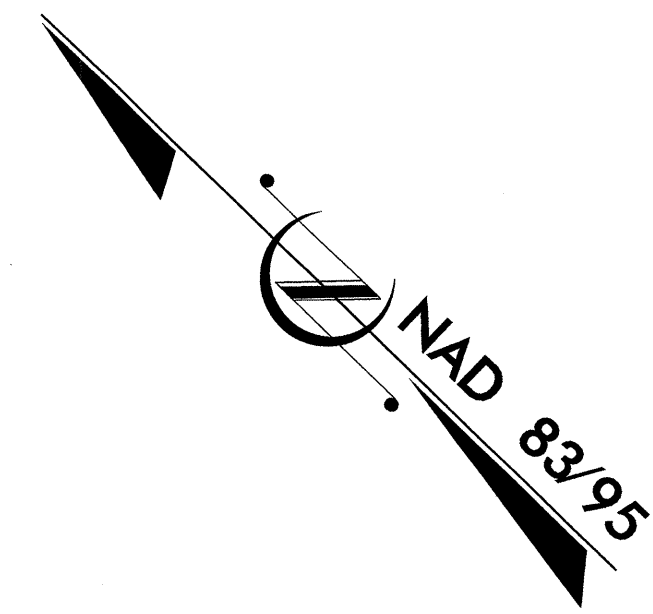


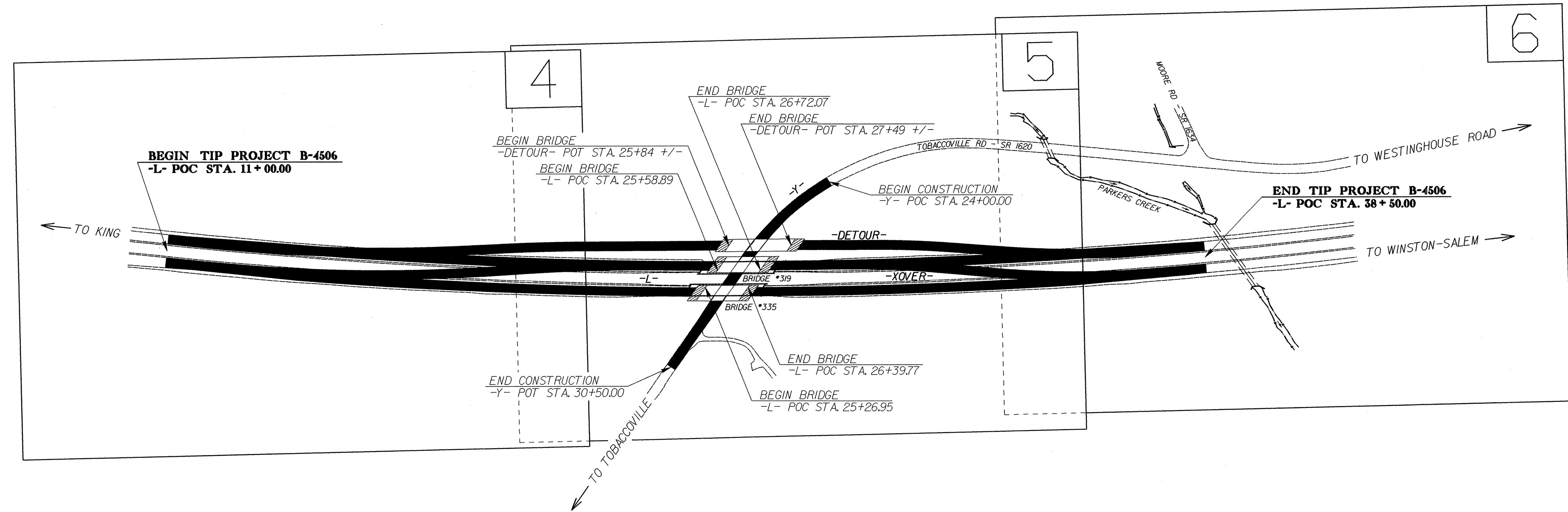
STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	B-4506	EC-1	
STATE PROJ. NO.	F.A. PROJ. NO.	DESCRIPTION	

TIP PROJECT: B-4506

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



**LOCATION: BRIDGES NO. 319 & NO. 335 ON US 52
OVER SR 1620 (TOBACCOVILLE RD.)
TYPE OF WORK: GRADING, PAVING, DRAINAGE, RETAINING WALLS & STRUCTURES**



EROSION AND SEDIMENT CONTROL MEASURES

Std. #	Description	Symbol
1630.03	Temporary Silt Ditch	---
1630.05	Temporary Diversion	TD
1605.01	Temporary Silt Fence	
1606.01	Special Sediment Control Fence	
1622.01	Temporary Berms and Slope Drains	T
1630.02	Silt Basin Type B	▨
1633.01	Temporary Rock Silt Check Type-A	▩
	Temporary Rock Silt Check Type-A with Matting and Polyacrylamide (PAM)	▩
1633.02	Temporary Rock Silt Check Type-B	▩
	Wattle / Coir Fiber Wattle	⤴
	Wattle / Coir Fiber Wattle with Polyacrylamide (PAM)	⤴
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

0
PLANS
0
PROFILE (HORIZONTAL)
0
PROFILE (VERTICAL)

ROADSIDE ENVIRONMENTAL UNIT
DIVISION OF HIGHWAYS
STATE OF NORTH CAROLINA

THESE EROSION AND SEDIMENT CONTROL PLANS COMPLY
WITH THE REGULATIONS SET FORTH BY THE
NCG-010000 GENERAL CONSTRUCTION PERMIT EFFECTIVE AUGUST 3, 2011
ISSUED BY THE NORTH CAROLINA DEPARTMENT OF ENVIRONMENT AND
NATURAL RESOURCES DIVISION OF WATER QUALITY.

Prepared In the Office of:
ROADSIDE ENVIRONMENTAL UNIT
1 South Wilmington St.
Raleigh, NC 27611
2012 STANDARD SPECIFICATIONS

Roadway Standard Drawings

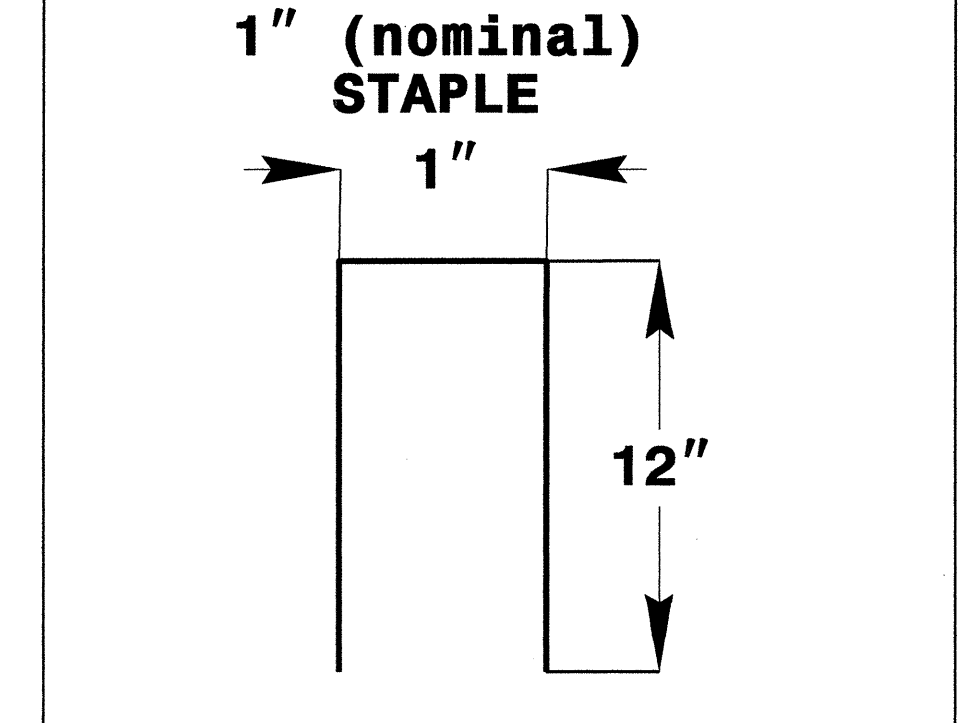
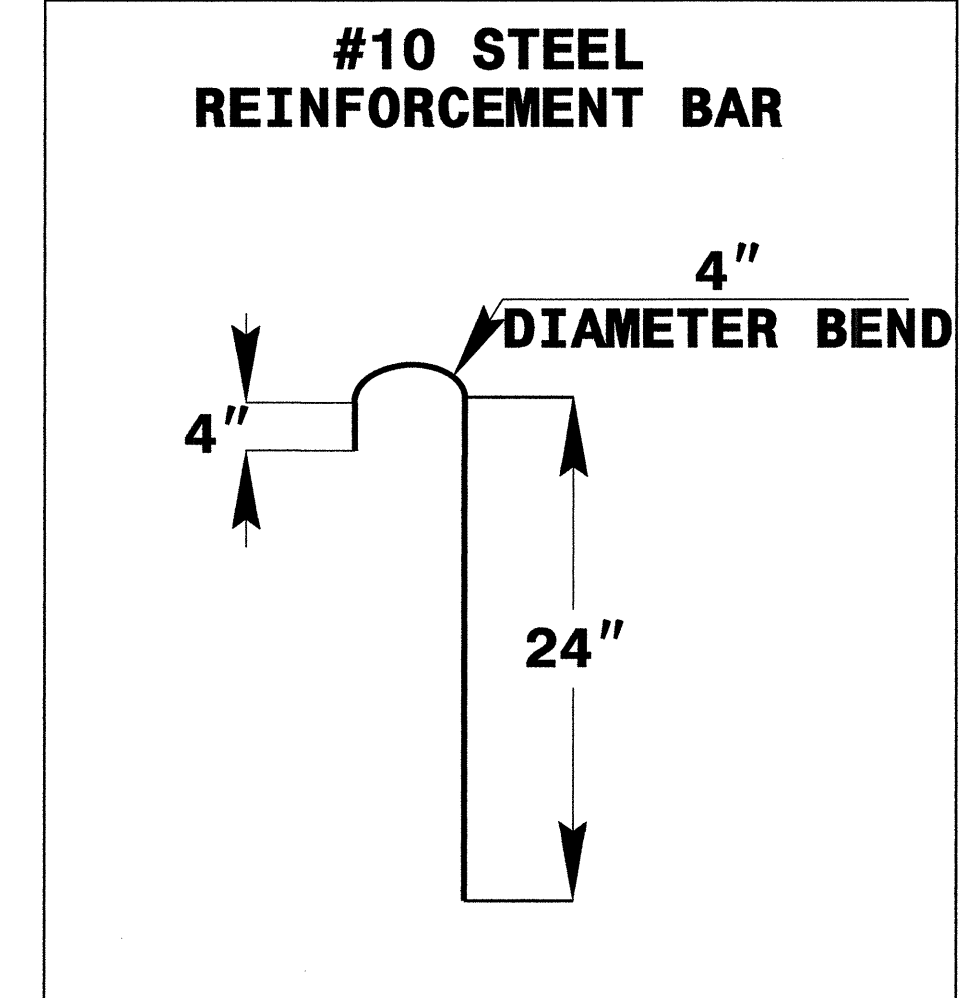
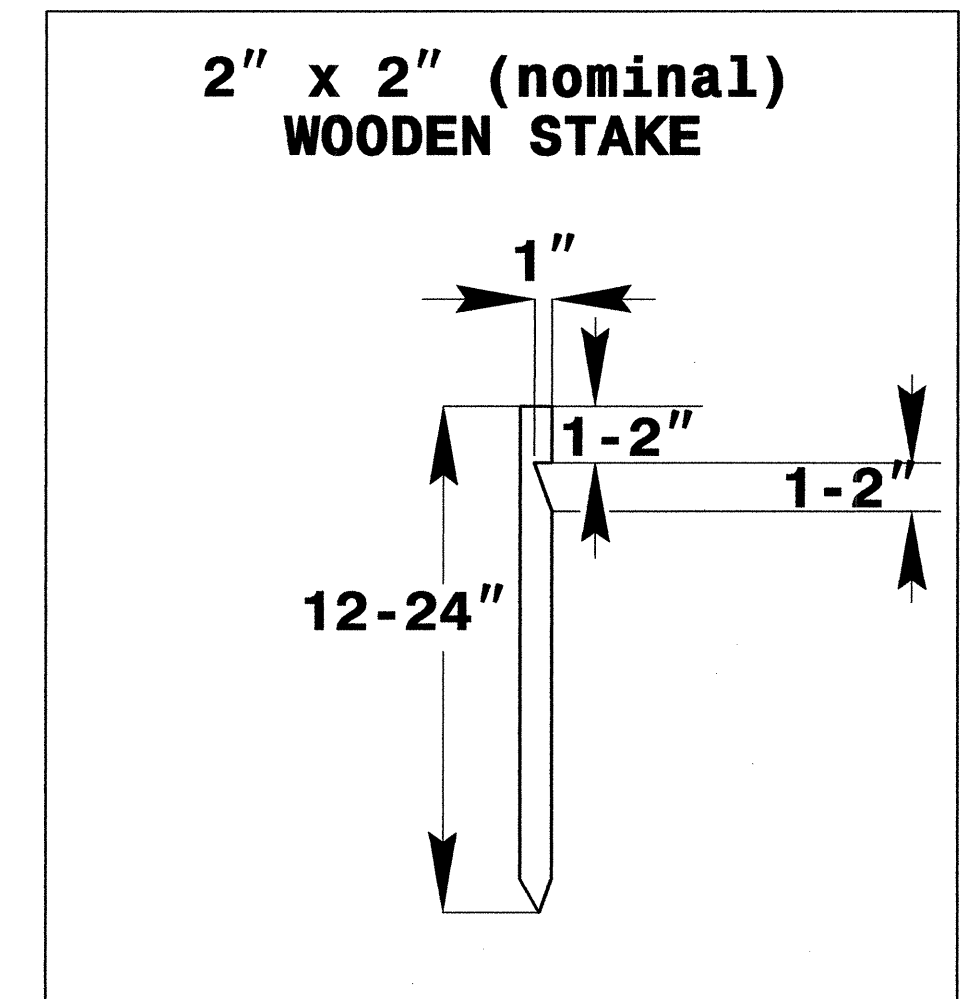
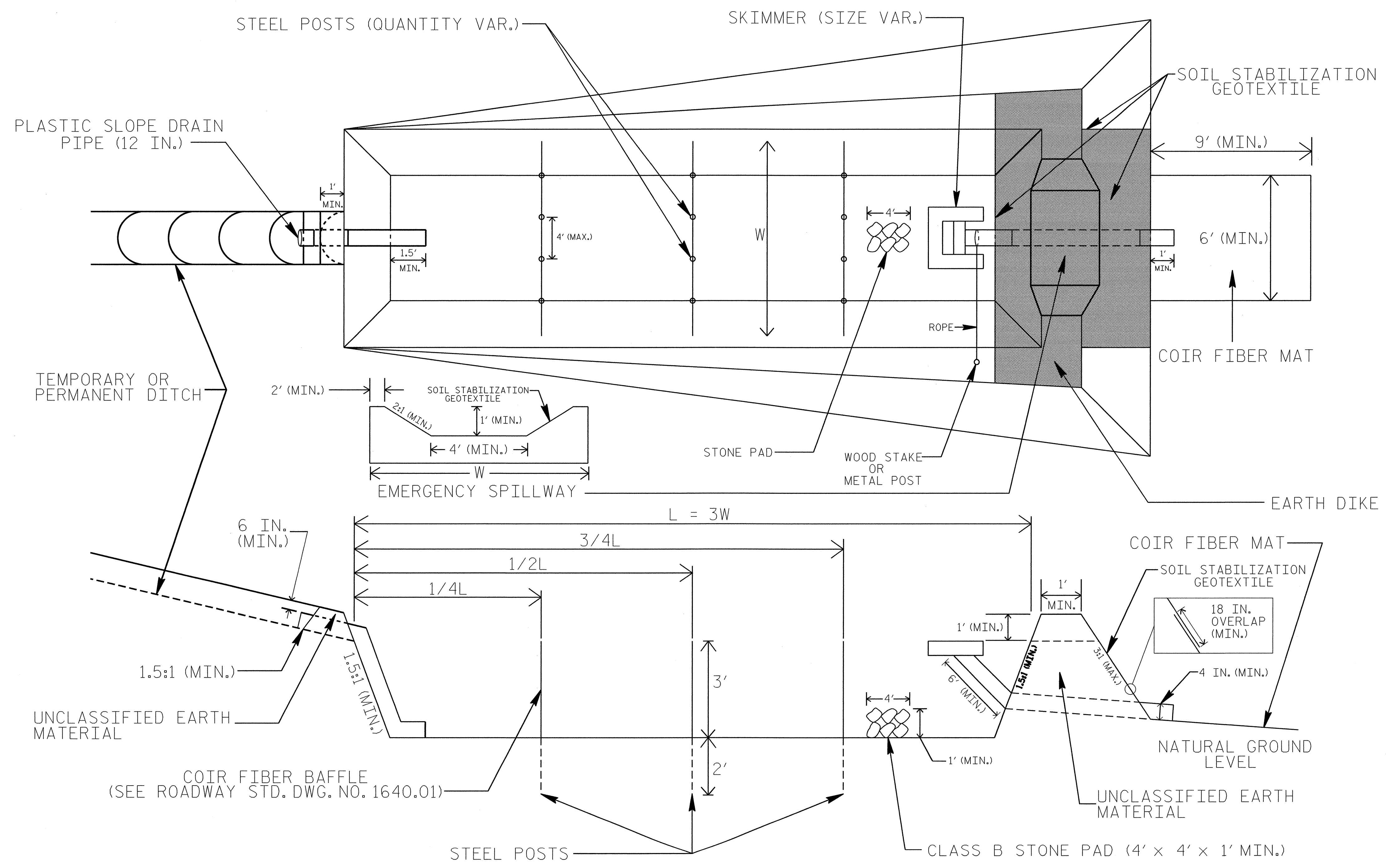
The following roadway english standards as appear in "Roadway Standard Drawings"- Roadway Design Unit - N. C. Department of Transportation - Raleigh, N. C., dated January 2012 and the latest revision thereto are applicable to this project and by reference hereby are considered a part of these plans.

1604.01 Railroad Erosion Control Detail	1632.01 Rock Inlet Sediment Trap Type A
1605.01 Temporary Silt Fence	1632.02 Rock Inlet Sediment Trap Type B
1606.01 Special Sediment Control Fence	1632.03 Rock Inlet Sediment Trap Type C
1607.01 Gravel Construction Entrance	1633.01 Temporary Rock Silt Check Type A
1622.01 Temporary Berms and Slope Drains	1633.02 Temporary Rock Silt Check Type B
1630.01 Riser Basin	1634.01 Temporary Rock Sediment Dam Type A
1630.02 Silt Basin Type B	1634.02 Temporary Rock Sediment Dam Type B
1630.03 Temporary Silt Ditch	1635.01 Rock Pipe Inlet Sediment Trap Type A
1630.04 Stilling Basin	1635.02 Rock Pipe Inlet Sediment Trap Type B
1630.05 Temporary Diversion	1640.01 Coir Fiber Baffle
1630.06 Special Stilling Basin	1645.01 Temporary Stream Crossing
1631.01 Matting Installation	

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PROJECT REFERENCE NO. B-4506	SHEET NO. EC-2
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

SKIMMER BASIN WITH BAFFLES DETAIL



COIR FIBER MAT ANCHOR OPTIONS

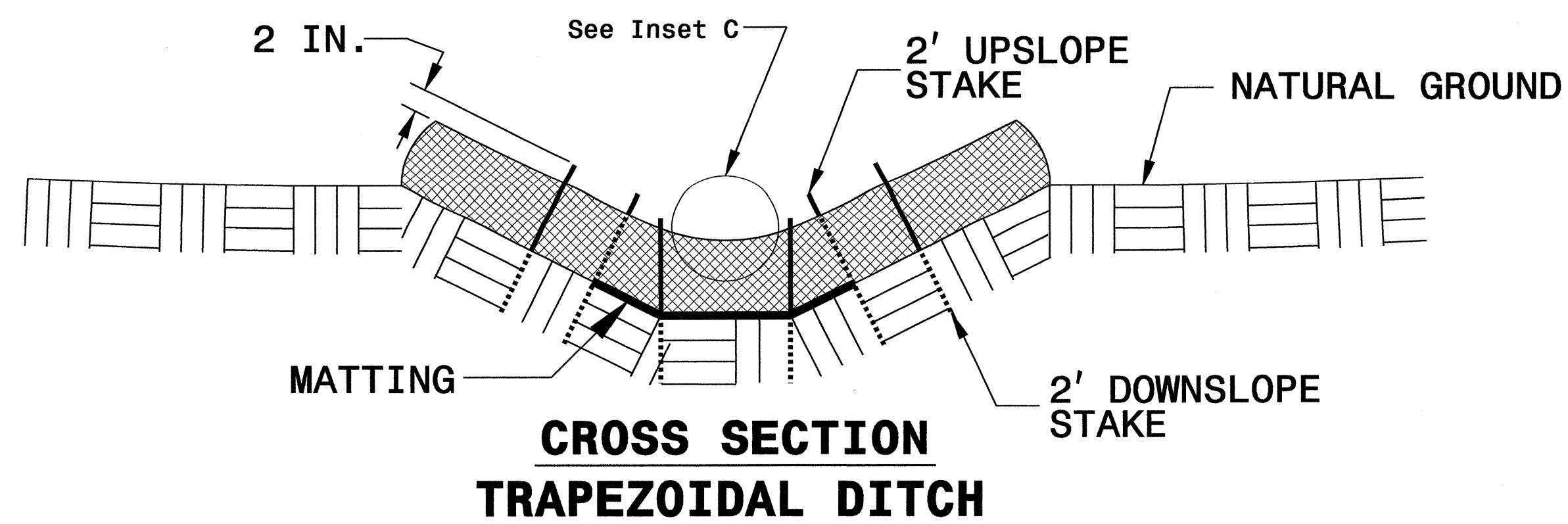
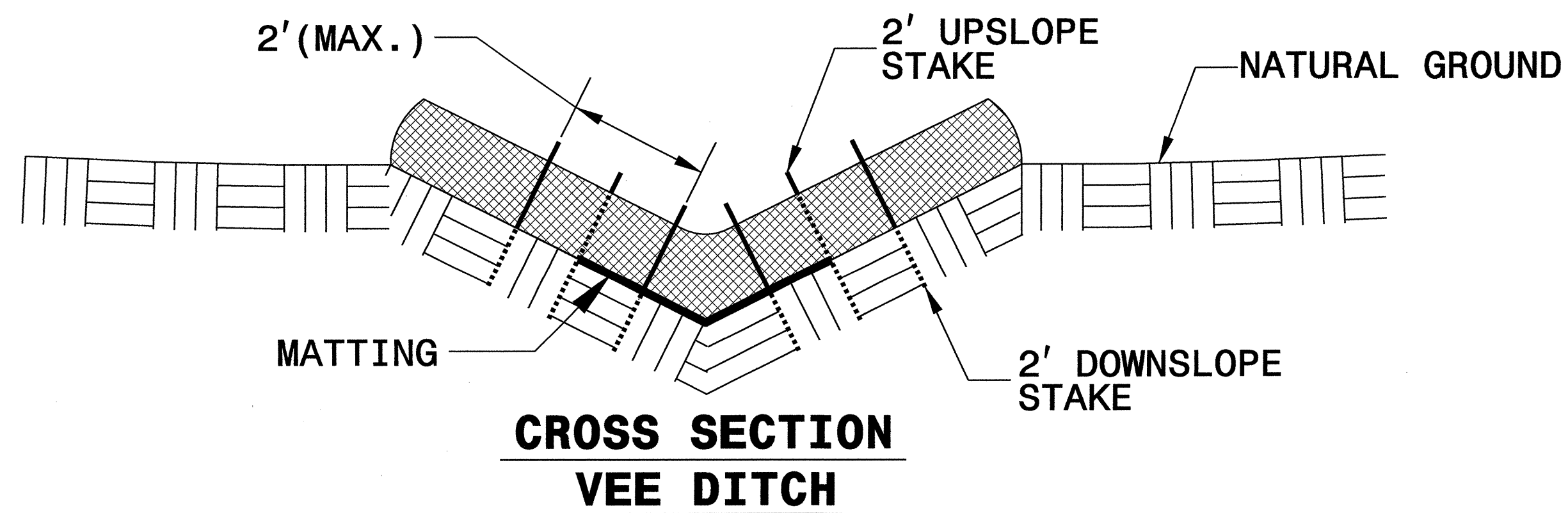
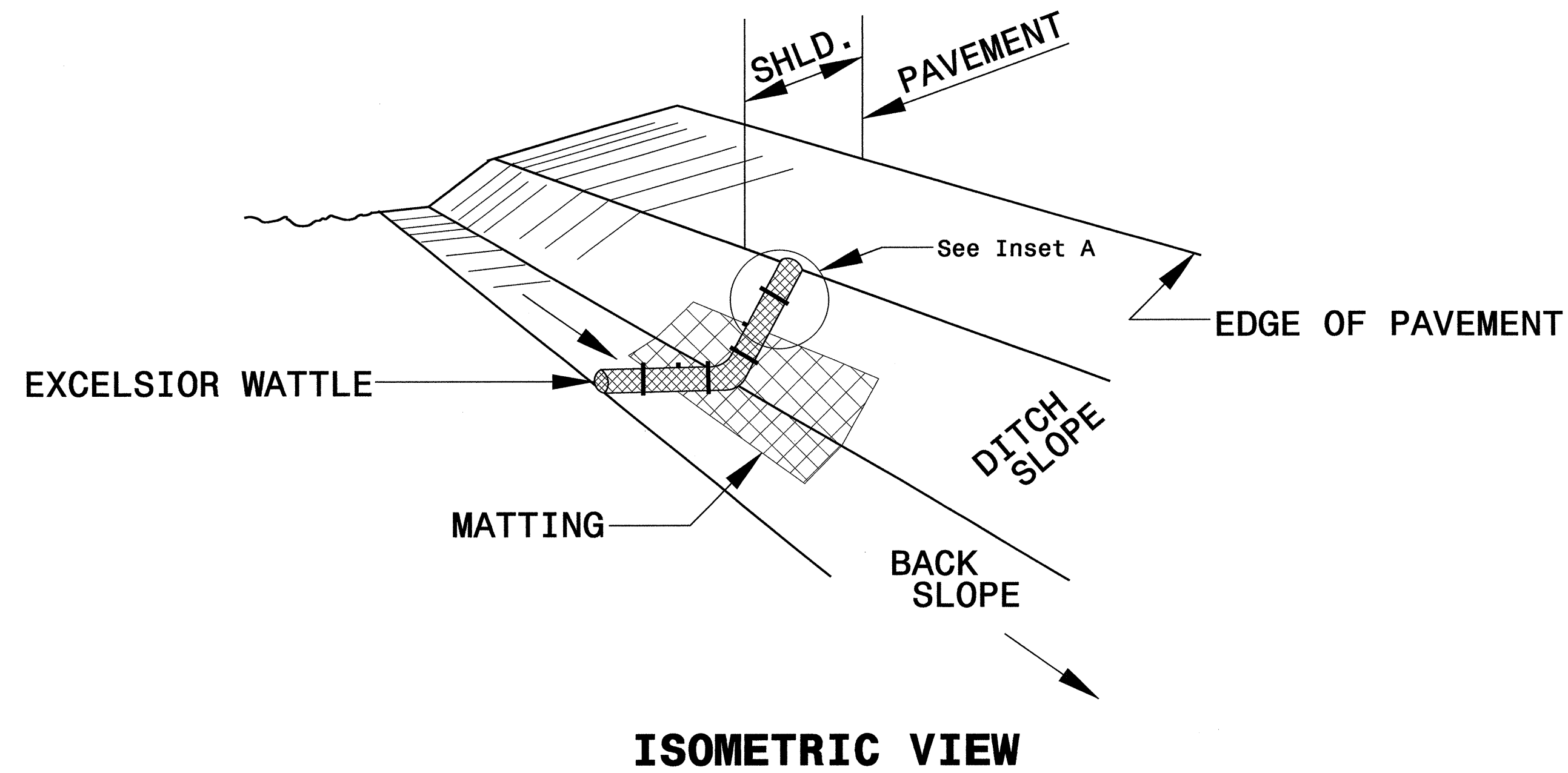
NOTES

1. SEED AND PLACE MATTING FOR EROSION CONTROL ON INTERIOR AND EXTERIOR SIDESLOPES.
2. LIMIT EARTH DIKE HEIGHT TO 5 FT.
3. FOR BASIN DEPTH OF 3 FT., 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.
5. PLASTIC SLOPE DRAIN PIPE AT INLET OF BASIN MAY BE REPLACED BY FILTRATION GEOTEXTILE AS DIRECTED.
6. SOIL STABILIZATION GEOTEXTILE FOR EMERGENCY SPILLWAY SHALL BE ONE CONTINUOUS PIECE OF MATERIAL OR OVERLAPPED 18 IN. (MIN.)

NOT TO SCALE

PROJECT REFERENCE NO. B-4506	SHEET NO. EC-2A
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

WATTLE WITH POLYACRYLAMIDE (PAM) DETAIL



NOTES:

USE MINIMUM 12 IN. DIAMETER EXCELSIOR WATTLE.

USE 2 FT. WOODEN STAKES WITH A 2 IN. BY 2 IN. NOMINAL CROSS SECTION.

ONLY INSTALL WATTLE(S) TO A HEIGHT IN DITCH SO FLOW WILL NOT WASH AROUND WATTLE AND SCOUR DITCH SLOPES AND AS DIRECTED.

INSTALL A MINIMUM OF 2 UPSLOPE STAKES AND 4 DOWNSLOPE STAKES AT AN ANGLE TO WEDGE WATTLE TO BOTTOM OF DITCH.

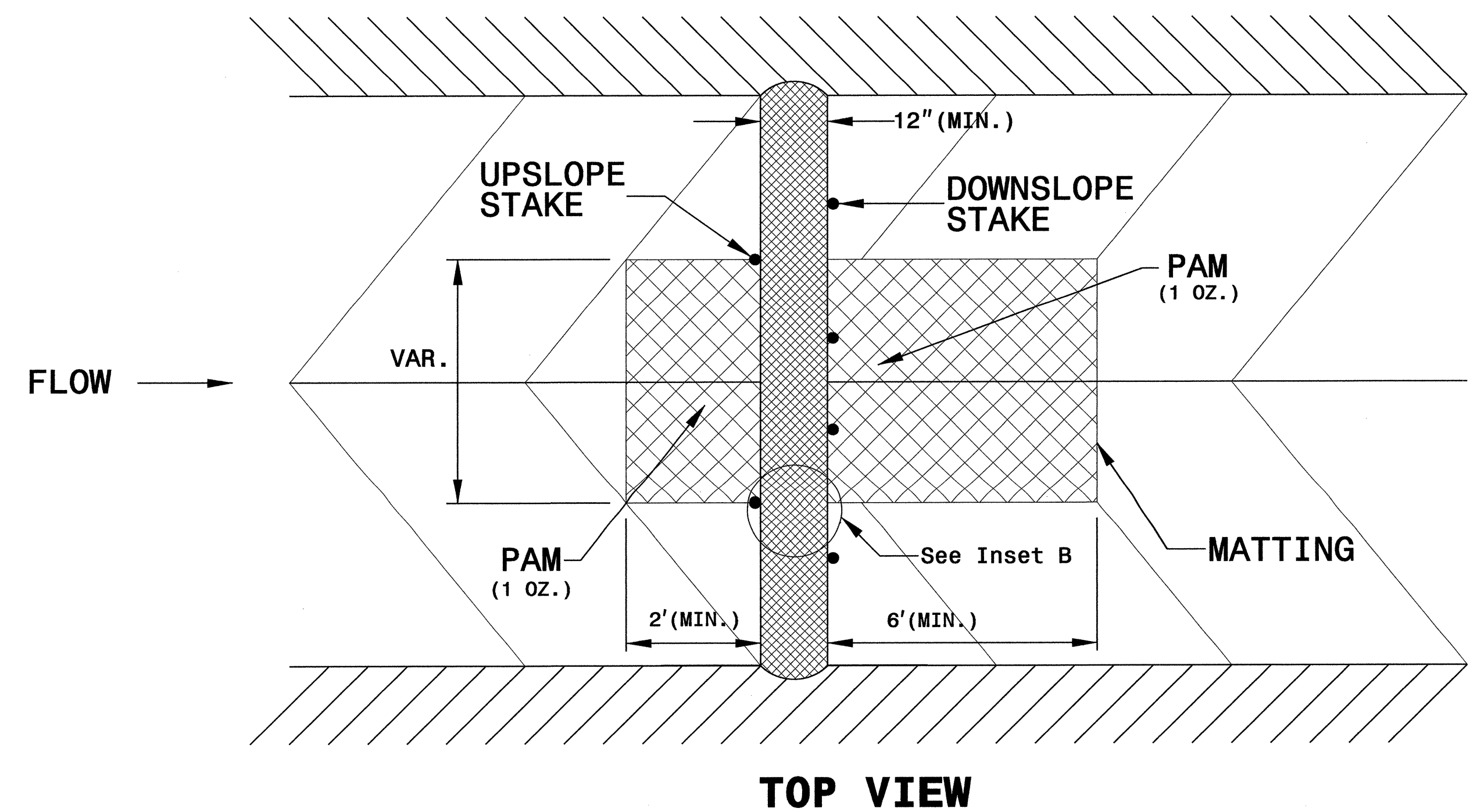
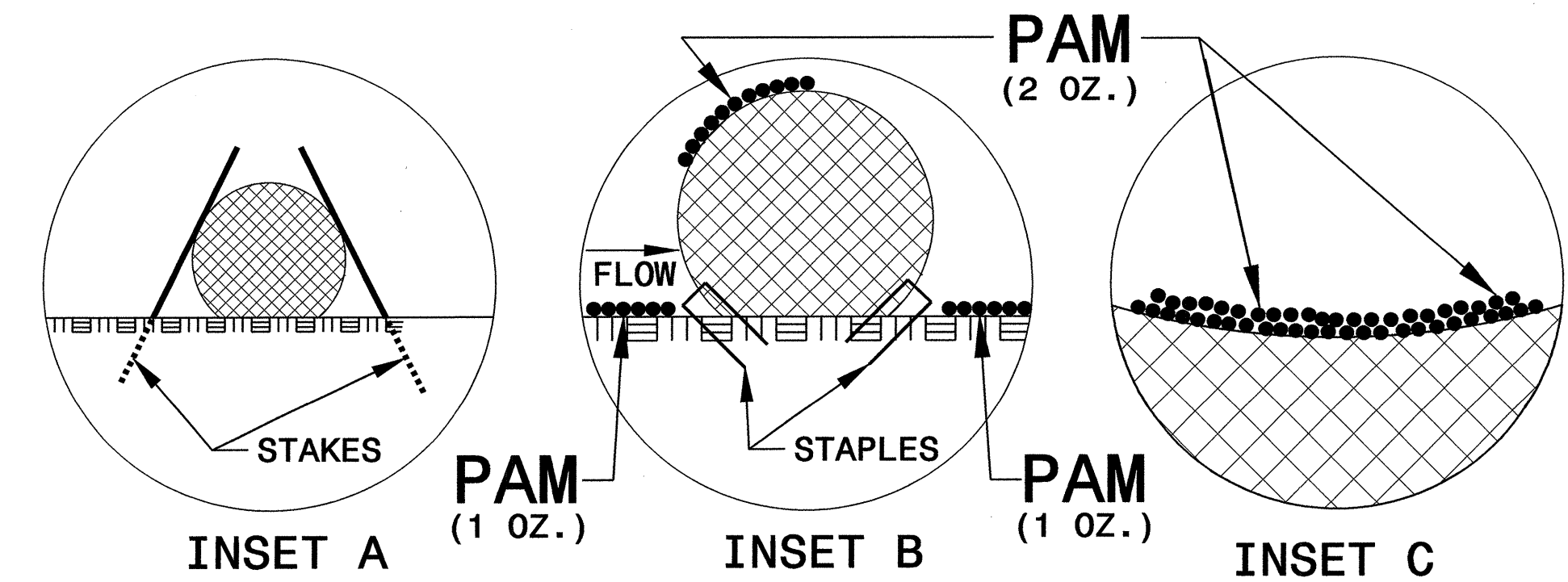
PROVIDE STAPLES MADE OF 0.125 IN. DIAMETER STEEL WIRE FORMED INTO A U SHAPE NOT LESS THAN 12" IN LENGTH.

INSTALL STAPLES APPROXIMATELY EVERY 1 LINEAR FOOT ON BOTH SIDES OF WATTLE AND AT EACH END TO SECURE IT TO THE SOIL.

INSTALL MATTING IN ACCORDANCE WITH SECTION 1631 OF THE STANDARD SPECIFICATIONS.

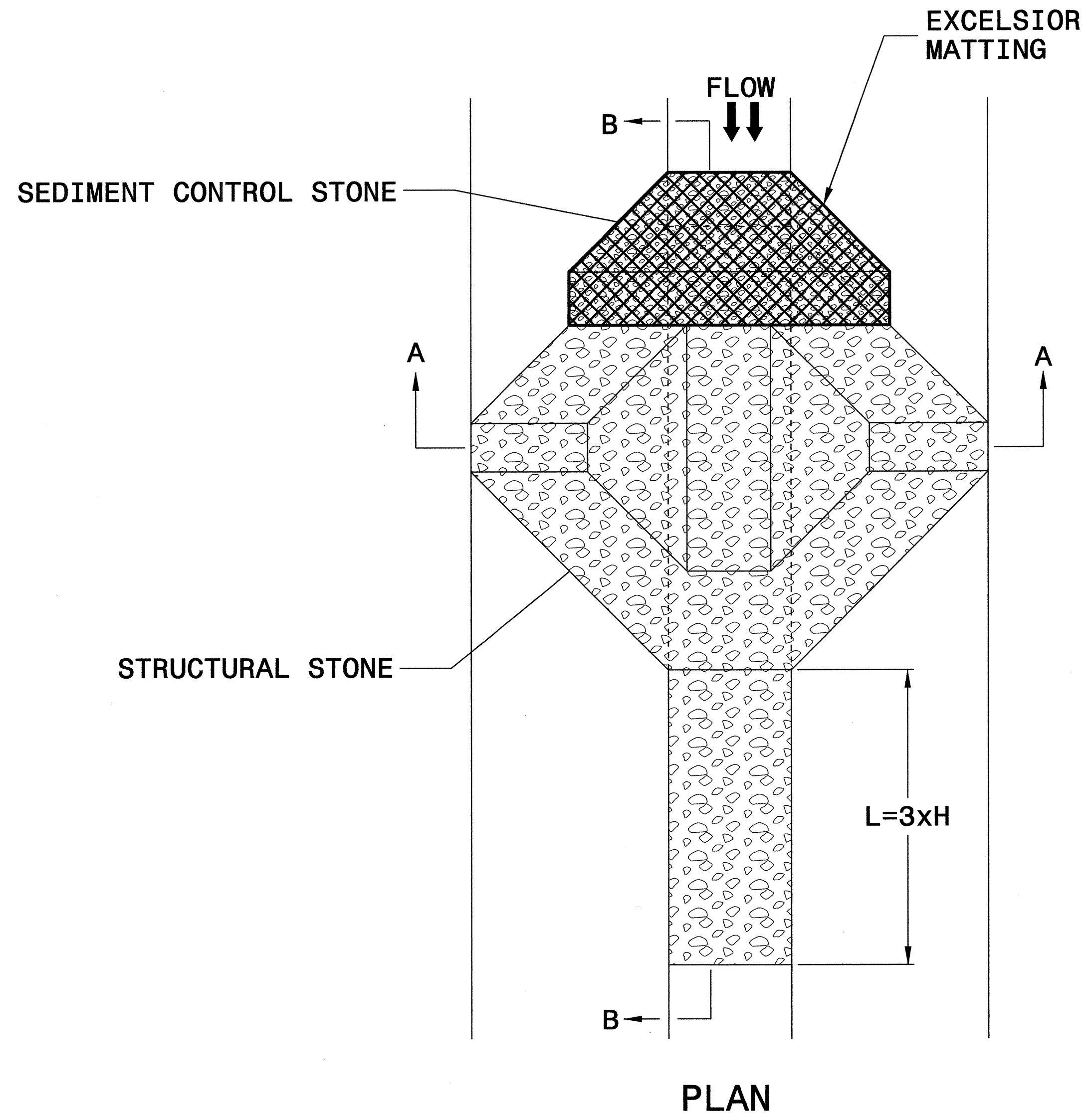
PRIOR TO POLYACRYLAMIDE (PAM) APPLICATION, OBTAIN A SOIL SAMPLE FROM PROJECT LOCATION, AND FROM OFFSITE MATERIAL, AND ANALYZE FOR APPROPRIATE PAM FLOCCULANT TO BE APPLIED TO EACH WATTLE.

INITIALLY APPLY 2 OUNCES OF ANIONIC OR NEUTRALLY CHARGED PAM OVER WATTLE WHERE WATER WILL FLOW AND 1 OUNCE OF PAM ON MATTING ON EACH SIDE OF WATTLE. REAPPLY PAM AFTER EVERY RAINFALL EVENT THAT IS EQUAL TO OR EXCEEDS 0.50 IN.



PROJECT REFERENCE NO. B-4506	SHEET NO. EC-2B
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

TEMPORARY ROCK SILT CHECK TYPE 'A' WITH EXCELSIOR MATTING AND POLYACRYLAMIDE (PAM)

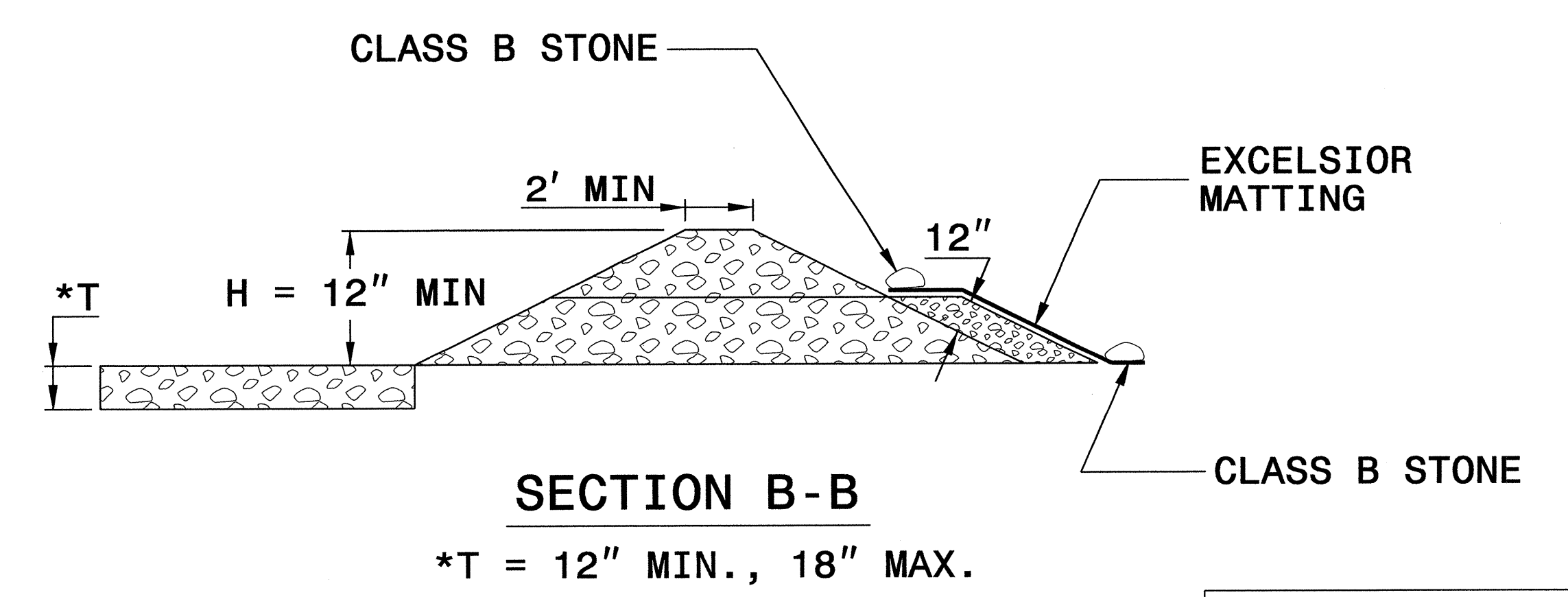
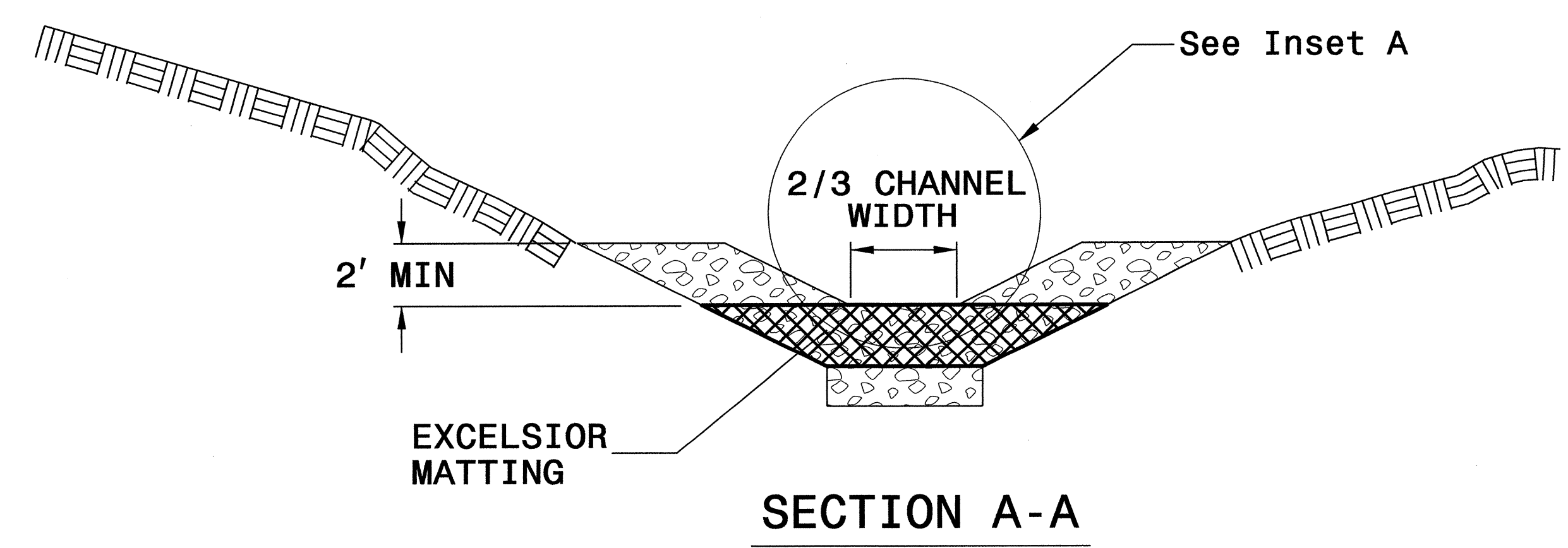
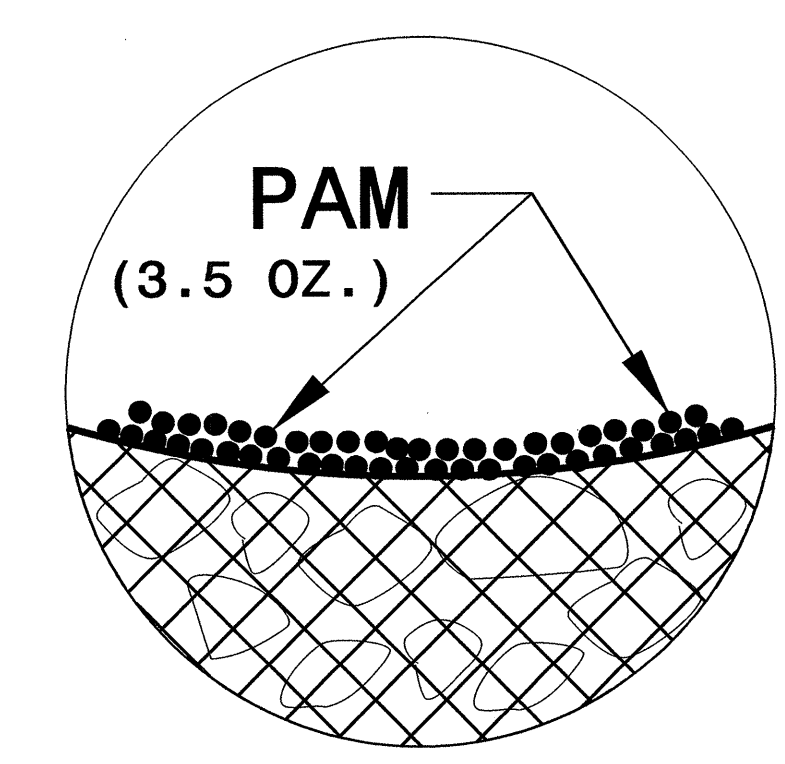


NOTES

USE EXCELSIOR FOR MATTING MATERIAL AND ANCHOR MATTING SECTION AT TOP AND BOTTOM WITH CLASS B STONE.

PRIOR TO POLYACRYLAMIDE (PAM) APPLICATION, OBTAIN A SOIL SAMPLE FROM PROJECT LOCATION, AND FROM OFFSITE MATERIAL, AND ANALYZE FOR APPROPRIATE PAM FLOCCULANT TO BE APPLIED TO EACH ROCK SILT CHECK.

INITIALLY APPLY 3.5 OUNCES OF POLYACRYLAMIDE (PAM) TO TOP OF MATTING SECTION AND AFTER EVERY RAINFALL EVENT THAT EQUALS OR EXCEEDS 0.50 INCHES.



NOT TO SCALE

DIVISION OF HIGHWAYS
STATE OF NORTH CAROLINA

PROJECT REFERENCE NO. <i>B-4506</i>	SHEET NO. <i>EC-3A</i>
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

SOIL STABILIZATION TIMEFRAMES

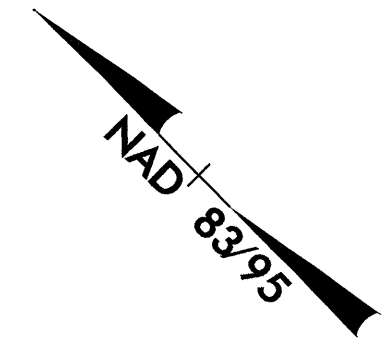
<i>SITE DESCRIPTION</i>	<i>STABILIZATION TIME</i>	<i>TIMEFRAME EXCEPTIONS</i>
PERIMETER DIKES, SWALES, DITCHES AND SLOPES	7 DAYS	NONE
HIGH QUALITY WATER (HQW) ZONES	7 DAYS	NONE
SLOPES STEEPER THAN 3:1	7 DAYS	IF SLOPES ARE 10' OR LESS IN LENGTH AND ARE NOT STEEPER THAN 2:1, 14 DAYS ARE ALLOWED.
SLOPES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

PROJECT REFERENCE NO.	SHEET NO.
B-4506	EC-04/CONST.04
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

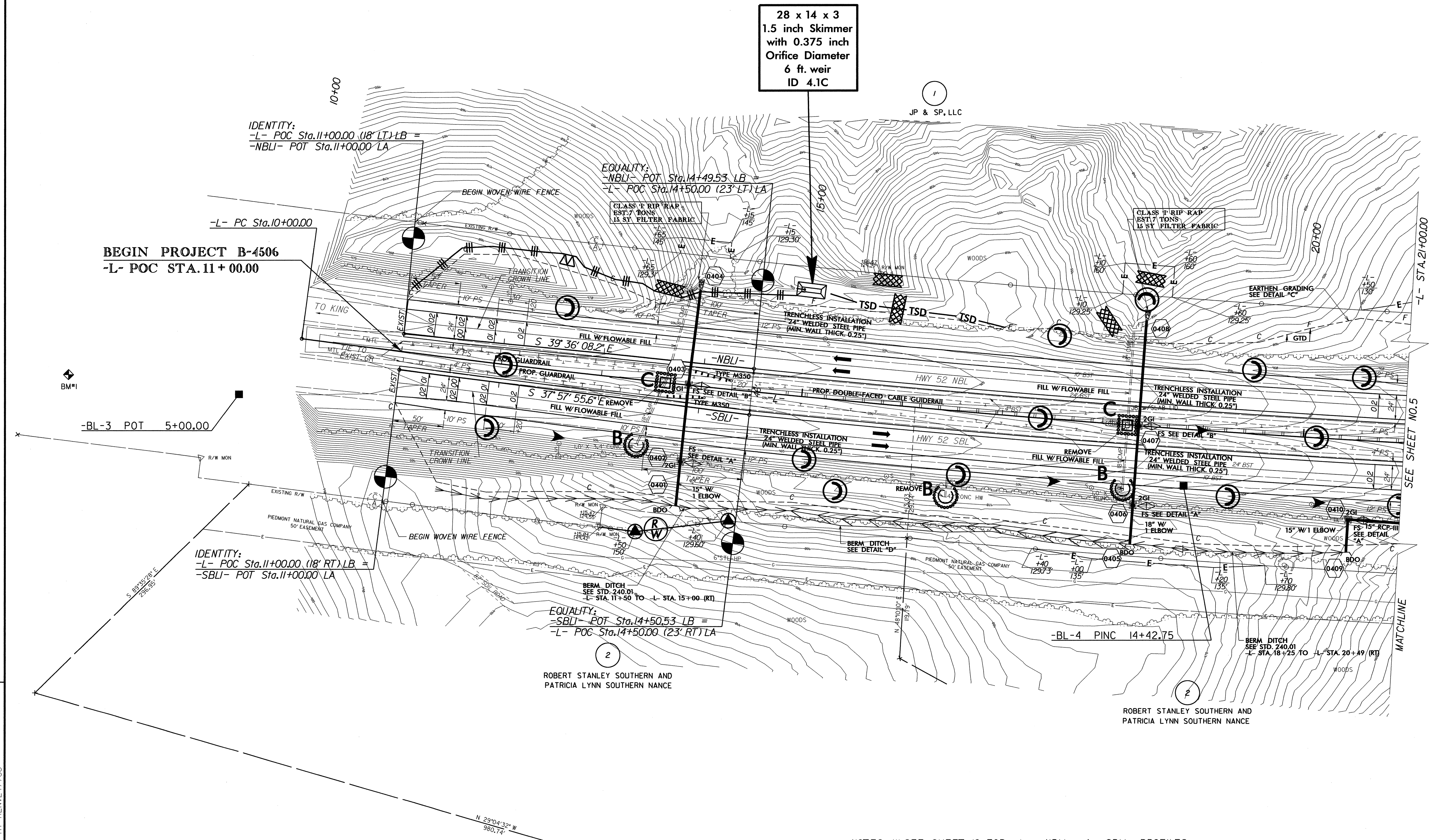
CLEARING AND GRUBBING
EROSION CONTROL FOR
CONSTRUCTION SHEET 4

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

-L- CURVE DATA
PI Sta 26+19.31
 $\Delta = 12^\circ 52' 07.1" (LT)$
 $D = 0' 23' 56.5"$
 $L = 3,225.00'$
 $T = 1,619.31'$
 $R = 14,358.86'$
SE = SEE PLANS



28 x 14 x 3
1.5 inch Skimmer
with 0.375 inch
Orifice Diameter
6 ft. weir
ID 4.1C



REVISIONS

BEGIN PROJECT B-4506
-L- POC STA. 11 + 00.00

-BL-3 POT 5+00.00

IDENTITY:
-L- POC Sta. 11+00.00 (18' RT) LB =
-SBLI- POT Sta. 11+00.00 LA

EQUALITY:
-SBLI- POT Sta. 14+50.53 LB =
-L- POC Sta. 14+50.00 (23' RT) LA

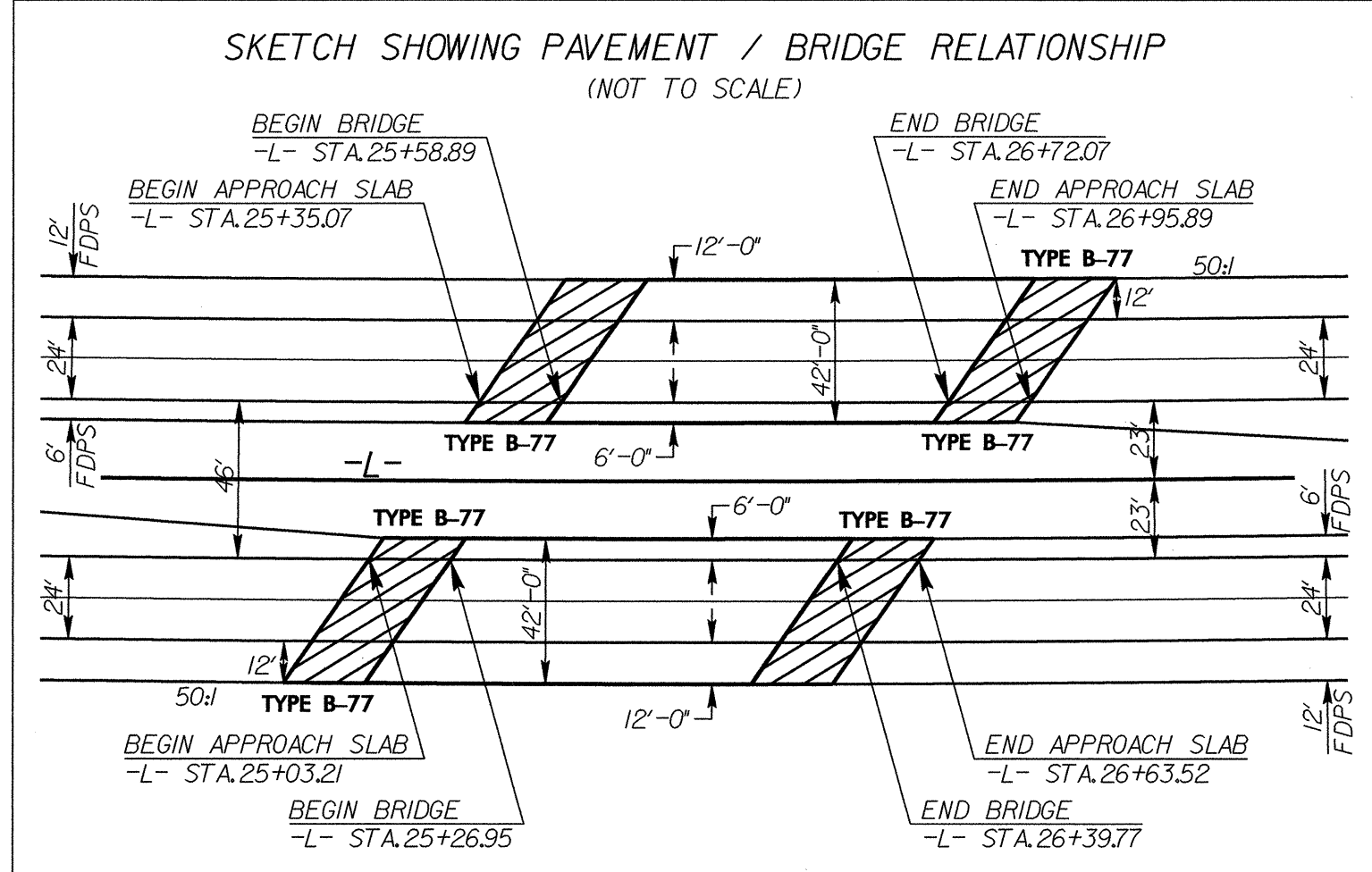
-BL-4 PINC 14+42.75

ROBERT STANLEY SOUTHERN AND
PATRICIA LYNN SOUTHERN NANCE

ROBERT STANLEY SOUTHERN AND
PATRICIA LYNN SOUTHERN NANCE

NOTES: (1) SEE SHEET 10 FOR -L-, -NBLI- & -SBLI- PROFILES
(2) SEE SHEET 2-D FOR DRAINAGE DETAILS
(3) SEE SHEETS 7, 8 & 9 FOR TEMP. DETOUR

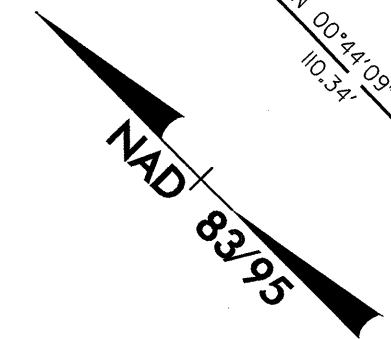
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NOTE:
PLACE TEMPORARY ROCK SEDIMENT DAMS TYPE - B AND TEMPORARY ROCK SILT CHECKS TYPE - A AT DRAINAGE OUTLETS.

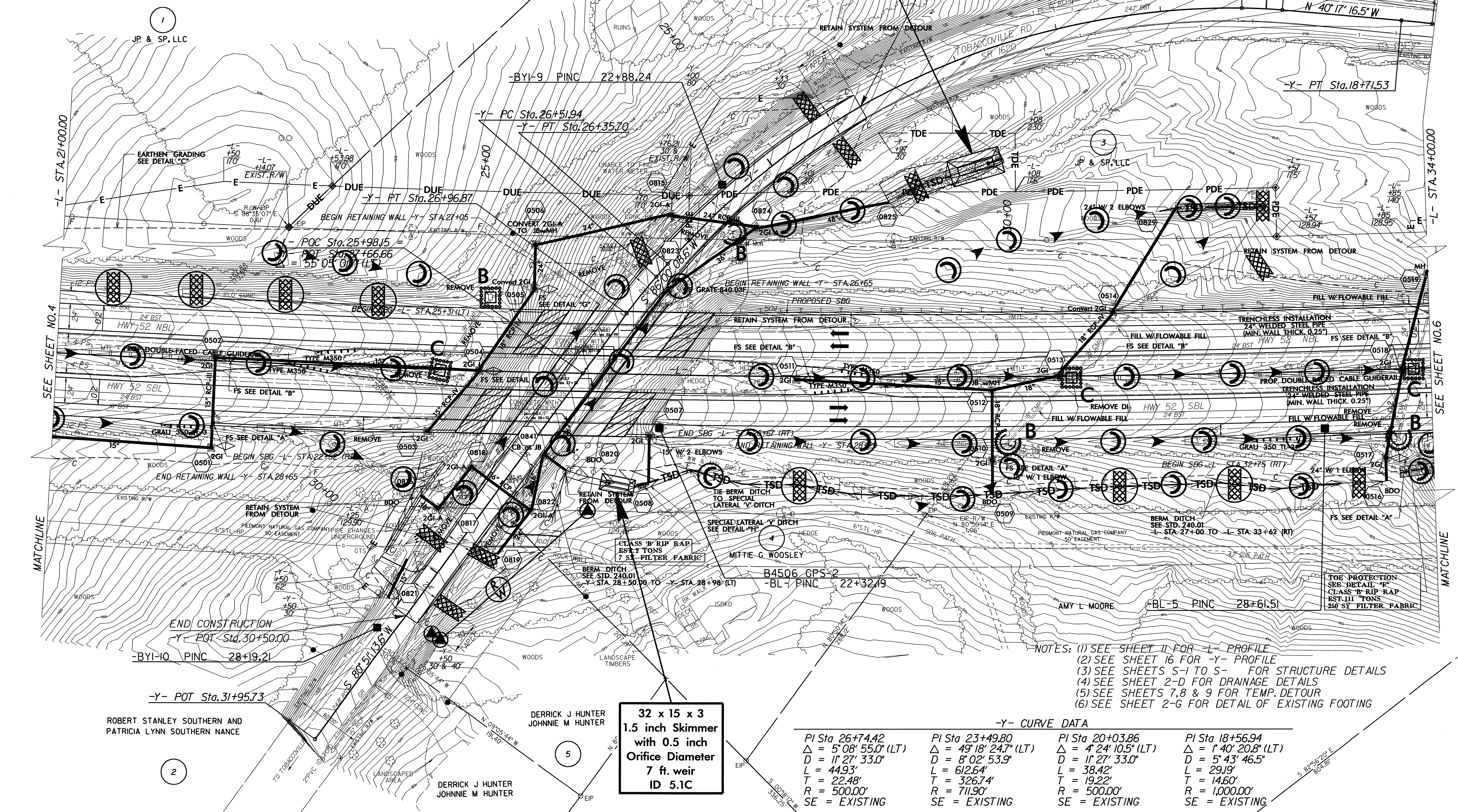
CLEARING AND GRUBBING EROSION CONTROL FOR CONSTRUCTION SHEET 5

-L- CURVE DATA
 PI Sta 26+19.31
 $\Delta = 12^\circ 52' 07.1''$ (LT)
 $D = 0^\circ 23' 56.5''$
 $L = 3,225.00'$
 $T = 1,619.31'$
 $R = 14,358.86'$
 $SE = .02$



WILLIAM ASHFORD CALDWELL III
 DIANA M CLADWELL

50 x 25 x 3
 1.5 inch Skimmer
 with 1.0 inch
 Orifice Diameter
 17 ft. weir
 ID 5.2C



REVISIONS

32 x 15 x 3
 1.5 inch Skimmer
 with 0.5 inch
 Orifice Diameter
 7 ft. weir
 ID 5.1C

-Y- CURVE DATA

PI Sta 26+74.42 $\Delta = 5^\circ 08' 55.0''$ (LT) $D = 1^\circ 27' 33.0''$ $L = 44.93'$ $T = 22.48'$ $R = 500.00'$ $SE = \text{EXISTING}$	PI Sta 23+49.80 $\Delta = 49^\circ 18' 24.7''$ (LT) $D = 8^\circ 02' 53.9''$ $L = 612.64'$ $T = 326.74'$ $R = 711.90'$ $SE = \text{EXISTING}$	PI Sta 20+03.86 $\Delta = 4^\circ 24' 10.5''$ (LT) $D = 1^\circ 27' 33.0''$ $L = 38.42'$ $T = 19.22'$ $R = 500.00'$ $SE = \text{EXISTING}$	PI Sta 18+56.94 $\Delta = 1^\circ 40' 20.8''$ (LT) $D = 5^\circ 43' 46.5''$ $L = 29.19'$ $T = 14.60'$ $R = 1,000.00'$ $SE = \text{EXISTING}$
--	---	--	--

NOTES: (1) SEE SHEET 11 FOR -L- PROFILE
 (2) SEE SHEET 16 FOR -Y- PROFILE
 (3) SEE SHEETS S-1 TO S- FOR STRUCTURE DETAILS
 (4) SEE SHEET 2-D FOR DRAINAGE DETAILS
 (5) SEE SHEETS 7, 8 & 9 FOR TEMP. DETOUR
 (6) SEE SHEET 2-G FOR DETAIL OF EXISTING FOOTING

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ROBERT STANLEY SOUTHERN AND
 PATRICIA LYNN SOUTHERN NANCE

DERRICK J HUNTER
 JOHNNIE M HUNTER

DERRICK J HUNTER
 JOHNNIE M HUNTER

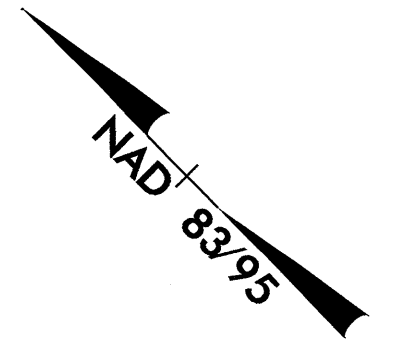
PROJECT REFERENCE NO. B-4506	SHEET NO. EC-06/CONST.06
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

-Y- CURVE DATA
 PI Sta 11+26.82
 $\Delta = 17^{\circ} 27' 27.5" (RT)$
 $D = 6^{\circ} 56' 11.5"$
 $L = 251.68'$
 $T = 126.82'$
 $R = 826.00'$
 SE = EXISTING

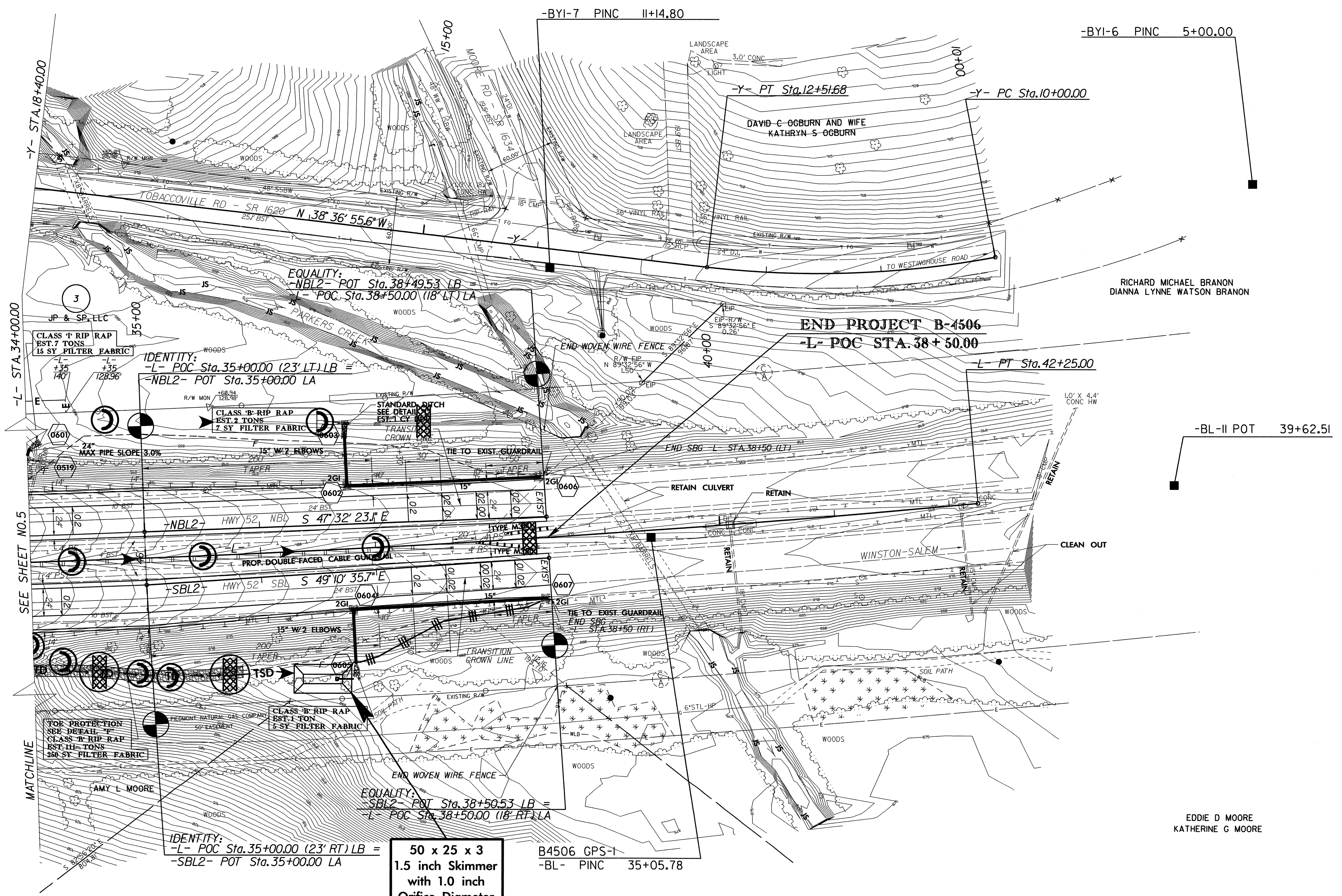
-L- CURVE DATA
 PI Sta 26+19.31
 $\Delta = 12^{\circ} 52' 07.1" (LT)$
 $D = 0^{\circ} 23' 56.5"$
 $L = 3,225.00'$
 $T = 1,619.31'$
 $R = 14,358.86'$
 SE = SEE PLANS

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

CLEARING AND GRUBBING
 EROSION CONTROL FOR
 CONSTRUCTION SHEET 6



WILLIAM ASHFORD CALDWELL III
 DIANA M CLADWELL



50 x 25 x 3
 1.5 inch Skimmer
 with 1.0 inch
 Orifice Diameter
 17 ft. weir
 ID 6.1C

EDDIE D MOORE
 KATHERINE G MOORE

NOTES: (1) SEE SHEET 12 FOR -L-, -NBL2- & -SBL2- PROFILES
 (2) SEE SHEET 2-D FOR DRAINAGE DETAILS
 (3) SEE SHEETS 7, 8 & 9 FOR TEMP. DETOUR

REVISIONS

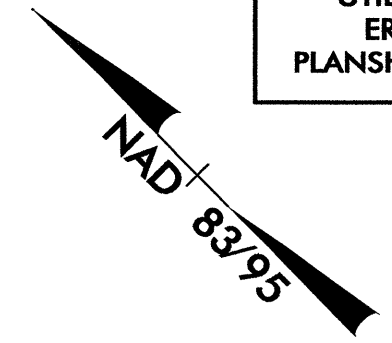
SEE SHEET NO. 5

MATCHLINE

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PROJECT REFERENCE NO.	SHEET NO.
B-4506	EC-07/CONST.07
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

UTILIZE CLEARING AND GRUBBING
EROSION CONTROL PLAN FOR
PLANSHEET 4 FOR DETOUR PLANSHEET 7



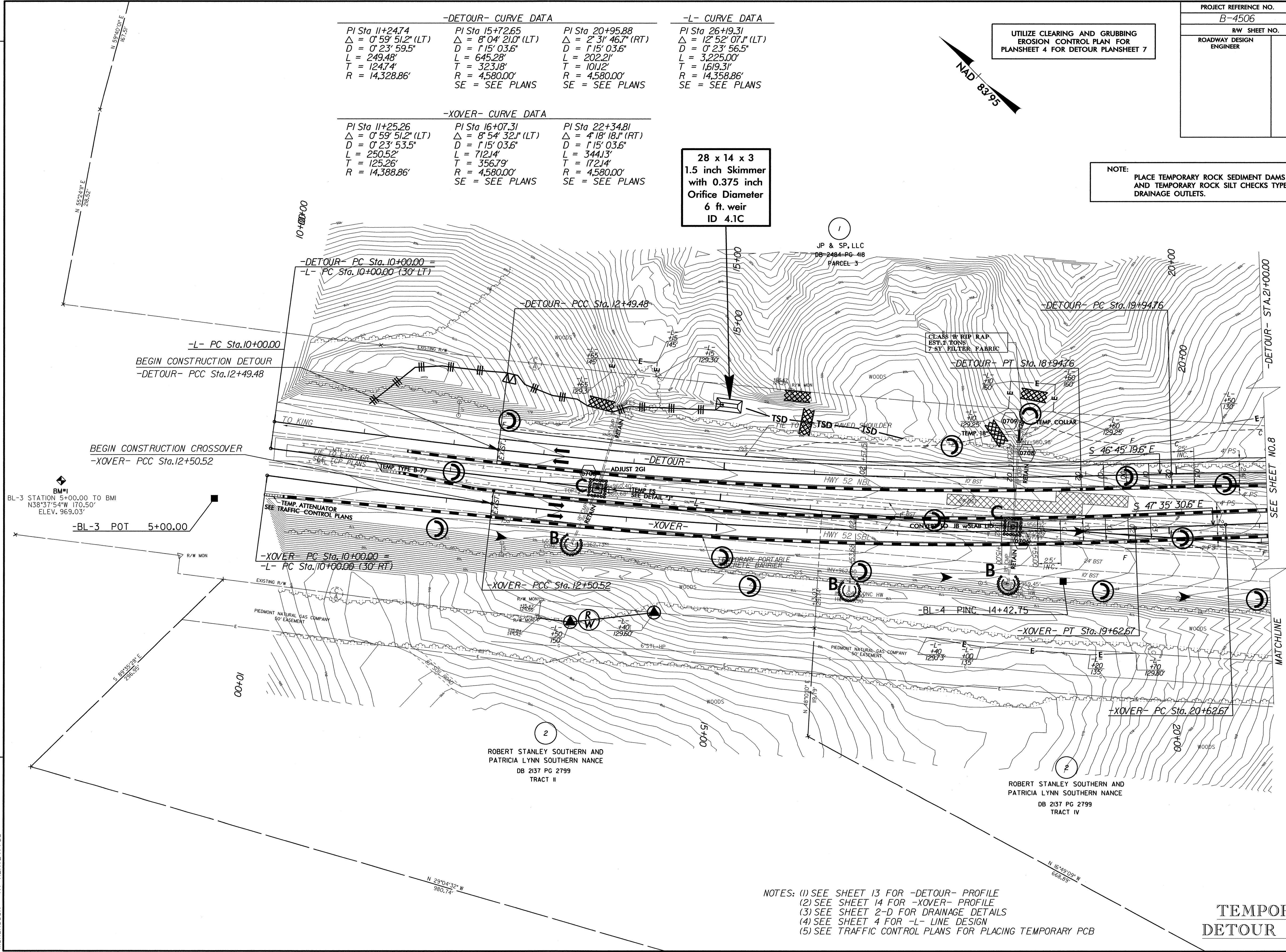
-DETOUR- CURVE DATA			-L- CURVE DATA		
PI Sta 11+24.74	PI Sta 15+72.65	PI Sta 20+95.88	PI Sta 26+19.31		
$\Delta = 0^\circ 59' 51.2" (LT)$	$\Delta = 8^\circ 04' 21.0" (LT)$	$\Delta = 2^\circ 31' 46.7" (RT)$	$\Delta = 12^\circ 52' 07.1" (LT)$		
$D = 0^\circ 23' 59.5"$	$D = 1^\circ 15' 03.6"$	$D = 1^\circ 15' 03.6"$	$D = 0^\circ 23' 56.5"$		
$L = 249.48'$	$L = 645.28'$	$L = 202.21'$	$L = 3,225.00'$		
$T = 124.74'$	$T = 323.18'$	$T = 101.12'$	$T = 1,619.31'$		
$R = 14,328.86'$	$R = 4,580.00'$	$R = 4,580.00'$	$R = 14,358.86'$		
	SE = SEE PLANS	SE = SEE PLANS	SE = SEE PLANS		

-XOVER- CURVE DATA		
PI Sta 11+25.26	PI Sta 16+07.31	PI Sta 22+34.81
$\Delta = 0^\circ 59' 51.2" (LT)$	$\Delta = 8^\circ 54' 32.1" (LT)$	$\Delta = 4^\circ 18' 18.1" (RT)$
$D = 0^\circ 23' 53.5"$	$D = 1^\circ 15' 03.6"$	$D = 1^\circ 15' 03.6"$
$L = 250.52'$	$L = 712.14'$	$L = 344.13'$
$T = 125.26'$	$T = 356.79'$	$T = 172.14'$
$R = 14,388.86'$	$R = 4,580.00'$	$R = 4,580.00'$
	SE = SEE PLANS	SE = SEE PLANS

28 x 14 x 3
1.5 inch Skimmer
with 0.375 inch
Orifice Diameter
6 ft. weir
ID 4.1C

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

REVISIONS



NOTES: (1) SEE SHEET 13 FOR -DETOUR- PROFILE
(2) SEE SHEET 14 FOR -XOVER- PROFILE
(3) SEE SHEET 2-D FOR DRAINAGE DETAILS
(4) SEE SHEET 4 FOR -L- LINE DESIGN
(5) SEE TRAFFIC CONTROL PLANS FOR PLACING TEMPORARY PCB

TEMPORARY
DETOUR SHEET

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PROJECT REFERENCE NO. B-4506	SHEET NO. EC-09/CONST.09
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

UTILIZE CLEARING AND GRUBBING EROSION CONTROL PLAN FOR PLANSHEET 6 FOR DETOUR PLANSHEET 9

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

-Y- CURVE DATA
 PI Sta 11+26.82
 $\Delta = 17' 27' 27.5"$ (RT)
 $D = 6' 56' 11.5"$
 $L = 251.68'$
 $T = 126.82'$
 $R = 826.00'$
 SE = EXISTING

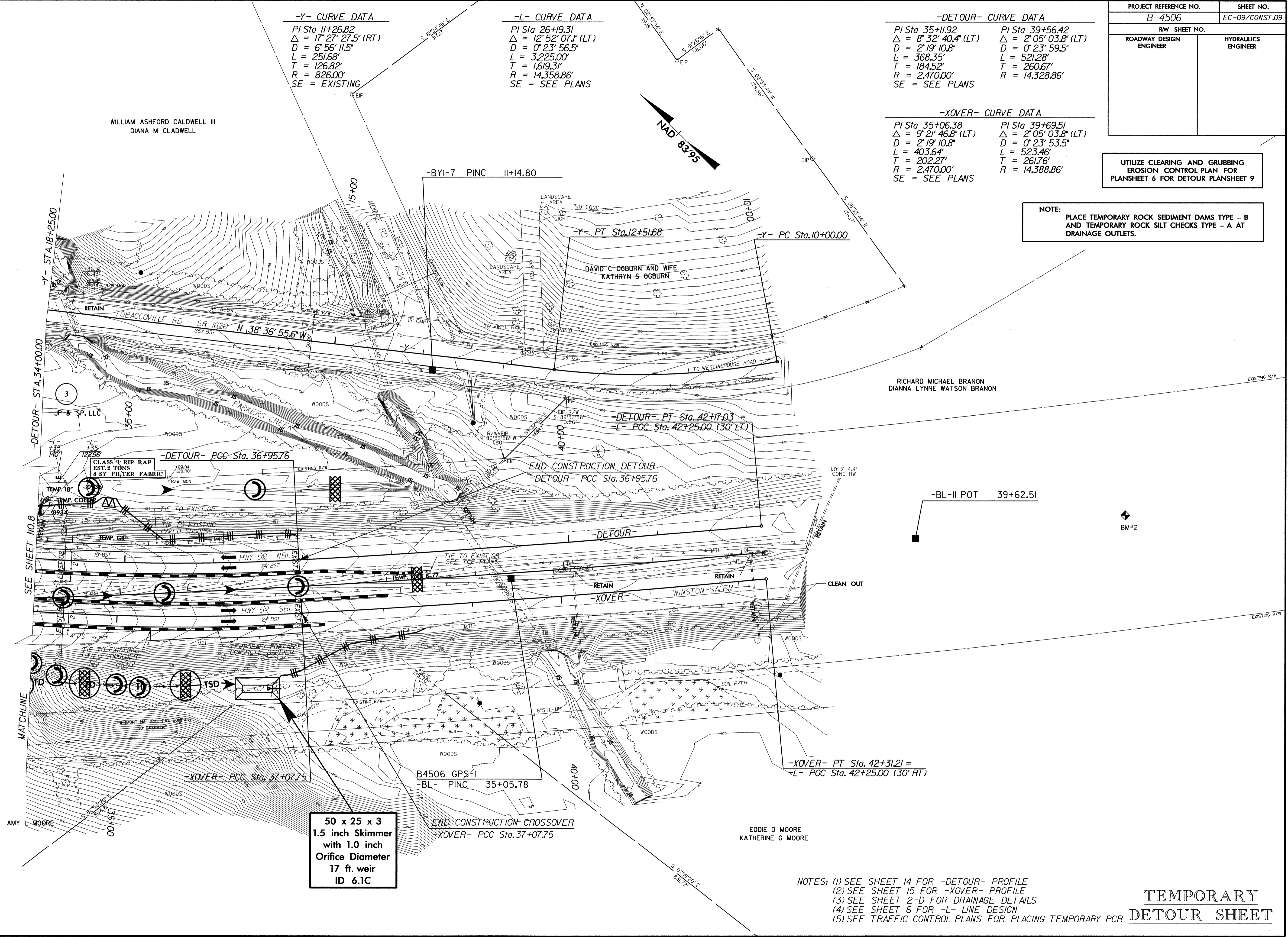
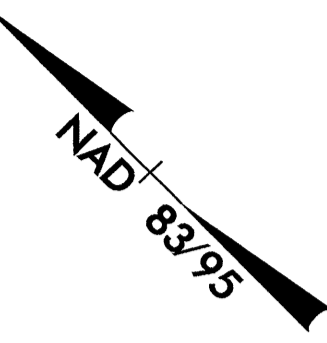
-L- CURVE DATA
 PI Sta 26+19.31
 $\Delta = 12' 52' 07.1"$ (LT)
 $D = 0' 23' 56.5"$
 $L = 3,225.00'$
 $T = 1,619.31'$
 $R = 14,358.86'$
 SE = SEE PLANS

-DETOUR- CURVE DATA
 PI Sta 35+11.92
 $\Delta = 8' 32' 40.4"$ (LT)
 $D = 2' 19' 10.8"$
 $L = 368.35'$
 $T = 184.52'$
 $R = 2,470.00'$
 SE = SEE PLANS

PI Sta 39+56.42
 $\Delta = 2' 05' 03.8"$ (LT)
 $D = 0' 23' 59.5"$
 $L = 523.28'$
 $T = 260.67'$
 $R = 14,328.86'$

-XOVER- CURVE DATA
 PI Sta 35+06.38
 $\Delta = 9' 21' 46.8"$ (LT)
 $D = 2' 19' 10.8"$
 $L = 403.64'$
 $T = 202.27'$
 $R = 2,470.00'$
 SE = SEE PLANS

PI Sta 39+69.51
 $\Delta = 2' 05' 03.8"$ (LT)
 $D = 0' 23' 53.5"$
 $L = 523.46'$
 $T = 261.76'$
 $R = 14,388.86'$



50 x 25 x 3
 1.5 inch Skimmer
 with 1.0 inch
 Orifice Diameter
 17 ft. weir
 ID 6.1C

- NOTES: (1) SEE SHEET 14 FOR -DETOUR- PROFILE
 (2) SEE SHEET 15 FOR -XOVER- PROFILE
 (3) SEE SHEET 2-D FOR DRAINAGE DETAILS
 (4) SEE SHEET 6 FOR -L- LINE DESIGN
 (5) SEE TRAFFIC CONTROL PLANS FOR PLACING TEMPORARY PCB

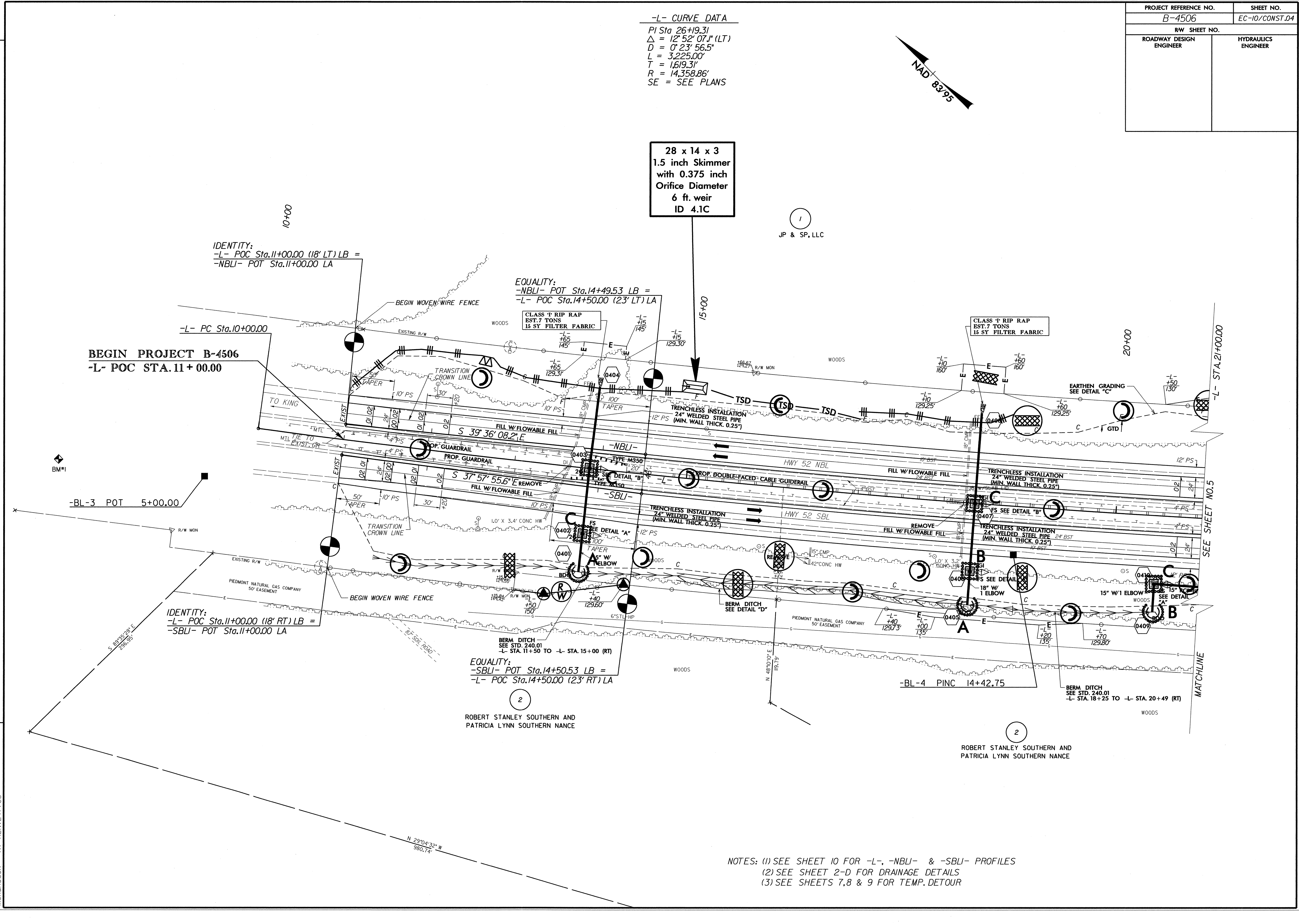
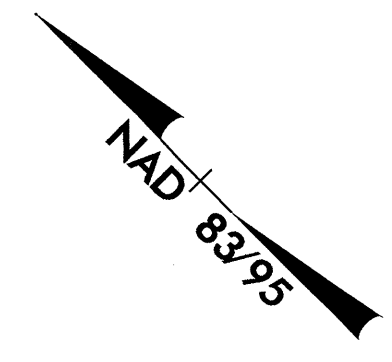
TEMPORARY
 DETOUR SHEET

REVISIONS

21-DEC-2011 11:29
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 mhancock - RT - RENJ247768

PROJECT REFERENCE NO.	SHEET NO.
B-4506	EC-10/CONST.04
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

-L- CURVE DATA
 PI Sta. 26+19.31
 $\Delta = 12^\circ 52' 07.1" (LT)$
 $D = 0' 23' 56.5"$
 $L = 3,225.00'$
 $T = 1,619.31'$
 $R = 14,358.86'$
 SE = SEE PLANS



BEGIN PROJECT B-4506
 -L- POC STA. 11+00.00

-BL-3 POT 5+00.00

IDENTITY:
 -L- POC Sta. 11+00.00 (18' RT) LB =
 -SBLI- POT Sta. 11+00.00 LA

EQUALITY:
 -SBLI- POT Sta. 14+50.53 LB =
 -L- POC Sta. 14+50.00 (23' RT) LA

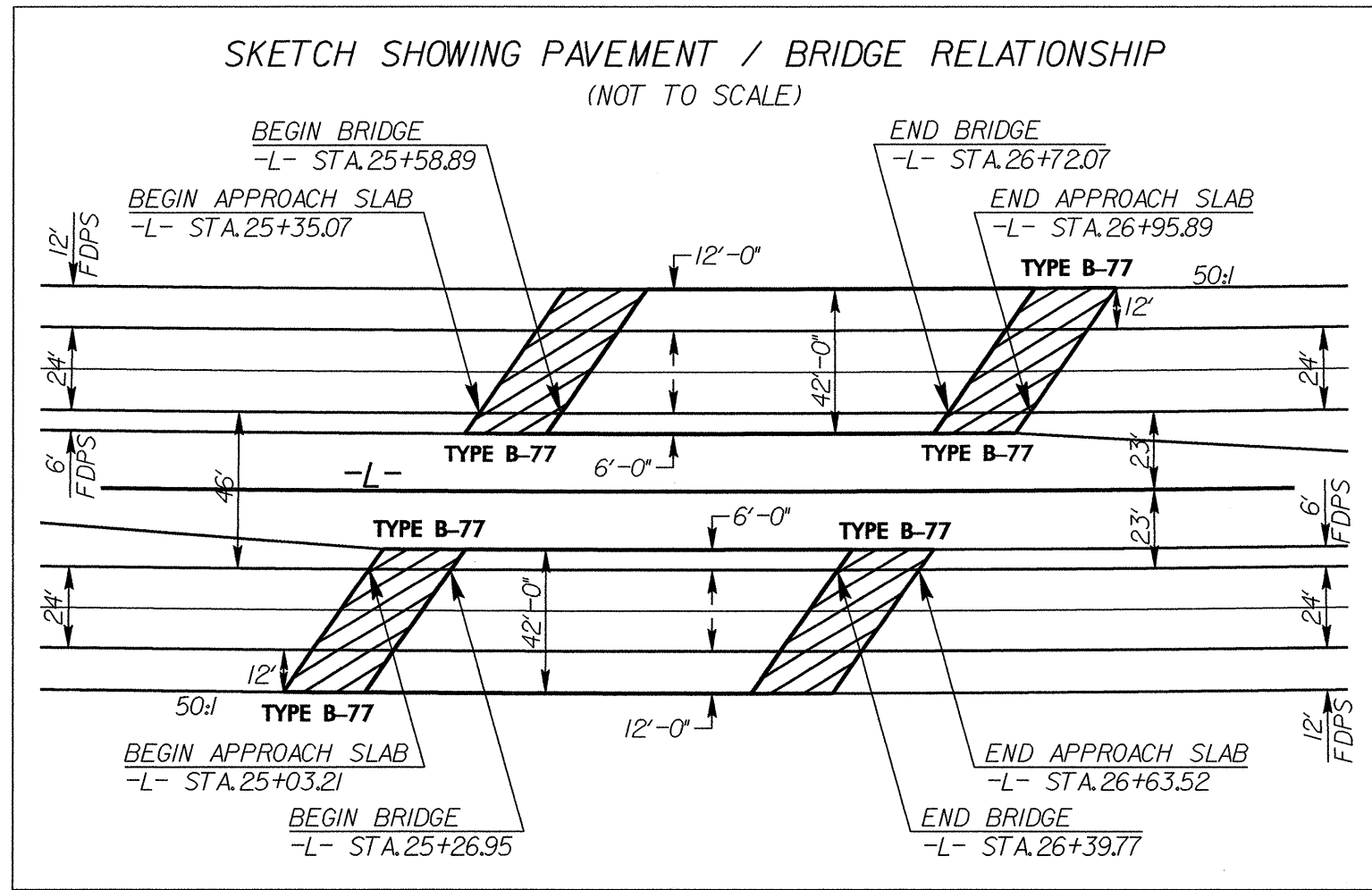
-BL-4 PINC 14+42.75

ROBERT STANLEY SOUTHERN AND
 PATRICIA LYNN SOUTHERN NANCE

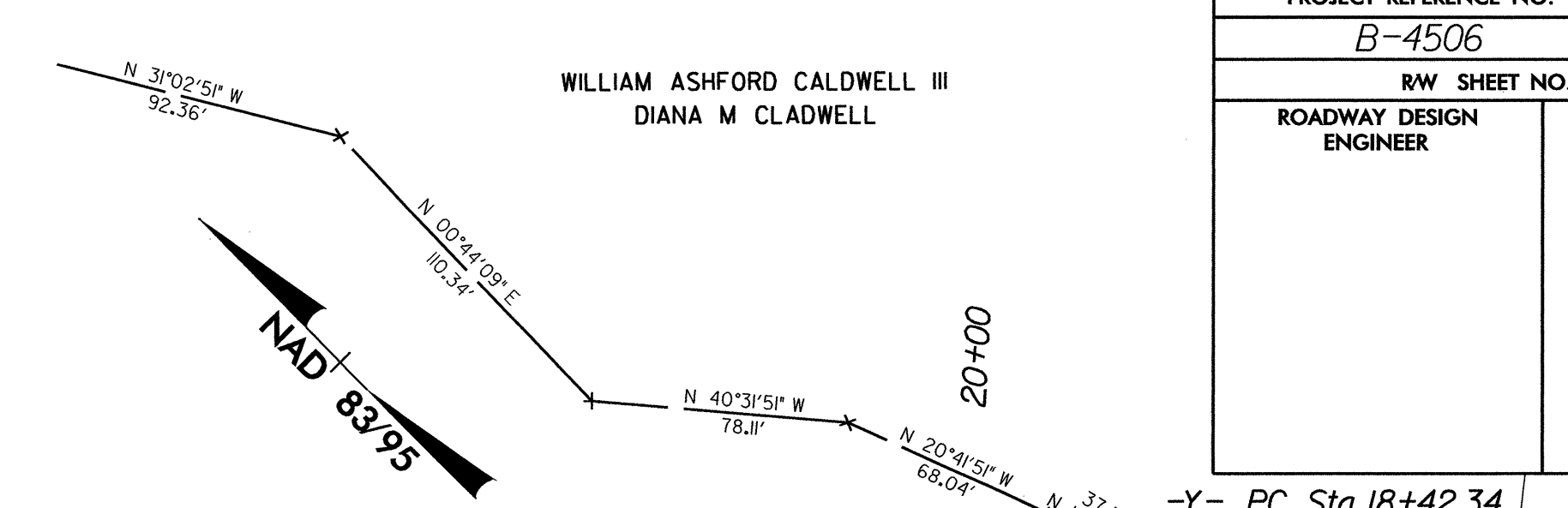
NOTES: (1) SEE SHEET 10 FOR -L-, -NBLI- & -SBLI- PROFILES
 (2) SEE SHEET 2-D FOR DRAINAGE DETAILS
 (3) SEE SHEETS 7, 8 & 9 FOR TEMP. DETOUR

REVISIONS

21-DEC-2011 10:01
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 metacook AT RENW247768



-L- CURVE DATA
 PI Sta 26+19.31
 $\Delta = 12^\circ 52' 07.1''$ (LT)
 $D = 0' 23' 56.5''$
 $L = 3,225.00'$
 $T = 1,619.31'$
 $R = 14,358.86'$
 $SE = .02$

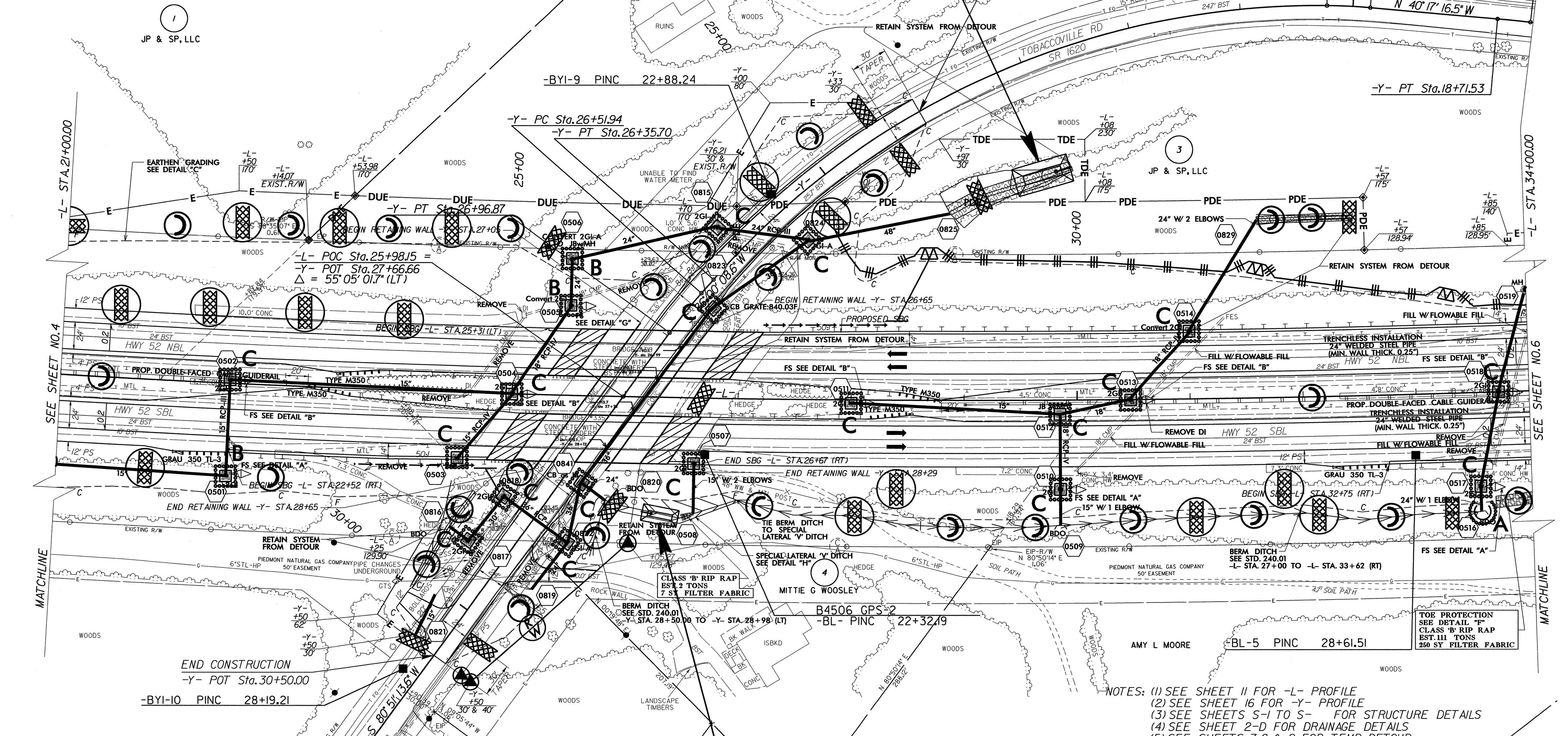


50 x 25 x 3
 1.5 inch Skimmer
 with 1.0 inch
 Orifice Diameter
 17 ft. weir
 ID 5.2C

32 x 15 x 3
 1.5 inch Skimmer
 with 0.5 inch
 Orifice Diameter
 7 ft. weir
 ID 5.1C

-Y- CURVE DATA

PI Sta 26+74.42 $\Delta = 5^\circ 08' 55.0''$ (LT) $D = 1' 27' 33.0''$ $L = 44.93'$ $T = 22.48'$ $R = 500.00'$ $SE = \text{EXISTING}$	PI Sta 23+49.80 $\Delta = 49^\circ 18' 24.7''$ (LT) $D = 8^\circ 02' 53.9''$ $L = 612.64'$ $T = 326.74'$ $R = 711.90'$ $SE = \text{EXISTING}$	PI Sta 20+03.86 $\Delta = 4^\circ 24' 10.5''$ (LT) $D = 1' 27' 33.0''$ $L = 38.42'$ $T = 19.22'$ $R = 500.00'$ $SE = \text{EXISTING}$	PI Sta 18+56.94 $\Delta = 1^\circ 40' 20.8''$ (LT) $D = 5^\circ 43' 46.5''$ $L = 29.19'$ $T = 14.60'$ $R = 1,000.00'$ $SE = \text{EXISTING}$
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- NOTES: (1) SEE SHEET 11 FOR -L- PROFILE
 (2) SEE SHEET 16 FOR -Y- PROFILE
 (3) SEE SHEETS S-1 TO S- FOR STRUCTURE DETAILS
 (4) SEE SHEET 2-D FOR DRAINAGE DETAILS
 (5) SEE SHEETS 7, 8 & 9 FOR TEMP. DETOUR
 (6) SEE SHEET 2-G FOR DETAIL OF EXISTING FOOTING

REVISIONS

SEE SHEET NO. 4

SEE SHEET NO. 6

MATCHLINE

MATCHLINE

21-DEC-2011 10:37
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 melanchock AT RENW247168

ROBERT STANLEY SOUTHERN AND
 PATRICIA LYNN SOUTHERN NANCE

DERRICK J HUNTER
 JOHNIE M HUNTER

AMY L MOORE

MITTIE G WOOSLEY

1

3

3

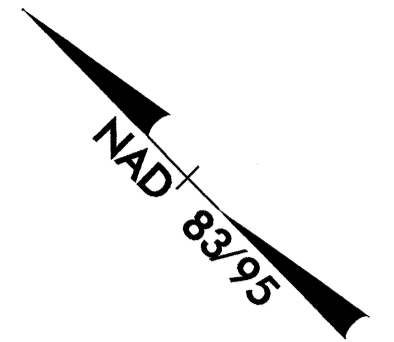
5

2

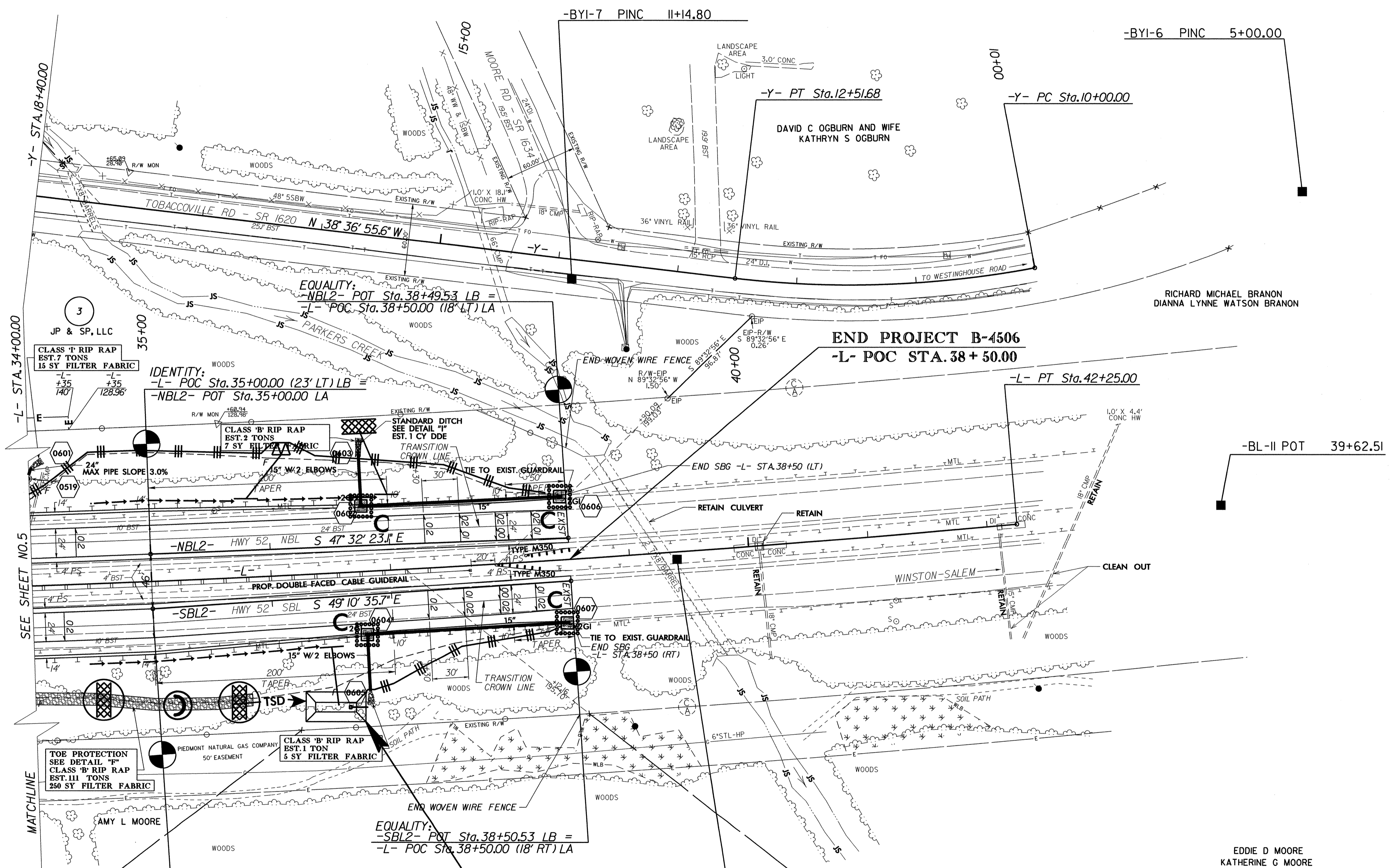
PROJECT REFERENCE NO. B-4506	SHEET NO. EC-12/CONST.06
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

-Y- CURVE DATA
 PI Sta 11+26.82
 $\Delta = 17^{\circ} 27' 27.5''$ (RT)
 $D = 6^{\circ} 56' 11.5''$
 $L = 251.68'$
 $T = 126.82'$
 $R = 826.00'$
 SE = EXISTING

-L- CURVE DATA
 PI Sta 26+19.31
 $\Delta = 12^{\circ} 52' 07.1''$ (LT)
 $D = 0^{\circ} 23' 56.5''$
 $L = 3,225.00'$
 $T = 1,619.31'$
 $R = 14,358.86'$
 SE = SEE PLANS



WILLIAM ASHFORD CALDWELL III
 DIANA M CLADWELL



50 x 25 x 3
 1.5 inch Skimmer
 with 1.0 inch
 Orifice Diameter
 17 ft. weir
 ID 6.1C

B4506 GPS-I
 -BL- PINC 35+05.78

EDDIE D MOORE
 KATHERINE G MOORE

NOTES: (1) SEE SHEET 12 FOR -L-, -NBL2- & -SBL2- PROFILES
 (2) SEE SHEET 2-D FOR DRAINAGE DETAILS
 (3) SEE SHEETS 7, 8 & 9 FOR TEMP. DETOUR

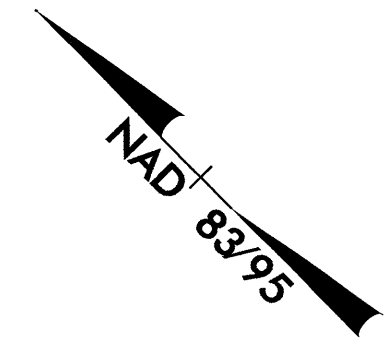
REVISIONS

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 mehancoc AT REN247768

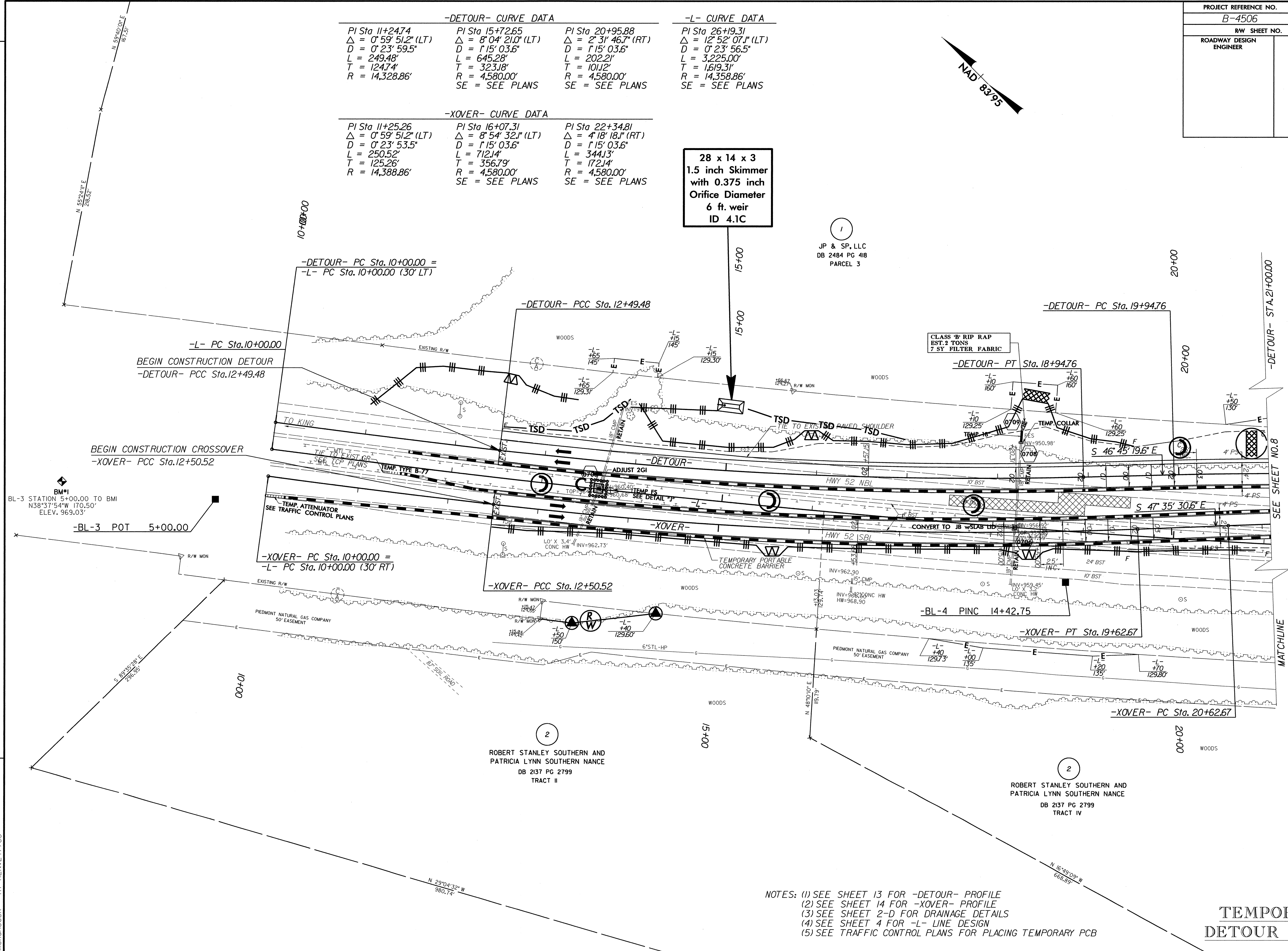
PROJECT REFERENCE NO.	SHEET NO.
B-4506	EC-13/CONST.07
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

-DETOUR- CURVE DATA			-L- CURVE DATA		
PI Sta 11+247.4	PI Sta 15+72.65	PI Sta 20+95.88	PI Sta 26+19.31		
$\Delta = 0^\circ 59' 51.2" (LT)$	$\Delta = 8^\circ 04' 21.0" (LT)$	$\Delta = 2^\circ 31' 46.7" (RT)$	$\Delta = 12^\circ 52' 07.1" (LT)$		
D = 0' 23' 59.5"	D = 1' 15' 03.6"	D = 1' 15' 03.6"	D = 0' 23' 56.5"		
L = 249.48'	L = 645.28'	L = 202.21'	L = 3,225.00'		
T = 124.74'	T = 323.18'	T = 101.12'	T = 1,619.31'		
R = 14,328.86'	R = 4,580.00'	R = 4,580.00'	R = 14,358.86'		
	SE = SEE PLANS	SE = SEE PLANS	SE = SEE PLANS		

-XOVER- CURVE DATA		
PI Sta 11+25.26	PI Sta 16+07.31	PI Sta 22+34.81
$\Delta = 0^\circ 59' 51.2" (LT)$	$\Delta = 8^\circ 54' 32.1" (LT)$	$\Delta = 4^\circ 18' 18.1" (RT)$
D = 0' 23' 53.5"	D = 1' 15' 03.6"	D = 1' 15' 03.6"
L = 250.52'	L = 712.14'	L = 344.13'
T = 125.26'	T = 356.79'	T = 172.14'
R = 14,388.86'	R = 4,580.00'	R = 4,580.00'
	SE = SEE PLANS	SE = SEE PLANS



REVISIONS



BM#1
BL-3 STATION 5+00.00 TO BM1
N38°37'54"W 170.50'
ELEV. 969.03'

BL-3 POT 5+00.00

-XOVER- PC Sta. 10+00.00 =
-L- PC Sta. 10+00.00 (30' RT)

PIEDMONT NATURAL GAS COMPANY
50' EASEMENT

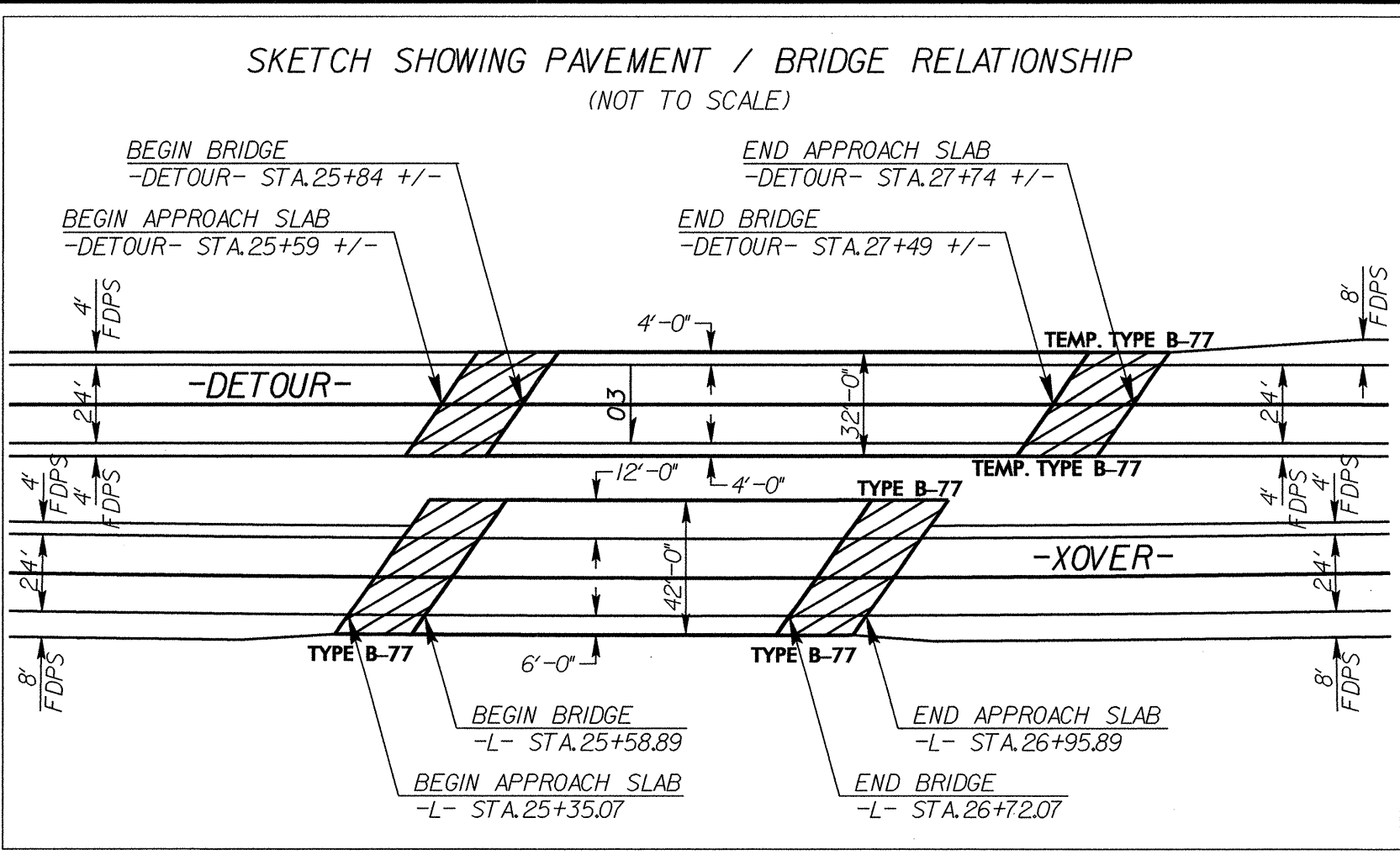
2
ROBERT STANLEY SOUTHERN AND
PATRICIA LYNN SOUTHERN NANCE
DB 2137 PG 2799
TRACT II

2
ROBERT STANLEY SOUTHERN AND
PATRICIA LYNN SOUTHERN NANCE
DB 2137 PG 2799
TRACT IV

- NOTES: (1) SEE SHEET 13 FOR -DETOUR- PROFILE
(2) SEE SHEET 14 FOR -XOVER- PROFILE
(3) SEE SHEET 2-D FOR DRAINAGE DETAILS
(4) SEE SHEET 4 FOR -L- LINE DESIGN
(5) SEE TRAFFIC CONTROL PLANS FOR PLACING TEMPORARY PCB

TEMPORARY
DETOUR SHEET

21-DEC-2011 11:09
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mehancock AT RENV247768

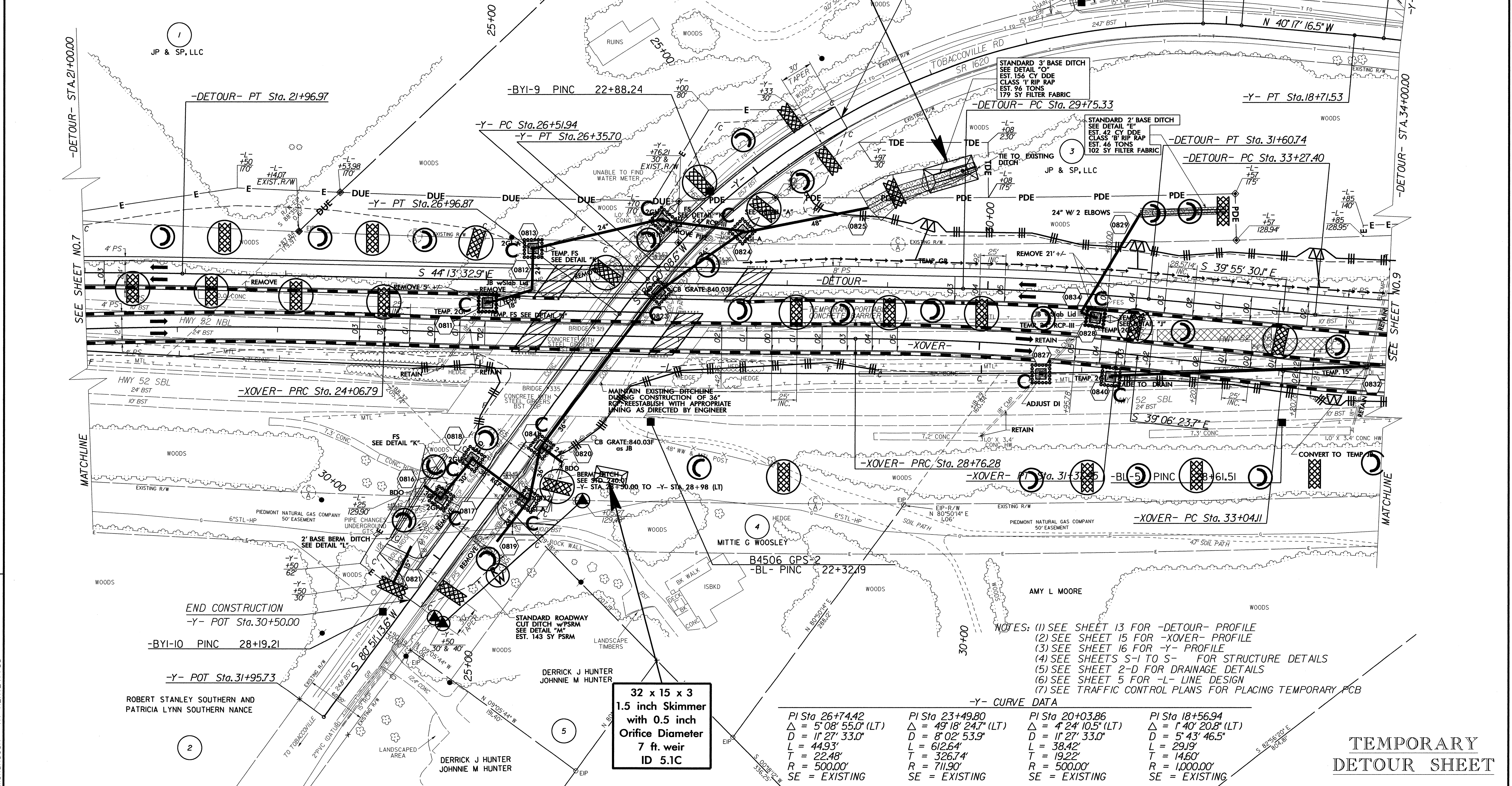


-DETOUR- CURVE DATA			-L- CURVE DATA		
PI Sta 20+95.88	PI Sta 30+68.08	PI Sta 35+11.92	PI Sta 26+19.31		
$\Delta = 2' 31' 46.7''$ (RT)	$\Delta = 4' 18' 02.7''$ (RT)	$\Delta = 8' 32' 40.4''$ (LT)	$\Delta = 12' 52' 07.1''$ (LT)		
$D = 1' 15' 03.6''$	$D = 2' 19' 10.8''$	$D = 2' 19' 10.8''$	$D = 0' 23' 56.5''$		
$L = 202.21'$	$L = 185.40'$	$L = 368.35'$	$L = 3,225.00'$		
$T = 101.12'$	$T = 92.75'$	$T = 184.52'$	$T = 1,619.31'$		
$R = 4,580.00'$	$R = 2,470.00'$	$R = 2,470.00'$	$R = 14,358.86'$		
SE = SEE PLANS	SE = SEE PLANS	SE = SEE PLANS	SE = .02		

-XOVER- CURVE DATA		
PI Sta 22+34.81	PI Sta 26+41.56	PI Sta 30+06.99
$\Delta = 4' 18' 18.1''$ (RT)	$\Delta = 1' 52' 40.7''$ (LT)	$\Delta = 6' 03' 29.5''$
$D = 1' 15' 03.6''$	$D = 0' 24' 00.0''$	$D = 2' 19' 10.8''$
$L = 344.13'$	$L = 469.49'$	$L = 261.17'$
$T = 172.14'$	$T = 234.76'$	$T = 130.71'$
$R = 4,580.00'$	$R = 14,323.86'$	$R = 2,470.00'$
SE = SEE PLANS	SE = SEE PLANS	SE = SEE PLANS

50 x 25 x 3
1.5 inch Skimmer
with 1.0 inch
Orifice Diameter
17 ft. weir
ID 5.2C

32 x 15 x 3
1.5 inch Skimmer
with 0.5 inch
Orifice Diameter
7 ft. weir
ID 5.1C



-Y- CURVE DATA			
PI Sta 26+74.42	PI Sta 23+49.80	PI Sta 20+03.86	PI Sta 18+56.94
$\Delta = 5' 08' 55.0''$ (LT)	$\Delta = 49' 18' 24.7''$ (LT)	$\Delta = 4' 24' 10.5''$ (LT)	$\Delta = 1' 40' 20.8''$ (LT)
$D = 1' 27' 33.0''$	$D = 8' 02' 53.9''$	$D = 1' 27' 33.0''$	$D = 5' 43' 46.5''$
$L = 44.93'$	$L = 612.64'$	$L = 38.42'$	$L = 29.19'$
$T = 22.48'$	$T = 326.74'$	$T = 19.22'$	$T = 14.60'$
$R = 500.00'$	$R = 711.90'$	$R = 500.00'$	$R = 1,000.00'$
SE = EXISTING	SE = EXISTING	SE = EXISTING	SE = EXISTING

TEMPORARY
DETOUR SHEET

REVISIONS

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menhcock

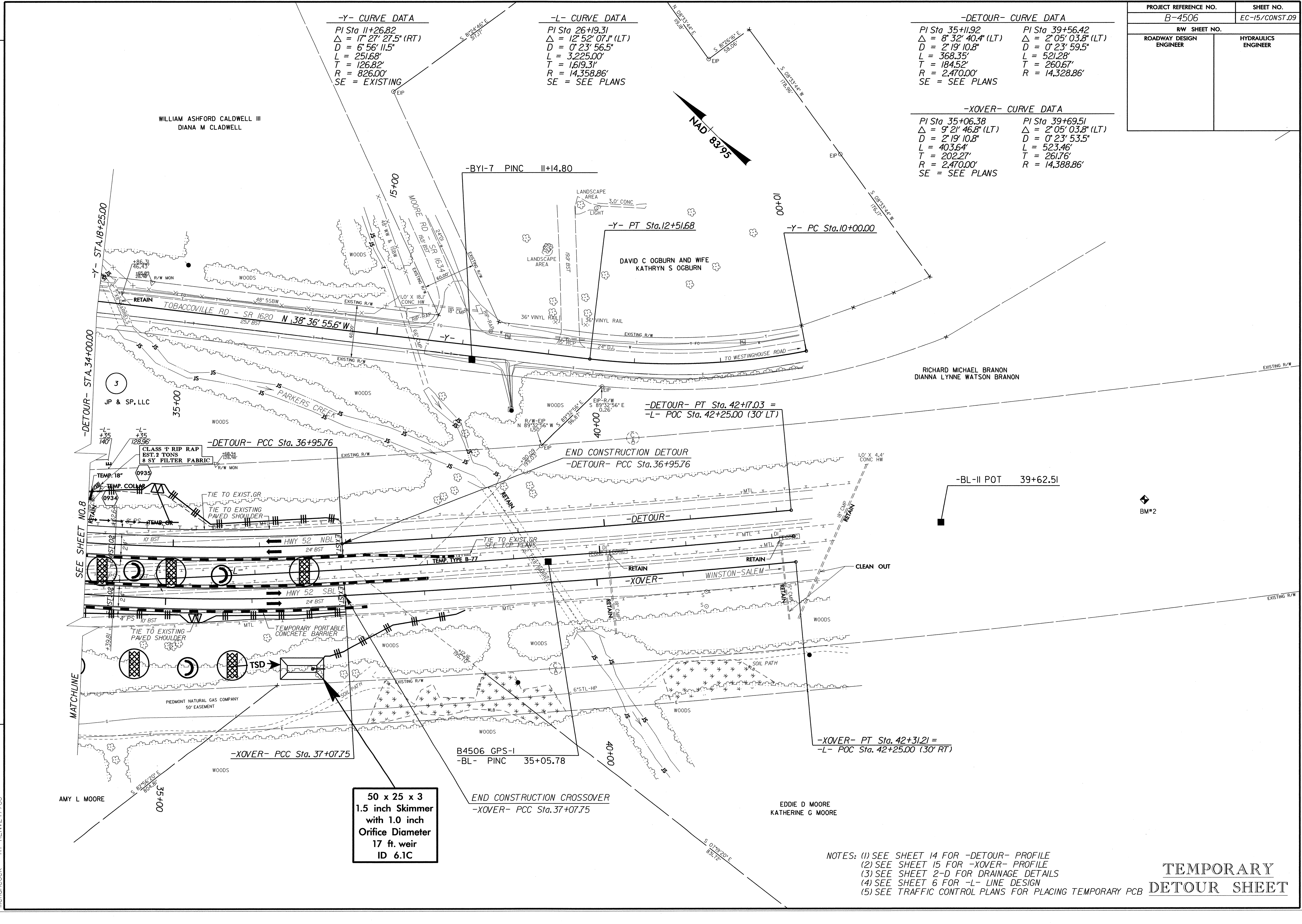
PROJECT REFERENCE NO. B-4506	SHEET NO. EC-15/CONST.09
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

-Y- CURVE DATA
 PI Sta 11+26.82
 $\Delta = 17' 27" 27.5" (RT)$
 $D = 6' 56" 11.5"$
 $L = 251.68'$
 $T = 126.82'$
 $R = 826.00'$
 SE = EXISTING

-L- CURVE DATA
 PI Sta 26+19.31
 $\Delta = 12' 52" 07.1" (LT)$
 $D = 0' 23' 56.5"$
 $L = 3,225.00'$
 $T = 1,619.31'$
 $R = 14,358.86'$
 SE = SEE PLANS

-DETOUR- CURVE DATA
 PI Sta 35+11.92 PI Sta 39+56.42
 $\Delta = 8' 32" 40.4" (LT)$ $\Delta = 2' 05" 03.8" (LT)$
 $D = 2' 19" 10.8"$ $D = 0' 23' 59.5"$
 $L = 368.35'$ $L = 521.28'$
 $T = 184.52'$ $T = 260.67'$
 $R = 2,470.00'$ $R = 14,328.86'$
 SE = SEE PLANS

-XOVER- CURVE DATA
 PI Sta 35+06.38 PI Sta 39+69.51
 $\Delta = 9' 21" 46.8" (LT)$ $\Delta = 2' 05" 03.8" (LT)$
 $D = 2' 19" 10.8"$ $D = 0' 23' 53.5"$
 $L = 403.64'$ $L = 523.46'$
 $T = 202.27'$ $T = 261.76'$
 $R = 2,470.00'$ $R = 14,388.86'$
 SE = SEE PLANS



REVISIONS

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 AT RENV247768
 mehaneck

NOTES: (1) SEE SHEET 14 FOR -DETOUR- PROFILE
 (2) SEE SHEET 15 FOR -XOVER- PROFILE
 (3) SEE SHEET 2-D FOR DRAINAGE DETAILS
 (4) SEE SHEET 6 FOR -L- LINE DESIGN
 (5) SEE TRAFFIC CONTROL PLANS FOR PLACING TEMPORARY PCB

**TEMPORARY
 DETOUR SHEET**