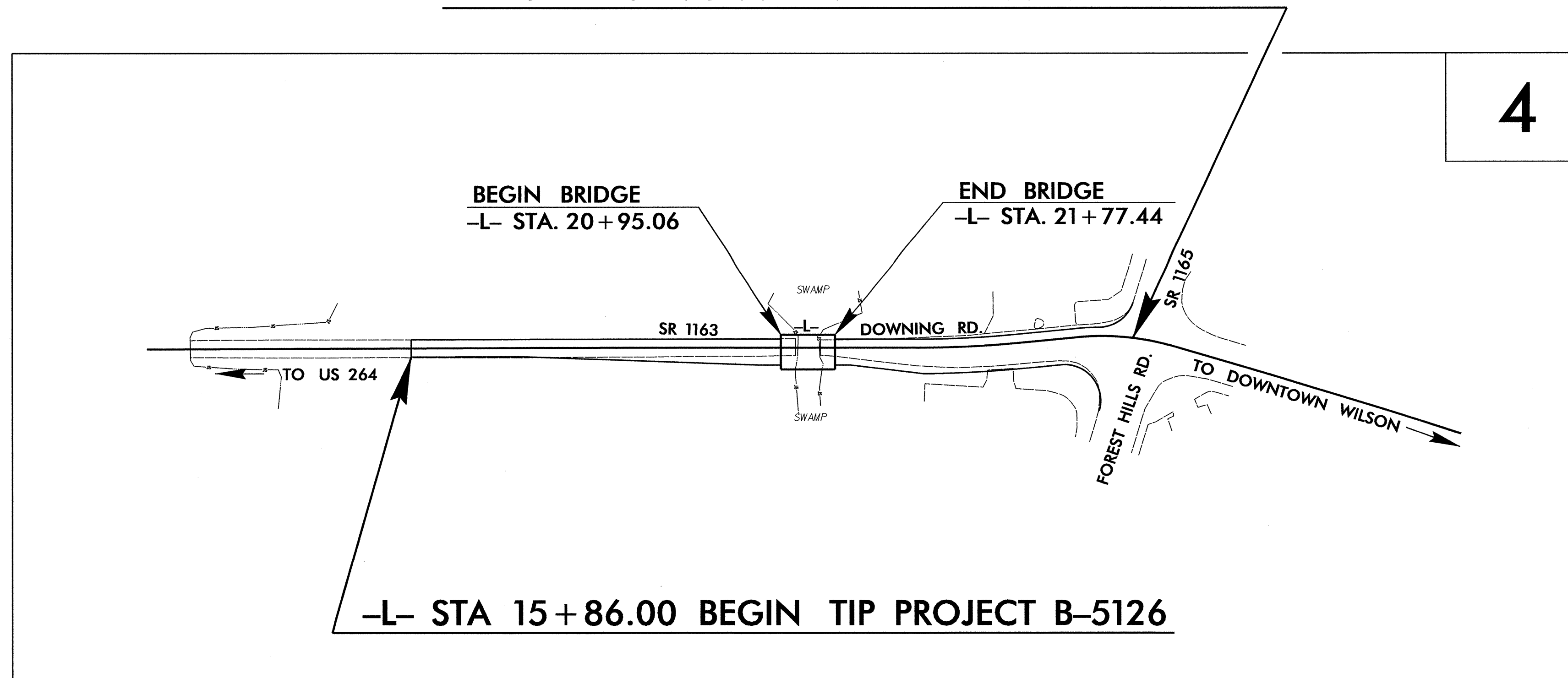
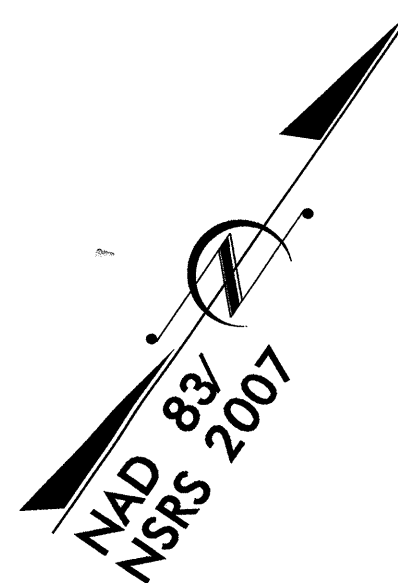


TIP PROJECT: B-5126

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

**LOCATION: BRIDGE 65 OVER A SWAMP OF CONTENTNEA CK
 OVERFLOW/WIGGINS MILL RESERVOIR ON SR 1163
 (DOWNING ROAD) IN WILSON**

TYPE OF WORK: GRADING, DRAINAGE, PAVING, SIGNALS, AND STRUCTURES
 -L- STA 25+75.00 END TIP PROJECT B-5126



STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	B-5126	EC-1	
STATE PROJ. NO.	F.A. PROJ. NO.	DESCRIPTION	

EROSION AND SEDIMENT CONTROL MEASURES

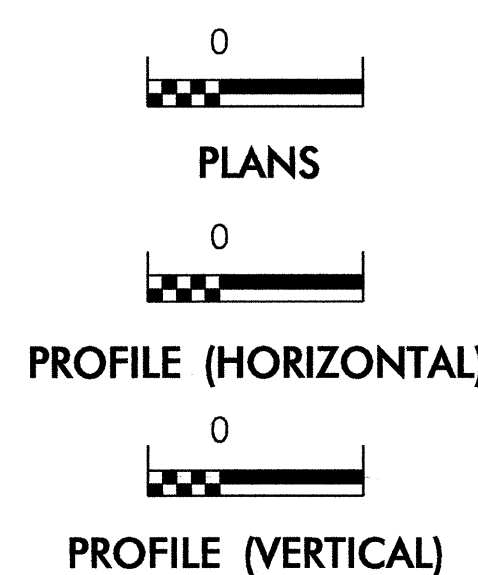
Std. #	Description	Symbol
1630.03	Temporary Silt Ditch	TD
1630.05	Temporary Diversion	TD
1605.01	Temporary Silt Fence	TSF
1606.01	Special Sediment Control Fence	SSCF
1622.01	Temporary Berms and Slope Drains	TBSD
1630.02	Silt Basin Type B	SB
1633.01	Temporary Rock Silt Check Type-A	TRSCA
	Temporary Rock Silt Check Type-A with Matting and Polyacrylamide (PAM)	TRSCA-PAM
1633.02	Temporary Rock Silt Check Type-B	TRSCB
	Wattle / Coir Fiber Wattle	WCFW
	Wattle / Coir Fiber Wattle with Polyacrylamide (PAM)	WCFW-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.**

**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

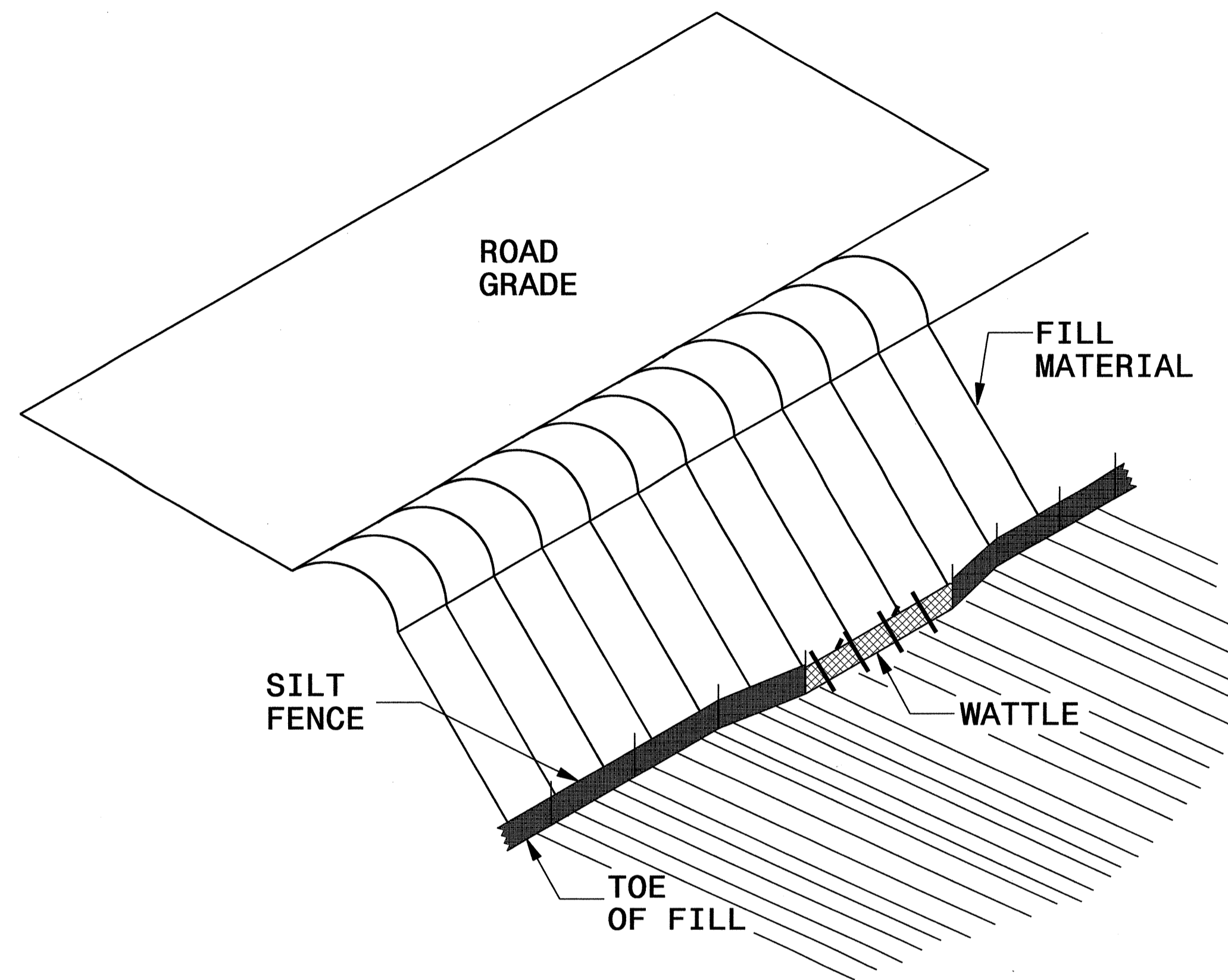
Roadway Standard Drawings

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.

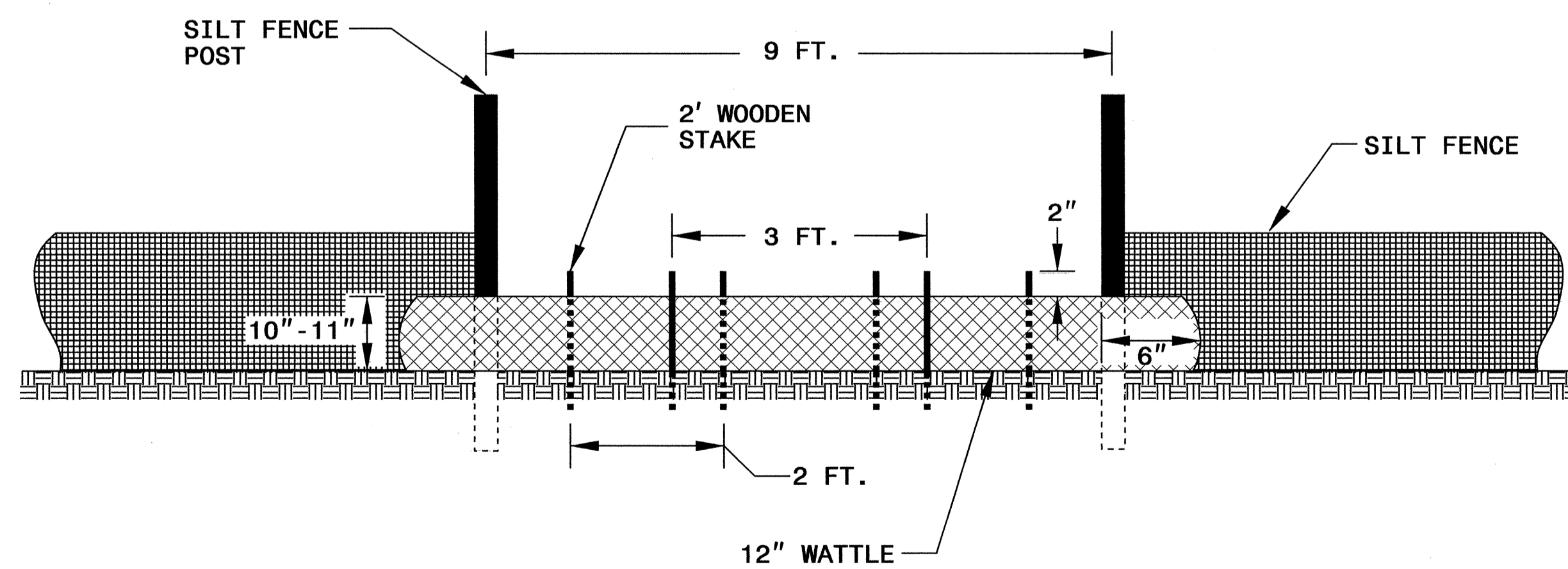
1604.01 Railroad Erosion Control Detail	1632.01 Rock Inlet Sediment Trap Type A
1605.01 Temporary Silt Fence	1632.02 Rock Inlet Sediment Trap Type B
1606.01 Special Sediment Control Fence	1632.03 Rock Inlet Sediment Trap Type C
1607.01 Gravel Construction Entrance	1633.01 Temporary Rock Silt Check Type 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	

SILT FENCE COIR FIBER WATTLE BREAK DETAIL

PROJECT REFERENCE NO.		SHEET NO.	
B-5126		EC-2	
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.

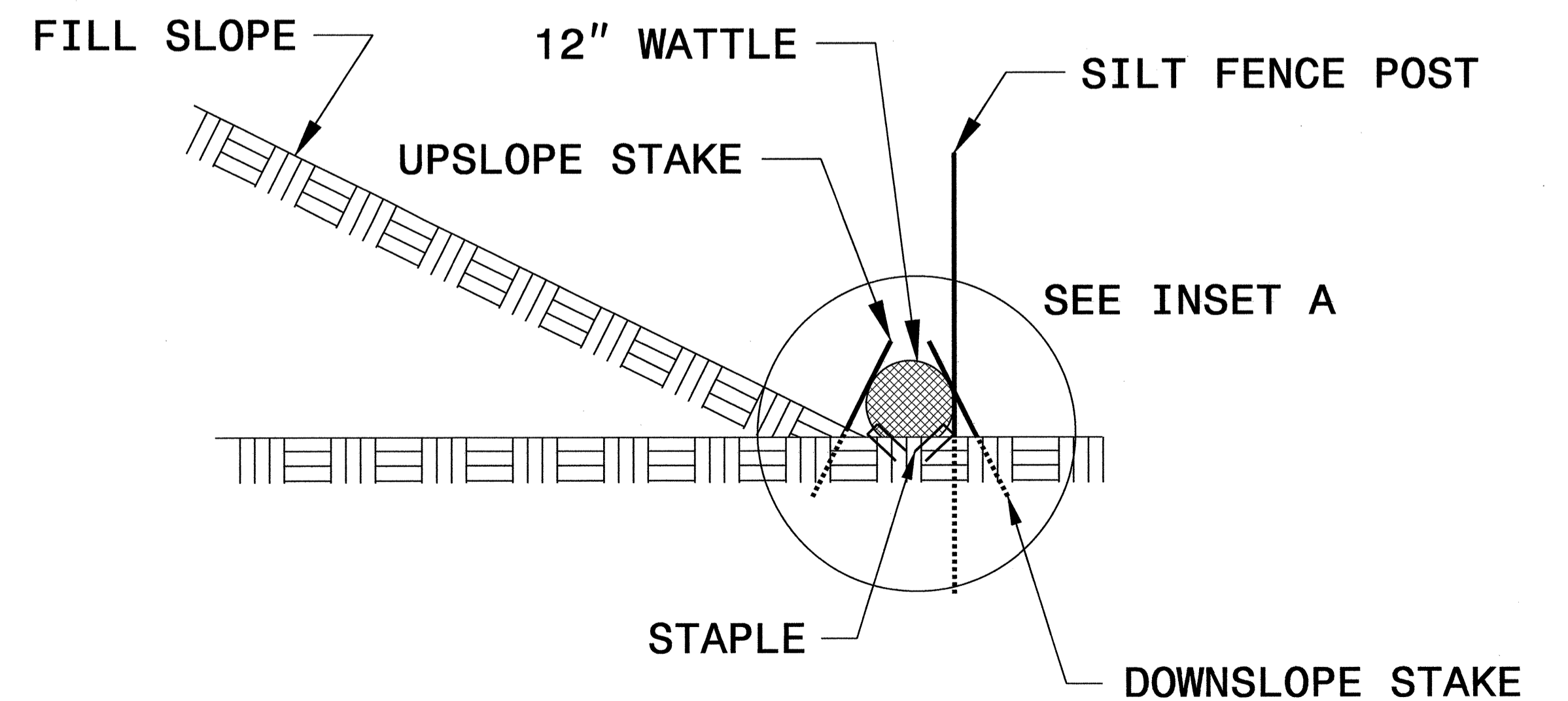
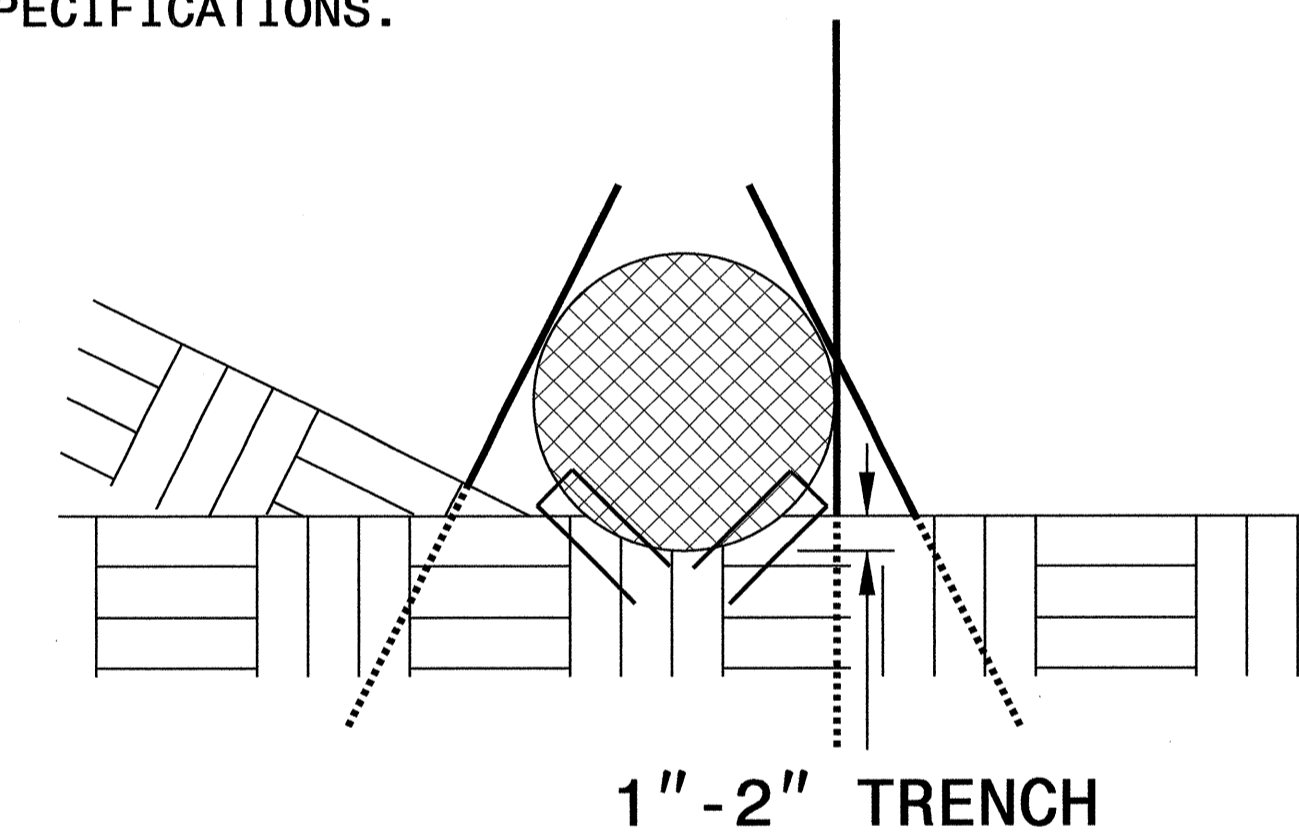
PROVIDE STAPLES MADE OF 0.125 IN. DIAMETER STEEL WIRE FORMED INTO A U SHAPE NOT LESS THAN 12" IN LENGTH.

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.

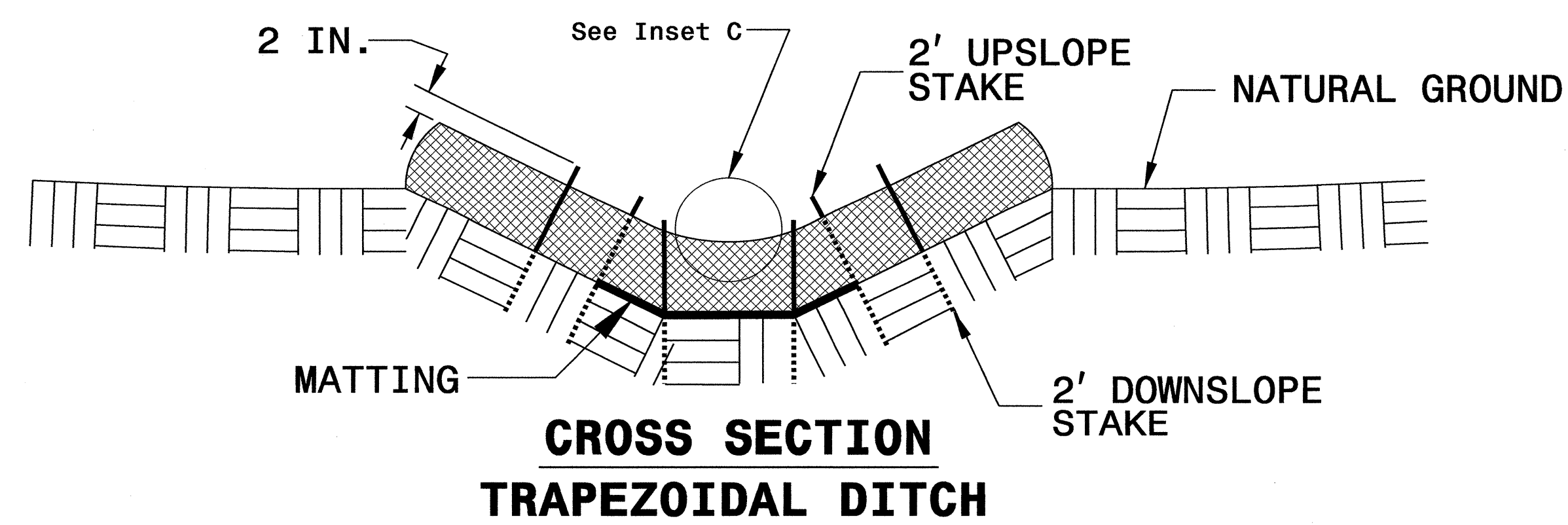
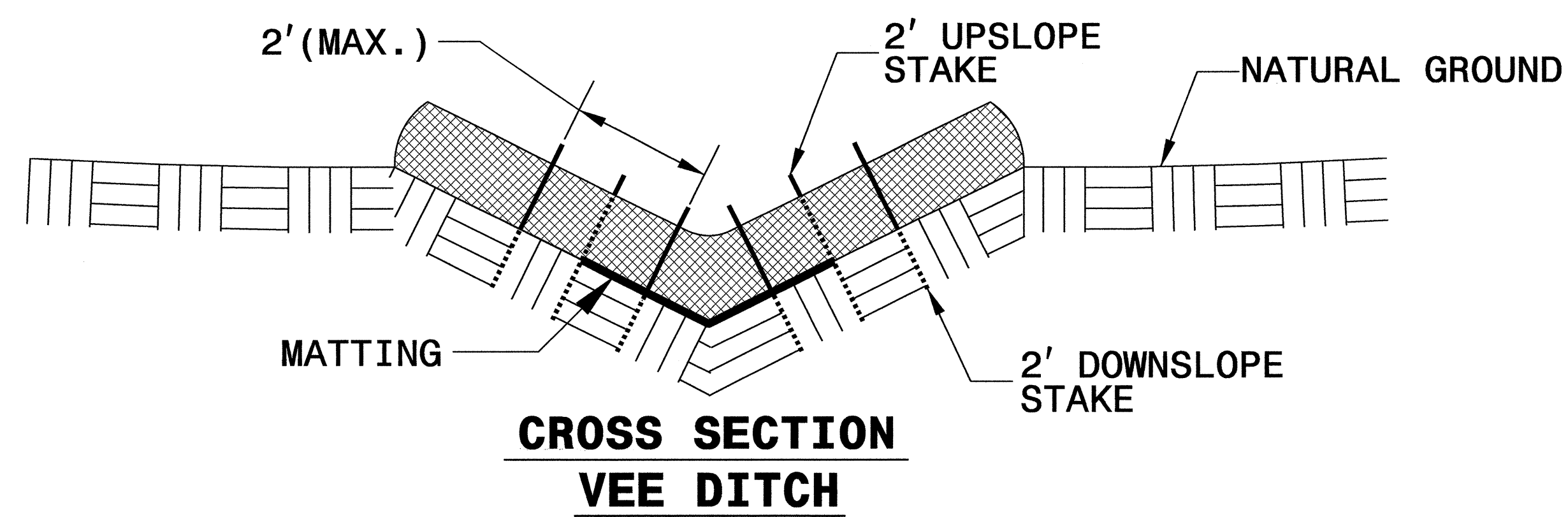
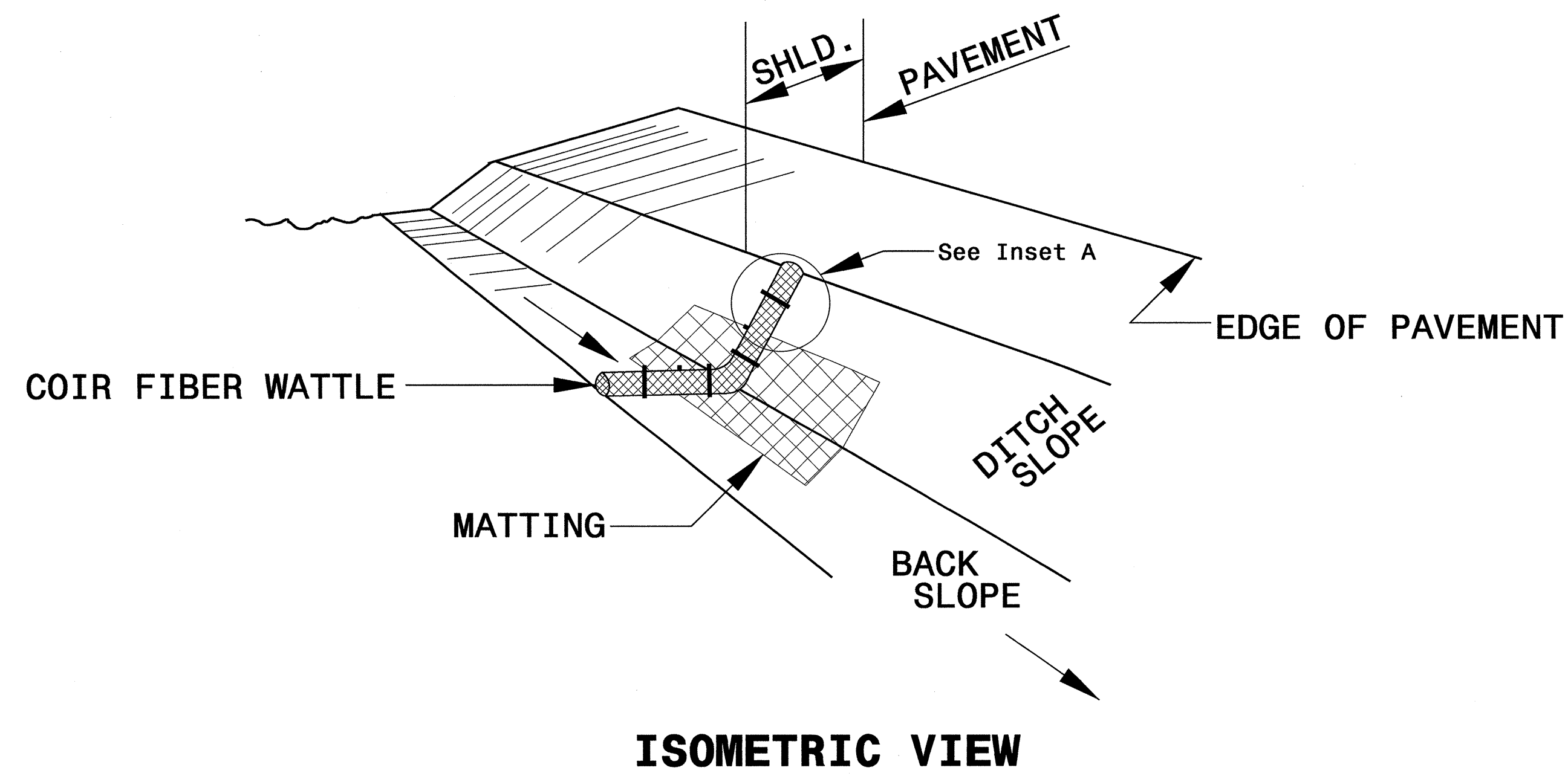
INSET A



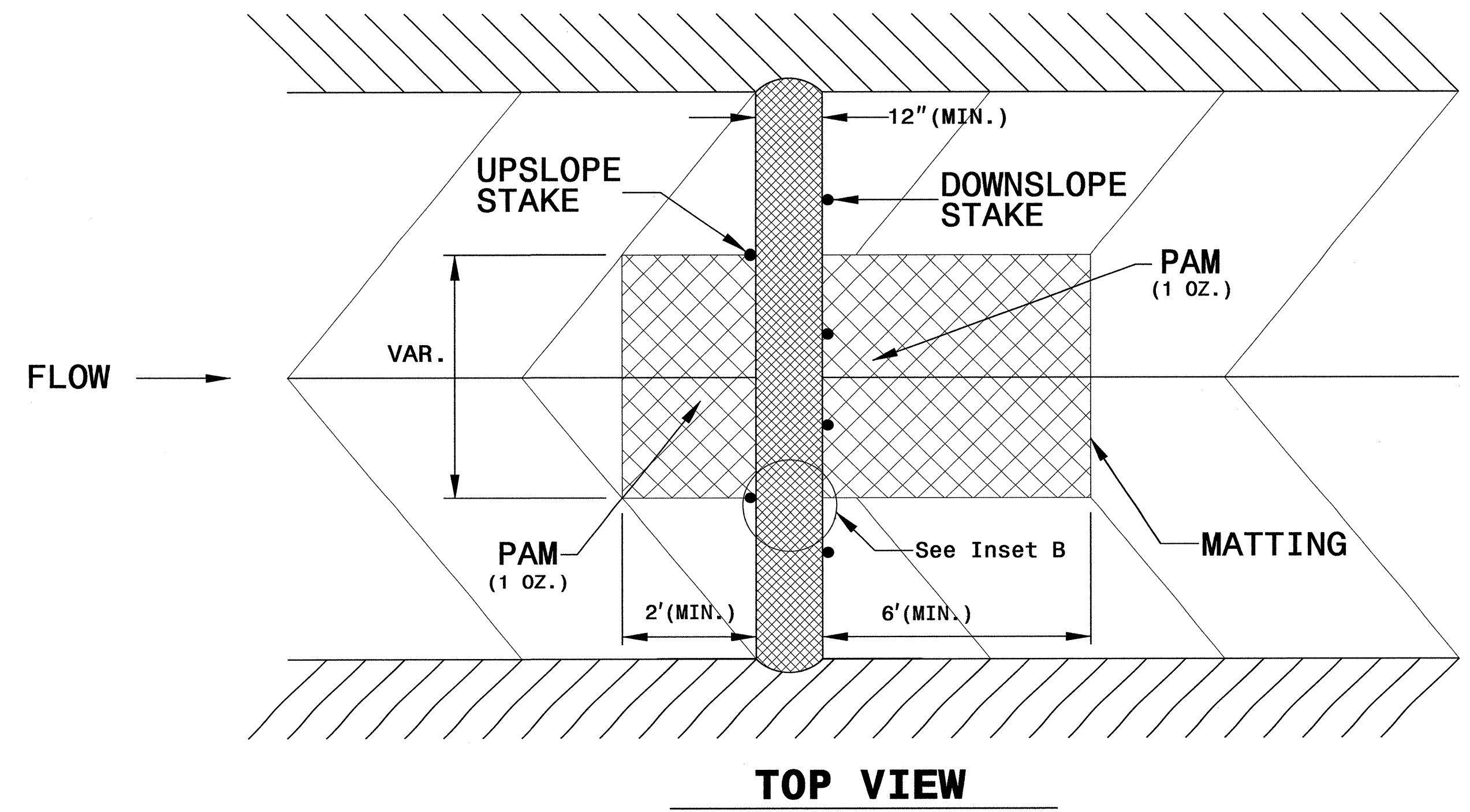
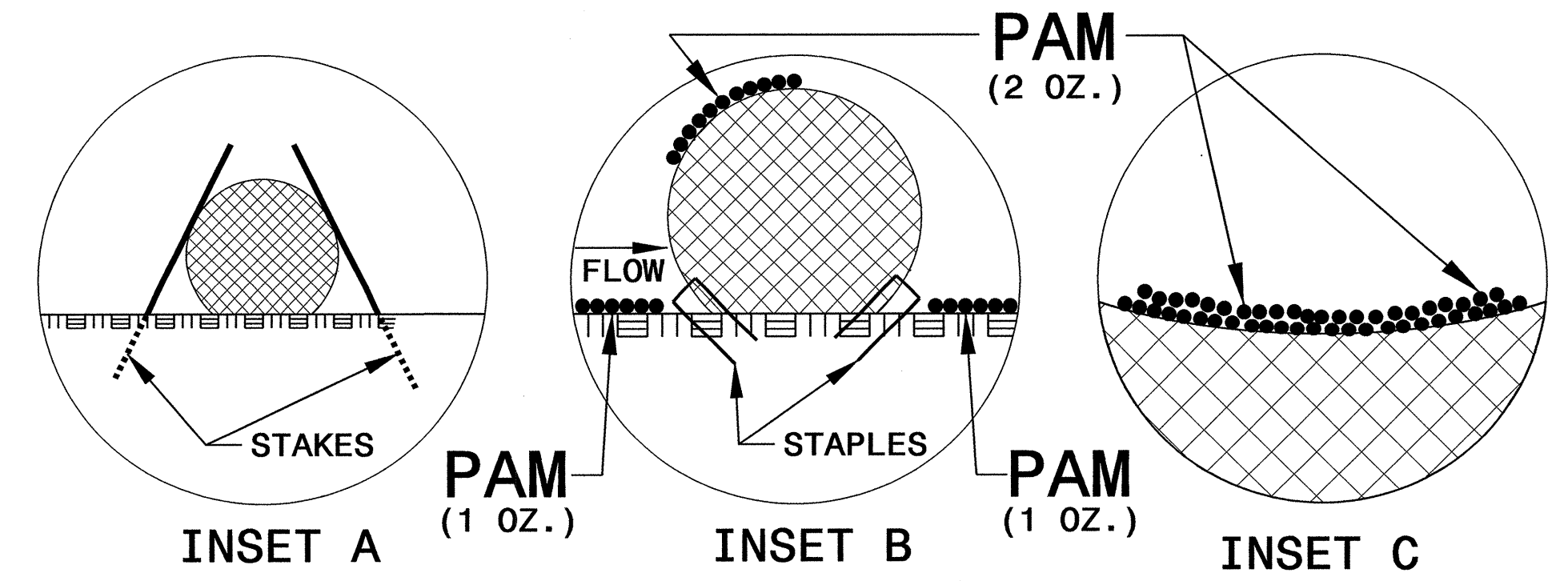
SIDE VIEW

PROJECT REFERENCE NO. B-5126	SHEET NO. EC-2A
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 MATTING ON EACH SIDE OF WATTLE. REAPPLY PAM AFTER EVERY RAINFALL EVENT THAT IS EQUAL TO OR EXCEEDS 0.50 IN.



DIVISION OF HIGHWAYS
STATE OF NORTH CAROLINA

PROJECT REFERENCE NO.	SHEET NO.
<i>B-5126</i>	<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.

8/17/99

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

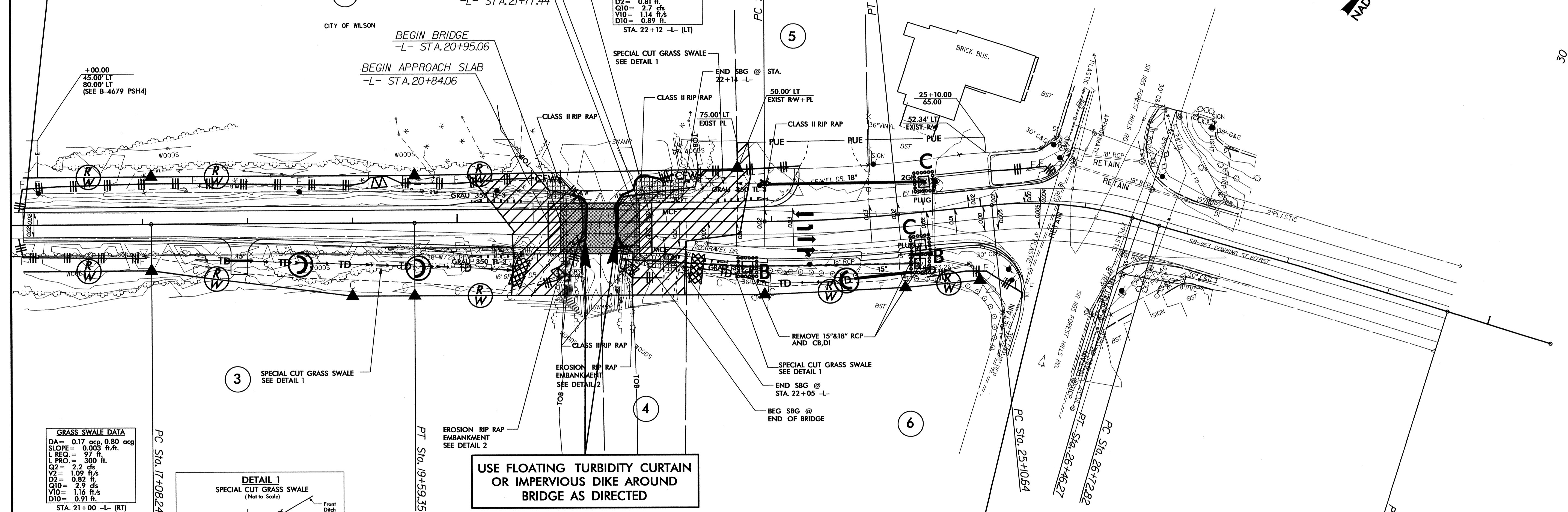
NOTE:
UTILIZE SPECIAL STILLING BASIN WHERE APPLICABLE.

PROJECT REFERENCE NO. B-5126	SHEET NO. EC-4/CONST.4
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

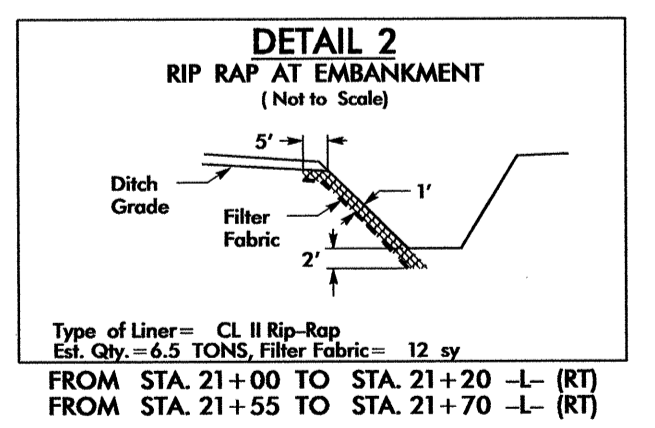
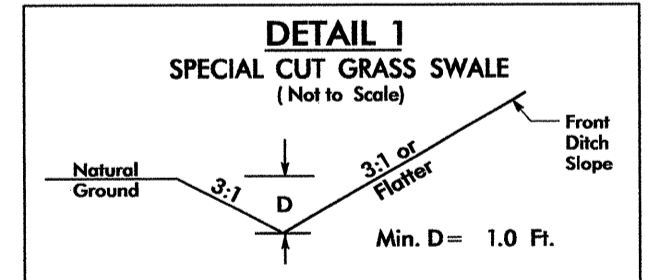
BEGIN TIP PROJECT B-5126
END TIP PROJECT B-4679
-L- STA.15+86.00

END APPROACH SLAB
-L- STA.21+88.44
BEG SBG @
END OF BRIDGE
END BRIDGE
-L- STA.21+77.44

GRASS SWALE DATA
DA= 0.36 acp, 0.30 ocp
SLOPE= 0.003 ft./ft.
L REQ= 66 ft.
L PRO= 88 ft.
Q2= 2.09 cfs
V2= 1.07 ft/s
D2= 0.81 ft.
Q10= 2.7 cfs
V10= 1.14 ft/s
D10= 0.89 ft.
STA. 22+12 -L- (LT)



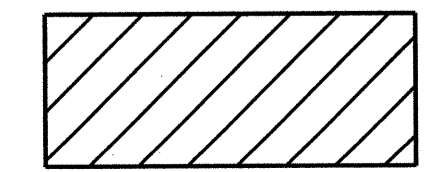
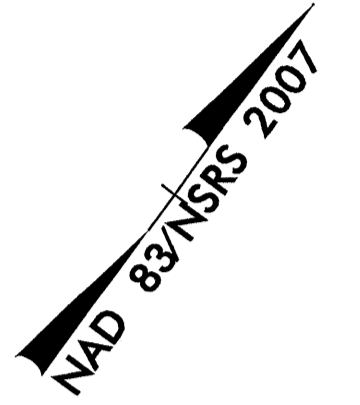
GRASS SWALE DATA
DA= 0.17 acp, 0.80 ocp
SLOPE= 0.003 ft./ft.
L REQ= 97 ft.
L PRO= 300 ft.
Q2= 2.2 cfs
V2= 1.09 ft/s
D2= 0.82 ft.
Q10= 2.9 cfs
V10= 1.16 ft/s
D10= 0.91 ft.
STA. 21+00 -L- (RT)



GRASS SWALE DATA
DA= 0.58 acp, 0.56 ocp
SLOPE= 0.003 ft./ft.
L REQ= 114 ft.
L PRO= 223 ft.
Q2= 3.9 cfs
V2= 1.25 ft/s
D2= 1.02 ft.
Q10= 5.0 cfs
V10= 1.33 ft/s
D10= 1.12 ft.
STA. 21+55 -L- (RT)

USE FLOATING TURBIDITY CURTAIN
OR IMPERVIOUS DIKE AROUND
BRIDGE AS DIRECTED

END TIP PROJECT B-5126
END GRADE
-L- STA 25+75.00



ENVIRONMENTALLY SENSITIVE AREA
SEE PROJECT SPECIAL PROVISIONS

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wlschandler AT BENNY24778

Place Matting for Erosion Control on Fill Slopes as Work Allows.

PROJECT REFERENCE NO. B-5126		SHEET NO. EC-5/CONST.4	
RW SHEET NO.			
ROADWAY DESIGN ENGINEER		HYDRAULICS ENGINEER	

NOTE: UTILIZE SPECIAL STILLING BASIN WHERE APPLICABLE.

BEGIN TIP PROJECT B-5126
END TIP PROJECT B-4679
-L- STA.15+86.00

END APPROACH SLAB
-L- STA.21+88.44
END BRIDGE
-L- STA.21+77.44

BEGIN BRIDGE
-L- STA.20+95.06
BEGIN APPROACH SLAB
-L- STA.20+84.06

GRASS SWALE DATA

DA =	0.36 acp, 0.30 acg
SLOPE =	0.003 ft./ft.
L REQ =	66 ft.
L PRO =	88 ft.
Q2 =	2.09 cfs
V2 =	1.07 ft/s
D2 =	0.81 ft.
Q10 =	2.7 cfs
V10 =	1.14 ft/s
D10 =	0.89 ft.

STA. 22+12 -L- (LT)

GRASS SWALE DATA

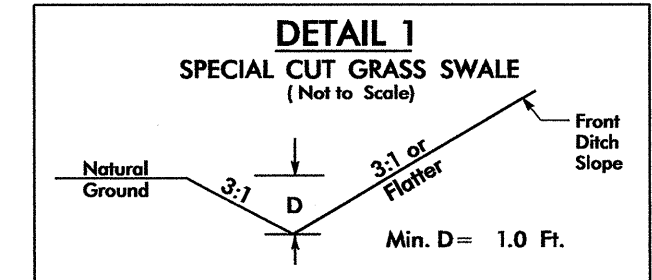
DA =	0.17 acp, 0.80 acg
SLOPE =	0.003 ft./ft.
L REQ =	97 ft.
L PRO =	300 ft.
Q2 =	2.2 cfs
V2 =	1.09 ft/s
D2 =	0.82 ft.
Q10 =	2.9 cfs
V10 =	1.16 ft/s
D10 =	0.91 ft.

STA. 21+00 -L- (RT)

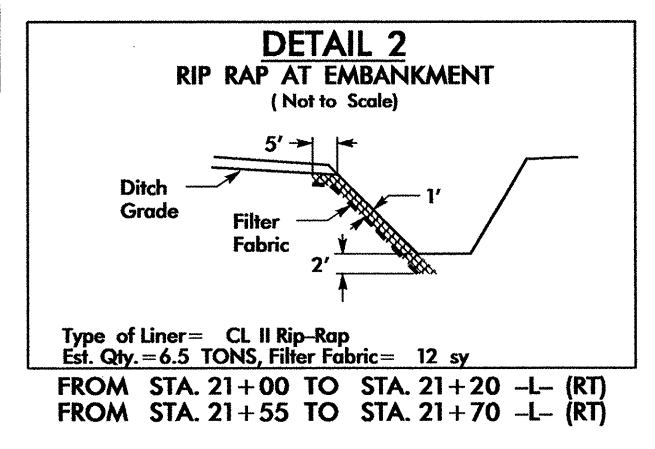
GRASS SWALE DATA

DA =	0.58 acp, 0.56 acg
SLOPE =	0.003 ft./ft.
L REQ =	114 ft.
L PRO =	223 ft.
Q2 =	3.9 cfs
V2 =	1.25 ft/s
D2 =	1.02 ft.
Q10 =	5.0 cfs
V10 =	1.33 ft/s
D10 =	1.12 ft.

STA. 21+55 -L- (RT)



FROM STA. 18+00 TO STA. 21+00 -L- (RT)
FROM STA. 21+55 TO STA. 24+50 -L- (RT)
FROM STA. 22+00 TO STA. 23+00 -L- (LT)



USE FLOATING TURBIDITY CURTAIN OR IMPERVIOUS DIKE AROUND BRIDGE AS DIRECTED

END TIP PROJECT B-5126
END GRADE
-L- STA 25+75.00

8/17/99
 28 FEB 2003 07:55
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