

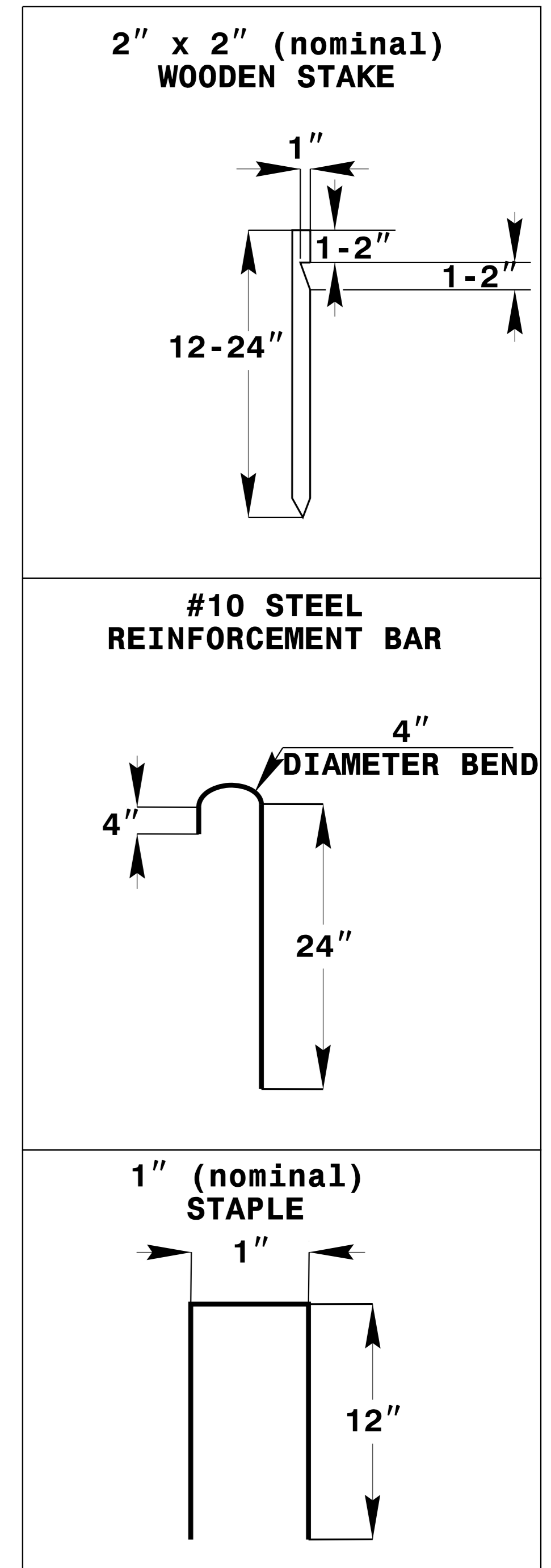
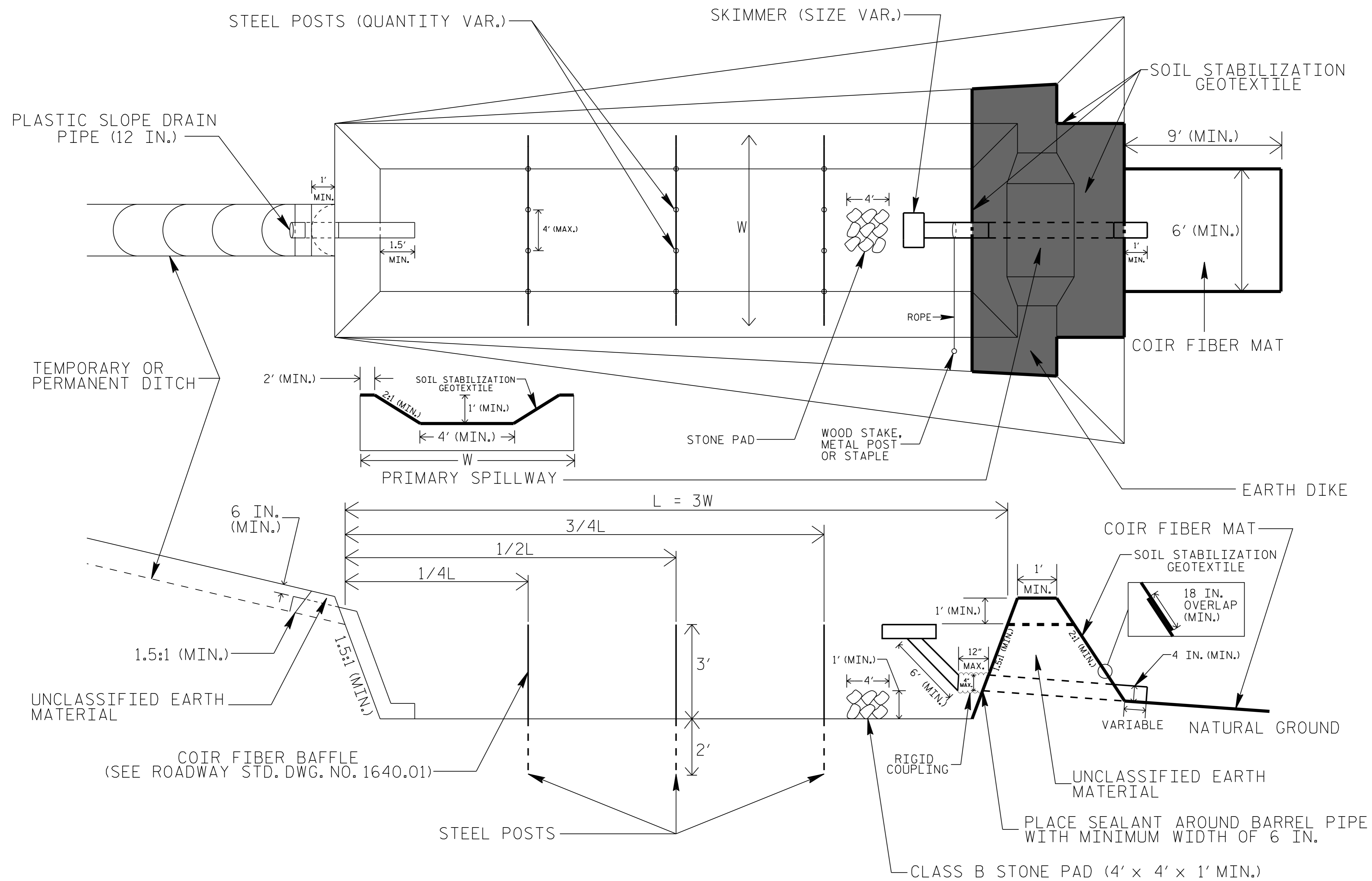
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PROJECT REFERENCE NO. B-5345	SHEET NO. EC-2
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

SKIMMER BASIN WITH BAFFLES DETAIL



COIR FIBER MAT ANCHOR OPTIONS

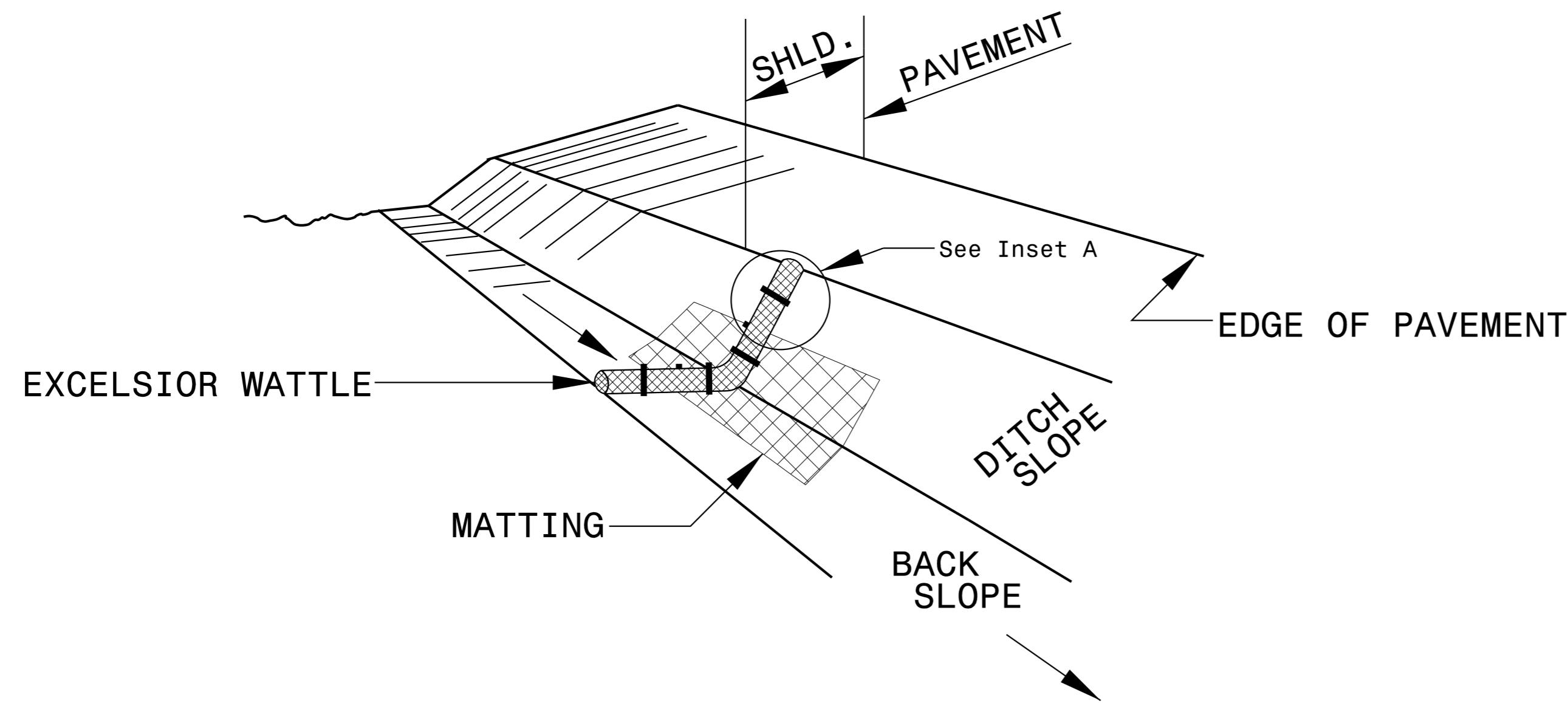
NOTES

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.).

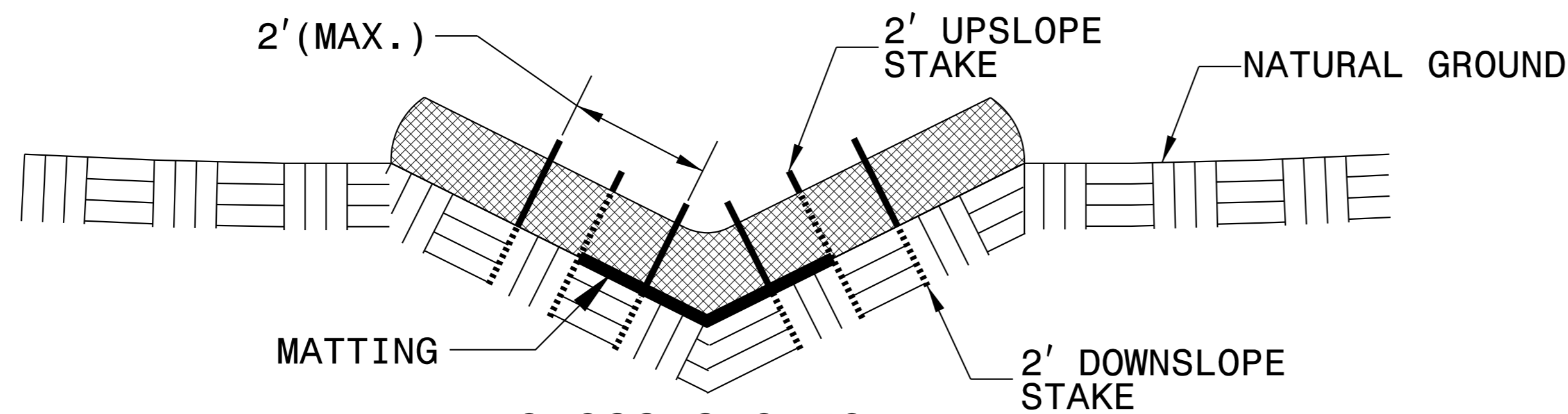
NOT TO SCALE

Kimley»Horn <small>© 2015</small> 421 FAYETTEVILLE STREET, SUITE 600 RALEIGH, NC 27601 <small>RIGHT-OF-WAY REV.</small> <small>CONST. REV.</small>	PROJECT REFERENCE NO.	SHEET NO.
	B-5345	EC-2A
	ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

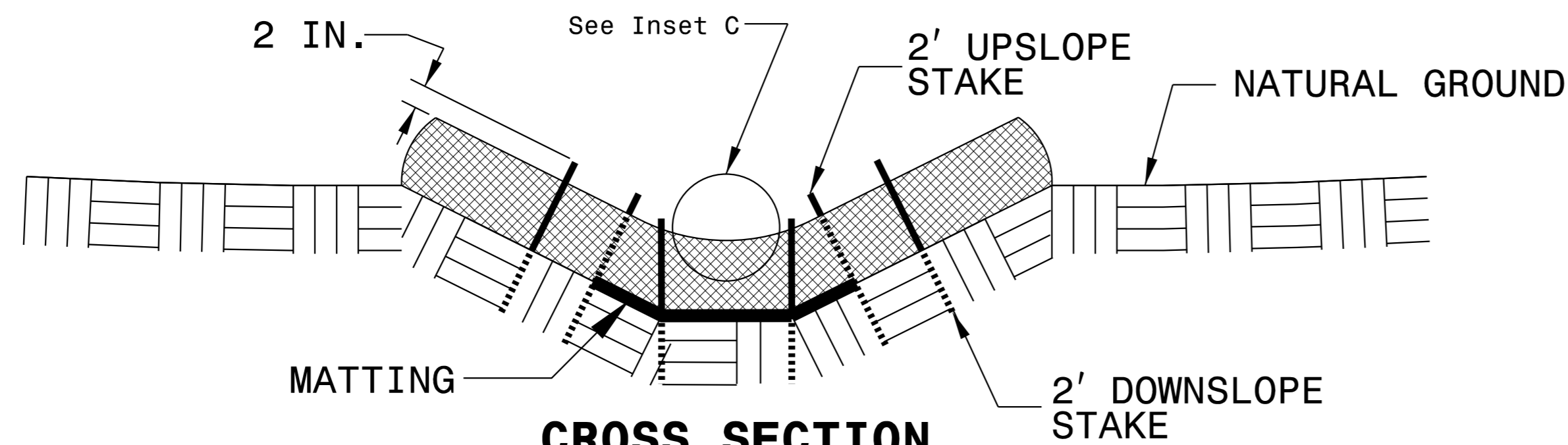
WATTLE WITH POLYACRYLAMIDE (PAM) DETAIL



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.

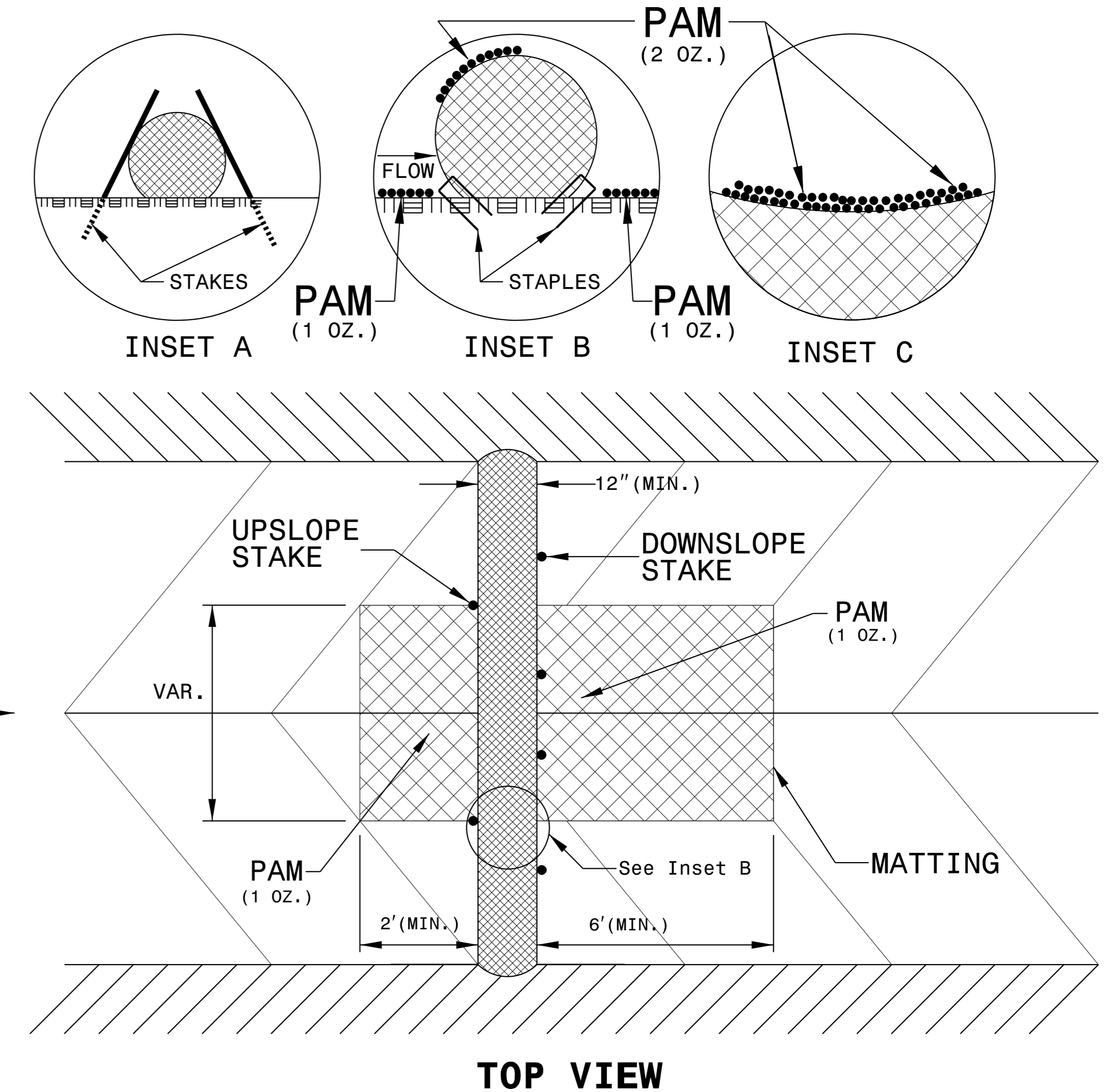
PROVIDE STAPLES MADE OF 0.125 IN. DIAMETER STEEL WIRE FORMED INTO A U SHAPE NOT LESS THAN 12" IN LENGTH.

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

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

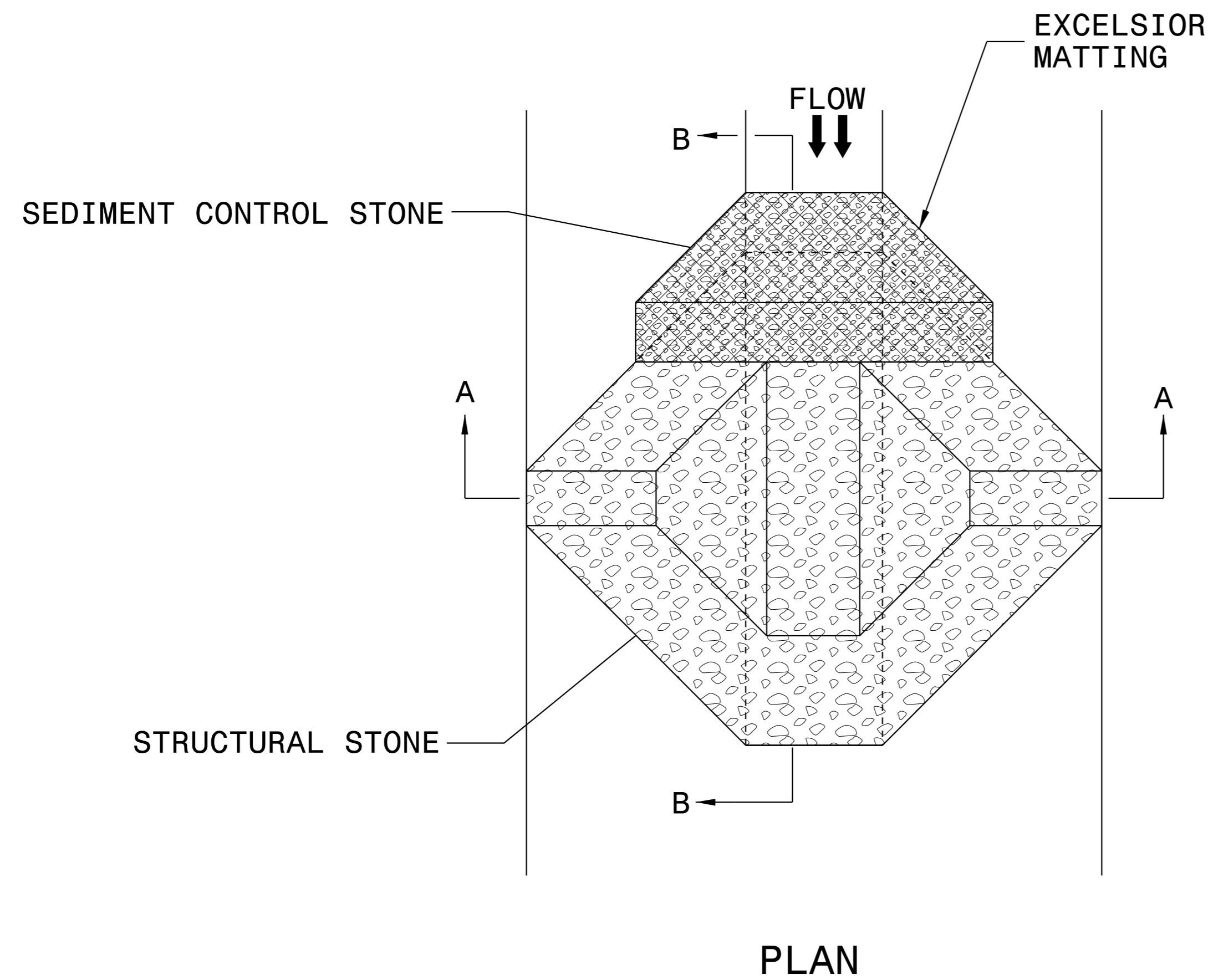
NOTES:

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

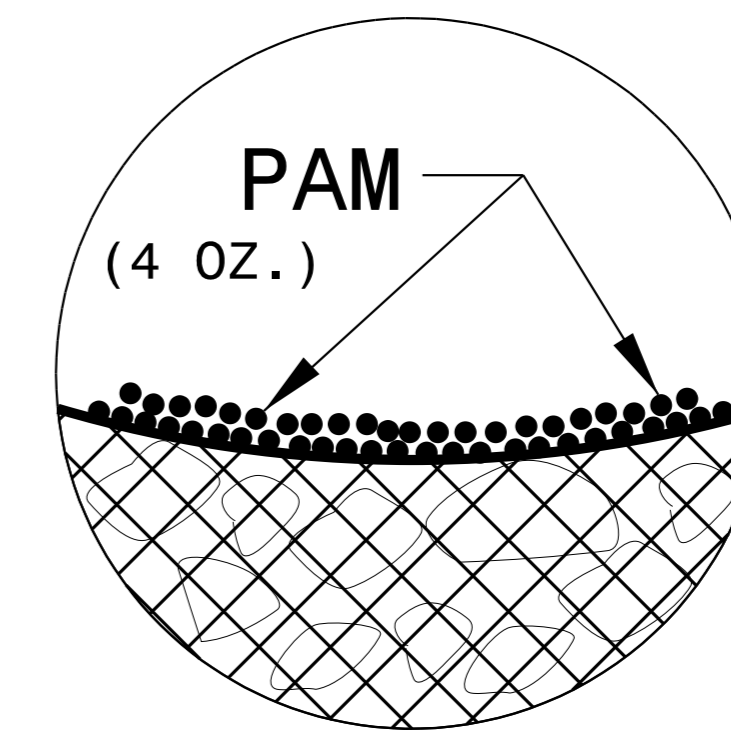
USE EXCELSIOR FOR MATTING MATERIAL AND ANCHOR MATTING SECTION AT TOP AND BOTTOM WITH CLASS B STONE.

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.

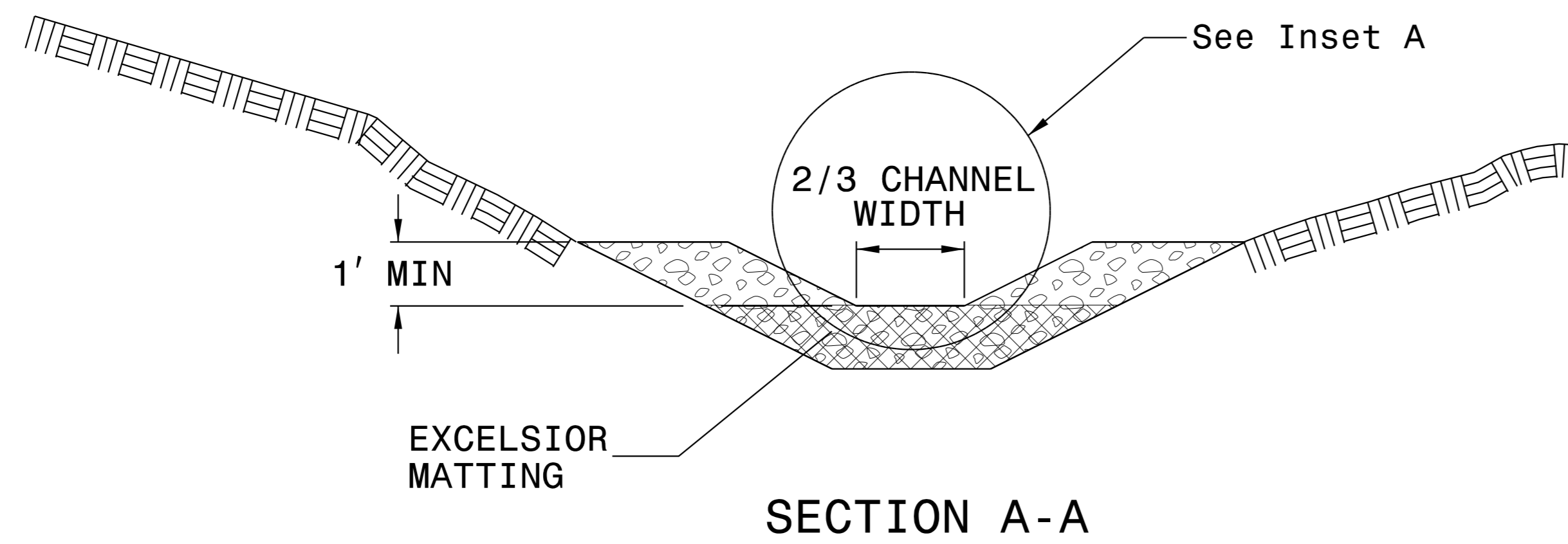
INITIALLY APPLY 4 OUNCES OF POLYACRYLAMIDE (PAM) TO TOP OF MATTING SECTION AND AFTER EVERY RAINFALL EVENT THAT EQUALS OR EXCEEDS 0.50 INCHES.



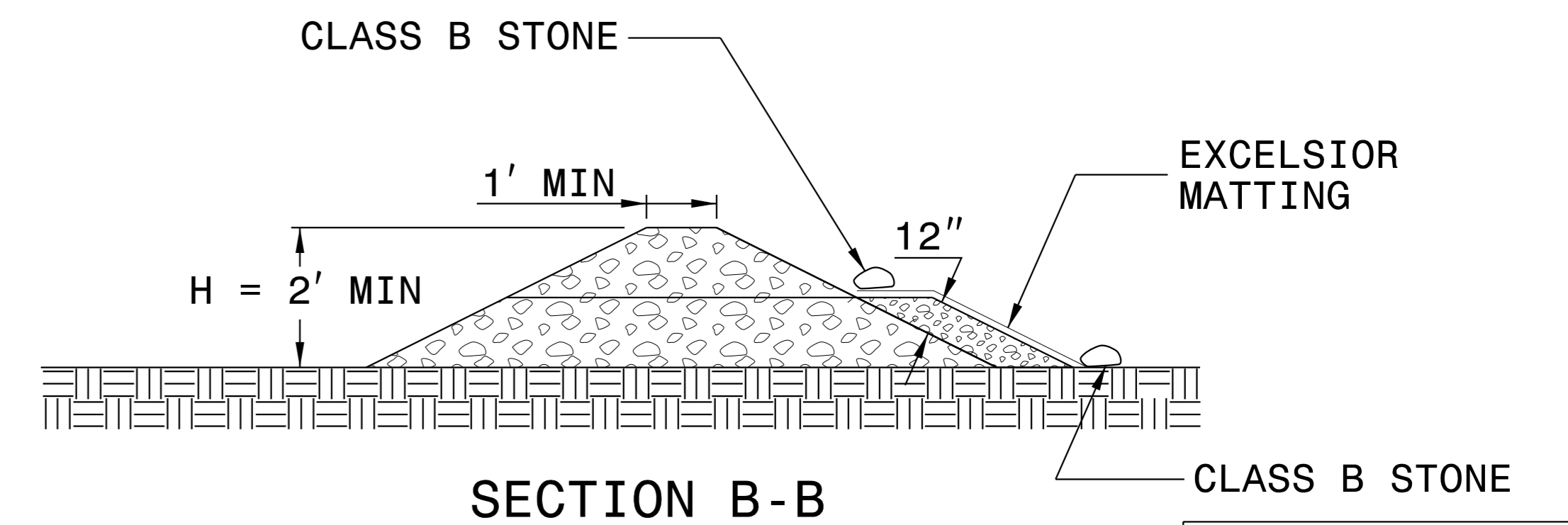
PLAN



INSET A



SECTION A-A



SECTION B-B

NOT TO SCALE

DIVISION OF HIGHWAYS
STATE OF NORTH CAROLINA



PROJECT REFERENCE NO. <i>B-5345</i>	SHEET NO. <i>EC-3</i>
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
RIGHT-OF-WAY REV.	
CONST. REV.	

SOIL STABILIZATION SUMMARY SHEET

MATTING FOR EROSION CONTROL

PERMANENT SOIL REINFORCEMENT MAT

CONST SHEET NO.	LINE	FROM STATION	TO STATION	SIDE	ESTIMATE (SY)
SLOPES:					
4	-L-	13+50	16+15	L	145
4	-L-	12+79	16+25	R	690
4	-L-	16+91	19+00	L	80
4	-L-	16+91	20+00	R	465
4	-L-	15+38	15+89	R	95
4	-L-	17+62	17+93	R	95
4	-L-	17+62	18+05	R	95
5	-L-	14+75	16+25	R	75
5	-L-	13+50	16+58	R	735
5	-L-	16+96	18+50	R	65
5	-L-	16+86	20+19	R	455
DITCHES:					
4	-L-	11+00	12+75	R	140
5	-LDET-	15+75	16+50	R	50
SUBTOTAL					3185
MISCELLANEOUS MATTING TO BE INSTALLED AS DIRECTED BY THE ENGINEER					2000
TOTAL					5185
SAY					5200

CONST SHEET NO.	LINE	FROM STATION	TO STATION	SIDE	ESTIMATE (SY)
DITCHES:					
4	-L-	18+25	19+75	R	110
5	-LDET-	16+50	17+54	R	65
4	-L-	18+50	18+90	L	20
5	-LDET-	12+00	13+47	L	65
5	-LDET-	14+36	15+75	L	65
SUBTOTAL					325
ADDITIONAL PSRM TO BE INSTALLED					50
TOTAL					375
SAY					400

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2/20/2017

DIVISION OF HIGHWAYS
STATE OF NORTH CAROLINA

Kimley»Horn <small>©2017</small>		PROJECT REFERENCE NO. <i>B-5345</i>	SHEET NO. <i>EC-3A</i>
<small>421 FAYETTEVILLE STREET, SUITE 600 RALEIGH, NC 27601</small>		ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
<small>RIGHT-OF-WAY REV.</small>			
<small>CONST. REV.</small>			

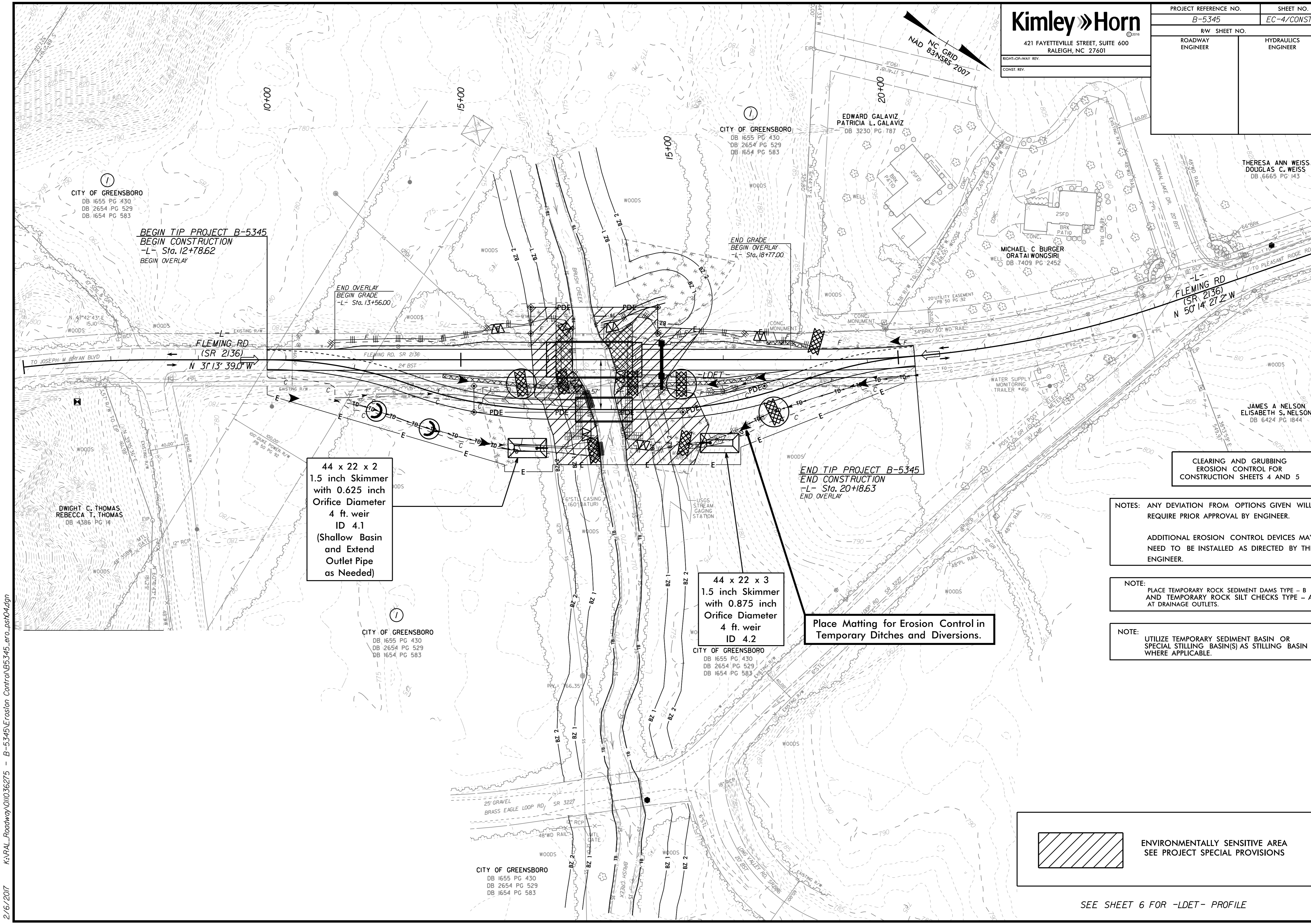
SOIL STABILIZATION TIMEFRAMES

<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.

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2/20/2017

PROJECT REFERENCE NO. B-5345	SHEET NO. EC-4/CONST. 4
RW SHEET NO.	
ROADWAY ENGINEER	HYDRAULICS ENGINEER



CITY OF GREENSBORO
DB 1655 PG 430
DB 2654 PG 529
DB 1654 PG 583

BEGIN TIP PROJECT B-5345
BEGIN CONSTRUCTION
-L- Sta. 12+78.62
BEGIN OVERLAY

END OVERLAY
BEGIN GRADE
-L- Sta. 13+56.00

END GRADE
BEGIN OVERLAY
-L- Sta. 18+77.00

END TIP PROJECT B-5345
END CONSTRUCTION
-L- Sta. 20+18.63
END OVERLAY

44 x 22 x 2
1.5 inch Skimmer
with 0.625 inch
Orifice Diameter
4 ft. weir
ID 4.1
(Shallow Basin
and Extend
Outlet Pipe
as Needed)

44 x 22 x 3
1.5 inch Skimmer
with 0.875 inch
Orifice Diameter
4 ft. weir
ID 4.2

Place Matting for Erosion Control in
Temporary Ditches and Diversions.

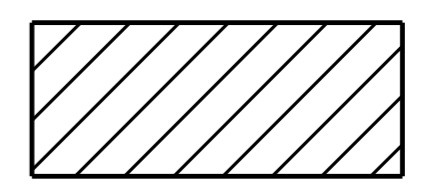
CLEARING AND GRUBBING
EROSION CONTROL FOR
CONSTRUCTION SHEETS 4 AND 5

NOTES: ANY DEVIATION FROM OPTIONS GIVEN WILL
REQUIRE PRIOR APPROVAL BY ENGINEER.

ADDITIONAL EROSION CONTROL DEVICES MAY
NEED TO BE INSTALLED AS DIRECTED BY THE
ENGINEER.

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

NOTE:
UTILIZE TEMPORARY SEDIMENT BASIN OR
SPECIAL STILLING BASIN(S) AS STILLING BASIN
WHERE APPLICABLE.

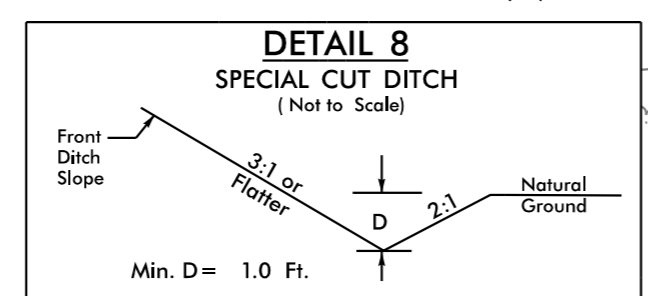
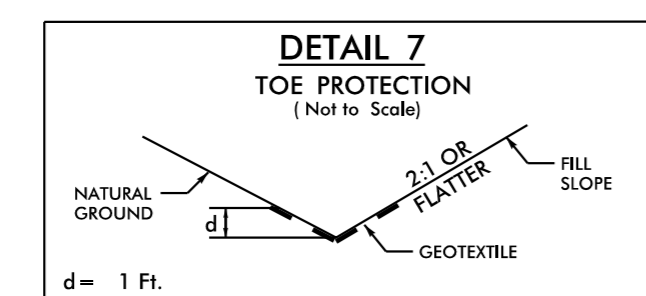
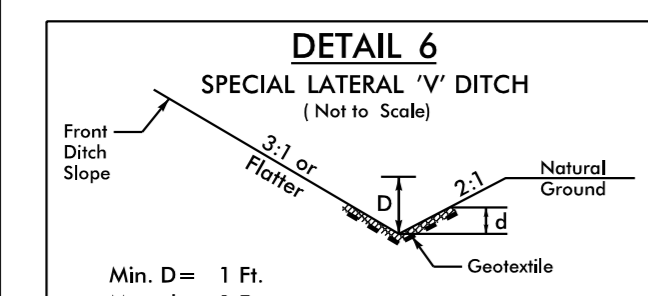
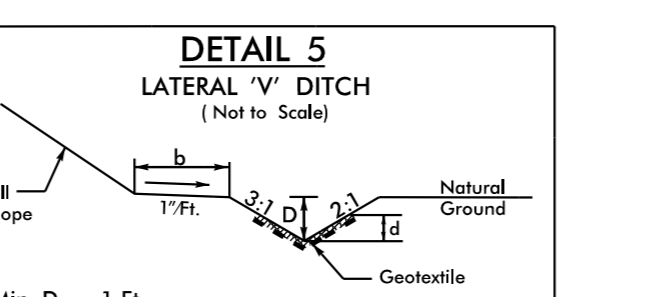
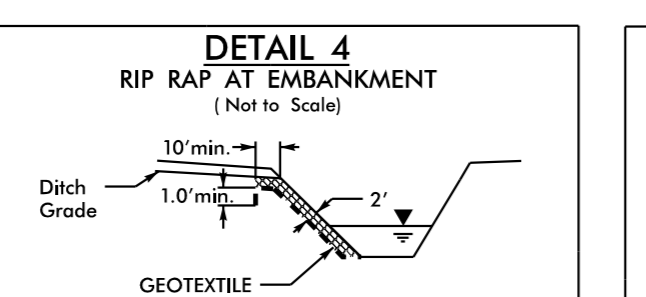
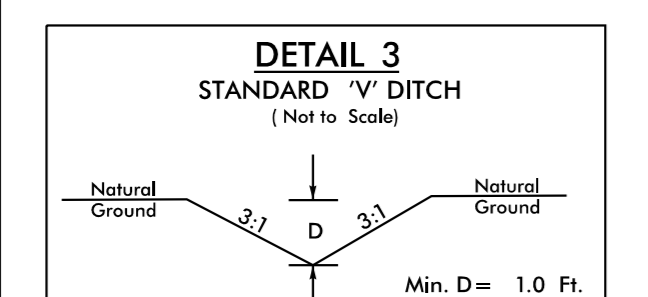
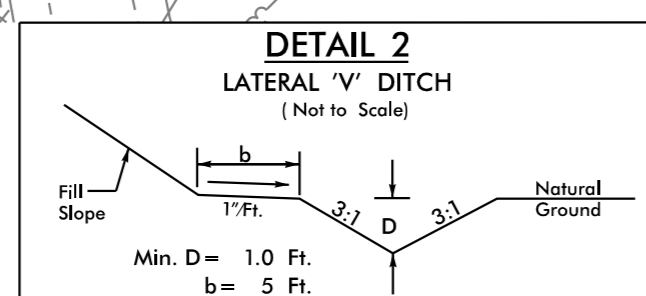
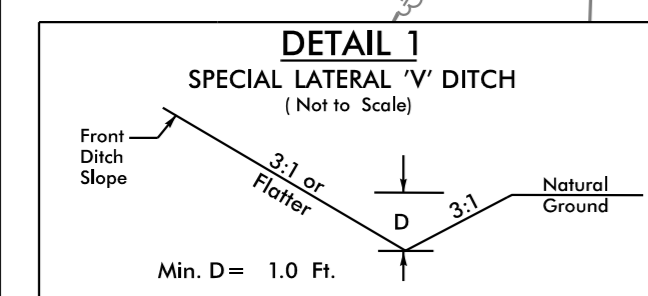
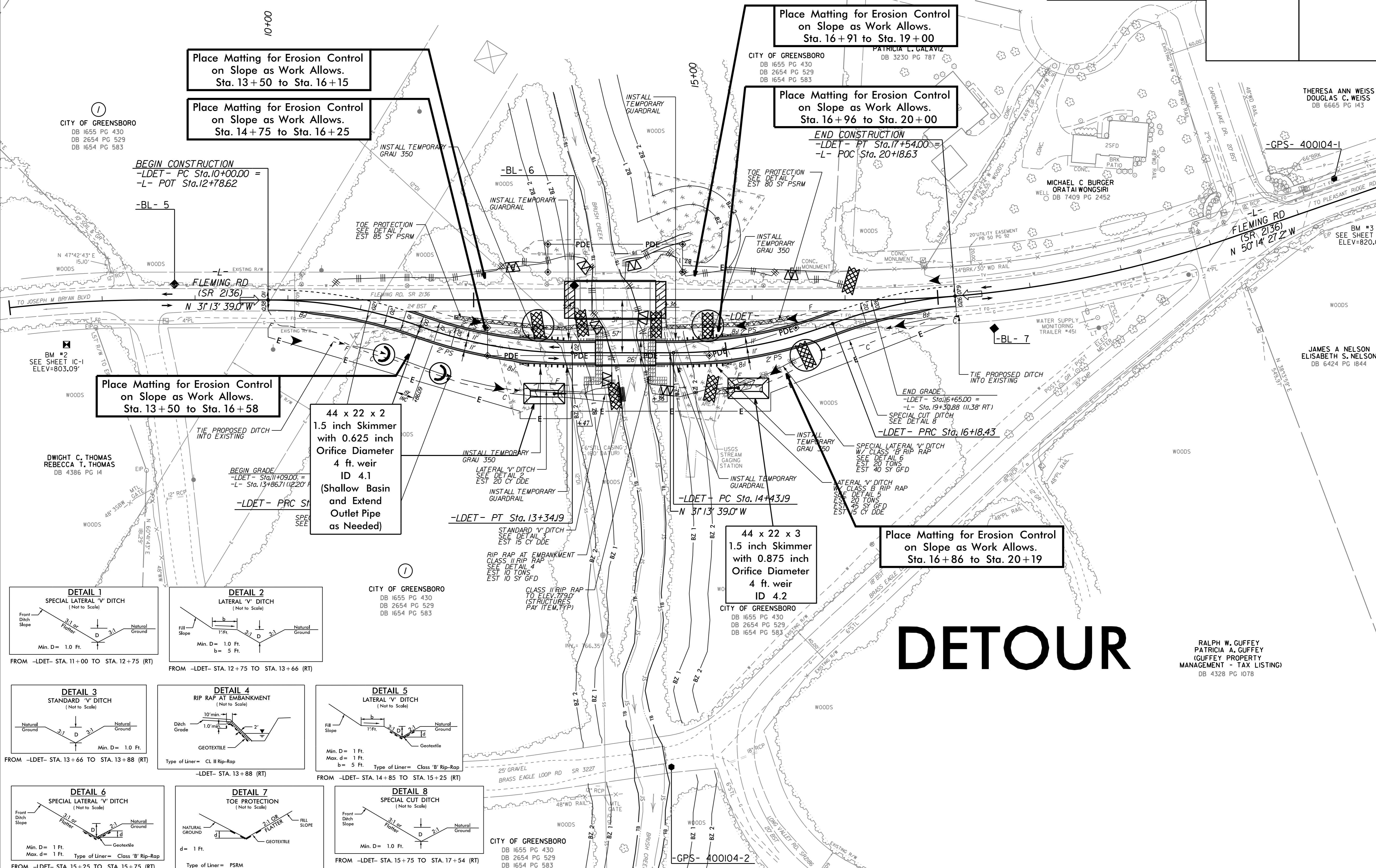
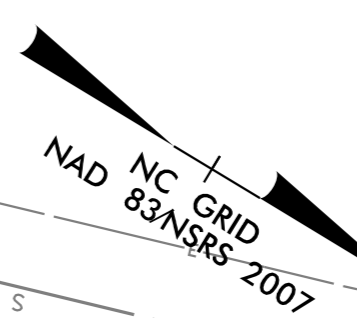


ENVIRONMENTALLY SENSITIVE AREA
SEE PROJECT SPECIAL PROVISIONS

SEE SHEET 6 FOR -LDET- PROFILE

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PROJECT REFERENCE NO. B-5345	SHEET NO. EC-5/CONST. 5
ROADWAY ENGINEER	HYDRAULICS ENGINEER



DETOUR

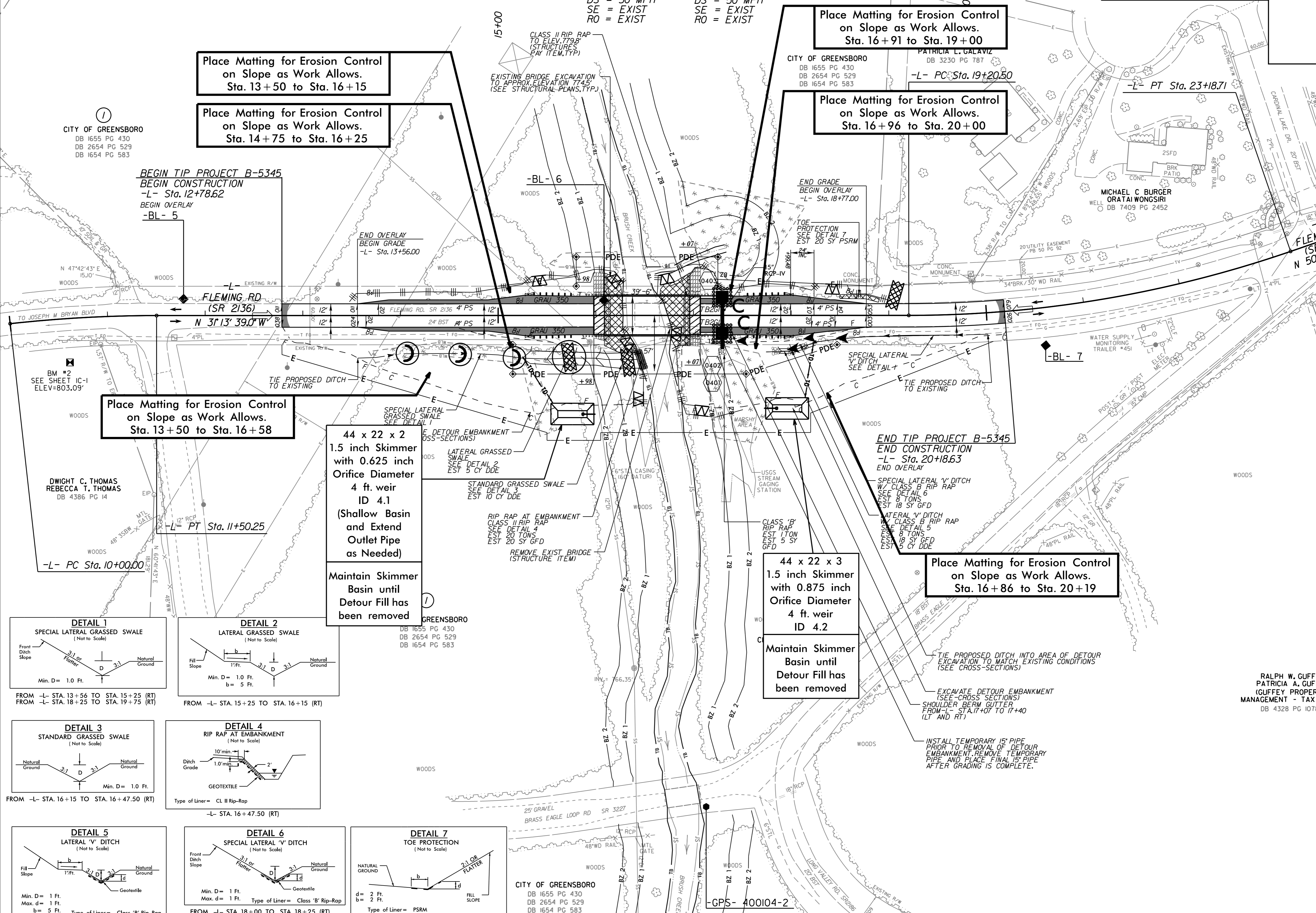
RALPH W. GUFFEY
PATRICIA A. GUFFEY
(GUFFEY PROPERTY
MANAGEMENT - TAX LISTING)
DB 4328 PG 1078

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PROJECT REFERENCE NO.	SHEET NO.
B-5345	EC-6/CONST. 4
RW SHEET NO.	HYDRAULICS ENGINEER
ROADWAY ENGINEER	

PI Sta 10+75.20 Δ = 6' 20" 21" (RT)
D = 4' 13" 08.9"
L = 150.25'
T = 75.20'
R = 1,358.00'
DS = 50 MPH
SE = EXIST
RO = EXIST

PI Sta 21+21.45 Δ = 19' 00" 48.2" (LT)
D = 4' 46" 28.7"
L = 398.22'
T = 200.96'
R = 1,200.00'
DS = 50 MPH
SE = EXIST
RO = EXIST



Place Matting for Erosion Control on Slope as Work Allows. Sta. 13+50 to Sta. 16+15

Place Matting for Erosion Control on Slope as Work Allows. Sta. 14+75 to Sta. 16+25

Place Matting for Erosion Control on Slope as Work Allows. Sta. 16+91 to Sta. 19+00

Place Matting for Erosion Control on Slope as Work Allows. Sta. 16+96 to Sta. 20+00

Place Matting for Erosion Control on Slope as Work Allows. Sta. 13+50 to Sta. 16+58

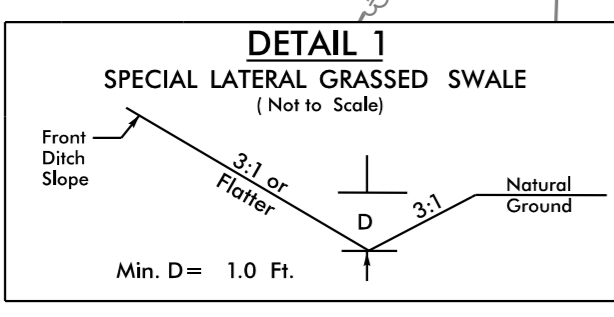
Place Matting for Erosion Control on Slope as Work Allows. Sta. 16+86 to Sta. 20+19

44 x 22 x 2
1.5 inch Skimmer with 0.625 inch Orifice Diameter
4 ft. weir
ID 4.1
(Shallow Basin and Extend Outlet Pipe as Needed)

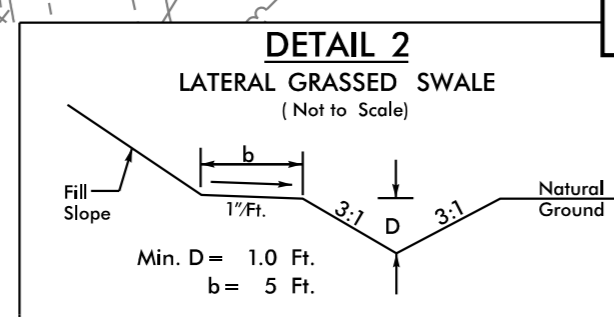
44 x 22 x 3
1.5 inch Skimmer with 0.875 inch Orifice Diameter
4 ft. weir
ID 4.2

Maintain Skimmer Basin until Detour Fill has been removed

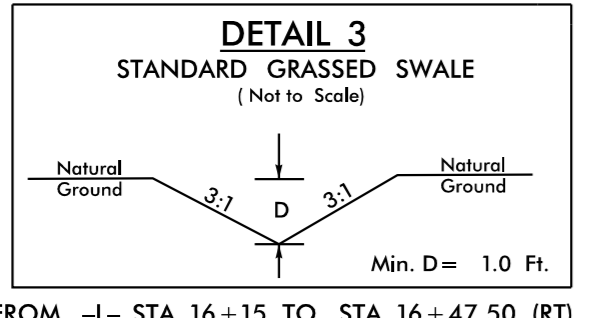
Maintain Skimmer Basin until Detour Fill has been removed



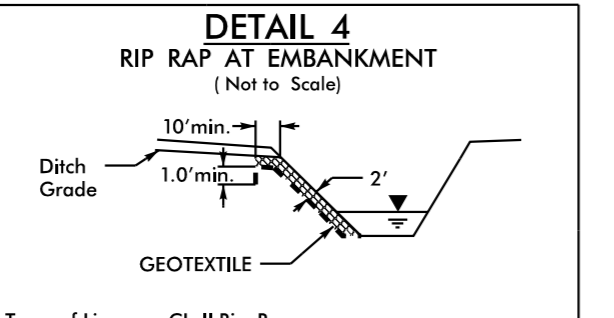
FROM -L- STA. 13+56 TO STA. 15+25 (RT)
FROM -L- STA. 18+25 TO STA. 19+75 (RT)



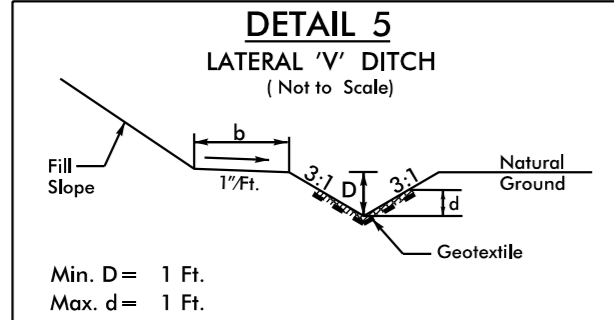
FROM -L- STA. 15+25 TO STA. 16+15 (RT)



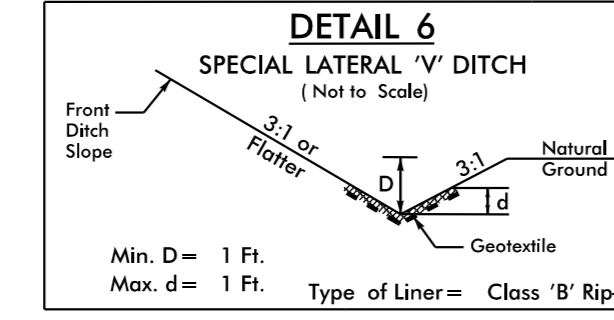
FROM -L- STA. 16+15 TO STA. 16+47.50 (RT)



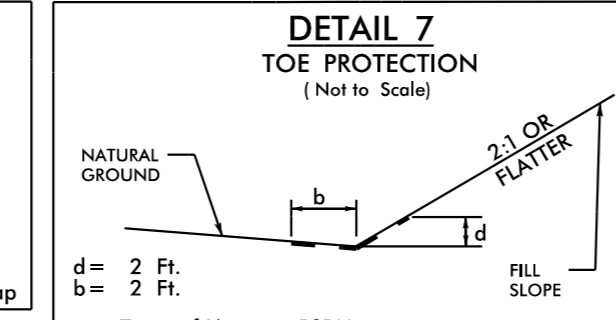
FROM -L- STA. 16+47.50 (RT)



FROM -L- STA. 17+75 TO STA. 18+00 (RT)



FROM -L- STA. 18+00 TO STA. 18+25 (RT)



FROM -L- STA. 18+50 TO STA. 18+90 (LT)

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