

STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	B-4560	EC-1	
STATE PROJ. NO.	F.A. PROJ. NO.	DESCRIPTION	

TIP PROJECT: B-4560

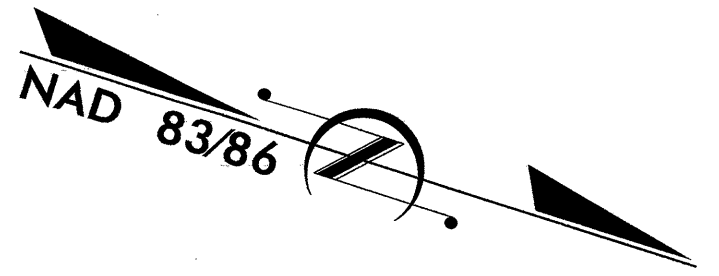
STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

PLAN FOR PROPOSED
HIGHWAY EROSION CONTROL

JOHNSTON COUNTY

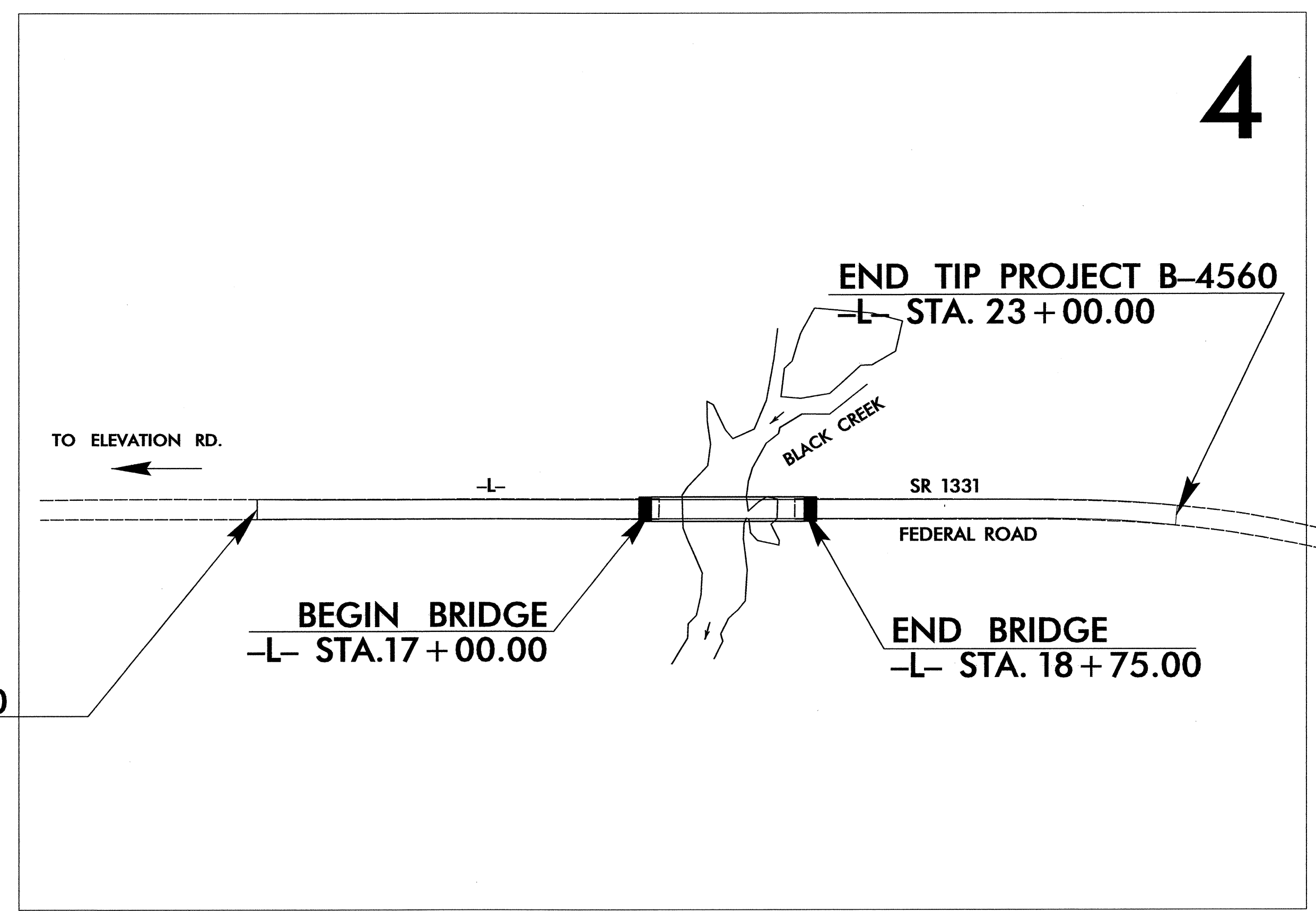
**LOCATION: BRIDGE NO. 102 OVER BLACK CREEK
ON SR 1331 (FEDERAL RD.)**

TYPE OF WORK: GRADING, PAVING, DRAINAGE AND STRUCTURE



EROSION AND SEDIMENT CONTROL MEASURES

Std. #	Description	Symbol
1630.05	Temporary Silt Ditch	
1630.05	Temporary Diversion	
1605.01	Temporary Silt Fence	
1606.01	Special Sediment Control Fence	
1622.01	Temporary Berms and Slope Drains	
	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 / Coir Fiber Wattle	
	Wattle / Coir Fiber Wattle with Polyacrylamide (PAM)	
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:	
	Type A	
	Type B	
	Type C	
	Skimmer Basin	
	Tiered Skimmer Basin	
	Infiltration Basin	



**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

0

PLANS

0

PROFILE (HORIZONTAL)

0

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

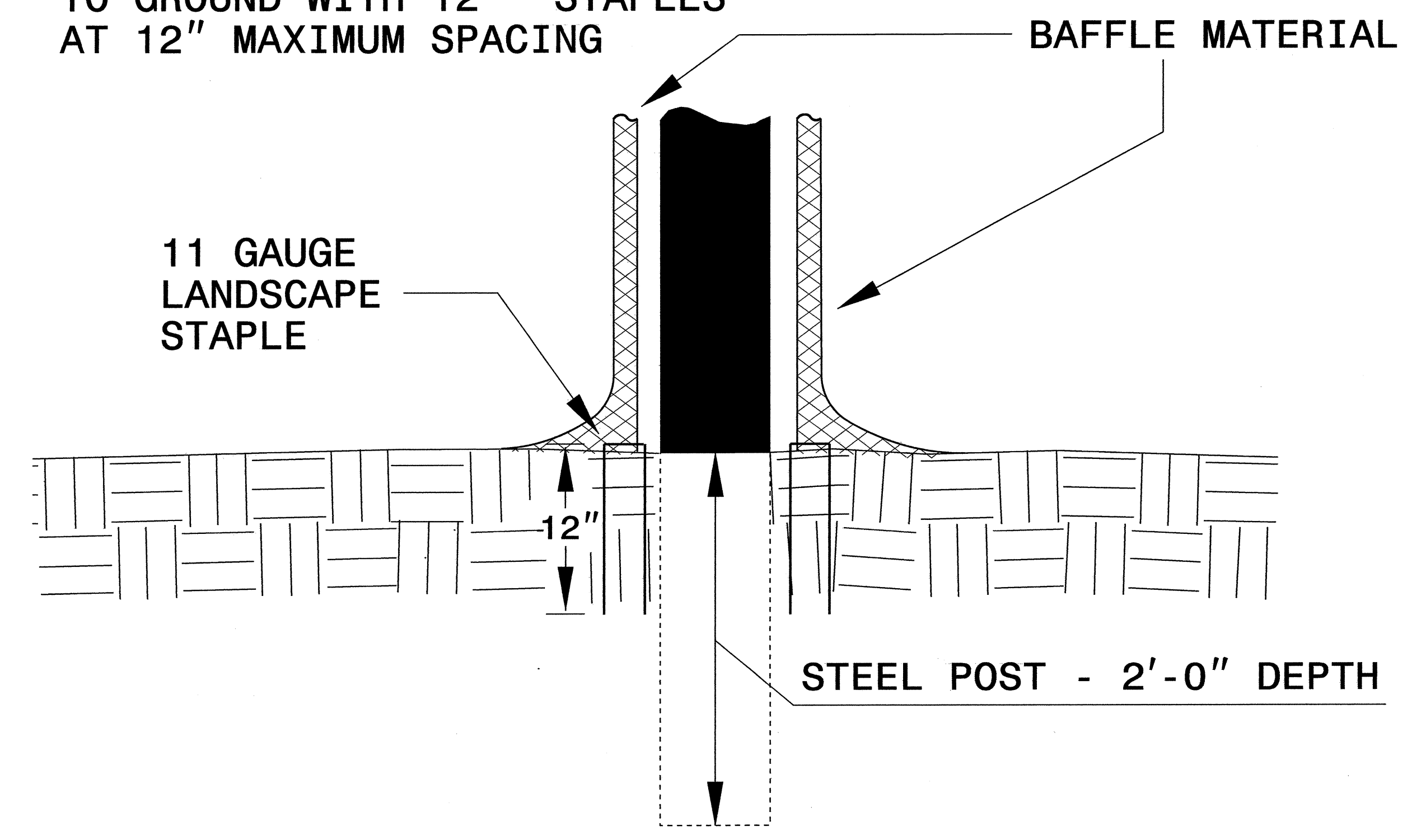
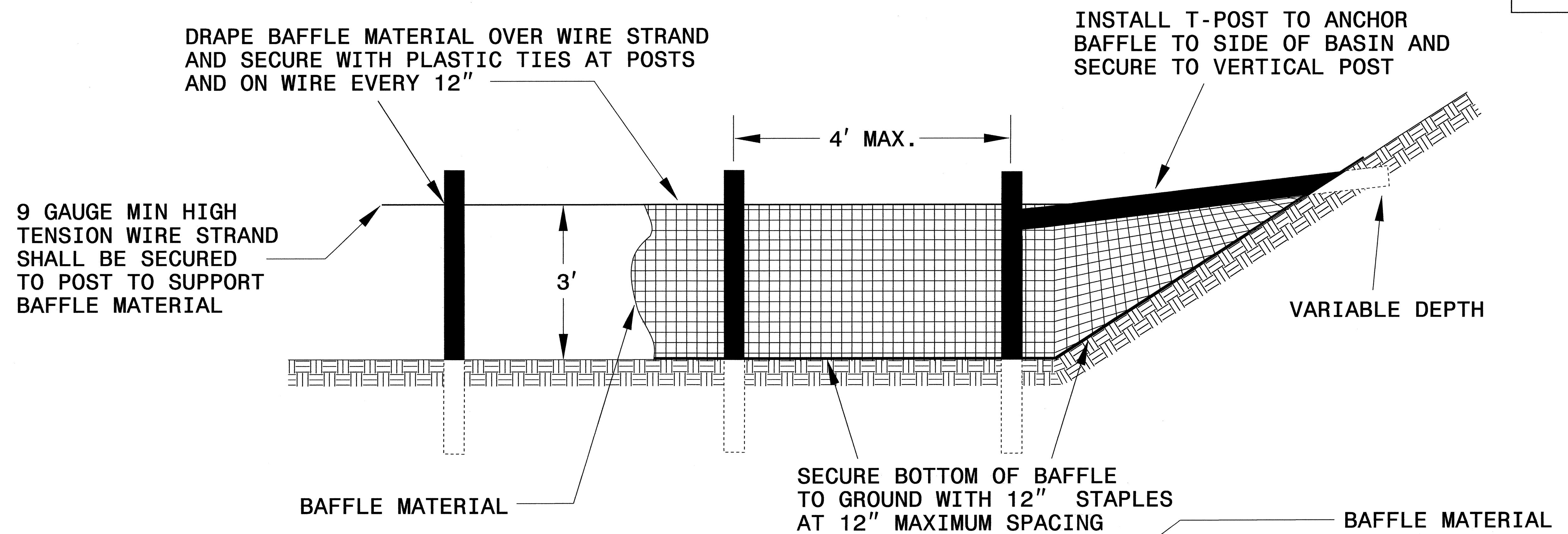
The following roadway english standards as appear in "Roadway Standard Drawings"- Roadway Design Unit - N. C. Department of Transportation - Raleigh, N. C., dated July 18, 2006 and the latest revision thereto are applicable to this project and by reference hereby are considered a part of these plans.

1605.01 Temporary Silt Fence	1630.06 Special Stilling Basin
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	

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PROJECT REFERENCE NO. B-4560	SHEET NO. EC-2
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

COIR FIBER BAFFLE DETAIL



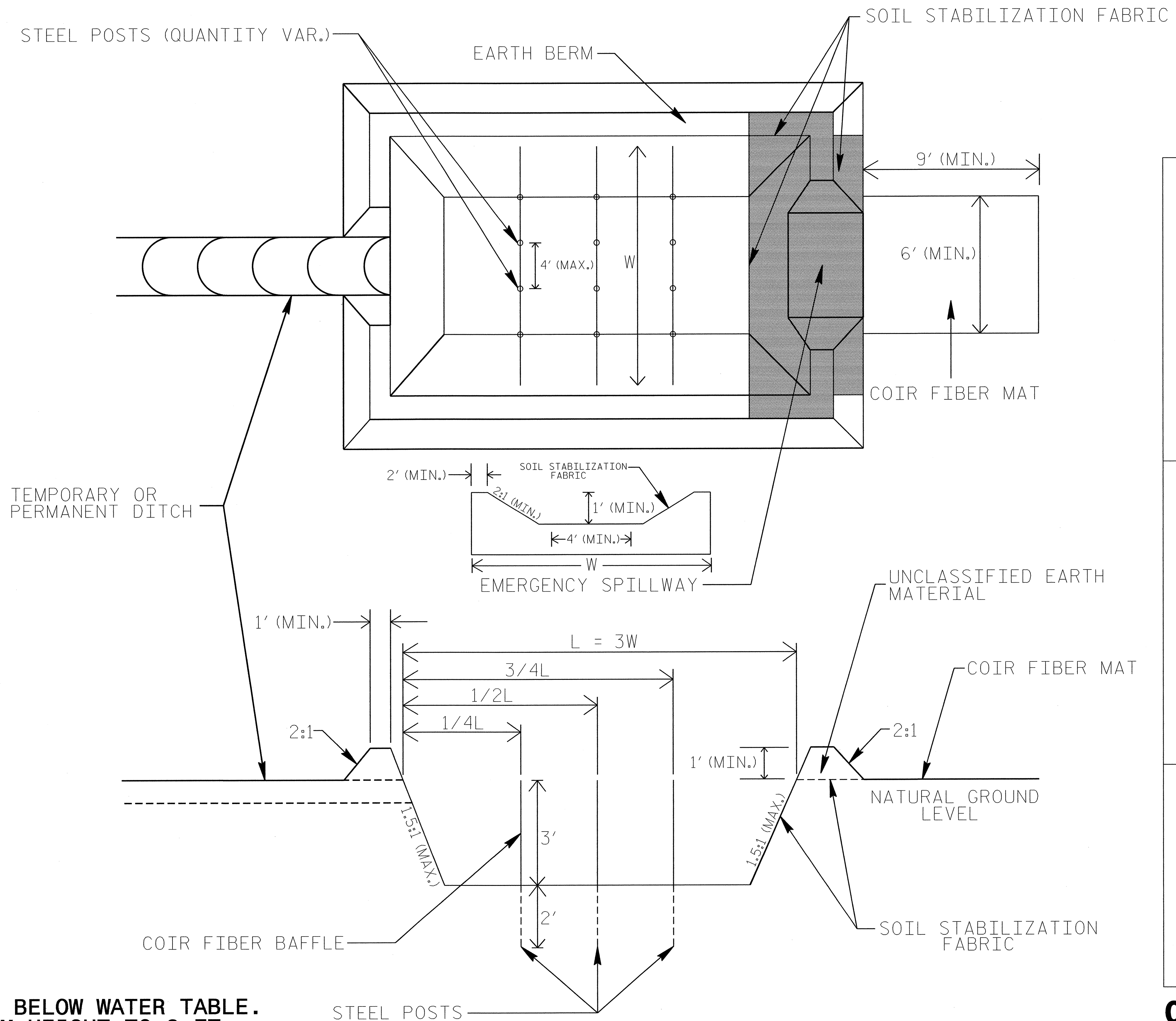
NOTES:

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

INFILTRATION BASIN WITH BAFFLES DETAIL

PROJECT REFERENCE NO. B-4560	SHEET NO. EC-2A
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER



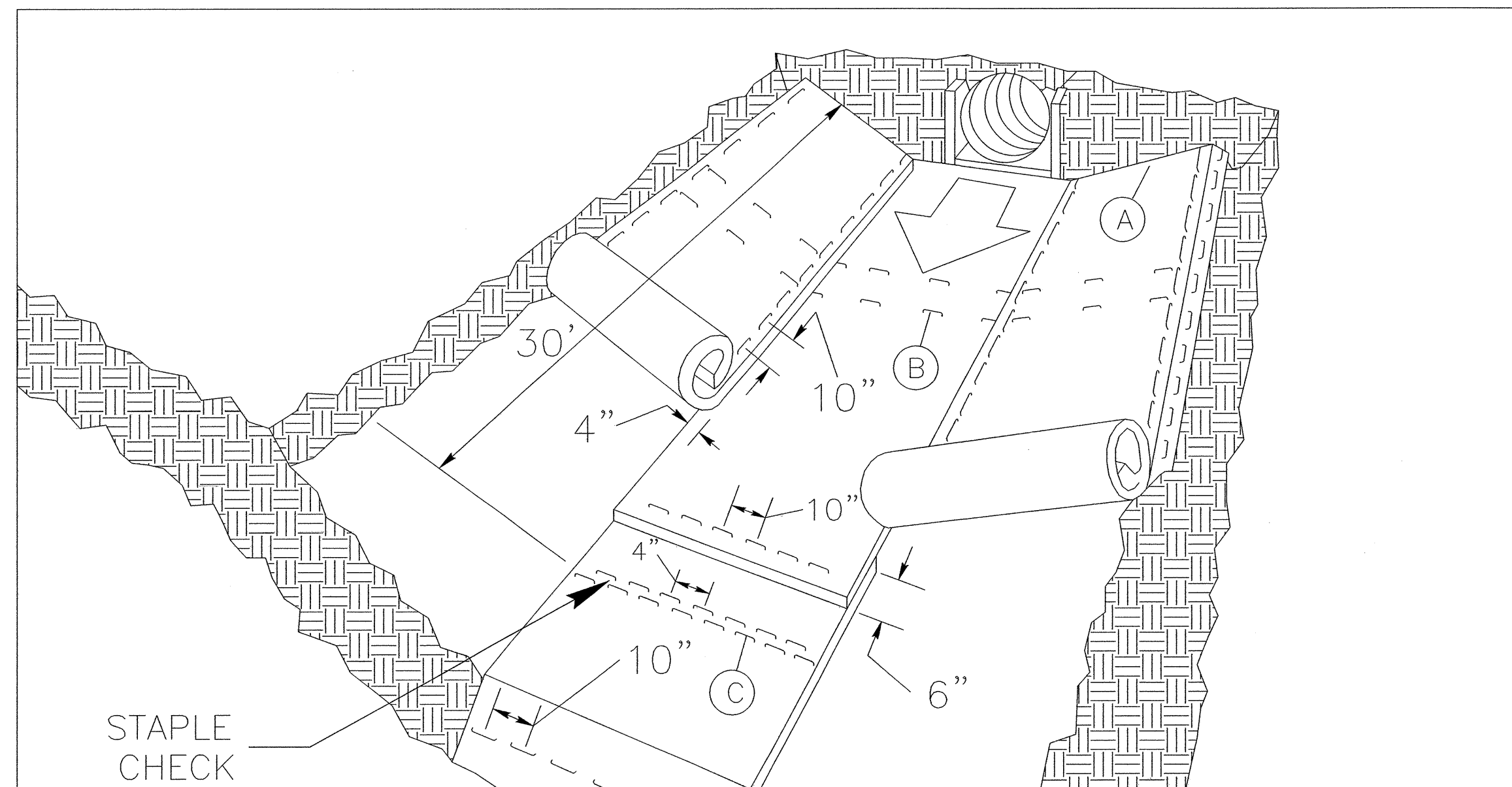
NOTES

1. DO NOT EXCAVATE BELOW WATER TABLE.
2. LIMIT EARTH BERM HEIGHT TO 3 FT.
3. AVOID COMPACTING BOTTOM OF BASIN.
4. FOR BASIN DEPTH OF 3 FT., THE MINIMUM BASIN WIDTH SHALL BE 9 FT.
5. DETERMINE EMERGENCY SPILLWAY LENGTH (FT.) USING $Q/0.8$, WHERE Q IS FLOW RATE (CFS) INTO BASIN.

COIR FIBER MAT ANCHOR OPTIONS

PROJECT REFERENCE NO. B-4560	SHEET NO. EC-2B
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

MATTING INSTALLATION DETAIL



MATTING IN DITCHES

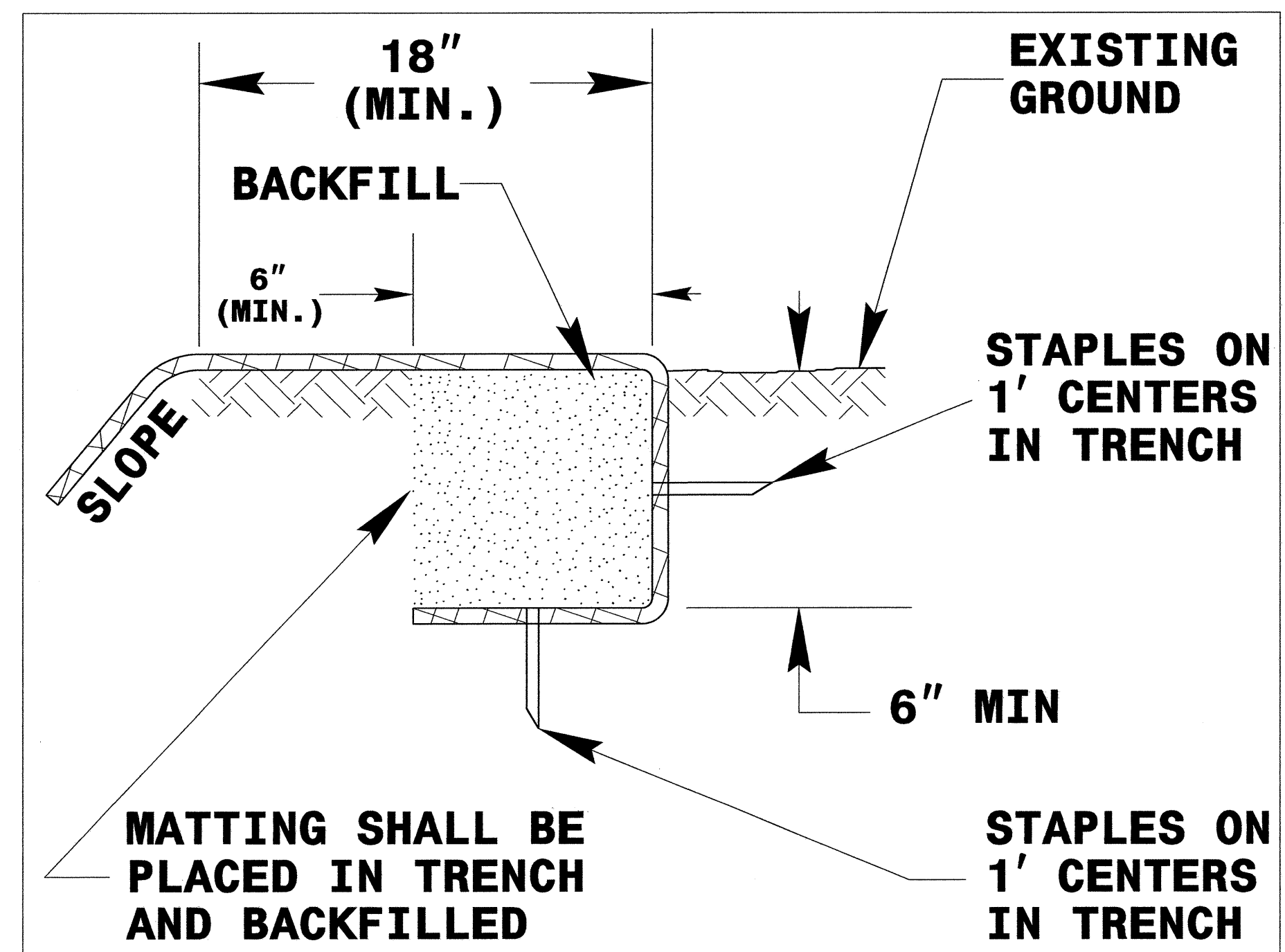
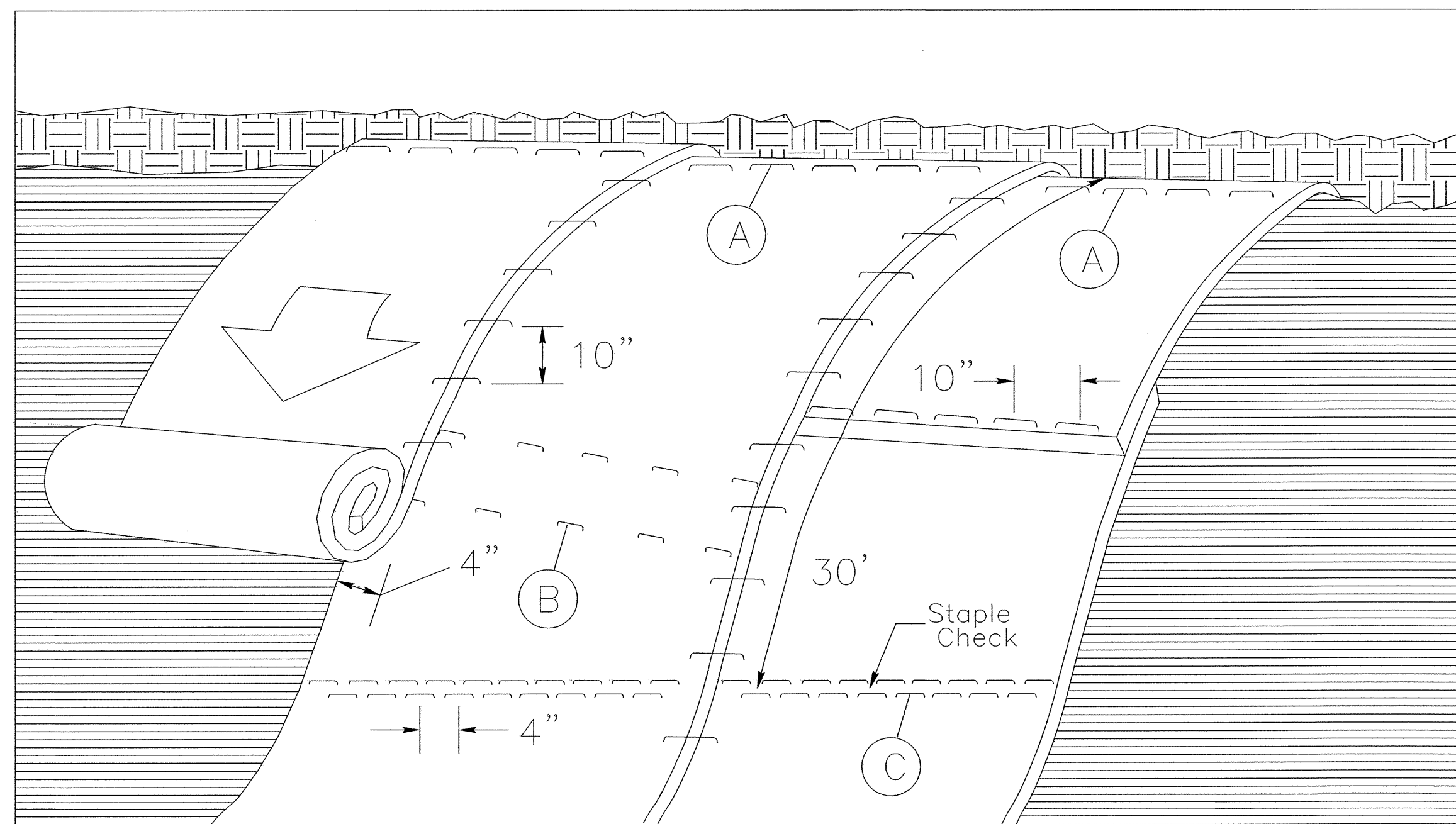


DIAGRAM (A)



MATTING ON SLOPES

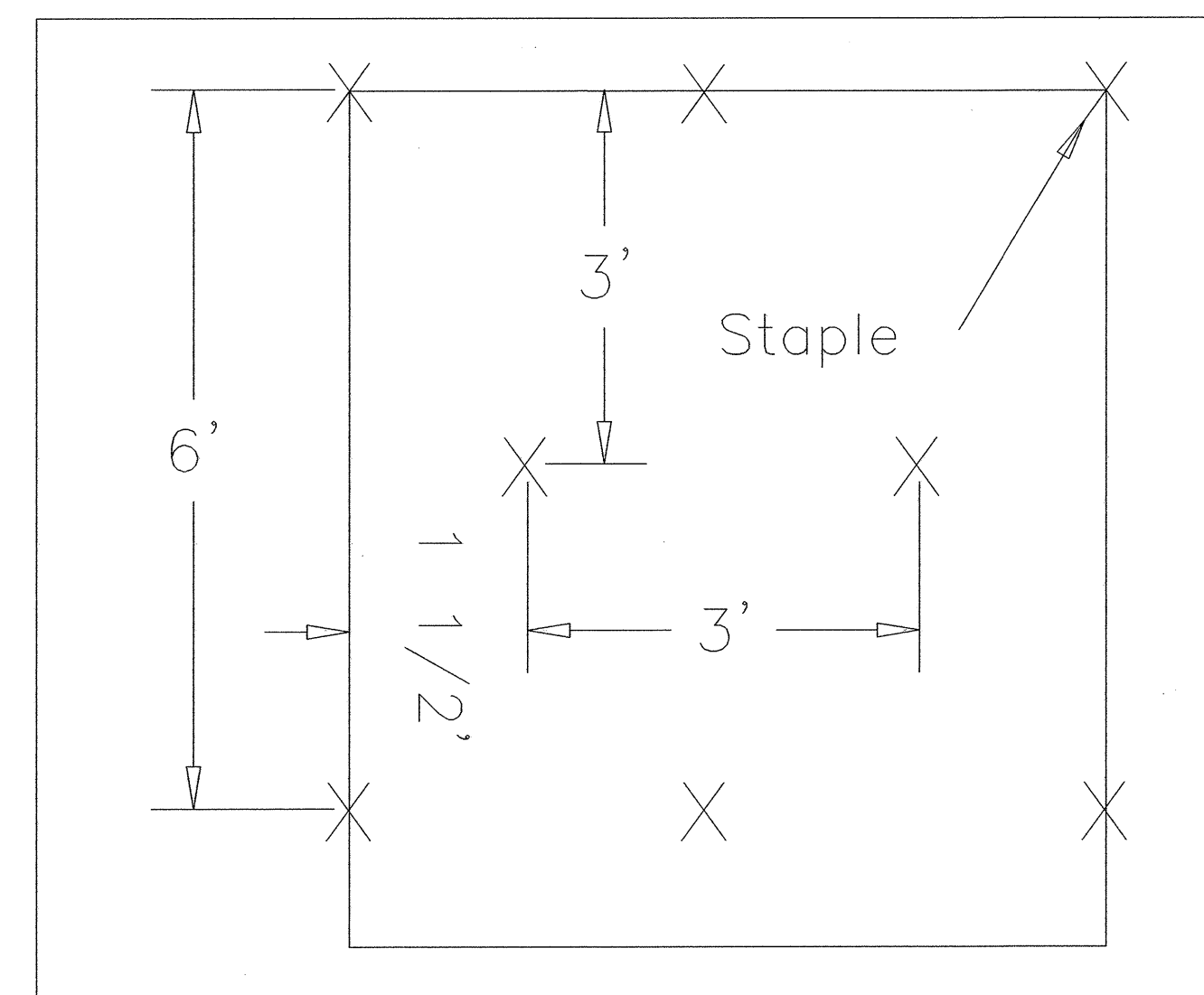


DIAGRAM (B)

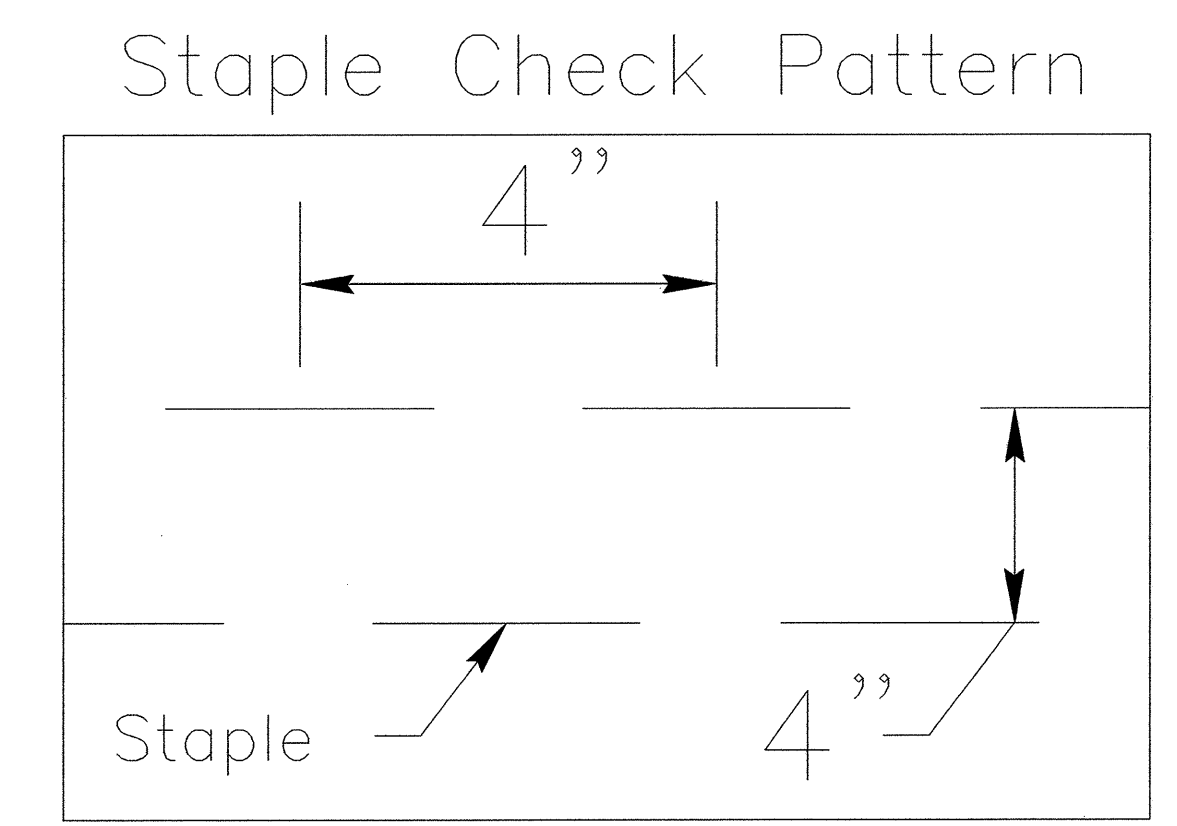


DIAGRAM (C)

NOTES:

THIS DETAIL APPLIES TO STRAW, EXCELSIOR, AND PERMANENT SOIL REINFORCEMENT MAT (PSRM) INSTALLATION.

STAPLES SHALL BE NO. 11 GAUGE STEEL WIRE FORMED INTO A "U" SHAPE WITH A MINIMUM THROAT WIDTH OF 1 INCH AND NOT LESS THAN 6 INCHES IN LENGTH.

NOT TO SCALE

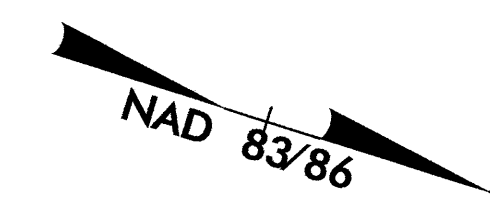
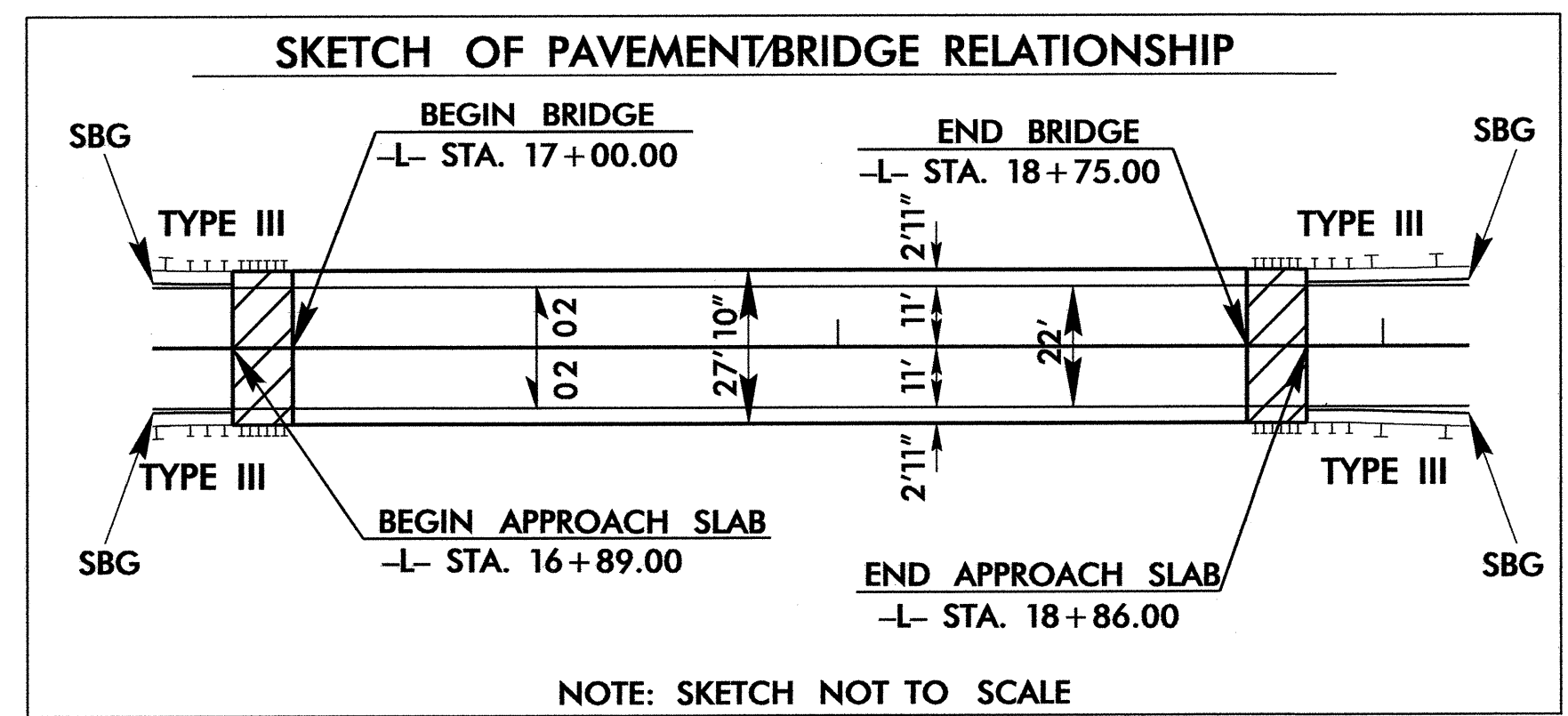
DIVISION OF HIGHWAYS
STATE OF NORTH CAROLINA

PROJECT REFERENCE NO. <i>B-4560</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.

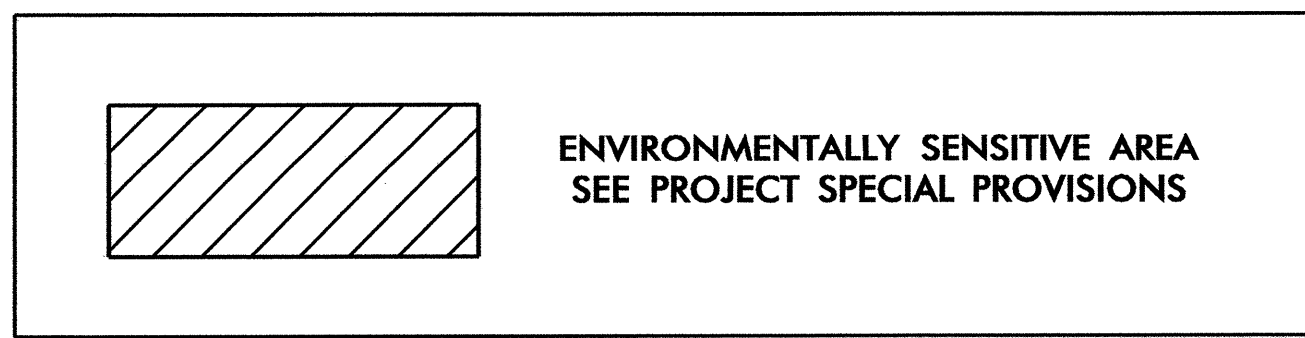
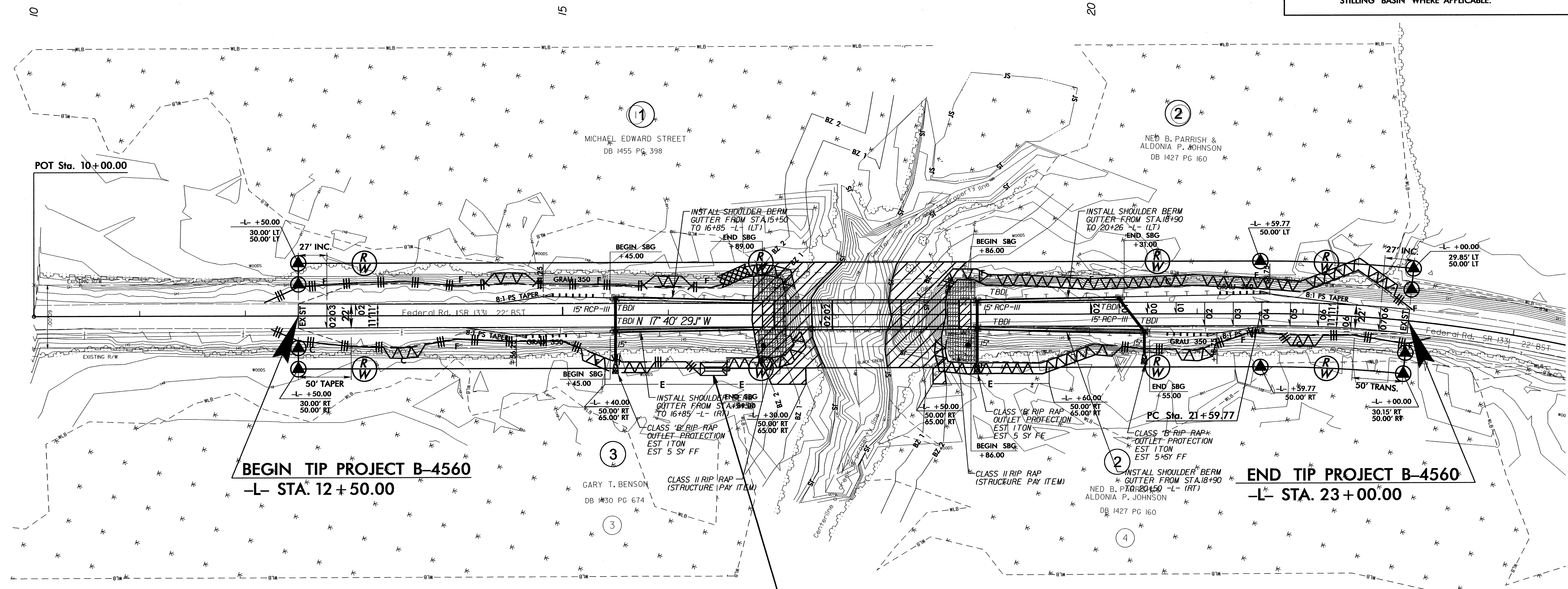
PROJECT REFERENCE NO. B-4560	SHEET NO. EC-4/CONST.4
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER



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.

NOTE:
UTILIZE SPECIAL STILLING BASIN AS
STILLING BASIN WHERE APPLICABLE.



25 x 12 x 3
4 ft. weir
(See Infiltration
Basin Detail)
ID 4.1C

-L-
PI Sta 24+90.46
 $\Delta = 26' 34' 49.2''$ (RT)
D = 4'05' 33.2"
L = 649.48'
T = 330.69'
R = 1,400.00'

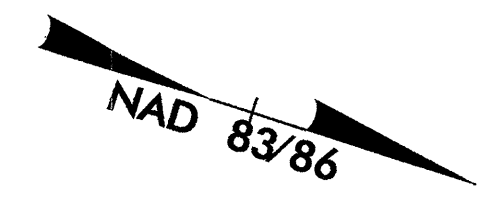
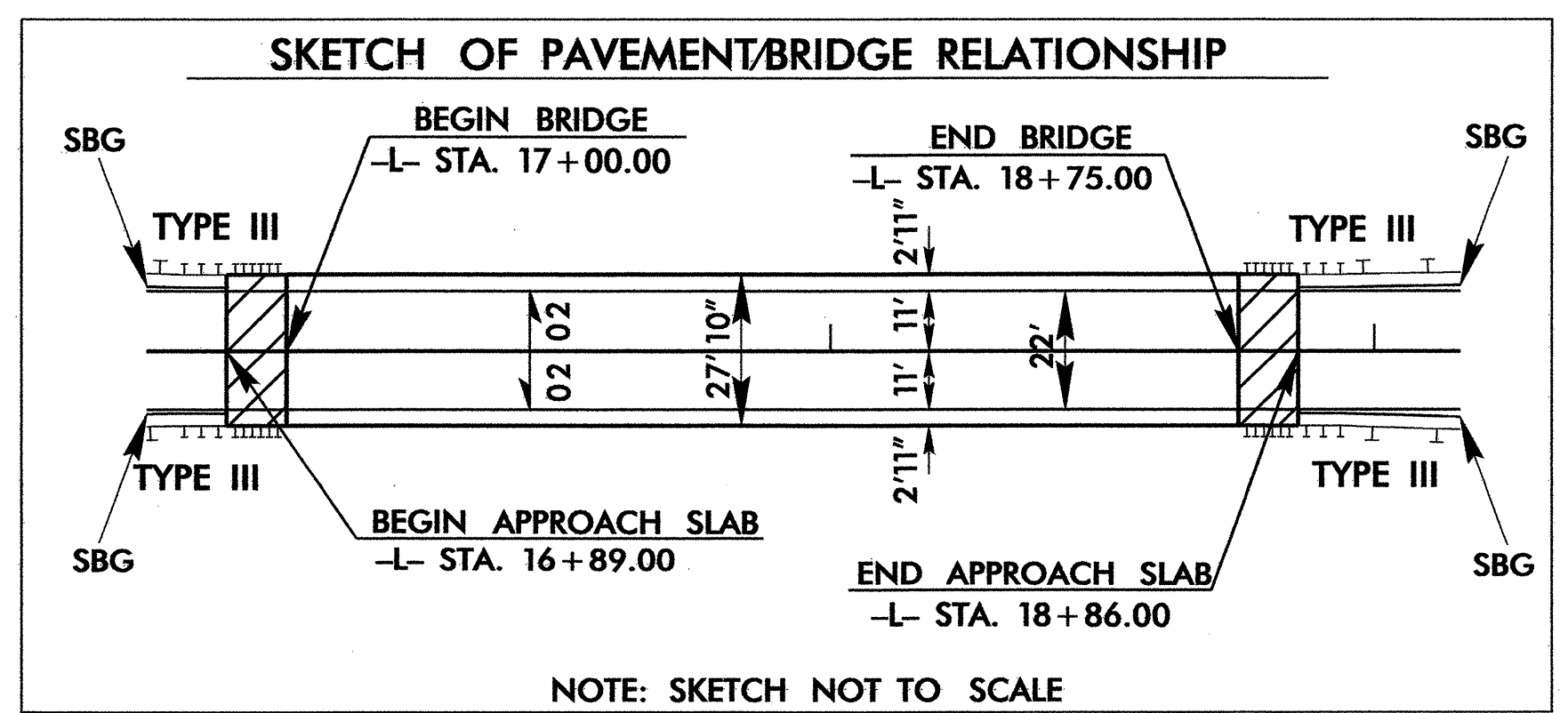
BRIDGE APPROACH SLAB

NOTES:
1) SEE SHEET 5 FOR -L- PROFILE
2) SEE SHEETS S-23 - S-42 FOR STRUCTURE PLANS

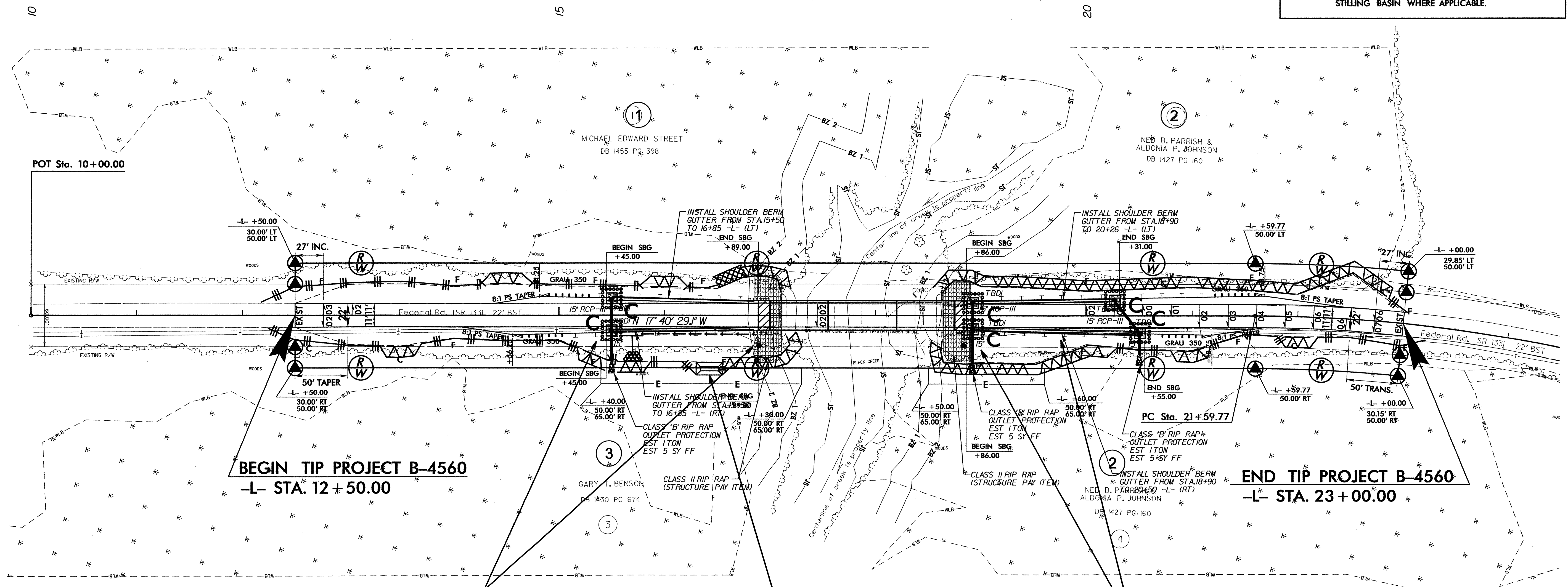
REVISIONS

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15/16/01/REVISIONS

PROJECT REFERENCE NO.	SHEET NO.
B-4560	EC-5/CONST.4
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER



NOTE: UTILIZE SPECIAL STILLING BASIN AS STILLING BASIN WHERE APPLICABLE.



Place Matting for Erosion Control on Slope as Work Allows.

25 x 12 x 3
4 ft. weir
(See Infiltration Basin Detail)
ID 4.1C

-L-
PI Sta 24+90.46
Δ = 26° 34' 49.2" (RT)
D = 4' 05" 33.2"
L = 649.48'
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Place Matting for Erosion Control on Slope as Work Allows.

BRIDGE APPROACH SLAB

NOTES:
1) SEE SHEET 5 FOR -L- PROFILE
2) SEE SHEETS S-23 - S-42 FOR STRUCTURE PLANS

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REVISIONS
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