

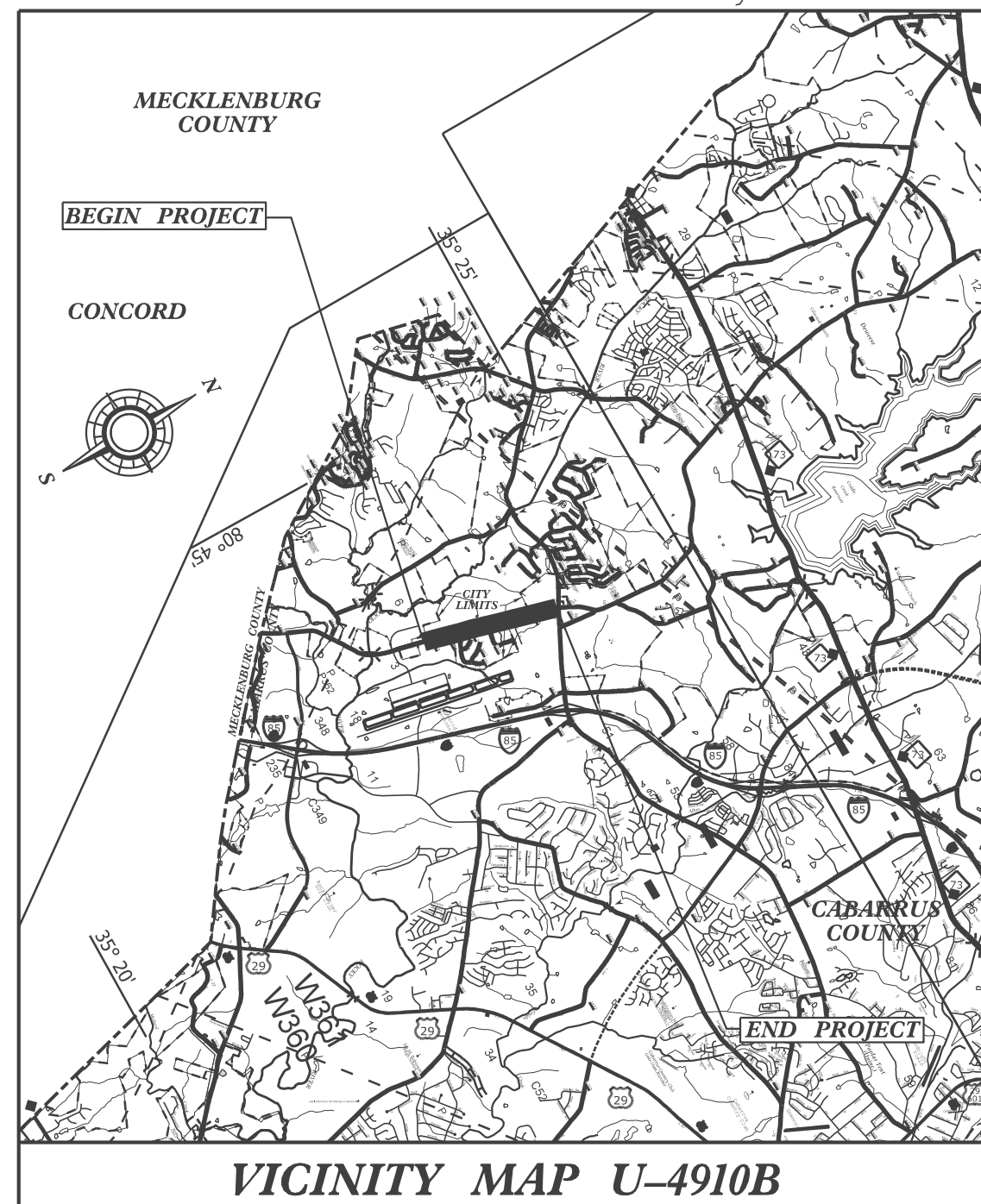
**This electronic collection of documents is provided
for the convenience of the user
and is Not a Certified Document –**

**The documents contained herein were originally issued
and sealed by the individuals whose names and license
numbers appear on each page, on the dates appearing
with their signature on that page.**

**This file or an individual page
shall not be considered a certified document.**

TIP PROJECT: U-4910B

See Sheet 1-A For Index of Sheets
See Sheet 1-B For Conventional Symbols



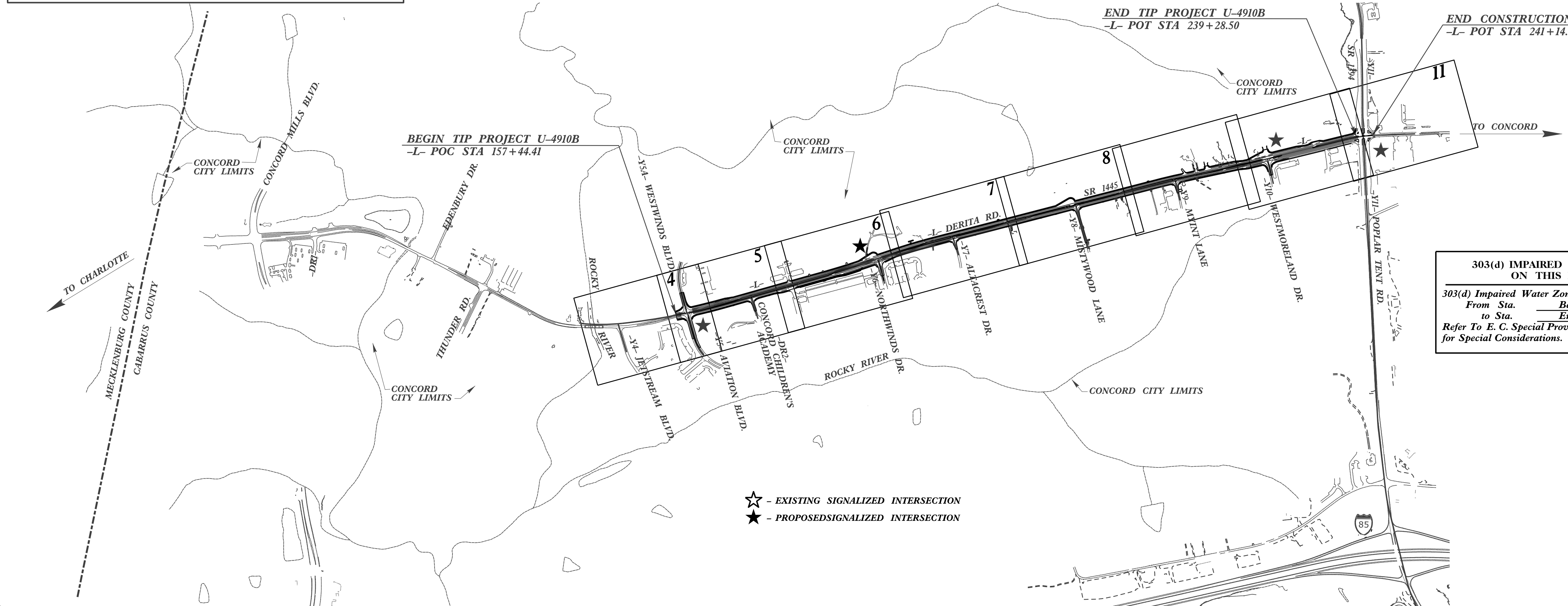
STATE OF NORTH CAROLINA DIVISION OF HIGHWAYS

PLAN FOR PROPOSED HIGHWAY EROSION CONTROL

CABARRUS COUNTY

LOCATION: SR-1445(DERITA ROAD) FROM AVIATION BOULEVARD TO THE INTERSECTION OF SR 1394 POPLAR TENT ROAD.

TYPE OF WORK: GRADING, PAVING, DRAINAGE, SIGNALS & SIGNING



☆ - EXISTING SIGNALIZED INTERSECTION
★ - PROPOSED SIGNALIZED INTERSECTION

STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	U-4910B	EC-1	
STATE PROJ. NO.	F.A. PROJ. NO.	DESCRIPTION	
40373.1.F3	HPP-1445(7)	PE	
40373.2.F2	HPP-1445(7)	R/W & UTIL	
40373.3.3	STPA-1445(008)	CONST	

EROSION AND SEDIMENT CONTROL MEASURES

Std. #	Description	Symbol
1630.05	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	
1630.04	Stilling Basin	
1630.06	Special Stilling Basin	
	Rock Inlet Sediment Trap:	
1632.01	Type A	
1632.02	Type B	
1632.03	Type C	
	Skimmer Basin	
	Tiered Skimmer Basin	
	Infiltration Basin	

303(d) IMPAIRED WATER(S) EXIST ON THIS PROJECT

303(d) Impaired Water Zone(s) Exist From Sta. _____ Begin to Sta. _____ End

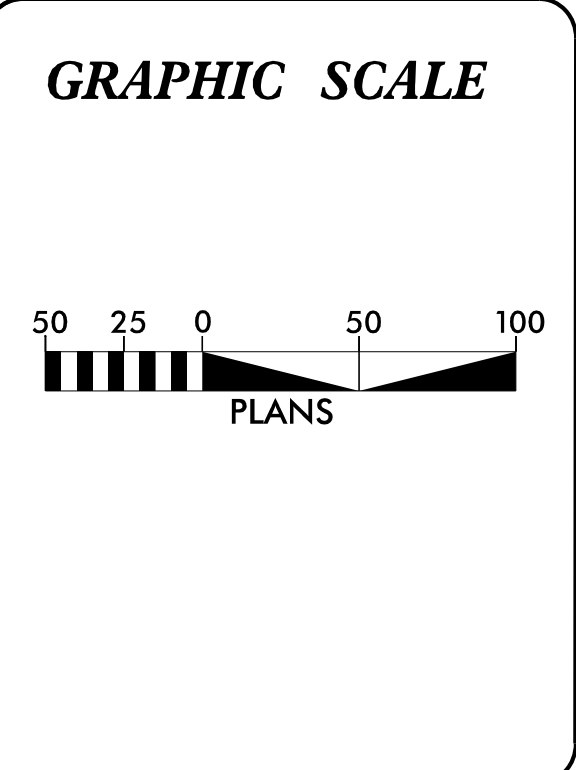
Refer To E. C. Special Provisions for Special Considerations.

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 3, 2011 AND ISSUED BY THE NORTH CAROLINA DEPARTMENT OF ENVIRONMENT AND NATURAL RESOURCES DIVISION OF WATER RESOURCES.

Prepared in the Office of:

SUNGATE DESIGN GROUP, P.A.

915 JONES FRANKLIN ROAD
RALEIGH, NORTH CAROLINA 27606
TEL (919) 859-2243 FAX (919) 859-6258
ENG FIRM LICENSE NO. C-880

Designed by:

Brian Elam, PE 3195

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:

Natalie Chan, PE, CPESC, CPSWQ

Roadway Standard Drawings

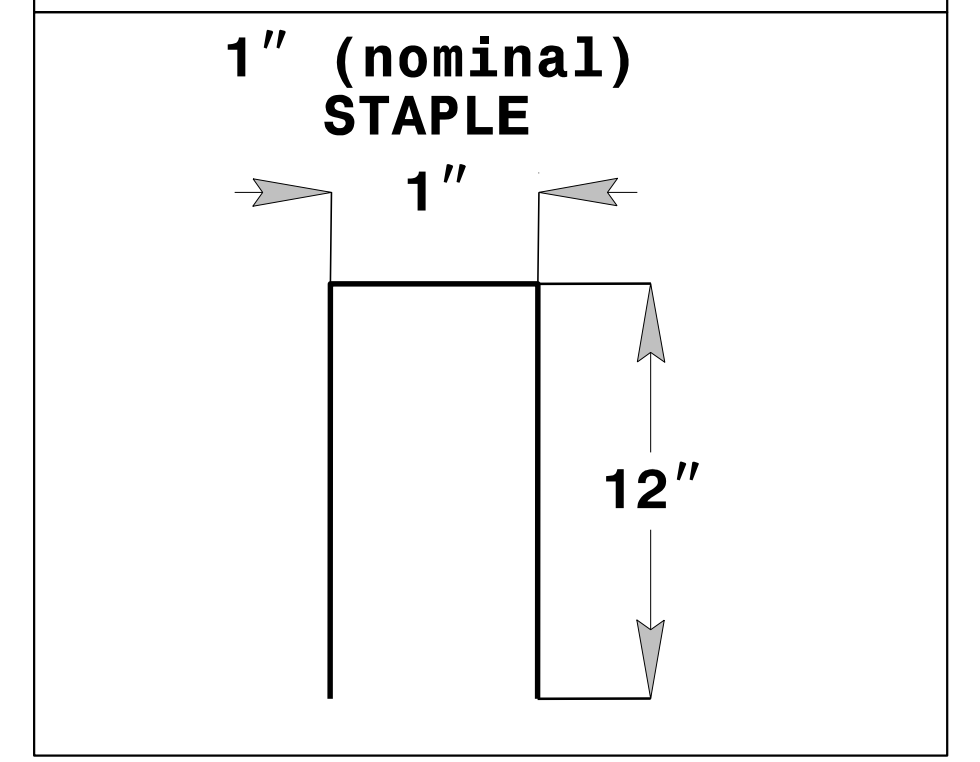
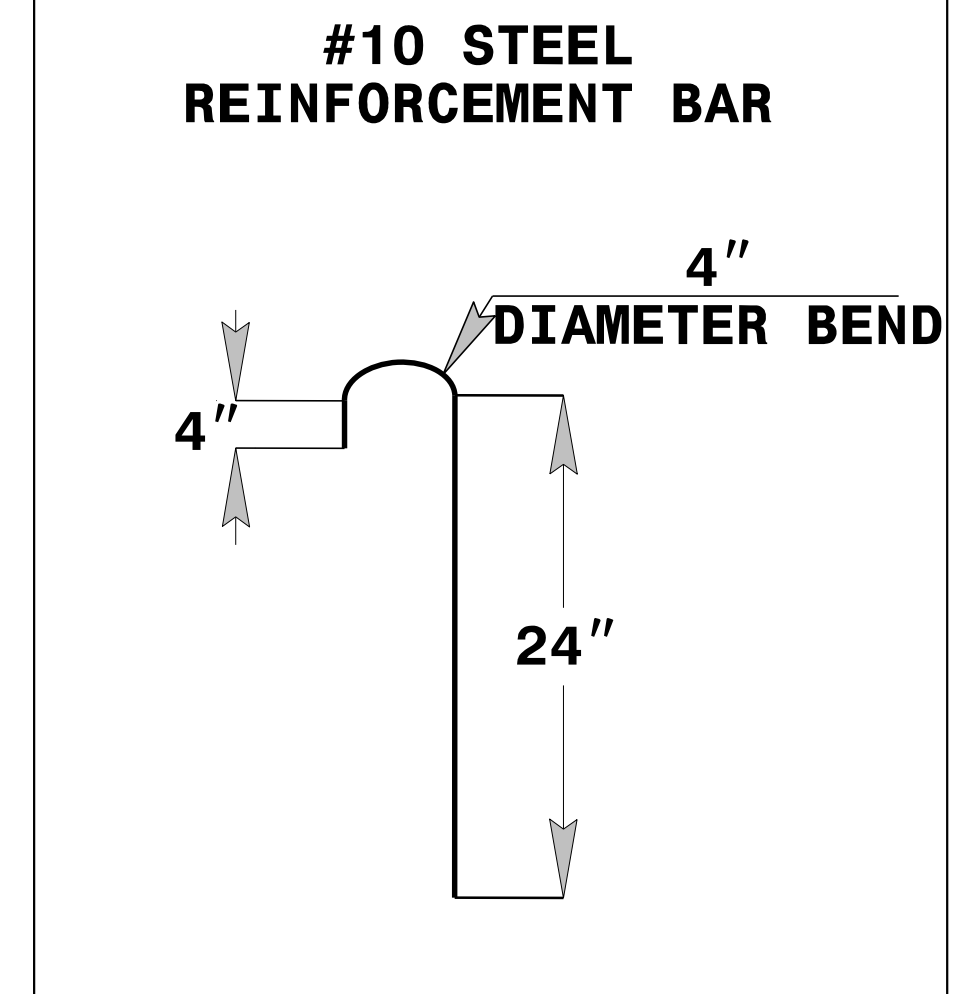
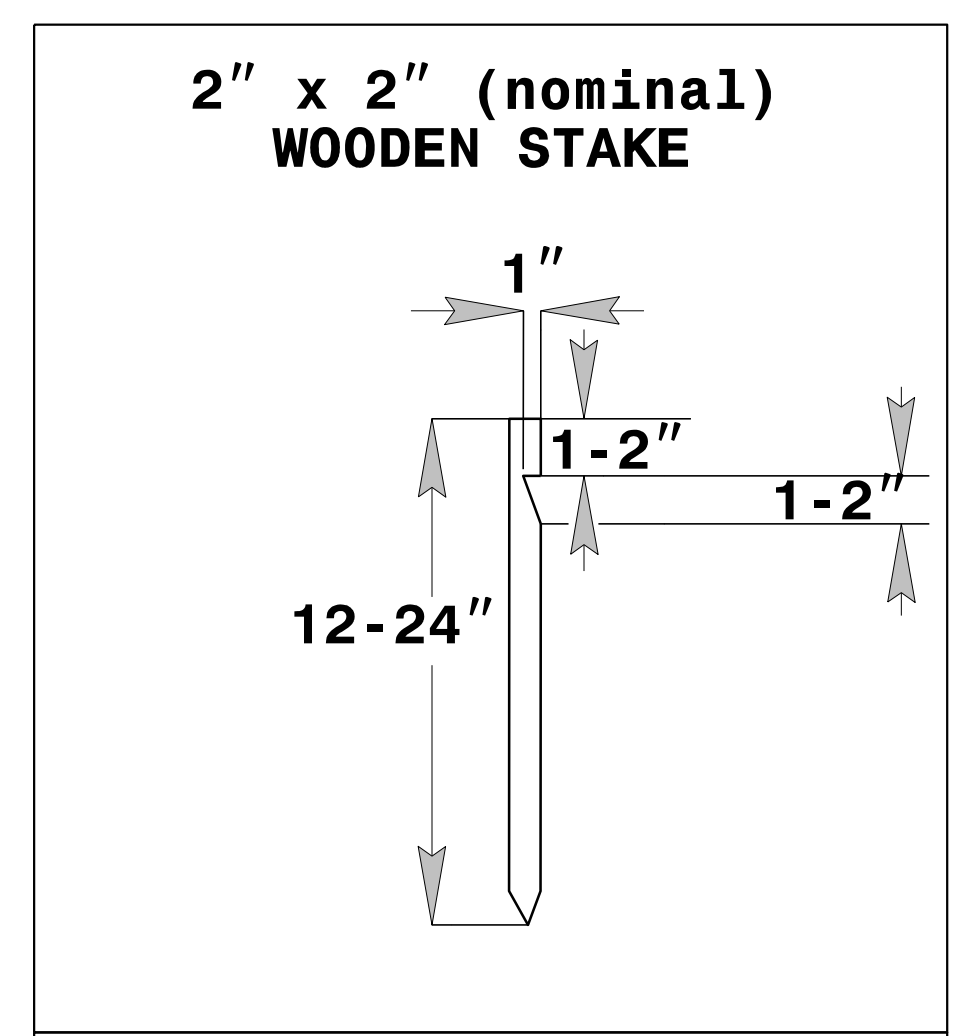
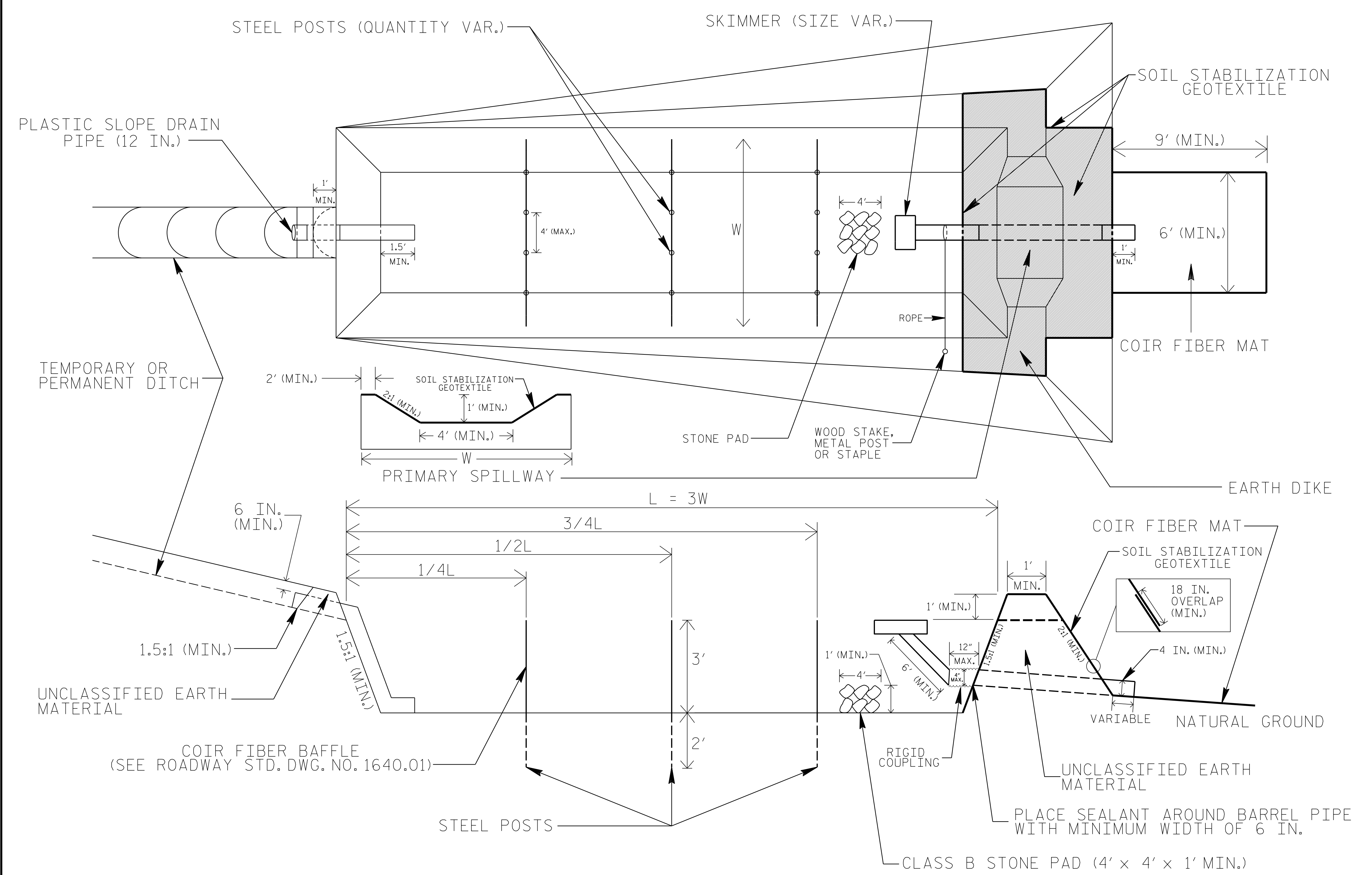
The following roadway english standards as appear in "Roadway Standard Drawings"-- Roadway Design Unit - N. C. Department of Transportation - Raleigh, N. C., dated January 2012 and the latest revision thereto are applicable to this project and by reference hereby are considered a part of these plans.

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	1645.01 Temporary Stream Crossing
1631.01 Matting Installation	

9/9/2016 E:\dml\psh_01\tsch\vdgn

PROJECT REFERENCE NO. U-4910B	SHEET NO. EC-2
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

SKIMMER BASIN WITH BAFFLES DETAIL



COIR FIBER MAT ANCHOR OPTIONS

NOTES

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

NOT TO SCALE

PROJECT REFERENCE NO. <i>U-4910B</i>	SHEET NO. <i>EC-2A</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.

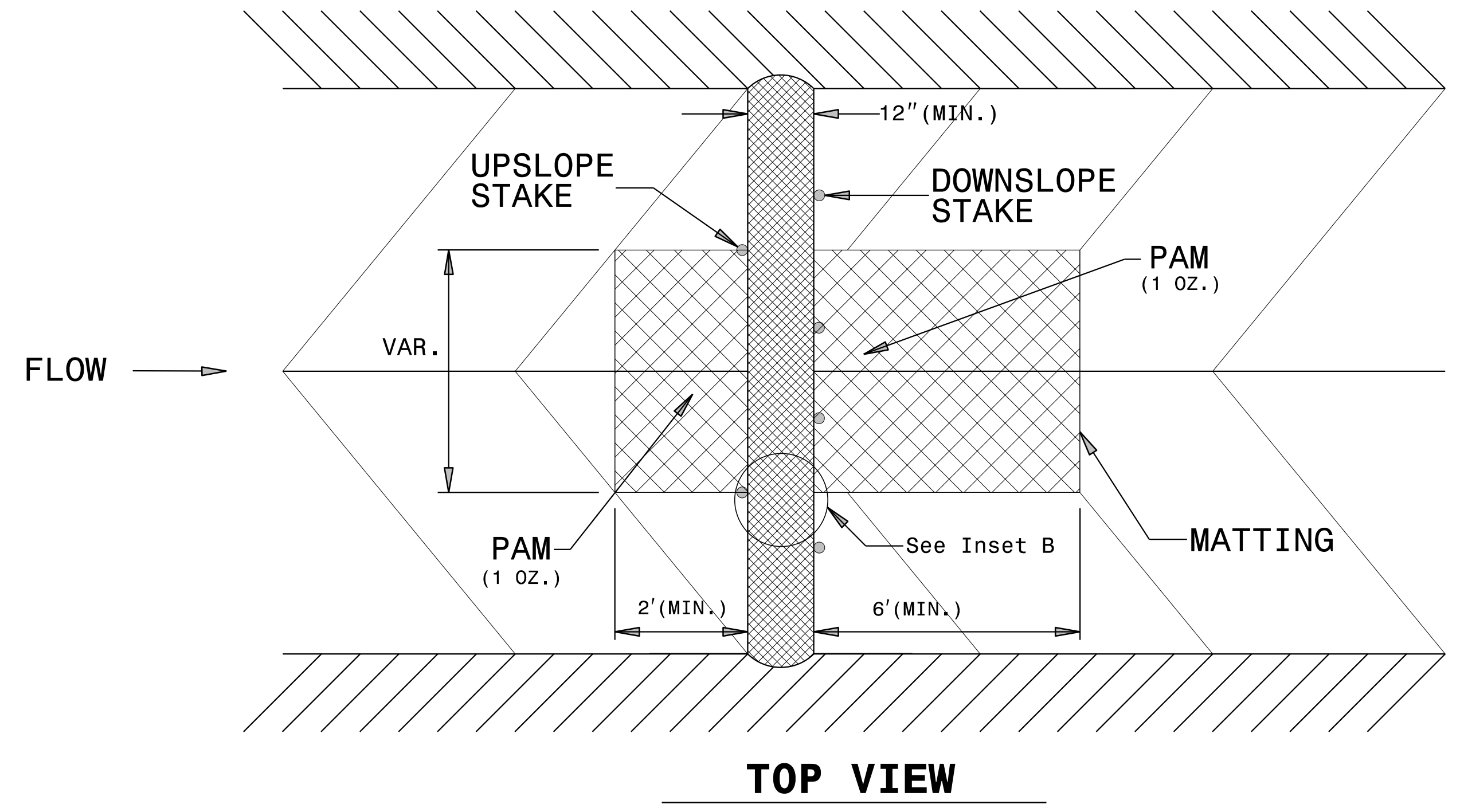
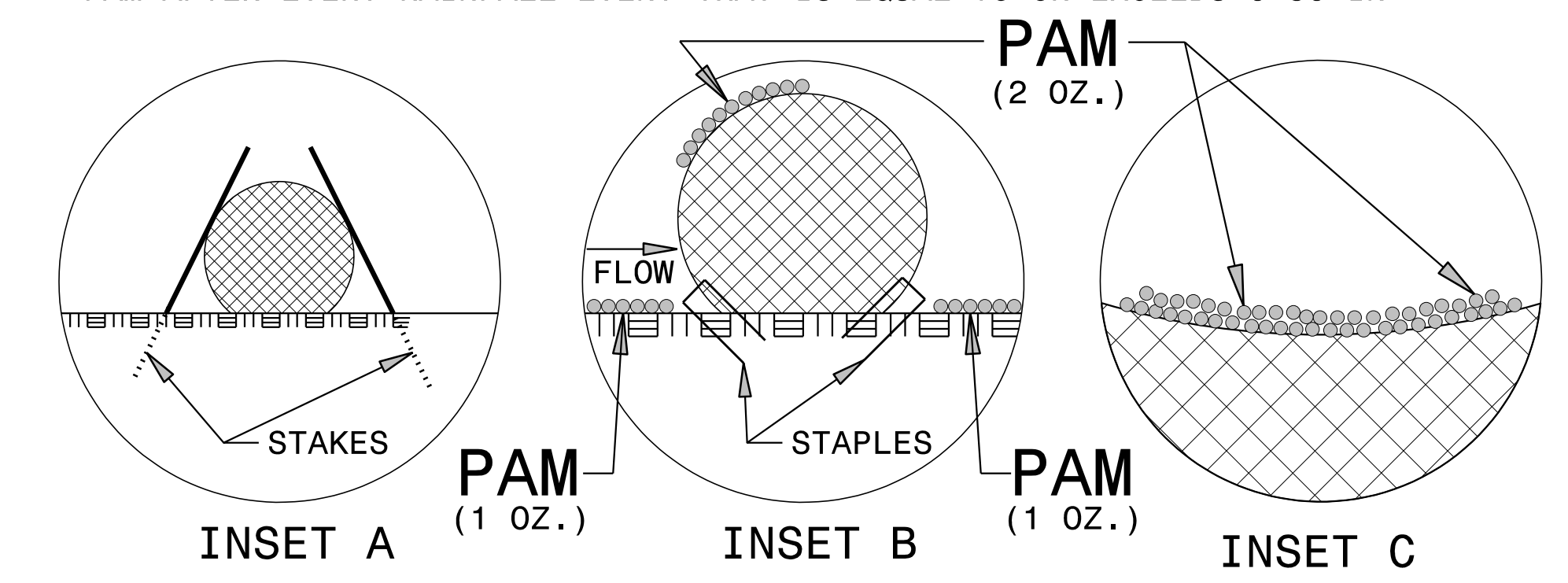
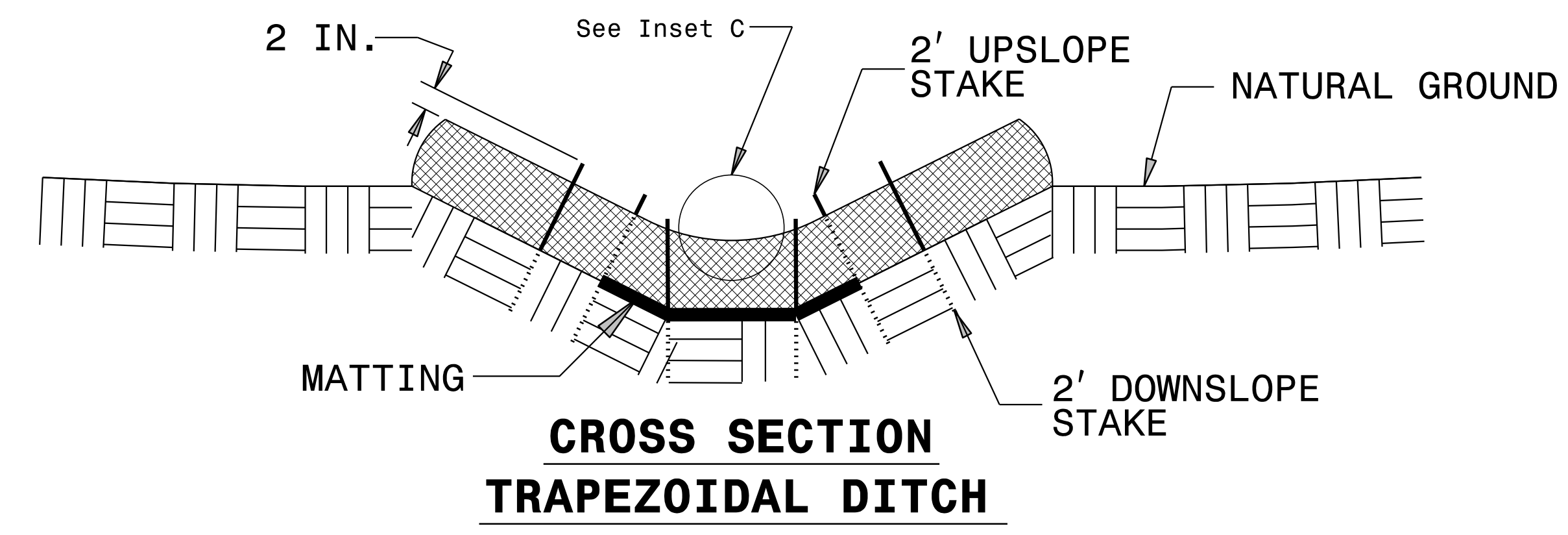
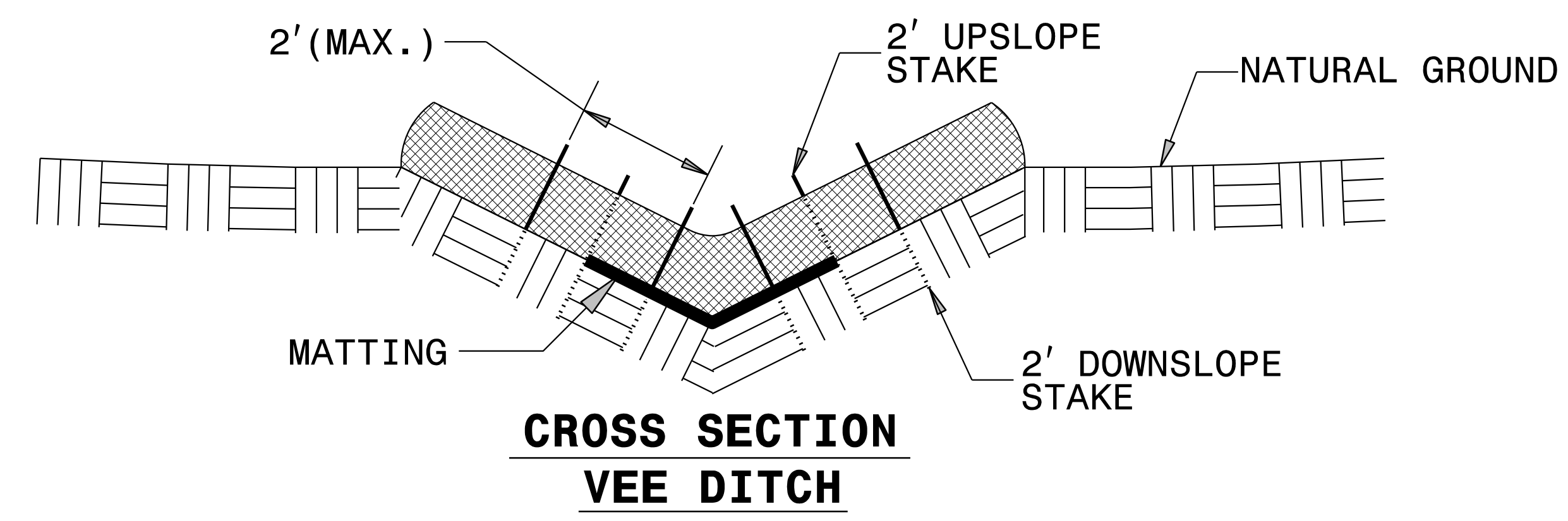
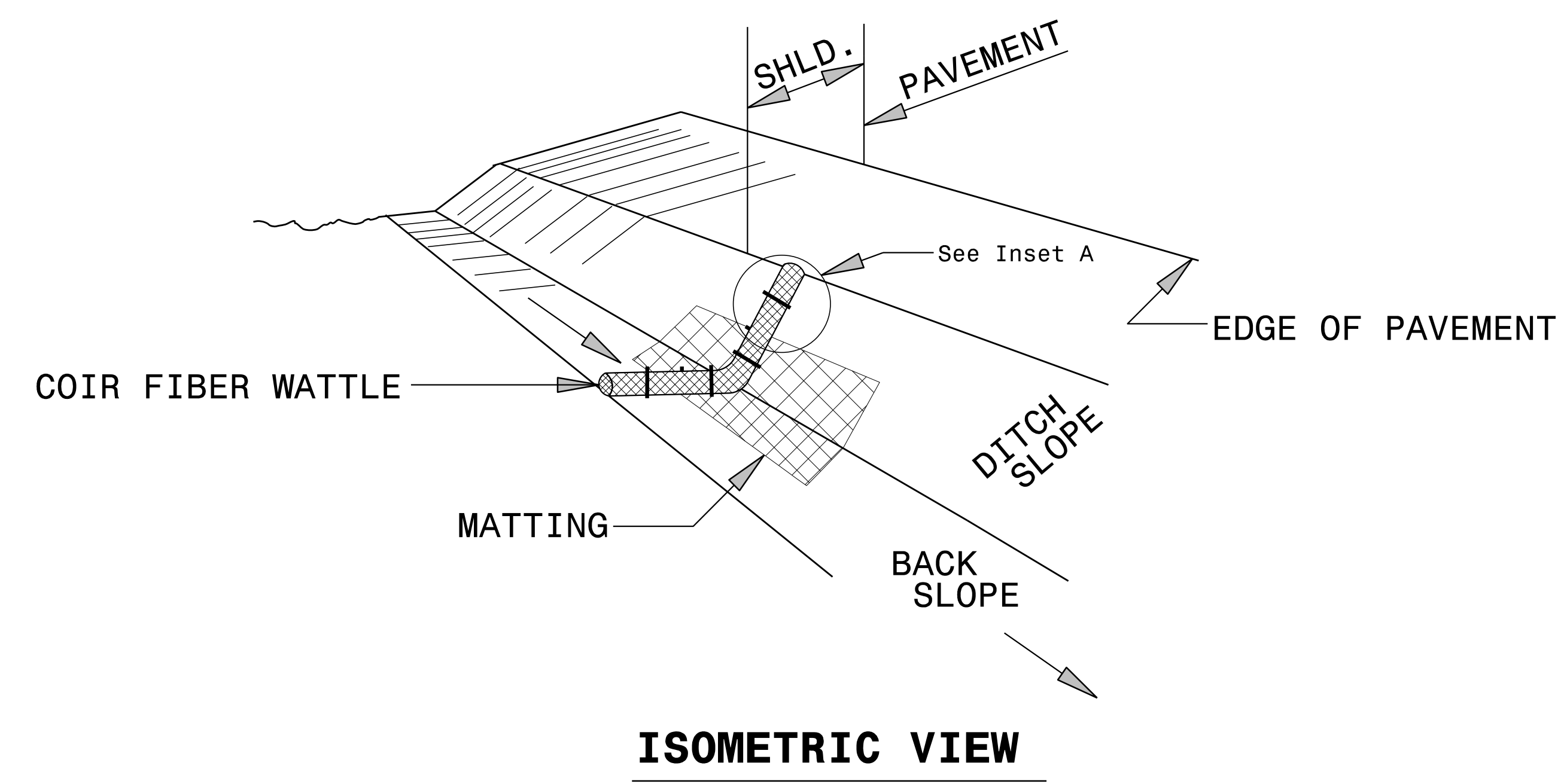
PROVIDE STAPLES MADE OF 0.125 IN. DIAMETER STEEL WIRE FORMED INTO A U SHAPE NOT LESS THAN 12" IN LENGTH.

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.

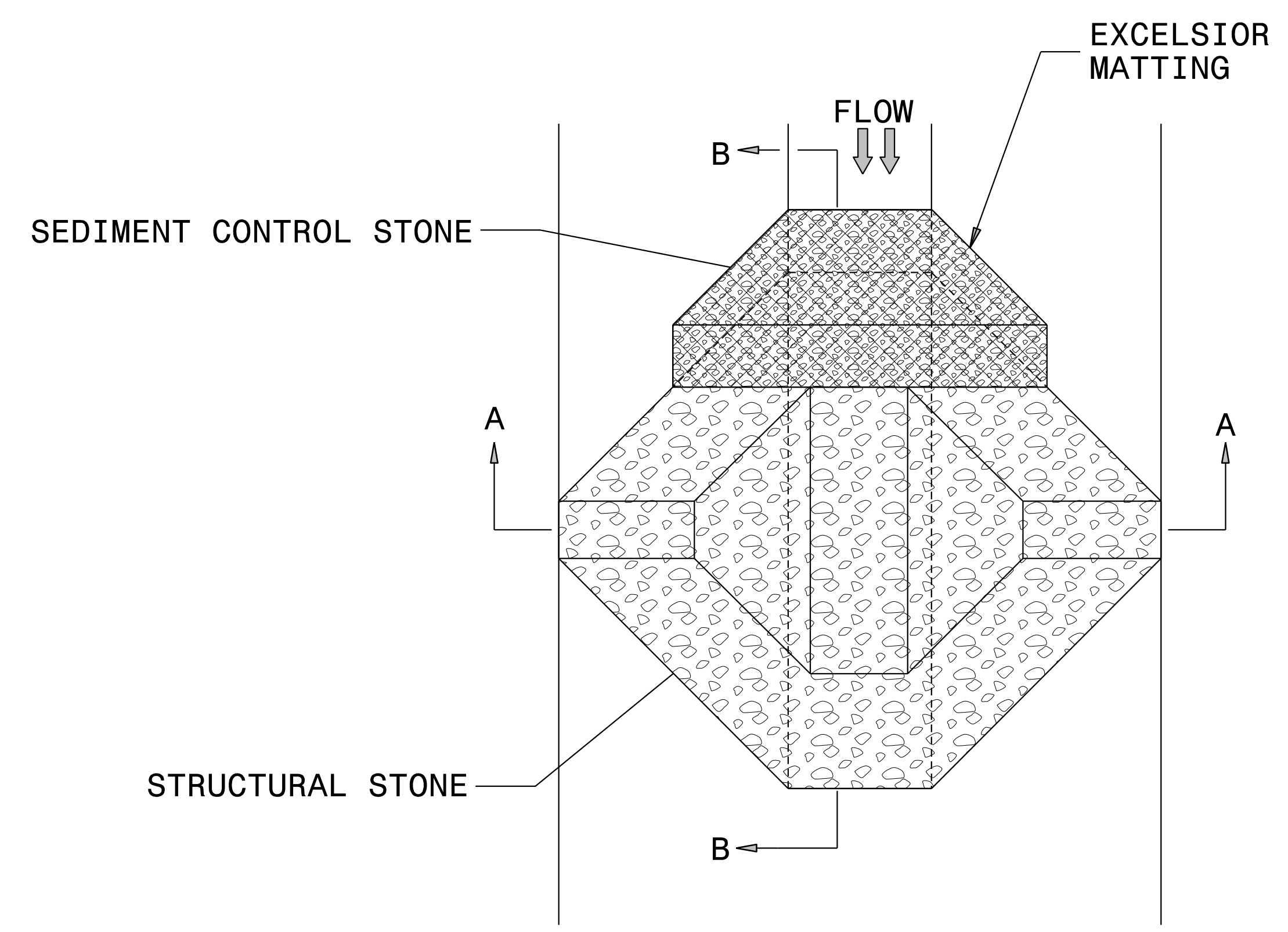
PRIOR TO POLYACRYLAMIDE (PAM) APPLICATION, OBTAIN A SOIL SAMPLE FROM PROJECT LOCATION, AND FROM OFFSITE MATERIAL, AND ANALYZE FOR APPROPRIATE PAM FLOCCULANT TO BE APPLIED TO EACH WATTLE.

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.	SHEET NO.
U-4910B	EC-2B
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

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



PLAN

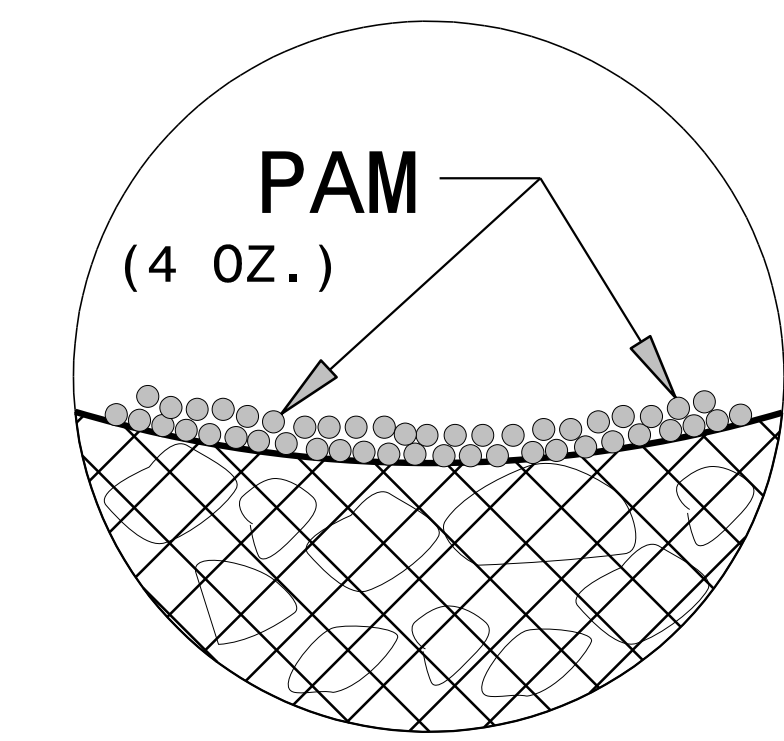
NOTES:

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

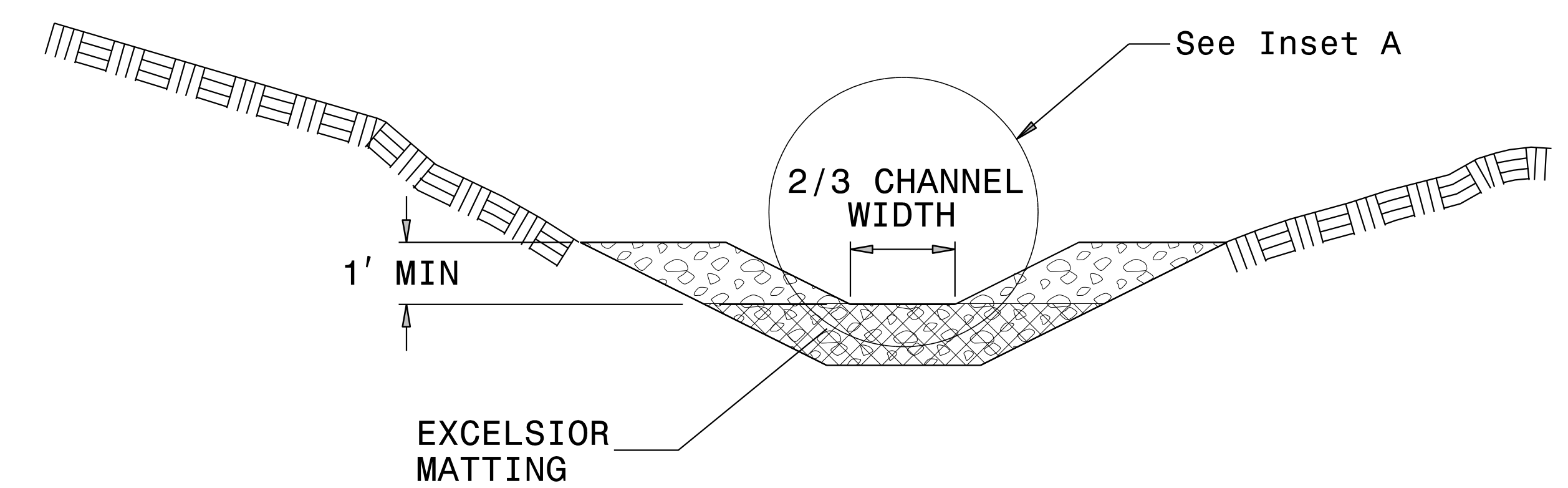
USE EXCELSIOR FOR MATTING MATERIAL AND ANCHOR MATTING SECTION AT TOP AND BOTTOM WITH CLASS B STONE.

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

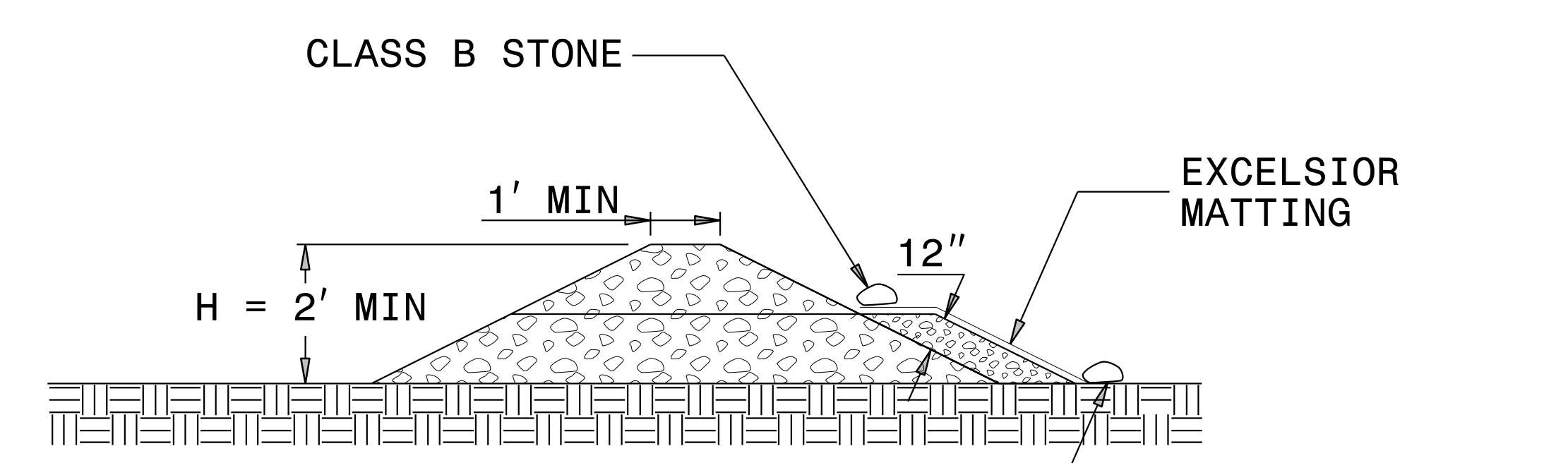
INITIALLY APPLY 4 OUNCES OF POLYACRYLAMIDE (PAM) TO TOP OF MATTING SECTION AND AFTER EVERY RAINFALL EVENT THAT EQUALS OR EXCEEDS 0.50 INCHES.



INSET A



SECTION A-A



SECTION B-B

NOT TO SCALE

DIVISION OF HIGHWAYS
STATE OF NORTH CAROLINA

PROJECT REFERENCE NO. <i>U-4910B</i>	SHEET NO. <i>EC-03</i>
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

SOIL STABILIZATION TIMEFRAMES

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

PROJECT REFERENCE NO.	SHEET NO.
U-4910B	EC-05/CONST.05
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

CLEARING AND GRUBBING EROSION CONTROL FOR CONSTRUCTION SHEET 05

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

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

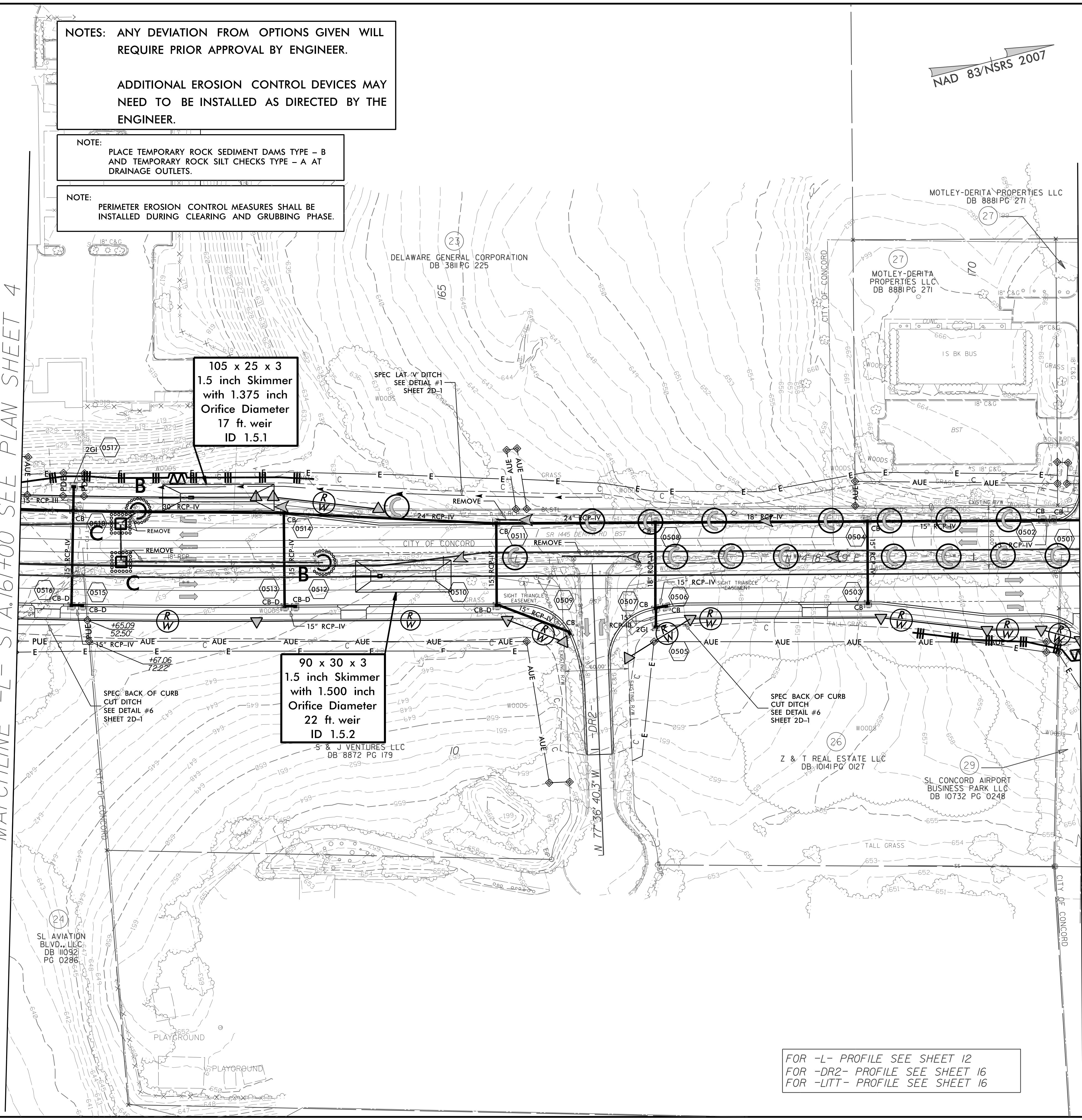
NOTE: PLACE TEMPORARY ROCK SEDIMENT DAMS TYPE - B AND TEMPORARY ROCK SILT CHECKS TYPE - A AT DRAINAGE OUTLETS.

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

NAD 83/NSRS 2007

MATCHLINE -L- STA. 161+00 SEE PLAN SHEET 4

MATCHLINE -L- STA. 171+00 SEE PLAN SHEET 6



105 x 25 x 3
1.5 inch Skimmer
with 1.375 inch
Orifice Diameter
17 ft. weir
ID 1.5.1

90 x 30 x 3
1.5 inch Skimmer
with 1.500 inch
Orifice Diameter
22 ft. weir
ID 1.5.2

FOR -L- PROFILE SEE SHEET 12
FOR -DR2- PROFILE SEE SHEET 16
FOR -LITT- PROFILE SEE SHEET 16

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

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

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

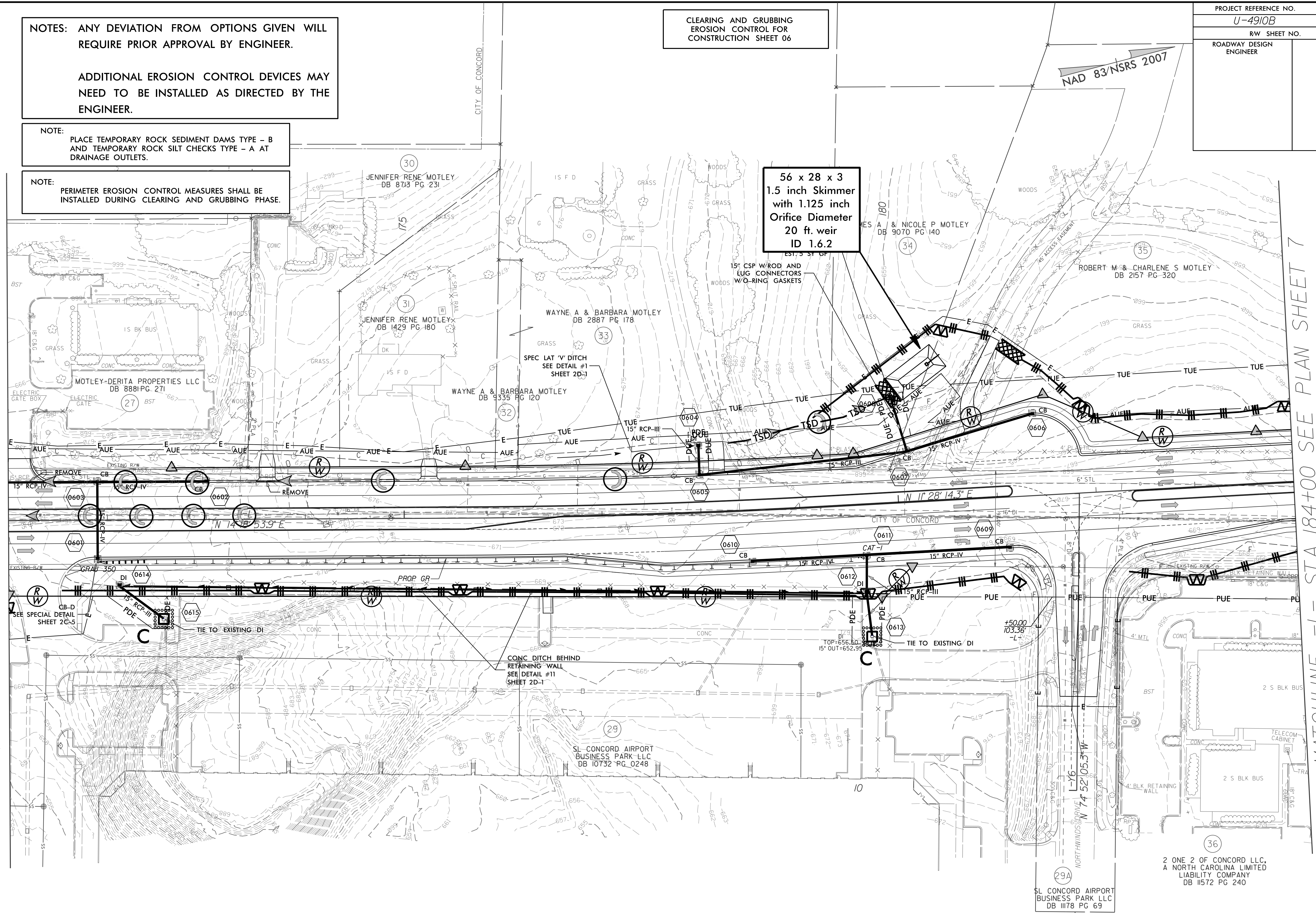
NOTE: PERIMETER EROSION CONTROL MEASURES SHALL BE INSTALLED DURING CLEARING AND GRUBBING PHASE.

CLEARING AND GRUBBING EROSION CONTROL FOR CONSTRUCTION SHEET 06

PROJECT REFERENCE NO.	SHEET NO.
U-4910B	EC-06/CONST.06
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

MATCHLINE -L- STA. 171+00 SEE PLAN SHEET 5

MATCHLINE -L- STA. 184+00 SEE PLAN SHEET 7



56 x 28 x 3
1.5 inch Skimmer
with 1.125 inch
Orifice Diameter
20 ft. weir
ID 1.6.2

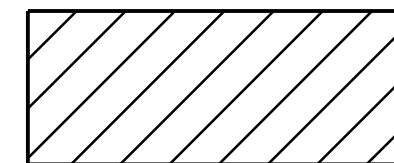
FOR -L- PROFILE SEE SHEET 12
FOR -Y6- PROFILE SEE SHEET 15

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

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

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

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



ENVIRONMENTALLY SENSITIVE AREA
SEE PROJECT SPECIAL PROVISIONS

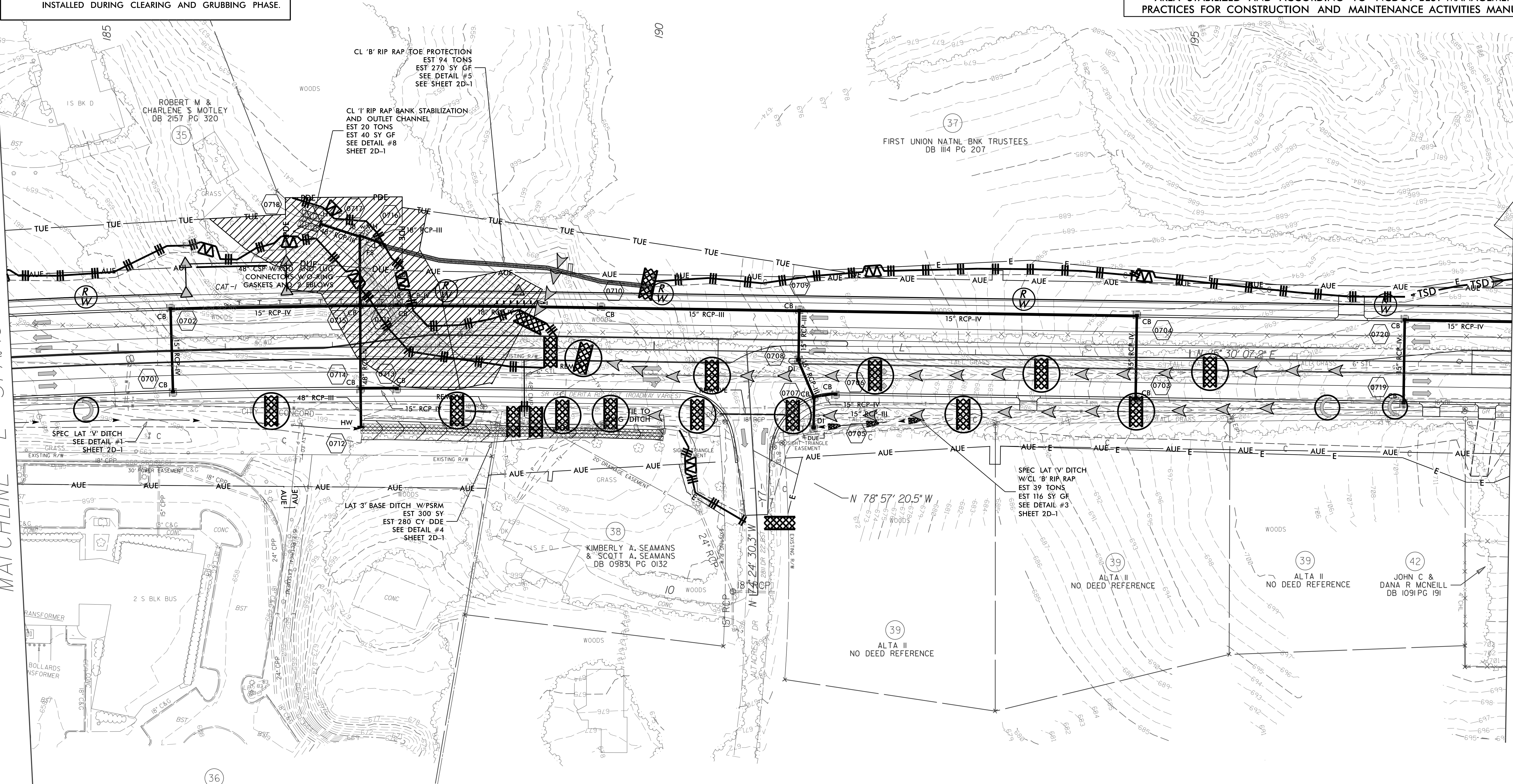
NAD 83/NSRS 2007

PROJECT REFERENCE NO. U-4910B	SHEET NO. EC-07/CONST.07
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

CLEARING AND GRUBBING
EROSION CONTROL FOR
CONSTRUCTION SHEET 07

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.

MATCHLINE -L- STA. 184+00 SEE PLAN SHEET 6



MATCHLINE -L- STA. 198+00 SEE PLAN SHEET 8

36
2 ONE 2 OF CONCORD LLC,
A NORTH CAROLINA LIMITED
LIABILITY COMPANY
DB 11572 PG 240

38
KIMBERLY A. SEAMANS
& SCOTT A. SEAMANS
DB 09831 PG 0132

39
ALTA II
NO DEED REFERENCE

39
ALTA II
NO DEED REFERENCE

42
JOHN C &
DANA R MCNEILL
DB 1091 PG 191

FOR -L- PROFILE SEE SHEET 13
FOR -Y7- PROFILE SEE SHEET 15

PROJECT REFERENCE NO.	SHEET NO.
U-4910B	EC-08/CONST.08
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

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

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

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

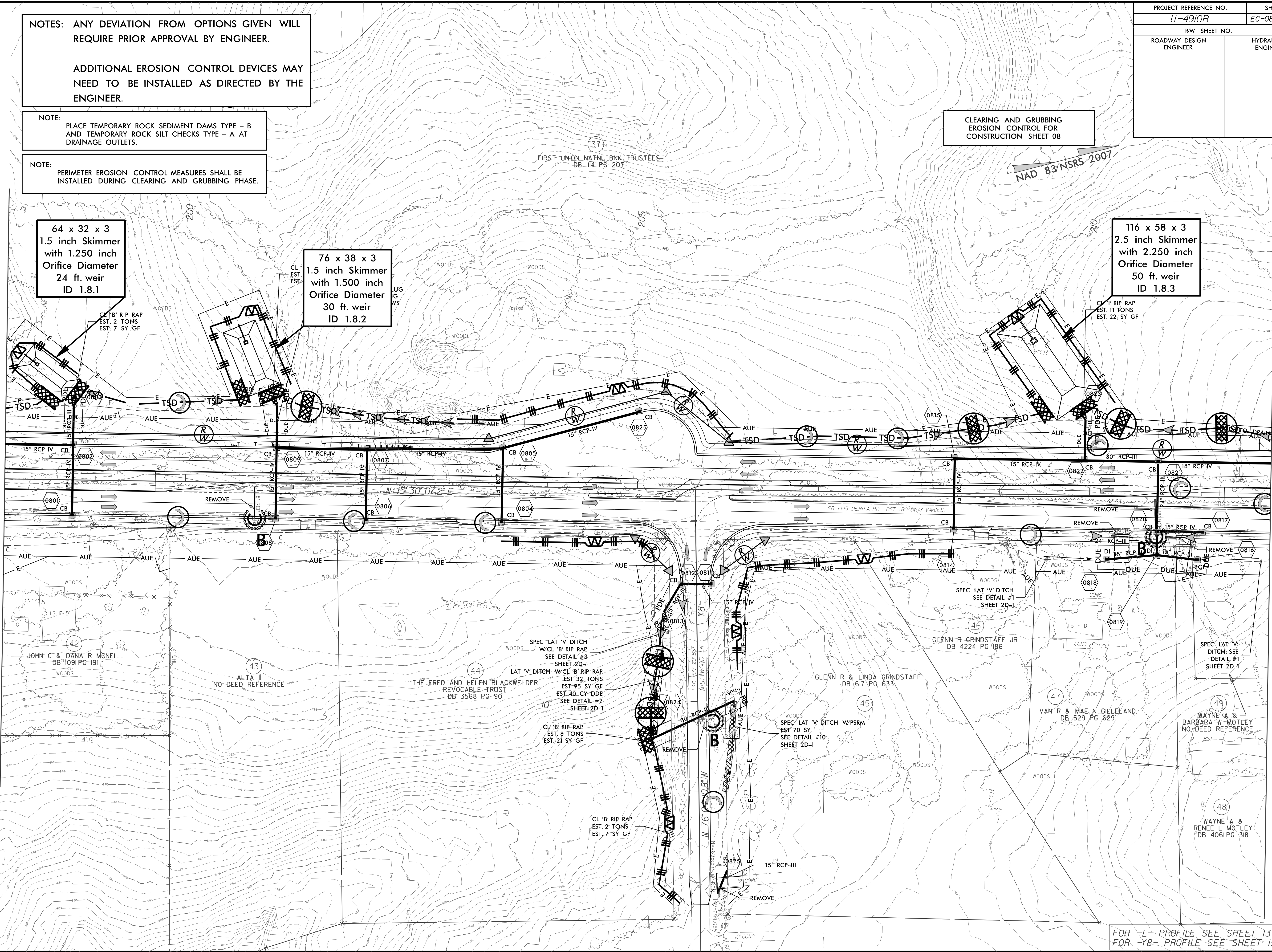
NOTE: PERIMETER EROSION CONTROL MEASURES SHALL BE INSTALLED DURING CLEARING AND GRUBBING PHASE.

CLEARING AND GRUBBING EROSION CONTROL FOR CONSTRUCTION SHEET 08

NAD 83/NSRS 2007

MATCHLINE -L- STA. 198+00 SEE PLAN SHEET 7

MATCHLINE STA. 212+00 SEE PLAN SHEET 9



FOR -L- PROFILE SEE SHEET 13
FOR -Y8- PROFILE SEE SHEET 15

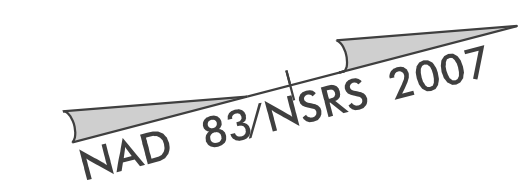
NOTES: ANY DEVIATION FROM OPTIONS GIVEN WILL REQUIRE PRIOR APPROVAL BY ENGINEER.

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

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

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

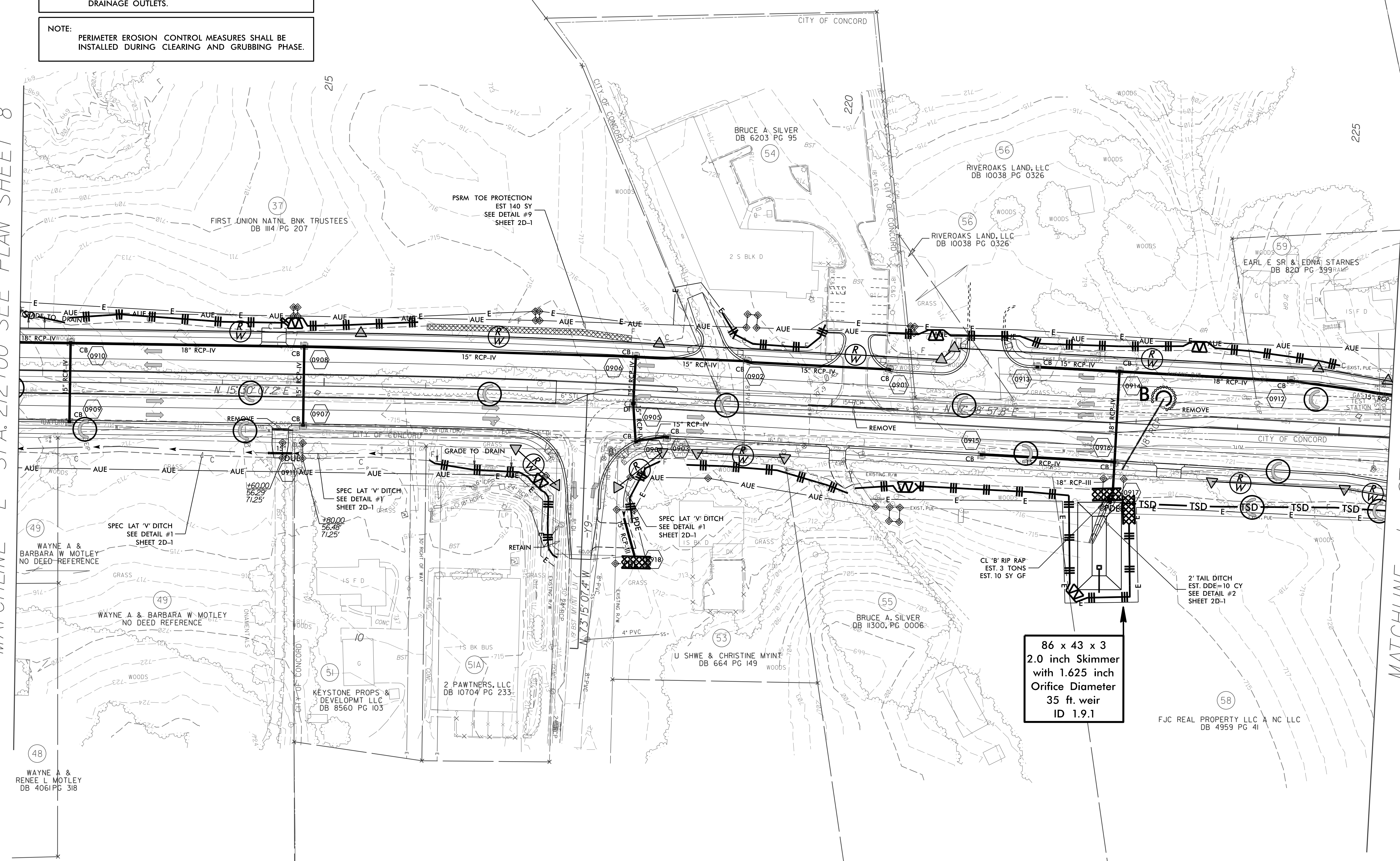
CLEARING AND GRUBBING
EROSION CONTROL FOR
CONSTRUCTION SHEET 09



PROJECT REFERENCE NO. <i>U-4910B</i>	SHEET NO. <i>EC-09/CONST.09</i>
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

MATCHLINE -L- STA. 212+00 SEE PLAN SHEET 8

MATCHLINE -L- STA. 225+50 SEE PLAN SHEET 10



86 x 43 x 3
2.0 inch Skimmer
with 1.625 inch
Orifice Diameter
35 ft. weir
ID 1.9.1

FOR -L- PROFILE SEE SHEET 14
FOR -Y9- PROFILE SEE SHEET 16

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

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

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

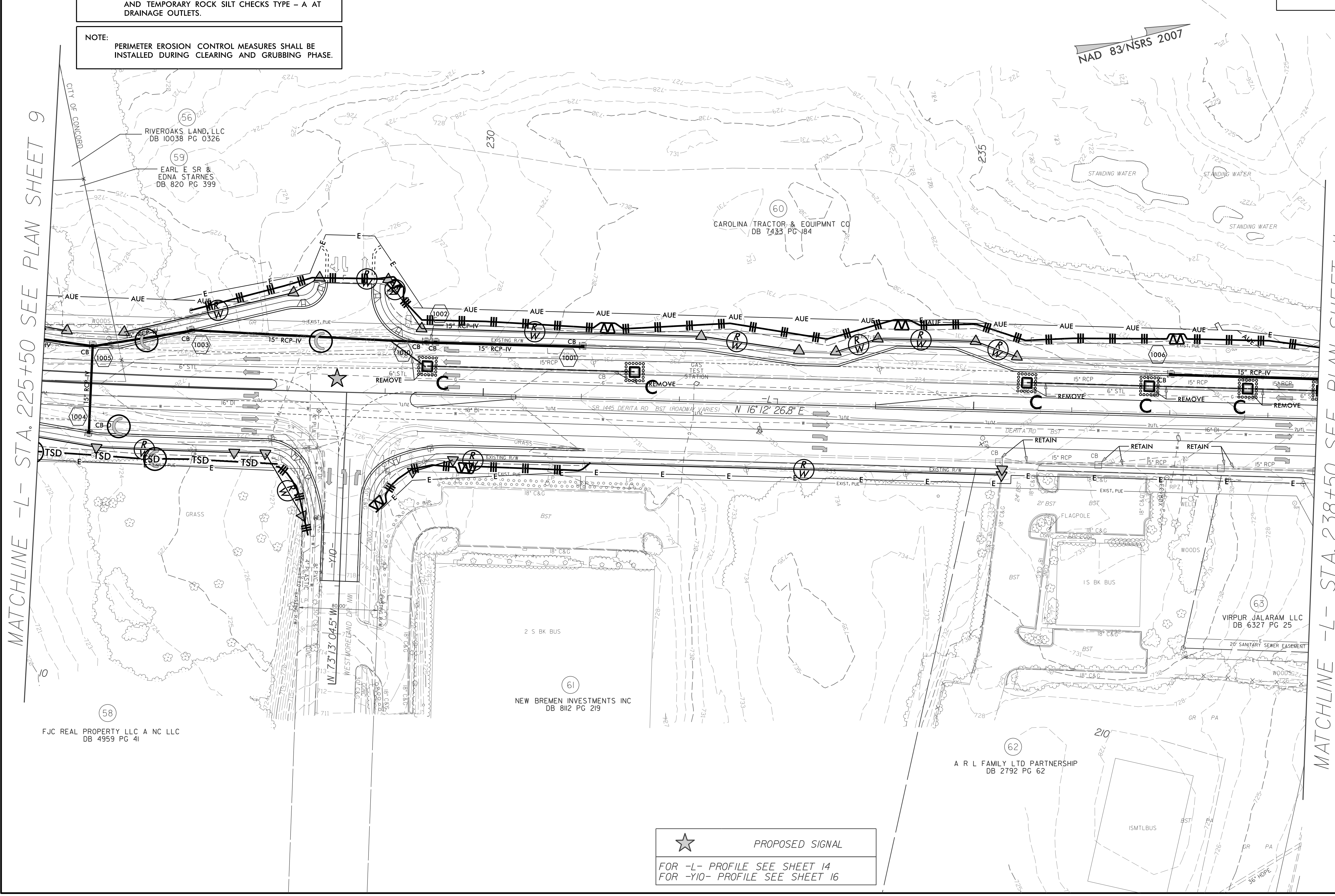
NOTE: PERIMETER EROSION CONTROL MEASURES SHALL BE INSTALLED DURING CLEARING AND GRUBBING PHASE.

CLEARING AND GRUBBING
EROSION CONTROL FOR
CONSTRUCTION SHEET 10

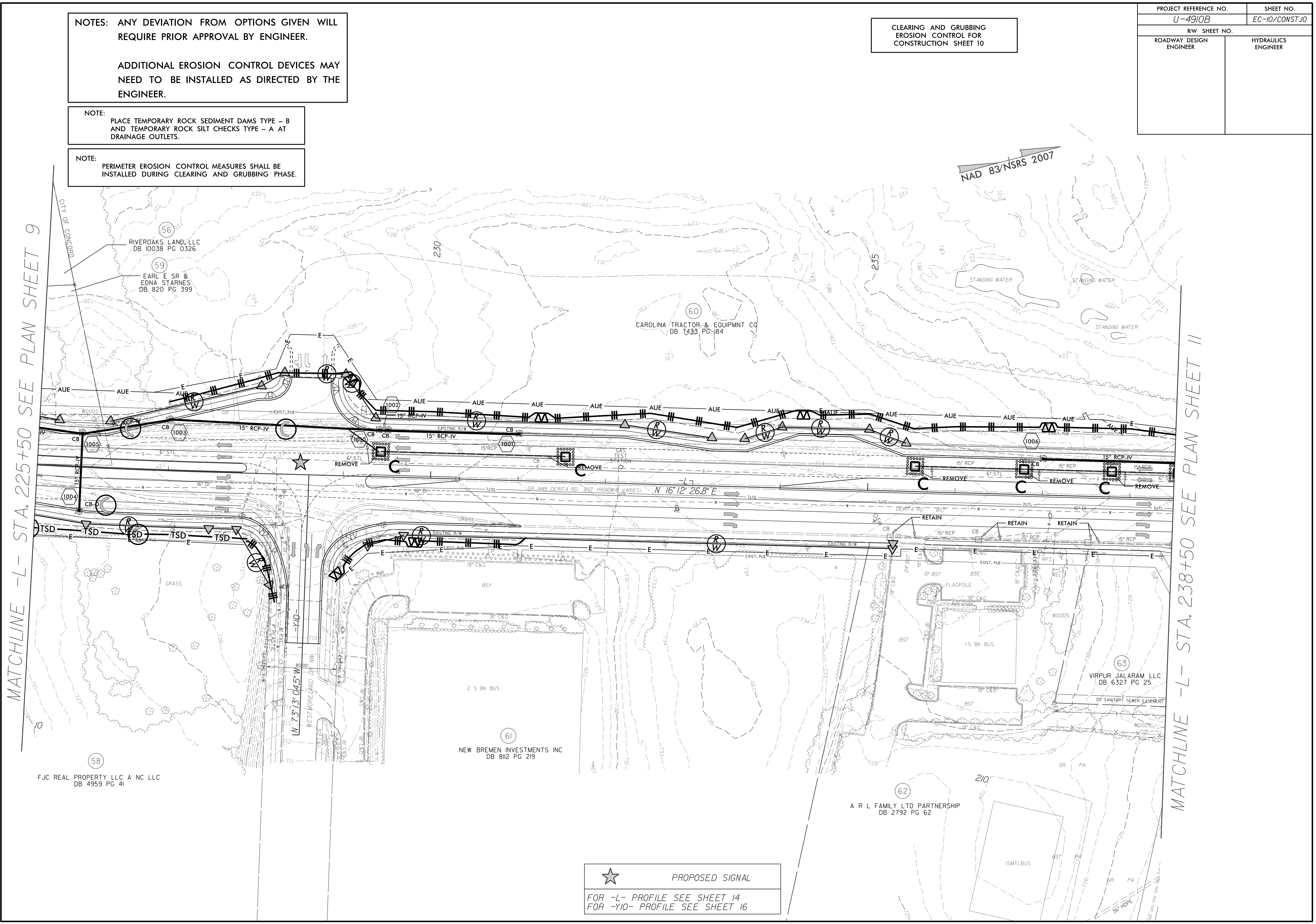
PROJECT REFERENCE NO. U-4910B	SHEET NO. EC-10/CONST-10
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

MATCHLINE -L- STA. 225+50 SEE PLAN SHEET 9

MATCHLINE -L- STA. 238+50 SEE PLAN SHEET 11

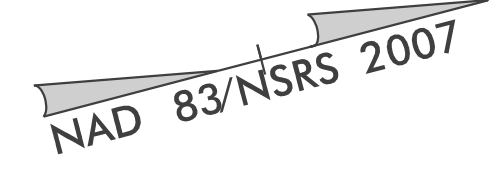


★ PROPOSED SIGNAL
FOR -L- PROFILE SEE SHEET 14
FOR -Y10- PROFILE SEE SHEET 16



PROJECT REFERENCE NO.	SHEET NO.
U-4910B	EC-II/CONST.II
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

CLEARING AND GRUBBING
EROSION CONTROL FOR
CONSTRUCTION SHEET 11



MATCHLINE -L- STA. 238+50 SEE PLAN SHEET 10



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.

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

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

★ PROPOSED SIGNAL
FOR -L- PROFILE SEE SHEET 14

PROJECT REFERENCE NO.	SHEET NO.
U-4910B	EC-12/CONST.04
RW SHEET NO.	HYDRAULICS ENGINEER
ROADWAY DESIGN ENGINEER	

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

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

FINAL GRADE EROSION CONTROL FOR CONSTRUCTION SHEET 04

NAD 83/NSRS 2007

Place Matting for Erosion Control on Slope as Work Allows. Sta. 12+45 -Y5A- RT to Sta. 161+00 -L- LT

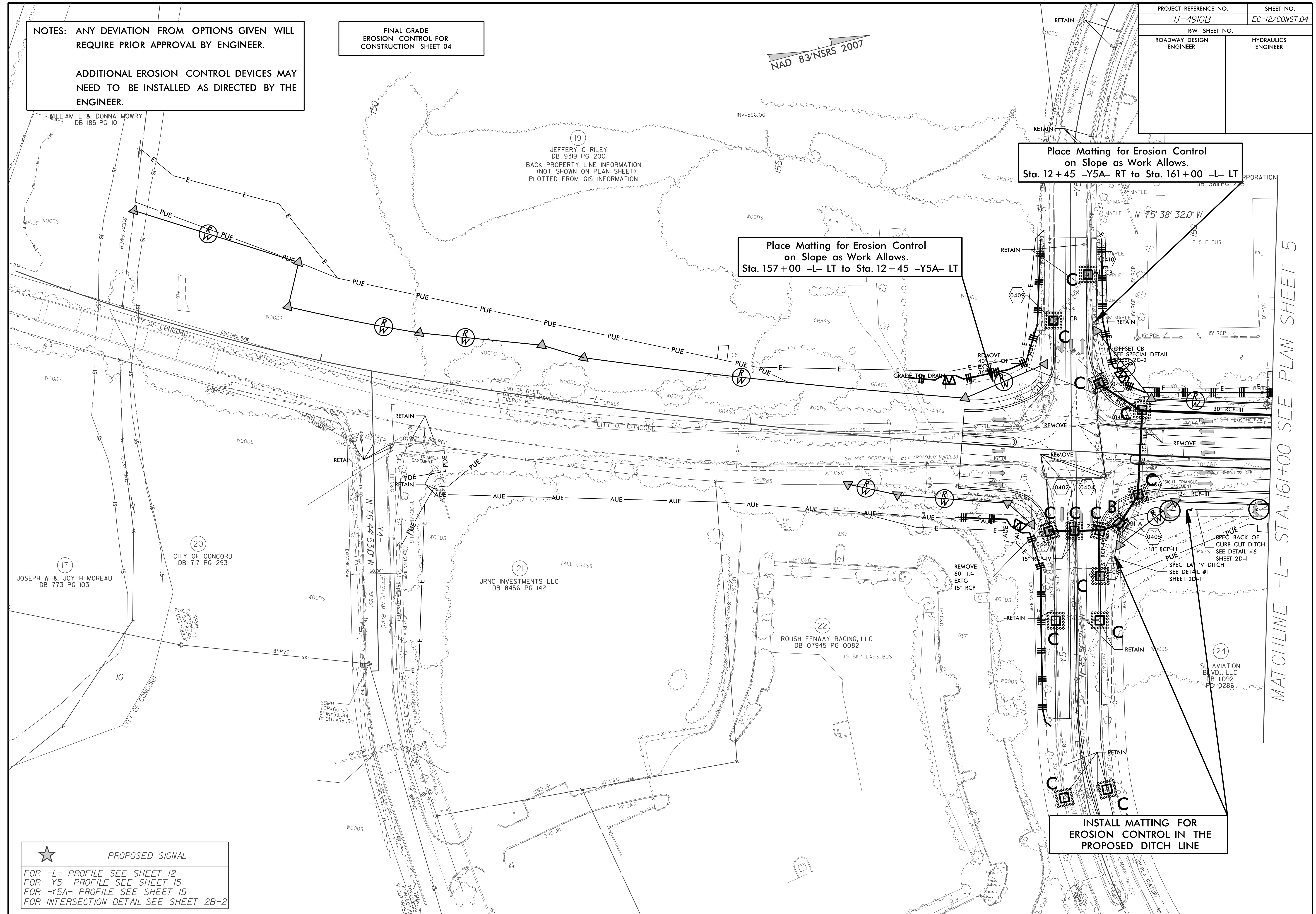
Place Matting for Erosion Control on Slope as Work Allows. Sta. 157+00 -L- LT to Sta. 12+45 -Y5A- LT

INSTALL MATTING FOR EROSION CONTROL IN THE PROPOSED DITCH LINE

★ PROPOSED SIGNAL

FOR -L- PROFILE SEE SHEET 12
 FOR -Y5- PROFILE SEE SHEET 15
 FOR -Y5A- PROFILE SEE SHEET 15
 FOR INTERSECTION DETAIL SEE SHEET 2B-2

MATCHLINE -L- STA. 161+00 SEE PLAN SHEET 15



PROJECT REFERENCE NO.	SHEET NO.
U-4910B	EC-14/CONST.06
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

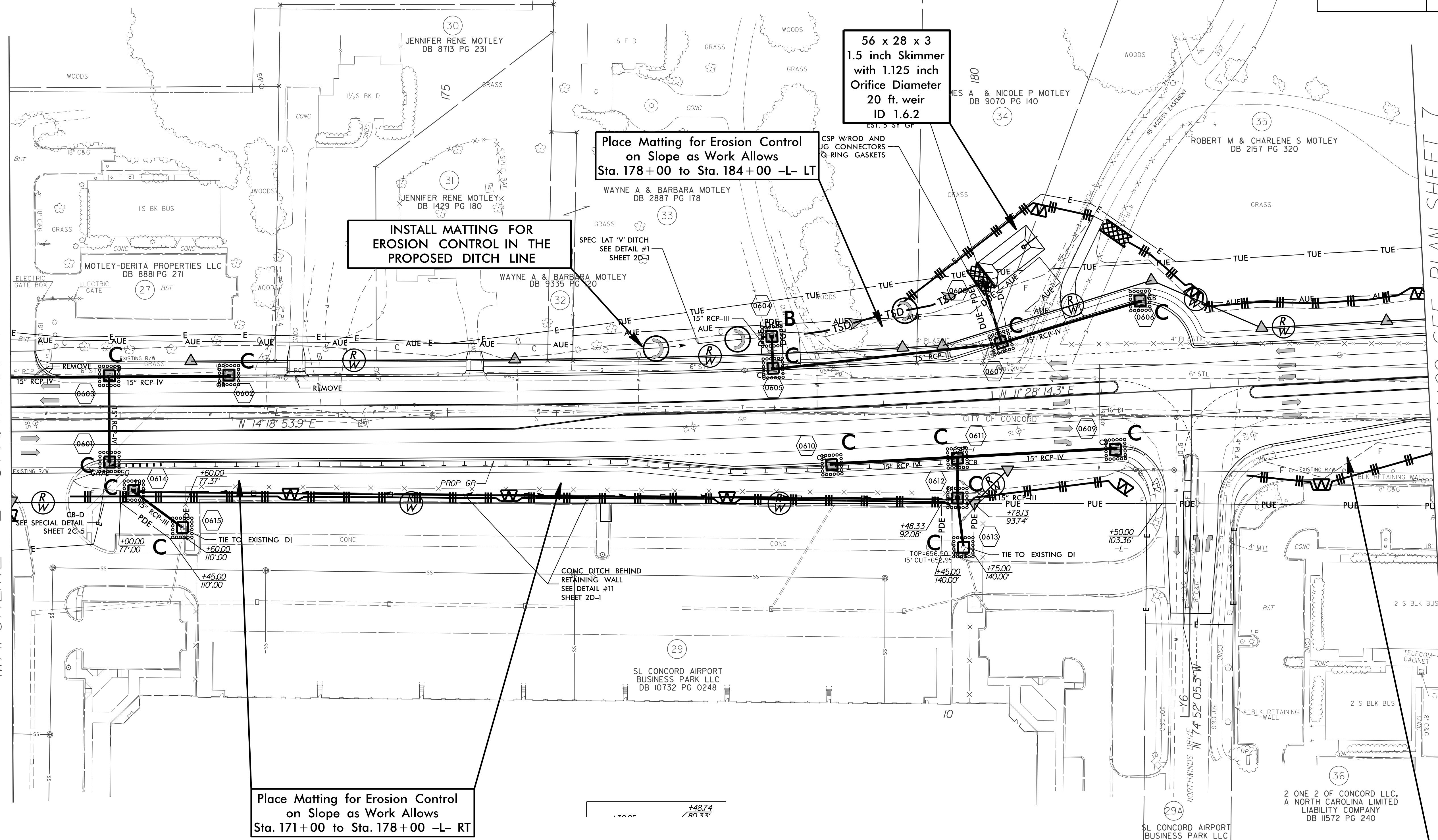
NOTES: ANY DEVIATION FROM OPTIONS GIVEN WILL REQUIRE PRIOR APPROVAL BY ENGINEER.

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

FINAL GRADE EROSION CONTROL FOR CONSTRUCTION SHEET 06

MATCHLINE -L- STA. 171+00 SEE PLAN SHEET 5

MATCHLINE -L- STA. 184+00 SEE PLAN SHEET 7



Place Matting for Erosion Control on Slope as Work Allows Sta. 178+00 to Sta. 184+00 -L- LT

INSTALL MATTING FOR EROSION CONTROL IN THE PROPOSED DITCH LINE

56 x 28 x 3
1.5 inch Skimmer
with 1.125 inch
Orifice Diameter
20 ft. weir
ID 1.6.2

Place Matting for Erosion Control on Slope as Work Allows Sta. 171+00 to Sta. 178+00 -L- RT

Place Matting for Erosion Control on Slope as Work Allows Sta. 182+25 to Sta. 184+00 -L- RT

+38.84/ 96.89	+48.74/ 97.07
PUE STATION & OFFSET DETAIL 176+45 RT	

FOR -L- PROFILE SEE SHEET 12
FOR -Y6- PROFILE SEE SHEET 15

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

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

PROJECT REFERENCE NO. U-4910B	SHEET NO. EC-15/CONST.07
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

NAD 83/NSRS 2007

FINAL GRADE EROSION CONTROL FOR CONSTRUCTION SHEET 07

MATCHLINE -L- STA. 184+00 SEE PLAN SHEET 6

MATCHLINE -L- STA. 198+00 SEE PLAN SHEET 8

Place Matting for Erosion Control on Slope as Work Allows. Sta. 184+00 to Sta. 191+00 -L- LT

Place Matting for Erosion Control on Slope as Work Allows. Sta. 196+00 to Sta. 198+00 -L- LT

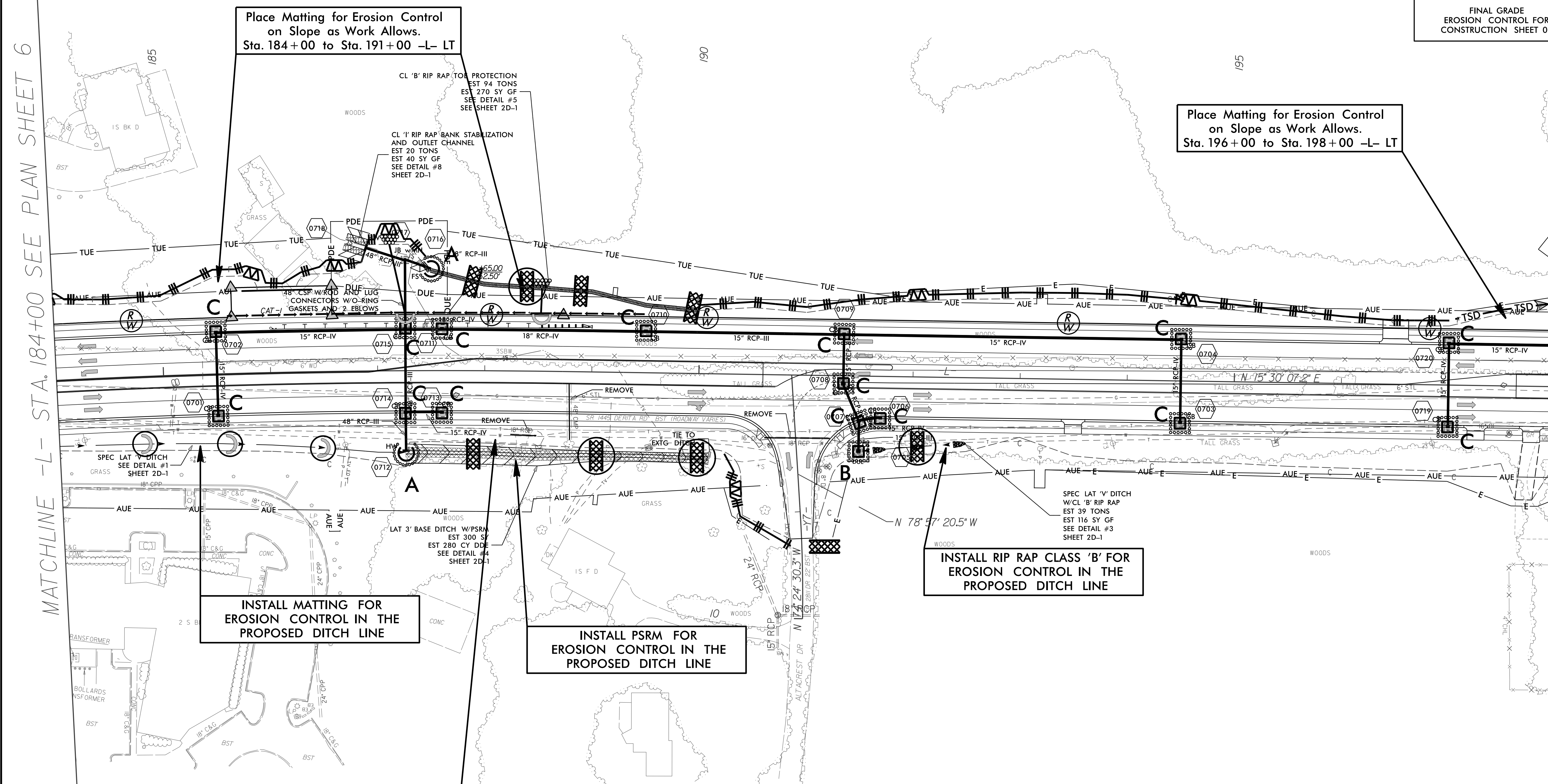
INSTALL MATTING FOR EROSION CONTROL IN THE PROPOSED DITCH LINE

INSTALL PSRM FOR EROSION CONTROL IN THE PROPOSED DITCH LINE

INSTALL RIP RAP CLASS 'B' FOR EROSION CONTROL IN THE PROPOSED DITCH LINE

Place Matting for Erosion Control on Slope as Work Allows. Sta. 187+25 to Sta. 190+25 -L- RT

FOR -L- PROFILE SEE SHEET 13
FOR -Y7- PROFILE SEE SHEET 15



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

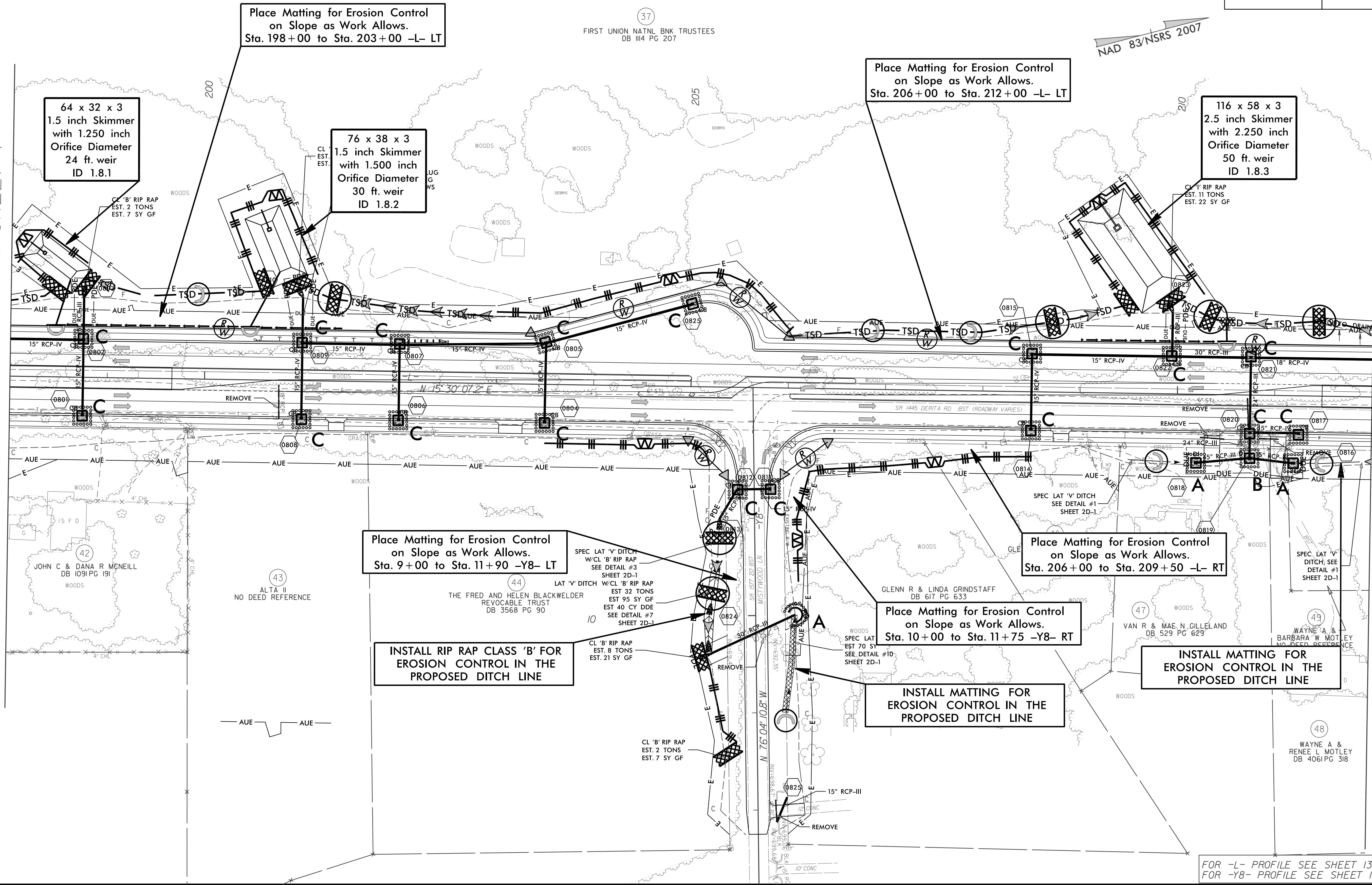
ADDITIONAL EROSION CONTROL DEVICES MAY NEED TO BE INSTALLED AS DIRECTED BY THE ENGINEER.

FINAL GRADE
EROSION CONTROL FOR
CONSTRUCTION SHEET 08

PROJECT REFERENCE NO. U-4910B	SHEET NO. EC-16/CONST.08
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

MATCHLINE -L- STA. 198+00 SEE PLAN SHEET 7

MATCHLINE STA. 212+00 SEE PLAN SHEET 9

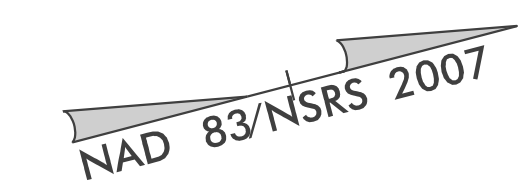


FOR -L- PROFILE SEE SHEET 13
FOR -Y8- PROFILE SEE SHEET 15

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

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

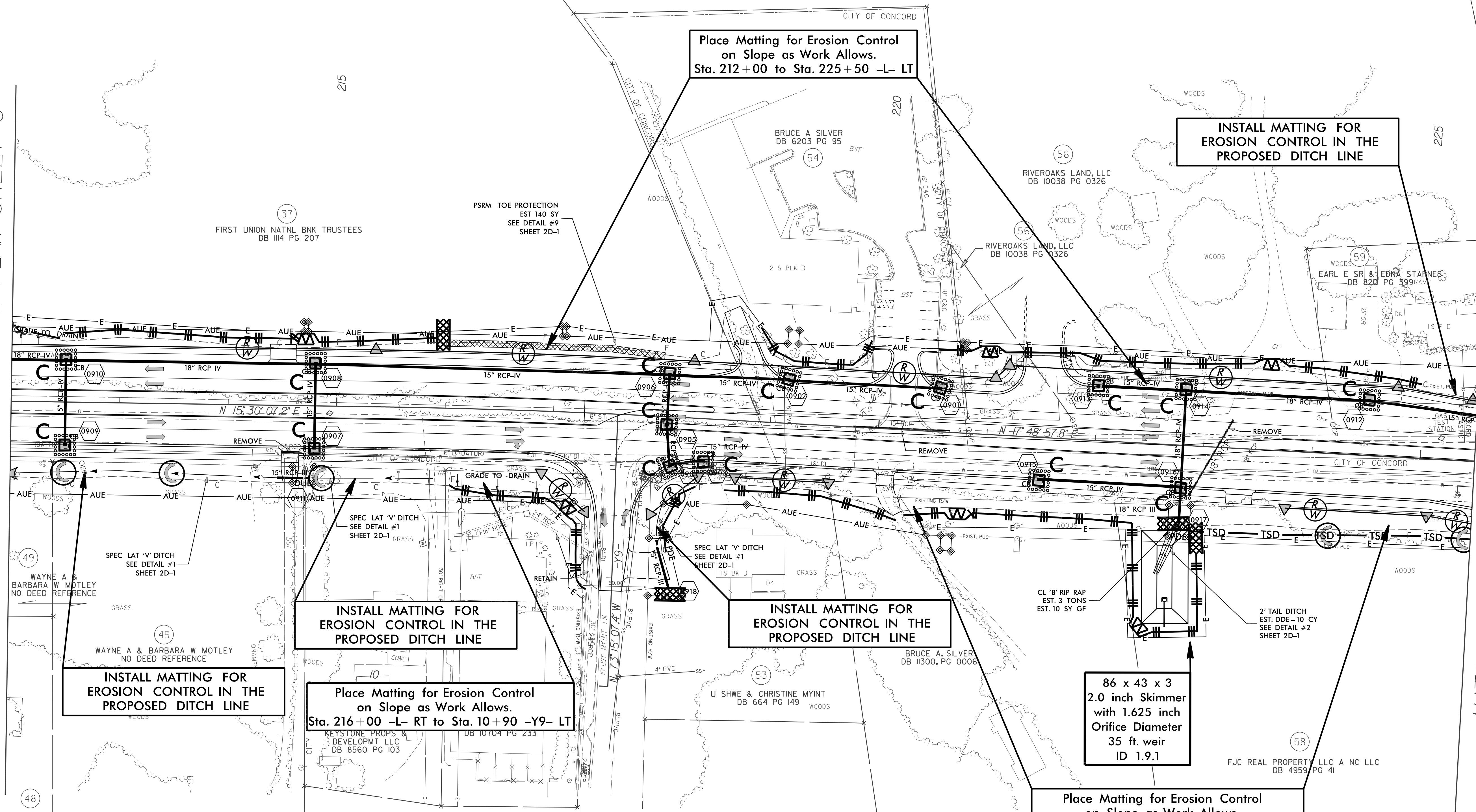
FINAL GRADE
EROSION CONTROL FOR
CONSTRUCTION SHEET 09



PROJECT REFERENCE NO.	SHEET NO.
U-4910B	EC-17/CONST.09
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

MATCHLINE -L- STA. 212+00 SEE PLAN SHEET 8

MATCHLINE -L- STA. 225+50 SEE PLAN SHEET 10



Place Matting for Erosion Control on Slope as Work Allows. Sta. 212+00 to Sta. 225+50 -L- LT

INSTALL MATTING FOR EROSION CONTROL IN THE PROPOSED DITCH LINE

INSTALL MATTING FOR EROSION CONTROL IN THE PROPOSED DITCH LINE

INSTALL MATTING FOR EROSION CONTROL IN THE PROPOSED DITCH LINE

INSTALL MATTING FOR EROSION CONTROL IN THE PROPOSED DITCH LINE

Place Matting for Erosion Control on Slope as Work Allows. Sta. 216+00 -L- RT to Sta. 10+90 -Y9- LT

86 x 43 x 3
2.0 inch Skimmer
with 1.625 inch
Orifice Diameter
35 ft. weir
ID 1.9.1

Place Matting for Erosion Control on Slope as Work Allows. Sta. 10+90 -Y9- RT to Sta. 225+50 -L- RT

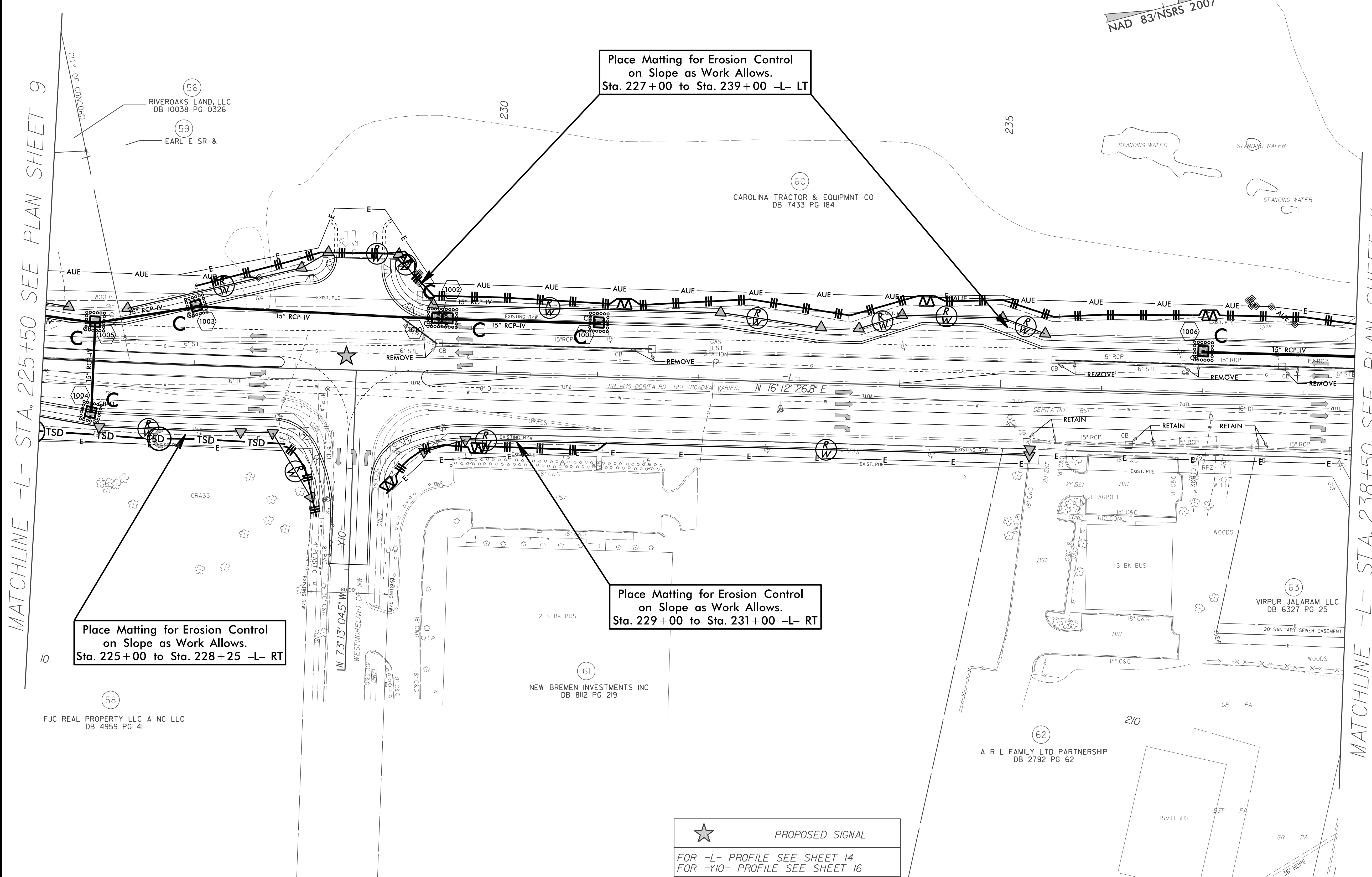
FOR -L- PROFILE SEE SHEET 14
FOR -Y9- PROFILE SEE SHEET 16

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

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

FINAL GRADE
EROSION CONTROL FOR
CONSTRUCTION SHEET 10

PROJECT REFERENCE NO. U-4910B	SHEET NO. EC-18/CONST 10
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER



Place Matting for Erosion Control
on Slope as Work Allows.
Sta. 227+00 to Sta. 239+00 -L- LT

Place Matting for Erosion Control
on Slope as Work Allows.
Sta. 225+00 to Sta. 228+25 -L- RT

Place Matting for Erosion Control
on Slope as Work Allows.
Sta. 229+00 to Sta. 231+00 -L- RT

★ PROPOSED SIGNAL
FOR -L- PROFILE SEE SHEET 14
FOR -Y10- PROFILE SEE SHEET 16

NAD 83/NSRS 2007

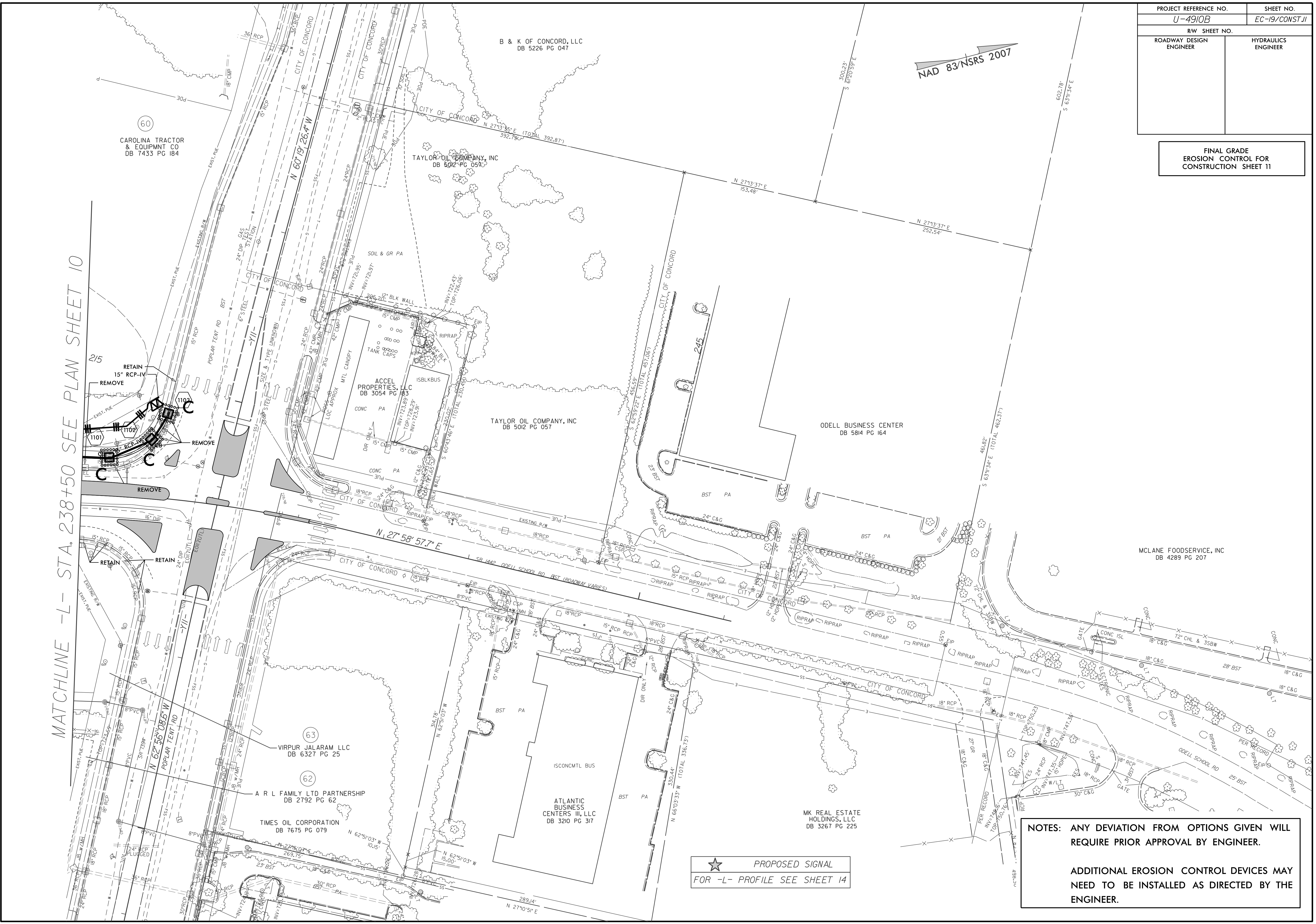
MATCHLINE -L- STA. 225+50 SEE PLAN SHEET 9

MATCHLINE -L- STA. 238+50 SEE PLAN SHEET 11

PROJECT REFERENCE NO.	SHEET NO.
U-4910B	EC-19/CONST.II
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

FINAL GRADE
EROSION CONTROL FOR
CONSTRUCTION SHEET 11

MATCHLINE -L- STA. 238+50 SEE PLAN SHEET 10



★ PROPOSED SIGNAL
FOR -L- PROFILE SEE SHEET 14

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

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