

**TIP PROJECT: B-3337**

STATE OF NORTH CAROLINA  
DIVISION OF HIGHWAYS

---

PLAN FOR PROPOSED  
HIGHWAY EROSION CONTROL

---

**GUILFORD COUNTY**

**LOCATION: BRIDGE NO. 527 OVER NORTH BUFFALO  
CREEK ON SR 1001 (CHURCH ST)**

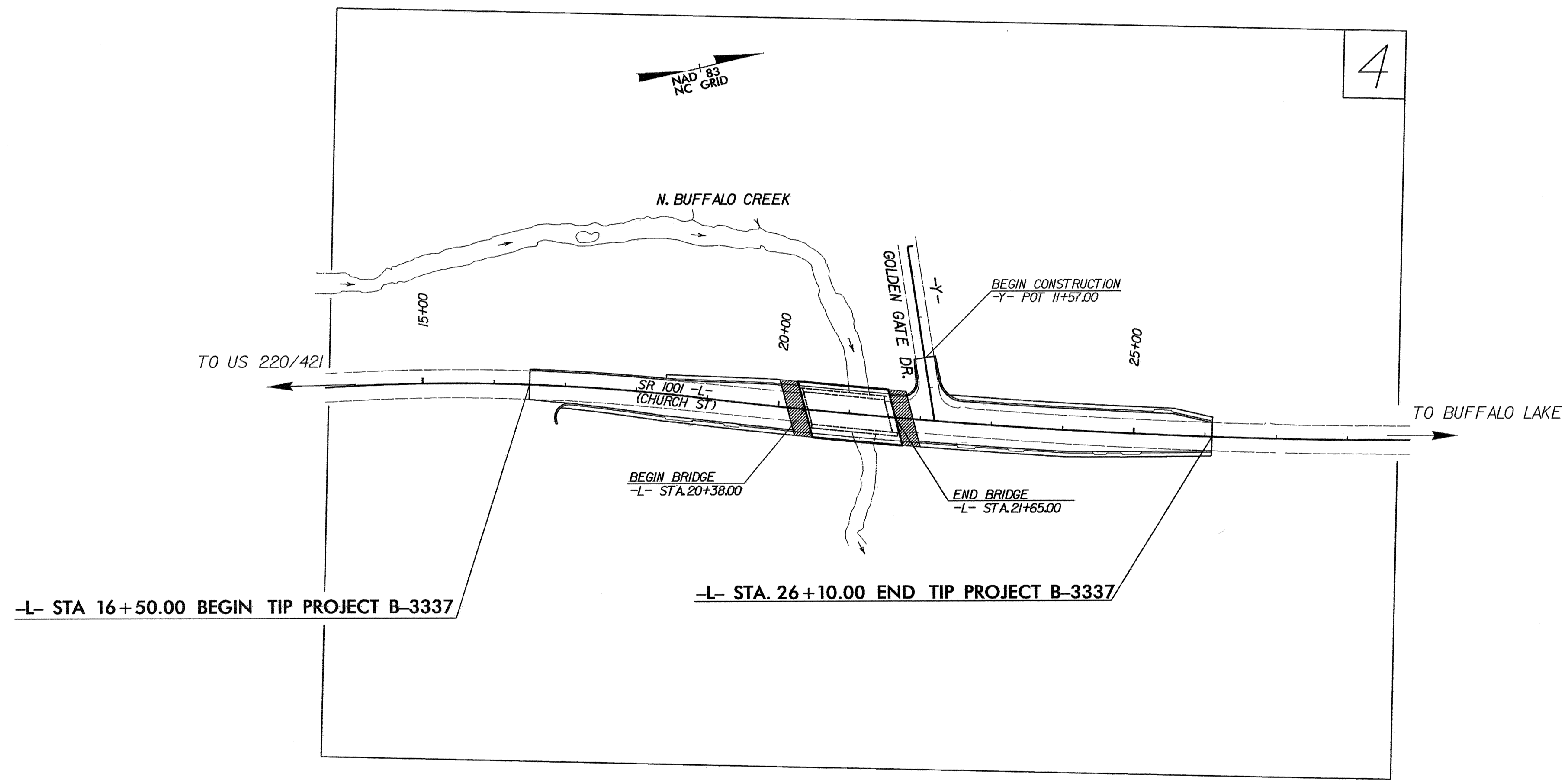
**TYPE OF WORK: GRADING, DRAINAGE, PAVING, SIGNALS, AND STRUCTURE**

STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	B-3337	EC-1	
STATE PROJ. NO.	F.A. PROJ. NO.	DESCRIPTION	

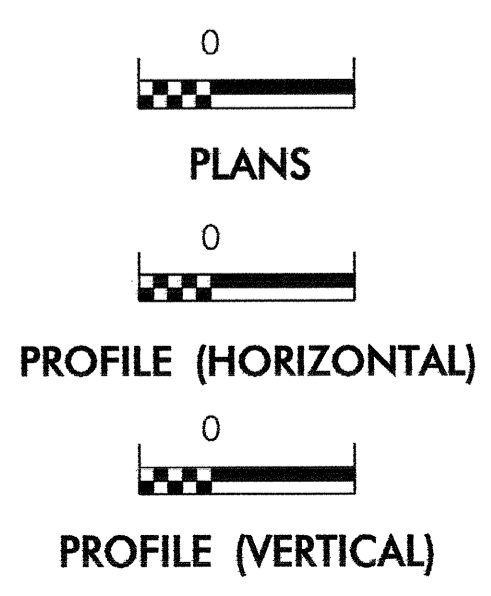
**EROSION AND SEDIMENT CONTROL MEASURES**

Std. #	Description	Symbol
	Streambank Reforestation.....	
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.....	
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.....	

**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

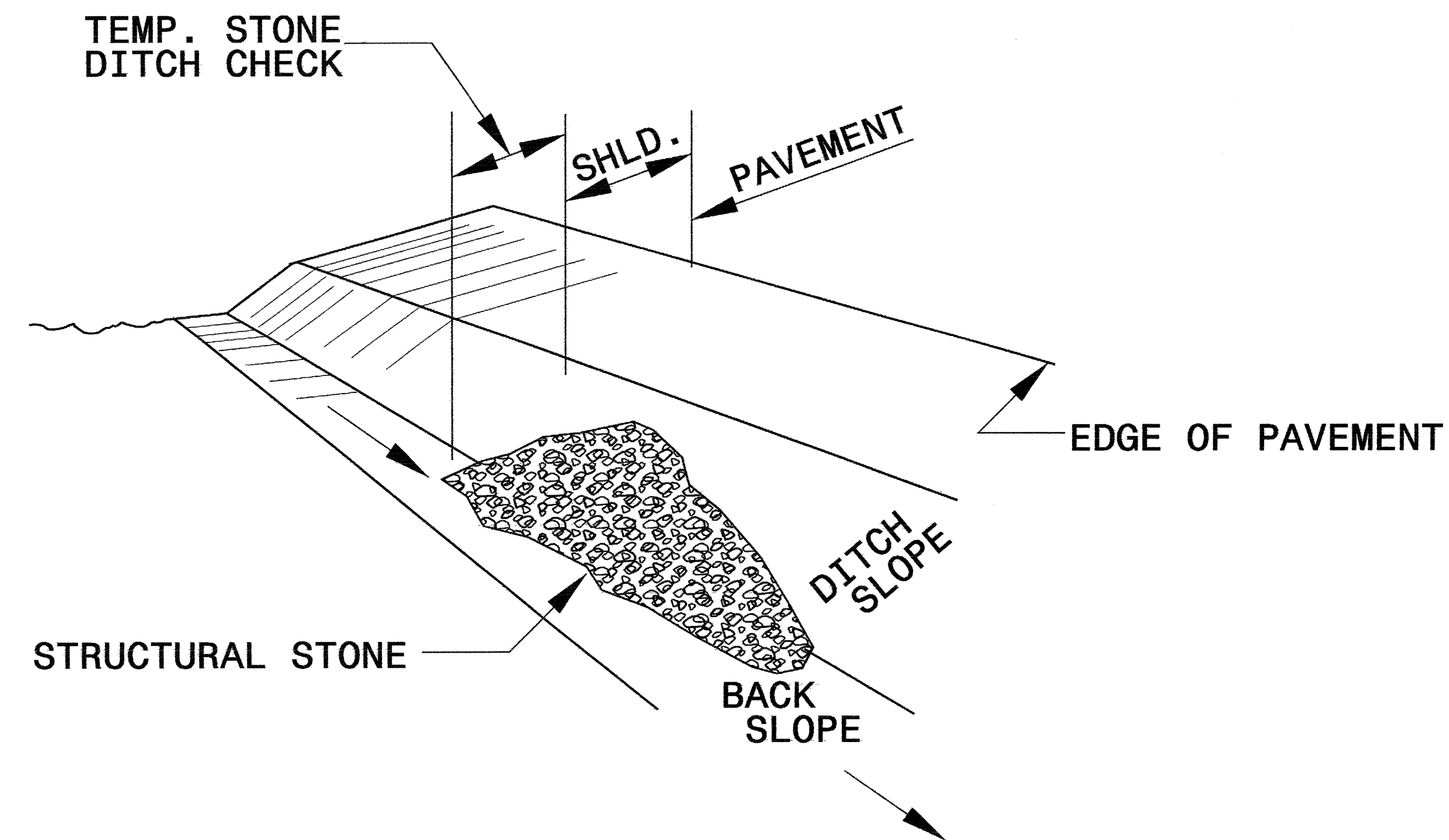
The following roadway english standards as appear in "Roadway Standard Drawings"- Roadway Design Unit - N. C. Department of Transportation - Raleigh, N. C., dated July 18, 2006 and the latest revision thereto are applicable to this project and by reference hereby are considered a part of these plans.

1605.01 Temporary Silt Fence	1630.06 Special Stilling Basin
1607.01 Gravel Construction Entrance	1632.03 Rock Inlet Sediment Trap Type C
	1633.01 Temporary Rock Silt Check Type A
	1634.02 Temporary Rock Sediment Dam Type B

18-MAY-2007 11:44  
projects-b-63337-ec-1\design\63337\_rdu\_sta.dgn

PROJECT REFERENCE NO. B-3337	SHEET NO. EC-2
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

# TEMPORARY ROCK SILT CHECK TYPE 'B' DETAIL

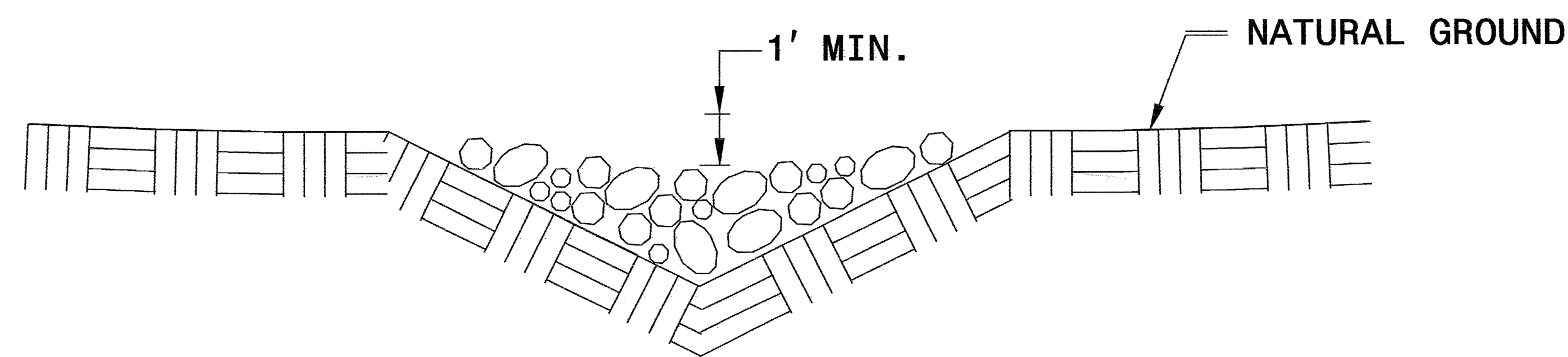


**ISOMETRIC VIEW**

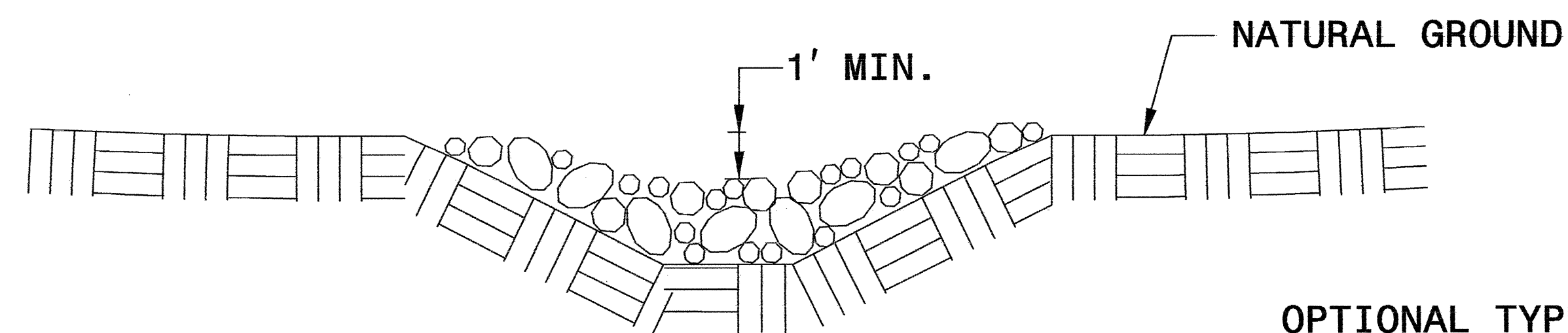
**NOTES:**

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

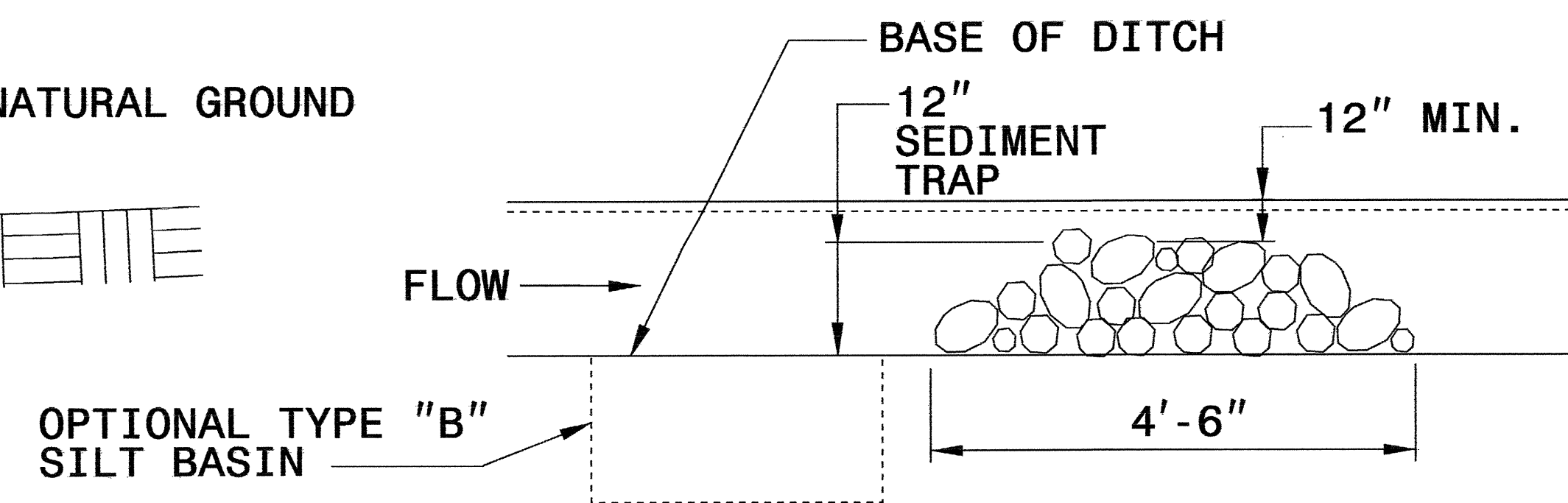
THE ENGINEER MAY DIRECT THE OPTION OF CLASS "A" STONE FOR SITES HAVING LESS THAN ONE (1) ACRE DRAINAGE AREA AND A DITCH GRADE LESS THAN 3%.



**CROSS SECTION  
VEE DITCH**



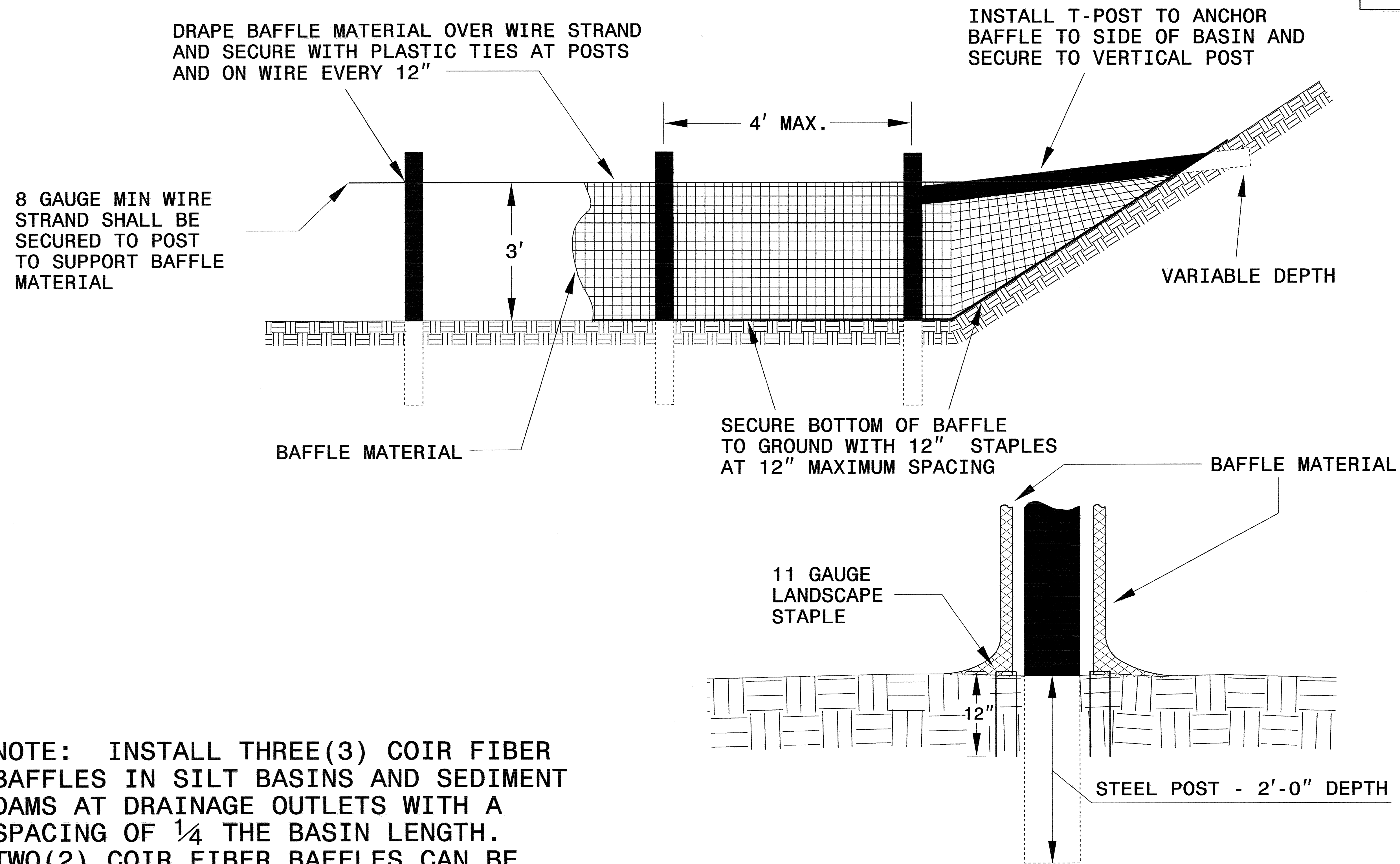
**CROSS SECTION  
TRAPEZOIDAL DITCH**



**ELEVATION VIEW**

PROJECT REFERENCE NO. B-3337	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.

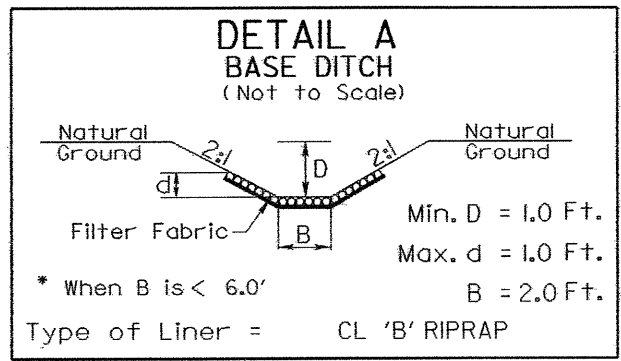
BAFFLE MATERIAL SHALL BE SECURED TO THE BOTTOM AND SIDES OF BASIN USING 12" LANDSCAPE STAPLES

8/17/99  
 18-MAY-2007 11:45  
 s:\xipr\c\ec\3337\environmental\design\3337\_rdy\_psh4.dgn  
 d:\3337\3337.dwg

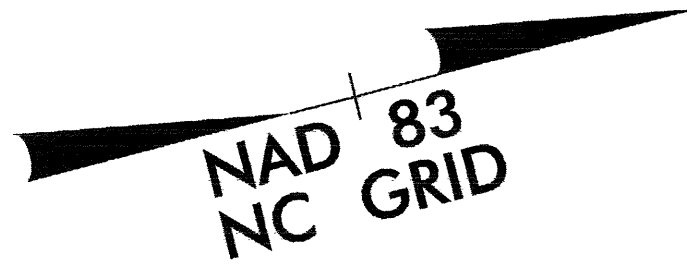
CLEARING AND GRUBBING  
 EROSION CONTROL FOR  
 CONSTRUCTION SHEET 4

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

NOTE:  
 UTILIZE SPECIAL STILLING BASIN  
 WHERE APPLICABLE.



-L- STA. 20+00 +/- LT  
 EST. DDE = 2 CY  
 EST. CL 'B' RIPRAP = 6 TONS  
 EST. FILTER FABRIC = 18 SY.  
 L = 20 FT +/-  
 MIN. SLOPE = 0.5%

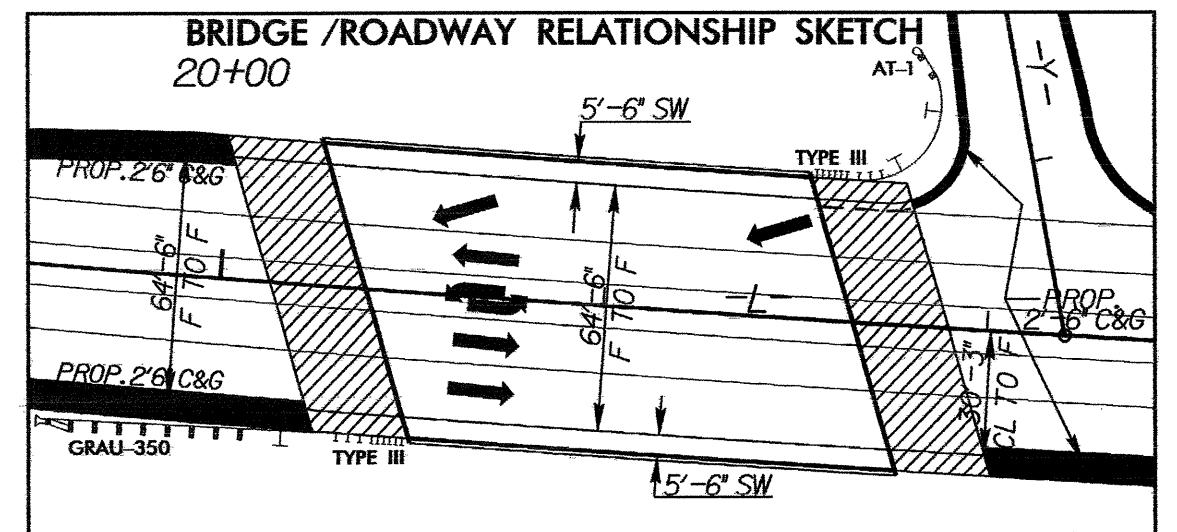
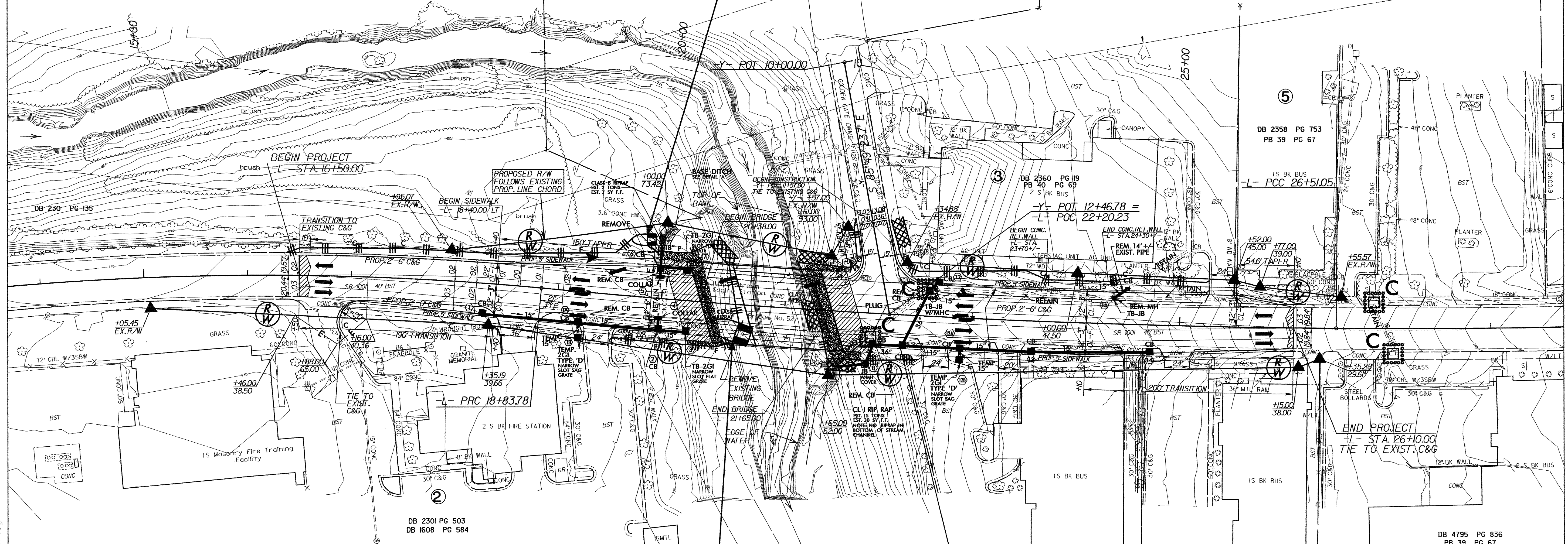


23 x 11 x 3  
 4' weir  
 ID 4.1

DB 3423 PG 349

**DRAINAGE NOTES**  
 1. PROPOSED AND TEMPORARY DRAINAGE ALONG THE RIGHT SIDE OF -L- (CHURCH STREET) WILL BE CONSTRUCTED DURING PHASE I OF CONSTRUCTION.  
 2. TEMPORARY TRAFFIC BEARING STEEL PLATES SHALL BE UTILIZED TO COVER AND PROTECT DRAINAGE STRUCTURES LOCATED UNDER TEMPORARY WIDENING PAVEMENT DURING PHASE I OF CONSTRUCTION AND WHILE UNDER TRAFFIC DURING PHASE II CONSTRUCTION.  
 3. 2G1 GRATES LOCATED IN THE BRIDGE APPROACH SLAB ON THE RIGHT SIDE OF -L- SHALL BE TRAFFIC BEARING AND WELDED TO THE GRATE TO KEEP THEM IN PLACE WHILE UNDER TRAFFIC DURING PHASE II CONSTRUCTION.  
 4. ONCE TEMPORARY PAVEMENT IS NO LONGER NEEDED DURING PHASE II CONSTRUCTION, REMOVE TEMPORARY DRAINAGE AND COMPLETE CONSTRUCTION OF PROPOSED CATCH BASINS ALONG THE RIGHT SIDE OF -L-.

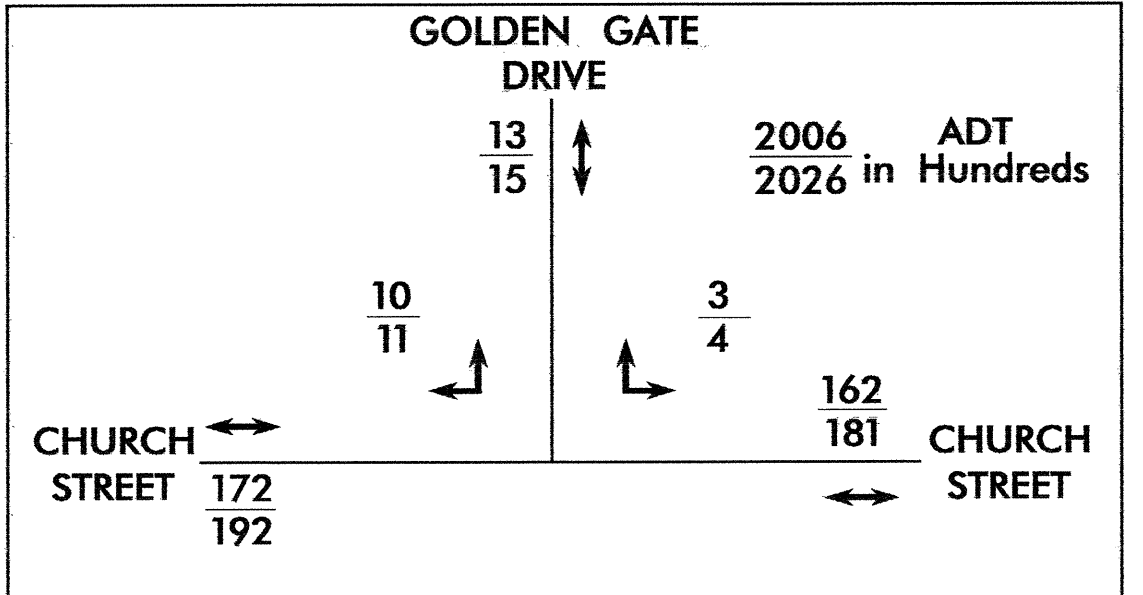
PROJECT REFERENCE NO. B-3337	SHEET NO. EC-3/CONST.4
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER



39 x 19 x 3  
 6' weir  
 ID 4.2

SEE SHEETS S-1 THRU S-55  
 FOR STRUCTURES PLANS

NOTE:  
 ALL DRAINAGE PIPES ARE  
 CLASS III REINFORCED CONCRETE,  
 UNLESS OTHERWISE NOTED.



-L-		
PI Sta 16+18.34	PI Sta 22+67.64	PI Sta 28+95.01
$\Delta = 10' 36'' 41.9''$ (RT)	$\Delta = 4' 53'' 04.5''$ (LT)	$\Delta = 3' 31'' 16.2''$ (LT)
$D = 1' 59'' 35.3''$	$D = 0' 38'' 11.8''$	$D = 0' 43'' 18.8''$
$L = 532.4'$	$L = 767.27'$	$L = 487.78'$
$T = 266.97'$	$T = 383.87'$	$T = 243.97'$
$R = 2,874.64'$	$R = 9,000.00'$	$R = 7,937.05'$
$SE = 0.03$	$SE = 0.02$	$SE = 0.02$
$Vd = 45$ MPH	$Vd = 50$ MPH	$Vd = 50$ MPH

SEE SHEET 5 FOR -L- PROFILE

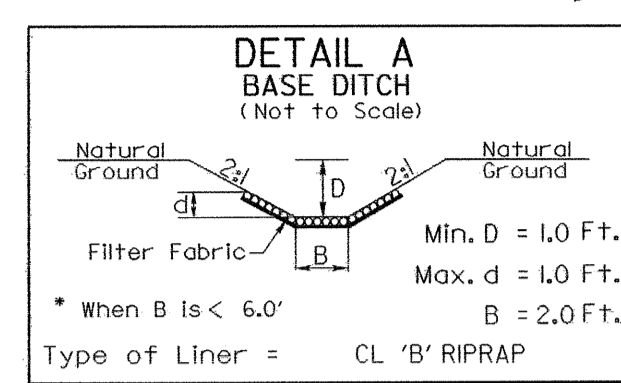
8/17/99

18-MAY-2007 13:27  
g:\tiprojects\33337\environmental\design\33337\_rdy\_psh4.dgn  
Richard

PROJECT REFERENCE NO.	SHEET NO.
B-3337	EC-4/CONST.4
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

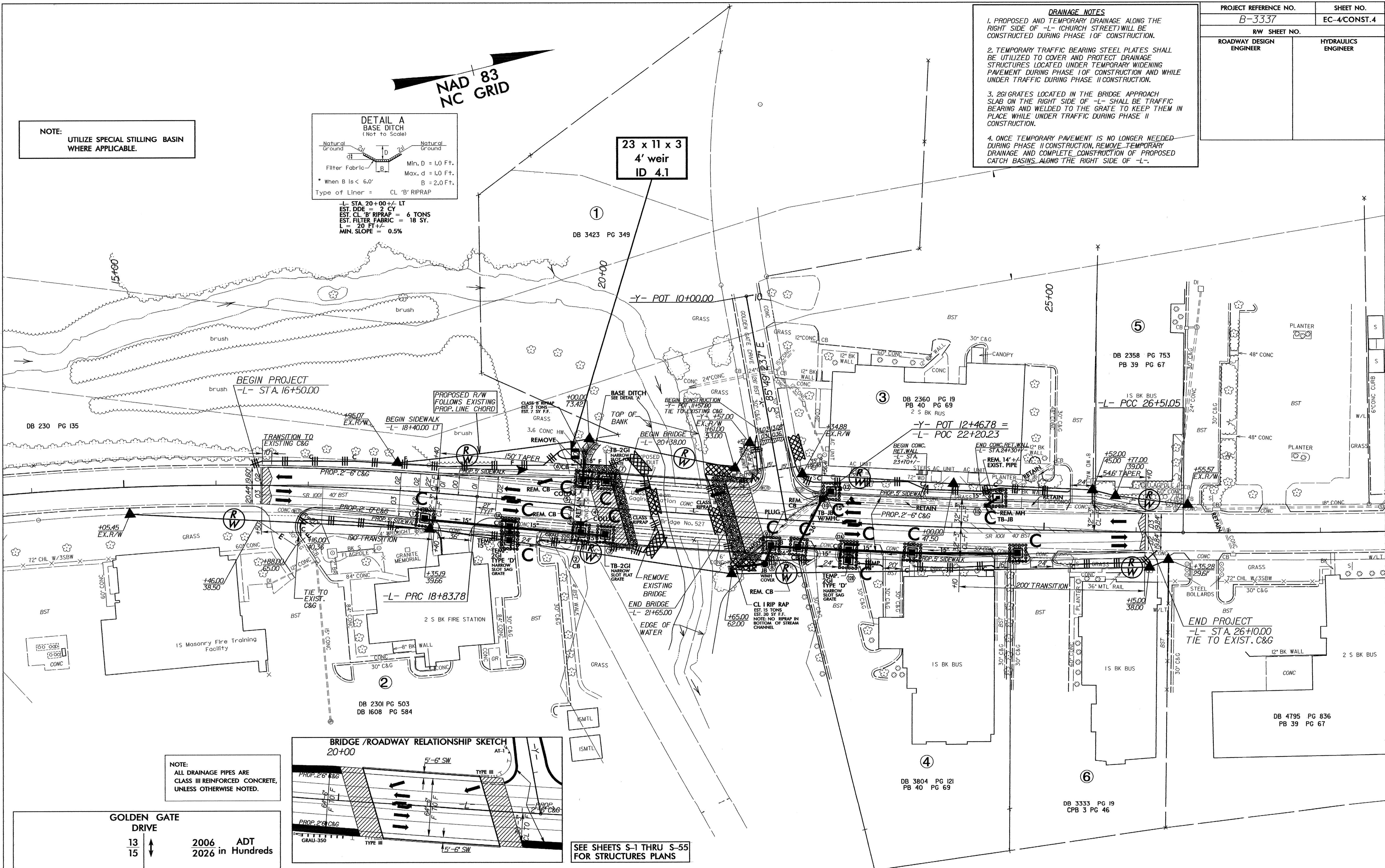
- DRAINAGE NOTES**
1. PROPOSED AND TEMPORARY DRAINAGE ALONG THE RIGHT SIDE OF -L- (CHURCH STREET) WILL BE CONSTRUCTED DURING PHASE I OF CONSTRUCTION.
  2. TEMPORARY TRAFFIC BEARING STEEL PLATES SHALL BE UTILIZED TO COVER AND PROTECT DRAINAGE STRUCTURES LOCATED UNDER TEMPORARY WIDENING PAVEMENT DURING PHASE I OF CONSTRUCTION AND WHILE UNDER TRAFFIC DURING PHASE II CONSTRUCTION.
  3. 26I GRATES LOCATED IN THE BRIDGE APPROACH SLAB ON THE RIGHT SIDE OF -L- SHALL BE TRAFFIC BEARING AND WELDED TO THE GRATE TO KEEP THEM IN PLACE WHILE UNDER TRAFFIC DURING PHASE II CONSTRUCTION.
  4. ONCE TEMPORARY PAVEMENT IS NO LONGER NEEDED DURING PHASE II CONSTRUCTION, REMOVE TEMPORARY DRAINAGE AND COMPLETE CONSTRUCTION OF PROPOSED CATCH BASINS ALONG THE RIGHT SIDE OF -L-.

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

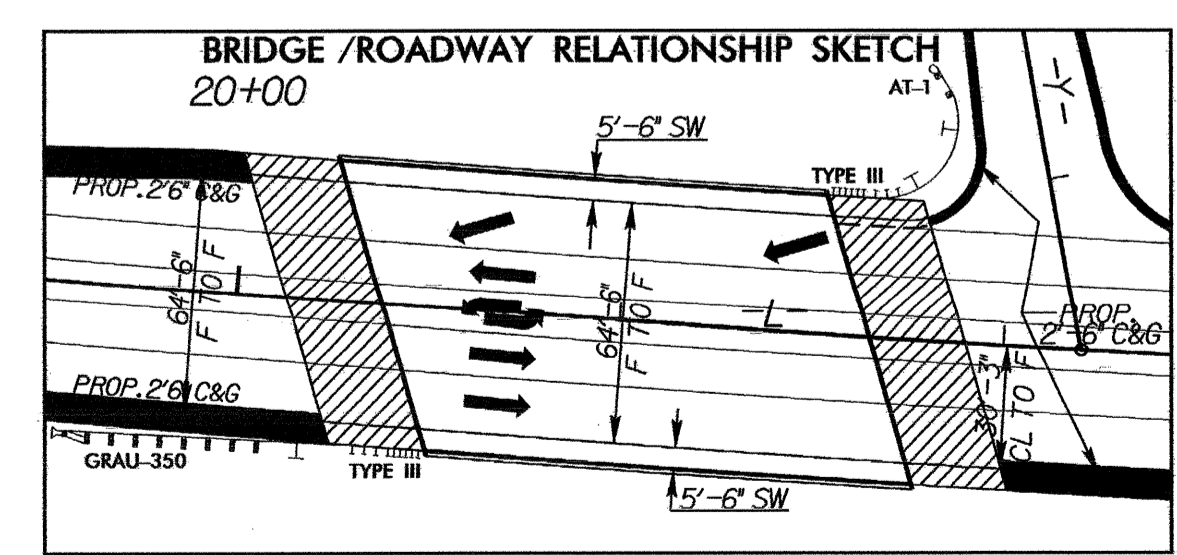


-L- STA. 20+00 +/- LT  
EST. DDE = 2 CY  
EST. CL 'B' RIPRAP = 6 TONS  
EST. FILTER FABRIC = 18 SY.  
L = 20 FT +/-  
MIN. SLOPE = 0.5%

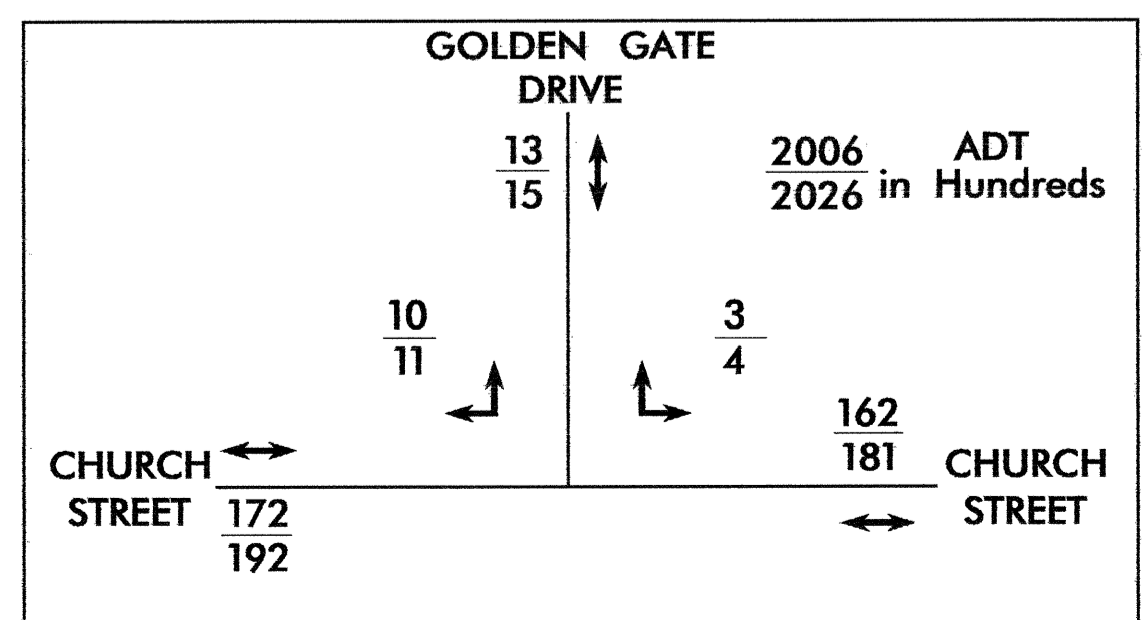
**23 x 11 x 3  
4' weir  
ID 4.1**



**NOTE:**  
ALL DRAINAGE PIPES ARE CLASS III REINFORCED CONCRETE, UNLESS OTHERWISE NOTED.



SEE SHEETS S-1 THRU S-55 FOR STRUCTURES PLANS



-L-		
PI Sta 16+18.34	PI Sta 22+67.64	PI Sta 28+95.01
$\Delta = 10' 36" 41.9" (RT)$	$\Delta = 4' 53" 04.5" (LT)$	$\Delta = 3' 31" 16.2" (LT)$
D = 1' 59' 35.3"	D = 0' 38' 11.8"	D = 0' 43' 18.8"
L = 532.41'	L = 167.27'	L = 487.78'
T = 266.97'	T = 383.87'	T = 243.97'
R = 2,874.64'	R = 9,000.00'	R = 7,937.05'
SE = 0.03	SE = 0.02	SE = 0.02
Vd = 45 MPH	Vd = 50 MPH	Vd = 50 MPH

SEE SHEET 5 FOR -L- PROFILE