orifice Diameter  
8 ft. weir  
ID 12.2

32 x 14 x 3  
1.5 inch Skimmer  
with 0.5 inch  
Orifice Diameter  
6 ft. weir  
ID 12.6

54 x 27 x 3  
1.5 inch Skimmer  
with 1.125 inch  
Orifice Diameter  
19 ft. weir  
ID 12.7F

48 x 19 x 3  
1.5 inch Skimmer  
with 0.875 inch  
Orifice Diameter  
11 ft. weir  
ID 12.5



NAD 8395  
NC GRID

AMEX PROPERTIES, LLC  
DB 955 PG 495  
PB 20 PG 95

JAMES ROBERT YATES  
DB 1273-PG 2291  
PB 20 PG 95

154  
ROE LTD  
DB 873 PG 1-4

DENNIS A. CALDWELL  
DB 1372 PG 1680

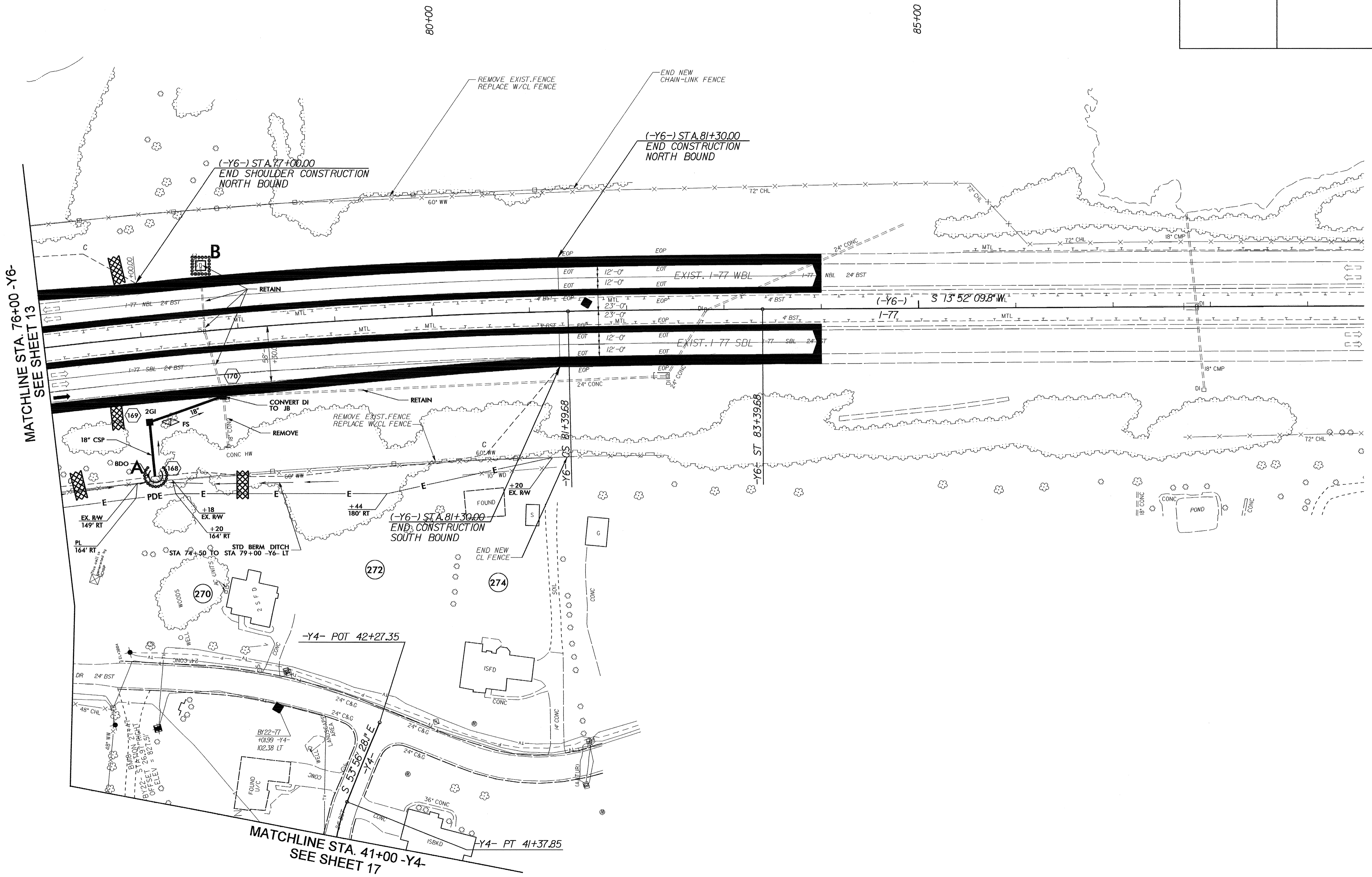
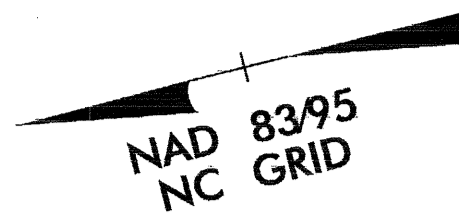
161  
JIMMY G. CALDWELL  
DB 1372 PG 1683







PROJECT REFERENCE NO.	SHEET NO.
R-3833B	EC-29/CONST.14
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

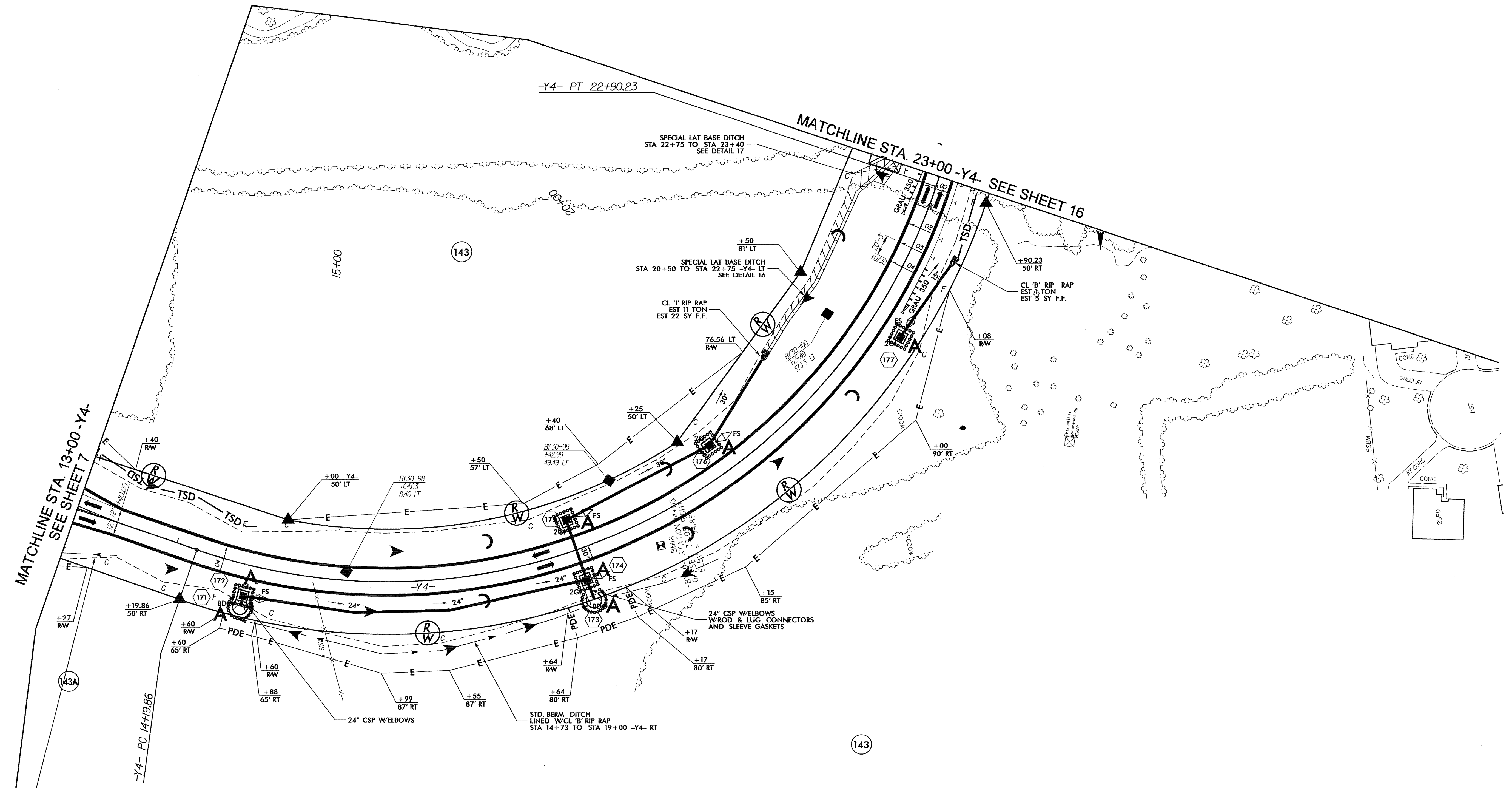
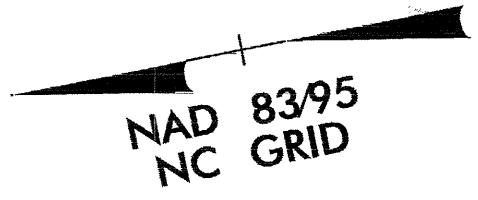


MATCHLINE STA. 76+00 -Y6-  
SEE SHEET 13

MATCHLINE STA. 41+00 -Y4-  
SEE SHEET 17



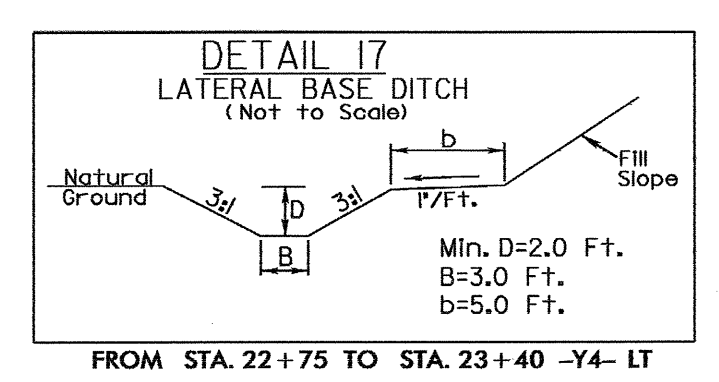
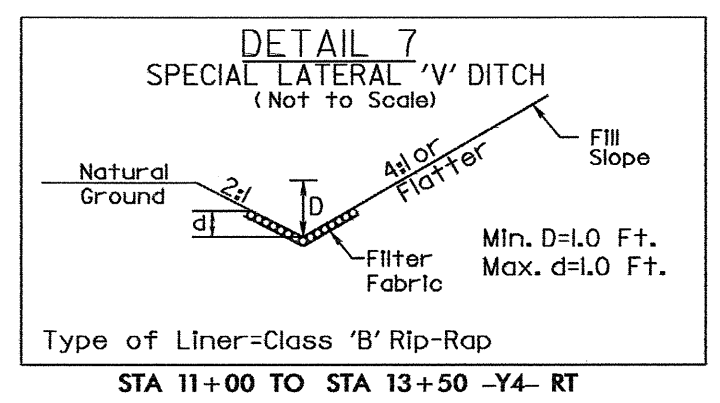
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R-3833B		EC-30/CONST.15	
RW SHEET NO.			
ROADWAY DESIGN ENGINEER		HYDRAULICS ENGINEER	



MATCHLINE STA. 13+00 -Y4-  
SEE SHEET 7

MATCHLINE STA. 23+00 -Y4-  
SEE SHEET 16

SPECIAL LAT 'V' DITCH  
LINED W/CL 'B' RIP RAP  
STA 11+00 TO STA 13+50 -Y4- RT  
SEE DETAIL 7



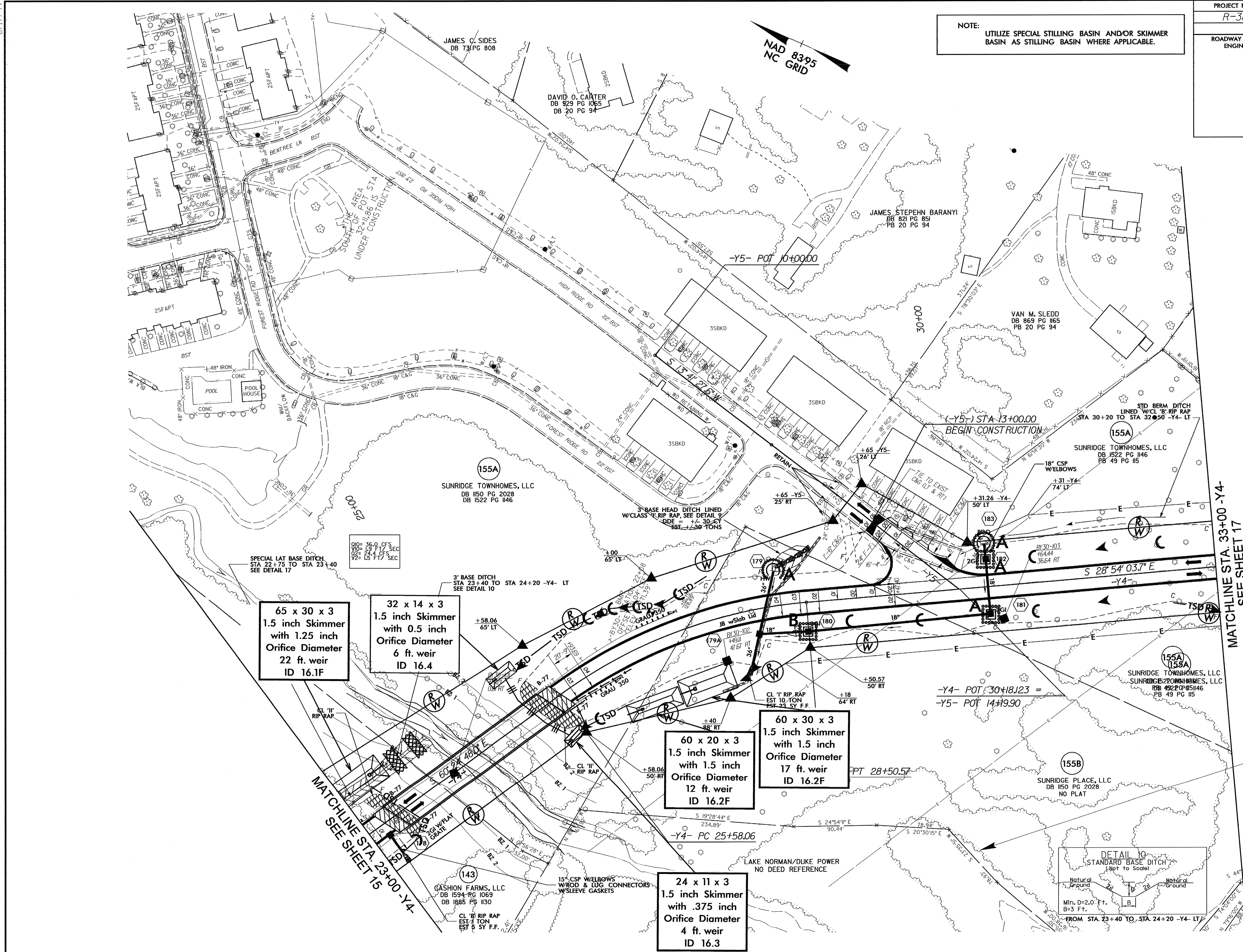


8/17/99

PROJECT REFERENCE NO. R-3833B		SHEET NO. EC-31/CONST.16	
RW SHEET NO.		HYDRAULICS ENGINEER	
ROADWAY DESIGN ENGINEER			

NOTE:  
UTILIZE SPECIAL STILLING BASIN AND/OR SKIMMER BASIN AS STILLING BASIN WHERE APPLICABLE.

NAD 8395  
NC GRID



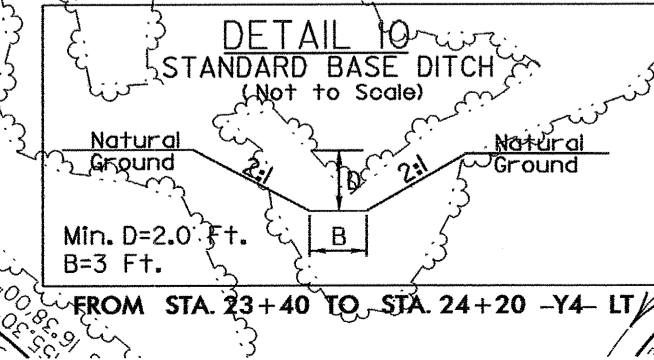
65 x 30 x 3  
1.5 inch Skimmer  
with 1.25 inch  
Orifice Diameter  
22 ft. weir  
ID 16.1F

32 x 14 x 3  
1.5 inch Skimmer  
with 0.5 inch  
Orifice Diameter  
6 ft. weir  
ID 16.4

60 x 20 x 3  
1.5 inch Skimmer  
with 1.5 inch  
Orifice Diameter  
12 ft. weir  
ID 16.2F

60 x 30 x 3  
1.5 inch Skimmer  
with 1.5 inch  
Orifice Diameter  
17 ft. weir  
ID 16.2F

24 x 11 x 3  
1.5 inch Skimmer  
with .375 inch  
Orifice Diameter  
4 ft. weir  
ID 16.3



MATCHLINE STA. 33+00 -Y4  
SEE SHEET 17

FERC BOUNDARY

MATCHLINE STA. 23+00 -Y4  
SEE SHEET 15



PROJECT REFERENCE NO.	SHEET NO.
R-3833B	EC-32/CONST.17
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

