

0151DEL P1061

TIP PROJECT: P-5206A

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

ROWAN COUNTY

PEELER ROAD - GRADE SEPARATION OVER NCRR/NS
FROM REID TO NORTH KANNAPOLIS

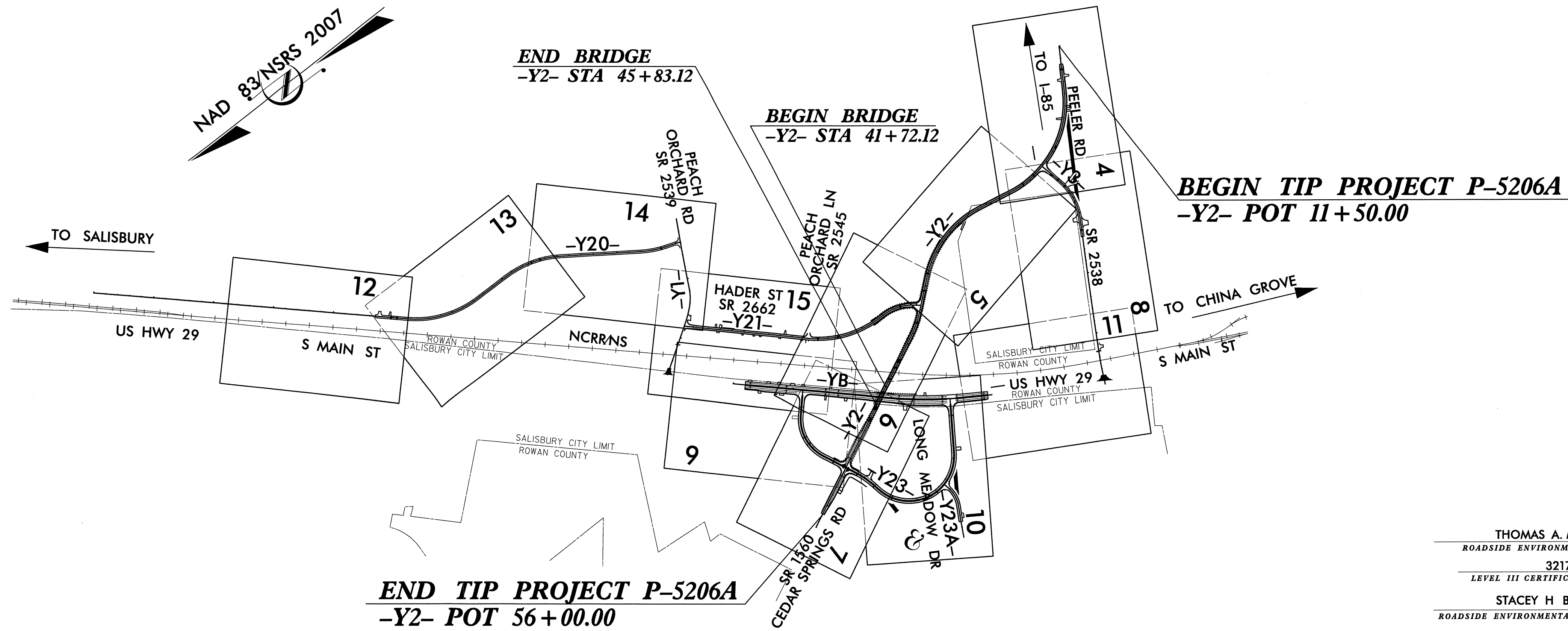


Table with 4 columns: STATE, STATE PROJECT REFERENCE NO., SHEET NO., TOTAL SHEETS. Values: N.C., P-5206A, EC-1.

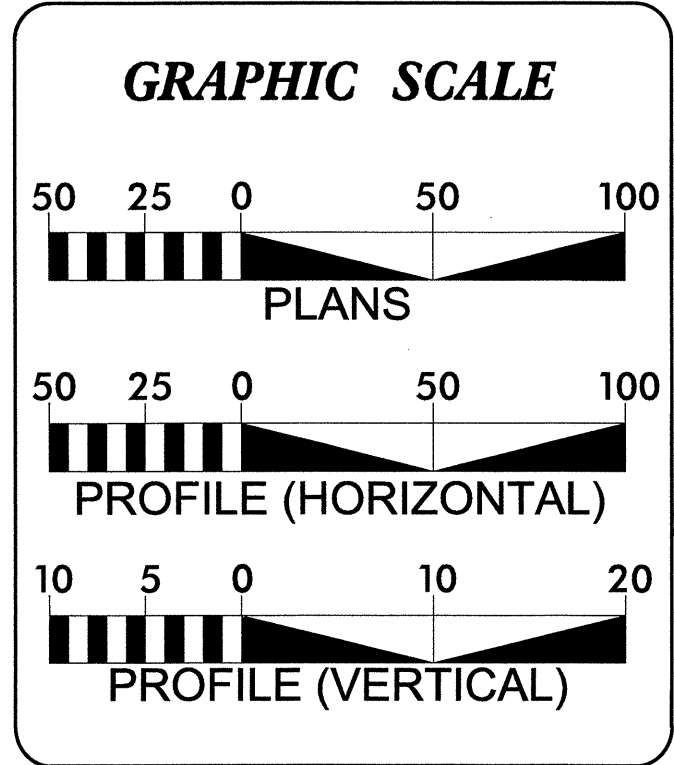
EROSION AND SEDIMENT CONTROL MEASURES

Table listing erosion and sediment control measures with columns for Std. #, Description, and Symbol. Includes items like Temporary Silt Ditch, Temporary Diversion, Temporary Silt Fence, etc.

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

THOMAS A. MILLER, P.E.
ROADSIDE ENVIRONMENTAL ENGINEER
3217
LEVEL III CERTIFICATION NUMBER
STACEY H. BAILEY, P.E.
ROADSIDE ENVIRONMENTAL PROJECT ENGINEER
3074
LEVEL III CERTIFICATION NUMBER

Florence & Hutcheson
CONSULTING ENGINEERS
5121 Kingdom Way, Suite 100 Raleigh, NC 27607
NC License No: P-0258



ROADSIDE ENVIRONMENTAL UNIT
DIVISION OF HIGHWAYS
STATE OF NORTH CAROLINA
LEVEL III CERTIFIED BY:
STACEY H. BAILEY, PE
CERTIFICATION NUMBER: 3074
ISSUED: NOVEMBER 21, 2012

THESE EROSION AND SEDIMENT CONTROL PLANS COMPLY
WITH THE REGULATIONS SET FORTH BY THE
NCG-010000 GENERAL CONSTRUCTION PERMIT EFFECTIVE AUGUST 3, 2011
ISSUED BY THE NORTH CAROLINA DEPARTMENT OF ENVIRONMENT AND
NATURAL RESOURCES DIVISION OF WATER QUALITY.

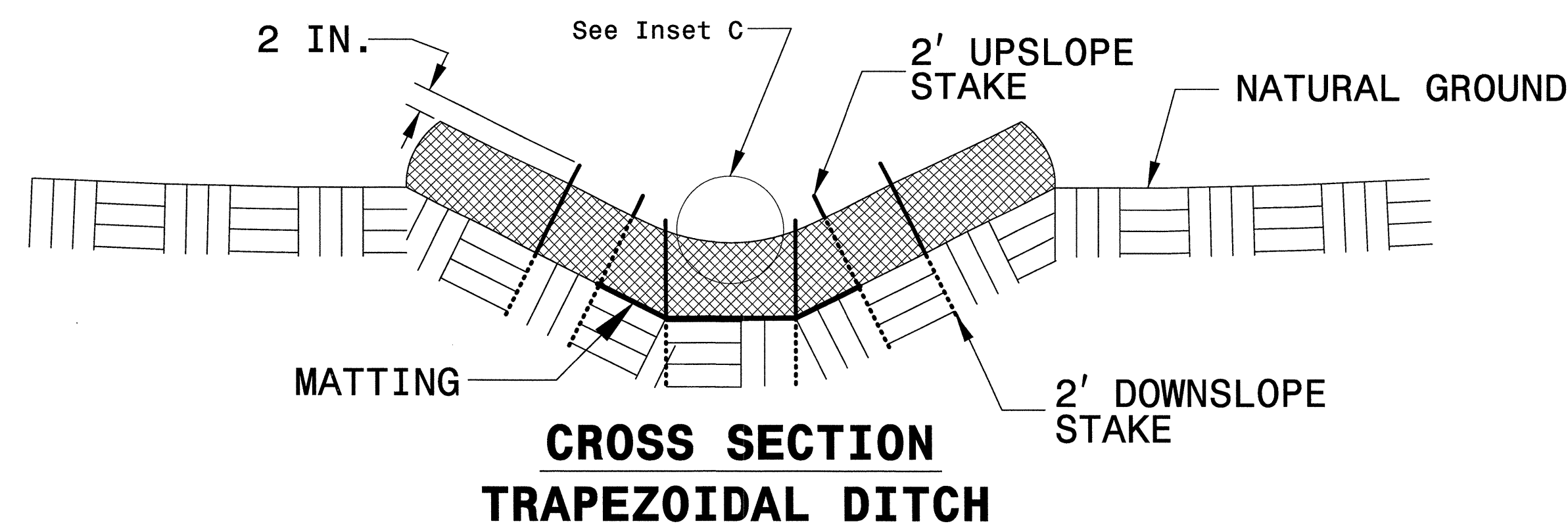
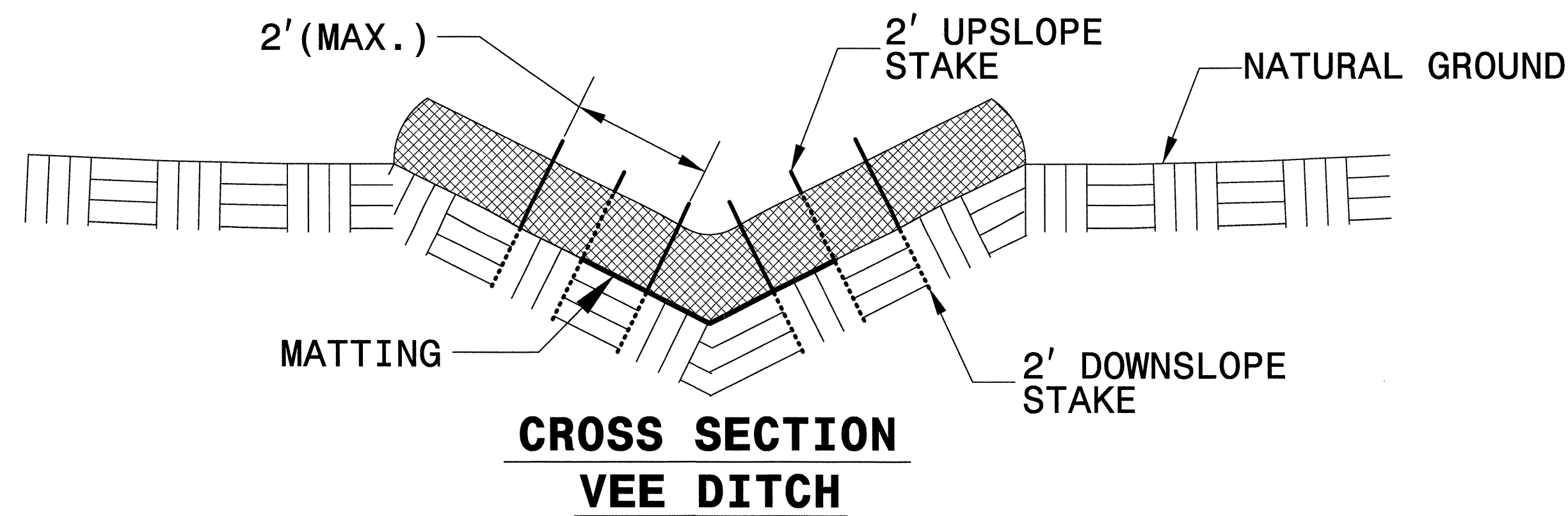
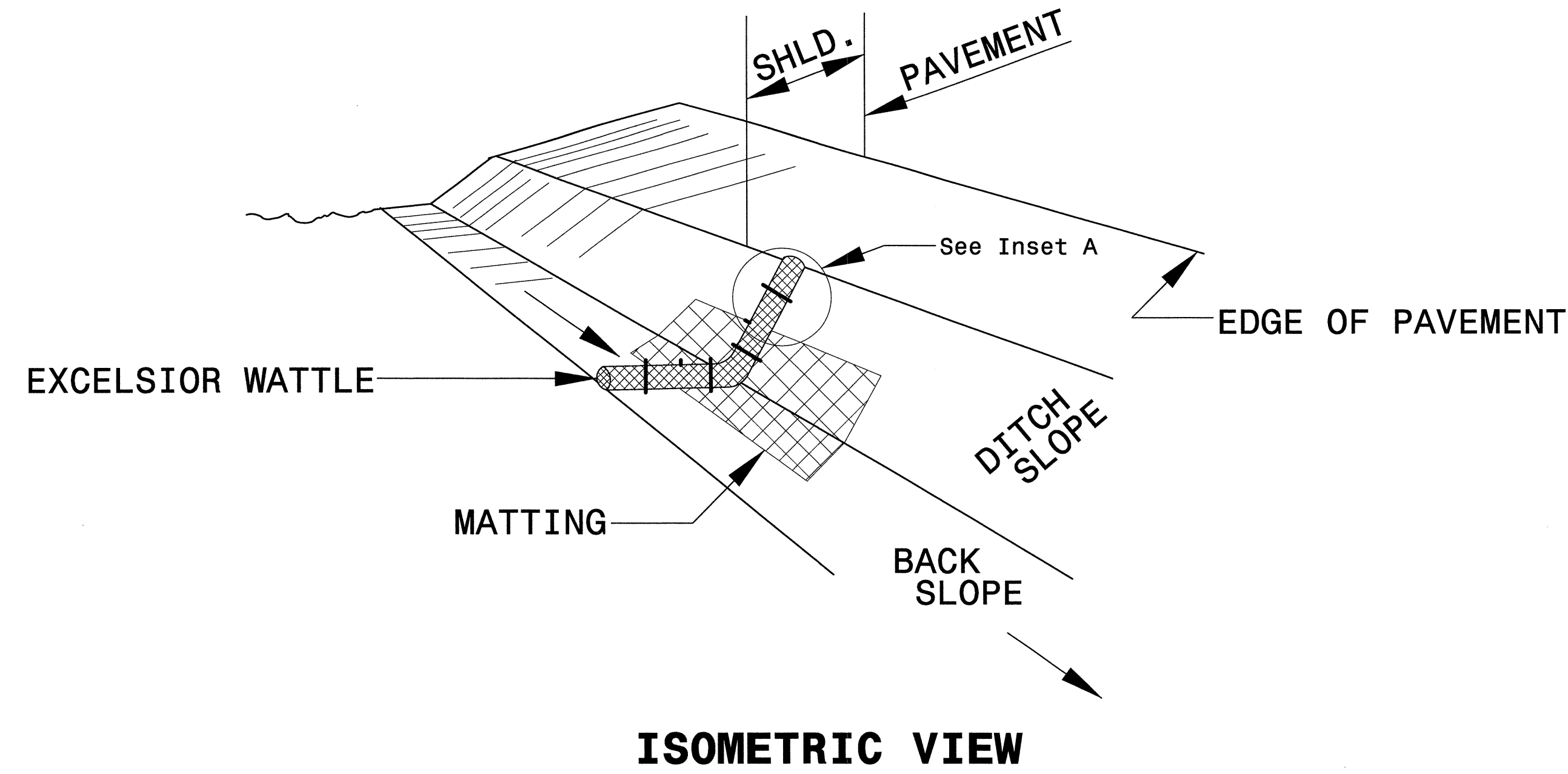
Prepared In the Office of:
FLORENCE & HUTCHESON
5121 KINGDOM WAY
SUITE 100
RALEIGH, NC 27607
919-851-6066
NC LIC. NO. F-0258
2012 STANDARD SPECIFICATIONS

Table of Roadway Standard Drawings listing standards like Railroad Erosion Control Detail, Temporary Silt Fence, etc., with corresponding drawing numbers.

11/21/2012 F:\Hydro\eroc\eroc\Drawings\5206a.ec\_tsh.dgn Florence & Hutcheson, Inc.

PROJECT REFERENCE NO. P-5206A	SHEET NO. EC-2
RW SHEET NO.	
ROADSIDE ENVIRONMENTAL PROJECT ENGINEER	

# WATTLE WITH POLYACRYLAMIDE (PAM) DETAIL



**NOTES:**

USE MINIMUM 12 IN. DIAMETER EXCELSIOR WATTLE.

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

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

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

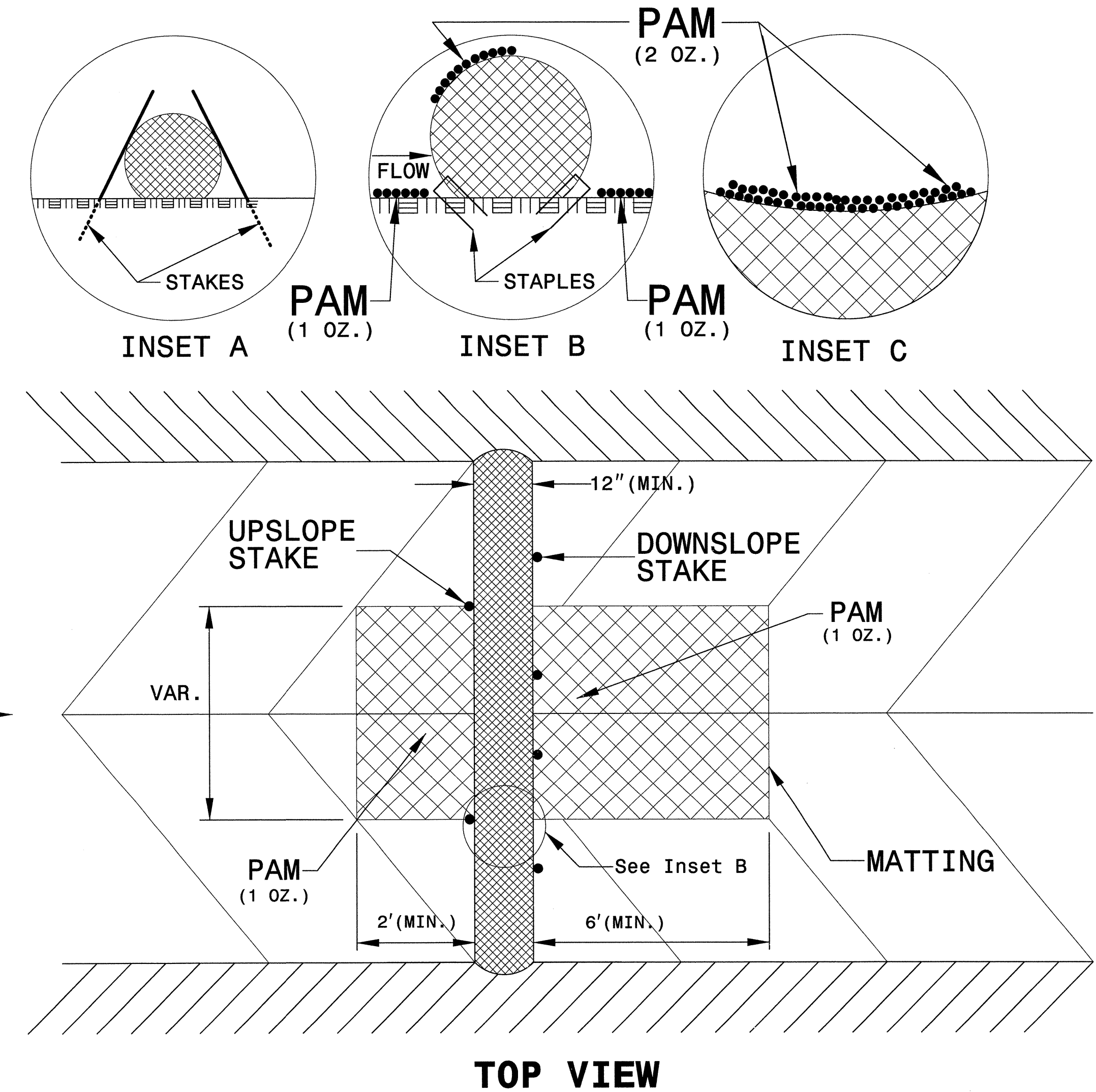
PROVIDE STAPLES MADE OF 0.125 IN. DIAMETER STEEL WIRE FORMED INTO A U SHAPE NOT LESS THAN 12" IN LENGTH.

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

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

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

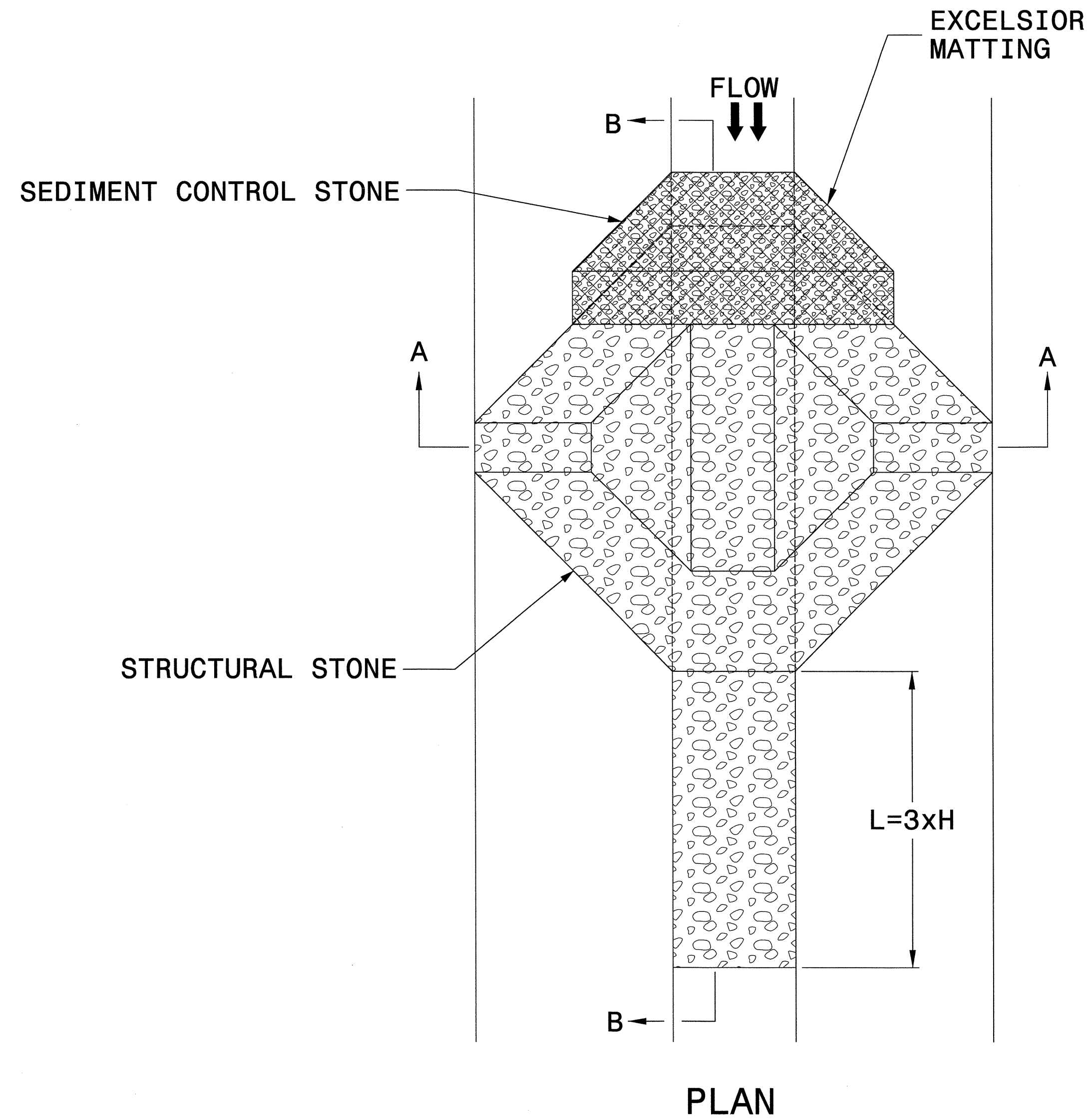
INITIALLY APPLY 2 OUNCES OF ANIONIC OR NEUTRALLY CHARGED PAM OVER WATTLE WHERE WATER WILL FLOW AND 1 OUNCE OF PAM ON MATTING ON EACH SIDE OF WATTLE. REAPPLY PAM AFTER EVERY RAINFALL EVENT THAT IS EQUAL TO OR EXCEEDS 0.50 IN.





PROJECT REFERENCE NO. P-5206A	SHEET NO. EC-2A
ROADSIDE ENVIRONMENTAL PROJECT ENGINEER	

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

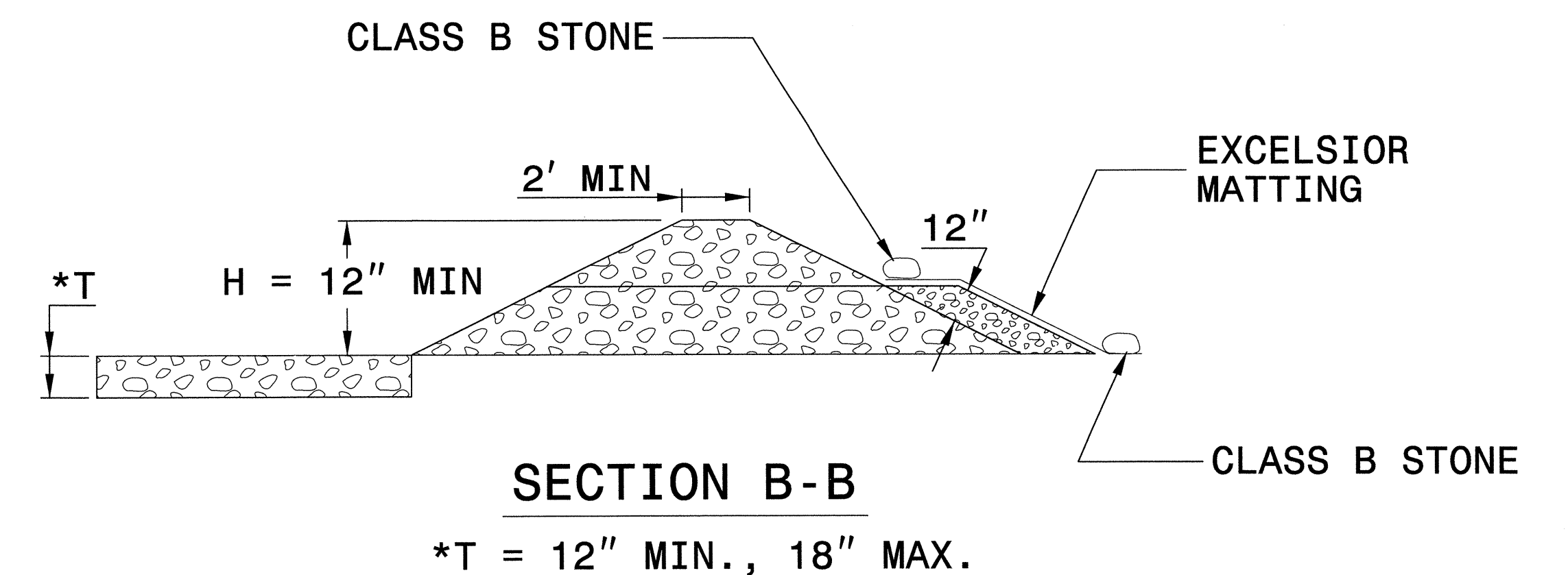
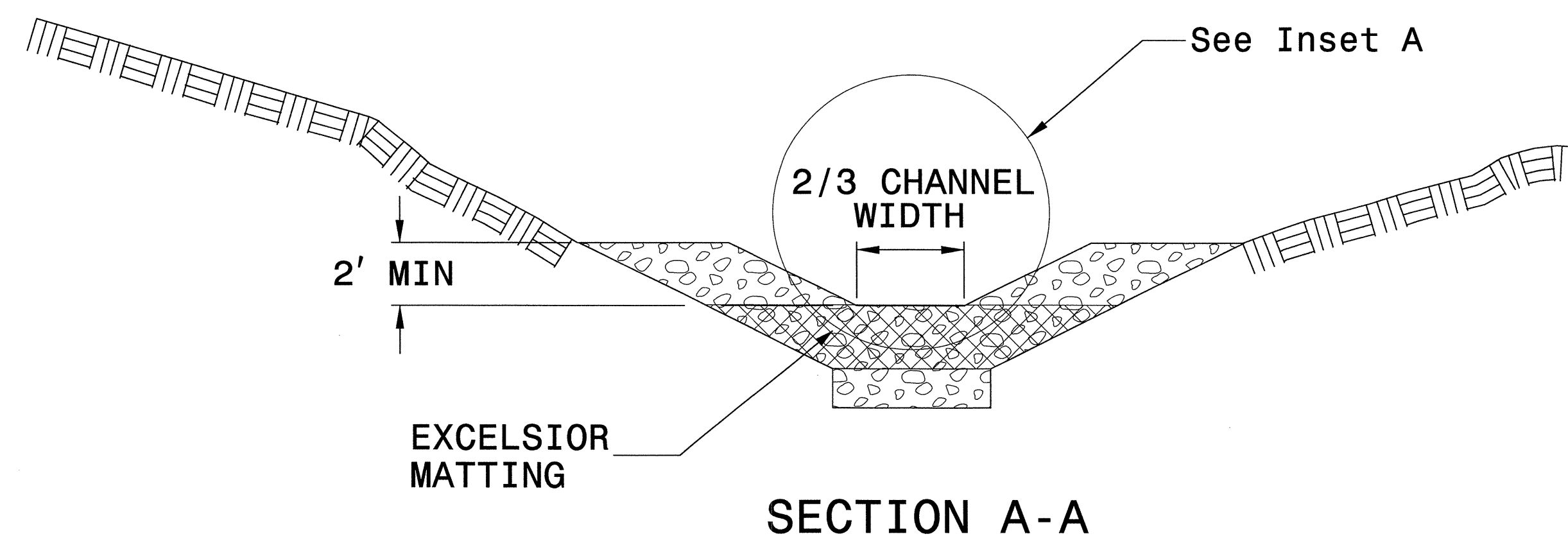
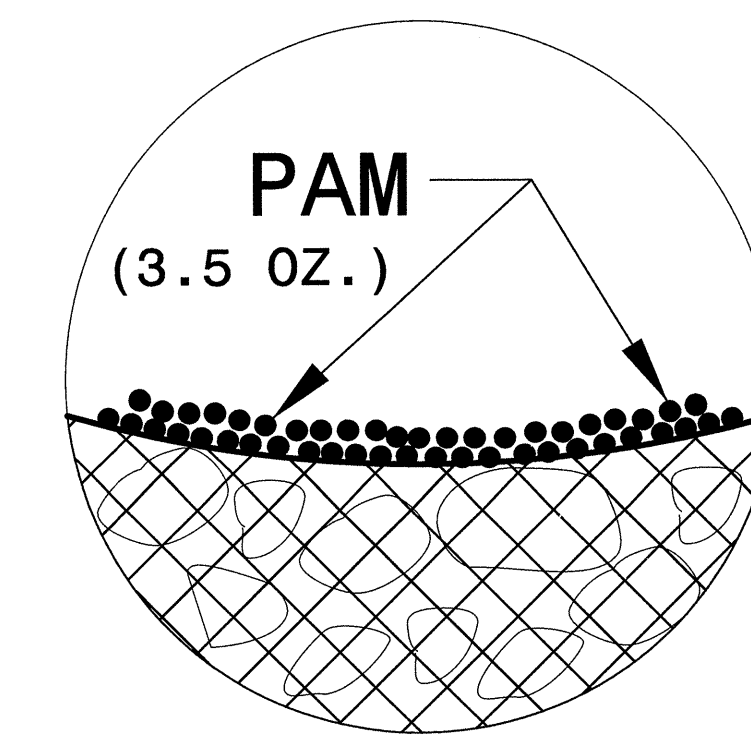


## NOTES

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

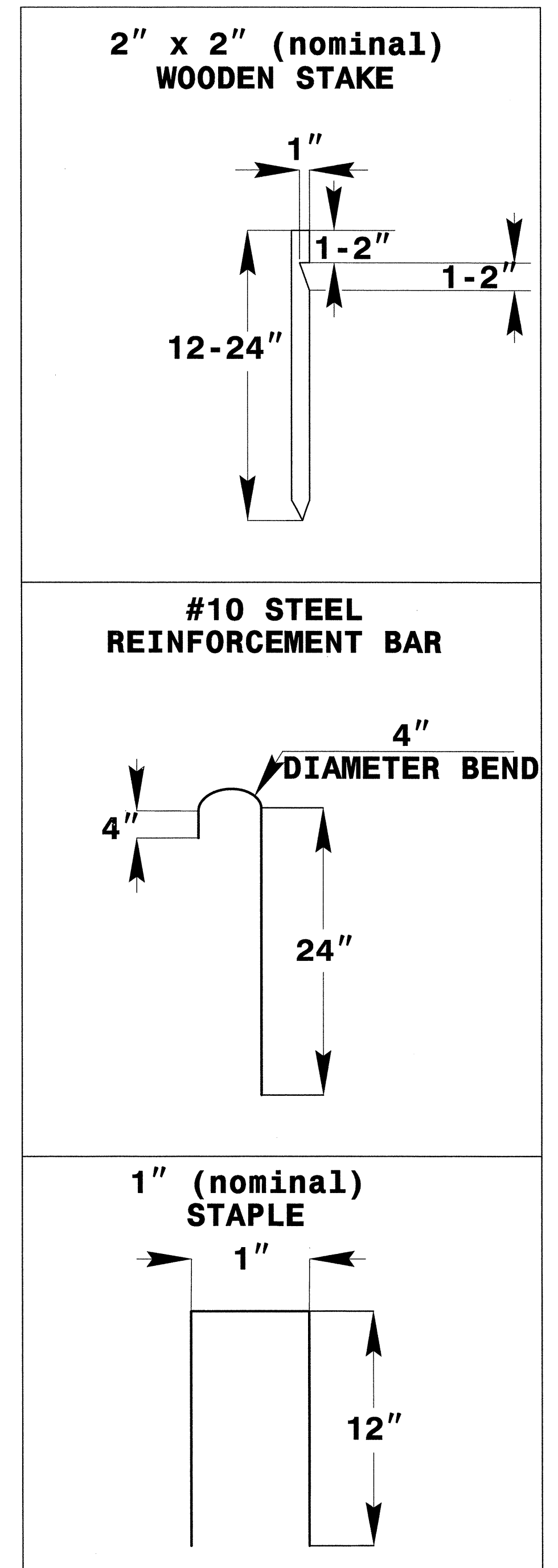
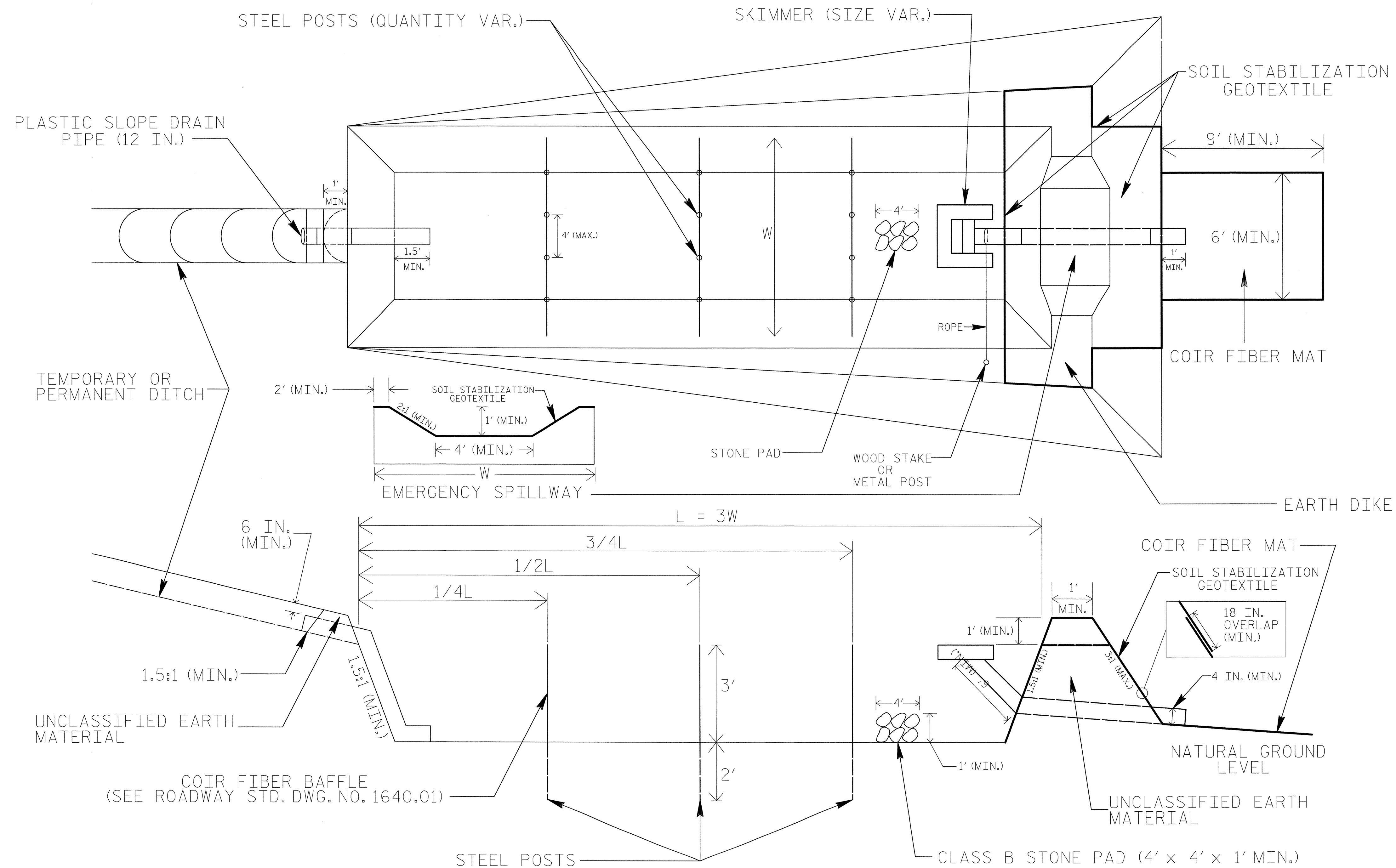
PRIOR TO POLYACRYLAMIDE (PAM) APPLICATION, OBTAIN A SOIL SAMPLE FROM PROJECT LOCATION, AND FROM OFFSITE MATERIAL, AND ANALYZE FOR APPROPRIATE PAM FLOCCULANT TO BE APPLIED TO EACH ROCK SILT CHECK.

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



NOT TO SCALE

# SKIMMER BASIN WITH BAFFLES DETAIL



## NOTES

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

NOT TO SCALE





DIVISION OF HIGHWAYS  
STATE OF NORTH CAROLINA

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PROJECT REFERENCE NO.	SHEET NO.
<i>P-5206A</i>	<i>EC-3A</i>
ROADSIDE ENVIRONMENTAL PROJECT ENGINEER	

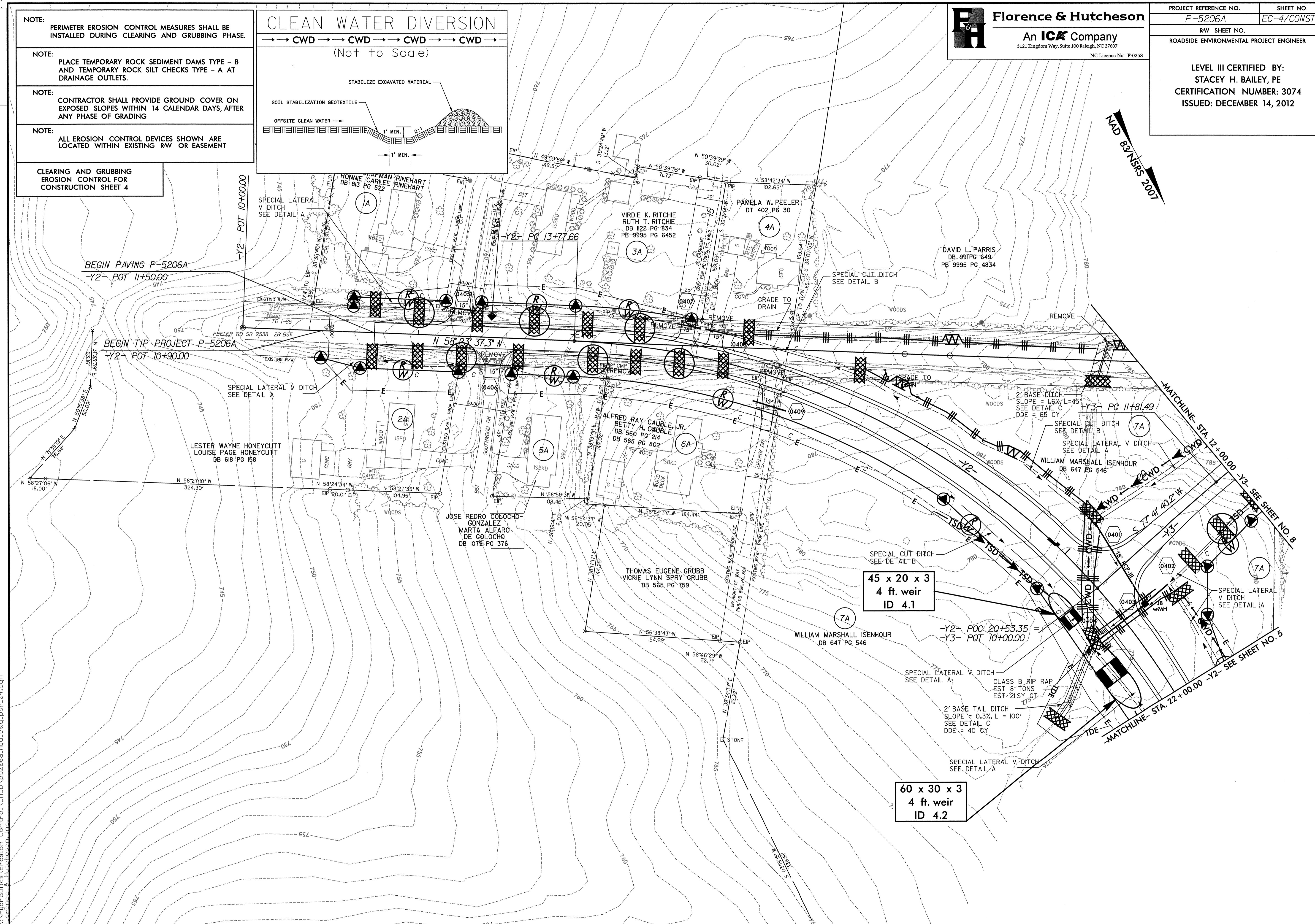
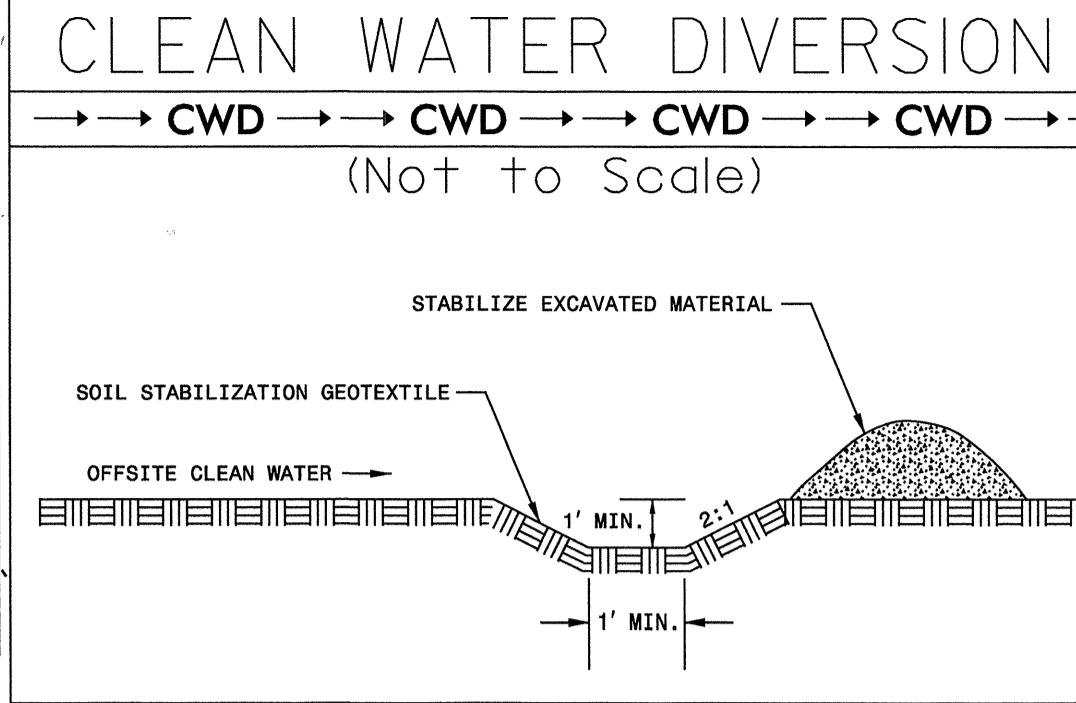
## ***SOIL STABILIZATION TIMEFRAMES***

<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.



- 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.
- NOTE:** CONTRACTOR SHALL PROVIDE GROUND COVER ON EXPOSED SLOPES WITHIN 14 CALENDAR DAYS, AFTER ANY PHASE OF GRADING
- NOTE:** ALL EROSION CONTROL DEVICES SHOWN ARE LOCATED WITHIN EXISTING RAW OR EASEMENT

CLEARING AND GRUBBING EROSION CONTROL FOR CONSTRUCTION SHEET 4



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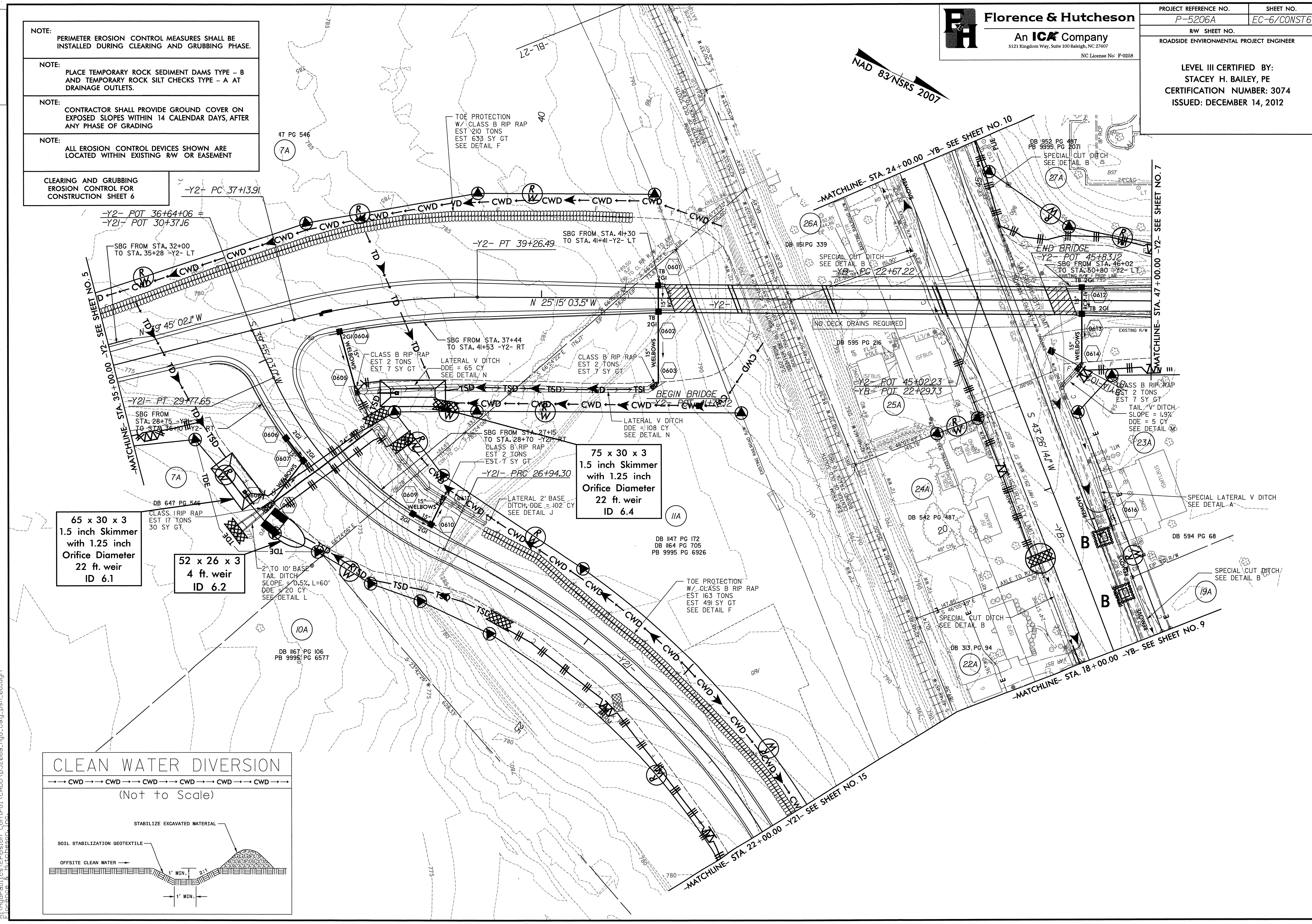
**NOTE:**  
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**NOTE:**  
 ALL EROSION CONTROL DEVICES SHOWN ARE LOCATED WITHIN EXISTING RW OR EASEMENT

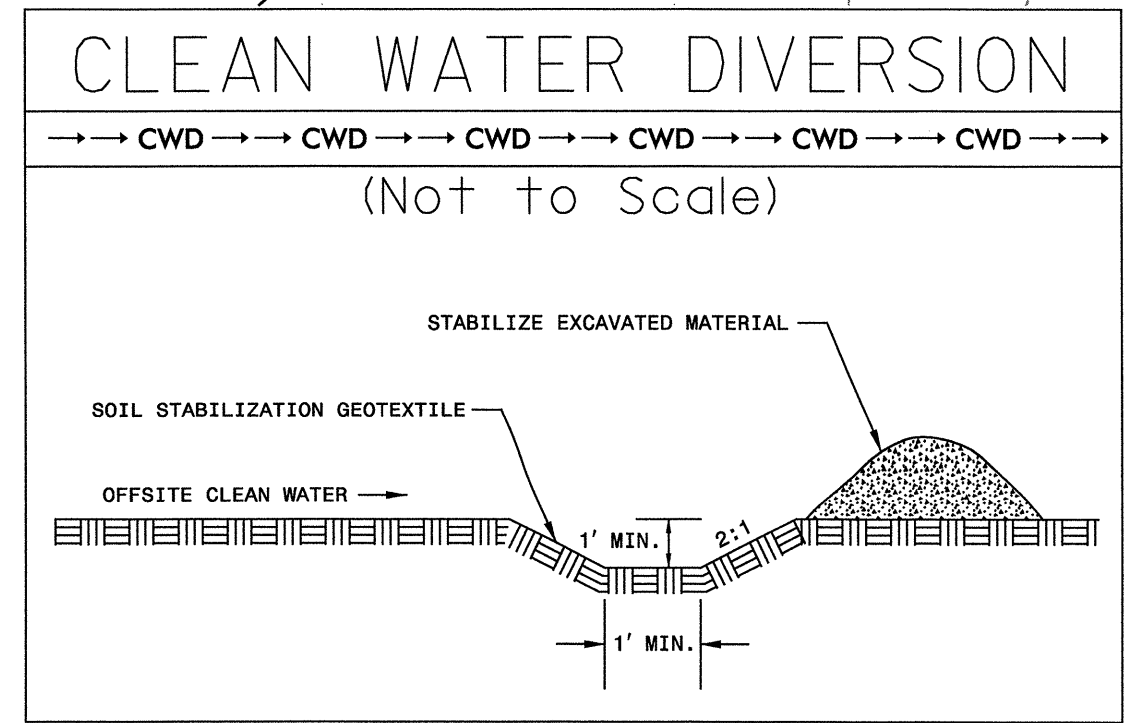
**CLEARING AND GRUBBING EROSION CONTROL FOR CONSTRUCTION SHEET 6**



**65 x 30 x 3**  
 1.5 inch Skimmer  
 with 1.25 inch  
 Orifice Diameter  
 22 ft. weir  
 ID 6.1

**52 x 26 x 3**  
 4 ft. weir  
 ID 6.2

**75 x 30 x 3**  
 1.5 inch Skimmer  
 with 1.25 inch  
 Orifice Diameter  
 22 ft. weir  
 ID 6.4



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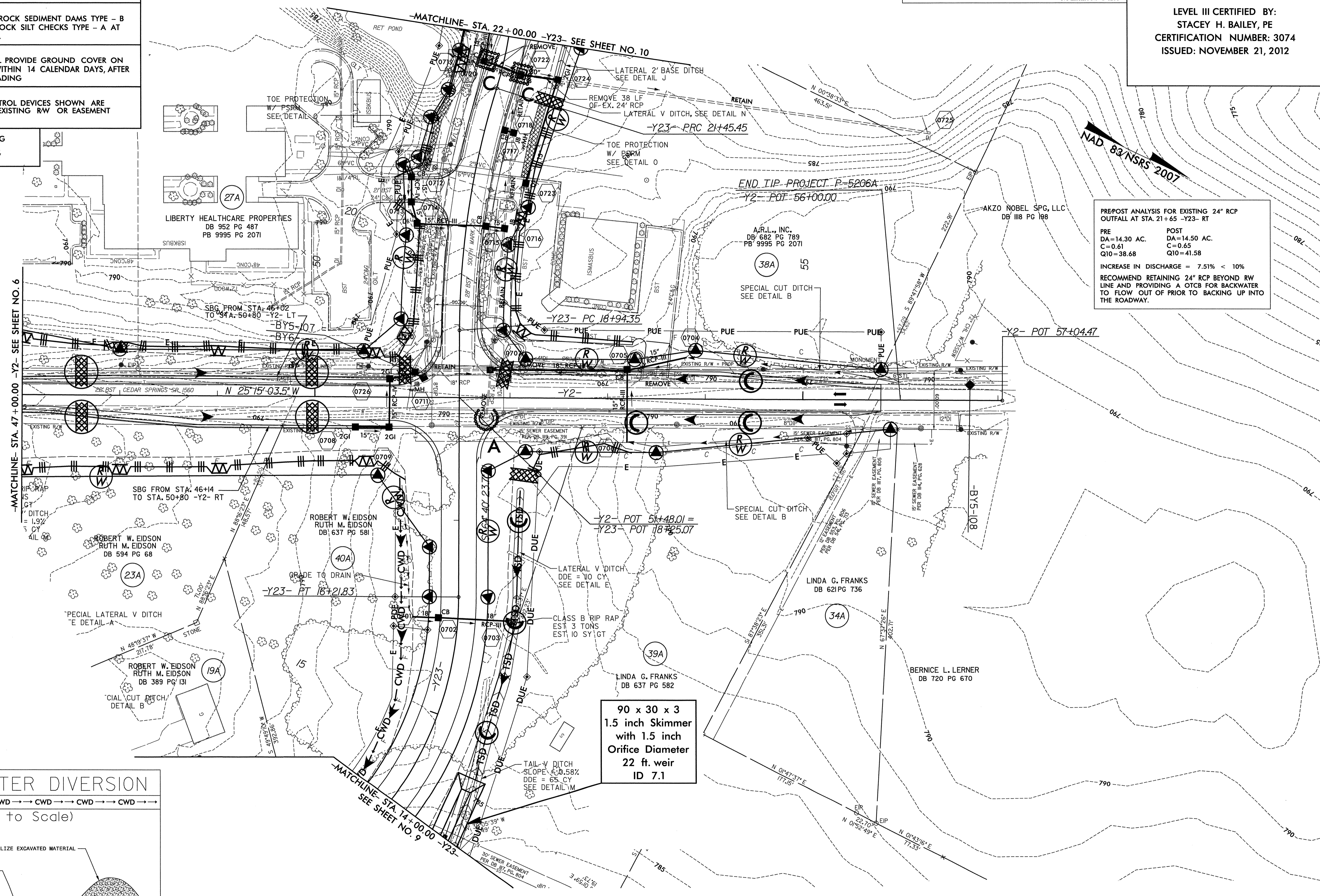
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CLEARING AND GRUBBING EROSION CONTROL FOR CONSTRUCTION SHEET 7



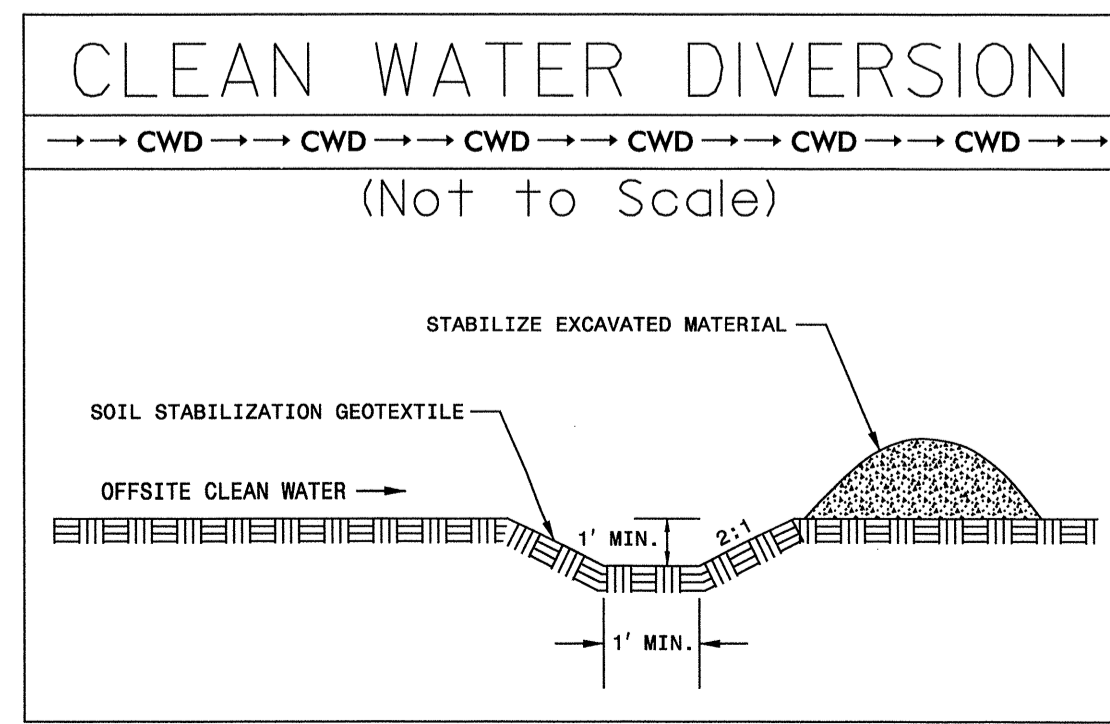
PREPOST ANALYSIS FOR EXISTING 24" RCP  
 OUTFALL AT STA. 21+65 -Y23- RT

PRE	POST
DA=14.30 AC.	DA=14.50 AC.
C=0.61	C=0.65
Q10=38.68	Q10=41.58

INCREASE IN DISCHARGE = 7.51% < 10%

RECOMMEND RETAINING 24" RCP BEYOND RW LINE AND PROVIDING A OTCB FOR BACKWATER TO FLOW OUT OF PRIOR TO BACKING UP INTO THE ROADWAY.

90 x 30 x 3  
 1.5 inch Skimmer  
 with 1.5 inch  
 Orifice Diameter  
 22 ft. weir  
 ID 7.1



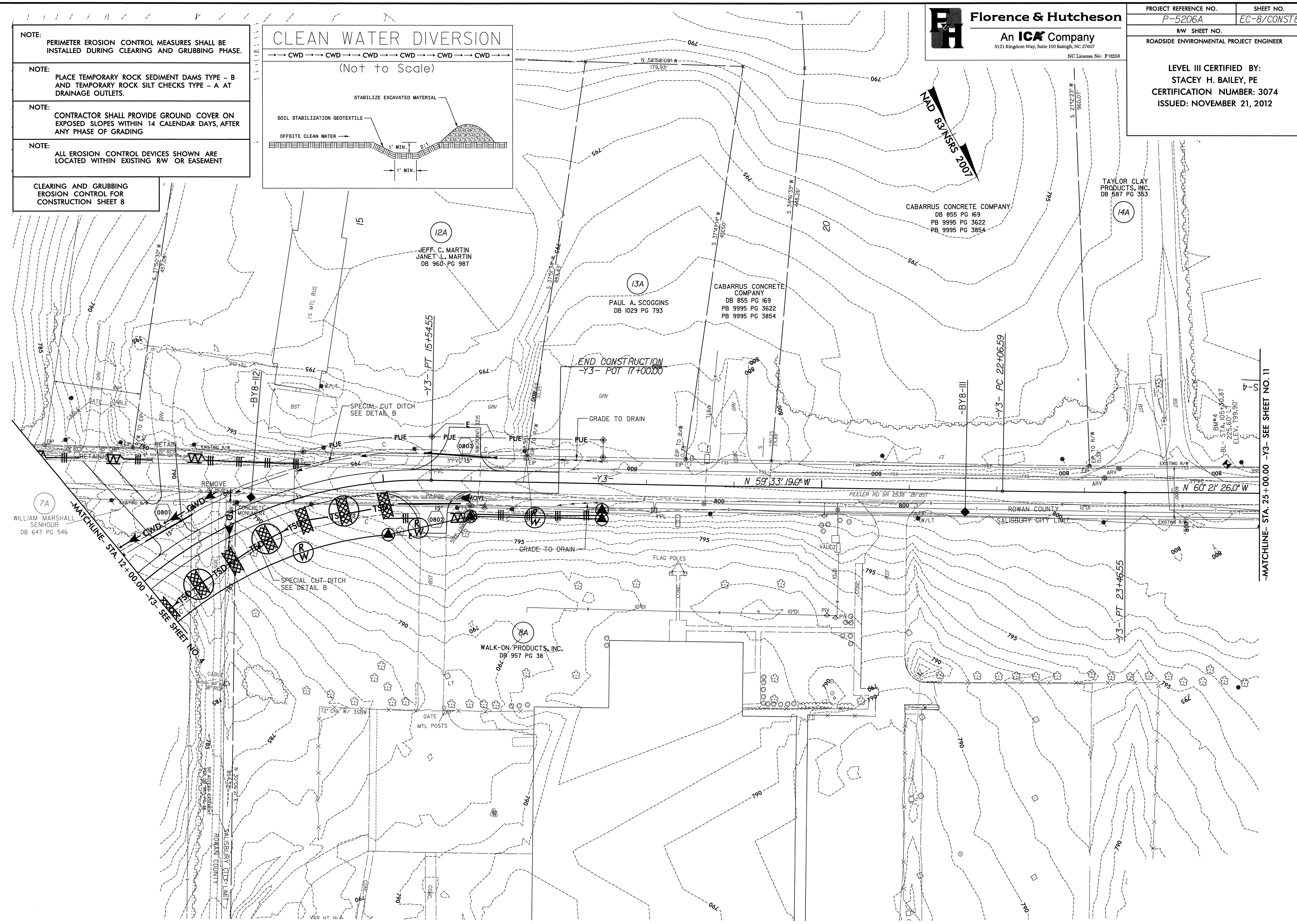
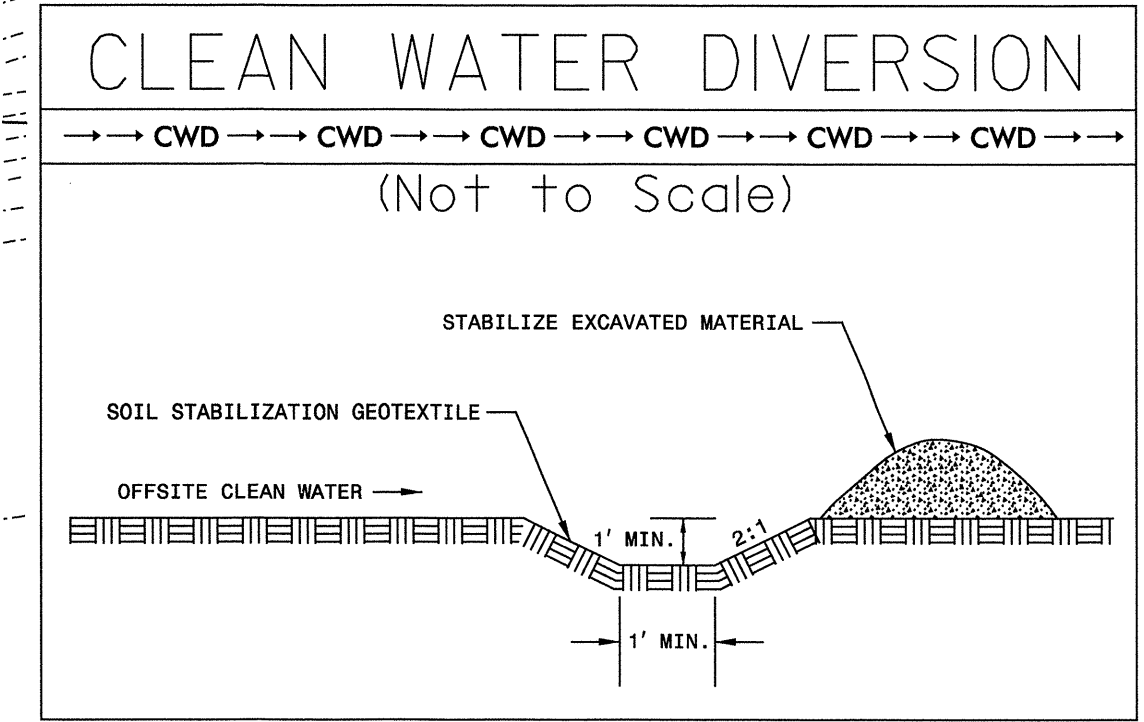


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 5121 Kingdom Way, Suite 100 Raleigh, NC 27607  
 NC License No: F-0258

PROJECT REFERENCE NO. P-5206A	SHEET NO. EC-8/CONST 8
RW SHEET NO.	
ROADSIDE ENVIRONMENTAL PROJECT ENGINEER	
LEVEL III CERTIFIED BY: STACEY H. BAILEY, PE CERTIFICATION NUMBER: 3074 ISSUED: NOVEMBER 21, 2012	

- 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.
- NOTE:** CONTRACTOR SHALL PROVIDE GROUND COVER ON EXPOSED SLOPES WITHIN 14 CALENDAR DAYS, AFTER ANY PHASE OF GRADING
- NOTE:** ALL EROSION CONTROL DEVICES SHOWN ARE LOCATED WITHIN EXISTING RW OR EASEMENT
- CLEARING AND GRUBBING EROSION CONTROL FOR CONSTRUCTION SHEET 8



11/21/2012  
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 Florence & Hutcheson, Inc.

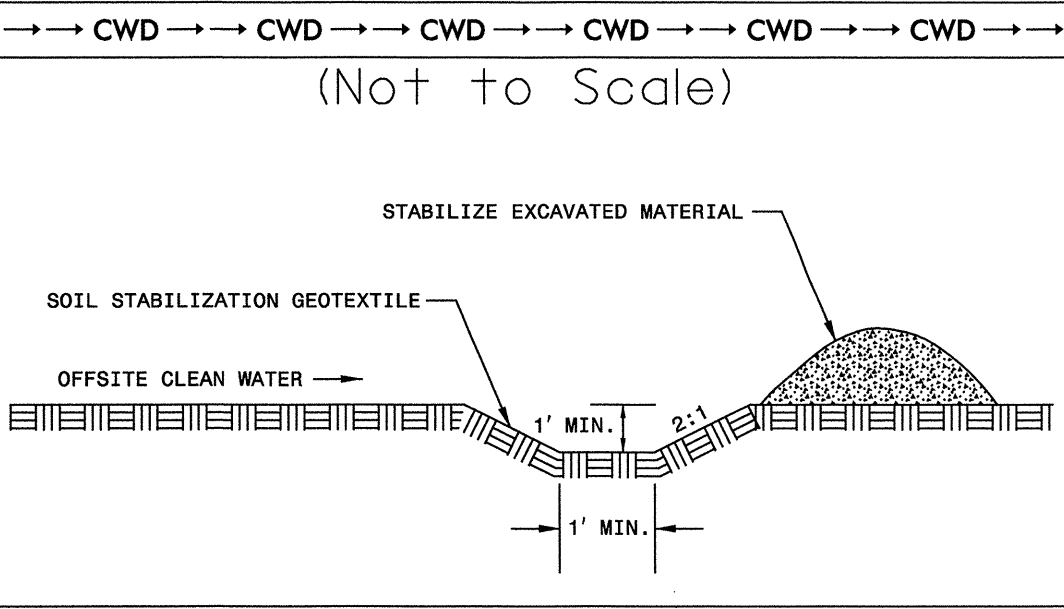


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- NOTE:**  
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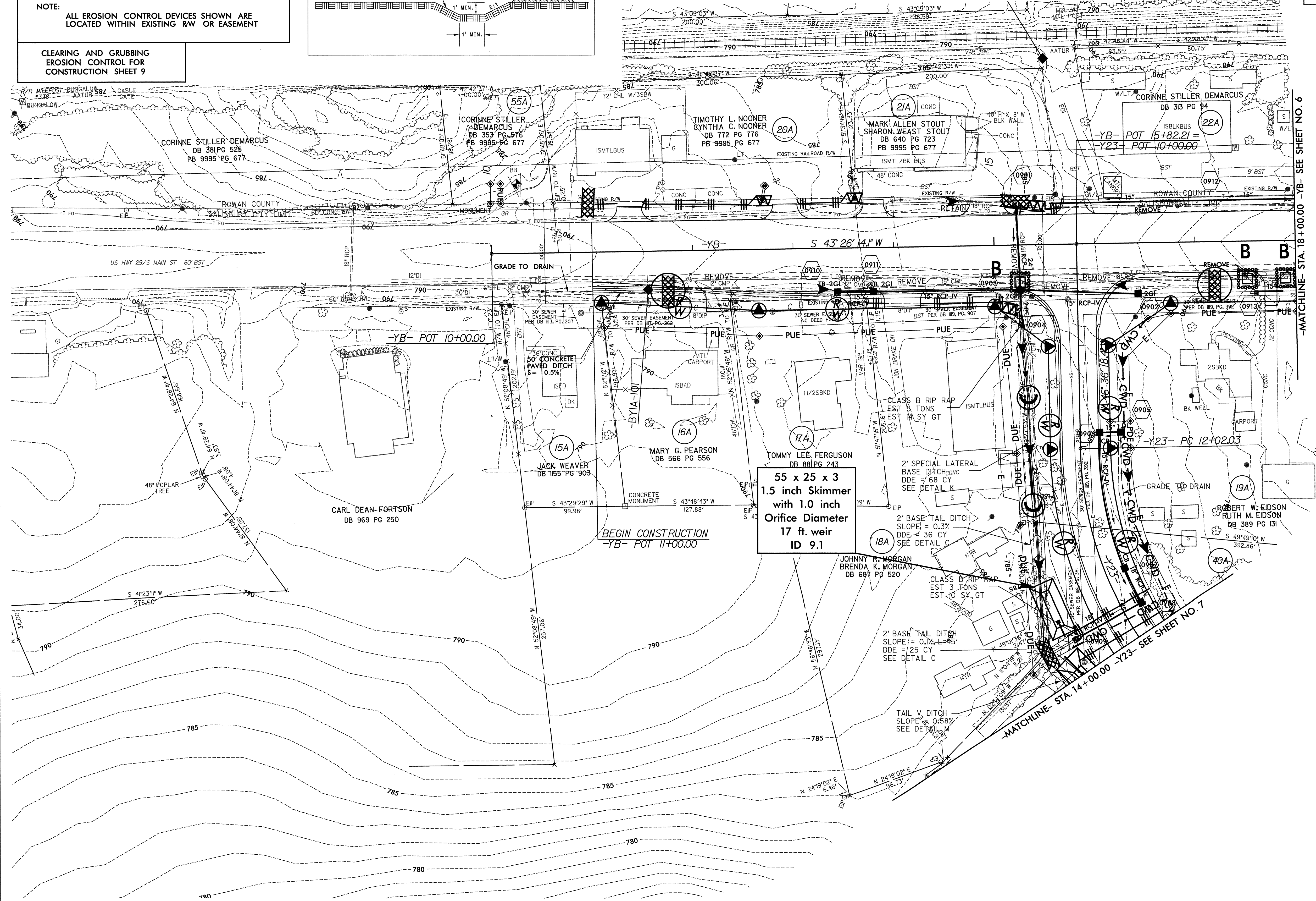
CLEARING AND GRUBBING EROSION CONTROL FOR CONSTRUCTION SHEET 9

### CLEAN WATER DIVERSION



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NC License No. F-0258

PROJECT REFERENCE NO. P-5206A	SHEET NO. EC-9/CONST9
RW SHEET NO.	
ROADSIDE ENVIRONMENTAL PROJECT ENGINEER	
LEVEL III CERTIFIED BY: STACEY H. BAILEY, PE CERTIFICATION NUMBER: 3074 ISSUED: NOVEMBER 21, 2012	



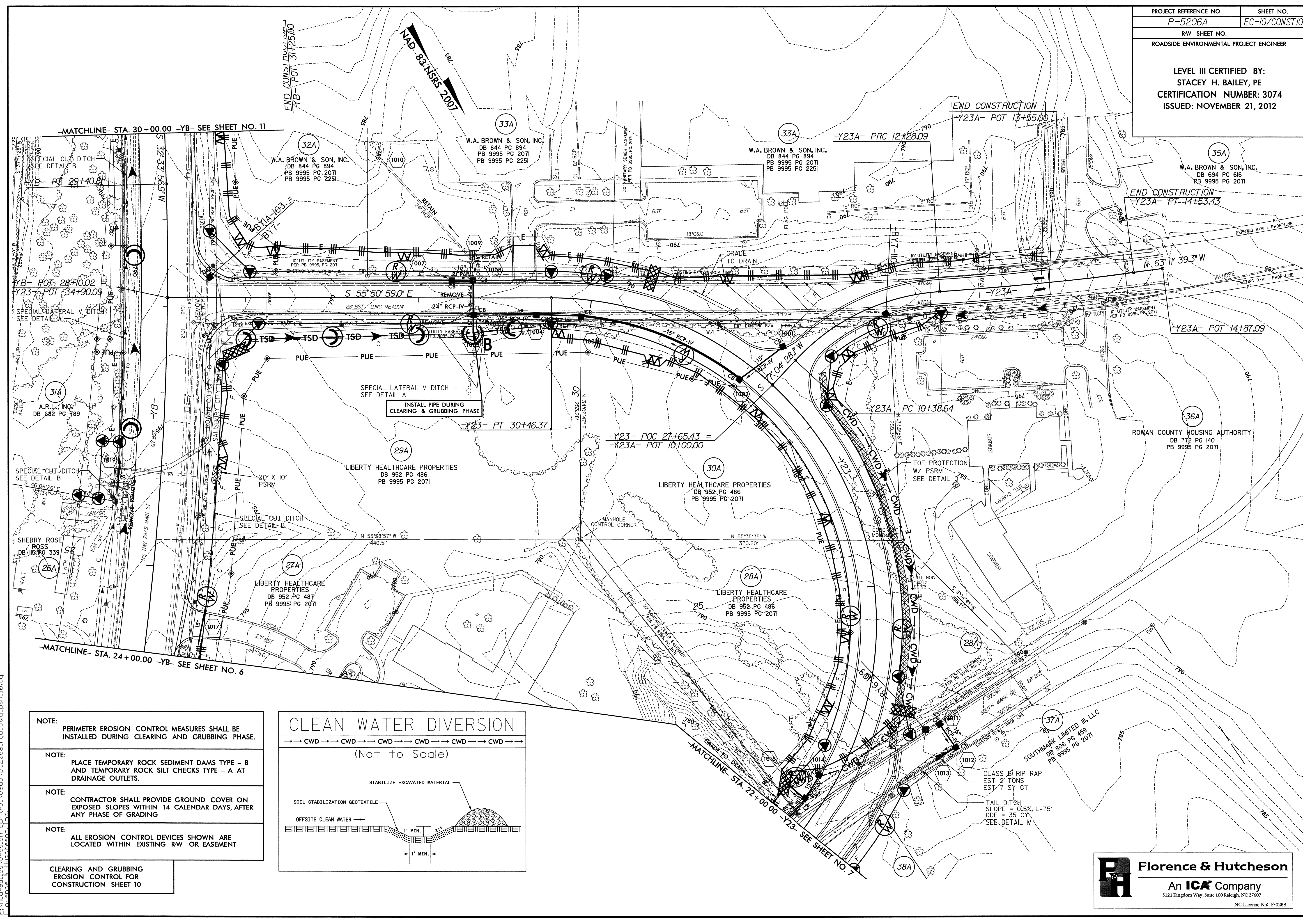
NAD 83/NSRS 2007

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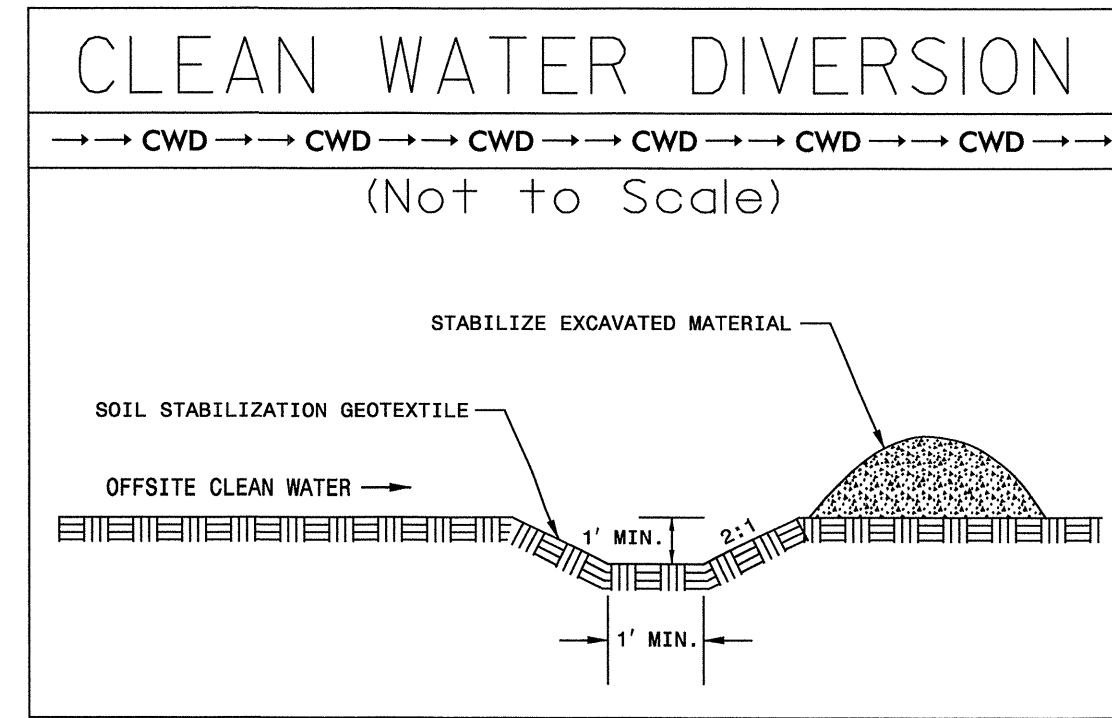


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PROJECT REFERENCE NO.	SHEET NO.
P-5206A	EC-10/CONSTIO
RW SHEET NO.	
ROADSIDE ENVIRONMENTAL PROJECT ENGINEER	
LEVEL III CERTIFIED BY: STACEY H. BAILEY, PE CERTIFICATION NUMBER: 3074 ISSUED: NOVEMBER 21, 2012	



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- NOTE: PLACE TEMPORARY ROCK SEDIMENT DAMS TYPE - B AND TEMPORARY ROCK SILT CHECKS TYPE - A AT DRAINAGE OUTLETS.
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- NOTE: ALL EROSION CONTROL DEVICES SHOWN ARE LOCATED WITHIN EXISTING RW OR EASEMENT
- CLEARING AND GRUBBING EROSION CONTROL FOR CONSTRUCTION SHEET 10



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PROJECT REFERENCE NO. P-5206A	SHEET NO. EC-II/CONST II
RW SHEET NO.	
ROADSIDE ENVIRONMENTAL PROJECT ENGINEER	
LEVEL III CERTIFIED BY: STACEY H. BAILEY, PE CERTIFICATION NUMBER: 3074 ISSUED: NOVEMBER 21, 2012	

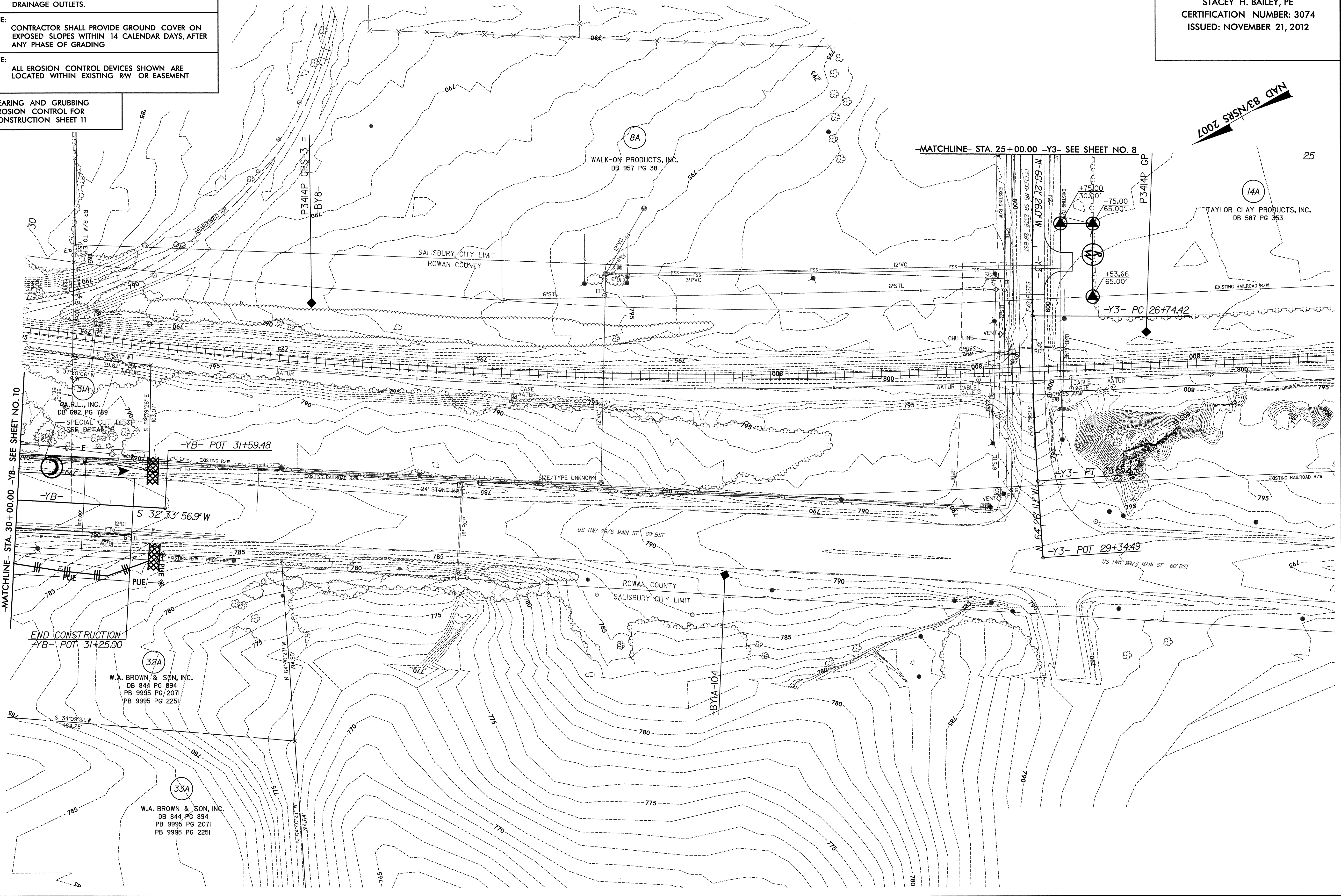
NOTE:  
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CLEARING AND GRUBBING EROSION CONTROL FOR CONSTRUCTION SHEET 11

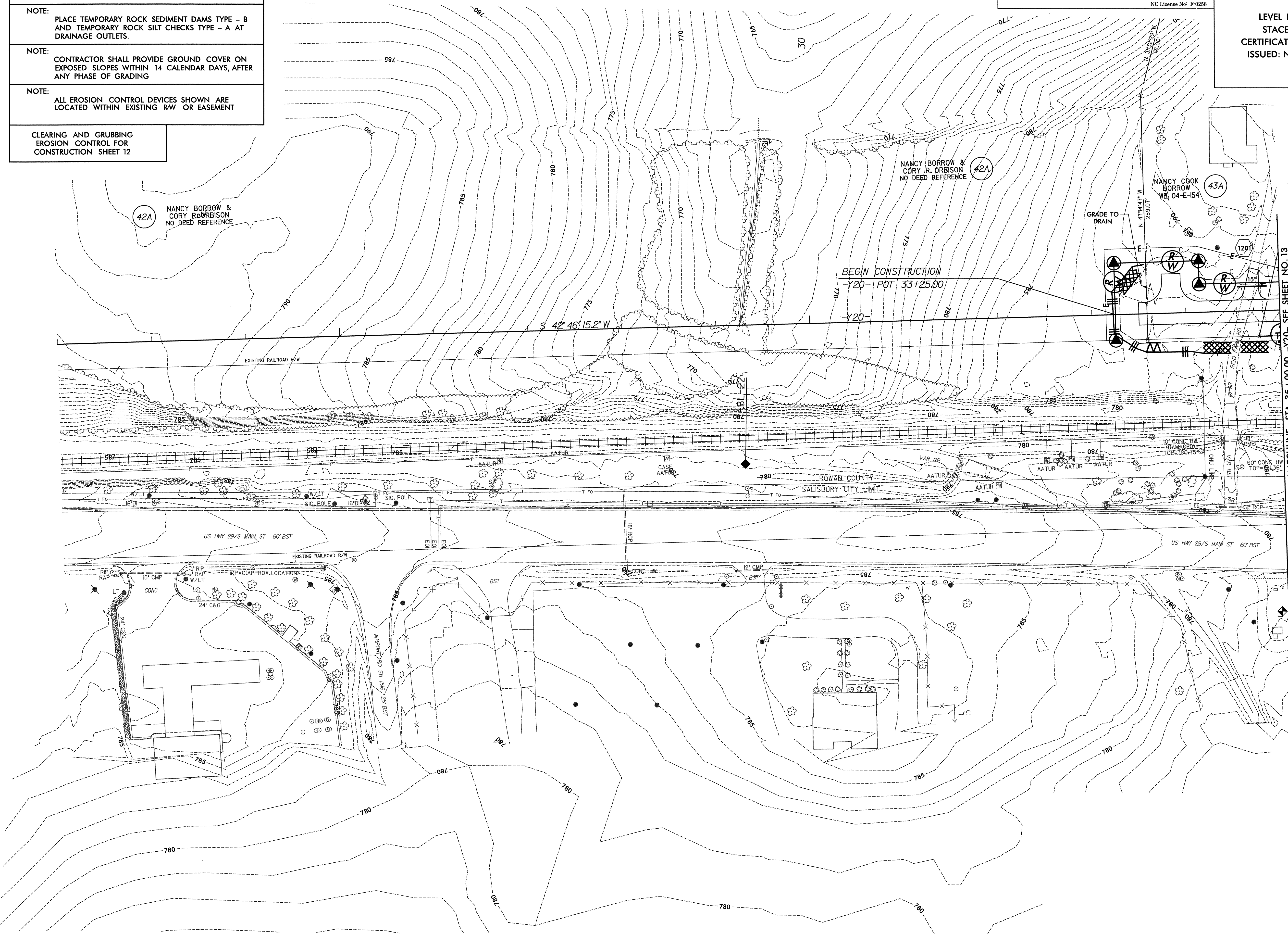




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PROJECT REFERENCE NO. P-5206A	SHEET NO. EC-12/CONST12
RW SHEET NO.	
ROADSIDE ENVIRONMENTAL PROJECT ENGINEER	
LEVEL III CERTIFIED BY: STACEY H. BAILEY, PE CERTIFICATION NUMBER: 3074 ISSUED: NOVEMBER 21, 2012	

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- CLEARING AND GRUBBING EROSION CONTROL FOR CONSTRUCTION SHEET 12



**NAD 83/USRS 2007**

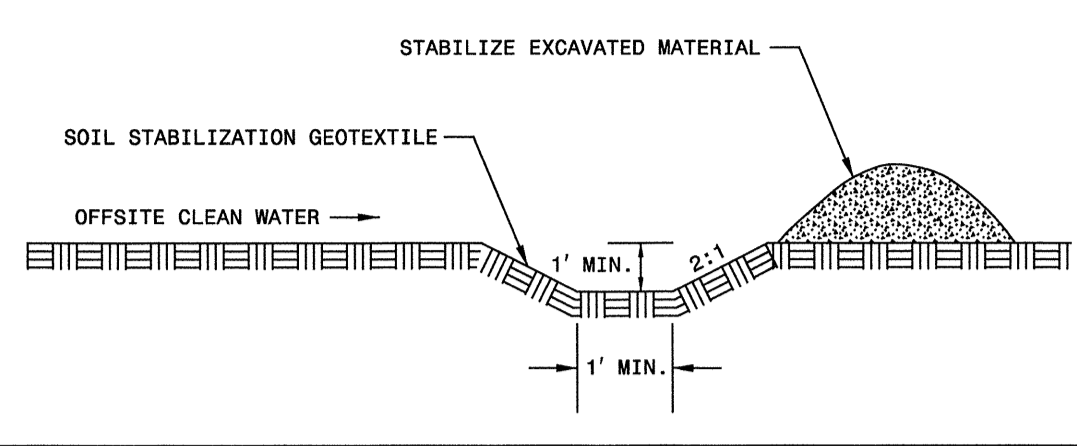
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 Florence & Hutcheson, Inc.



# CLEAN WATER DIVERSION

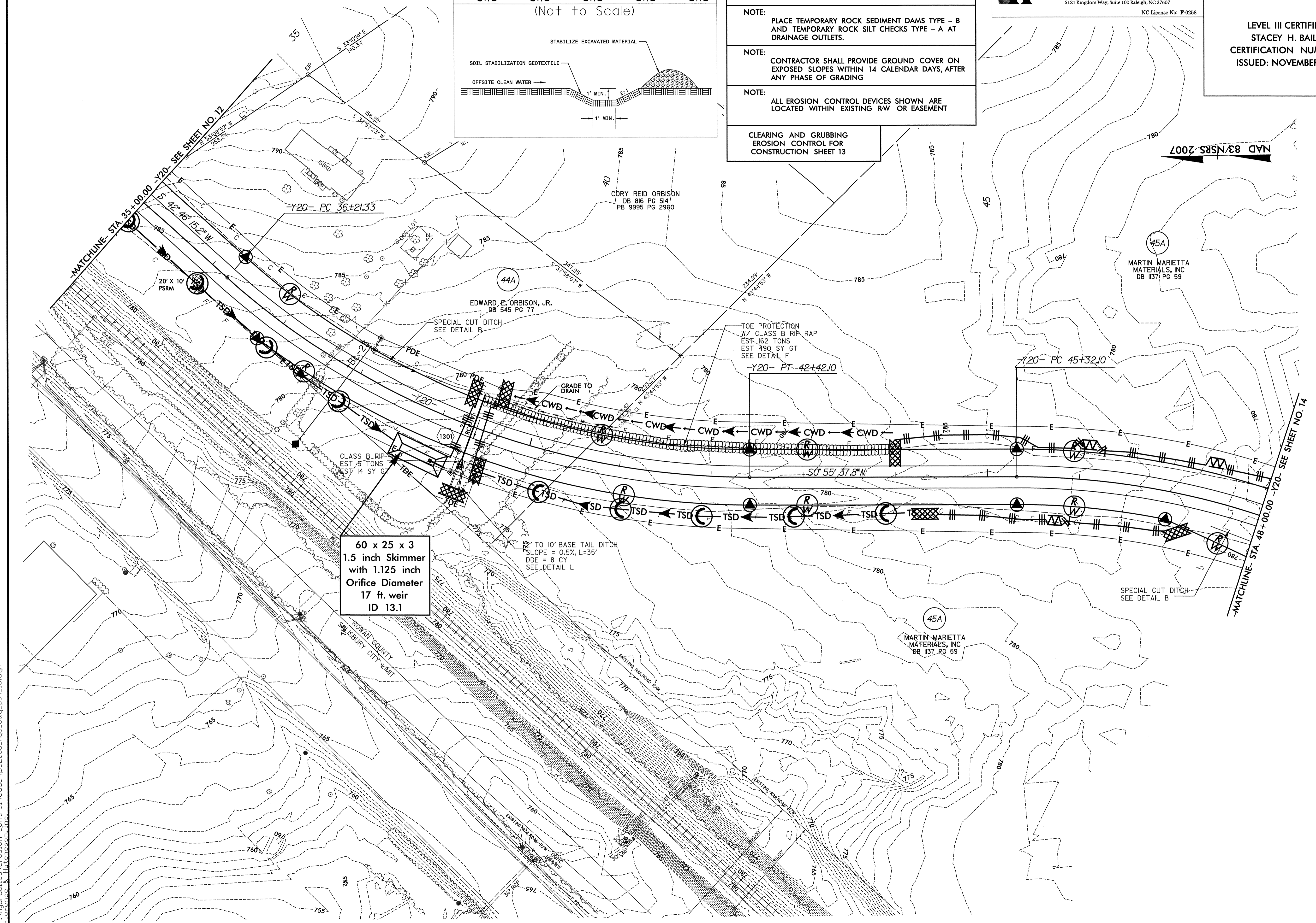
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(Not to Scale)



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- CLEARING AND GRUBBING EROSION CONTROL FOR CONSTRUCTION SHEET 13

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NC License No: P-0258

PROJECT REFERENCE NO.	SHEET NO.
P-5206A	EC-13/CONST13
R/W SHEET NO.	
ROADSIDE ENVIRONMENTAL PROJECT ENGINEER	
LEVEL III CERTIFIED BY: STACEY H. BAILEY, PE CERTIFICATION NUMBER: 3074 ISSUED: NOVEMBER 21, 2012	



60 x 25 x 3  
1.5 inch Skimmer  
with 1.125 inch  
Orifice Diameter  
17 ft. weir  
ID 13.1



0151DEL\_P10b1

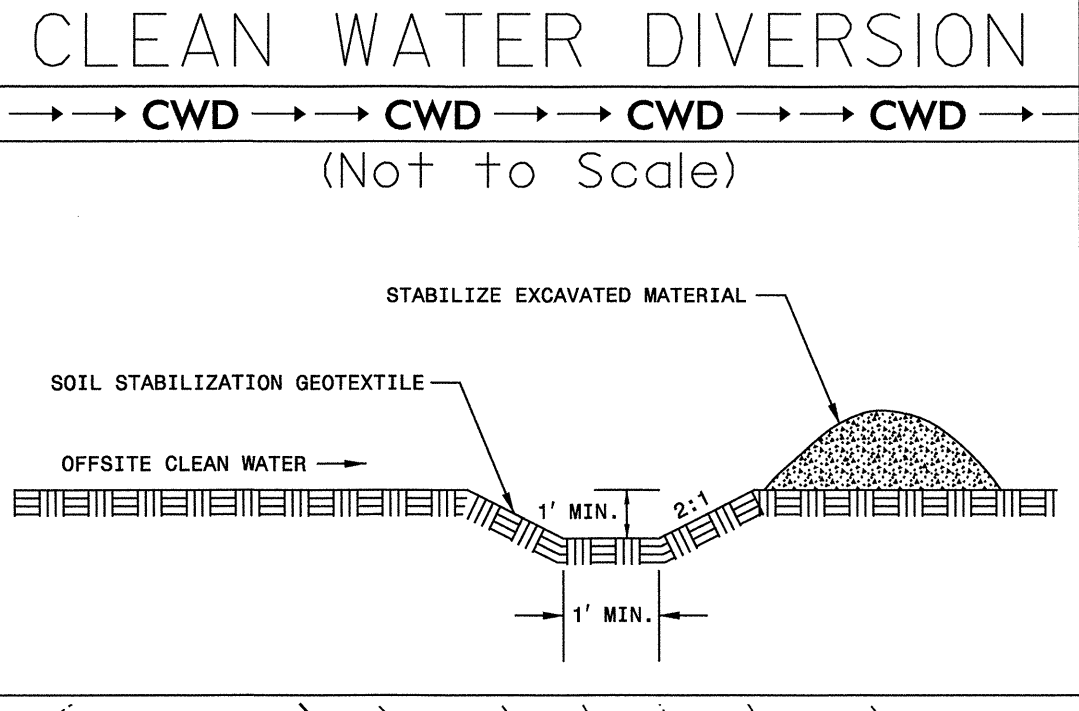
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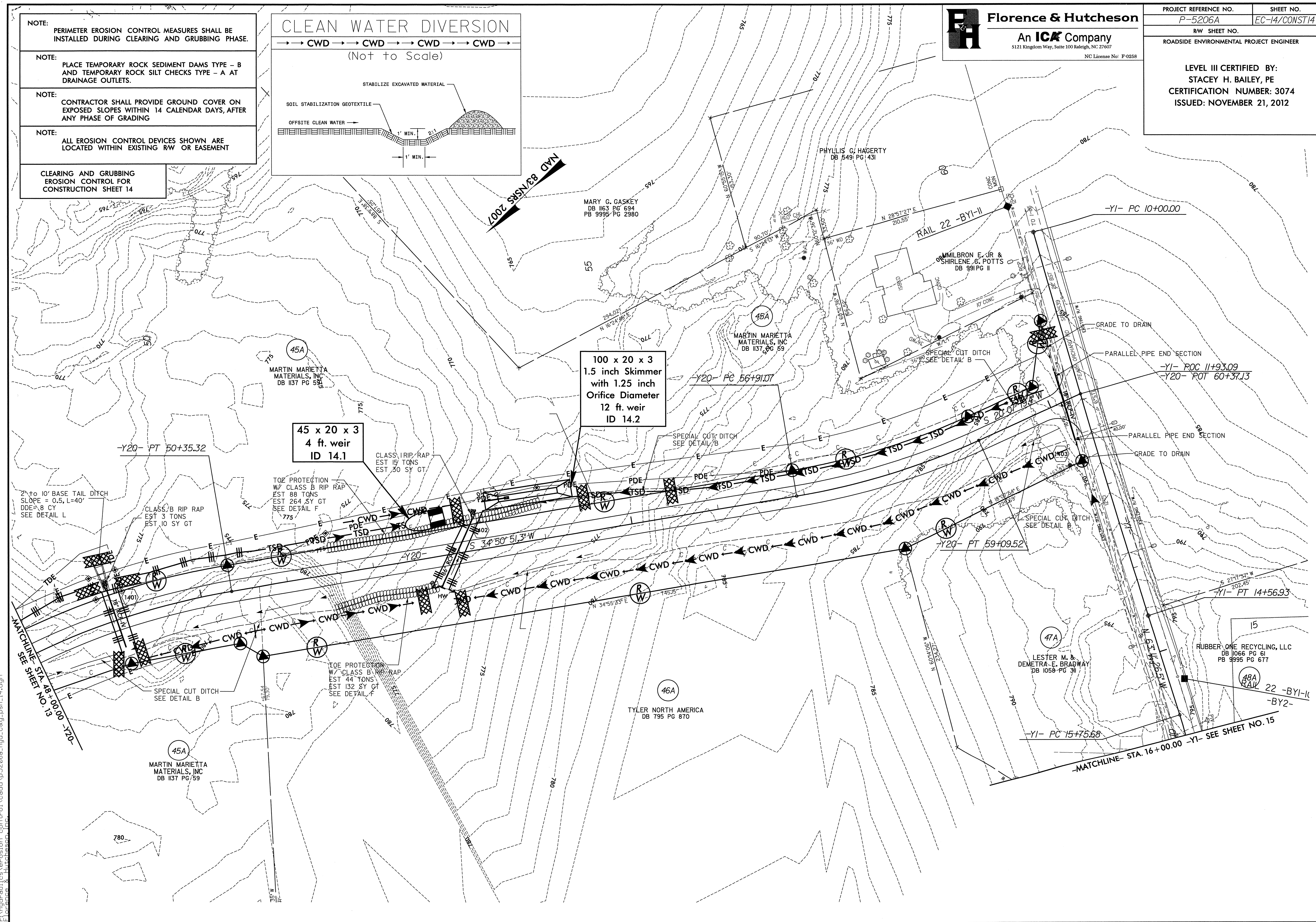
**NOTE:** ALL EROSION CONTROL DEVICES SHOWN ARE LOCATED WITHIN EXISTING RW OR EASEMENT

**CLEARING AND GRUBBING EROSION CONTROL FOR CONSTRUCTION SHEET 14**



**Florence & Hutcheson**  
An **ICA** Company  
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NC License No: F-0258

PROJECT REFERENCE NO. P-5206A	SHEET NO. EC-14/CONST14
RW SHEET NO.	
ROADSIDE ENVIRONMENTAL PROJECT ENGINEER	
LEVEL III CERTIFIED BY: STACEY H. BAILEY, PE CERTIFICATION NUMBER: 3074 ISSUED: NOVEMBER 21, 2012	



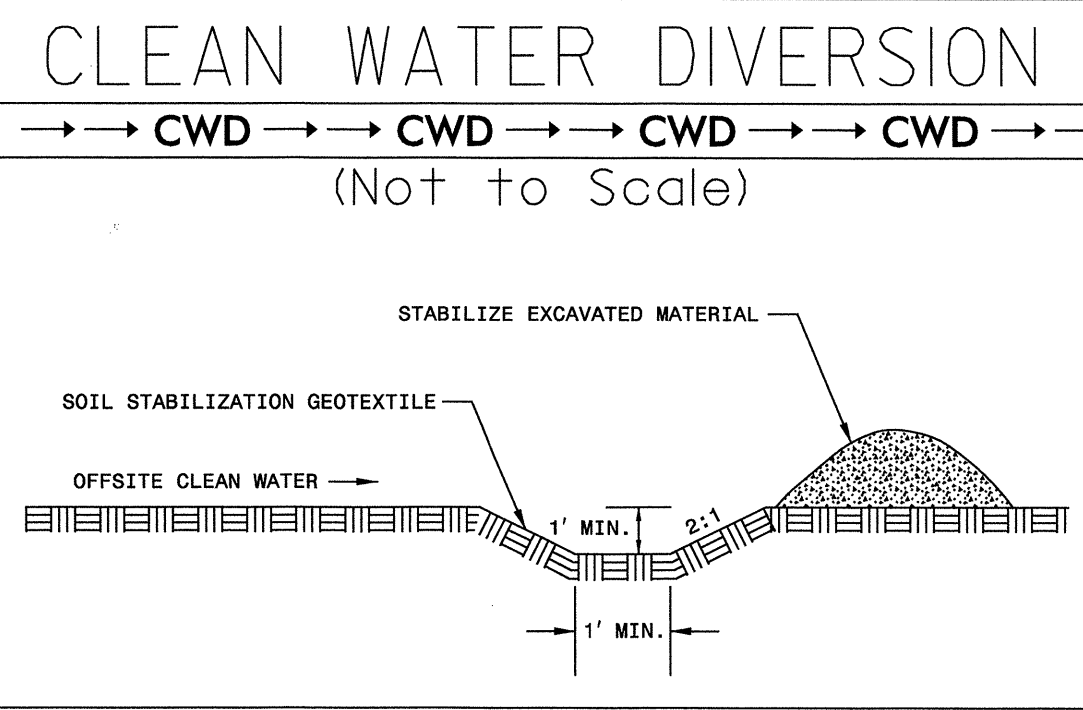
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Florence & Hutcheson, Inc.



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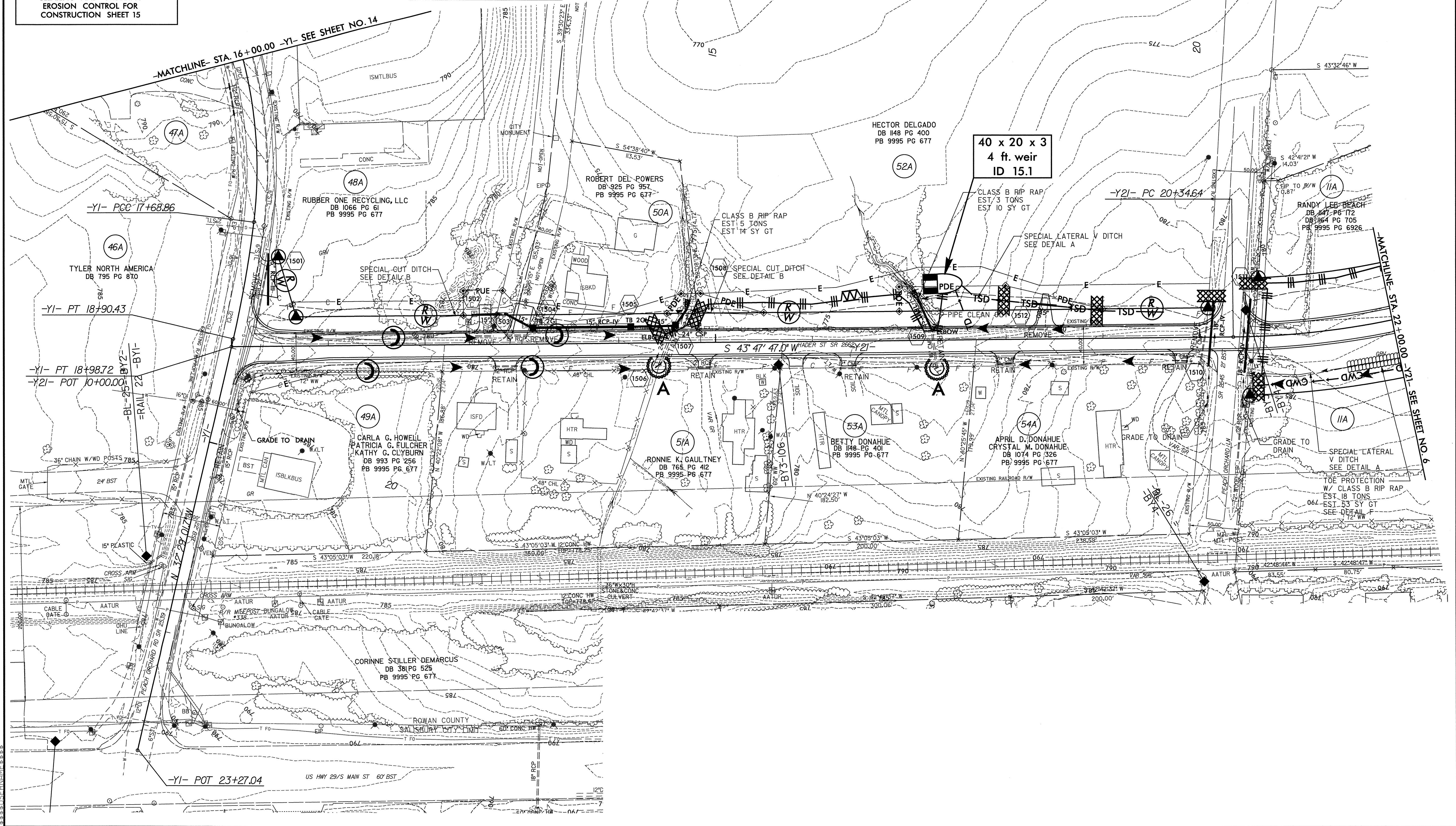
CLEARING AND GRUBBING EROSION CONTROL FOR CONSTRUCTION SHEET 15



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An ICA Company  
5121 Kingdom Way, Suite 100 Raleigh, NC 27607  
NC License No: F-0258

PROJECT REFERENCE NO. P-5206A	SHEET NO. EC-15/CONST15
RW SHEET NO.	
ROADSIDE ENVIRONMENTAL PROJECT ENGINEER	

LEVEL III CERTIFIED BY:  
STACEY H. BAILEY, PE  
CERTIFICATION NUMBER: 3074  
ISSUED: NOVEMBER 29, 2012



0151DEL\_P10b1



0151DEL\_P10b1

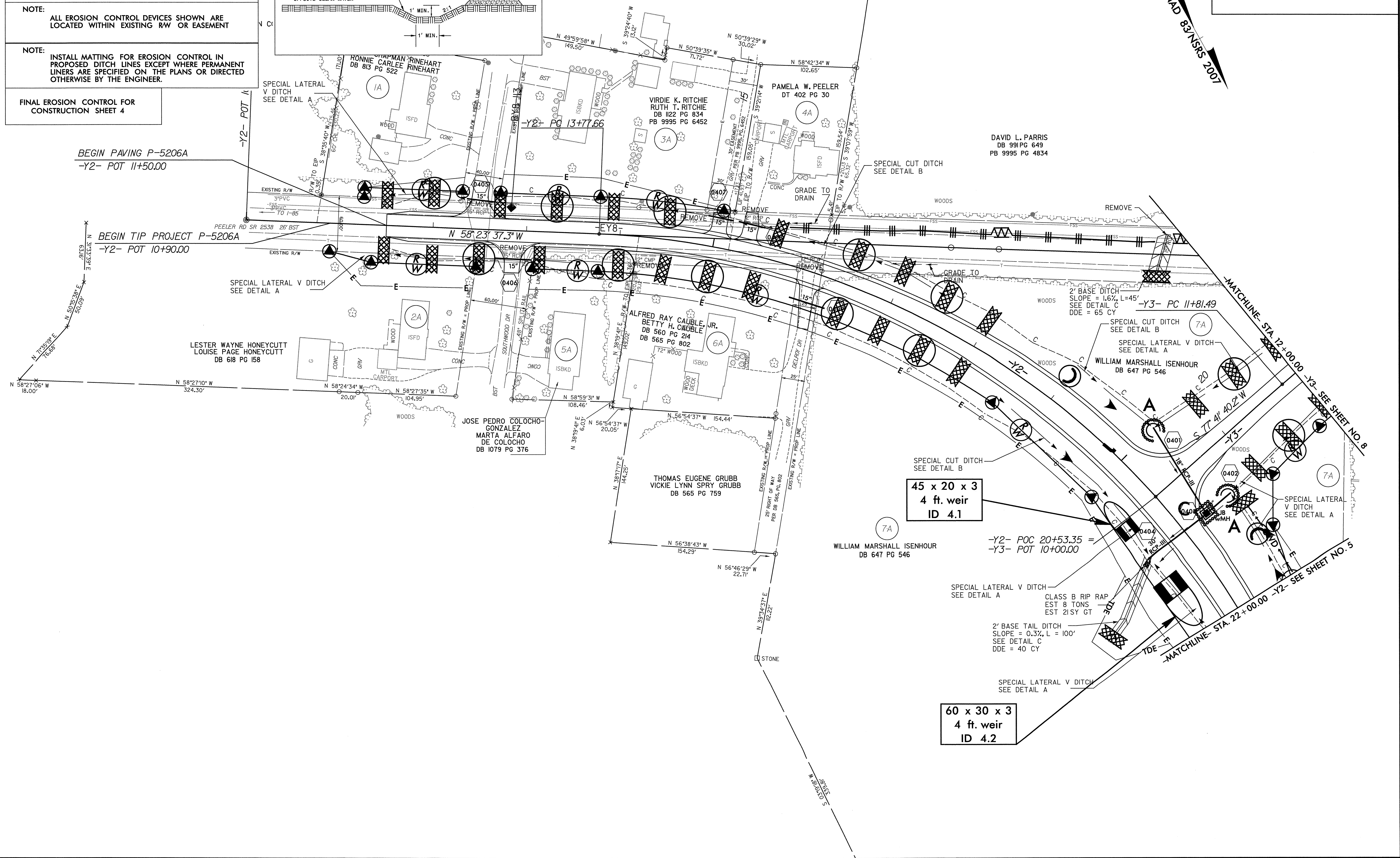
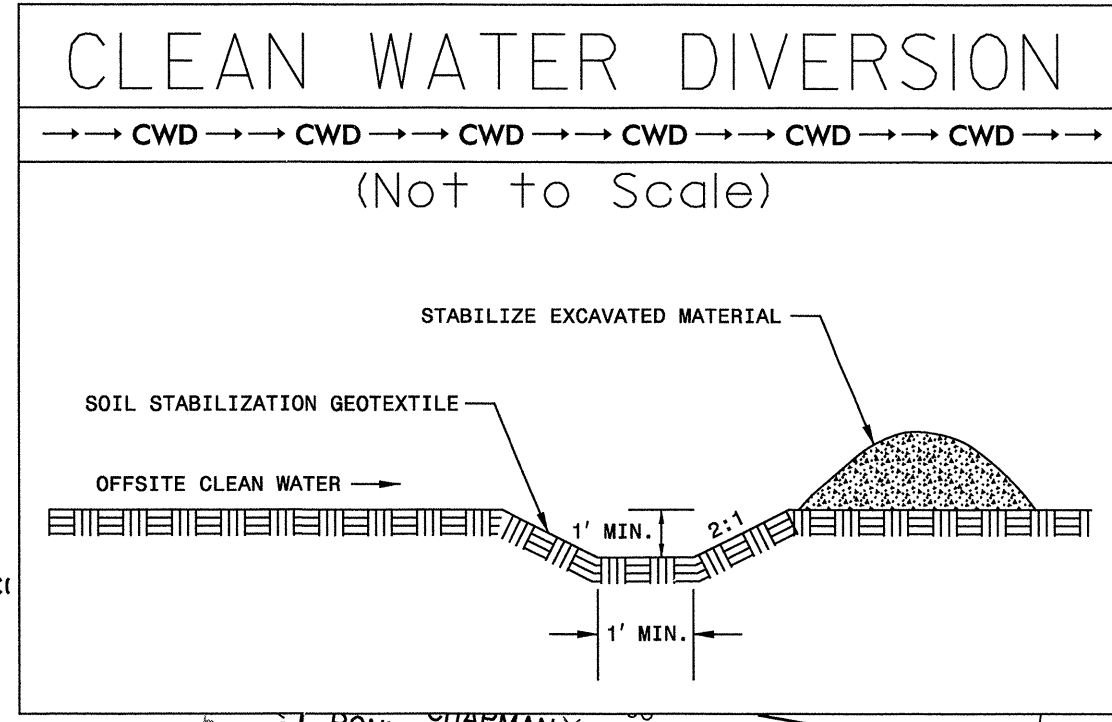
**Florence & Hutcheson**  
 An ICA Company  
 5121 Kingdom Way, Suite 100 Raleigh, NC 27607  
 NC License No: F-0258

PROJECT REFERENCE NO. P-5206A	SHEET NO. EC-16/CONST 4
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R/W SHEET NO.  
ROADSIDE ENVIRONMENTAL PROJECT ENGINEER

LEVEL III CERTIFIED BY:  
 STACEY H. BAILEY, PE  
 CERTIFICATION NUMBER: 3074  
 ISSUED: DECEMBER 14, 2012

- NOTE:** CONTRACTOR SHALL PROVIDE INLET PROTECTION FOR PARTIALLY INSTALLED STORM DRAIN. THIS MEASURE SHOULD BE INSTALLED AT THE END OF EACH WORKING DAY.
- NOTE:** CONTRACTOR SHALL MAINTAIN ALL DEVICES AS PROJECT IS BROUGHT UP TO GRADE.
- NOTE:** CONTRACTOR SHALL PROVIDE GROUND COVER ON EXPOSED SLOPES WITHIN 14 CALENDAR DAYS, AFTER ANY PHASE OF GRADING.
- NOTE:** ALL EROSION CONTROL DEVICES SHOWN ARE LOCATED WITHIN EXISTING R/W OR EASEMENT
- NOTE:** INSTALL MATTING FOR EROSION CONTROL IN PROPOSED DITCH LINES EXCEPT WHERE PERMANENT LINERS ARE SPECIFIED ON THE PLANS OR DIRECTED OTHERWISE BY THE ENGINEER.
- FINAL EROSION CONTROL FOR CONSTRUCTION SHEET 4**

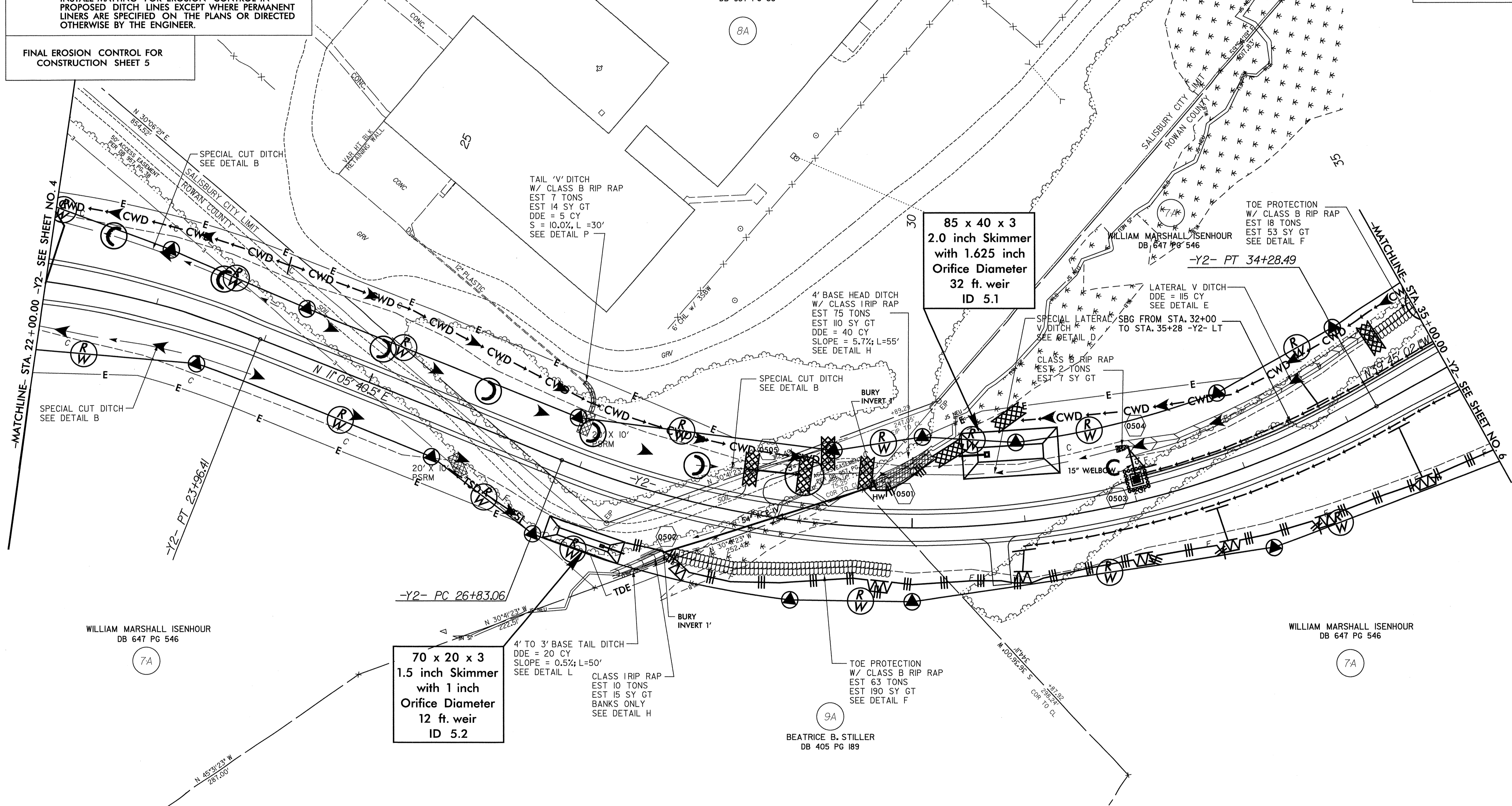
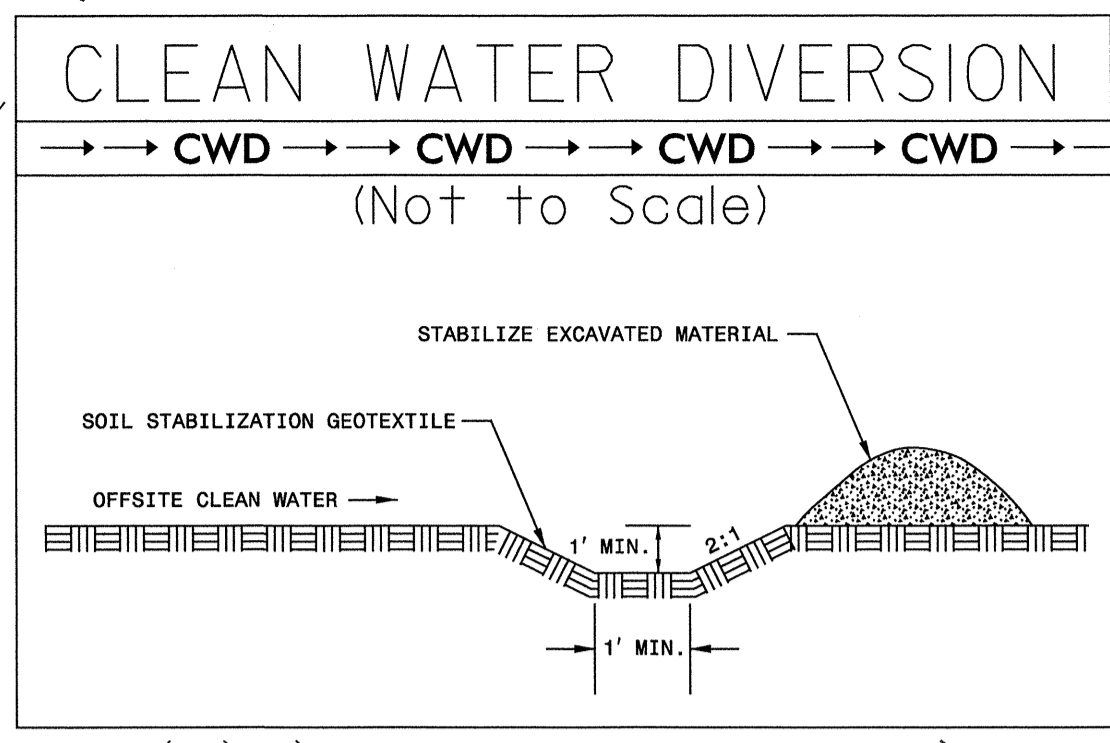


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 Florence & Hutcheson, Inc.





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- FINAL EROSION CONTROL FOR CONSTRUCTION SHEET 5**



WILLIAM MARSHALL ISEHOUR  
DB 647 PG 546

7A

70 x 20 x 3  
1.5 inch Skimmer  
with 1 inch  
Orifice Diameter  
12 ft. weir  
ID 5.2

4' TO 3' BASE TAIL DITCH  
DDE = 20 CY  
SLOPE = 0.5%; L=50'  
SEE DETAIL L

CLASS RIP RAP  
EST 10 TONS  
EST 15 SY GT  
BANKS ONLY  
SEE DETAIL H

BURY INVERT 1'

TOE PROTECTION  
W/ CLASS B RIP RAP  
EST 63 TONS  
EST 190 SY GT  
SEE DETAIL F

9A

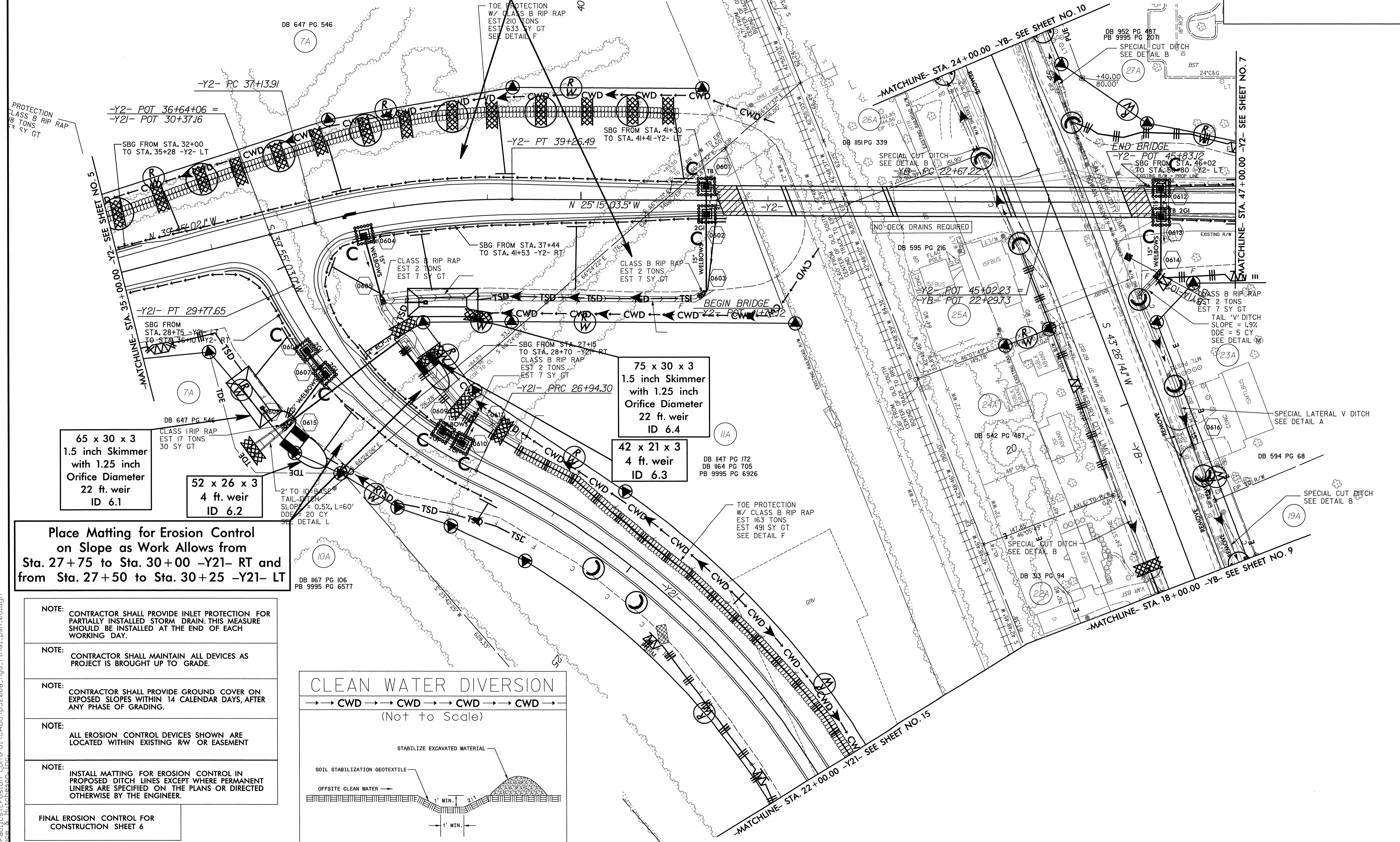
BEATRICE B. STILLER  
DB 405 PG 189

WILLIAM MARSHALL ISEHOUR  
DB 647 PG 546

7A



**Place Matting for Erosion Control  
 on Slope as Work Allows from  
 Sta. 35+00 to Sta. 41+00 -Y2- LT and  
 from Sta. 37+60 to Sta. 41+00 -Y2- RT**



**65 x 30 x 3  
 1.5 inch Skimmer  
 with 1.25 inch  
 Orifice Diameter  
 22 ft. weir  
 ID 6.1**

**52 x 26 x 3  
 4 ft. weir  
 ID 6.2**

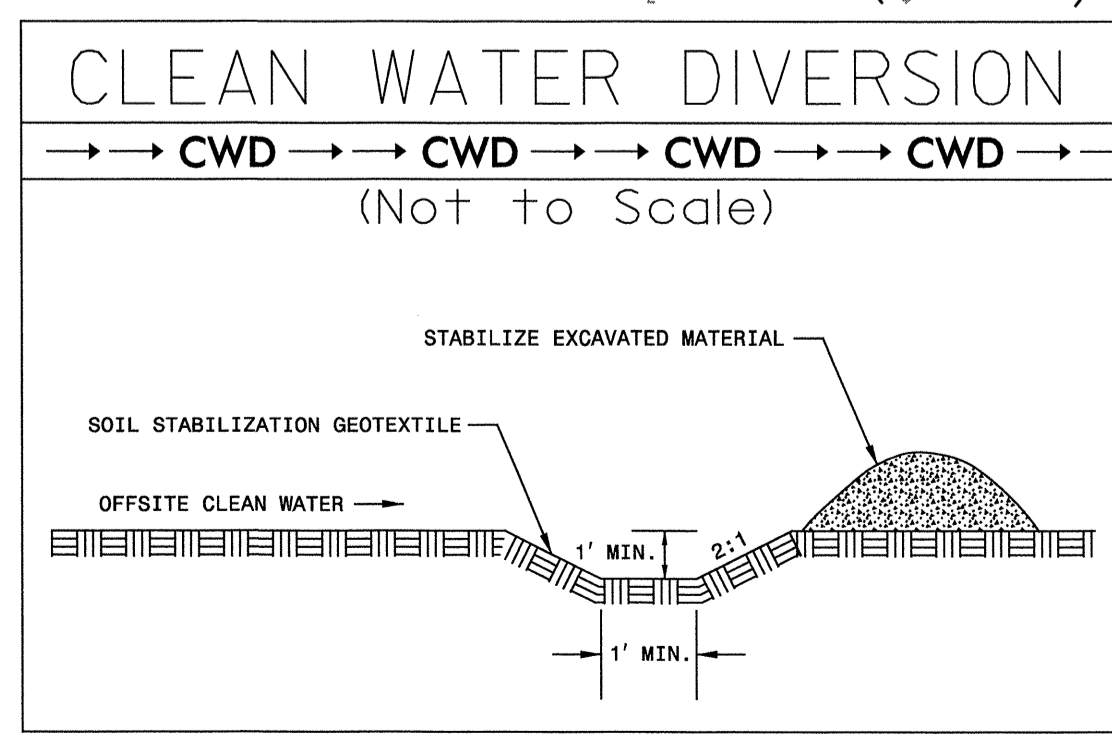
**42 x 21 x 3  
 4 ft. weir  
 ID 6.3**

**75 x 30 x 3  
 1.5 inch Skimmer  
 with 1.25 inch  
 Orifice Diameter  
 22 ft. weir  
 ID 6.4**

**Place Matting for Erosion Control  
 on Slope as Work Allows from  
 Sta. 27+75 to Sta. 30+00 -Y21- RT and  
 from Sta. 27+50 to Sta. 30+25 -Y21- LT**

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- NOTE: INSTALL MATTING FOR EROSION CONTROL IN PROPOSED DITCH LINES EXCEPT WHERE PERMANENT LINERS ARE SPECIFIED ON THE PLANS OR DIRECTED OTHERWISE BY THE ENGINEER.

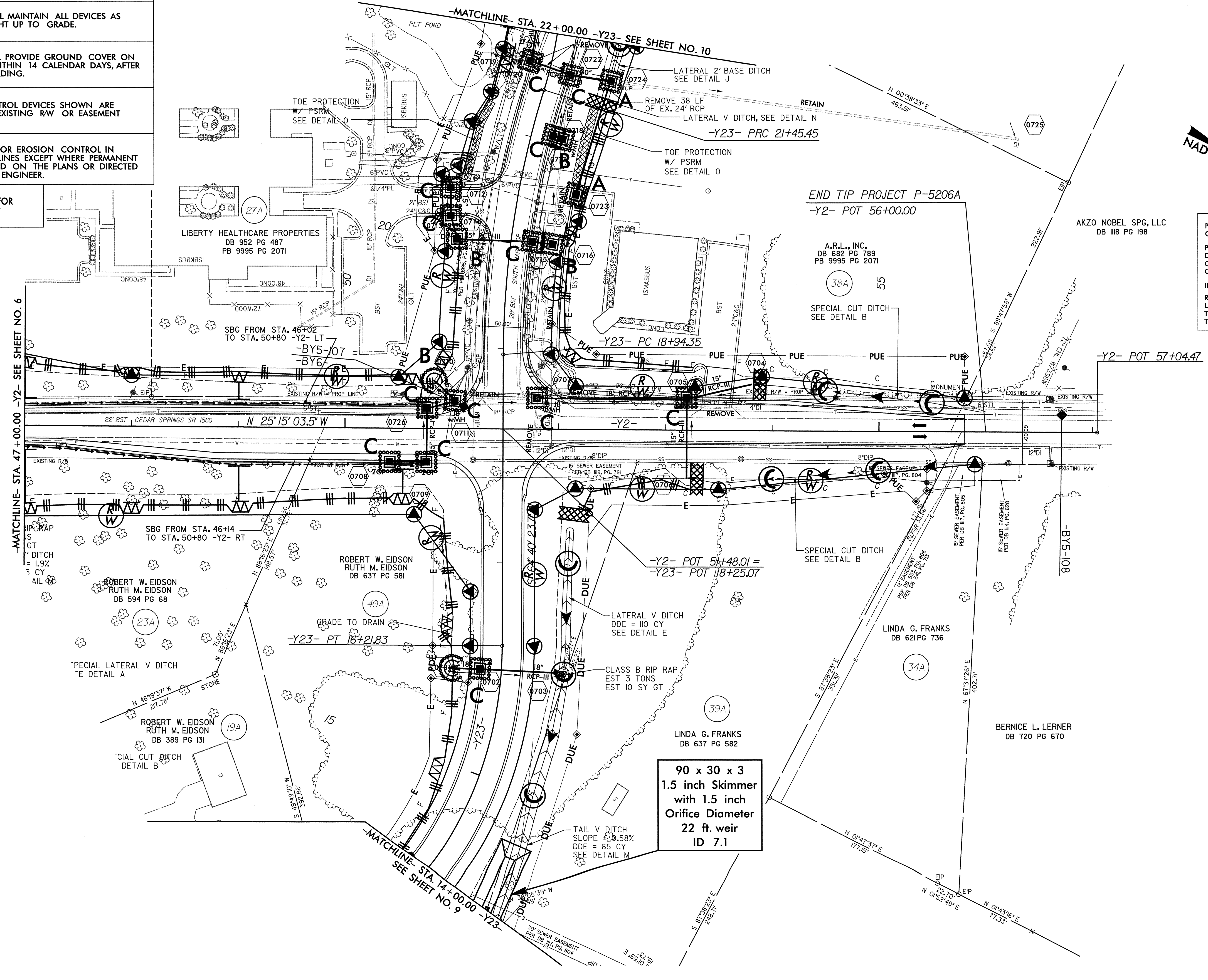
FINAL EROSION CONTROL FOR  
 CONSTRUCTION SHEET 6





0151DEL\_P10b1

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- FINAL EROSION CONTROL FOR CONSTRUCTION SHEET 7**



PREPOST ANALYSIS FOR EXISTING 24" RCP  
 OUTFALL AT STA. 21+65 -Y23- RT

PRE	POST
DA=14.30 AC.	DA=14.50 AC.
C=0.61	C=0.65
Q10=38.68	Q10=41.58

INCREASE IN DISCHARGE = 7.51% < 10%  
 RECOMMEND RETAINING 24" RCP BEYOND RW LINE AND PROVIDING A OTCB FOR BACKWATER TO FLOW OUT OF PRIOR TO BACKING UP INTO THE ROADWAY.

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 5121 Kingdom Way, Suite 100 Raleigh, NC 27607  
 NC License No: F-0258

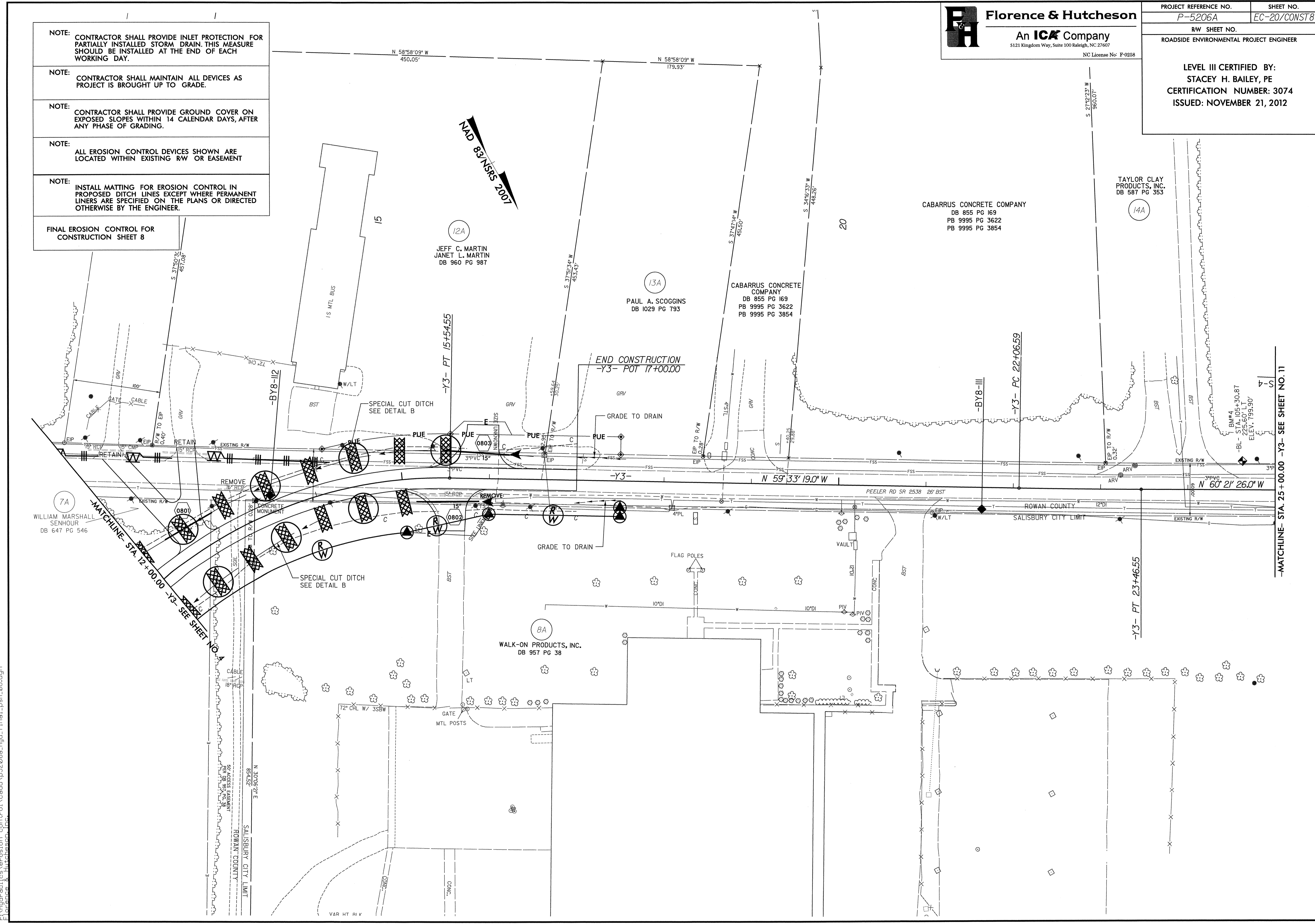
PROJECT REFERENCE NO.	SHEET NO.
P-5206A	EC-20/CONST8

R/W SHEET NO.  
ROADSIDE ENVIRONMENTAL PROJECT ENGINEER

LEVEL III CERTIFIED BY:  
 STACEY H. BAILEY, PE  
 CERTIFICATION NUMBER: 3074  
 ISSUED: NOVEMBER 21, 2012

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FINAL EROSION CONTROL FOR CONSTRUCTION SHEET 8

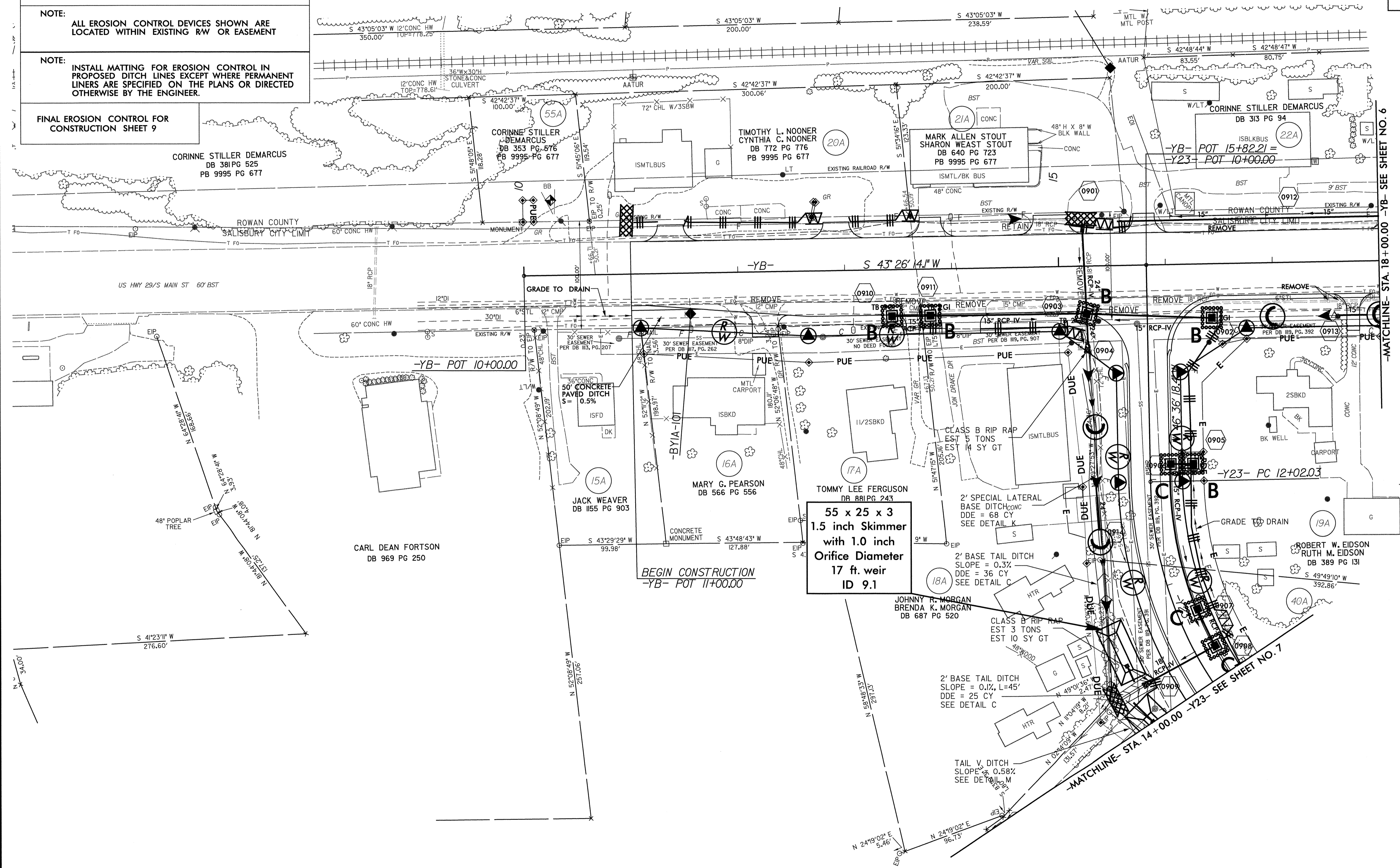


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 Florence & Hutcheson, Inc.



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- FINAL EROSION CONTROL FOR CONSTRUCTION SHEET 9**



NAD 83/NSRS 2011

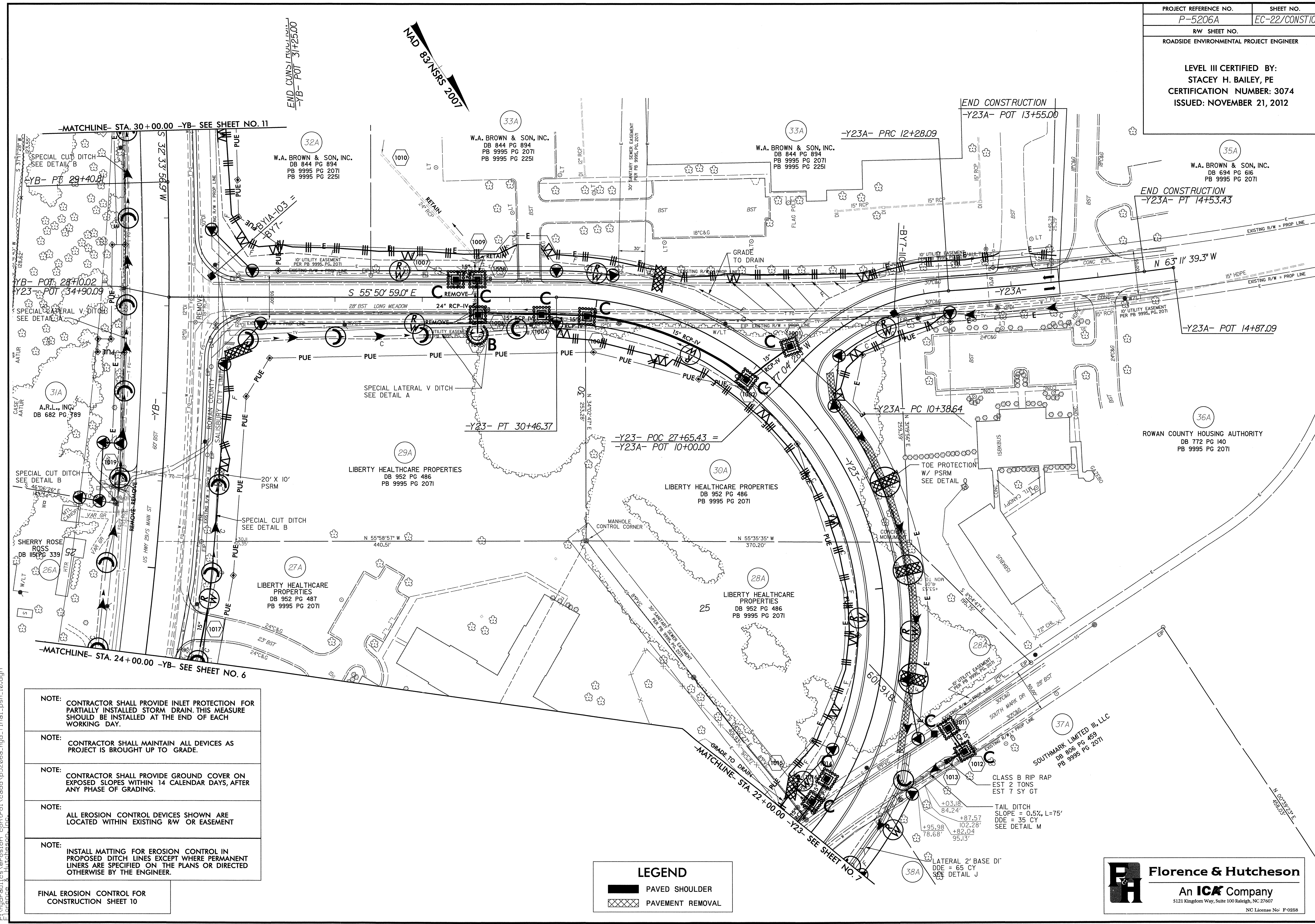
**55 x 25 x 3  
 1.5 inch Skimmer  
 with 1.0 inch  
 Orifice Diameter  
 17 ft weir  
 ID 9.1**

11/21/2012  
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 Florence & Hutcheson, Inc.



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PROJECT REFERENCE NO.	SHEET NO.
P-5206A	EC-22/CONST10
RW SHEET NO.	
ROADSIDE ENVIRONMENTAL PROJECT ENGINEER	
LEVEL III CERTIFIED BY: STACEY H. BAILEY, PE CERTIFICATION NUMBER: 3074 ISSUED: NOVEMBER 21, 2012	



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FINAL EROSION CONTROL FOR CONSTRUCTION SHEET 10

**LEGEND**

- PAVED SHOULDER
- PAVEMENT REMOVAL

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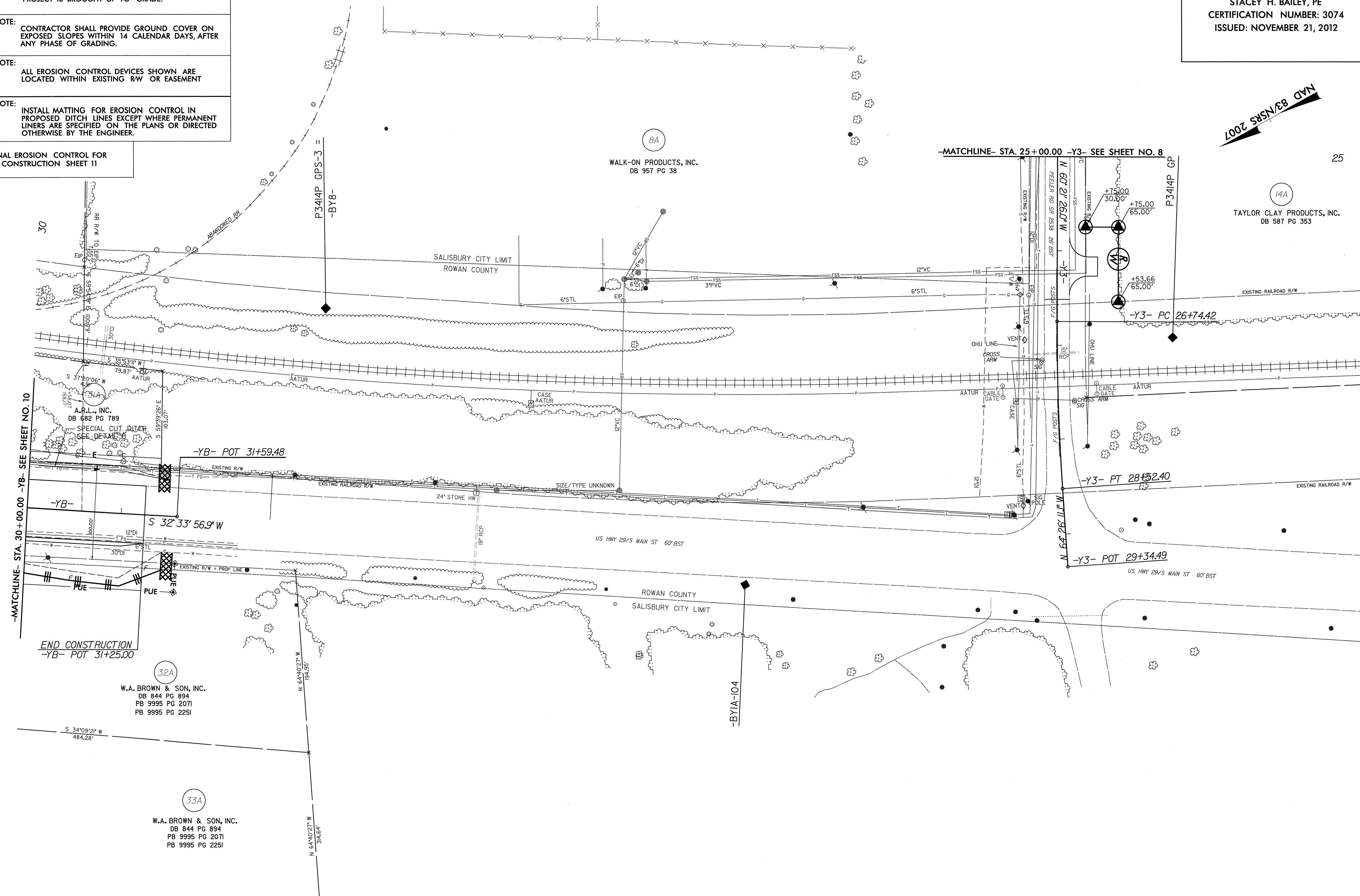
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LEVEL III CERTIFIED BY:  
 STACEY H. BAILEY, PE  
 CERTIFICATION NUMBER: 3074  
 ISSUED: NOVEMBER 21, 2012

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FINAL EROSION CONTROL FOR CONSTRUCTION SHEET 11



MAD 83/RSK/28  
 2007

25

-MATCHLINE- STA. 30+00.00 -YB- SEE SHEET NO. 10

-MATCHLINE- STA. 25+00.00 -Y3- SEE SHEET NO. 8

END CONSTRUCTION  
 -YB- POT 31+25.00

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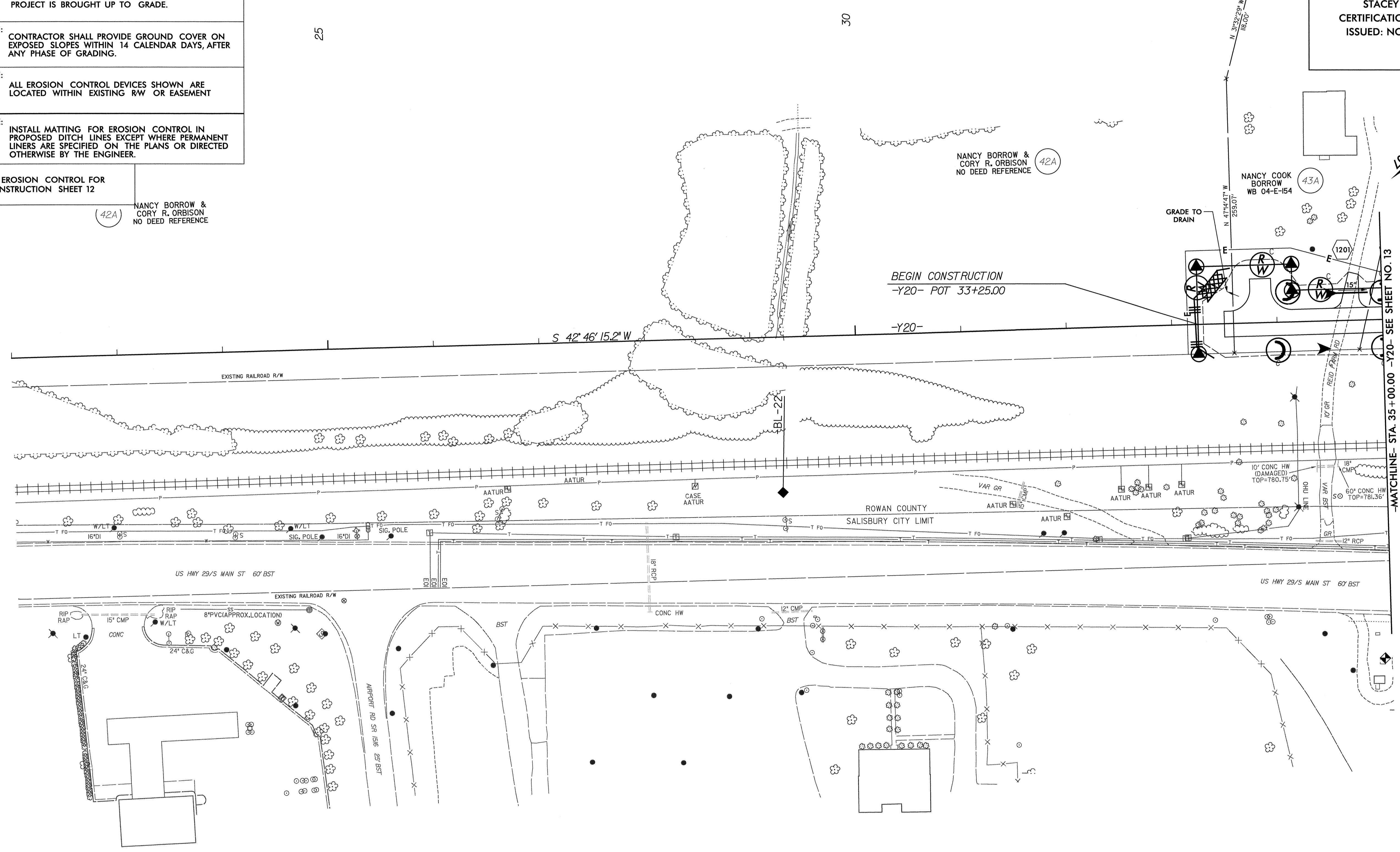
**Florence & Hutcheson**  
 An **ICA** Company  
 5121 Kingdom Way, Suite 100 Raleigh, NC 27607  
 NC License No: F-0258

PROJECT REFERENCE NO. P-5206A	SHEET NO. EC-24/CONST12
RW SHEET NO.	
ROADSIDE ENVIRONMENTAL PROJECT ENGINEER	
LEVEL III CERTIFIED BY: STACEY H. BAILEY, PE CERTIFICATION NUMBER: 3074 ISSUED: NOVEMBER 21, 2012	

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FINAL EROSION CONTROL FOR CONSTRUCTION SHEET 12

(42A) NANCY BORROW & CORY R. ORBISON NO DEED REFERENCE



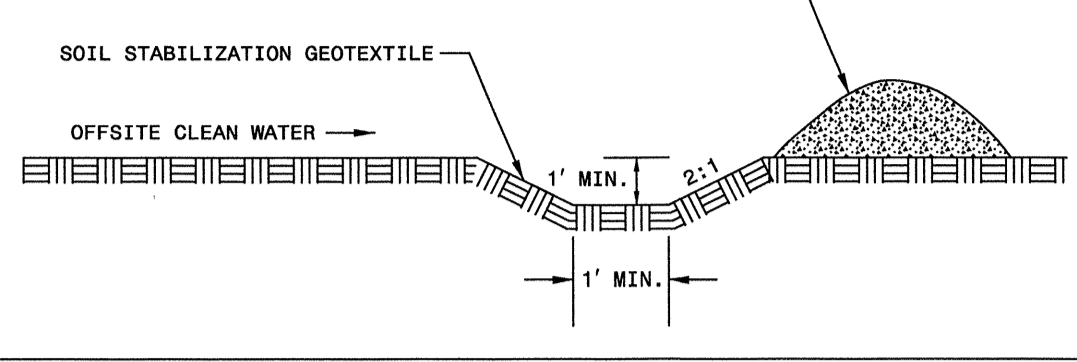
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# CLEAN WATER DIVERSION

→ CWD → CWD → CWD → CWD →

(Not to Scale)



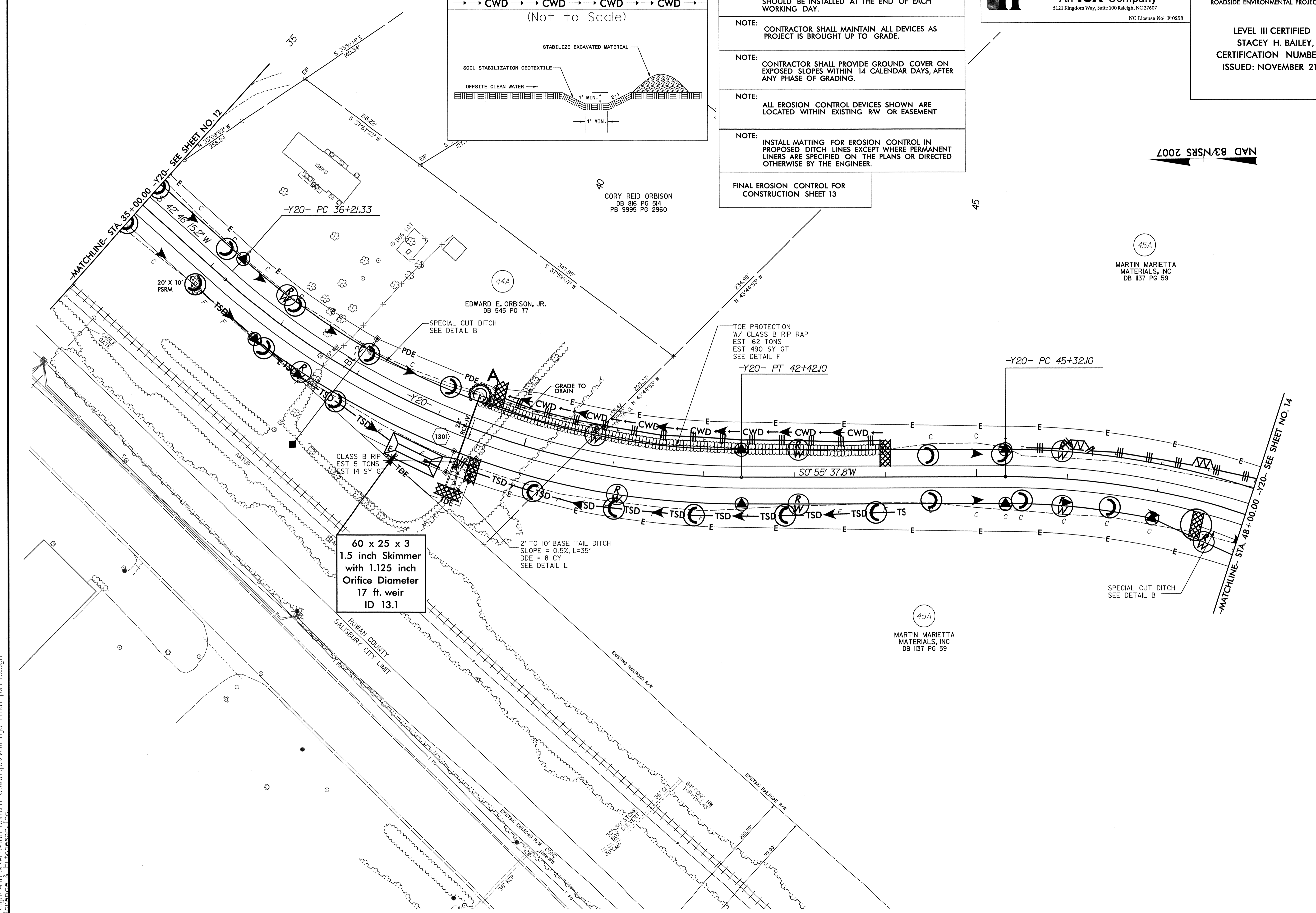
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- FINAL EROSION CONTROL FOR CONSTRUCTION SHEET 13**

**Florence & Hutcheson**  
An ICA Company  
5121 Kingdom Way, Suite 100 Raleigh, NC 27607  
NC License No: P-0258

PROJECT REFERENCE NO. P-5206A	SHEET NO. EC-25/CONST13
RW SHEET NO.	
ROADSIDE ENVIRONMENTAL PROJECT ENGINEER	

LEVEL III CERTIFIED BY:  
STACEY H. BAILEY, PE  
CERTIFICATION NUMBER: 3074  
ISSUED: NOVEMBER 21, 2012

NAD 83/NRS 2007



11/21/2012  
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Florence & Hutcheson, Inc.



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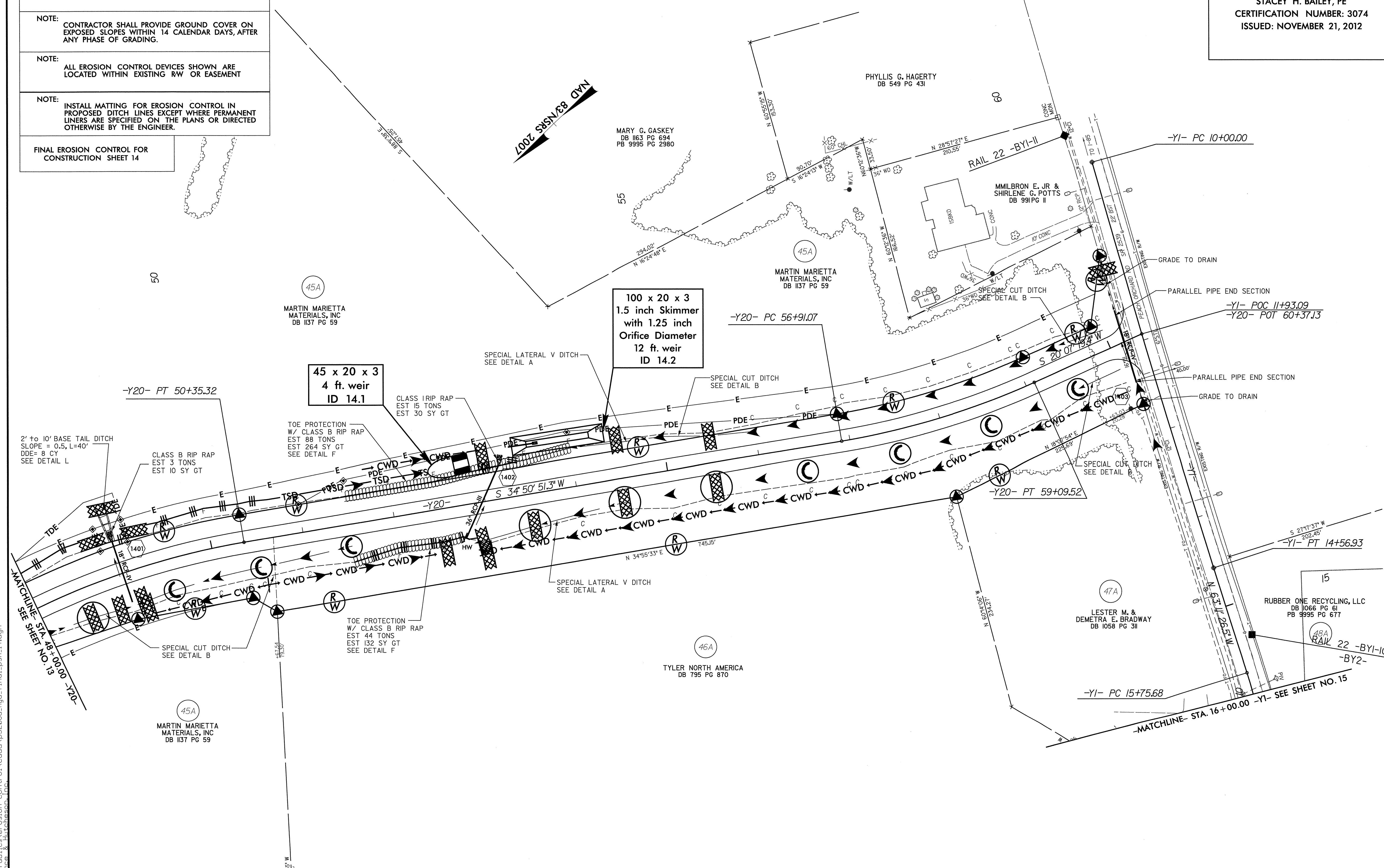
NOTE: INSTALL MATTING FOR EROSION CONTROL IN PROPOSED DITCH LINES EXCEPT WHERE PERMANENT LINERS ARE SPECIFIED ON THE PLANS OR DIRECTED OTHERWISE BY THE ENGINEER.

FINAL EROSION CONTROL FOR CONSTRUCTION SHEET 14

**Florence & Hutcheson**  
An ICA Company  
5121 Kingdom Way, Suite 100 Raleigh, NC 27607  
NC License No: F-0258

PROJECT REFERENCE NO. P-5206A	SHEET NO. EC-26/CONST14
RW SHEET NO.	
ROADSIDE ENVIRONMENTAL PROJECT ENGINEER	

LEVEL III CERTIFIED BY:  
STACEY H. BAILEY, PE  
CERTIFICATION NUMBER: 3074  
ISSUED: NOVEMBER 21, 2012



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Florence & Hutcheson, Inc.

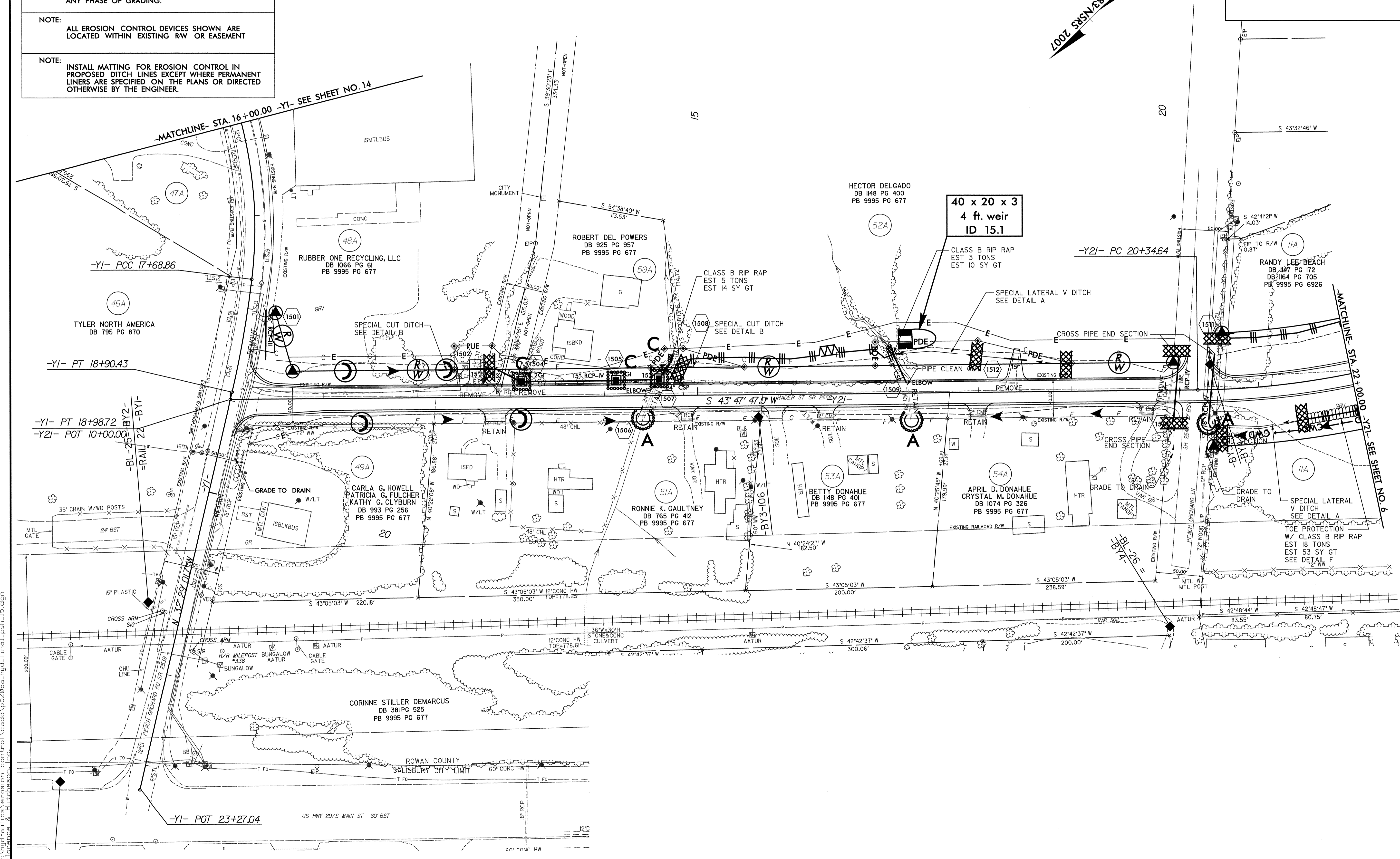
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FINAL EROSION CONTROL FOR CONSTRUCTION SHEET 15

**Florence & Hutcheson**  
An **ICA** Company  
5121 Kingdom Way, Suite 100 Raleigh, NC 27607  
NC License No: P-0258

PROJECT REFERENCE NO.	SHEET NO.
P-5206A	EC-27/CONST15
RW SHEET NO.	
ROADSIDE ENVIRONMENTAL PROJECT ENGINEER	
LEVEL III CERTIFIED BY: STACEY H. BAILEY, PE CERTIFICATION NUMBER: 3074 ISSUED: NOVEMBER 21, 2012	



11/21/2012  
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