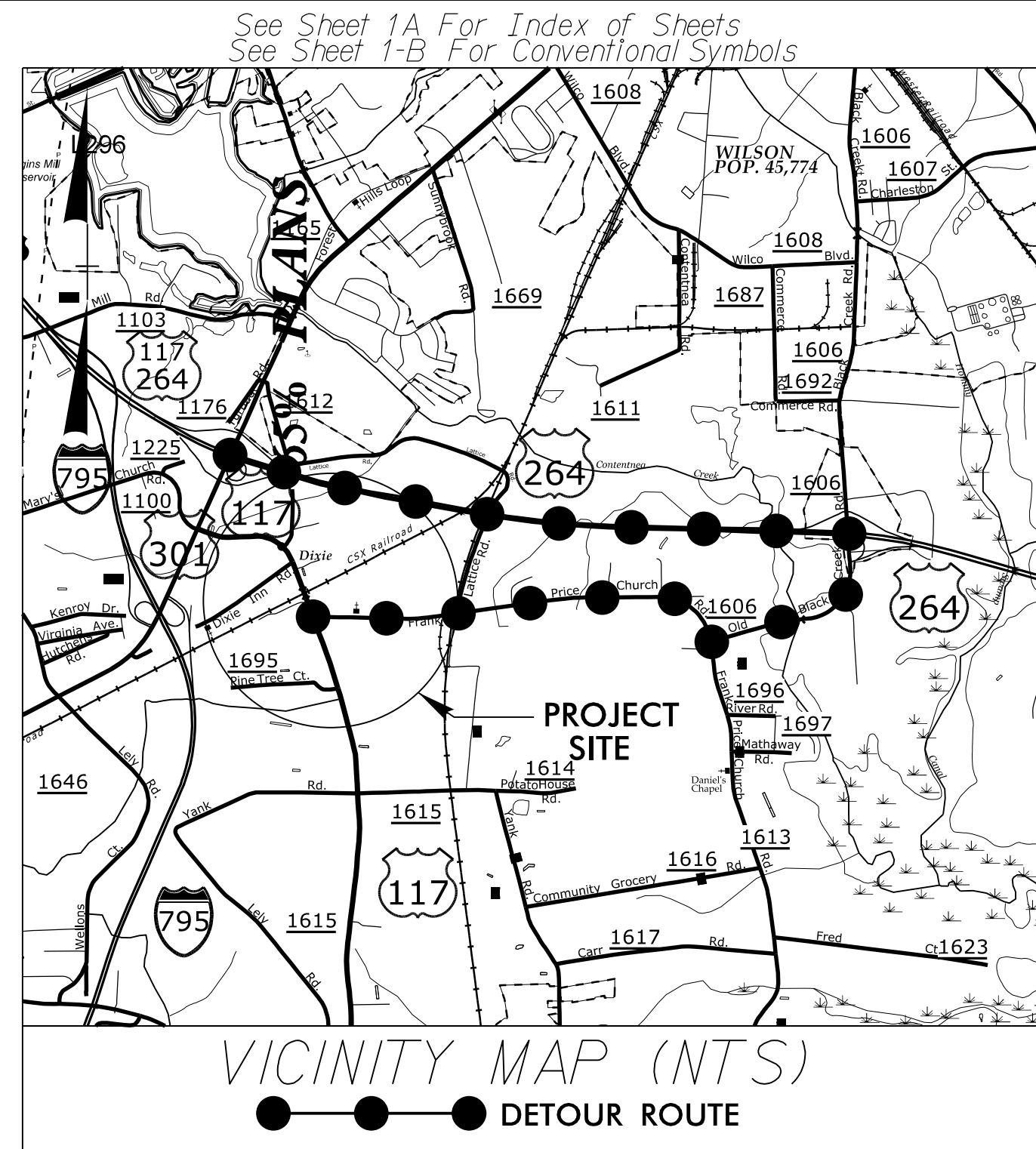


STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	B-5666	EC-1	
STATE PROJ. NO.	F.A. PROJ. NO.	DESCRIPTION	

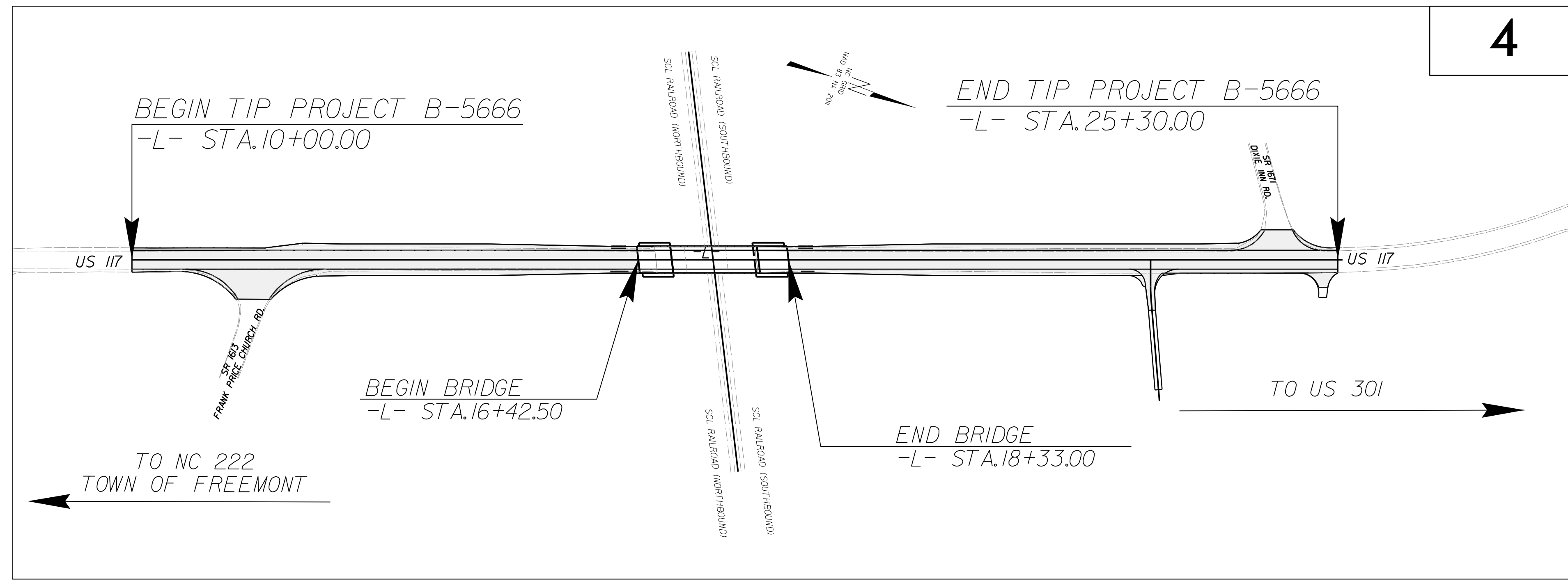
TIP PROJECT: B-5666



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

**LOCATION: REPLACE BRIDGE NO. 47 OVER SCL RAILROAD
ON US 117**

TYPE OF WORK: GRADING, DRAINAGE, PAVING AND STRUCTURE



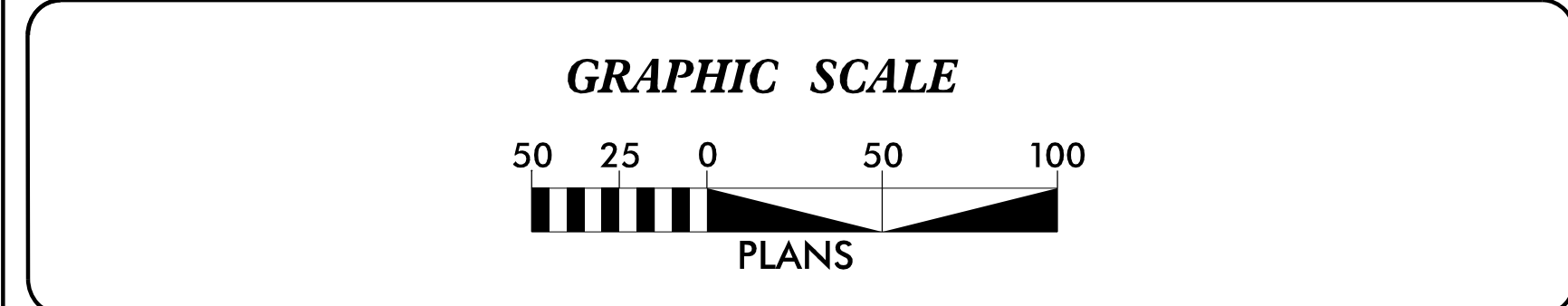
A DESIGN EXCEPTION WILL BE REQUIRED FOR SAG & CREST VERTICAL CURVES AND VERTICAL STOPPING SIGHT DISTANCE.

EROSION AND SEDIMENT CONTROL MEASURES

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

THIS PROJECT HAS BEEN DESIGNED TO SENSITIVE WATERSHED STANDARDS.

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



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.

KCI
http://www.kci.com

Prepared in the Office of:
KCI ASSOCIATES OF NORTH CAROLINA, PA
4505 FALLS OF NEUSE ROAD
RALEIGH, NC 27609

Designed by:
LEAH YOUNG, PE #3157
NAME LEVEL III CERTIFICATION NO.

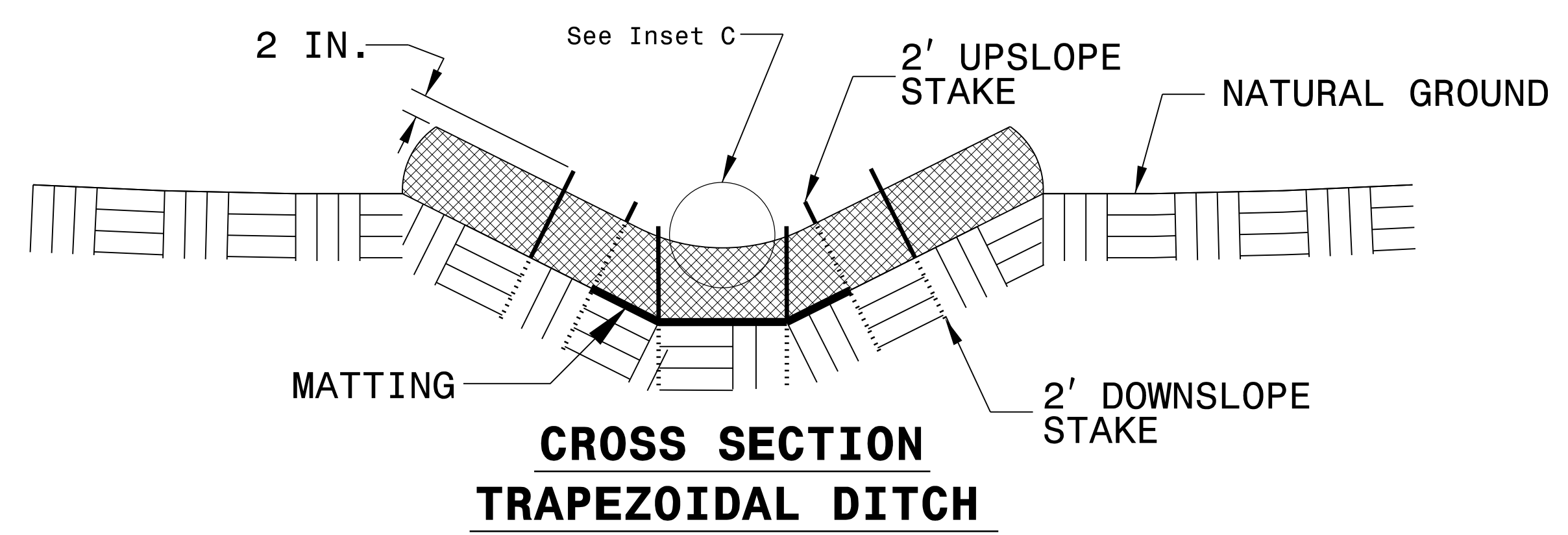
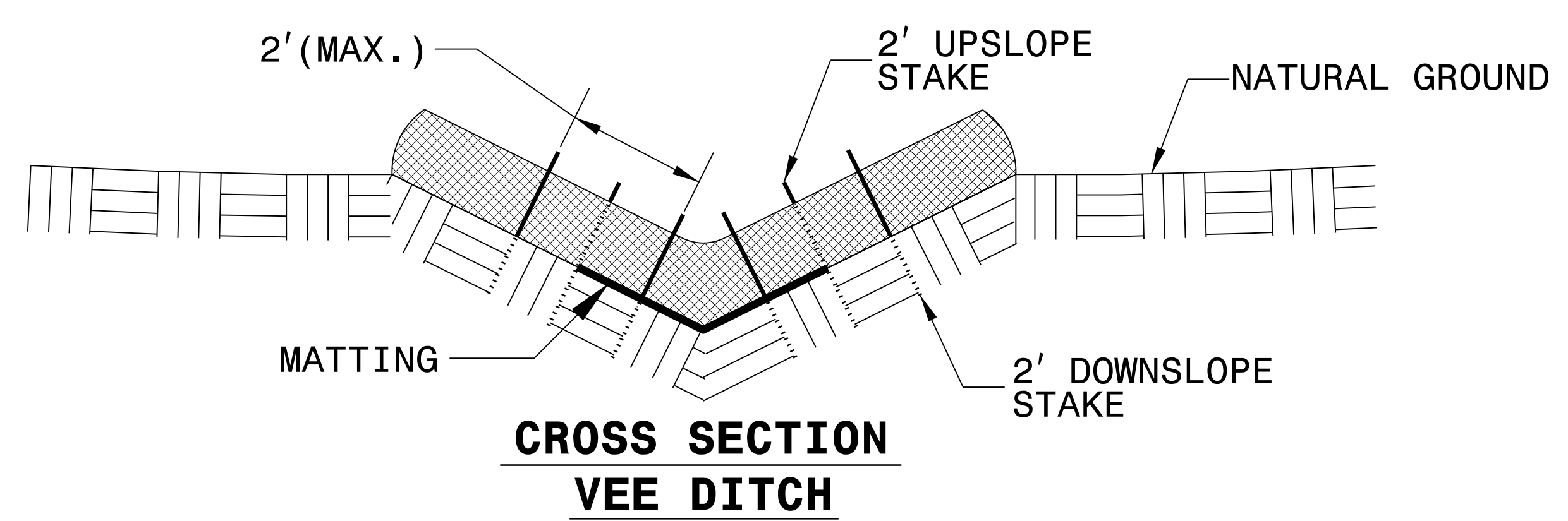
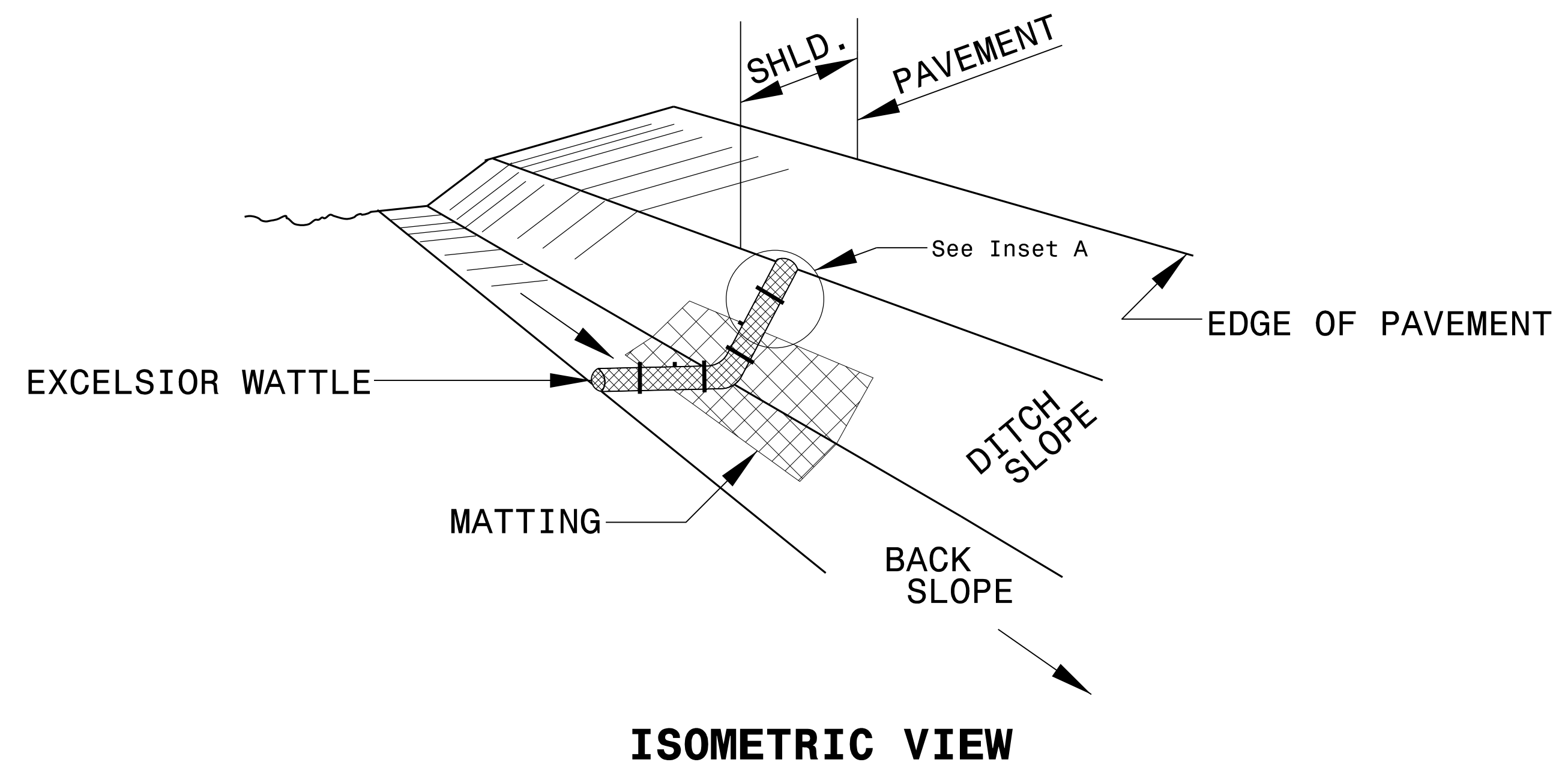
Roadway Standard Drawings

The following roadway english standards as appear in "Roadway Standard Drawings"- Roadway Design Unit - N. C. Department of Transportation - Raleigh, N. C., dated January 2018 and the latest revision thereto are applicable to this project and by reference hereby are considered a part of these plans.

1604.01 Railroad Erosion Control Detail	1632.01 Rock Inlet Sediment Trap Type A
1605.01 Temporary Silt Fence	1632.02 Rock Inlet Sediment Trap Type 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	

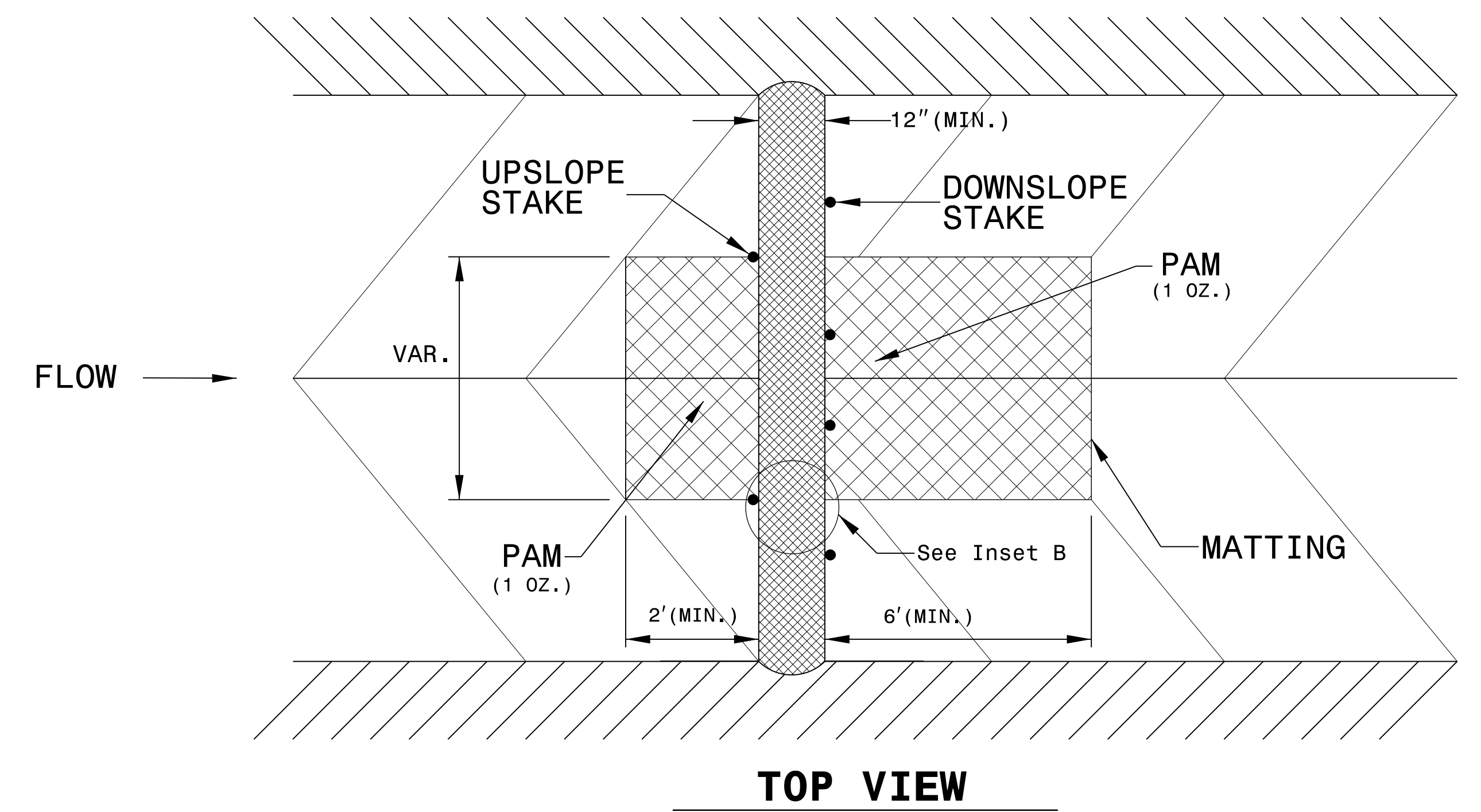
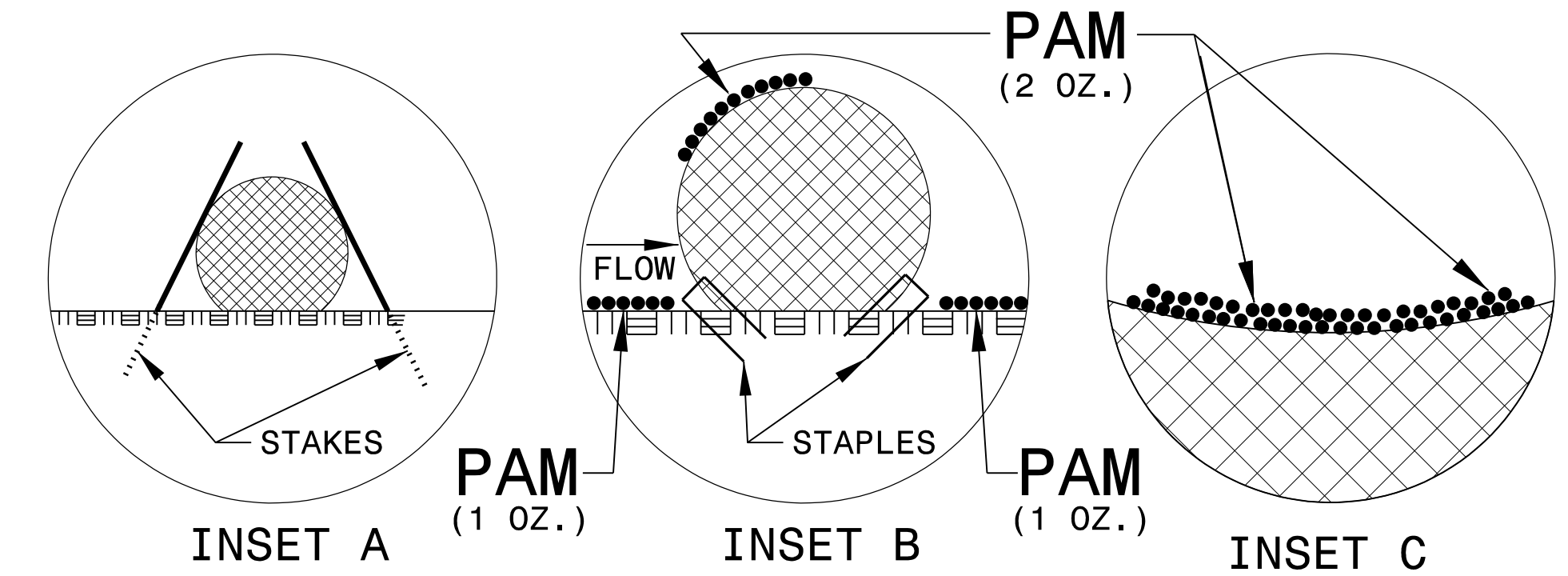
PROJECT REFERENCE NO. B-5666	SHEET NO. EC-2
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

WATTLE WITH POLYACRYLAMIDE (PAM) DETAIL



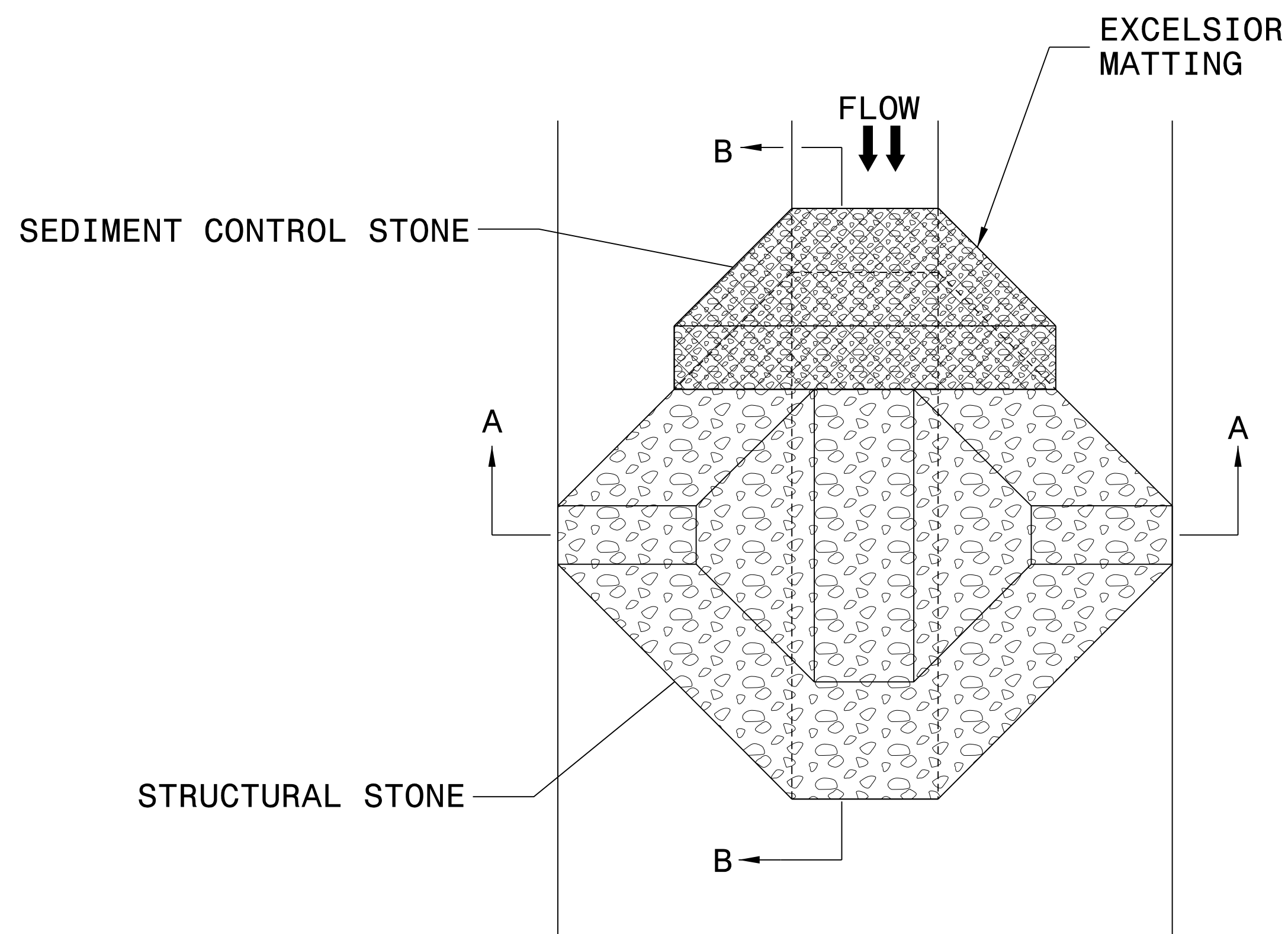
NOTES:

- USE MINIMUM 12 IN. DIAMETER EXCELSIOR 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 MATTING ON EACH SIDE OF WATTLE. REAPPLY PAM AFTER EVERY RAINFALL EVENT THAT IS EQUAL TO OR EXCEEDS 0.50 IN.



PROJECT REFERENCE NO. B-5666	SHEET NO. EC-2A
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

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



PLAN

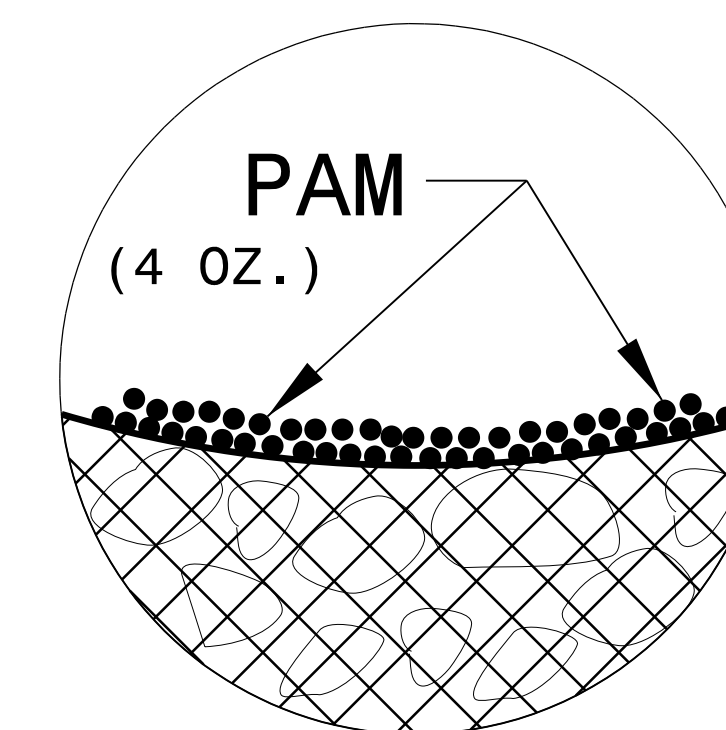
NOTES:

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

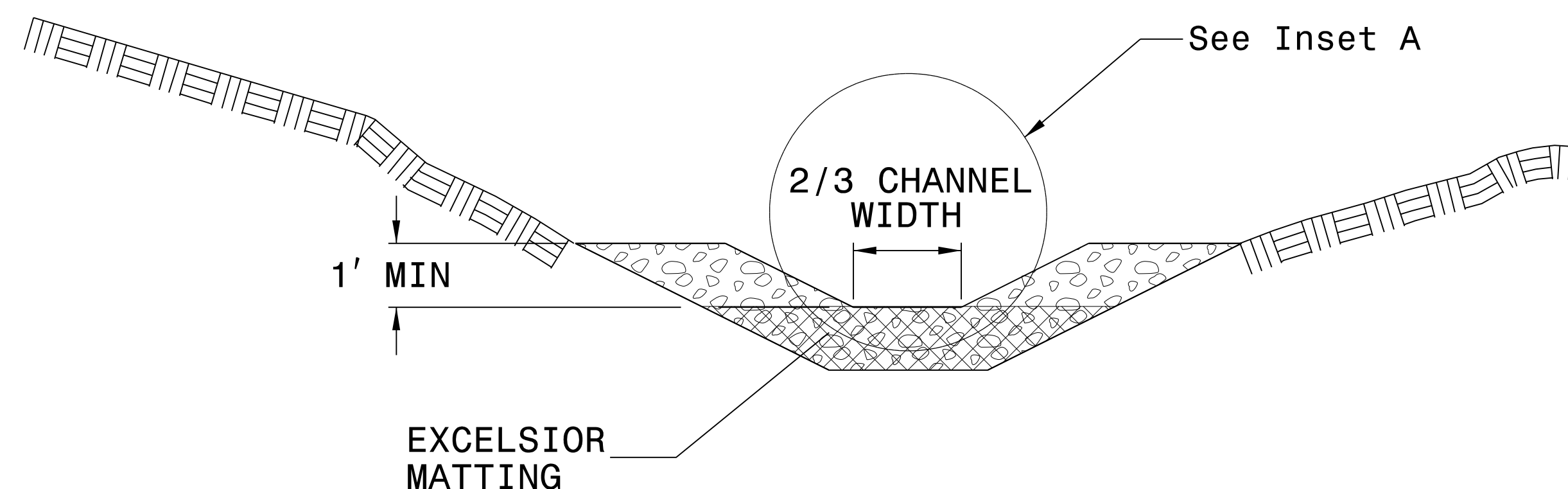
USE EXCELSIOR FOR MATTING MATERIAL AND ANCHOR MATTING SECTION AT TOP AND BOTTOM WITH CLASS B STONE.

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.

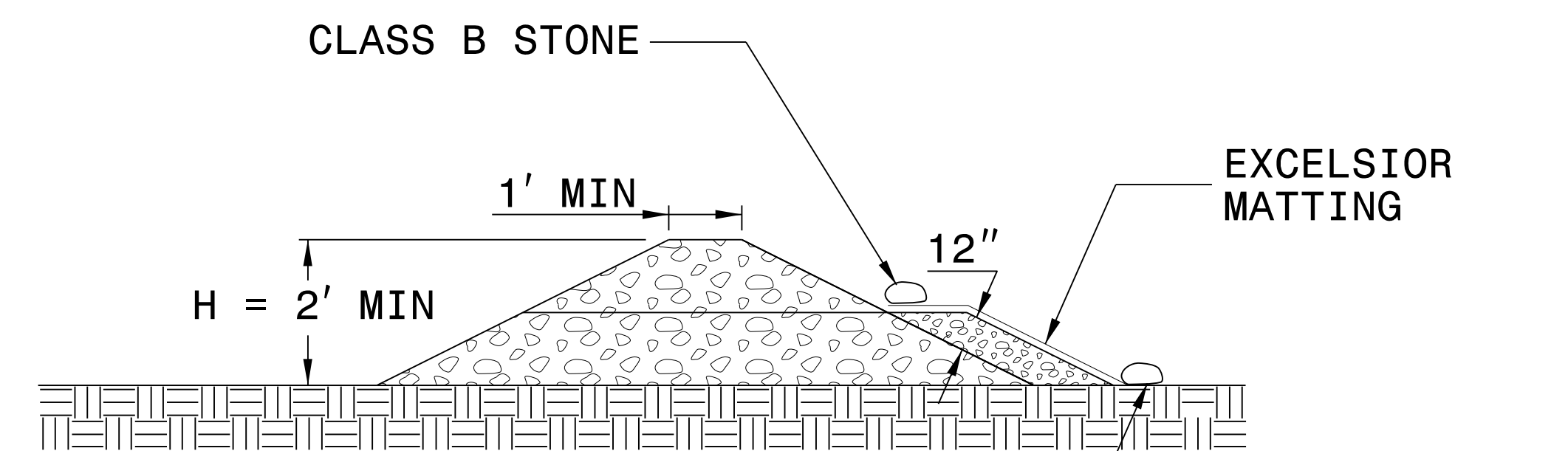
INITIALLY APPLY 4 OUNCES OF POLYACRYLAMIDE (PAM) TO TOP OF MATTING SECTION AND AFTER EVERY RAINFALL EVENT THAT EQUALS OR EXCEEDS 0.50 INCHES.



INSET A



SECTION A-A



SECTION B-B

NOT TO SCALE

RAILROAD EROSION CONTROL DETAIL

PROJECT REFERENCE NO. B-5666	SHEET NO. EC-2B
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

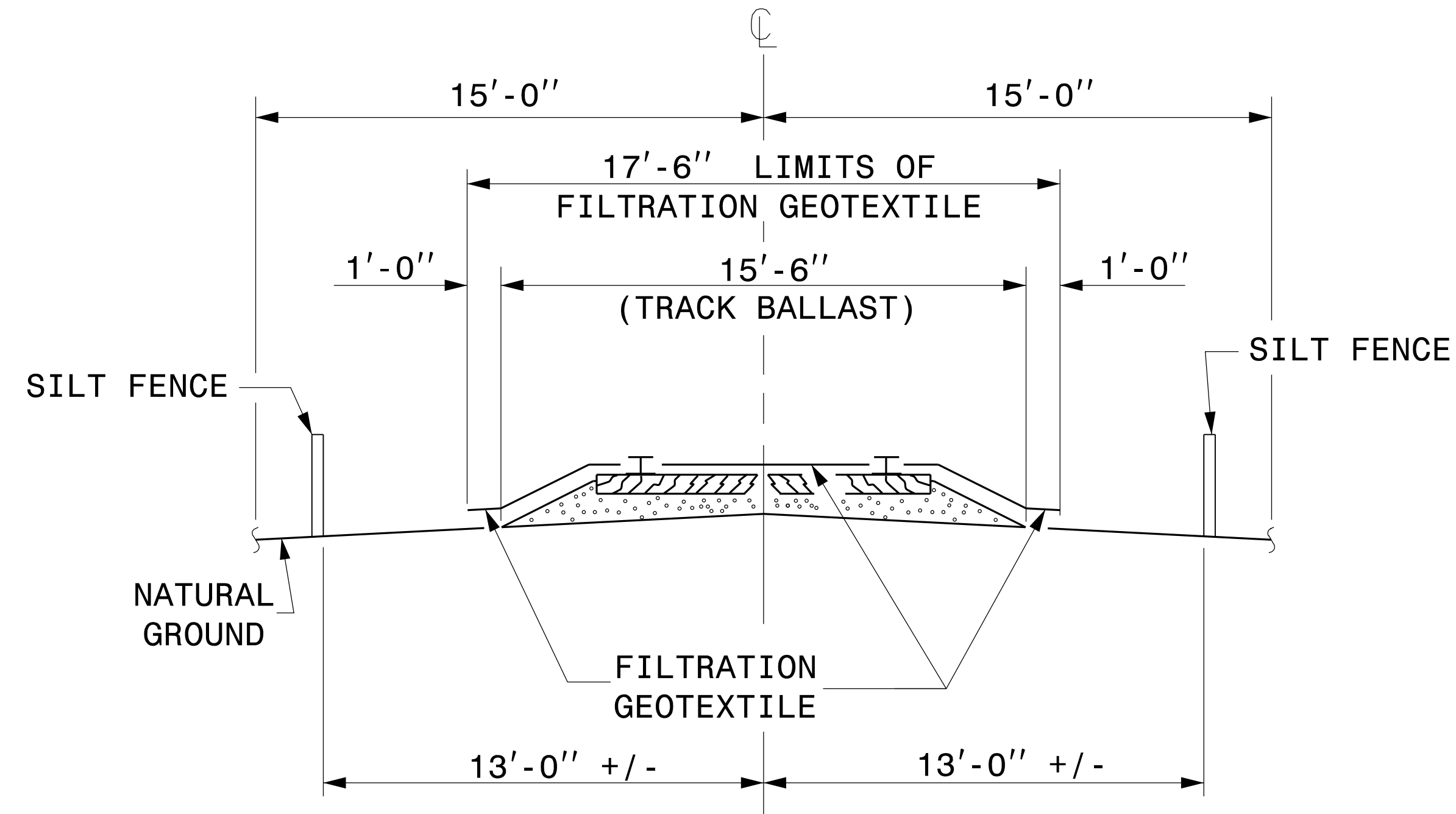
STATE OF NORTH CAROLINA
DEPT. OF TRANSPORTATION
DIVISION OF HIGHWAYS
RALEIGH, N.C.

1-12

ENGLISH STANDARD DRAWING FOR
RAILROAD EROSION CONTROL DETAIL

SHEET 1 OF 1

1604.01



NOTES

INSTALL RAILROAD EROSION CONTROL MEASURES PRIOR TO PERFORMING ANY WORK IN THE RAILROAD RIGHT-OF-WAY.

ADDITIONAL EROSION CONTROL MEASURES FOR PROTECTION OF RAILROAD DITCHES MAY BE REQUIRED AS DIRECTED.

MAKE NO SEPARATE PAYMENT FOR RAILROAD EROSION CONTROL MEASURES.

EXTEND LIMITS OF SILT FENCE AND FILTRATION GEOTEXTILE PARALLEL TO RAILROAD A MINIMUM OF 10'-0" OUTSIDE EDGE OF SUPERSTRUCTURE OR TOE OF SLOPE ON CONSTRUCTION. A GREATER LENGTH OF SILT FENCE OR FILTRATION GEOTEXTILE MAY BE REQUIRED AS DIRECTED.

NAIL FILTRATION GEOTEXTILE TO TIMBER RAIL TIES WITH PRIME SOURCE "GRIP CAP" OR EQUIVALENT. SECURE FILTRATION GEOTEXTILE ON SHOULDER AS DIRECTED BY THE RAILROAD AND NCDOT.

STATE OF NORTH CAROLINA
DEPT. OF TRANSPORTATION
DIVISION OF HIGHWAYS
RALEIGH, N.C.

1-12

ENGLISH STANDARD DRAWING FOR
RAILROAD EROSION CONTROL DETAIL

SHEET 1 OF 1

1604.01

DIVISION OF HIGHWAYS
STATE OF NORTH CAROLINA

PROJECT REFERENCE NO.	SHEET NO.
B-5666	EC-3
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

SOIL STABILIZATION SUMMARY SHEET

MATTING FOR EROSION CONTROL

PERMANENT SOIL REINFORCEMENT MAT

CONST SHEET NO.	LINE	FROM STATION	TO STATION	SIDE	ESTIMATE (SY)
4	-L-	13+00	14+50	LT	100
4	-L-	14+50	16+61.4	LT	110
4	-L-	20+50	20+83.6	LT	15
4	-L-	20+83.9	23+00	LT	170
4	-L-	23+00	23+85	LT	55
4	-L-	20+62	22+00	RT	70
			SUBTOTAL		520
	MISCELLANEOUS MATTING TO BE INSTALLED AS DIRECTED BY THE ENGINEER				1515
			TOTAL		2035
			SAY		2050

CONST SHEET NO.	LINE	FROM STATION	TO STATION	SIDE	ESTIMATE (SY)
4	-L-	20+00	20+50	LT	25
			SUBTOTAL		25
			ADDITIONAL PERM TO BE INSTALLED		0
			TOTAL		25
			SAY		30

DIVISION OF HIGHWAYS
STATE OF NORTH CAROLINA

SOIL STABILIZATION TIMEFRAMES

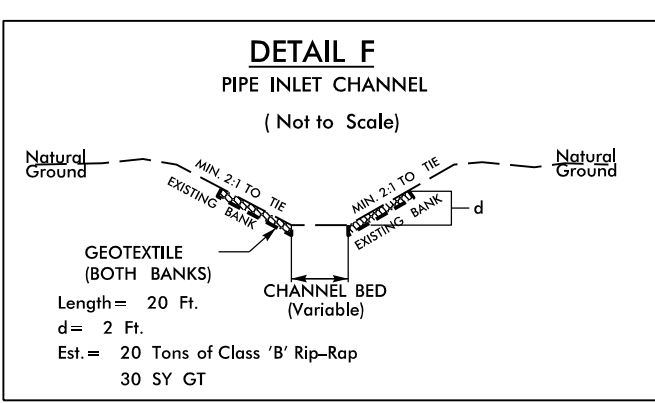
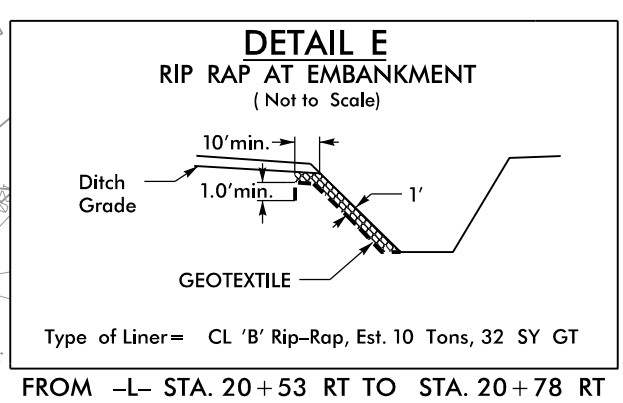
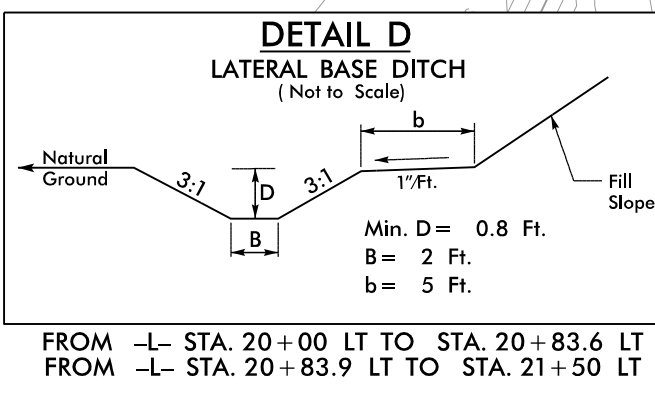
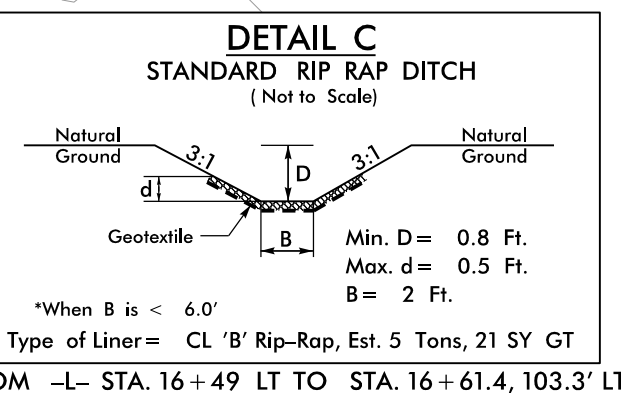
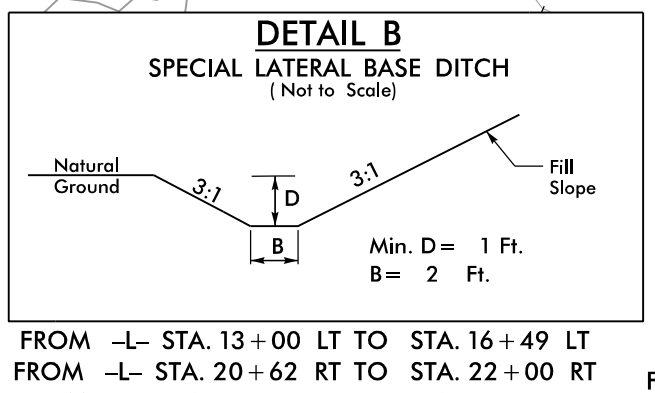
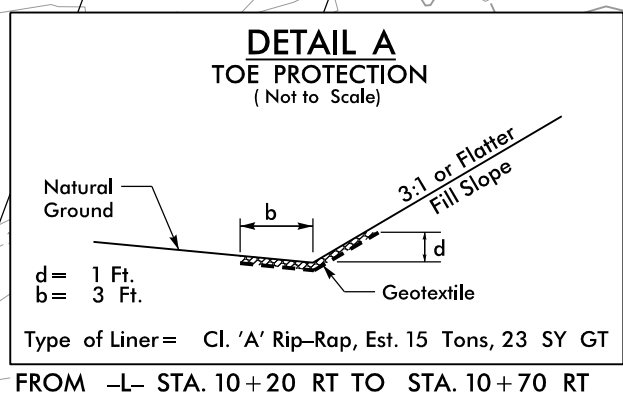
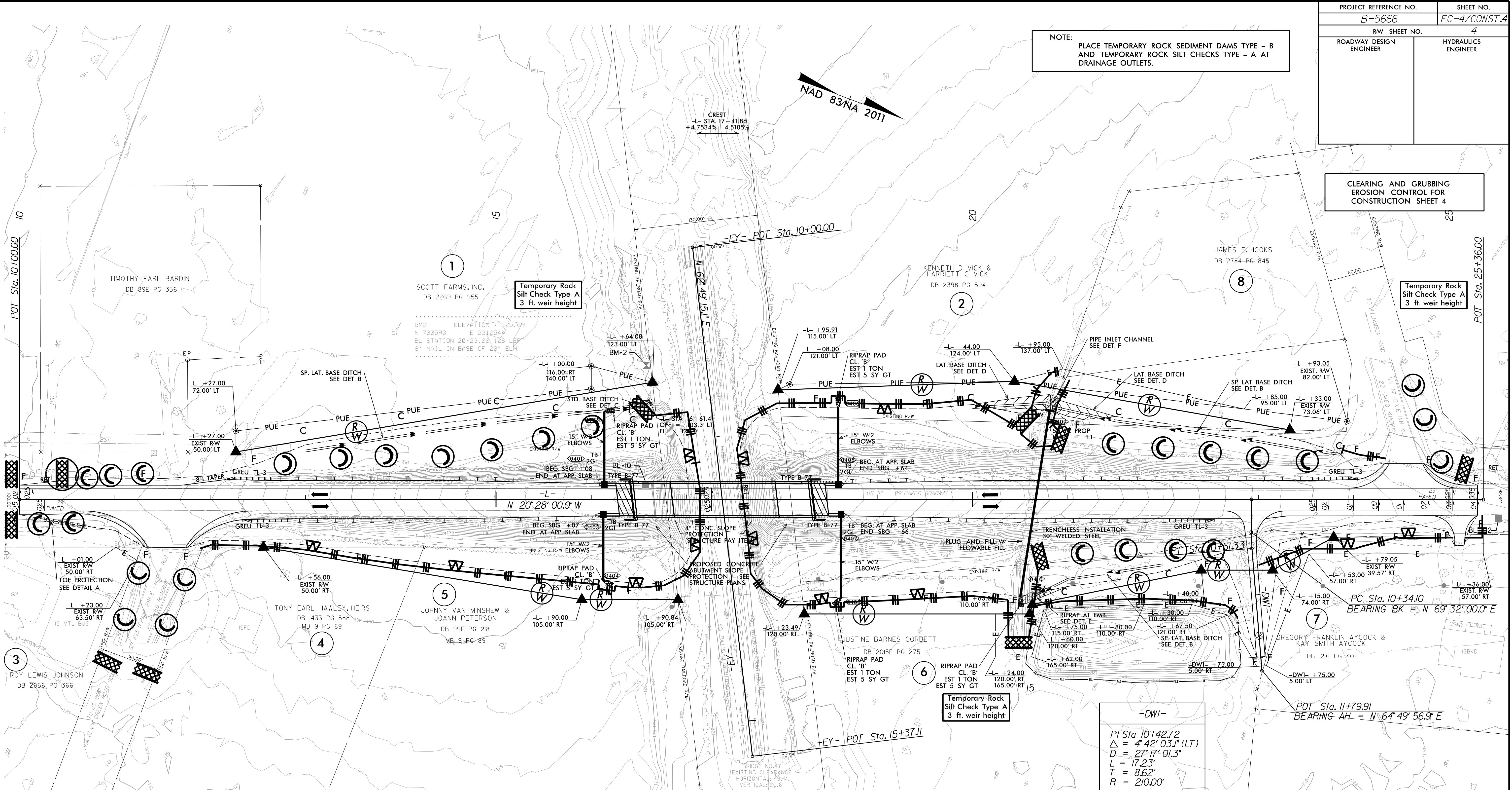
<i>SITE DESCRIPTION</i>	<i>STABILIZATION TIME</i>	<i>TIMEFRAME EXCEPTIONS</i>
PERIMETER DIKES, SWALES, DITCHES AND SLOPES	7 DAYS	NONE
HIGH QUALITY WATER (HQW) ZONES	7 DAYS	NONE
SLOPES STEEPER THAN 3:1	7 DAYS	IF SLOPES ARE 10' OR LESS IN LENGTH AND ARE NOT STEEPER THAN 2:1, 14 DAYS ARE ALLOWED.
SLOPES 3:1 OR FLATTER	14 DAYS	7 DAYS FOR SLOPES GREATER THAN 50' IN LENGTH.
ALL OTHER AREAS WITH SLOPES FLATTER THAN 4:1	14 DAYS	NONE, EXCEPT FOR PERIMETERS AND HQW ZONES.

PROJECT REFERENCE NO.	SHEET NO.
B-5666	EC-4/CONST.4
RW SHEET NO. 4	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

CLEARING AND GRUBBING EROSION CONTROL FOR CONSTRUCTION SHEET 4

Temporary Rock Silt Check Type A 3 ft. weir height

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



LEGEND

-DWI-
PI Sta 10+42.72
Δ = 4' 42" 03.1" (LT)
D = 27' 17" 01.3"
L = 17.23'
T = 8.62'
R = 210.00'

8/17/99
 4/17/00
 5/18/01
 5/19/04
 5/22/05
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 5/22/100

PROJECT REFERENCE NO.	SHEET NO.
B-5666	EC-5/CONST.4
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

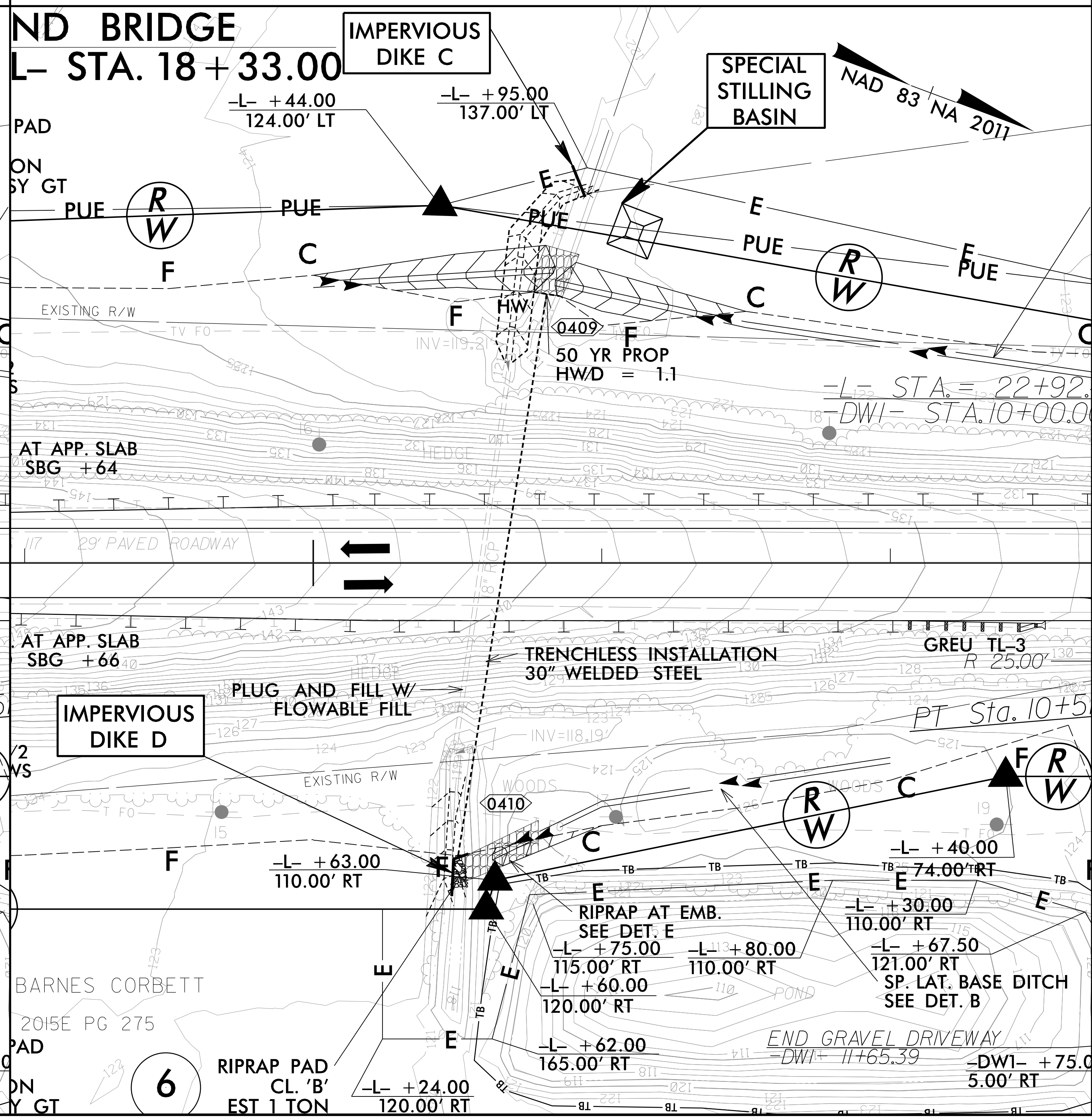
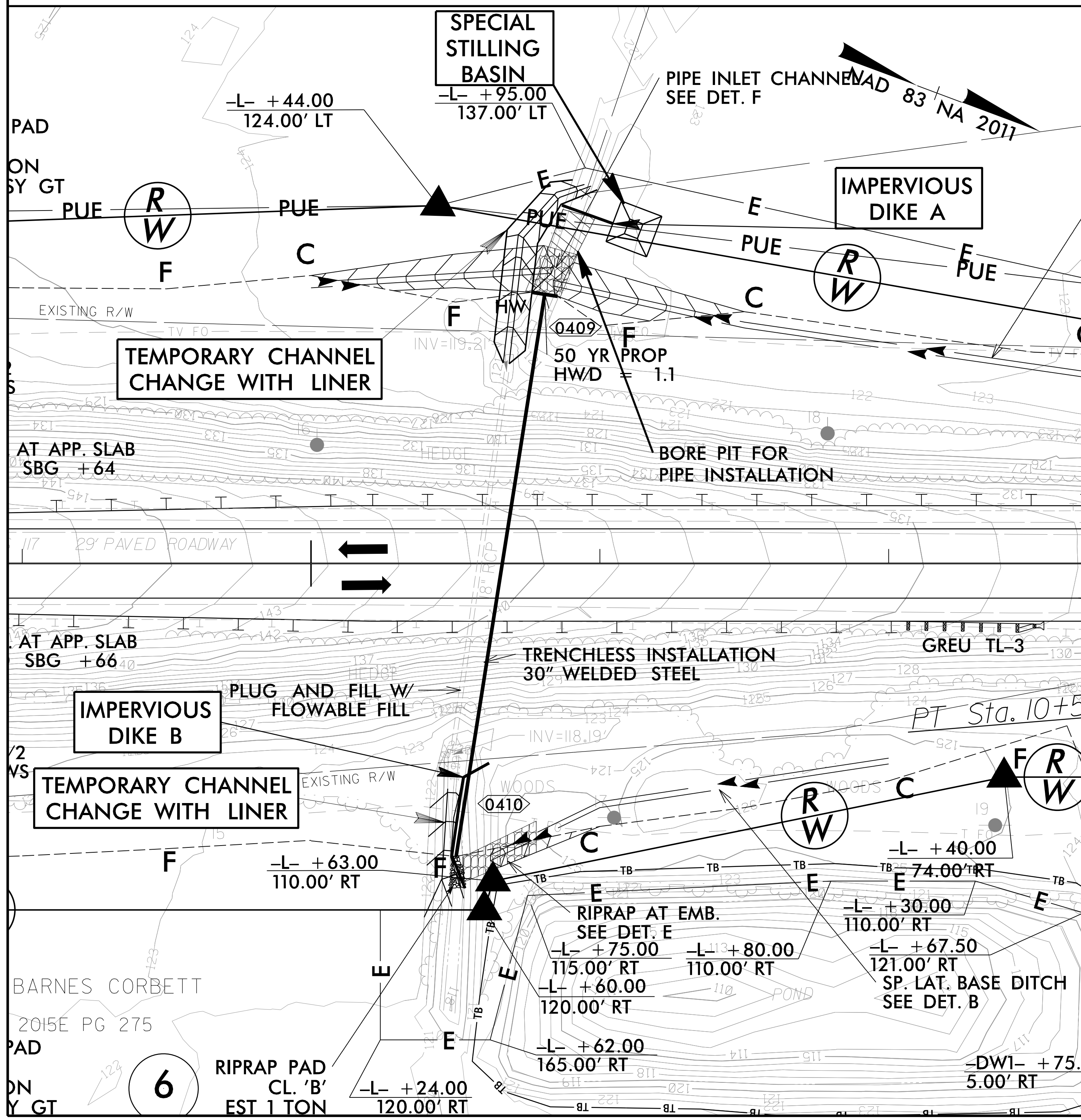
PIPE CONSTRUCTION SEQUENCE STA. 20+66.21 -L-

PHASE I

PHASE II

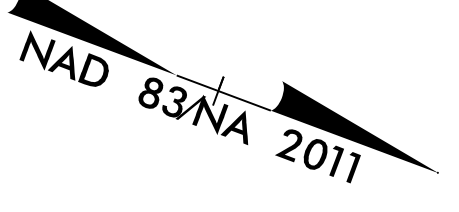
1. CONSTRUCT SPECIAL STILLING BASIN AND UTILIZE SPECIAL STILLING BASIN AS NEEDED.
2. CONSTRUCT TEMPORARY CHANNEL CHANGES.
3. INSTALL IMPERVIOUS DIKES A & B AND ANY PERIMETER EROSION CONTROL DEVICES AS NEEDED.
4. DIG BORE PIT FOR TRENCHLESS INSTALLATION & PREPARE PHASE I SECTION OF PROPOSED PIPE.
5. INSTALL 30" WELDED STEEL PIPE AS WORK ALLOWS. INSTALL CHANNEL IMPROVEMENTS FOR UPSTREAM AND DOWNSTREAM ENDS AS WORK ALLOWS.
6. REMOVE IMPERVIOUS DIKES A & B.

1. INSTALL IMPERVIOUS DIKES C & D.
2. PLUG & FILL EXISTING 18" RCP AS WORK ALLOWS.
3. FILL TEMPORARY CHANNEL CHANGE & REGRADE BACK TO NATURAL GROUND OUTSIDE CONSTRUCTION AREAS.
4. COMPLETE REMAINING PORTIONS OF CHANNEL IMPROVEMENTS FOR UPSTREAM AND DOWNSTREAM ENDS.
5. REMOVE IMPERVIOUS DIKES C & D.
6. REMOVE SPECIAL STILLING BASIN.
7. STABILIZE ANY DISTURBED AREAS PRIOR TO REMOVAL OF ANY PERIMETER EC DEVICES.
8. COMPLETE PROPOSED ROADWAY SECTION.



PROJECT REFERENCE NO.	SHEET NO.
B-5666	EC-6/CONST.4
RW SHEET NO.	4
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

Place Matting for Erosion Control on Slope as Work Allows. Sta. 13+00 to Sta. 24+00



INSTALL MATTING FOR IN THE PROPOSED DITCH LINE FROM -L- 13+00 LT TO 16+61.4 LT.

INSTALL MATTING FOR IN THE PROPOSED DITCH LINE FROM -L- 20+50 LT TO 20+83.6 LT. FROM -L- 20+83.9 LT TO 23+85 LT.

INSTALL PSRM IN THE PROPOSED DITCH LINE FROM -L- 20+00 LT TO 20+50 LT

Temporary Rock Silt Check Type A 3 ft. weir height

Temporary Rock Silt Check Type A 3 ft. weir height

Temporary Rock Silt Check Type A 2.25 ft. weir height

8/17/99

POT Sta. 10+00.00

ROY LEWIS JOHNSON DB 2656 PG 366

4/1/00 5/18/01 9/14/05 22 B-5666-Roadside-NCADDVPS (N.B.-5666-ESC-esh06.FINAL.dgn Sawyer-Walters

TIMOTHY EARL BARDIN DB 89E PG 356

SCOTT FARMS, INC. DB 2269 PG 955

KENNETH D. VICK & HARRIETT C. VICK DB 2398 PG 594

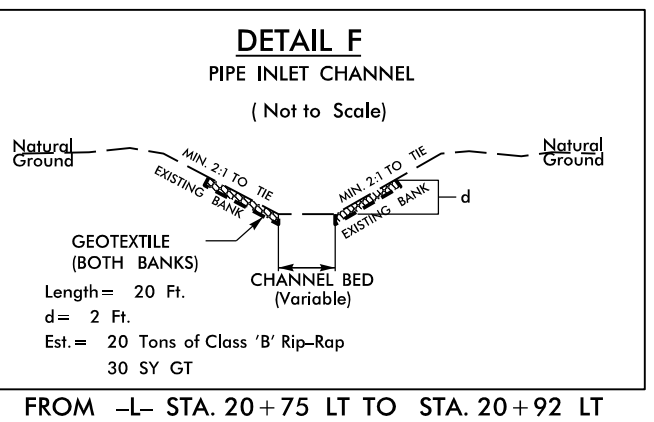
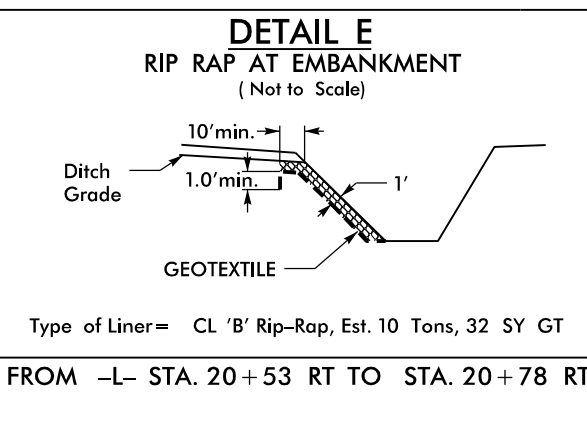
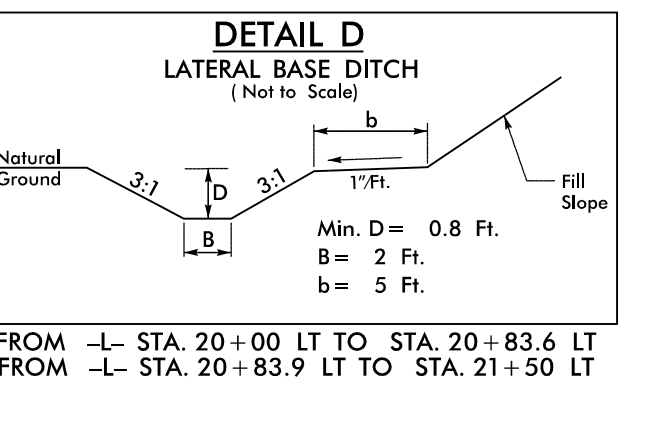
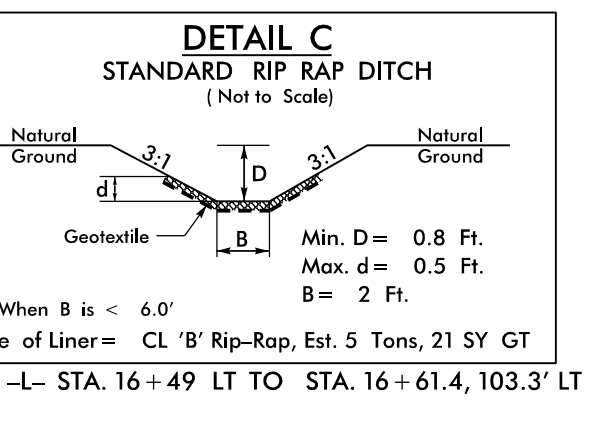
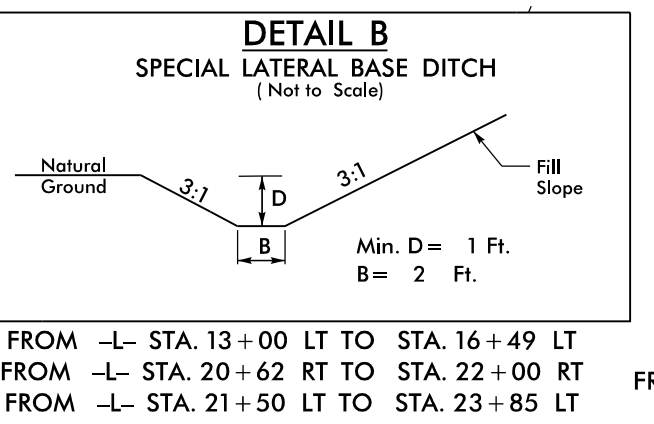
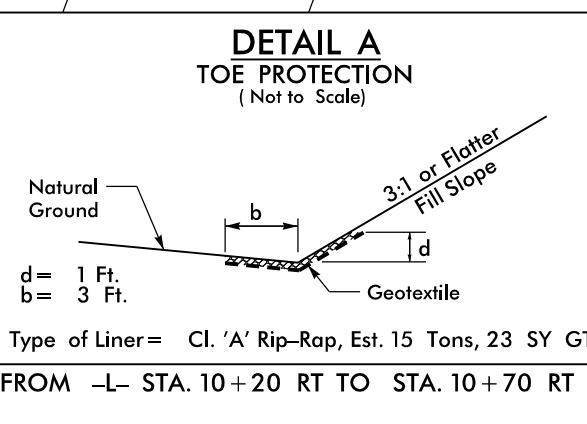
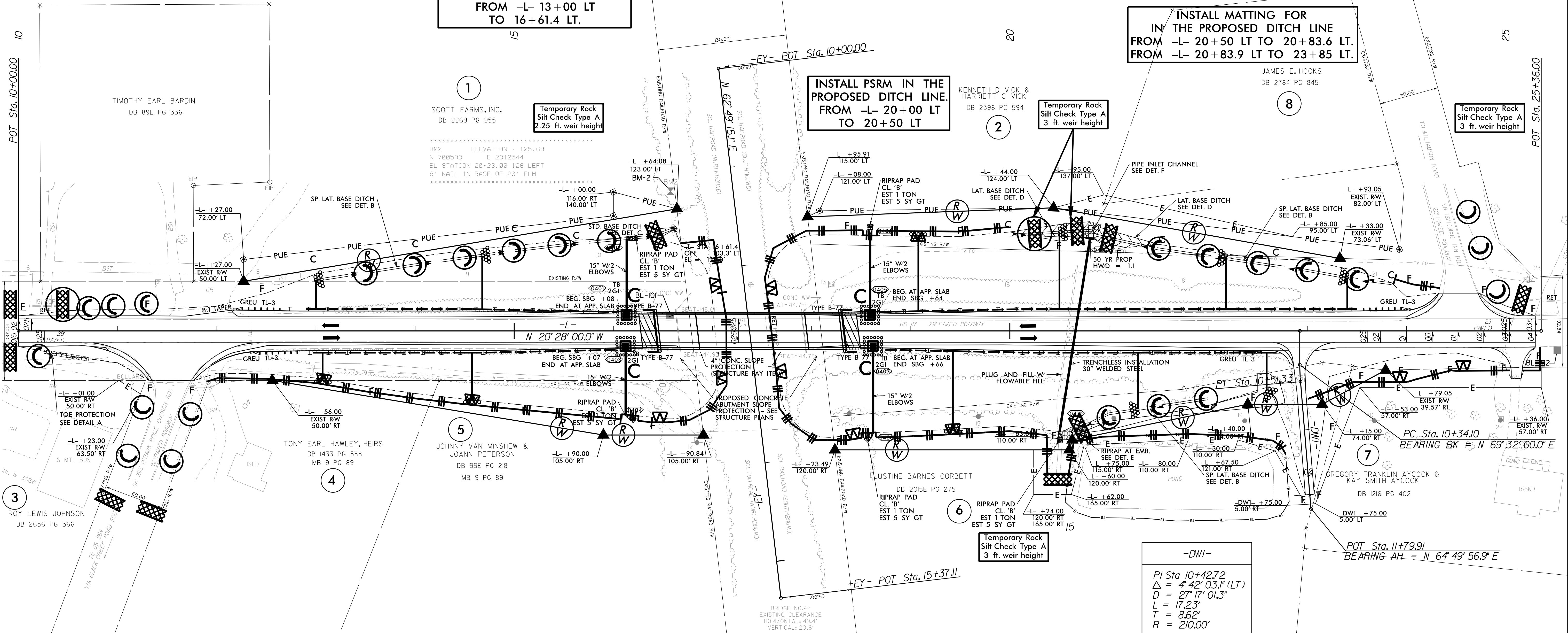
JAMES E. HOOKS DB 2784 PG 845

TONY EARL HAWLEY, HEIRS DB 1433 PG 588 MB 9 PG 89

JOHNNY VAN MINSHEW & JOANN PETERSON DB 99E PG 218 MB 9 PG 89

JUSTINE BARNES CORBETT DB 2015E PG 275

GREGORY FRANKLIN AYCOCK & KAY SMITH AYCOCK DB 1216 PG 402



INSTALL MATTING FOR IN THE PROPOSED DITCH LINE FROM -L- 20+62 RT TO 22+00 RT.

-DWI-
PI Sta. 10+42.72
Δ = 4' 42" 03.1" (LT)
D = 27' 17" 01.3"
L = 17.23'
T = 8.62'
R = 210.00'

LEGEND