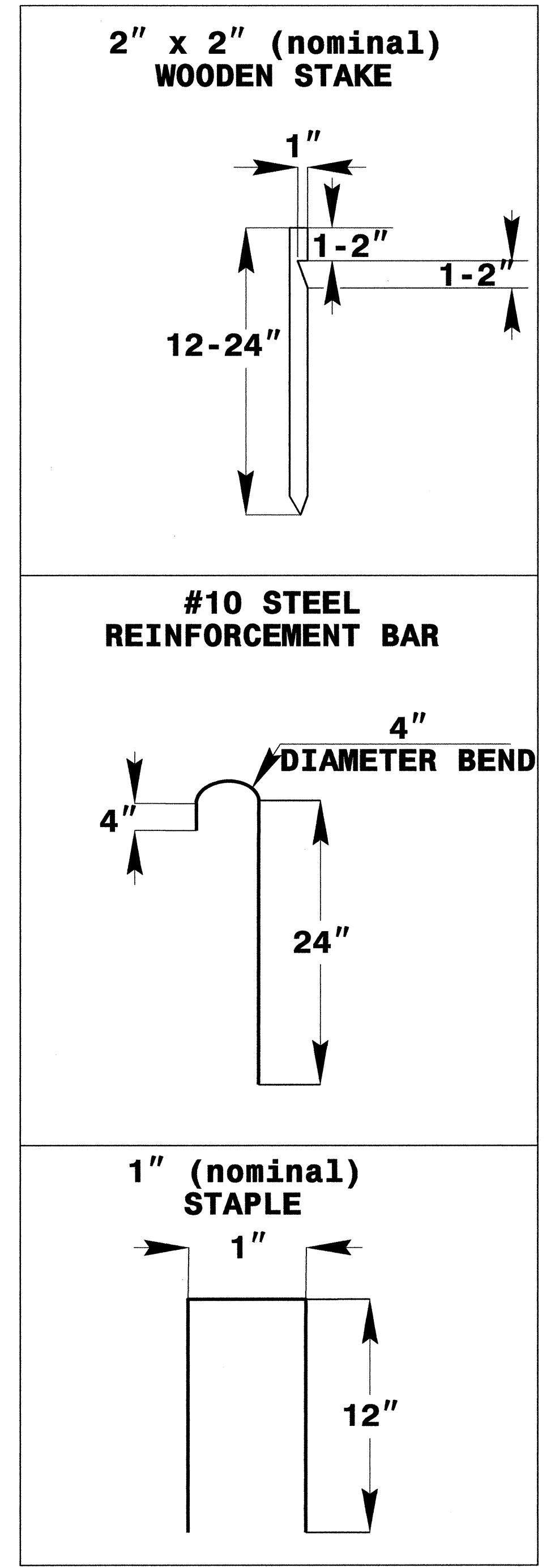
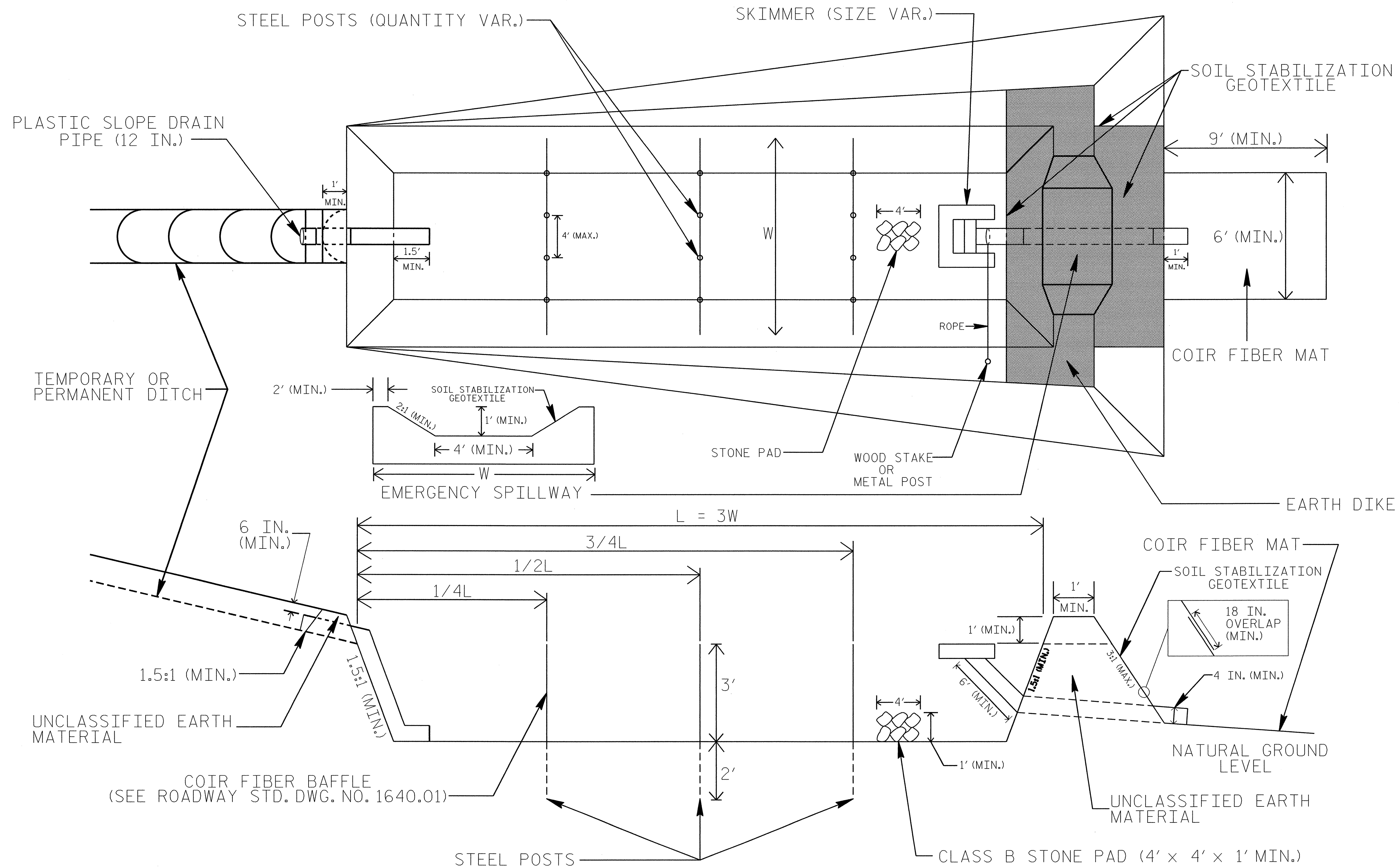


PROJECT REFERENCE NO. R-2719AA	SHEET NO. EC-02
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

SKIMMER BASIN WITH BAFFLES DETAIL



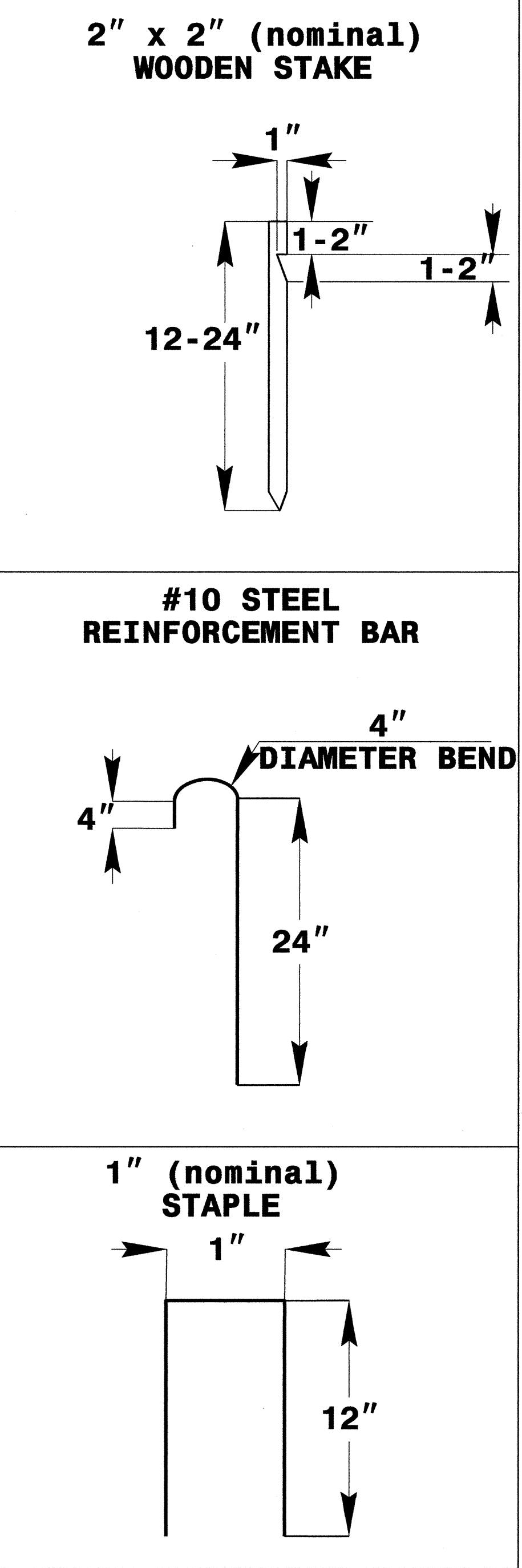
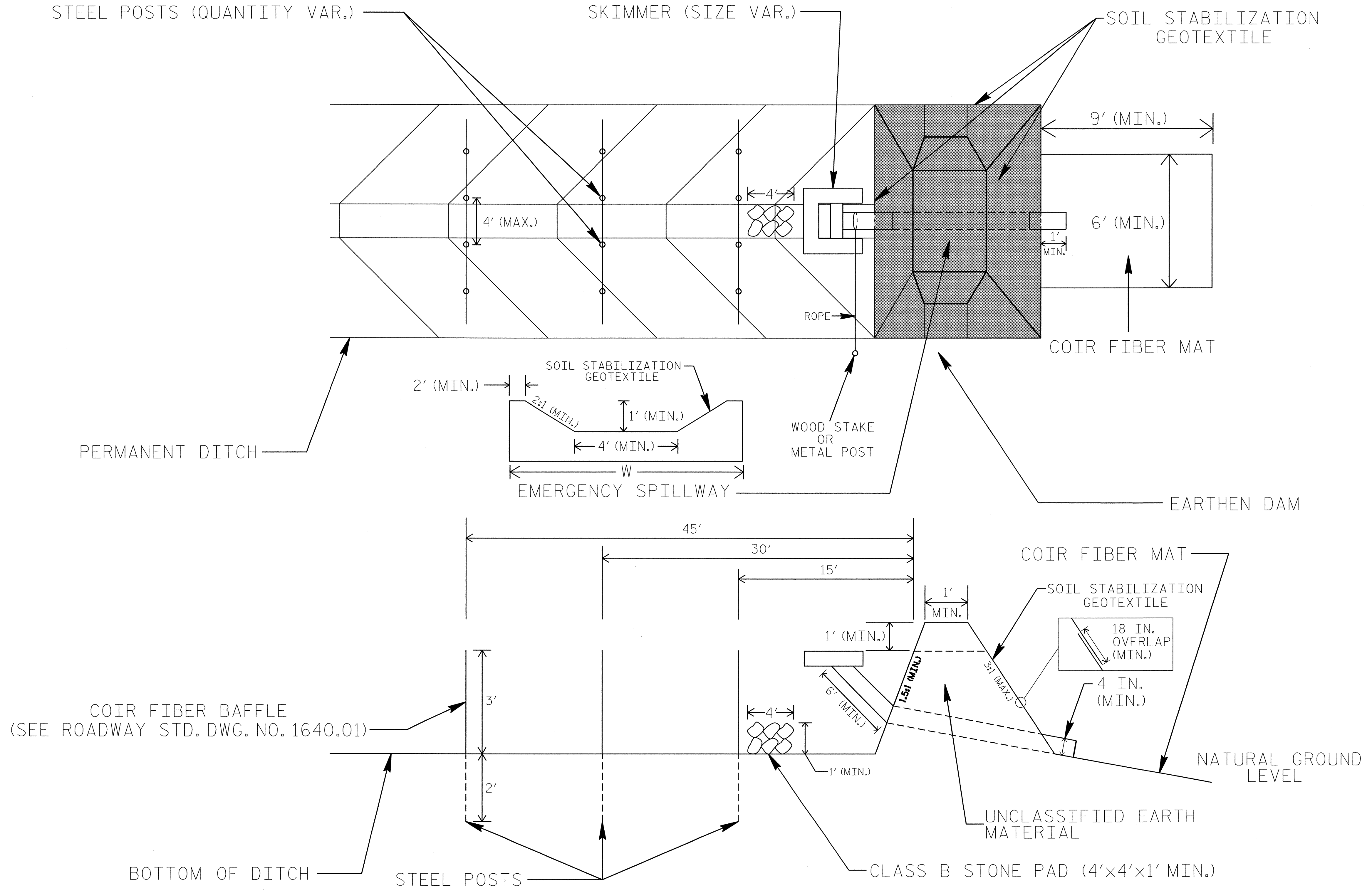
NOTES

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 EMERGENCY SPILLWAY 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 AS DIRECTED.
6. SOIL STABILIZATION GEOTEXTILE FOR EMERGENCY SPILLWAY SHALL BE ONE CONTINUOUS PIECE OF MATERIAL OR OVERLAPPED 18 IN. (MIN.).

NOT TO SCALE

PROJECT REFERENCE NO. R-2719AA	SHEET NO. EC-2A
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

EARTHEN DAM WITH SKIMMER



COIR FIBER MAT ANCHOR OPTIONS

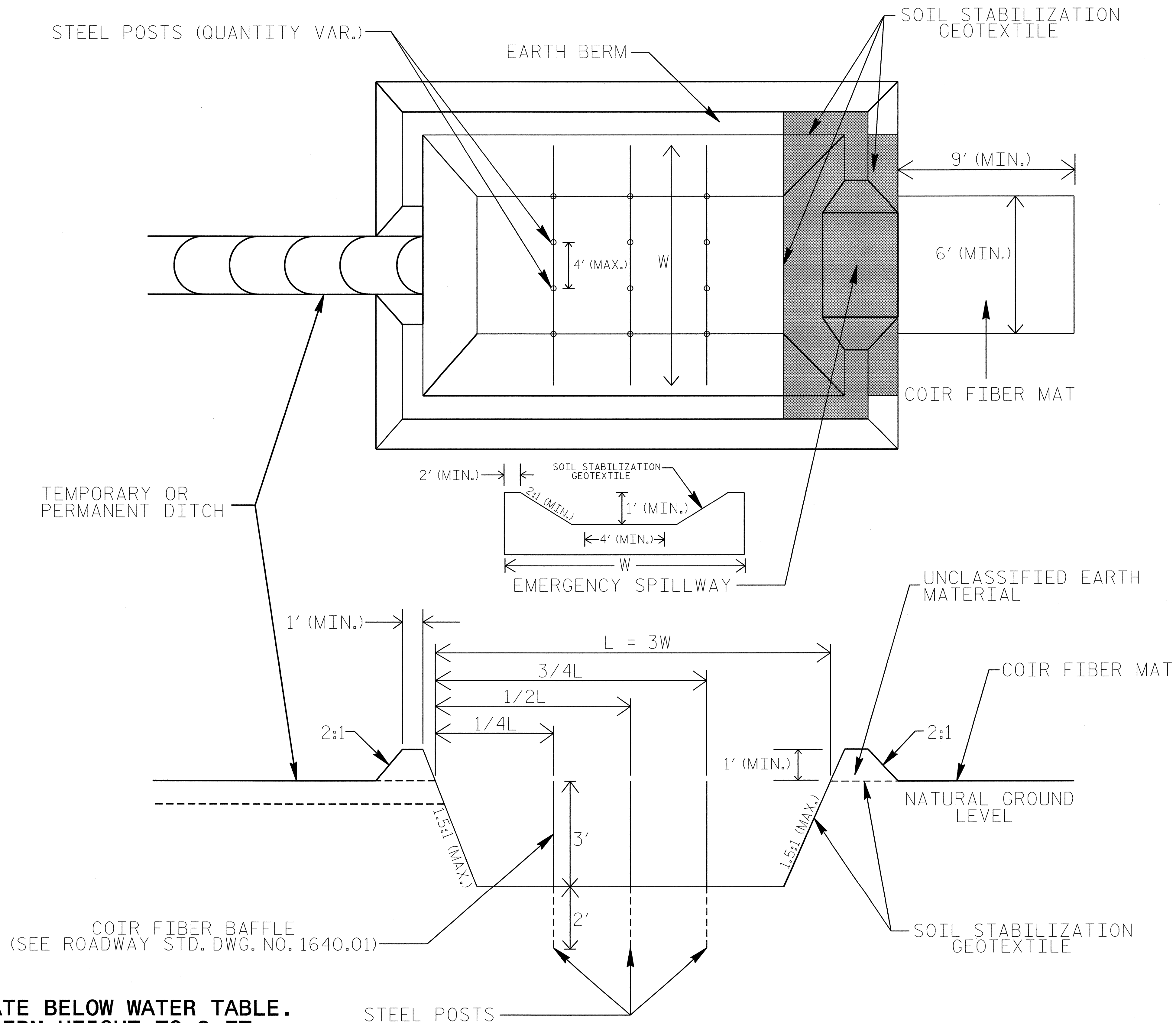
NOTES

1. LIMIT EARTHEN DAM HEIGHT TO 5 FT.
2. DETERMINE EMERGENCY SPILLWAY LENGTH (FT.) USING $Q/0.8$, WHERE Q IS FLOW RATE (CFS) INTO BASIN.
3. SOIL STABILIZATION GEOTEXTILE FOR EMERGENCY SPILLWAY SHALL BE ONE CONTINUOUS PIECE OF MATERIAL OR OVERLAPPED 18 IN. (MIN.).

NOT TO SCALE

INFILTRATION BASIN WITH BAFFLES DETAIL

PROJECT REFERENCE NO. R-2719AA	SHEET NO. EC-2B
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER



2" x 2" (nominal) WOODEN STAKE

#10 STEEL REINFORCEMENT BAR

1" (nominal) STAPLE

COIR FIBER MAT ANCHOR OPTIONS

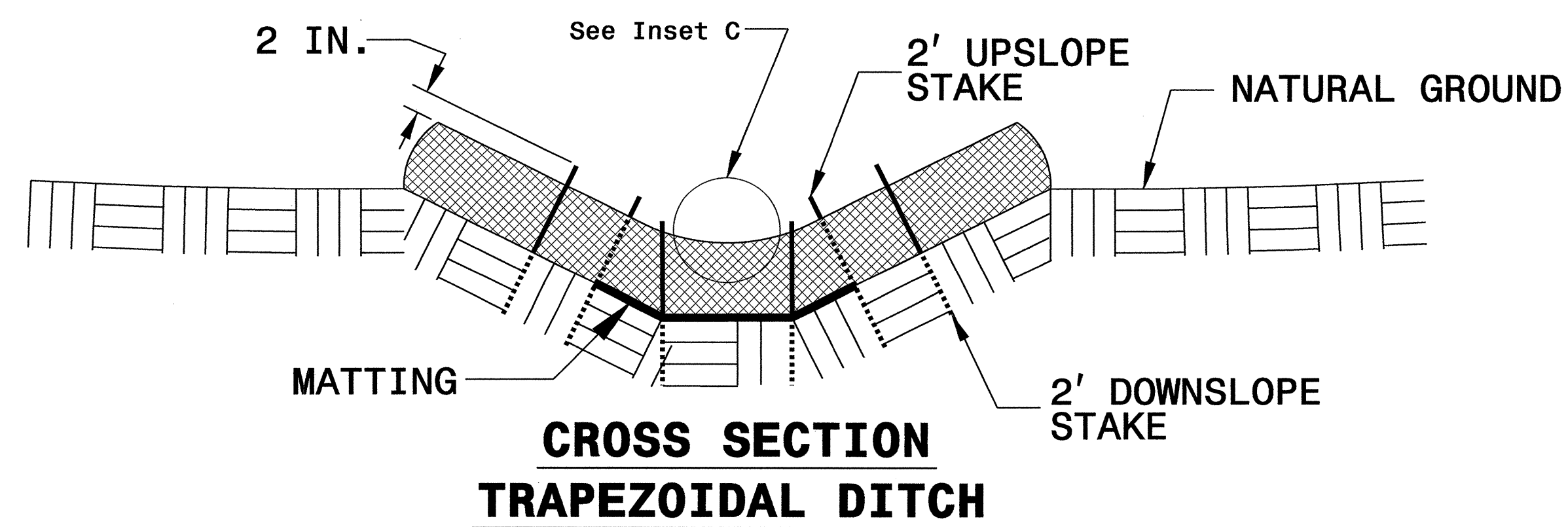
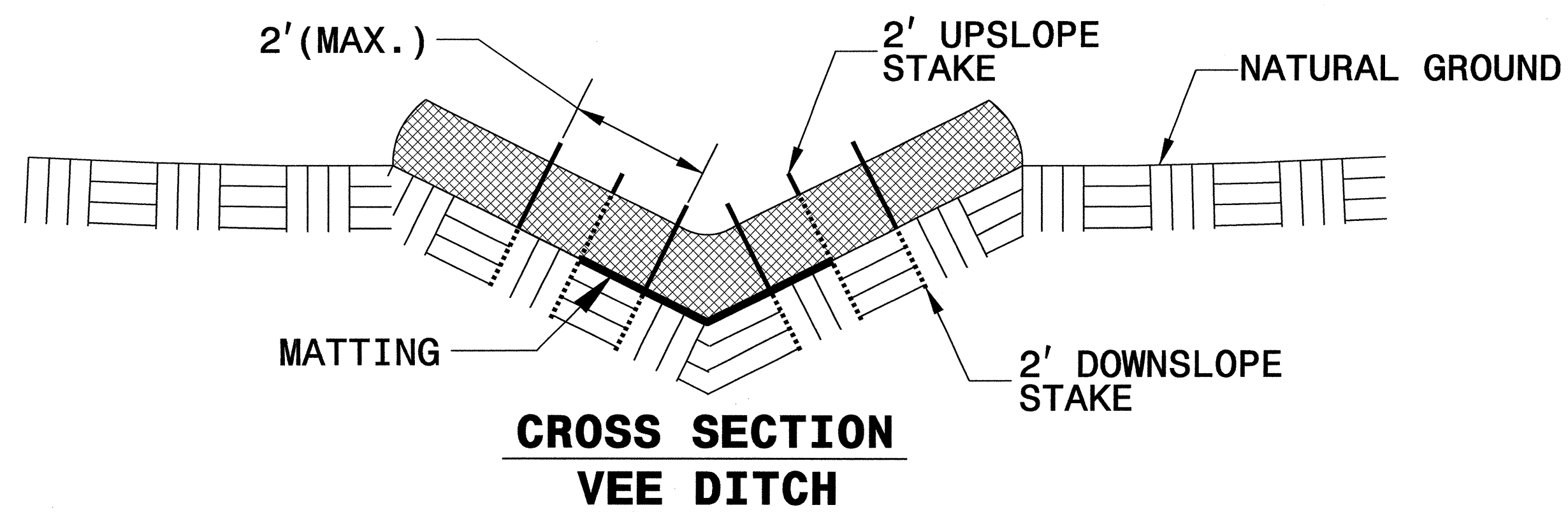
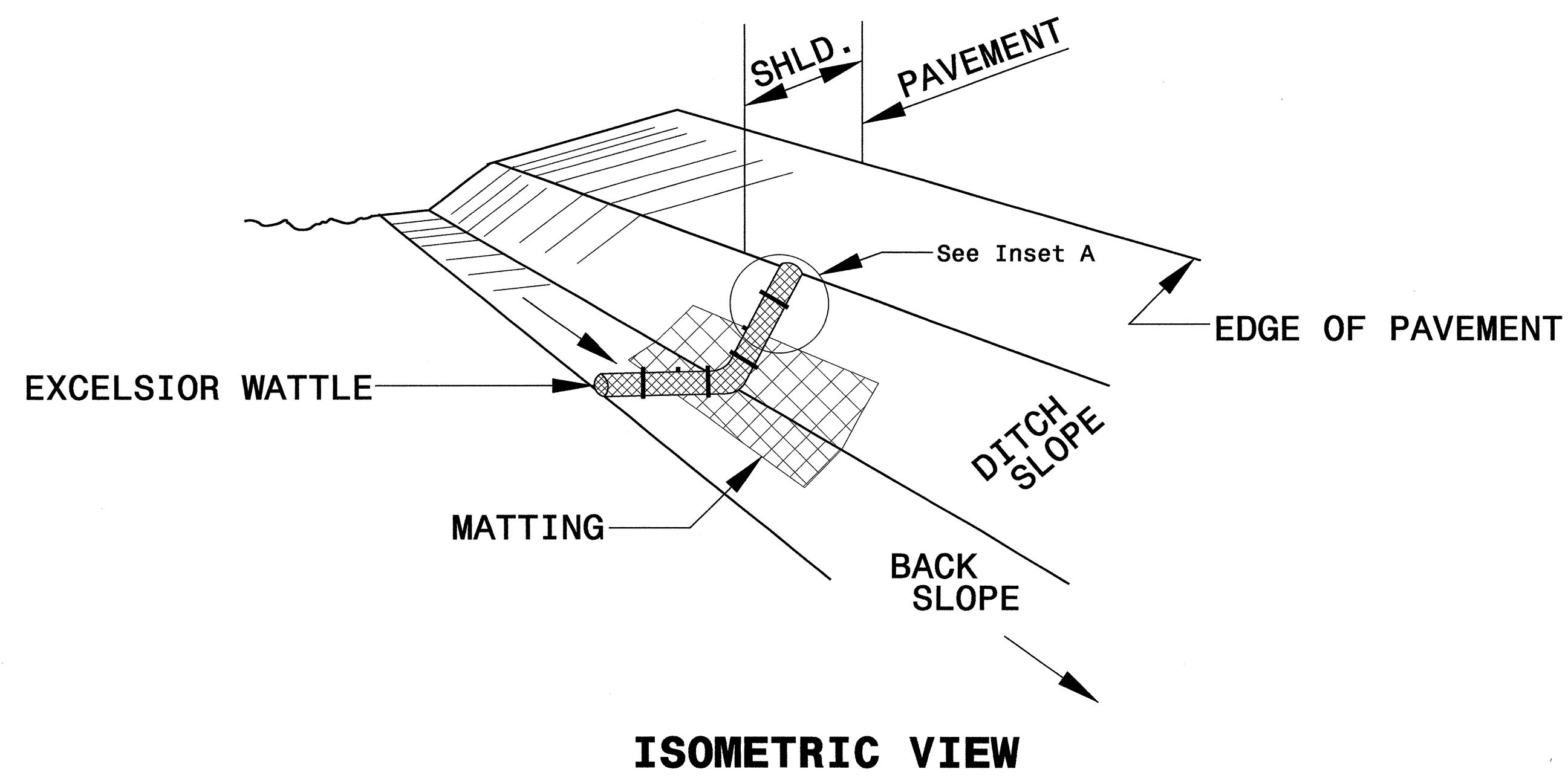
NOTES

- DO NOT EXCAVATE BELOW WATER TABLE.
- LIMIT EARTH BERM HEIGHT TO 3 FT.
- AVOID COMPACTING BOTTOM OF BASIN.
- FOR BASIN DEPTH OF 3 FT., THE MINIMUM BASIN WIDTH SHALL BE 9 FT.
- DETERMINE EMERGENCY SPILLWAY LENGTH (FT.) USING $Q/0.8$, WHERE Q IS FLOW RATE (CFS) INTO BASIN.

NOT TO SCALE

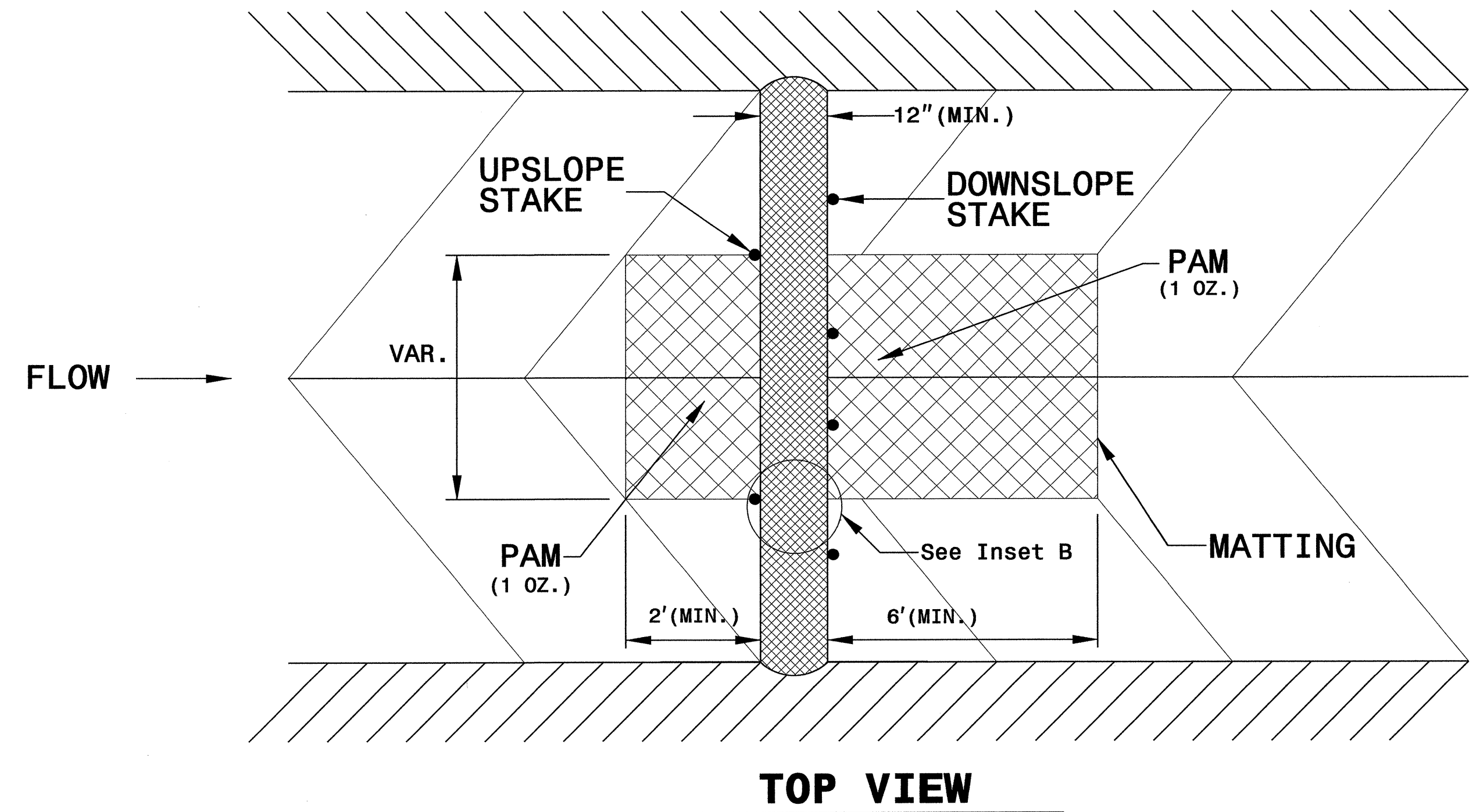
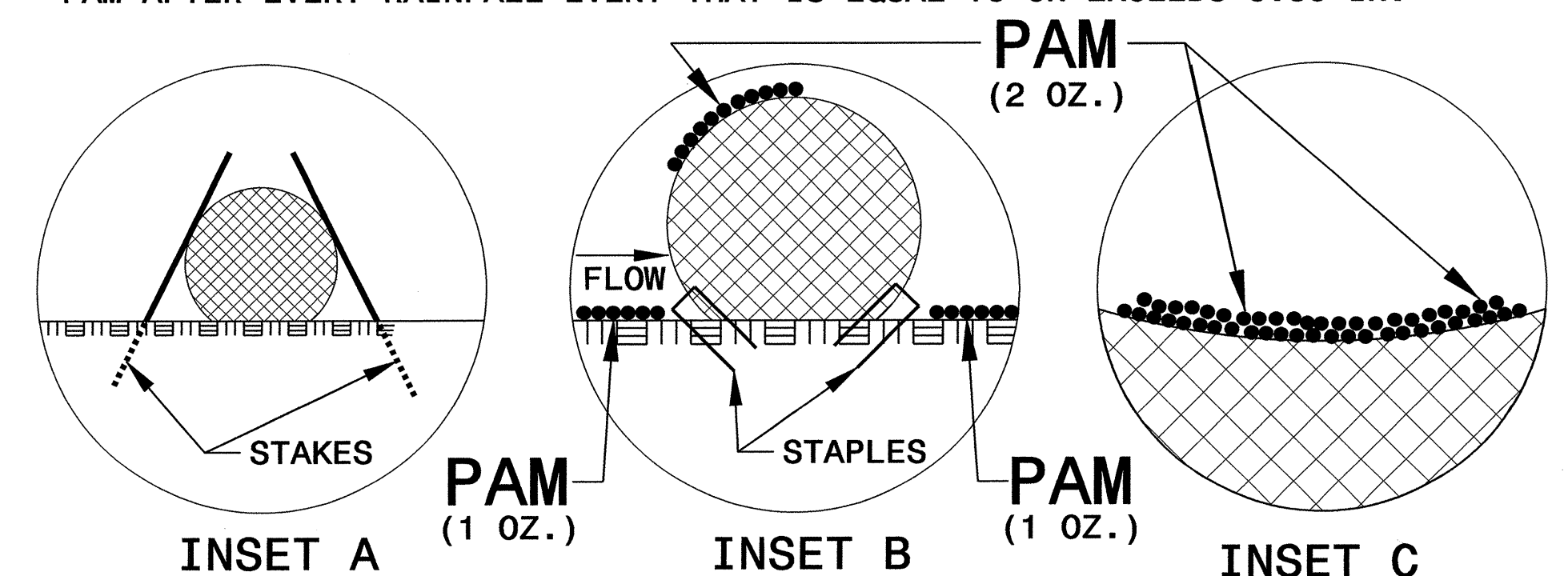
PROJECT REFERENCE NO.		SHEET NO.	
R-2719AA		EC-2C	
RW SHEET NO.			
ROADWAY DESIGN ENGINEER		HYDRAULICS ENGINEER	

WATTLE WITH POLYACRYLAMIDE (PAM) DETAIL



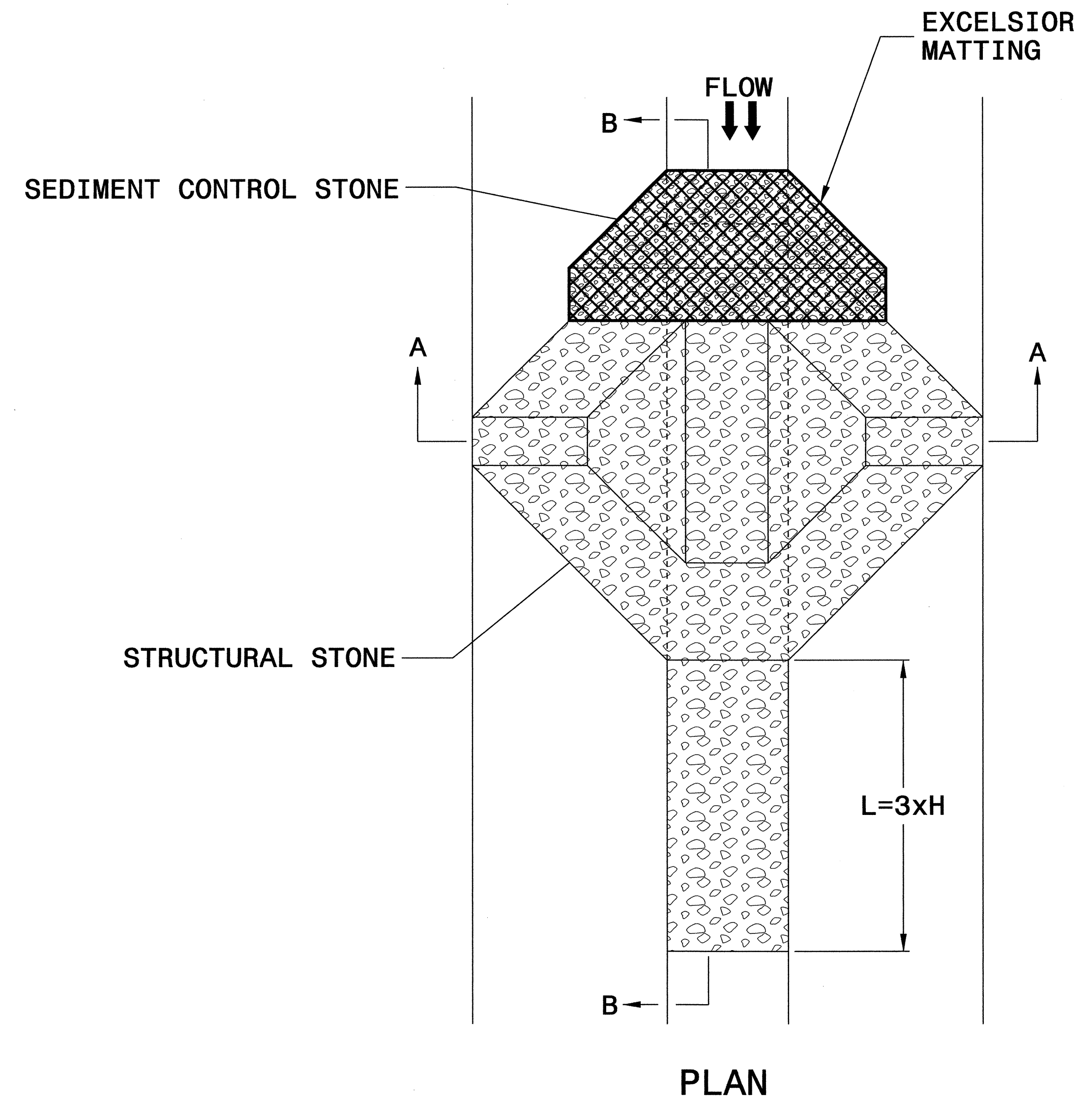
NOTES:

- 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. R-2719AA	SHEET NO. EC-2D
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

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

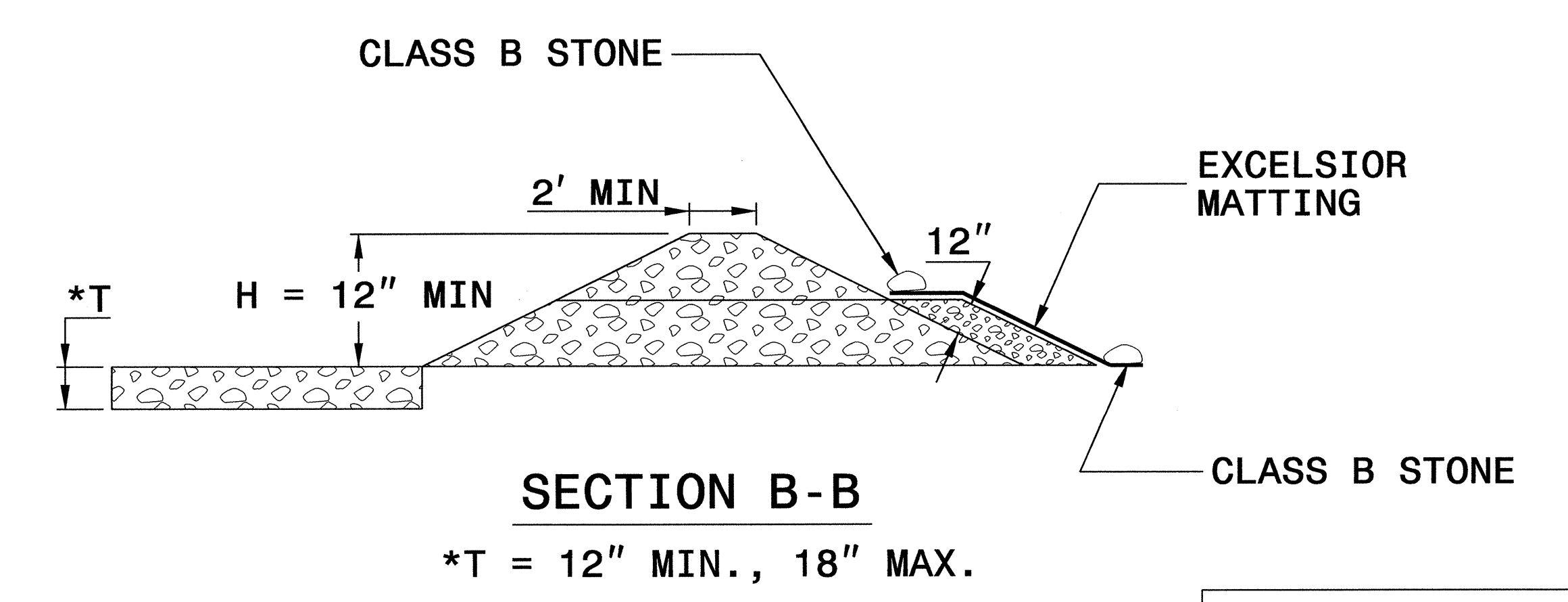
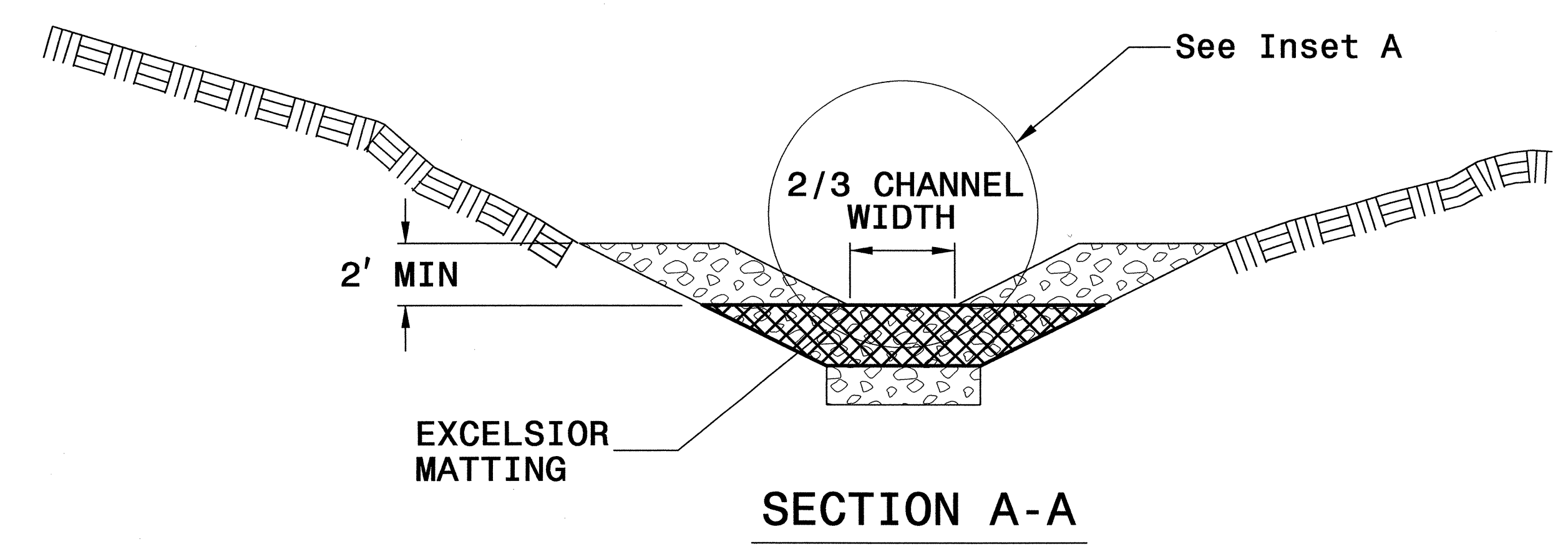
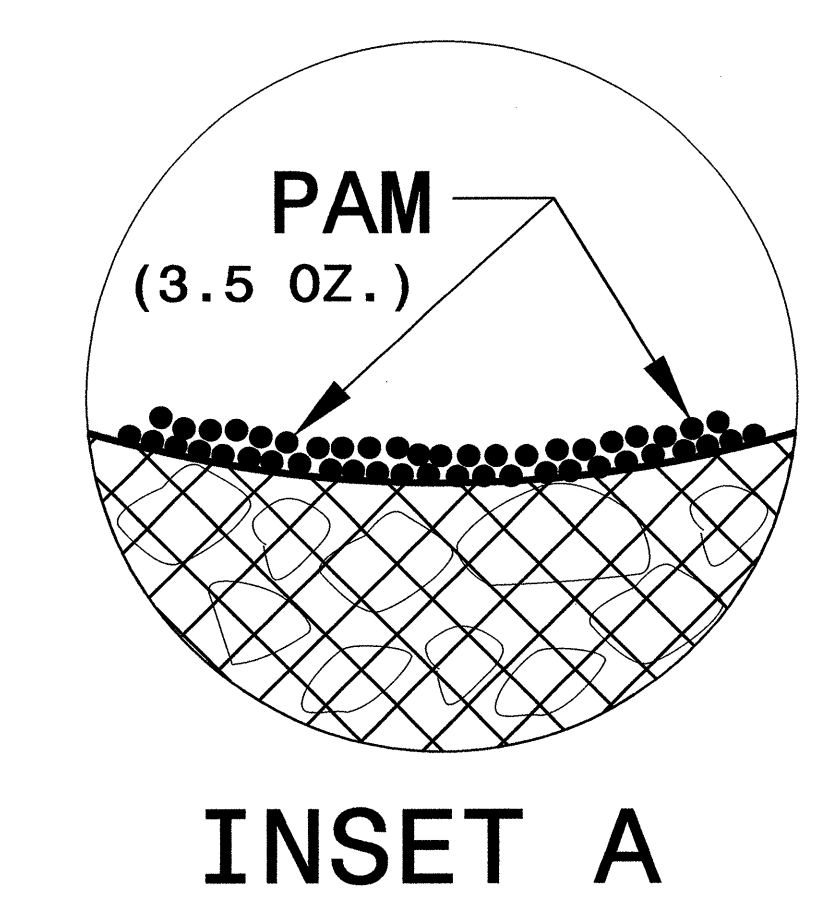


NOTES

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



NOT TO SCALE

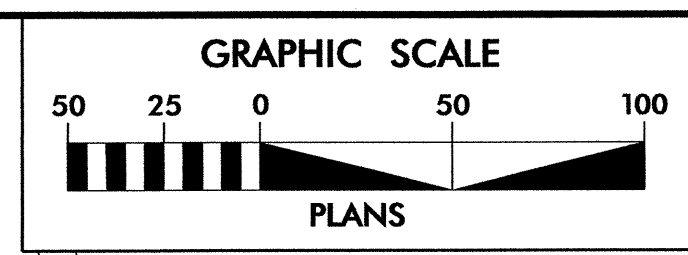
DIVISION OF HIGHWAYS
STATE OF NORTH CAROLINA

PROJECT REFERENCE NO. <i>R-2719AA</i>	SHEET NO. <i>EC-3A</i>
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

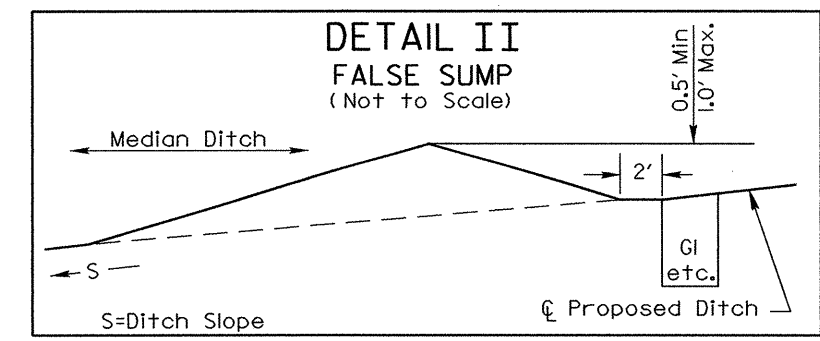
SOIL STABILIZATION TIMEFRAMES

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 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.

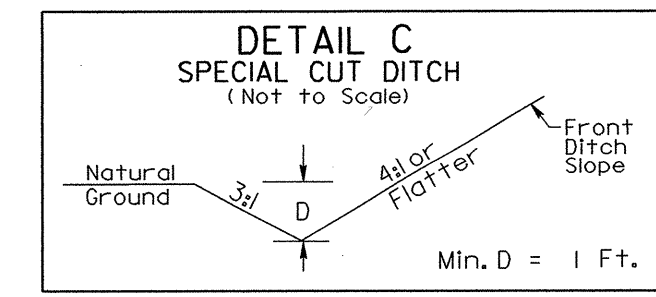
PROJECT REFERENCE NO.	SHEET NO.
R-2719AA	EC-4/CONST.23
R/W SHEET NO.	23
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER



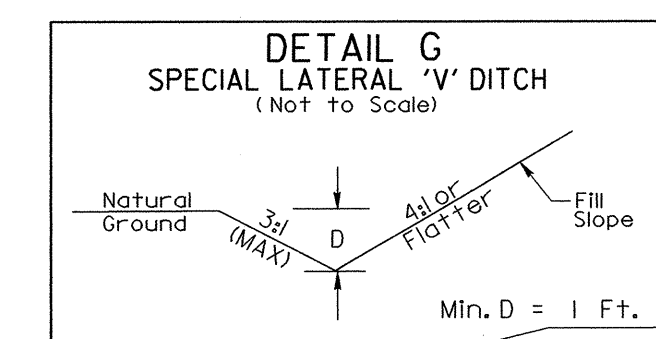
NOTE: FOR -YI- PROFILE, SEE SHEET 46
 FOR -YIO- PROFILE, SEE SHEET 60
 FOR INTERSECTION DETAIL SEE SHEET 2-J



SHEET	ROADWAY	STATION	SIDE
23	-YI-	15+60	MED



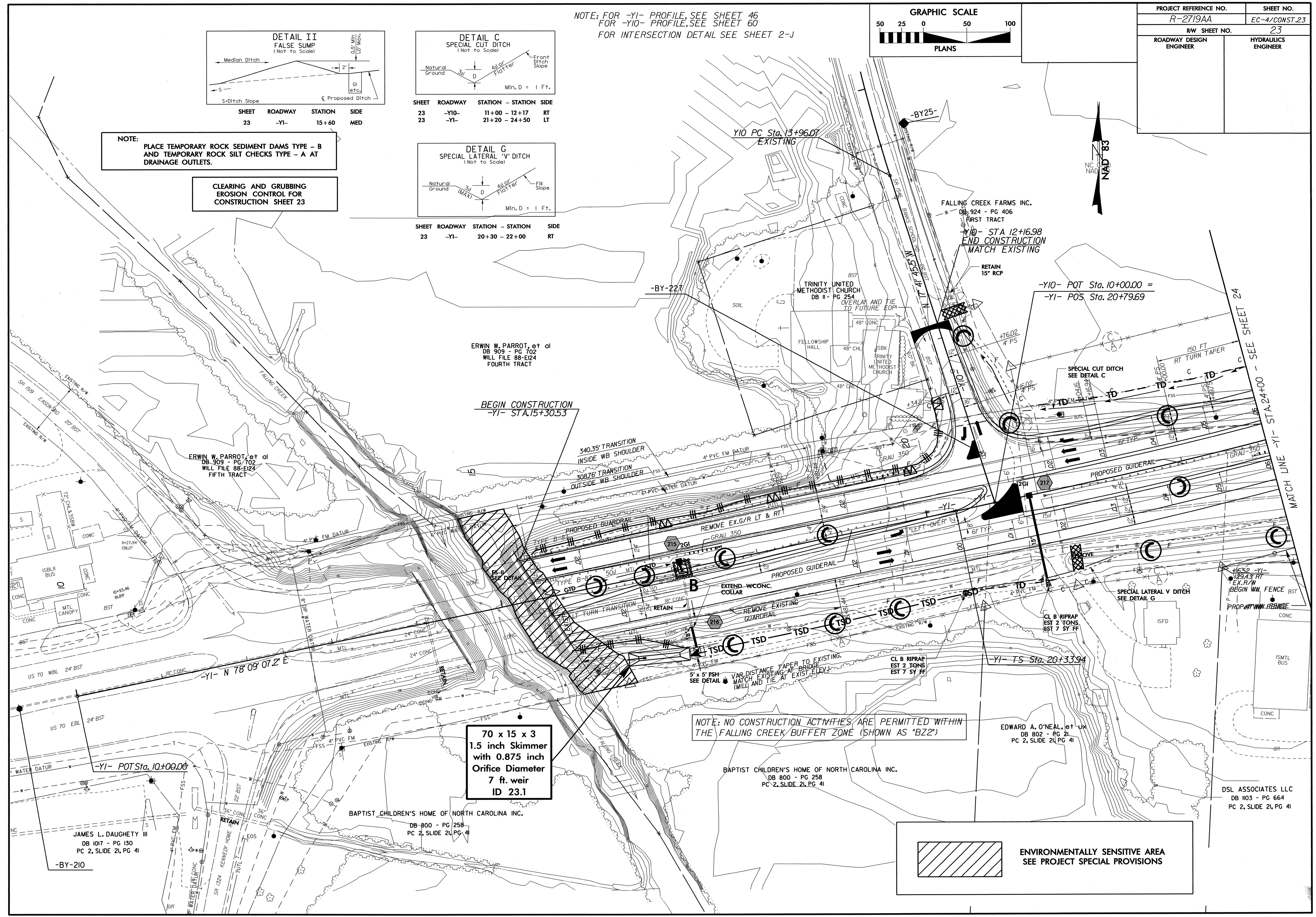
SHEET	ROADWAY	STATION - STATION	SIDE
23	-YIO-	11+00 - 12+17	RT
23	-YI-	21+20 - 24+50	LT



SHEET	ROADWAY	STATION - STATION	SIDE
23	-YI-	20+30 - 22+00	RT

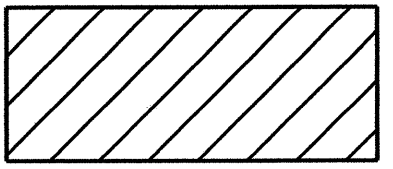
NOTE: PLACE TEMPORARY ROCK SEDIMENT DAMS TYPE - B AND TEMPORARY ROCK SILT CHECKS TYPE - A AT DRAINAGE OUTLETS.

CLEARING AND GRUBBING EROSION CONTROL FOR CONSTRUCTION SHEET 23



70 x 15 x 3
 1.5 inch Skimmer
 with 0.875 inch
 Orifice Diameter
 7 ft. weir
 ID 23.1

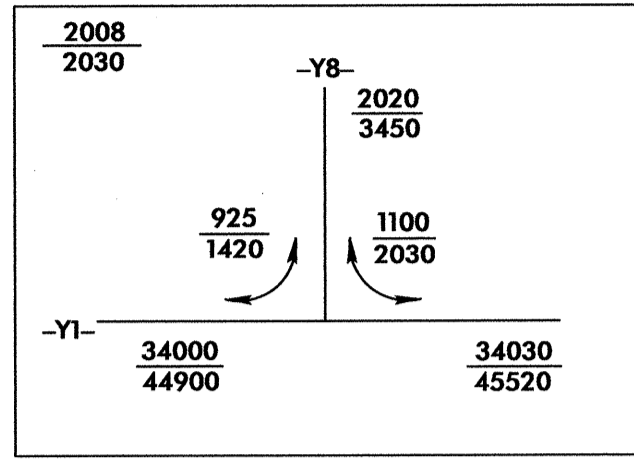
NOTE: NO CONSTRUCTION ACTIVITIES ARE PERMITTED WITHIN THE FALLING CREEK BUFFER ZONE (SHOWN AS "BZ2")

 ENVIRONMENTALLY SENSITIVE AREA
 SEE PROJECT SPECIAL PROVISIONS

CLEARING AND GRUBBING
EROSION CONTROL FOR
CONSTRUCTION SHEET 27

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

US 70 (Y1)/Y8
TRAFFIC DIAGRAM

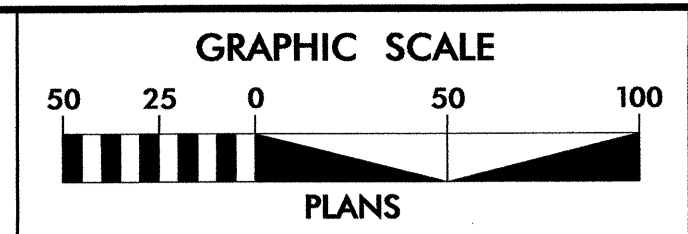


-Y1RT- CURVE DATA

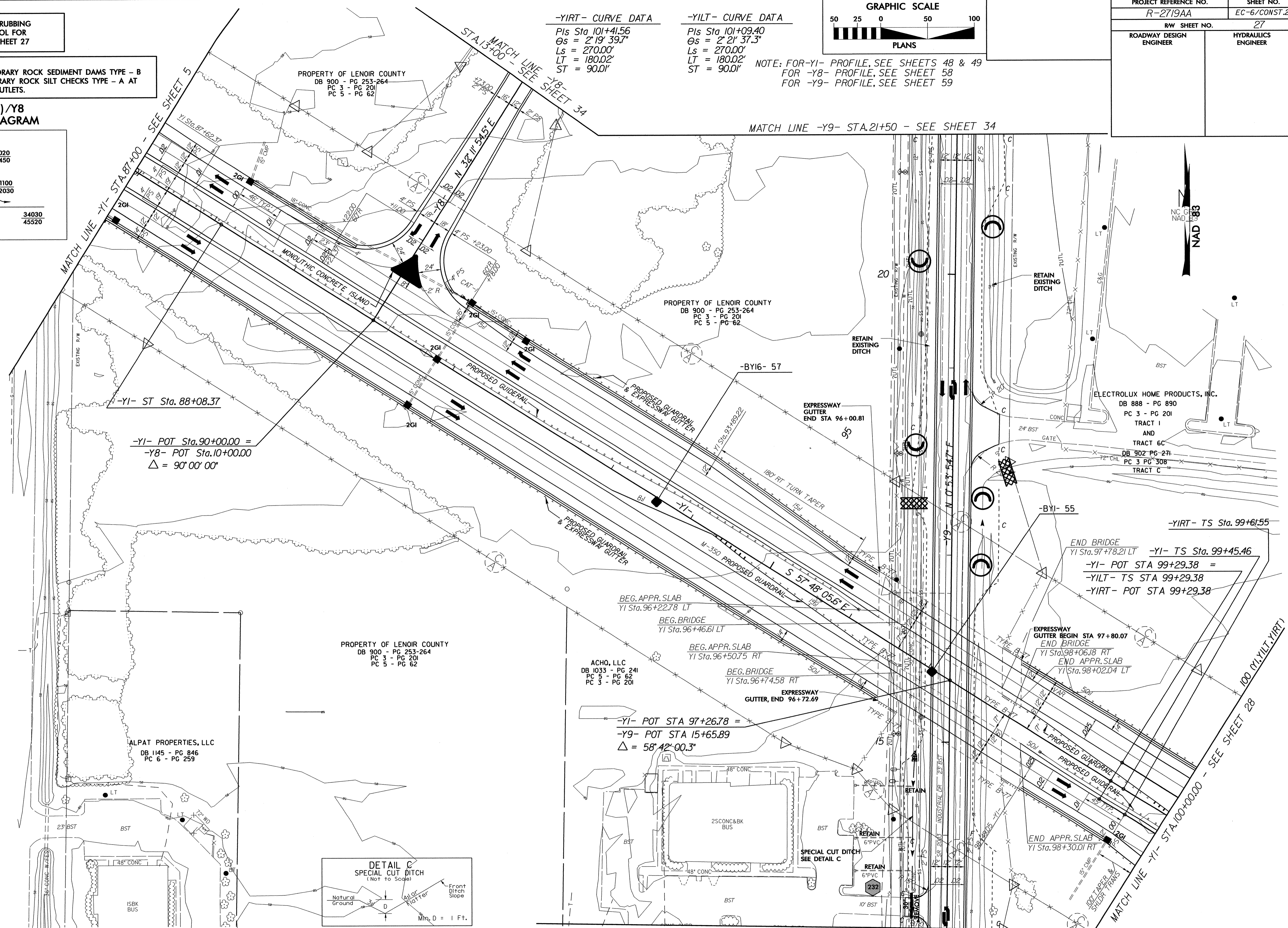
PIs Sta 101+41.56
Os = 2° 19' 39.7"
Ls = 270.00'
LT = 180.02'
ST = 90.01'

-Y1LT- CURVE DATA

PIs Sta 101+09.40
Os = 2° 21' 37.3"
Ls = 270.00'
LT = 180.02'
ST = 90.01'



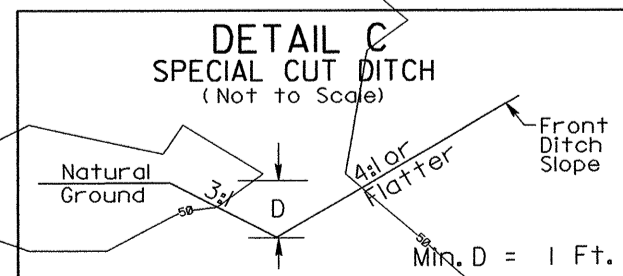
PROJECT REFERENCE NO. R-2719AA	SHEET NO. EC-6/CONST.27
RW SHEET NO. 27	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER



-Y1- POT Sta. 88+08.37
-Y8- POT Sta. 10+00.00 =
-Y1- POT Sta. 90+00.00 =
Δ = 90° 00' 00"

-Y1- POT STA 97+26.78 =
-Y9- POT STA 15+65.89
Δ = 58° 42' 00.3"

END BRIDGE
Y1 Sta. 97+78.21 LT
-Y1- TS Sta. 99+45.46
-Y1- POT STA 99+29.38 =
-Y1LT- TS STA 99+29.38
-Y1RT- POT STA 99+29.38

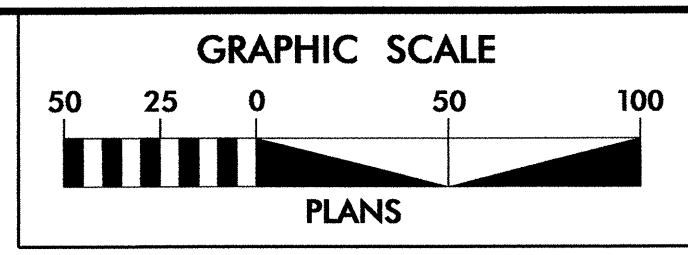


SHEET ROADWAY STATION - STATION SIDE
27 -Y9- 11+50 - 14+90 LT

MATCH LINE -Y9- STA.13+00 - SEE SHEET 33

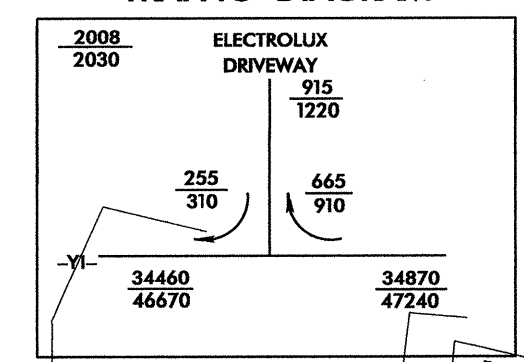
NAD 83

PROJECT REFERENCE NO.	SHEET NO.
R-2719AA	EC-7/CONST.28
RW SHEET NO.	28
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER



NOTE: FOR -Y1- PROFILE, SEE SHEET 49
 FOR -Y15- PROFILE, SEE SHEET 61
 SEE SHEET 2-K FOR INTERSECTION DETAILS

US 70 (Y1)/ELECTROLUX DRIVEWAY TRAFFIC DIAGRAM



CLEARING AND GRUBBING
 EROSION CONTROL FOR
 CONSTRUCTION SHEET 28

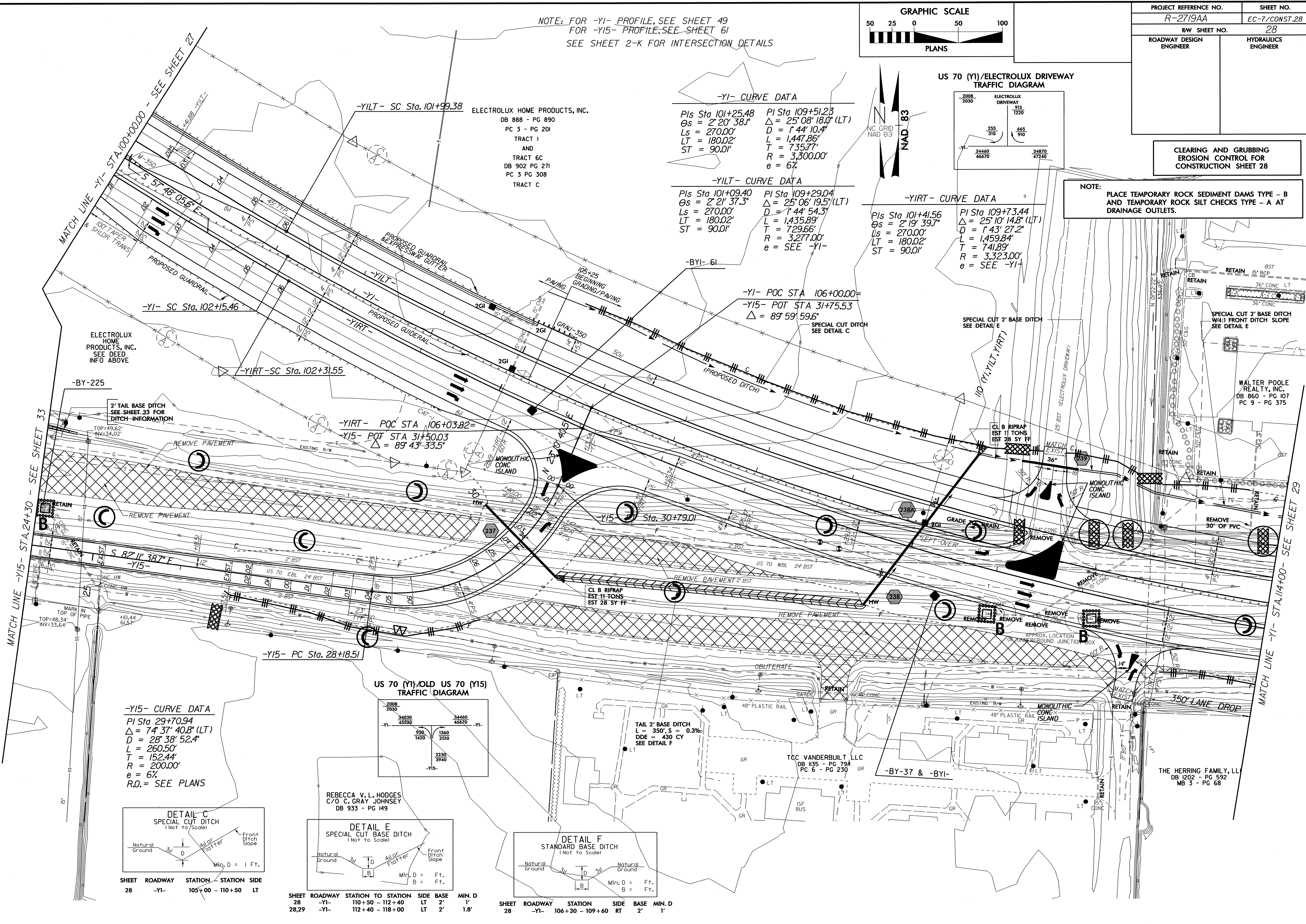
NOTE: PLACE TEMPORARY ROCK SEDIMENT DAMS TYPE - B AND TEMPORARY ROCK SILT CHECKS TYPE - A AT DRAINAGE OUTLETS.

-Y1- CURVE DATA
 PIs Sta 101+25.48 PI Sta 109+51.23
 $\Delta = 25^{\circ} 08' 18.0''$ (LT)
 $D = 1^{\circ} 44' 10.4''$
 $L = 1,447.86'$
 $T = 735.77'$
 $R = 3,300.00'$
 $e = 6\%$

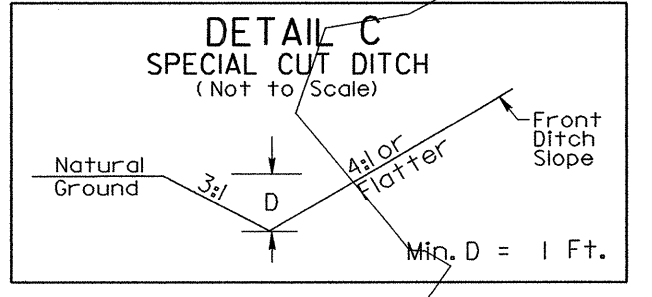
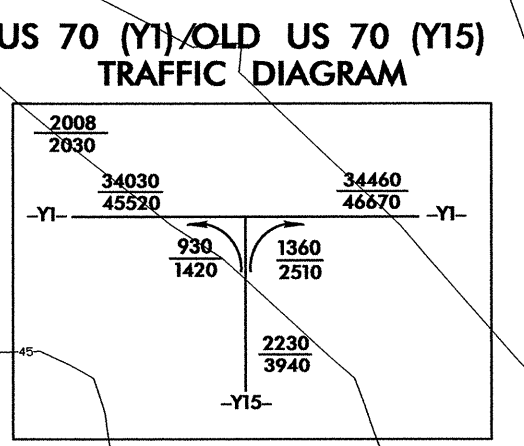
-Y1LT- CURVE DATA
 PIs Sta 101+09.40 PI Sta 109+29.04
 $\Delta = 25^{\circ} 06' 19.5''$ (LT)
 $D = 1^{\circ} 44' 54.3''$
 $L = 1,435.89'$
 $T = 729.66'$
 $R = 3,277.00'$
 $e = \text{SEE -Y1-}$

-Y1RT- CURVE DATA
 PIs Sta 101+41.56 PI Sta 109+73.44
 $\Delta = 25^{\circ} 10' 14.8''$ (LT)
 $D = 1^{\circ} 43' 27.2''$
 $L = 1,459.84'$
 $T = 741.89'$
 $R = 3,323.00'$
 $e = \text{SEE -Y1-}$

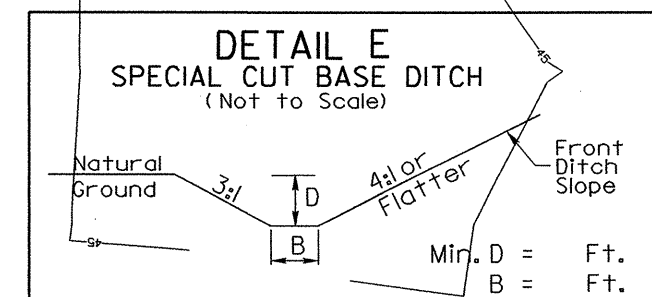
-Y1- POC STA 106+00.00=
 -Y15- POT STA 31+75.53
 $\Delta = 89^{\circ} 59' 59.6''$
 SPECIAL CUT DITCH
 SEE DETAIL C



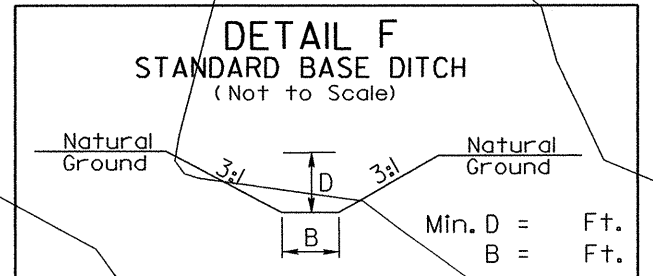
-Y15- CURVE DATA
 PI Sta 29+70.94
 $\Delta = 74^{\circ} 37' 40.8''$ (LT)
 $D = 28^{\circ} 38' 52.4''$
 $L = 260.50'$
 $T = 152.44'$
 $R = 200.00'$
 $e = 6\%$
 R.O. = SEE PLANS



SHEET	ROADWAY	STATION	STATION	SIDE	MIN. D
28	-Y1-	105+00	110+50	LT	1'

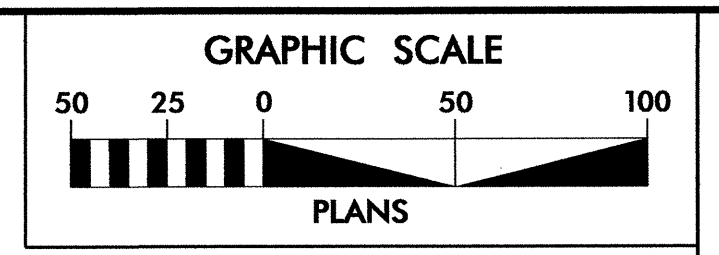


SHEET	ROADWAY	STATION TO	STATION	SIDE	BASE	MIN. D
28	-Y1-	110+50	112+40	LT	2'	1'
28,29	-Y1-	112+40	118+00	LT	2'	1.8'



SHEET	ROADWAY	STATION	SIDE	BASE	MIN. D
28	-Y1-	106+30 - 109+60	RT	2'	1'

PROJECT REFERENCE NO.	SHEET NO.
R-2719AA	EC-8/CONST.29
R/W SHEET NO.	29
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER



-YI- CURVE DATA

PI Sta 109+51.23	PIs Sta 117+53.34
$\Delta = 25^{\circ}08'18.0''$ (LT)	$\Theta_s = 2^{\circ}20'38.1''$
$D = 1^{\circ}44'10.4''$	$L_s = 270.00'$
$L = 1,447.86'$	$LT = 180.02'$
$T = 735.77'$	$ST = 90.01'$
$R = 3,300.00'$	
$e = 6\%$	

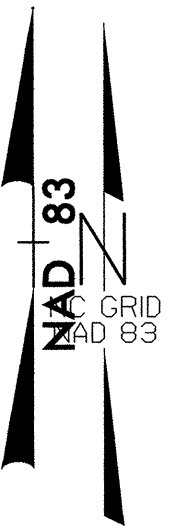
NOTE: FOR -YI- PROFILE, SEE SHEET 50

-YILT- CURVE DATA

PI Sta 109+29.04	PIs Sta 117+25.28
$\Delta = 25^{\circ}06'19.5''$ (LT)	$\Theta_s = 2^{\circ}21'37.3''$
$D = 1^{\circ}44'54.3''$	$L_s = 270.00'$
$L = 1,435.89'$	$LT = 180.02'$
$T = 729.66'$	$ST = 90.01'$
$R = 3,277.00'$	
$e = \text{SEE -YI-}$	

-YIRT- CURVE DATA

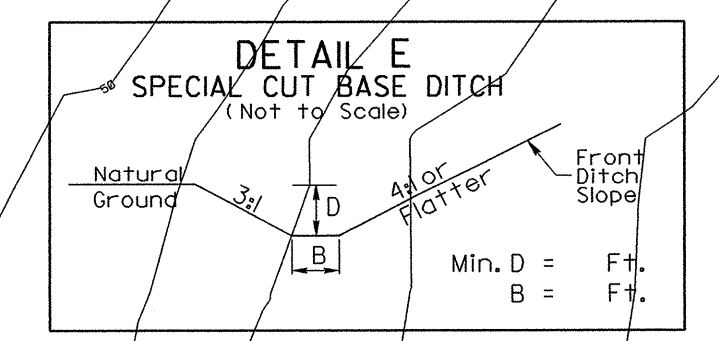
PI Sta 109+73.44	PIs Sta 117+81.40
$\Delta = 25^{\circ}10'14.8''$ (LT)	$\Theta_s = 2^{\circ}19'39.7''$
$D = 1^{\circ}43'27.2''$	$L_s = 270.00'$
$L = 1,459.84'$	$LT = 180.02'$
$T = 741.89'$	$ST = 90.01'$
$R = 3,323.00'$	
$e = \text{SEE -YI-}$	



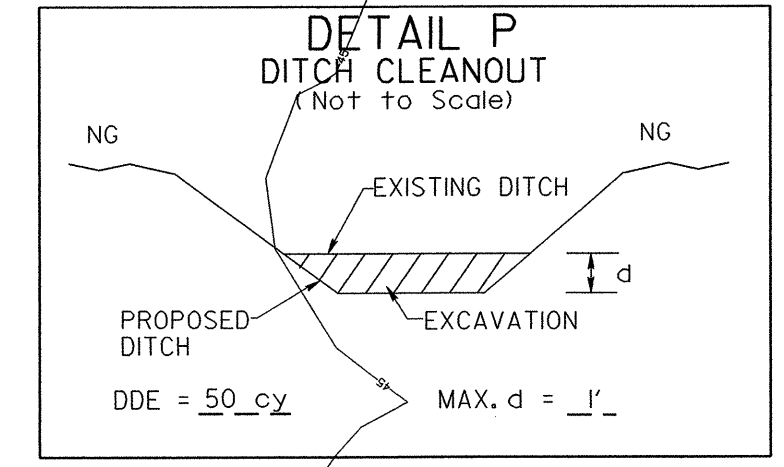
CLEARING AND GRUBBING
EROSION CONTROL FOR
CONSTRUCTION SHEET 29

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

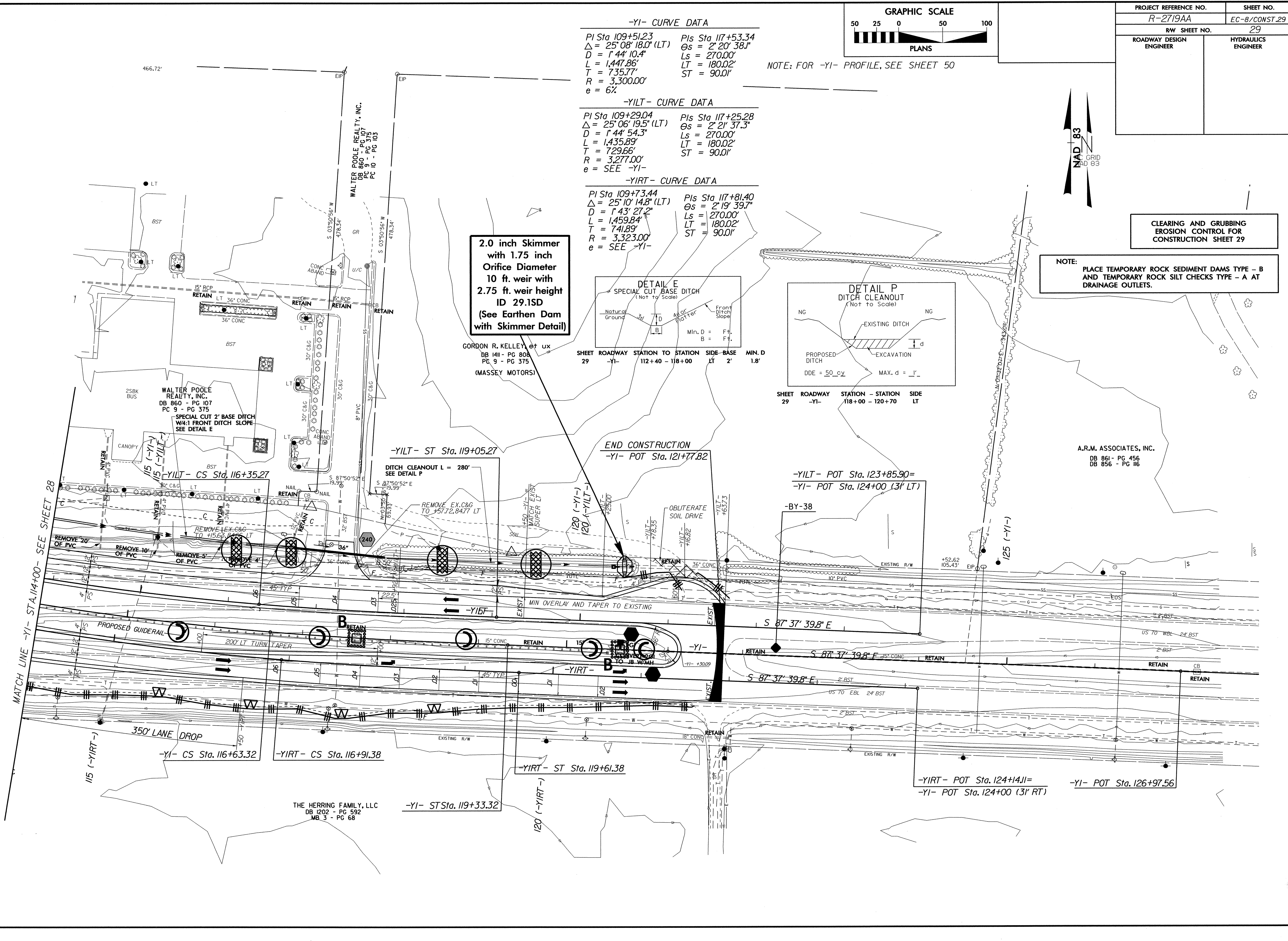
**2.0 inch Skimmer
with 1.75 inch
Orifice Diameter
10 ft. weir with
2.75 ft. weir height
ID 29.1SD
(See Earthen Dam
with Skimmer Detail)**



SHEET	ROADWAY	STATION	STATION	SIDE	BASE	MIN. D
29	-YI-	112+40	118+00	LT	2'	1.8'



SHEET	ROADWAY	STATION	STATION	SIDE
29	-YI-	118+00	120+70	LT

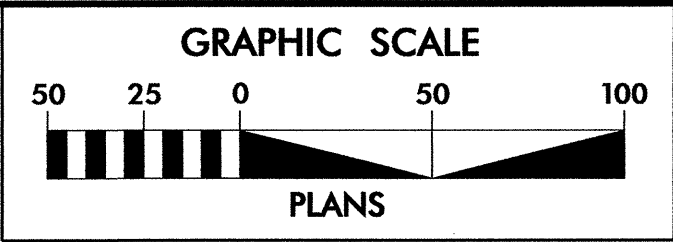


MATCH LINE -YI- STA. 114+00- SEE SHEET 28

115 (-YIRT-)

120 (-YIRT-)

125 (-YI-)

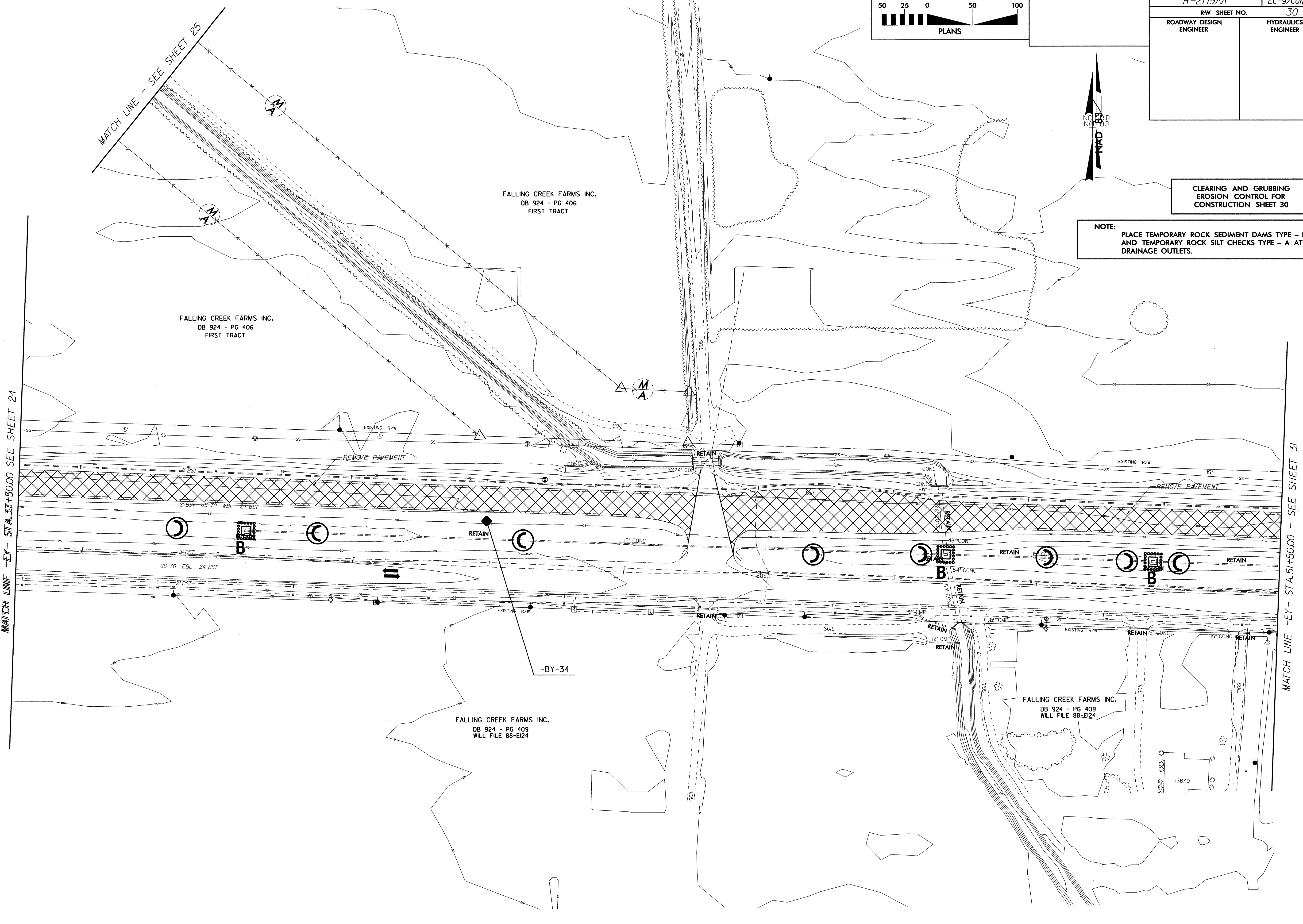


PROJECT REFERENCE NO. R-2719AA	SHEET NO. EC-9/CONST.30
RW SHEET NO. 30	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER



CLEARING AND GRUBBING
EROSION CONTROL FOR
CONSTRUCTION SHEET 30

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

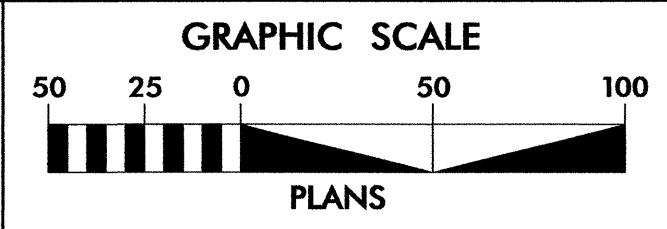


MATCH LINE -EY- STA. 33+50.00 SEE SHEET 24

MATCH LINE -EY- STA. 51+50.00 - SEE SHEET 31

-BY-34

FALLING CREEK FARMS INC.
DB 924 - PG 409
WILL FILE 88-EI24

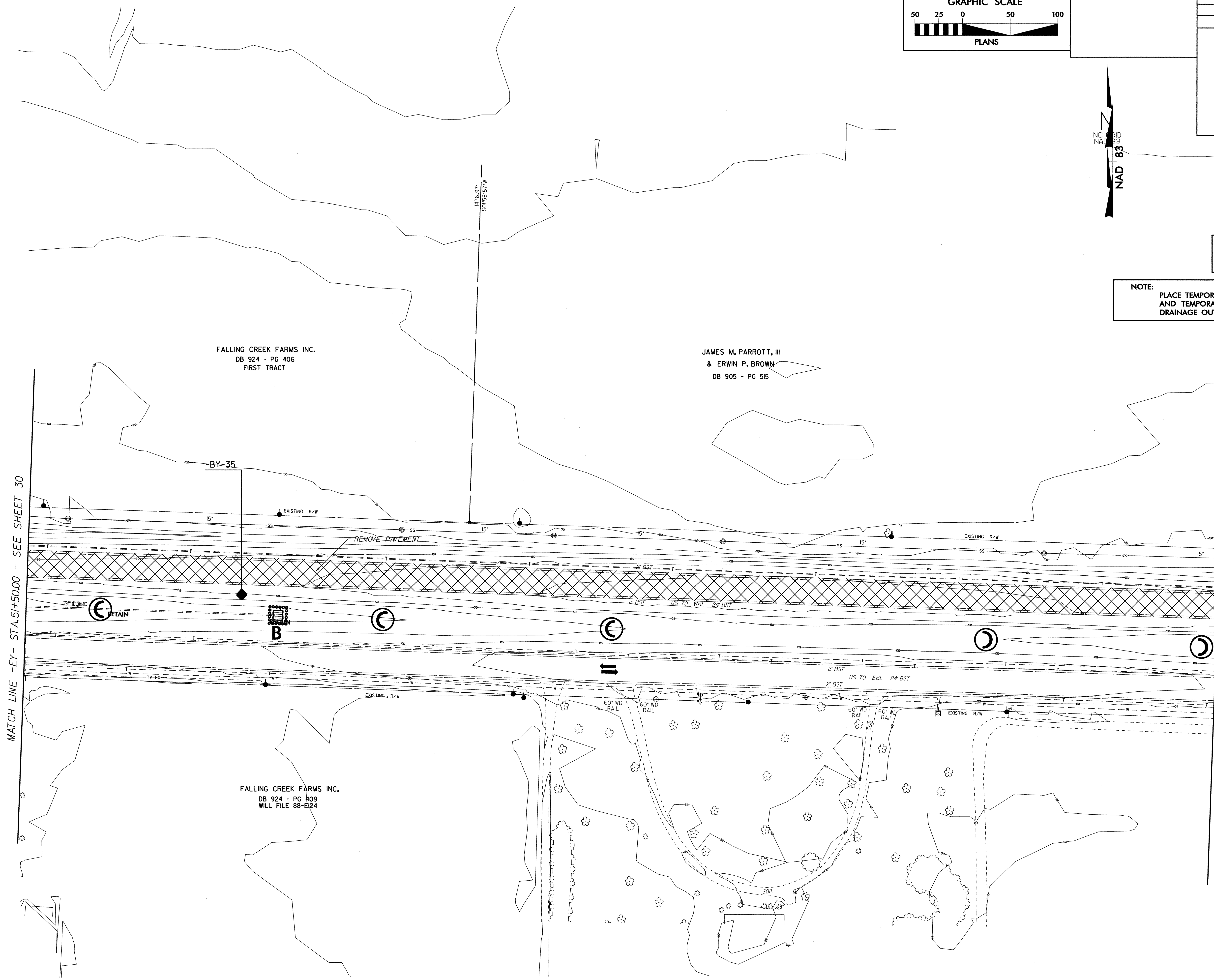


PROJECT REFERENCE NO. <i>R-2719AA</i>	SHEET NO. <i>EC-10/CONST.31</i>
R/W SHEET NO. <i>31</i>	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER



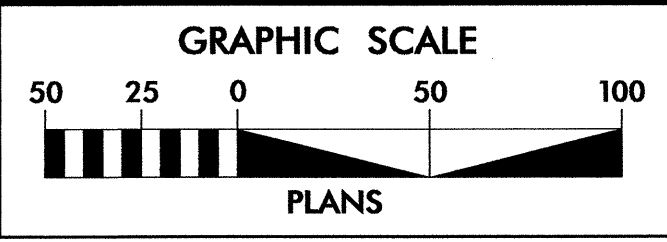
CLEARING AND GRUBBING
EROSION CONTROL FOR
CONSTRUCTION SHEET 31

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



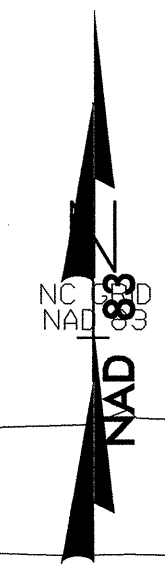
3

3



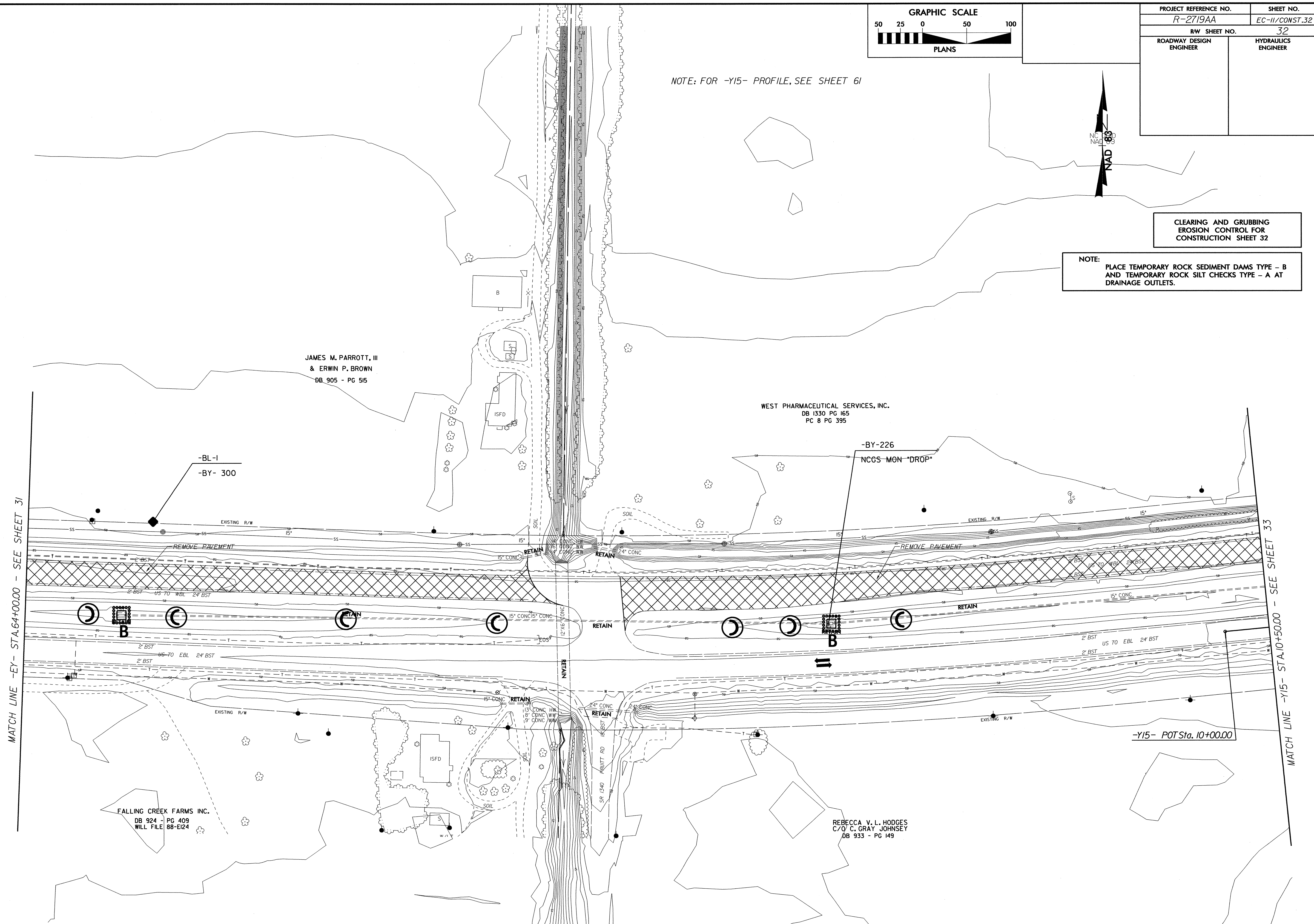
PROJECT REFERENCE NO. R-2719AA	SHEET NO. EC-II/CONST.32
R/W SHEET NO. 32	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

NOTE: FOR -Y15- PROFILE, SEE SHEET 61



CLEARING AND GRUBBING
EROSION CONTROL FOR
CONSTRUCTION SHEET 32

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

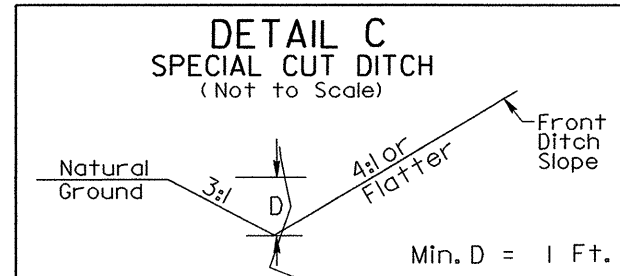
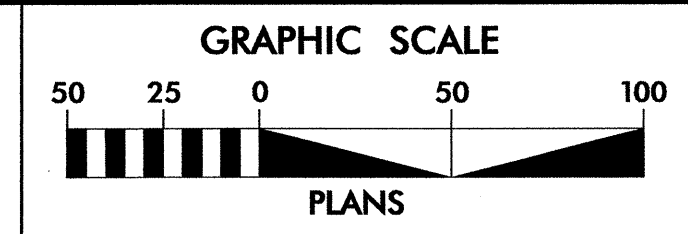


MATCH LINE -EY- STA. 64+00.00 - SEE SHEET 31

MATCH LINE -Y15- STA. 10+50.00 - SEE SHEET 33

-Y15- POT Sta. 10+00.00

PROJECT REFERENCE NO.	SHEET NO.
R-2719AA	EC-13/CONST.34
RW SHEET NO.	34
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER



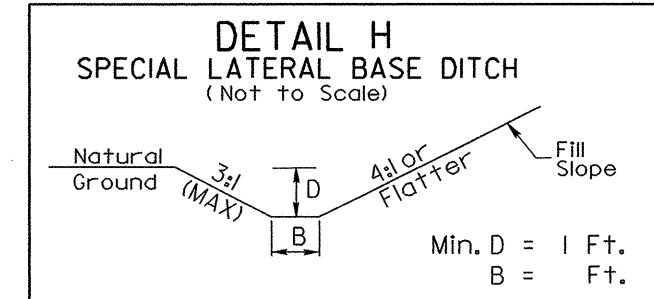
SHEET	ROADWAY	STATION - STATION	SIDE
34	-Y8-	14+85 - 15+30	RT
34	-Y8-	15+50 - 24+47	LT
34	-Y8-	17+50 - 24+47	RT
34	-Y9-	26+50 - 30+65	LT
34	-Y9-	25+50 - 31+90	RT

-Y8- CURVE DATA
 PI Sta 15+17.84
 $\Delta = 33^\circ 25' 17.8''$ (LT)
 $D = 19' 05' 54.9''$
 $L = 174.99'$
 $T = 90.07'$
 $R = 300.00'$
 $e = 4\%$

-Y9- CURVE DATA
 PI Sta 26+52.81
 $\Delta = 8^\circ 02' 44.9''$ (RT)
 $D = 4' 58' 56.1''$
 $L = 161.49'$
 $T = 80.88'$
 $R = 1,150.00'$
 $e = NC$

-Y8- CURVE DATA
 PI Sta 22+04.48
 $\Delta = 99^\circ 27' 03.4''$ (LT)
 $D = 24' 22' 52.3''$
 $L = 407.90'$
 $T = 277.35'$
 $R = 235.00'$
 $e = 4\%$

NOTE: FOR -Y8- PROFILE, SEE SHEET 58
 FOR -Y9- PROFILE, SEE SHEET 59



SHEET	ROADWAY	STATION - STATION	SIDE	BASE	MIN. D
34	-Y9-	30+65 - 32+50	LT	2'	1'

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

CLEARING AND GRUBBING EROSION CONTROL FOR CONSTRUCTION SHEET 34

