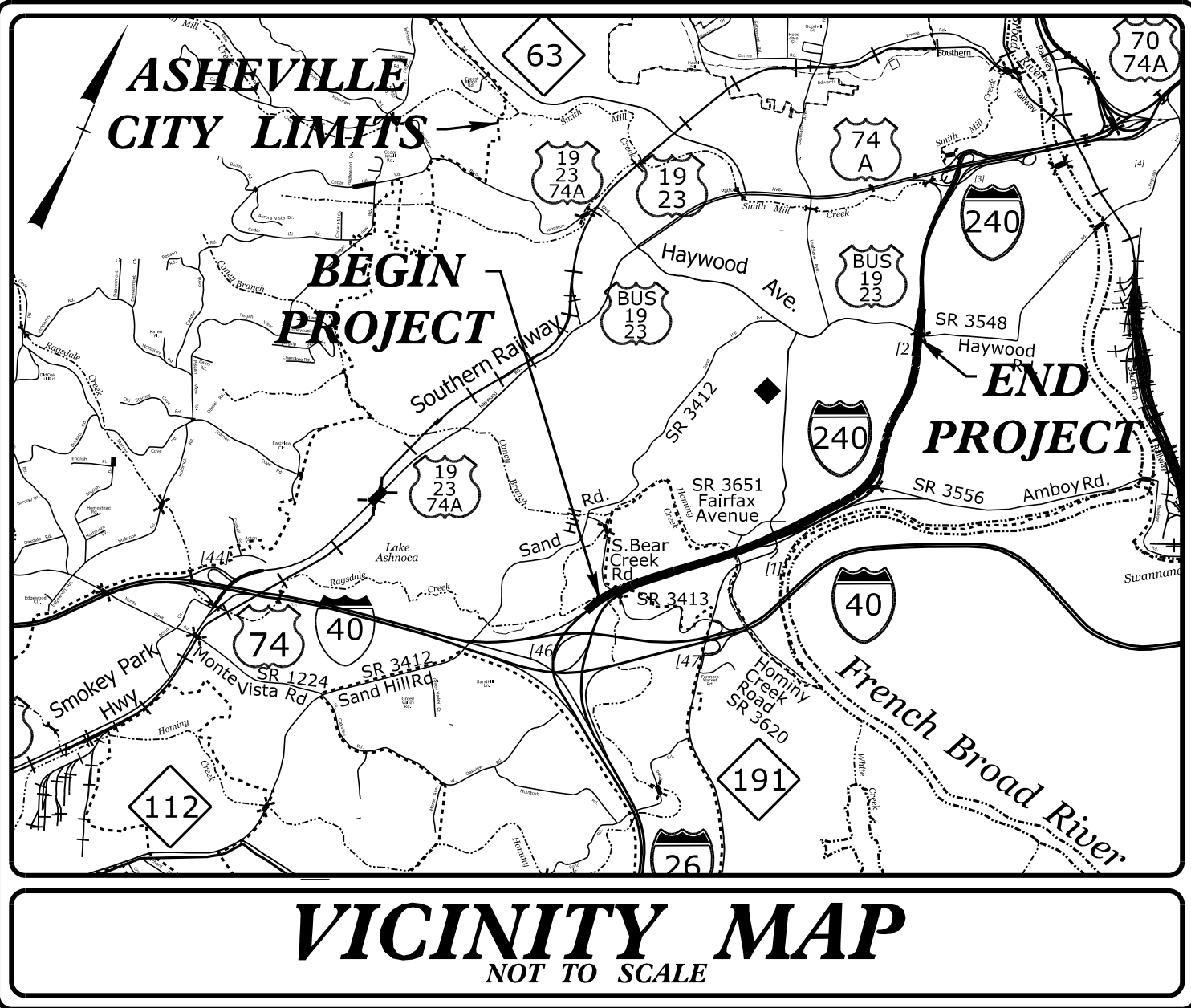


STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	I-2513AC	EC-1	46
STATE PROJ. NO.	F.A. PROJ. NO.	DESCRIPTION	
34165.1.13		P.E.	
34165.2.18		R /W	
34165.2.19		UTIL.	
34165.3.8		CONST.	



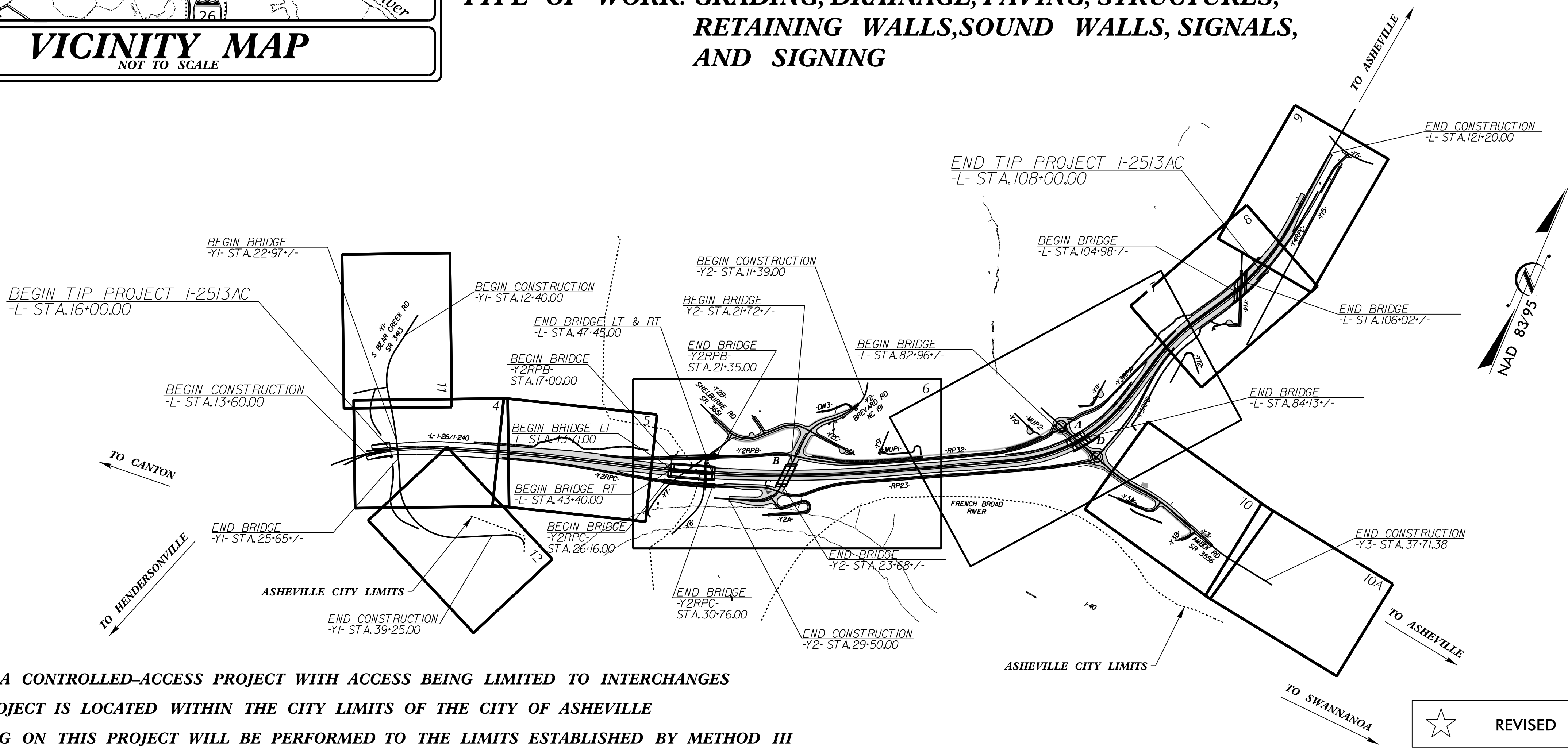
STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

PLAN FOR PROPOSED
HIGHWAY EROSION CONTROL

BUNCOMBE COUNTY

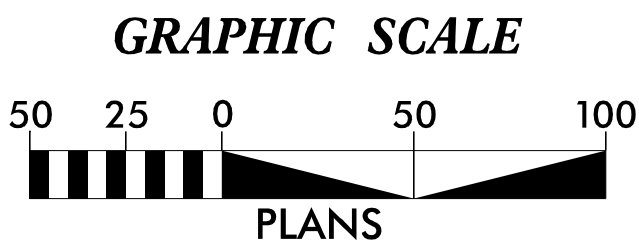
LOCATION: I-26/I-40/I-240 INTERCHANGE TO SR 3548 (HAYWOOD RD)

TYPE OF WORK: GRADING, DRAINAGE, PAVING, STRUCTURES,
RETAINING WALLS, SOUND WALLS, SIGNALS,
AND SIGNING



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
THIS PROJECT IS LOCATED WITHIN THE CITY LIMITS OF THE CITY OF ASHEVILLE
CLEARING ON THIS PROJECT WILL BE PERFORMED TO THE LIMITS ESTABLISHED BY METHOD III



THESE EROSION AND SEDIMENT CONTROL PLANS COMPLY
WITH THE REGULATIONS SET FORTH BY THE
NCG-010000 GENERAL STORMWATER CONSTRUCTION PERMIT
ISSUED BY THE NORTH CAROLINA DEPARTMENT OF
ENVIRONMENTAL QUALITY DIVISION OF ENERGY,
MINERAL, AND LAND RESOURCES.

Prepared in the Office of:
NVS
8514 McAlpine Park Drive, Suite 135
Charlotte, NC 28211
NC License #F-1333

Designed by:
WILL J. WEATHERSBEE **3161**
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.	SHEET NO.
I-25/3AC	EC-2
R/W SHEET NO.	

EROSION & SEDIMENT CONTROL LEGEND

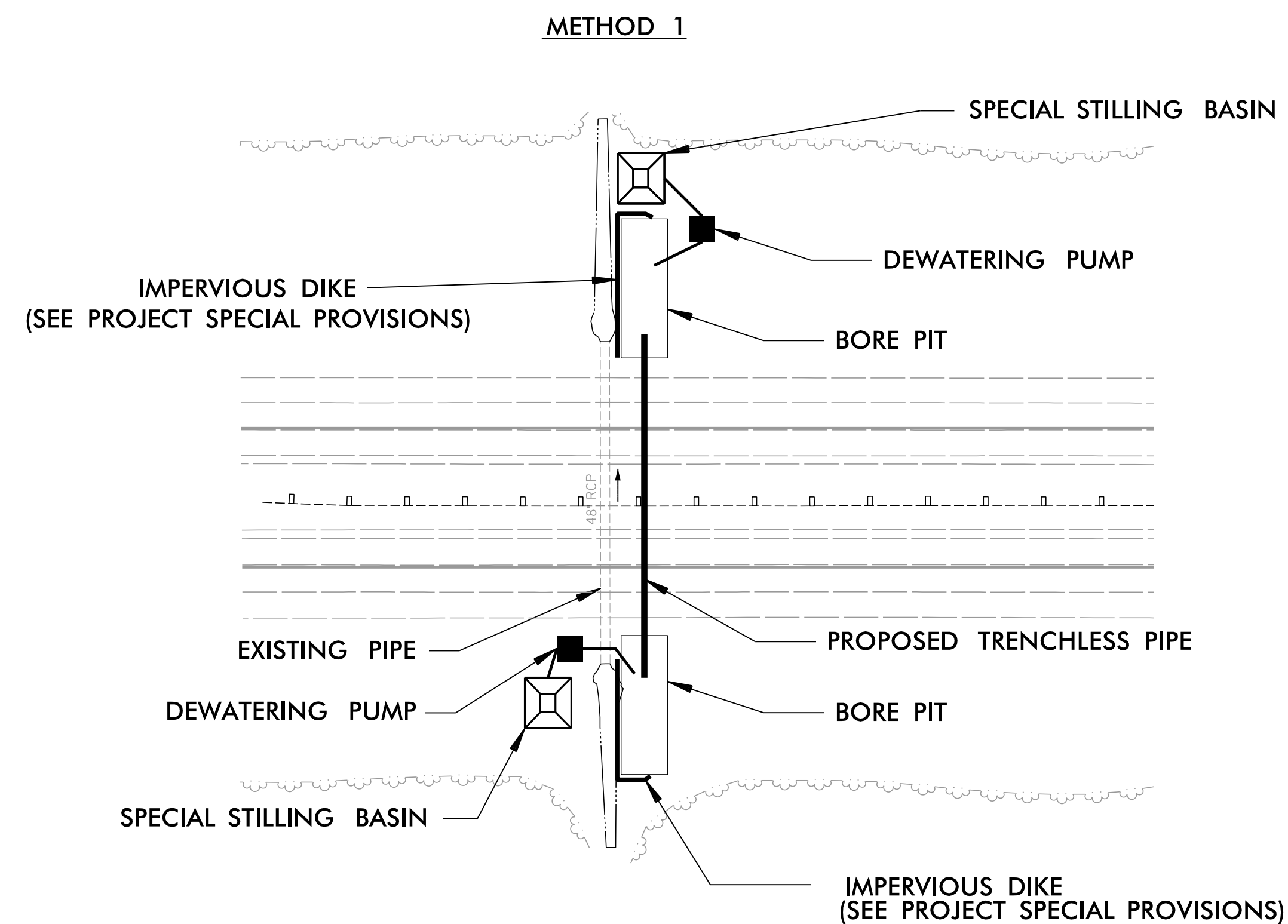
Std. #	Description	Symbol	Std. #	Description	Symbol
1605.01	Temporary Silt Fence		1633.01	Temporary Rock Silt Check Type A	
1606.01	Special Sediment Control Fence		1633.02	Temporary Rock Silt Check Type B	
1622.01	Temporary Berms and Slope Drains		1633.03	Temporary Rock Silt Check Type A with Excelsior 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				

CONSTRUCTION SEQUENCE FOR TRENCHLESS INSTALLATION

PROJECT REFERENCE NO.	SHEET NO.
I-2513AC	EC-2A
R/W SHEET NO.	

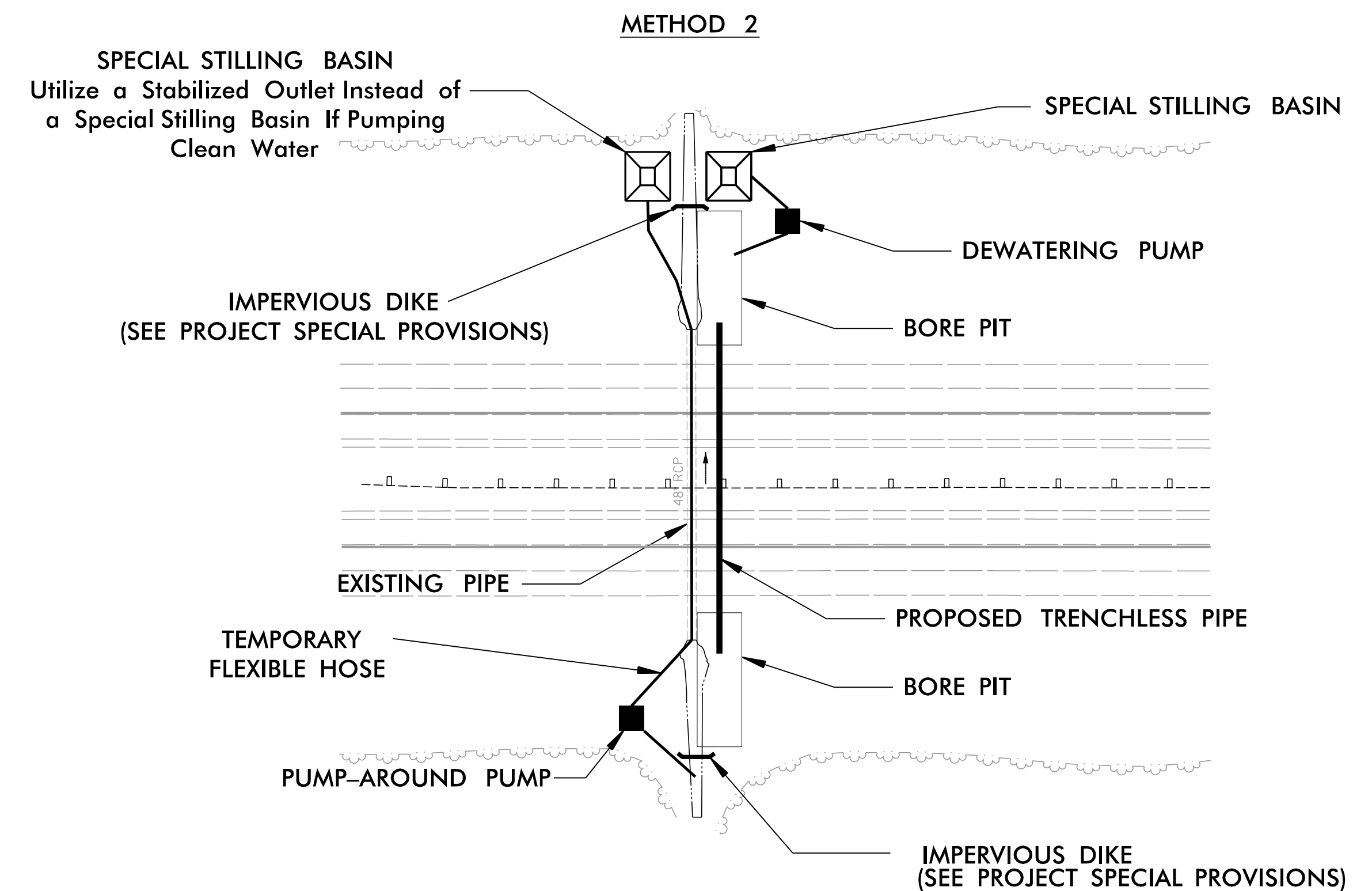
NOTES:

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



METHOD 1: CONSTRUCTION SEQUENCE FOR TYPICAL WORK AREA

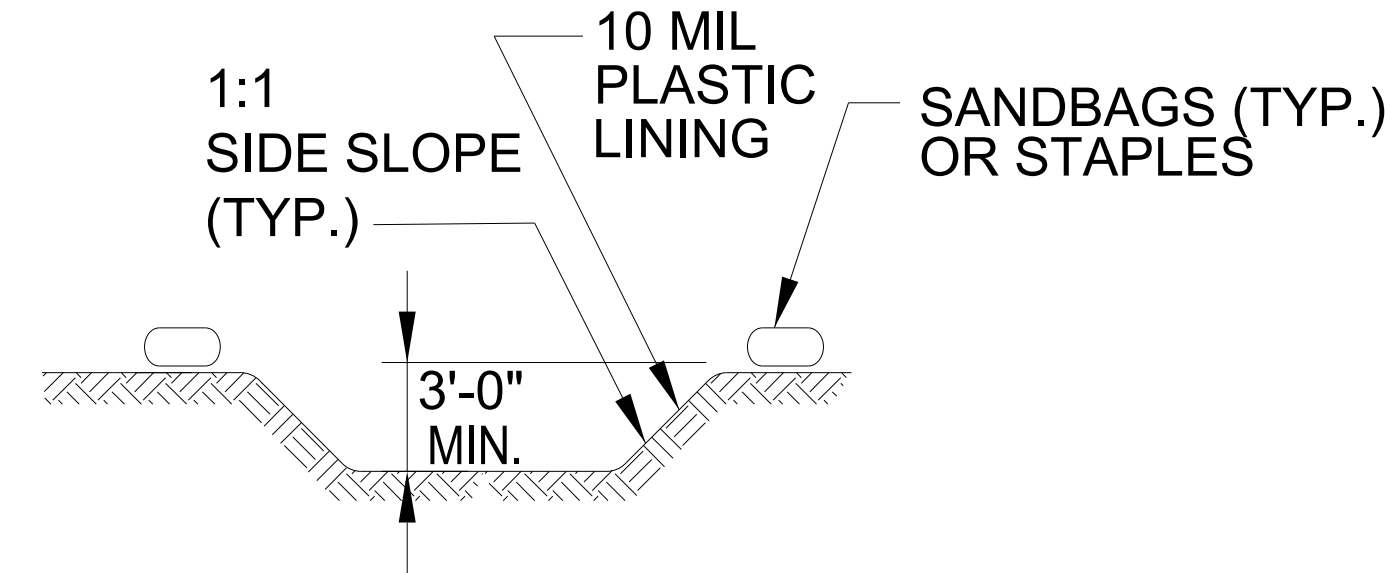
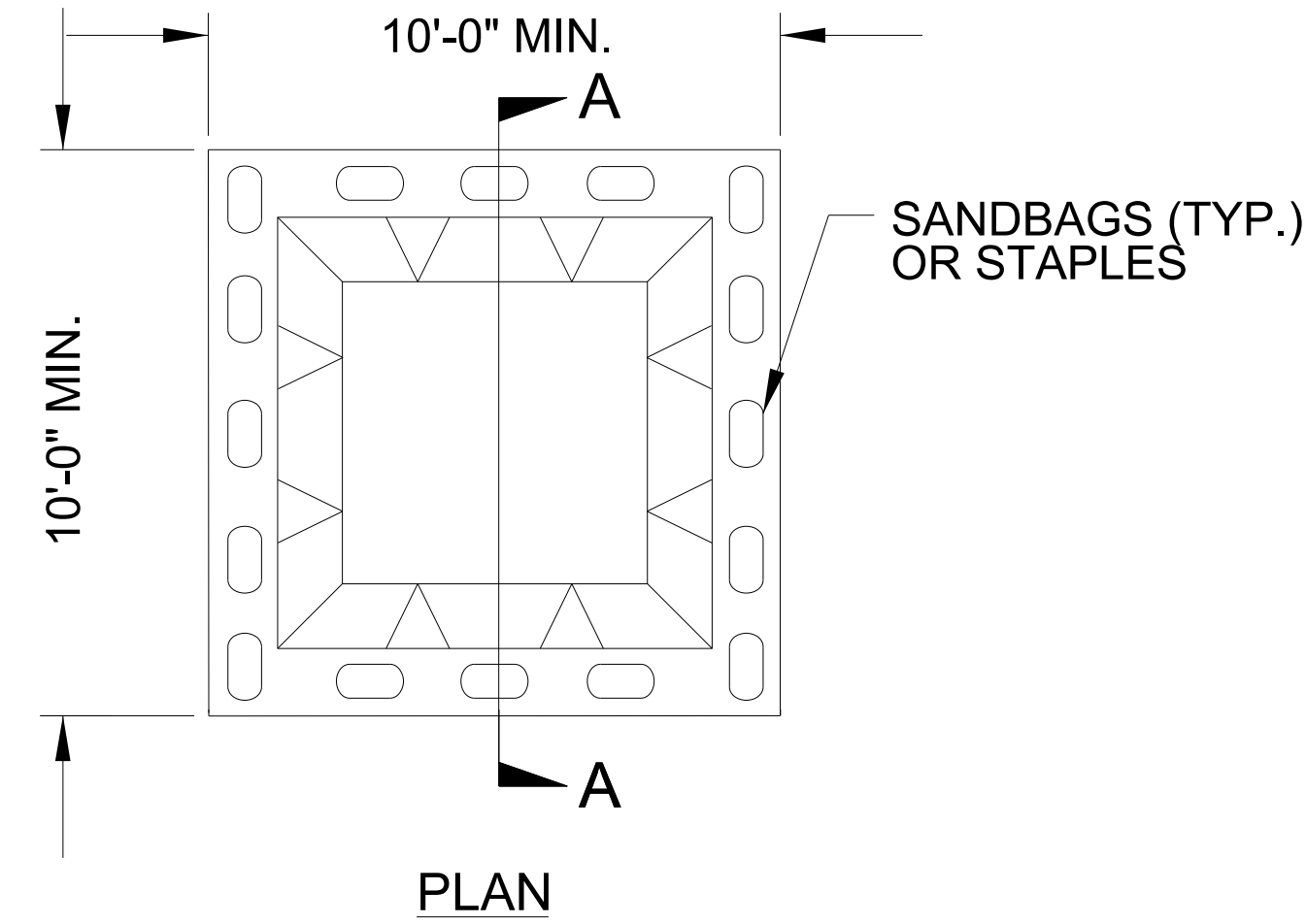
1. INSTALL SPECIAL STILLING BASIN(S) AS NEEDED.
2. PLACE UPSTREAM IMPERVIOUS DIKE AND CONSTRUCT BORE PIT FOR TRENCHLESS INSTALLATION. INSTALL PUMPING APPARATUS AND DEWATER ENTRAPPED AREA. AREA TO BE DEWATERED SHALL BE EQUAL TO ONE DAY'S WORK.
3. PLACE DOWNSTREAM IMPERVIOUS DIKE AND CONSTRUCT BORE PIT FOR TRENCHLESS INSTALLATION. INSTALL PUMPING APPARATUS AND DEWATER ENTRAPPED AREA. AREA TO BE DEWATERED SHALL BE EQUAL TO ONE DAY'S WORK.
4. INSTALL TRENCHLESS PIPE IN ACCORDANCE WITH THE PLANS.
5. EXCAVATE ANY ACCUMULATED SILT AND DEWATER BEFORE REMOVAL OF IMPERVIOUS DIKES. REMOVE IMPERVIOUS DIKES, PUMPS, AND TEMPORARY FLEXIBLE HOSE. (DOWNSTREAM IMPERVIOUS DIKES FIRST).
6. REMOVE SPECIAL STILLING BASIN(S) AND BACKFILL. STABILIZE DISTURBED AREA WITH SEED AND MULCH.



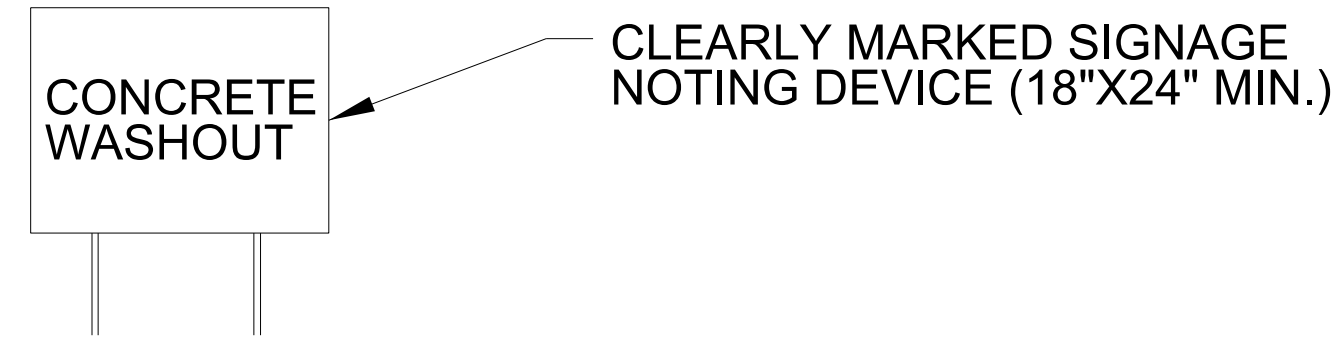
METHOD 2: CONSTRUCTION SEQUENCE FOR TYPICAL WORK AREA

1. INSTALL SPECIAL STILLING BASIN(S).
2. INSTALL UPSTREAM PUMP AND TEMPORARY FLEXIBLE HOSE.
3. PLACE UPSTREAM IMPERVIOUS DIKE AND CONSTRUCT BORE PIT FOR TRENCHLESS INSTALLATION.
4. PLACE DOWNSTREAM IMPERVIOUS DIKE AND PUMPING APPARATUS. DEWATER ENTRAPPED AREA. AREA TO BE DEWATERED SHALL BE EQUAL TO ONE DAY'S WORK.
5. BEGIN PUMPING OPERATIONS FOR STREAM DIVERSION.
6. INSTALL TRENCHLESS PIPE IN ACCORDANCE WITH THE PLANS.
7. EXCAVATE ANY ACCUMULATED SILT AND DEWATER BEFORE REMOVAL OF IMPERVIOUS DIKES. REMOVE IMPERVIOUS DIKES, PUMPS, AND TEMPORARY FLEXIBLE HOSE. (DOWNSTREAM IMPERVIOUS DIKES FIRST).
8. REMOVE SPECIAL STILLING BASIN(S) AND BACKFILL. STABILIZE DISTURBED AREA WITH SEED AND MULCH.

ONSITE CONCRETE WASHOUT STRUCTURE WITH LINER

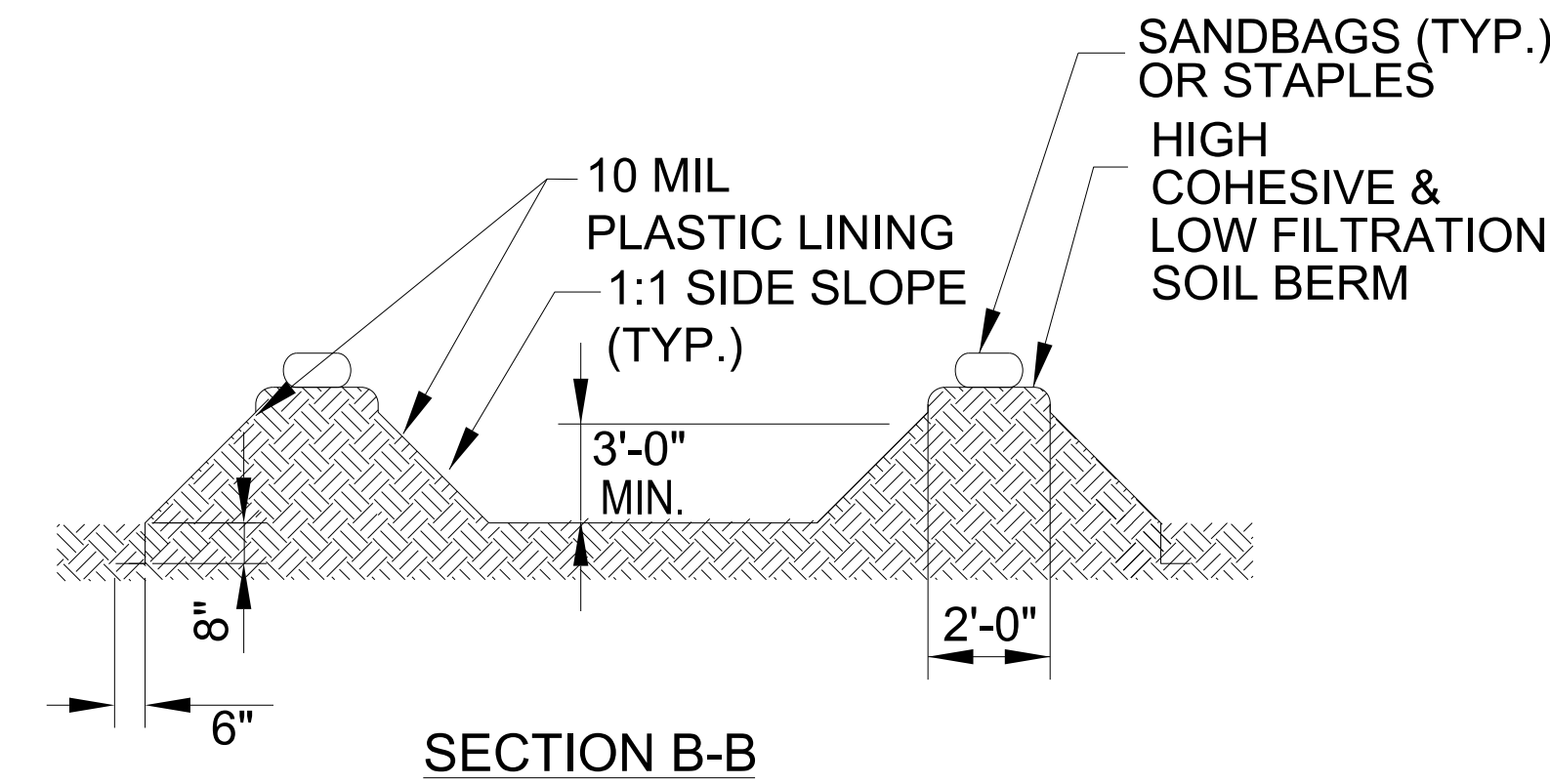
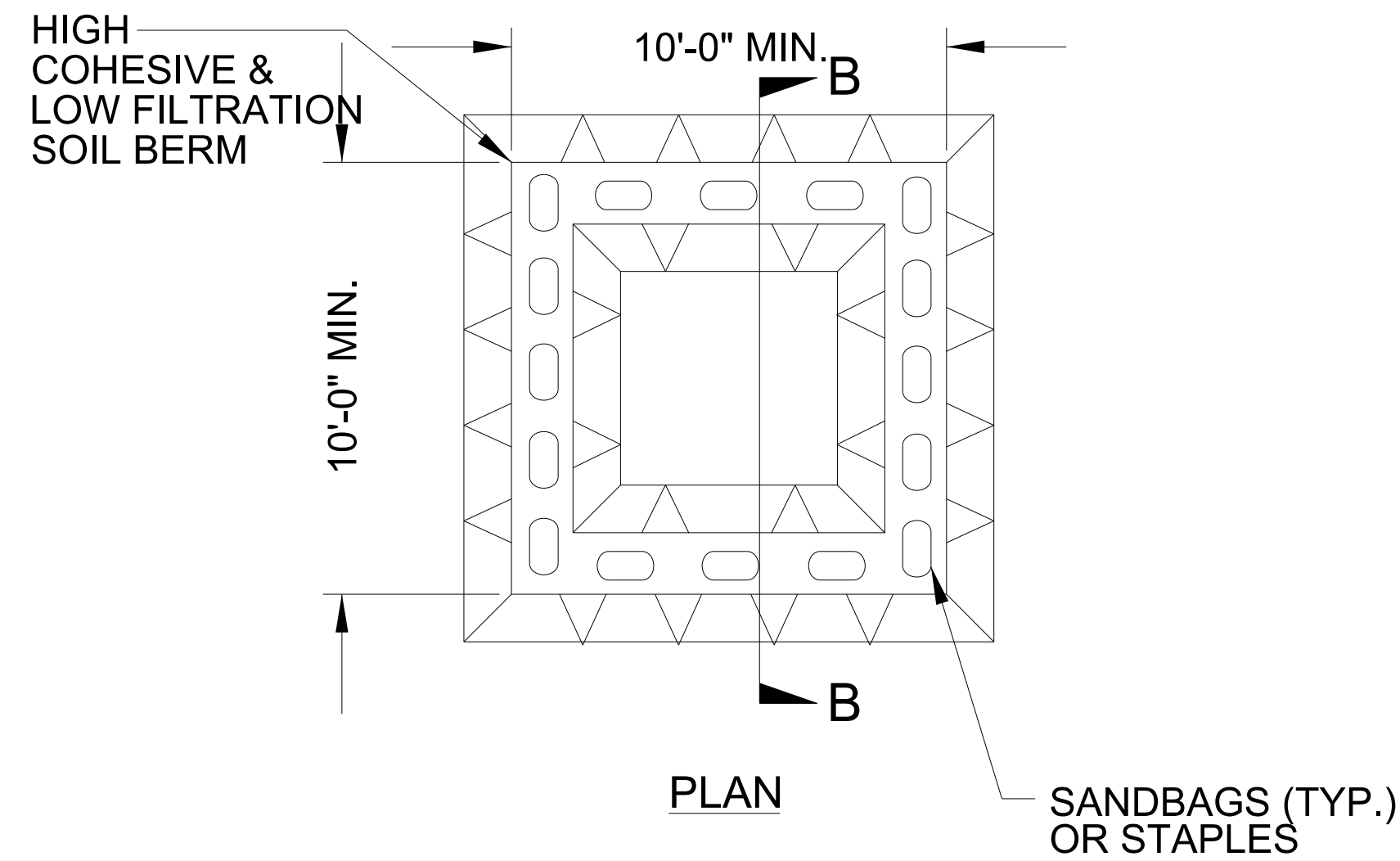


SECTION A-A



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.



SECTION B-B

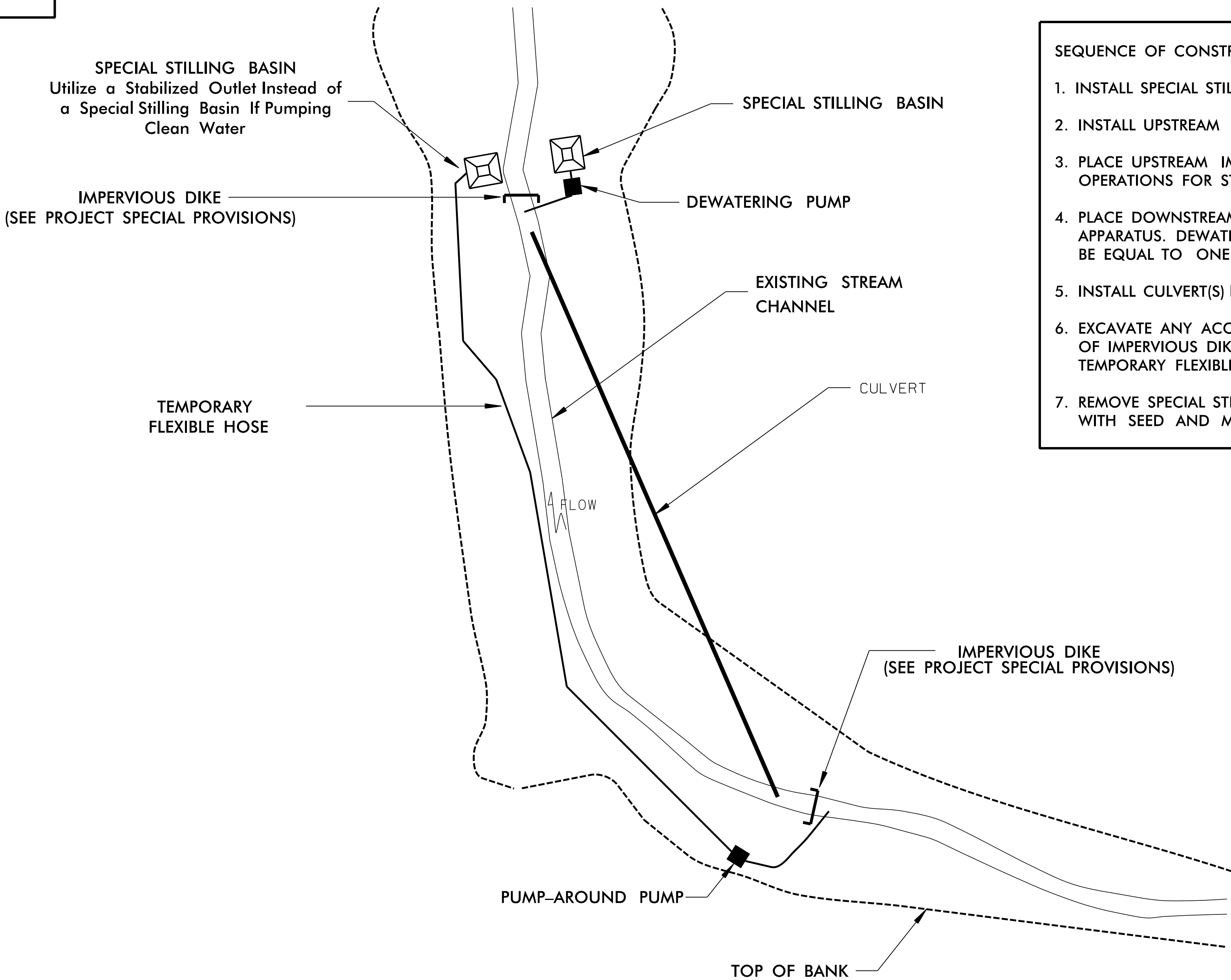


ABOVE GRADE WASHOUT STRUCTURE
NOT TO SCALE

- 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.

EXAMPLE OF PUMP-AROUND OPERATION

- NOTES:
- 1) All excavation shall be performed in only dry or isolated areas of the work zone.
 - 2) Impervious dikes are to be used to isolate work from stream flow when necessary.
 - 3) Maintenance of stream flow operations shall be incidental to the work. This includes polyethylene sheeting, diversion pipes, pumps and hoses.
 - 4) Pumps and hoses shall be of sufficient size and quantity to dewater the work area and maintain stream bypass flow.



- 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. INSTALL CULVERT(S) 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. REMOVE SPECIAL STILLING BASIN(S) AND BACKFILL. STABILIZE DISTURBED AREA WITH SEED AND MULCH.

DIVISION OF HIGHWAYS

STATE OF NORTH CAROLINA

SOIL STABILIZATION SUMMARY SHEET

DITCH MATTING FOR EROSION CONTROL

CONST SHEET NO.	LINE	FROM STATION	TO STATION	SIDE	ESTIMATE (SY)
5	STRAW MATTING:				
4	-L-	13+86	15+00	RT	145
4	-L-	14+50	15+09	LT	35
4	-L-	15+10	15+50	RT	50
4	-L-	17+35	20+25	RT	370
4	-Y1-	19+45	21+00	RT	160
4	-Y1B-	10+32	31+00	RT	1620
4	-DET3-	13+50	16+00	LT	290
4	-DET3-	16+00	17+50	LT	85
4	-DET3-	14+50	16+00	LT	85
4	-DET3-	16+00	19+50	LT	190
4	-DET7-	10+00	15+98	LT	325
4	-DET7-	16+07	16+75	RT	40
5	-DET8-	10+00	12+50	LT	140
5	-DET8/11-	12+22	13+50	RT/LT	225
5	-DET16-	11+00	15+00	LT	220
5	-DET8-	13+50	15+00	RT	85
5	-DET8-	12+50	17+00	LT	295
5	-DET1-	10+00	17+20	LT	1090
5	-DET8-	17+20	18+50	LT	165
5	-DET8-	15+01	21+00	RT	470
5	-L-	28+50	30+50	RT	375
5	-L-	30+50	32+50	RT	205
5	-L-	30+50	33+85	LT	455
5	-L-	30+50	33+86	RT	625
5	-L-	33+86	35+00	LT	215
5	-L-	33+86	35+50	RT	205
5	-L-	34+50	35+50	RT	105
5	-L-	35+50	36+14	RT	65
5	-L-	35+50	37+19	RT	210

DITCH MATTING FOR EROSION CONTROL

CONST SHEET NO.	LINE	FROM STATION	TO STATION	SIDE	ESTIMATE (SY)
5	-L-	36+14	37+19	RT	110
5	-L-	37+20	37+87	RT	55
5	-L-	37+19	39+25	RT	255
5	-L-	37+87	39+25	RT	140
5	-L-	39+25	41+00	RT	325
5	-L-	41+00	42+00	RT	100
5	-L-	35+14	42+11	LT	1295
5	-L-	33+85	35+00	LT	145
5	-L-	35+01	35+75	LT	95
6	-Y2-	15+30	16+00	RT	55
6	-DW3-	11+76	12+42	LT	55
6	-Y2C-	11+50	12+50	RT	105
6	-Y2B-	11+57	13+50	LT	125
6	-RP32-	11+23	14+26	LT	310
6	-DET14-	12+50	14+90	LT	245
6	-Y2-	16+00	17+30	RT	105
6	-DET14-	15+00	18+00	LT	290
6	-Y8-	19+59	21+04	RT	95
6	-Y2RPC-	31+30	32+81	RT	210
6	-L-	48+10	51+28	LT	705
6	-L-	47+77	53+00	RT	335
6	-L-	53+86	55+65	LT	115
6	-L-	63+72		RT	35
6	-L-	68+15		RT	45
6	-DET2-	15+00	18+00	LT	320
7	-DET6-	17+00	21+00	RT	395
7	-Y3-	18+50	19+00	LT	60
8	-DET6-	12+00	16+00	RT	395
8	-L-	100+00	100+90	RT	95
		SHEET SUBTOTAL			15160

DIVISION OF HIGHWAYS

STATE OF NORTH CAROLINA

SOIL STABILIZATION SUMMARY SHEET

MATTING FOR EROSION CONTROL

CONST SHEET NO.	LINE	FROM STATION	TO STATION	SIDE	ESTIMATE (SY)
8	-L-	108+50	109+88	RT	160
9	-DET19-	4+00	5+00	LT	150
9	-DET19-	5+00	6+50	LT	150
9	-L-	112+50	112+09	RT	50
10	-Y3-	30+52	29+69	RT	175
10	-Y3-	30+52	31+39	RT	185
10A	-Y3-	31+39	34+10	RT	575
		SHEET SUBTOTAL			1445
			STRAW TOTAL		16605
	EXCELSIOR MATTING:				
4	-L-	14+00	14+45	RT	60
4	-L-	16+50	18+50	LT	110
4	-L-	18+51	19+40	RT	50
5	-DET8	17+00	17+20	LT	15
5	-L-	32+68	35+00	LT	235
5	-L-	39+25	42+00	RT	280
6	-DET2-	13+00	13+50	LT	50
6	-DET14-	15+50	18+00	RT	195
6	-Y2B-	17+84	18+33	RT	60
6	-Y2B-	19+84	21+65	LT	165
6	-Y2RPC-	32+81	34+67	RT	255
6	-L-	51+50	53+50	LT	445
6	-L-	53+50	53+86	LT	65
6	-DET9-	10+97	13+77	RT	155
6	-DET5-	11+30	14+00	LT	180
6	-L-	65+54		RT	20
6	-L-	48+10	51+28	LT	210
6	-L-	48+10	51+90	RT	295

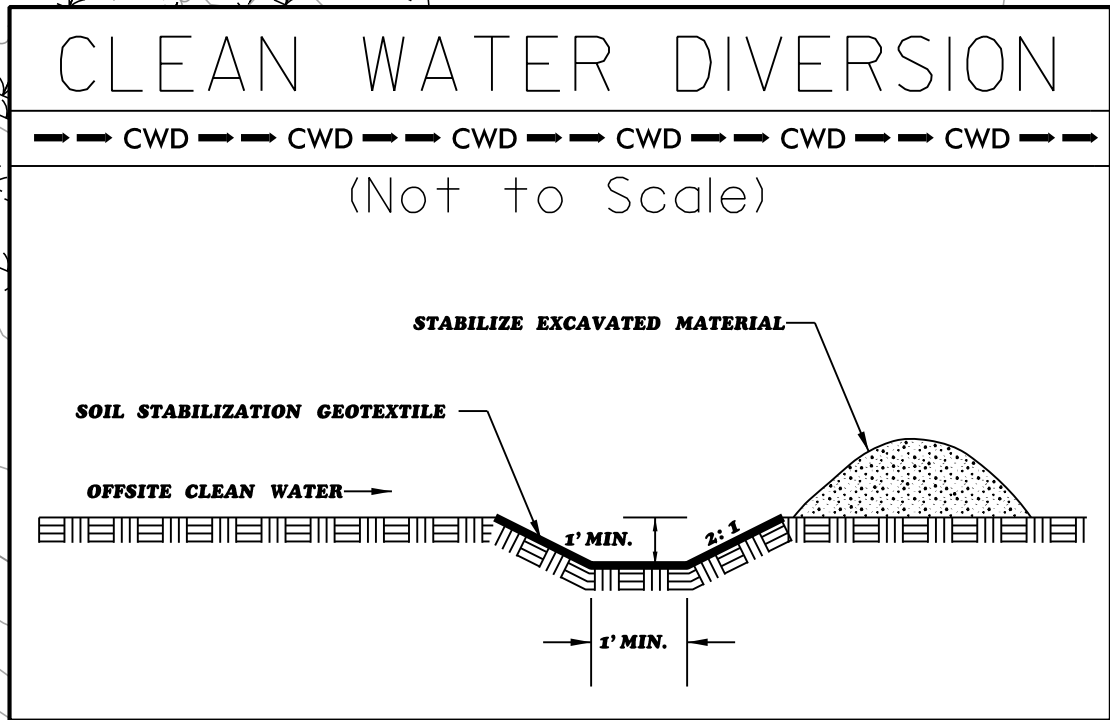
MATTING FOR EROSION CONTROL

CONST SHEET NO.	LINE	FROM STATION	TO STATION	SIDE	ESTIMATE (SY)
6	-DET2-	19+64	19+98	LT	35
7	-RP32-	34+29	35+68	LT	275
8	-L-	106+50	108+00	RT	125
9	-L-	112+09	109+88	RT	260
9	-DET19	6+50	8+40	LT	150
			SUBTOTAL		3690
	SLOPE MATTING:				
4	-L-	14+50	16+25	LT	1130
4	-L-	14+50	16+30	RT	1260
4	-L-	20+00	27+50	LT	3400
4	-L-	21+00	26+00	RT	2420
5	-L-	29+50	42+00	RT	15300
5	-L-	31+00	34+00	LT	2950
6	-L-	64+50	67+50	LT	1350
7	-L-	68+50	76+00	LT	6670
7	-Y3RPD-	18+50	21+00	LT	1380
8	-L-	100+50	104+00	RT	2570
8	-L-	103+75	105+00	LT	1030
		SLOPE MATTING SUBTOTAL			39460
			STRAW TOTAL		56065
		EXCELSIOR SUBTOTAL			3690
	MISCELLANEOUS MATTING TO BE INSTALLED AS DIRECTED BY THE ENGINEER				77895
				TOTAL	137650

DIVISION OF HIGHWAYS
STATE OF NORTH CAROLINA

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 TO 4:1	14 DAYS	7 DAYS FOR SLOPES GREATER THAN 50' IN LENGTH WITH SLOPES STEEPER THAN 4:1. 7 DAYS FOR PERIMETER DIKES, SWALES, DITCHES PERIMETER SLOPES, AND HQW ZONES
ALL OTHER AREAS WITH SLOPES FLATTER THAN 4:1	14 DAYS	7 DAYS FOR PERIMETER DIKES, SWALES, DITCHES PERIMETER SLOPES, AND HQW ZONES



NOTE:	PLACE TEMPORARY ROCK SEDIMENT DAMS TYPE - B AND TEMPORARY ROCK SILT CHECKS TYPE - A AT DRAINAGE OUTLETS.
NOTE:	ALL EROSION CONTROL DEVICES SHOWN ARE LOCATED WITHIN EXISTING RW OR EASEMENT.
NOTE:	PERIMETER EROSION CONTROL MEASURES SHALL BE INSTALLED DURING CLEARING AND GRUBBING PHASE.
NOTE:	CONTRACTOR SHALL PROVIDE GROUND COVER ON EXPOSED SLOPES IN ACCORDANCE WITH THE "SOIL STABILIZATION TIMEFRAMES," SEE EC-3C.
NOTE:	PRIOR TO INSTALLATION OF EROSION CONTROL DEVICES, CONTRACTOR SHALL VERIFY BOUNDARIES OF JURISDICTIONAL AREAS AND DELINEATE WITH SAFETY FENCE OR FLAGGING.

★ REVISED SIGNAL

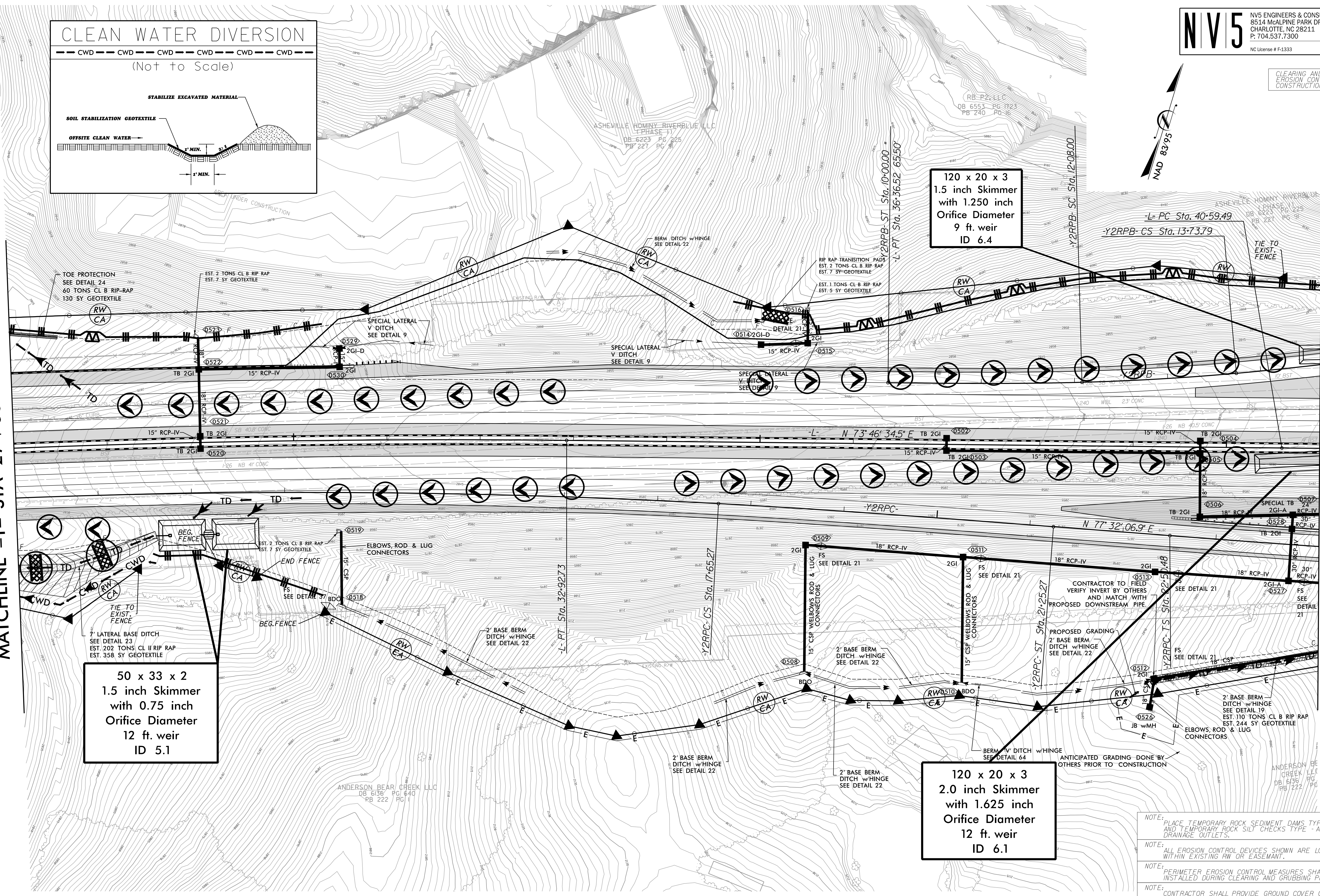
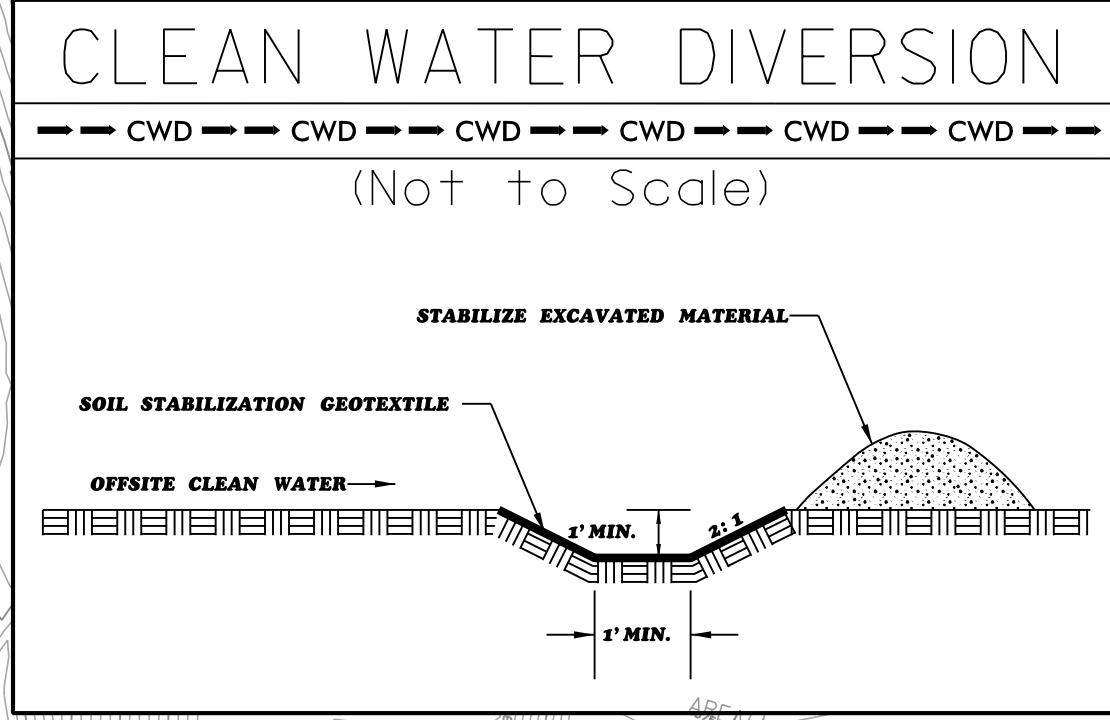
8/17/99

6/19/2026
R:\Environmental\Design\AC_PSH\1-2513AC-EC-PSH-05.dgn
David Rucker

REVISIONS

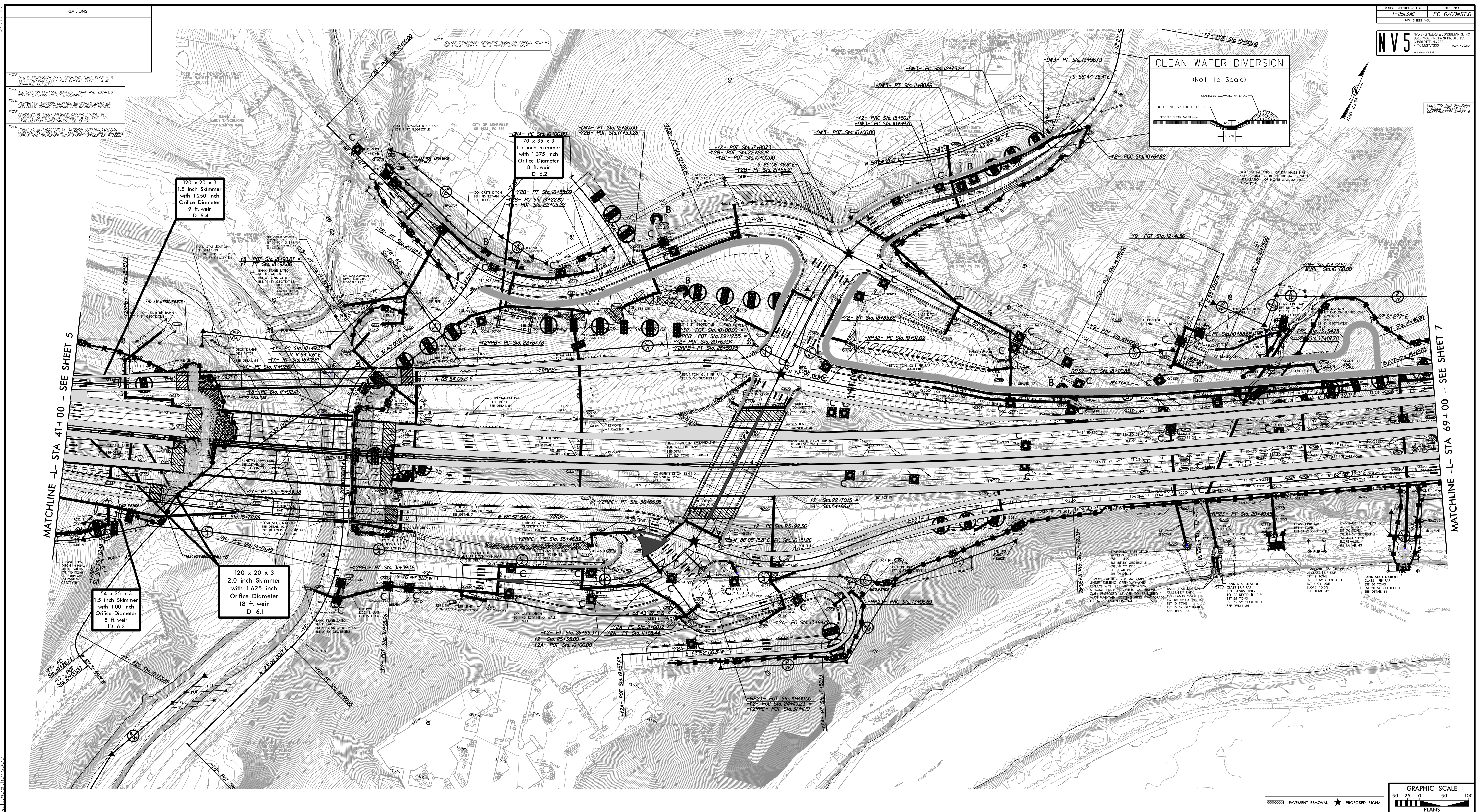
MATCHLINE -Y- STA 27+00 - SEE SHEET 4

MATCHLINE -Y- STA 41+00 - SEE SHEET 6



REVISED SIGNAL

- NOTE: PLACE TEMPORARY ROCK SEDIMENT DAMS TYPE - B AND TEMPORARY ROCK SILT CHECKS TYPE - A AT DRAINAGE OUTLETS.
- NOTE: ALL EROSION CONTROL DEVICES SHOWN ARE LOCATED WITHIN EXISTING RW OR EASEMENT.
- NOTE: PERIMETER EROSION CONTROL MEASURES SHALL BE INSTALLED DURING CLEARING AND GRUBBING PHASE.
- NOTE: CONTRACTOR SHALL PROVIDE GROUND COVER ON EXPOSED SLOPES IN ACCORDANCE WITH THE "SOIL STABILIZATION TIMEFRAMES" SEE EC-3C.
- NOTE: PRIOR TO INSTALLATION OF EROSION CONTROL DEVICES, CONTRACTOR SHALL VERIFY BOUNDARIES OF JURISDICTIONAL AREAS AND DELINEATE WITH SAFETY FENCE OR FLAGGING.



REVISIONS

- NAD 83/95



PROJECT REFERENCE NO.	SHEET NO.
I-25I3AC	EC-7/CONST
B/W SHEET NO.	

N|V|5 NVS ENGINEERS & CONSULTANTS, INC.
 8514 MCALPINE PARK DR, STE 135
 CHARLOTTE, NC 28213
 P: 704.537.7300 www.NVS.com
 NC License # F-3333

