

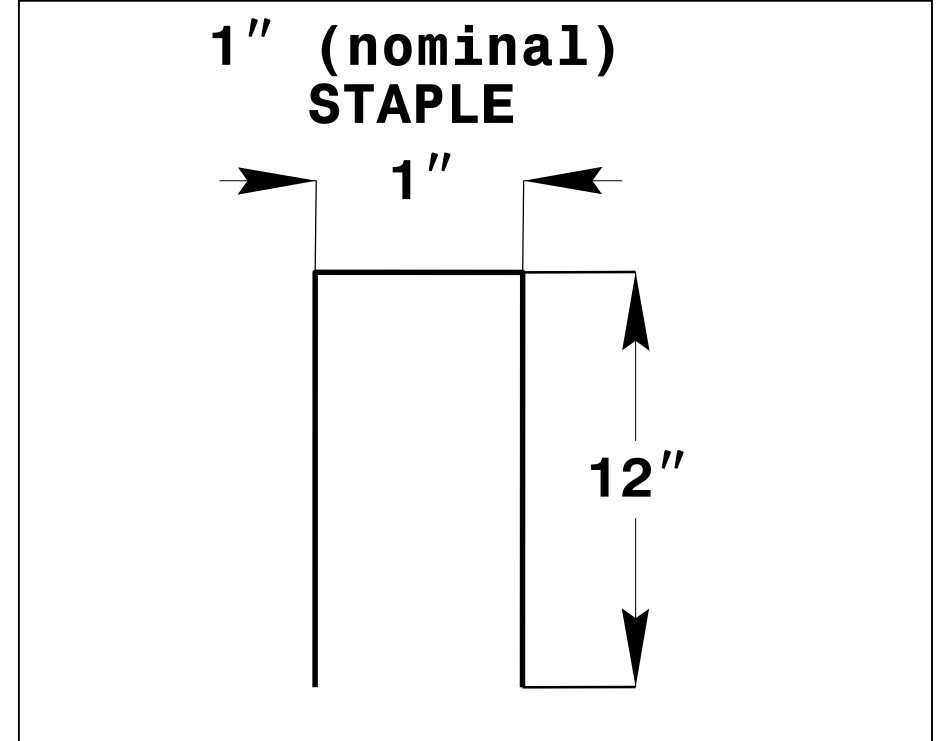
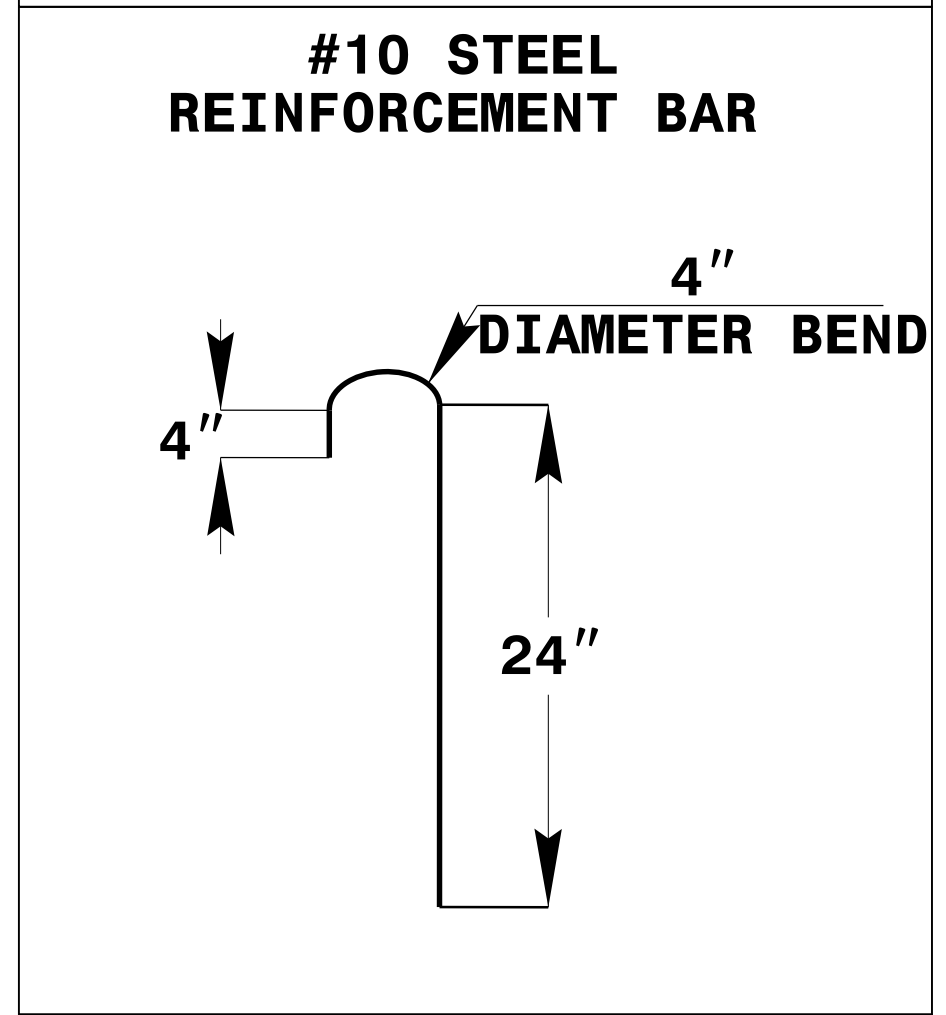
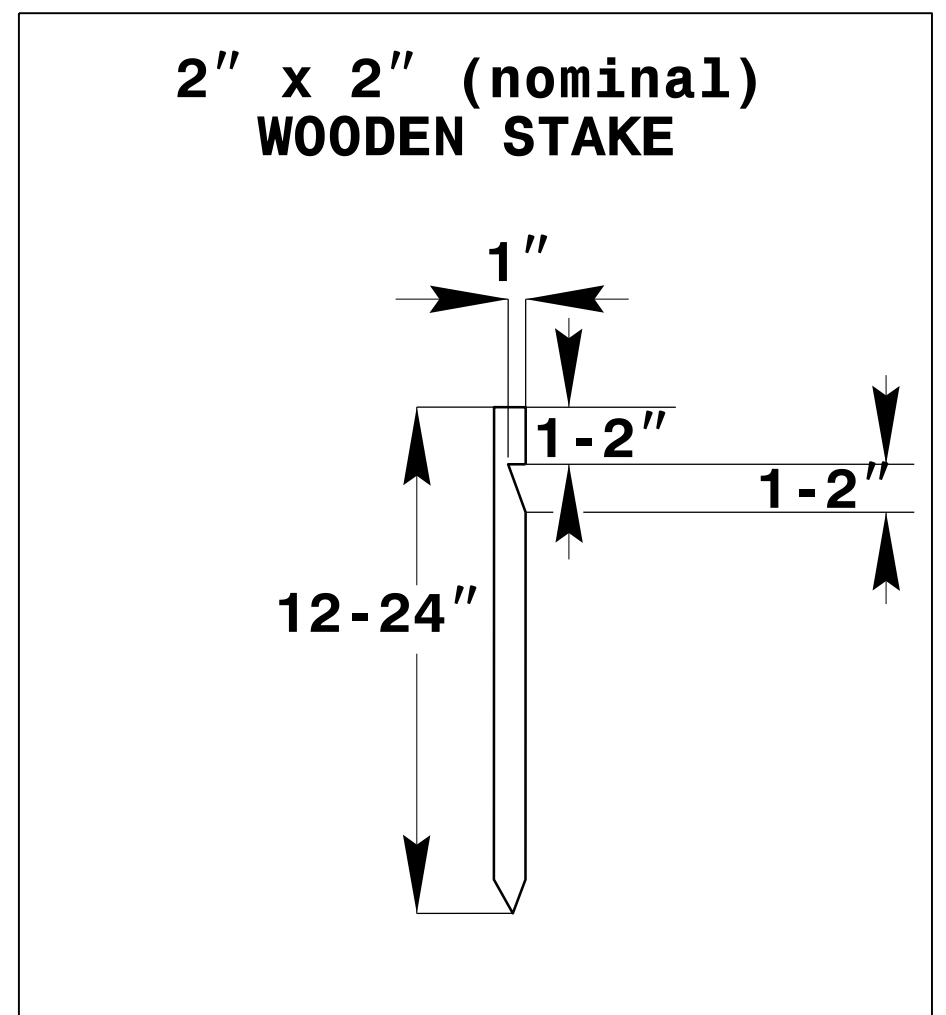
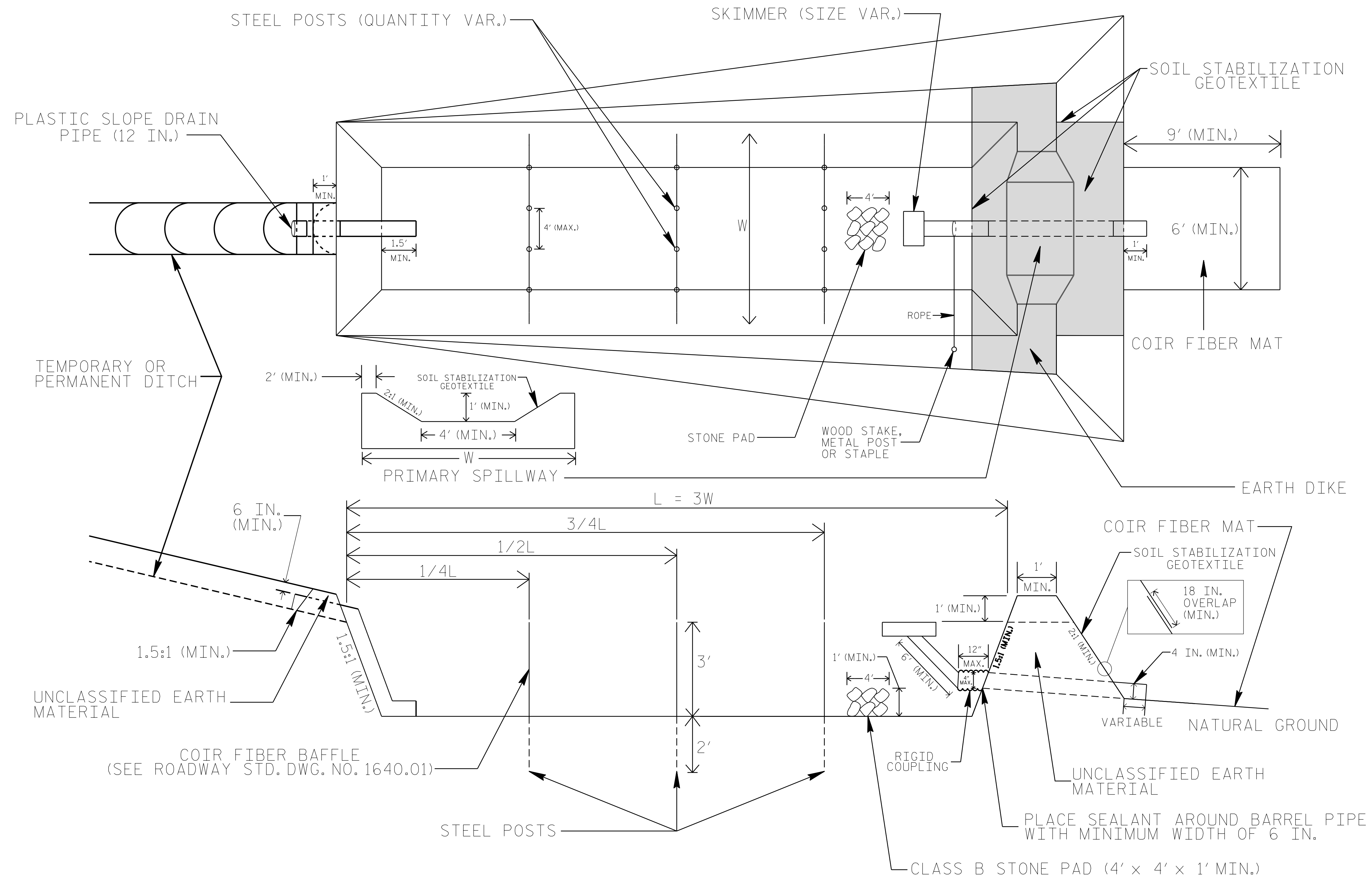
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PROJECT REFERENCE NO. B-4848	SHEET NO. EC-2
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

SKIMMER BASIN WITH BAFFLES DETAIL



COIR FIBER MAT ANCHOR OPTIONS

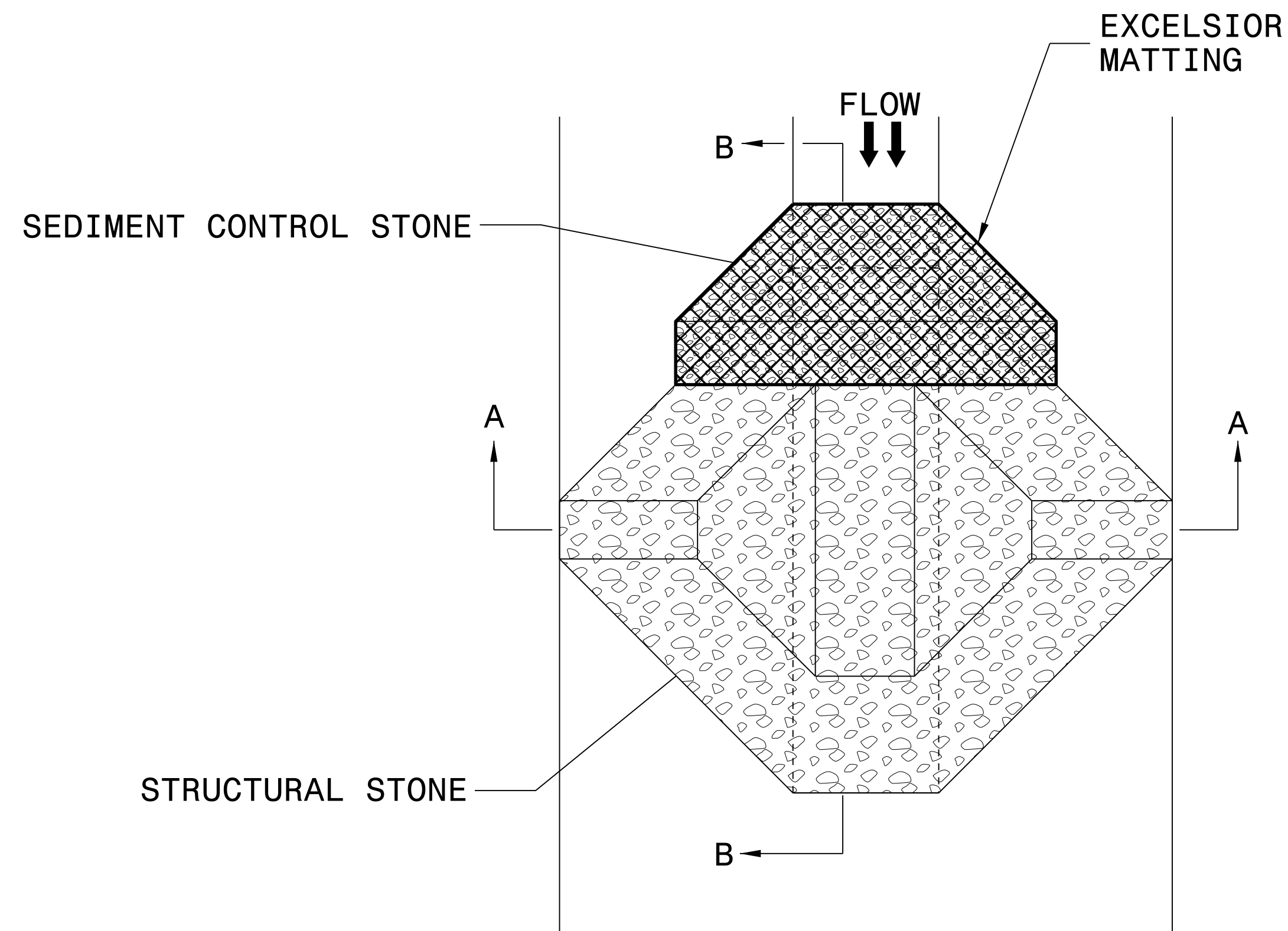
NOTES

1. SEED AND PLACE MATTING FOR EROSION CONTROL ON INTERIOR AND EXTERIOR SIDESLOPES.
2. LIMIT EARTH DIKE HEIGHT TO 5 FT.
3. FOR BASIN DEPTH OF 3 FT., THE MINIMUM BASIN WIDTH SHALL BE 9 FT.
4. DETERMINE PRIMARY SPILLWAY WEIR LENGTH (FT.) USING $Q/0.8$, WHERE Q IS FLOW RATE (CFS) INTO BASIN.
5. PLASTIC SLOPE DRAIN PIPE AT INLET OF BASIN MAY BE REPLACED BY FILTRATION GEOTEXTILE OR TARP AS DIRECTED.
6. SOIL STABILIZATION GEOTEXTILE FOR PRIMARY SPILLWAY SHALL BE ONE CONTINUOUS PIECE OF MATERIAL OR OVERLAPPED 18 IN. (MIN.).

NOT TO SCALE

PROJECT REFERENCE NO. B-4848	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

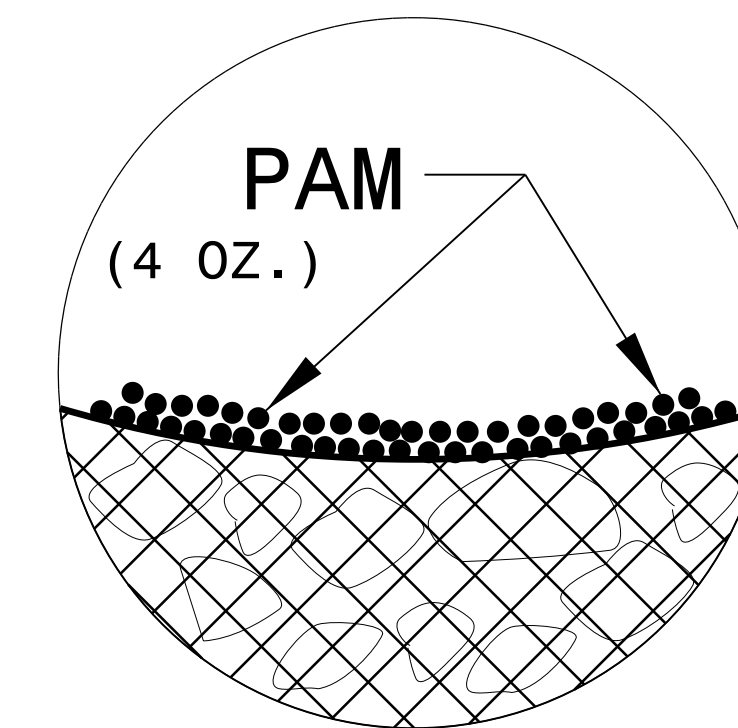
NOTES:

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

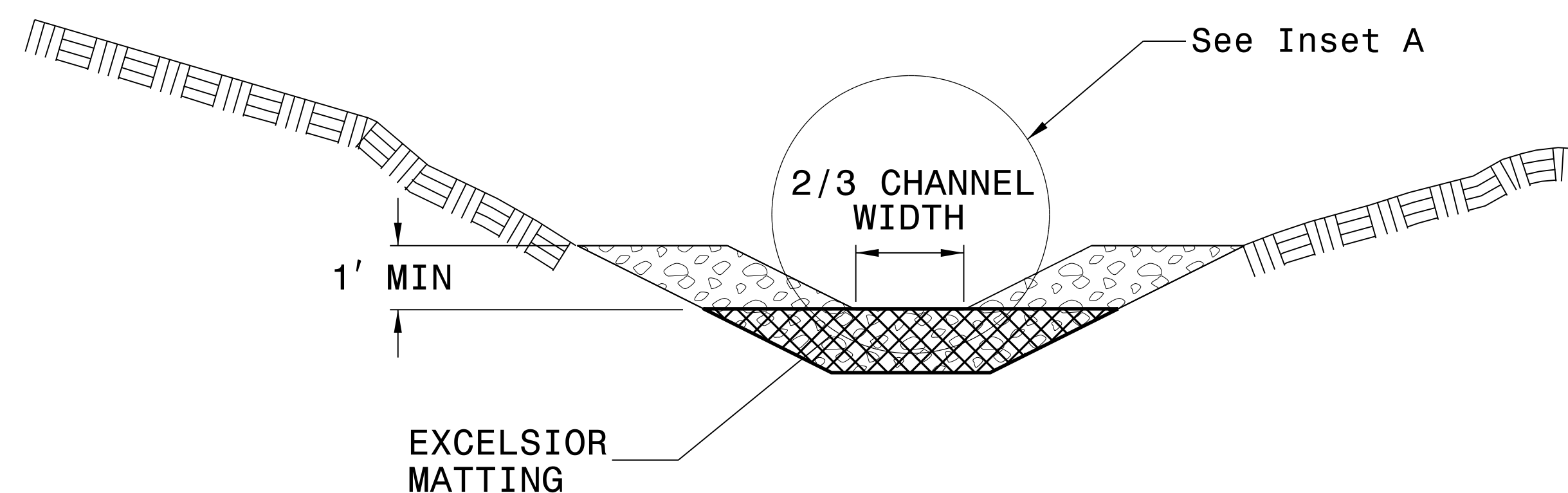
USE EXCELSIOR FOR MATTING MATERIAL AND ANCHOR MATTING SECTION AT TOP AND BOTTOM WITH CLASS B STONE.

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.

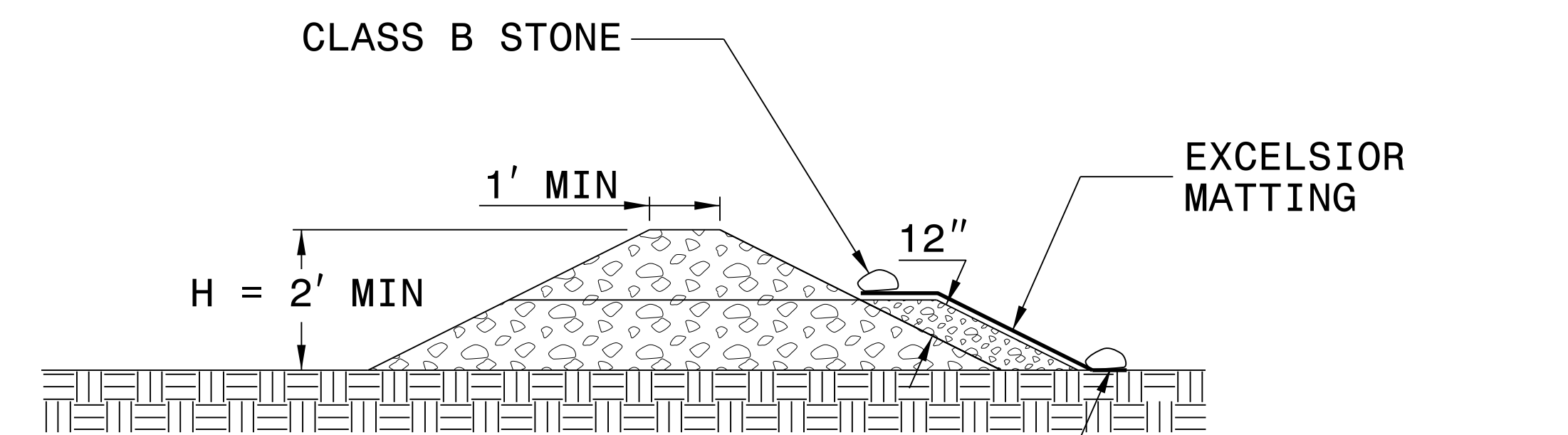
INITIALLY APPLY 4 OUNCES OF POLYACRYLAMIDE (PAM) TO TOP OF MATTING SECTION AND AFTER EVERY RAINFALL EVENT THAT EQUALS OR EXCEEDS 0.50 INCHES.



INSET A



SECTION A-A

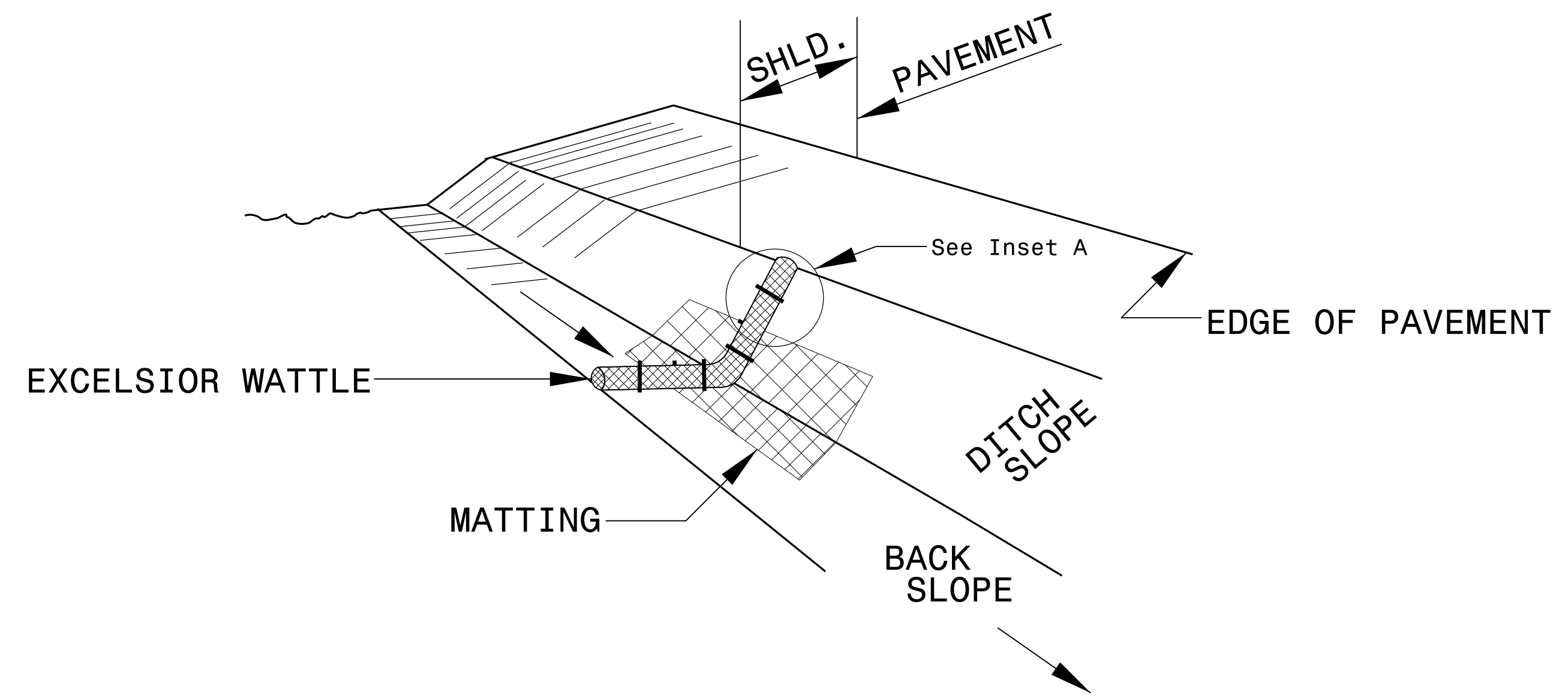


SECTION B-B

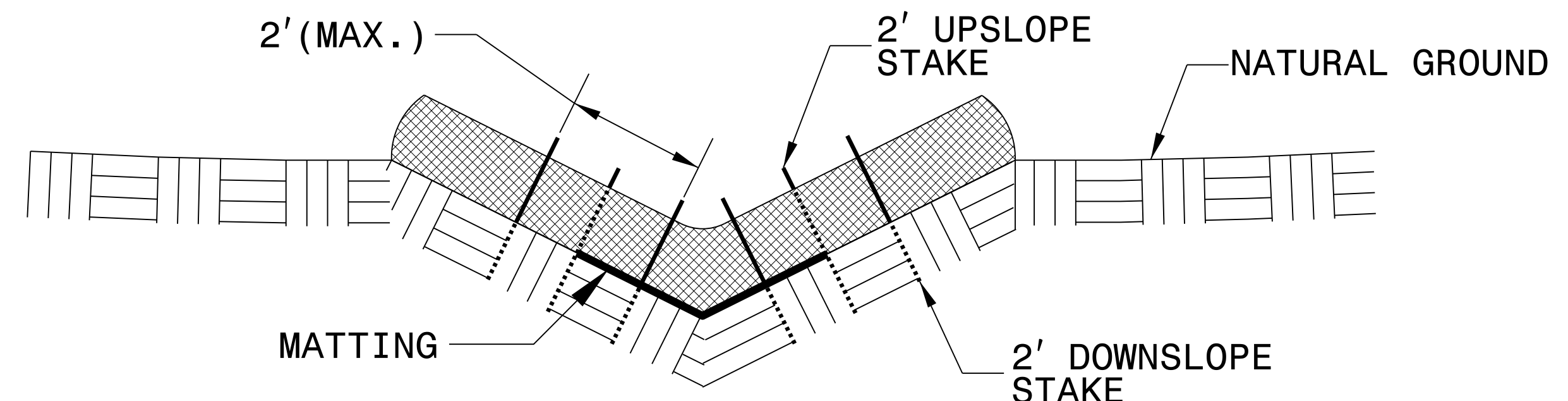
NOT TO SCALE

PROJECT REFERENCE NO. B-4848	SHEET NO. EC-2B
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

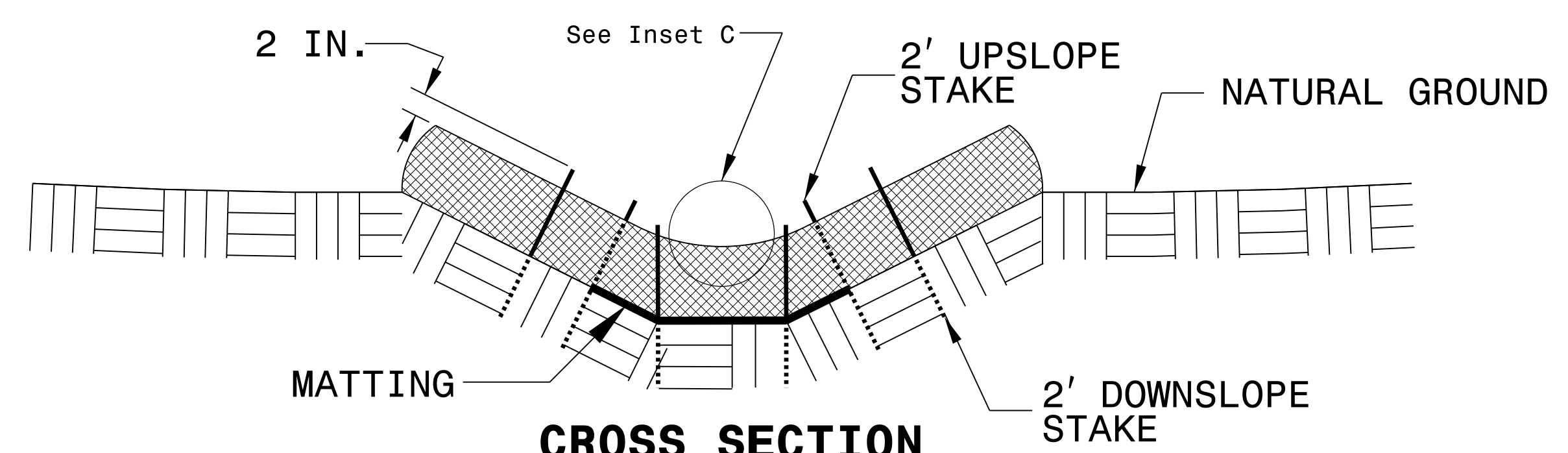
WATTLE WITH POLYACRYLAMIDE (PAM) DETAIL



ISOMETRIC VIEW

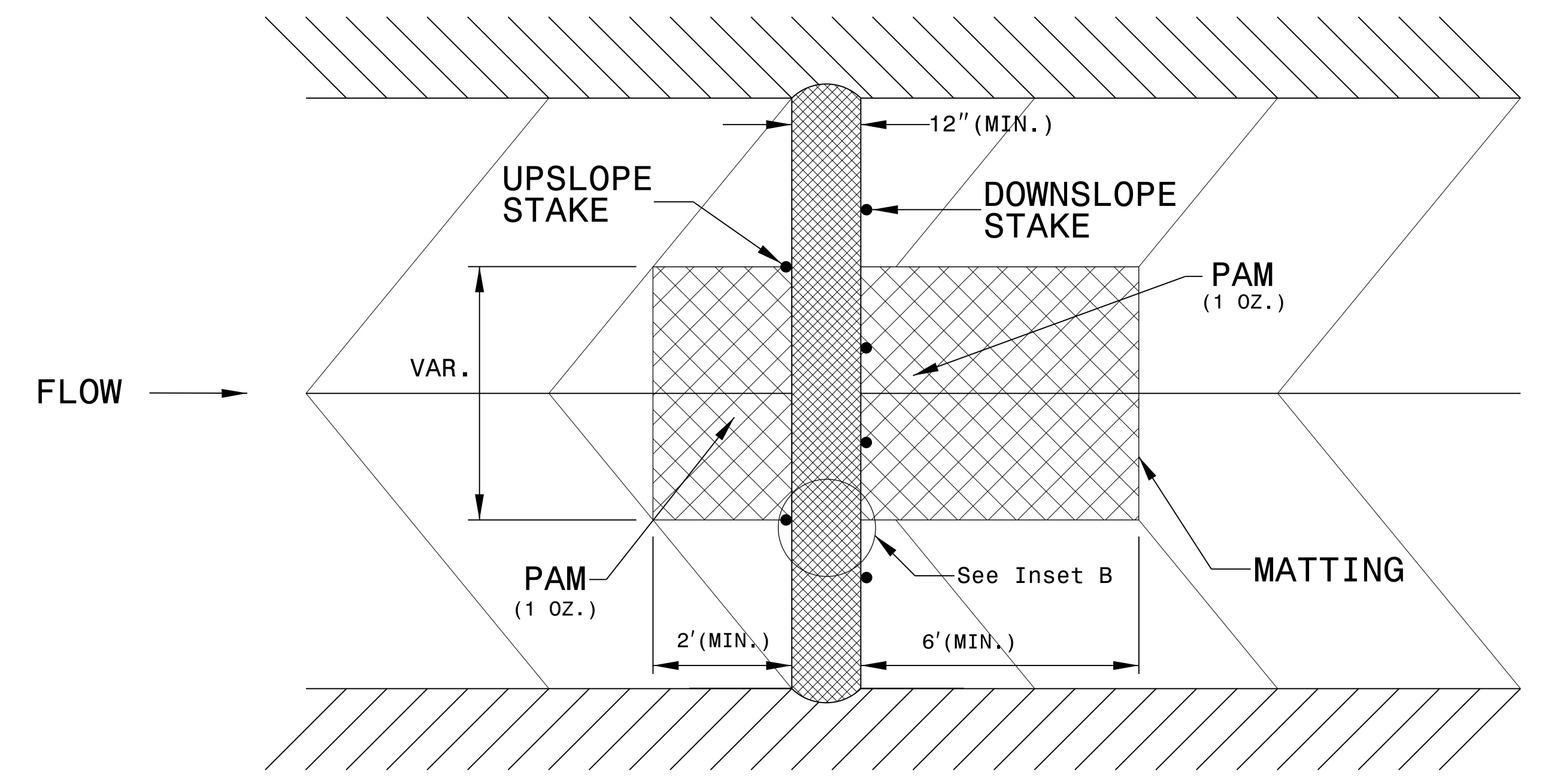
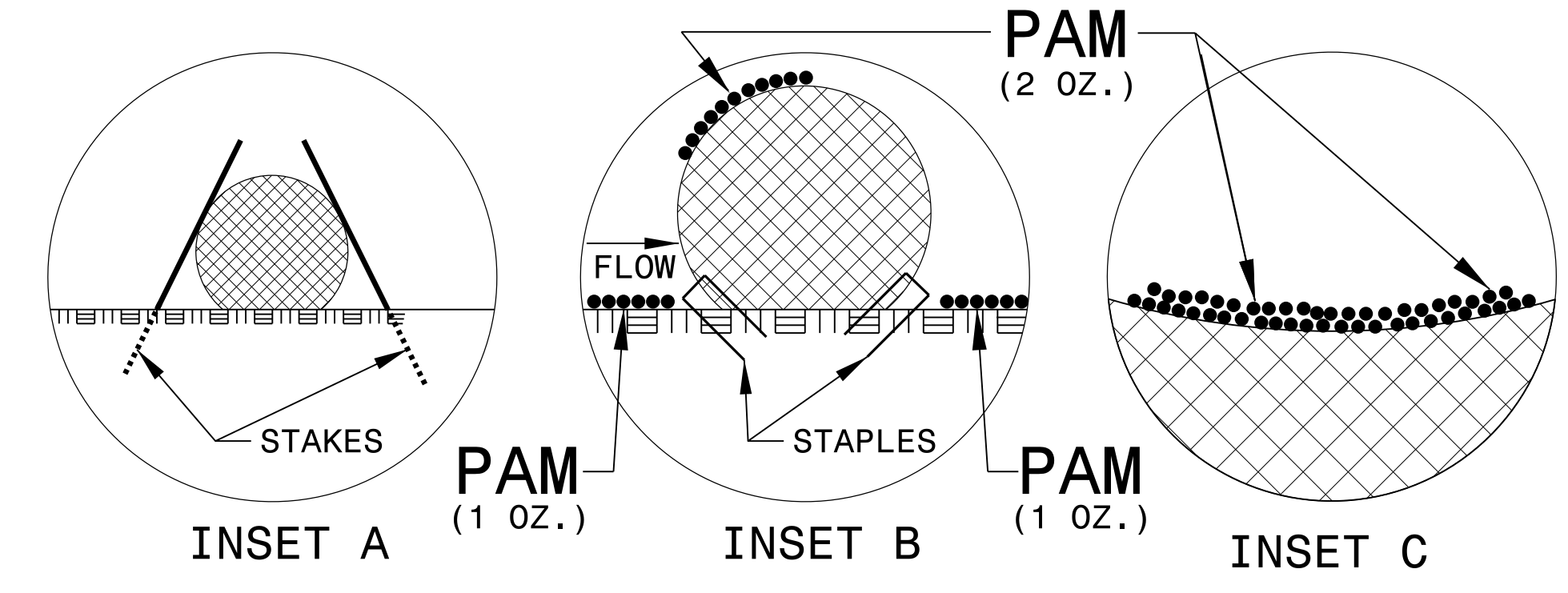


CROSS SECTION VEE DITCH



CROSS SECTION TRAPEZOIDAL DITCH

- 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.



TOP VIEW

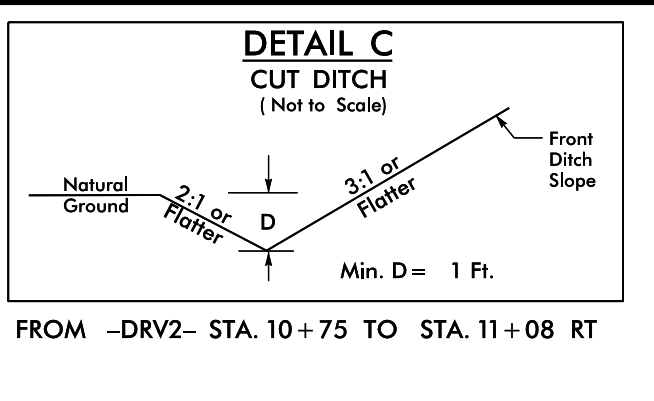
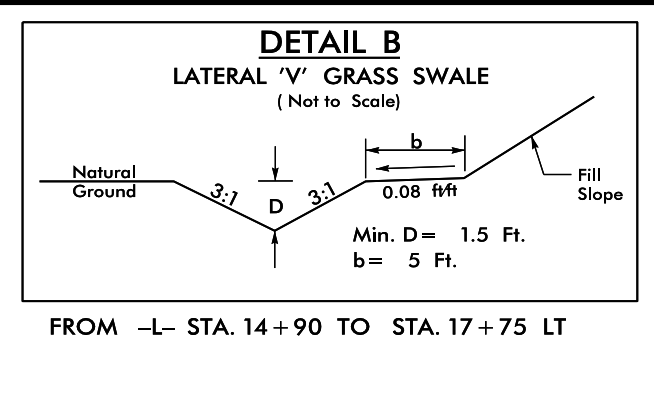
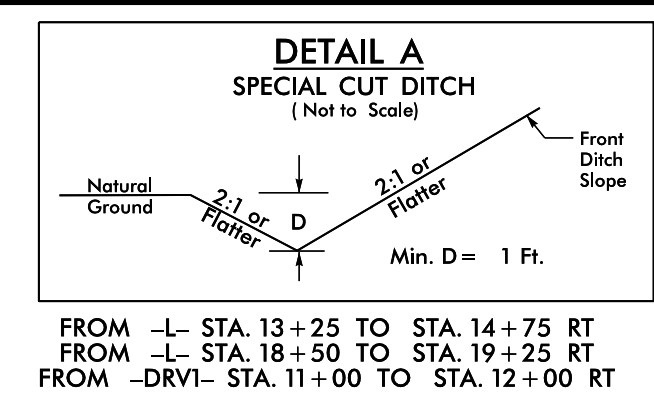
DIVISION OF HIGHWAYS
STATE OF NORTH CAROLINA

PROJECT REFERENCE NO. <i>B-4848</i>	SHEET NO. <i>EC-3A</i>
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

SOIL STABILIZATION TIMEFRAMES

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

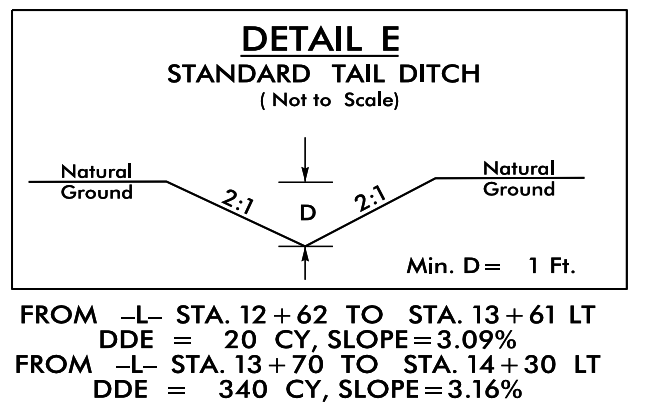
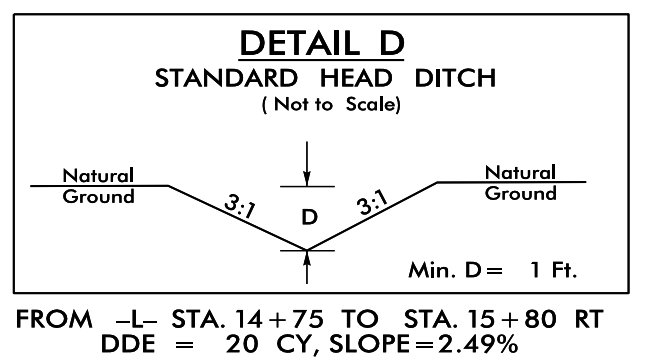
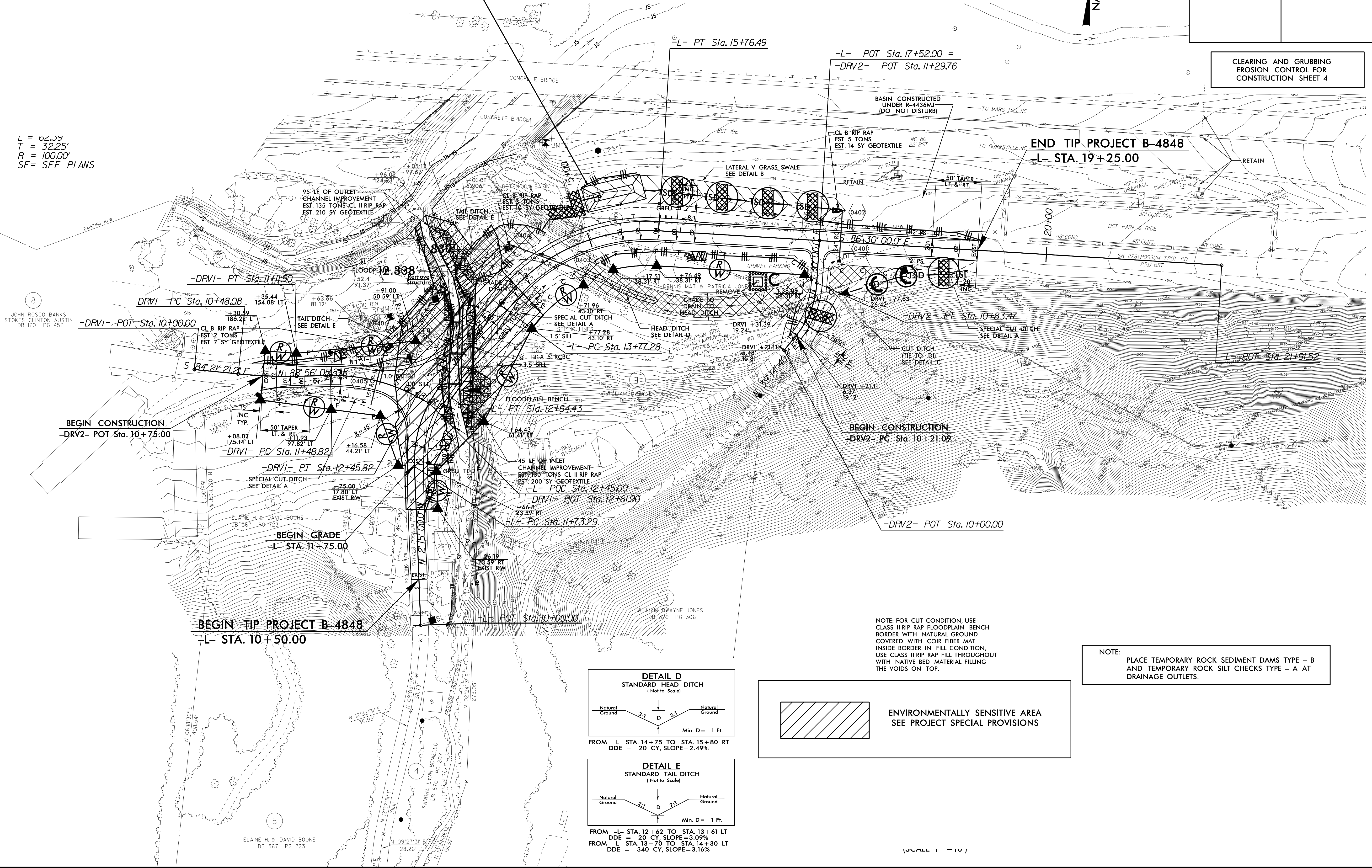
CLEARING AND GRUBBING EROSION CONTROL FOR CONSTRUCTION SHEET 4



NAD 83/2011

61 x 30 x 3
1.5 inch Skimmer
with 1.250 inch
Orifice Diameter
7 ft. weir
ID 4.3

L = 62.33
T = 32.25'
R = 100.00'
SE = SEE PLANS



ENVIRONMENTALLY SENSITIVE AREA
SEE PROJECT SPECIAL PROVISIONS

NOTE: FOR CUT CONDITION, USE CLASS II RIP RAP FLOODPLAIN 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.

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

(SCALE 1" = 10')

8/17/99

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8

JOHN ROSCO BANKS
STOKES CLINTON AUSTIN
DB 170 PG 457

5

ELAINE H. & DAVID BOONE
DB 367 PG 723

PROJECT REFERENCE NO. B-4848	SHEET NO. EC-5/CONST.4
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

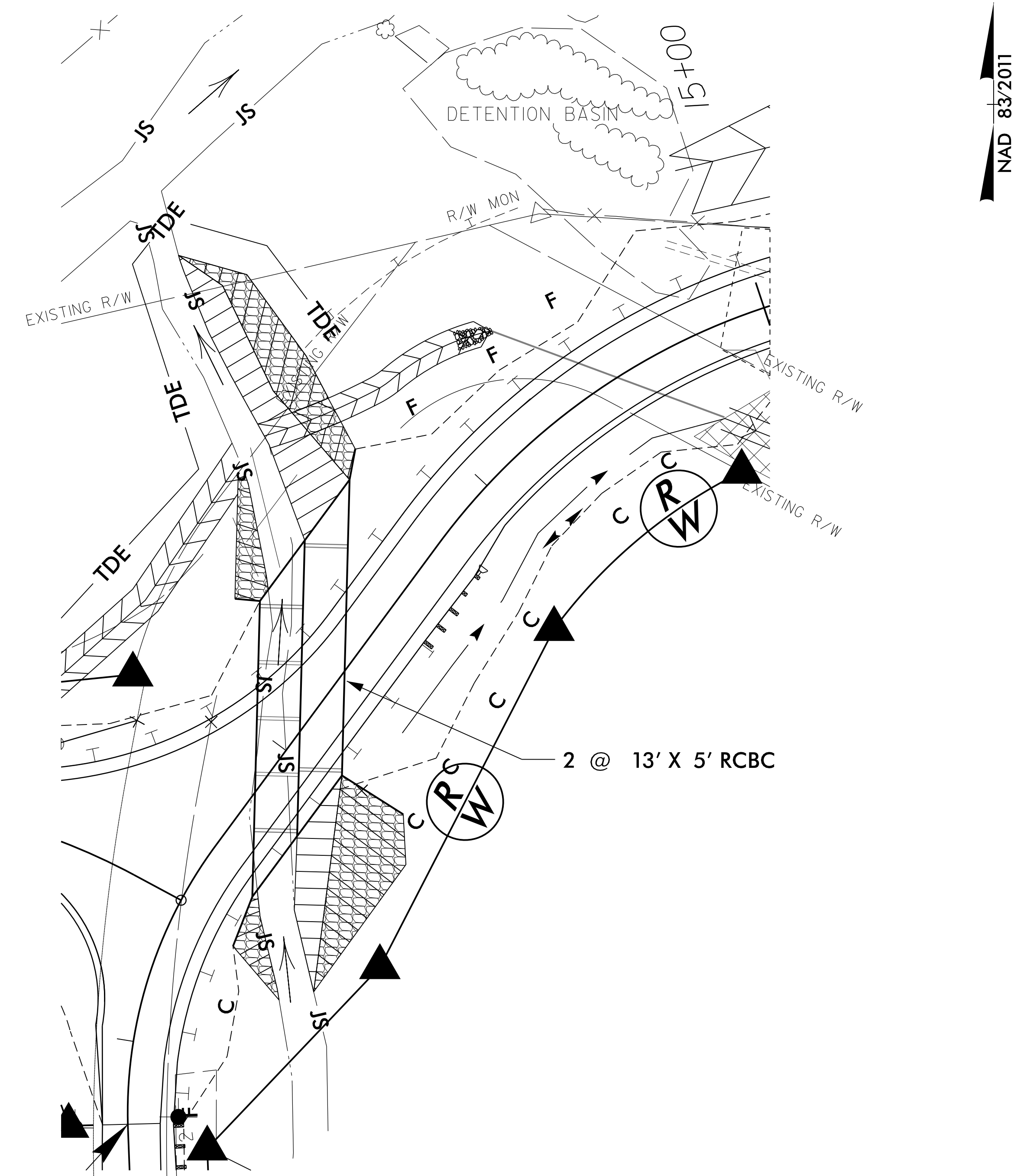
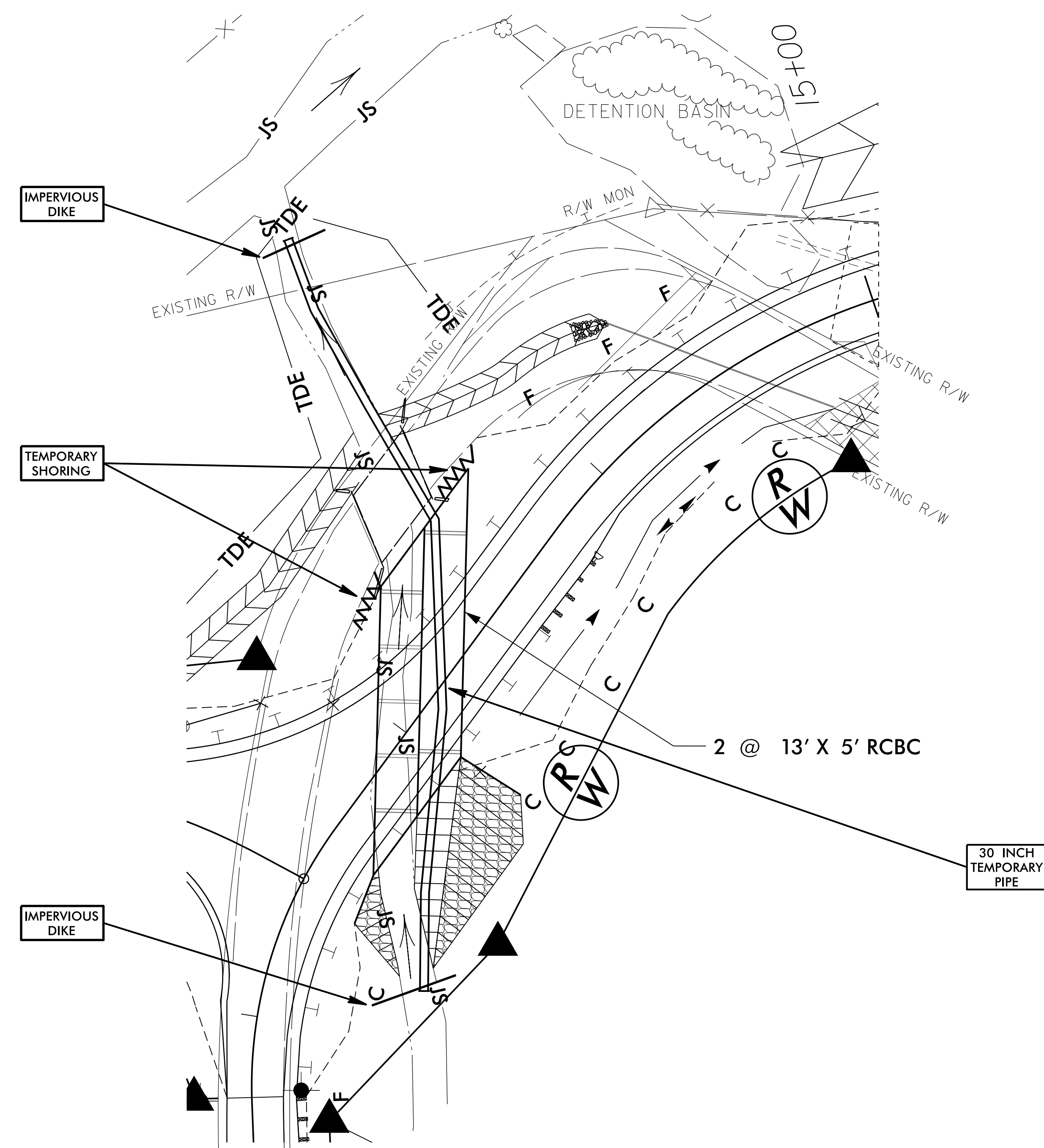
CULVERT CONSTRUCTION SEQUENCE STA. 13+07 -L-

PHASE I

1. UTILIZE SPECIAL STILLING BASIN(S) AS NEEDED THROUGHOUT CULVERT CONSTRUCTION.
2. CONSTRUCT IMPERVIOUS DIKES AND INSTALL 30" TEMPORARY PIPE.
3. INSTALL TEMPORARY SHORING AND REMOVE WINGWALLS FROM UPSTREAM FACE OF EXISTING BRIDGE TO FACILITATE CONSTRUCTION OF PROPOSED CULVERT.
4. CONSTRUCT PROPOSED CULVERT, FROM NORTHERN TO SOUTHERN END, INLET WINGWALLS, AND INLET CHANNEL IMPROVEMENTS. SHIFT TEMPORARY PIPE BETWEEN BARRELS AS NEEDED FOR EASE OF CONSTRUCTION.
5. CONSTRUCT PROPOSED ROADWAY AND TIE INS: FROM 10+75 TO 12+40 -DRV1-, FROM 12+45 TO 14+43 -L-, AND FROM 14+75 TO 18+41 -L-.

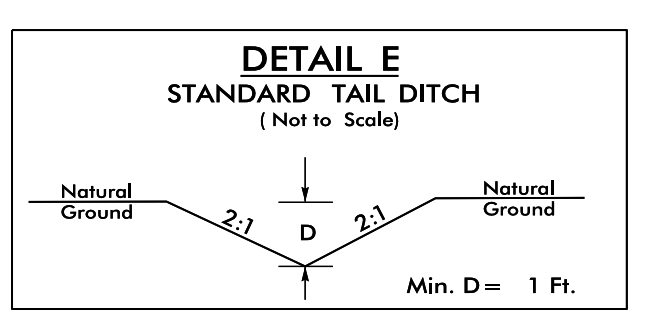
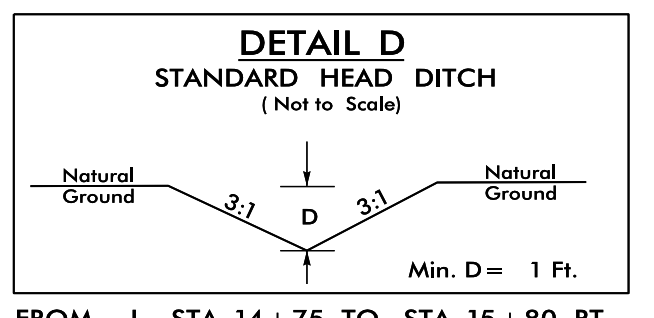
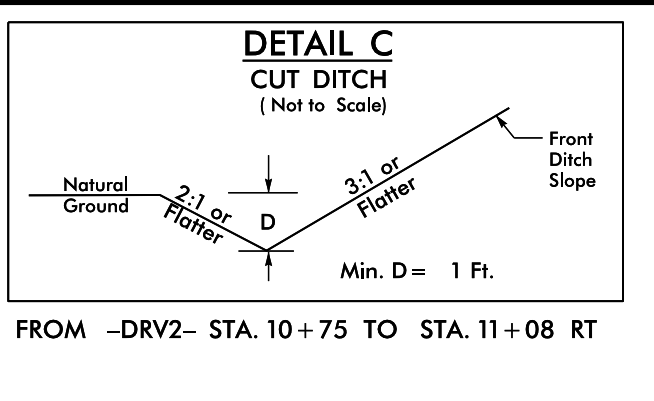
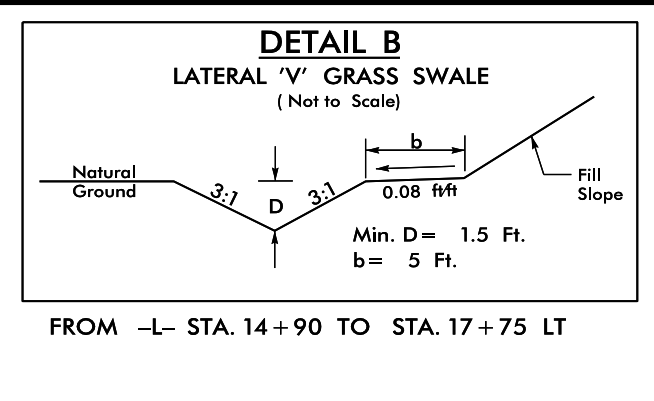
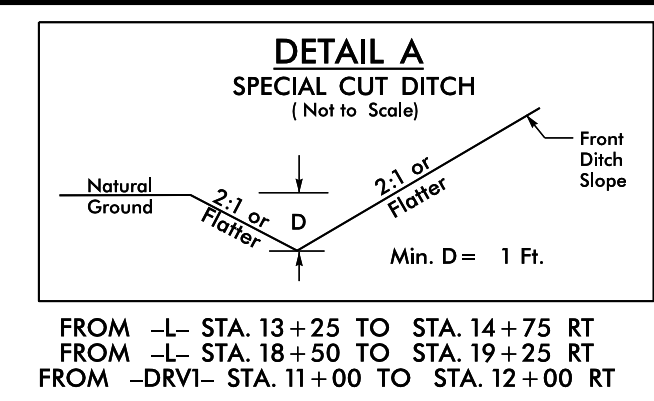
PHASE II

6. CONSTRUCT REMAINING ROADWAY ALIGNMENT: FROM 12+40 TO 12+62 -DRV1-, FROM 10+45 TO 12+45 -L-, AND FROM 14+43 TO 14+75 -L-.
7. SHIFT TRAFFIC TO NEWLY CONSTRUCTED ROADWAY.
8. REMOVE EXISTING BRIDGE, ROADWAY, AND TEMPORARY SHORING.
9. CONSTRUCT PROPOSED OUTLET WINGWALLS AND OUTLET CHANNEL IMPROVEMENTS.
10. REMOVE IMPERVIOUS DIKES AND 30" TEMPORARY PIPE, ALLOWING FLOW THROUGH PROPOSED CULVERT.
11. REMOVE ANY REMAINING SPECIAL STILLING BASIN(S), AND COMPLETE ROADWAY.



PROJECT REFERENCE NO. B-4848	SHEET NO. EC-6/CONST.4
RW SHEET NO.	HYDRAULICS ENGINEER
ROADWAY DESIGN ENGINEER	

NAD 83/2011



32 x 15 x 3
1.5 inch Skimmer
with 0.500 inch
Orifice Diameter
4 ft. weir
ID 4.1

61 x 30 x 3
1.5 inch Skimmer
with 1.250 inch
Orifice Diameter
7 ft. weir
ID 4.3

43 x 21 x 3
1.5 inch Skimmer
with 0.750 inch
Orifice Diameter
4 ft. weir
ID 4.2

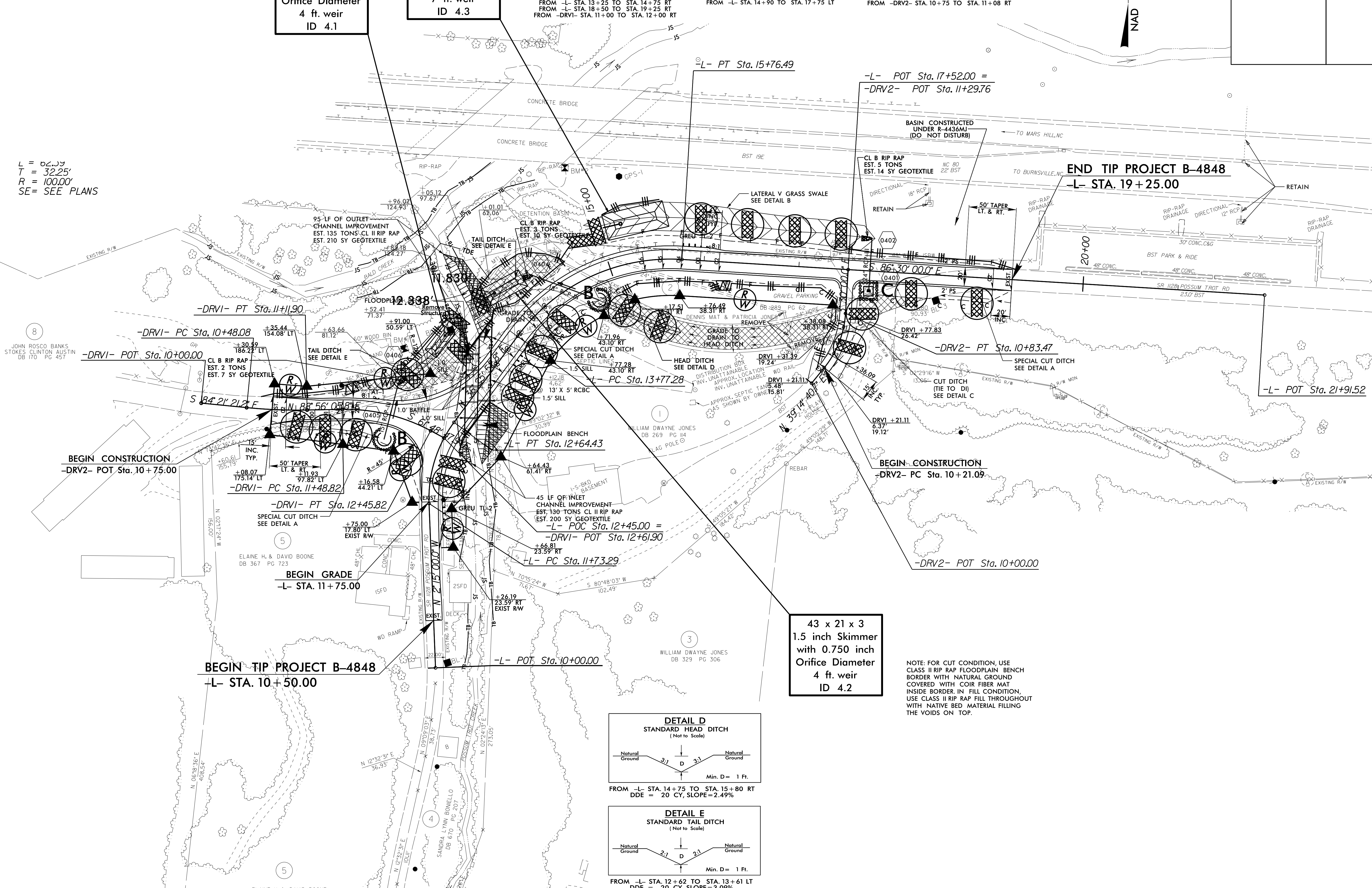
L = 62.33'
T = 32.25'
R = 100.00'
SE = SEE PLANS

NOTE: FOR CUT CONDITION, USE CLASS II RIP RAP FLOODPLAIN 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.

(SCALE 1" = 10')

8/17/99

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BEGIN TIP PROJECT B-4848
-L- STA. 10+50.00

END TIP PROJECT B-4848
-L- STA. 19+25.00

BEGIN CONSTRUCTION
-DRV2- POT Sta. 10+75.00

BEGIN CONSTRUCTION
-DRV2- PC Sta. 10+21.09

BEGIN GRADE
-L- STA. 11+75.00

-DRV2- POT Sta. 10+00.00

-L- POT Sta. 10+00.00

-L- POT Sta. 17+52.00 =
-DRV2- POT Sta. 11+29.76

-DRV1- PC Sta. 10+48.08

-DRV2- PT Sta. 10+83.47

-L- POT Sta. 21+91.52

ELAINE H. & DAVID BOONE
DB 367 PG 723

WILLIAM DWAYNE JONES
DB 329 PG 306

ELAINE H. & DAVID BOONE
DB 367 PG 723

-L- PC Sta. 11+73.29

-DRV1- POT Sta. 12+61.90

-L- PC Sta. 12+45.00 =

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