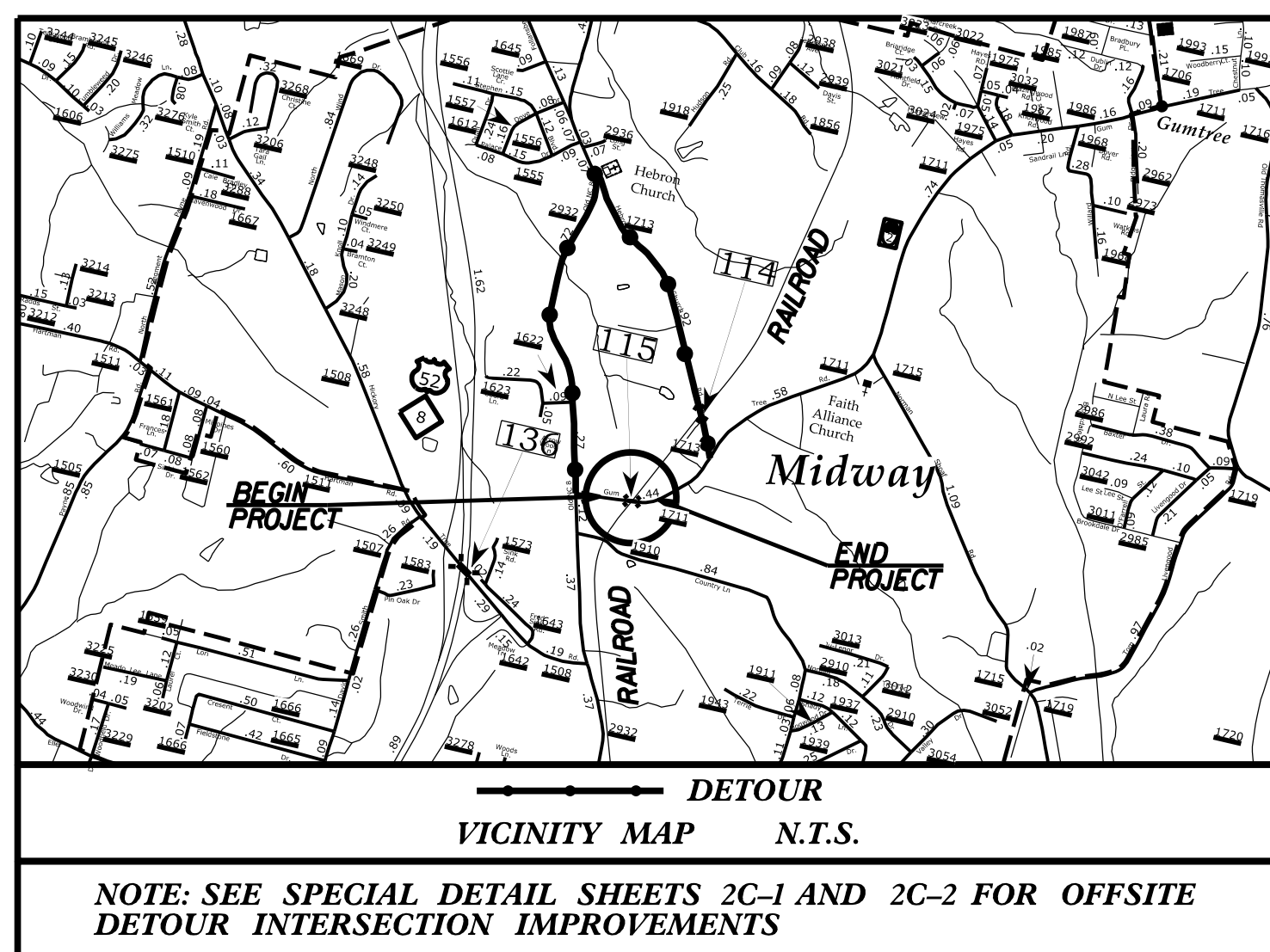


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numbers appear on each page, on the dates appearing
with their signature on that page.**

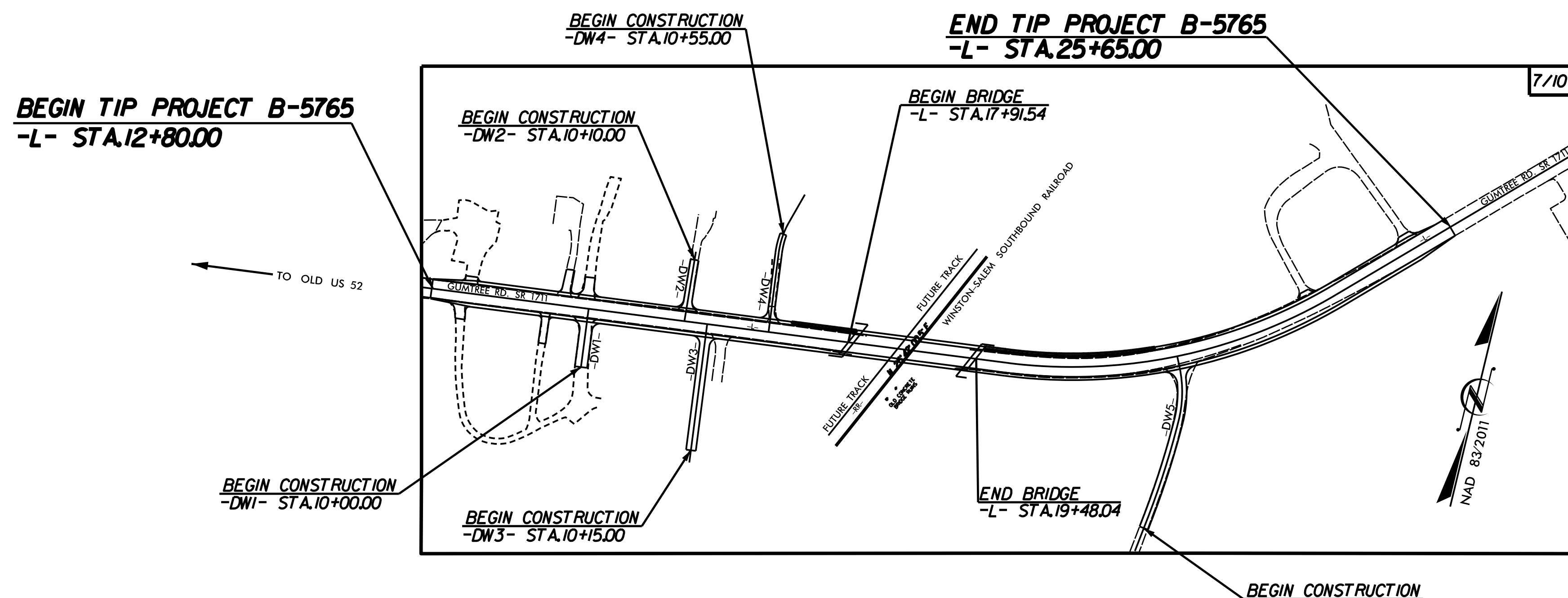
**This file or an individual page
shall not be considered a certified document.**

TIP PROJECT: B-5765



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

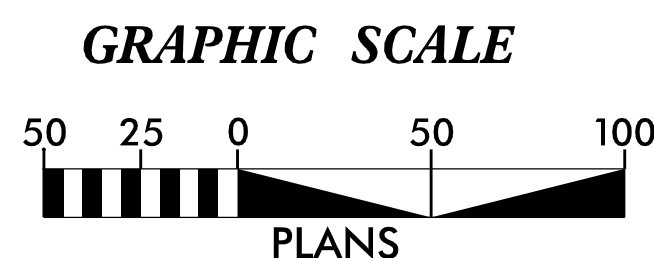
LOCATION: REPLACE BRIDGE NO. 115 ON SR 1711 (GUMTREE ROAD)
OVER WINSTON-SALEM SOUTHBOUND RAILROAD
TYPE OF WORK: GRADING, DRAINAGE, PAVING, AND STRUCTURE



EROSION AND SEDIMENT CONTROL MEASURES

Std. #	Description	Symbol
1630.03	Temporary Silt Ditch	TD
1630.05	Temporary Diversion	TD
1605.01	Temporary Silt Fence	TSF
1606.01	Special Sediment Control Fence	SSCF
1622.01	Temporary Berms and Slope Drains	TBSD
1630.02	Silt Basin Type B	SB
1633.01	Temporary Rock Silt Check Type-A	TRSCA
	Temporary Rock Silt Check Type-A with Matting and Polyacrylamide (PAM)	TRSCA-PAM
1633.02	Temporary Rock Silt Check Type-B	TRSCB
	Wattle/Coir Fiber Wattle	WF
	Wattle/Coir Fiber Wattle with Polyacrylamide (PAM)	WF-PAM
1634.01	Temporary Rock Sediment Dam Type-A	TRSDA
1634.02	Temporary Rock Sediment Dam Type-B	TRSDB
1635.01	Rock Pipe Inlet Sediment Trap Type-A	RPISTRA
1635.02	Rock Pipe Inlet Sediment Trap Type-B	RPISTRB
1630.04	Stilling Basin	SB
1630.06	Special Stilling Basin	SSB
	Rock Inlet Sediment Trap:	
1632.01	Type A	A
1632.02	Type B	B
1632.03	Type C	C
	Skimmer Basin	SKB
	Tiered Skimmer Basin	TSKB
	Infiltration Basin	IB

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:
PARRISH AND PARTNERS
11325 N. COMMUNITY HOUSE RD.
CHARLOTTE, NC 28277

Designed by:
KEVIN HIGGINS, PE 4000
NAME LEVEL III CERTIFICATION NO.

Highway 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 Wattle
1630.06 Special Stilling Basin	1645.01 Temporary Stream Crossing
1631.01 Matting Installation	

PROJECT REFERENCE NO. B-5765	SHEET NO. EC-2
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

COIR FIBER WATTLE WITH POLYACRYLAMIDE (PAM) DETAIL

NOTES:

USE MINIMUM 12 IN. DIAMETER COIR FIBER (COCONUT FIBER) 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.

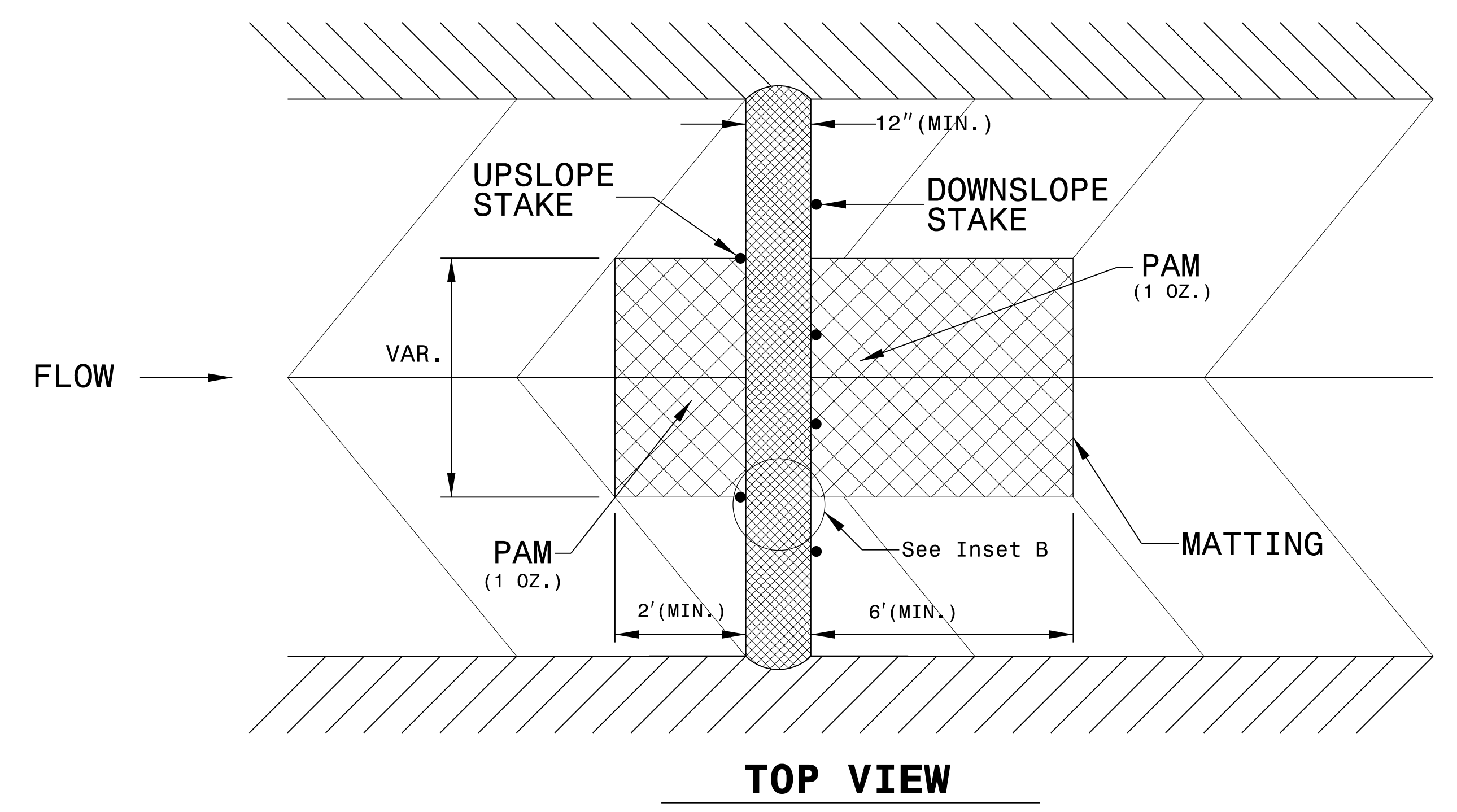
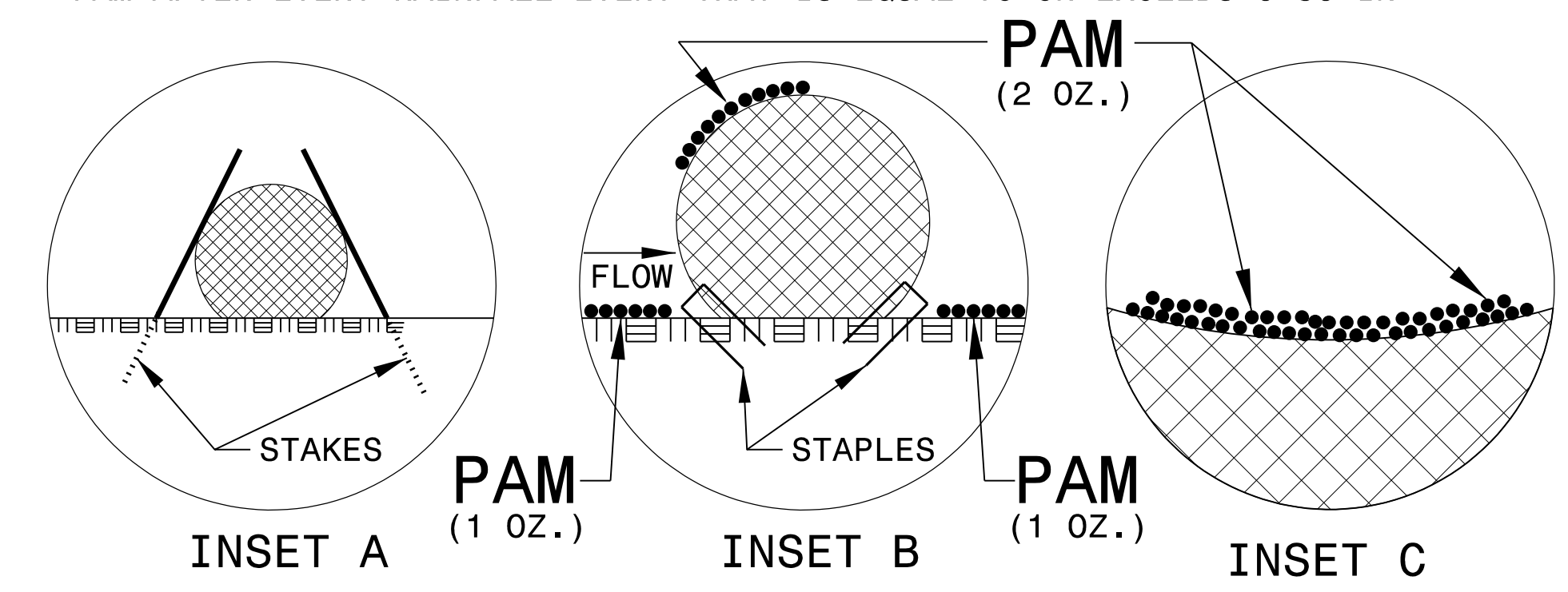
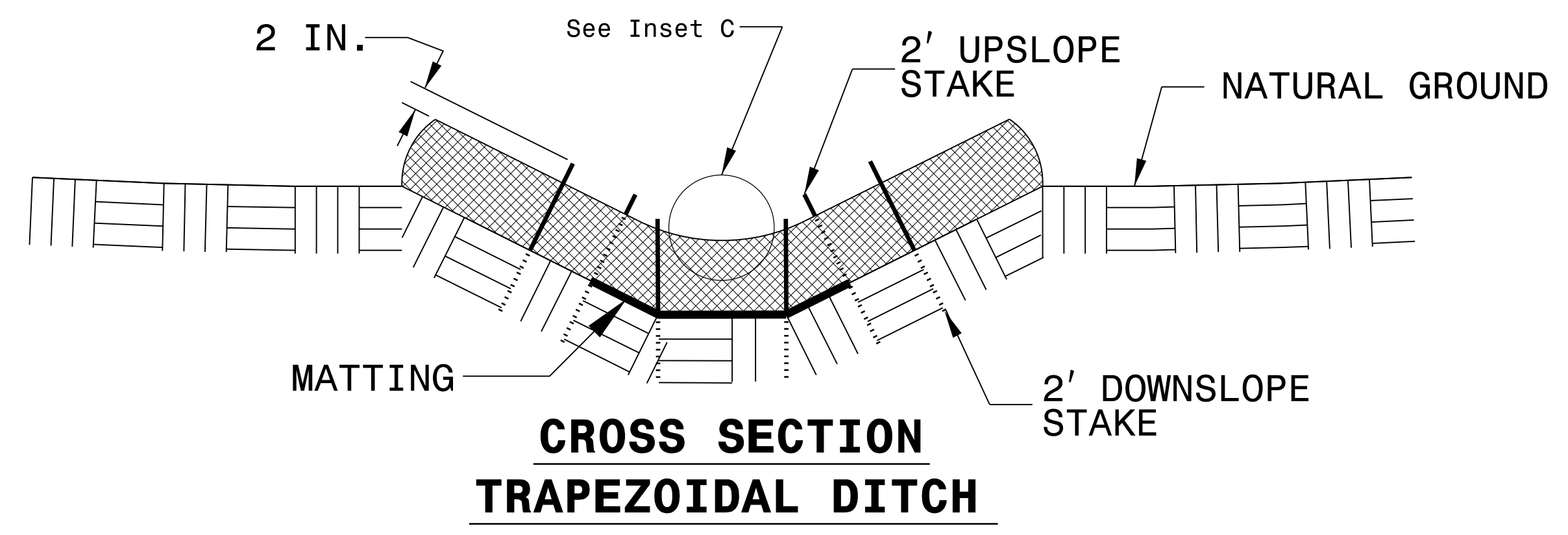
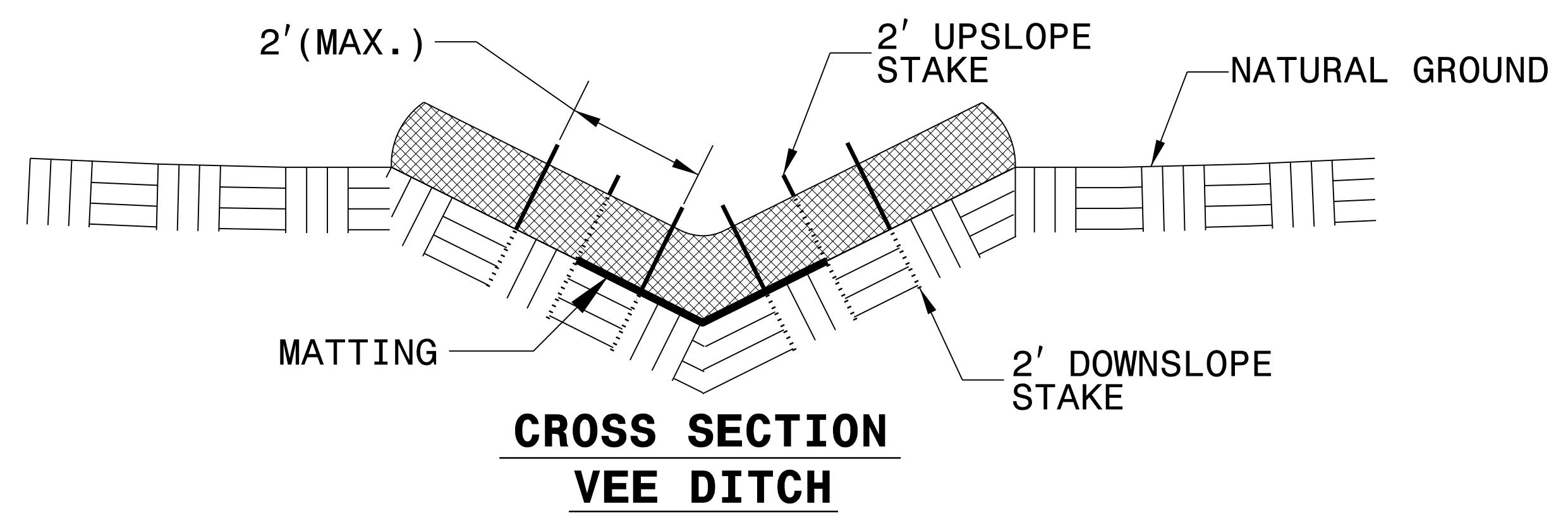
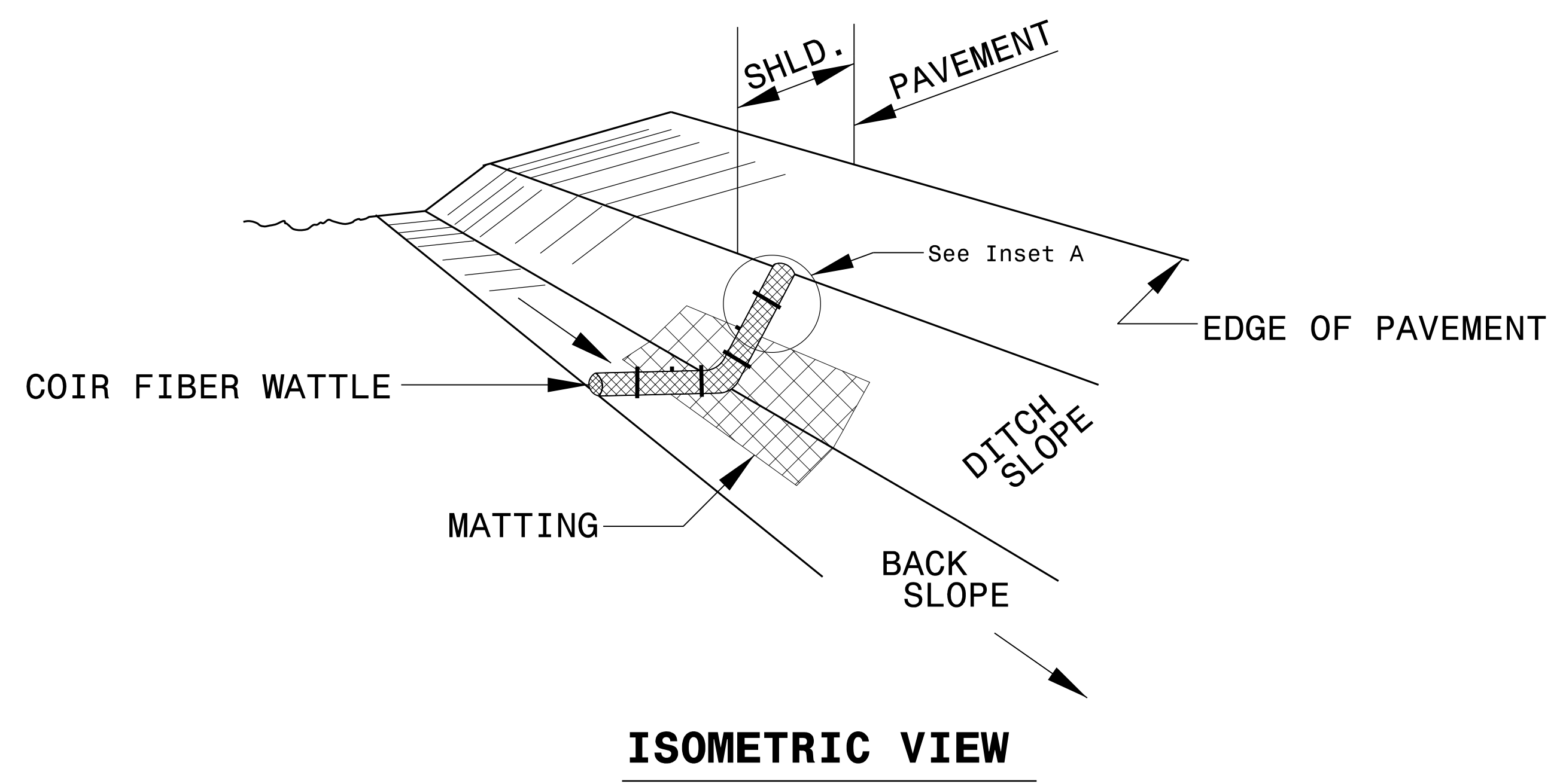
PROVIDE STAPLES MADE OF 0.125 IN. DIAMETER STEEL WIRE FORMED INTO A U SHAPE NOT LESS THAN 12" IN LENGTH.

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.

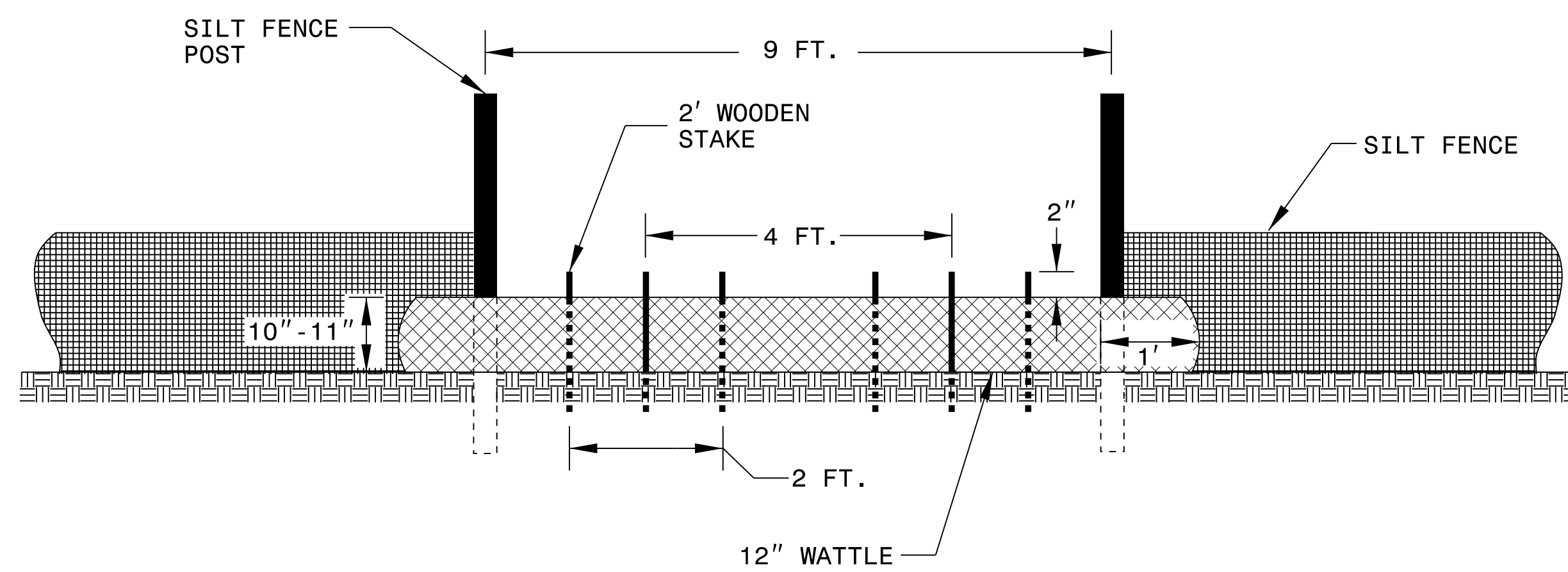
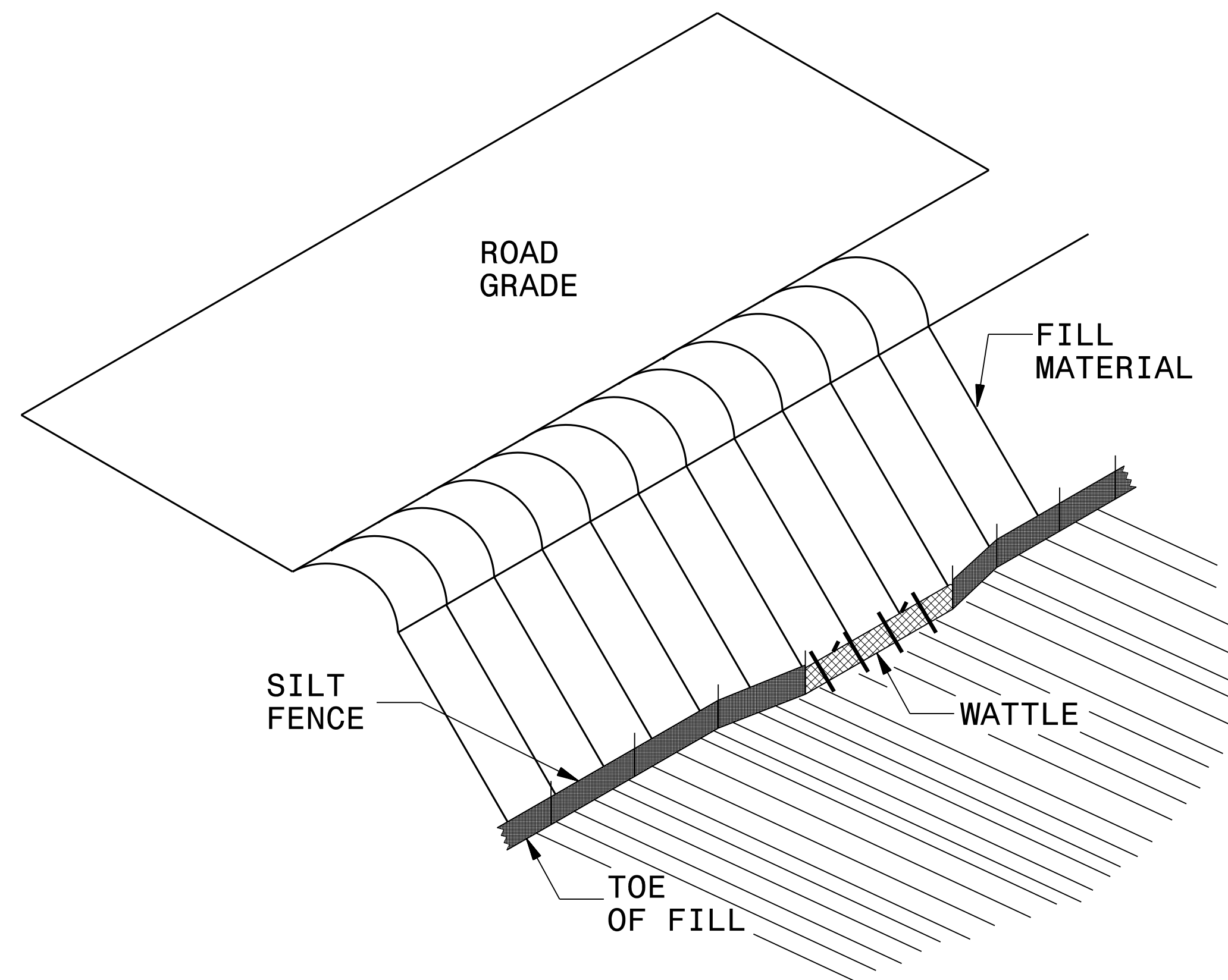
PRIOR TO POLYACRYLAMIDE (PAM) APPLICATION, OBTAIN A SOIL SAMPLE FROM PROJECT LOCATION, AND FROM OFFSITE MATERIAL, AND ANALYZE FOR APPROPRIATE PAM FLOCCULANT TO BE APPLIED TO EACH WATTLE.

INITIALLY APPLY 2 OUNCES OF ANIONIC OR NEUTRALLY CHARGED PAM OVER WATTLE WHERE WATER WILL FLOW AND 1 OUNCE OF PAM ON EACH SIDE OF WATTLE. REAPPLY PAM AFTER EVERY RAINFALL EVENT THAT IS EQUAL TO OR EXCEEDS 0.50 IN.



SILT FENCE COIR FIBER WATTLE BREAK DETAIL

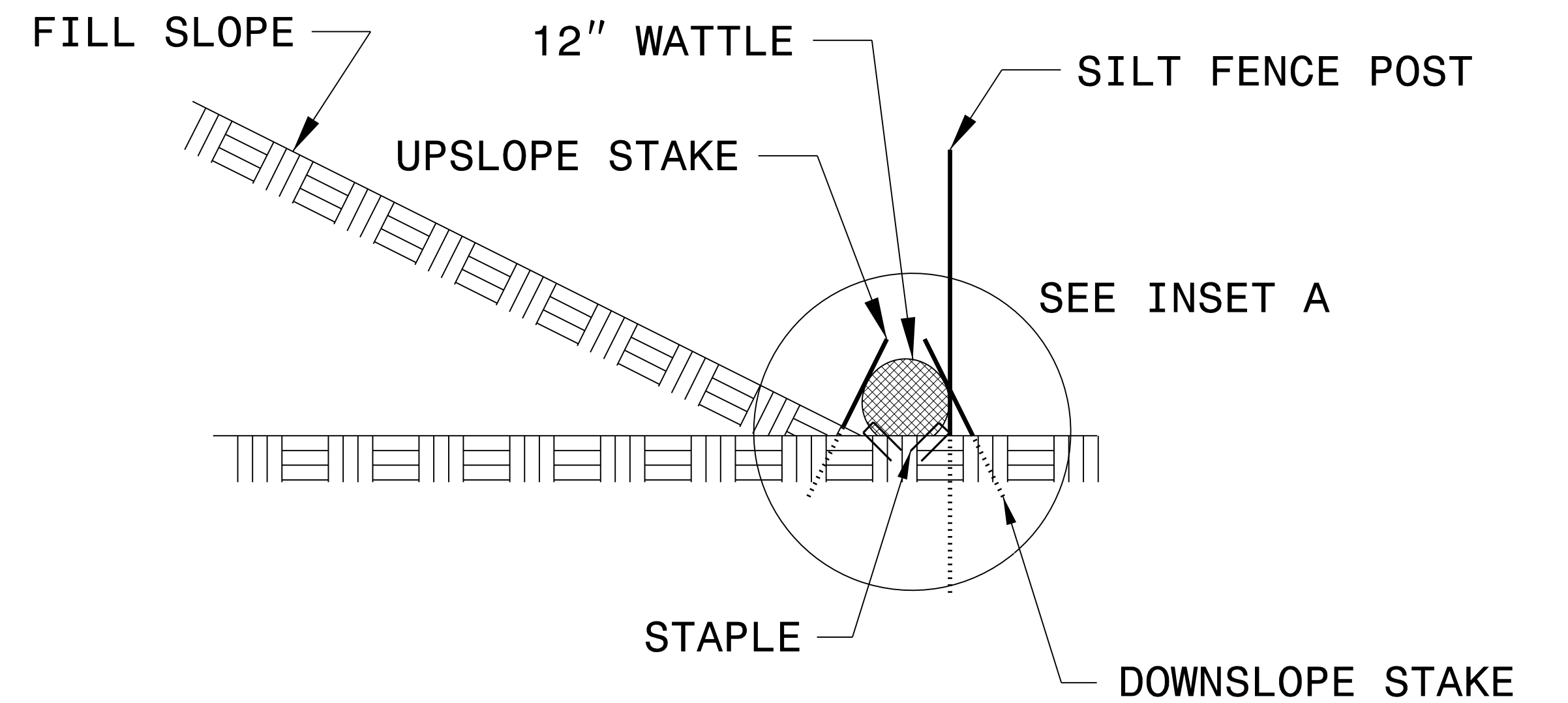
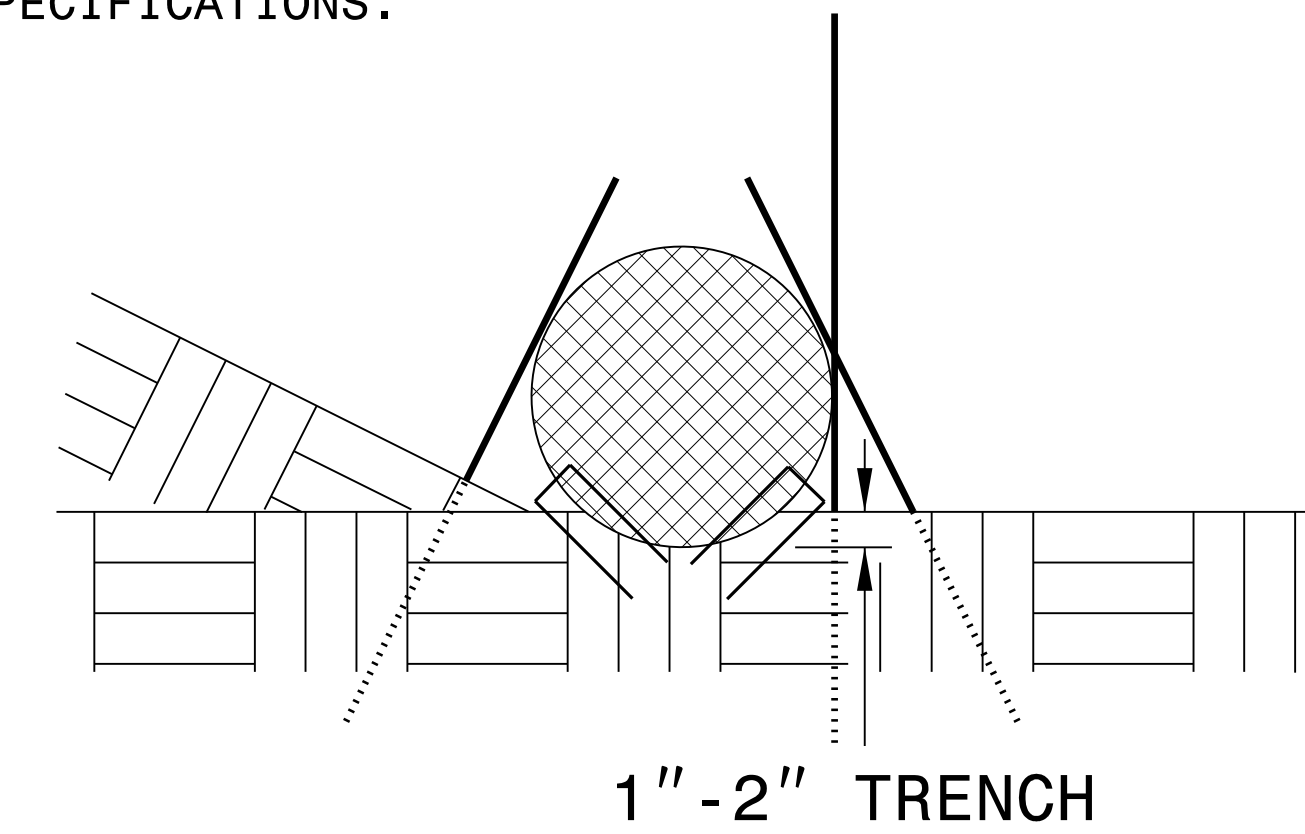
PROJECT REFERENCE NO. <i>B-5765</i>	SHEET NO. <i>EC-3</i>
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER



NOTES:

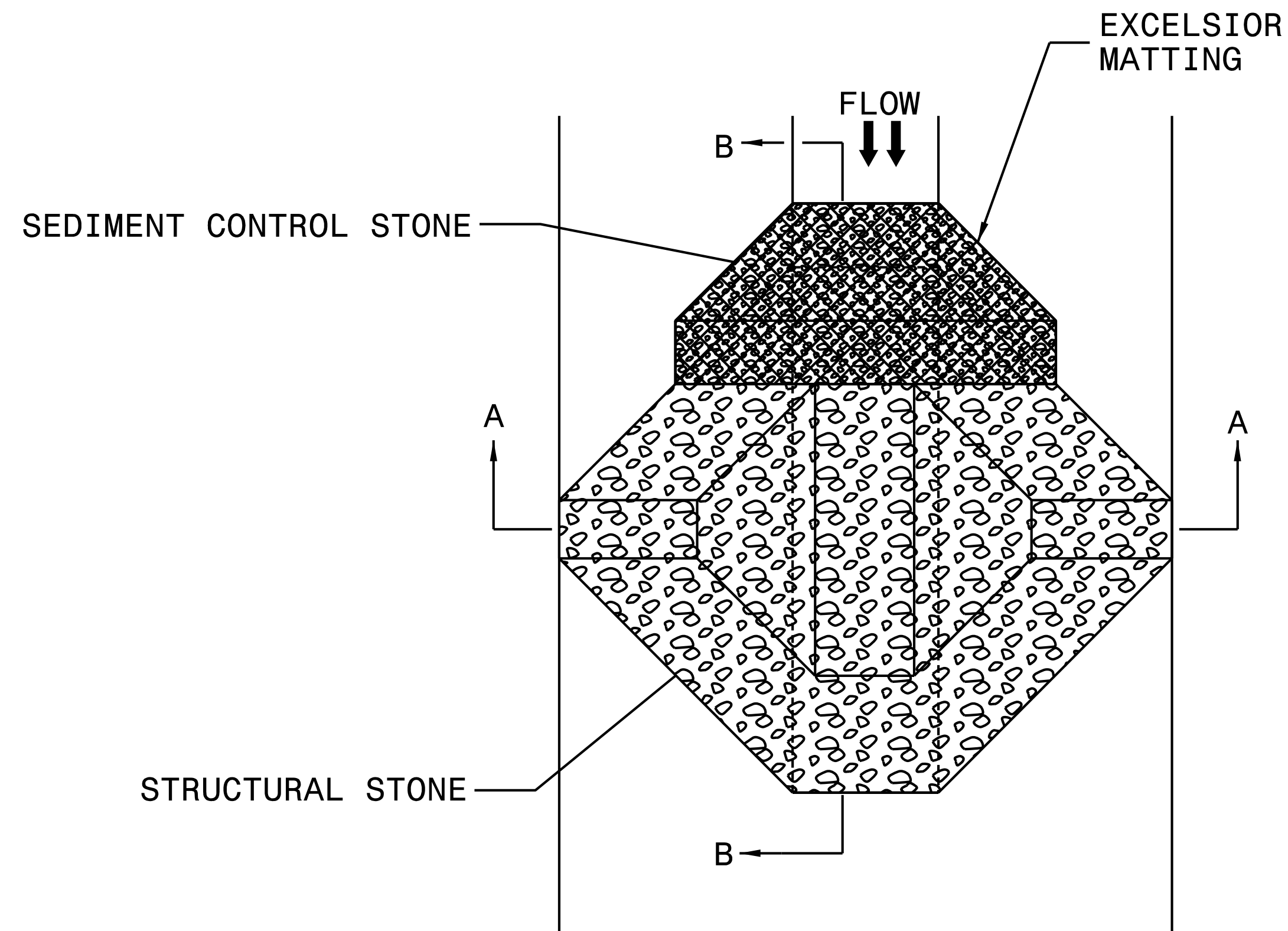
- USE MINIMUM 12 IN. DIAMETER COIR FIBER (COCONUT FIBER) WATTLE AND LENGTH OF 10 FT.
- EXCAVATE A 1 TO 2 INCH TRENCH FOR WATTLE TO BE PLACED.
- DO NOT PLACE WATTLE ON TOE OF SLOPE.
- USE 2 FT. WOODEN STAKES WITH A 2 IN. BY 2 IN. NOMINAL CROSS SECTION.
- INSTALL A MINIMUM OF 2 UPSLOPE STAKES AND 4 DOWNSLOPE 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



PROJECT REFERENCE NO. <i>B-5765</i>	SHEET NO. <i>EC-4</i>
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

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



PLAN

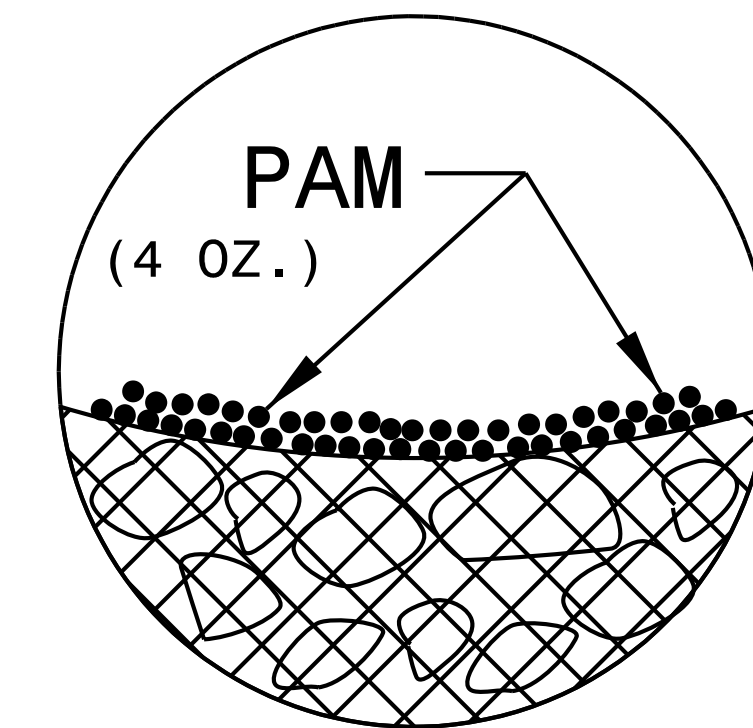
NOTES:

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

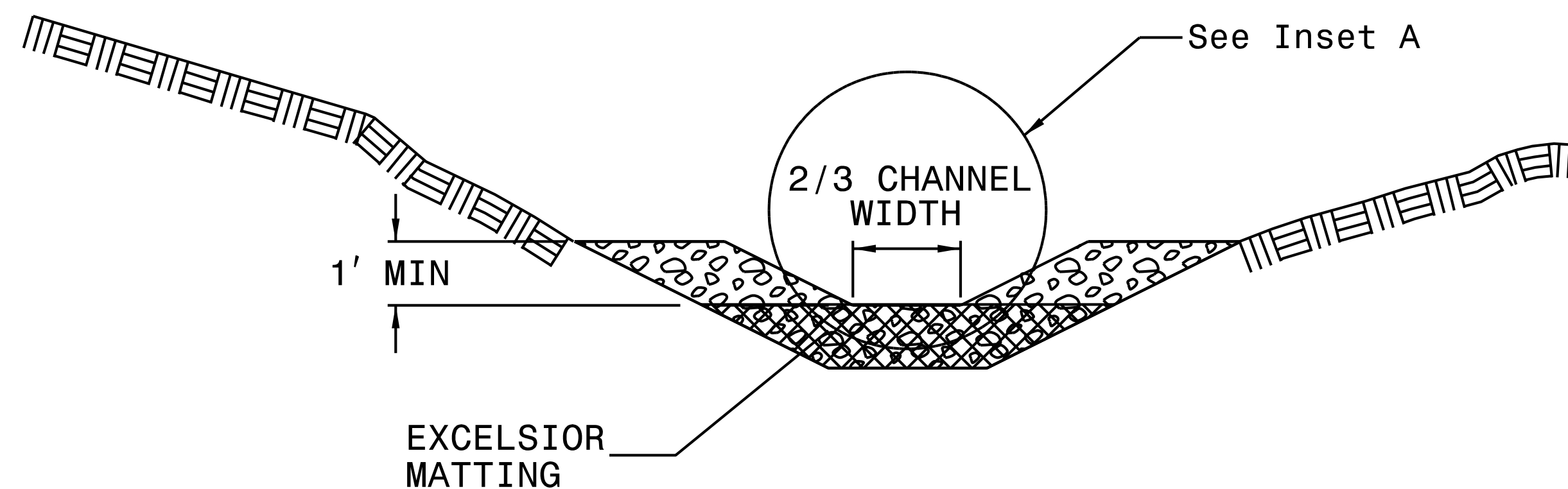
USE EXCELSIOR FOR MATTING MATERIAL AND ANCHOR MATTING SECTION AT TOP AND BOTTOM WITH CLASS B STONE.

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.

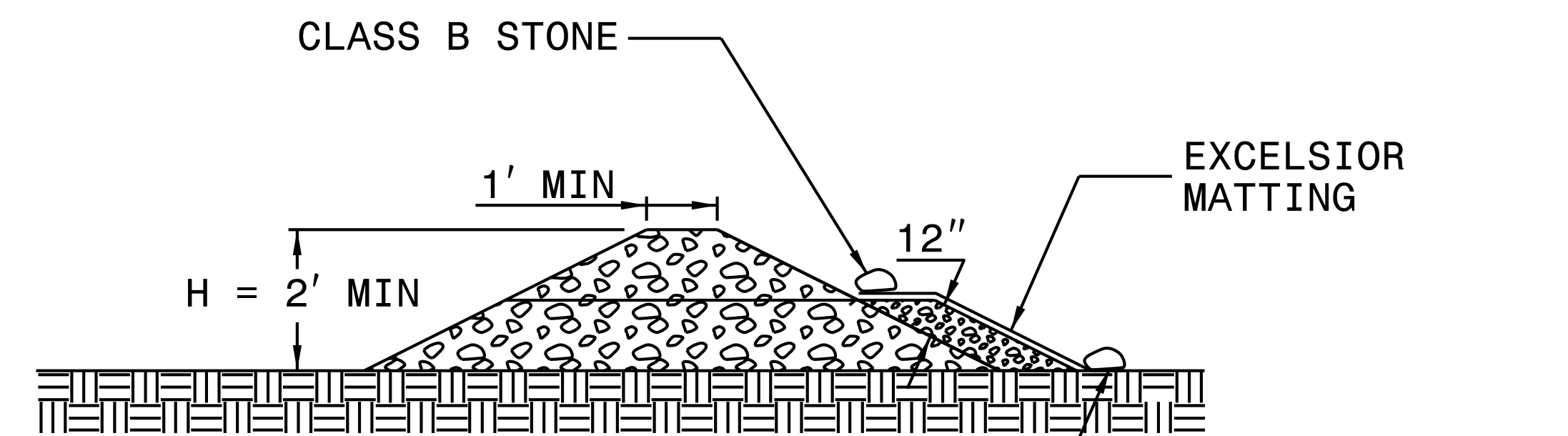
INITIALLY APPLY 4 OUNCES OF POLYACRYLAMIDE (PAM) TO TOP OF MATTING SECTION AND AFTER EVERY RAINFALL EVENT THAT EQUALS OR EXCEEDS 0.50 INCHES.



INSET A



SECTION A-A

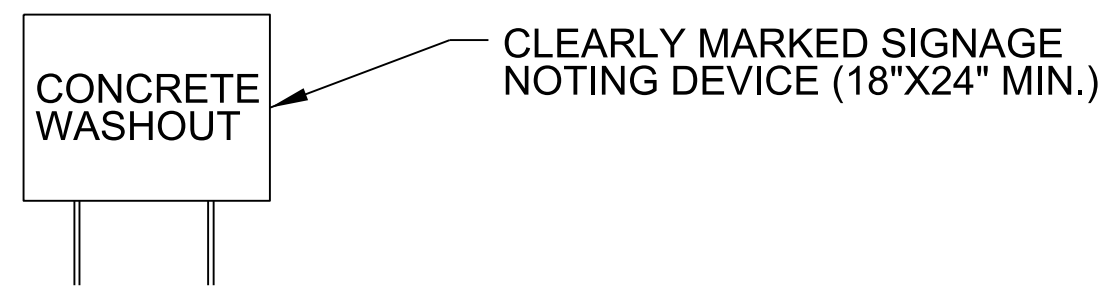
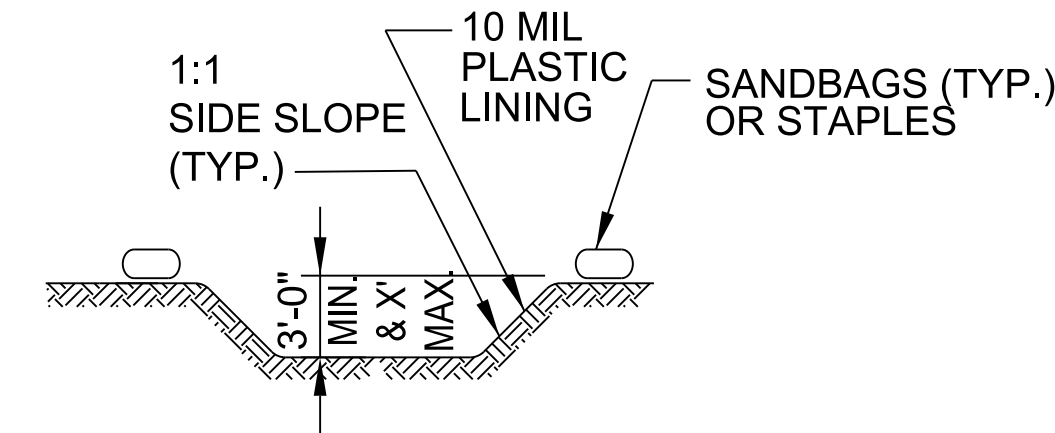
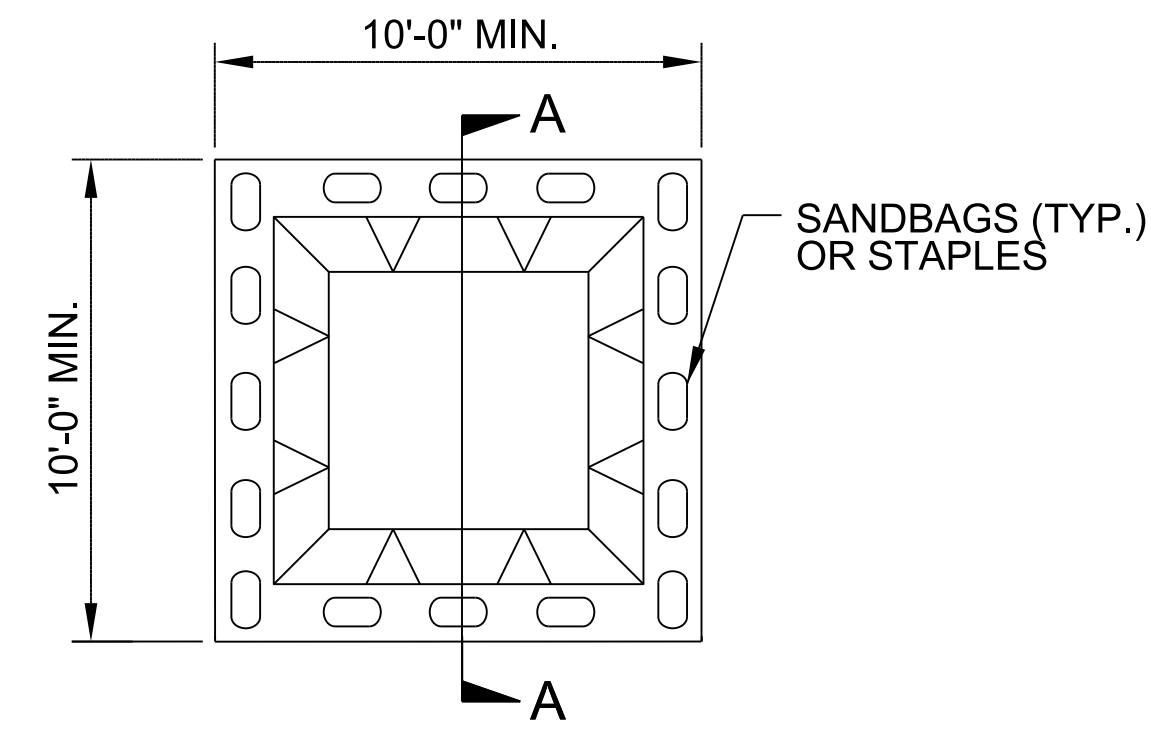


SECTION B-B

NOT TO SCALE

PROJECT REFERENCE NO. <i>B-5765</i>	SHEET NO. <i>EC-5</i>
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

ONSITE CONCRETE WASHOUT STRUCTURE WITH LINER



SECTION A-A

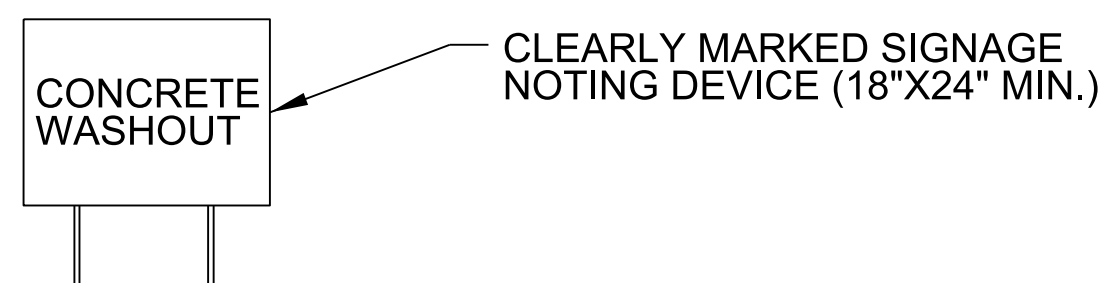
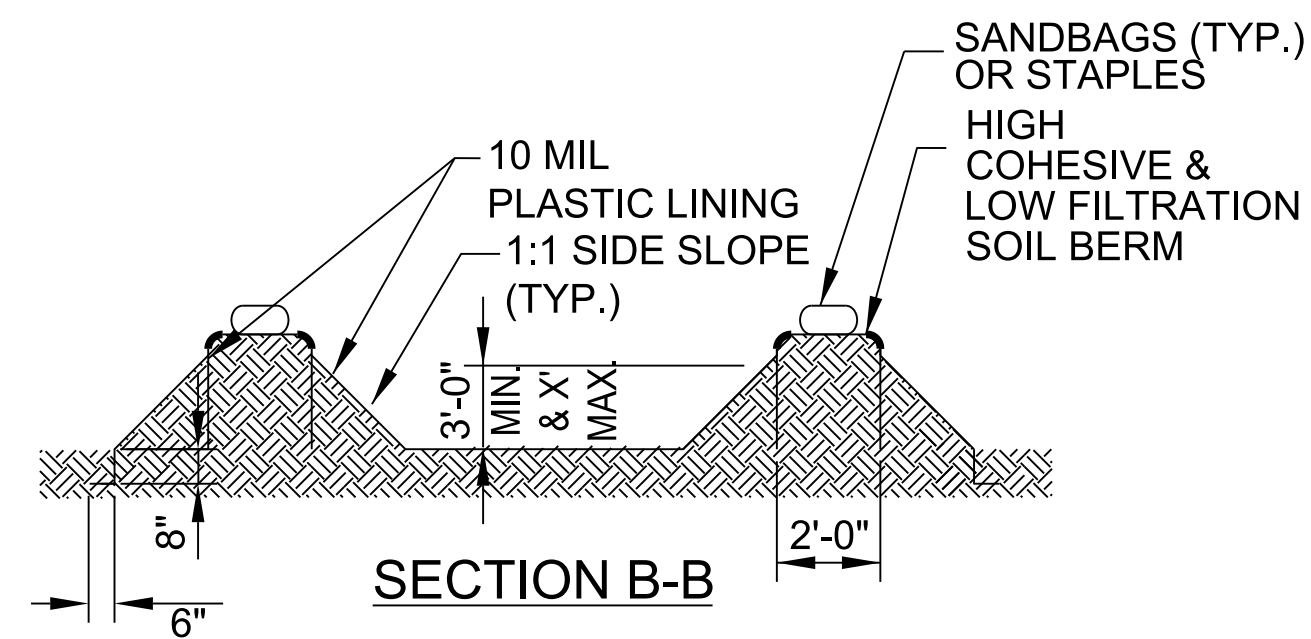
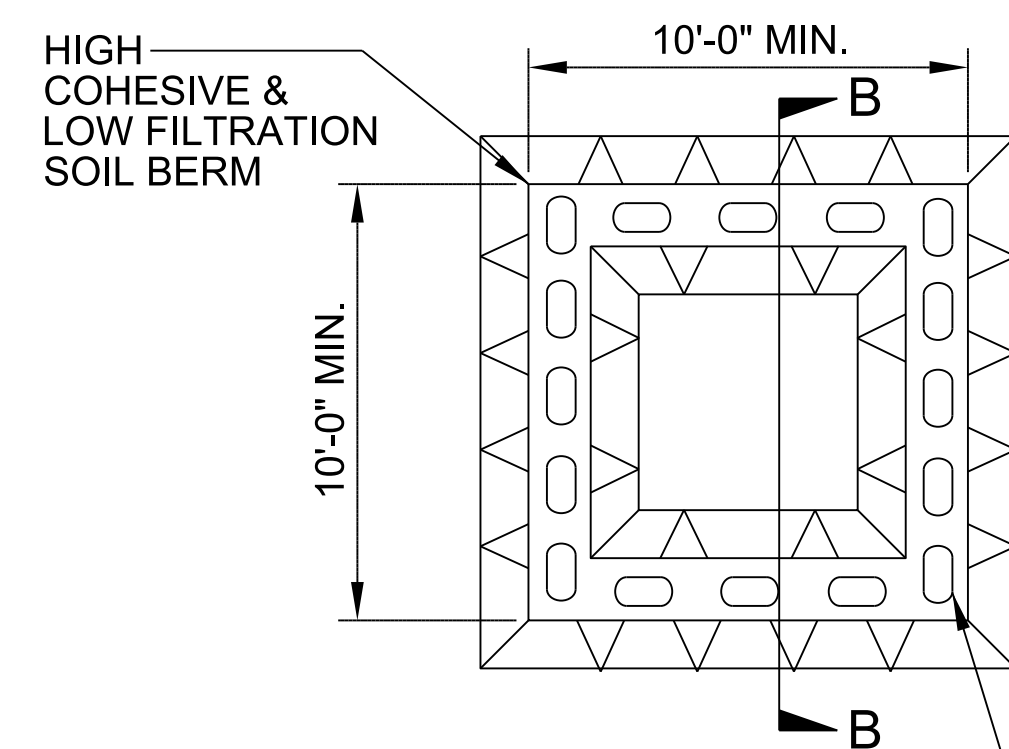
NOTES:

1. ACTUAL LOCATION DETERMINED IN FIELD
2. THE CONCRETE WASHOUT STRUCTURES SHALL BE MAINTAINED WHEN THE LIQUID AND/OR SOLID REACHES 75% OF THE STRUCTURES CAPACITY.
3. CONCRETE WASHOUT STRUCTURE NEEDS TO BE CLEARLY MARKED WITH SIGNAGE NOTING DEVICE.

PLAN

BELOW GRADE WASHOUT STRUCTURE

NOT TO SCALE



NOTES:

1. ACTUAL LOCATION DETERMINED IN FIELD
2. THE CONCRETE WASHOUT STRUCTURES SHALL BE MAINTAINED WHEN THE LIQUID AND/OR SOLID REACHES 75% OF THE STRUCTURES CAPACITY TO PROVIDE ADEQUATE HOLDING CAPACITY WITH A MINIMUM 12 INCHES OF FREEBOARD.
3. CONCRETE WASHOUT STRUCTURE NEEDS TO BE CLEARLY MARKED WITH SIGNAGE NOTING DEVICE.

PLAN

ABOVE GRADE WASHOUT STRUCTURE

NOT TO SCALE

DIVISION OF HIGHWAYS
STATE OF NORTH CAROLINA

PROJECT REFERENCE NO. <i>B-5765</i>	SHEET NO. <i>EC-6</i>
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

SOIL STABILIZATION TIMEFRAMES

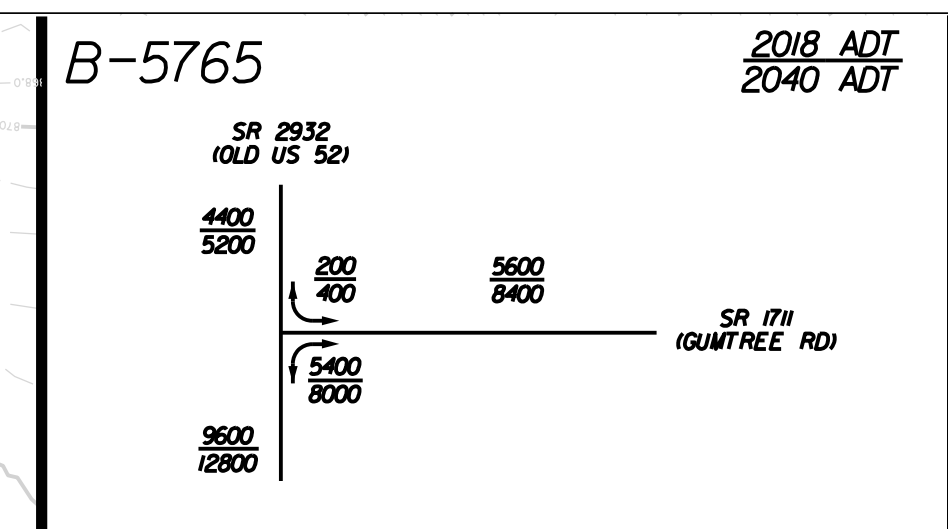
<i>SITE DESCRIPTION</i>	<i>STABILIZATION TIME</i>	<i>TIMEFRAME EXCEPTIONS</i>
PERIMETER DIKES, SWALES, DITCHES AND SLOPES	7 DAYS	NONE
HIGH QUALITY WATER (HQW) ZONES	7 DAYS	NONE
SLOPES STEEPER THAN 3:1	7 DAYS	IF SLOPES ARE 10' OR LESS IN LENGTH AND ARE NOT STEEPER THAN 2:1, 14 DAYS ARE ALLOWED.
SLOPES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

8/17/99

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

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

CLEARING AND GRUBBING EROSION CONTROL FOR CONSTRUCTION SHEET 4



PROJECT REFERENCE NO.	SHEET NO.
B-5765	EC-8
RW SHEET NO.	HYDRAULICS ENGINEER
ROADWAY DESIGN ENGINEER	

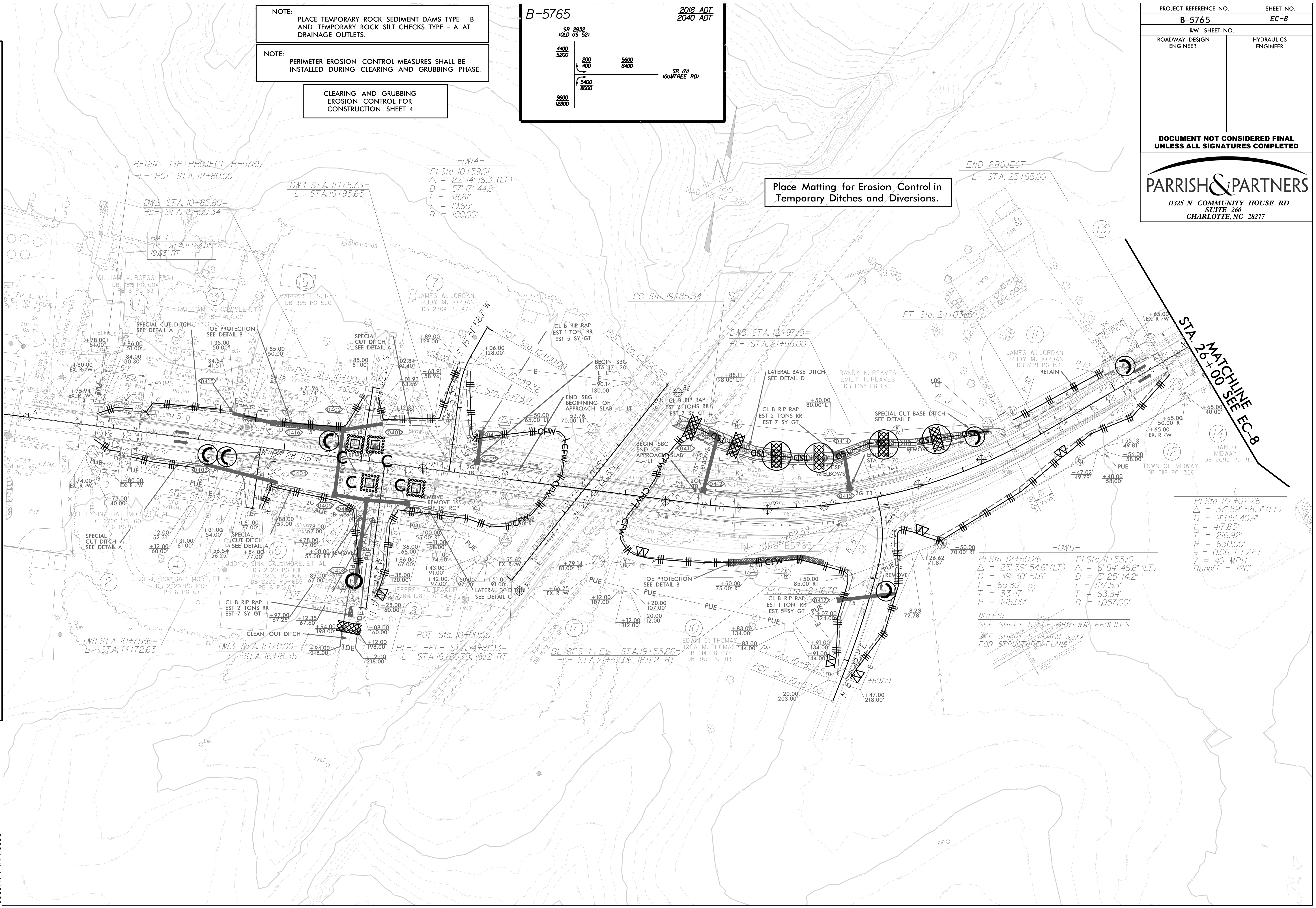
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

PARRISH & PARTNERS
 11325 N COMMUNITY HOUSE RD
 SUITE 260
 CHARLOTTE, NC 28277

Place Matting for Erosion Control in Temporary Ditches and Diversions.

REVISIONS

STA. 26+00 MATCHLINE SEE EC-8



-L-
 PI Sta 22+02.26
 $\Delta = 37^{\circ} 59' 58.3"$ (LT)
 $D = 9^{\circ} 05' 40.4"$
 $L = 417.83'$
 $T = 216.92'$
 $R = 630.00'$
 $e = 0.06$ FT/FT
 $V = 40$ MPH
 Runoff = 126'


-L-
 PI Sta 12+50.26
 $\Delta = 25^{\circ} 59' 54.6"$ (LT)
 $D = 39^{\circ} 30' 51.6"$
 $L = 65.80'$
 $T = 33.47'$
 $R = 145.00'$

-L-
 PI Sta 11+53.10
 $\Delta = 6^{\circ} 54' 46.6"$ (LT)
 $D = 5^{\circ} 25' 14.2"$
 $L = 127.53'$
 $T = 63.84'$
 $R = 1,057.00'$

NOTES:
 SEE SHEET 5 FOR DRIVEWAY PROFILES
 SEE SHEET S-114RUS-XX FOR STRUCTURE PLANS

SYSTEM: CON
 USER: J...
 TIME: 8/17/99 10:00 AM

OFFSITE DETOUR IMPROVEMENTS TO THE INTERSECTION OF SR 1711 (GUMTREE ROAD) AND SR 1713 (HEBRON CHURCH ROAD)

PROJECT REFERENCE NO. B-5765	SHEET NO. EC-9
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	
 11325 N COMMUNITY HOUSE RD SUITE 260 CHARLOTTE, NC 28277	

CLEARING AND GRUBBING
EROSION CONTROL FOR
CONSTRUCTION SHEET 2C-2

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-

PI Sta 29+77.49 Δ = 26° 27' 07.2" (LT) D = 8' 11' 06.4" L = 323.17' T = 164.52' R = 700.00'	PI Sta 33+82.07 Δ = 1° 35' 12.0" (LT) D = 2' 51' 53.2" L = 55.39' T = 27.69' R = 2,000.00'	PI Sta 36+32.89 Δ = 7° 48' 11.3" (RT) D = 5' 27' 24.3" L = 143.00' T = 71.61' R = 1,050.00'
--	---	--

-Y3-

PI Sta 11+48.42 Δ = 2° 37' 57.1" (LT) D = 1° 54' 35.5" L = 137.84' T = 68.93' R = 3,000.00' e = MATCH EXIST.	PI Sta 12+84.30 Δ = 1° 40' 14.8" (LT) D = 11' 27' 33.0" L = 101.85' T = 51.10' R = 500.00' e = MATCH EXIST.
--	---

REVISIONS
 8/17/99
 \$\$\$\$\$\$SYTIME\$\$\$\$\$\$
 \$\$\$\$\$\$DGN\$\$\$\$\$\$
 \$\$\$\$\$\$DATE\$\$\$\$\$\$
 \$\$\$\$\$\$USER\$\$\$\$\$\$



MATCHLINE STA. 26+00 SEE EC-7
 13
 14


BL-GPS-2 -EL- STA.26+92.67=
-L- STA.28+92.29, 19.76' RT

-Y3- POT STA.13+46.74=
-L- STA.33+66.88

BL-7 -EL- STA.32+31.62=
-L- STA.34+31.24, 17.11' RT

NOTES:
SEE SHEET 6 FOR -Y3- PROFILE

OFFSITE DETOUR IMPROVEMENTS TO THE INTERSECTION OF OLD US 52 AND SR 1713 (HEBRON CHURCH ROAD)

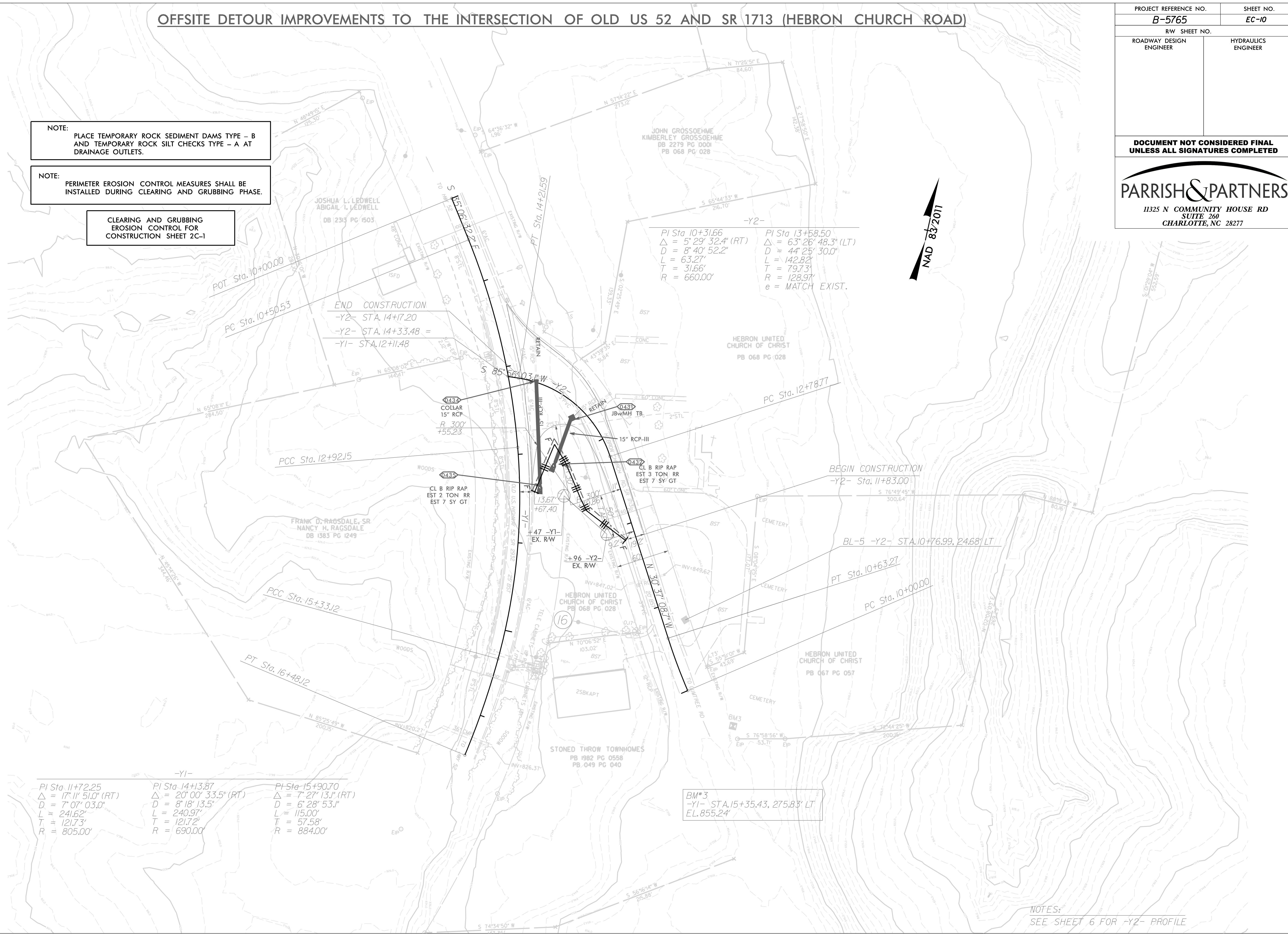
PROJECT REFERENCE NO. B-5765	SHEET NO. EC-10
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	
 11325 N COMMUNITY HOUSE RD SUITE 260 CHARLOTTE, NC 28277	

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

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

CLEARING AND GRUBBING EROSION CONTROL FOR CONSTRUCTION SHEET 2C-1

REVISIONS

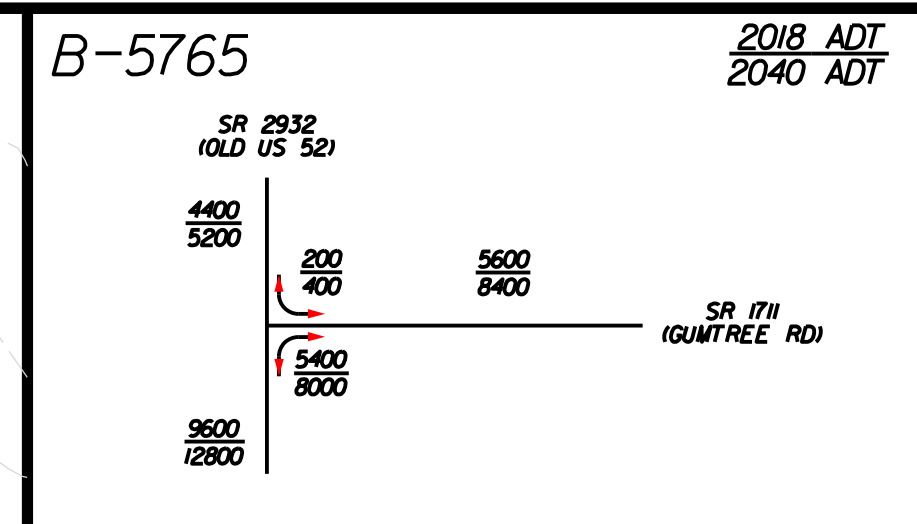


NOTES:
SEE SHEET 6 FOR -Y2- PROFILE

8/17/99
\$\$\$\$SYTIME\$\$\$\$
\$\$\$\$DATE\$\$\$\$
\$\$\$\$DRAWN\$\$\$\$
\$\$\$\$CHECKED\$\$\$\$
\$\$\$\$DATE\$\$\$\$

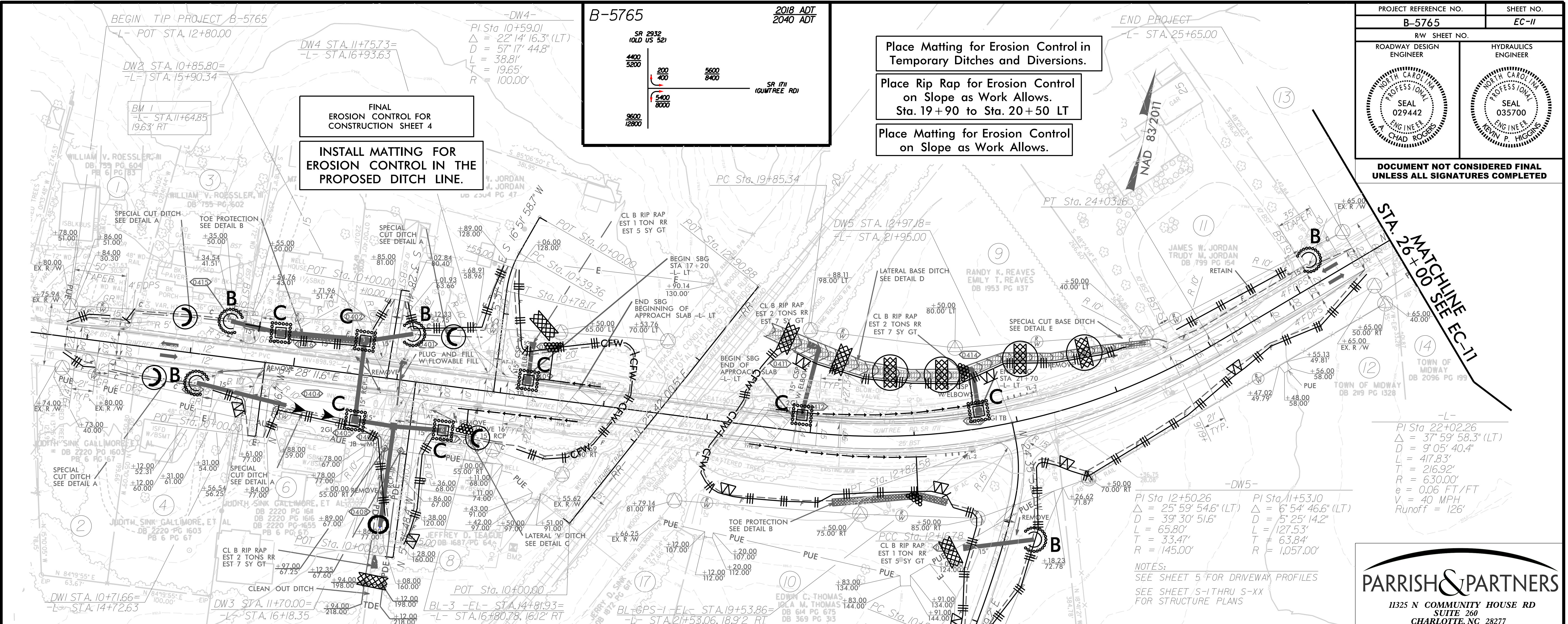
PROJECT REFERENCE NO. B-5765	SHEET NO. EC-II
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

DOCUMENT NOT CONSIDERED FINAL
UNLESS ALL SIGNATURES COMPLETED

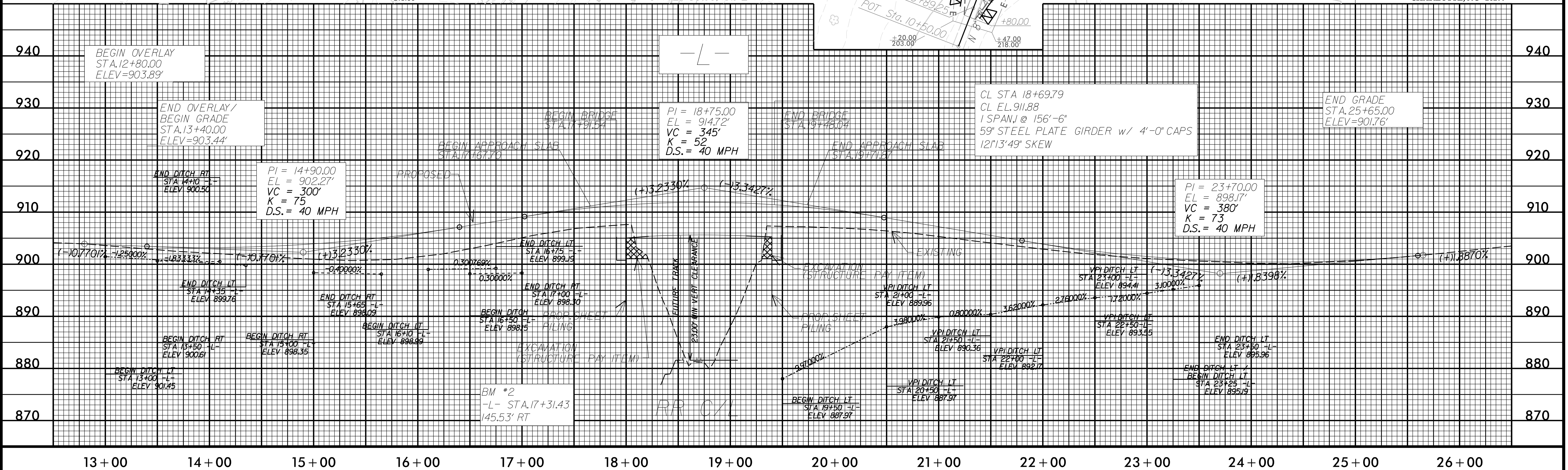


Place Matting for Erosion Control in Temporary Ditches and Diversions.
Place Rip Rap for Erosion Control on Slope as Work Allows. Sta. 19+90 to Sta. 20+50 LT
Place Matting for Erosion Control on Slope as Work Allows.

FINAL EROSION CONTROL FOR CONSTRUCTION SHEET 4
INSTALL MATTING FOR EROSION CONTROL IN THE PROPOSED DITCH LINE.



PARRISH & PARTNERS
11325 N COMMUNITY HOUSE RD
SUITE 260
CHARLOTTE, NC 28277



REVISIONS

8/17/99
SUNSHINE SYSTEMS

