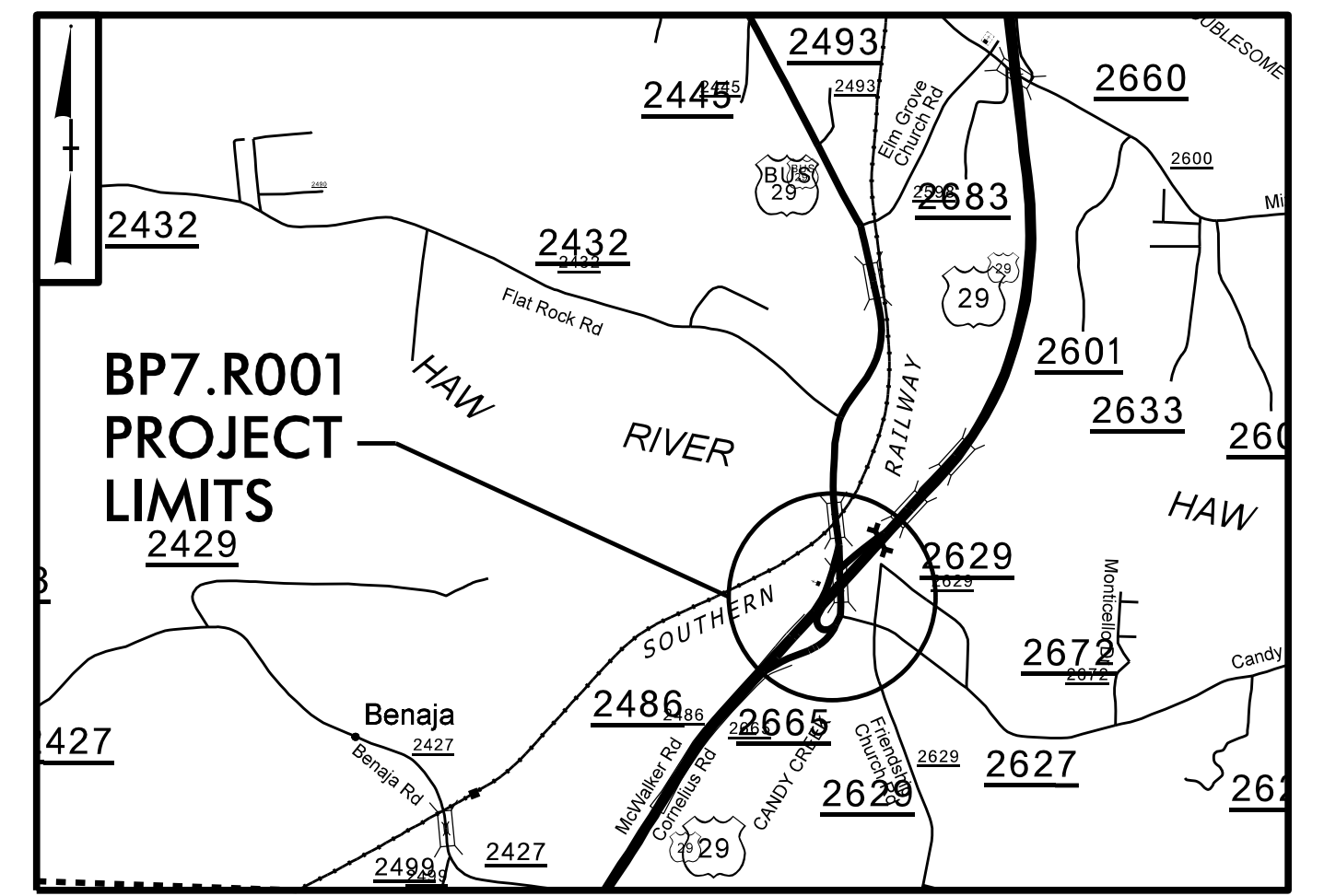


STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	BP7.R001	EC-1	
STATE PROJ. NO.	P.A. PROJ. NO.	DESCRIPTION	
BP7.R001.1		PE	
BP7.R001.2		R/W	
BP7.R001.3		CONST.	

TIP PROJECT: BP7.R001

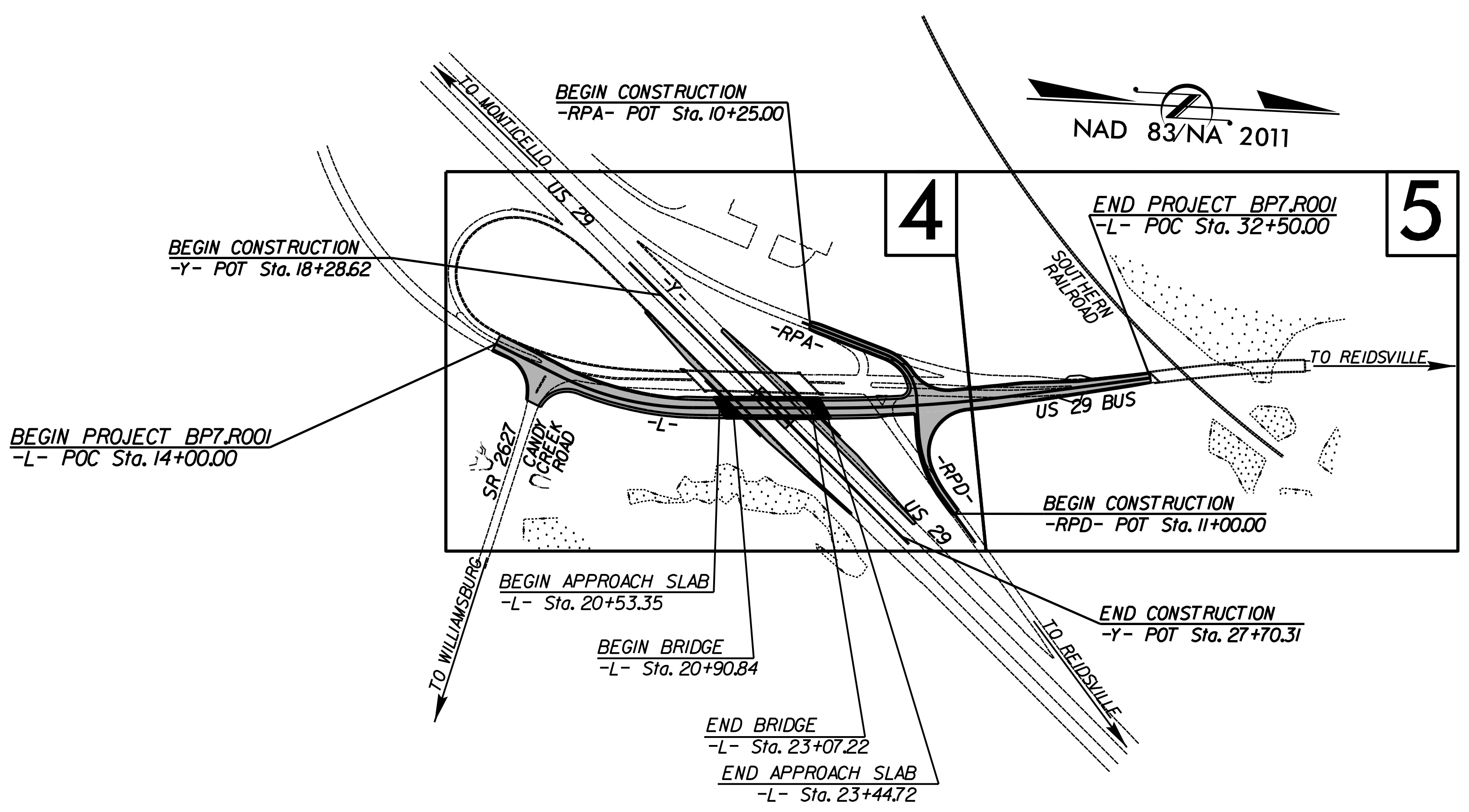


VICINITY MAP
NOT TO SCALE

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

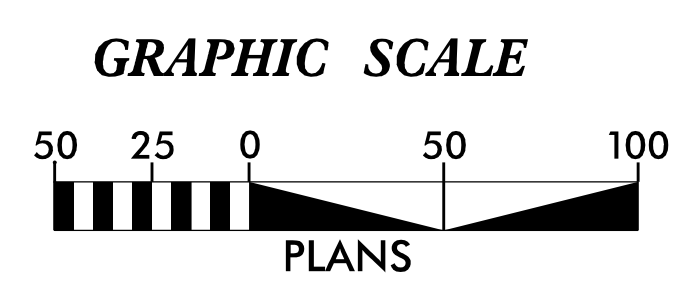
ROCKINGHAM COUNTY

LOCATION: BRIDGE NO. 23 OVER US 29 ON US 29 BUSINESS
TYPE OF WORK: GRADING, PAVING, DRAINAGE AND STRUCTURE

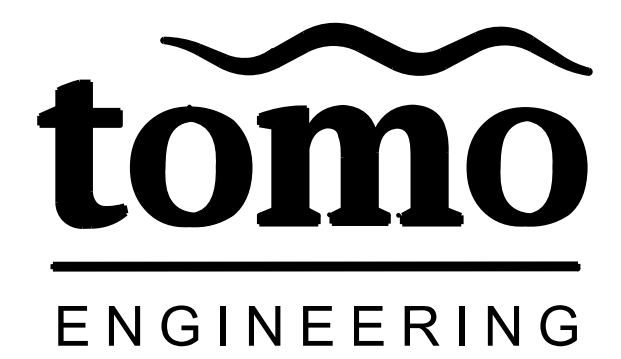


THIS PROJECT CONTAINS EROSION CONTROL PLANS FOR CLEARING AND GRUBBING PHASE OF CONSTRUCTION.

☆ EXISTING SIGNAL
★ PROPOSED SIGNAL



THESE EROSION AND SEDIMENT CONTROL PLANS COMPLY WITH THE APPLICABLE REGULATIONS SET FORTH BY THE NCG-010000 GENERAL CONSTRUCTION PERMIT ISSUED BY THE NORTH CAROLINA DEPARTMENT OF ENVIRONMENTAL QUALITY DIVISION OF WATER RESOURCES.



Tomo Engineering, PLLC
2319 Cardinal Drive, Durham, N.C. 27707
(919) 414-4410
License No.: P-2066

Prepared In the Office of:
Tomo Engineering, PLLC
2319 Cardinal Drive
Durham, NC 27707

Designed by:
Tyler Overby 4140
NAME LEVEL III CERTIFICATION NO.

Roadway Standard Drawings

The "Roadway Standard Drawings"- Roadway Design Unit - N. C. Department of Transportation - Raleigh, N. C., dated January 2024 and the latest revision thereto are applicable to this project and by reference hereby are considered a part of these plans.

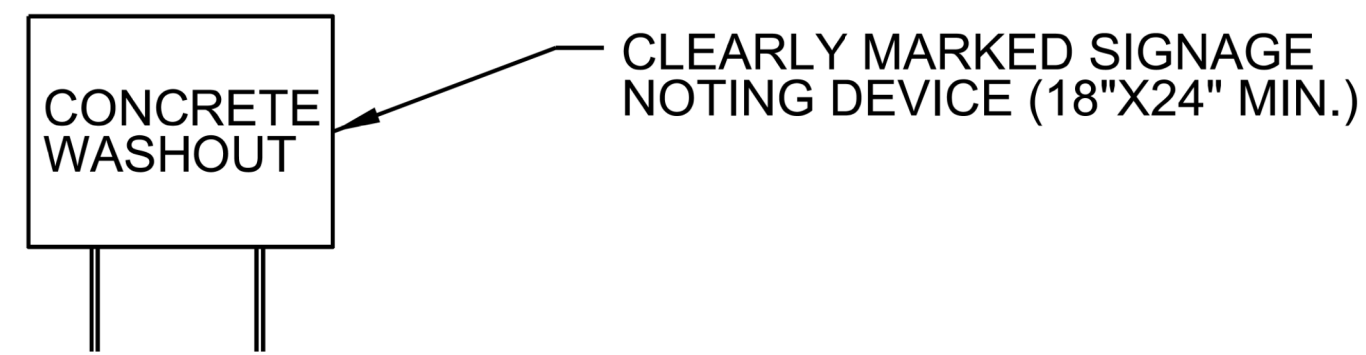
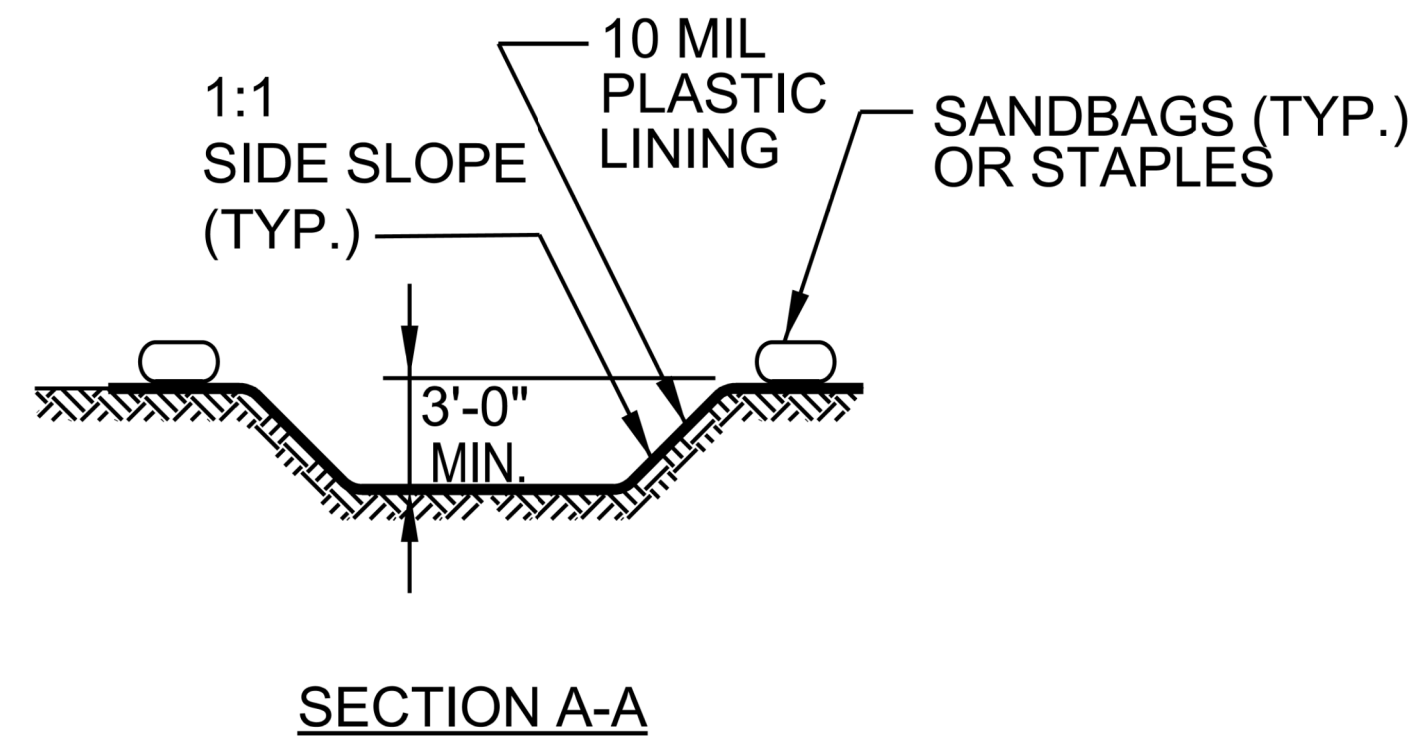
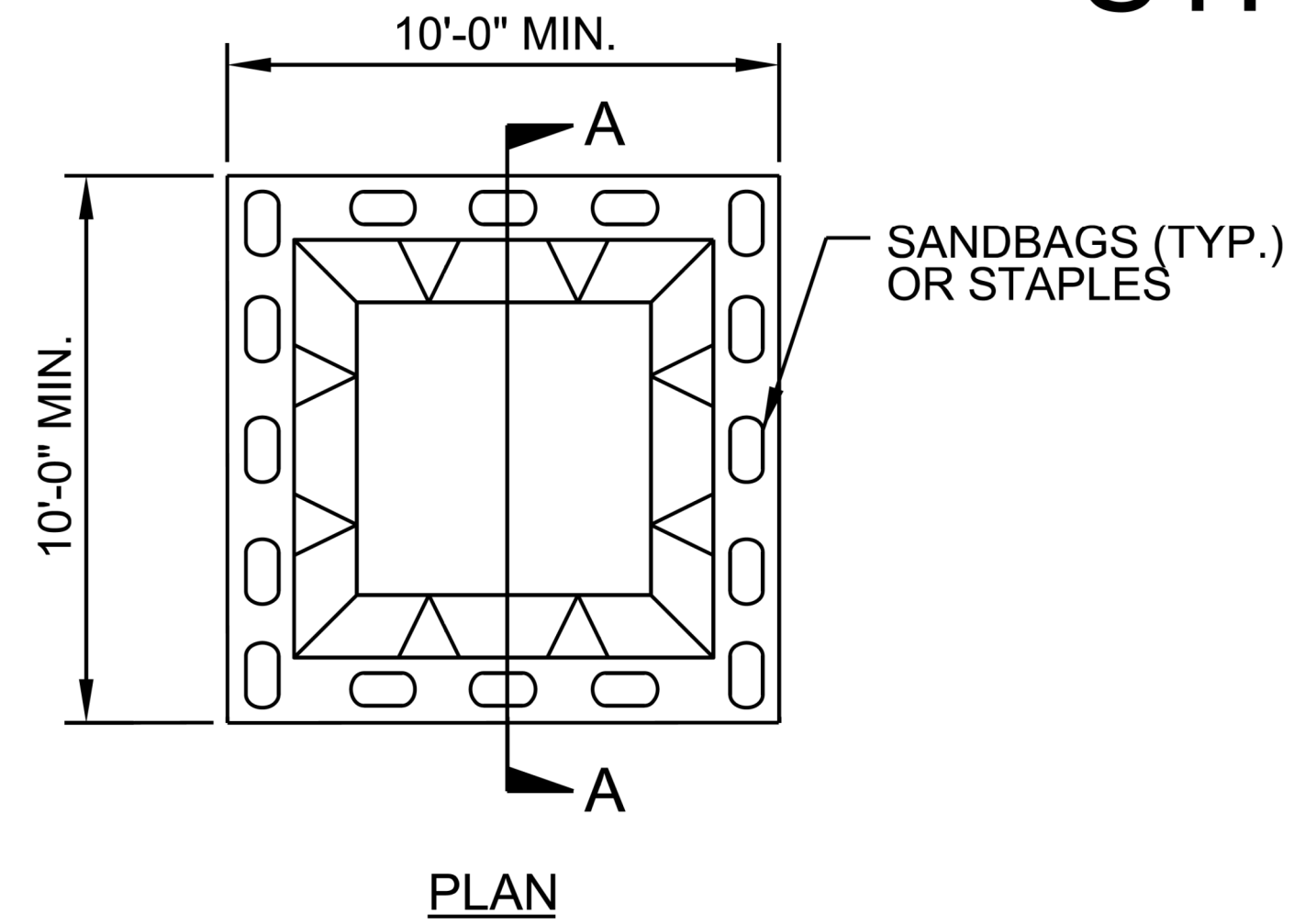
P:\02024\BP7.R001\A\EROSION\CAADD\SHEET\BP7R001.ecr.tsh.dgn

DIVISION OF HIGHWAYS STATE OF NORTH CAROLINA

EROSION & SEDIMENT CONTROL LEGEND

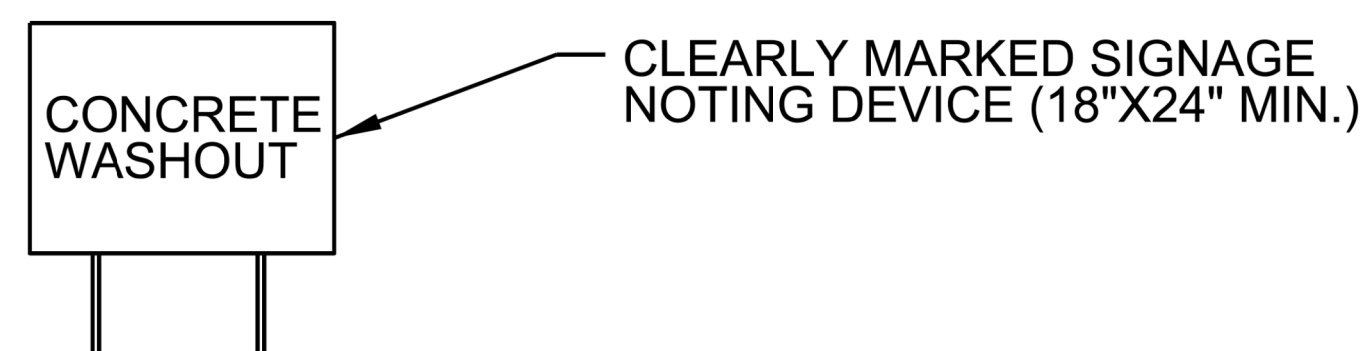
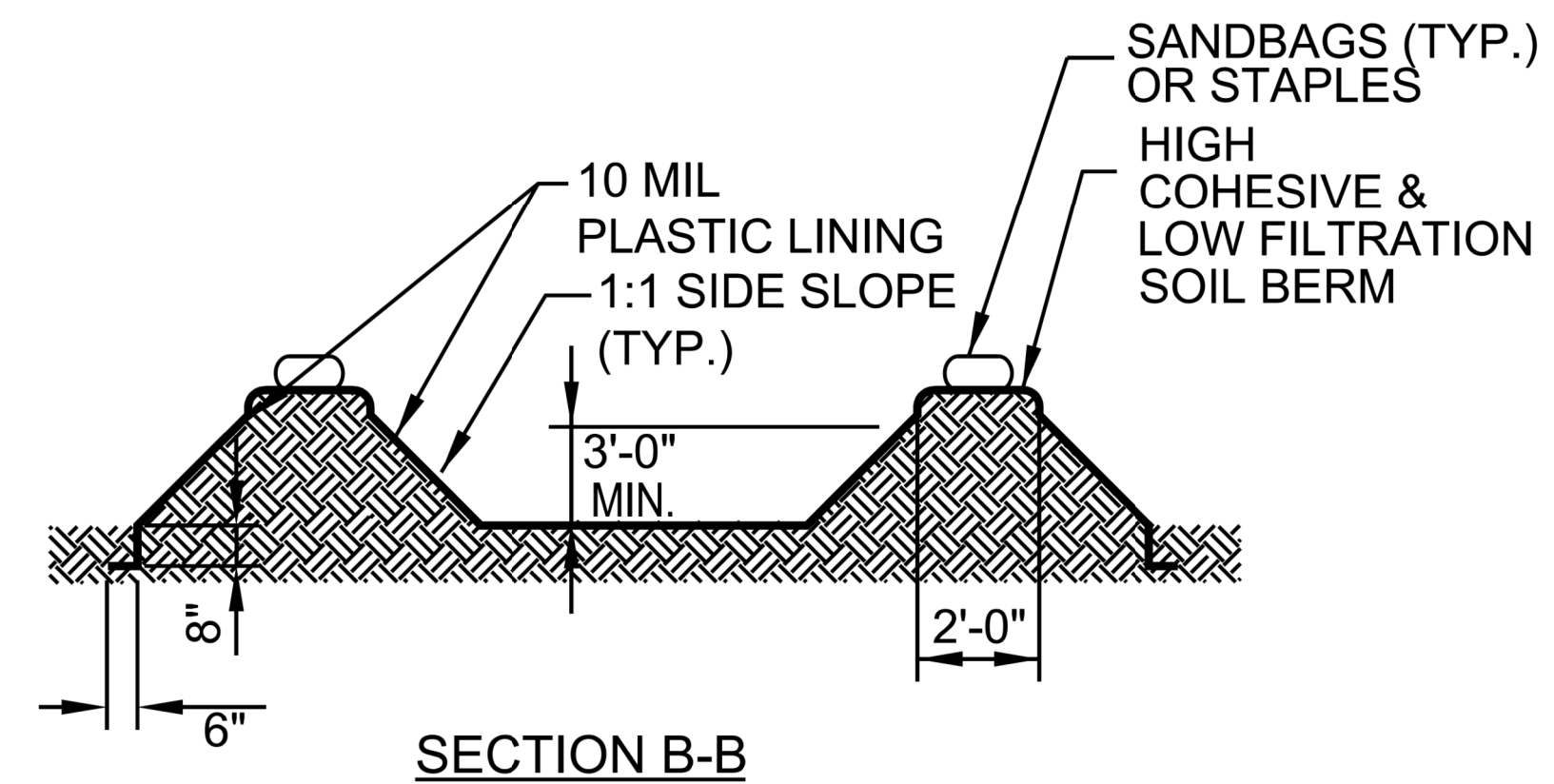
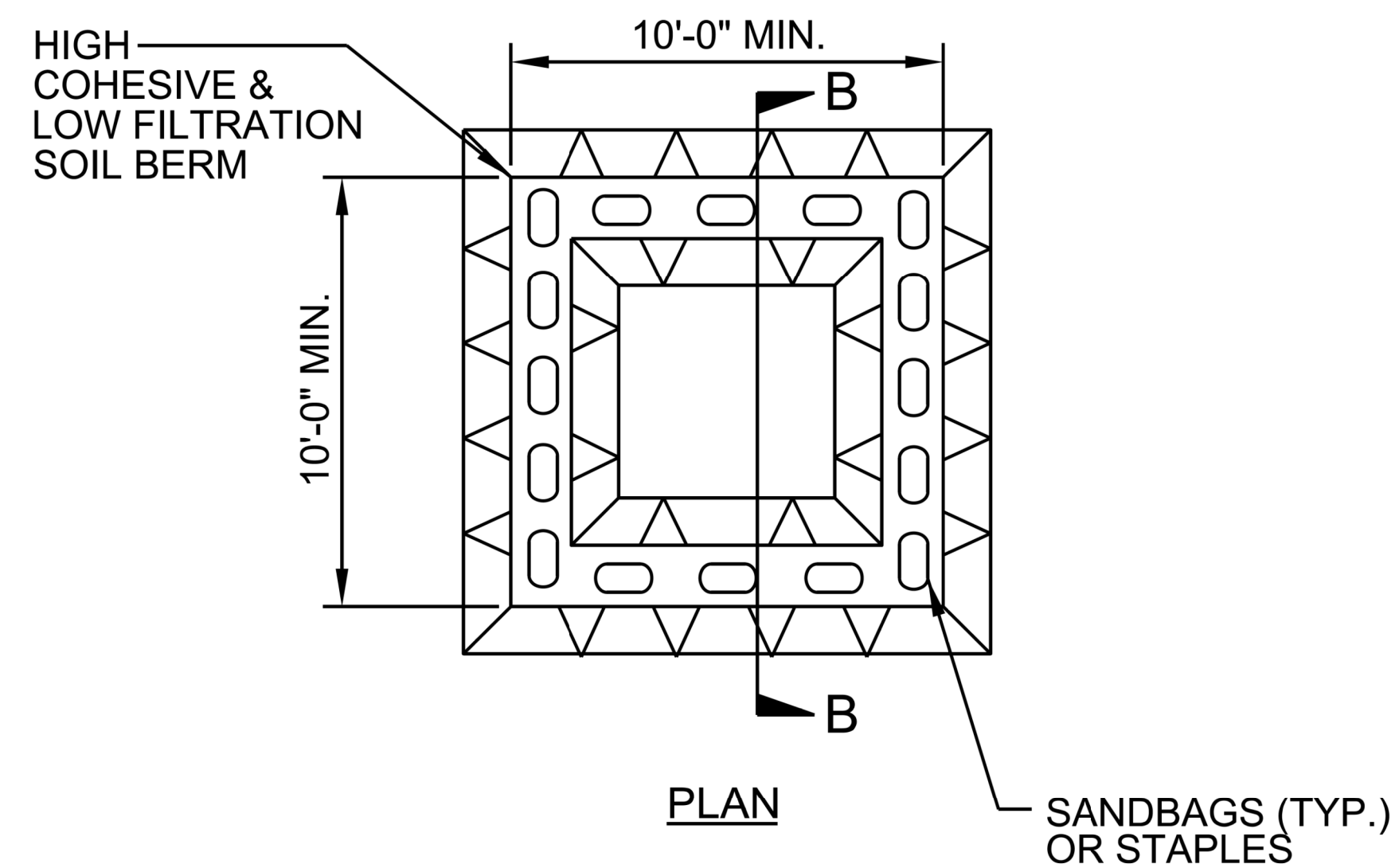
<u>Std. #</u>	<u>Description</u>	<u>Symbol</u>	<u>Std. #</u>	<u>Description</u>	<u>Symbol</u>
1605.01	Temporary Silt Fence		1633.01	Temporary Rock Silt Check Type A	
1606.01	Special Sediment Control Fence		1633.02	Temporary Rock Silt Check Type B	
1622.01	Temporary Berms and Slope Drains		1633.03	Temporary Rock Silt Check Type A with Excelsior Matting and Flocculant	
1630.02	Silt Basin Type B		1634.01	Temporary Rock Sediment Dam Type A	
1630.03	Temporary Silt Ditch		1634.02	Temporary Rock Sediment Dam Type B	
1630.04	Stilling Basin		1635.01	Rock Pipe Inlet Sediment Trap Type A	
1630.05	Temporary Diversion		1635.02	Rock Pipe Inlet Sediment Trap Type B	
1630.06	Special Stilling Basin		1636.01	Excelsior Wattle Check	
1630.07	Skimmer Basin		1636.01	Excelsior Wattle Check with Flocculant	
1630.08	Tiered Skimmer Basin		1636.01	Coir Fiber Wattle Check	
1630.09	Earthen Dam with Skimmer		1636.01	Coir Fiber Wattle Check with Flocculant	
	Infiltration Basin		1636.02	Silt Fence Excelsior Wattle Break	
	Rock Inlet Sediment Trap:			Silt Fence Coir Fiber Wattle Break	
1632.01	Type A		1636.02	Excelsior Wattle Barrier	
1632.02	Type B		1636.03	Coir Fiber Wattle Barrier	
1632.03	Type C				

ONSITE CONCRETE WASHOUT STRUCTURE WITH LINER



BELOW GRADE WASHOUT STRUCTURE
NOT TO SCALE

- NOTES:**
1. ACTUAL LOCATION DETERMINED IN FIELD
 2. THE CONCRETE WASHOUT STRUCTURES SHALL BE MAINTAINED WHEN THE LIQUID AND/OR SOLID REACHES 75% OF THE STRUCTURES CAPACITY TO PROVIDE ADEQUATE HOLDING CAPACITY WITH A MINIMUM 12 INCHES OF FREEBOARD.
 3. CONCRETE WASHOUT STRUCTURE NEEDS TO BE CLEARLY MARKED WITH SIGNAGE NOTING DEVICE.



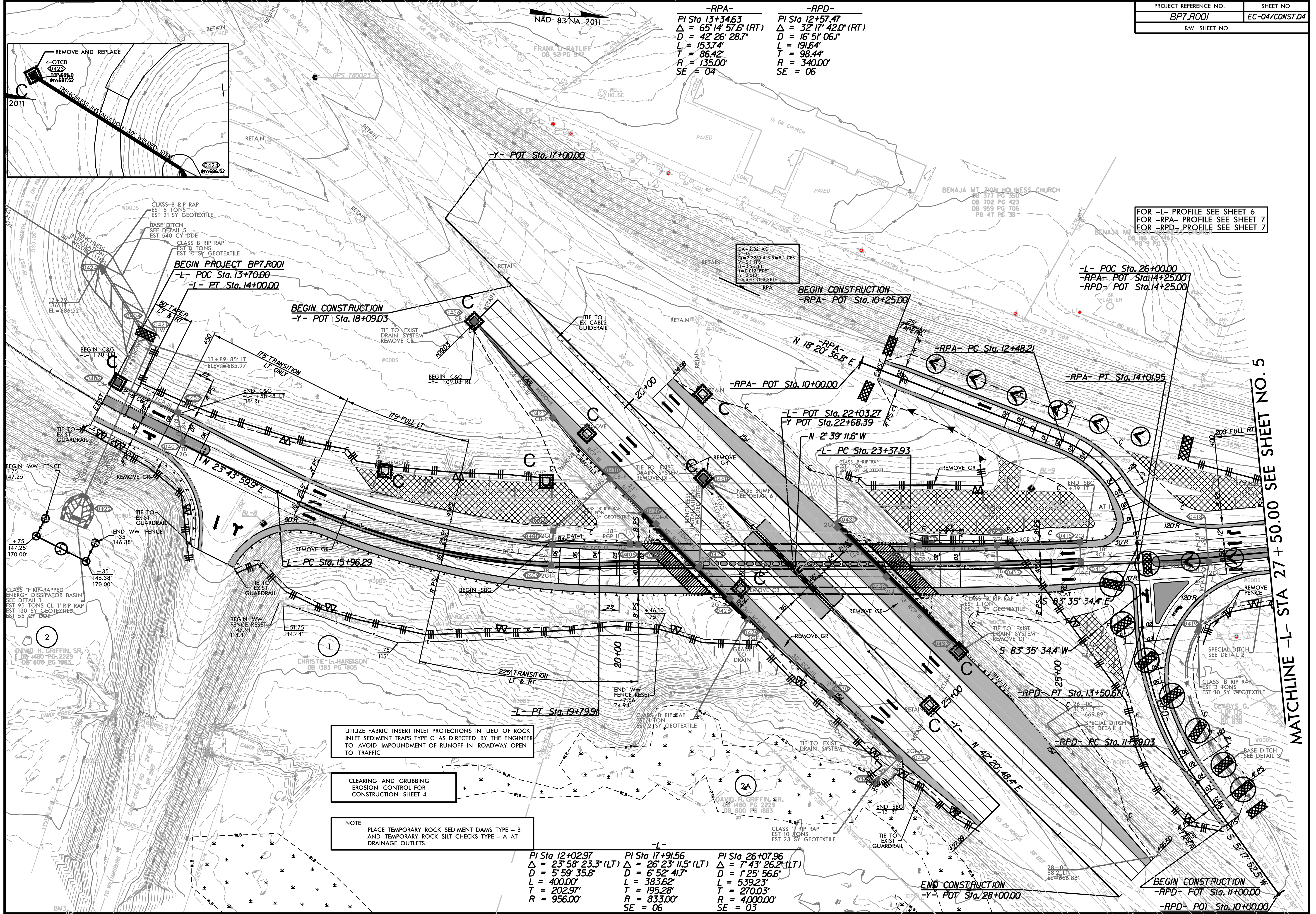
ABOVE GRADE WASHOUT STRUCTURE
NOT TO SCALE

- NOTES:**
1. ACTUAL LOCATION DETERMINED IN FIELD
 2. THE CONCRETE WASHOUT STRUCTURES SHALL BE MAINTAINED WHEN THE LIQUID AND/OR SOLID REACHES 75% OF THE STRUCTURES CAPACITY TO PROVIDE ADEQUATE HOLDING CAPACITY WITH A MINIMUM 12 INCHES OF FREEBOARD.
 3. CONCRETE WASHOUT STRUCTURE NEEDS TO BE CLEARLY MARKED WITH SIGNAGE NOTING DEVICE.

-RPA-
 PI Sta 13+34.63
 $\Delta = 65' 14" 57.6" (RT)$
 $D = 42' 26" 28.7"$
 $L = 153.74'$
 $T = 86.42'$
 $R = 135.00'$
 $SE = 04$

-RPD-
 PI Sta 12+57.47
 $\Delta = 32' 17" 42.0" (RT)$
 $D = 16' 51" 06.1"$
 $L = 191.64'$
 $T = 98.44'$
 $R = 340.00'$
 $SE = 06$

FOR -L- PROFILE SEE SHEET 6
 FOR -RPA- PROFILE SEE SHEET 7
 FOR -RPD- PROFILE SEE SHEET 8



UTILIZE FABRIC INSERT INLET PROTECTIONS IN LIEU OF ROCK INLET SEDIMENT TRAPS TYPE-C AS DIRECTED BY THE ENGINEER TO AVOID IMPOUNDMENT OF RUNOFF IN ROADWAY OPEN TO TRAFFIC

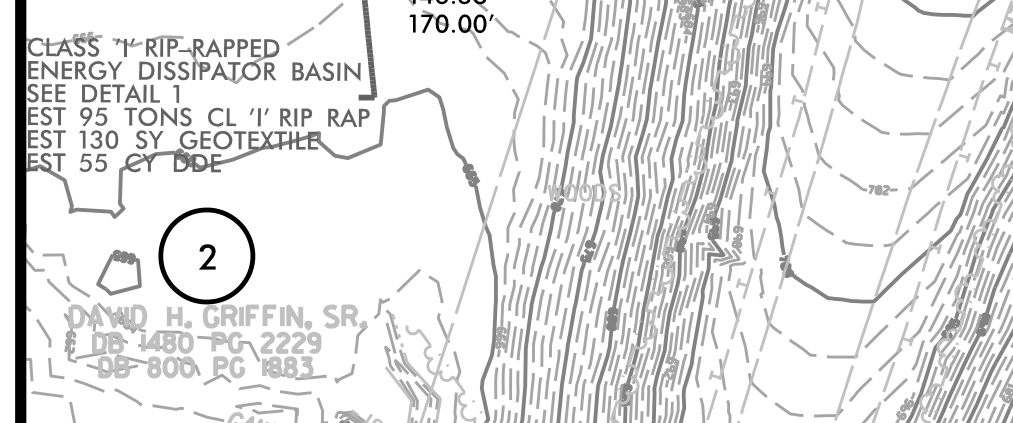
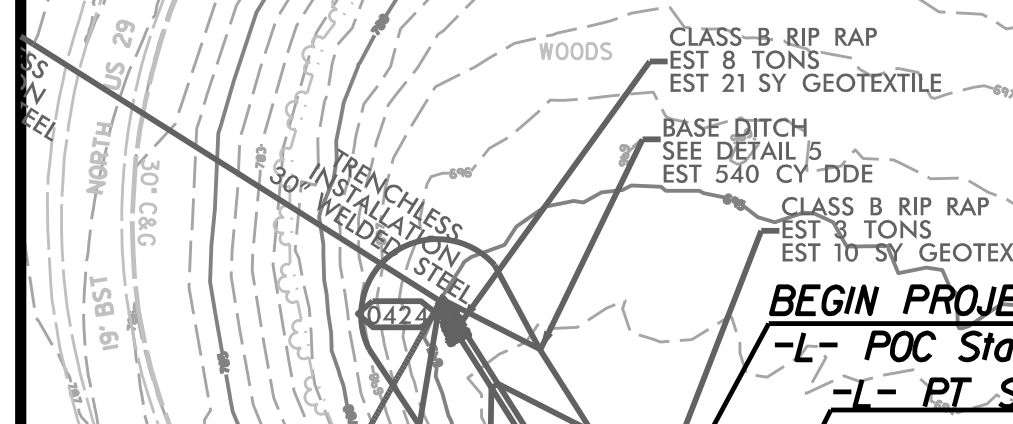
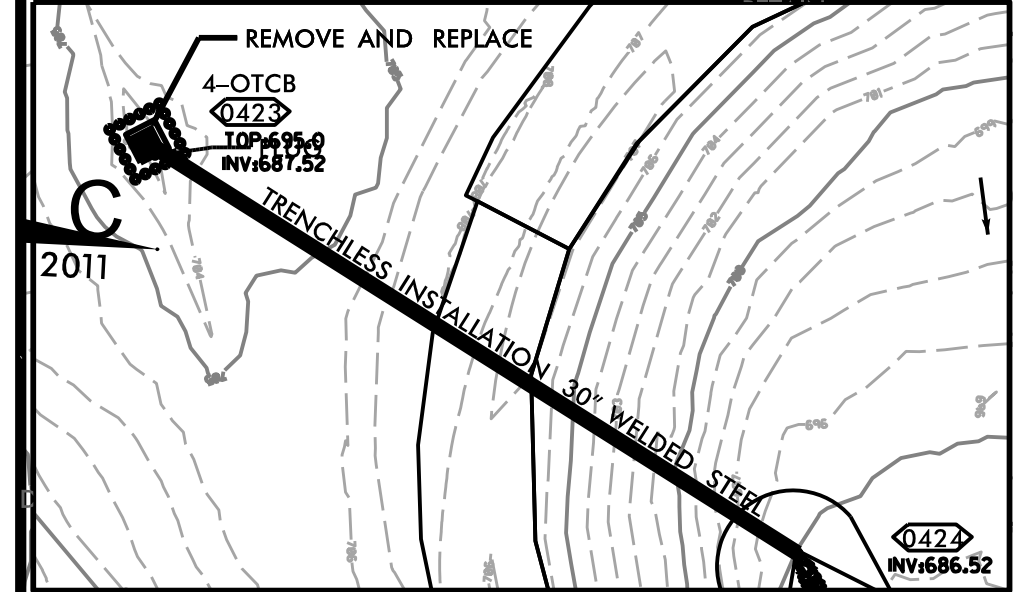
CLEARING AND GRUBBING EROSION CONTROL FOR CONSTRUCTION SHEET 4

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

-L-
 PI Sta 12+02.97
 $\Delta = 23' 58" 23.3" (LT)$
 $D = 5' 59" 35.8"$
 $L = 400.00'$
 $T = 202.97'$
 $R = 956.00'$

-L-
 PI Sta 17+91.56
 $\Delta = 26' 23" 11.5" (LT)$
 $D = 6' 52" 41.7"$
 $L = 383.62'$
 $T = 195.28'$
 $R = 833.00'$
 $SE = 06$

-L-
 PI Sta 26+07.96
 $\Delta = 7' 43" 26.2" (LT)$
 $D = 1' 25" 56.6"$
 $L = 539.23'$
 $T = 270.03'$
 $R = 4,000.00'$
 $SE = 03$

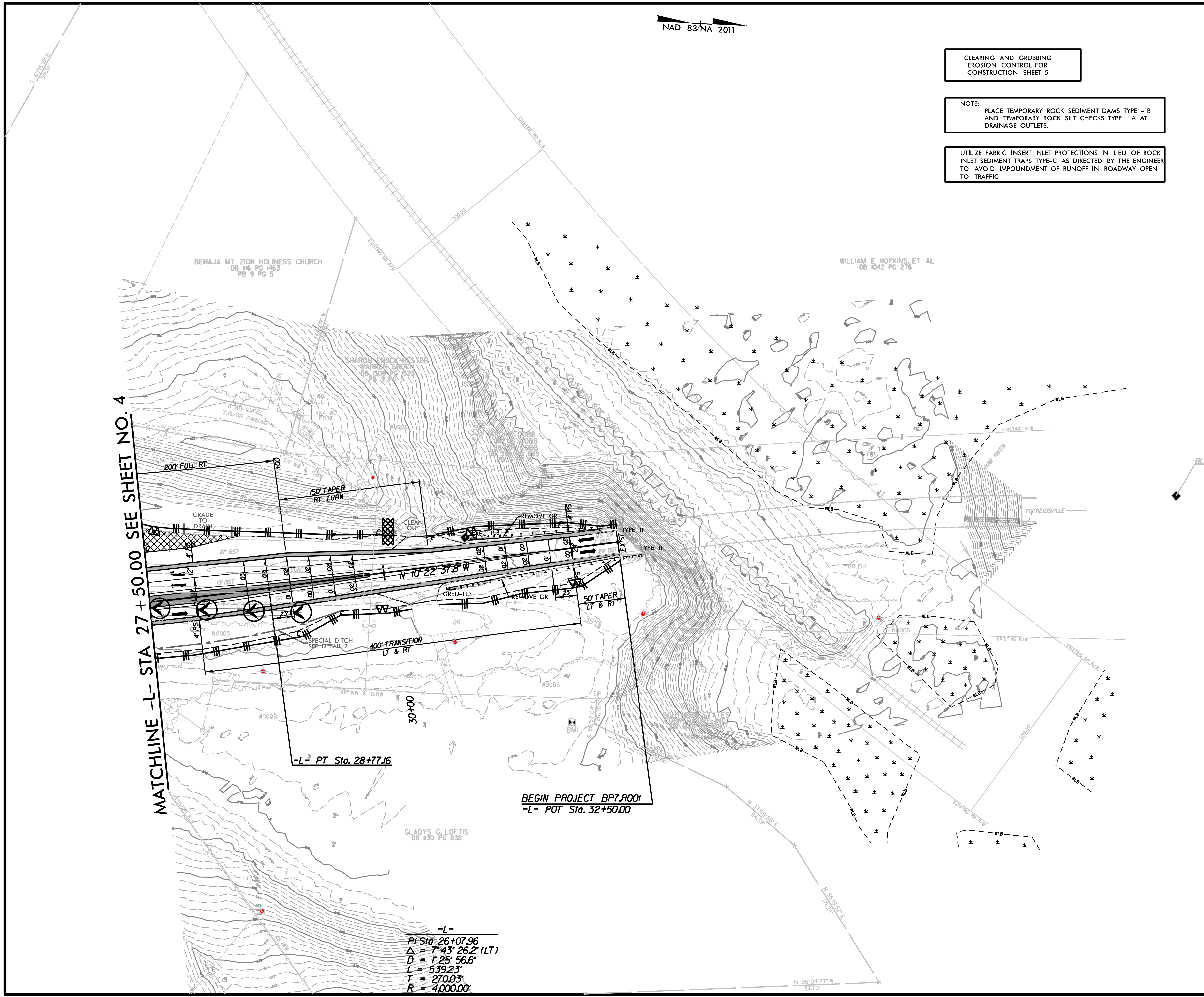


NAD 83/NA 2011

CLEARING AND GRUBBING
EROSION CONTROL FOR
CONSTRUCTION SHEET 5

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

UTILIZE FABRIC INSERT INLET PROTECTIONS IN LIEU OF ROCK
INLET SEDIMENT TRAPS TYPE-C AS DIRECTED BY THE ENGINEER
TO AVOID IMPOUNDMENT OF RUNOFF IN ROADWAY OPEN
TO TRAFFIC



MATCHLINE -L- STA 27 + 50.00 SEE SHEET NO. 4

BENAJA MT ZION HOLINESS CHURCH
DB 116 PG 1463
PB 9 PG 5

WILLIAM E. HOPKINS, ET AL
DB 1042 PG 276

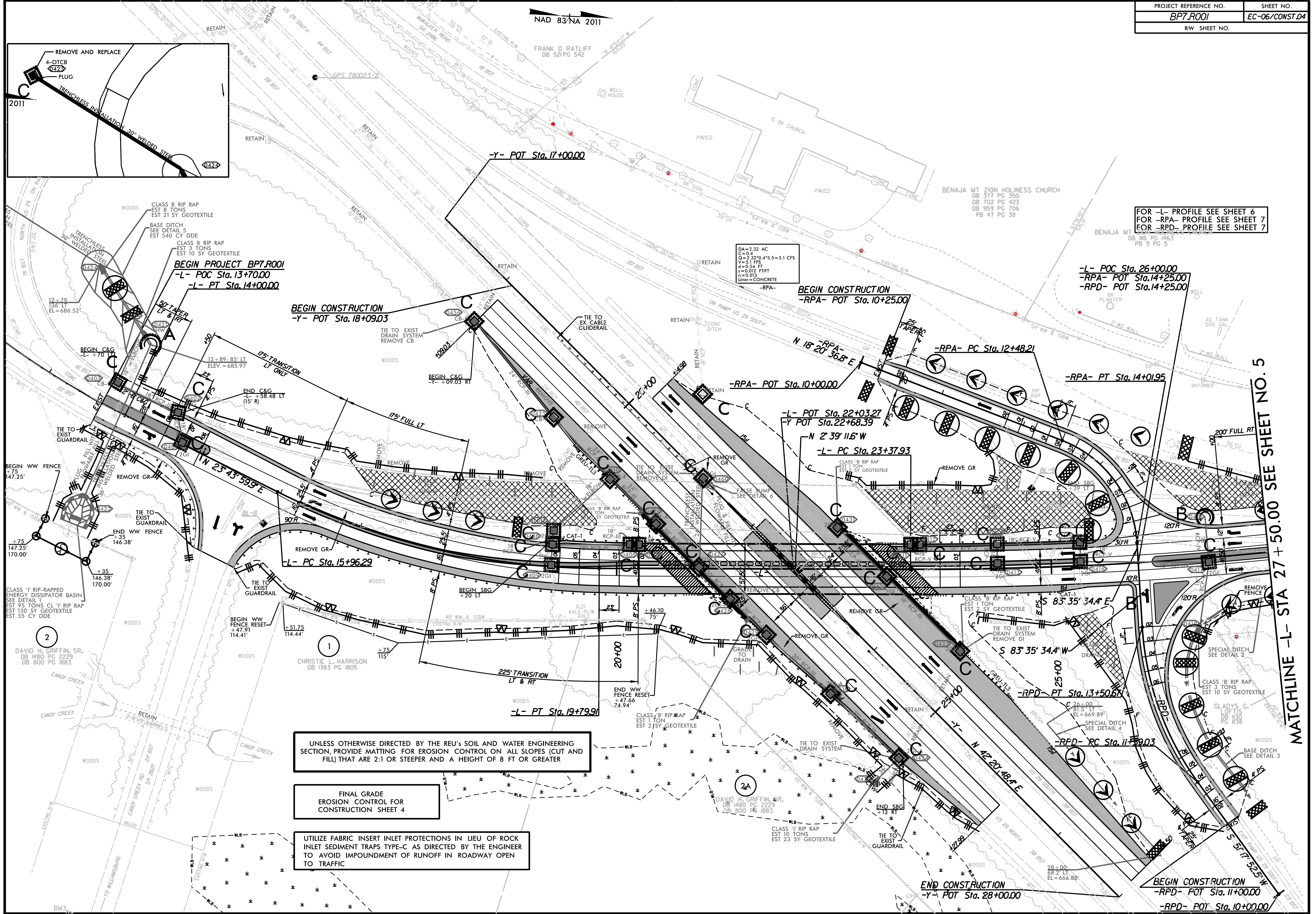
SHARON HOLCOMB
DB 1508 PG 222
PB 9 PG 5

GLADYS G. LOFTIS
DB #30 PG 838

BEGIN PROJECT BP7.R001
-L- POT Sta. 32+50.00

-L- PT Sta. 28+77.16

-L-
PI Sta 26+07.96
 $\Delta = 7' 43' 26.2''$ (LT)
 $D = 1,25' 56.6''$
 $L = 539.23'$
 $T = 270.03'$
 $R = 4,000.00'$



FOR -L- PROFILE SEE SHEET 6
 FOR -RPA- PROFILE SEE SHEET 7
 FOR -RPD- PROFILE SEE SHEET 7

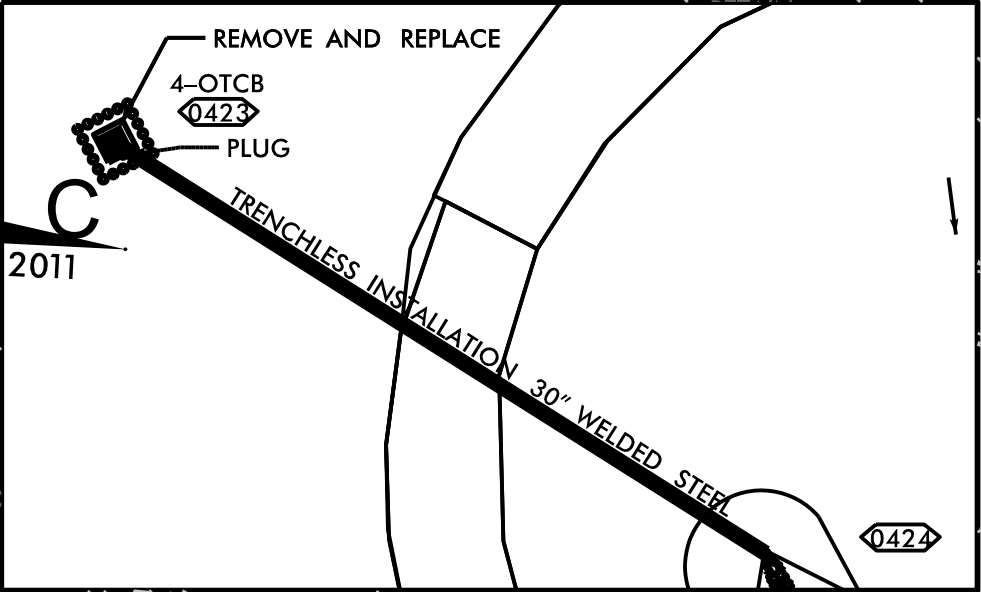
DA=2.32 AC
 C=0.4
 Q=2.32*0.415.5=5.1 CFS
 V=5.1 FPS
 d=0.54 FT
 s=0.012 FF/FT
 n=0.013
 Liner=CONCRETE
 -RPA-

UNLESS OTHERWISE DIRECTED BY THE REU'S SOIL AND WATER ENGINEERING SECTION, PROVIDE MATTING FOR EROSION CONTROL ON ALL SLOPES (CUT AND FILL) THAT ARE 2:1 OR STEEPER AND A HEIGHT OF 8 FT OR GREATER

FINAL GRADE EROSION CONTROL FOR CONSTRUCTION SHEET 4

UTILIZE FABRIC INSERT INLET PROTECTIONS IN LIEU OF ROCK INLET SEDIMENT TRAPS TYPE-C AS DIRECTED BY THE ENGINEER TO AVOID IMPOUNDMENT OF RUNOFF IN ROADWAY OPEN TO TRAFFIC

MATCHLINE -L- STA 27 + 50.00 SEE SHEET NO. 5



-L- POC Sta. 26+00.00
 -RPA- POT Sta. 14+25.00
 -RPD- POT Sta. 14+25.00

BEGIN PROJECT BP7.R001
 -L- POC Sta. 13+70.00
 -L- PT Sta. 14+00.00

BEGIN CONSTRUCTION
 -Y- POT Sta. 18+09.03

BEGIN CONSTRUCTION
 -RPA- POT Sta. 10+25.00

-L- POT Sta. 22+03.27
 -Y POT Sta. 22+68.39

-L- PC Sta. 23+37.93

-L- PC Sta. 15+96.29

-L- PT Sta. 19+79.91

-RPD- PT Sta. 13+50.67

-RPD- PC Sta. 11+59.03

END CONSTRUCTION
 -Y- POT Sta. 28+00.00

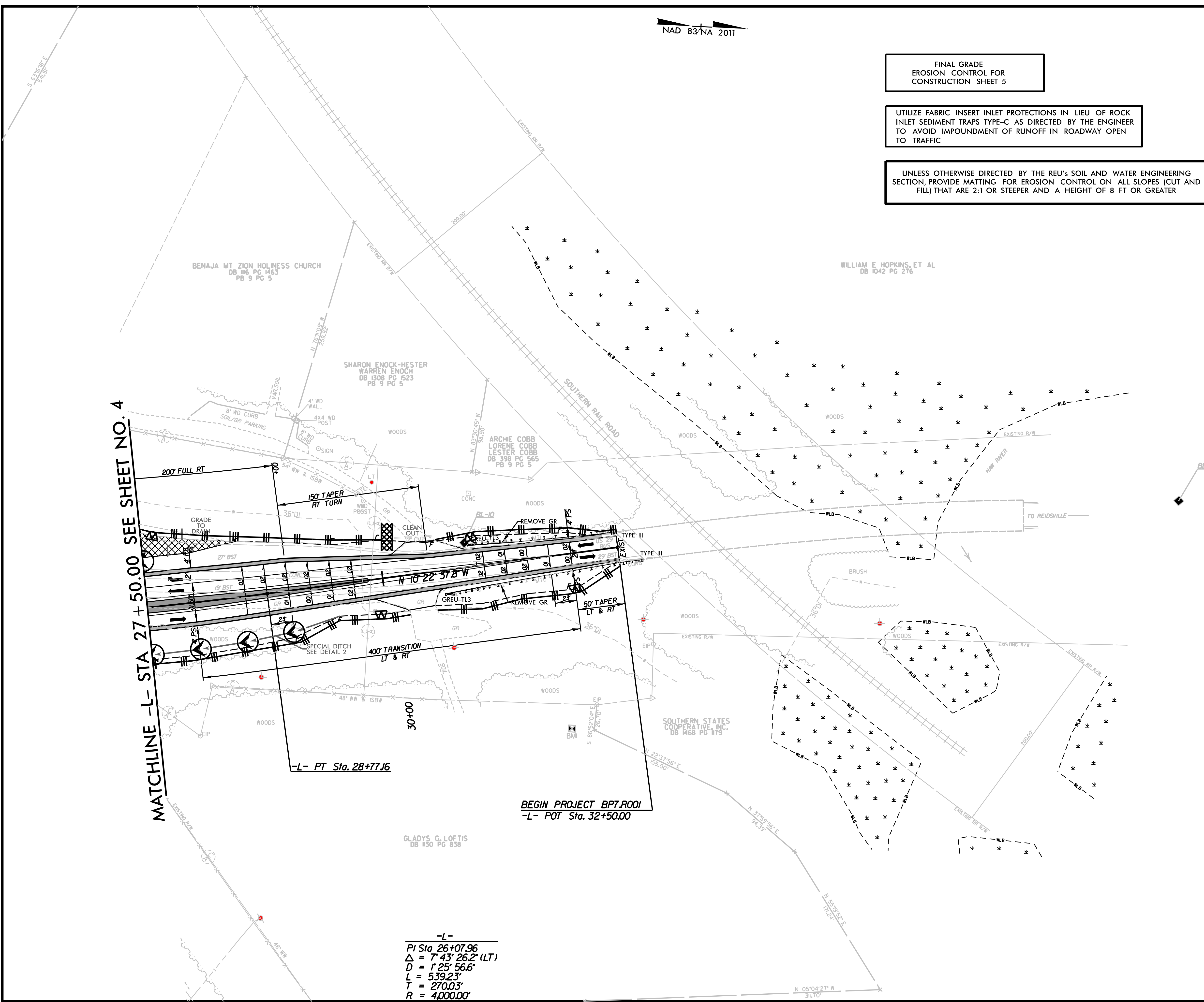
BEGIN CONSTRUCTION
 -RPD- POT Sta. 10+00.00
 -RPD- POT Sta. 10+00.00

NAD 83/NA 2011

FINAL GRADE
EROSION CONTROL FOR
CONSTRUCTION SHEET 5

UTILIZE FABRIC INSERT INLET PROTECTIONS IN LIEU OF ROCK
INLET SEDIMENT TRAPS TYPE-C AS DIRECTED BY THE ENGINEER
TO AVOID IMPOUNDMENT OF RUNOFF IN ROADWAY OPEN
TO TRAFFIC

UNLESS OTHERWISE DIRECTED BY THE REU'S SOIL AND WATER ENGINEERING
SECTION, PROVIDE MATTING FOR EROSION CONTROL ON ALL SLOPES (CUT AND
FILL) THAT ARE 2:1 OR STEEPER AND A HEIGHT OF 8 FT OR GREATER



MATCHLINE -L- STA 27 + 50.00 SEE SHEET NO. 4

200' FULL RT

150' TAPER RT TURN

GRADE TO DRAIN

27' BST

19' BST

23' BST

SPECIAL DITCH SEE DETAIL 2

400' TRANSITION LT & RT

-L- PT Sta. 28+77.16

30+00

BEGIN PROJECT BPT7R001
-L- POT Sta. 32+50.00

GLADYS G. LOFTIS
DB #30 PG 838

-L-
PI Sta. 26+07.96
 $\Delta = 7^{\circ}43'26.2"$ (LT)
D = 125' 56.6"
L = 539.23'
T = 270.03'
R = 4,000.00'