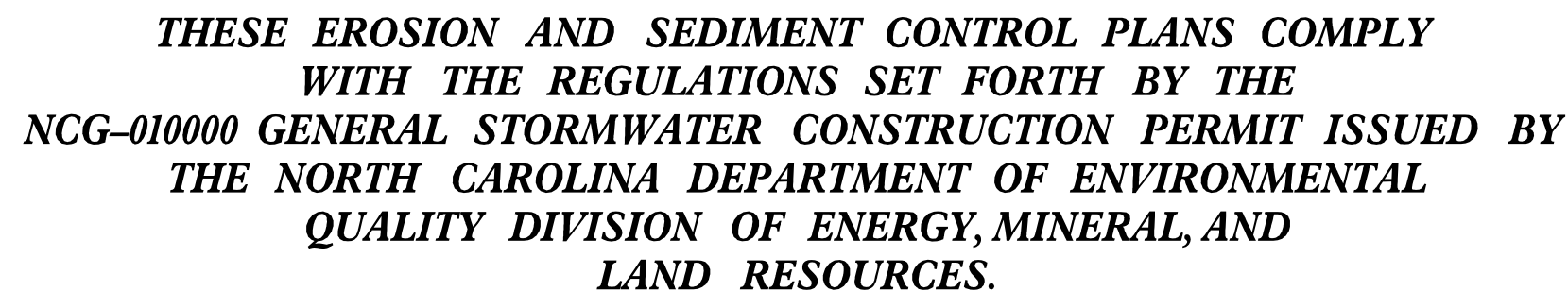


3/25/2026
...\\cadd\U-5711-hyd-ec-tsh.dgn
3:15:08 PM

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

**LOCATION: SR 1712 (PINEVIEW ROAD/STREET) FROM WEST OF
SYLVAN DRIVE TO US 220 BUSINESS IN ASHEBORO**
TYPE OF WORK: DRAINAGE, GRADING, PAVING, SIGNALS, AND CULVERT



Designed by:

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.

PROJECT REFERENCE NO.
U-5711

SHEET NO.
EC-02

DIVISION OF HIGHWAYS
STATE OF NORTH CAROLINA

EROSION & SEDIMENT CONTROL LEGEND

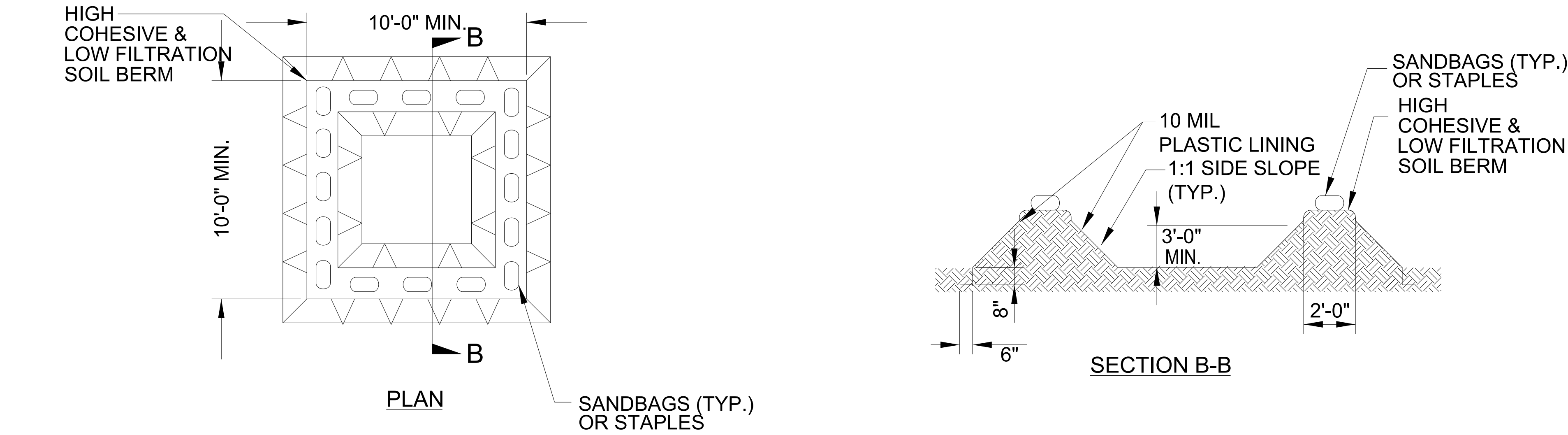
Std. #	Description	Symbol	Std. #	Description	Symbol
1605.01	Temporary Silt Fence		1633.01	Temporary Rock Silt Check Type A	
1606.01	Special Sediment Control Fence		1633.02	Temporary Rock Silt Check Type B	
1622.01	Temporary Berms and Slope Drains		1633.03	Temporary Rock Silt Check Type A with Excelsior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

ONSITE CONCRETE WASHOUT STRUCTURE WITH LINER



- 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.

BELOW GRADE WASHOUT STRUCTURE
NOT TO SCALE

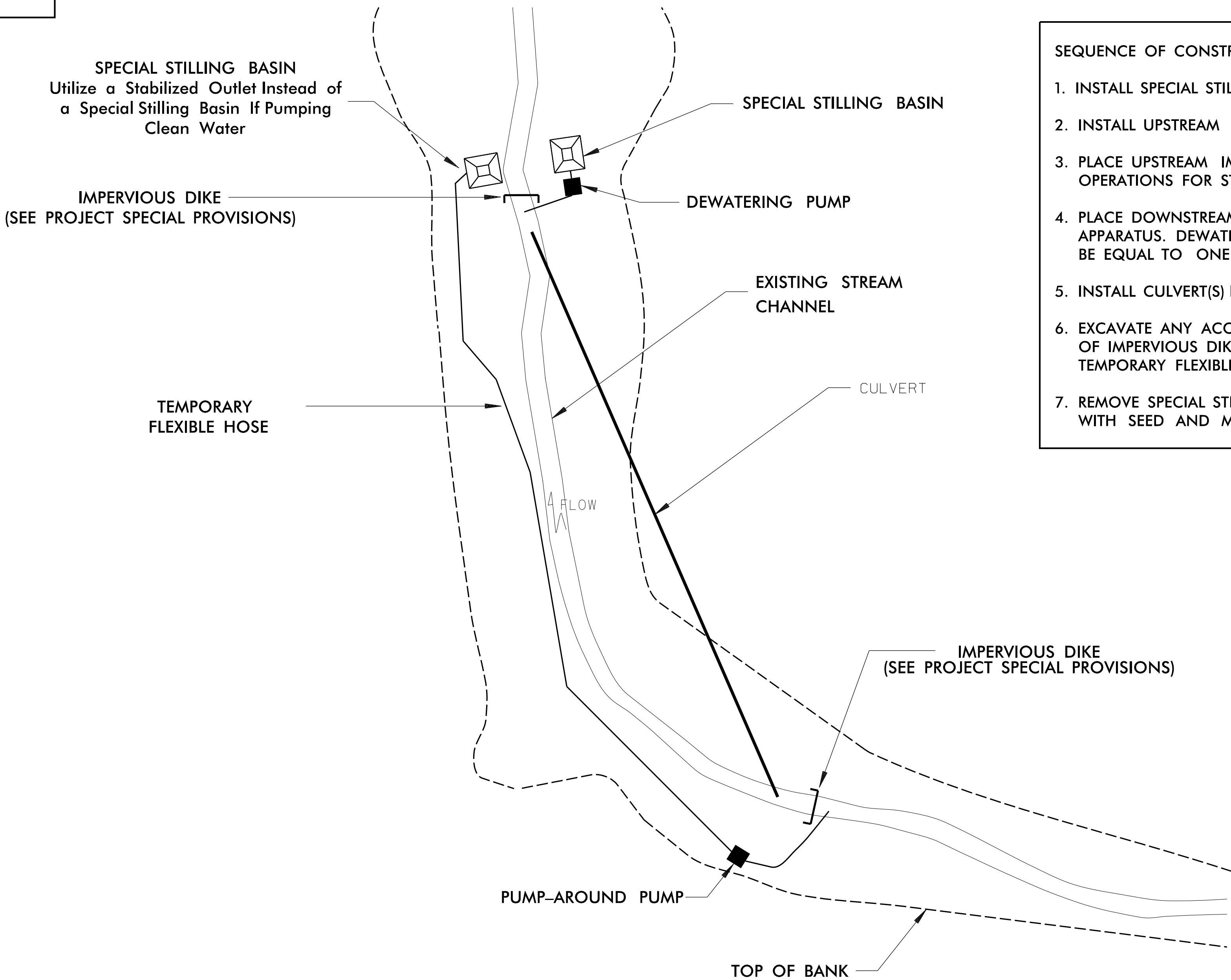


- NOTES:
1. ACTUAL LOCATION DETERMINED IN FIELD
 2. THE CONCRETE WASHOUT STRUCTURES SHALL BE MAINTAINED WHEN THE LIQUID AND/OR SOLID REACHES 75% OF THE STRUCTURES CAPACITY TO PROVIDE ADEQUATE HOLDING CAPACITY WITH A MINIMUM 12 INCHES OF FREEBOARD.
 3. CONCRETE WASHOUT STRUCTURE NEEDS TO BE CLEARLY MARKED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

ABOVE GRADE WASHOUT STRUCTURE
NOT TO SCALE

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

MATTING FOR SLOPES

CONST SHEET NO.	LINE	FROM STATION	TO STATION	SIDE	ESTIMATE (SY)
6	-L-	43+50	45+60	Lt.	155
6	-L-	42+00	44+35	Rt.	270
			SUBTOTAL		425
	MATTING FOR DITCHES – STRAW				
4/5	-L-	19+00	20+50	Rt.	40
5	-L-	24+68	25+53	Rt.	25
5	-L-	28+00	33+13	Rt.	260
5	-L-	33+82	34+50	Lt.	25
6	-L-	35+90	37+00	Rt.	35
6	-L-	36+50	37+36	Lt.	35
6	-L-	39+77	41+00	Rt.	30
7	-L-	47+50	48+88	Lt.	40
7	-L-	54+65	55+00	Lt.	15
		TOTAL FOR DITCHES			505
		TOTAL FOR SLOPES			425
MISCELLANEOUS MATTING TO BE INSTALLED AS DIRECTED BY THE ENGINEER					8875
				TOTAL	9805
				SAY	10,000

PERMANENT SOIL REINFORCEMENT MAT

CONST SHEET NO.	LINE	FROM STATION	TO STATION	SIDE	ESTIMATE (SY)
PSRM FROM DRAINAGE CALLOUTS – TYPE 1					
5	-L-	20+50	21+50	RT.	80
5	-L-	24+80	25+32	LT.	50
5	-L-	26+60	27+40	RT.	80
5	-L-	33+24	33+40	RT.	15
6	-L-	33+74	34+12	RT.	20
6	-L-	44+30	45+60	LT.	210
				TOTAL	455
PSRM FROM DRAINAGE CALLOUTS – TYPE 2					
5	-L-	25+60	27+09	LT.	240
5	-Y2-	12+85	13+50	LT.	105
				TOTAL	345
PSRM FROM DRAINAGE CALLOUTS – TYPE 4					
5	-L-	32+00	32+92	LT.	55
6	-L-	41+00	42+10	LT.	210
6	-L-	41+30	43+80	RT.	220
6	-L-	43+05	43+91	LT.	220
6	-Y3-	10+45	10+88	LT.	30
6	-Y3-	10+40	11+50	RT.	130
				TOTAL	865

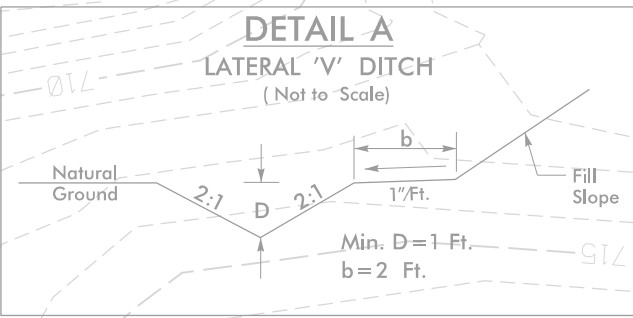
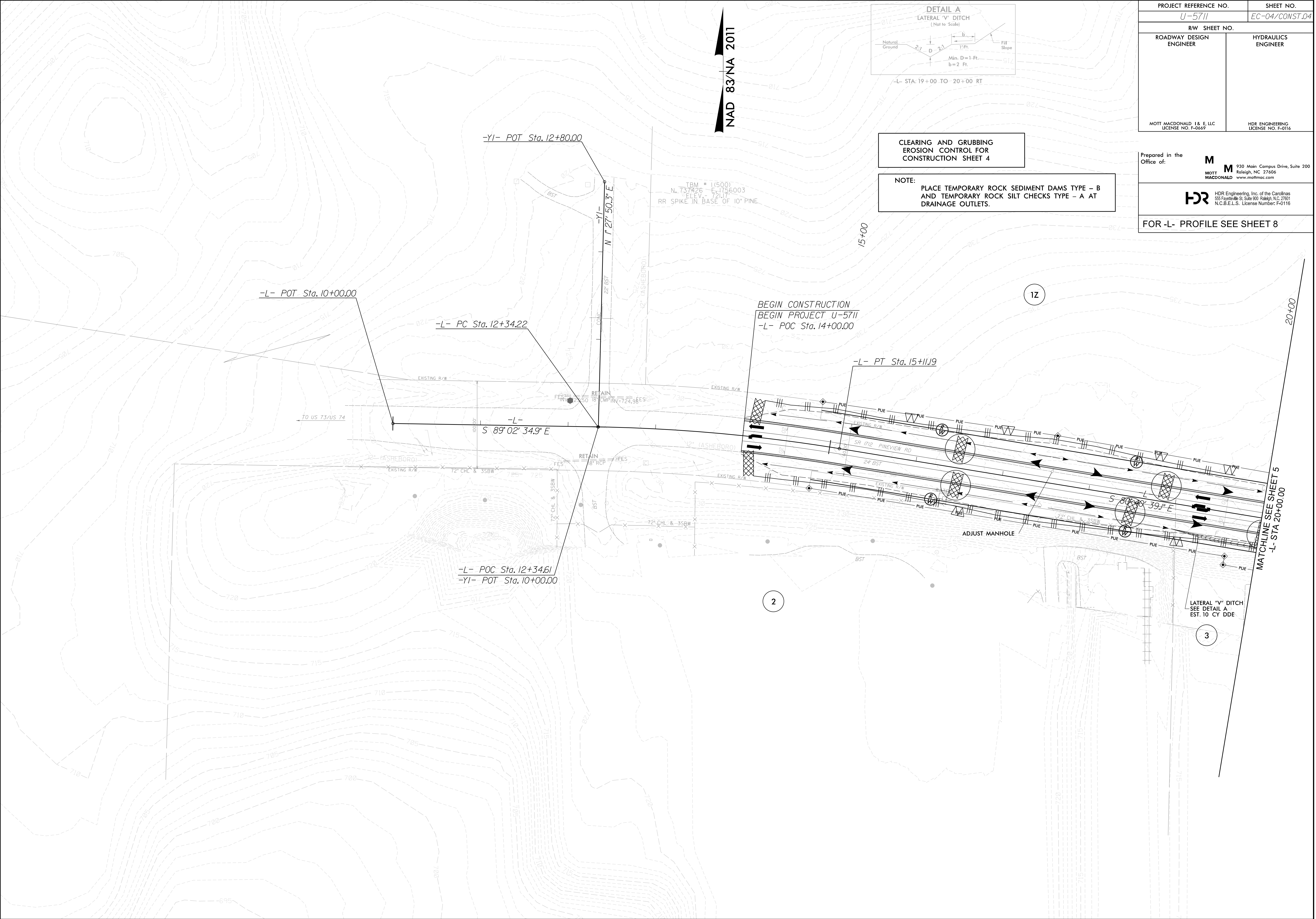
DIVISION OF HIGHWAYS
STATE OF NORTH CAROLINA

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

5/14/99

12/19/2025 11:43:01 AM
U-5711-EC_PSH.CG.dgn



-L- STA. 19+00 TO 20+00 RT

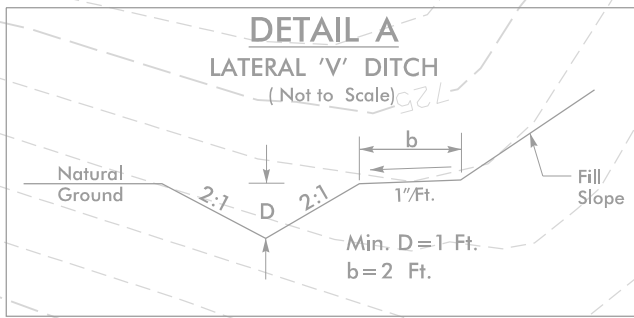
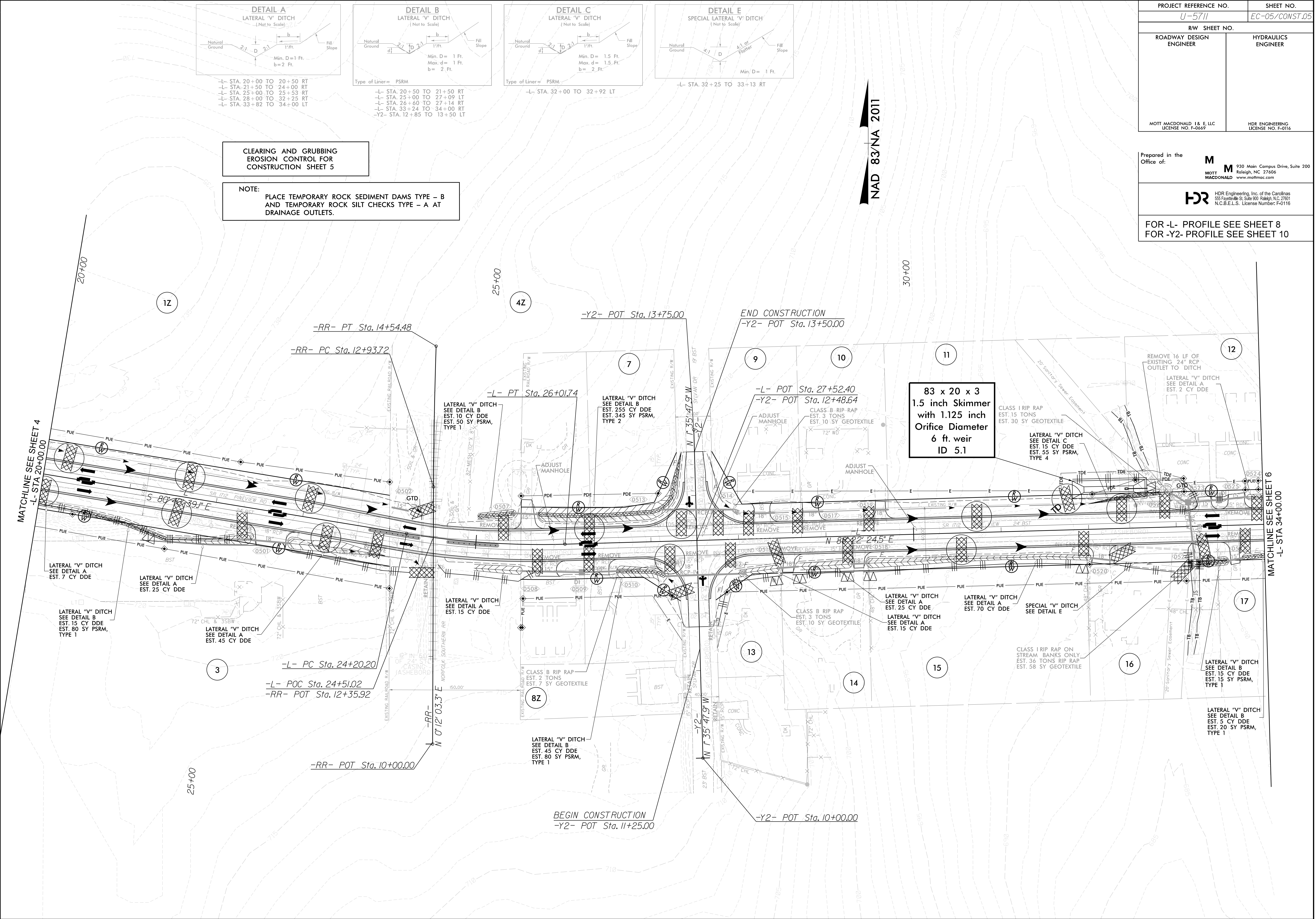
CLEARING AND GRUBBING
EROSION CONTROL FOR
CONSTRUCTION SHEET 4

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

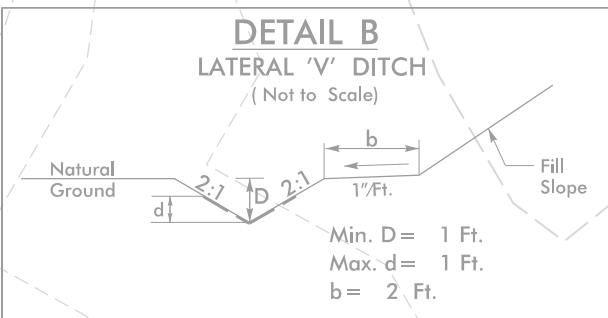
PROJECT REFERENCE NO. <i>U-5711</i>		SHEET NO. <i>EC-04/CONST.04</i>	
RW SHEET NO.			
ROADWAY DESIGN ENGINEER		HYDRAULICS ENGINEER	
MOTT MACDONALD 1 & E, LLC LICENSE NO. F-0669		HDR ENGINEERING LICENSE NO. F-0116	
Prepared in the Office of:			
M MOTT MACDONALD		M 930 Main Campus Drive, Suite 200 Raleigh, NC 27606 www.mottmac.com	
HDR		HDR Engineering, Inc. of the Carolinas 555 Fayetteville St., Suite 900 Raleigh, N.C. 27601 N.C.B.E.L.S. License Number: F-0116	
FOR -L- PROFILE SEE SHEET 8			

5/14/99

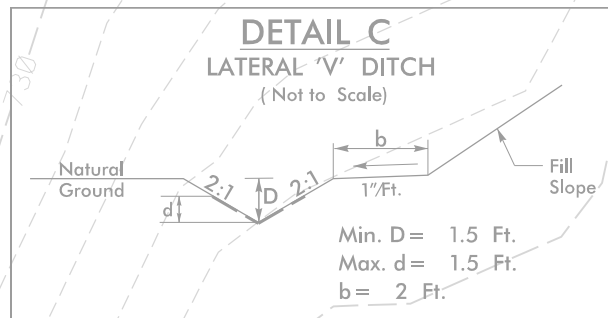
12/19/2025 11:23:06 AM 5711-EC_PSH_CG.dgn



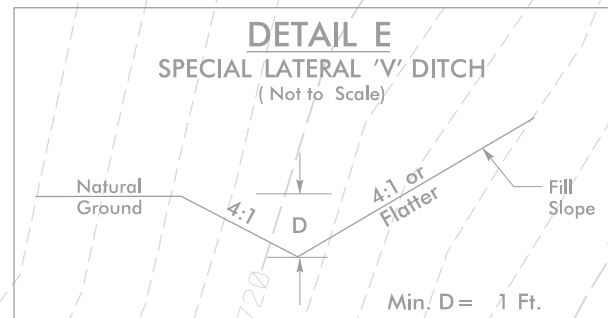
-L- STA. 20+00 TO 20+50 RT
-L- STA. 21+50 TO 24+00 RT
-L- STA. 25+00 TO 25+53 RT
-L- STA. 28+00 TO 32+25 RT
-L- STA. 33+82 TO 34+00 LT



Type of Liner = PSRM
-L- STA. 20+50 TO 21+50 RT
-L- STA. 25+00 TO 27+09 LT
-L- STA. 26+60 TO 27+14 RT
-L- STA. 33+24 TO 34+00 RT
-Y2- STA. 12+85 TO 13+50 LT



Type of Liner = PSRM
-L- STA. 32+00 TO 32+92 LT



-L- STA. 32+25 TO 33+13 RT

CLEARING AND GRUBBING
EROSION CONTROL FOR
CONSTRUCTION SHEET 5

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

PROJECT REFERENCE NO.		SHEET NO.	
U-5711		EC-05/CONST.05	
R/W SHEET NO.			
ROADWAY DESIGN ENGINEER		HYDRAULICS ENGINEER	
MOTT MACDONALD 1 & E LLC LICENSE NO. F-0669		HDR ENGINEERING LICENSE NO. F-0116	

Prepared in the Office of:

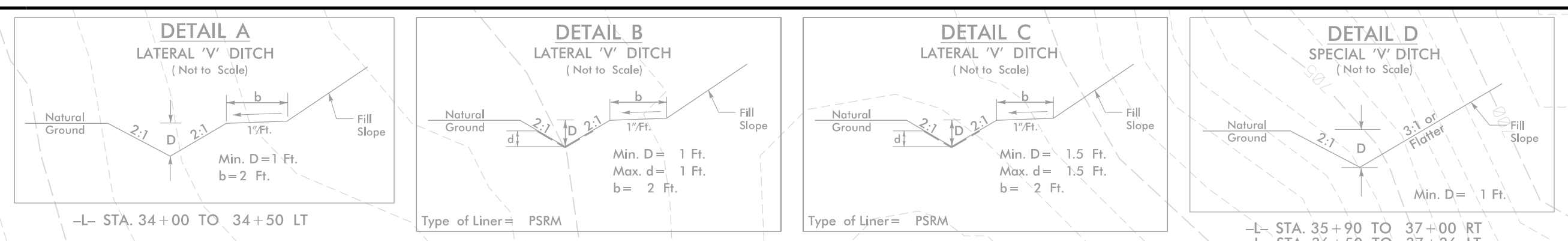
M 930 Main Campus Drive, Suite 200
Raleigh, NC 27606
MOTT MACDONALD www.mottmac.com

HDR HDR Engineering, Inc. of the Carolinas
255 Fayetteville St., Suite 800, Raleigh, NC 27601
N.C.B.E.L.S. License Number: F-0116

FOR -L- PROFILE SEE SHEET 8
FOR -Y2- PROFILE SEE SHEET 10

5/14/99

12/9/2025 5:11:57 PM 5711-EC_PSH.CG.dgn



CLEARING AND GRUBBING
EROSION CONTROL FOR
CONSTRUCTION SHEET 6

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

NAD 83/NA 2011

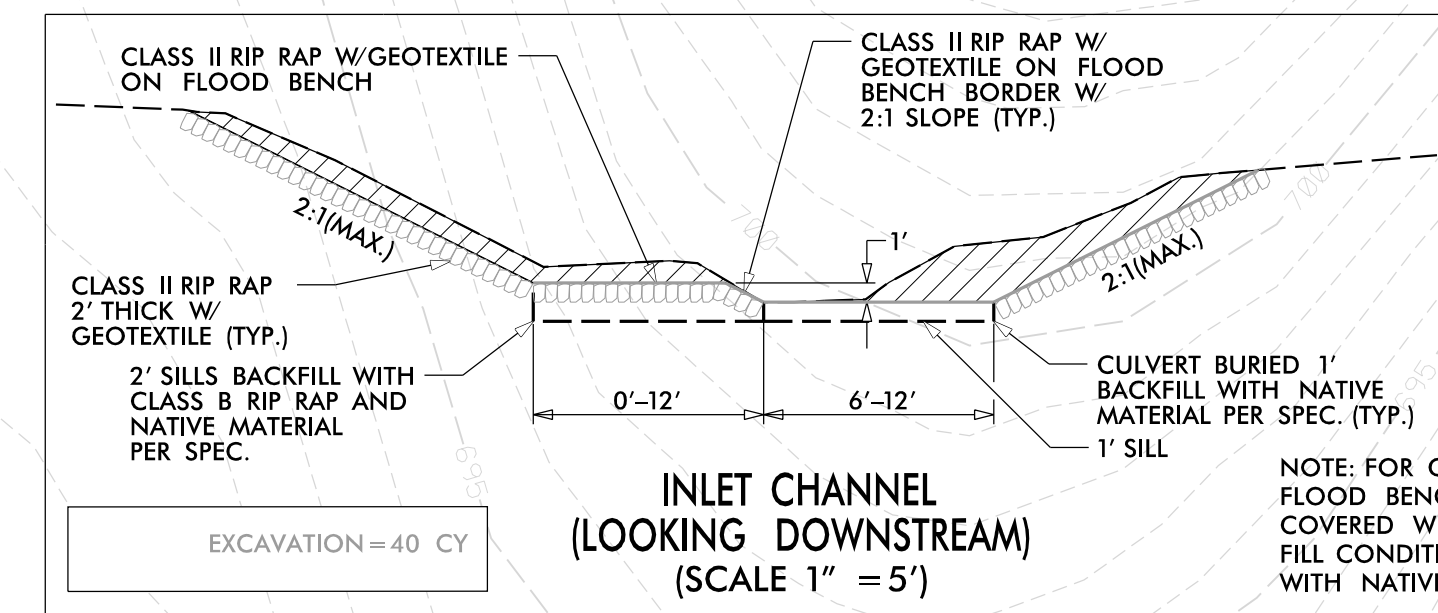
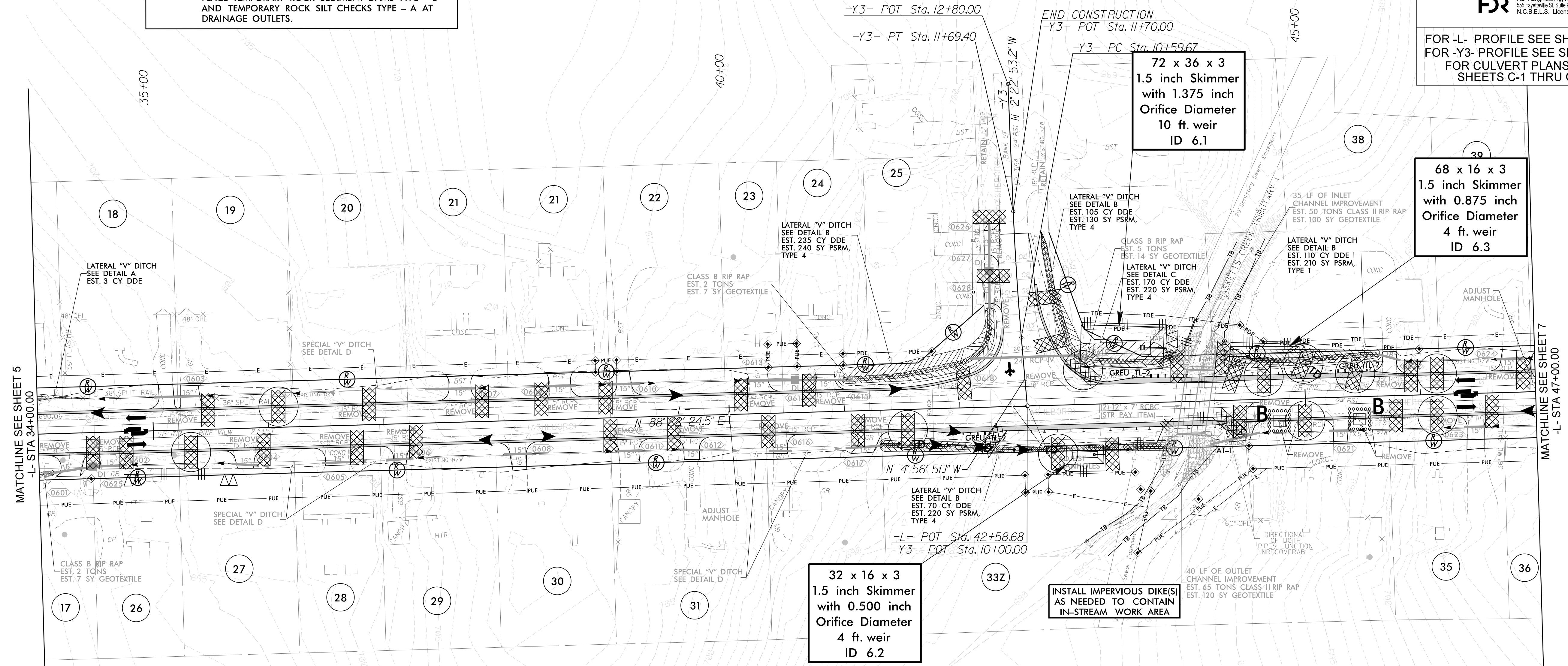
PROJECT REFERENCE NO.		SHEET NO.	
U-5711		EC-06/CONST.06	
RW SHEET NO.			
ROADWAY DESIGN ENGINEER		HYDRAULICS ENGINEER	
MOTT MACDONALD 1 & E, LLC LICENSE NO. F-0669		HDR ENGINEERING LICENSE NO. F-0116	

Prepared in the
Office of:

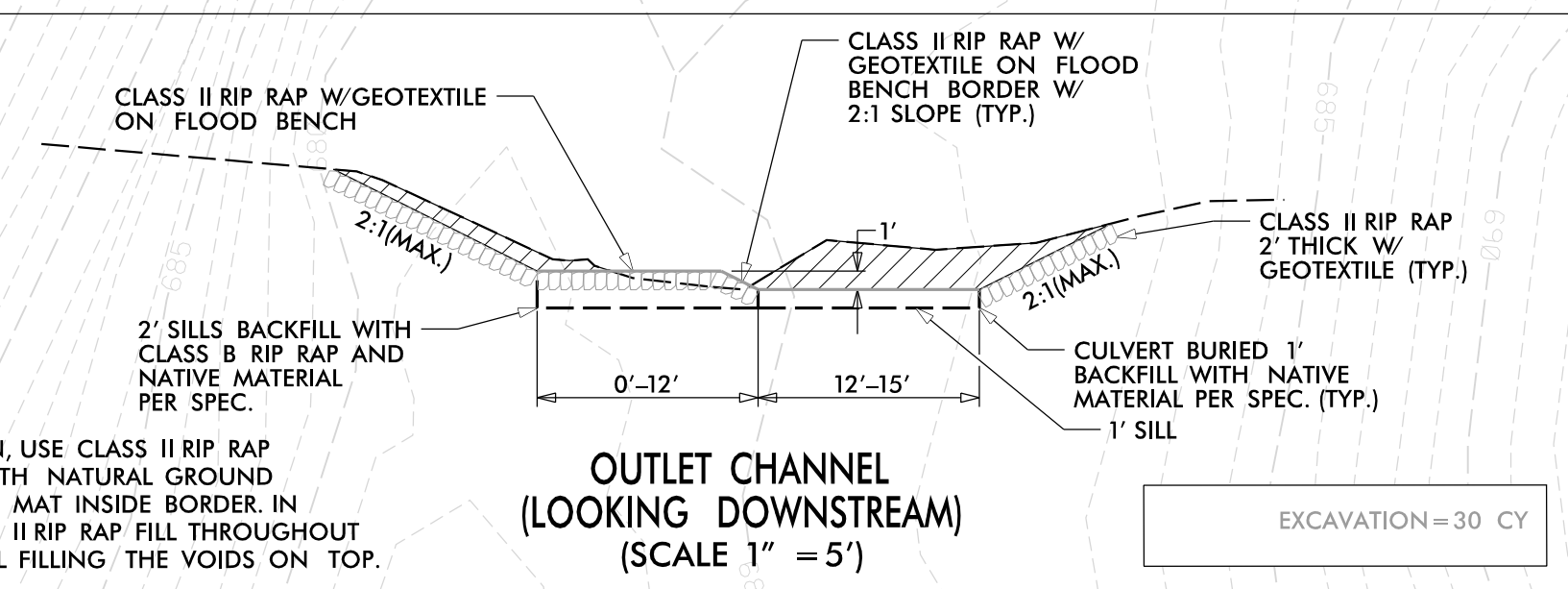
M 930 Main Campus Drive, Suite 200
Raleigh, NC 27606
MOTT
MACDONALD www.mottmac.com

HDR HDR Engineering, Inc. of the Carolinas
255 Fayetteville St., Suite 800, Raleigh, NC 27601
N.C.B.E.L.S. License Number: F-0116

FOR -L- PROFILE SEE SHEETS 8 & 9
FOR -Y3- PROFILE SEE SHEET 10
FOR CULVERT PLANS SEE
SHEETS C-1 THRU C-7



NOTE: FOR CUT CONDITION, USE CLASS II RIP RAP FLOOD BENCH BORDER WITH NATURAL GROUND COVERED WITH COIR FIBER MAT INSIDE BORDER. IN FILL CONDITION, USE CLASS II RIP RAP FILL THROUGHOUT WITH NATIVE BED MATERIAL FILLING THE VOIDS ON TOP.

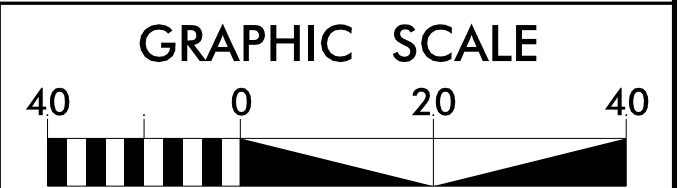


REVISIONS

2 @ 12' x 7' RCBC CULVERT CONSTRUCTION SEQUENCE 44+05 -L-

PROJECT REFERENCE NO.	SHEET NO.
U-5711	EC-6A/CONST.6
RW SHEET NO.	

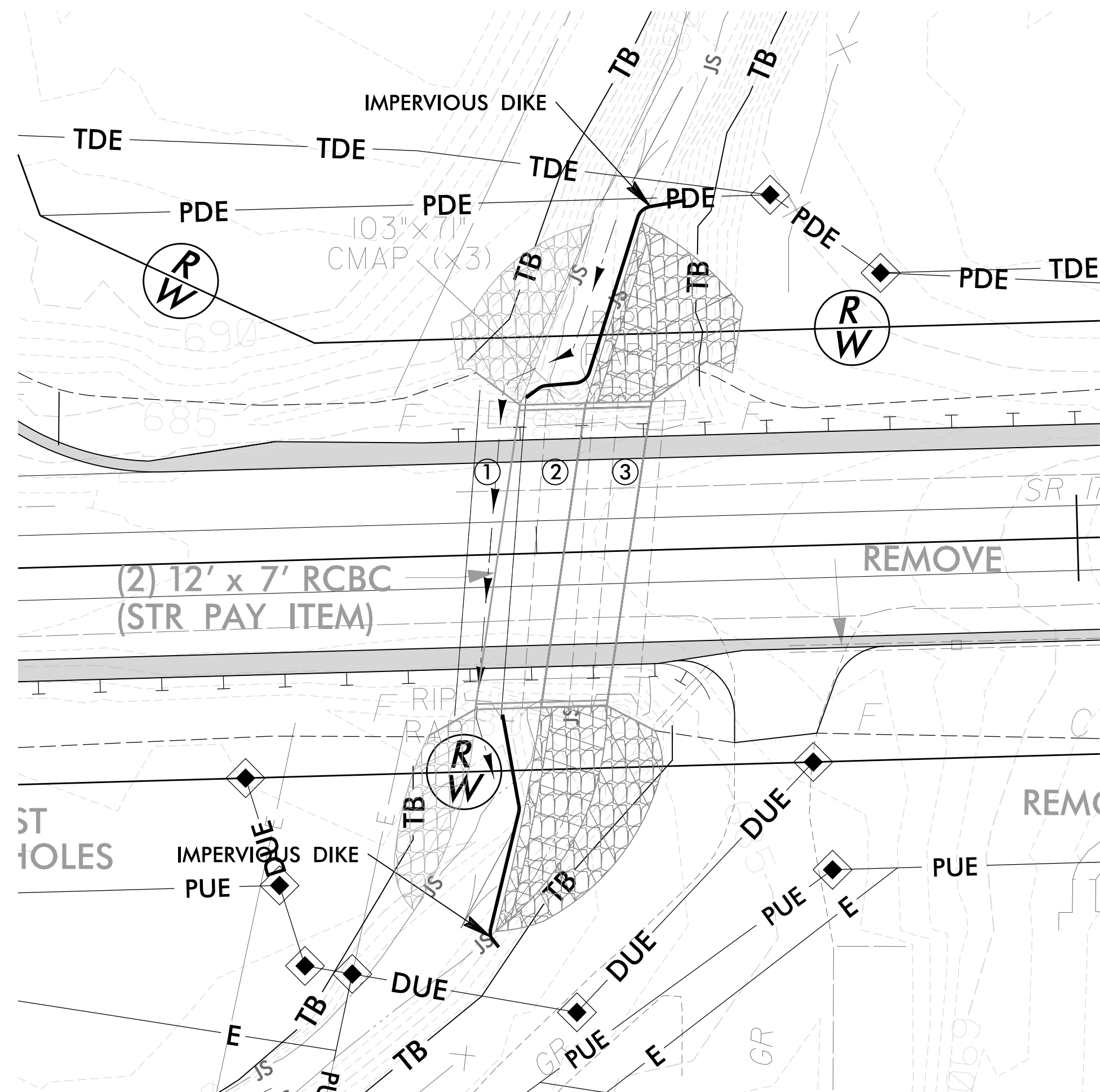
HDR HDR Engineering, Inc. of the Carolinas
555 Fayetteville St, Suite 900 Raleigh, N.C. 27601
N.C.B.E.L.S. License Number: F-0116



NAD 83/NA 2011

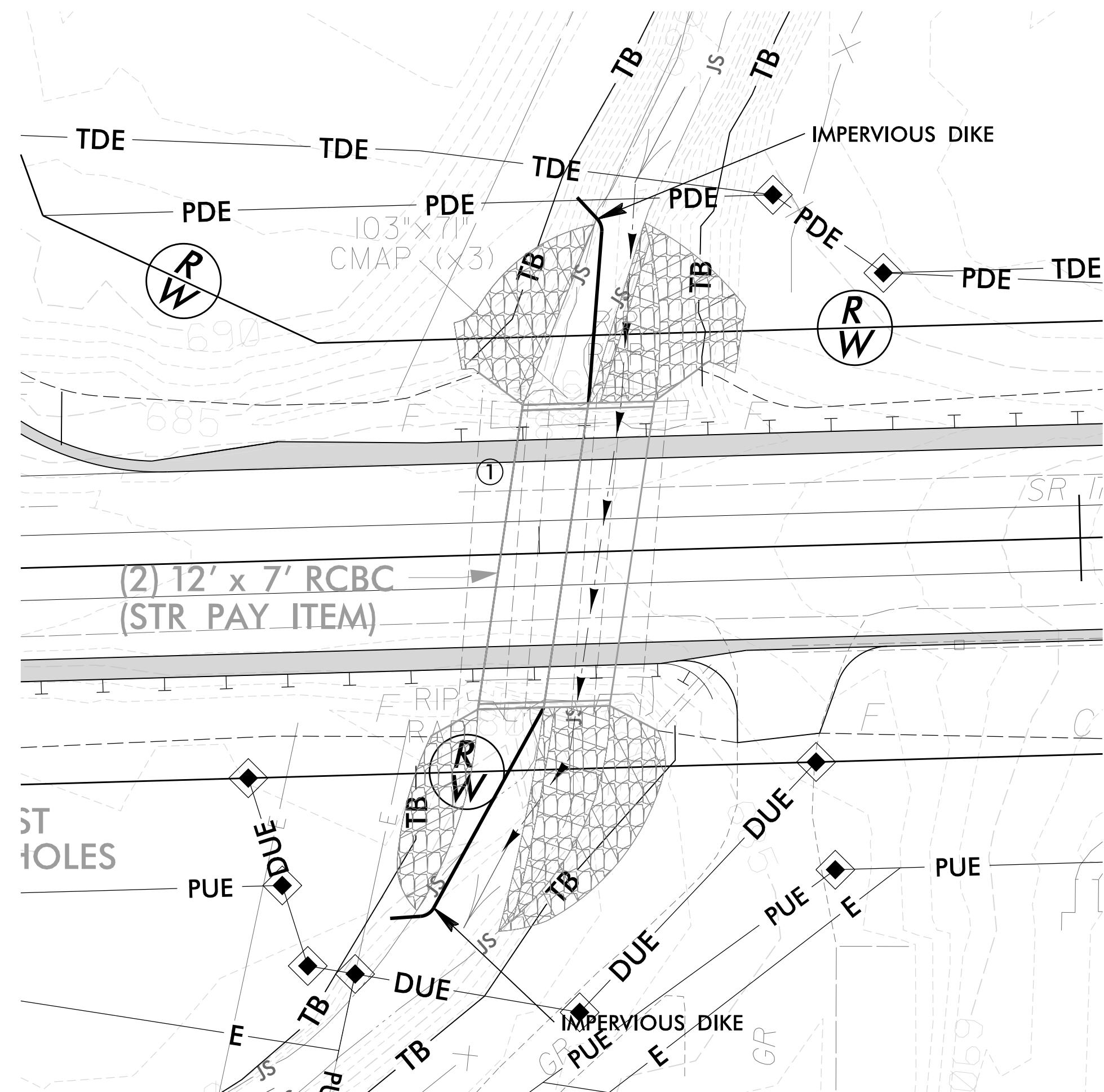
PHASE 1

- 1.) UTILIZE TEMPORARY IMPERVIOUS DIKES TO DIVERT FLOW THROUGH EXISTING ARCH PIPE BARRELS 2 AND 3. PROVIDE PUMP AND SPECIAL STILLING BASIN TO CLEAN SEDIMENT AND DEBRIS FROM EXISTING ARCH PIPE BARREL 1.
- 2.) INSTALL IMPERVIOUS DIKES UPSTREAM AND DOWNSTREAM OF PROPOSED CULVERT SURROUNDING WORK AREA OF THE EAST RCBC BARREL AND DIVERT FLOW THROUGH EXISTING ARCH PIPE BARREL 1.
- 3.) PROVIDE PUMP AND SPECIAL STILLING BASIN TO DEWATER WORK AREA.
- 4.) REMOVE EXISTING ARCH PIPE BARRELS 2 AND 3.
- 5.) CONSTRUCT CULVERT BOTTOM AND SIDES OF THE EAST RCBC BARREL.
- 6.) FILL BARREL BOTTOM WITH NATIVE MATERIAL TO THE NATURAL CHANNEL BED ELEVATION.
- 7.) CONSTRUCT CULVERT TOP AND WINGWALLS OF THE EAST RCBC BARREL.
- 8.) BEGIN UPSTREAM AND DOWNSTREAM CHANNEL IMPROVEMENTS TO MAXIMUM EXTENT IN ANTICIPATION OF USING EAST RCBC BARREL TO ALLOW FLOW DURING PHASE 2 CONSTRUCTION. DO NOT CONSTRUCT 2' SILL IN EAST RCBC BARREL IN THIS PHASE.
- 9.) REMOVE IMPERVIOUS DIKES TO ALLOW FLOW THROUGH THE EAST RCBC BARREL.



PHASE 2

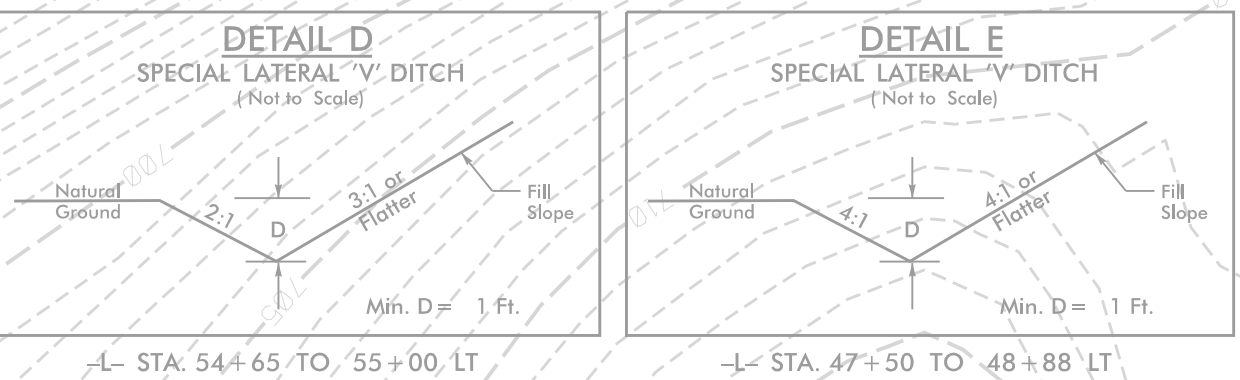
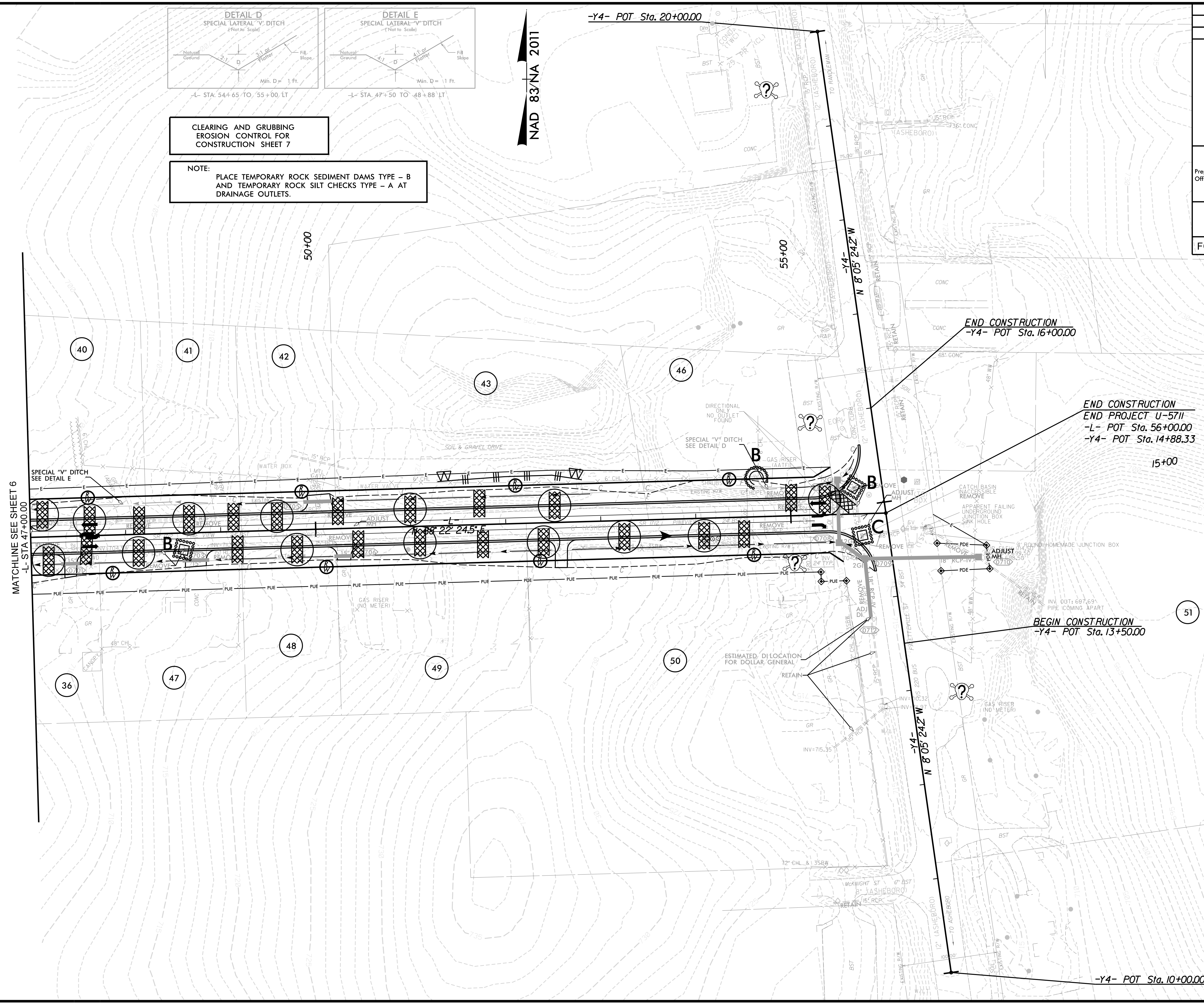
- 1.) INSTALL IMPERVIOUS DIKE UPSTREAM AND DOWNSTREAM OF PROPOSED CULVERT SURROUNDING WORK AREA OF THE WEST RCBC BARREL.
- 2.) PROVIDE PUMP AND SPECIAL STILLING BASIN TO DEWATER WORK AREA FOR THE WEST RCBC BARREL.
- 3.) REMOVE EXISTING ARCH PIPE BARREL 1.
- 4.) CONSTRUCT CULVERT BOTTOM AND SIDES OF THE WEST RCBC BARREL.
- 5.) FILL BARREL BOTTOM WITH NATIVE MATERIAL TO THE NATURAL CHANNEL BED ELEVATION.
- 6.) CONSTRUCT CULVERT TOP AND WINGWALLS OF THE WEST RCBC BARREL.
- 7.) COMPLETE UPSTREAM AND DOWNSTREAM CHANNEL IMPROVEMENTS ON WEST CHANNEL BANK.
- 8.) REMOVE IMPERVIOUS DIKES TO ALLOW FLOW THROUGH WEST RCBC BARREL.
- 9.) COMPLETE REMAINING CHANNEL IMPROVEMENTS AND SILLS IN EAST RCBC BARREL.
- 10.) REMOVE ANY REMAINING PUMP-AROUNDS AND SPECIAL STILLING BASINS.



5/14/99

3/25/2026 - 5711-EC_PSH.CG.dgn

3:40:59 PM



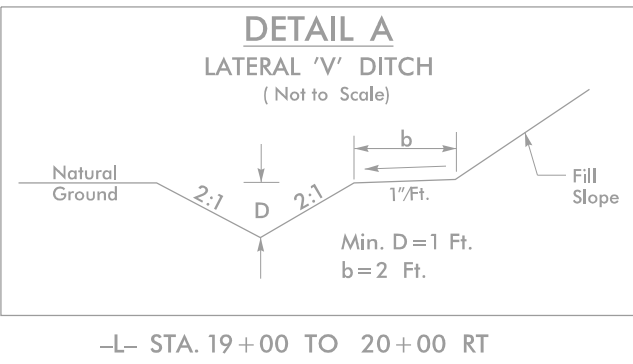
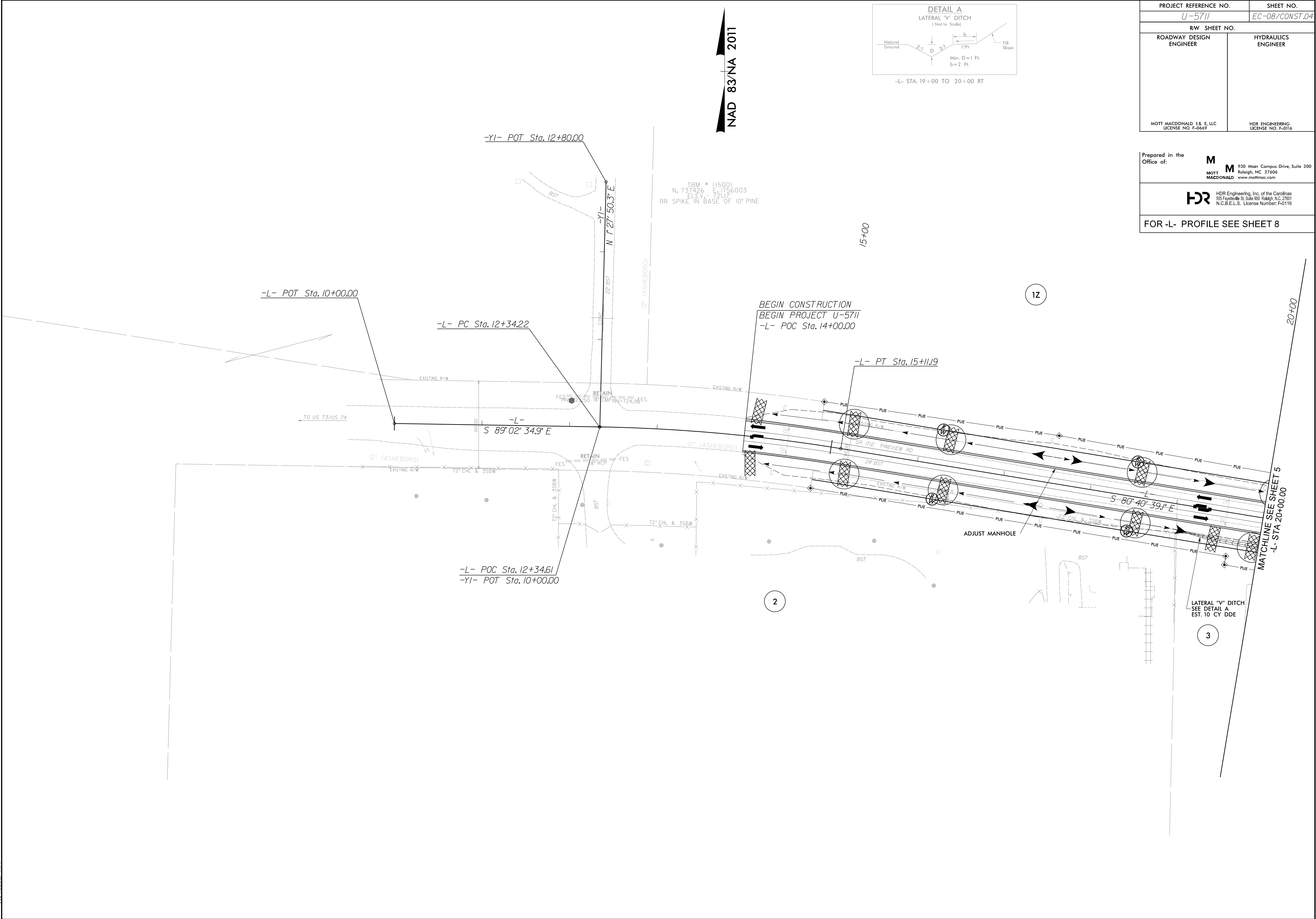
CLEARING AND GRUBBING
EROSION CONTROL FOR
CONSTRUCTION SHEET 7

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

PROJECT REFERENCE NO.		SHEET NO.	
U-5711		EC-07/CONST.07	
RW SHEET NO.			
ROADWAY DESIGN ENGINEER		HYDRAULICS ENGINEER	
MOTT MACDONALD 1 & E, LLC LICENSE NO. F-0669		HDR ENGINEERING LICENSE NO. F-0116	
Prepared in the Office of:			
MOTT MACDONALD		930 Main Campus Drive, Suite 200 Raleigh, NC 27606 www.mottmac.com	
HDR		HDR Engineering, Inc. of the Carolinas 555 Fayetteville St. Suite 200 Raleigh, N.C. 27601 N.C.B.E.L.S. License Number: F-0116	
FOR -L- PROFILE SEE SHEET 9			

5/14/99

12/19/2025
U-5711_EC_PSH.F.dgn
11:43:38 AM



PROJECT REFERENCE NO.		SHEET NO.
U-5711		EC-08/CONST.04
RW SHEET NO.		
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER	
MOTT MACDONALD 1 & E, LLC LICENSE NO. F-6669		HDR ENGINEERING LICENSE NO. F-0116

Prepared in the Office of:

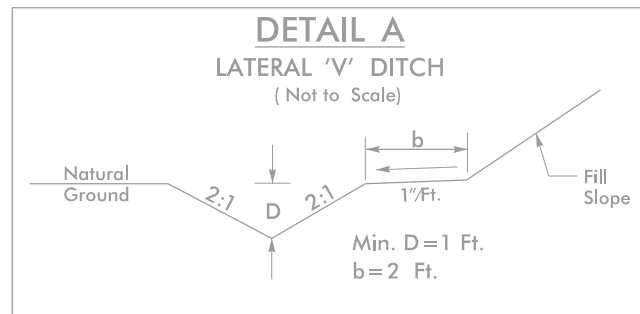
M MOTT MACDONALD 930 Main Campus Drive, Suite 200 Raleigh, NC 27606
www.mottmac.com

HDR HDR Engineering, Inc. of the Carolinas 255 Fayetteville St., Suite 800 Raleigh, NC 27601
N.C.B.E.L.S. License Number: F-0116

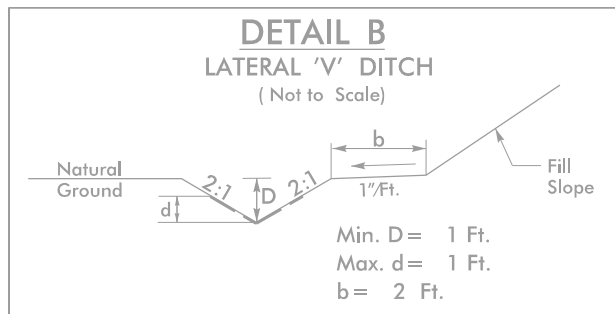
FOR -L- PROFILE SEE SHEET 8

5/14/99

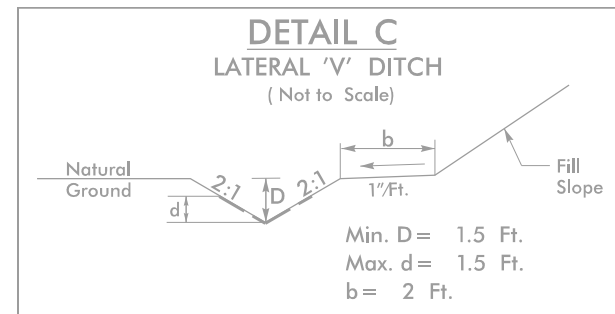
12/19/2025
11:43:48 AM
U-5711_EC_PSH.F.dgn



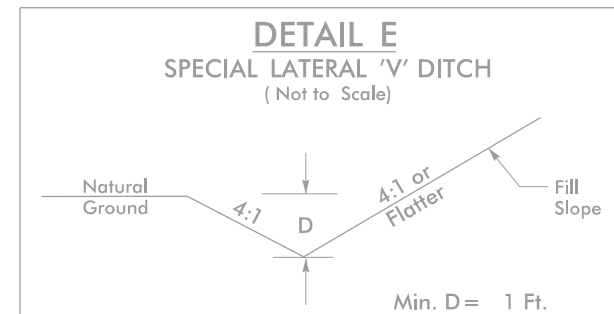
-L- STA. 20+00 TO 20+50 RT
-L- STA. 21+50 TO 24+00 RT
-L- STA. 25+00 TO 25+53 RT
-L- STA. 28+00 TO 32+25 RT
-L- STA. 33+82 TO 34+00 LT



Type of Liner = PSRM
-L- STA. 20+50 TO 21+50 RT
-L- STA. 25+00 TO 27+09 LT
-L- STA. 26+60 TO 27+14 RT
-L- STA. 33+24 TO 34+00 RT
-Y2- STA. 12+85 TO 13+50 LT



Type of Liner = PSRM
-L- STA. 32+00 TO 32+92 LT

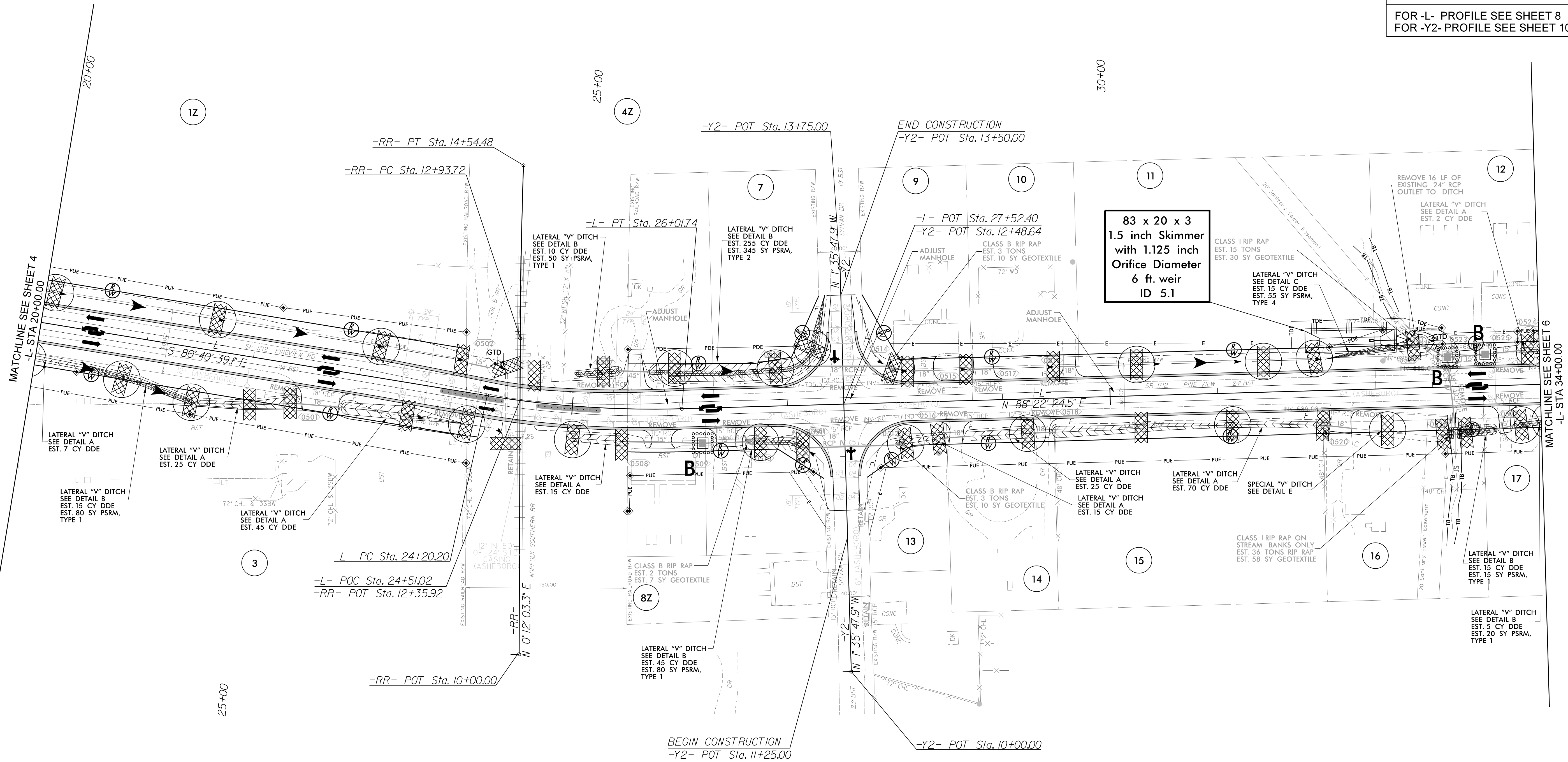


-L- STA. 32+25 TO 33+13 RT

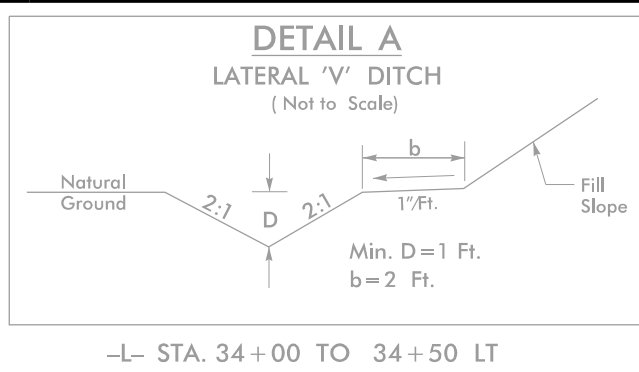
NAD 83/NA 2011

PROJECT REFERENCE NO.		SHEET NO.
U-5711		EC-09/CONST.05
RW SHEET NO.		
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER	
MOTT MACDONALD 1 & E, LLC LICENSE NO. F-6669		HDR ENGINEERING LICENSE NO. F-0116

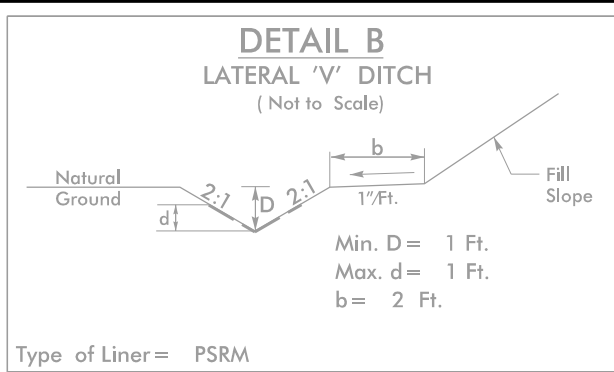
Prepared in the Office of:	M MOTT MACDONALD	930 Main Campus Drive, Suite 200 Raleigh, NC 27606 www.mottmac.com
HDR HDR Engineering, Inc. of the Carolinas 255 Fayetteville St., Suite 800, Raleigh, N.C. 27601 N.C.B.E.L.S. License Number: F-0116		
FOR -L- PROFILE SEE SHEET 8 FOR -Y2- PROFILE SEE SHEET 10		



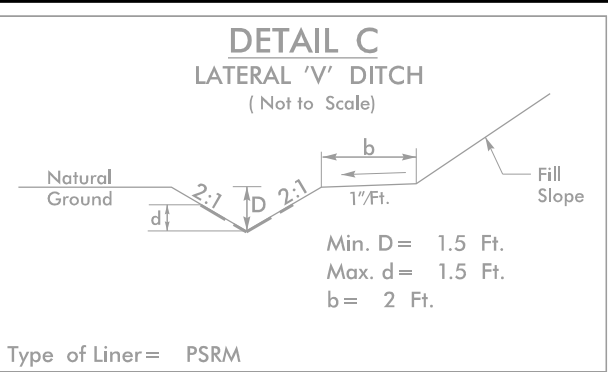
5/14/99



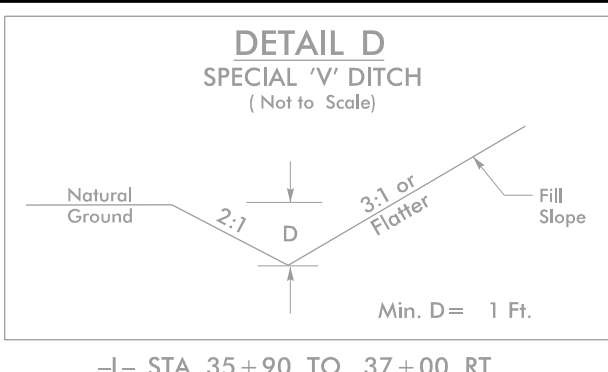
-L- STA. 34+00 TO 34+50 LT



Type of Liner = PSRM
-L- STA. 34+00 TO 34+12 RT
-L- STA. 41+00 TO 42+10 LT
-L- STA. 41+30 TO 43+84 RT
-L- STA. 44+28 TO 45+60 LT
-Y3- STA. 10+45 TO 10+88 LT
-Y3- STA. 10+40 TO 11+50 RT



Type of Liner = PSRM
-L- STA. 43+05 TO 43+92 LT

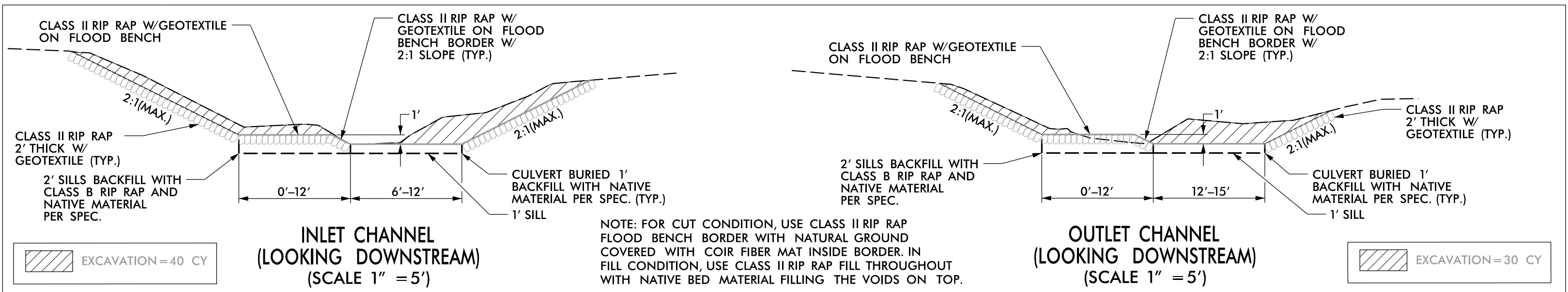
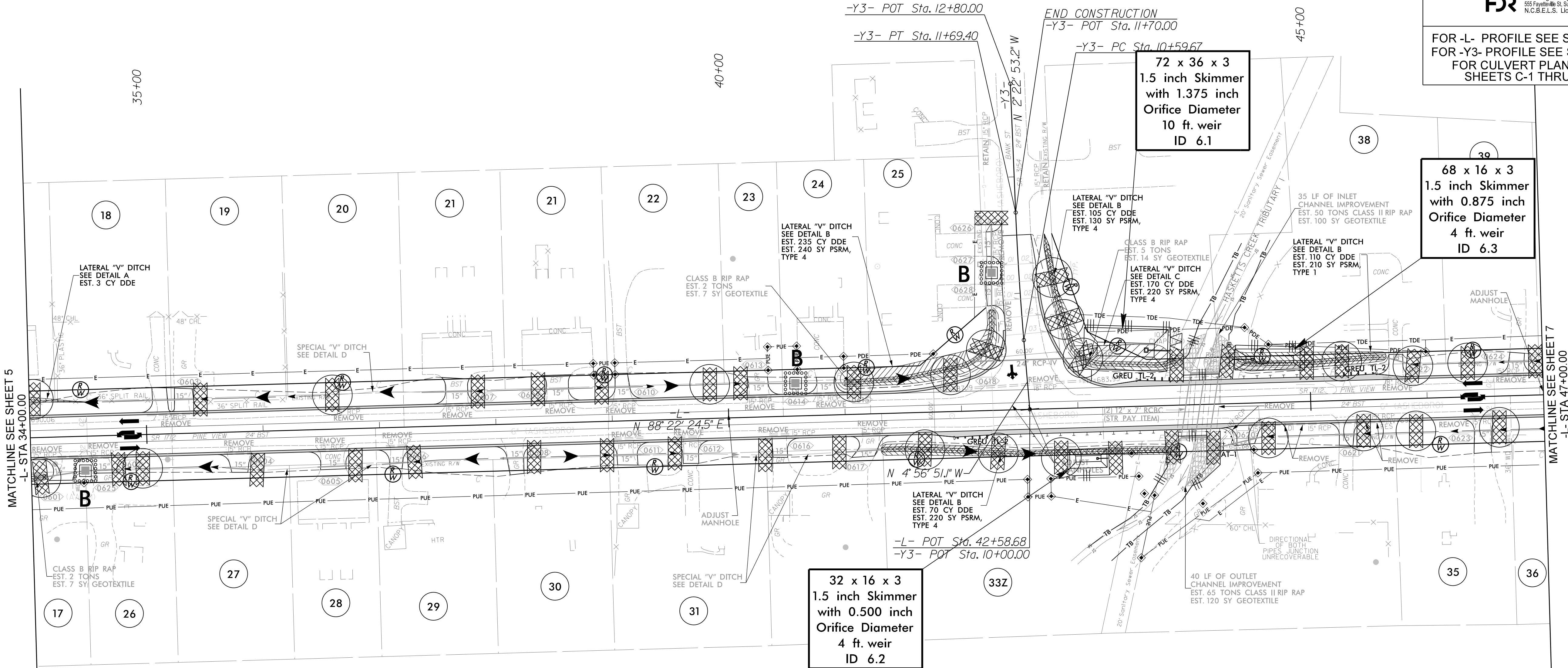


-L- STA. 35+90 TO 37+00 RT
-L- STA. 36+50 TO 37+36 LT
-L- STA. 39+77 TO 41+00 RT

NAD 83/NA 2011

PROJECT REFERENCE NO.		SHEET NO.
U-5711		EC-10/CONST.06
RW SHEET NO.		
ROADWAY DESIGN ENGINEER		HYDRAULICS ENGINEER
MOTT MACDONALD 1 & E, LLC LICENSE NO. F-6669		HDR ENGINEERING LICENSE NO. F-0116

Prepared in the Office of:	M MOTT MACDONALD 930 Main Campus Drive, Suite 200 Raleigh, NC 27606 www.mottmac.com
	HDR HDR Engineering, Inc. of the Carolinas 255 Fayetteville St., Suite 800, Raleigh, NC 27601 N.C.B.E.L.S. License Number: F-0116
FOR -L- PROFILE SEE SHEETS 8 & 9 FOR -Y3- PROFILE SEE SHEET 10 FOR CULVERT PLANS SEE SHEETS C-1 THRU C-7	



12/19/2025 U-5711_EC_PSH.F.dgn
11:43:44 AM



PROJECT REFERENCE NO.		SHEET NO.	
U-5711		EC-II/CONST.07	
RW SHEET NO.			
ROADWAY DESIGN ENGINEER		HYDRAULICS ENGINEER	
MOTT MACDONALD I & E LLC LICENSE NO. F-0669		HDR ENGINEERING LICENSE NO. F-0116	
Prepared in the Office of: M MOTT MACDONALD 930 Main Campus Drive, Suite 200 Raleigh, NC 27606 www.mottmac.com			
		HDR Engineering, Inc. of the Carolinas 255 Fayetteville St. Suite 900 Raleigh, NC 27601 N.C.B.E.L.S. License Number F-0116	
FOR L- PROFILE SEE SHEET 9			