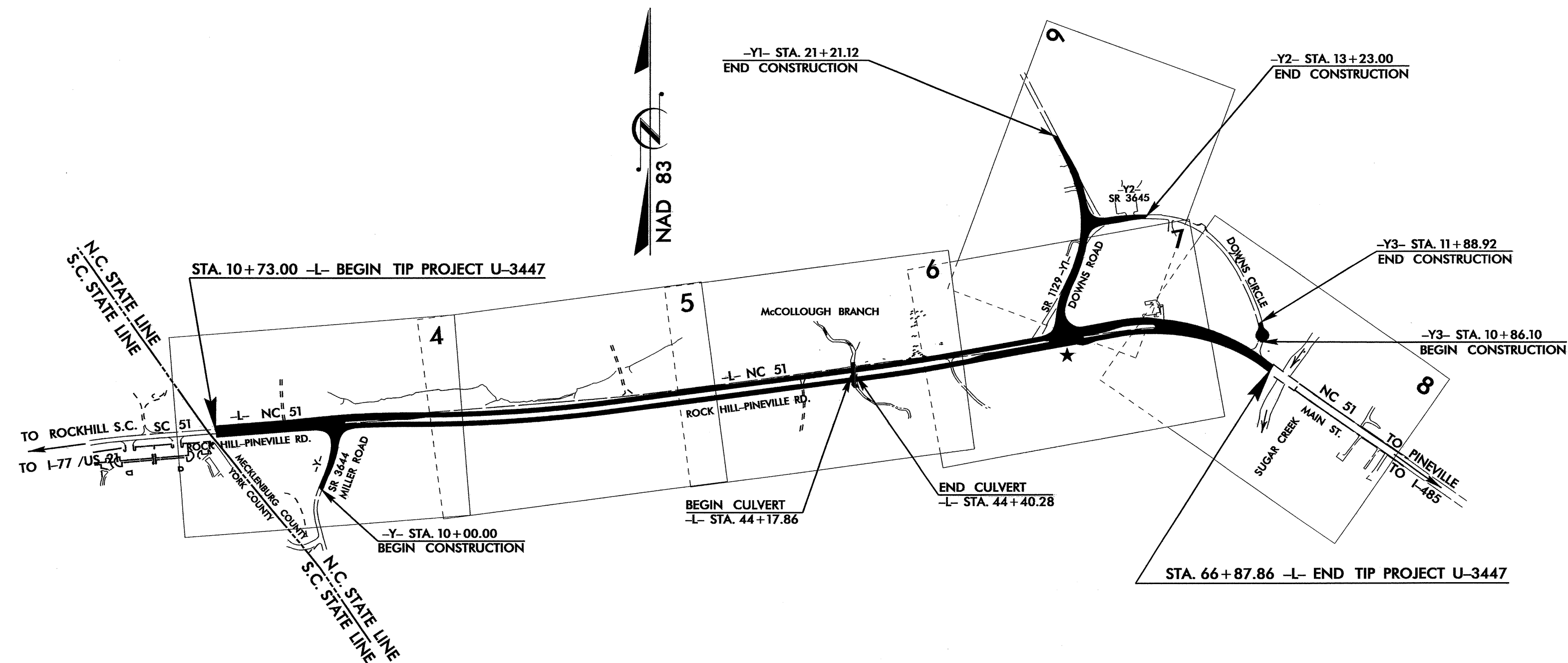


TIP PROJECT: U-3447

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

**LOCATION: NC 51, ROCK HILL - PINEVILLE RD. FROM THE
 SC STATE LINE TO SR 3645 (DOWNS CIRCLE)
 TYPE OF WORK: GRADING, DRAINAGE, PAVING, CULVERT,
 AND SIGNALS.**



STATE NO.	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	U-3447	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
1605.01	Temporary Silt Fence	III III III
1606.01	Special Sediment Control Fence	III III III
1622.01	Temporary Berms and Slope Drains	— T —
1630.01	Riser Basin	⊙
	Silt Basin Type B	▨
1633.01	Temporary Rock Silt Check Type-A	▨
	Temporary Rock Silt Check Type-B	▨
	Wattle	— W —
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	A
1632.02	Type B	B
1632.03	Type C	C
	Skimmer Basin	▭
	Tiered Skimmer Basin	▭
	Infiltration Basin	▭

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

GRAPHIC SCALE

0 ——— 0

PLANS

0 ——— 0

PROFILE (HORIZONTAL)

0 ——— 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

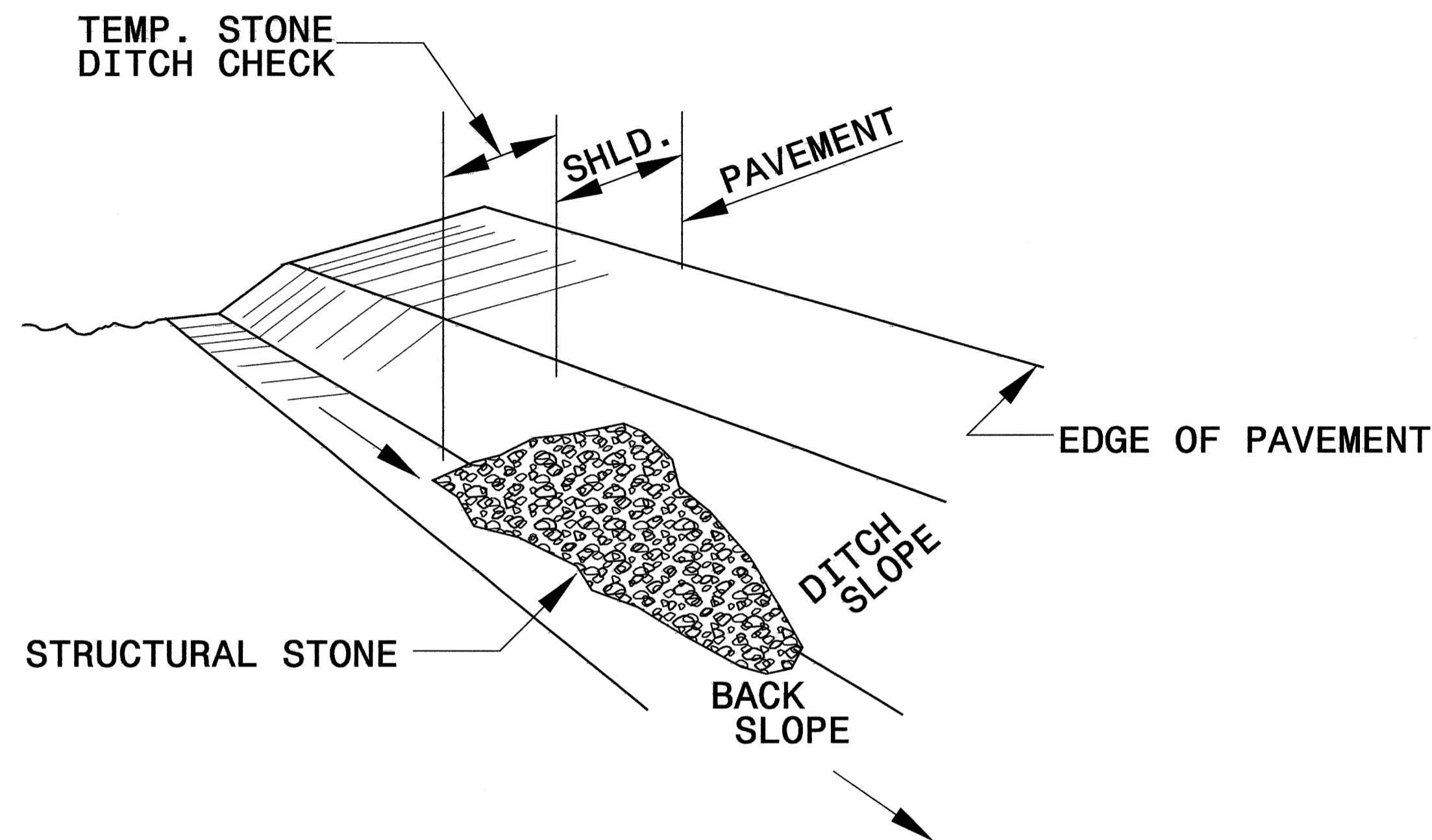
The following roadway english standards as appear in "Roadway Standard Drawings"- Roadway Design Unit - N. C. Department of Transportation - Raleigh, N. C., dated July 18, 2006 and the latest revision thereto are applicable to this project and by reference hereby are considered a part of these plans.

1605.01 Temporary Silt Fence	1630.04 Stilling Basin
1606.01 Special Sediment Control Fence	1630.05 Temporary Diversion
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	1635.02 Rock Pipe Inlet Sediment Trap Type B

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 13:20 11/11/08
 13:20 11/11/08
 13:20 11/11/08

PROJECT REFERENCE NO. U-3447	SHEET NO. EC-2
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

TEMPORARY ROCK SILT CHECK TYPE 'B' DETAIL

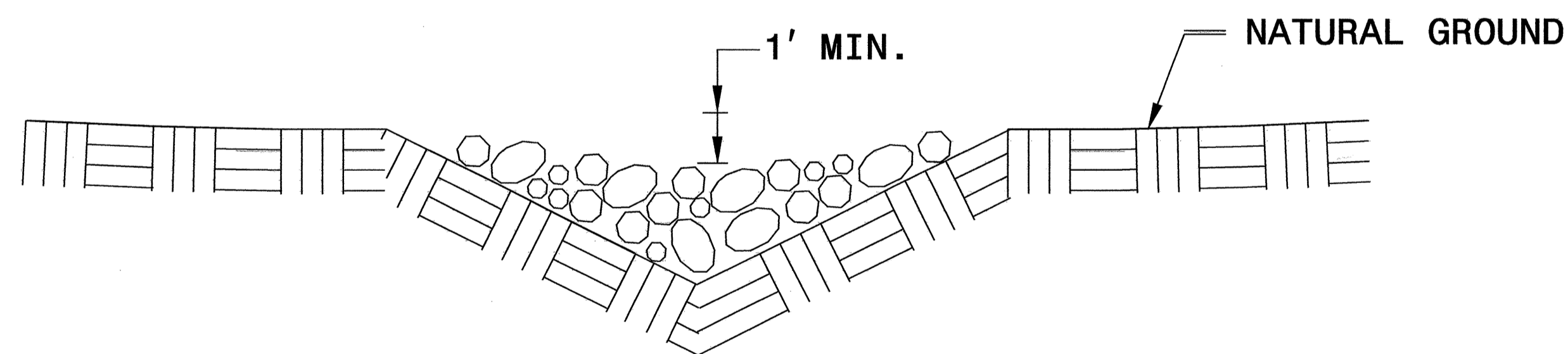


ISOMETRIC VIEW

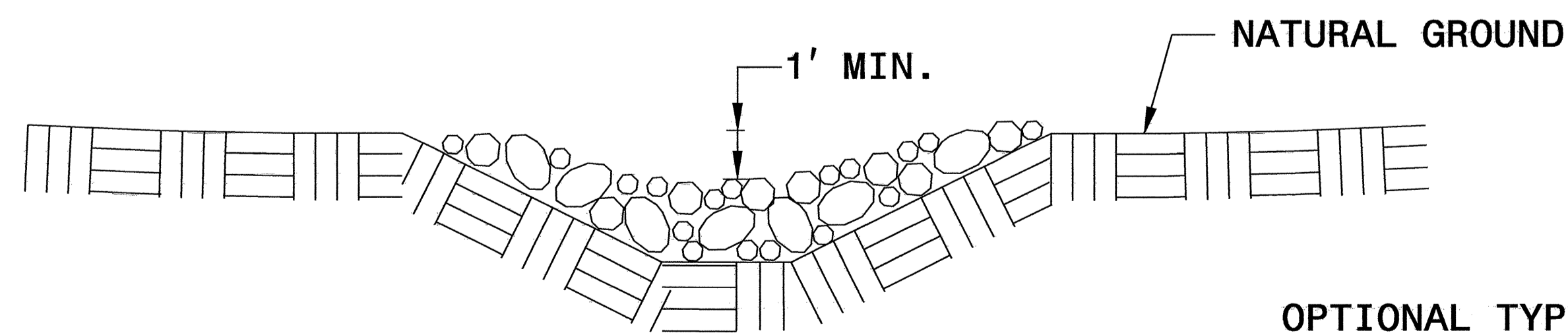
NOTES:

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

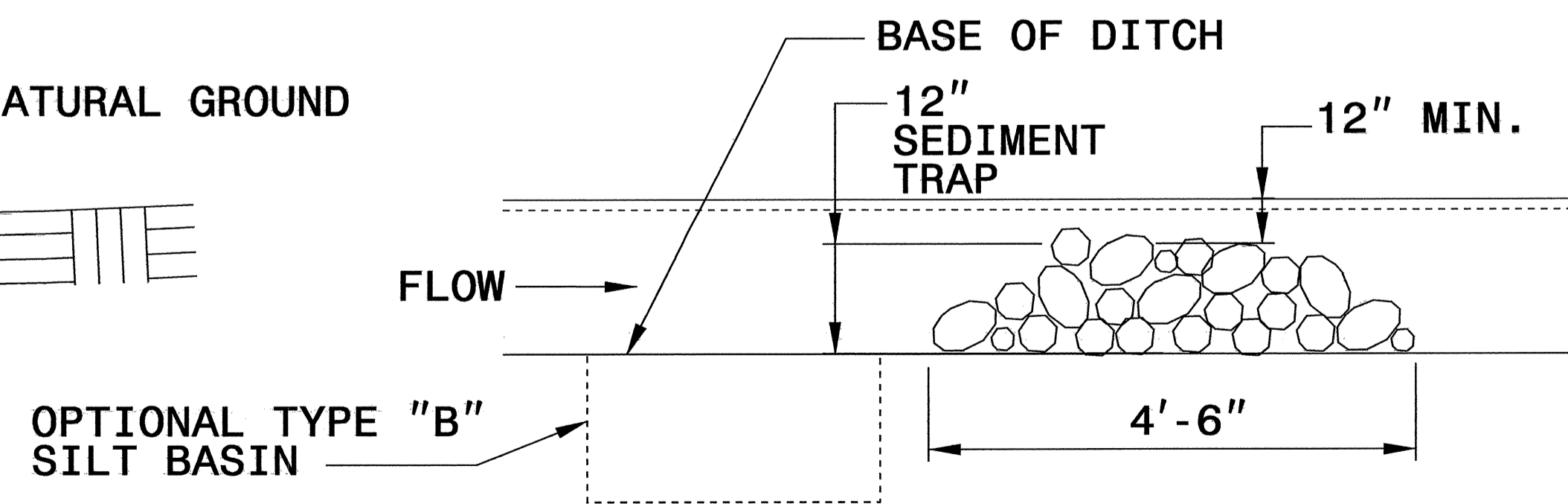
THE ENGINEER MAY DIRECT THE OPTION OF CLASS "A" STONE FOR SITES HAVING LESS THAN ONE (1) ACRE DRAINAGE AREA AND A DITCH GRADE LESS THAN 3%.



**CROSS SECTION
VEE DITCH**



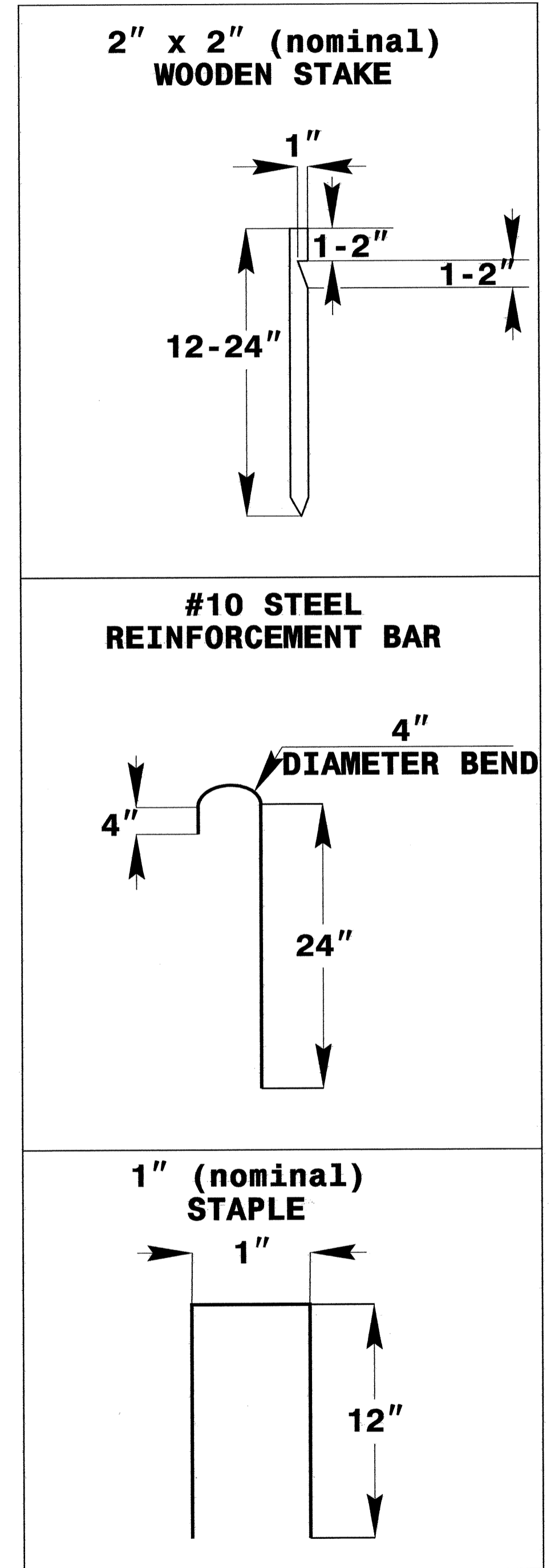
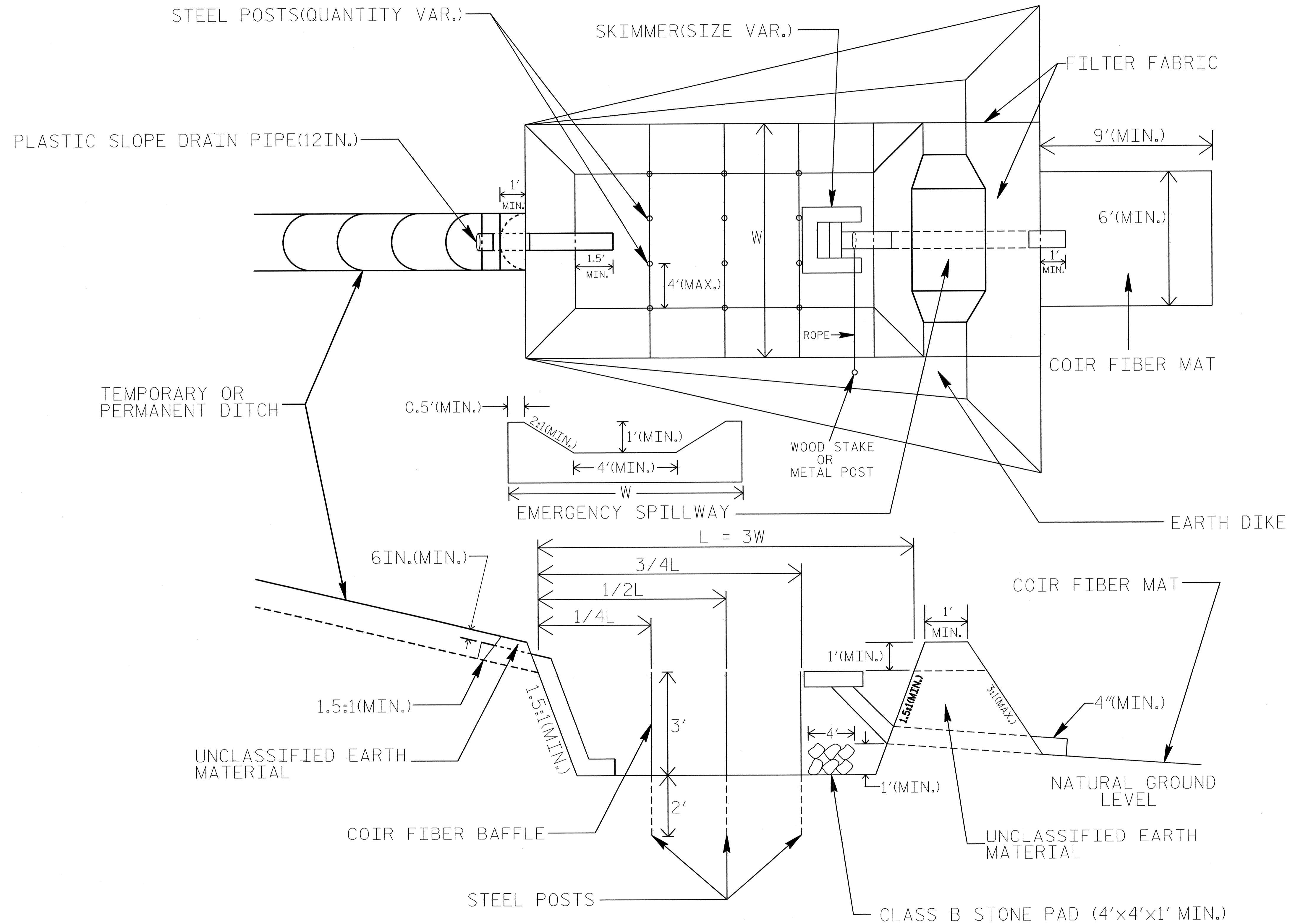
**CROSS SECTION
TRAPEZOIDAL DITCH**



ELEVATION VIEW

SKIMMER BASIN WITH BAFFLES DETAIL

PROJECT REFERENCE NO. U-3447	SHEET NO. EC-2A
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER



COIR FIBER MAT ANCHOR OPTIONS

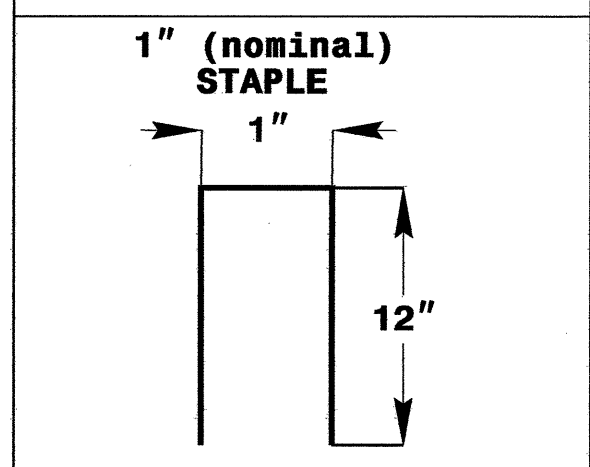
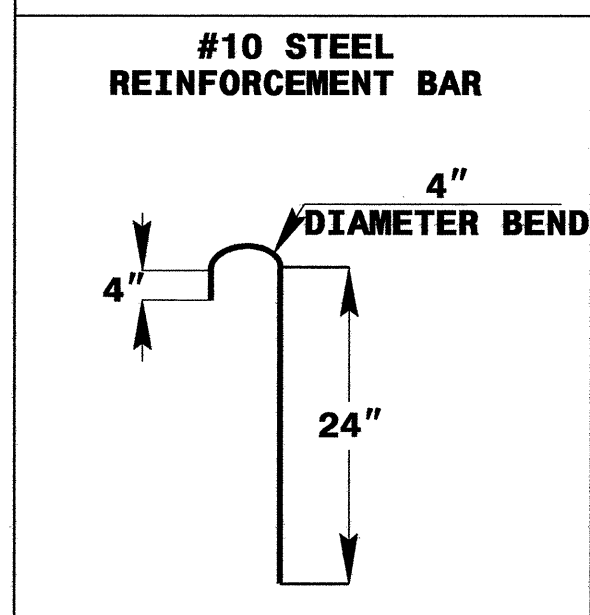
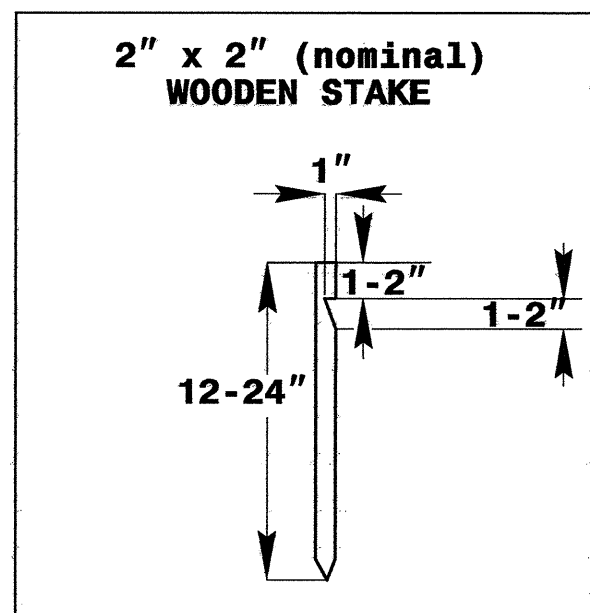
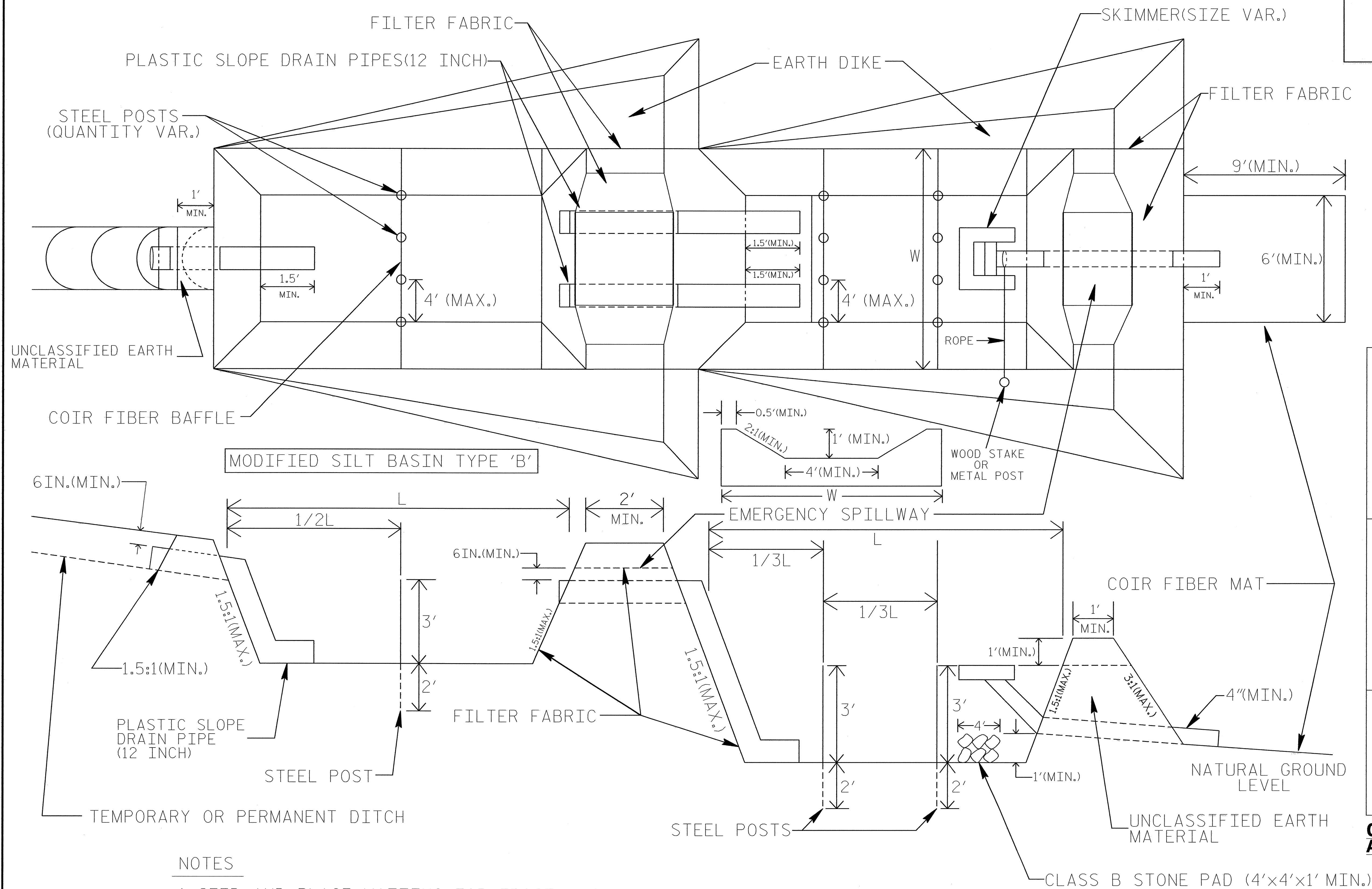
NOTES

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. U-3447	SHEET NO. EC-2B
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER



COIR FIBER MAT ANCHOR OPTIONS

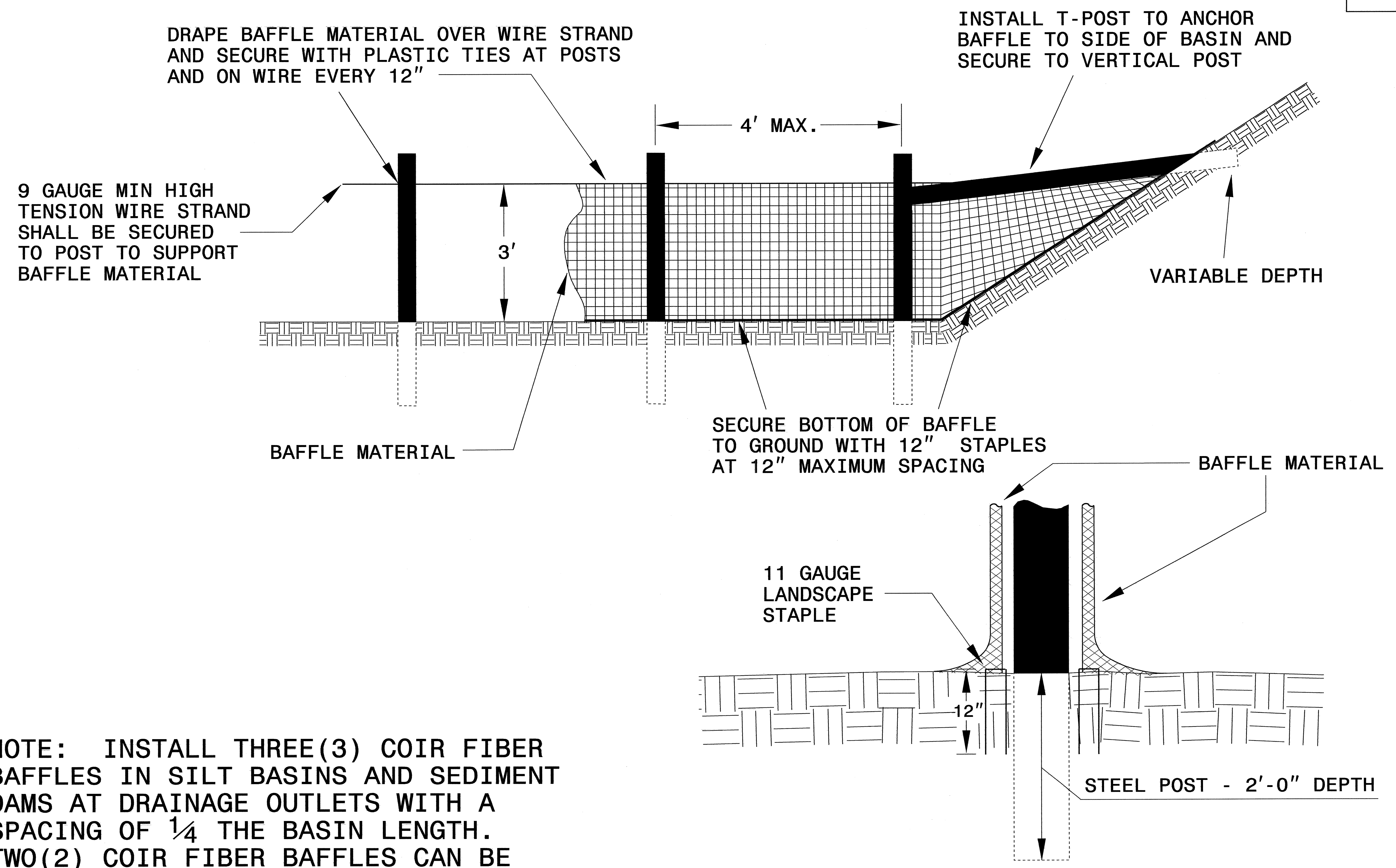
NOTES

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. U-3447	SHEET NO. EC-20
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

COIR FIBER BAFFLE DETAIL



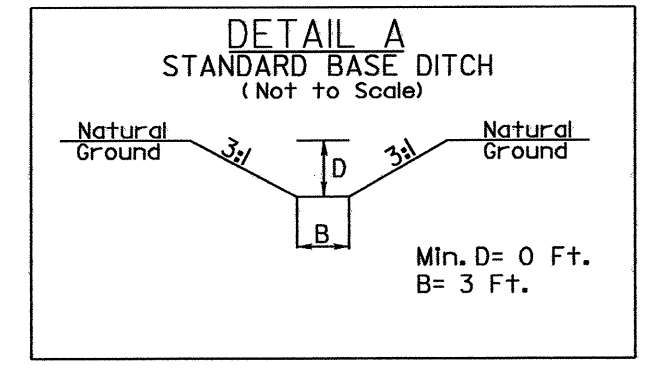
NOTE: INSTALL THREE(3) COIR FIBER BAFFLES IN SILT BASINS AND SEDIMENT DAMS AT DRAINAGE OUTLETS WITH A SPACING OF $\frac{1}{4}$ THE BASIN LENGTH. TWO(2) COIR FIBER BAFFLES CAN BE INSTALLED IN SILT BASINS AND DAMS LESS THAN 20 FT. IN LENGTH WITH A SPACING OF $\frac{1}{3}$ THE BASIN LENGTH.

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

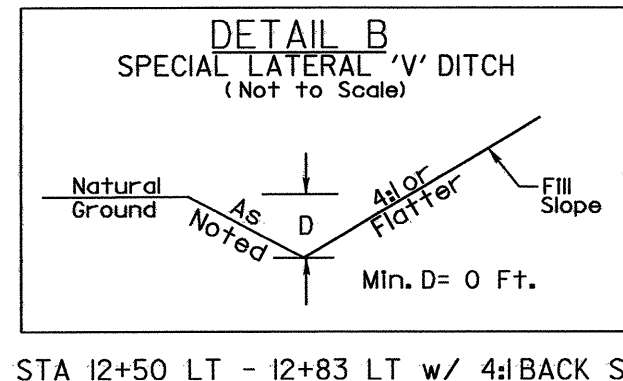
8/17/99

CLEARING AND GRUBBING EROSION CONTROL FOR CONSTRUCTION SHEET 4

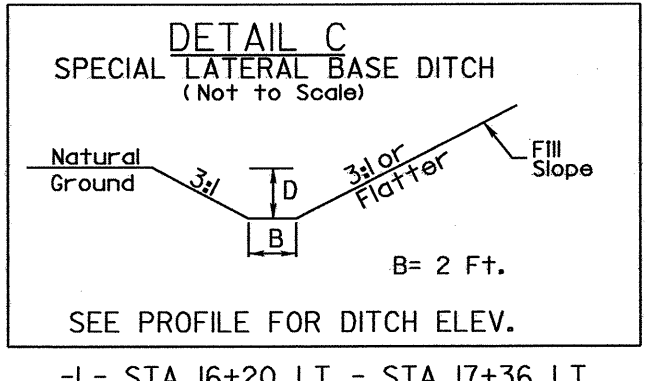
NOTE:
PLACE TEMPORARY ROCK SEDIMENT DAMS TYPE - B AND TEMPORARY ROCK SILT CHECKS TYPE - A AT DRAINAGE OUTLETS.



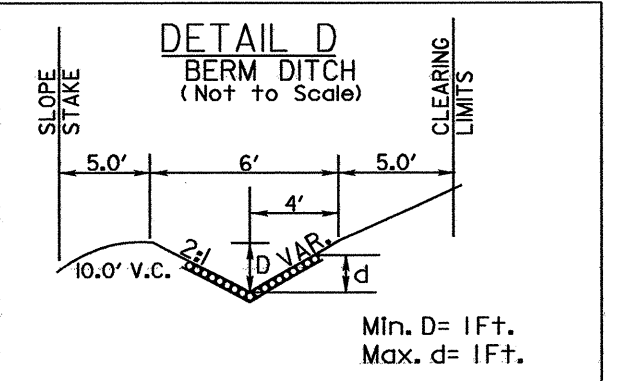
-L- STA 19+28 LT LENGTH = 24 FT. SLOPE = 2.7%



-Y- STA 12+50 LT - 12+83 LT w/ 4:1 BACK SLOPE
-Y- STA 12+00 RT -L- 18+00 RT w/ 2:1 BACK SLOPE



-L- STA 16+20 LT - STA 17+36 LT
SEE PROFILE FOR DITCH ELEV.



Type of Liner = PSRM
-L- STA 18+00 RT - STA 20+20 RT

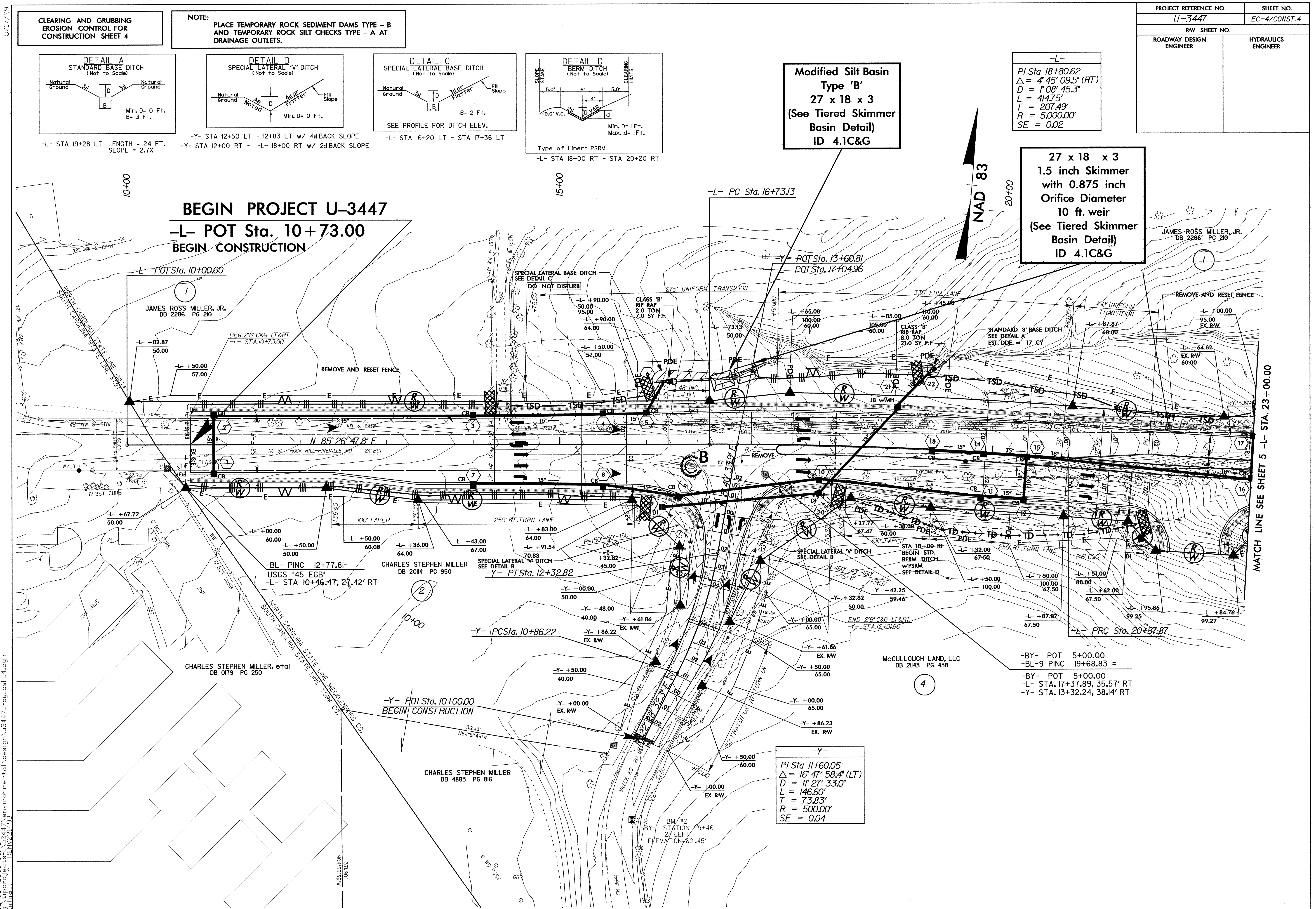
PROJECT REFERENCE NO.	SHEET NO.
U-3447	EC-4/CONST.4
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

Modified Silt Basin
Type 'B'
27 x 18 x 3
(See Tiered Skimmer Basin Detail)
ID 4.1C&G

-L-
PI Sta 18+80.62
 $\Delta = 4' 45'' 09.5''$ (RT)
D = 1' 08' 45.3"
L = 414.75'
T = 207.49'
R = 5,000.00'
SE = 0.02

27 x 18 x 3
1.5 inch Skimmer
with 0.875 inch
Orifice Diameter
10 ft. weir
(See Tiered Skimmer Basin Detail)
ID 4.1C&G

REVISIONS



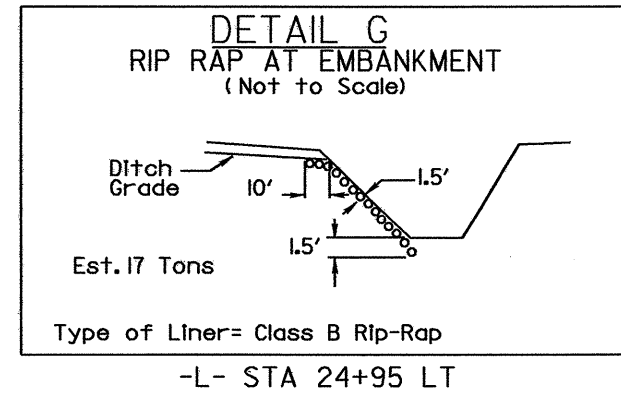
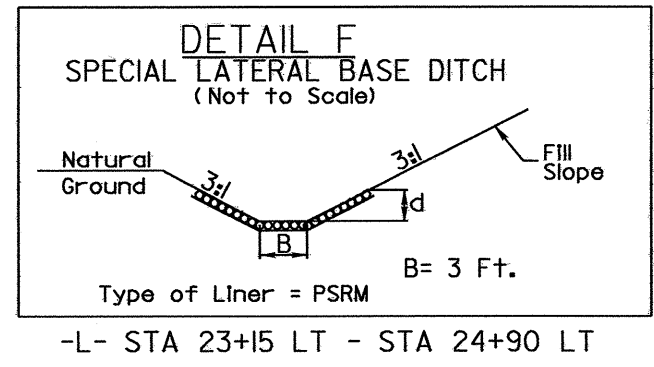
-Y-
PI Sta 11+60.05
 $\Delta = 16' 47'' 58.4''$ (LT)
D = 11' 27' 33.0"
L = 146.60'
T = 73.83'
R = 500.00'
SE = 0.04

-BY- POT 5+00.00
-BL-9 PINC 19+68.83 =
-BY- POT 5+00.00
-L- STA. 17+37.89, 35.57' RT
-Y- STA. 13+32.24, 38.14' RT

MATCH LINE SEE SHEET 5 -L- STA. 23+00.00

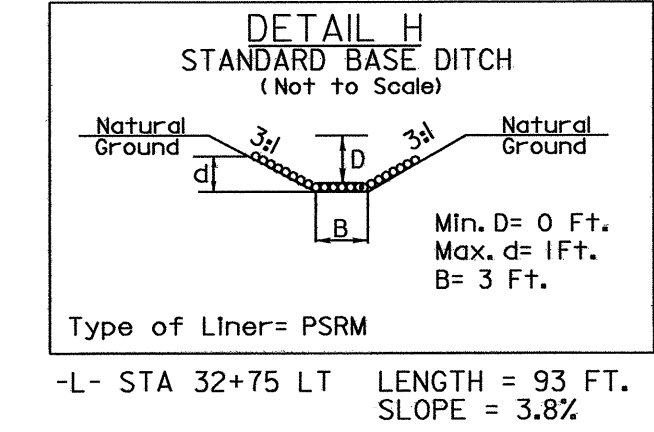
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PROJECT REFERENCE NO.	SHEET NO.
U-3447	EC-5/CONST.5
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER



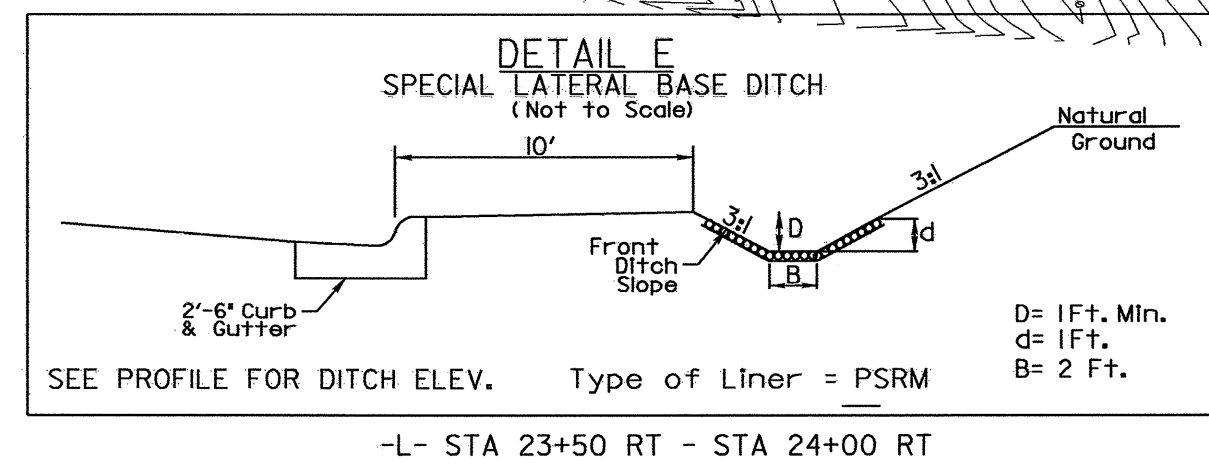
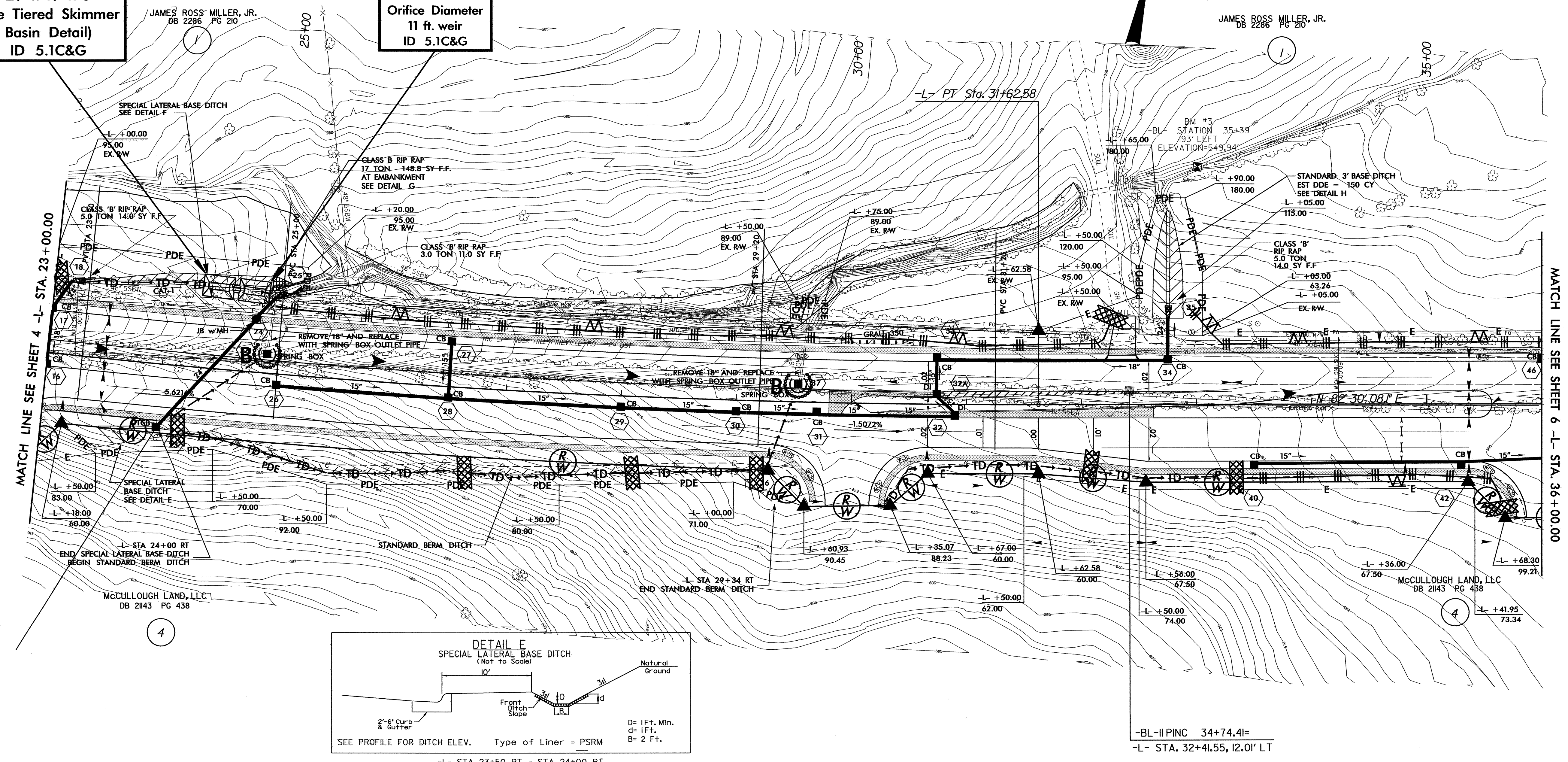
-L-

PI Sta 26+26.04
 $\Delta = 7' 41'' 49.3'' (LT)$
 $D = 0' 42'' 58.3''$
 $L = 1,074.71'$
 $T = 538.16'$
 $R = 8,000.00'$
 $SE = 0.02$



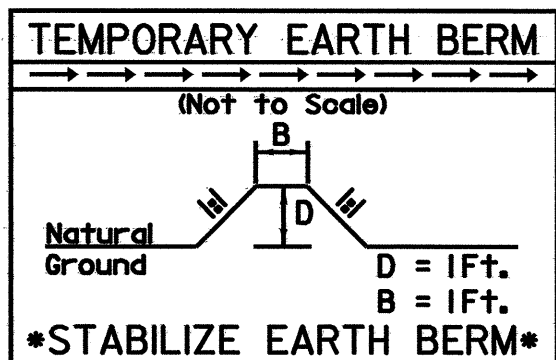
Modified Silt Basin
Type 'B'
29 x 19 x 3
(See Tiered Skimmer
Basin Detail)
ID 5.1C&G

29 x 19 x 3
1.5 inch Skimmer
with 1.0 inch
Orifice Diameter
11 ft. weir
ID 5.1C&G



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.

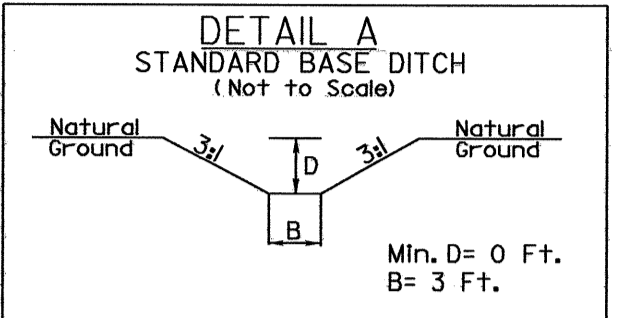
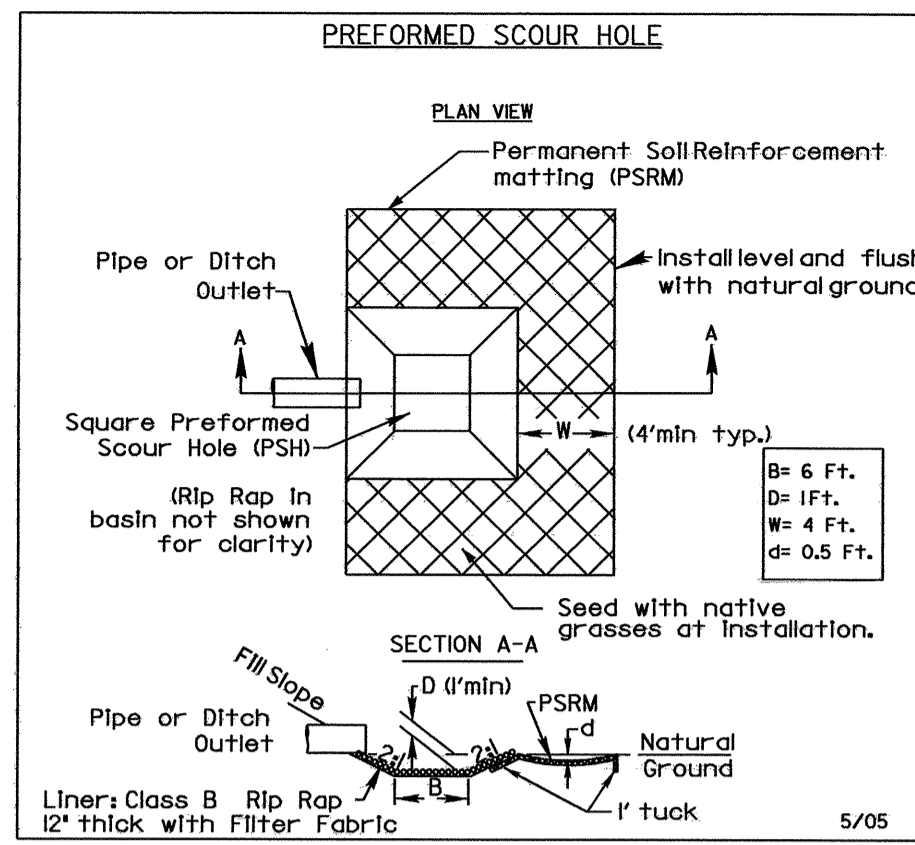


SEE SHEET 10 FOR -L- PROFILE

REVISIONS

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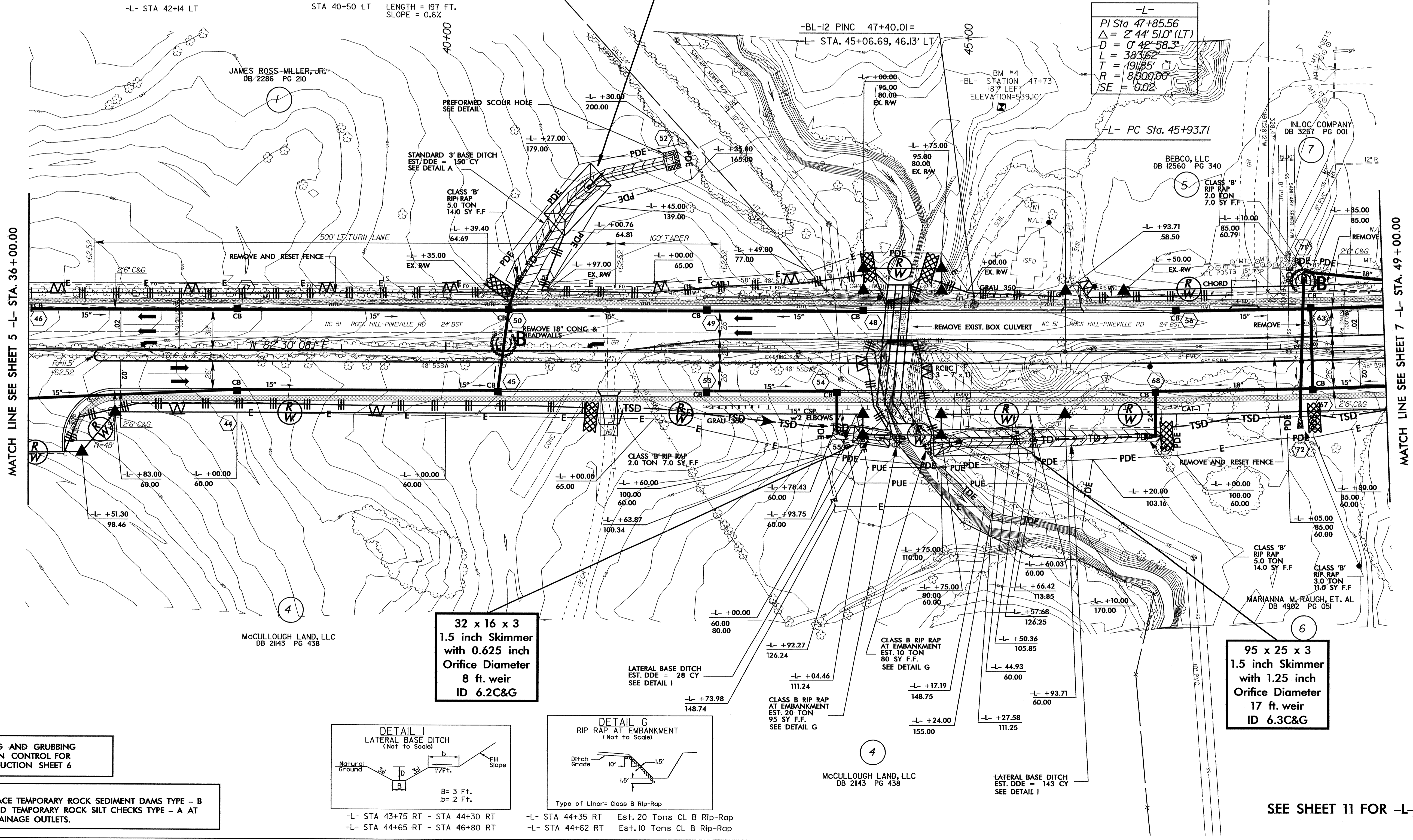
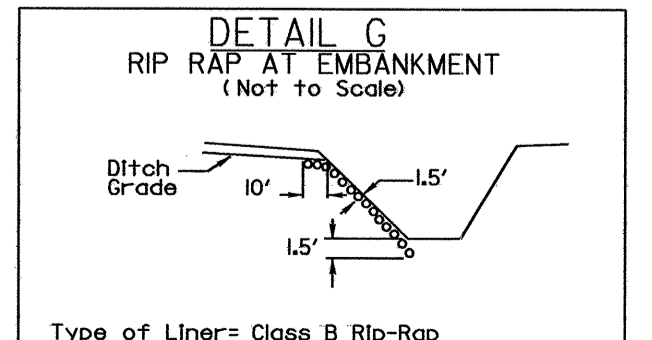
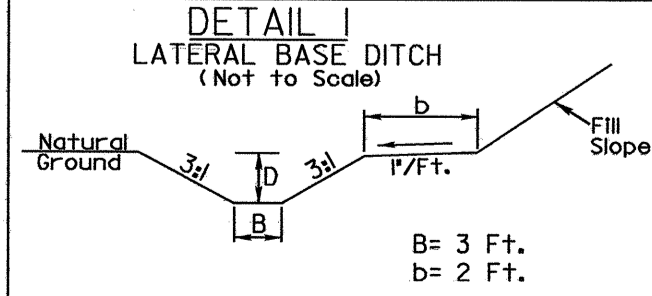
PROJECT REFERENCE NO.	SHEET NO.
U-3447	EC-6/CONST.6
R/W SHEET NO.	ROADWAY DESIGN ENGINEER
	HYDRAULICS ENGINEER



62 x 31 x 3
1.5 inch Skimmer
with 1.0 inch
Orifice Diameter
26 ft. weir
ID 6.1C&G

32 x 16 x 3
1.5 inch Skimmer
with 0.625 inch
Orifice Diameter
8 ft. weir
ID 6.2C&G

95 x 25 x 3
1.5 inch Skimmer
with 1.25 inch
Orifice Diameter
17 ft. weir
ID 6.3C&G



CLEARING AND GRUBBING
EROSION CONTROL FOR
CONSTRUCTION SHEET 6

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

-L- STA 43+75 RT - STA 44+30 RT
-L- STA 44+65 RT - STA 46+80 RT
-L- STA 44+35 RT Est. 20 Tons CL B Rip-Rap
-L- STA 44+62 RT Est. 10 Tons CL B Rip-Rap

REVISIONS

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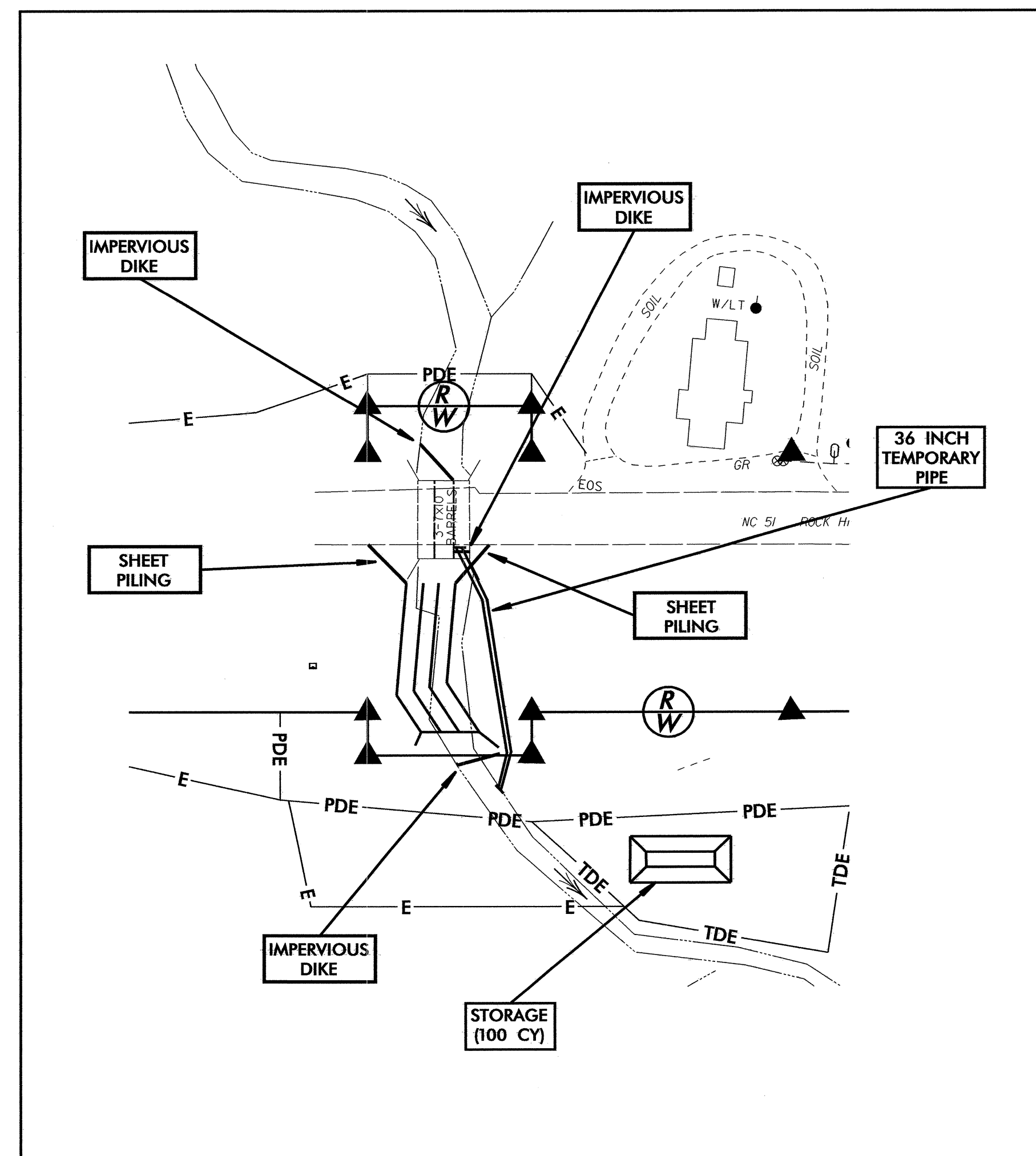
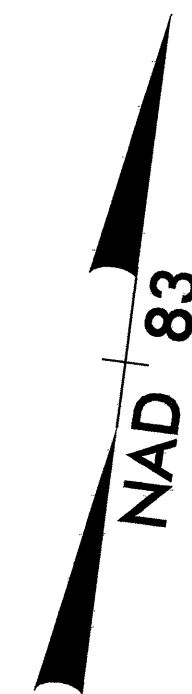
SEE SHEET 11 FOR -L- PROFILE

CULVERT CONSTRUCTION SEQUENCE STA. 44+40 -L-

PROJECT REFERENCE NO. U-3447	SHEET NO. EC-7/CONST.6
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

PHASE I

- 1.) CONSTRUCT STILLING BASIN (100 CY).
- 2.) CONSTRUCT IMPERVIOUS DIKES.
- 3.) INSTALL 36" TEMPORARY CMP TO DIVERT FLOW AROUND SITE.
- 4.) CONSTRUCT CULVERT BARRELS AND DOWNSTREAM WING WALLS
- 5.) INSTALL SHEET PILING AND CONSTRUCT NEW ROADWAY OVER NEW BARRELS.
- 6.) REMOVE DIKES, SHEET PILING, TEMPORARY PIPE AND EXISTING CULVERT.

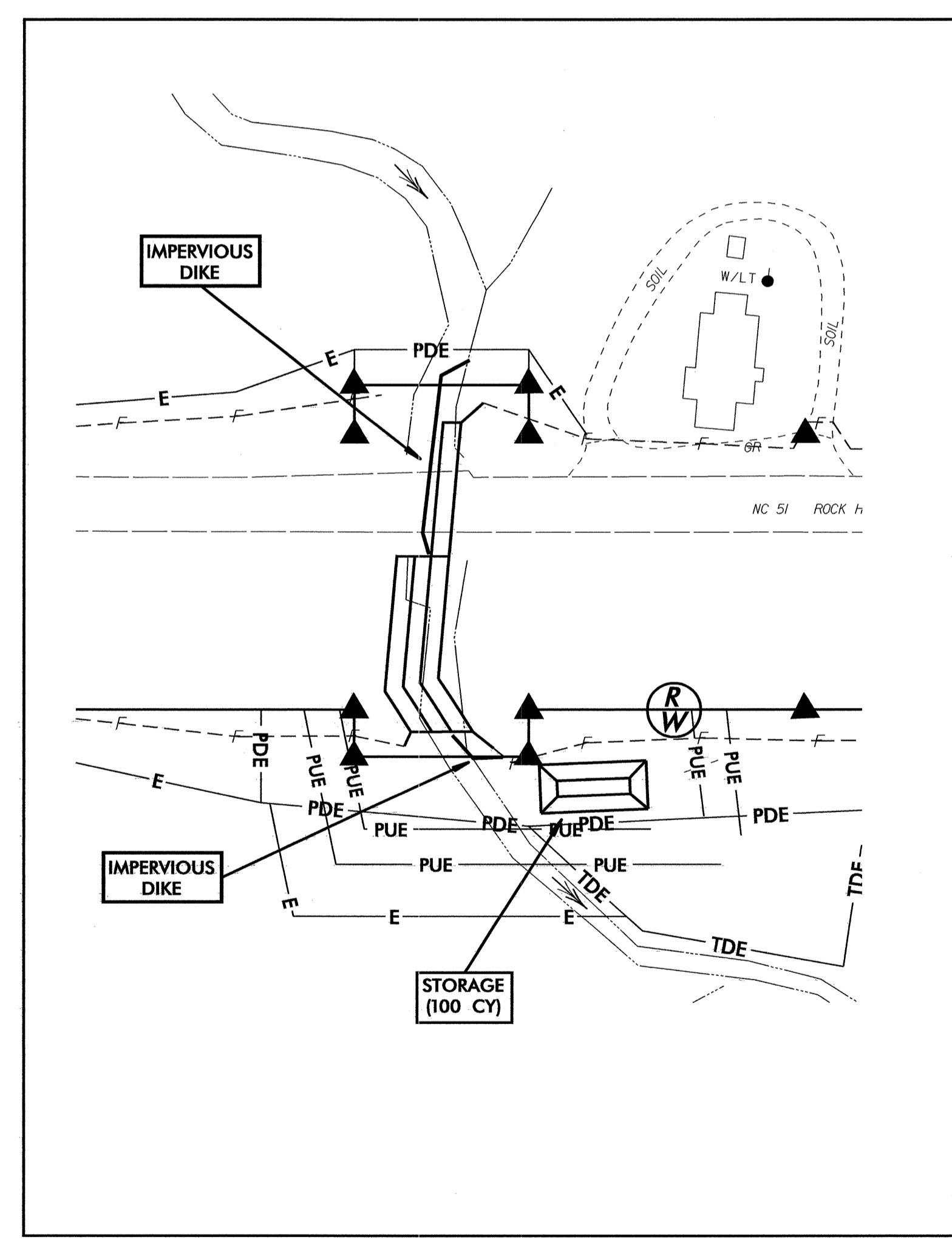
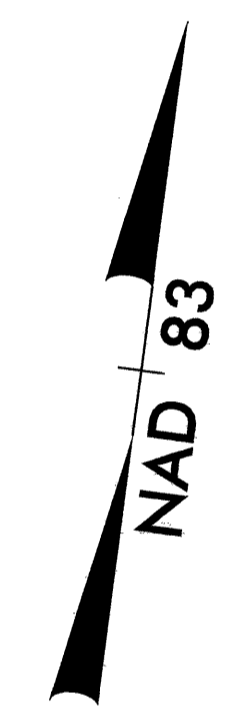


PROJECT REFERENCE NO. U-3447	SHEET NO. EC-7A/CONST.6
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

CULVERT CONSTRUCTION SEQUENCE STA. 44+40 -L-

PHASE II

- 1.) CONSTRUCT IMPERVIOUS DIKES AS INDICATED.
- 2.) DIRECT FLOW INTO MIDDLE AND WESTERN BARRELS.
- 3.) COMPLETE CONSTRUCTION OF EASTERN BARREL.
- 4.) CONSTRUCT UPSTREAM NE WINGWALL.
- 5.) REMOVE IMPERVIOUS DIKES.

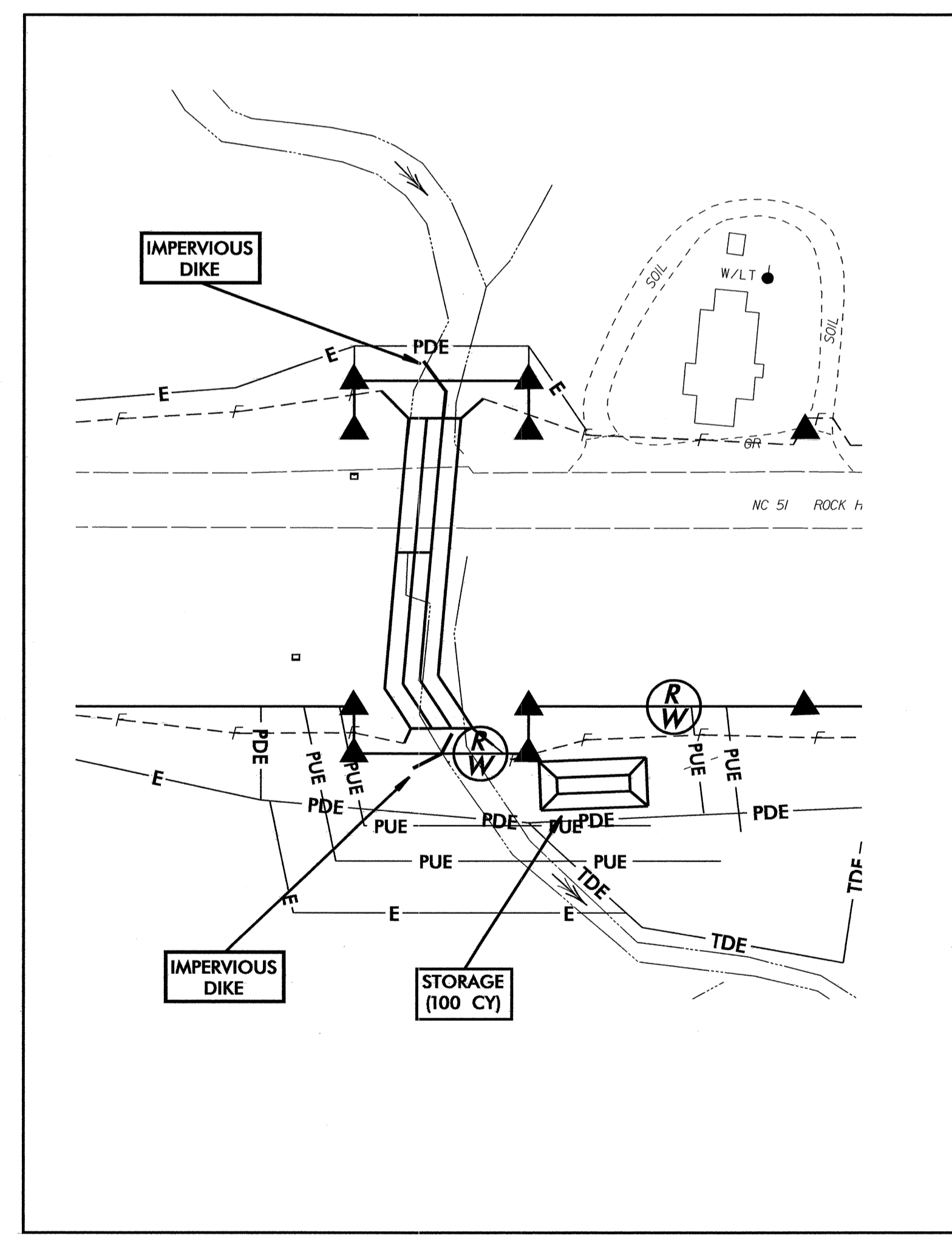
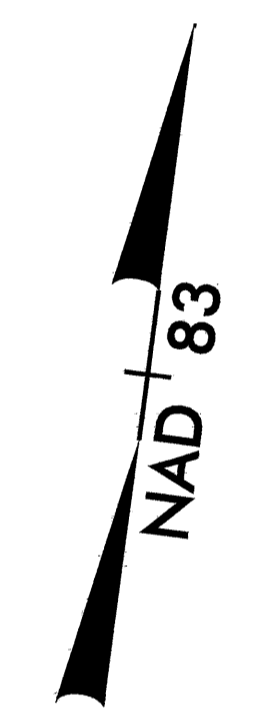


PROJECT REFERENCE NO. U-3447	SHEET NO. EC-7B/CONST.6
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

CULVERT CONSTRUCTION SEQUENCE STA. 44+40 -L-

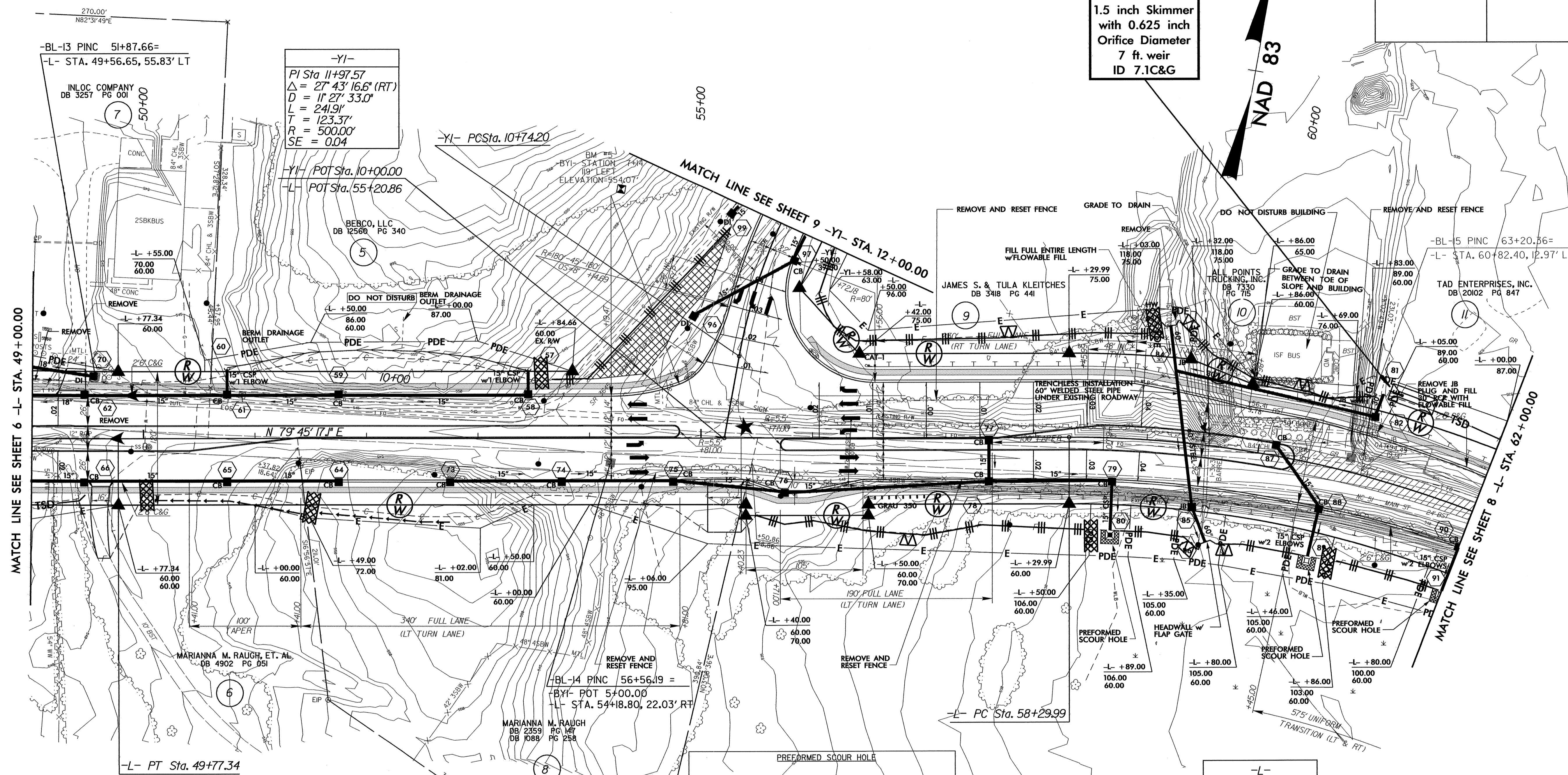
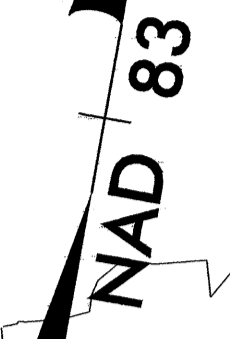
PHASE III

- | | |
|---|--|
| 1.) CONSTRUCT IMPERVIOUS DIKES AS INDICATED. | 4.) CONSTRUCT UPSTREAM NW WINGWALL. |
| 2.) DIRECT FLOW INTO COMPLETED EASTERN BARREL. | 5.) REMOVE IMPERVIOUS DIKES. |
| 3.) COMPLETE CONSTRUCTION OF MIDDLE & WESTERN BARREL. | 6.) COMPLETE CHANNEL IMPROVEMENTS & ROADWAY. |



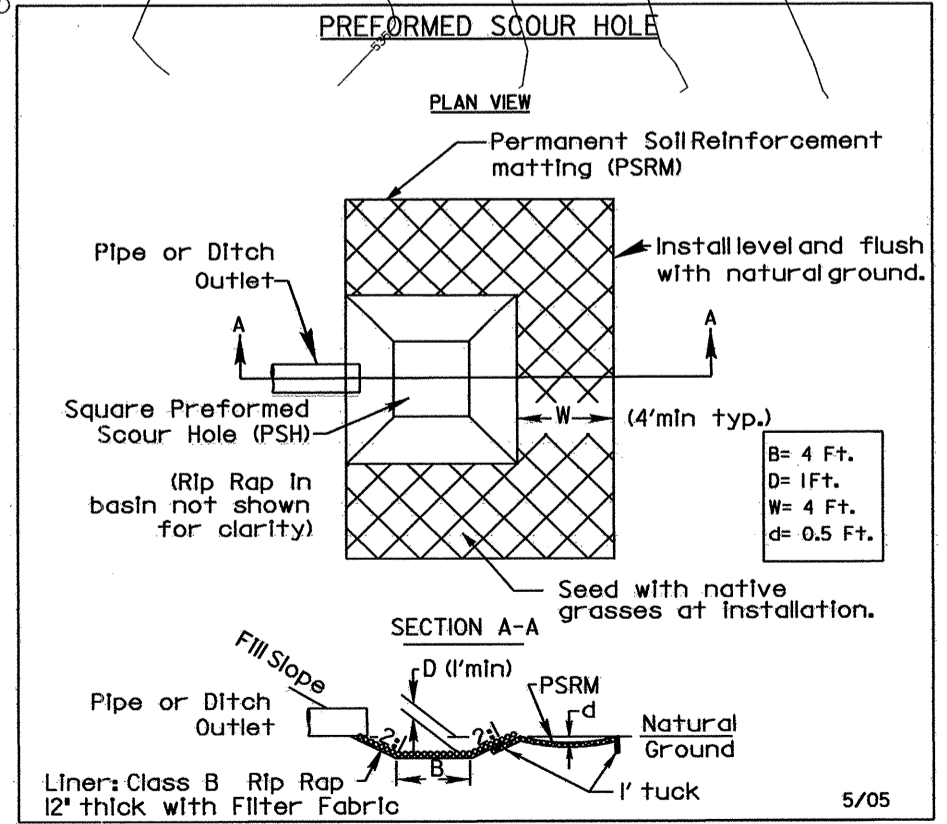
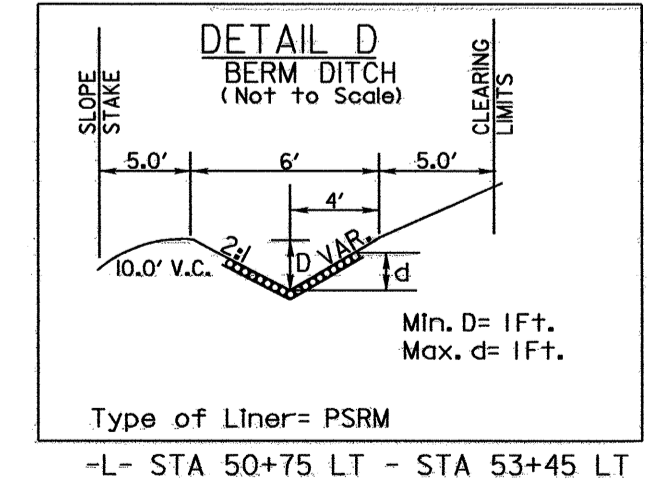
PROJECT REFERENCE NO.	SHEET NO.
U-3447	EC-8/CONST.7
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

42 x 15 x 3
1.5 inch Skimmer
with 0.625 inch
Orifice Diameter
7 ft. weir
ID 7.1C&G

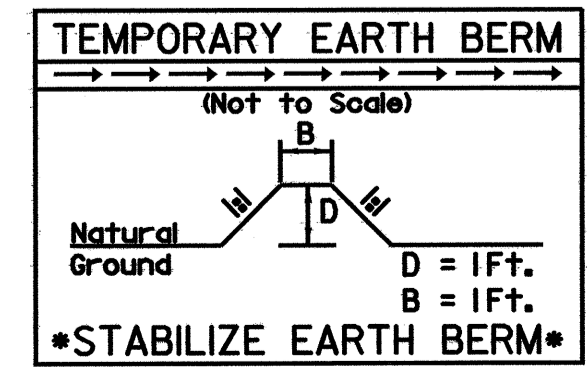


-YI-
PI Sta 11+97.57
 $\Delta = 27^\circ 43' 16.6''$ (RT)
D = 11' 27' 33.0"
L = 241.9'
T = 123.37'
R = 500.00'
SE = 0.04

-L-
PI Sta 62+46.50
 $\Delta = 45^\circ 13' 25.7''$ (RT)
D = 5' 43' 46.5"
L = 789.30'
T = 416.50'
R = 1,000.00'
SE = 0.04



-L- STA 58+70 RT
-L- STA 60+65 RT
-L- STA 62+00 RT

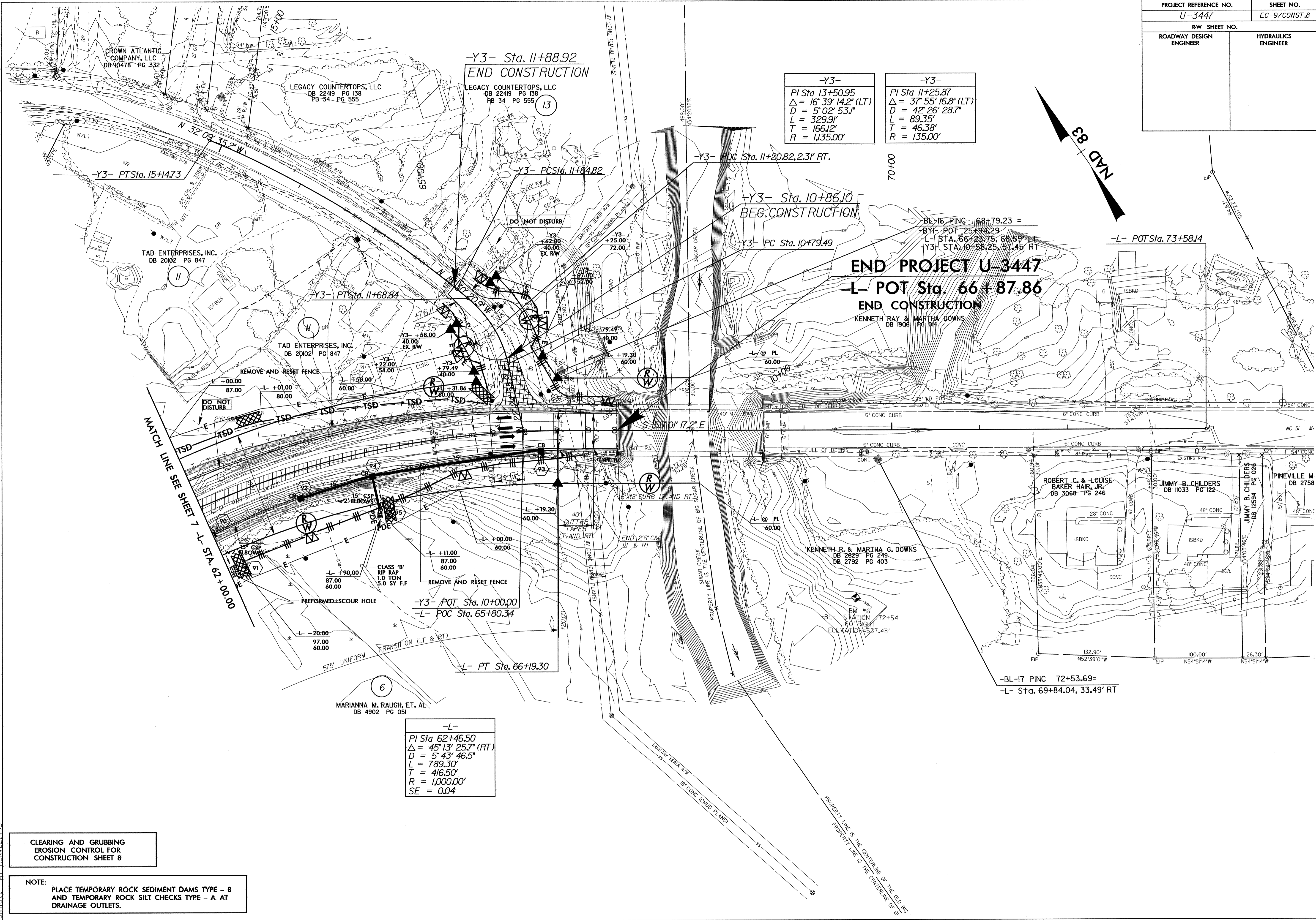


CLEARING AND GRUBBING
EROSION CONTROL FOR
CONSTRUCTION SHEET 7

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

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PROJECT REFERENCE NO. U-3447	SHEET NO. EC-9/CONST.8
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER



-Y3-
PI Sta 13+50.95
$\Delta = 16^{\circ} 39' 14.2" (LT)$
$D = 5^{\circ} 02' 53.1"$
$L = 329.91'$
$T = 166.12'$
$R = 1,135.00'$

-Y3-
PI Sta 11+25.87
$\Delta = 37^{\circ} 55' 16.8" (LT)$
$D = 42^{\circ} 26' 28.7"$
$L = 89.35'$
$T = 46.38'$
$R = 135.00'$

-L-
PI Sta 62+46.50
$\Delta = 45^{\circ} 13' 25.7" (RT)$
$D = 5^{\circ} 43' 46.5"$
$L = 789.30'$
$T = 416.50'$
$R = 1,000.00'$
$SE = 0.04$

CLEARING AND GRUBBING
EROSION CONTROL FOR
CONSTRUCTION SHEET 8

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

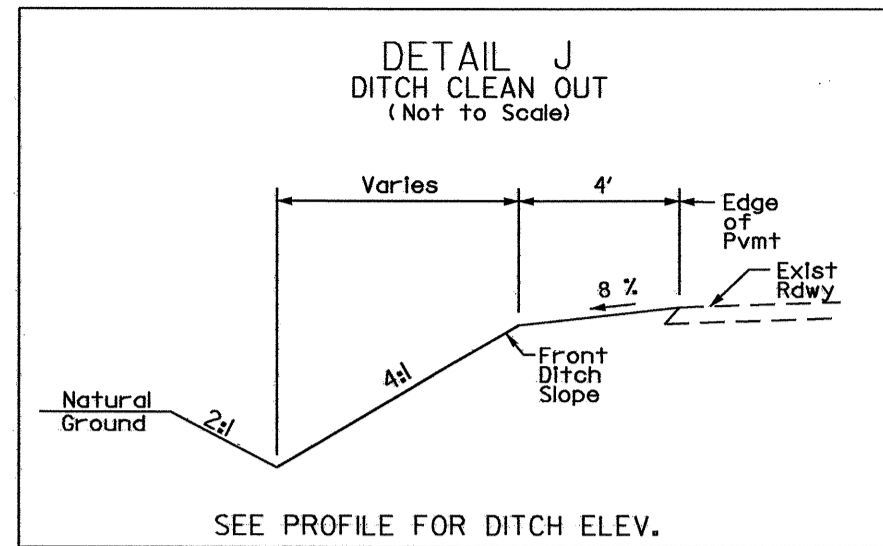
REVISIONS

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tblatt AT REN22193

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.

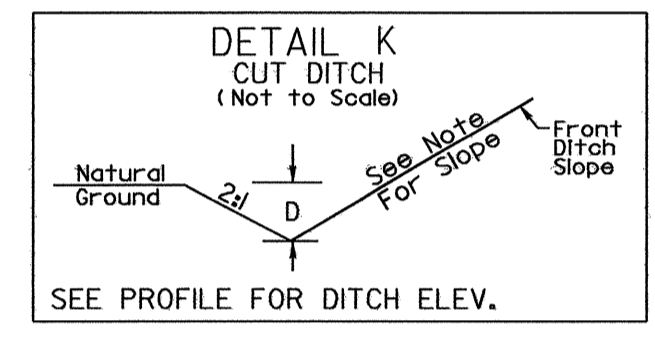
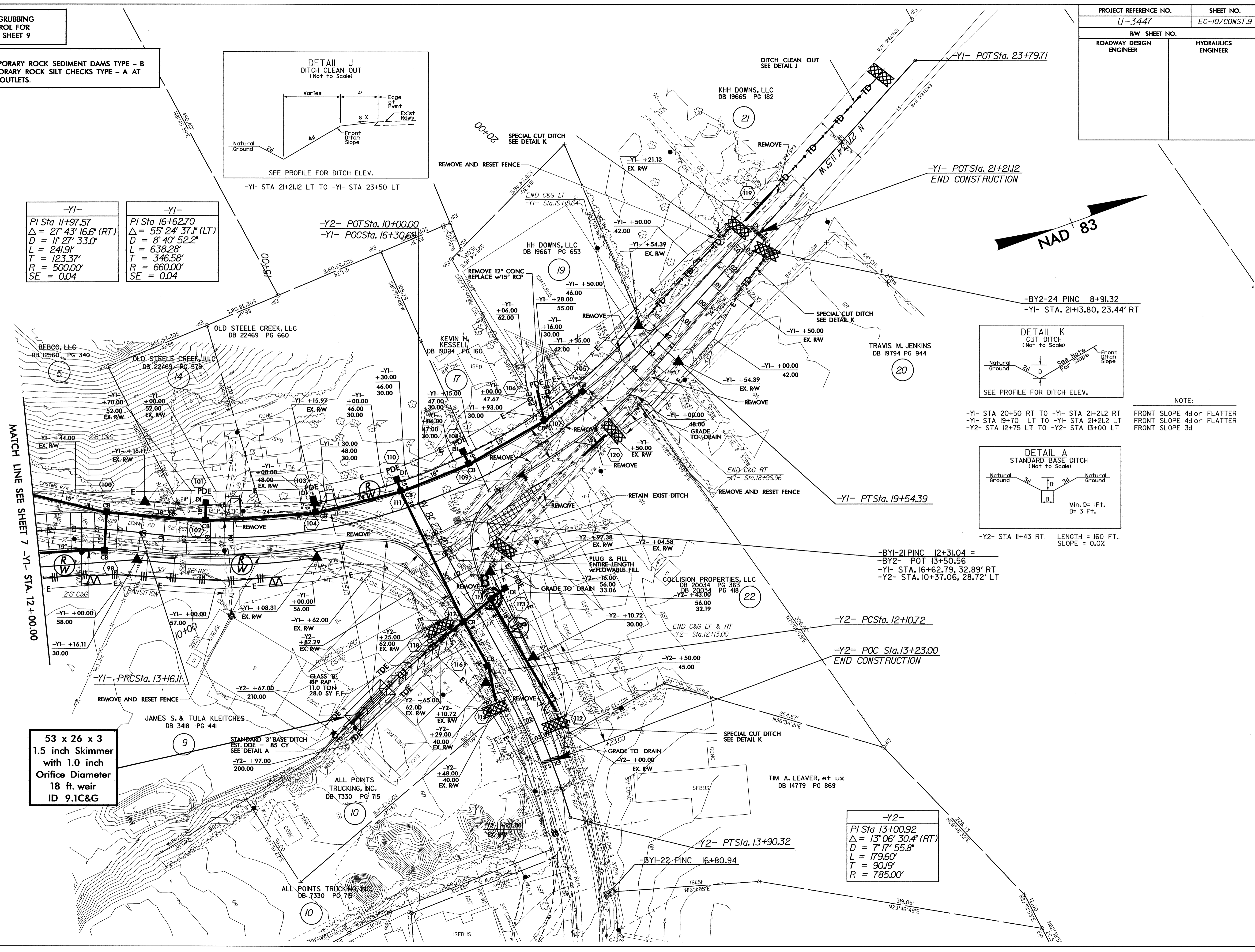


SEE PROFILE FOR DITCH ELEV.
-YI- STA 21+21.12 LT TO -YI- STA 23+50 LT

-YI-	-YI-
PI Sta 11+97.57	PI Sta 16+62.70
$\Delta = 27' 43" 16.6" (RT)$	$\Delta = 55' 24" 37.1" (LT)$
$D = 11' 27" 33.0"$	$D = 8' 40" 52.2"$
$L = 241.9'$	$L = 638.28'$
$T = 123.37'$	$T = 346.58'$
$R = 500.00'$	$R = 660.00'$
$SE = 0.04$	$SE = 0.04$

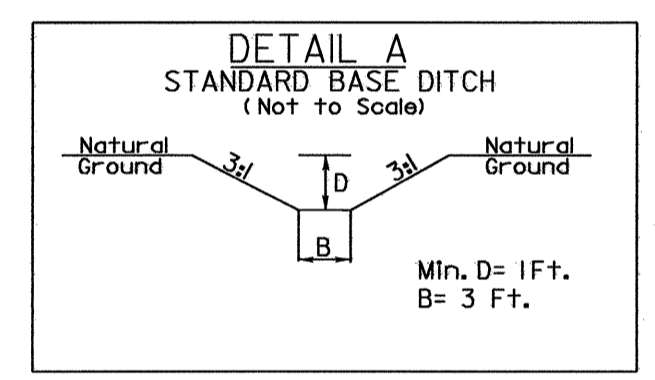
-Y2- POTSta. 10+00.00
-YI- POCSta. 16+30.69

PROJECT REFERENCE NO. U-3447	SHEET NO. EC-10/CONST.9
RW SHEET NO.	HYDRAULICS ENGINEER
ROADWAY DESIGN ENGINEER	



SEE PROFILE FOR DITCH ELEV.
-YI- STA 20+50 RT TO -YI- STA 21+21.2 RT
-YI- STA 19+70 LT TO -YI- STA 21+21.2 LT
-Y2- STA 12+75 LT TO -Y2- STA 13+00 LT

NOTE:
FRONT SLOPE 4% or FLATTER
FRONT SLOPE 4% or FLATTER
FRONT SLOPE 3%

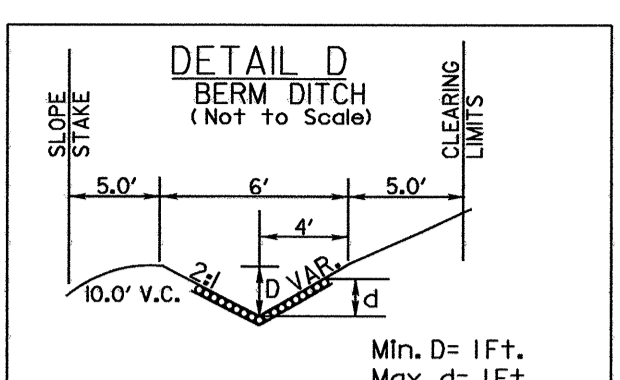
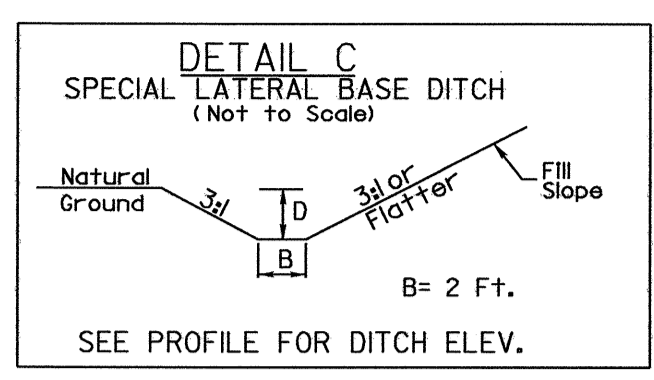
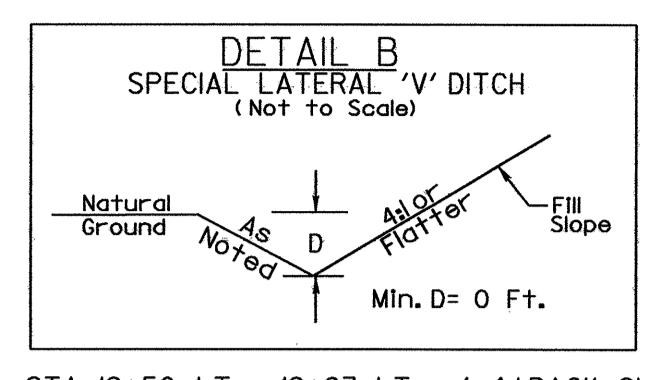
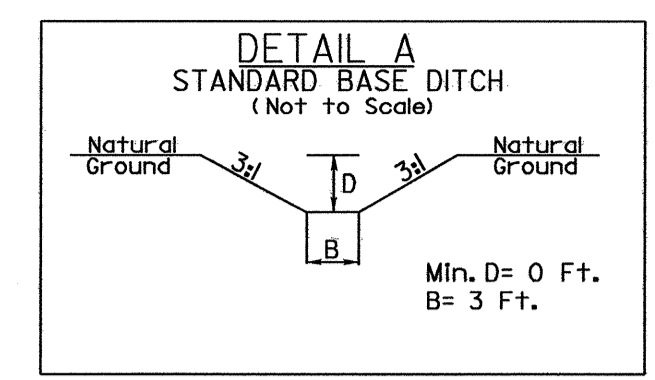


-Y2- STA 11+43 RT LENGTH = 160 FT. SLOPE = 0.0%

53 x 26 x 3
1.5 inch Skimmer
with 1.0 inch
Orifice Diameter
18 ft. weir
ID 9.1C&G

-Y2-
PI Sta 13+00.92
$\Delta = 13' 06" 30.4" (RT)$
$D = 7' 17" 55.8"$
$L = 179.60'$
$T = 90.19'$
$R = 785.00'$

PROJECT REFERENCE NO.	SHEET NO.
U-3447	EC-II/CONST.4
R/W SHEET NO.	HYDRAULICS ENGINEER
ROADWAY DESIGN ENGINEER	



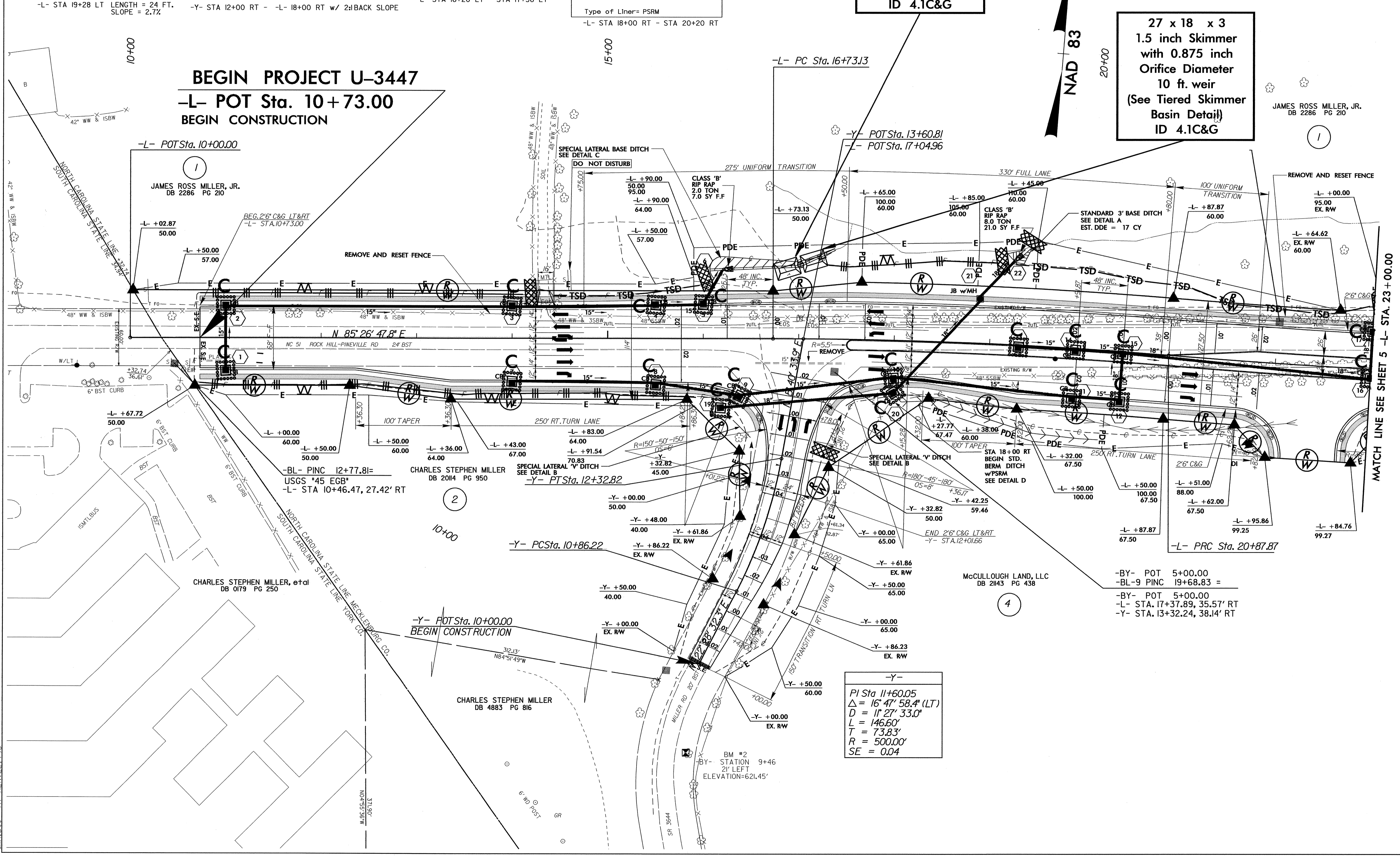
Modified Silt Basin
Type 'B'
27 x 18 x 3
(See Tiered Skimmer Basin Detail)
ID 4.1C&G

-L-
 PI Sta 18+80.62
 $\Delta = 4' 45" 09.5" (RT)$
 $D = 1' 08" 45.3"$
 $L = 414.75'$
 $T = 207.49'$
 $R = 5,000.00'$
 $SE = 0.02$

27 x 18 x 3
1.5 inch Skimmer
with 0.875 inch
Orifice Diameter
10 ft. weir
(See Tiered Skimmer Basin Detail)
ID 4.1C&G

JAMES ROSS MILLER, JR.
 DB 2286 PG 210

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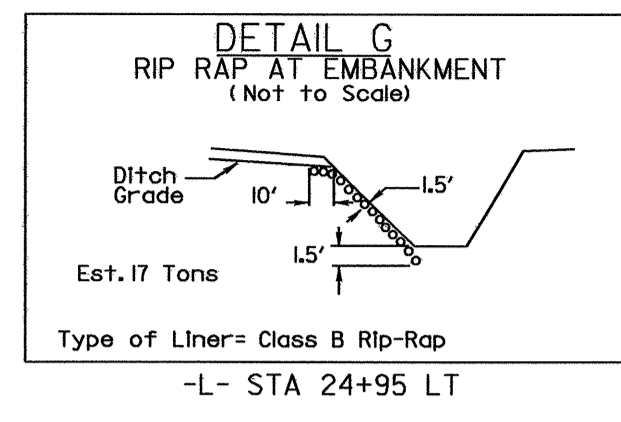
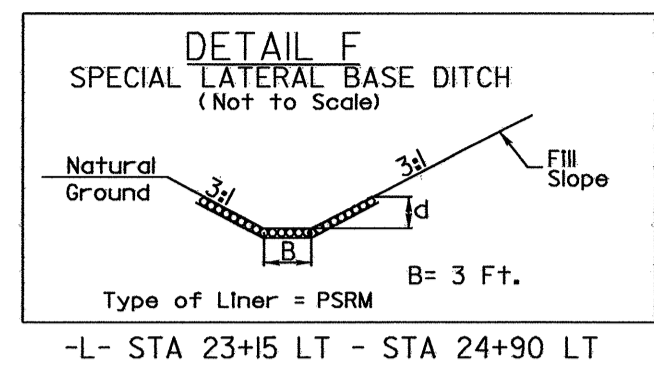


-Y-
 PI Sta 11+60.05
 $\Delta = 16' 47" 58.4" (LT)$
 $D = 11' 27" 33.0"$
 $L = 146.60'$
 $T = 73.83'$
 $R = 500.00'$
 $SE = 0.04$

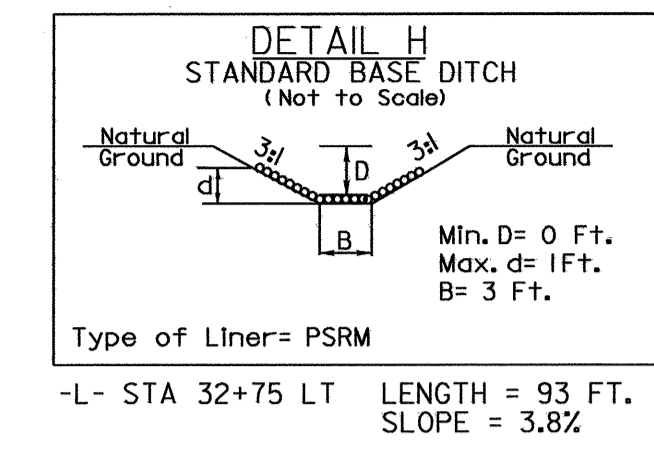
-BY- POT 5+00.00
 -BL-9 PINC 19+68.83 =
 -L- STA. 17+37.89, 35.57' RT
 -Y- STA. 13+32.24, 38.14' RT

MATCH LINE SEE SHEET 5 -L- STA. 23+00.00

PROJECT REFERENCE NO.	SHEET NO.
U-3447	EC-12/CONST.5
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER



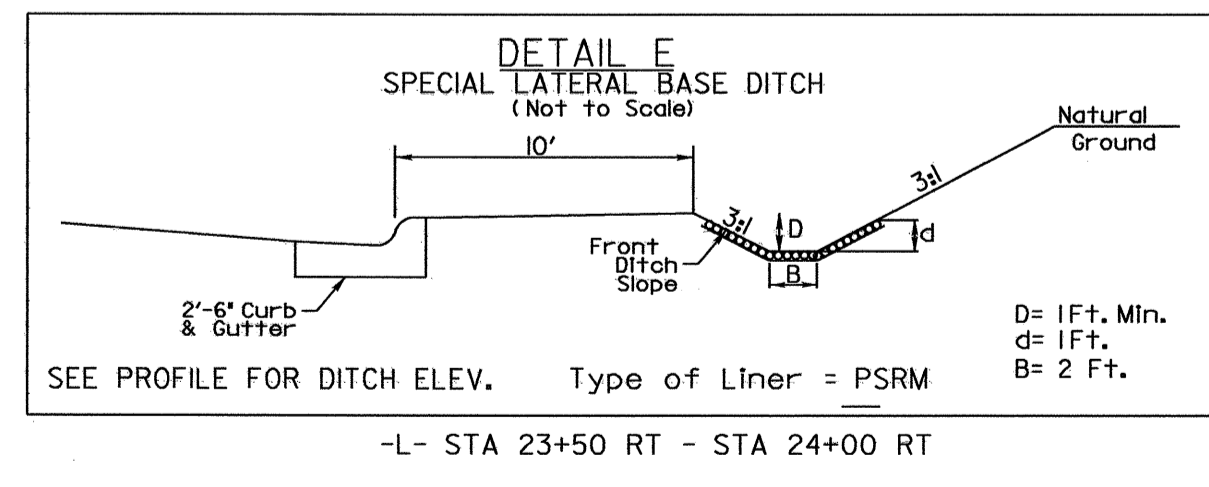
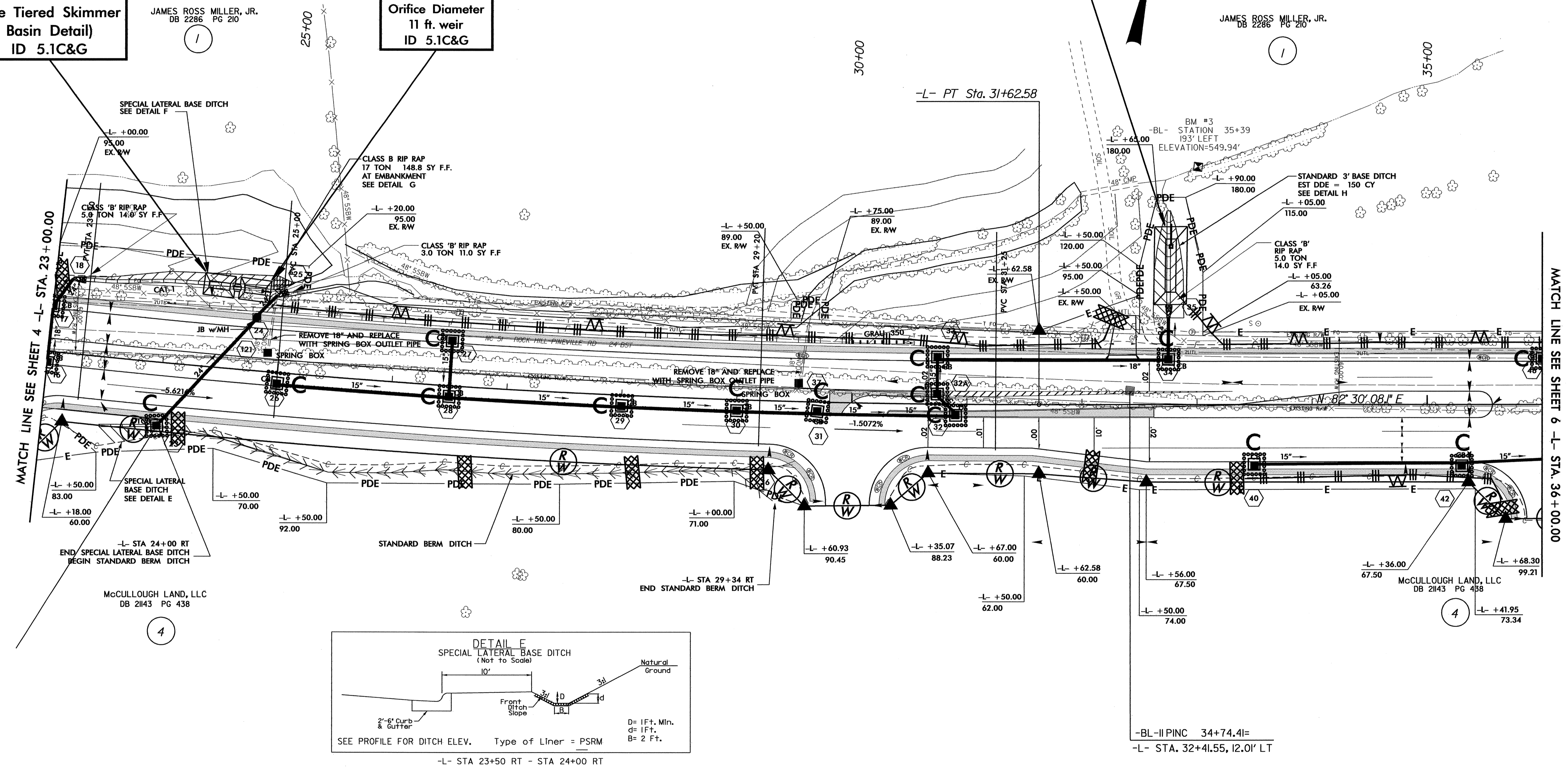
-L-
 PI Sta 26+26.04
 $\Delta = 7' 41'' 49.3'' (LT)$
 $D = 0' 42'' 58.3''$
 $L = 1,074.71'$
 $T = 538.16'$
 $R = 8,000.00'$
 $SE = 0.02$



Modified Silt Basin
 Type 'B'
 29 x 19 x 3
 (See Tiered Skimmer Basin Detail)
 ID 5.1C&G

29 x 19 x 3
 1.5 inch Skimmer
 with 1.0 inch Orifice Diameter
 11 ft. weir
 ID 5.1C&G

62 x 31 x 3
 1.5 inch Skimmer
 with 1.25 inch Orifice Diameter
 23 ft. weir
 ID 5.2 Final

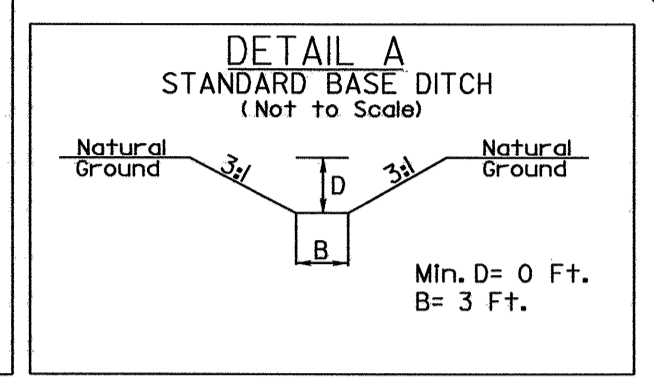
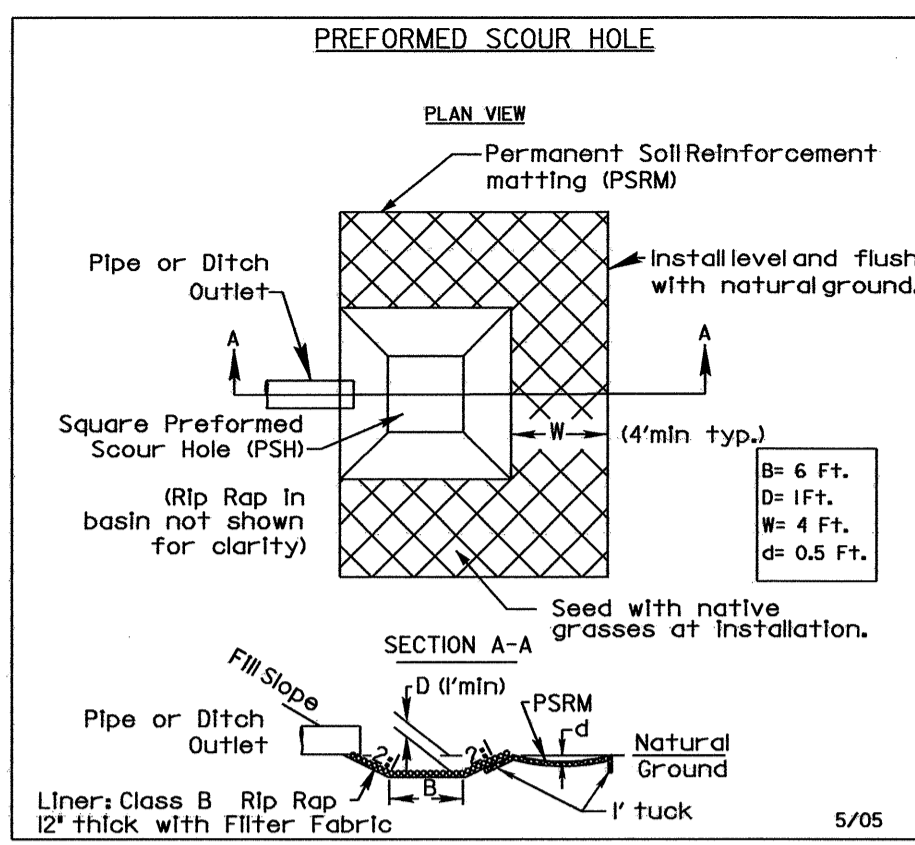


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SEE SHEET 10 FOR -L- PROFILE

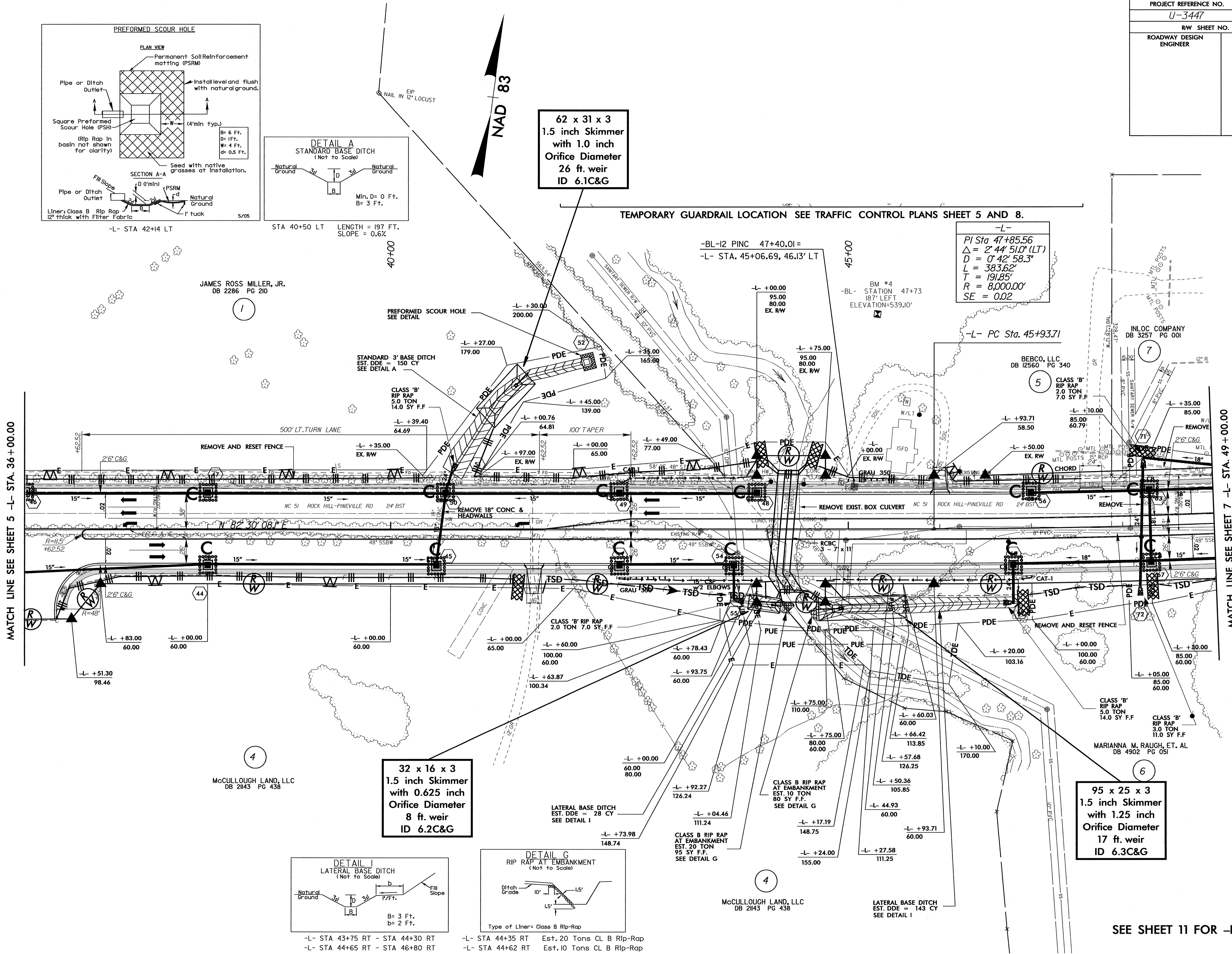
PROJECT REFERENCE NO.	SHEET NO.
U-3447	EC-13/CONST.6
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER



62 x 31 x 3
1.5 inch Skimmer
with 1.0 inch
Orifice Diameter
26 ft. weir
ID 6.1C&G

TEMPORARY GUARDRAIL LOCATION SEE TRAFFIC CONTROL PLANS SHEET 5 AND 8.

-L-
PI Sta 47+85.56
 $\Delta = 2' 44" 51.0" (LT)$
 $D = 0' 42" 58.3"$
 $L = 383.62'$
 $T = 191.85'$
 $R = 8,000.00'$
 $SE = 0.02$

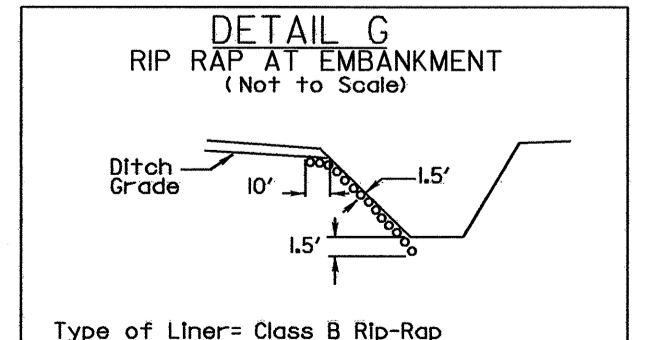
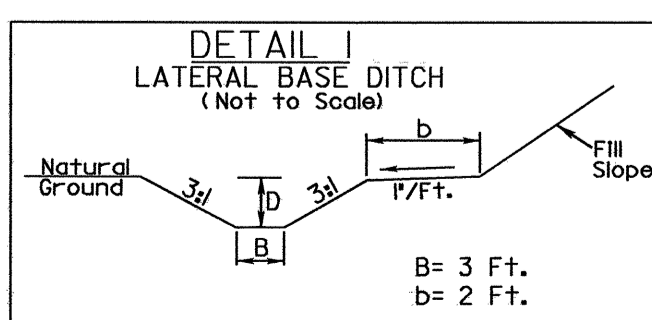


MATCH LINE SEE SHEET 5 -L- STA. 36+00.00

MATCH LINE SEE SHEET 7 -L- STA. 49+00.00

32 x 16 x 3
1.5 inch Skimmer
with 0.625 inch
Orifice Diameter
8 ft. weir
ID 6.2C&G

95 x 25 x 3
1.5 inch Skimmer
with 1.25 inch
Orifice Diameter
17 ft. weir
ID 6.3C&G



-L- STA 43+75 RT - STA 44+30 RT
-L- STA 44+65 RT - STA 46+80 RT
-L- STA 44+35 RT Est. 20 Tons CL B Rip-Rap
-L- STA 44+62 RT Est. 10 Tons CL B Rip-Rap

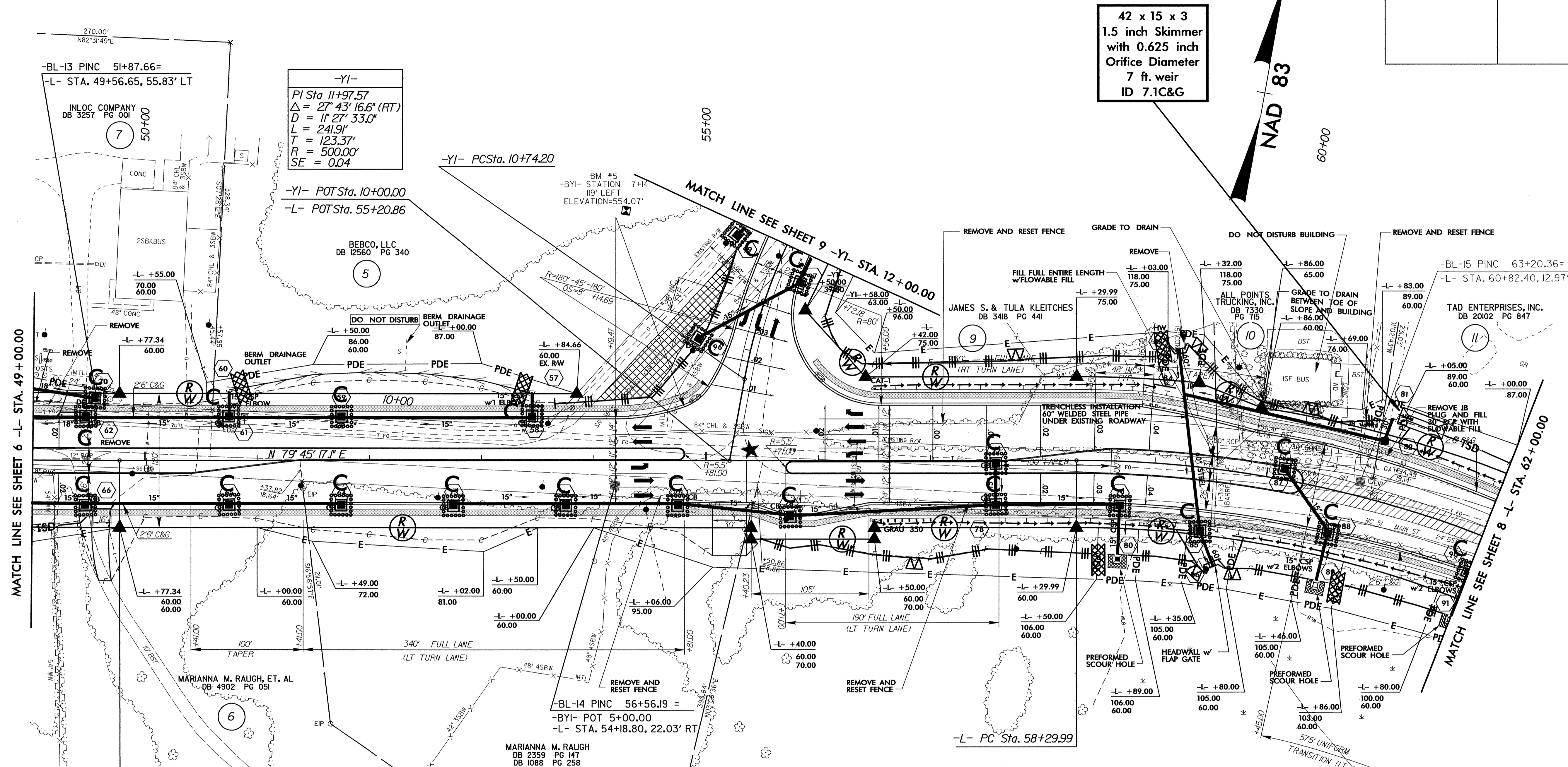
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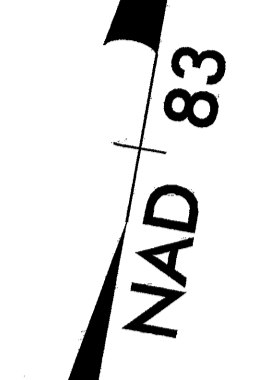
SEE SHEET 11 FOR -L- PROFILE

PROJECT REFERENCE NO.		SHEET NO.	
U-3447		EC-14/CONST.7	
RW SHEET NO.		HYDRAULICS ENGINEER	
ROADWAY DESIGN ENGINEER			

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42 x 15 x 3
1.5 inch Skimmer
with 0.625 inch
Orifice Diameter
7 ft. weir
ID 7.1C&G

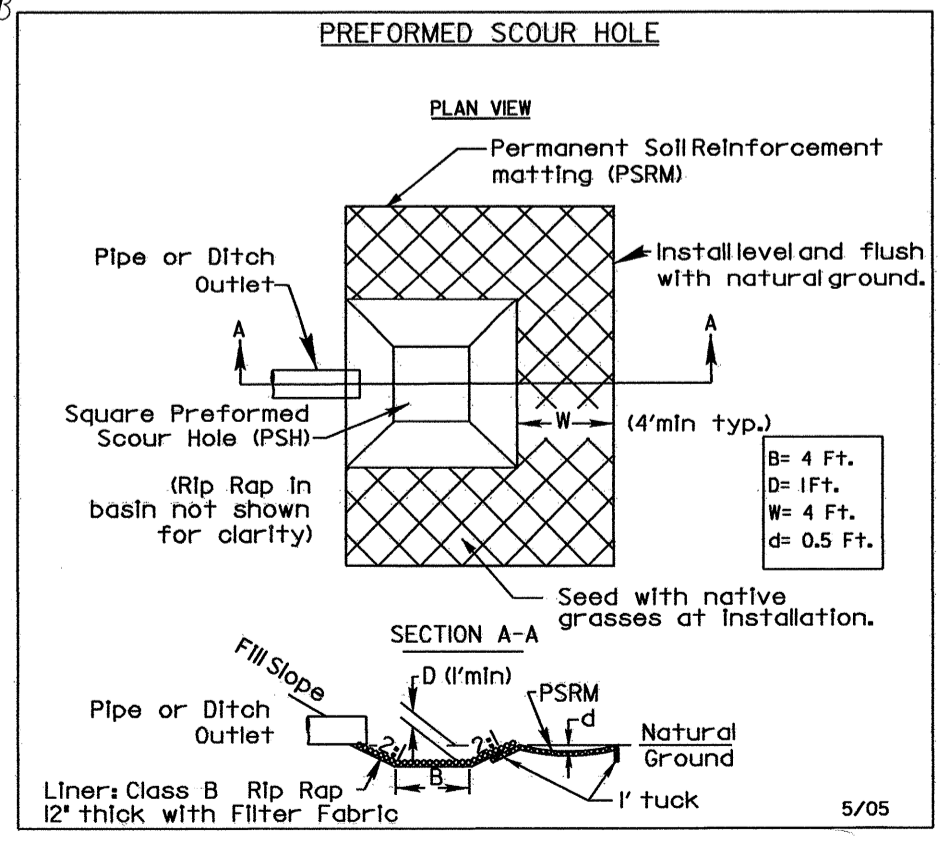
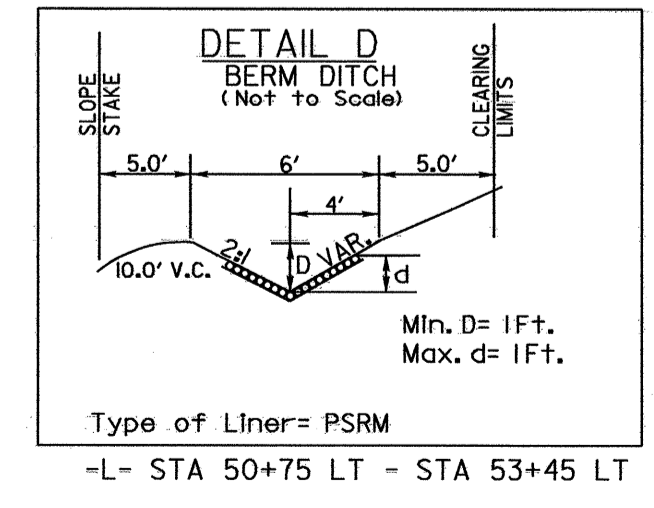


-YI-
PI Sta 11+97.57
 $\Delta = 27' 43'' 16.6'' (RT)$
 $D = 11' 27'' 33.0''$
 $L = 241.9'$
 $T = 123.37'$
 $R = 500.00'$
 $SE = 0.04$

-YI- POT Sta. 10+00.00
-L- POT Sta. 55+20.86

-BL-14 PINC 56+56.19 =
-BYI- POT 5+00.00
-L- STA. 54+18.80, 22.03' RT

-L-
PI Sta 62+46.50
 $\Delta = 45' 13'' 25.7'' (RT)$
 $D = 5' 43'' 46.5''$
 $L = 789.30'$
 $T = 416.50'$
 $R = 1,000.00'$
 $SE = 0.04$

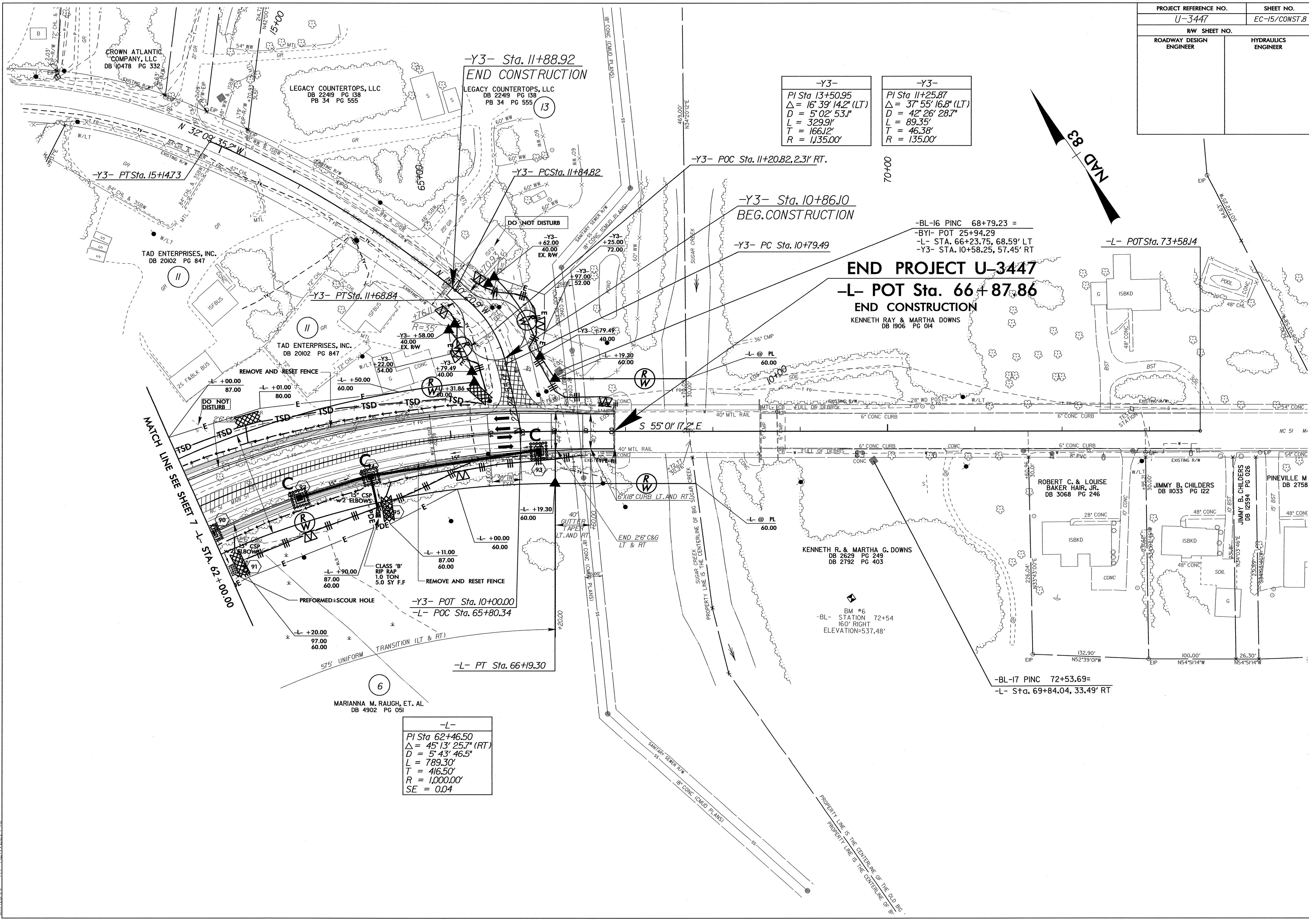


PROJECT REFERENCE NO.	SHEET NO.
U-3447	EC-15/CONST.B
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

-Y3- PI Sta 13+50.95 Δ = 16° 39' 14.2" (LT) D = 5° 02' 53.1" L = 329.91' T = 166.12' R = 1,135.00'	-Y3- PI Sta 11+25.87 Δ = 37° 55' 16.8" (LT) D = 42° 26' 28.7" L = 89.35' T = 46.38' R = 135.00'
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-L- PI Sta 62+46.50 Δ = 45° 13' 25.7" (RT) D = 5° 43' 46.5" L = 789.30' T = 416.50' R = 1,000.00' SE = 0.04
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END PROJECT U-3447
-L- POT Sta. 66+87.86
END CONSTRUCTION
 KENNETH RAY & MARTHA DOWNS
 DB 1906 PG 014



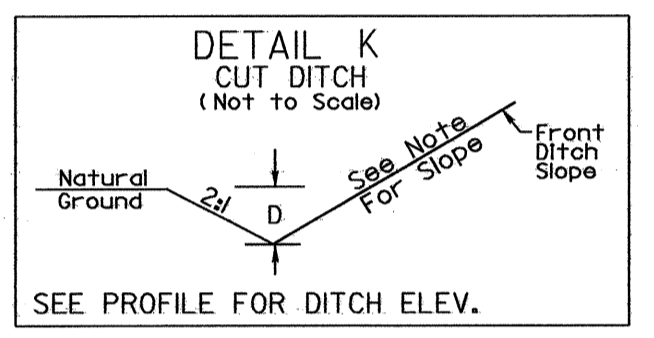
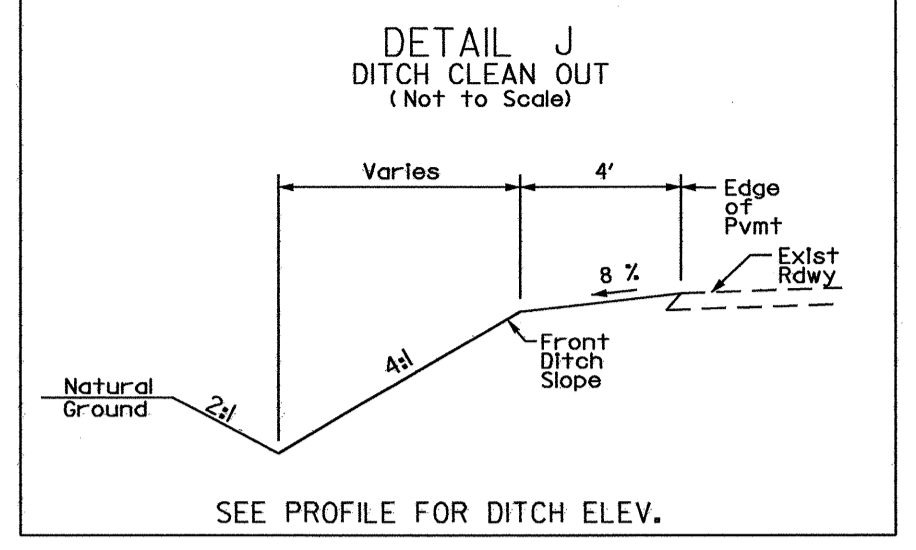
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PROJECT REFERENCE NO. U-3447	SHEET NO. EC-16/CONST.9
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

8/17/99

-Y1-	-Y1-
PI Sta 11+97.57	PI Sta 16+62.70
$\Delta = 27^{\circ} 43' 16.6"$ (RT)	$\Delta = 55^{\circ} 24' 37.1"$ (LT)
D = 11' 27' 33.0"	D = 8' 40' 52.2"
L = 241.91'	L = 638.28'
T = 123.37'	T = 346.58'
R = 500.00'	R = 660.00'
SE = 0.04	SE = 0.04



NOTE:
-Y1- STA 20+50 RT TO -Y1- STA 21+2.2 RT
FRONT SLOPE 4:1 or FLATTER
-Y1- STA 19+70 LT TO -Y1- STA 21+21.2 LT
FRONT SLOPE 4:1 or FLATTER
-Y2- STA 12+75 LT TO -Y2- STA 13+00 LT
FRONT SLOPE 3:1

-Y2- STA 11+43 RT
LENGTH = 160 FT.
SLOPE = 0.0X

MATCH LINE SEE SHEET 7 -Y1- STA. 12+00.00

53 x 26 x 3
1.5 inch Skimmer
with 1.0 inch
Orifice Diameter
18 ft. weir
ID 9.1C&G

-Y2-
PI Sta 13+00.92
$\Delta = 13^{\circ} 06' 30.4"$ (RT)
D = 7' 17' 55.8"
L = 179.60'
T = 90.19'
R = 785.00'

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