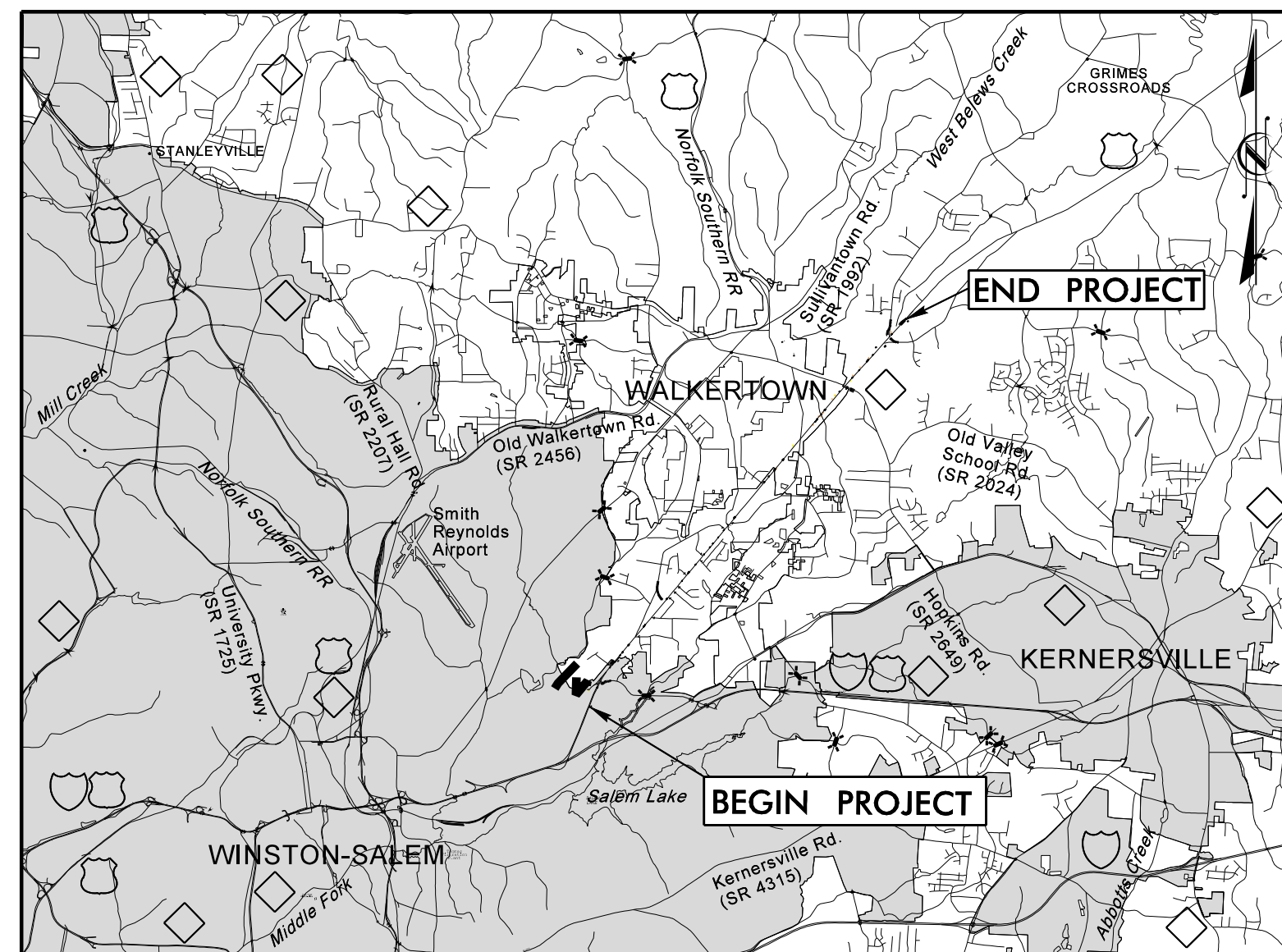


TIP PROJECT: R-2577A

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

PLAN FOR PROPOSED
HIGHWAY EROSION CONTROL
FORSYTH COUNTY

STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	R-2577A	EC-1	
STATE PROJ. NO.	F.A. PROJ. NO.	DESCRIPTION	

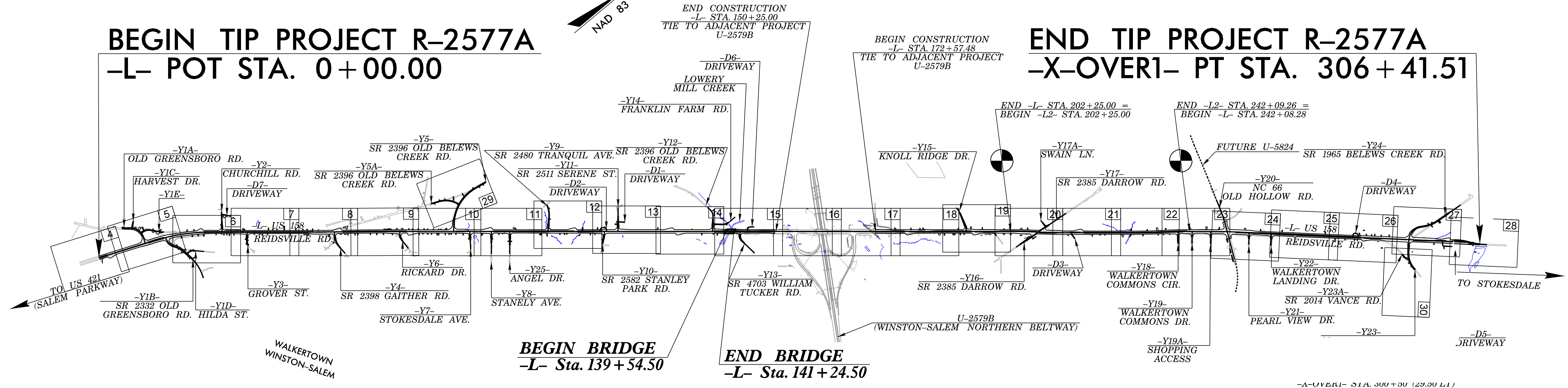


VICINITY MAP (NTS)

**LOCATION: US 158 (REIDSVILLE RD.) FROM NORTH OF
US 421 /I-40 BUS. TO SR 1965 (BELEWS CREEK RD.)**

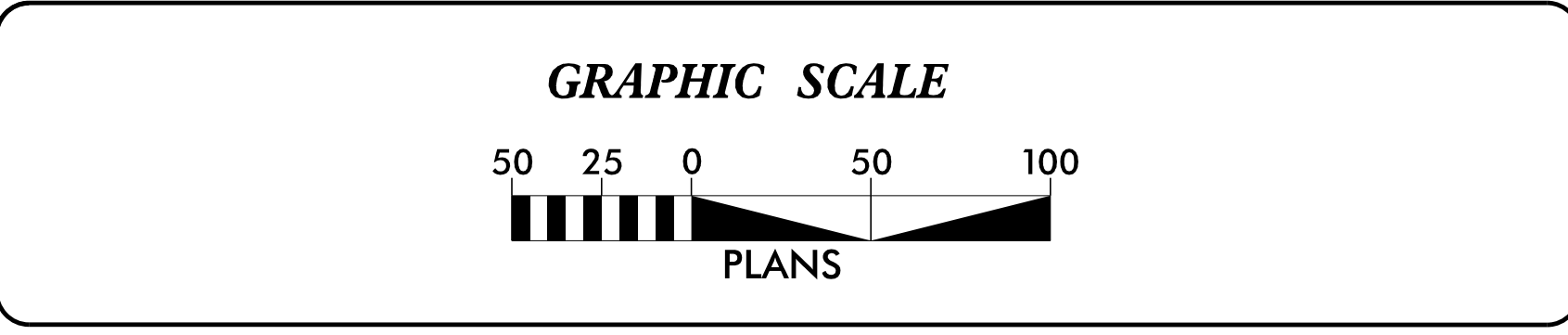
**TYPE OF WORK: GRADING, PAVING, WIDENING, DRAINAGE,
CULVERTS, SIGNING, STRUCTURES, RETAINING WALL,
SIGNALS, & UTILITIES**

- Clearing and Grubbing Phase
- Final Phase
- Both Phases
- Matting for Erosion Control



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

INSTALL SAFETY FENCE
AT ALL PERMITTED SITES
PRIOR TO CLEARING AND GRUBBING



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.



Prepared in the Office of:
RUMMEL, KLEPPER, & KAHL, LLP
8601 SIX FORKS ROAD, SUITE 700
RALEIGH, NORTH CAROLINA 27609
NC LICENSE NO. F-0112
1-888-521-4455 OR 919-878-9560

Designed by:
ROBERT B. HUSKEY, PE 3493
NAME LEVEL III CERTIFICATION NO.

Roadway Standard Drawings

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

DIVISION OF HIGHWAYS STATE OF NORTH CAROLINA

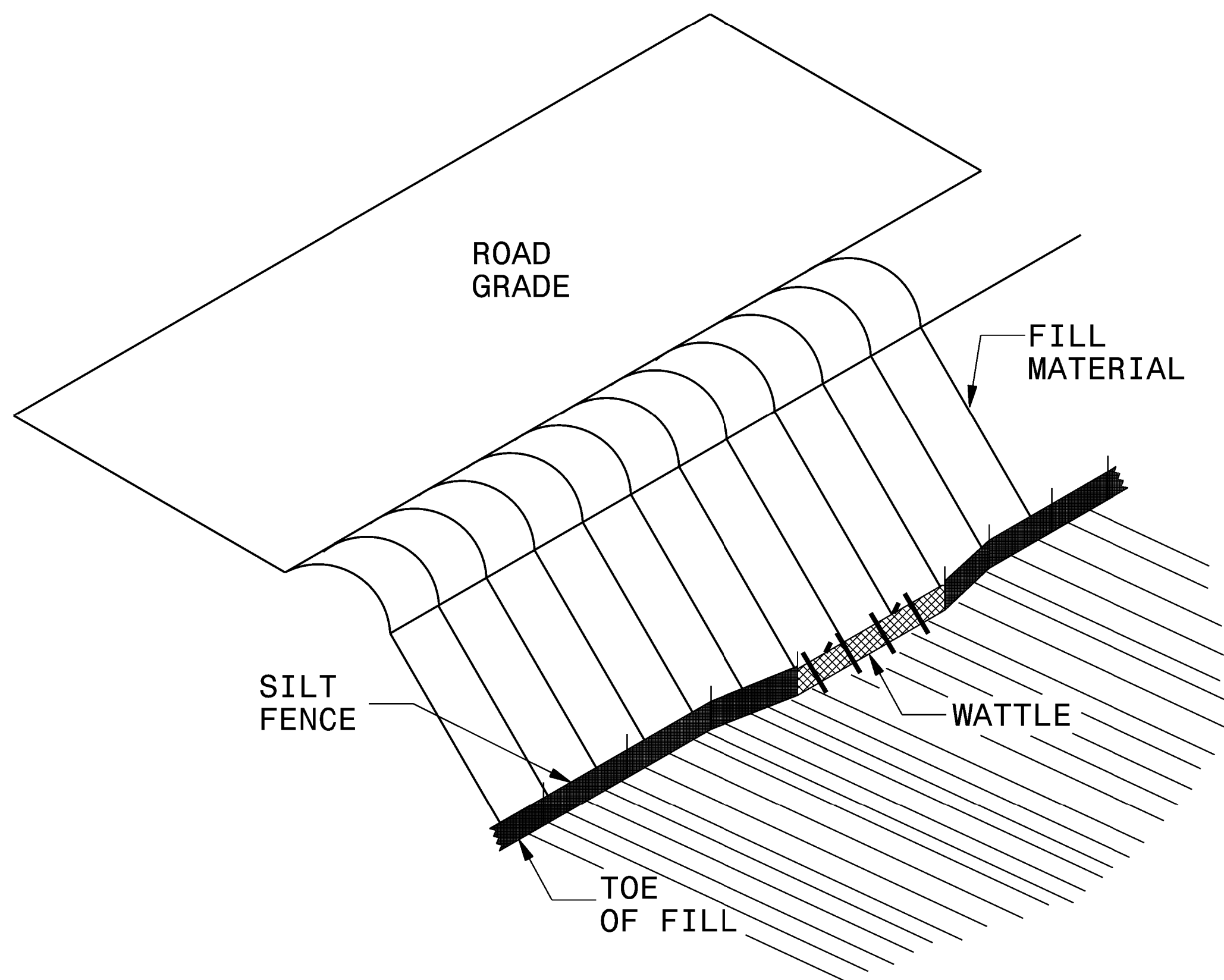
PROJECT REFERENCE NO. R-2577A	SHEET NO. EC-01A
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

EROSION & SEDIMENT CONTROL LEGEND

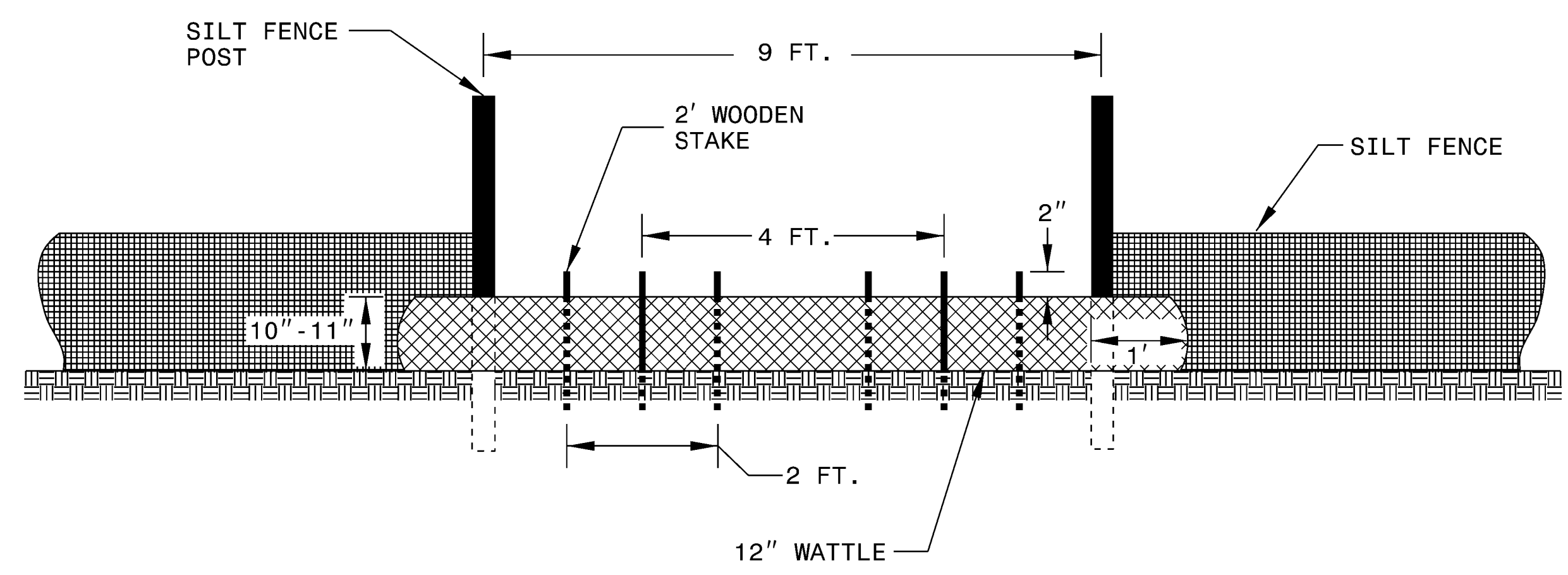
Std. #	Description	Symbol	Std. #	Description	Symbol
1605.01	Temporary Silt Fence		1633.01	Temporary Rock Silt Check Type A	
1606.01	Special Sediment Control Fence		1633.02	Temporary Rock Silt Check Type B	
1622.01	Temporary Berms and Slope Drains		1633.03	Temporary Rock Silt Check Type A with Excelsior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

PROJECT REFERENCE NO. <i>R-2577A</i>	SHEET NO. <i>EC-2</i>
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

SILT FENCE COIR FIBER WATTLE BREAK DETAIL



ISOMETRIC VIEW

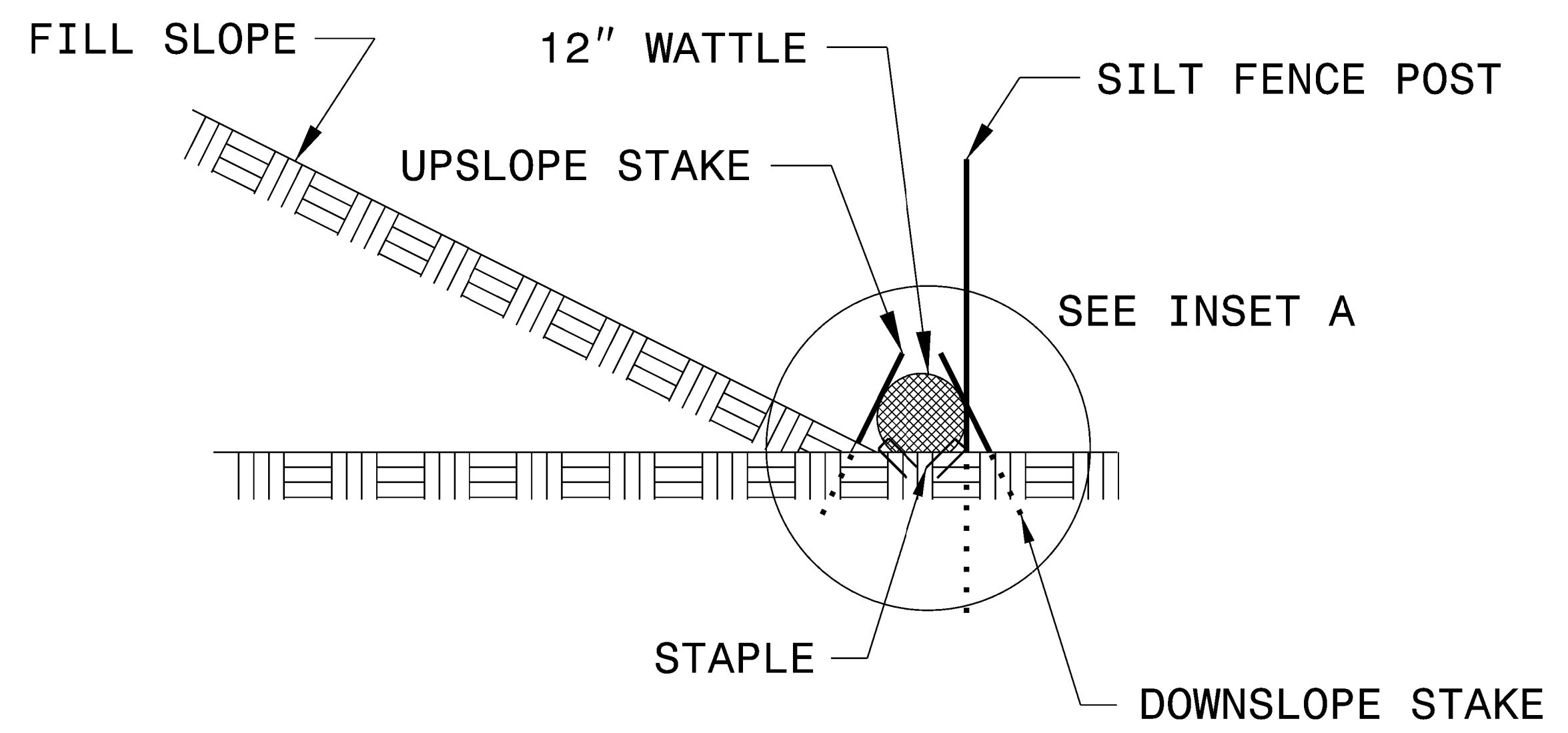
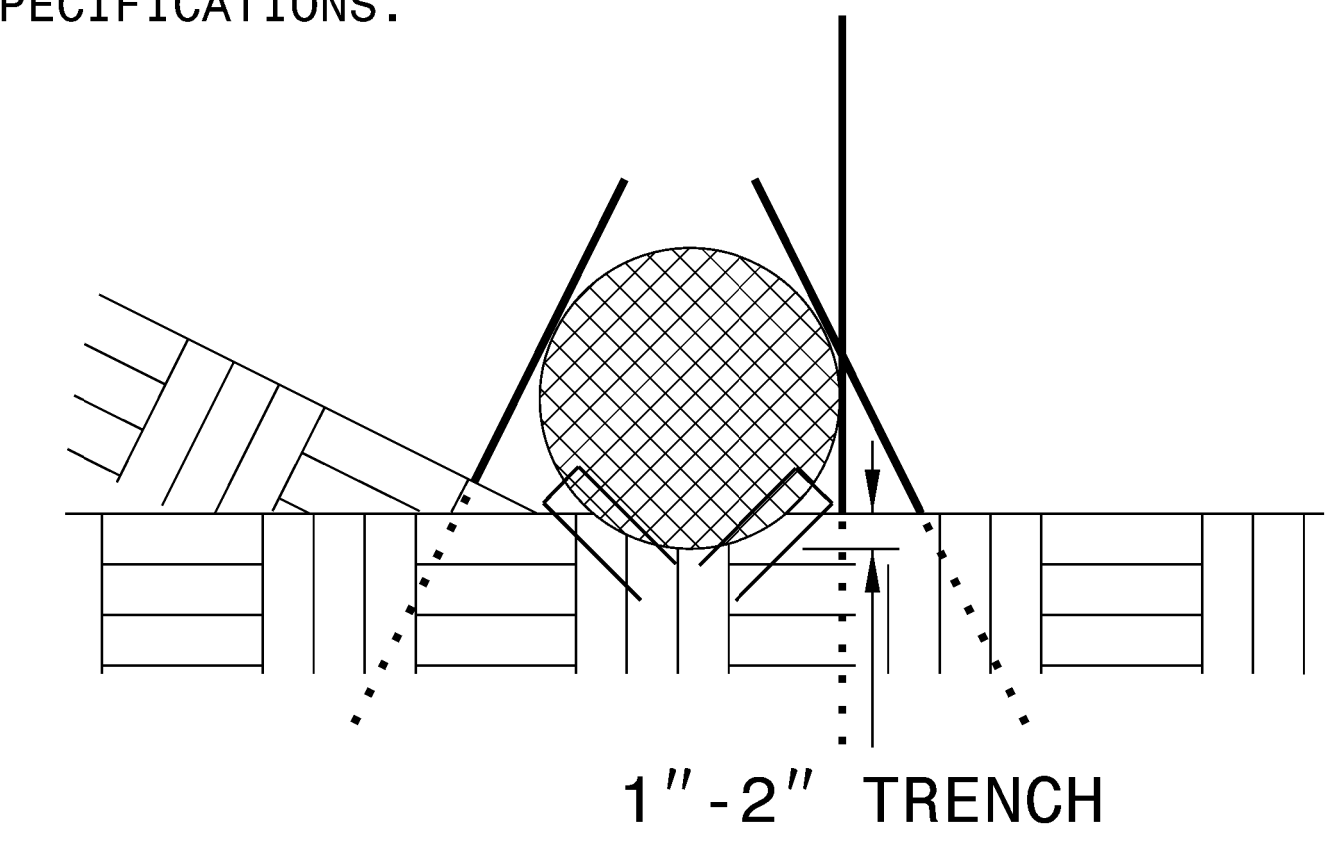


VIEW FROM SLOPE

NOTES:

- USE MINIMUM 12 IN. DIAMETER COIR FIBER (COCONUT FIBER) WATTLE AND LENGTH OF 10 FT.
- EXCAVATE A 1 TO 2 INCH TRENCH FOR WATTLE TO BE PLACED.
- DO NOT PLACE WATTLE 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.
- WATTLE INSTALLATION CAN BE ON OUTSIDE OF THE SILT FENCE AS DIRECTED.
- INSTALL TEMPORARY SILT FENCE IN ACCORDANCE WITH SECTION 1605 OF THE STANDARD SPECIFICATIONS.

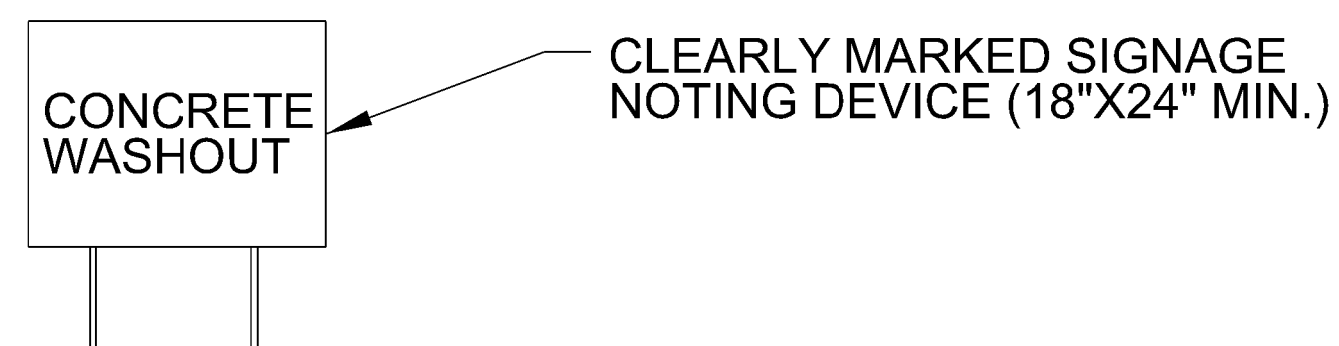
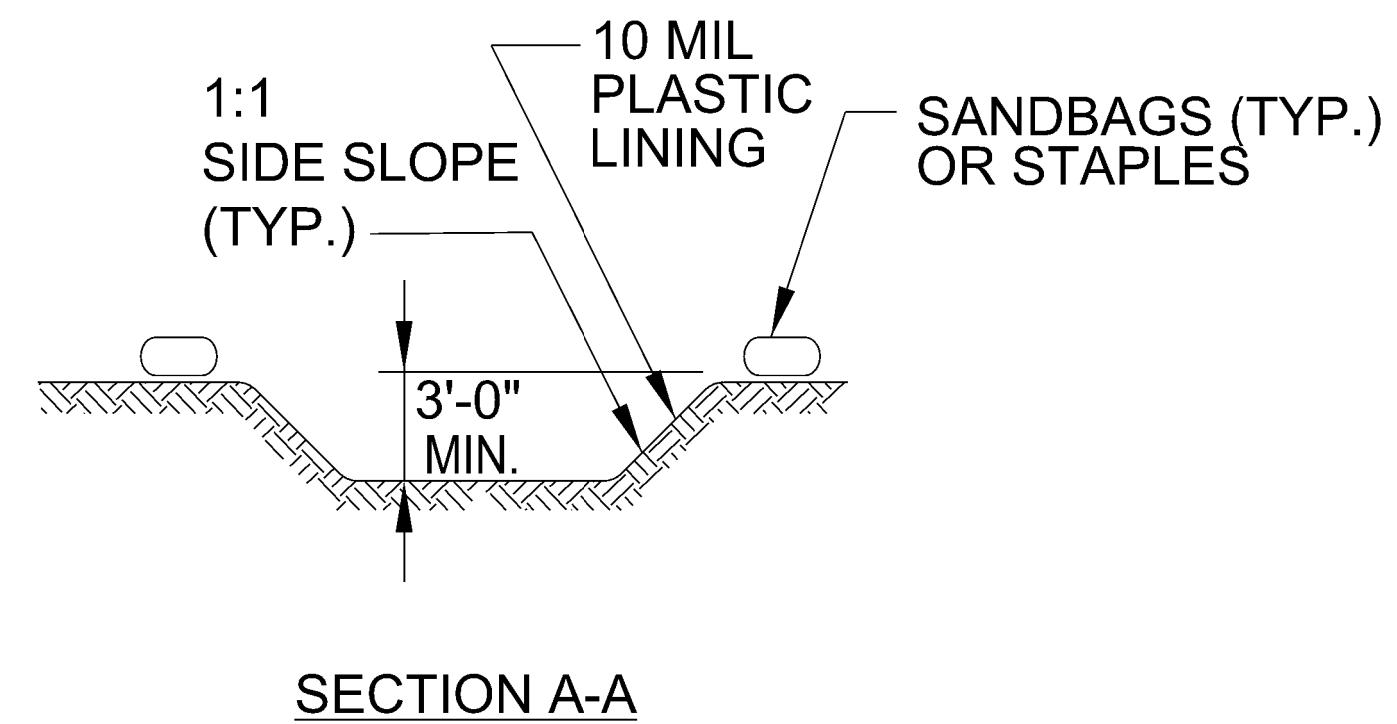
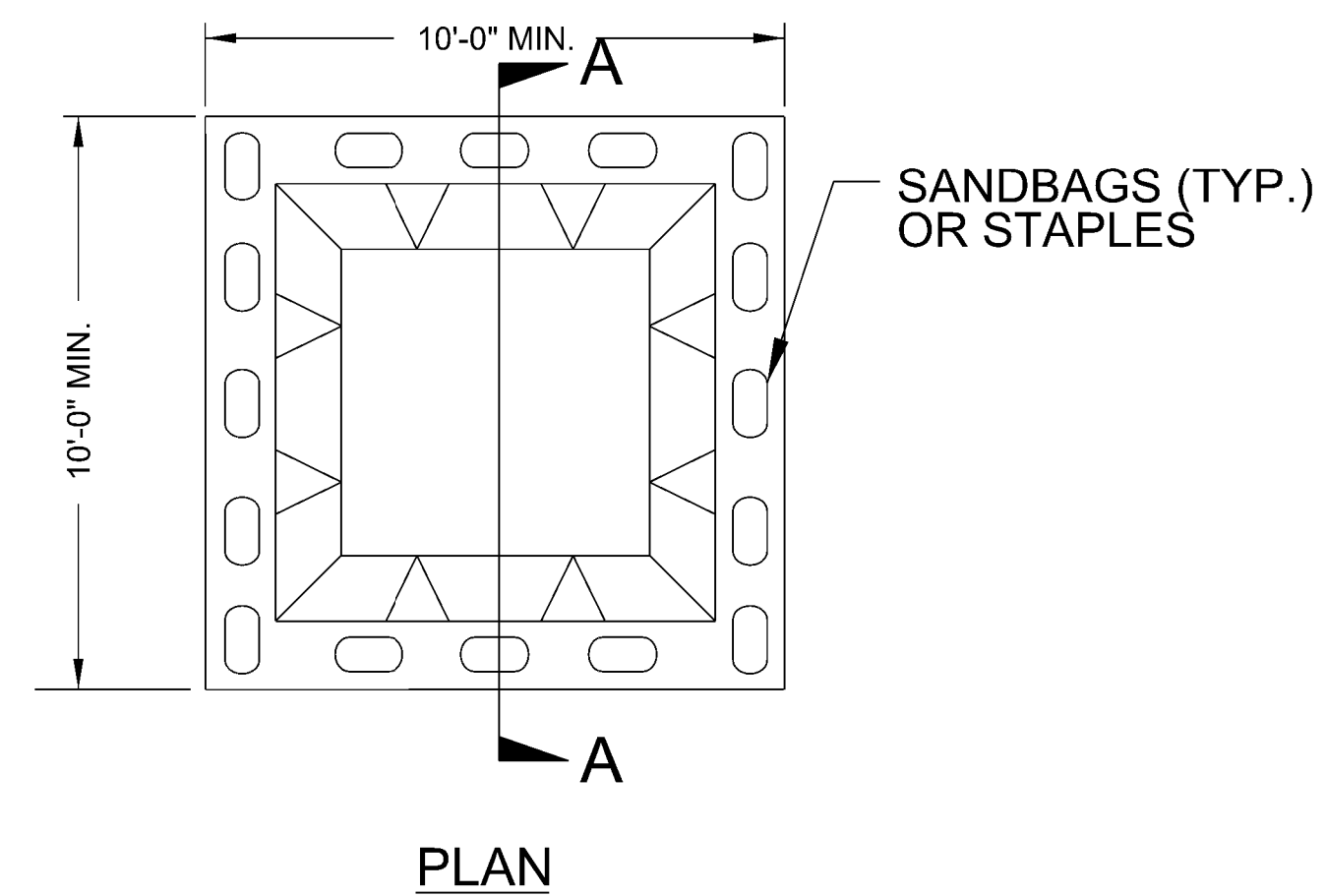
INSET A



SIDE VIEW

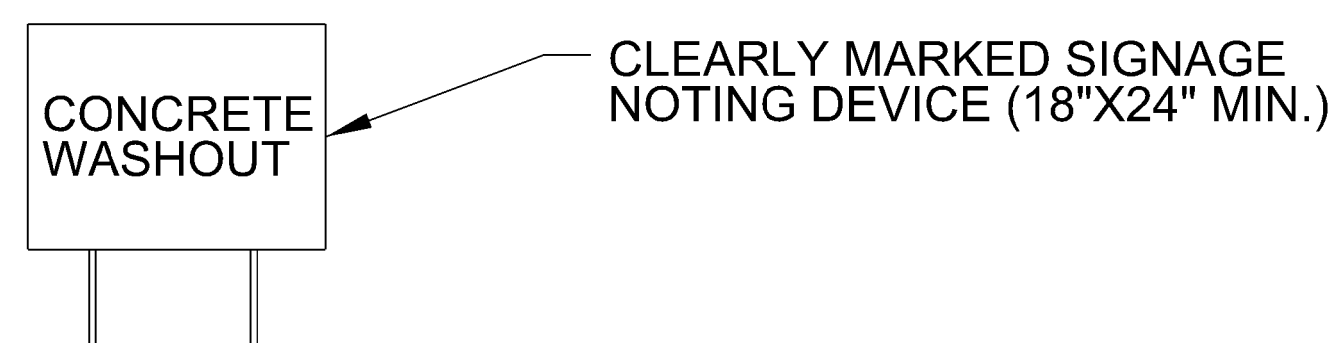
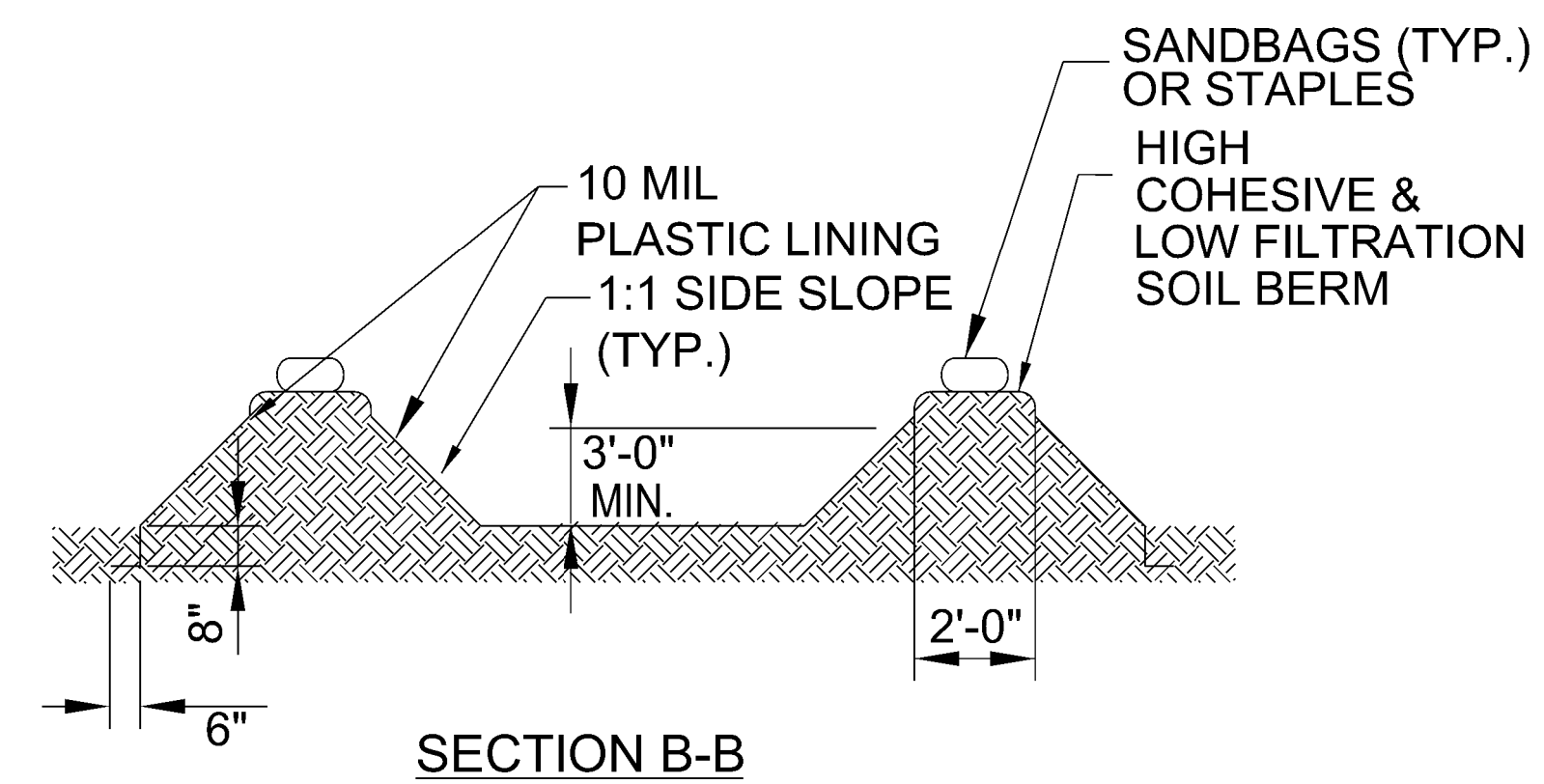
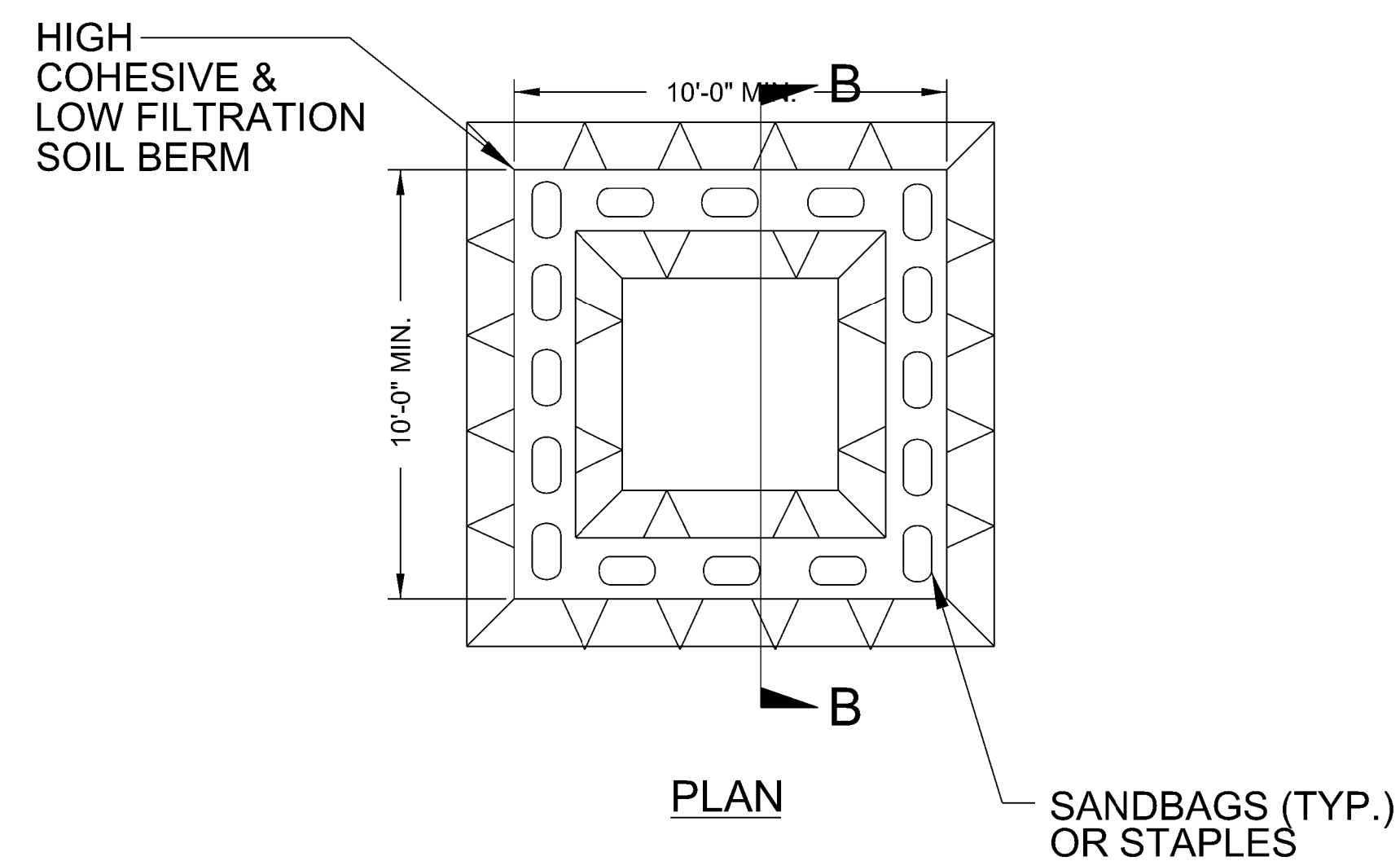
PROJECT REFERENCE NO. <i>R-2577A</i>	SHEET NO. <i>EC-2A</i>
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

ONSITE CONCRETE WASHOUT STRUCTURE WITH LINER



BELOW GRADE WASHOUT STRUCTURE
NOT TO SCALE

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



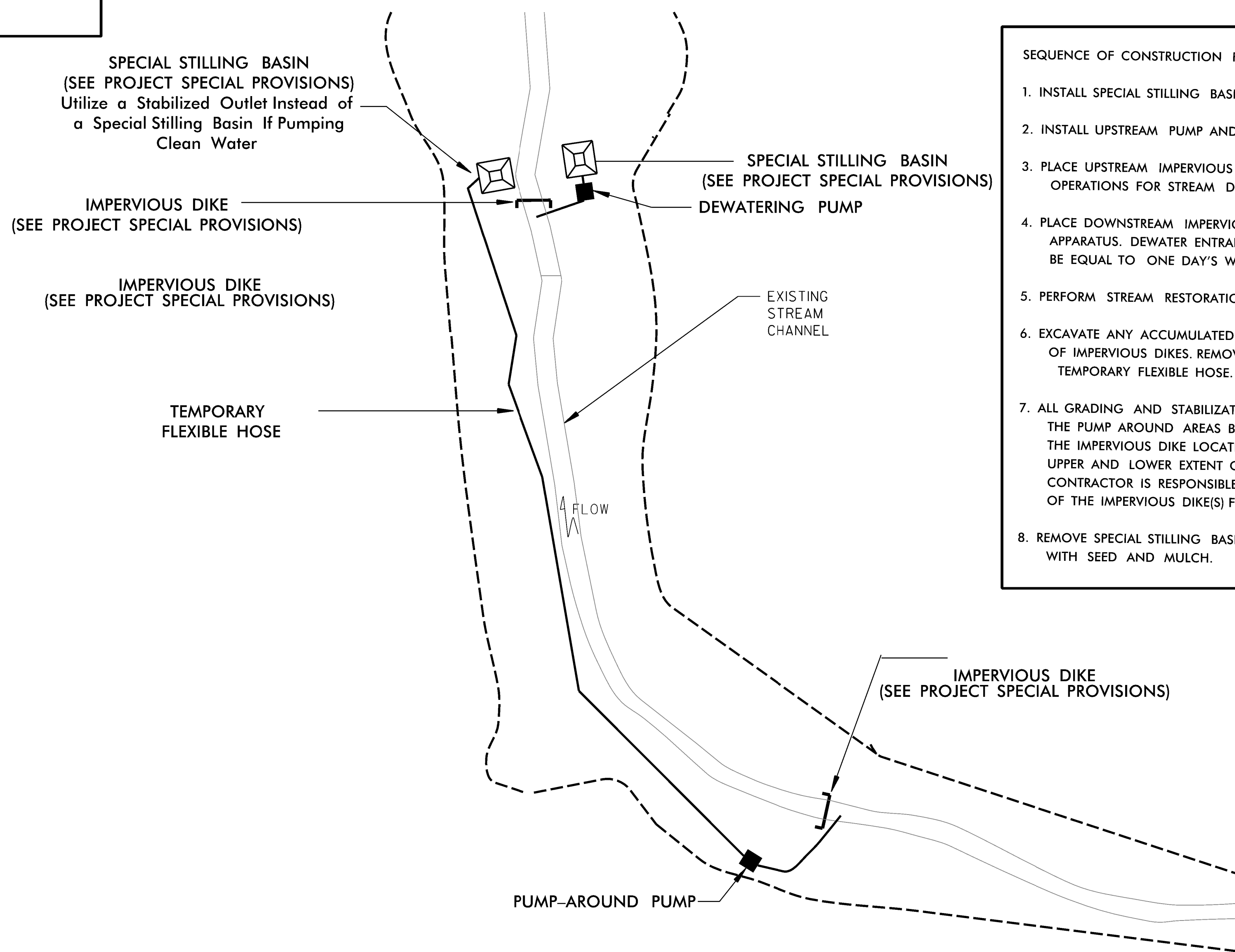
ABOVE GRADE WASHOUT STRUCTURE
NOT TO SCALE

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

PROJECT REFERENCE NO. <i>R-2577A</i>	SHEET NO. <i>EC-2B</i>
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

EXAMPLE OF PUMP-AROUND OPERATION

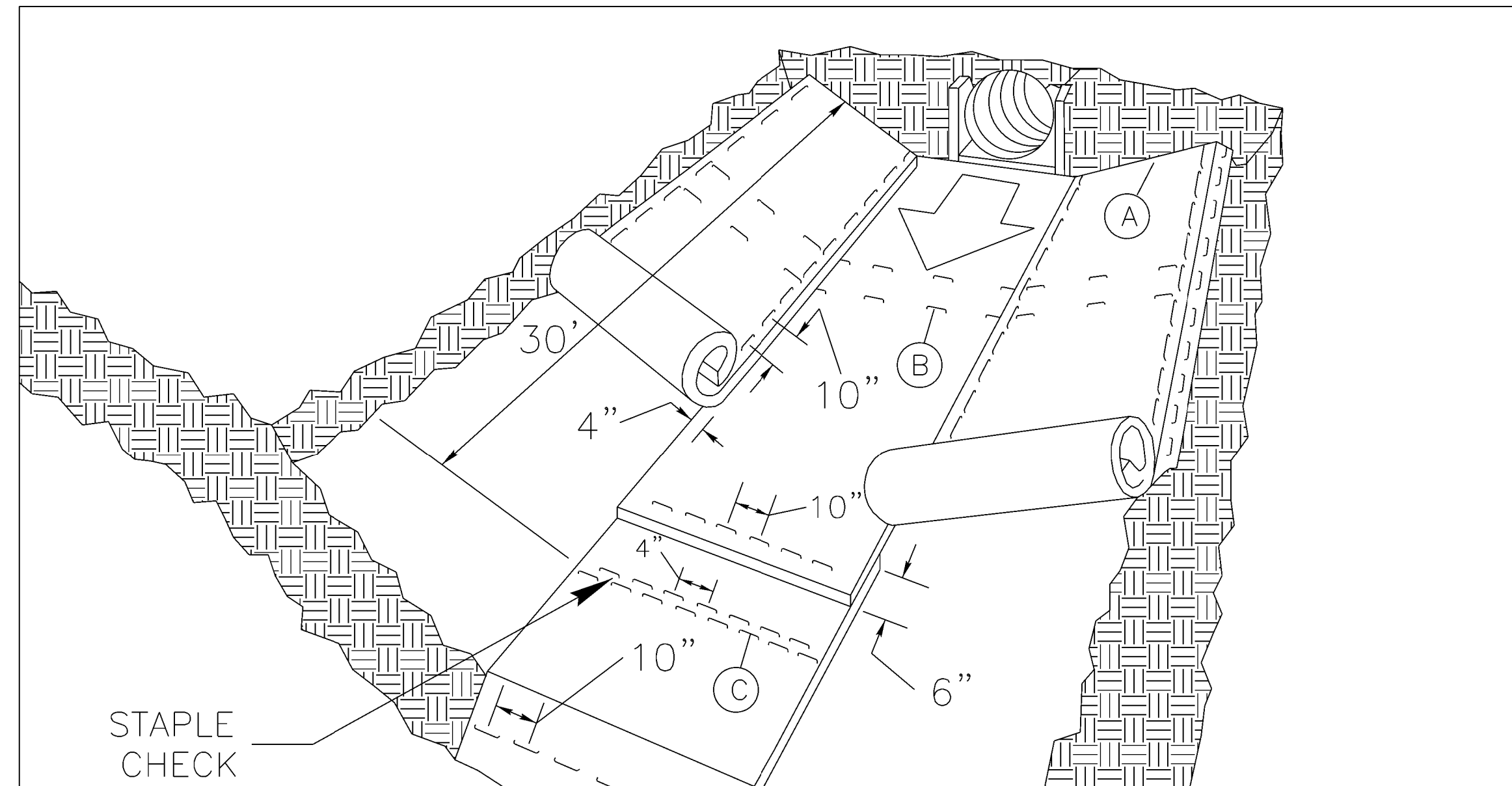
- NOTES:
- 1) All excavation shall be performed in only dry or isolated sections of channel.
 - 2) Impervious dikes are to be used to isolate work from stream flow when necessary.
 - 3) All graded areas shall be stabilized within 24 hours.
 - 4) Maintenance of stream flow operations shall be incidental 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.

PROJECT REFERENCE NO. <i>R-2577A</i>	SHEET NO. <i>EC-2C</i>
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

MATTING INSTALLATION DETAIL



MATTING IN DITCHES

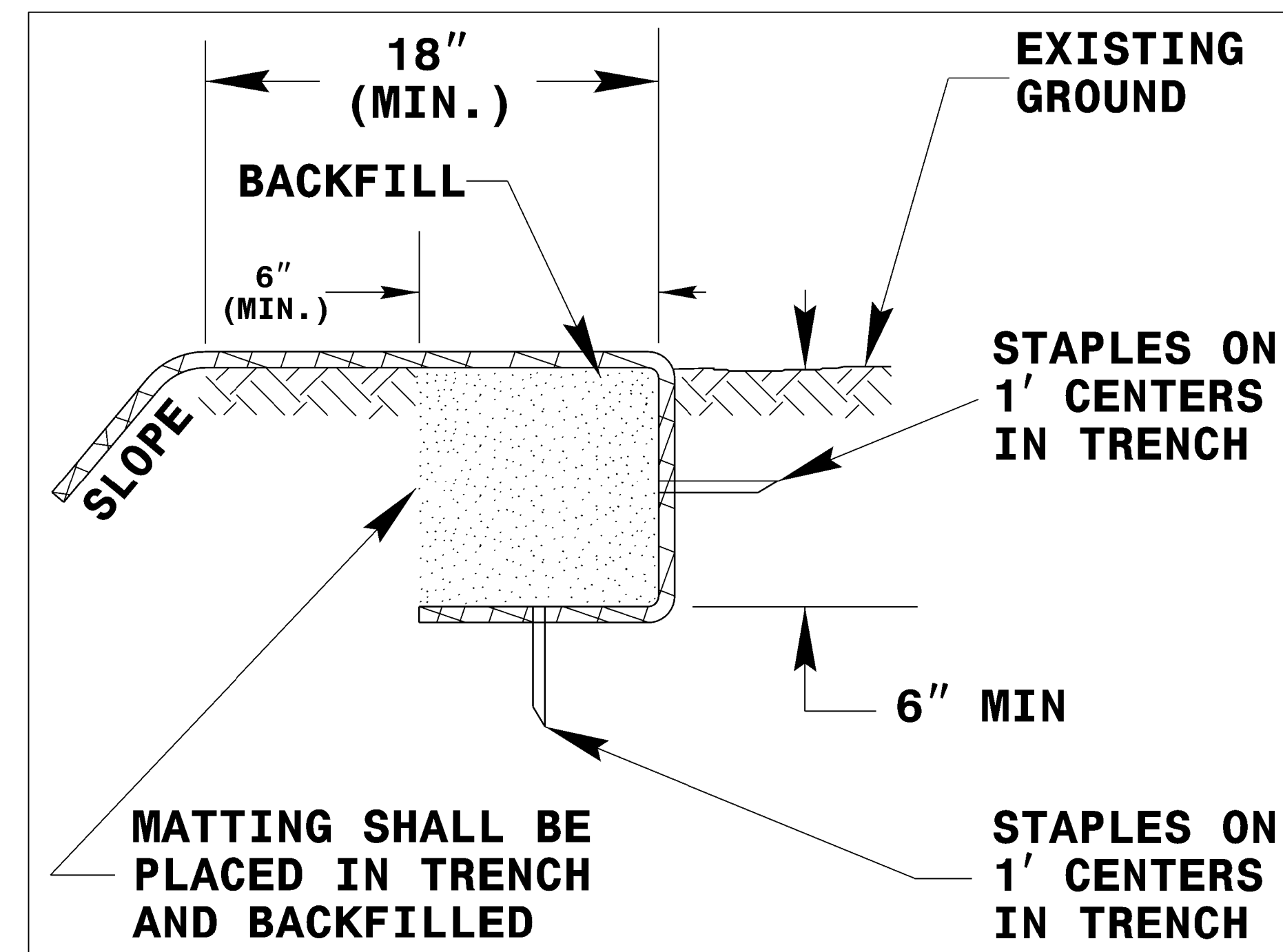
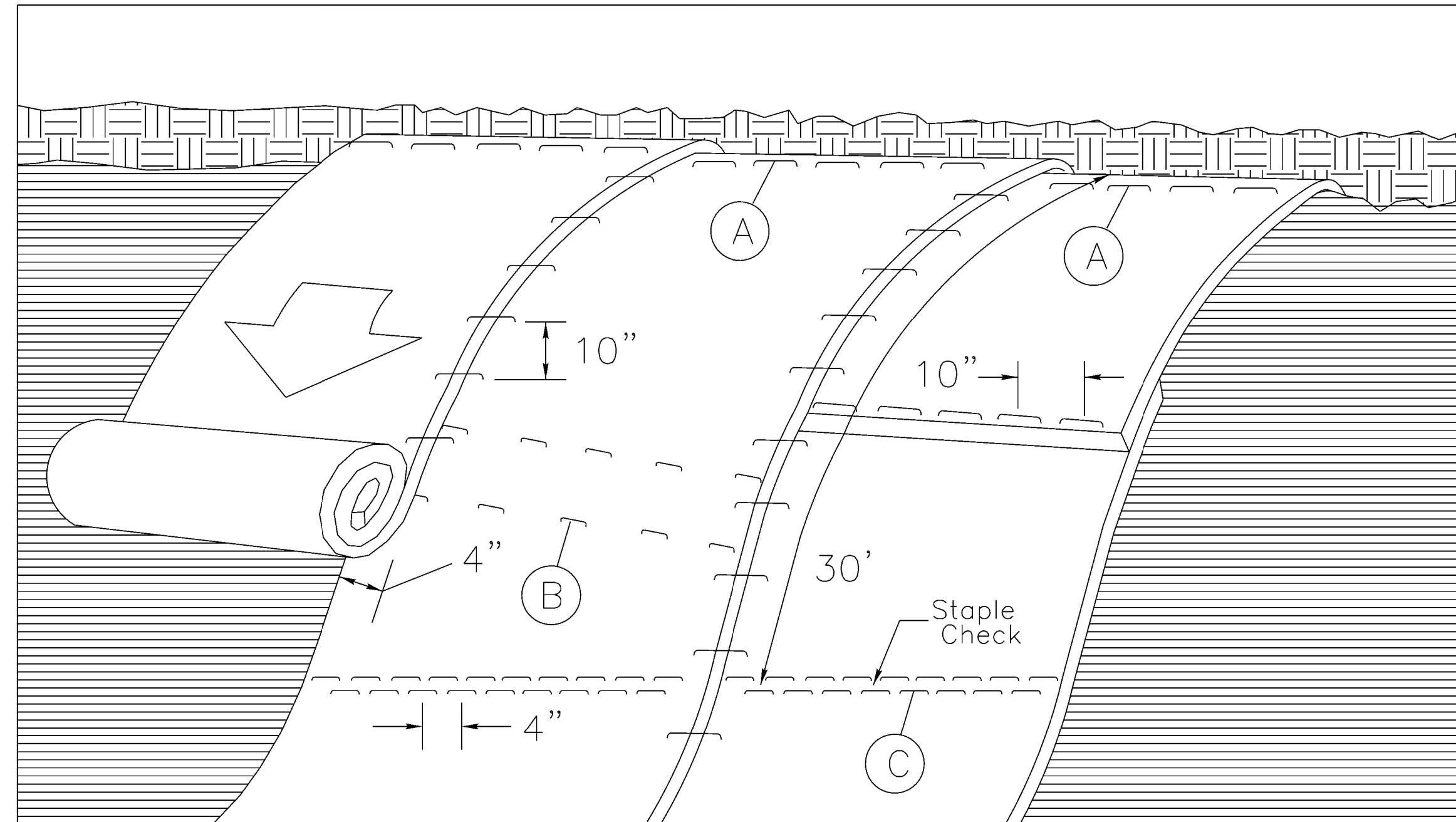


DIAGRAM (A)



MATTING ON SLOPES

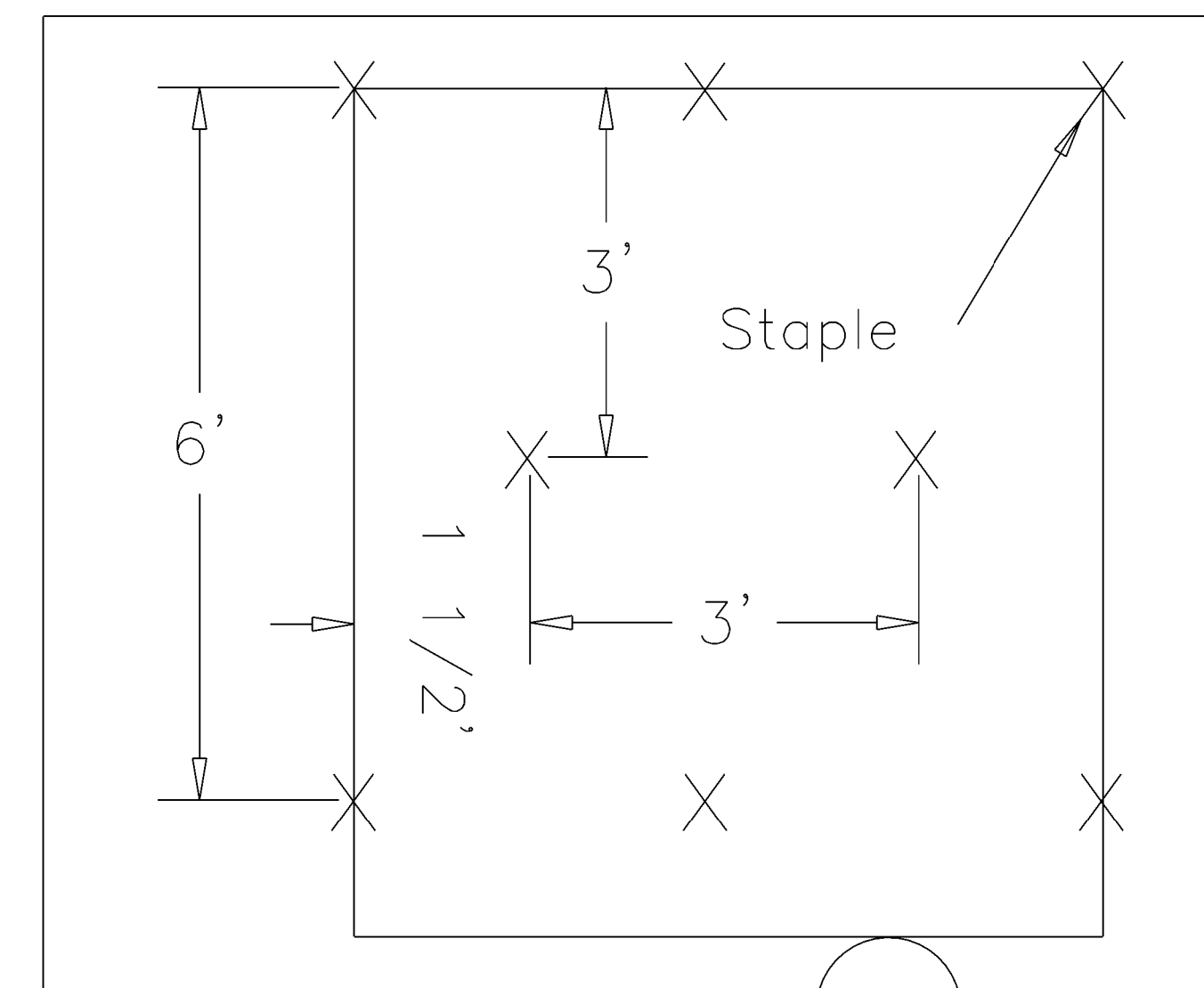


DIAGRAM B

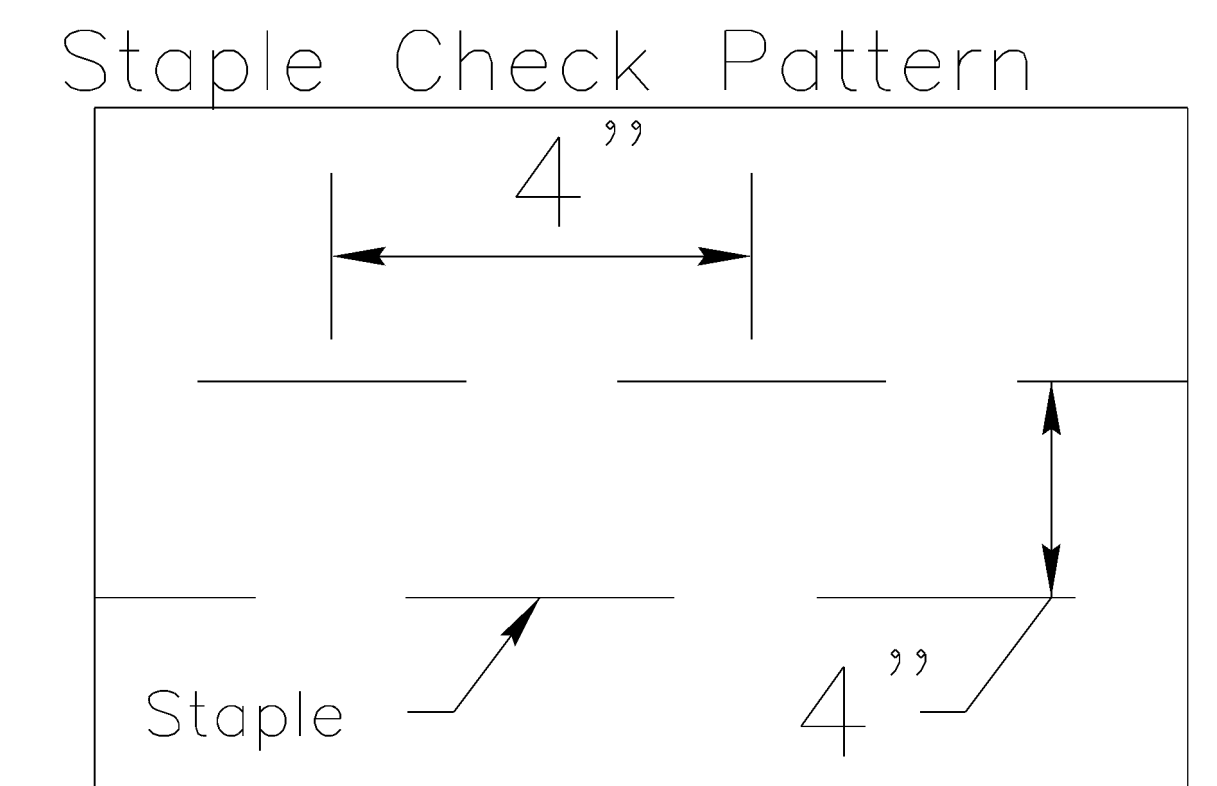


DIAGRAM (C)

NOTES:

THIS DETAIL APPLIES TO STRAW, EXCELSIOR, AND PERMANENT SOIL REINFORCEMENT MAT (PSRM) INSTALLATION.
 STAPLES SHALL BE NO. 11 GAUGE STEEL WIRE FORMED INTO A "U" SHAPE WITH A MINIMUM THROAT WIDTH OF 1 INCH AND NOT LESS THAN 6 INCHES IN LENGTH.

NOT TO SCALE

DIVISION OF HIGHWAYS
STATE OF NORTH CAROLINA

PROJECT REFERENCE NO. <i>R-2577A</i>	SHEET NO. <i>EC-3B</i>
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

SOIL STABILIZATION SUMMARY SHEET

STRAW MATTING FOR EROSION CONTROL

STRAW MATTING FOR EROSION CONTROL

CONST SHEET NO.	LINE	FROM STATION	TO STATION	SIDE	ESTIMATE (SY)
4	L	2+00	3+00	LT	105
5	L	7+00	8+00	LT	55
5	L	11+33	11+54	LT	15
5	L	13+00	14+00	LT	55
5	L	14+00	16+50	LT	140
5	YIE	12+00	12+50	RT	4
5	YIE	12+50	13+50	RT	80
5	YIE	15+00	16+00	RT	0
5	YIA	11+00	12+00	LT	55
5	YIA	15+64	15+96	LT	20
5	YIB	11+26	11+50	LT	15
5/6	YIB	11+50	14+00	LT	195
5/6	YIB	13+50	14+50	RT	100
5/6	L	16+50	20+50	RT	220
6	L	22+00	20+00	LT	110
6	L	20+50	21+50	RT	100
6	L	20+50	21+00	RT	30
6	L	22+00	23+24	RT	70
6	L	23+24	25+00	RT	100
6	L	25+00	25+80	RT	45
6	L	25+80	27+50	RT	95
6	L	27+50	29+50	RT	110
6	YIB	14+00	15+79	LT	140
6	YIB	17+50	18+00	LT	40
6	YID	11+50	12+00	RT	40
6	YID	11+50	12+00	LT	40
6	YID	12+00	13+50	RT	115
6	YID	12+00	12+50	LT	40
6	Y2	11+50	12+00	RT	40
6	Y2	11+50	12+00	LT	40

SUBTOTAL 2,214

CONST SHEET NO.	LINE	FROM STATION	TO STATION	SIDE	ESTIMATE (SY)
6	YID	13+50	13+74	RT	20
6	YID	13+50	13+77	LT	25
6/7	L	30+00	32+50	RT	140
7	L	35+00	35+80	RT	45
7	L	35+80	37+50	RT	185
7	L	38+50	39+50	RT	105
7	L	41+00	42+00	RT	55
7	Y3	10+91	11+20	RT	20
7	Y3	12+00	13+00	RT	80
7	Y3	12+00	13+00	LT	80
8	L	44+50	45+85	RT	75
8	L	48+50	50+00	RT	125
8	L	50+00	51+00	RT	165
8/9	L	55+50	58+50	RT	90
8	Y4	11+50	12+50	RT	80
9	L	58+50	59+50	RT	55
9	L	59+50	60+50	RT	85
9	L	60+50	62+79	RT	190
9	L	64+50	65+50	RT	55
9	L	65+50	66+50	RT	55
9	L	68+00	68+31	RT	20
9	L	68+31	69+00	RT	75
9	Y6	11+35	11+85	LT	30
9	Y6	11+35	11+50	RT	10
9	Y6	11+50	11+85	RT	20
10	L	73+65	74+50	LT	50
10	L	74+50	76+00	LT	85
10	L	76+00	78+00	LT	110
10	L	78+00	80+50	RT	140
10	L	80+00	81+50	LT	85

SUBTOTAL 2,355
PAGE TOTAL 4,569

DIVISION OF HIGHWAYS
STATE OF NORTH CAROLINA

PROJECT REFERENCE NO. R-2577A	SHEET NO. EC-3C
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

SOIL STABILIZATION SUMMARY SHEET

STRAW MATTING FOR EROSION CONTROL

STRAW MATTING FOR EROSION CONTROL

CONST SHEET NO.	LINE	FROM STATION	TO STATION	SIDE	ESTIMATE (SY)
10	L	83+00	83+50	LT	30
10	L	83+50	84+50	LT	55
10	Y5	18+50	19+50	RT	55
10	Y5	19+50	21+00	RT	50
10	Y5	21+50	22+50	LT	80
10	Y5	21+50	22+50	RT	80
10	Y7	11+00	12+00	RT	80
11	L	88+30	90+00	LT	140
11	L	90+00	91+00	LT	55
11	L	90+25	91+20	RT	95
11	L	91+00	92+50	LT	85
11	L	94+50	95+00	LT	30
11	Y8	11+78	12+50	LT	60
11	Y25	10+73	11+00	RT	30
11	Y25	12+50	13+00	LT	40
11	Y25	12+50	13+00	RT	40
12	L	106+25	106+50	RT	15
12	Y9	13+50	14+50	LT	105
12	Y9	13+50	14+50	LT	105
12	Y9	14+50	15+06	LT	60
13	L	116+22	117+00	LT	85
13	L	117+00	122+99	RT	325
13/14	L	122+99	125+00	RT	110
13	L	123+00	124+00	LT	85
13	Y11	11+50	12+00	RT	40
13	Y11	13+00	14+00	LT	125
14	L	125+00	128+50	RT	190
14	L	131+50	131+75	LT	30
14	L	132+50	134+25	LT	95
14	L	134+25	135+78	LT	85

SUBTOTAL 2,460

CONST SHEET NO.	LINE	FROM STATION	TO STATION	SIDE	ESTIMATE (SY)
14	Y12	21+25	22+50	RT	145
14	Y12	23+38	23+88	RT	30
15	Y14	13+31	14+00	LT	55
18	L	179+50	180+50	LT	55
18	L	181+00	181+50	LT	30
18	L	181+50	182+11	LT	35
18	L	184+00	185+50	LT	85
18	L	185+50	188+50	LT	245
18	L	185+20	185+50	RT	20
18/19	L	186+50	192+52	RT	330
19	L	193+06	194+37	LT	75
19/20	L	199+43	200+07	RT	0
19	Y15	11+25	11+50	LT	15
19	Y15	12+50	15+00	LT	140
20	L/L2	201+23	203+50	RT	125
20	L2	209+26	208+31	RT	95
20	Y17A	10+50	11+34	LT	70
20	Y17A	10+50	11+00	RT	30
22	L2	220+00	225+00	RT	275
22	L2	229+50	230+00	LT	30
22	L2	235+34	238+50	LT	175
22	L2	235+40	238+75	RT	185
23	L2	240+47	242+09	RT	205
23	L	242+08	242+14	RT	10
23	L	245+00	245+50	LT	30
23/24	L	247+11	250+00	RT	160
26	L	285+50	286+37	RT	50
26	L	285+22	285+74	RT	30
27	L	284+00	285+22	RT	70
27	L	287+00	290+00	LT	230

SUBTOTAL 3,030
PAGE TOTAL 5,490

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Bhuskey

DIVISION OF HIGHWAYS
STATE OF NORTH CAROLINA

PROJECT REFERENCE NO. <i>R-2577A</i>	SHEET NO. <i>EC-3D</i>
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

SOIL STABILIZATION SUMMARY SHEET
STRAW MATTING FOR EROSION CONTROL

CONST SHEET NO.	LINE	FROM STATION	TO STATION	SIDE	ESTIMATE (SY)
28	L	301+05	304+77	RT	205
28	L	303+50	304+50	LT	100
28	XOVER	305+50	305+64	LT	15
29	Y5	10+00	11+50	LT	85
29	Y5	11+50	14+00	LT	310
29	Y5	11+50	14+00	RT	250
29	Y5A	10+00	11+00	RT	45
29	Y5A	10+00	11+00	LT	80
29	Y5A	11+00	13+00	LT	155
29	Y5A	11+00	13+00	RT	155
29	Y5A	13+00	15+50	RT	195
29	Y5A	15+50	16+00	RT	40
29	Y24	13+09	15+50	RT	135
29	Y24	15+50	17+34	RT	100
29	Y24	18+50	20+00	RT	190
29	Y24	20+00	20+50	RT	30
29	Y24	20+50	21+23	RT	60
29	Y24	21+23	22+23	RT	55
29	Y24	23+00	23+63	RT	35
30	Y23	16+00	17+00	LT	55
30	Y23	13+79	14+72	RT	55
			SUBTOTAL		2,350
			STRAW MATTING TOTAL		12,409

DIVISION OF HIGHWAYS
STATE OF NORTH CAROLINA

PROJECT REFERENCE NO. R-2577A	SHEET NO. EC-3E
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

SOIL STABILIZATION SUMMARY SHEET

EROSION CONTROL EXCELSIOR MATTING

CONST SHEET NO.	LINE	FROM STATION	TO STATION	SIDE	ESTIMATE (SY)
4	L/Y4	0+00	1+63	RT	215
4	L	1+00	1+97	RT	55
4	L	3+59	3+82	LT	25
4	L	3+82	4+00	LT	10
5	L	6+50	7+00	LT	30
5	L	12+00	13+00	LT	55
5	YIC	11+00	11+18	LT	10
5	YIA	12+50	14+24	LT	95
7	L	39+50	41+00	RT	85
7/8	L	42+00	44+50	RT	205
7	Y3	11+50	12+00	LT	40
7	Y3	11+50	12+00	RT	40
8	L	47+50	48+50	RT	105
8	Y4	12+50	14+00	RT	120
8	Y4	12+50	14+00	LT	120
9	L	62+79	64+50	RT	140
9	L	67+80	68+00	RT	25
9	Y6	10+63	11+35	RT	80
10	L	78+00	78+50	LT	30
10	L	80+50	82+00	RT	85
10	L	81+50	82+00	LT	30
10	L	82+00	82+49	RT	30
10	L	82+00	82+43	LT	25
10/11	L	84+50	85+55	LT	60
10	Y5	21+00	22+50	RT	85
11	L	86+85	87+00	LT	10
11	L	87+00	87+28	LT	20
11	L	87+28	88+00	LT	40
11	L	88+00	88+30	LT	20
11	L	92+50	92+75	LT	15

SUBTOTAL 2,845

EROSION CONTROL EXCELSIOR MATTING

CONST SHEET NO.	LINE	FROM STATION	TO STATION	SIDE	ESTIMATE (SY)
11	L	93+10	94+00	LT	50
11	L	95+00	96+50	LT	85
12	L	98+00	99+71	RT	180
12	L	102+50	104+50	LT	110
12	L	104+50	106+00	LT	85
12	L	107+85	108+50	LT	70
12/13	L	109+50	112+00	RT	140
13	L	115+00	117+00	RT	110
13	L	117+00	118+50	LT	125
13	L	118+50	123+00	LT	370
13/14	L	124+50	128+50	LT	220
13	Y10	10+72	11+50	LT	65
13	Y11	11+50	12+00	LT	40
13	Y11	12+17	13+00	LT	90
13	Y11	14+00	14+40	LT	45
14	L	129+50	131+50	LT	210
15	Y13	10+85	11+50	RT	75
15	Y13	11+00	11+50	LT	40
18	L	178+50	179+00	LT	30
18	L	180+50	181+00	LT	30
18/19	L	188+50	192+00	LT	190
19	L	194+37	195+69	LT	75
19	L	195+69	198+50	LT	155
21	L2	215+50	217+50	LT	110
21	L2	217+70	218+00	LT	20
21/22	L2	225+78	229+24	LT	355
22	L2	230+50	235+00	RT	245
23	L	242+22	245+00	LT	155
23	L	243+14	244+50	RT	170
26/27	L	286+50	290+10	RT	195

SUBTOTAL 3,840
PAGE TOTAL 6,685

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Bhuskey

DIVISION OF HIGHWAYS
STATE OF NORTH CAROLINA

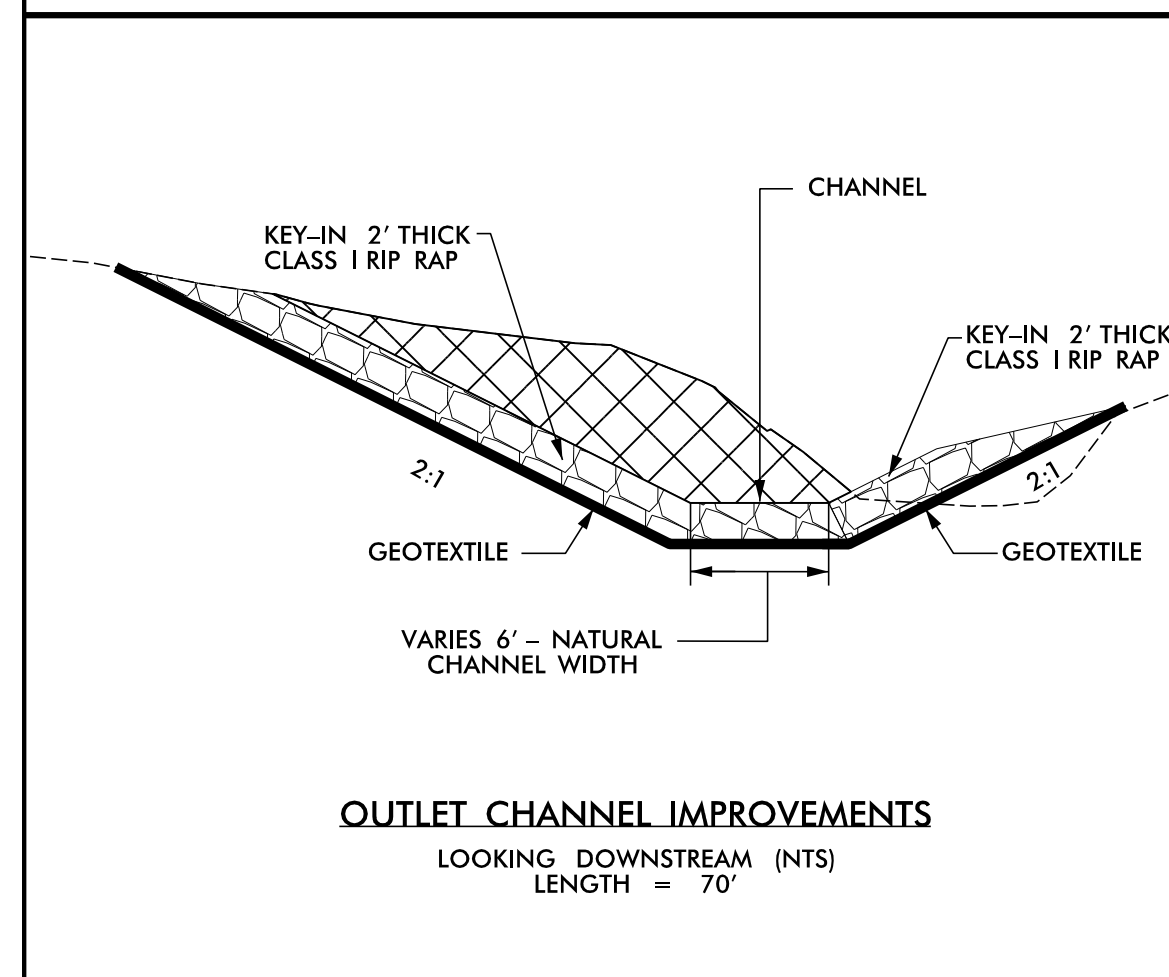
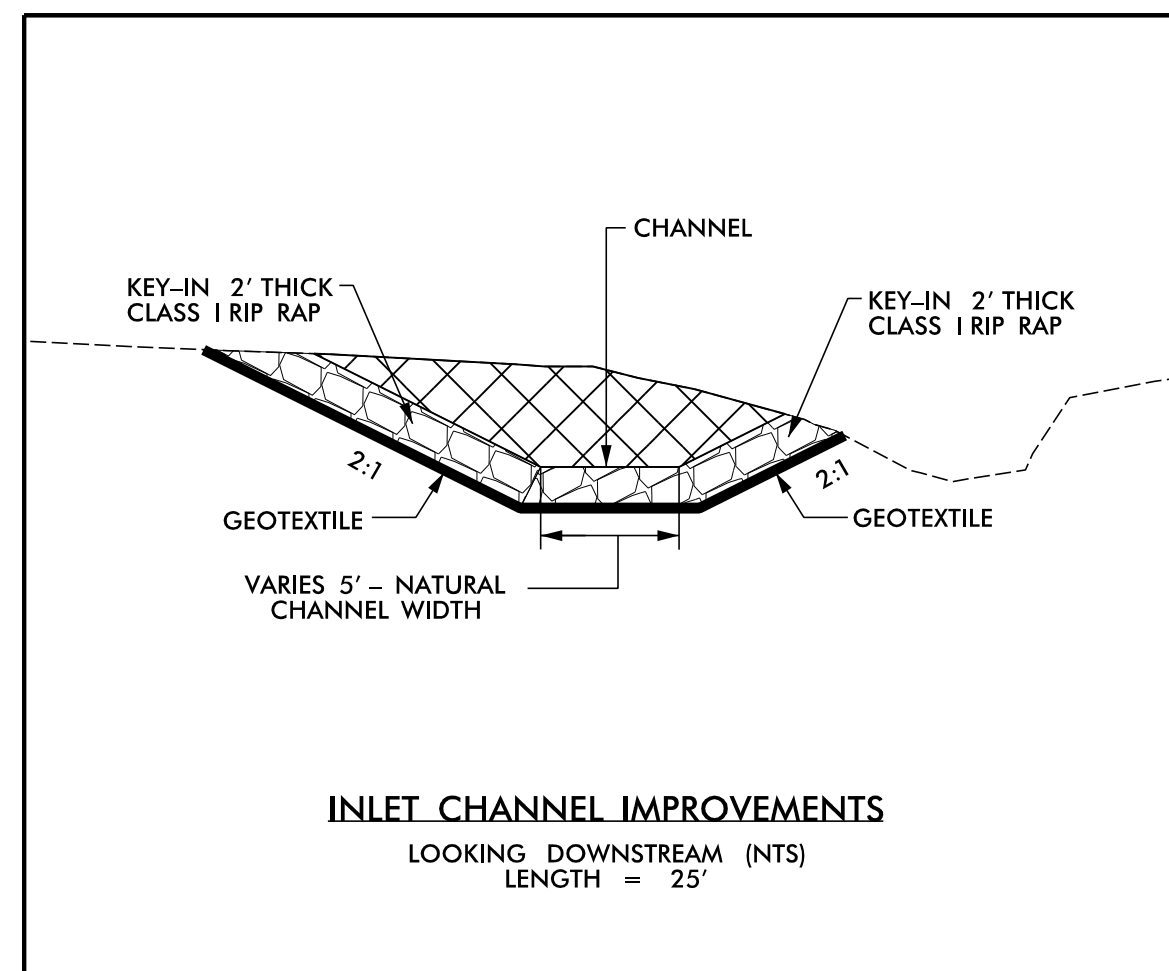
PROJECT REFERENCE NO. <i>R-2577A</i>	SHEET NO. <i>EC-3G</i>
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

SOIL STABILIZATION TIMEFRAMES

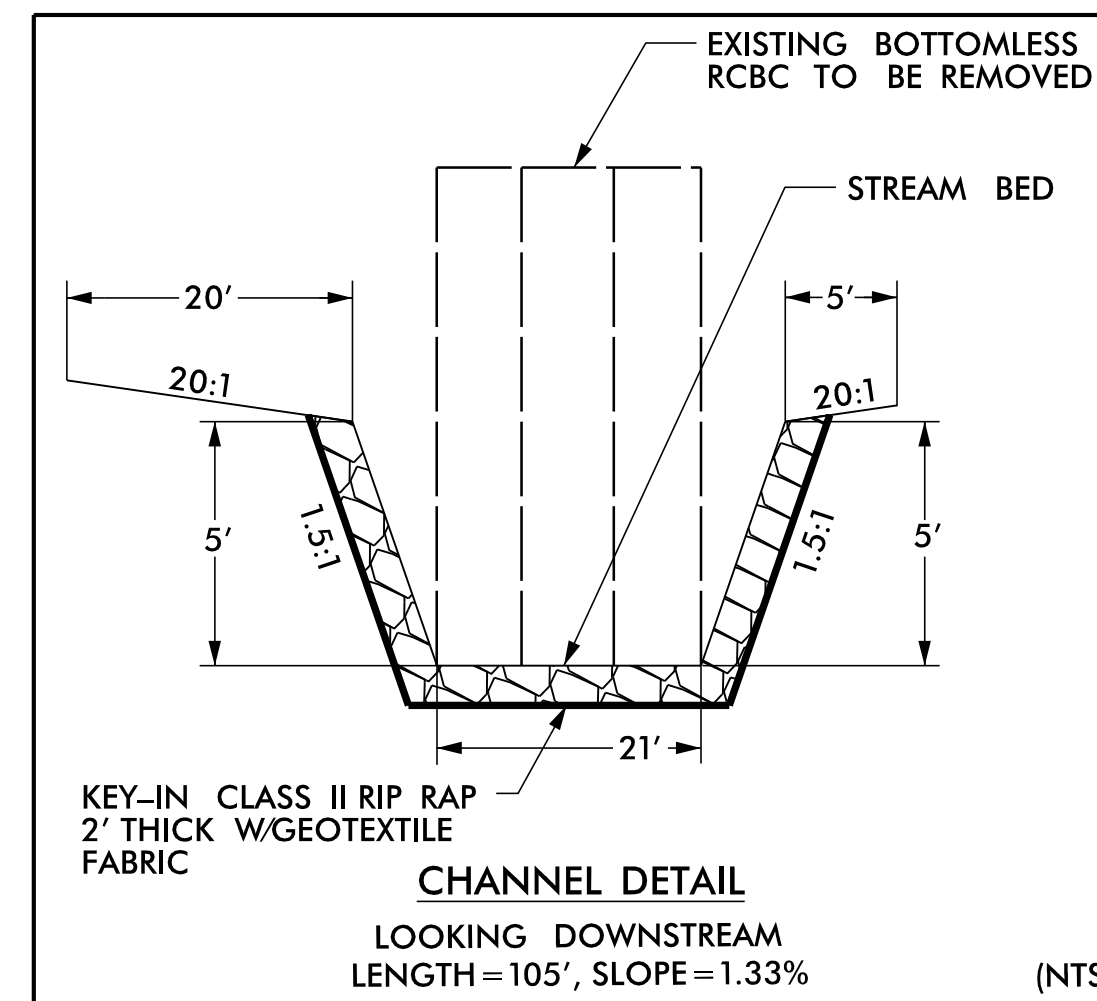
SITE DESCRIPTION	STABILIZATION TIME	TIMEFRAME EXCEPTIONS
PERIMETER DIKES, SWALES, DITCHES AND SLOPES	7 DAYS	NONE
HIGH QUALITY WATER (HQW) ZONES	7 DAYS	NONE
SLOPES STEEPER THAN 3:1	7 DAYS	IF SLOPES ARE 10' OR LESS IN LENGTH AND ARE NOT STEEPER THAN 2:1, 14 DAYS ARE ALLOWED.
SLOPES 3:1 OR FLATTER	14 DAYS	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. R-2577A	SHEET NO. EC-31
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

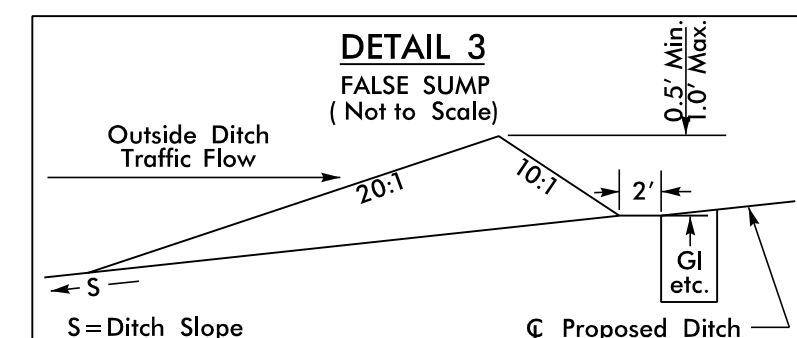
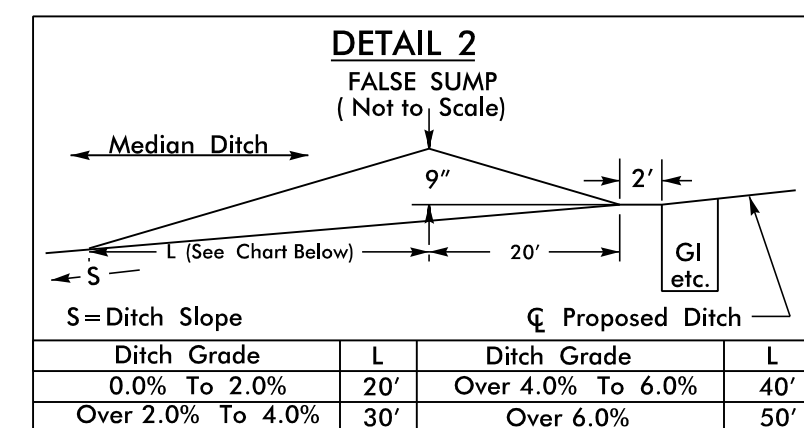
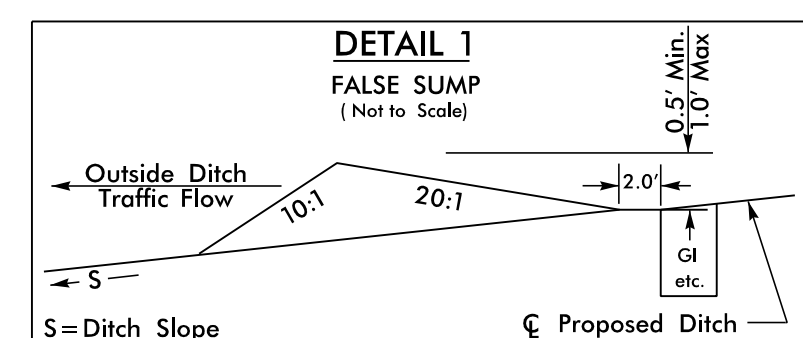
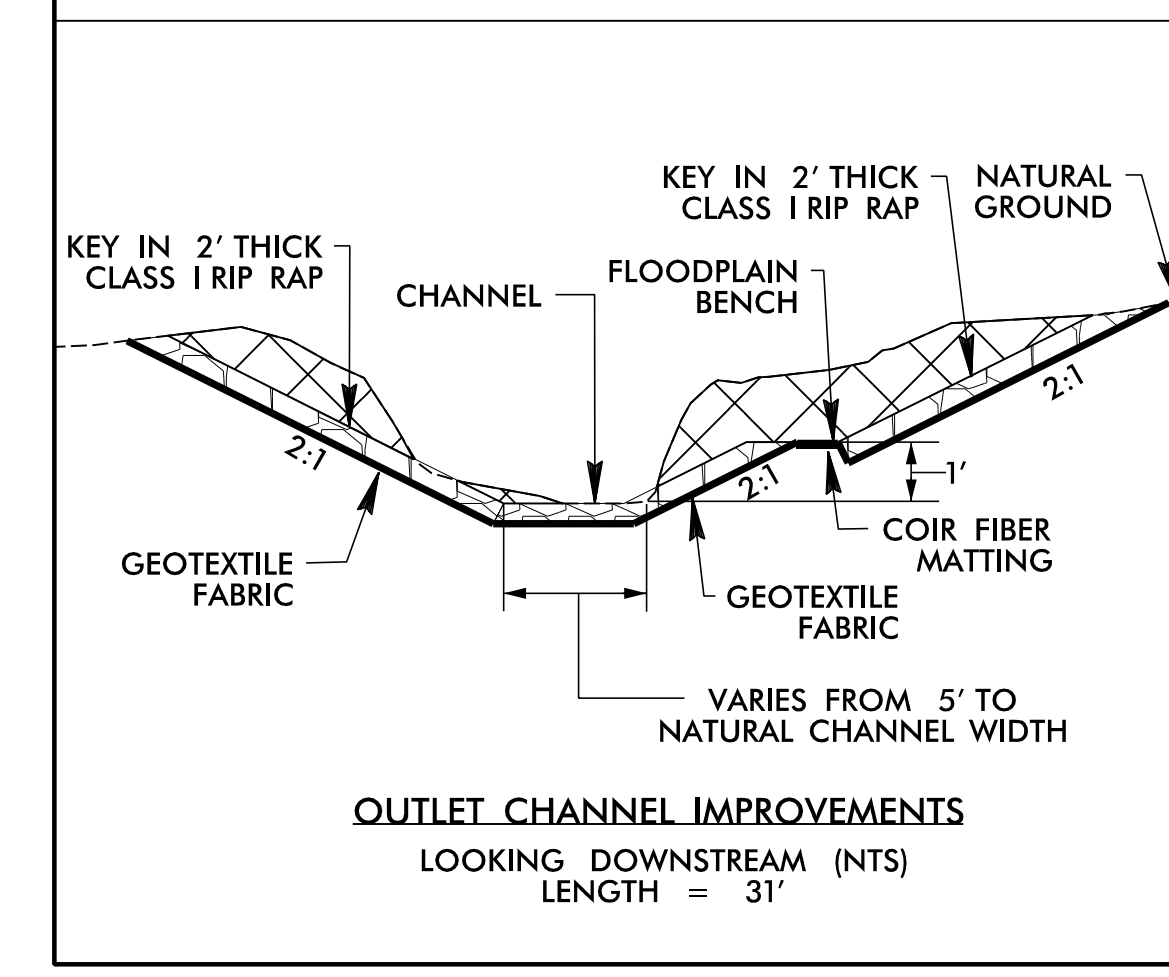
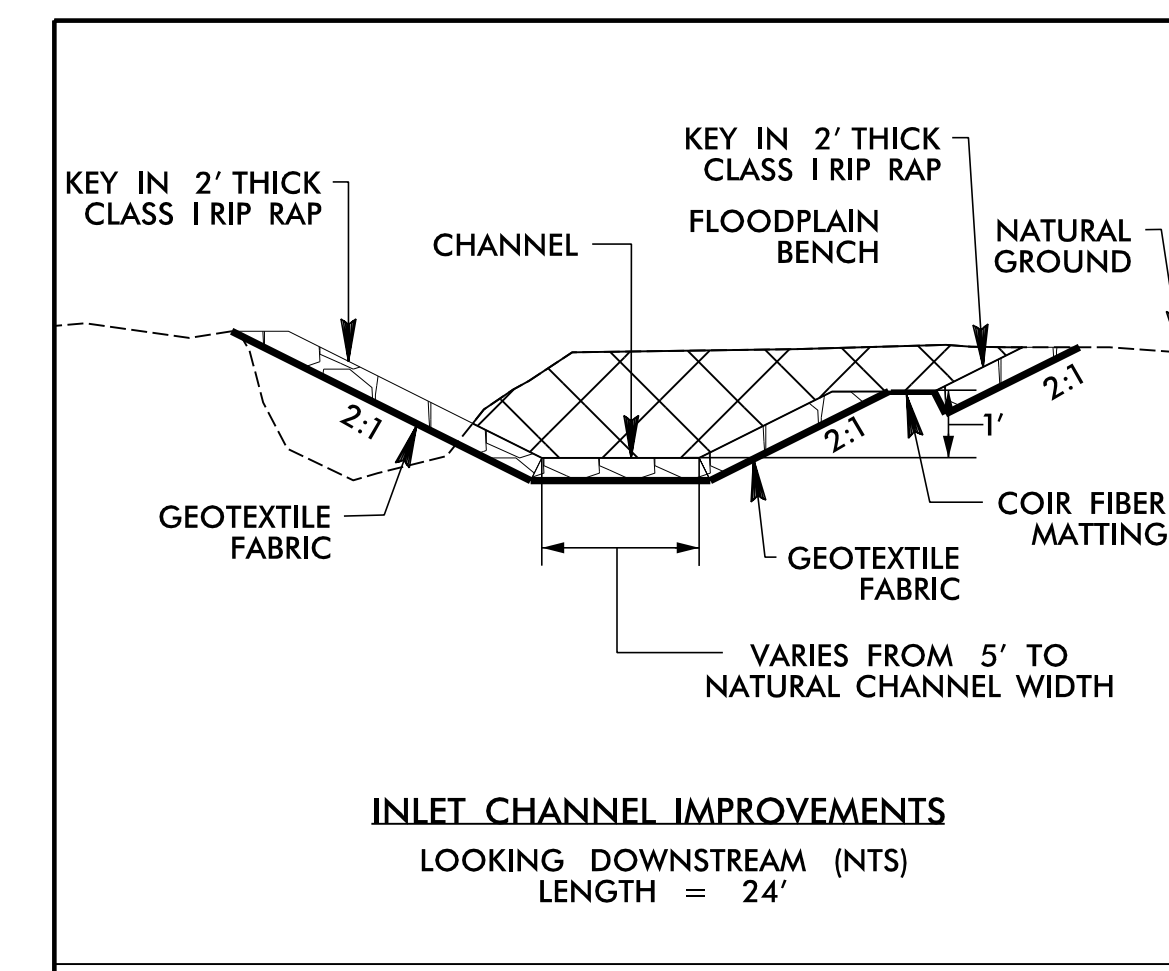
UT LOWERY MILL CREEK DETAILS -L- 107 + 57



LOWERY MILL CREEK DETAIL -L- 140 + 39.5



MARTIN MILL CREEK DETAILS -L2- 229 + 09



PROJECT REFERENCE NO. R-2577A	SHEET NO. EC-04/CONST.4
RW SHEET NO. ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

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

NOTE: UTILIZE FABRIC INSERT INLET PROTECTION IN LIEU OF TYPE C INLET PROTECTION WHERE WATER MIGHT POND ON ROADWAY USED BY PUBLIC TRAFFIC.

CLEARING AND GRUBBING EROSION CONTROL FOR CONSTRUCTION SHEET 4

51 x 34 x 3
1.5 inch Skimmer
with 1.375 inch
Orifice Diameter
13 ft. weir
(See Tiered Skimmer
Basin Detail)
ID 4-2

44 x 29 x 3
1.5 inch Skimmer
with 1.250 inch
Orifice Diameter
10 ft. weir
(See Tiered Skimmer
Basin Detail)
ID 4-1

Modified Silt Basin
Type 'B'
44 x 29 x 3
10 ft. weir
(See Tiered Skimmer
Basin Detail)
ID 4-1

58 x 29 x 3
1.5 inch Skimmer
with 1.250 inch
Orifice Diameter
5 ft. weir
ID 4-3

45 x 22 x 3
1.5 inch Skimmer
with 0.875 inch
Orifice Diameter
4 ft. weir
ID 4-4

BEGIN TIP PROJECT R-2577A
-L- STA. 0 + 00.00

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-BL- 102

MATCHLINE -L- STA. 4 + 50 SEE SHEET 5

★ PROPOSED SIGNAL



PROJECT REFERENCE NO.	SHEET NO.
R-2577A	EC-05/CONST.5
RW SHEET NO.	HYDRAULICS ENGINEER
ROADWAY DESIGN ENGINEER	

DB 3619 PG 236
CONDO PLAT 8 PG 136

44 x 22 x 3
1.5 inch Skimmer
with 0.875 inch
Orifice Diameter
4 ft. weir
ID 5.2

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

NOTE: UTILIZE FABRIC INSERT INLET PROTECTION IN LIEU OF TYPE C INLET PROTECTION WHERE WATER MIGHT POND ON ROADWAY USED BY PUBLIC TRAFFIC.

51 x 34 x 3
1.5 inch Skimmer
with 1.375 inch
Orifice Diameter
13 ft. weir
(See Tiered Skimmer
Basin Detail)
ID 4-2

59 x 29 x 3
1.5 inch Skimmer
with 1.25 inch
Orifice Diameter
6 ft. weir
ID 5.6

Modified Silt Basin
Type 'B'
51 x 34 x 3
13 ft. weir
(See Tiered Skimmer
Basin Detail)
ID 4-2

59 x 29 x 3
1.5 inch Skimmer
with 1.25 inch
Orifice Diameter
6 ft. weir
ID 5.5

MATCHLINE -L- STA. 4+50 SEE SHEET 4

MATCHLINE -L- STA. 18+00 SEE SHEET 6

45 x 22 x 3
1.5 inch Skimmer
with 0.875 inch
Orifice Diameter
4 ft. weir
ID 4-4

32 x 15 x 3
1.5 inch Skimmer
with 0.500 inch
Orifice Diameter
4 ft. weir
ID 5.3

34 x 16 x 3
1.5 inch Skimmer
with 0.500 inch
Orifice Diameter
4 ft. weir
ID 5.4

NOTE: ALL DRIVES ARE 18' WIDE WITH 10' RADII UNLESS OTHERWISE NOTED

★ PROPOSED SIGNAL

BM # 2
N 862560 E 1649507
-L- STA. 14+13.23 OFF 253.63' RT
ELEV=884.50'

REMOVAL OF EXISTING PAVEMENT

MATCHLINE -L- STA. 13+50
SEE SHEET 6

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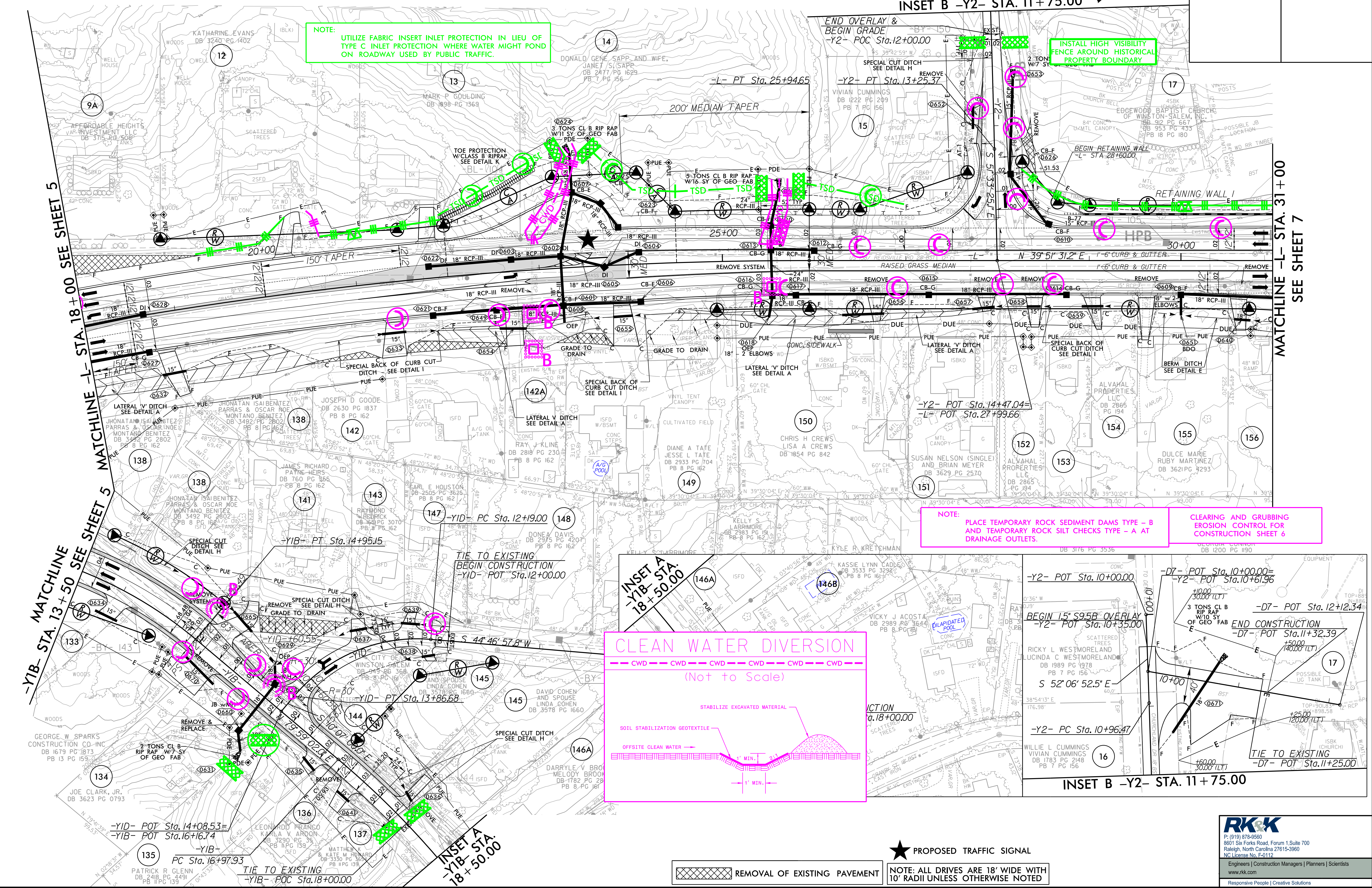
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PROJECT REFERENCE NO. R-2577A	SHEET NO. EC-06/CONST.6
RW SHEET NO.	HYDRAULICS ENGINEER
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

917.50' E
92.04'

NAD 83/2011

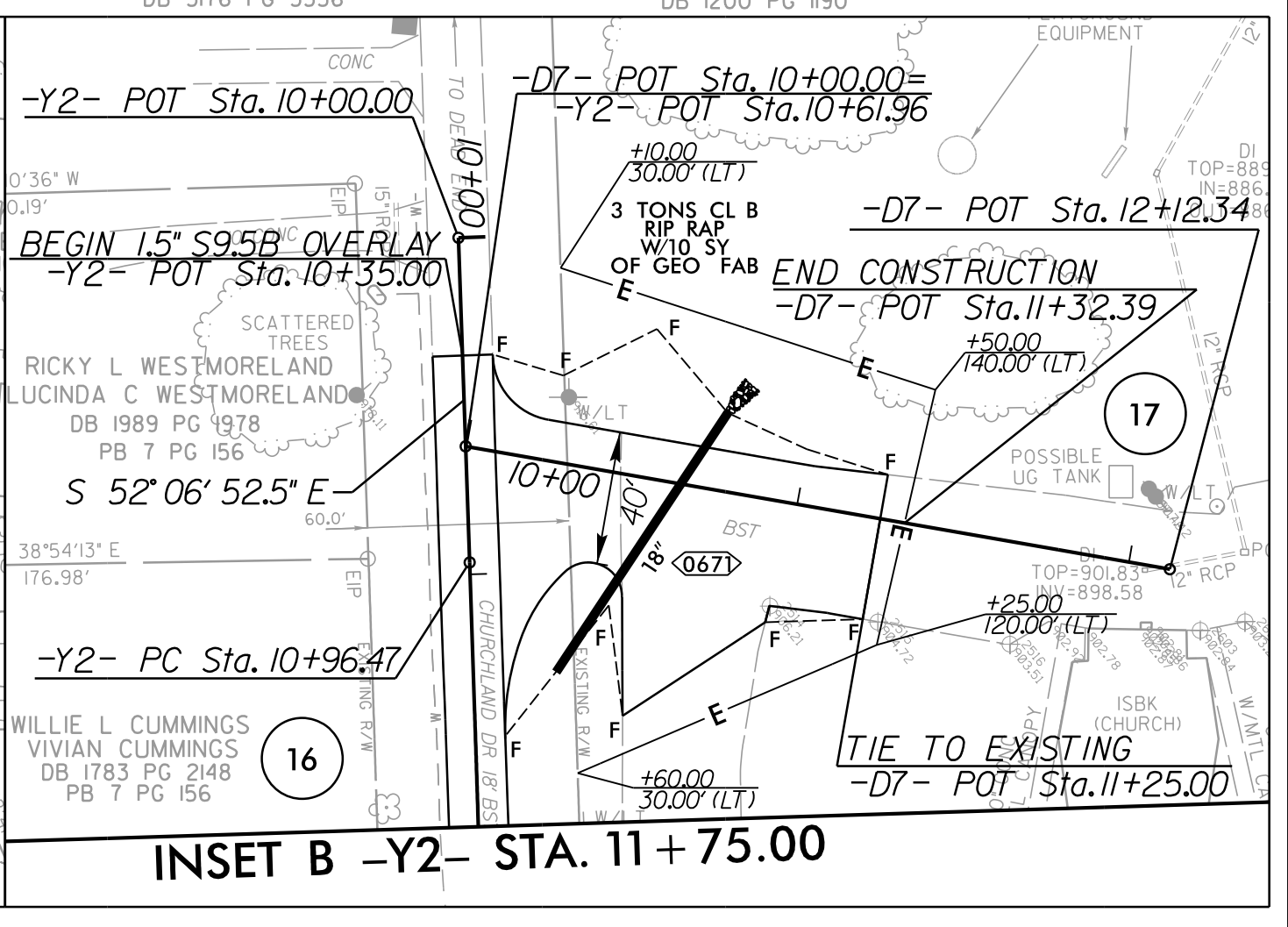
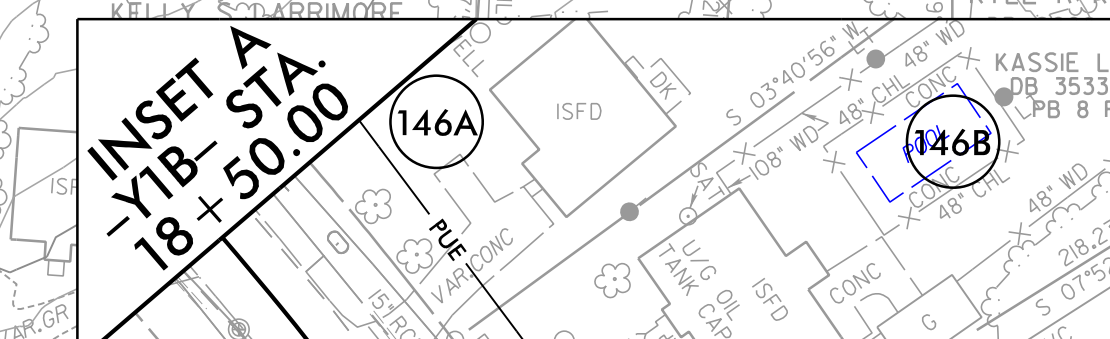


NOTE:
UTILIZE FABRIC INSERT INLET PROTECTION IN LIEU OF TYPE C INLET PROTECTION WHERE WATER MIGHT POND ON ROADWAY USED BY PUBLIC TRAFFIC.

INSTALL HIGH VISIBILITY FENCE AROUND HISTORICAL PROPERTY BOUNDARY

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



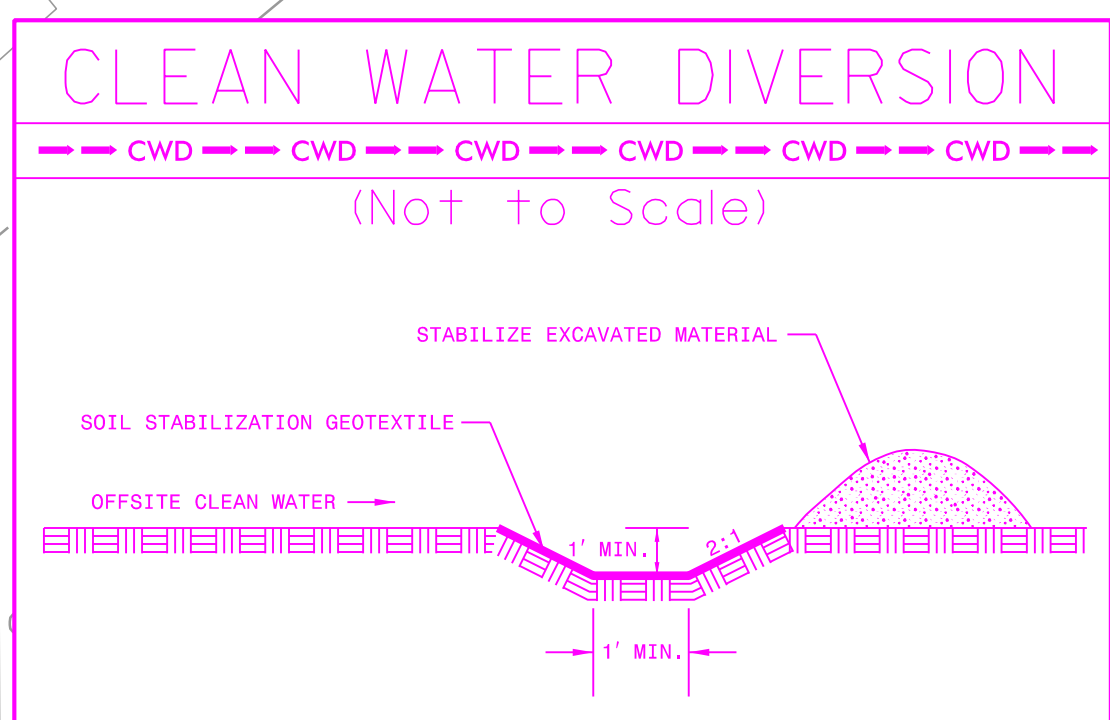
REMOVAL OF EXISTING PAVEMENT

★ PROPOSED TRAFFIC SIGNAL
NOTE: ALL DRIVES ARE 18' WIDE WITH 10' RADII UNLESS OTHERWISE NOTED

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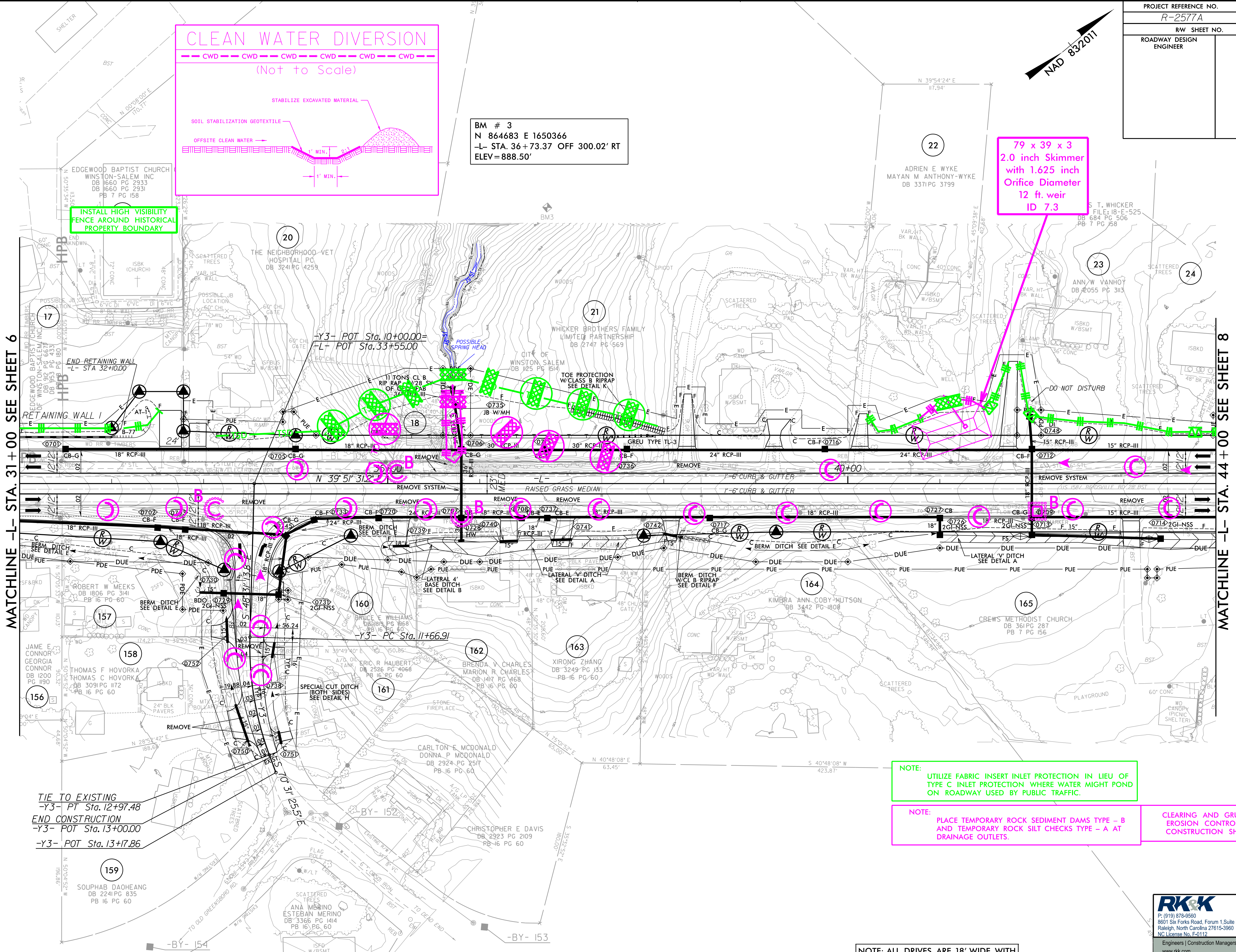
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PROJECT REFERENCE NO. R-2577A	SHEET NO. EC-07/CONST.7
RW SHEET NO.	HYDRAULICS ENGINEER
ROADWAY DESIGN ENGINEER	



BM # 3
N 864683 E 1650366
-L- STA. 36+73.37 OFF 300.02' RT
ELEV = 888.50'

79 x 39 x 3
2.0 inch Skimmer
with 1.625 inch
Orifice Diameter
12 ft. weir
ID 7.3



MATCHLINE -L- STA. 31+00 SEE SHEET 6

MATCHLINE -L- STA. 44+00 SEE SHEET 8

NOTE: UTILIZE FABRIC INSERT INLET PROTECTION IN LIEU OF TYPE C INLET PROTECTION WHERE WATER MIGHT POND ON ROADWAY USED BY PUBLIC TRAFFIC.

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 7

TIE TO EXISTING
-Y3- PT Sta. 12+97.48
END CONSTRUCTION
-Y3- POT Sta. 13+00.00
-Y3- POT Sta. 13+17.86

NOTE: ALL DRIVES ARE 18' WIDE WITH 10' RADII UNLESS OTHERWISE NOTED

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PROJECT REFERENCE NO.	R-2577A	SHEET NO.	EC-08/CONST.8
RW SHEET NO.		HYDRAULICS ENGINEER	
ROADWAY DESIGN ENGINEER			

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 8

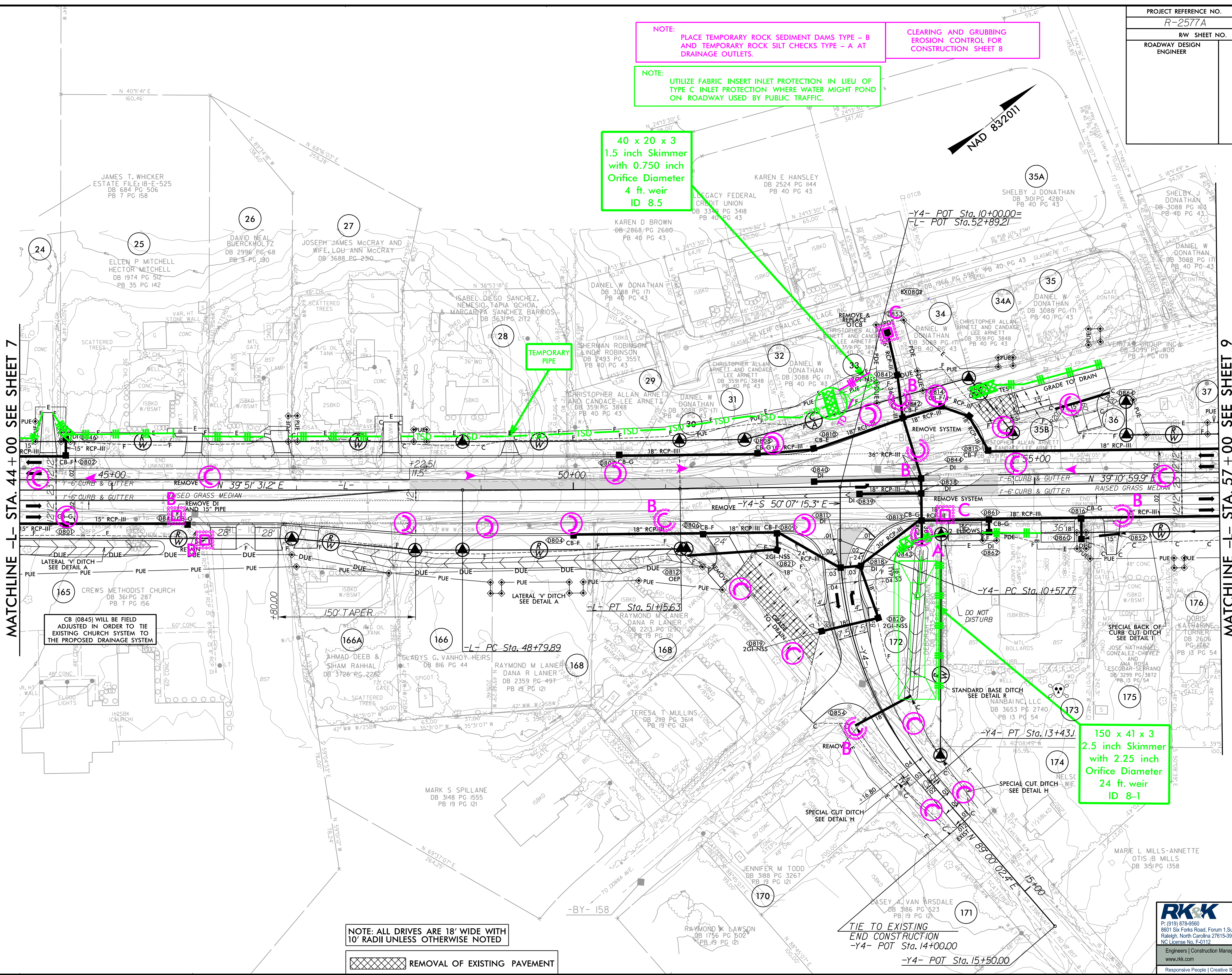
NOTE: UTILIZE FABRIC INSERT INLET PROTECTION IN LIEU OF TYPE C INLET PROTECTION WHERE WATER MIGHT POND ON ROADWAY USED BY PUBLIC TRAFFIC.

40 x 20 x 3
1.5 inch Skimmer
with 0.750 inch
Orifice Diameter
4 ft. weir
ID 8.5

150 x 41 x 3
2.5 inch Skimmer
with 2.25 inch
Orifice Diameter
24 ft. weir
ID 8-1

MATCHLINE -L- STA. 44 + 00 SEE SHEET 7

MATCHLINE -L- STA. 57 + 00 SEE SHEET 9



CB (0845) WILL BE FIELD ADJUSTED IN ORDER TO TIE EXISTING CHURCH SYSTEM TO THE PROPOSED DRAINAGE SYSTEM.

NOTE: ALL DRIVES ARE 18' WIDE WITH 10' RADII UNLESS OTHERWISE NOTED

REMOVAL OF EXISTING PAVEMENT

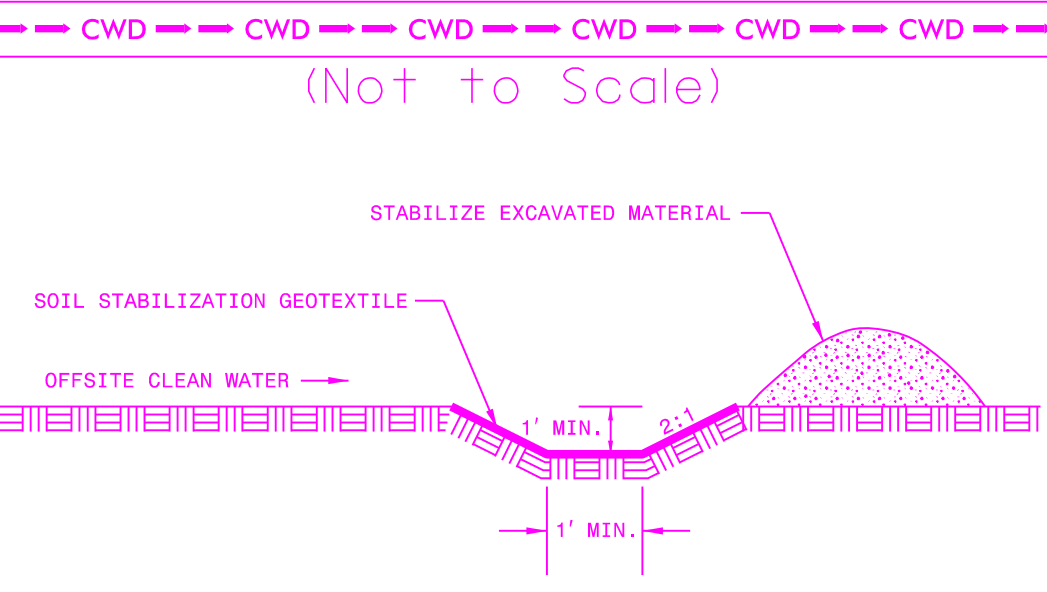
TIE TO EXISTING END CONSTRUCTION
-Y4- POT Sta. 14+00.00
-Y4- POT Sta. 15+50.00

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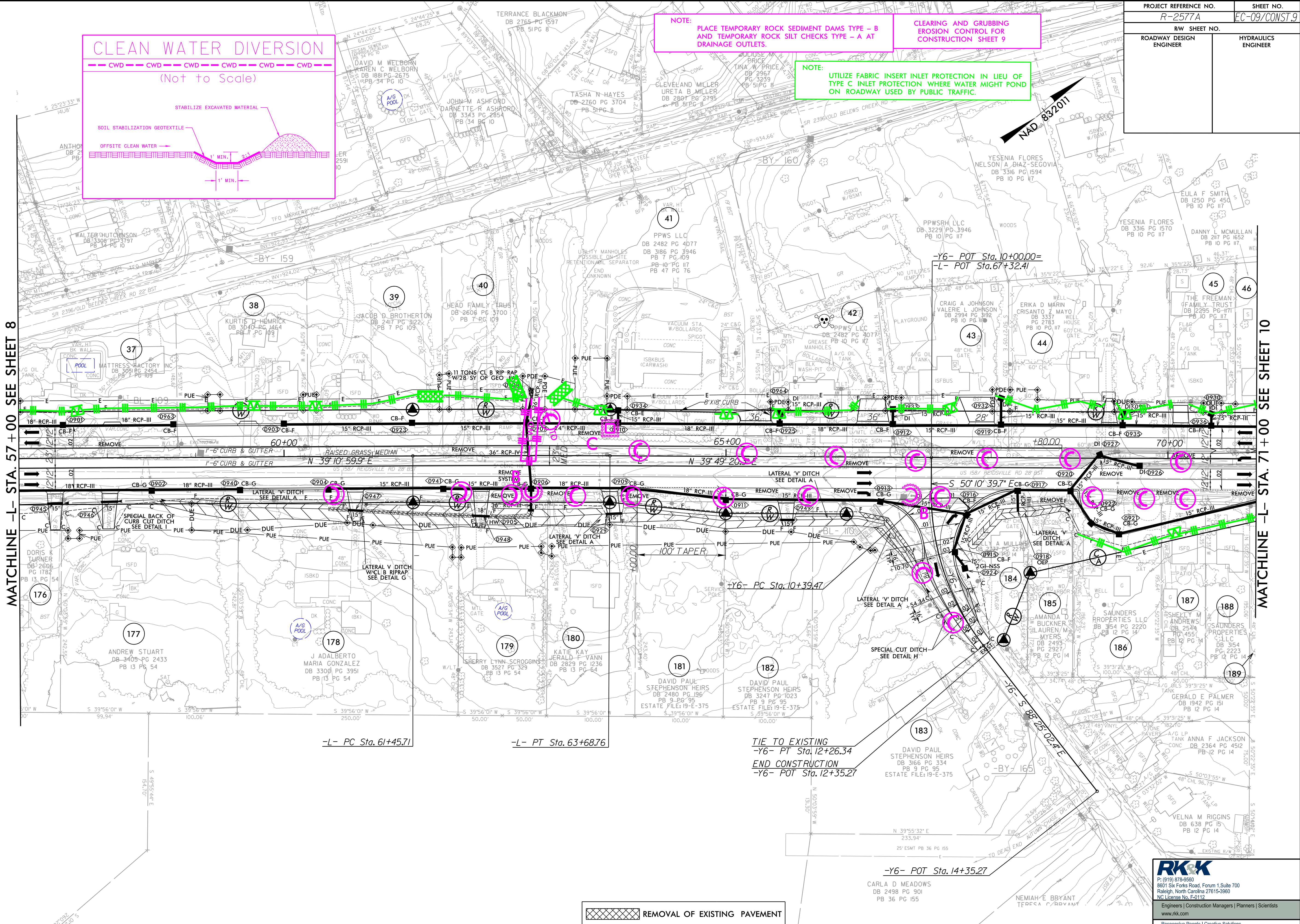
CLEAN WATER DIVERSION



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 9

NOTE: UTILIZE FABRIC INSERT INLET PROTECTION IN LIEU OF TYPE C INLET PROTECTION WHERE WATER MIGHT POND ON ROADWAY USED BY PUBLIC TRAFFIC.



MATCHLINE -L- STA. 57+00 SEE SHEET 8

MATCHLINE -L- STA. 71+00 SEE SHEET 10

REMOVAL OF EXISTING PAVEMENT

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PROJECT REFERENCE NO. R-2577A	SHEET NO. EC-10/CONST.10
RW SHEET NO.	HYDRAULICS ENGINEER
ROADWAY DESIGN ENGINEER	

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

**95 x 45 x 3
2.0 inch Skimmer
with 1.750 inch
Orifice Diameter
16 ft. weir
ID 10.1**

**74 x 30 x 3
1.5 inch Skimmer
with 1.25 inch
Orifice Diameter
17 ft. weir
ID 10.2**

NOTE: UTILIZE FABRIC INSERT INLET PROTECTION IN LIEU OF TYPE C INLET PROTECTION WHERE WATER MIGHT POND ON ROADWAY USED BY PUBLIC TRAFFIC.

REPLACE CONCRETE DRIVE AS NEEDED TO MATCH EXISTING PATTERN

**BM # 5
N 867531 E 1653703
-L- STA. 79+98.04 OFF 416.92' RT
ELEV = 916.16'**

★ PROPOSED TRAFFIC SIGNAL

NOTE: ALL DRIVEWAYS ARE 18' UNLESS OTHERWISE NOTED

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MANNA BAPTIST CHURCH
DB 1636 PG 1729

MATCHLINE -L- STA. 71+00 SEE SHEET 9

MATCHLINE -L- STA. 84+50 SEE SHEET 11

MATCHLINE -Y5- STA. 19+75 SEE SHEET 29

**TIE TO EXISTING
-Y7- POT Sta. 12+00.00
END CONSTRUCTION
-Y7- POT Sta. 12+10.00**

**END CONSTRUCTION
-Y7- POT Sta. 13+99.02**

**-Y5- POT Sta. 24+04.15=
-L- POT Sta. 79+25.00**

**-Y5- PT Sta. 22+71.59
-L- POT Sta. 82+79.17**

8/17/19

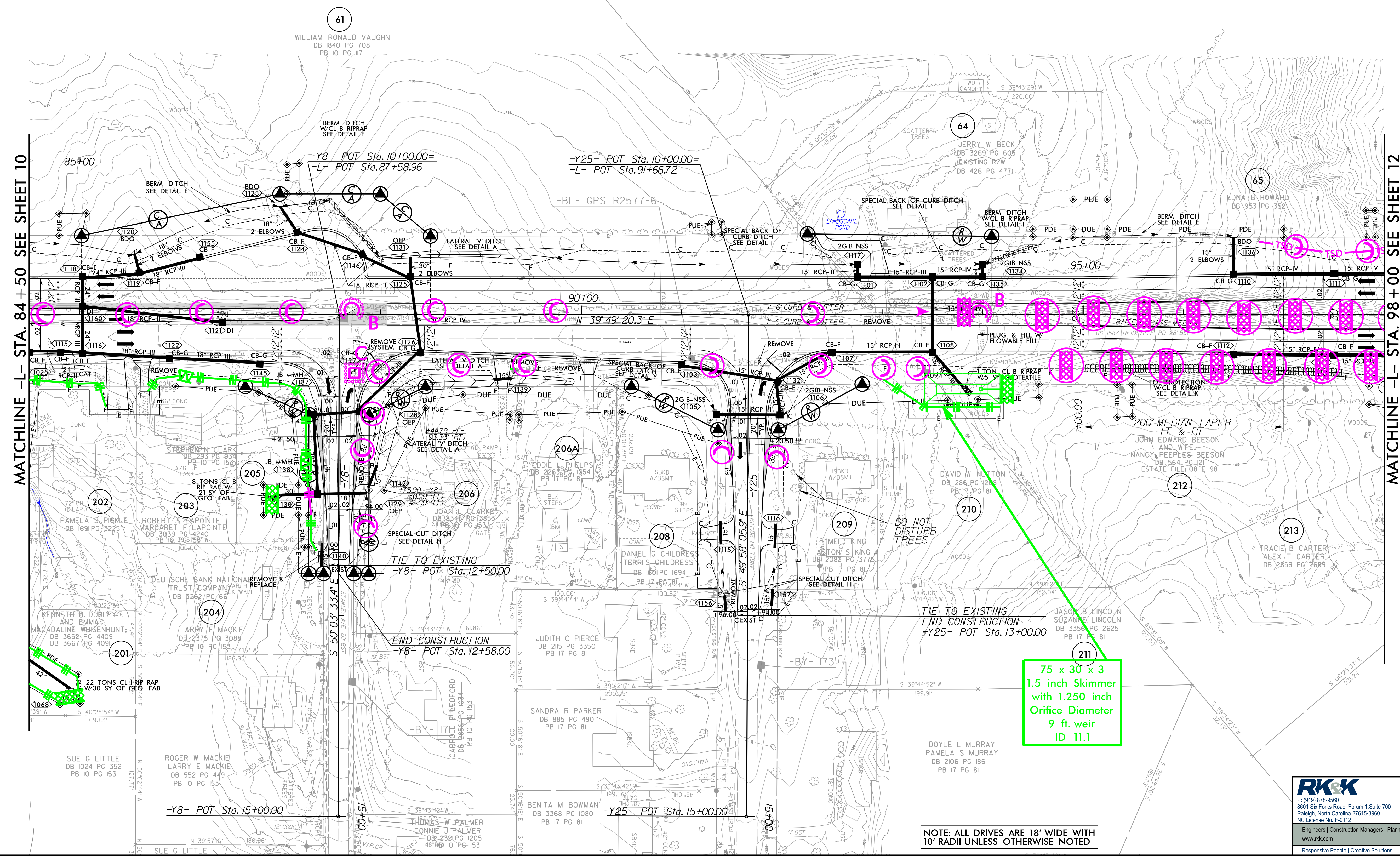
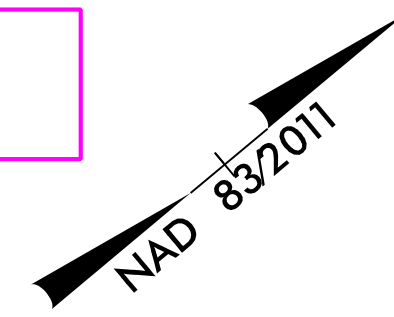
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PROJECT REFERENCE NO. R-2577A	SHEET NO. EC-11/CONST.11
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

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

NOTE: UTILIZE FABRIC INSERT INLET PROTECTION IN LIEU OF TYPE C INLET PROTECTION WHERE WATER MIGHT POND ON ROADWAY USED BY PUBLIC TRAFFIC.

CLEARING AND GRUBBING EROSION CONTROL FOR CONSTRUCTION SHEET 11



MATCHLINE -L- STA. 84 + 50 SEE SHEET 10

MATCHLINE -L- STA. 98 + 00 SEE SHEET 12

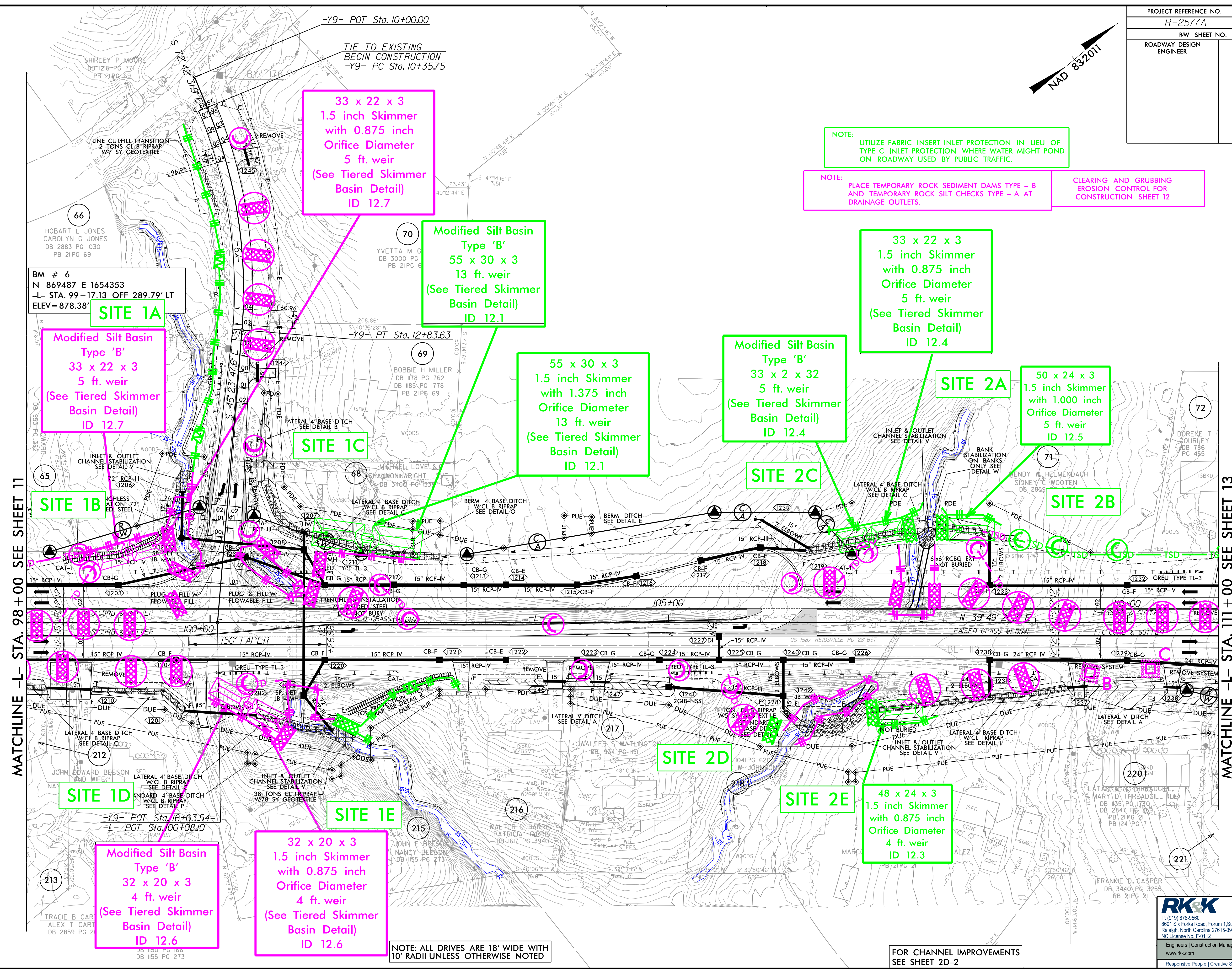
75 x 30 x 3
1.5 inch Skimmer
with 1.250 inch
Orifice Diameter
9 ft. weir
ID 11.1

NOTE: ALL DRIVES ARE 18' WIDE WITH 10' RADII UNLESS OTHERWISE NOTED

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PROJECT REFERENCE NO. R-2577A	SHEET NO. EC-12/CONST.12
RW SHEET NO.	HYDRAULICS ENGINEER
ROADWAY DESIGN ENGINEER	



33 x 22 x 3
1.5 inch Skimmer
with 0.875 inch
Orifice Diameter
5 ft. weir
(See Tiered Skimmer
Basin Detail)
ID 12.7

Modified Silt Basin
Type 'B'
55 x 30 x 3
13 ft. weir
(See Tiered Skimmer
Basin Detail)
ID 12.1

NOTE:
UTILIZE FABRIC INSERT INLET PROTECTION IN LIEU OF
TYPE C INLET PROTECTION WHERE WATER MIGHT POND
ON ROADWAY USED BY PUBLIC TRAFFIC.

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 12

BM # 6
N 869487 E 1654353
-L- STA. 99+17.13 OFF 289.79' LT
ELEV = 878.38'

Modified Silt Basin
Type 'B'
33 x 22 x 3
5 ft. weir
(See Tiered Skimmer
Basin Detail)
ID 12.7

55 x 30 x 3
1.5 inch Skimmer
with 1.375 inch
Orifice Diameter
13 ft. weir
(See Tiered Skimmer
Basin Detail)
ID 12.1

Modified Silt Basin
Type 'B'
33 x 2 x 32
5 ft. weir
(See Tiered Skimmer
Basin Detail)
ID 12.4

33 x 22 x 3
1.5 inch Skimmer
with 0.875 inch
Orifice Diameter
5 ft. weir
(See Tiered Skimmer
Basin Detail)
ID 12.4

50 x 24 x 3
1.5 inch Skimmer
with 1.000 inch
Orifice Diameter
5 ft. weir
ID 12.5

MATCHLINE -L- STA. 98 + 00 SEE SHEET 11

MATCHLINE -L- STA. 111 + 00 SEE SHEET 13

Modified Silt Basin
Type 'B'
32 x 20 x 3
4 ft. weir
(See Tiered Skimmer
Basin Detail)
ID 12.6

32 x 20 x 3
1.5 inch Skimmer
with 0.875 inch
Orifice Diameter
4 ft. weir
(See Tiered Skimmer
Basin Detail)
ID 12.6

48 x 24 x 3
1.5 inch Skimmer
with 0.875 inch
Orifice Diameter
4 ft. weir
ID 12.3

NOTE: ALL DRIVES ARE 18' WIDE WITH
10' RADII UNLESS OTHERWISE NOTED

FOR CHANNEL IMPROVEMENTS
SEE SHEET 2D-2

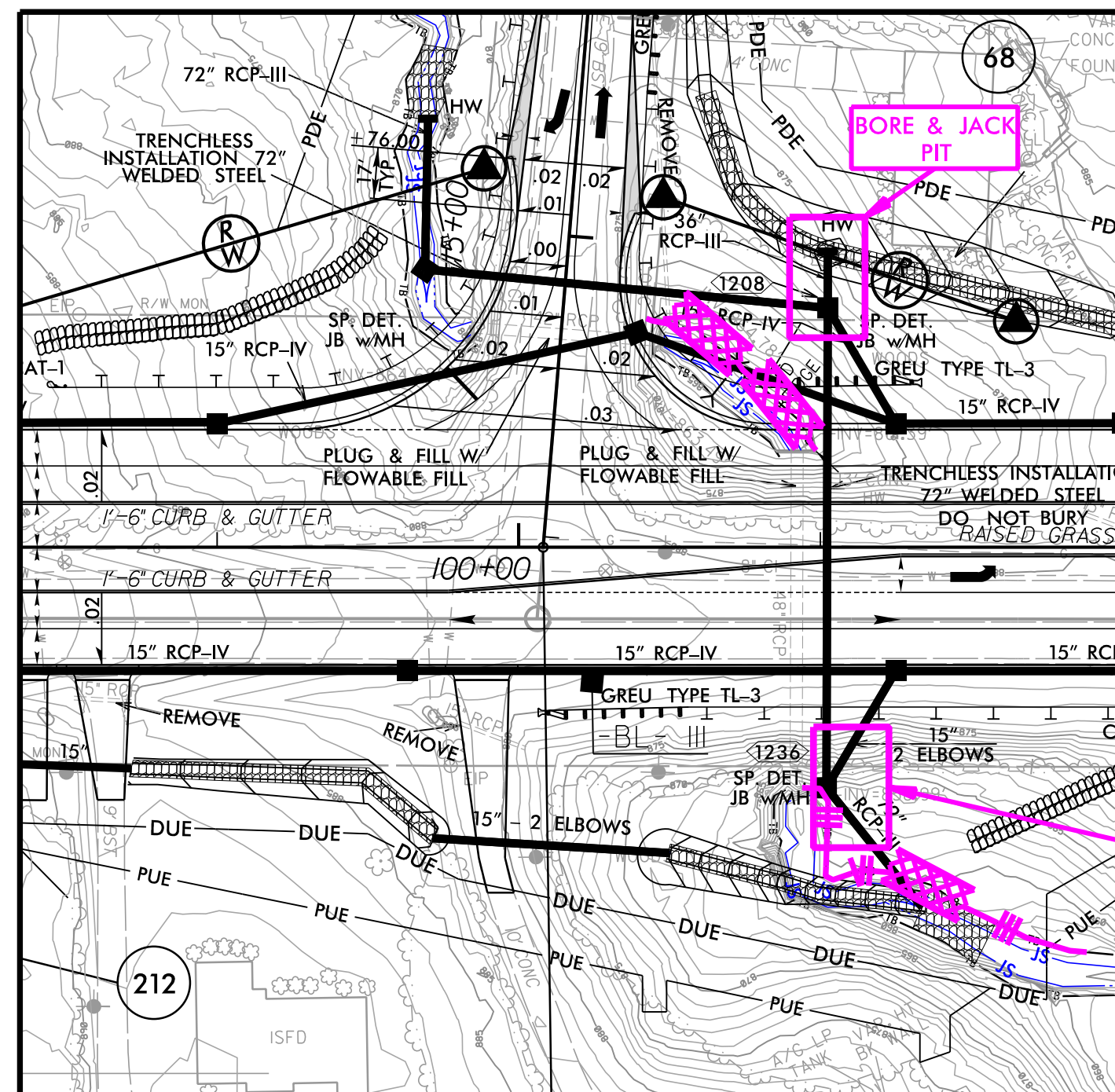
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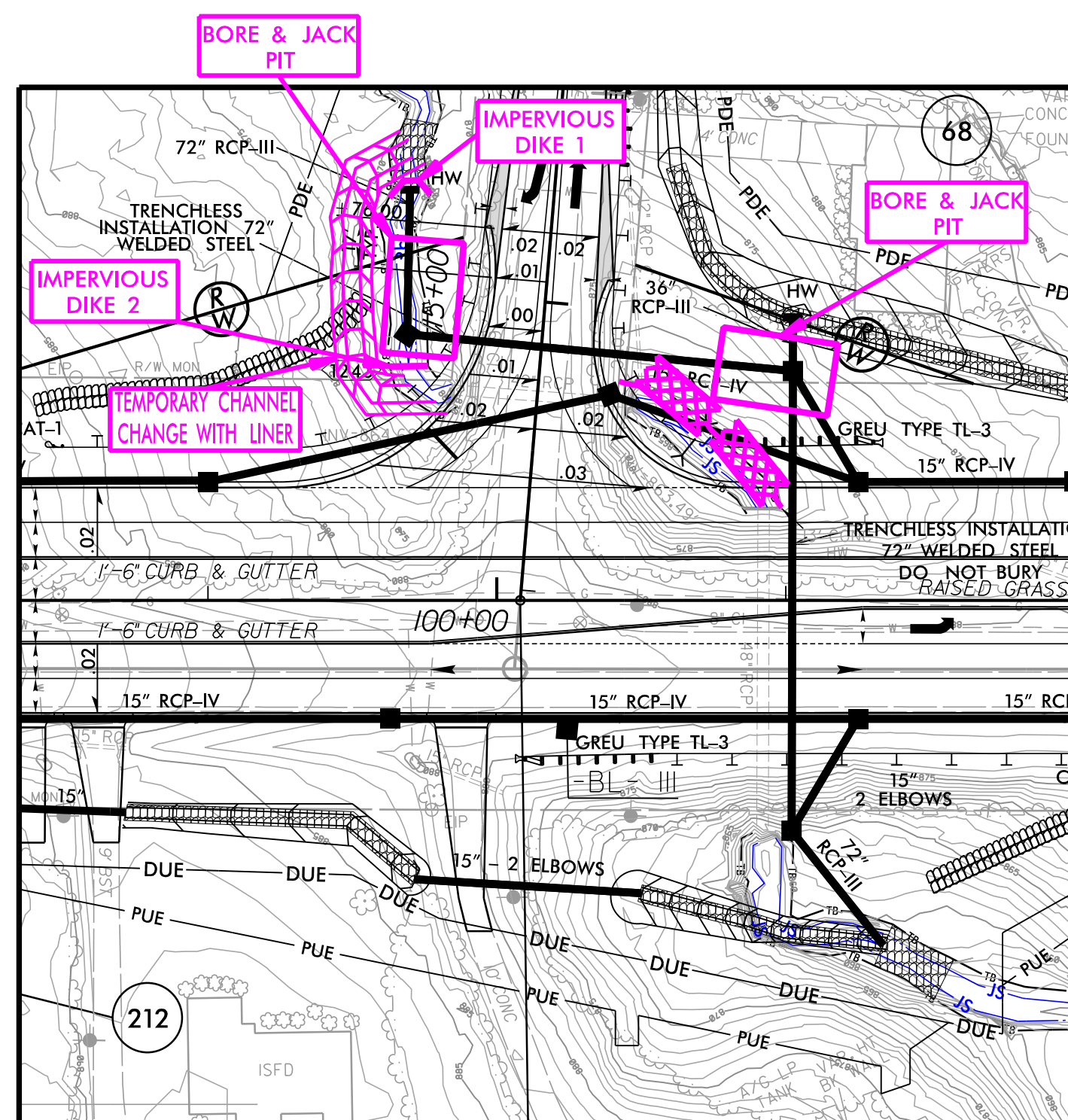
PROJECT REFERENCE NO. R-2577A	SHEET NO. EC-12/CONST.12A
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

CROSS-PIPE INSTALLATION SEQUENCE -L- STA. 101+02 PHASE 1



1. MAINTAIN TRAFFIC ON EXISTING ROADWAY.
2. MAINTAIN FLOW THROUGH EXISTING 48" RCP.
3. UTILIZE SPECIAL STILLING BASIN(S) DURING PIPE INSTALLATION AS NEEDED.
4. INSTALL TEMPORARY STILT FENCE AROUND THE JURISDICTIONAL STREAMS, UPSTREAM AND DOWNSTREAM, AS SHOWN.
5. CONSTRUCT ENTRANCE AND RECEIVING PITS IN PREPARATION FOR TRENCHLESS INSTALLATION OF 72" WELDED STEEL PIPE.
6. BORE AND JACK 72" WELDED STEEL PIPE FROM UPSTREAM END.
7. REMOVE BORE PITS ONCE THE 72" WELDED STEEL PIPE IS PROPERLY INSTALLED. STABILIZE DISTURBED AREA AND BACKFILL ACCORDINGLY.
8. ONCE INSTALLATION IS COMPLETE AND DISTURBED AREA IS STABILIZED, INSTALL PROPOSED STRUCTURES 1208 AND 1236. CONNECT THE 72" WELDED STEEL PIPE TO EACH STRUCTURE.

CROSS-PIPE INSTALLATION SEQUENCE -Y9- STA. 15+16 PHASE 2

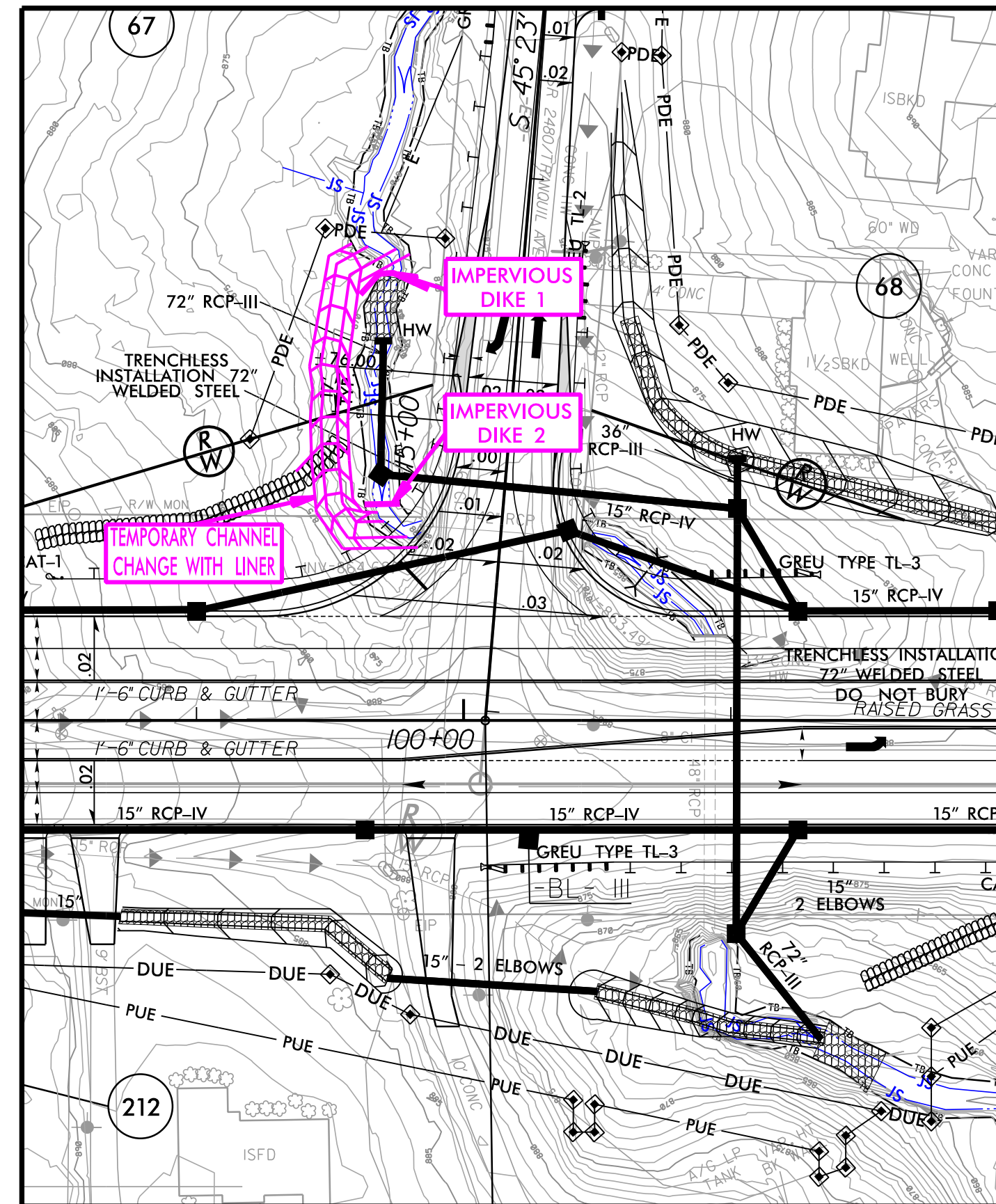


1. UTILIZE SPECIAL STILLING BASIN(S) DURING PIPE INSTALLATION AS NEEDED.
2. INSTALL STANDARD 6' BASE DITCH PER DETAIL Q, SUBSTITUTING SOIL STABILIZATION GEOTEXTILE FABRIC FOR CL. I RIPRAP, AT INLET END OF PROPOSED 72" RCP-III, DIRECTING FLOW AROUND PROPOSED PIPE AND INTO EXISTING 42" RCP.
3. MAINTAIN FLOW THROUGH EXISTING 42" RCP.
4. CONSTRUCT ENTRANCE AND RECEIVING PITS IN PREPARATION FOR TRENCHLESS INSTALLATION OF 72" WELDED STEEL PIPE.
5. BORE AND JACK 72" WELDED STEEL PIPE FROM UPSTREAM END.
6. REMOVE BORE PITS ONCE THE 72" PIPE IS PROPERLY INSTALLED. STABILIZE DISTURBED AREA AND BACKFILL ACCORDINGLY.
7. ONCE INSTALLATION IS COMPLETE AND DISTURBED AREA IS STABILIZED, INSTALL PROPOSED STRUCTURE 1243 AND CONNECT 72" WELDED STEEL PIPE.

PROJECT REFERENCE NO. R-2577A	SHEET NO. EC-12/CONST.12B
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

CROSS-PIPE INSTALLATION SEQUENCE -Y9- STA. 14+65 PHASE 3

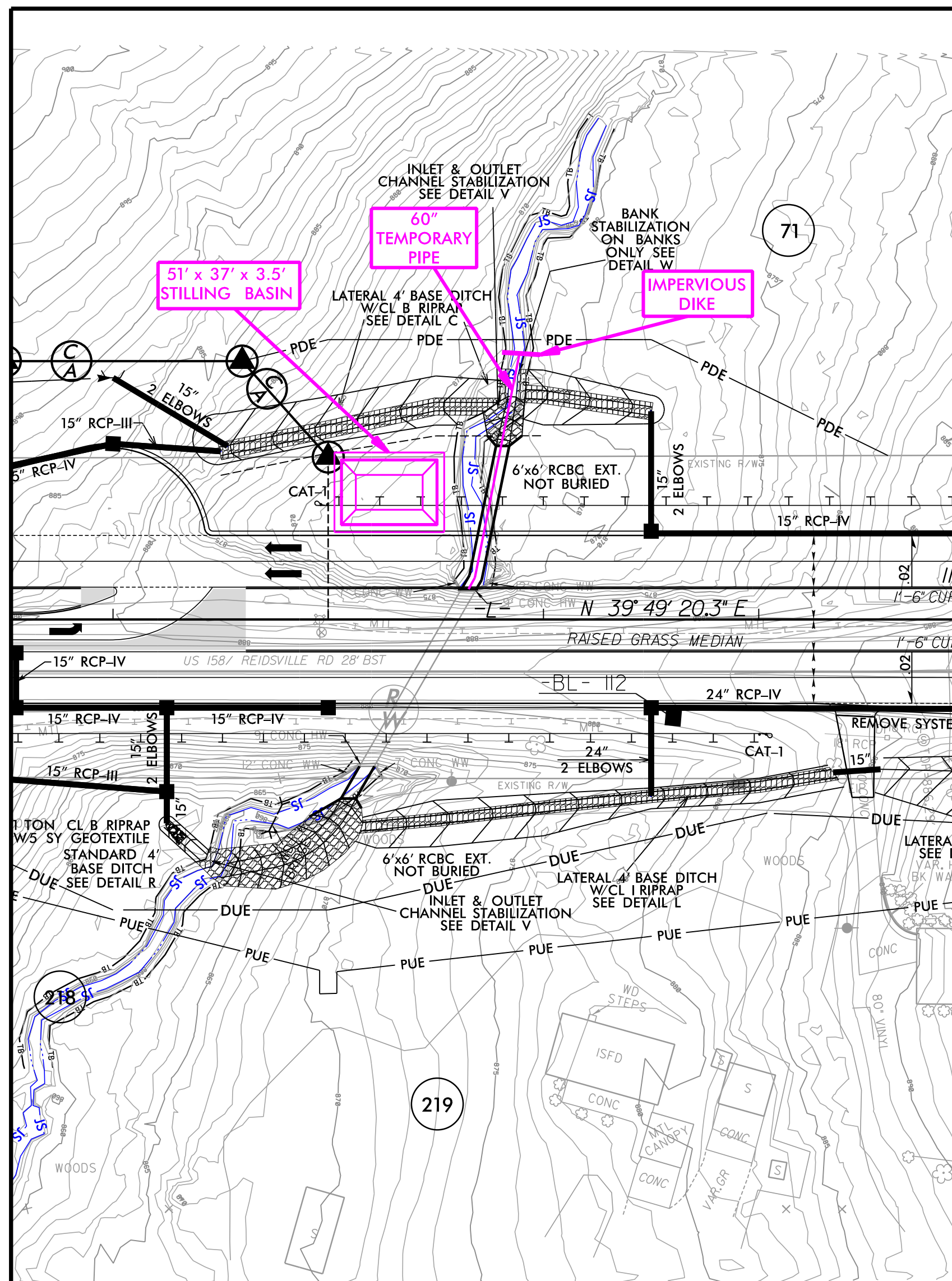
1. CONSTRUCT TRENCH FOR 72" RCP IN EMPTY, RELOCATED STREAM BED.
2. INSTALL 72" RCP-III AND CONSTRUCT HEAD WALL.
3. CONNECT THE DOWNSTREAM END OF 72" RCP TO STRUCTURE 1243.
4. CONSTRUCT CHANNEL IMPROVEMENTS AND TIE JS STREAM TO INLET END OF PROPOSED 72" RCP-III. REMOVE TEMPORARY CHANNEL CHANGE.
5. CONSTRUCT PROPOSED ROADWAY PAVEMENT, SLOPES, AND DITCHES PER ROADWAY PLANS.



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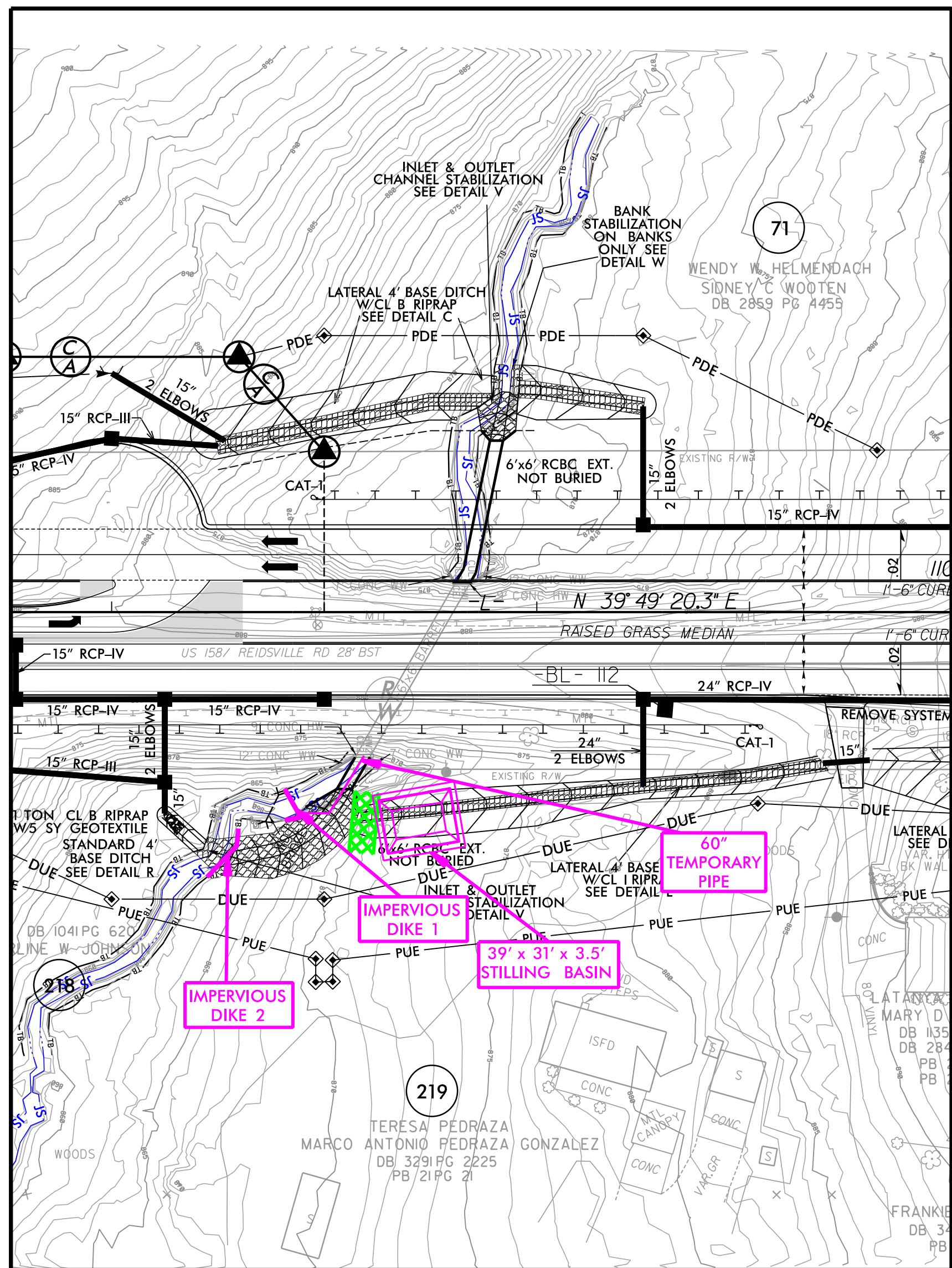
PROJECT REFERENCE NO. R-2577A	SHEET NO. EC-12/CONST.12C
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER



CULVERT INSTALLATION SEQUENCE -L- STA. 107+57 PHASE 1

1. MAINTAIN TRAFFIC ON EXISTING ROADWAY.
2. INSTALL IMPERVIOUS DIKE AS SHOWN ON PLAN.
3. INSTALL 60" TEMPORARY PIPE TIED TO IMPERVIOUS DIKE AND EXISTING BOX CULVERT AS SHOWN ON PLAN.
4. MAINTAIN FLOW THROUGH TEMPORARY PIPE AND EXISTING BOX CULVERT.
5. INSTALL STILLING BASIN WITH MINIMUM SEDIMENT CAPACITY OF 65 CY ON UPSTREAM SIDE OF US 158.
6. CONSTRUCT ENTIRE LENGTH OF UPSTREAM BOX CULVERT EXTENSION. INSTALL CULVERT HEADWALLS AND CHANNEL IMPROVEMENTS.
7. REMOVE TEMPORARY PIPE, IMPERVIOUS DIKE, AND STILLING BASIN.
8. CONSTRUCT PROPOSED ROADWAY AND EMBANKMENTS AS SHOWN ON ROADWAY PLANS OVER NEW BOX CULVERT EXTENSION.

PROJECT REFERENCE NO. R-2577A	SHEET NO. EC-127CONST12D
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

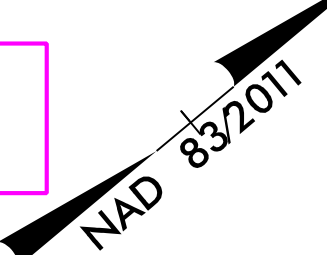


CULVERT INSTALLATION SEQUENCE

-L- STA. 107+57 PHASE 2

1. SHIFT TRAFFIC TO NEWLY CONSTRUCTED ROADWAY.
2. INSTALL IMPERVIOUS DIKES AS SHOWN ON PLAN.
3. INSTALL 60" TEMPORARY PIPE TIED TO IMPERVIOUS DIKE AND EXISTING BOX CULVERT AS SHOWN ON PLAN.
4. MAINTAIN FLOW THROUGH TEMPORARY PIPE AND EXISTING BOX CULVERT.
5. INSTALL STILLING BASIN WITH MINIMUM SEDIMENT CAPACITY OF 25 CY ON DOWNSTREAM SIDE OF US 158.
6. CONSTRUCT ENTIRE LENGTH OF DOWNSTREAM BOX CULVERT EXTENSION.
7. INSTALL CULVERT HEADWALLS AND CHANNEL IMPROVEMENTS.
8. PROTECT THE NEWLY RELOCATED STREAM PRIOR TO REMOVING THE IMPERVIOUS DIKE.
9. REMOVE TEMPORARY PIPE, IMPERVIOUS DIKES, AND STILLING BASIN.
10. CONSTRUCT PROPOSED ROADWAY AND EMBANKMENTS AS SHOWN ON ROADWAY PLANS OVER NEW BOX CULVERT EXTENSION.

PROJECT REFERENCE NO. R-2577A	SHEET NO. EC-13/CONST.13
RW SHEET NO.	HYDRAULICS ENGINEER
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

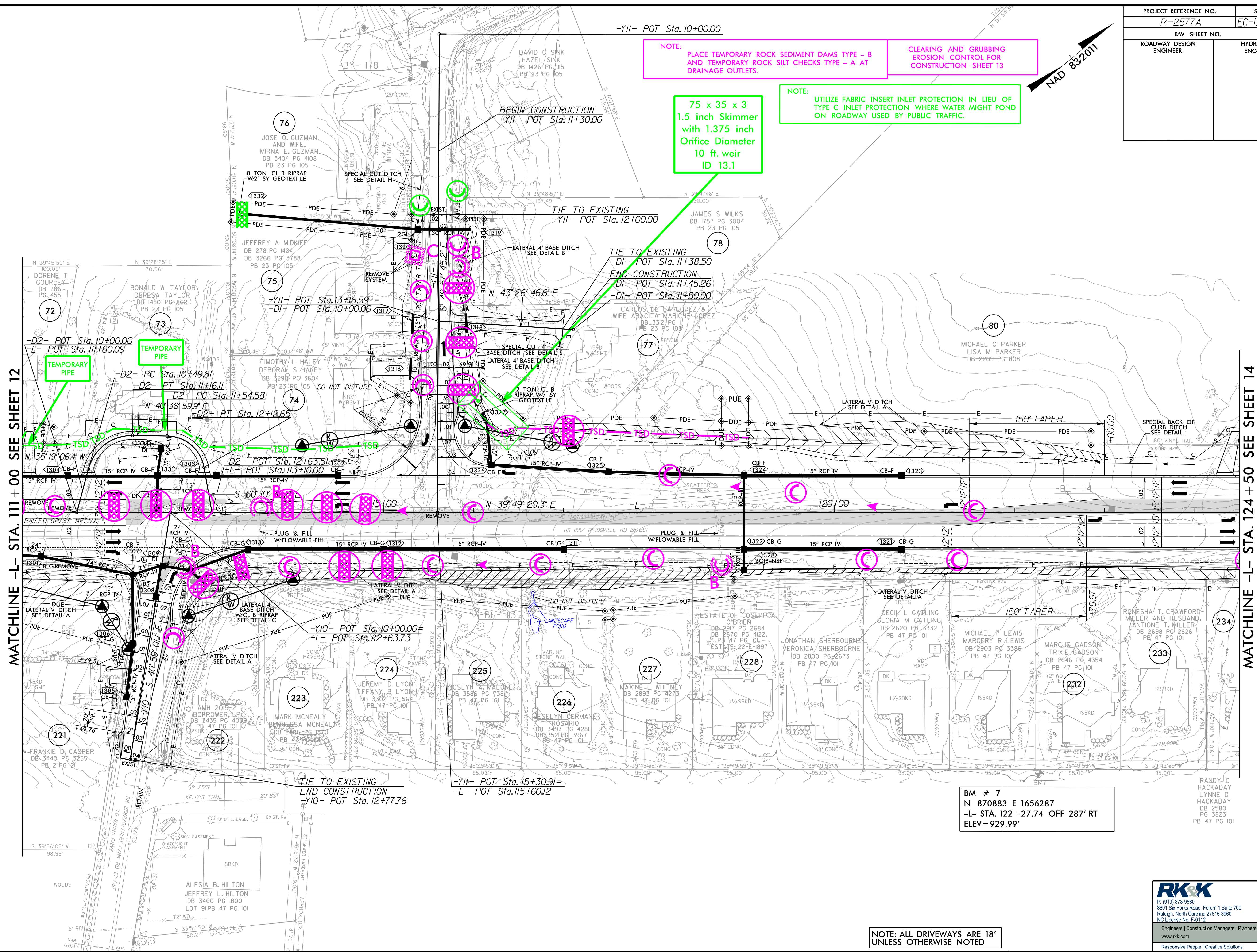


NOTE: PLACE TEMPORARY ROCK SEDIMENT DAMS TYPE - B AND TEMPORARY ROCK SILT CHECKS TYPE - A AT DRAINAGE OUTLETS.

CLEARING AND GRUBBING EROSION CONTROL FOR CONSTRUCTION SHEET 13

75 x 35 x 3
1.5 inch Skimmer
with 1.375 inch
Orifice Diameter
10 ft. weir
ID 13.1

NOTE: UTILIZE FABRIC INSERT INLET PROTECTION IN LIEU OF TYPE C INLET PROTECTION WHERE WATER MIGHT POND ON ROADWAY USED BY PUBLIC TRAFFIC.



MATCHLINE -L- STA. 111 + 00 SEE SHEET 12

MATCHLINE -L- STA. 124 + 50 SEE SHEET 14

BM # 7
N 870883 E 1656287
-L- STA. 122 + 27.74 OFF 287' RT
ELEV = 929.99'

RANDY C HACKADAY
LYNNE D HACKADAY
DB 2580 PG 3823
PB 47 PG IOI

NOTE: ALL DRIVEWAYS ARE 18' UNLESS OTHERWISE NOTED

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12/14/2023
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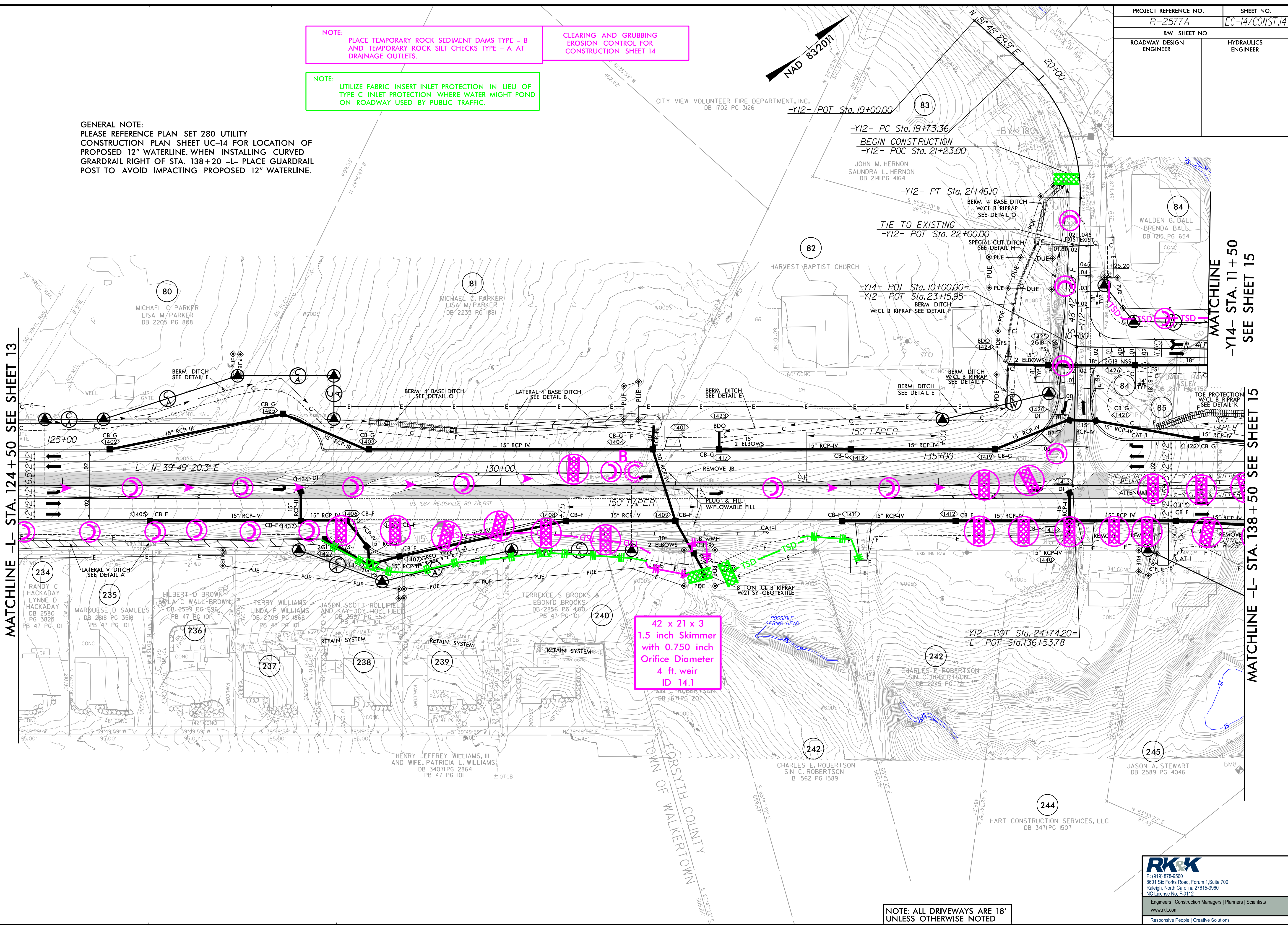
PROJECT REFERENCE NO. R-2577A	SHEET NO. EC-14/CONST.14
RW SHEET NO.	HYDRAULICS ENGINEER
ROADWAY DESIGN ENGINEER	

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 14

NOTE: UTILIZE FABRIC INSERT INLET PROTECTION IN LIEU OF TYPE C INLET PROTECTION WHERE WATER MIGHT POND ON ROADWAY USED BY PUBLIC TRAFFIC.

GENERAL NOTE: PLEASE REFERENCE PLAN SET 280 UTILITY CONSTRUCTION PLAN SHEET UC-14 FOR LOCATION OF PROPOSED 12" WATERLINE. WHEN INSTALLING CURVED GUARDRAIL RIGHT OF STA. 138+20 -L- PLACE GUARDRAIL POST TO AVOID IMPACTING PROPOSED 12" WATERLINE.



42 x 21 x 3
1.5 inch Skimmer
with 0.750 inch
Orifice Diameter
4 ft. weir
ID 14.1

NOTE: ALL DRIVEWAYS ARE 18' UNLESS OTHERWISE NOTED

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MATCHLINE -L- STA. 124+50 SEE SHEET 13

MATCHLINE
-Y14- STA. 11+50
SEE SHEET 15

MATCHLINE -L- STA. 138+50 SEE SHEET 15

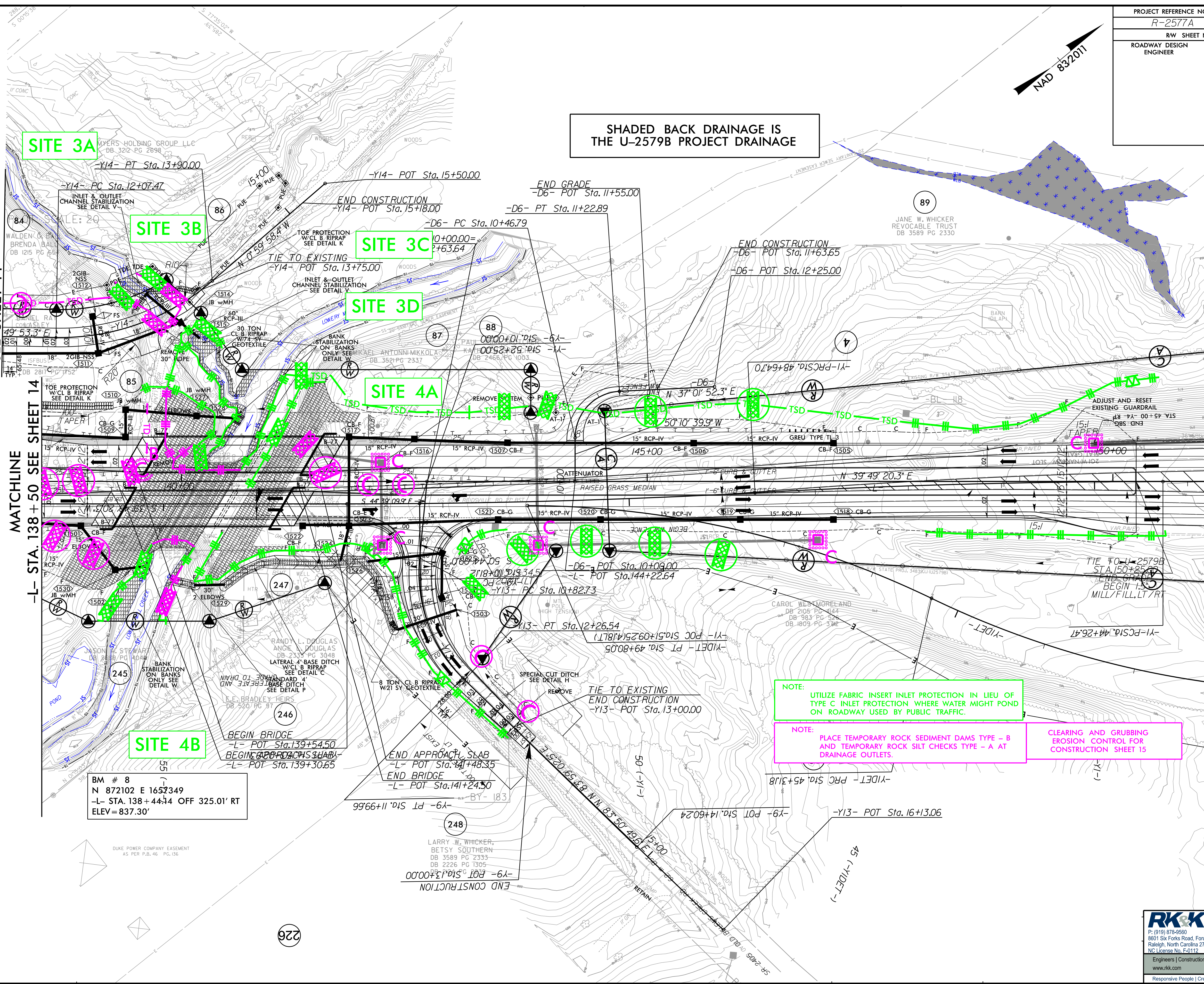
8/17/19

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PROJECT REFERENCE NO. R-2577A	SHEET NO. EC-15/CONST.15
RW SHEET NO.	HYDRAULICS ENGINEER
ROADWAY DESIGN ENGINEER	

SHADED BACK DRAINAGE IS THE U-2579B PROJECT DRAINAGE

MATCHLINE
-Y14- STA. 11+50
SEE SHEET 14



SITE 3A

SITE 3B

SITE 3C

SITE 3D

SITE 4A

SITE 4B

BM # 8
N 872102 E 1652349
-L- STA. 138 + 44.4 OFF 325.01' RT
ELEV = 837.30'

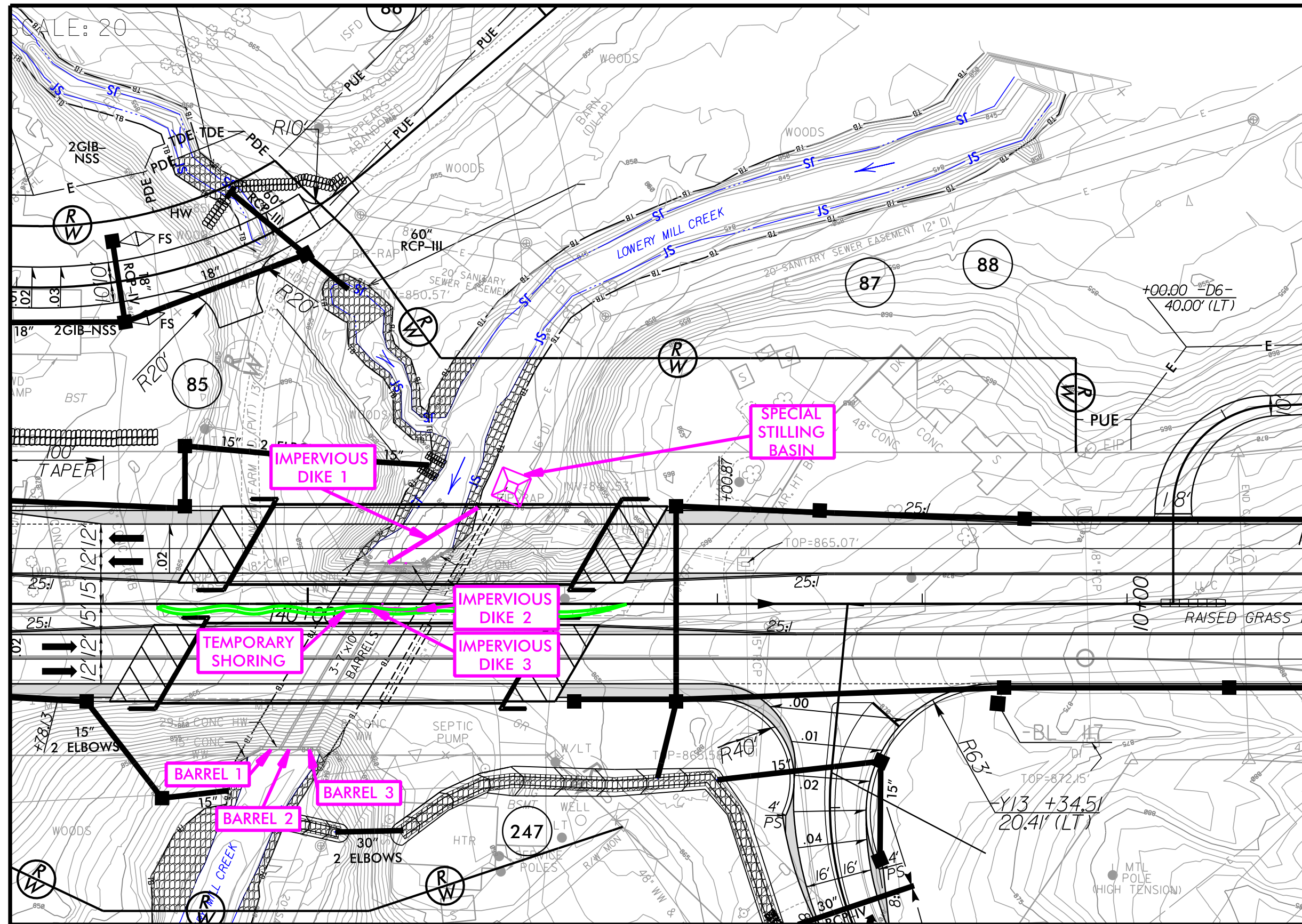
NOTE: UTILIZE FABRIC INSERT INLET PROTECTION IN LIEU OF TYPE C INLET PROTECTION WHERE WATER MIGHT POND ON ROADWAY USED BY PUBLIC TRAFFIC.

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 15

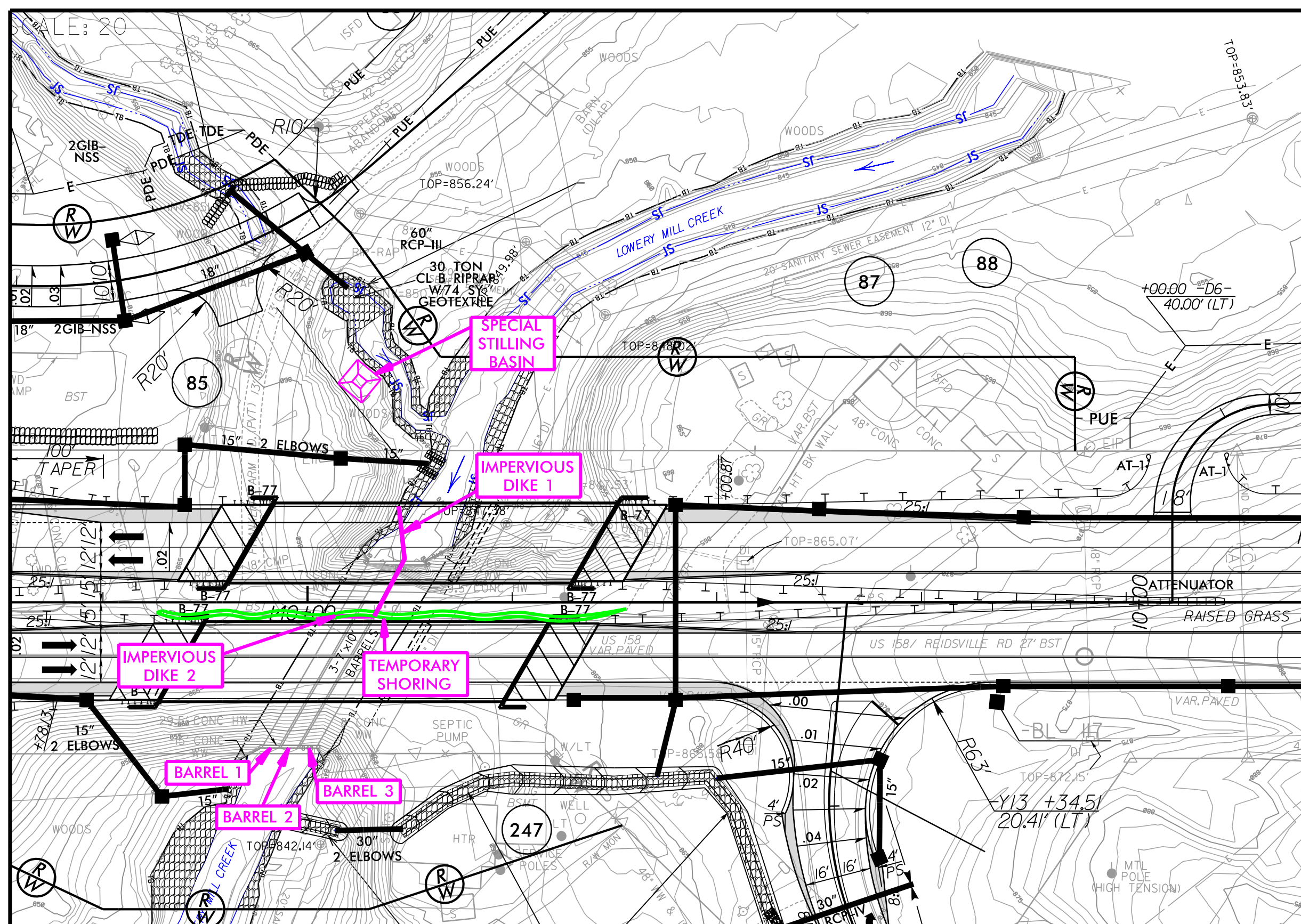
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PROJECT REFERENCE NO. <i>R-2577A</i>	SHEET NO. <i>EC-15/CONST.15A</i>
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER



BRIDGE INSTALLATION SEQUENCE -L- STA. 140+39.5 PHASE 1

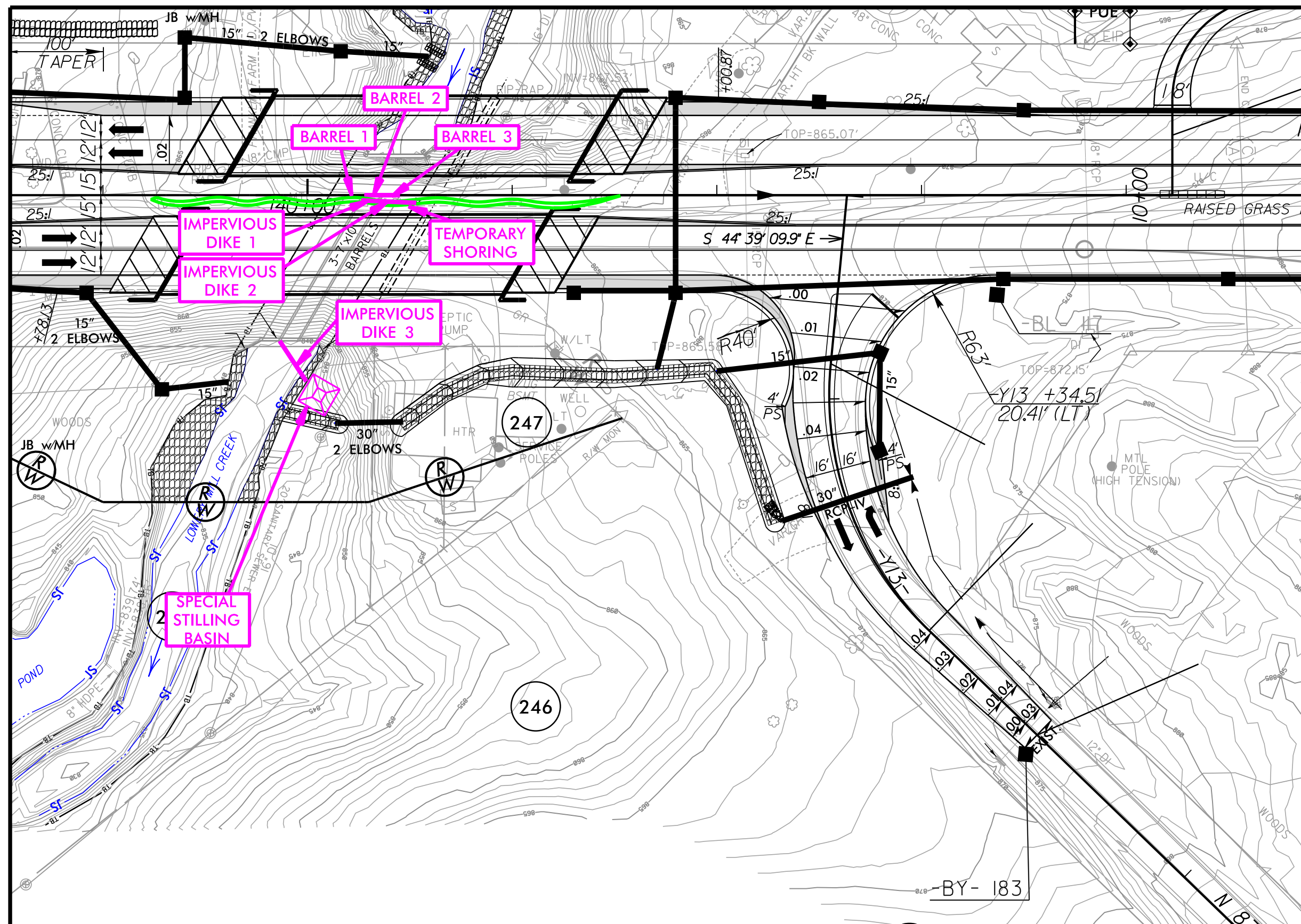
1. MAINTAIN TRAFFIC ON EXISTING ROADWAY.
2. INSTALL IMPERVIOUS DIKES AS SHOWN ON PLAN.
3. INSTALL SPECIAL STILLING BASIN WITH ANTICIPATED SEDIMENT CAPACITY OF 256 CY AS SHOWN ON PLAN.
4. MAINTAIN FLOW THROUGH BARREL ONE OF CULVERT.
5. CONSTRUCT TEMPORARY SHORING AS SHOWN ON PLAN.
6. REMOVE 24 LINEAR FEET OF BARRELS TWO AND THREE. REPLACE WITH CHANNEL AND CHANNEL IMPROVEMENTS, TYING NEW PARTIALLY CONSTRUCTED CHANNEL TO REMAINDER OF BARRELS.
7. REMOVE IMPERVIOUS DIKES AND SPECIAL STILLING BASIN.



BRIDGE INSTALLATION SEQUENCE -L- STA. 140+39.5 PHASE 2

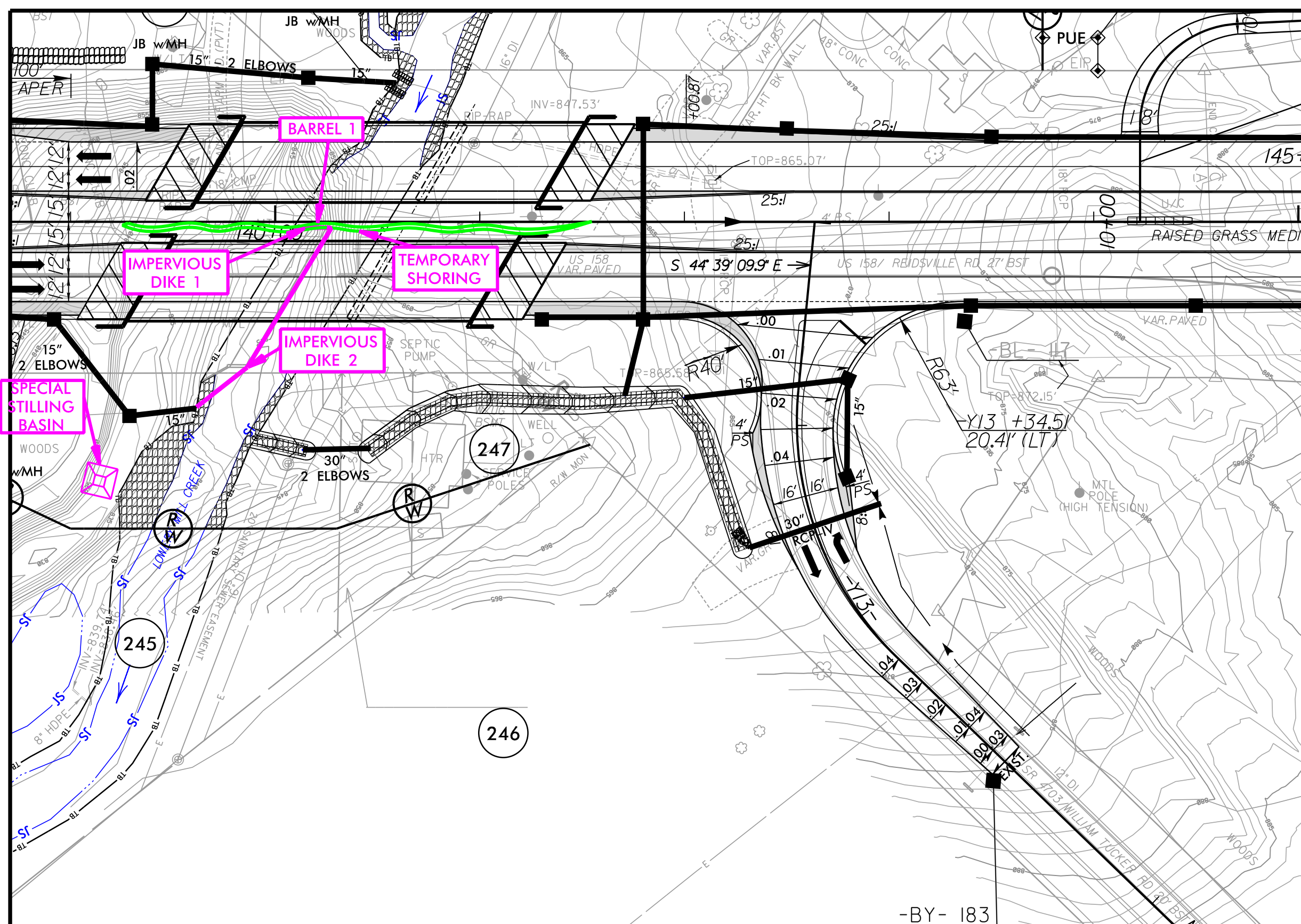
1. INSTALL IMPERVIOUS DIKES AS SHOWN ON PLAN.
2. INSTALL SPECIAL STILLING BASIN WITH ANTICIPATED SEDIMENT CAPACITY OF 157 CY AS SHOWN ON PLAN.
3. MAINTAIN FLOW THROUGH PARTIALLY CONSTRUCTED CHANNEL AND REMAINING DOWNSTREAM PORTION OF BARELLS TWO AND THREE.
4. REMOVE 24 LINEAR FEET OF BARREL ONE.
5. CONSTRUCT ENTIRE SOUTHBOUND PORTION OF CHANNEL AND CHANNEL IMPROVEMENTS.
6. REMOVE IMPERVIOUS DIKES AND SPECIAL STILLING BASIN.
7. CONSTRUCT SOUTHBOUND BRIDGE, ROADWAY AND ROADWAY APPROACHES AS SHOWN ON ROADWAY PLANS.

PROJECT REFERENCE NO. <i>R-2577A</i>	SHEET NO. <i>EC-15/CONST.15B</i>
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER



BRIDGE INSTALLATION SEQUENCE -L- STA. 140 + 39.5 PHASE 3

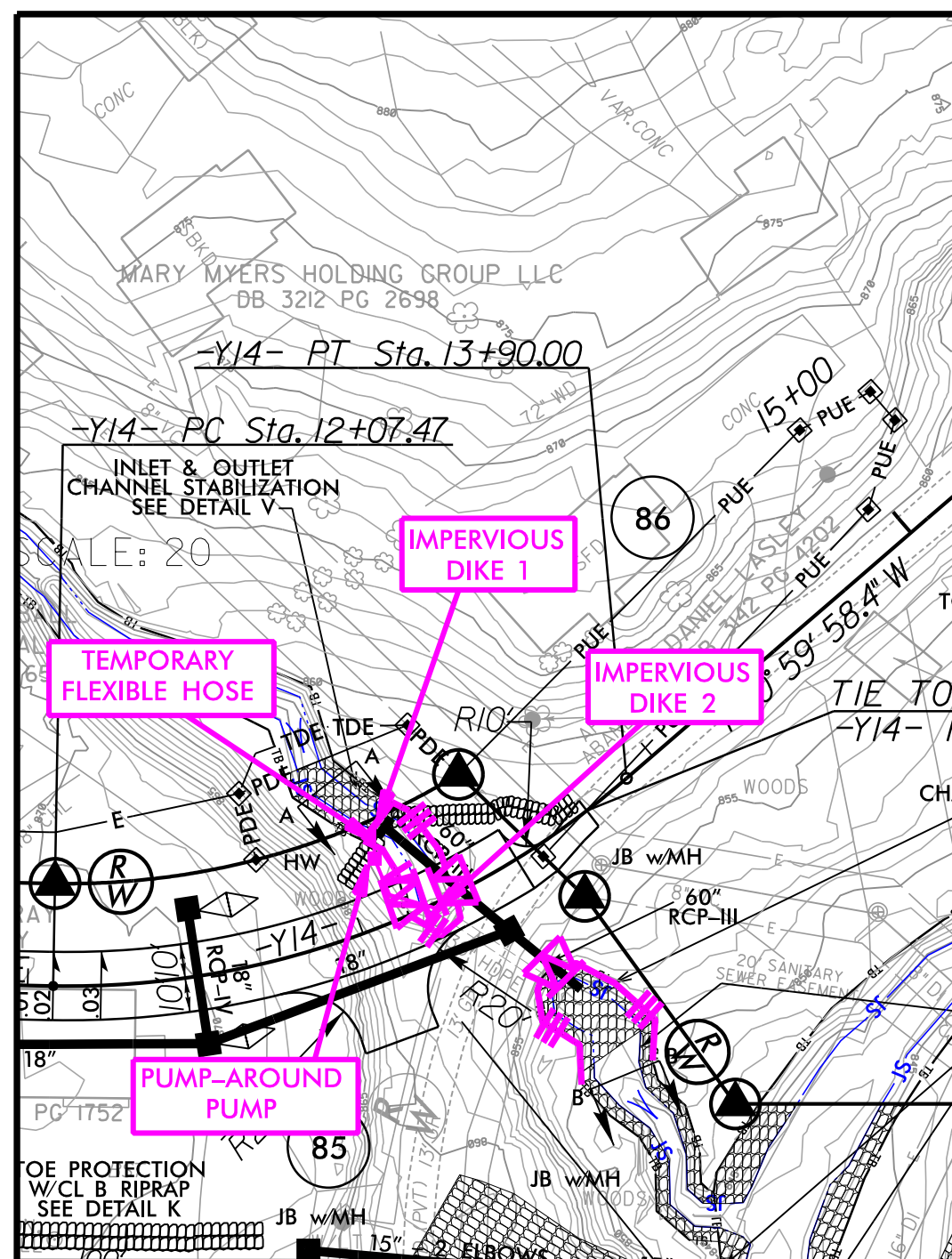
1. MOVE TRAFFIC TO NEWLY CONSTRUCTED SOUTHBOUND BRIDGE.
2. INSTALL IMPERVIOUS DIKES AS SHOWN ON PLAN.
3. INSTALL SPECIAL STILLING BASIN FOR ANTICIPATED SEDIMENT CAPACITY OF 314 CY AS SHOWN ON PLAN.
4. MAINTAIN FLOW THOROUGH BARREL ONE OF CULVERT.
5. REMOVE 82 LINEAR FEET OF BARRELS TWO AND THREE. REPLACE WITH PARTIAL DOWNSTREAM PORTION OF CHANNEL AND CHANNEL IMPROVEMENTS.
6. REMOVE IMPERVIOUS DIKES AND SPECIAL STILLING BASIN.



BRIDGE INSTALLATION SEQUENCE -L- STA. 140 + 39.5 PHASE 4

1. INSTALL IMPERVIOUS DIKES AS SHOWN ON PLAN.
3. INSTALL SPECIAL STILLING BASIN WITH ANTICIPATED SEDIMENT CAPACITY OF 208 CY AS SHOWN ON PLAN.
4. MAINTAIN FLOW THROUGH PARTIALLY CONSTRUCTED CHANNEL.
5. REMOVE 83 LINEAR FEET OF BARREL ONE.
6. CONSTRUCT REMAINING CHANNEL AND CHANNEL IMPROVEMENTS.
7. REMOVE TEMPORARY SHORING, IMPERVIOUS DIKES AND SPECIAL STILLING BASIN.
8. CONSTRUCT NORTHBOUND BRIDGES, ROADWAY AND ROADWAY APPROACHES AS SHOWN ON ROADWAY PLANS.
9. SHIFT TRAFFIC AND OPEN NORTHBOUND BRIDGE TO FINAL TRAFFIC PATTERN.

PROJECT REFERENCE NO.	SHEET NO.
R-2577A	EC-15/CONST15C
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER



CROSS-PIPE INSTALLATION SEQUENCE -Y14- STA. 13+27 PHASE 1

1. UTILIZE TRAFFIC CONTROL AS SEEN FIT IN FIELD.
3. UTILIZE SPECIAL STILLING BASIN(S) DURING PIPE INSTALLATION AS NEEDED.
4. INSTALL TEMPORARY SILT FENCE AROUND THE JURISDICTIONAL STREAMS, UPSTREAM AND DOWNSTREAM, AS SHOWN.
5. INSTALL PUMP AROUND AND IMPERVIOUS DIKES AS SHOWN ON PLAN.
6. MAINTAIN FLOW THROUGH PUMP AROUND AND EXISTING 30" HDPE.
7. CONSTRUCT TRENCH FOR 60" RCP-III.
8. CONSTRUCT JUNCTION BOX AND HEAD WALL. INSTALL BOTH RCP-III'S, CONNECTING UPSTREAM PIPE TO BOTH HEADWALL AND JB AND DOWNSTREAM PIPE TO JB.
9. CONSTRUCT CHANNEL IMPROVEMENTS ON UPSTREAM AND DOWNSTREAM SIDE AND TIE JS STREAM TO INLET END OF PROPOSED 60" RCP-III. REMOVE IMPERVIOUS DIKES AND PUMP AROUND.
10. CONSTRUCT PROPOSED ROADWAY PAVEMENT, SLOPES, AND DITCHES PER ROADWAY PLANS.

PROJECT REFERENCE NO. R-2577A	SHEET NO. EC-16/CONST.16
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

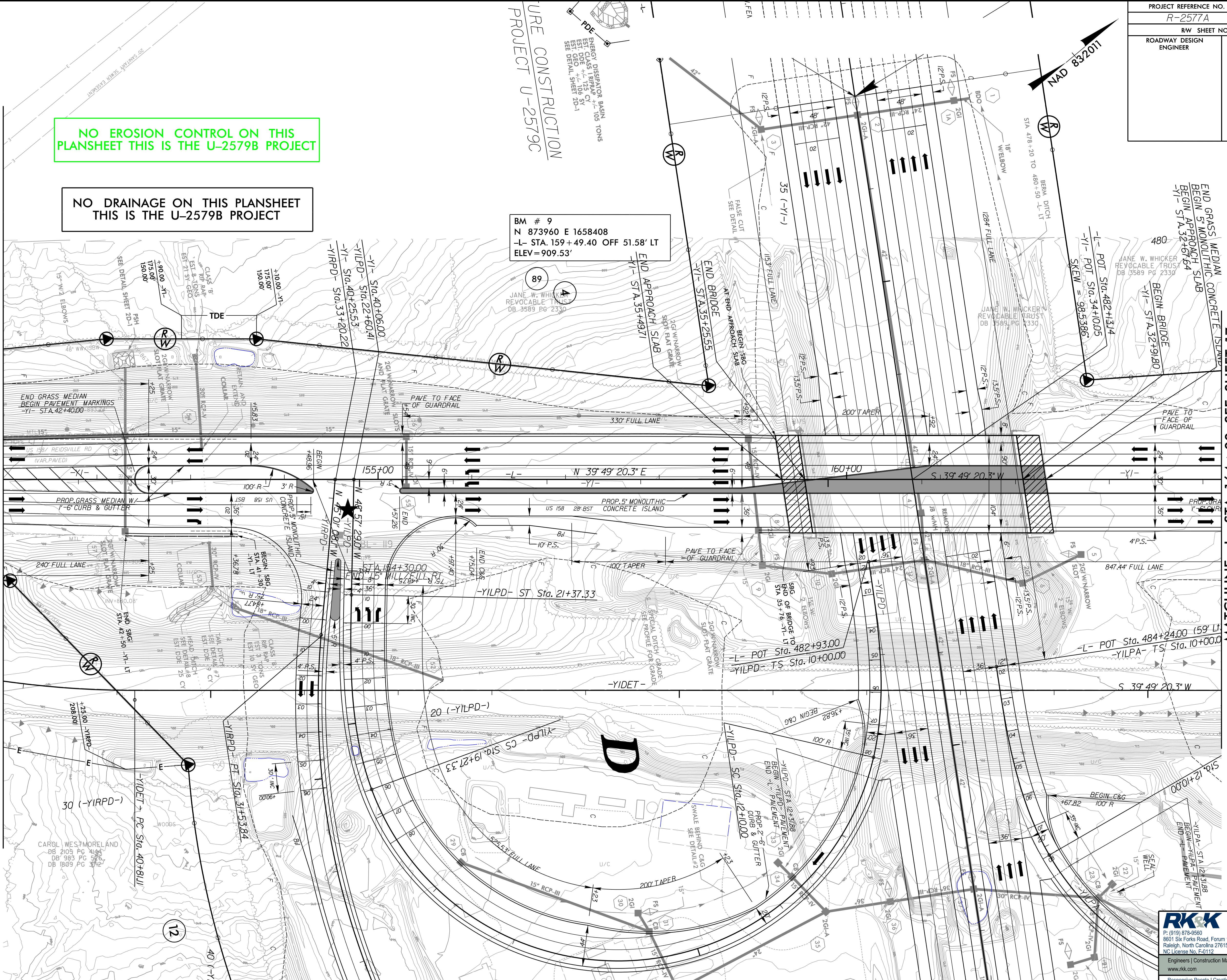
NO EROSION CONTROL ON THIS PLANSHEET THIS IS THE U-2579B PROJECT

NO DRAINAGE ON THIS PLANSHEET THIS IS THE U-2579B PROJECT

BM # 9
N 873960 E 1658408
-L- STA. 159+49.40 OFF 51.58' LT
ELEV = 909.53'

MATCHLINE -L- STA. 151+00 SEE SHEET 15

MATCHLINE -L- STA. 164+00 SEE SHEET 17



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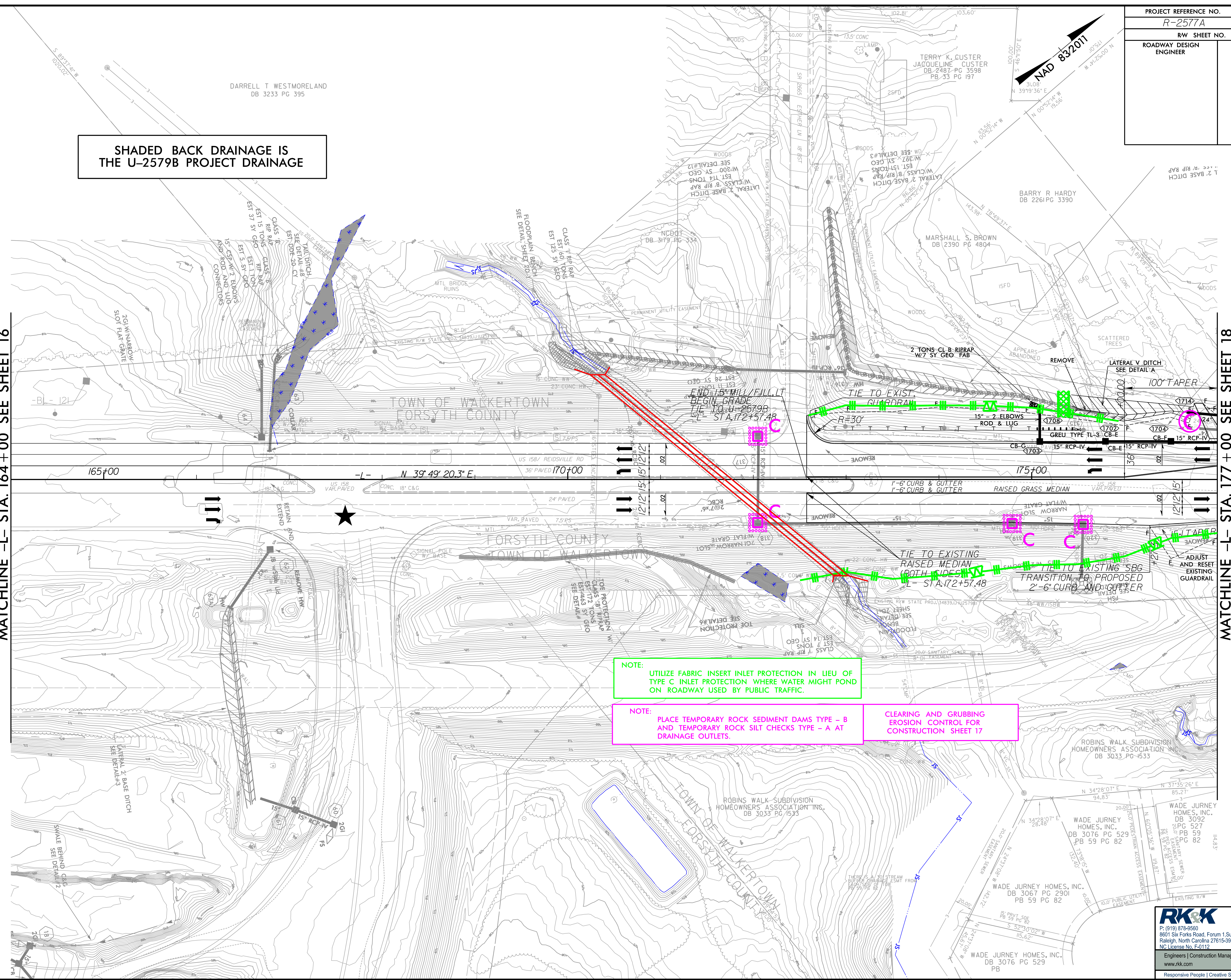
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PROJECT REFERENCE NO. R-2577A	SHEET NO. EC-17/CONST.17
RW SHEET NO. ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

SHADED BACK DRAINAGE IS THE U-2579B PROJECT DRAINAGE

MATCHLINE -L- STA. 164+00 SEE SHEET 16

MATCHLINE -L- STA. 177+00 SEE SHEET 18



NOTE:
UTILIZE FABRIC INSERT INLET PROTECTION IN LIEU OF TYPE C INLET PROTECTION WHERE WATER MIGHT POND ON ROADWAY USED BY PUBLIC TRAFFIC.

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 17

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PROJECT REFERENCE NO. R-2577A	SHEET NO. EC-18/CONST.18
RW SHEET NO.	HYDRAULICS ENGINEER
ROADWAY DESIGN ENGINEER	

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

NOTE:
UTILIZE FABRIC INSERT INLET PROTECTION IN LIEU OF TYPE C INLET PROTECTION WHERE WATER MIGHT POND ON ROADWAY USED BY PUBLIC TRAFFIC.

CLEARING AND GRUBBING EROSION CONTROL FOR CONSTRUCTION SHEET 18

SHADED BACK DRAINAGE IS THE U-2579B PROJECT DRAINAGE

98 x 38 x 3
2.0 inch Skimmer
with 1.625 inch
Orifice Diameter
14 ft. weir
ID 18.1

28 x 17 x 3
1.5 inch Skimmer
with 0.625 inch
Orifice Diameter
4 ft. weir
(See Tiered Skimmer
Basin Detail)
ID 18.1

Modified Silt Basin
Type 'B'
28 x 17 x 3
4 ft. weir
(See Tiered Skimmer
Basin Detail)
ID 18.1

BM # 10
N 875520 E 1660195
-L- STA. 182 + 91.04 OFF 321.72' RT
ELEV = 923.01'

NOTE: ALL DRIVEWAYS ARE 18' UNLESS OTHERWISE NOTED

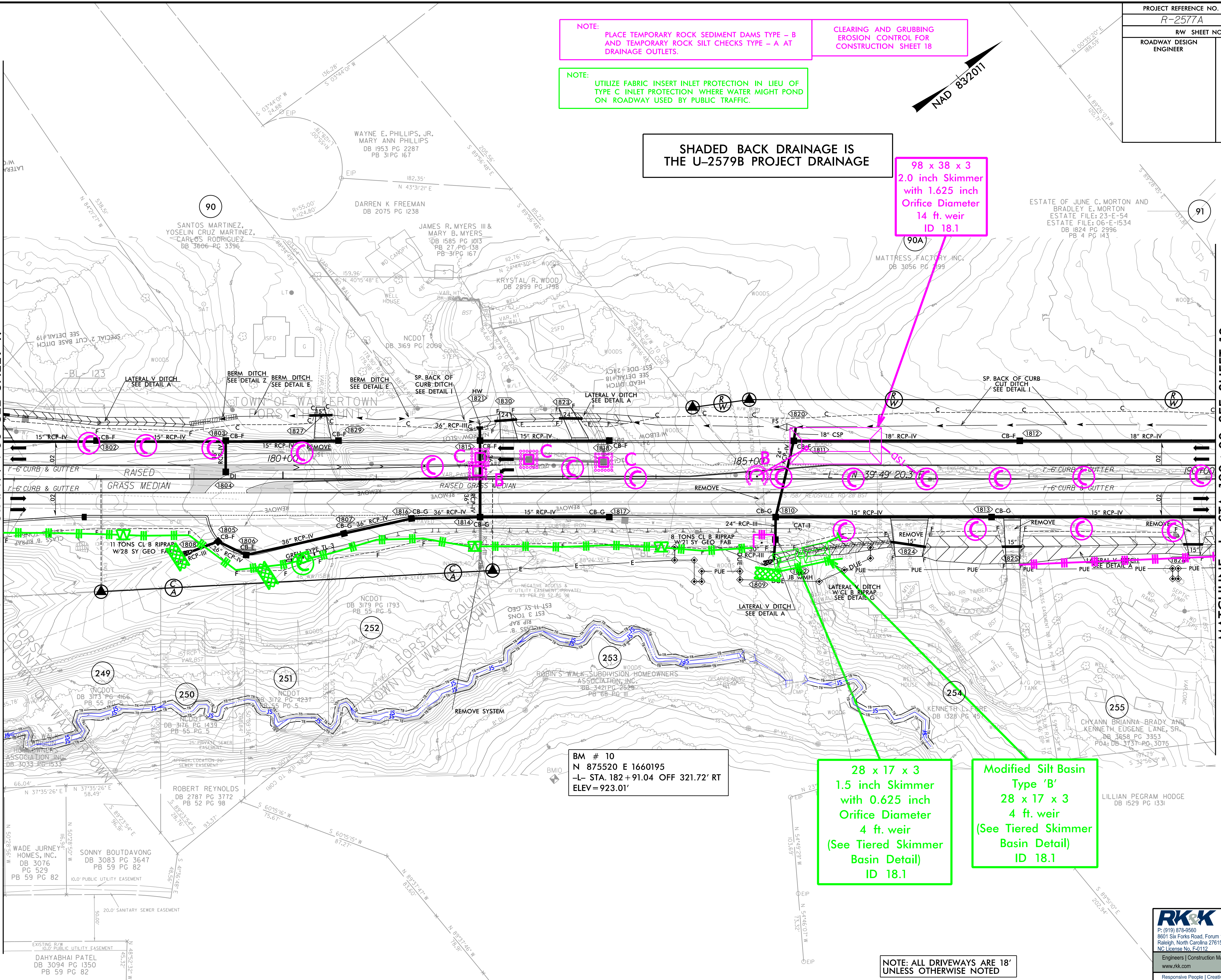
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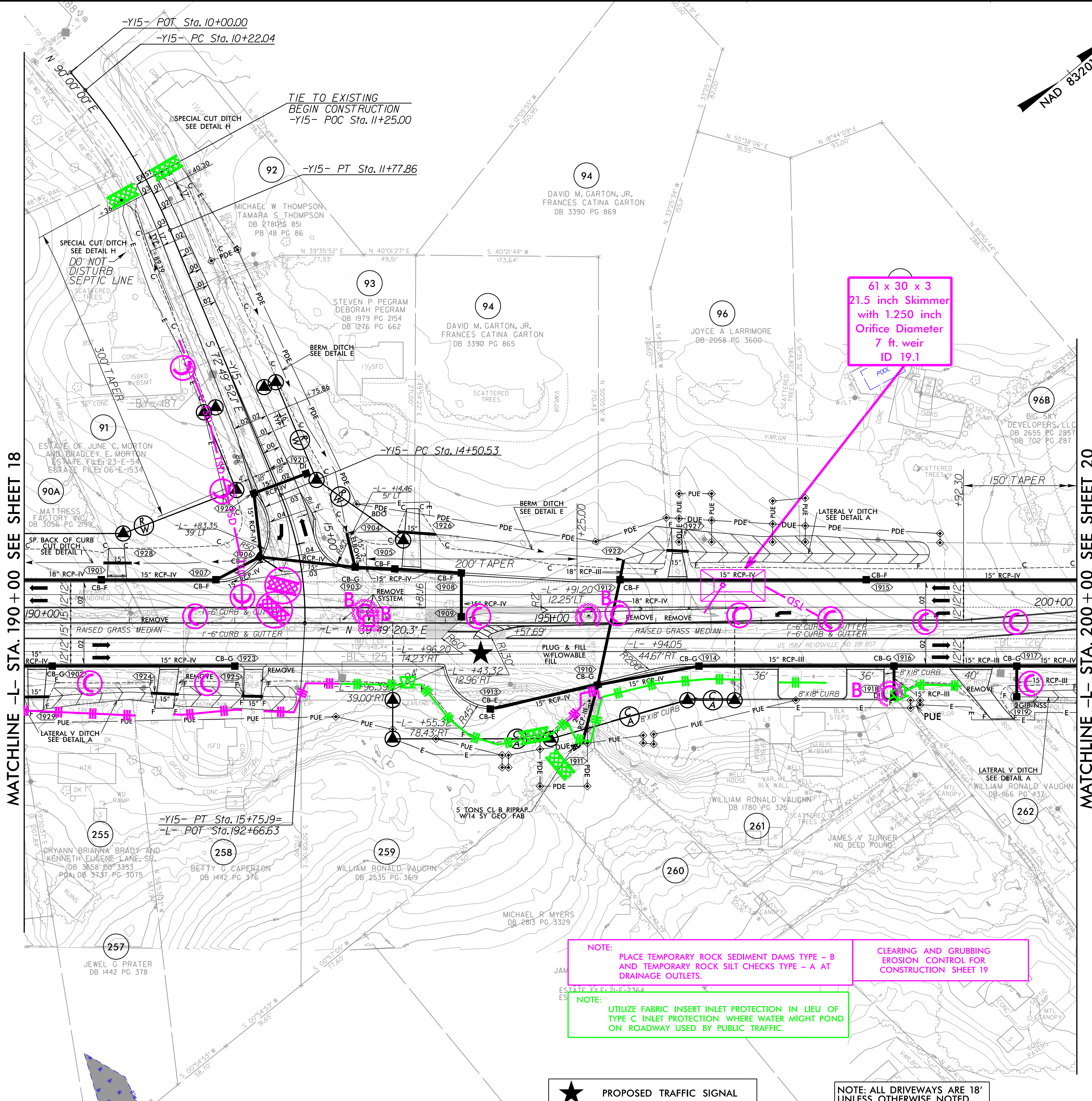
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12/14/2023

MATCHLINE -L- STA. 177 + 00 SEE SHEET 17

MATCHLINE -L- STA. 190 + 00 SEE SHEET 19



PROJECT REFERENCE NO. R-2577A		SHEET NO. EC-19/CONST.19	
RW SHEET NO. ROADWAY DESIGN ENGINEER		HYDRAULICS ENGINEER	



MATCHLINE -L- STA. 190 + 00 SEE SHEET 18

MATCHLINE -L- STA. 200 + 00 SEE SHEET 20

61 x 30 x 3
21.5 inch Skimmer
with 1.250 inch
Orifice Diameter
7 ft. weir
ID 19.1

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 19

NOTE:
UTILIZE FABRIC INSERT INLET PROTECTION IN LIEU OF
TYPE C INLET PROTECTION WHERE WATER MIGHT POND
ON ROADWAY USED BY PUBLIC TRAFFIC.

★ PROPOSED TRAFFIC SIGNAL

NOTE: ALL DRIVEWAYS ARE 18'
UNLESS OTHERWISE NOTED

8/17/19

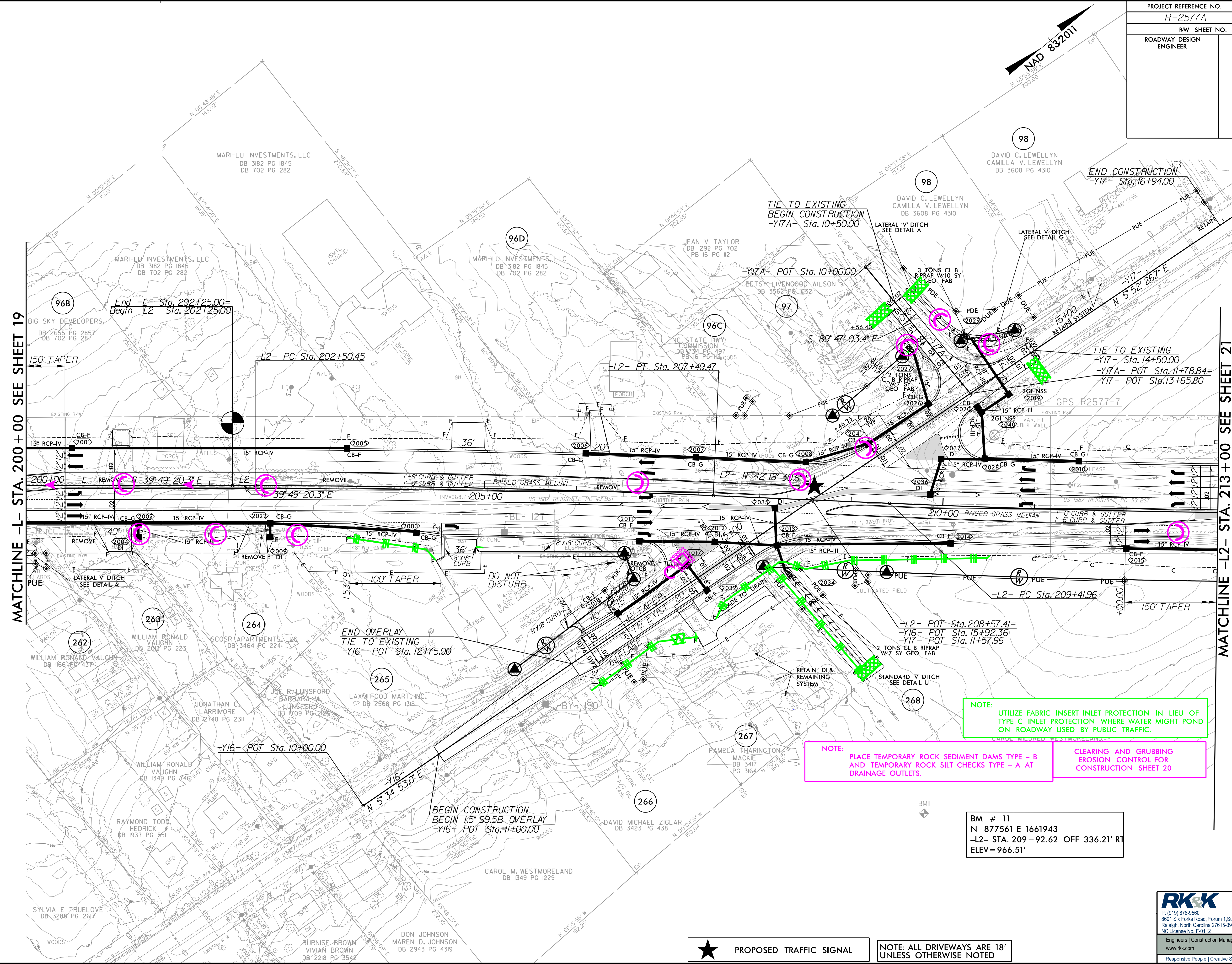
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PROJECT REFERENCE NO. R-2577A	SHEET NO. EC-20/CONST.20
RW SHEET NO. ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

8/17/19

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MATCHLINE -L- STA. 200+00 SEE SHEET 19

MATCHLINE -L2- STA. 213+00 SEE SHEET 21

NOTE: UTILIZE FABRIC INSERT INLET PROTECTION IN LIEU OF TYPE C INLET PROTECTION WHERE WATER MIGHT POND ON ROADWAY USED BY PUBLIC TRAFFIC.

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

NOTE: CLEARING AND GRUBBING EROSION CONTROL FOR CONSTRUCTION SHEET 20

BM # 11
N 877561 E 1661943
-L2- STA. 209+92.62 OFF 336.21' RT
ELEV=966.51'

★ PROPOSED TRAFFIC SIGNAL

NOTE: ALL DRIVEWAYS ARE 18' UNLESS OTHERWISE NOTED

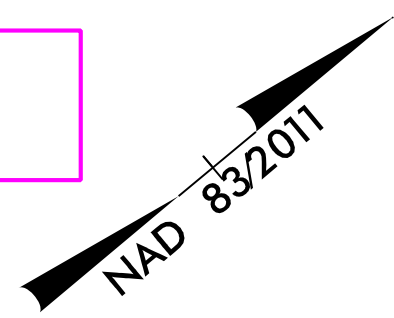
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PROJECT REFERENCE NO. R-2577A	SHEET NO. EC-21/CONST.21
RW SHEET NO.	HYDRAULICS ENGINEER
ROADWAY DESIGN ENGINEER	

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

NOTE: UTILIZE FABRIC INSERT INLET PROTECTION IN LIEU OF TYPE C INLET PROTECTION WHERE WATER MIGHT POND ON ROADWAY USED BY PUBLIC TRAFFIC.

CLEARING AND GRUBBING EROSION CONTROL FOR CONSTRUCTION SHEET 21



NCDOT WILL FIELD LOCATE THE AREA FOR THE FENCE AND LANDSCAPING AT THE PARK.

INSTALL SAFETY FENCE ALONG WALKING TRAIL UNTIL CHAIN LINK FENCE IS INSTALLED.

(2) 25 x 17 x 3
1.5 inch Skimmer
with 0.625 inch
Orifice Diameter
4 ft. weir
(See Tiered Skimmer
Basin Detail)
ID 21.2

SITE 5A

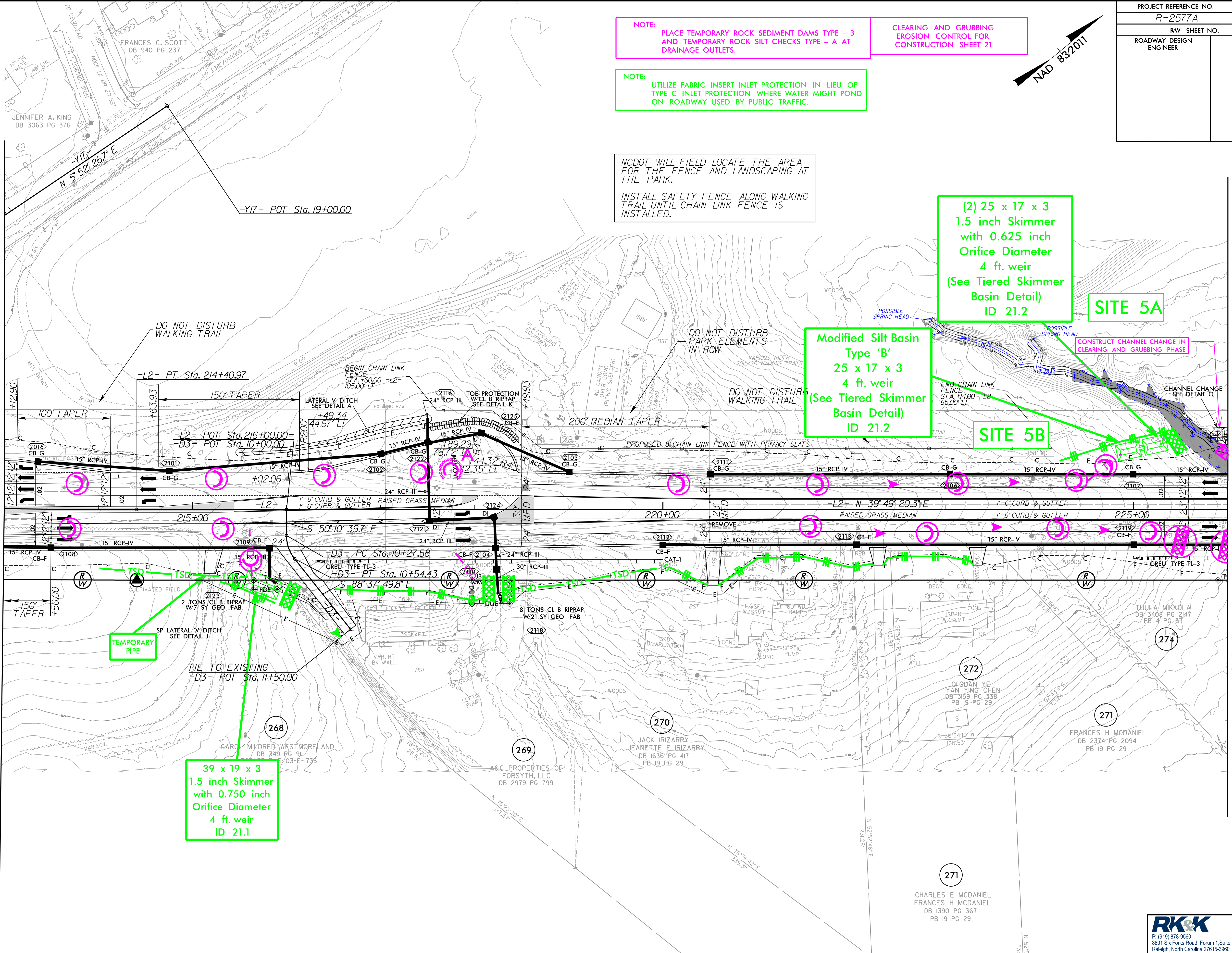
Modified Silt Basin
Type 'B'
25 x 17 x 3
4 ft. weir
(See Tiered Skimmer
Basin Detail)
ID 21.2

SITE 5B

CONSTRUCT CHANNEL CHANGE IN CLEARING AND GRUBBING PHASE

MATCHLINE -L2- STA. 213+00 SEE SHEET 20

MATCHLINE -L2- STA. 226+00 SEE SHEET 22



TEMPORARY PIPE

39 x 19 x 3
1.5 inch Skimmer
with 0.750 inch
Orifice Diameter
4 ft. weir
ID 21.1

NOTE: PROPOSED LANDSCAPE SCREENING - SEE LANDSCAPE PLANS

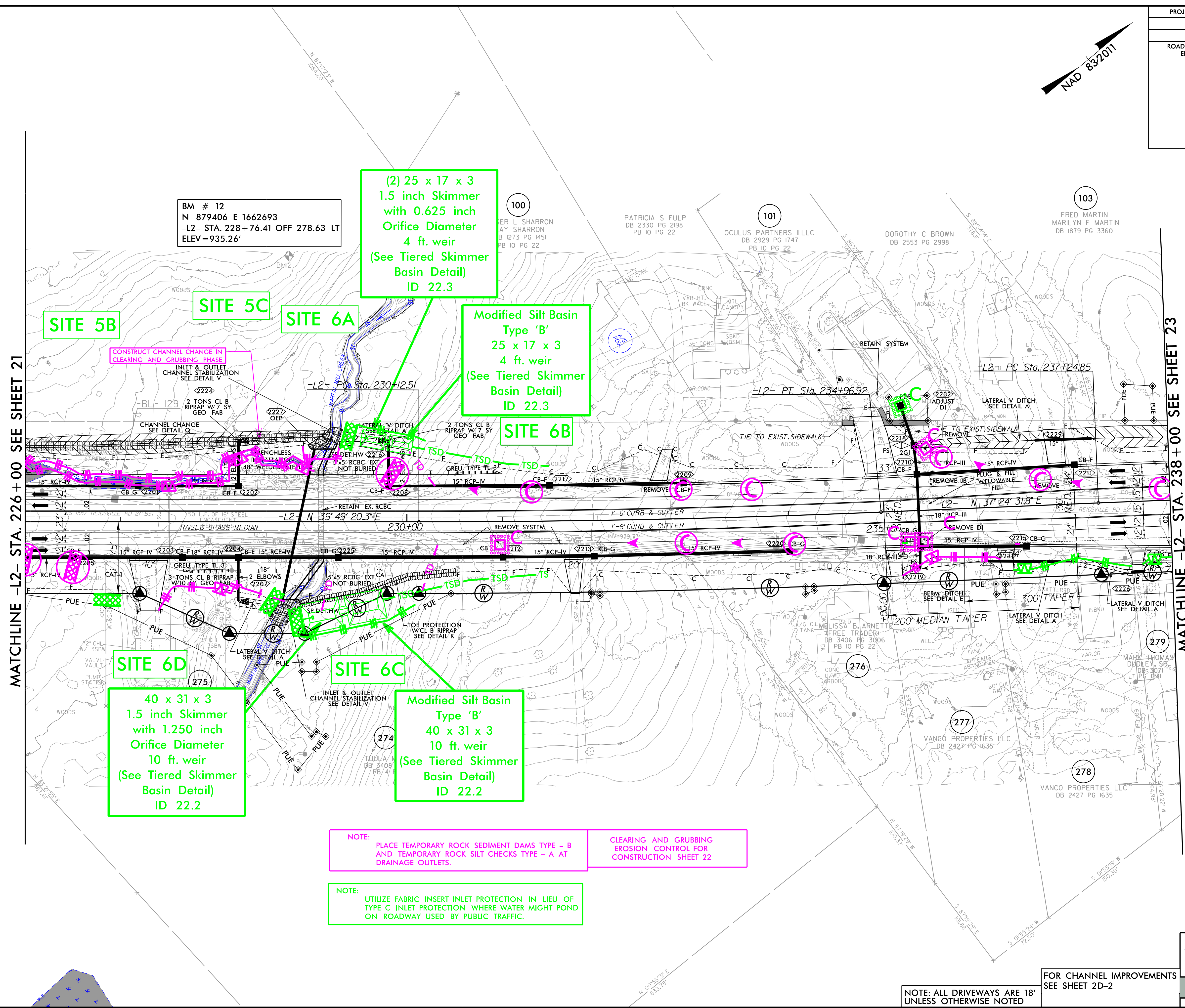
NOTE: ALL DRIVEWAYS ARE 18' UNLESS OTHERWISE NOTED

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R-2577A-EC-21.dgn

PROJECT REFERENCE NO. R-2577A	SHEET NO. EC-22/CONST.22
RW SHEET NO.	HYDRAULICS ENGINEER
ROADWAY DESIGN ENGINEER	



BM # 12
N 879406 E 1662693
-L2- STA. 228 + 76.41 OFF 278.63 LT
ELEV = 935.26'

SITE 5B

SITE 5C

SITE 6A

Modified Silt Basin
Type 'B'
25 x 17 x 3
4 ft. weir
(See Tiered Skimmer
Basin Detail)
ID 22.3

SITE 6B

SITE 6D
40 x 31 x 3
1.5 inch Skimmer
with 1.250 inch
Orifice Diameter
10 ft. weir
(See Tiered Skimmer
Basin Detail)
ID 22.2

SITE 6C

Modified Silt Basin
Type 'B'
40 x 31 x 3
10 ft. weir
(See Tiered Skimmer
Basin Detail)
ID 22.2

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 22

NOTE: UTILIZE FABRIC INSERT INLET PROTECTION IN LIEU OF TYPE C INLET PROTECTION WHERE WATER MIGHT POND ON ROADWAY USED BY PUBLIC TRAFFIC.

NOTE: ALL DRIVEWAYS ARE 18' UNLESS OTHERWISE NOTED

FOR CHANNEL IMPROVEMENTS SEE SHEET 2D-2

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