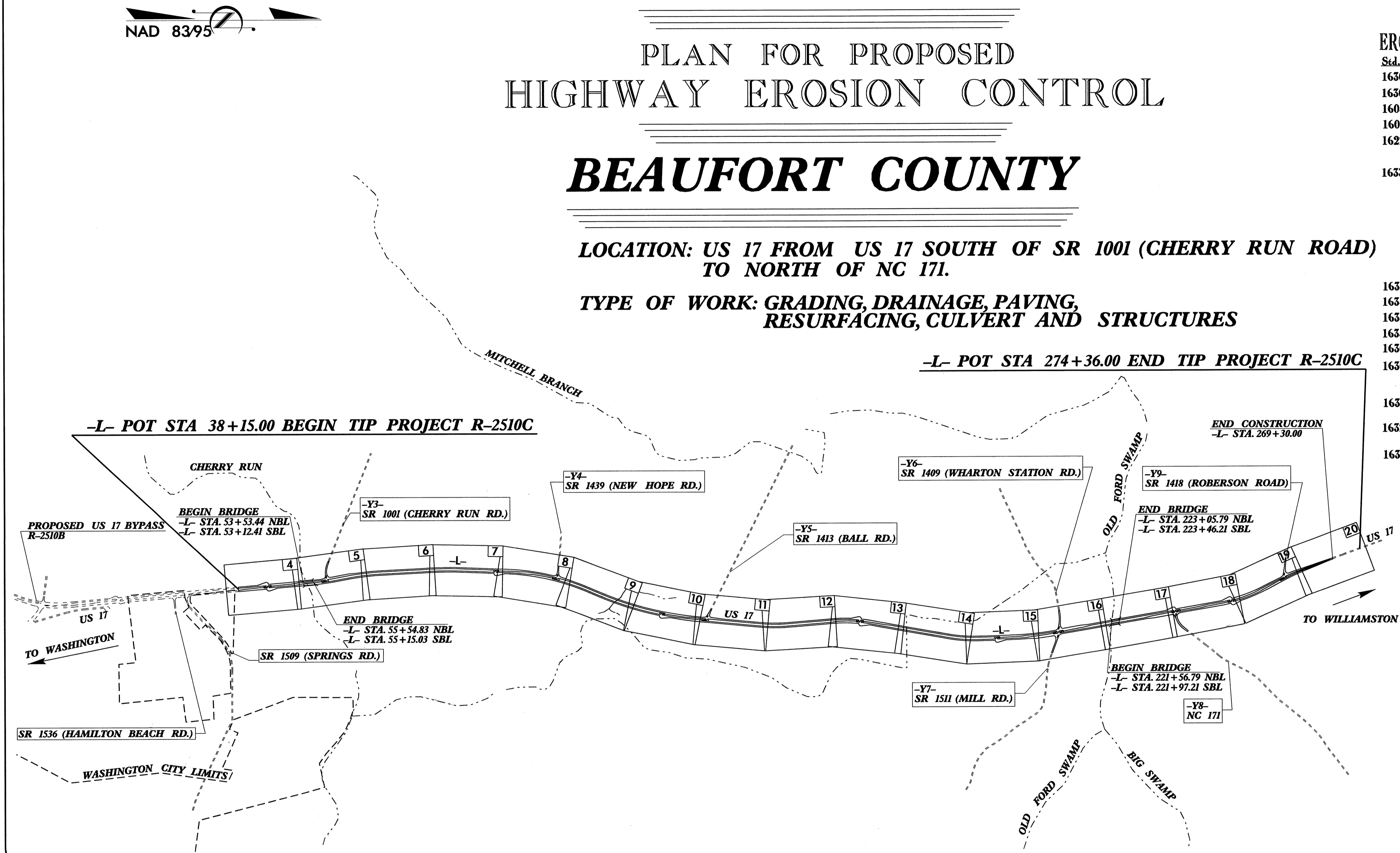


TIP PROJECT: R-2510C

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

**LOCATION: US 17 FROM US 17 SOUTH OF SR 1001 (CHERRY RUN ROAD)
 TO NORTH OF NC 171.**

**TYPE OF WORK: GRADING, DRAINAGE, PAVING,
 RESURFACING, CULVERT AND STRUCTURES**



STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	R-2510C	EC-1	
STATE PROJ. NO.	F.A. PROJ. NO.	DESCRIPTION	

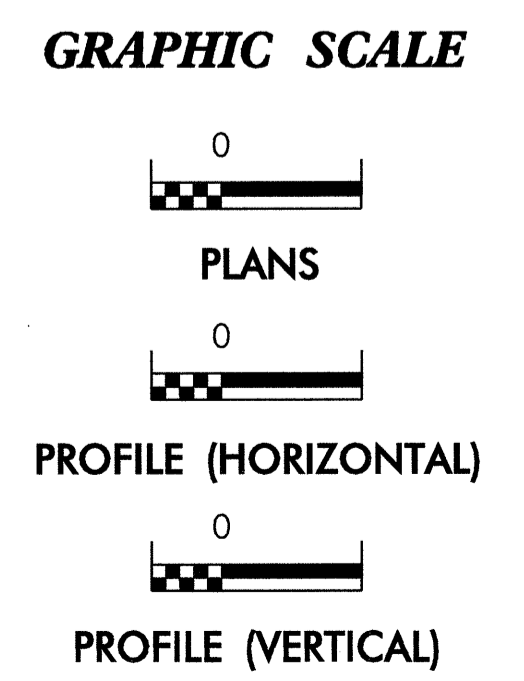
EROSION AND SEDIMENT CONTROL MEASURES

Std. #	Description	Symbol
1630.03	Temporary Silt Ditch	TD
1630.05	Temporary Diversion	TD
1605.01	Temporary Silt Fence	III III III
1606.01	Special Sediment Control Fence	III III III
1622.01	Temporary Berms and Slope Drains	III III III
	Silt Basin Type B	III III III
1633.01	Temporary Rock Silt Check Type-A	III III III
	Temporary Rock Silt Check Type-A with Matting and Polyacrylamide (PAM)	III III III
	Temporary Rock Silt Check Type-B	III III III
	Wattle/Coir Fiber Wattle	III III III
	Wattle/Coir Fiber Wattle with Polyacrylamide (PAM)	III III III
1634.01	Temporary Rock Sediment Dam Type-A	III III III
1634.02	Temporary Rock Sediment Dam Type-B	III III III
1635.01	Rock Pipe Inlet Sediment Trap Type-A	III III III
1635.02	Rock Pipe Inlet Sediment Trap Type-B	III III III
1630.04	Stilling Basin	III III III
1630.06	Special Stilling Basin	III III III
	Rock Inlet Sediment Trap:	
1632.01	Type A	A
1632.02	Type B	B
1632.03	Type C	C
	Skimmer Basin	III III III
	Tiered Skimmer Basin	III III III
	Infiltration Basin	III III III

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

THIS PROJECT HAS BEEN DESIGNED TO SENSITIVE WATERSHED STANDARDS.

ENVIRONMENTALLY SENSITIVE AREA(S) EXIST ON THIS PROJECT
 Refer To E. C. Special Provisions for Special Considerations.



ROADSIDE ENVIRONMENTAL UNIT
 DIVISION OF HIGHWAYS
 STATE OF NORTH CAROLINA

Prepared in the Office of:
ROADSIDE ENVIRONMENTAL UNIT
 1 South Wilmington St.
 Raleigh, NC 27611
2006 STANDARD SPECIFICATIONS

Roadway Standard Drawings

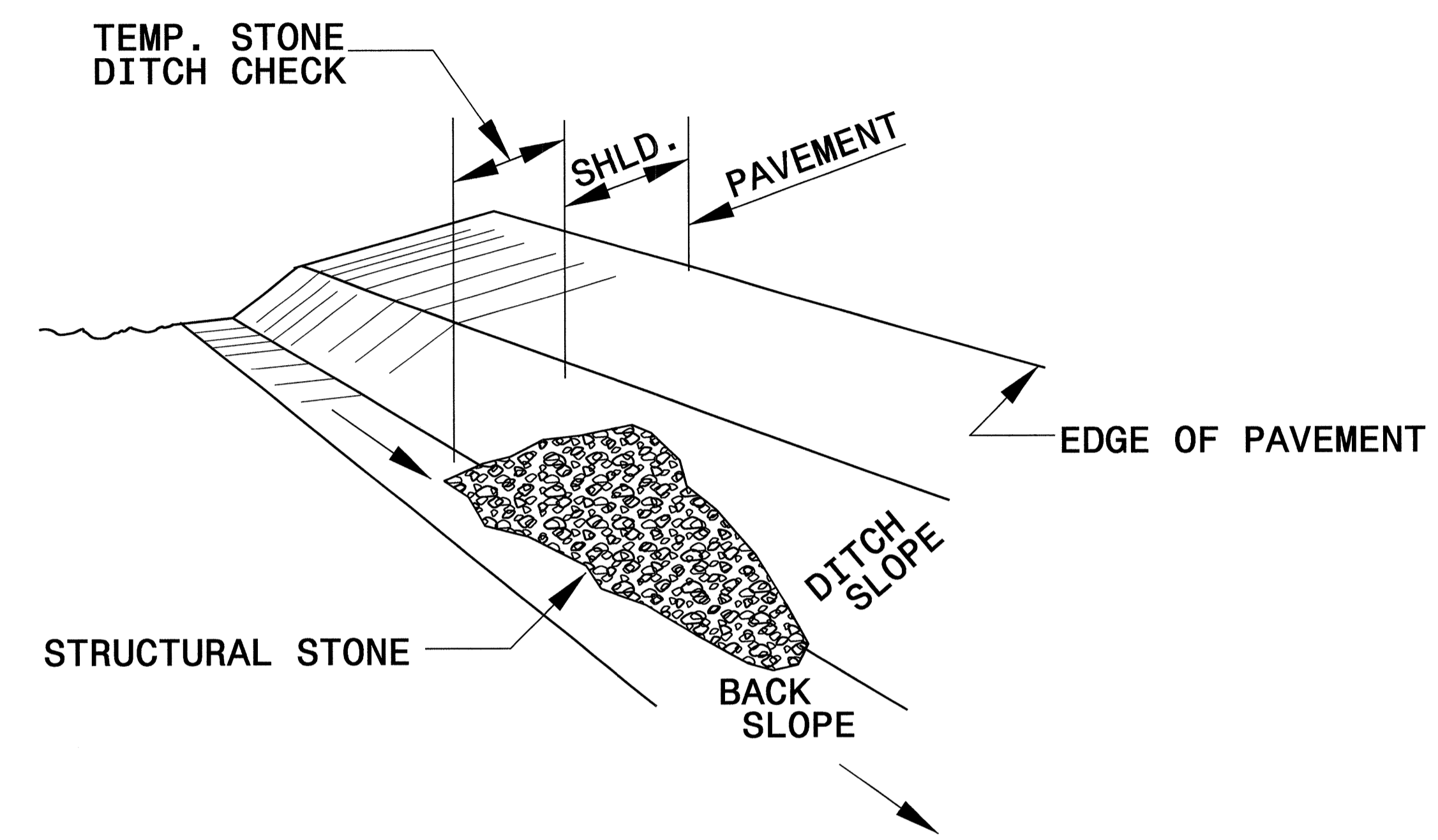
The following roadway english standards as appear in "Roadway Standard Drawings"- Roadway Design Unit - N. C. Department of Transportation - Raleigh, N. C., dated July 18, 2006 and the latest revision thereto are applicable to this project and by reference hereby are considered a part of these plans.

1605.01 Temporary Silt Fence	1630.06 Special Stilling Basin
1606.01 Special Sediment Control Fence	1632.02 Rock Inlet Sediment Trap Type B
1607.01 Gravel Construction Entrance	1632.03 Rock Inlet Sediment Trap Type C
1622.01 Temporary Berms and Slope Drains	1633.01 Temporary Rock Silt Check Type A
1630.03 Temporary Silt Ditch	1635.01 Rock Pipe Inlet Sediment Trap Type A
1630.05 Temporary Diversion	1635.02 Rock Pipe Inlet Sediment Trap Type B

R-2510C-01-01-2006 (REV) Jemmi.Ferguson@ncdot.gov
 Jemmi.Ferguson@ncdot.gov
 R-2510C-01-01-2006 (REV) Jemmi.Ferguson@ncdot.gov

PROJECT REFERENCE NO. <i>R-2510C</i>	SHEET NO. <i>EC-2</i>
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

TEMPORARY ROCK SILT CHECK TYPE 'B' DETAIL

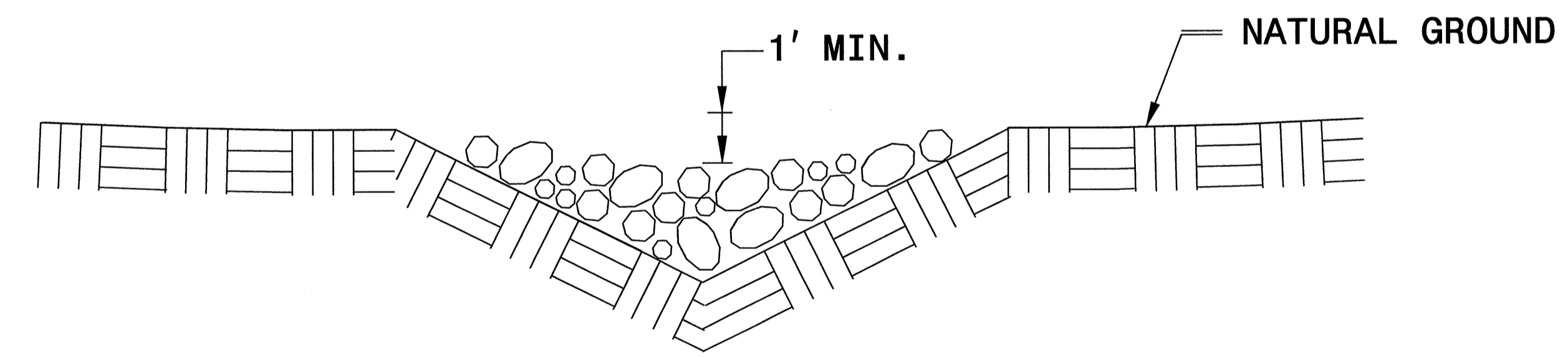


ISOMETRIC VIEW

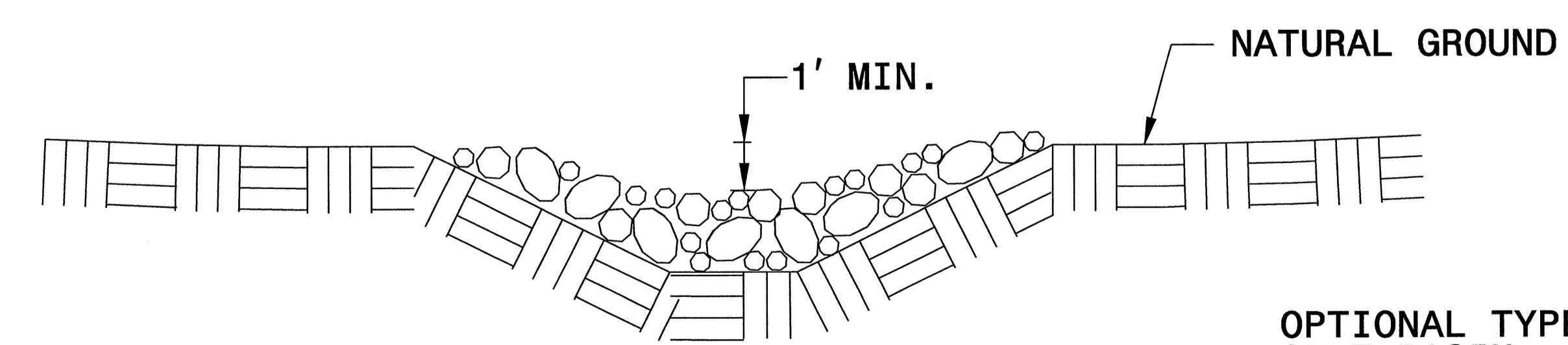
NOTES:

USE CLASS 'B' EROSION CONTROL STONE FOR STRUCTURAL STONE.

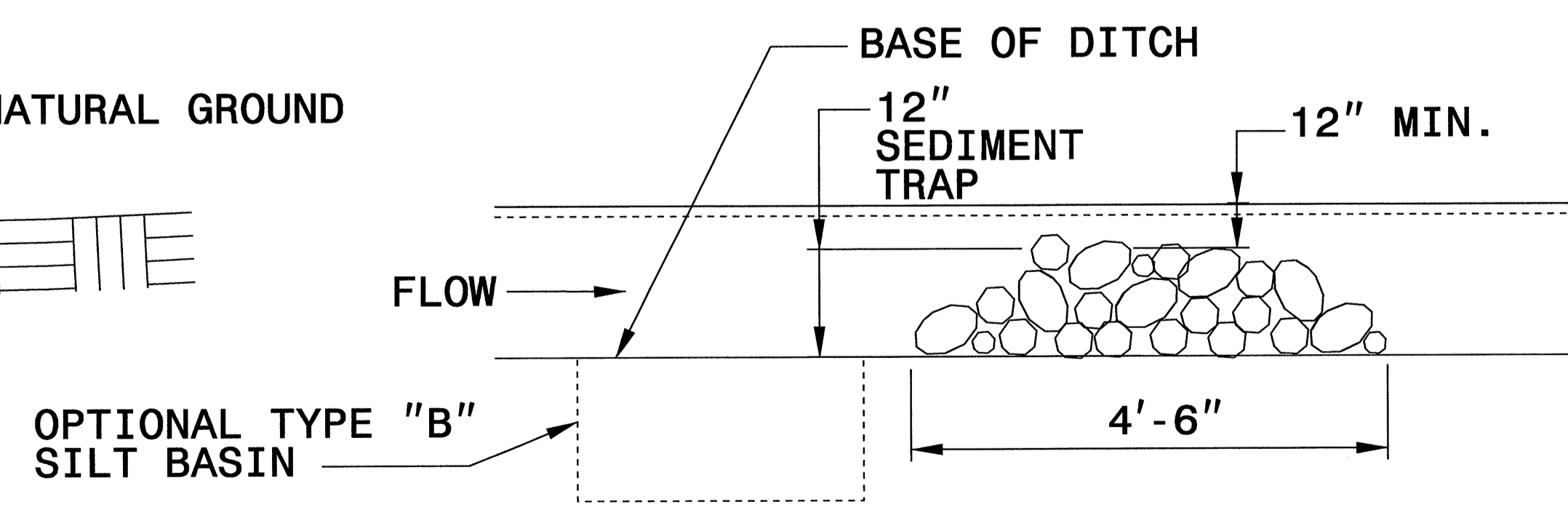
THE ENGINEER MAY DIRECT THE OPTION OF CLASS "A" STONE FOR SITES HAVING LESS THAN ONE (1) ACRE DRAINAGE AREA AND A DITCH GRADE LESS THAN 3%.



CROSS SECTION VEE DITCH



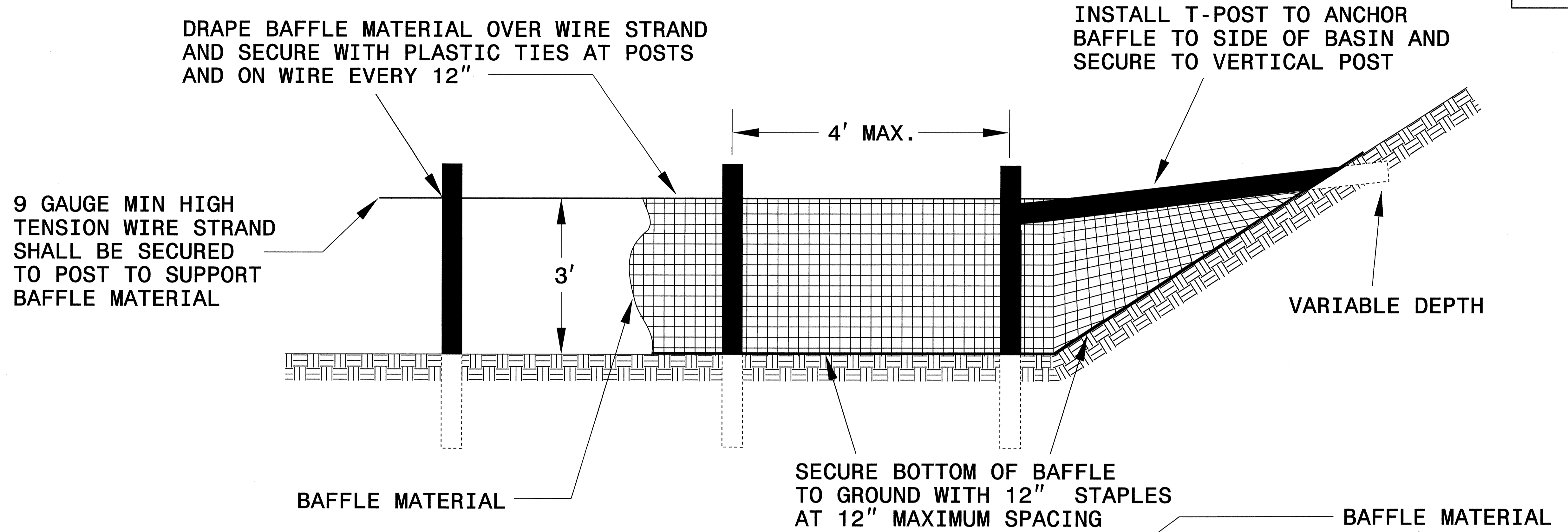
CROSS SECTION TRAPEZOIDAL DITCH



ELEVATION VIEW

PROJECT REFERENCE NO. R-2510C	SHEET NO. EC-2A
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

COIR FIBER BAFFLE DETAIL

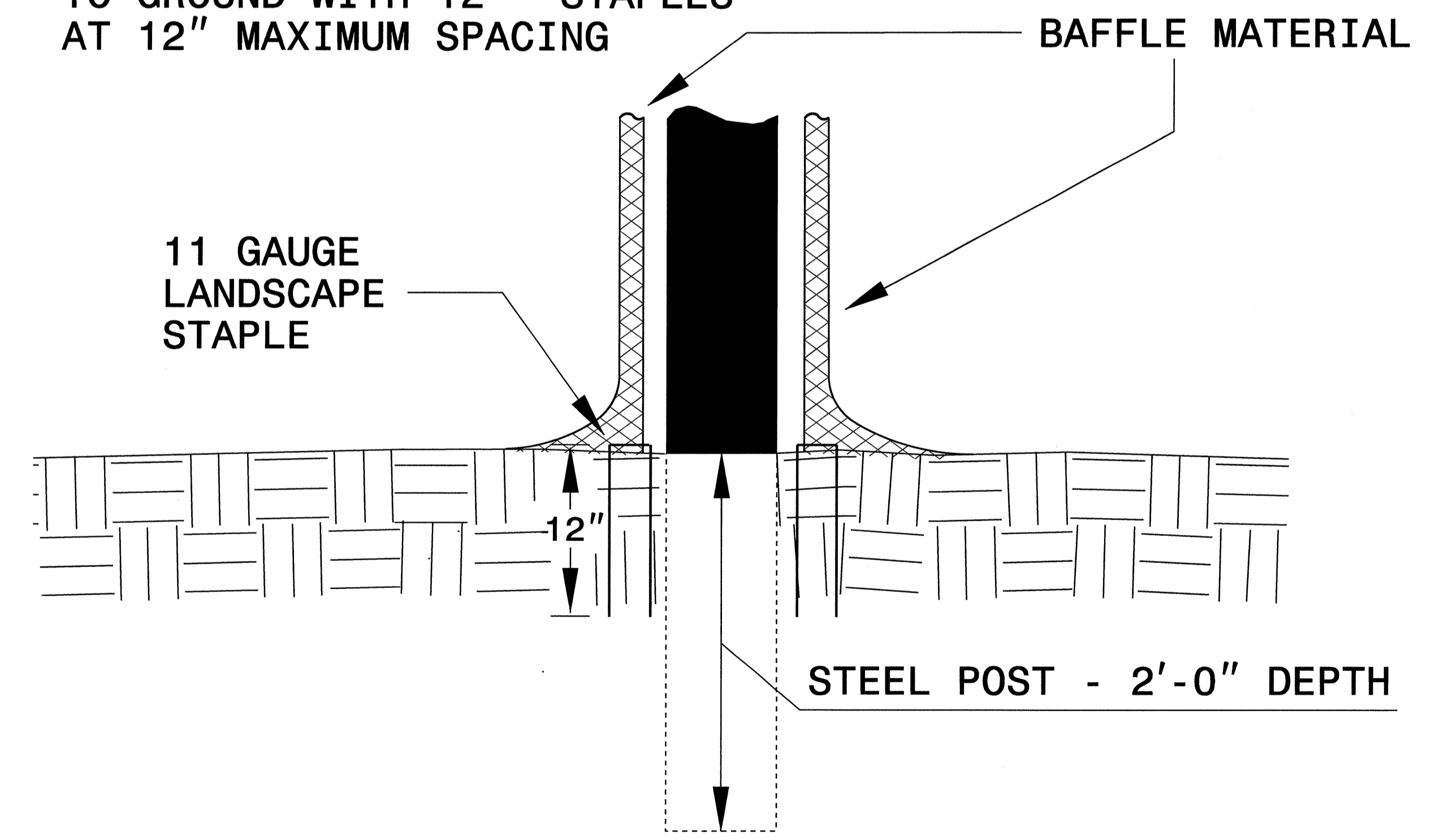


NOTES:

1. INSTALL THREE (3) COIR FIBER BAFFLES IN SILT BASINS AND SEDIMENT DAMS AT DRAINAGE OUTLETS WITH A SPACING OF $\frac{1}{4}$ THE BASIN LENGTH.

2. TWO (2) COIR FIBER BAFFLES CAN BE INSTALLED IN SILT BASINS AND DAMS LESS THAN 20 FT. IN LENGTH WITH A SPACING OF $\frac{1}{3}$ THE BASIN LENGTH.

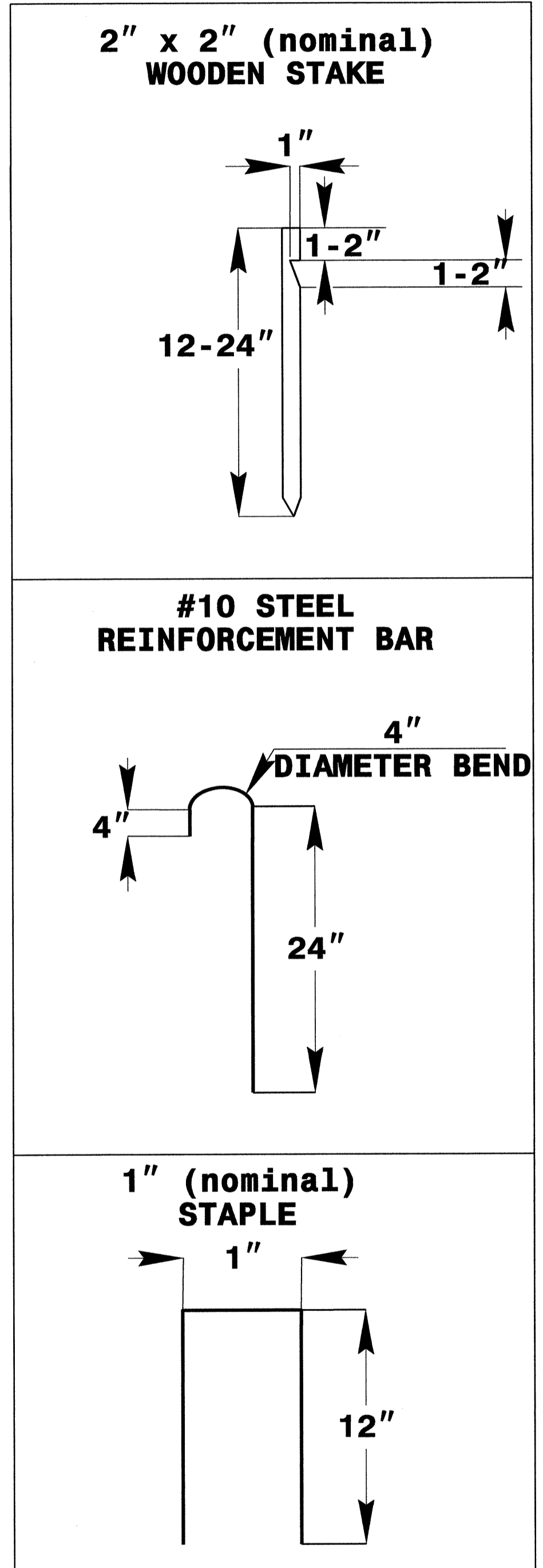
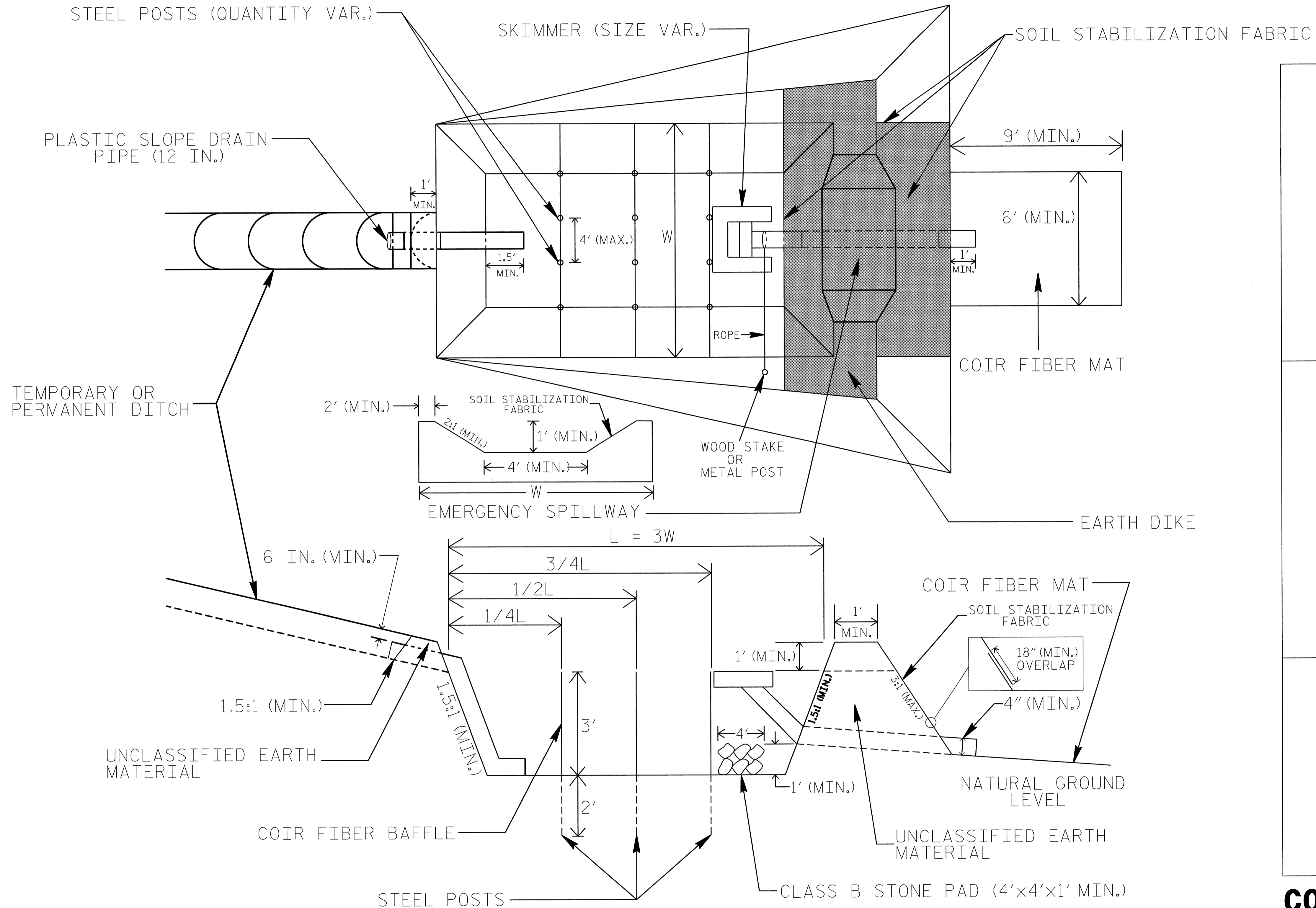
3. TOP HEIGHT OF COIR FIBER BAFFLES SHALL NOT BE BELOW BASE OF EMERGENCY SPILLWAY ELEVATION.



BAFFLE MATERIAL SHALL BE SECURED TO THE BOTTOM AND SIDES OF BASIN USING 12" LANDSCAPE STAPLES

SKIMMER BASIN WITH BAFFLES DETAIL

PROJECT REFERENCE NO. R-2510C	SHEET NO. EC-2B
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER



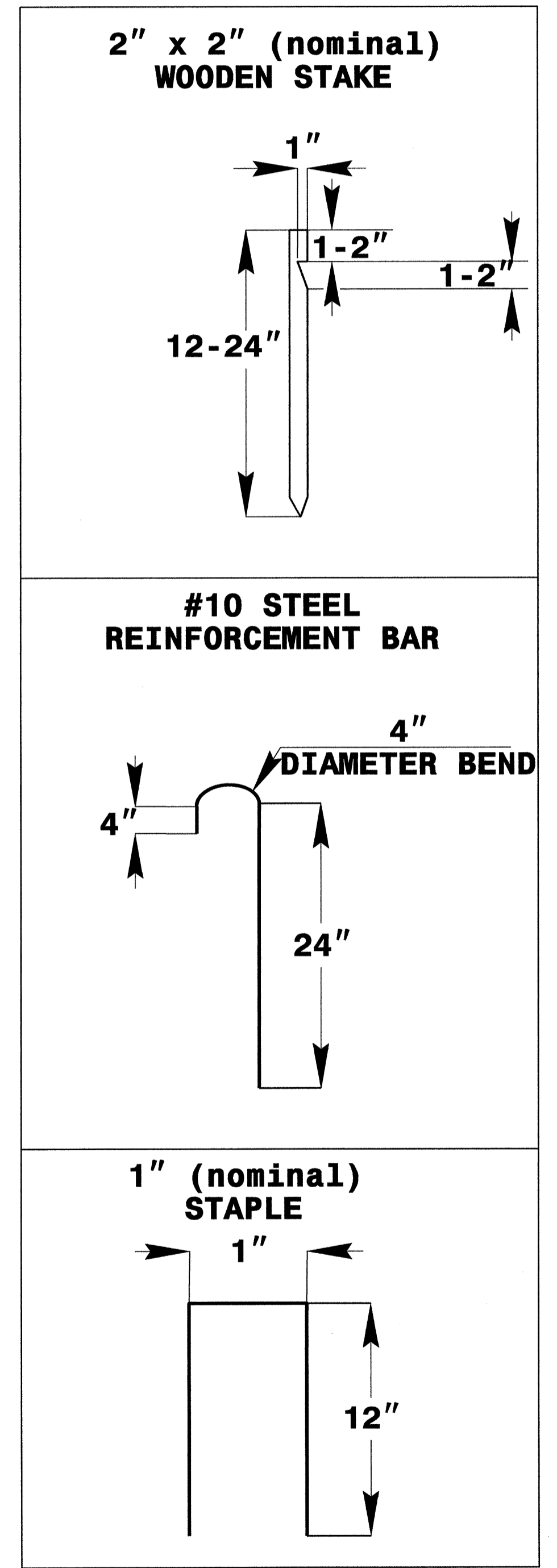
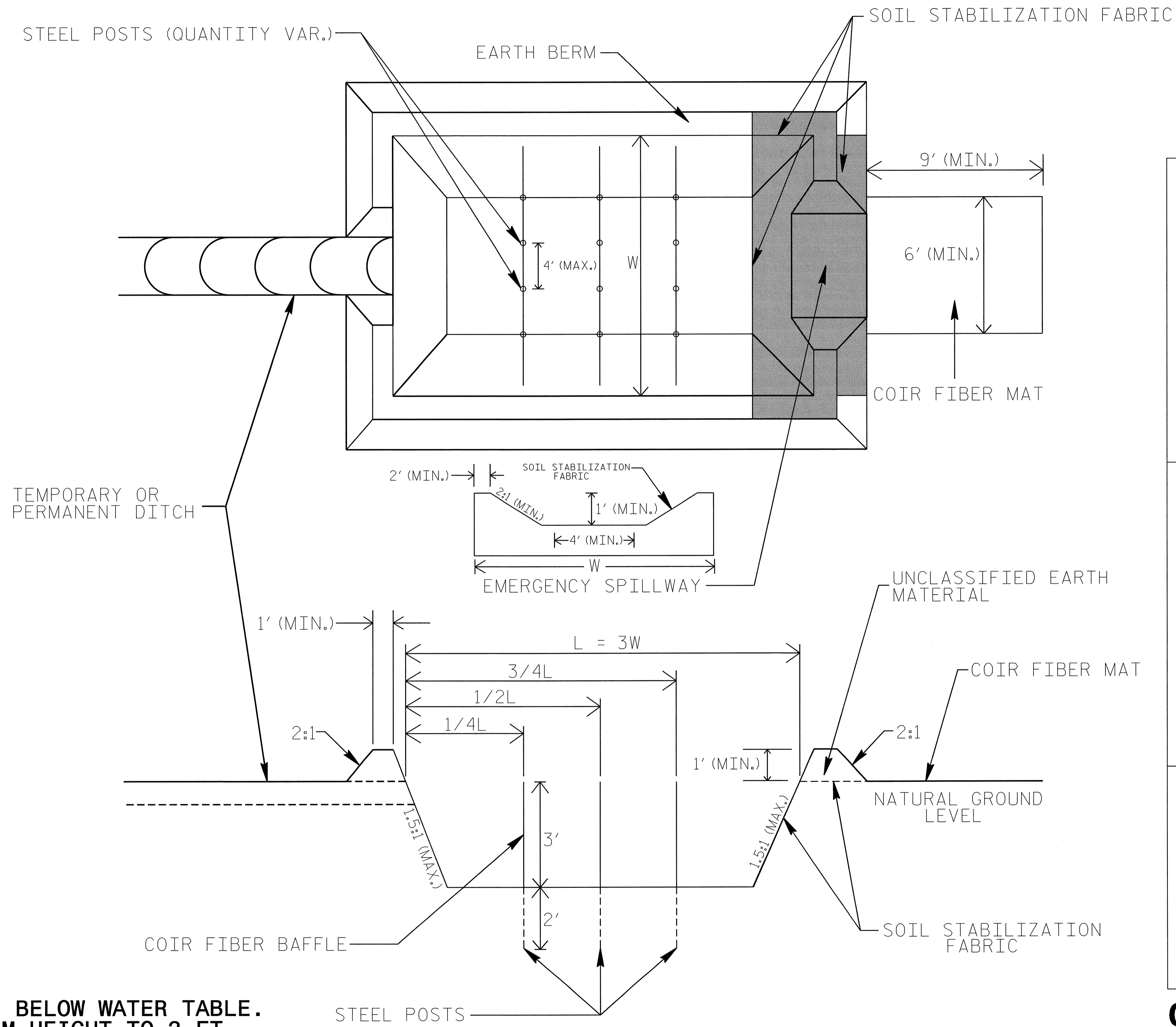
NOTES

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 FILTER FABRIC AS DIRECTED.
6. SOIL STABILIZATION FABRIC FOR EMERGENCY SPILLWAY SHALL BE ONE CONTINUOUS PIECE OF MATERIAL OR OVERLAPPED 18" AS SHOWN.

NOT TO SCALE

INFILTRATION BASIN WITH BAFFLES DETAIL

PROJECT REFERENCE NO. R-2510C	SHEET NO. EC-2C
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER



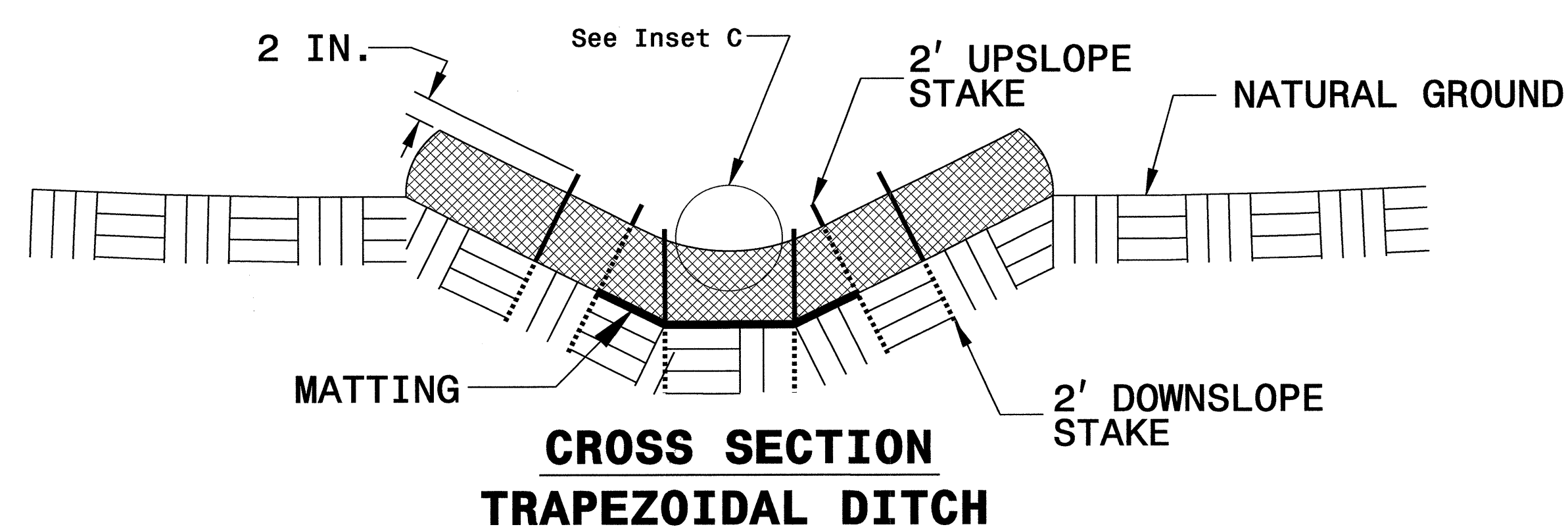
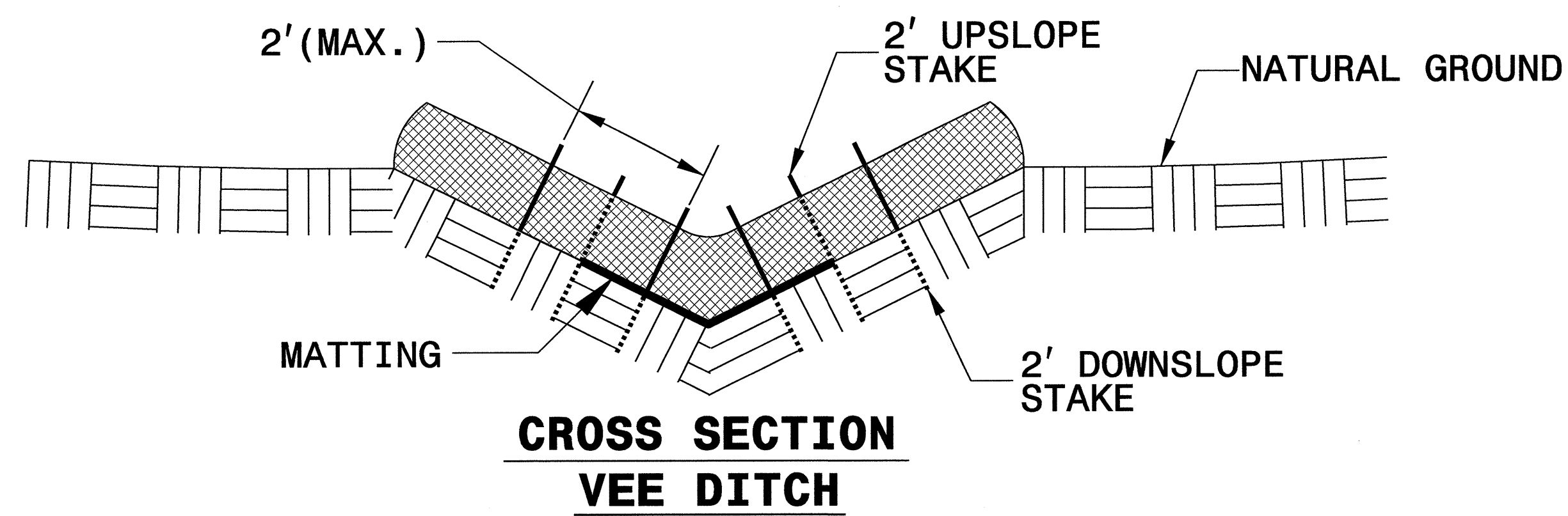
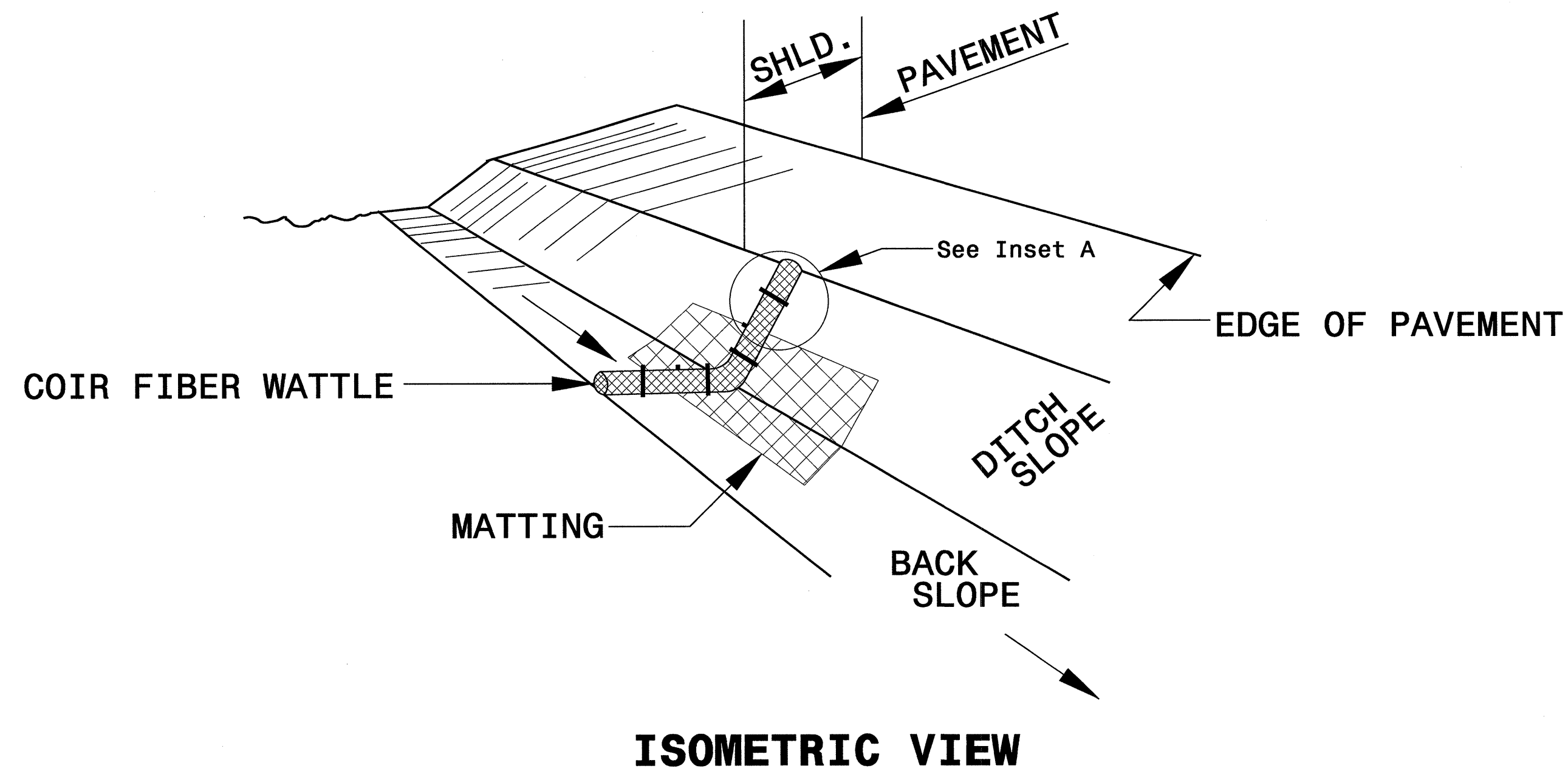
COIR FIBER MAT ANCHOR OPTIONS

NOTES

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

PROJECT REFERENCE NO. <i>R-2510C</i>	SHEET NO. <i>EC-2D</i>
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

COIR FIBER WATTLE WITH POLYACRYLAMIDE (PAM) DETAIL



NOTES:

USE MINIMUM 12 IN. DIAMETER COIR FIBER (COCONUT FIBER) 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.

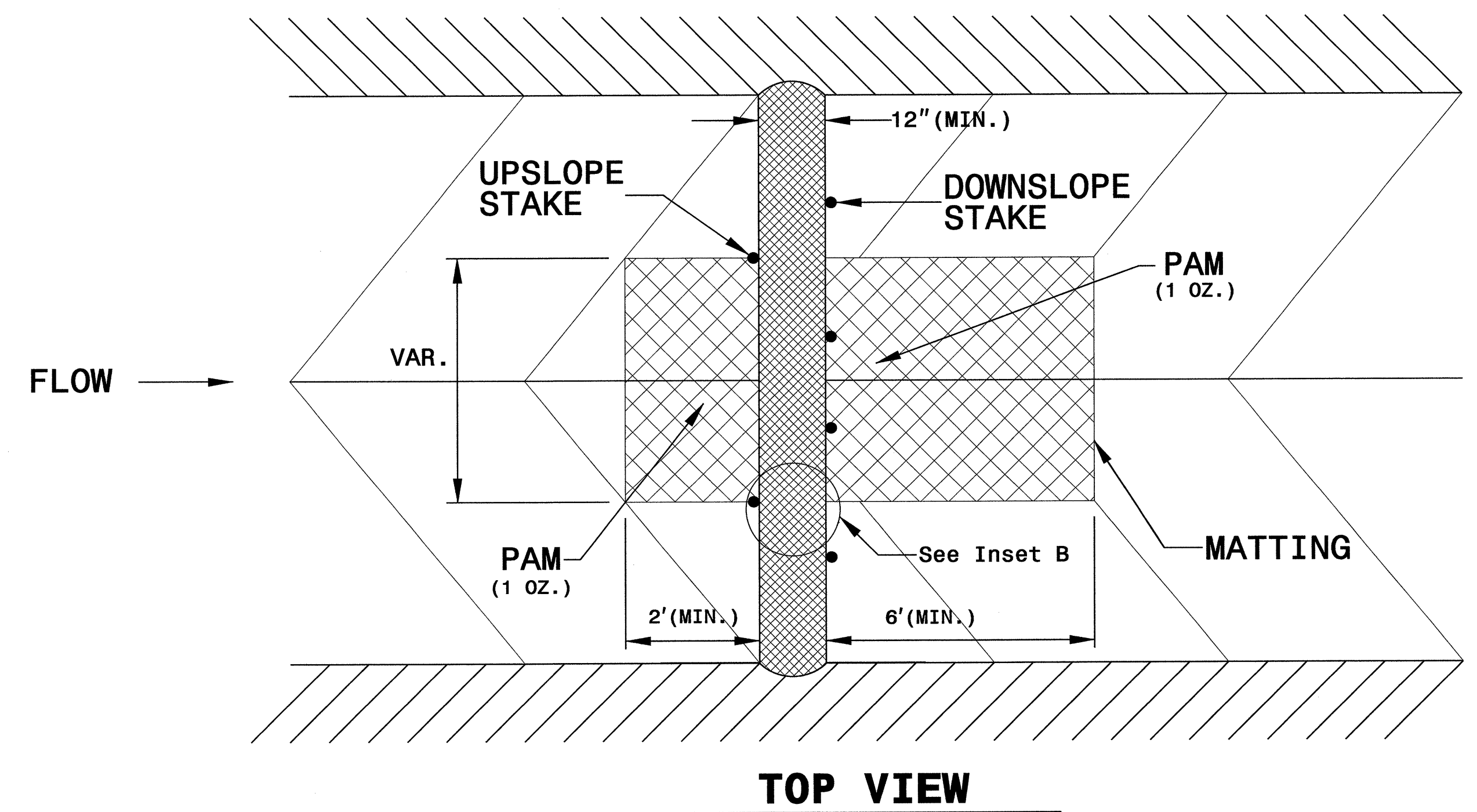
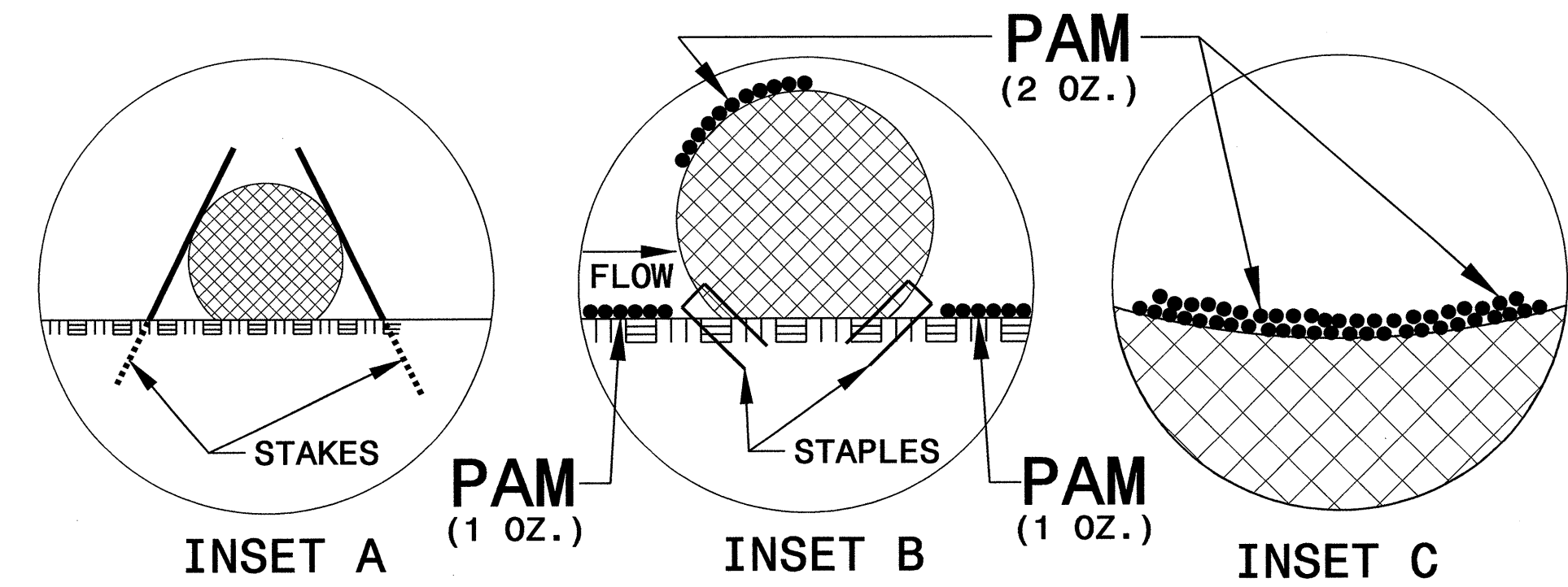
PROVIDE STAPLES MADE OF 0.125 IN. DIAMETER STEEL WIRE FORMED INTO A U SHAPE NOT LESS THAN 12" IN LENGTH.

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.

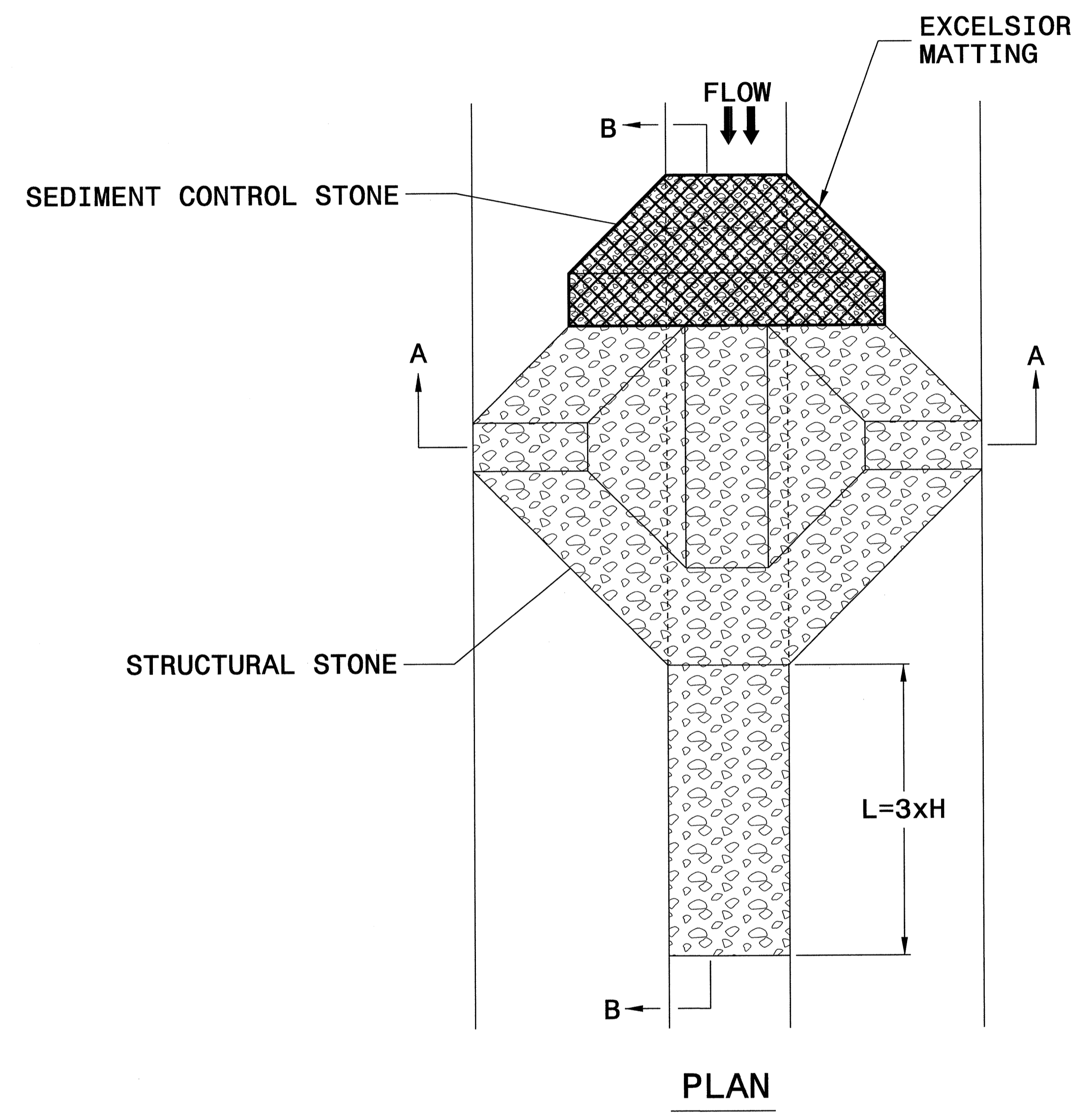
PRIOR TO POLYACRYLAMIDE (PAM) APPLICATION, OBTAIN A SOIL SAMPLE FROM PROJECT LOCATION, AND FROM OFFSITE MATERIAL, AND ANALYZE FOR APPROPRIATE PAM FLOCCULANT TO BE APPLIED TO EACH WATTLE.

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-2510C	SHEET NO. EC-2E
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

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

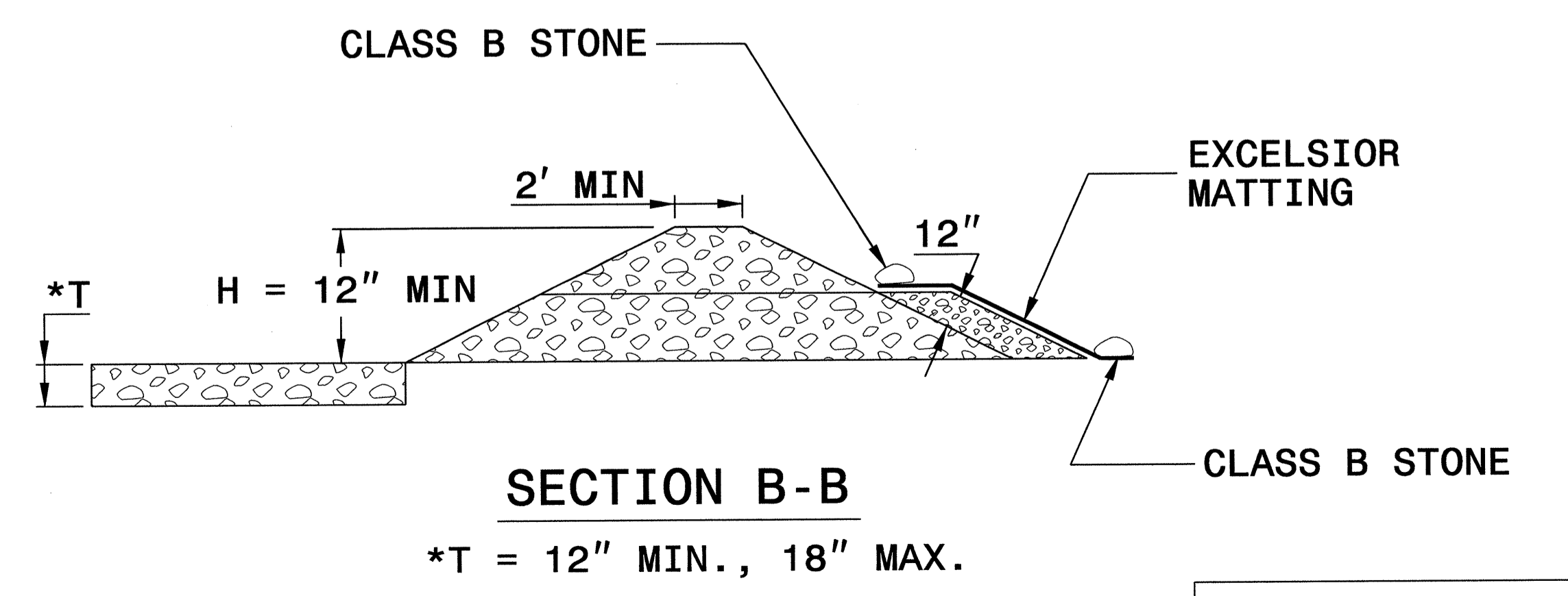
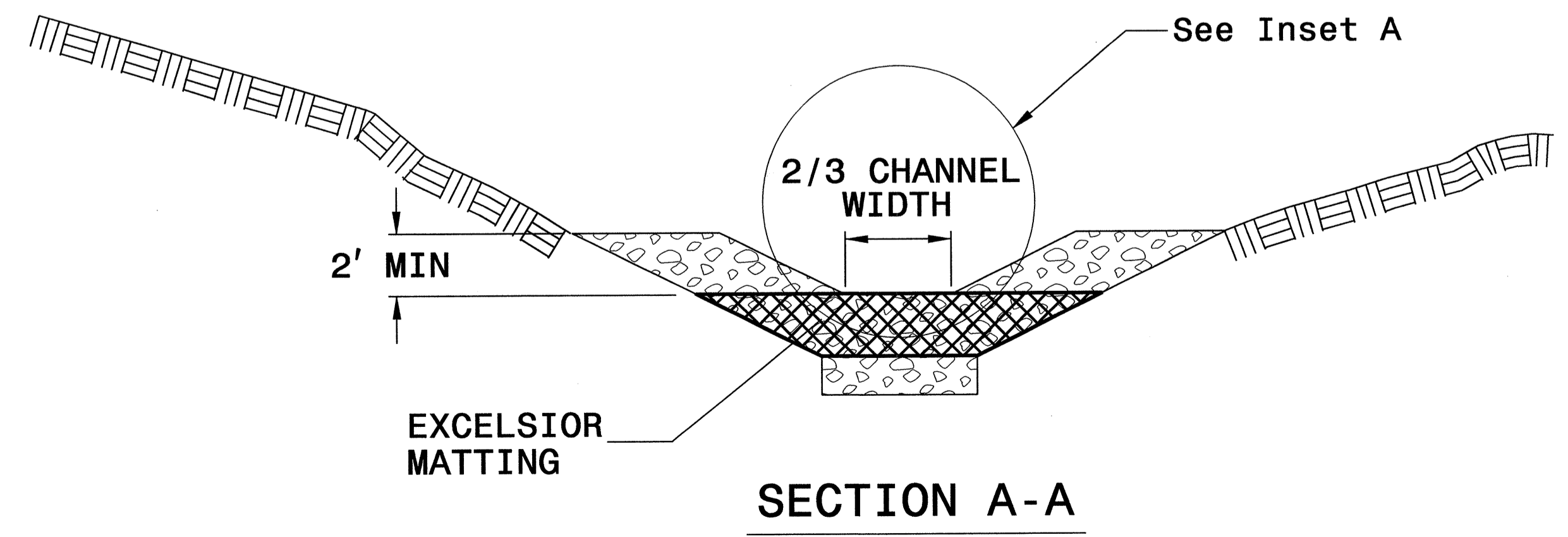
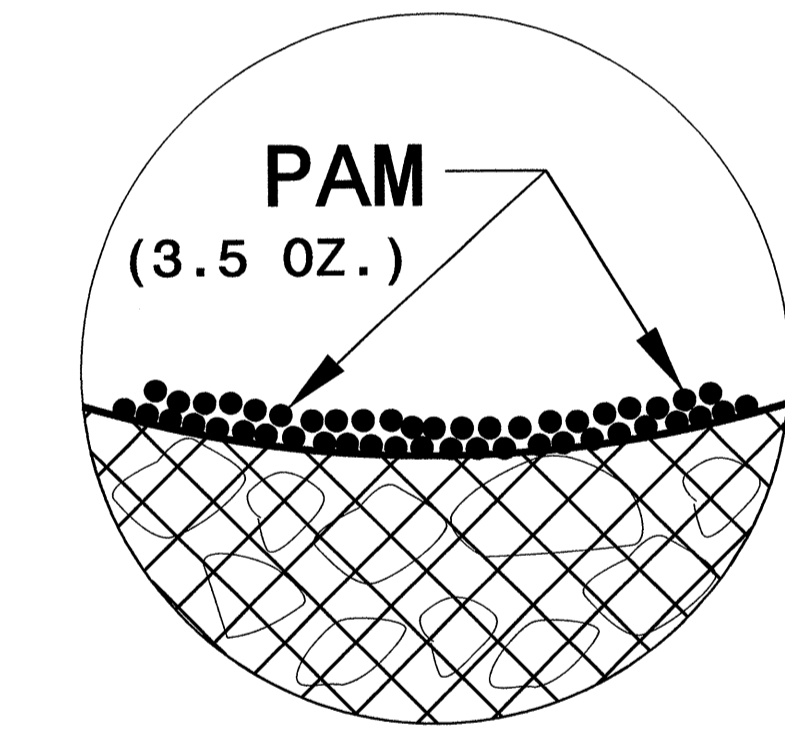


NOTES

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

BORROW PIT DEWATERING BASIN DETAIL

PROJECT REFERENCE NO. R-2510C	SHEET NO. EC-2F
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

GENERAL NOTES:

DETERMINE BORROW PIT DEWATERING BASIN SIZE USING $V = 8.0203 * Q * T$, WHERE V IS VOLUME (FT³), Q IS PUMP FLOW RATE (GPM), AND T IS DEWATERING TIME (HR). USE MAXIMUM FLOW RATE OF 1000 GPM AND A MINIMUM DEWATERING TIME OF 2 HOURS.

RISER SHALL BE A NON-PERFORATED, SMOOTH OR CORRUGATED MATERIAL WITH A FLASHBOARD OPTION.

CONSTRUCT THE COIR FIBER BAFFLE WITH A MATERIAL THAT MEETS THE SPECIFICATIONS OF THE COIR FIBER MAT SPECIAL PROVISION PROVIDED IN THE CONTRACT.

PROVIDE 5' STEEL POSTS OF THE SELF-FASTENER ANGLE STEEL TYPE. INSTALL STEEL POSTS WITH NO MORE THAN 3' OF THE POST APPEARING ABOVE THE GROUND.

ATTACH THE COIR FIBER MAT TO THE STEEL POSTS WITH WIRE OR OTHER ACCEPTABLE MEANS AND STAPLED INTO THE BOTTOM AND SIDE SLOPES OF THE BASIN WITH 12" STAPLES.

INSTALL TYPE 2 FILTER FABRIC ON SIDESLOPES AND BOTTOM OF BASIN AT INLET AS SHOWN IN THE DETAIL.

USE THE TYPICAL SECTION SHOWN FOR THE BORROW PIT DEWATERING BASIN AS A GUIDE. THE BASIN MAY HAVE ANY TYPE CONFIGURATION AS LONG AS SUFFICIENT VOLUME IS PROVIDED AND PROVISIONS ARE MADE FOR A NON-PERFORATED RISER.

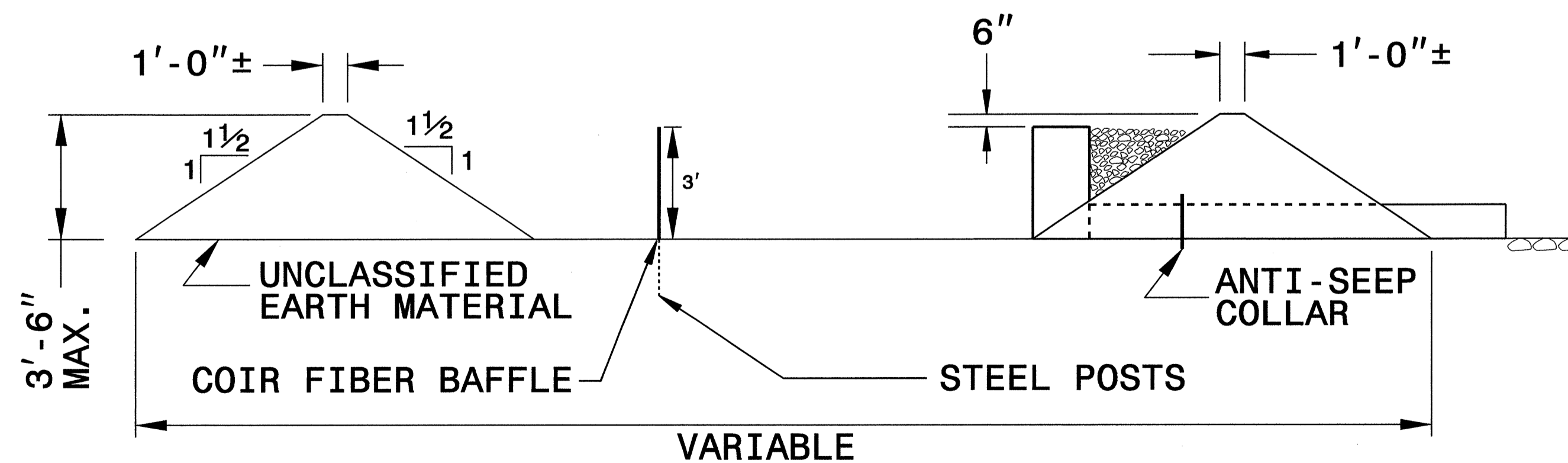
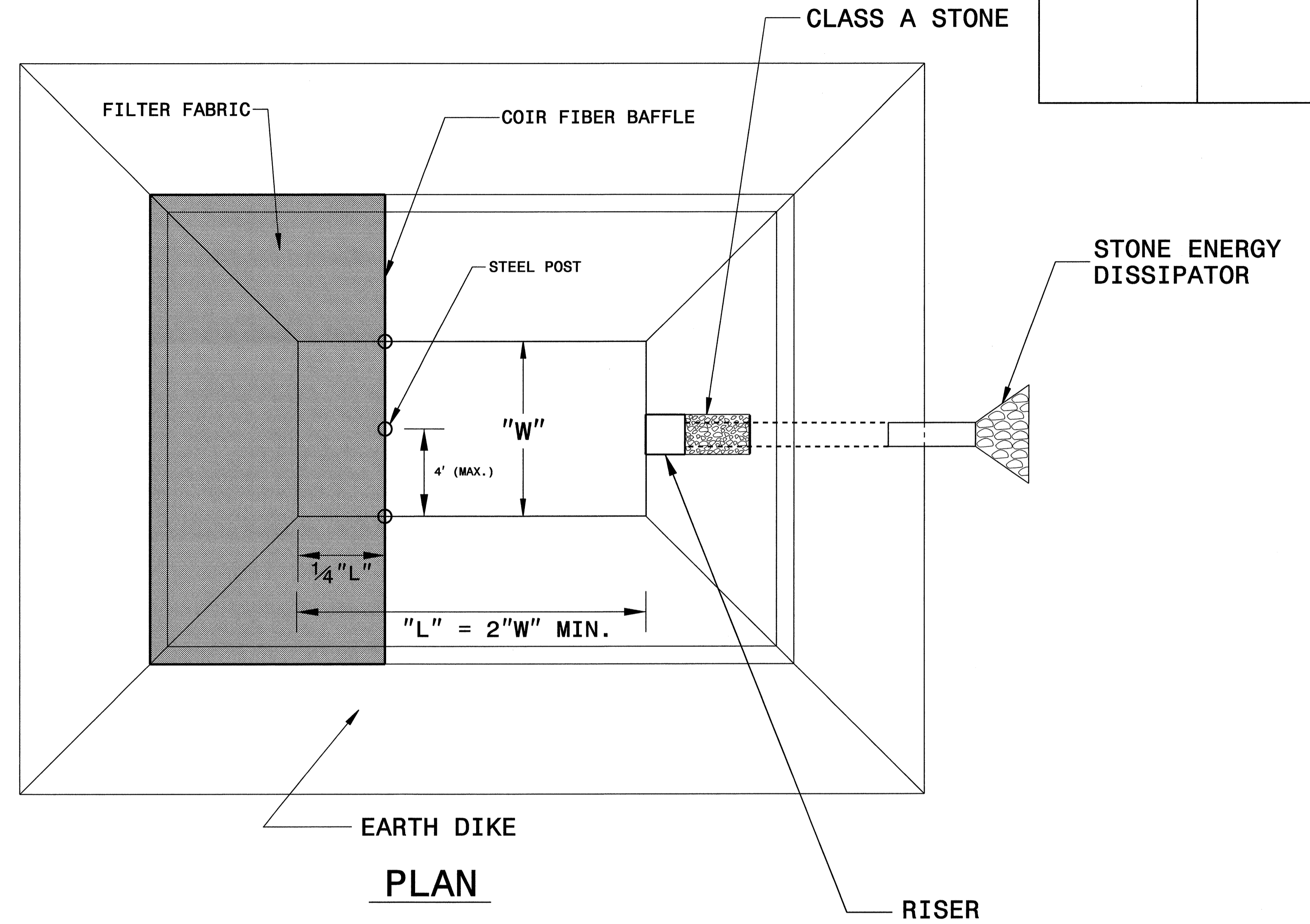
DO NOT EXCEED 3½ FT. IN HEIGHT FOR THE EARTH DIKES REQUIRED FOR BORROW PIT DEWATERING BASIN.

THE BORROW PIT DEWATERING BASIN SIZE IS VARIABLE AND DEPENDENT ON SPECIFIC SITE REQUIREMENTS AS WELL AS PROPOSED CONSTRUCTION OPERATIONS.

SUBMIT THE SIZE, LOCATION AND RISER PIPE MATERIAL FOR APPROVAL PRIOR TO CONSTRUCTION.

PUMP THE EFFLUENT INTO THE BORROW PIT DEWATERING BASIN TO A MAXIMUM DEPTH OF 6 IN. BELOW TOP OF EARTH DIKE.

PROVIDE A STONE ENERGY DISSIPATOR PAD AT THE OUTLET OF THE PUMP DISCHARGE HOSE AND OUTLET OF THE RISER BARREL IN ACCORDANCE WITH ROADWAY STANDARD DRAWING 876.02 FOR OUTLET W/O DITCH.

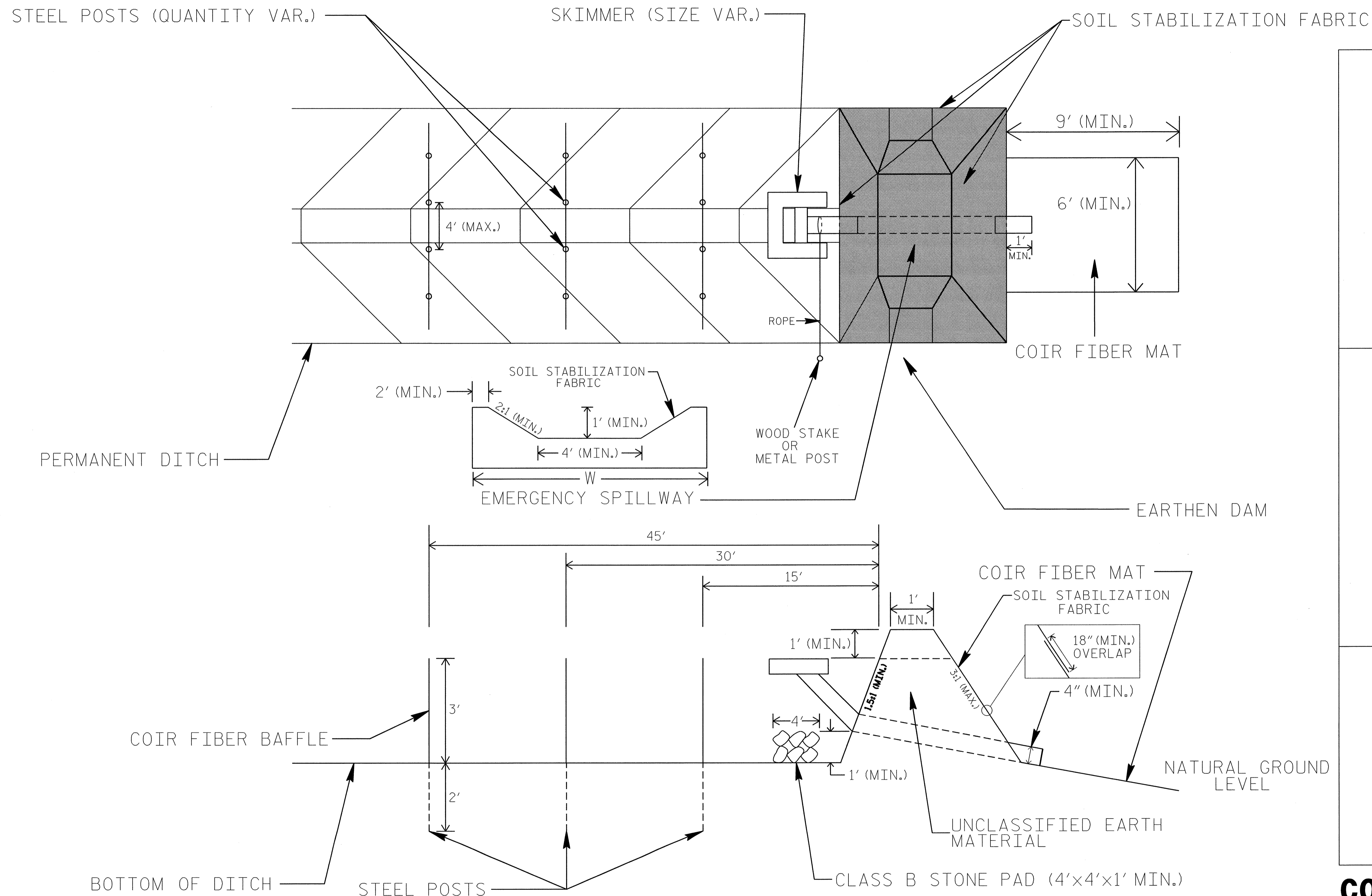


TYPICAL SECTION VIEW

NOT TO SCALE

EARTHEN DAM WITH SKIMMER

PROJECT REFERENCE NO. R-2510C	SHEET NO. EC-2G
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER



NOTES

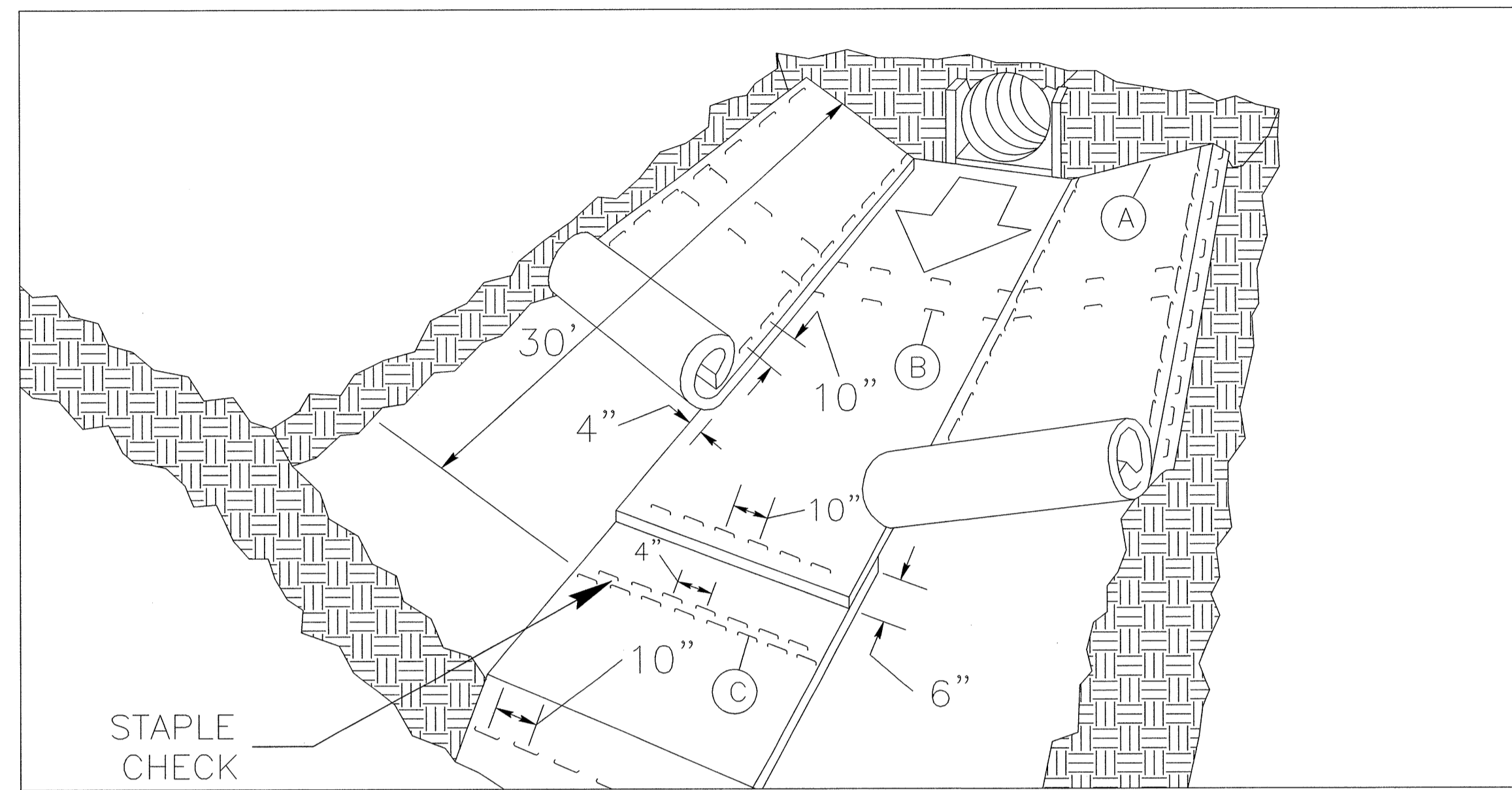
1. LIMIT EARTHEN DAM HEIGHT TO 5 FT.
2. DETERMINE EMERGENCY SPILLWAY LENGTH (FT.) USING $Q/0.8$, WHERE Q IS FLOW RATE (CFS) INTO BASIN.
3. SOIL STABILIZATION FABRIC FOR EMERGENCY SPILLWAY SHALL BE ONE CONTINUOUS PIECE OF MATERIAL OR OVERLAPPED 18" AS SHOWN.

COIR FIBER MAT ANCHOR OPTIONS

NOT TO SCALE

PROJECT REFERENCE NO. <i>R-2510C</i>	SHEET NO. <i>EC-2H</i>
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

MATTING INSTALLATION DETAIL



MATTING IN DITCHES

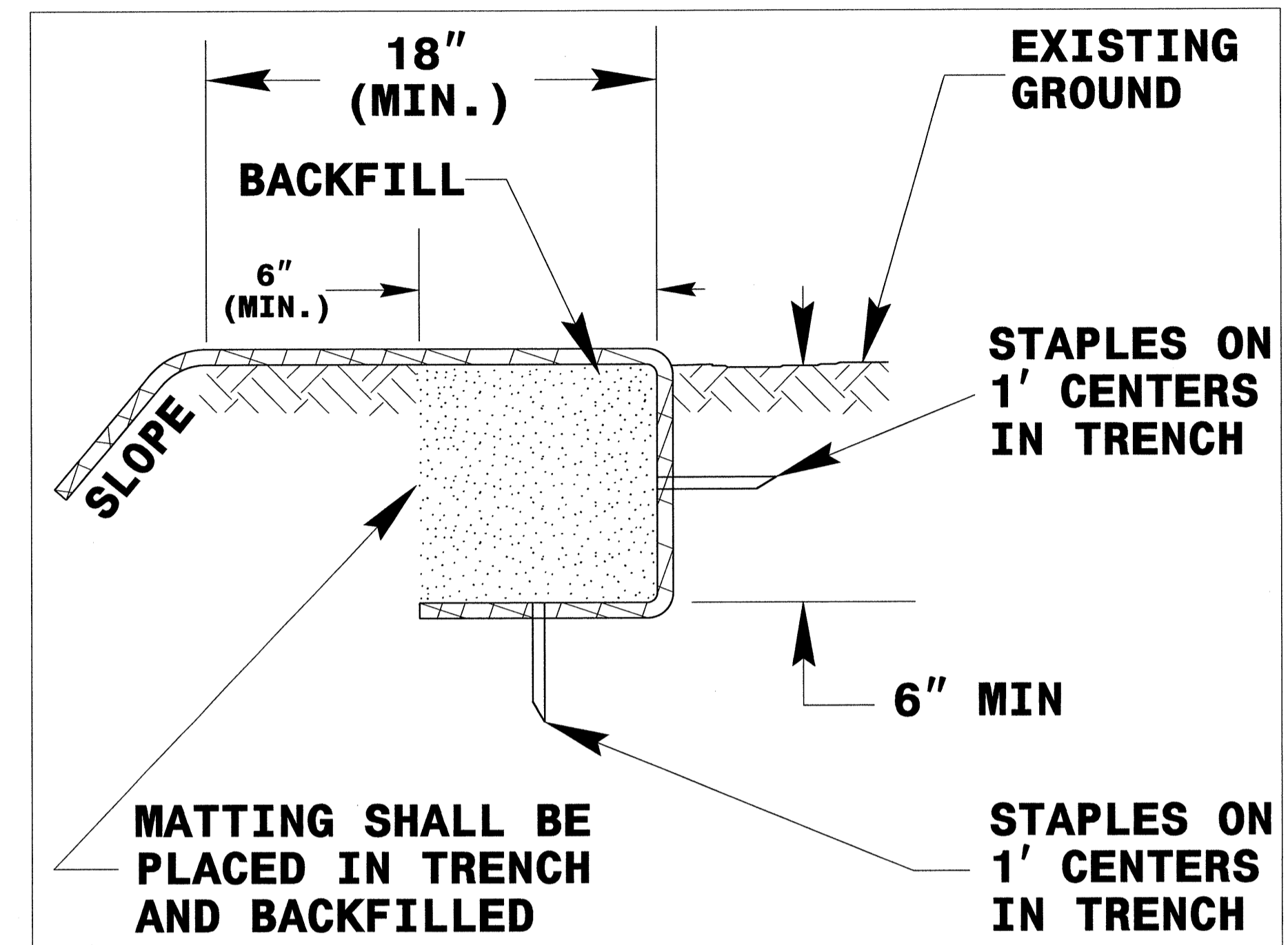
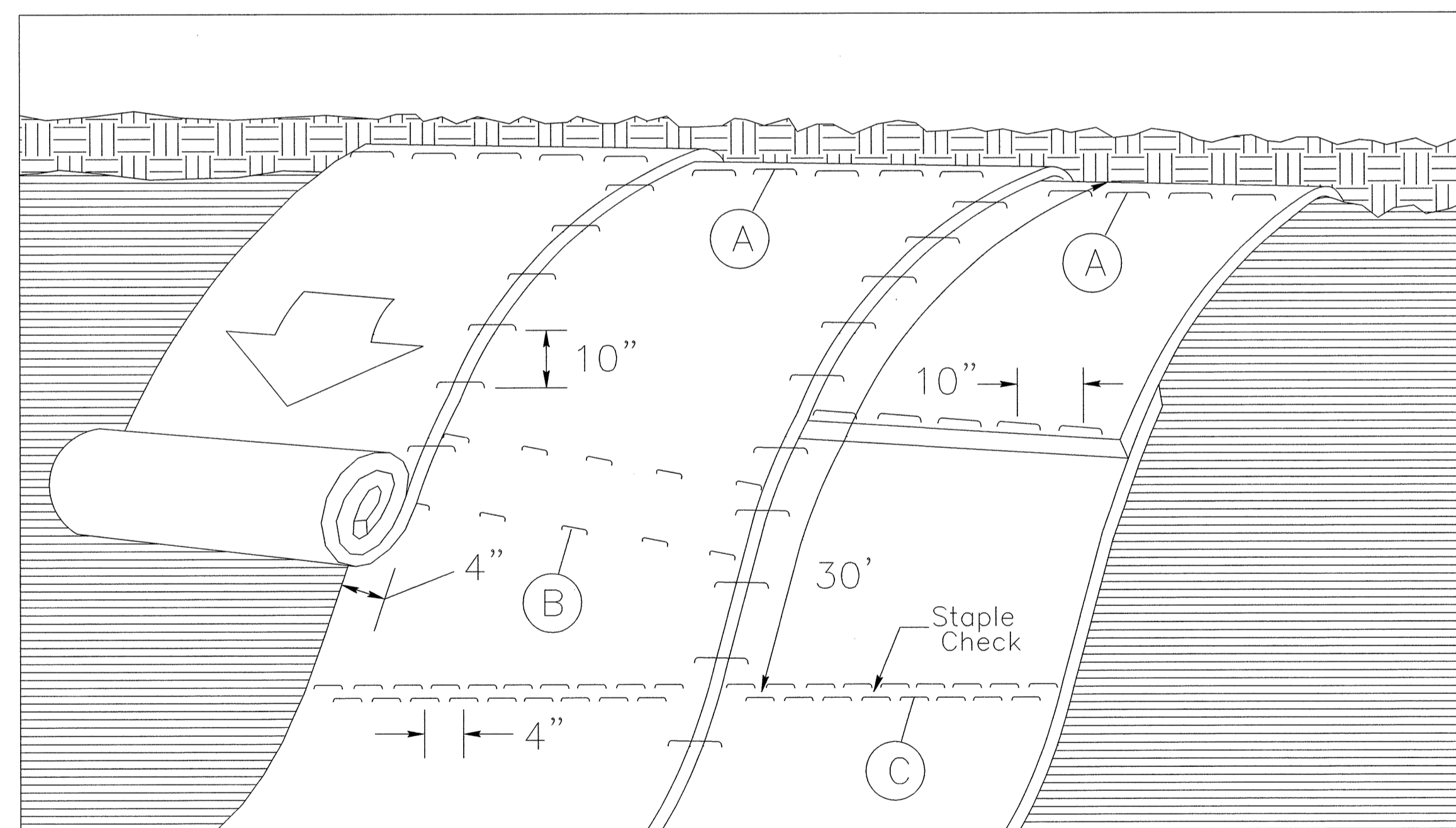


DIAGRAM (A)



MATTING ON SLOPES

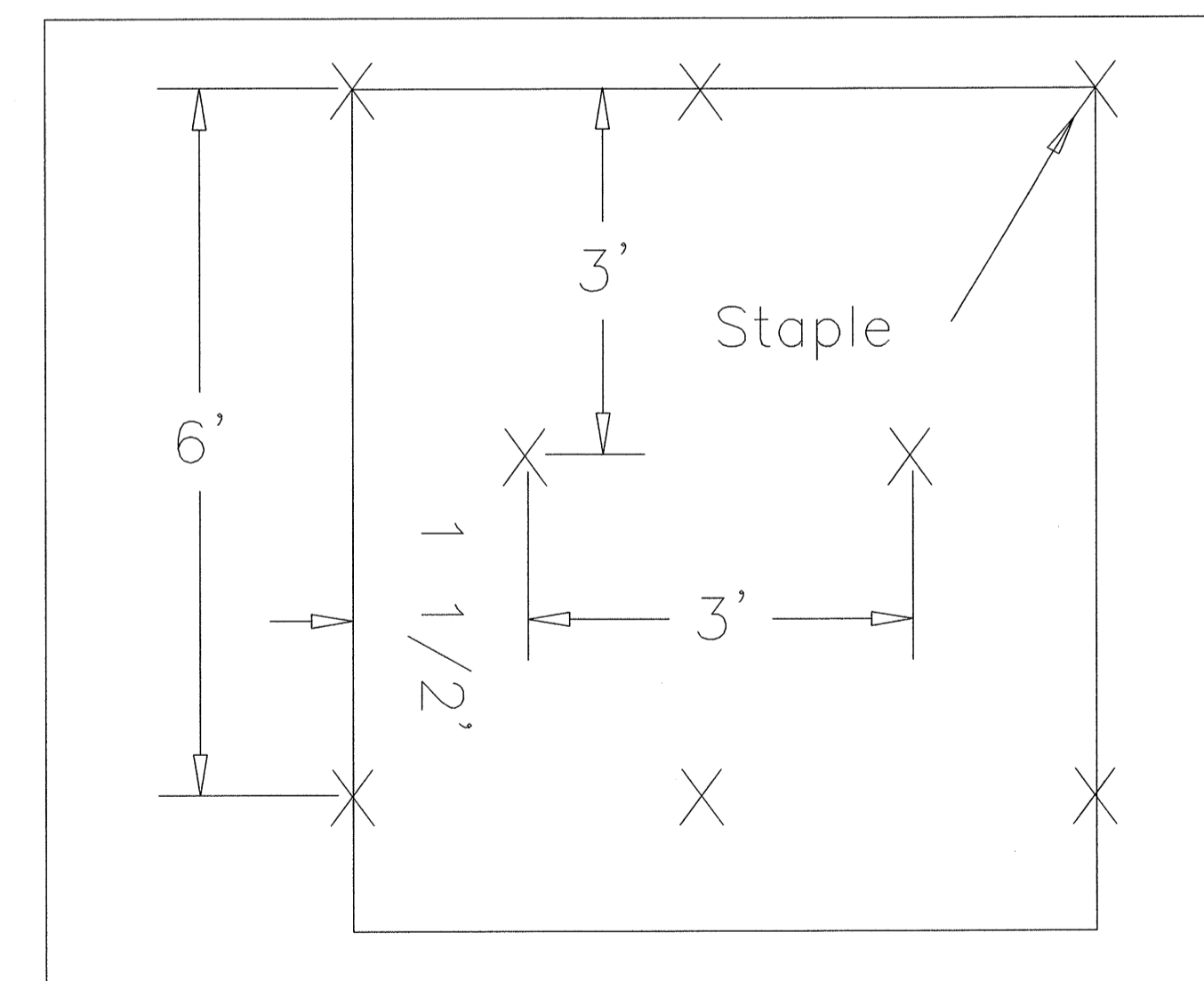


DIAGRAM (B)

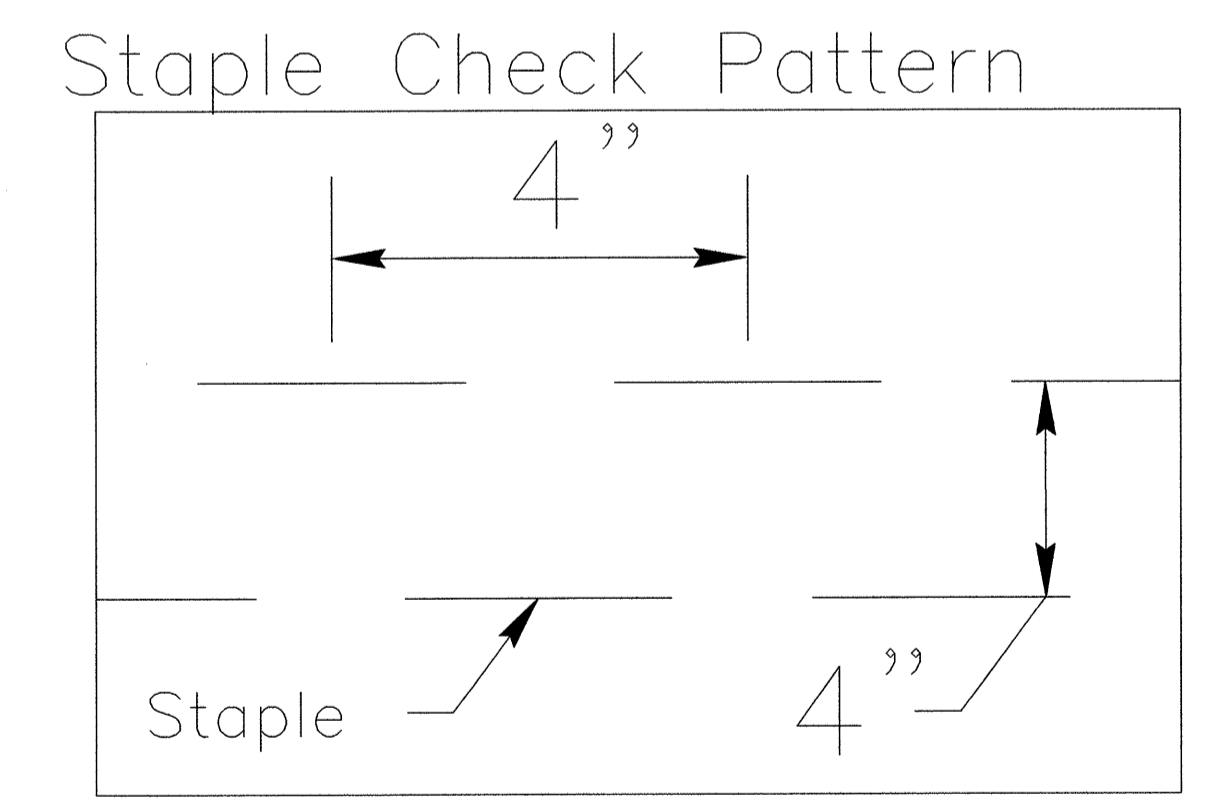


DIAGRAM (C)

NOTES:

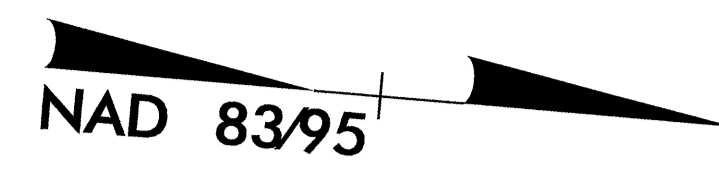
THIS DETAIL APPLIES TO STRAW, EXCELSIOR, AND PERMANENT SOIL REINFORCEMENT MAT (PSRM) INSTALLATION.

STAPLES SHALL BE NO. 11 GAUGE STEEL WIRE FORMED INTO A "U" SHAPE WITH A MINIMUM THROAT WIDTH OF 1 INCH AND NOT LESS THAN 6 INCHES IN LENGTH.

NOT TO SCALE

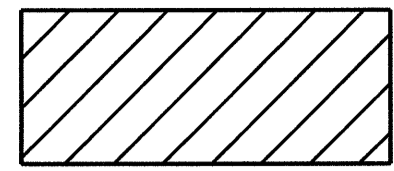
8/17/99

PROJECT REFERENCE NO. R-2510C	SHEET NO. EC-4/CONST.4
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER



JOSEPH D. ARNOLD
DB 1300 - PG 734
MB 1 - PG 50

ORRIN K. LANGLEY, et al
DB 1077 - PG 507
DB 893 - PG 713

 ENVIRONMENTALLY SENSITIVE AREA
SEE PROJECT SPECIAL PROVISIONS

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 4

GOtha W. WOOLARD ESTATE
(C/O DEBORAH WOOLARD MITCHELL)
DB 1127 - PG 863
DB 893 - PG 713
ESTATE FILE 03-E325

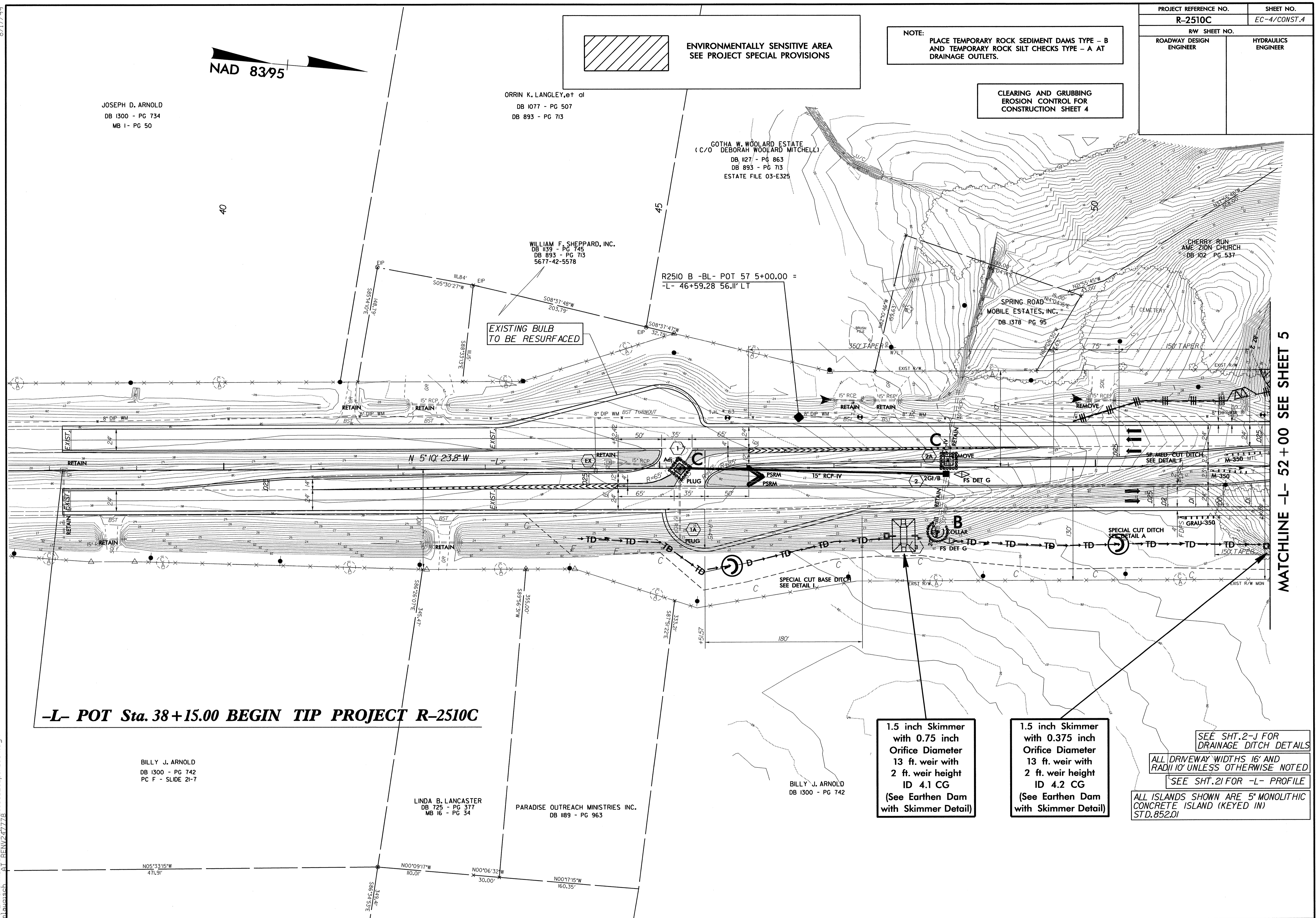
WILLIAM F. SHEPPARD, INC.
DB 1139 - PG 745
DB 893 - PG 713
5677-42-5578

R2510 B -BL- POT 57 5+00.00 =
-L- 46+59.28 56.11' LT

EXISTING BULB
TO BE RESURFACED

SPRING ROAD
MOBILE ESTATES, INC.
DB 1378 - PG 95

CHERRY RUN
AME ZION CHURCH
DB 102 - PG 537



-L- POT Sta. 38+15.00 BEGIN TIP PROJECT R-2510C

BILLY J. ARNOLD
DB 1300 - PG 742
PC F - SLIDE 21-7

LINDA B. LANCASTER
DB 125 - PG 377
MB 16 - PG 34

PARADISE OUTREACH MINISTRIES INC.
DB 1189 - PG 963

BILLY J. ARNOLD
DB 1300 - PG 742

1.5 inch Skimmer
with 0.75 inch
Orifice Diameter
13 ft. weir with
2 ft. weir height
ID 4.1 CG
(See Earthen Dam
with Skimmer Detail)

1.5 inch Skimmer
with 0.375 inch
Orifice Diameter
13 ft. weir with
2 ft. weir height
ID 4.2 CG
(See Earthen Dam
with Skimmer Detail)

SEE SHT. 2-J FOR
DRAINAGE DITCH DETAILS
ALL DRIVEWAY WIDTHS 16' AND
RADIUS 10' UNLESS OTHERWISE NOTED
SEE SHT. 2I FOR -L- PROFILE
ALL ISLANDS SHOWN ARE 5' MONOLITHIC
CONCRETE ISLAND (KEYED IN)
STD. 852.01

MATCHLINE -L- 52+00 SEE SHEET 5

05-OCT-2010 08:34
D:\projects\2510\ec-ec.pst\004.dgn
m:\cvs\comm\ec-ec\plan\2510\ec-ec.pst\004.dgn

PROJECT REFERENCE NO.	SHEET NO.
R-2510C	EC-5/CONST.5
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

GOTHA W. WOOLARD ESTATE
(C/O DEBORAH WOOLARD MITCHELL)
DB 1127 - PG 863
DB 893 - PG 713
ESTATE FILE 03-E325

ENVIRONMENTALLY SENSITIVE AREA
SEE PROJECT SPECIAL PROVISIONS

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 5

1.5 inch Skimmer
with 0.375 inch
Orifice Diameter
13 ft. weir with
2 ft. weir height
ID 5.1 CG
(See Earthen Dam
with Skimmer Detail)

MATCHLINE -L- 52+00 SEE SHEET 4

MATCHLINE -L- 66+00 SEE SHEET 6

1.5 inch Skimmer
with 0.375 inch
Orifice Diameter
13 ft. weir with
2 ft. weir height
ID 4.2 CG
(See Earthen Dam
with Skimmer Detail)

1.5 inch Skimmer
with 0.375 inch
Orifice Diameter
13 ft. weir with
2 ft. weir height
ID 5.2 CG
(See Earthen Dam
with Skimmer Detail)

SEE SHEETS -- THRU --
FOR STRUCTURE PLANS
ALL DRIVEWAY WIDTHS 16' AND
RADIUS 10' UNLESS OTHERWISE NOTED
SEE SHT. 21 & 22 FOR -L- PROFILE
SEE SHT. 30 FOR -Y3- PROFILE
ALL ISLANDS SHOWN ARE 5' MONOLITHIC
CONCRETE ISLAND (KEYED IN)
STD. 852.01
SEE SHT. 2-E FOR INTERSECTION DETAIL
SEE SHT. 2-J FOR DRAINAGE DITCH DETAILS

-TI- 102 8+73.22 PINC=
ELEV= 9.32' NAIL SET
-L- 54+41.05 81.59' RT

-TI- 103 10+62.66 POT=
ELEV= 8.91' NAIL SET
-L- 56+11.71 57.88' RT

GPS R2510C-1 23+12.79 PINC =
-L- 64+68.18 1.15' RT

IA
BILLY J. ARNOLD
DB 1300 - PG 742

PI Sta 13+17.06
Δ = 27° 40' 35.0" (LT)
D = 11' 41' 34.9"
L = 236.69'
T = 120.70'
R = 490.00'

PIs Sta 57+20.65
Δ = 4° 48' 06.2" (LT)
D = 0' 29' 53.6"
L = 963.76'
T = 482.16'
R = 11,500.00'

PIs Sta 63+17.11
Δs = 0' 38' 03.4"
Ls = 120.00'
LT = 80.00'
ST = 40.00'

PI Sta 66+24.82
Δ = 5° 39' 21.3" (RT)
D = 1' 03' 25.6"
L = 535.03'
T = 267.73'
R = 5,420.00'
SE = 0.030
INC = 40.00'

05-OCT-2010 08:38
D:\env\environmental\2510c\ec-psd\005.dgn
11/27/2010 11:27:16

8/17/99

8/17/99

JOSEPH H. BOSTON, ET UX
DB 1061 PG 5
DB 1110 PG 931

TUYET BEATTY-MOORE, ET VIR
DB 1061 PG 2
DB 1089 PG 237

1.5 inch Skimmer
with 0.625 inch
Orifice Diameter
13 ft. weir with
2 ft. weir height
ID 6.1 CG
(See Earthen Dam
with Skimmer Detail)

1.5 inch Skimmer
with 0.875 inch
Orifice Diameter
13 ft. weir with
2 ft. weir height
ID 6.3 CG
(See Earthen Dam
with Skimmer Detail)

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

CLEARING AND GRUBBING
EROSION CONTROL FOR
CONSTRUCTION SHEET 6

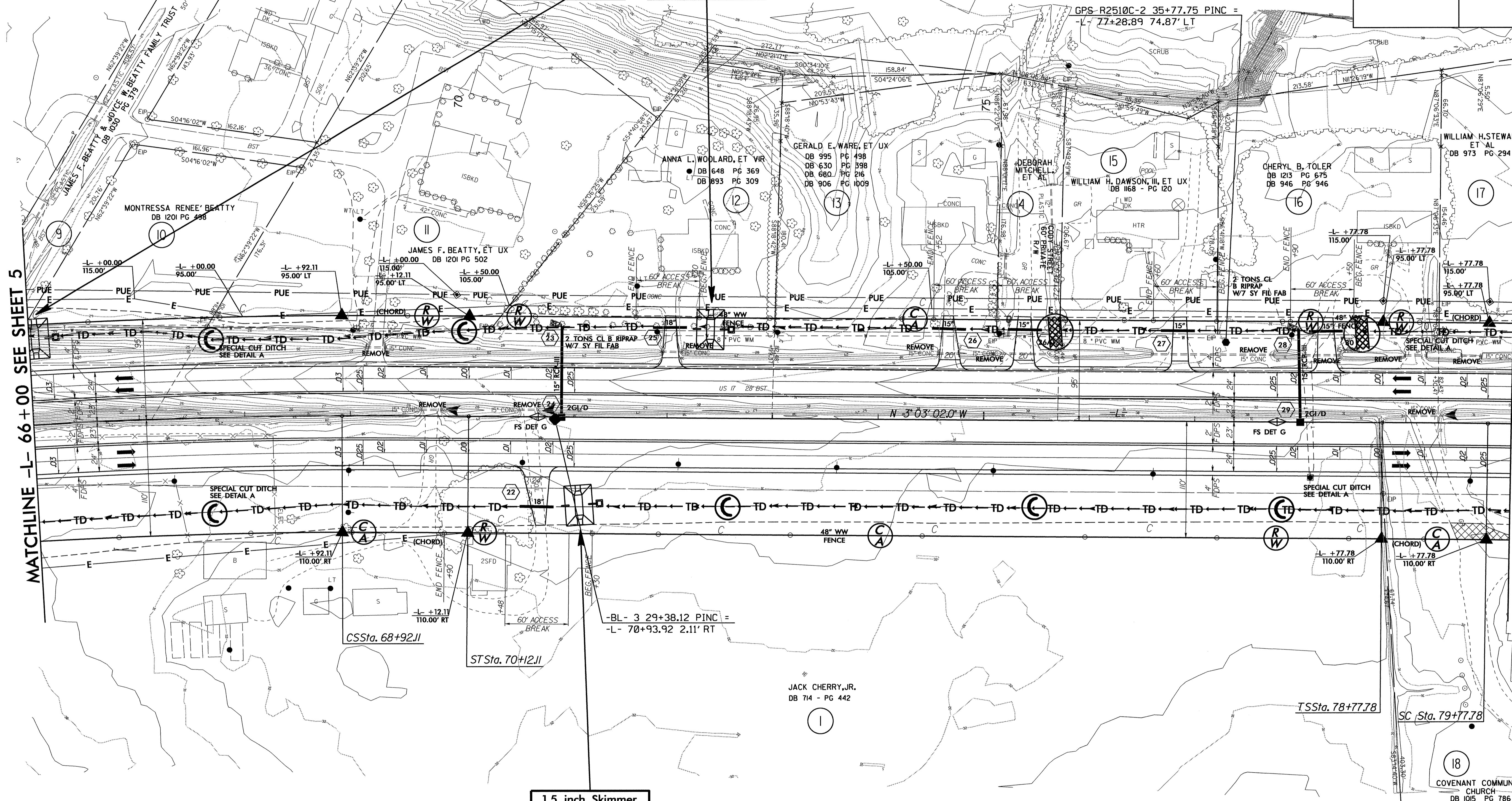
PROJECT REFERENCE NO. R-2510C	SHEET NO. EC-6/CONST.6
RW SHEET NO. ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

NAD 8395

GPS R2510C-2 35+77.75 PINC =
-L- 77+28.89 74.87' LT

MATCHLINE -L- 66+00 SEE SHEET 5

MATCHLINE -L- 80+00 SEE SHEET 7



1.5 inch Skimmer
with 0.75 inch
Orifice Diameter
13 ft. weir with
2 ft. weir height
ID 6.2 CG
(See Earthen Dam
with Skimmer Detail)

JACK CHERRY, JR.
DB 714 - PG 442

ALL DRIVEWAY WIDTHS 16' AND
RADI 10' UNLESS OTHERWISE NOTED
SEE SHT. 22 FOR -L- PROFILE

PI Sta 66+24.82 Δ = 5' 39" 21.3" (RT) D = 1' 03" 25.6" L = 535.03' T = 267.73' R = 5,420.00' SE = 0.030 INC = 40.00'	PIs Sta 69+32.11 Θs = 0' 38" 03.4" Ls = 120.00' LT = 80.00' ST = 40.00'	PIs Sta 79+44.45 Θs = 0' 22" 33.4" Ls = 100.00' LT = 66.67' ST = 33.33'	PI Sta 82+63.79 Δ = 4' 17" 55.1" (RT) D = 0' 45" 06.9" L = 571.69' T = 285.98' R = 7,620.00' SE = 0.025 INC = 40.00'
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OBLITERATE

SEE SHT. 2-J FOR DRAINAGE DITCH DETAILS

05-OCT-2010 08:41
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Environment
11/24/2010

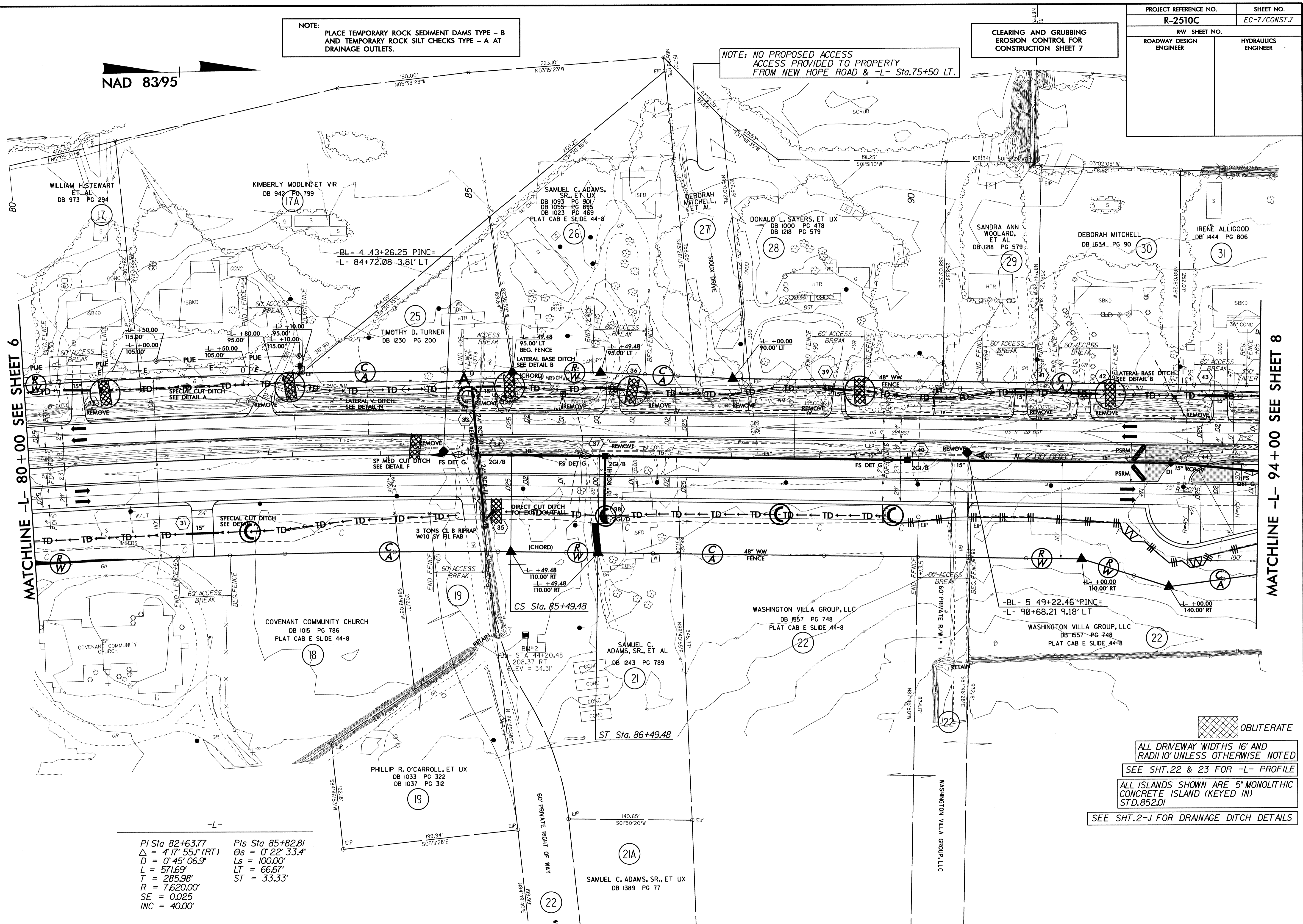
PROJECT REFERENCE NO.	SHEET NO.
R-2510C	EC-7/CONST.7
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

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

NOTE: NO PROPOSED ACCESS ACCESS PROVIDED TO PROPERTY FROM NEW HOPE ROAD & -L- Sta.75+50 LT.


CLEARING AND GRUBBING EROSION CONTROL FOR CONSTRUCTION SHEET 7

NAD 83/95



MATCHLINE -L- 80+00 SEE SHEET 6

MATCHLINE -L- 94+00 SEE SHEET 8

 OBLITERATE

ALL DRIVEWAY WIDTHS 16' AND RADII 10' UNLESS OTHERWISE NOTED

SEE SHT.22 & 23 FOR -L- PROFILE

ALL ISLANDS SHOWN ARE 5' MONOLITHIC CONCRETE ISLAND (KEYED IN) STD.852.01

SEE SHT.2-J FOR DRAINAGE DITCH DETAILS

-L-

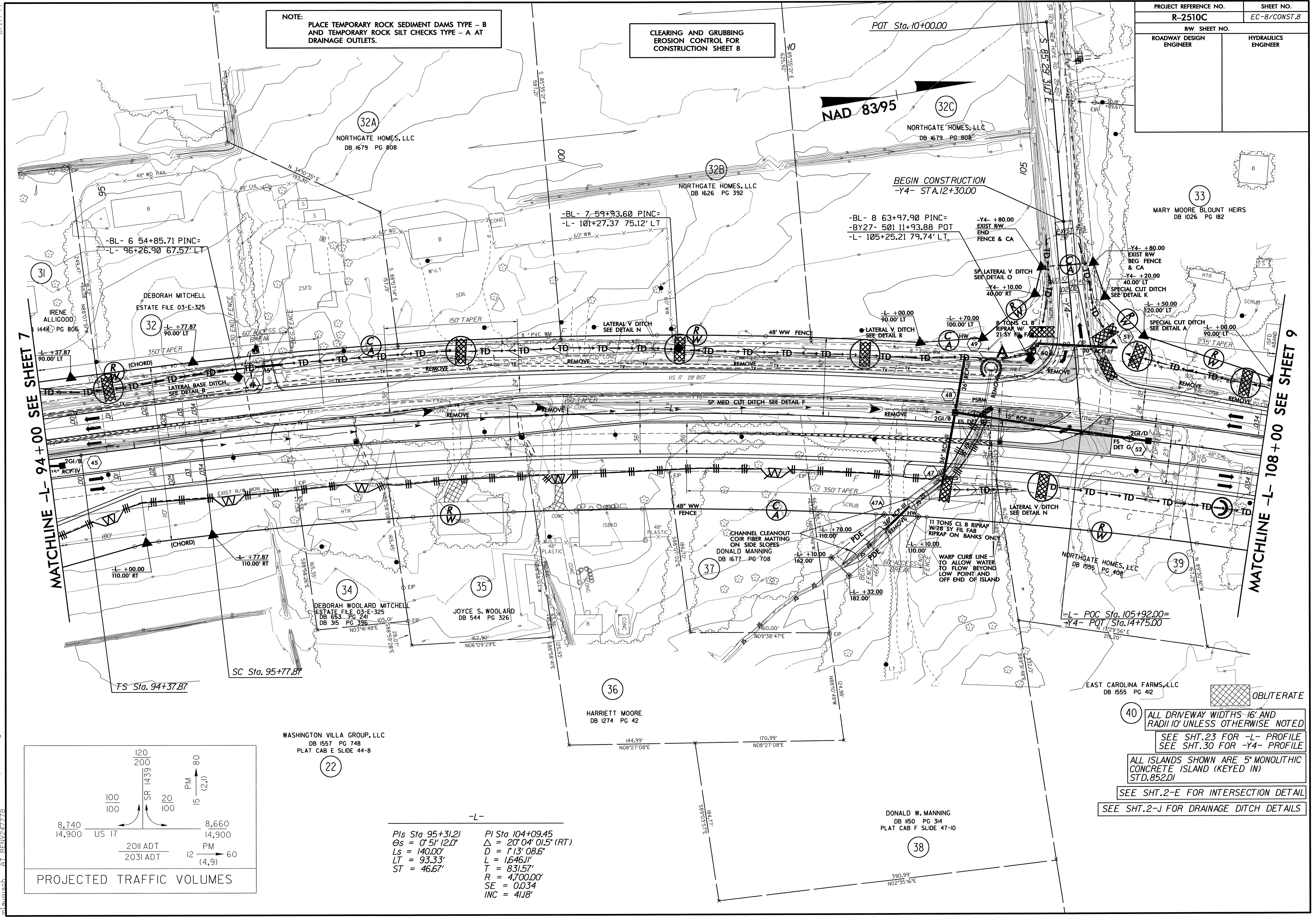
PI Sta 82+63.77	PIs Sta 85+82.81
$\Delta = 4' 17'' 55.1''$ (RT)	$\Theta_s = 0' 22'' 33.4''$
$D = 0' 45'' 06.9''$	$L_s = 100.00'$
$L = 571.69'$	$LT = 66.67'$
$T = 285.98'$	$ST = 33.33'$
$R = 7,620.00'$	
$SE = 0.025$	
$INC = 40.00'$	

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mlawatsch 41 RENV24773

PROJECT REFERENCE NO. R-2510C	SHEET NO. EC-B/CONST.B
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

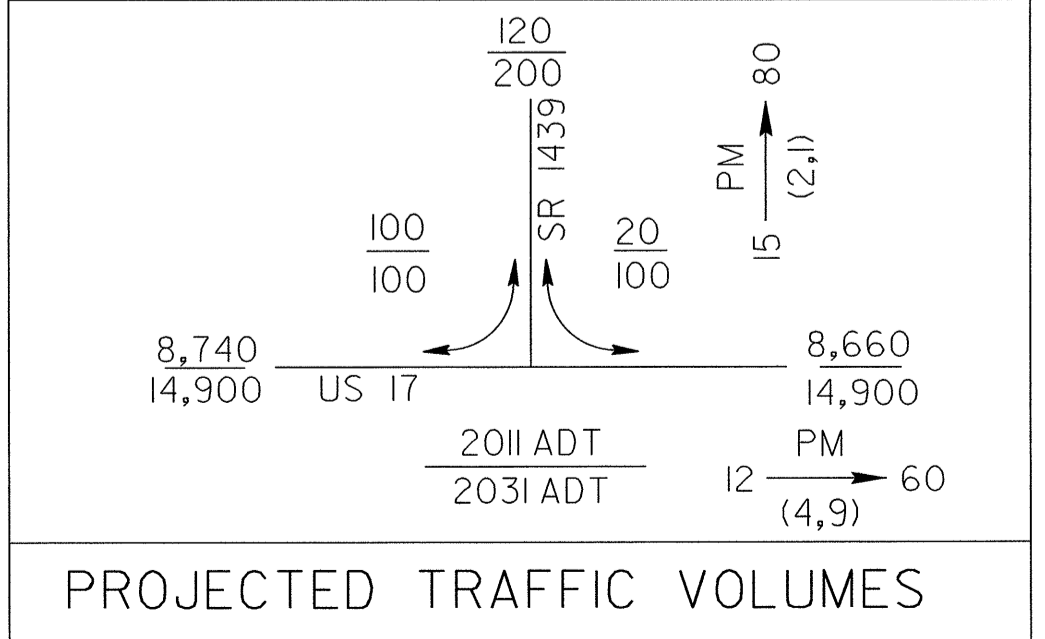
NOTE:
PLACE TEMPORARY ROCK SEDIMENT DAMS TYPE - B
AND TEMPORARY ROCK SILT CHECKS TYPE - A AT
DRAINAGE OUTLETS.

CLEARING AND GRUBBING
EROSION CONTROL FOR
CONSTRUCTION SHEET 8



MATCHLINE -L- 94+00 SEE SHEET 7

MATCHLINE -L- 108+00 SEE SHEET 9

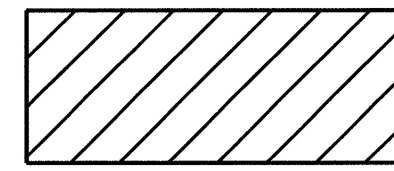


-L-
 PIs Sta 95+31.21
 Gs = 0' 51' 12.0"
 Ls = 140.00'
 LT = 93.33'
 ST = 46.67'
 PI Sta 104+09.45
 Δ = 20' 04' 01.5" (RT)
 D = 1' 13' 08.6"
 L = 1,646.11'
 T = 831.57'
 R = 4,700.00'
 SE = 0.034
 INC = 41.8'

- 40 ALL DRIVEWAY WIDTHS -16'- AND RADIUS 10' UNLESS OTHERWISE NOTED
SEE SHT.23 FOR -L- PROFILE
SEE SHT.30 FOR -Y4- PROFILE
- ALL ISLANDS SHOWN ARE 5' MONOLITHIC CONCRETE ISLAND (KEYED IN) STD.852.01
- SEE SHT.2-E FOR INTERSECTION DETAIL
- SEE SHT.2-J FOR DRAINAGE DITCH DETAILS

8/17/99
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8/17/99



ENVIRONMENTALLY SENSITIVE AREA
SEE PROJECT SPECIAL PROVISIONS

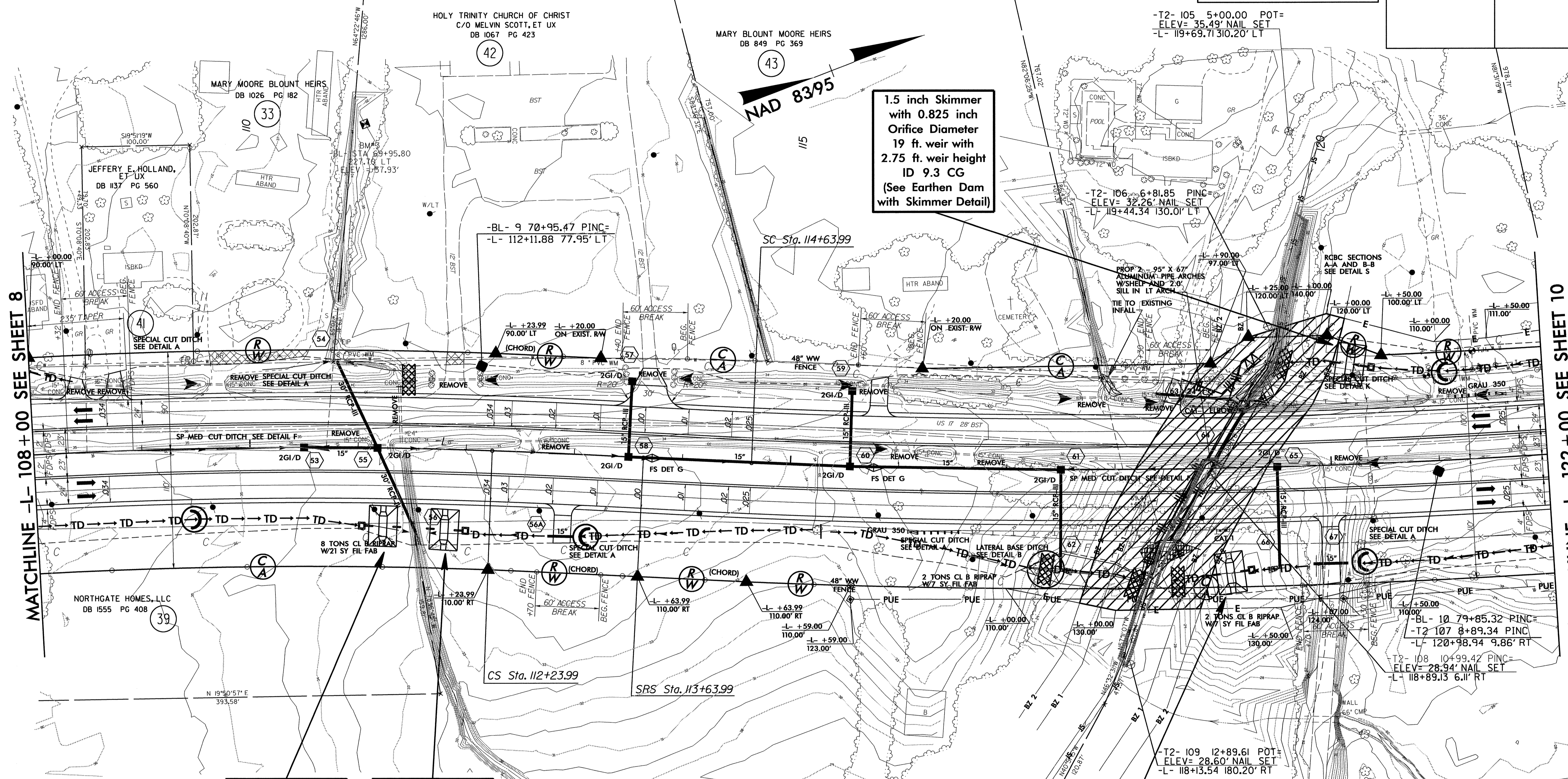
NOTE:
PLACE TEMPORARY ROCK SEDIMENT DAMS TYPE - B
AND TEMPORARY ROCK SILT CHECKS TYPE - A AT
DRAINAGE OUTLETS.

JAMES REUBEN FERRELL
DB 813 PG 258
ESTATE FILE 86/E/406

44

CLEARING AND GRUBBING
EROSION CONTROL FOR
CONSTRUCTION SHEET 9

PROJECT REFERENCE NO. R-2510C	SHEET NO. EC-9/CONST.9
RW SHEET NO.	HYDRAULICS ENGINEER
ROADWAY DESIGN ENGINEER	



1.5 inch Skimmer
with 0.825 inch
Orifice Diameter
19 ft. weir with
2.75 ft. weir height
ID 9.3 CG
(See Earthen Dam
with Skimmer Detail)

1.5 inch Skimmer
with 0.875 inch
Orifice Diameter
13 ft. weir with
2 ft. weir height
ID 9.1 CG
(See Earthen Dam
with Skimmer Detail)

1.5 inch Skimmer
with 0.75 inch
Orifice Diameter
13 ft. weir with
2 ft. weir height
ID 9.2 CG
(See Earthen Dam
with Skimmer Detail)

1.5 inch Skimmer
with 0.375 inch
Orifice Diameter
13 ft. weir with
2 ft. weir height
ID 9.4 CG
(See Earthen Dam
with Skimmer Detail)

PI Sta 104+09.45 Δ = 20' 04" 01.5' (RT) D = 1' 13" 08.6" L = 1646.11' T = 831.57' R = 4700.00' SE = 0.034 INC = 41J8'	Pis Sta 112+70.65 Δs = 0' 51" 12.0" Ls = 140.00' LT = 93.33' ST = 46.67'	Pis Sta 114+30.65 Δs = 0' 24" 48.2" Ls = 100.00' LT = 66.67' ST = 33.33'	PI Sta 125+45.57 Δ = 17' 44" 29.2' (LT) D = 0' 49" 36.4" L = 2145.85' T = 1081.58' R = 6930.00' SE = 0.025 INC = 40.00'
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OBLITERATE
ALL DRIVEWAY WIDTHS 16' AND
RADIUS 10' UNLESS OTHERWISE NOTED
SEE SHT.23 & 24 FOR -L- PROFILE
SEE SHT.2-J FOR DRAINAGE DITCH DETAILS

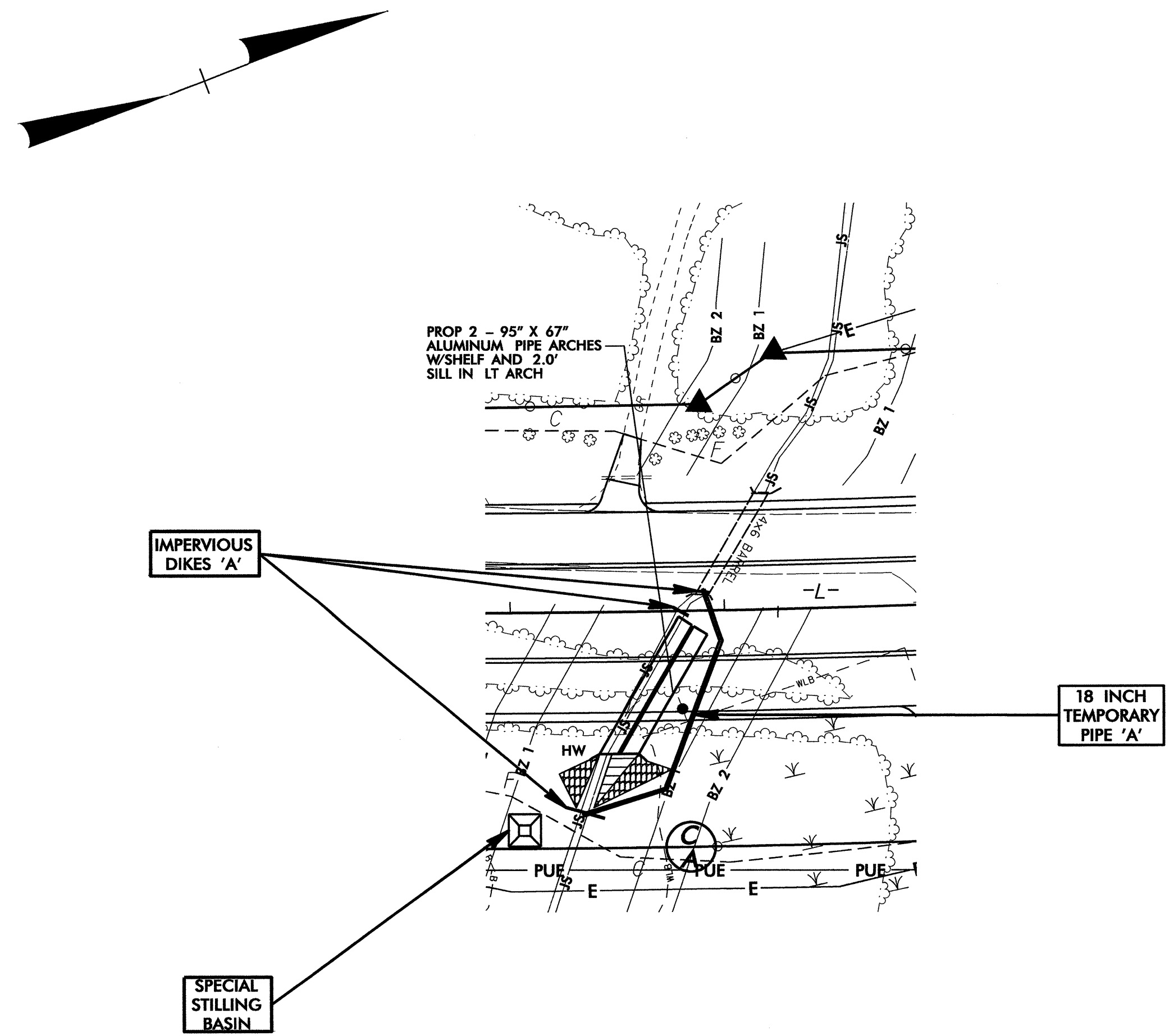
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CULVERT CONSTRUCTION SEQUENCE STA. 118+89 -L-

PROJECT REFERENCE NO. <i>R-2510C</i>	SHEET NO. <i>EC-10/CONST.9</i>
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

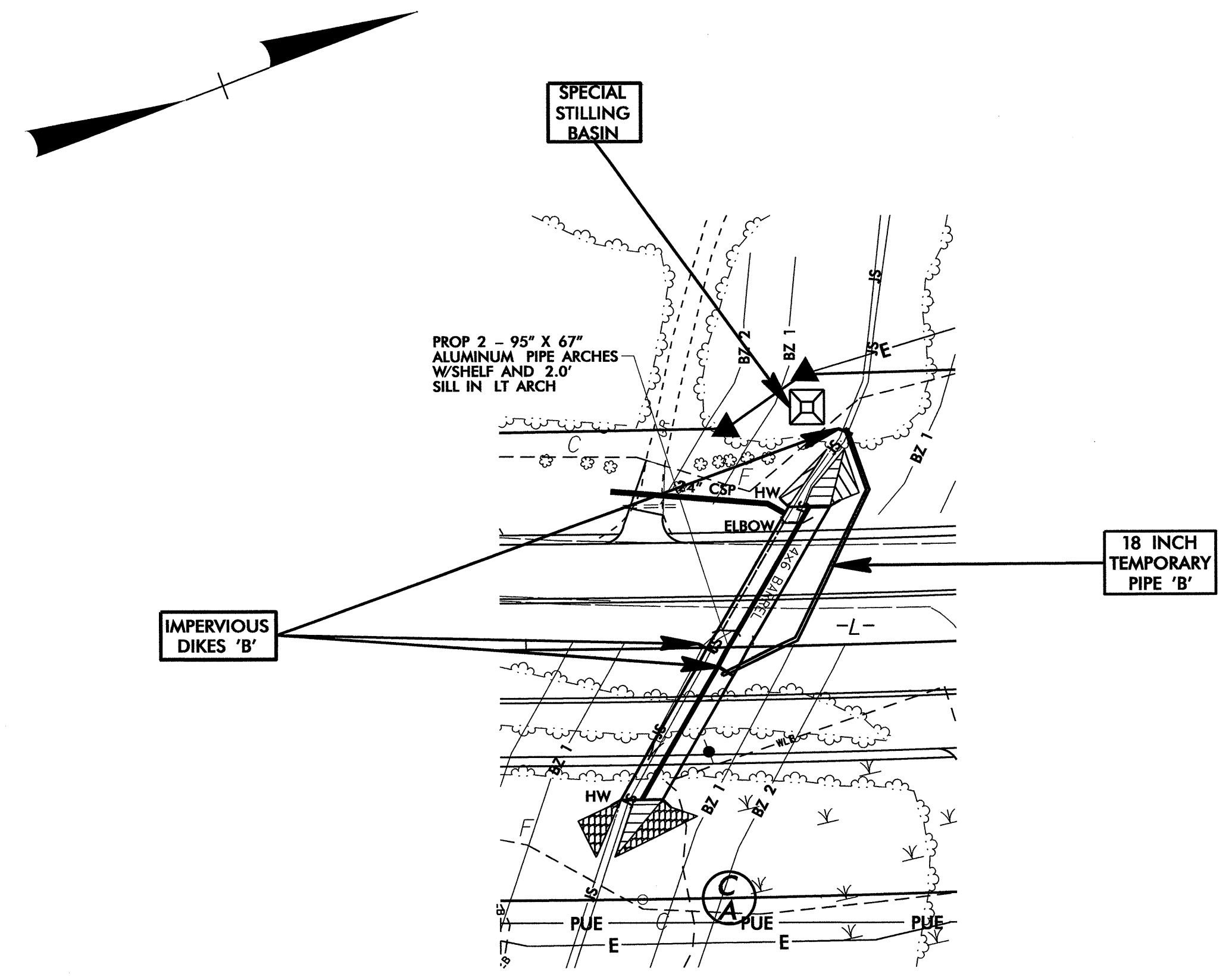
PHASE I

1. INSTALL IMPERVIOUS DIKES 'A' AND 18 INCH TEMPORARY PIPE 'A' TO DIVERT STREAM AROUND WORK AREA.
2. DEWATER WORK AREA UTILIZING SPECIAL STILLING BASIN(S).
3. CONSTRUCT APPROXIMATELY 74 FT. OF PROPOSED 2 - 95" X 67" ALUMINUM PIPE ARCHES.
4. INSTALL OUTLET CHANNEL IMPROVEMENTS.
5. REMOVE IMPERVIOUS DIKES, TEMPORARY PIPE 'A' AND SPECIAL STILLING BASIN(S).
6. COMPLETE ROADWAY SECTION TO THE EAST SIDE.



PHASE II

7. INSTALL IMPERVIOUS DIKES 'B' AND 18 INCH TEMPORARY PIPE 'B' TO DIVERT STREAM INTO 95" X 67" NORTHERNMOST ALUMINUM PIPE ARCH AT STA. 119+00 -L-.
8. DEWATER WORK AREA UTILIZING SPECIAL STILLING BASIN(S).
9. REMOVE EXISTING CULVERT.
10. CONSTRUCT REMAINDER OF 2 - 95" X 67" ALUMINUM PIPE ARCHES.
11. INSTALL INLET CHANNEL IMPROVEMENTS.
12. REMOVE IMPERVIOUS DIKES, TEMPORARY PIPE 'B' AND SPECIAL STILLING BASIN(S).
13. COMPLETE ROADWAY.



8/17/99

PROJECT REFERENCE NO. R-2510C	SHEET NO. EC-11/CONST-10
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

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 10

1.5 inch Skimmer
with 0.375 inch
Orifice Diameter
13 ft. weir with
2 ft. weir height
ID 10.2 CG
(See Earthen Dam
with Skimmer Detail)

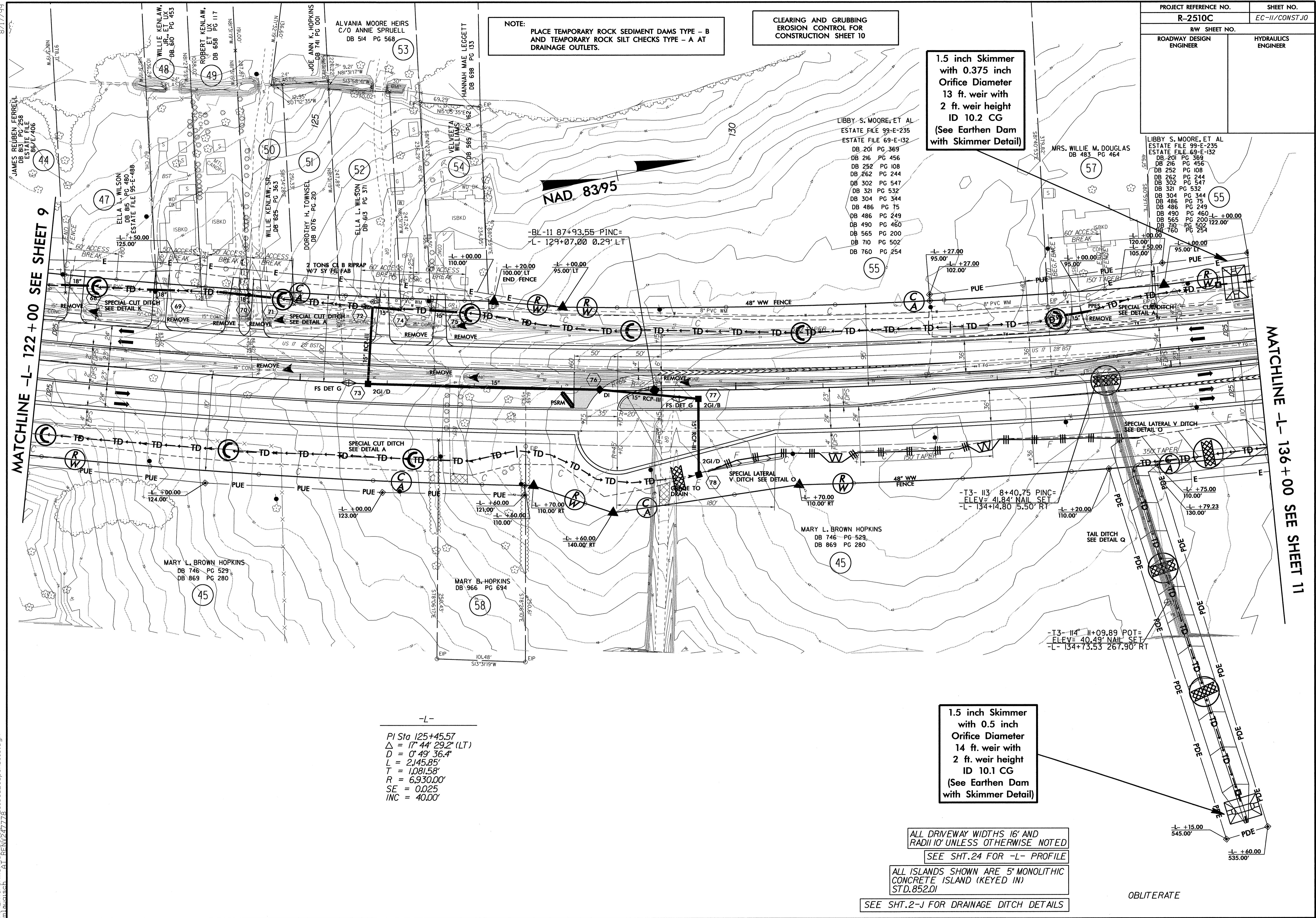
1.5 inch Skimmer
with 0.5 inch
Orifice Diameter
14 ft. weir with
2 ft. weir height
ID 10.1 CG
(See Earthen Dam
with Skimmer Detail)

ALL DRIVEWAY WIDTHS 16' AND
RADII 10' UNLESS OTHERWISE NOTED
SEE SHT.24 FOR -L- PROFILE

ALL ISLANDS SHOWN ARE 5" MONOLITHIC
CONCRETE ISLAND (KEYED IN)
STD.852.01

SEE SHT.2-J FOR DRAINAGE DITCH DETAILS

OBLITERATE



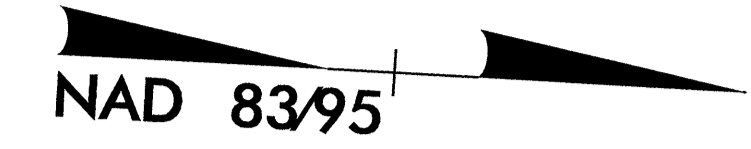
-L-
 PI Sta 125+45.7
 $\Delta = 17' 44" 29.2" (LT)$
 $D = 0' 49" 36.4"$
 $L = 2,145.85'$
 $T = 1,081.58'$
 $R = 6,930.00'$
 $SE = 0.025$
 $INC = 40.00'$

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8/17/99

PROJECT REFERENCE NO. R-2510C	SHEET NO. EC-13/CONST.12
RW SHEET NO. ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

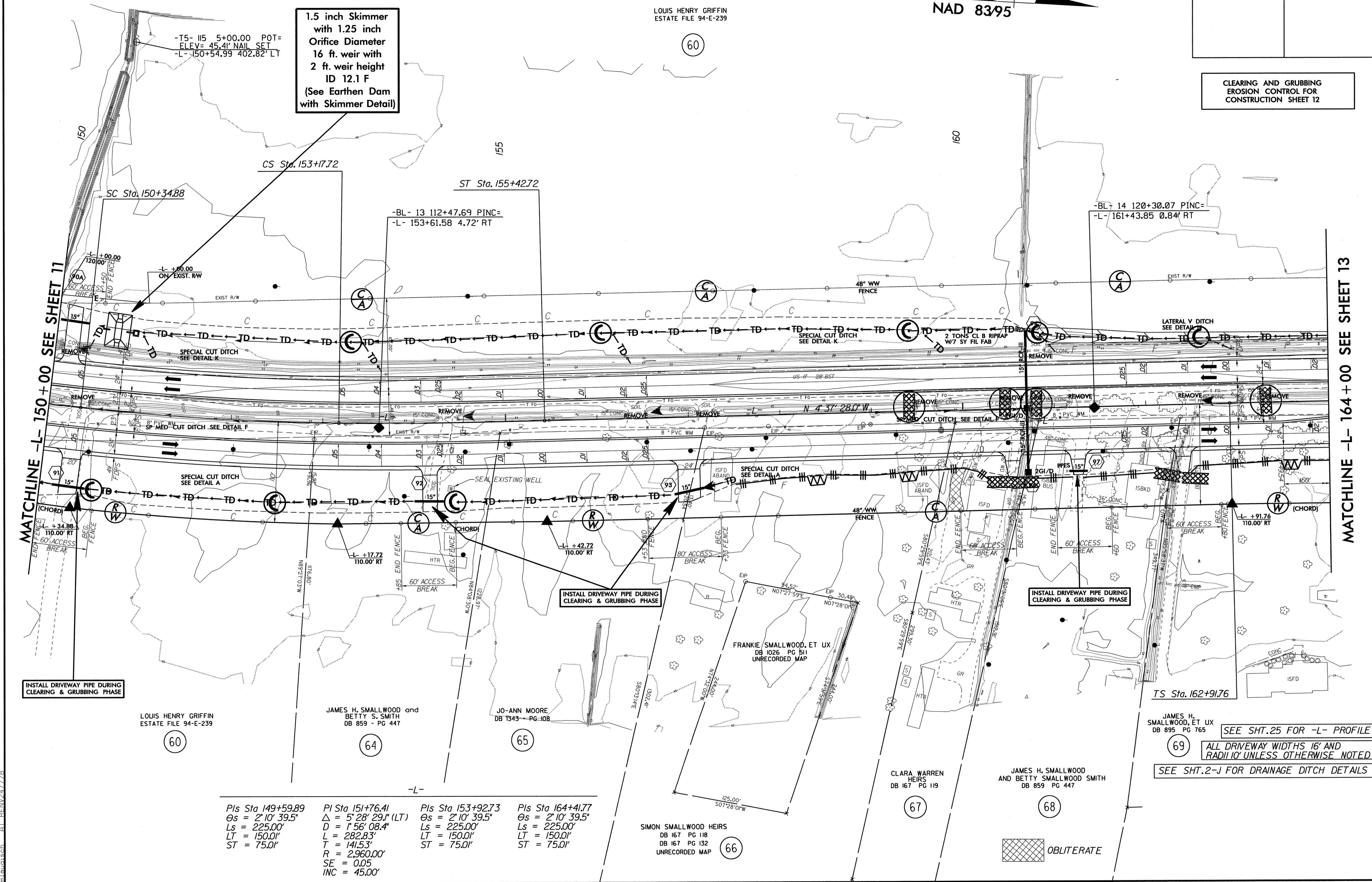
NOTE:
PLACE TEMPORARY ROCK SEDIMENT DAMS TYPE - B
AND TEMPORARY ROCK SILT CHECKS TYPE - A AT
DRAINAGE OUTLETS.



CLEARING AND GRUBBING
EROSION CONTROL FOR
CONSTRUCTION SHEET 12

LOUIS HENRY GRIFFIN
ESTATE FILE 94-E-239

1.5 inch Skimmer
with 1.25 inch
Orifice Diameter
16 ft. weir with
2 ft. weir height
ID 12.1 F
(See Earthen Dam
with Skimmer Detail)



MATCHLINE -L- 150+00 SEE SHEET 11

MATCHLINE -L- 164+00 SEE SHEET 13

Pls Sta 149+59.89 $\Theta_s = 2'10'' 39.5''$ $L_s = 225.00'$ $LT = 150.01'$ $ST = 75.01'$	Pls Sta 151+76.41 $\Delta = 5'28'' 29.1'' (LT)$ $D = 1'56'' 08.4''$ $L = 282.83'$ $T = 141.53'$ $R = 2,960.00'$ $SE = 0.05$ $INC = 45.00'$	Pls Sta 153+92.73 $\Theta_s = 2'10'' 39.5''$ $L_s = 225.00'$ $LT = 150.01'$ $ST = 75.01'$	Pls Sta 164+41.77 $\Theta_s = 2'10'' 39.5''$ $L_s = 225.00'$ $LT = 150.01'$ $ST = 75.01'$
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INSTALL DRIVEWAY PIPE DURING
CLEARING & GRUBBING PHASE

INSTALL DRIVEWAY PIPE DURING
CLEARING & GRUBBING PHASE

INSTALL DRIVEWAY PIPE DURING
CLEARING & GRUBBING PHASE

SEE SHT.25 FOR -L- PROFILE
ALL DRIVEWAY WIDTHS 16' AND
RADIUS UNLESS OTHERWISE NOTED
SEE SHT.2-J FOR DRAINAGE DITCH DETAILS

OBLITERATE

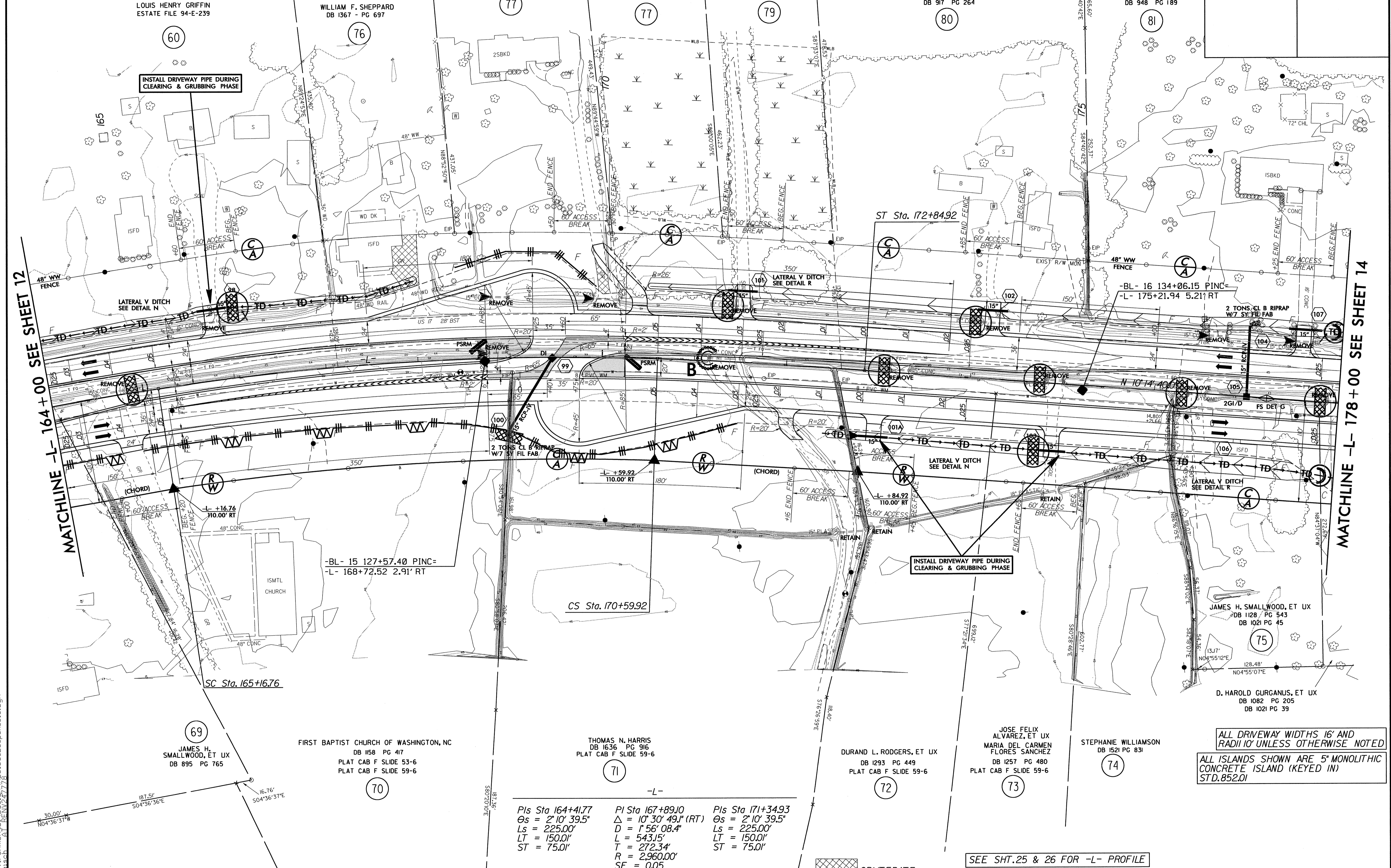
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11/17/99

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 13

NAD 8395

8/17/99



MATCHLINE -L- 164+00 SEE SHEET 12

MATCHLINE -L- 178+00 SEE SHEET 14

-L-
 Pls Sta 164+41.77 Pls Sta 167+89.10 Pls Sta 171+34.93
 $\theta_s = 2' 10' 39.5''$ $\Delta = 10' 30' 49.1''$ (RT) $\theta_s = 2' 10' 39.5''$
 $L_s = 225.00'$ $D = 1' 56' 08.4''$ $L_s = 225.00'$
 $LT = 150.01'$ $L = 543.15'$ $LT = 150.01'$
 $ST = 75.01'$ $T = 272.34'$ $ST = 75.01'$
 $R = 2,960.00'$
 $SE = 0.05$
 $INC = 45.00'$

OBLITERATE

SEE SHT. 25 & 26 FOR -L- PROFILE
 SEE SHT. 2-J FOR DRAINAGE DITCH DETAILS

ALL DRIVEWAY WIDTHS 16' AND
 RADII 10' UNLESS OTHERWISE NOTED
 ALL ISLANDS SHOWN ARE 5" MONOLITHIC
 CONCRETE ISLAND (KEYED IN)
 STD. 852.01

05-OCT-2010 09:07 D:\projects\2510C-EC-ps-h_013.dgn
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 ALL RIGHTS RESERVED

PROJECT REFERENCE NO.	SHEET NO.
R-2510C	EC-15/CONST.14
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

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 14

1.5 inch Skimmer with 0.875 inch Orifice Diameter 10 ft. weir with 2 ft. weir height ID 14.1 F (See Earthen Dam with Skimmer Detail)

INSTALL DRIVEWAY PIPE DURING CLEARING & GRUBBING PHASE

1.5 inch Skimmer with 0.75 inch Orifice Diameter 16 ft. weir with 2 ft. weir height ID 14.2 F (See Earthen Dam with Skimmer Detail)

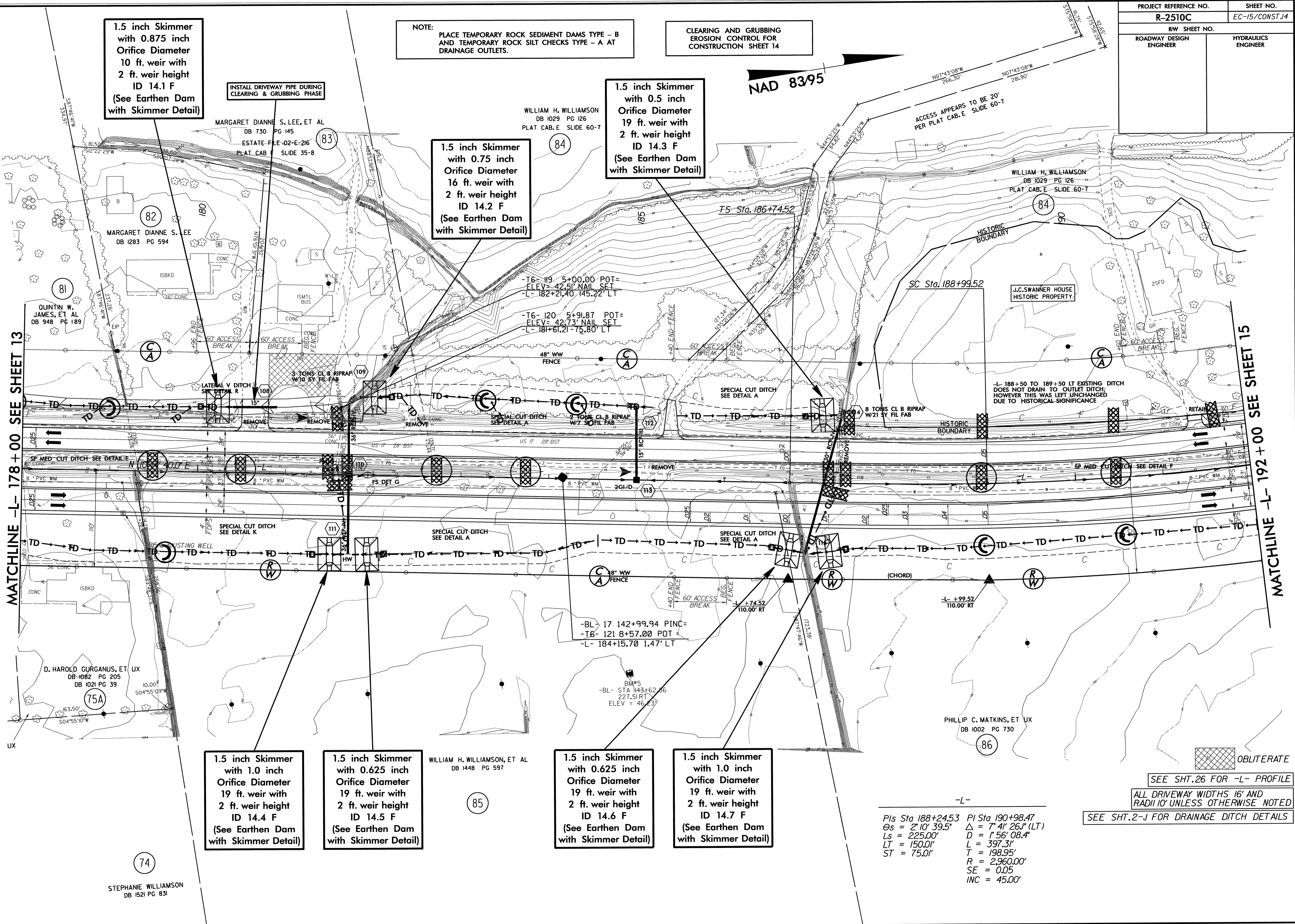
1.5 inch Skimmer with 0.5 inch Orifice Diameter 19 ft. weir with 2 ft. weir height ID 14.3 F (See Earthen Dam with Skimmer Detail)

1.5 inch Skimmer with 1.0 inch Orifice Diameter 19 ft. weir with 2 ft. weir height ID 14.4 F (See Earthen Dam with Skimmer Detail)

1.5 inch Skimmer with 0.625 inch Orifice Diameter 19 ft. weir with 2 ft. weir height ID 14.5 F (See Earthen Dam with Skimmer Detail)

1.5 inch Skimmer with 0.625 inch Orifice Diameter 19 ft. weir with 2 ft. weir height ID 14.6 F (See Earthen Dam with Skimmer Detail)

1.5 inch Skimmer with 1.0 inch Orifice Diameter 19 ft. weir with 2 ft. weir height ID 14.7 F (See Earthen Dam with Skimmer Detail)



-L-
 PIs Sta 188+24.53 PI Sta 190+98.47
 Os = 2' 10" 39.5" Δ = 7' 4" 26.1" (LT)
 Ls = 225.00' D = 1' 56" 08.4"
 LT = 150.01' L = 397.31'
 ST = 75.01' T = 198.95'
 R = 2,960.00'
 SE = 0.05
 INC = 45.00'

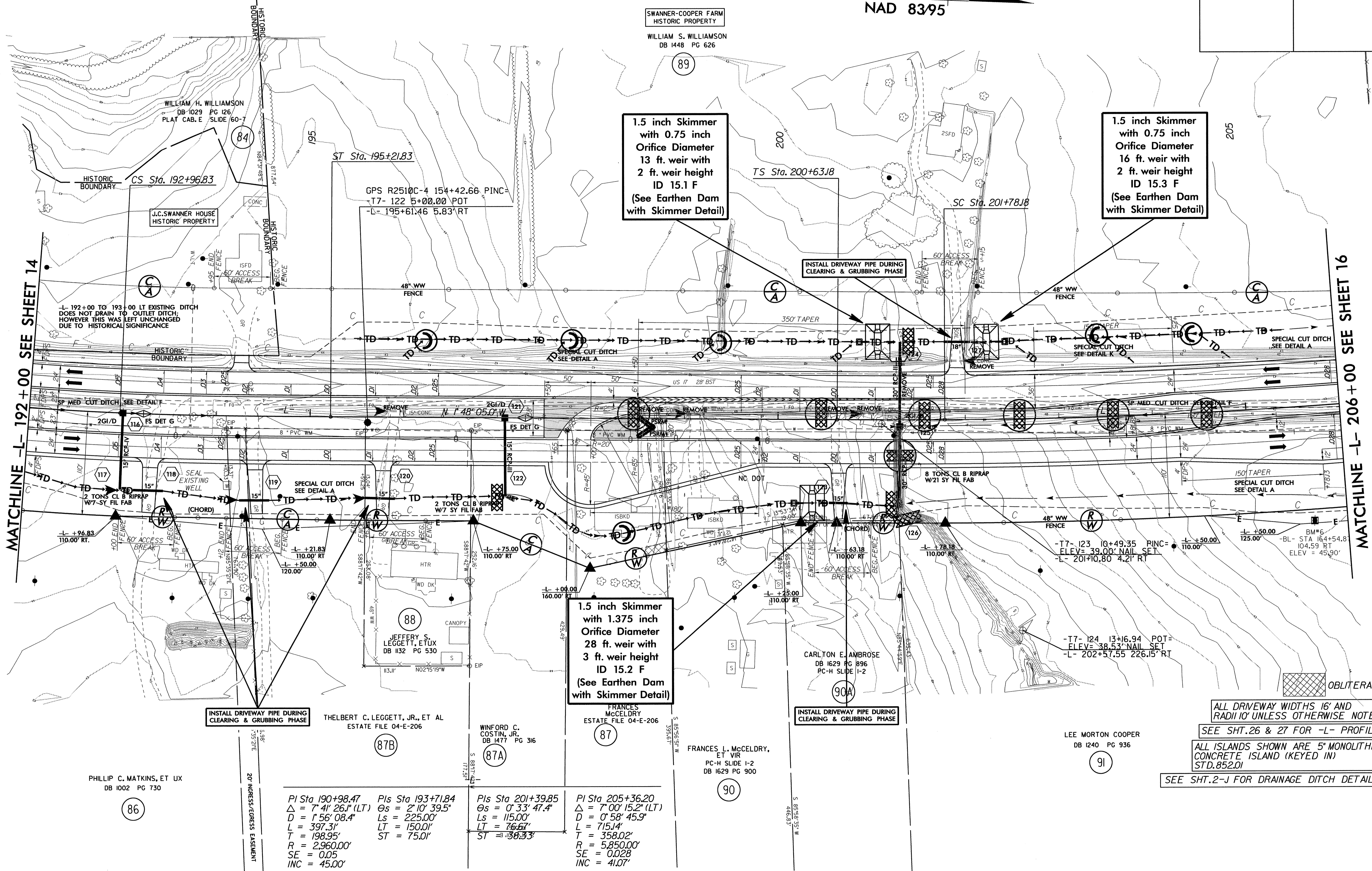
SEE SHT.26 FOR -L- PROFILE
ALL DRIVEWAY WIDTHS 16' AND RADII 10' UNLESS OTHERWISE NOTED
SEE SHT.2-J FOR DRAINAGE DITCH DETAILS

8/17/99
 05-OCT-2010 09:40
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 mlayach

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 15

NAD 83/95



MATCHLINE -L- 192+00 SEE SHEET 14

MATCHLINE -L- 206+00 SEE SHEET 16

1.5 inch Skimmer with 0.75 inch Orifice Diameter
13 ft. weir with 2 ft. weir height
ID 15.1 F
(See Earthen Dam with Skimmer Detail)

1.5 inch Skimmer with 0.75 inch Orifice Diameter
16 ft. weir with 2 ft. weir height
ID 15.3 F
(See Earthen Dam with Skimmer Detail)

1.5 inch Skimmer with 1.375 inch Orifice Diameter
28 ft. weir with 3 ft. weir height
ID 15.2 F
(See Earthen Dam with Skimmer Detail)

<p>PI Sta 190+98.47 Δ = 7° 41' 26.1" (LT) D = 1' 56" 08.4" L = 397.31' T = 198.95' R = 2,960.00' SE = 0.05 INC = 45.00'</p>	<p>PIs Sta 193+71.84 Θs = 2° 10' 39.5" Ls = 225.00' LT = 150.01' ST = 75.01'</p>	<p>PIs Sta 201+39.85 Θs = 0° 33' 47.4" Ls = 115.00' LT = 76.67' ST = 36.33'</p>	<p>PI Sta 205+36.20 Δ = 7° 00' 15.2" (LT) D = 0° 58' 45.9" L = 715.14' T = 358.02' R = 5,850.00' SE = 0.028 INC = 41.07'</p>
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ALL DRIVEWAY WIDTHS 16' AND RADII 10' UNLESS OTHERWISE NOTED
SEE SHT. 26 & 27 FOR -L- PROFILE
ALL ISLANDS SHOWN ARE 5" MONOLITHIC CONCRETE ISLAND (KEYED IN) STD. 852.01
SEE SHT. 2-J FOR DRAINAGE DITCH DETAILS

8/17/99
05-OCT-2010 09:21
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8/17/99

ENVIRONMENTALLY SENSITIVE AREA
SEE PROJECT SPECIAL PROVISIONS

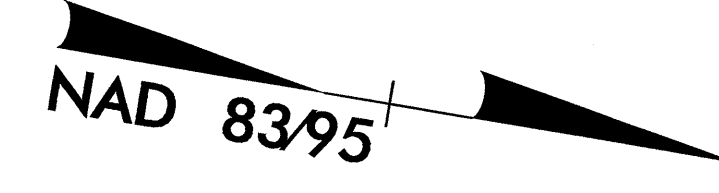
SWANNER-COOPER FARM
HISTORIC PROPERTY

WILLIAM S. WILLIAMSON
DB 1448 PG 626

OTTIS B. WOOLARD, ET UX
DB 716 PG 560
DB 832 PG 167
DB 917 PG 312

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

PROJECT REFERENCE NO. R-2510C	SHEET NO. EC-17/CONST.16
RW SHEET NO.	HYDRAULICS ENGINEER
ROADWAY DESIGN ENGINEER	



NAD 8395

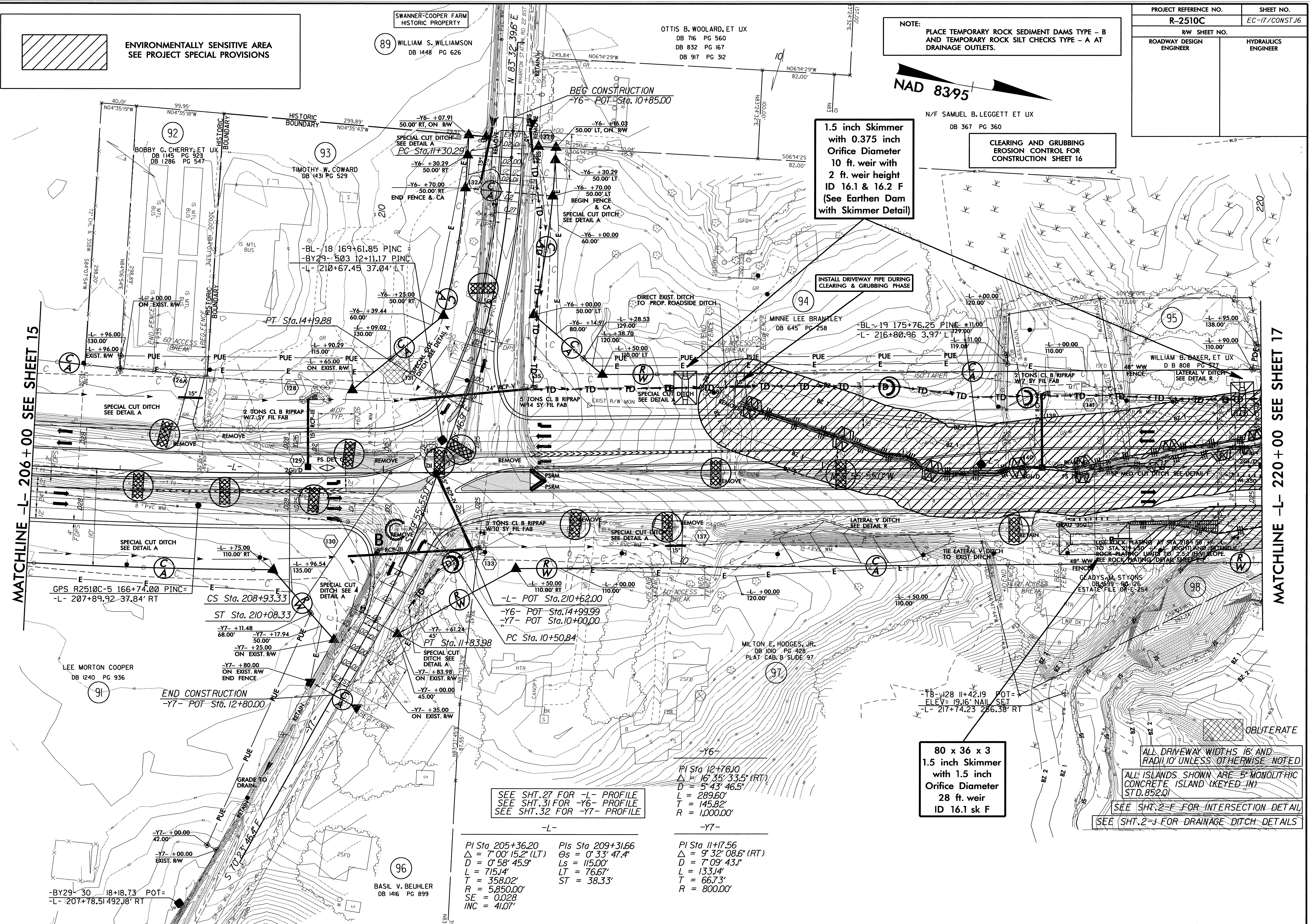
CLEARING AND GRUBBING
EROSION CONTROL FOR
CONSTRUCTION SHEET 16

1.5 inch Skimmer
with 0.375 inch
Orifice Diameter
10 ft. weir with
2 ft. weir height
ID 16.1 & 16.2 F
(See Earthen Dam
with Skimmer Detail)

INSTALL DRIVEWAY PIPE DURING
CLEARING & GRUBBING PHASE

MATCHLINE -L- 206+00 SEE SHEET 15

MATCHLINE -L- 220+00 SEE SHEET 17



SEE SHT. 27 FOR -L- PROFILE
SEE SHT. 31 FOR -Y6- PROFILE
SEE SHT. 32 FOR -Y7- PROFILE

-L-	-Y7-
PI Sta 205+36.20 Δ = 7' 00" 15.2" (LT) D = 0' 58" 45.9" L = 715.14' T = 358.02' R = 5,850.00' SE = 0.028 INC = 41.07'	PIs Sta 209+31.66 Os = 0' 33" 47.4" Ls = 115.00' LT = 76.67' ST = 38.33'
	PI Sta 11+7.56 Δ = 9' 32" 08.6" (RT) D = 7' 09" 43.1" L = 133.14' T = 66.73' R = 800.00'

80 x 36 x 3
1.5 inch Skimmer
with 1.5 inch
Orifice Diameter
28 ft. weir
ID 16.1 sk F

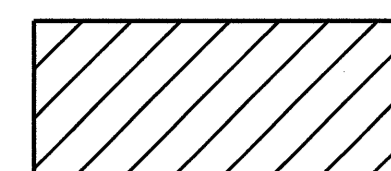
ALL DRIVEWAY WIDTHS 16' AND
RADIUS 10' UNLESS OTHERWISE NOTED

ALL ISLANDS SHOWN ARE 5' MONOLITHIC
CONCRETE ISLAND (KEYED IN)
STD. 852.01

SEE SHT. 2-F FOR INTERSECTION DETAIL
SEE SHT. 2-J FOR DRAINAGE DITCH DETAILS

05-OCT-2010 09:24
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mlausisch - AT - RENV27778

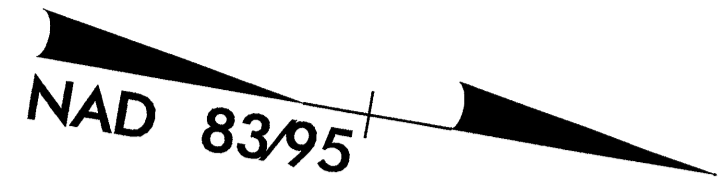
8/17/99
85-GCT-200 09z27 D:\s\p\y\2510-ec-ph-017.dgn
PLANNING AND DESIGN GROUP
DATE: 08/17/99

 ENVIRONMENTALLY SENSITIVE AREA
SEE PROJECT SPECIAL PROVISIONS

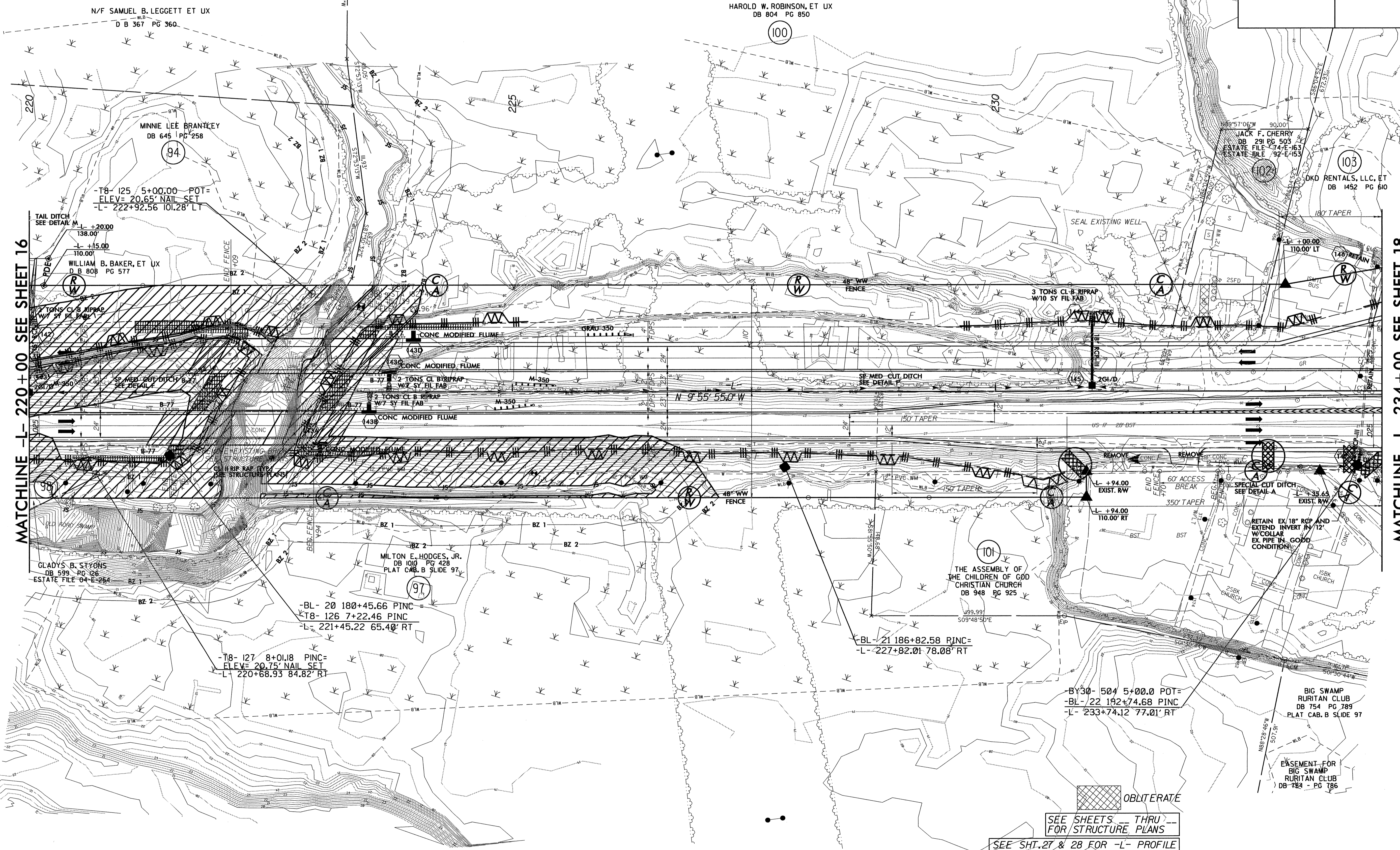
CLEARING AND GRUBBING
EROSION CONTROL FOR
CONSTRUCTION SHEET 17

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

BEGIN APPROACH SLAB -L- STA. 221+73.36 (SBL)
BEGIN APPROACH SLAB -L- STA. 221+32.94 (NBL)
BEGIN BRIDGE -L- STA. 221+97.21 (SBL)
BEGIN BRIDGE -L- STA. 221+56.79 (NBL)
END BRIDGE -L- STA. 223+46.21 (SBL)
END BRIDGE -L- STA. 223+05.79 (NBL)
END APPROACH SLAB -L- STA. 223+70.06 (SBL)
END APPROACH SLAB -L- STA. 223+29.64 (NBL)



PROJECT REFERENCE NO. R-2510C	SHEET NO. EC-18/CONST.17
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER



MATCHLINE -L- 220+00 SEE SHEET 16

MATCHLINE -L- 234+00 SEE SHEET 18

SEE SHEETS THRU
FOR STRUCTURE PLANS
SEE SHT. 27 & 28 FOR -L- PROFILE
ALL DRIVEWAY WIDTHS 16' AND
RADI 10' UNLESS OTHERWISE NOTED
SEE SHT. 2-J FOR DRAINAGE DITCH DETAILS

 OBLITERATE

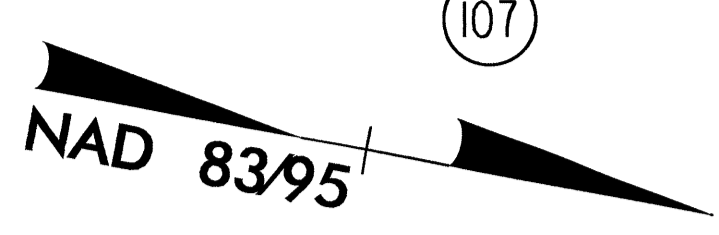
MATCHLINE -L- 220+00 SEE SHEET 16

MATCHLINE -L- 234+00 SEE SHEET 18

8/17/79

PROJECT REFERENCE NO.	SHEET NO.
R-2510C	EC-19/CONST.18
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

PHILLIP C. MATKINS, ET UX
DB 1027 PG 234
PLAT CAB. E SLIDE 49-9



**2.0 inch Skimmer
with 1.625 inch
Orifice Diameter
20 ft. weir with
3.25 ft. weir height
ID 18.1 F
(See Earthen Dam
with Skimmer Detail)**

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 18**

**INSTALL DRIVEWAY PIPE DURING
CLEARING & GRUBBING PHASE**

NOTE: At the discretion of the engineer, the seep located
at -L- Sta. 236+00.30 feet left, should be drained
off the project utilizing underdrain.

DKD RENTALS, LLC, ET AL
DB 1452 PG 610

JOSEPH E. ROGERS
DB 890 PG 265

REBECCA
MOORE ROGERS
ESTATE FILE 93-E-322
DB 553 PG 221

WILLIAM C. ROGERS
DB 1043 PG 716

PHILLIP C. MATKINS, ET UX
DB 710 PG 186

ARAH BELL CARRAWAY, ET AL
DB 1431 PG 103

MATCHLINE -L- 234+00 SEE SHEET 17

MATCHLINE -L- 248+00 SEE SHEET 19

THE ASSEMBLY
OF THE CHILDREN OF
GOD CHRISTIAN
CHURCH
DB 948 PG 925

YB - 28.57
EXIST. RW
END FENCE
& CA

BIG SWAMP
RURITAN CLUB
DB 754 PG 789
PLAT CAB. B SLIDE 97

WOODMEN OF THE WORLD LODGE
HISTORIC PROPERTY
TRUSTEES OF THE WOODMEN
OF THE WORLD CAMP NUMBER 671
DB 808 PG 740

THE OLD FORD CHURCH OF CHRIST
DB 695 PG 203

**1.5 inch Skimmer
with 0.75 inch
Orifice Diameter
28 ft. weir with
3 ft. weir height
ID 18.2 F
(See Earthen Dam
with Skimmer Detail)**

**1.5 inch Skimmer
with 0.5 inch
Orifice Diameter
10 ft. weir with
2 ft. weir height
ID 18.1 CG
(See Earthen Dam
with Skimmer Detail)**

-YB-
PI Sta 12+41.13
Δ = 4' 4" 32.0" (LT)
D = 13' 46" 22.9"
L = 302.71'
T = 158.41'
R = 416.00'
E = 0.036
INC = 18.06'

-L-
PIs Sta 245+03.82
Os = 2' 10" 39.5"
Ls = 225.00'
LT = 150.01'
ST = 75.01'

PI Sta 249+15.77
Δ = 12' 59" 21.1" (LT)
D = 1' 56" 08.4"
L = 671.04'
T = 336.97'
R = 2,960.00'
E = 0.05
INC = 45.00'

ALL DRIVEWAY WIDTHS 16' AND
RADII 10' UNLESS OTHERWISE NOTED

SEE SHT. 28 FOR -L- PROFILE
SEE SHT. 32 FOR -YB- PROFILE

ALL ISLANDS SHOWN ARE 5' MONOLITHIC
CONCRETE ISLAND (KEYED IN)
STD. 852.01

SEE SHT. 2-G FOR INTERSECTION DETAIL

SEE SHT. 2-J FOR DRAINAGE DITCH DETAILS

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8/17/99

PROJECT REFERENCE NO. R-2510C	SHEET NO. EC-20/CONST.19
R/W SHEET NO.	HYDRAULICS ENGINEER
ROADWAY DESIGN ENGINEER	

 ENVIRONMENTALLY SENSITIVE AREA
SEE PROJECT SPECIAL PROVISIONS

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 19

1.5 inch Skimmer with 0.625 inch Orifice Diameter 15 ft. weir with 2.25 ft. weir height ID 19.1 F (See Earthen Dam with Skimmer Detail)

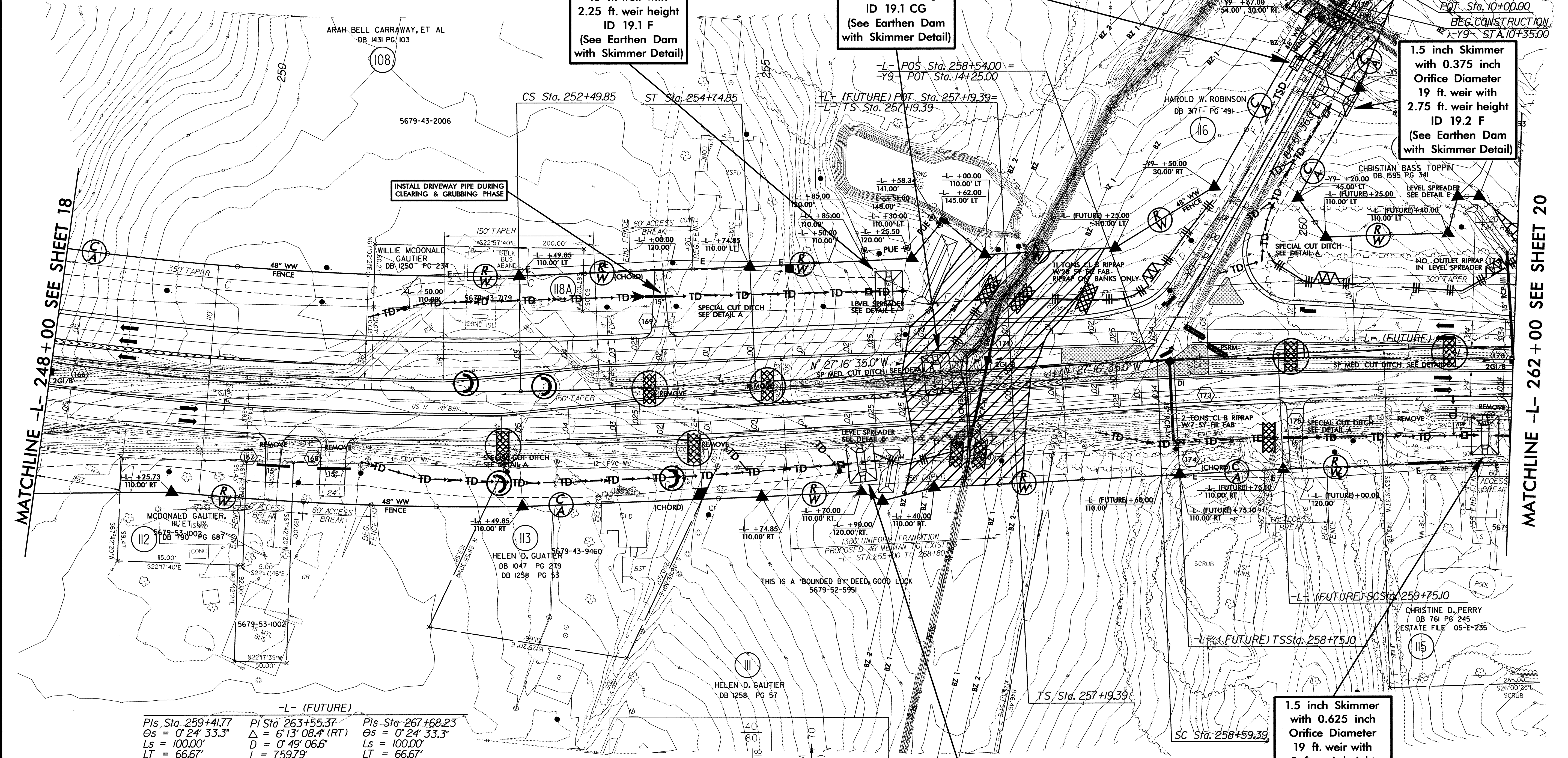
1.5 inch Skimmer with 0.375 inch Orifice Diameter 5 ft. weir with 3.25 ft. weir height ID 19.1 CG (See Earthen Dam with Skimmer Detail)

12 x 9 x 3 4 ft. weir (See Infiltration Basin Detail) ID 19.1 F

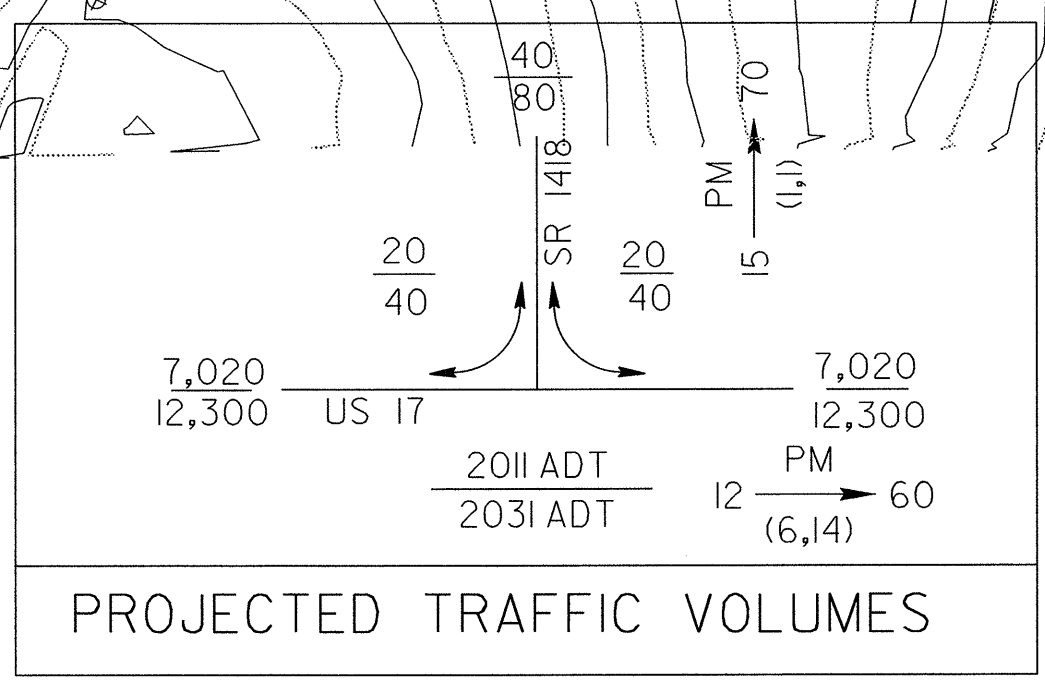
1.5 inch Skimmer with 0.375 inch Orifice Diameter 19 ft. weir with 2.75 ft. weir height ID 19.2 F (See Earthen Dam with Skimmer Detail)

1.5 inch Skimmer with 0.625 inch Orifice Diameter 19 ft. weir with 2 ft. weir height ID 19.4 F (See Earthen Dam with Skimmer Detail)

INSTALL PIPE(S) IN JURISDICTIONAL AREAS ACCORDING TO NCDOT BEST MANAGEMENT PRACTICES FOR CONSTRUCTION AND MAINTENANCE ACTIVITIES MANUAL.



-L- (FUTURE) Pls Sta. 259+41.77 $\Delta s = 0^{\circ} 24' 33.3''$ $Ls = 100.00'$ $LT = 66.67'$ $ST = 33.33'$	-L- (FUTURE) Pls Sta. 263+55.37 $\Delta = 6^{\circ} 13' 08.4''$ (RT) $D = 0^{\circ} 49' 06.6''$ $L = 759.79'$ $T = 380.27'$ $R = 7,000.00'$ $SE = 0.025$ $INC = 38.40'$	-L- (FUTURE) Pls Sta. 267+68.23 $\Delta s = 0^{\circ} 24' 33.3''$ $Ls = 100.00'$ $LT = 66.67'$ $ST = 33.33'$	-L- (FUTURE) Pls Sta. 249+15.77 $\Delta = 12^{\circ} 59' 21.1''$ (LT) $D = 1^{\circ} 56' 08.4''$ $L = 671.04'$ $T = 336.97'$ $R = 2,960.00'$ $SE = 0.05$ $INC = 45.00'$	-L- (FUTURE) Pls Sta. 253+24.86 $\Delta s = 2^{\circ} 10' 39.5''$ $Ls = 225.00'$ $LT = 150.01'$ $ST = 75.01'$	-L- (FUTURE) Pls Sta. 258+12.73 $\Delta s = 0^{\circ} 51' 12.0''$ $Ls = 140.00'$ $LT = 93.33'$ $ST = 46.67'$	-L- (FUTURE) Pls Sta. 260+78.19 $\Delta = 5^{\circ} 19' 50.9''$ (RT) $D = 1^{\circ} 13' 08.6''$ $L = 437.29'$ $T = 218.80'$ $R = 4,700.00'$ $SE = 0.034$ $INC = 40.18'$
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1.5 inch Skimmer with 0.375 inch Orifice Diameter 19 ft. weir with 2 ft. weir height ID 19.3 F (See Earthen Dam with Skimmer Detail)

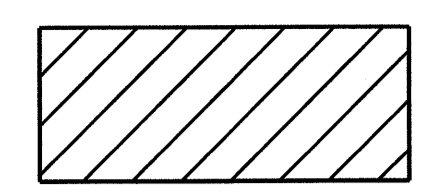
ALL ISLANDS SHOWN ARE 5" MONOLITHIC CONCRETE ISLAND (KEYED IN) STD. 852.01
SEE SHT. 2-J FOR DRAINAGE DITCH DETAILS

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8/17/99
05-OCT-2010 09:35
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mlawatsch

Note: For permitting purposes, construct subgrade, fill slope and required drainage for future project.
(-L- Sta 262+50 to 264+00 LT.)

1.5 inch Skimmer
with 0.625 inch
Orifice Diameter
21 ft. weir with
3.5 ft. weir height
ID 20.1 F
(See Earthen Dam
with Skimmer Detail)

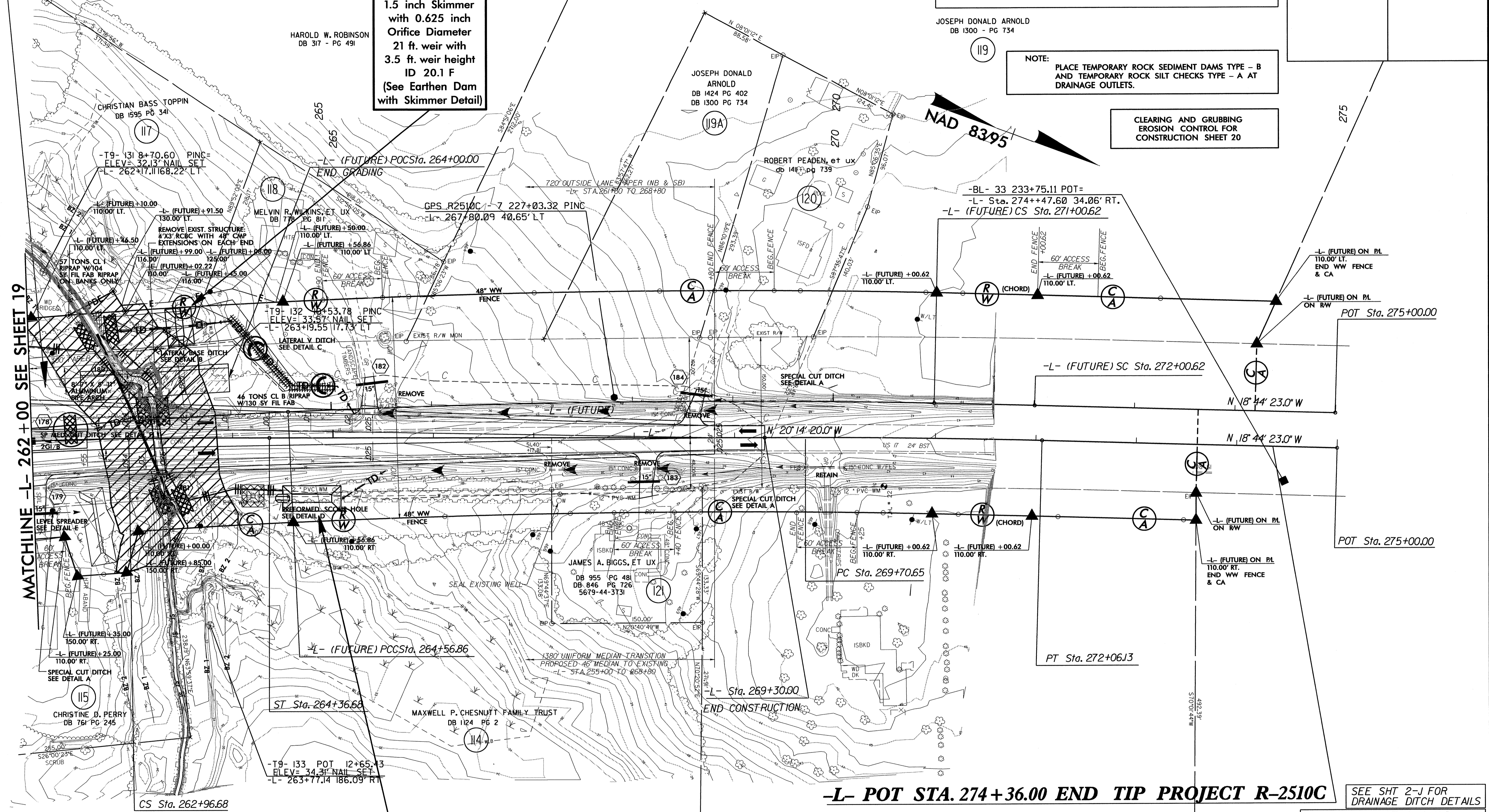


ENVIRONMENTALLY SENSITIVE AREA
SEE PROJECT SPECIAL PROVISIONS

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 20

PROJECT REFERENCE NO. R-2510C	SHEET NO. <i>EC-21/CONST.20</i>
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER



MATCHLINE -L- 262+00 SEE SHEET 19

INSTALL PIPE(S) IN JURISDICTIONAL AREAS ACCORDING TO
NCDOT BEST MANAGEMENT PRACTICES FOR
CONSTRUCTION AND MAINTENANCE ACTIVITIES MANUAL.

58 x 25 x 3
17 ft. weir
(See Infiltration
Basin Detail)
ID 20.1 F

-L- POT STA. 274+36.00 END TIP PROJECT R-2510C

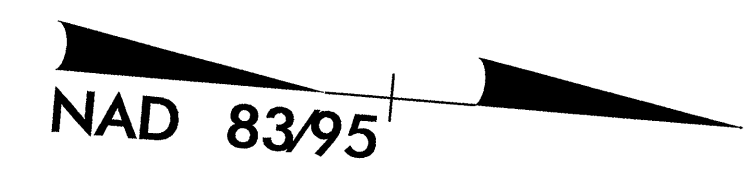
SEE SHT 2-J FOR
DRAINAGE DITCH DETAILS
ALL DRIVEWAY WIDTHS 16' AND
RADII 10' UNLESS OTHERWISE NOTED
SEE SHT.29 FOR -L- & -L- (FUTURE) PROFILES

ALAMEDA L. EDWARDS
DB 869 PG 286

122

PROJECT REFERENCE NO.	SHEET NO.
R-2510C	EC-22/CONST.4
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

NOTE:
INSTALL TEMPORARY SLOPE DRAINS TO CONVEY RUNOFF FROM ROAD GRADE INTO PROPOSED DITCHES WITH A SPACING OF 1000 FT. OR AS DIRECTED.



JOSEPH D. ARNOLD
DB 1300 - PG 734
MB 1 - PG 50

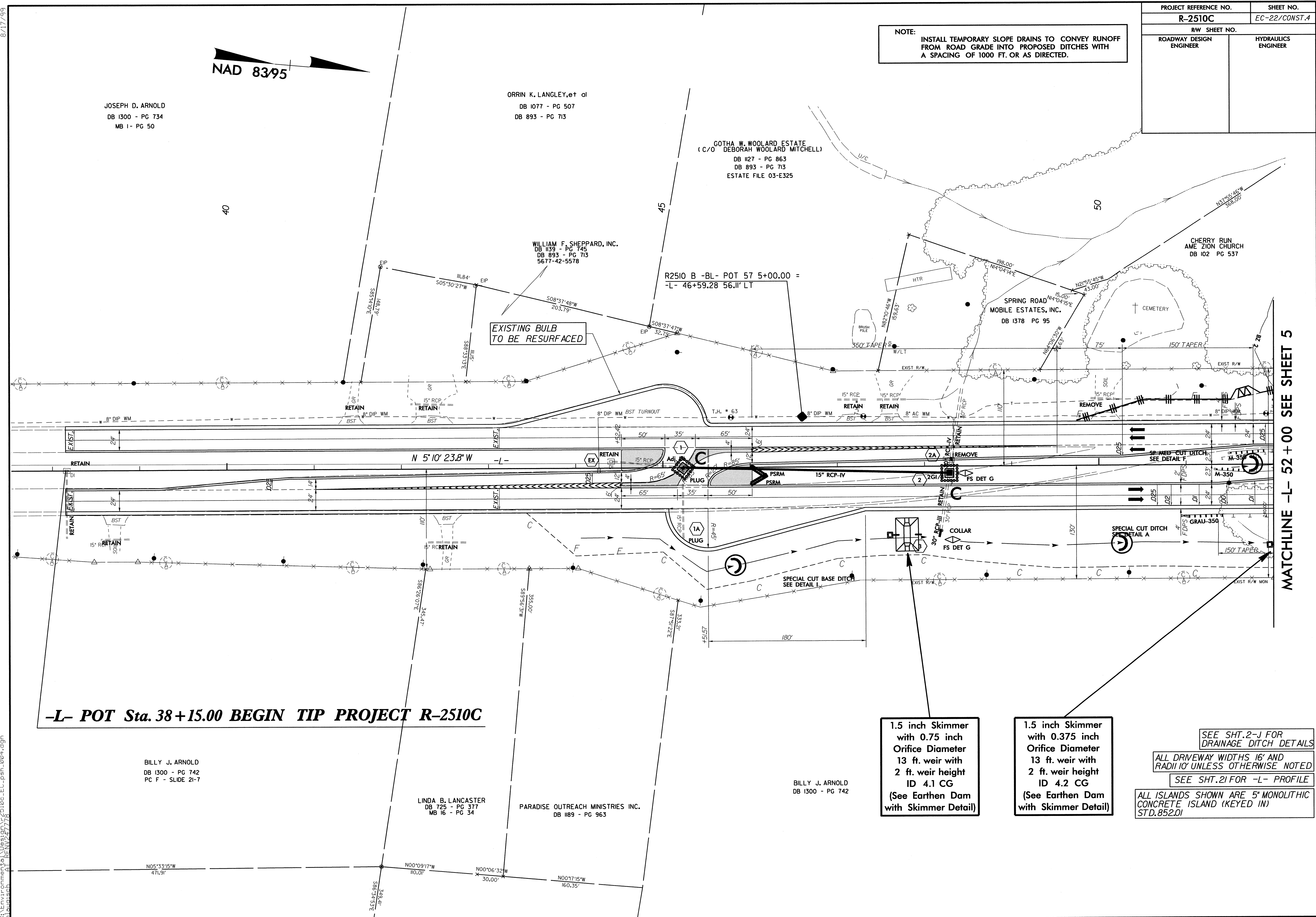
ORRIN K. LANGLEY, et al
DB 1077 - PG 507
DB 893 - PG 713

GOTHA W. WOOLARD ESTATE
(C/O DEBORAH WOOLARD MITCHELL)
DB 1127 - PG 863
DB 893 - PG 713
ESTATE FILE 03-E325

WILLIAM F. SHEPPARD, INC.
DB 1139 - PG 745
DB 893 - PG 713
5677-42-5578

SPRING ROAD
MOBILE ESTATES, INC.
DB 1378 PG 95

CHERRY RUN
AME ZION CHURCH
DB 102 PG 537



-L- POT Sta. 38+15.00 BEGIN TIP PROJECT R-2510C

BILLY J. ARNOLD
DB 1300 - PG 742
PC F - SLIDE 21-7

LINDA B. LANCASTER
DB 725 - PG 377
MB 16 - PG 34

PARADISE OUTREACH MINISTRIES INC.
DB 1189 - PG 963

BILLY J. ARNOLD
DB 1300 - PG 742

1.5 inch Skimmer
with 0.75 inch
Orifice Diameter
13 ft. weir with
2 ft. weir height
ID 4.1 CG
(See Earthen Dam
with Skimmer Detail)

1.5 inch Skimmer
with 0.375 inch
Orifice Diameter
13 ft. weir with
2 ft. weir height
ID 4.2 CG
(See Earthen Dam
with Skimmer Detail)

SEE SHT. 2-J FOR
DRAINAGE DITCH DETAILS
ALL DRIVEWAY WIDTHS 16' AND
RADII 10' UNLESS OTHERWISE NOTED
SEE SHT. 2I FOR -L- PROFILE
ALL ISLANDS SHOWN ARE 5' MONOLITHIC
CONCRETE ISLAND (KEYED IN)
STD. 852.01

MATCHLINE -L- 52 + 00 SEE SHEET 5

8/17/99
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BILLY J. ARNOLD
AT 11:24:27

PROJECT REFERENCE NO.	SHEET NO.
R-2510C	EC-23/CONST.5
RW SHEET NO.	HYDRAULICS ENGINEER
ROADWAY DESIGN ENGINEER	

GOTHA W. WOOLARD ESTATE
(C/O) DEBORAH WOOLARD MITCHELL
DB 1127 - PG 863
DB 893 - PG 713
ESTATE FILE 03-E325

NOTE:
INSTALL TEMPORARY SLOPE DRAINS TO CONVEY RUNOFF FROM ROAD GRADE INTO PROPOSED DITCHES WITH A SPACING OF 1000 FT. OR AS DIRECTED.

NAD 8395

BEGIN CONSTRUCTION
-Y3- STA. 11+75.00

1.5 inch Skimmer with 0.375 inch Orifice Diameter
13 ft. weir with 2 ft. weir height
ID 5.1 CG
(See Earthen Dam with Skimmer Detail)

MATCHLINE -L- 52+00 SEE SHEET 4

MATCHLINE -L- 66+00 SEE SHEET 6

1.5 inch Skimmer with 0.375 inch Orifice Diameter
13 ft. weir with 2 ft. weir height
ID 4.2 CG
(See Earthen Dam with Skimmer Detail)

1.5 inch Skimmer with 0.375 inch Orifice Diameter
13 ft. weir with 2 ft. weir height
ID 5.2 CG
(See Earthen Dam with Skimmer Detail)

SEE SHEETS -- THRU -- FOR STRUCTURE PLANS
ALL DRIVEWAY WIDTHS 16' AND RADII 10' UNLESS OTHERWISE NOTED
SEE SHT. 21 & 22 FOR -L- PROFILE
SEE SHT. 30 FOR -Y3- PROFILE
ALL ISLANDS SHOWN ARE 5' MONOLITHIC CONCRETE ISLAND (KEYED IN) STD. 852.01
SEE SHT. 2-E FOR INTERSECTION DETAIL
SEE SHT. 2-J FOR DRAINAGE DITCH DETAILS

IA
BILLY J. ARNOLD
DB 1300 - PG 742

-Y3-
PI Sta 13+17.06
Δ = 27° 40' 35.0" (LT)
D = 11' 41' 34.9"
L = 236.69'
T = 120.70'
R = 490.00'

PI Sta 57+20.65
Δ = 4° 48' 06.2" (LT)
D = 0' 29' 53.6"
L = 96.376'
T = 482.16'
R = 11,500.00'

PIs Sta 63+17.11
Δs = 0' 38' 03.4"
Ls = 120.00'
LT = 80.00'
ST = 40.00'

PI Sta 66+24.82
Δ = 5° 39' 21.3" (RT)
D = 1' 03' 25.6"
L = 535.03'
T = 267.73'
R = 5,420.00'
SE = 0.030
INC = 40.00'

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PROJECT REFERENCE NO.	SHEET NO.
R-2510C	EC-24/CONST.6
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

NOTE:
INSTALL TEMPORARY SLOPE DRAINS TO CONVEY RUNOFF FROM ROAD GRADE INTO PROPOSED DITCHES WITH A SPACING OF 1000 FT. OR AS DIRECTED.

NAD 8395

1.5 inch Skimmer with 0.625 inch Orifice Diameter
13 ft. weir with 2 ft. weir height
ID 6.1 CG
(See Earthen Dam with Skimmer Detail)

1.5 inch Skimmer with 0.875 inch Orifice Diameter
13 ft. weir with 2 ft. weir height
ID 6.3 CG
(See Earthen Dam with Skimmer Detail)

1.5 inch Skimmer with 0.75 inch Orifice Diameter
13 ft. weir with 2 ft. weir height
ID 6.2 CG
(See Earthen Dam with Skimmer Detail)

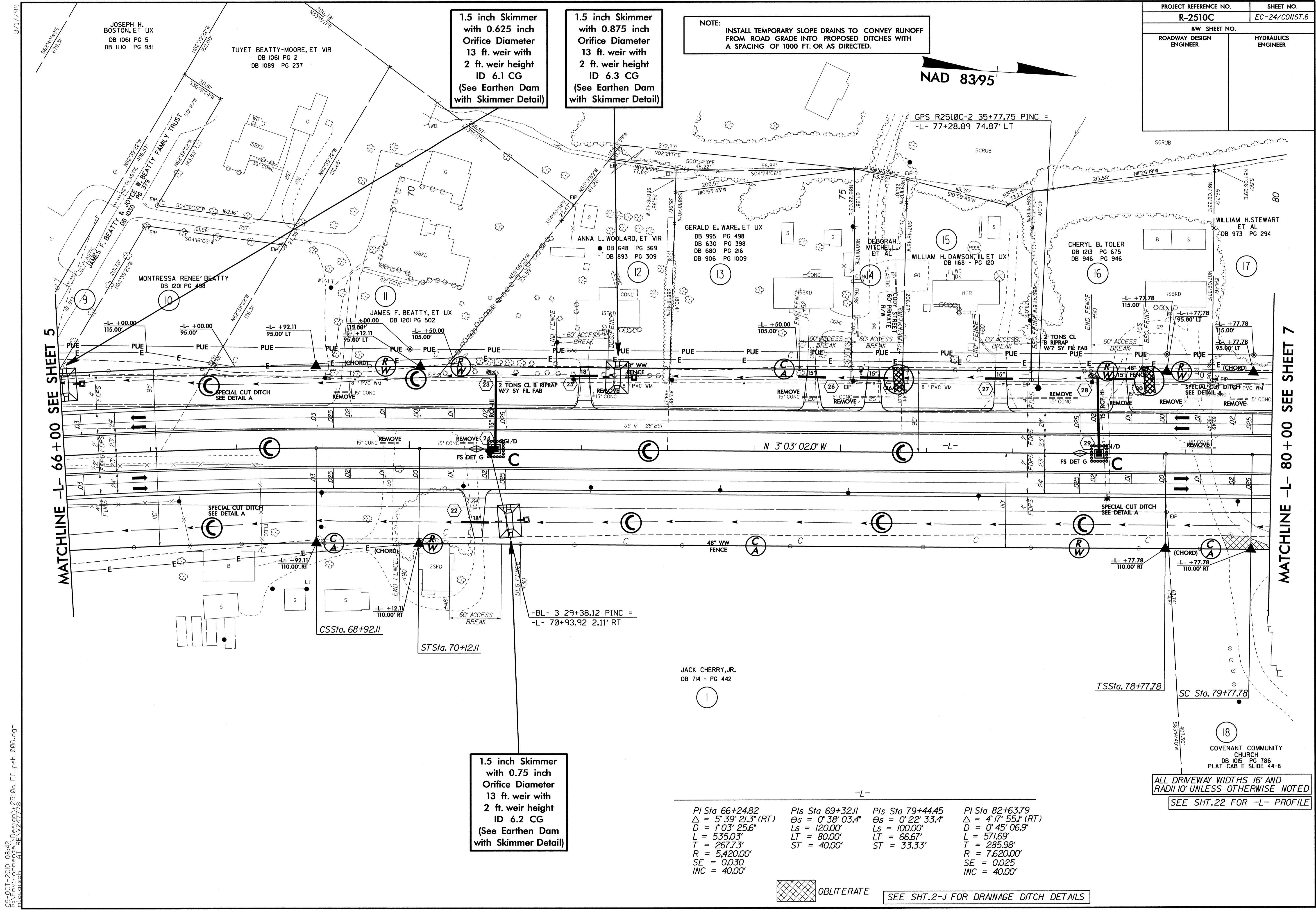
JACK CHERRY, JR.
DB 714 - PG 442

$PI\ Sta\ 66+24.82$ $\Delta = 5' 39" 21.3" (RT)$ $D = 1' 03' 25.6"$ $L = 535.03'$ $T = 267.73'$ $R = 5,420.00'$ $SE = 0.030$ $INC = 40.00'$	$PIs\ Sta\ 69+32.11$ $\Theta_s = 0' 38" 03.4"$ $L_s = 120.00'$ $LT = 80.00'$ $ST = 40.00'$	$PIs\ Sta\ 79+44.45$ $\Theta_s = 0' 22" 33.4"$ $L_s = 100.00'$ $LT = 66.67'$ $ST = 33.33'$	$PI\ Sta\ 82+63.79$ $\Delta = 4' 17" 55.1" (RT)$ $D = 0' 45" 06.9"$ $L = 571.69'$ $T = 285.98'$ $R = 7,620.00'$ $SE = 0.025$ $INC = 40.00'$
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OBLITERATE

SEE SHT. 2-J FOR DRAINAGE DITCH DETAILS

ALL DRIVEWAY WIDTHS 16' AND RADII 10' UNLESS OTHERWISE NOTED
SEE SHT. 22 FOR -L- PROFILE



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 ALL RIGHTS RESERVED

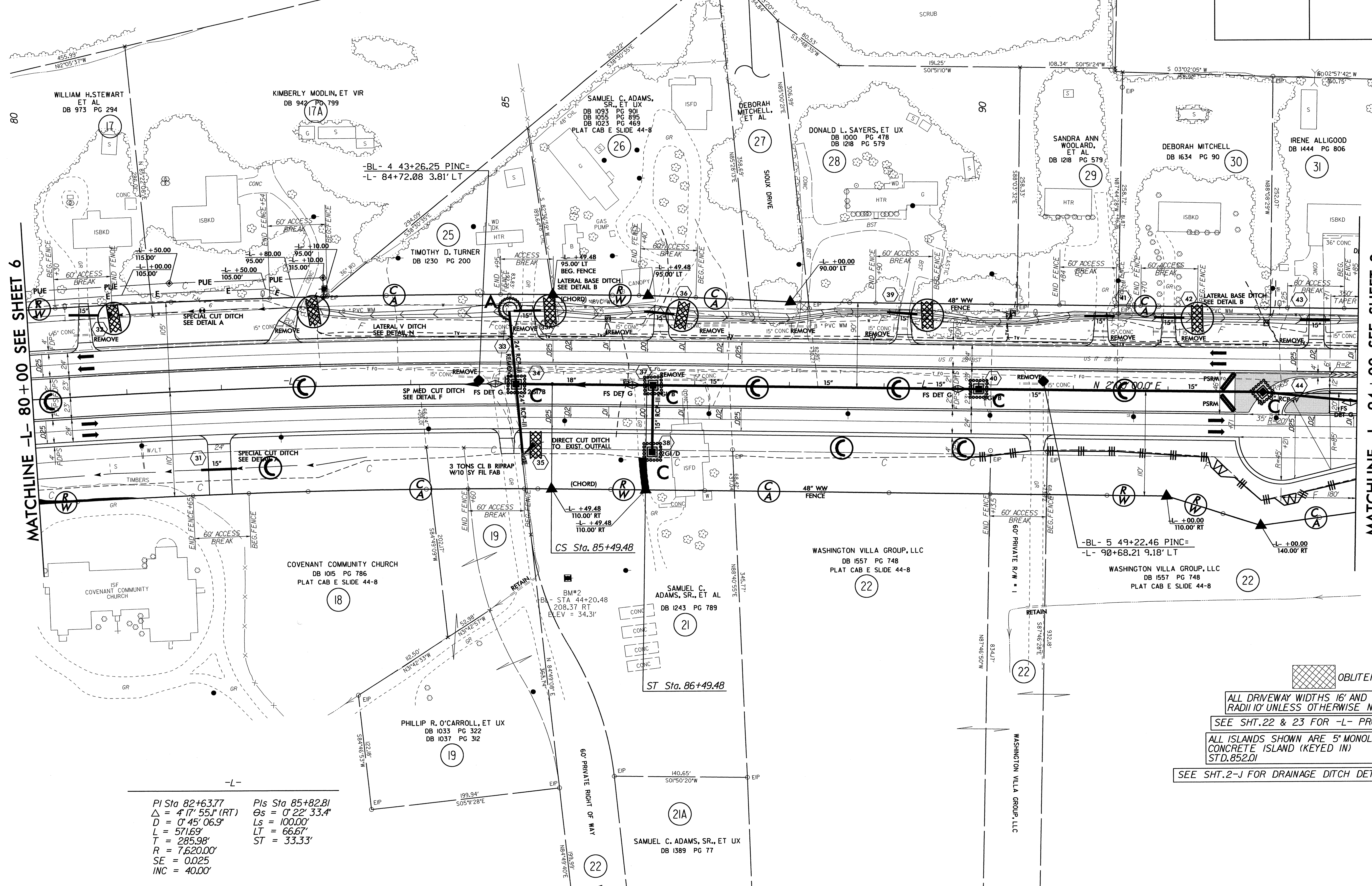
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PROJECT REFERENCE NO.	SHEET NO.
R-2510C	EC-25/CONST.7
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

NOTE: INSTALL TEMPORARY SLOPE DRAINS TO CONVEY RUNOFF FROM ROAD GRADE INTO PROPOSED DITCHES WITH A SPACING OF 1000 FT. OR AS DIRECTED.

NOTE: NO PROPOSED ACCESS ACCESS PROVIDED TO PROPERTY FROM NEW HOPE ROAD & -L- Sta.75+50 LT.

NAD 8395



MATCHLINE -L- 80+00 SEE SHEET 6

MATCHLINE -L- 94+00 SEE SHEET 8

-L-
 PI Sta 82+63.77
 $\Delta = 4' 17'' 55.1''$ (RT)
 $D = 0' 45'' 06.9''$
 $L = 571.69'$
 $T = 285.98'$
 $R = 7,620.00'$
 $SE = 0.025$
 $INC = 40.00'$

PIs Sta 85+82.81
 $\Theta_s = 0' 22'' 33.4''$
 $L_s = 100.00'$
 $LT = 66.67'$
 $ST = 33.33'$

OBLITERATE

ALL DRIVEWAY WIDTHS 16' AND RADII 10' UNLESS OTHERWISE NOTED

SEE SHT. 22 & 23 FOR -L- PROFILE

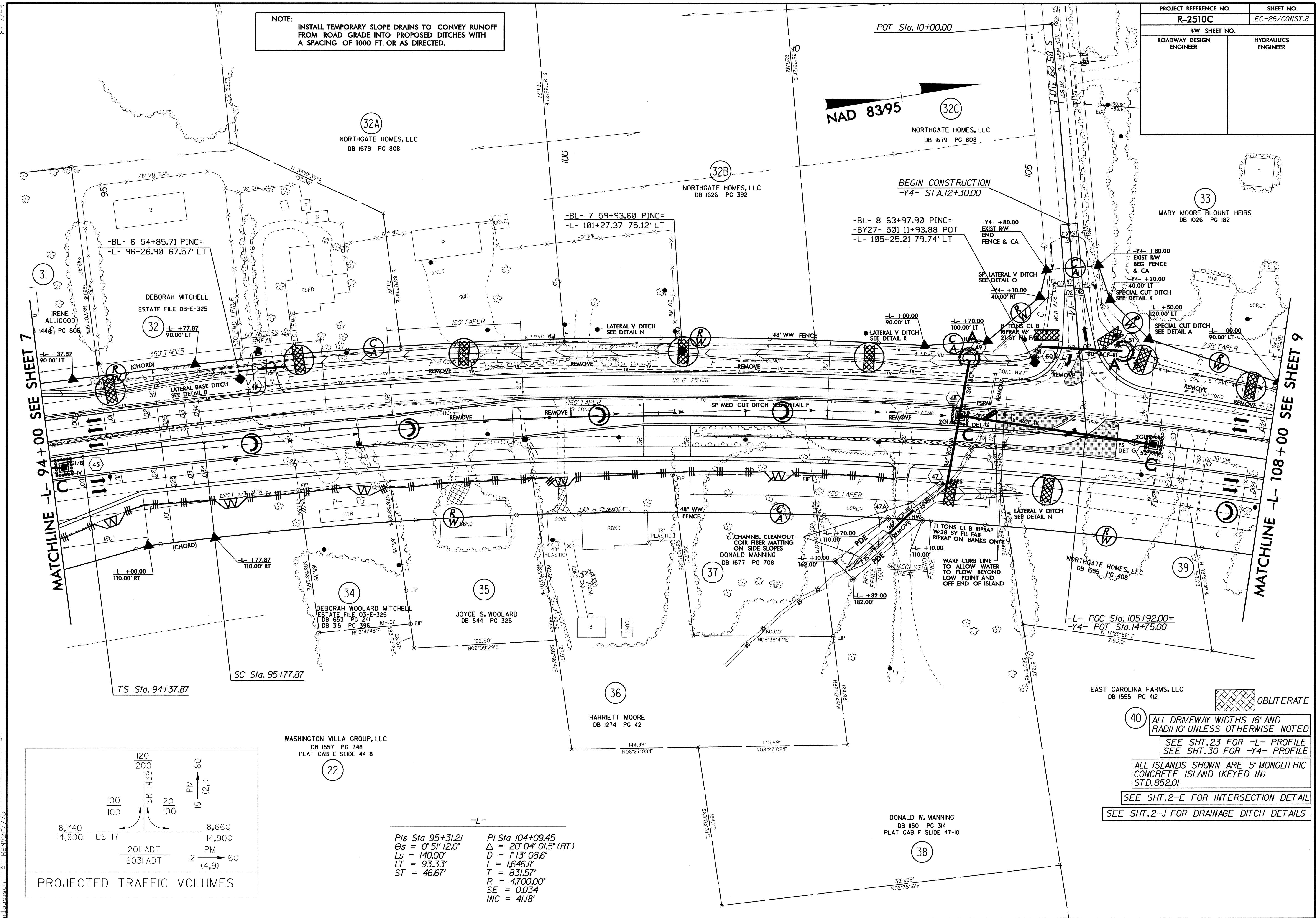
ALL ISLANDS SHOWN ARE 5' MONOLITHIC CONCRETE ISLAND (KEYED IN) STD. 852.01

SEE SHT. 2-J FOR DRAINAGE DITCH DETAILS

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 mlawisch - AT RENVZ47778

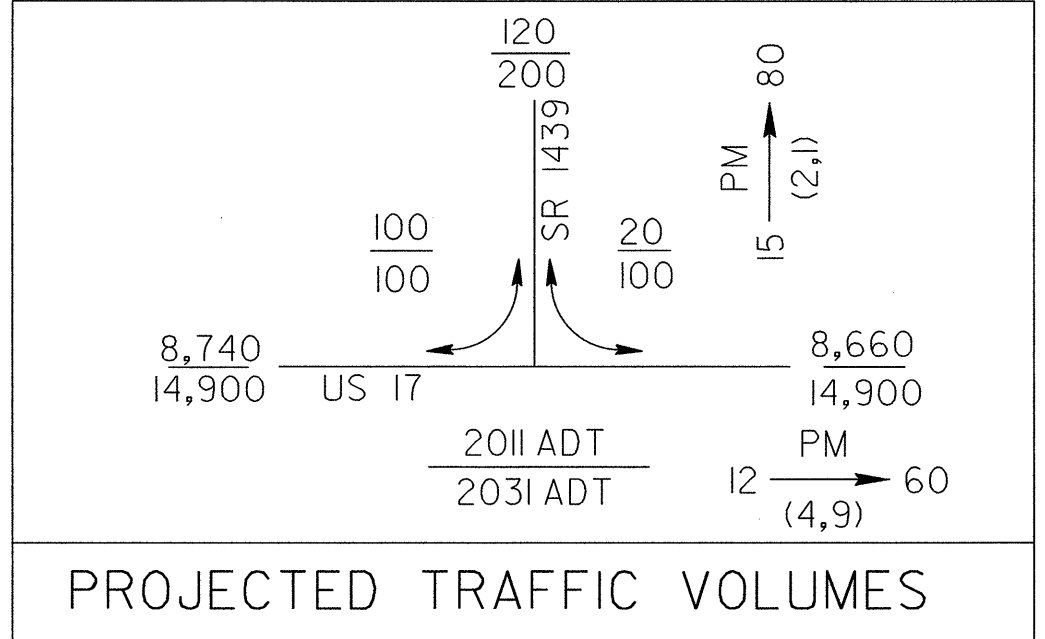
PROJECT REFERENCE NO. R-2510C	SHEET NO. EC-26/CONST.B
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

NOTE:
INSTALL TEMPORARY SLOPE DRAINS TO CONVEY RUNOFF FROM ROAD GRADE INTO PROPOSED DITCHES WITH A SPACING OF 1000 FT. OR AS DIRECTED.



MATCHLINE -L- 94+00 SEE SHEET 7

MATCHLINE -L- 108+00 SEE SHEET 9



-L-
 Pls Sta 95+31.21
 Δs = 0° 51' 12.0"
 Ls = 140.00'
 LT = 93.33'
 ST = 46.67'
 Pi Sta 104+09.45
 Δ = 20° 04' 01.5" (RT)
 D = 1' 13' 08.6"
 L = 1646.11'
 T = 831.57'
 R = 4700.00'
 SE = 0.034
 INC = 41.8'

- 40 ALL DRIVEWAY WIDTHS 16' AND RADII 10' UNLESS OTHERWISE NOTED
SEE SHT.23 FOR -L- PROFILE
SEE SHT.30 FOR -Y4- PROFILE
- ALL ISLANDS SHOWN ARE 5" MONOLITHIC CONCRETE ISLAND (KEYED IN) STD.852.01
- SEE SHT.2-E FOR INTERSECTION DETAIL
- SEE SHT.2-J FOR DRAINAGE DITCH DETAILS

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PROJECT REFERENCE NO.	SHEET NO.
R-2510C	EC-27/CONST.9
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

NOTE:
INSTALL TEMPORARY SLOPE DRAINS TO CONVEY RUNOFF FROM ROAD GRADE INTO PROPOSED DITCHES WITH A SPACING OF 1000 FT. OR AS DIRECTED.

JAMES REUBEN FERRELL
DB 813 PG 258
ESTATE FILE 867E/406

NAD 8395

1.5 inch Skimmer with 0.825 inch Orifice Diameter 19 ft. weir with 2.75 ft. weir height ID 9.3 CG (See Earthen Dam with Skimmer Detail)

1.5 inch Skimmer with 0.875 inch Orifice Diameter 13 ft. weir with 2 ft. weir height ID 9.1 CG (See Earthen Dam with Skimmer Detail)

1.5 inch Skimmer with 0.75 inch Orifice Diameter 13 ft. weir with 2 ft. weir height ID 9.2 CG (See Earthen Dam with Skimmer Detail)

1.5 inch Skimmer with 0.375 inch Orifice Diameter 13 ft. weir with 2 ft. weir height ID 9.4 CG (See Earthen Dam with Skimmer Detail)

OBLITERATE

ALL DRIVEWAY WIDTHS 16' AND RADIUS 10' UNLESS OTHERWISE NOTED

SEE SHT. 23 & 24 FOR -L- PROFILE

SEE SHT. 2-J FOR DRAINAGE DITCH DETAILS

PI Sta 104+09.45 Δ = 20° 04' 01.5" (RT) D = 1' 13" 08.6" L = 1,646.11' T = 831.57' R = 4,700.00' SE = 0.034 INC = 41.18'	PIs Sta 112+70.65 Os = 0° 51' 12.0" Ls = 100.00' LT = 93.33' ST = 46.67'	PIs Sta 114+30.65 Os = 0° 24' 48.2" Ls = 100.00' LT = 66.67' ST = 33.33'	PI Sta 125+45.57 Δ = 17° 44' 29.2" (LT) D = 0° 49' 36.4" L = 2,145.85' T = 1,081.58' R = 6,930.00' SE = 0.025 INC = 40.00'
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MATCHLINE -L- 108 + 00 SEE SHEET 8

MATCHLINE -L- 122 + 00 SEE SHEET 10

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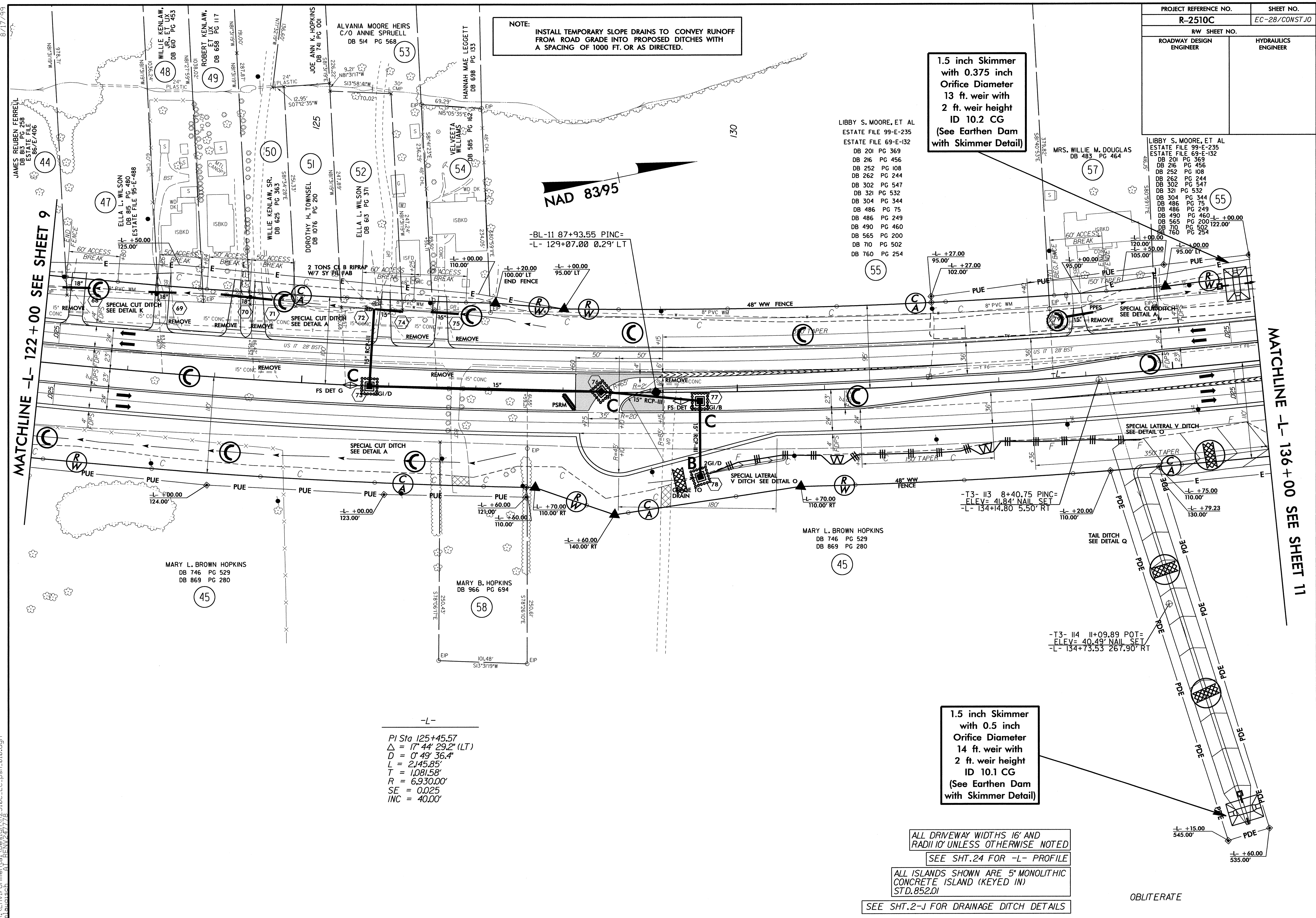
PROJECT REFERENCE NO.	SHEET NO.
R-2510C	EC-28/CONST JO
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

NOTE: INSTALL TEMPORARY SLOPE DRAINS TO CONVEY RUNOFF FROM ROAD GRADE INTO PROPOSED DITCHES WITH A SPACING OF 1000 FT. OR AS DIRECTED.

1.5 inch Skimmer with 0.375 inch Orifice Diameter 13 ft. weir with 2 ft. weir height ID 10.2 CG (See Earthen Dam with Skimmer Detail)

LIBBY S. MOORE, ET AL
ESTATE FILE 99-E-235
ESTATE FILE 69-E-132
DB 201 PG 369
DB 216 PG 456
DB 252 PG 108
DB 262 PG 244
DB 302 PG 547
DB 321 PG 532
DB 304 PG 344
DB 486 PG 75
DB 486 PG 249
DB 490 PG 460
DB 565 PG 200
DB 710 PG 502
DB 760 PG 254

LIBBY S. MOORE, ET AL
ESTATE FILE 99-E-235
ESTATE FILE 69-E-132
DB 201 PG 369
DB 216 PG 456
DB 252 PG 108
DB 302 PG 547
DB 321 PG 532
DB 304 PG 344
DB 486 PG 75
DB 486 PG 249
DB 490 PG 460
DB 565 PG 200
DB 710 PG 502
DB 760 PG 254



NAD 83/95

-BL-11 87+93.55 PINC=
-L- 129+07.00 0.29' LT

-T3- 113 8+40.75 PINC=
ELEV= 41.84' NAIL SET
-L- 134+14.80 5.50' RT

-T3- 114 11+09.89 POT=
ELEV= 40.49' NAIL SET
-L- 134+73.53 267.90' RT

-L-
PI Sta 125+45.57
 $\Delta = 17' 44'' 29.2''$ (LT)
 $D = 0' 49'' 36.4''$
 $L = 2,145.85'$
 $T = 1,081.58'$
 $R = 6,930.00'$
 $SE = 0.025$
 $INC = 40.00'$

1.5 inch Skimmer with 0.5 inch Orifice Diameter 14 ft. weir with 2 ft. weir height ID 10.1 CG (See Earthen Dam with Skimmer Detail)

ALL DRIVEWAY WIDTHS 16' AND RADIUS UNLESS OTHERWISE NOTED
SEE SHT. 24 FOR -L- PROFILE

ALL ISLANDS SHOWN ARE 5' MONOLITHIC CONCRETE ISLAND (KEYED IN) STD. 852.01

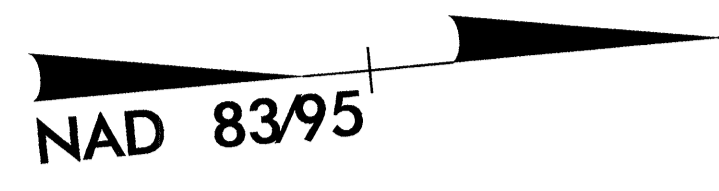
SEE SHT. 2-J FOR DRAINAGE DITCH DETAILS

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NOTE: INSTALL TEMPORARY SLOPE DRAINS TO CONVEY RUNOFF FROM ROAD GRADE INTO PROPOSED DITCHES WITH A SPACING OF 1000 FT. OR AS DIRECTED.

LIBBY S. MOORE
ESTATE FILE 99-E-235
ESTATE FILE 69-E-132
DB 262 PG 244
DB 216 PG 456



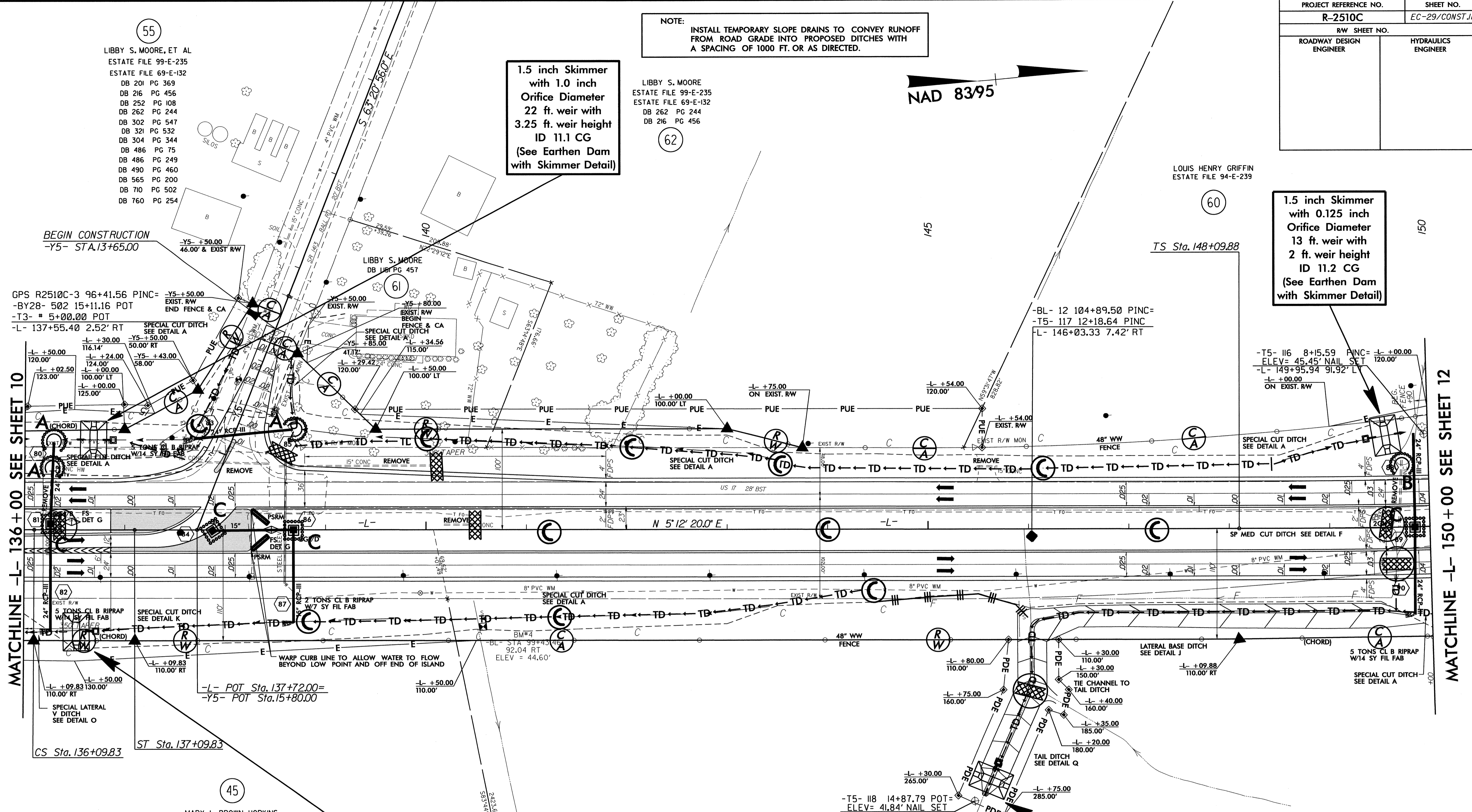
LIBBY S. MOORE, ET AL
ESTATE FILE 99-E-235
ESTATE FILE 69-E-132
DB 201 PG 369
DB 216 PG 456
DB 252 PG 108
DB 262 PG 244
DB 302 PG 547
DB 321 PG 532
DB 304 PG 344
DB 486 PG 75
DB 486 PG 249
DB 490 PG 460
DB 565 PG 200
DB 710 PG 502
DB 760 PG 254

1.5 inch Skimmer
with 1.0 inch
Orifice Diameter
22 ft. weir with
3.25 ft. weir height
ID 11.1 CG
(See Earthen Dam
with Skimmer Detail)

1.5 inch Skimmer
with 0.125 inch
Orifice Diameter
13 ft. weir with
2 ft. weir height
ID 11.2 CG
(See Earthen Dam
with Skimmer Detail)

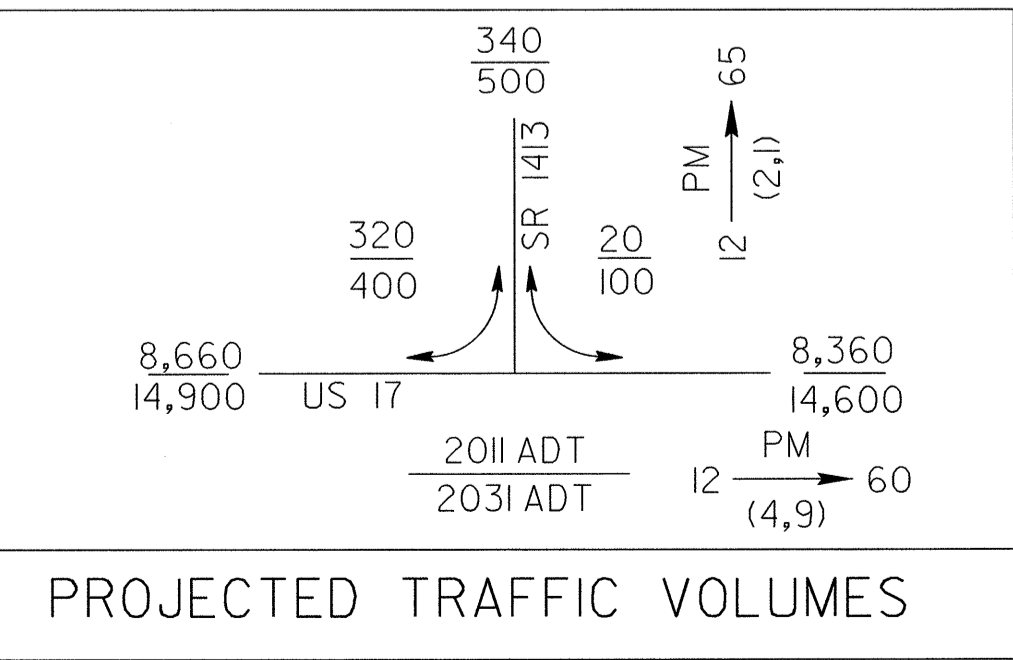
1.5 inch Skimmer
with 1.125 inch
Orifice Diameter
19 ft. weir with
2.75 ft. weir height
ID 11.1 F
(See Earthen Dam
with Skimmer Detail)

1.5 inch Skimmer
with 1.0 inch
Orifice Diameter
8 ft. weir with
1 ft. weir height
ID 11.2 F
(See Earthen Dam
with Skimmer Detail)



MATCHLINE -L- 136 + 00 SEE SHEET 10

MATCHLINE -L- 150 + 00 SEE SHEET 12



PI Sta 125+45.57	PIs Sta 136+43.17	PIs Sta 149+59.89
$\Delta = 17^{\circ} 44' 29.2''$ (LT)	$\Delta = 0^{\circ} 24' 48.2''$	$\Delta = 2^{\circ} 10' 39.5''$
$D = 0^{\circ} 49' 36.4''$	$Ls = 100.00'$	$Ls = 225.00'$
$L = 2,145.85'$	$LT = 66.67'$	$LT = 150.01'$
$T = 1,081.58'$	$ST = 33.33'$	$ST = 75.01'$
$RE = 6,930.00'$		
$SE = 0.025$		
$INC = 40.00'$		

ALL DRIVEWAY WIDTHS 16' AND
RADIUS 10' UNLESS OTHERWISE NOTED

SEE SHT. 24 & 25 FOR -L- PROFILE
SEE SHT. 31 FOR -Y5- PROFILE

ALL ISLANDS SHOWN ARE 5' MONOLITHIC
CONCRETE ISLAND (KEYED IN)
STD. 852.01

SEE SHT. 2-F FOR INTERSECTION DETAIL
SEE SHT. 2-J FOR DRAINAGE DITCH DETAILS

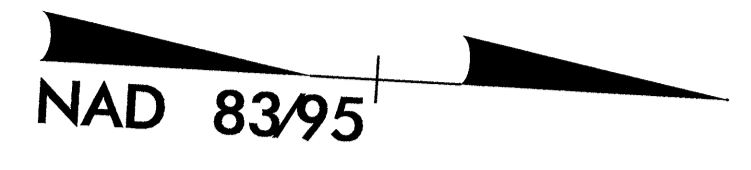


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LIBBY S. MOORE

8/17/99

PROJECT REFERENCE NO.	SHEET NO.
R-2510C	EC-30/CONST J2
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

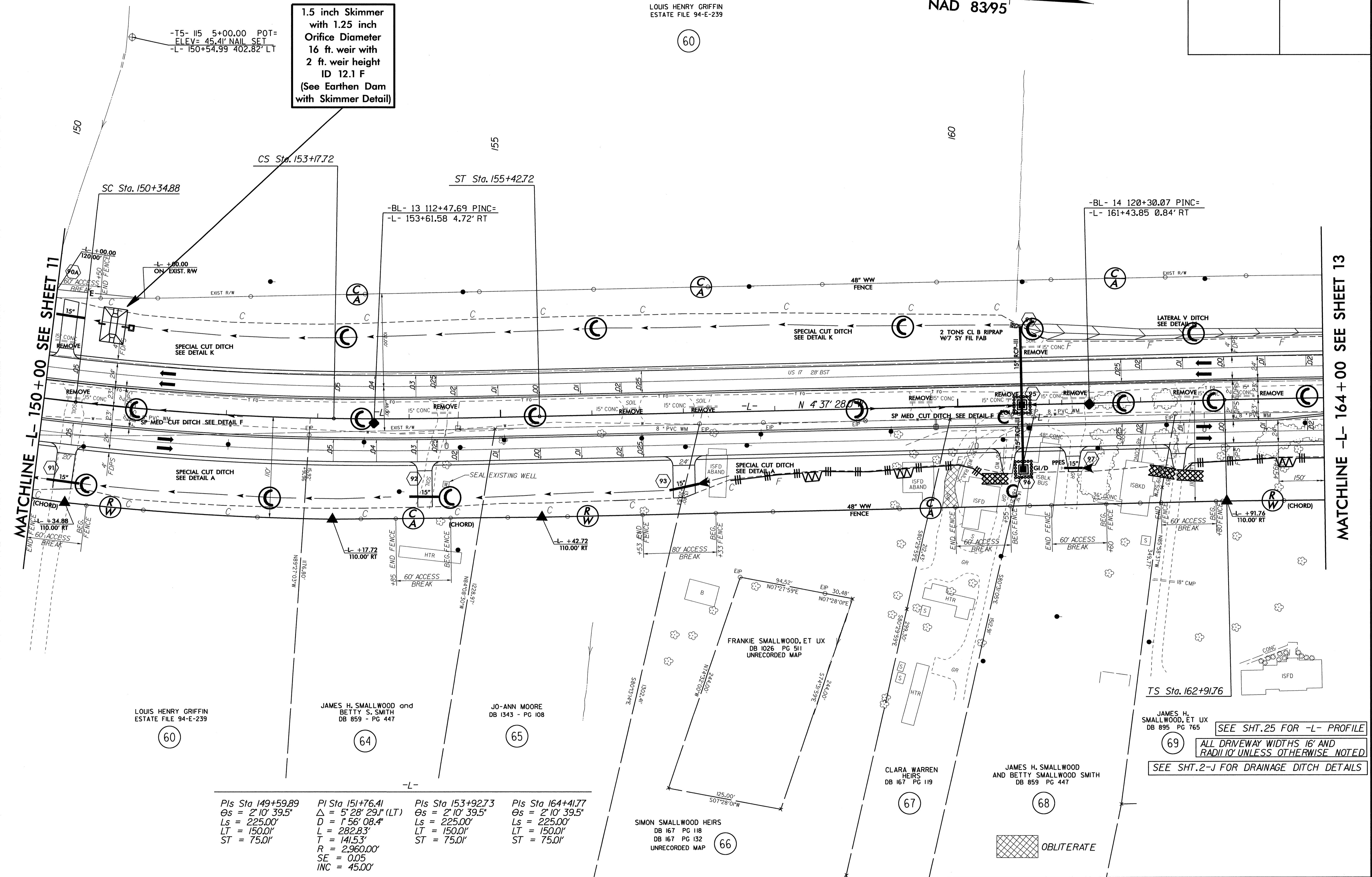
NOTE:
INSTALL TEMPORARY SLOPE DRAINS TO CONVEY RUNOFF FROM ROAD GRADE INTO PROPOSED DITCHES WITH A SPACING OF 1000 FT. OR AS DIRECTED.



LOUIS HENRY GRIFFIN
ESTATE FILE 94-E-239

60

1.5 inch Skimmer
with 1.25 inch
Orifice Diameter
16 ft. weir with
2 ft. weir height
ID 12.1 F
(See Earthen Dam
with Skimmer Detail)



MATCHLINE -L- 150+00 SEE SHEET 11

MATCHLINE -L- 164+00 SEE SHEET 13

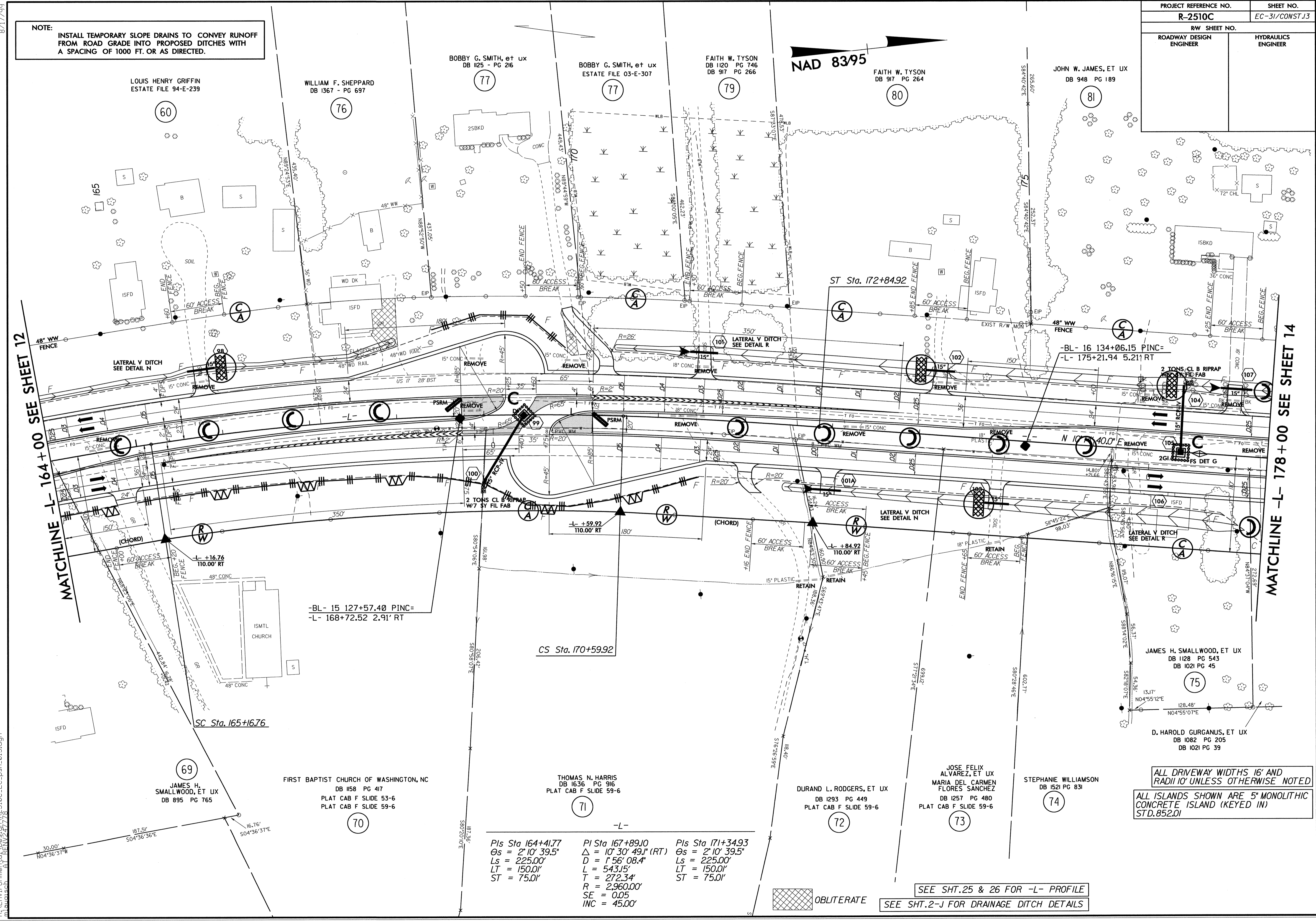
Pls Sta 149+59.89 Os = 2' 10' 39.5" Ls = 225.00' LT = 150.01' ST = 75.01'	Pl Sta 151+76.41 Δ = 5' 28' 29.1" (LT) D = 1' 56' 08.4" L = 282.83' T = 141.53' R = 2,960.00' SE = 0.05 INC = 45.00'	Pls Sta 153+92.73 Os = 2' 10' 39.5" Ls = 225.00' LT = 150.01' ST = 75.01'	Pls Sta 164+41.77 Os = 2' 10' 39.5" Ls = 225.00' LT = 150.01' ST = 75.01'
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SEE SHT. 25 FOR -L- PROFILE
ALL DRIVEWAY WIDTHS 16' AND RADIUS 10' UNLESS OTHERWISE NOTED
SEE SHT. 2-J FOR DRAINAGE DITCH DETAILS

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NOTE:
INSTALL TEMPORARY SLOPE DRAINS TO CONVEY RUNOFF FROM ROAD GRADE INTO PROPOSED DITCHES WITH A SPACING OF 1000 FT. OR AS DIRECTED.

NAD 8395



MATCHLINE -L- 164 + 00 SEE SHEET 12

MATCHLINE -L- 178 + 00 SEE SHEET 14

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alvarez

SC Sta. 165+16.76
-L- +16.76
110.00' RT

-BL- 15 127+57.40 PINC=
-L- 168+72.52 2.91' RT

CS Sta. 170+59.92

ST Sta. 172+84.92

-BL- 16 134+06.15 PINC=
-L- 175+21.94 5.21' RT

-L-

Pls Sta 164+41.77	PI Sta 167+89.10	Pls Sta 171+34.93
Os = 2' 10" 39.5"	Δ = 10' 30" 49.1" (RT)	Os = 2' 10" 39.5"
Ls = 225.00'	D = 1' 56" 08.4"	Ls = 225.00'
LT = 150.00'	L = 543.15'	LT = 150.00'
ST = 75.00'	T = 272.34'	ST = 75.00'
	R = 2,960.00'	
	SE = 0.05	
	INC = 45.00'	

OBLITERATE

SEE SHT. 25 & 26 FOR -L- PROFILE
SEE SHT. 2-J FOR DRAINAGE DITCH DETAILS

ALL DRIVEWAY WIDTHS 16' AND
RADI 10' UNLESS OTHERWISE NOTED
ALL ISLANDS SHOWN ARE 5" MONOLITHIC
CONCRETE ISLAND (KEYED IN)
STD. 852.01

PROJECT REFERENCE NO.	SHEET NO.
R-2510C	EC-32/CONST.14
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

NOTE:
INSTALL TEMPORARY SLOPE DRAINS TO CONVEY RUNOFF FROM ROAD GRADE INTO PROPOSED DITCHES WITH A SPACING OF 1000 FT. OR AS DIRECTED.

1.5 inch Skimmer with 0.875 inch Orifice Diameter
10 ft. weir with 2 ft. weir height
ID 14.1 F
(See Earthen Dam with Skimmer Detail)

1.5 inch Skimmer with 0.5 inch Orifice Diameter
19 ft. weir with 2 ft. weir height
ID 14.3 F
(See Earthen Dam with Skimmer Detail)

1.5 inch Skimmer with 0.75 inch Orifice Diameter
16 ft. weir with 2 ft. weir height
ID 14.2 F
(See Earthen Dam with Skimmer Detail)

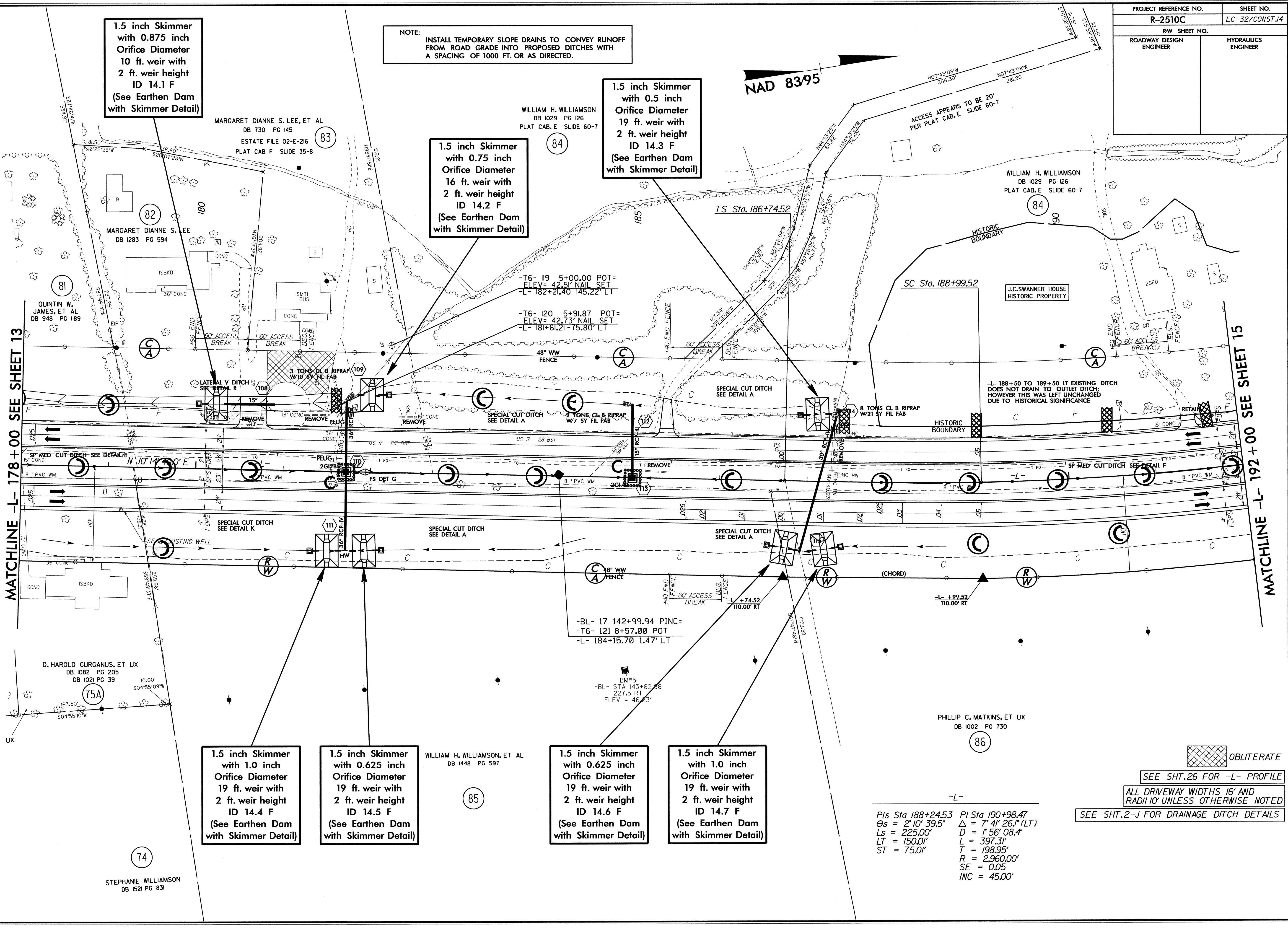
1.5 inch Skimmer with 1.0 inch Orifice Diameter
19 ft. weir with 2 ft. weir height
ID 14.4 F
(See Earthen Dam with Skimmer Detail)

1.5 inch Skimmer with 0.625 inch Orifice Diameter
19 ft. weir with 2 ft. weir height
ID 14.5 F
(See Earthen Dam with Skimmer Detail)

1.5 inch Skimmer with 0.625 inch Orifice Diameter
19 ft. weir with 2 ft. weir height
ID 14.6 F
(See Earthen Dam with Skimmer Detail)

1.5 inch Skimmer with 1.0 inch Orifice Diameter
19 ft. weir with 2 ft. weir height
ID 14.7 F
(See Earthen Dam with Skimmer Detail)

NAD 8395



OBLITERATE
SEE SHT.26 FOR -L- PROFILE
ALL DRIVEWAY WIDTHS 16' AND RADII 10' UNLESS OTHERWISE NOTED
SEE SHT.2-J FOR DRAINAGE DITCH DETAILS

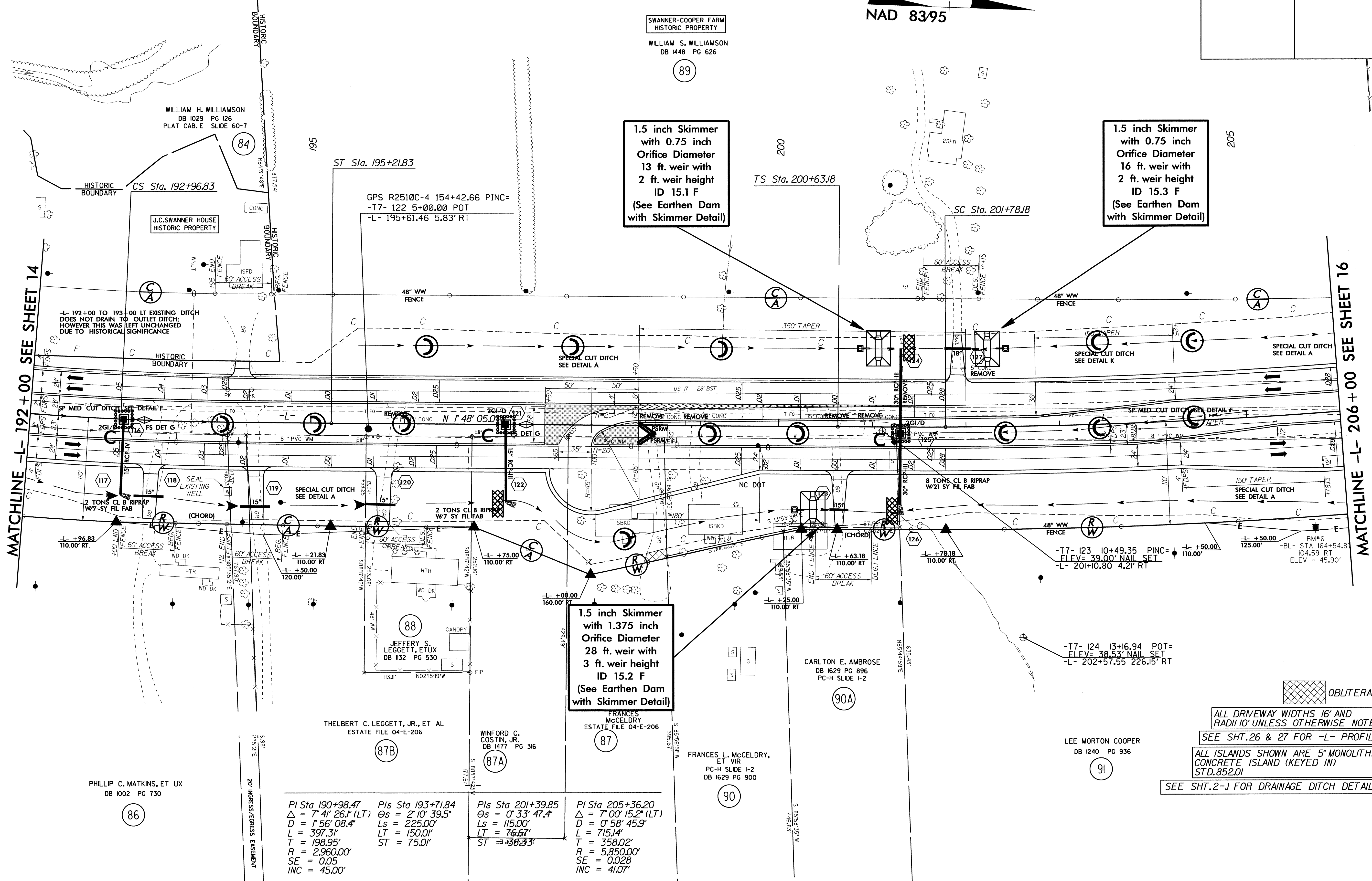
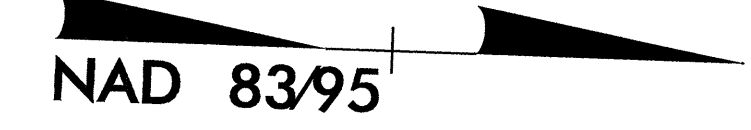
-L-
PI Sta 188+24.53
 $\theta_s = 2^{\circ}10'39.5''$
 $L_s = 225.00'$
 $LT = 150.01'$
 $ST = 75.01'$
PI Sta 190+98.47
 $\Delta = 7^{\circ}41'26.1''$ (LT)
 $D = 1^{\circ}56'08.4''$
 $L = 397.31'$
 $T = 198.95'$
 $R = 2,960.00'$
 $SE = 0.05$
 $INC = 45.00'$

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PROJECT REFERENCE NO.	SHEET NO.
R-2510C	EC-33/CONST.15
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

NOTE:
INSTALL TEMPORARY SLOPE DRAINS TO CONVEY RUNOFF FROM ROAD GRADE INTO PROPOSED DITCHES WITH A SPACING OF 1000 FT. OR AS DIRECTED.



1.5 inch Skimmer
with 0.75 inch
Orifice Diameter
13 ft. weir with
2 ft. weir height
ID 15.1 F
(See Earthen Dam
with Skimmer Detail)

1.5 inch Skimmer
with 0.75 inch
Orifice Diameter
16 ft. weir with
2 ft. weir height
ID 15.3 F
(See Earthen Dam
with Skimmer Detail)

1.5 inch Skimmer
with 1.375 inch
Orifice Diameter
28 ft. weir with
3 ft. weir height
ID 15.2 F
(See Earthen Dam
with Skimmer Detail)

PI Sta 190+98.47 $\Delta = 7' 41'' 26.1''$ (LT) $D = 1' 56'' 08.4''$ $L = 397.31'$ $T = 198.95'$ $R = 2,960.00'$ $SE = 0.05$ $INC = 45.00'$	PIs Sta 193+71.84 $\Theta_s = 2' 10'' 39.5''$ $L_s = 225.00'$ $LT = 150.01'$ $ST = 75.01'$	PIs Sta 201+39.85 $\Theta_s = 0' 33'' 47.4''$ $L_s = 115.00'$ $LT = 76.67'$ $ST = 36.33'$	PI Sta 205+36.20 $\Delta = 7' 00'' 15.2''$ (LT) $D = 0' 58'' 45.9''$ $L = 715.14'$ $T = 358.02'$ $R = 5,850.00'$ $SE = 0.028$ $INC = 41.07'$
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MATCHLINE -L- 192+00 SEE SHEET 14

MATCHLINE -L- 206+00 SEE SHEET 16

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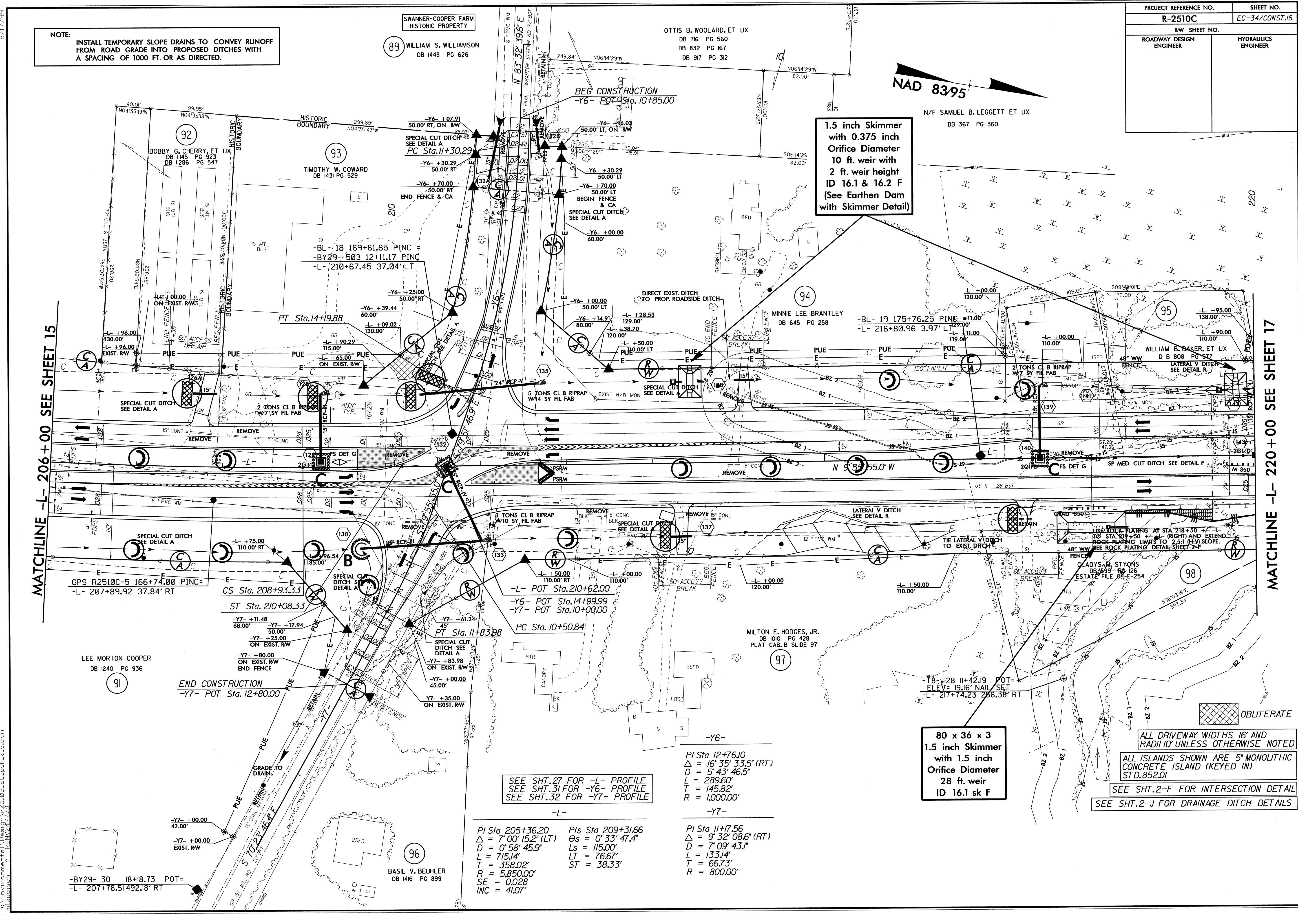
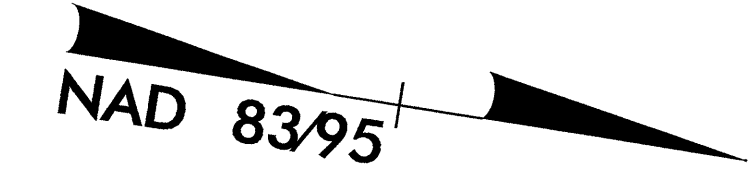
ALL DRIVEWAY WIDTHS 16' AND
RADIUS 10' UNLESS OTHERWISE NOTED

SEE SHT.26 & 27 FOR -L- PROFILE

ALL ISLANDS SHOWN ARE 5' MONOLITHIC
CONCRETE ISLAND (KEYED IN)
STD.852.01

SEE SHT.2-J FOR DRAINAGE DITCH DETAILS

NOTE:
INSTALL TEMPORARY SLOPE DRAINS TO CONVEY RUNOFF FROM ROAD GRADE INTO PROPOSED DITCHES WITH A SPACING OF 1000 FT. OR AS DIRECTED.



80 x 36 x 3
1.5 inch Skimmer with 1.5 inch Orifice Diameter
28 ft. weir
ID 16.1 sk F

SEE SHT. 27 FOR -L- PROFILE
SEE SHT. 31 FOR -Y6- PROFILE
SEE SHT. 32 FOR -Y7- PROFILE

<p>PI Sta 205+36.20 Δ = 7° 00' 15.2" (LT) D = 0' 58' 45.9" L = 715.14' T = 358.02' R = 5,850.00' SE = 0.028 INC = 41.07'</p>	<p>PIs Sta 209+31.66 Os = 0' 33' 47.4" Ls = 115.00' LT = 76.67' ST = 38.33'</p>	<p>PI Sta 11+7.56 Δ = 9° 32' 08.6" (RT) D = 7° 09' 43.1" L = 133.14' T = 66.73' R = 800.00'</p>
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OBLITERATE
ALL DRIVEWAY WIDTHS 16' AND RADII 10' UNLESS OTHERWISE NOTED
ALL ISLANDS SHOWN ARE 5" MONOLITHIC CONCRETE ISLAND (KEYED IN) STD. 852.01
SEE SHT. 2-F FOR INTERSECTION DETAIL
SEE SHT. 2-J FOR DRAINAGE DITCH DETAILS

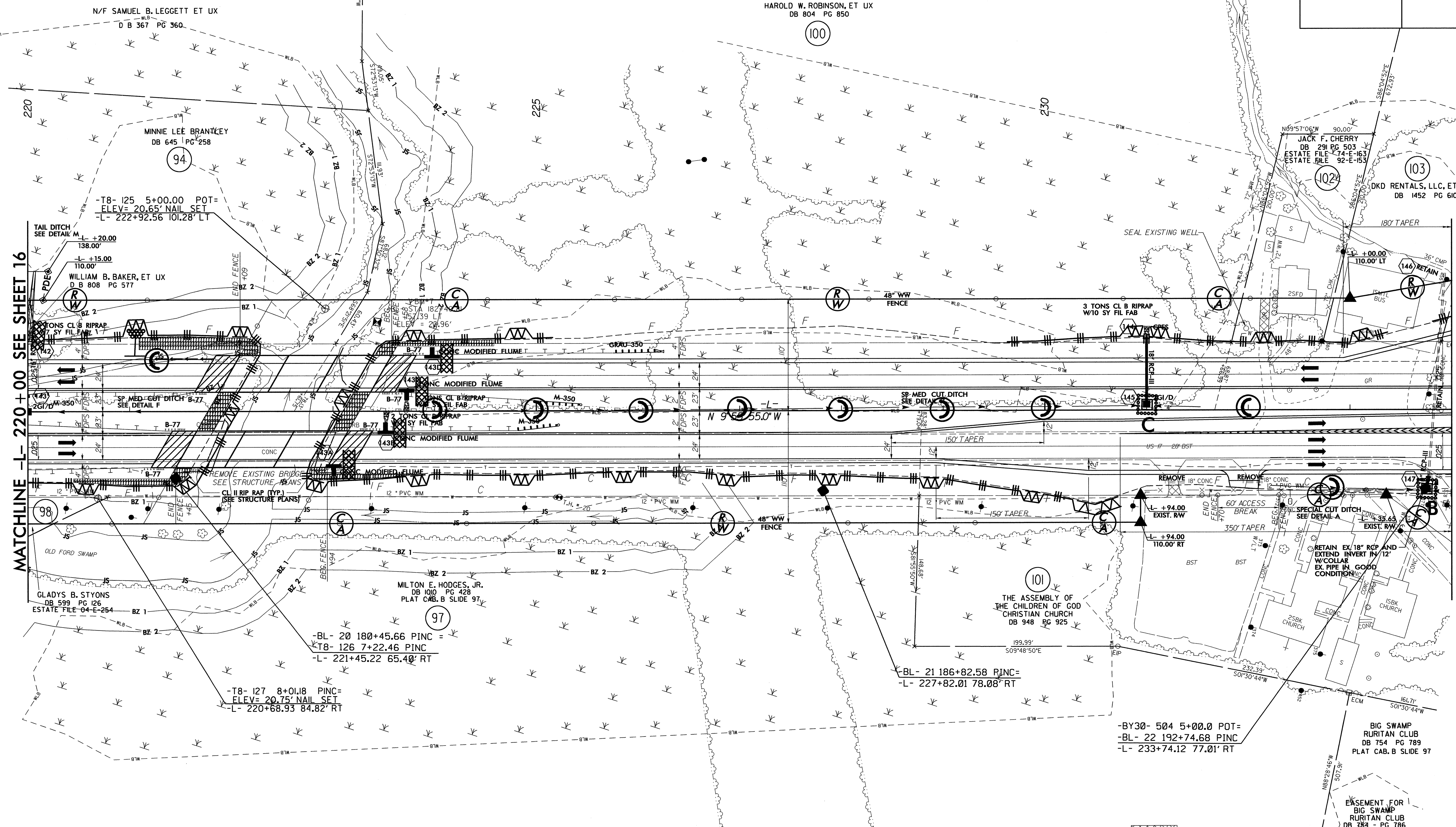
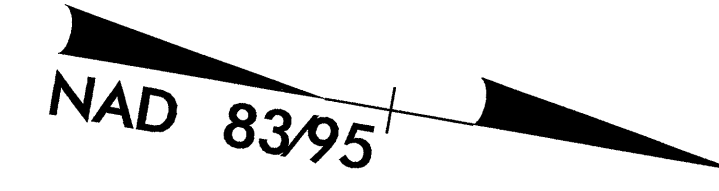
MATCHLINE -L- 206+00 SEE SHEET 15

MATCHLINE -L- 220+00 SEE SHEET 17

PROJECT REFERENCE NO.	SHEET NO.
R-2510C	EC-35/CONST.7
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

BEGIN APPROACH SLAB -L- STA. 221+73.36 (SBL)
 BEGIN APPROACH SLAB -L- STA. 221+32.94 (NBL)
 BEGIN BRIDGE -L- STA. 221+97.21 (SBL)
 BEGIN BRIDGE -L- STA. 221+56.79 (NBL)
 END BRIDGE -L- STA. 223+46.21 (SBL)
 END BRIDGE -L- STA. 223+05.79 (NBL)
 END APPROACH SLAB -L- STA. 223+70.06 (SBL)
 END APPROACH SLAB -L- STA. 223+29.64 (NBL)

NOTE: INSTALL TEMPORARY SLOPE DRAINS TO CONVEY RUNOFF FROM ROAD GRADE INTO PROPOSED DITCHES WITH A SPACING OF 1000 FT. OR AS DIRECTED.



MATCHLINE -L- 220+00 SEE SHEET 16

MATCHLINE -L- 234+00 SEE SHEET 18

OBLITERATE

SEE SHEETS -- THRU -- FOR STRUCTURE PLANS

SEE SHT. 27 & 28 FOR -L- PROFILE

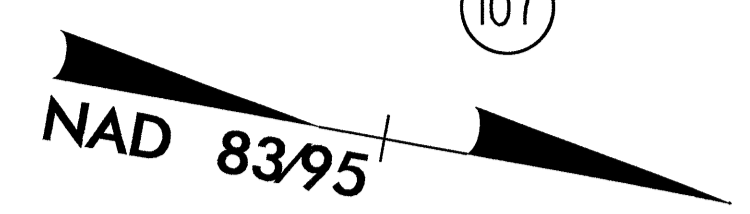
ALL DRIVEWAY WIDTHS 16' AND RADIUS 10' UNLESS OTHERWISE NOTED

SEE SHT. 2-J FOR DRAINAGE DITCH DETAILS

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PROJECT REFERENCE NO.	SHEET NO.
R-2510C	EC-36/CONST.18
R/W SHEET NO.	HYDRAULICS ENGINEER
ROADWAY DESIGN ENGINEER	

PHILLIP C. MATKINS, ET UX
DB 1027 PG 234
PLAT CAB. E SLIDE 49-9

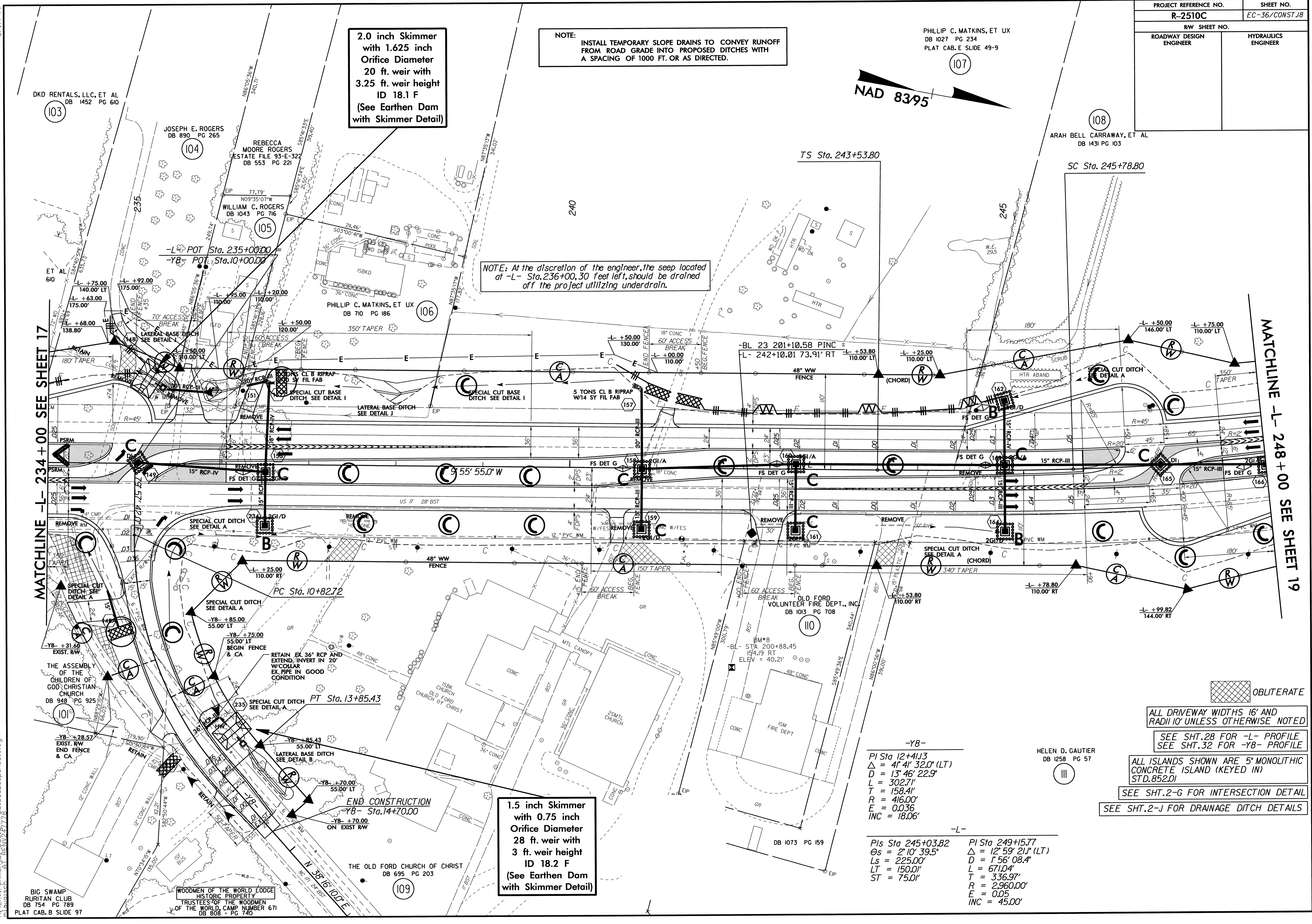


NOTE: INSTALL TEMPORARY SLOPE DRAINS TO CONVEY RUNOFF FROM ROAD GRADE INTO PROPOSED DITCHES WITH A SPACING OF 1000 FT. OR AS DIRECTED.

2.0 inch Skimmer
with 1.625 inch
Orifice Diameter
20 ft. weir with
3.25 ft. weir height
ID 18.1 F
(See Earthen Dam
with Skimmer Detail)

NOTE: At the discretion of the engineer, the seep located at -L- Sta. 236+00.30 feet left, should be drained off the project utilizing underdrain.

1.5 inch Skimmer
with 0.75 inch
Orifice Diameter
28 ft. weir with
3 ft. weir height
ID 18.2 F
(See Earthen Dam
with Skimmer Detail)



MATCHLINE -L- 234+00 SEE SHEET 17

MATCHLINE -L- 248+00 SEE SHEET 19

OBLITERATE

ALL DRIVEWAY WIDTHS 16' AND RADI 10' UNLESS OTHERWISE NOTED

SEE SHT. 28 FOR -L- PROFILE
SEE SHT. 32 FOR -Y8- PROFILE

ALL ISLANDS SHOWN ARE 5' MONOLITHIC CONCRETE ISLAND (KEYED IN) STD. 852.01

SEE SHT. 2-G FOR INTERSECTION DETAIL
SEE SHT. 2-J FOR DRAINAGE DITCH DETAILS

-Y8-

PI Sta 12+41.3
Δ = 4' 4" 32.0" (LT)
D = 13' 46" 22.9"
L = 302.7'
T = 158.4'
R = 416.0'
E = 0.036
INC = 18.06'

-L-

PIs Sta 245+03.82	PI Sta 249+15.77
Δs = 2' 10" 39.5"	Δ = 12' 59" 21.1" (LT)
Δs = 225.00'	D = 1' 56" 08.4"
LT = 150.01'	L = 671.04'
ST = 75.01'	T = 336.97'
	R = 2960.00'
	E = 0.05
	INC = 45.00'

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BIG SWAMP
RURITAN CLUB
DB 754 PG 789
PLAT CAB. B SLIDE 97

THE ASSEMBLY OF THE CHILDREN OF GOD CHRISTIAN CHURCH
DB 948 PG 925

DKD RENTALS, LLC, ET AL
DB 1452 PG 610

JOSEPH E. ROGERS
DB 890 PG 265

REBECCA MOORE ROGERS ESTATE FILE 93-E-322
DB 553 PG 221

WILLIAM C. ROGERS
DB 1043 PG 716

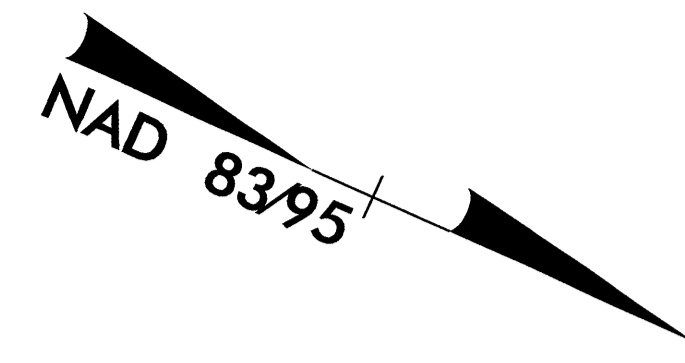
PHILLIP C. MATKINS, ET UX
DB 710 PG 186

OLD FORD VOLUNTEER FIRE DEPT., INC.
DB 1013 PG 708

HELEN D. GAUTIER
DB 1258 PG 57

THE OLD FORD CHURCH OF CHRIST
DB 695 PG 203

NOTE:
INSTALL TEMPORARY SLOPE DRAINS TO CONVEY RUNOFF FROM ROAD GRADE INTO PROPOSED DITCHES WITH A SPACING OF 1000 FT. OR AS DIRECTED.

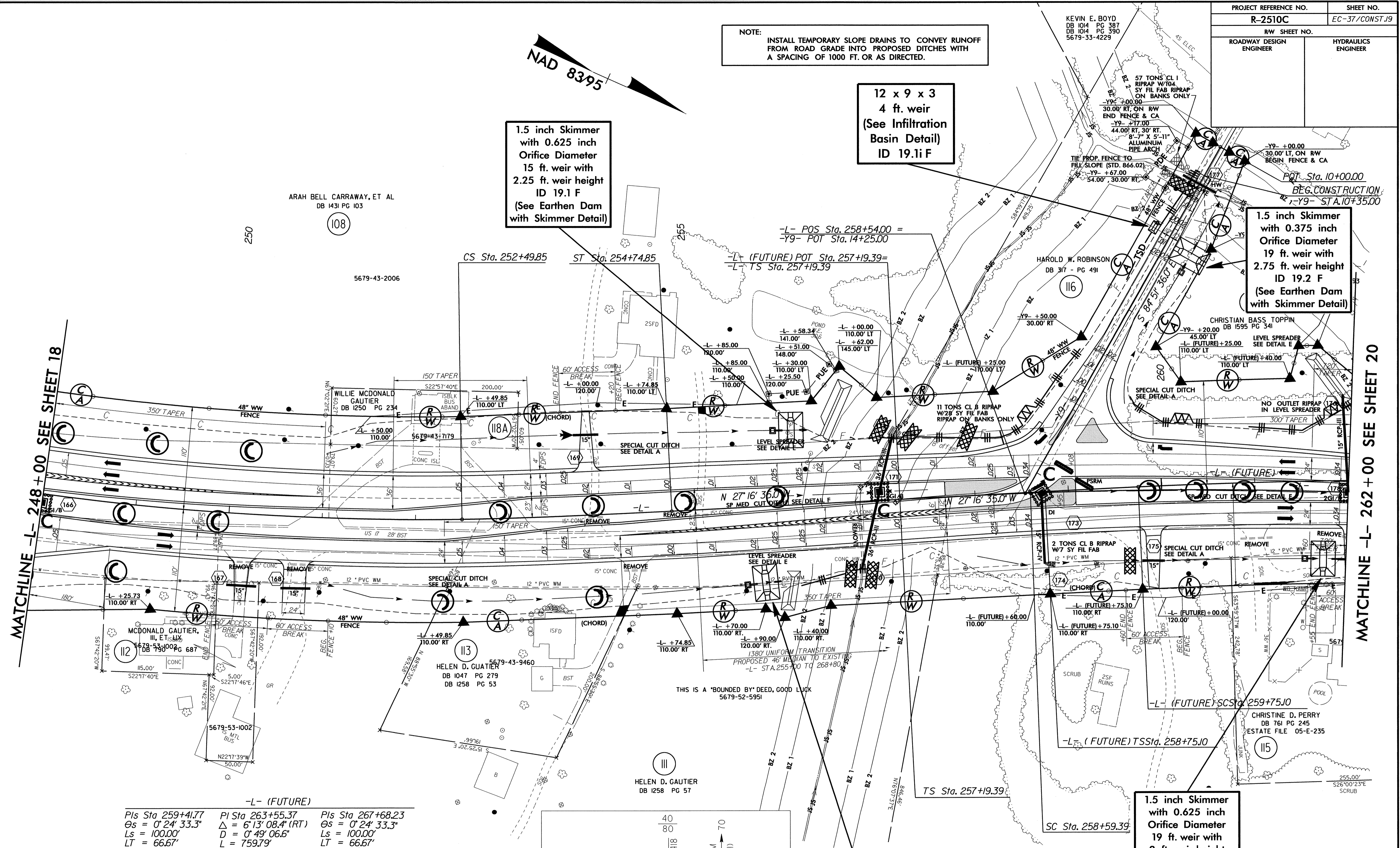


1.5 inch Skimmer with 0.625 inch Orifice Diameter
15 ft. weir with 2.25 ft. weir height
ID 19.1 F
(See Earthen Dam with Skimmer Detail)

12 x 9 x 3
4 ft. weir
(See Infiltration Basin Detail)
ID 19.1 F

1.5 inch Skimmer with 0.375 inch Orifice Diameter
19 ft. weir with 2.75 ft. weir height
ID 19.2 F
(See Earthen Dam with Skimmer Detail)

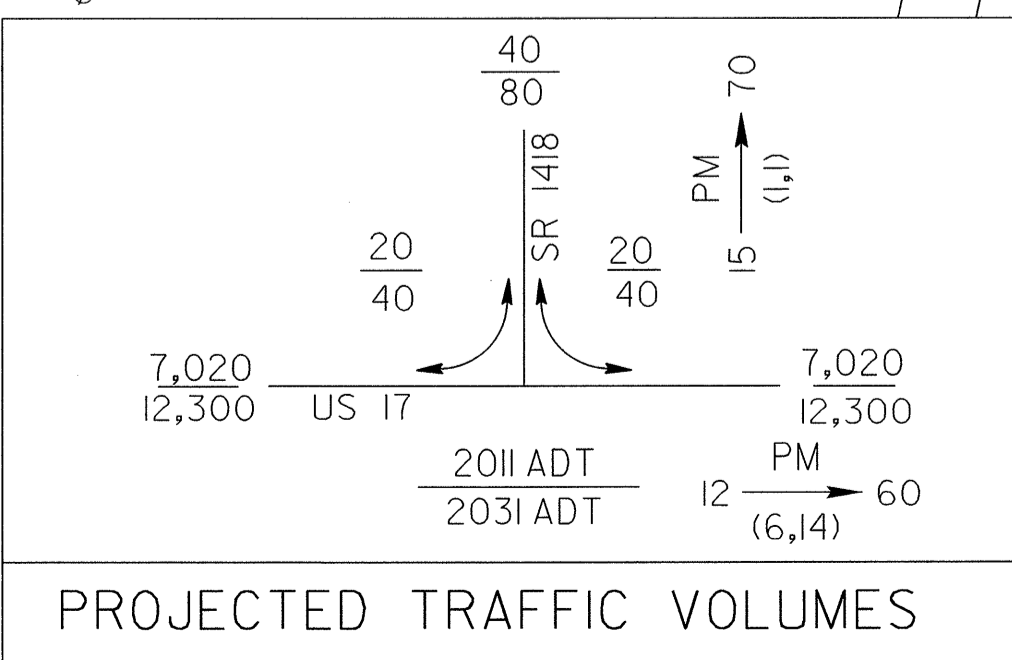
1.5 inch Skimmer with 0.625 inch Orifice Diameter
19 ft. weir with 2 ft. weir height
ID 19.4 F
(See Earthen Dam with Skimmer Detail)



MATCHLINE -L- 248+00 SEE SHEET 18

MATCHLINE -L- 262+00 SEE SHEET 20

-L- (FUTURE)		
PI Sta 249+15.77 Δ = 12° 59' 21" (LT) D = 1' 56" 08.4" L = 671.04' T = 336.97' R = 2,960.00' SE = 0.05 INC = 45.00'	PI Sta 253+24.86 Δ = 2° 10' 39.5" D = 225.00' L = 150.01' T = 75.01'	PI Sta 260+78.19 Δ = 5° 19' 50.9" (RT) D = 1' 13" 08.6" L = 437.29' T = 218.80' R = 4,700.00' SE = 0.034 INC = 40.18'
PI Sta 259+41.77 Δ = 0° 24' 33.3" D = 100.00' L = 66.67' T = 33.33'	PI Sta 263+55.37 Δ = 6° 13' 08.4" (RT) D = 0° 49' 06.6" L = 759.79' T = 380.27' R = 7,000.00' SE = 0.025 INC = 38.40'	PI Sta 267+68.23 Δ = 0° 24' 33.3" D = 100.00' L = 66.67' T = 33.33'



1.5 inch Skimmer with 0.375 inch Orifice Diameter
19 ft. weir with 2 ft. weir height
ID 19.3 F
(See Earthen Dam with Skimmer Detail)

MAXWELL P. CHESNUTT FAMILY TRUST
DB 1124 PG 2

ALL ISLANDS SHOWN ARE 5' MONOLITHIC CONCRETE ISLAND (KEYED IN) STD.852.01

SEE SHT.2-J FOR DRAINAGE DITCH DETAILS

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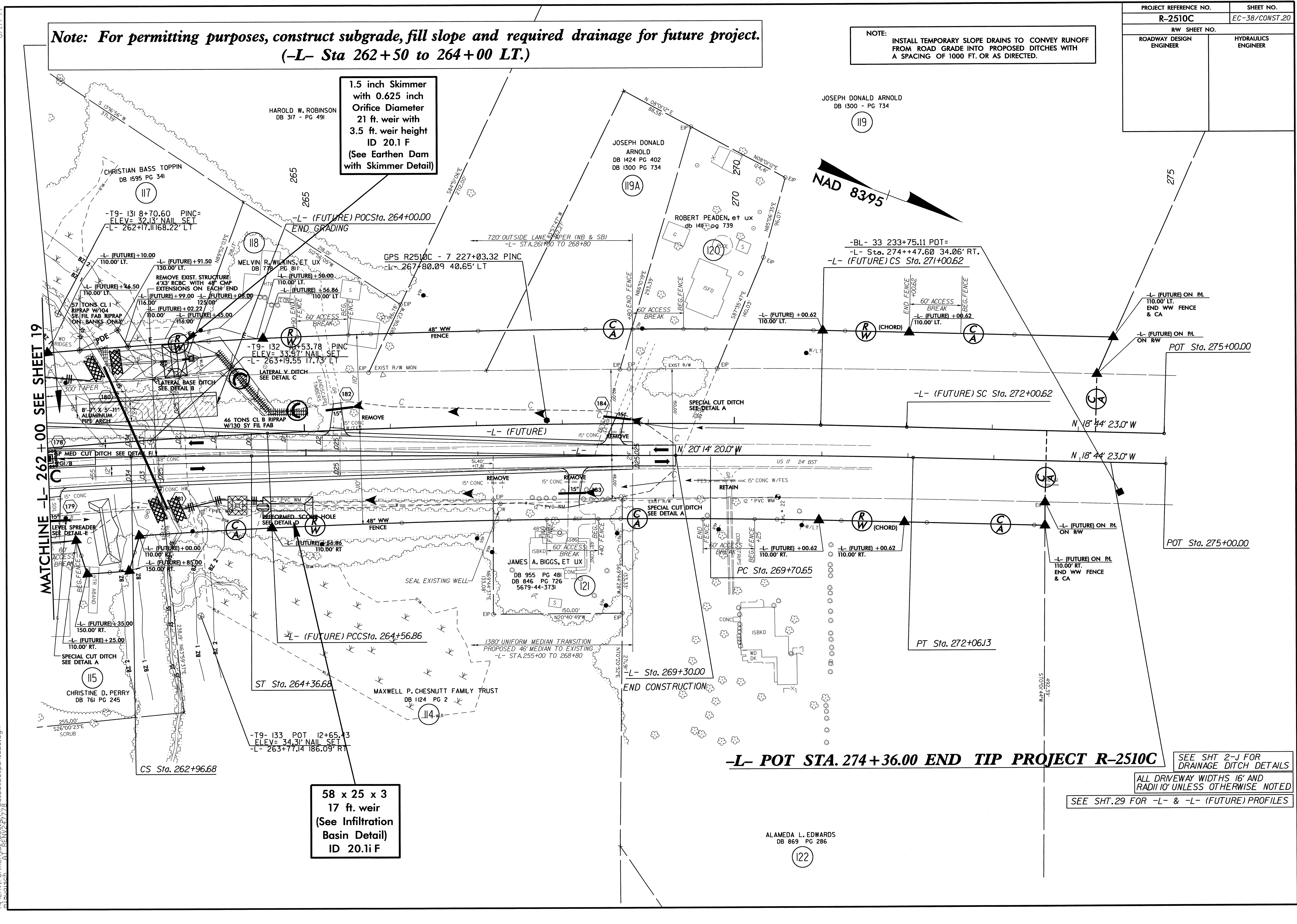
PROJECT REFERENCE NO.	SHEET NO.
R-2510C	EC-38/CONST.20
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

Note: For permitting purposes, construct subgrade, fill slope and required drainage for future project.
 (-L- Sta 262+50 to 264+00 LT.)

NOTE:
 INSTALL TEMPORARY SLOPE DRAINS TO CONVEY RUNOFF FROM ROAD GRADE INTO PROPOSED DITCHES WITH A SPACING OF 1000 FT. OR AS DIRECTED.

1.5 inch Skimmer
 with 0.625 inch
 Orifice Diameter
 21 ft. weir with
 3.5 ft. weir height
 ID 20.1 F
 (See Earthen Dam
 with Skimmer Detail)

58 x 25 x 3
 17 ft. weir
 (See Infiltration
 Basin Detail)
 ID 20.1 F



MATCHLINE -L- 262+00 SEE SHEET 19

-L- POT STA. 274+36.00 END TIP PROJECT R-2510C

SEE SHT 2-J FOR
 DRAINAGE DITCH DETAILS
 ALL DRIVEWAY WIDTHS 16' AND
 RADII 10' UNLESS OTHERWISE NOTED
 SEE SHT. 29 FOR -L- & -L- (FUTURE) PROFILES

8/17/99
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