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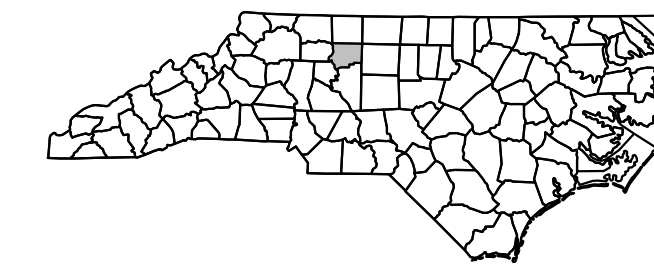
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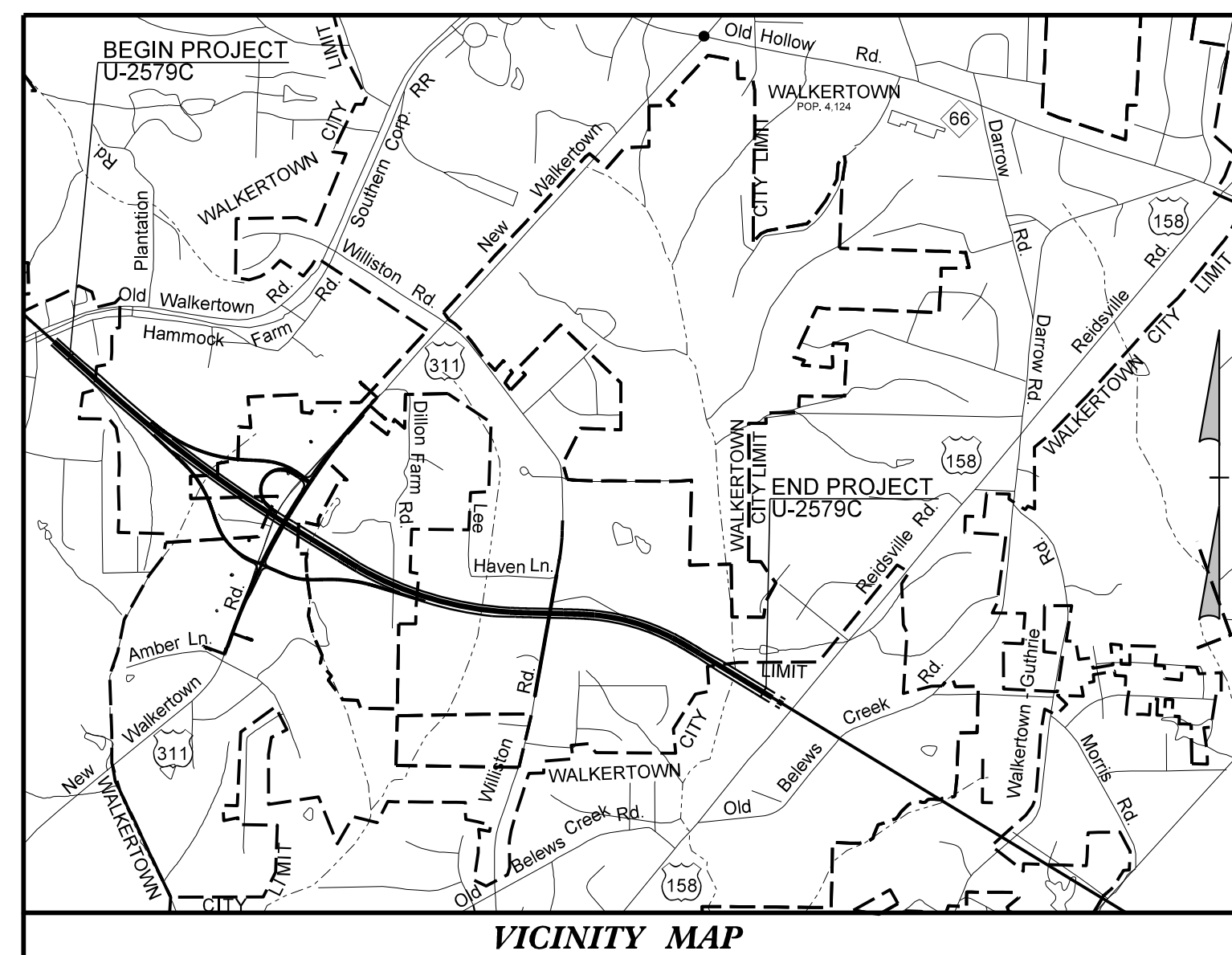
TIP PROJECT: U-2579C

See Sheet 1-A For Index of Sheets
See Sheet 1-B For Conventional Symbol

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



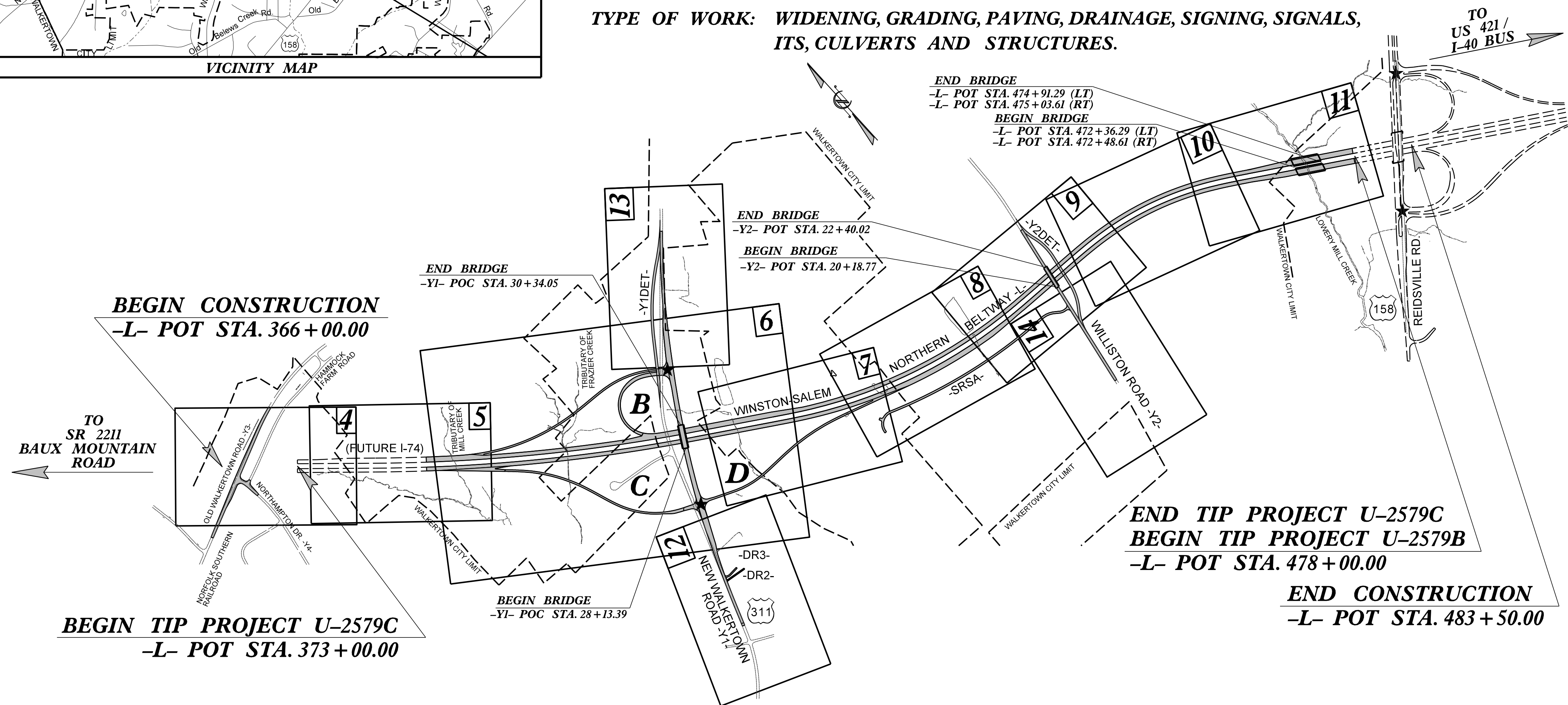
STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	U-2579C	EC-1	
STATE PROJ. NO.	F.A. PROJ. NO.	DESCRIPTION	



FORSYTH COUNTY

**LOCATION: WINSTON - SALEM NORTHERN BELTWAY (EASTERN SECTION)
FROM US 311 TO US 158 (FUTURE I-74)**

**TYPE OF WORK: WIDENING, GRADING, PAVING, DRAINAGE, SIGNING, SIGNALS,
ITS, CULVERTS AND STRUCTURES.**

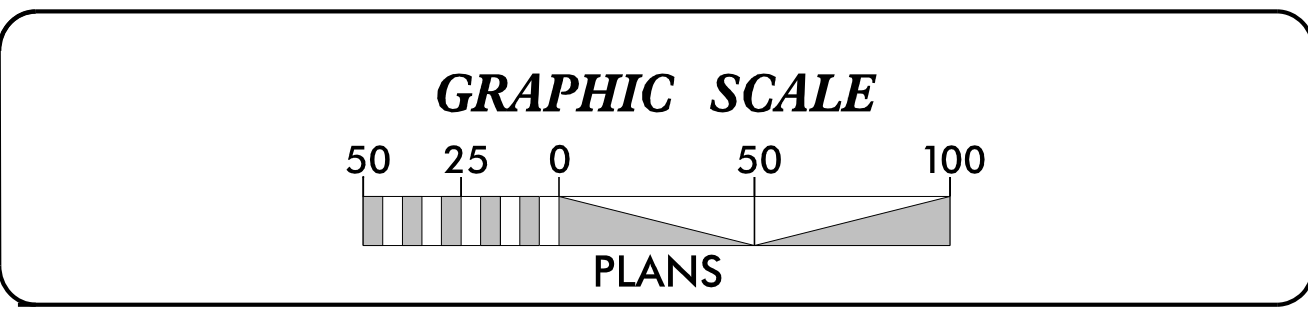


EROSION AND SEDIMENT CONTROL MEASURES

Std. #	Description	Symbol
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	
1630.02	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	
1632.02	Type B	
1632.03	Type C	
	Skimmer Basin	
	Tiered Skimmer Basin	
	Infiltration Basin	

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

THIS IS A CONTROLLED-ACCESS PROJECT WITH ACCESS BEING LIMITED TO INTERCHANGES



THESE EROSION AND SEDIMENT CONTROL PLANS COMPLY WITH THE REGULATIONS SET FORTH BY THE NCG-010000 GENERAL CONSTRUCTION PERMIT EFFECTIVE AUGUST 1, 2016 AND ISSUED BY THE NORTH CAROLINA DEPARTMENT OF ENVIRONMENT AND NATURAL RESOURCES DIVISION OF WATER RESOURCES.

Prepared in the Office of:
SUNGATE DESIGN GROUP, P.A.

905 JONES FRANKLIN ROAD
RALEIGH, NORTH CAROLINA 27606
TEL (919) 859-2243
ENG FIRM LICENSE NO. C-890

Designed by:
WILLIAM T. PERRY, EI #3899
NAME LEVEL III CERTIFICATION NO.

Reviewed in the Office of:
ROADSIDE ENVIRONMENTAL UNIT

1 South Wilmington St.
Raleigh, NC 27611

2012 STANDARD SPECIFICATIONS

Reviewed by:
JEREMY GOODWIN, P.E., CPESC, CPSWQ

Roadway Standard Drawings

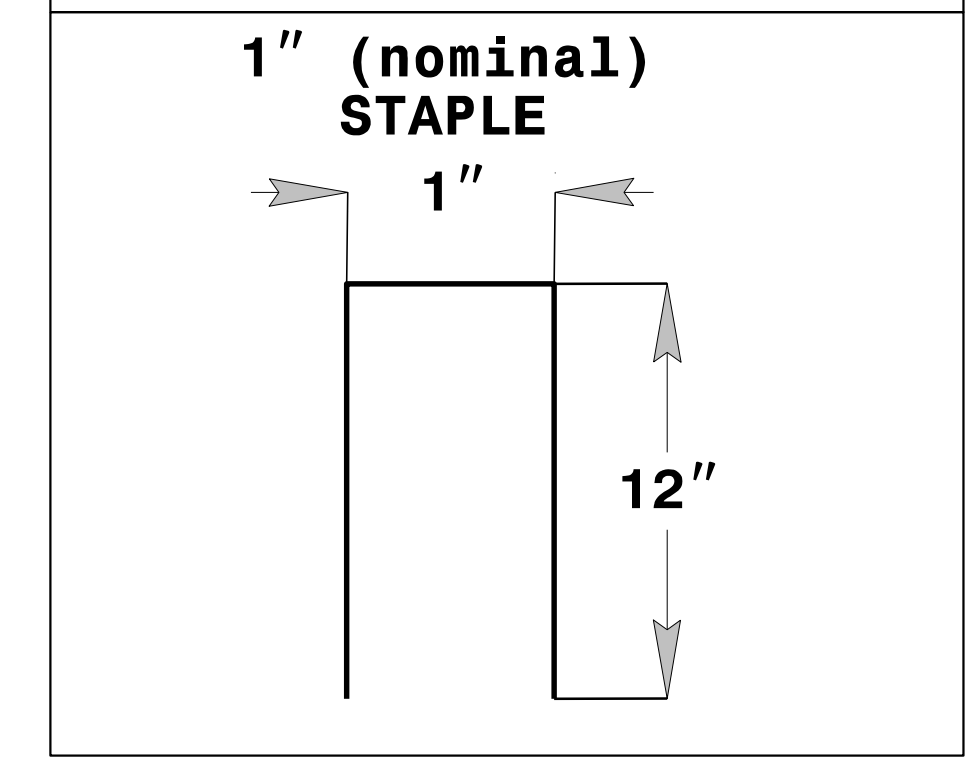
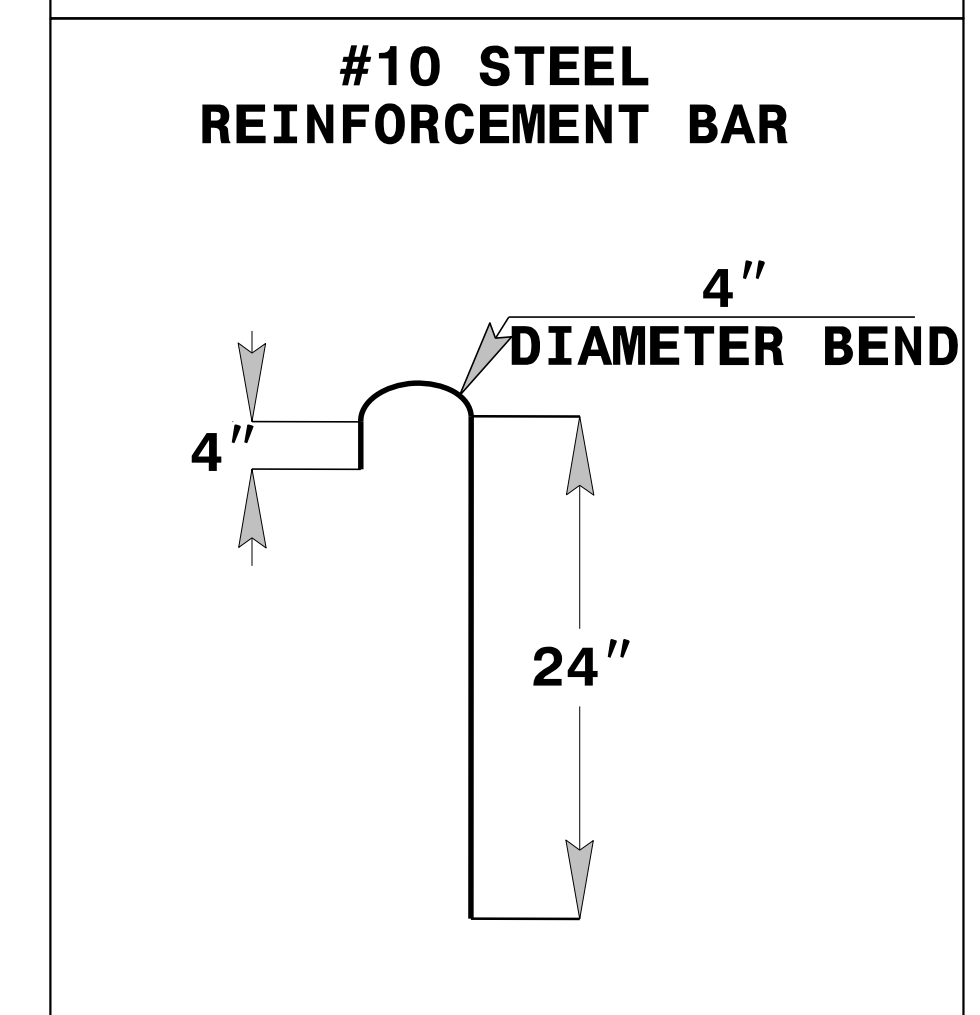
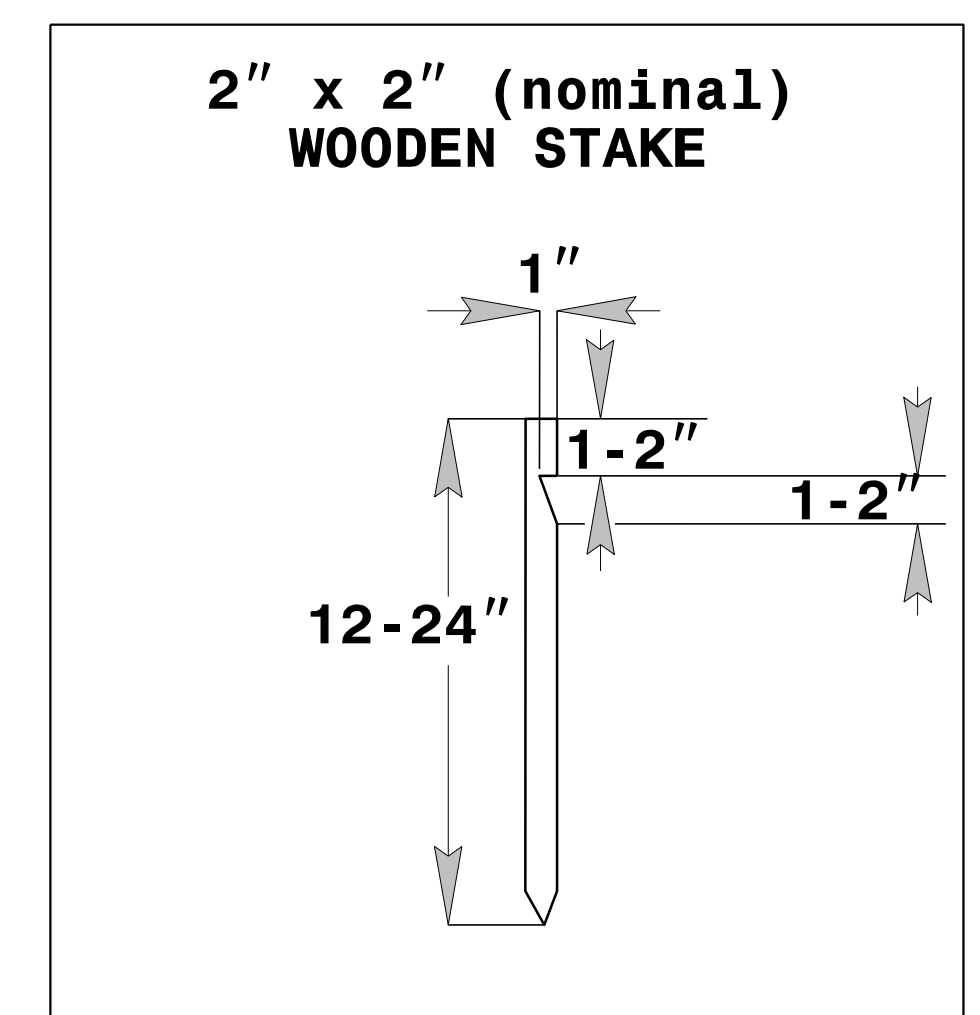
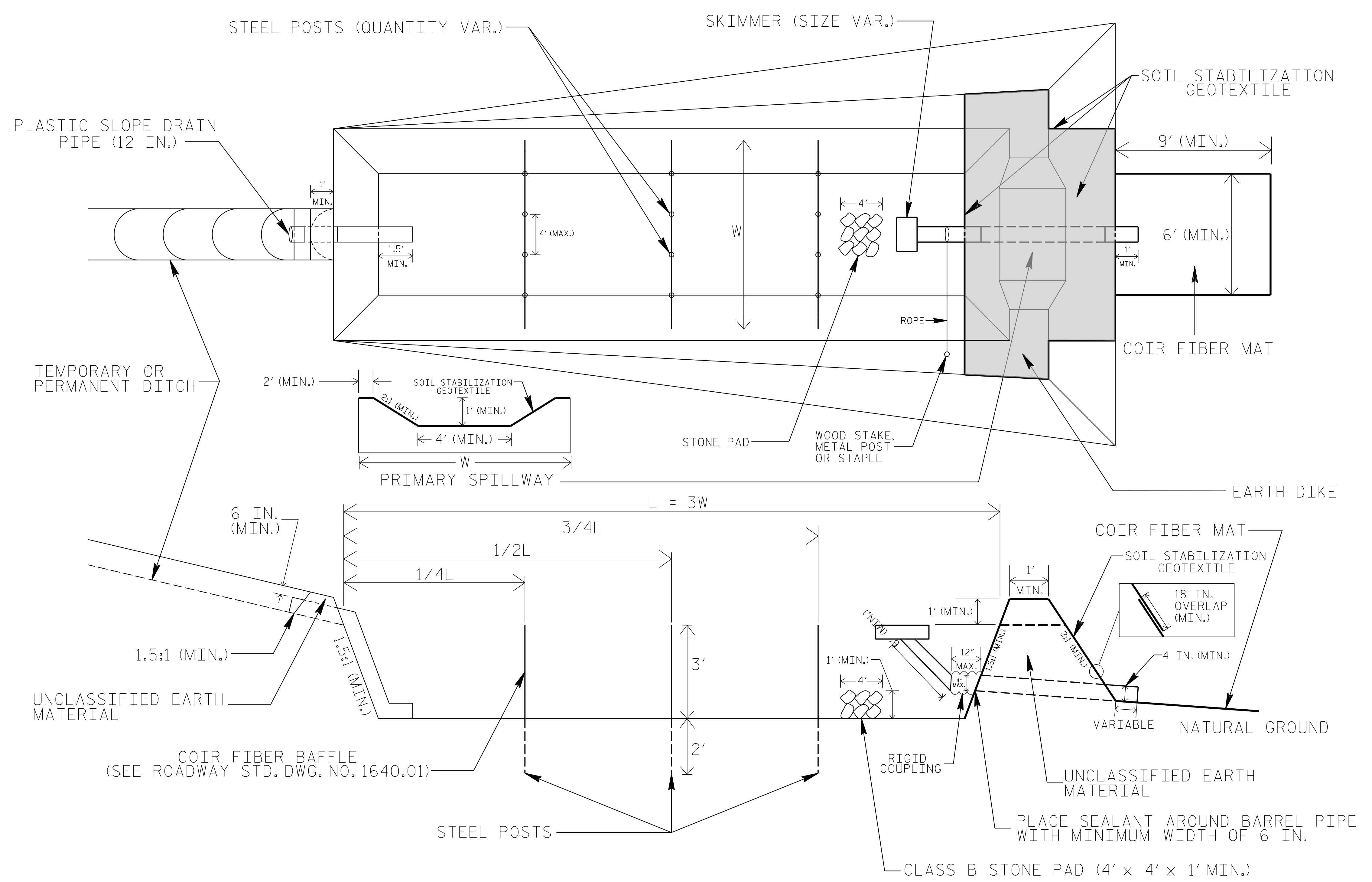
The following roadway english standards as appear in "Roadway Standard Drawings"- Roadway Design Unit - N. C. Department of Transportation - Raleigh, N. C., dated January 2012 and the latest revision thereto are applicable to this project and by reference hereby are considered a part of these plans.

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	

7/08/2017 EC.dsn psh_01.dgn

PROJECT REFERENCE NO. U-2579C	SHEET NO. EC-2
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

SKIMMER BASIN WITH BAFFLES DETAIL



COIR FIBER MAT ANCHOR OPTIONS

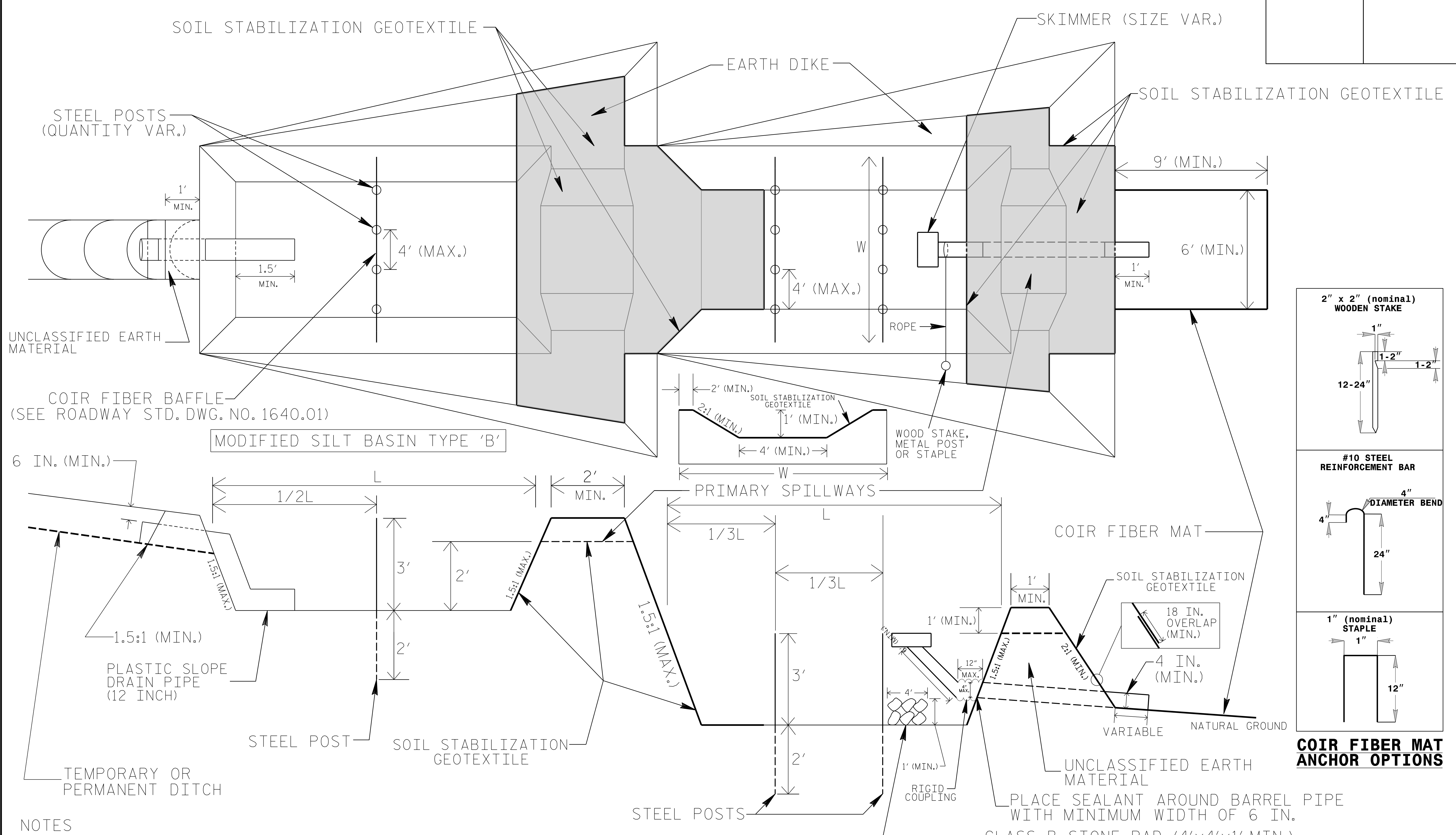
NOTES

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 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

TIERED SKIMMER BASIN DETAIL

PROJECT REFERENCE NO. U-2579C	SHEET NO. EC-2A
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER



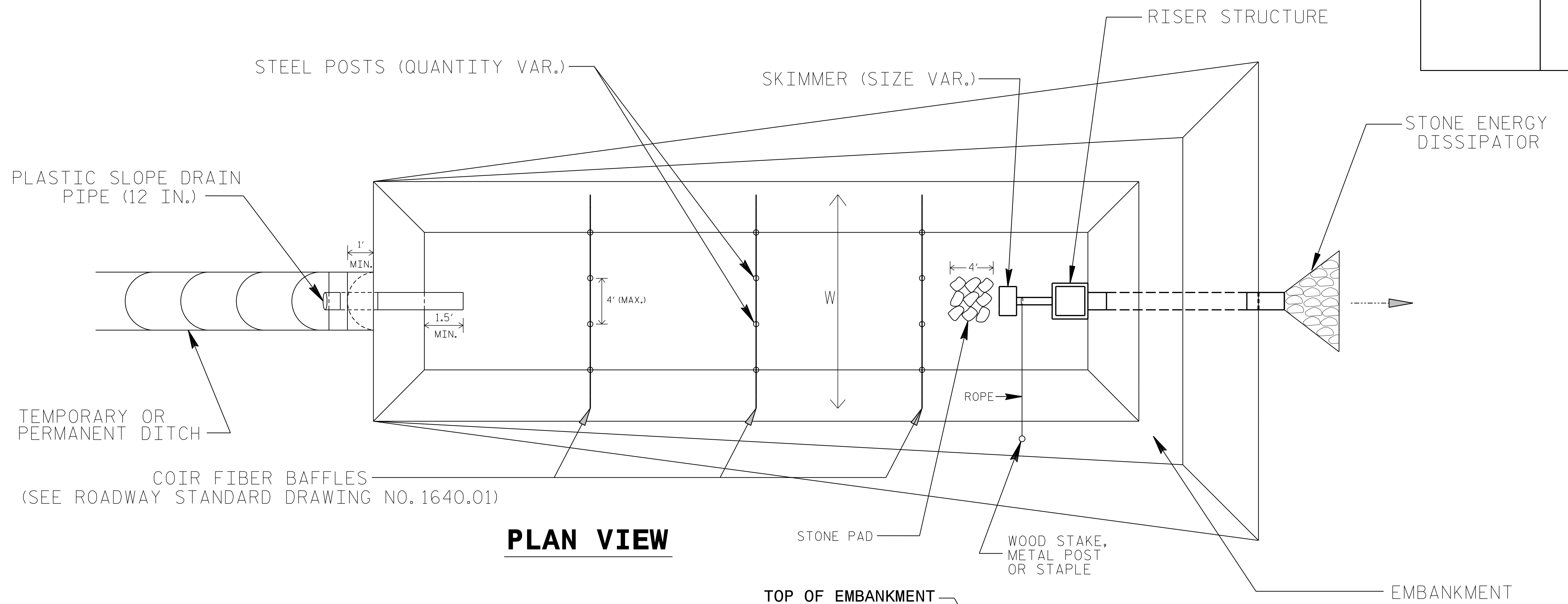
NOTES

1. SEED AND PLACE MATTING FOR EROSION CONTROL ON INTERIOR AND EXTERIOR SIDESLOPES OF BASINS.
2. LIMIT HEIGHT OF EARTH DIKES TO 5 FT.
3. ADDITIONAL MODIFIED SILT BASINS TYPE 'B' MAY BE NEEDED DEPENDING ON SLOPE.
4. FOR BASIN DEPTHS OF 3FT., THE MINIMUM BASIN WIDTHS SHALL BE 9 FT.
5. DETERMINE PRIMARY SPILLWAY WEIR LENGTHS (FT.) USING $Q/0.8$, WHERE Q IS FLOW RATE (CFS) INTO UPPER BASIN.
6. SOIL STABILIZATION GEOTEXTILE FOR PRIMARY SPILLWAYS SHALL BE ONE CONTINUOUS PIECE OF MATERIAL OR OVERLAPPED 18 IN. (MIN.).

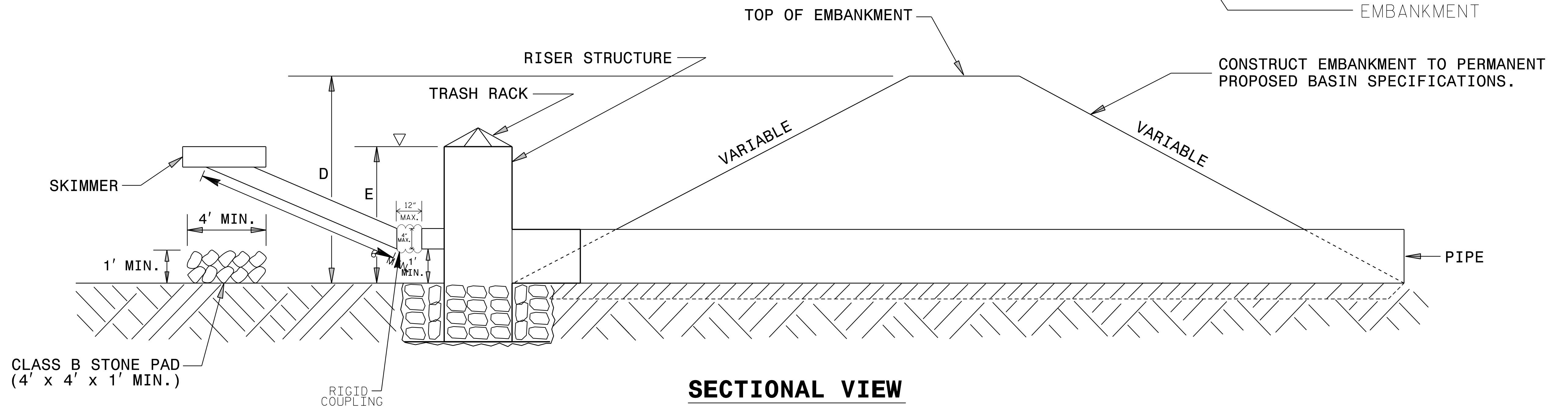
NOT TO SCALE

PROJECT REFERENCE NO. U-2579C	SHEET NO. EC-2B
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

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.

NOT TO SCALE

PROJECT REFERENCE NO. U-2579C	SHEET NO. EC-2C
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

COIR FIBER WATTLE WITH POLYACRYLAMIDE (PAM) DETAIL

NOTES:

USE MINIMUM 12 IN. DIAMETER COIR FIBER (COCONUT FIBER) 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.

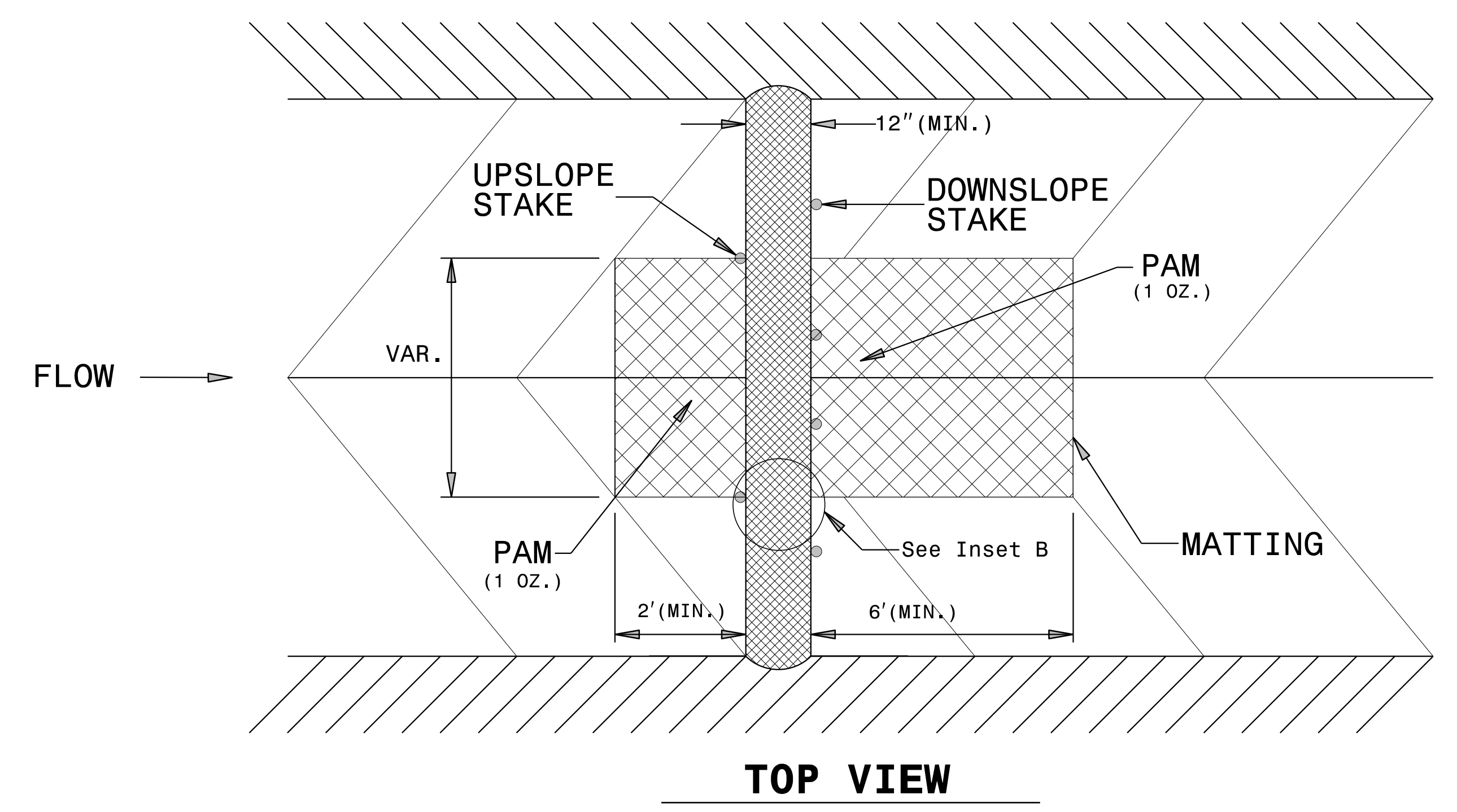
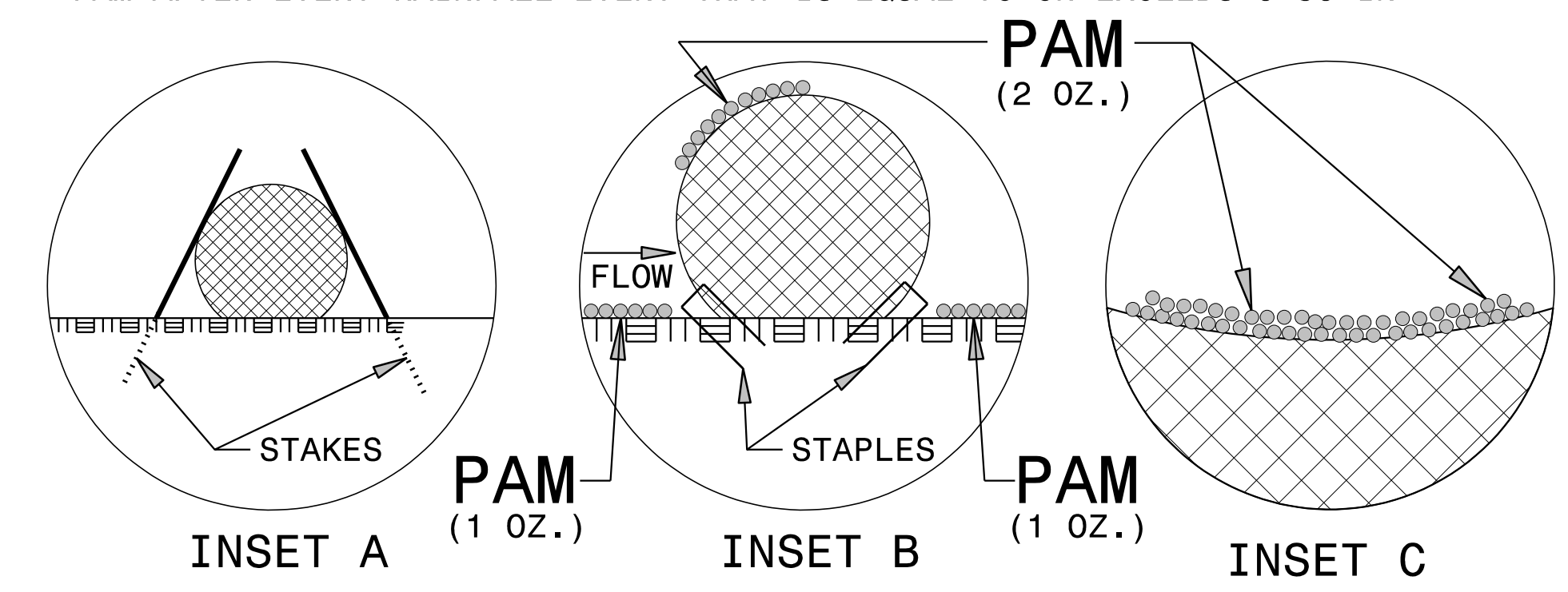
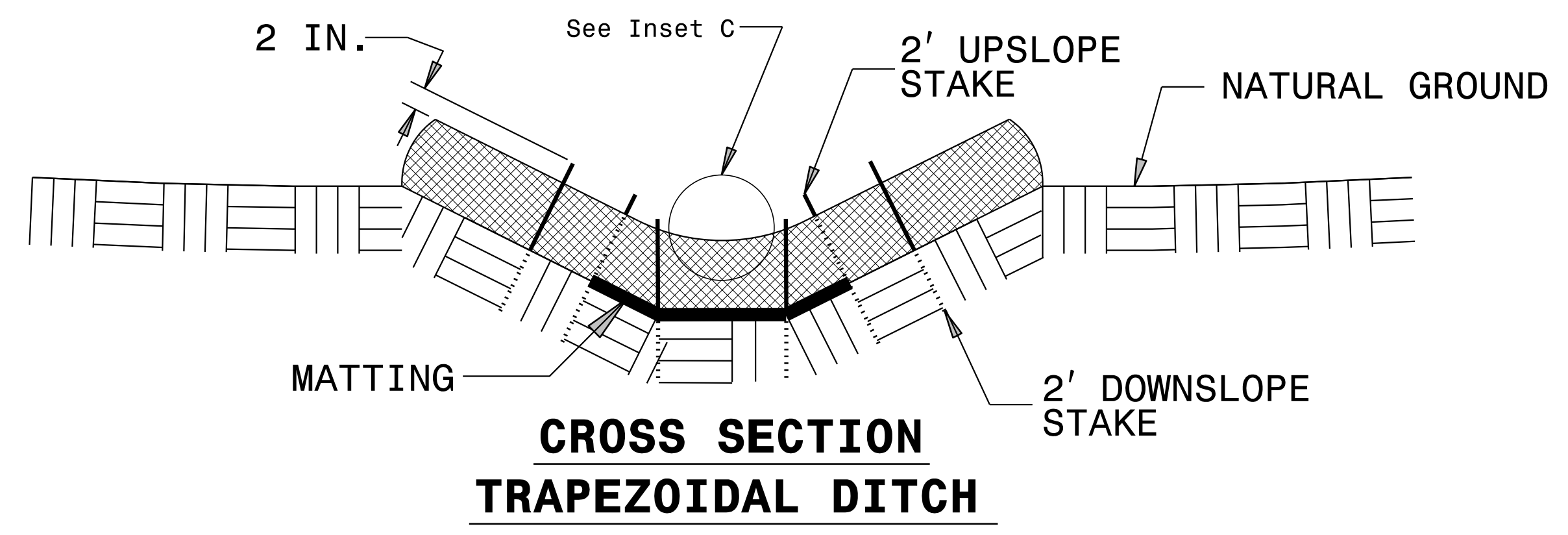
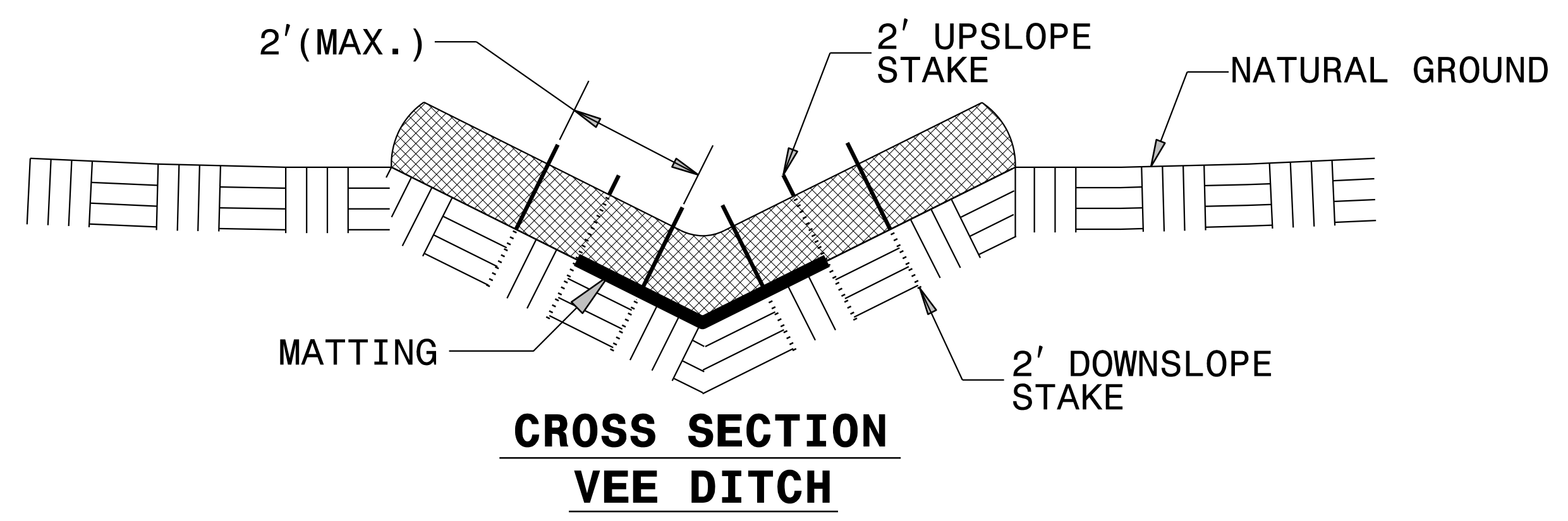
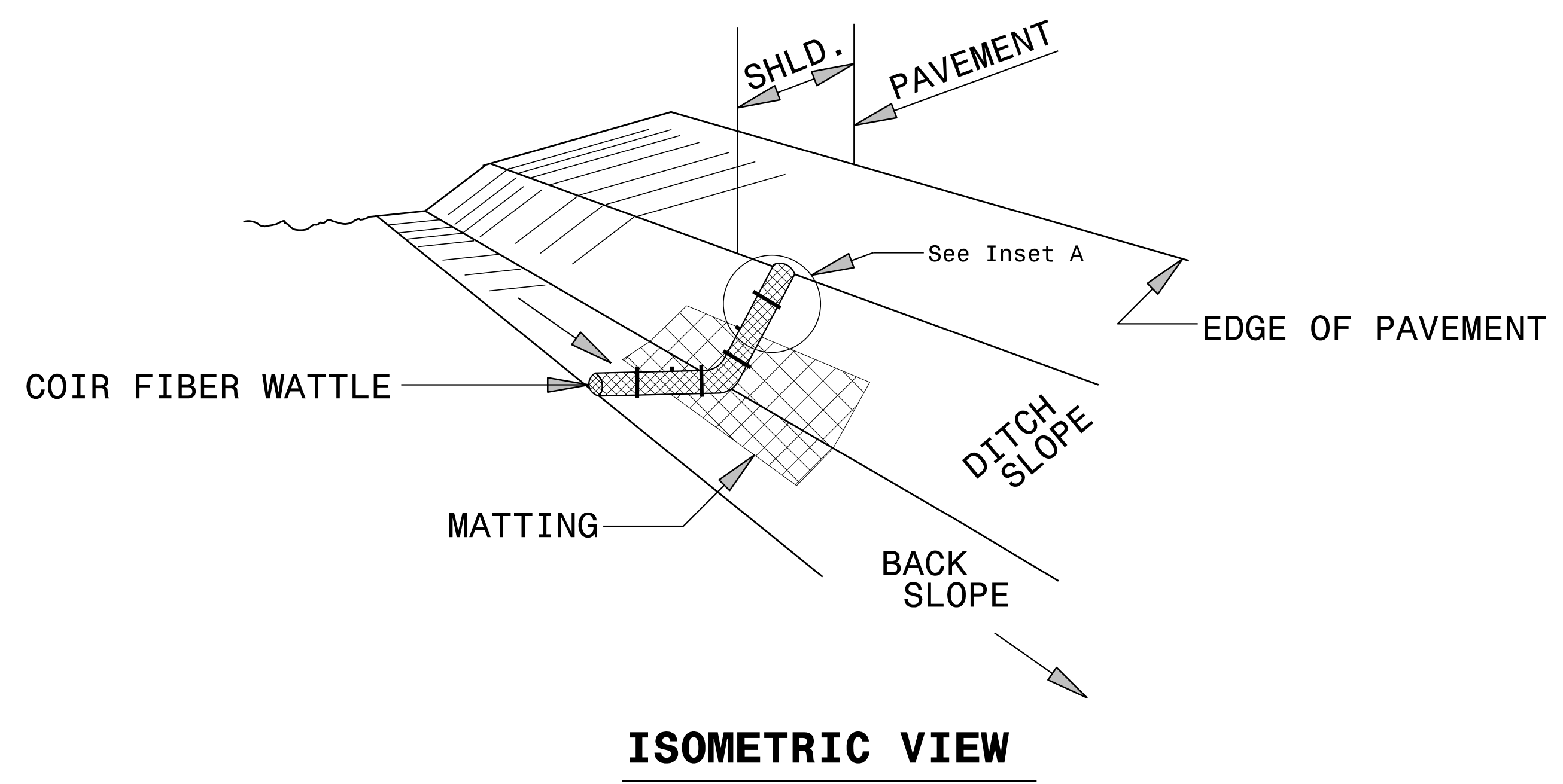
PROVIDE STAPLES MADE OF 0.125 IN. DIAMETER STEEL WIRE FORMED INTO A U SHAPE NOT LESS THAN 12" IN LENGTH.

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.

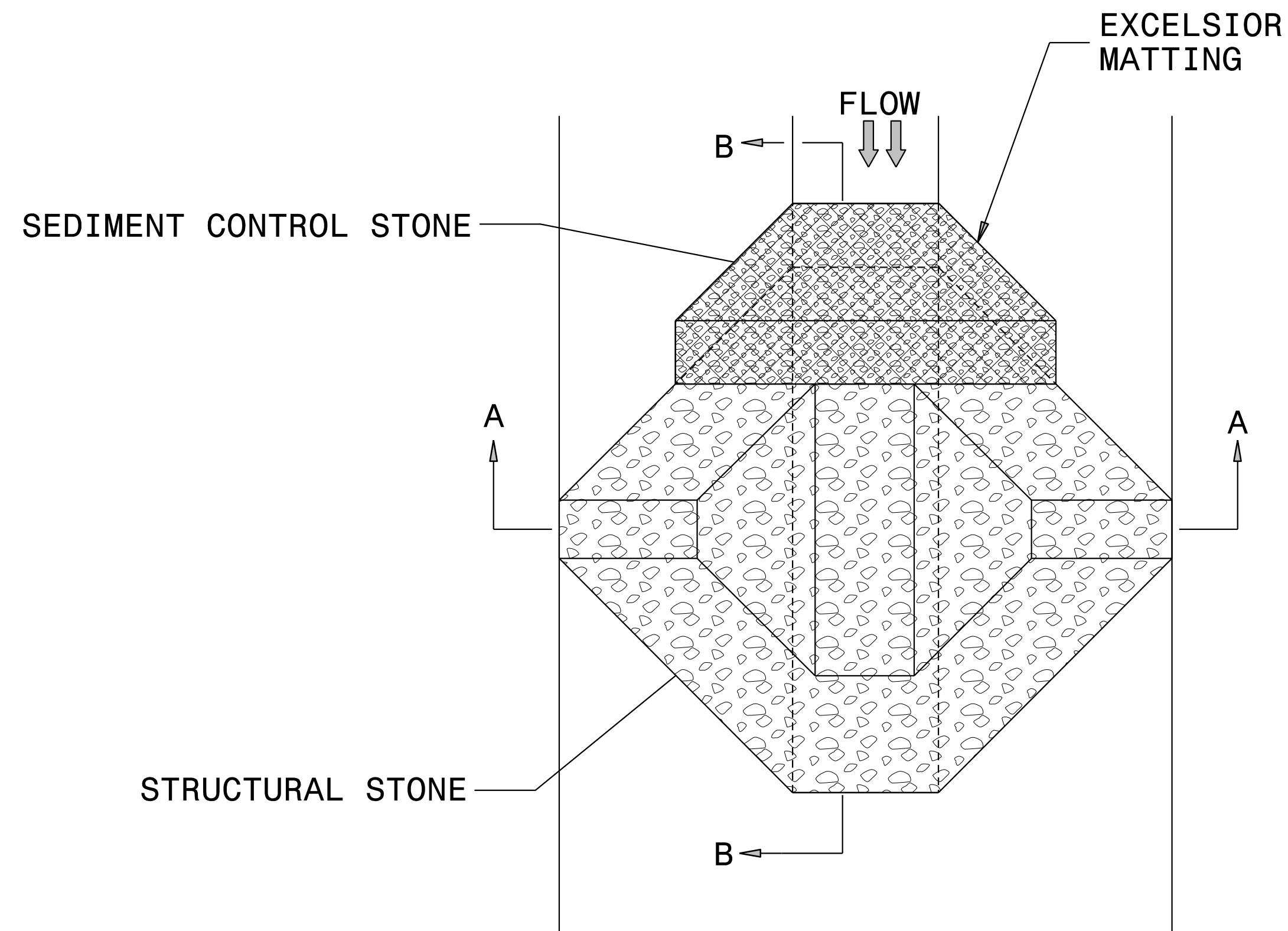
PRIOR TO POLYACRYLAMIDE (PAM) APPLICATION, OBTAIN A SOIL SAMPLE FROM PROJECT LOCATION, AND FROM OFFSITE MATERIAL, AND ANALYZE FOR APPROPRIATE PAM FLOCCULANT TO BE APPLIED TO EACH WATTLE.

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

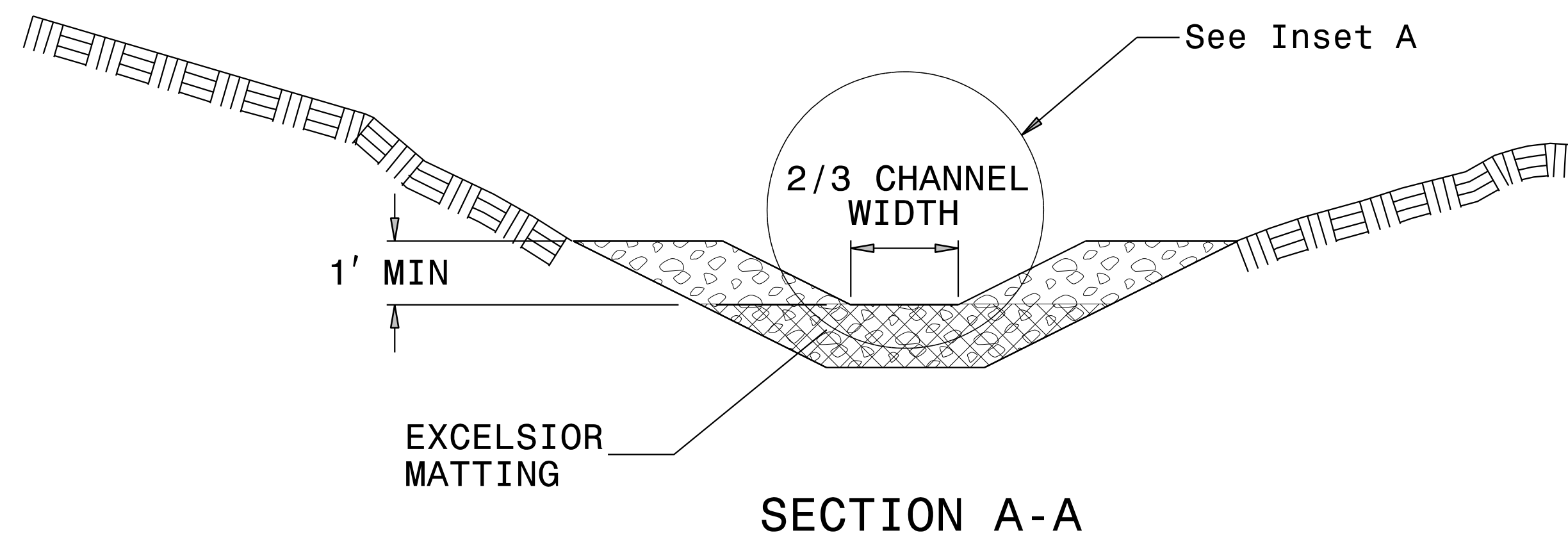


PROJECT REFERENCE NO. U-2579C	SHEET NO. EC-2D
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

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



PLAN



SECTION A-A

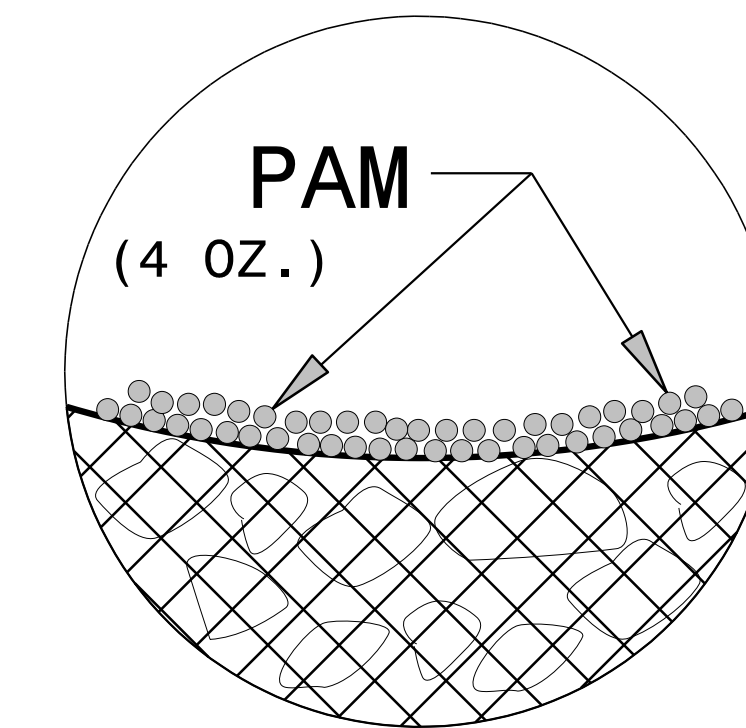
NOTES:

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

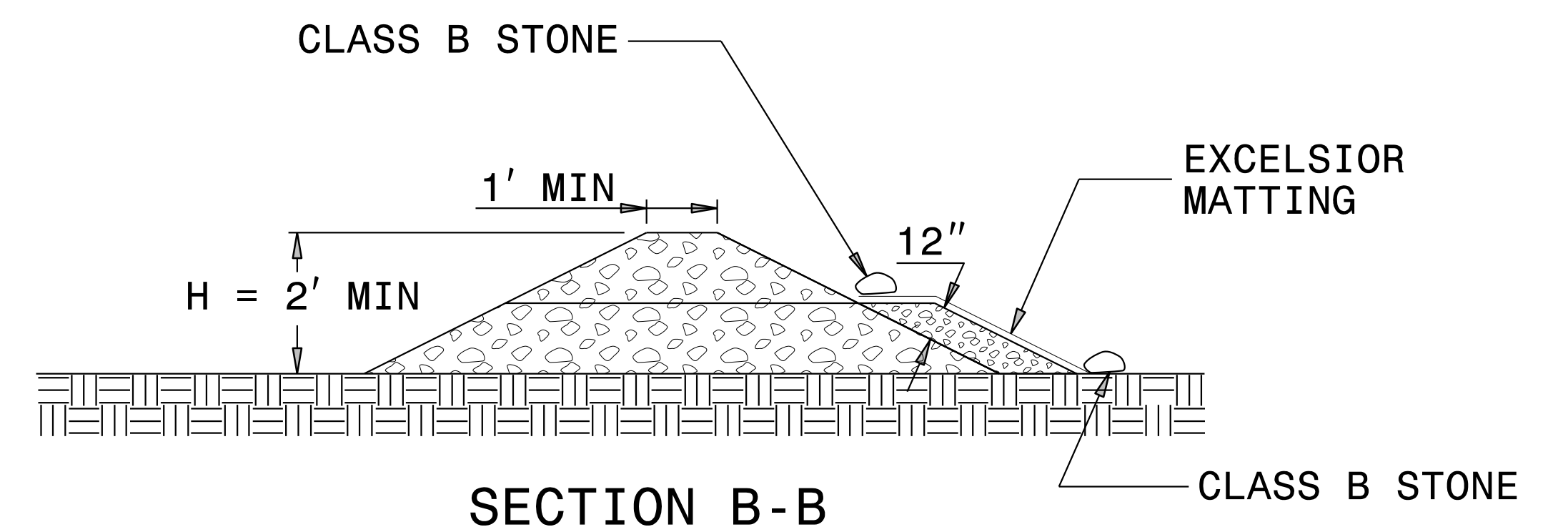
USE EXCELSIOR FOR MATTING MATERIAL AND ANCHOR MATTING SECTION AT TOP AND BOTTOM WITH CLASS B STONE.

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

DIVISION OF HIGHWAYS
STATE OF NORTH CAROLINA

PROJECT REFERENCE NO. <i>U-2579C</i>	SHEET NO. <i>EC-3</i>
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

SOIL STABILIZATION SUMMARY SHEET

MATTING FOR EROSION CONTROL

MATTING FOR EROSION CONTROL

CONST SHEET NO.	LINE	FROM STATION	TO STATION	SIDE	ESTIMATE (SY)
4	-L-	373+00	374+50	LT	115
4	-L-	374+50	377+50	LT	355
4	-L-	373+00	377+00	MED	805
4	-Y3-	13+30	16+00	LT	175
4	-Y3-	13+25	17+00	RT	210
4	-Y3-	19+50	23+00	RT	245
4	-Y3-	25+30	26+50	LT	85
4	-Y4-	10+10	11+20	RT	80
5	-L-	377+00	390+00	MED	2610
6	-L-	390+00	414+50	MED	4920
6	-L-	414+50	418+75	MED	855
6	-L-	402+50	408+50	RT	1350
6	-L-	410+06.22	413+00	LT	240
6	-L-	410+06.22	413+00	RT	270
6	-L-	415+00	425+00	LT	2250
6	-L-	415+50	424+50	RT	2025
6	-Y1-	23+50	26+00	LT	335
6	-Y1-	26+00	26+89	LT	85
6	-Y1-	26+89	27+50	LT	60
6	-Y1-	35+00	39+50	RT	415
6	-Y1-	37+50	41+00	LT	345
6	-Y1LPB-	14+00	--	LT	75
6	-Y1LPB-	15+00	17+13.05	LT	480
6	-Y1RPB-	24+50	29+50	RT	1125
6	-Y1RPB-	26+50	32+00	LT	1235
6	-Y1RPC-	24+00	25+97.08	LT	450
6	-Y1RPC-	25+97.08	27+25	LT	285
6	-Y1RPC-	27+25	28+50	LT	285
6	-Y1RPC-	28+50	29+50	LT	225
6	-Y1RPC-	25+00	25+97.08	RT	115

CONST SHEET NO.	LINE	FROM STATION	TO STATION	SIDE	ESTIMATE (SY)
6	-Y1RPC-	29+61.75	32+11.75	LT	565
6	-Y1RPC-	31+00	32+11.75	RT	205
6	-Y1RPD-	13+04.07	22+50	LT	1735
6	-Y1RPD-	19+10	22+50	RT	765
6	-Y1DET-	16+00	22+00	LT	545
6	-Y1DET-	19+50	20+50	RT	95
6	-Y1DET-	20+50	22+00	RT	140
7	-L-	418+50	427+50	MED	1630
7	-L-	425+00	427+50	LT	565
7	-GRSA-	10+00	11+00	LT	100
8	-L-	427+50	435+00	MED	1355
8	-L-	435+00	440+50	MED	995
8	-L-	427+50	429+50	LT	450
8	-L-	429+50	432+25	LT	620
8	-L-	432+25	434+00	LT	395
8	-GRSA-	16+03	17+46.25	LT	105
9	-L-	440+50	453+50	MED	2190
9	-L-	443+50	444+77.34	LT	120
9	-L-	444+77.34	446+50	LT	80
9	-L-	444+00	444+50	RT	25
9	-L-	444+50	446+00	RT	70
9	-L-	448+00	470+50	RT	5055
9	-L-	448+00	469+00	LT	4720
9	-L-	451+00	454+50	LT	175
9	-Y2-	18+50	20+00	LT	140
9	-Y2-	22+50	26+50	RT	730
9	-Y2-	22+50	26+00	LT	635
9	-Y2DET-	17+00	18+00	LT	70
9	-Y2DET-	18+00	18+50	LT	35
9	-Y2DET-	18+50	20+00	LT	105

DIVISION OF HIGHWAYS
STATE OF NORTH CAROLINA

PROJECT REFERENCE NO. <i>U-2579C</i>	SHEET NO. <i>EC-3A</i>
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

SOIL STABILIZATION SUMMARY SHEET

MATTING FOR EROSION CONTROL

CONST SHEET NO.	LINE	FROM STATION	TO STATION	SIDE	ESTIMATE (SY)
9	-Y2DET-	20+00	23+00	RT	210
9	-Y2DET-	23+00	23+75	RT	70
9	-Y2DET-	23+50	--	LT	80
9	-Y2DET-	24+50	27+50	RT	210
9	-Y2DET-	23+00	25+00	LT	140
10	-L-	453+50	465+50	MED	2025
11	-L-	465+50	472+00	MED	1305
11	-L-	475+00	478+00	MED	605
12	-Y1-	11+50	12+50	LT	60
12	-Y1-	12+50	13+07	LT	55
12	-Y1-	13+07	14+00	LT	85
12	-Y1-	14+00	21+50	LT	1005
13	-Y1-	39+50	42+03	RT	180
13	-Y1-	42+05	43+00	RT	70
13	-Y1-	46+50	48+00	LT	140
13	-Y1DET-	22+00	24+00	LT	140
13	-Y1DET-	26+50	29+00	LT	185
13	-Y1DET-	30+50	33+00	LT	175
13	-Y1DET-	22+00	24+50	RT	175
14	-Y2-	10+00	14+00	LT	365
14	-Y2-	10+00	15+13	RT	470
14	-Y2-	15+50	17+50	LT	185
14	-Y2-	15+13	20+00	RT	445
14	-GRSA-	28+96.73	31+50	RT	355
14	-GRSA-	28+96.73	31+50	LT	355
14	-Y2DET-	16+00	17+00	RT	70
			SUBTOTAL		55,680
	MISCELLANEOUS MATTING TO BE INSTALLED AS DIRECTED BY THE ENGINEER				364695
			TOTAL		420375
			SAY		420500

PERMANENT SOIL REINFORCEMENT MAT

CONST SHEET NO.	LINE	FROM STATION	TO STATION	SIDE	ESTIMATE (SY)
6	-L-	392+00	395+00	LT	410
6	-L-	392+50	395+00	RT	345
6	-L-	417+00	418+50	LT	75
6	-Y1LPB-	14+00	15+00	RT	95
7	-GRSA-	10+50	12+00	RT	105
7	-GRSA-	11+00	12+00	LT	70
8	-GRSA-	13+78.88	16+03	RT	160
8	-GRSA-	13+78.88	16+03	LT	160
8	-GRSA-	16+03	17+98.73	RT	140
9	-L-	442+50	444+00	RT	245
9	-Y2DET-	23+75	24+50	RT	70
13	-Y1-	43+00	46+50	RT	245
13	-Y1DET-	24+00	26+50	LT	185
13	-Y1DET-	29+00	30+50	LT	105
			SUBTOTAL		2,410
		ADDITIONAL	PRGM TO BE INSTALLED		0
			TOTAL		2410
			SAY		2,500

DIVISION OF HIGHWAYS
STATE OF NORTH CAROLINA

PROJECT REFERENCE NO. <i>U-2579C</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 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.
U-2579C	EC-04/CONST.04
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	

-Y3- -Y4-

PI Sta 29+34.40 PI Sta 11+82.16
 $\Delta = 30'12"45.2"$ (RT) $\Delta = 19'40"26.4"$ (LT)
 $D = 2'58"35.1"$ $D = 15'54"55.8"$
 $L = 1,015.07'$ $L = 123.62'$
 $T = 519.63'$ $T = 62.42'$
 $R = 1,925.00'$ $R = 360.00'$
SE = .05
RO = SEE PLANS

END CONSTRUCTION
-Y3- POT STA. 26 + 50.00

BEGIN CONSTRUCTION
-Y3- POT STA. 13 + 25.00

BEGIN CONSTRUCTION
-L- POT STA. 366 + 00.00

BEGIN TIP PROJECT U-2579C
BEGIN GRADING
-L- POT STA. 373 + 00.00

BEGIN CONSTRUCTION
-Y4- POT STA. 10 + 10.00

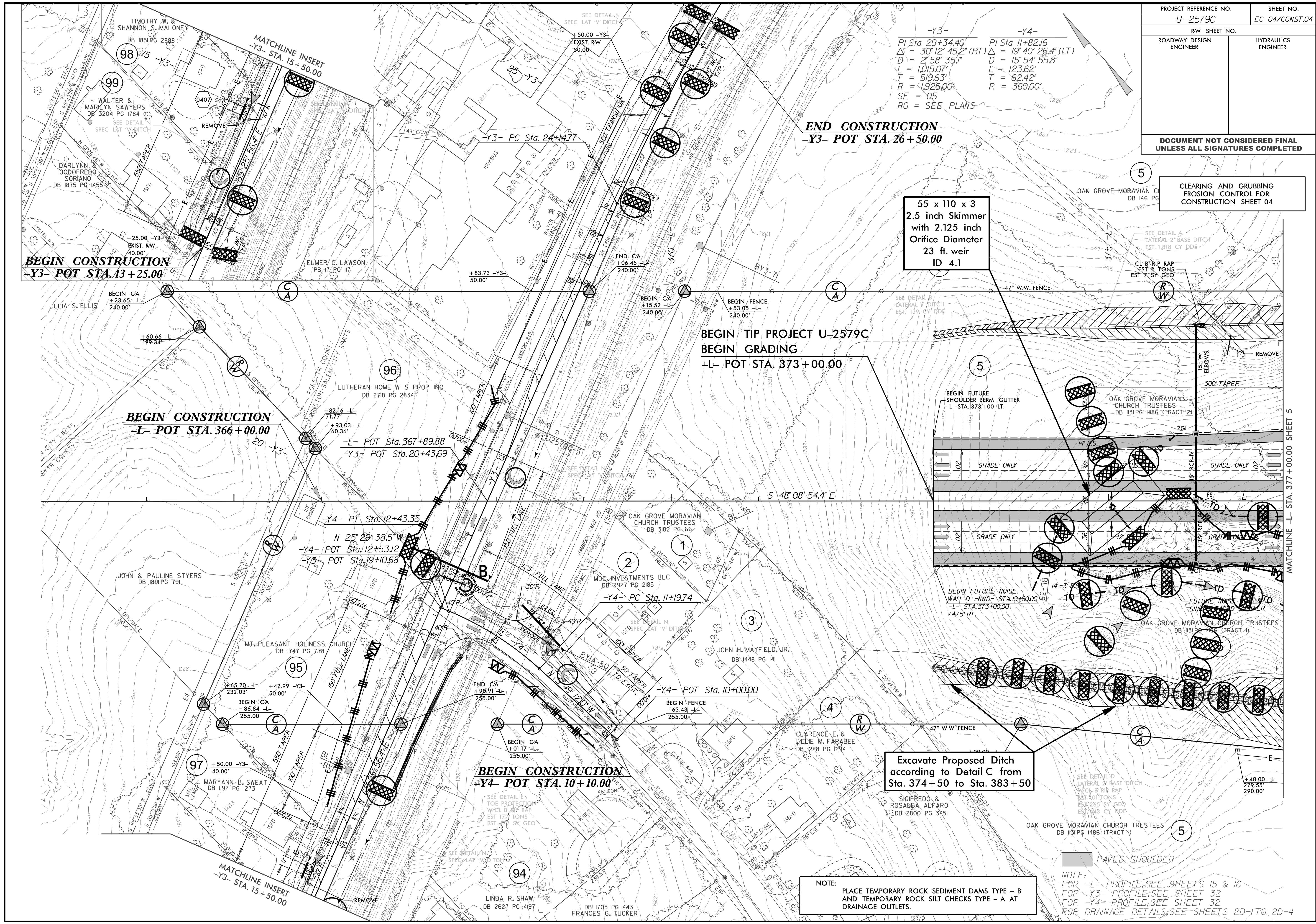
Excavate Proposed Ditch according to Detail C from Sta. 374 + 50 to Sta. 383 + 50

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

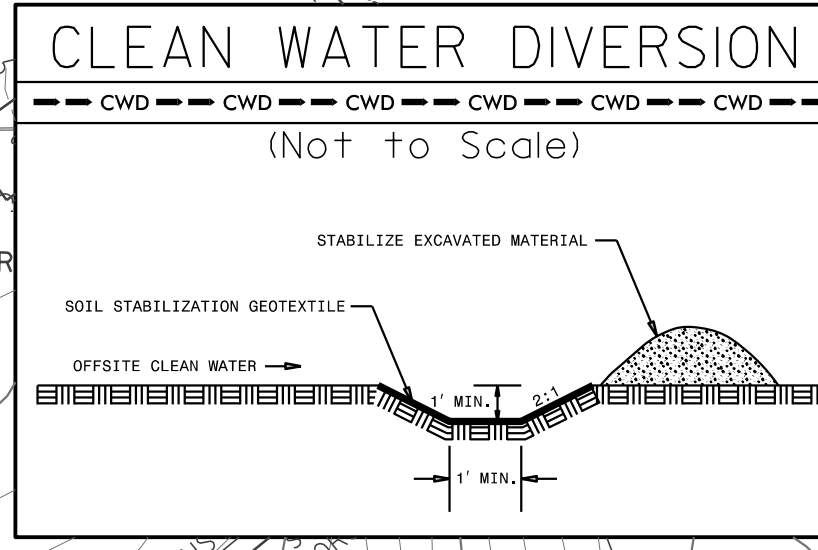
NOTE:
FOR -L- PROFILE, SEE SHEETS 15 & 16
FOR -Y3- PROFILE, SEE SHEET 32
FOR -Y4- PROFILE, SEE SHEET 32
FOR DRAINAGE DETAILS, SEE SHEETS 2D-1 TO 2D-4

55 x 110 x 3
2.5 inch Skimmer
with 2.125 inch
Orifice Diameter
23 ft. weir
ID 4.1

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



PROJECT REFERENCE NO. R-2579C	SHEET NO. EC-05/CONST.05
RW SHEET NO.	HYDRAULICS ENGINEER
ROADWAY DESIGN ENGINEER	
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	



29 x 58 x 3
1.5 inch Skimmer
with 1.25 inch
Orifice Diameter
6 ft. weir
ID 5.1

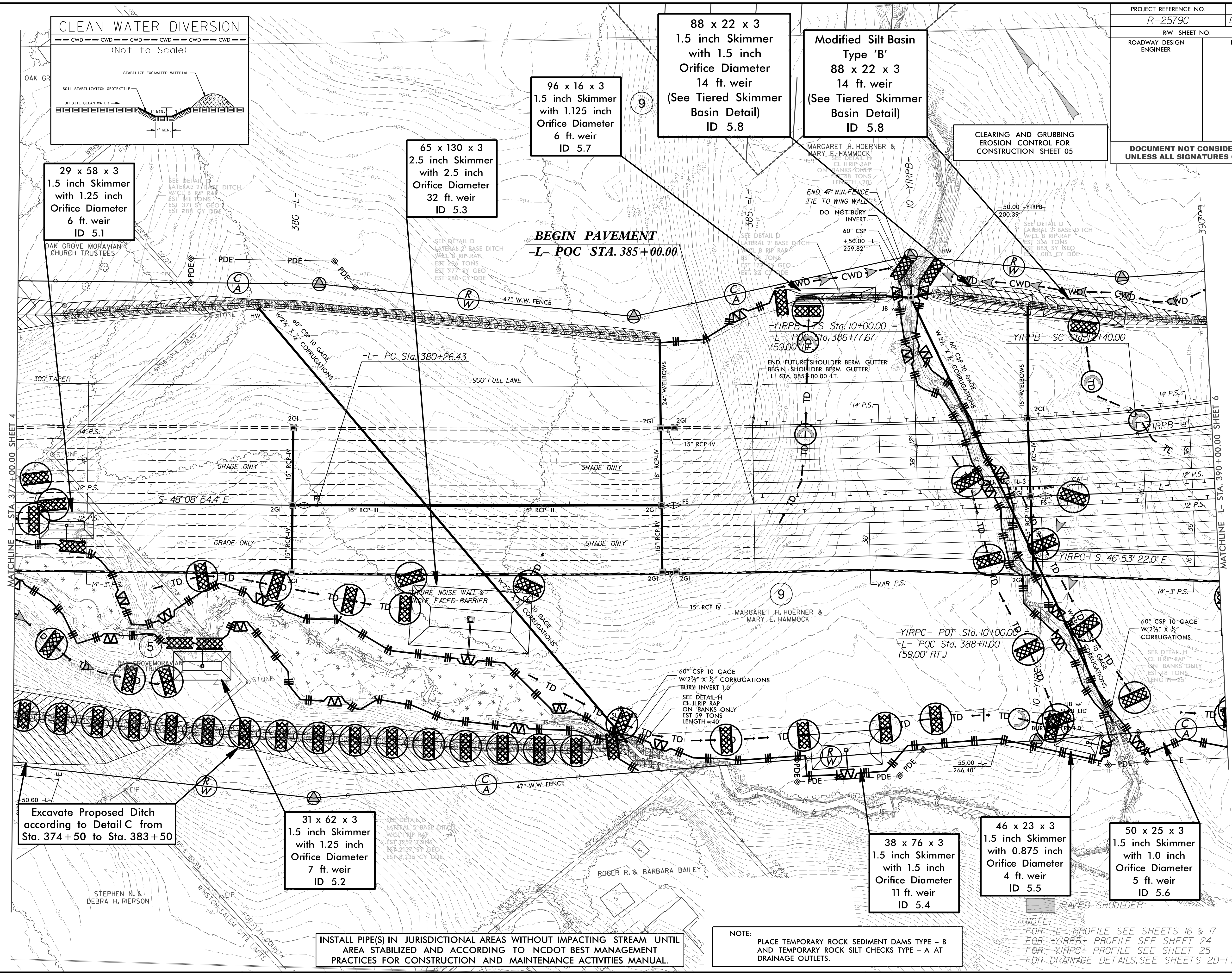
65 x 130 x 3
2.5 inch Skimmer
with 2.5 inch
Orifice Diameter
32 ft. weir
ID 5.3

96 x 16 x 3
1.5 inch Skimmer
with 1.125 inch
Orifice Diameter
6 ft. weir
ID 5.7

88 x 22 x 3
1.5 inch Skimmer
with 1.5 inch
Orifice Diameter
14 ft. weir
(See Tiered Skimmer
Basin Detail)
ID 5.8

Modified Silt Basin
Type 'B'
88 x 22 x 3
14 ft. weir
(See Tiered Skimmer
Basin Detail)
ID 5.8

CLEARING AND GRUBBING
EROSION CONTROL FOR
CONSTRUCTION SHEET 05



Excavate Proposed Ditch
according to Detail C from
Sta. 374+50 to Sta. 383+50

31 x 62 x 3
1.5 inch Skimmer
with 1.25 inch
Orifice Diameter
7 ft. weir
ID 5.2

38 x 76 x 3
1.5 inch Skimmer
with 1.5 inch
Orifice Diameter
11 ft. weir
ID 5.4

46 x 23 x 3
1.5 inch Skimmer
with 0.875 inch
Orifice Diameter
4 ft. weir
ID 5.5

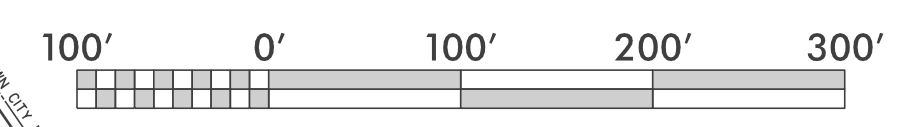
50 x 25 x 3
1.5 inch Skimmer
with 1.0 inch
Orifice Diameter
5 ft. weir
ID 5.6

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.

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

NOTE:
FOR -L- PROFILE SEE SHEETS 16 & 17
FOR -YIRPB- PROFILE SEE SHEET 24
FOR -YIRPC- PROFILE SEE SHEET 25
FOR DRAINAGE DETAILS, SEE SHEETS 2D-1 TO 2D-4

8/17/99
6/23/2017 Ec_dsn_psh_06_cg.dgn

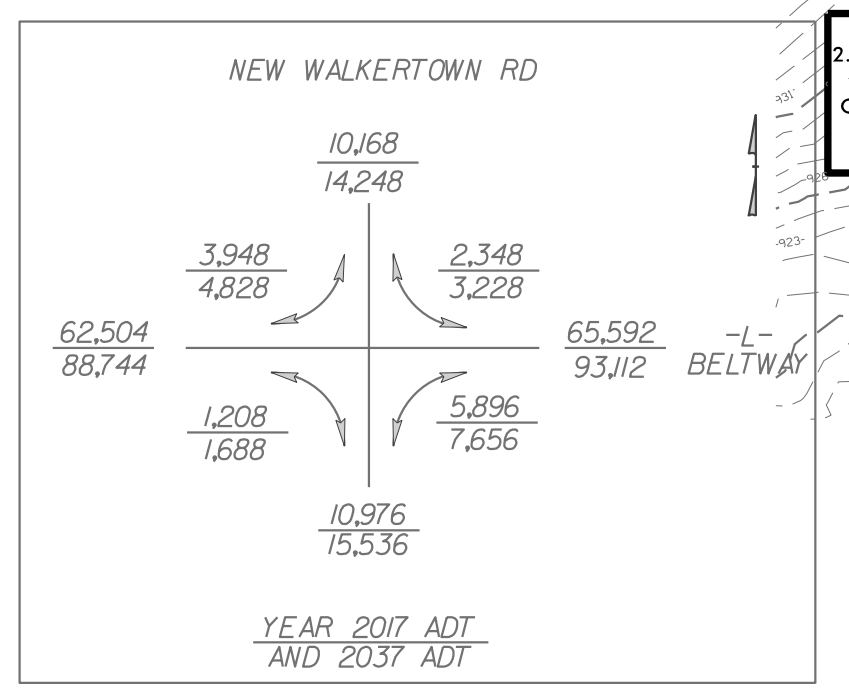
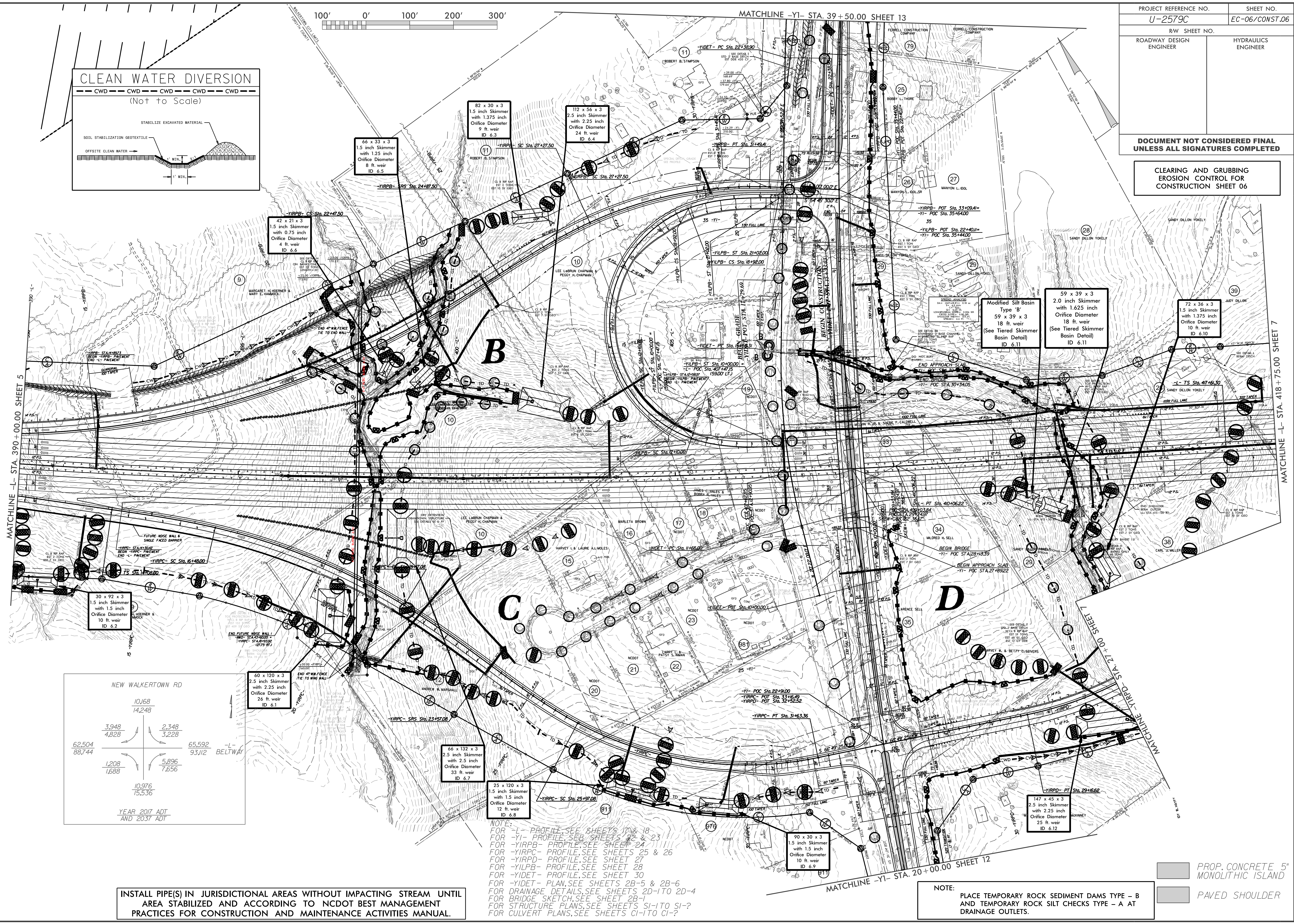
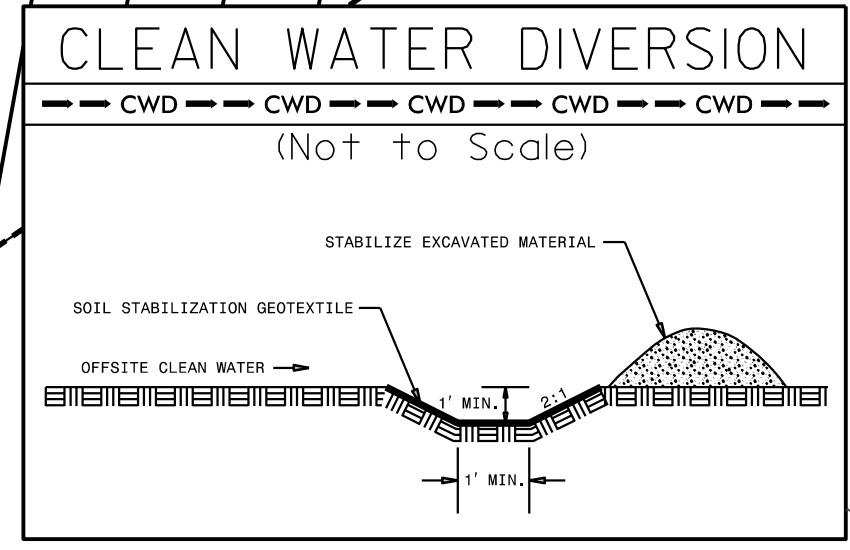


MATCHLINE -Y1- STA. 39+50.00 SHEET 13

PROJECT REFERENCE NO. U-2579C	SHEET NO. EC-06/CONST.06
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

**DOCUMENT NOT CONSIDERED FINAL
UNLESS ALL SIGNATURES COMPLETED**

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



NOTE:
 FOR -L- PROFILE, SEE SHEETS 17 & 18
 FOR -Y1- PROFILE, SEE SHEETS 22 & 23
 FOR -YIRPB- PROFILE, SEE SHEET 24
 FOR -YIRPC- PROFILE, SEE SHEETS 25 & 26
 FOR -YIRPD- PROFILE, SEE SHEET 27
 FOR -YILPB- PROFILE, SEE SHEET 28
 FOR -YIDET- PROFILE, SEE SHEET 30
 FOR -YIDET- PLAN, SEE SHEETS 2B-5 & 2B-6
 FOR DRAINAGE DETAILS, SEE SHEETS 2D-1 TO 2D-4
 FOR BRIDGE SKETCH, SEE SHEET 2B-1
 FOR STRUCTURE PLANS, SEE SHEETS S1-1 TO S1-7
 FOR CULVERT PLANS, SEE SHEETS C1-1 TO C1-7

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.

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



MATCHLINE -L- STA. 390+00.00 SHEET 5

MATCHLINE -L- STA. 418+75.00 SHEET 7

MATCHLINE -Y1- STA. 20+00.00 SHEET 12

1@6'X7' RCBC CONSTRUCTION SEQUENCE STA. 397 + 73 -L- UT TO FRAZIER CREEK

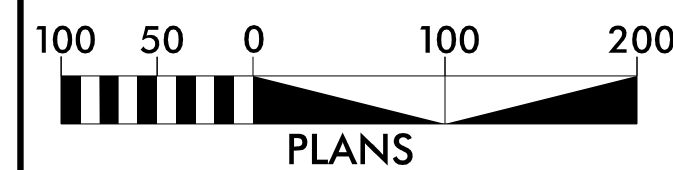
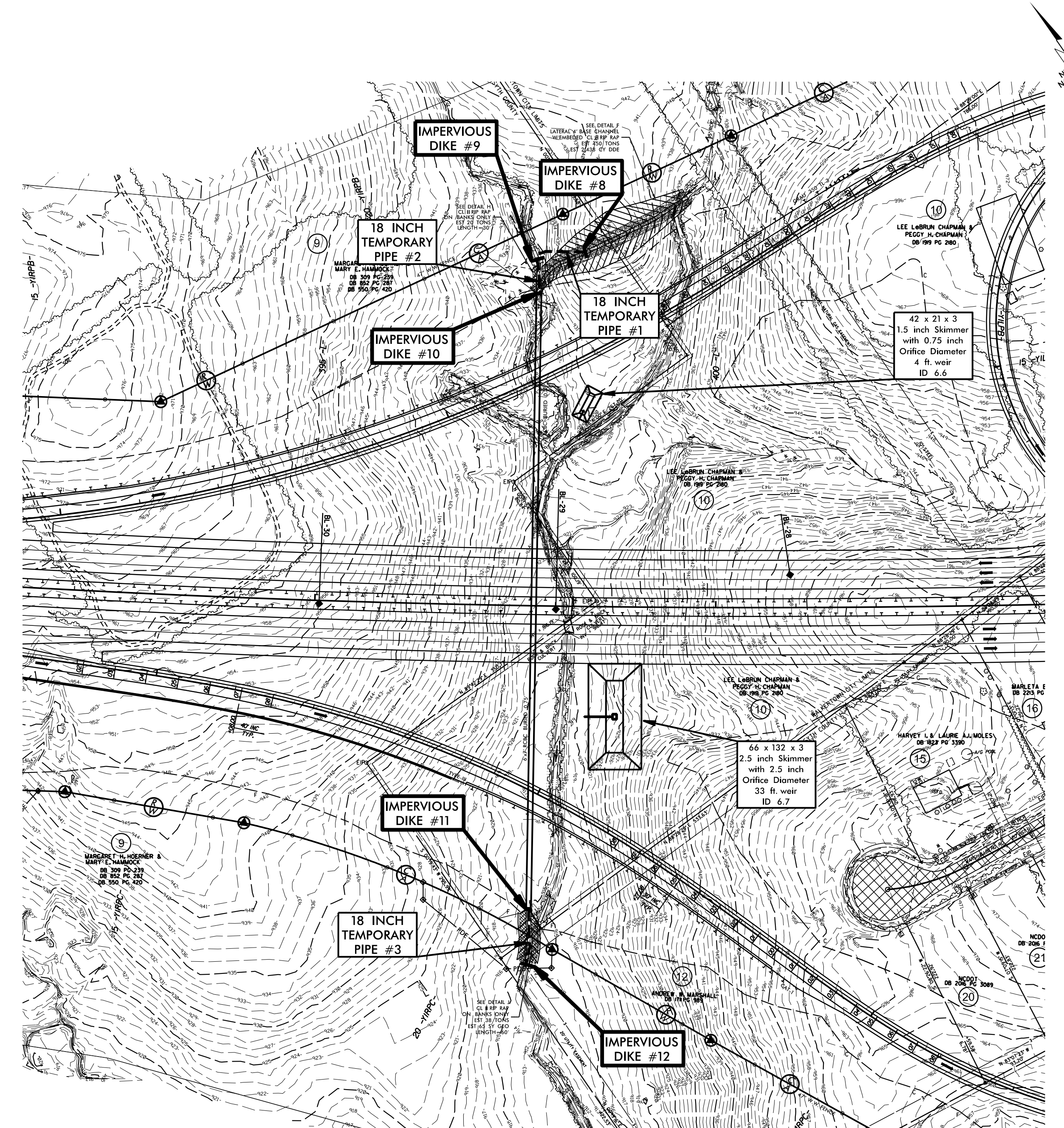
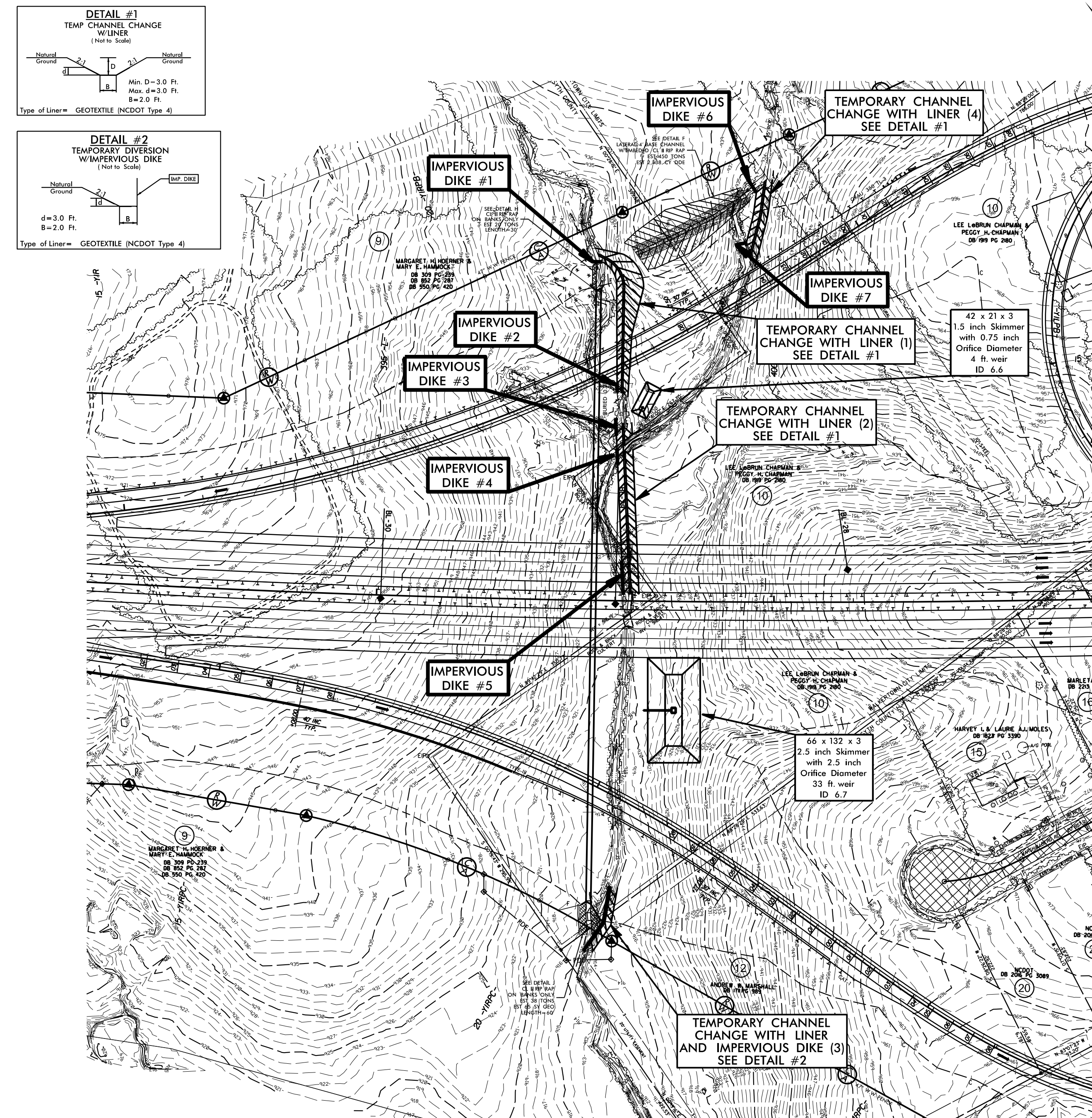
PROJECT REFERENCE NO. U-2579C	SHEET NO. EC-06A/CONST.06
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

PHASE I

- 1.) CONSTRUCT SKIMMER BASINS 6.6 AND 6.7.
- 2.) CONSTRUCT TEMPORARY CHANNEL CHANGE WITH LINER (1) AND (2) (SEE DETAIL #1)
- 3.) CONSTRUCT TEMPORARY CHANNEL CHANGE WITH LINER (3) (SEE DETAIL #2) AND INSTALL IMPERVIOUS DIKES #1, #2, #3, #4, #5, DIVERTING FLOW THROUGH TEMPORARY CHANNEL CHANGES (1) (2) AND (3).
- 4.) CONSTRUCT TEMPORARY CHANNEL CHANGE WITH LINER (4) (SEE DETAIL #1), IMPERVIOUS DIKE #6 AND IMPERVIOUS DIKE #7, DIVERTING FLOW THROUGH TEMPORARY CHANNEL CHANGE (4).
- 5.) DEWATER CONSTRUCTION AREAS, UTILIZING SKIMMER BASINS 6.6 AND 6.7 FOR PUMPED EFFLUENT.
- 6.) CONSTRUCT PROPOSED 1@6'X7' RCBC, UPSTREAM BANK STABILIZATION AND +/- 45 FT OF OUTLET CHANNEL, IN ACCORDANCE WITH THE PLANS.
- 7.) CONSTRUCT +/- 157 FT OF UPSTREAM LATERAL 4 FT BASE CHANNEL WITH CLASS 'II' RIP RAP, IN ACCORDANCE WITH THE PLANS.

PHASE II

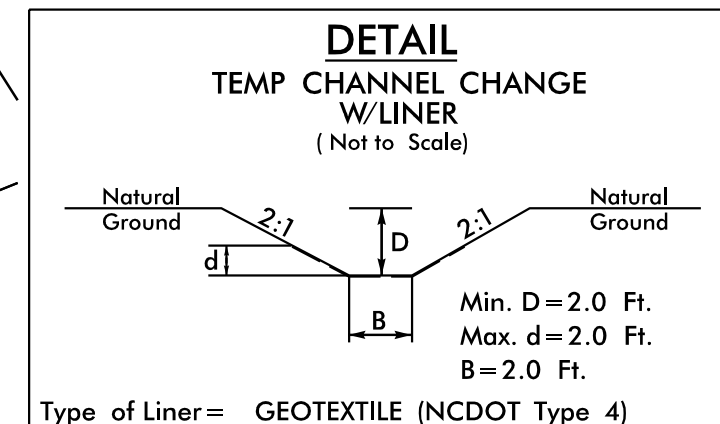
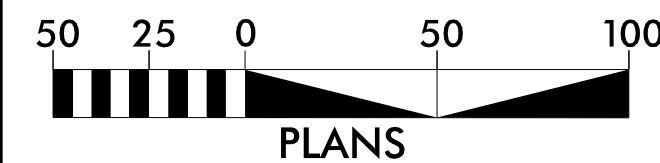
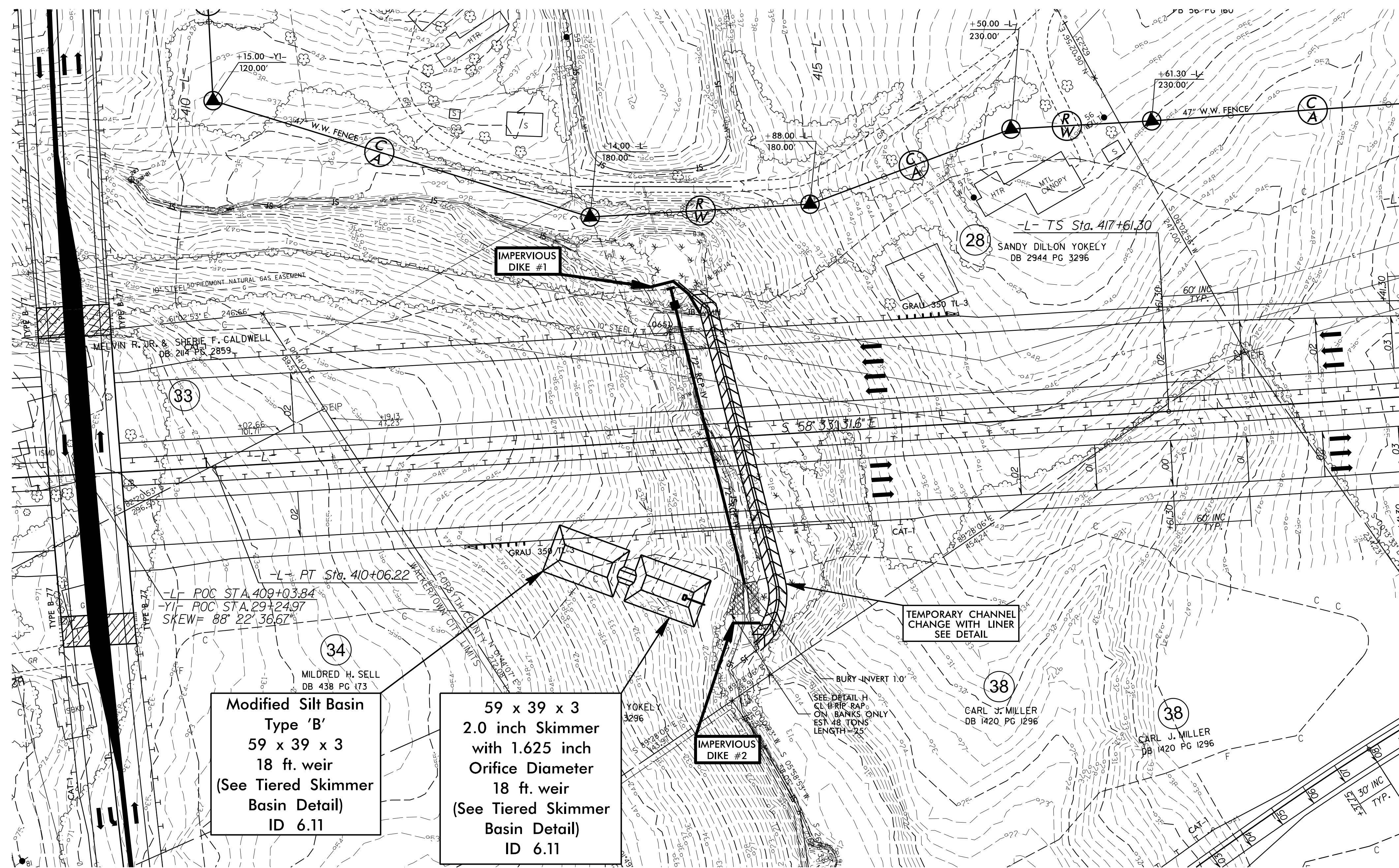
- 1.) INSTALL IMPERVIOUS DIKE #8 AND TEMPORARY 18" FLEXIBLE PIPE #1 AND REMOVE IMPERVIOUS DIKE #6 AND REMOVE TEMPORARY CHANNEL CHANGE (4), DIVERTING FLOW THROUGH LATERAL 4 FT BASE CHANNEL AND THROUGH TEMPORARY PIPE #1.
- 2.) INSTALL IMPERVIOUS DIKES #9, #10, #11 AND #12 AND TEMPORARY 18" FLEXIBLE PIPES #2 AND #3. REMOVE TEMPORARY CHANNEL CHANGES (1), (2) AND (3), DIVERTING FLOW THROUGH TEMPORARY PIPES #2 AND #3.
- 3.) DEWATER CONSTRUCTION AREAS, UTILIZING SKIMMERS BASINS 6.6 AND 6.7 FOR PUMPED EFFLUENT.
- 4.) CONSTRUCTION REMAINDER OF LATERAL 4 FT BASE CHANNEL WITH CLASS 'II' RIP RAP AND OUTLET CHANNEL, IN ACCORDANCE WITH THE PLANS.
- 5.) REMOVE IMPERVIOUS DIKES #8, #9, #10, #11, #12 AND TEMPORARY PIPES #1, #2 AND #3.
- 6.) COMPLETE ROADWAY.



72" RCP CONSTRUCTION SEQUENCE STA. 413+97 -L- UT TO FRAZIER CREEK

PROJECT REFERENCE NO. U-2579C	SHEET NO. EC-06B/CONST.06
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

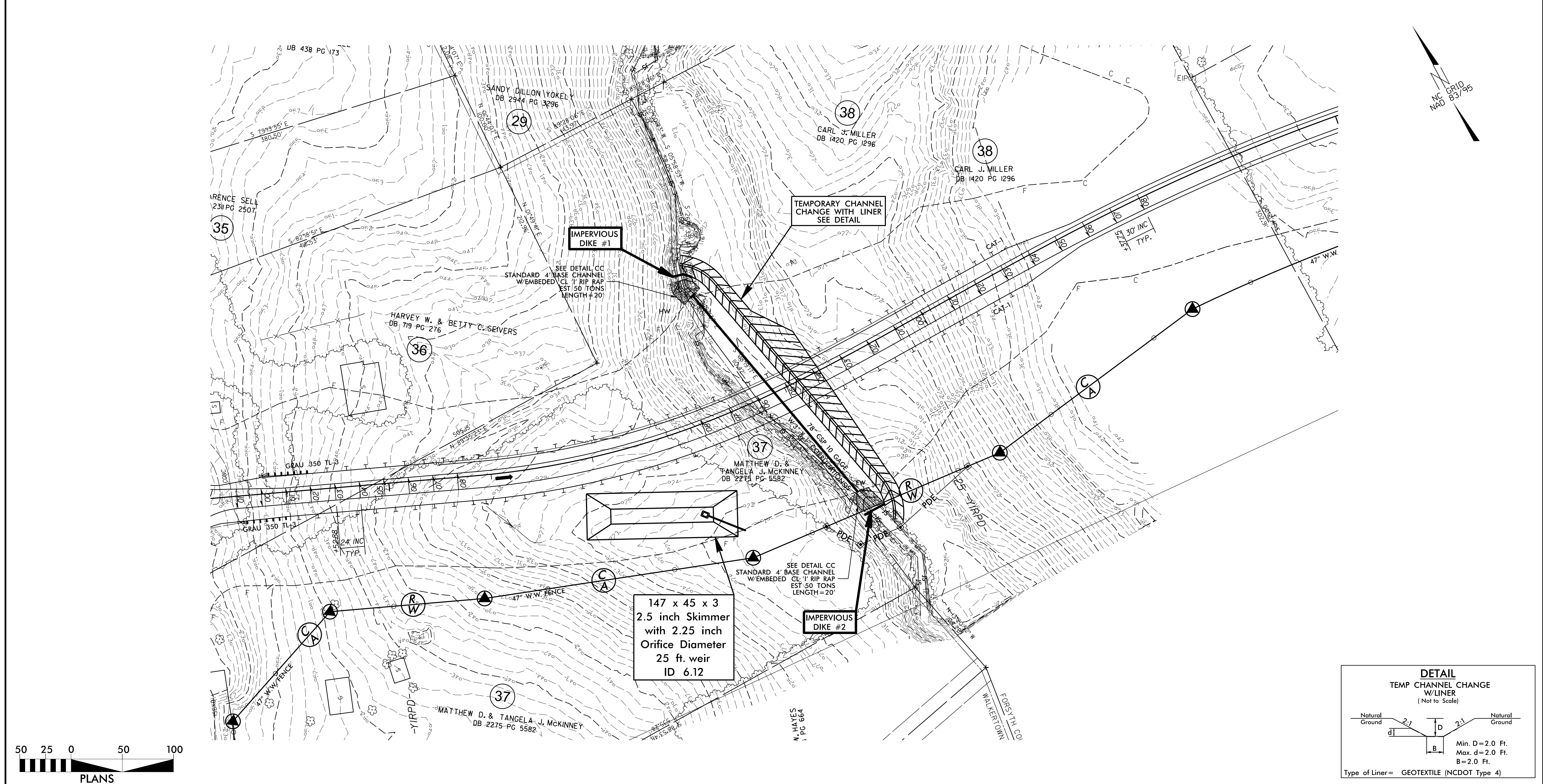
- 1.) CONSTRUCT TIERED SKIMMER BASIN 6.11.
- 2.) CONSTRUCT TEMPORARY CHANNEL CHANGE WITH LINER (SEE DETAIL).
- 3.) INSTALL IMPERVIOUS DIKES #1 AND #2 AND DIVERT FLOW INTO TEMPORARY CHANNEL.
- 4.) DEWATER CONSTRUCTION AREA, UTILIZING SKIMMER BASIN 6.11 FOR PUMPED EFFLUENT.
- 5.) INSTALL 72" RCP W/HEADWALL, JB w/MH-0651 AND DOWNSTREAM BANK STABILIZATION IN ACCORDANCE WITH THE PLANS.
- 6.) REMOVE IMPERVIOUS DIKES #1, #2 AND TEMPORARY CHANNEL AND DIRECT FLOW THROUGH 72" RCP.
- 7.) COMPLETE ROADWAY.



78" CSP CONSTRUCTION SEQUENCE STA. 26+11 -YIRPD- UT TO FRAZIER CREEK

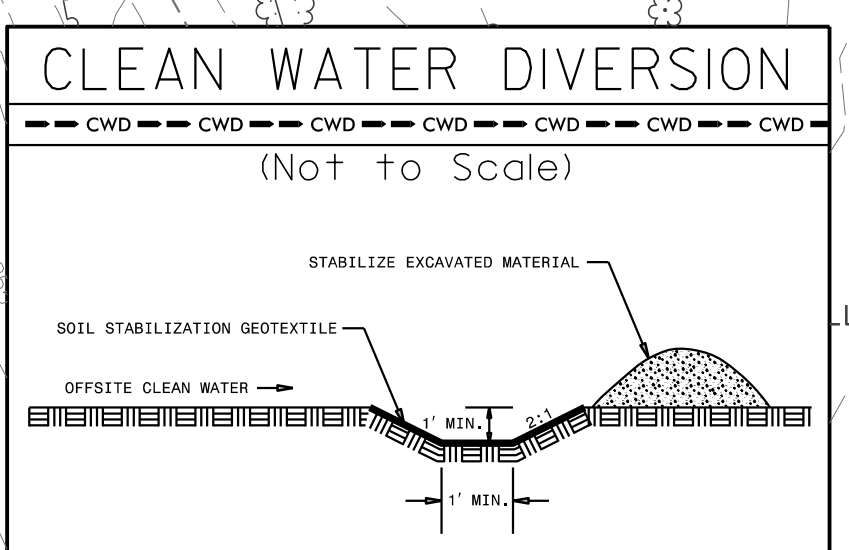
PROJECT REFERENCE NO. U-2579C	SHEET NO. EC-07A/CONST.07
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

- 1.) CONSTRUCT SKIMMER BASIN 6.12.
- 2.) CONSTRUCT TEMPORARY CHANNEL CHANGE WITH LINER (SEE DETAIL).
- 3.) INSTALL IMPERVIOUS DIKES #1 AND #2 AND DIVERT FLOW INTO TEMPORARY CHANNEL.
- 4.) DEWATER CONSTRUCTION AREA, UTILIZING SKIMMER BASIN 6.12 FOR PUMPED EFFLUENT.
- 5.) INSTALL 78" CSP W/HEADWALL AND ENDWALL AND UPSTREAM AND DOWNSTREAM CHANNELS IN ACCORDANCE WITH THE PLANS.
- 6.) REMOVE IMPERVIOUS DIKES #1, #2 AND TEMPORARY CHANNEL AND DIRECT FLOW THROUGH 78" CSP.
- 7.) COMPLETE ROADWAY.



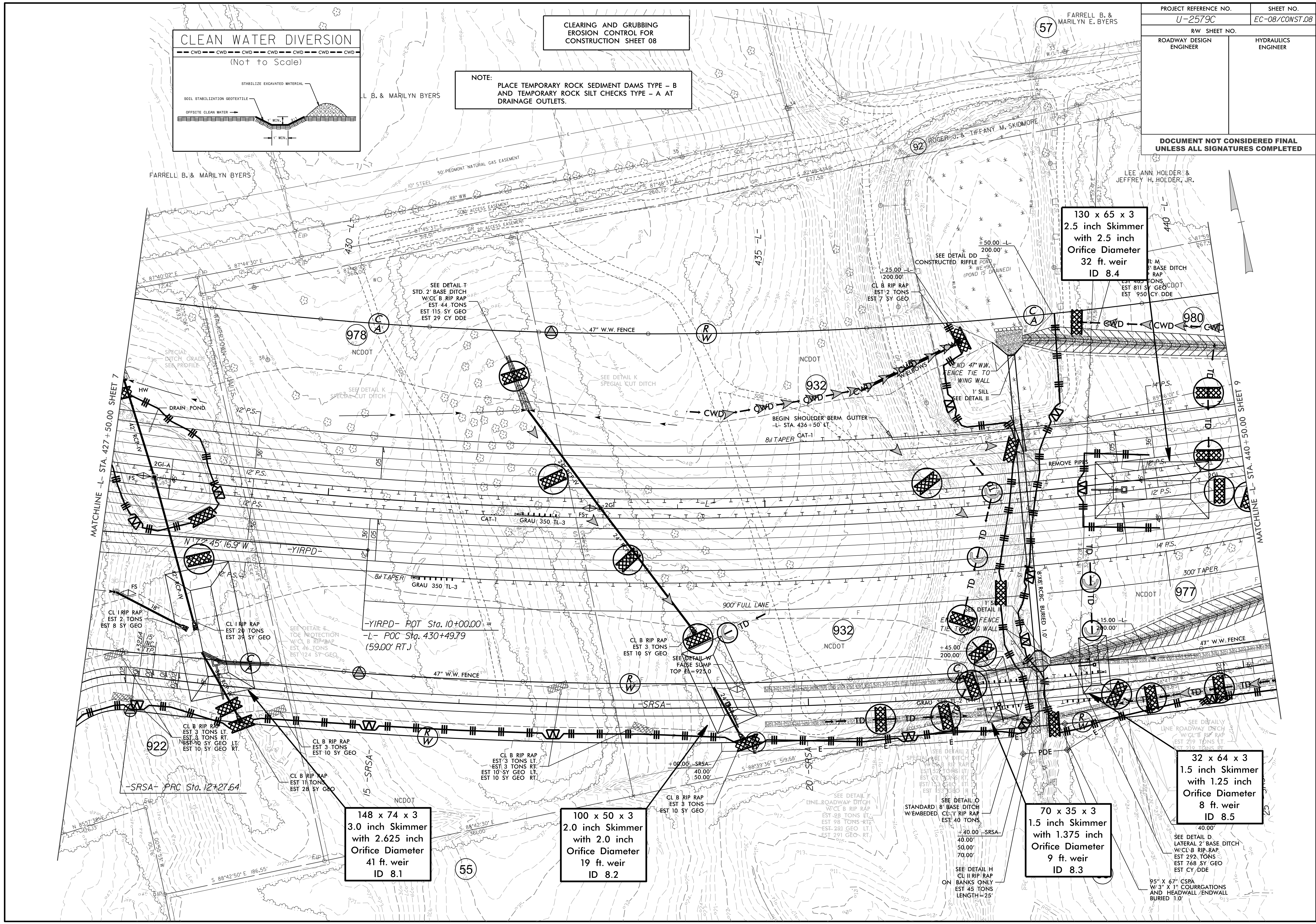
PROJECT REFERENCE NO.	SHEET NO.
U-2579C	EC-08/CONST.08
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED



CLEARING AND GRUBBING EROSION CONTROL FOR CONSTRUCTION SHEET 08

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



**130 x 65 x 3
2.5 inch Skimmer
with 2.5 inch
Orifice Diameter
32 ft. weir
ID 8.4**

**148 x 74 x 3
3.0 inch Skimmer
with 2.625 inch
Orifice Diameter
41 ft. weir
ID 8.1**

**100 x 50 x 3
2.0 inch Skimmer
with 2.0 inch
Orifice Diameter
19 ft. weir
ID 8.2**

**70 x 35 x 3
1.5 inch Skimmer
with 1.375 inch
Orifice Diameter
9 ft. weir
ID 8.3**

**32 x 64 x 3
1.5 inch Skimmer
with 1.25 inch
Orifice Diameter
8 ft. weir
ID 8.5**

MATCHLINE -L- STA. 427+50.00 SHEET 7

MATCHLINE -L- STA. 440+50.00 SHEET 9

SEE DETAIL D LATERAL 2' BASE DITCH W/CL B RIP RAP EST 292 TONS EST 768 SY GEO EST CY DDE

95" X 67" CSFA W/3" X 1" COURRAGONS AND HEADWALL/ENDWALL BURIED 1.0'

-SRSA- PRC Sta. 12+27.64

-YIRPD- POT Sta. 10+00.00 =
-L- POC Sta. 430+49.79
(59.00' RT.)

BEGIN SHOULDER BERM GUTTER
-L- STA. 436+50' LT.
8% TAPER CAT-1

SEE DETAIL DD CONSTRUCTED RIFLE POINT WEIR (POND IS DRAINED)

CL B RIP RAP EST 2 TONS EST 7 SY GEO

SEE DETAIL T STD. 2' BASE DITCH W/CL B RIP RAP EST 44 TONS EST 115 SY GEO EST 29 CY DDE

SEE DETAIL K SPECIAL CUT DITCH

END 47" W.W. FENCE TIE TO WING WALL
1' SILL
SEE DETAIL II

DRAIN POND

CL I RIP RAP EST 2 TONS EST 8 SY GEO

CL I RIP RAP EST 20 TONS EST 39 SY GEO

SEE DETAIL E TOE PROTECTION W/CL B RIP RAP EST 46 TONS EST 124 SY GEO

CL B RIP RAP EST 3 TONS EST 10 SY GEO

CL B RIP RAP EST 3 TONS LT. EST 10 SY GEO RT. EST 10 SY GEO

CL B RIP RAP EST 11 TONS EST 28 SY GEO

CL B RIP RAP EST 3 TONS LT. EST 10 SY GEO RT. EST 10 SY GEO

CL B RIP RAP EST 3 TONS EST 10 SY GEO

SEE DETAIL O STANDARD 8" BASE DITCH W/EMBEDDED CL I RIP RAP EST 40 TONS

SEE DETAIL H CL I RIP RAP ON BANKS ONLY EST 45 TONS LENGTH=25'

SEE DETAIL J LATERAL 2' BASE DITCH W/CL B RIP RAP EST 219 TONS EST 519 SY GEO EST CY DDE

SEE DETAIL D LATERAL 2' BASE DITCH W/CL B RIP RAP EST 292 TONS EST 768 SY GEO EST CY DDE

SEE DETAIL D LATERAL 2' BASE DITCH W/CL B RIP RAP EST 292 TONS EST 768 SY GEO EST CY DDE

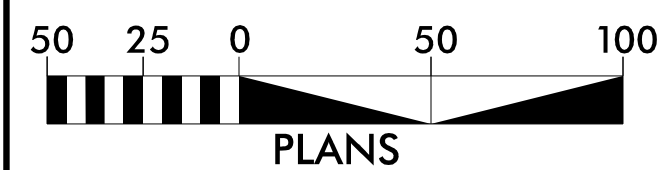
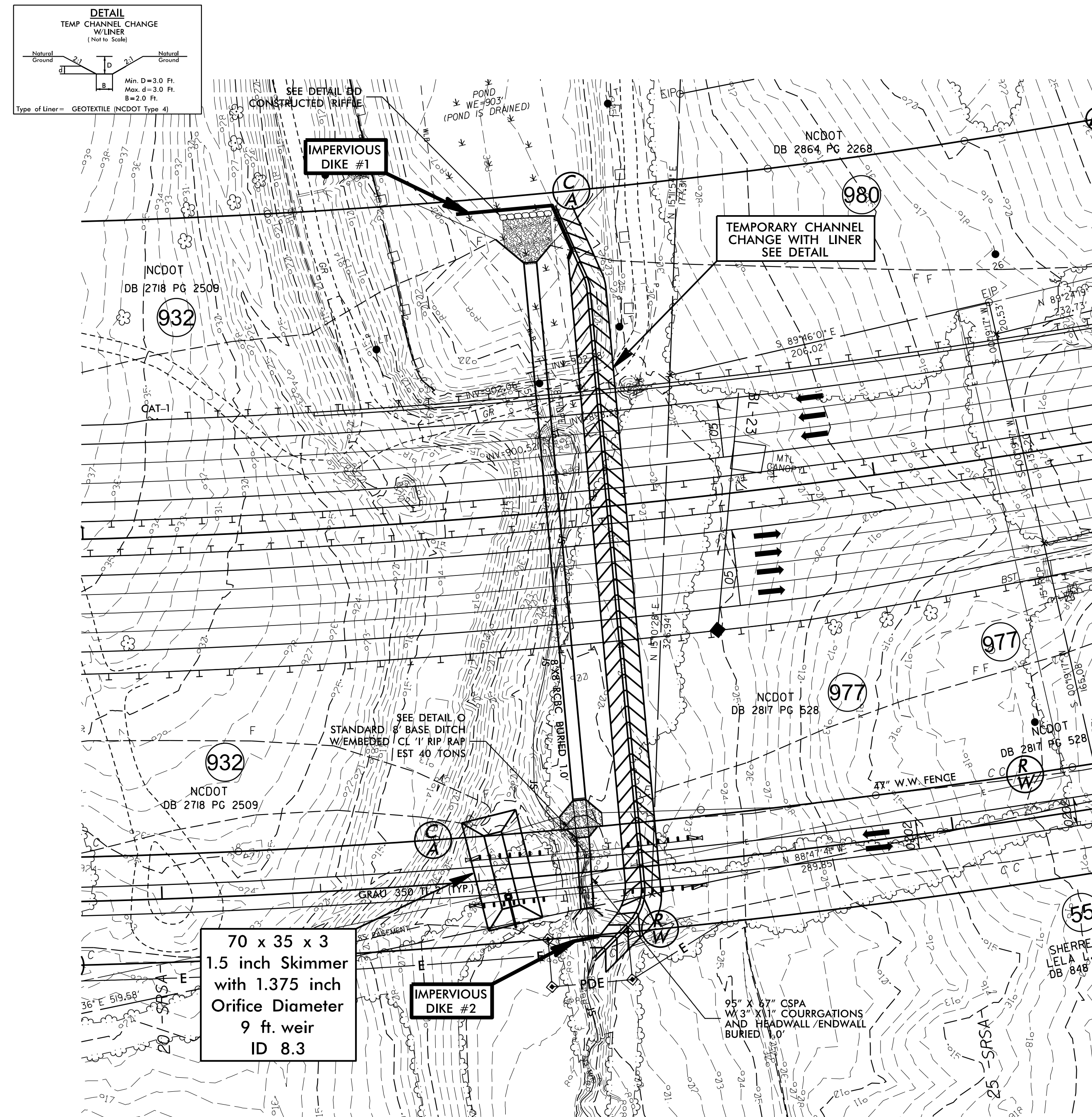
SEE DETAIL D LATERAL 2' BASE DITCH W/CL B RIP RAP EST 292 TONS EST 768 SY GEO EST CY DDE

1@8'X8' RCBC – STA. 437+97 –L– AND 1@95"X67" CSPA – STA. 22+67 –SRSA– CONSTRUCTION SEQUENCE FRAZIER CREEK

PROJECT REFERENCE NO. <i>U-2579C</i>	SHEET NO. <i>EC-08A/CONST.08</i>
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

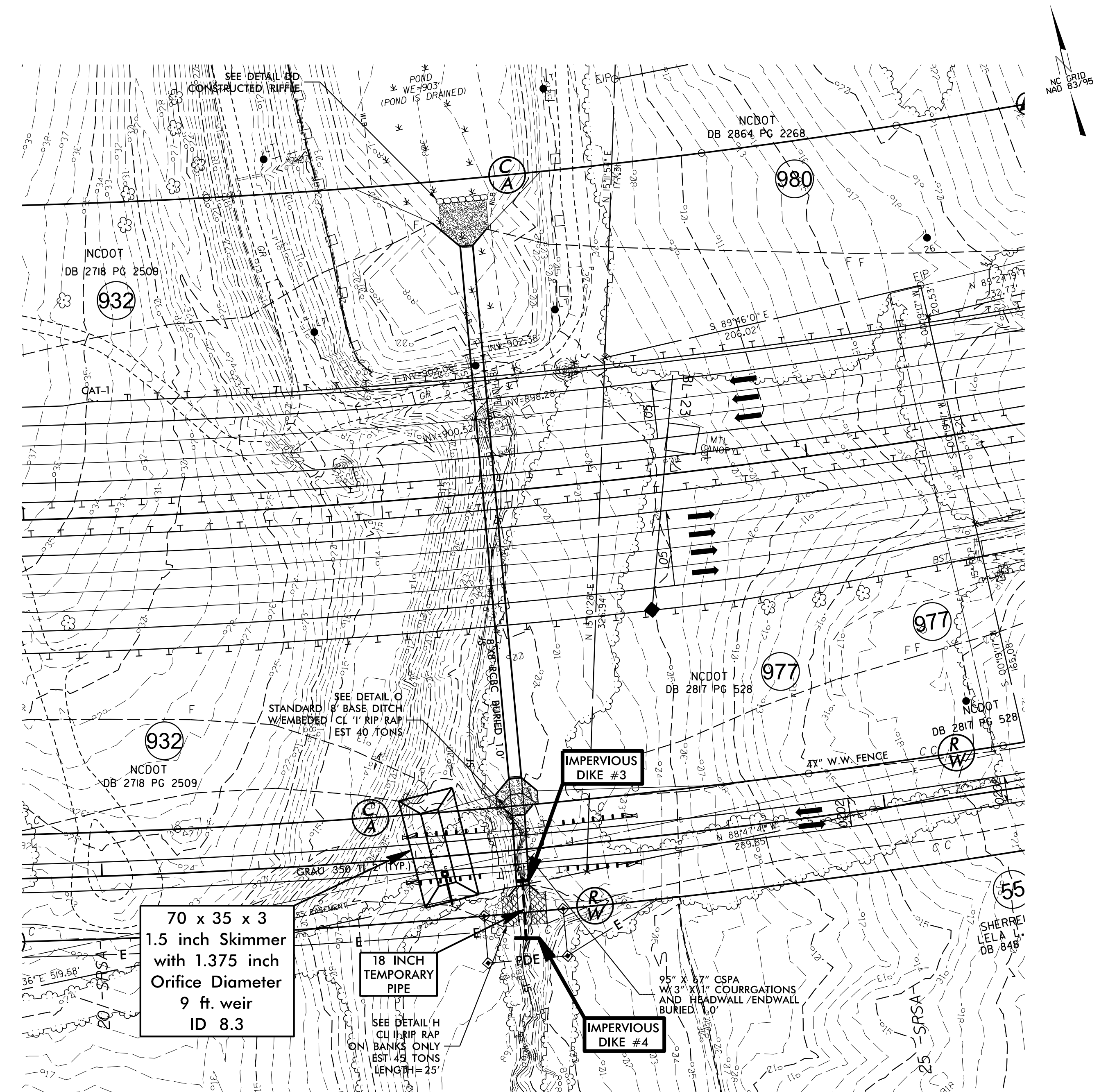
PHASE I

- 1.) CONSTRUCT SKIMMER BASIN 8.3.
- 2.) CONSTRUCT TEMPORARY CHANNEL CHANGE WITH LINER. (SEE DETAIL)
- 3.) INSTALL IMPERVIOUS DIKE #1 AND IMPERVIOUS DIKE #2.
- 4.) DIVERT FLOW THROUGH TEMPORARY CHANNEL CHANGE AND DEWATER CONSTRUCTION AREA, UTILIZING SKIMMER BASIN 8.3 FOR PUMPED EFFLUENT.
- 5.) CONSTRUCT PROPOSED 1@8'X8' RCBC, 95"X67" CSPA, UPSTREAM CONSTRUCTED RIFFLE AND 8' BASE CHANNEL BETWEEN RCBC AND CSPA, IN ACCORDANCE WITH THE PLANS.

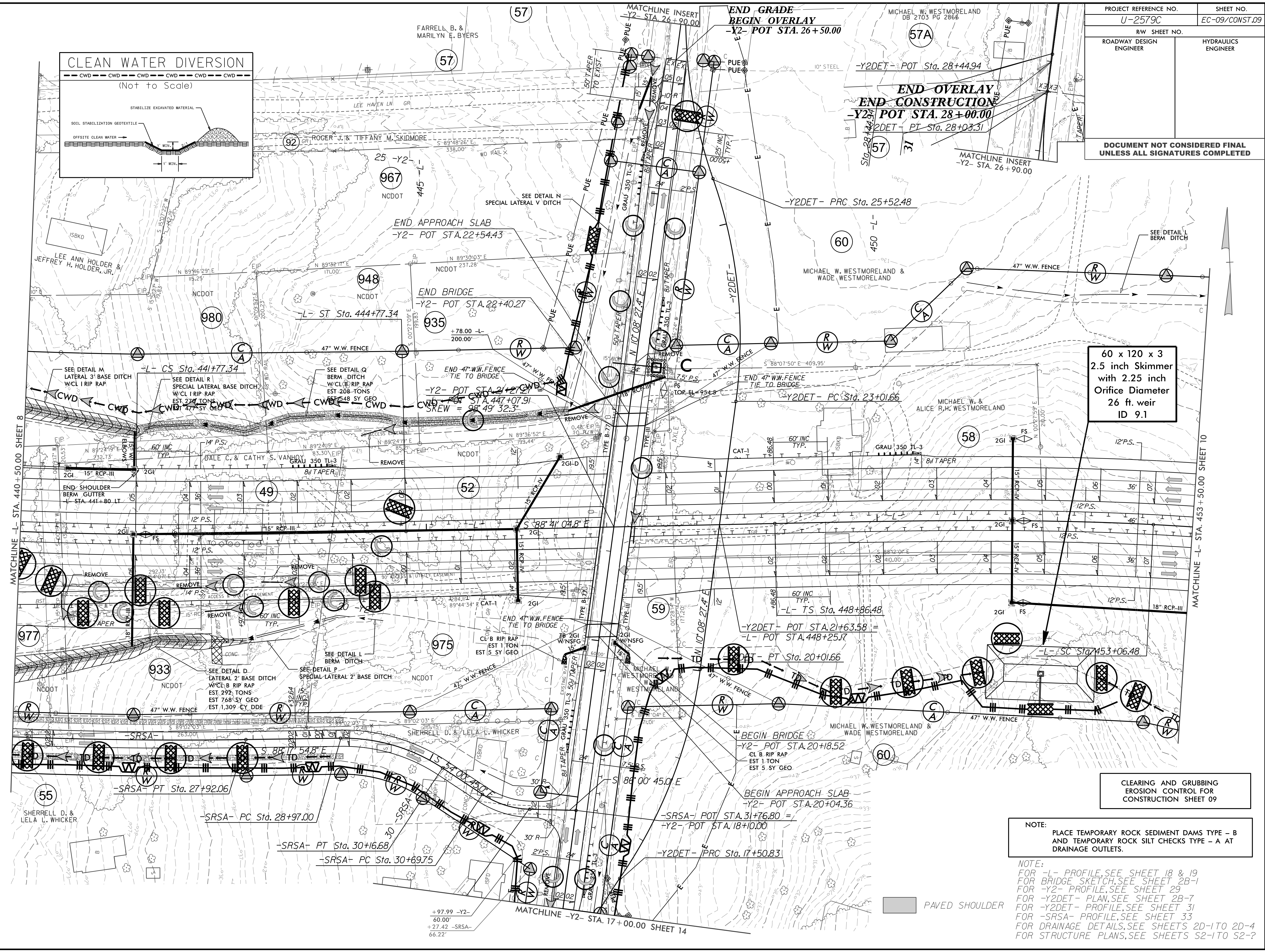
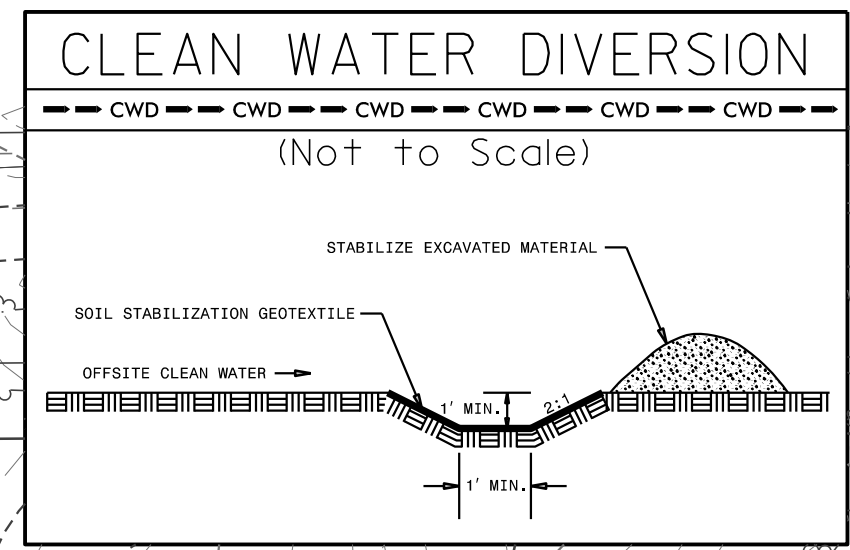


PHASE II

- 1.) REMOVE IMPERVIOUS DIKES #1, TEMPORARY CHANNEL CHANGE AND IMPERVIOUS DIKE #2, DIRECTING FLOW THROUGH RCBC AND CSPA.
- 2.) INSTALL IMPERVIOUS DIKE #3, TEMPORARY 18" FLEXIBLE PIPE AND IMPERVIOUS DIKE #4.
- 3.) DIRECT FLOW THROUGH TEMPORARY PIPE AND DEWATER CONSTRUCTION AREA UTILIZING BASIN 8.3 FOR PUMPED EFFLUENT.
- 4.) CONSTRUCT DOWNSTREAM BANK STABILIZATION, IN ACCORDANCE WITH THE PLANS.
- 5.) REMOVE IMPERVIOUS DIKE #3, TEMPORARY 18" FLEXIBLE PIPE AND IMPERVIOUS DIKE #4.
- 6.) COMPLETE ROADWAYS.



PROJECT REFERENCE NO.	SHEET NO.
U-2579C	EC-09/CONST.09
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	



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

NOTE:
FOR -L- PROFILE, SEE SHEET 18 & 19
FOR BRIDGE SKETCH, SEE SHEET 2B-1
FOR -Y2- PROFILE, SEE SHEET 29
FOR -Y2DET- PLAN, SEE SHEET 2B-7
FOR -Y2DET- PROFILE, SEE SHEET 31
FOR -SRSA- PROFILE, SEE SHEET 33
FOR DRAINAGE DETAILS, SEE SHEETS 2D-1 TO 2D-4
FOR STRUCTURE PLANS, SEE SHEETS S2-1 TO S2-?

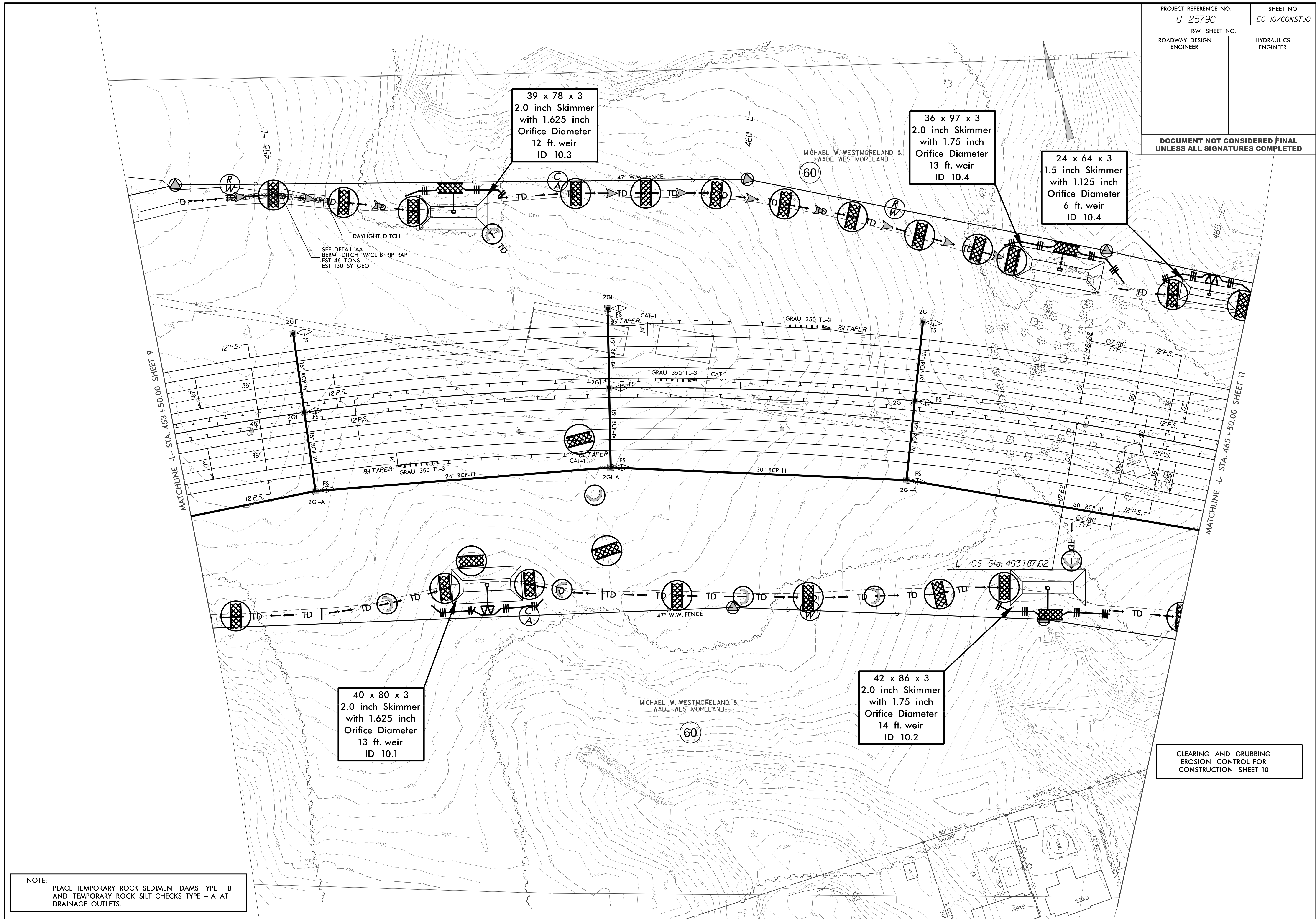
PAVED SHOULDER

MATCHLINE -L- STA. 440+50.00 SHEET 8

MATCHLINE -L- STA. 453+50.00 SHEET 10

MATCHLINE -Y2- STA. 17+00.00 SHEET 14

PROJECT REFERENCE NO.	SHEET NO.
U-2579C	EC-10/CONST.10
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	



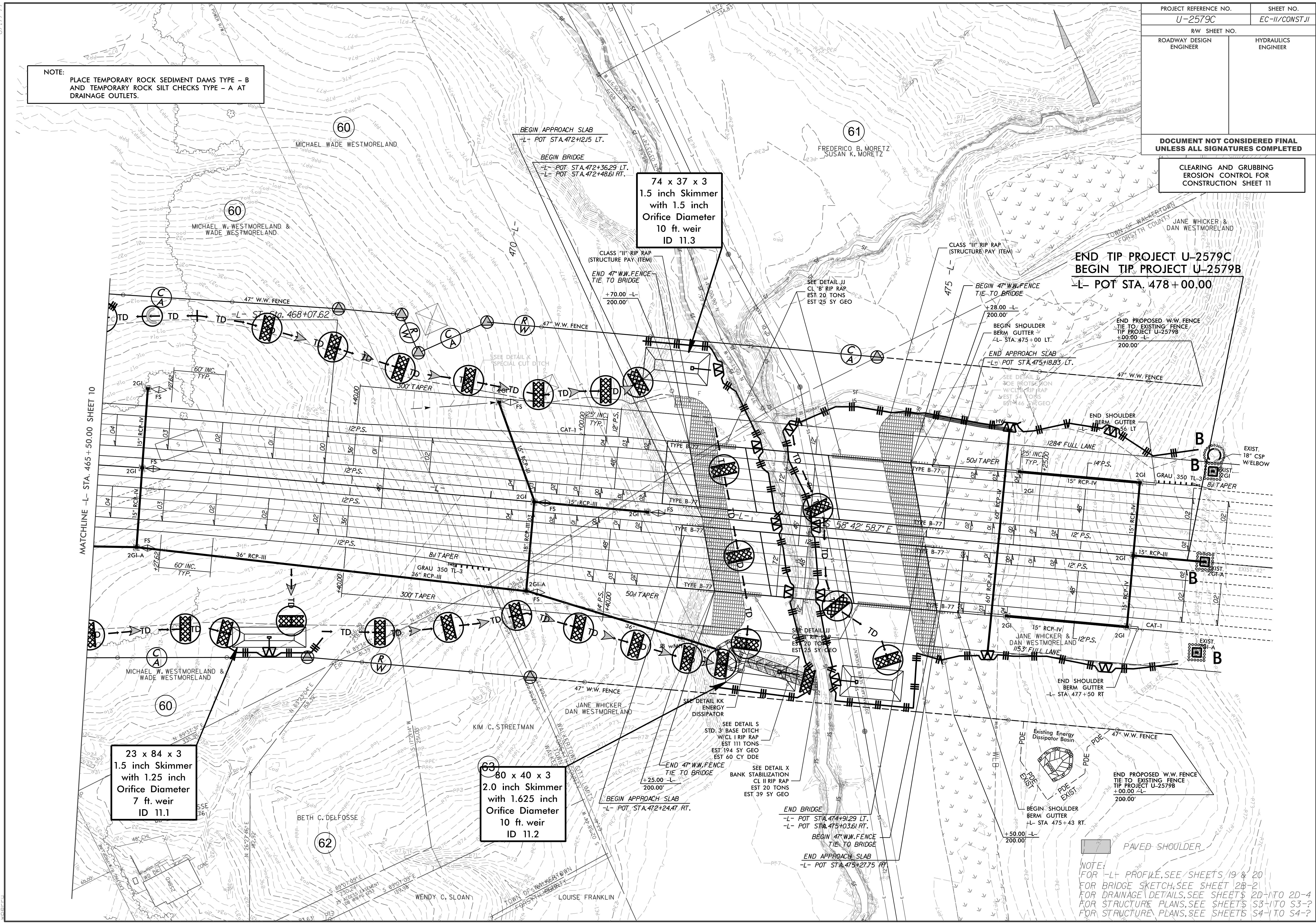
NOTE: PLACE TEMPORARY ROCK SEDIMENT DAMS TYPE - B AND TEMPORARY ROCK SILT CHECKS TYPE - A AT DRAINAGE OUTLETS.

CLEARING AND GRUBBING EROSION CONTROL FOR CONSTRUCTION SHEET 10

PROJECT REFERENCE NO. U-2579C	SHEET NO. EC-II/CONST.II
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	

CLEARING AND GRUBBING
EROSION CONTROL FOR
CONSTRUCTION SHEET 11

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



74 x 37 x 3
1.5 inch Skimmer
with 1.5 inch
Orifice Diameter
10 ft. weir
ID 11.3

23 x 84 x 3
1.5 inch Skimmer
with 1.25 inch
Orifice Diameter
7 ft. weir
ID 11.1

80 x 40 x 3
2.0 inch Skimmer
with 1.625 inch
Orifice Diameter
10 ft. weir
ID 11.2

END TIP PROJECT U-2579C
BEGIN TIP PROJECT U-2579B
-L- POT STA. 478+00.00

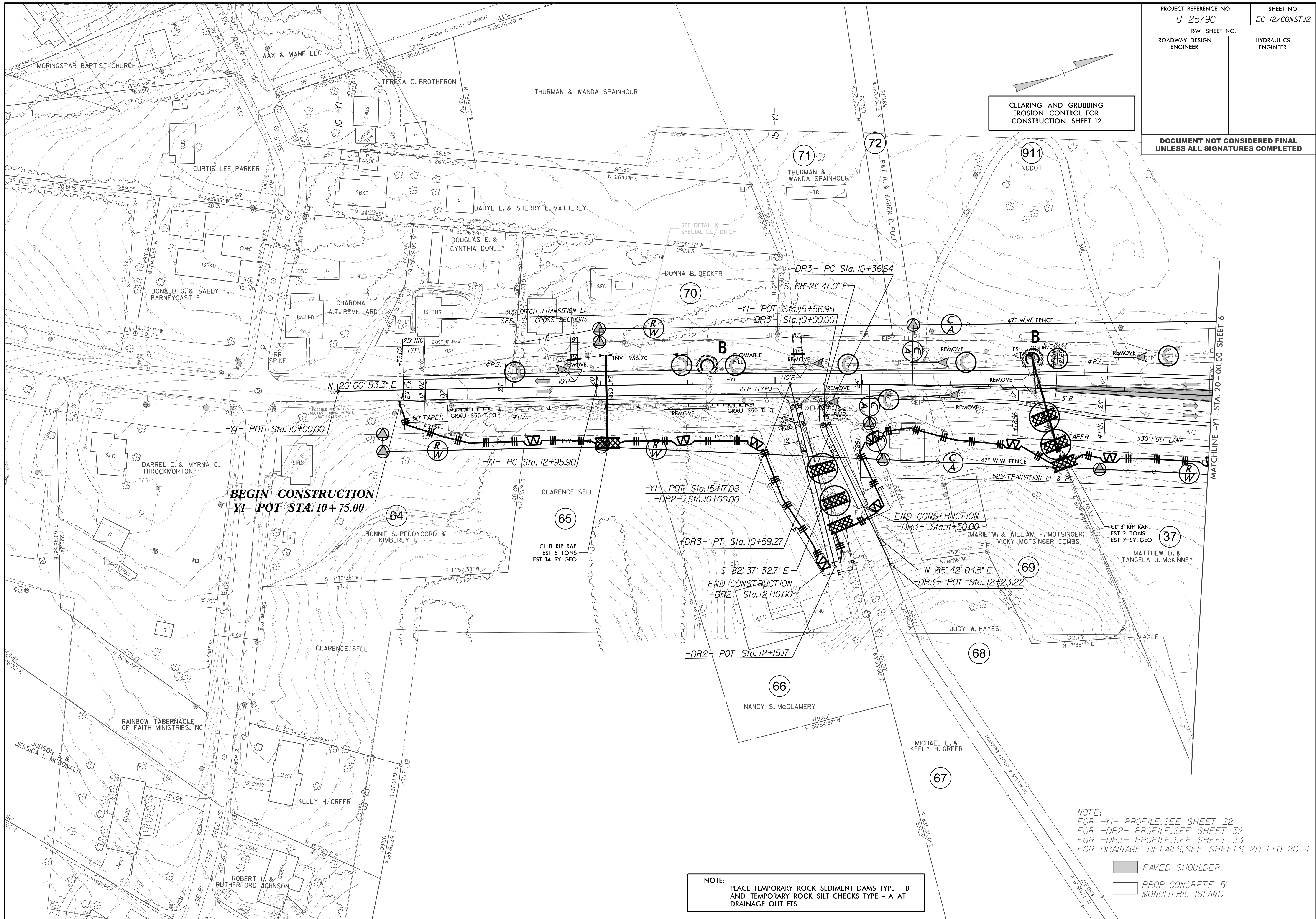
NOTE:
FOR -L- PROFILE, SEE SHEETS 19 & 20
FOR BRIDGE SKETCH, SEE SHEET 2B-2
FOR DRAINAGE DETAILS, SEE SHEETS 2D-1 TO 2D-4
FOR STRUCTURE PLANS, SEE SHEETS S3-1 TO S3-2
FOR STRUCTURE PLANS, SEE SHEETS S4-1 TO S4-2

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MATCHLINE -L- STA. 465+50.00 SHEET 10

PROJECT REFERENCE NO.	SHEET NO.
U-2579C	EC-12/CONST.12
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	

CLEARING AND GRUBBING
EROSION CONTROL FOR
CONSTRUCTION SHEET 12



BEGIN CONSTRUCTION
-Y1- POT STA. 10+75.00

END CONSTRUCTION
-DR3- STA. 11+50.00

END CONSTRUCTION
-DR2- STA. 12+10.00

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

NOTE:
FOR -Y1- PROFILE, SEE SHEET 22
FOR -DR2- PROFILE, SEE SHEET 32
FOR -DR3- PROFILE, SEE SHEET 33
FOR DRAINAGE DETAILS, SEE SHEETS 2D-1 TO 2D-4

- PAVED SHOULDER
- PROP. CONCRETE 5" MONOLITHIC ISLAND

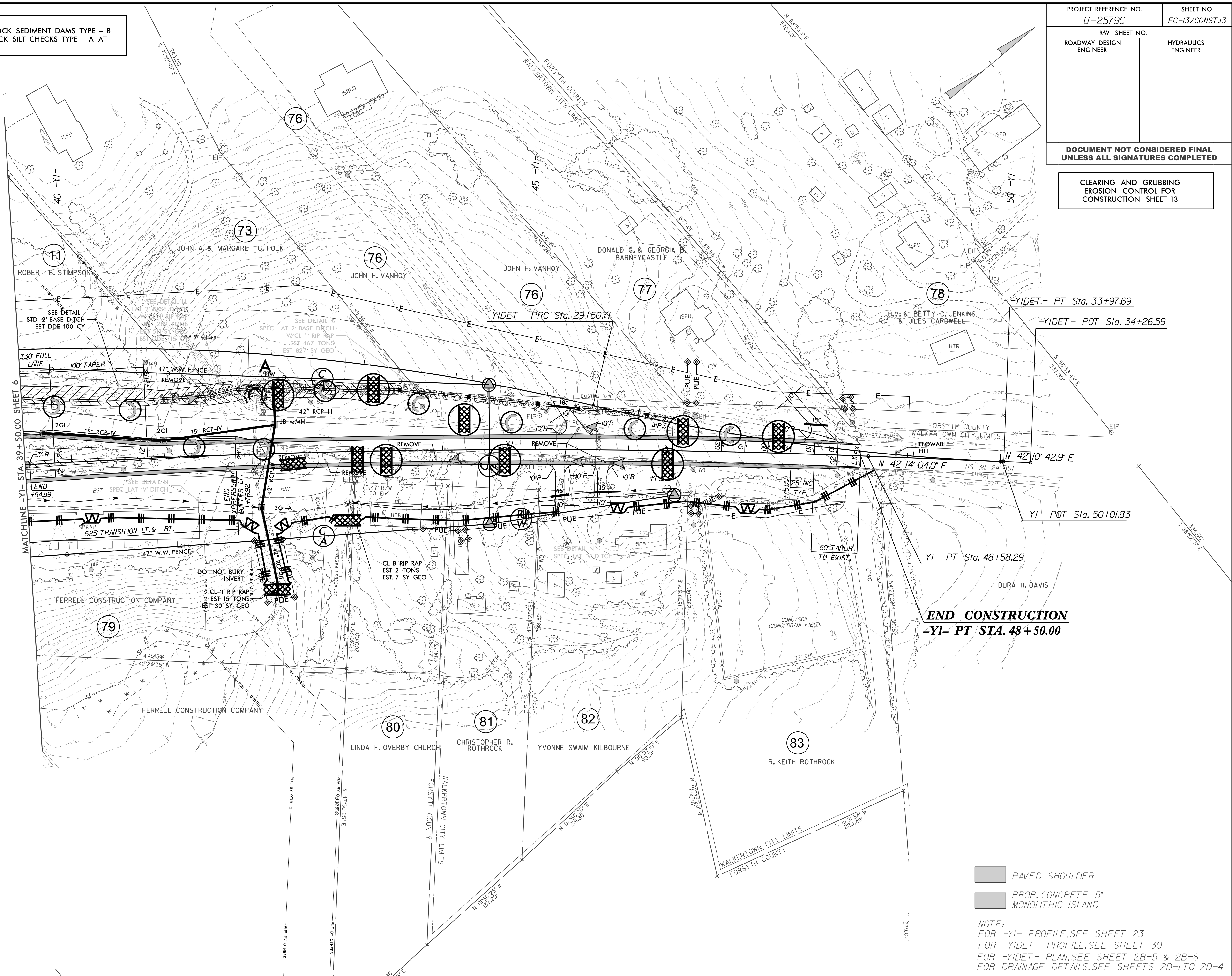
MATCHLINE -Y1- STA. 20+00.00 SHEET 6

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

PROJECT REFERENCE NO.	SHEET NO.
U-2579C	EC-13/CONST.13
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

DOCUMENT NOT CONSIDERED FINAL
UNLESS ALL SIGNATURES COMPLETED

CLEARING AND GRUBBING
EROSION CONTROL FOR
CONSTRUCTION SHEET 13



END CONSTRUCTION
-YI- PT STA. 48+50.00

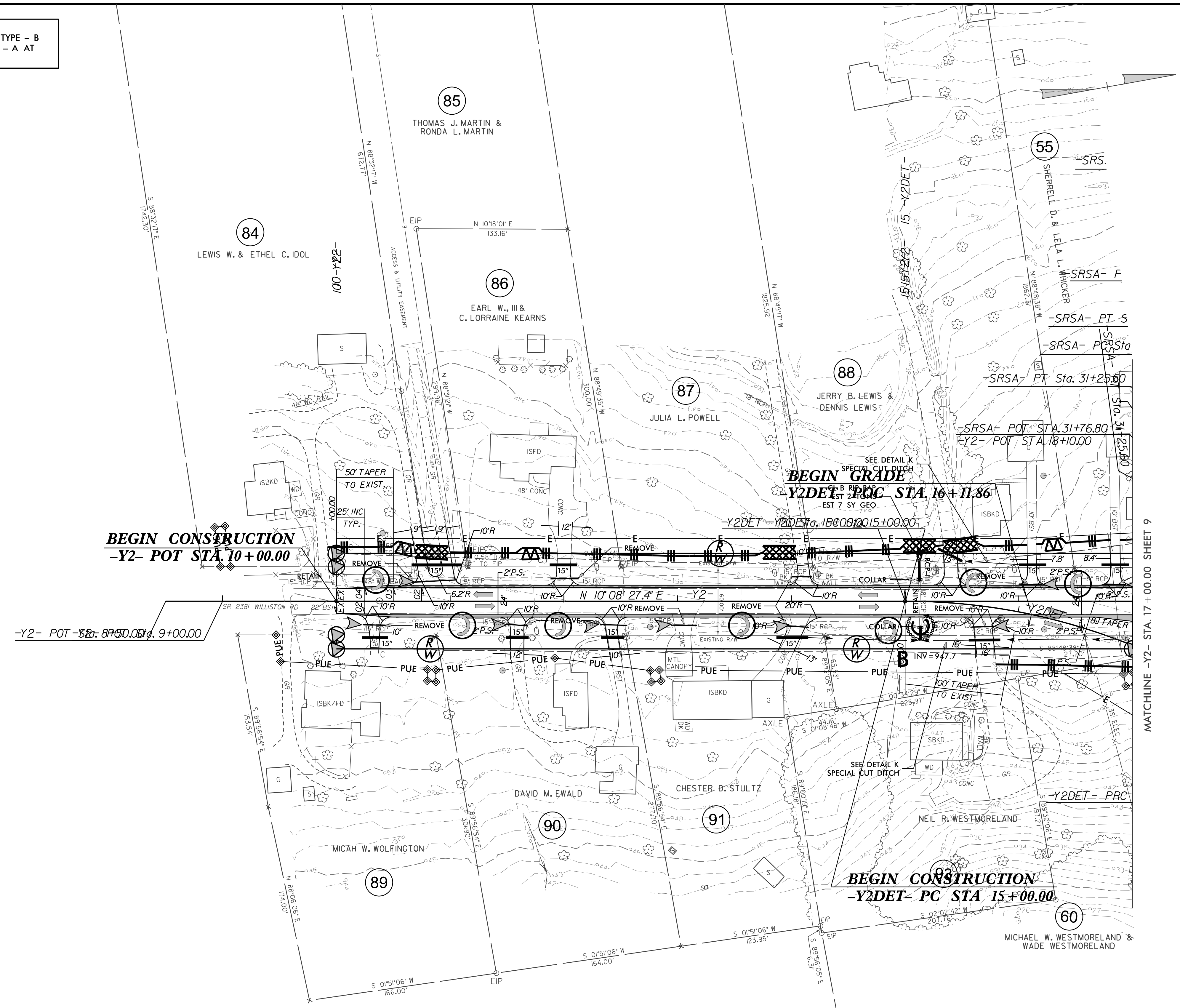
- PAVED SHOULDER
- PROP. CONCRETE 5' MONOLITHIC ISLAND

NOTE:
FOR -YI- PROFILE, SEE SHEET 23
FOR -YIDET- PROFILE, SEE SHEET 30
FOR -YIDET- PLAN, SEE SHEETS 2B-5 & 2B-6
FOR DRAINAGE DETAILS, SEE SHEETS 2D-1 TO 2D-4

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

PROJECT REFERENCE NO.	SHEET NO.
U-2579C	EC-14/CONST.14
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	

CLEARING AND GRUBBING
EROSION CONTROL FOR
CONSTRUCTION SHEET 14



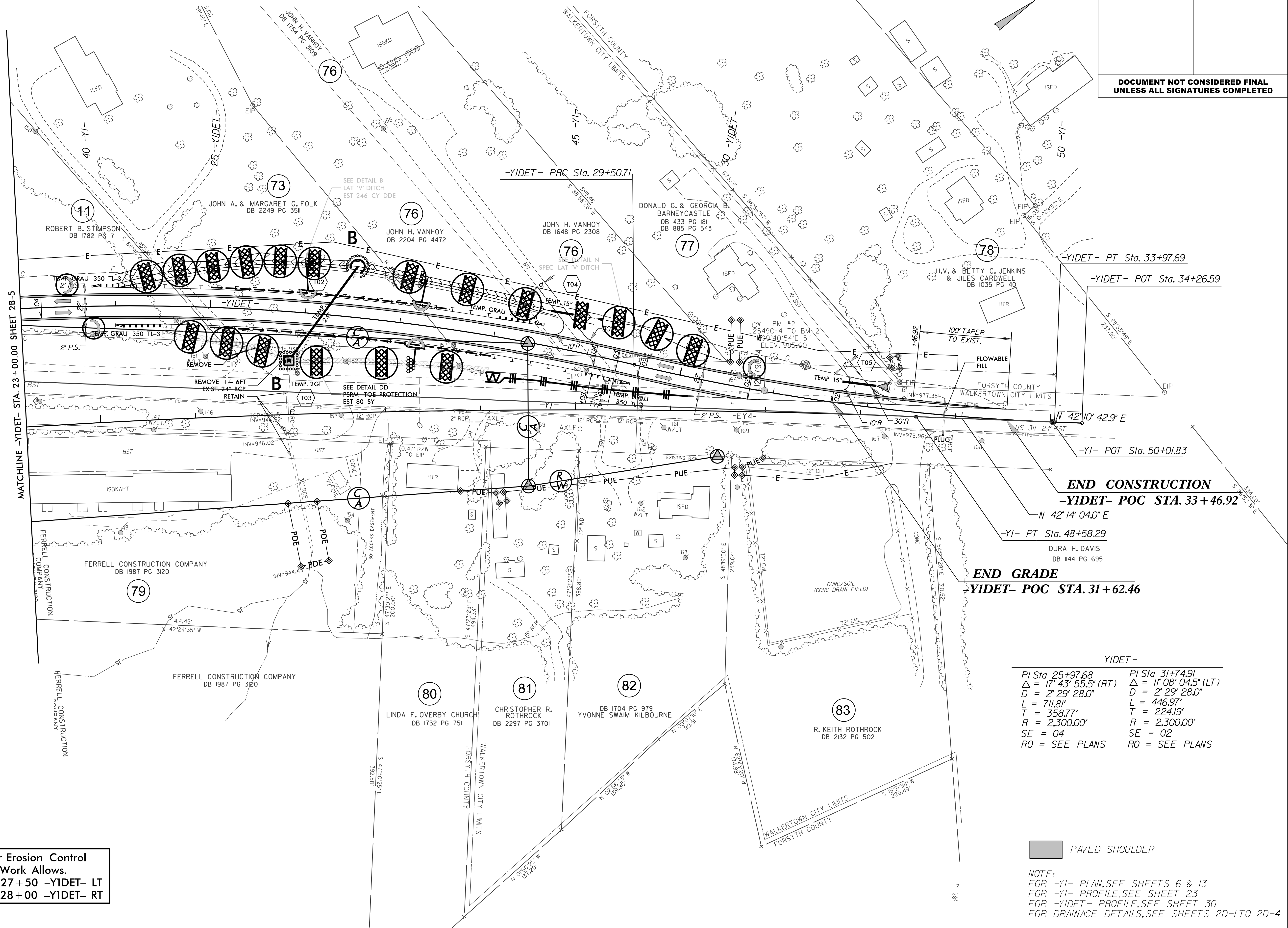
MATCHLINE -Y2- STA. 17+00.00 SHEET 9

PAVED SHOULDER

NOTE:
FOR -Y2- PROFILE, SEE SHEET 29
FOR -Y2DET- PLAN, SEE SHEET 28-7
FOR -Y2DET- PROFILE, SEE SHEET 31
FOR DRAINAGE DETAILS, SEE SHEETS 2D-1 TO 2D-4

-YI- DETOUR

PROJECT REFERENCE NO.	SHEET NO.
U-2579C	EC-16/CONST.2B6
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	



Place Matting for Erosion Control
on Slope as Work Allows.
Sta. 25+00 to Sta. 27+50 -YIDET- LT
Sta. 25+00 to Sta. 28+00 -YIDET- RT

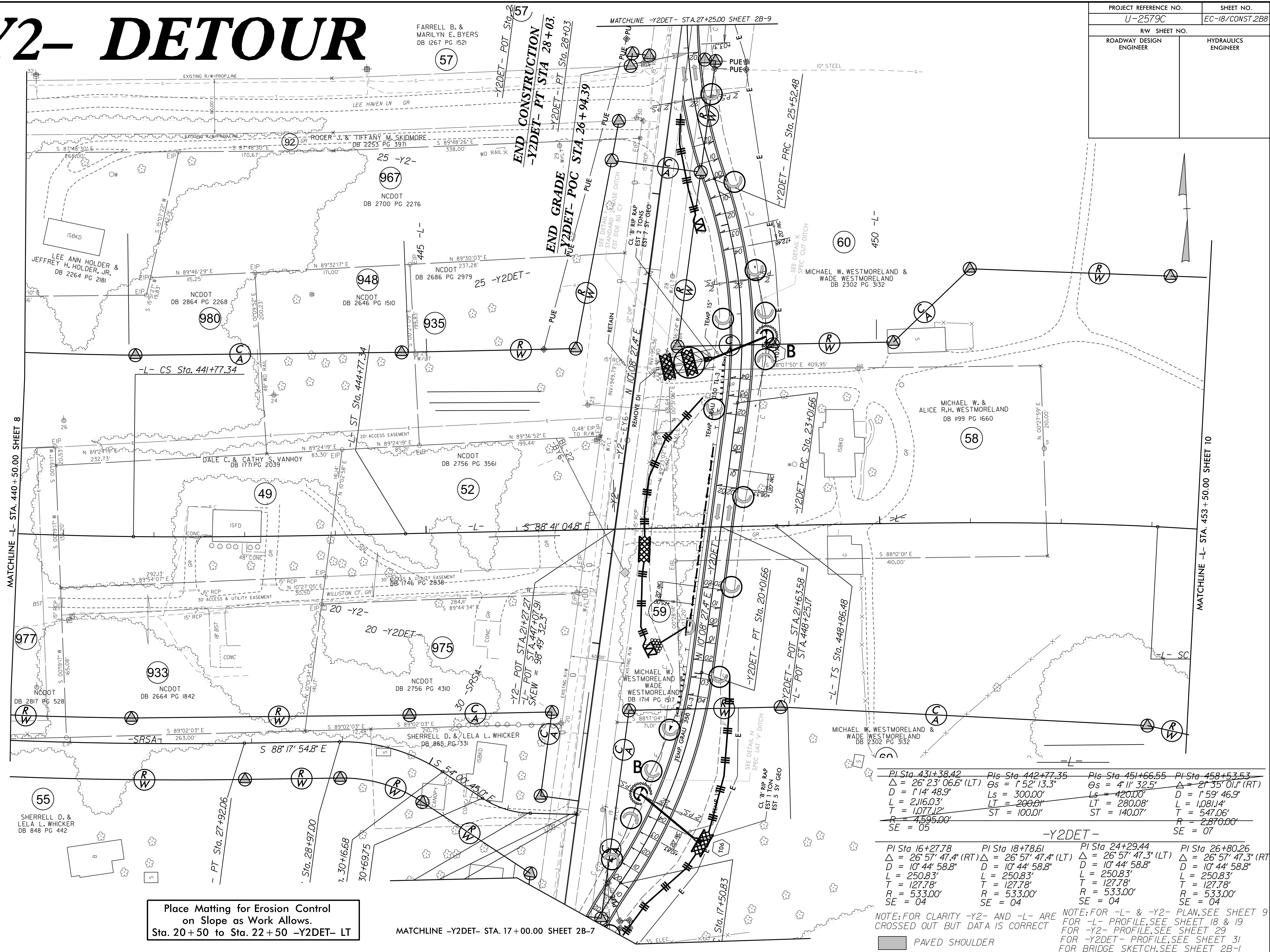
PAVED SHOULDER

NOTE:
FOR -YI- PLAN, SEE SHEETS 6 & 13
FOR -YI- PROFILE, SEE SHEET 23
FOR -YIDET- PROFILE, SEE SHEET 30
FOR DRAINAGE DETAILS, SEE SHEETS 2D-1 TO 2D-4

YIDET-	
PI Sta 25+97.68	PI Sta 31+74.91
$\Delta = 17^{\circ} 43' 55.5''$ (RT)	$\Delta = 11^{\circ} 08' 04.5''$ (LT)
D = 2' 29' 28.0"	D = 2' 29' 28.0"
L = 711.81'	L = 446.97'
T = 358.77'	T = 224.19'
R = 2,300.00'	R = 2,300.00'
SE = 04	SE = 02
RO = SEE PLANS	RO = SEE PLANS

-Y2- DETOUR

PROJECT REFERENCE NO.	SHEET NO.
U-2579C	EC-18/CONST.2BB
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER



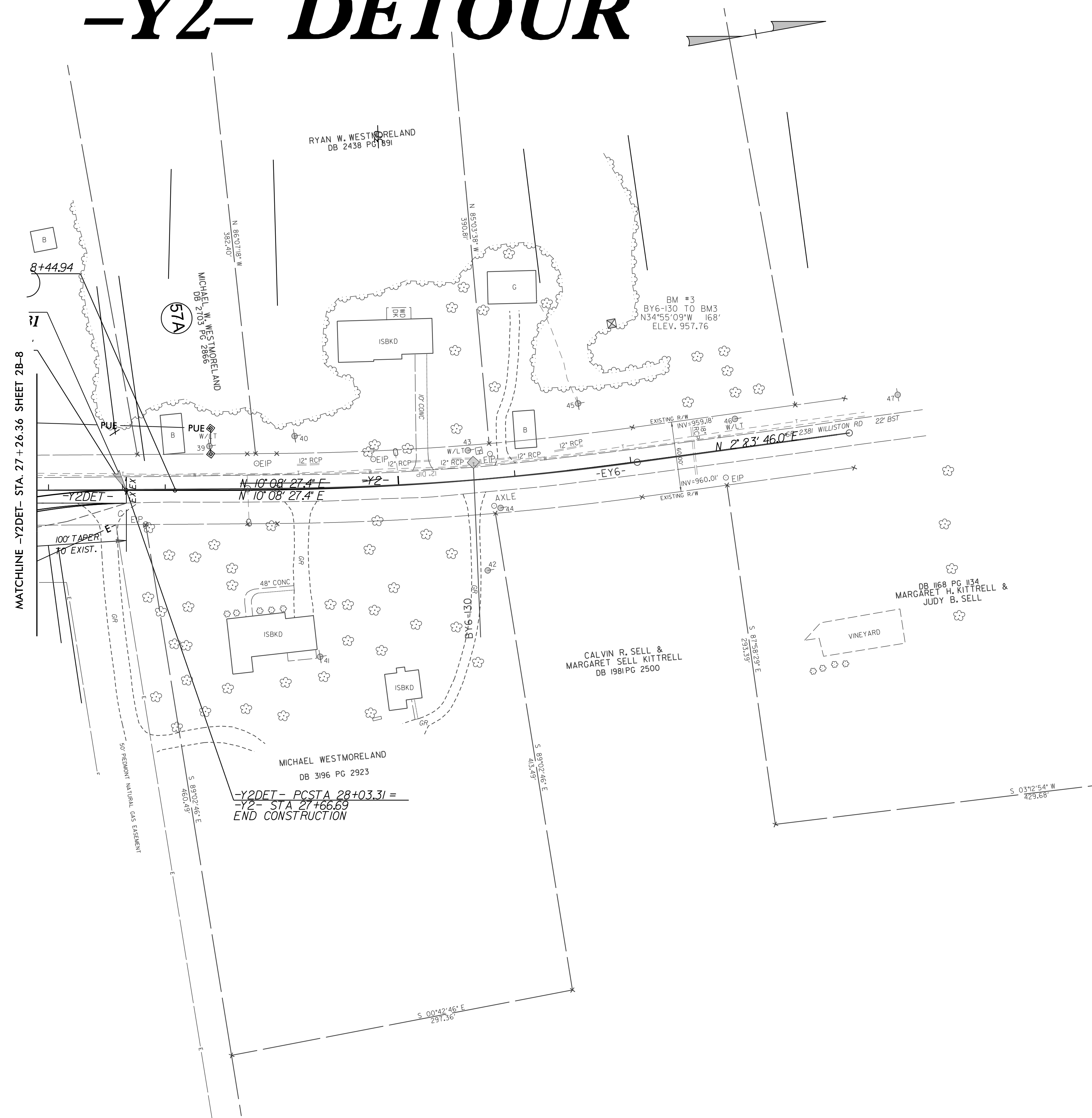
Place Matting for Erosion Control
on Slope as Work Allows.
Sta. 20+50 to Sta. 22+50 -Y2DET- LT

NOTE: FOR CLARITY -Y2- AND -L- ARE CROSSED OUT BUT DATA IS CORRECT
NOTE: FOR -L- & -Y2- PLAN, SEE SHEET 9
FOR -L- PROFILE, SEE SHEET 18 & 19
FOR -Y2- PROFILE, SEE SHEET 29
FOR -Y2DET- PROFILE, SEE SHEET 31
FOR BRIDGE SKETCH, SEE SHEET 2B-1

PAVED SHOULDER

-Y2- DETOUR

PROJECT REFERENCE NO.	SHEET NO.
U-2579C	EC-19/CONST.2B9
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER



MATCHLINE -Y2DET- STA. 27 + 26.36 SHEET 2B-8

-Y2DET- PCSTA 28+03.31 =
-Y2- STA 27+66.69
END CONSTRUCTION

PAVED SHOULDER

-Y2DET-
PI Sta 26+80.26
 $\Delta = 26^\circ 57' 47.3''$ (RT)
 $D = 10^\circ 44' 58.8''$
 $L = 250.83'$
 $T = 127.78'$
 $R = 533.00'$

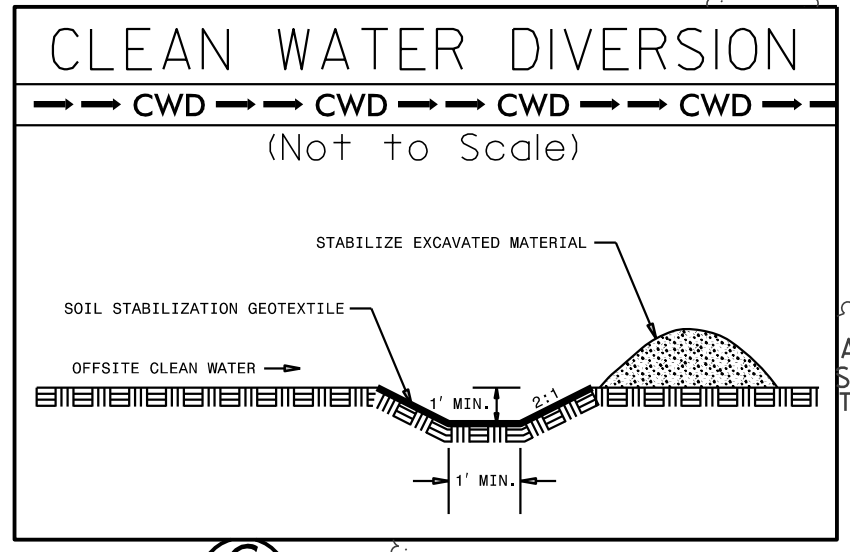
NOTE: FOR CLARITY -Y2- IS CROSSED OUT BUT DATA IS CORRECT
NOTE:
FOR -Y2- PLAN, SEE SHEET 9
FOR -Y2- PROFILE, SEE SHEET 29
FOR -Y2DET- PROFILE, SEE SHEET 31

PROJECT REFERENCE NO.	SHEET NO.
U-2579C	EC-20/CONST.04
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	

-Y3- -Y4-

PI Sta 29+34.40 PI Sta 11+82.16
 $\Delta = 30'12'45.2"$ (RT) $\Delta = 19'40'26.4"$ (LT)
 $D = 2'58'35.1"$ $D = 15'54'55.8"$
 $L = 1,015.07'$ $L = 123.62'$
 $T = 519.63'$ $T = 62.42'$
 $R = 1,925.00'$ $R = 360.00'$
SE = 05
RO = SEE PLANS

END CONSTRUCTION
-Y3- POT STA. 26+50.00



48 x 12 x 3
ID 4.2

BEGIN TIP PROJECT U-2579C
BEGIN GRADING
-L- POT STA. 373+00.00

BEGIN CONSTRUCTION
-Y3- POT STA. 13+25.00

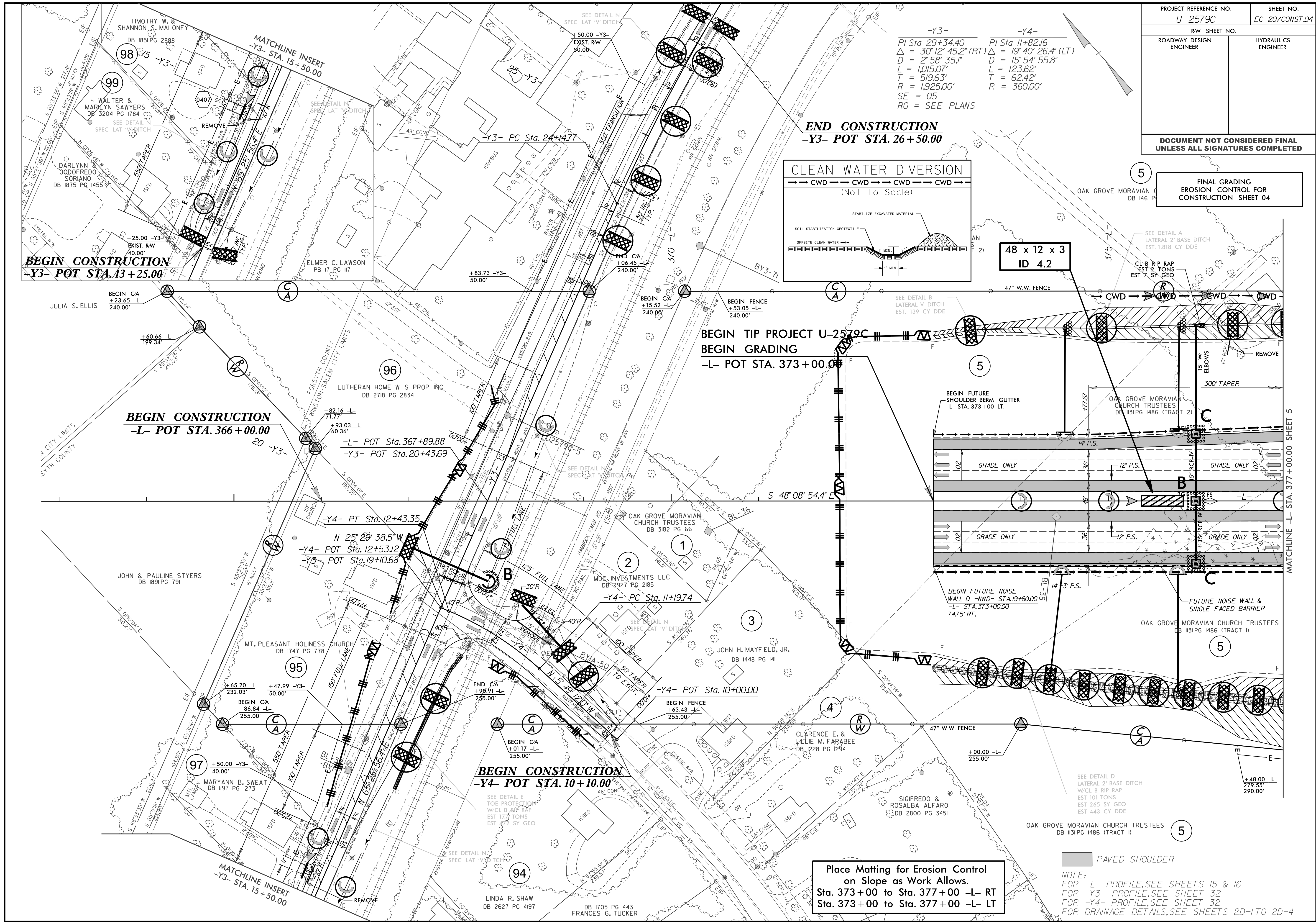
BEGIN CONSTRUCTION
-L- POT STA. 366+00.00

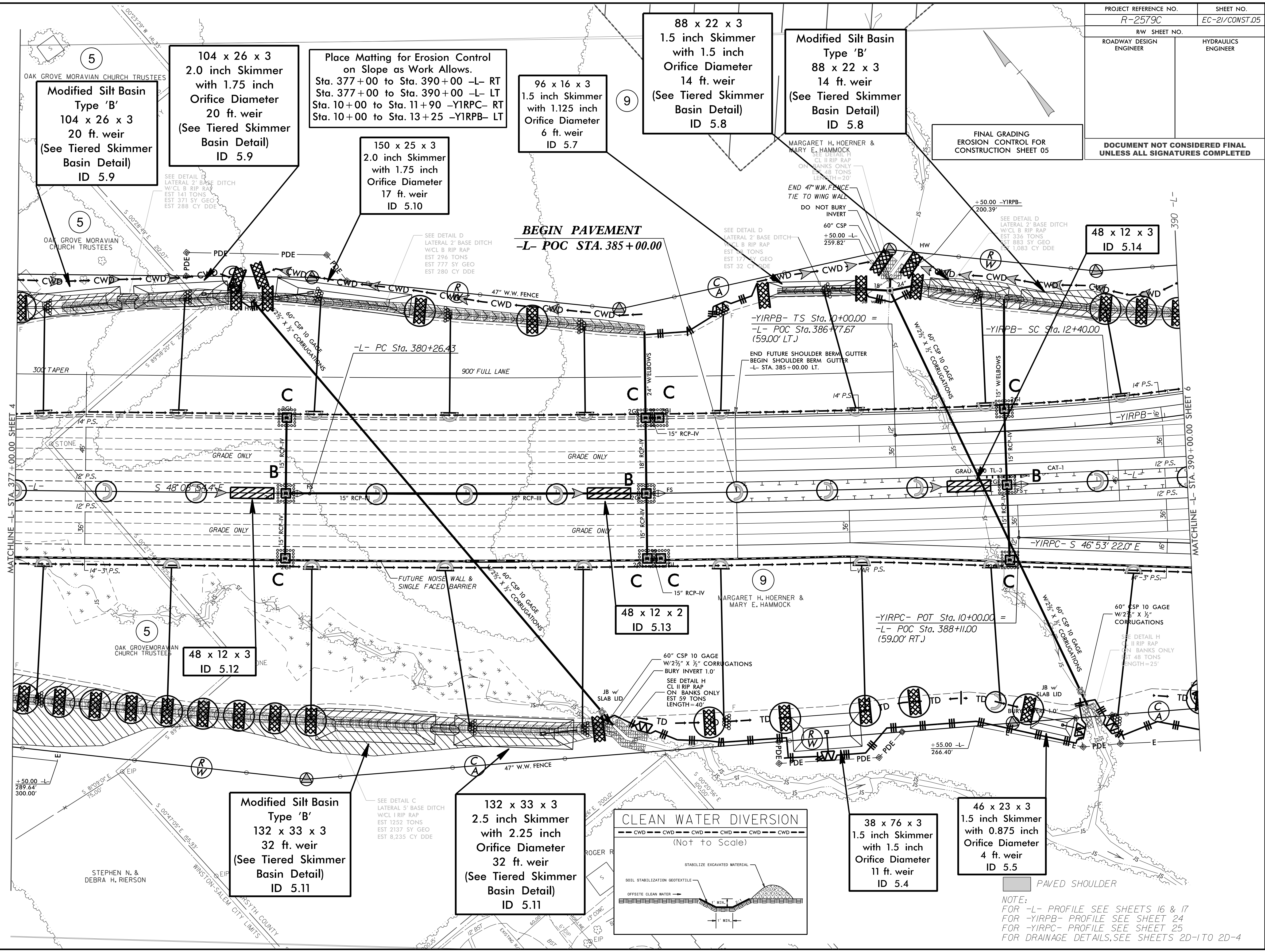
BEGIN CONSTRUCTION
-Y4- POT STA. 10+10.00

Place Matting for Erosion Control
on Slope as Work Allows.
Sta. 373+00 to Sta. 377+00 -L- RT
Sta. 373+00 to Sta. 377+00 -L- LT

PAVED SHOULDER

NOTE:
FOR -L- PROFILE, SEE SHEETS 15 & 16
FOR -Y3- PROFILE, SEE SHEET 32
FOR -Y4- PROFILE, SEE SHEET 32
FOR DRAINAGE DETAILS, SEE SHEETS 2D-1 TO 2D-4





NOTE:
FOR -L- PROFILE SEE SHEETS 16 & 17
FOR -YIRPB- PROFILE SEE SHEET 24
FOR -YIRPC- PROFILE SEE SHEET 25
FOR DRAINAGE DETAILS, SEE SHEETS 2D-1 TO 2D-4

6/13/2017 Ec.dsn_psh_22_fg.dgn 8.177.99

Place Matting for Erosion Control on Slope as Work Allows.

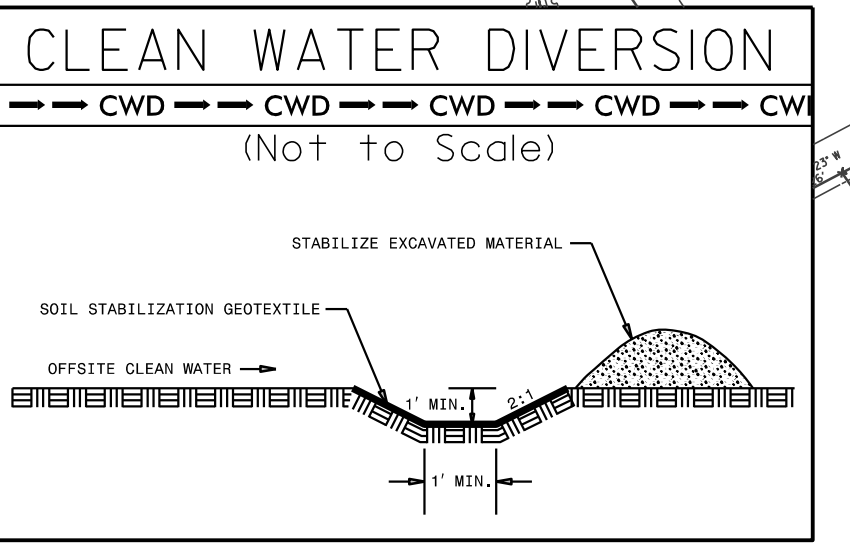
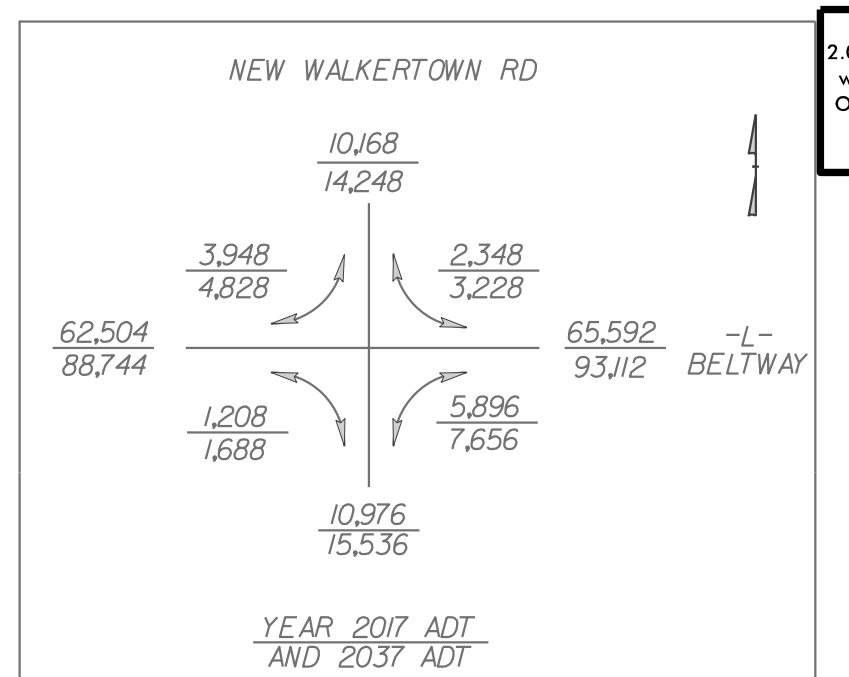
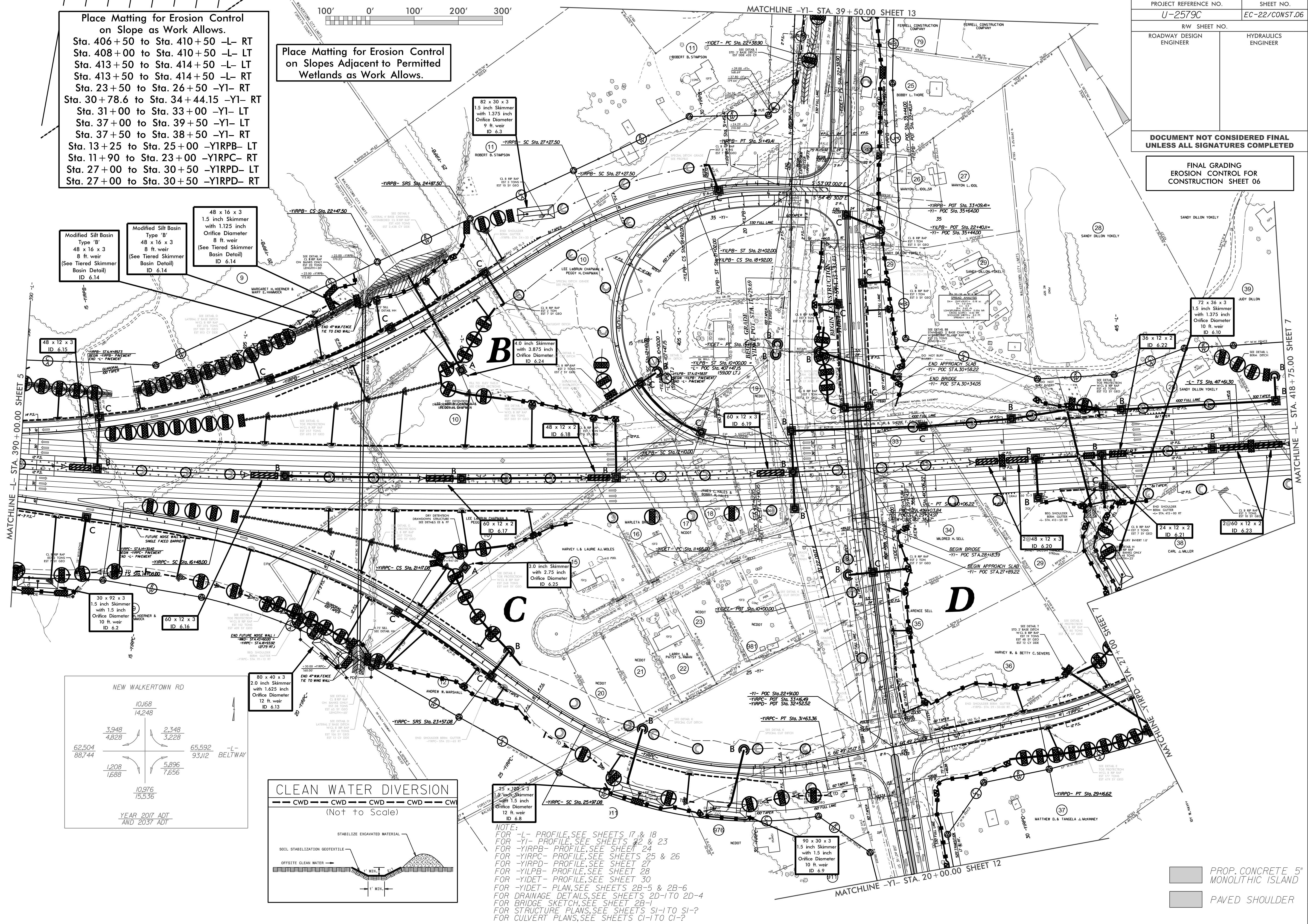
Sta. 406+50 to Sta. 410+50 -L- RT
 Sta. 408+00 to Sta. 410+50 -L- LT
 Sta. 413+50 to Sta. 414+50 -L- LT
 Sta. 413+50 to Sta. 414+50 -L- RT
 Sta. 23+50 to Sta. 26+50 -Y1- RT
 Sta. 30+78.6 to Sta. 34+44.15 -Y1- RT
 Sta. 31+00 to Sta. 33+00 -Y1- LT
 Sta. 37+00 to Sta. 39+50 -Y1- LT
 Sta. 37+50 to Sta. 38+50 -Y1- RT
 Sta. 13+25 to Sta. 25+00 -Y1RPB- LT
 Sta. 11+90 to Sta. 23+00 -Y1RPC- RT
 Sta. 27+00 to Sta. 30+50 -Y1RPD- LT
 Sta. 27+00 to Sta. 30+50 -Y1RPD- RT

Place Matting for Erosion Control on Slopes Adjacent to Permitted Wetlands as Work Allows.

Modified Silt Basin Type 'B'
 48 x 16 x 3
 8 ft. weir
 (See Tiered Skimmer Basin Detail)
 ID 6.14

Modified Silt Basin Type 'B'
 48 x 16 x 3
 8 ft. weir
 (See Tiered Skimmer Basin Detail)
 ID 6.14

48 x 16 x 3
 1.5 inch Skimmer with 1.125 inch Orifice Diameter
 8 ft. weir
 (See Tiered Skimmer Basin Detail)
 ID 6.14



NOTE:
 FOR -L- PROFILE, SEE SHEETS 17 & 18
 FOR -Y1- PROFILE, SEE SHEETS 22 & 23
 FOR -Y1RPB- PROFILE, SEE SHEET 24
 FOR -Y1RPC- PROFILE, SEE SHEETS 25 & 26
 FOR -Y1RPD- PROFILE, SEE SHEET 27
 FOR -Y1DET- PROFILE, SEE SHEET 30
 FOR -Y1DET- PLAN, SEE SHEETS 2B-5 & 2B-6
 FOR DRAINAGE DETAILS, SEE SHEETS 2D-1 TO 2D-4
 FOR BRIDGE SKETCH, SEE SHEET 2B-1
 FOR STRUCTURE PLANS, SEE SHEETS S1-1 TO S1-7
 FOR CULVERT PLANS, SEE SHEETS C1-1 TO C1-7

PROJECT REFERENCE NO.	SHEET NO.
U-2579C	EC-22/CONST.06
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

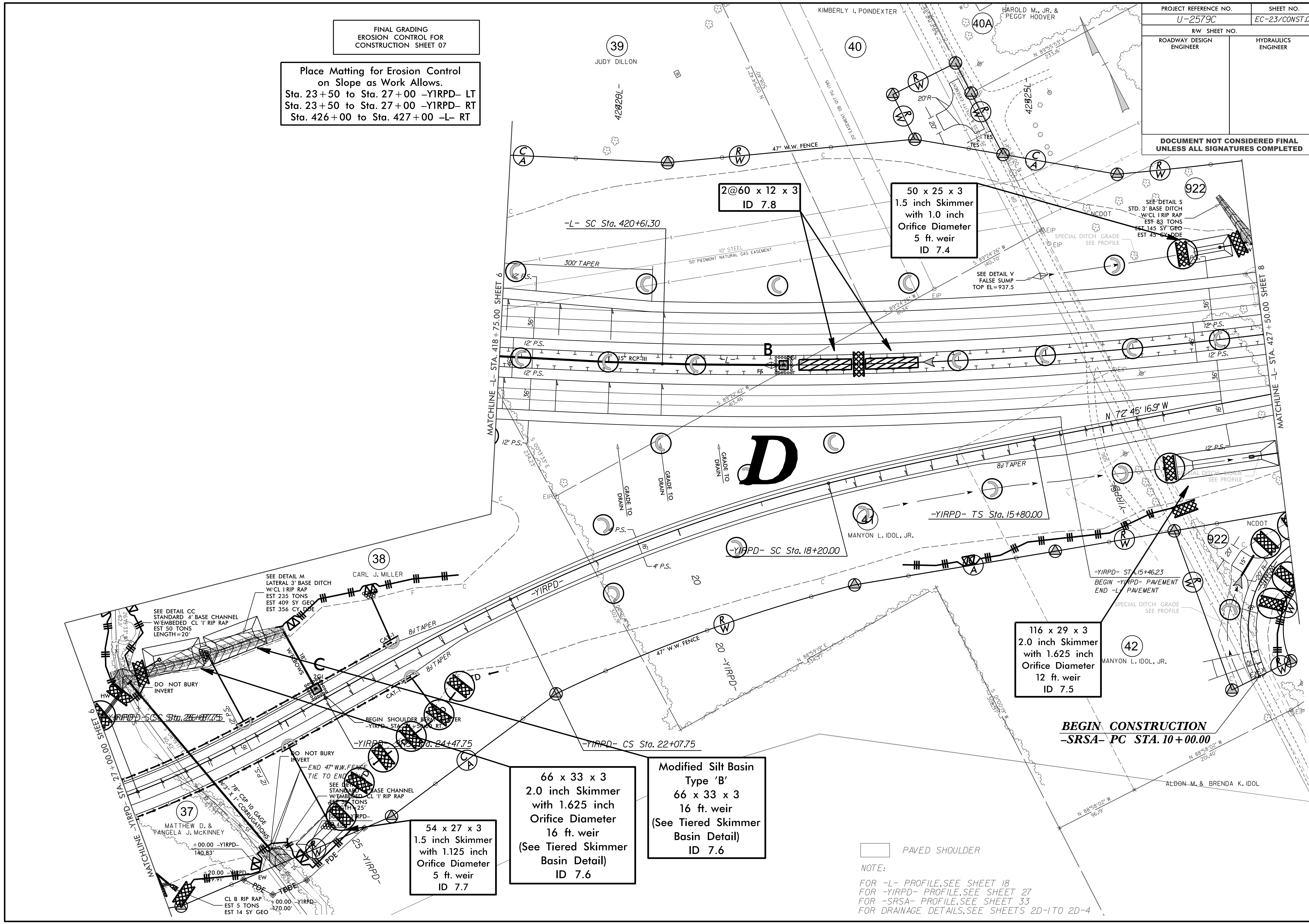
FINAL GRADING EROSION CONTROL FOR CONSTRUCTION SHEET 06

PROP. CONCRETE 5' MONOLITHIC ISLAND
 PAVED SHOULDER

PROJECT REFERENCE NO. U-2579C	SHEET NO. EC-23/CONST.07
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	

FINAL GRADING
EROSION CONTROL FOR
CONSTRUCTION SHEET 07

Place Matting for Erosion Control
on Slope as Work Allows.
Sta. 23+50 to Sta. 27+00 -YIRPD- LT
Sta. 23+50 to Sta. 27+00 -YIRPD- RT
Sta. 426+00 to Sta. 427+00 -L- RT



2@60 x 12 x 3
ID 7.8

50 x 25 x 3
1.5 inch Skimmer
with 1.0 inch
Orifice Diameter
5 ft. weir
ID 7.4

116 x 29 x 3
2.0 inch Skimmer
with 1.625 inch
Orifice Diameter
12 ft. weir
ID 7.5

66 x 33 x 3
2.0 inch Skimmer
with 1.625 inch
Orifice Diameter
16 ft. weir
(See Tiered Skimmer
Basin Detail)
ID 7.6

54 x 27 x 3
1.5 inch Skimmer
with 1.125 inch
Orifice Diameter
5 ft. weir
ID 7.7

Modified Silt Basin
Type 'B'
66 x 33 x 3
16 ft. weir
(See Tiered Skimmer
Basin Detail)
ID 7.6

PAVED SHOULDER

NOTE:
FOR -L- PROFILE, SEE SHEET 18
FOR -YIRPD- PROFILE, SEE SHEET 27
FOR -SRSA- PROFILE, SEE SHEET 33
FOR DRAINAGE DETAILS, SEE SHEETS 2D-1 TO 2D-4

PAVED SHOULDER

NOTE:
FOR -L- PROFILE, SEE SHEET 18
FOR -YIRPD- PROFILE, SEE SHEET 27
FOR -SRSA- PROFILE, SEE SHEET 33
FOR DRAINAGE DETAILS, SEE SHEETS 2D-1 TO 2D-4
FOR CULVERT PLANS, SEE SHEETS C2-1 TO C2-2

CLEARING AND GRUBBING
EROSION CONTROL FOR
CONSTRUCTION SHEET 08

Place Matting for Erosion Control
on Slope as Work Allows.
Sta. 432+00 to Sta. 440+50 -L- RT
Sta. 435+50 to Sta. 440+50 -L- LT
Sta. 20+00 to 21+66 -SRSA- LT

Place Matting for Erosion Control
on Slopes Adjacent to Permitted
Wetlands as Work Allows.

130 x 26 x 3
2.0 inch Skimmer
with 1.875 inch
Orifice Diameter
25 ft. weir
(See Tiered Skimmer
Basin Detail)
ID 8.10

Modified Silt Basin
Type 'B'
130 x 26 x 3
18 ft. weir
(See Tiered Skimmer
Basin Detail)
ID 8.10

84 x 21 x 3
1.5 inch Skimmer
with 1.25 inch
Orifice Diameter
7 ft. weir
ID 8.6

84 x 21 x 3
1.5 inch Skimmer
with 1.25 inch
Orifice Diameter
6 ft. weir
ID 8.7

68 x 17 x 3
1.5 inch Skimmer
with 0.875 inch
Orifice Diameter
4 ft. weir
ID 8.8

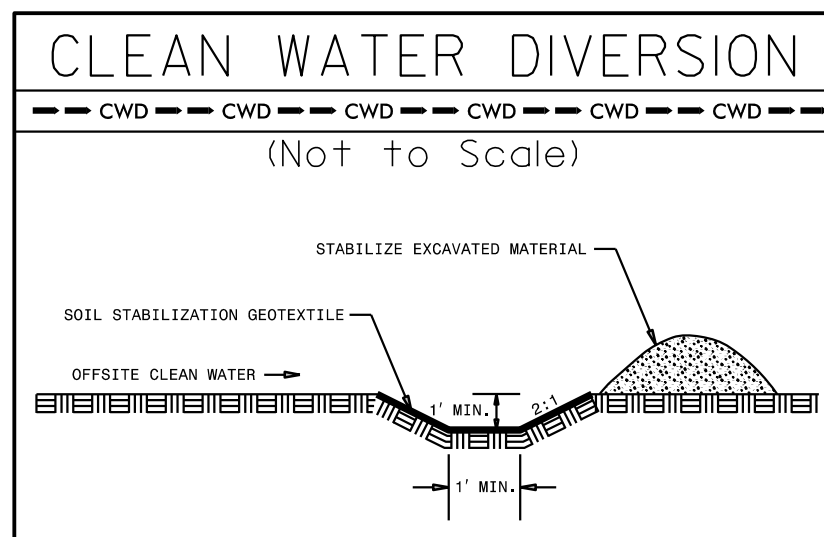
2@60 x 12 x 3
ID 8.11

2@36 x 12 x 3
ID 8.12

2@72 x 12 x 3
ID 9.2

95 x 19 x 3
1.5 inch Skimmer
with 1.375 inch
Orifice Diameter
13 ft. weir
(See Tiered Skimmer
Basin Detail)
ID 8.9

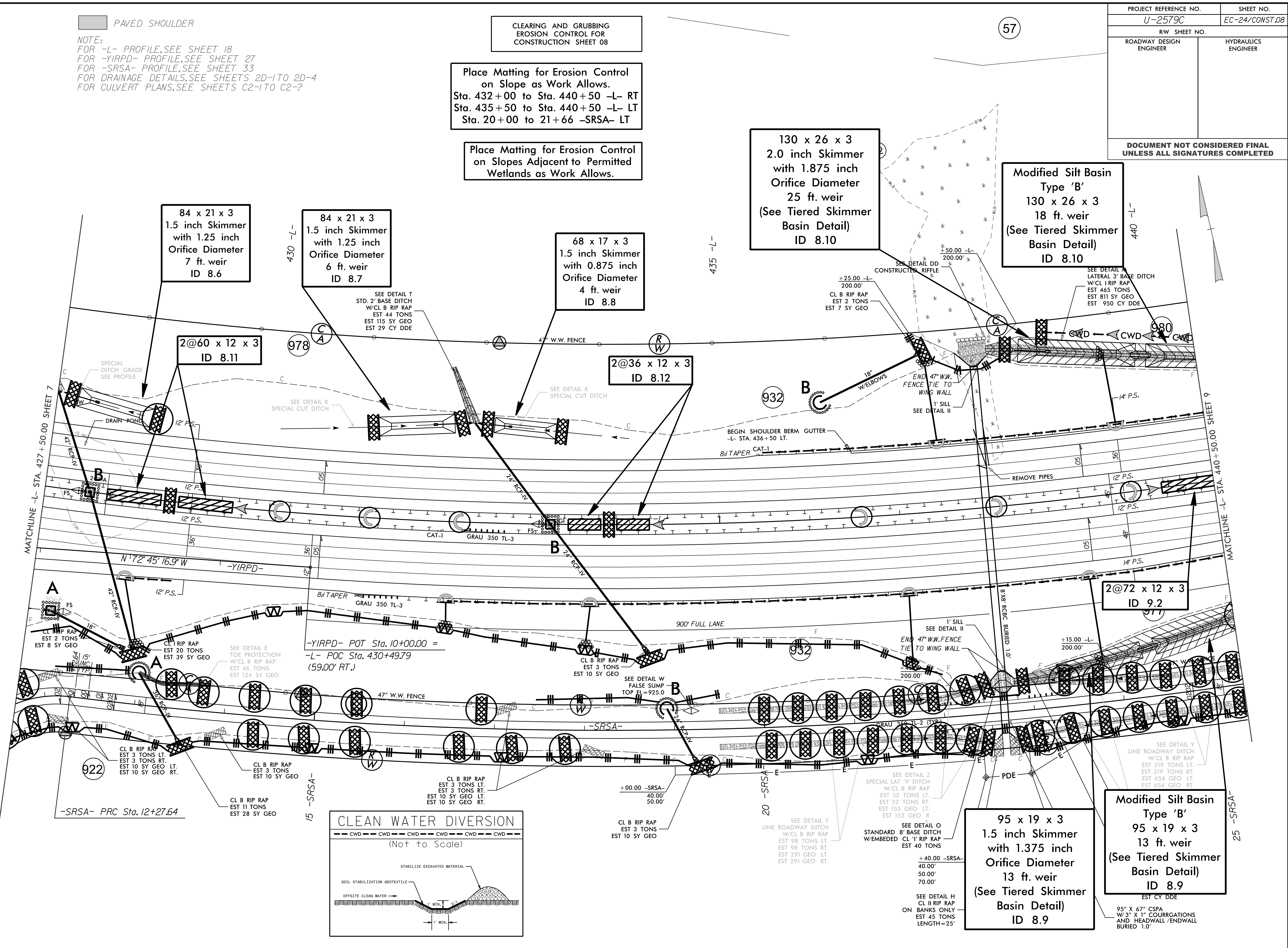
Modified Silt Basin
Type 'B'
95 x 19 x 3
13 ft. weir
(See Tiered Skimmer
Basin Detail)
ID 8.9



95" x 67" CSPA
W/3" x 1" COURRGATIONS
AND HEADWALL/ENDWALL
BURIED 1.0'

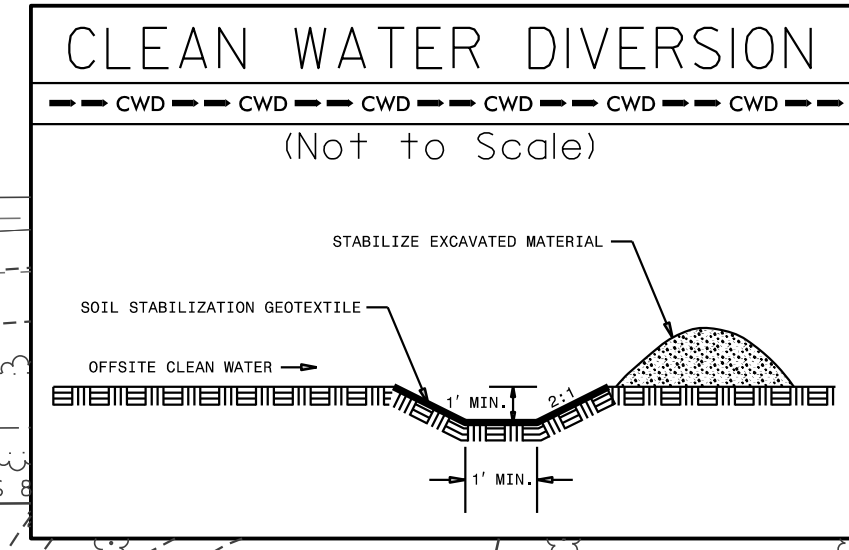
DOCUMENT NOT CONSIDERED FINAL
UNLESS ALL SIGNATURES COMPLETED

PROJECT REFERENCE NO. U-2579C	SHEET NO. EC-24/CONST.08
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

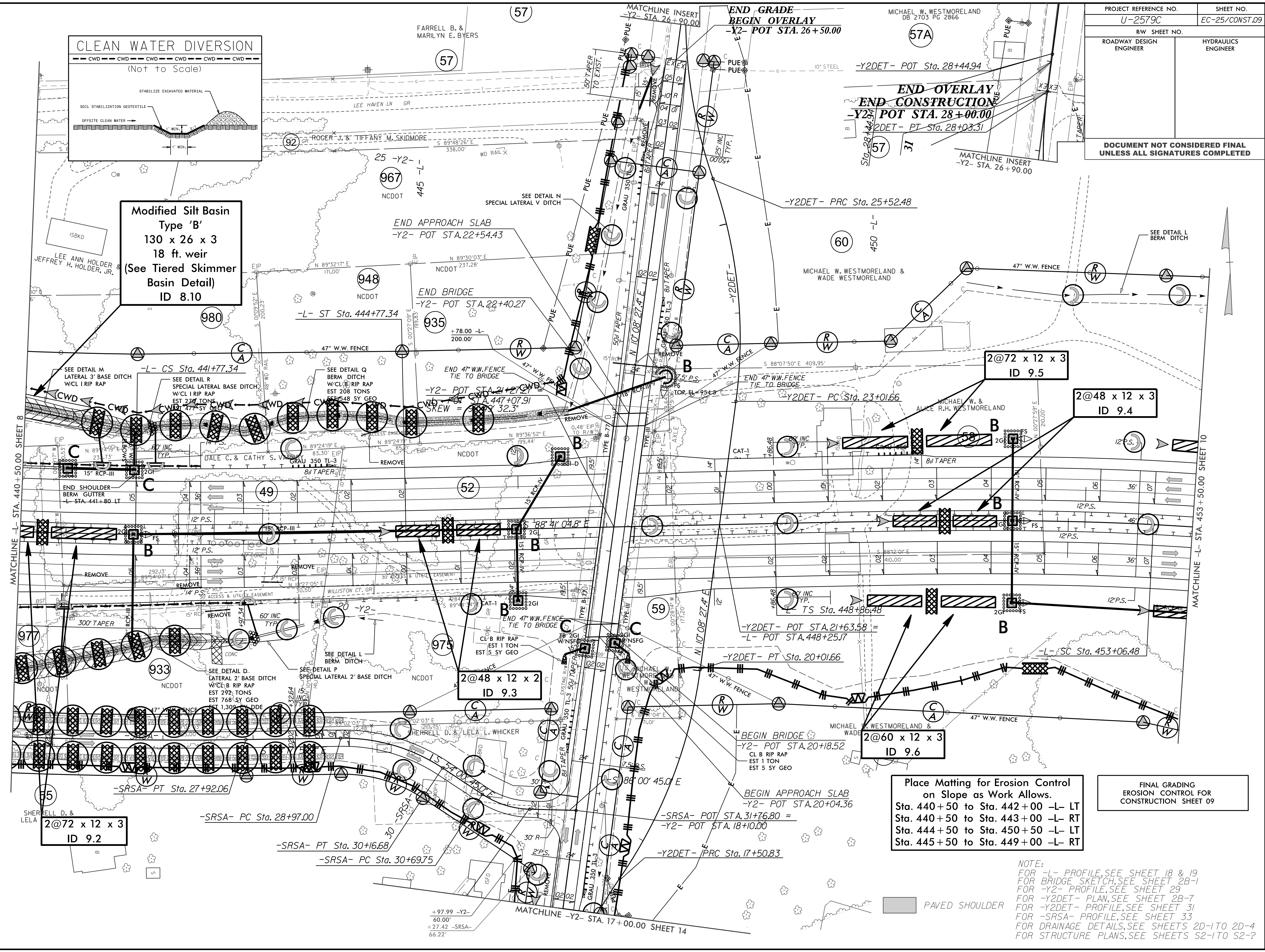


PROJECT REFERENCE NO.	SHEET NO.
U-2579C	EC-25/CONST.09
RW SHEET NO.	HYDRAULICS ENGINEER
ROADWAY DESIGN ENGINEER	

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED



Modified Silt Basin
Type 'B'
130 x 26 x 3
18 ft. weir
(See Tiered Skimmer Basin Detail)
ID 8.10



MATCHLINE -L- STA. 440+50.00 SHEET 8

MATCHLINE -L- STA. 453+50.00 SHEET TO

2@72 x 12 x 3
ID 9.2

2@48 x 12 x 2
ID 9.3

2@60 x 12 x 3
ID 9.6

2@72 x 12 x 3
ID 9.5

2@48 x 12 x 3
ID 9.4

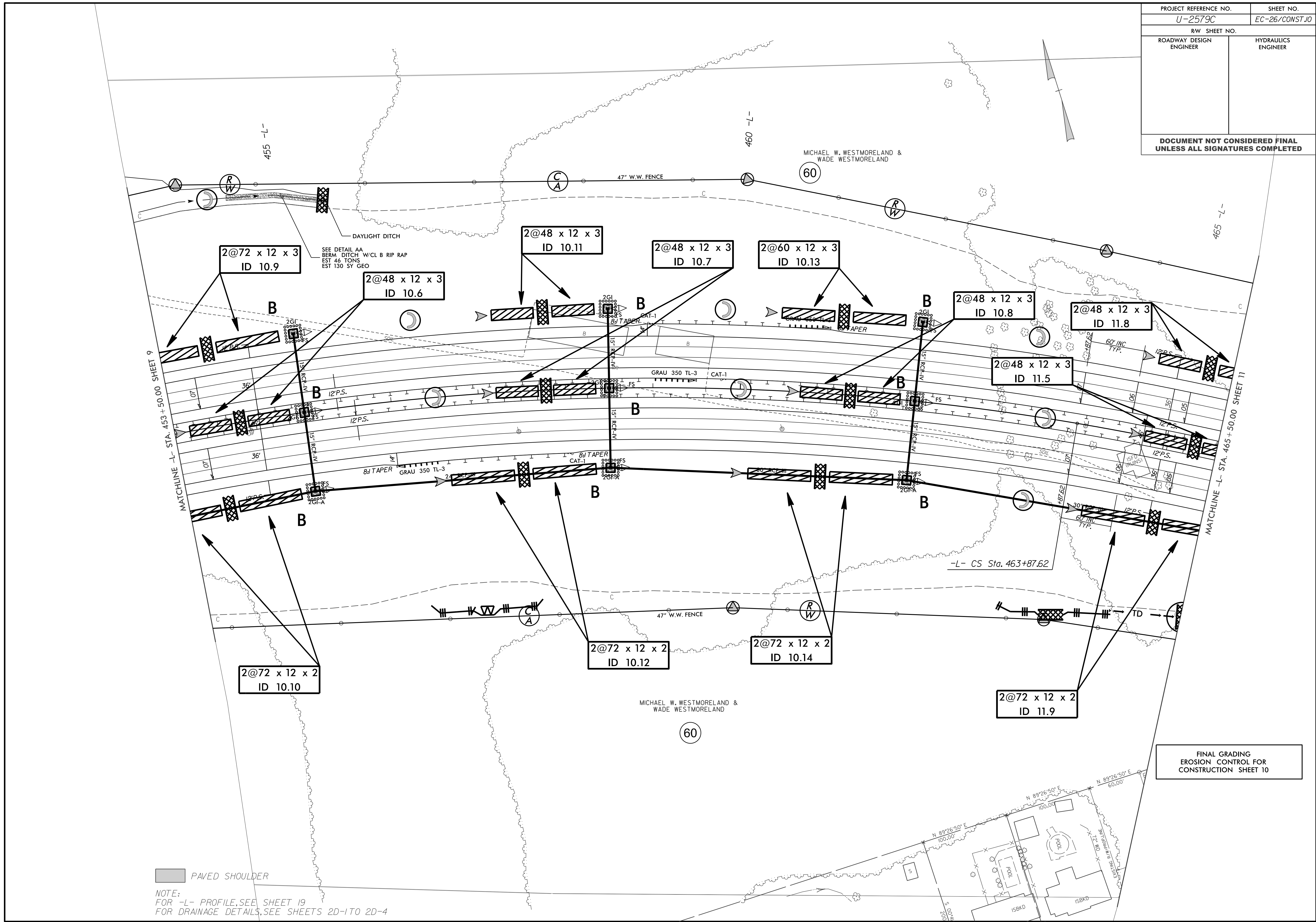
Place Matting for Erosion Control on Slope as Work Allows.
Sta. 440+50 to Sta. 442+00 -L- LT
Sta. 440+50 to Sta. 443+00 -L- RT
Sta. 444+50 to Sta. 450+50 -L- LT
Sta. 445+50 to Sta. 449+00 -L- RT

FINAL GRADING
EROSION CONTROL FOR
CONSTRUCTION SHEET 09

NOTE:
FOR -L- PROFILE, SEE SHEET 18 & 19
FOR BRIDGE SKETCH, SEE SHEET 2B-1
FOR -Y2- PROFILE, SEE SHEET 29
FOR -Y2DET- PLAN, SEE SHEET 2B-7
FOR -Y2DET- PROFILE, SEE SHEET 31
FOR -SRSA- PROFILE, SEE SHEET 33
FOR DRAINAGE DETAILS, SEE SHEETS 2D-1 TO 2D-4
FOR STRUCTURE PLANS, SEE SHEETS S2-1 TO S2-?

PAVED SHOULDER

PROJECT REFERENCE NO. U-2579C	SHEET NO. EC-26/CONST.10
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	



■ PAVED SHOULDER
 NOTE:
 FOR -L- PROFILE, SEE SHEET 19
 FOR DRAINAGE DETAILS, SEE SHEETS 2D-1 TO 2D-4

FINAL GRADING
 EROSION CONTROL FOR
 CONSTRUCTION SHEET 10

PROJECT REFERENCE NO.	SHEET NO.
U-2579C	EC-27/CONST II
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	

FINAL GRADING EROSION CONTROL FOR CONSTRUCTION SHEET 11

Place Matting for Erosion Control on Slope as Work Allows.
 Sta. 471+40 to Sta. 472+00 -L- LT
 Sta. 472+00 to Sta. 472+75 -L- RT
 Sta. 475+00 to Sta. 477+00 -L- LT
 Sta. 475+00 to Sta. 477+50 -L- RT

Place Matting for Erosion Control on Slopes Adjacent to Permitted Wetlands as Work Allows.

74 x 37 x 3
 1.5 inch Skimmer
 with 1.5 inch
 Orifice Diameter
 10 ft. weir
 ID 11.3

24 x 12 x 2
 ID 11.7

2@48 x 12 x 3
 ID 11.10

2@48 x 12 x 3
 ID 11.8

2@48 x 12 x 3
 ID 11.5

2@48 x 12 x 3
 ID 11.6

2@72 x 12 x 2
 ID 11.9

2@72 x 12 x 2
 ID 11.11

23 x 84 x 3
 1.5 inch Skimmer
 with 1.25 inch
 Orifice Diameter
 7 ft. weir
 ID 11.1

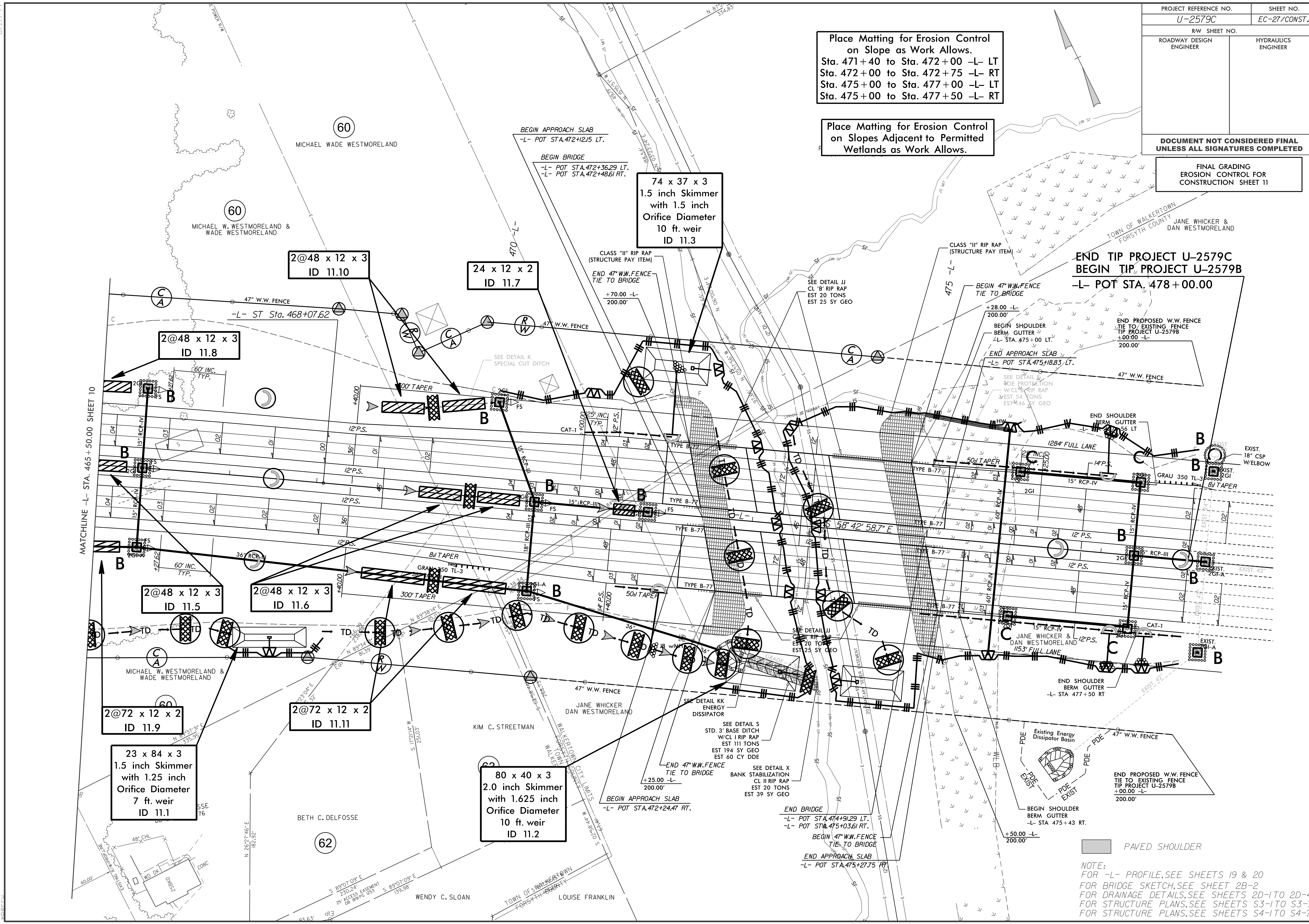
80 x 40 x 3
 2.0 inch Skimmer
 with 1.625 inch
 Orifice Diameter
 10 ft. weir
 ID 11.2

END TIP PROJECT U-2579C
 BEGIN TIP PROJECT U-2579B
 -L- POT STA. 478+00.00

PAVED SHOULDER

NOTE:
 FOR -L- PROFILE, SEE SHEETS 19 & 20
 FOR BRIDGE SKETCH, SEE SHEET 2B-2
 FOR DRAINAGE DETAILS, SEE SHEETS 2D-1 TO 2D-4
 FOR STRUCTURE PLANS, SEE SHEETS S3-1 TO S3-2
 FOR STRUCTURE PLANS, SEE SHEETS S4-1 TO S4-2

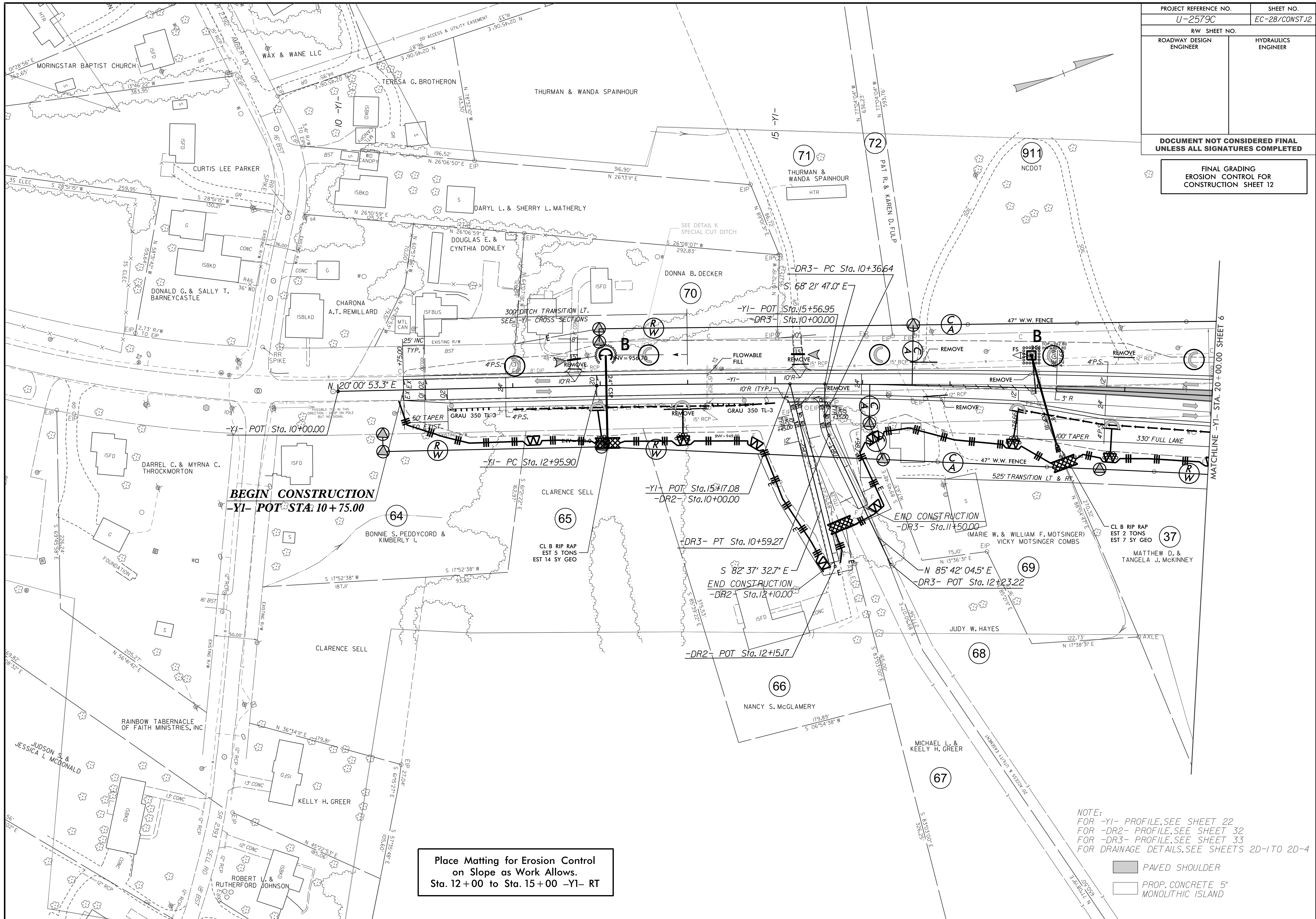
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PROJECT REFERENCE NO.	SHEET NO.
U-2579C	EC-28/CONST.12
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

DOCUMENT NOT CONSIDERED FINAL
UNLESS ALL SIGNATURES COMPLETED

FINAL GRADING
EROSION CONTROL FOR
CONSTRUCTION SHEET 12



Place Matting for Erosion Control
on Slope as Work Allows.
Sta. 12+00 to Sta. 15+00 -Y1- RT

NOTE:
FOR -Y1- PROFILE, SEE SHEET 22
FOR -DR2- PROFILE, SEE SHEET 32
FOR -DR3- PROFILE, SEE SHEET 33
FOR DRAINAGE DETAILS, SEE SHEETS 2D-1 TO 2D-4

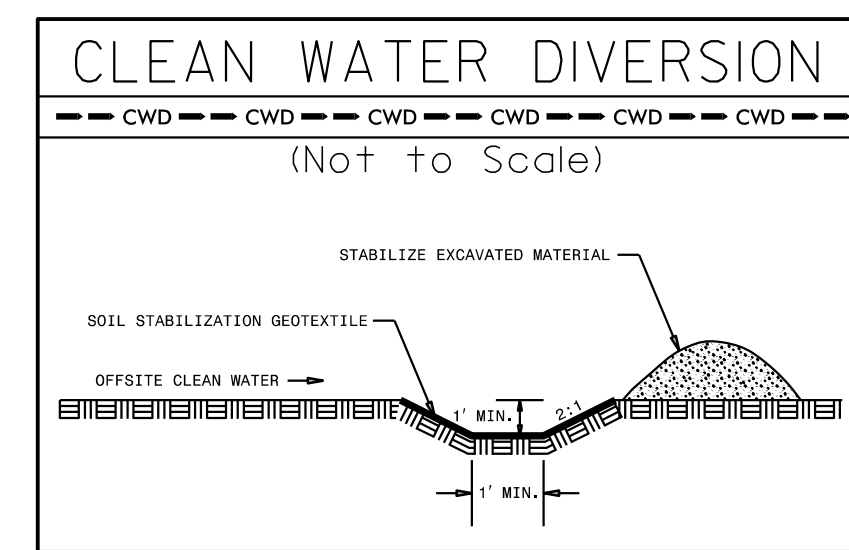
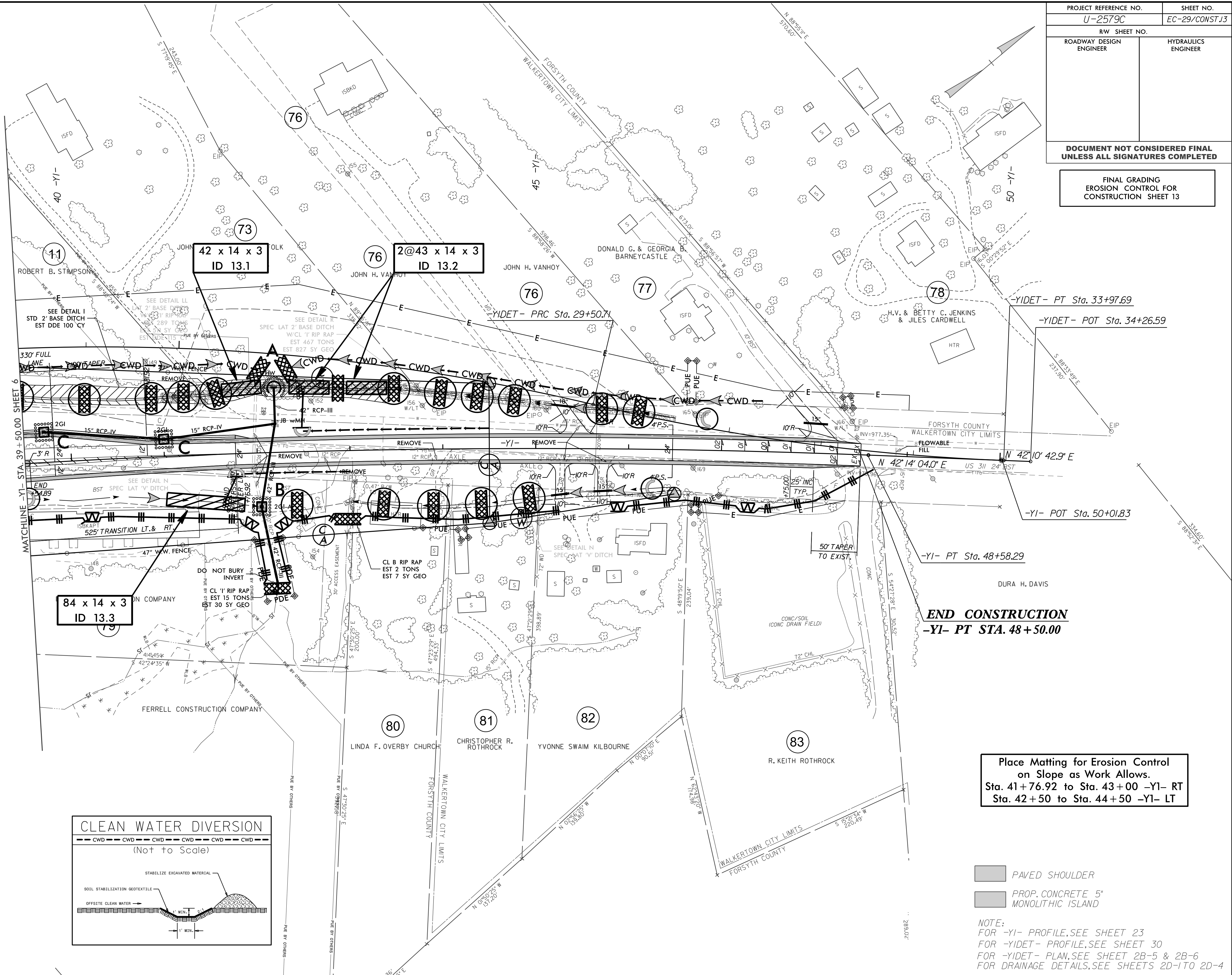
- PAVED SHOULDER
- PROP. CONCRETE 5' MONOLITHIC ISLAND

MATCHLINE -Y1- STA. 20+00.00 SHEET 6

PROJECT REFERENCE NO.	SHEET NO.
U-2579C	EC-29/CONST.13
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

DOCUMENT NOT CONSIDERED FINAL
UNLESS ALL SIGNATURES COMPLETED

FINAL GRADING
EROSION CONTROL FOR
CONSTRUCTION SHEET 13



Place Matting for Erosion Control
on Slope as Work Allows.
Sta. 41+76.92 to Sta. 43+00 -Y1- RT
Sta. 42+50 to Sta. 44+50 -Y1- LT

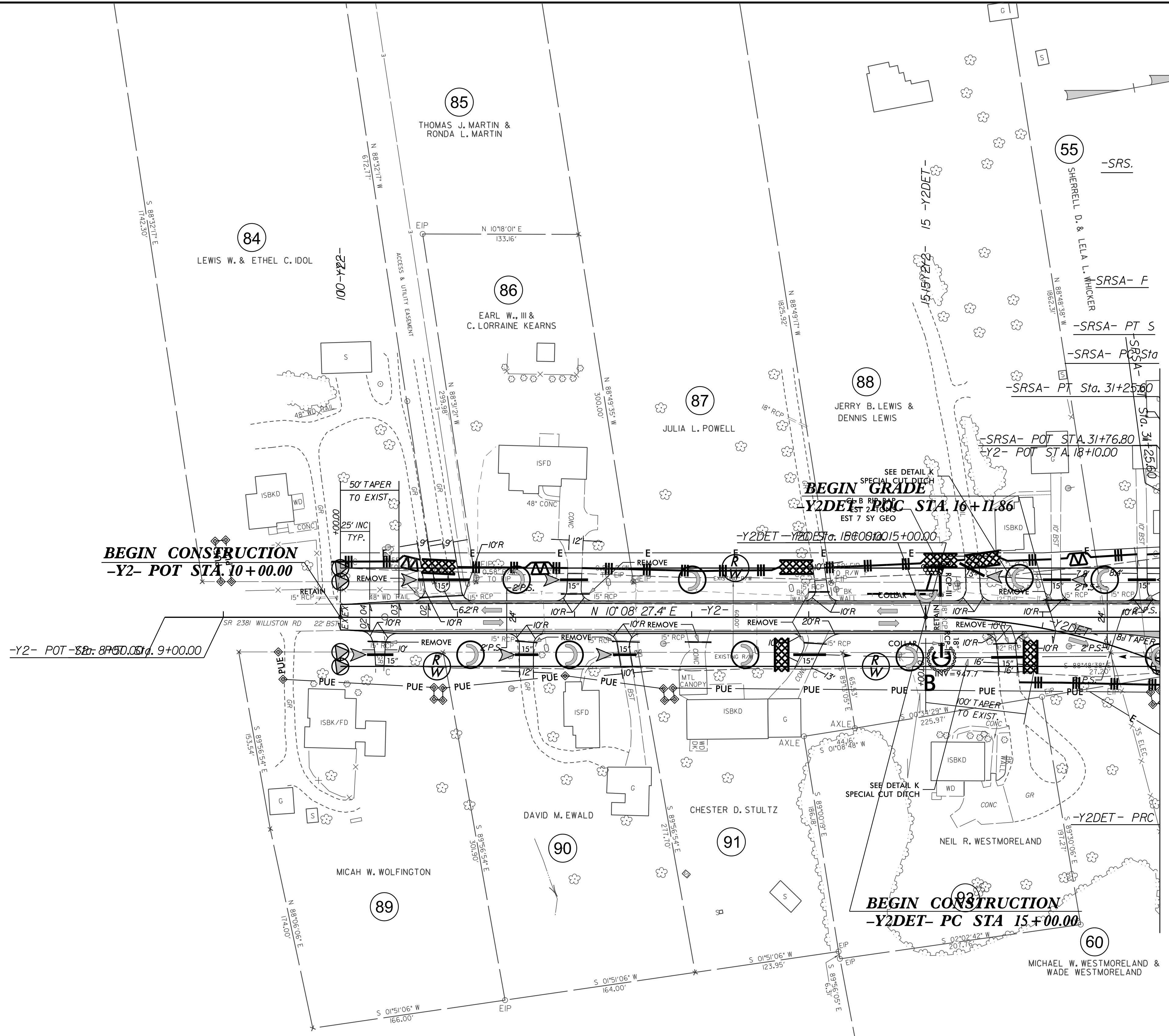
- PAVED SHOULDER
- PROP. CONCRETE 5' MONOLITHIC ISLAND

NOTE:
FOR -YI- PROFILE, SEE SHEET 23
FOR -YIDET- PROFILE, SEE SHEET 30
FOR -YIDET- PLAN, SEE SHEETS 2B-5 & 2B-6
FOR DRAINAGE DETAILS, SEE SHEETS 2D-1 TO 2D-4

PROJECT REFERENCE NO.	SHEET NO.
U-2579C	EC-30/CONST.14
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	

FINAL GRADING
EROSION CONTROL FOR
CONSTRUCTION SHEET 14

**Place Matting for Erosion Control
on Slope as Work Allows.
Sta. 14+50 to Sta. 15+00 -Y2- LT**



MATCHLINE -Y2- STA. 17+00.00 SHEET 9

PAVED SHOULDER

NOTE:
FOR -Y2- PROFILE, SEE SHEET 29
FOR -Y2DET- PLAN, SEE SHEET 28-7
FOR -Y2DET- PROFILE, SEE SHEET 31
FOR DRAINAGE DETAILS, SEE SHEETS 2D-1 TO 2D-4