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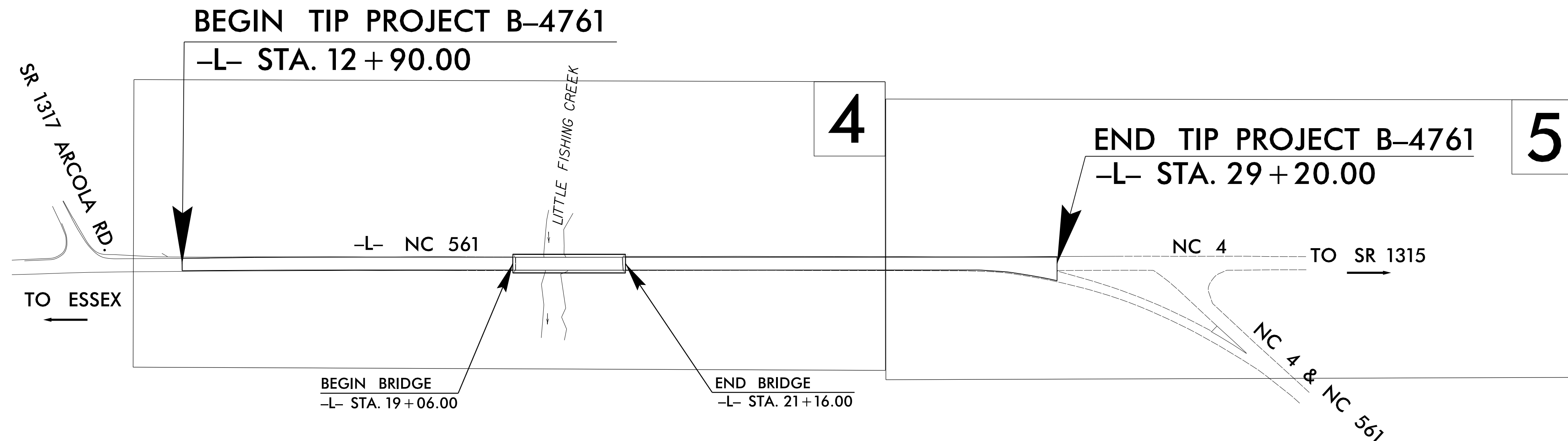
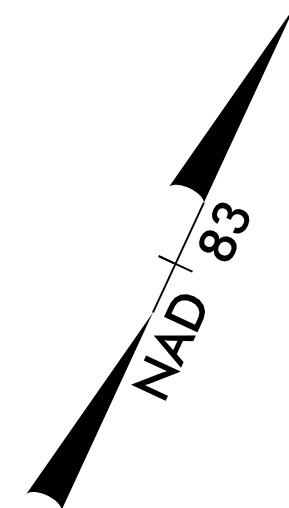
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**TIP PROJECT: B-4761**

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

**LOCATION: BRIDGE NO. 29 OVER LITTLE FISHING CREEK  
 ON NC 561**

**TYPE OF WORK: GRADING, DRAINAGE, PAVING AND STRUCTURE**



**EROSION AND SEDIMENT CONTROL MEASURES**

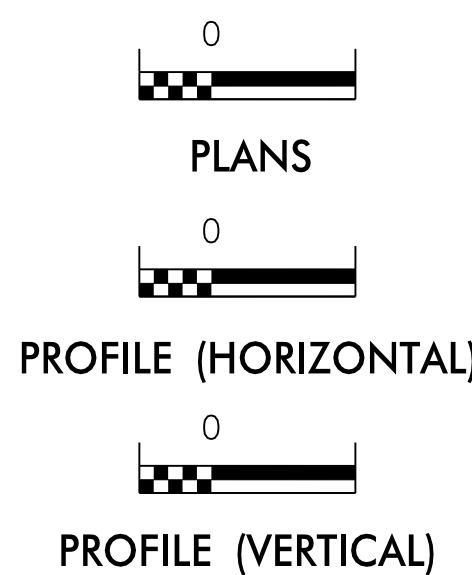
Std. #	Description	Symbol
1630.03	Temporary Silt Ditch	TD
1630.05	Temporary Diversion	TD
1605.01	Temporary Silt Fence	III III III
1606.01	Special Sediment Control Fence	X X X X X X X X
1622.01	Temporary Berms and Slope Drains	TD
1630.02	Silt Basin Type B	Silt Basin Type B symbol
1633.01	Temporary Rock Silt Check Type-A	Rock Silt Check Type-A symbol
	Temporary Rock Silt Check Type-A with Matting and Polyacrylamide (PAM)	Rock Silt Check Type-A with PAM symbol
1633.02	Temporary Rock Silt Check Type-B	Rock Silt Check Type-B symbol
	Wattle / Coir Fiber Wattle	Wattle / Coir Fiber Wattle symbol
	Wattle / Coir Fiber Wattle with Polyacrylamide (PAM)	Wattle / Coir Fiber Wattle with PAM symbol
1634.01	Temporary Rock Sediment Dam Type-A	Rock Sediment Dam Type-A symbol
1634.02	Temporary Rock Sediment Dam Type-B	Rock Sediment Dam Type-B symbol
1635.01	Rock Pipe Inlet Sediment Trap Type-A	Rock Pipe Inlet Sediment Trap Type-A symbol
1635.02	Rock Pipe Inlet Sediment Trap Type-B	Rock Pipe Inlet Sediment Trap Type-B symbol
1630.04	Stilling Basin	Stilling Basin symbol
1630.06	Special Stilling Basin	Special Stilling Basin symbol
	Rock Inlet Sediment Trap:	
1632.01	Type A	Type A symbol
1632.02	Type B	Type B symbol
1632.03	Type C	Type C symbol
	Skimmer Basin	Skimmer Basin symbol
	Tiered Skimmer Basin	Tiered Skimmer Basin symbol
	Infiltration Basin	Infiltration Basin symbol

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

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

**ENVIRONMENTALLY  
 SENSITIVE AREA(S) EXIST  
 ON THIS PROJECT**  
*Refer To E. C. Special Provisions  
 for Special Considerations.*

**GRAPHIC SCALE**



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**

Designed by:  
**Noelle Ring** **3456**  
 NAME LEVEL III CERTIFICATION NO.

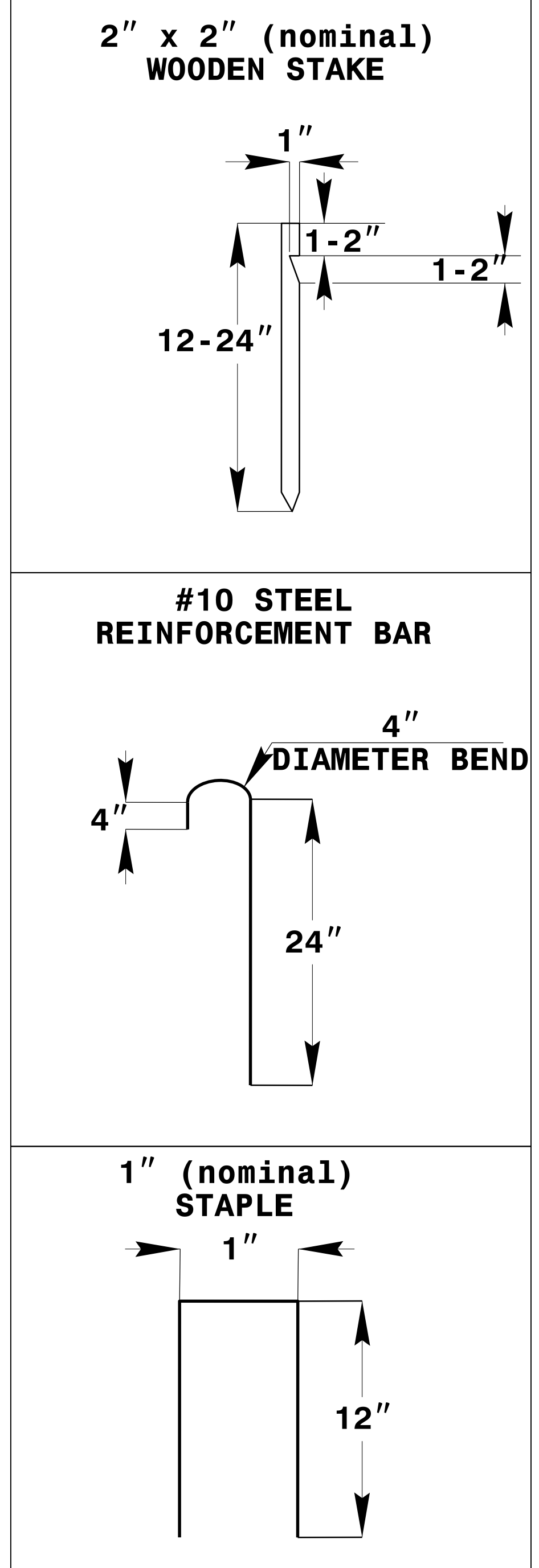
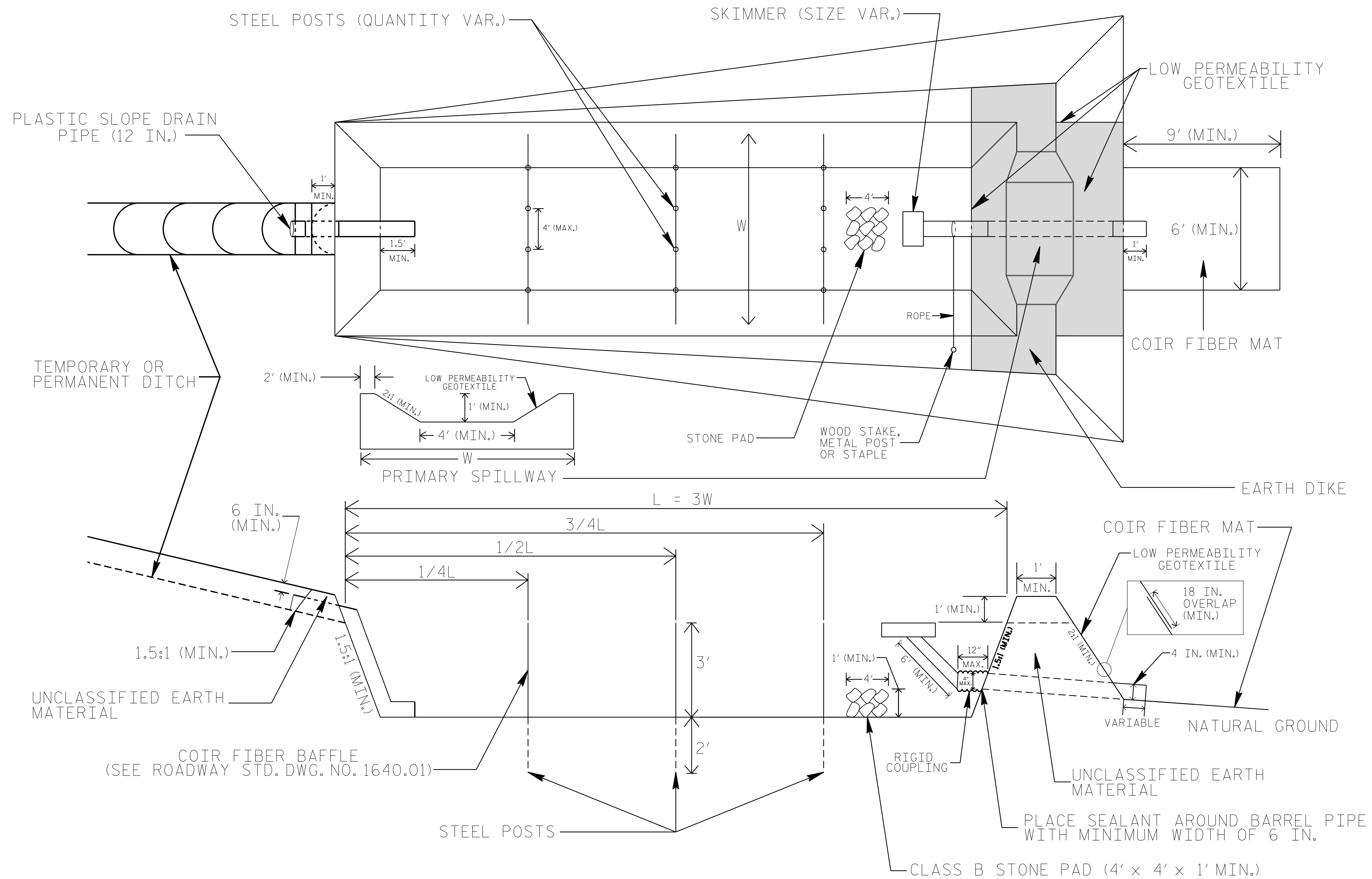
**Roadway Standard Drawings**

The following roadway english standards as appear in "Roadway Standard Drawings"- Roadway Design Unit - N. C. Department of Transportation - Raleigh, N. C., dated January 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	

PROJECT REFERENCE NO. B-4761	SHEET NO. EC-2
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

# SKIMMER BASIN WITH BAFFLES DETAIL (EAST)



## COIR FIBER MAT ANCHOR OPTIONS

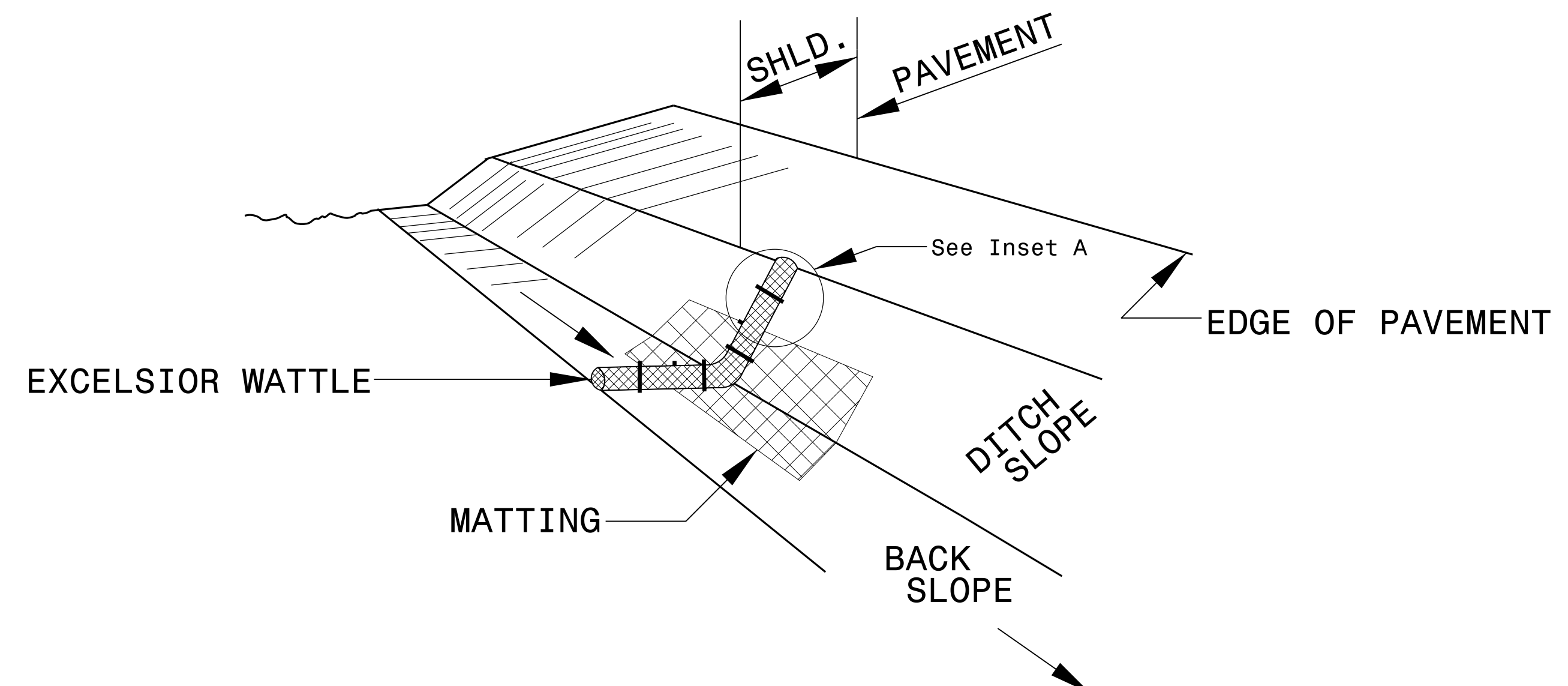
### NOTES

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. LOW PERMEABILITY GEOTEXTILE FOR PRIMARY SPILLWAY SHALL BE ONE CONTINUOUS PIECE OF MATERIAL OR OVERLAPPED 18 IN. (MIN.).

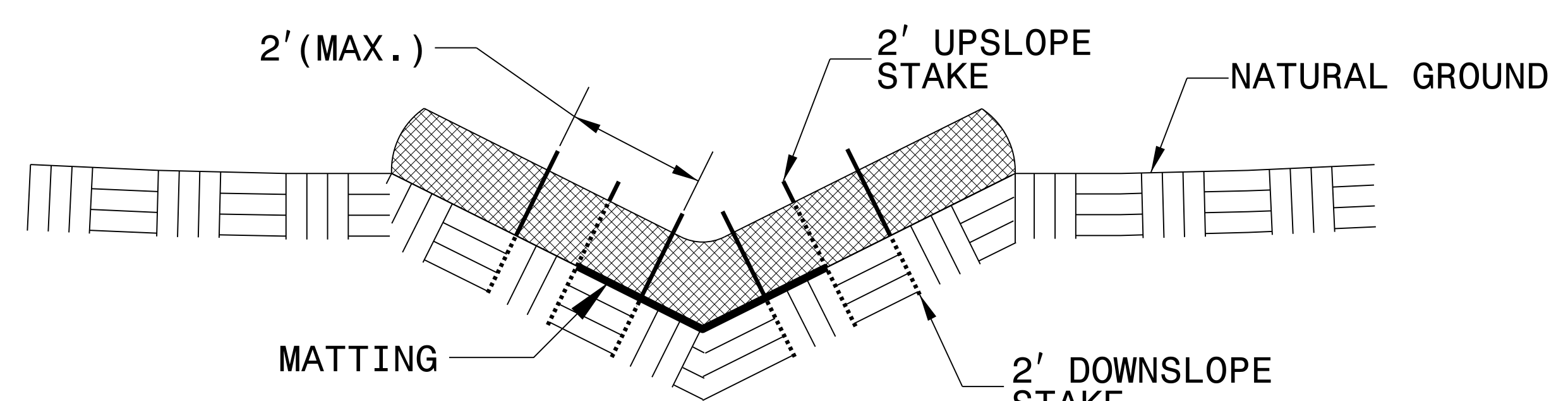
NOT TO SCALE

PROJECT REFERENCE NO. B-4761	SHEET NO. EC-2A
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

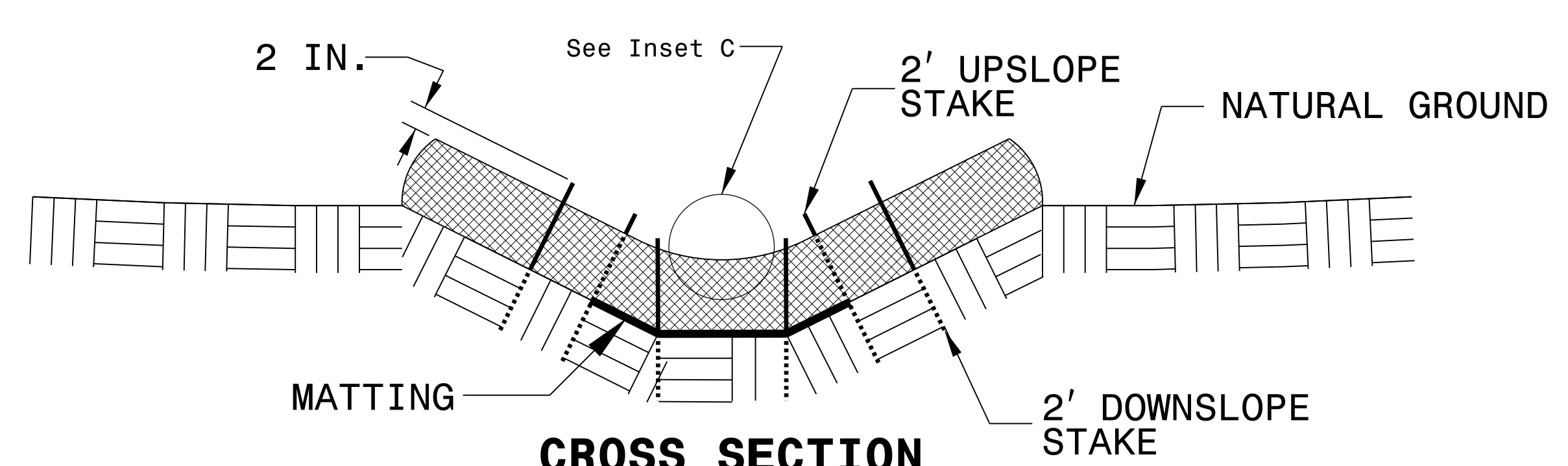
# WATTLE WITH POLYACRYLAMIDE (PAM) DETAIL



**ISOMETRIC VIEW**

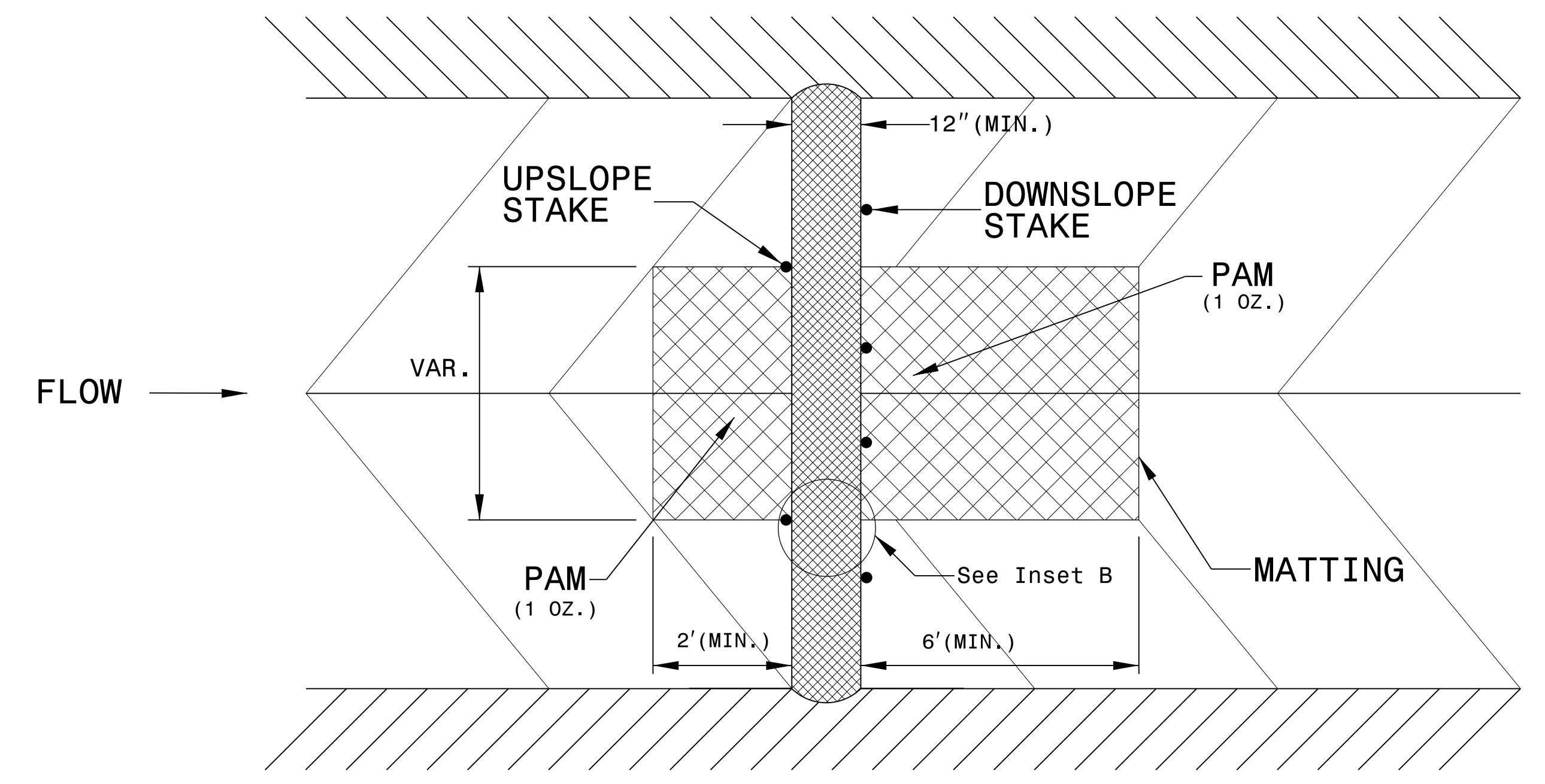
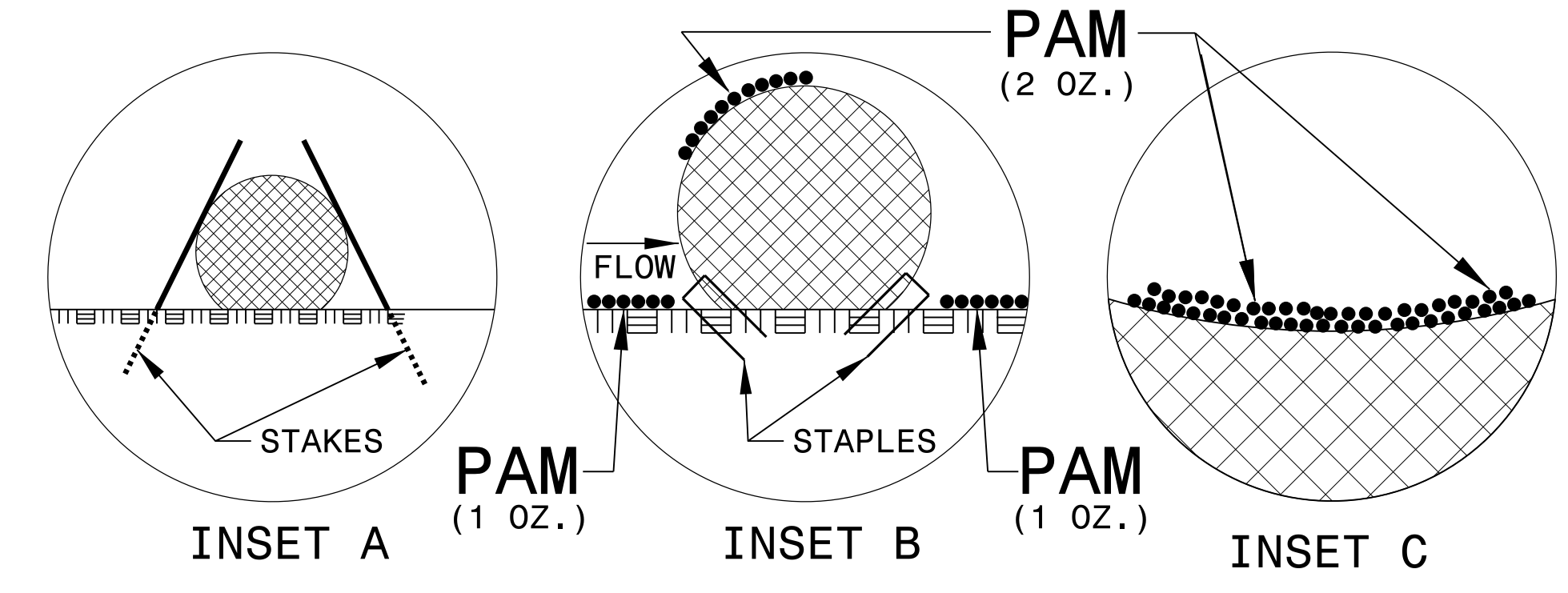


**CROSS SECTION VEE DITCH**



**CROSS SECTION TRAPEZOIDAL DITCH**

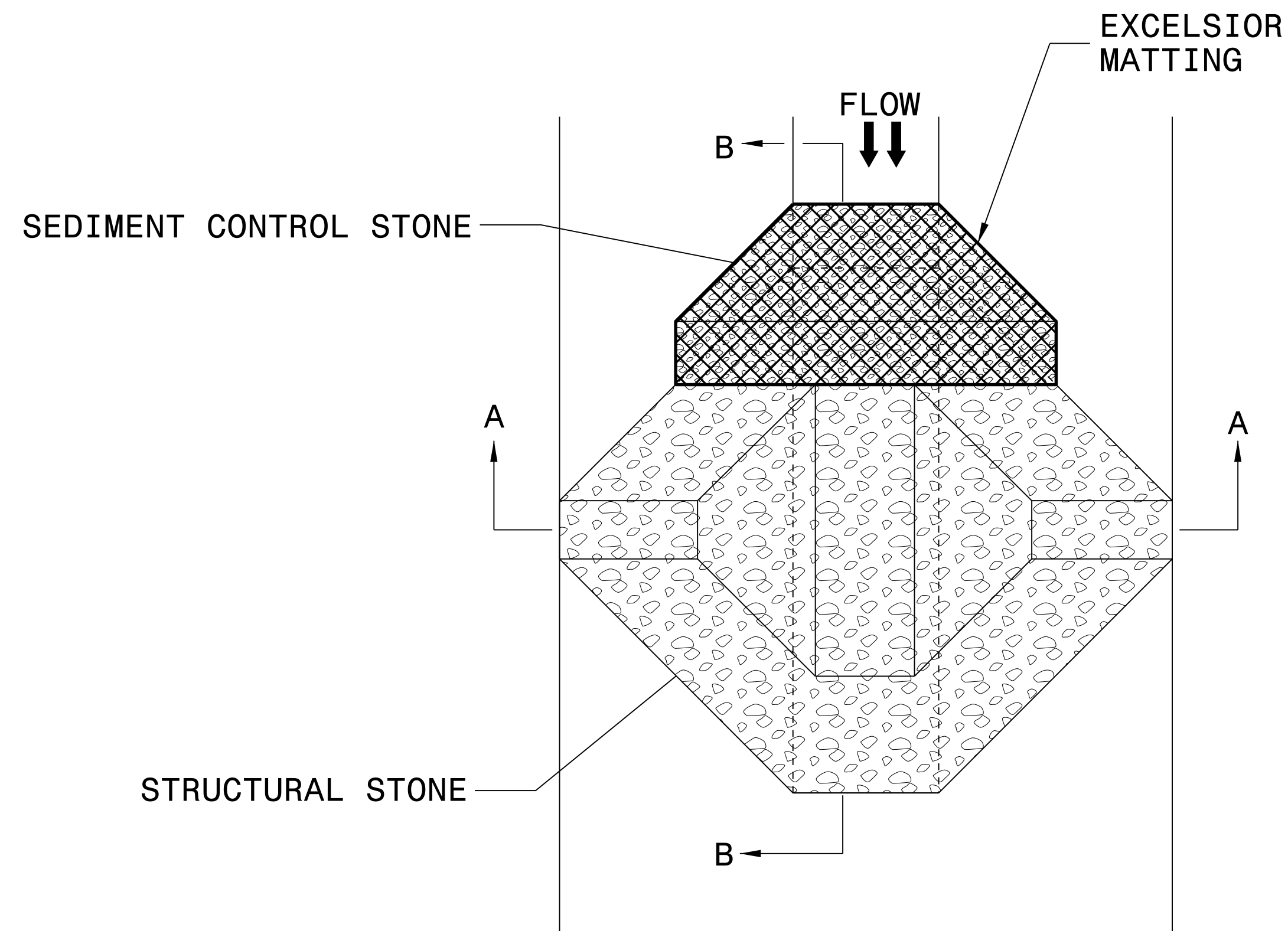
- NOTES:
- USE MINIMUM 12 IN. DIAMETER EXCELSIOR WATTLE.
  - USE 2 FT. WOODEN STAKES WITH A 2 IN. BY 2 IN. NOMINAL CROSS SECTION.
  - ONLY INSTALL WATTLE(S) TO A HEIGHT IN DITCH SO FLOW WILL NOT WASH AROUND WATTLE AND SCOUR DITCH SLOPES AND AS DIRECTED.
  - INSTALL A MINIMUM OF 2 UPSLOPE STAKES AND 4 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.



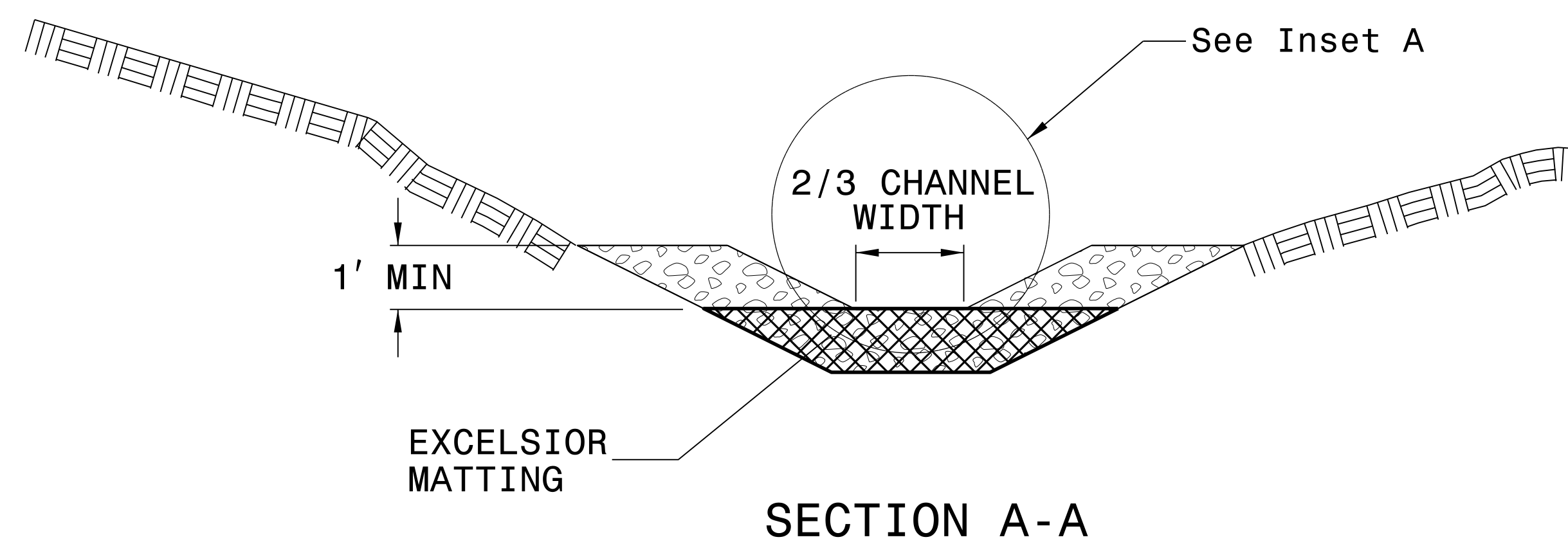
**TOP VIEW**

PROJECT REFERENCE NO. B-4761	SHEET NO. EC-2B
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

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



PLAN



SECTION A-A

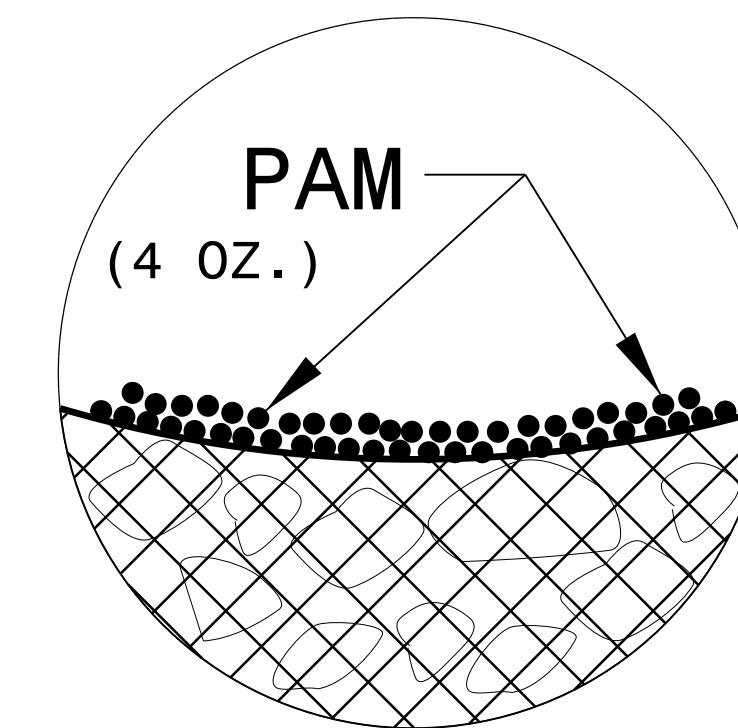
**NOTES:**

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

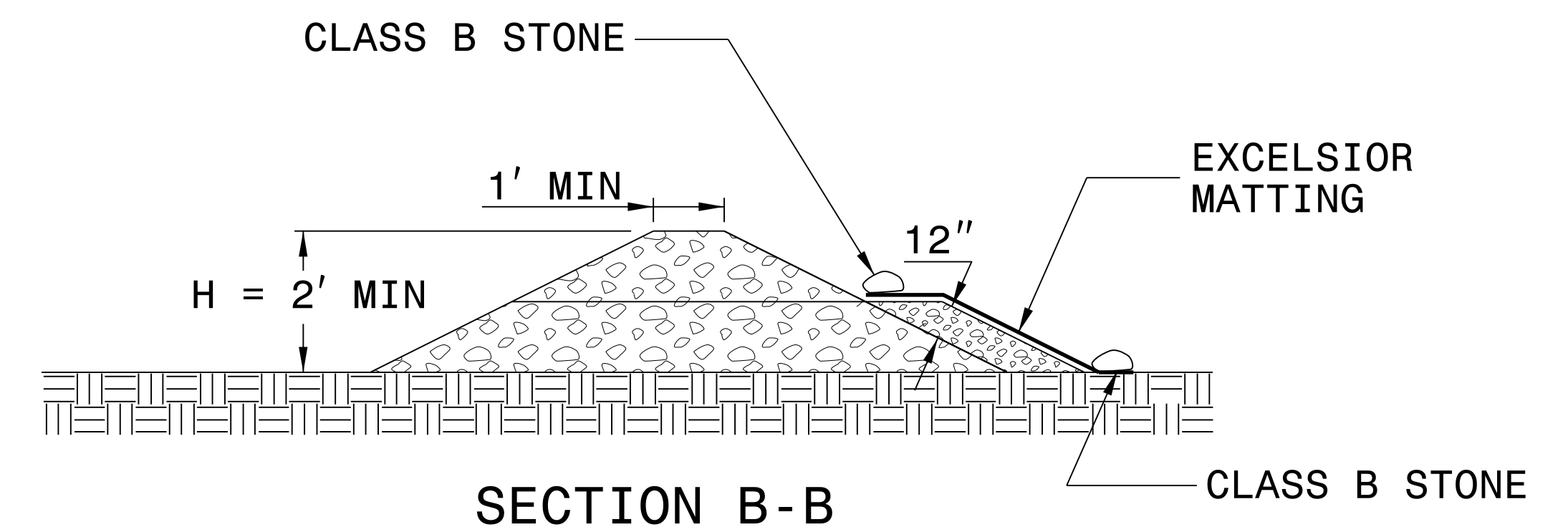
USE EXCELSIOR FOR MATTING MATERIAL AND ANCHOR MATTING SECTION AT TOP AND BOTTOM WITH CLASS B STONE.

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 B-B

NOT TO SCALE

DIVISION OF HIGHWAYS  
STATE OF NORTH CAROLINA

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PROJECT REFERENCE NO. <i>B-4761</i>	SHEET NO. <i>EC-3</i>
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

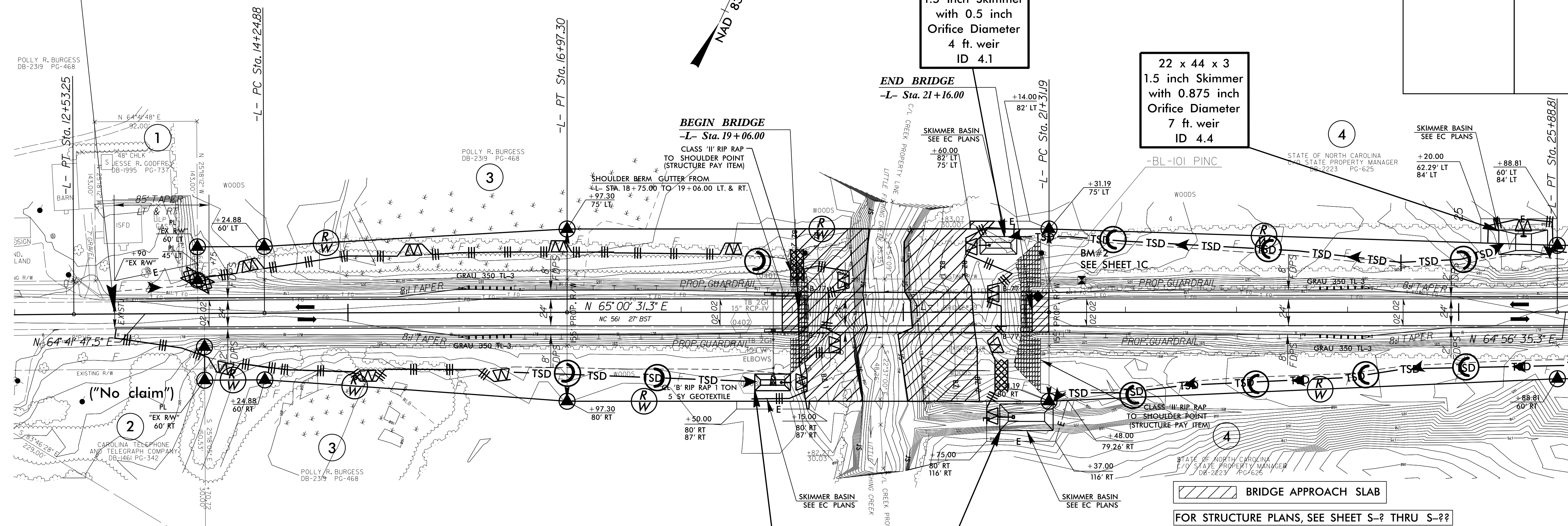
# ***SOIL STABILIZATION TIMEFRAMES***

<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.

PROJECT REFERENCE NO. <i>B-4761</i>	SHEET NO. <i>EC-4/CONST.4</i>
RW SHEET NO.	HYDRAULICS ENGINEER
ROADWAY DESIGN ENGINEER	

CLEARING AND GRUBBING  
EROSION CONTROL FOR  
CONSTRUCTION SHEET 4

**BEGIN TIP PROJECT B-4761**  
**-L- POT Sta. 12 + 90.00**



33 x 16 x 3  
1.5 inch Skimmer  
with 0.5 inch  
Orifice Diameter  
4 ft. weir  
ID 4.1

22 x 44 x 3  
1.5 inch Skimmer  
with 0.875 inch  
Orifice Diameter  
7 ft. weir  
ID 4.4

32 x 15 x 3  
1.5 inch Skimmer  
with 0.5 inch  
Orifice Diameter  
4 ft. weir  
ID 4.2

48 x 24 x 3  
1.5 inch Skimmer  
with 0.875 inch  
Orifice Diameter  
9 ft. weir  
ID 4.3

BRIDGE APPROACH SLAB  
FOR STRUCTURE PLANS, SEE SHEET S-? THRU S-??

ENVIRONMENTALLY SENSITIVE AREA  
SEE PROJECT SPECIAL PROVISIONS

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

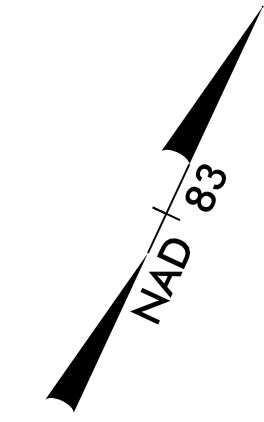
NOTE:  
UTILIZE TEMPORARY SEDIMENT BASIN OR SPECIAL STILLING  
BASIN(S) AS STILLING BASIN WHERE APPLICABLE.

8/17/99

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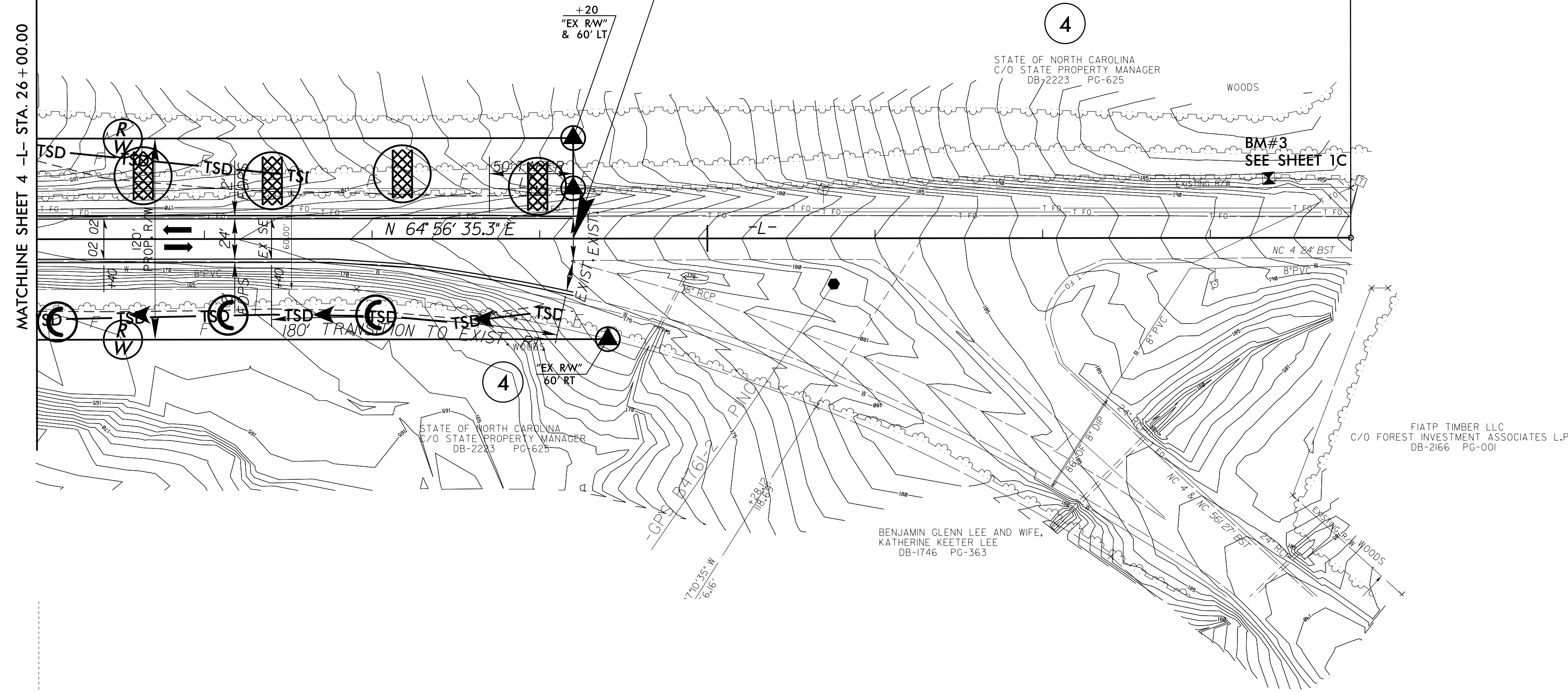
MATCHLINE SHEET 5 -L- STA. 26 + 00.00

PROJECT REFERENCE NO.	SHEET NO.
B-4761	EC-5/CONST.5
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER



**END TIP PROJECT B-4761**  
**-L- POT Sta. 29+20.00**

MATCHLINE SHEET 4 -L- STA. 26+00.00



CLEARING AND GRUBBING  
 EROSION CONTROL FOR  
 CONSTRUCTION SHEET 5

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

8/17/99

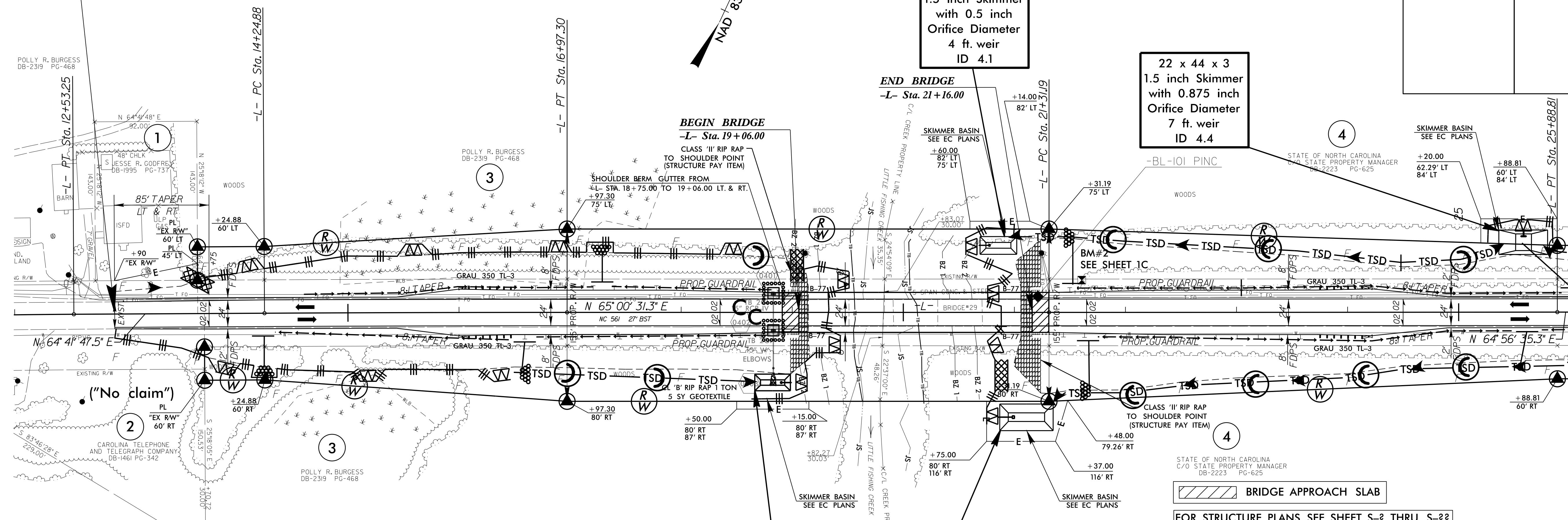
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PROJECT REFERENCE NO. B-4761	SHEET NO. EC-6/CONST.4
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

**BEGIN TIP PROJECT B-4761**  
-L- POT Sta. 12+90.00



BRIDGE APPROACH SLAB  
FOR STRUCTURE PLANS, SEE SHEET S-? THRU S-??

32 x 15 x 3  
1.5 inch Skimmer  
with 0.5 inch  
Orifice Diameter  
4 ft. weir  
ID 4.2

48 x 24 x 3  
1.5 inch Skimmer  
with 0.875 inch  
Orifice Diameter  
9 ft. weir  
ID 4.3

33 x 16 x 3  
1.5 inch Skimmer  
with 0.5 inch  
Orifice Diameter  
4 ft. weir  
ID 4.1

22 x 44 x 3  
1.5 inch Skimmer  
with 0.875 inch  
Orifice Diameter  
7 ft. weir  
ID 4.4

Place Matting for Erosion Control  
on Slopes as Work Allows.  
Sta. 14+00 to Sta. 19+00

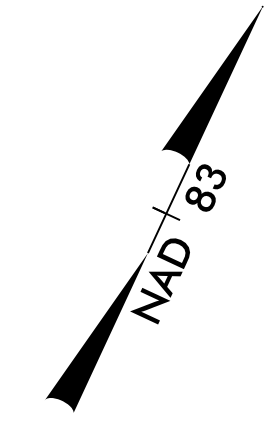
Place Matting for Erosion Control  
on Slopes as Work Allows.  
Sta. 21+30 to Sta. 26+00

NOTE:  
UTILIZE TEMPORARY SEDIMENT BASIN OR SPECIAL STILLING  
BASIN(S) AS STILLING BASIN WHERE APPLICABLE.

8/17/99

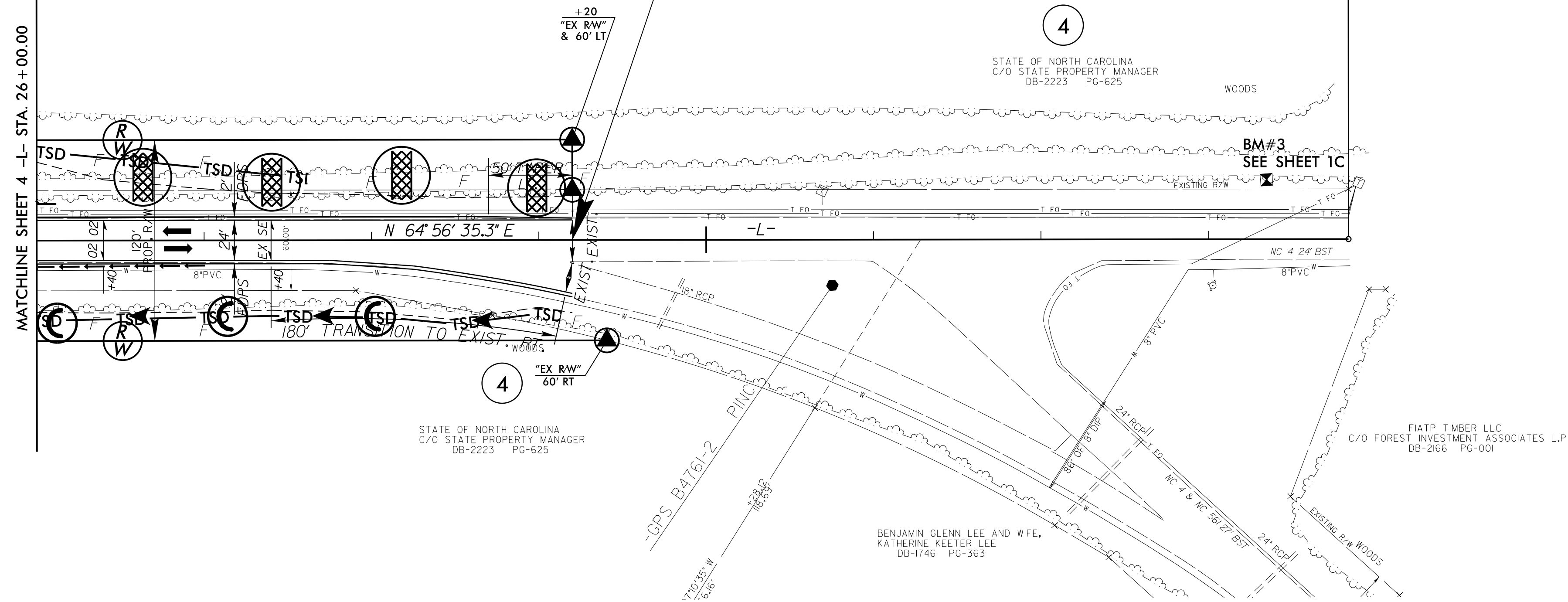
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PROJECT REFERENCE NO.	SHEET NO.
B-4761	EC-7/CONST.5
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER



**END TIP PROJECT B-4761**  
**-L- POT Sta. 29+20.00**

MATCHLINE SHEET 4 -L- STA. 26+00.00



Place Matting for Erosion Control  
on Slopes as Work Allows.  
Sta. 26+00 to Sta. 28+50

8/17/99

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kimberly.sorenson