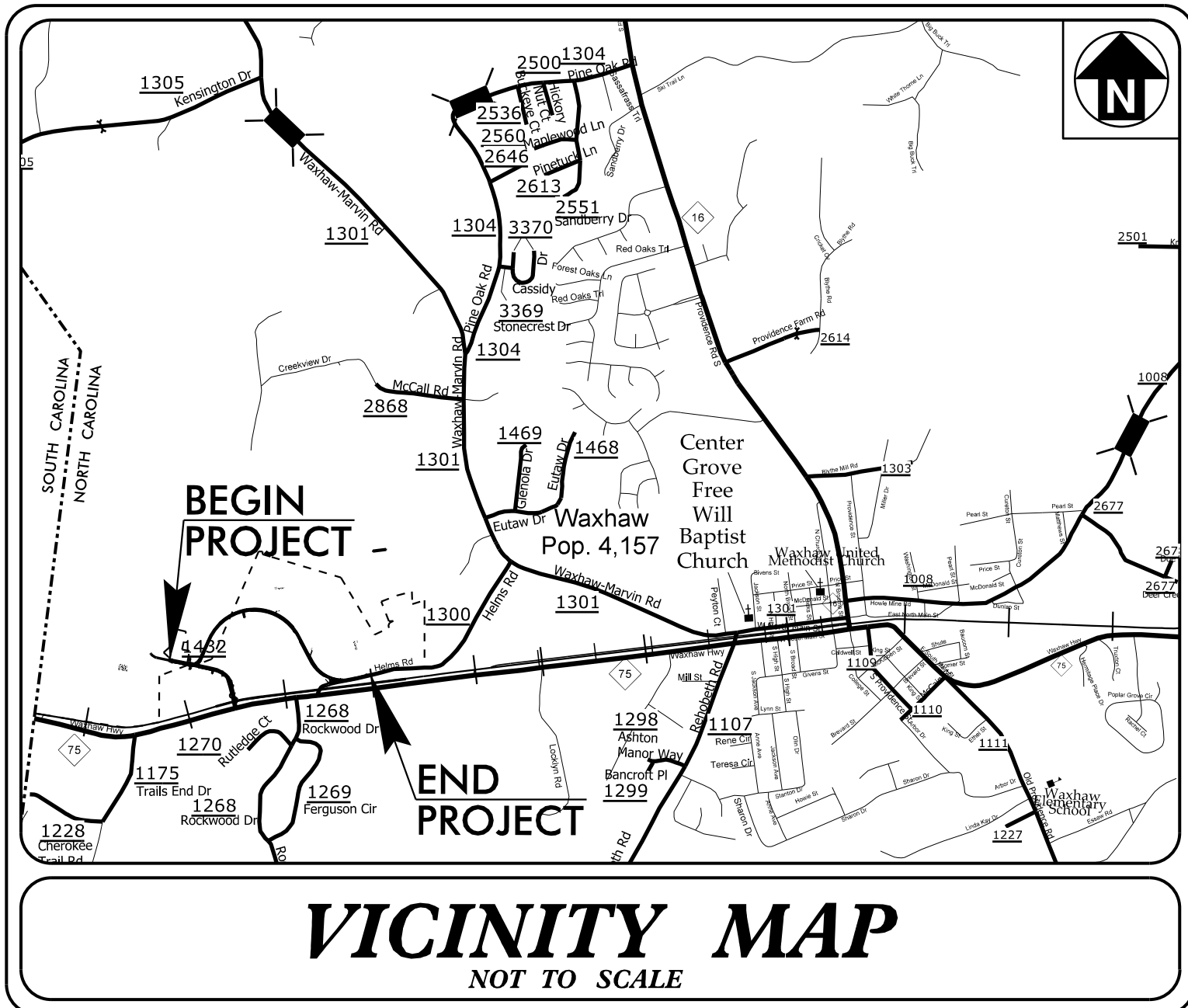


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TIP PROJECT: Y-5500JC



STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

PLAN FOR PROPOSED
HIGHWAY EROSION CONTROL

UNION COUNTY

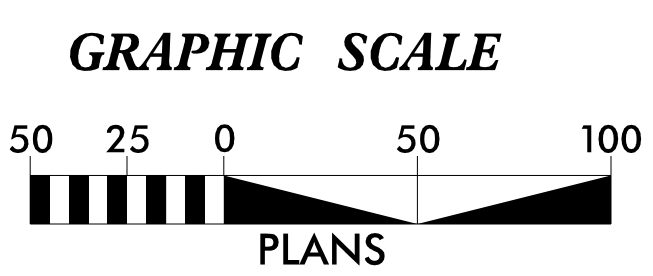
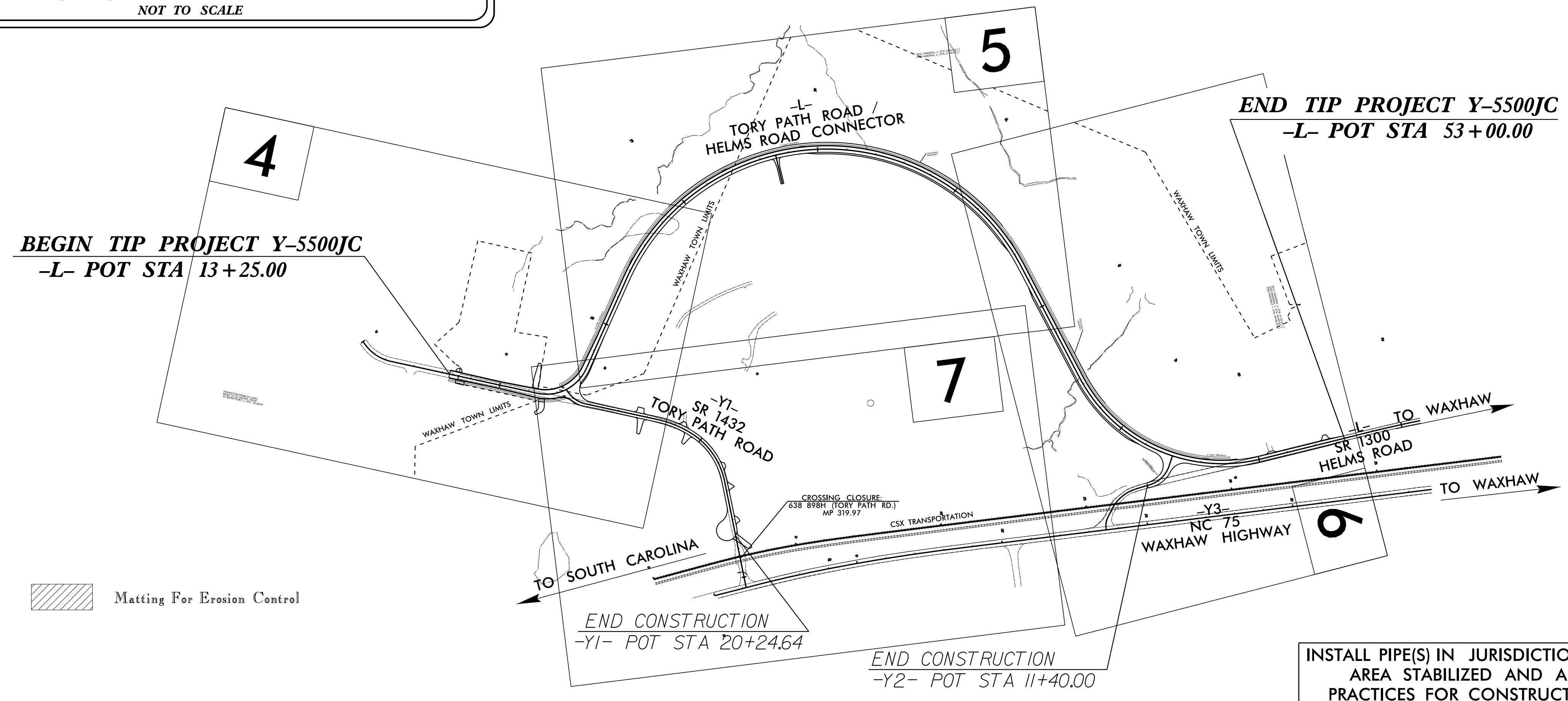
**LOCATION: SR 1432 (TORY PATH ROAD)(CROSSING NUMBER 638 898H, MP 319.97)
CROSSING CLOSURE AT CSX TRANSPORTATION, AND EXTENSION
TO SR 1300 (HELMS ROAD) IN WAXHAW**



STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	Y-5500JC	EC-1	
STATE PROJ. NO.	F.A. PROJ. NO.	DESCRIPTION	
45533.1.18		PE	
45533.2.18		RW	

EROSION AND SEDIMENT CONTROL MEASURES

Std. #	Description	Symbol
1630.03	Temporary Silt Ditch	TD
1630.05	Temporary Diversion	TD
1605.01	Temporary Silt Fence	TSF
1606.01	Special Sediment Control Fence	SSCF
1622.01	Temporary Berms and Slope Drains	TBSD
1630.02	Silt Basin Type B	SB
1633.01	Temporary Rock Silt Check Type-A	TRSCA
	Temporary Rock Silt Check Type-A with Matting and Polyacrylamide (PAM)	TRSCA-PAM
1633.02	Temporary Rock Silt Check Type-B	TRSCB
	Wattle / Coir Fiber Wattle	WCFW
	Wattle / Coir Fiber Wattle with Polyacrylamide (PAM)	WCFW-PAM
1634.01	Temporary Rock Sediment Dam Type-A	TRSDA
1634.02	Temporary Rock Sediment Dam Type-B	TRSDB
1635.01	Rock Pipe Inlet Sediment Trap Type-A	RPISTRA
1635.02	Rock Pipe Inlet Sediment Trap Type-B	RPISTRB
1630.04	Stilling Basin	SB
1630.06	Special Stilling Basin	SSB
	Rock Inlet Sediment Trap:	
1632.01	Type A	A
1632.02	Type B	B
1632.03	Type C	C
	Skimmer Basin	SKB
	Tiered Skimmer Basin	TSKB
	Infiltration Basin	IB



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.

M M
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NC License No. F-0669

Designed by:
Eleni Riggs, PE **3056**
NAME LEVEL III CERTIFICATION NO.

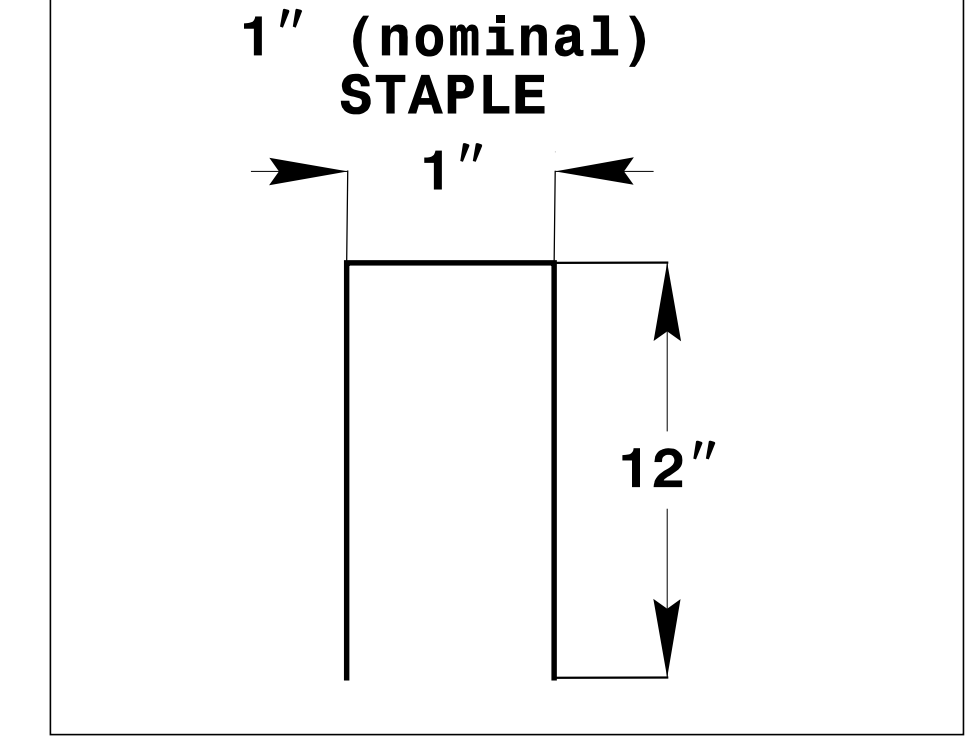
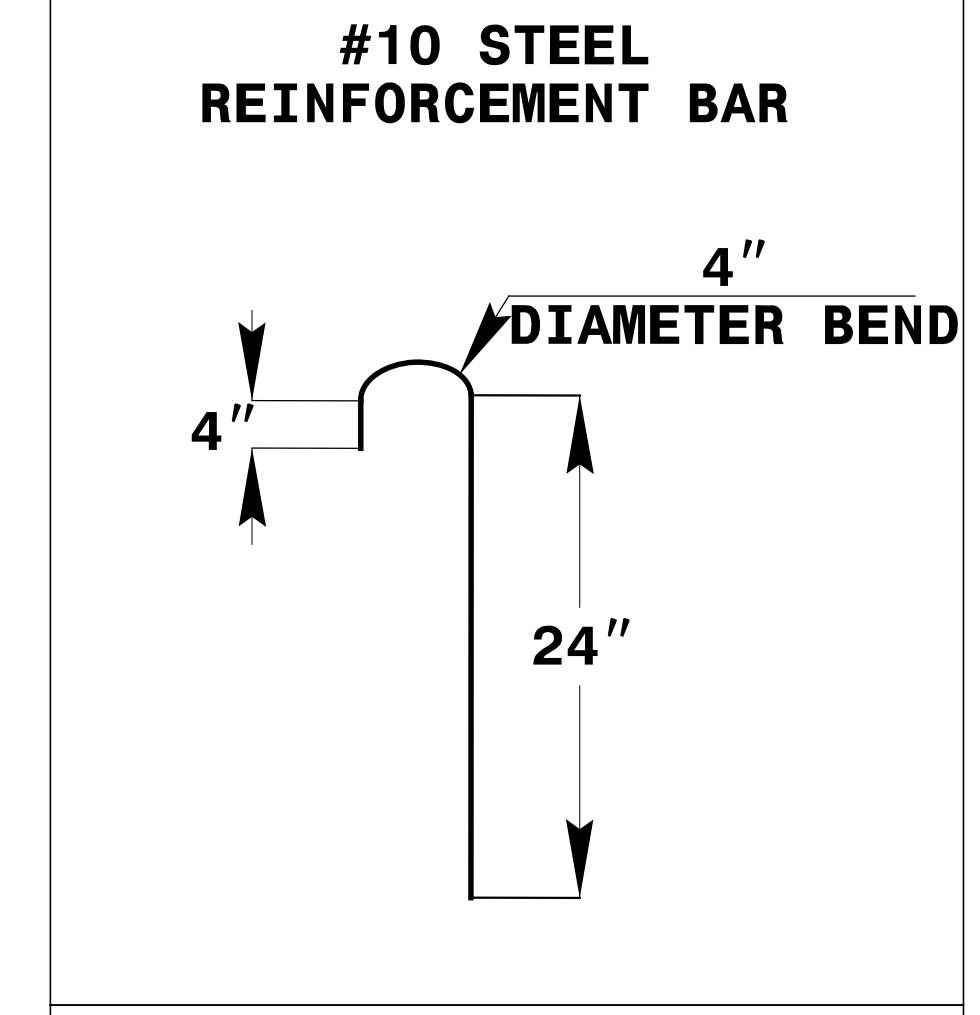
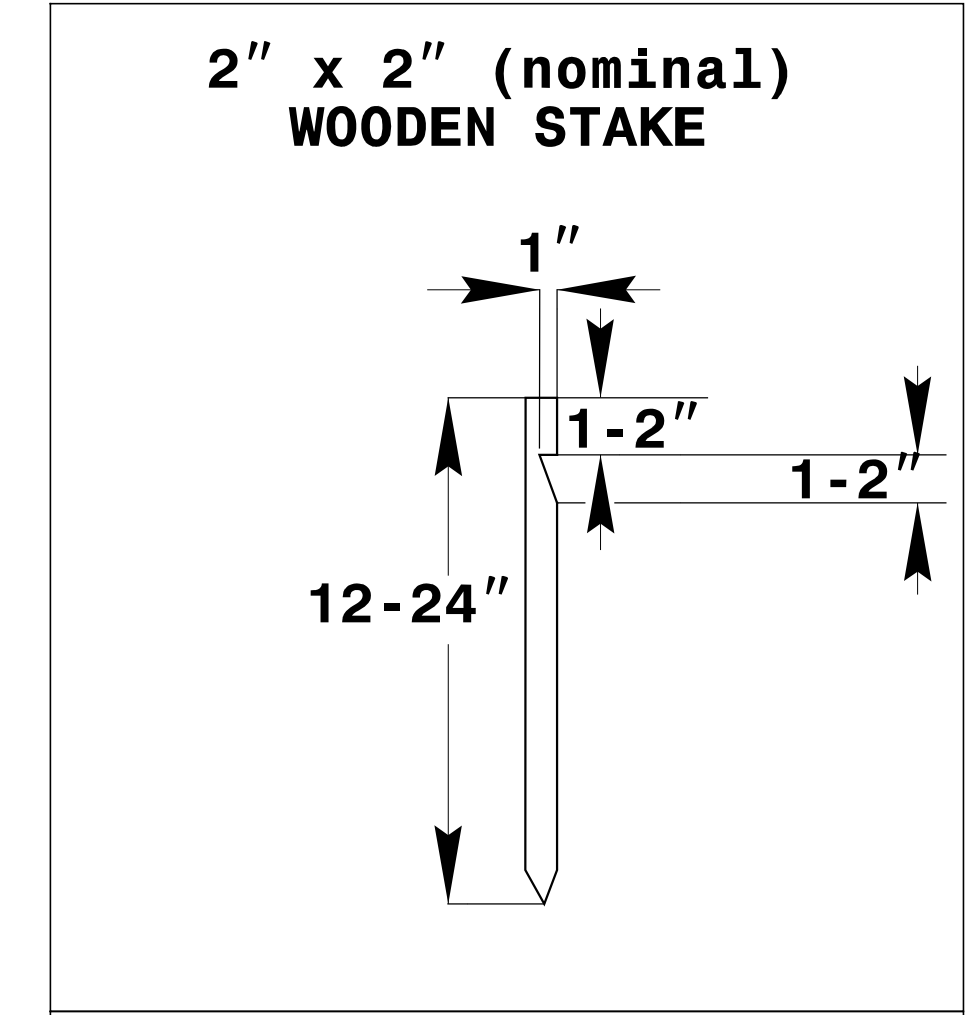
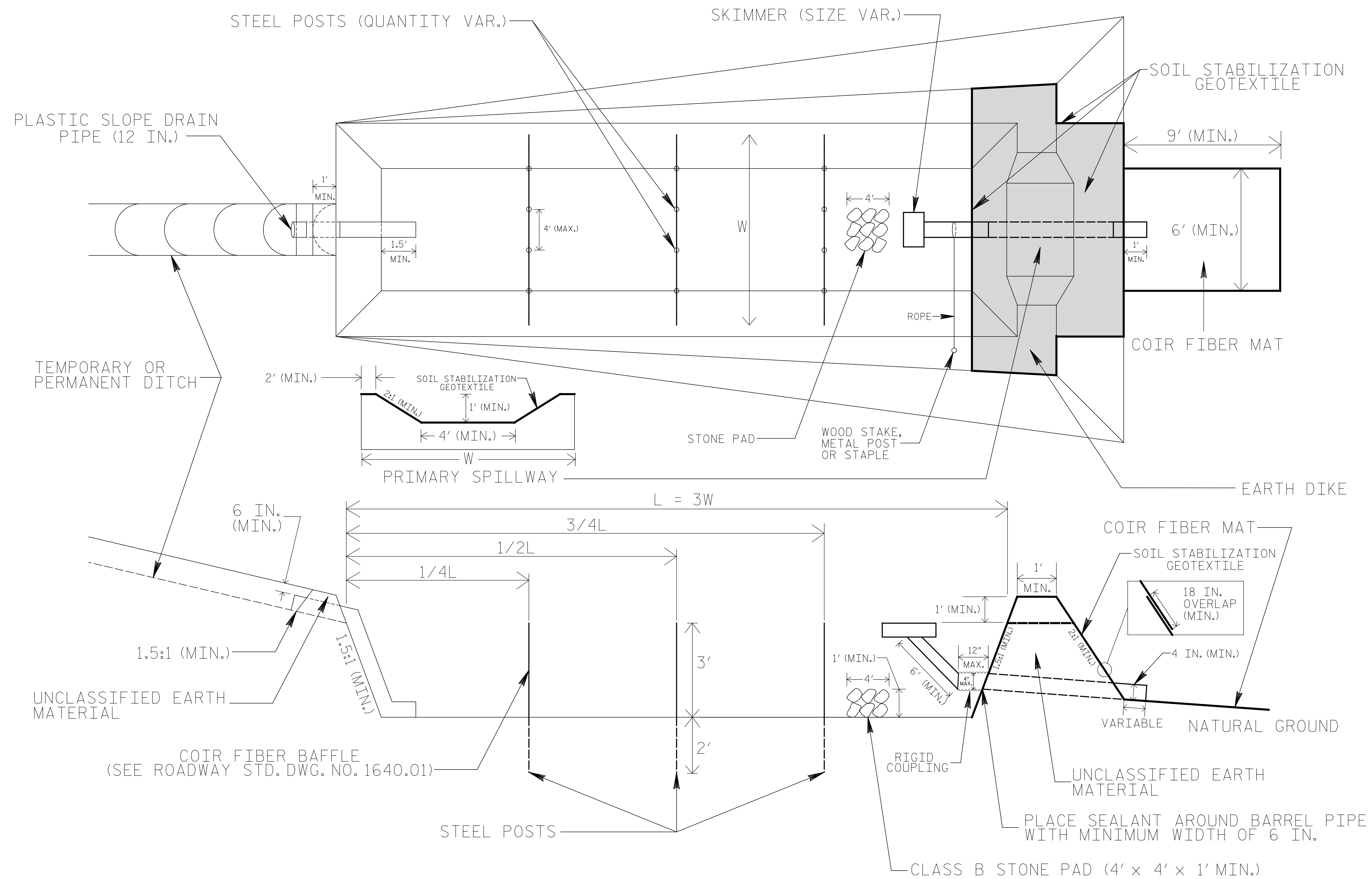
Highway Standard Drawings

The following roadway english standards as appear in "Roadway Standard Drawings"- Roadway Design Unit - N. C. Department of Transportation - Raleigh, N. C., dated January 2018 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 J
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 J
1630.01 Riser Basin	1634.01 Temporary Rock Sediment Dam Type A
1630.02 Silt Basin Type J	1634.02 Temporary Rock Sediment Dam Type J
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 J
1630.05 Temporary Diversion	1640.01 Coir Fiber Wattle
1630.06 Special Stilling Basin	1645.01 Temporary Stream Crossing
1631.01 Matting Installation	

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SKIMMER BASIN WITH BAFFLES DETAIL



COIR FIBER MAT ANCHOR OPTIONS

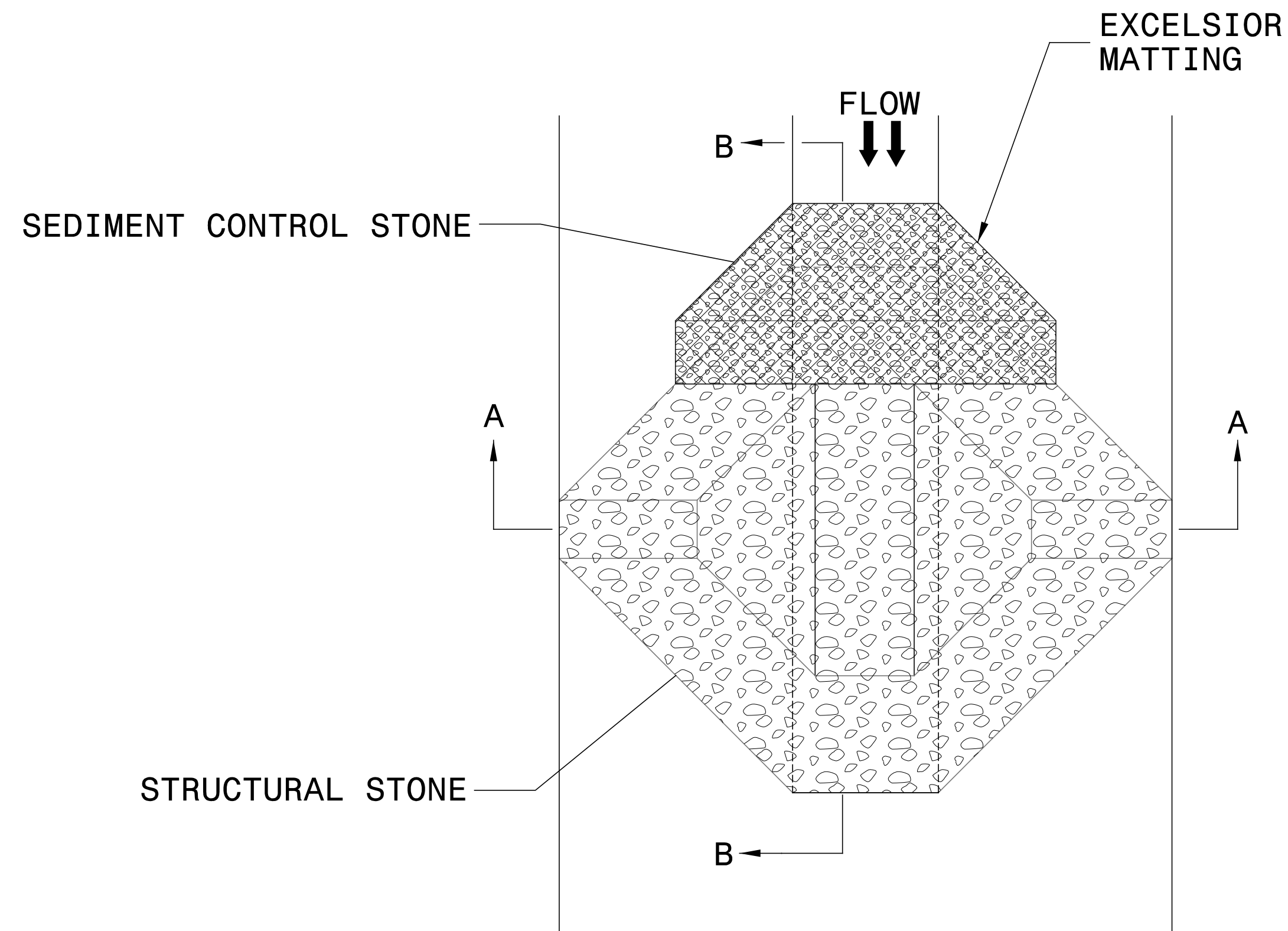
NOTES

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 PRIMARY SPILLWAY WEIR 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 OR TARP AS DIRECTED.
6. SOIL STABILIZATION GEOTEXTILE FOR PRIMARY SPILLWAY SHALL BE ONE CONTINUOUS PIECE OF MATERIAL OR OVERLAPPED 18 IN. (MIN.).

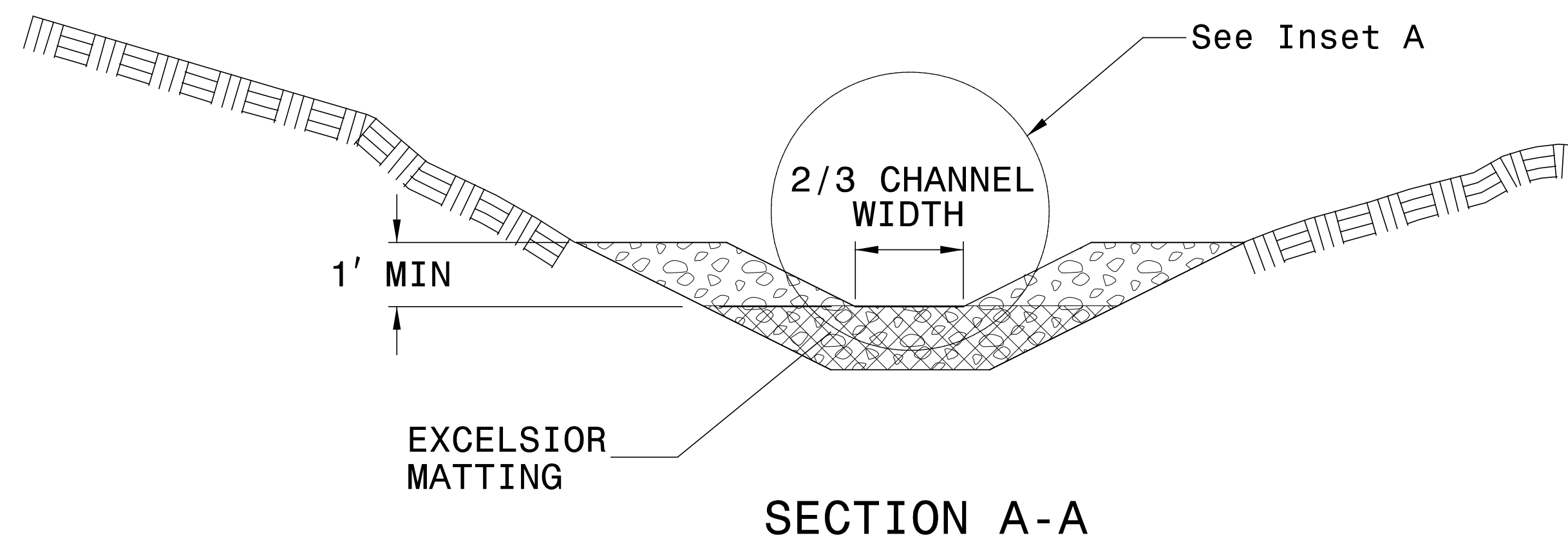
NOT TO SCALE

11/23/2021 R:\E\Position_ConTrol\F-14288_ec.psn02.dgn MOTT MACDONALD

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



PLAN



SECTION A-A

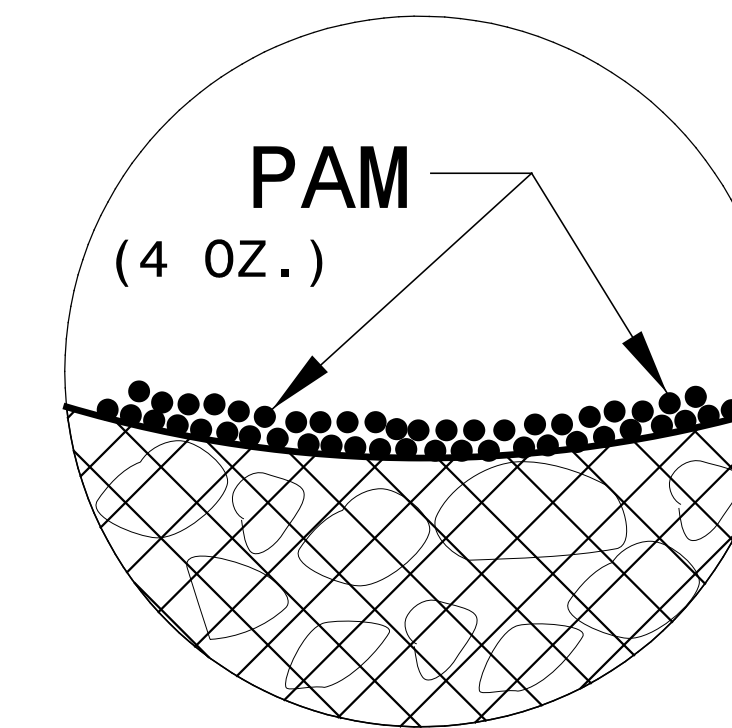
NOTES:

INSTALL TEMPORARY ROCK SILT CHECK TYPE A IN ACCORDANCE WITH ROADWAY STANDARD DRAWING NO. 1633.01.

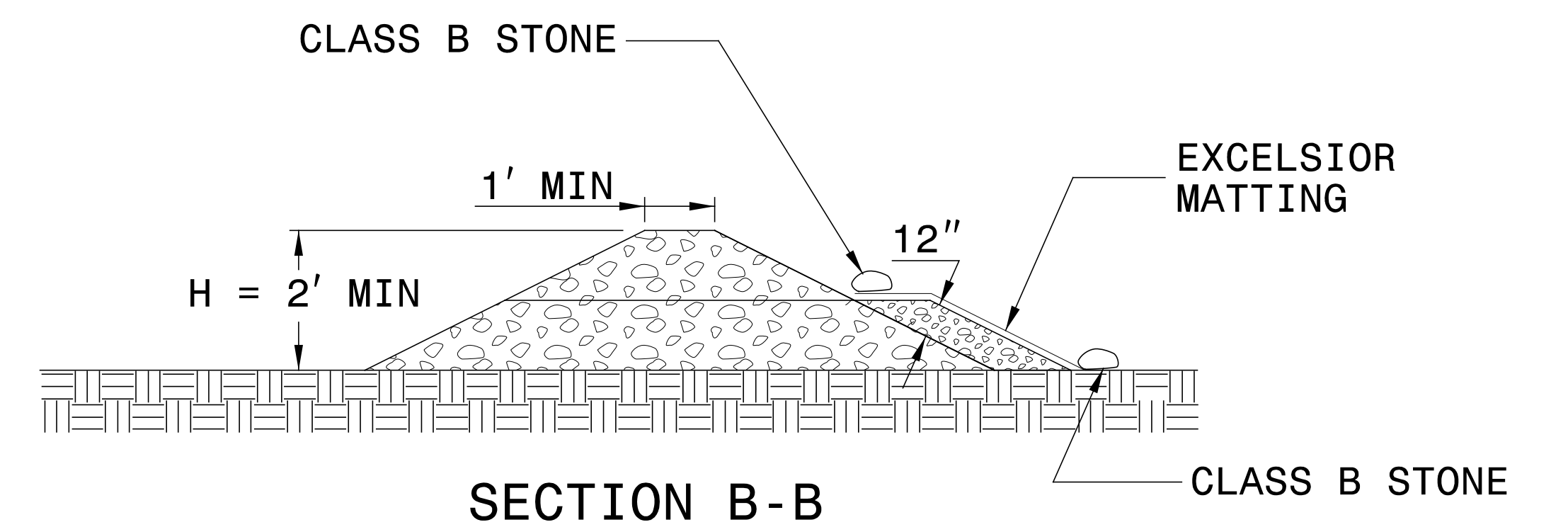
USE EXCELSIOR FOR MATTING MATERIAL AND ANCHOR MATTING SECTION AT TOP AND BOTTOM WITH CLASS B STONE.

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



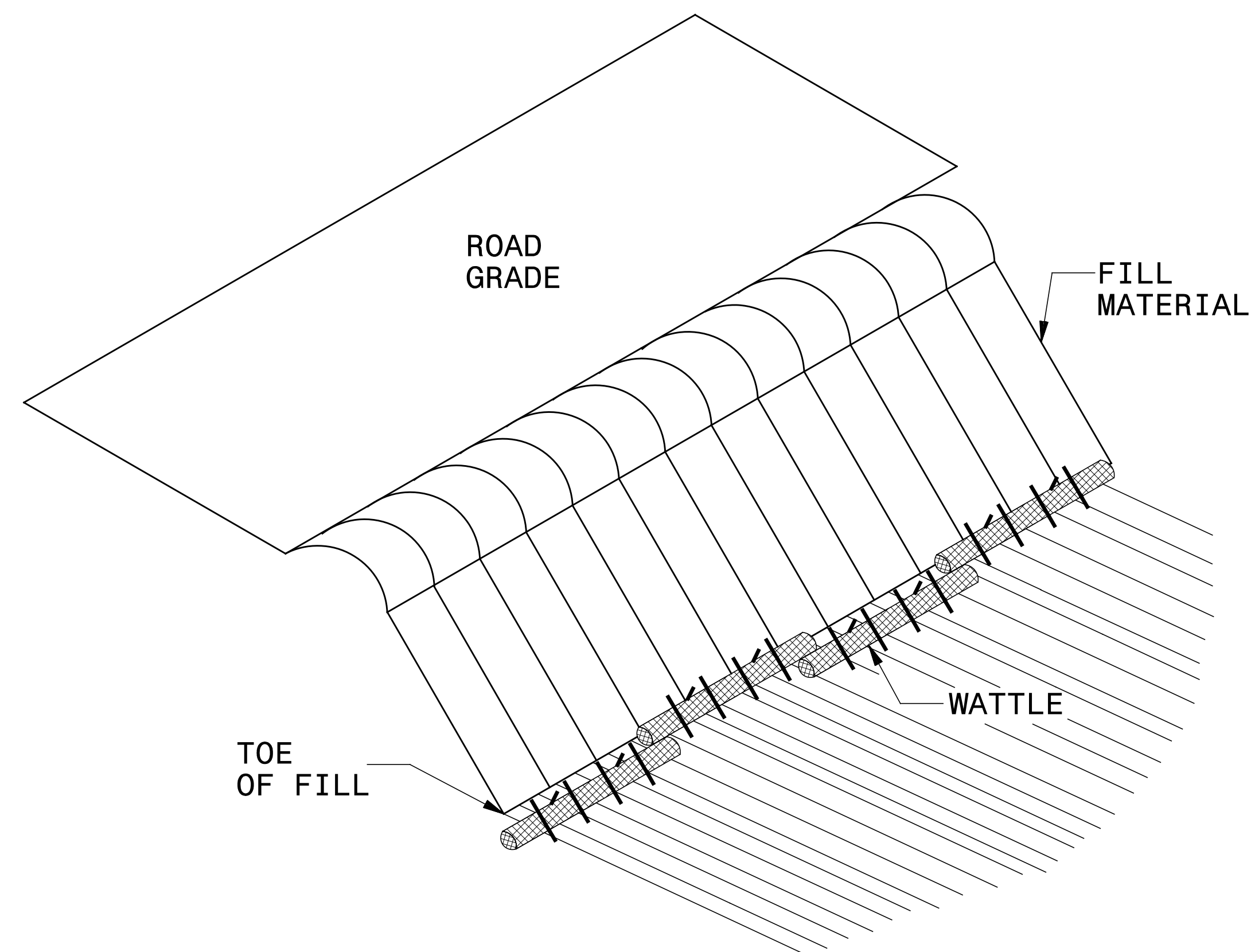
INSET A



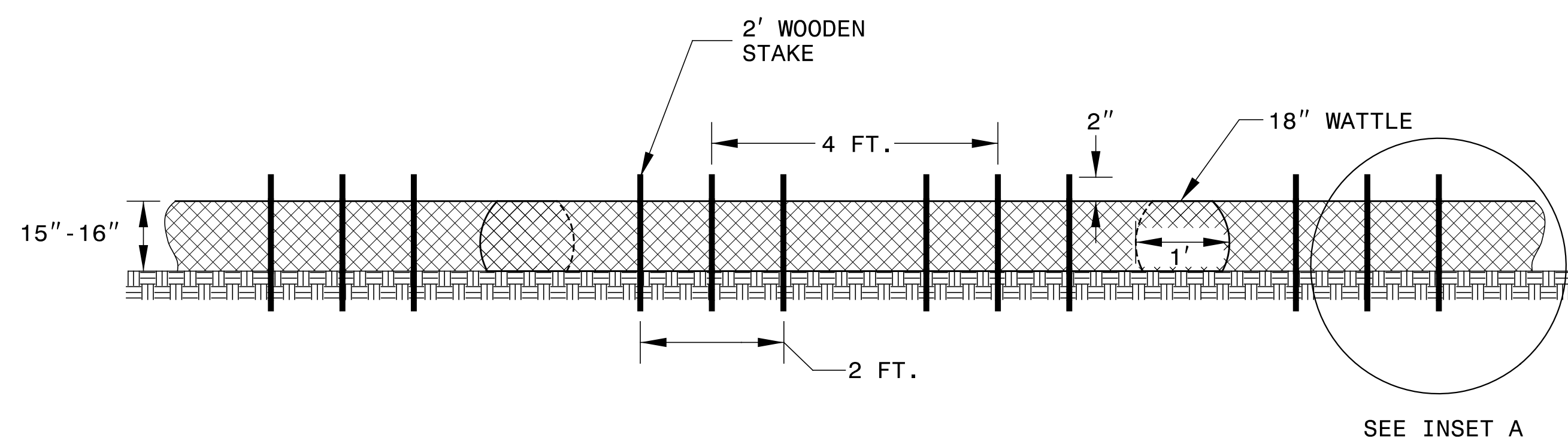
SECTION B-B

NOT TO SCALE

WATTLE BARRIER DETAIL



ISOMETRIC VIEW



FRONT VIEW

NOTES:

USE MINIMUM 18 IN. NOMINAL DIAMETER EXCELSIOR WATTLE AND LENGTH OF 10 FT.

EXCAVATE A 2 TO 3 INCH TRENCH FOR WATTLE TO BE PLACED.

DO NOT PLACE WATTLES ON TOE OF SLOPE.

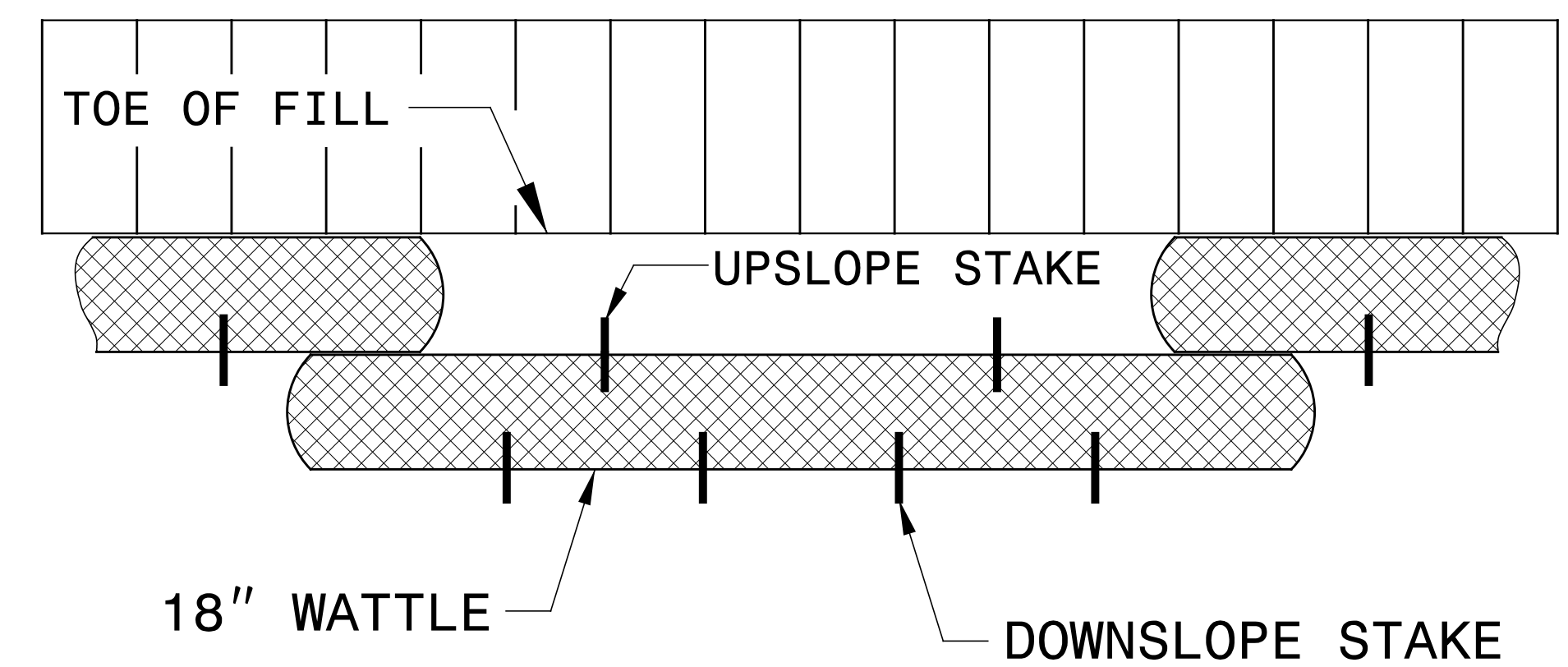
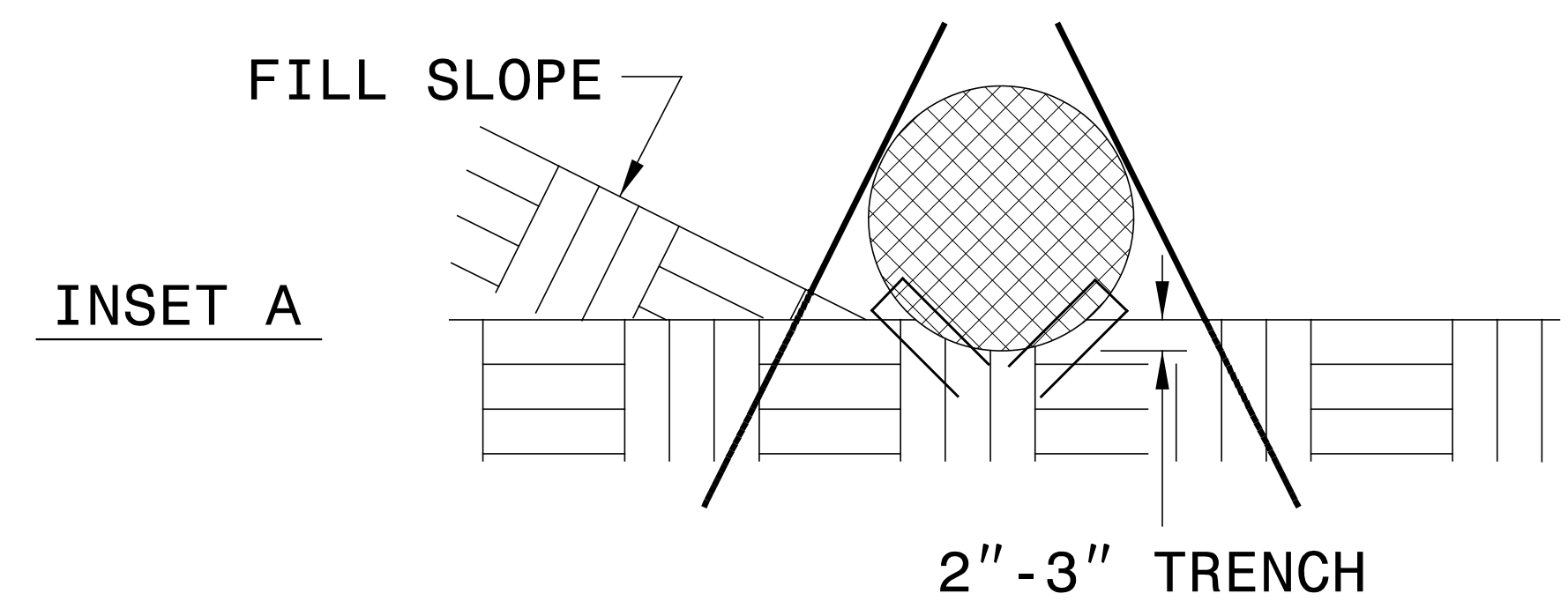
USE 2 FT. WOODEN STAKES WITH A 2 IN. BY 2 IN. NOMINAL CROSS SECTION.

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

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

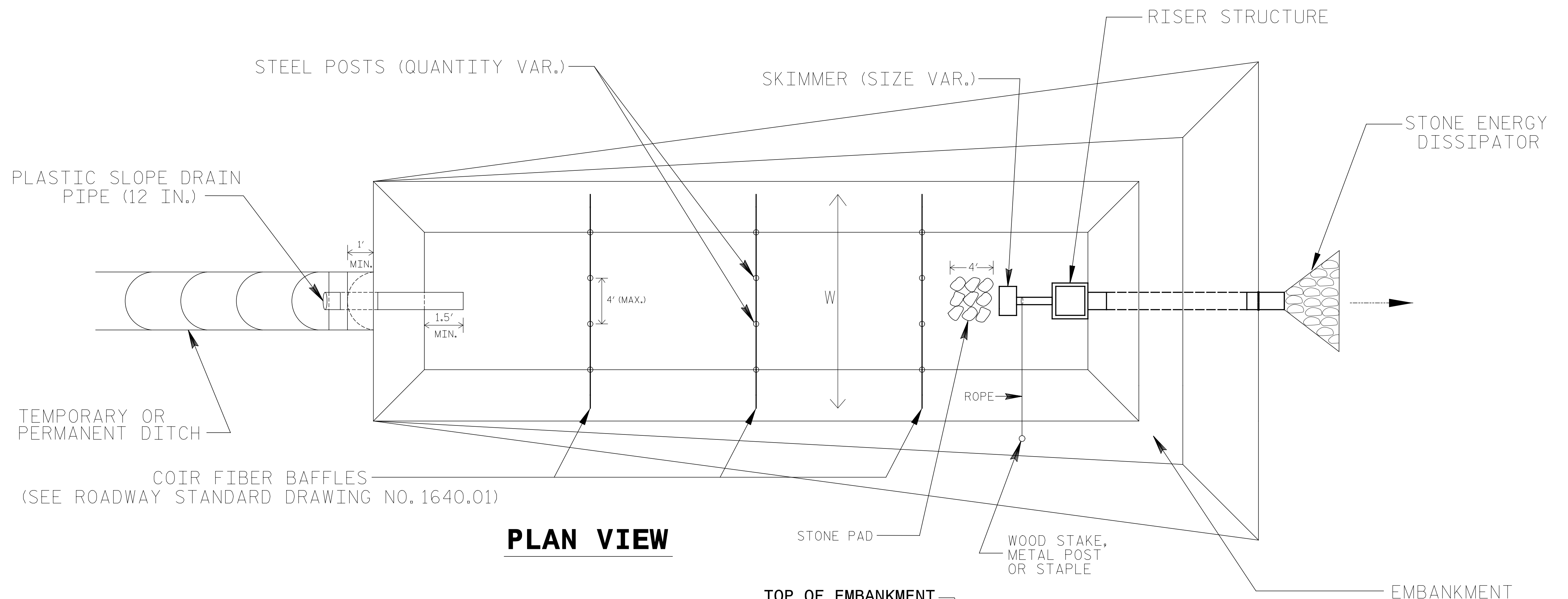
INSTALL STAPLES APPROXIMATELY EVERY 1 LINEAR FOOT ON BOTH SIDES OF WATTLE AND AT EACH END TO SECURE IT TO THE SOIL.

FOR BREAKS ALONG LARGE SLOPES, USE MAXIMUM SPACING OF 25 FT.

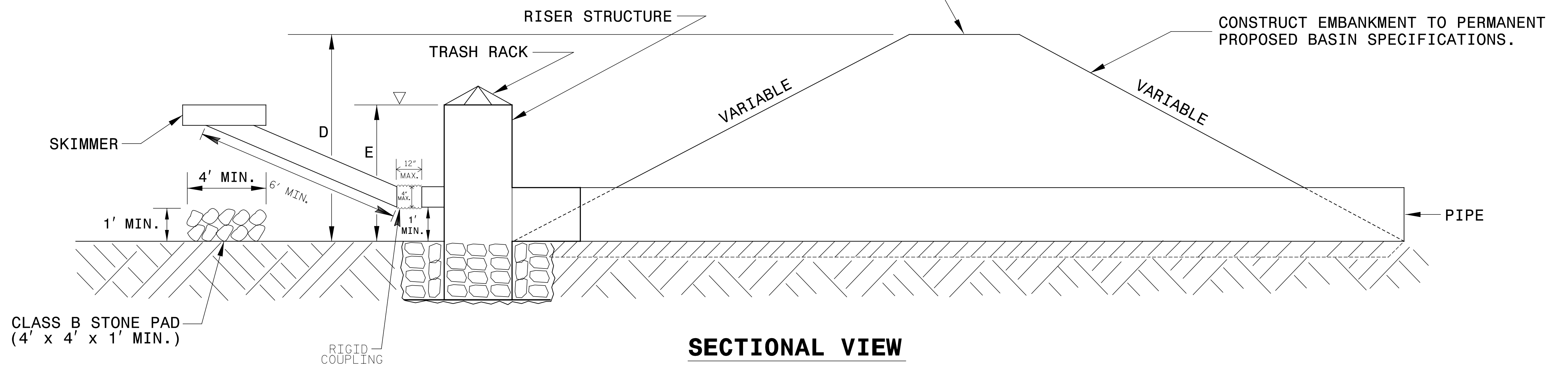


TOP VIEW

STORMWATER BASIN WITH SKIMMER



PLAN VIEW



SECTIONAL VIEW

NOTES

1. SEED AND PLACE MATTING FOR EROSION CONTROL ON INTERIOR AND EXTERIOR SIDESLOPES.
2. INSTALL A MINIMUM OF 3 COIR FIBER BAFFLES IN ACCORDANCE WITH ROADWAY STD. DRAWING 1640.01.
3. INSTALL SKIMMER AND COUPLING TO RISER STRUCTURE OR DIRECTLY INTO EMBANKMENT 1 FT. FROM BOTTOM OF BASIN.
4. THE ARM PIPE SHALL HAVE A MINIMUM LENGTH OF 6 FT. BETWEEN THE SKIMMER AND COUPLING.
5. PLASTIC SLOPE DRAIN PIPE AT INLET OF BASIN MAY BE REPLACED BY FILTRATION GEOTEXTILE AS DIRECTED.
6. THE DIFFERENCE BETWEEN LENGTHS "D" AND "E" REPRESENT THE FREEBOARD AND SHOULD BE 1 FT. MINIMUM.

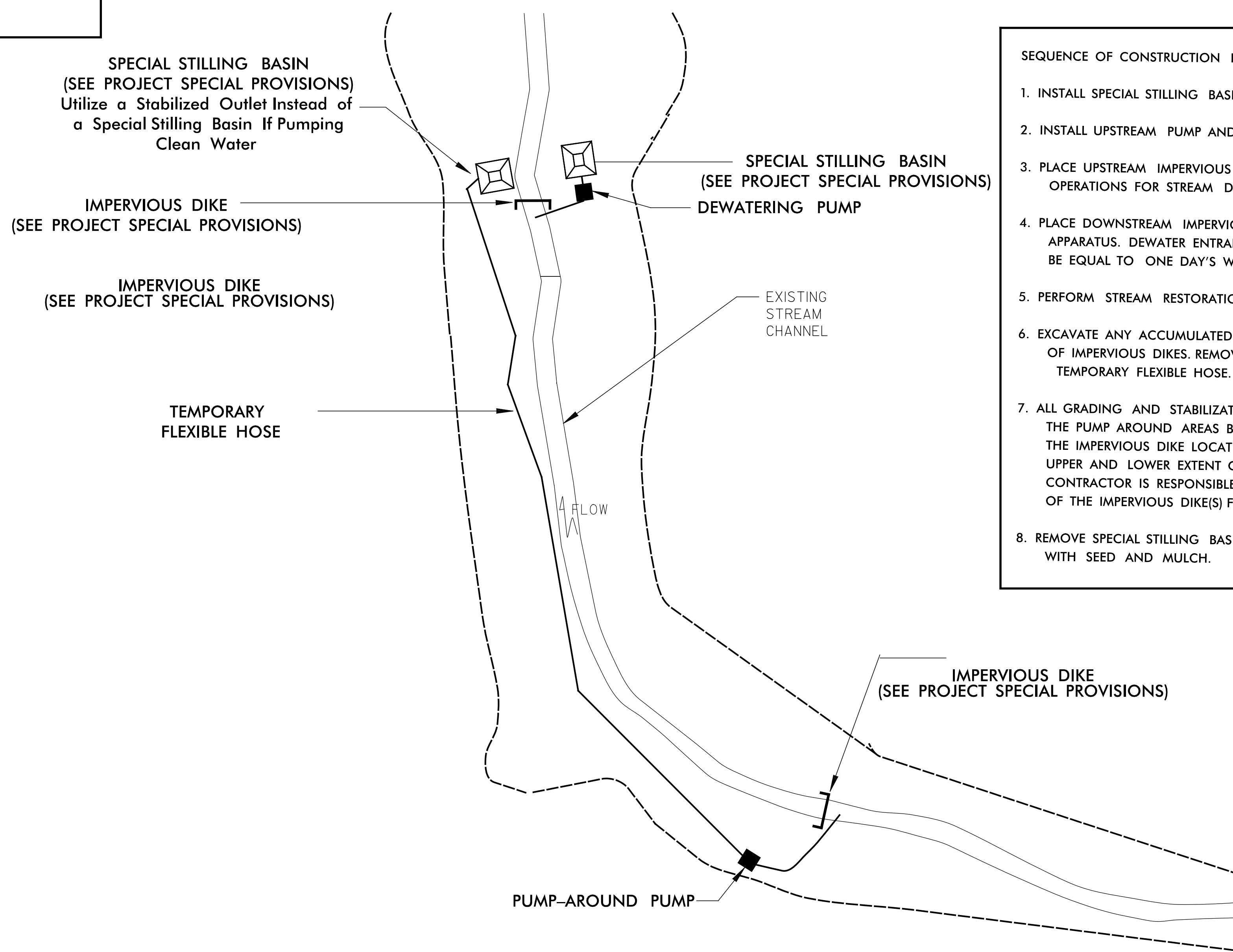
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MOTT MACDONALD

NOT TO SCALE

EXAMPLE OF PUMP-AROUND OPERATION

NOTES:

- 1) All excavation shall be performed in only dry or isolated sections of channel.
- 2) Impervious dikes are to be used to isolate work from stream flow when necessary.
- 3) All graded areas shall be stabilized within 24 hours.
- 4) Maintenance of stream flow operations shall be incidental to the work. This includes polyethylene sheeting, diversion pipes, pumps and hoses.
- 5) Pumps and hoses shall be of sufficient size to dewater the work area.



SEQUENCE OF CONSTRUCTION FOR TYPICAL WORK AREA

1. INSTALL SPECIAL STILLING BASIN(S).
2. INSTALL UPSTREAM PUMP AND TEMPORARY FLEXIBLE HOSE.
3. PLACE UPSTREAM IMPERVIOUS DIKE AND BEGIN PUMPING OPERATIONS FOR STREAM DIVERSION.
4. PLACE DOWNSTREAM IMPERVIOUS DIKE AND PUMPING APPARATUS. DEWATER ENTRAPPED AREA. AREA TO BE DEWATERED SHALL BE EQUAL TO ONE DAY'S WORK.
5. PERFORM STREAM RESTORATION WORK IN ACCORDANCE WITH THE PLANS.
6. EXCAVATE ANY ACCUMULATED SILT AND DEWATER BEFORE REMOVAL OF IMPERVIOUS DIKES. REMOVE IMPERVIOUS DIKES, PUMPS, AND TEMPORARY FLEXIBLE HOSE. (DOWNSTREAM IMPERVIOUS DIKES FIRST).
7. ALL GRADING AND STABILIZATION MUST BE COMPLETED IN ONE DAY WITHIN THE PUMP AROUND AREAS BETWEEN THE IMPERVIOUS DIKES. THE IMPERVIOUS DIKE LOCATIONS AS SHOWN ON THIS SHEET ONLY SHOW THE UPPER AND LOWER EXTENT OF WORK FOR EACH STREAM SEGMENT. THE CONTRACTOR IS RESPONSIBLE FOR DETERMINING THE LOCATION OF THE IMPERVIOUS DIKE(S) FOR EACH DAY'S WORK.
8. REMOVE SPECIAL STILLING BASIN(S) AND BACKFILL. STABILIZE DISTURBED AREA WITH SEED AND MULCH.

DIVISION OF HIGHWAYS
STATE OF NORTH CAROLINA

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.

-L- SEE PROFILE SHEET 8
 -Y1- SEE PROFILE SHEET 9
 FOR DITCH DETAILS SEE SHEET 2D-1
 FOR CURB RAMP DETAILS SEE SHEET 2C-3

-L-		-Y1-	
PI Sta 10+69.26	PI Sta 17+52.31	PI Sta 10+45.25	PI Sta 17+52.31
$\Delta = 4^{\circ}08'29.3"$ (LT)	$\Delta = 78^{\circ}10'56.6"$ (LT)	$\Delta = 48^{\circ}41'33.8"$ (LT)	$\Delta = 78^{\circ}10'56.6"$ (LT)
D = 39'01" 52.1"	D = 38'11" 49.9"	D = 57'17" 44.8"	D = 38'11" 49.9"
L = 105.41'	L = 204.68'	L = 84.98'	L = 204.68'
T = 55.09'	T = 121.86'	T = 45.25'	T = 121.86'
R = 146.80'	R = 150.00'	R = 100.00'	R = 150.00'
SE = 0.04	SE = 0.04	SE = 0.04	SE = 0.04
RO = 72'	RO = 72'	RO = 56'	RO = 72'
TR = 36'	TR = 36'	TR = 28'	TR = 36'

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

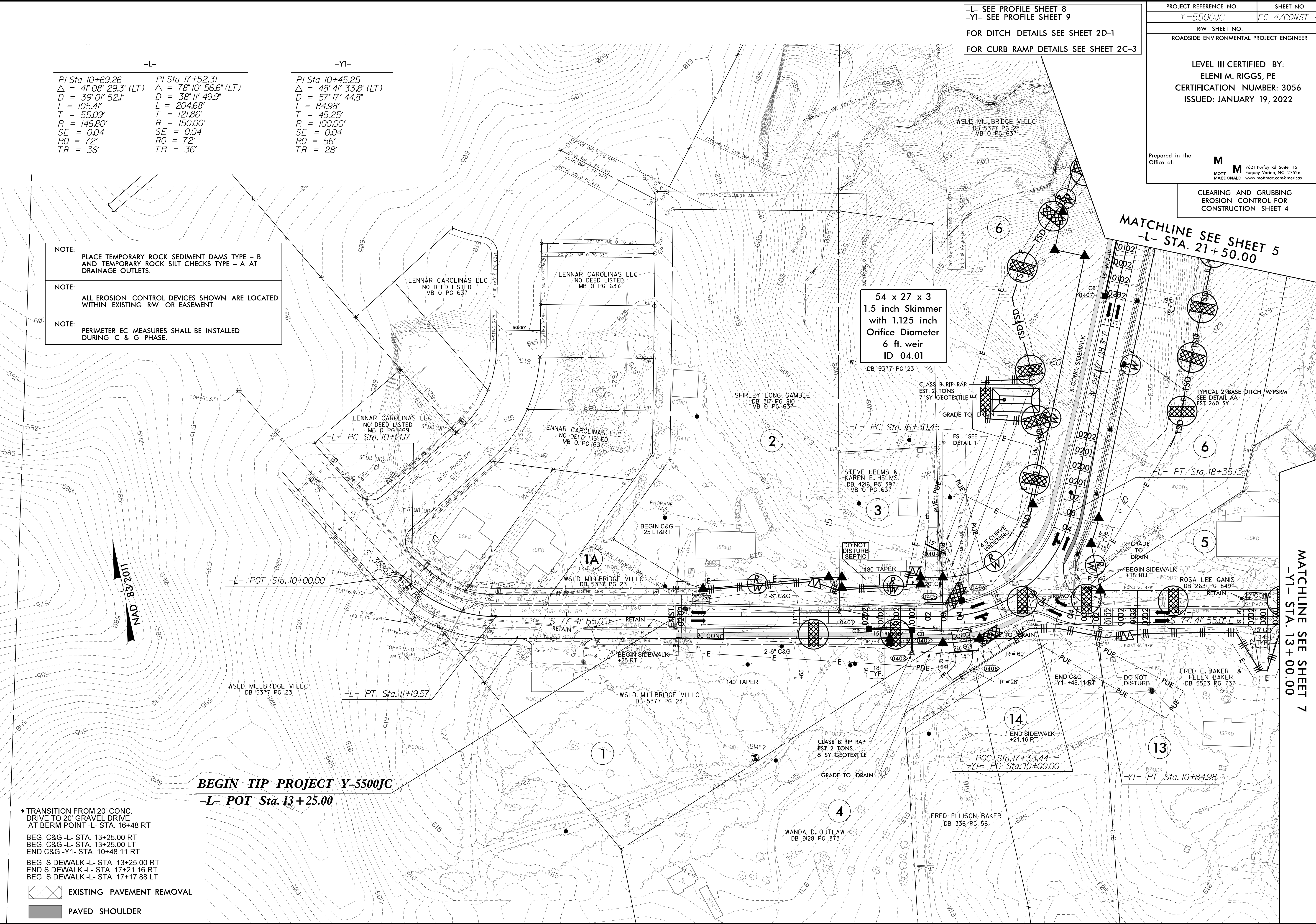
NOTE: ALL EROSION CONTROL DEVICES SHOWN ARE LOCATED WITHIN EXISTING RW OR EASEMENT.

NOTE: PERIMETER EC MEASURES SHALL BE INSTALLED DURING C & G PHASE.

54 x 27 x 3
 1.5 inch Skimmer
 with 1.125 inch
 Orifice Diameter
 6 ft. weir
 ID 04.01

MATCHLINE SEE SHEET 5
 -L- STA. 21+50.00

MATCHLINE SEE SHEET 7
 -Y1- STA. 13+00.00



* TRANSITION FROM 20' CONC. DRIVE TO 20' GRAVEL DRIVE AT BERM POINT -L- STA. 16+48 RT

BEG. C&G -L- STA. 13+25.00 RT
 BEG. C&G -L- STA. 13+25.00 LT
 END C&G -Y1- STA. 10+48.11 RT

BEG. SIDEWALK -L- STA. 13+25.00 RT
 END SIDEWALK -L- STA. 17+21.16 RT
 BEG. SIDEWALK -L- STA. 17+17.88 LT

EXISTING PAVEMENT REMOVAL
 PAVED SHOULDER

8/17/99
 4/9/2022
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8/17/99

4/9/2022 n:\c\tr\o\F-14288.ec.psh05.dgn

PROJECT REFERENCE NO.	SHEET NO.
Y-5500JC	EC-5/CONST-5
RW SHEET NO.	
ROADSIDE ENVIRONMENTAL PROJECT ENGINEER	
LEVEL III CERTIFIED BY: ELENI M. RIGGS, PE CERTIFICATION NUMBER: 3056 ISSUED: JANUARY 19, 2022	

Prepared in the Office of:

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CLEARING AND GRUBBING
EROSION CONTROL FOR
CONSTRUCTION SHEET 5

-L- SEE PROFILE SHEETS 8 & 9
FOR DITCH DETAILS SEE SHEET 2D-1
FOR HANDRAIL DETAILS SEE SHEET 2C-2

PAVED SHOULDER
BEG. HANDRAIL -L- STA. 24+50.00 LT
END HANDRAIL -L- STA. 37+00.00 LT

8 Slopes should be stage seeded to minimize exposure at Jurisdictional Stream.

50 x 25 x 3
1.5 inch Skimmer
with 1.0 inch
Orifice Diameter
5 ft. weir
ID 05.01

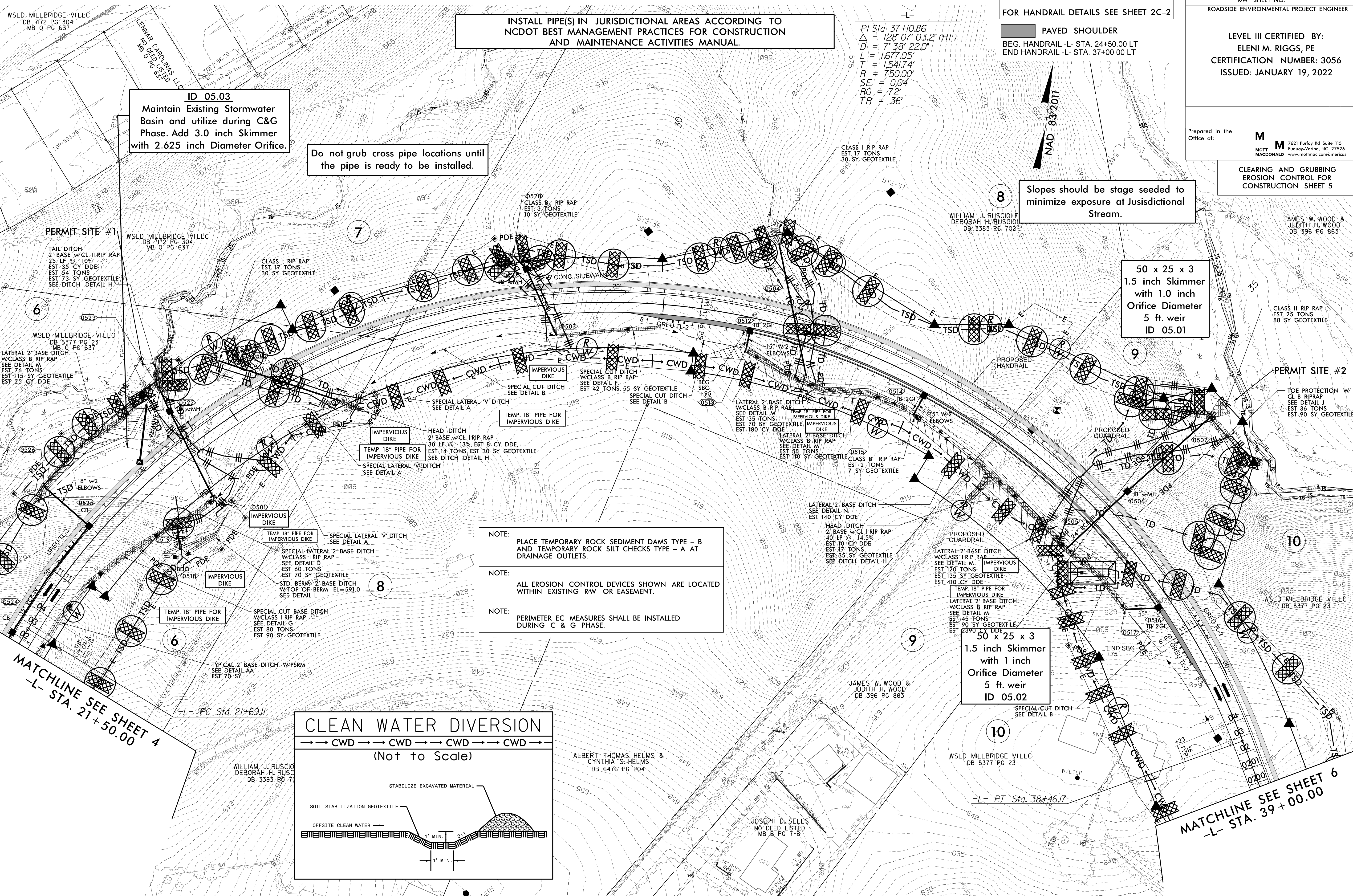
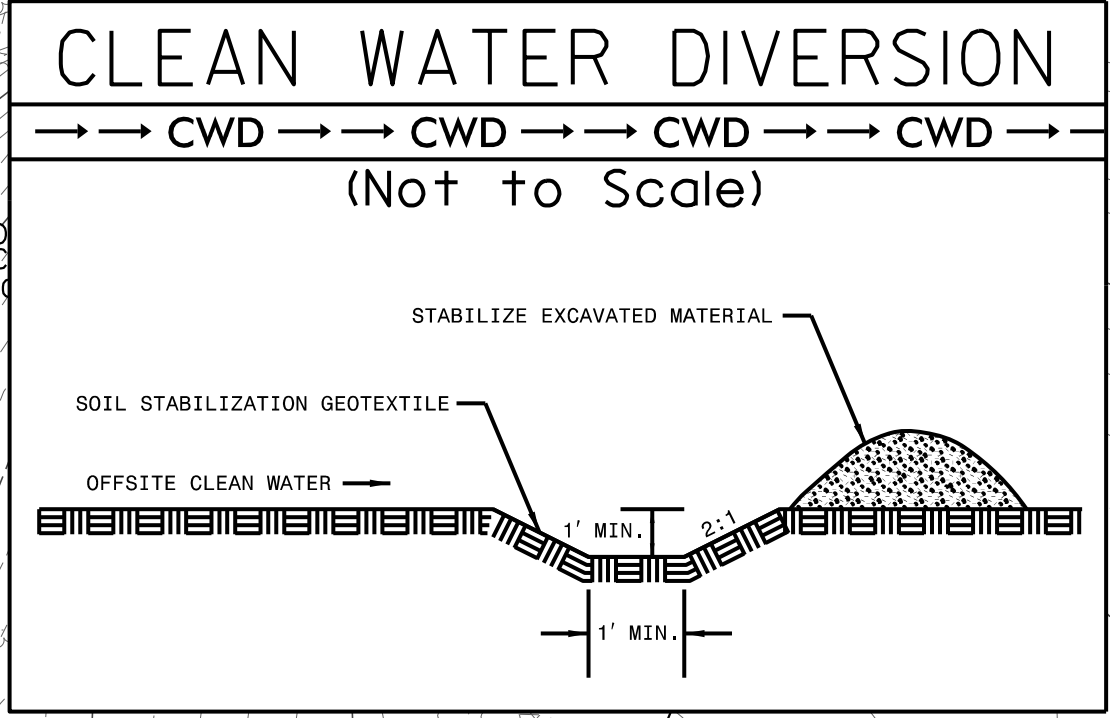
50 x 25 x 3
1.5 inch Skimmer
with 1 inch
Orifice Diameter
5 ft. weir
ID 05.02

INSTALL PIPE(S) IN JURISDICTIONAL AREAS ACCORDING TO NCDOT BEST MANAGEMENT PRACTICES FOR CONSTRUCTION AND MAINTENANCE ACTIVITIES MANUAL.

ID 05.03
Maintain Existing Stormwater Basin and utilize during C&G Phase. Add 3.0 inch Skimmer with 2.625 inch Diameter Orifice.

Do not grub cross pipe locations until the pipe is ready to be installed.

- NOTE: PLACE TEMPORARY ROCK SEDIMENT DAMS TYPE - B AND TEMPORARY ROCK SILT CHECKS TYPE - A AT DRAINAGE OUTLETS.
- NOTE: ALL EROSION CONTROL DEVICES SHOWN ARE LOCATED WITHIN EXISTING RW OR EASEMENT.
- NOTE: PERIMETER EC MEASURES SHALL BE INSTALLED DURING C & G PHASE.



MATCHLINE SEE SHEET 4
-L- STA. 21+50.00

MATCHLINE SEE SHEET 6
-L- STA. 39+00.00

-L-
PI Sta 37+10.86
 $\Delta = 128' 07" 03.2" (RT)$
 $D = 7' 38" 22.0"$
 $L = 1,677.05'$
 $T = 1,541.74'$
 $R = 750.00'$
 $SE = 0.04'$
 $RO = 72'$
 $TR = 36'$

WILLIAM J. RUSCIO
DEBORAH H. RUSCIO
DB 3383 PG 76

ALBERT THOMAS HELMS &
CYNTHIA S. HELMS
DB 6476 PG 204

JAMES W. WOOD &
JUDITH H. WOOD
DB 396 PG 863

JOSEPH D. SELL'S
NO DEED LISTED
MB 8 PG 7-8

JAMES W. WOOD &
JUDITH H. WOOD
DB 396 PG 863

TOE PROTECTION W/
CL B RIPRAP
SEE DETAIL I
EST 36 TONS
EST 90 SY GEOTEXTILE

PERMIT SITE #1
TAIL DITCH
2' BASE w/CL II RIP RAP
25 LF @ 10%
EST 35 CY DDE
EST 84 TONS
EST 73 SY GEOTEXTILE
SEE DITCH DETAIL H

W/TLR
LATERAL 2' BASE DITCH
w/CLASS B RIP RAP
SEE DETAIL M
EST 76 TONS
EST 116 SY GEOTEXTILE
EST 25 CY DDE

W/TLR
LATERAL 2' BASE DITCH
w/CLASS B RIP RAP
SEE DETAIL M
EST 76 TONS
EST 116 SY GEOTEXTILE
EST 25 CY DDE

W/TLR
LATERAL 2' BASE DITCH
w/CLASS B RIP RAP
SEE DETAIL M
EST 76 TONS
EST 116 SY GEOTEXTILE
EST 25 CY DDE

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LATERAL 2' BASE DITCH
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W/TLR
LATERAL 2' BASE DITCH
w/CLASS B RIP RAP
SEE DETAIL M
EST 76 TONS
EST 116 SY GEOTEXTILE
EST 25 CY DDE

W/TLR
LATERAL 2' BASE DITCH
w/CLASS B RIP RAP
SEE DETAIL M
EST 76 TONS
EST 116 SY GEOTEXTILE
EST 25 CY DDE

W/TLR
LATERAL 2' BASE DITCH
w/CLASS B RIP RAP
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EST 116 SY GEOTEXTILE
EST 25 CY DDE

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w/CLASS B RIP RAP
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EST 116 SY GEOTEXTILE
EST 25 CY DDE

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LATERAL 2' BASE DITCH
w/CLASS B RIP RAP
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LATERAL 2' BASE DITCH
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W/TLR
LATERAL 2' BASE DITCH
w/CLASS B RIP RAP
SEE DETAIL M
EST 76 TONS
EST 116 SY GEOTEXTILE
EST 25 CY DDE

CLEARING AND GRUBBING
EROSION CONTROL FOR
CONSTRUCTION SHEET 6

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

NOTE:
ALL EROSION CONTROL DEVICES SHOWN ARE LOCATED WITHIN EXISTING RW OR EASEMENT.

NOTE:
PERIMETER EC MEASURES SHALL BE INSTALLED DURING C & G PHASE.

-L- SEE PROFILE SHEET 9
-Y2- SEE PROFILE SHEET 9
FOR DITCH DETAILS SEE SHEET 2D-1

EXISTING PAVEMENT REMOVAL

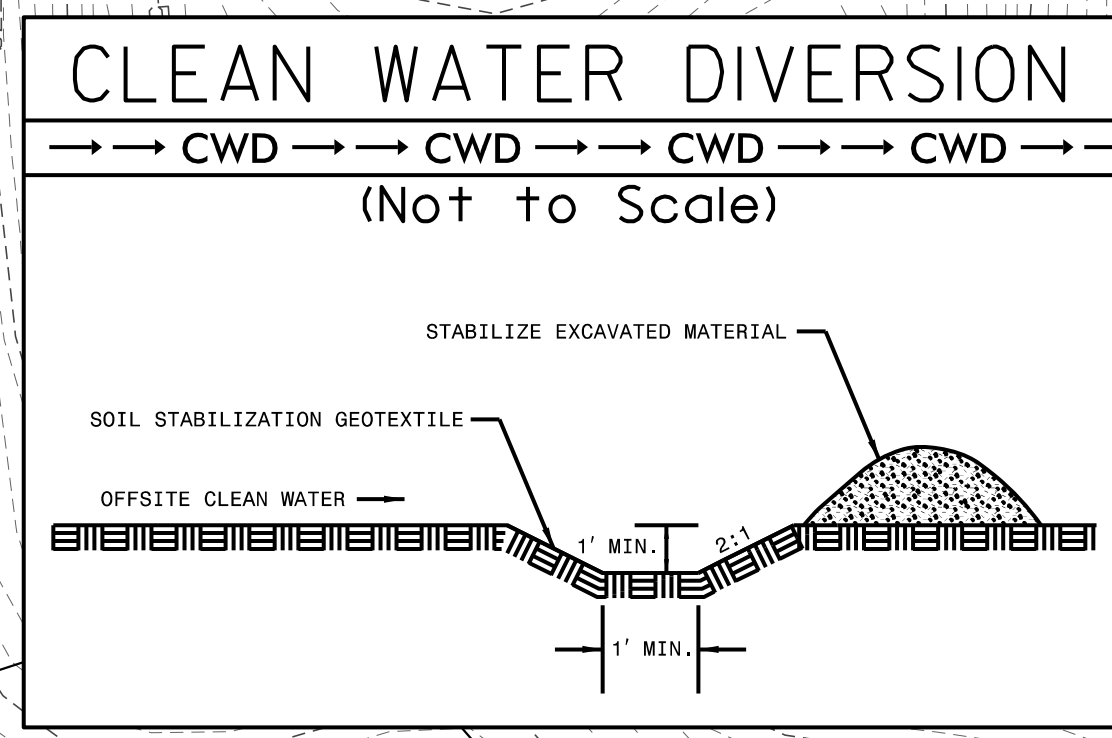
PAVED SHOULDER

INSTALL PIPE(S) IN JURISDICTIONAL AREAS WITHOUT IMPACTING STREAM UNTIL AREA STABILIZED AND ACCORDING TO NCDOT BEST MANAGEMENT PRACTICES FOR CONSTRUCTION AND MAINTENANCE ACTIVITIES MANUAL.

END TIP PROJECT Y-5500JC
-L- POT Sta. 53+00.00

-Y2-	
PI Sta. 13+41.76 Δ = 34' 16" 18.2" (LT) D = 88' 23" 02.7" L = 38.78' T = 19.99' R = 64.83' SE = 0.04 RO = 92' TR = 56'	PI Sta. 12+40.21 Δ = 44' 23" 17.5" (LT) D = 43' 08" 17.3" L = 102.90' T = 54.19' R = 132.82' SE = 0.04 RO = 92' TR = 56'
PI Sta. 11+60.00 Δ = 2' 42" 27.2" (LT) D = 5' 12" 02.6" L = 52.06' T = 26.04' R = 110.169' SE = 0.04 RO = 92' TR = 56'	PI Sta. 10+89.22 Δ = 56' 17" 30.5" (RT) D = 57' 17" 44.8" L = 98.25' T = 53.50' R = 100.00' SE = 0.04 RO = 92' TR = 56'

-L-	
PI Sta. 47+05.85 Δ = 76' 07" 05.2" (LT) D = 10' 25" 02.7" L = 730.68' T = 430.62' R = 550.00' SE = 0.04 RO = 72' TR = 36'	



Slopes should be stage seeded to minimize exposure at Jusisdictional Stream.

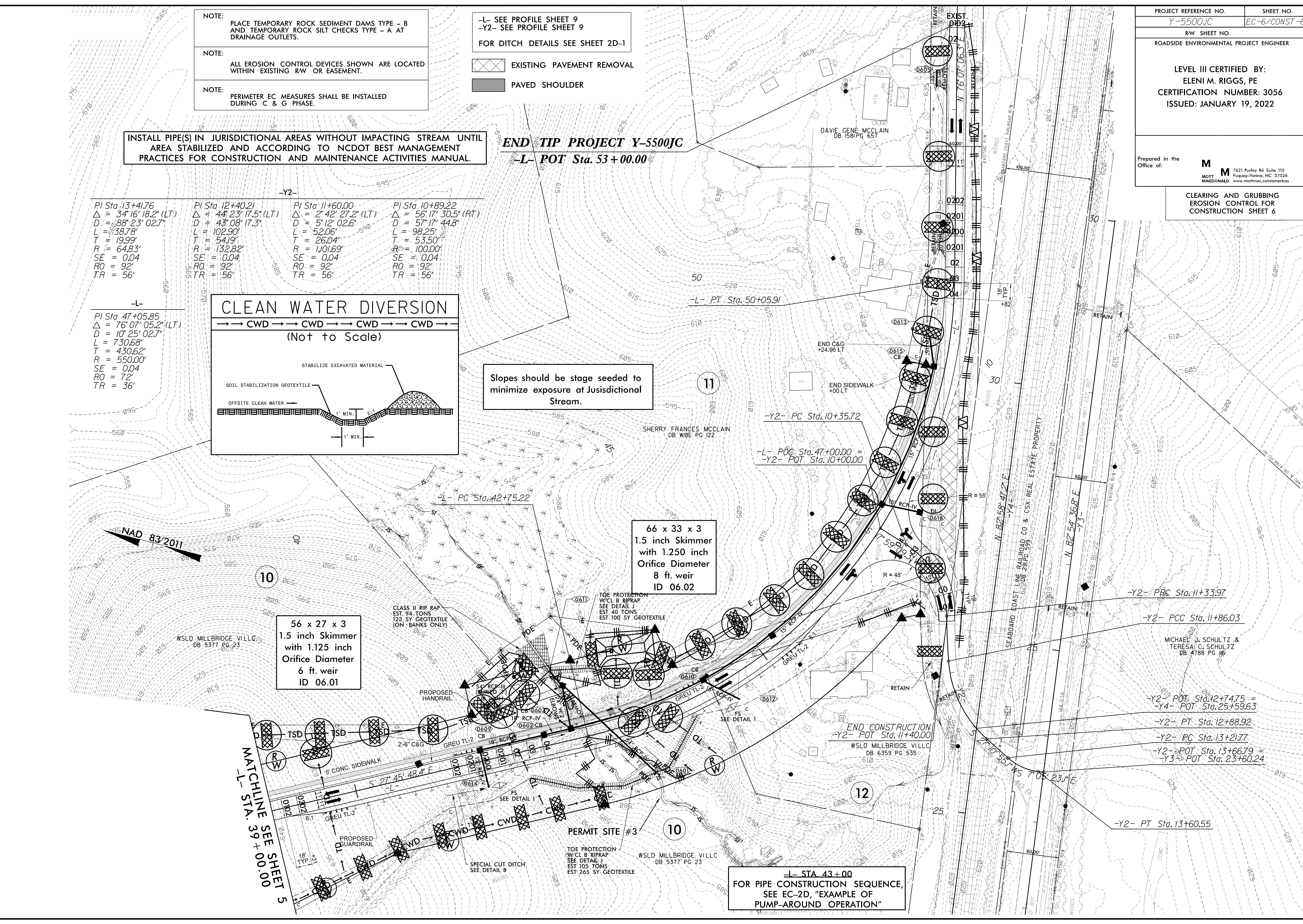
66 x 33 x 3
1.5 inch Skimmer
with 1.250 inch
Orifice Diameter
8 ft. weir
ID 06.02

56 x 27 x 3
1.5 inch Skimmer
with 1.125 inch
Orifice Diameter
6 ft. weir
ID 06.01

-L- STA 43+00
FOR PIPE CONSTRUCTION SEQUENCE,
SEE EC-2D, 'EXAMPLE OF
PUMP-AROUND OPERATION'

8/17/19

4/9/2022 n_Constr\01\F-14288.ec_psh06.dgn
MOTT MACDONALD



8/17/19

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

NOTE: ALL EROSION CONTROL DEVICES SHOWN ARE LOCATED WITHIN EXISTING RW OR EASEMENT.

NOTE: PERIMETER EC MEASURES SHALL BE INSTALLED DURING C & G PHASE.

LEVEL III CERTIFIED BY:
ELENI M. RIGGS, PE
CERTIFICATION NUMBER: 3056
ISSUED: JANUARY 19, 2022

Prepared in the Office of:

M MOTT MACDONALD
7621 Purfoy Rd Suite 115
Plymouth, NC 27576
www.mottmac.com/mreos

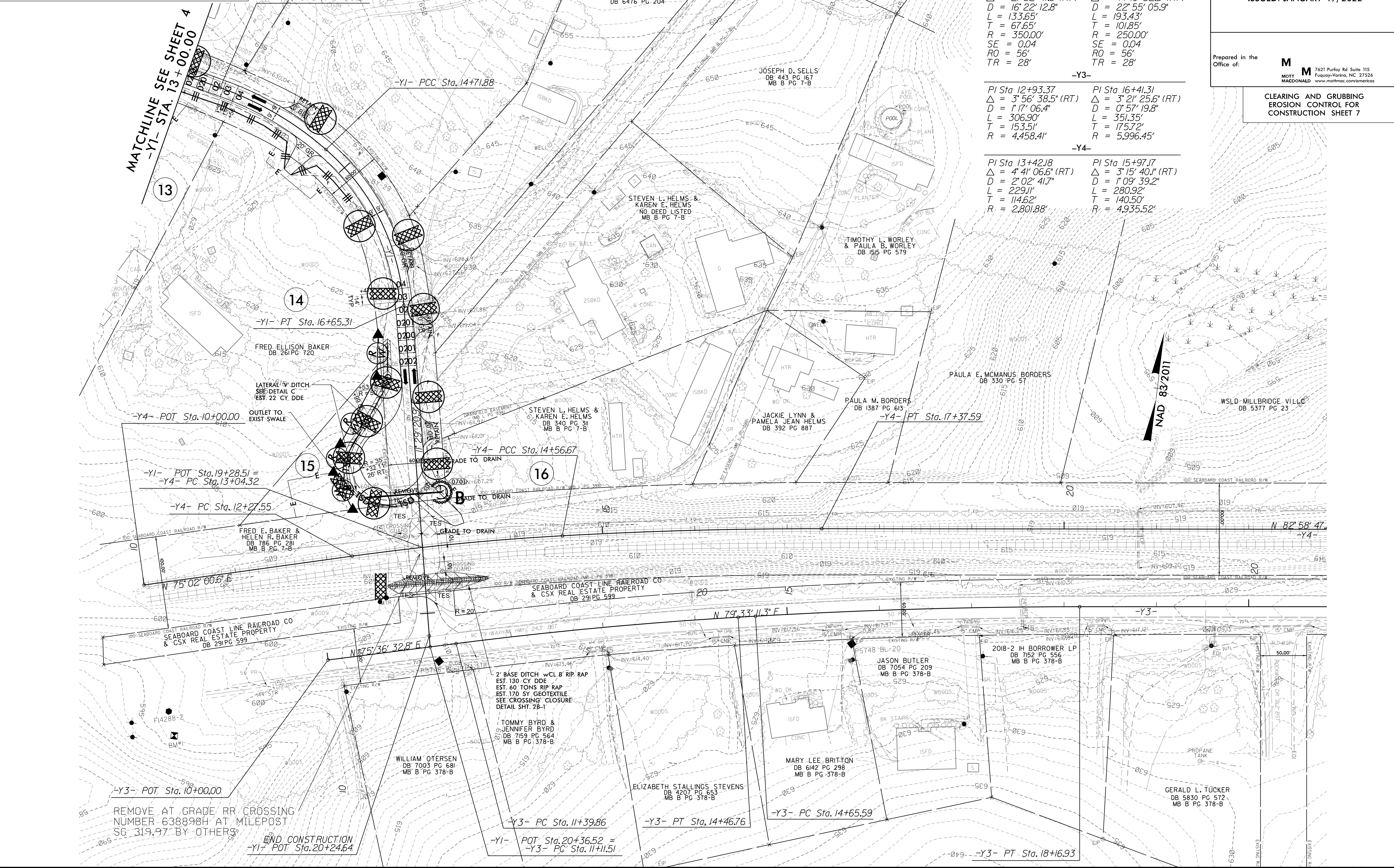
CLEARING AND GRUBBING
EROSION CONTROL FOR
CONSTRUCTION SHEET 7

-Y1- SEE PROFILE SHEET 9

FOR CROSSING CLOSURE DETAIL SEE SHEET 2B-1
FOR DITCH DETAILS SEE SHEET 2D-1

EXISTING PAVEMENT REMOVAL

-Y1-	
PI Sta 14+05.88 $\Delta = 21' 52" 41.6" (RT)$ D = 16' 22' 12.8" L = 133.65' T = 67.65' R = 350.00' SE = 0.04 RO = 56' TR = 28'	PI Sta 15+73.73 $\Delta = 44' 19" 52.5" (RT)$ D = 22' 55' 05.9" L = 193.43' T = 101.85' R = 250.00' SE = 0.04 RO = 56' TR = 28'
-Y3-	
PI Sta 12+93.37 $\Delta = 3' 56' 38.5" (RT)$ D = 1' 17' 06.4" L = 306.90' T = 153.51' R = 4,458.41'	PI Sta 16+41.31 $\Delta = 3' 21' 25.6" (RT)$ D = 0' 57' 19.8" L = 351.35' T = 175.72' R = 5,996.45'
-Y4-	
PI Sta 13+42.18 $\Delta = 4' 41' 06.6" (RT)$ D = 2' 02' 41.7" L = 229.11' T = 114.62' R = 2,801.88'	PI Sta 15+97.17 $\Delta = 3' 15' 40.1" (RT)$ D = 1' 09' 39.2" L = 280.92' T = 140.50' R = 4,935.52'



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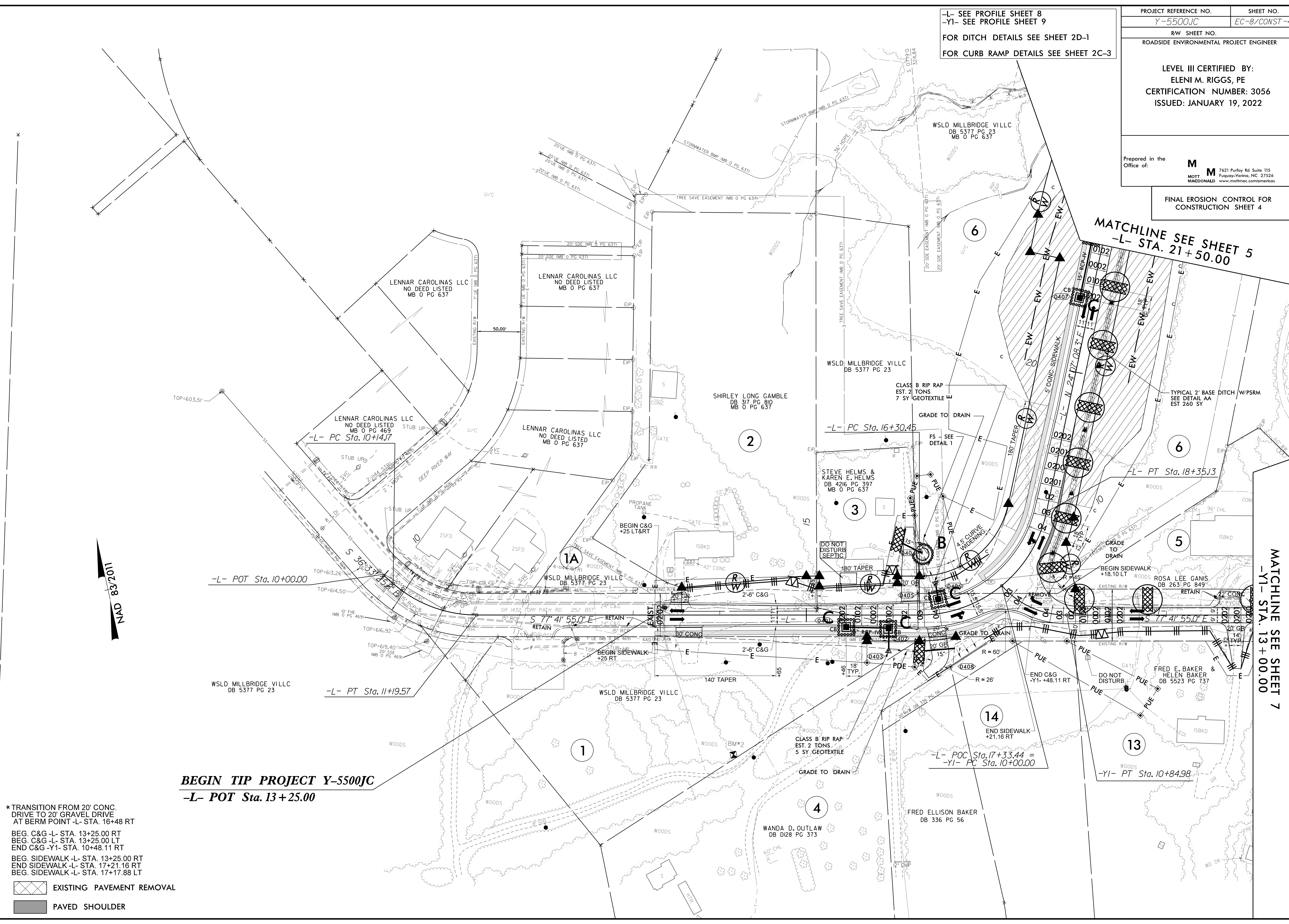
PROJECT REFERENCE NO. Y-5500JC	SHEET NO. EC-B/CONST-4
RW SHEET NO. ROADSIDE ENVIRONMENTAL PROJECT ENGINEER	
LEVEL III CERTIFIED BY: ELENI M. RIGGS, PE CERTIFICATION NUMBER: 3056 ISSUED: JANUARY 19, 2022	
Prepared in the Office of:	M MOTT MACDONALD 7621 Purfoy Rd Suite 115 Fuquay-Varina, NC 27526 www.mottmac.com/mottmac
FINAL EROSION CONTROL FOR CONSTRUCTION SHEET 4	

-L- SEE PROFILE SHEET 8
-YI- SEE PROFILE SHEET 9
FOR DITCH DETAILS SEE SHEET 2D-1
FOR CURB RAMP DETAILS SEE SHEET 2C-3

MATCHLINE SEE SHEET 5
-L- STA. 21+50.00

MATCHLINE SEE SHEET 7
-YI- STA. 13+00.00

8/17/19 4/9/2022 \\mfc\mfc\p\14288.ec.pst\08.dgn



BEGIN TIP PROJECT Y-5500JC
-L- POT Sta. 13+25.00

* TRANSITION FROM 20' CONC. DRIVE TO 20' GRAVEL DRIVE AT BERM POINT -L- STA. 16+48 RT
BEG. C&G -L- STA. 13+25.00 RT
BEG. C&G -L- STA. 13+25.00 LT
END C&G -YI- STA. 10+48.11 RT
BEG. SIDEWALK -L- STA. 13+25.00 RT
END SIDEWALK -L- STA. 17+21.16 RT
BEG. SIDEWALK -L- STA. 17+17.88 LT

EXISTING PAVEMENT REMOVAL
PAVED SHOULDER

8/17/199

4/9/2022
M:\F-14288.ec.psh09.dgn

PROJECT REFERENCE NO.	SHEET NO.
Y-5500JC	EC-9/CONST-5
RW SHEET NO.	
ROADSIDE ENVIRONMENTAL PROJECT ENGINEER	
LEVEL III CERTIFIED BY: ELENI M. RIGGS, PE CERTIFICATION NUMBER: 3056 ISSUED: JANUARY 19, 2022	
Prepared in the Office of:	M MOTT MACDONALD 7621 Purfoy Rd Suite 115 Fuquay-Varina, NC 27526 www.mottmac.com/americas

FINAL EROSION CONTROL FOR CONSTRUCTION SHEET 5

JAMES W. WOOD & JUDITH H. WOOD
DB 396 PG 863

CLASS II RIP RAP
EST. 25 TONS
38 SY GEOTEXTILE

TOE PROTECTION W/ CL B RIP RAP
SEE DETAIL J
EST 36 TONS
EST 90 SY GEOTEXTILE

W/CLASS B RIP RAP
EST 115 SY GEOTEXTILE
EST 25 CY DDE

W/CLASS B RIP RAP
EST 115 SY GEOTEXTILE
EST 25 CY DDE

W/CLASS B RIP RAP
EST 115 SY GEOTEXTILE
EST 25 CY DDE

W/CLASS B RIP RAP
EST 115 SY GEOTEXTILE
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W/CLASS B RIP RAP
EST 115 SY GEOTEXTILE
EST 25 CY DDE

W/CLASS B RIP RAP
EST 115 SY GEOTEXTILE
EST 25 CY DDE

-L- SEE PROFILE SHEETS 8 & 9
FOR DITCH DETAILS SEE SHEET 2D-1
FOR HANDRAIL DETAILS SEE SHEET 2C-2

PAVED SHOULDER
BEG. HANDRAIL -L- STA. 24+50.00 LT
END HANDRAIL -L- STA. 37+00.00 LT



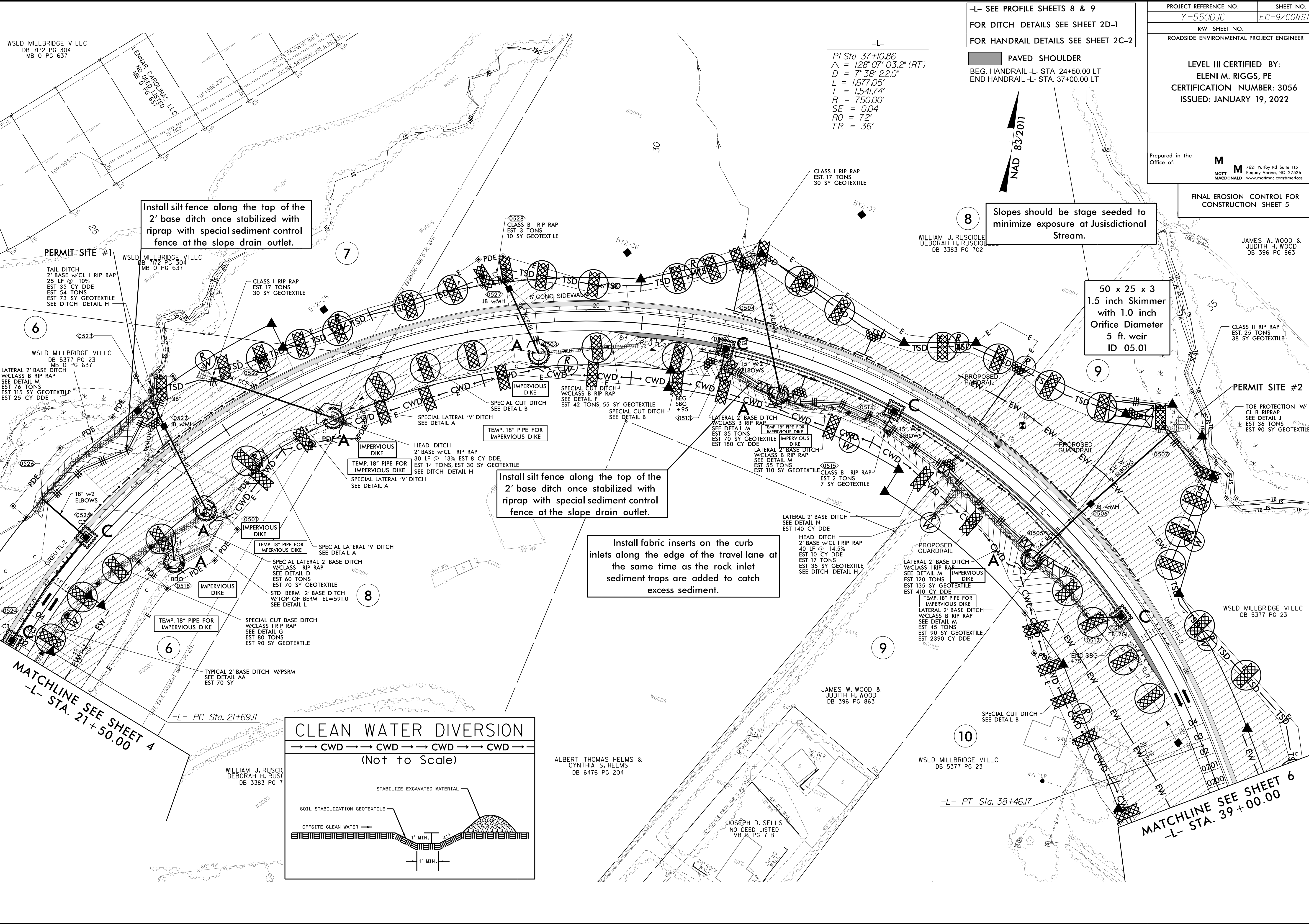
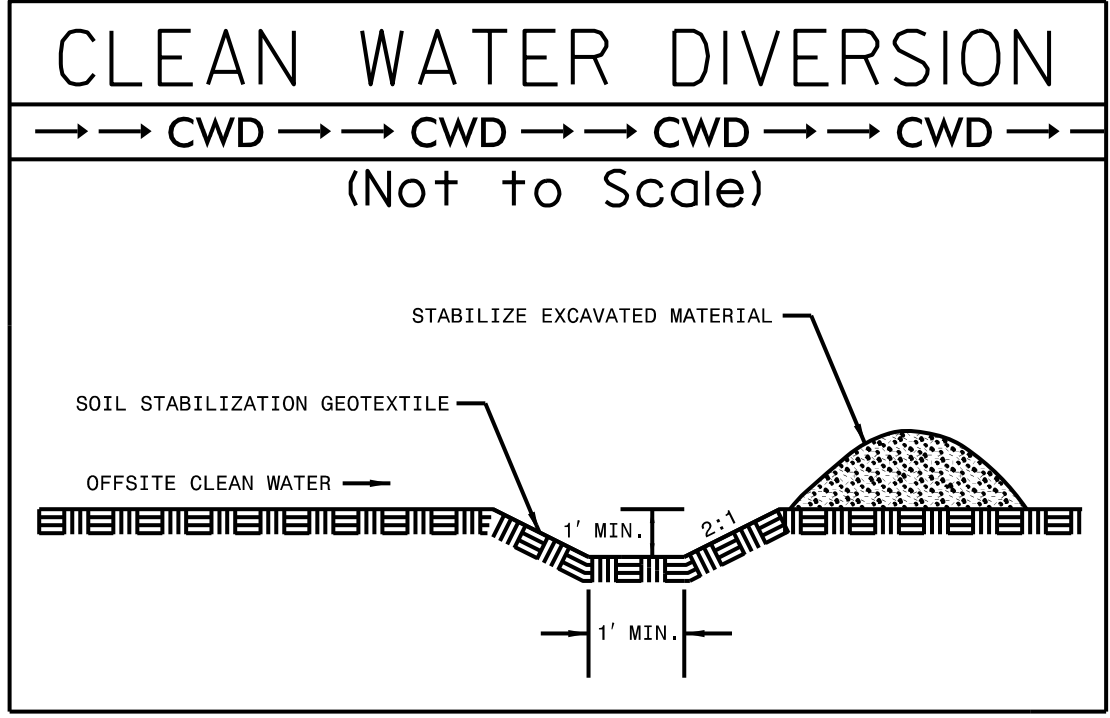
-L-
 $PI Sta. 37+10.86$
 $\Delta = 128' 07" 03.2" (RT)$
 $D = 7' 38" 22.0"$
 $L = 1,677.05'$
 $T = 1,541.74'$
 $R = 750.00'$
 $SE = 0.04$
 $RO = 72'$
 $TR = 36'$

8 Slopes should be stage seeded to minimize exposure at Jusisdictional Stream.

50 x 25 x 3
1.5 inch Skimmer
with 1.0 inch
Orifice Diameter
5 ft. weir
ID 05.01

Install silt fence along the top of the 2' base ditch once stabilized with riprap with special sediment control fence at the slope drain outlet.

Install fabric inserts on the curb inlets along the edge of the travel lane at the same time as the rock inlet sediment traps are added to catch excess sediment.



MATCHLINE SEE SHEET 4
-L- STA. 21+50.00

MATCHLINE SEE SHEET 6
-L- STA. 39+00.00

-L- PC Sta. 21+69.11

-L- PT Sta. 38+46.17

WSLD MILLBRIDGE VILLC
DB 7172 PG 304
MB 0 PG 637

WSLD MILLBRIDGE VILLC
DB 5377 PG 23
MB 0 PG 637

WSLD MILLBRIDGE VILLC
DB 5377 PG 23
MB 0 PG 637

WSLD MILLBRIDGE VILLC
DB 5377 PG 23

WILLIAM J. RUSCIOLE
DEBORAH H. RUSCIOLE
DB 3383 PG 7

ALBERT THOMAS HELMS &
CYNTHIA S. HELMS
DB 6476 PG 204

JAMES W. WOOD &
JUDITH H. WOOD
DB 396 PG 863

JOSEPH D. SELLS
NO DEED LISTED
MB 8 PG 1-8

WSLD MILLBRIDGE VILLC
DB 5377 PG 23

