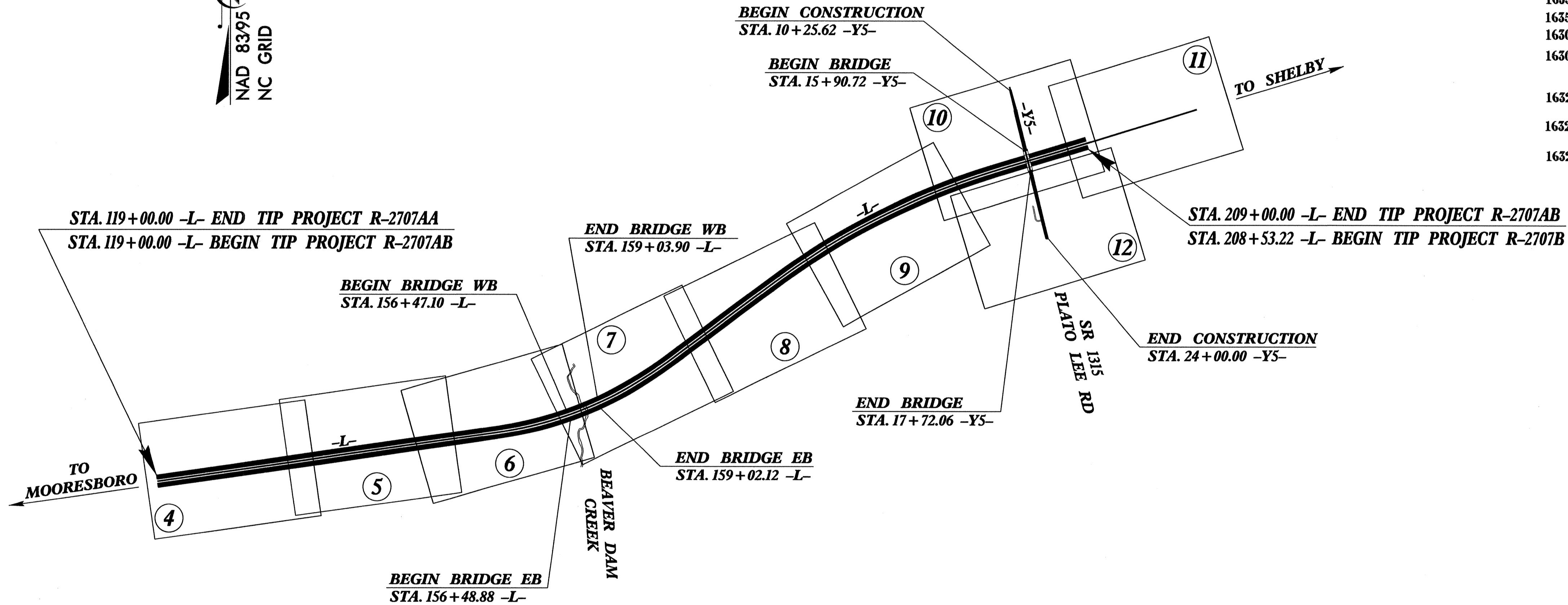


STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	R-2707AB	EC-1	
STATE PROJ. NO.	F.A. PROJ. NO.	DESCRIPTION	

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

LOCATION: US 74 (SHELBY BYPASS) FROM EAST OF SR 1318  
(KIMBRELL ROAD) TO EAST OF SR 1315 (PLATO LEE ROAD)

TYPE OF WORK: GRADING, PAVING, DRAINAGE, AND STRUCTURES



**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	
1630.02	Silt Basin Type B	
1633.01	Temporary Rock Silt Check Type-A	
	Temporary Rock Silt Check Type-A with Matting and Polyacrylamide (PAM)	
1633.02	Temporary Rock Silt Check Type-B	
	Wattle / Coir Fiber Wattle	
	Wattle / Coir Fiber Wattle with Polyacrylamide (PAM)	
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.

**TIP PROJECT: R-2707AB**

**GRAPHIC SCALE**

0

PLANS

0

PROFILE (HORIZONTAL)

0

PROFILE (VERTICAL)

ROADSIDE ENVIRONMENTAL UNIT  
DIVISION OF HIGHWAYS  
STATE OF NORTH CAROLINA

THESE EROSION AND SEDIMENT CONTROL PLANS COMPLY  
WITH THE REGULATIONS SET FORTH BY THE  
NCG-010000 GENERAL CONSTRUCTION PERMIT EFFECTIVE AUGUST 3, 2011  
ISSUED BY THE NORTH CAROLINA DEPARTMENT OF ENVIRONMENT AND  
NATURAL RESOURCES DIVISION OF WATER QUALITY.

Prepared in the Office of:  
**ROADSIDE ENVIRONMENTAL UNIT**  
1 South Wilmington St.  
Raleigh, NC 27611  
**2012 STANDARD SPECIFICATIONS**

Roadway Standard Drawings

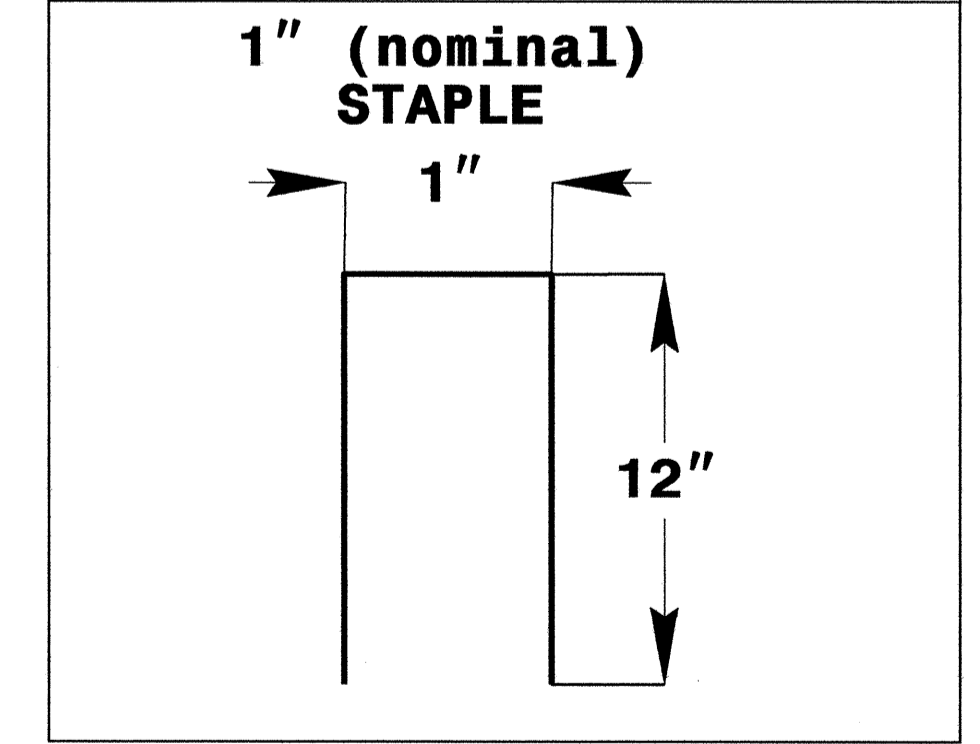
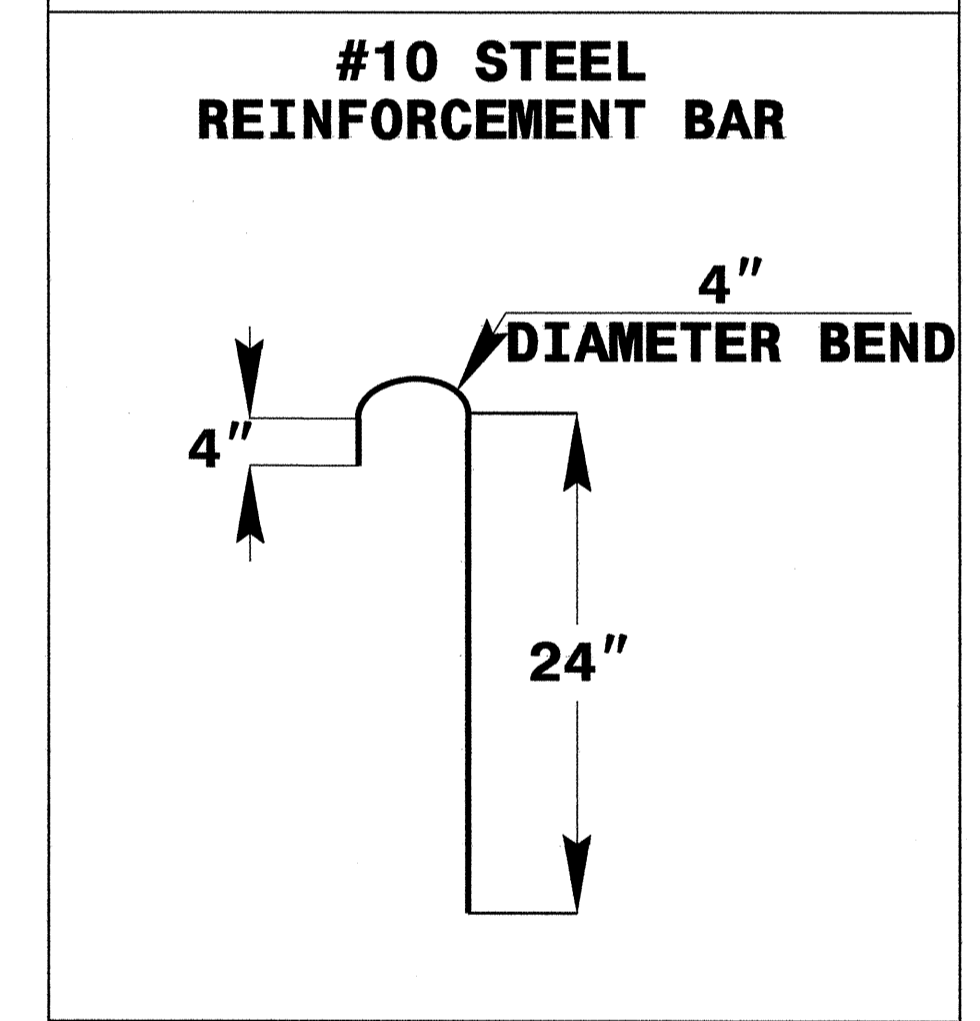
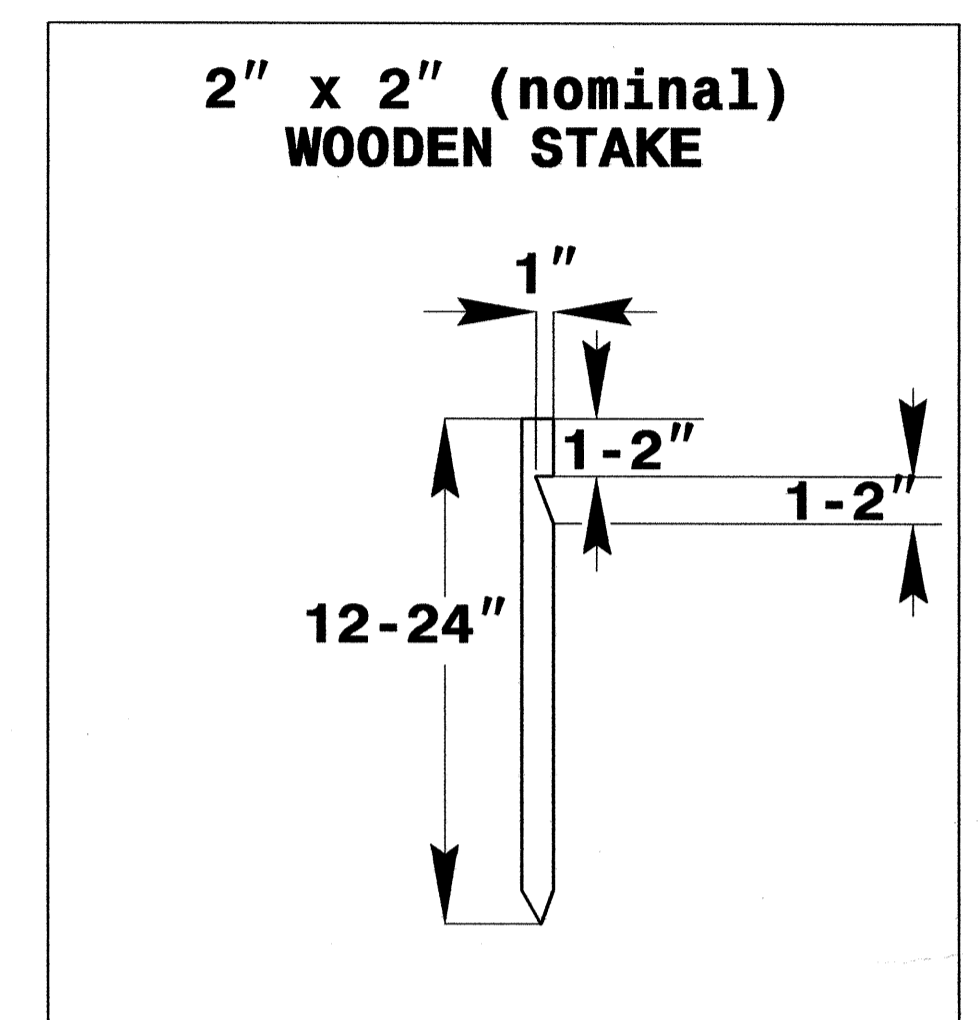
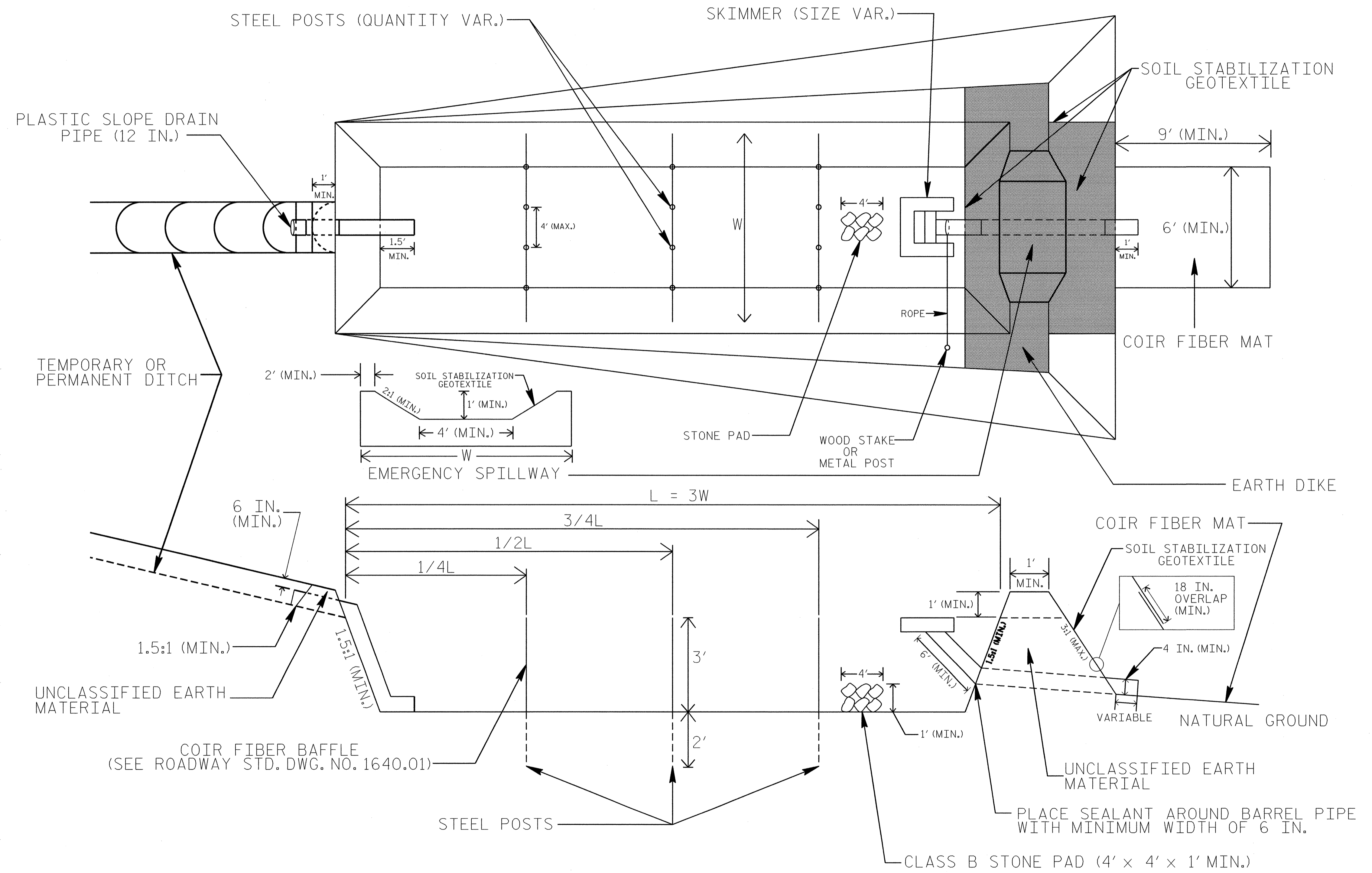
The following roadway english standards as appear in "Roadway Standard Drawings"- Roadway Design Unit - N. C. Department of Transportation - Raleigh, N. C., dated January 2012 and the latest revision thereto are applicable to this project and by reference hereby are considered a part of these plans.

1604.01 Railroad Erosion Control Detail	1632.01 Rock Inlet Sediment Trap Type A
1605.01 Temporary Silt Fence	1632.02 Rock Inlet Sediment Trap Type B
1606.01 Special Sediment Control Fence	1632.03 Rock Inlet Sediment Trap Type C
1607.01 Gravel Construction Entrance	1633.01 Temporary Rock Silt Check Type A
1622.01 Temporary Berms and Slope Drains	1633.02 Temporary Rock Silt Check Type B
1630.01 Riser Basin	1634.01 Temporary Rock Sediment Dam Type A
1630.02 Silt Basin Type B	1634.02 Temporary Rock Sediment Dam Type B
1630.03 Temporary Silt Ditch	1635.01 Rock Pipe Inlet Sediment Trap Type A
1630.04 Stilling Basin	1635.02 Rock Pipe Inlet Sediment Trap Type B
1630.05 Temporary Diversion	1640.01 Coir Fiber Baffle
1630.06 Special Stilling Basin	1645.01 Temporary Stream Crossing
1631.01 Matting Installation	

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PROJECT REFERENCE NO. R-2707AB	SHEET NO. EC-02
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

# SKIMMER BASIN WITH BAFFLES DETAIL



## COIR FIBER MAT ANCHOR OPTIONS

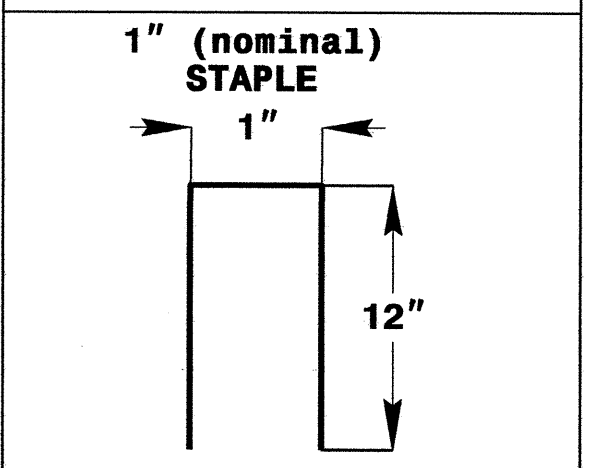
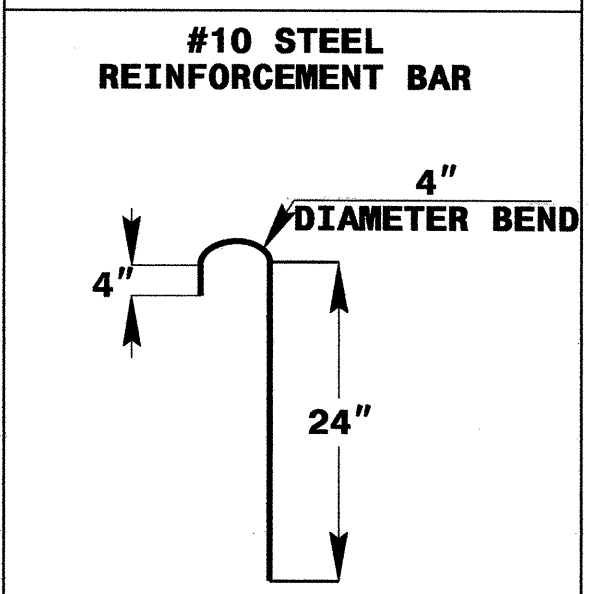
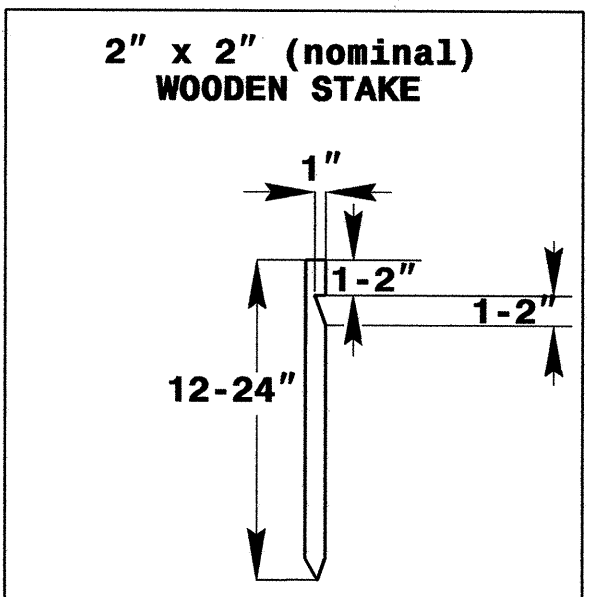
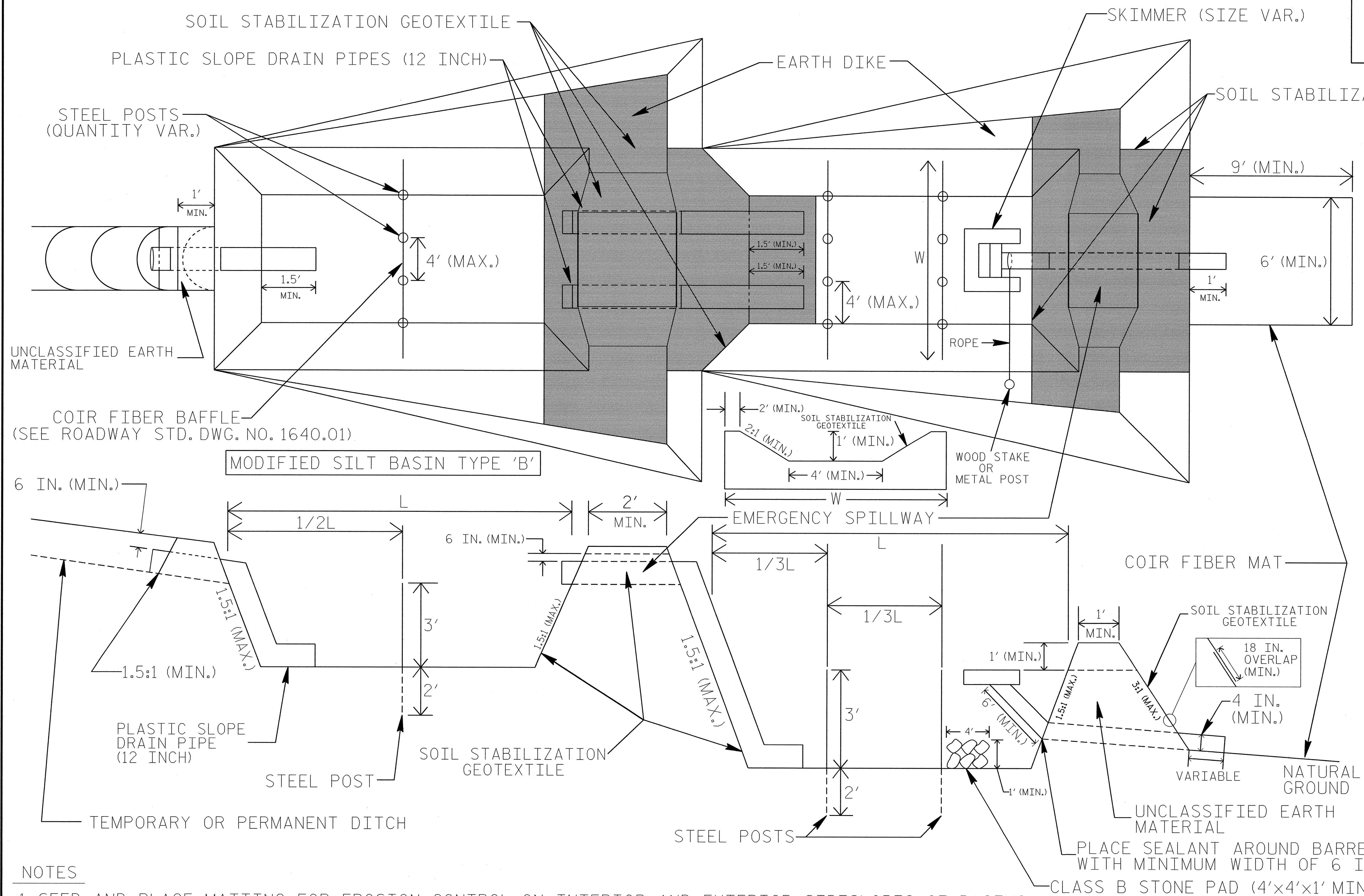
### NOTES

1. SEED AND PLACE MATTING FOR EROSION CONTROL ON INTERIOR AND EXTERIOR SIDESLOPES.
2. LIMIT EARTH DIKE HEIGHT TO 5 FT.
3. FOR BASIN DEPTH OF 3 FT., THE MINIMUM BASIN WIDTH SHALL BE 9 FT.
4. DETERMINE EMERGENCY SPILLWAY WEIR LENGTH (FT.) USING  $Q/0.8$ , WHERE Q IS FLOW RATE (CFS) INTO BASIN.
5. PLASTIC SLOPE DRAIN PIPE AT INLET OF BASIN MAY BE REPLACED BY FILTRATION GEOTEXTILE OR TARP AS DIRECTED.
6. SOIL STABILIZATION GEOTEXTILE FOR EMERGENCY SPILLWAY SHALL BE ONE CONTINUOUS PIECE OF MATERIAL OR OVERLAPPED 18 IN. (MIN.).

NOT TO SCALE

# TIERED SKIMMER BASIN DETAIL

PROJECT REFERENCE NO. R-2707AB	SHEET NO. EC-2A
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER



### COIR FIBER MAT ANCHOR OPTIONS

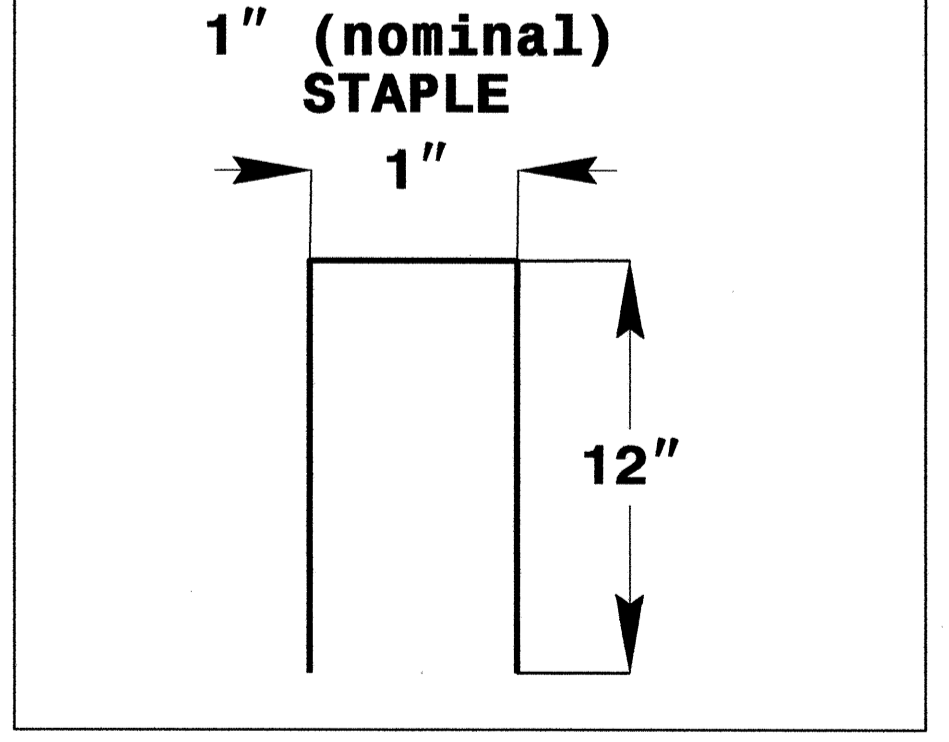
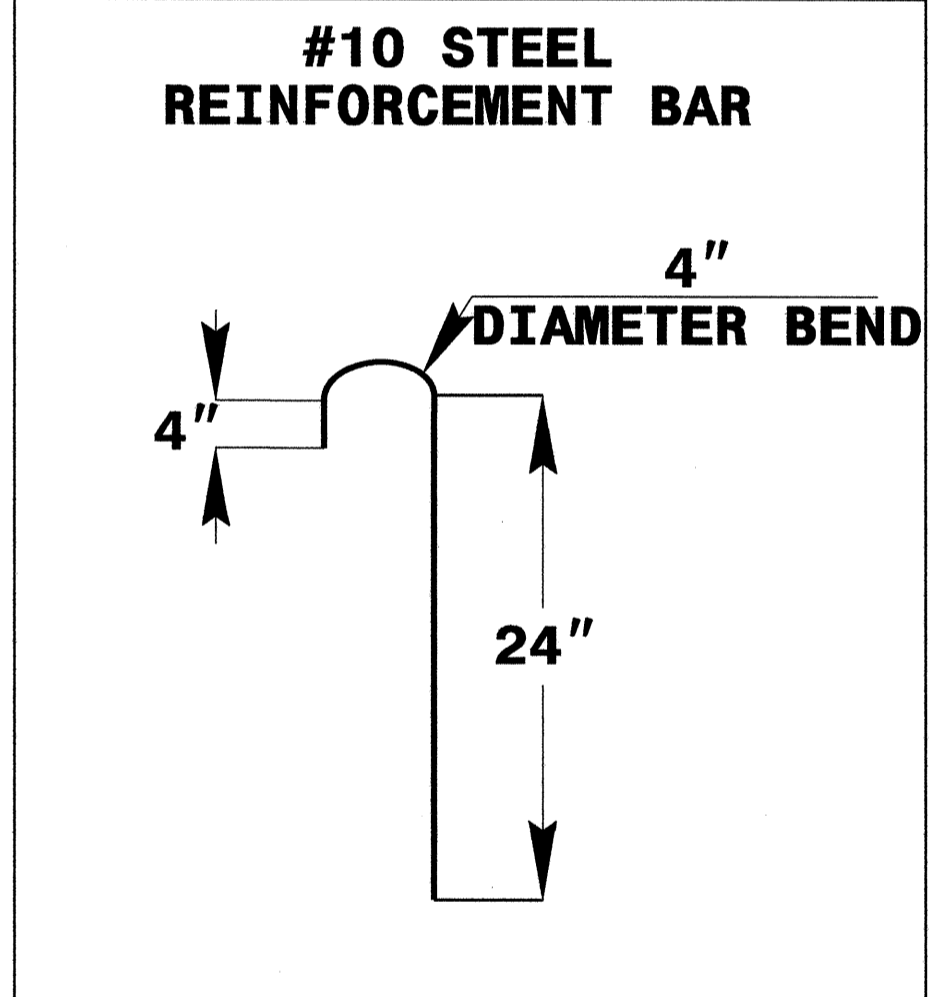
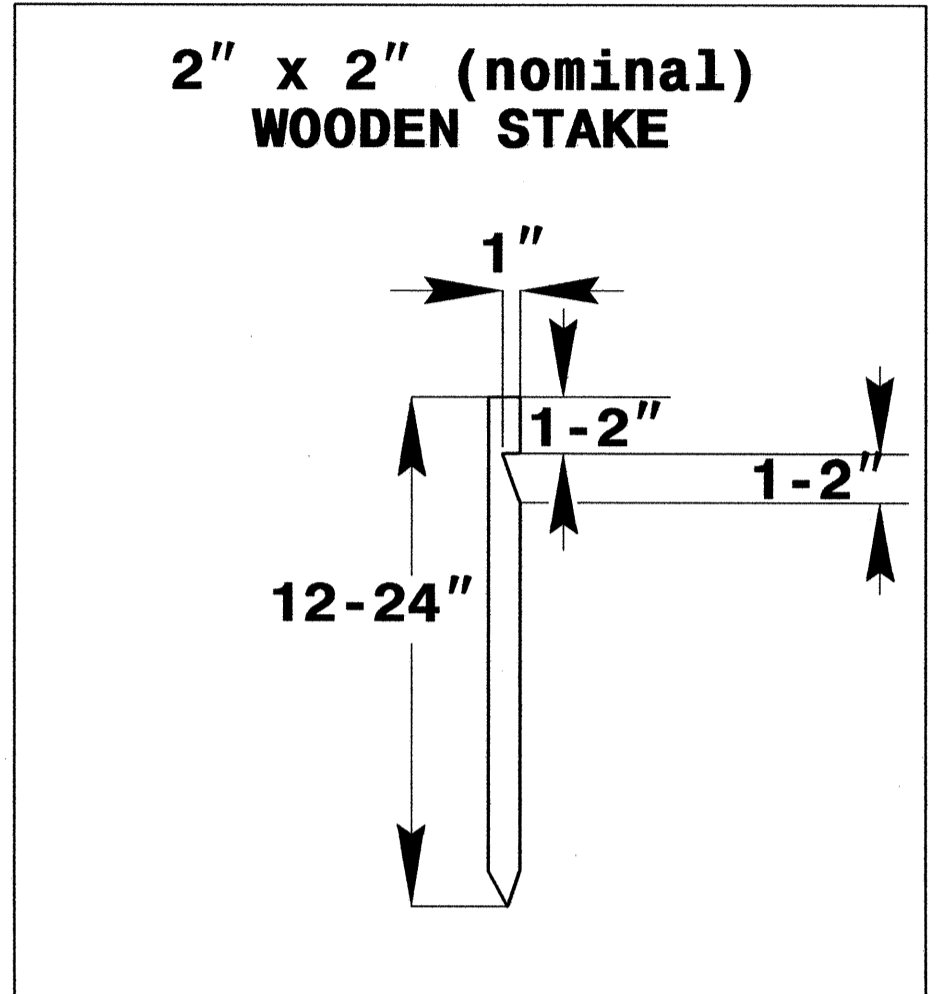
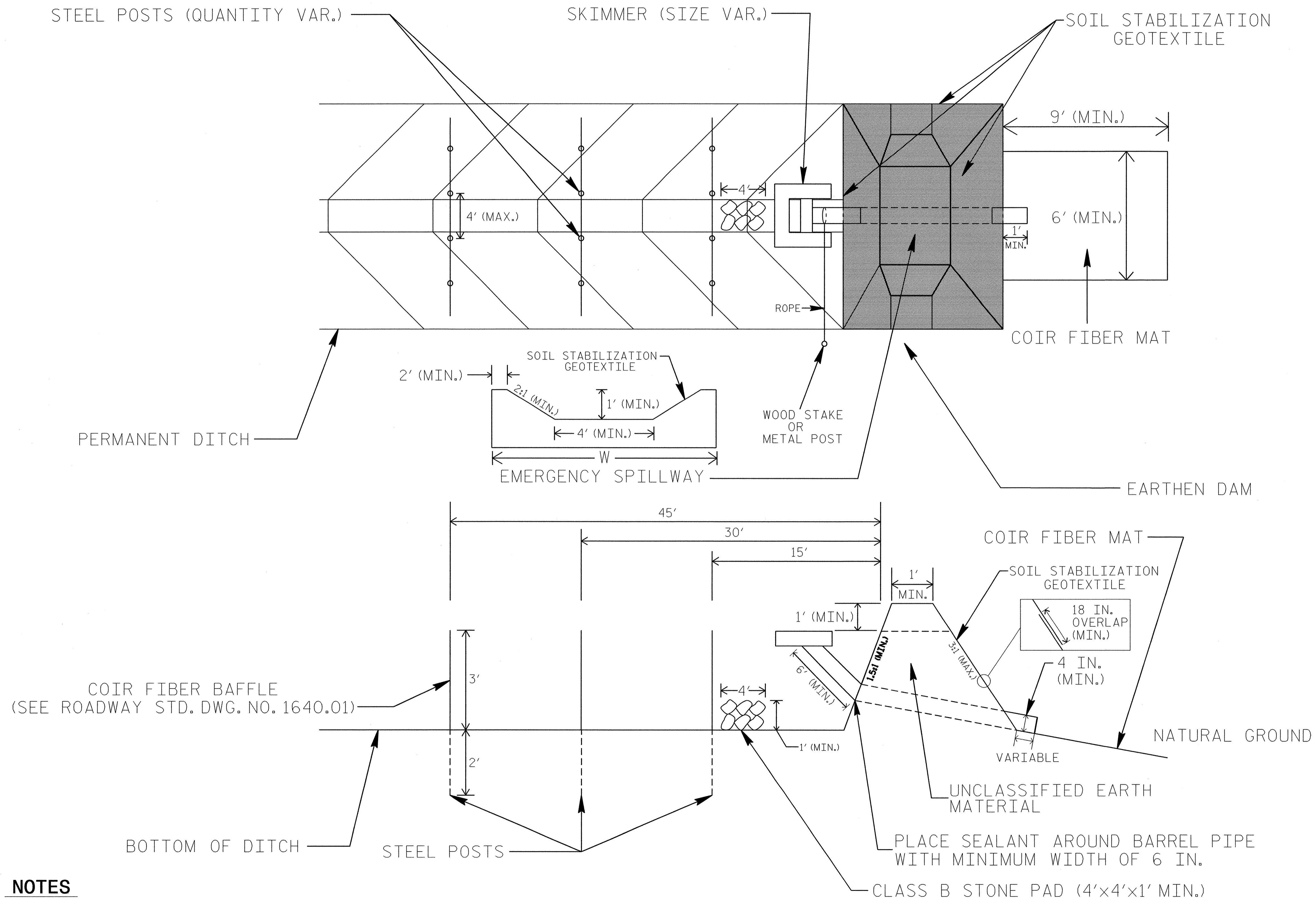
### NOTES

1. SEED AND PLACE MATTING FOR EROSION CONTROL ON INTERIOR AND EXTERIOR 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. FOR BASIN DEPTHS OF 3 FT., 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.
6. SOIL STABILIZATION GEOTEXTILE FOR EMERGENCY SPILLWAYS SHALL BE ONE CONTINUOUS PIECE OF MATERIAL OR OVERLAPPED 18 IN. (MIN.).

NOT TO SCALE

PROJECT REFERENCE NO. R-2707AB	SHEET NO. EC-2B
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

# EARTHEN DAM WITH SKIMMER



## COIR FIBER MAT ANCHOR OPTIONS

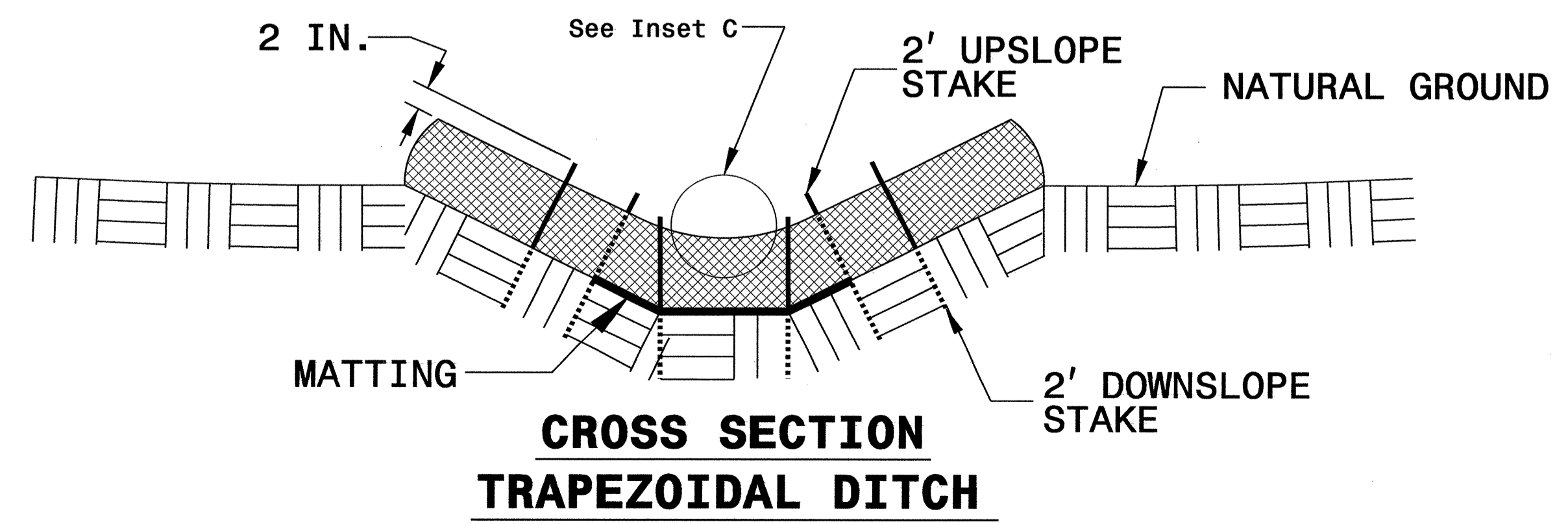
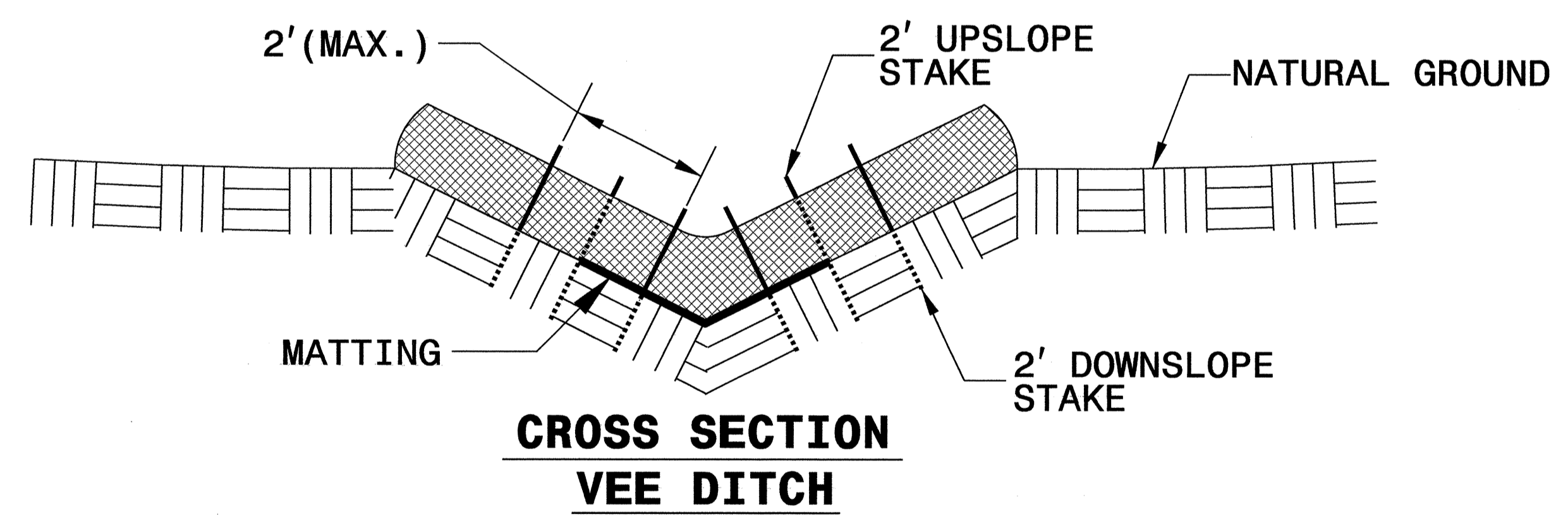
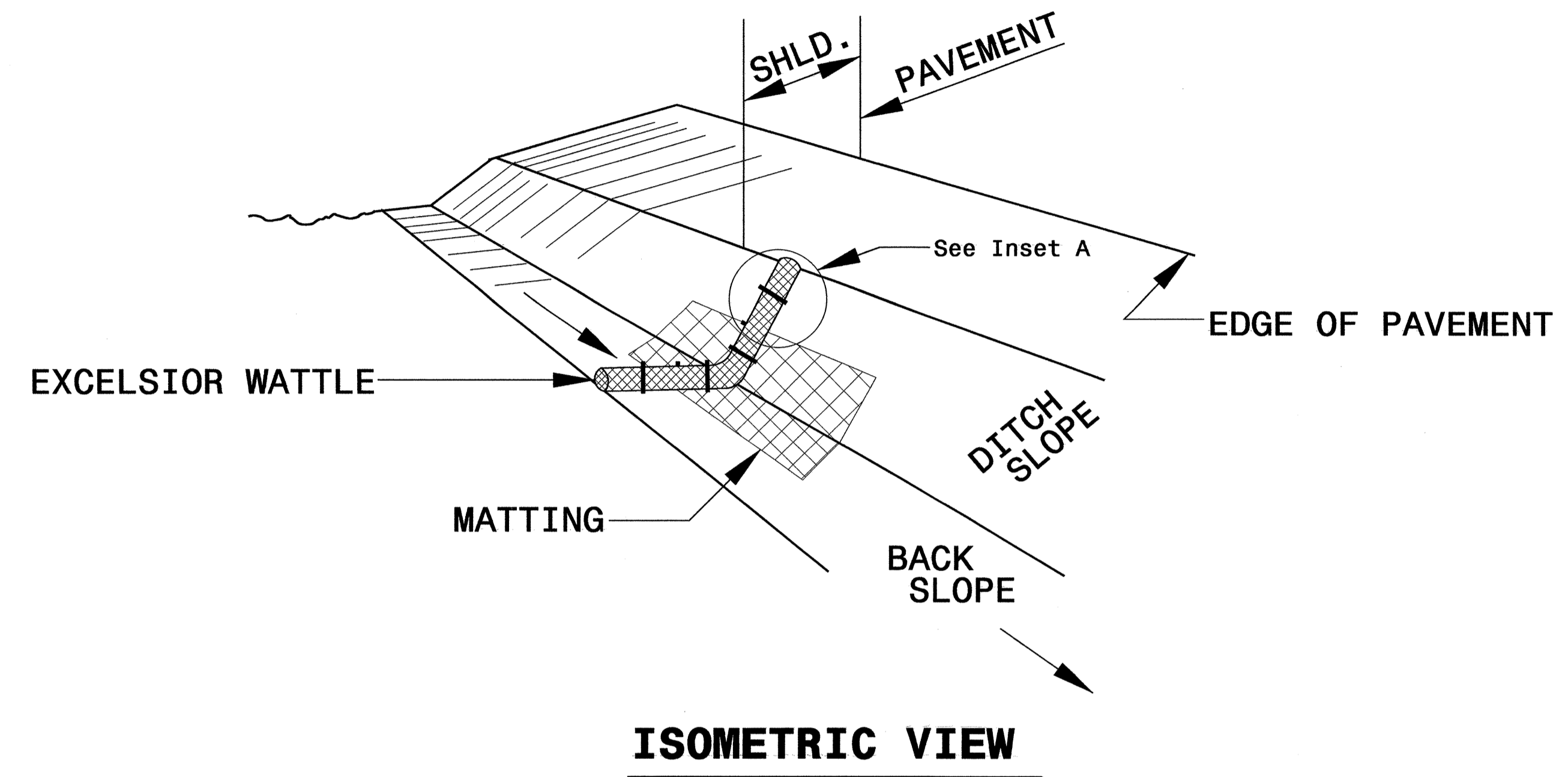
### NOTES

1. LIMIT EARTHEN DAM HEIGHT TO 5 FT.
2. DETERMINE EMERGENCY SPILLWAY LENGTH (FT.) USING  $Q/0.8$ , WHERE Q IS FLOW RATE (CFS) INTO BASIN.
3. SOIL STABILIZATION GEOTEXTILE FOR EMERGENCY SPILLWAY SHALL BE ONE CONTINUOUS PIECE OF MATERIAL OR OVERLAPPED 18 IN. (MIN.).

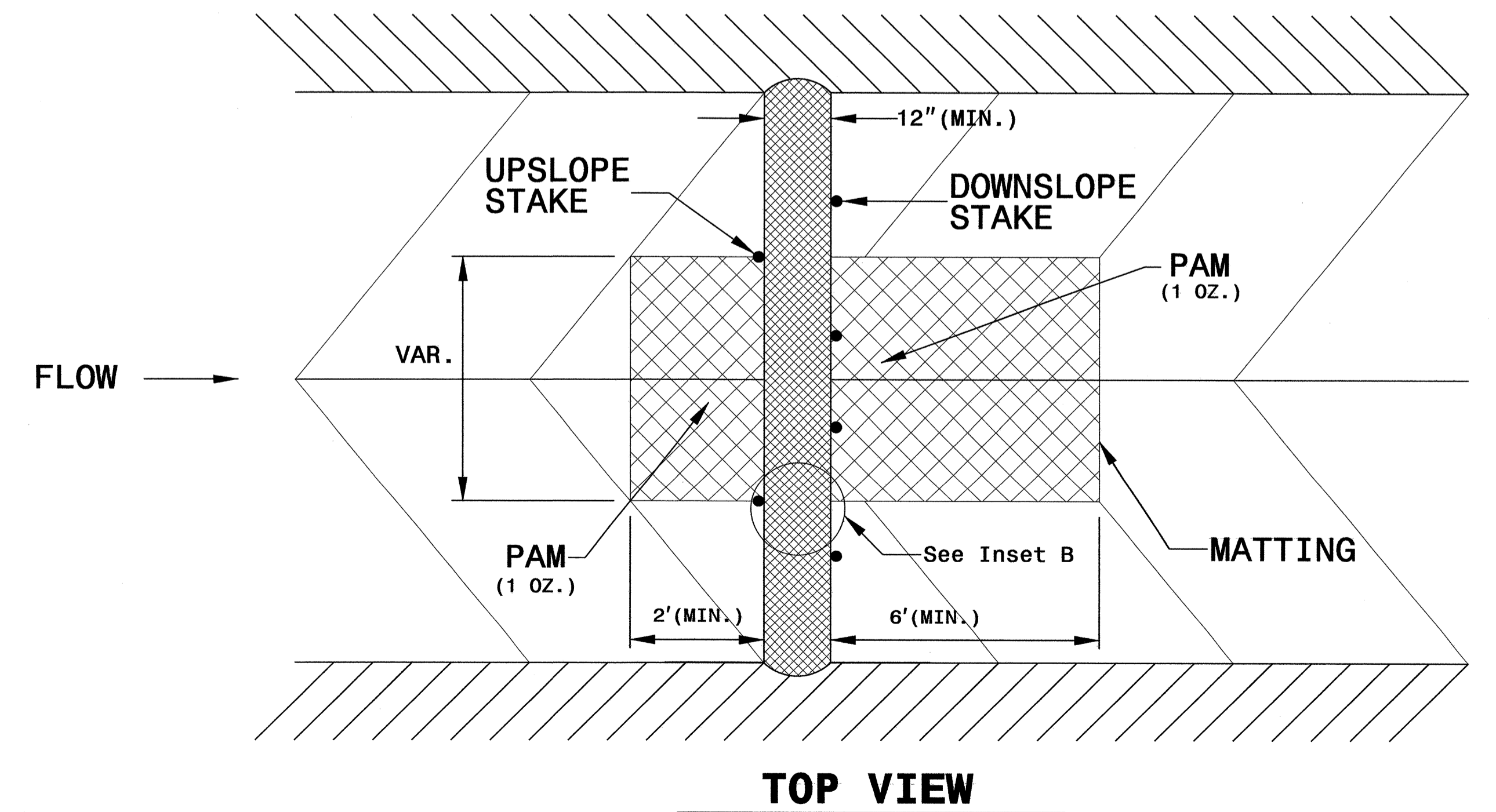
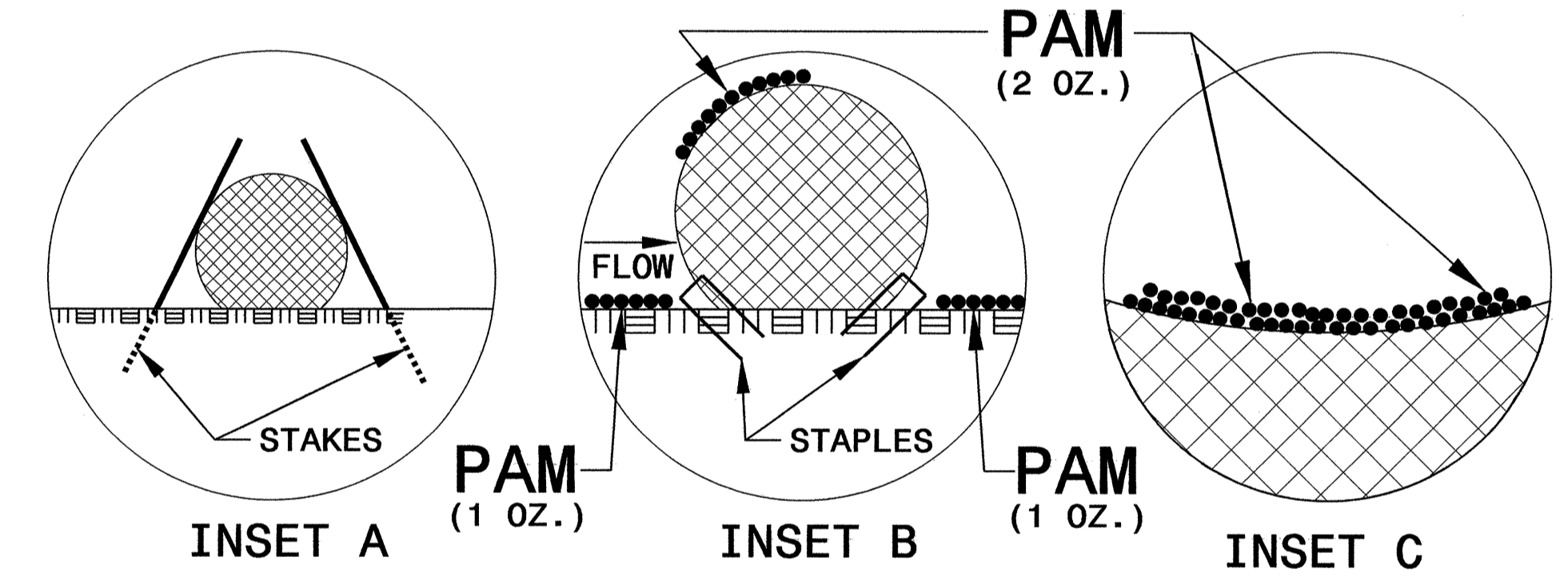
NOT TO SCALE

PROJECT REFERENCE NO. R-2707AB	SHEET NO. EC-2C
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

# WATTLE WITH POLYACRYLAMIDE (PAM) DETAIL

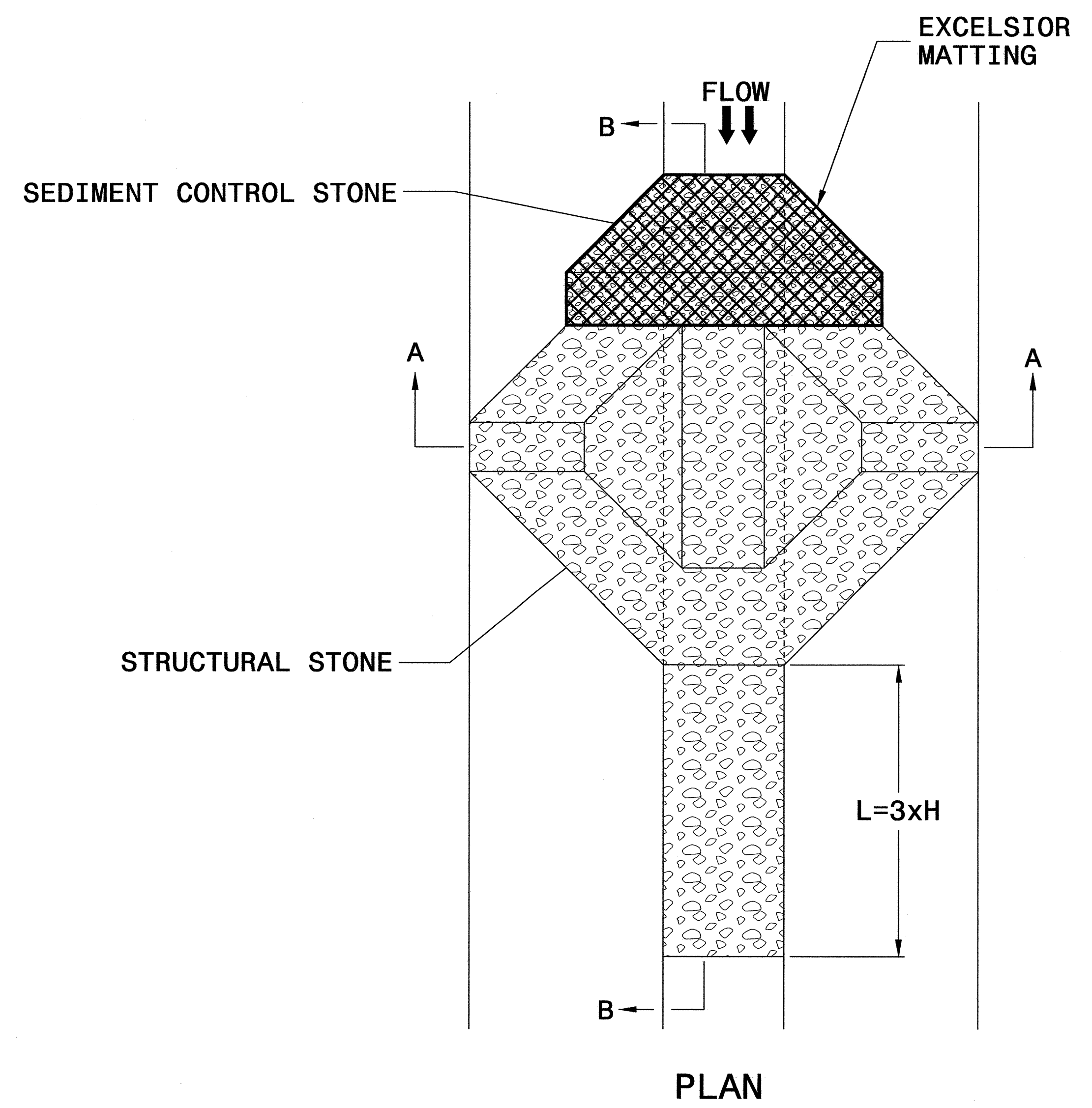


- NOTES:
- USE MINIMUM 12 IN. DIAMETER EXCELSIOR WATTLE.
  - USE 2 FT. WOODEN STAKES WITH A 2 IN. BY 2 IN. NOMINAL CROSS SECTION.
  - ONLY INSTALL WATTLE(S) TO A HEIGHT IN DITCH SO FLOW WILL NOT WASH AROUND WATTLE AND SCOUR DITCH SLOPES AND AS DIRECTED.
  - INSTALL A MINIMUM OF 2 UPSLOPE STAKES AND 4 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.
  - PRIOR TO POLYACRYLAMIDE (PAM) APPLICATION, OBTAIN A SOIL SAMPLE FROM PROJECT LOCATION, AND FROM OFFSITE MATERIAL, AND ANALYZE FOR APPROPRIATE PAM FLOCCULANT TO BE APPLIED TO EACH WATTLE.
  - INITIALLY APPLY 2 OUNCES OF ANIONIC OR NEUTRALLY CHARGED PAM OVER WATTLE WHERE WATER WILL FLOW AND 1 OUNCE OF PAM ON MATTING ON EACH SIDE OF WATTLE. REAPPLY PAM AFTER EVERY RAINFALL EVENT THAT IS EQUAL TO OR EXCEEDS 0.50 IN.



PROJECT REFERENCE NO. R-2707AB	SHEET NO. EC-2D
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

# TEMPORARY ROCK SILT CHECK TYPE 'A' WITH EXCELSIOR MATTING AND POLYACRYLAMIDE (PAM)

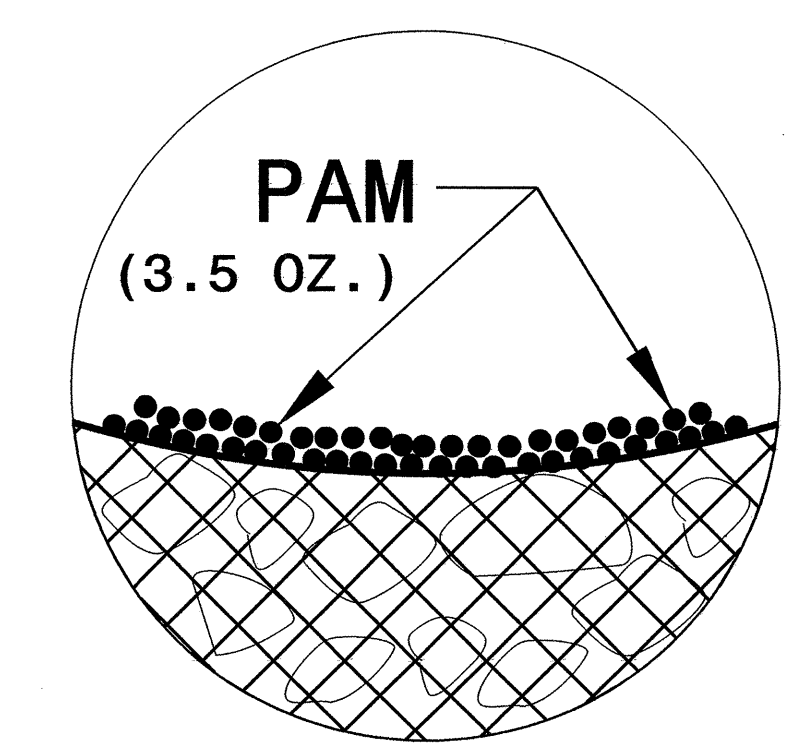


## NOTES

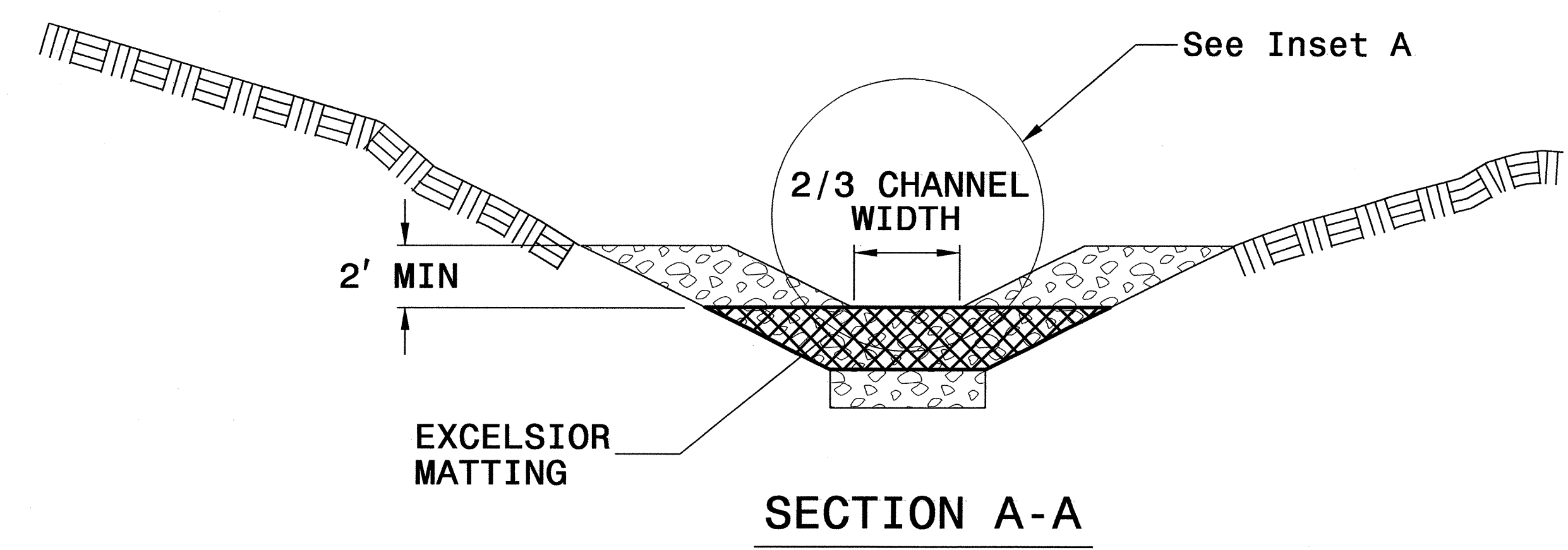
USE EXCELSIOR FOR MATTING MATERIAL AND ANCHOR MATTING SECTION AT TOP AND BOTTOM WITH CLASS B STONE.

PRIOR TO POLYACRYLAMIDE (PAM) APPLICATION, OBTAIN A SOIL SAMPLE FROM PROJECT LOCATION, AND FROM OFFSITE MATERIAL, AND ANALYZE FOR APPROPRIATE PAM FLOCCULANT TO BE APPLIED TO EACH ROCK SILT CHECK.

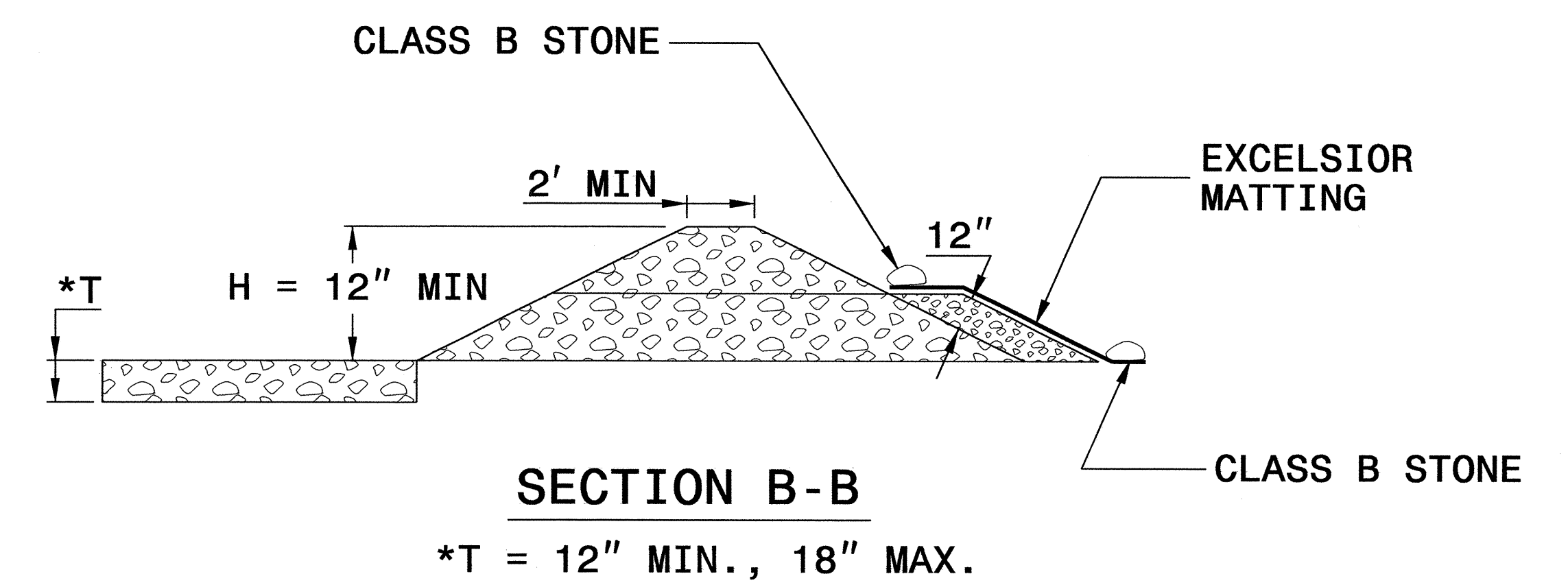
INITIALLY APPLY 3.5 OUNCES OF POLYACRYLAMIDE (PAM) TO TOP OF MATTING SECTION AND AFTER EVERY RAINFALL EVENT THAT EQUALS OR EXCEEDS 0.50 INCHES.



INSET A



SECTION A-A



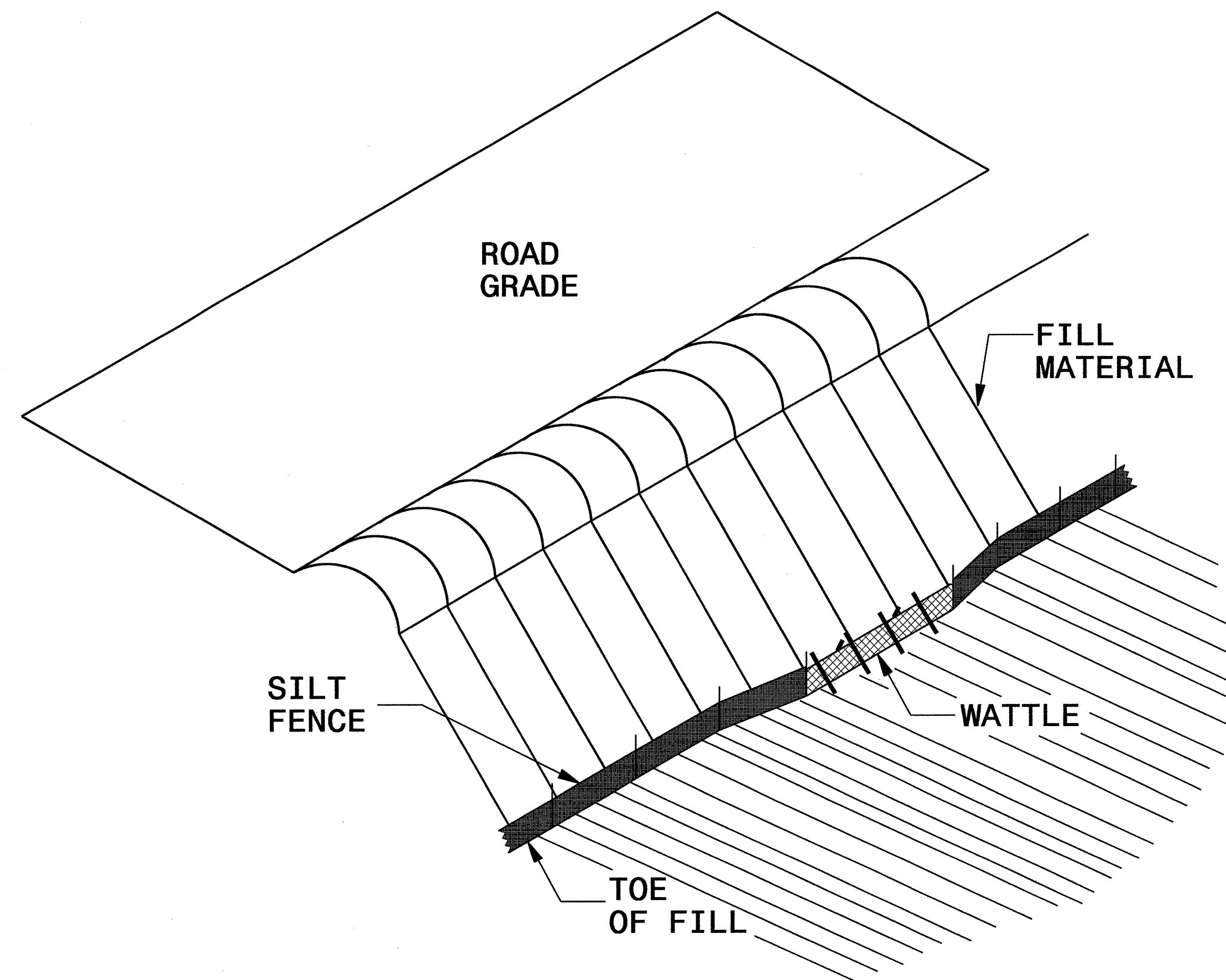
SECTION B-B

\*T = 12" MIN., 18" MAX.

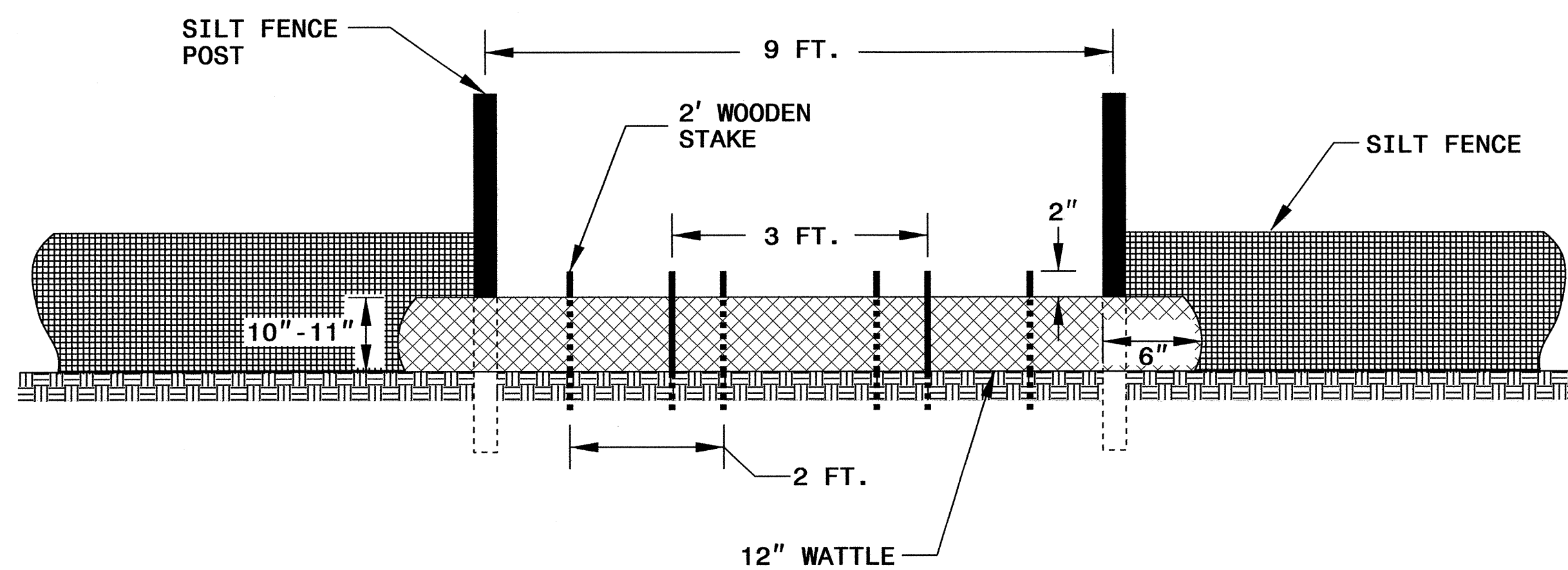
NOT TO SCALE

# SILT FENCE COIR FIBER WATTLE BREAK DETAIL

PROJECT REFERENCE NO. R-2707AB	SHEET NO. EC-2E
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER



**ISOMETRIC VIEW**

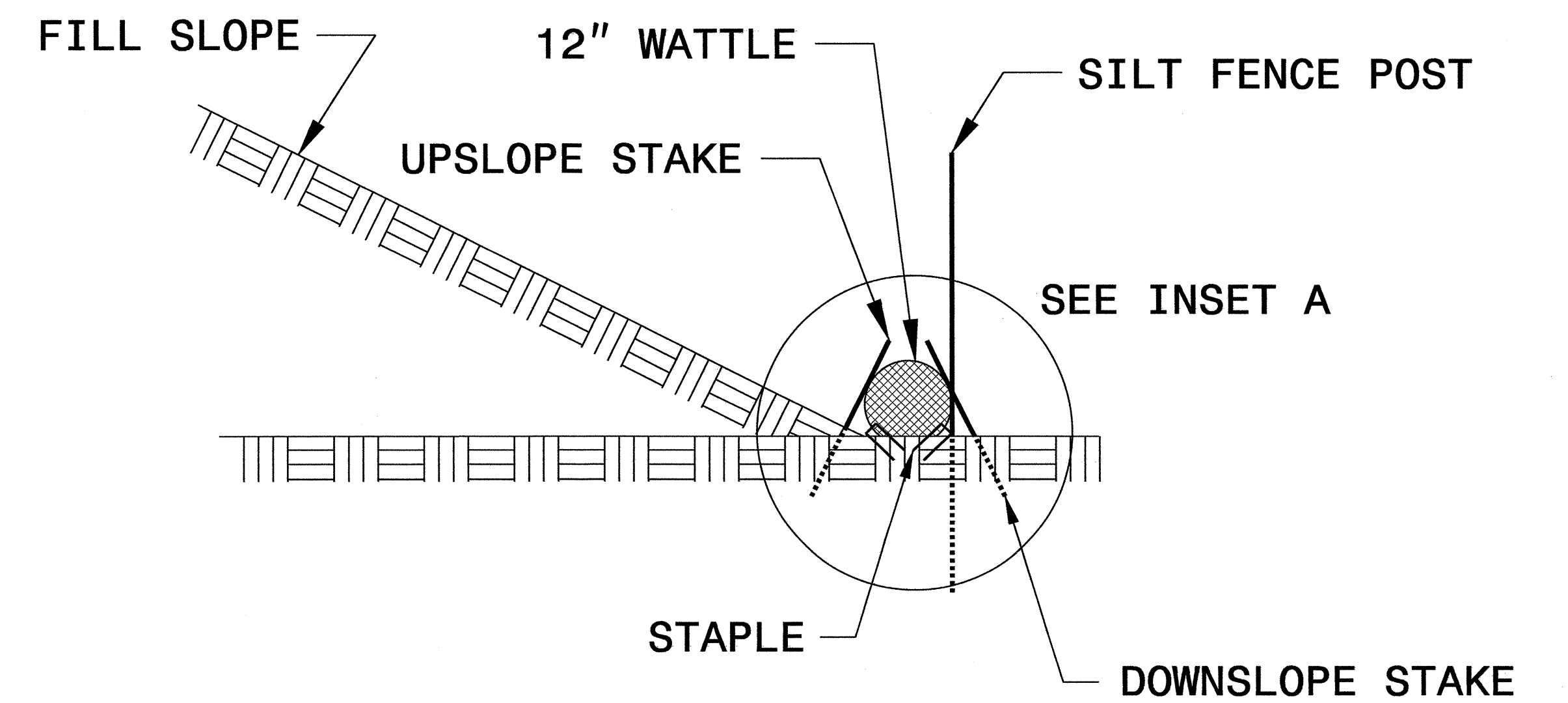
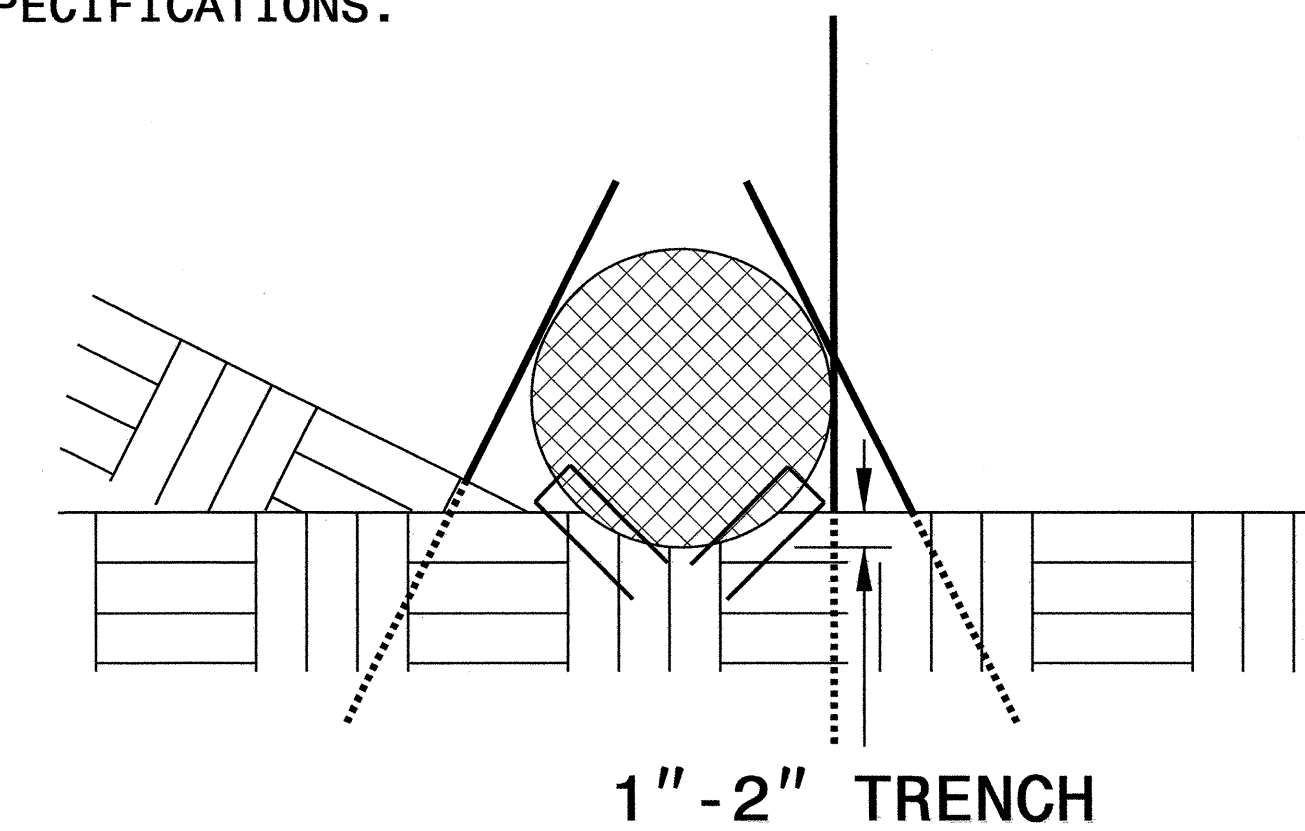


**VIEW FROM SLOPE**

**NOTES:**

- USE MINIMUM 12 IN. DIAMETER COIR FIBER (COCONUT FIBER) WATTLE AND LENGTH OF 10 FT.
- EXCAVATE A 1 TO 2 INCH TRENCH FOR WATTLE TO BE PLACED.
- DO NOT PLACE WATTLE ON TOE OF SLOPE.
- USE 2 FT. WOODEN STAKES WITH A 2 IN. BY 2 IN. NOMINAL CROSS SECTION.
- INSTALL A MINIMUM OF 2 UPSLOPE STAKES AND 4 DOWNSLOPE STAKES AT AN ANGLE TO WEDGE WATTLE TO GROUND.
- 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.
- WATTLE INSTALLATION CAN BE ON OUTSIDE OF THE SILT FENCE AS DIRECTED.
- INSTALL TEMPORARY SILT FENCE IN ACCORDANCE WITH SECTION 1605 OF THE STANDARD SPECIFICATIONS.

**INSET A**



**SIDE VIEW**





DIVISION OF HIGHWAYS  
STATE OF NORTH CAROLINA

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PROJECT REFERENCE NO. <i>R-2707AB</i>	SHEET NO. <i>EC-3A</i>
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

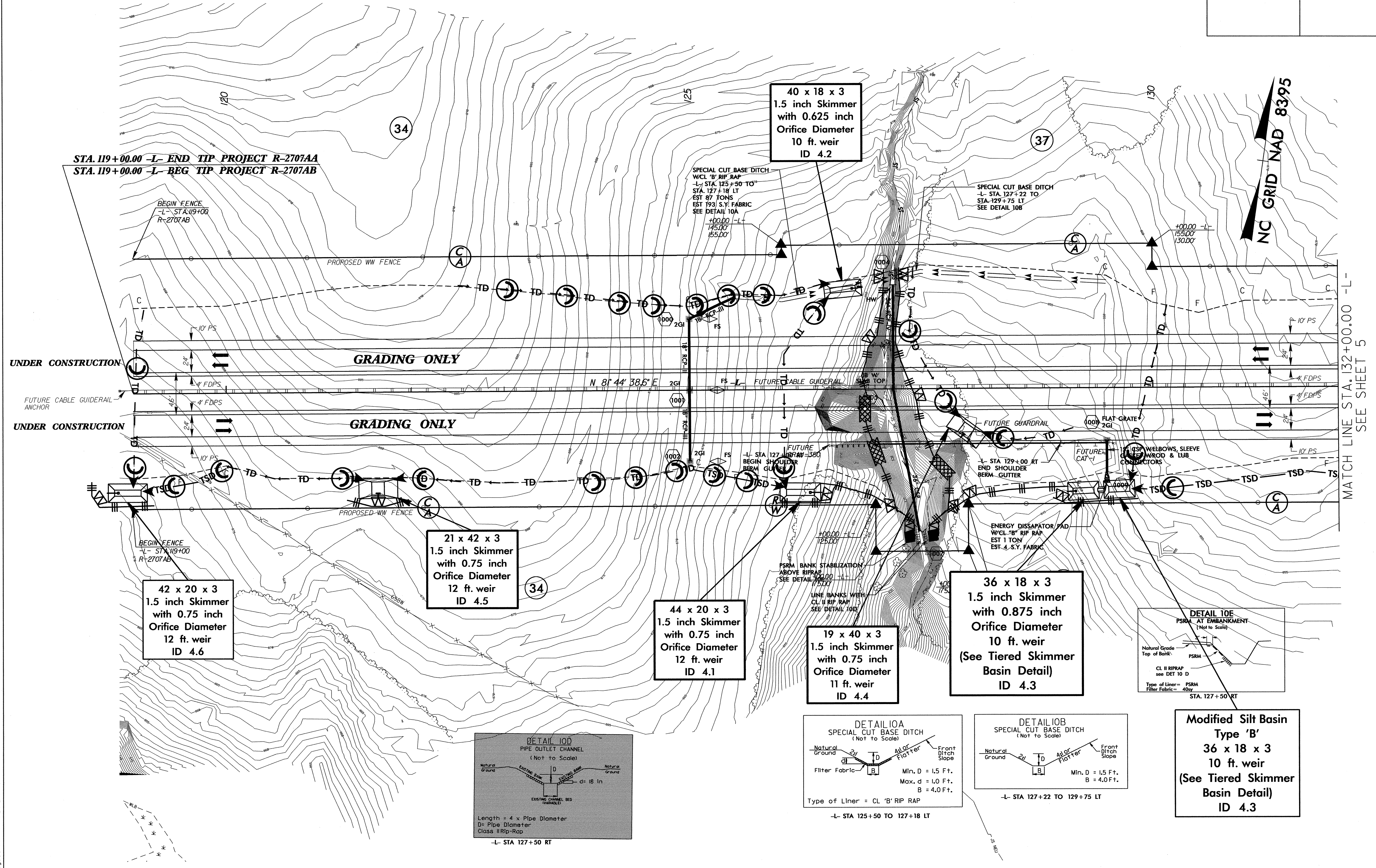
# SOIL STABILIZATION TIMEFRAMES

<i>SITE DESCRIPTION</i>	<i>STABILIZATION TIME</i>	<i>TIMEFRAME EXCEPTIONS</i>
PERIMETER DIKES, SWALES, DITCHES AND SLOPES	7 DAYS	NONE
HIGH QUALITY WATER (HQW) ZONES	7 DAYS	NONE
SLOPES STEEPER THAN 3:1	7 DAYS	IF SLOPES ARE 10' OR LESS IN LENGTH AND ARE NOT STEEPER THAN 2:1, 14 DAYS ARE ALLOWED.
SLOPES 3:1 OR FLATTER	14 DAYS	7 DAYS FOR SLOPES GREATER THAN 50' IN LENGTH.
ALL OTHER AREAS WITH SLOPES FLATTER THAN 4:1	14 DAYS	NONE, EXCEPT FOR PERIMETERS AND HQW ZONES.

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 4

PROJECT REFERENCE NO. R-2707AB	SHEET NO. EC-04/CONST.04
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER



42 x 20 x 3  
1.5 inch Skimmer  
with 0.75 inch  
Orifice Diameter  
12 ft. weir  
ID 4.6

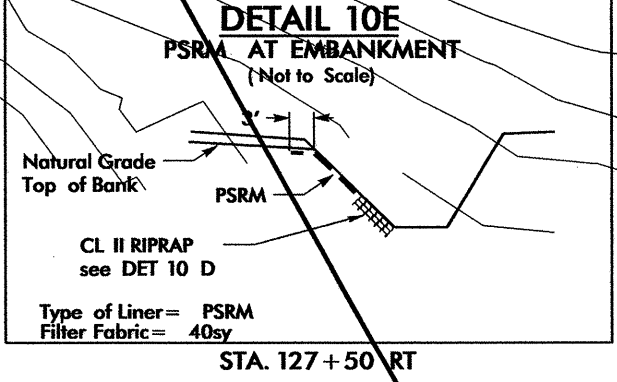
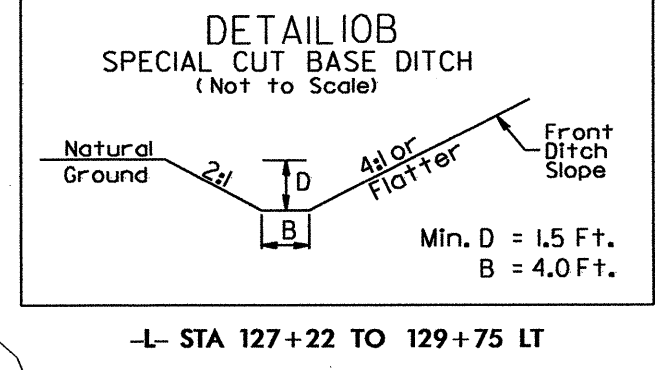
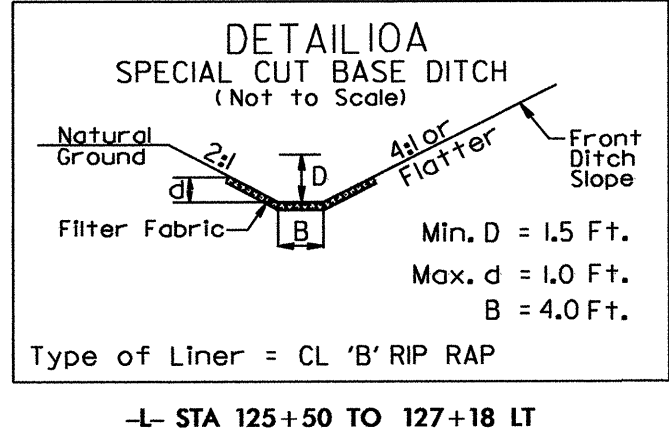
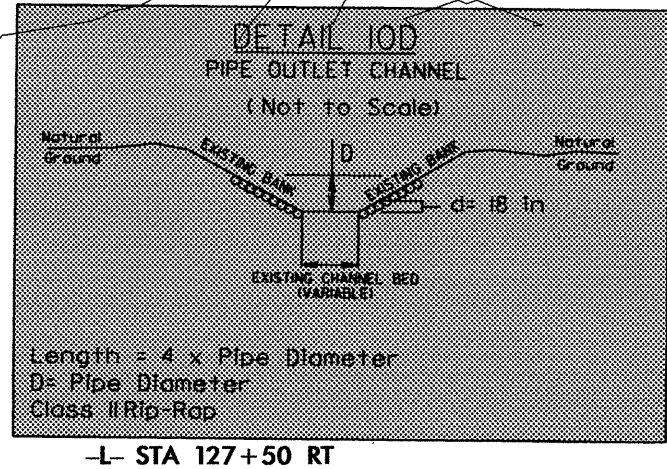
21 x 42 x 3  
1.5 inch Skimmer  
with 0.75 inch  
Orifice Diameter  
12 ft. weir  
ID 4.5

44 x 20 x 3  
1.5 inch Skimmer  
with 0.75 inch  
Orifice Diameter  
12 ft. weir  
ID 4.1

19 x 40 x 3  
1.5 inch Skimmer  
with 0.75 inch  
Orifice Diameter  
11 ft. weir  
ID 4.4

36 x 18 x 3  
1.5 inch Skimmer  
with 0.875 inch  
Orifice Diameter  
10 ft. weir  
(See Tiered Skimmer  
Basin Detail)  
ID 4.3

Modified Silt Basin  
Type 'B'  
36 x 18 x 3  
10 ft. weir  
(See Tiered Skimmer  
Basin Detail)  
ID 4.3

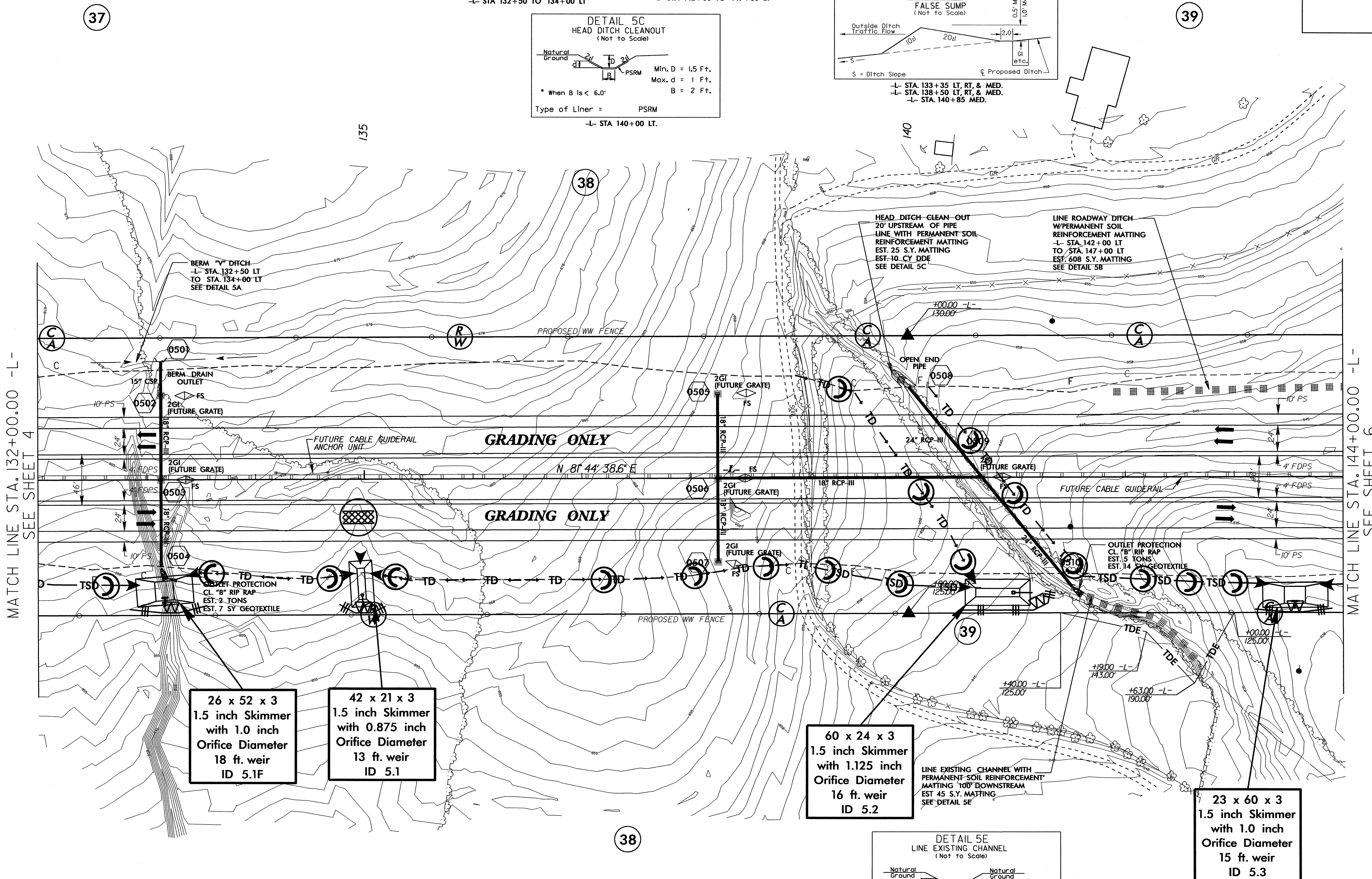
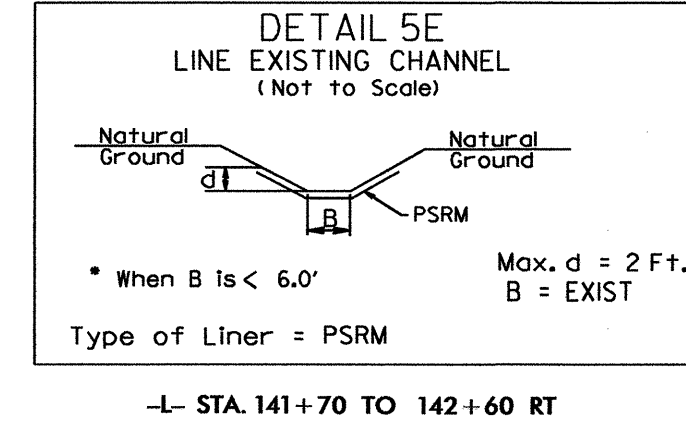
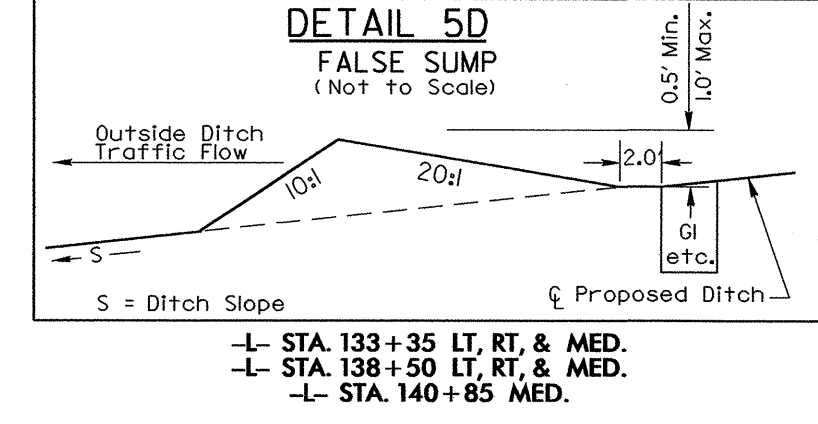
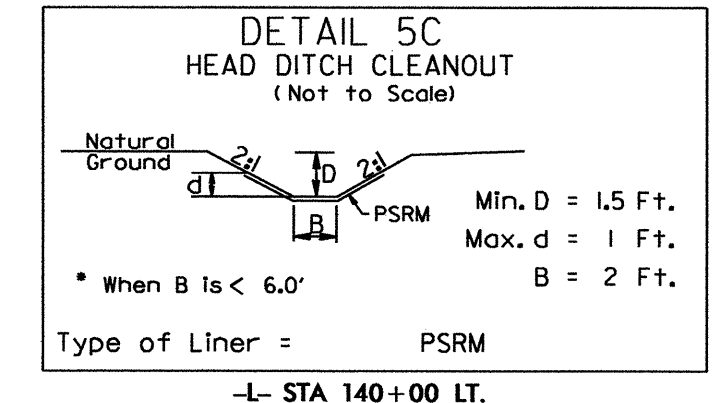
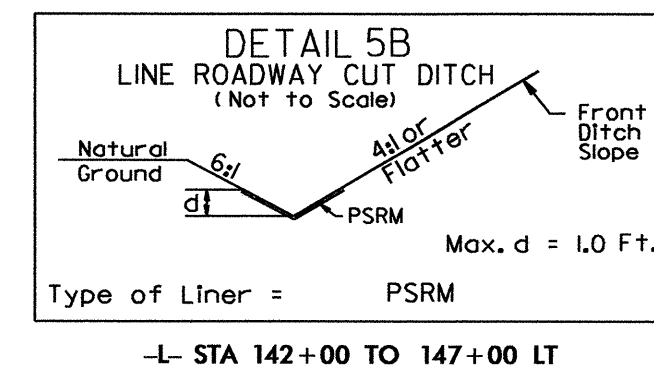
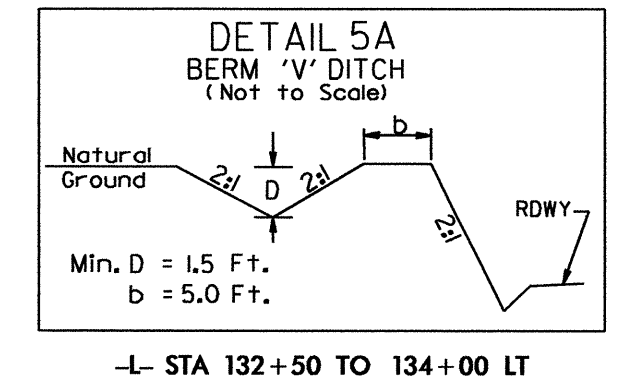


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NOTE:  
PLACE TEMPORARY ROCK SEDIMENT DAMS TYPE - B  
AND TEMPORARY ROCK SILT CHECKS TYPE - A AT  
DRAINAGE OUTLETS.

CLEARING AND GRUBBING  
EROSION CONTROL FOR  
CONSTRUCTION SHEET 5

PROJECT REFERENCE NO. R-2707AB	SHEET NO. EC-05/CONST.05
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER



26 x 52 x 3  
1.5 inch Skimmer  
with 1.0 inch  
Orifice Diameter  
18 ft. weir  
ID 5.1F

42 x 21 x 3  
1.5 inch Skimmer  
with 0.875 inch  
Orifice Diameter  
13 ft. weir  
ID 5.1

60 x 24 x 3  
1.5 inch Skimmer  
with 1.125 inch  
Orifice Diameter  
16 ft. weir  
ID 5.2

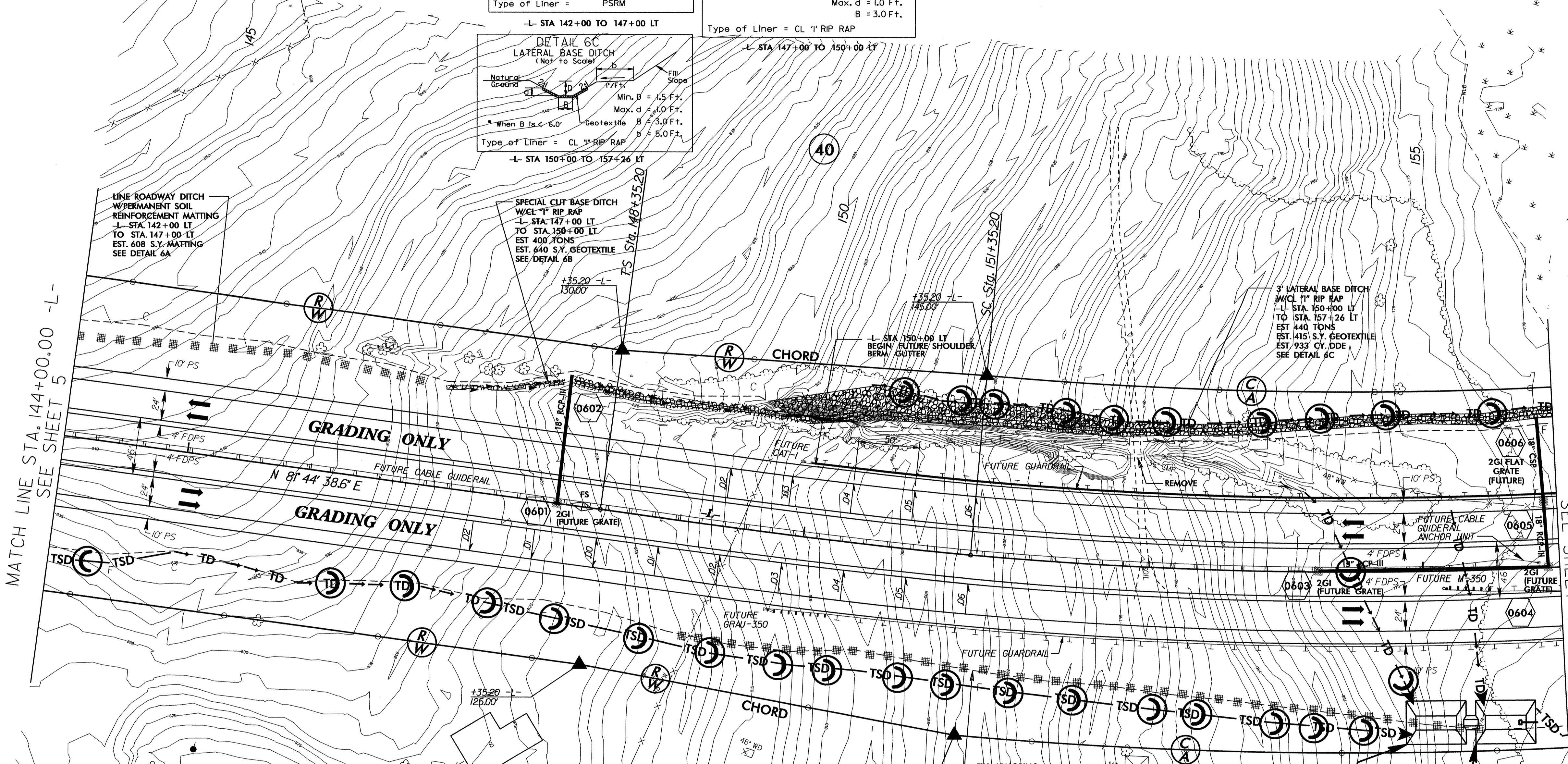
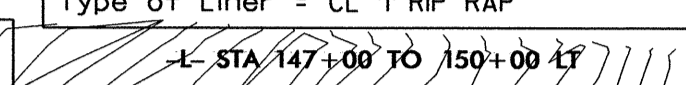
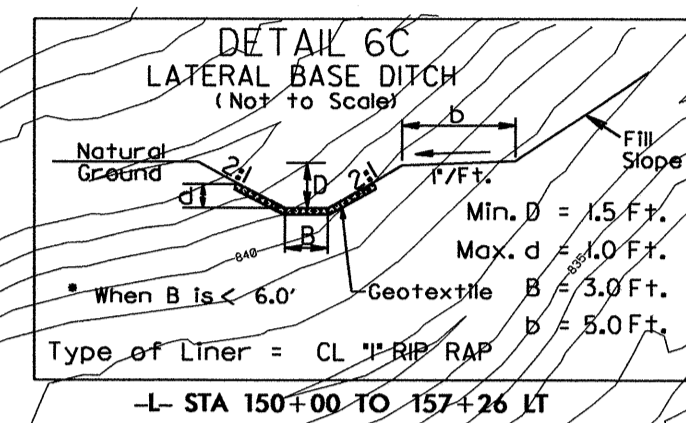
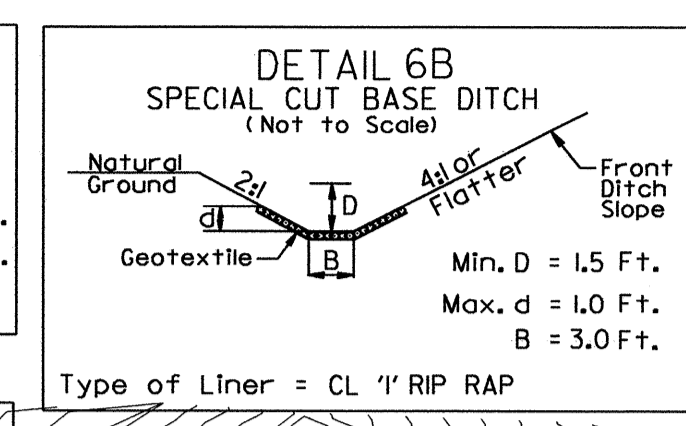
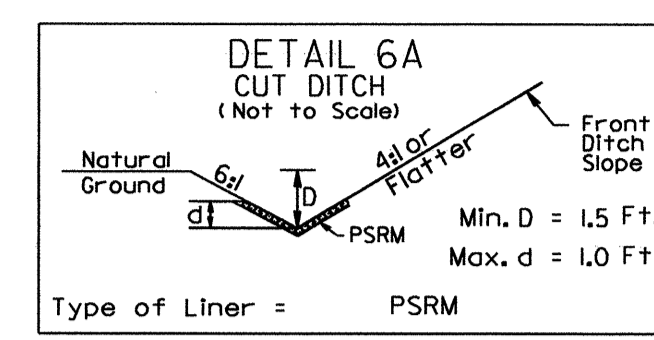
23 x 60 x 3  
1.5 inch Skimmer  
with 1.0 inch  
Orifice Diameter  
15 ft. weir  
ID 5.3

NC GRID NAD 8395

**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 6

PROJECT REFERENCE NO. R-2707AB		SHEET NO. EC-06/CONST.06	
RW SHEET NO.			
ROADWAY DESIGN ENGINEER		HYDRAULICS ENGINEER	



MATCH LINE STA. 144+00.00 -L-  
SEE SHEET 5

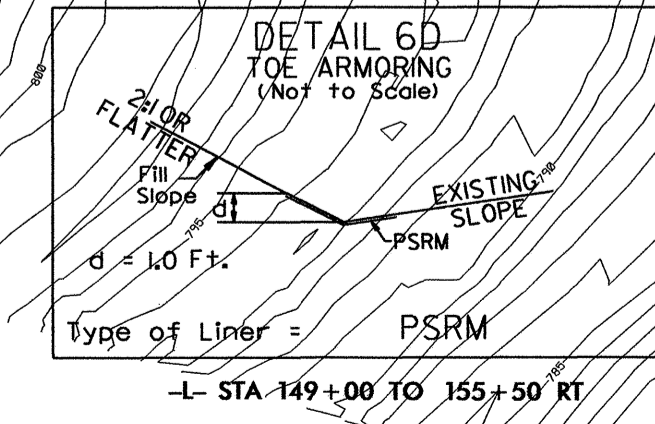
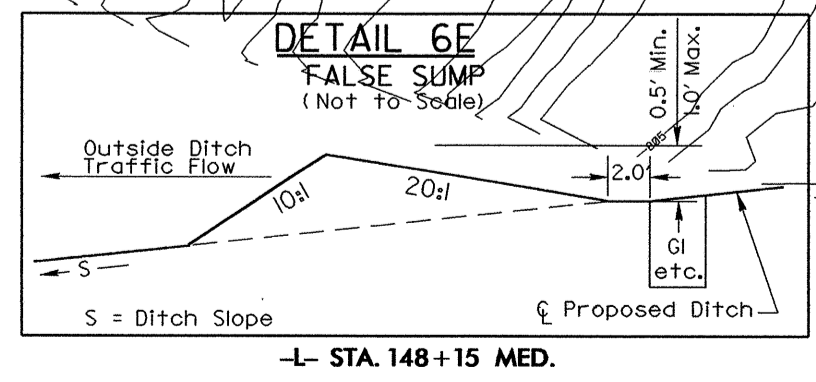
MATCH LINE STA. 156+10.00 -L-  
SEE SHEET 7

NC GRID NAD 8395

04-MAY-2013 09:37  
R:\Environmental\Design\R2707AB\_EC\_psh\_06.dgn  
Jogoodwin AT RENV247770

**52 x 35 x 3**  
**1.5 inch Skimmer**  
**with 1.50 inch**  
**Orifice Diameter**  
**27 ft. weir**  
**(See Tiered Skimmer**  
**Basin Detail)**  
**ID 6.1**

**Modified Silt Basin**  
**Type 'B'**  
**52 x 35 x 3**  
**27 ft. weir**  
**(See Tiered Skimmer**  
**Basin Detail)**  
**ID 6.1**



PROJECT REFERENCE NO. R-2707AB		SHEET NO. 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.

NOTE: UTILIZE SKIMMER BASIN AS STILLING BASIN WHERE APPLICABLE.

CLEARING AND GRUBBING EROSION CONTROL FOR CONSTRUCTION SHEET 7

24 x 48 x 3  
1.5 inch Skimmer  
with 0.875 inch  
Orifice Diameter  
16 ft. weir  
ID 7.2F

38 x 17 x 3  
1.5 inch Skimmer  
with 0.625 inch  
Orifice Diameter  
9 ft. weir  
ID 7.2

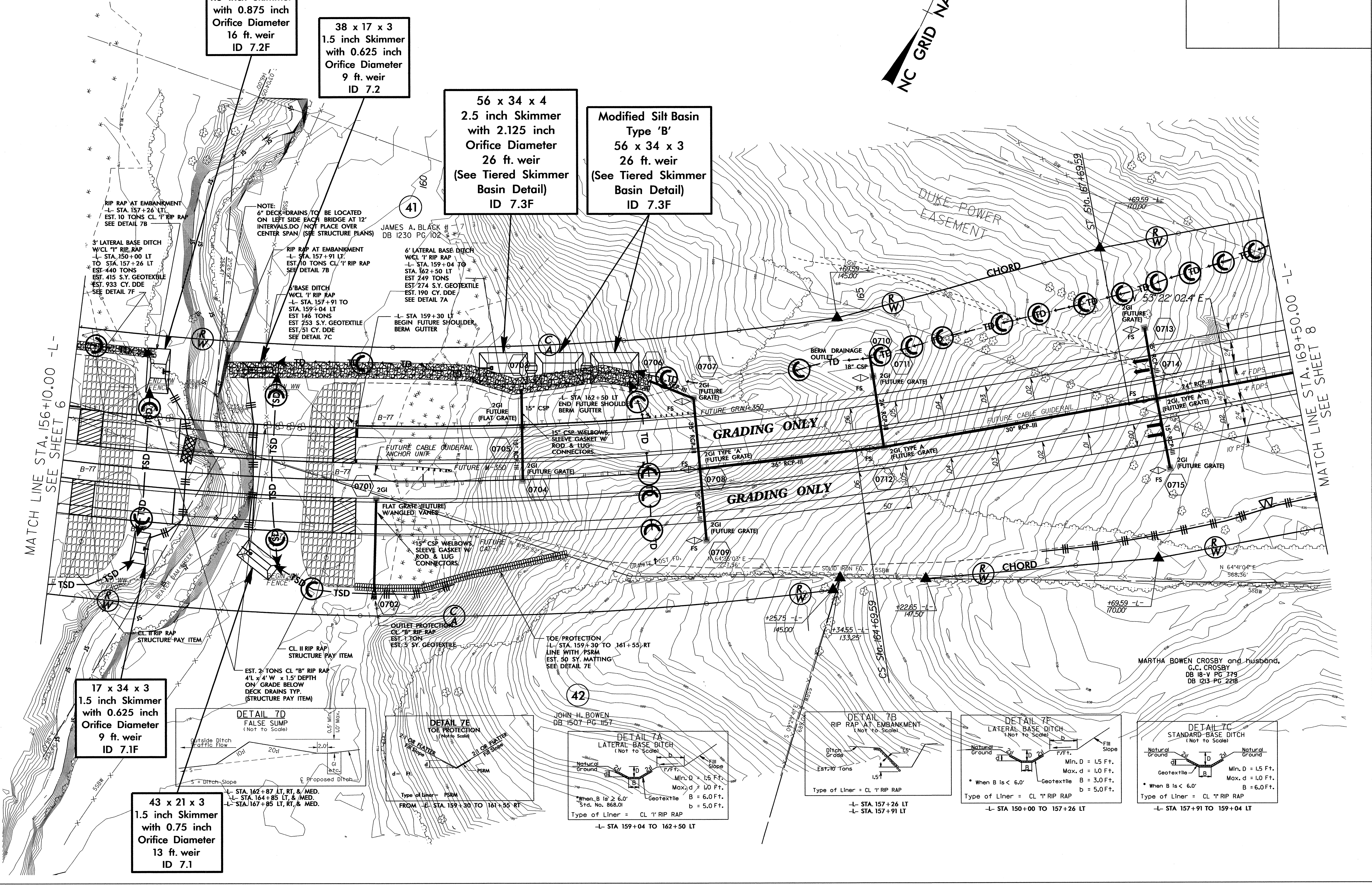
56 x 34 x 4  
2.5 inch Skimmer  
with 2.125 inch  
Orifice Diameter  
26 ft. weir  
(See Tiered Skimmer  
Basin Detail)  
ID 7.3F

Modified Silt Basin  
Type 'B'  
56 x 34 x 3  
26 ft. weir  
(See Tiered Skimmer  
Basin Detail)  
ID 7.3F

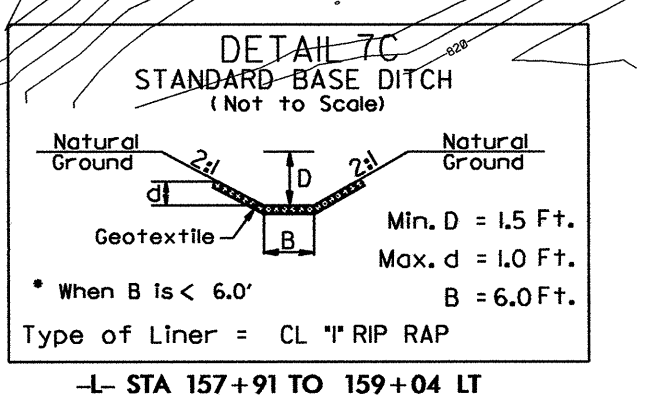
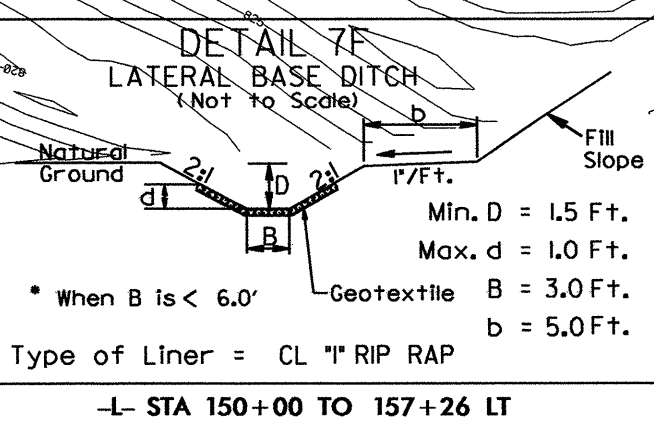
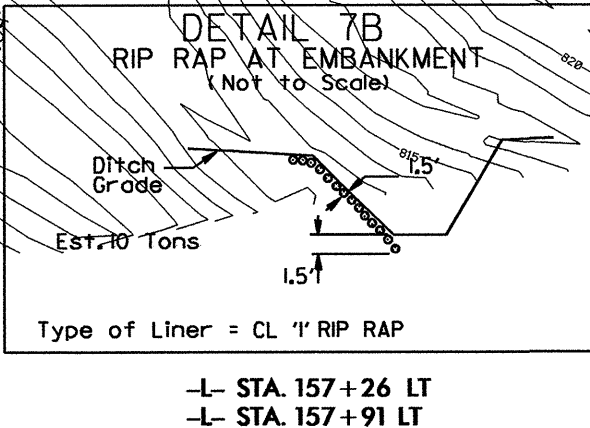
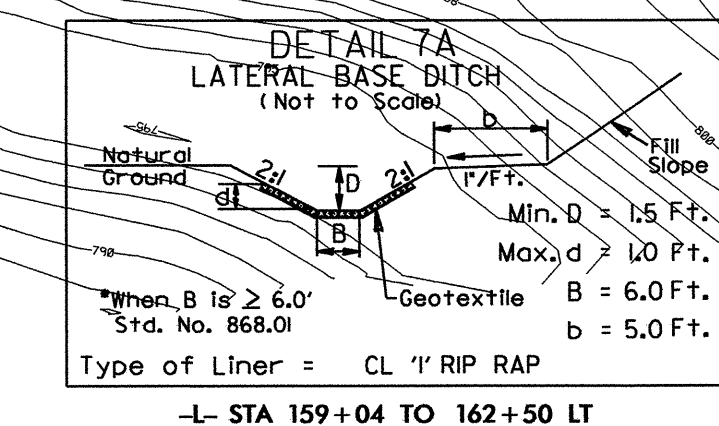
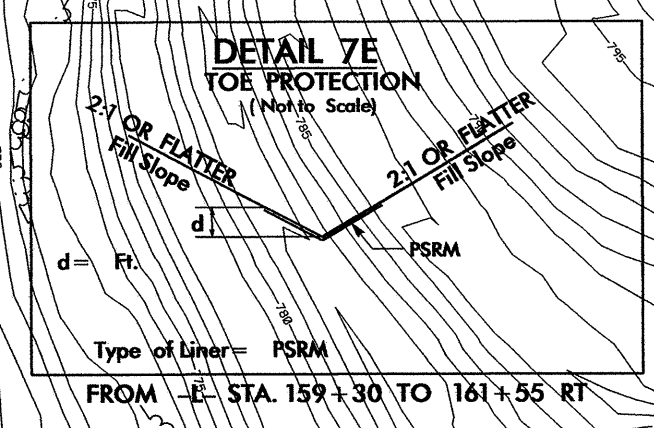
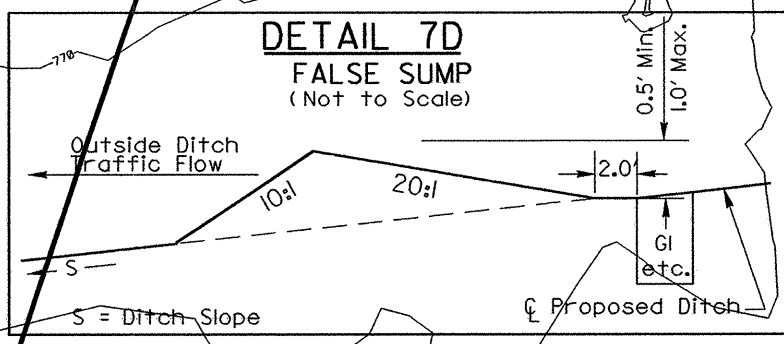
MATCH LINE STA. 156+10.00 -L-  
SEE SHEET 6

MATCH LINE STA. 169+50.00 -L-  
SEE SHEET 8

NC GRID NAD 8395



17 x 34 x 3  
1.5 inch Skimmer  
with 0.625 inch  
Orifice Diameter  
9 ft. weir  
ID 7.1F



43 x 21 x 3  
1.5 inch Skimmer  
with 0.75 inch  
Orifice Diameter  
13 ft. weir  
ID 7.1

EST. 2 TONS CL "B" RIP RAP  
4' L x 4' W x 1.5' DEPTH  
ON GRADE BELOW  
DECK DRAINS TYP.  
(STRUCTURE PAY ITEM)

JOHN H. BOWEN  
DB 1507 PG 1157

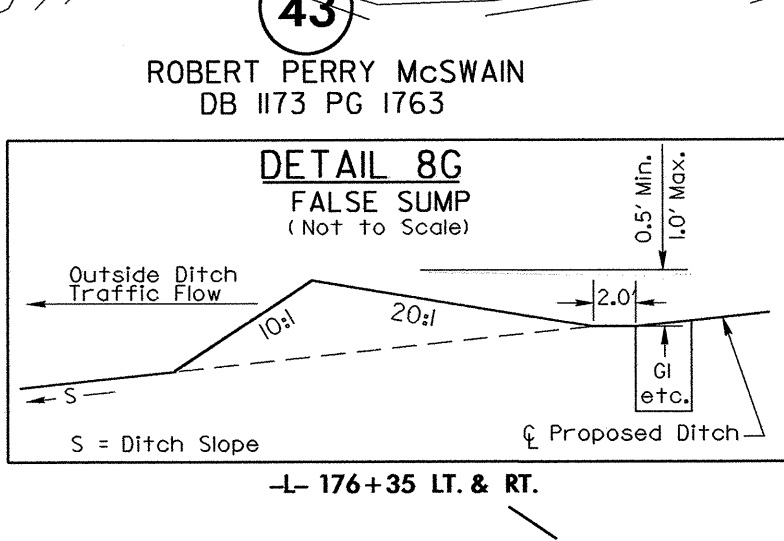
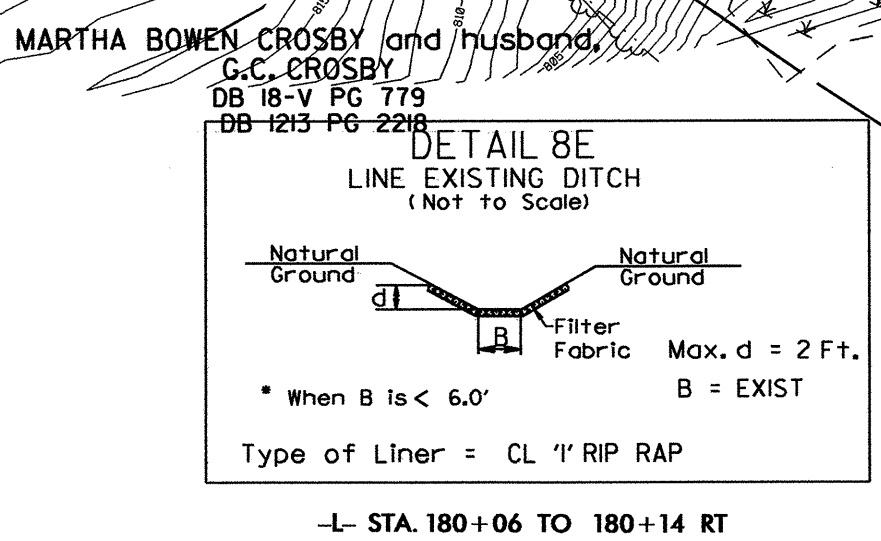
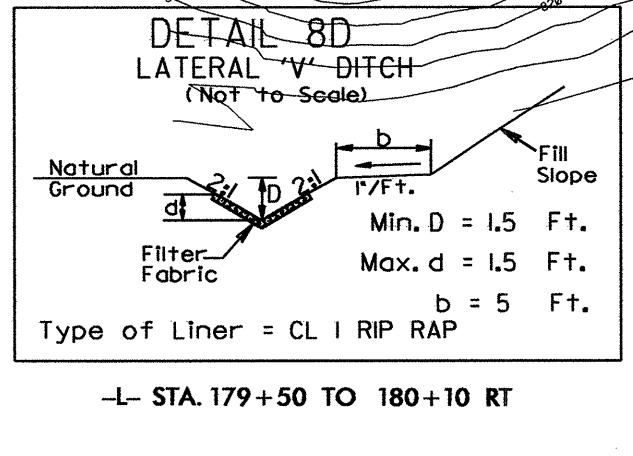
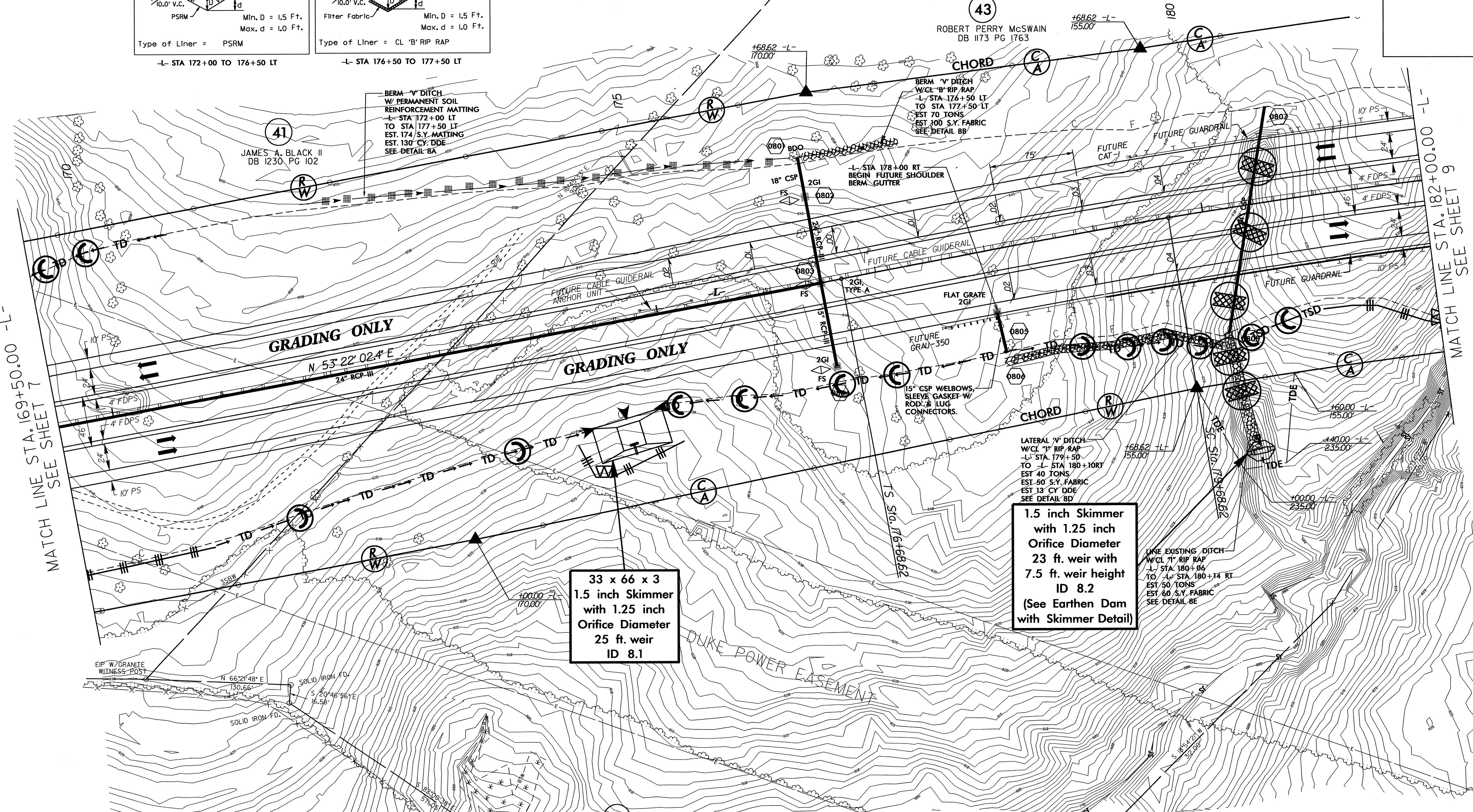
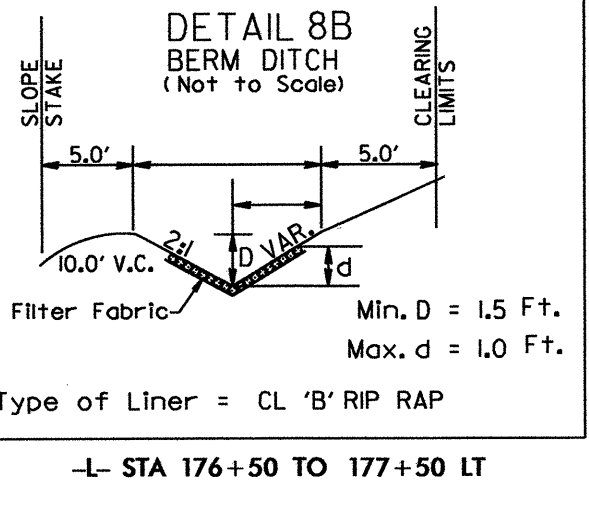
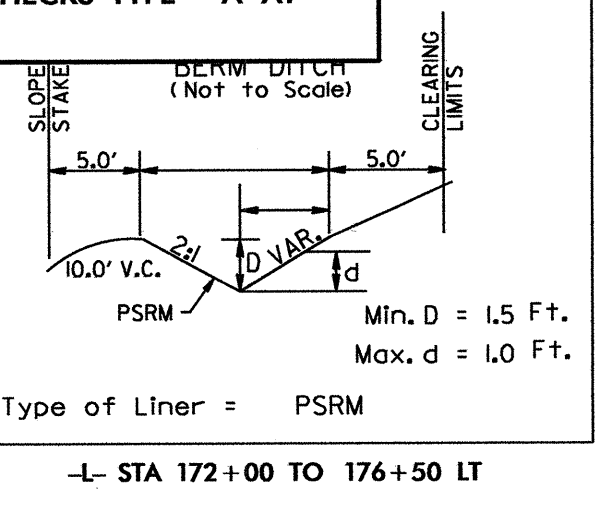
MARTHA BOWEN CROSBY and husband,  
G.C. CROSBY  
DB 18-Y PG 779  
DB 1213 PG 228

04-MAY-2003 09:45  
R:\E:\from m... AT RENY241770  
Jogoodwin

PROJECT REFERENCE NO.	SHEET NO.
R-2707AB	EC-8/CONST.8
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.

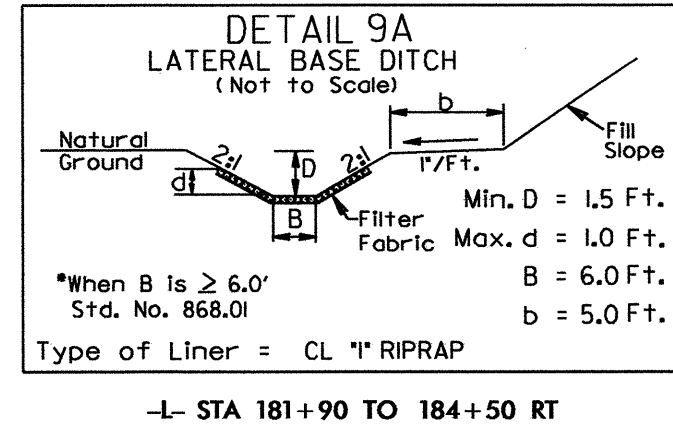
CLEARING AND GRUBBING EROSION CONTROL FOR CONSTRUCTION SHEET 8



NC GRID NAD 83/95

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 9



24 x 22 x 3  
1.5 inch Skimmer  
with 0.75 inch  
Orifice Diameter  
12 ft. weir  
(See Tiered Skimmer  
Basin Detail)  
ID 9.1

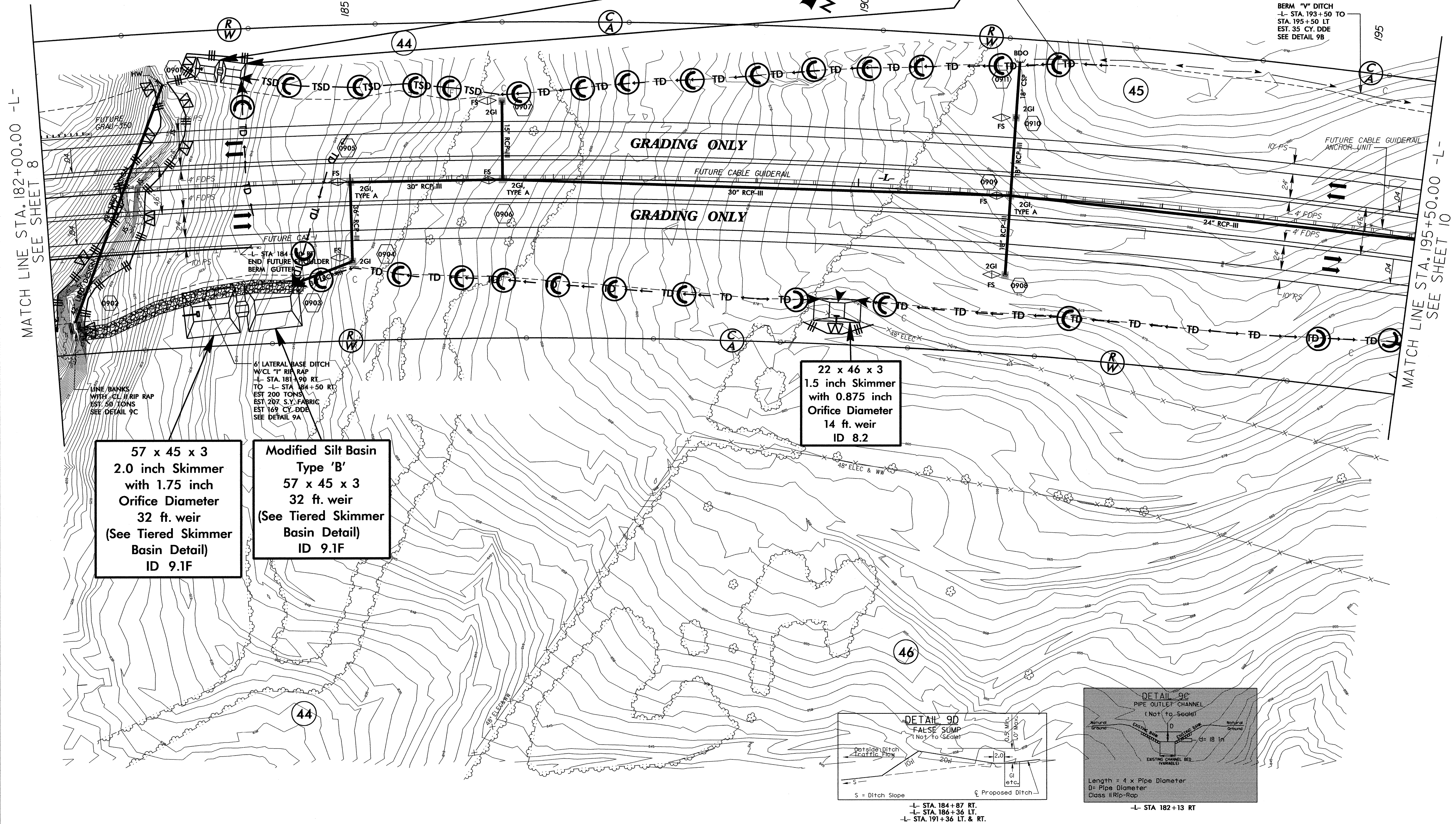
Modified Silt Basin  
Type 'B'  
24 x 22 x 3  
14 ft. weir  
(See Tiered Skimmer  
Basin Detail)  
ID 9.1

NC GRID NAD83/95  
190

BERM "V" DITCH  
-L- STA. 191+50 TO  
STA. 193+50 LT  
EST. 32 CY. DDE  
SEE DETAIL 9B

BERM "V" DITCH  
-L- STA. 193+50 TO  
STA. 195+50 LT  
EST. 35 CY. DDE  
SEE DETAIL 9B

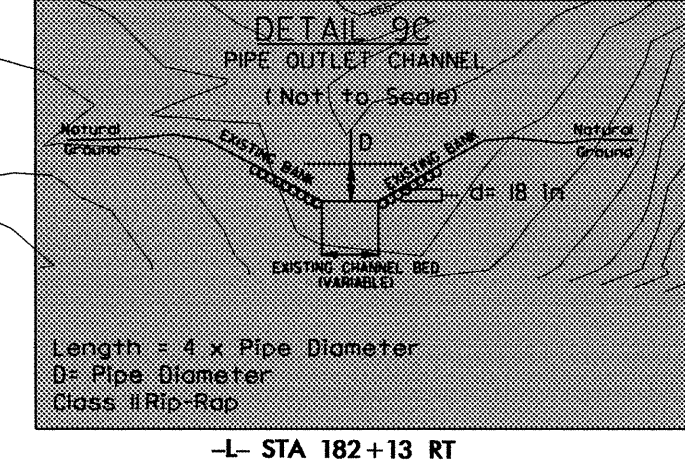
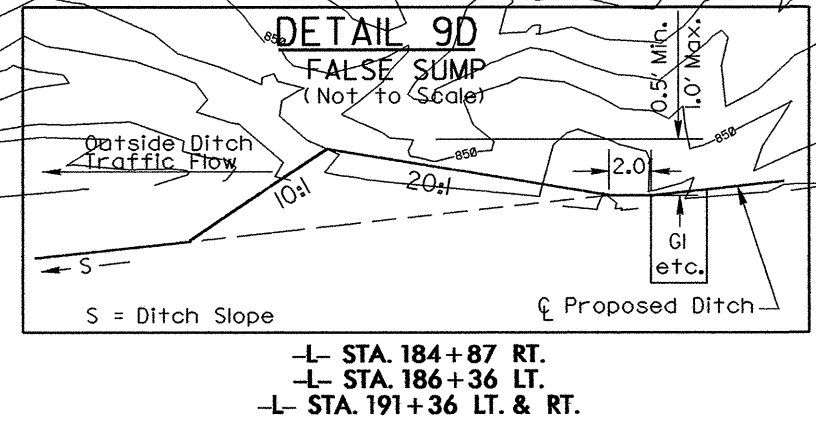
PROJECT REFERENCE NO. R-2707AB		SHEET NO. EC-09/CONST.09	
RW SHEET NO.			
ROADWAY DESIGN ENGINEER		HYDRAULICS ENGINEER	



57 x 45 x 3  
2.0 inch Skimmer  
with 1.75 inch  
Orifice Diameter  
32 ft. weir  
(See Tiered Skimmer  
Basin Detail)  
ID 9.1F

Modified Silt Basin  
Type 'B'  
57 x 45 x 3  
32 ft. weir  
(See Tiered Skimmer  
Basin Detail)  
ID 9.1F

22 x 46 x 3  
1.5 inch Skimmer  
with 0.875 inch  
Orifice Diameter  
14 ft. weir  
ID 8.2

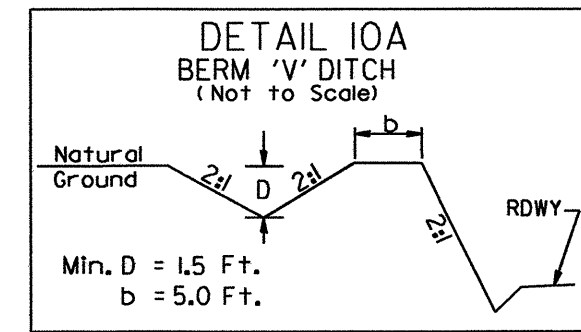
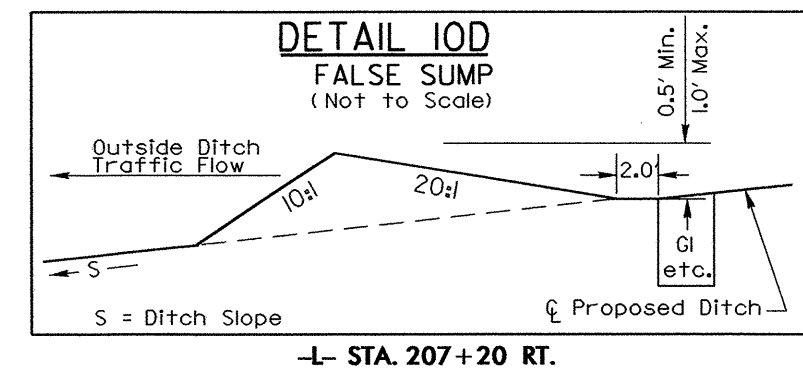


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jagoos\inf AT REN24770

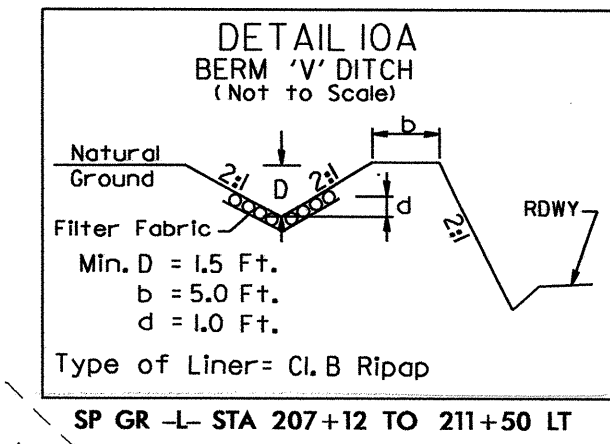
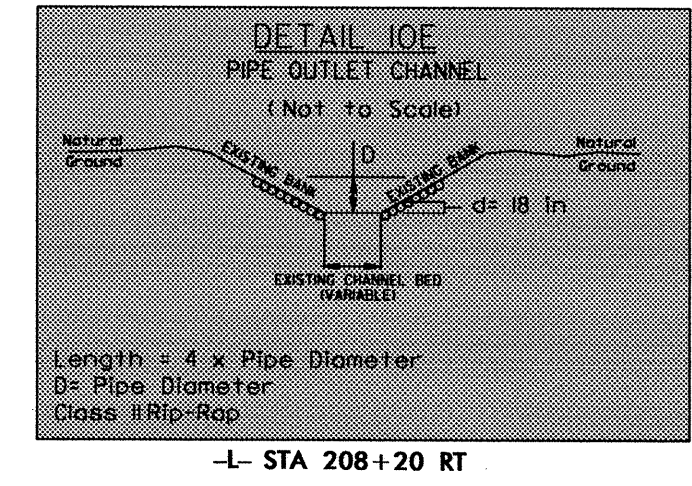
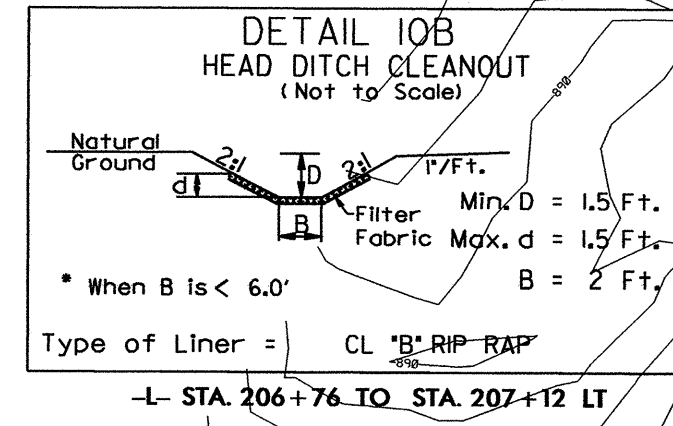
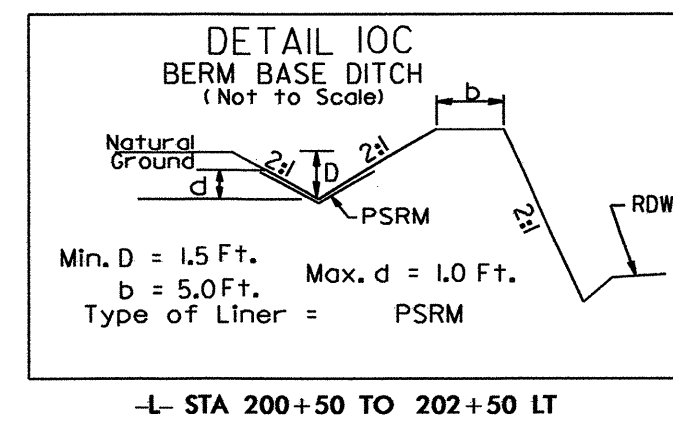
NOTE:  
PLACE TEMPORARY ROCK SEDIMENT DAMS TYPE - B  
AND TEMPORARY ROCK SILT CHECKS TYPE - A AT  
DRAINAGE OUTLETS.

CLEARING AND GRUBBING  
EROSION CONTROL FOR  
CONSTRUCTION SHEET 10

PROJECT REFERENCE NO. R-2707AB	SHEET NO. EC-10/CONST.10
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

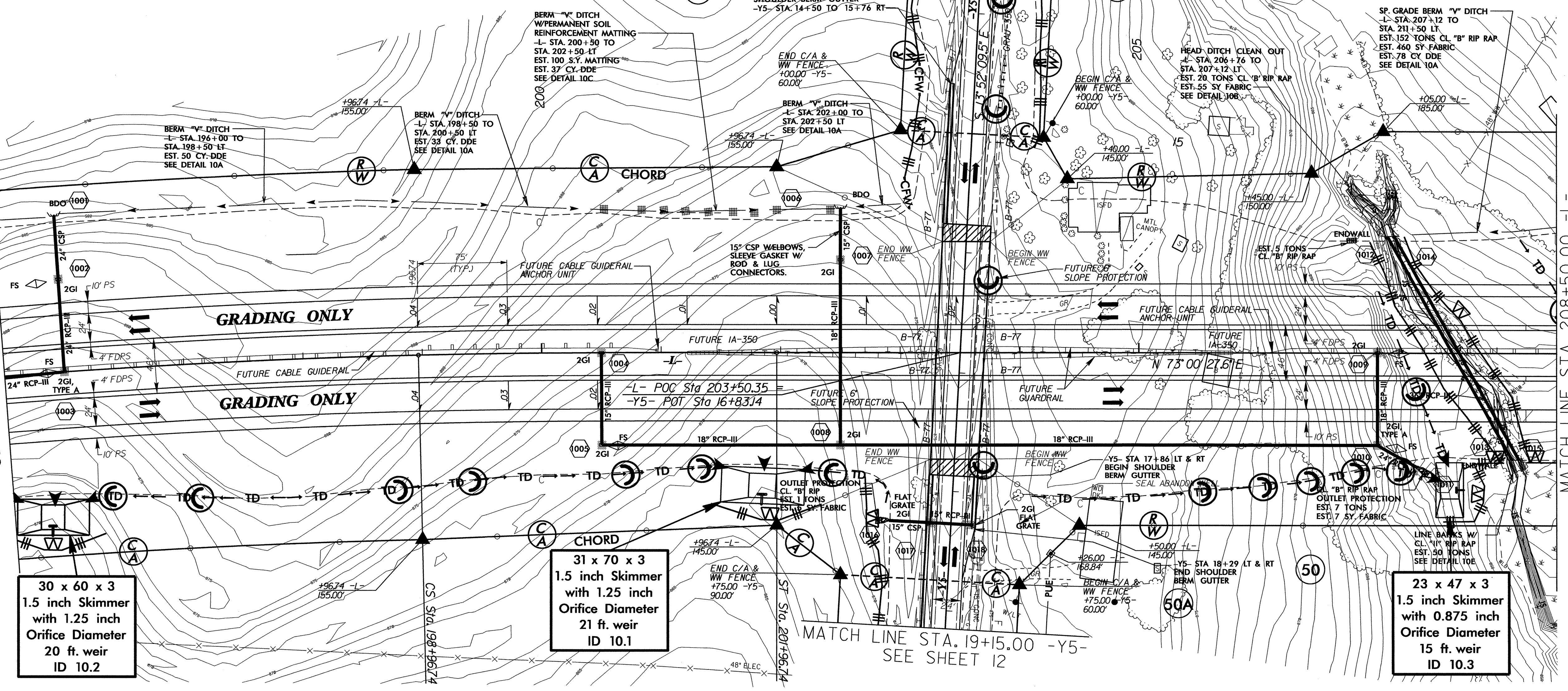


- L- STA 196+00 TO 198+50 LT
- L- STA 198+50 TO 200+50 LT
- L- STA 202+00 TO 202+50 LT
- L- STA 206+67 TO 213+00 LT



NC GRID NAD 83/95

MATCH LINE STA. 195+50.00 -L-  
SEE SHEET 9

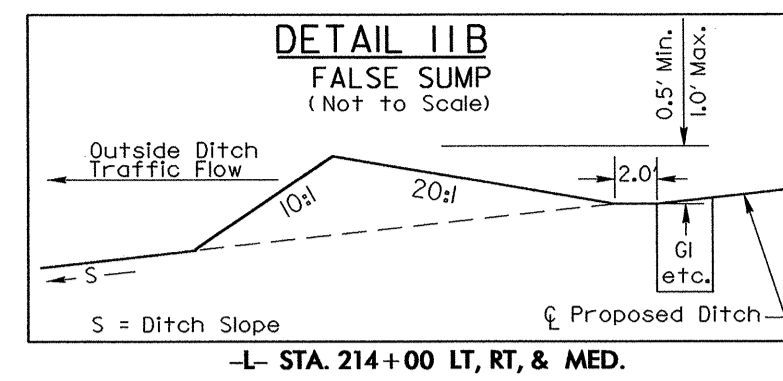
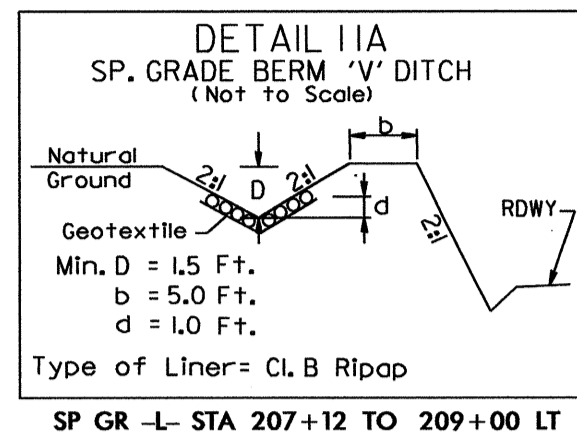
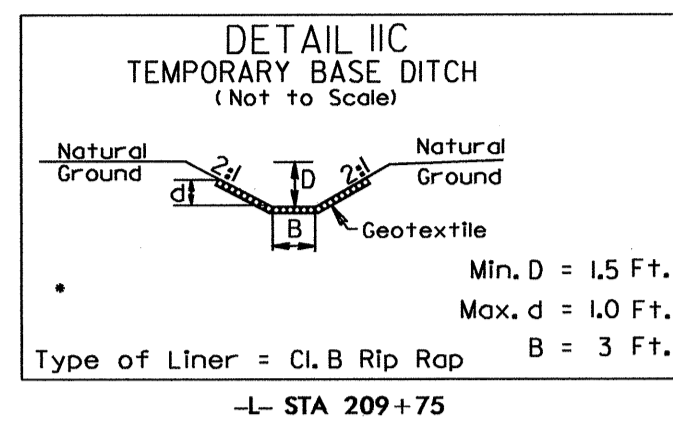




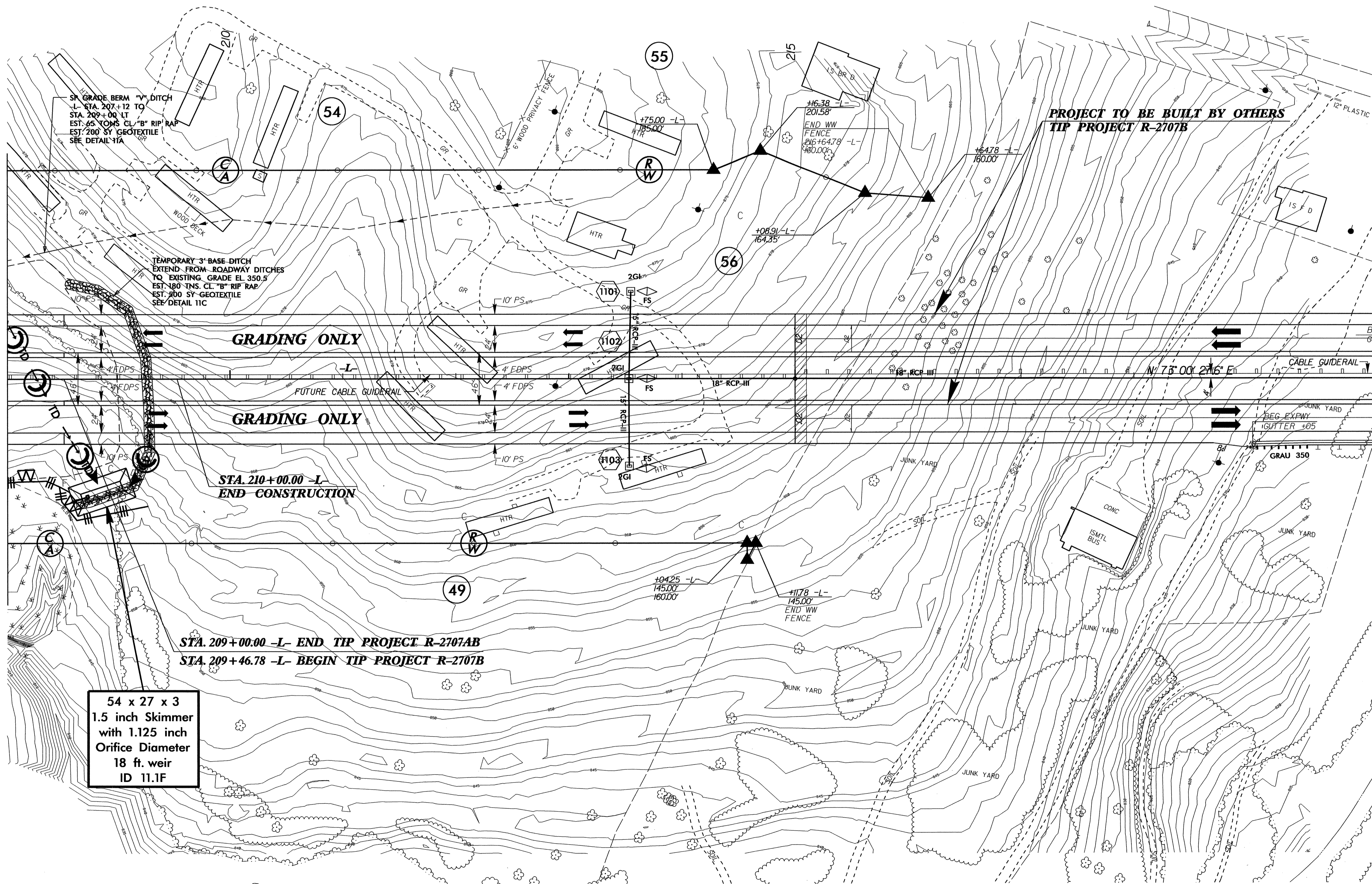
NOTE:  
PLACE TEMPORARY ROCK SEDIMENT DAMS TYPE - B  
AND TEMPORARY ROCK SILT CHECKS TYPE - A AT  
DRAINAGE OUTLETS.

CLEARING AND GRUBBING  
EROSION CONTROL FOR  
CONSTRUCTION SHEET 11

PROJECT REFERENCE NO. R-2707AB	SHEET NO. EC-II/CONST.11
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER



MATCH LINE STA. 208+50.00 -L-  
SEE SHEET 10



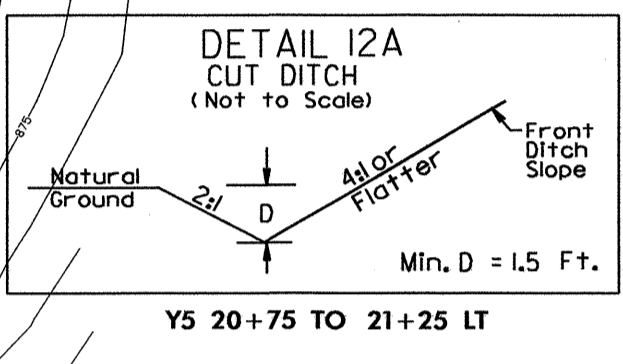
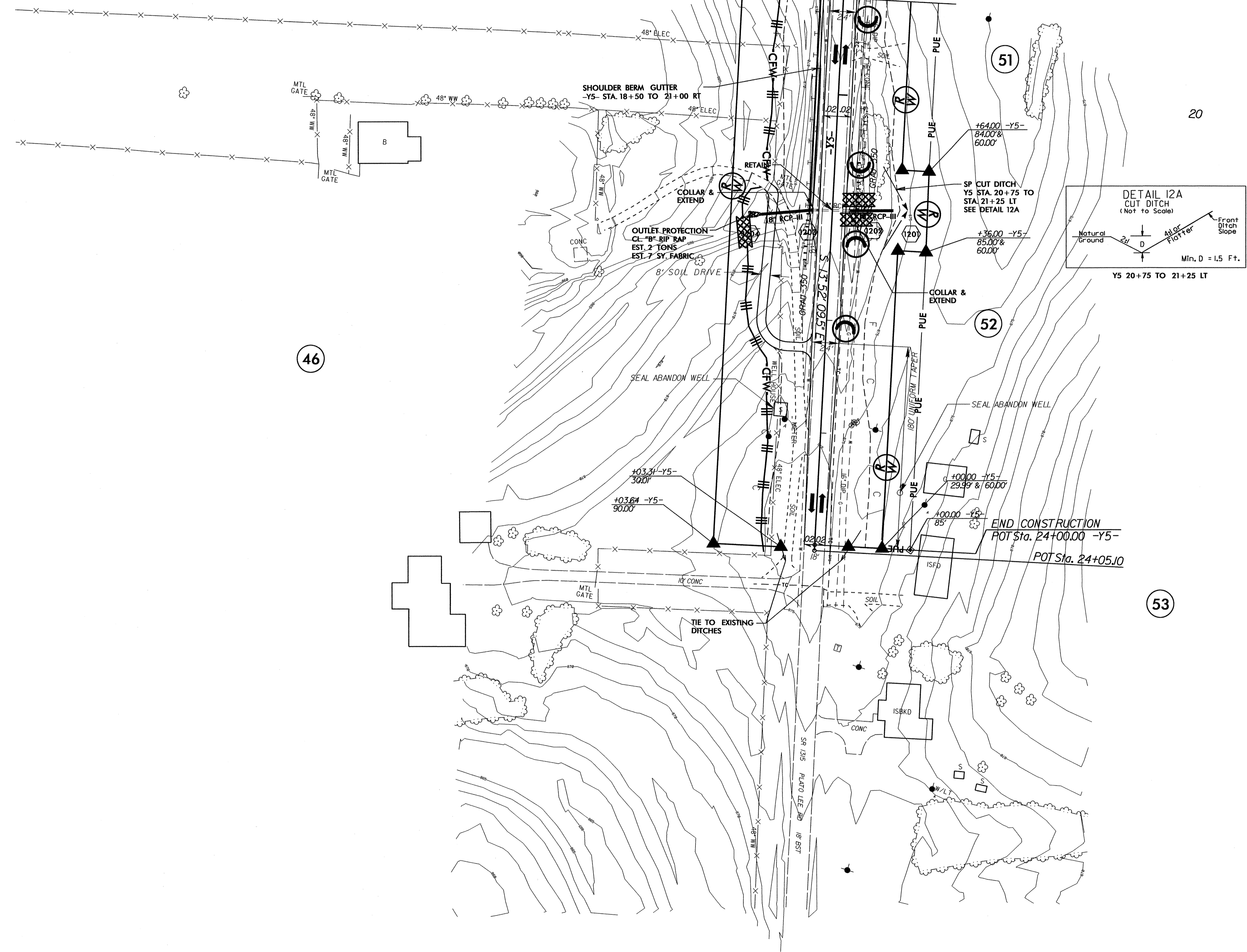
NC GRID NAD 83/95

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

PROJECT REFERENCE NO. R-2707AB	SHEET NO. EC-12/CONST.12
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

MATCH LINE STA. 19+15.00 -Y5-  
 SEE SHEET 10



NC GRID NAD 8395

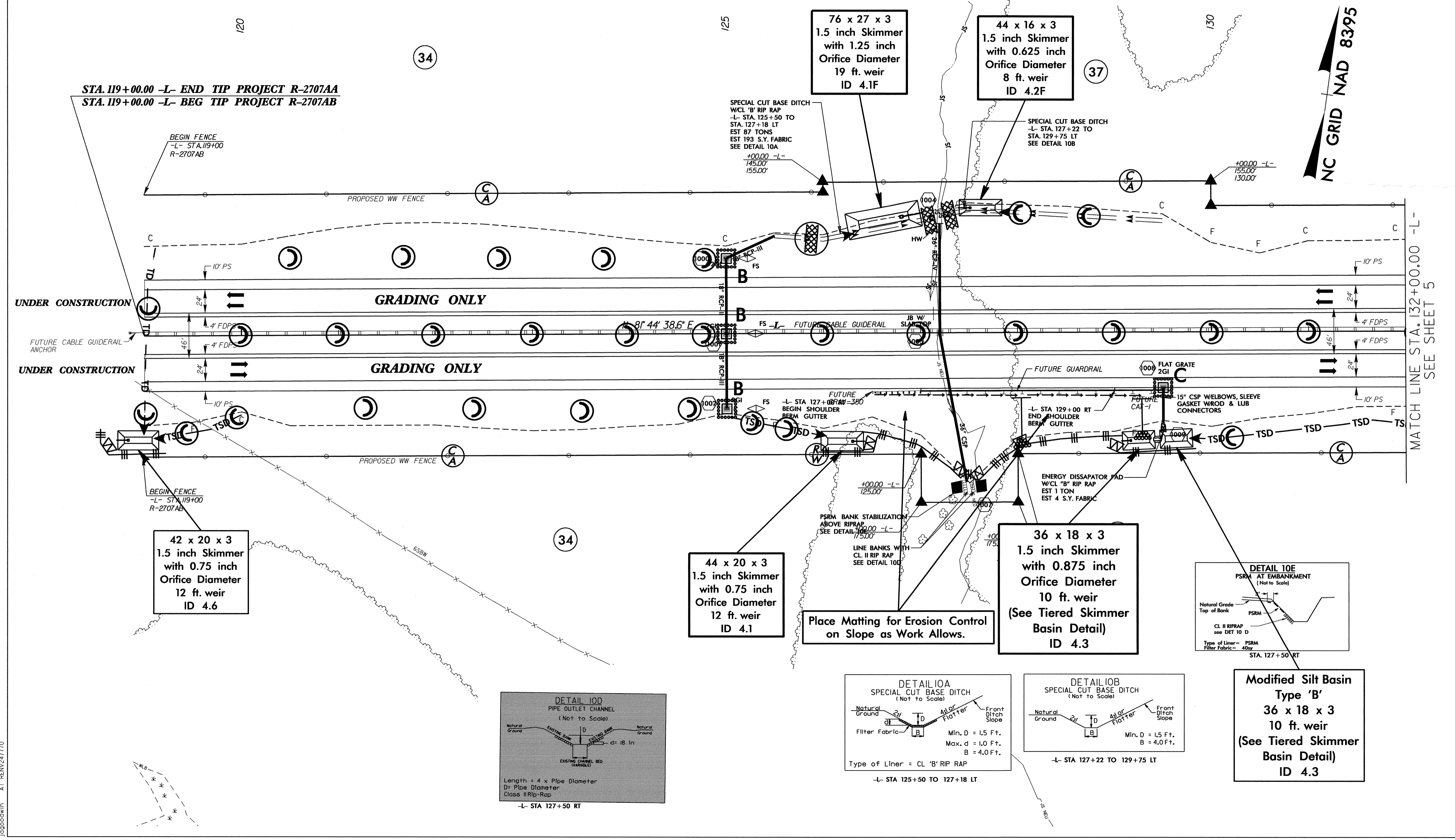
46

52

50

53

PROJECT REFERENCE NO. <i>R-2707AB</i>	SHEET NO. <i>EC-13/CONST.04</i>
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER



STA. 119+00.00 -L- END TIP PROJECT R-2707AA  
 STA. 119+00.00 -L- BEG TIP PROJECT R-2707AB

42 x 20 x 3  
 1.5 inch Skimmer  
 with 0.75 inch  
 Orifice Diameter  
 12 ft. weir  
 ID 4.6

76 x 27 x 3  
 1.5 inch Skimmer  
 with 1.25 inch  
 Orifice Diameter  
 19 ft. weir  
 ID 4.1F

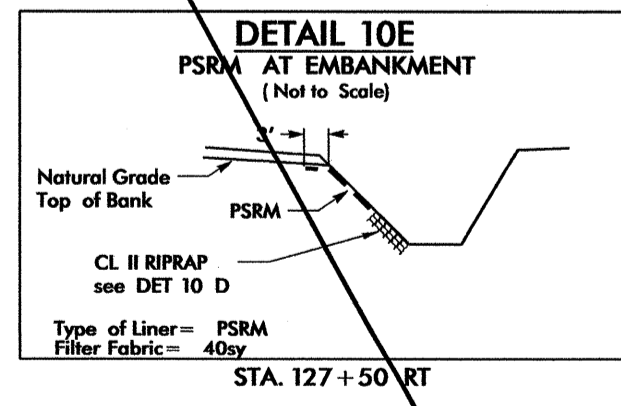
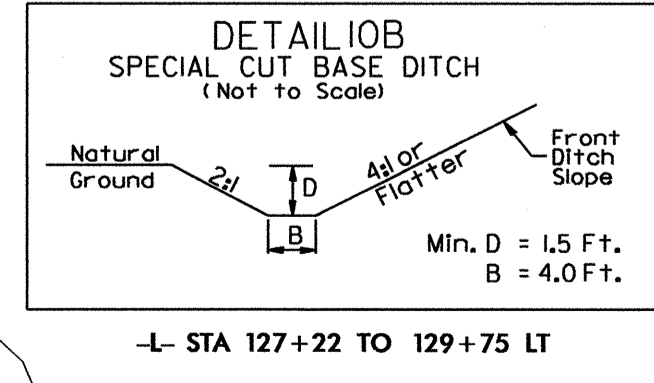
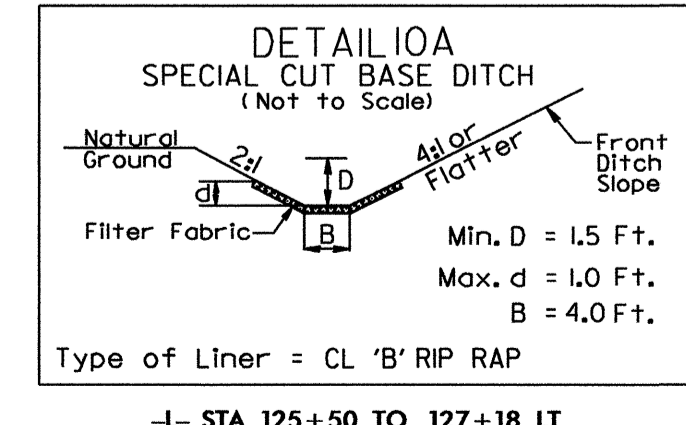
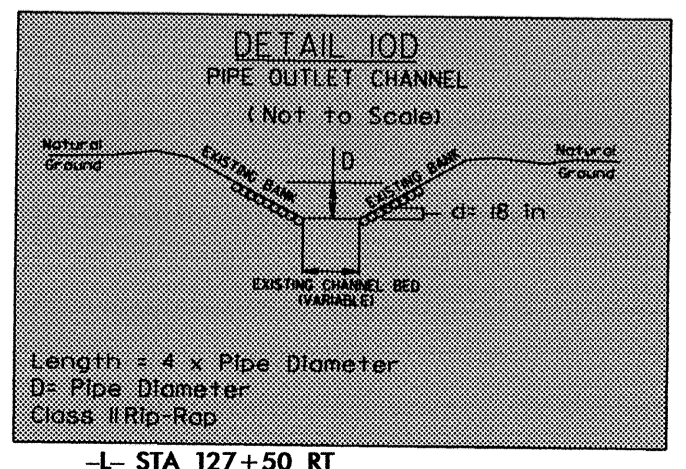
44 x 16 x 3  
 1.5 inch Skimmer  
 with 0.625 inch  
 Orifice Diameter  
 8 ft. weir  
 ID 4.2F

44 x 20 x 3  
 1.5 inch Skimmer  
 with 0.75 inch  
 Orifice Diameter  
 12 ft. weir  
 ID 4.1

36 x 18 x 3  
 1.5 inch Skimmer  
 with 0.875 inch  
 Orifice Diameter  
 10 ft. weir  
 (See Tiered Skimmer  
 Basin Detail)  
 ID 4.3

Modified Silt Basin  
 Type 'B'  
 36 x 18 x 3  
 10 ft. weir  
 (See Tiered Skimmer  
 Basin Detail)  
 ID 4.3

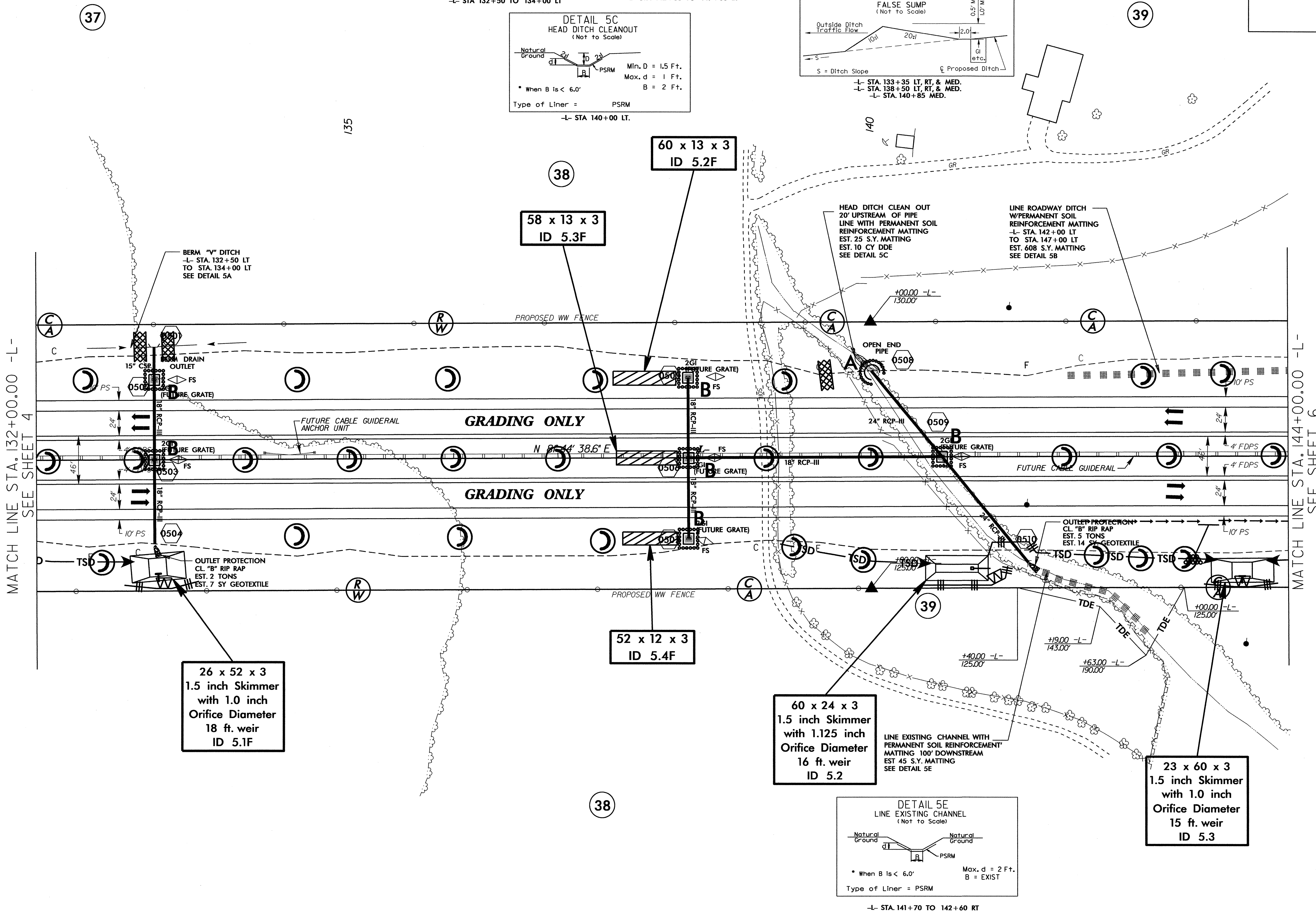
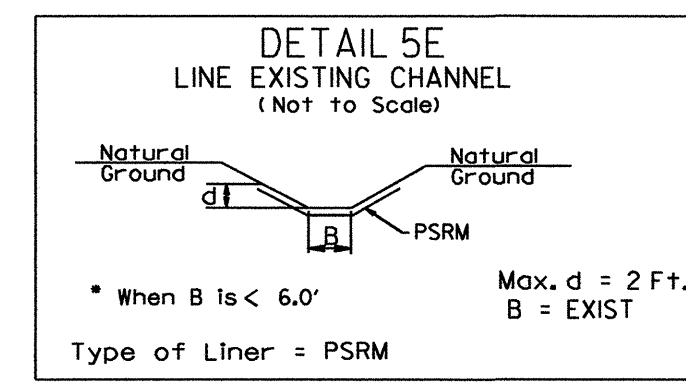
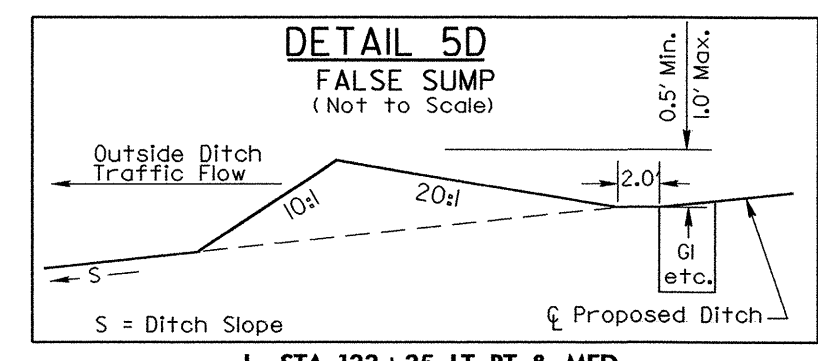
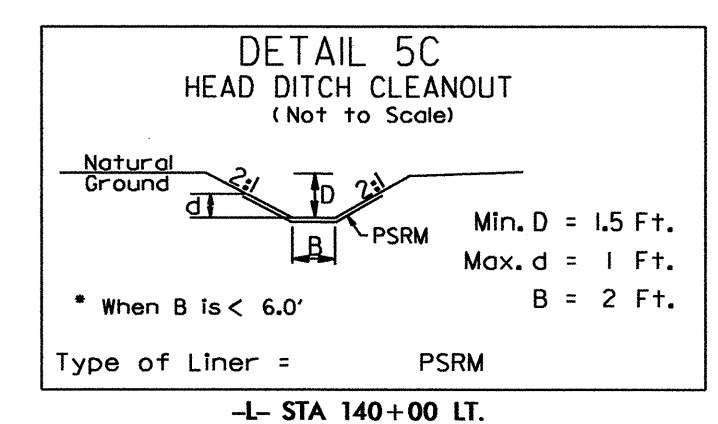
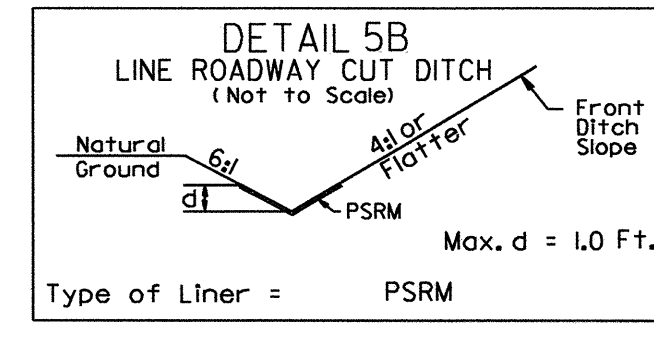
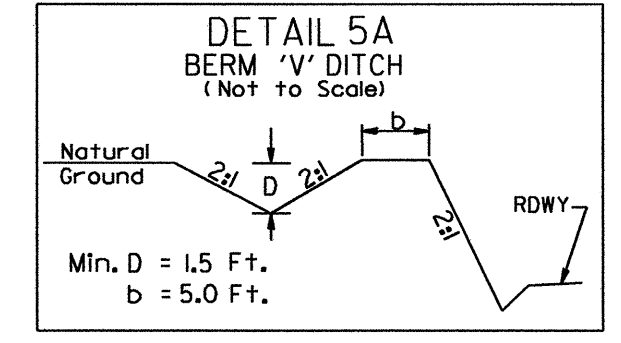
Place Matting for Erosion Control  
 on Slope as Work Allows.



MATCH LINE STA. 132+00.00 -L-  
 SEE SHEET 5

04-MAY-2013 09:23  
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 Jagoedwin AT REN247770

PROJECT REFERENCE NO. R-2707AB	SHEET NO. EC-14/CONST.05
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

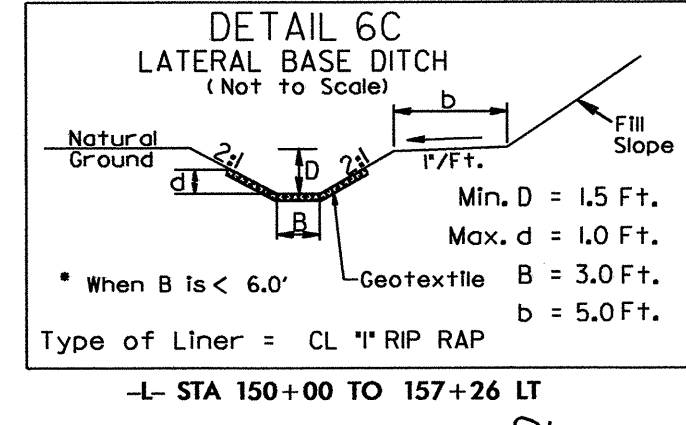
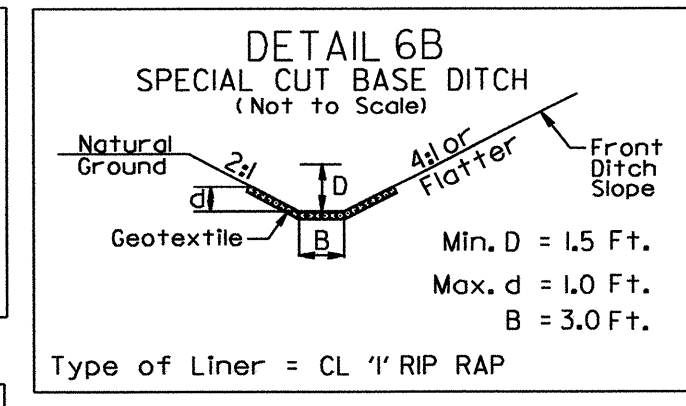
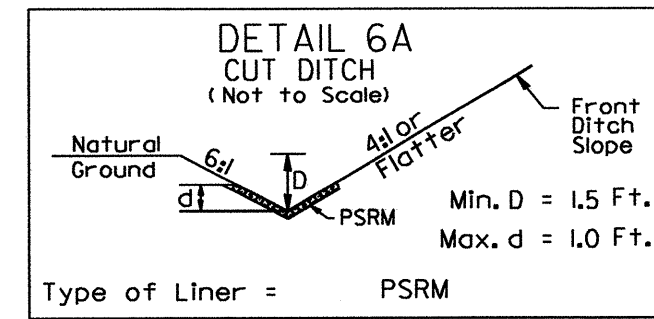


NC GRID NAD 8395

MATCH LINE STA. 132+00.00 -L-  
SEE SHEET 4

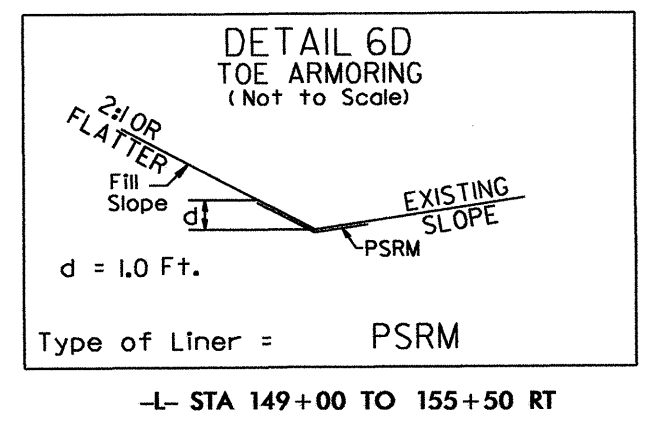
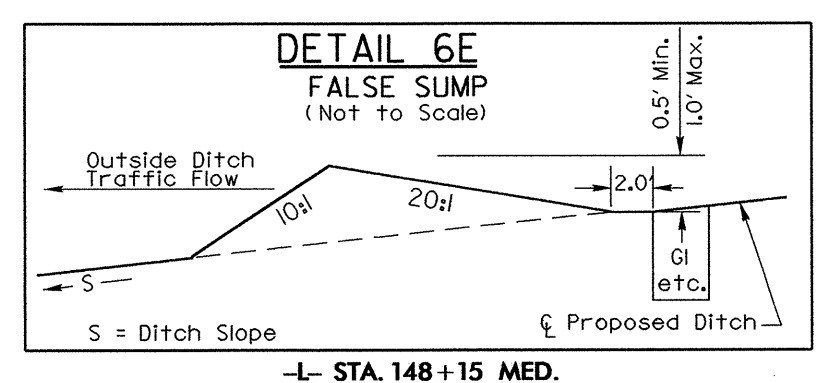
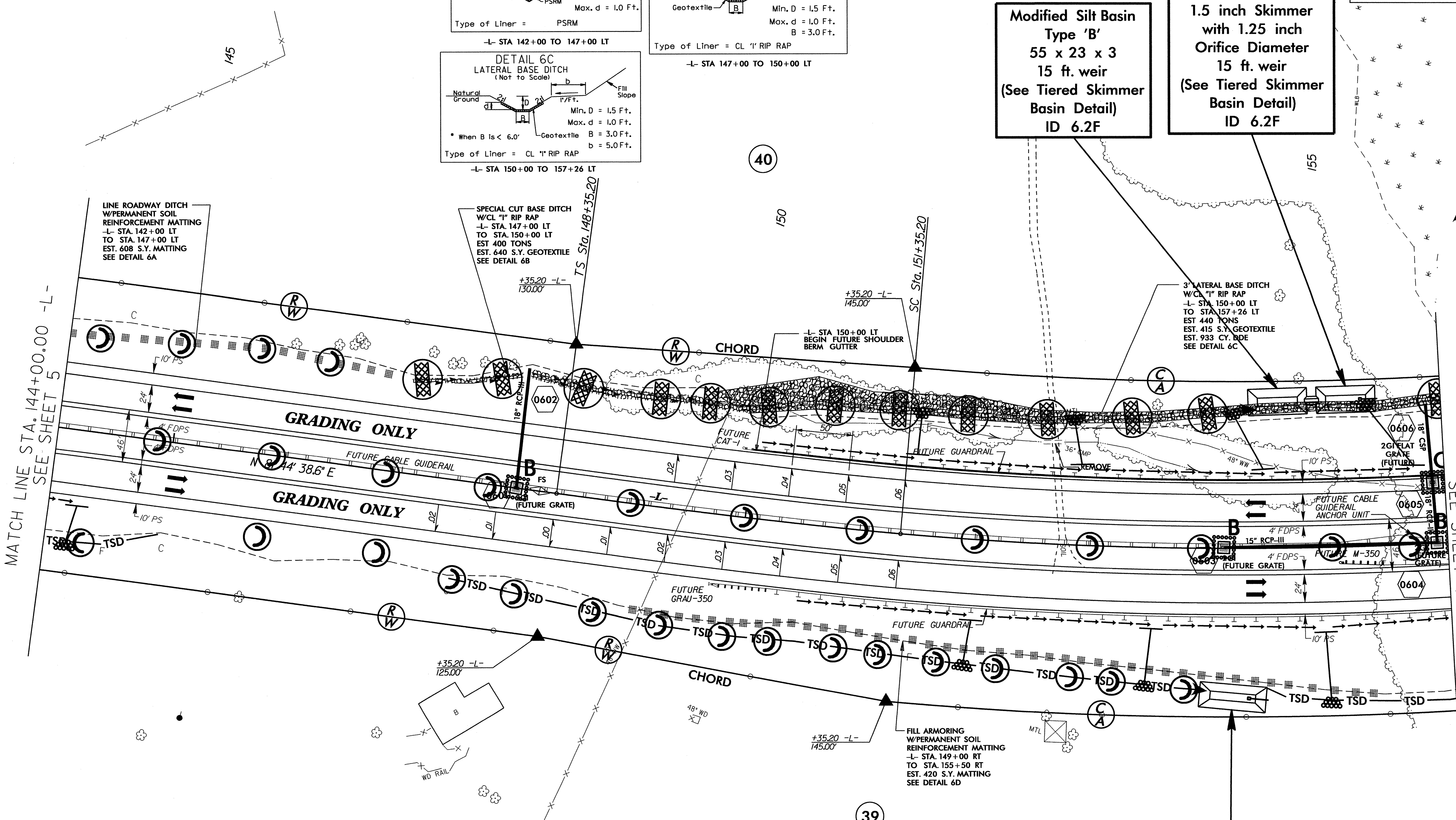
MATCH LINE STA. 144+00.00 -L-  
SEE SHEET 6

PROJECT REFERENCE NO. R-2707AB	SHEET NO. EC-15/CONST.06
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER



**Modified Silt Basin**  
Type 'B'  
55 x 23 x 3  
15 ft. weir  
(See Tiered Skimmer Basin Detail)  
ID 6.2F

**55 x 23 x 3**  
1.5 inch Skimmer  
with 1.25 inch  
Orifice Diameter  
15 ft. weir  
(See Tiered Skimmer Basin Detail)  
ID 6.2F



**58 x 22 x 3**  
1.5 inch Skimmer  
with 1.0 inch  
Orifice Diameter  
14 ft. weir  
ID 6.1F

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 Jagoedwin AT REN247770

PROJECT REFERENCE NO. R-2707AB	SHEET NO. EC-16/CONST.07
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

NOTE:  
UTILIZE SKIMMER BASIN AS STILLING BASIN WHERE APPLICABLE.

24 x 48 x 3  
1.5 inch Skimmer  
with 0.875 inch  
Orifice Diameter  
16 ft. weir  
ID 7.2F

38 x 17 x 3  
1.5 inch Skimmer  
with 0.625 inch  
Orifice Diameter  
9 ft. weir  
ID 7.2

Place Matting for Erosion Control  
on Slopes Adjacent to Permitted  
Wetlands as Work Allows.

56 x 34 x 4  
2.5 inch Skimmer  
with 2.125 inch  
Orifice Diameter  
26 ft. weir  
(See Tiered Skimmer  
Basin Detail)  
ID 7.3F

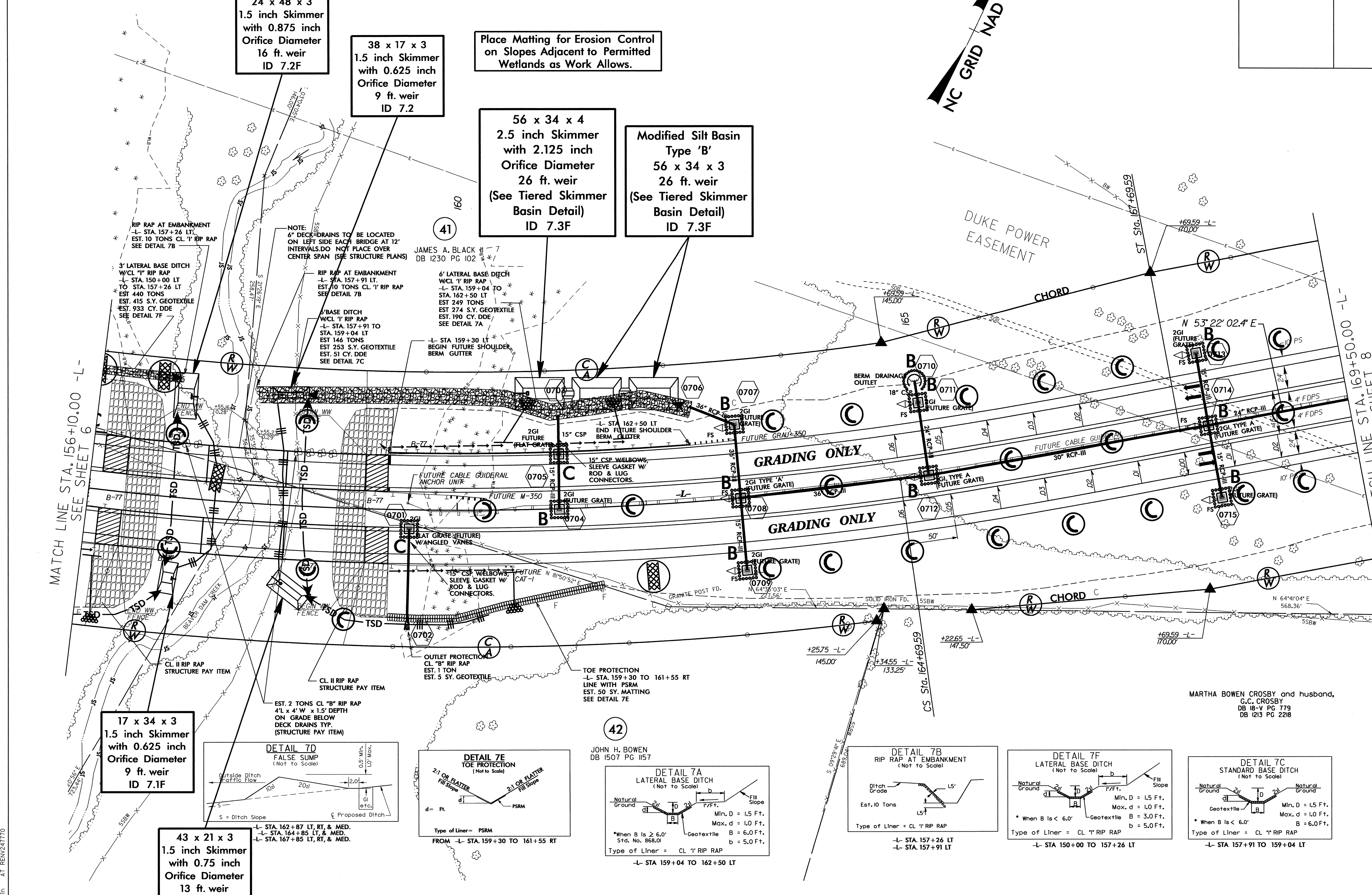
Modified Silt Basin  
Type 'B'  
56 x 34 x 3  
26 ft. weir  
(See Tiered Skimmer  
Basin Detail)  
ID 7.3F

MATCH LINE STA. 156+10.00 -L-  
SEE SHEET 6

MATCH LINE STA. 169+50.00 -L-  
SEE SHEET 8

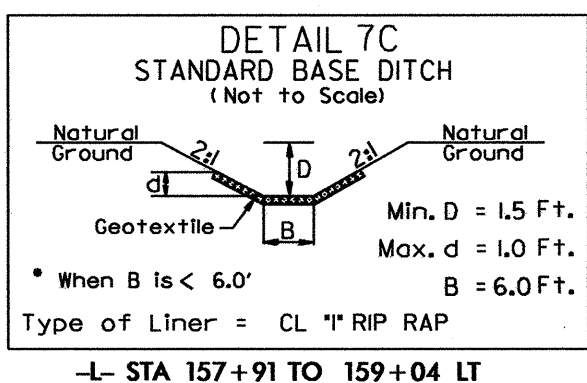
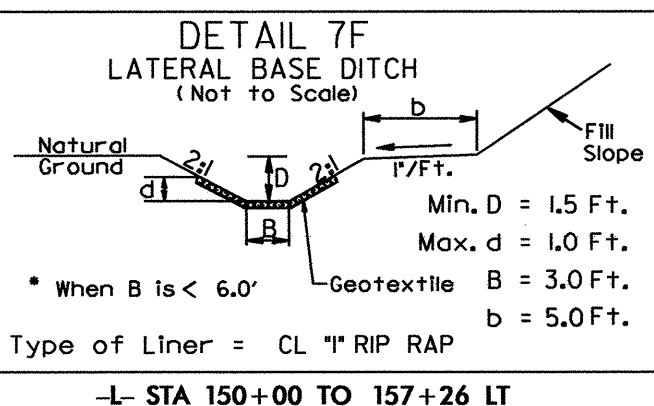
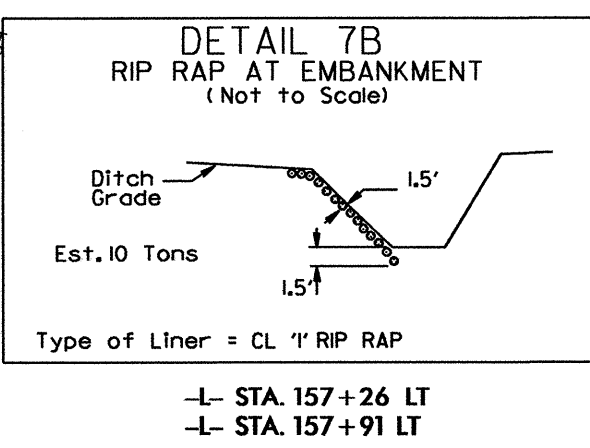
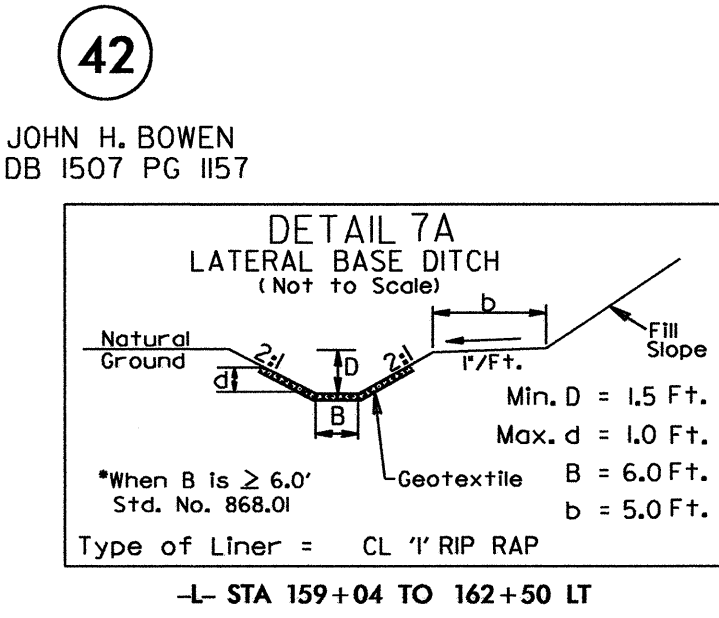
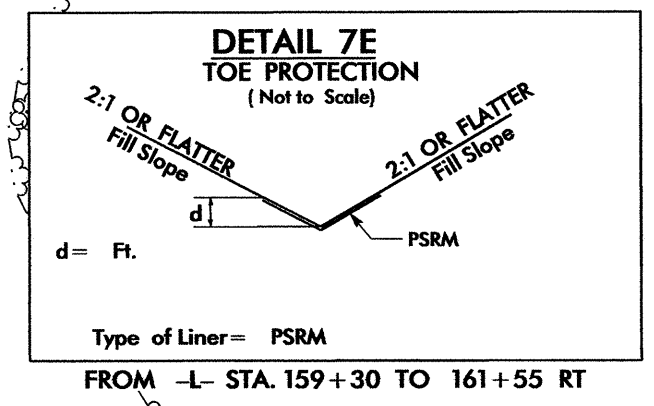
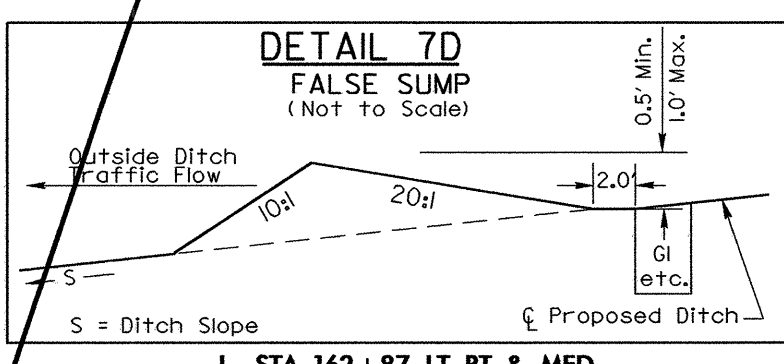
NC GRID NAD 8395

DUKE POWER  
EASEMENT



17 x 34 x 3  
1.5 inch Skimmer  
with 0.625 inch  
Orifice Diameter  
9 ft. weir  
ID 7.1F

43 x 21 x 3  
1.5 inch Skimmer  
with 0.75 inch  
Orifice Diameter  
13 ft. weir  
ID 7.1

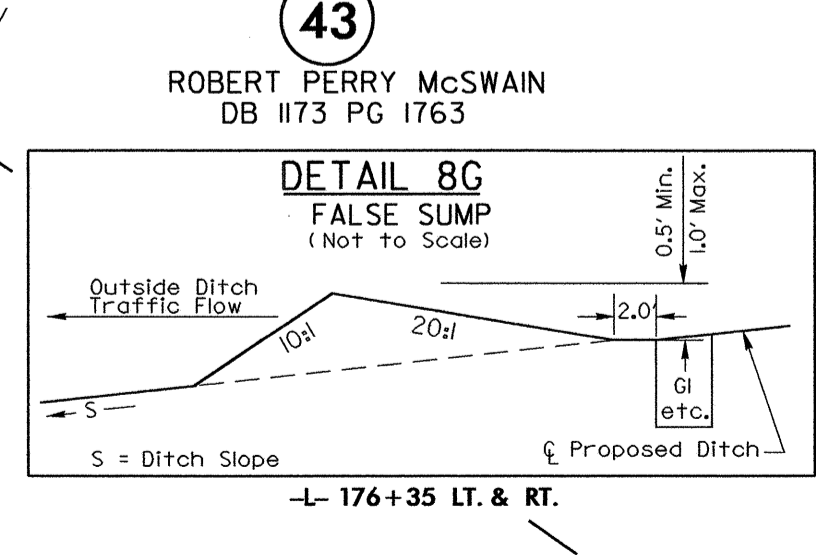
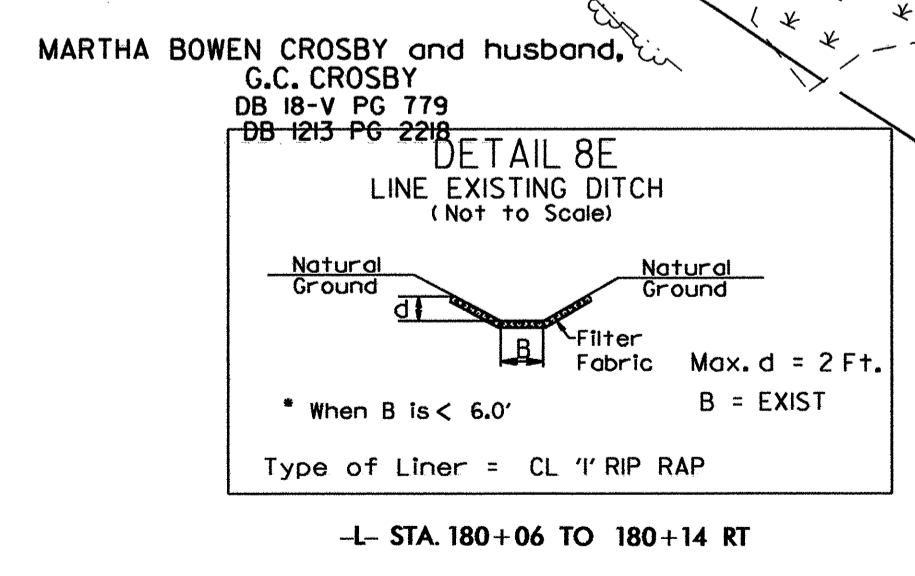
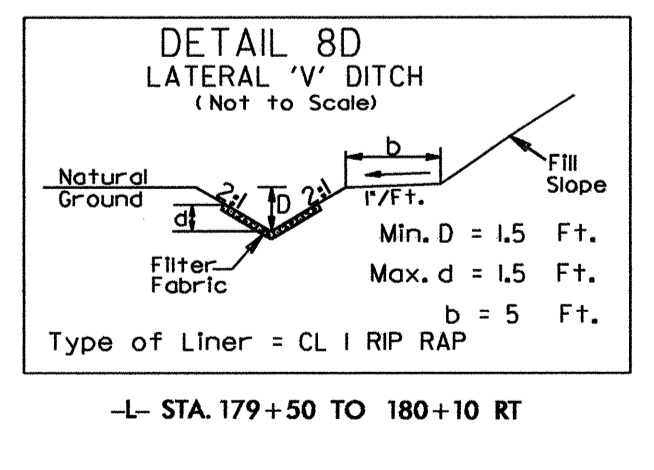
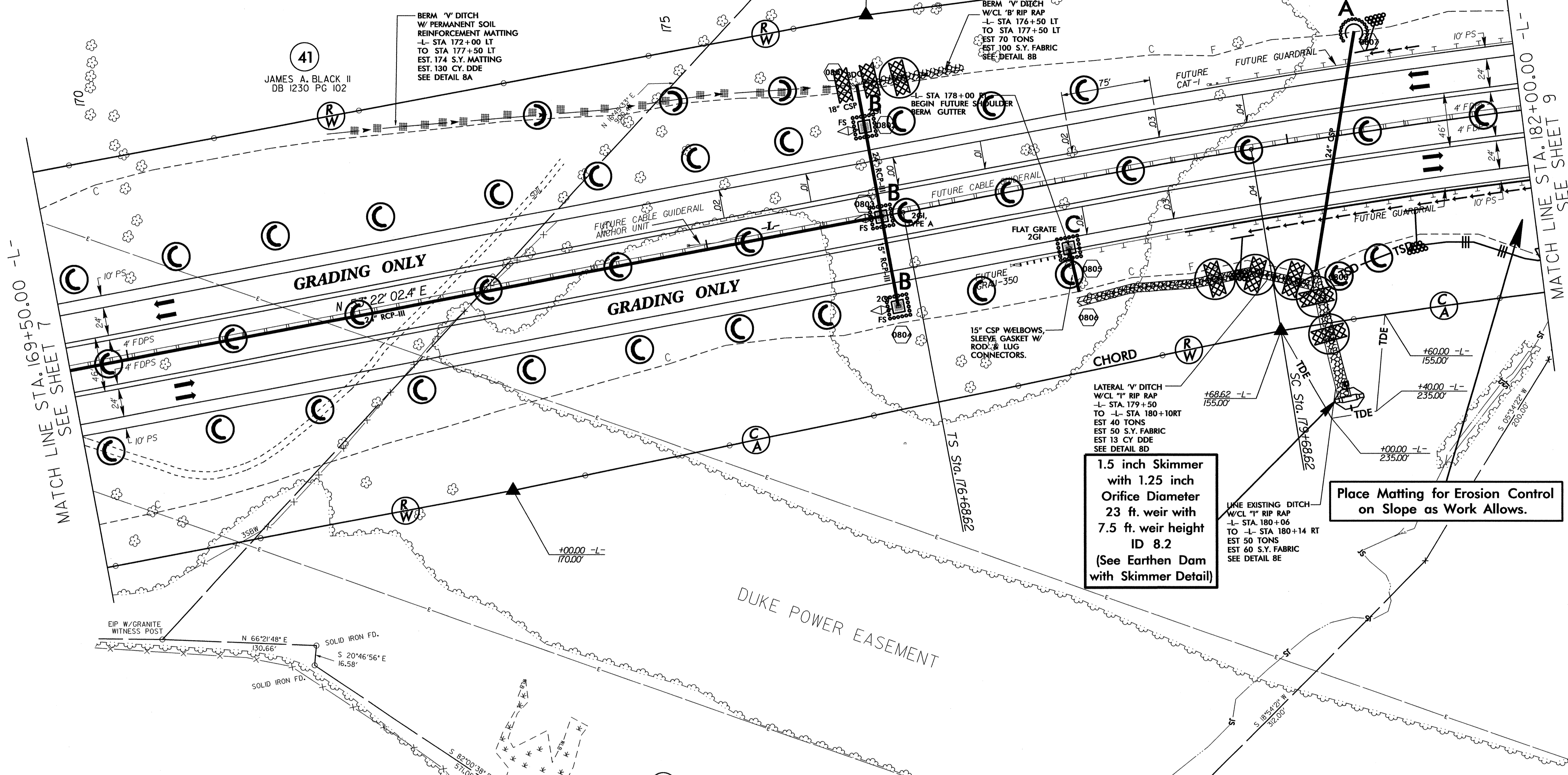
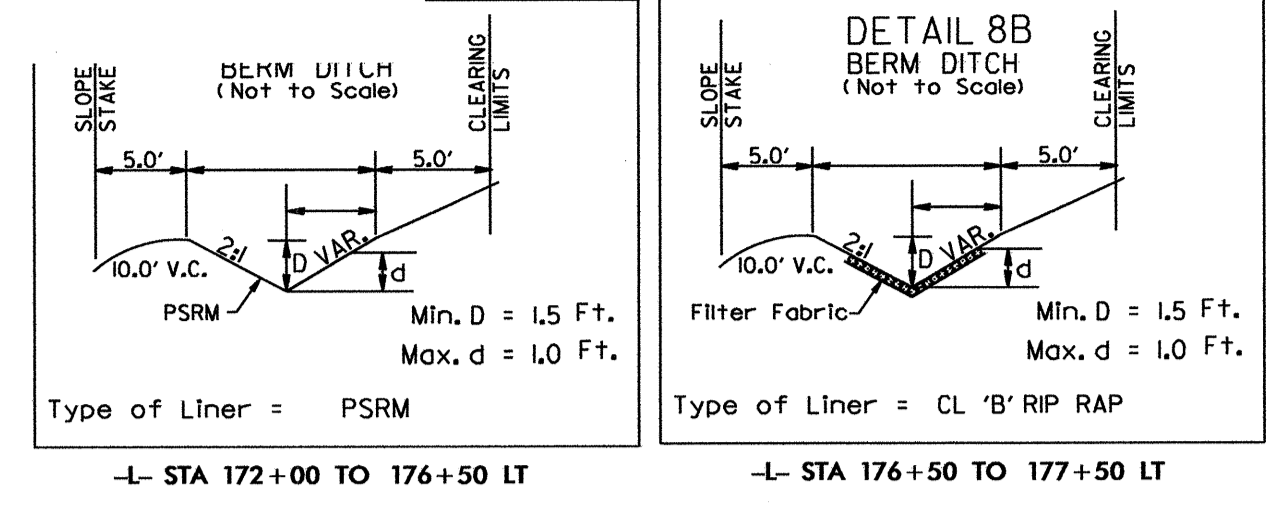


42  
JOHN H. BOWEN  
DB 1507 PG 1157

MARTHA BOWEN CROSBY and husband,  
G.C. CROSBY  
DB 18-V PG 779  
DB 1213 PG 2218

04-MAY-2013 09:45  
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Jagoodwin AT RENZI47770

PROJECT REFERENCE NO.		SHEET NO.	
R-2707AB		EC-17/CONST.08	
RW SHEET NO.			
ROADWAY DESIGN ENGINEER		HYDRAULICS ENGINEER	



**1.5 inch Skimmer with 1.25 inch Orifice Diameter**  
23 ft. weir with 7.5 ft. weir height ID 8.2  
(See Earthen Dam with Skimmer Detail)

**Place Matting for Erosion Control on Slope as Work Allows.**

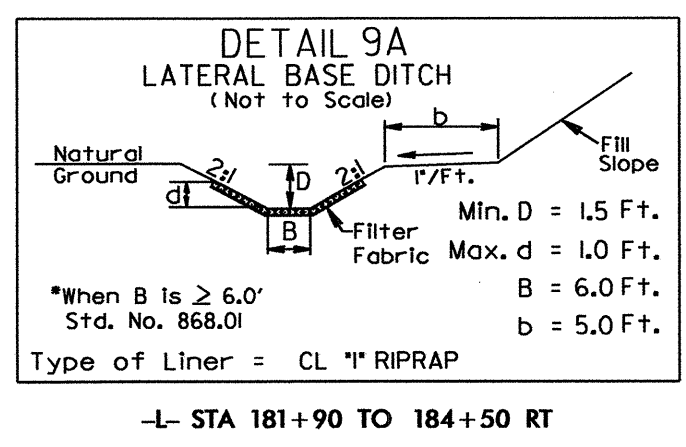
**NC GRID NAD 8395**

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PROJECT REFERENCE NO. R-2707AB		SHEET NO. EC-18/CONST.09	
RW SHEET NO.			
ROADWAY DESIGN ENGINEER		HYDRAULICS ENGINEER	

24 x 22 x 3  
1.5 inch Skimmer  
with 0.75 inch  
Orifice Diameter  
12 ft. weir  
(See Tiered Skimmer  
Basin Detail)  
ID 9.1

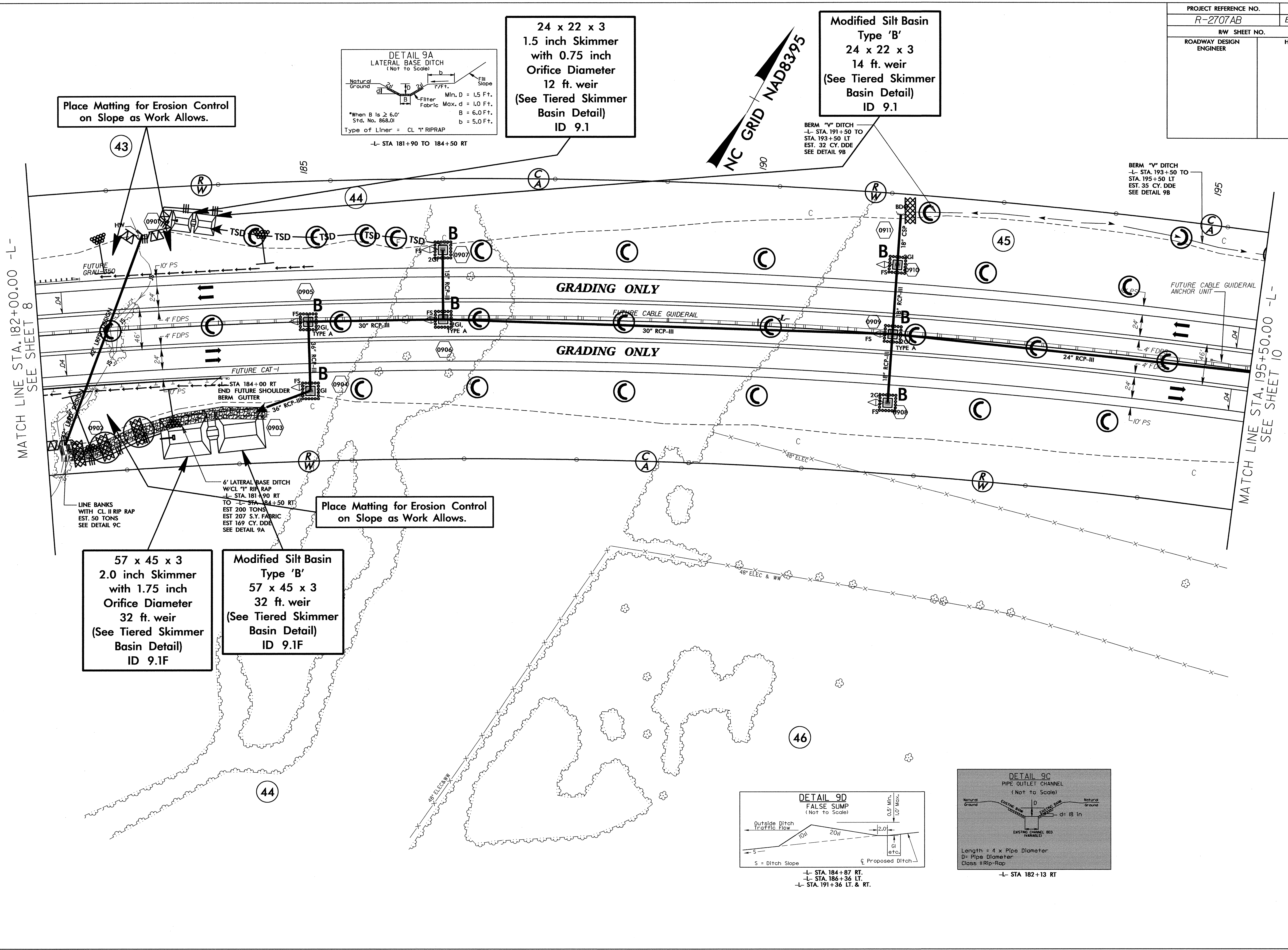
Modified Silt Basin  
Type 'B'  
24 x 22 x 3  
14 ft. weir  
(See Tiered Skimmer  
Basin Detail)  
ID 9.1



Place Matting for Erosion Control  
on Slope as Work Allows.

BERM "V" DITCH  
-L- STA. 191+50 TO  
STA. 193+50 LT  
EST. 32 CY. DDE  
SEE DETAIL 9B

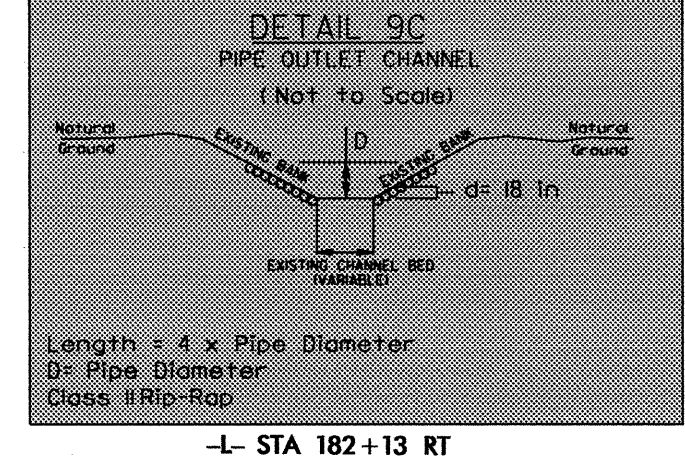
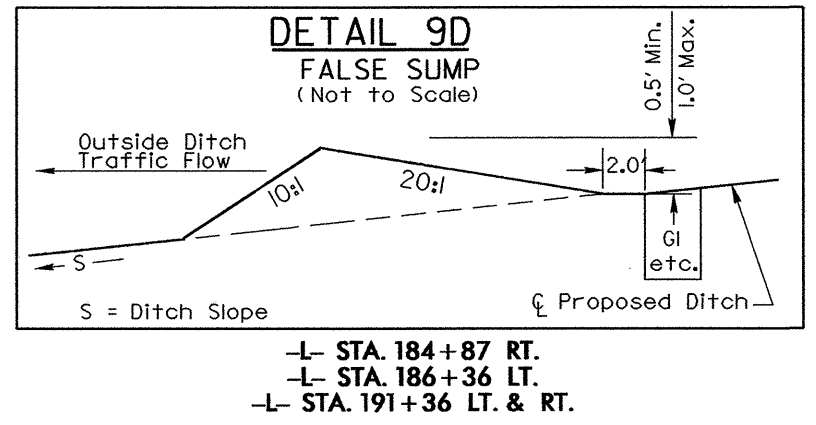
BERM "V" DITCH  
-L- STA. 193+50 TO  
STA. 195+50 LT  
EST. 35 CY. DDE  
SEE DETAIL 9B



57 x 45 x 3  
2.0 inch Skimmer  
with 1.75 inch  
Orifice Diameter  
32 ft. weir  
(See Tiered Skimmer  
Basin Detail)  
ID 9.1F

Modified Silt Basin  
Type 'B'  
57 x 45 x 3  
32 ft. weir  
(See Tiered Skimmer  
Basin Detail)  
ID 9.1F

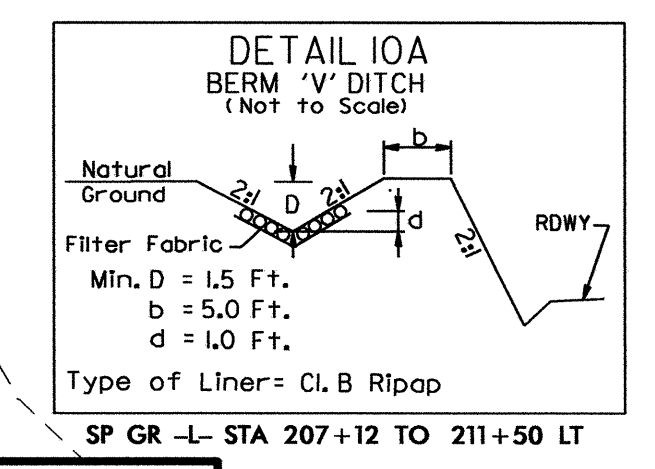
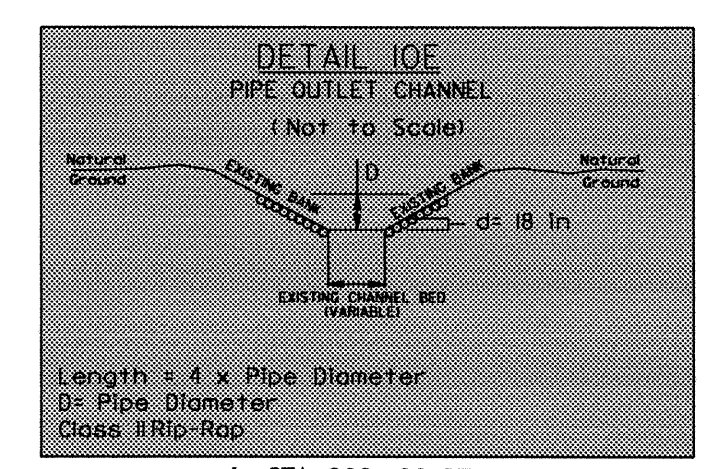
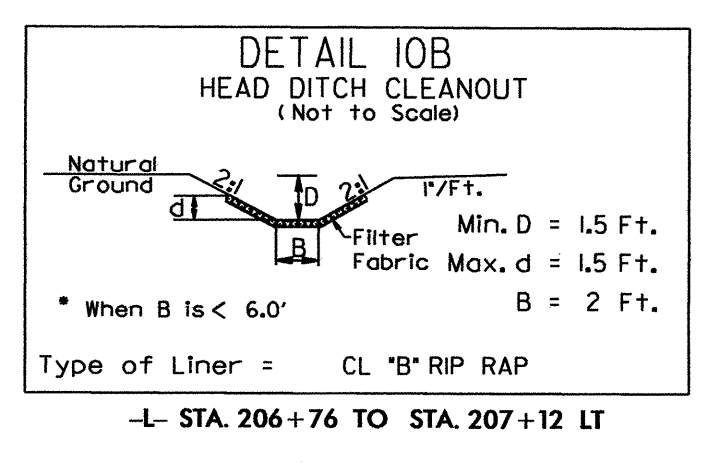
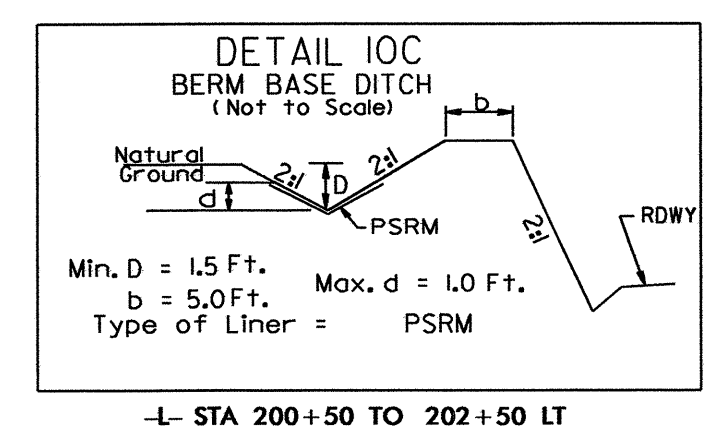
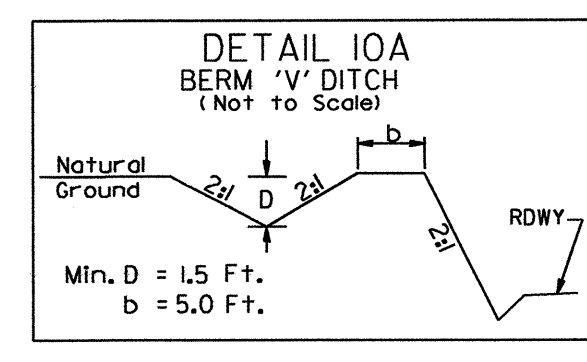
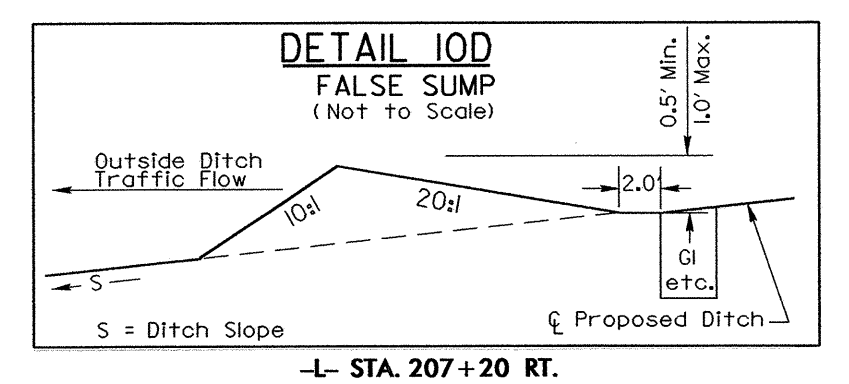
Place Matting for Erosion Control  
on Slope as Work Allows.



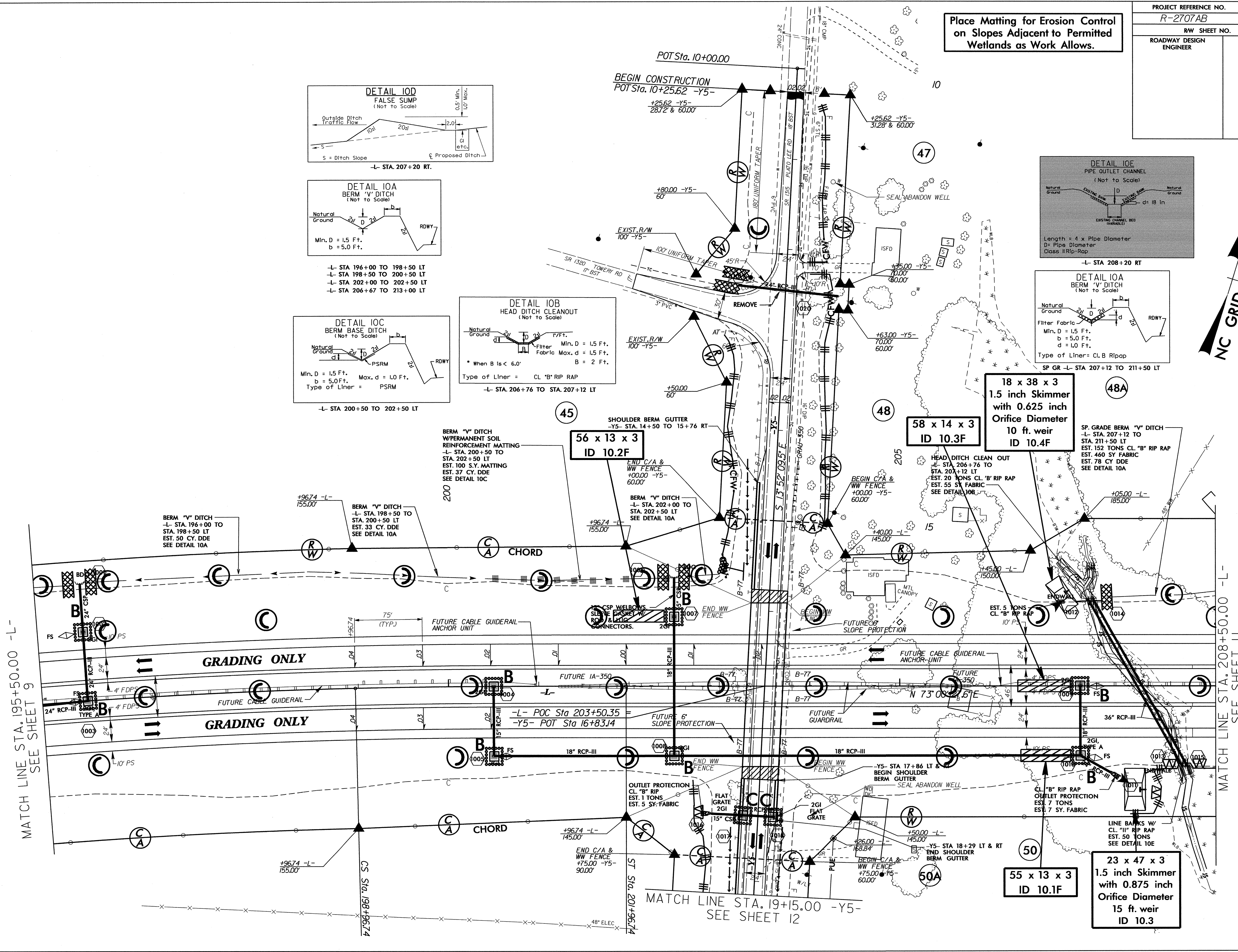
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Jagoodwin AT RENV247770



Place Matting for Erosion Control on Slopes Adjacent to Permitted Wetlands as Work Allows.



NC GRID NAD 8395



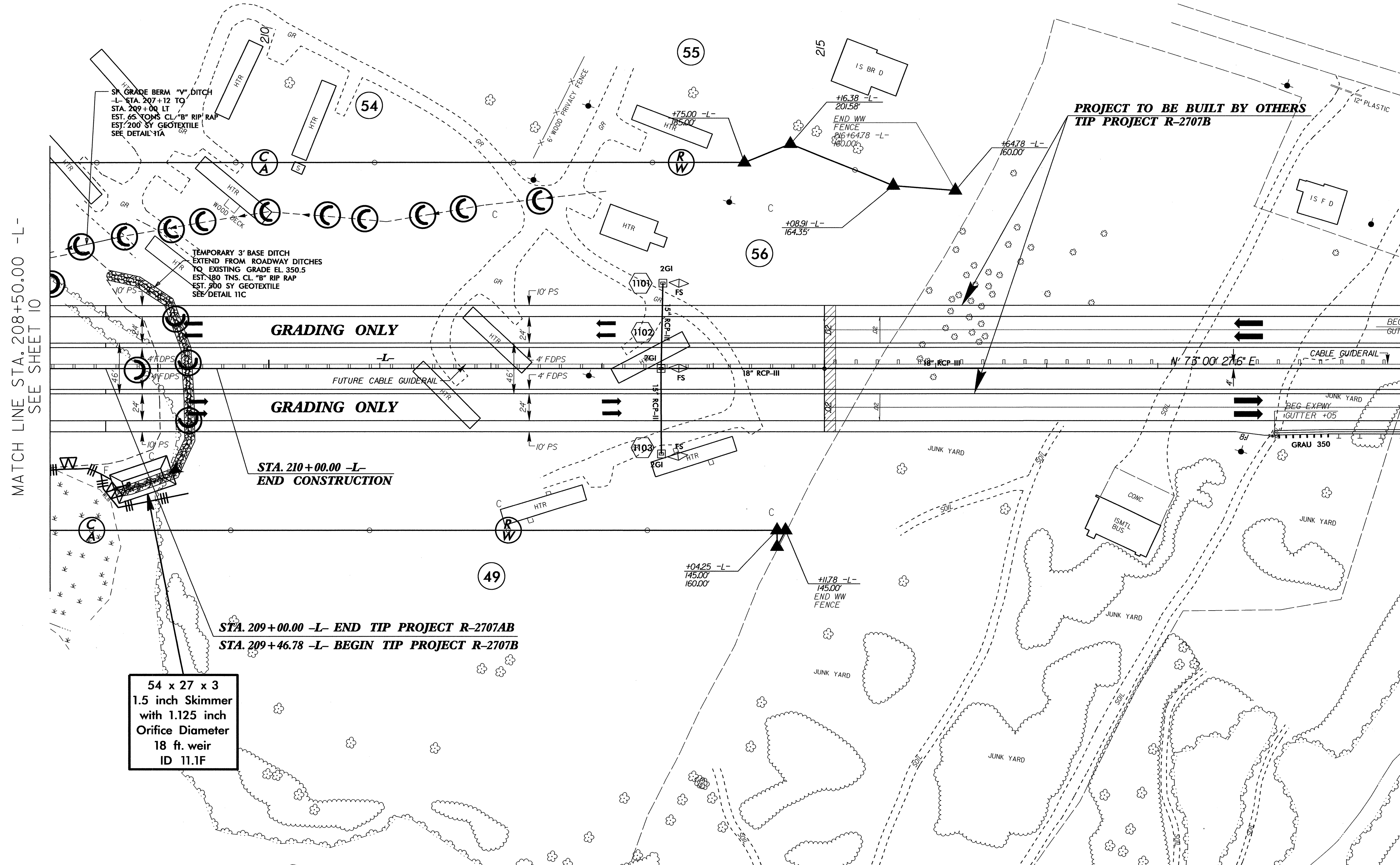
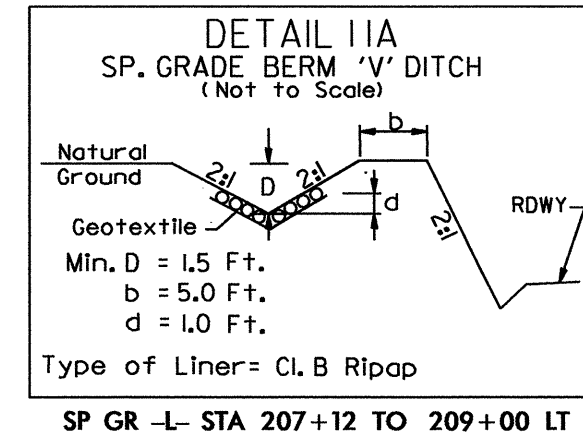
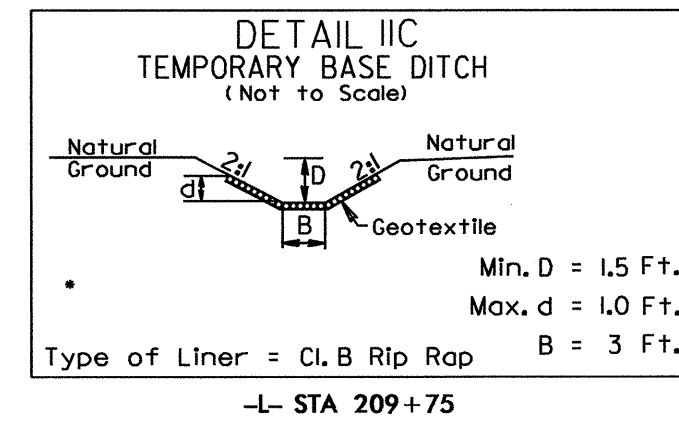
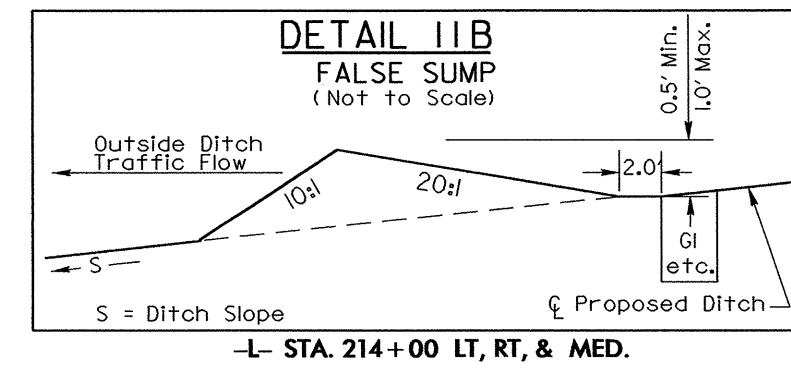
MATCH LINE STA. 195+50.00 -L- SEE SHEET 9

MATCH LINE STA. 208+50.00 -L- SEE SHEET 11

MATCH LINE STA. 19+15.00 -Y5- SEE SHEET 12

Place Matting for Erosion Control on Slopes Adjacent to Permitted Wetlands as Work Allows.

PROJECT REFERENCE NO. R-2707AB		SHEET NO. EC-20/CONST.II	
RW SHEET NO.			
ROADWAY DESIGN ENGINEER		HYDRAULICS ENGINEER	



MATCH LINE STA. 208+50.00 -L-  
SEE SHEET 10

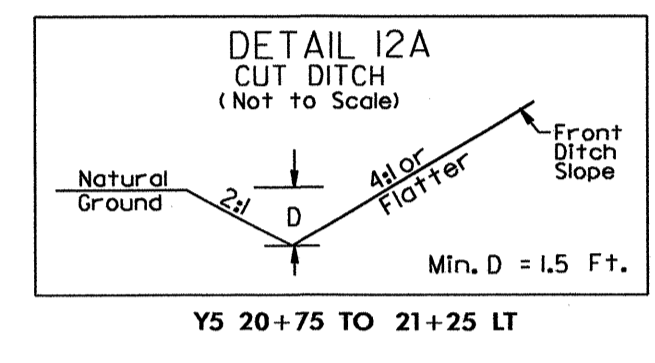
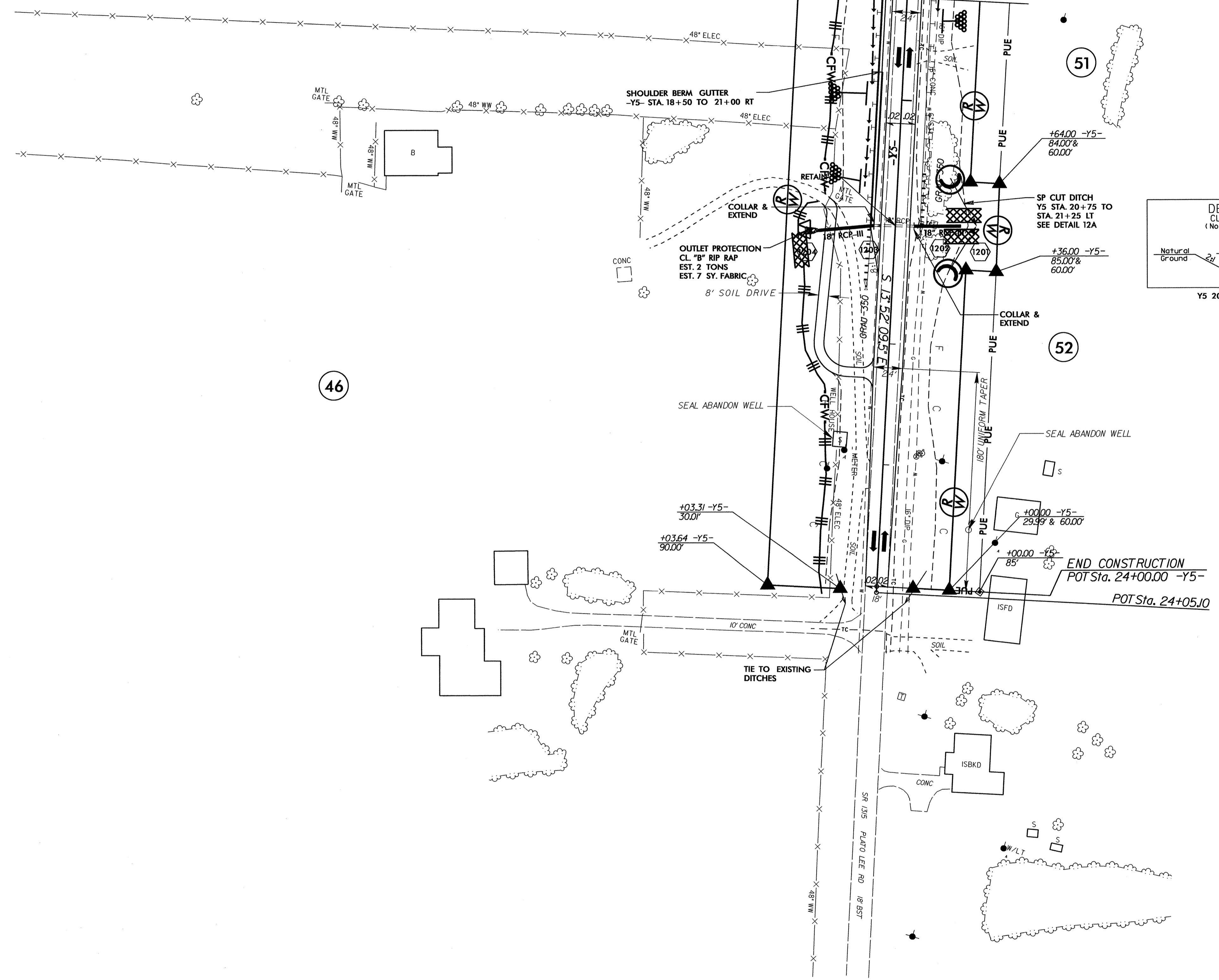
54 x 27 x 3  
1.5 inch Skimmer  
with 1.125 inch  
Orifice Diameter  
18 ft. weir  
ID 11.1F

NC GRID NAD 83/95

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PROJECT REFERENCE NO. R-2707AB	SHEET NO. EC-21/CONST.12
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

MATCH LINE STA. 19+15.00 -Y5-  
SEE SHEET 10



NC GRID NAD 8395

46

52

50

53