

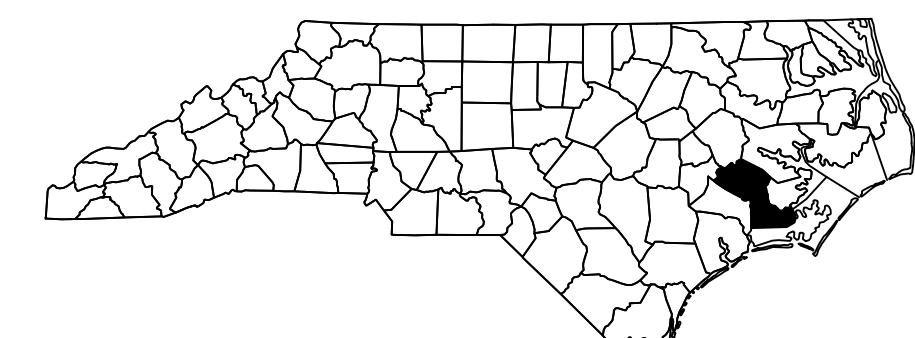
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STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	R-5516	EC-1	
STATE PROJ. NO.	F.A. PROJ. NO.	DESCRIPTION	
45492.1.1	NHS-0070(154)	P.E.	
45492.2.1	NHS-0070(154)	RW AND UTIL.	

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS



CRAVEN COUNTY

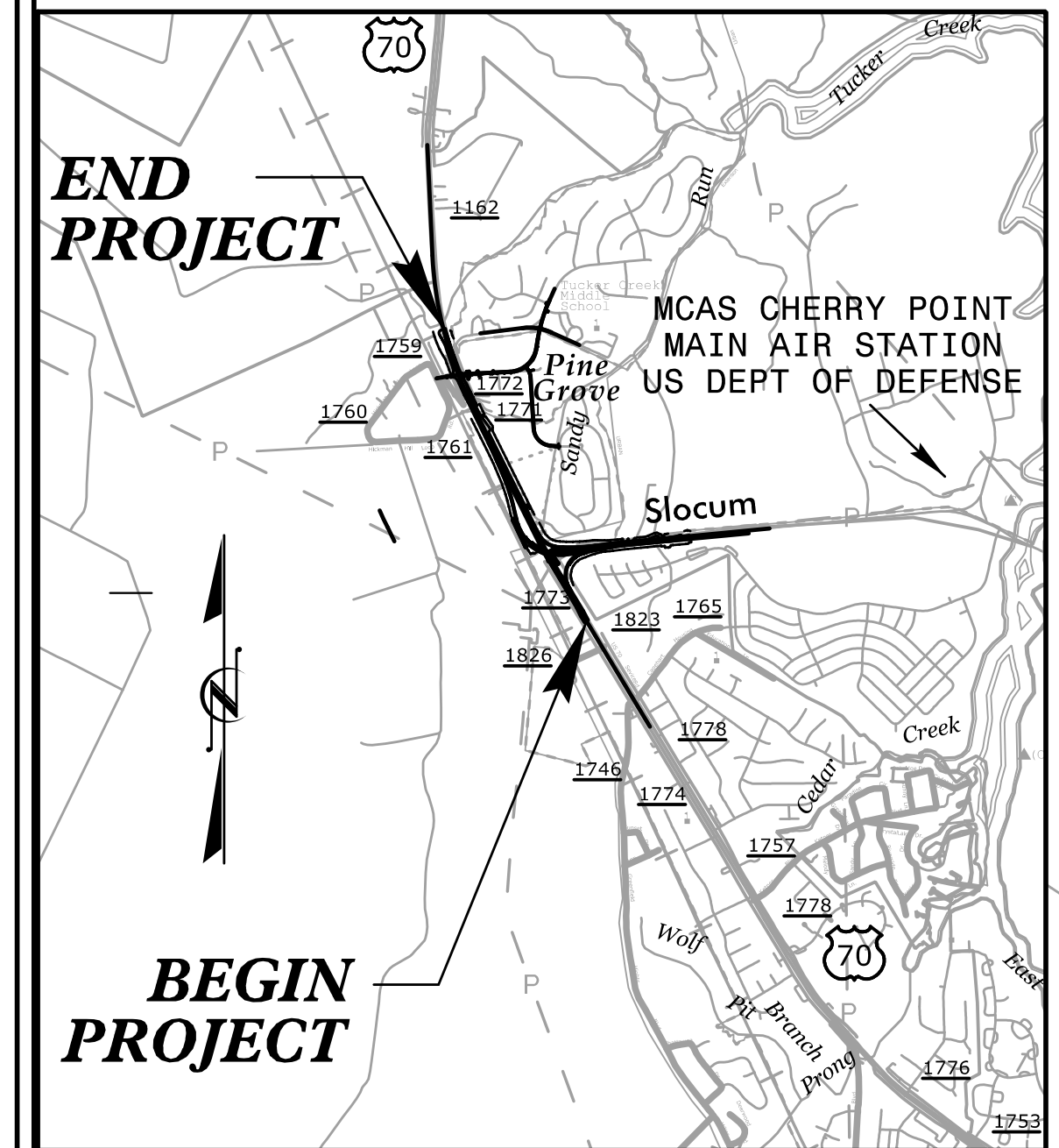
PLAN FOR PROPOSED
HIGHWAY EROSION CONTROL

LOCATION: INTERCHANGE FROM US 70 TO SLOCUM ROAD AT CHERRY POINT MILITARY BASE

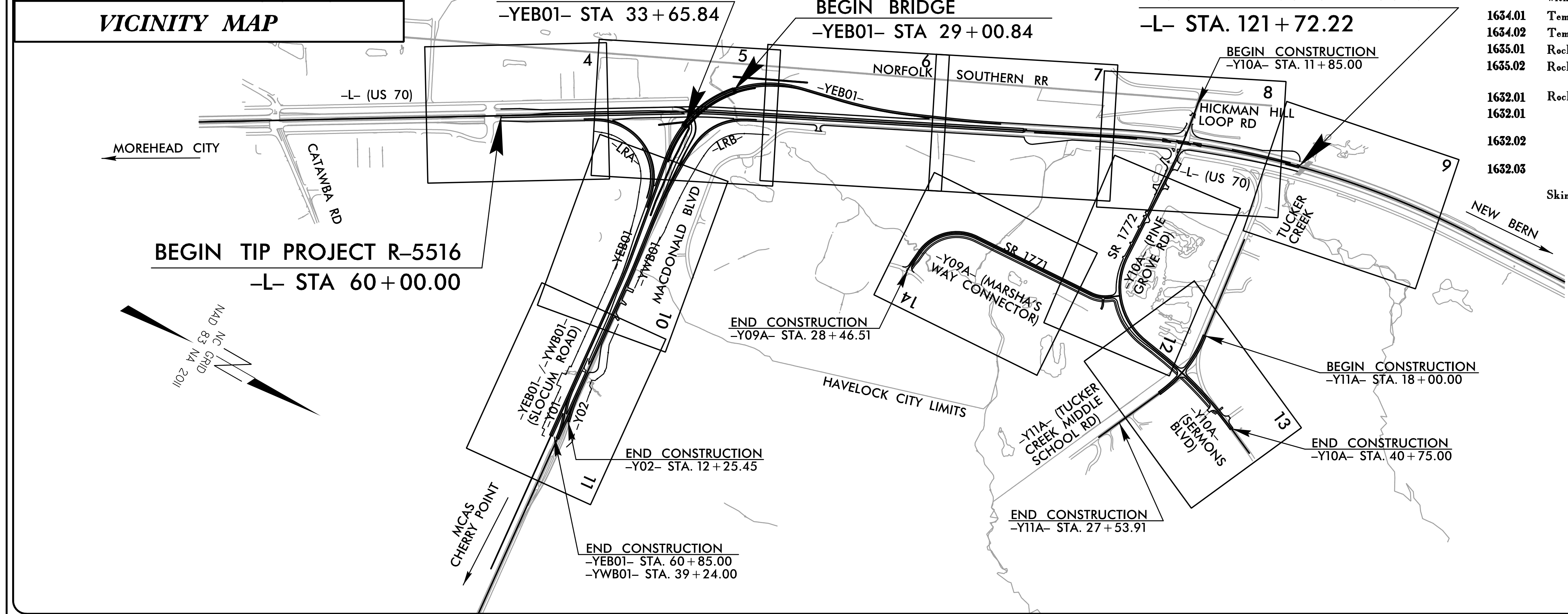
TYPE OF WORK: GRADING, PAVING, DRAINAGE, CULVERT, STRUCTURE, AND SIGNALS

TIP PROJECT: R-5516

CONTRACT:



VICINITY MAP



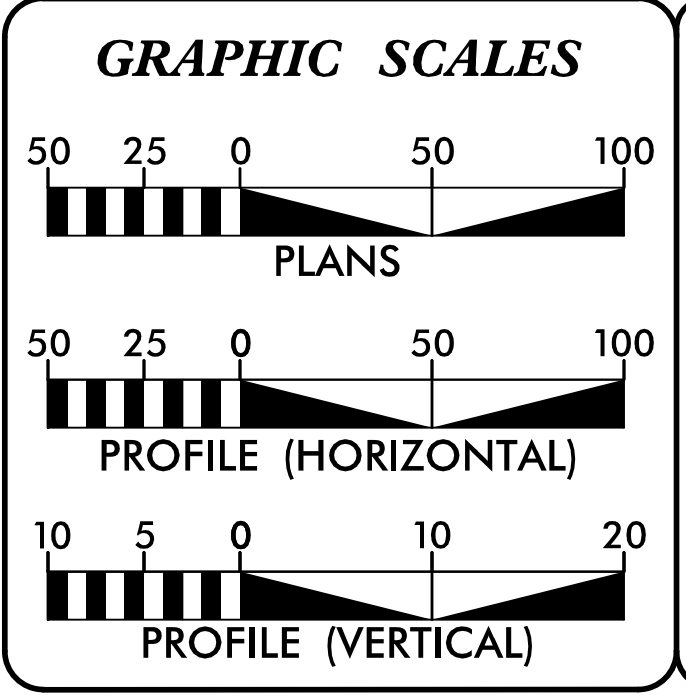
EROSION AND SEDIMENT CONTROL MEASURES

Std. #	Description	Symbol
1630.03	Temporary Silt Ditch	—
1630.05	Temporary Diversion	—
1605.01	Temporary Silt Fence	—
1606.01	Special Sediment Control Fence	—
1622.01	Temporary Berms and Slope Drains	—
1630.02	Silt Basin Type B	—
1633.01	Temporary Rock Silt Check Type-A	—
	Temporary Rock Silt Check Type-A with Matting and Polyacrylamide (PAM)	—
1633.02	Temporary Rock Silt Check Type-B	—
	Wattle / Coir Fiber Wattle	—
	Wattle / Coir Fiber Wattle with Polyacrylamide (PAM)	—
1634.01	Temporary Rock Sediment Dam Type-A	—
1634.02	Temporary Rock Sediment Dam Type-B	—
1635.01	Rock Pipe Inlet Sediment Trap Type-A	—
1635.02	Rock Pipe Inlet Sediment Trap Type-B	—
1632.01	Rock Inlet Sediment Trap:	
1632.01	Type A	A
1632.02	Type B	B
1632.03	Type C	C
	Skimmer Basin	—

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.



THESE EROSION AND SEDIMENT CONTROL PLANS COMPLY WITH THE REGULATIONS SET FORTH BY THE NCG-010000 GENERAL CONSTRUCTION PERMIT EFFECTIVE AUGUST 1, 2016 AND ISSUED BY THE NORTH CAROLINA DEPARTMENT OF ENVIRONMENT AND NATURAL RESOURCES DIVISION OF WATER RESOURCES.

Prepared In the Office of:
AECOM
Firm License No. F-0342
701 Corporate Center Drive, Suite 475
Raleigh NC 27607
(919) 854-6200 (919) 854-6259 (Fax)

Designed by:
RENE REMY CPESC, CPSWQ 3125
NAME LEVEL III CERTIFICATION NO.

Reviewed In the Office of:
ROADSIDE ENVIRONMENTAL UNIT
1 South Wilmington St.
Raleigh, NC 27611

2012 STANDARD SPECIFICATIONS

Reviewed by:
WES CHANDLER, EI

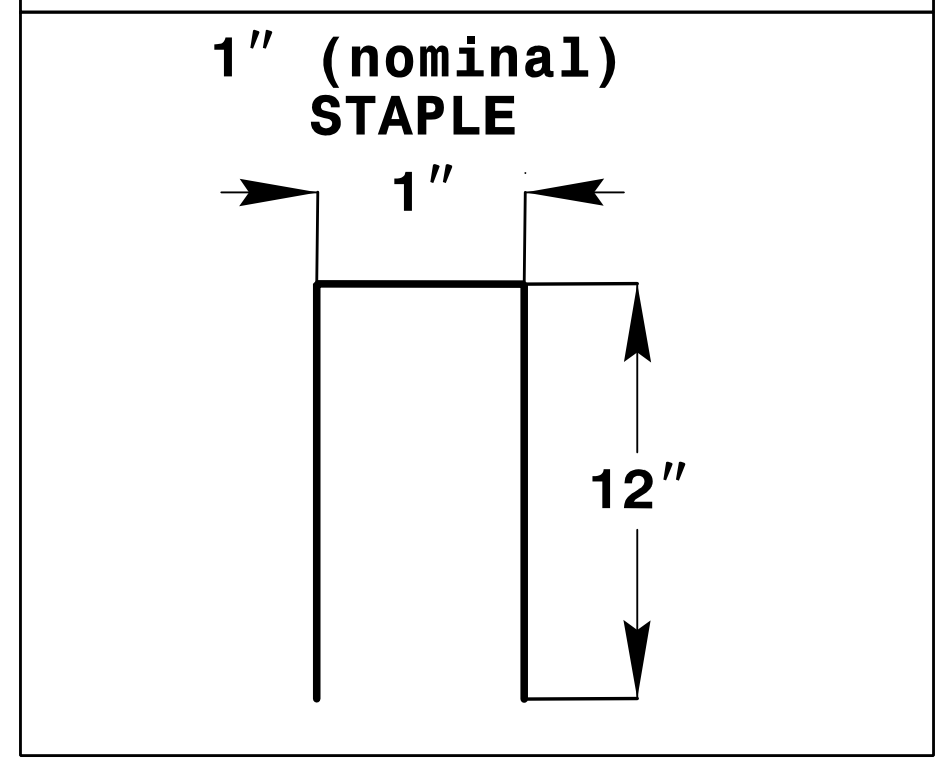
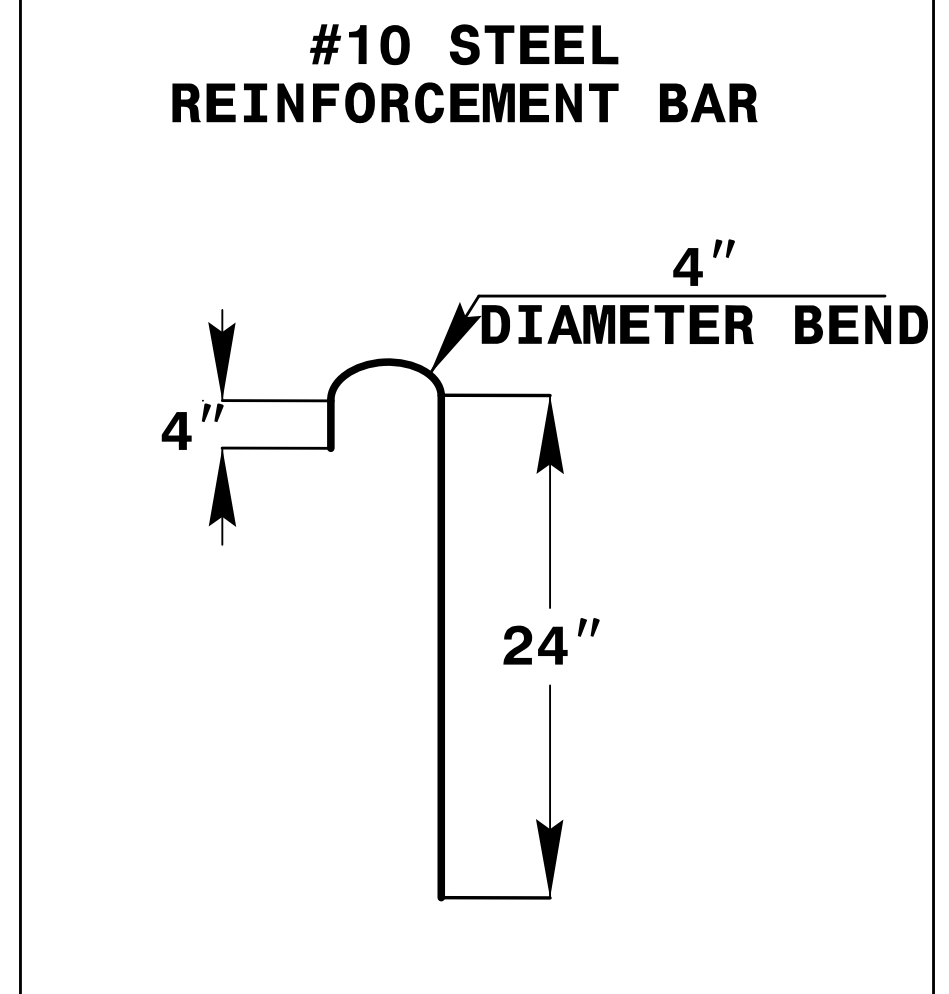
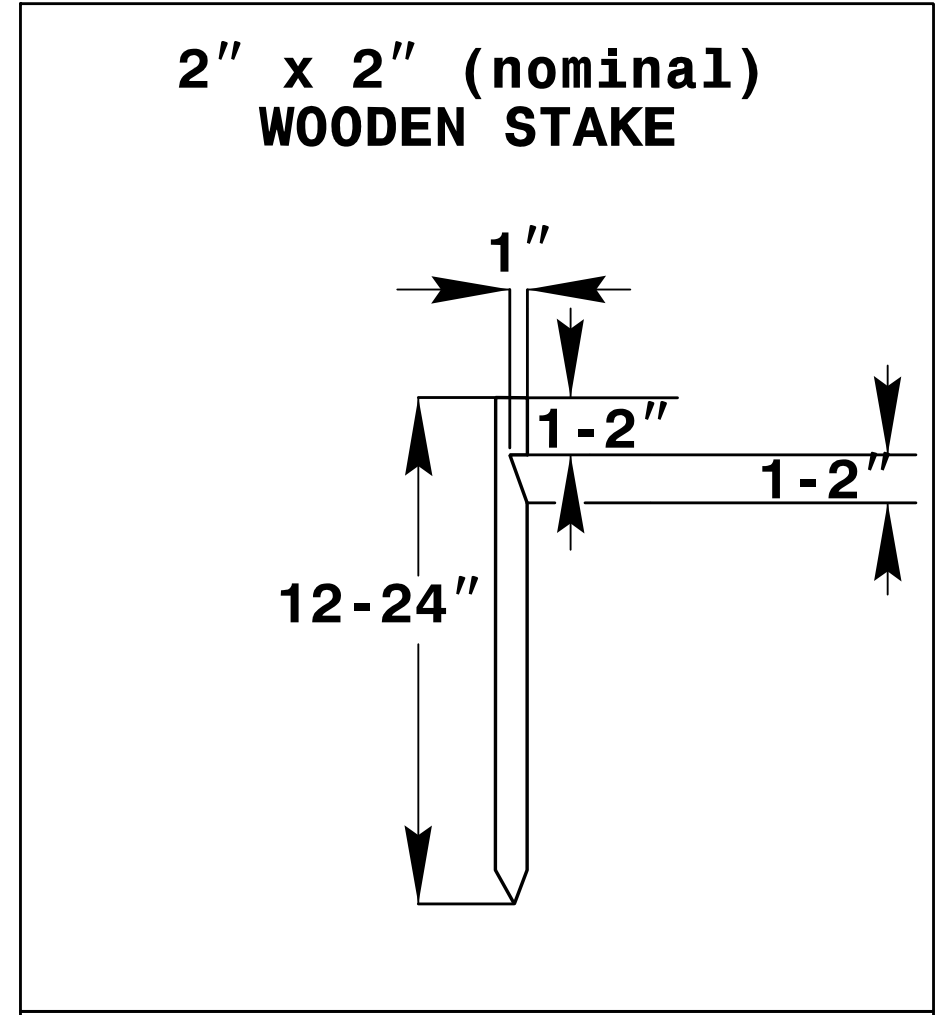
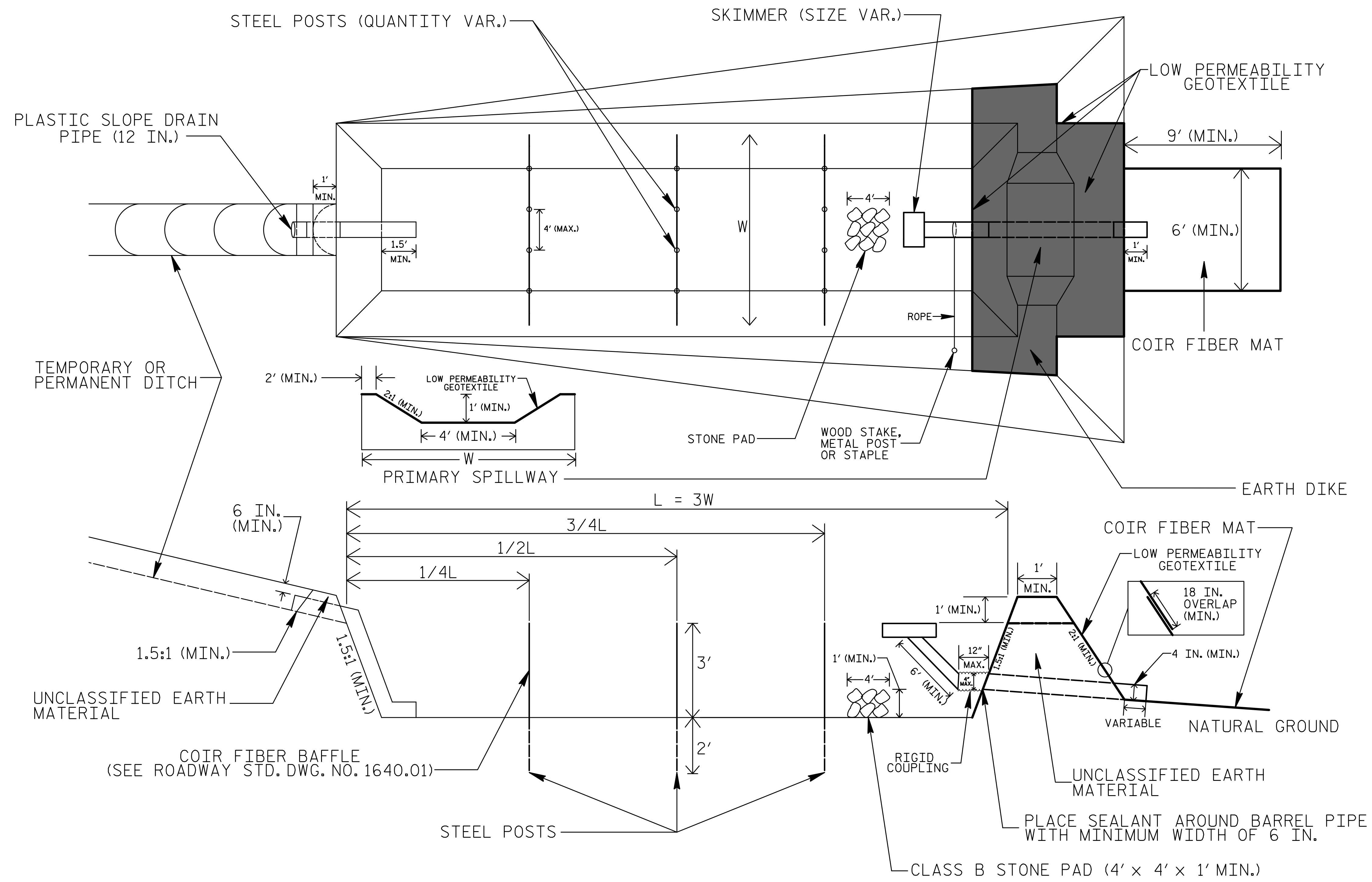
Roadway Standard Drawings

The following roadway english standards as appear in "Roadway Standard Drawings"- Roadway Design Unit - N. C. Department of Transportation - Raleigh, N. C., dated January 2012 and the latest revision thereto are applicable to this project and by reference hereby are considered a part of these plans.

1604.01 Railroad Erosion Control Detail	1632.01 Rock Inlet Sediment Trap Type A
1605.01 Temporary Silt Fence	1632.02 Rock Inlet Sediment Trap Type B
1606.01 Special Sediment Control Fence	1632.03 Rock Inlet Sediment Trap Type C
1607.01 Gravel Construction Entrance	1633.01 Temporary Rock Silt Check Type A
1622.01 Temporary Berms and Slope Drains	1633.02 Temporary Rock Silt Check Type B
1630.01 Riser Basin	1634.01 Temporary Rock Sediment Dam Type A
1630.02 Silt Basin Type B	1634.02 Temporary Rock Sediment Dam Type B
1630.03 Temporary Silt Ditch	1635.01 Rock Pipe Inlet Sediment Trap Type A
1630.04 Stilling Basin	1635.02 Rock Pipe Inlet Sediment Trap Type B
1630.05 Temporary Diversion	1640.01 Coir Fiber Baffle
1630.06 Special Stilling Basin	1640.01 Temporary Stream Crossing
1631.01 Matting Installation	

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Dwg: R:\Environmental\Design\5516_rw_ec_sht.dgn

SKIMMER BASIN WITH BAFFLES DETAIL (EAST)



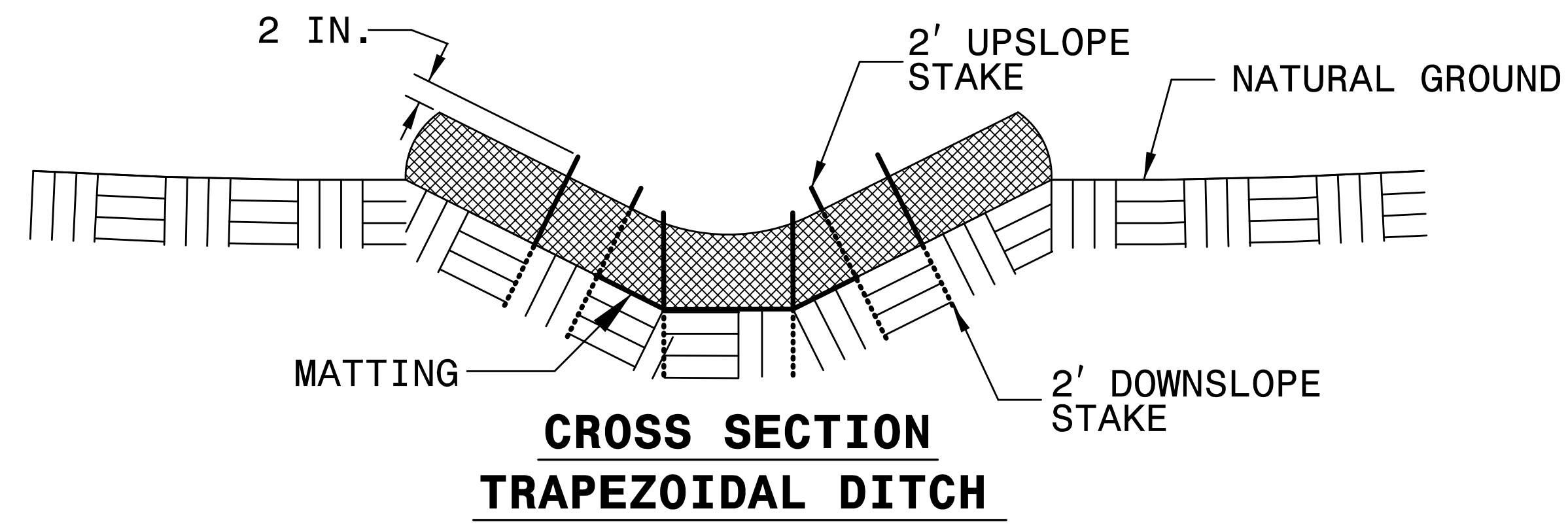
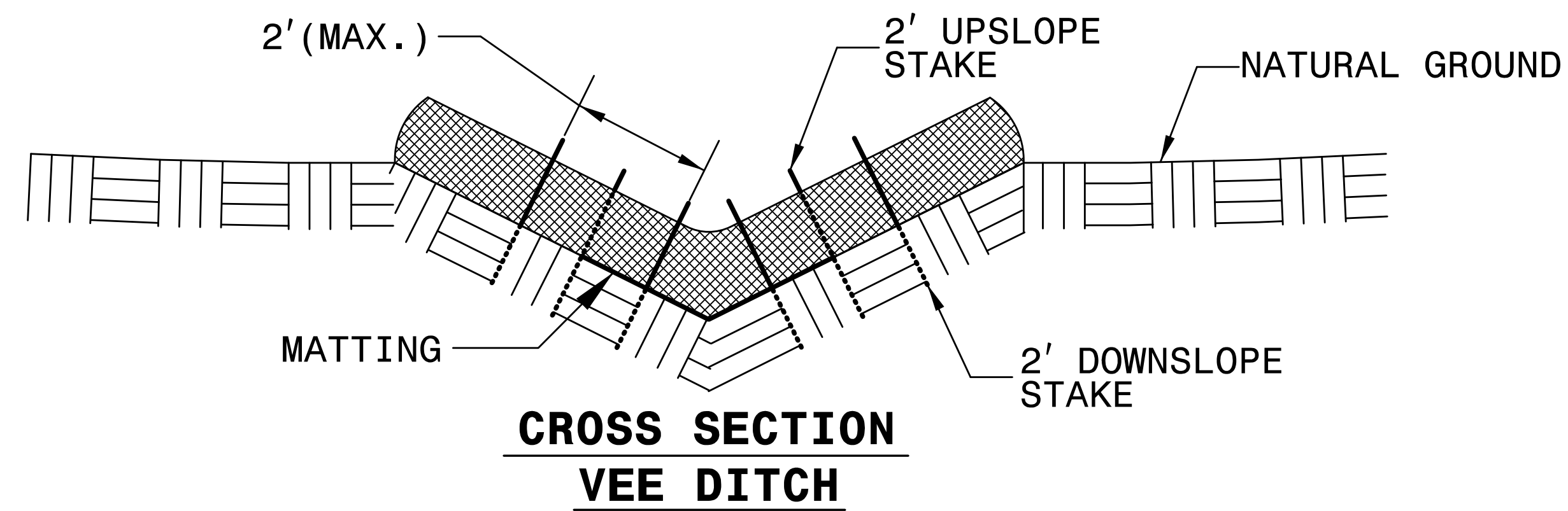
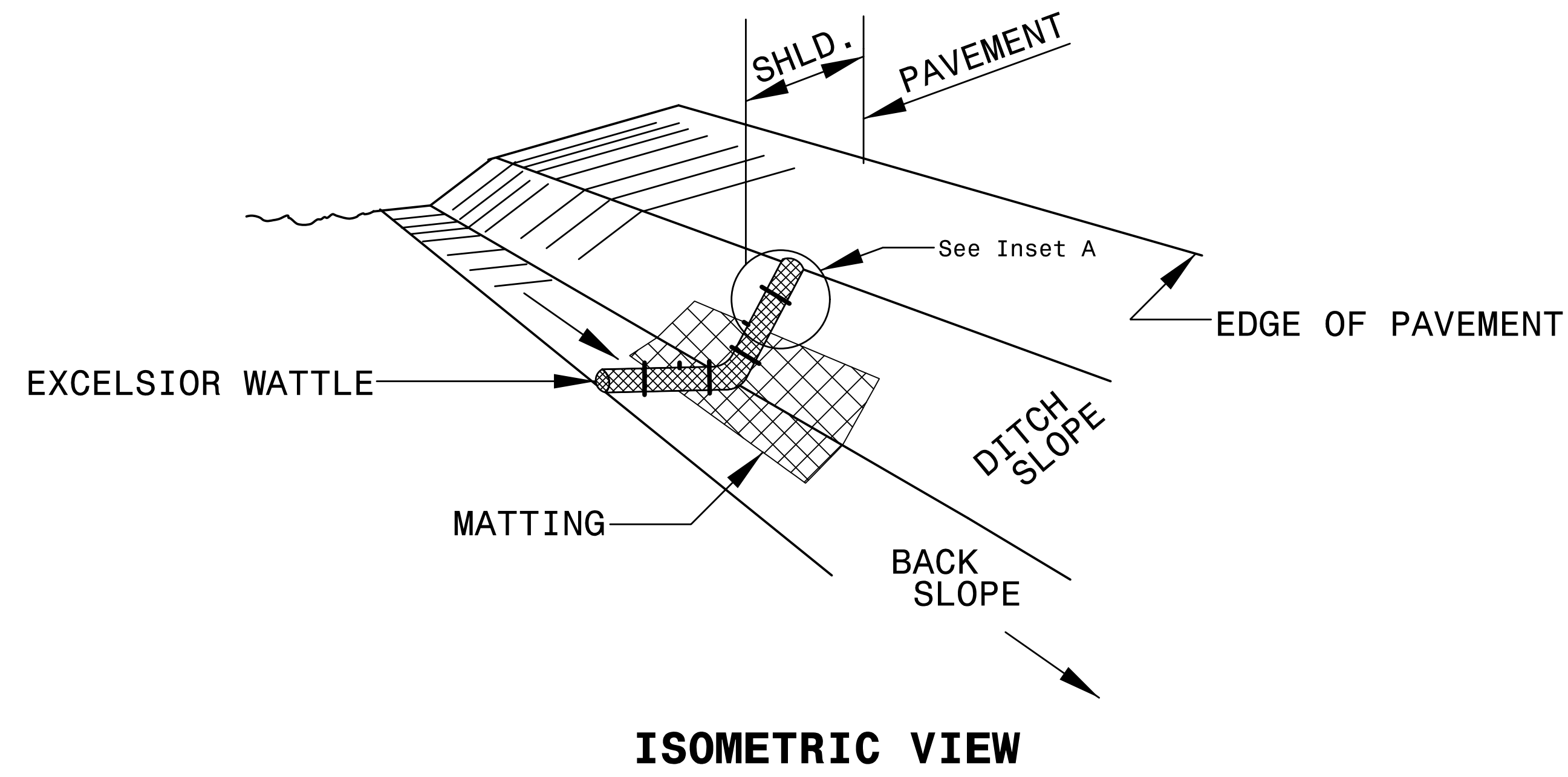
COIR FIBER MAT ANCHOR OPTIONS

NOTES

1. SEED AND PLACE MATTING FOR EROSION CONTROL ON INTERIOR AND EXTERIOR SIDESLOPES.
2. LIMIT EARTH DIKE HEIGHT TO 5 FT.
3. FOR BASIN DEPTH OF 3 FT., THE MINIMUM BASIN WIDTH SHALL BE 9 FT.
4. DETERMINE PRIMARY SPILLWAY WEIR LENGTH (FT.) USING $Q/0.4$, WHERE Q IS FLOW RATE (CFS) INTO BASIN.
5. PLASTIC SLOPE DRAIN PIPE AT INLET OF BASIN MAY BE REPLACED BY FILTRATION GEOTEXTILE OR TARP AS DIRECTED.
6. LOW PERMEABILITY GEOTEXTILE FOR PRIMARY SPILLWAY SHALL BE ONE CONTINUOUS PIECE OF MATERIAL OR OVERLAPPED 18 IN. (MIN.).

NOT TO SCALE

WATTLE DETAIL



NOTES:

USE MINIMUM 12 IN. DIAMETER EXCELSIOR WATTLE.

USE 2 FT. WOODEN STAKES WITH A 2 IN. BY 2 IN. NOMINAL CROSS SECTION.

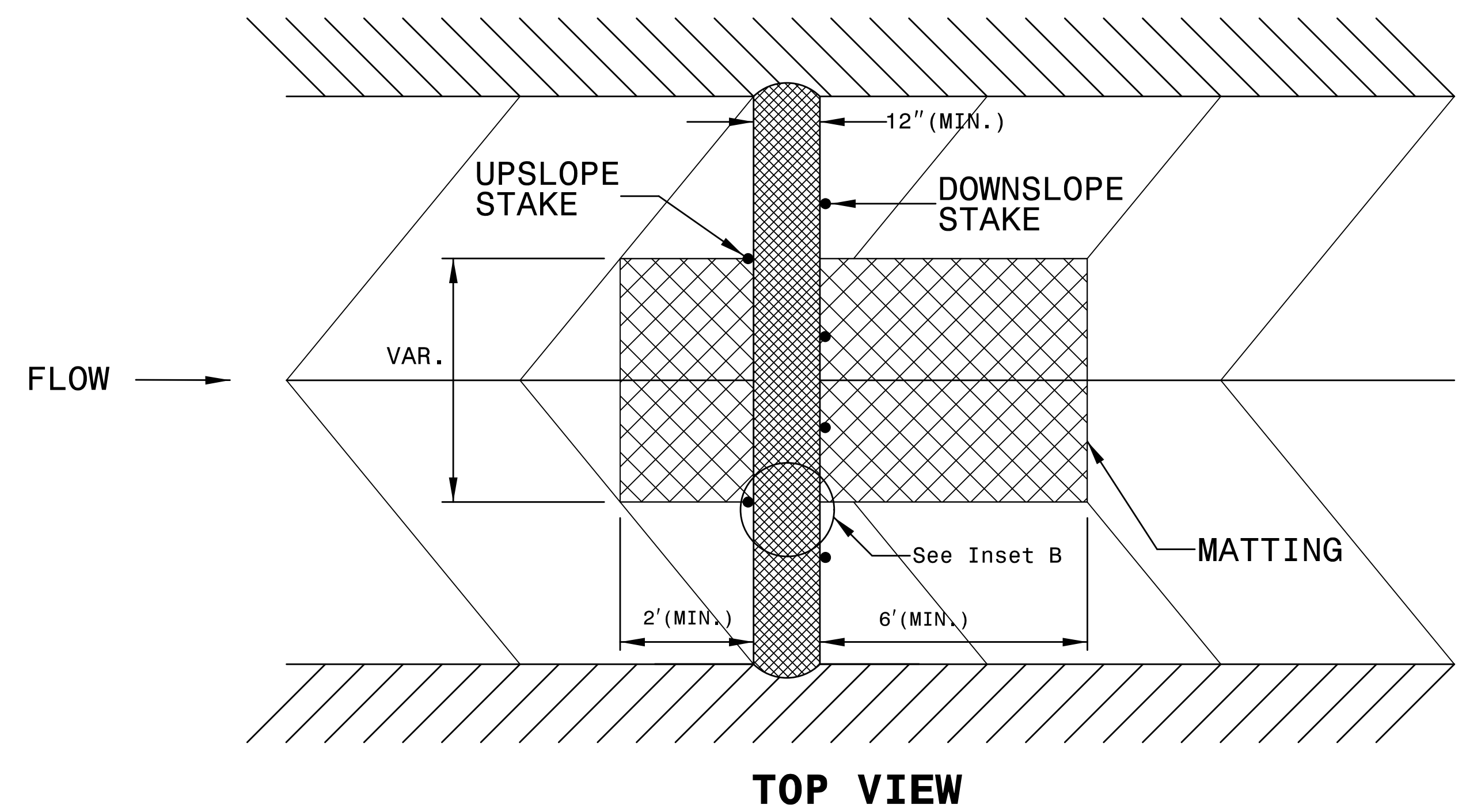
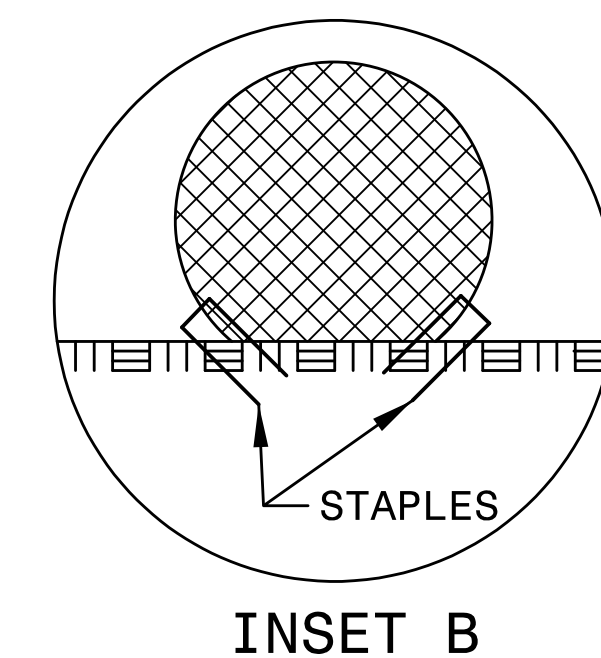
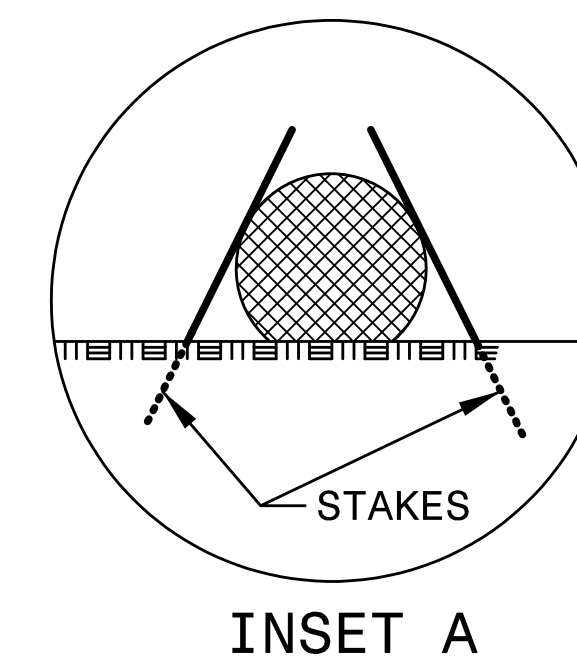
ONLY INSTALL WATTLE(S) TO A HEIGHT IN DITCH SO FLOW WILL NOT WASH AROUND WATTLE AND SCOUR DITCH SLOPES AND AS DIRECTED.

INSTALL A MINIMUM OF 2 UPSLOPE STAKES AND 4 DOWNSLOPE STAKES AT AN ANGLE TO WEDGE WATTLE TO BOTTOM OF DITCH.

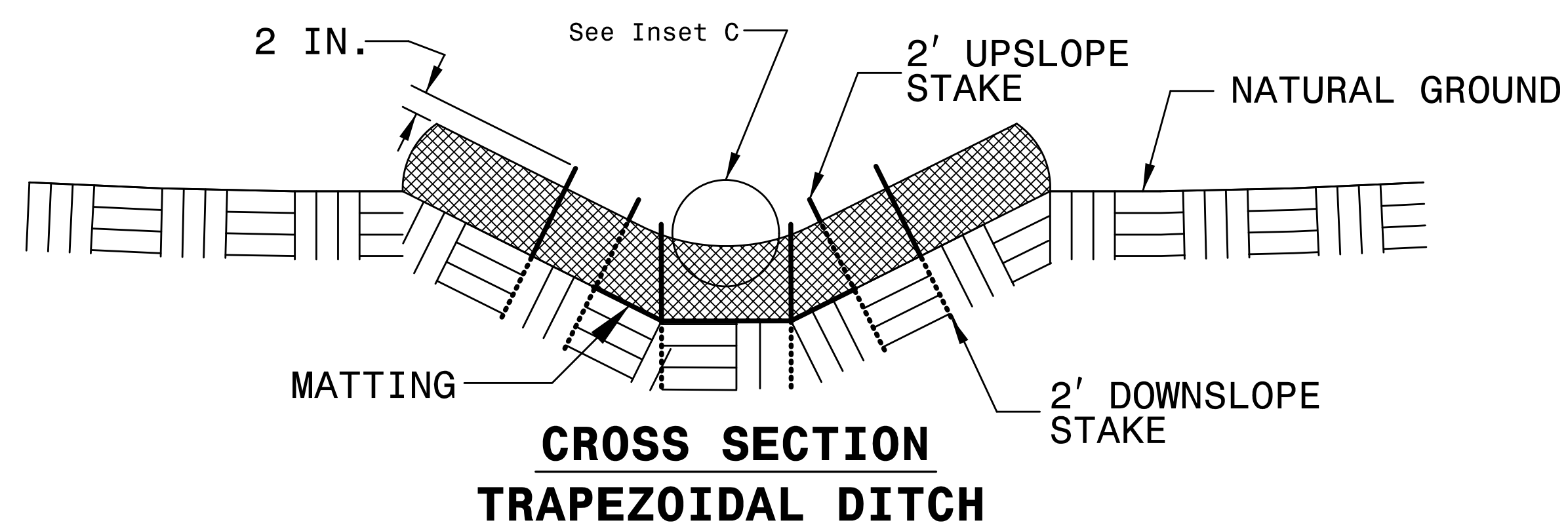
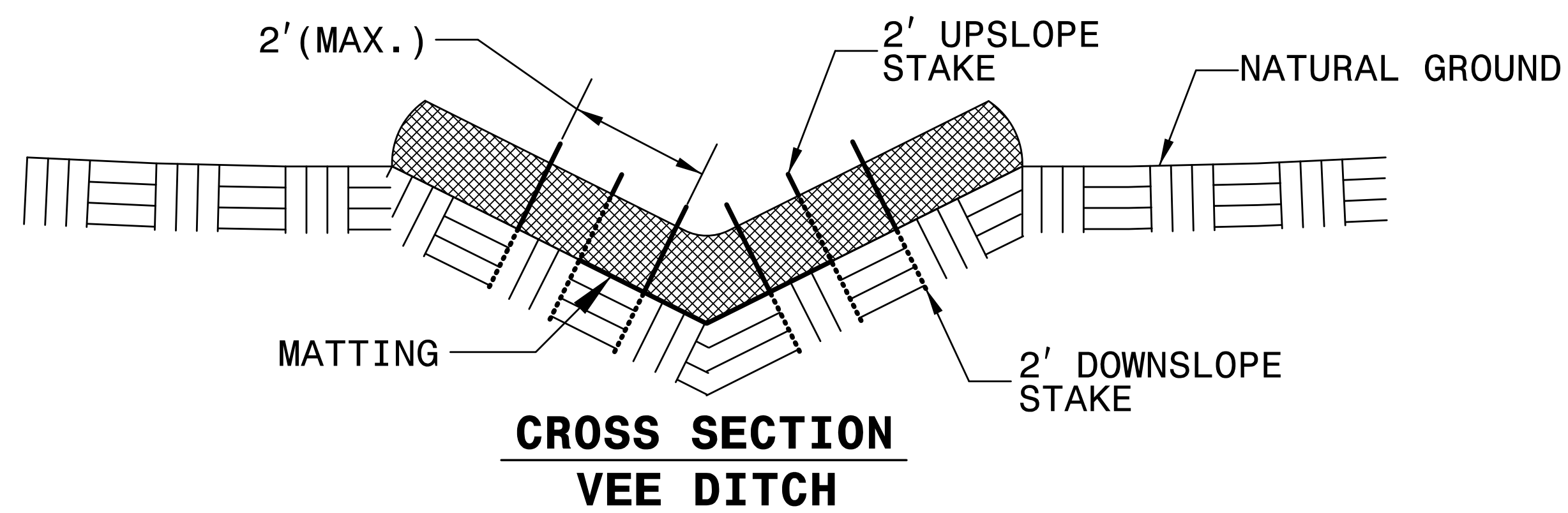
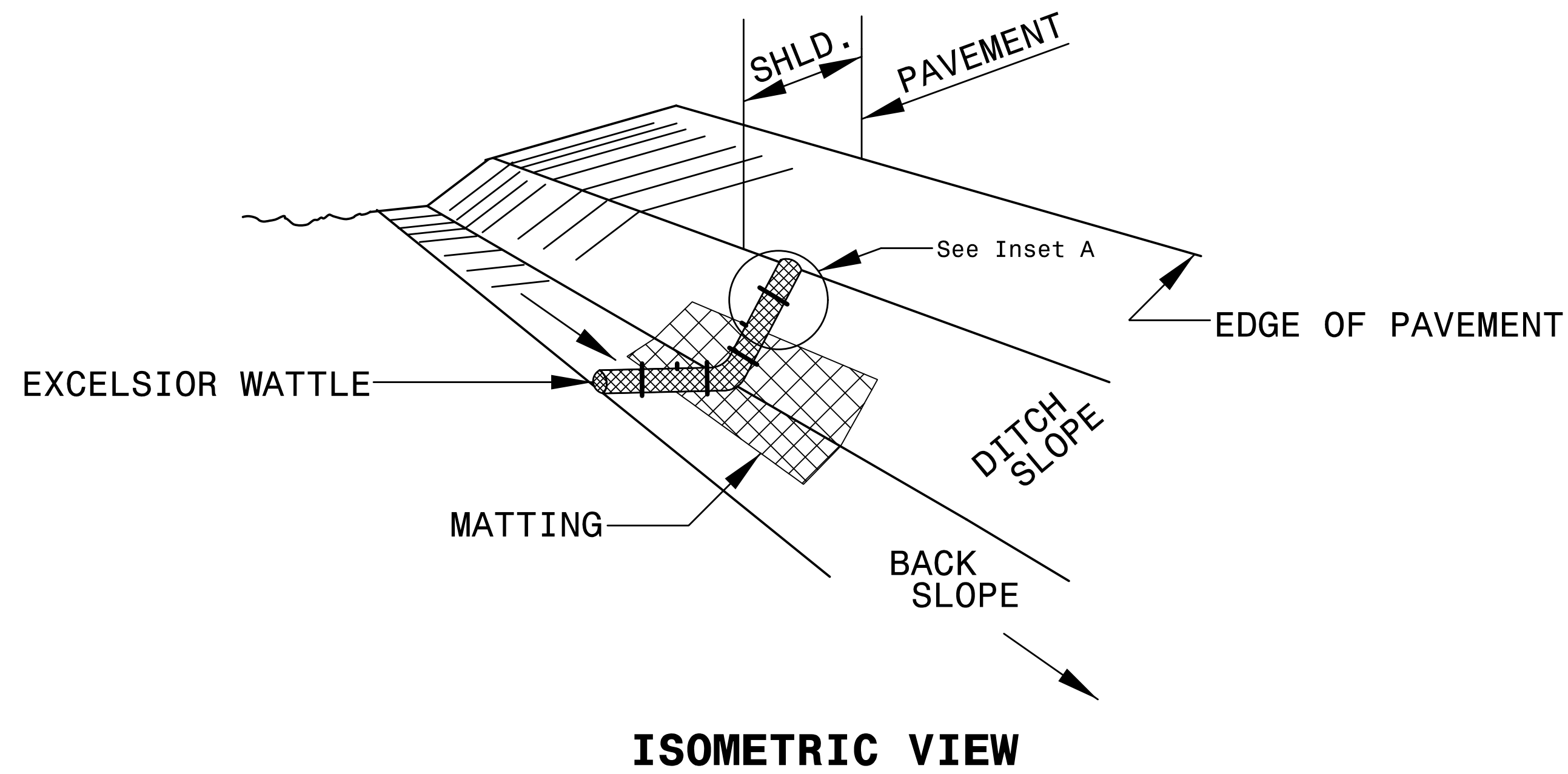
PROVIDE STAPLES MADE OF 0.125 IN. DIAMETER STEEL WIRE FORMED INTO A U SHAPE NOT LESS THAN 12" IN LENGTH.

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.



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.

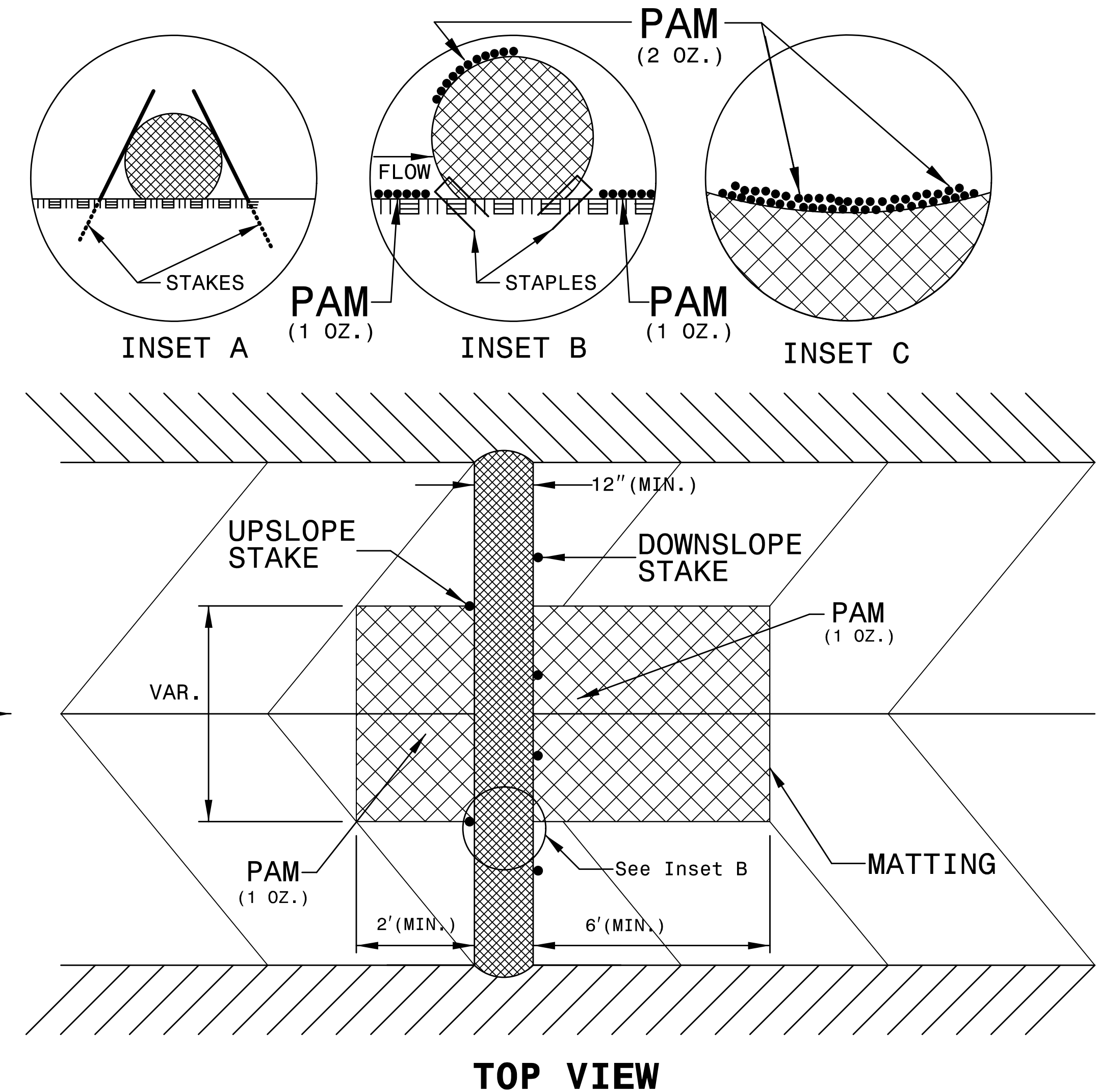
PROVIDE STAPLES MADE OF 0.125 IN. DIAMETER STEEL WIRE FORMED INTO A U SHAPE NOT LESS THAN 12" IN LENGTH.

INSTALL STAPLES APPROXIMATELY EVERY 1 LINEAR FOOT ON BOTH SIDES OF WATTLE AND AT EACH END TO SECURE IT TO THE SOIL.

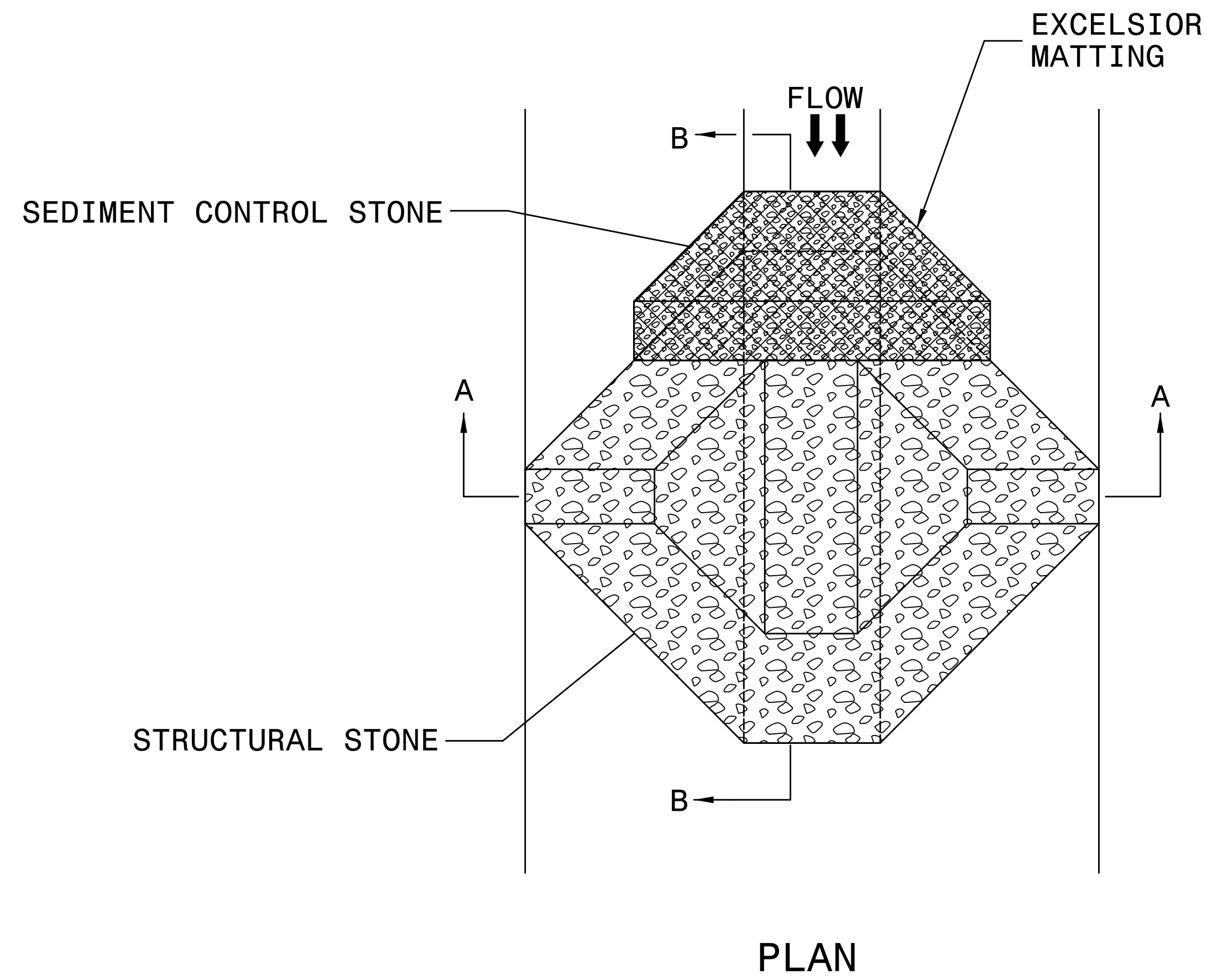
INSTALL MATTING IN ACCORDANCE WITH SECTION 1631 OF THE STANDARD SPECIFICATIONS.

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 EACH SIDE OF WATTLE. REAPPLY PAM AFTER EVERY RAINFALL EVENT THAT IS EQUAL TO OR EXCEEDS 0.50 IN.



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



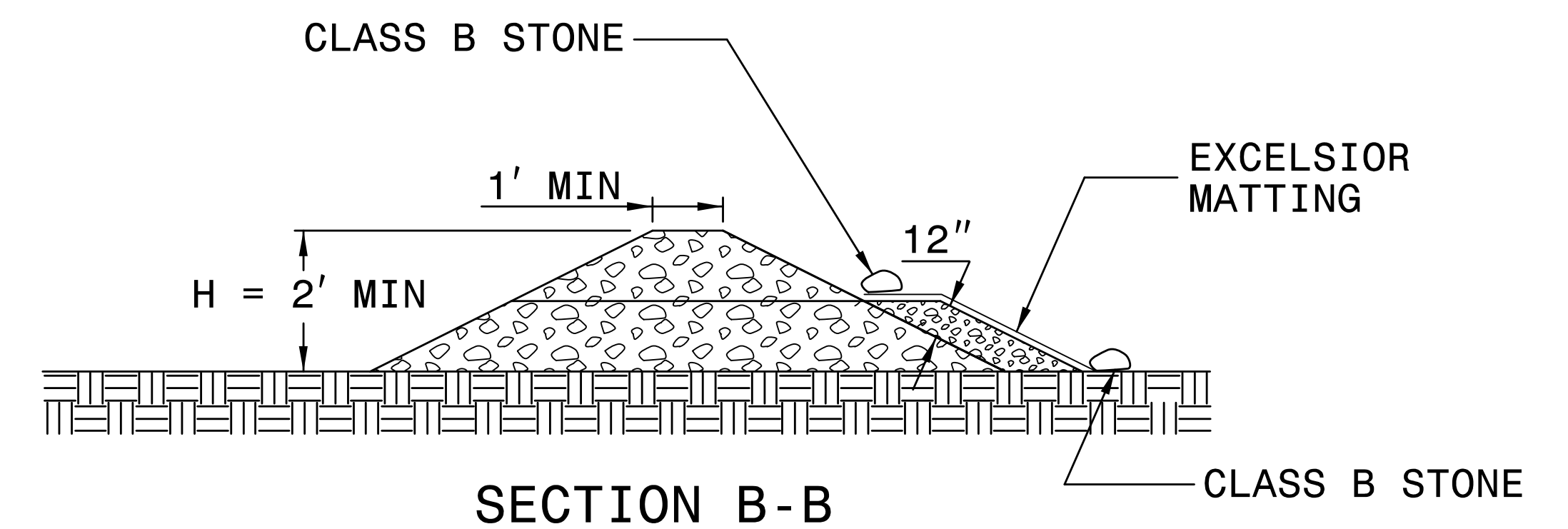
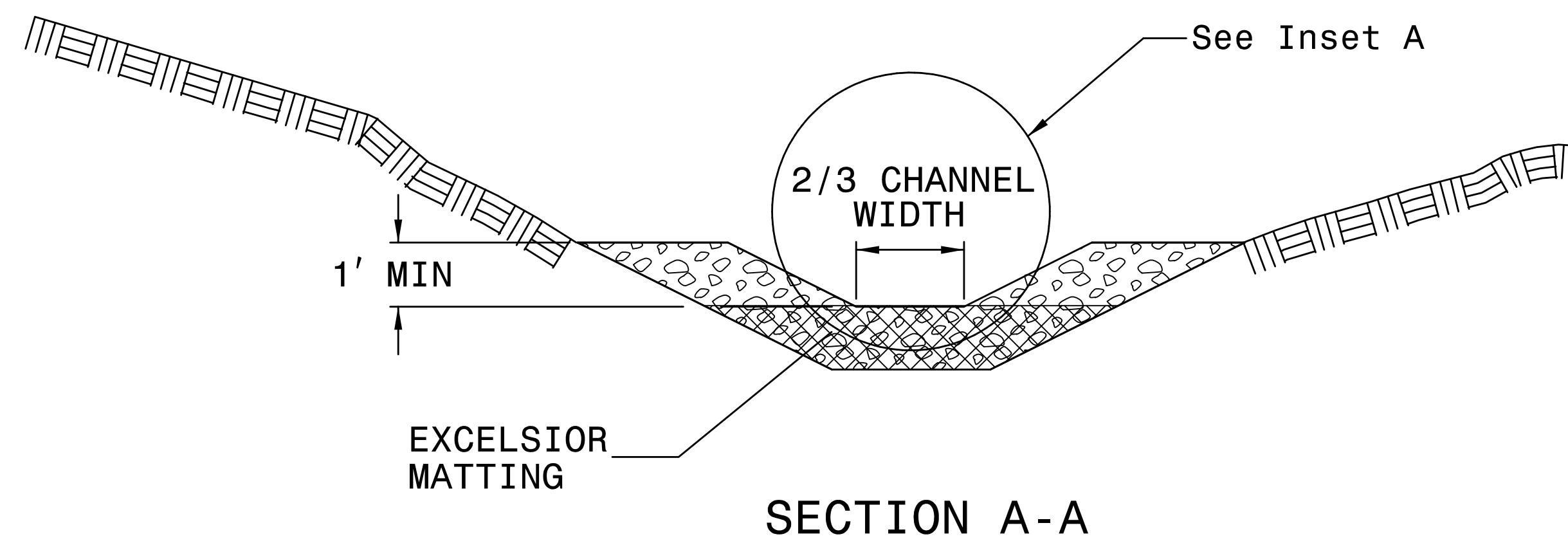
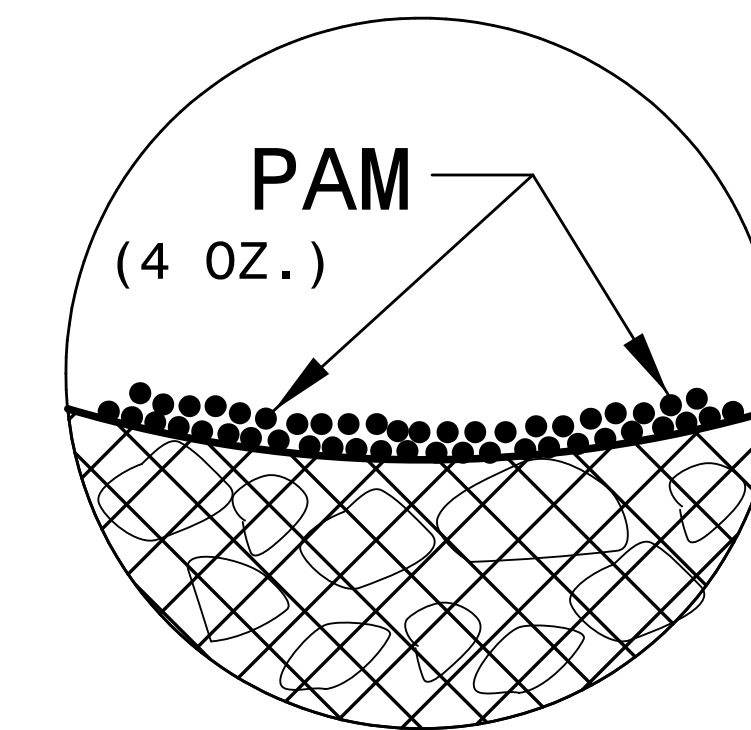
NOTES:

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

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

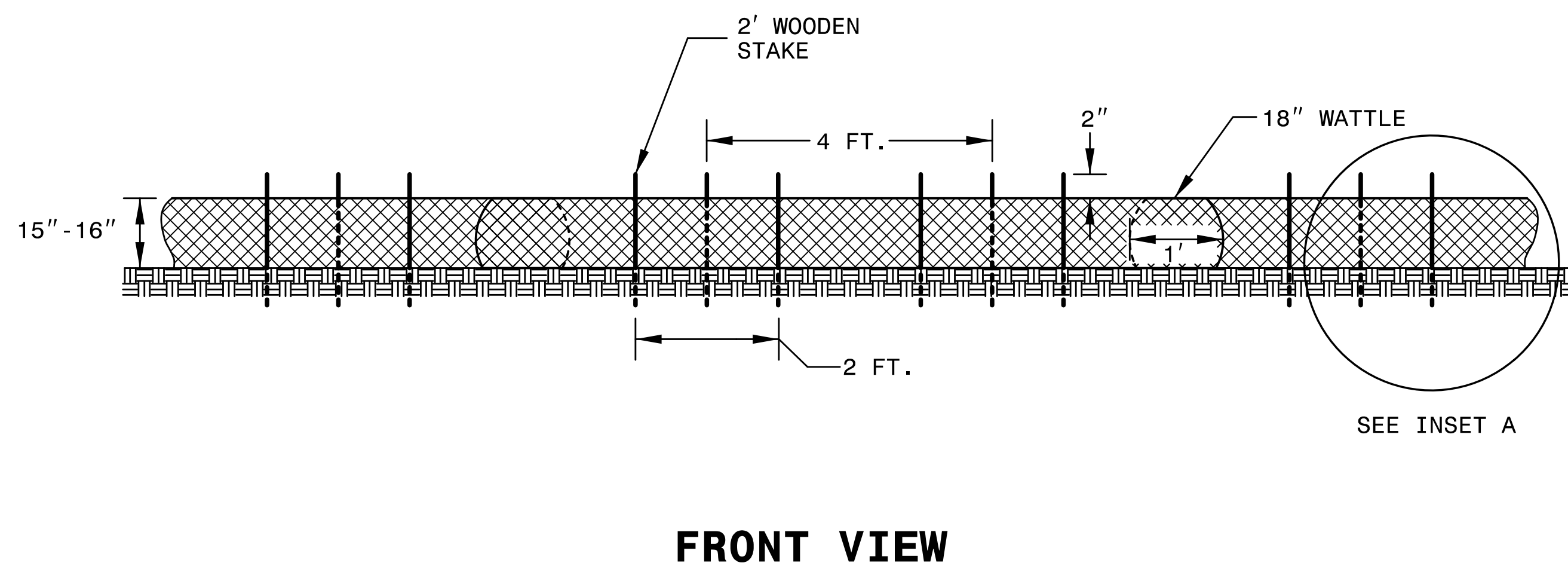
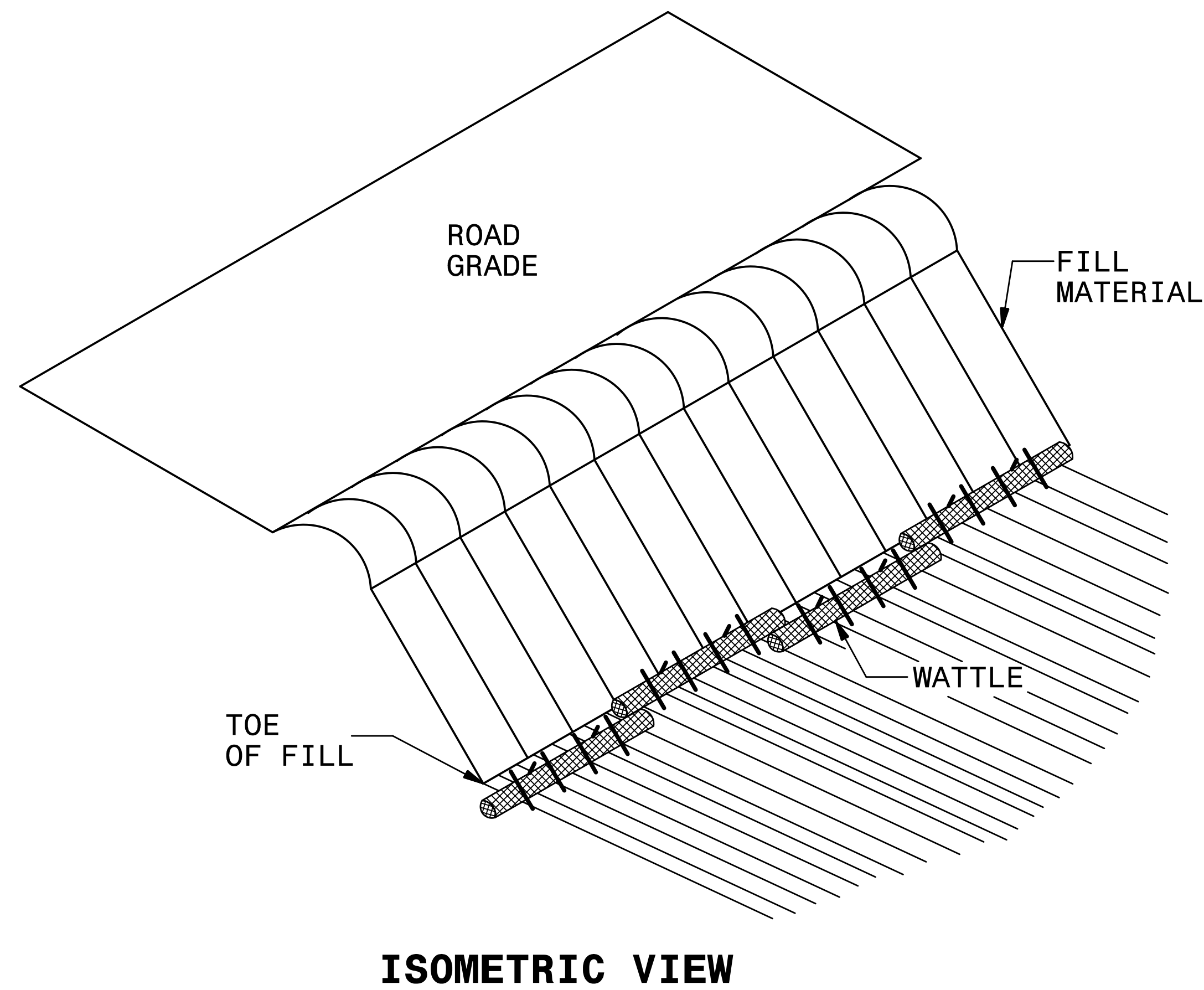
PRIOR TO POLYACRYLAMIDE (PAM) APPLICATION, OBTAIN A SOIL SAMPLE FROM PROJECT LOCATION, AND FROM OFFSITE MATERIAL, AND ANALYZE FOR APPROPRIATE PAM FLOCCULANT TO BE APPLIED TO EACH ROCK SILT CHECK.

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



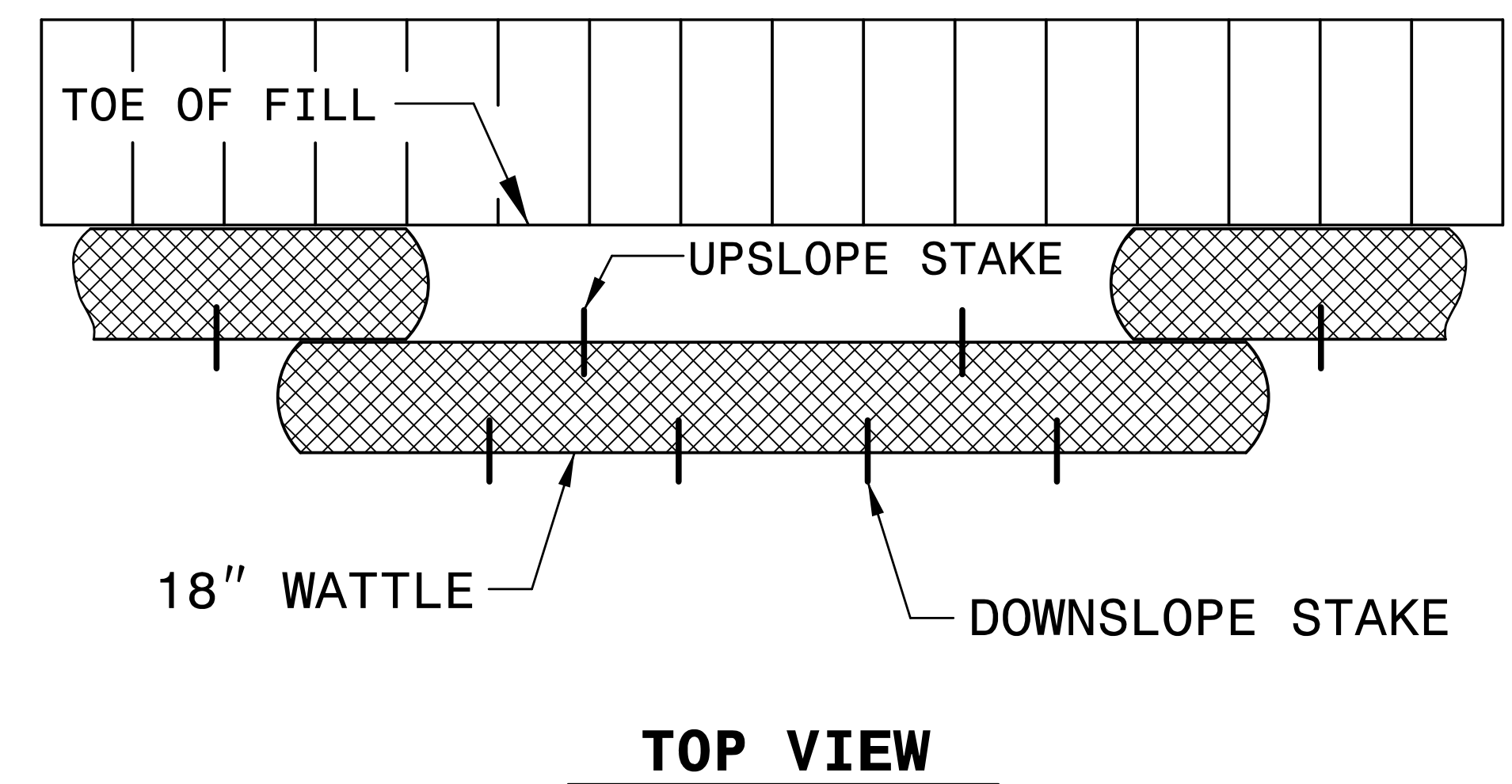
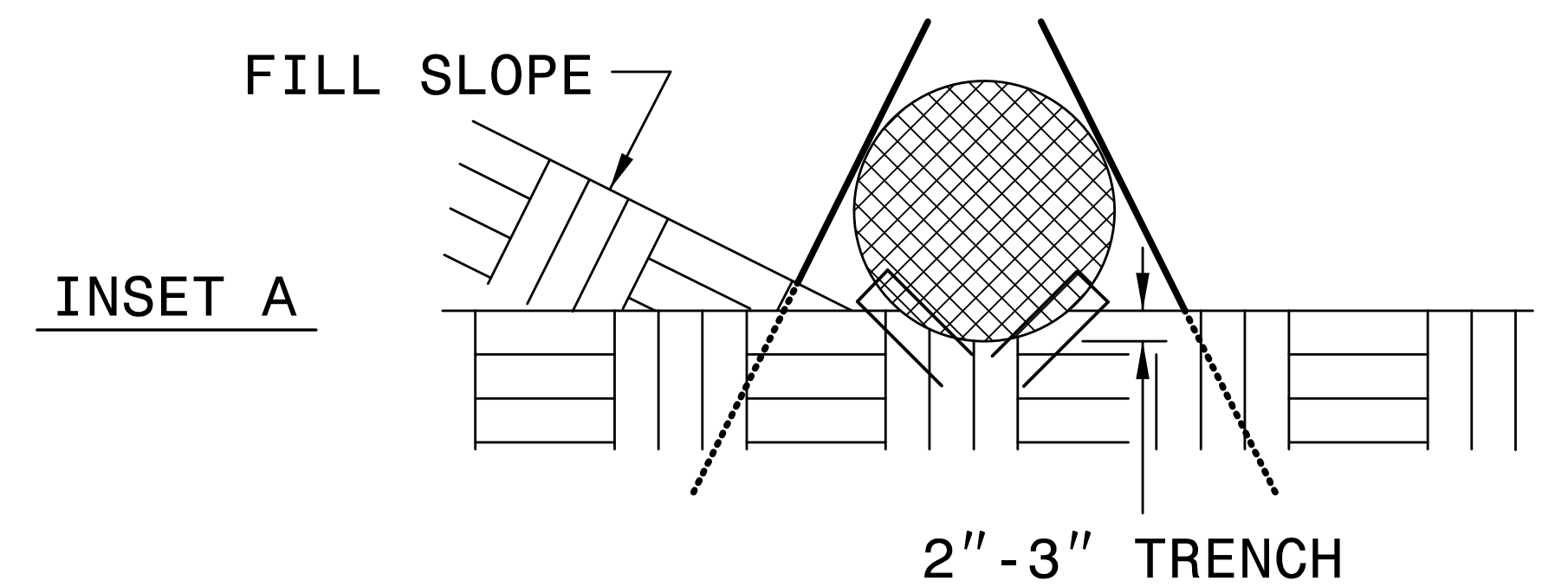
NOT TO SCALE

WATTLE BARRIER DETAIL



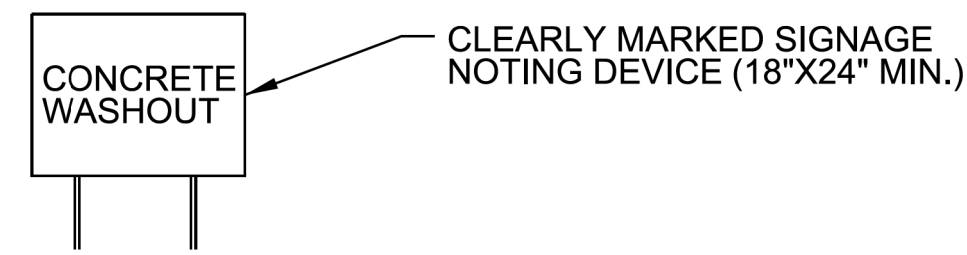
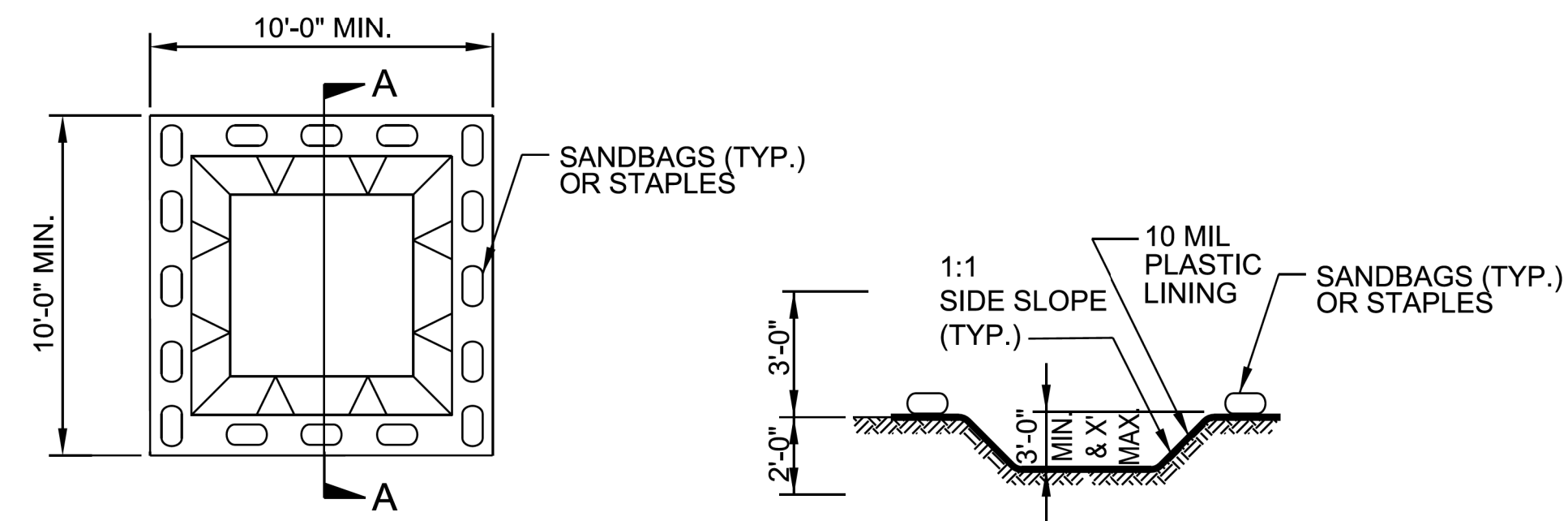
NOTES:

- USE MINIMUM 18 IN. NOMINAL DIAMETER EXCELSIOR WATTLE AND LENGTH OF 10 FT.
- EXCAVATE A 2 TO 3 INCH TRENCH FOR WATTLE TO BE PLACED.
- DO NOT PLACE WATTLES ON TOE OF SLOPE.
- USE 2 FT. WOODEN STAKES WITH A 2 IN. BY 2 IN. NOMINAL CROSS SECTION.
- INSTALL A MINIMUM OF 2 UPSLOPE STAKES AND 4 DOWNSLOPE STAKES AT AN ANGLE TO WEDGE WATTLE TO GROUND.
- 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.
- FOR BREAKS ALONG LARGE SLOPES, USE MAXIMUM SPACING OF 25 FT.



WITH LINER, NO GRAVEL APPROACH

ONSITE CONCRETE WASHOUT STRUCTURE WITH LINER



PLAN

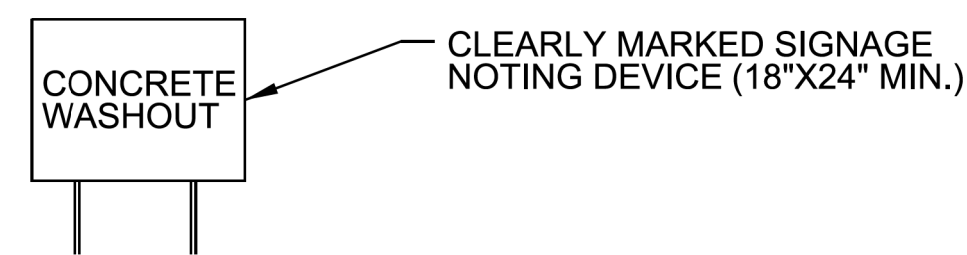
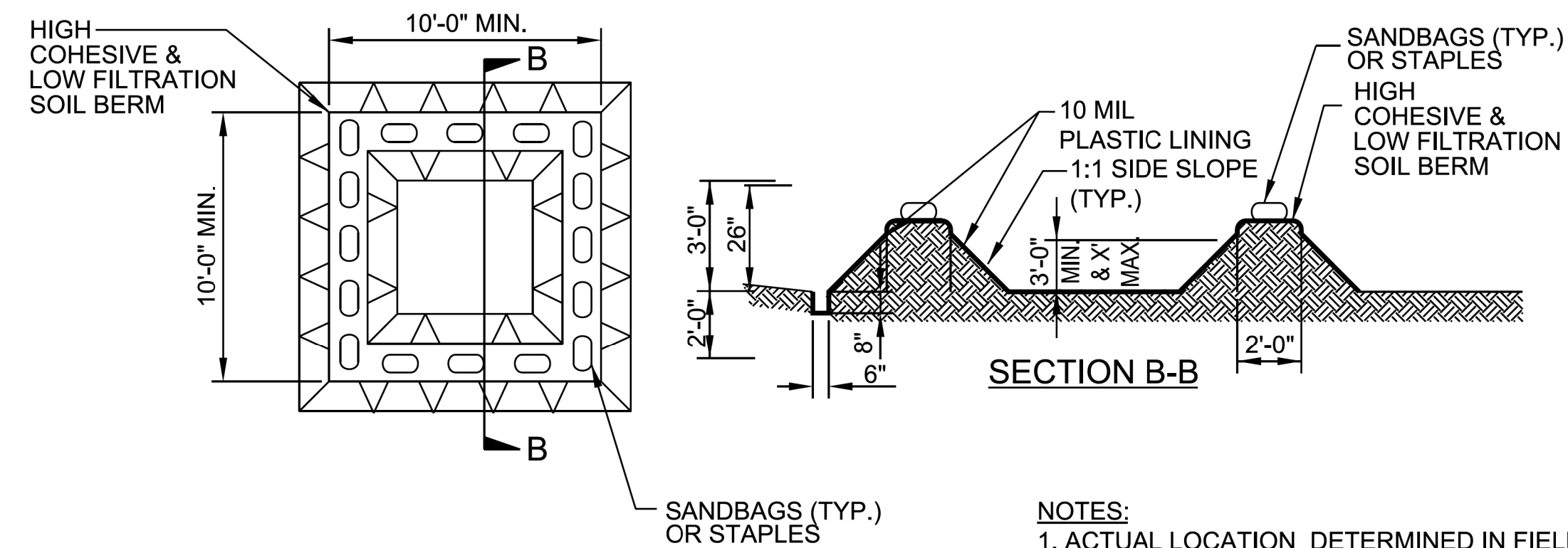
SECTION A-A

NOTES:

1. ACTUAL LOCATION DETERMINED IN FIELD
2. THE CONCRETE WASHOUT STRUCTURES SHALL BE MAINTAINED WHEN THE LIQUID AND/OR SOLID REACHES 75% OF THE STRUCTURES CAPACITY.
3. CONCRETE WASHOUT STRUCTURE NEEDS TO BE CLEARLY MARKED WITH SIGNAGE NOTING DEVICE.

BELOW GRADE WASHOUT STRUCTURE

NOT TO SCALE



PLAN

NOTES:

1. ACTUAL LOCATION DETERMINED IN FIELD
2. THE CONCRETE WASHOUT STRUCTURES SHALL BE MAINTAINED WHEN THE LIQUID AND/OR SOLID REACHES 75% OF THE STRUCTURES CAPACITY TO PROVIDE ADEQUATE HOLDING CAPACITY WITH A MINIMUM 12 INCHES OF FREEBOARD.
3. CONCRETE WASHOUT STRUCTURE NEEDS TO BE CLEARLY MARKED WITH SIGNAGE NOTING DEVICE.

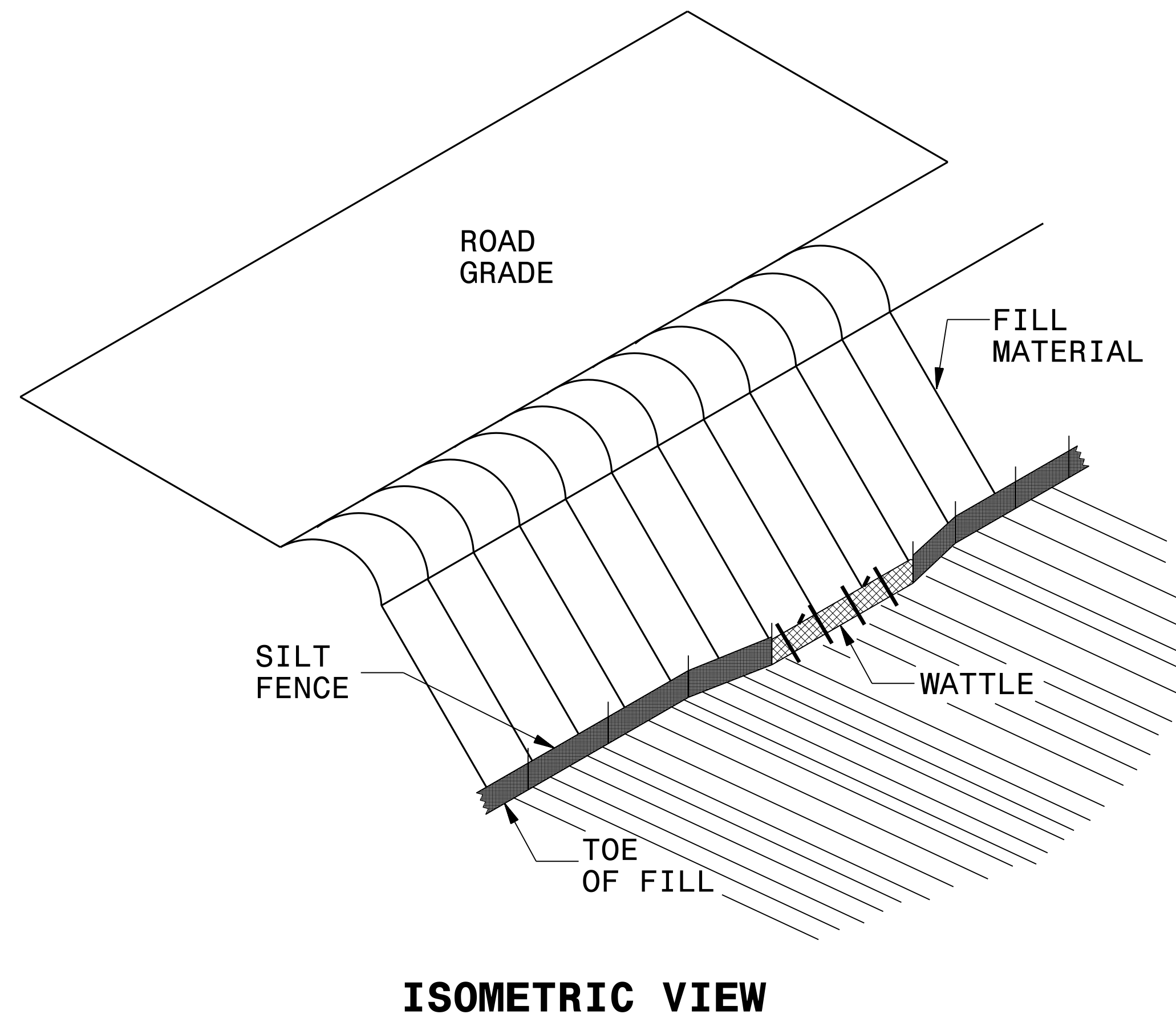
ABOVE GRADE WASHOUT STRUCTURE

NOT TO SCALE

PRELIMINARY DESIGN
NOT FOR CONSTRUCTION

PROJECT REFERENCE NO. <i>R-5516</i>	SHEET NO. <i>EC-2F</i>
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

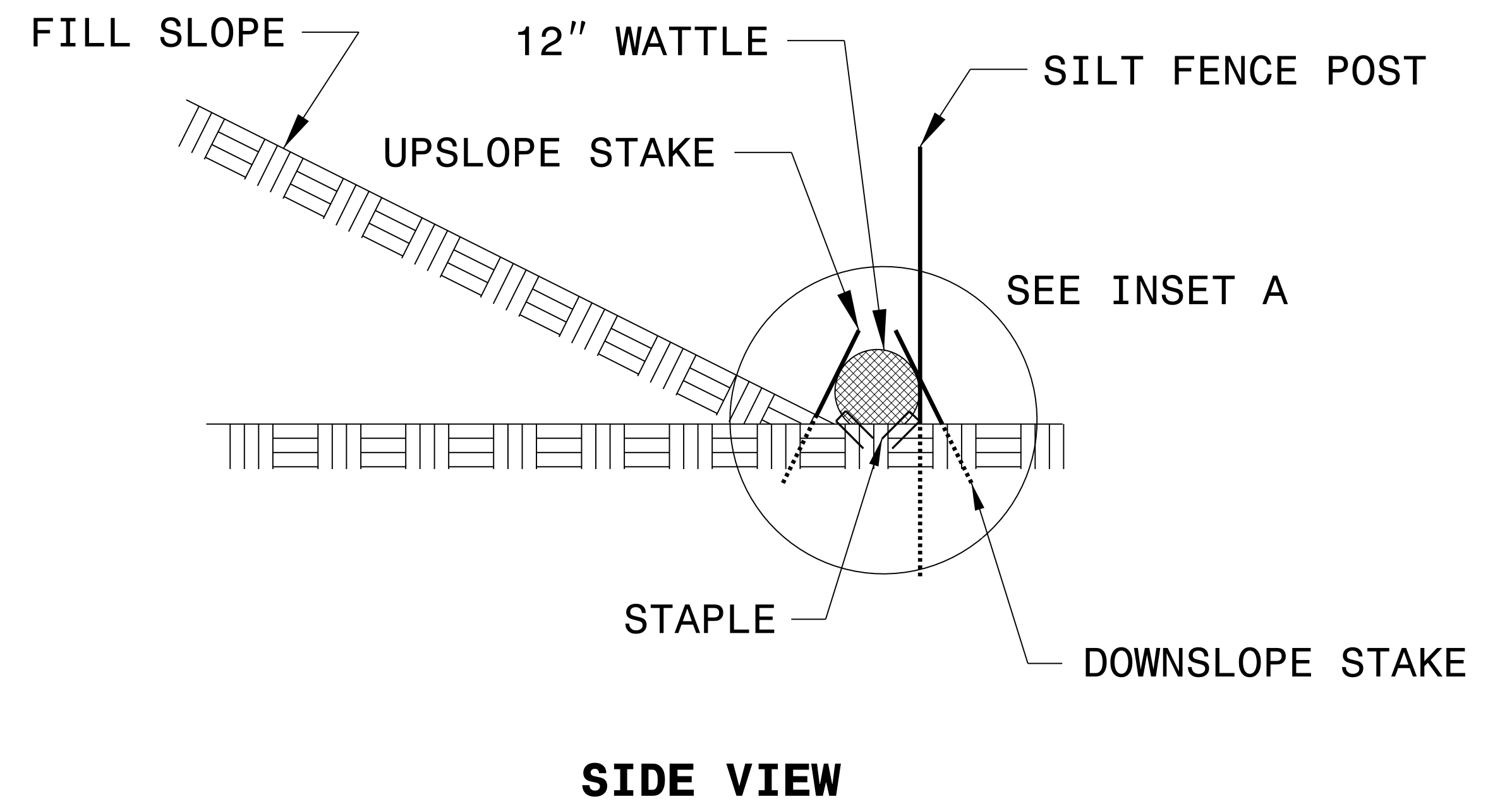
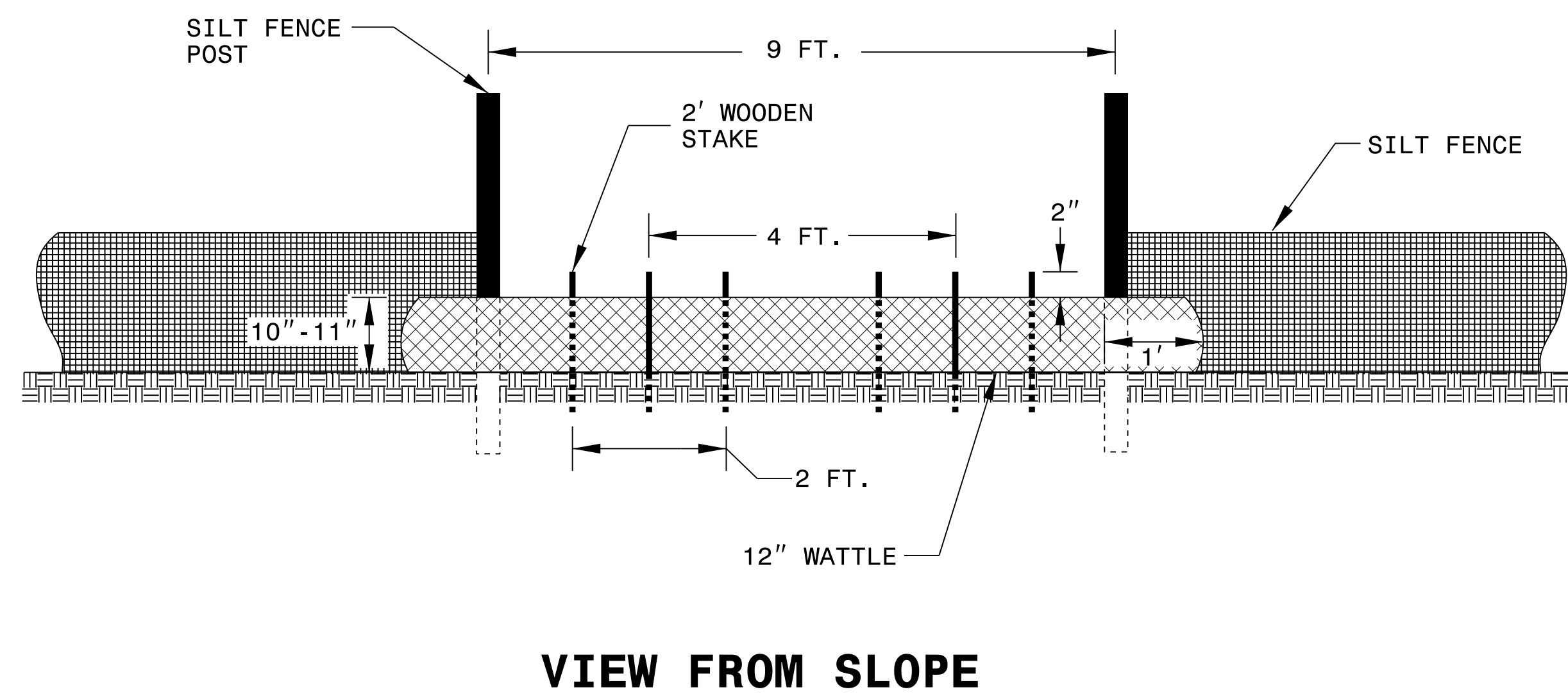
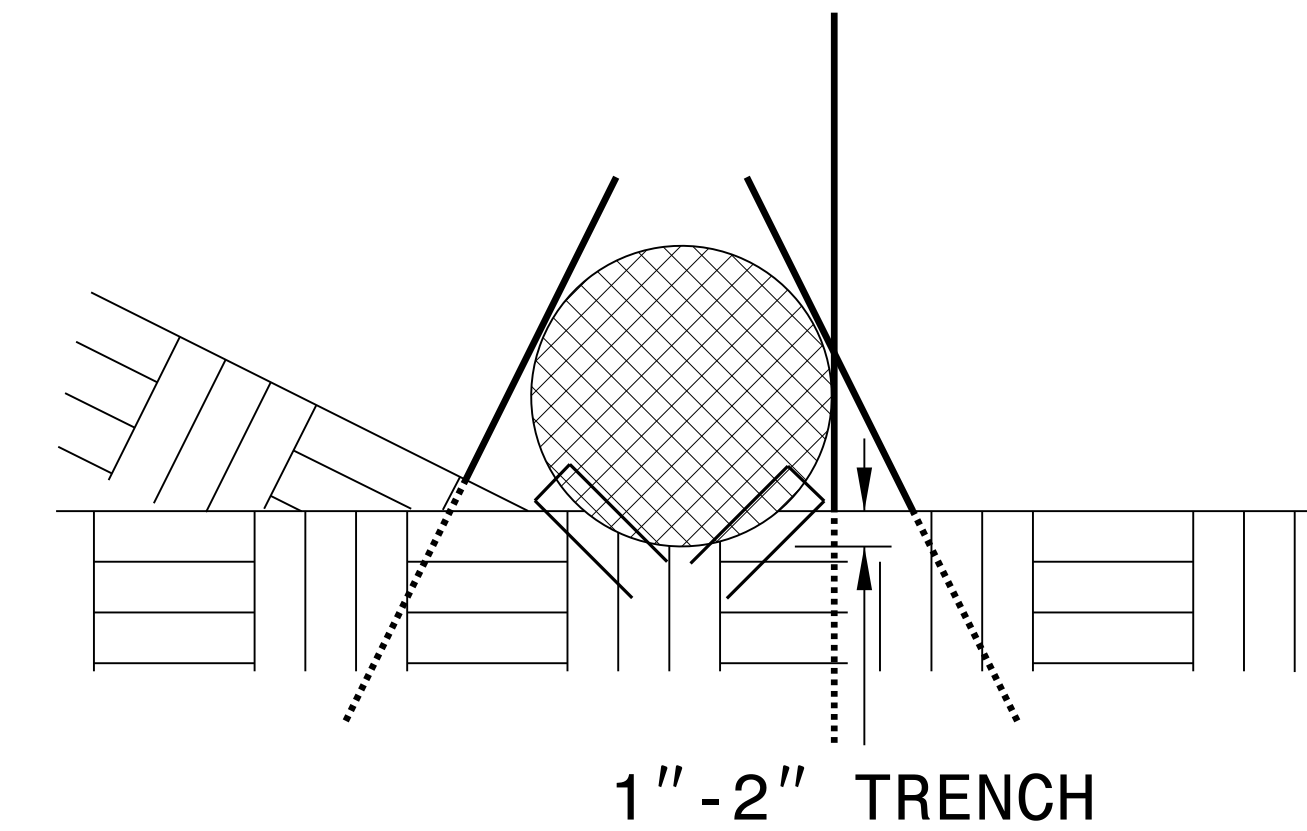
SILT FENCE WATTLE BREAK DETAIL



NOTES:

- USE MINIMUM 12 IN. DIAMETER EXCELSIOR WATTLE AND LENGTH OF 10 FT.
- EXCAVATE A 1 TO 2 INCH TRENCH FOR WATTLE TO BE PLACED.
- DO NOT PLACE WATTLE ON TOE OF SLOPE.
- USE 2 FT. WOODEN STAKES WITH A 2 IN. BY 2 IN. NOMINAL CROSS SECTION.
- INSTALL A MINIMUM OF 2 UPSLOPE STAKES AND 4 DOWNSLOPE STAKES AT AN ANGLE TO WEDGE WATTLE TO GROUND.
- 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.
- WATTLE INSTALLATION CAN BE ON OUTSIDE OF THE SILT FENCE AS DIRECTED.
- INSTALL TEMPORARY SILT FENCE IN ACCORDANCE WITH SECTION 1605 OF THE STANDARD SPECIFICATIONS.

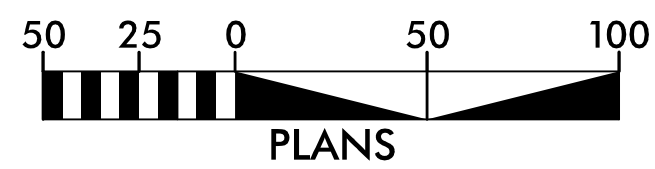
INSET A



DIVISION OF HIGHWAYS
STATE OF NORTH CAROLINA

SOIL STABILIZATION TIMEFRAMES

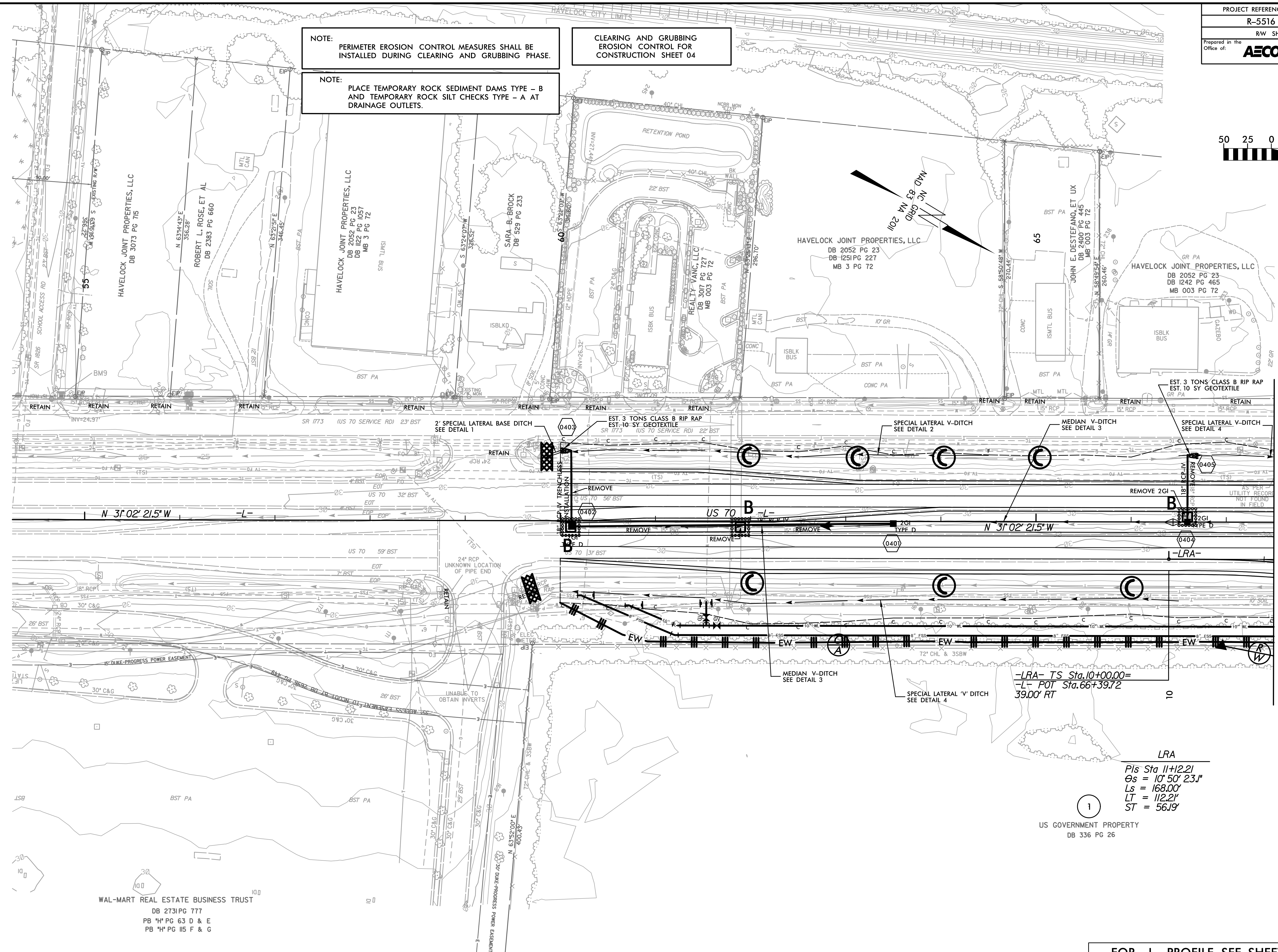
<i>SITE DESCRIPTION</i>	<i>STABILIZATION TIME</i>	<i>TIMEFRAME EXCEPTIONS</i>
PERIMETER DIKES, SWALES, DITCHES AND SLOPES	7 DAYS	NONE
HIGH QUALITY WATER (HQW) ZONES	7 DAYS	NONE
SLOPES STEEPER THAN 3:1	7 DAYS	IF SLOPES ARE 10' OR LESS IN LENGTH AND ARE NOT STEEPER THAN 2:1, 14 DAYS ARE ALLOWED.
SLOPES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



NOTE: PERIMETER EROSION CONTROL MEASURES SHALL BE INSTALLED DURING CLEARING AND GRUBBING PHASE.

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 04



LRA
 Pls Sta 11+12.21
 Os = 10' 50" 23.1"
 Ls = 168.00'
 LT = 112.21'
 ST = 56.19'

1
 US GOVERNMENT PROPERTY
 DB 336 PG 26

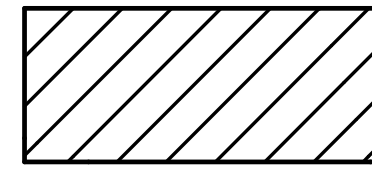
WAL-MART REAL ESTATE BUSINESS TRUST
 DB 2731 PG 777
 PB *H* PG 63 D & E
 PB *H* PG 115 F & G

FOR -L- PROFILE, SEE SHEET NO. 15
 FOR -LRA- PROFILE, SEE SHEET NO. 18

NOTE: PERIMETER EROSION CONTROL MEASURES SHALL BE INSTALLED DURING CLEARING AND GRUBBING PHASE.

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 05

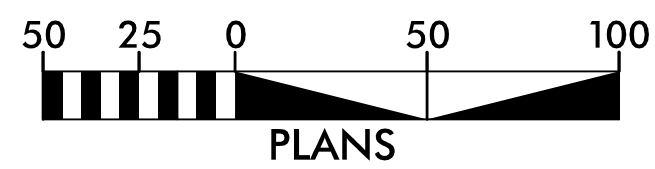


ENVIRONMENTALLY SENSITIVE AREA
SEE PROJECT SPECIAL PROVISIONS

PROJECT REFERENCE NO.	SHEET NO.
R-5516	EC-05/CONST.05
RW SHEET NO.	
Prepared in the Office of:	
<small>NC FIRM LICENSE No. F-0342 701 Corporate Center Drive, Suite 475 Raleigh, NC 27607 (919) 854-6200 • (919) 854-6259 FAX</small>	

-L-	-LRA-	-LRB-
PI Sta 75+56.92 Δ = 4° 33' 25.0" (RT) D = 2° 00' 00.0" L = 227.86' T = 113.99' R = 2,864.79' Se = 0.04 DS = 50 MPH Runoff = 144.0'	PIs Sta 11+12.21 Θs = 10° 50' 23.1" Ls = 168.00' LT = 112.21' ST = 56.19'	PI Sta 16+09.21 Δ = 89° 38' 18.4" (RT) D = 12° 54' 16.0" L = 694.63' T = 441.21' R = 444.00' Se = 0.08 DS = 40 MPH Runoff = 168.0'
		PIs Sta 11+12.21 Θs = 10° 50' 23.1" Ls = 168.00' LT = 112.21' ST = 56.19'
		PI Sta 13+25.82 Δ = 39° 08' 05.9" (LT) D = 12° 54' 16.0" L = 303.27' T = 157.82' R = 444.00' Se = 0.08 DS = 40 MPH Runoff = 168.0'
		PIs Sta 15+31.36 Θs = 0° 47' 54.6" Ls = 10° 50' 35.8" L = 168.00' LT = 108.40' ST = 60.09'
		PI Sta 19+49.36 Δ = 9° 40' 46.0" (LT) D = 1° 33' 52.1" L = 618.70' T = 310.09' R = 3,662.29' Se = RC DS = 40 MPH Runoff = 121.5'
		PI Sta 31+10.10 Δ = 76° 29' 46.8" (LT) D = 6° 52' 41.7" L = 1,112.15' T = 656.64' R = 833.00' Se = 0.06 DS = 50 MPH Runoff = 144.0'
		PIs Sta 36+13.64 Θs = 4° 57' 08.4" Ls = 144.00' LT = 96.04' ST = 48.03'

-YWB01-
PI Sta 12+78.54 Δ = 120° 15' 08.0" (RT) D = 35° 48' 35.5" L = 335.81' T = 278.54' R = 160.00' Se = 0.06 DS = 20 MPH Runoff = 175.0'
PIs Sta 17+02.36 Δ = 6° 59' 27.5" (LT) D = 0° 57' 17.3" L = 732.19' T = 366.55' R = 6000.83' Se = NC DS = 40 MPH Runoff = N/A



50' x 25' x 3'
1.5 inch Skimmer
with 1.0 inch
Orifice Diameter
9 ft. weir
ID 5.1

MATCHLINE -L- STA 67+50.00
SEE PLAN SHEET EC-04

MATCHLINE -L- STA 80+50.00
SEE PLAN SHEET EC-06

MATCHLINE -YEB01-
STA 26+00.00
SEE PLAN SHEET EC-06

MATCHLINE -LRA-
STA 17+00.00
SEE PLAN SHEET EC-10

MATCHLINE -YEB01- / -YWB01-
STA 37+00.00 / 16+00.00
SEE PLAN SHEET EC-10

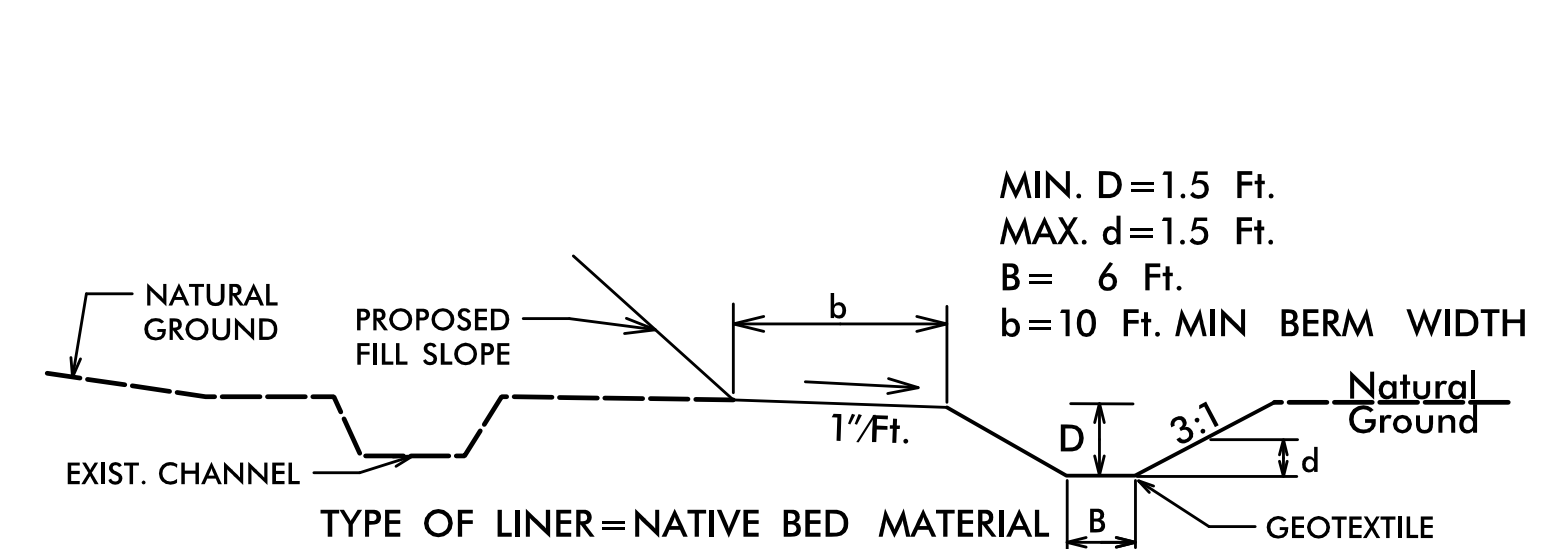
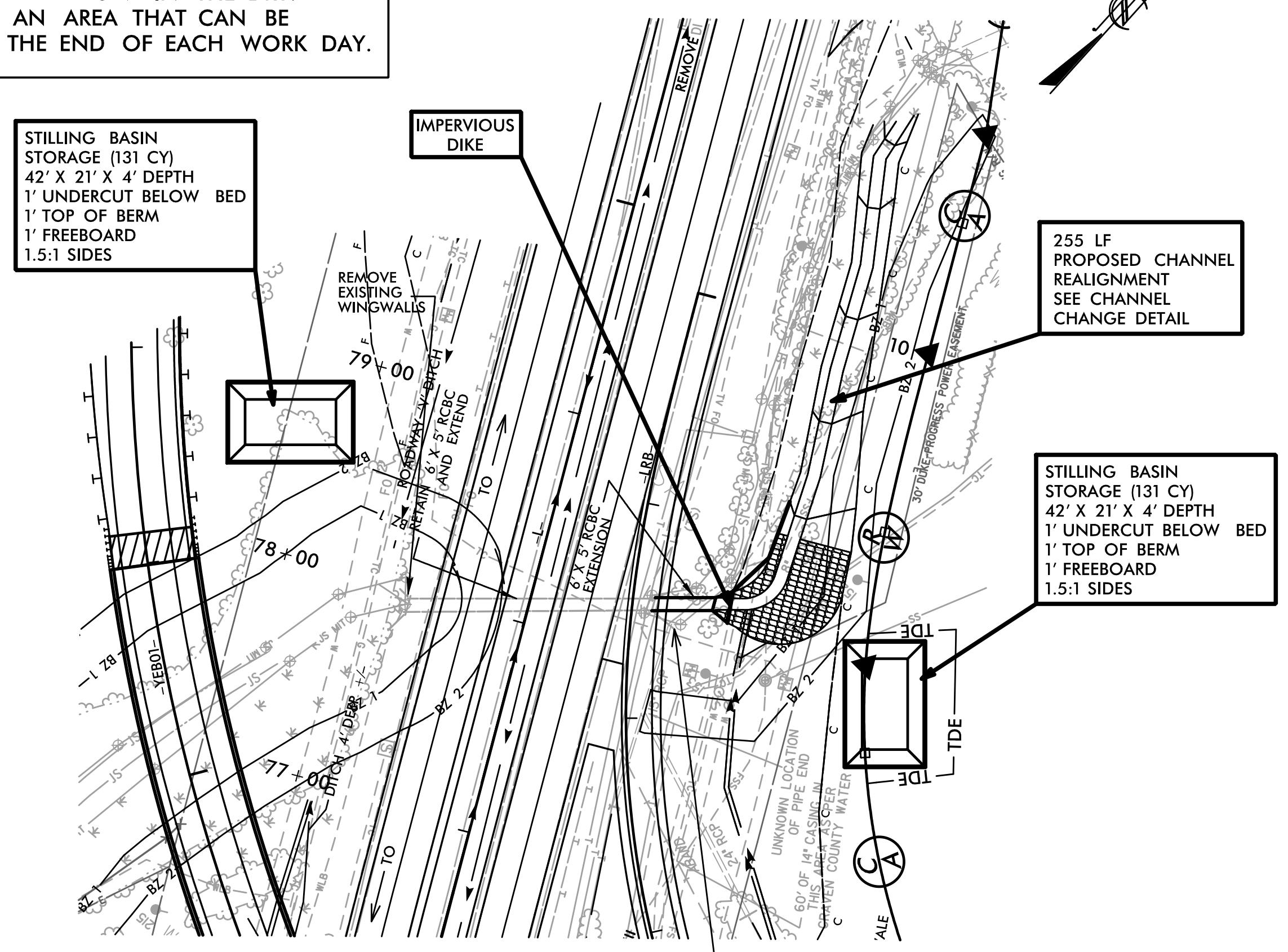
★ PROPOSED TRAFFIC SIGNAL
FOR -L RT- PROFILE, SEE SHEET NO. 15
FOR -L LT- PROFILE, SEE SHEET NO. 16
FOR -LRA- PROFILE, SEE SHEET NO. 18
FOR -LRB- PROFILE, SEE SHEET NO. 19
FOR -YEB01- PROFILE, SEE SHEET NO. 20
FOR -YWB01- PROFILE, SEE SHEET NO. 21

PHASE I

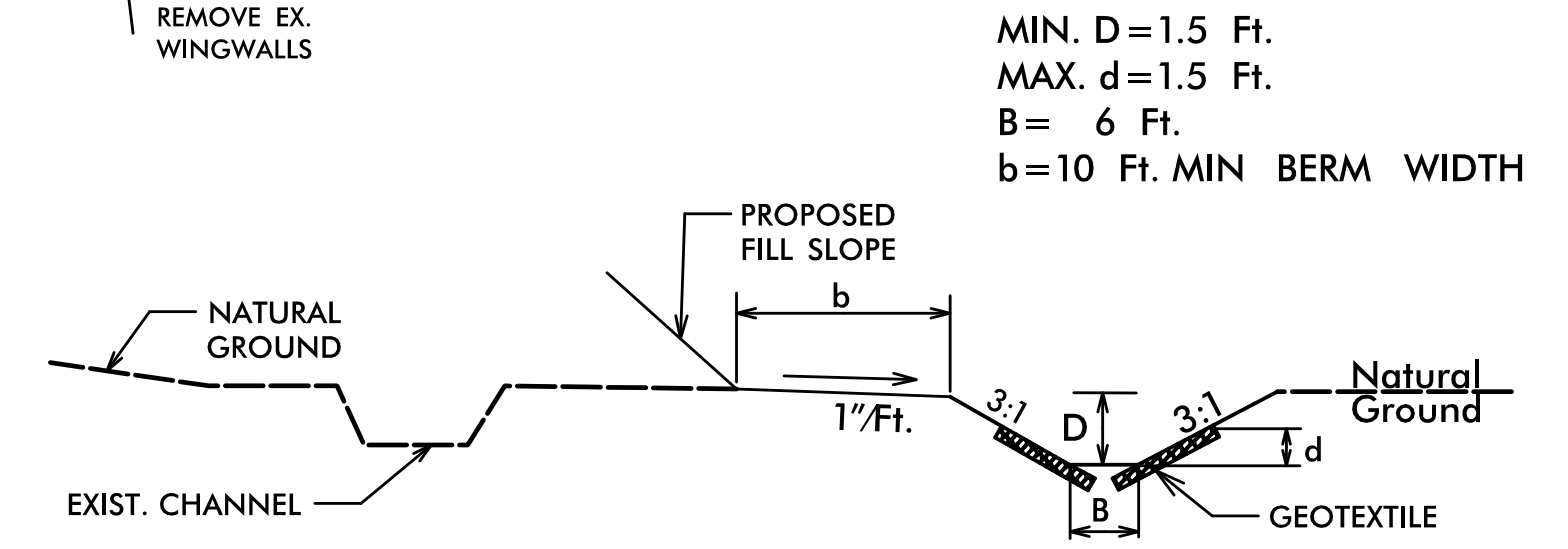
CONSTRUCTION SEQUENCE STA. 78+08.84 -L- FOR SINGLE BARREL 6' X 5' RCBC EXTENSION

1. CONSTRUCT STILLING BASINS, MINIMUM VOLUME REQUIRED =131 CY. EACH.
2. CONSTRUCT IMPERVIOUS DIKE DOWNSTREAM OF CULVERT OUTLET TO PREVENT FLOW FROM ENTERING CHANNEL REALIGNMENT.
3. CONSTRUCT CHANNEL REALIGNMENT. DIRECT FLOW INTO ORIGINAL CHANNEL UNTIL NEW CHANNEL IS STABLE.
4. REMOVE IMPERVIOUS DIKE AND DIVERT FLOW INTO CHANNEL REALIGNMENT.
5. STABILIZE DISTURBED AREAS.

NOTE:
ALL WORK SHALL BE DONE IN THE DRY. ONLY DISTURB AN AREA THAT CAN BE STABILIZED AT THE END OF EACH WORK DAY.



CHANNEL CHANGE DETAIL
(LOOKING DOWNSTREAM)
(-L- STA. 78+70 TO 80+73 RT)
(NOT TO SCALE)



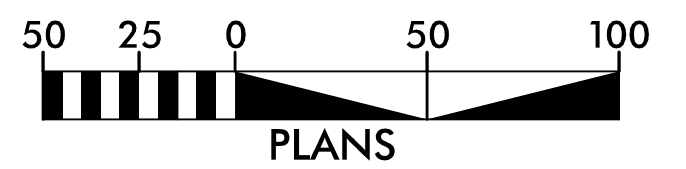
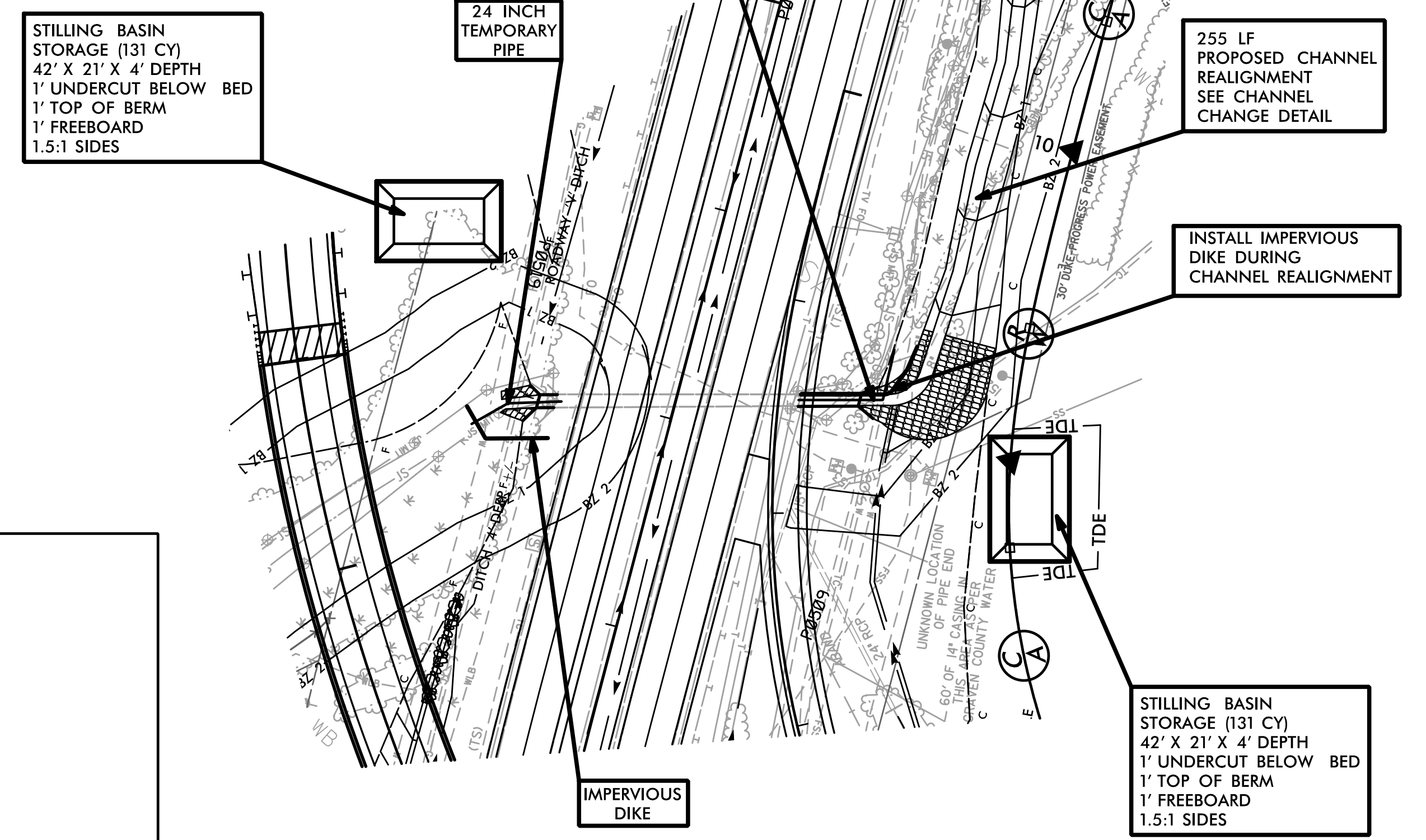
CHANNEL CHANGE DETAIL
(LOOKING DOWNSTREAM)
(-L- STA. 78+30 TO 78+70 RT)
(NOT TO SCALE)

PHASE II

CONSTRUCTION SEQUENCE STA. 78+08.84 -L- FOR SINGLE BARREL 6' X 5' RCBC EXTENSION

1. INSTALL UPSTREAM IMPERVIOUS DIKE.
2. INSTALL 24" TEMPORARY PIPES.
3. REMOVE EXISTING HEADWALLS.
4. CONSTRUCT 6'X5' RCBC EXTENSIONS WHILE PUMPING EFFLUENT INTO THE STILLING BASINS.
5. CONSTRUCT INLET AND OUTLET CHANNELS AND STABILIZE.
6. REMOVE IMPERVIOUS DIKES AND TEMPORARY PIPES AND DIVERT FLOW THROUGH THE RCBC.
7. REMOVE STILLING BASINS.
8. STABILIZE ALL DISTURBED AREAS.
9. COMPLETE ROADWAY.

NOTE:
ALL WORK SHALL BE DONE IN THE DRY. ONLY DISTURB AN AREA THAT CAN BE STABILIZED AT THE END OF EACH WORK DAY.

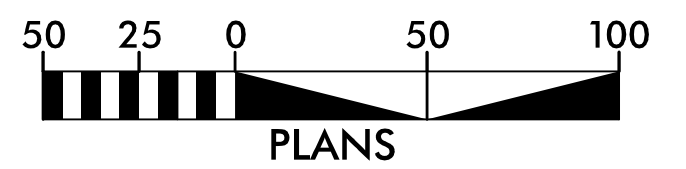


 ENVIRONMENTALLY SENSITIVE AREA
SEE PROJECT SPECIAL PROVISIONS

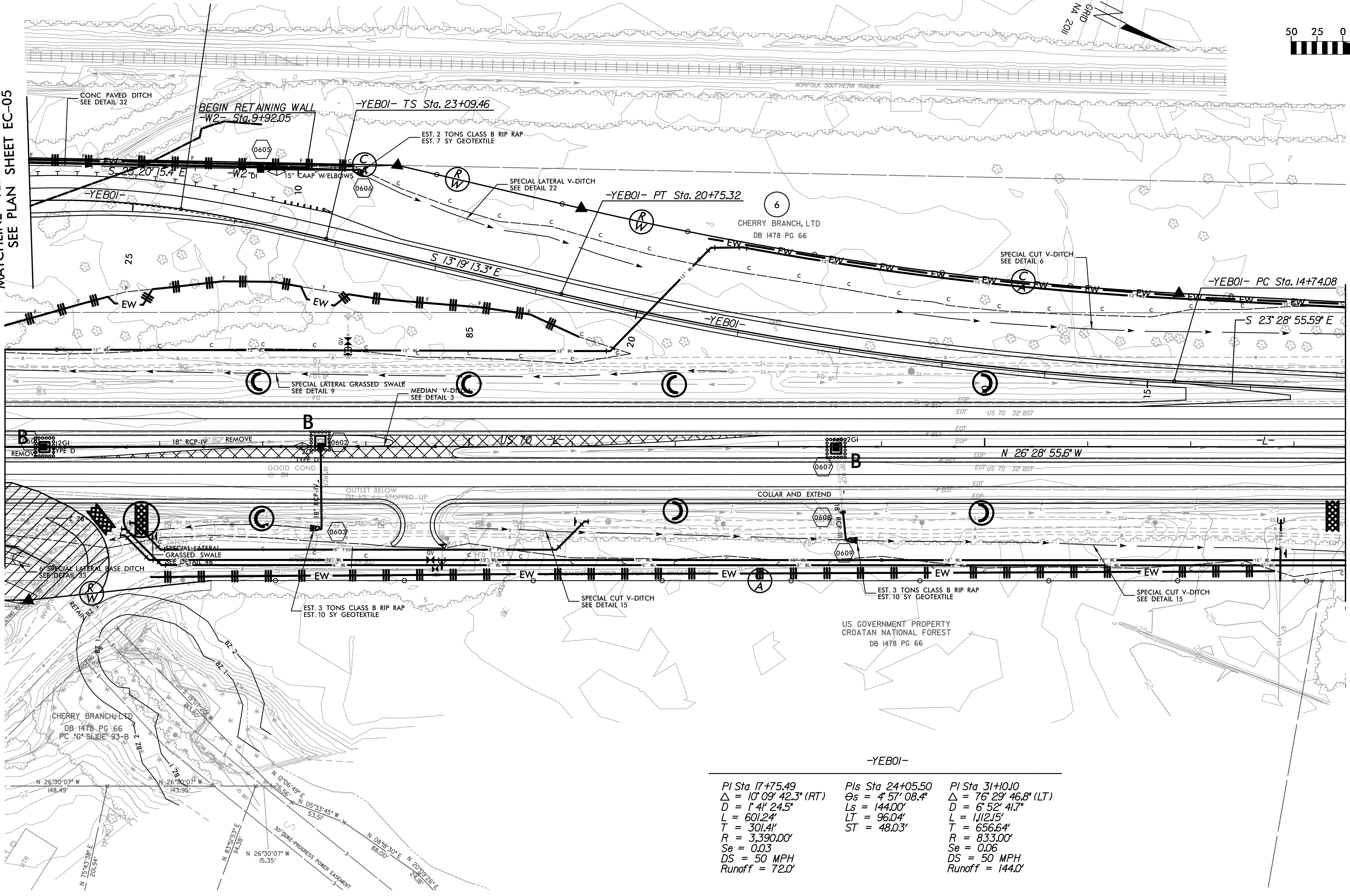
NOTE: PERIMETER EROSION CONTROL MEASURES SHALL BE INSTALLED DURING CLEARING AND GRUBBING PHASE.

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 06



MATCHLINE -L- STA 80+50.00
SEE PLAN SHEET EC-05



MATCHLINE -L- /-YEB01-
STA 93+50.00 / 13+07.88
SEE PLAN SHEET EC-07

-YEB01- PI Sta 17+75.49 $\Delta = 10^{\circ}09'42.3''$ (RT) $D = 1^{\circ}41'24.5''$ $L = 601.24'$ $T = 301.41'$ $R = 3,390.00'$ $Se = 0.03$ $DS = 50$ MPH $Runoff = 72.0'$	PIs Sta 24+05.50 $\Theta_s = 4^{\circ}57'08.4''$ $Ls = 144.00'$ $LT = 96.04'$ $ST = 48.03'$	PI Sta 31+10.10 $\Delta = 76^{\circ}29'46.8''$ (LT) $D = 6^{\circ}52'41.7''$ $L = 1,112.15'$ $T = 656.64'$ $R = 833.00'$ $Se = 0.06$ $DS = 50$ MPH $Runoff = 144.0'$
--	---	--

FOR -L- PROFILE, SEE SHEET NO. 16
FOR -YEB01- PROFILE, SEE SHEET NOS. 19 & 20

NOTE: PERIMETER EROSION CONTROL MEASURES SHALL BE INSTALLED DURING CLEARING AND GRUBBING PHASE.

US GOVERNMENT PROPERTY
CROATAN NATIONAL FOREST

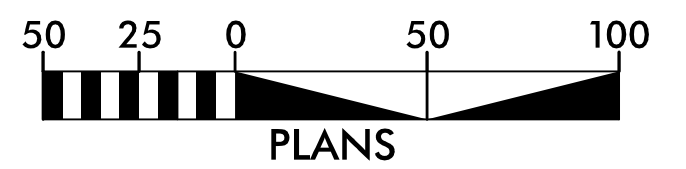
CLEARING AND GRUBBING
EROSION CONTROL FOR
CONSTRUCTION SHEET 07

NEDHAM HICKMAN, HEIRS
DB 81 PG 253
DRAWN BY CRAVEN COUNTY TAX

GREEN CHAPEL MISSIONARY BAPTIST CHURCH
DB 1695 PG 259
DRAWN BY CRAVEN COUNTY TAX

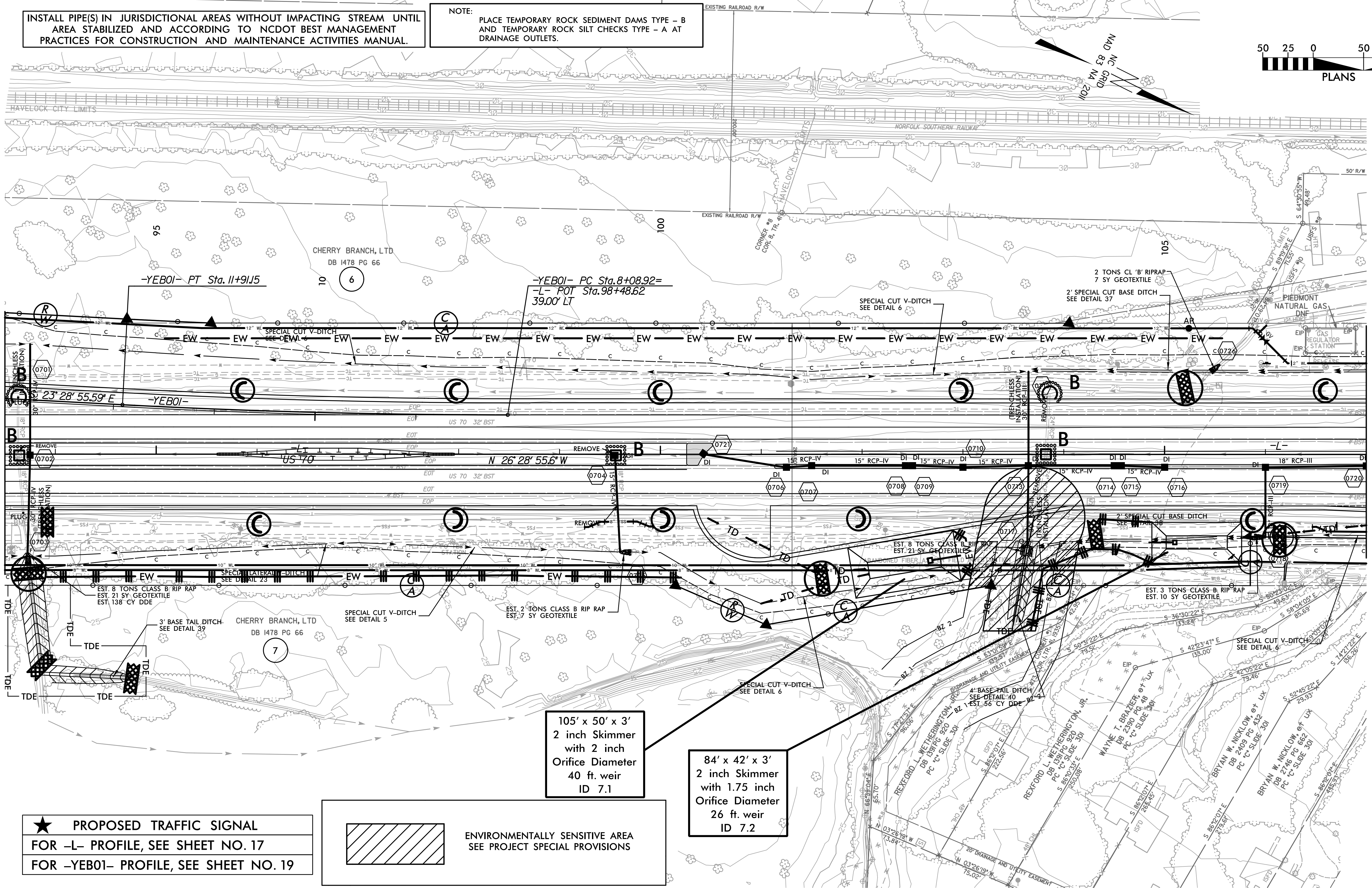
INSTALL PIPE(S) IN JURISDICTIONAL AREAS WITHOUT IMPACTING STREAM UNTIL AREA STABILIZED AND ACCORDING TO NCDOT BEST MANAGEMENT PRACTICES FOR CONSTRUCTION AND MAINTENANCE ACTIVITIES MANUAL.

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



MATCHLINE -L- /-YEB01-
STA 93+50.00 / STA 13+07.88
SEE PLAN SHEET EC-06

MATCHLINE -L- STA 107+00.00
SEE PLAN SHEET EC-08



★ PROPOSED TRAFFIC SIGNAL
FOR -L- PROFILE, SEE SHEET NO. 17
FOR -YEB01- PROFILE, SEE SHEET NO. 19

ENVIRONMENTALLY SENSITIVE AREA
SEE PROJECT SPECIAL PROVISIONS

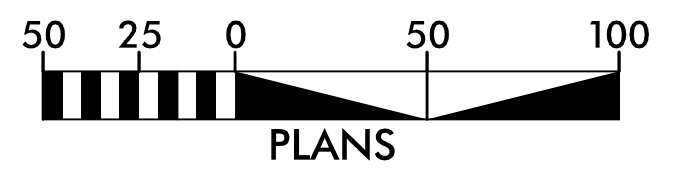
105' x 50' x 3'
2 inch Skimmer
with 2 inch
Orifice Diameter
40 ft. weir
ID 7.1

84' x 42' x 3'
2 inch Skimmer
with 1.75 inch
Orifice Diameter
26 ft. weir
ID 7.2

NOTE: PERIMETER EROSION CONTROL MEASURES SHALL BE INSTALLED DURING CLEARING AND GRUBBING PHASE.

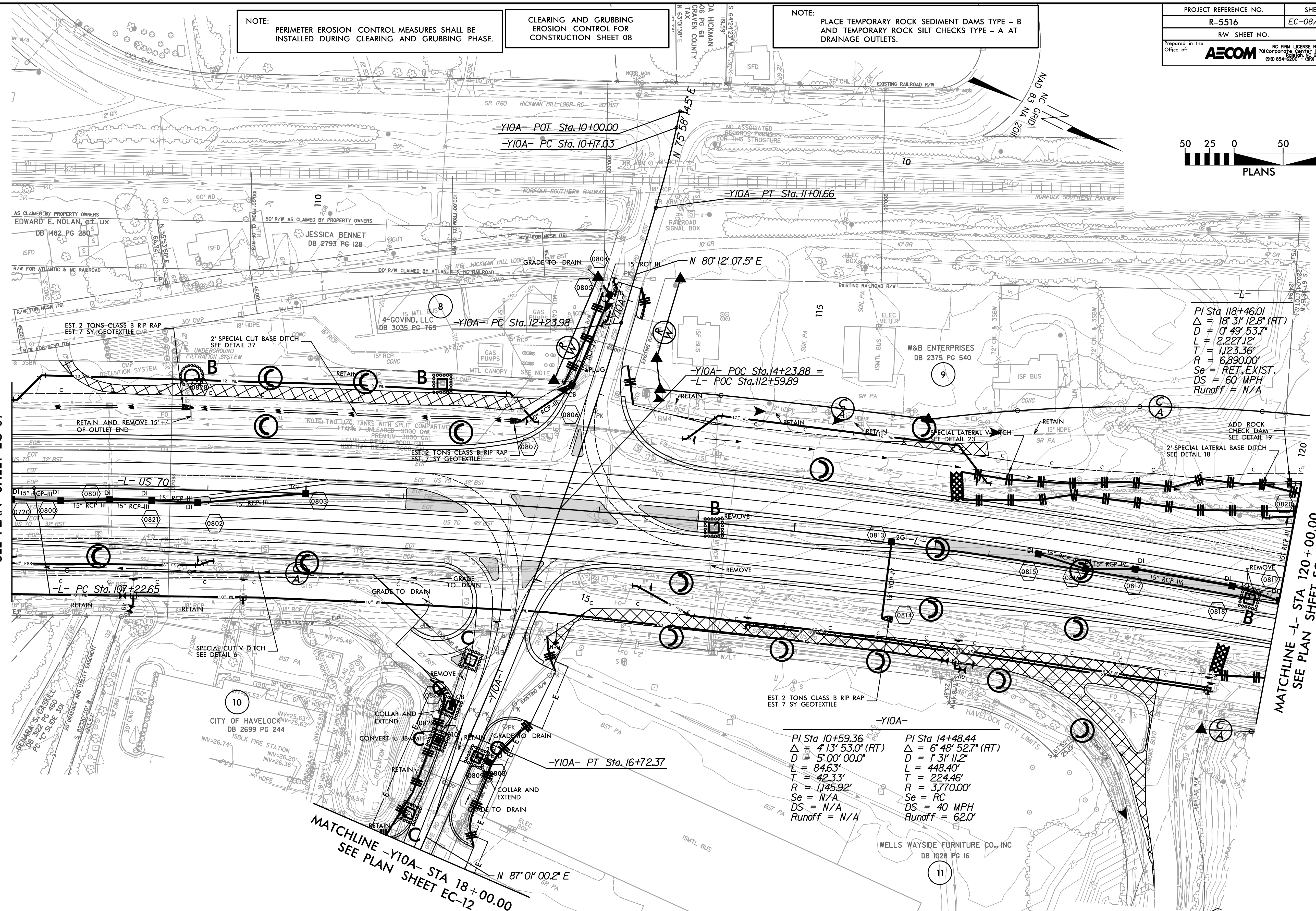
CLEARING AND GRUBBING EROSION CONTROL FOR CONSTRUCTION SHEET 08

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



MATCHLINE -L- STA 107+00.00
SEE PLAN SHEET EC-07

MATCHLINE -L- STA 120+00.00
SEE PLAN SHEET EC-09



-L-
 PI Sta 118+46.01
 $\Delta = 18' 31'' 12.8'' (RT)$
 $D = 0' 49' 53.7''$
 $L = 2,227.12'$
 $T = 1,123.36'$
 $R = 6,890.00'$
 $Se = RET. EXIST.$
 $DS = 60 MPH$
 $Runoff = N/A$

-Y10A-
 PI Sta 10+59.36
 $\Delta = 4' 13' 53.0'' (RT)$
 $D = 5' 00' 00.0''$
 $L = 84.63'$
 $T = 42.33'$
 $R = 1,145.92'$
 $Se = N/A$
 $DS = N/A$
 $Runoff = N/A$

-Y10A-
 PI Sta 14+48.44
 $\Delta = 6' 48' 52.7'' (RT)$
 $D = 1' 31' 11.2''$
 $L = 448.40'$
 $T = 224.46'$
 $R = 3,770.00'$
 $Se = RC$
 $DS = 40 MPH$
 $Runoff = 62.0'$

MATCHLINE -Y10A- STA 18+00.00
SEE PLAN SHEET EC-12


- ★ PROPOSED TRAFFIC SIGNAL
- ▣ PROPOSED PAVEMENT REMOVAL
- FOR -L- PROFILE, SEE SHEET NO. 17
- FOR -Y10A- PROFILE, SEE SHEET NO. 24

CLEARING AND GRUBBING
EROSION CONTROL FOR
CONSTRUCTION SHEET 09

NOTE:
PERIMETER EROSION CONTROL MEASURES SHALL BE
INSTALLED DURING CLEARING AND GRUBBING PHASE.

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

 ENVIRONMENTALLY SENSITIVE AREA
SEE PROJECT SPECIAL PROVISIONS

PROJECT REFERENCE NO.	SHEET NO.
R-5516	EC-09/CONST.09
RW SHEET NO.	
<small>Prepared in the Office of:</small> 	

MATCHLINE -L- STA 120+00.00
SEE PLAN SHEET EC-08



-L-
 PI Sta 121+72.18
 $\Delta = 23^{\circ} 45' 41.1''$ (RT)
 $D = 0^{\circ} 49' 53.7''$
 $L = 2,857.39'$
 $T = 1,449.53'$
 $R = 6,890.00'$
 $Se = RET. EXIST.$
 $DS = 60$ MPH
 $Runoff = N/A$

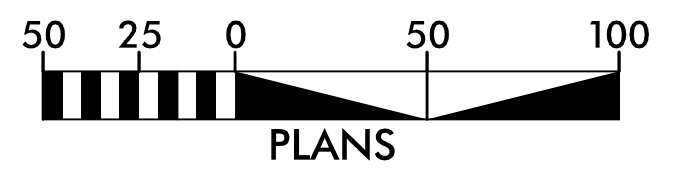
DATE/TIME: 23:06:56 PM
 Draw: R:\Environmental\Design\556_r\ec09.dgn

FOR -L- PROFILE, SEE SHEET NO. 18

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

NOTE: PERIMETER EROSION CONTROL MEASURES SHALL BE INSTALLED DURING CLEARING AND GRUBBING PHASE.



NC GRID
NAD 83 NA 2011

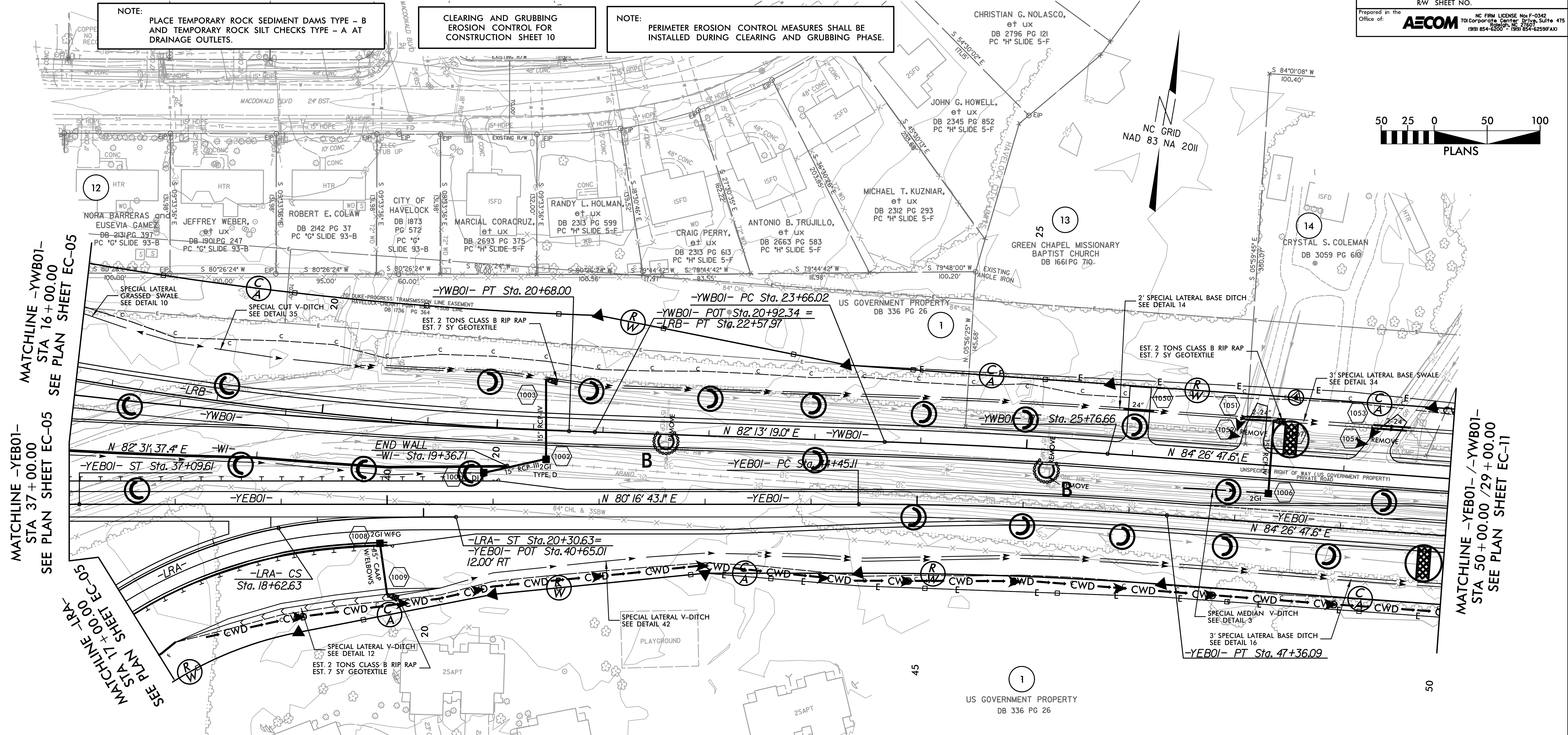
MATCHLINE -YWB01-
STA 16+00.00
SEE PLAN SHEET EC-05

MATCHLINE -YEB01-
STA 37+00.00
SEE PLAN SHEET EC-05

MATCHLINE -YWB01-
STA 16+00.00
SEE PLAN SHEET EC-05

MATCHLINE -YEB01-
STA 37+00.00
SEE PLAN SHEET EC-05

MATCHLINE -YWB01-
STA 50+00.00 /29+00.00
SEE PLAN SHEET EC-11



-LRA-
 PI Sta 16+09.21
 $\Delta = 89^{\circ} 38' 18.4''$ (RT)
 $D = 12' 54' 16.0''$
 $L = 694.63'$
 $T = 441.21'$
 $R = 444.00'$
 $Se = 0.08$
 $DS = 40$ MPH
 $Runoff = 168.0'$

-LRA-
 PIs Sta 19+18.82
 $\Delta = 10^{\circ} 50' 23.1''$
 $Ls = 168.00'$
 $LT = 112.21'$
 $ST = 56.19'$

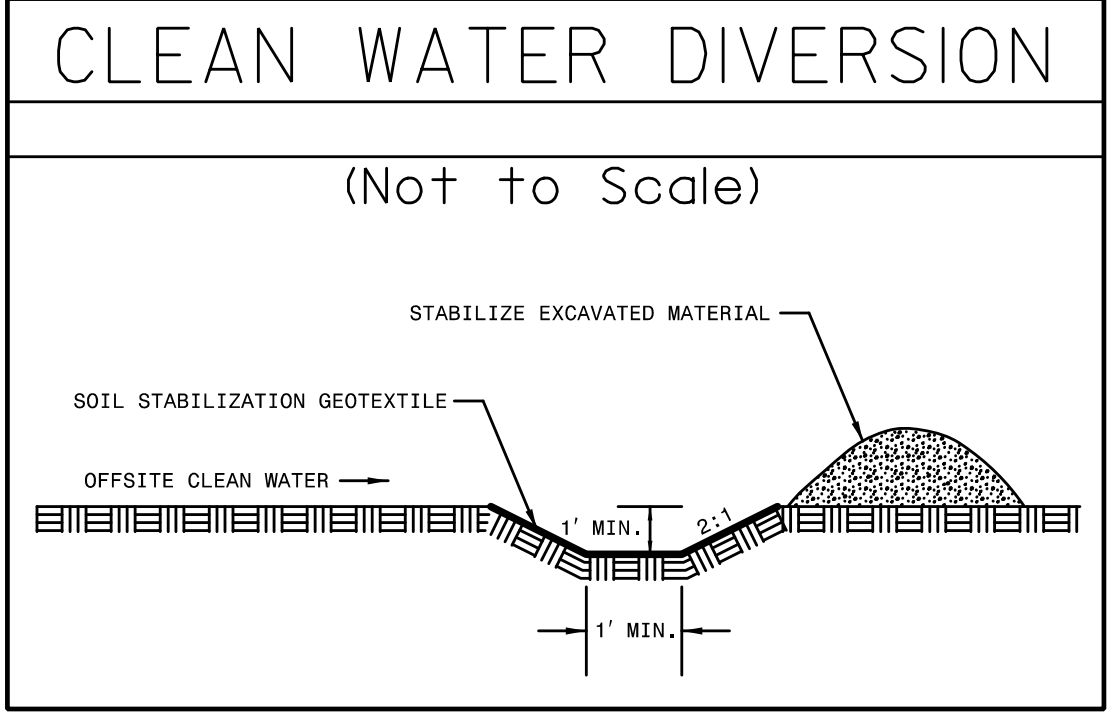
-LRB-
 PI Sta 19+49.36
 $\Delta = 9^{\circ} 40' 46.0''$ (LT)
 $D = 1' 33' 52.1''$
 $L = 618.70'$
 $T = 310.09'$
 $R = 3,662.29'$
 $Se = RC$
 $DS = 40$ MPH
 $Runoff = 121.5'$

-YEB01-
 PIs Sta 36+13.64
 $\Delta = 4^{\circ} 57' 08.4''$
 $Ls = 144.00'$
 $LT = 96.04'$
 $ST = 48.03'$

-YEB01-
 PI Sta 45+90.66
 $\Delta = 4^{\circ} 10' 04.6''$ (RT)
 $D = 1' 25' 56.6''$
 $L = 290.98'$
 $T = 145.55'$
 $R = 4,000.00'$
 $Se = 0.025$
 $DS = 40$ MPH
 $Runoff = 144.0'$

-YWB01-
 PI Sta 17+02.36
 $\Delta = 6^{\circ} 59' 27.5''$ (LT)
 $D = 0^{\circ} 57' 17.3''$
 $L = 732.19'$
 $T = 366.55'$
 $R = 6,000.83'$
 $Se = 0.025$
 $DS = 40$ MPH
 $Runoff = N/A$

-YWB01-
 PI Sta 24+71.35
 $\Delta = 2^{\circ} 13' 28.6''$ (RT)
 $D = 1' 03' 22.1''$
 $L = 210.64'$
 $T = 105.33'$
 $R = 5,425.00'$
 $Se = 0.025$
 $DS = 40$ MPH
 $Runoff = N/A$



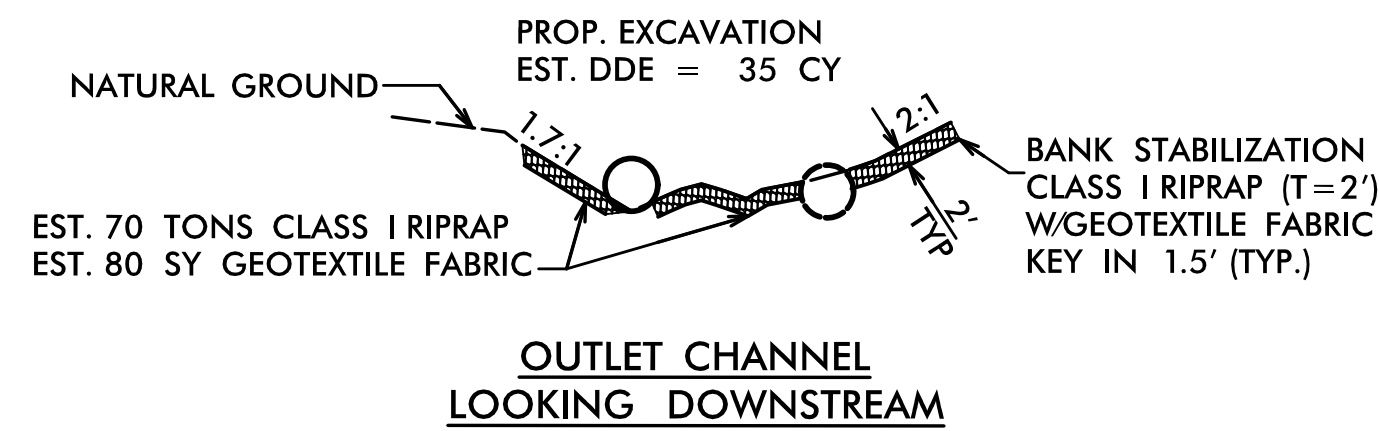
FOR -LRA- PROFILE, SEE SHEET NO. 18
 FOR -LRB- PROFILE, SEE SHEET NO. 19
 FOR -YWB01- PROFILE, SEE SHEET NO. 22
 FOR -YEB01- PROFILE, SEE SHEET NOS. 20 & 21

PHASE I

CONSTRUCTION SEQUENCE

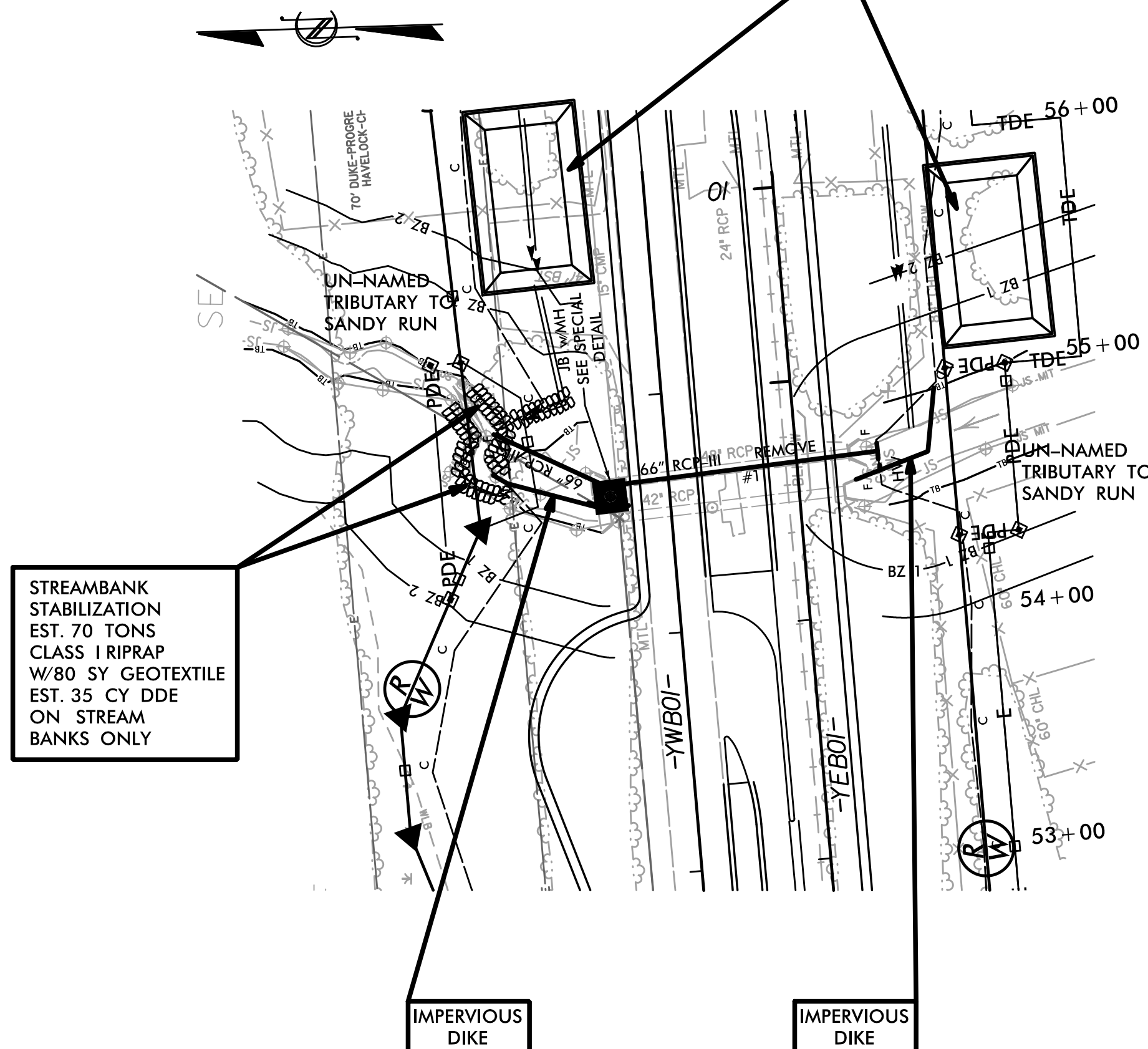
- YEB01- STA. 54+66.3 FOR 1 66" RCP
- YEB01- STA. 54+79.3 FOR 1 66" RCP

1. CONSTRUCT STILLING BASINS, MINIMUM VOLUME REQUIRED = 267 CY EACH.
2. INSTALL IMPERVIOUS DIKES AND DIVERT FLOW INTO THE EXISTING 42" RCP.
3. WHILE PUMPING EFFLUENT INTO THE STILLING BASINS, REMOVE THE EXISTING 48" RCP AND HEAD WALLS.
4. CONSTRUCT 66" RCP #1 IN THE LOCATION OF THE EXISTING 48" RCP AND HALF OF THE JB, PART OF THE HW AND THE RIP RAP BANK STABILIZATION AT THE OUTLET OF THE CHANNEL.



NOTE:
ALL WORK SHALL BE DONE IN THE DRY. ONLY DISTURB AN AREA THAT CAN BE STABILIZED AT THE END OF EACH WORK DAY.

STILLING BASIN STORAGE (267 CY) EACH
60' X 30' X 4' DEPTH
1' UNDERCUT BELOW BED
1' TOP OF BERM
1' FREEBOARD
1.5:1 SIDES



PHASE II

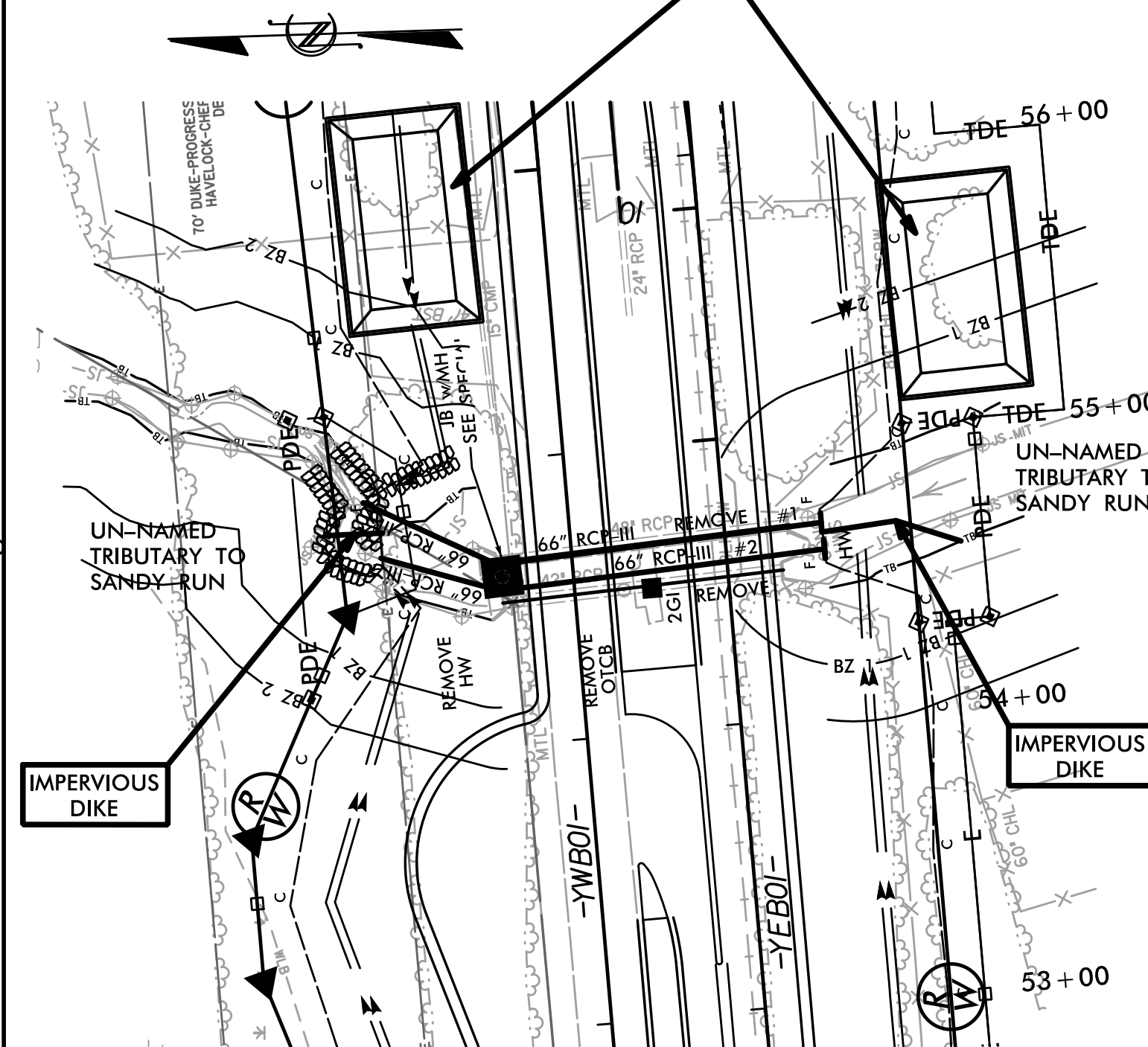
CONSTRUCTION SEQUENCE

- YEB01- STA. 54+66.3 FOR 1 66" RCP
- YEB01- STA. 54+79.3 FOR 1 66" RCP

1. MODIFY IMPERVIOUS DIKES AT THE INLET AND OUTLET OF STREAM.
2. DIVERT FLOW INTO THE NEWLY CONSTRUCTED 66" RCP
3. WHILE PUMPING EFFLUENT INTO THE STILLING BASINS, REMOVE THE 42" RCP ALONG WITH THE HW AT THE INLET AND OUTLET
4. CONSTRUCT 66" RCP #2. COMPLETE THE HW, AND JB CONSTRUCTION AND THE RIP RAP BANK STABILIZATION AT THE OUTLET OF THE CHANNEL.

NOTE:
ALL WORK SHALL BE DONE IN THE DRY. ONLY DISTURB AN AREA THAT CAN BE STABILIZED AT THE END OF EACH WORK DAY.

STILLING BASIN STORAGE (267 CY) EACH
60' X 30' X 4' DEPTH
1' UNDERCUT BELOW BED
1' TOP OF BERM
1' FREEBOARD
1.5:1 SIDES

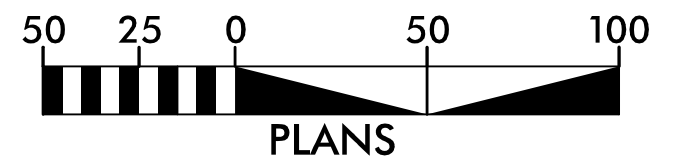
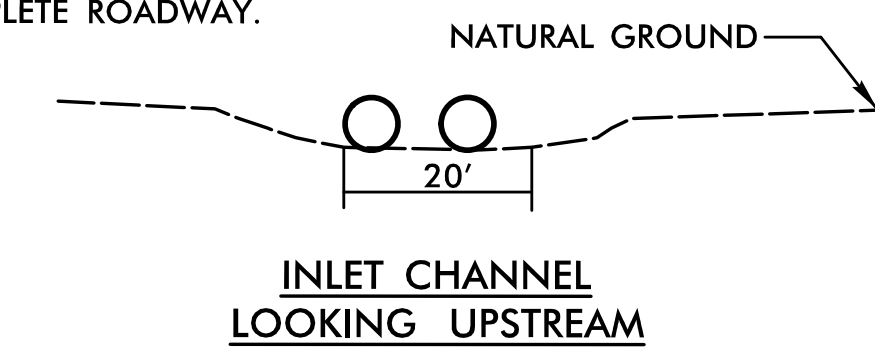


PHASE III

CONSTRUCTION SEQUENCE

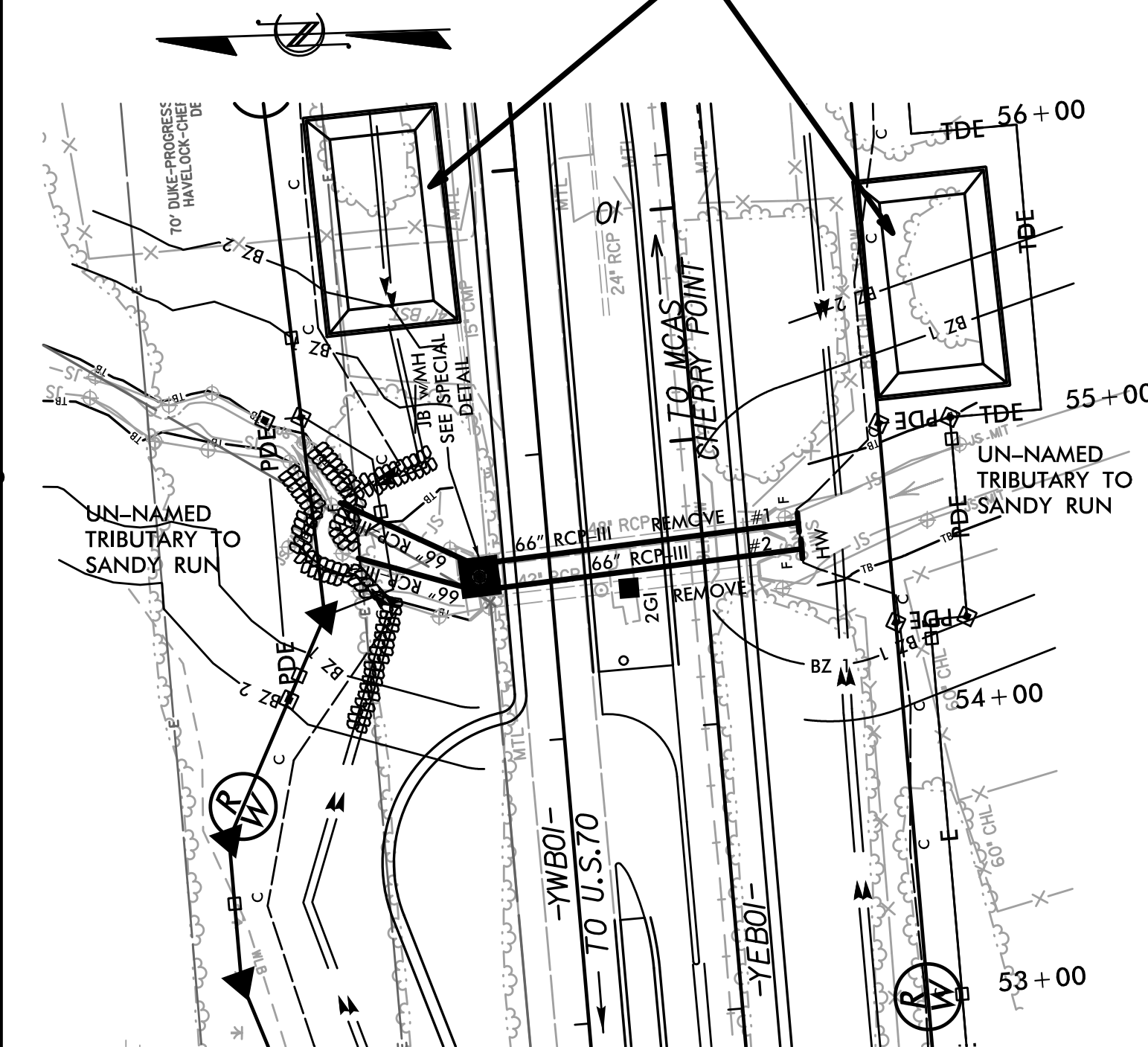
- YEB01- STA. 54+66.3 FOR 1 66" RCP
- YEB01- STA. 54+79.3 FOR 1 66" RCP

1. REMOVE IMPERVIOUS DIKES AND STILLING BASINS.
2. STABILIZE ALL DISTURBED AREAS.
2. COMPLETE ROADWAY.



NOTE:
ALL WORK SHALL BE DONE IN THE DRY. ONLY DISTURB AN AREA THAT CAN BE STABILIZED AT THE END OF EACH WORK DAY.

STILLING BASIN STORAGE (267 CY) EACH
60' X 30' X 4' DEPTH
1' UNDERCUT BELOW BED
1' TOP OF BERM
1' FREEBOARD
1.5:1 SIDES

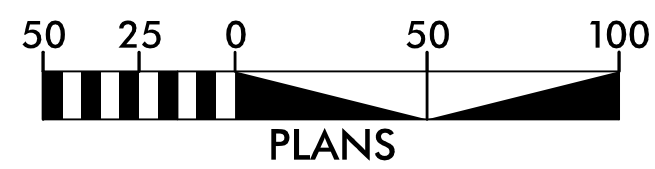


CLEARING AND GRUBBING
EROSION CONTROL FOR
CONSTRUCTION SHEET 12

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

NOTE:
PERIMETER EROSION CONTROL MEASURES SHALL BE
INSTALLED DURING CLEARING AND GRUBBING PHASE.

-Y10A-
PI Sta 28+29.17
 $\Delta = 77' 38" 38.6" (LT)$
 $D = 10' 44" 58.8"$
 $L = 722.29'$
 $T = 428.88'$
 $R = 533.00'$
 $Se = 0.060$
 $DS = 40 MPH$
 $Runoff = 126.0'$



MATCHLINE -Y10A- STA 18+00.00
SEE PLAN SHEET EC-08

MATCHLINE -Y10A- STA 31+50.00
SEE PLAN SHEET EC-13

-Y10A- PT Sta. 31+22.58

-Y09A- POT Sta. 10+00.00 =
-Y10A- POC Sta. 27+14.31

-Y09A- PC Sta. 10+82.34

-Y10A- PC Sta. 24+00.29

-Y09A-
PI Sta 11+56.79
 $\Delta = 33' 10' 07.8" (RT)$
 $D = 22' 55' 05.9"$
 $L = 144.73'$
 $T = 74.45'$
 $R = 250.00'$
 $Se = 0.06$
 $DS = 30 MPH$
 $Runoff = 102.0'$

-Y09A- PT Sta. 12+2

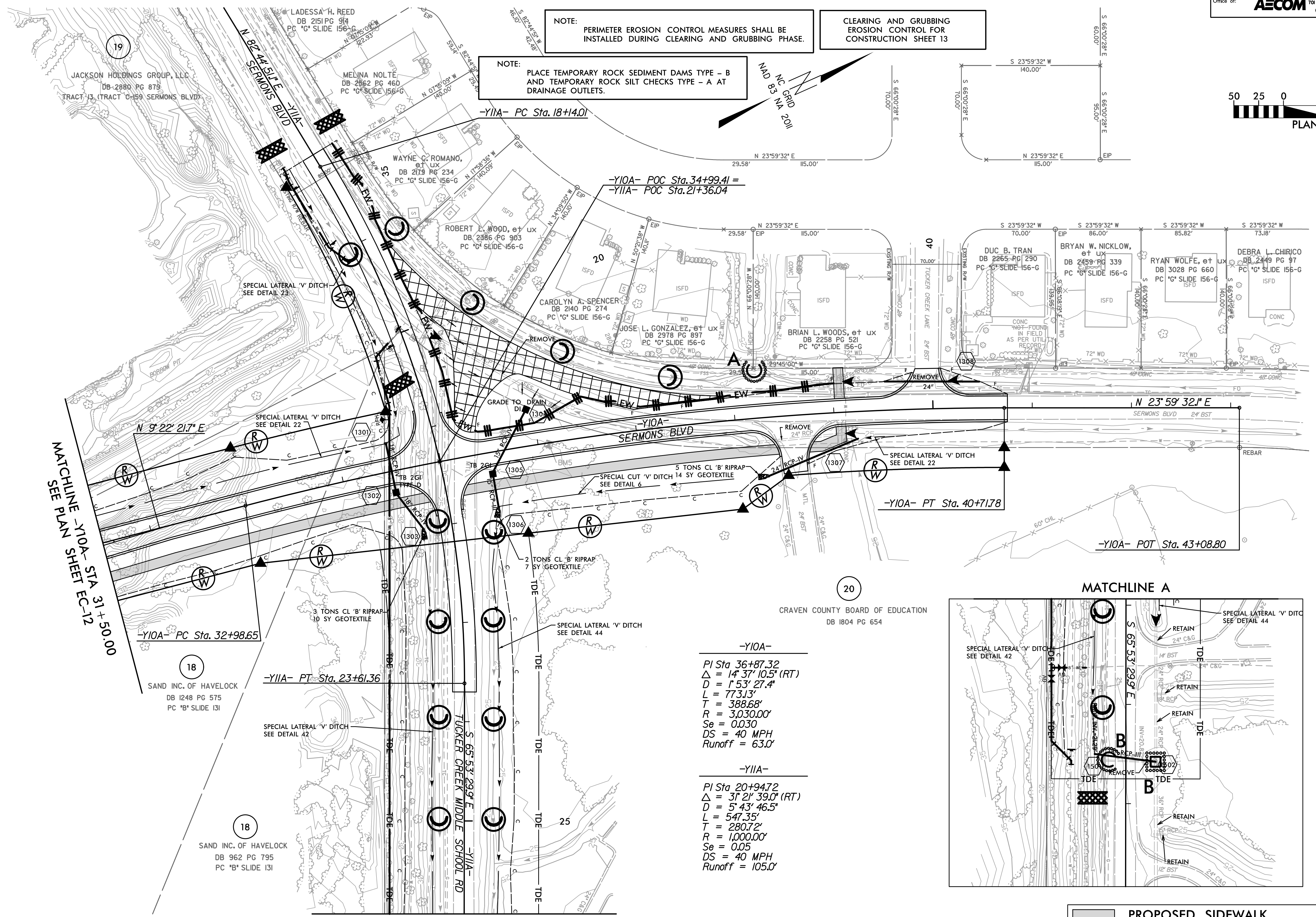
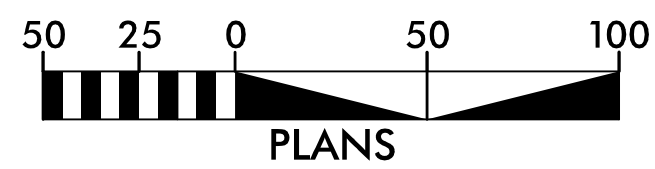
MATCHLINE -Y09A- STA 14+00.00
SEE PLAN SHEET EC-14

PROPOSED SIDEWALK
FOR -Y09A- PROFILE, SEE SHEET NO. 23
FOR -Y10A- PROFILE, SEE SHEET NO. 24

NOTE: PERIMETER EROSION CONTROL MEASURES SHALL BE INSTALLED DURING CLEARING AND GRUBBING PHASE.

CLEARING AND GRUBBING EROSION CONTROL FOR CONSTRUCTION SHEET 13

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

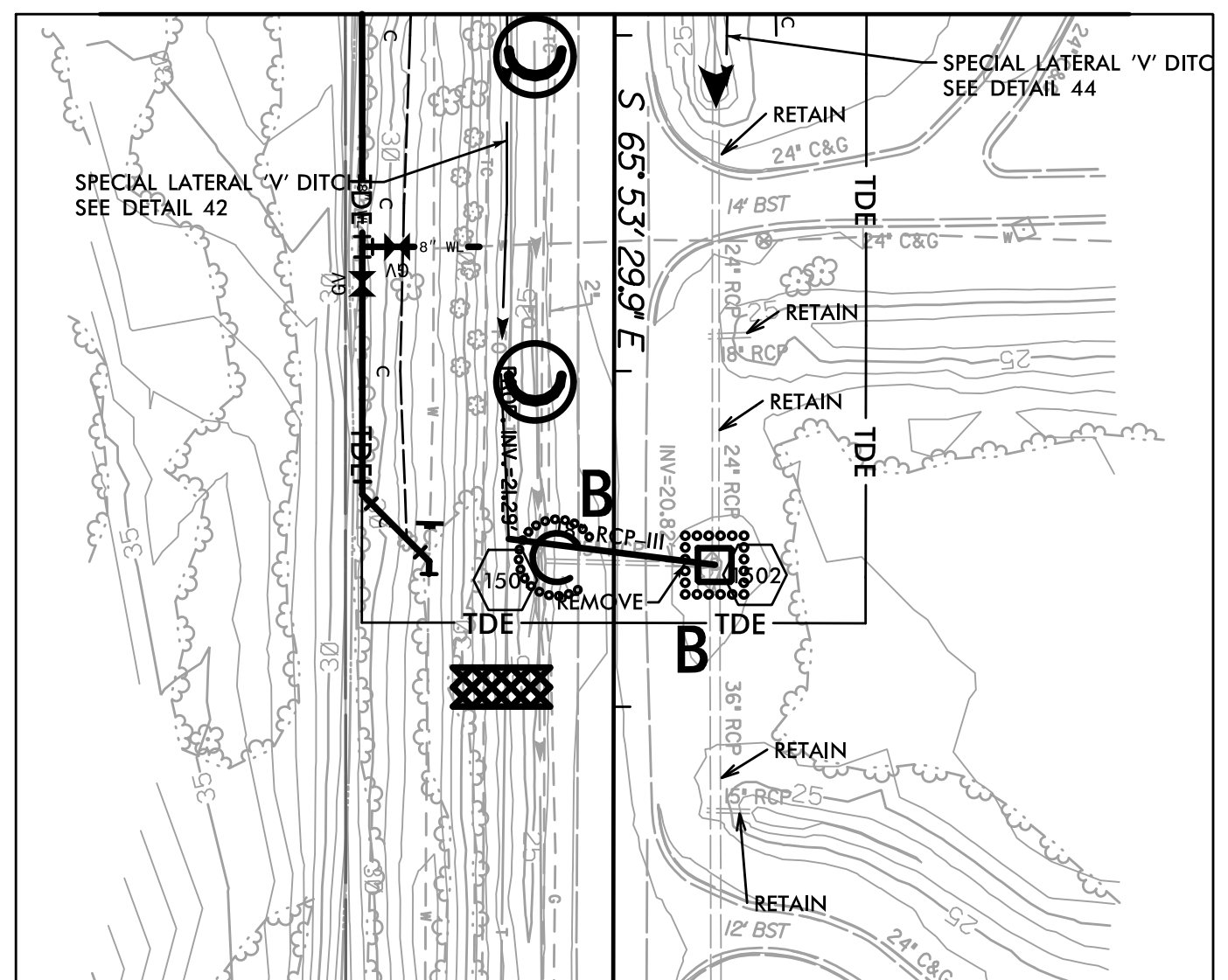


-Y10A-

PI Sta. 36+87.32
 $\Delta = 14' 37' 10.5''$ (RT)
 $D = 1' 53' 27.4''$
 $L = 773.13'$
 $T = 388.68'$
 $R = 3,030.00'$
 $Se = 0.030$
 $DS = 40$ MPH
 $Runoff = 63.0'$

-Y11A-

PI Sta. 20+94.72
 $\Delta = 31' 21' 39.0''$ (RT)
 $D = 5' 43' 46.5''$
 $L = 547.35'$
 $T = 280.72'$
 $R = 1,000.00'$
 $Se = 0.05$
 $DS = 40$ MPH
 $Runoff = 105.0'$



PROPOSED SIDEWALK
 PROPOSED PAVEMENT REMOVAL
 FOR -Y10A- PROFILE, SEE SHEET NO. 25
 FOR -Y11A- PROFILE, SEE SHEET NO. 25

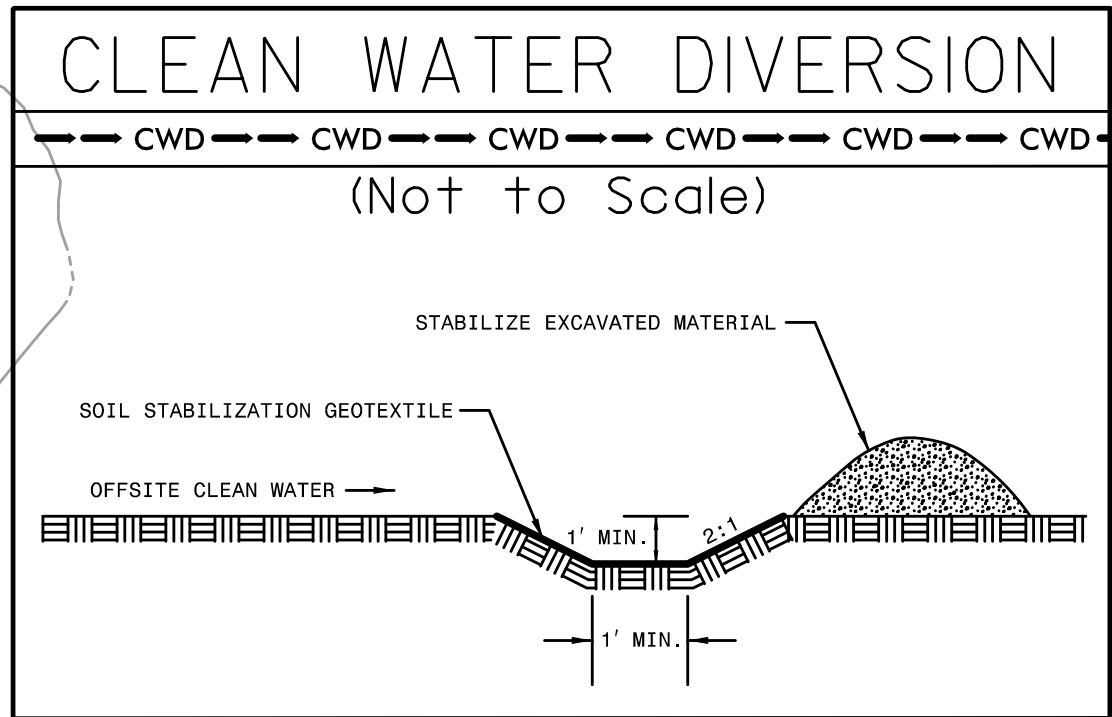
 ENVIRONMENTALLY SENSITIVE AREA
SEE PROJECT SPECIAL PROVISIONS

NOTE: PERIMETER EROSION CONTROL MEASURES SHALL BE INSTALLED DURING CLEARING AND GRUBBING PHASE.

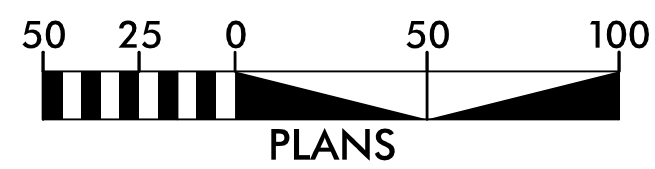
CLEARING AND GRUBBING EROSION CONTROL FOR CONSTRUCTION SHEET 14

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

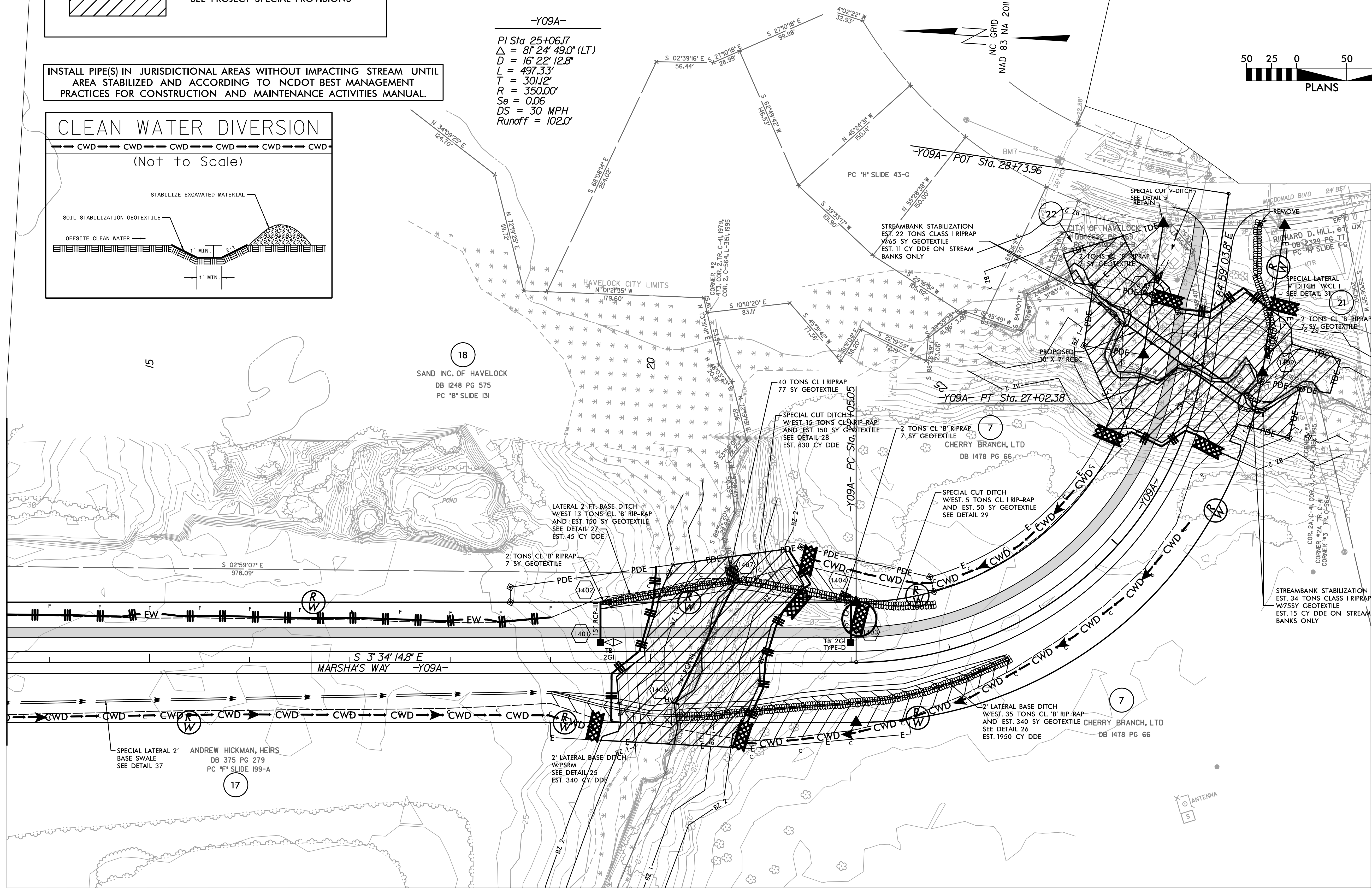
INSTALL PIPE(S) IN JURISDICTIONAL AREAS WITHOUT IMPACTING STREAM UNTIL AREA STABILIZED AND ACCORDING TO NCDOT BEST MANAGEMENT PRACTICES FOR CONSTRUCTION AND MAINTENANCE ACTIVITIES MANUAL.



-Y09A-
PI Sta 25+06.17
 $\Delta = 81^{\circ} 24' 49.0''$ (LT)
 $D = 16' 22'' 12.8''$
 $L = 497.33'$
 $T = 301.12'$
 $R = 350.00'$
 $S_e = 0.06$
 $DS = 30$ MPH
 $Runoff = 102.0'$

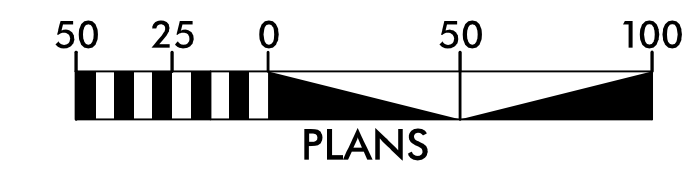


MATCHLINE -Y09A- STA 14+00.00
SEE PLAN SHEET EC-12



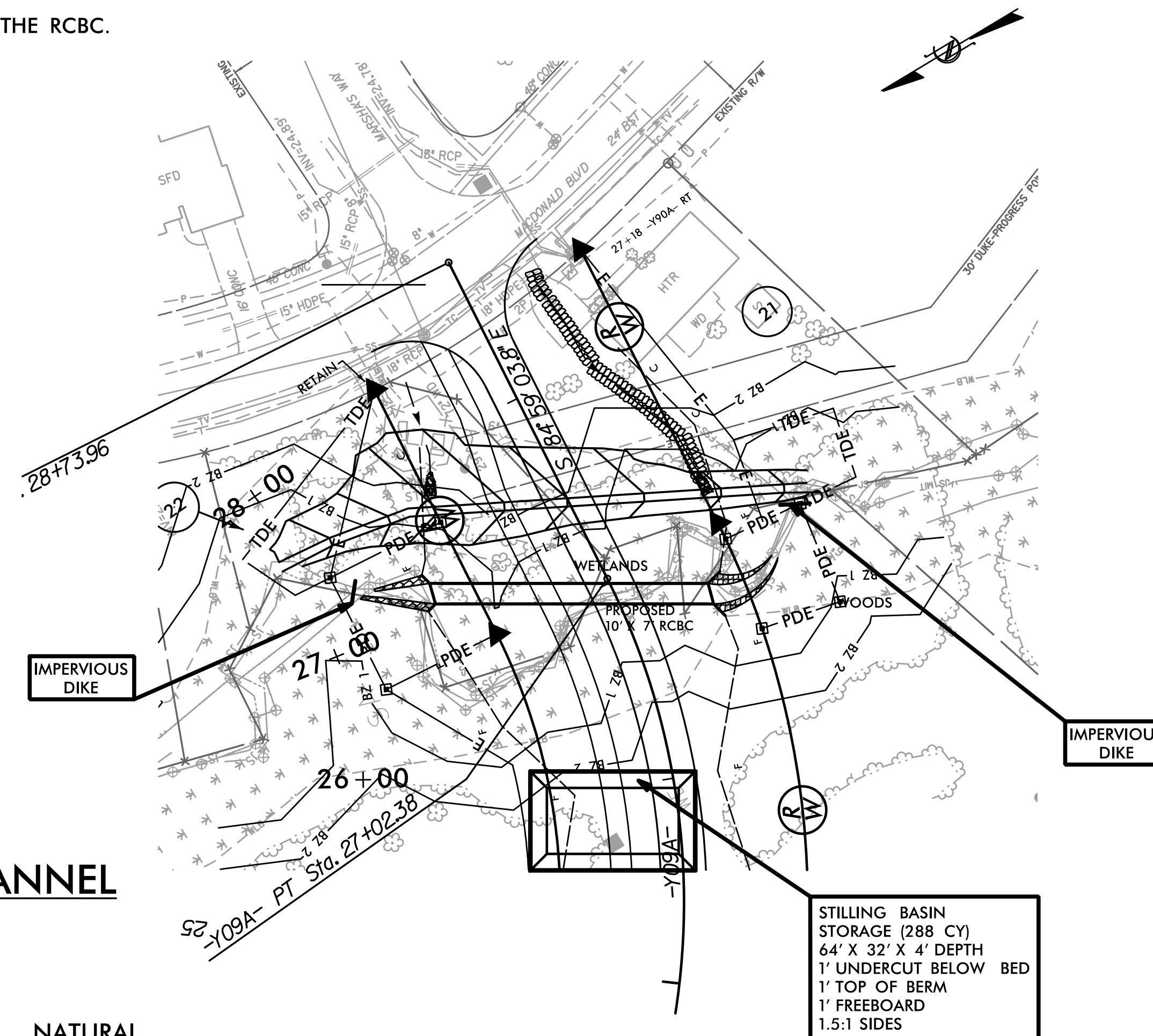
 PROPOSED SIDEWALK
FOR -Y09A- PROFILE, SEE SHEET NO. 23

CONSTRUCTION SEQUENCE STA. 26+87.53 -Y09A- FOR SINGLE BARREL 10' X 7' RCBC W/BEVELED HEADWALL

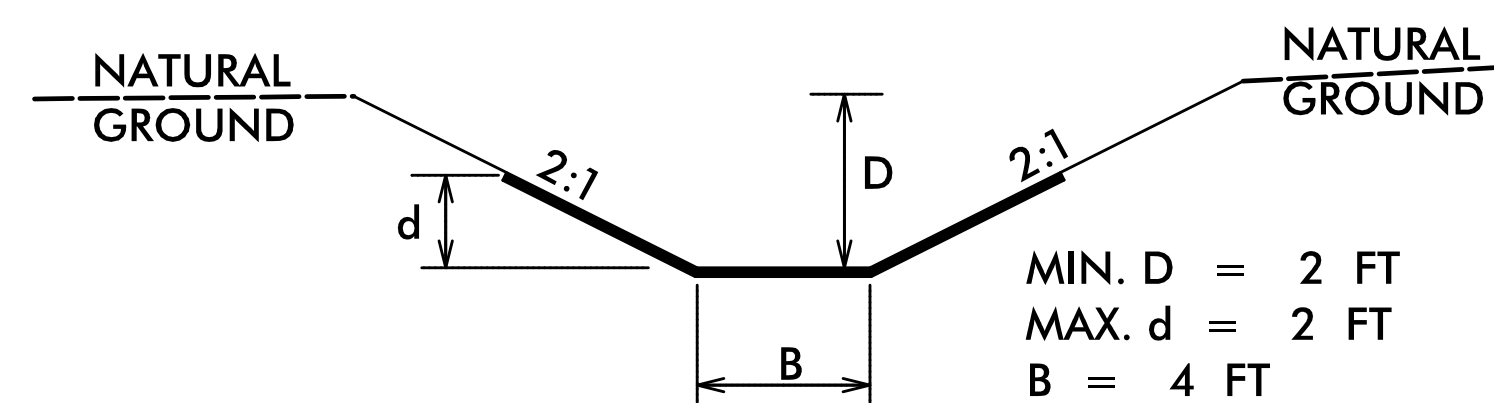


1. CONSTRUCT STILLING BASIN, MINIMUM VOLUME REQUIRED = 288 CY.
2. CONSTRUCT TEMPORARY DIVERSION CHANNEL AND IMPERVIOUS DIKES AND DIVERT FLOW INTO DIVERSION CHANNEL.
3. CONSTRUCT 10' X 7' RCBC WHILE PUMPING EFFLUENT INTO THE STILLING BASIN.
4. CONSTRUCT INLET AND OUTLET CHANNELS AND INSTALL BANK STABILIZATION.
5. REMOVE IMPERVIOUS DIKES AND DIVERT FLOW THROUGH THE RCBC.
6. REMOVE DIVERSION CHANNEL AND STILLING BASIN.
7. STABILIZE ALL DISTURBED AREAS.
8. COMPLETE ROADWAY.

NOTE:
ALL WORK SHALL BE DONE IN THE DRY.
ONLY DISTURB AN AREA THAT CAN BE STABILIZED AT THE END OF EACH WORK DAY.



TEMPORARY DIVERSION CHANNEL (NOT TO SCALE)



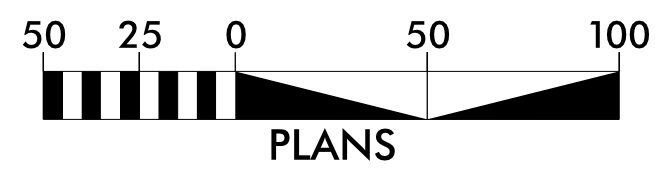
TYPE OF LINER = GEOTEXTILE FOR SOIL STABILIZATION

-L-	-LRA-	-LRB-	-YEB01-
PI Sta 75+56.92 $\Delta = 4' 33" 25.9" (RT)$ $D = 2' 00" 00.0"$ $L = 227.86'$ $T = 113.99'$ $R = 2,864.79'$ $Se = 0.04$ $DS = 50 MPH$ $Runoff = 144.0'$	PIs Sta 11+12.21 $\Theta s = 10' 50" 23.1"$ $Ls = 168.00'$ $LT = 112.21'$ $ST = 56.19'$	PI Sta 16+09.21 $\Delta = 89' 38" 18.4" (RT)$ $D = 12' 54" 16.0"$ $L = 694.63'$ $T = 441.21'$ $R = 444.00'$ $Se = 0.08$ $DS = 40 MPH$ $Runoff = 168.0'$	PI Sta 31+10.10 $\Delta = 76' 29" 46.8" (LT)$ $D = 6' 52" 41.7"$ $L = 1,112.15'$ $T = 656.64'$ $R = 833.00'$ $Se = 0.06$ $DS = 50 MPH$ $Runoff = 144.0'$

-YWB01-
PI Sta 12+78.54 $\Delta = 120' 15" 08.0" (RT)$ $D = 35' 48" 35.5"$ $L = 335.81'$ $T = 278.54'$ $R = 160.00'$ $Se = 0.06$ $DS = 20 MPH$ $Runoff = 175.0'$

-YWB01-
PI Sta 17+02.36 $\Delta = 6' 59" 27.5" (LT)$ $D = 0' 57" 17.3"$ $L = 732.19'$ $T = 366.55'$ $R = 6000.83'$ $Se = NC$ $DS = 40 MPH$ $Runoff = N/A$

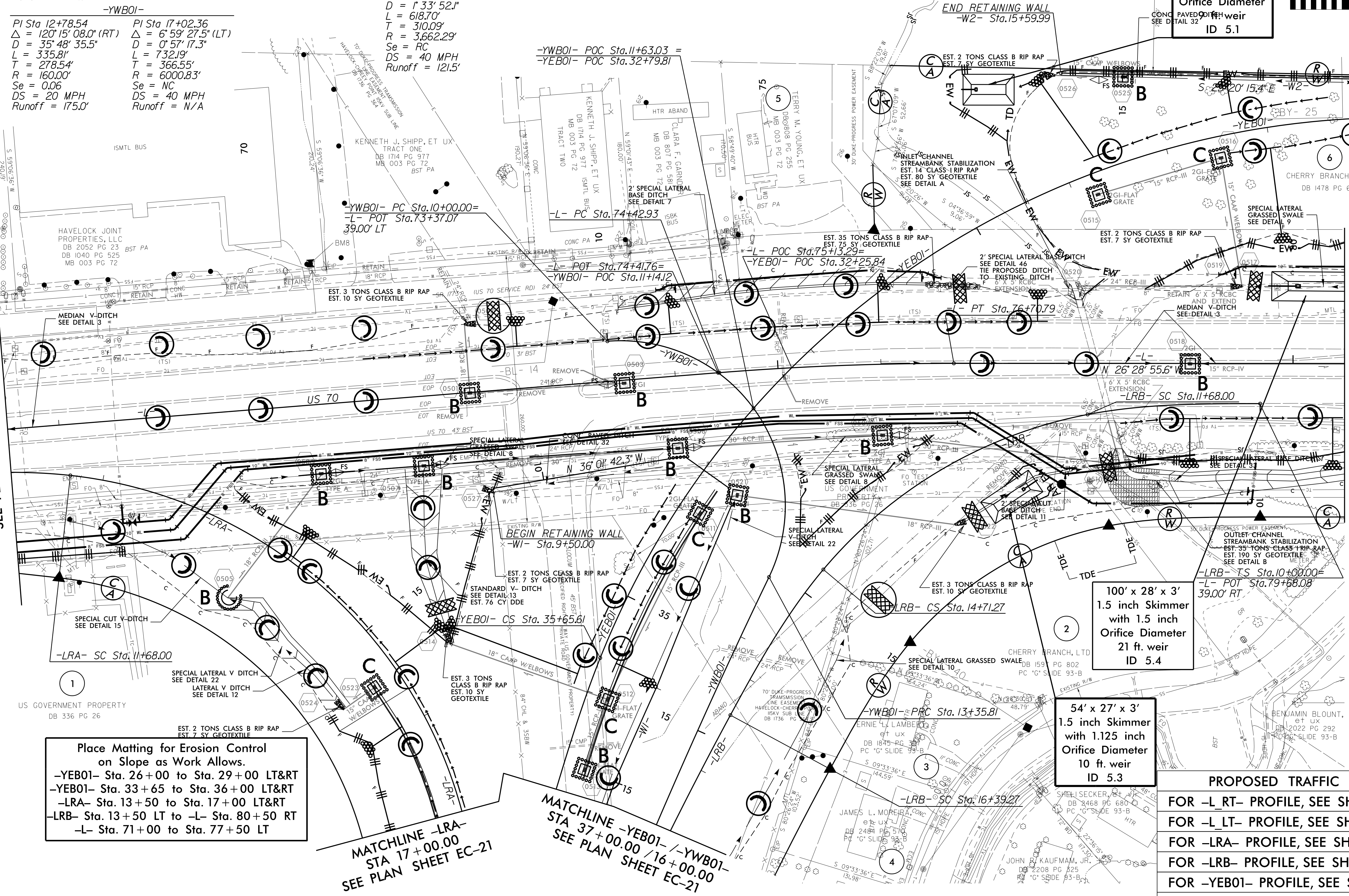
-LRB-
PI Sta 19+49.36 $\Delta = 9' 40" 46.0" (LT)$ $D = 1' 33" 52.1"$ $L = 618.70'$ $T = 310.09'$ $R = 3,662.29'$ $Se = RC$ $DS = 40 MPH$ $Runoff = 121.5'$



50' x 25' x 3'
1.5 inch Skimmer
with 1.0 inch
Orifice Diameter
ID 5.1

MATCHLINE -L- STA 67+50.00
SEE PLAN SHEET EC-15

MATCHLINE -L- STA 80+50.00
SEE PLAN SHEET EC-17



Place Matting for Erosion Control
on Slope as Work Allows.
 -YEB01- Sta. 26+00 to Sta. 29+00 LT&RT
 -YEB01- Sta. 33+65 to Sta. 36+00 LT&RT
 -LRA- Sta. 13+50 to Sta. 17+00 LT&RT
 -LRB- Sta. 13+50 LT to -L- Sta. 80+50 RT
 -L- Sta. 71+00 to Sta. 77+50 LT

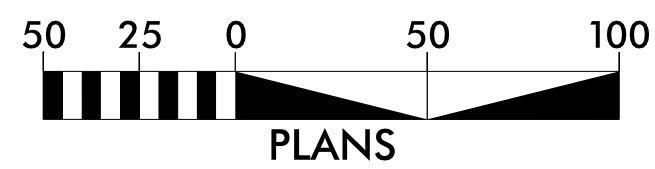
100' x 28' x 3'
1.5 inch Skimmer
with 1.5 inch
Orifice Diameter
21 ft. weir
ID 5.4

54' x 27' x 3'
1.5 inch Skimmer
with 1.125 inch
Orifice Diameter
10 ft. weir
ID 5.3

PROPOSED TRAFFIC SIGNAL	
FOR -L RT- PROFILE, SEE SHEET NO. 15	
FOR -L LT- PROFILE, SEE SHEET NO. 16	
FOR -LRA- PROFILE, SEE SHEET NO. 18	
FOR -LRB- PROFILE, SEE SHEET NO. 19	
FOR -YEB01- PROFILE, SEE SHEET NO. 20	
FOR -YWB01- PROFILE, SEE SHEET NO. 21	

MATCHLINE -LRA- STA 17+00.00
SEE PLAN SHEET EC-21

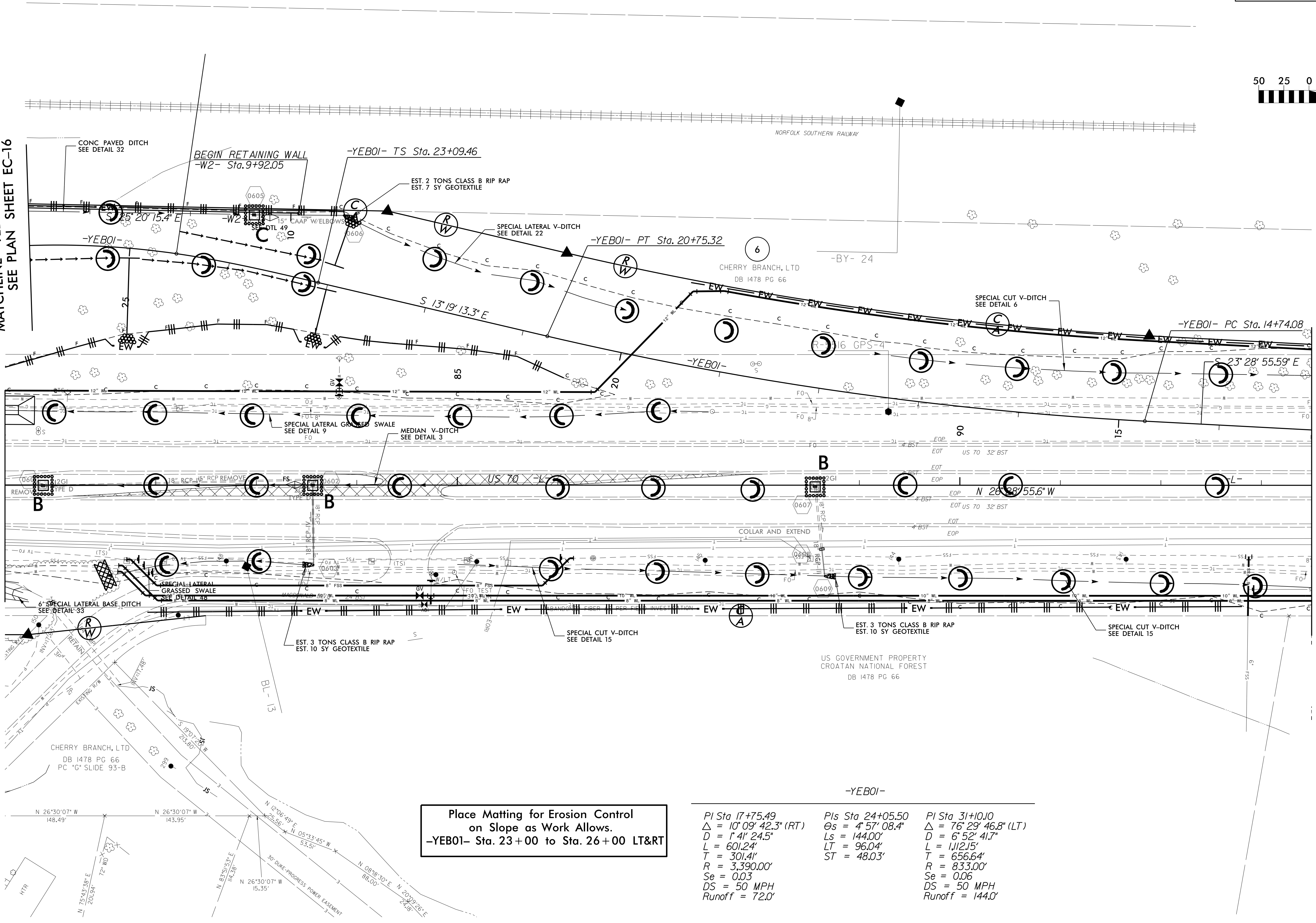
MATCHLINE -YEB01- / -YWB01- STA 37+00.00 / 16+00.00
SEE PLAN SHEET EC-21



MATCHLINE -YEB01- STA 26+00.00
SEE PLAN SHEET EC-16

MATCHLINE -L- STA 80+50.00
SEE PLAN SHEET EC-16

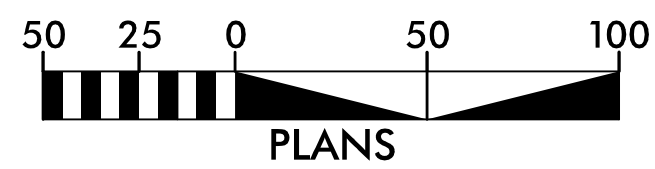
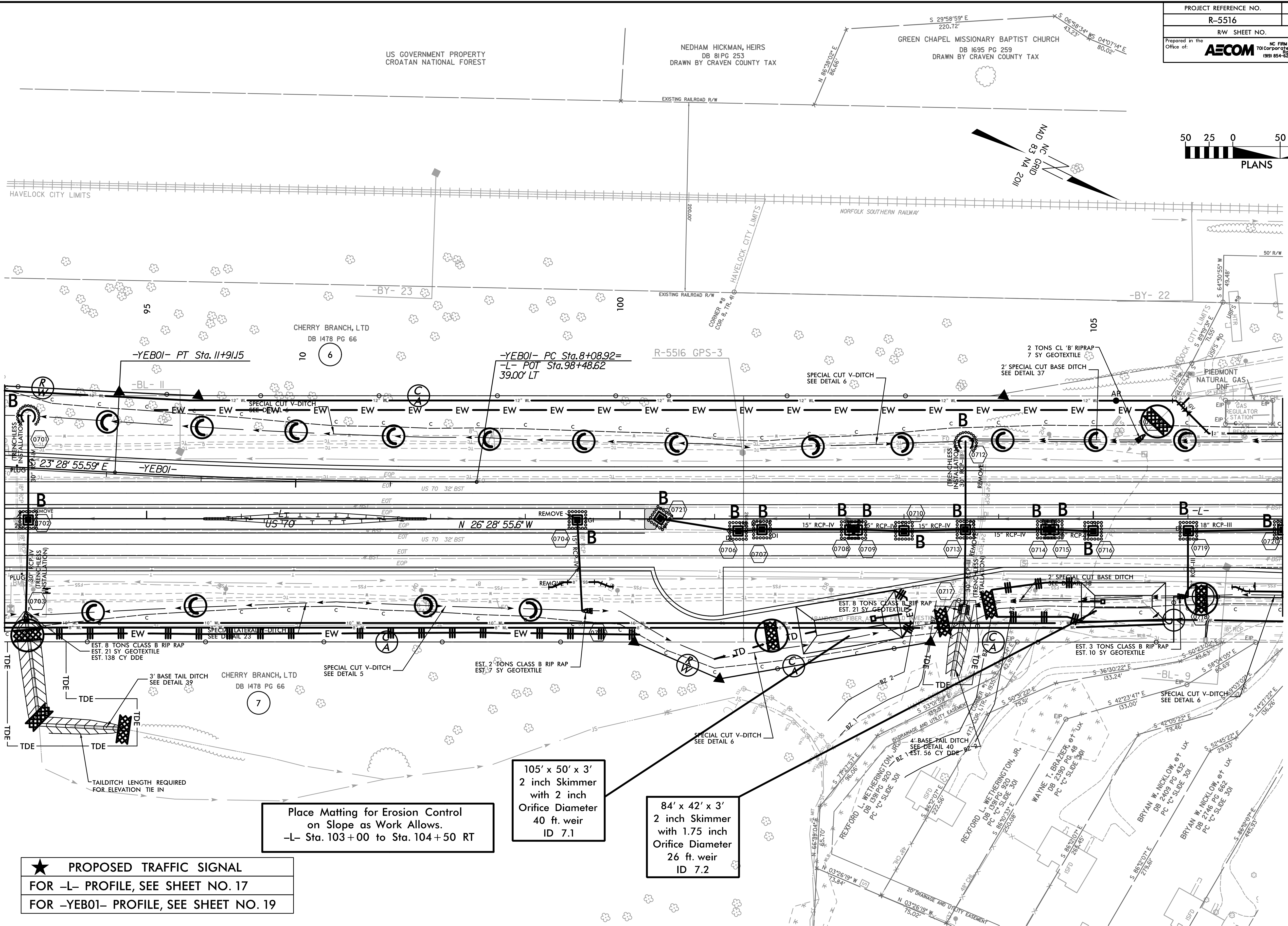
MATCHLINE -L- /-YEB01-
STA 93+50.00 /13+07.88
SEE PLAN SHEET EC-18



Place Matting for Erosion Control
on Slope as Work Allows.
-YEB01- Sta. 23+00 to Sta. 26+00 LT&RT

PI Sta 17+75.49 $\Delta = 10^{\circ}09'42.3"$ (RT) $D = 1^{\circ}41'24.5"$ $L = 601.24'$ $T = 301.41'$ $R = 3,390.00'$ $Se = 0.03$ $DS = 50$ MPH $Runoff = 72.0'$	PIs Sta 24+05.50 $\Theta_s = 4^{\circ}57'08.4"$ $Ls = 144.00'$ $LT = 96.04'$ $ST = 48.03'$	PI Sta 31+10.10 $\Delta = 76^{\circ}29'46.8"$ (LT) $D = 6^{\circ}52'41.7"$ $L = 1,112.15'$ $T = 656.64'$ $R = 833.00'$ $Se = 0.06$ $DS = 50$ MPH $Runoff = 144.0'$
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FOR -L- PROFILE, SEE SHEET NO. 16
FOR -YEB01- PROFILE, SEE SHEET NOS. 19 & 20



MATCHLINE -L- /-YEB01-
STA 93+50.00 / STA 13+07.88
SEE PLAN SHEET EC-17

MATCHLINE -L- STA 107+00.00
SEE PLAN SHEET EC-19

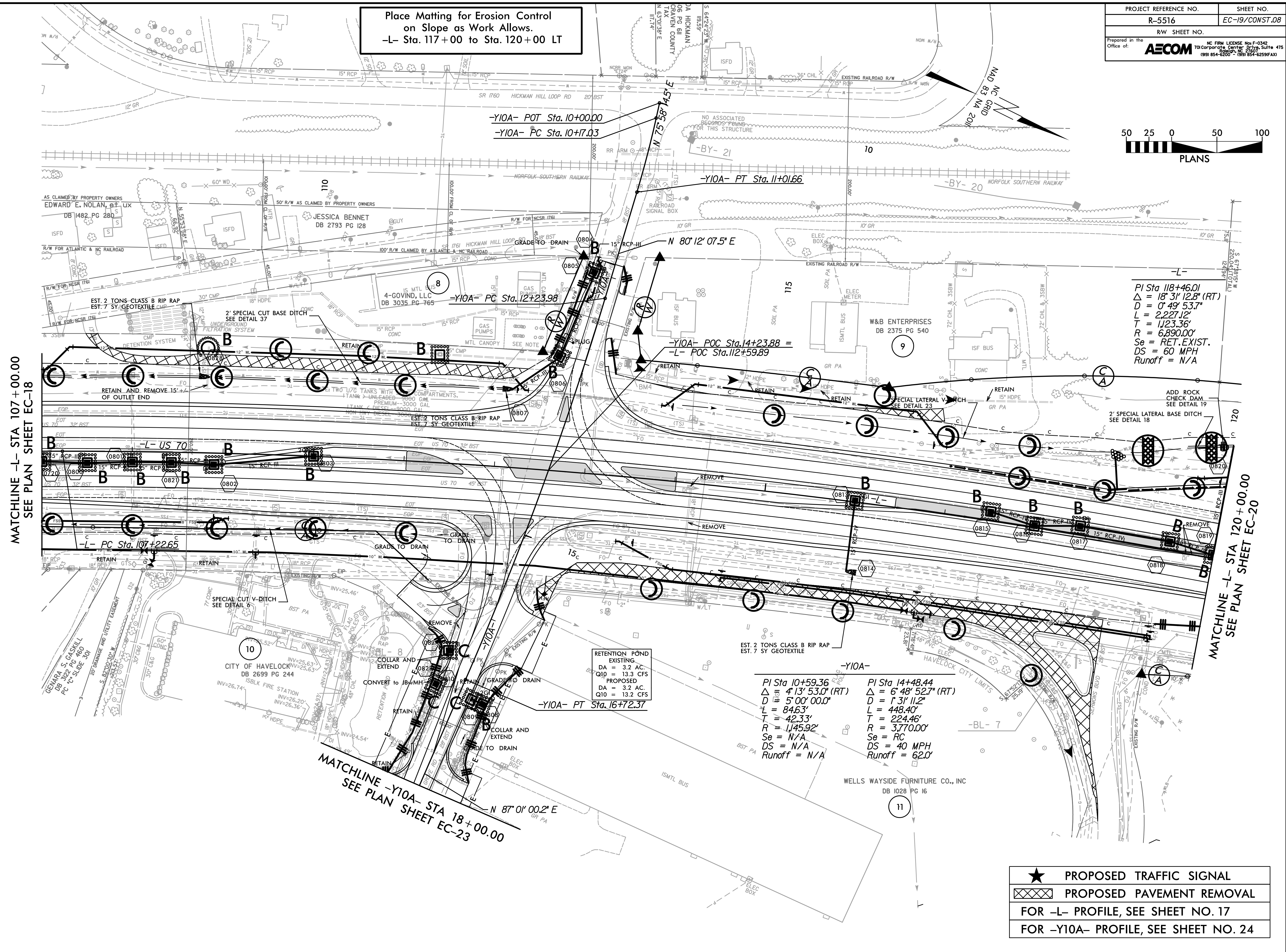
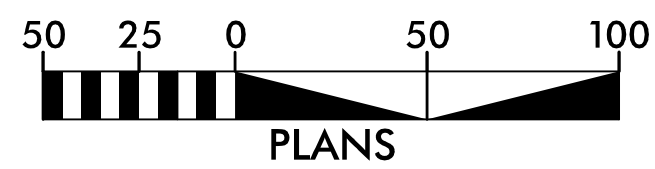
★ PROPOSED TRAFFIC SIGNAL
FOR -L- PROFILE, SEE SHEET NO. 17
FOR -YEB01- PROFILE, SEE SHEET NO. 19

Place Matting for Erosion Control
on Slope as Work Allows.
-L- Sta. 103+00 to Sta. 104+50 RT

105' x 50' x 3'
2 inch Skimmer
with 2 inch
Orifice Diameter
40 ft. weir
ID 7.1

84' x 42' x 3'
2 inch Skimmer
with 1.75 inch
Orifice Diameter
26 ft. weir
ID 7.2

Place Matting for Erosion Control on Slope as Work Allows.
 -L- Sta. 117+00 to Sta. 120+00 LT



-L-
 PI Sta 118+46.01
 $\Delta = 18' 31'' 12.8''$ (RT)
 $D = 0' 49'' 53.7''$
 $L = 2,227.12'$
 $T = 1,123.36'$
 $R = 6,890.00'$
 $Se = RET. EXIST.$
 $DS = 60$ MPH
 $Runoff = N/A$

-Y10A-
 PI Sta 10+59.36
 $\Delta = 4' 13'' 53.0''$ (RT)
 $D = 5' 00'' 00.0''$
 $L = 84.63'$
 $T = 42.33'$
 $R = 1,145.92'$
 $Se = N/A$
 $DS = N/A$
 $Runoff = N/A$

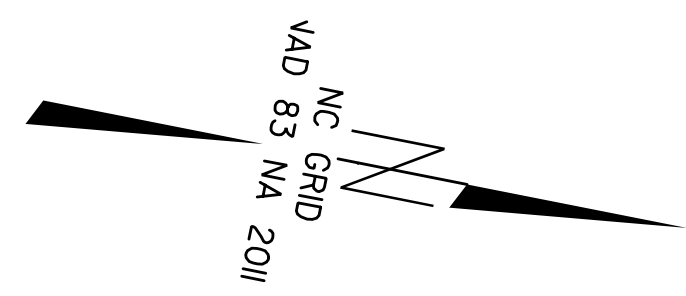
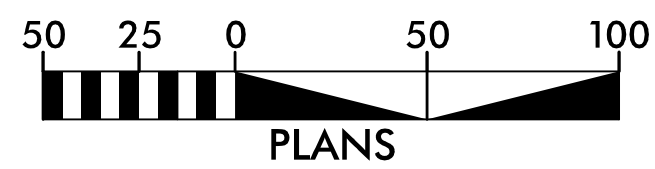
PI Sta 14+48.44
 $\Delta = 6' 48'' 52.7''$ (RT)
 $D = 1' 31'' 11.2''$
 $L = 448.40'$
 $T = 224.46'$
 $R = 3,770.00'$
 $Se = RC$
 $DS = 40$ MPH
 $Runoff = 62.0'$

RETENTION POND
 EXISTING
 $DA = 3.2$ AC.
 $Q_{10} = 13.3$ CFS
 PROPOSED
 $DA = 3.2$ AC.
 $Q_{10} = 13.2$ CFS

- ★ PROPOSED TRAFFIC SIGNAL
- ▣ PROPOSED PAVEMENT REMOVAL
- FOR -L- PROFILE, SEE SHEET NO. 17
- FOR -Y10A- PROFILE, SEE SHEET NO. 24

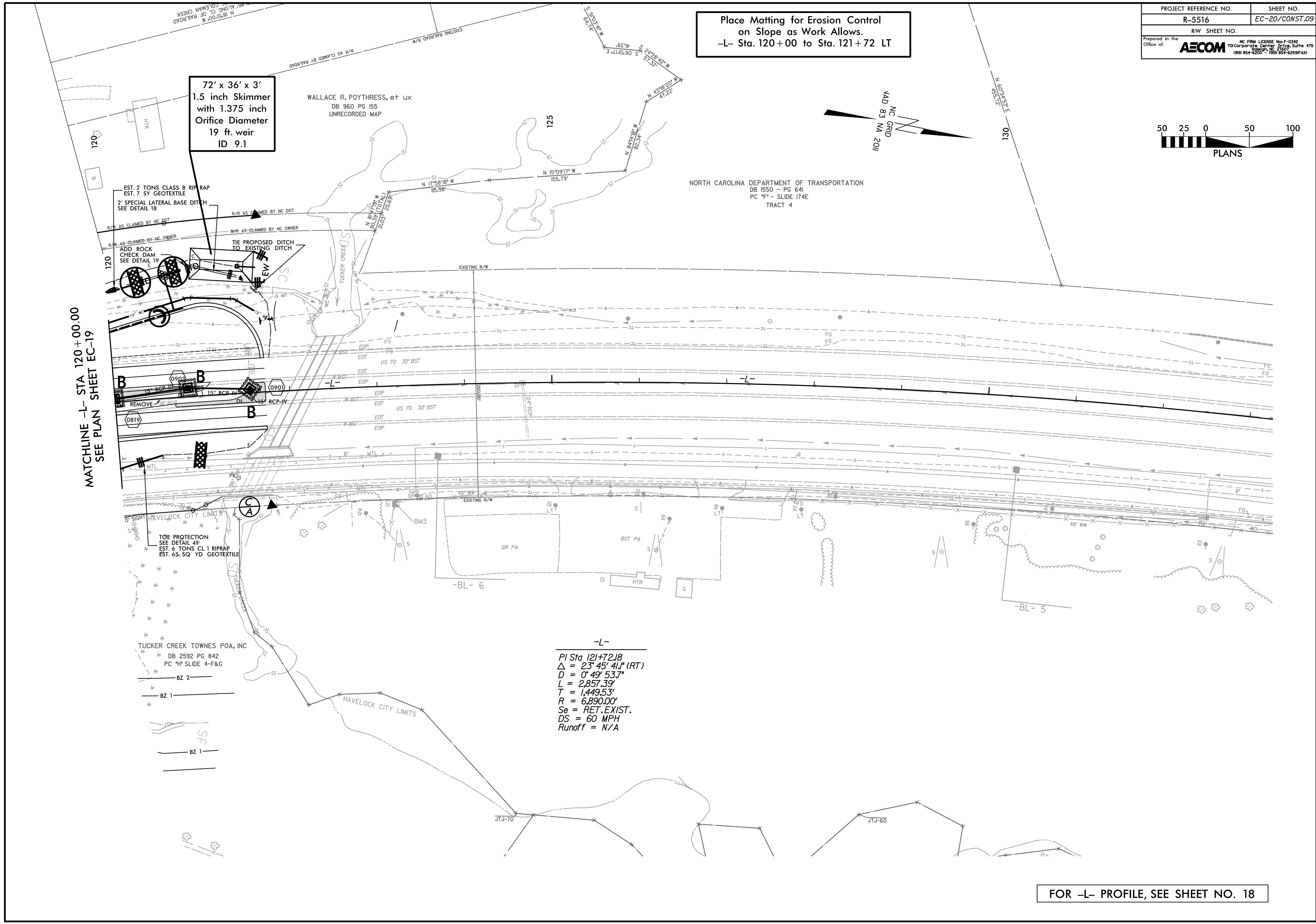
Place Matting for Erosion Control
on Slope as Work Allows.
-L- Sta. 120+00 to Sta. 121+72 LT

72' x 36' x 3'
1.5 inch Skimmer
with 1.375 inch
Orifice Diameter
19 ft. weir
ID 9.1



NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
DB 1550 - PG 641
PC *F* - SLIDE 174E
TRACT 4

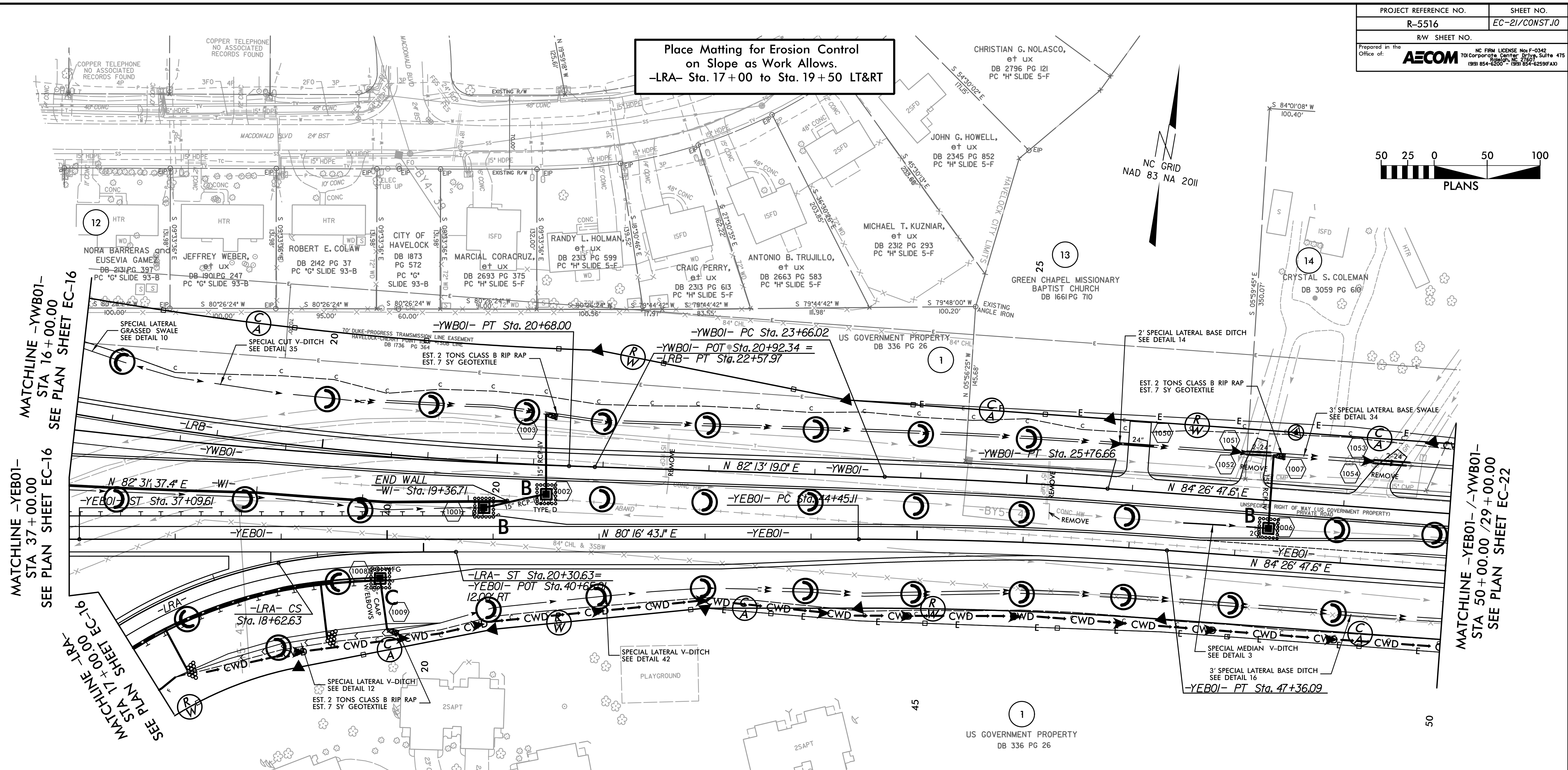
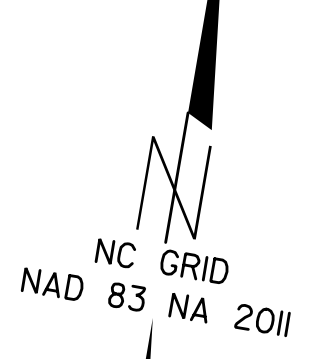
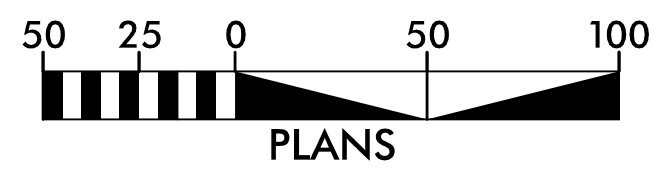
MATCHLINE -L- STA 120+00.00
SEE PLAN SHEET EC-19



-L-
PI Sta 121+72.18
 $\Delta = 23^{\circ} 45' 41.1''$ (RT)
 $D = 0^{\circ} 49' 53.7''$
 $L = 2,857.39'$
 $T = 1,449.53'$
 $R = 6,890.00'$
 $Se = RET. EXIST.$
 $DS = 60 MPH$
 $Runoff = N/A$

FOR -L- PROFILE, SEE SHEET NO. 18

Place Matting for Erosion Control
on Slope as Work Allows.
-LRA- Sta. 17+00 to Sta. 19+50 LT&RT



MATCHLINE -YWB01-
STA 16+00.00
SEE PLAN SHEET EC-16

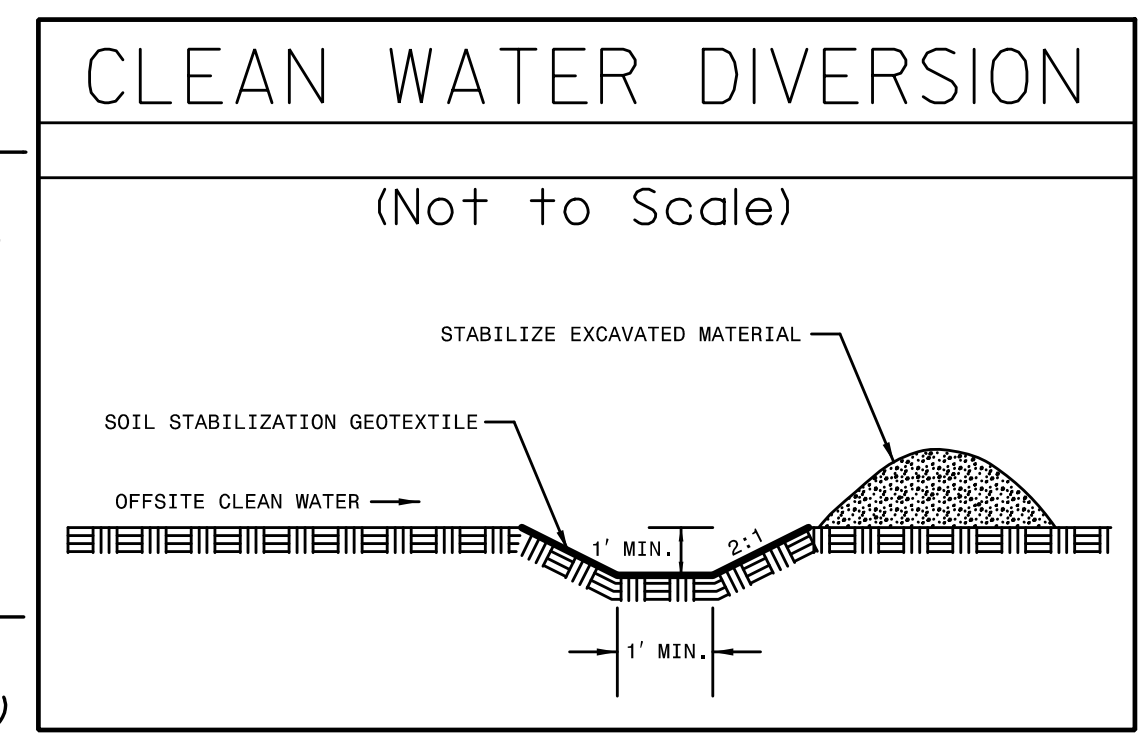
MATCHLINE -YEB01-
STA 37+00.00
SEE PLAN SHEET EC-16

MATCHLINE -LRA-
STA 17+00.00
SEE PLAN SHEET EC-16

MATCHLINE -YWB01-
STA 50+00.00 / 29+00.00
SEE PLAN SHEET EC-22

-LRA-		-LRB-	
PI Sta 16+09.21	PIs Sta 19+18.82	PI Sta 19+49.36	
$\Delta = 89' 38" 18.4" (RT)$	$\Delta = 10' 50" 23.1"$	$\Delta = 9' 40' 46.0" (LT)$	
$D = 12' 54' 16.0"$	$Ls = 168.00'$	$D = 1' 33' 52.1"$	
$L = 694.63'$	$LT = 112.21'$	$L = 618.70'$	
$T = 441.21'$	$ST = 56.19'$	$T = 310.09'$	
$R = 444.00'$		$R = 3,662.29'$	
$Se = 0.08$		$Se = RC$	
$DS = 40 MPH$		$DS = 40 MPH$	
$Runoff = 168.0'$		$Runoff = 121.5'$	

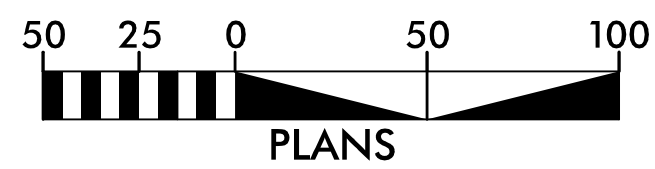
-YEB01-	
PIs Sta 36+13.64	PI Sta 45+90.66
$\Delta = 4' 57' 08.4"$	$\Delta = 4' 10' 04.6" (RT)$
$Ls = 144.00'$	$D = 1' 25' 56.6"$
$LT = 96.04'$	$L = 290.98'$
$ST = 48.03'$	$T = 145.55'$
	$R = 4,000.00'$
	$Se = 0.025$
	$DS = 40 MPH$
	$Runoff = 144.0'$
-YWB01-	
PI Sta 17+02.36	PI Sta 24+71.35
$\Delta = 6' 59' 27.5" (LT)$	$\Delta = 2' 13' 28.6" (RT)$
$D = 0' 57' 17.3"$	$D = 1' 03' 22.1"$
$L = 732.19'$	$L = 210.64'$
$T = 366.55'$	$T = 105.33'$
$R = 6,000.83'$	$R = 5,425.00'$
$Se = 0.025$	$Se = 0.025$
$DS = 40 MPH$	$DS = 40 MPH$
$Runoff = N/A$	$Runoff = N/A$



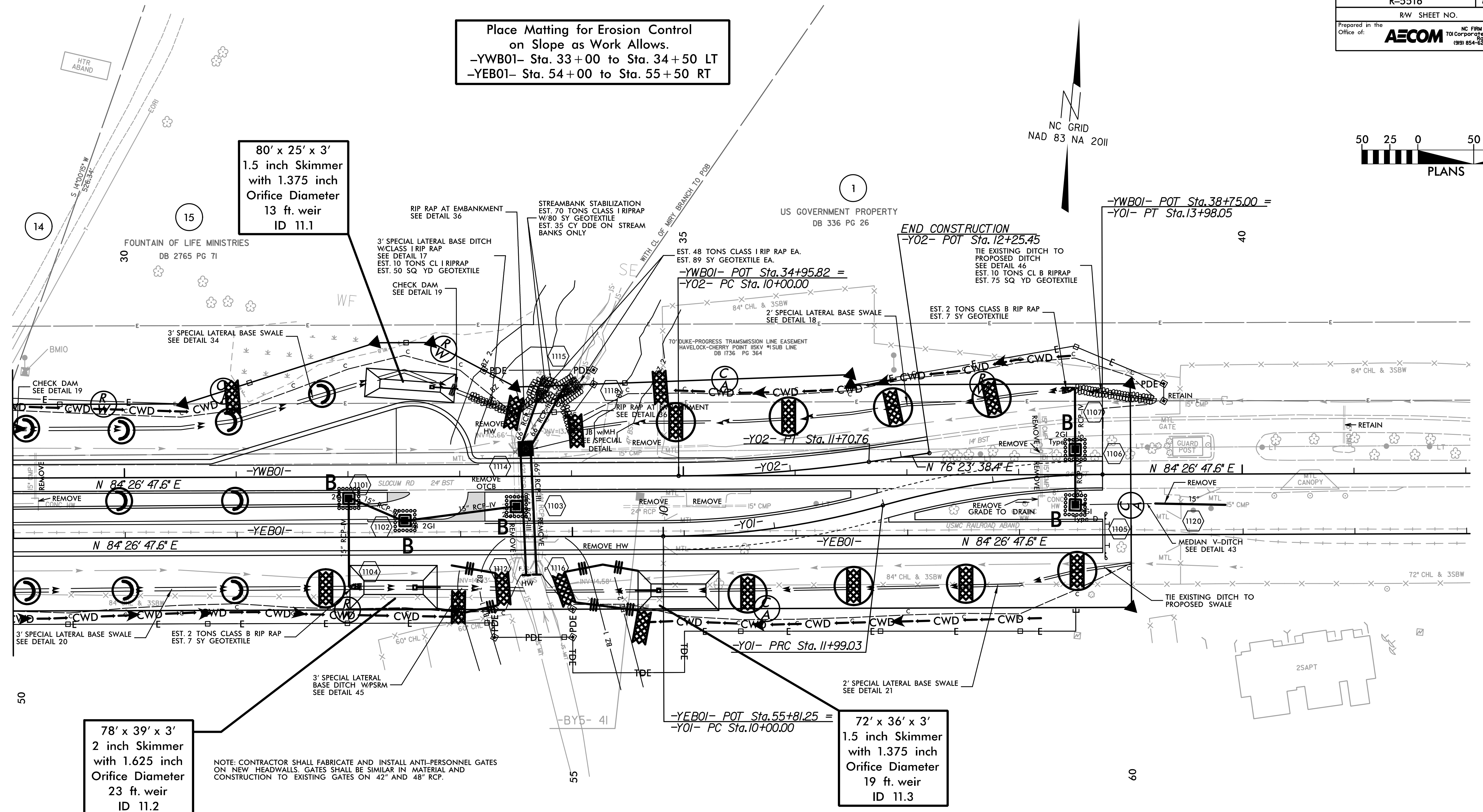
FOR -LRA- PROFILE, SEE SHEET NO. 18
 FOR -LRB- PROFILE, SEE SHEET NO. 19
 FOR -YWB01- PROFILE, SEE SHEET NO. 22
 FOR -YEB01- PROFILE, SEE SHEET NOS. 20 & 21

Place Matting for Erosion Control on Slope as Work Allows.
 -YWB01- Sta. 33+00 to Sta. 34+50 LT
 -YEB01- Sta. 54+00 to Sta. 55+50 RT

NC GRID
 NAD 83 NA 2011

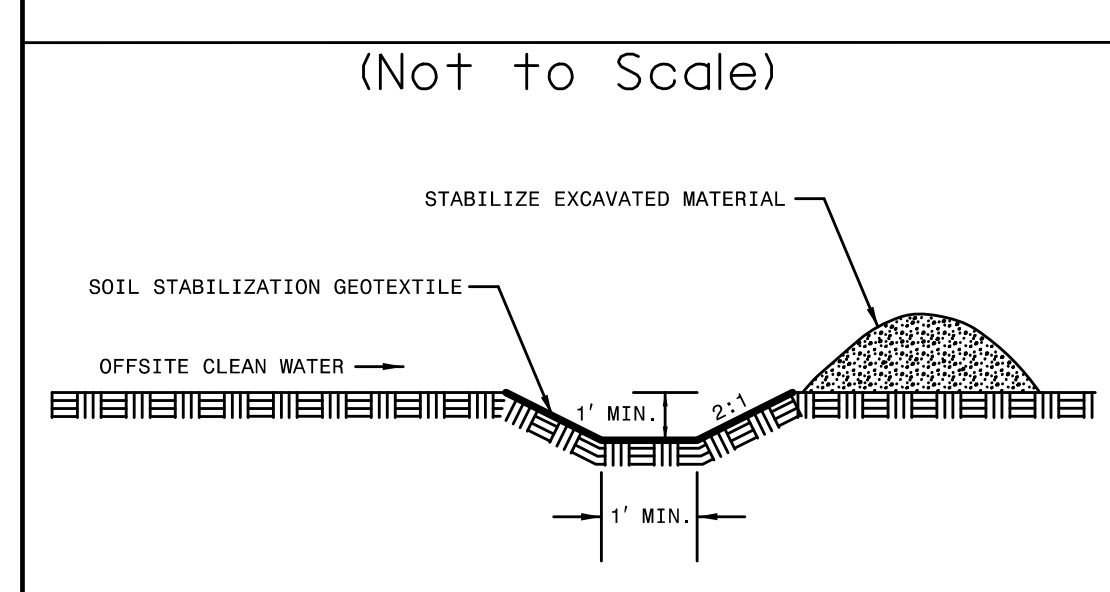


MATCHLINE -YEB01- / -YWB01-
 STA 50+00.00 / 29+00.00
 SEE PLAN SHEET EC-21



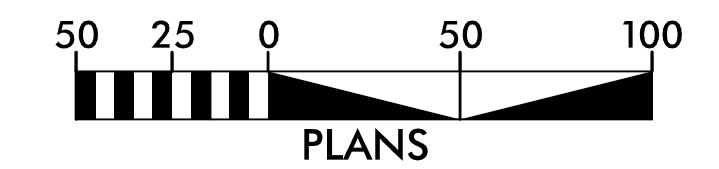
NOTE: CONTRACTOR SHALL FABRICATE AND INSTALL ANTI-PERSONNEL GATES ON NEW HEADWALLS. GATES SHALL BE SIMILAR IN MATERIAL AND CONSTRUCTION TO EXISTING GATES ON 42" AND 48" RCP.

CLEAN WATER DIVERSION



-Y01-		-Y02-
PI Sta 11+00.14	PI Sta 12+99.16	PI Sta 10+85.52
$\Delta = 15' 38' 32.9''$ (LT)	$\Delta = 15' 38' 32.9''$ (RT)	$\Delta = 8' 03' 09.2''$ (LT)
$D = 7' 51' 34.2''$	$D = 7' 51' 34.2''$	$D = 4' 42' 56.5''$
$L = 199.03'$	$L = 199.03'$	$L = 170.76'$
$T = 100.14'$	$T = 100.14'$	$T = 85.52'$
$R = 729.00'$	$R = 729.00'$	$R = 1,215.00'$
$Se = VARIES$	$Se = VARIES$	$Se = RC$
$DS = 40$ MPH	$DS = 40$ MPH	$DS = 40$ MPH
Runoff = 84.0'	Runoff = 84.0'	

FOR -YEB01- PROFILE, SEE SHEET NO. 21
 FOR -YWB01- PROFILE, SEE SHEET NO. 22
 FOR -Y01- PROFILE, SEE SHEET NO. 26
 FOR -Y02- PROFILE, SEE SHEET NO. 26



MATCHLINE -Y10A- STA 18+00.00
SEE PLAN SHEET EC-19

MATCHLINE -Y10A- STA 31+50.00
SEE PLAN SHEET EC-24

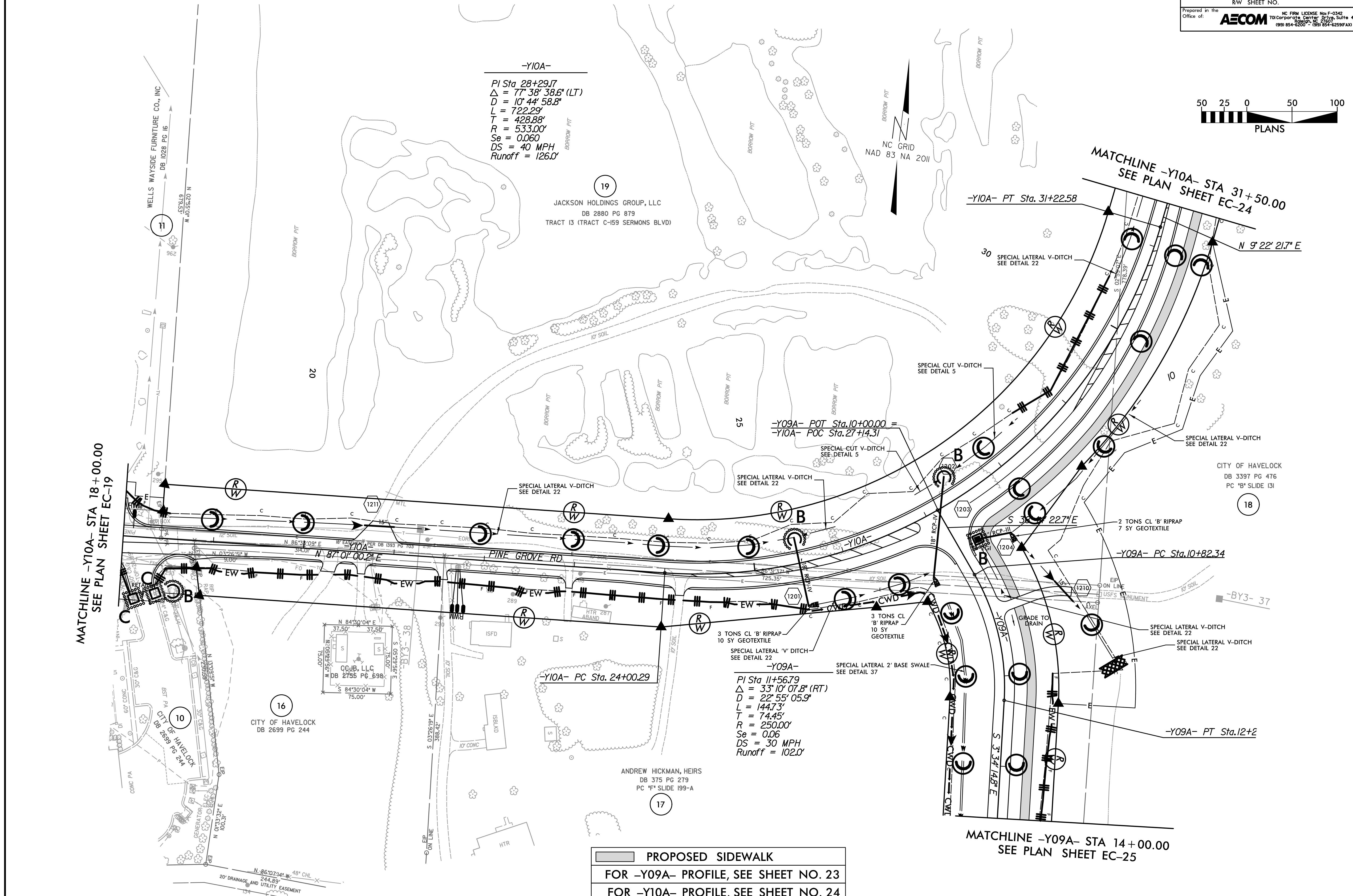
MATCHLINE -Y09A- STA 14+00.00
SEE PLAN SHEET EC-25

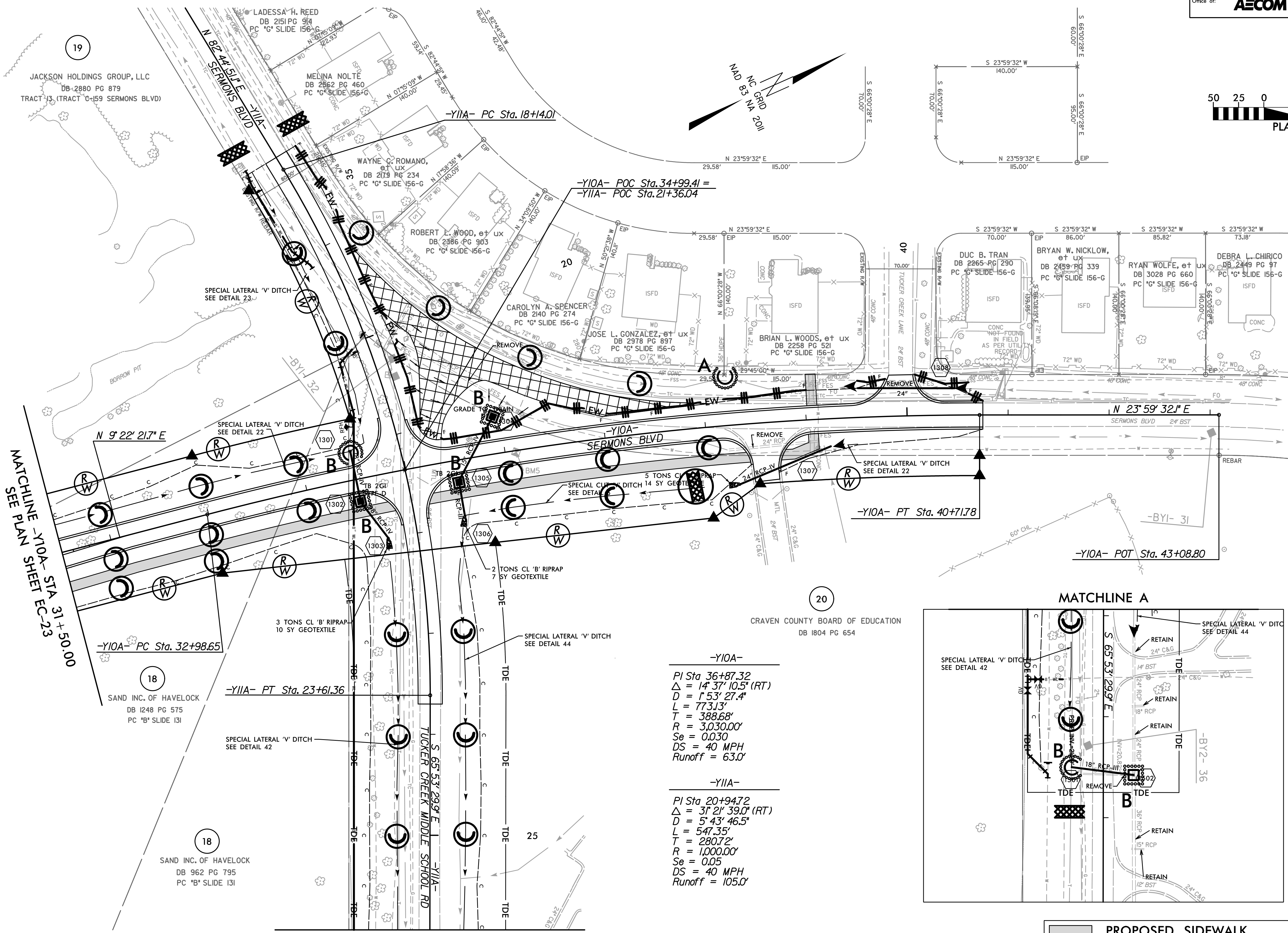
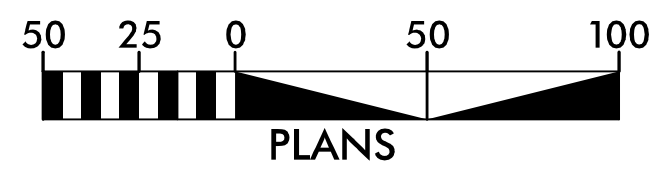
-Y10A-
 PI Sta 28+29.17
 $\Delta = 77^\circ 38' 38.6" (LT)$
 $D = 10^\circ 44' 58.8"$
 $L = 722.29'$
 $T = 428.88'$
 $R = 533.00'$
 $Se = 0.060$
 $DS = 40 MPH$
 $Runoff = 126.0'$

-Y09A- POT Sta. 10+00.00 =
-Y10A- POC Sta. 27+14.31

-Y09A-
 PI Sta 11+56.79
 $\Delta = 33^\circ 10' 07.8" (RT)$
 $D = 22^\circ 55' 05.9"$
 $L = 144.73'$
 $T = 74.45'$
 $R = 250.00'$
 $Se = 0.06$
 $DS = 30 MPH$
 $Runoff = 102.0'$

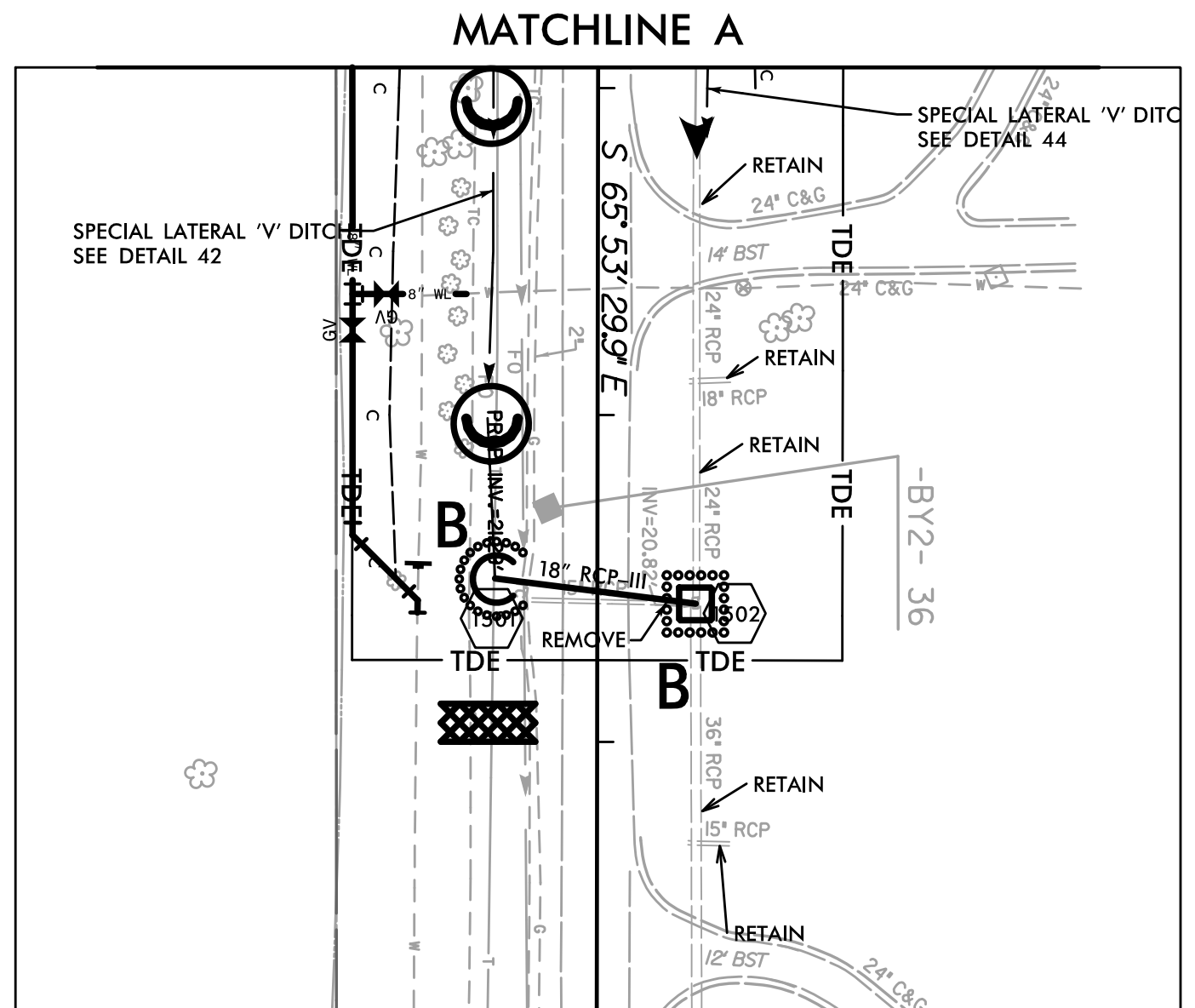
PROPOSED SIDEWALK
 FOR -Y09A- PROFILE, SEE SHEET NO. 23
 FOR -Y10A- PROFILE, SEE SHEET NO. 24





-Y10A-
 PI Sta. 36+87.32
 $\Delta = 14^{\circ} 37' 10.5''$ (RT)
 $D = 1^{\circ} 53' 27.4''$
 $L = 77.313'$
 $T = 388.68'$
 $R = 3,030.00'$
 $Se = 0.030$
 $DS = 40$ MPH
 $Runoff = 63.0'$

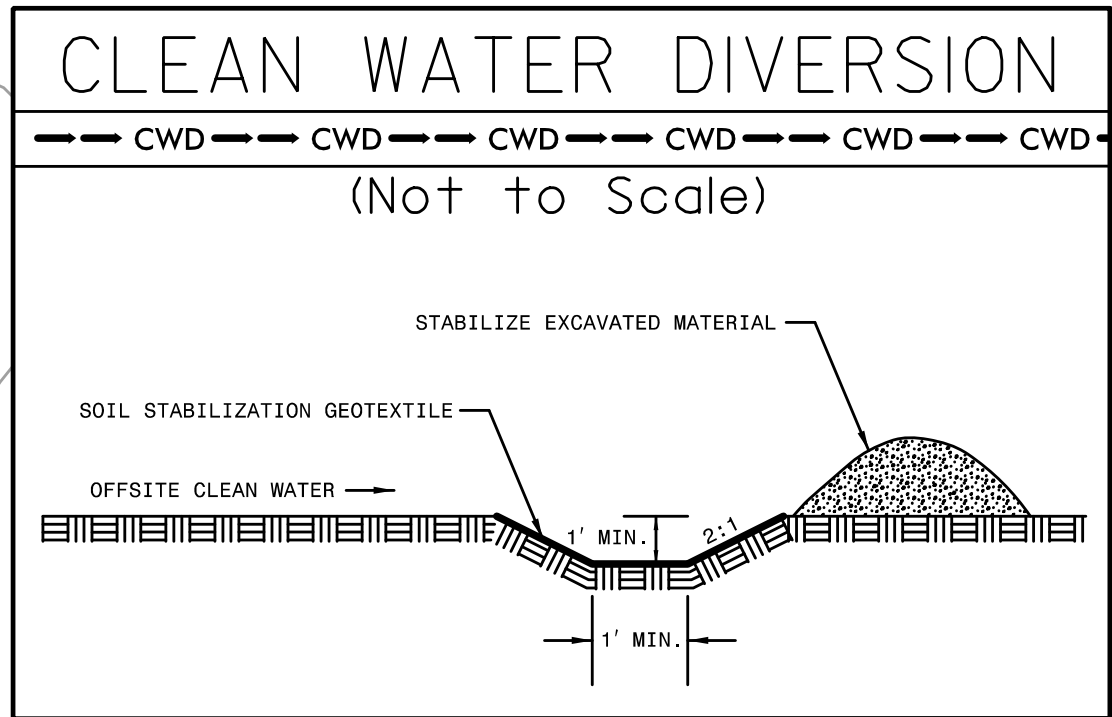
-Y11A-
 PI Sta. 20+94.72
 $\Delta = 31^{\circ} 21' 39.0''$ (RT)
 $D = 5^{\circ} 43' 46.5''$
 $L = 547.35'$
 $T = 280.72'$
 $R = 1,000.00'$
 $Se = 0.05$
 $DS = 40$ MPH
 $Runoff = 105.0'$



	PROPOSED SIDEWALK
	PROPOSED PAVEMENT REMOVAL
FOR -Y10A- PROFILE, SEE SHEET NO. 25	
FOR -Y11A- PROFILE, SEE SHEET NO. 25	

Place Matting for Erosion Control on Slope as Work Allows.
-Y09A- Sta. 19+50 to Sta. 22+00 LT&RT
-Y09A- Sta. 26+50 to Sta. 28+00 LT&RT

-Y09A-
PI Sta 25+06.17
 $\Delta = 81' 24" 49.0"$ (LT)
 $D = 16' 22" 12.8"$
 $L = 497.33'$
 $T = 301.12'$
 $R = 350.00'$
 $Se = 0.06$
 $DS = 30$ MPH
Runoff = 102.0'



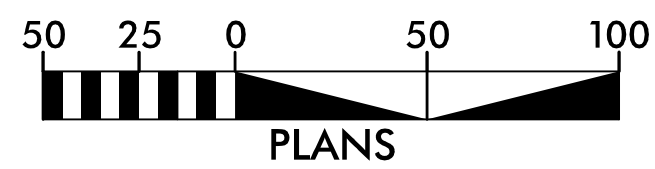
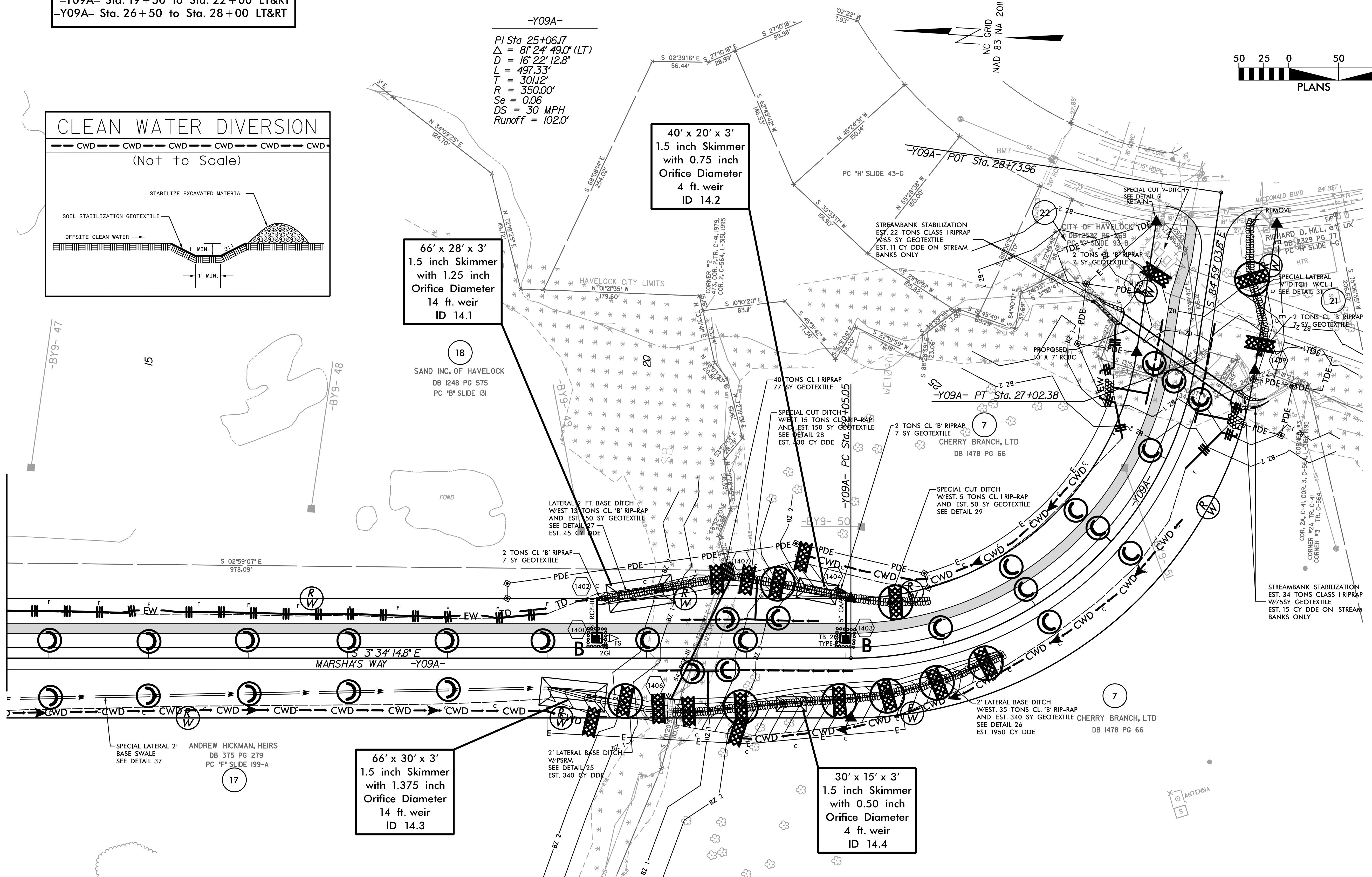
66' x 28' x 3'
1.5 inch Skimmer
with 1.25 inch
Orifice Diameter
14 ft. weir
ID 14.1

40' x 20' x 3'
1.5 inch Skimmer
with 0.75 inch
Orifice Diameter
4 ft. weir
ID 14.2

66' x 30' x 3'
1.5 inch Skimmer
with 1.375 inch
Orifice Diameter
14 ft. weir
ID 14.3

30' x 15' x 3'
1.5 inch Skimmer
with 0.50 inch
Orifice Diameter
4 ft. weir
ID 14.4

MATCHLINE -Y09A- STA 14+00.00
SEE PLAN SHEET EC-23



PROPOSED SIDEWALK
FOR -Y09A- PROFILE, SEE SHEET NO. 23