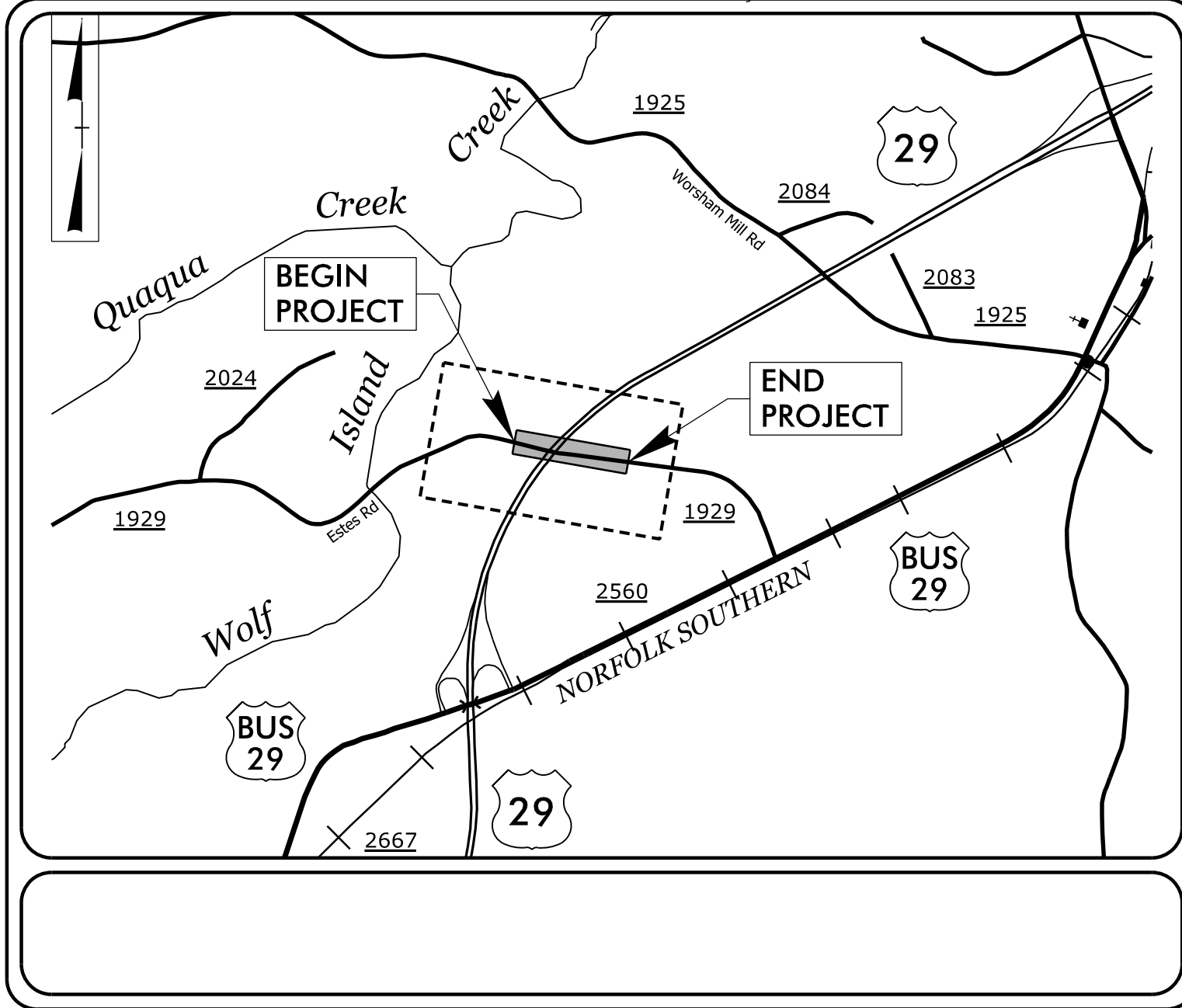


TIP PROJECT: BR-0097

See Sheet 1B For Conventional Symbols

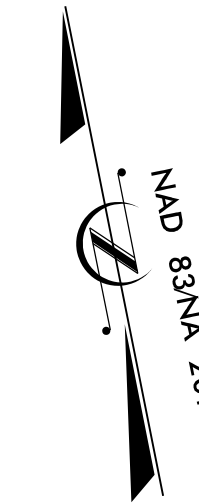


STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS
PLAN FOR PROPOSED
HIGHWAY EROSION CONTROL

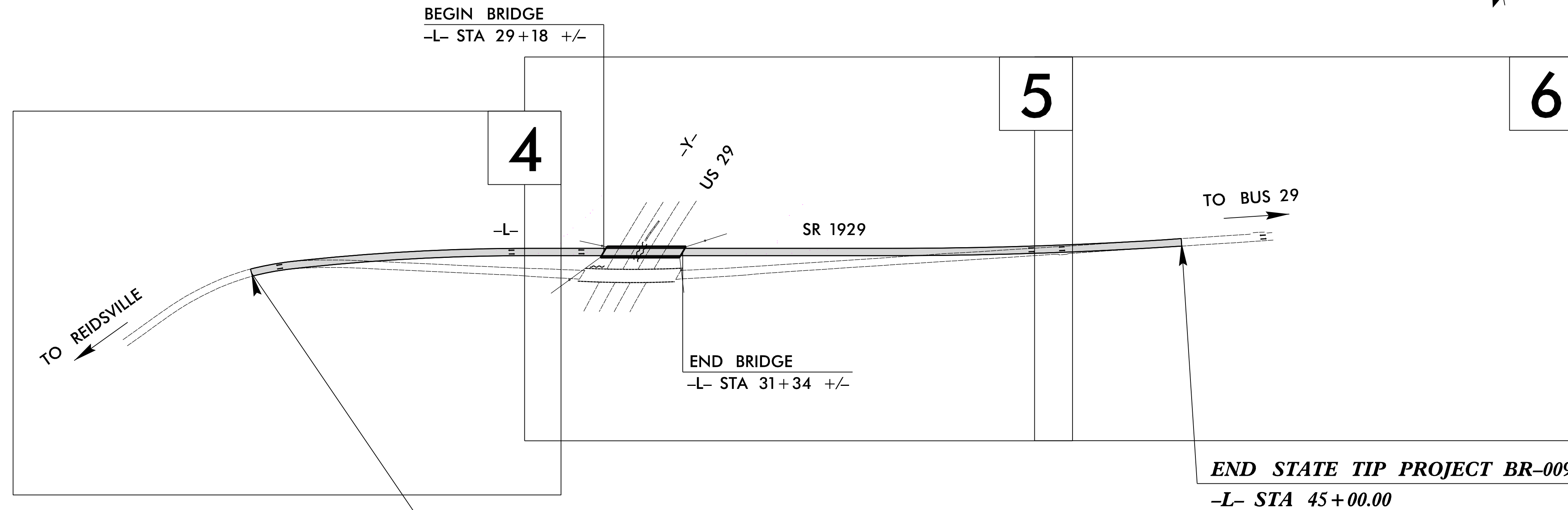
ROCKINGHAM COUNTY

LOCATION: BRIDGE NO. 780178 ON SR 1929 OVER US 29

TYPE OF WORK: GRADING, DRAINAGE, PAVING,
AND STRUCTURES



STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	BR-0097	EC-1	
STATE PROJ. NO.	F.A. PROJ. NO.	DESCRIPTION	
67097.1.1	N/A	PE	



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

BEGIN STATE TIP PROJECT BR-0097
-L- STA 19+50.00

THERE IS NO CONTROL OF ACCESS ON THIS PROJECT.
CLEARING ON THIS PROJECT SHALL BE PERFORMED TO THE LIMITS ESTABLISHED BY METHOD II

GRAPHIC SCALE



THESE EROSION AND SEDIMENT CONTROL PLANS COMPLY WITH
THE APPLICABLE REGULATIONS SET FORTH BY THE NCG-010000
GENERAL CONSTRUCTION PERMIT EFFECTIVE APRIL 1, 2019
AND ISSUED BY THE NORTH CAROLINA DEPARTMENT OF
ENVIRONMENTAL QUALITY DIVISION OF WATER RESOURCES.



moffatt & nichol

Prepared in the Office of:

MOFFATT & NICHOL
4700 FALLS OF NEUSE ROAD, SUITE 300
RALEIGH, NORTH CAROLINA 27609
(919)781-4626 PHONE (919)781-4869 FAX

Designed by:

KHALIL GOODMAN 4575
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.

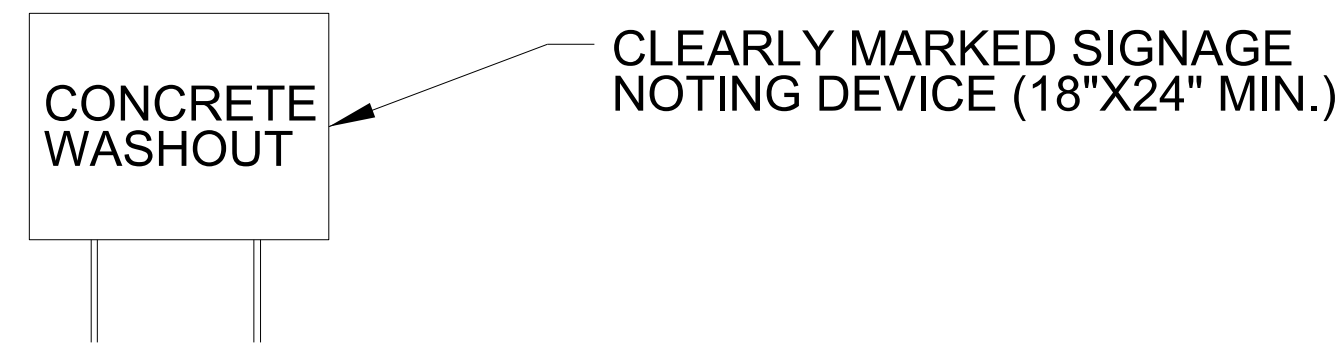
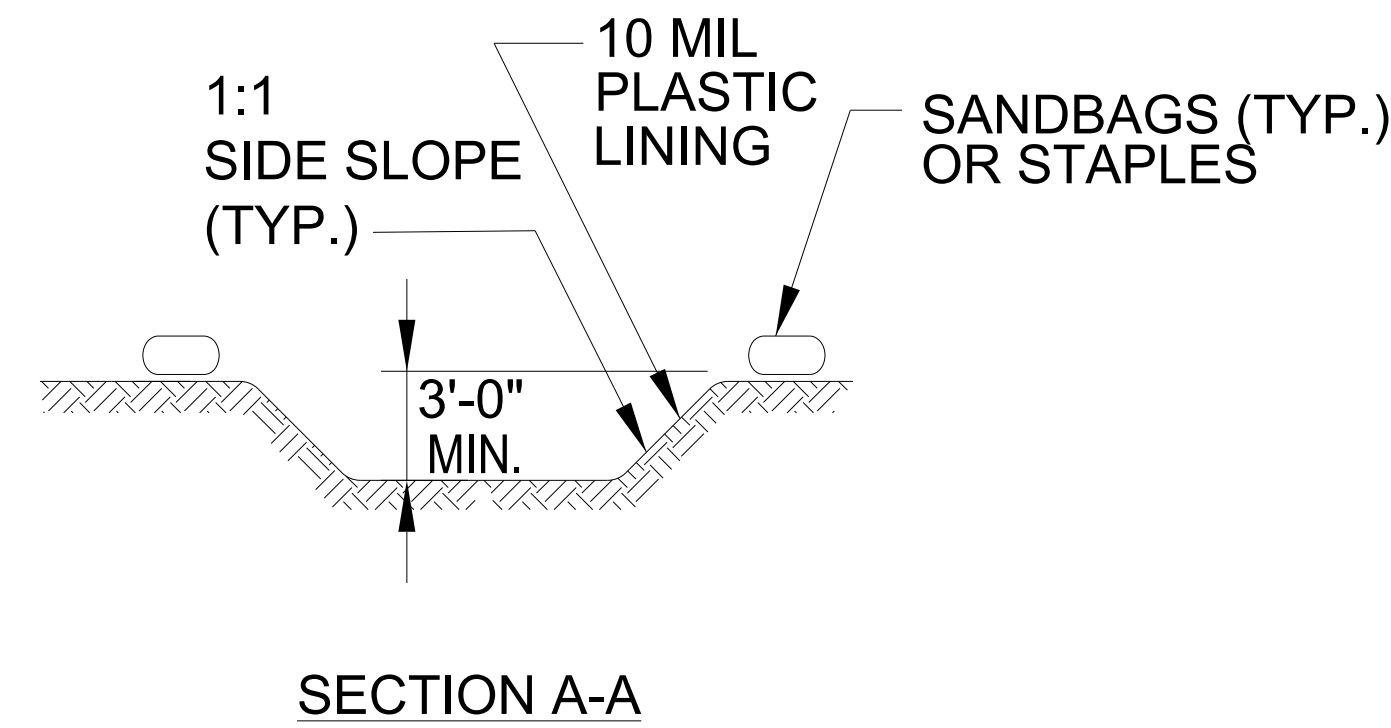
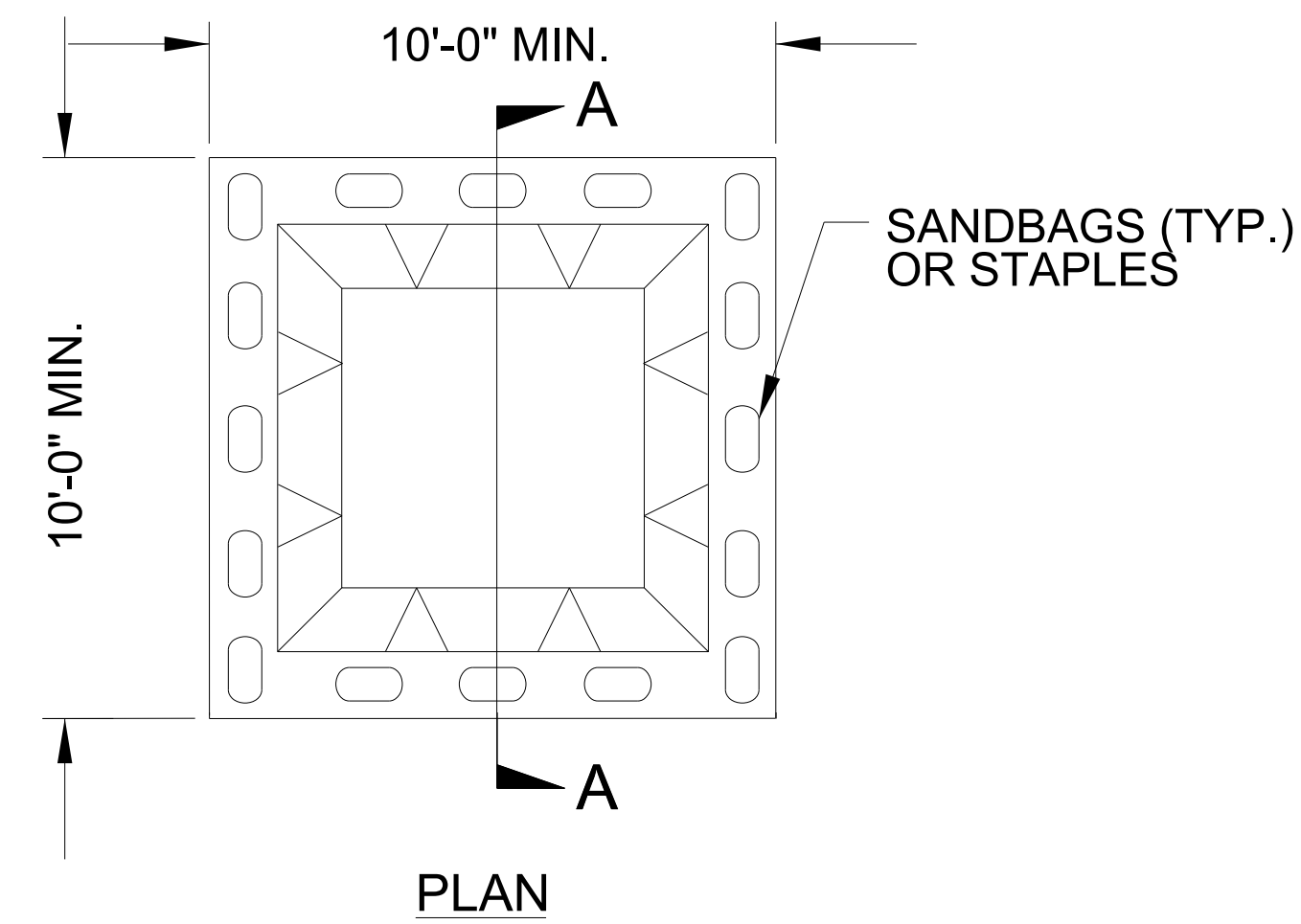
DIVISION OF HIGHWAYS

PROJECT REFERENCE NO.	SHEET NO.
BR-0097	EC-2
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

Std. #	Description	Symbol	Std. #	Description	Symbol
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		1636.03	Excelsior Wattle Barrier	
1632.02	Type B		1636.03	Coir Fiber Wattle Barrier	
1632.03	Type C				

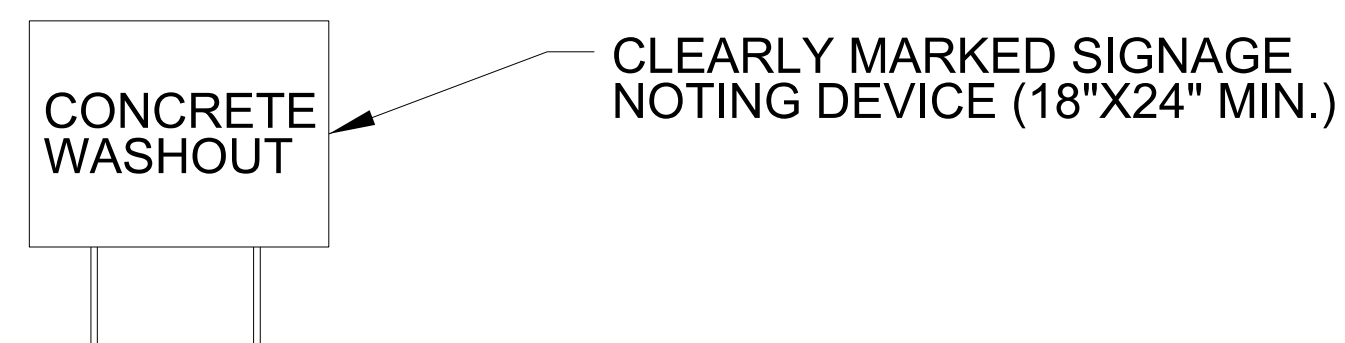
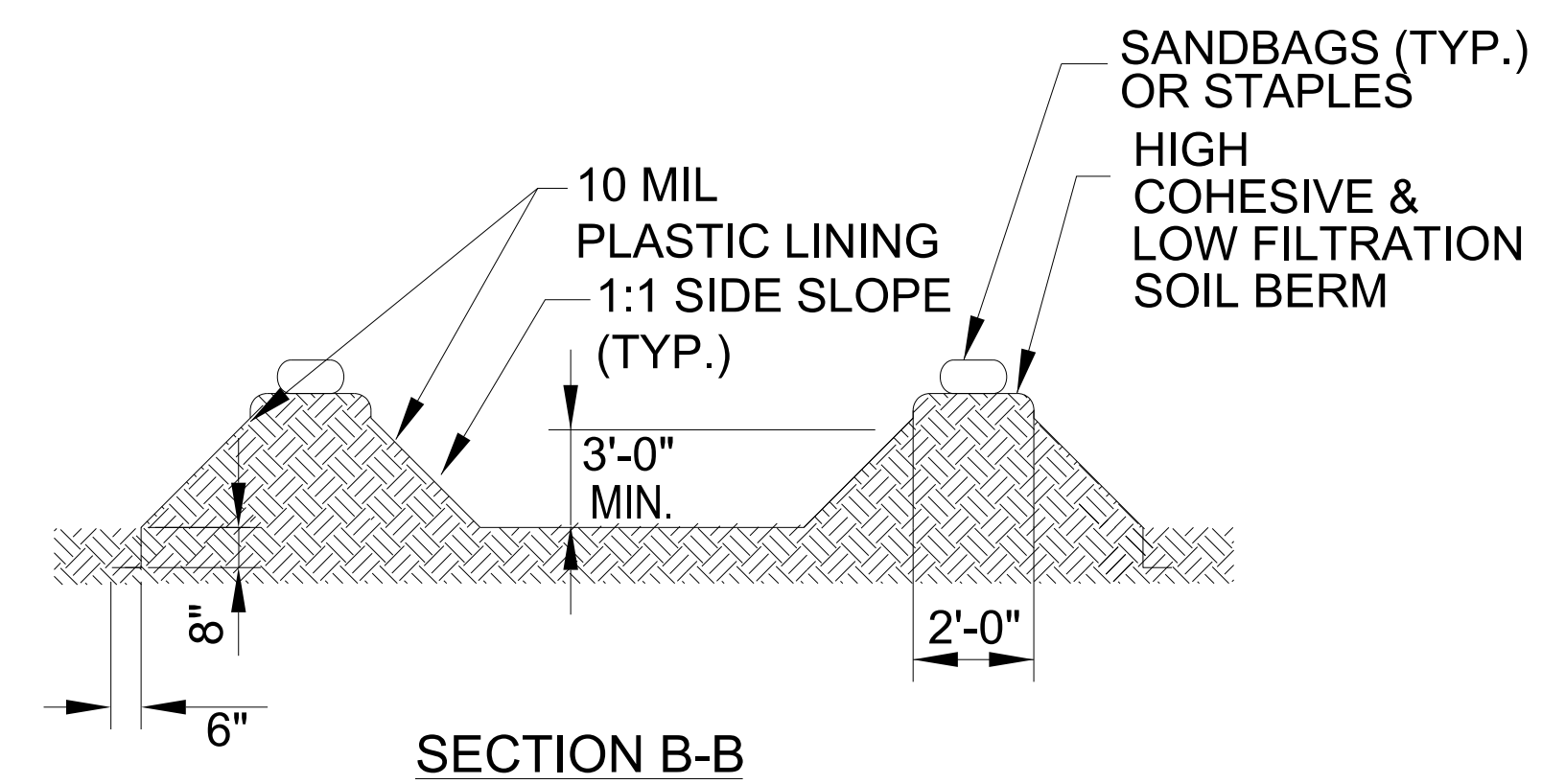
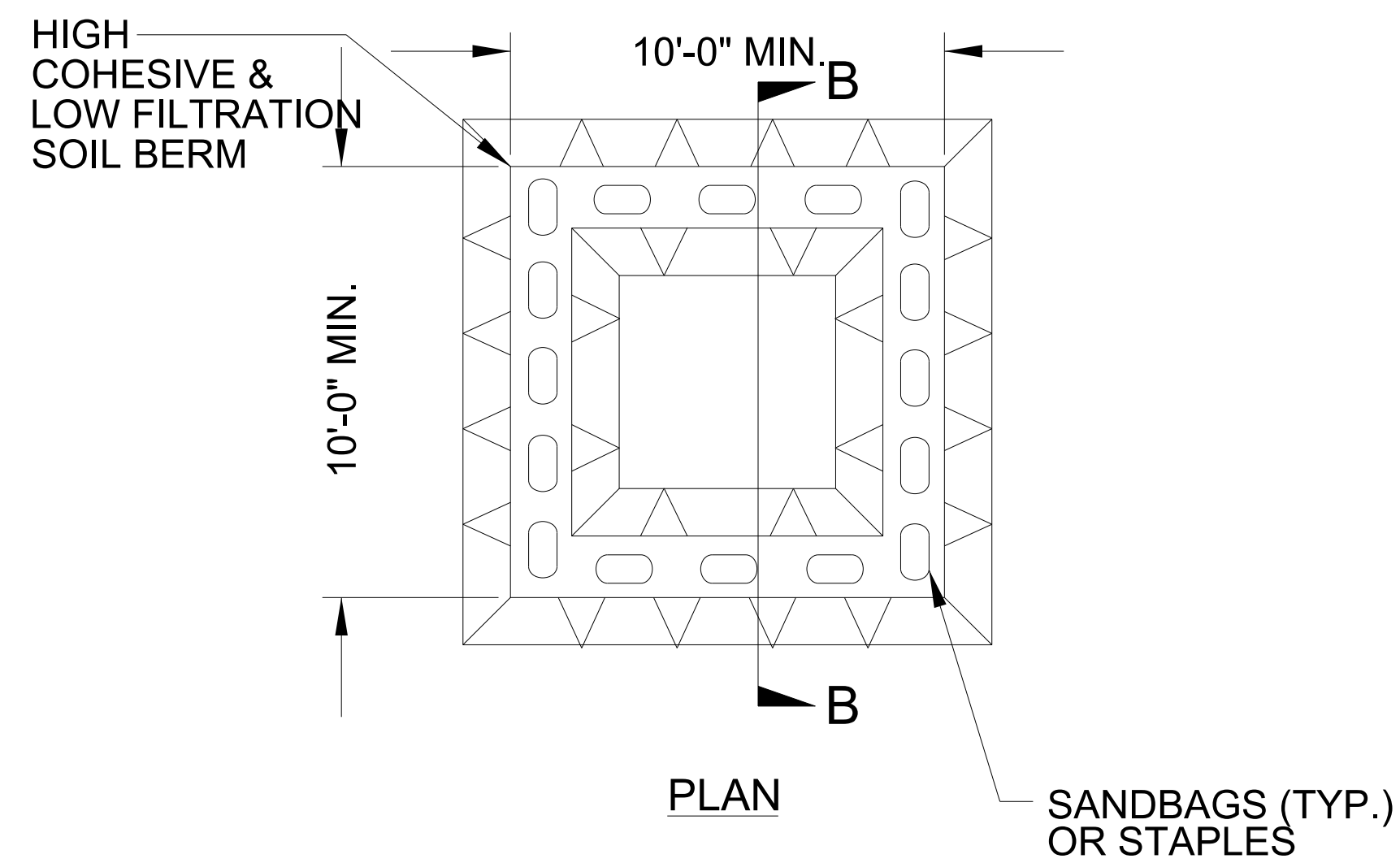
PROJECT REFERENCE NO. <i>BR-0097</i>	SHEET NO. <i>EC-2A</i>
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

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

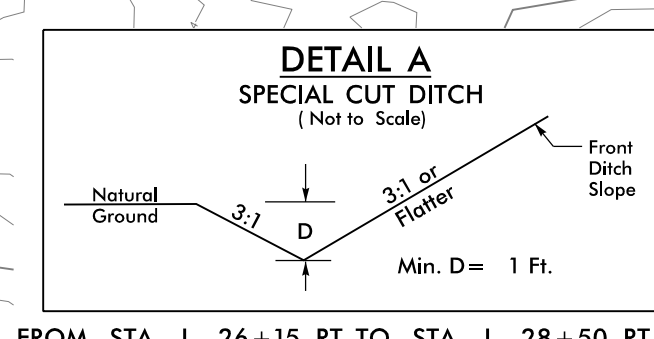
- NOTES:
1. ACTUAL LOCATION DETERMINED IN FIELD
 2. THE CONCRETE WASHOUT STRUCTURES SHALL BE MAINTAINED WHEN THE LIQUID AND/OR SOLID REACHES 75% OF THE STRUCTURES CAPACITY TO PROVIDE ADEQUATE HOLDING CAPACITY WITH A MINIMUM 12 INCHES OF FREEBOARD.
 3. CONCRETE WASHOUT STRUCTURE NEEDS TO BE CLEARLY MARKED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

DIVISION OF HIGHWAYS
STATE OF NORTH CAROLINA

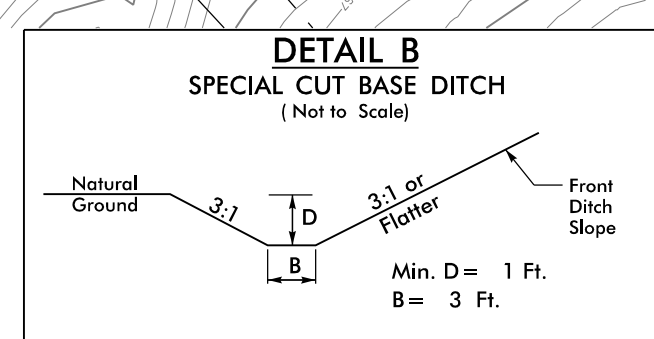
PROJECT REFERENCE NO. <i>BR-0097</i>	SHEET NO. <i>EC-3B</i>
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

SOIL STABILIZATION TIMEFRAMES

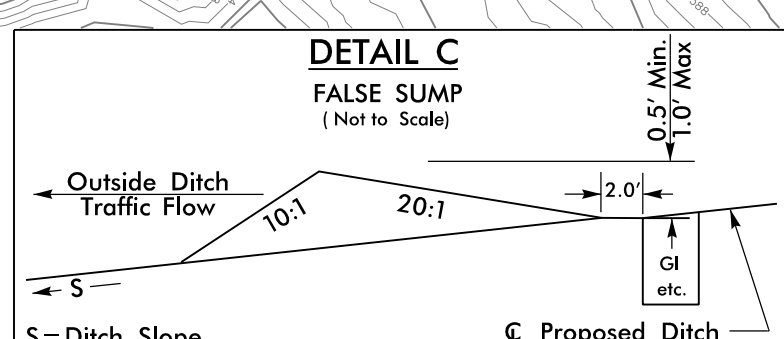
<i>SITE DESCRIPTION</i>	<i>STABILIZATION TIME</i>	<i>TIMEFRAME EXCEPTIONS</i>
PERIMETER DIKES, SWALES, DITCHES AND SLOPES	7 DAYS	NONE
HIGH QUALITY WATER (HQW) ZONES	7 DAYS	NONE
SLOPES STEEPER THAN 3:1	7 DAYS	IF SLOPES ARE 10' OR LESS IN LENGTH AND ARE NOT STEEPER THAN 2:1, 14 DAYS ARE ALLOWED.
SLOPES 3:1 TO 4:1	14 DAYS	7 DAYS FOR SLOPES GREATER THAN 50' IN LENGTH WITH SLOPES STEEPER THAN 4:1. 7 DAYS FOR PERIMETER DIKES, SWALES, DITCHES PERIMETER SLOPES, AND HQW ZONES
ALL OTHER AREAS WITH SLOPES FLATTER THAN 4:1	14 DAYS	7 DAYS FOR PERIMETER DIKES, SWALES, DITCHES PERIMETER SLOPES, AND HQW ZONES



FROM STA. -L- 26+15 RT TO STA. -L- 28+50 RT



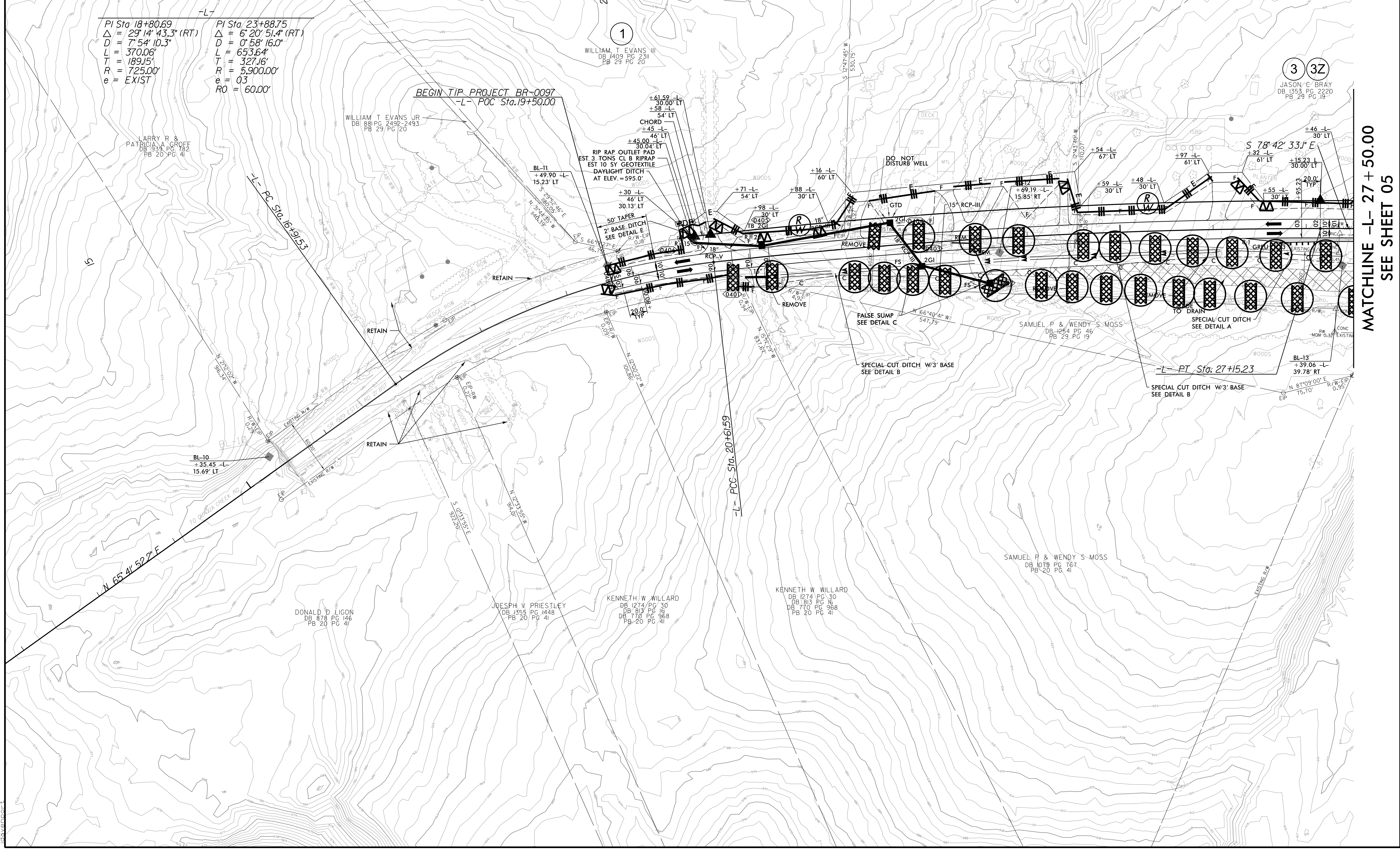
FROM STA. -L- 21+21 RT TO STA. -L- 26+15 RT



AT -L- STA. 22+75 RT
AT -L- STA. 23+57 RT

**CLEARING AND GRUBBING
EROSION CONTROL FOR
CONSTRUCTION SHEET 04**

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



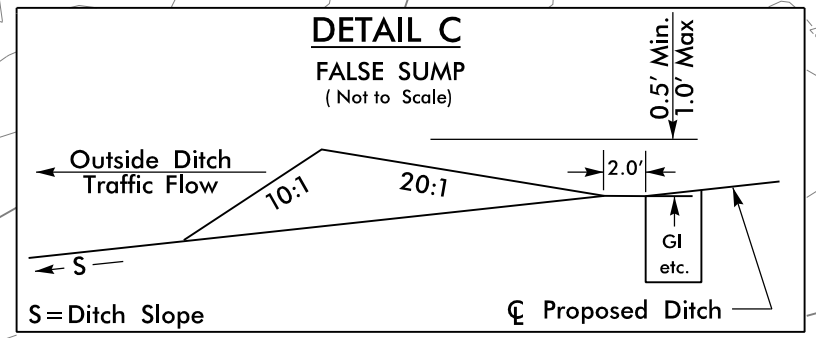
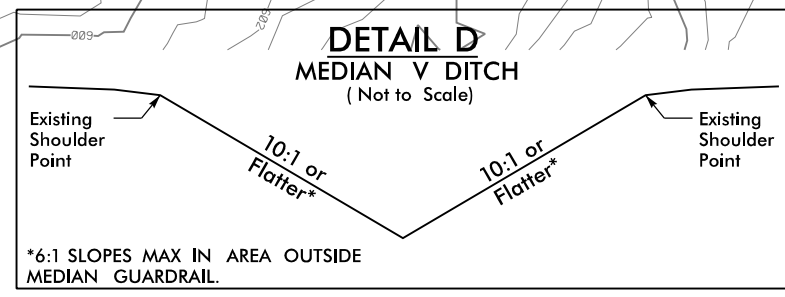
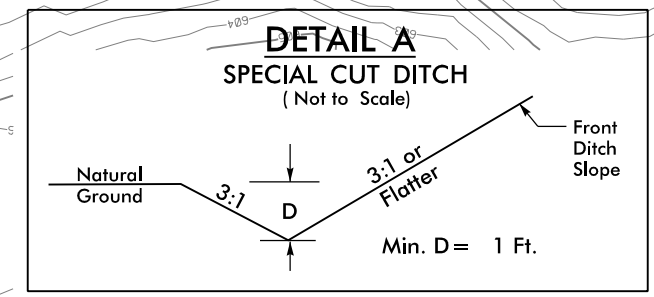
PI Sta 18+80.69
Δ = 29°14'43.3" (RT)
D = 7'54"10.3"
L = 370.06'
T = 189.15'
R = 725.00'
e = EXIST

PI Sta 23+88.75
Δ = 6°20'51.4" (RT)
D = 0'58"16.0"
L = 653.64'
T = 327.16'
R = 5,900.00'
e = 03
RO = 60.00'

BEGIN TIP PROJECT BR-0097
-L- POC Sta. 19+50.00

MATCHLINE -L- 27 + 50.00
SEE SHEET 05

6/5/2024
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**CLEARING AND GRUBBING
EROSION CONTROL FOR
CONSTRUCTION SHEET 05**

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

FROM STA. -L- 26+15 RT TO STA. -L- 28+50 RT
FROM STA. -L- 33+15 LT TO STA. -L- 40+32 LT
FROM STA. -L- 40+62 LT TO STA. -L- 42+44 LT

FROM -Y- STA. 12+77 (0.47' LT) (ELEV. = 613.04')
TO -Y- STA. 16+04.5 (0.47' LT) (ELEV. = 611.66')

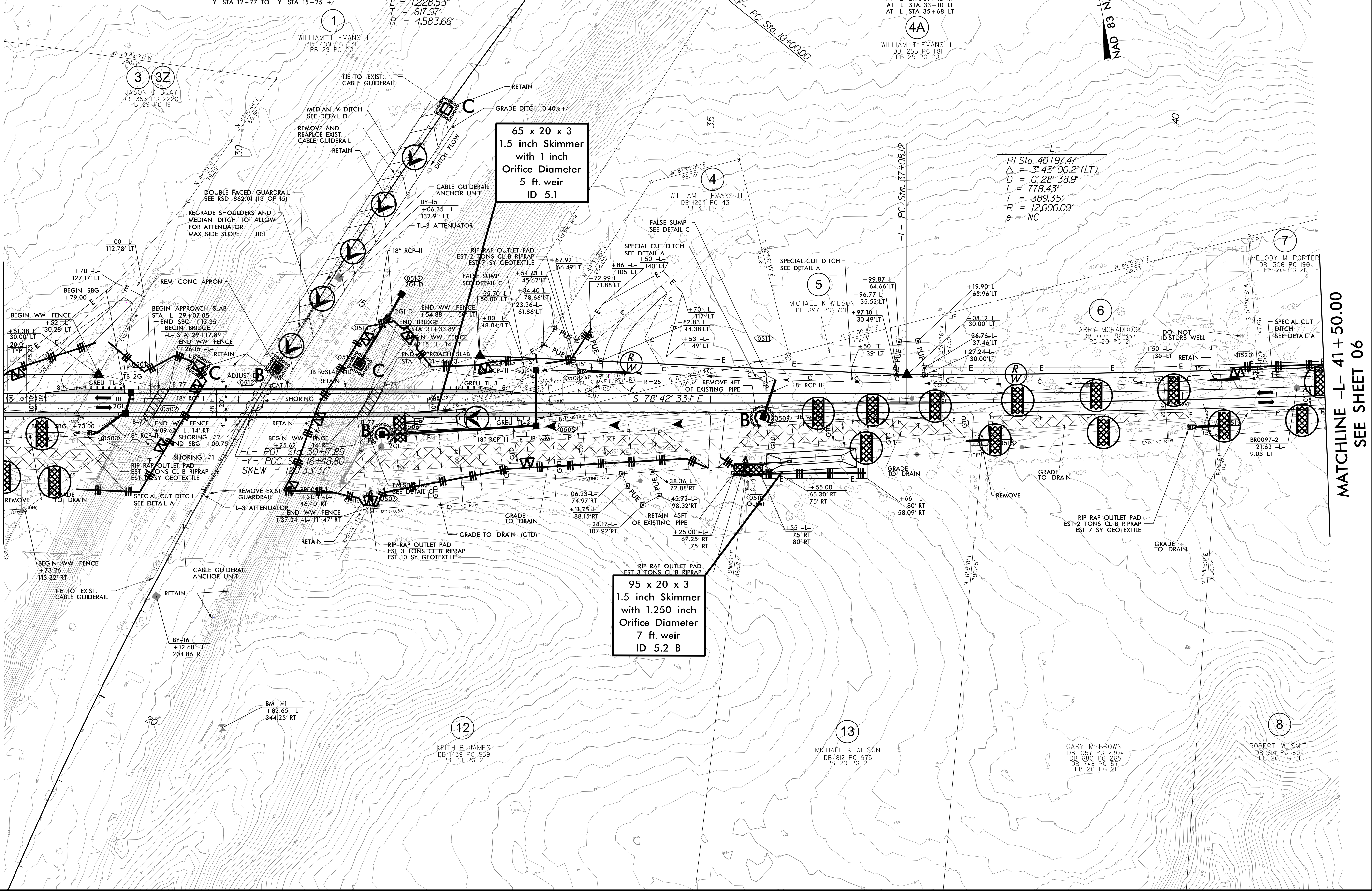
PI Sta 16+17.97
 $\Delta = 15' 21" 23.7" (LT)$
 $D = 1' 15" 00.0"$
 $L = 1,228.53'$
 $T = 617.97'$
 $R = 4,583.66'$

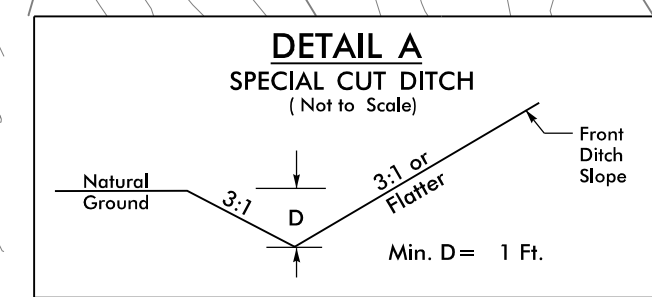
AT -L- STA. 31+40 RT
AT -L- STA. 33+10 LT
AT -L- STA. 35+68 LT

MATCHLINE -L- 27 + 50.00
SEE SHEET 04

MATCHLINE -L- 41 + 50.00
SEE SHEET 06

6/5/2024
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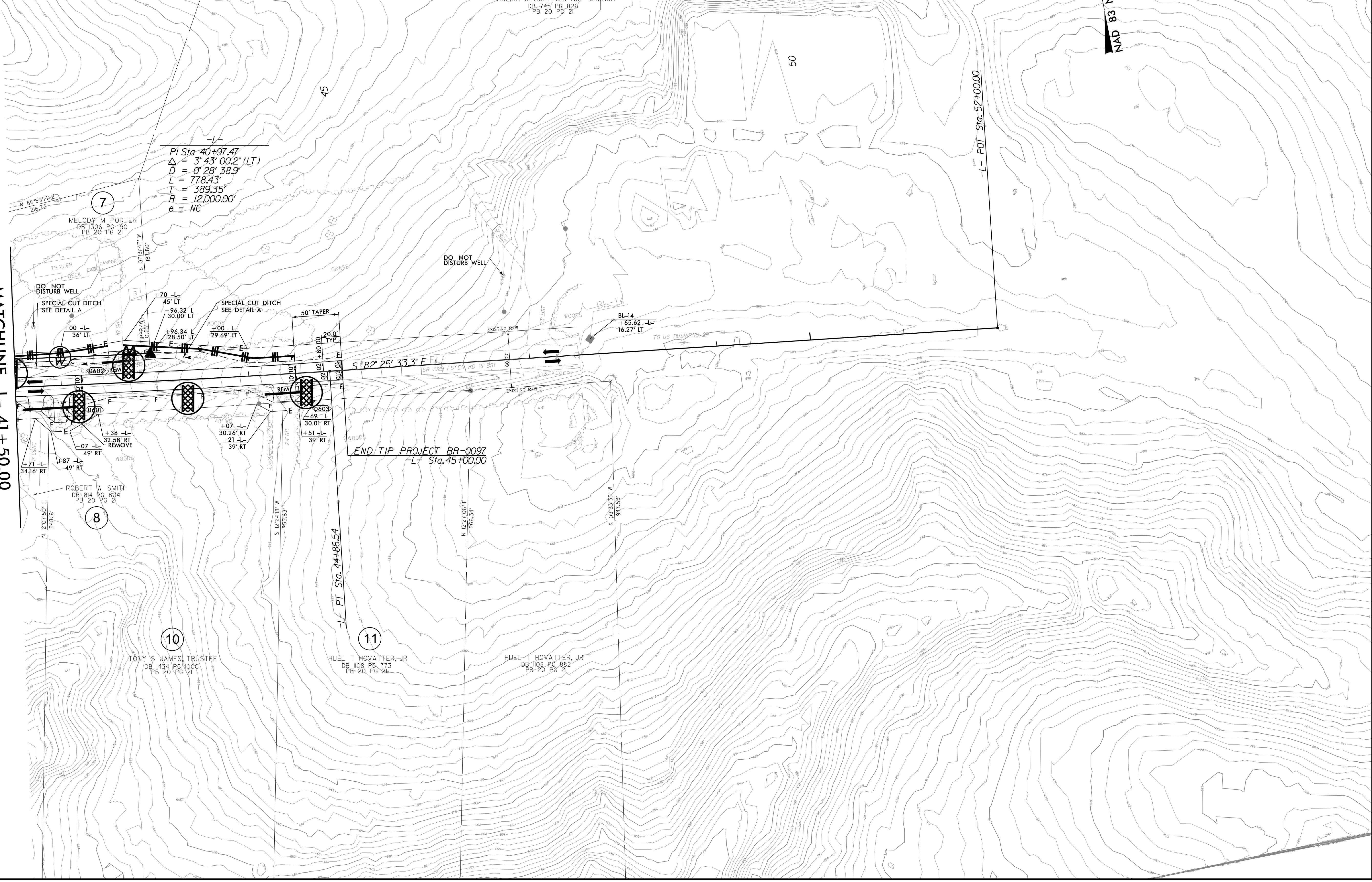


**CLEARING AND GRUBBING
EROSION CONTROL FOR
CONSTRUCTION SHEET 06**

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

FROM STA. -L- 40+62 LT TO STA. -L- 42+44 LT
FROM STA. -L- 42+74 LT TO STA. -L- 43+50 LT

MATCHLINE -L- 41+50.00
SEE SHEET 05



7
MELODY M PORTER
DB 1306 PG 190
PB 20 PG 21

9
RUEFIN STACEY BAPTIST CHURCH
DB 745 PG 826
PB 20 PG 21

8
ROBERT W SMITH
DB 814 PG 804
PB 20 PG 21

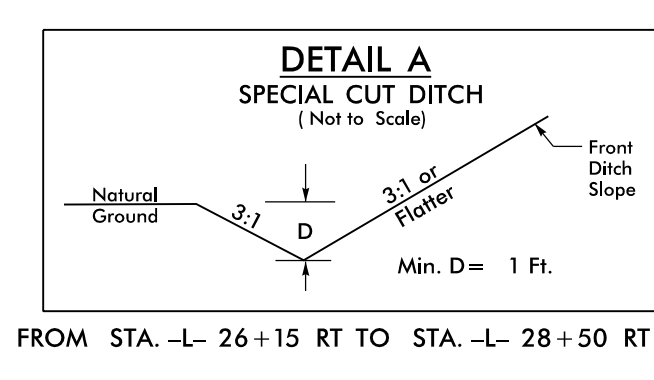
10
TONY S JAMES, TRUSTEE
DB 1434 PG 000
PB 20 PG 21

11
HUEL T HOVATTER, JR
DB 1108 PG 773
PB 20 PG 21

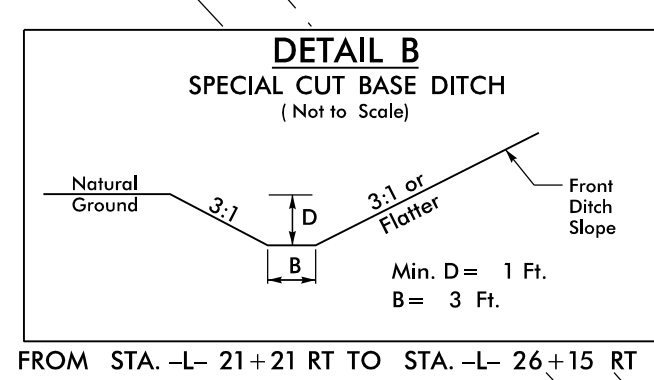
HUEL T HOVATTER, JR
DB 1108 PG 882
PB 20 PG 21

NAD 83 NAD 2011

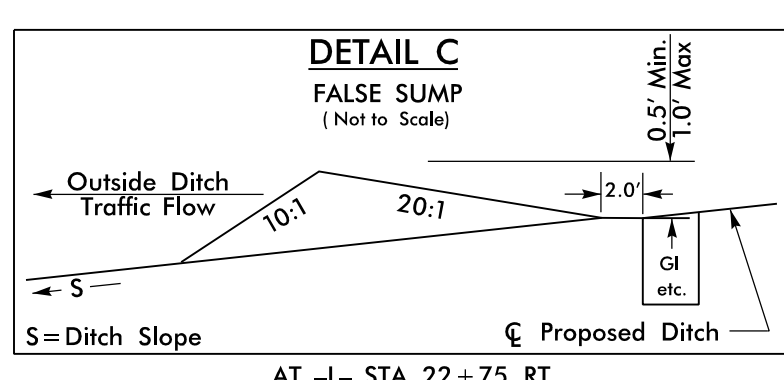
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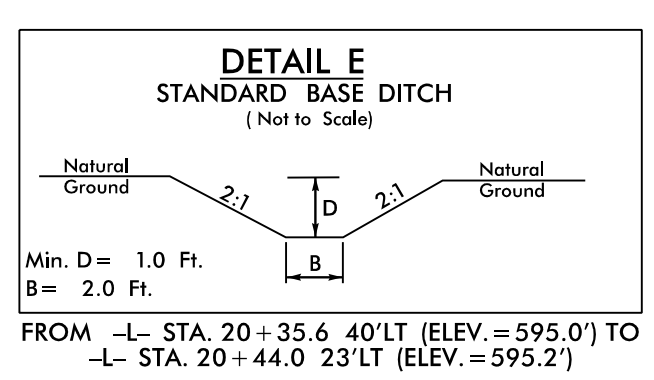
FROM STA. -L- 26+15 RT TO STA. -L- 28+50 RT



FROM STA. -L- 21+21 RT TO STA. -L- 26+15 RT



AT -L- STA. 22+75 RT
AT -L- STA. 23+57 RT

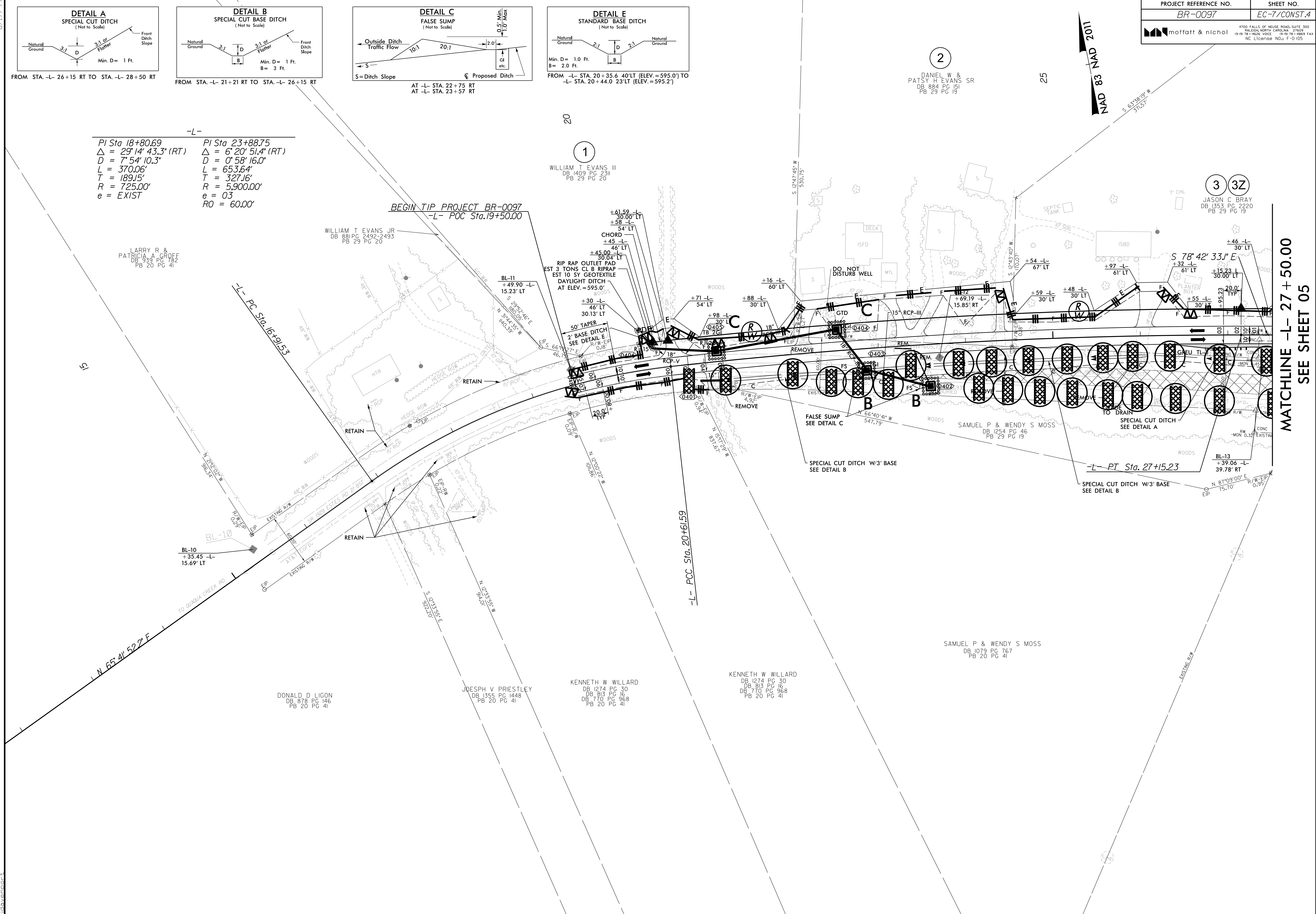


FROM -L- STA. 20+35.6 40' LT (ELEV. = 595.0') TO
-L- STA. 20+44.0 23' LT (ELEV. = 595.2')

-L-

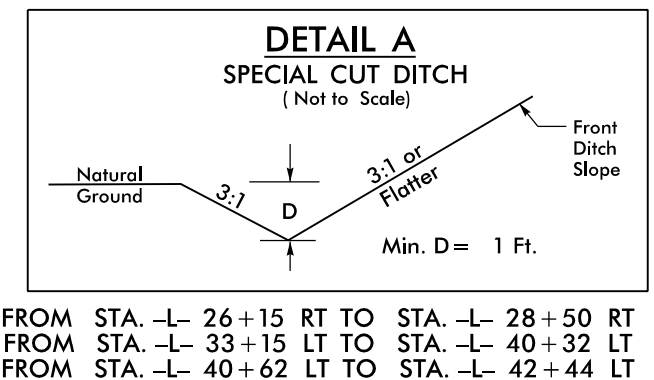
<i>PI Sta 18+80.69</i> $\Delta = 29' 14'' 43.3'' (RT)$ $D = 7' 54'' 10.3''$ $L = 370.06'$ $T = 189.15'$ $R = 725.00'$ $e = EXIST$	<i>PI Sta 23+88.75</i> $\Delta = 6' 20'' 51.4'' (RT)$ $D = 0' 58'' 16.0''$ $L = 653.64'$ $T = 327.16'$ $R = 5,900.00'$ $e = 03$ $RO = 60.00'$
---	--

BEGIN TIP PROJECT BR-0097
-L- POC Sta. 19+50.00

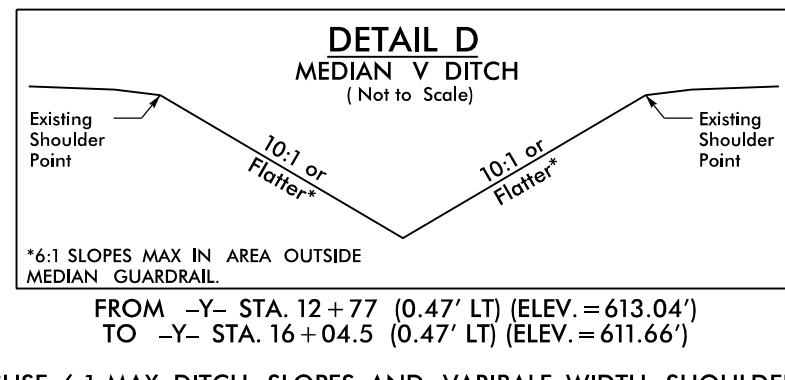


MATCHLINE -L- 27 + 50.00
SEE SHEET 05

6/5/2024
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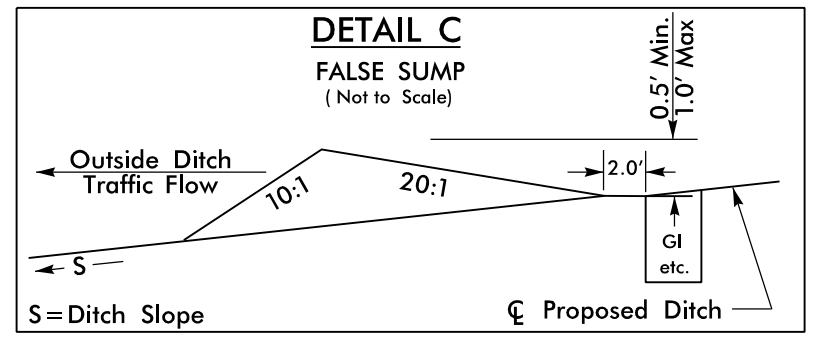
FROM STA. -L- 26+15 RT TO STA. -L- 28+50 RT
 FROM STA. -L- 33+15 LT TO STA. -L- 40+32 LT
 FROM STA. -L- 40+62 LT TO STA. -L- 42+44 LT



FROM -Y- STA. 12+77 (0.47' LT) (ELEV. = 613.04')
 TO -Y- STA. 16+04.5 (0.47' LT) (ELEV. = 611.66')

*USE 6:1 MAX DITCH SLOPES AND VARIABLE WIDTH SHOULDER
 -Y- STA 12+77 TO -Y- STA 15+25 +/-

PI Sta 16+17.97
 $\Delta = 15' 21'' 23.7''$ (LT)
 $D = 1' 15'' 00.0''$
 $L = 1,228.53'$
 $T = 617.97'$
 $R = 4,583.66'$

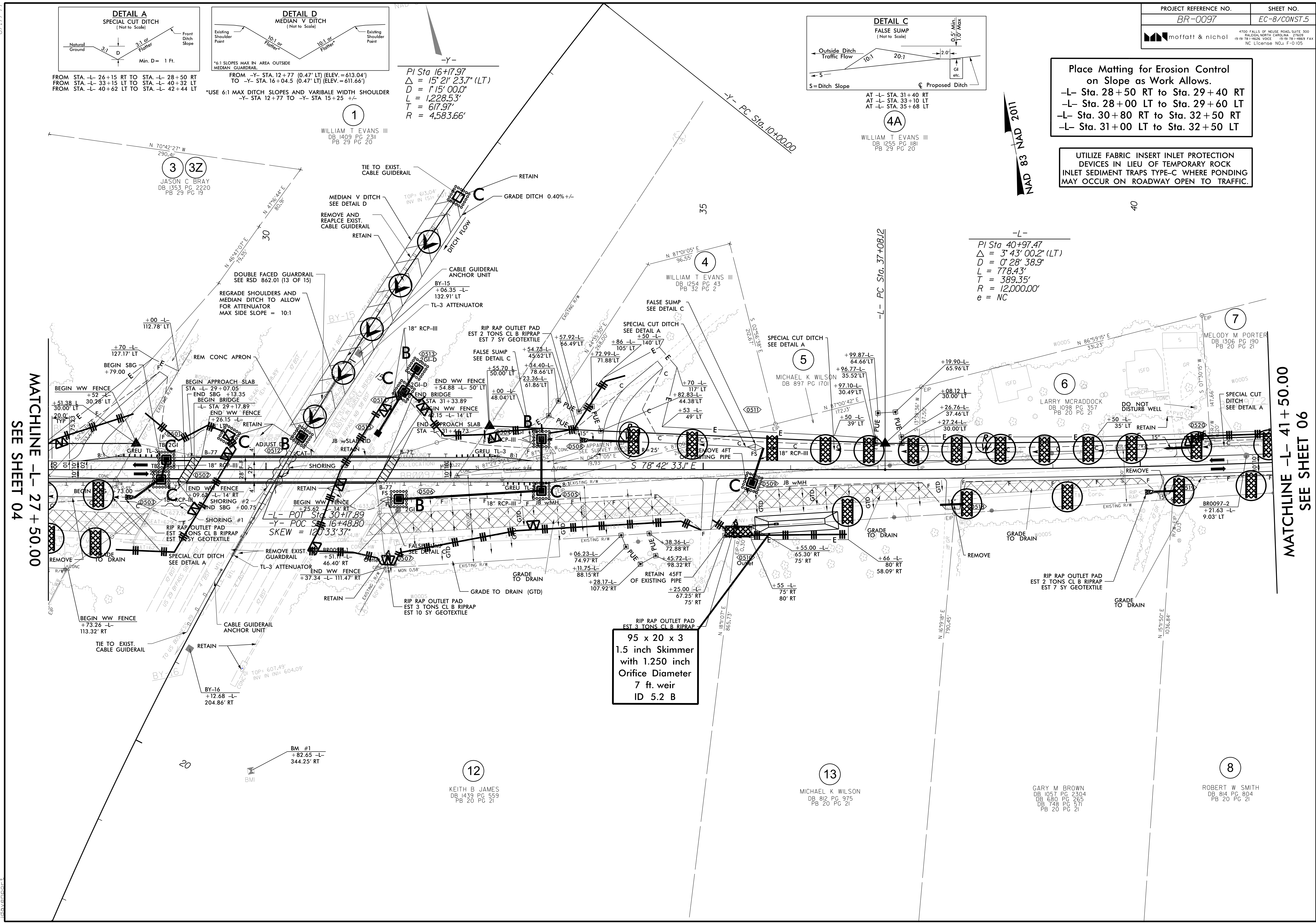


AT -L- STA. 31+40 RT
 AT -L- STA. 33+10 LT
 AT -L- STA. 35+68 LT

Place Matting for Erosion Control on Slope as Work Allows.

- L- Sta. 28+50 RT to Sta. 29+40 RT
- L- Sta. 28+00 LT to Sta. 29+60 LT
- L- Sta. 30+80 RT to Sta. 32+50 RT
- L- Sta. 31+00 LT to Sta. 32+50 LT

UTILIZE FABRIC INSERT INLET PROTECTION DEVICES IN LIEU OF TEMPORARY ROCK INLET SEDIMENT TRAPS TYPE-C WHERE PONDING MAY OCCUR ON ROADWAY OPEN TO TRAFFIC.



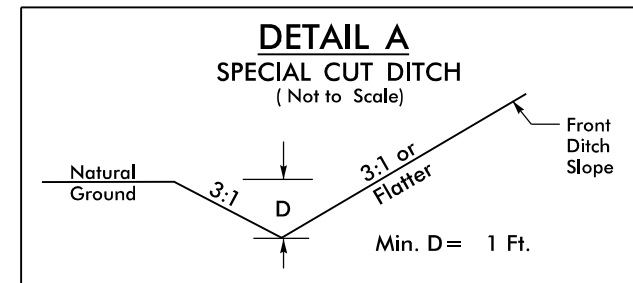
MATCHLINE -L- 27 + 50.00
SEE SHEET 04

MATCHLINE -L- 41 + 50.00
SEE SHEET 06

-L-
 PI Sta 40+97.47
 $\Delta = 3' 43'' 00.2''$ (LT)
 $D = 0' 28'' 38.9''$
 $L = 778.43'$
 $T = 389.35'$
 $R = 12,000.00'$
 $e = NC$

95 x 20 x 3
 1.5 inch Skimmer
 with 1.250 inch
 Orifice Diameter
 7 ft. weir
 ID 5.2 B

6/5/2024
 C:\Users\jbr\OneDrive\Documents\BR-0097\Roadside\PSH\BR0097_REU_EC08_PSH05_F_incl.dgn



FROM STA. -L- 40+62 LT TO STA. -L- 42+44 LT
FROM STA. -L- 42+74 LT TO STA. -L- 43+50 LT

9

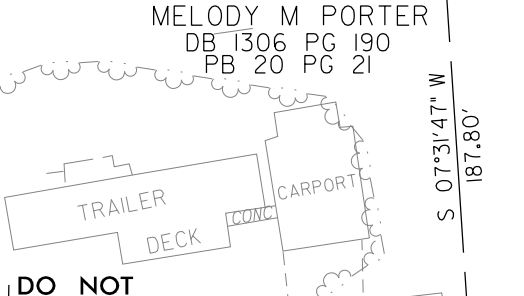
RUFFIN STACEY BAPTIST CHURCH
DB 745 PG 826
PB 20 PG 21

NAD 83 NAD 2011

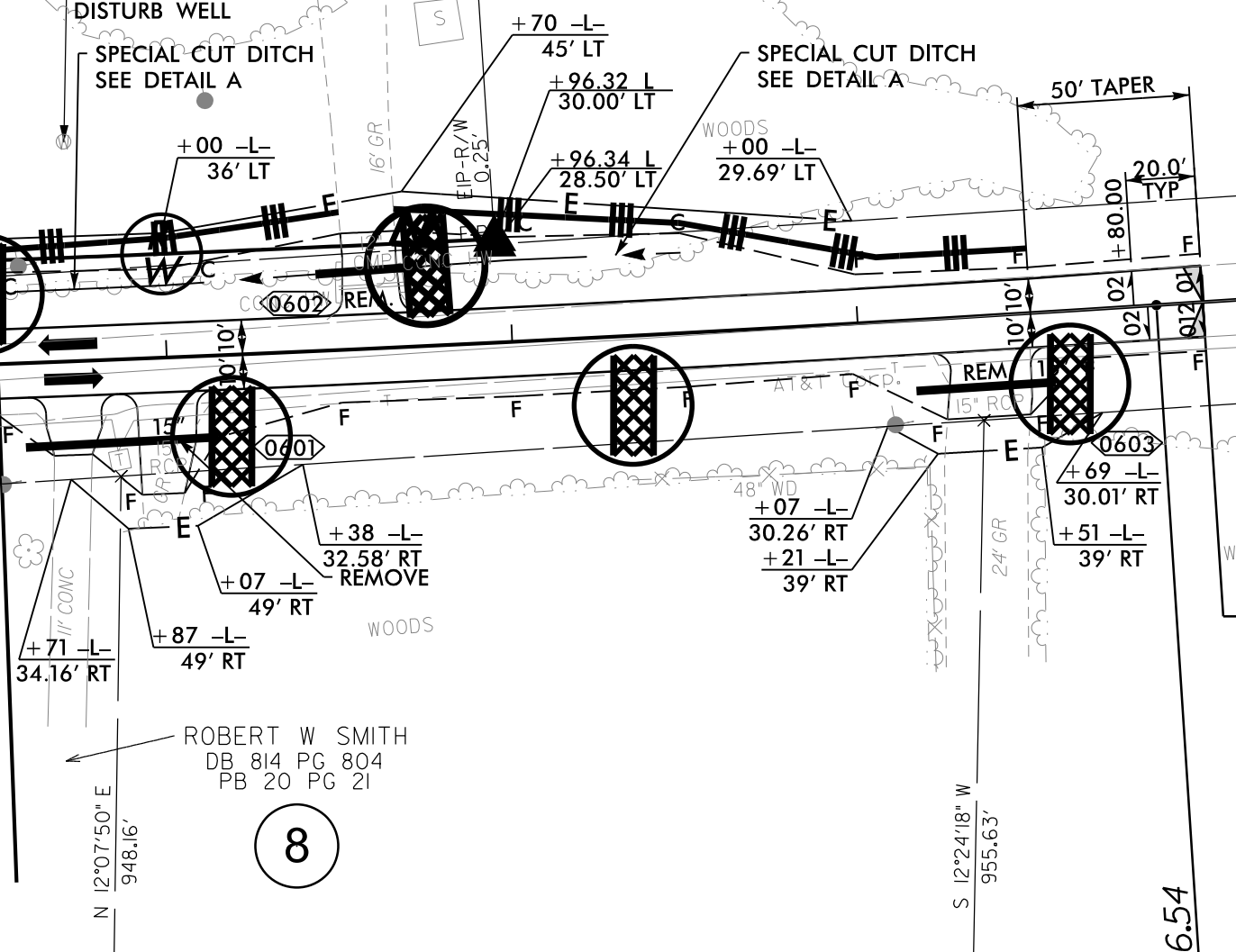
-L-
PI Sta 40+97.47
 $\Delta = 3^{\circ} 43' 00.2''$ (LT)
D = 0' 28' 38.9"
L = 778.43'
T = 389.35'
R = 12,000.00'
e = NC

MATCHLINE -L- 41+50.00
SEE SHEET 05

7
MELODY M PORTER
DB 1306 PG 190
PB 20 PG 21



8
ROBERT W SMITH
DB 814 PG 804
PB 20 PG 21



END TIP PROJECT BR-0097
-L- Sta. 45+00.00

10
TONY S JAMES, TRUSTEE
DB 1434 PG 1000
PB 20 PG 21

11
HUEL T HOVATTER, JR
DB 1108 PG 773
PB 20 PG 21

HUEL T HOVATTER, JR
DB 1108 PG 882
PB 20 PG 21

6/5/2024 6:56:16 AM 11-110\BR-0097\Roadside\PSH\BR0097_REU_EC09_PSH06_F.ino.dgn