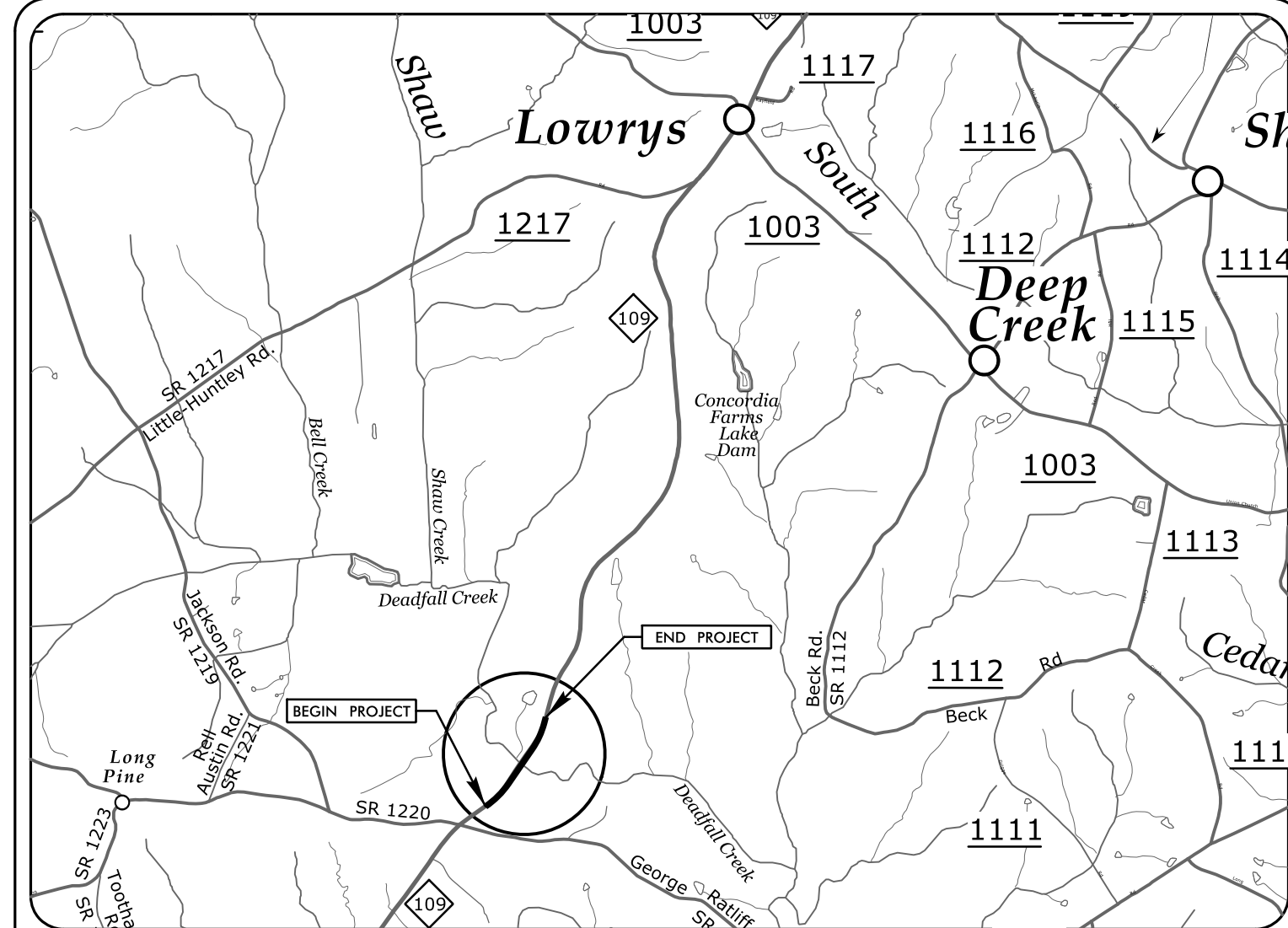


**TIP PROJECT: B-5818**



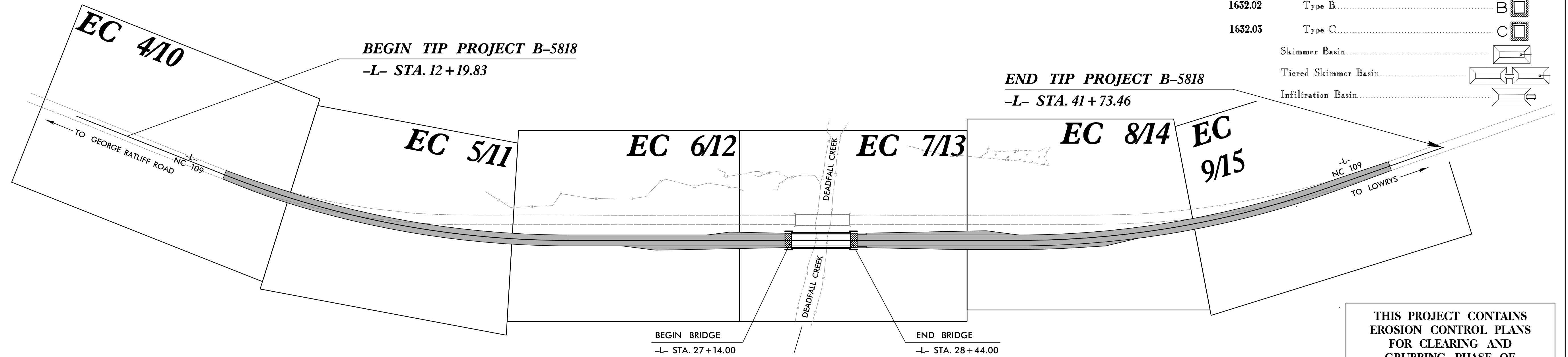
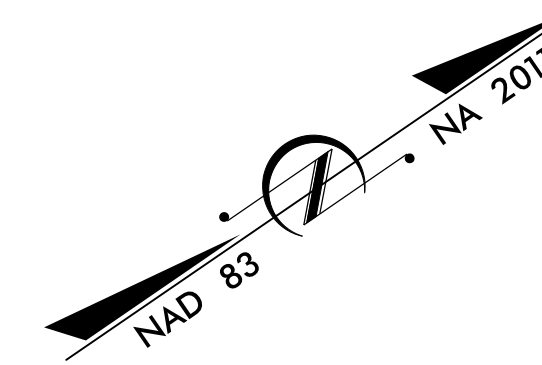
**VICINITY MAP**  
NOT TO SCALE

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

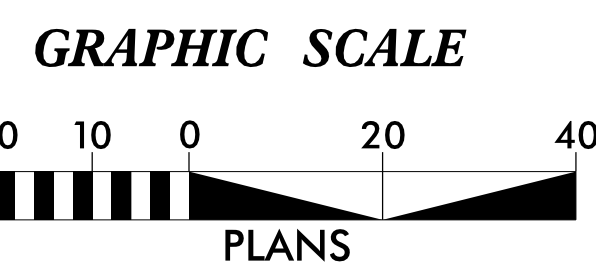
STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	B-5818	EC-1	19
STATE PROJ. NO.	F.A. PROJ. NO.	DESCRIPTION	
45771.1.1		P.E.	
45771.2.1		ROW/UTILITIES	
45771.3.1		CONSTRUCTION	

**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
1606.01	Special Sediment Control Fence	III
1622.01	Temporary Berms and Slope Drains	TD
1630.02	Silt Basin Type B	Silt Basin Type B
1633.01	Temporary Rock Silt Check Type-A	Rock Silt Check Type-A
	Temporary Rock Silt Check Type-A with Matting and Polyacrylamide (PAM)	Rock Silt Check Type-A with PAM
1633.02	Temporary Rock Silt Check Type-B	Rock Silt Check Type-B
	Wattle/Coir Fiber Wattle	Wattle/Coir Fiber Wattle
	Wattle/Coir Fiber Wattle with Polyacrylamide (PAM)	Wattle/Coir Fiber Wattle with PAM
1634.01	Temporary Rock Sediment Dam Type-A	Rock Sediment Dam Type-A
1634.02	Temporary Rock Sediment Dam Type-B	Rock Sediment Dam Type-B
1635.01	Rock Pipe Inlet Sediment Trap Type-A	Rock Pipe Inlet Sediment Trap Type-A
1635.02	Rock Pipe Inlet Sediment Trap Type-B	Rock Pipe Inlet Sediment Trap Type-B
1630.04	Stilling Basin	Stilling Basin
1630.06	Special Stilling Basin	Special Stilling Basin
	Rock Inlet Sediment Trap:	
1632.01	Type A	A
1632.02	Type B	B
1632.03	Type C	C
	Skimmer Basin	Skimmer Basin
	Tiered Skimmer Basin	Tiered Skimmer Basin
	Infiltration Basin	Infiltration Basin



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



**THESE EROSION AND SEDIMENT CONTROL PLANS COMPLY WITH  
THE APPLICABLE REGULATIONS SET FORTH BY THE NCG-010000  
GENERAL CONSTRUCTION PERMIT EFFECTIVE APRIL 1, 2019  
AND ISSUED BY THE NORTH CAROLINA DEPARTMENT OF  
ENVIRONMENTAL QUALITY DIVISION OF WATER RESOURCES.**



Prepared in the Office of:  
**STV ENGINEERS, INC.**  
900 WEST TRADE STREET, SUITE 715  
CHARLOTTE, NC 28202

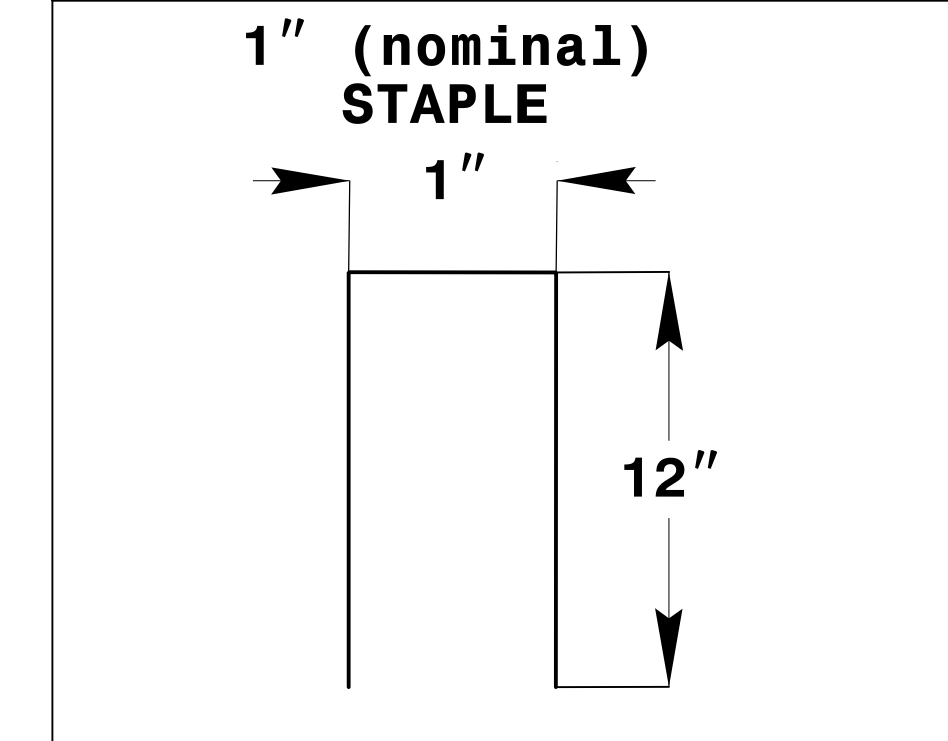
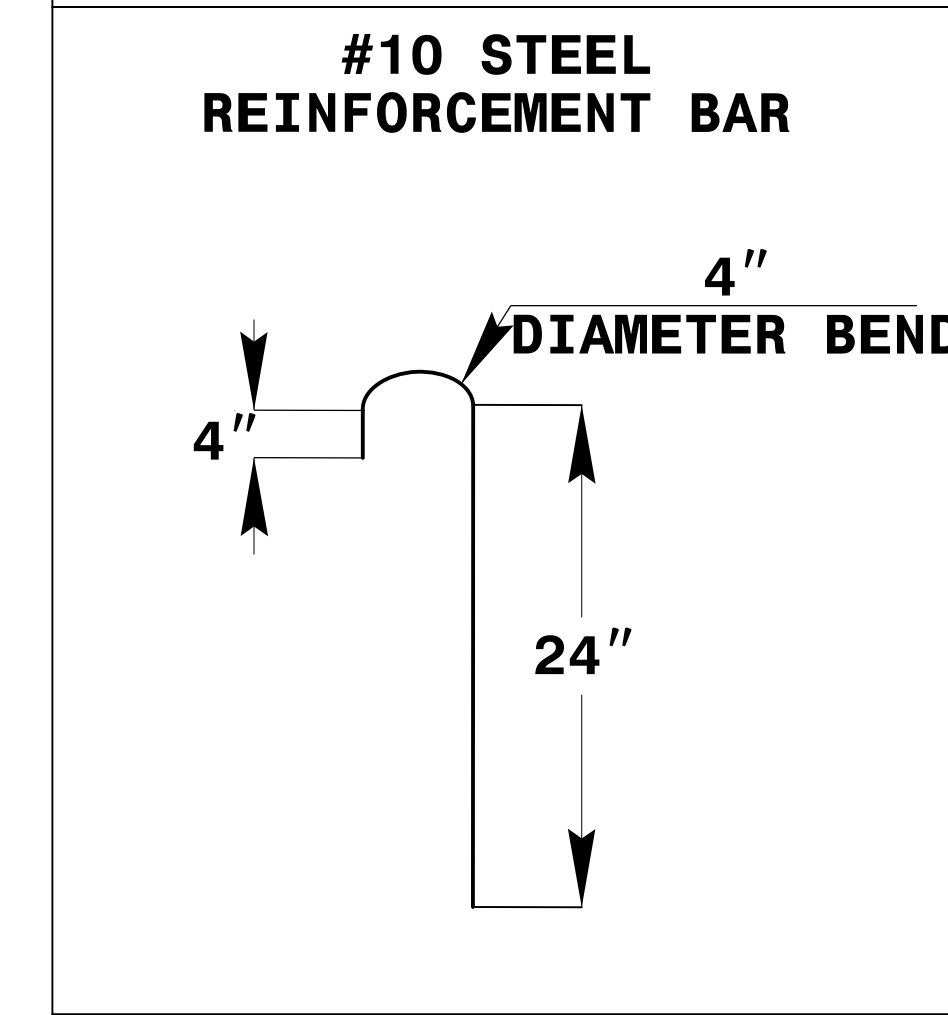
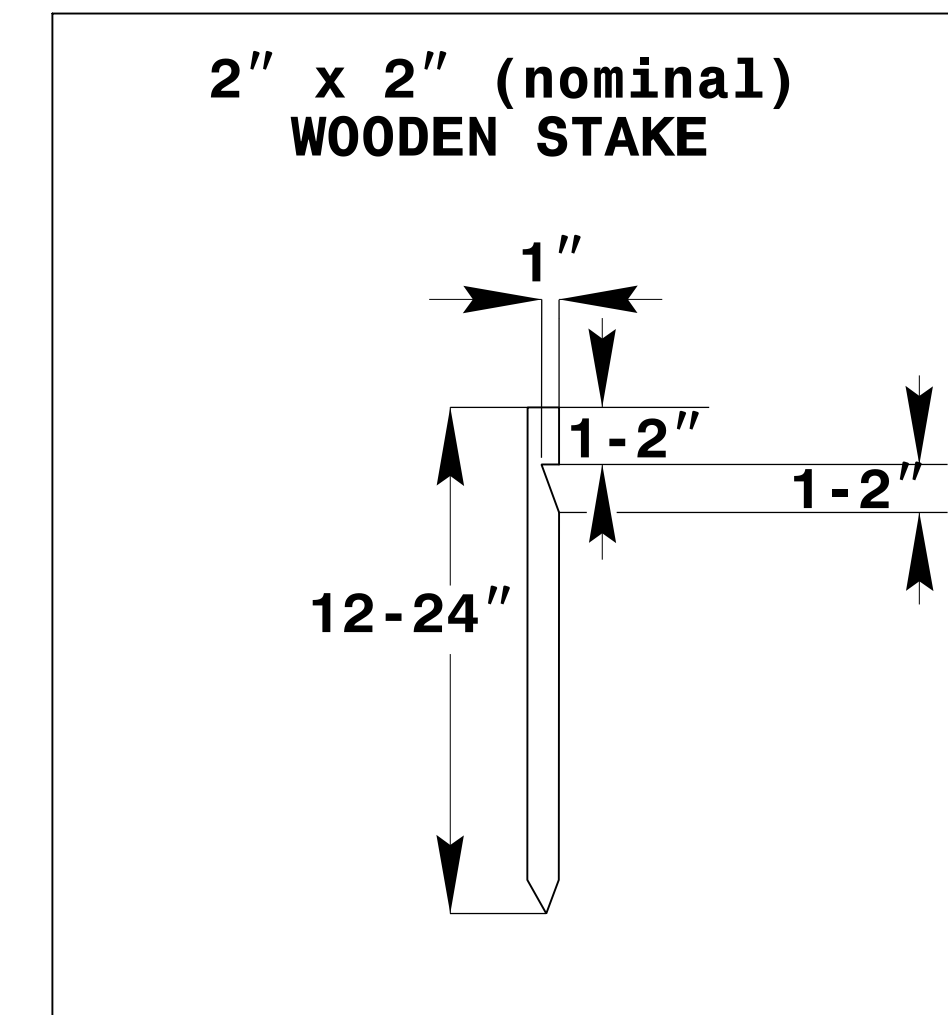
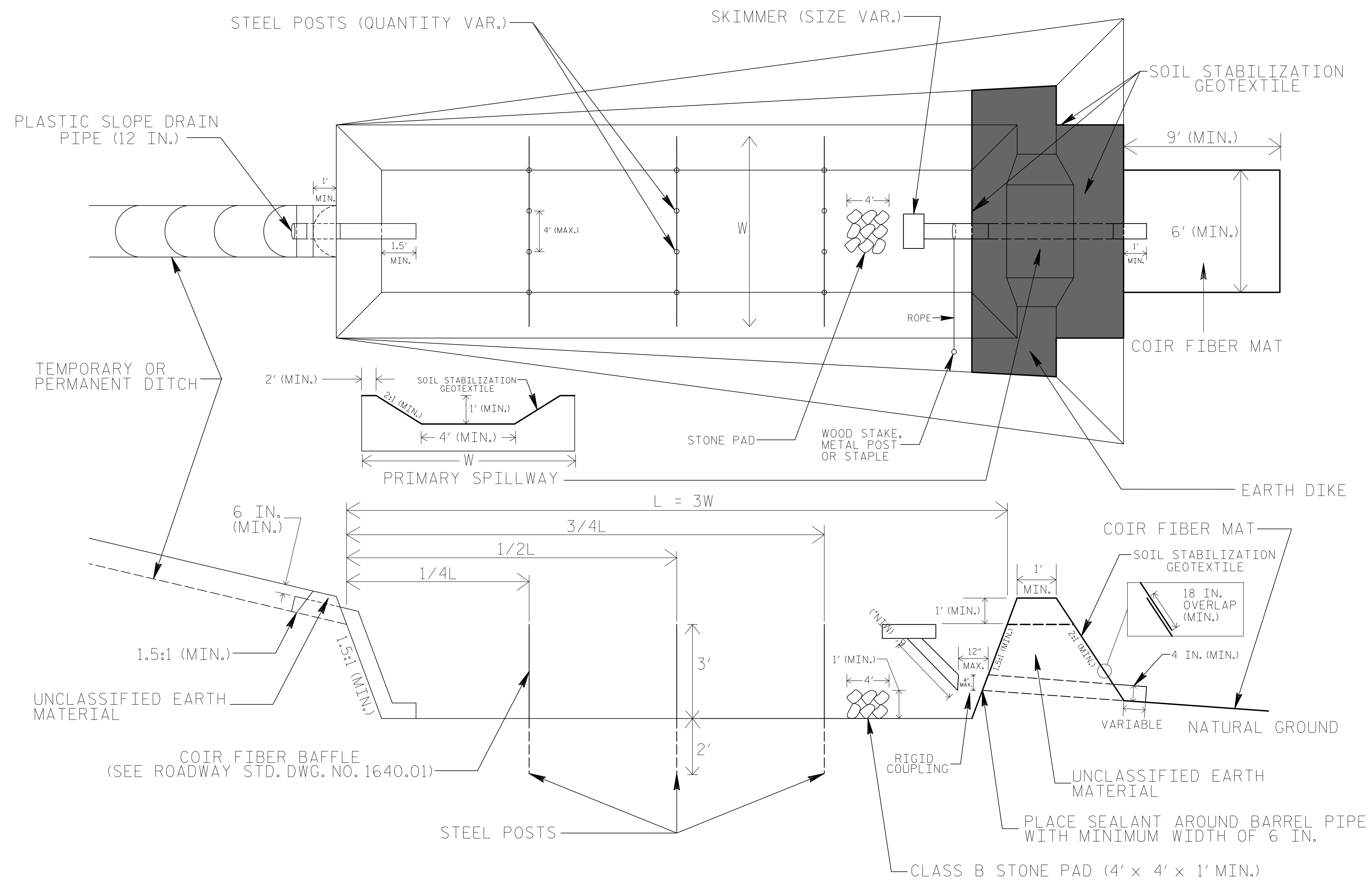
Designed by:  
**DILLON BAWAYAN** **4157**  
NAME LEVEL III CERTIFICATION NO.

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 2018 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	

# SKIMMER BASIN WITH BAFFLES DETAIL



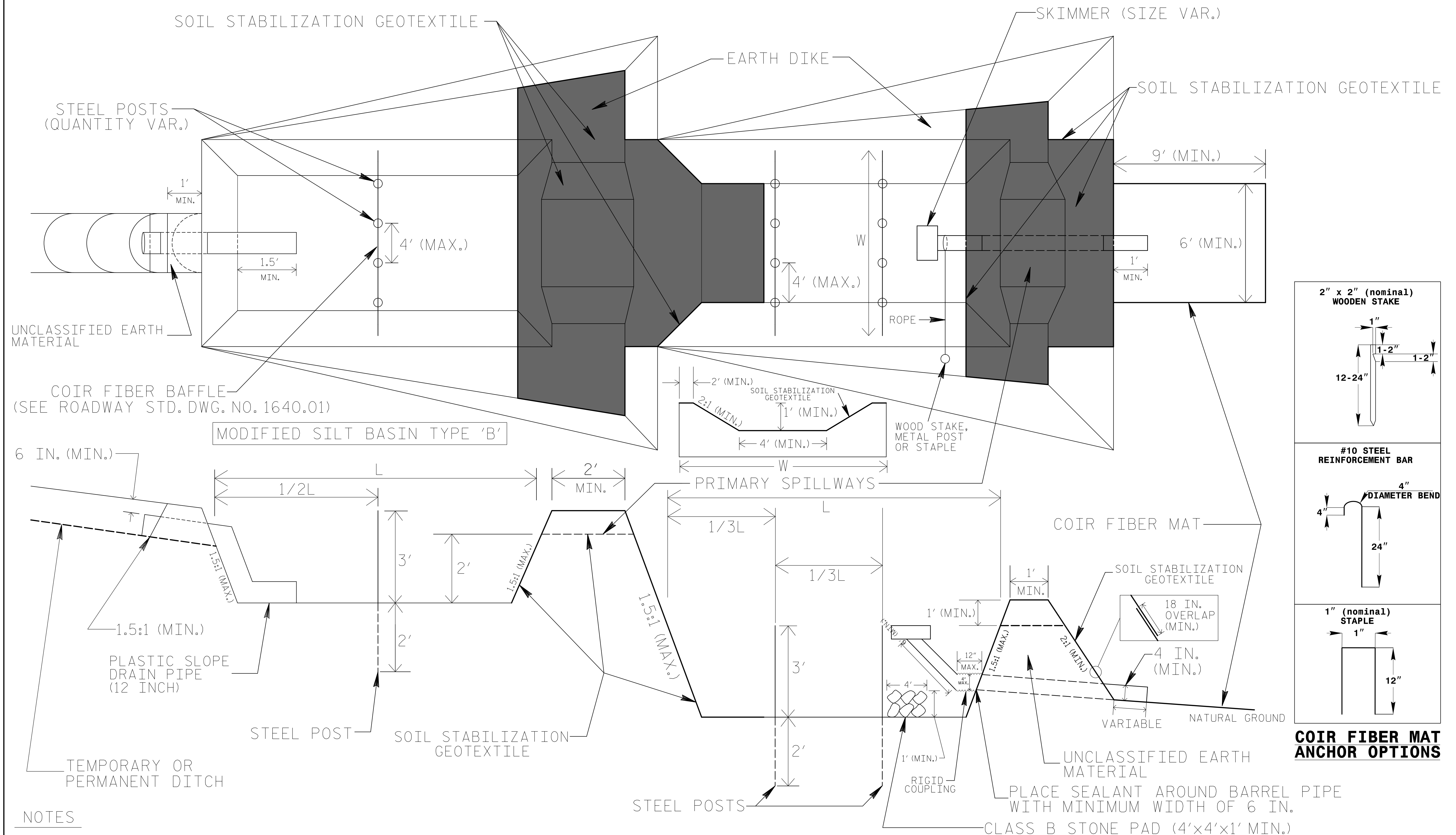
## COIR FIBER MAT ANCHOR OPTIONS

### 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 PRIMARY 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 PRIMARY SPILLWAY SHALL BE ONE CONTINUOUS PIECE OF MATERIAL OR OVERLAPPED 18 IN. (MIN.).

NOT TO SCALE

# TIERED SKIMMER BASIN DETAIL

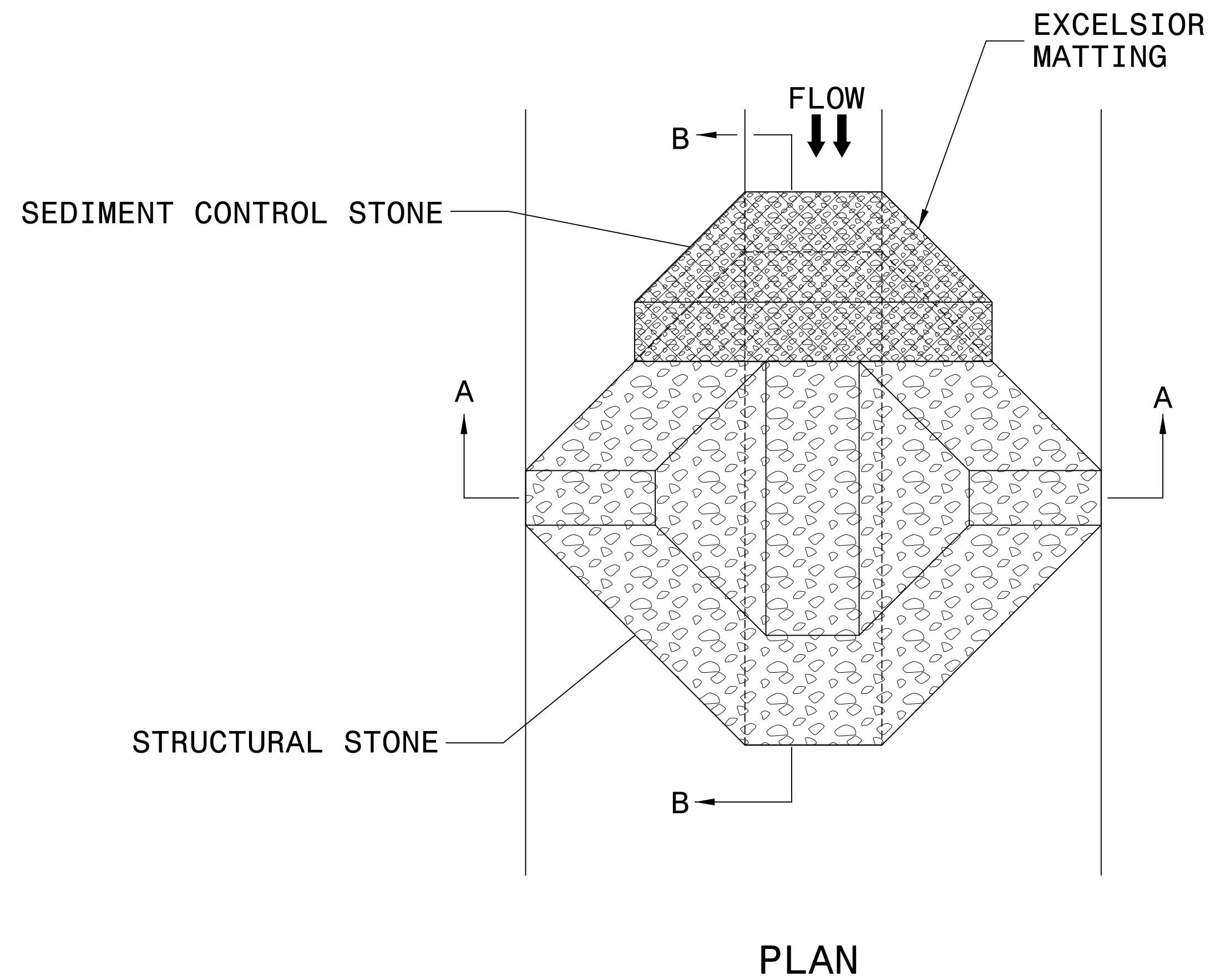


## NOTES

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 3FT., THE MINIMUM BASIN WIDTHS SHALL BE 9 FT.
5. DETERMINE PRIMARY SPILLWAY WEIRLENGTHS (FT.) USING  $Q/0.8$ , WHERE Q IS FLOW RATE (CFS) INTO UPPER BASIN.
6. SOIL STABILIZATION GEOTEXTILE FOR PRIMARY SPILLWAYS SHALL BE ONE CONTINUOUS PIECE OF MATERIAL OR OVERLAPPED 18 IN. (MIN.).

NOT TO SCALE

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



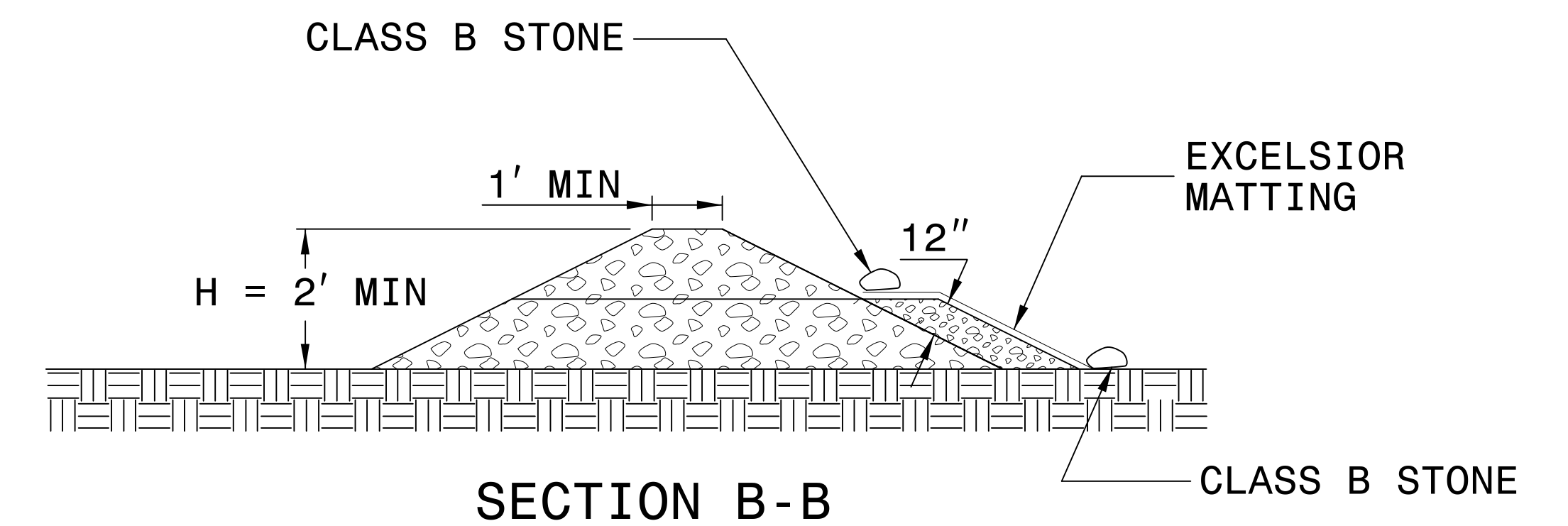
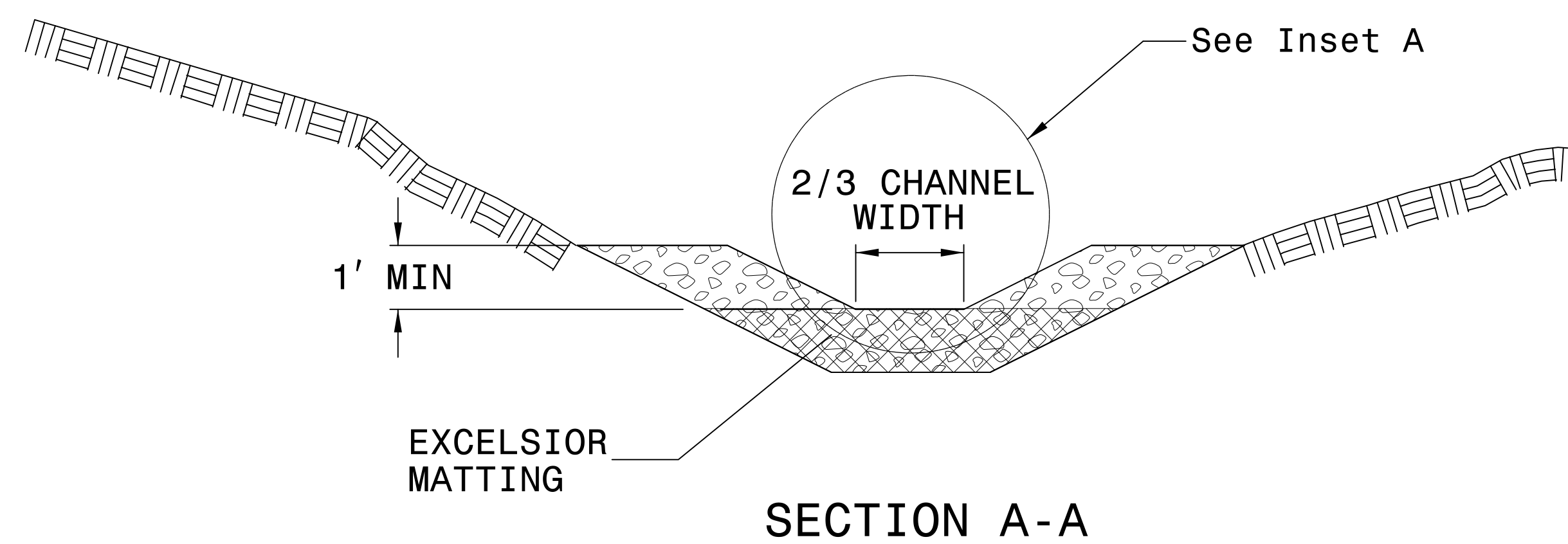
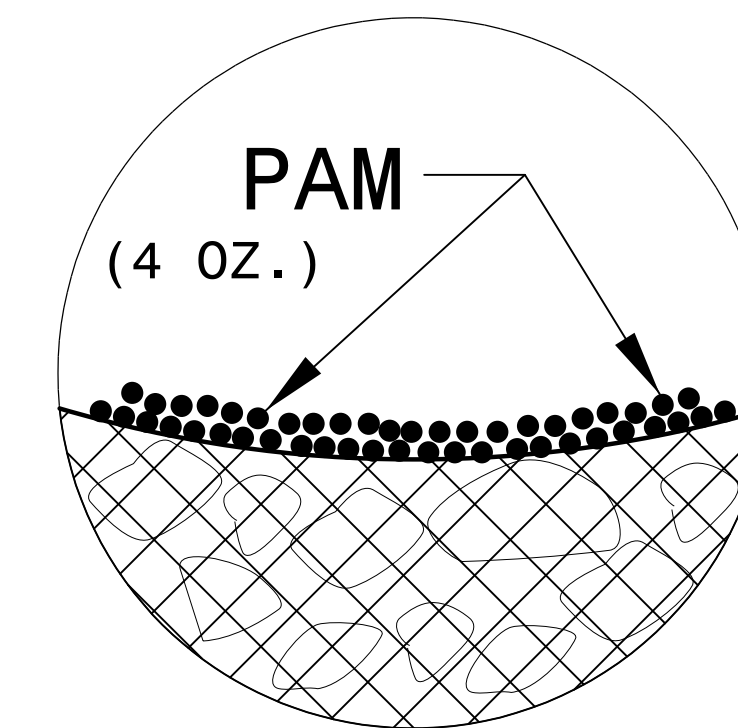
## NOTES:

INSTALL TEMPORARY ROCK SILT CHECK TYPE A IN ACCORDANCE WITH ROADWAY STANDARD DRAWING NO. 1633.01.

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

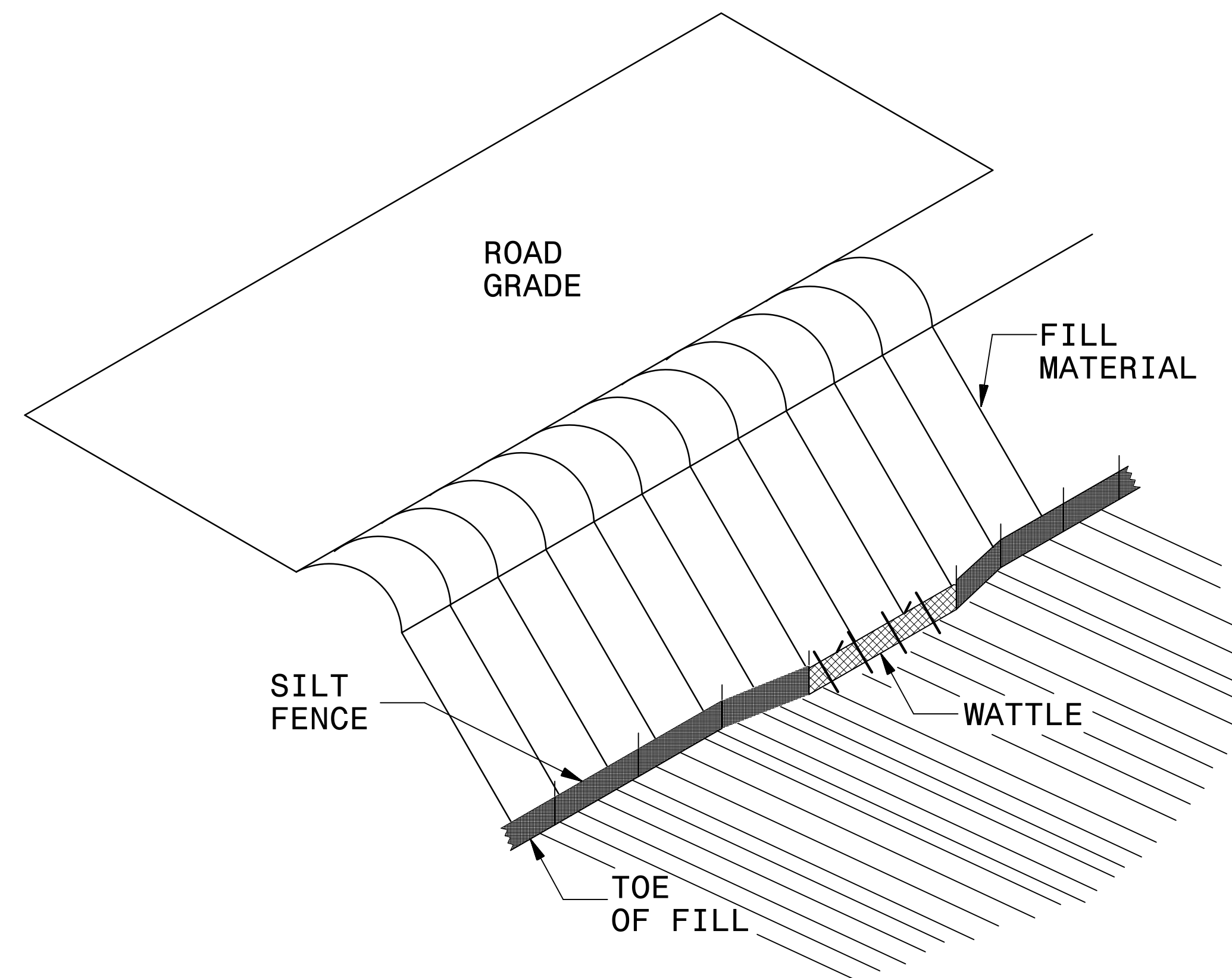
PRIOR TO POLYACRYLAMIDE (PAM) APPLICATION, OBTAIN A SOIL SAMPLE FROM PROJECT LOCATION, AND FROM OFFSITE MATERIAL, AND ANALYZE FOR APPROPRIATE PAM FLOCCULANT TO BE APPLIED TO EACH ROCK SILT CHECK.

INITIALLY APPLY 4 OUNCES OF POLYACRYLAMIDE (PAM) TO TOP OF MATTING SECTION AND AFTER EVERY RAINFALL EVENT THAT EQUALS OR EXCEEDS 0.50 INCHES.

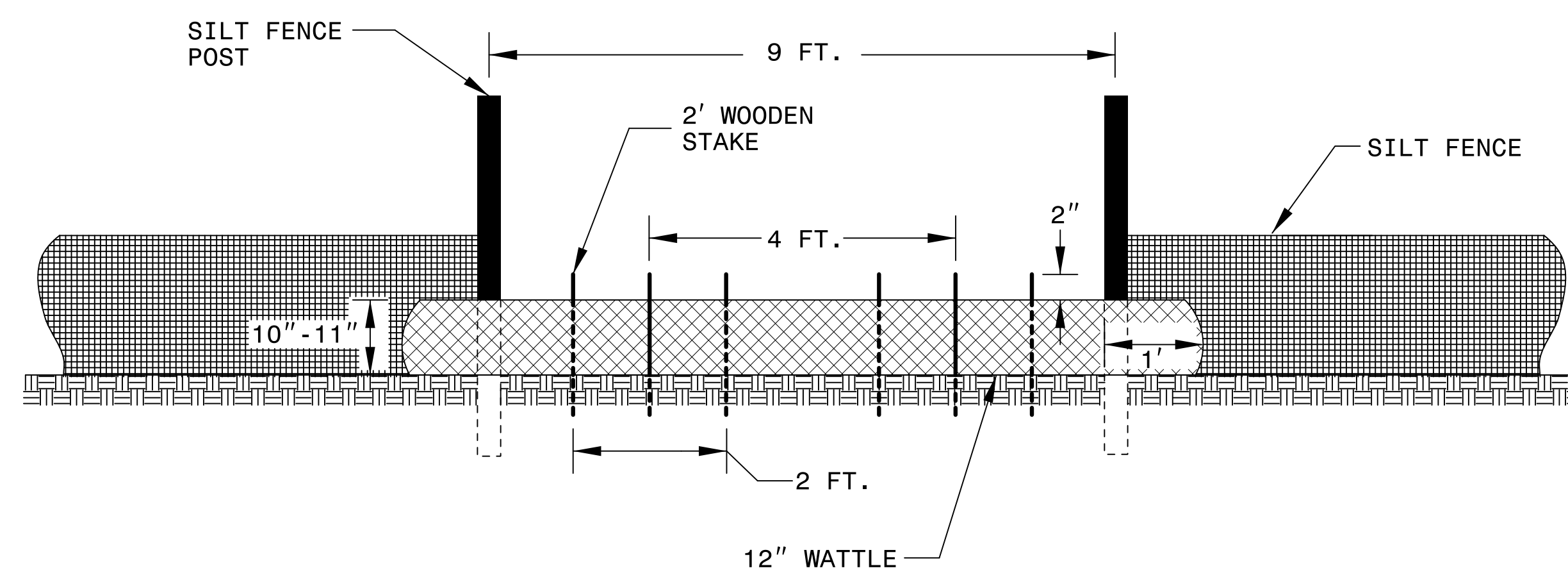


NOT TO SCALE

# SILT FENCE COIR FIBER WATTLE BREAK DETAIL



**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.

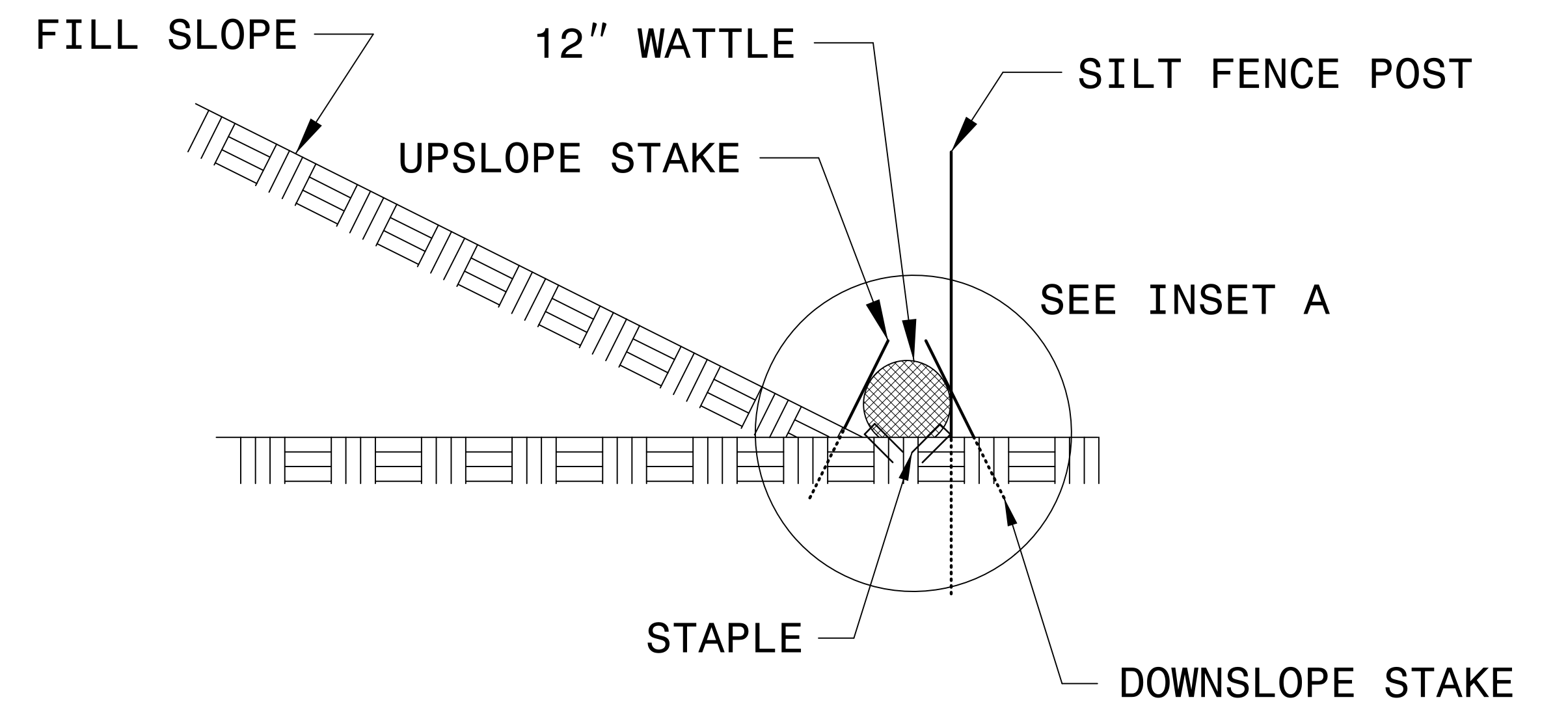
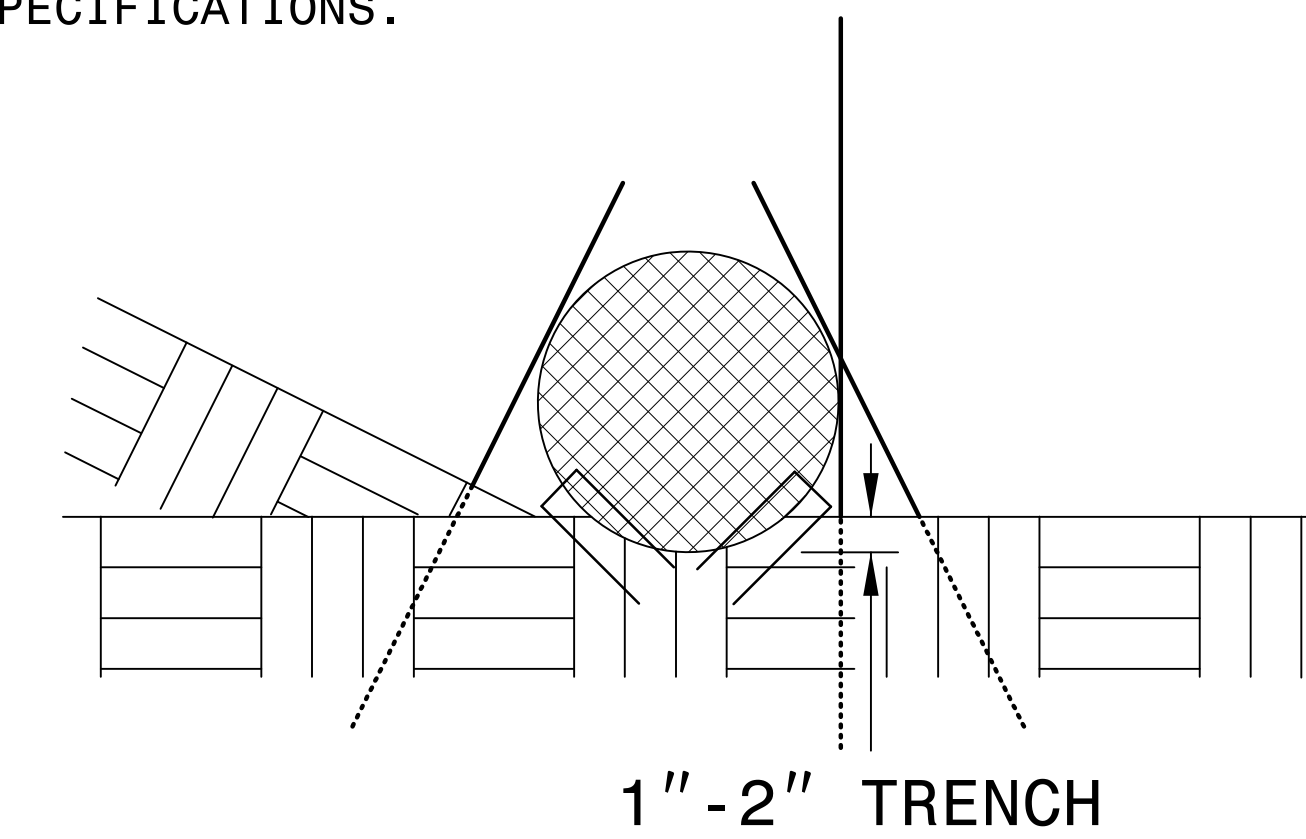
PROVIDE STAPLES MADE OF 0.125 IN. DIAMETER STEEL WIRE FORMED INTO A U SHAPE NOT LESS THAN 12" IN LENGTH.

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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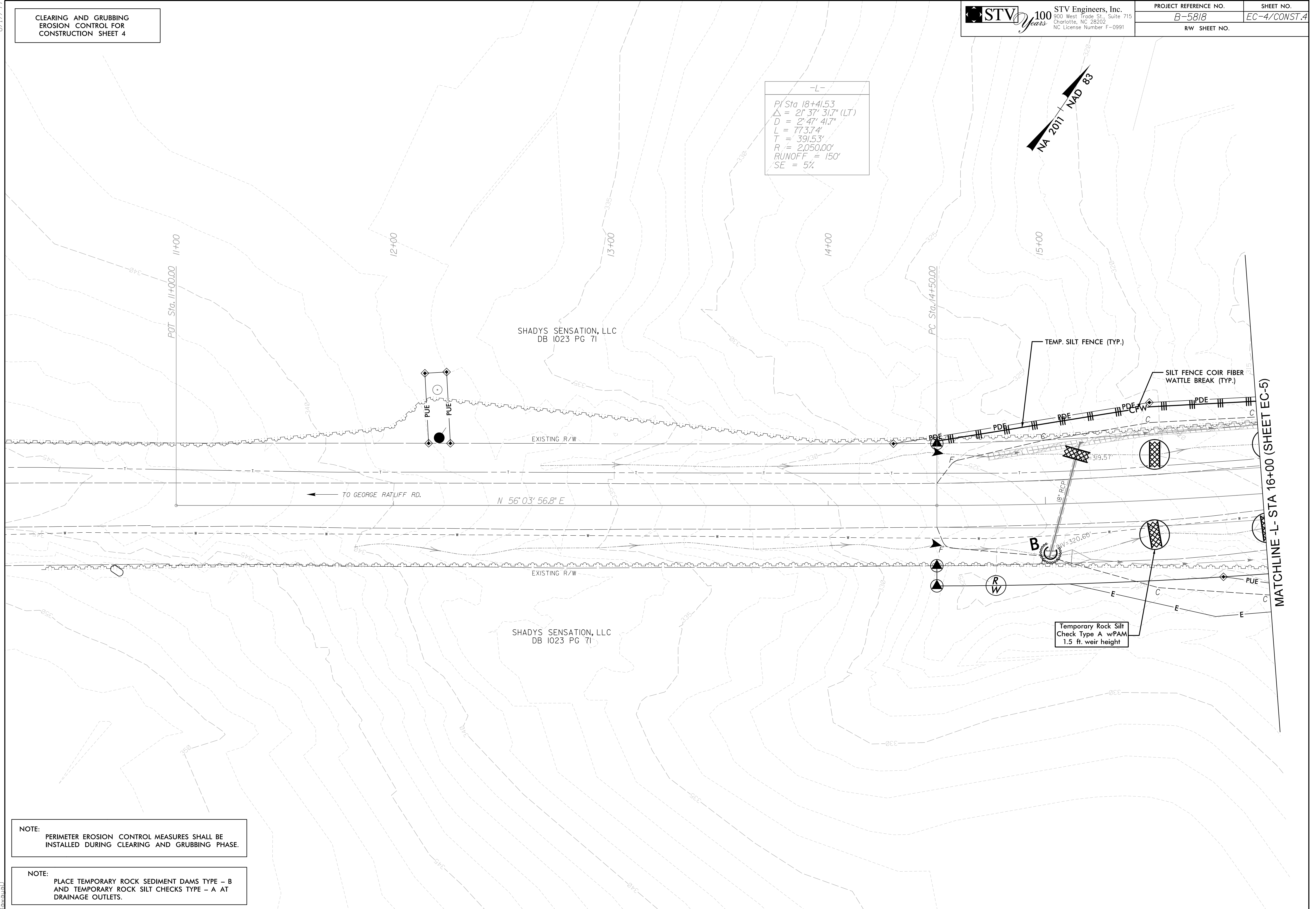
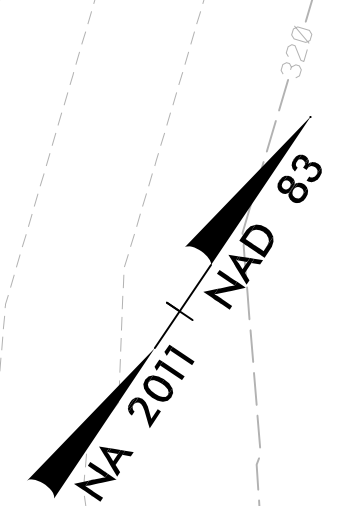


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## ***SOIL STABILIZATION TIMEFRAMES***

<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.

-L-  
PI Sta 18+41.53  
 $\Delta = 21' 37" 31.7" (LT)$   
D = 2' 47" 41.7"  
L = 773.74'  
T = 391.53'  
R = 2,050.00'  
RUNOFF = 150'  
SE = 5%



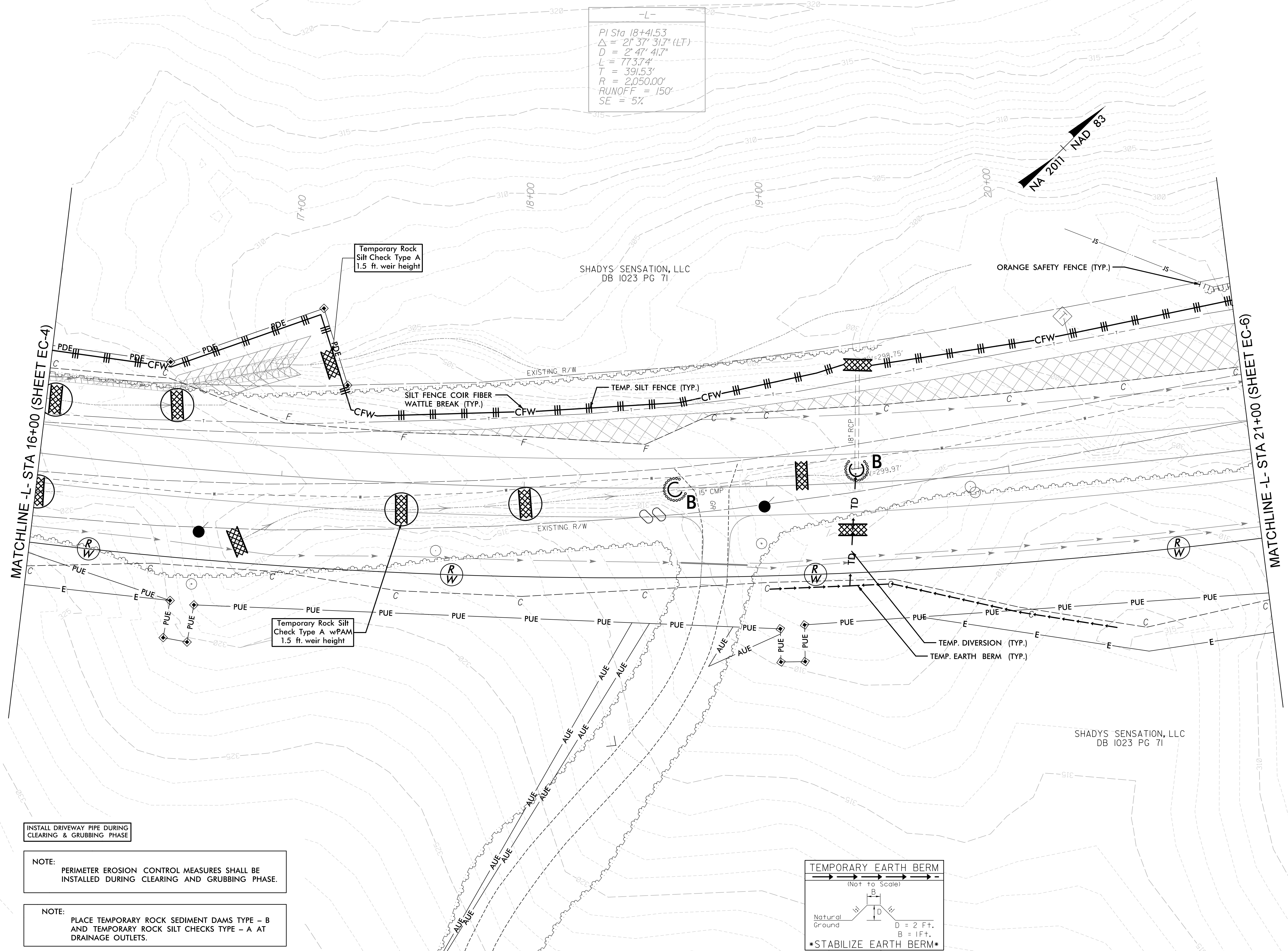
NOTE:  
PERIMETER EROSION CONTROL MEASURES SHALL BE  
INSTALLED DURING CLEARING AND GRUBBING PHASE.

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



-L-

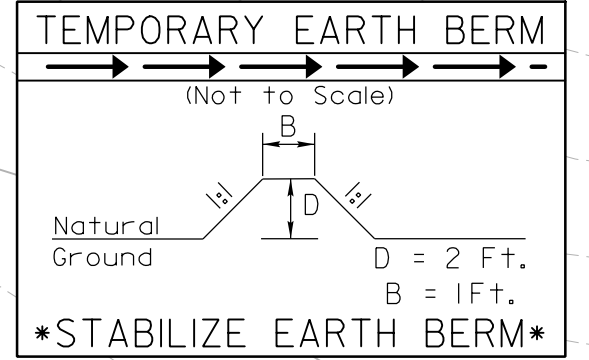
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 $D = 2^\circ 47' 41.7"$   
 $L = 773.74'$   
 $T = 391.53'$   
 $R = 2,050.00'$   
 $RUNOFF = 150'$   
 $SE = 5\%$



INSTALL DRIVEWAY PIPE DURING  
CLEARING & GRUBBING PHASE

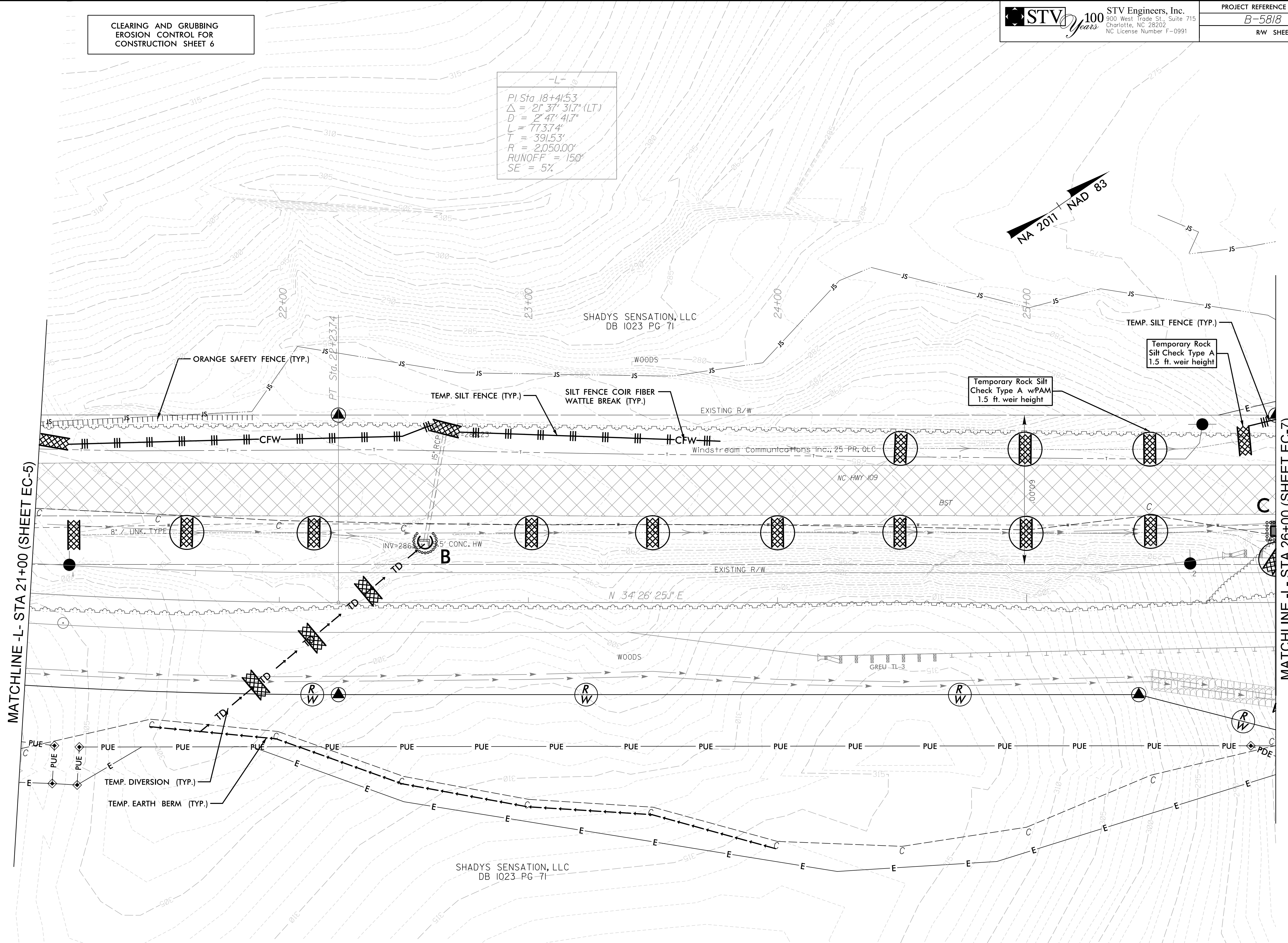
NOTE:  
PERIMETER EROSION CONTROL MEASURES SHALL BE  
INSTALLED DURING CLEARING AND GRUBBING PHASE.

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



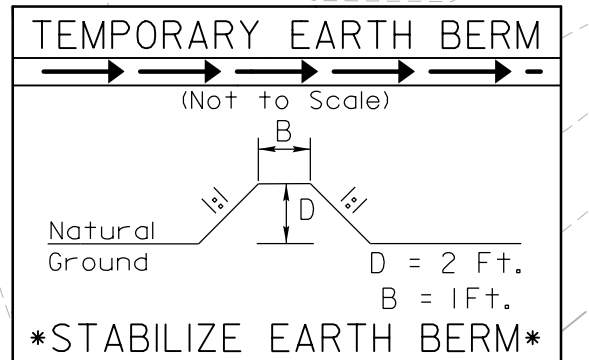
**CLEARING AND GRUBBING  
EROSION CONTROL FOR  
CONSTRUCTION SHEET 6**

-L-  
 PI Sta 18+41.53  
 $\Delta = 21' 37" 31.7"$  (LT)  
 $D = 2' 47" 41.7"$   
 $L = 773.74'$   
 $T = 391.53'$   
 $R = 2,050.00'$   
 RUNOFF = 150"  
 SE = 5%



MATCHLINE -L- STA 21+00 (SHEET EC-5)

MATCHLINE -L- STA 26+00 (SHEET EC-7)

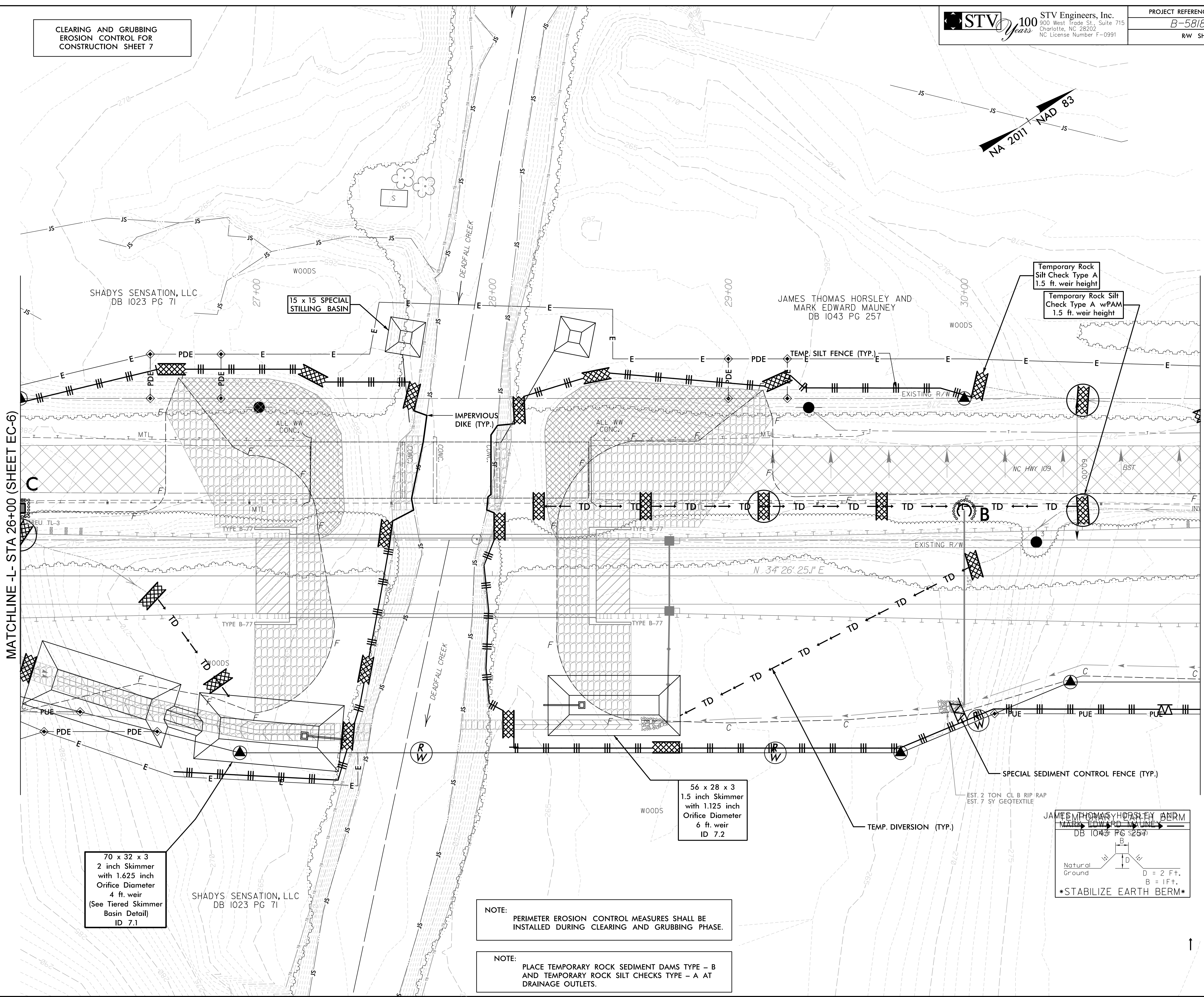
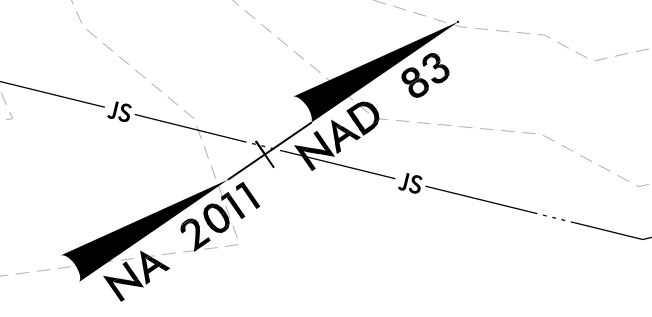


**NOTE:** PERIMETER EROSION CONTROL MEASURES SHALL BE INSTALLED DURING CLEARING AND GRUBBING PHASE.

**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 7



MATCHLINE -L- STA 26+00 (SHEET EC-6)

MATCHLINE -L- STA 31+00 (SHEET EC-8)

70 x 32 x 3  
2 inch Skimmer  
with 1.625 inch  
Orifice Diameter  
4 ft. weir  
(See Tiered Skimmer  
Basin Detail)  
ID 7.1

15 x 15 SPECIAL  
STILLING BASIN

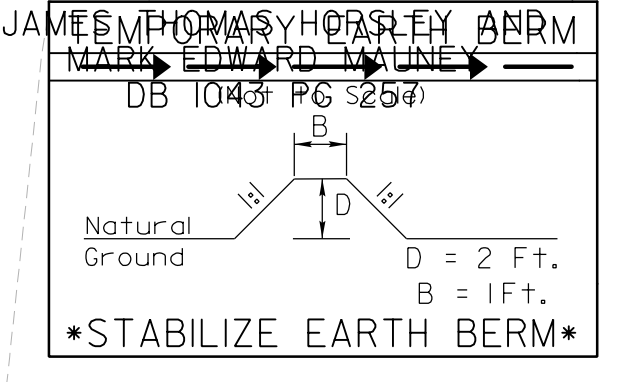
56 x 28 x 3  
1.5 inch Skimmer  
with 1.125 inch  
Orifice Diameter  
6 ft. weir  
ID 7.2

Temporary Rock  
Silt Check Type A  
1.5 ft. weir height

Temporary Rock Silt  
Check Type A w/PAM  
1.5 ft. weir height

NOTE: PERIMETER EROSION CONTROL MEASURES SHALL BE INSTALLED DURING CLEARING AND GRUBBING PHASE.

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

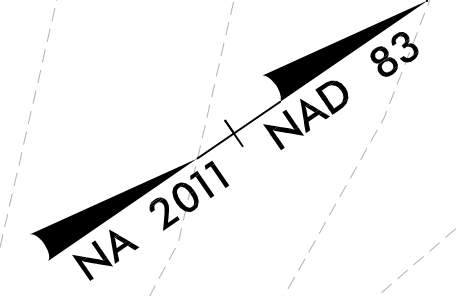


8/17/99

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CLEARING AND GRUBBING  
EROSION CONTROL FOR  
CONSTRUCTION SHEET 8

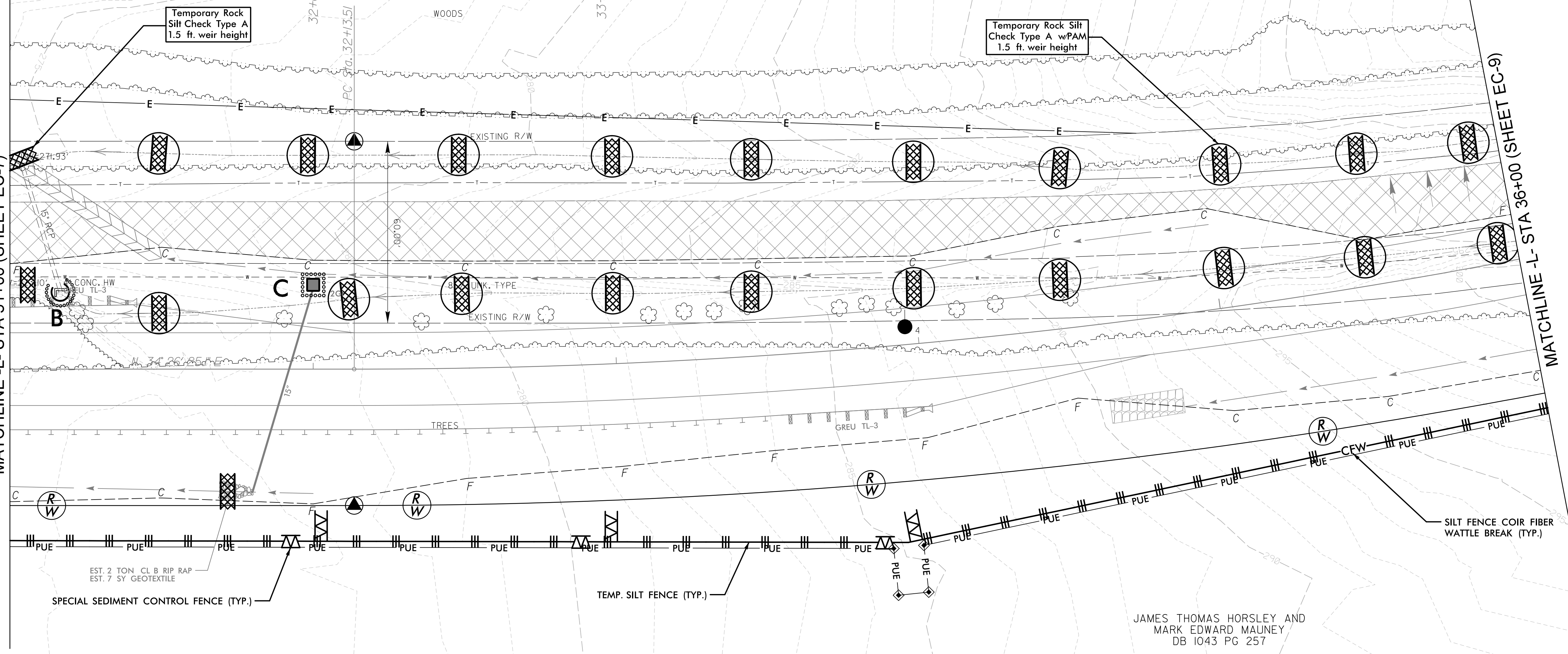
-L-  
PI Sta. 35+62.03  
 $\Delta = 19' 17" 50.5" (LT)$   
 $D = 2' 47" 41.7"$   
 $L = 690.45'$   
 $T = 348.52'$   
 $R = 2,050.00'$   
RUNOFF = 150'  
SE = 5%



JAMES THOMAS HORSLEY AND  
MARK EDWARD MAUNEY  
DB 1043 PG 257

MATCHLINE -L- STA 31+00 (SHEET EC-7)

MATCHLINE -L- STA 36+00 (SHEET EC-9)



NOTE:  
PERIMETER EROSION CONTROL MEASURES SHALL BE  
INSTALLED DURING CLEARING AND GRUBBING PHASE.

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

JAMES THOMAS HORSLEY AND  
MARK EDWARD MAUNEY  
DB 1043 PG 257



8/17/99

CLEARING AND GRUBBING  
EROSION CONTROL FOR  
CONSTRUCTION SHEET 9

**STV** 100 Years  
STV Engineers, Inc.  
300 West Trade St., Suite 715  
Charlotte, NC 28202  
NC License Number F-0991

PROJECT REFERENCE NO.	SHEET NO.
B-5818	EC-9/CONST.9
RW SHEET NO.	

-L-

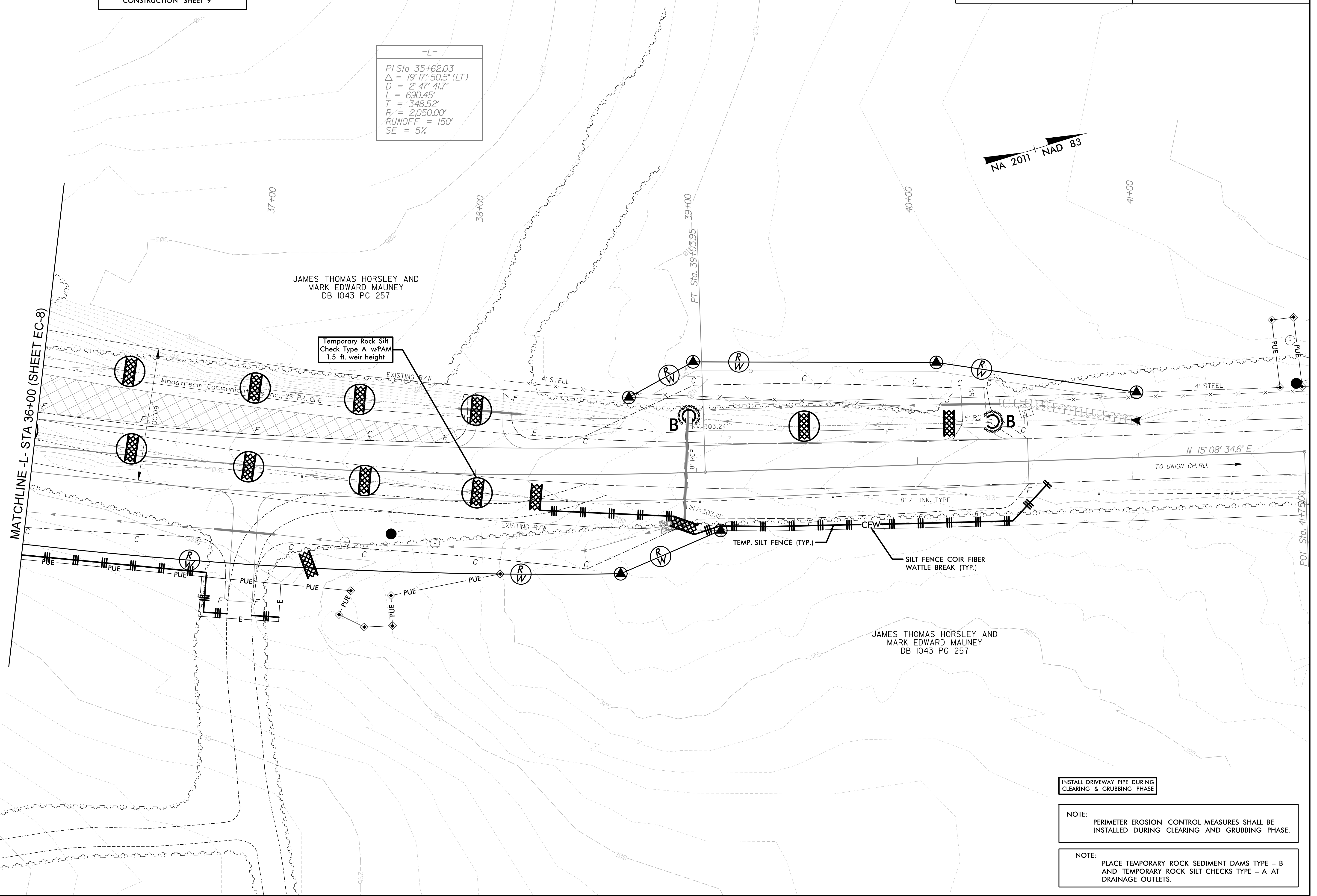
PI Sta 35+62.03  
 $\Delta = 19' 17" 50.5" (LT)$   
 $D = 2' 47" 41.7"$   
 $L = 690.45'$   
 $T = 348.52'$   
 $R = 2,050.00'$   
 RUNOFF = 150'  
 SE = 5%

NA 2011 NAD 83

JAMES THOMAS HORSLEY AND  
MARK EDWARD MAUNEY  
DB 1043 PG 257

Temporary Rock Silt  
Check Type A w/PAM  
1.5 ft. weir height

MATCHLINE -L- STA 36+00 (SHEET EC-8)



INSTALL DRIVEWAY PIPE DURING  
CLEARING & GRUBBING PHASE

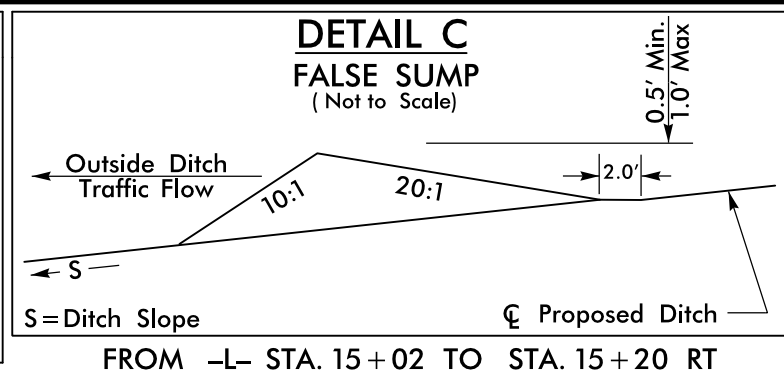
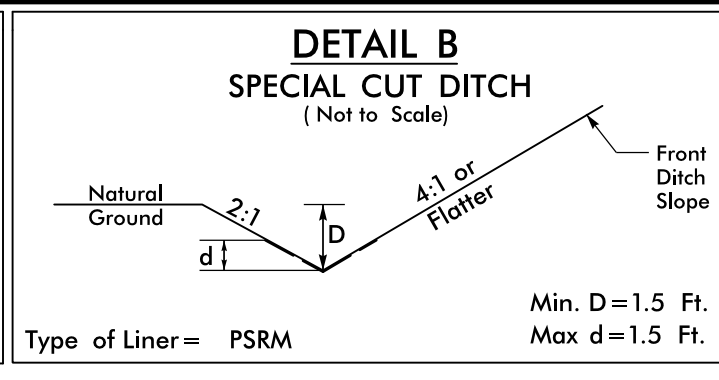
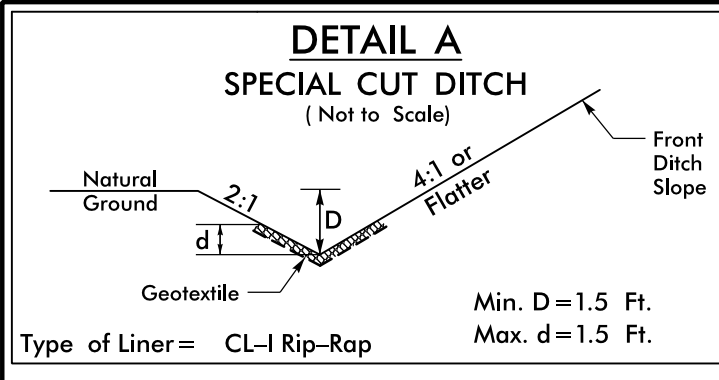
NOTE:  
PERIMETER EROSION CONTROL MEASURES SHALL BE  
INSTALLED DURING CLEARING AND GRUBBING PHASE.

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

4/14/2021  
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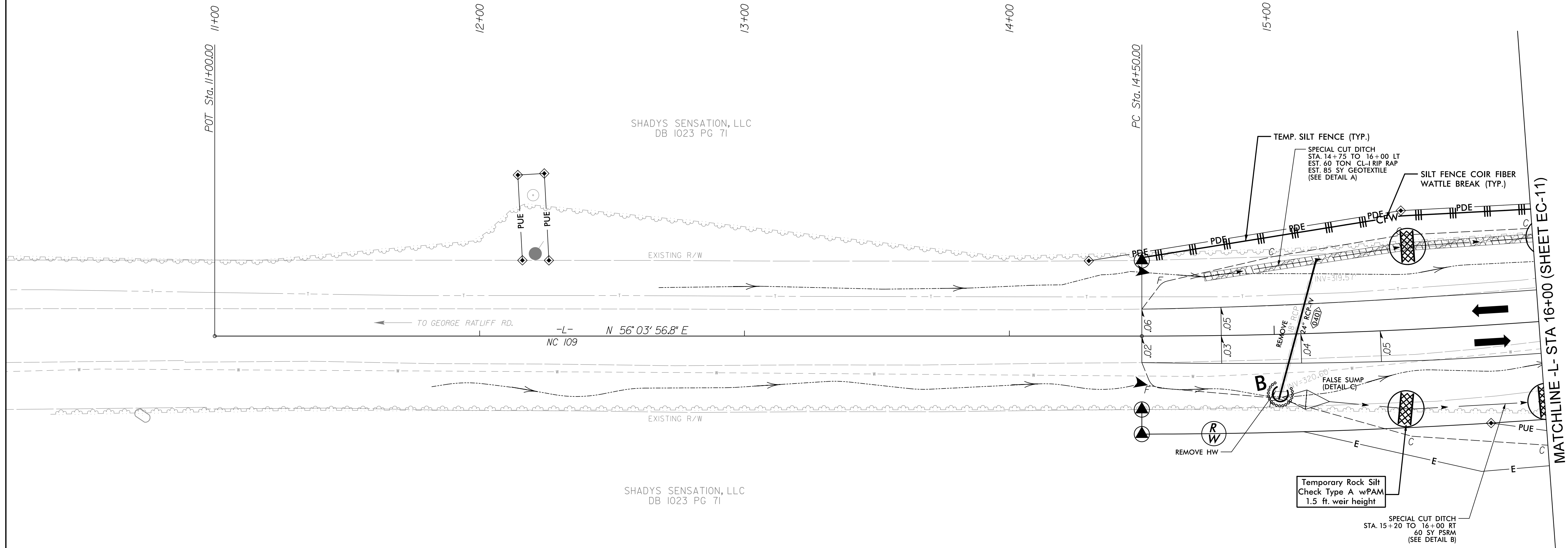
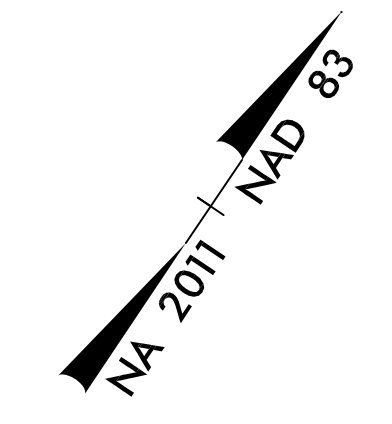
8/17/99



FINAL  
EROSION CONTROL FOR  
CONSTRUCTION SHEET 4

-L-

PI Sta 18+41.53  
 $\Delta = 21.37' 31.7" (LT)$   
 $D = 2' 47' 41.7"$   
 $L = 773.74'$   
 $T = 391.53'$   
 $R = 2050.00'$   
 $RUNOFF = 150'$   
 $SE = 5\%$

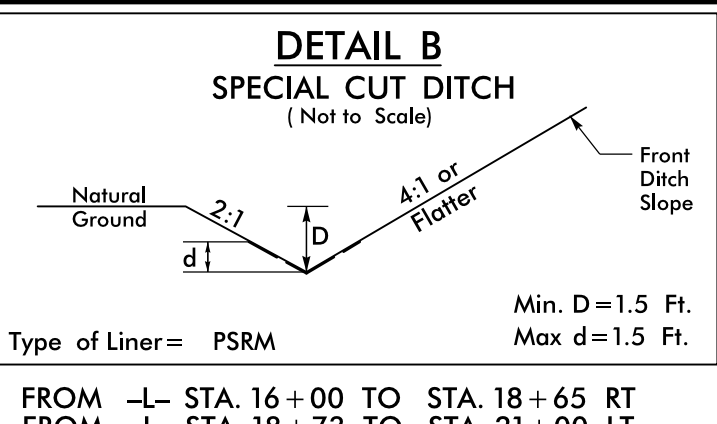
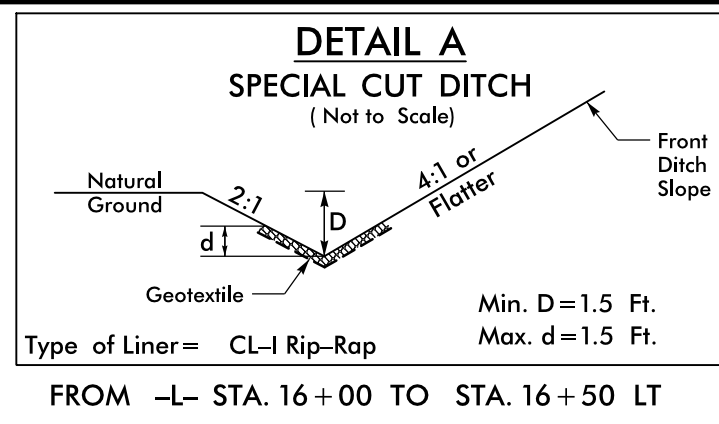


1/15/2021  
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 Rowland

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

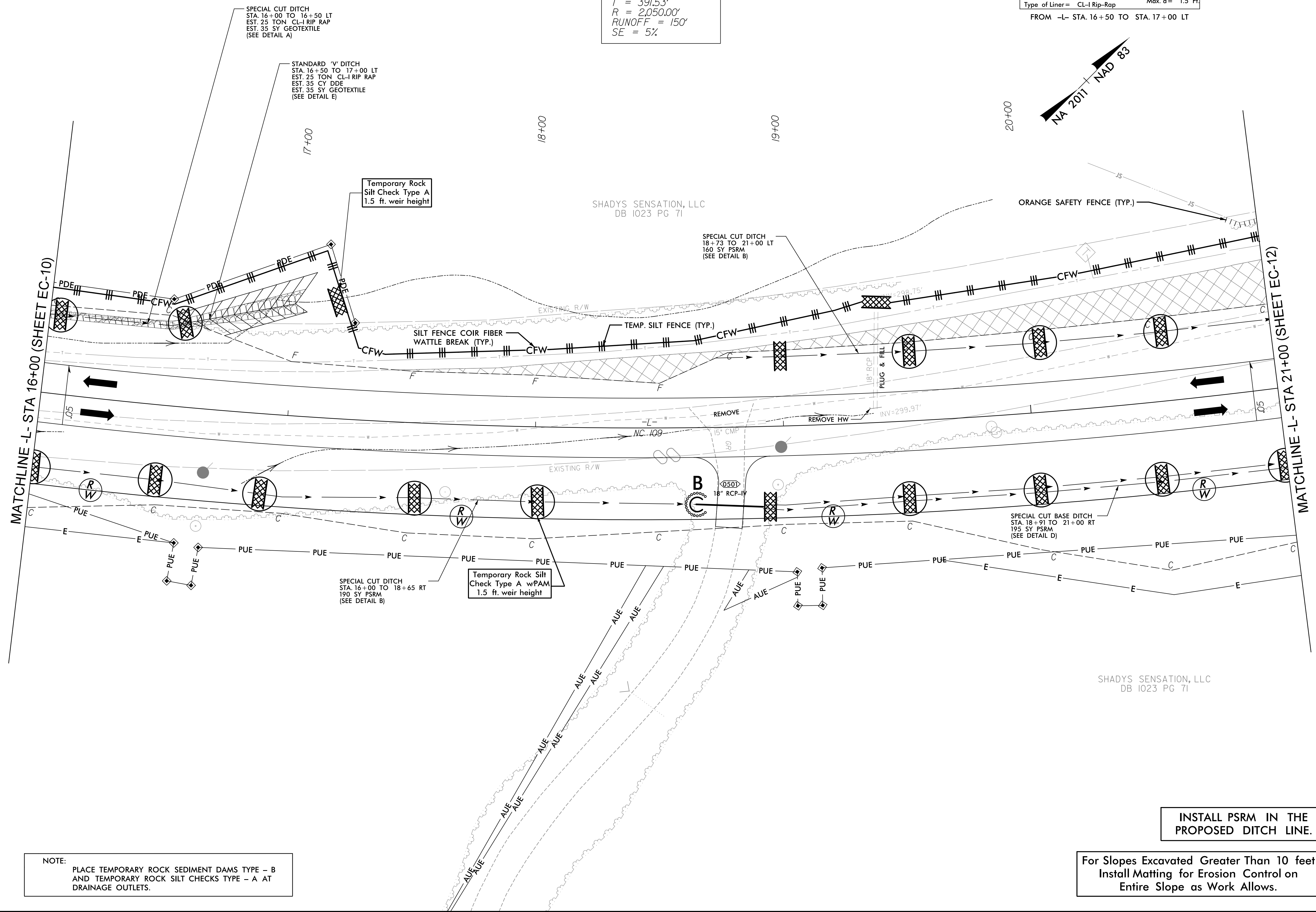
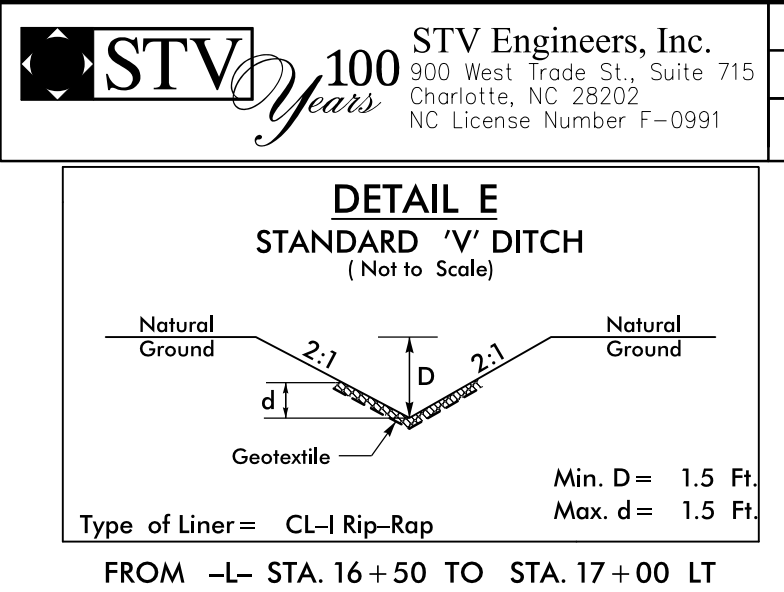
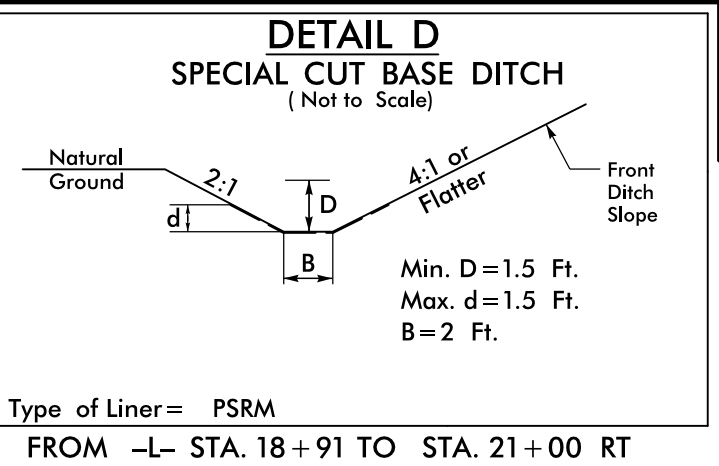
INSTALL PSRM IN THE  
PROPOSED DITCH LINE.

For Slopes Excavated Greater Than 10 feet  
Install Matting for Erosion Control on  
Entire Slope as Work Allows.



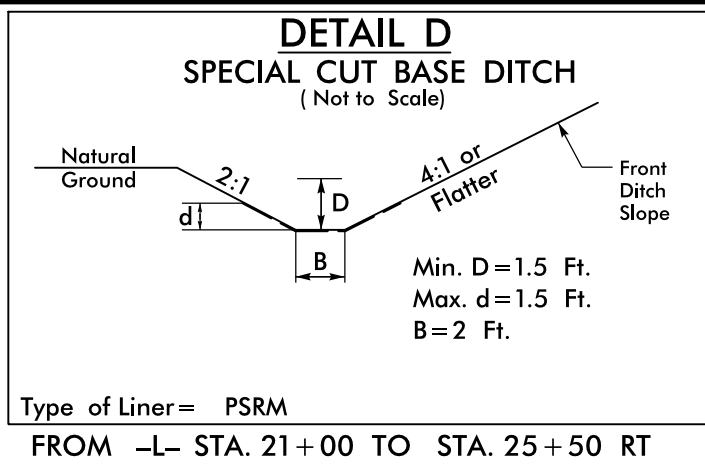
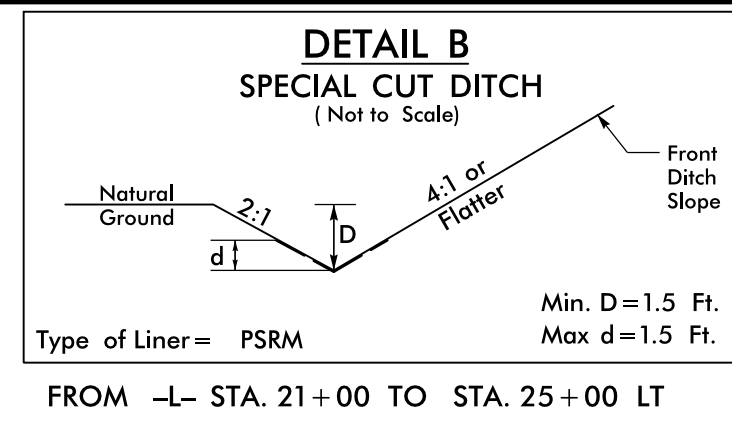
**FINAL EROSION CONTROL FOR CONSTRUCTION SHEET 5**

-L-  
PI Sta 18+41.53  
 $\Delta = 2' 37' 31.7" (LT)$   
 $D = 2' 47' 41.7"$   
 $L = 773.74'$   
 $T = 391.53'$   
 $R = 2,050.00'$   
RUNOFF = 150'  
SE = 5%



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

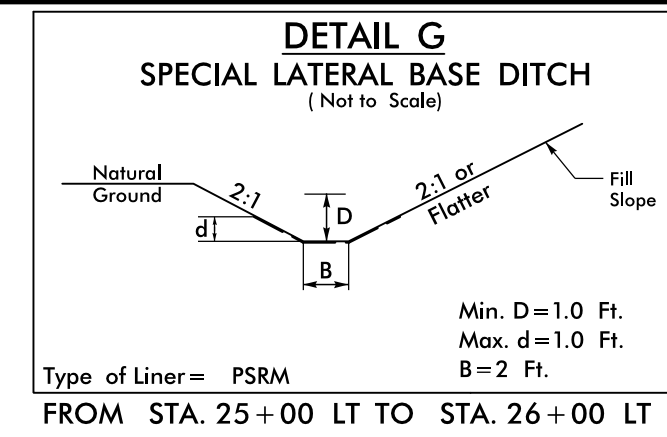
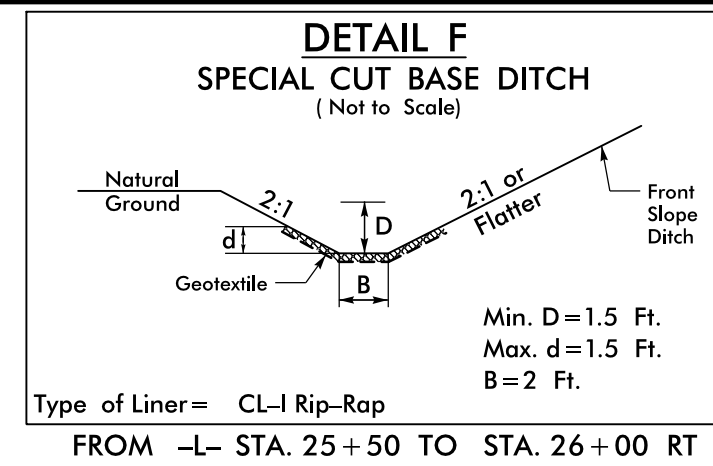
**INSTALL PSRM IN THE PROPOSED DITCH LINE.**  
**For Slopes Excavated Greater Than 10 feet Install Matting for Erosion Control on Entire Slope as Work Allows.**



**FINAL**  
**EROSION CONTROL FOR**  
**CONSTRUCTION SHEET 6**

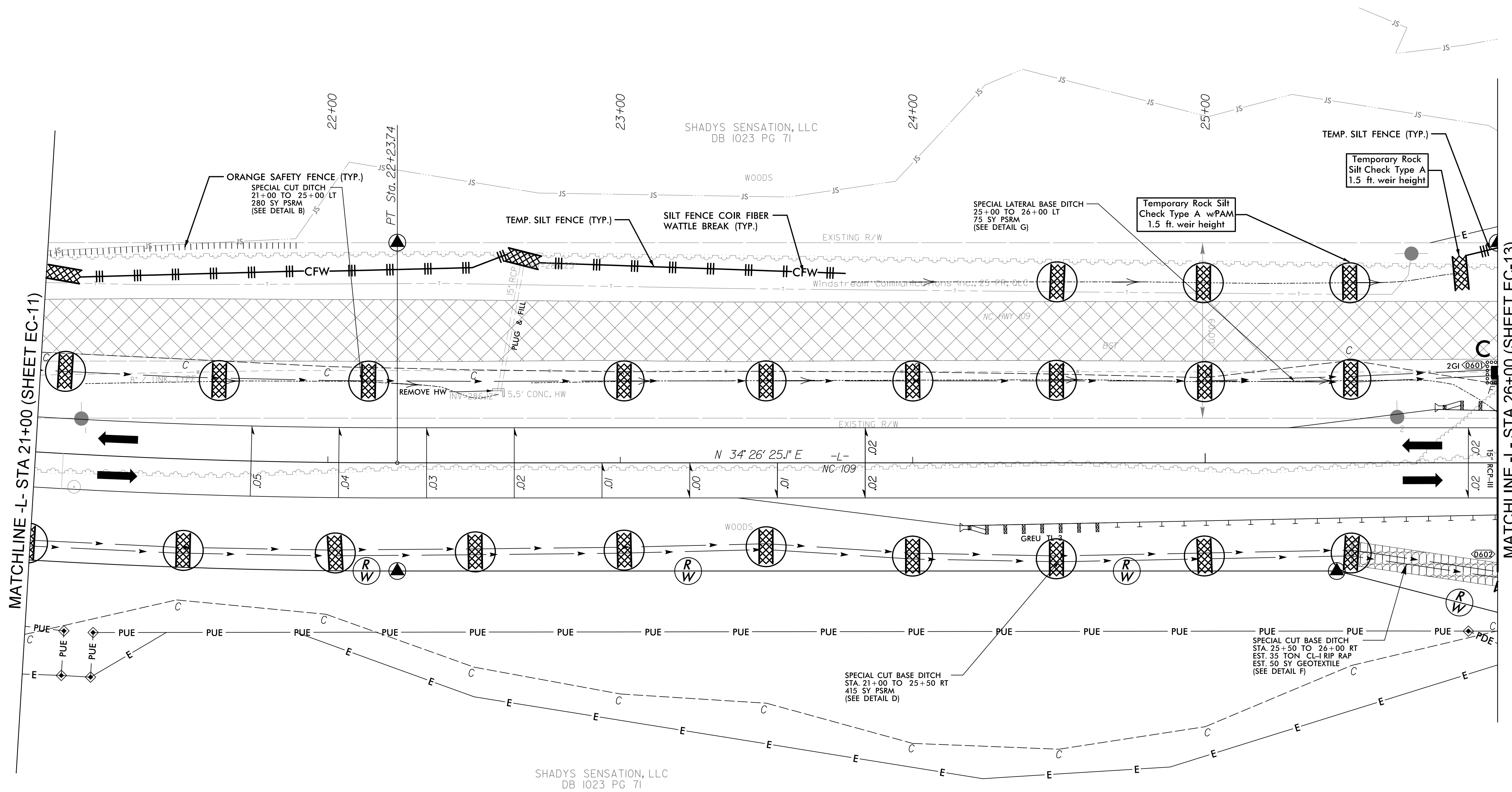
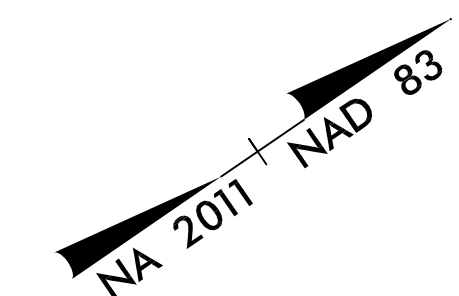
-L-

PI Sta 18+41.53  
 $\Delta = 2' 37'' 31.7''$  (LT)  
 $D = 2' 47'' 41.7''$   
 $L = 773.74'$   
 $T = 391.53'$   
 $R = 2,050.00'$   
 $RUNOFF = 150'$   
 $SE = 5\%$



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 Charlotte, NC 28202  
 NC License Number F-0991

PROJECT REFERENCE NO.	SHEET NO.
B-5818	EC-12/CONST.6
RW SHEET NO.	

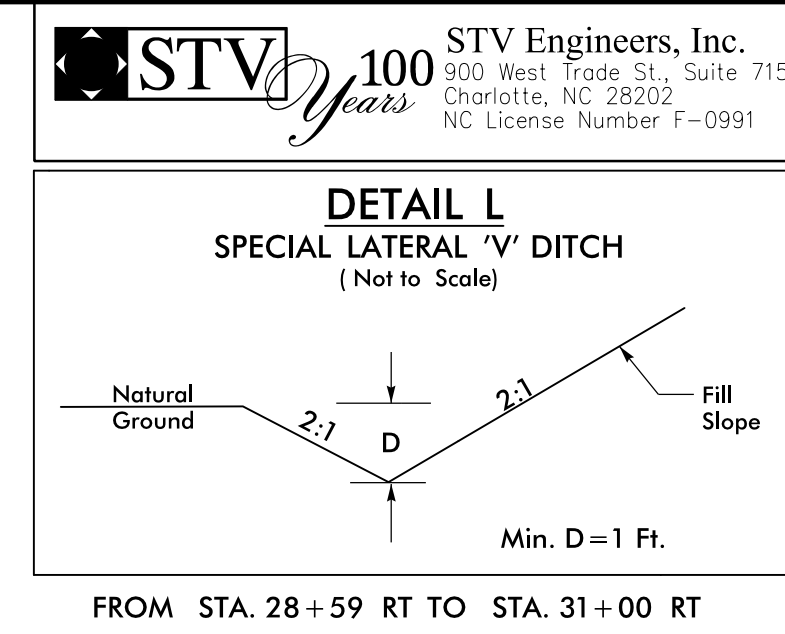
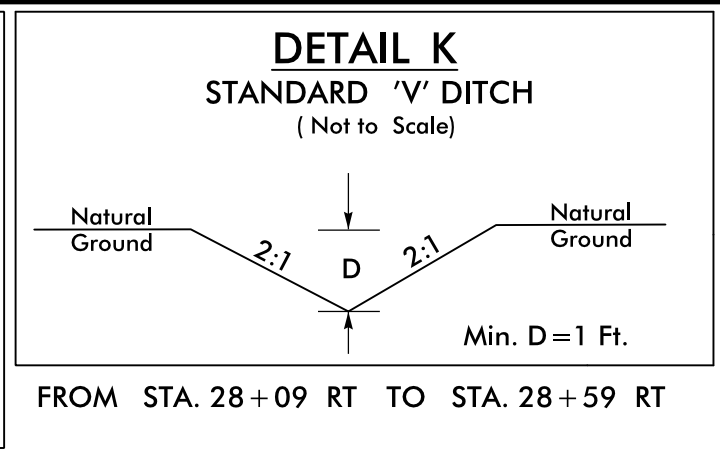
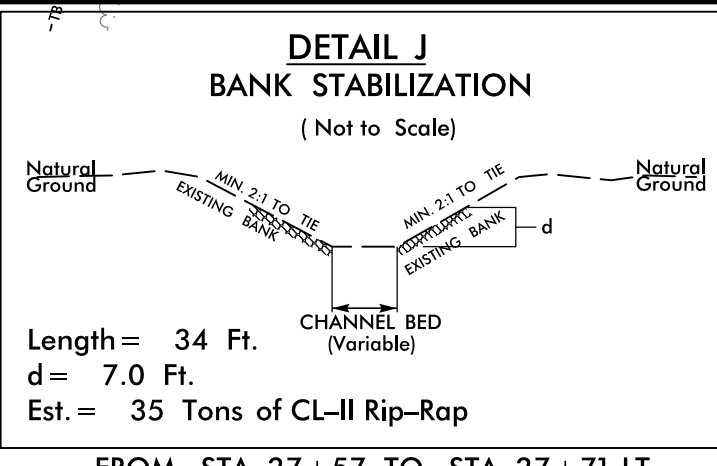
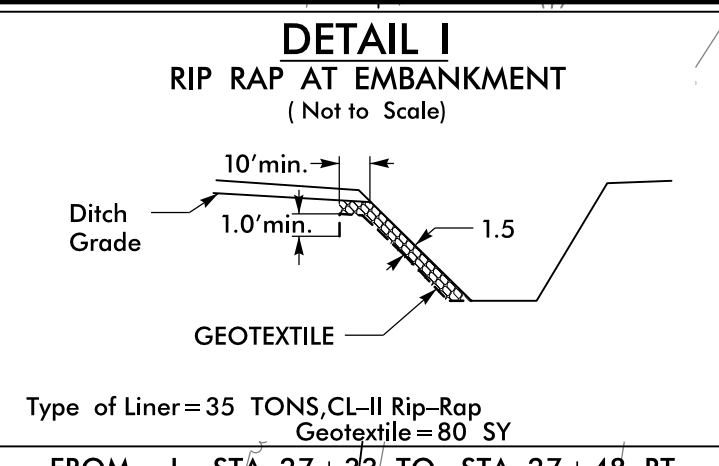
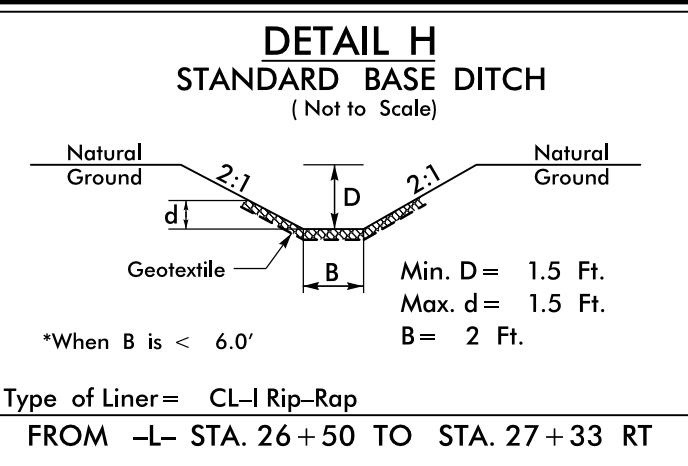
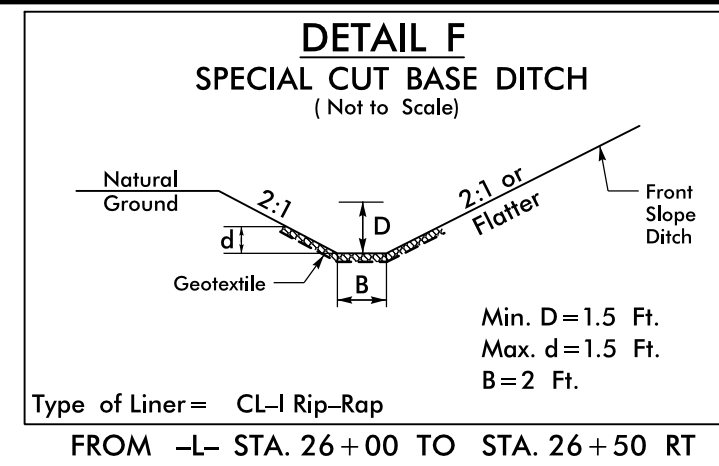


NOTE:  
 PLACE TEMPORARY ROCK SEDIMENT DAMS TYPE - B  
 AND TEMPORARY ROCK SILT CHECKS TYPE - A AT  
 DRAINAGE OUTLETS.

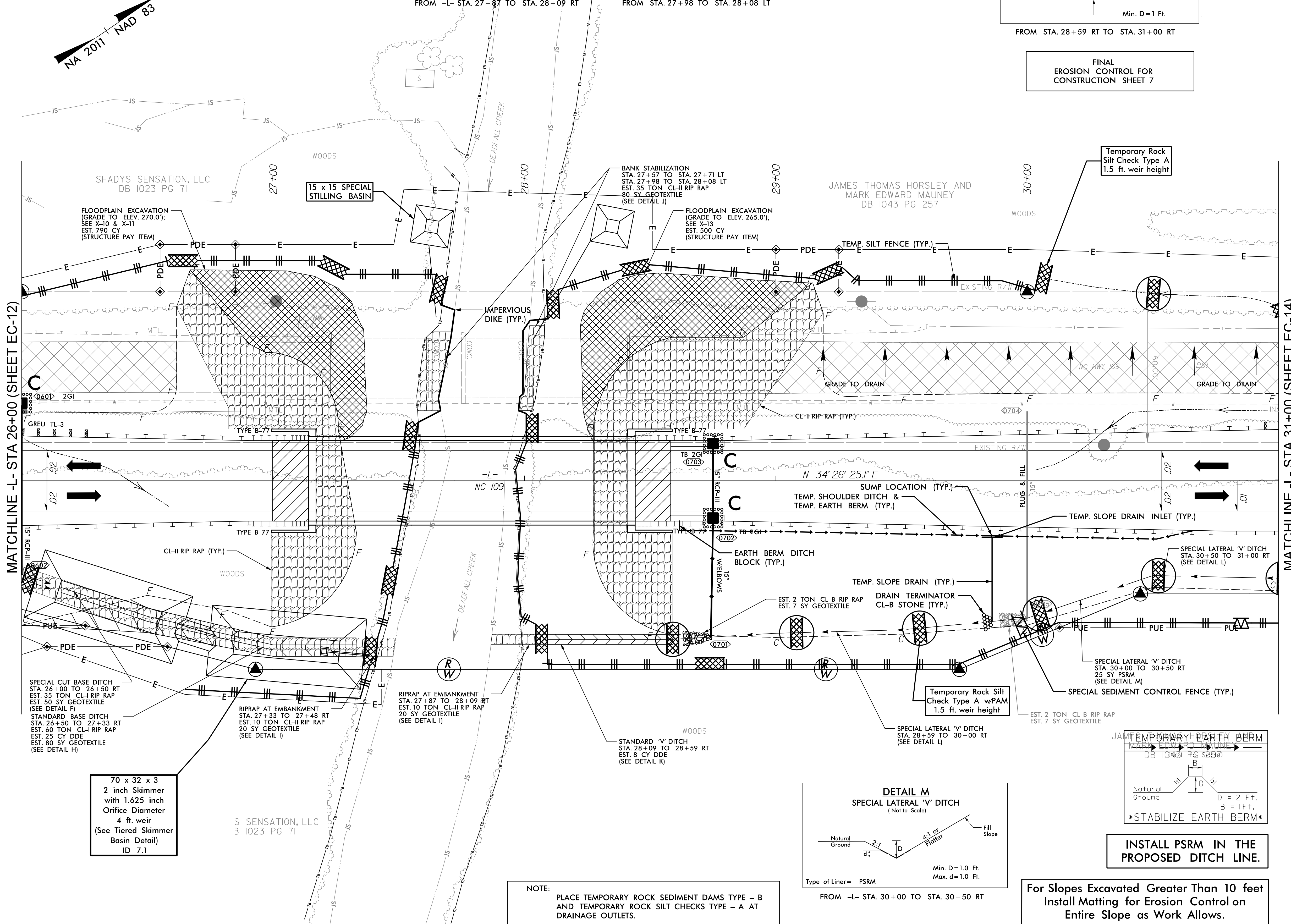
**INSTALL PSRM IN THE**  
**PROPOSED DITCH LINE.**

For Slopes Excavated Greater Than 10 feet  
 Install Matting for Erosion Control on  
 Entire Slope as Work Allows.





FINAL  
EROSION CONTROL FOR  
CONSTRUCTION SHEET 7

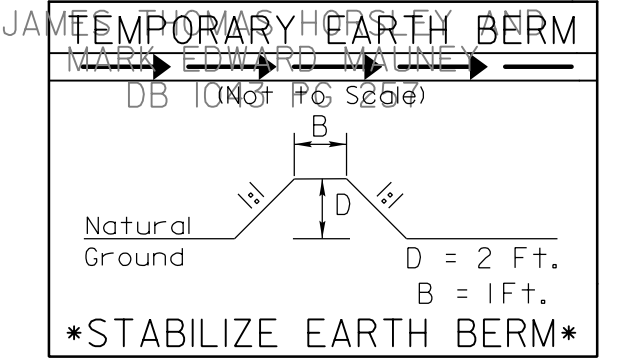
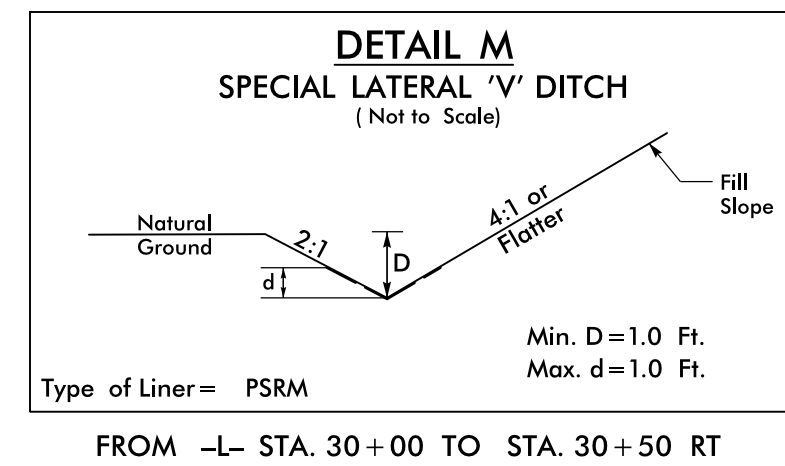


MATCHLINE -L- STA 26+00 (SHEET EC-12)

MATCHLINE -L- STA 31+00 (SHEET EC-14)

70 x 32 x 3  
2 inch Skimmer  
with 1.625 inch  
Orifice Diameter  
4 ft. weir  
(See Tiered Skimmer  
Basin Detail)  
ID 7.1

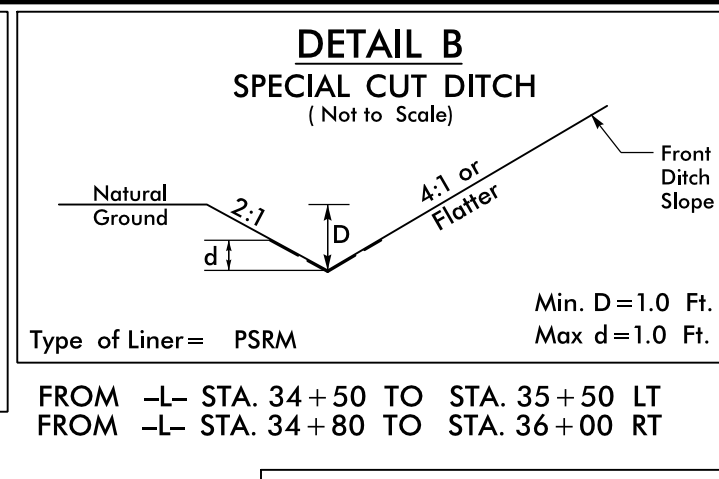
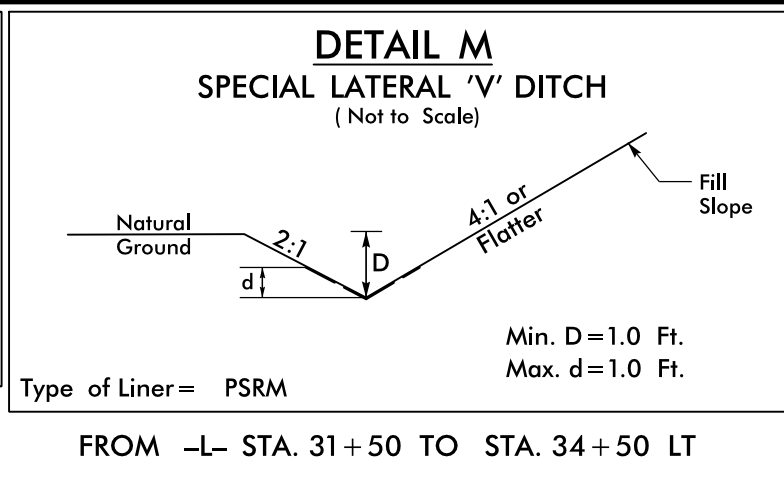
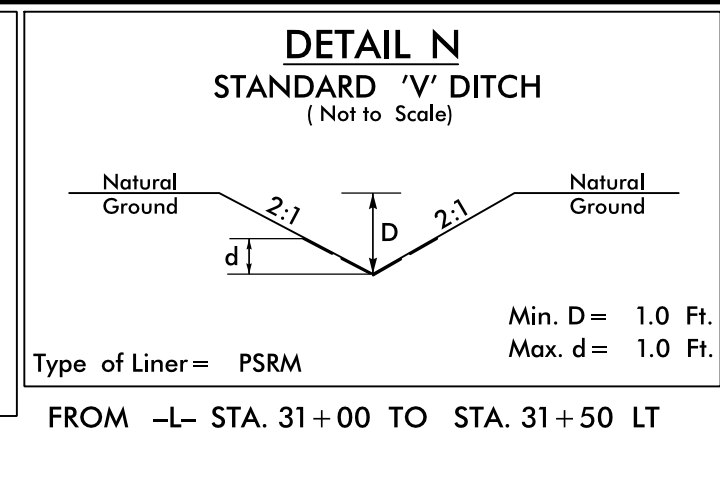
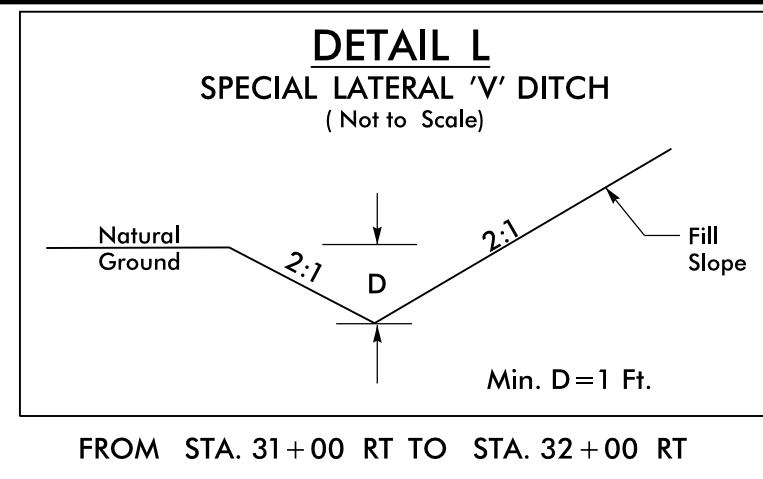
S SENSATION, LLC  
3 1023 PG 71



INSTALL PSRM IN THE  
PROPOSED DITCH LINE.

For Slopes Excavated Greater Than 10 feet  
Install Matting for Erosion Control on  
Entire Slope as Work Allows.

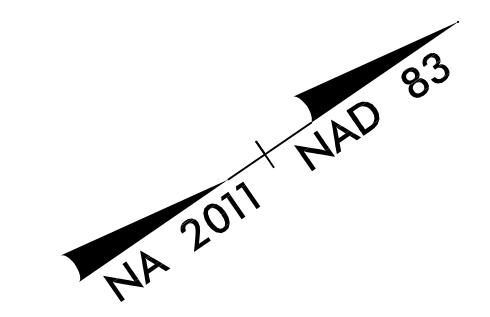
NOTE:  
PLACE TEMPORARY ROCK SEDIMENT DAMS TYPE - B  
AND TEMPORARY ROCK SILT CHECKS TYPE - A AT  
DRAINAGE OUTLETS.



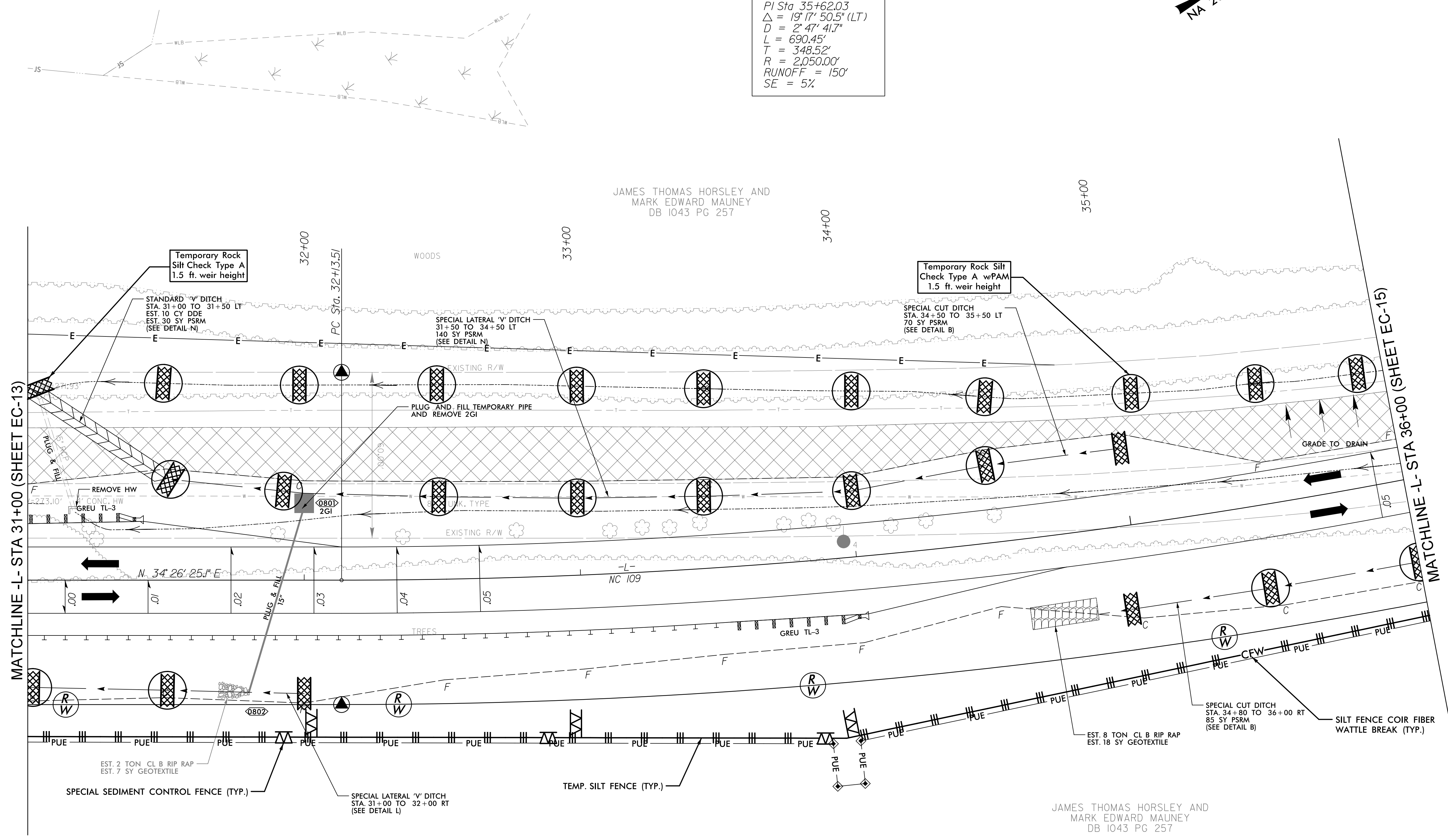
FINAL  
EROSION CONTROL FOR  
CONSTRUCTION SHEET 8

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Charlotte, NC 28202  
NC License Number F-0991

PROJECT REFERENCE NO.	SHEET NO.
B-5818	EC-14/CONST.8
RW SHEET NO.	



-L-  
PI Sta 35+62.03  
 $\Delta = 19' 17' 50.5''$  (LT)  
D = 2' 47' 41.7"  
L = 690.45'  
T = 348.52'  
R = 2,050.00'  
RUNOFF = 150'  
SE = 5%



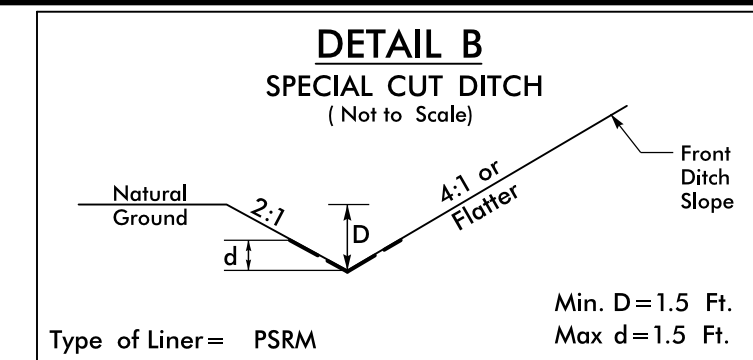
MATCHLINE -L- STA 31+00 (SHEET EC-13)

MATCHLINE -L- STA 36+00 (SHEET EC-15)

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

**INSTALL PSRM IN THE  
PROPOSED DITCH LINE.**  
  
For Slopes Excavated Greater Than 10 feet  
Install Matting for Erosion Control on  
Entire Slope as Work Allows.

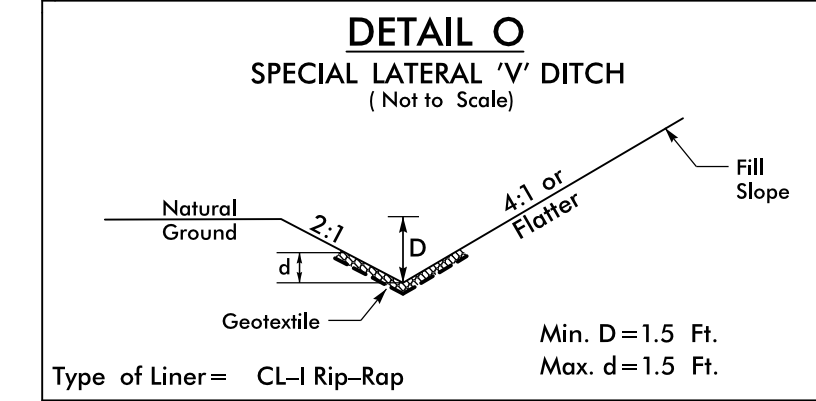




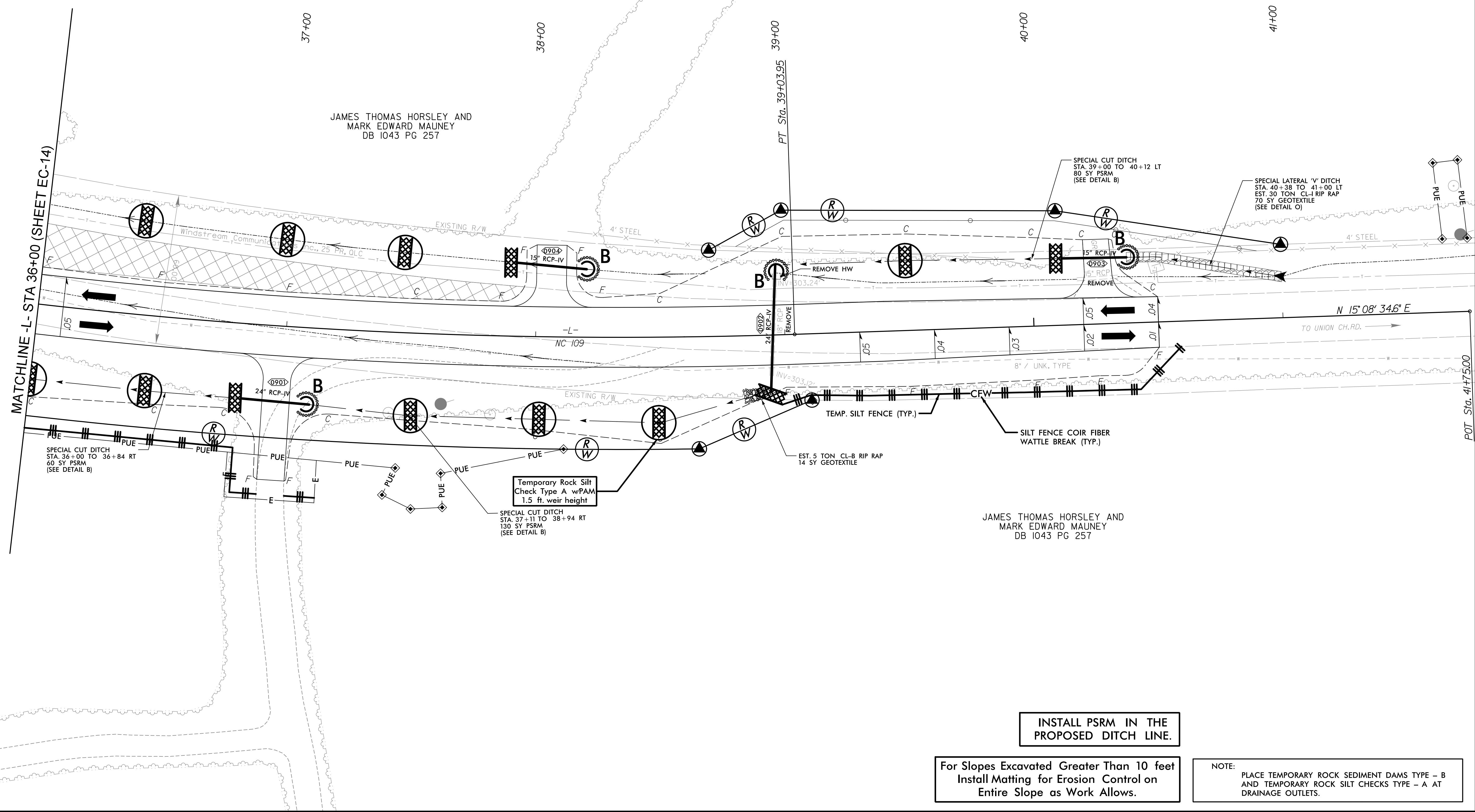
FROM -L- STA. 36+00 TO STA. 36+84 RT  
FROM -L- STA. 37+11 TO STA. 38+94 RT  
FROM -L- STA. 39+00 TO STA. 40+12 LT

FINAL EROSION CONTROL FOR CONSTRUCTION SHEET 9

-L-  
PI Sta 35+62.03  
Δ = 19° 17' 50.5" (LT)  
D = 2' 47" 41.7"  
L = 690.45'  
T = 348.52'  
R = 2,050.00'  
RUNOFF = 150'  
SE = 5%



FROM -L- STA. 40+38 TO STA. 41+00 LT



INSTALL PSRM IN THE PROPOSED DITCH LINE.

For Slopes Excavated Greater Than 10 feet Install Matting for Erosion Control on Entire Slope as Work Allows.

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