

TIP PROJECT: B-3621

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

PLAN FOR PROPOSED
HIGHWAY EROSION CONTROL

BURKE COUNTY

LOCATION: Bridge No. 148 over Micol Creek on SR 1547

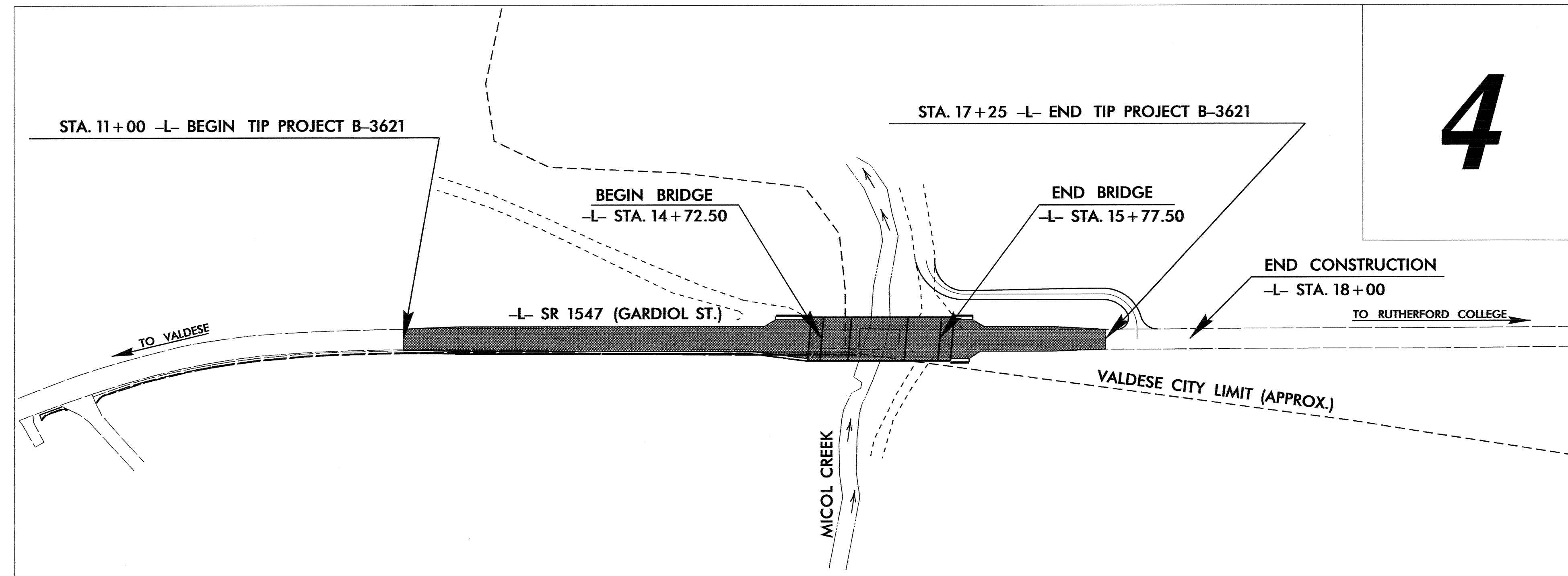
TYPE OF WORK: Grading, Paving, Drainage, and Structure

STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	B-3621	EC-1	
STATE PROJ. NO.	F.A. PROJ. NO.	DESCRIPTION	

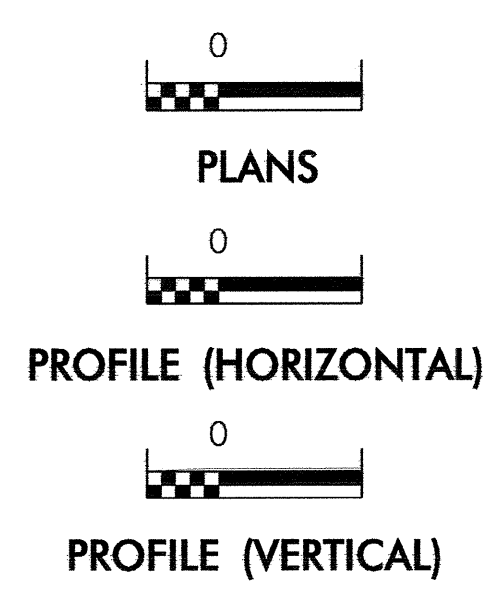
EROSION AND SEDIMENT CONTROL MEASURES

Sed. #	Description	Symbol
	Streambank Reforestation	
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	
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

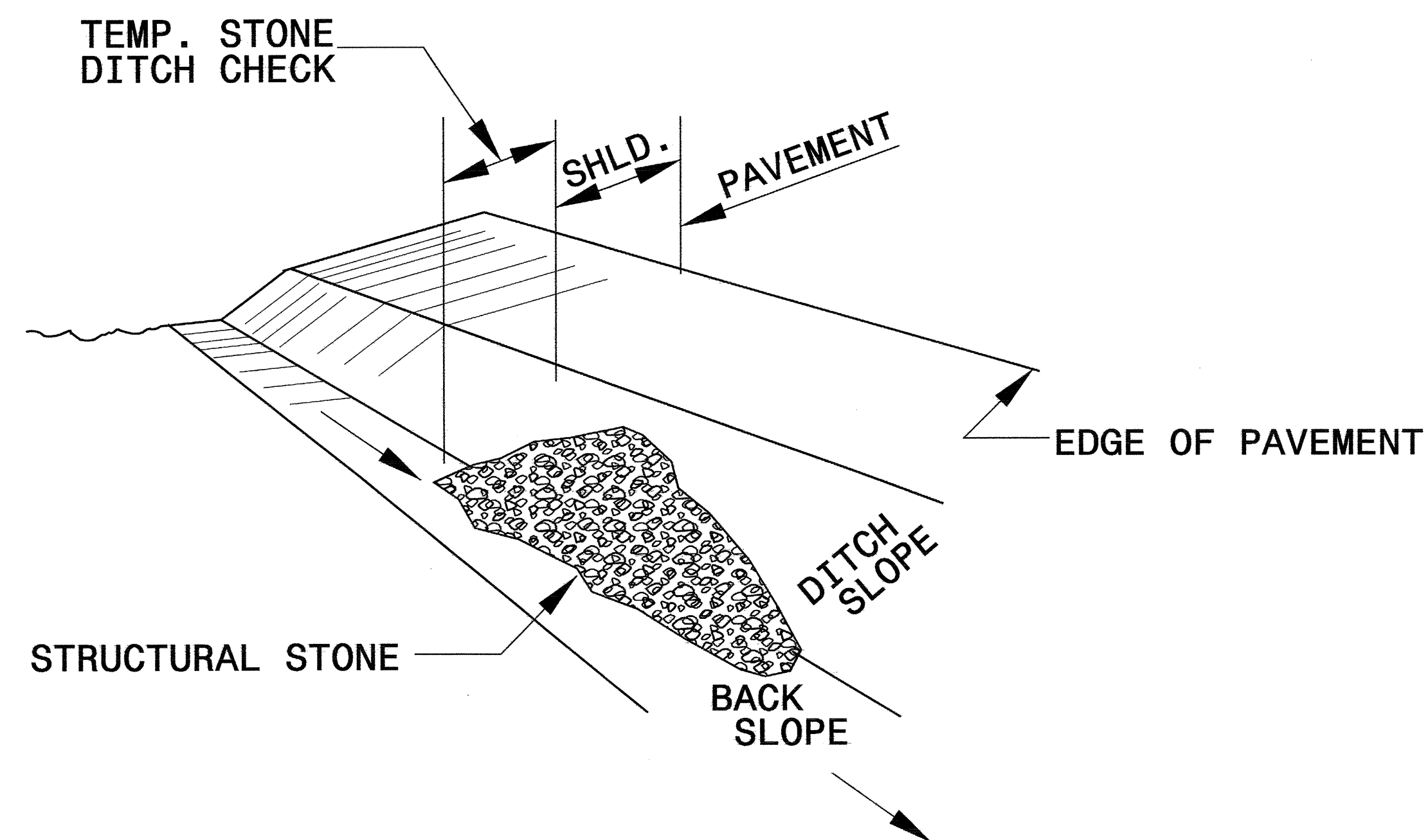
The following roadway english standards as appear in "Roadway Standard Drawings"- Roadway Design Unit - N. C. Department of Transportation - Raleigh, N. C., dated July 18, 2006 and the latest revision thereto are applicable to this project and by reference hereby are considered a part of these plans.

1605.01 Temporary Silt Fence	1630.06 Special Stilling Basin
1607.01 Gravel Construction Entrance	1632.03 Rock Inlet Sediment Trap Type C
1630.02 Silt Basin Type B	1633.01 Temporary Rock Silt Check Type A
1630.03 Temporary Silt Ditch	1634.02 Temporary Rock Sediment Dam Type B

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Rev 2/24/05

PROJECT REFERENCE NO. <i>B-3621</i>	SHEET NO. <i>EC-2</i>
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

TEMPORARY ROCK SILT CHECK TYPE 'B' DETAIL

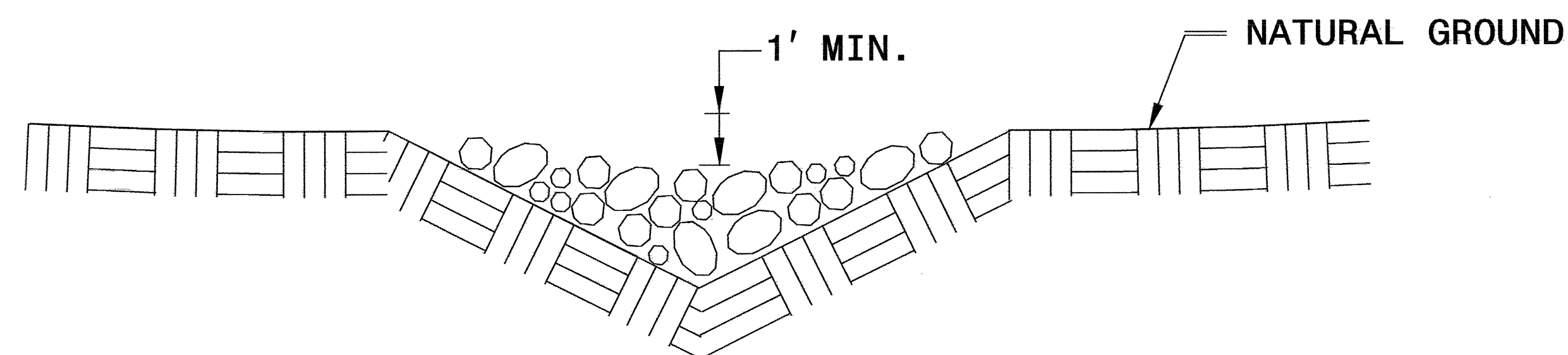


ISOMETRIC VIEW

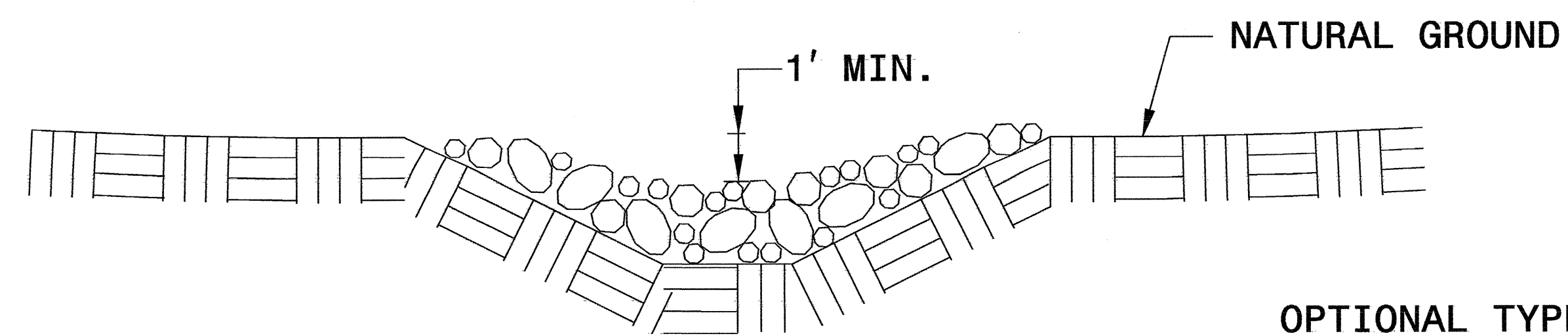
NOTES:

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

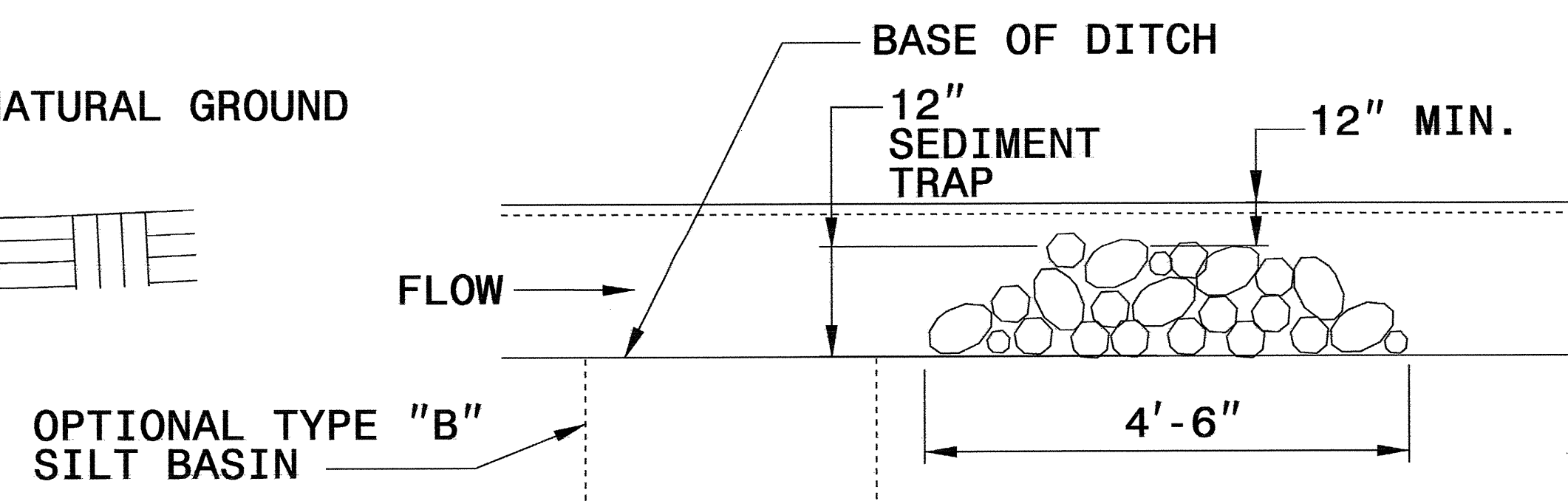
THE ENGINEER MAY DIRECT THE OPTION OF CLASS "A" STONE FOR SITES HAVING LESS THAN ONE (1) ACRE DRAINAGE AREA AND A DITCH GRADE LESS THAN 3%.



CROSS SECTION VEE DITCH



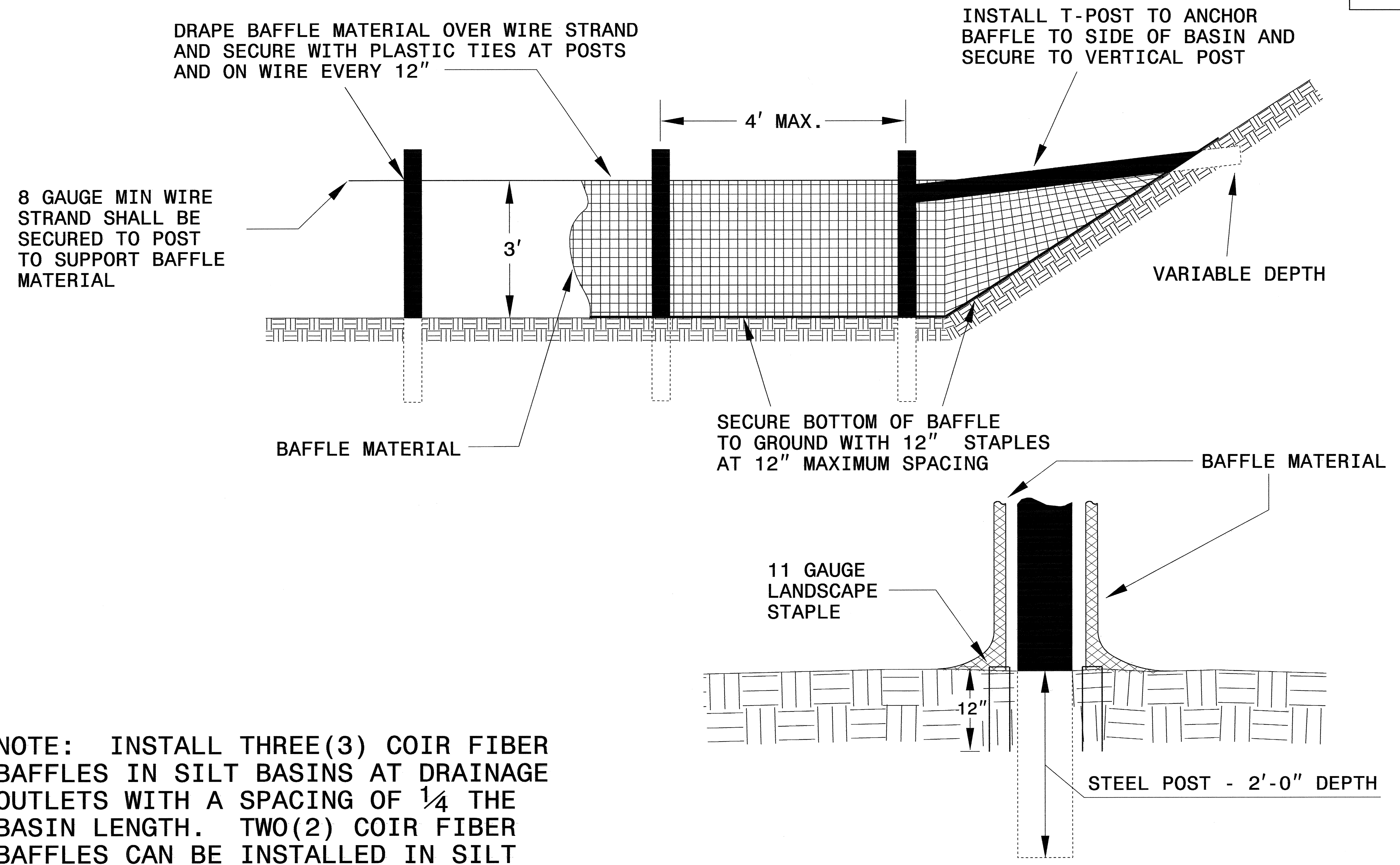
CROSS SECTION TRAPEZOIDAL DITCH



ELEVATION VIEW

PROJECT REFERENCE NO. B-3621 >>	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 AT DRAINAGE OUTLETS WITH A SPACING OF $\frac{1}{4}$ THE BASIN LENGTH. TWO(2) COIR FIBER BAFFLES CAN BE INSTALLED IN SILT BASINS 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

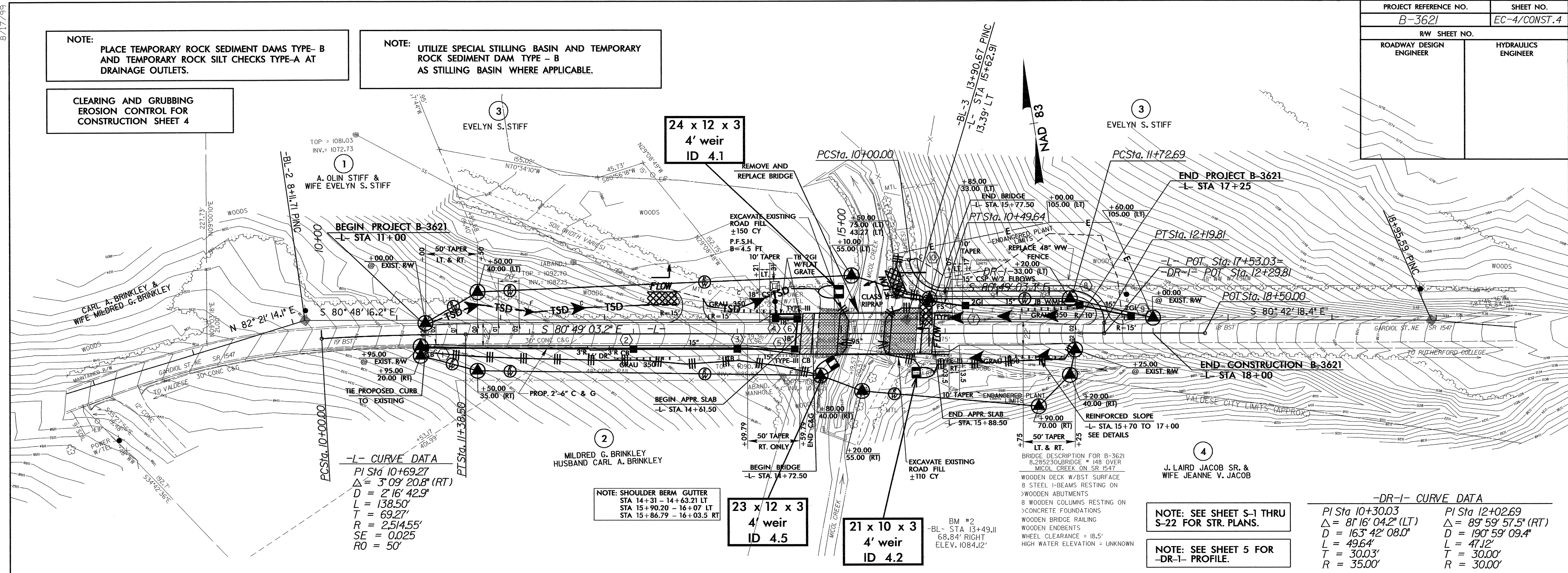
PROJECT REFERENCE NO.	SHEET NO.
B-3621	EC-4/CONST.4
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

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

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

CLEARING AND GRUBBING EROSION CONTROL FOR CONSTRUCTION SHEET 4

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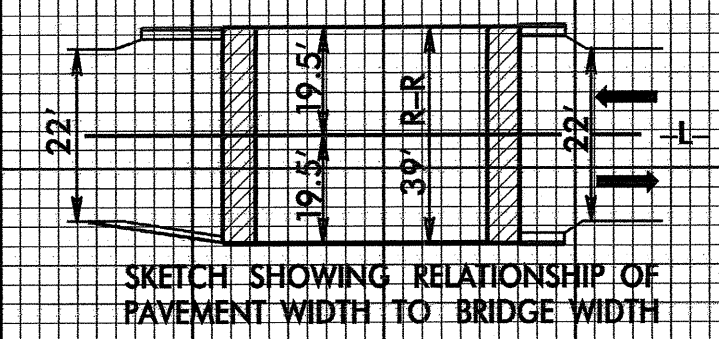
-L- CURVE DATA
 PI Sta 10+69.27
 $\Delta = 3^{\circ} 09' 20.8''$ (RT)
 D = 2' 16' 42.9"
 L = 138.50'
 T = 69.27'
 R = 2.51455'
 SE = 0.025
 RO = 50'

-DR-1- CURVE DATA

PI Sta 10+30.03	PI Sta 12+02.69
$\Delta = 8^{\circ} 16' 04.2''$ (LT)	$\Delta = 89^{\circ} 59' 57.5''$ (RT)
D = 163' 42' 08.0"	L = 190' 59' 09.4"
L = 49.64'	L = 47.12'
T = 30.03'	T = 30.00'
R = 35.00'	R = 30.00'

NOTE: SEE SHEET S-1 THRU S-22 FOR STR. PLANS.

NOTE: SEE SHEET 5 FOR -DR-1- PROFILE.



STRUCTURE HYDRAULIC DATA

DESIGN DISCHARGE	= 1715 CFS
DESIGN FREQUENCY	= 25 YRS
DESIGN HW ELEVATION	= 1084.0 FT
BASE DISCHARGE	= 1975 CFS
BASE FREQUENCY	= 100 YRS
BASE HW ELEVATION	= 1084.5 FT
OVERTOPPING DISCHARGE	= 3500+ CFS
OVERTOPPING FREQUENCY	= +500 YRS
OVERTOPPING ELEVATION	= 1090.96 FT

BM #1
 N 738006.6860 E 1244383.24
 ELEV. 1146.68'
 -BL- STA 4+85 43.6' LEFT

BM #2
 N 737859.6710 E 1245281.1220
 ELEV. 1084.12'
 -BL- STA 13+49.11 68.84' RIGHT

BM #3
 N 737859.7950 E 1246274.6000
 ELEV. 1178.25'
 -BL- STA 23+20.77 126.59' LEFT

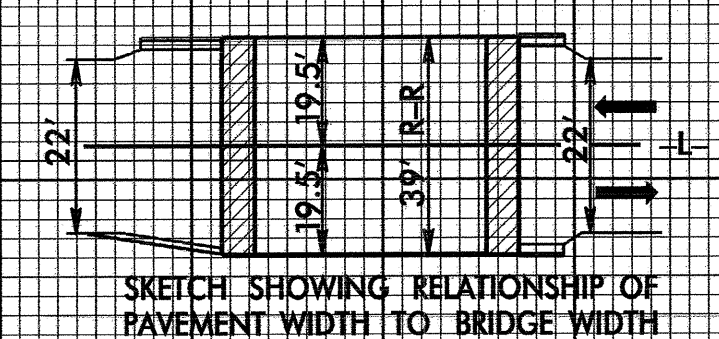
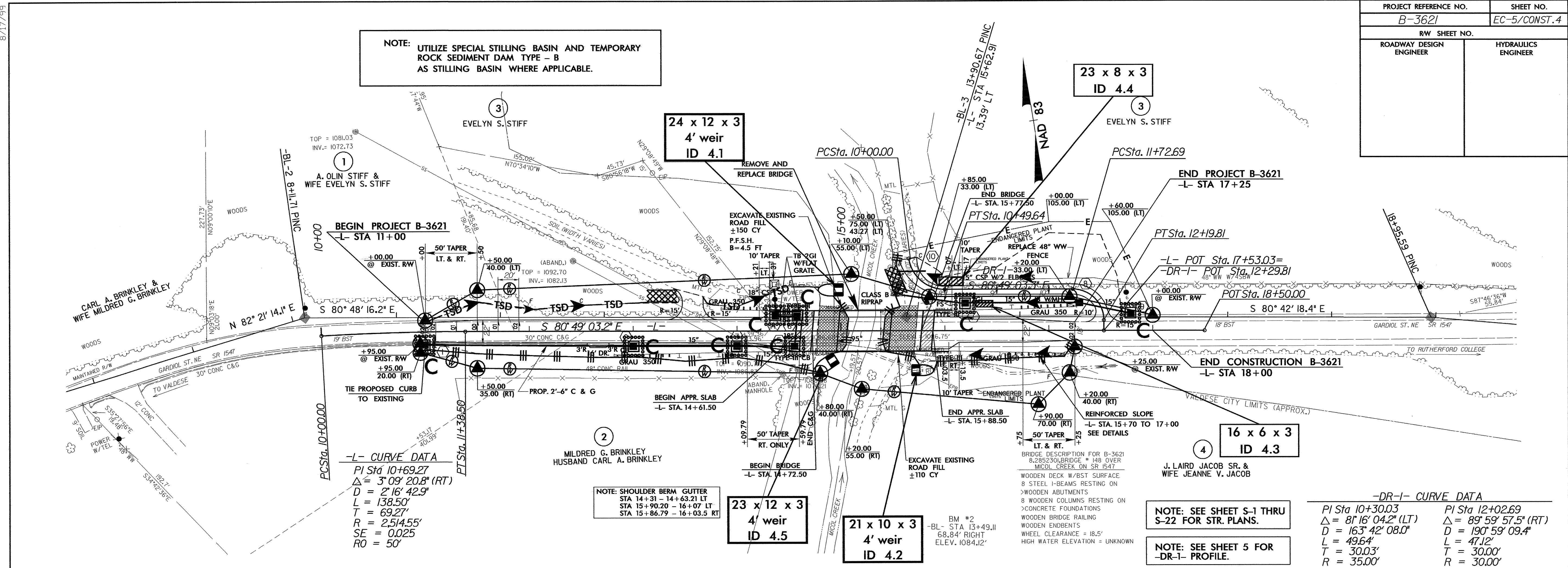
** DESIGN EXCEPTION REQUIRED

DITCH LEGEND	
RIGHT DITCH	-----
	1,130
	1,120
	1,110
	1,100
	1,090
	1,080
	1,070
	1,060
	1,050

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 Michael A. RENY 2/21/05

PROJECT REFERENCE NO.	SHEET NO.
B-3621	EC-5/CONST. 4
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

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



STRUCTURE HYDRAULIC DATA

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BASE DISCHARGE	= 1975 CFS
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BASE HW ELEVATION	= 1084.5 FT
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OVERTOPPING FREQUENCY	= +500 YRS
OVERTOPPING ELEVATION	= 1090.96 FT

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Michael A. RE NV 22/14/5