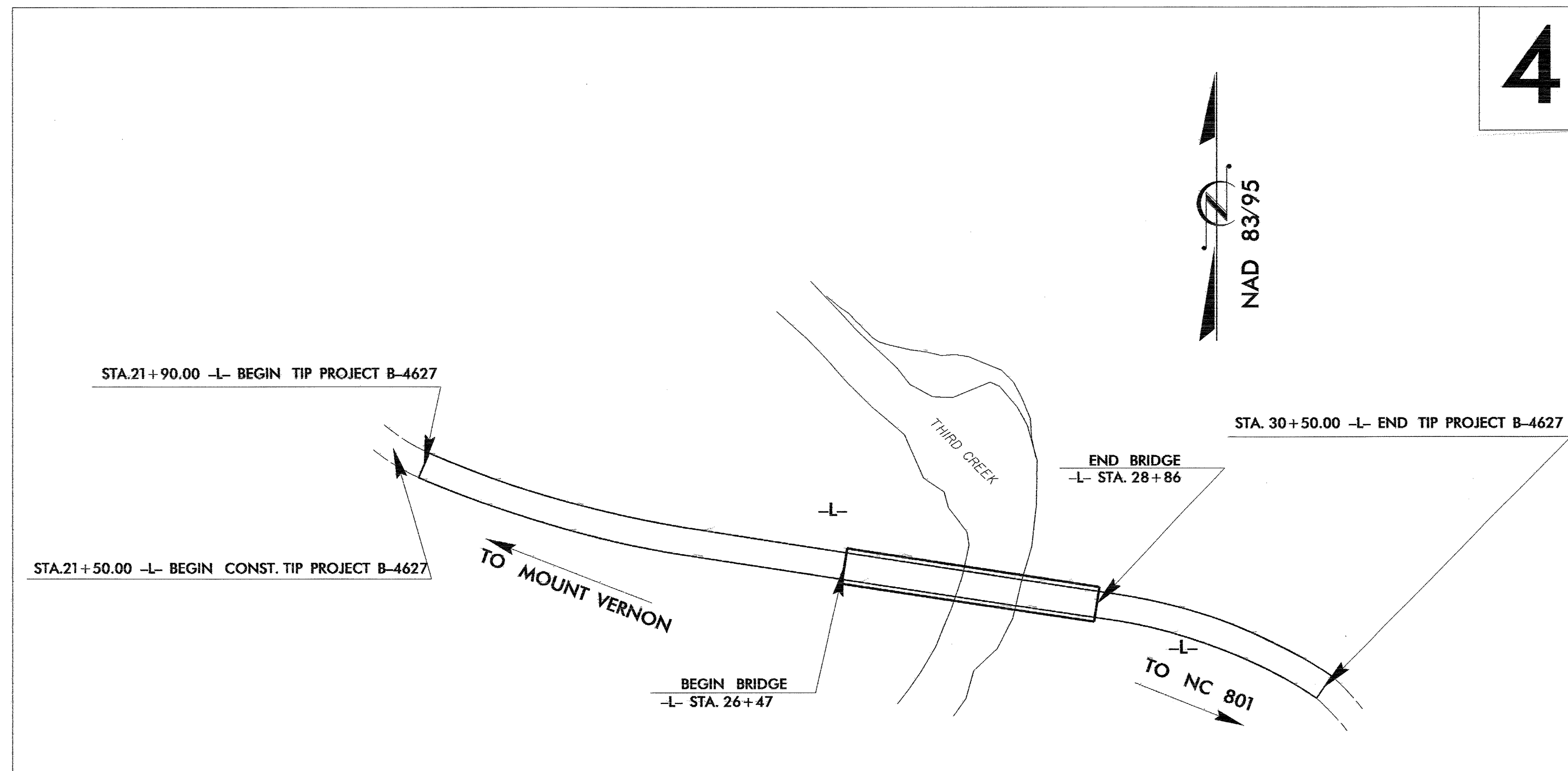


STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	B-4627	EC-1	
STATE PROJ. NO.	F.A. PROJ. NO.	DESCRIPTION	

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

LOCATION: BRIDGE OVER THIRD CREEK AND APPROACHES
 ON SR. 1003 (COOL SPRINGS RD.)

TYPE OF WORK: GRADING, DRAINAGE, PAVING AND STRUCTURE



EROSION AND SEDIMENT CONTROL MEASURES

Std. #	Description	Symbol
1630.03	Temporary Silt Ditch.....	TSD
1630.05	Temporary Diversion.....	TD
1605.01	Temporary Silt Fence.....	III III III
1606.01	Special Sediment Control Fence.....	⊗
1622.01	Temporary Berms and Slope Drains.....	TBD
	Silt Basin Type B.....	⊞
1633.01	Temporary Rock Silt Check Type-A.....	⊠
	Temporary Rock Silt Check Type-A with Matting and Polyacrylamide (PAM)	⊡
	Temporary Rock Silt Check Type-B.....	▶
	Wattle.....	⤿
1634.01	Temporary Rock Sediment Dam Type-A.....	⊞
1634.02	Temporary Rock Sediment Dam Type-B.....	⊞
1635.01	Rock Pipe Inlet Sediment Trap Type-A.....	⊠
1635.02	Rock Pipe Inlet Sediment Trap Type-B.....	⊠
1630.04	Stilling Basin.....	⊠
1630.06	Special Stilling Basin.....	⊠
	Rock Inlet Sediment Trap:	
1632.01	Type A.....	A
1632.02	Type B.....	B
1632.03	Type C.....	C
	Skimmer Basin.....	⊠
	Tiered Skimmer Basin.....	⊠
	Infiltration Basin.....	⊠

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

TIP PROJECT: B-4627

GRAPHIC SCALE

PLANS

PROFILE (HORIZONTAL)

PROFILE (VERTICAL)

ROADSIDE ENVIRONMENTAL UNIT
 DIVISION OF HIGHWAYS
 STATE OF NORTH CAROLINA

Prepared In the Office of:
ROADSIDE ENVIRONMENTAL UNIT
 1 South Wilmington St.
 Raleigh, NC 27611
2006 STANDARD SPECIFICATIONS

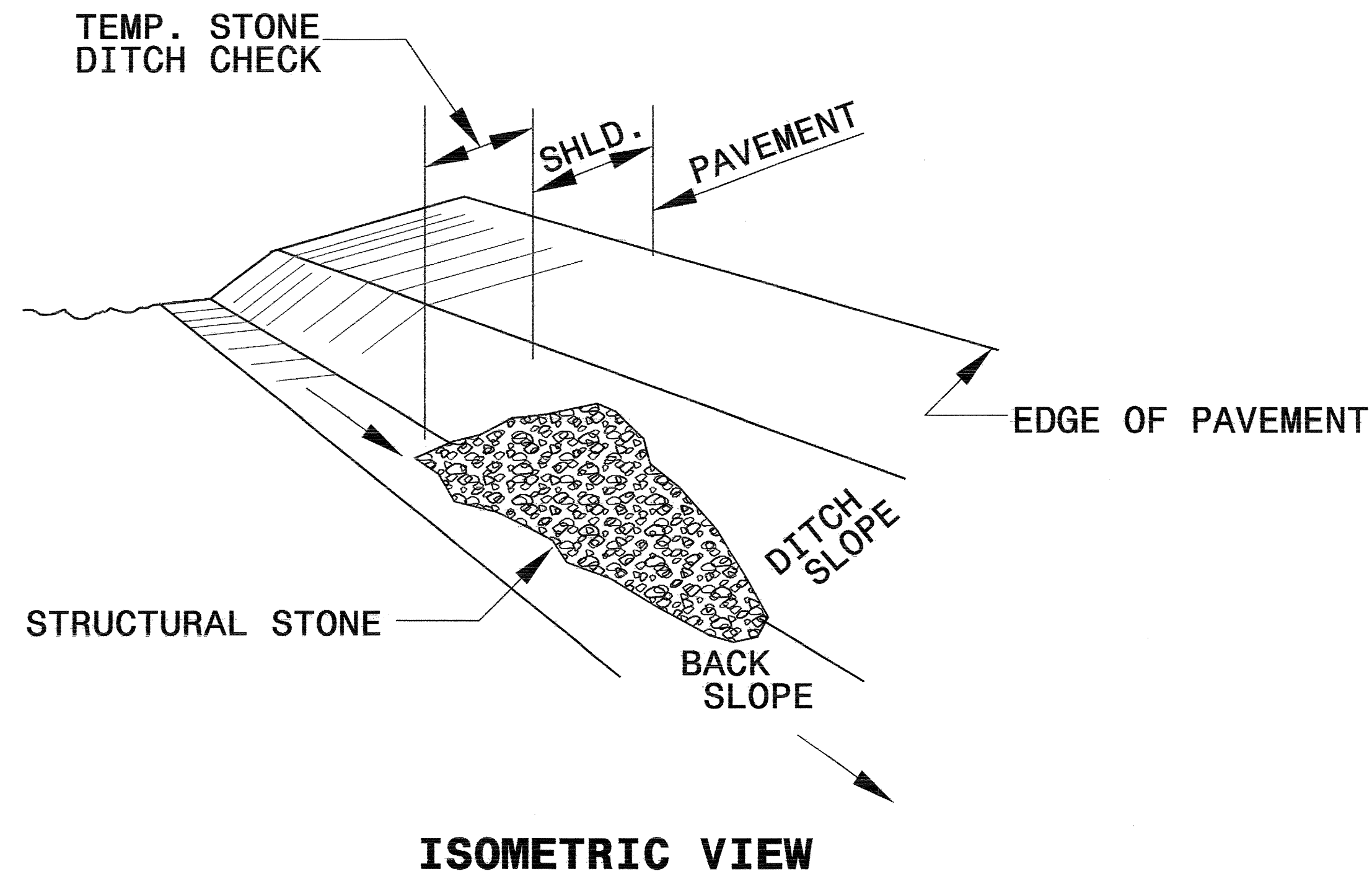
Roadway Standard Drawings

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

1605.01 Temporary Silt Fence	1630.05 Temporary Diversion
1606.01 Special Sediment Control Fence	1630.06 Special Stilling Basin
1607.01 Gravel Construction Entrance	1632.03 Rock Inlet Sediment Trap Type C
1622.01 Temporary Berms and Slope Drains	1633.01 Temporary Rock Silt Check Type A

PROJECT REFERENCE NO. B-4627	SHEET NO. EC-2
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

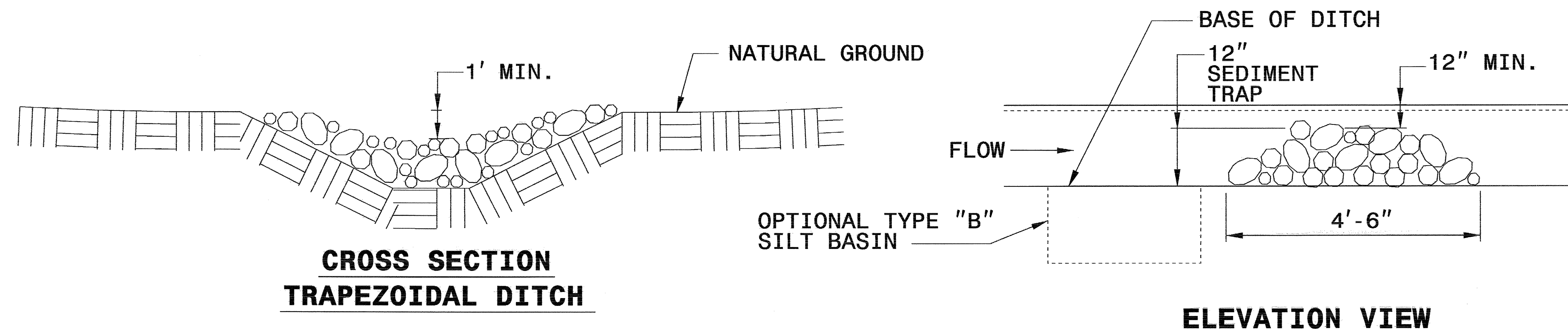
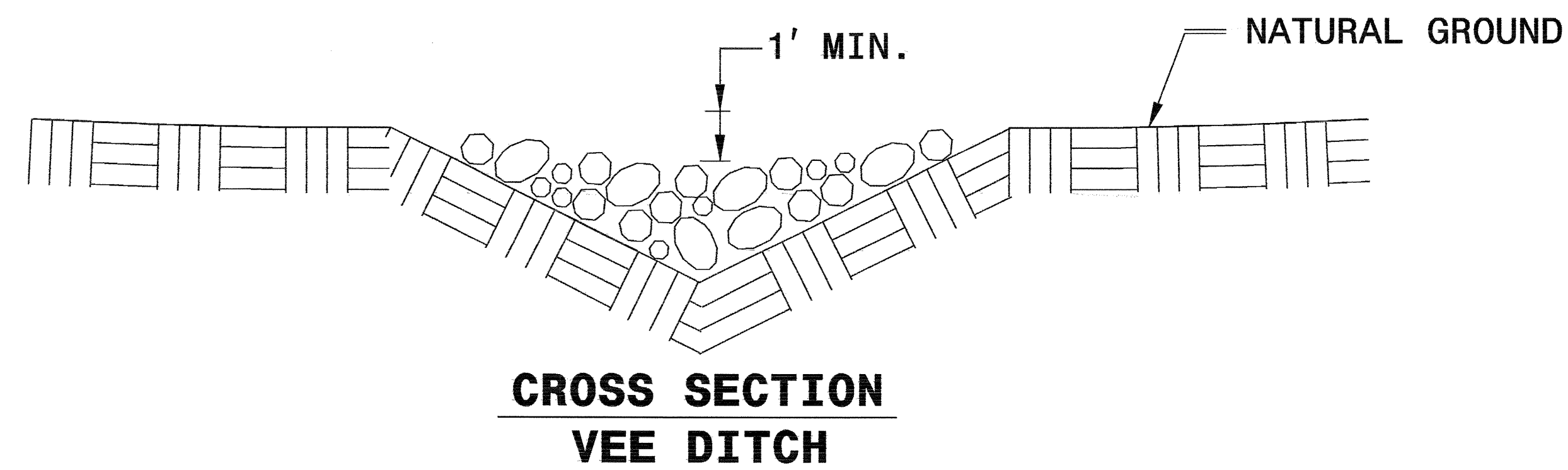
TEMPORARY ROCK SILT CHECK TYPE 'B' DETAIL



NOTES:

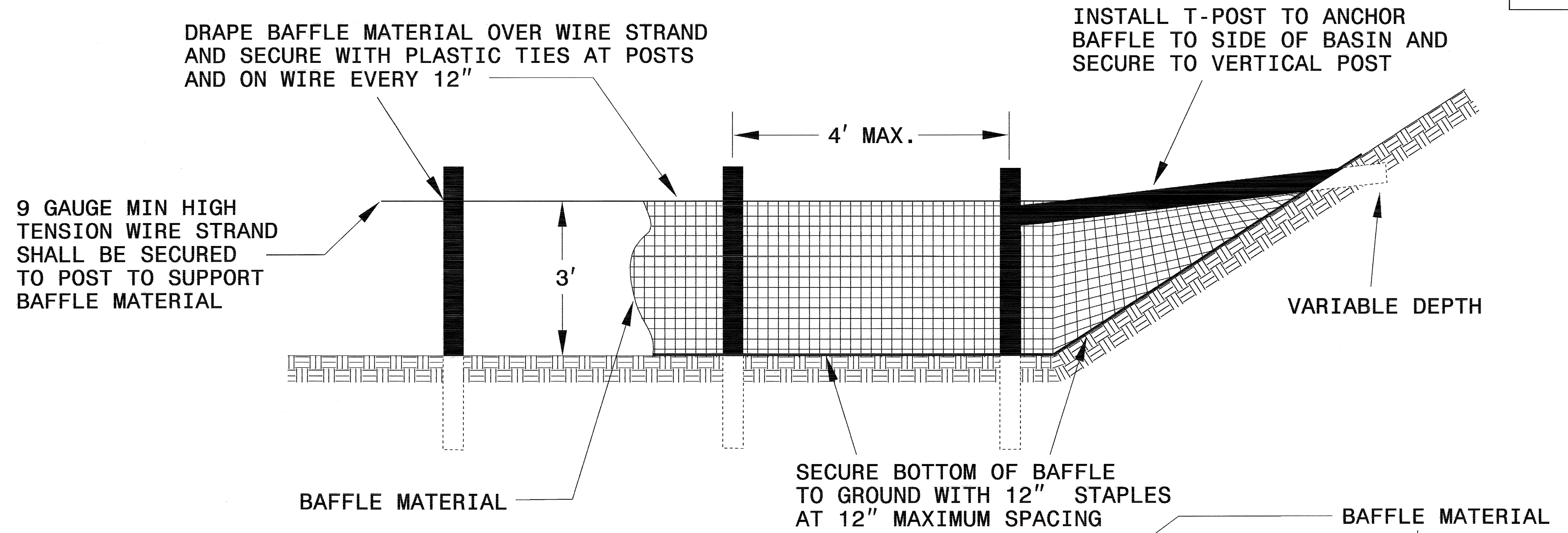
USE CLASS 'B' EROSION CONTROL STONE FOR STRUCTURAL STONE.

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



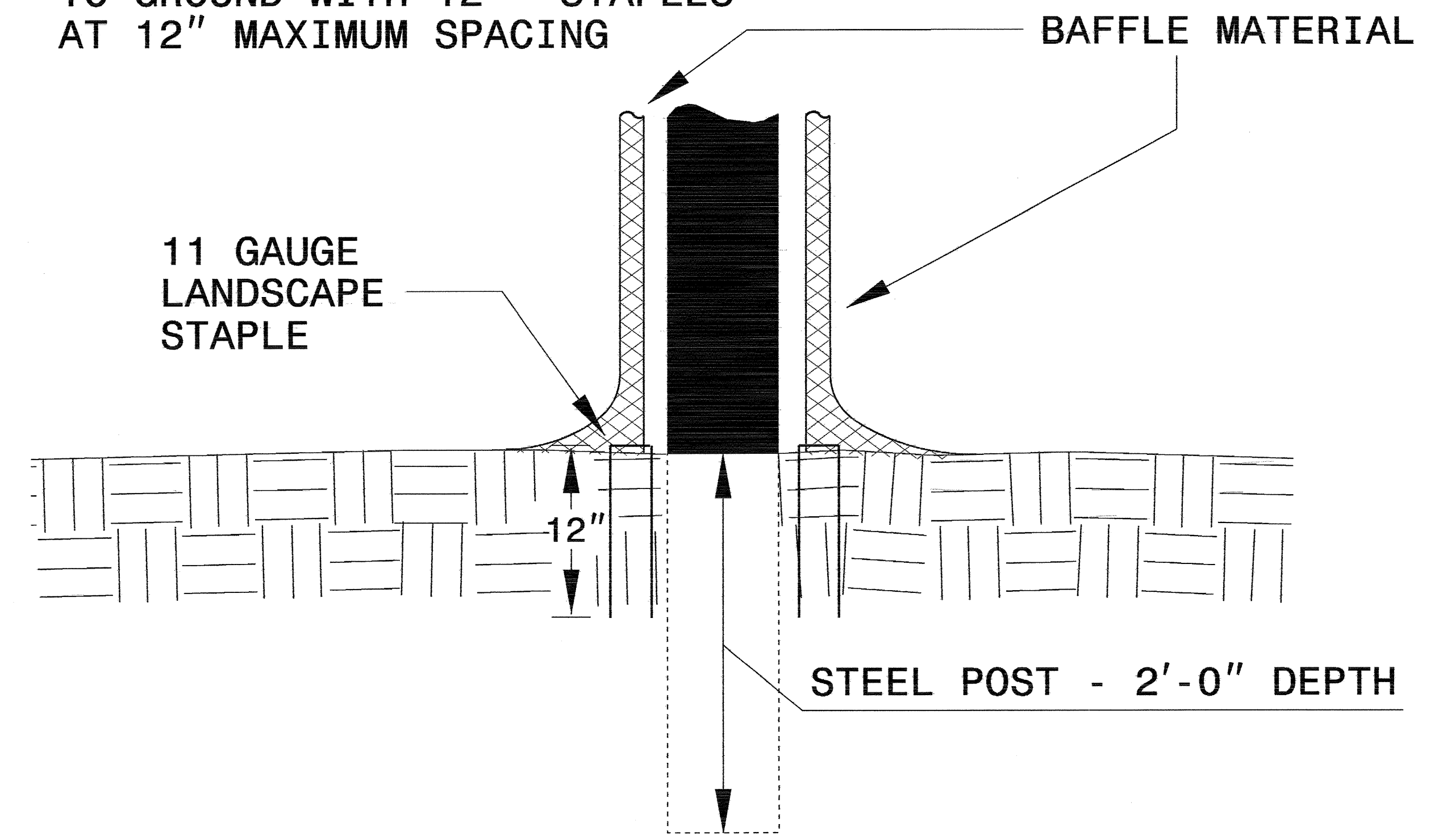
PROJECT REFERENCE NO. B-4627	SHEET NO. EC-2A
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

COIR FIBER BAFFLE DETAIL



NOTES:

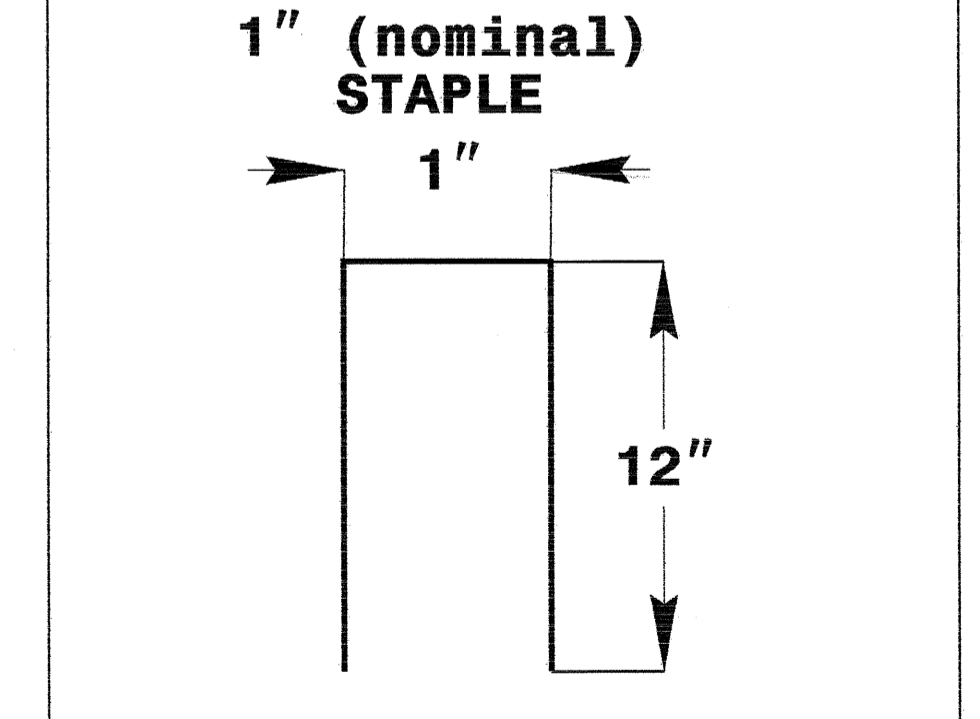
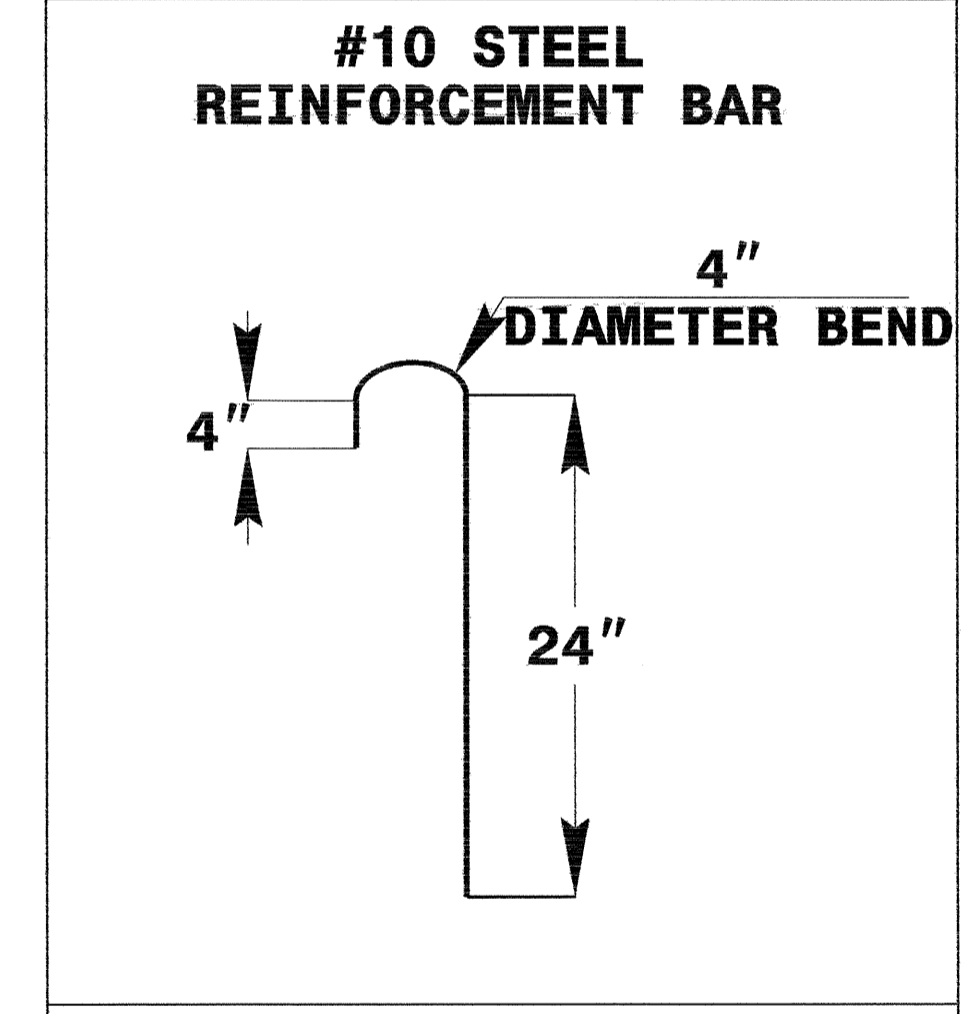
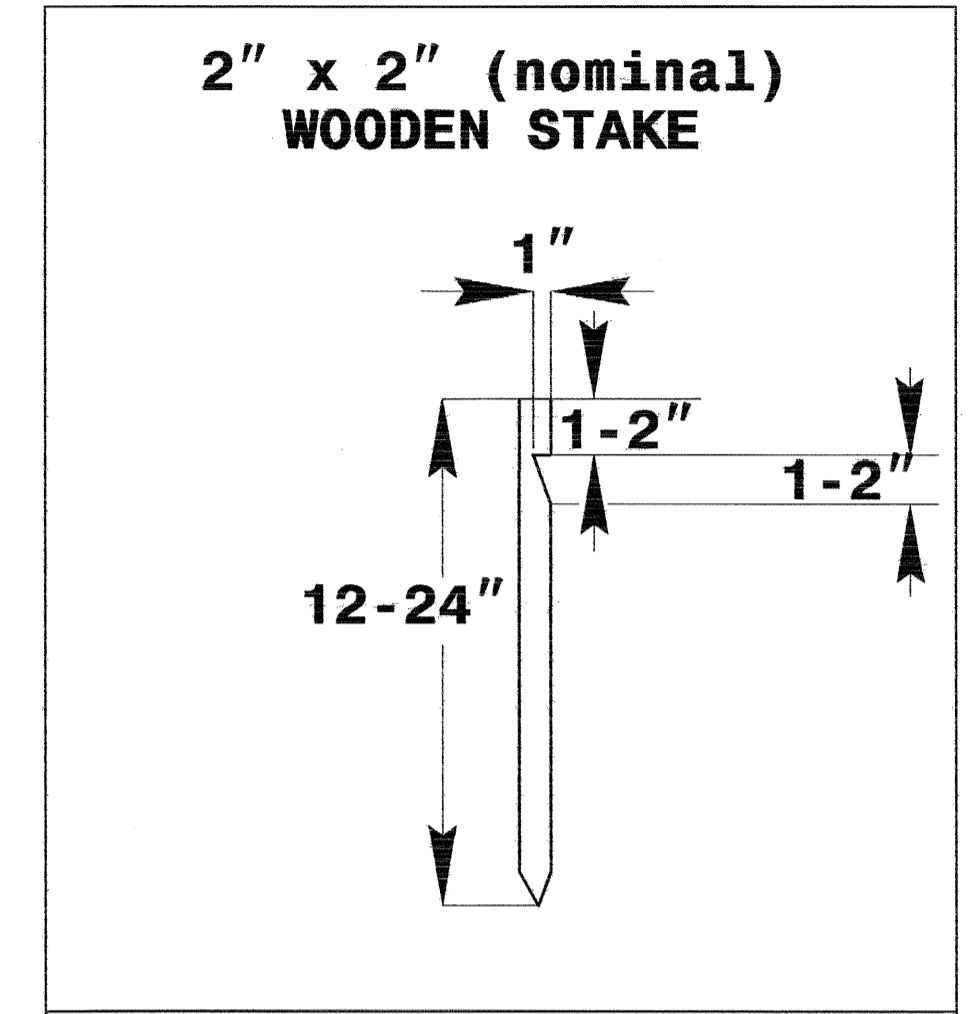
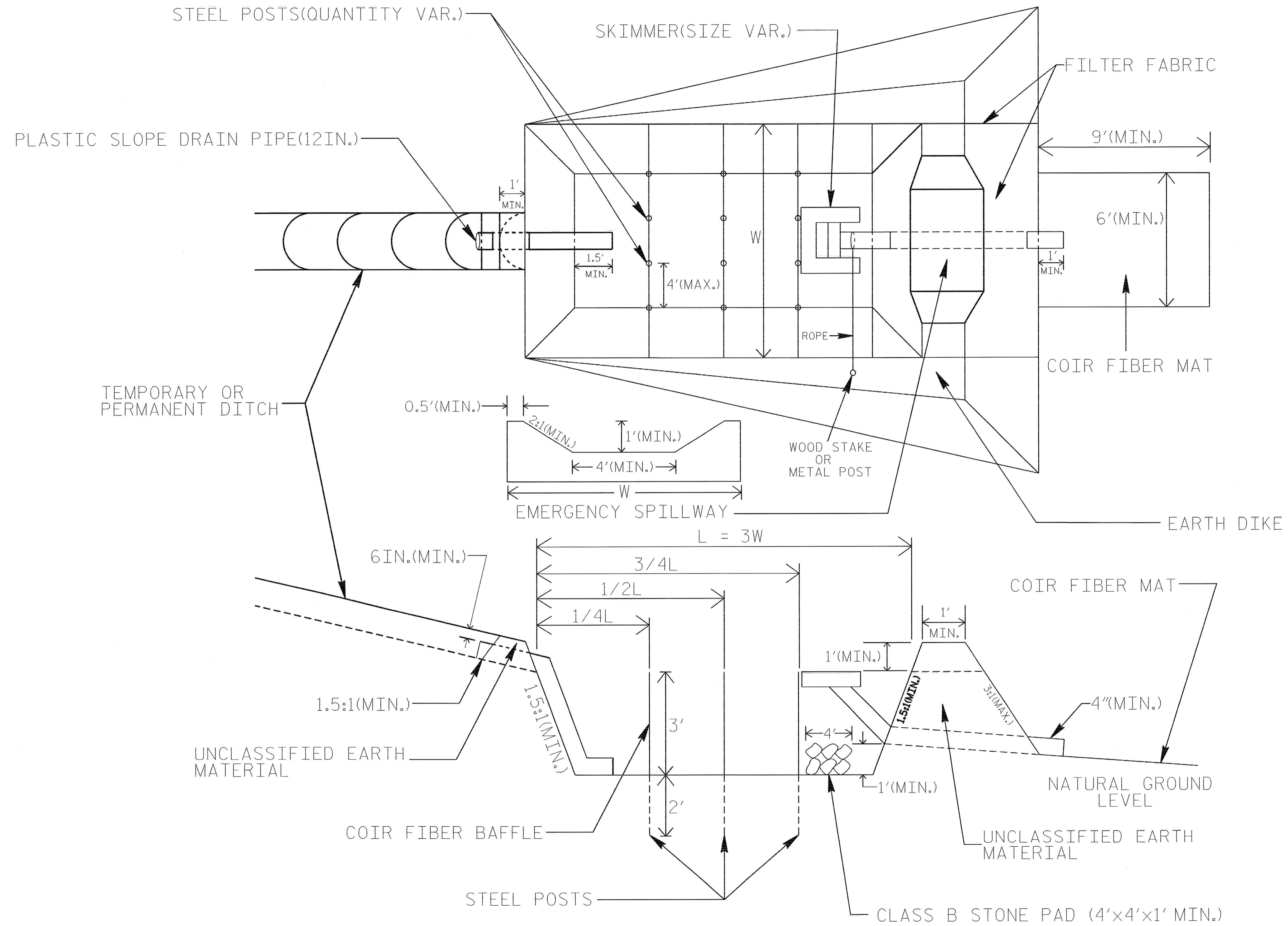
1. INSTALL THREE(3) COIR FIBER BAFFLES IN SILT BASINS AND SEDIMENT DAMS AT DRAINAGE OUTLETS WITH A SPACING OF $\frac{1}{4}$ THE BASIN LENGTH.
2. TWO(2) COIR FIBER BAFFLES CAN BE INSTALLED IN SILT BASINS AND DAMS LESS THAN 20 FT. IN LENGTH WITH A SPACING OF $\frac{1}{3}$ THE BASIN LENGTH.
3. TOP HEIGHT OF COIR FIBER BAFFLES SHALL NOT BE BELOW BASE OF EMERGENCY SPILLWAY ELEVATION.



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

SKIMMER BASIN WITH BAFFLES DETAIL

PROJECT REFERENCE NO. B-4627	SHEET NO. EC-2B
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER



COIR FIBER MAT ANCHOR OPTIONS

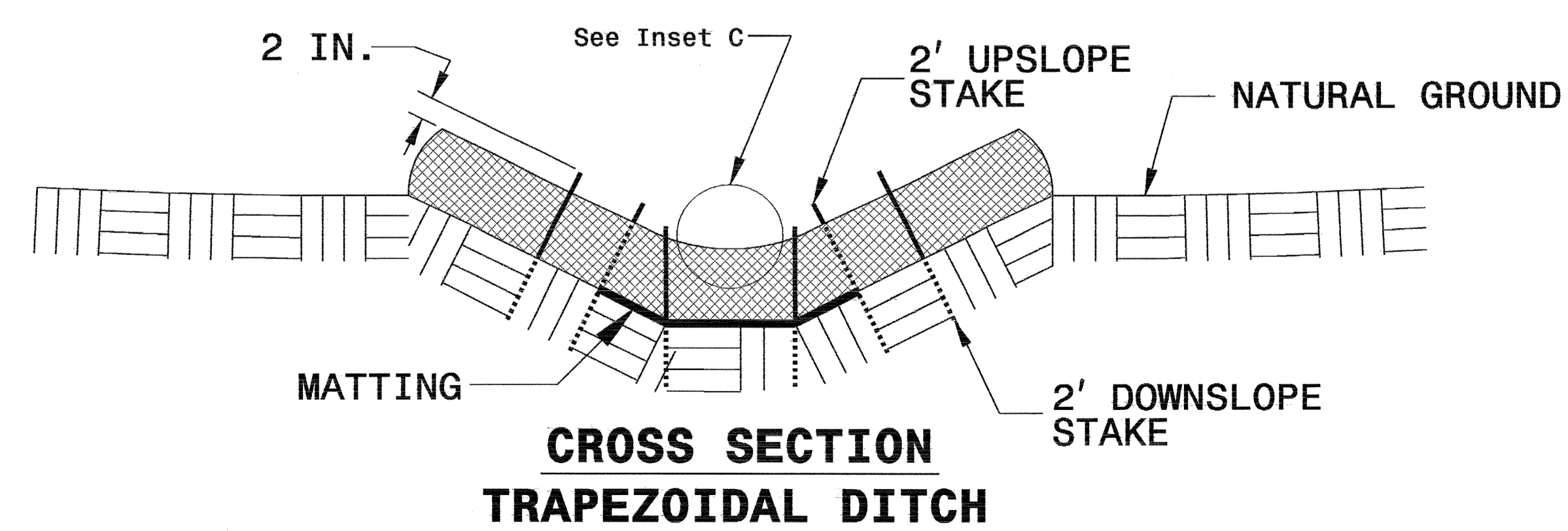
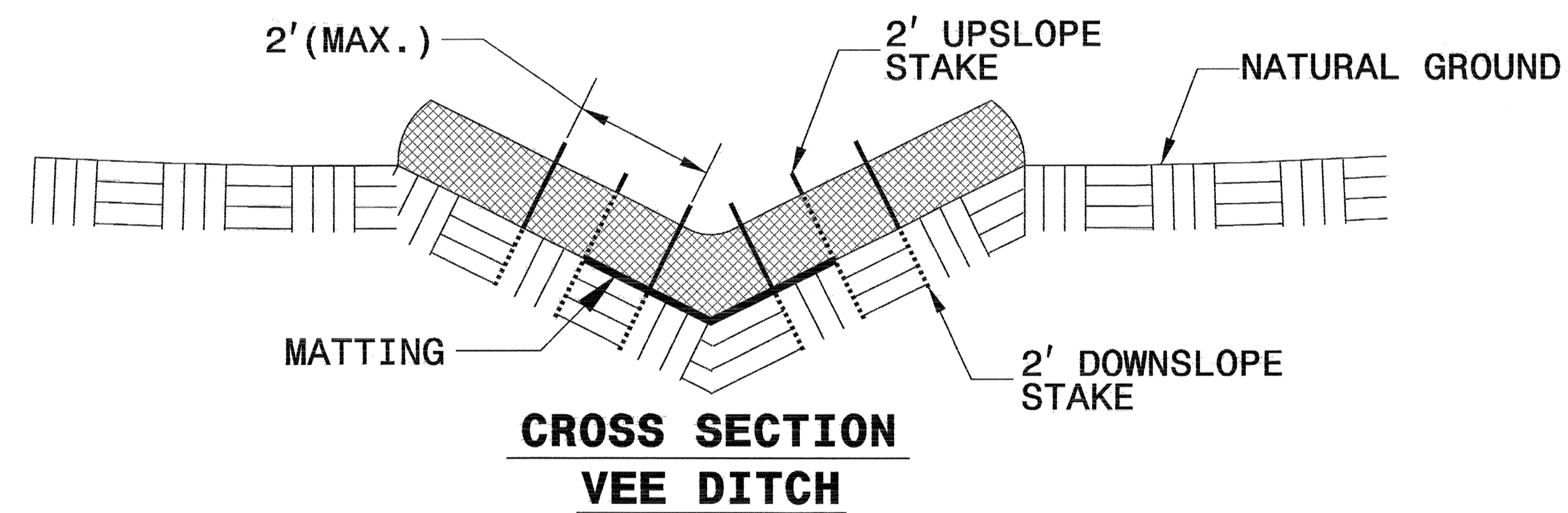
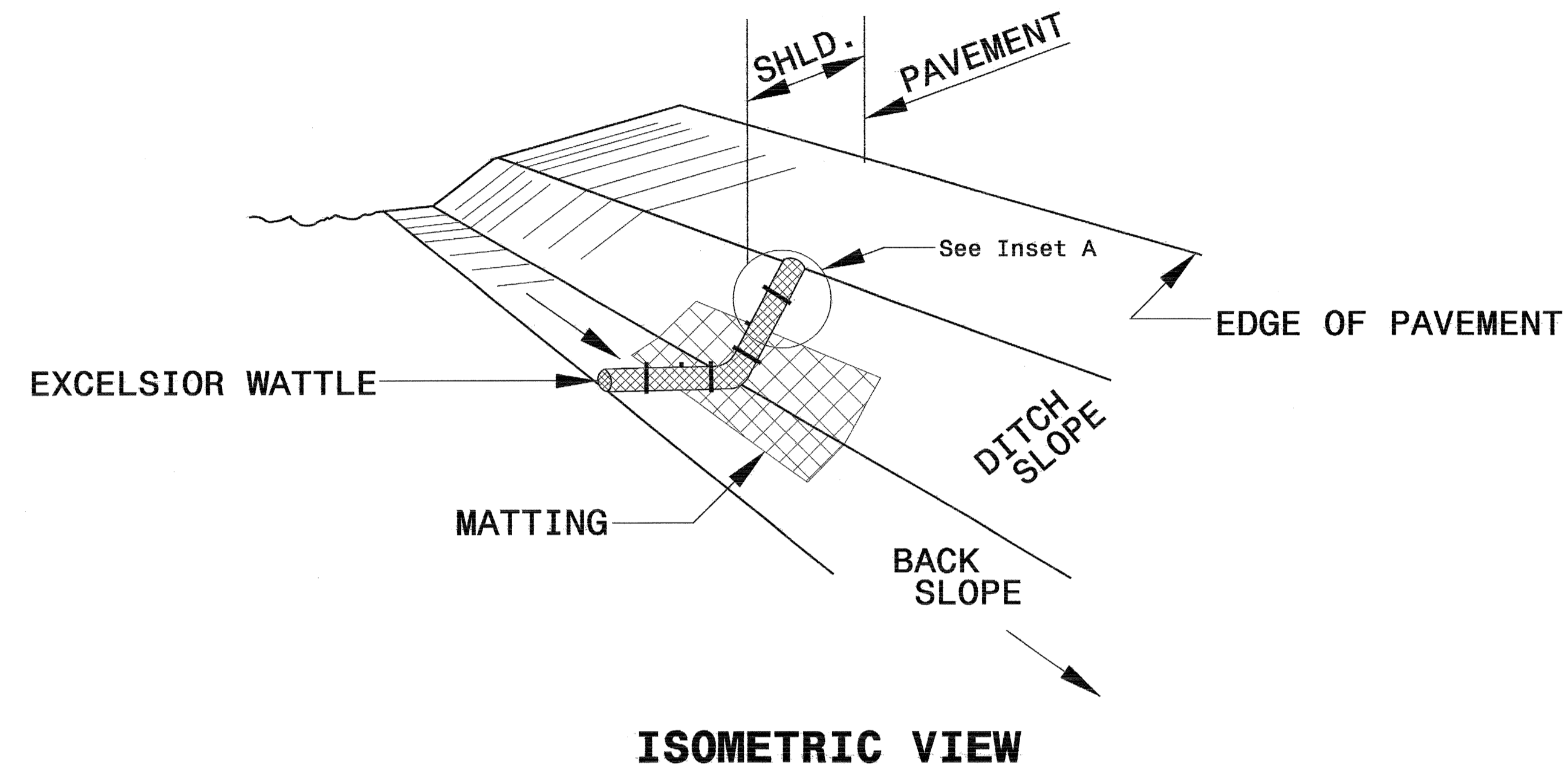
NOTES

1. SEED AND PLACE MATTING FOR EROSION CONTROL ON INTERIOR SIDESLOPES.
2. LIMIT EARTH DIKE HEIGHT TO 5 FT.
3. THE MINIMUM BASIN WIDTH SHALL BE 9 FT.
4. DETERMINE EMERGENCY SPILLWAY LENGTH (FT.) USING $Q/0.8$, WHERE Q IS FLOW RATE (CFS) INTO BASIN.

NOT TO SCALE

PROJECT REFERENCE NO. B-4627	SHEET NO. EC-2C
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

WATTLE WITH POLYACRYLAMIDE DETAIL



NOTES:

USE MINIMUM 12 IN. DIAMETER EXCELSIOR WATTLE.

USE 2 FT. WOODEN STAKES WITH A 2 IN. BY 2 IN. 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.

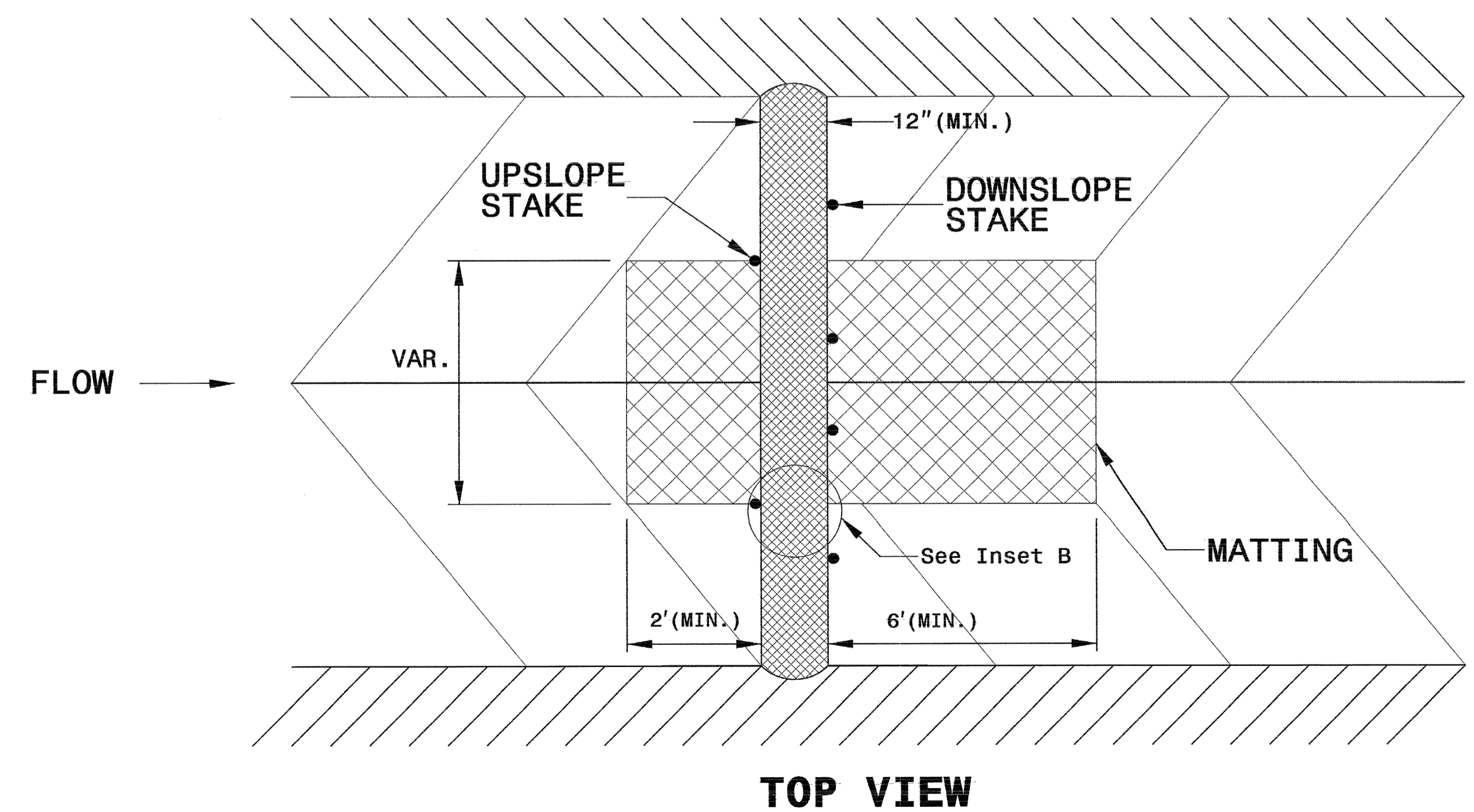
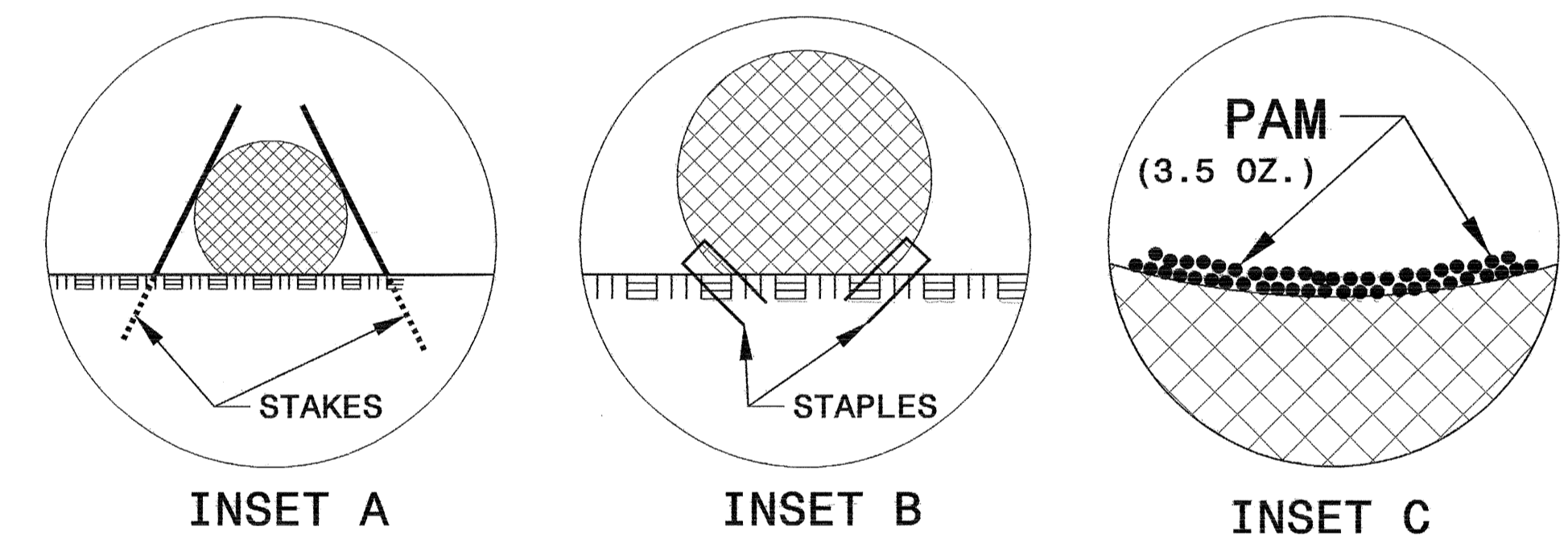
PROVIDE STAPLES MADE OF 0.125 IN. DIAMETER STEEL WIRE FORMED INTO A U SHAPE NOT LESS THAN 12" IN LENGTH.

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.

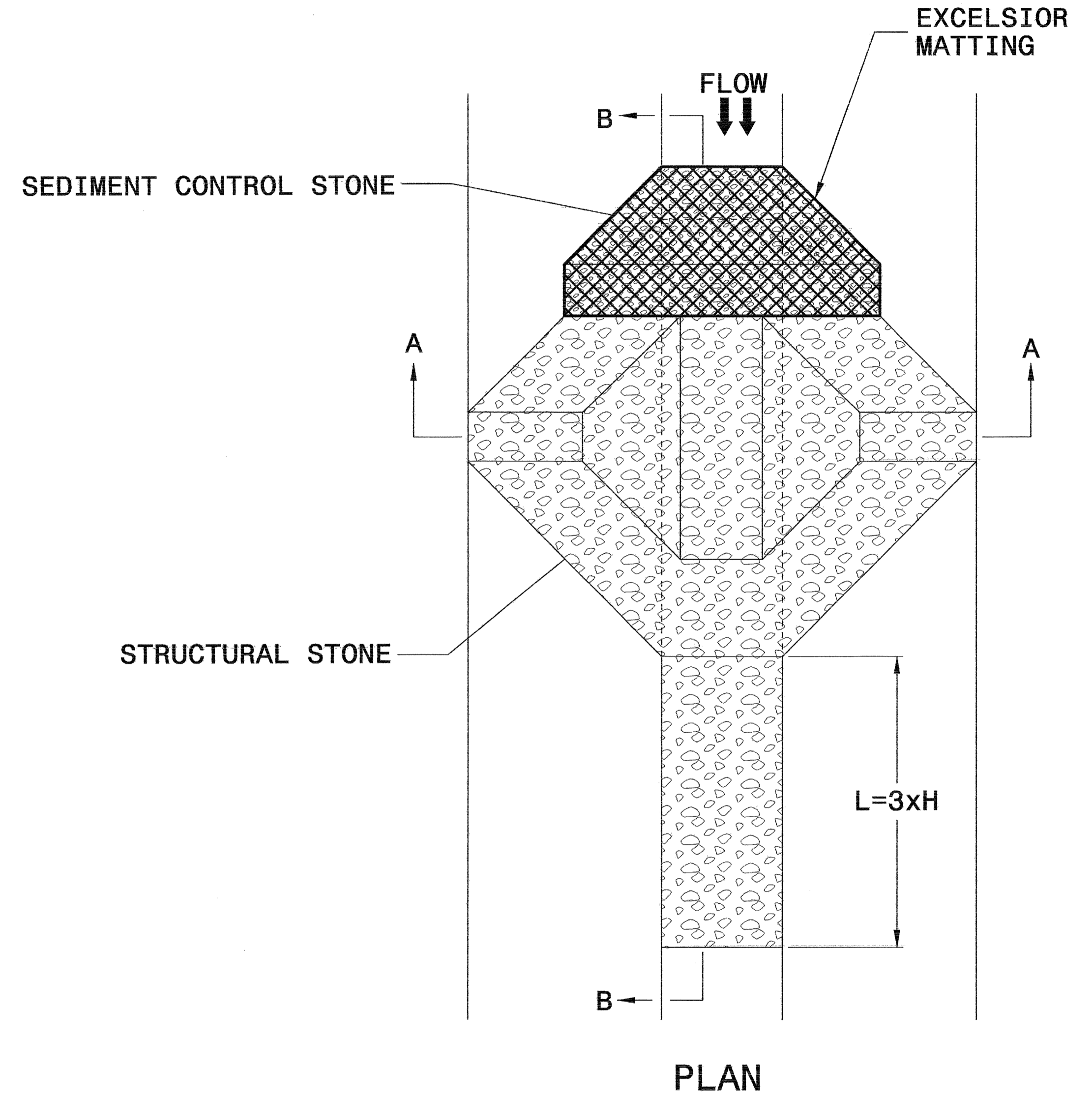
PRIOR TO POLYACRYLAMIDE (PAM) APPLICATION, OBTAIN A SOIL SAMPLE FROM PROJECT LOCATION, AND FROM OFFSITE MATERIAL, AND ANALYZE FOR APPROPRIATE PAM FLOCCULANT TO BE APPLIED TO EACH WATTLE.

INITIALLY APPLY 3.5 OUNCES OF ANIONIC OR NEUTRALLY CHARGED POLYACRYLAMIDE (PAM) OVER WATTLE WHERE WATER WILL FLOW AND AFTER EVERY RAINFALL EVENT THAT IS EQUAL TO OR EXCEEDS 0.50 IN.



PROJECT REFERENCE NO. B-4627	SHEET NO. EC-2D
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

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

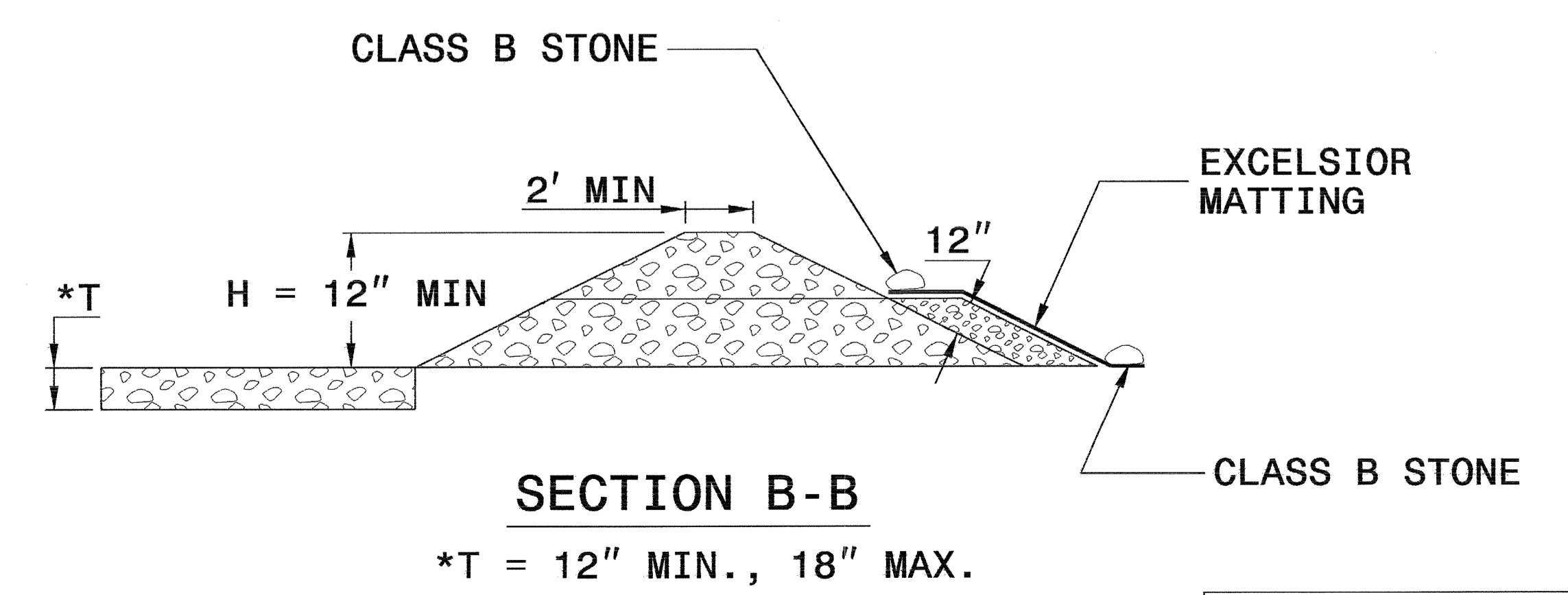
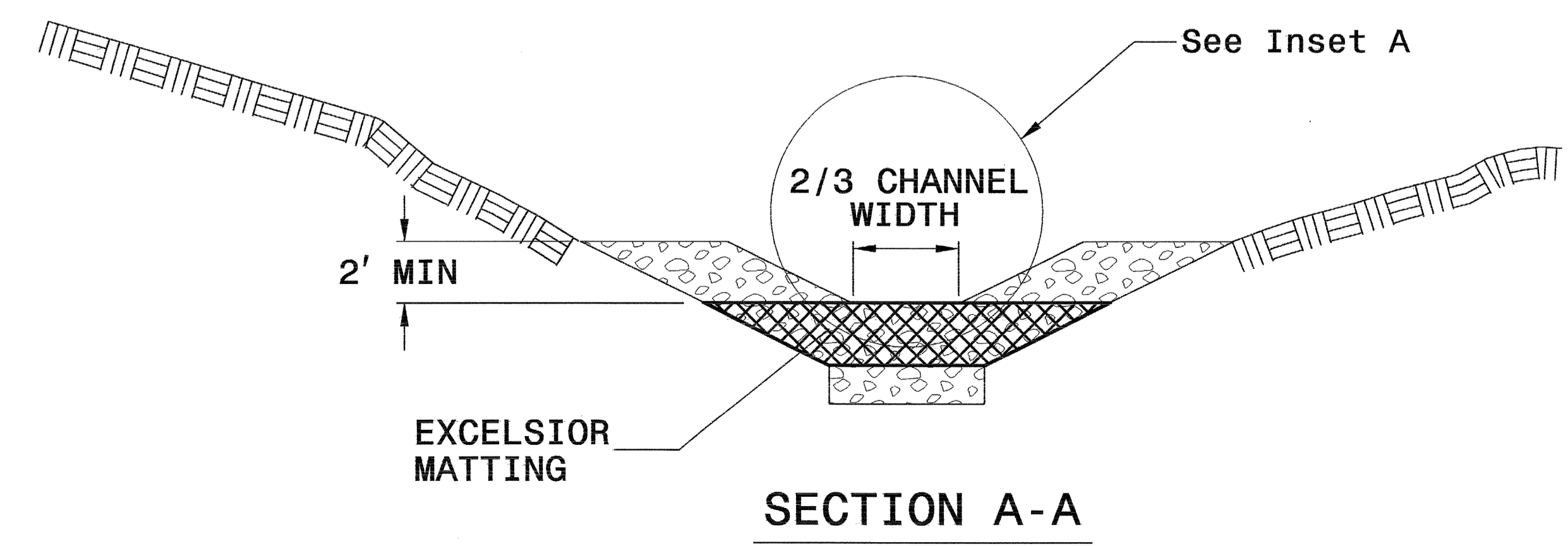
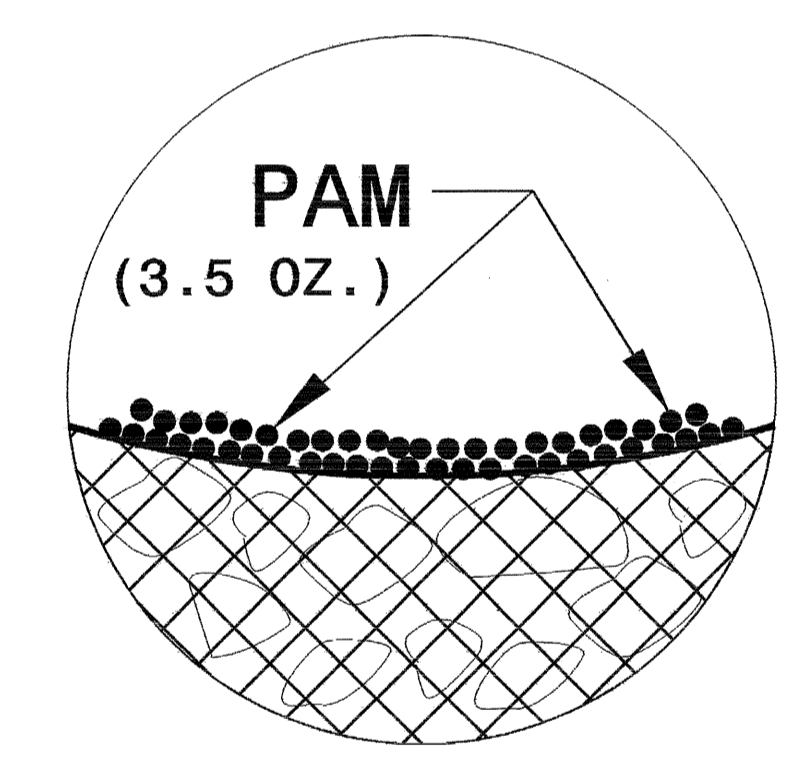


NOTES

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.



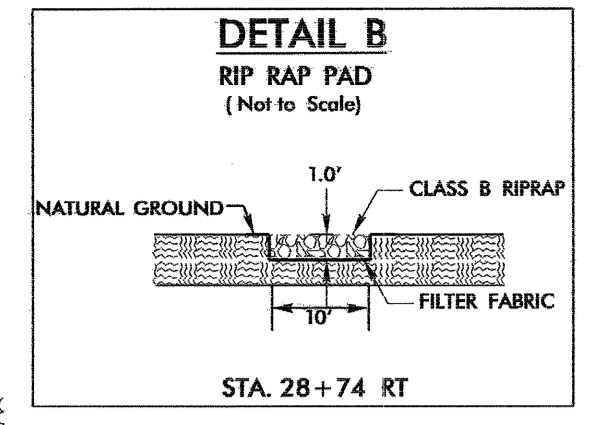
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8/17/99

CLEARING AND GRUBBING
EROSION CONTROL FOR
CONSTRUCTION SHEET 4

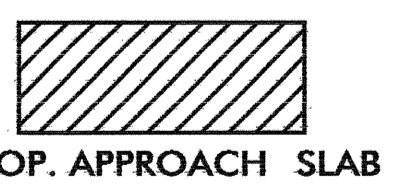
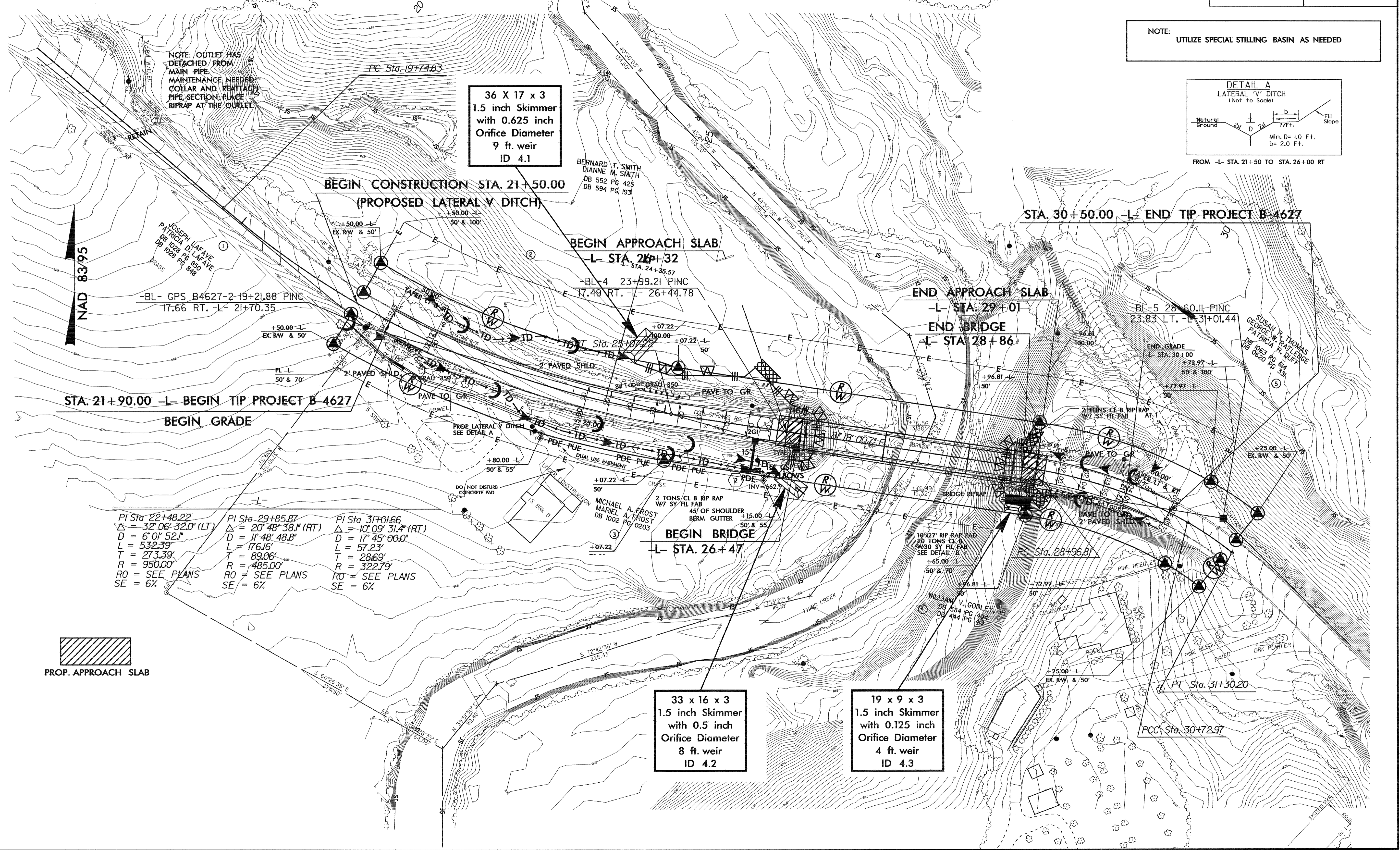
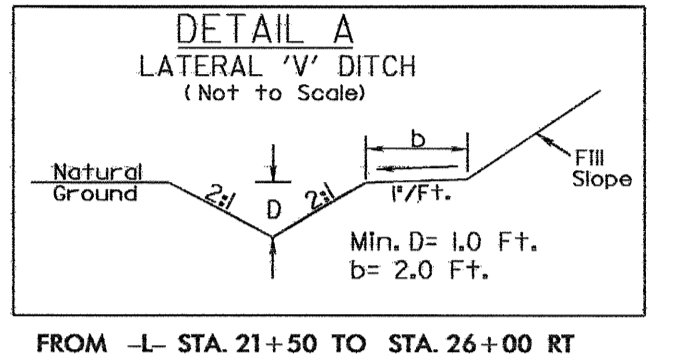
NOTE:
PLACE TEMPORARY ROCK SEDIMENT DAMS TYPE - B
AND TEMPORARY ROCK SILT CHECKS TYPE - A AT
DRAINAGE OUTLETS.

PLACE DECK DRAINS
AT THE FOLLOWING
LOCATIONS:
L 26+60
L 26+78
L 26+96
L 27+14
L 27+32
L 28+25
L 28+43
L 28+61
L 28+79



PROJECT REFERENCE NO. B-4627	SHEET NO. EC-04/CONST.04
R/W SHEET NO.	HYDRAULICS ENGINEER
ROADWAY DESIGN ENGINEER	

NOTE:
UTILIZE SPECIAL STILLING BASIN AS NEEDED



PI Sta 22+48.22 Δ = 32° 06' 32.0" (LT) D = 6' 01' 52.1" L = 532.39' T = 273.39' R = 950.00' RO = SEE PLANS SE = 6%	PI Sta 29+85.87 Δ = 20° 48' 38.1" (RT) D = 11' 48' 48.8" L = 176.16' T = 89.06' R = 485.00' RO = SEE PLANS SE = 6%	PI Sta 31+01.66 Δ = 10° 09' 31.4" (RT) D = 17' 45' 00.0" L = 57.23' T = 28.69' R = 322.79' RO = SEE PLANS SE = 6%
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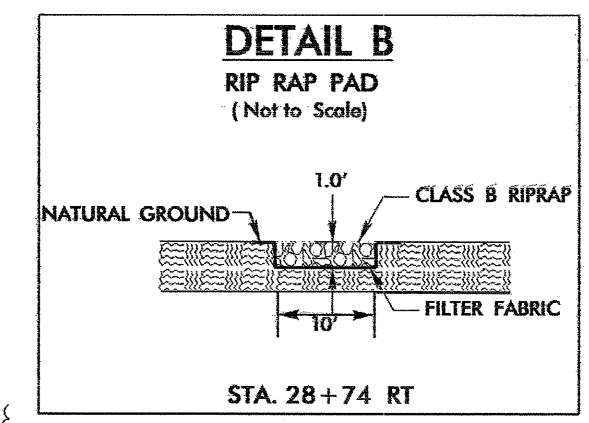
33 x 16 x 3
1.5 inch Skimmer
with 0.5 inch
Orifice Diameter
8 ft. weir
ID 4.2

19 x 9 x 3
1.5 inch Skimmer
with 0.125 inch
Orifice Diameter
4 ft. weir
ID 4.3

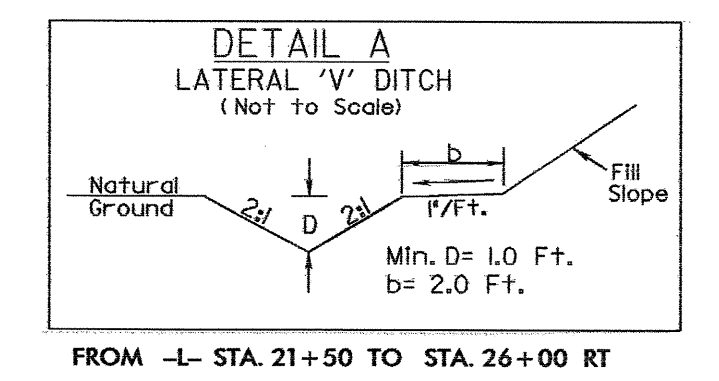
36 X 17 X 3
1.5 inch Skimmer
with 0.625 inch
Orifice Diameter
9 ft. weir
ID 4.1

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PROJECT REFERENCE NO. B-4627	SHEET NO. EC-05/CONST.04
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER



NOTE: UTILIZE SPECIAL STILLING BASIN AS NEEDED



PLACE DECK DRAINS AT THE FOLLOWING LOCATIONS:
 L 26+60
 L 26+78
 L 26+96
 L 27+14
 L 27+32
 L 28+25
 L 28+43
 L 28+61
 L 28+79

NOTE: OUTLET HAS DETACHED FROM MAIN PIPE. MAINTENANCE NEEDED: COLLAR AND REATTACH PIPE SECTION, PLACE RIPRAP AT THE OUTLET.

36 X 17 x 3
 1.5 inch Skimmer
 with 0.625 inch
 Orifice Diameter
 9 ft. weir
 ID 4.1

18 x 9 x 3
 1.5 inch Skimmer
 with 0.125 inch
 Orifice Diameter
 4 ft. weir
 ID 4.4

33 x 16 x 3
 1.5 inch Skimmer
 with 0.5 inch
 Orifice Diameter
 8 ft. weir
 ID 4.2

19 x 9 x 3
 1.5 inch Skimmer
 with 0.125 inch
 Orifice Diameter
 4 ft. weir
 ID 4.3

NAD 83/95

STA. 21+90.00 -L- BEGIN TIP PROJECT B-4627
 BEGIN GRADE

STA. 30+50.00 -L- END TIP PROJECT B-4627

PI Sta 22+48.22 Δ = 32° 06' 32.0" (LT) D = 6' 01' 52.1" L = 532.39' T = 273.39' R = 950.00' RO = SEE PLANS SE = 6%	PI Sta 29+85.87 Δ = 20° 48' 38.1" (RT) D = 11' 48' 48.8" L = 176.16' T = 89.06' R = 485.00' RO = SEE PLANS SE = 6%	PI Sta 31+01.66 Δ = 10° 09' 31.4" (RT) D = 17' 45' 00.0" L = 57.23' T = 28.69' R = 322.79' RO = SEE PLANS SE = 6%
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 15-OCT-2009 14:18
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