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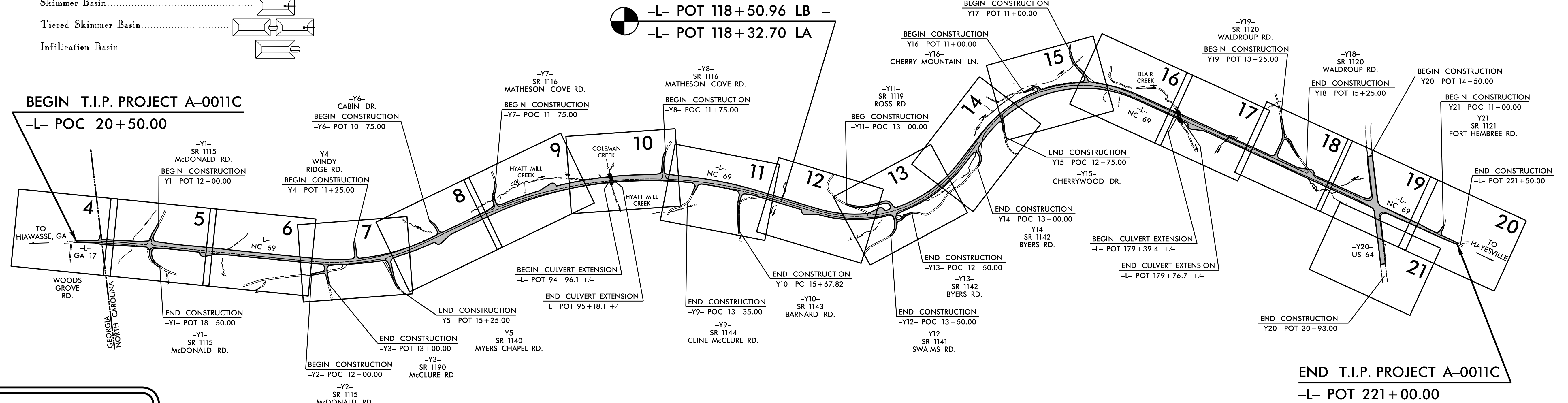
TIP PROJECT: A-0011C

EROSION AND SEDIMENT CONTROL MEASURES

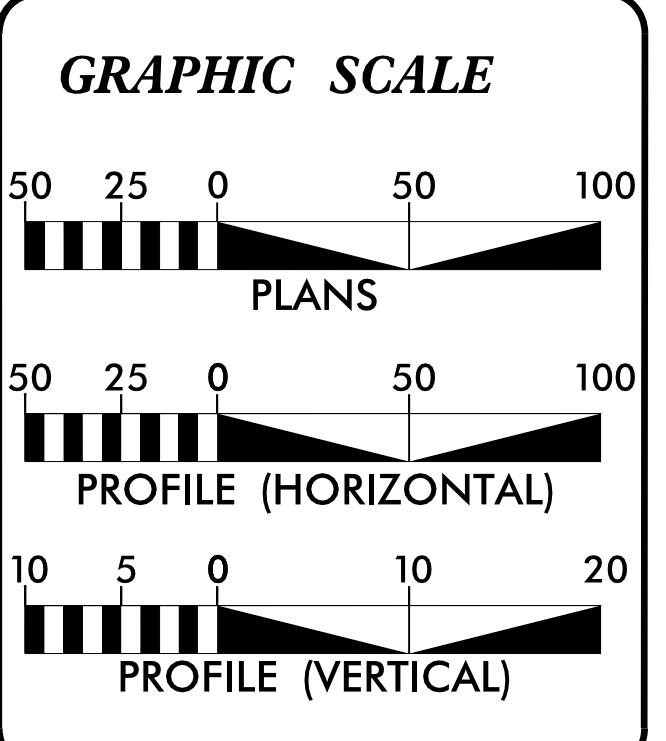
Std. #	Description	Symbol
1630.03	Temporary Silt Ditch	
1630.05	Temporary Diversion	
1605.01	Temporary Silt Fence	
1606.01	Special Sediment Control Fence	
1622.01	Temporary Berms and Slope Drains	
1630.02	Silt Basin Type B	
1633.01	Temporary Rock Silt Check Type-A	
	Temporary Rock Silt Check Type-A with 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	
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	

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

LOCATION: NC 69 FROM GEORGIA STATE LINE TO US 64
TYPE OF WORK: GRADING, DRAINAGE, PAVING, SIGNALS,
AND CULVERTS



NCDOT CONTACT:
KENNETH McDOWELL
ASSISTANT DESIGN CONSTRUCTION
ENGINEER, DIV. 14
(828) 631-1172



ROADSIDE ENVIRONMENTAL UNIT
DIVISION OF HIGHWAYS
STATE OF NORTH CAROLINA

THESE EROSION AND SEDIMENT CONTROL PLANS COMPLY
WITH THE REGULATIONS SET FORTH BY THE
NCG-010000 GENERAL CONSTRUCTION PERMIT EFFECTIVE APRIL 1, 2019
ISSUED BY THE NORTH CAROLINA DEPARTMENT OF ENVIRONMENT AND
NATURAL RESOURCES DIVISION OF WATER QUALITY.

Prepared in the Office of:
Weston & Sampson
598 East Chatham Street Suite 137
Cary, NC 27511
Phone: 919.297.0220 Fax: 919.297.0221
NC License: C-4847

Prepared For:
ROADSIDE ENVIRONMENTAL UNIT
1 South Wilmington St.
Raleigh, NC 27611

2018 STANDARD SPECIFICATIONS

Designed by:
PAUL CAMERON, PE 3624
NAME LEVEL III CERTIFICATION NO.

Roadway Standard Drawings

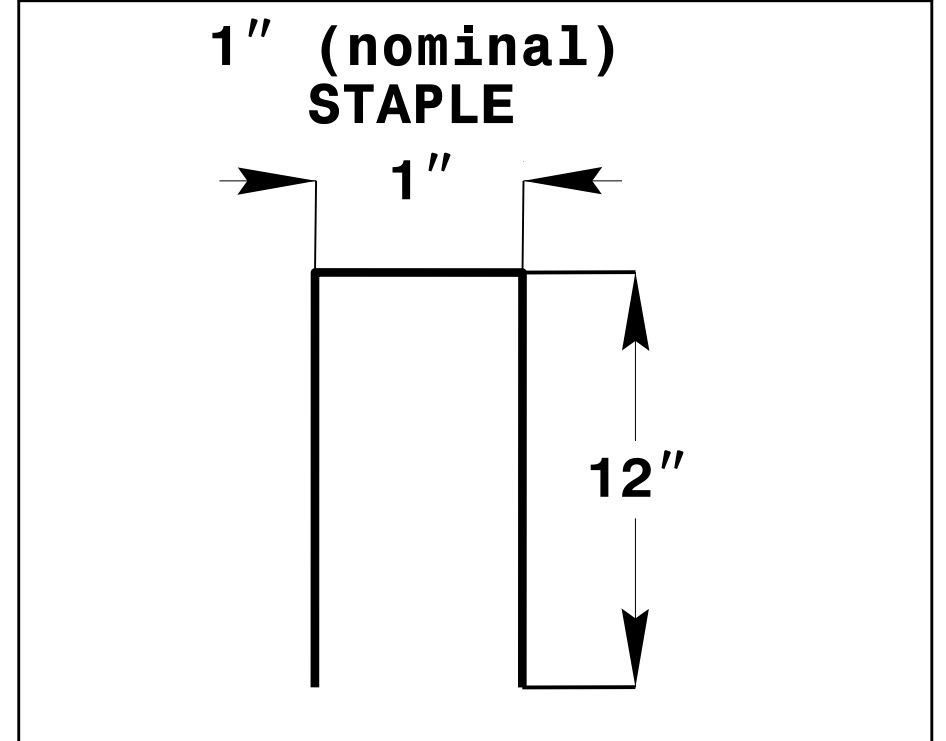
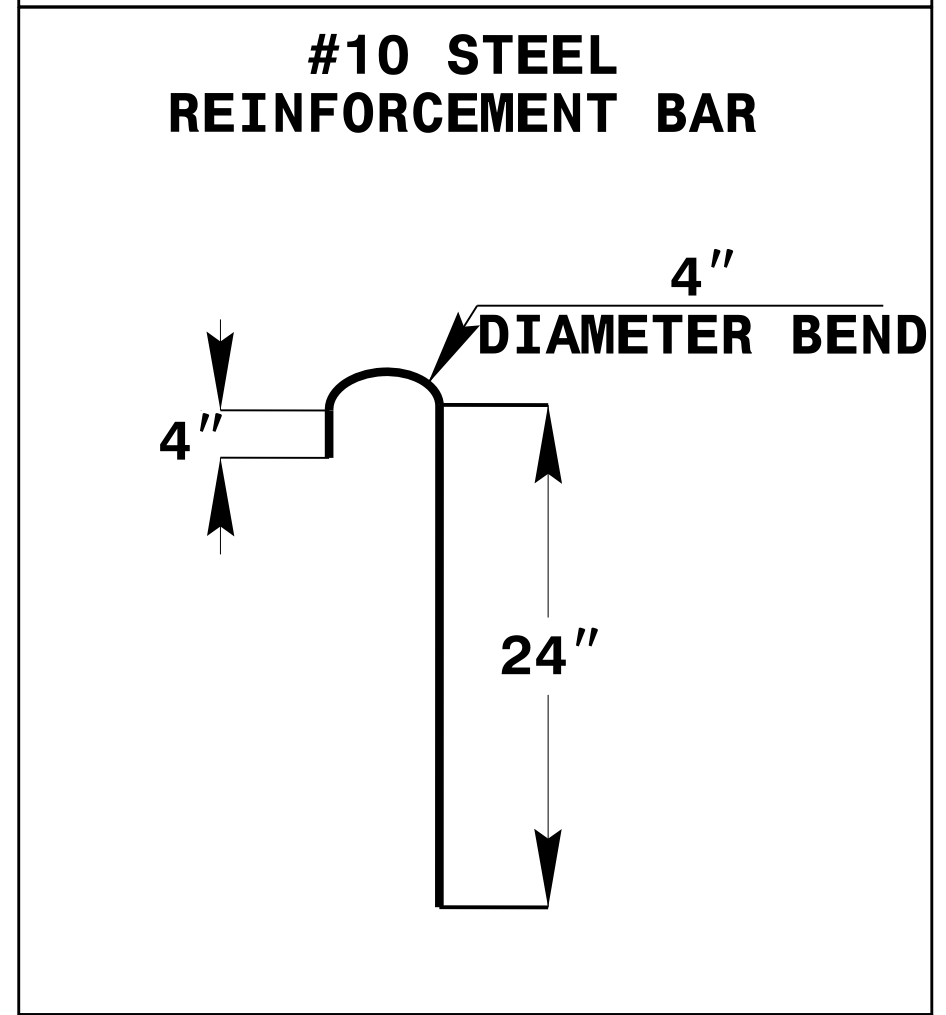
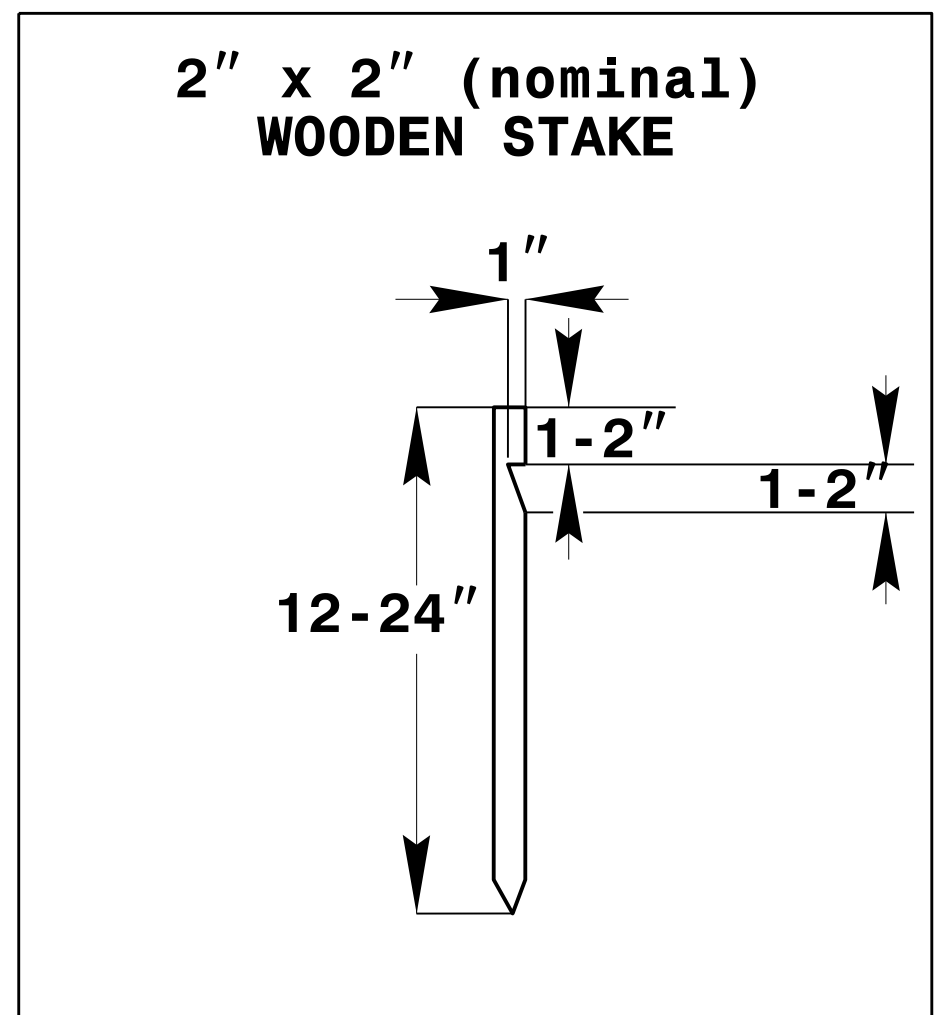
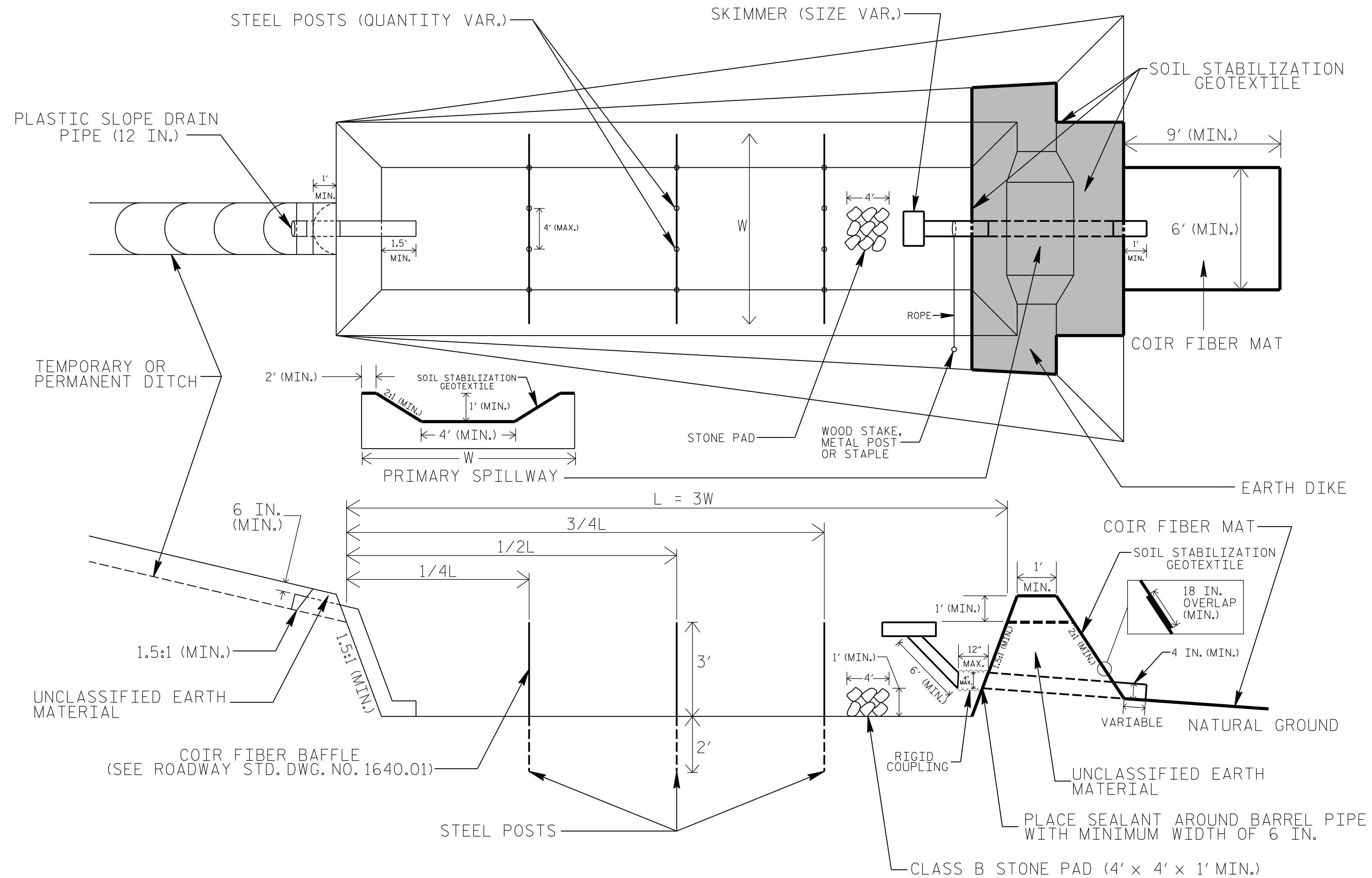
The following roadway english standards as appear in "Roadway Standard Drawings"- Roadway Design Unit - N. C. Department of Transportation - Raleigh, N. C., dated January 2018 and the latest revision thereto are applicable to this project and by reference hereby are considered a part of these plans.

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	

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PROJECT REFERENCE NO. A-0011C	SHEET NO. EC-2
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

SKIMMER BASIN WITH BAFFLES DETAIL



COIR FIBER MAT ANCHOR OPTIONS

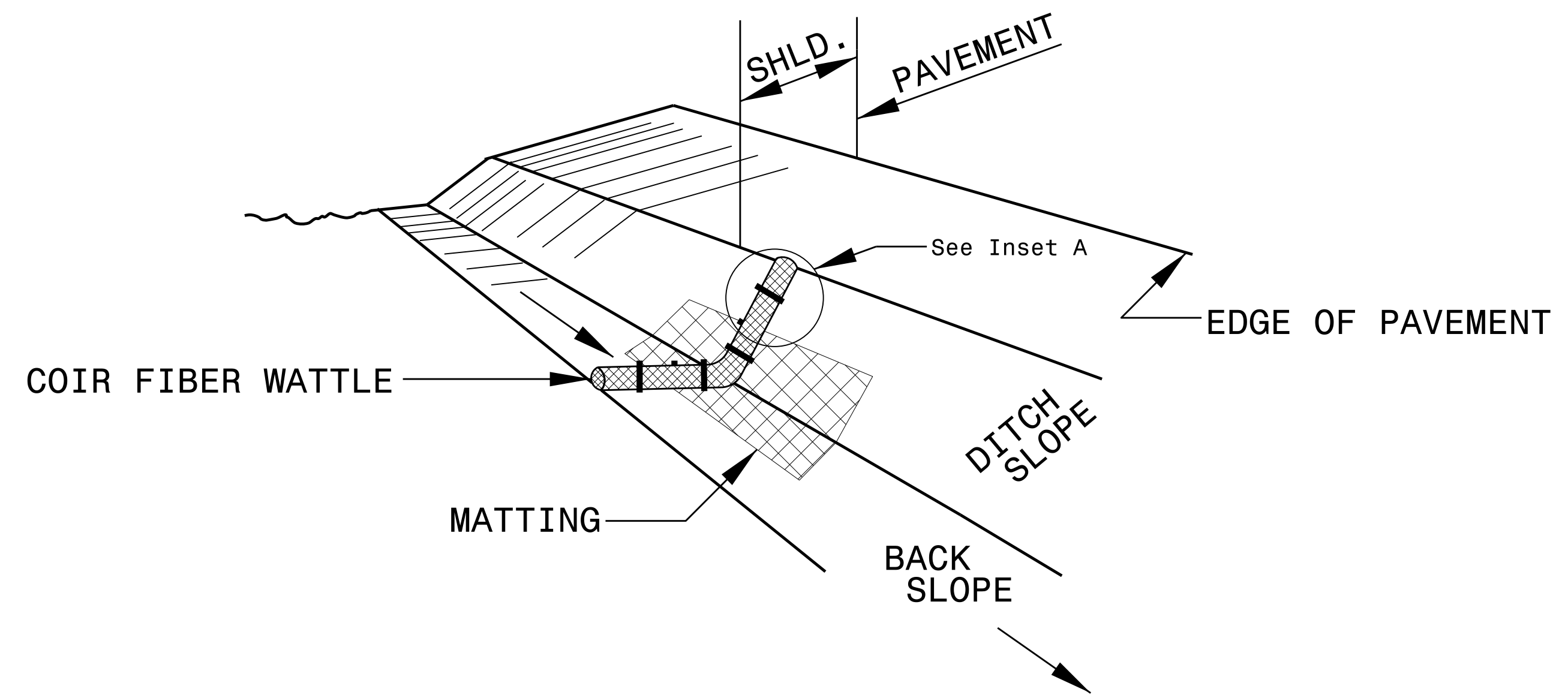
NOTES

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.).

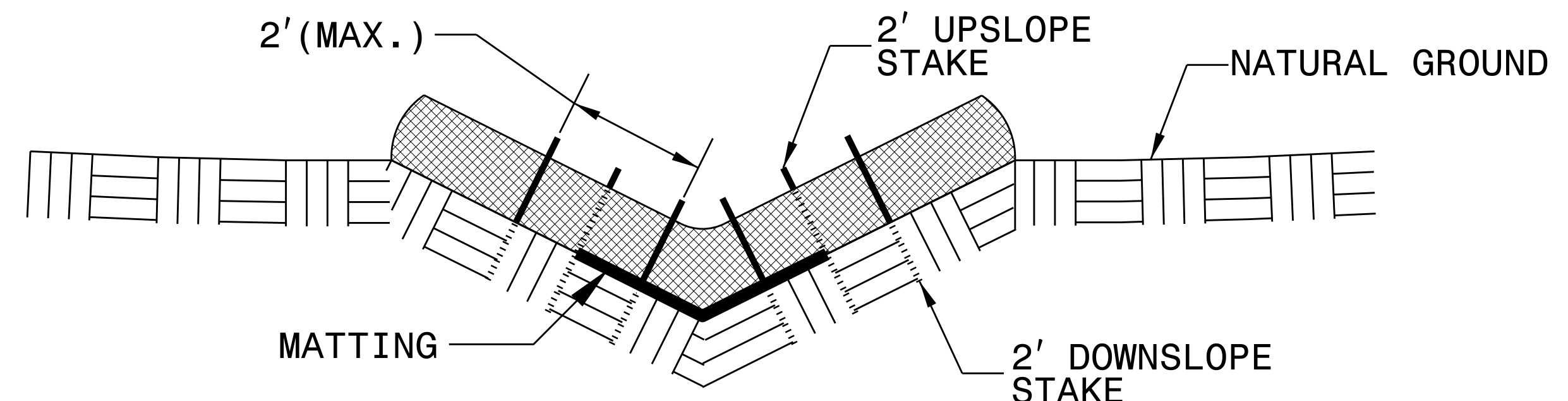
NOT TO SCALE

PROJECT REFERENCE NO. A-0011C	SHEET NO. EC-2A
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

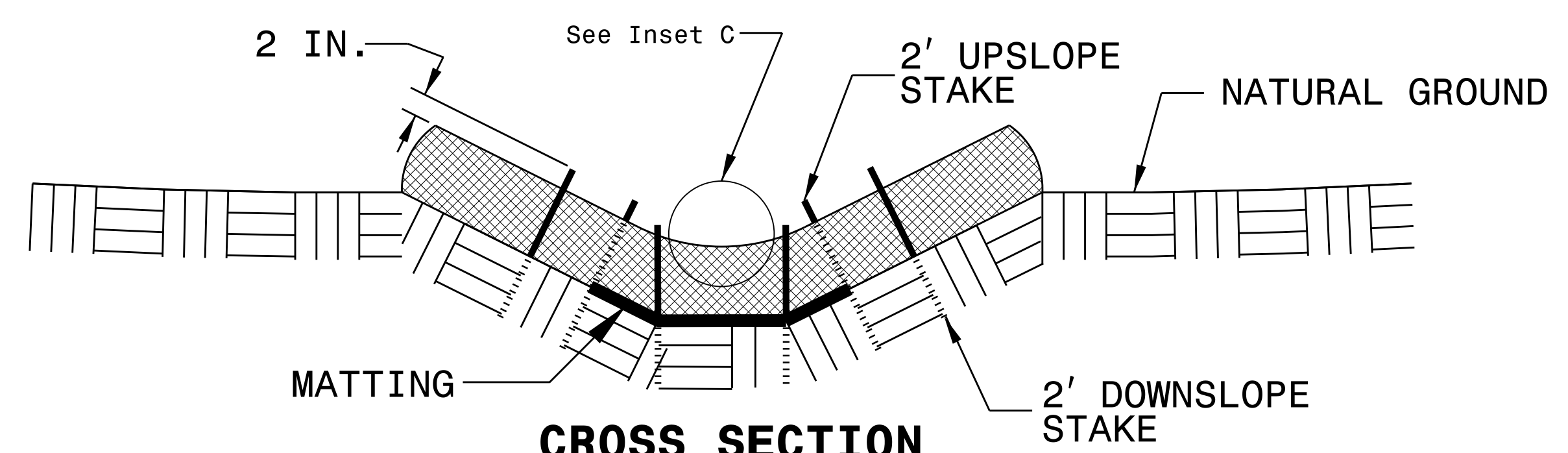
COIR FIBER WATTLE WITH POLYACRYLAMIDE (PAM) DETAIL



ISOMETRIC VIEW

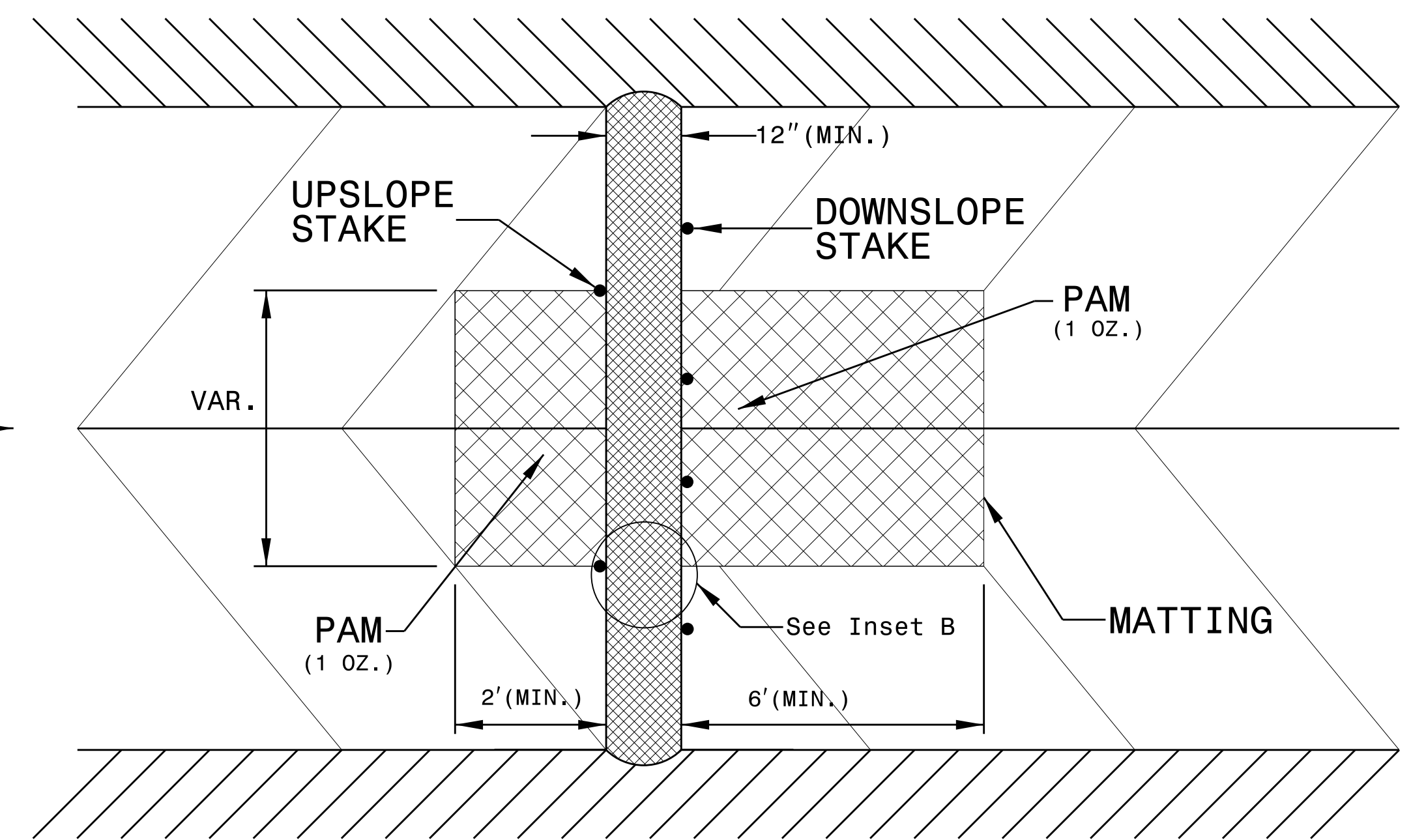
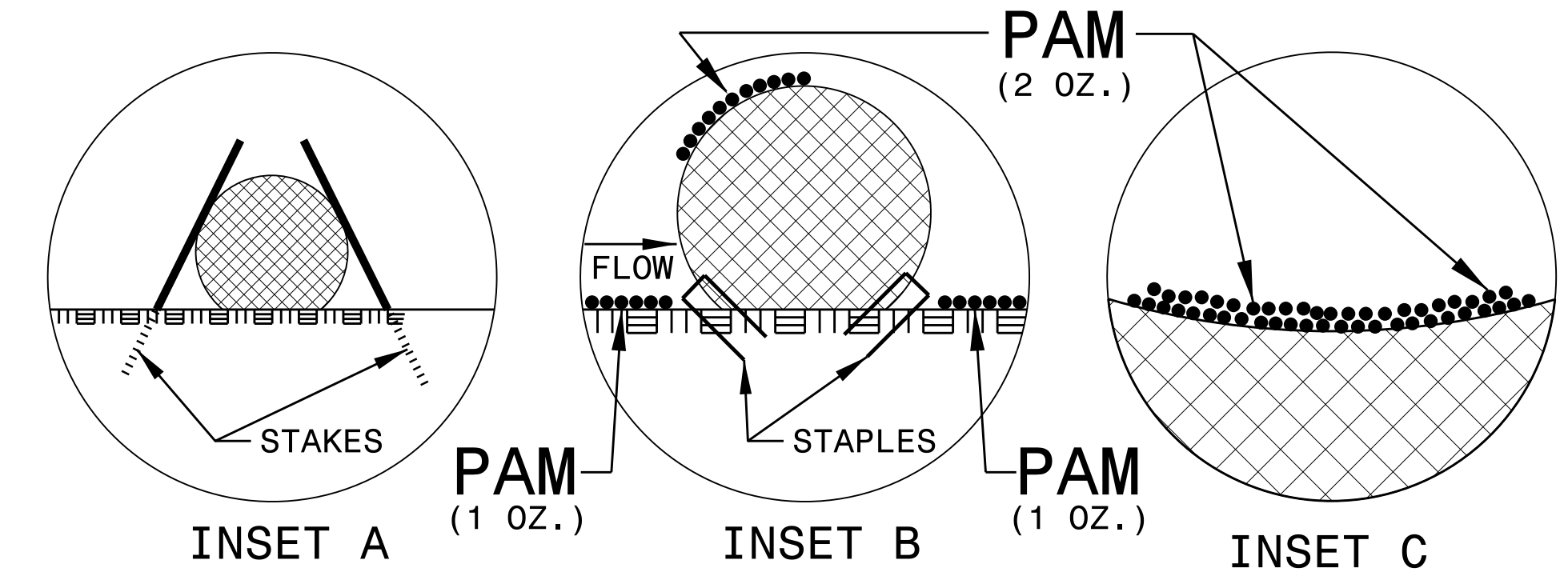


CROSS SECTION VEE DITCH



CROSS SECTION TRAPEZOIDAL DITCH

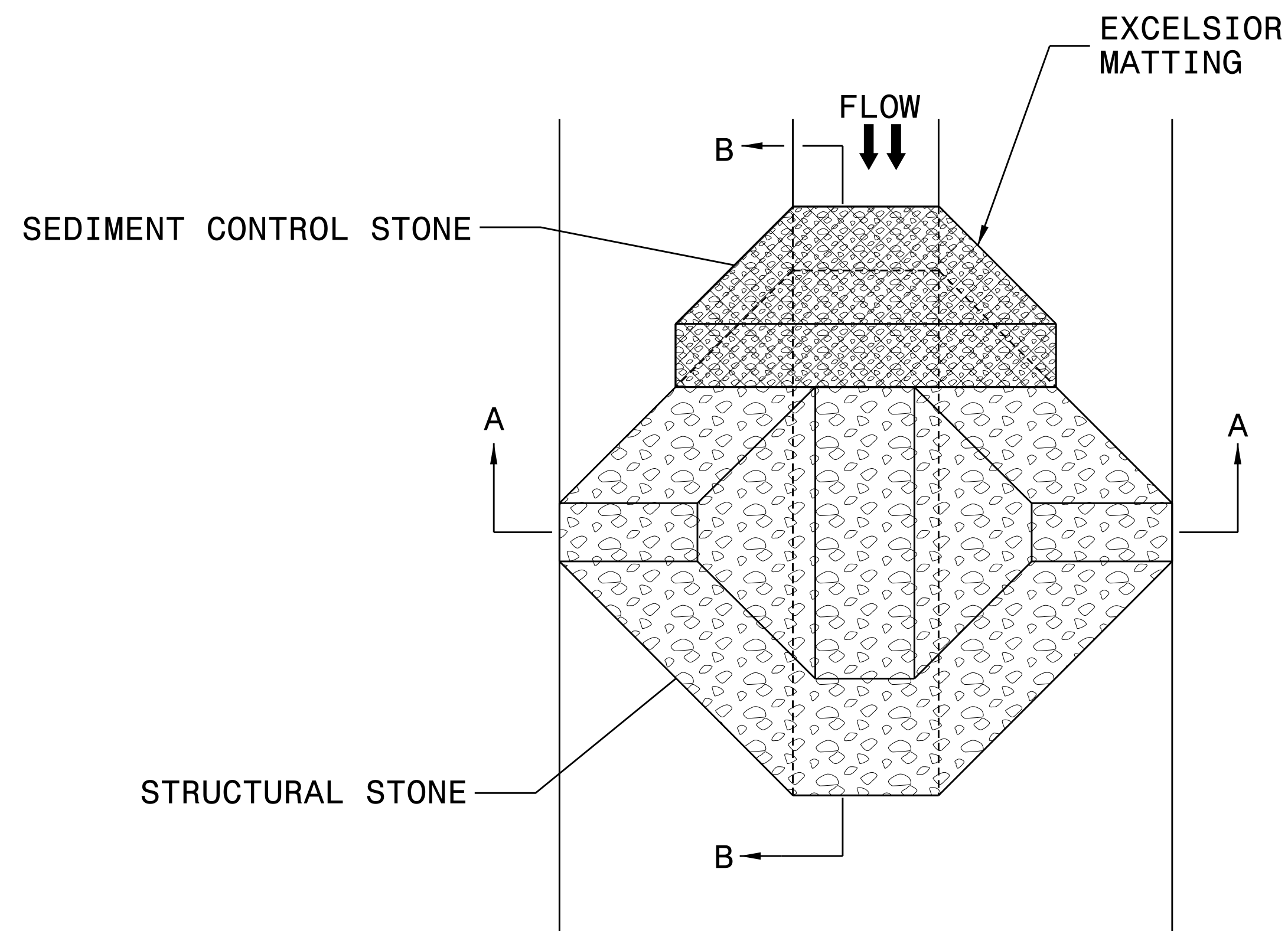
- NOTES:
- USE MINIMUM 12 IN. DIAMETER COIR FIBER (COCONUT FIBER) WATTLE.
 - USE 2 FT. WOODEN STAKES WITH A 2 IN. BY 2 IN. NOMINAL CROSS SECTION.
 - ONLY INSTALL WATTLE(S) TO A HEIGHT IN DITCH SO FLOW WILL NOT WASH AROUND WATTLE AND SCOUR DITCH SLOPES AND AS DIRECTED.
 - INSTALL A MINIMUM OF 2 UPSLOPE 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.



TOP VIEW

PROJECT REFERENCE NO. A-0011C	SHEET NO. EC-2B
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

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



PLAN

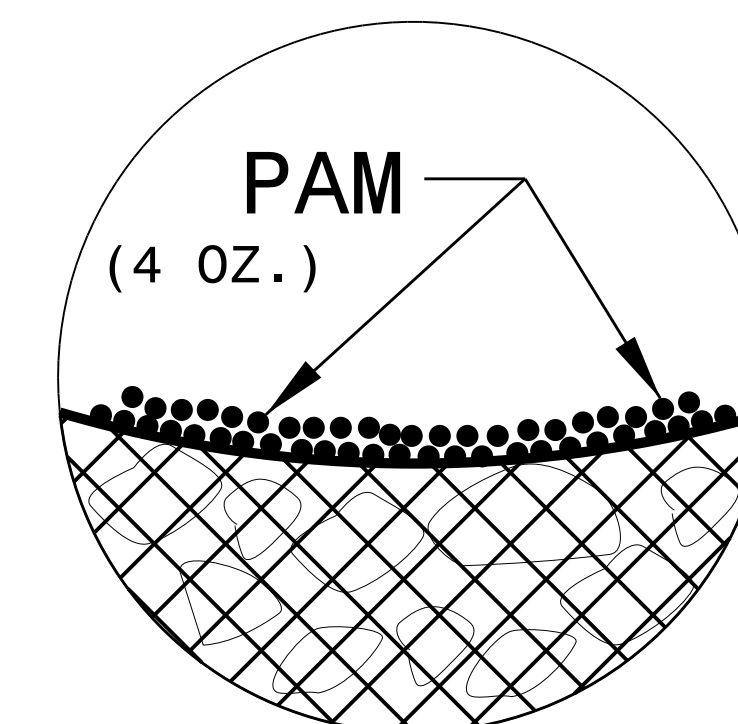
NOTES:

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

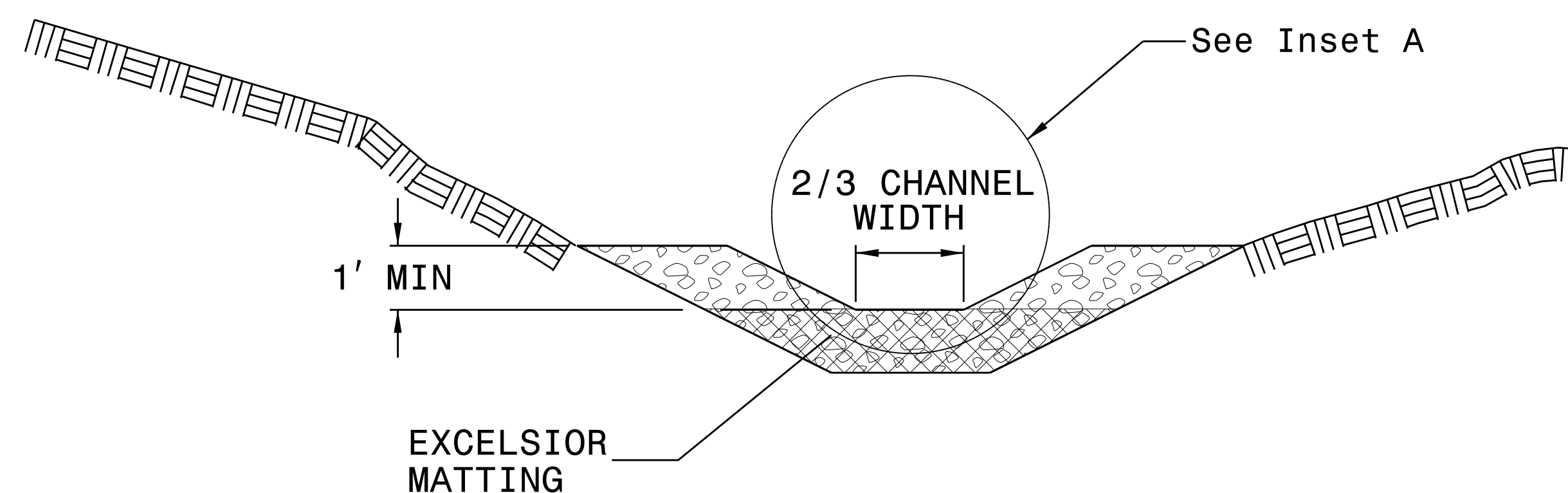
USE EXCELSIOR FOR MATTING MATERIAL AND ANCHOR MATTING SECTION AT TOP AND BOTTOM WITH CLASS B STONE.

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.

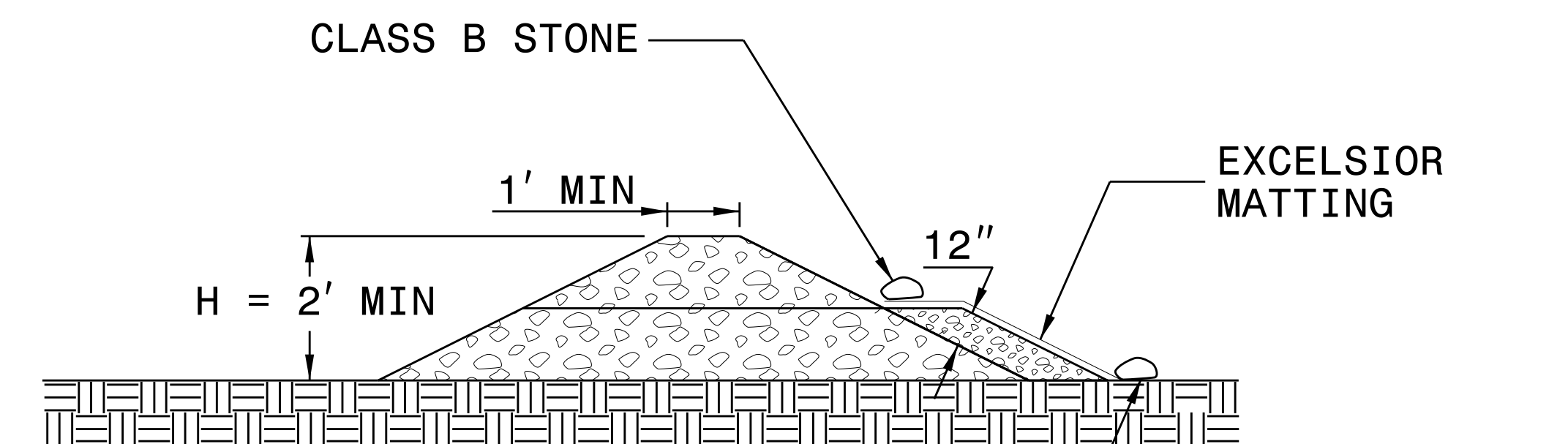
INITIALLY APPLY 4 OUNCES OF POLYACRYLAMIDE (PAM) TO TOP OF MATTING SECTION AND AFTER EVERY RAINFALL EVENT THAT EQUALS OR EXCEEDS 0.50 INCHES.



INSET A



SECTION A-A



SECTION B-B

NOT TO SCALE

DIVISION OF HIGHWAYS STATE OF NORTH CAROLINA

Weston & Sampson		NC License: C-4647	
WSE of North Carolina, PC 698 East Chatham Street Phone: 919.297.0220	Suite 137	Cary, NC 27511	Fax: 919.297.0221

PROJECT REFERENCE NO.	SHEET NO.
A-0011C	EC-3
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

SOIL STABILIZATION SUMMARY SHEET

MATTING FOR EROSION CONTROL

CONST SHEET NO.	LINE	FROM STATION	TO STATION	SIDE	ESTIMATE (SY)
4	-L-	23+94	25+00	LT	155
5	-L-	25+00	27+50	LT	555
6	-L-	41+00	41+67	LT	70
6	-L-	42+30	45+30	RT	660
7	-L-	62+50	64+50	LT	205
7	-Y5-	11+25	13+25	RT	540
7	-Y5-	10+75	12+00	LT	280
7	-Y5-	12+00	13+25	LT	280
8	-L-	64+50	65+40	LT	100
8	-L-	69+27	69+79	RT	170
8	-L-	71+50	72+50	RT	250
9	-L-	79+00	80+25	RT	180
9	-L-	88+14	90+00	RT	185
10	-L-	90+00	91+50	RT	175
10	-L-	102+60	103+50	LT	215
11	-L-	103+50	104+08	LT	120
11	-L-	107+16	110+00	RT	405
11	-L-	114+65	115+38	RT	50
13	-L-	138+75	140+25	LT	310
15	-Y17-	12+14	12+85	RT	90
17	-L-	179+30	180+00	RT	130
17	-L-	181+39	183+50	RT	570
17	-L-	181+17	183+73	LT	525
17	-L-	186+95	188+05	LT	260
17	-L-	186+38	186+56	RT	100
18	-Y19-	16+42	18+25	RT	180
18	-Y19-	16+65	17+50	LT	70
18	-Y19-	17+50	18+25	LT	60
18	-Y18-	11+30	12+00	LT	125
18	-Y18-	12+00	13+00	LT	160

MATTING FOR EROSION CONTROL

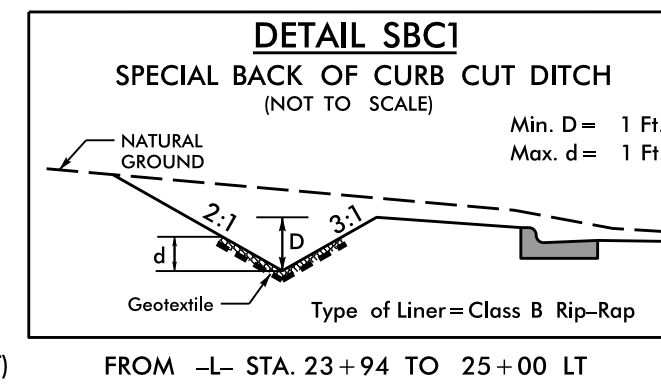
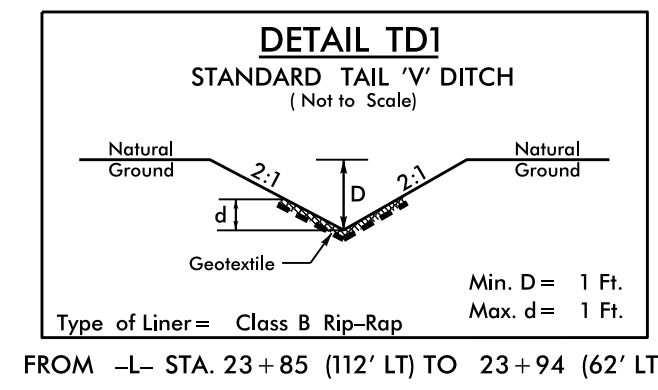
CONST SHEET NO.	LINE	FROM STATION	TO STATION	SIDE	ESTIMATE (SY)
19	-Y20-	20+50	21+15	LT	115
19	-L-	211+95	213+50	RT	265
20	-Y21-	11+00	11+60	RT	40
21	-Y20-	28+00	30+83	LT	680
			SUBTOTAL		8,275
MISCELLANEOUS MATTING TO BE INSTALLED AS DIRECTED BY THE ENGINEER					355,000
			TOTAL		363,275
			SAY		363,500

DIVISION OF HIGHWAYS
STATE OF NORTH CAROLINA

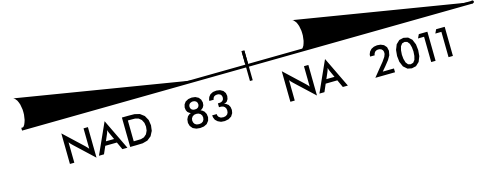
PROJECT REFERENCE NO. <i>A-0011C</i>	SHEET NO. <i>EC-3A</i>
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

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.



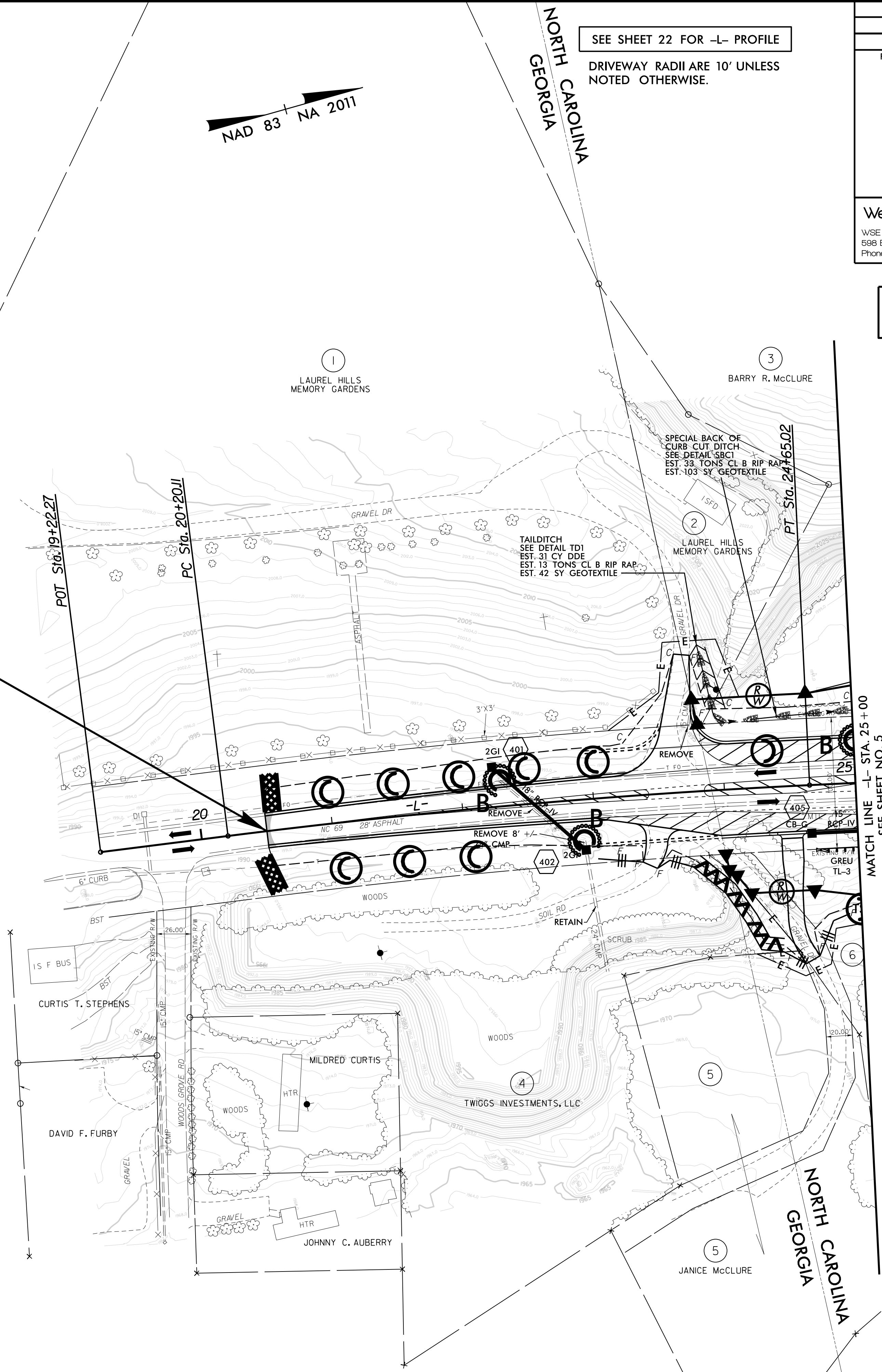
SEE SHEET 22 FOR -L- PROFILE
DRIVEWAY RADII ARE 10' UNLESS NOTED OTHERWISE.



PROJECT REFERENCE NO. A-0011C	SHEET NO. EC-4/CONST.4
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
<small>WSE of North Carolina, PC 588 East Chatham Street Phone: 919.297.0220</small>	
<small>NC License: C-4847 Suite 137 Cary, NC 27511 Fax: 919.297.0221</small>	

CLEARING AND GRUBBING
EROSION CONTROL FOR
CONSTRUCTION SHEET 4

BEGIN T.I.P. PROJECT A-0011C
-L- POC 20+50.00



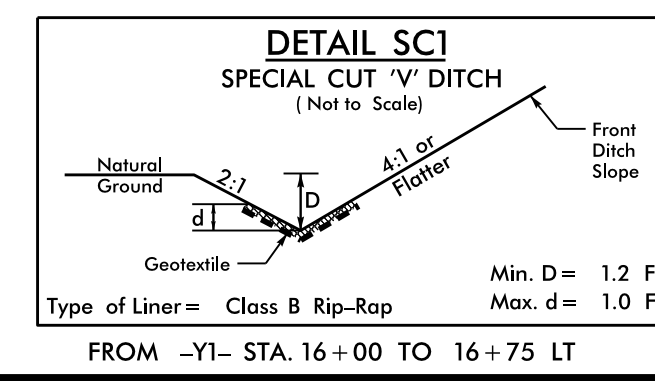
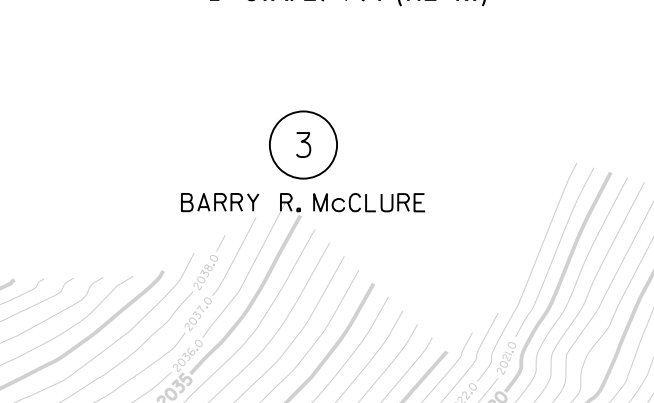
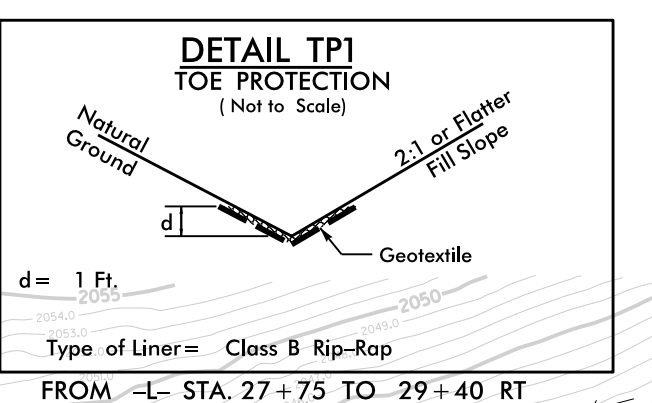
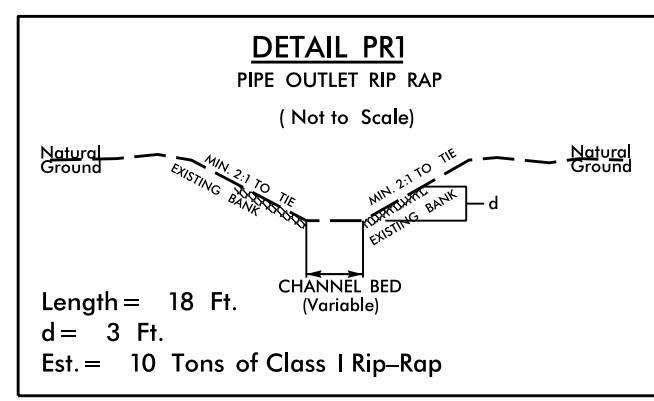
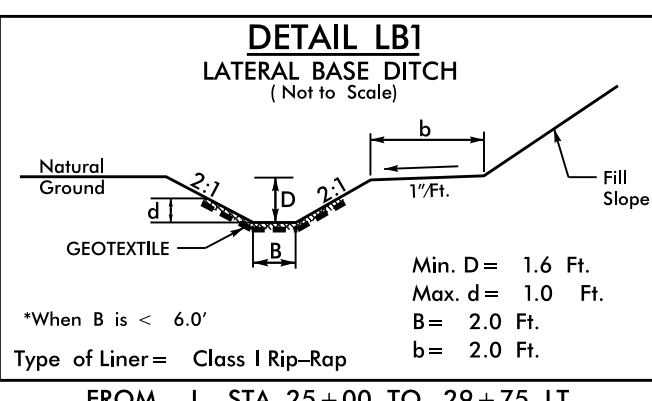
NOTE:
PLACE TEMPORARY ROCK SEDIMENT DAMS TYPE - B AND TEMPORARY ROCK SILT CHECKS TYPE - A AT DRAINAGE OUTLETS.

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

PROJECT REFERENCE NO. A-0011C	SHEET NO. EC-5/CONST.5
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
WSE of North Carolina, PC 588 East Chatham Street Phone: 919.297.0220	NC License: C-4847 Suite 137 Cary, NC 27511 Fax: 919.297.0221

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

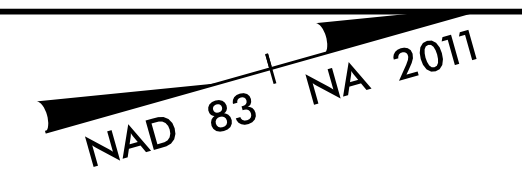
NOTE: PERIMETER EROSION CONTROL MEASURES SHALL BE INSTALLED DURING CLEARING AND GRUBBING PHASE.



80' x 28' x 3'
1.5 inch Skimmer
with 1.25 inch Orifice Diameter
9 ft. weir
ID 5.1

84' x 30' x 3'
1.5 inch Skimmer
with 1.375 inch Orifice Diameter
10 ft. weir
ID 5.2

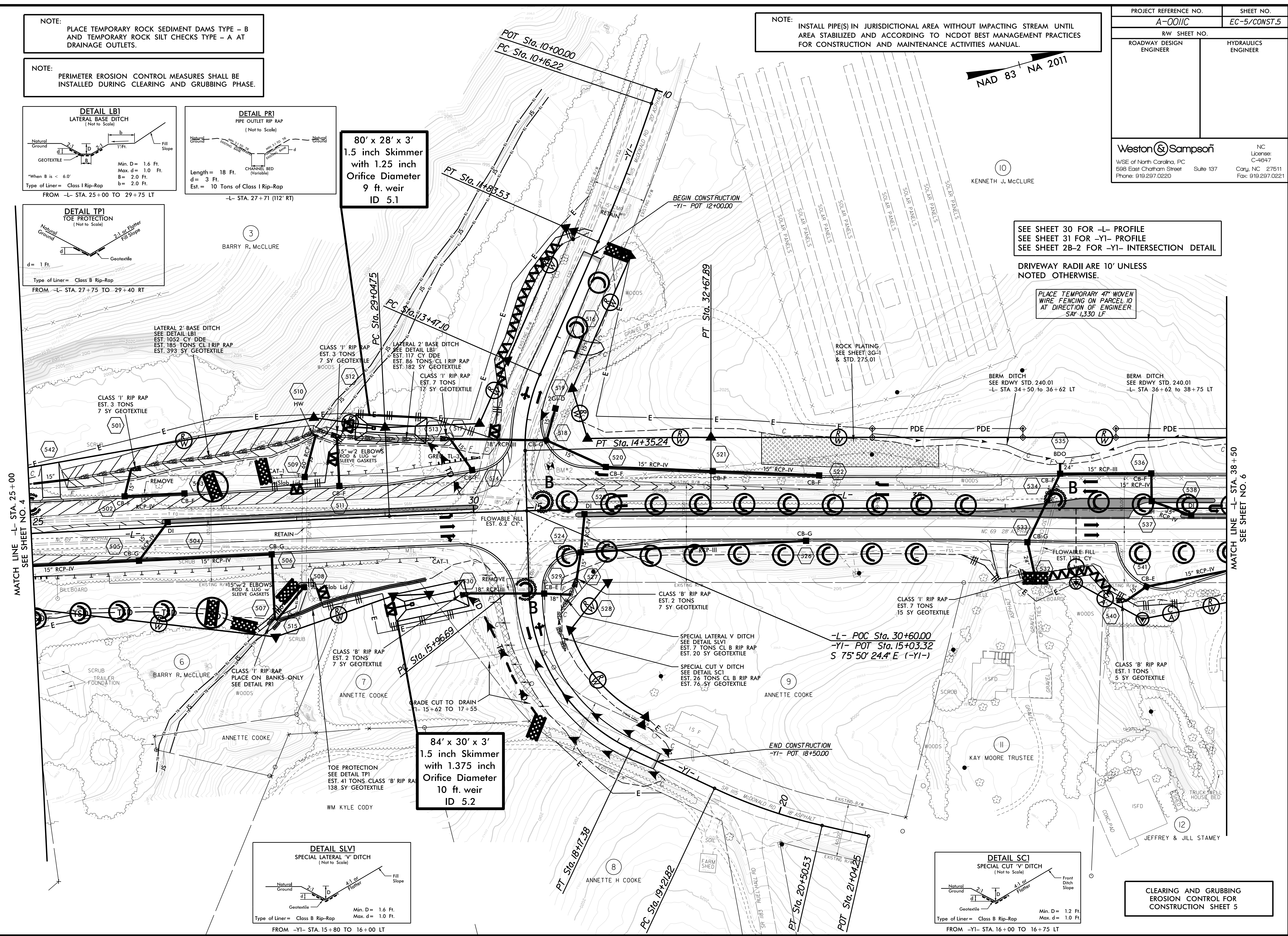
NOTE: INSTALL PIPE(S) IN JURISDICTIONAL AREA WITHOUT IMPACTING STREAM UNTIL AREA STABILIZED AND ACCORDING TO NCDOT BEST MANAGEMENT PRACTICES FOR CONSTRUCTION AND MAINTENANCE ACTIVITIES MANUAL.



SEE SHEET 30 FOR -L- PROFILE
SEE SHEET 31 FOR -Y1- PROFILE
SEE SHEET 2B-2 FOR -Y1- INTERSECTION DETAIL

DRIVEWAY RADII ARE 10' UNLESS NOTED OTHERWISE.

PLACE TEMPORARY 4" WOVEN WIRE FENCING ON PARCEL 10 AT DIRECTION OF ENGINEER SAY 1,330 LF



MATCH LINE -L- STA. 25+00
SEE SHEET NO. 4

MATCH LINE -L- STA. 38+50
SEE SHEET NO. 6

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CLEARING AND GRUBBING EROSION CONTROL FOR CONSTRUCTION SHEET 5

8/17/99

Weston & Sampson
 WSE of North Carolina, PC
 598 East Chatham Street Suite 137
 Phone: 919.287.0220

NC License: C-4847
 Corj, NC 27611
 Fax: 919.287.0221

PROJECT REFERENCE NO.	SHEET NO.
A-0011C	EC-6/CONST.5
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

PIPE CONSTRUCTION SEQUENCE STA. 28+09 -L-

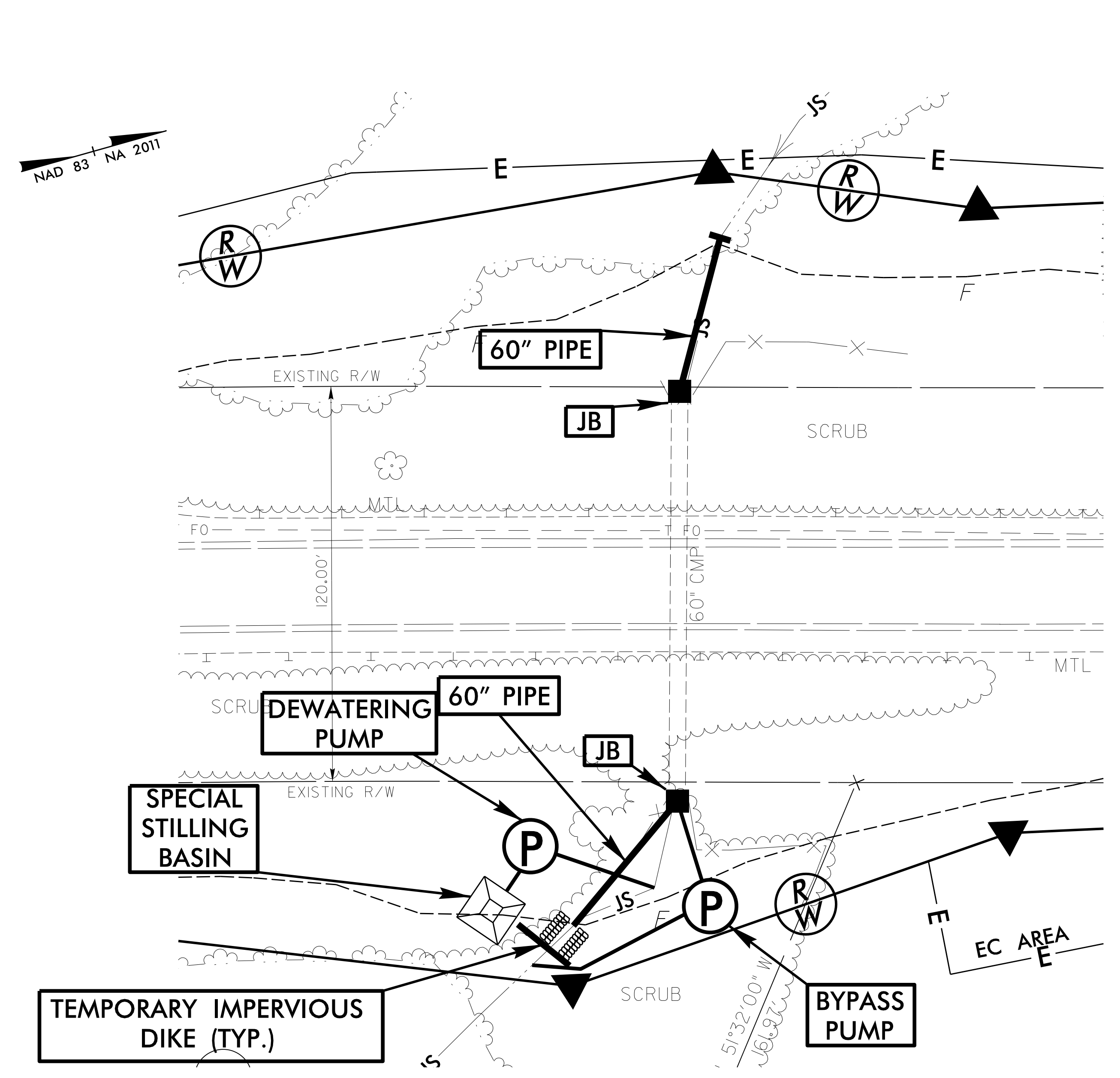
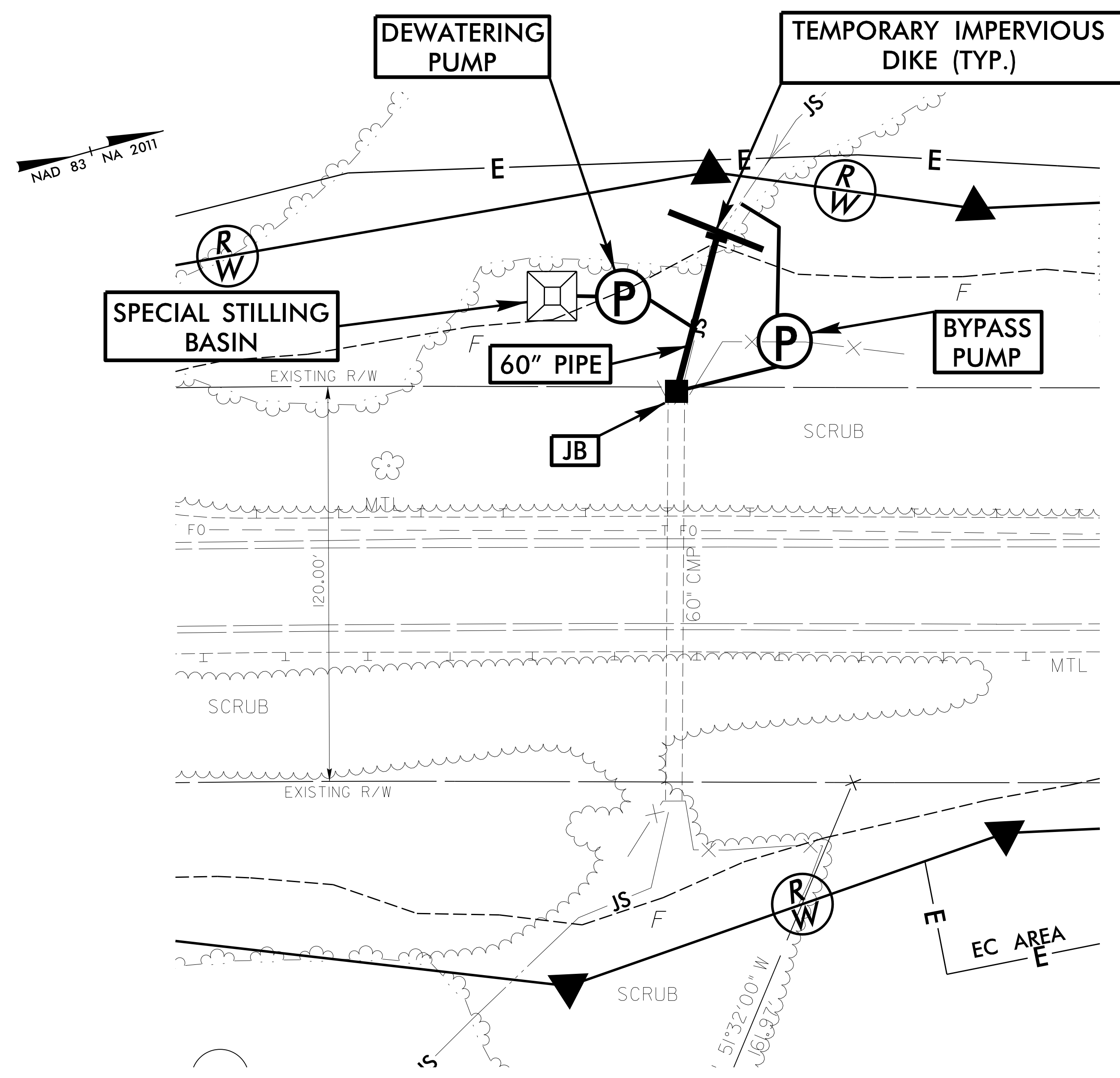
PHASE I

1. INSTALL UPSTREAM SPECIAL STILLING BASIN IN DESIRED LOCATION.
2. INSTALL UPSTREAM BYPASS PUMP WITH TEMPORARY FLEXIBLE HOSE.
3. INSTALL UPSTREAM IMPERVIOUS DIKE AND BEGIN PUMPING OPERATIONS FOR UPSTREAM CHANNEL DIVERSION.
4. PUMP IMPOUNDED BASE FLOW WITH DEWATERING PUMP THROUGH SPECIAL STILLING BASIN.
5. REMOVE UPSTREAM HEADWALL OF EX. 60" CMP.
6. INSTALL JUNCTION BOX (JB) AT INLET OF EX. 60" CMP, AND CONSTRUCT UPSTREAM PIPE EXTENSION AND HEADWALL.
7. REMOVE IMPERVIOUS DIKES AND PUMPING FEATURES. CONSTRUCT PHASE 1 OF TRAFFIC CONTROL PLAN.

PHASE II

1. INSTALL DOWNSTREAM SPECIAL STILLING BASIN IN DESIRED LOCATION.
2. INSTALL DOWNSTREAM BYPASS PUMP WITH TEMPORARY FLEXIBLE PIPE AS SHOWN.
3. INSTALL DOWNSTREAM IMPERVIOUS DIKE AND BEGIN PUMPING OPERATIONS FOR DOWNSTREAM CHANNEL DIVERSION.
4. PUMP IMPOUNDED FLOW WITH DEWATERING PUMP THROUGH SPECIAL STILLING BASIN.
5. INSTALL JUNCTION BOX (JB) AT OUTLET OF EX. 60" CMP, AND CONSTRUCT DOWNSTREAM PIPE EXTENSION AND EROSION RIP RAP PAD.
6. REMOVE IMPERVIOUS DIKES, SPECIAL STILLING BASIN, AND PUMP DIVERSION.
7. COMPLETE REAMINDER OF ROADWAY CONSTRUCTION.

NOTE: THE CONTRACTOR SHALL NOT PUMP SEDIMENT-LADEN WATER DIRECTLY INTO STREAM DURING EITHER PHASE OF PIPE CONSTRUCTION.



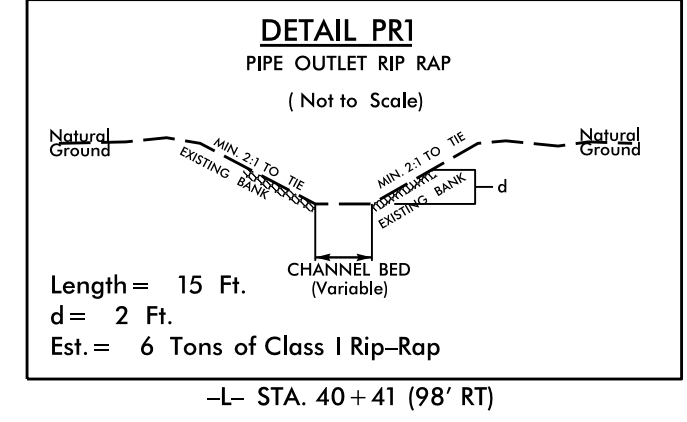
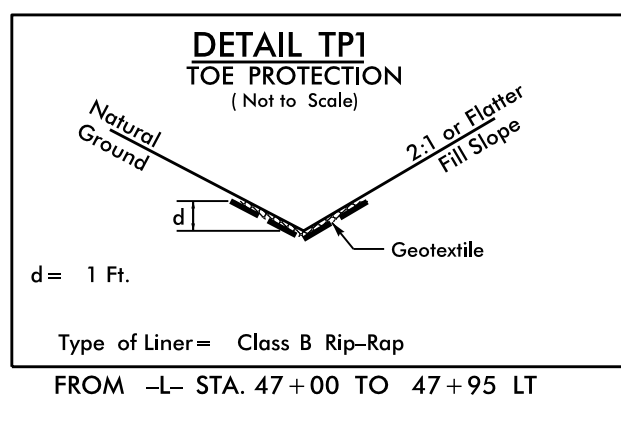
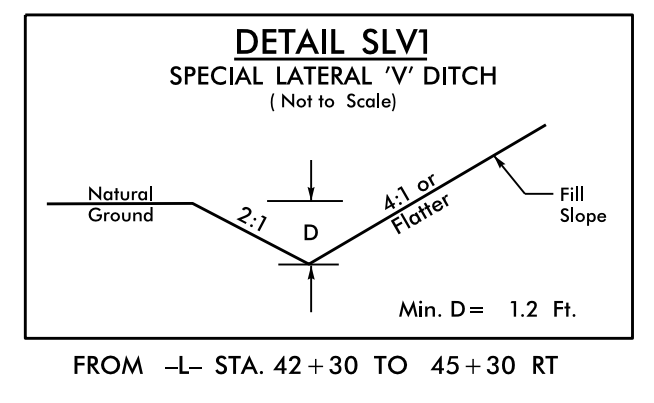
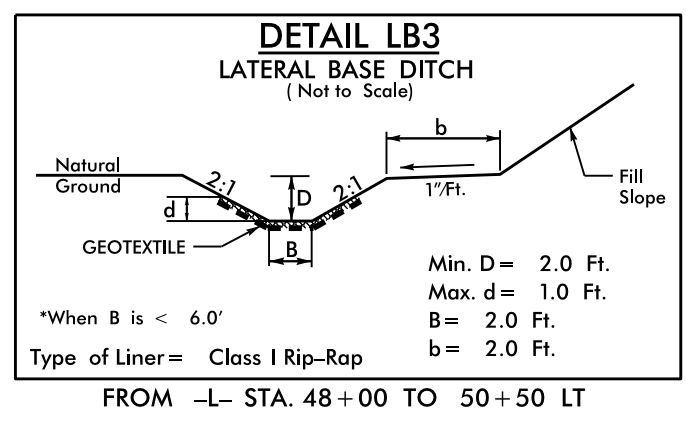
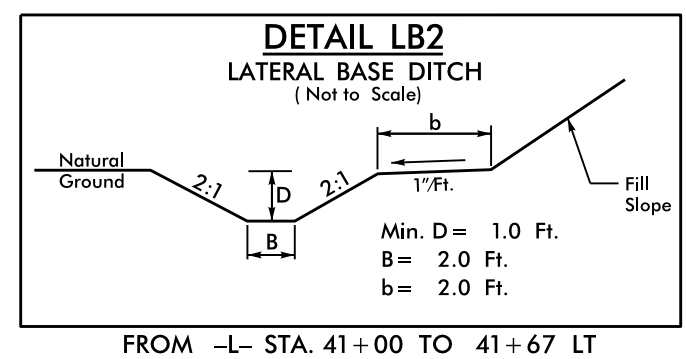
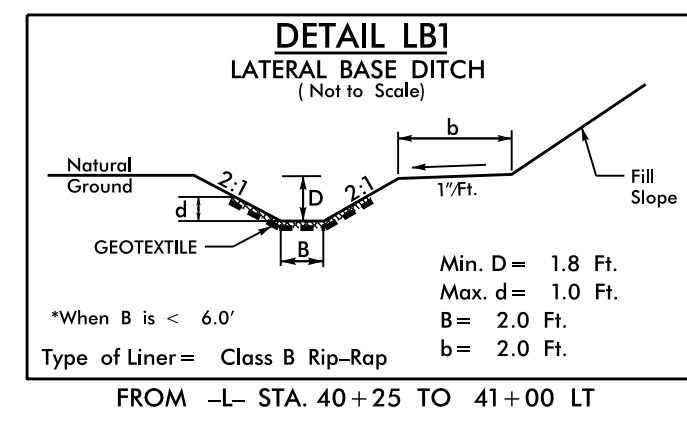
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PROJECT REFERENCE NO. A-0011C	SHEET NO. EC-7/CONST.6
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
Weston & Sampson WSE of North Carolina, PC 588 East Chatham Street Phone: 919.297.0220	
NC License: C-4847 Cary, NC 27511 Fax: 919.297.0221	

SEE SHEET 23 FOR -L- PROFILE

DRIVEWAY RADII ARE 10' UNLESS NOTED OTHERWISE.

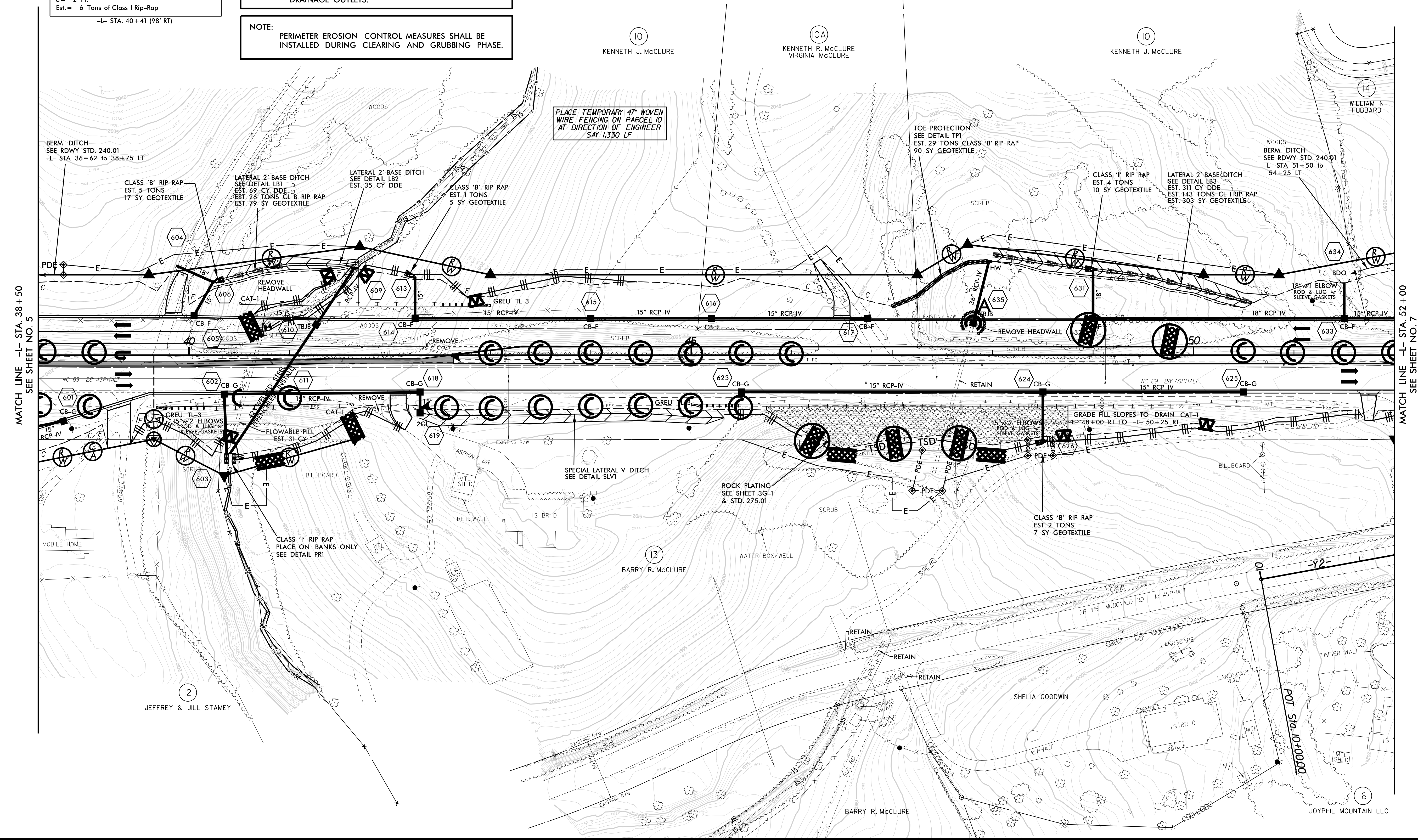
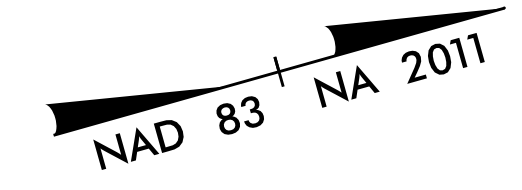
CLEARING AND GRUBBING EROSION CONTROL FOR CONSTRUCTION SHEET 6



NOTE: INSTALL PIPE(S) IN JURISDICTIONAL AREA 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.

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



MATCH LINE -L- STA. 38+50
SEE SHEET NO. 5

MATCH LINE -L- STA. 52+00
SEE SHEET NO. 7

8/17/19

8/17/2019 10:51:13 AM
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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.

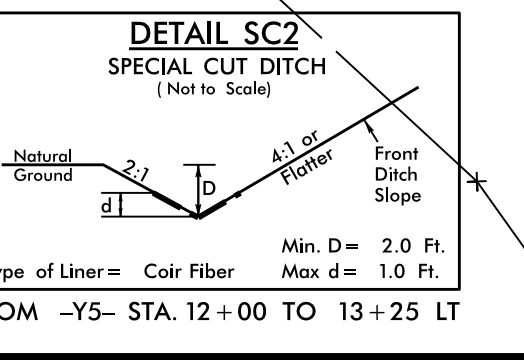
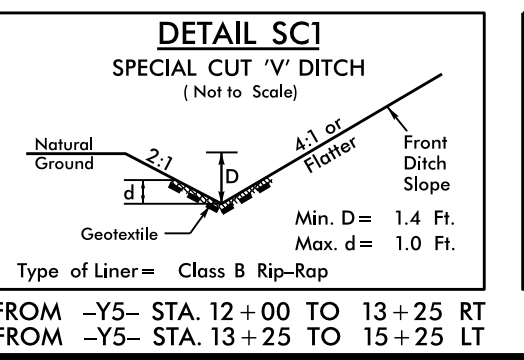
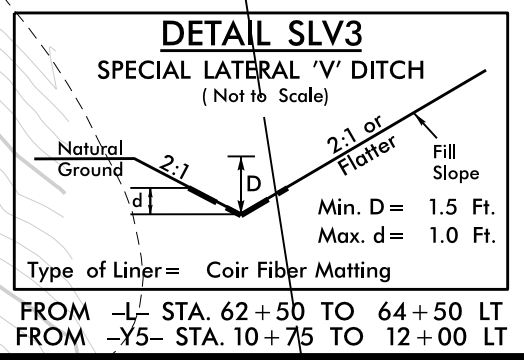
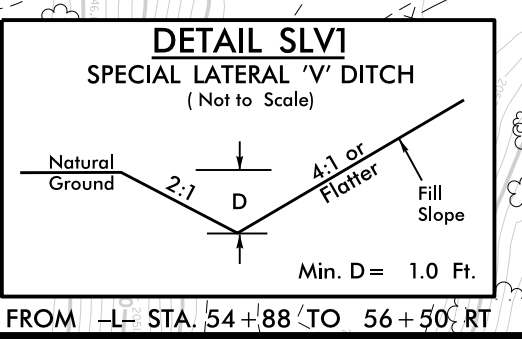
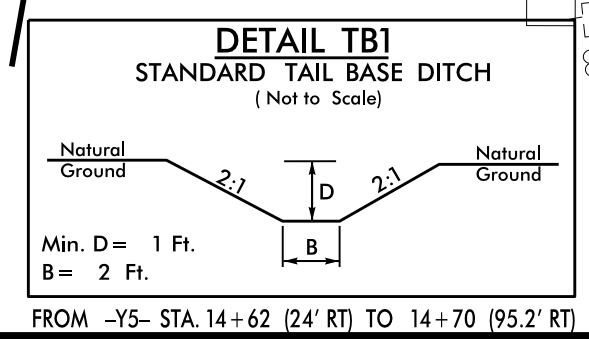
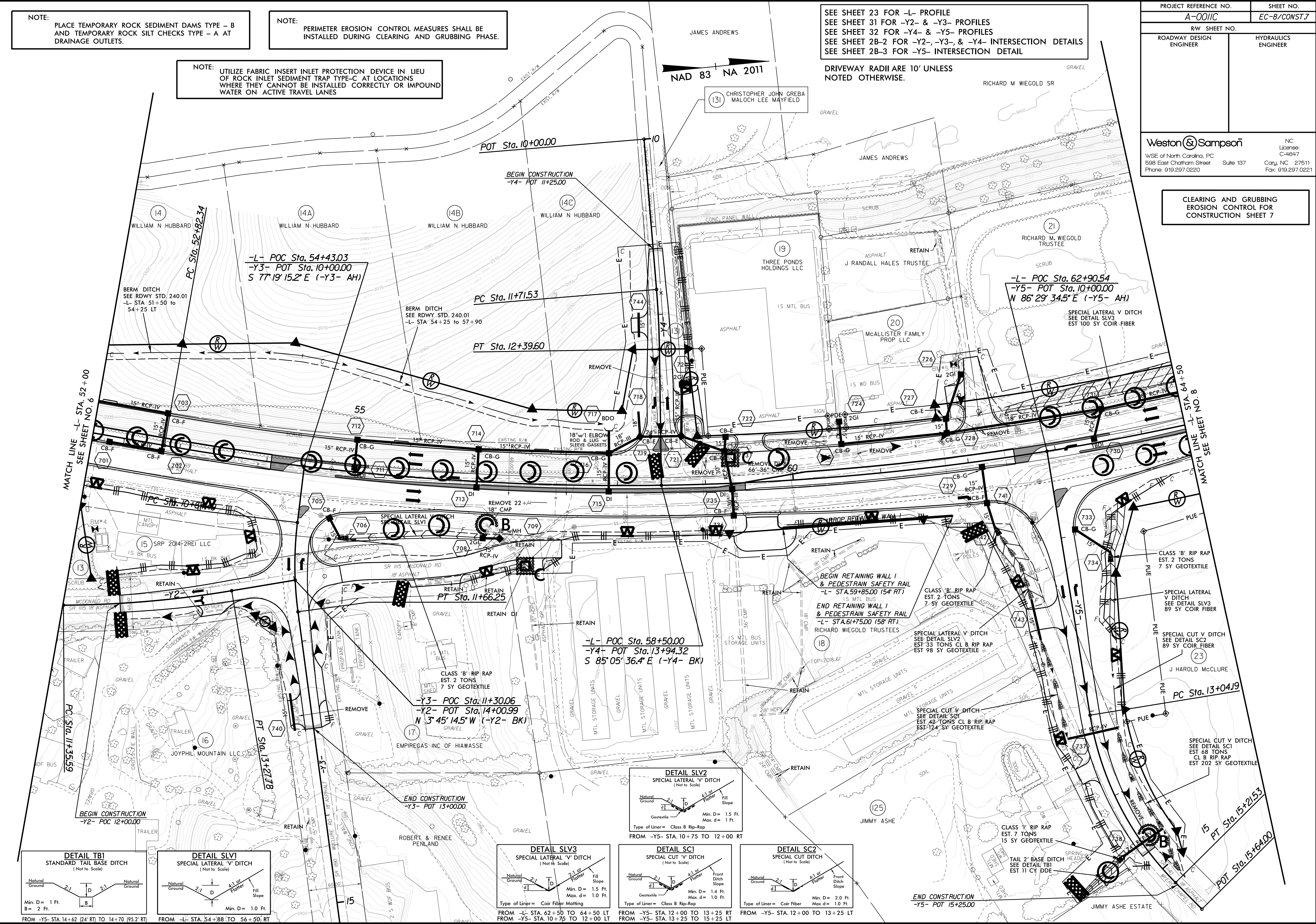
NOTE: UTILIZE FABRIC INSERT INLET PROTECTION DEVICE IN LIEU OF ROCK INLET SEDIMENT TRAP TYPE-C AT LOCATIONS WHERE THEY CANNOT BE INSTALLED CORRECTLY OR IMPOUND WATER ON ACTIVE TRAVEL LANES

SEE SHEET 23 FOR -L- PROFILE
SEE SHEET 31 FOR -Y2- & -Y3- PROFILES
SEE SHEET 32 FOR -Y4- & -Y5- PROFILES
SEE SHEET 2B-2 FOR -Y2-, -Y3- & -Y4- INTERSECTION DETAILS
SEE SHEET 2B-3 FOR -Y5- INTERSECTION DETAIL

DRIVEWAY RADII ARE 10' UNLESS NOTED OTHERWISE.

PROJECT REFERENCE NO. A-0011C	SHEET NO. EC-8/CONST.7
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
Weston & Sampson WSE of North Carolina, PC 588 East Chatham Street Phone: 919.297.0220	
NC License: C-4847 Suite 137 Cary, NC 27511 Fax: 919.297.0221	

CLEARING AND GRUBBING EROSION CONTROL FOR CONSTRUCTION SHEET 7



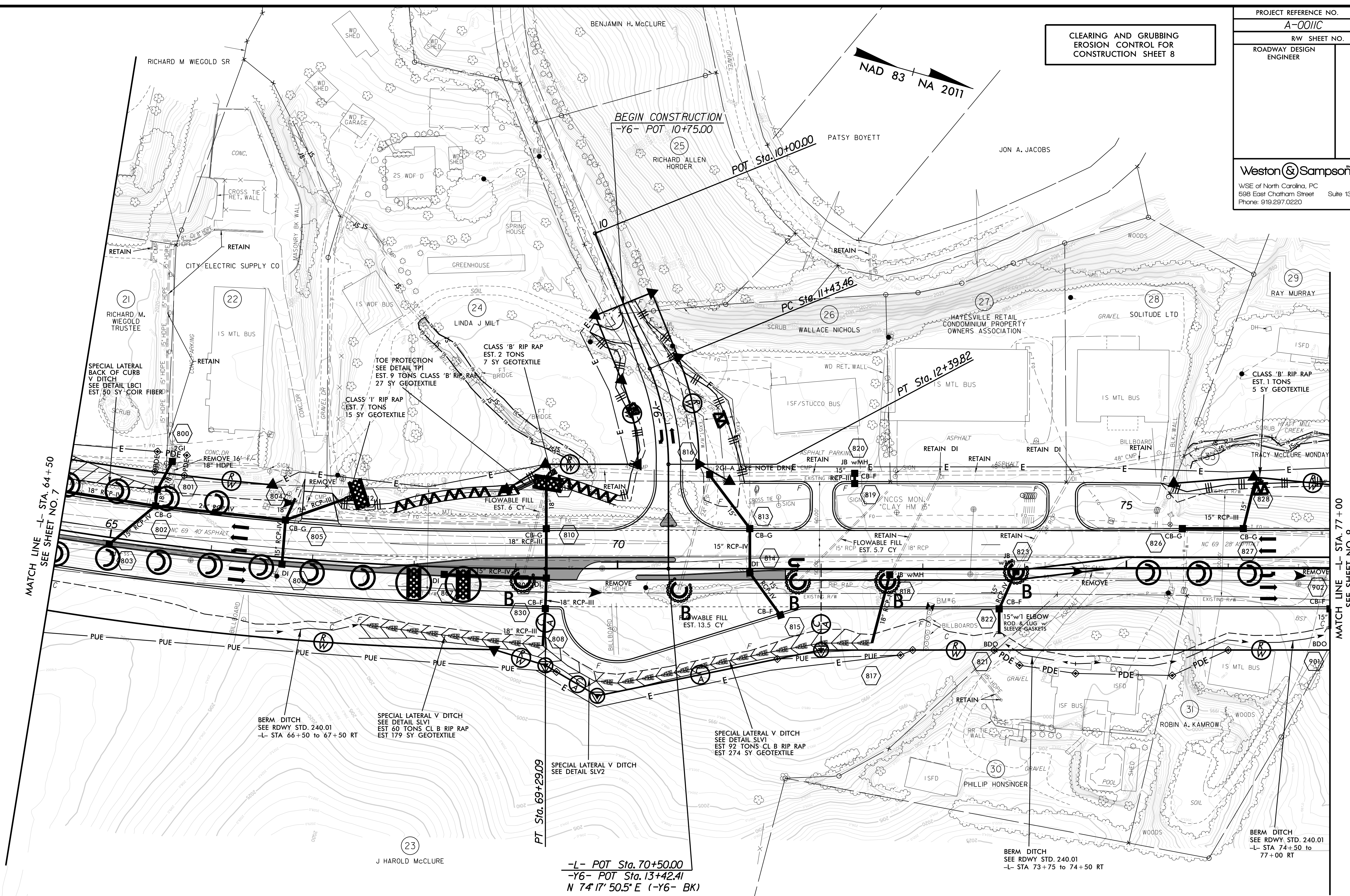
END CONSTRUCTION
-Y5- POT 15+25.00

8/17/19/95
8/17/2019 10:15:15 AM C:\Users\ec\0011C-EC-EC8.CG.dgn

PROJECT REFERENCE NO. A-0011C	SHEET NO. EC-9/CONST.8
RW SHEET NO.	HYDRAULICS ENGINEER
ROADWAY DESIGN ENGINEER	
Weston & Sampson	
WSE of North Carolina, PC 588 East Chatham Street Phone: 919.297.0220	NC License: C-4847 Suite 137 Cary, NC 27511 Fax: 919.297.0221

**CLEARING AND GRUBBING
EROSION CONTROL FOR
CONSTRUCTION SHEET 8**

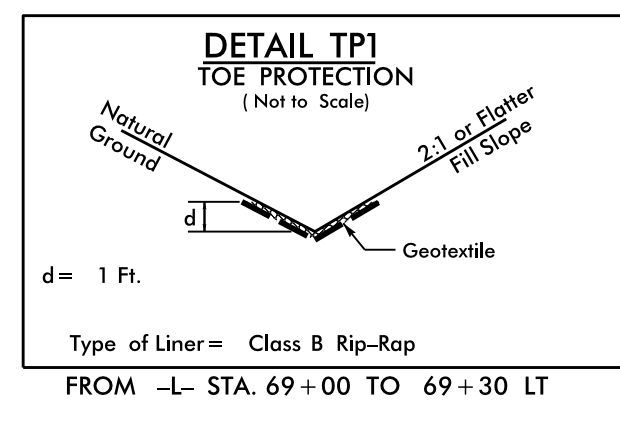
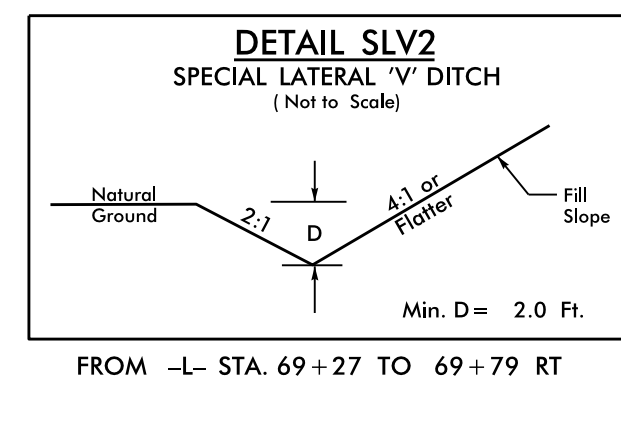
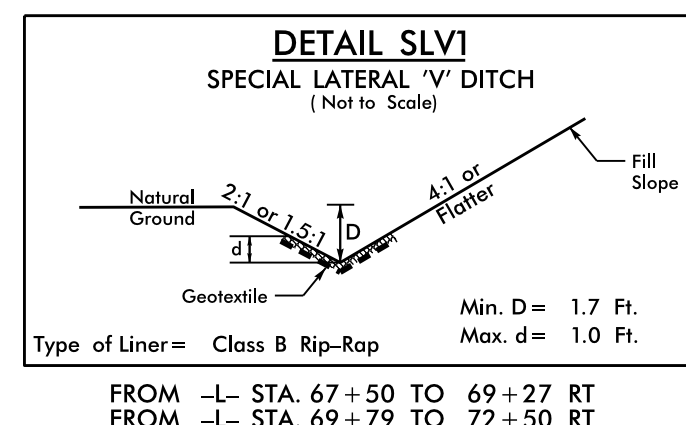
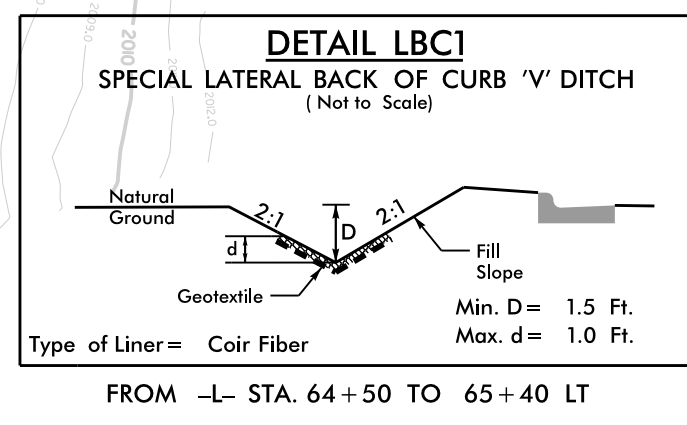
NAD 83
NA 2011



MATCH LINE -L- STA. 64+50
SEE SHEET NO. 7

MATCH LINE -L- STA. 77+00
SEE SHEET NO. 9

NOTE DRN
EXISTING DRAINAGE STRUCTURES MAY BE RETAINED AT THE DIRECTION OF THE ENGINEER



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

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

SEE SHEET 24 FOR -L- PROFILE
SEE SHEET 32 FOR -Y6- PROFILE
SEE SHEET 2B-3 FOR -Y6- INTERSECTION DETAIL

DRIVEWAY RADII ARE 10' UNLESS NOTED OTHERWISE.

8/17/19

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PROJECT REFERENCE NO. A-0011C	SHEET NO. EC-10/CONST.9
RW SHEET NO.	HYDRAULICS ENGINEER
ROADWAY DESIGN ENGINEER	
Weston Sampson WSE of North Carolina, PC 588 East Chatham Street Phone: 919.297.0220	
NC License: C-4847 Cary, NC 27511 Fax: 919.297.0221	

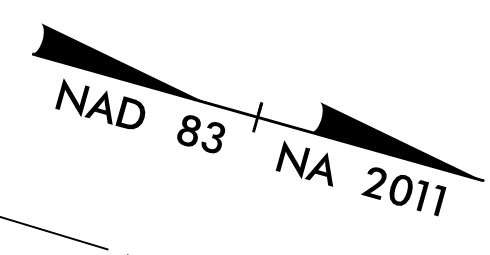
NOTE:
INSTALL PIPE(S) IN JURISDICTIONAL AREA WITHOUT IMPACTING STREAM UNTIL AREA STABILIZED AND ACCORDING TO NCDOT BEST MANAGEMENT PRACTICES FOR CONSTRUCTION AND MAINTENANCE ACTIVITIES MANUAL.

SEE SHEET 24 FOR -L- PROFILE
SEE SHEET 32 FOR -Y7- PROFILE
SEE SHEET 28-3 FOR -Y7- INTERSECTION DETAIL

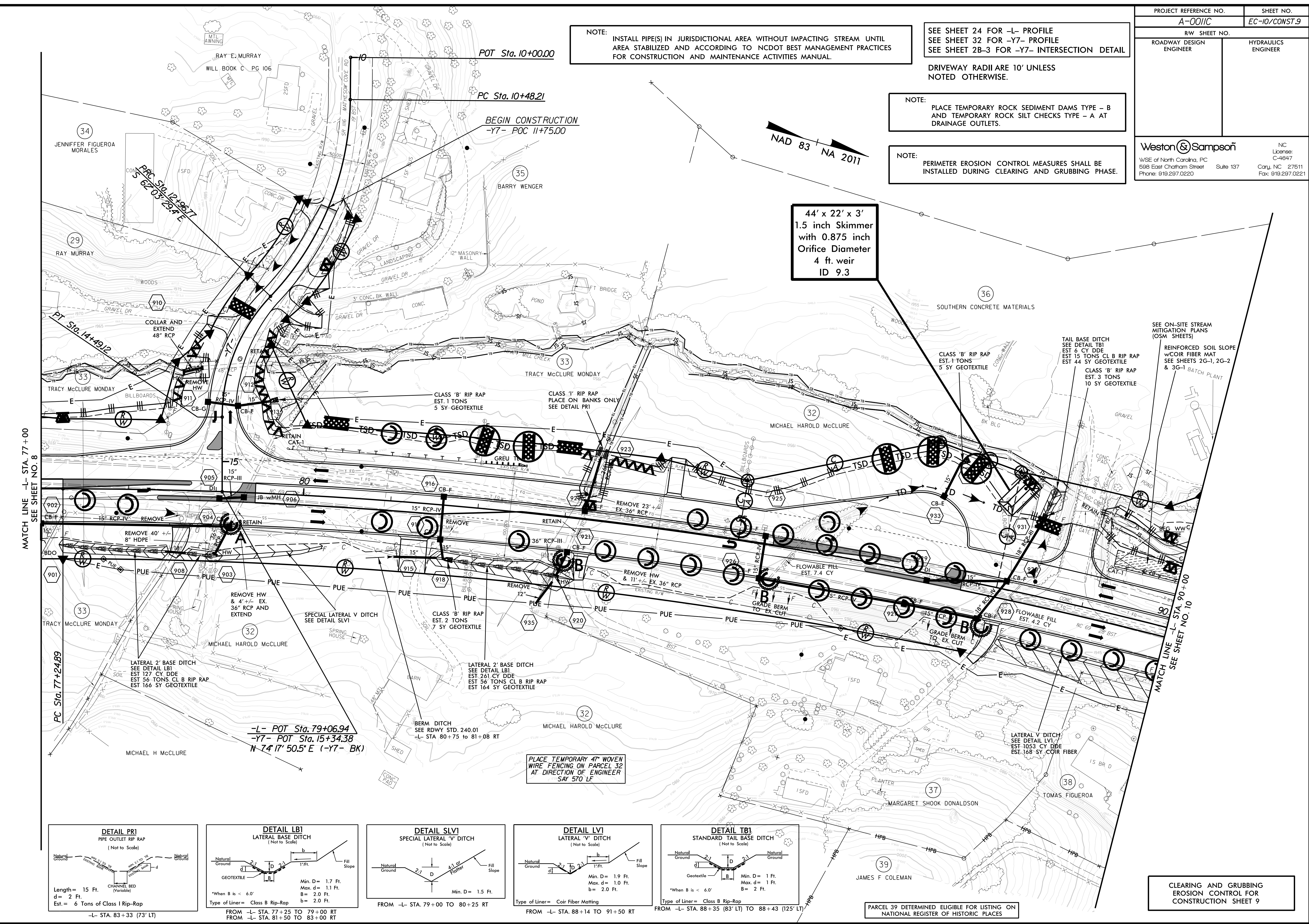
DRIVEWAY RADII ARE 10' UNLESS NOTED OTHERWISE.

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.

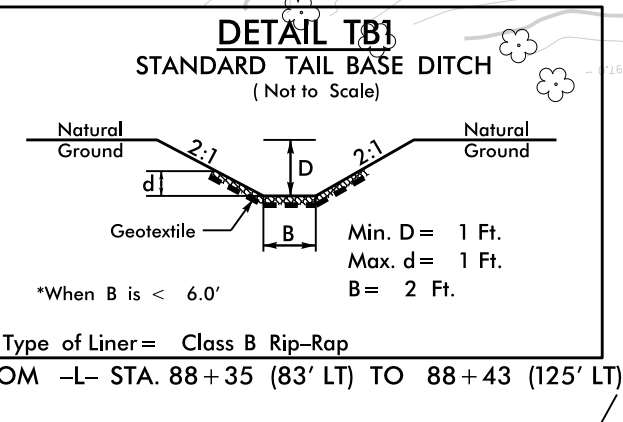
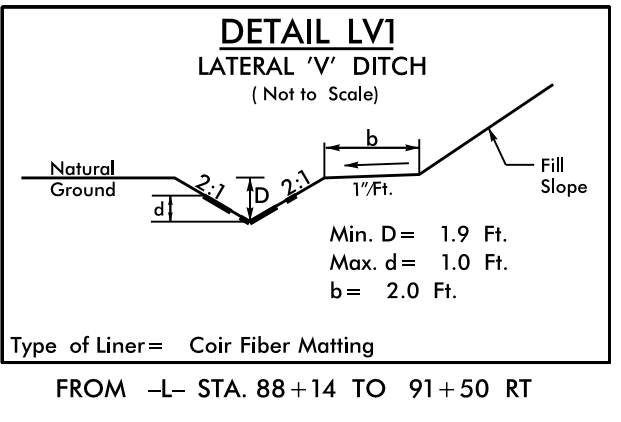
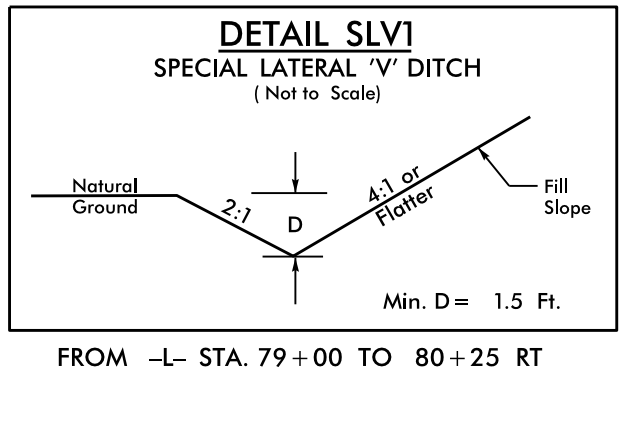
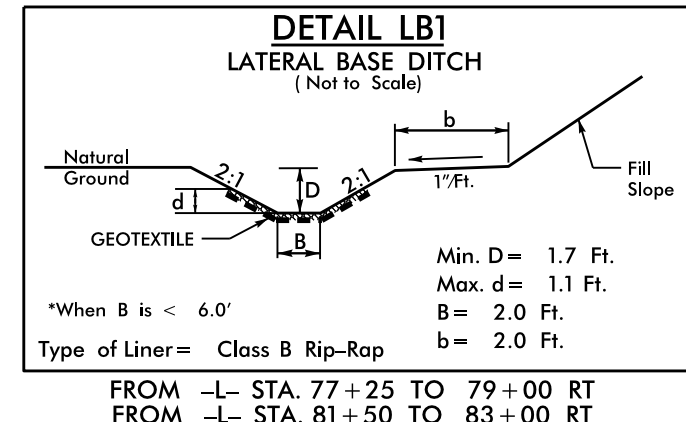
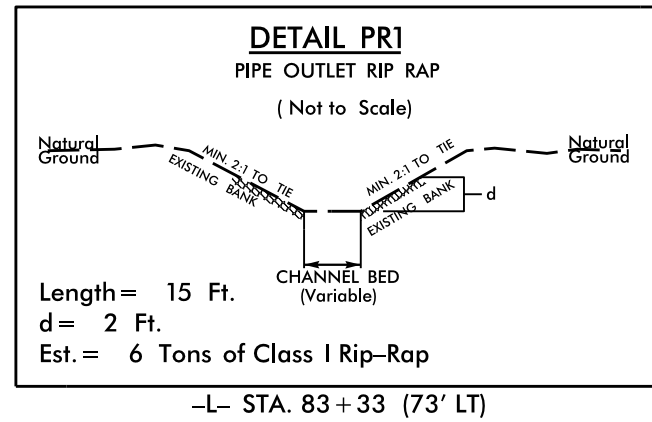


44' x 22' x 3'
1.5 inch Skimmer
with 0.875 inch
Orifice Diameter
4 ft. weir
ID 9.3



MATCH LINE -L- STA. 77+00
SEE SHEET NO. 8

MATCH LINE -L- STA. 90+00
SEE SHEET NO. 10



CLEARING AND GRUBBING
EROSION CONTROL FOR
CONSTRUCTION SHEET 9

PARCEL 39 DETERMINED ELIGIBLE FOR LISTING ON
NATIONAL REGISTER OF HISTORIC PLACES

8/17/19
8/17/2019
C:\Users\jmc\Documents\Projects\EC-10\EC-10.dgn

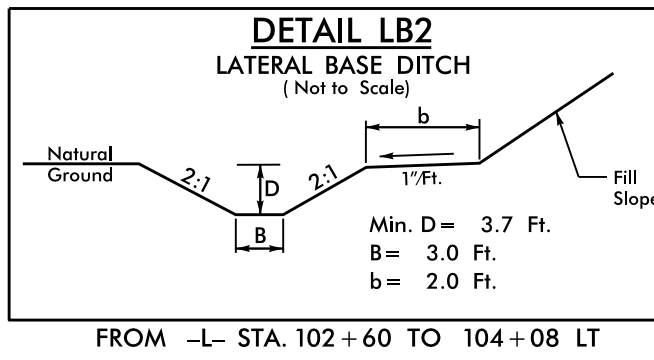
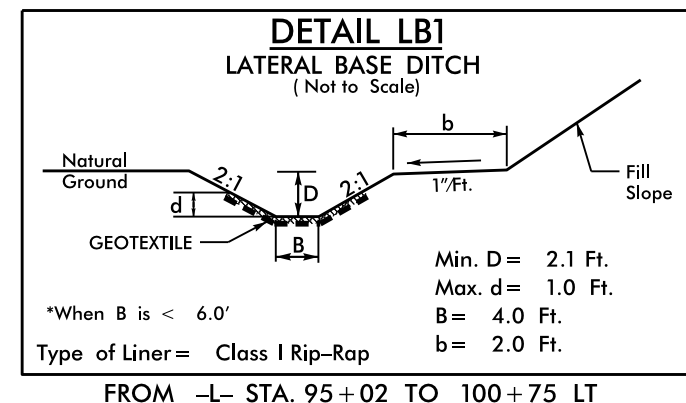
8/17/19

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

CLEARING AND GRUBBING EROSION CONTROL FOR CONSTRUCTION SHEET 10

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

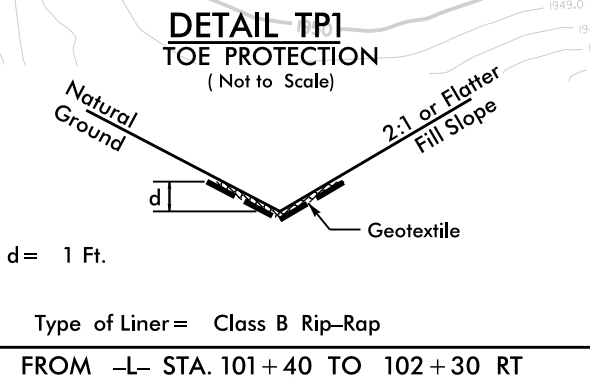
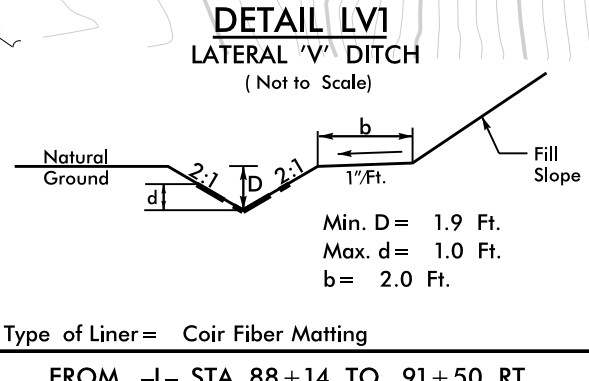
NOTE: PLACE TEMPORARY ROCK SEDIMENT DAMS TYPE - B AND TEMPORARY ROCK SILT CHECKS TYPE - A AT DRAINAGE OUTLETS.



95' x 20' x 3' 1.5 inch Skimmer with 1.25 inch Orifice Diameter 7 ft. weir ID 10.1

PLACE TEMPORARY 47' WOVEN WIRE FENCING ON PARCEL 41 AT DIRECTION OF ENGINEER SAY 610 LF

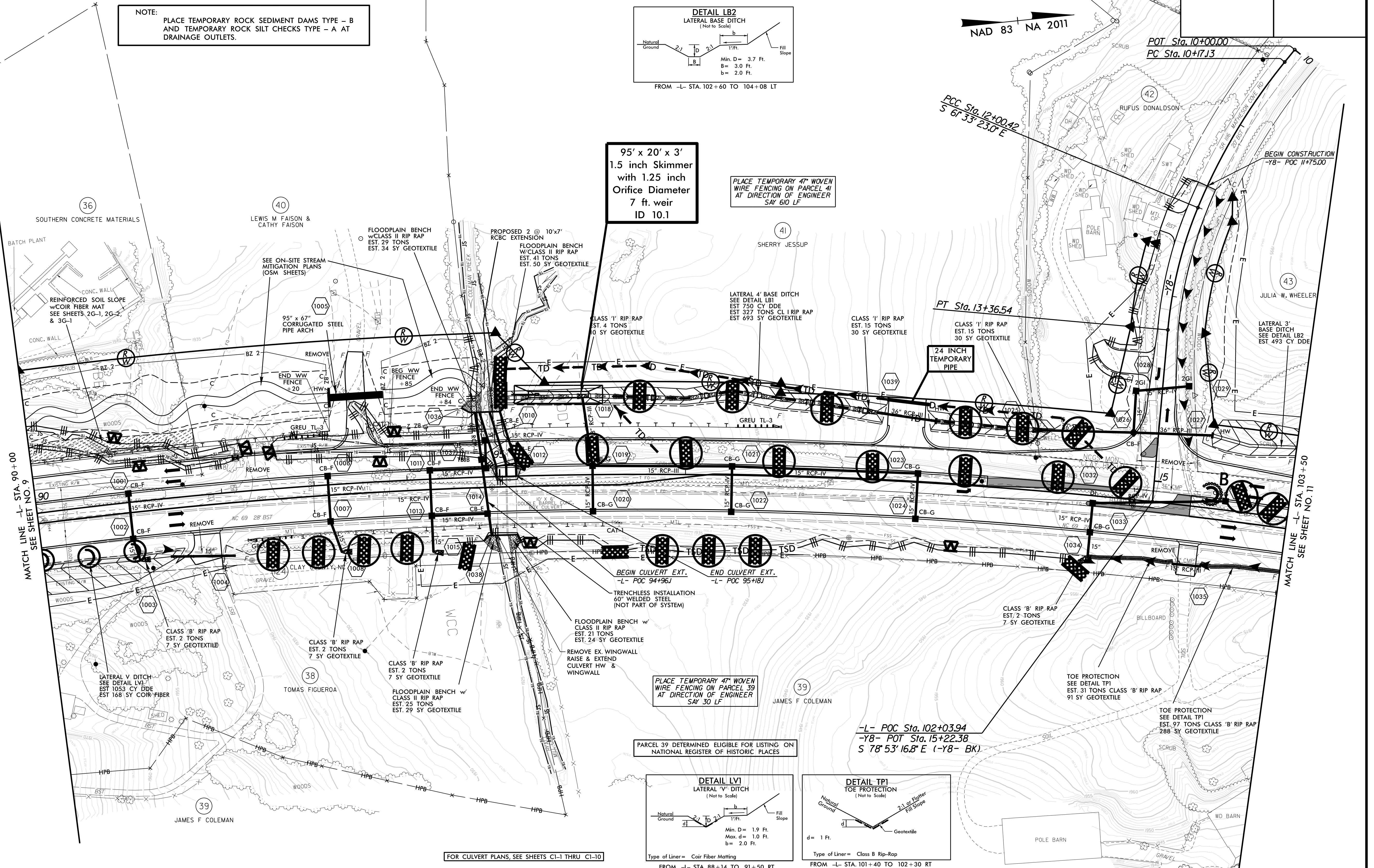
PLACE TEMPORARY 47' WOVEN WIRE FENCING ON PARCEL 39 AT DIRECTION OF ENGINEER SAY 30 LF



Weston & Sampson
WSE of North Carolina, PC
698 East Chatham Street
Phone: 919.297.0220
Suite 137
Cary, NC 27511
Fax: 919.297.0221

PROJECT REFERENCE NO. A-0011C
SHEET NO. EC-II/CONST JO
RW SHEET NO.
ROADWAY DESIGN ENGINEER
HYDRAULICS ENGINEER

NAD 83 NA 2011



MATCH LINE -L- STA. 90+00
SEE SHEET NO. 9

MATCH LINE -L- STA. 103+50
SEE SHEET NO. 11

FOR CULVERT PLANS, SEE SHEETS C1-1 THRU C1-10

8/17/2019
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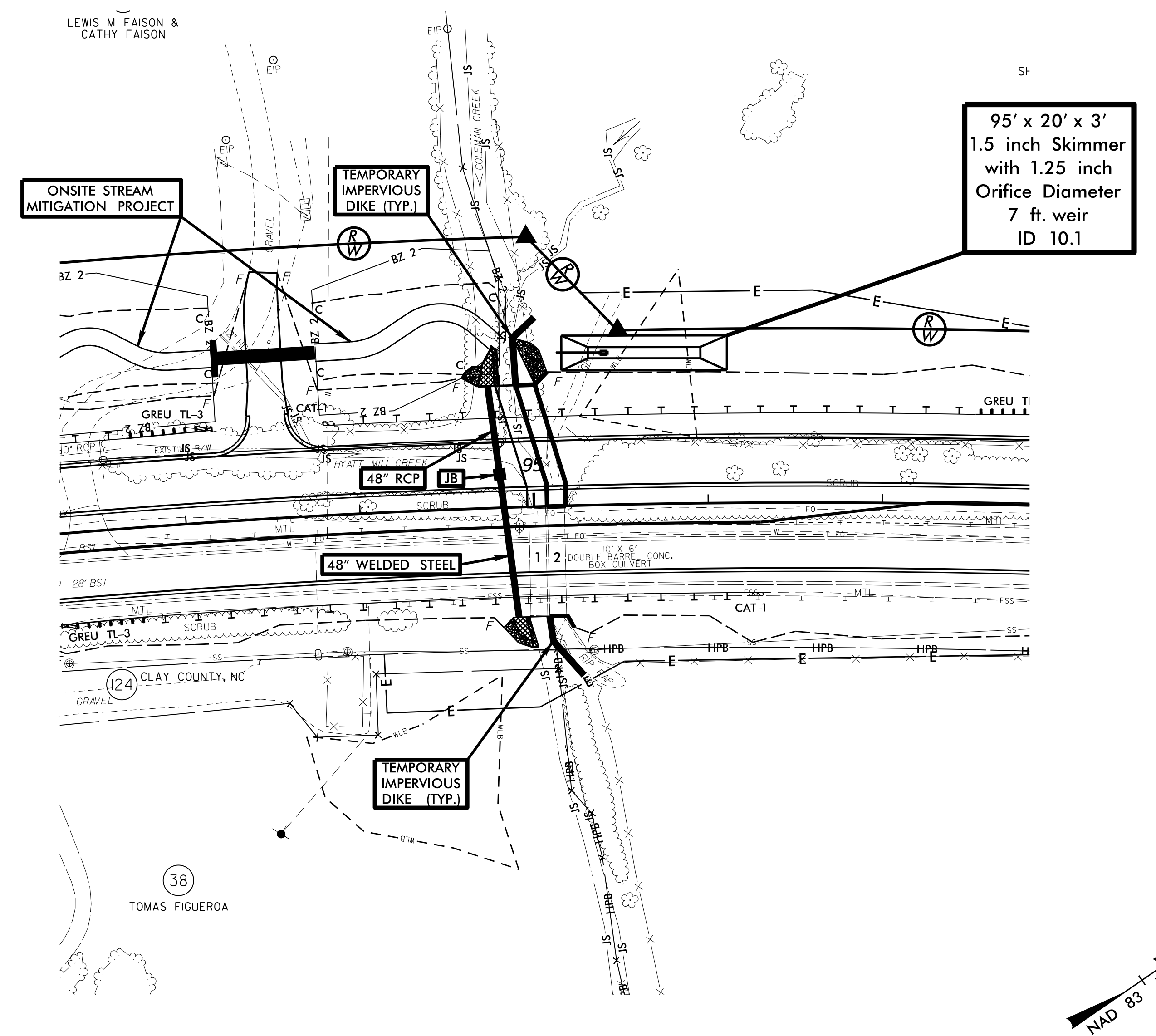
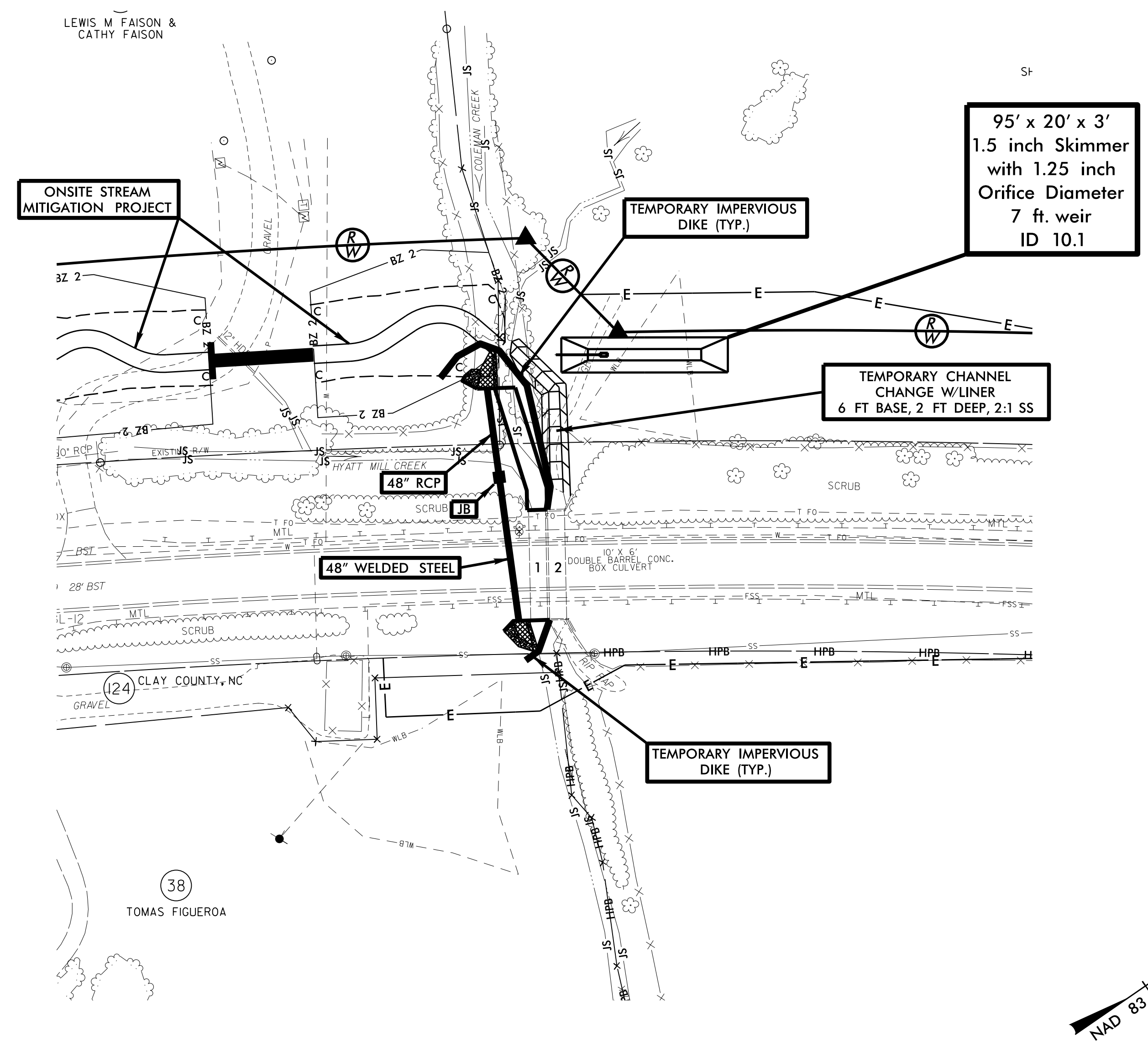
CULVERT CONSTRUCTION SEQUENCE STA. 94 + 91 -L-

PHASE I

PHASE II

- BEGIN CONSTRUCTION AFTER COMPLETION OF ONSITE MITIGATION (RELOCATION) OF HYATT MILL CREEK.
- PLACE SKIMMER BASIN 10.1 (95'X20'X3') AS SHOWN AND USE AS STILLING BASIN FOR DURATION OF CULVERT CONSTRUCTION.
- CONSTRUCT TEMPORARY UPSTREAM CHANNEL CHANGE WITH LINER (5 FT. BASE, 3 FT. DEEP, 2:1 SIDE SLOPES) TO NORTH OF HYATT MILL CREEK AND INSTALL UPSTREAM AND DOWNSTREAM IMPERVIOUS DIKES AS SHOWN TO DIVERT FLOW TO BARREL 2 ONLY.
- PUMP ANY IMPOUNDED FLOW TO SKIMMER BASIN.
- REMOVE EXISTING UPSTREAM AND DOWNSTREAM BARREL 1 WINGWALLS AND HEADWALLS AND CONSTRUCT BARREL 1 EXTENSION.
- INSTALL 48" PIPE BY TRENCHLESS METHODS, INSTALL JB CONNECTION AND ATTACH 48" RCP PORTION AS SHOWN.
- CONSTRUCT PORTION OF PROPOSED HEADWALL ALLOWED BY PLACEMENT OF IMPREVIOUS DIKE. CONSTRUCT SOUTHERN CULVERT FLOODPLAIN BENCHES AT INLET AND OUTLET AND COMPLETE ANY NECESSARY CHANNEL IMPROVEMENTS.

- ONCE PHASE I IS STABILIZED REMOVE TEMPORARY CHANNEL CHANGE AND PHASE I IMPERVIOUS DIKES.
- INSTALL PHASE II IMPERVIOUS DIKES AS SHOWN AND DIVERT FLOW THROUGH PROPOSED EXTENSION OF BARREL 1 AND 48" OVERFLOW PIPE.
- REMOVE REMAINDER OF EXISTING UPSTREAM HEADWALL.
- CONSTRUCT EXTENSION FOR BARREL 2, REMAINDER OF PROPOSED HEADWALL, AND REMAINDER OF INLET/OUTLET CHANNEL IMPROVEMENTS. COORDINATE WITH ENGINEER OF RECORD TO RETAIN CATTLE CROSSING THROUGH BARREL 2 EXTENSION.
- REMOVE ALL IMPERVIOUS DIKES AND DIVERT HYATT MILL CREEK BACK TO NORMAL FLOW CONDITIONS.
- COMPLETE ROADWAY AND REMOVE SKIMMER BASIN AFTER CONSTRUCTION COMPLETED OR AT ENGINEER'S DISCRETION.



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

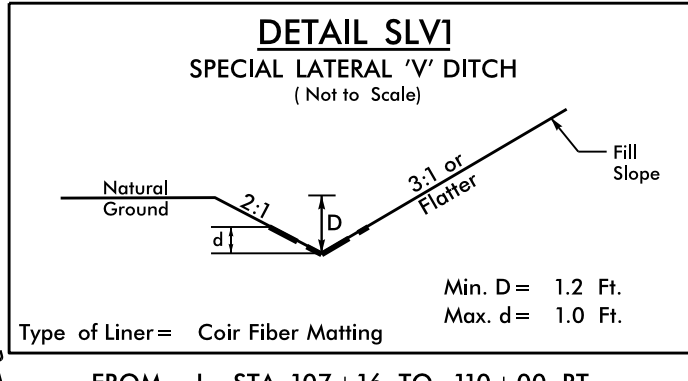
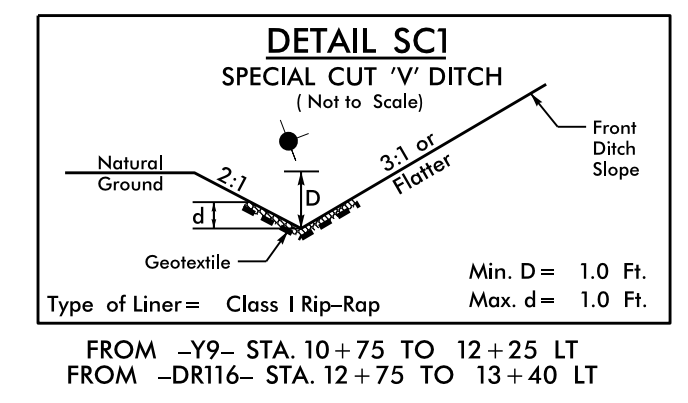
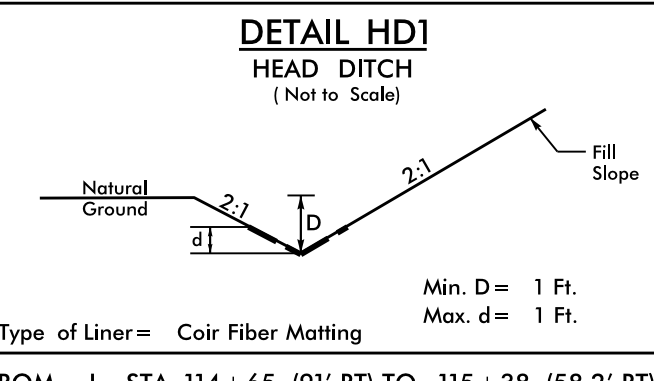
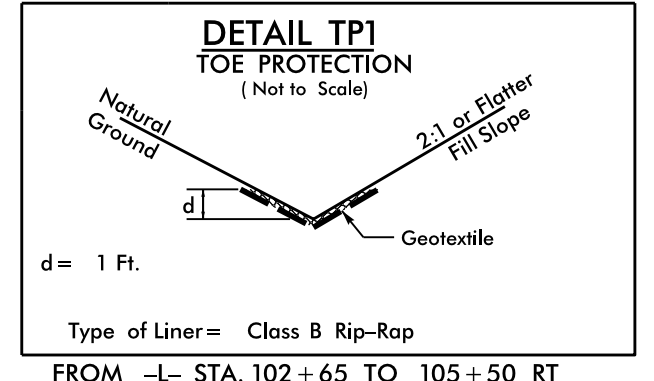
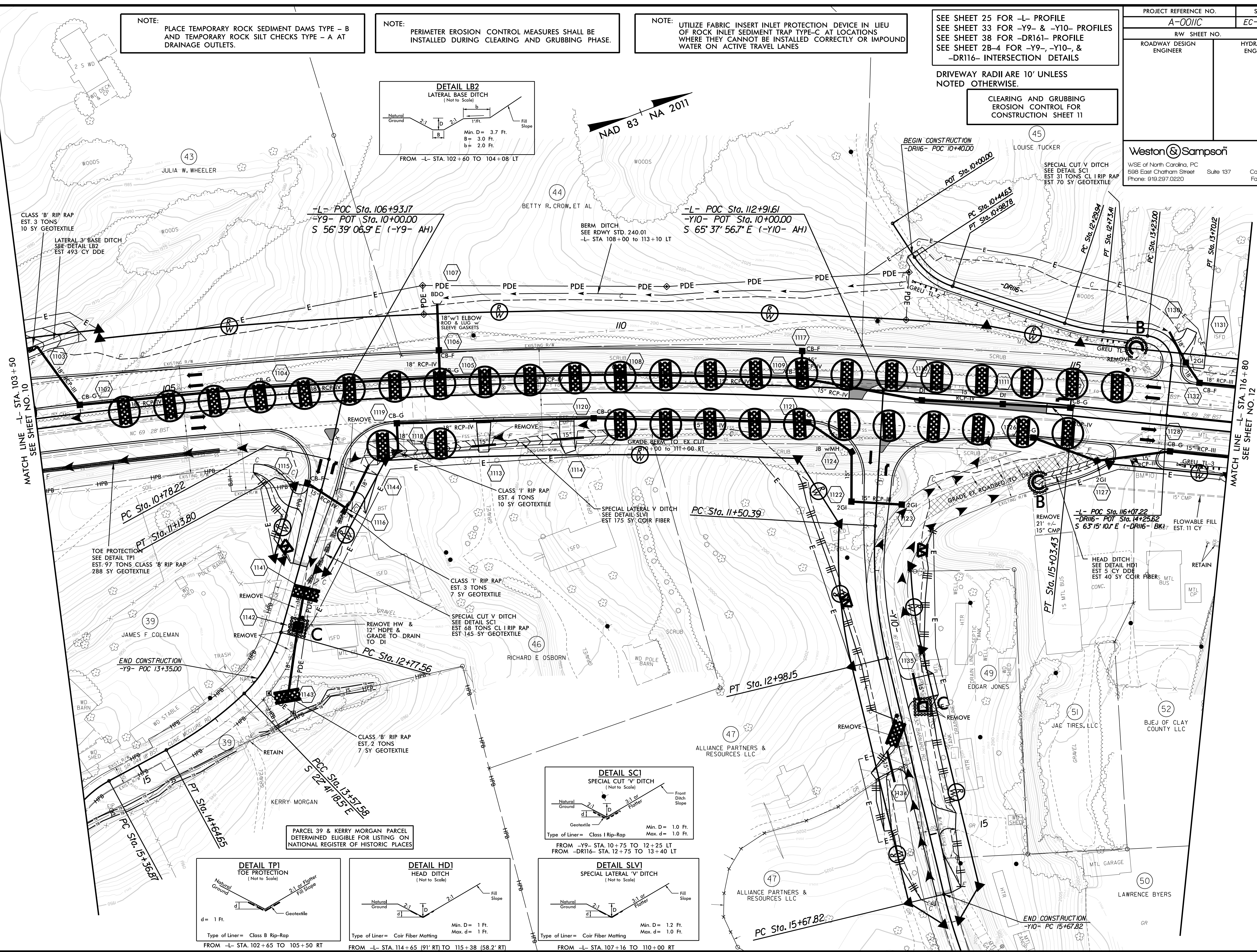
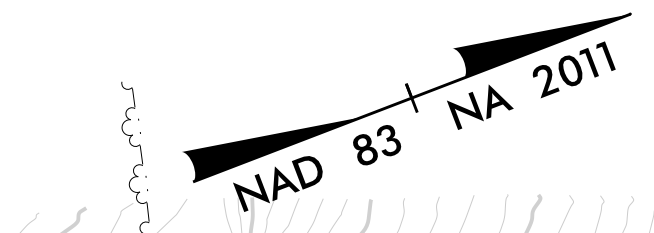
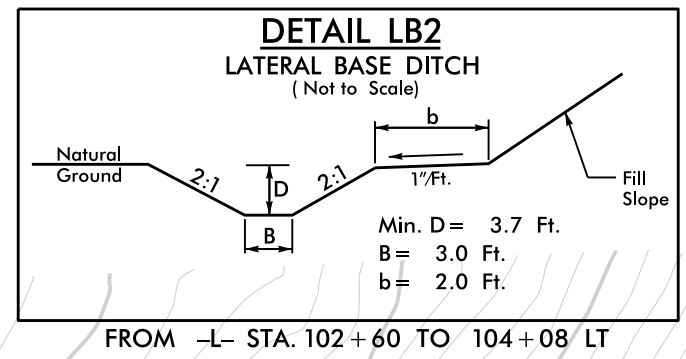
NOTE: PERIMETER EROSION CONTROL MEASURES SHALL BE INSTALLED DURING CLEARING AND GRUBBING PHASE.

NOTE: UTILIZE FABRIC INSERT INLET PROTECTION DEVICE IN LIEU OF ROCK INLET SEDIMENT TRAP TYPE-C AT LOCATIONS WHERE THEY CANNOT BE INSTALLED CORRECTLY OR IMPOUND WATER ON ACTIVE TRAVEL LANES

SEE SHEET 25 FOR -L- PROFILE
SEE SHEET 33 FOR -Y9- & -Y10- PROFILES
SEE SHEET 38 FOR -DR161- PROFILE
SEE SHEET 2B-4 FOR -Y9-, -Y10-, & -DR116- INTERSECTION DETAILS

DRIVEWAY RADII ARE 10' UNLESS NOTED OTHERWISE.

CLEARING AND GRUBBING EROSION CONTROL FOR CONSTRUCTION SHEET 11



PARCEL 39 & KERRY MORGAN PARCEL DETERMINED ELIGIBLE FOR LISTING ON NATIONAL REGISTER OF HISTORIC PLACES

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CLEARING AND GRUBBING EROSION CONTROL FOR CONSTRUCTION SHEET 12

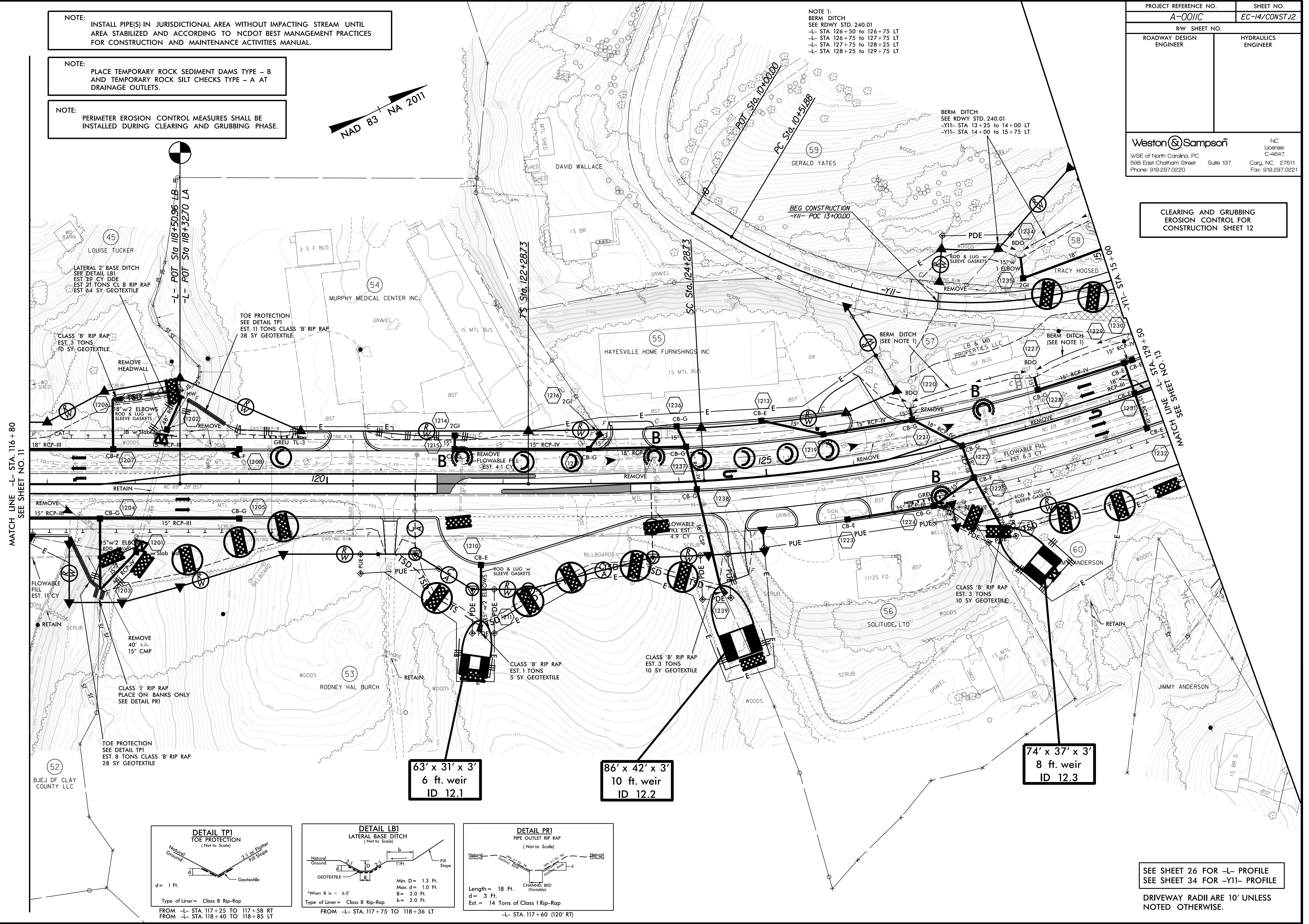
NOTE:
 INSTALL PIPE(S) IN JURISDICTIONAL AREA WITHOUT IMPACTING STREAM UNTIL AREA STABILIZED AND ACCORDING TO NCDOT BEST MANAGEMENT PRACTICES FOR CONSTRUCTION AND MAINTENANCE ACTIVITIES MANUAL.

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

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

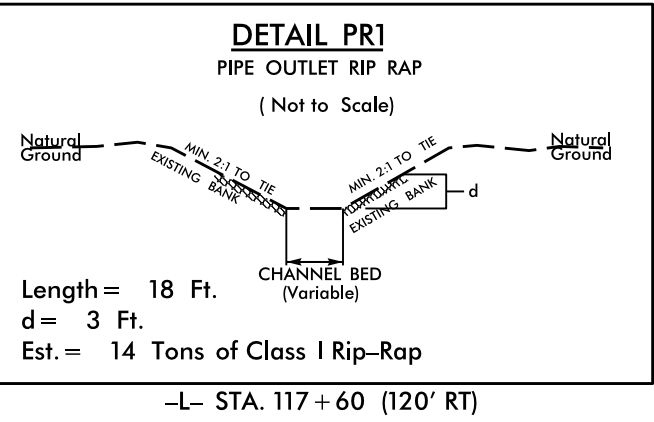
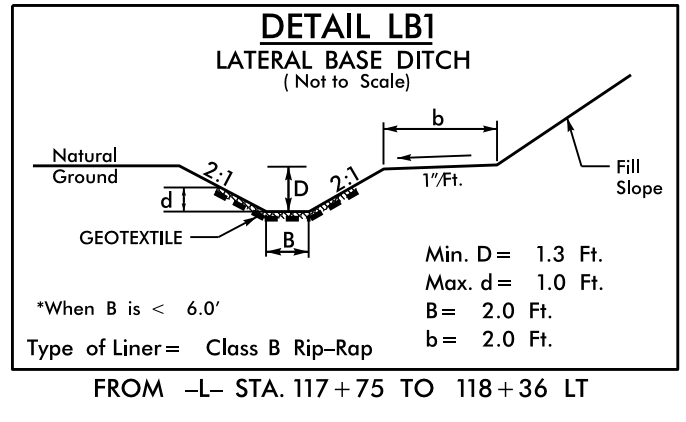
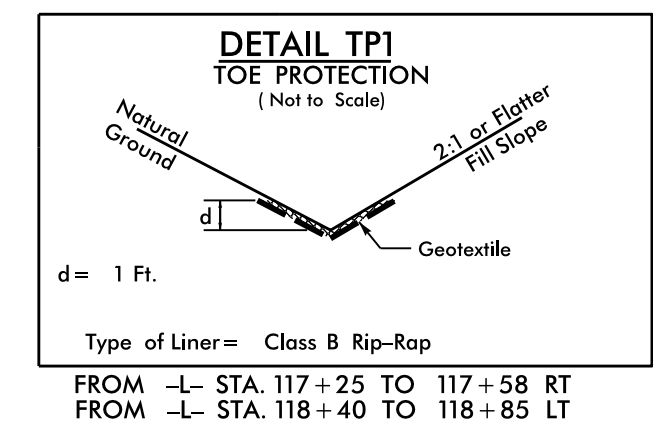
NOTE 1:
 BERM DITCH
 SEE RDWY STD. 240.01
 -L- STA 126+50 to 126+75 LT
 -L- STA 126+75 to 127+75 LT
 -L- STA 127+75 to 128+25 LT
 -L- STA 128+25 to 129+75 LT

BERM DITCH
 SEE RDWY STD. 240.01
 -Y11- STA 13+25 to 14+00 LT
 -Y11- STA 14+00 to 15+75 LT



MATCH LINE -L- STA 116+80
 SEE SHEET NO. 11

MATCH LINE -L- STA 158+80
 SEE SHEET NO. 12



SEE SHEET 26 FOR -L- PROFILE
 SEE SHEET 34 FOR -Y11- PROFILE
 DRIVEWAY RADII ARE 10' UNLESS NOTED OTHERWISE.

8/17/19

8/17/2019
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PROJECT REFERENCE NO. A-0011C	SHEET NO. EC-15/CONST J3
RW SHEET NO.	HYDRAULICS ENGINEER
ROADWAY DESIGN ENGINEER	

Weston & Sampson NC License: C-4847
 WSE of North Carolina, PC 588 East Chatham Street Phone: 919.297.0220 Suite 137 Cary, NC 27511 Fax: 919.297.0221

NOTE: INSTALL PIPE(S) IN JURISDICTIONAL AREA 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.

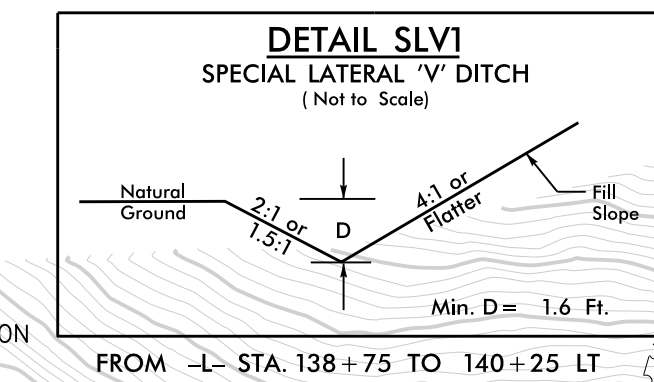
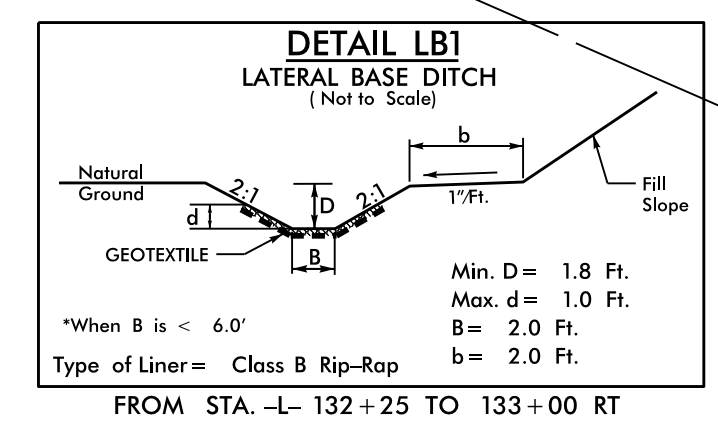
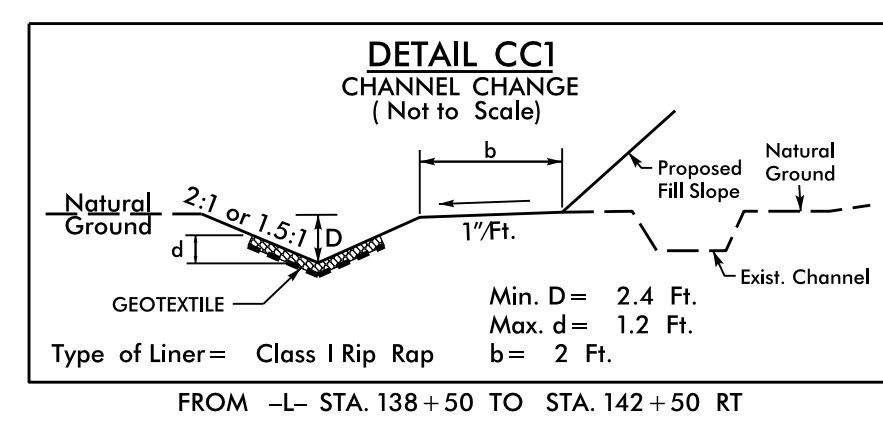
NOTE: PERIMETER EROSION CONTROL MEASURES SHALL BE INSTALLED DURING CLEARING AND GRUBBING PHASE.

NOTE: UTILIZE FABRIC INSERT INLET PROTECTION DEVICE IN LIEU OF ROCK INLET SEDIMENT TRAP TYPE-C AT LOCATIONS WHERE THEY CANNOT BE INSTALLED CORRECTLY OR IMPOUND WATER ON ACTIVE TRAVEL LANES

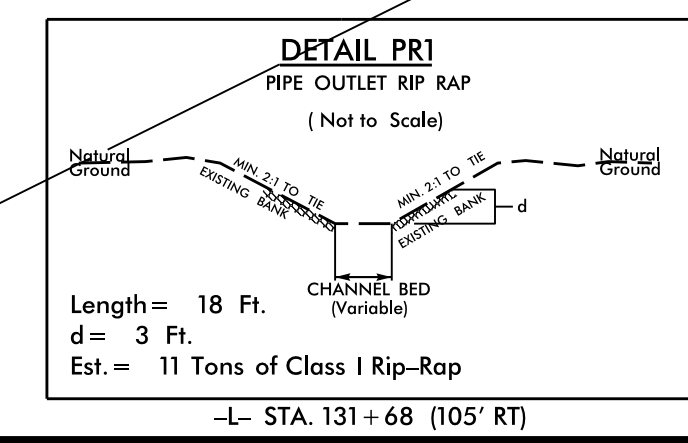
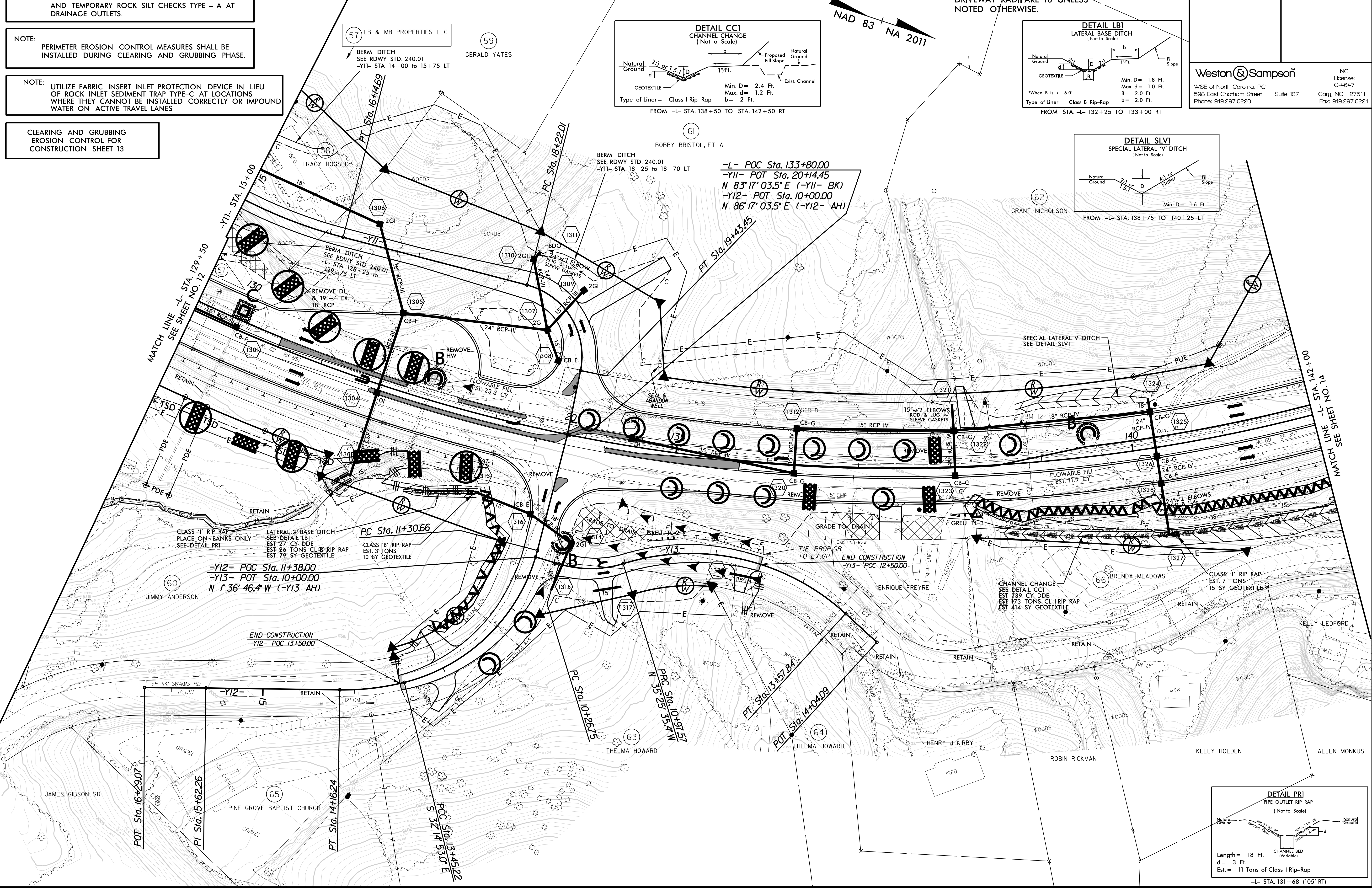
CLEARING AND GRUBBING EROSION CONTROL FOR CONSTRUCTION SHEET 13

SEE SHEET 26 FOR -L- PROFILE
 SEE SHEET 34 FOR -Y11-, -Y12-, & -Y13- PROFILES
 SEE SHEET 2B-4 FOR -Y11-, -Y12- & -Y13- INTERSECTION DETAILS

DRIVEWAY RADII ARE 10' UNLESS NOTED OTHERWISE.



-L- POC Sta. 133+80.00
 -Y11- POT Sta. 20+14.45
 N 83° 17' 03.5" E (-Y11- BK)
 -Y12- POT Sta. 10+00.00
 N 86° 17' 03.5" E (-Y12- AH)



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