

**TIP PROJECT: B-4402**

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

**LOCATION: BRIDGE #7 OVER TICKLE CREEK ON SR 1504**

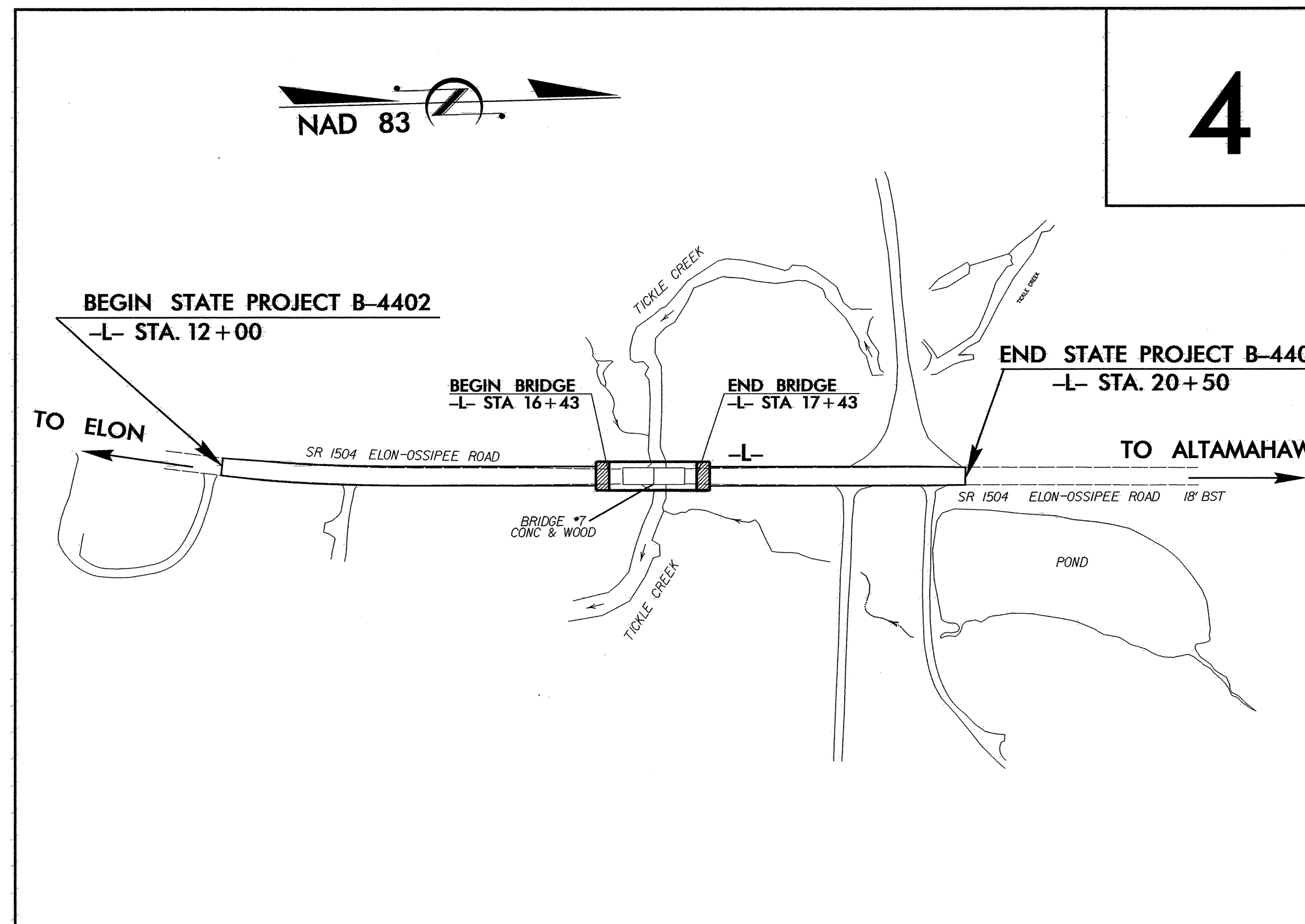
**TYPE OF WORK: GRADING, DRAINAGE, PAVING AND STRUCTURE**

STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	B-4402	EC-1	
STATE PROJ. NO.	F.A. PROJ. NO.	DESCRIPTION	

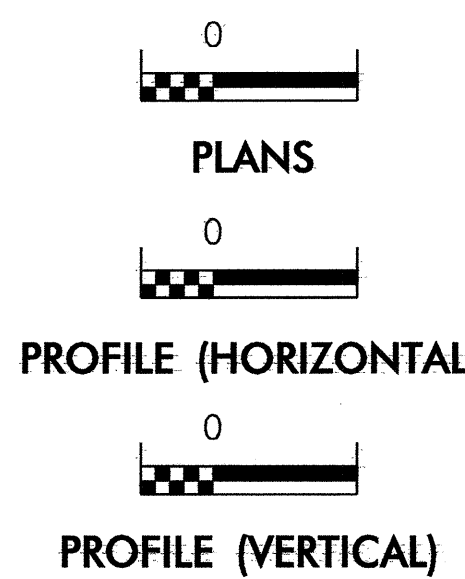
**EROSION AND SEDIMENT CONTROL MEASURES**

Std. #	Description	Symbol
1630.05	Temporary Silt Ditch.....	TD
1630.05	Temporary Diversion.....	TD
1605.01	Temporary Silt Fence.....	
1606.01	Special Sediment Control Fence.....	▲▲▲▲▲▲▲▲
1622.01	Temporary Berms and Slope Drains.....	—▲—▲—▲—▲—
1630.01	Riser Basin.....	○
	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.....	▭
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.**



**GRAPHIC SCALE**



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**

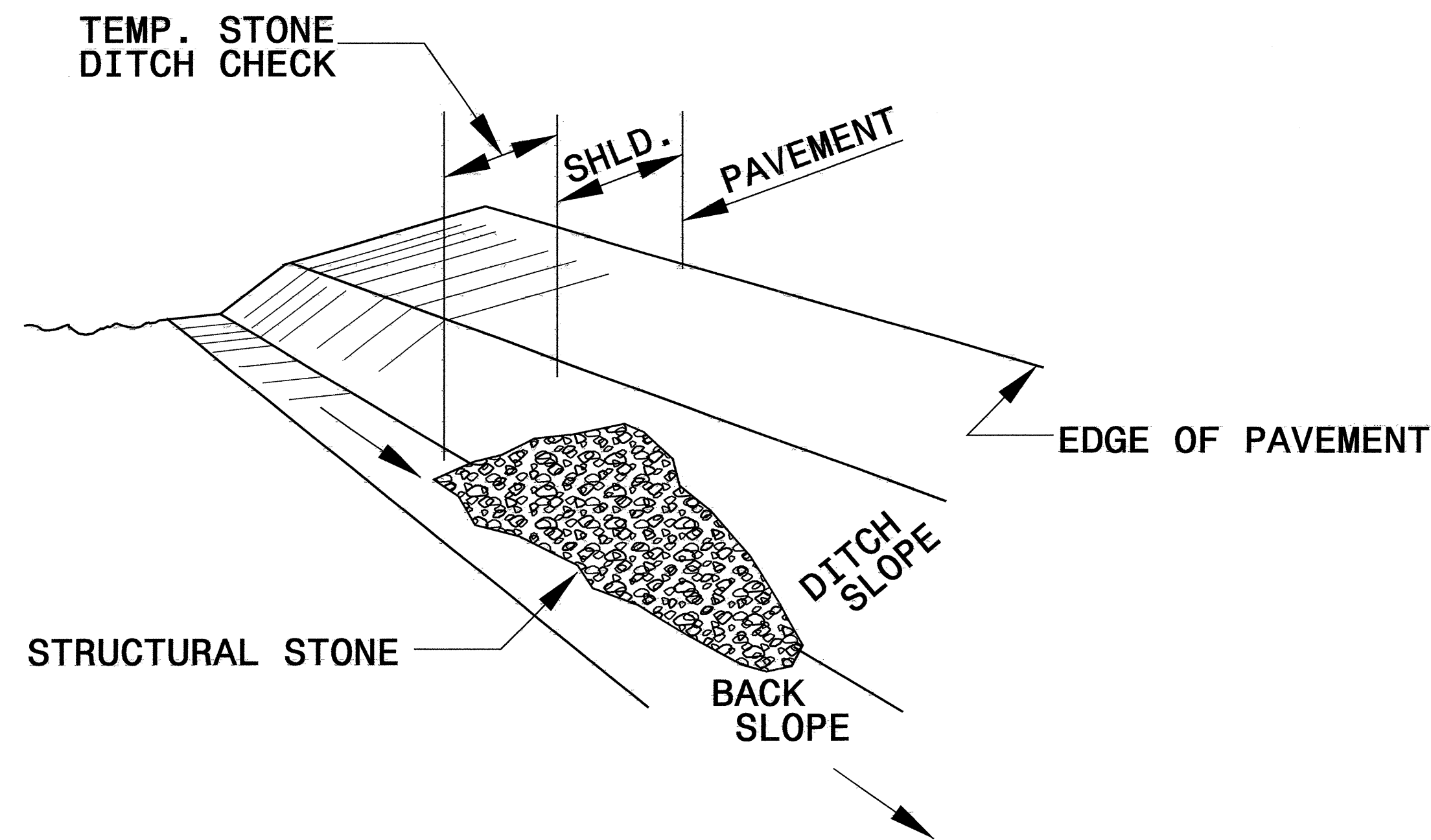
**Roadway Standard Drawings**

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  |
| 1606.01 Special Sediment Control Fence   | 1633.01 Temporary Rock Silt Check Type A |
| 1607.01 Gravel Construction Entrance     |  |
| 1622.01 Temporary Berms and Slope Drains |  |
| 1630.05 Temporary Diversion              |  |

PROJECT REFERENCE NO. B-4402	SHEET NO. EC-2
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

# TEMPORARY ROCK SILT CHECK TYPE 'B' DETAIL

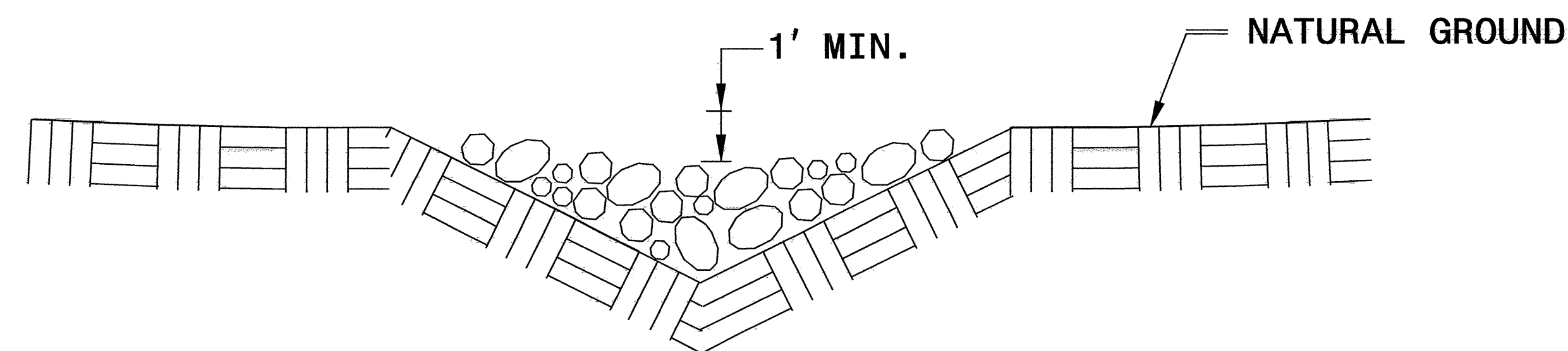


**ISOMETRIC VIEW**

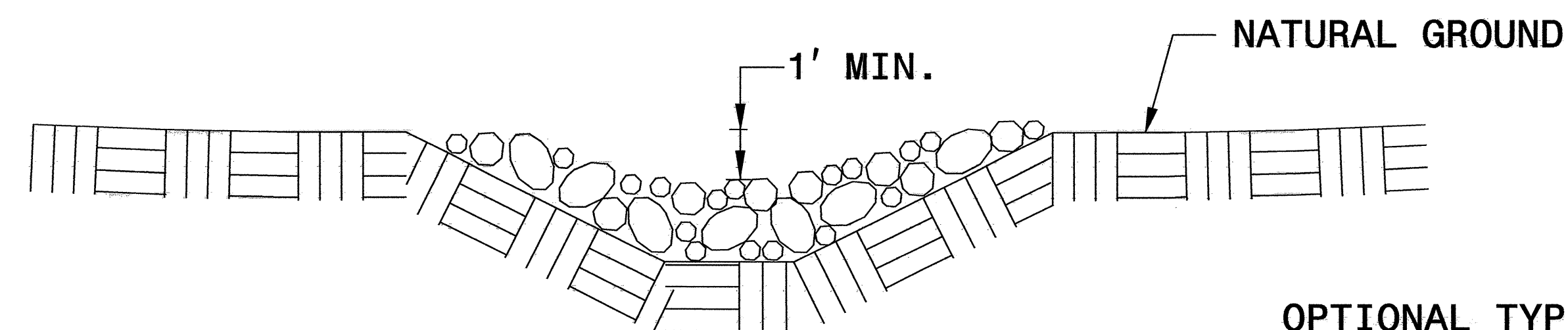
**NOTES:**

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

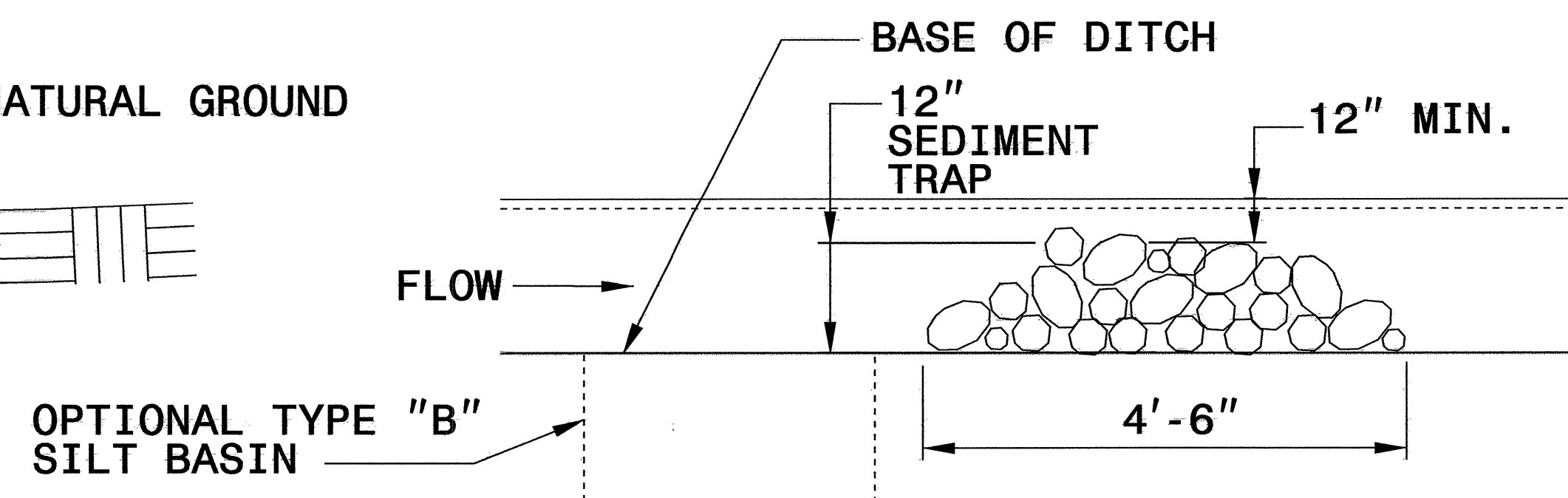
THE ENGINEER MAY DIRECT THE OPTION OF CLASS "A" STONE FOR SITES HAVING LESS THAN ONE (1) ACRE DRAINAGE AREA AND A DITCH GRADE LESS THAN 3%.



**CROSS SECTION VEE DITCH**



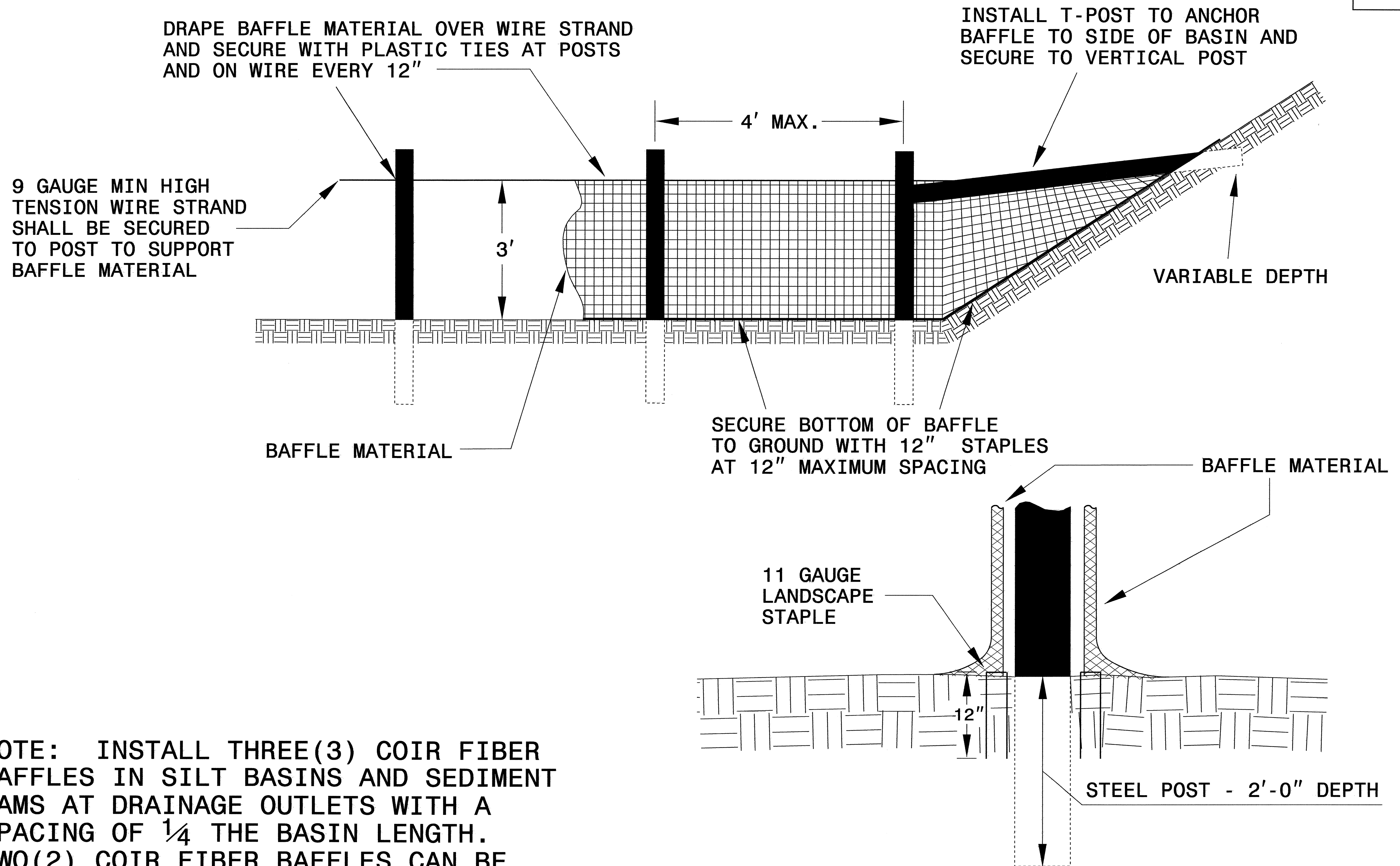
**CROSS SECTION TRAPEZOIDAL DITCH**



**ELEVATION VIEW**

PROJECT REFERENCE NO. B-4402	SHEET NO. EC-2A
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

# COIR FIBER BAFFLE DETAIL



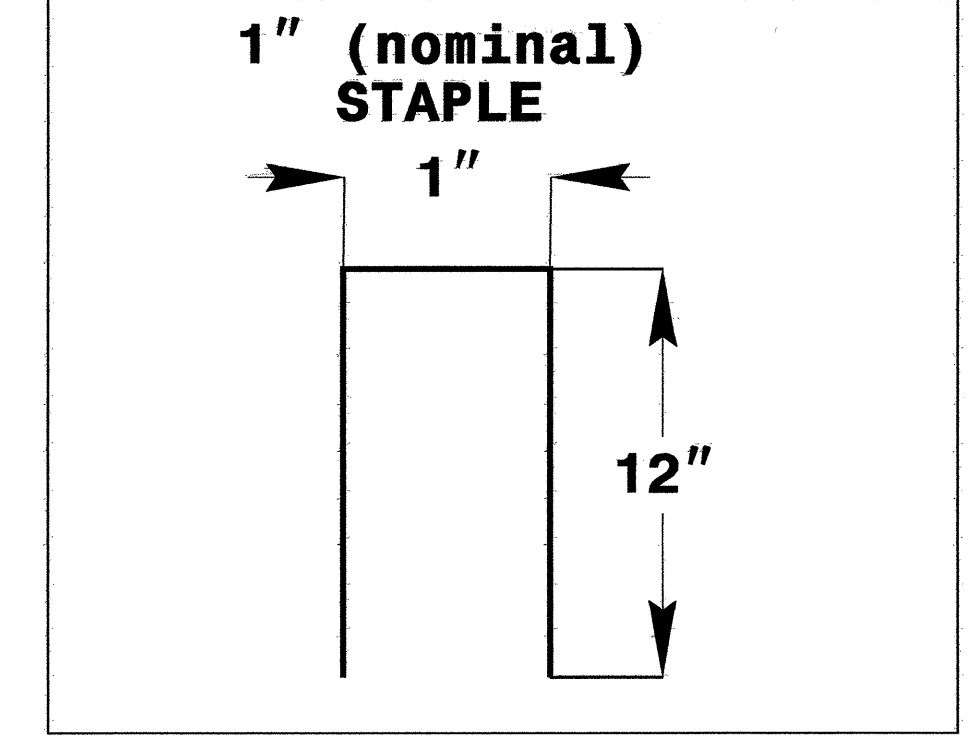
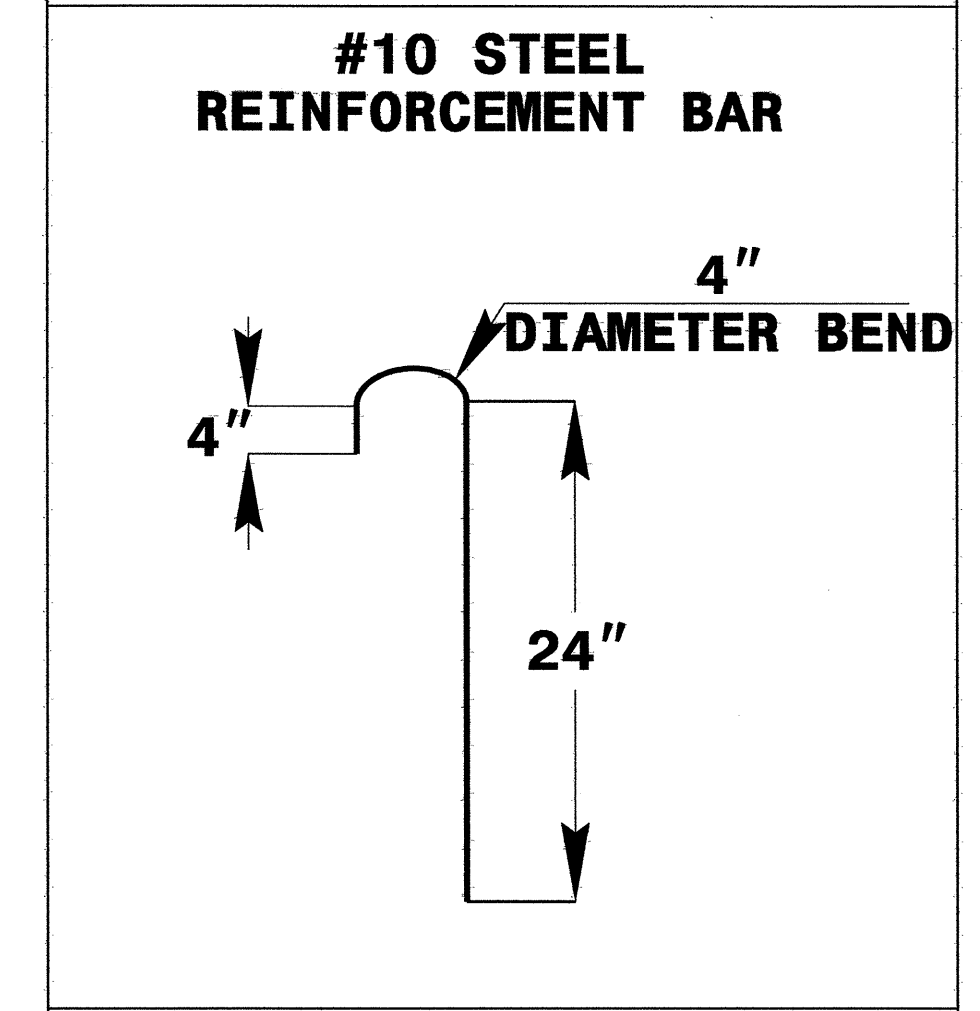
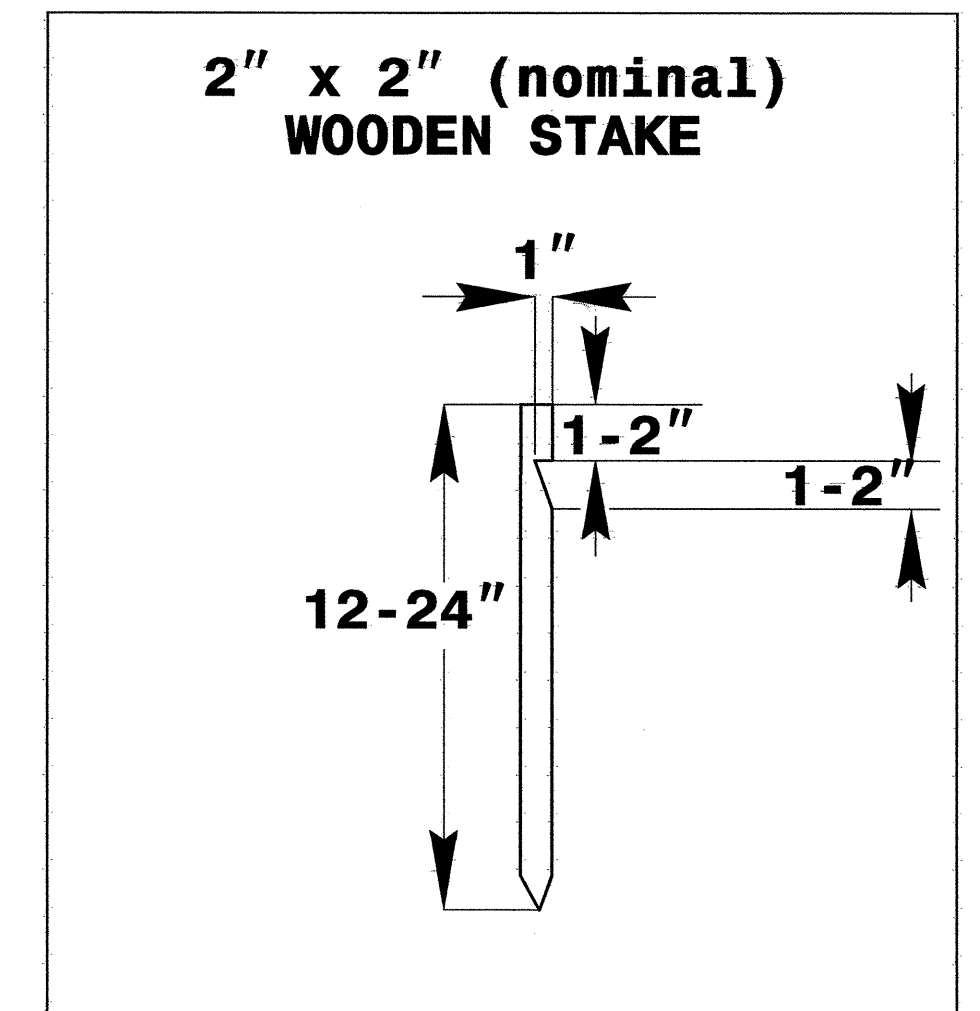
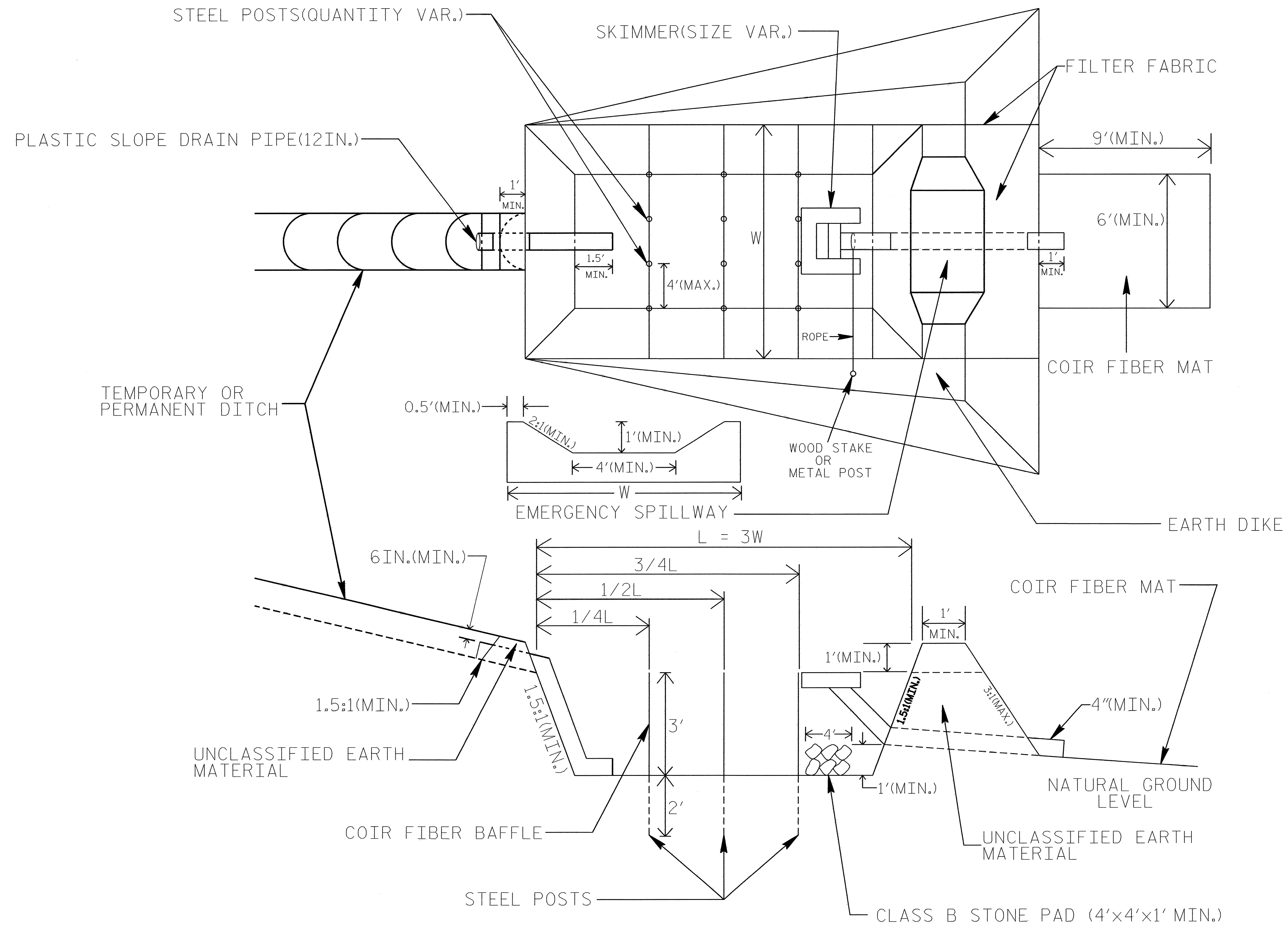
NOTE: INSTALL THREE(3) COIR FIBER BAFFLES IN SILT BASINS AND SEDIMENT DAMS AT DRAINAGE OUTLETS WITH A SPACING OF  $\frac{1}{4}$  THE BASIN LENGTH. TWO(2) COIR FIBER BAFFLES CAN BE INSTALLED IN SILT BASINS AND DAMS LESS THAN 20 FT. IN LENGTH WITH A SPACING OF  $\frac{1}{3}$  THE BASIN LENGTH.

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



# SKIMMER BASIN WITH BAFFLES DETAIL

PROJECT REFERENCE NO. B-4402	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





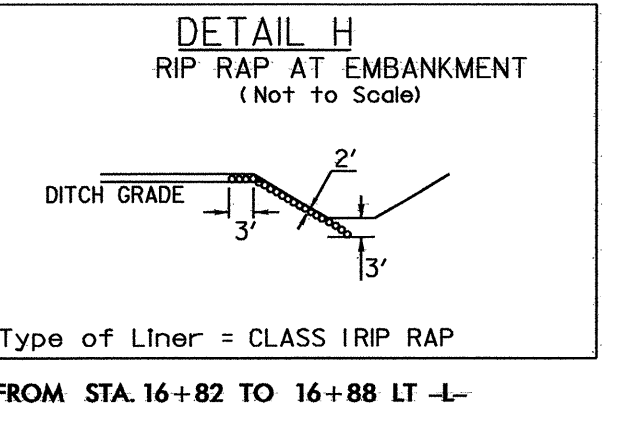
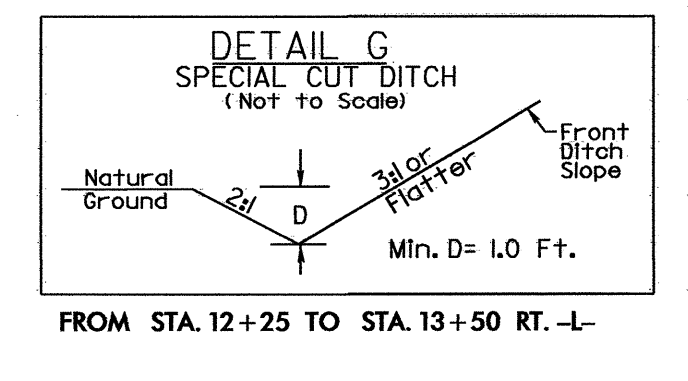
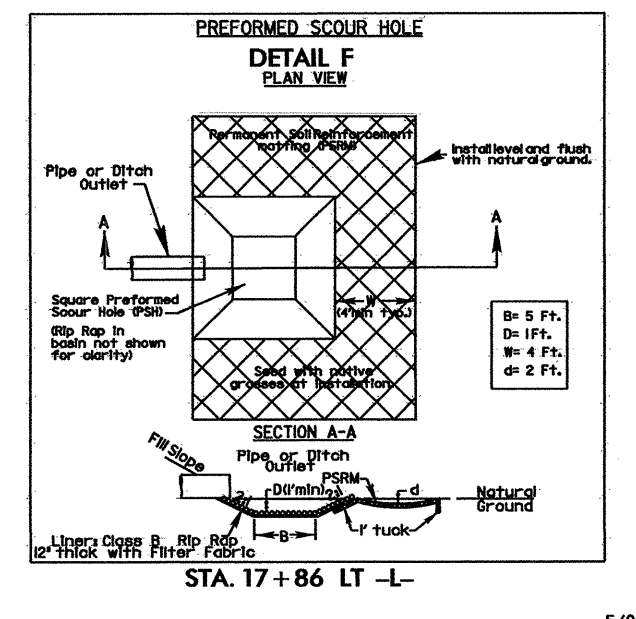
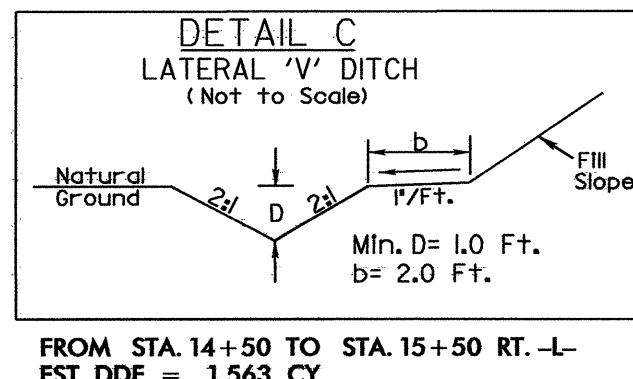
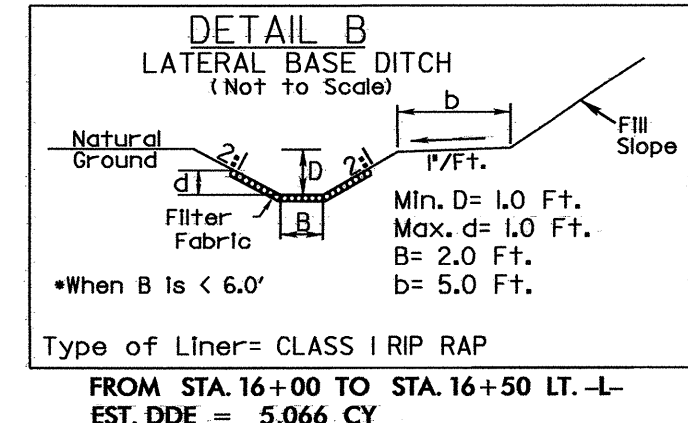
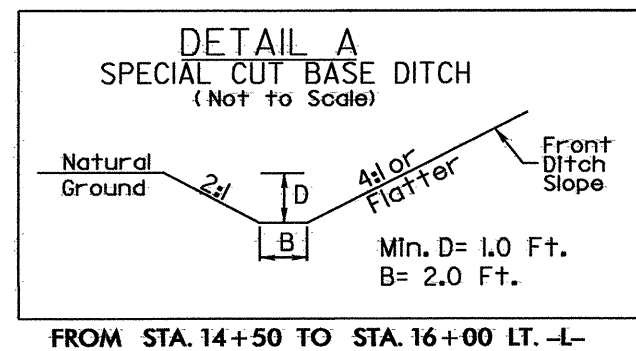




8/17/99

NOTE:  
UTILIZE SKIMMER BASIN  
AS STILLING BASIN WHERE APPLICABLE.

PROJECT REFERENCE NO. B-4402	SHEET NO. EC-5/CONST.4
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER



DETAIL I  
STABILIZE WITH RIP RAP PAD  
(Not to Scale)

EXCAVATION  
PROPOSED BRIDGE ABUTMENT  
EXISTING BRIDGE ABUTMENT  
TOP OF BANK

Type of LIner = Class II Rip-Rap

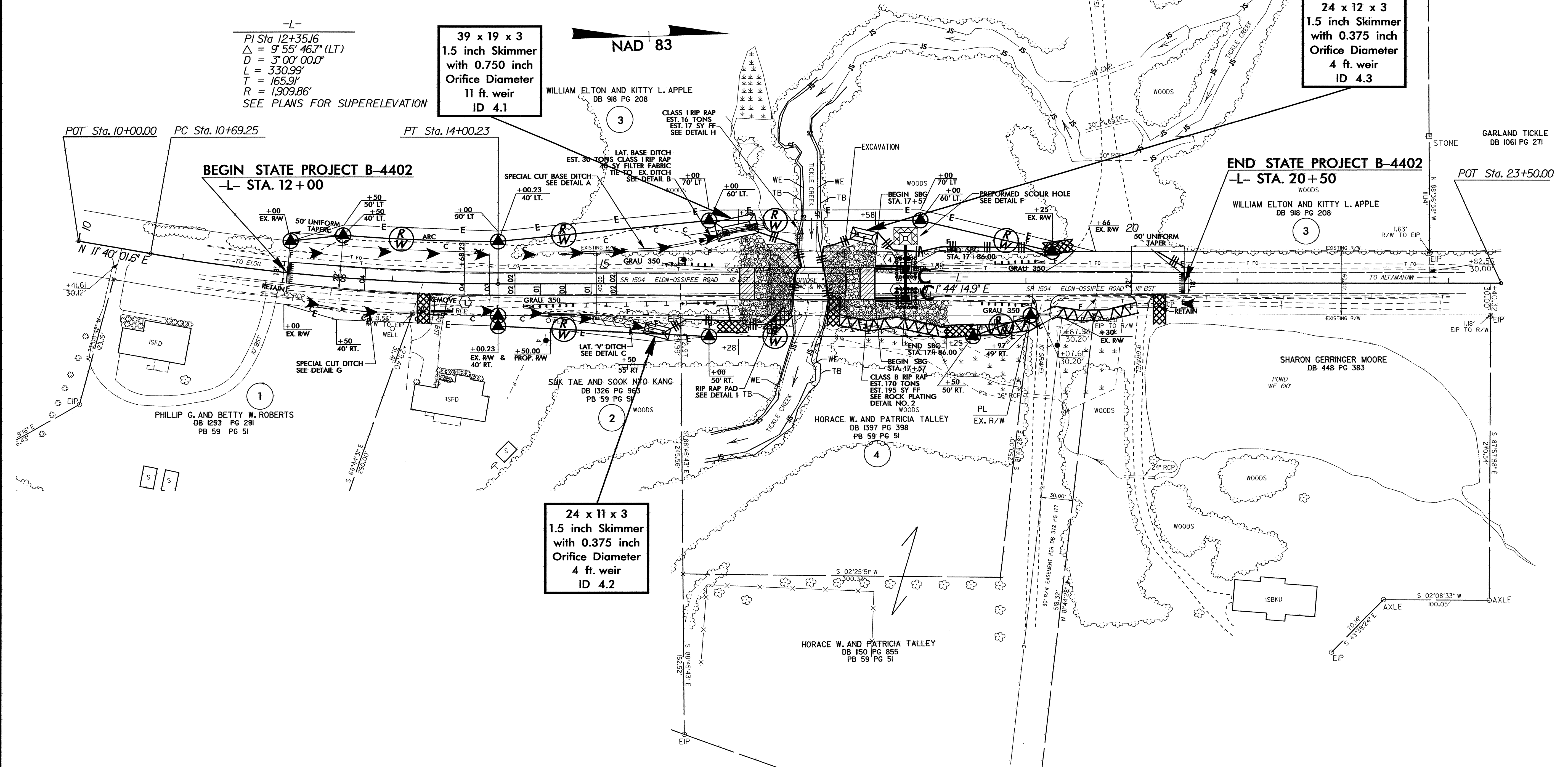
LINE	STA. TO STA.	RIP RAP (TONS)	FILTER FABRIC (YD <sup>2</sup> )
-L-	16+56 - 16+81 LT.	155	155
-L-	17+08 - 17+30 LT.	120	125

-L-  
PI Sta. 12+35.16  
 $\Delta = 9^{\circ} 55' 46.7''$  (LT)  
D = 3' 00" 00.0"  
L = 330.99'  
T = 165.91'  
R = 1,909.86'  
SEE PLANS FOR SUPERELEVATION

39 x 19 x 3  
1.5 inch Skimmer  
with 0.750 inch  
Orifice Diameter  
11 ft. weir  
ID 4.1

24 x 12 x 3  
1.5 inch Skimmer  
with 0.375 inch  
Orifice Diameter  
4 ft. weir  
ID 4.3

24 x 11 x 3  
1.5 inch Skimmer  
with 0.375 inch  
Orifice Diameter  
4 ft. weir  
ID 4.2



REVISIONS

22-SEP-2008 10:40  
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