

TIP PROJECT: B-4031

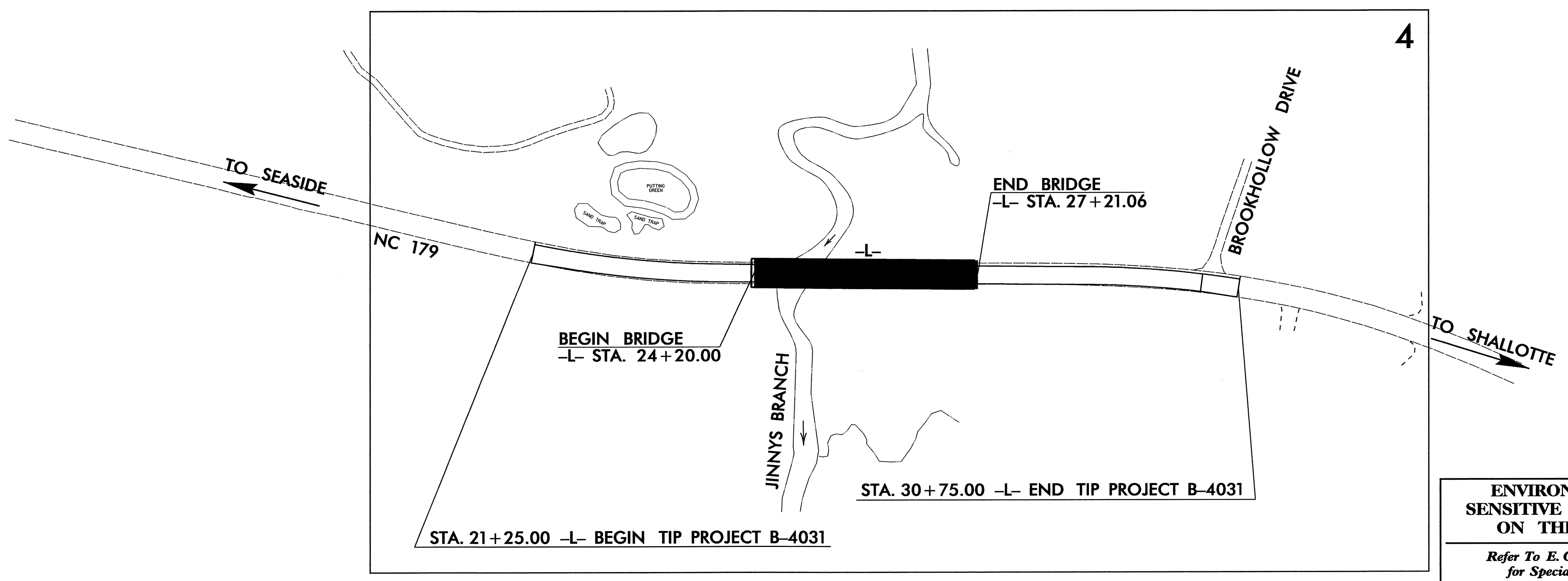
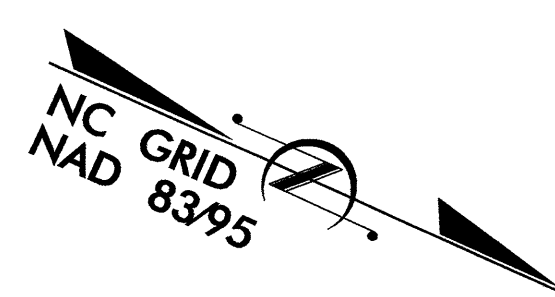
STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

PLAN FOR PROPOSED
HIGHWAY EROSION CONTROL

BRUNSWICK COUNTY

LOCATION: BRIDGE NO. 72 OVER JINNYS BRANCH ON NC 179

TYPE OF WORK: GRADING, PAVING, DRAINAGE AND STRUCTURE



STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	B-4031	EC-1	
STATE PROJ. NO.	F.A. PROJ. NO.	DESCRIPTION	

EROSION AND SEDIMENT CONTROL MEASURES

Std. #	Description	Symbol
1630.03	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.....	
1630.01	Riser Basin.....	
1630.02	Silt Basin Type B.....	
1633.01	Temporary Rock Silt Check Type-A.....	
	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.....	
	Rock Inlet Sediment Trap:	
1632.01	Type A.....	
1632.02	Type B.....	
1632.03	Type C.....	
	Skimmer Basin.....	
	Tiered Skimmer Basin.....	
	Infiltration Basin.....	

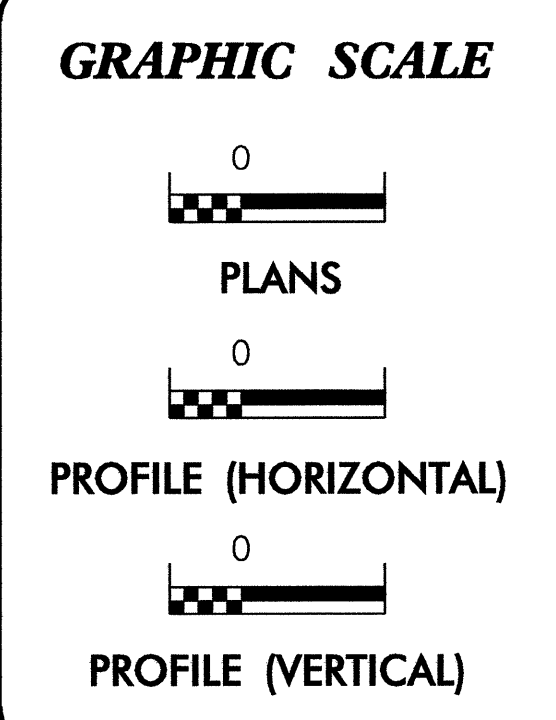
THIS PROJECT CONTAINS EROSION CONTROL PLANS FOR CLEARING AND GRUBBING PHASE OF CONSTRUCTION.

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.

HIGH QUALITY WATER(S) EXIST ON THIS PROJECT
High Quality Water Zone(s) Exist
From Sta. Beginning
to Sta. End
Refer To E. C. Special Provisions for Special Considerations.

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**ROADSIDE ENVIRONMENTAL UNIT
DIVISION OF HIGHWAYS
STATE OF NORTH CAROLINA**

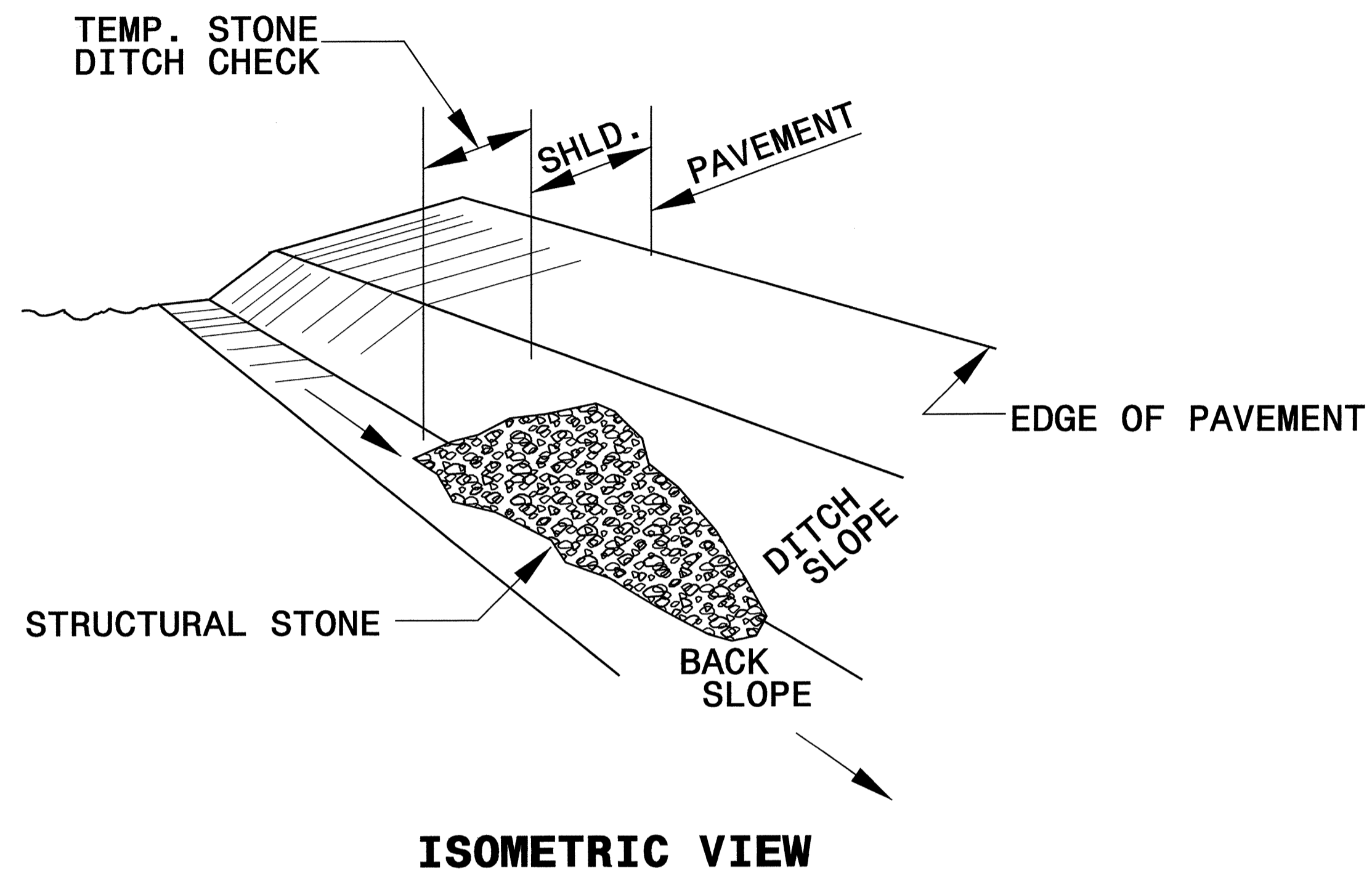
Prepared In the Office of:
ROADSIDE ENVIRONMENTAL UNIT
1 South Wilmington St.
Raleigh, NC 27611
2006 STANDARD SPECIFICATIONS

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	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	1634.02 Temporary Rock Sediment Dam Type B
1630.03 Temporary Silt Ditch	
1630.05 Temporary Diversion	

PROJECT REFERENCE NO. B-4031	SHEET NO. EC-2
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

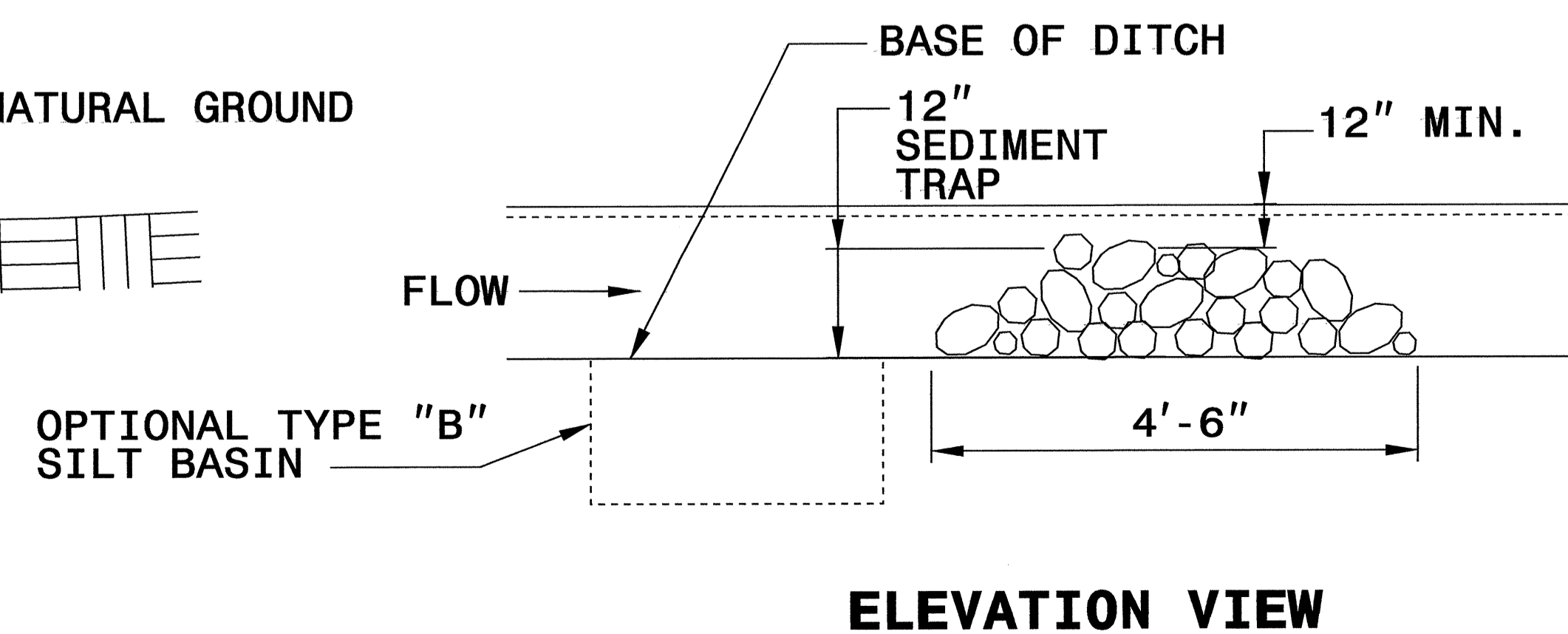
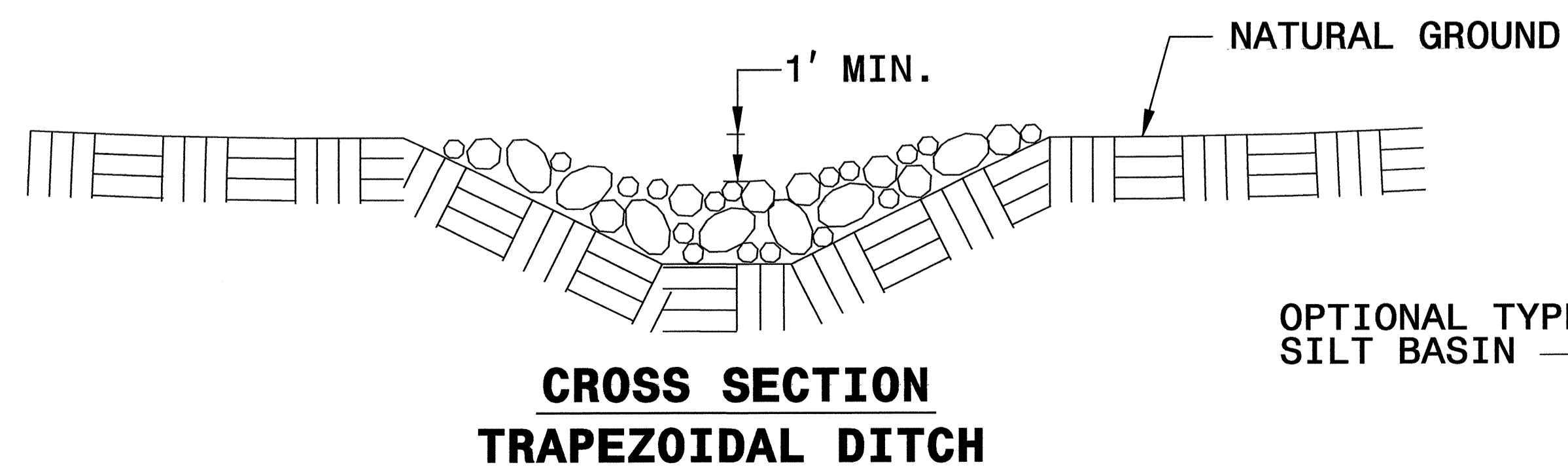
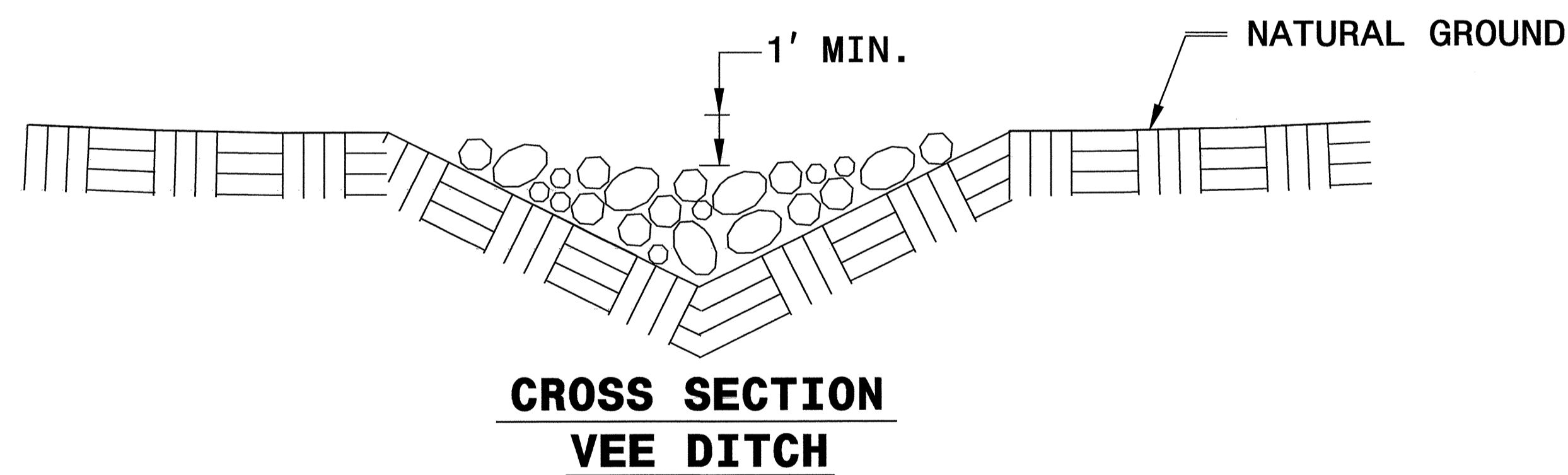
TEMPORARY ROCK SILT CHECK TYPE 'B' DETAIL



NOTES:

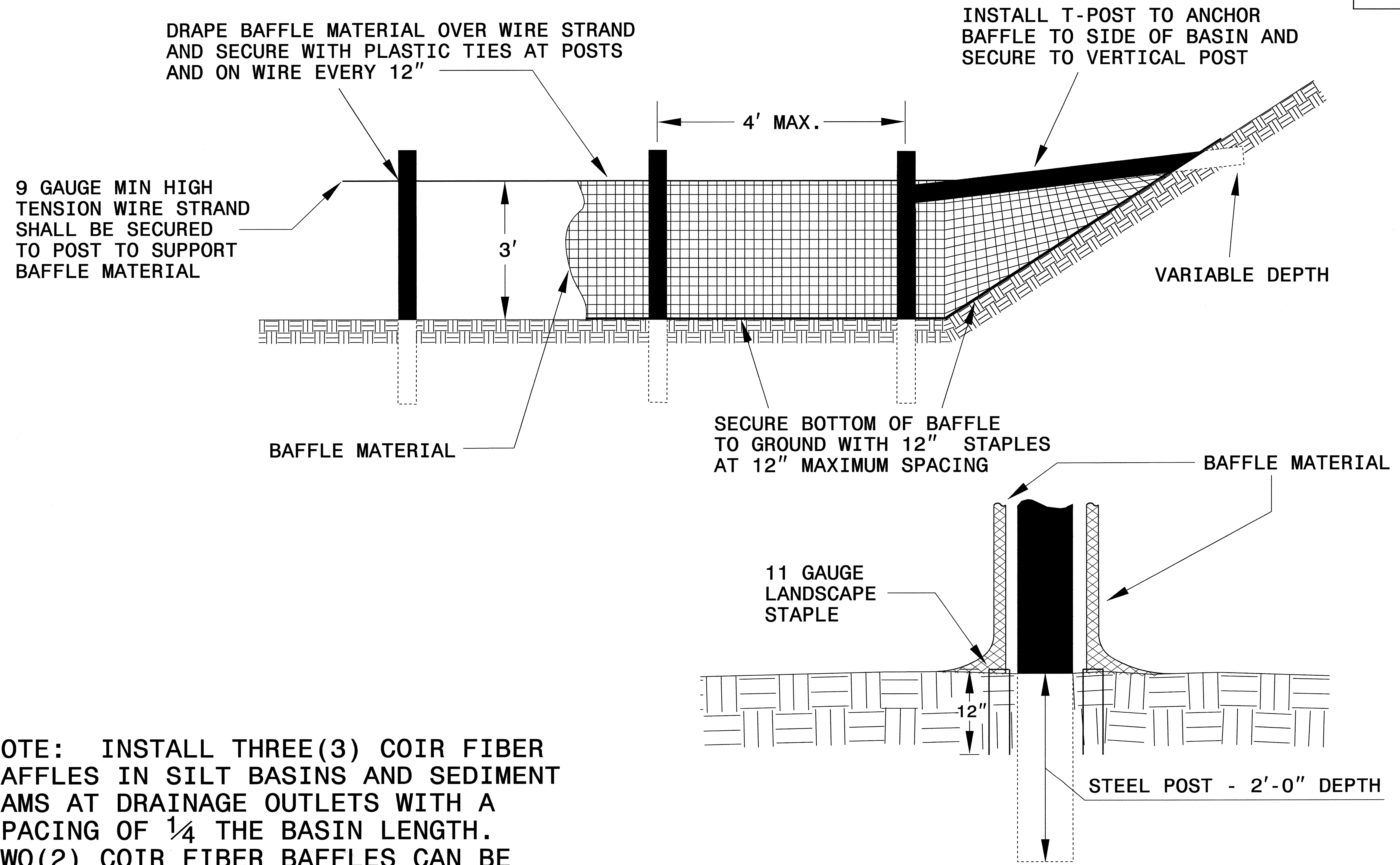
USE CLASS 'B' EROSION CONTROL STONE FOR STRUCTURAL STONE.

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-4031	SHEET NO. EC-2A
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

COIR FIBER BAFFLE DETAIL



NOTE: 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. 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.

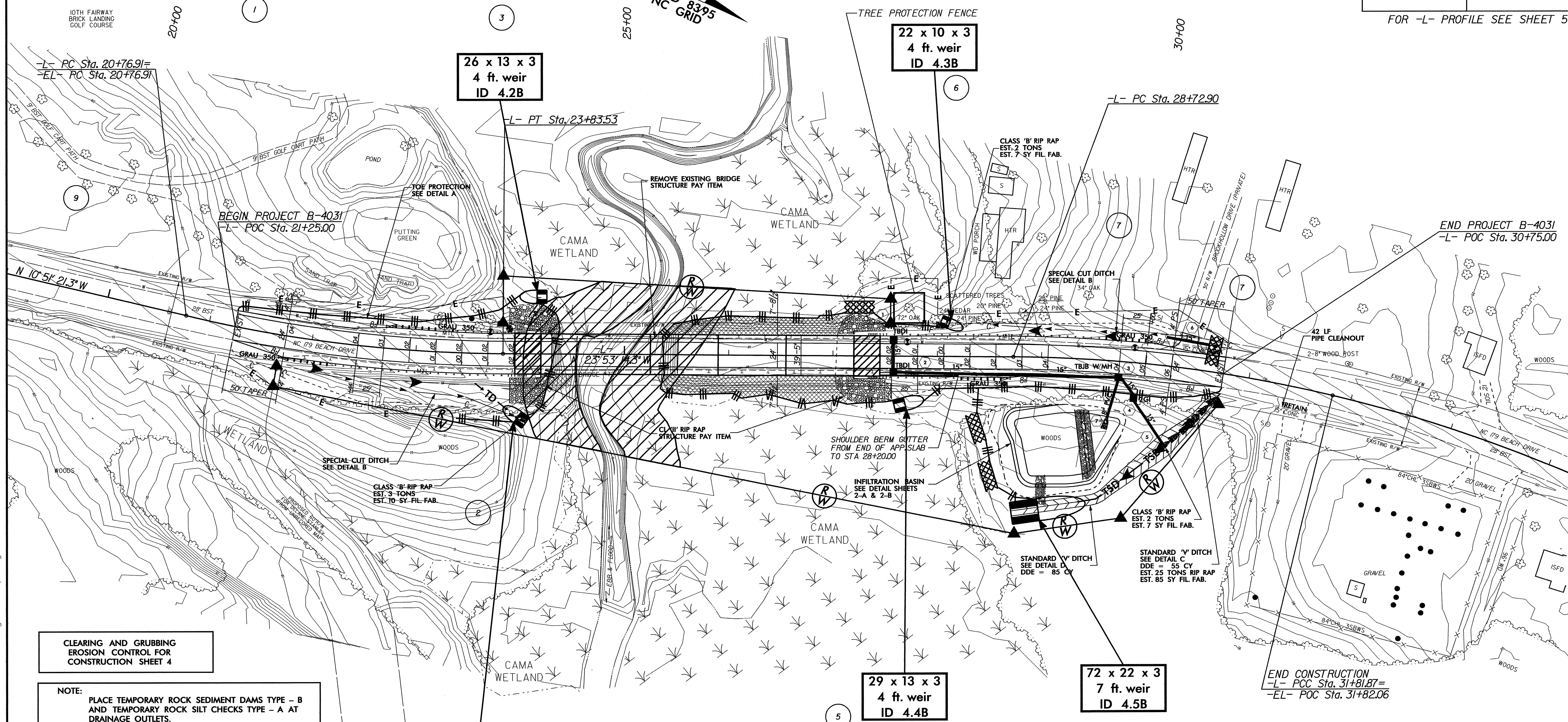
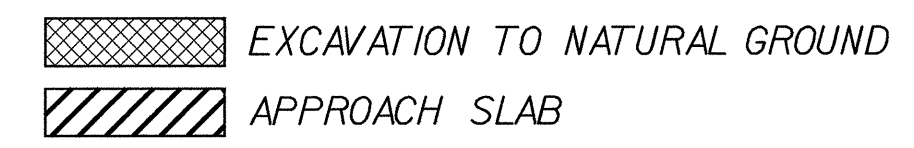
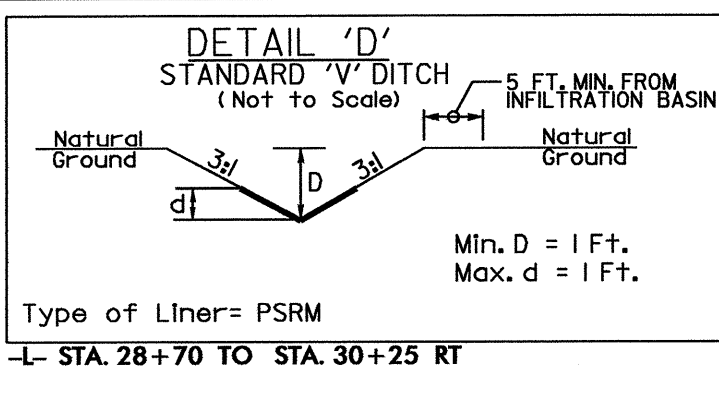
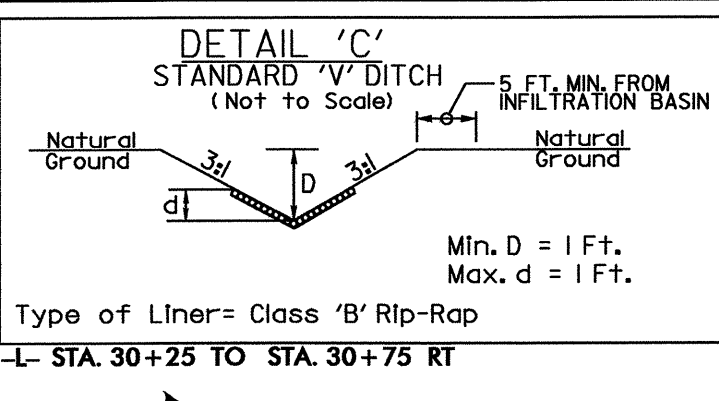
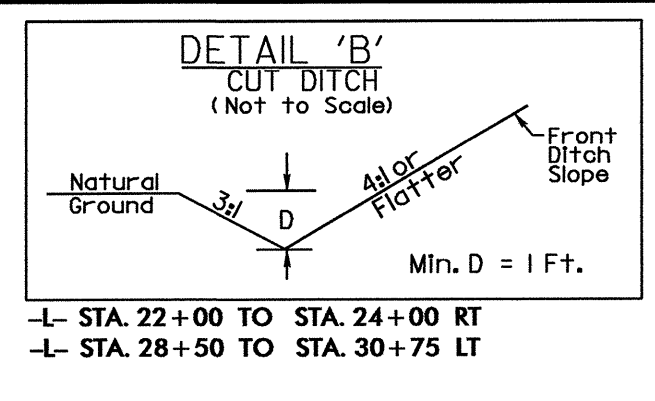
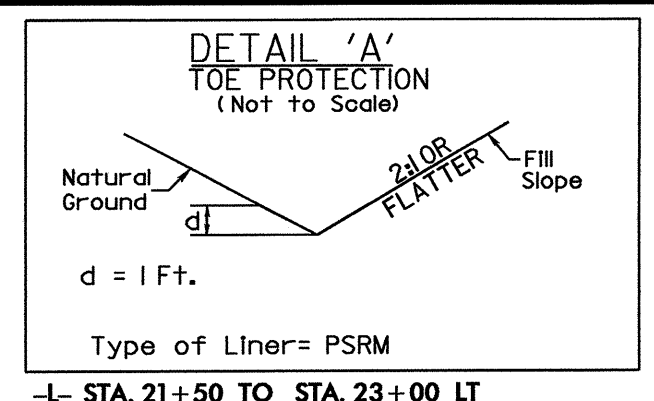
BAFFLE MATERIAL SHALL BE SECURED TO THE BOTTOM AND SIDES OF BASIN USING 12" LANDSCAPE STAPLES

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PROJECT REFERENCE NO. B-4031	SHEET NO. EC-4/CONST.4
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

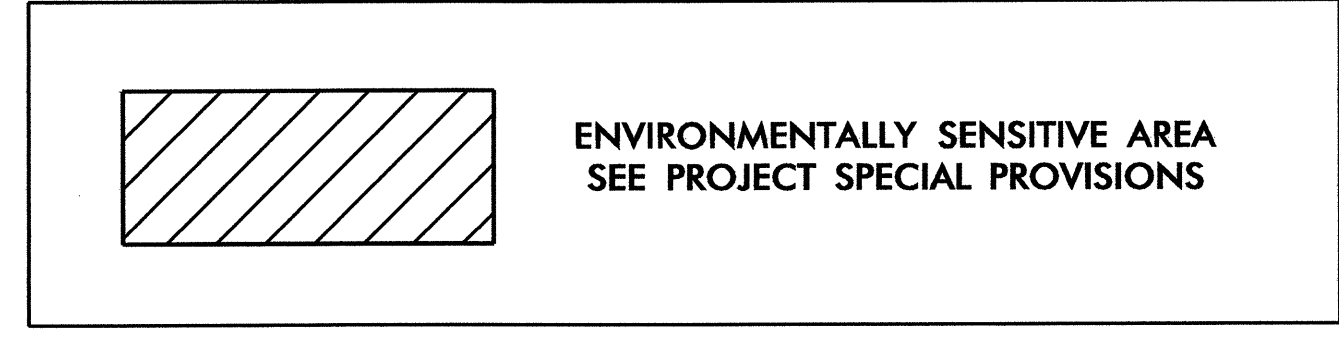
FOR -L- PROFILE SEE SHEET 5



CLEARING AND GRUBBING EROSION CONTROL FOR CONSTRUCTION SHEET 4

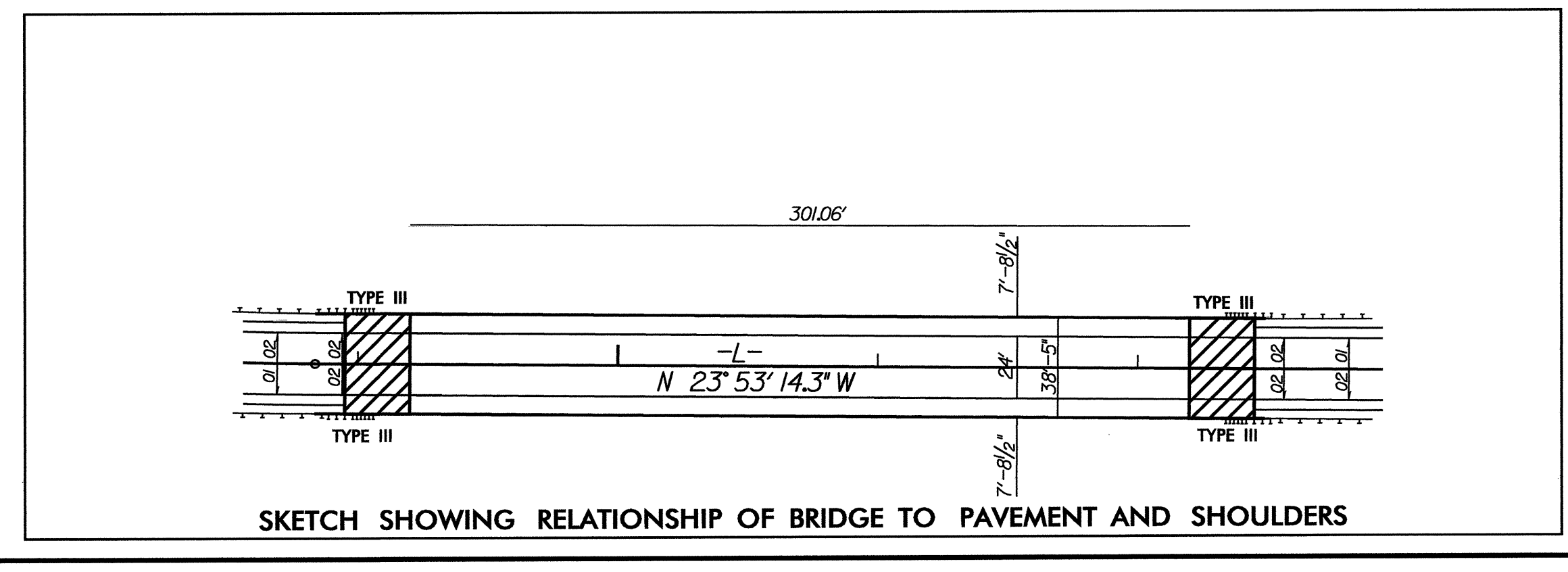
NOTE: PLACE TEMPORARY ROCK SEDIMENT DAMS TYPE - B AND TEMPORARY ROCK SILT CHECKS TYPE - A AT DRAINAGE OUTLETS.

NOTE: UTILIZE TEMPORARY ROCK SEDIMENT DAM TYPE - B AND TEMPORARY ROCK SILT CHECK TYPE - A AS STILLING BASIN WHERE APPLICABLE.



-L-		
PI Sta 22+30.89	PI Sta 30+28.06	PI Sta 33+74.16
$\Delta = 13^{\circ} 01' 53.0''$ (LT)	$\Delta = 13^{\circ} 06' 45.9''$ (RT)	$\Delta = 15^{\circ} 17' 32.3''$ (RT)
D = 4' 15" 00.0"	D = 4' 14" 38.9"	D = 4' 00" 00.0"
L = 306.62'	L = 308.96'	L = 382.31'
T = 153.98'	T = 155.16'	T = 192.30'
**R = 1,348.14'	**R = 1,350.00'	**R = 1,432.39'
SE = 06	SE = 06	SE = 06
DS = 60	DS = 60	DS = 60

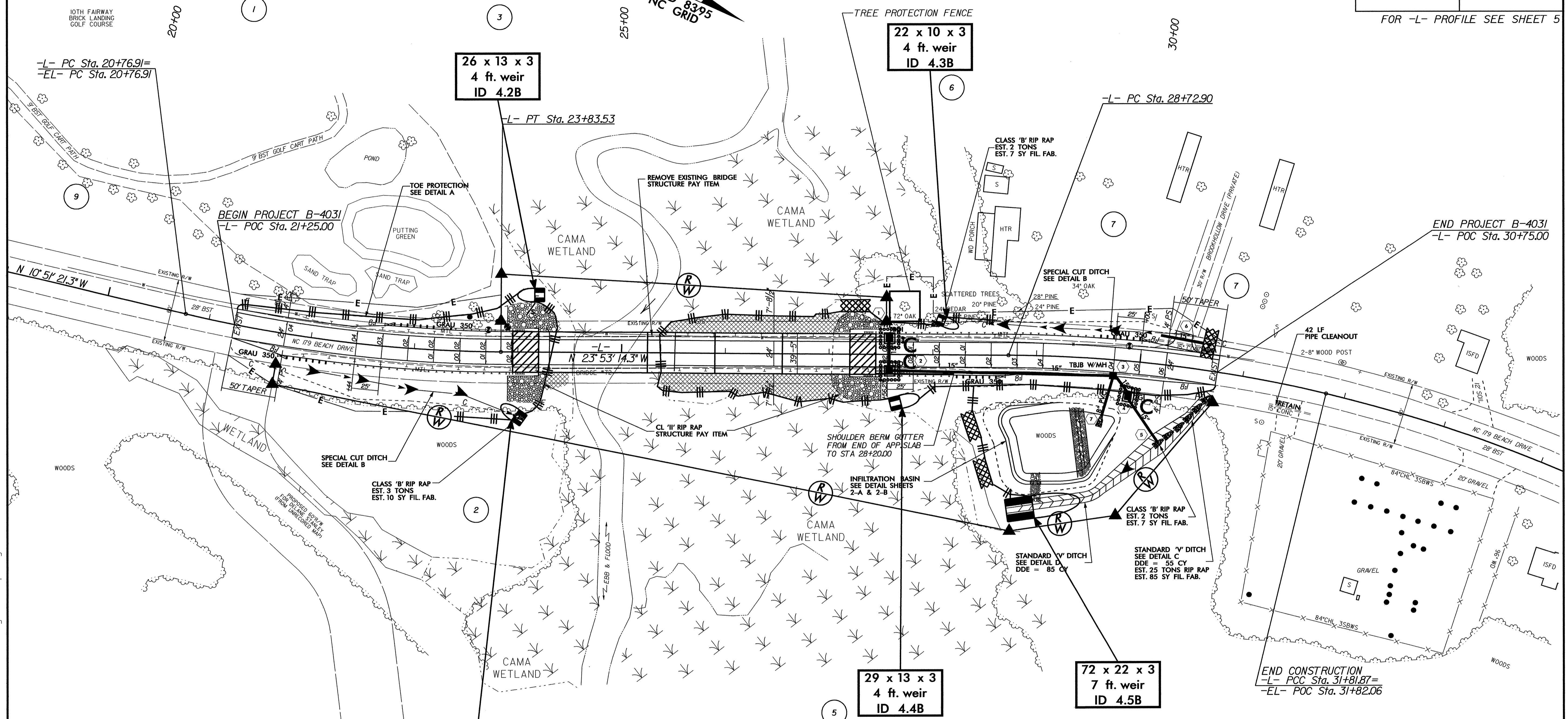
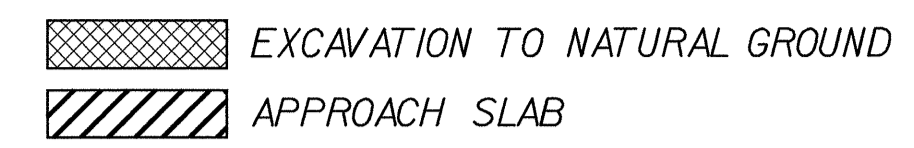
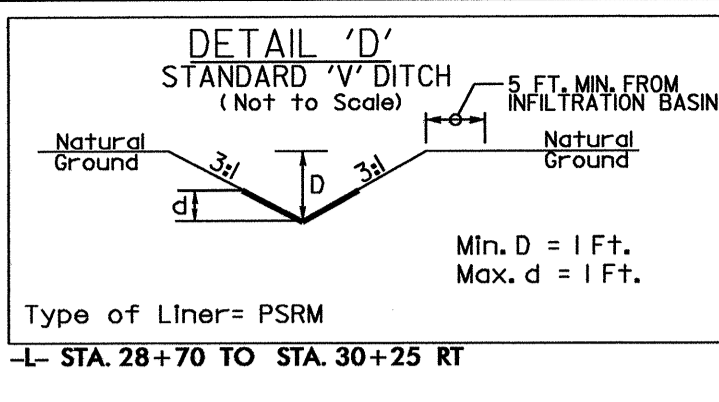
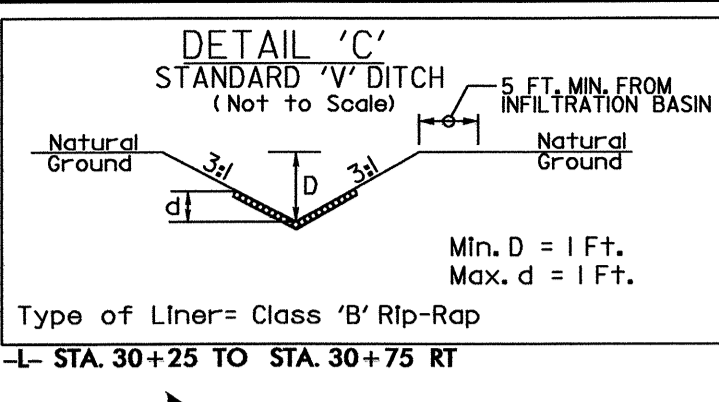
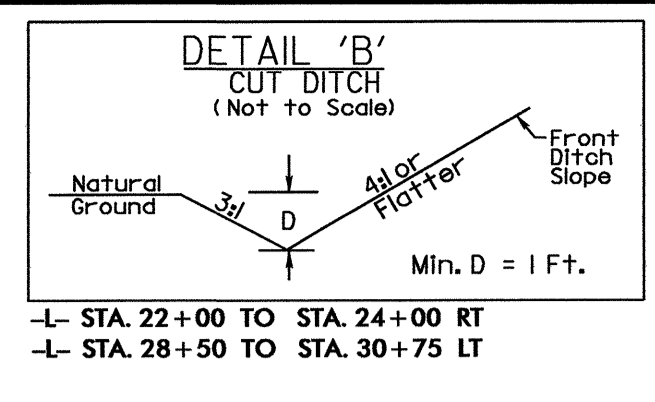
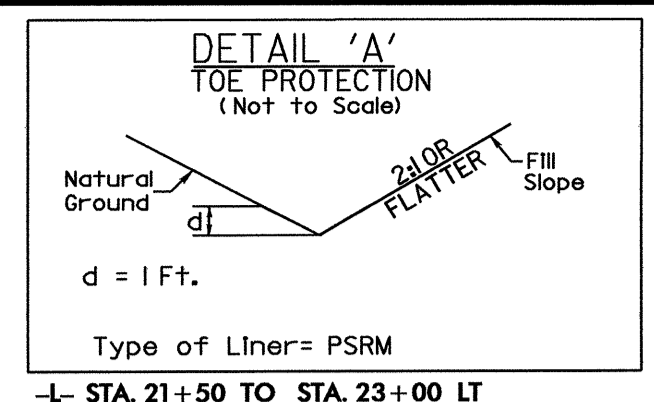
** DESIGN EXCEPTION - HORIZONTAL CURVE RADIUS



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PROJECT REFERENCE NO. B-4031	SHEET NO. EC-5/CONST.4
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

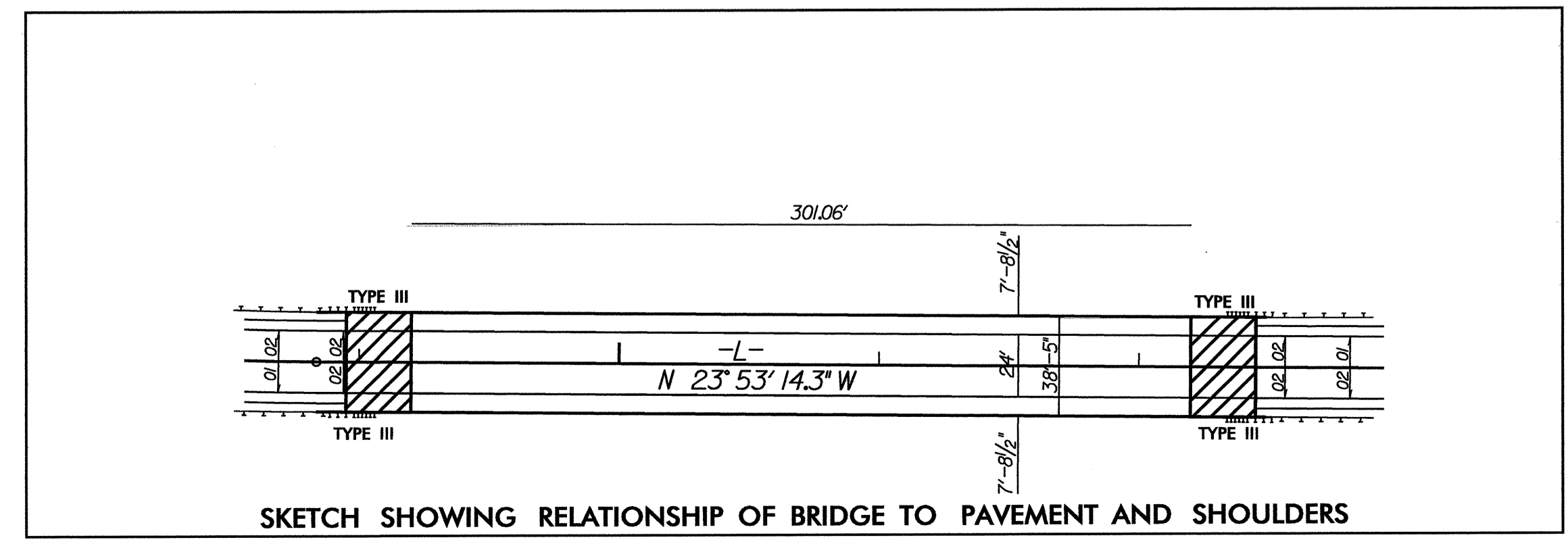
FOR -L- PROFILE SEE SHEET 5



NOTE:
 UTILIZE TEMPORARY ROCK SEDIMENT DAM TYPE - B
 AND TEMPORARY ROCK SILT CHECK TYPE - A
 AS STILLING BASIN WHERE APPLICABLE.

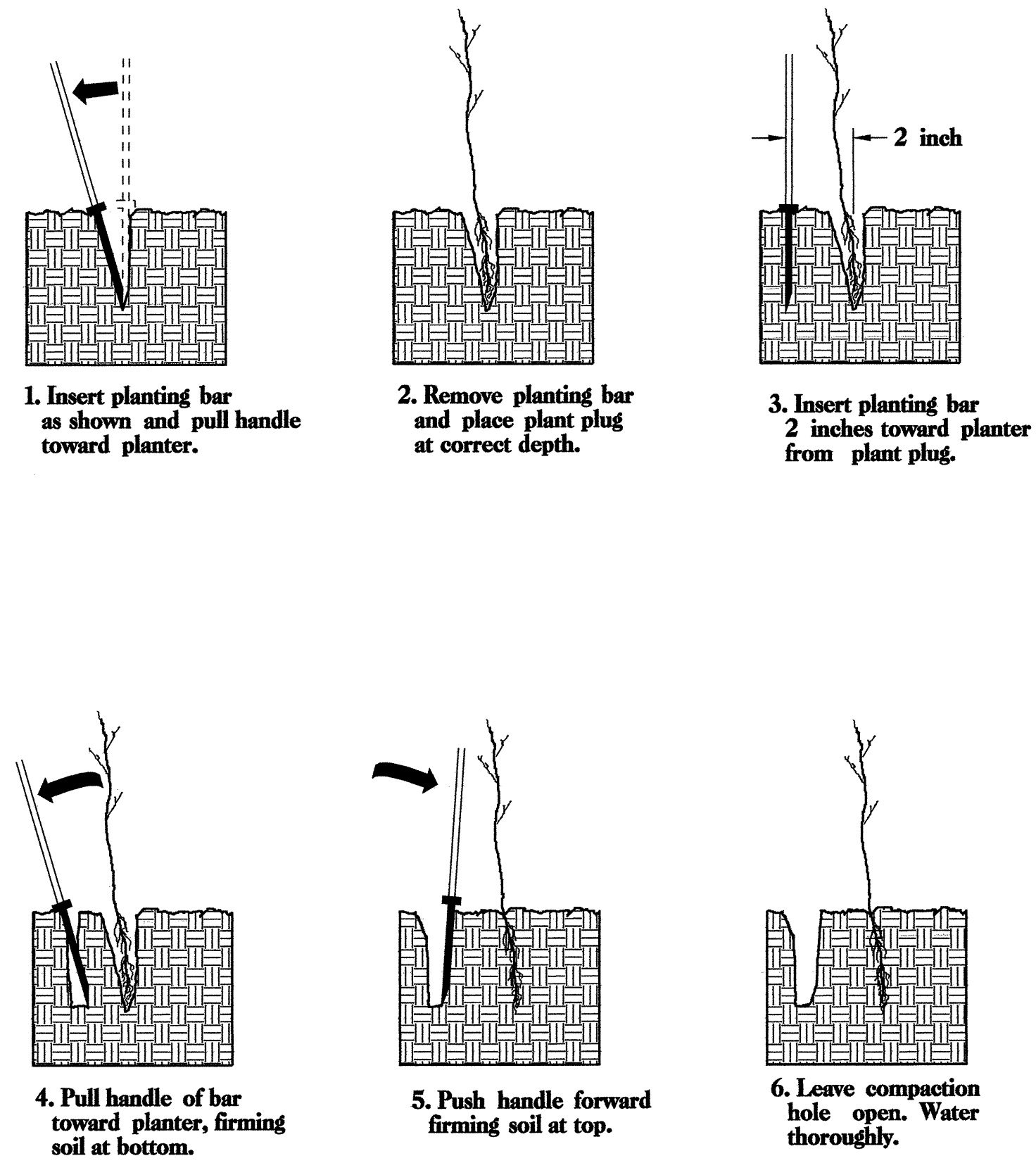
-L-		
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SE = 06	SE = 06	SE = 06
DS = 60	DS = 60	DS = 60

** DESIGN EXCEPTION - HORIZONTAL CURVE RADIUS



PLANTING DETAILS

DIBBLE PLANTING METHOD USING THE KBC PLANTING BAR



PLANTING NOTES:

PLANTING BAG
During planting, plant plugs shall be kept in a moist canvas bag or similar container to prevent the root systems from drying.



KBC PLANTING BAR
Planting bar shall have a blade with a triangular cross section, and shall be 12 inches long, 4 inches wide and 1 inch thick at center.



WETLAND GRASS PLANTING

- WETLAND GRASS SPECIES SHALL BE PLANTED 2 FT. TO 4 FT. ON CENTER, RANDOM SPACING, AVERAGING 3 FT. ON CENTER, APPROXIMATELY 4840 PLANTS PER ACRE.

WETLAND GRASS PLANTING

MIXTURE, TYPE, SIZE, AND FURNISH SHALL CONFORM TO THE FOLLOWING:

40% SPARTINA ALTERNIFLORA	SMOOTH CORDGRASS	2 in PEAT POT
30% SPARTINA PATENS	SALTMEADOW GRASS	2 in PEAT POT
30% JUNCUS ROEMERIANUS	BLACK NEEDLE RUSH	2 in PEAT POT

WETLAND GRASS PLANTING DETAIL SHEET

N.C.D.O.T. - ROADSIDE ENVIRONMENTAL UNIT