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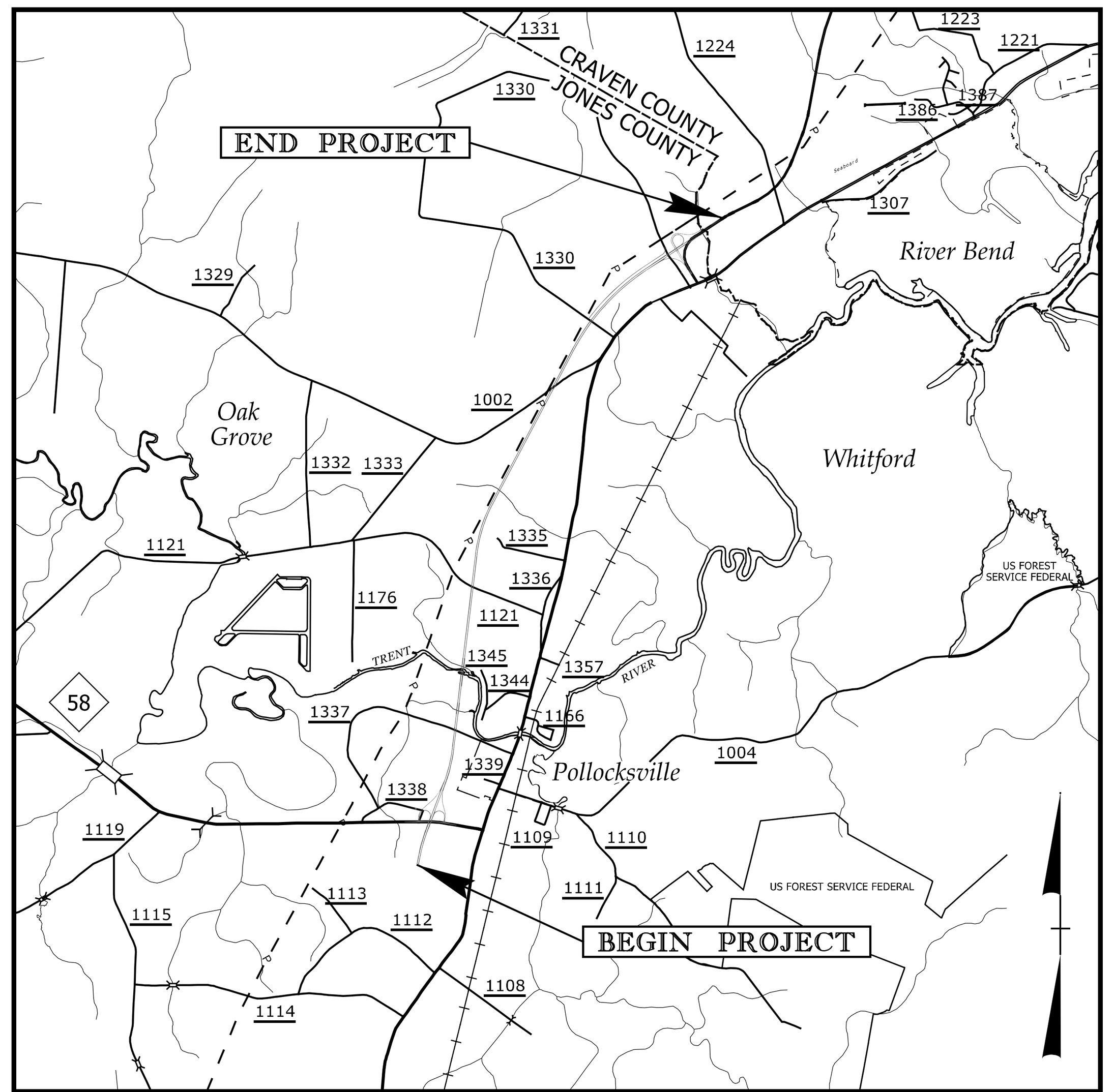
TIP PROJECT: R-2514D



VICINITY MAP

STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	R-2514D	EC-1	

STATE PROJ. NO.	F. A. PROJ. NO.	DESCRIPTION
34442.1.5		PE
34442.2.S5		RW & UTILITIES
34442.3.S6		CONST.

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

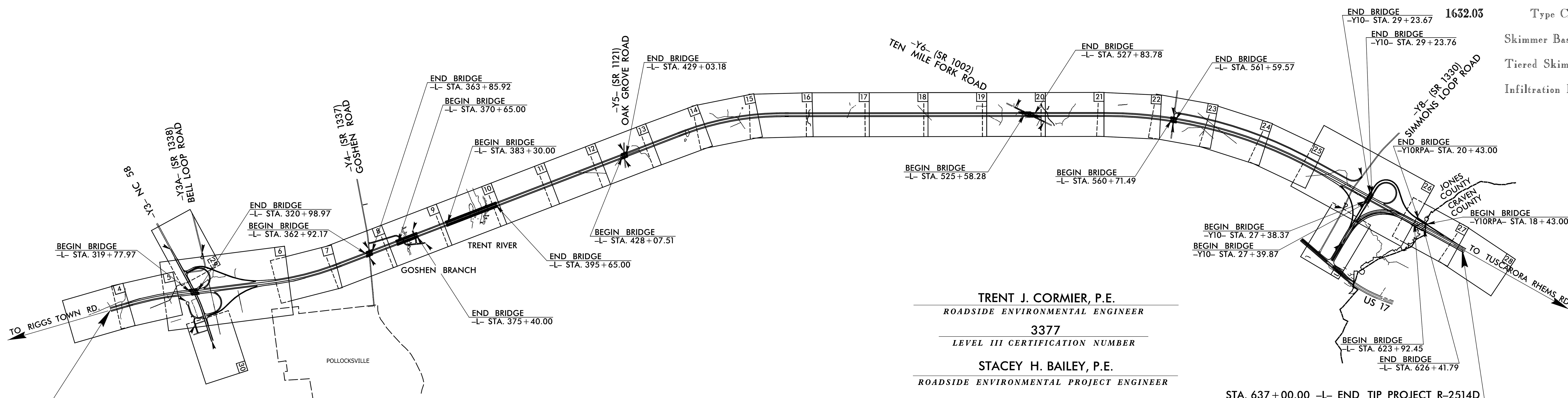
PLAN FOR PROPOSED
HIGHWAY EROSION CONTROL

JONES & CRAVEN COUNTIES

LOCATION: US 17 FROM SOUTH OF NC 58 TO THE NEW BERN BYPASS
TYPE OF WORK: GRADING, DRAINAGE, PAVING, AND STRUCTURES

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	A
1632.02	Type B	B
1632.03	Type C	C
	Skimmer Basin	
	Tiered Skimmer Basin	
	Infiltration Basin	



THIS PROJECT IS NOT WITHIN ANY MUNICIPAL BOUNDARIES.
THIS IS A CONTROLLED-ACCESS PROJECT WITH ACCESS BEING LIMITED TO INTERCHANGES.
CLEARING ON THIS PROJECT SHALL BE PERFORMED TO LIMITS ESTABLISHED BY METHOD III.

TRENT J. CORMIER, P.E.
ROADSIDE ENVIRONMENTAL ENGINEER
3377
LEVEL III CERTIFICATION NUMBER

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

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

ENVIRONMENTALLY SENSITIVE AREA(S) EXIST ON THIS PROJECT

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

THIS PROJECT HAS BEEN DESIGNED TO SENSITIVE WATERSHED STANDARDS.

GRAPHIC SCALE

0
PLANS
0
PROFILE (HORIZONTAL)
0
PROFILE (VERTICAL)

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:

ICA ENGINEERING
5121 KINGDIM WAY, SUITE 100
RALEIGH, NC 27607
919-851-6066
NC LIC. NO. F-0258

2012 STANDARD SPECIFICATIONS

Designed by:

STACEY H. BAILEY, P.E. ***3074***
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:

MANYUK (NATALIE) CHAN, P.E.

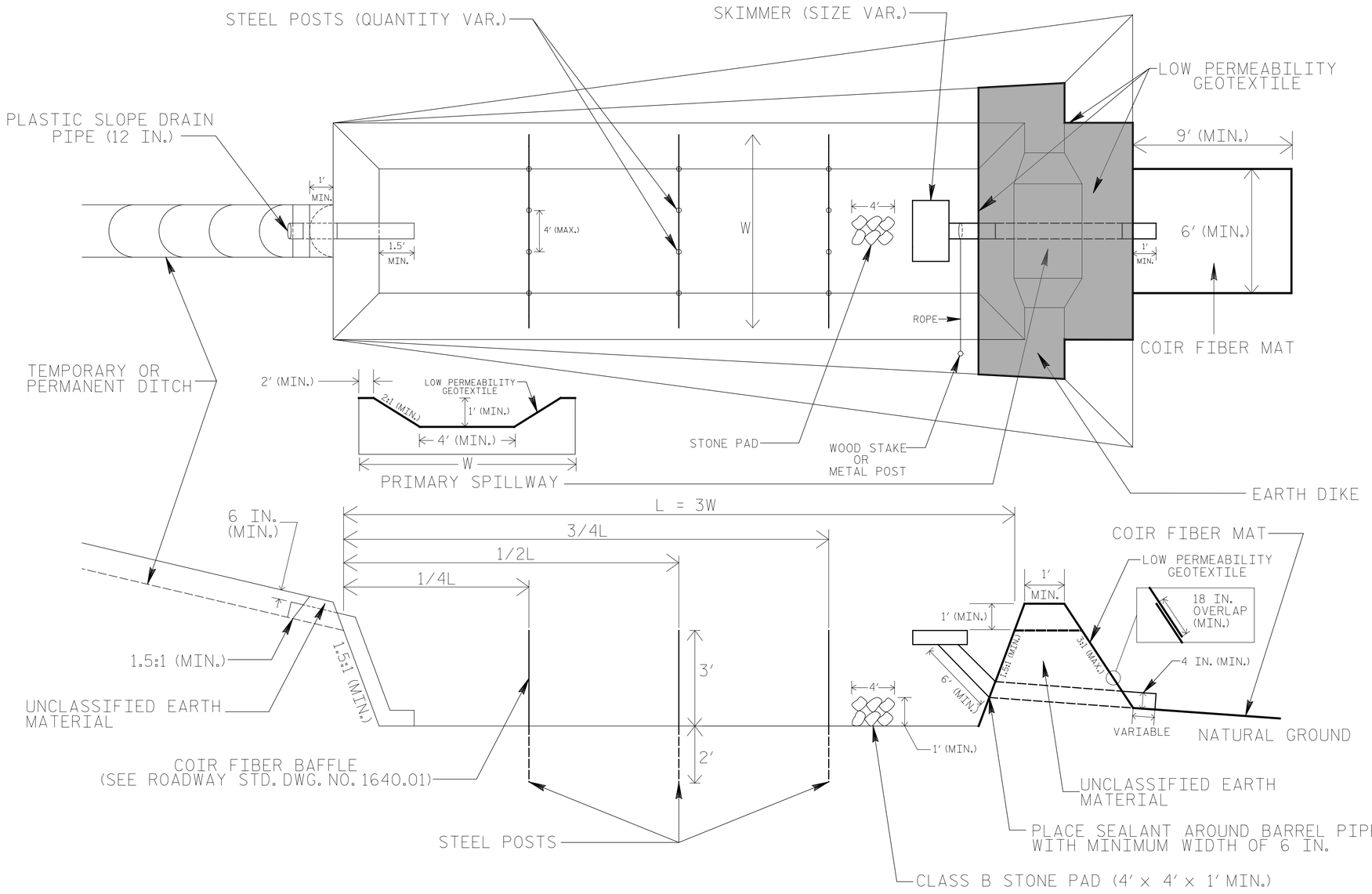
Roadway Standard Drawings

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 revison thereto are applicable to this project and by reference hereby are considered a part of these plans.

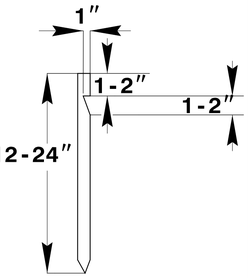
1604.01	Railroad Erosion Control Detail	1632.01	Rock Inlet Sediment Trap Type A
1605.01	Temporary Silt Fence	1632.02	Rock Inlet Sediment Trap Type B
1606.01	Special Sediment Control Fence	1632.03	Rock Inlet Sediment Trap Type C
1607.01	Gravel Construction Entrance	1633.01	Temporary Rock Silt Check Type 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		

PROJECT REFERENCE NO.	SHEET NO.
R-2514D	EC-2
R/W SHEET NO.	

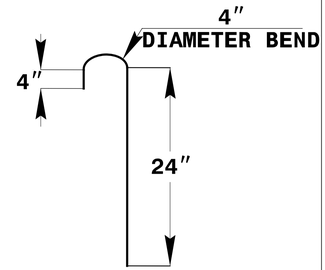
SKIMMER BASIN WITH BAFFLES DETAIL (EAST)



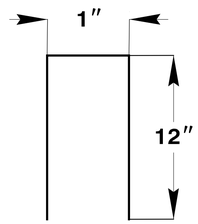
2" x 2" (nominal) WOODEN STAKE



#10 STEEL REINFORCEMENT BAR



1" (nominal) STAPLE



COIR FIBER MAT ANCHOR OPTIONS

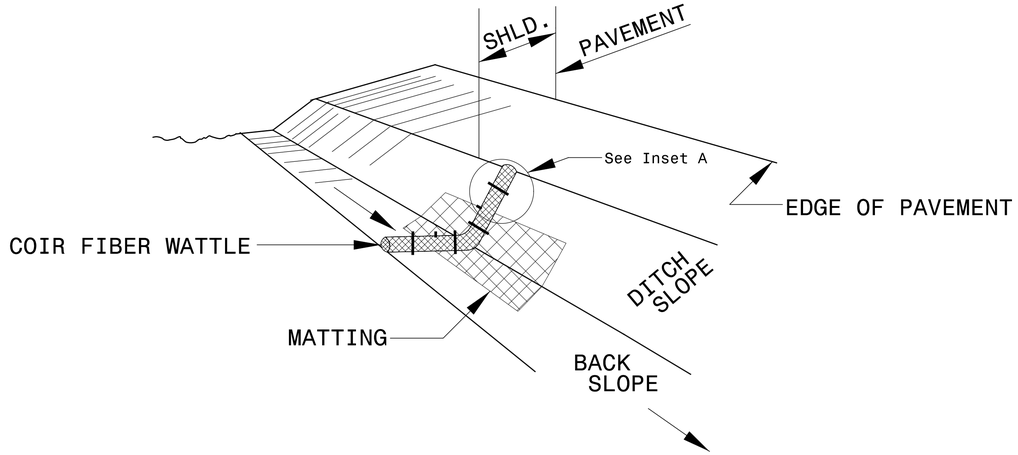
NOTES

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

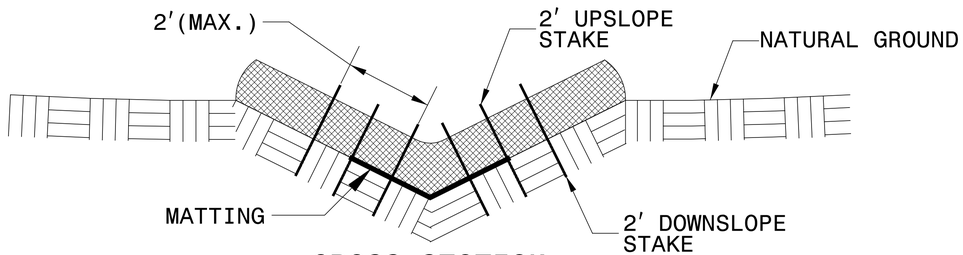
NOT TO SCALE

PROJECT REFERENCE NO.	SHEET NO.
R-2514D	EC-2A
R/W SHEET NO.	

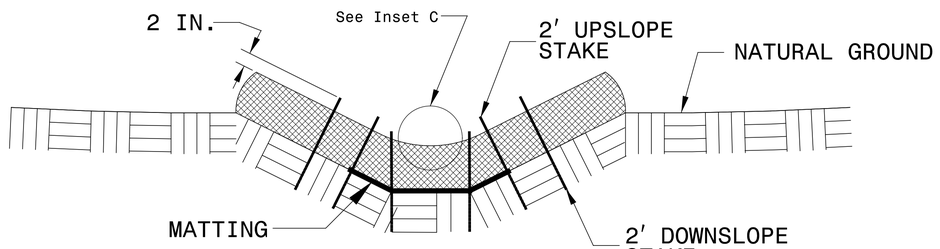
COIR FIBER WATTLE WITH POLYACRYLAMIDE (PAM) DETAIL



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.

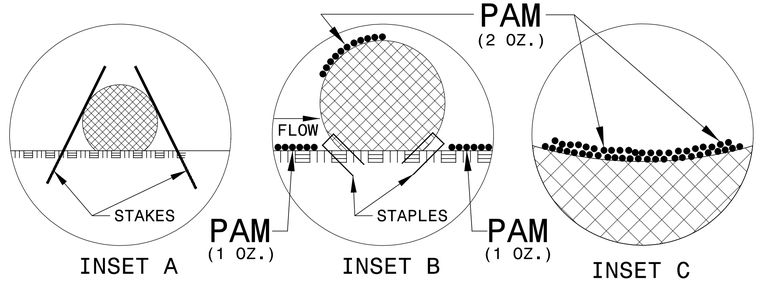
PROVIDE STAPLES MADE OF 0.125 IN. DIAMETER STEEL WIRE FORMED INTO A U SHAPE NOT LESS THAN 12″ IN LENGTH.

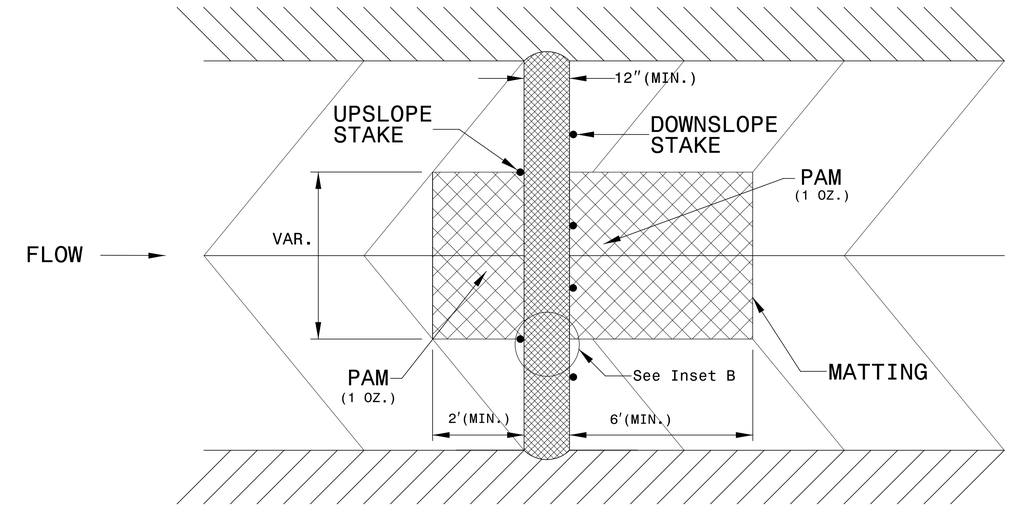
INSTALL STAPLES APPROXIMATELY EVERY 1 LINEAR FOOT ON BOTH SIDES OF WATTLE AND AT EACH END TO SECURE IT TO THE SOIL.

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.

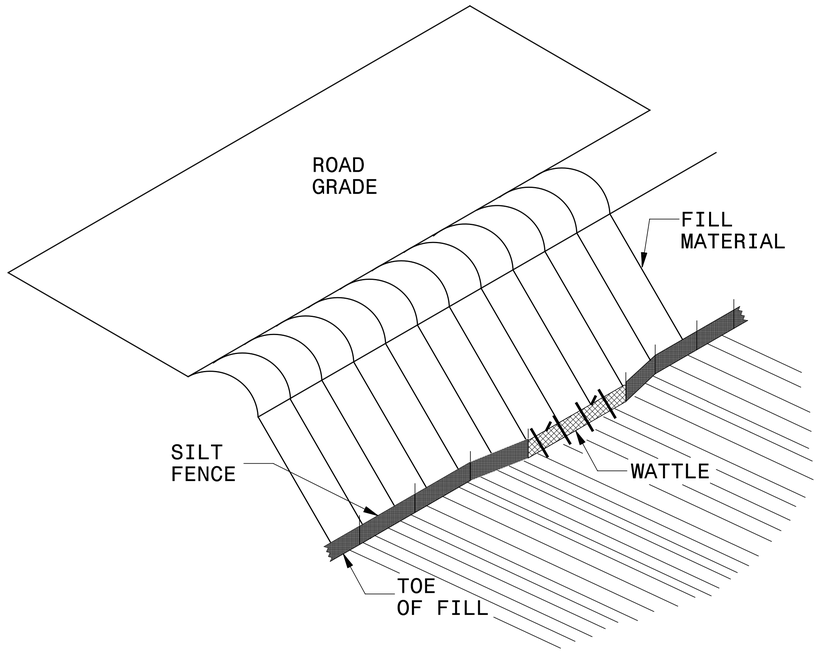




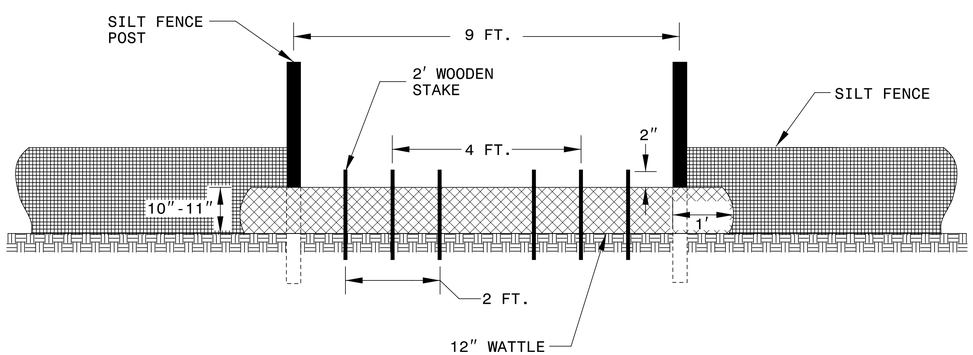
TOP VIEW

PROJECT REFERENCE NO.	SHEET NO.
R-2514D	EC-2B
R/W SHEET NO.	

SILT FENCE COIR FIBER WATTLE BREAK DETAIL



ISOMETRIC VIEW



VIEW FROM SLOPE

NOTES:

USE MINIMUM 12 IN. DIAMETER COIR FIBER (COCONUT FIBER) WATTLE AND LENGTH OF 10 FT.

EXCAVATE A 1 TO 2 INCH TRENCH FOR WATTLE TO BE PLACED.

DO NOT PLACE WATTLE ON TOE OF SLOPE.

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

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

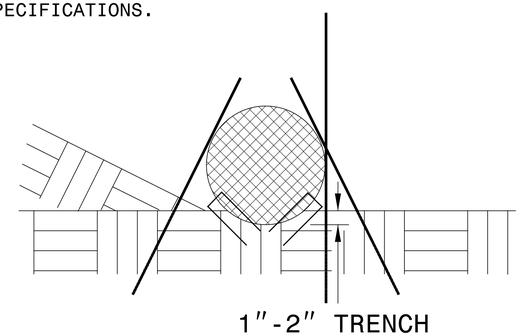
PROVIDE STAPLES MADE OF 0.125 IN. DIAMETER STEEL WIRE FORMED INTO A U SHAPE NOT LESS THAN 12" IN LENGTH.

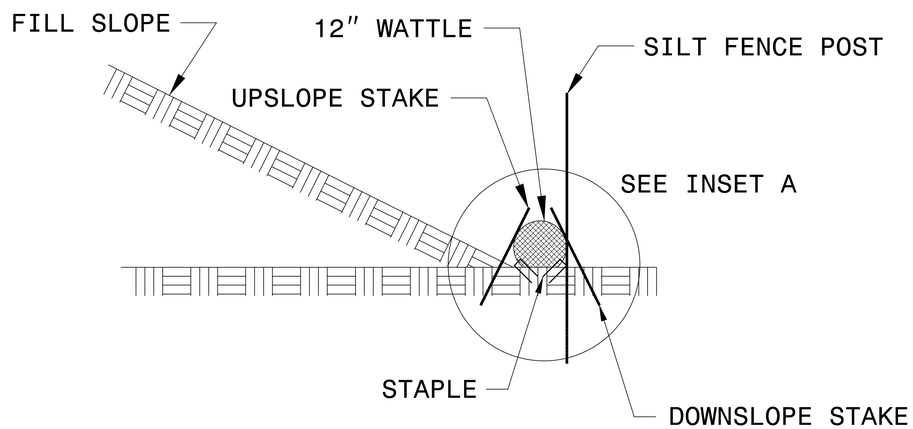
INSTALL STAPLES APPROXIMATELY EVERY 1 LINEAR FOOT ON BOTH SIDES OF WATTLE AND AT EACH END TO SECURE IT TO THE SOIL.

WATTLE INSTALLATION CAN BE ON OUTSIDE OF THE SILT FENCE AS DIRECTED.

INSTALL TEMPORARY SILT FENCE IN ACCORDANCE WITH SECTION 1605 OF THE STANDARD SPECIFICATIONS.

INSET A

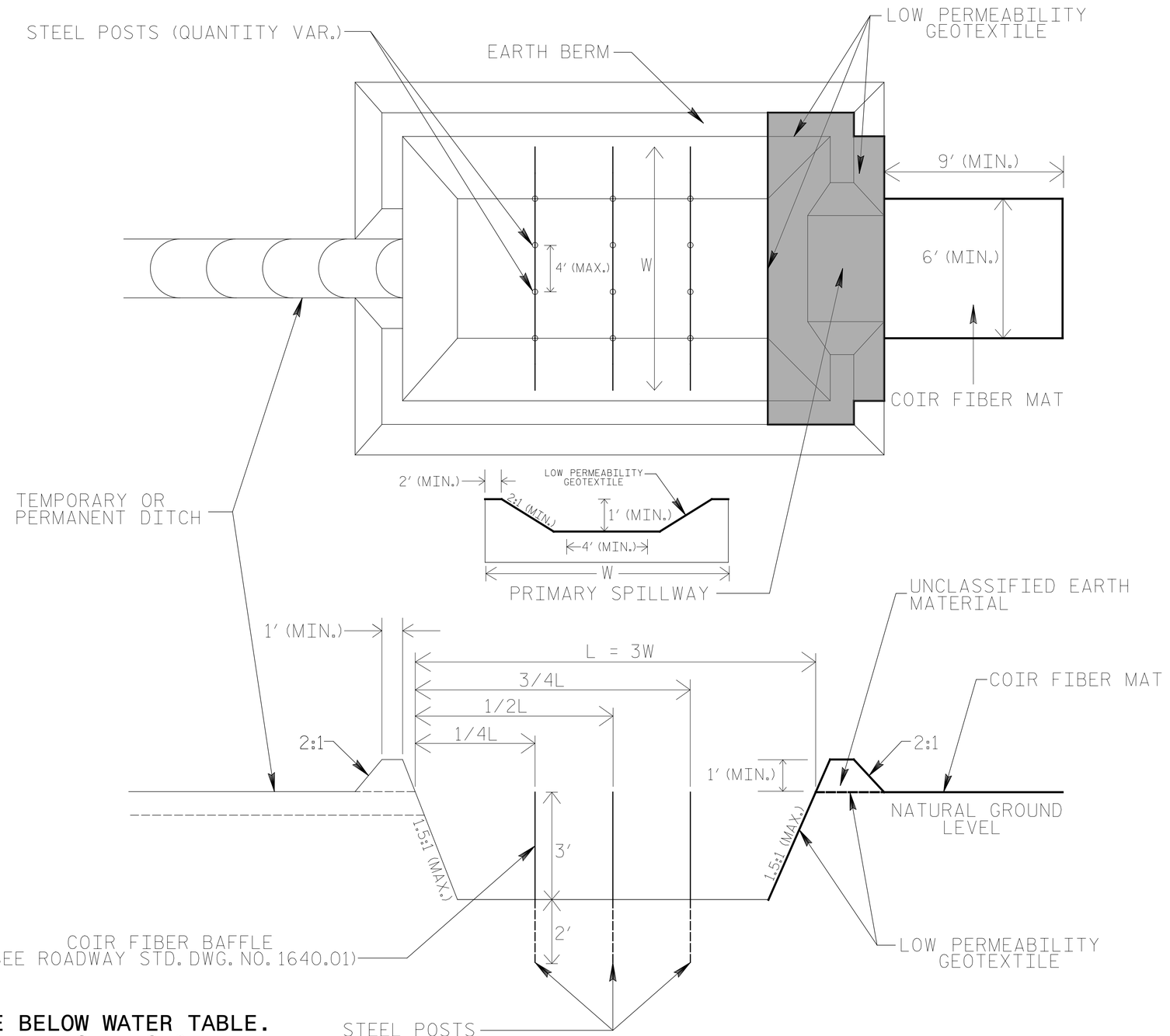




SIDE VIEW

PROJECT REFERENCE NO.	SHEET NO.
R-2514D	EC-2C
R/W SHEET NO.	

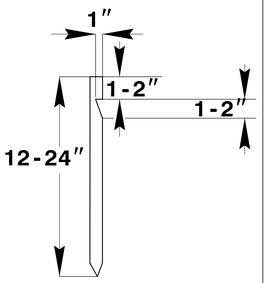
INFILTRATION BASIN WITH BAFFLES DETAIL (EAST)



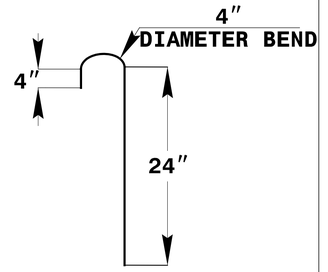
NOTES

1. DO NOT EXCAVATE BELOW WATER TABLE.
2. LIMIT EARTH BERM HEIGHT TO 3 FT.
3. AVOID COMPACTING BOTTOM OF BASIN.
4. FOR BASIN DEPTH OF 3 FT., THE MINIMUM BASIN WIDTH SHALL BE 9 FT.
5. DETERMINE PRIMARY SPILLWAY LENGTH (FT.) USING Q/0.4, WHERE Q IS FLOW RATE (CFS) INTO BASIN.

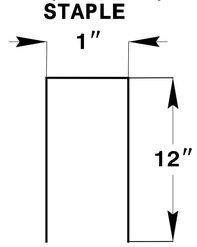
2" x 2" (nominal) WOODEN STAKE



#10 STEEL REINFORCEMENT BAR



1" (nominal) STAPLE

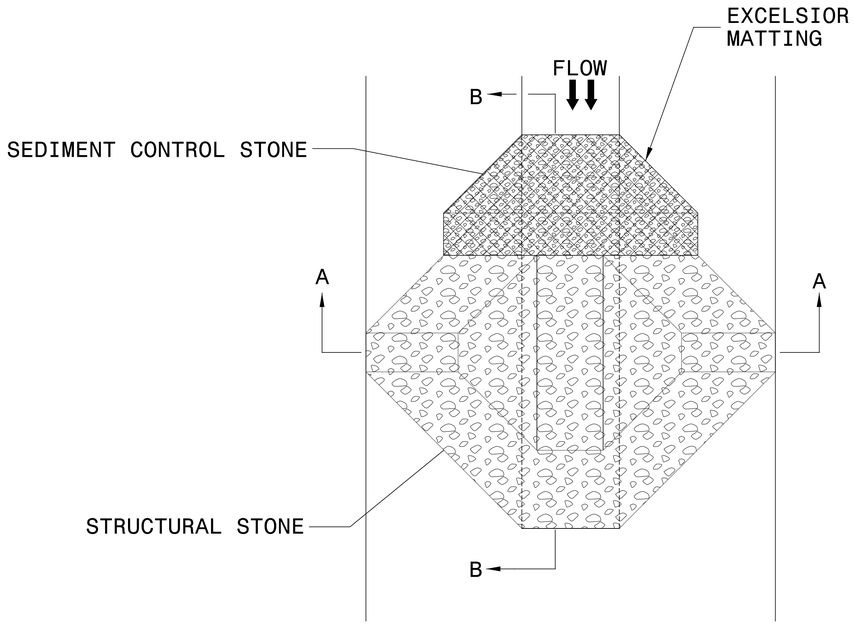


COIR FIBER MAT ANCHOR OPTIONS

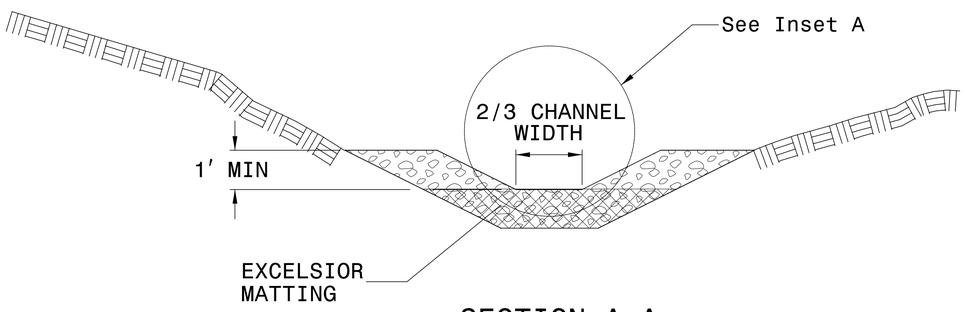
NOT TO SCALE

PROJECT REFERENCE NO.	SHEET NO.
R-2514D	EC-2D
R/W SHEET NO.	

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



PLAN



SECTION A-A

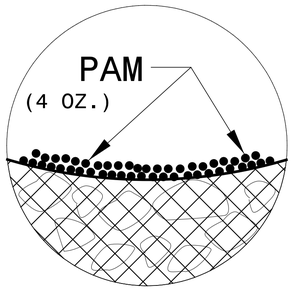
NOTES:

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

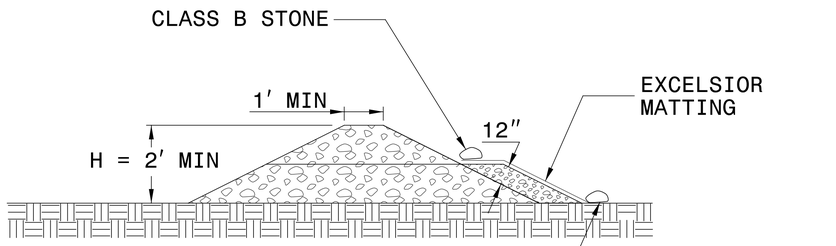
USE EXCELSIOR FOR MATTING MATERIAL AND ANCHOR MATTING SECTION AT TOP AND BOTTOM WITH CLASS B STONE.

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

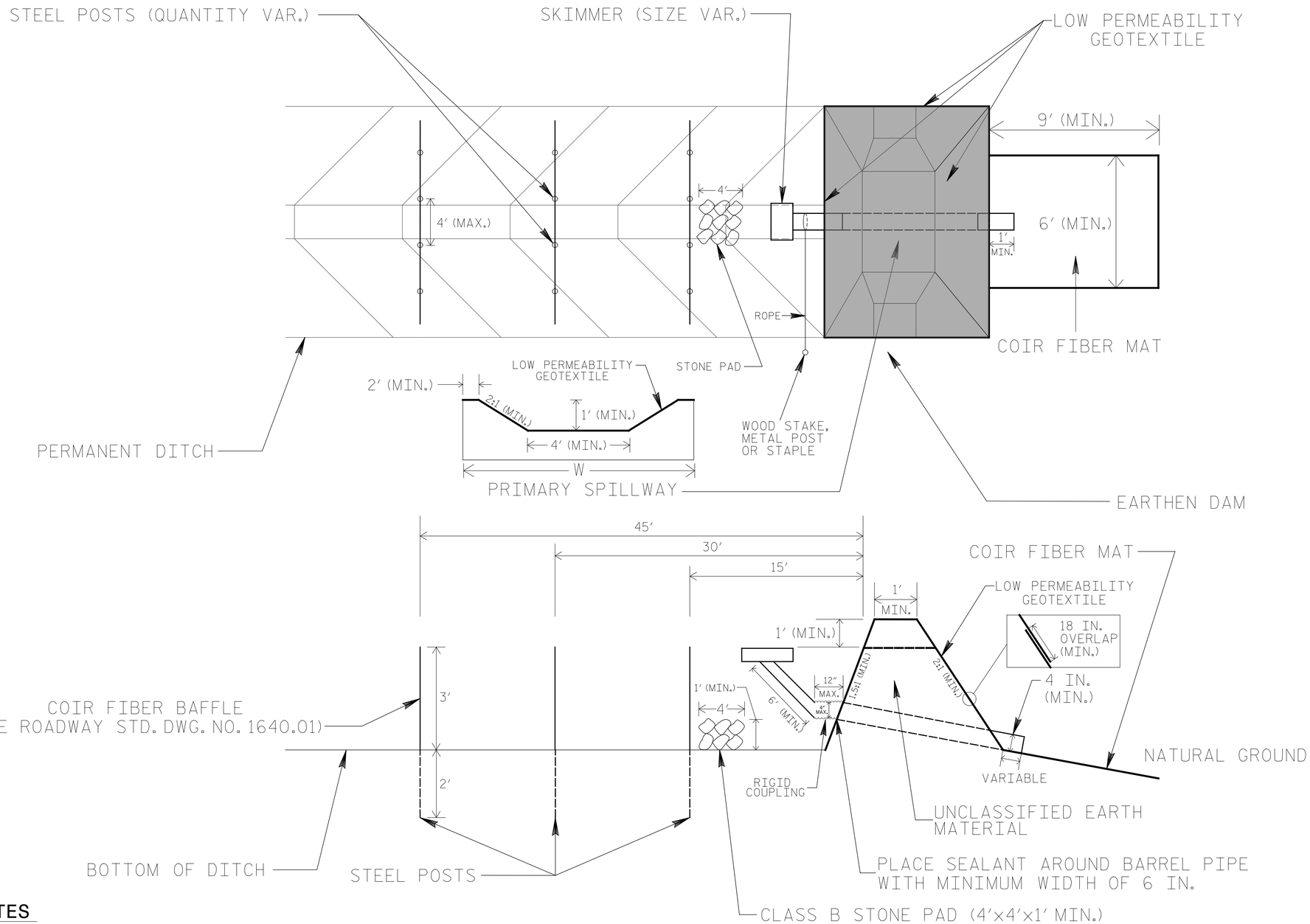


SECTION B-B

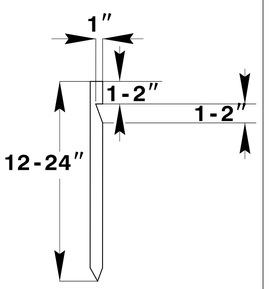
NOT TO SCALE

PROJECT REFERENCE NO.	SHEET NO.
R-2514D	EC-2E
R/W SHEET NO.	

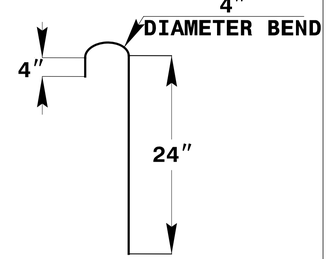
EARTHEN DAM WITH SKIMMER DETAIL (EAST)



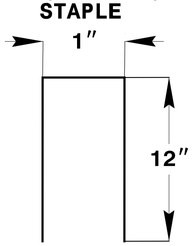
2″ x 2″ (nominal) WOODEN STAKE



#10 STEEL REINFORCEMENT BAR



1″ (nominal) STAPLE



COIR FIBER MAT ANCHOR OPTIONS

NOTES

1. LIMIT EARTHEN DAM HEIGHT TO 5 FT.
2. DETERMINE PRIMARY SPILLWAY LENGTH (FT.) USING Q/0.4, WHERE Q IS FLOW RATE (CFS) INTO BASIN.
3. LOW PERMEABILITY GEOTEXTILE FOR PRIMARY SPILLWAY SHALL BE ONE CONTINUOUS PIECE OF MATERIAL OR OVERLAPPED 18 IN. (MIN.).

NOT TO SCALE

PROJECT REFERENCE NO.	SHEET NO.
R-2514D	EC-2F
R/W SHEET NO.	

BORROW PIT DEWATERING BASIN DETAIL

GENERAL NOTES:

DETERMINE BORROW PIT DEWATERING BASIN SIZE USING V = 8.0203 * Q * T, WHERE V IS VOLUME (FT^3), Q IS PUMP FLOW RATE (GPM), AND T IS DEWATERING TIME (HR). USE MAXIMUM FLOW RATE OF 1000 GPM AND A MINIMUM DEWATERING TIME OF 2 HOURS.

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

CONSTRUCT THE COIR FIBER BAFFLE IN ACCORDANCE WITH ROADWAY STANDARD DRAWING 1640.01 AND WITH MATERIAL THAT MEETS THE SPECIFICATIONS OF ROADWAY STANDARD 1640-14.

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

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

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

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

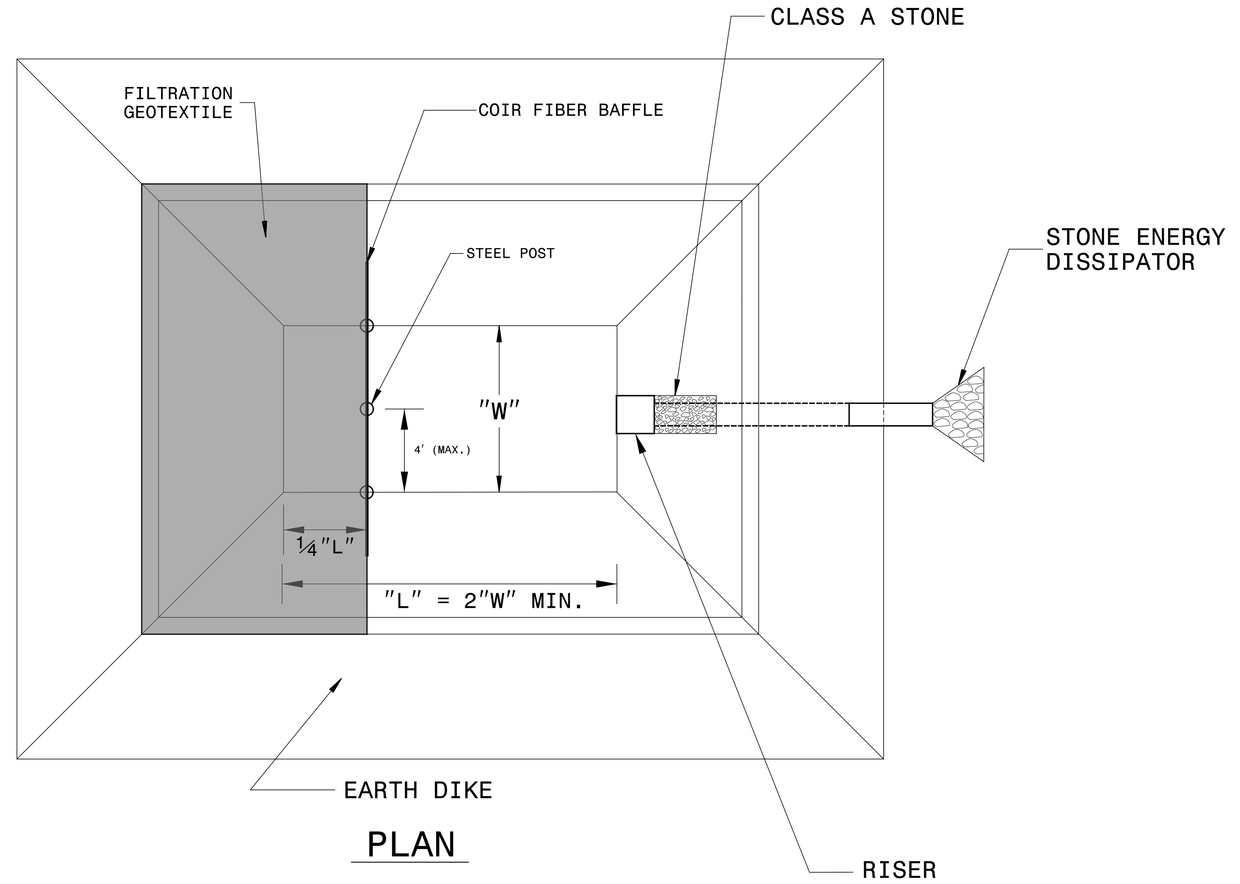
DO NOT EXCEED 3½ FT. IN HEIGHT FOR THE EARTH DIKES REQUIRED FOR BORROW PIT DEWATERING BASIN.

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

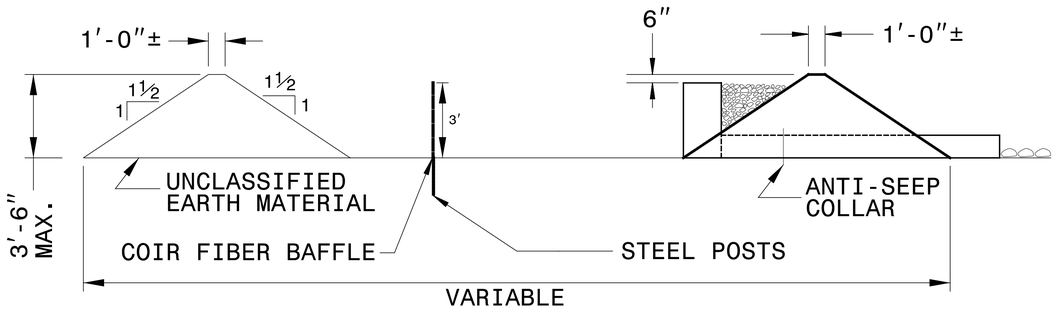
SUBMIT THE SIZE, LOCATION AND RISER PIPE MATERIAL FOR APPROVAL PRIOR TO CONSTRUCTION.

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

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



PLAN



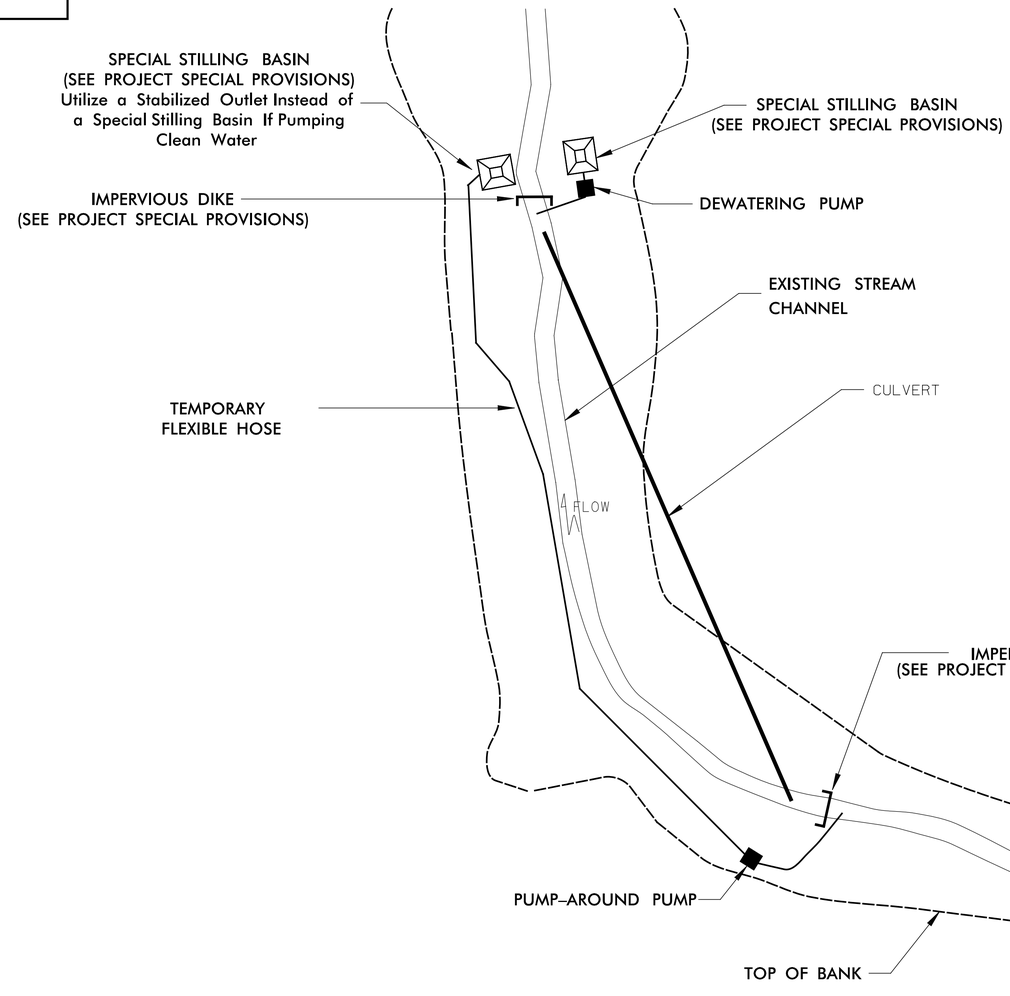
TYPICAL SECTION VIEW

NOT TO SCALE

PROJECT REFERENCE NO.	SHEET NO.
R-2514D	EC-26
R/W SHEET NO.	

EXAMPLE OF PUMP–AROUND OPERATION

NOTES:
1) All excavation shall be performed in only dry or isolated areas of the work zone.
2) Impervious dikes are to be used to isolate work from stream flow when necessary.
3) Maintenance of stream flow operations shall be incidental to the work. This includes polyethylene sheeting, diversion pipes, pumps and hoses.
4) Pumps and hoses shall be of sufficient size to dewater the work area.



SEQUENCE OF CONSTRUCTION FOR TYPICAL WORK AREA

1. INSTALL SPECIAL STILLING BASIN(S).
2. INSTALL UPSTREAM PUMP AND TEMPORARY FLEXIBLE HOSE.
3. PLACE UPSTREAM IMPERVIOUS DIKE AND BEGIN PUMPING OPERATIONS FOR STREAM DIVERSION.
4. PLACE DOWNSTREAM IMPERVIOUS DIKE AND PUMPING APPARATUS. DEWATER ENTRAPPED AREA. AREA TO BE DEWATERED SHALL BE EQUAL TO ONE DAY'S WORK.
5. INSTALL CULVERT(S) IN ACCORDANCE WITH THE PLANS.
6. EXCAVATE ANY ACCUMULATED SILT AND DEWATER BEFORE REMOVAL OF IMPERVIOUS DIKES. REMOVE IMPERVIOUS DIKES, PUMPS, AND TEMPORARY FLEXIBLE HOSE. (DOWNSTREAM IMPERVIOUS DIKES FIRST).
7. REMOVE SPECIAL STILLING BASIN(S) AND BACKFILL. STABILIZE DISTURBED AREA WITH SEED AND MULCH.

PROJECT REFERENCE NO.	SHEET NO.
R-2514D	EC-3

ROADSIDE ENVIRONMENTAL PROJECT ENGINEER

LEVEL III CERTIFIED BY:
STACEY H. BAILEY, PE
CERTIFICATION NUMBER: 3074
ISSUED: FEBRUARY 2, 2015

DIVISION OF HIGHWAYS
STATE OF NORTH CAROLINA

SOIL STABILIZATION SUMMARY SHEET

MATTING FOR FILL SLOPES

CONST SHEET NO.	LINE	FROM STATION	TO STATION	SIDE	ESTIMATE (SY)
4-5	-L-	300+00	304+60	LT.	2314
4-5	-L-	301+50	303+50	RT.	1105
5-6	-L-	311+00	319+50	LT.	6825
5-6	-L-	311+00	320+00	RT.	5319
6	-Y3RPD-	17+50	18+50	LT.	417
7	-L-	345+50	347+10	RT.	754
8	-L-	356+10	363+00	LT.	4624
8	-L-	356+10	362+75	RT.	4700
8-9	-L-	364+02	370+52	LT.	5254
8-9	-L-	363+70	370+52	RT.	5074
9	-DRV3-	18+25	22+30	LT.	361
9	-DRV3-	20+70	22+50	RT.	711
9-10	-L-	375+50	383+15	LT.	3965
9-10	-L-	375+45	383+18	RT.	3945
10-11	-L-	395+78	398+50	LT.	1576
10-11	-L-	395+78	403+50	RT.	4888
12-13	-L-	419+00	428+23	LT.	6354
12-13	-L-	419+50	427+92	RT.	5226
13-14	-L-	429+35	447+00	LT.	11132
13-14	-L-	429+12	445+50	RT.	11204
15	-L-	451+50	463+50	LT.	4379
15-16	-L-	456+00	464+00	RT.	2636
16-17	-L-	473+00	475+00	LT.	655
16-17	-L-	472+50	474+00	RT.	551
17	-L-	476+00	477+50	RT.	408
17	-L-	479+00	480+00	LT.	241
18	-L-	489+92	491+00	RT.	282
18	-L-	490+50	492+00	LT.	345
18	-L-	493+00	496+50	RT.	905

MATTING FOR FILL SLOPES

CONST SHEET NO.	LINE	FROM STATION	TO STATION	SIDE	ESTIMATE (SY)
18	-L-	493+50	496+12	LT.	668
19	-L-	503+23	506+50	RT.	820
20	-L-	518+50	524+42	LT.	3170
20	-L-	517+50	526+74	RT.	5914
20-21	-L-	525+50	537+00	LT.	5825
21	-L-	530+00	537+00	RT.	4488
22-23	-L-	548+00	560+69	LT.	6158
22-23	-L-	548+35	560+74	RT.	5747
23-24	-L-	561+58	572+00	LT.	6443
23	-L-	561+61	570+00	RT.	5548
24-25	-L-	575+50	592+50	LT.	5875
24-25	-L-	581+50	586+50	RT.	1599
25	-L-	591+50	593+10	RT.	392
26	-L-	610+00	611+50	LT.	595
26	-L-	610+50	612+50	RT.	1296
26	-L-	617+00	622+00	LT.	3262
26	-L-	620+00	623+50	RT.	1789
26	-Y10RPA-	22+50	25+00	LT.	1536
26	-Y10RPA	25+00	38+00	RT.	10025
26-31	-Y10RPC-	19+00	24+00	RT.	2452
27	-L-	626+50	629+50	RT.	1813
				TOTAL	171,568

PROJECT REFERENCE NO.	SHEET NO.
R-2514D	EC-3A

ROADSIDE ENVIRONMENTAL PROJECT ENGINEER

LEVEL III CERTIFIED BY:
STACEY H. BAILEY, PE
CERTIFICATION NUMBER: 3074
ISSUED: FEBRUARY 2, 2015

DIVISION OF HIGHWAYS
STATE OF NORTH CAROLINA

SOIL STABILIZATION SUMMARY SHEET

MATTING FOR CUT DITCHES

CONST SHEET NO.	LINE	FROM STATION	TO STATION	SIDE	ESTIMATE (SY)
5-6	-L-	310+50	317+00	MED.	875
6	-L-	323+50	341+00	MED.	2345
6	-Y3RPD-	25+50	26+00	LT.	60
6	-Y3RPD-	21+50	24+00	LT.	335
6	-Y3RPD-	21+50	24+00	RT.	335
7-8	-L-	350+00	354+10.43	MED.	550
7	-L-	345+00	347+00	LT.	140
7	-L-	349+50	352+00	LT.	175
7-8	-L-	353+50	354+10.43	LT.	45
7	-L-	352+00	353+50	RT.	205
8	-L-	354+10.43	360+00	MED.	790
8	-L-	366+50	368+00	MED.	205
8	-L-	354+50	357+00	LT.	175
8	-L-	357+00	357+45	RT.	45
8	-L-	358+50	360+50	RT.	140
8-9	-L-	367+50	368+50	RT.	70
8-9	-L-	359+00	360+50	LT.	105
8-9	-DRV3-	10+23.48	17+50	LT.	590
9	-L-	368+50	370+00	LT.	105
9	-DRV3-	23+02	24+25	LT.	170
9	-L-	368+00	370+50	MED.	555
9	-L-	375+50	379+50	MED.	715
11	-L-	399+45	403+50	RT.	670
11	-L-	398+50	399+18	RT.	120
11	-L-	397+00	397+50	RT.	35
11	-L-	403+50	404+00	MED.	70
11	-L-	399+50	399+70	LT.	15
12	-L-	415+00	419+70	RT.	700
12	-L-	409+00	422+00	MED.	1740

MATTING FOR CUT DITCHES

CONST SHEET NO.	LINE	FROM STATION	TO STATION	SIDE	ESTIMATE (SY)
13	-L-	422+00	427+86.21	MED.	1040
13	-L-	432+00	435+00	MED.	405
14	-L-	435+00	448+00	MED.	1740
14	-L-	446+50	447+50	RT.	135
15	-L-	448+00	450+17	RT.	275
19-20	-L-	514+00	525+00	MED.	1610
22-23	-L-	549+00	557+50	MED.	1145
23-24	-L-	564+00	573+50	MED.	1275
26	-L-	609+00	620+50	MED.	1540
26	-Y10RPC-	10+50	12+50	RT.	345
26	-Y10RPC-	16+00	17+00	RT.	150
			TOTAL		21,740
			TOTAL FILL SLOPE		171,560
MISCELLANEOUS MATTING TO BE INSTALLED AS DIRECTED BY THE ENGINEER					42,075
				TOTAL	235,375
				SAY	236,000

PROJECT REFERENCE NO.	SHEET NO.
R-2514D	EC-3B

ROADSIDE ENVIRONMENTAL PROJECT ENGINEER

LEVEL III CERTIFIED BY:
STACEY H. BAILEY, PE
CERTIFICATION NUMBER: 3074
ISSUED: FEBRUARY 2, 2015

DIVISION OF HIGHWAYS
STATE OF NORTH CAROLINA

SOIL STABILIZATION SUMMARY SHEET

PERMANENT SOIL REINFORCEMNT MAT

CONST SHEET NO.	LINE	FROM STATION	TO STATION	SIDE	ESTIMATE (SY)
6	-Y3RPD-	24+00	25+50	LT.	160
8	-L-	354+50	355+00	LT.	35
8	-L-	356+10	357+00	RT.	210
9	-L-	368+50	370+50	RT.	255
11	-L-	397+50	398+50	RT.	70
11	-L-	408+00	408+50	RT.	65
11	-L-	408+50	409+00	LT.	65
				SUBTOTAL	860
	ADDITIONAL PSRM TO BE INSTALLED				4050
				TOTAL	4910
				SAY	4910

PERMANENT SOIL REINFORCEMENT MAT

CONST SHEET NO.	LINE	FROM STATION	TO STATION	SIDE	ESTIMATE (SY)

PROJECT REFERENCE NO.	SHEET NO.
R-2514D	EC-3C

DIVISION OF HIGHWAYS
STATE OF NORTH CAROLINA

SOIL STABILIZATION TIMEFRAMES

SITE DESCRIPTION	STABILIZATION TIME	TIMEFRAME EXCEPTIONS
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.

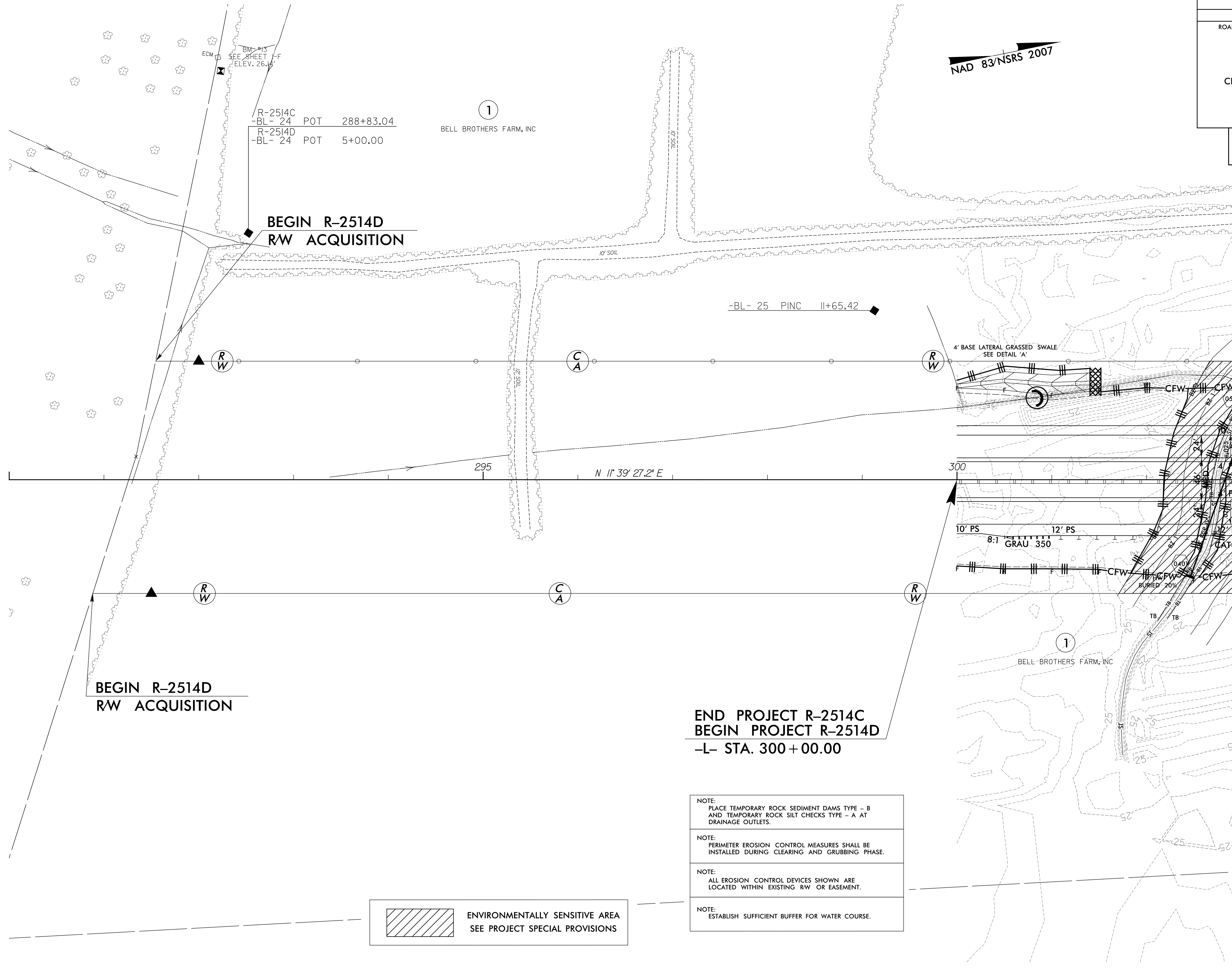
PROJECT REFERENCE NO.	SHEET NO.
R-2514D	EC-4/CONST.4
R/W SHEET NO.	

ROADSIDE ENVIRONMENTAL PROJECT ENGINEER

LEVEL III CERTIFIED BY:
STACEY H. BAILEY, PE
CERTIFICATION NUMBER: 3074
ISSUED: FEBRUARY 02, 2015

CLEARING AND GRUBBING
EROSION CONTROL FOR
CONSTRUCTION SHEET 4

REVISIONS



MATCHLINE -L- STA. 303+00.00 SEE SHEET 5

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:
ALL EROSION CONTROL DEVICES SHOWN ARE LOCATED WITHIN EXISTING R/W OR EASEMENT.

NOTE:
ESTABLISH SUFFICIENT BUFFER FOR WATER COURSE.

ENVIRONMENTALLY SENSITIVE AREA
SEE PROJECT SPECIAL PROVISIONS

SEE SHEET 32 FOR -L- PROFILE

8/17/99

$$$$$$SYSTIME$$$$$
R:\Hydraulics\Erosion Control\CADD\R2514D_hyd_c&g_psh_04.dgn

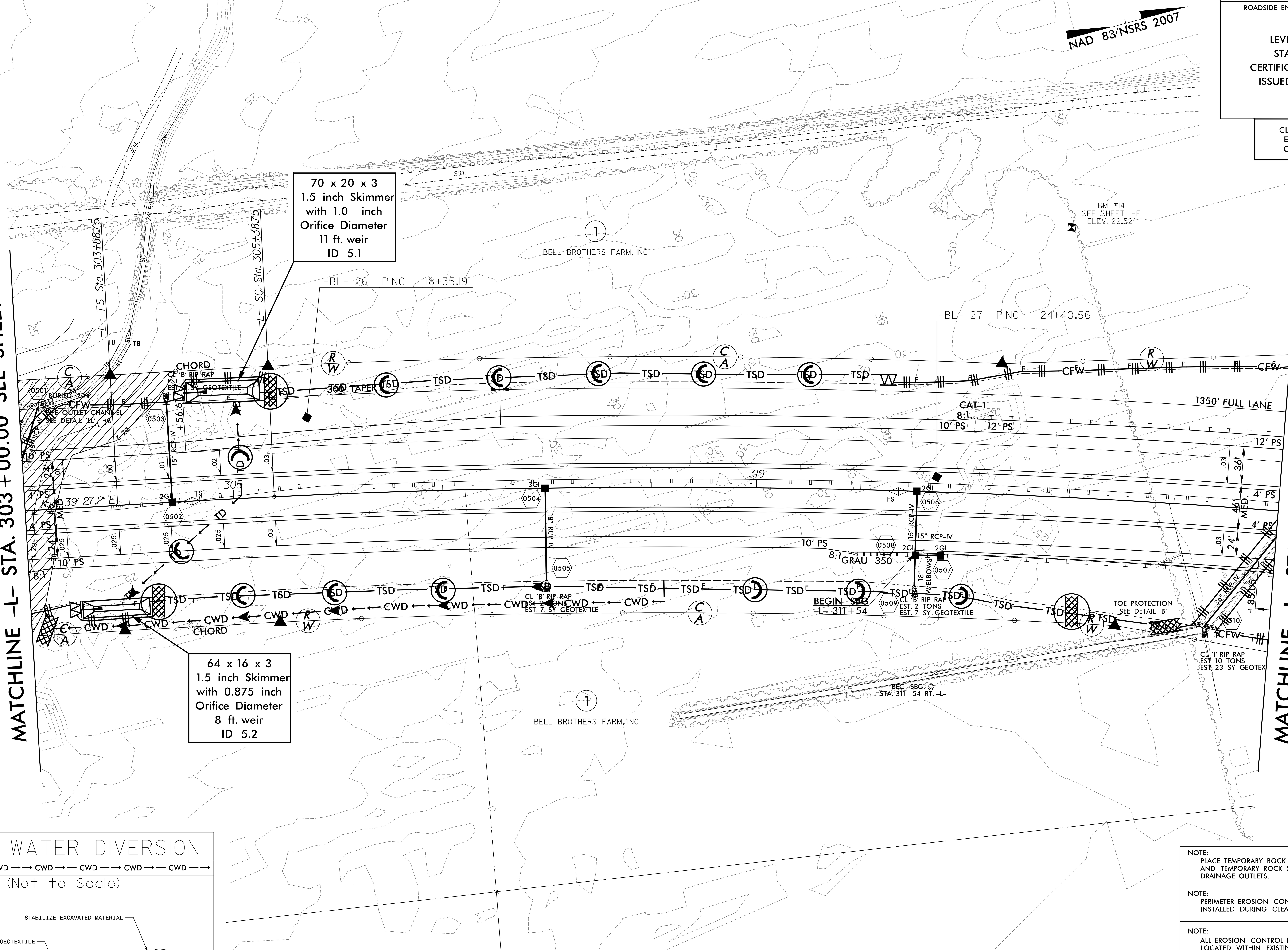
PROJECT REFERENCE NO.	SHEET NO.
R-2514D	EC-5/CONST.5
R/W SHEET NO.	

ROADSIDE ENVIRONMENTAL PROJECT ENGINEER

LEVEL III CERTIFIED BY:
STACEY H. BAILEY, PE
CERTIFICATION NUMBER: 3074
ISSUED: FEBRUARY 02, 2015

CLEARING AND GRUBBING
EROSION CONTROL FOR
CONSTRUCTION SHEET 5

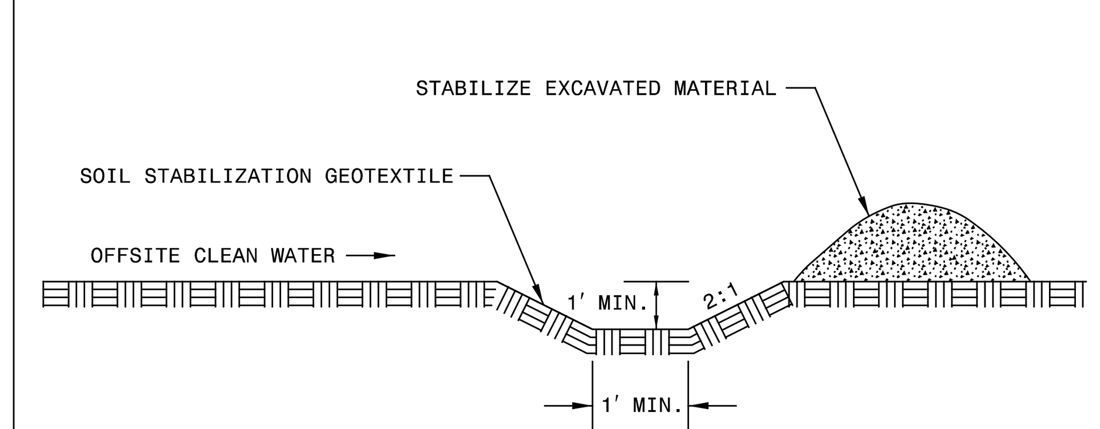
REVISIONS



CLEAN WATER DIVERSION

→ CWD → CWD → CWD → CWD → CWD → CWD →

(Not to Scale)



ENVIRONMENTALLY SENSITIVE AREA
SEE PROJECT SPECIAL PROVISIONS

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

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

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

NOTE:
ESTABLISH SUFFICIENT BUFFER FOR WATER COURSE.

SBG - "SHOULDER BERM GUTTER"

SEE SHEET 32 FOR -L- PROFILE

8/17/99

$$$$$$SYSTIME$$$$$ R:\Hydraulics\Erosion Control\CADD\R2514D_hyd_ec&g_psh_05.dgn

REVISIONS
R/W REVISION 6-24-14 (DWG) ADDED ADDITIONAL PUE AT -Y3- STA. 18+68.00 RT. ON PARCEL 1 (BELL BROTHERS FARM, INC). REVISED PUE ON PARCEL 36 (WILLIAM A. HILL).

PROJECT REFERENCE NO.	SHEET NO.
R-2514D	EC-6/CONST.6
R/W SHEET NO.	
ROADSIDE ENVIRONMENTAL PROJECT ENGINEER	

LEVEL III CERTIFIED BY:
STACEY H. BAILEY, PE
CERTIFICATION NUMBER: 3074
ISSUED: FEBRUARY 02, 2015

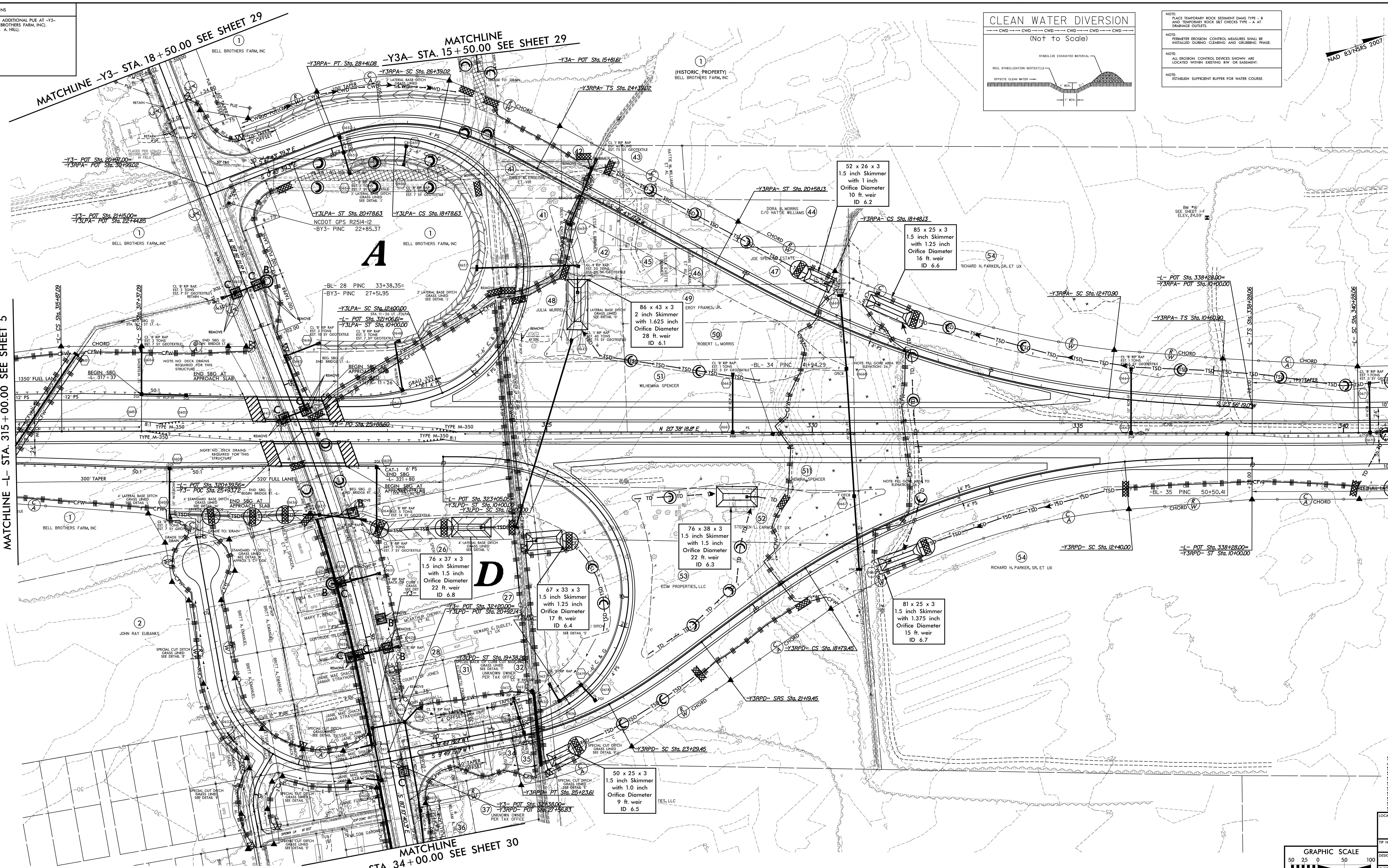
CLEARING AND GRUBBING
EROSION CONTROL FOR
CONSTRUCTION SHEET 4

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:
ALL EROSION CONTROL DEVICES SHOWN ARE LOCATED WITHIN EXISTING R/W OR EASEMENT.

NOTE:
ESTABLISH SUFFICIENT BUFFER FOR WATER COURSE.



SEE SHEET 6-A FOR -Y3B- & -DRV2- DESIGN AND R/W DETAILS
SEE SHEET 33 FOR -L- PROFILE
SEE SHEET 46 FOR -Y3- PROFILE
SEE SHEET 47 FOR -Y3RPA- PROFILE
SEE SHEET 49 FOR -Y3LPA- PROFILE
SEE SHEET 48 FOR -Y3RPD- PROFILE
SEE SHEET 49 FOR -Y3LPD- PROFILE
SEE SHEET 50 FOR -Y3B- PROFILE
SEE SHEET 50 FOR -DRV2- PROFILE
SEE SHEETS S-1 THRU S-? FOR STRUCTURE PLANS

SBG - "SHOULDER BERM GUTTER"

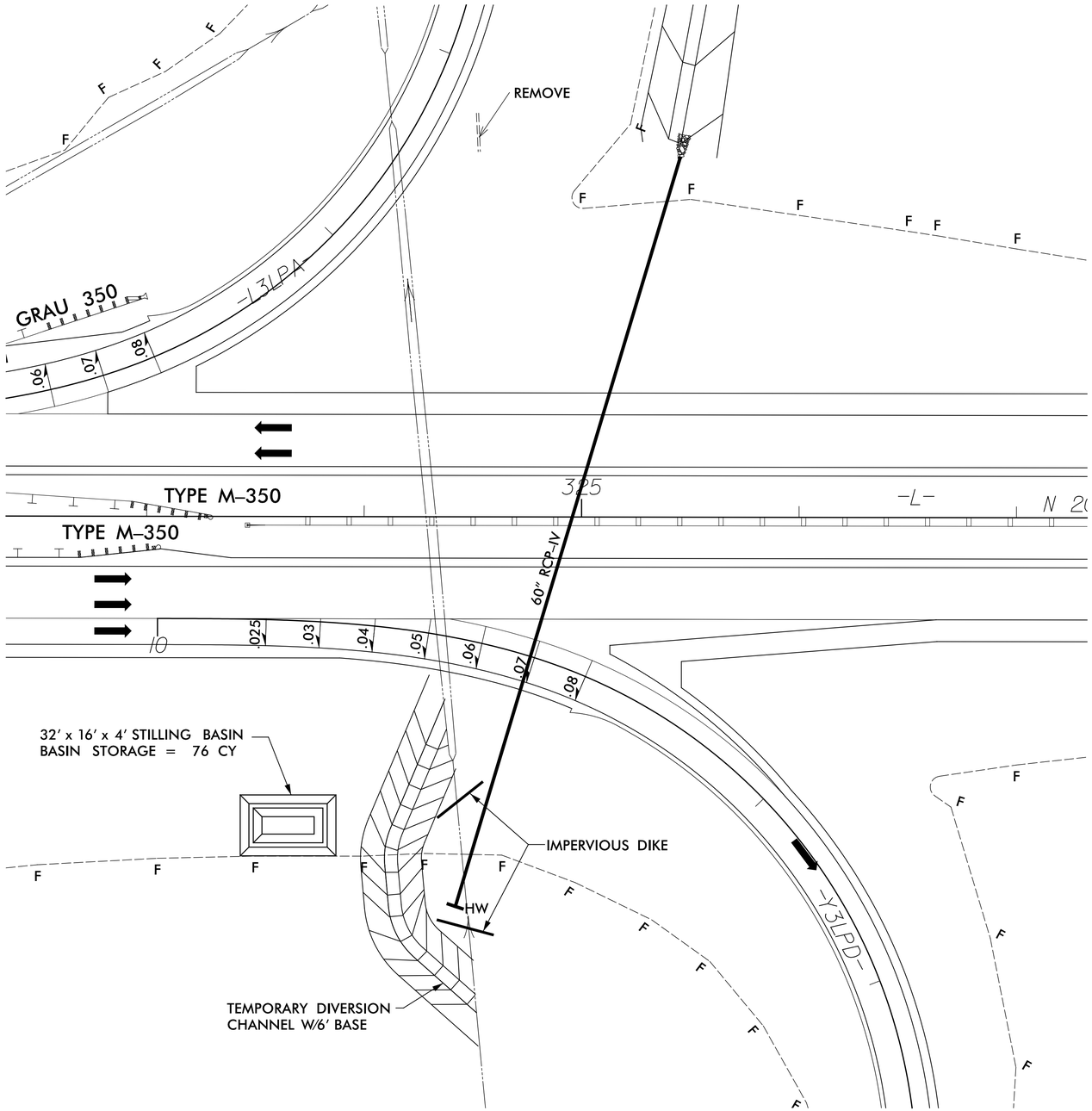
GRAPHIC SCALE
50 25 0 50 100
PLANS

LOCATION:	
TIP NO.:	COUNTY:
DESIGNED BY:	
CHECKED BY:	DATE:

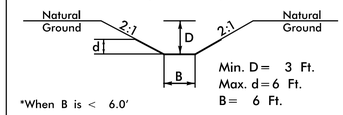
PROJECT REFERENCE NO.	SHEET NO.
R-2514D	EC-6A/CONST.6
R/W SHEET NO.	
ROADSIDE ENVIRONMENTAL PROJECT ENGINEER	

LEVEL III CERTIFIED BY:
STACEY H. BAILEY, PE
CERTIFICATION NUMBER: 3074
ISSUED: FEBRUARY 02, 2015

PIPE CONSTRUCTION SEQUENCE STA. 325+00 –L–



DETAIL
CULVERT DIVERSION CHANNEL
(Not to Scale)



Min. D= 3 Ft.
Max. d=6 Ft.
B= 6 Ft.

*When B is < 6.0'

Type of Liner= FILTER FABRIC – TYPE IV

NOTES

1. CULVERT CONSTRUCTION SHALL BE PERFORMED IN ONLY DRY OR ISOLATED SECTIONS OF CHANNEL.
2. IMPERVIOUS DIKES ARE TO BE USED TO ISOLATE WORK FROM STREAM FLOW AS NECESSARY.
3. ALL GRADED AREAS SHALL BE STABILIZED WITHIN 24 HOURS.
4. MAINTENANCE OF STREAM FLOW OPERATIONS SHALL BE INCIDENTAL TO THE WORK. THIS INCLUDES POLYETHYLENE SHEETING, DIVERSION PIPES, PUMPS AND HOSES.
5. PUMPS AND HOSES SHALL BE SUFFICIENT SIZE TO DEWATER THE WORK AREA.
6. THE CONTRACTOR SHALL NOT PUMP SEDIMENT-LADEN WATER DIRECTLY INTO STREAM. FOR DEWATERING OF CULVERT SITES, THE CONTRACTOR SHALL FILTER SEDIMENT-LADEN WATER THROUGH STILLING BASIN AND/OR SPECIAL STILLING BASIN.

CONSTRUCTION SEQUENCE

1. EXCAVATE TEMPORARY DIVERSION CHANNEL (~156 LF), DIVERT CHANNEL FLOW THROUGH TEMPORARY DIVERSION DITCH WITH USE OF IMPERVIOUS DIKES AS SHOWN.
2. CONSTRUCT STILLING BASIN TO SIZE SPECIFIED AT LOCATION SHOWN.
3. CONSTRUCT 60" RCP-IV w/HW
4. CONSTRUCT UPSTREAM AND DOWNSTREAM CHANNELS AND PLACE REQUIRED RIP RAP.
5. REMOVE STILLING BASIN, TEMPORARY DITCH, AND IMPERVIOUS DIKES.
6. CONSTRUCT PROPOSED ROADWAY.

30 0
15 30
SCALE: 1"= 30'

8/17/99
REVISIONS

$$$$$$$SYSTIME$$$$$$$
R:\Hydraulics\Erosion Control\CADD\R2514D_hyd_const_seq_psh6A.dgn
RAMEY KEMP & ASSOCIATES, INC.

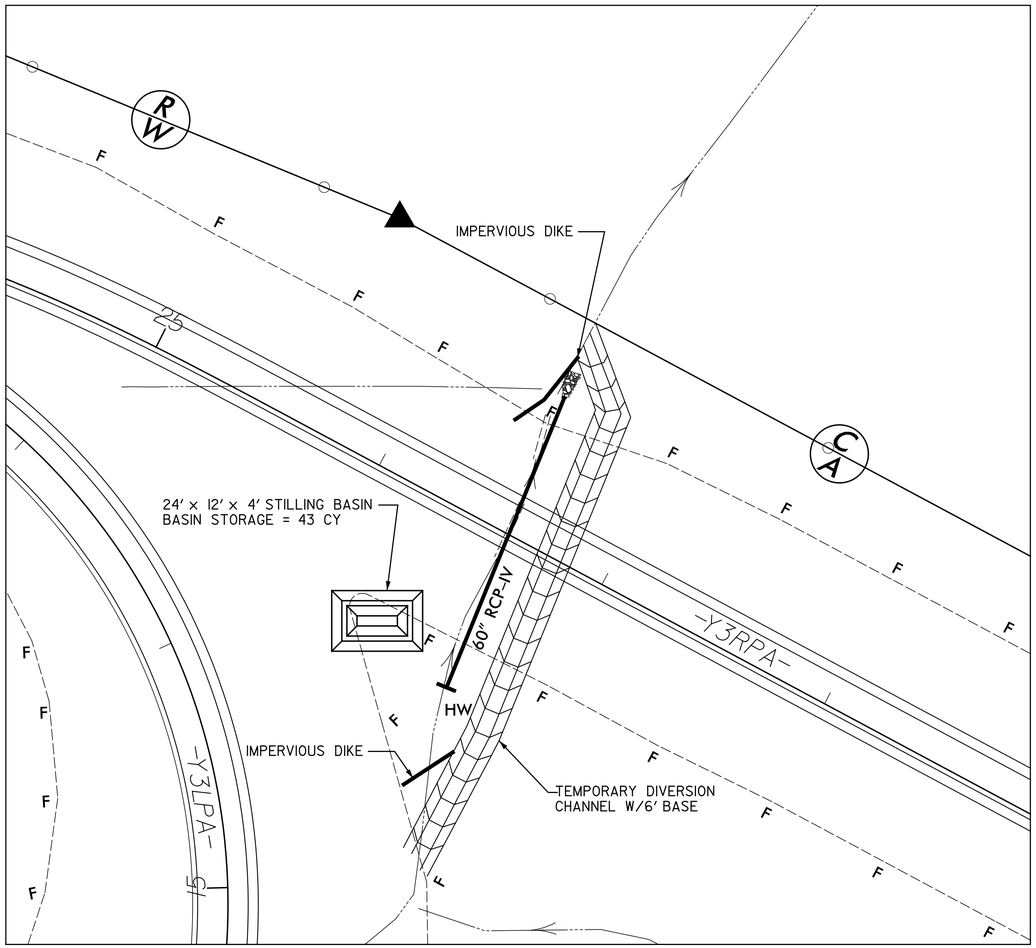
PROJECT REFERENCE NO.	SHEET NO.
R-2514D	EC-6B/CONST.6
R/W SHEET NO.	
ROADSIDE ENVIRONMENTAL PROJECT ENGINEER	

LEVEL III CERTIFIED BY:
STACEY H. BAILEY, PE
CERTIFICATION NUMBER: 3074
ISSUED: FEBRUARY 02, 2015

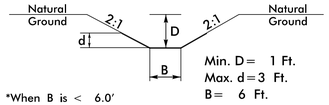
REVISIONS 8/17/99

PIPE CONSTRUCTION SEQUENCE STA. 23+40 –Y3RPA–

NAD 83/NSRS 2007



DETAIL
CULVERT DIVERSION CHANNEL
(Not to Scale)



Min. D= 1 Ft.
Max. d=3 Ft.
B= 6 Ft.

*When B is < 6.0'

Type of Liner= FILTER FABRIC – TYPE IV

NOTES

1. CULVERT CONSTRUCTION SHALL BE PERFORMED IN ONLY DRY OR ISOLATED SECTIONS OF CHANNEL.
2. IMPERVIOUS DIKES ARE TO BE USED TO ISOLATE WORK FROM STREAM FLOW AS NECESSARY.
3. ALL GRADED AREAS SHALL BE STABILIZED WITHIN 24 HOURS.
4. MAINTENANCE OF STREAM FLOW OPERATIONS SHALL BE INCIDENTAL TO THE WORK. THIS INCLUDES POLYETHYLENE SHEETING, DIVERSION PIPES, PUMPS AND HOSES.
5. PUMPS AND HOSES SHALL BE SUFFICIENT SIZE TO DEWATER THE WORK AREA.
6. THE CONTRACTOR SHALL NOT PUMP SEDIMENT-LADEN WATER DIRECTLY INTO STREAM. FOR DEWATERING OF CULVERT SITES, THE CONTRACTOR SHALL FILTER SEDIMENT-LADEN WATER THROUGH STILLING BASIN AND/OR SPECIAL STILLING BASIN.

CONSTRUCTION SEQUENCE

1. EXCAVATE TEMPORARY DIVERSION CHANNEL (~200 LF), INSTALL IMPERVIOUS DIKES (56 LF) AS SHOWN. DIVERT CHANNEL FLOW THROUGH TEMPORARY DIVERSION DITCH
2. CONSTRUCT STILLING BASIN TO SIZE SPECIFIED AT LOCATION SHOWN.
3. CONSTRUCT 60" RCP-IV w/HW.
4. CONSTRUCT ANY UPSTREAM AND DOWNSTREAM CHANNEL IMPROVEMENTS AND PLACE REQUIRED RIP RAP.
5. REMOVE IMPERVIOUS DIKES, STILLING BASIN, AND TEMPORARY DITCH.
6. CONSTRUCT PROPOSED ROADWAY.

30 0
15 30
SCALE: 1"= 30'

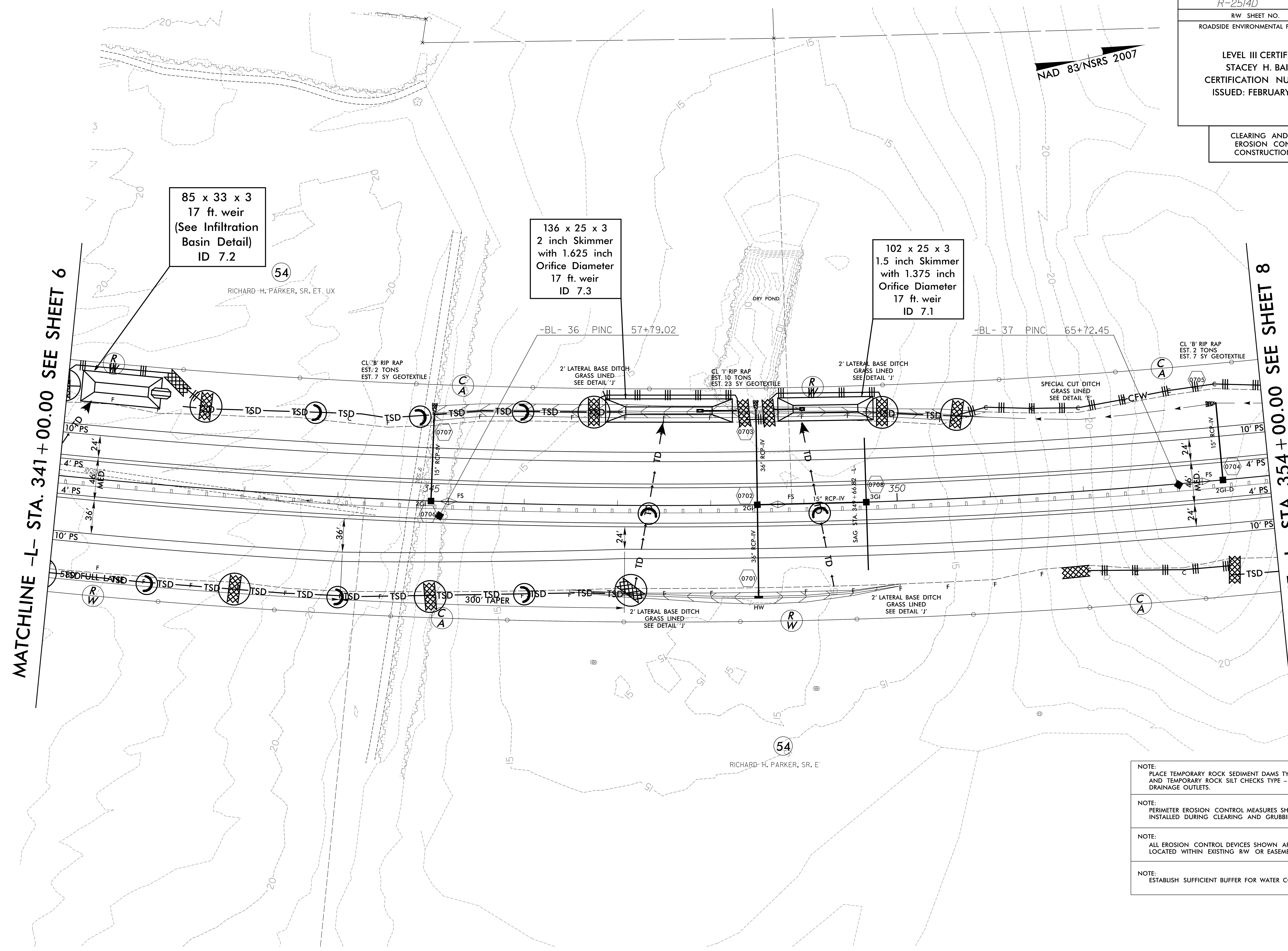
$$$$$$$SYSTIME$$$$$$
C:\Hydraulics\Erosion Control\CADD\R2514D_hyd_const_seq_psh6B.dgn
DGN ENGINEERING INC.

PROJECT REFERENCE NO.	SHEET NO.
R-2514D	EC-7/CONST.7
R/W SHEET NO.	

ROADSIDE ENVIRONMENTAL PROJECT ENGINEER

LEVEL III CERTIFIED BY:
STACEY H. BAILEY, PE
CERTIFICATION NUMBER: 3074
ISSUED: FEBRUARY 02, 2015

CLEARING AND GRUBBING
EROSION CONTROL FOR
CONSTRUCTION SHEET 7



NAD 83/NSRS 2007
85 x 33 x 3
17 ft. weir
(See Infiltration Basin Detail)
ID 7.2
136 x 25 x 3
2 inch Skimmer
with 1.625 inch
Orifice Diameter
17 ft. weir
ID 7.3
102 x 25 x 3
1.5 inch Skimmer
with 1.375 inch
Orifice Diameter
17 ft. weir
ID 7.1
RICHARD H. PARKER, SR. ET UX
DRY POND
-BL- 36 PINC 57+79.02
-BL- 37 PINC 65+72.45
CL 'B' RIP RAP
EST. 2 TONS
EST. 7 SY GEOTEXTILE
2' LATERAL BASE DITCH
GRASS LINED
SEE DETAIL 'J'
CL 'I' RIP RAP
EST. 10 TONS
EST. 23 SY GEOTEXTILE
SPECIAL CUT DITCH
GRASS LINED
SEE DETAIL 'E'
MATCHLINE -L- STA. 341+00.00 SEE SHEET 6
MATCHLINE -L- STA. 354+00.00 SEE SHEET 8
300' TAPER
SAG STA. 349+66.82 -L-
RICHARD H. PARKER, SR. E

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:
ALL EROSION CONTROL DEVICES SHOWN ARE LOCATED WITHIN EXISTING R/W OR EASEMENT.

NOTE:
ESTABLISH SUFFICIENT BUFFER FOR WATER COURSE.

REVISIONS

8/17/99

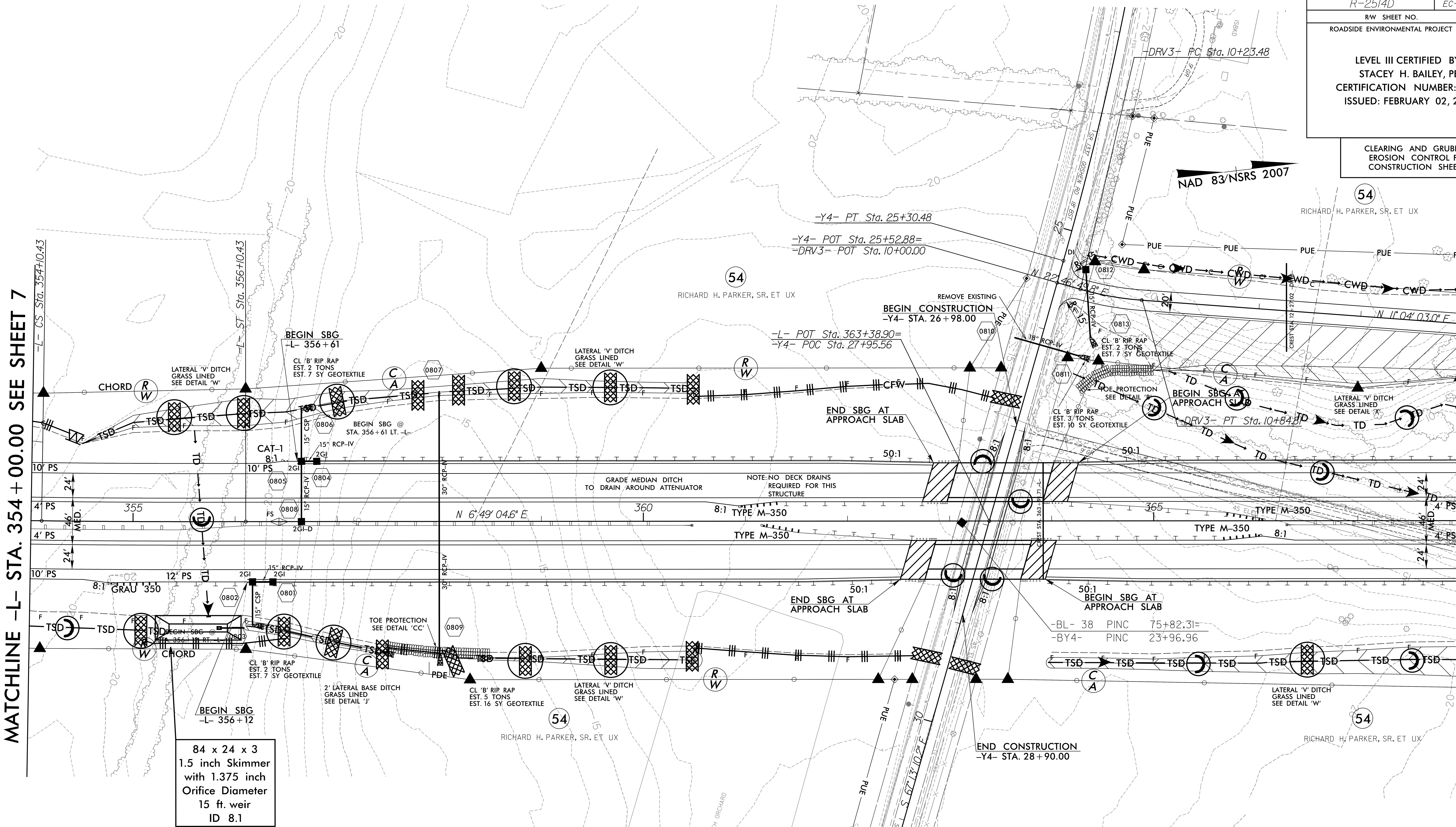
SEE SHEET 34 FOR -L- PROFILE

PROJECT REFERENCE NO.	SHEET NO.
R-2514D	EC-8/CONST.8
R/W SHEET NO.	

ROADSIDE ENVIRONMENTAL PROJECT ENGINEER

LEVEL III CERTIFIED BY:
STACEY H. BAILEY, PE
CERTIFICATION NUMBER: 3074
ISSUED: FEBRUARY 02, 2015

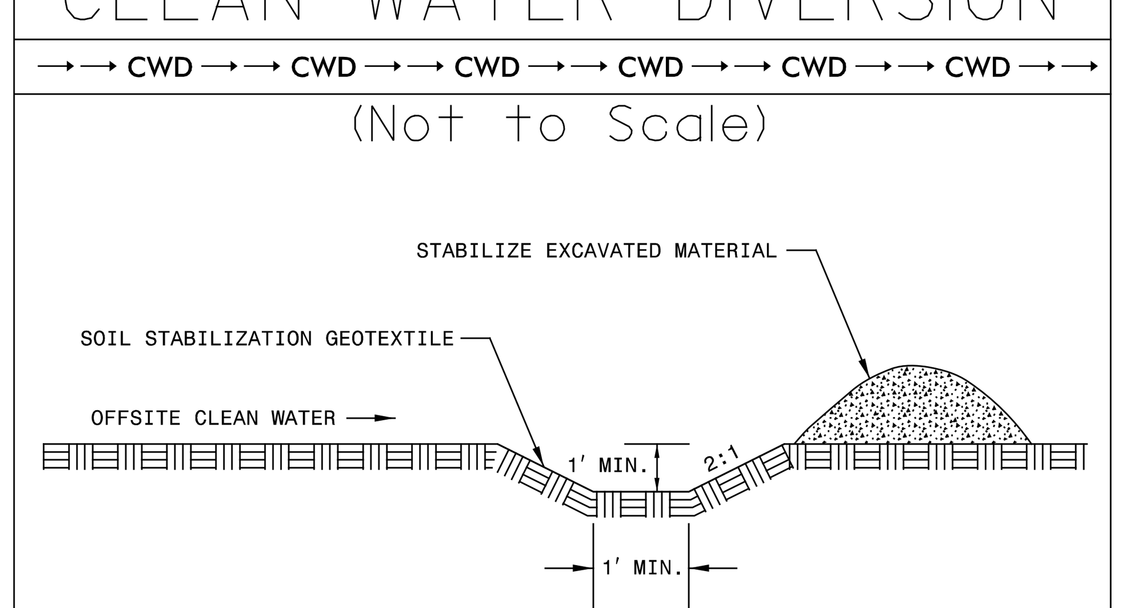
CLEARING AND GRUBBING
EROSION CONTROL FOR
CONSTRUCTION SHEET 8



NAD 83/NSRS 2007
MATCHLINE -L- STA. 354+00.00 SEE SHEET 7
MATCHLINE -L- STA. 368+00.00 SEE SHEET 9 STA. 14+00.00 -DRV3-
RICHARD H. PARKER, SR. ET UX
-DRV3- PC Sta. 10+23.48
-Y4- PT Sta. 25+30.48
-Y4- POT Sta. 25+52.88=
-DRV3- POT Sta. 10+00.00
BEGIN CONSTRUCTION
-Y4- STA. 26+98.00
REMOVE EXISTING
-L- POT Sta. 363+38.90=
-Y4- POC Sta. 27+95.56
-L- CS Sta. 354+10.43
-L- ST Sta. 356+10.43
BEGIN SBG
-L- 356+61
LATERAL 'V' DITCH
GRASS LINED
SEE DETAIL 'W'
CL 'B' RIP RAP
EST. 2 TONS
EST. 7 SY GEOTEXTILE
BEGIN SBG @
STA. 356+61 LT. -L-
CAT-1
GRADE MEDIAN DITCH
TO DRAIN AROUND ATTENUATOR
NOTE: NO DECK DRAINS
REQUIRED FOR THIS
STRUCTURE
N 6°49' 04.6" E
TYPE M-350
END SBG AT
APPROACH SLAB
CL 'B' RIP RAP
EST. 3 TONS
EST. 10 SY GEOTEXTILE
TOE PROTECTION
SEE DETAIL 'B'
BEGIN SBG AT
APPROACH SLAB
-DRV3- PT Sta. 10+84.81
LATERAL 'V' DITCH
GRASS LINED
SEE DETAIL 'X'
N 11° 04' 03.0" E
-BL- 38 PINC 75+82.31=
-BY4- PINC 23+96.96
TOE PROTECTION
SEE DETAIL 'CC'
2' LATERAL BASE DITCH
GRASS LINED
SEE DETAIL 'J'
CL 'B' RIP RAP
EST. 5 TONS
EST. 16 SY GEOTEXTILE
BEGIN SBG
-L- 356+12
END CONSTRUCTION
-Y4- STA. 28+90.00
PEACH ORCHARD
84 x 24 x 3
1.5 inch Skimmer
with 1.375 inch
Orifice Diameter
15 ft. weir
ID 8.1

CLEAN WATER DIVERSION

(Not to Scale)



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:
ALL EROSION CONTROL DEVICES SHOWN ARE LOCATED WITHIN EXISTING R/W OR EASEMENT.

NOTE:
ESTABLISH SUFFICIENT BUFFER FOR WATER COURSE.

SEE SHEET 34 FOR -L- PROFILE
SEE SHEET 51 FOR -Y4- PROFILE
SEE SHEET 51 FOR -DRV3- PROFILE
SEE SHEETS S-1 THRU S-? FOR STRUCTURE PLANS

REVISIONS

R/W REVISION 6-24-14 (DWG) - ADDED PUE TO PARCEL 54 (RICHARD H. PARKER, SR. ET UX) AT THE FOLLOWING LOCATIONS: -Y4- STA. 25+57.00 TO STA. 26+57.00 RT., -Y4- STA. 29+70.00 TO STA. 32+70.00 RT. AND -DRV3- STA. 10+30.00 TO STA. 16+50.72 LT. REVISED THE TCE FROM -DRV3- STA. 10+31.00 TO STA. 16+50.72 LT. ON PARCEL 54 (RICHARD H. PARKER, SR. ET UX).

8/17/99

PROJECT REFERENCE NO.	SHEET NO.
R-2514D	EC-9/CONST.9
R/W SHEET NO.	

ROADSIDE ENVIRONMENTAL PROJECT ENGINEER

LEVEL III CERTIFIED BY:
STACEY H. BAILEY, PE
CERTIFICATION NUMBER: 3074
ISSUED: FEBRUARY 02, 2015

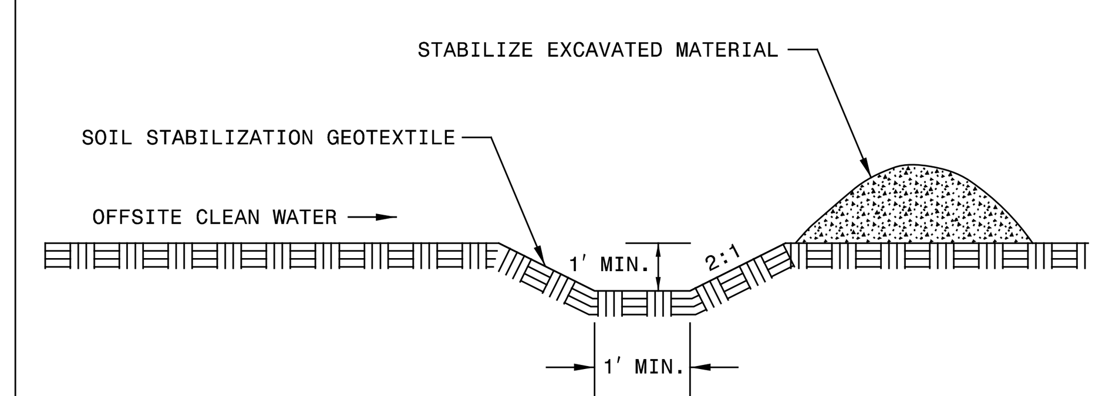
CLEARING AND GRUBBING
EROSION CONTROL FOR
CONSTRUCTION SHEET 9

ENVIRONMENTALLY SENSITIVE AREA
SEE PROJECT SPECIAL PROVISIONS

CLEAN WATER DIVERSION

→ → CWD → → CWD → → CWD → → CWD → → CWD → → CWD → →

(Not to Scale)



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

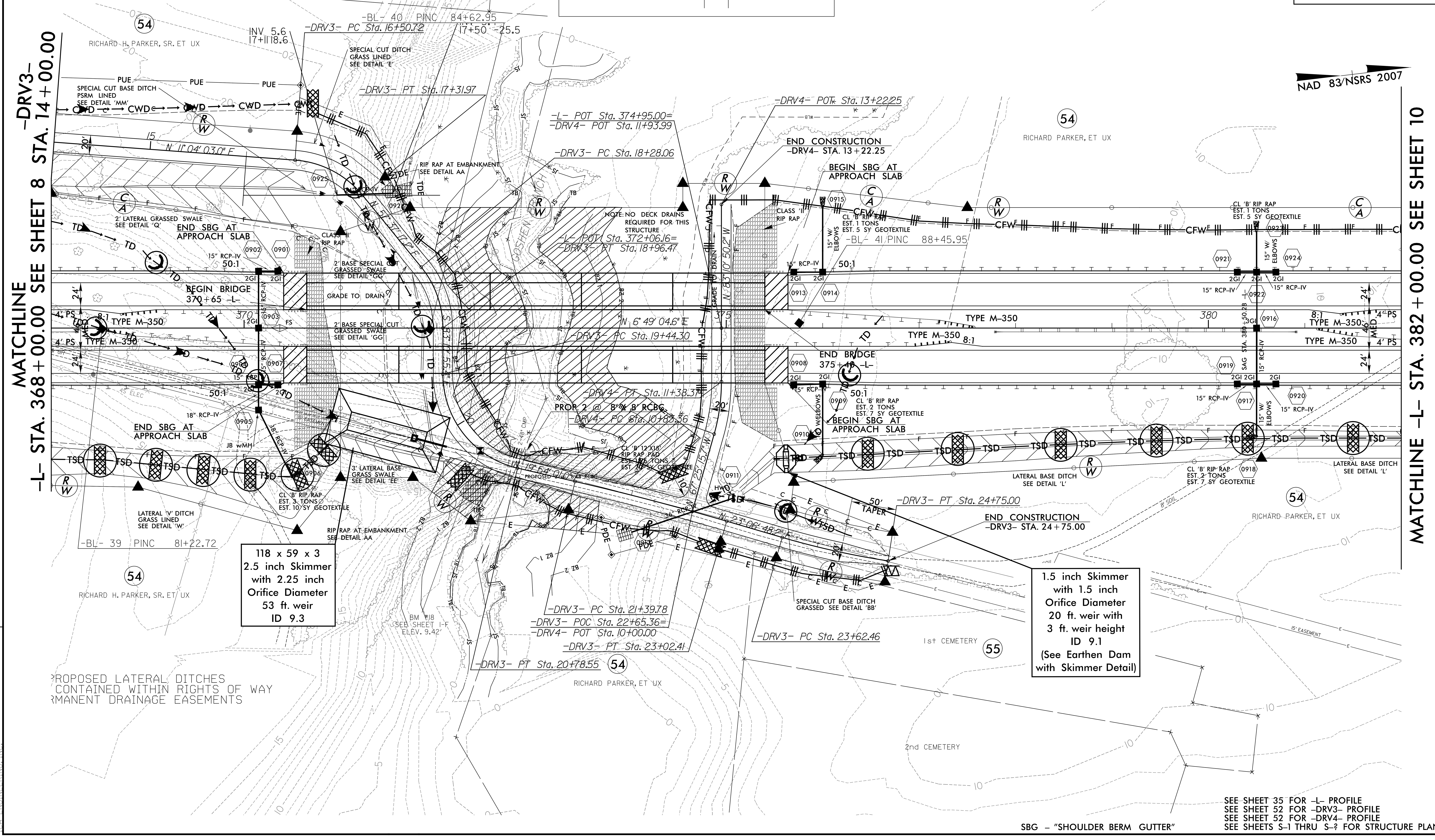
NOTE:
PERIMETER EROSION CONTROL MEASURES SHALL BE INSTALLED DURING CLEARING AND GRUBBING PHASE.

NOTE:
ALL EROSION CONTROL DEVICES SHOWN ARE LOCATED WITHIN EXISTING R/W OR EASEMENT.

NOTE:
ESTABLISH SUFFICIENT BUFFER FOR WATER COURSE.

REVISIONS

R/W REVISION 6-24-14 (DWG) – ADDED PUE TO PARCEL 54 (RICHARD H. PARKER, SR. ET UX) AT THE FOLLOWING LOCATIONS: -Y4- STA. 25+57.00 TO STA. 26+57.00 RT., -Y4- STA. 29+70.00 TO STA. 32+70.00 RT., AND -DRV3- STA. 10+30.00 TO STA. 16+50.72 LT. REVISED THE TCE FROM -DRV3- STA. 10+31.00 TO STA. 16+50.72 LT. ON PARCEL 54 (RICHARD H. PARKER, SR. ET UX).



MATCHLINE -L- STA. 368+00.00 SEE SHEET 8
-DRV3- STA. 14+00.00
MATCHLINE -L- STA. 382+00.00 SEE SHEET 10
NAD 83/NSRS 2007
AMERICAN LEGION POST NUMBER 64
RICHARD H. PARKER, SR. ET UX
RICHARD PARKER, ET UX
-BL- 40 PINC 84+62.95
-BL- 41 PINC 88+45.95
-BL- 39 PINC 81+22.72
INV 5.6
17+11 8.6
17+50 -25.5
-DRV3- PC Sta. 16+50.72
-DRV3- PT Sta. 17+31.97
SPECIAL CUT DITCH GRASS LINED SEE DETAIL 'E'
SPECIAL CUT BASE DITCH PSRM LINED SEE DETAIL 'MM'
-L- POT Sta. 374+95.00=
-DRV4- POT Sta. 11+93.99
-DRV4- POT Sta. 13+22.25
END CONSTRUCTION -DRV4- STA. 13+22.25
-DRV3- PC Sta. 18+28.06
RIP RAP AT EMBANKMENT SEE DETAIL AA
BEGIN SBG AT APPROACH SLAB
NOTE: NO DECK DRAINS REQUIRED FOR THIS STRUCTURE
-L- POT Sta. 372+06.16=
-DRV3- PT Sta. 18+96.47
2' LATERAL GRASSED SWALE SEE DETAIL 'Q'
END SBG AT APPROACH SLAB
CLASS 'II' RIP RAP
2' BASE SPECIAL CUT GRASSED SWALE SEE DETAIL 'GG'
BEGIN BRIDGE 370+65 -L-
GRADE TO DRAIN
TYPE M-350
-DRV3- PC Sta. 19+44.30
END BRIDGE 375+40 -L-
CL 'B' RIP RAP EST. 1 TONS EST. 5 SY GEOTEXTILE
CL 'B' RIP RAP EST. 2 TONS EST. 7 SY GEOTEXTILE
CL 'B' RIP RAP EST. 3 TONS EST. 10 SY GEOTEXTILE
-DRV4- PT Sta. 11+38.37
PROP. 2 @ 8' X 8' RCBC
-DRV4- PC Sta. 10+83.36
END SBG AT APPROACH SLAB
BEGIN SBG AT APPROACH SLAB
3' LATERAL BASE GRASS SWALE SEE DETAIL 'EE'
LATERAL BASE DITCH SEE DETAIL 'L'
LATERAL 'V' DITCH GRASS LINED SEE DETAIL 'W'
RIP RAP AT EMBANKMENT SEE DETAIL AA
50' TAPER
-DRV3- PT Sta. 24+75.00
END CONSTRUCTION -DRV3- STA. 24+75.00
118 x 59 x 3
2.5 inch Skimmer
with 2.25 inch
Orifice Diameter
53 ft. weir
ID 9.3
1.5 inch Skimmer
with 1.5 inch
Orifice Diameter
20 ft. weir with
3 ft. weir height
ID 9.1
(See Earthen Dam
with Skimmer Detail)
BM #18 SEE SHEET 1-F ELEV. 9.42'
-DRV3- PC Sta. 21+39.78
-DRV3- POC Sta. 22+65.36=
-DRV4- POT Sta. 10+00.00
-DRV3- PT Sta. 23+02.41
-DRV3- PT Sta. 20+78.55
-DRV3- PC Sta. 23+62.46
SPECIAL CUT BASE DITCH GRASSED SEE DETAIL 'BB'
1st CEMETERY
2nd CEMETERY
PROPOSED LATERAL DITCHES CONTAINED WITHIN RIGHTS OF WAY PERMANENT DRAINAGE EASEMENTS

SBG – "SHOULDER BERM GUTTER"

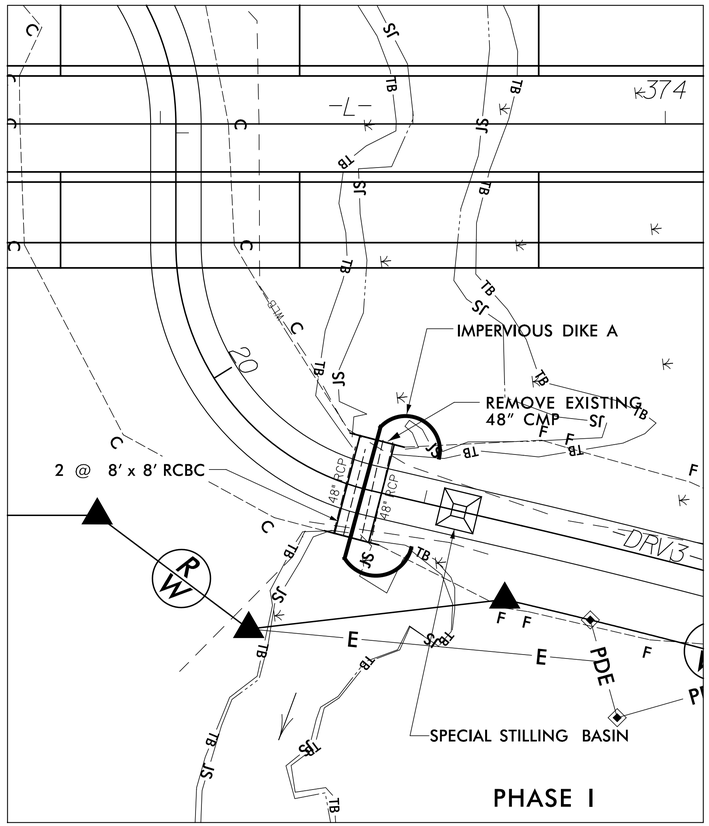
SEE SHEET 35 FOR -L- PROFILE
SEE SHEET 52 FOR -DRV3- PROFILE
SEE SHEET 52 FOR -DRV4- PROFILE
SEE SHEETS S-1 THRU S-? FOR STRUCTURE PLANS

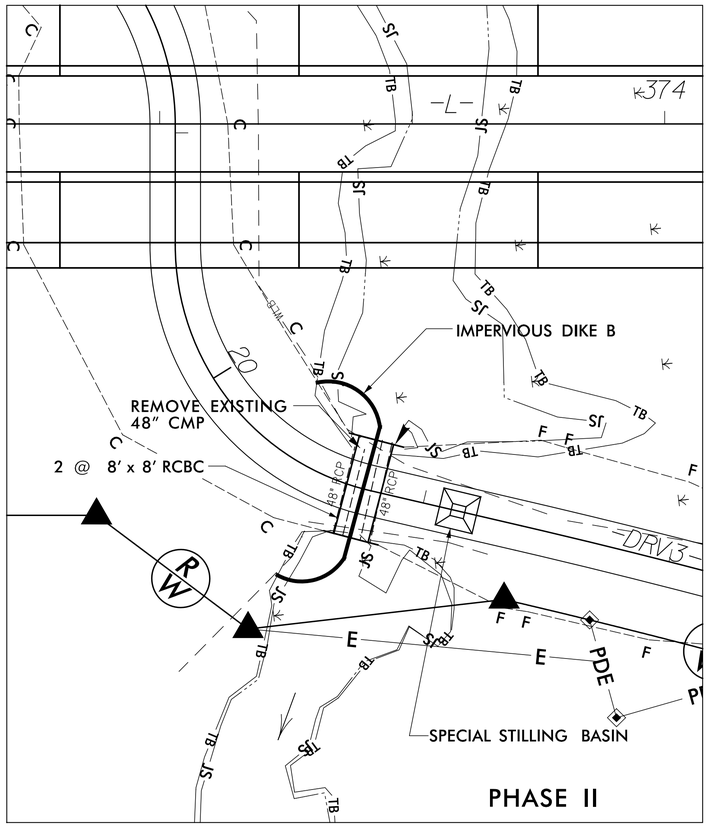
PROJECT REFERENCE NO.	SHEET NO.
R-2514D	EC-9A/CONST.9
R/W SHEET NO.	
ROADSIDE ENVIRONMENTAL PROJECT ENGINEER	

LEVEL III CERTIFIED BY:
STACEY H. BAILEY, PE
CERTIFICATION NUMBER: 3074
ISSUED: FEBRUARY 02, 2015

CULVERT CONSTRUCTION SEQUENCE STA. 20+75 –DRV3–

NAD 83/NSRS 2007





NOTES

1. CULVERT CONSTRUCTION SHALL BE PERFORMED IN ONLY DRY OR ISOLATED SECTIONS OF CHANNEL.
2. IMPERVIOUS DIKES ARE TO BE USED TO ISOLATE WORK FROM STREAM FLOW AS NECESSARY.
3. ALL GRADED AREAS SHALL BE STABILIZED WITHIN 24 HOURS.
4. MAINTENANCE OF STREAM FLOW OPERATIONS SHALL BE INCIDENTAL TO THE WORK. THIS INCLUDES POLYETHYLENE SHEETING, DIVERSION PIPES, PUMPS AND HOSES.
5. PUMPS AND HOSES SHALL BE SUFFICIENT SIZE TO DEWATER THE WORK AREA.
6. THE CONTRACTOR SHALL NOT PUMP SEDIMENT-LADEN WATER DIRECTLY INTO STREAM. FOR DEWATERING OF CULVERT SITES, THE CONTRACTOR SHALL FILTER SEDIMENT-LADEN WATER THROUGH STILLING BASIN AND/OR SPECIAL STILLING BASIN.

CONSTRUCTION SEQUENCE

1. PHASE 1: INSTALL IMPERVIOUS DIKE 'A' (130 LF) AS SHOWN. REMOVE NORTHERNMOST 48" CMP. MAINTAIN CHANNEL FLOW THROUGH REMAINING 48" CMP.
2. CONSTRUCT SPECIAL STILLING BASIN AT LOCATION SHOWN.
3. CONSTRUCT NORTHERNMOST BARREL OF 2 @ 8' x 8' RCBC PER PLANS AND SPECIFICATIONS.
4. PHASE 2: REMOVE IMPERVIOUS DIKE 'A' AND INSTALL IMPERVIOUS DIKE 'B' (140 LF) TO DIVERT FLOW THROUGH THE NEWLY CONSTRUCTED NORTHERNMOST CULVERT BARREL.
5. REMOVE THE SOUTHERNMOST 48" CMP. CONSTRUCT REMAINING BARREL OF 2 @ 8' x 8' RCBC PER PLANS AND SPECIFICATIONS.
6. REMOVE IMPERVIOUS DIKE 'B' AND SPECIAL STILLING BASIN.
7. CONSTRUCT PROPOSED ROADWAY.

30 0
15 30
SCALE: 1"= 30'

REVISIONS
8/17/99

$$$$$$$SYSTIME$$$$$$
P:\Hydraulics\Erosion Control\CADD\R2514D_hyd_const_seq_psh9A.dgn
TGA ENGINEERING INC.

PROJECT REFERENCE NO.	SHEET NO.
R-2514D	EC-10/CONST.10
R/W SHEET NO.	
ROADSIDE ENVIRONMENTAL PROJECT ENGINEER	

LEVEL III CERTIFIED BY:
STACEY H. BAILEY, PE
CERTIFICATION NUMBER: 3074
ISSUED: FEBRUARY 02, 2015

CLEARING AND GRUBBING
EROSION CONTROL FOR
CONSTRUCTION SHEET 10

NAD 83/NSRS 2007

MATCHLINE –L– STA. 382+00.00 SEE SHEET 9

MATCHLINE –L– STA. 396+00.00 SEE SHEET 11

REVISIONS

8/17/99

54 RICHARD PARKER, ET UX

56 THOMAS B. MOORE, ET AL

-BL- 44 PINC 101+83.44

-BL- 43 PINC 100+31.19

-BL- 42 PINC 98+42.77

-BL- 46 PINC 108+21.00

-BL- 45 PINC 104+91.52

END SBG AT APPROACH SLAB

BEGIN SBG AT APPROACH SLAB

CL 'B' RIP RAP
EST. 1 TONS
EST. 5 SY GEOTEXTILE

CL 'B' RIP RAP
EST. 2 TONS
EST. 7 SY GEOTEXTILE

CLASS 'II' RIP RAP

LATERAL BASE DITCH
SEE DETAIL 'L'

BEGIN BRIDGE
383+30 –L–

END BRIDGE
395+65 –L–

NO FENCE

TRENT RIVER

JOHN H. DAVIS, JR.

BM #19
SEE SHEET 1-F
ELEV. 13.46'

BM #20
SEE SHEET 1-F
ELEV. 3.92'

NOTE: STANDARD DECK DRAINS:
FROM STA. 383+35 TO STA. 388+50 RT
FROM STA. 383+35 TO STA. 388+50 LT.

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:
ALL EROSION CONTROL DEVICES SHOWN ARE LOCATED WITHIN EXISTING R/W OR EASEMENT.

NOTE:
ESTABLISH SUFFICIENT BUFFER FOR WATER COURSE.

ENVIRONMENTALLY SENSITIVE AREA
SEE PROJECT SPECIAL PROVISIONS

SBG – "SHOULDER BERM GUTTER"

SEE SHEET 35 FOR –L– PROFILE
SEE SHEETS S-1 THRU S-? FOR STRUCTURE PLANS

$$$$$SYSTIME$$$$$
$$$$$USERNAME$$$$$
DGN: Erosion Control\CADD\R2514D_hydl_e&g_psh_10.dgn
DCA ENGINEERING, INC.

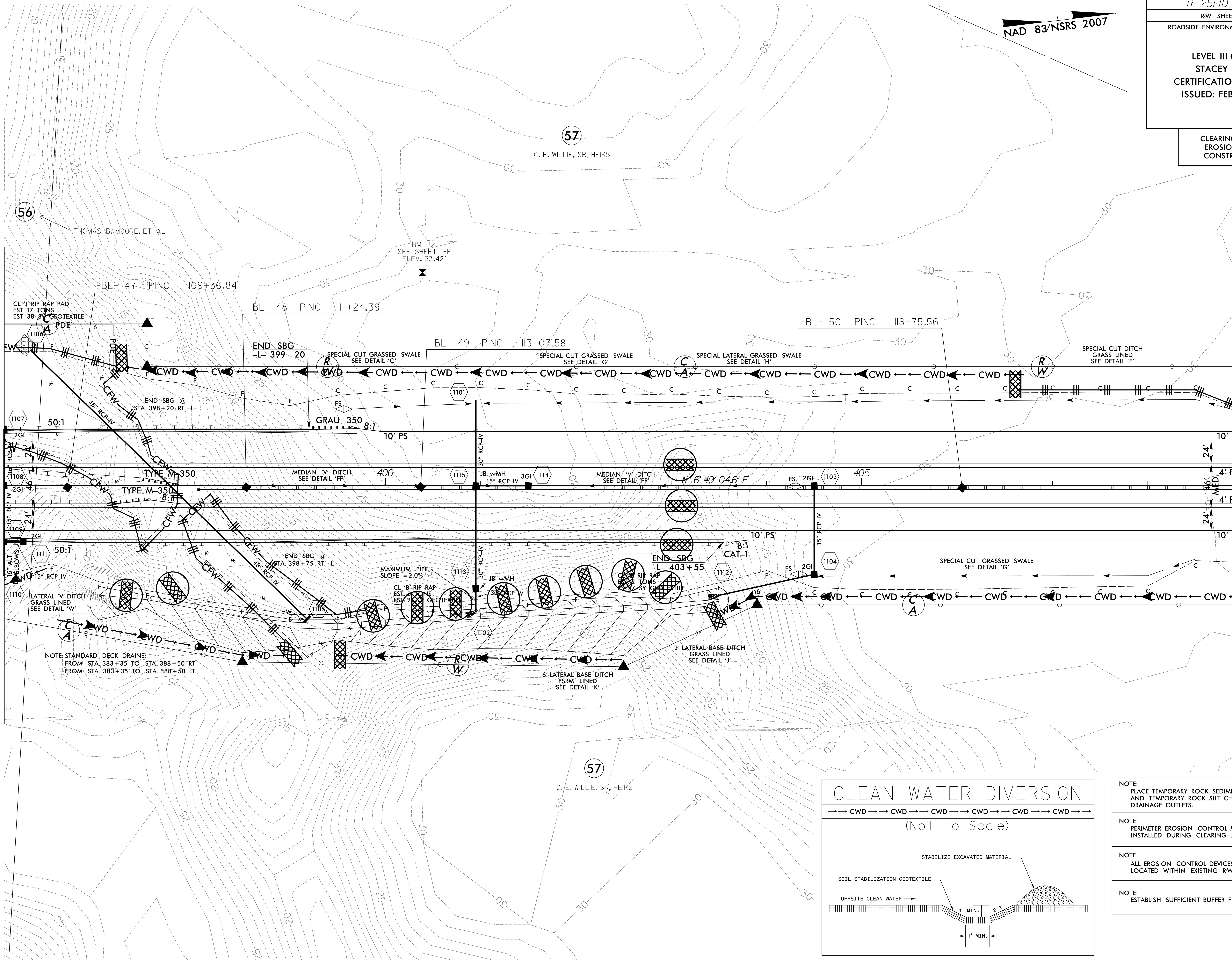
PROJECT REFERENCE NO.	SHEET NO.
R-2514D	EC-11/CONST11
R/W SHEET NO.	

ROADSIDE ENVIRONMENTAL PROJECT ENGINEER

LEVEL III CERTIFIED BY:
STACEY H. BAILEY, PE
CERTIFICATION NUMBER: 3074
ISSUED: FEBRUARY 02, 2015

CLEARING AND GRUBBING
EROSION CONTROL FOR
CONSTRUCTION SHEET 11

REVISIONS



NAD 83/NSRS 2007
MATCHLINE –L– STA. 396+00.00 SEE SHEET 10
MATCHLINE –L– STA. 409+00.00 SEE SHEET 12
57
C. E. WILLIE, SR. HEIRS
56
THOMAS B. MOORE, ET AL
BM #21
SEE SHEET 1-F
ELEV. 33.42'
-BL- 47 PINC 109+36.84
-BL- 48 PINC 111+24.39
-BL- 49 PINC 113+07.58
-BL- 50 PINC 118+75.56
CL 'I' RIP RAP PAD
EST. 17 TONS
EST. 38 SY GEOTEXTILE
END SBG
-L- 399+20
END SBG @
STA. 398+20 RT -L-
SPECIAL CUT GRASSED SWALE
SEE DETAIL 'G'
SPECIAL LATERAL GRASSED SWALE
SEE DETAIL 'H'
SPECIAL CUT DITCH
GRASS LINED
SEE DETAIL 'E'
GRAU 350
10' PS
TYPE M-350
MEDIAN 'V' DITCH
SEE DETAIL 'FF'
N 6° 49' 04.6" E
END SBG @
STA. 398+75 RT. -L-
MAXIMUM PIPE
SLOPE = 2.0%
CL 'B' RIP RAP
END SBG
-L- 403+55
CAT-1
LATERAL 'V' DITCH
GRASS LINED
SEE DETAIL 'W'
NOTE: STANDARD DECK DRAINS:
FROM STA. 383+35 TO STA. 388+50 RT
FROM STA. 383+35 TO STA. 388+50 LT.
6' LATERAL BASE DITCH
PSRM LINED
SEE DETAIL 'K'
2' LATERAL BASE DITCH
GRASS LINED
SEE DETAIL 'J'
CLEAN WATER DIVERSION
(Not to Scale)
STABILIZE EXCAVATED MATERIAL
SOIL STABILIZATION GEOTEXTILE
OFFSITE CLEAN WATER
1' MIN.

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

NOTE:
ESTABLISH SUFFICIENT BUFFER FOR WATER COURSE.

SBG – "SHOULDER BERM GUTTER"

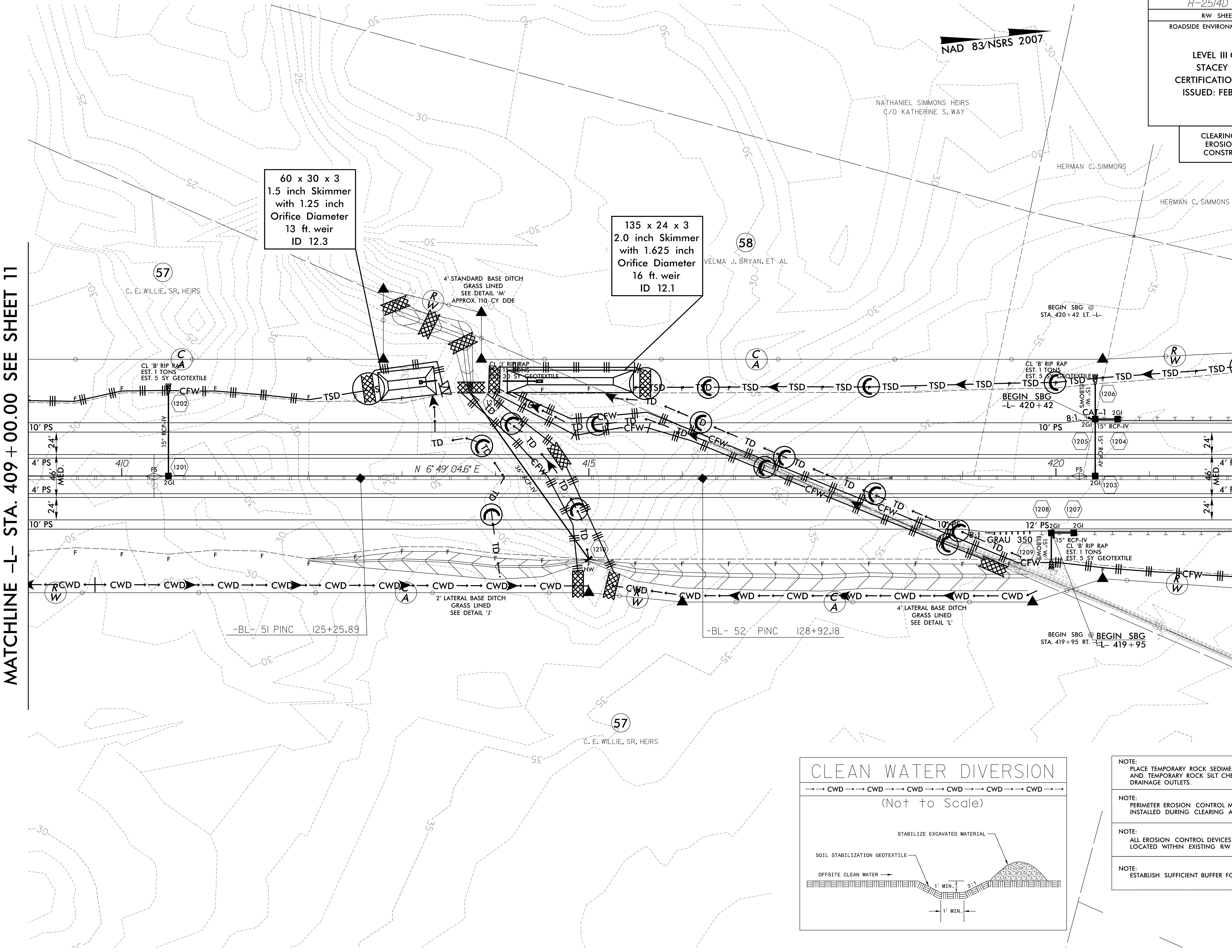
SEE SHEET 36 FOR –L– PROFILE
SEE SHEETS S-1 THRU S-? FOR STRUCTURE PLANS

PROJECT REFERENCE NO.	SHEET NO.
R-2514D	EC-12/CONST12
R/W SHEET NO.	

ROADSIDE ENVIRONMENTAL PROJECT ENGINEER

LEVEL III CERTIFIED BY:
STACEY H. BAILEY, PE
CERTIFICATION NUMBER: 3074
ISSUED: FEBRUARY 02, 2015

CLEARING AND GRUBBING
EROSION CONTROL FOR
CONSTRUCTION SHEET 12



NAD 83/NSRS 2007
NATHANIEL SIMMONS HEIRS
C/O KATHERINE S. WAY
HERMAN C. SIMMONS
HERMAN C. SIMMONS
60 x 30 x 3
1.5 inch Skimmer
with 1.25 inch
Orifice Diameter
13 ft. weir
ID 12.3
135 x 24 x 3
2.0 inch Skimmer
with 1.625 inch
Orifice Diameter
16 ft. weir
ID 12.1
58
VELMA J. BRYAN, ET AL
57
C. E. WILLIE, SR. HEIRS
4' STANDARD BASE DITCH
GRASS LINED
SEE DETAIL 'M'
APPROX. 110 CY DDE
BEGIN SBG @
STA. 420+42 LT. -L-
CL 'B' RIP RAP
EST. 1 TONS
EST. 5 SY GEOTEXTILE
BEGIN SBG
-L- 420+42
MATCHLINE -L- STA. 409+00.00 SEE SHEET 11
MATCHLINE -L- STA. 422+00.00 SEE SHEET 13
N 6° 49' 04.6" E
410
415
420
10' PS
4' PS
24'
46' MED.
12' PS
GRAU 350
15" RCP-IV
2' LATERAL BASE DITCH
GRASS LINED
SEE DETAIL 'J'
4' LATERAL BASE DITCH
GRASS LINED
SEE DETAIL 'L'
-BL- 51 PINC 125+25.89
-BL- 52 PINC 128+92.18
BEGIN SBG @
STA. 419+95 RT. -L-
BEGIN SBG
-L- 419+95
57
C. E. WILLIE, SR. HEIRS
CLEAN WATER DIVERSION
(Not to Scale)
STABILIZE EXCAVATED MATERIAL
SOIL STABILIZATION GEOTEXTILE
OFFSITE CLEAN WATER
1' MIN.
2:1
1' MIN.

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:
ALL EROSION CONTROL DEVICES SHOWN ARE LOCATED WITHIN EXISTING R/W OR EASEMENT.

NOTE:
ESTABLISH SUFFICIENT BUFFER FOR WATER COURSE.

SEE SHEET 36 FOR -L- PROFILE

REVISIONS

8/17/99

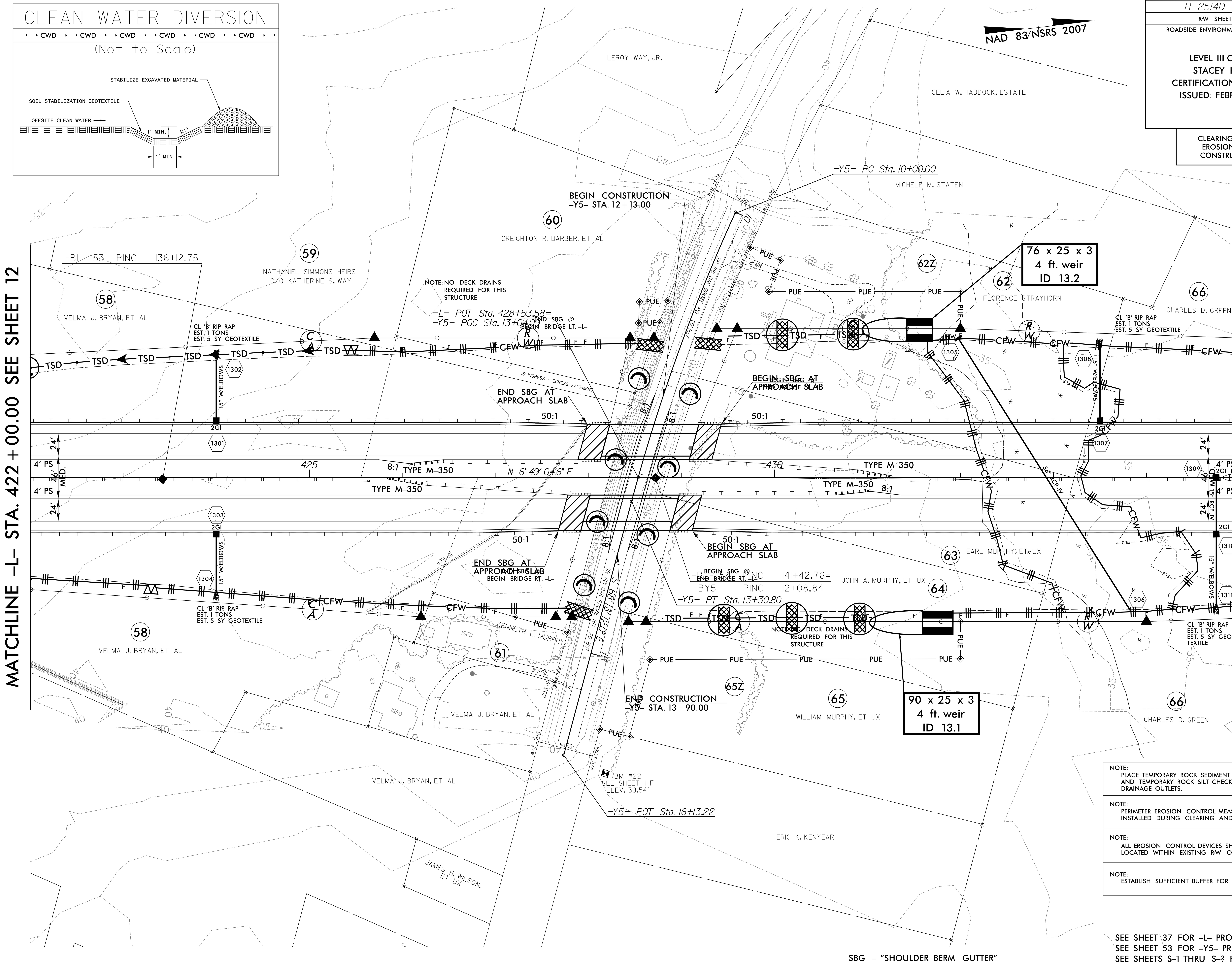
8/17/99

REVISIONS
R/W REVISION 7-23-14 (DWG) - ADDED A SECOND CLAIM OF PUE ON PARCEL 62Z (FLORENCE STRAYHORN) AND PARCEL 65Z (WILLIAM MURPHY, ET UX).

PROJECT REFERENCE NO.	SHEET NO.
R-2514D	EC-13/CONSTJ3
R/W SHEET NO.	
ROADSIDE ENVIRONMENTAL PROJECT ENGINEER	

LEVEL III CERTIFIED BY:
STACEY H. BAILEY, PE
CERTIFICATION NUMBER: 3074
ISSUED: FEBRUARY 02, 2015

CLEARING AND GRUBBING
EROSION CONTROL FOR
CONSTRUCTION SHEET 13


CLEAN WATER DIVERSION
CWD
(Not to Scale)
STABILIZE EXCAVATED MATERIAL
SOIL STABILIZATION GEOTEXTILE
OFFSITE CLEAN WATER
1' MIN.
2:1
NAD 83/NSRS 2007
MATCHLINE -L- STA. 422+00.00 SEE SHEET 12
MATCHLINE -L- STA. 435+00.00 SEE SHEET 14
BEGIN CONSTRUCTION -Y5- STA. 12+13.00
END CONSTRUCTION -Y5- STA. 13+90.00
-Y5- PC Sta. 10+00.00
-Y5- PT Sta. 13+30.80
-Y5- POT Sta. 16+13.22
-L- POT Sta. 428+53.58= -Y5- POC Sta. 13+04.00
-BL-53 PINC 136+12.75
-BY5- PINC 12+08.84
NOTE: NO DECK DRAINS REQUIRED FOR THIS STRUCTURE
76 x 25 x 3 4 ft. weir ID 13.2
90 x 25 x 3 4 ft. weir ID 13.1
CL 'B' RIP RAP EST. 1 TONS EST. 5 SY GEOTEXTILE
END SBG AT APPROACH SLAB
BEGIN SBG AT APPROACH SLAB
TYPE M-350
N 6° 49' 04.6" E
BM #22 SEE SHEET 1-F ELEV. 39.54'
LEROY WAY, JR.
CELIA W. HADDOCK, ESTATE
MICHELE M. STATEN
CREIGHTON R. BARBER, ET AL
NATHANIEL SIMMONS HEIRS C/O KATHERINE S. WAY
VELMA J. BRYAN, ET AL
FLORENCE STRAYHORN
CHARLES D. GREEN
EARL MURPHY, ET UX
JOHN A. MURPHY, ET UX
KENNETH L. MURPHY
WILLIAM MURPHY, ET UX
ERIC K. KENYEAR
JAMES H. WILSON, ET UX

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

NOTE:
ESTABLISH SUFFICIENT BUFFER FOR WATER COURSE.

SBG - "SHOULDER BERM GUTTER"

SEE SHEET 37 FOR -L- PROFILE
SEE SHEET 53 FOR -Y5- PROFILE
SEE SHEETS S-1 THRU S-? FOR STRUCTURE PLANS

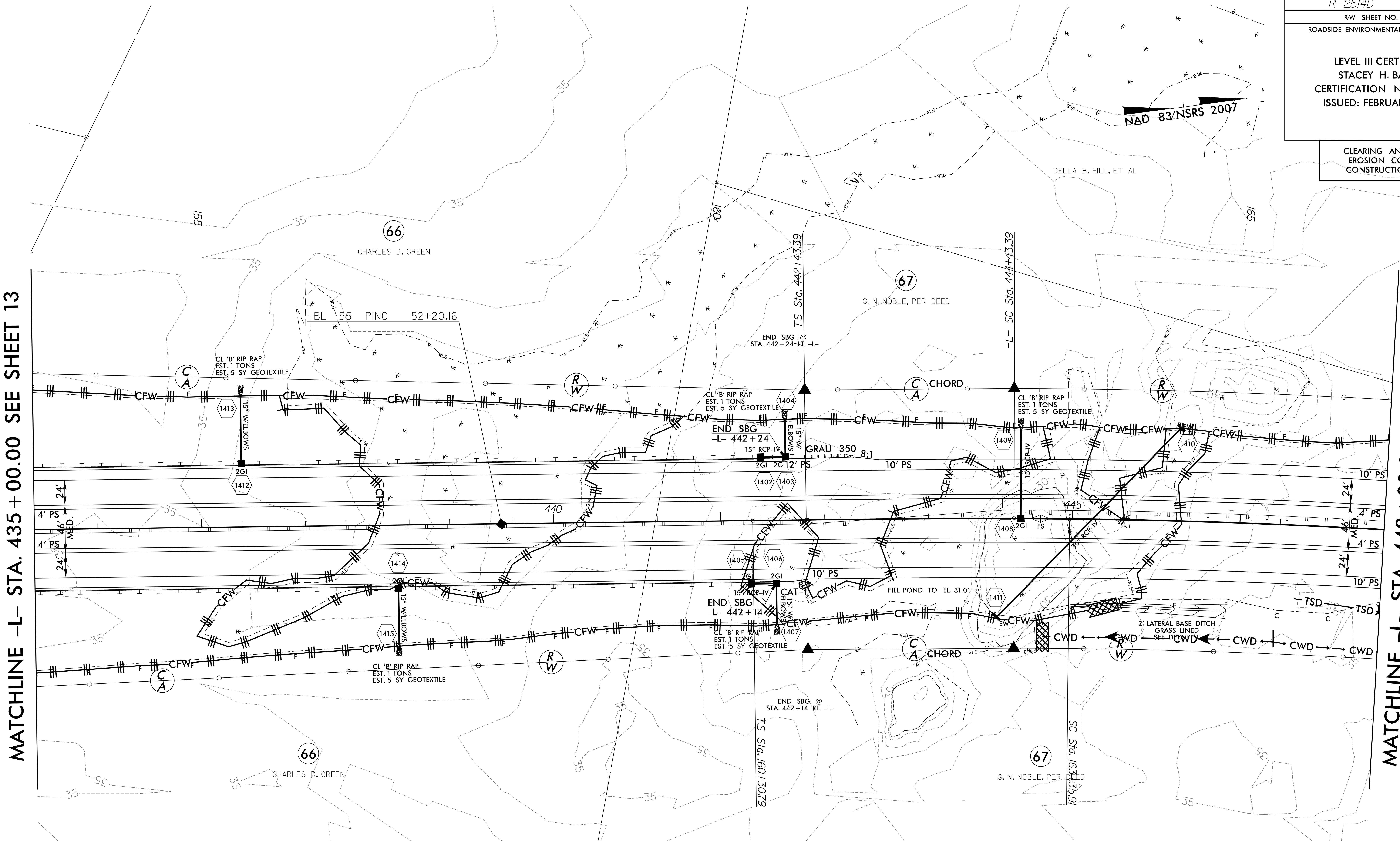
$$$$$$SYSTIME$$$$$
R:\Hydraulics\Erosion Control\CADD\R2514D_hyd_c&g_psh_13.dgn

PROJECT REFERENCE NO.	SHEET NO.
R-2514D	EC-14/CONSTJ4
R/W SHEET NO.	

ROADSIDE ENVIRONMENTAL PROJECT ENGINEER

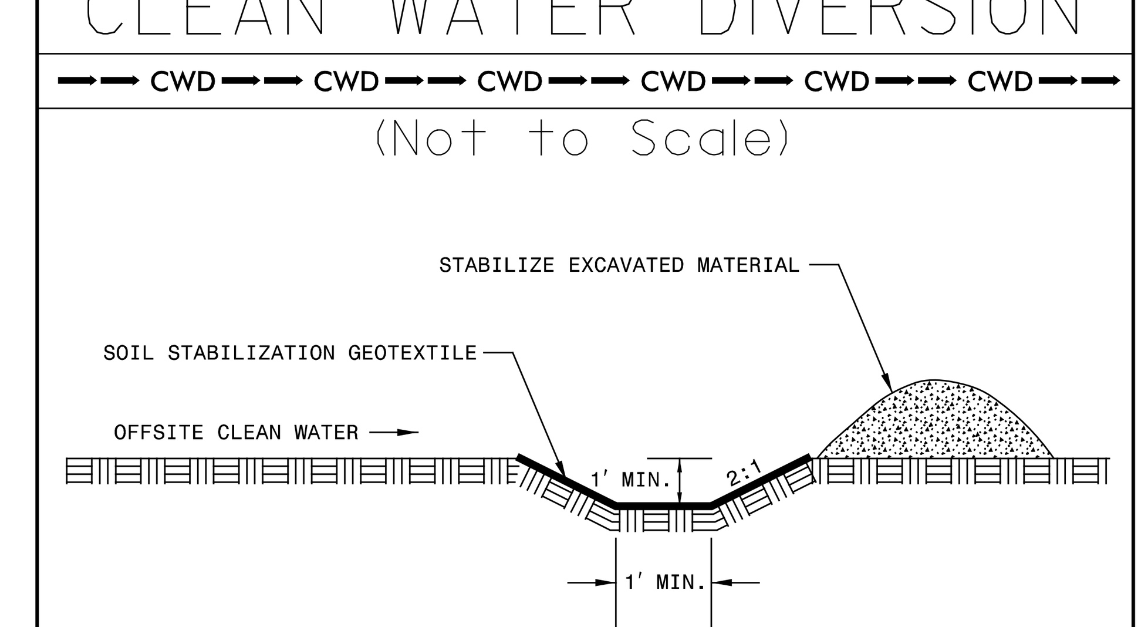
LEVEL III CERTIFIED BY:
STACEY H. BAILEY, PE
CERTIFICATION NUMBER: 3074
ISSUED: FEBRUARY 02, 2015

CLEARING AND GRUBBING
EROSION CONTROL FOR
CONSTRUCTION SHEET 14



CLEAN WATER DIVERSION

(Not to Scale)



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:
ALL EROSION CONTROL DEVICES SHOWN ARE LOCATED WITHIN EXISTING R/W OR EASEMENT.

NOTE:
ESTABLISH SUFFICIENT BUFFER FOR WATER COURSE.

SBG - "SHOULDER BERM GUTTER"

SEE SHEET 37 FOR -L- PROFILE

REVISIONS

8/17/99

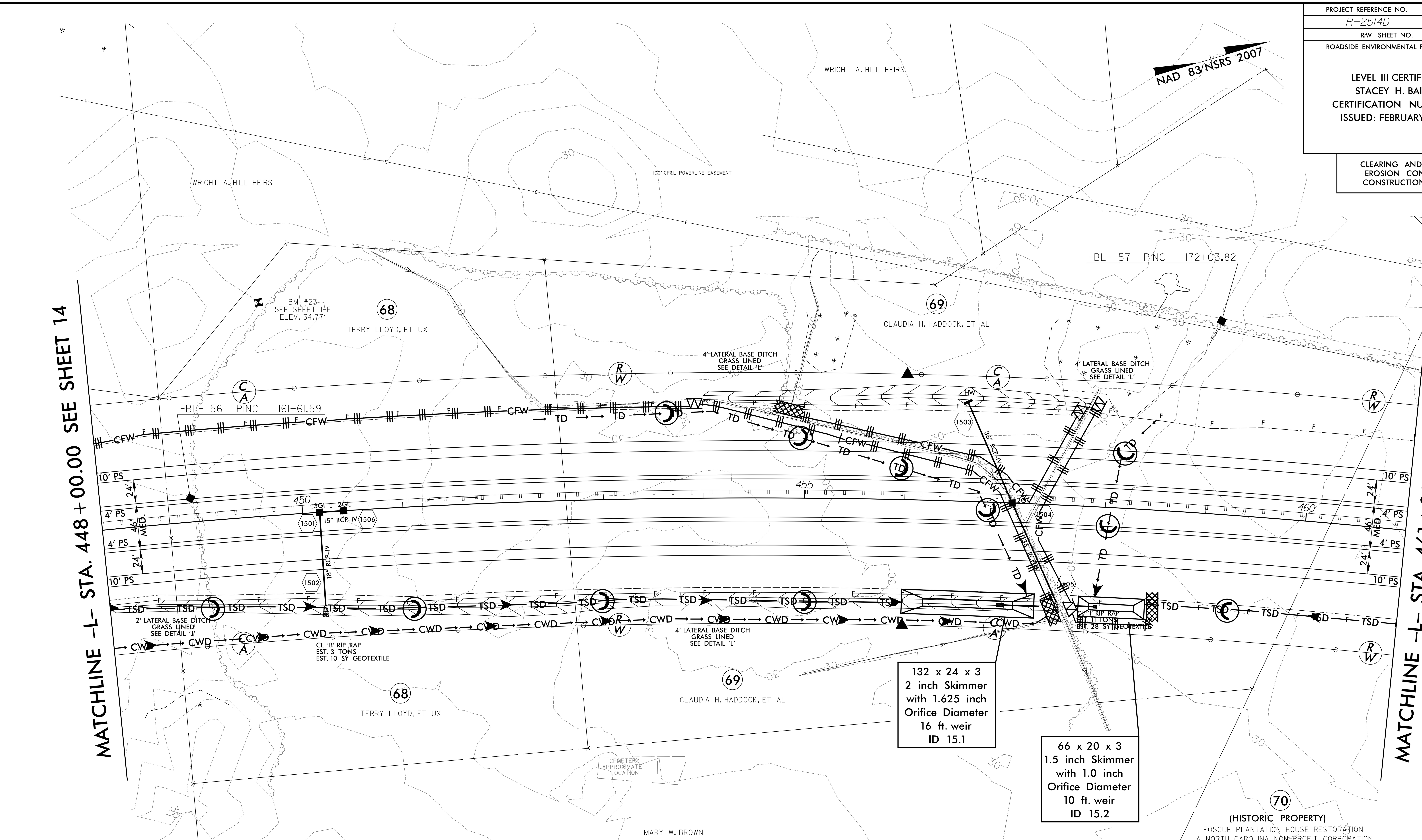
$$$$$$SYSTIME$$$$ R:\Hydraulics\Erosion Control\CADD\R2514D_hyd_c&g_psh_14.dgn

PROJECT REFERENCE NO.	SHEET NO.
R-2514D	EC-15/CONSTJ5
R/W SHEET NO.	

ROADSIDE ENVIRONMENTAL PROJECT ENGINEER

LEVEL III CERTIFIED BY:
STACEY H. BAILEY, PE
CERTIFICATION NUMBER: 3074
ISSUED: FEBRUARY 02, 2015

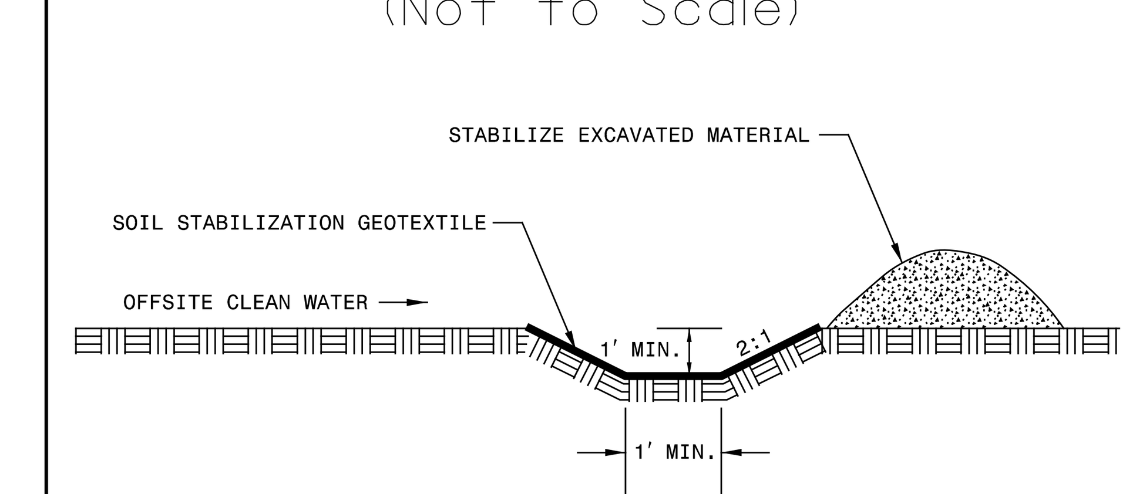
CLEARING AND GRUBBING EROSION CONTROL FOR CONSTRUCTION SHEET 15



NAD 83/NSRS 2007
WRIGHT A. HILL HEIRS
WRIGHT A. HILL HEIRS
100' CP&L POWERLINE EASEMENT
BM #23
SEE SHEET 1-F
ELEV. 34.77'
68
TERRY LLOYD, ET UX
69
CLAUDIA H. HADDOCK, ET AL
-BL- 56 PINC 161+61.59
-BL- 57 PINC 172+03.82
4' LATERAL BASE DITCH
GRASS LINED
SEE DETAIL 'L'
2' LATERAL BASE DITCH
GRASS LINED
SEE DETAIL 'J'
CL 'B' RIP RAP
EST. 3 TONS
EST. 10 SY GEOTEXTILE
MATCHLINE -L- STA. 448+00.00 SEE SHEET 14
MATCHLINE -L- STA. 461+00.00 SEE SHEET 16
10' PS
4' PS
24'
46' MED.
450
455
460
15" RCP-IV
18" RCP-IV
36" RCP-IV
CFW
TD
TSD
CWD
132 x 24 x 3
2 inch Skimmer
with 1.625 inch
Orifice Diameter
16 ft. weir
ID 15.1
66 x 20 x 3
1.5 inch Skimmer
with 1.0 inch
Orifice Diameter
10 ft. weir
ID 15.2
CEMETERY APPROXIMATE LOCATION
MARY W. BROWN
LUCY HILL
70
(HISTORIC PROPERTY)
FOSCUE PLANTATION HOUSE RESTORATION
A NORTH CAROLINA NON-PROFIT CORPORATION

CLEAN WATER DIVERSION

(Not to Scale)



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:
ALL EROSION CONTROL DEVICES SHOWN ARE LOCATED WITHIN EXISTING R/W OR EASEMENT.

NOTE:
ESTABLISH SUFFICIENT BUFFER FOR WATER COURSE.

SEE SHEET FOR 38 -L- PROFILE

REVISIONS

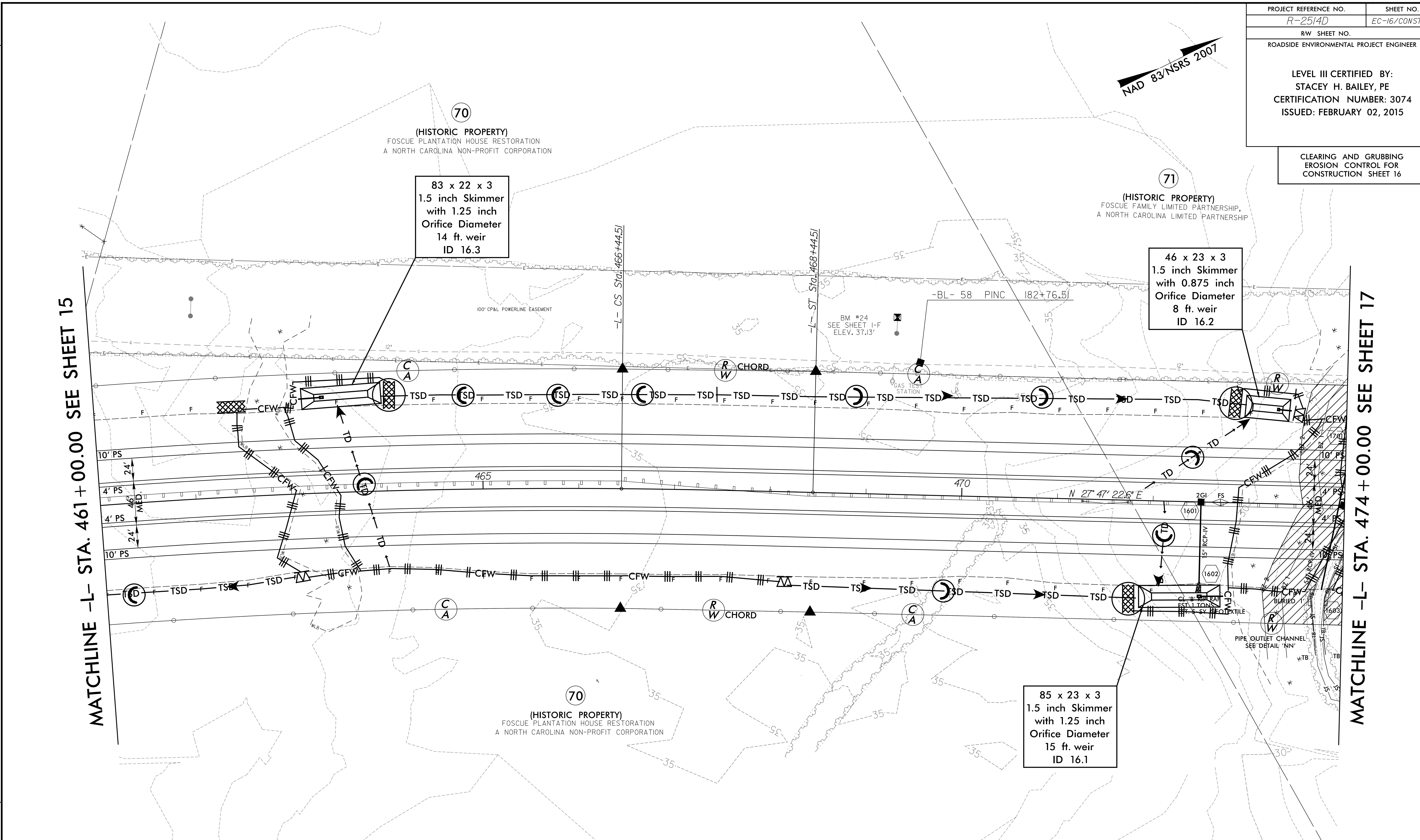
8/17/99

PROJECT REFERENCE NO.	SHEET NO.
R-2514D	EC-16/CONST16
R/W SHEET NO.	

ROADSIDE ENVIRONMENTAL PROJECT ENGINEER

LEVEL III CERTIFIED BY:
STACEY H. BAILEY, PE
CERTIFICATION NUMBER: 3074
ISSUED: FEBRUARY 02, 2015

CLEARING AND GRUBBING
EROSION CONTROL FOR
CONSTRUCTION SHEET 16



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:
ALL EROSION CONTROL DEVICES SHOWN ARE LOCATED WITHIN EXISTING R/W OR EASEMENT.

NOTE:
ESTABLISH SUFFICIENT BUFFER FOR WATER COURSE.

ENVIRONMENTALLY SENSITIVE AREA
SEE PROJECT SPECIAL PROVISIONS

SEE SHEET 38 FOR -L- PROFILE

REVISIONS

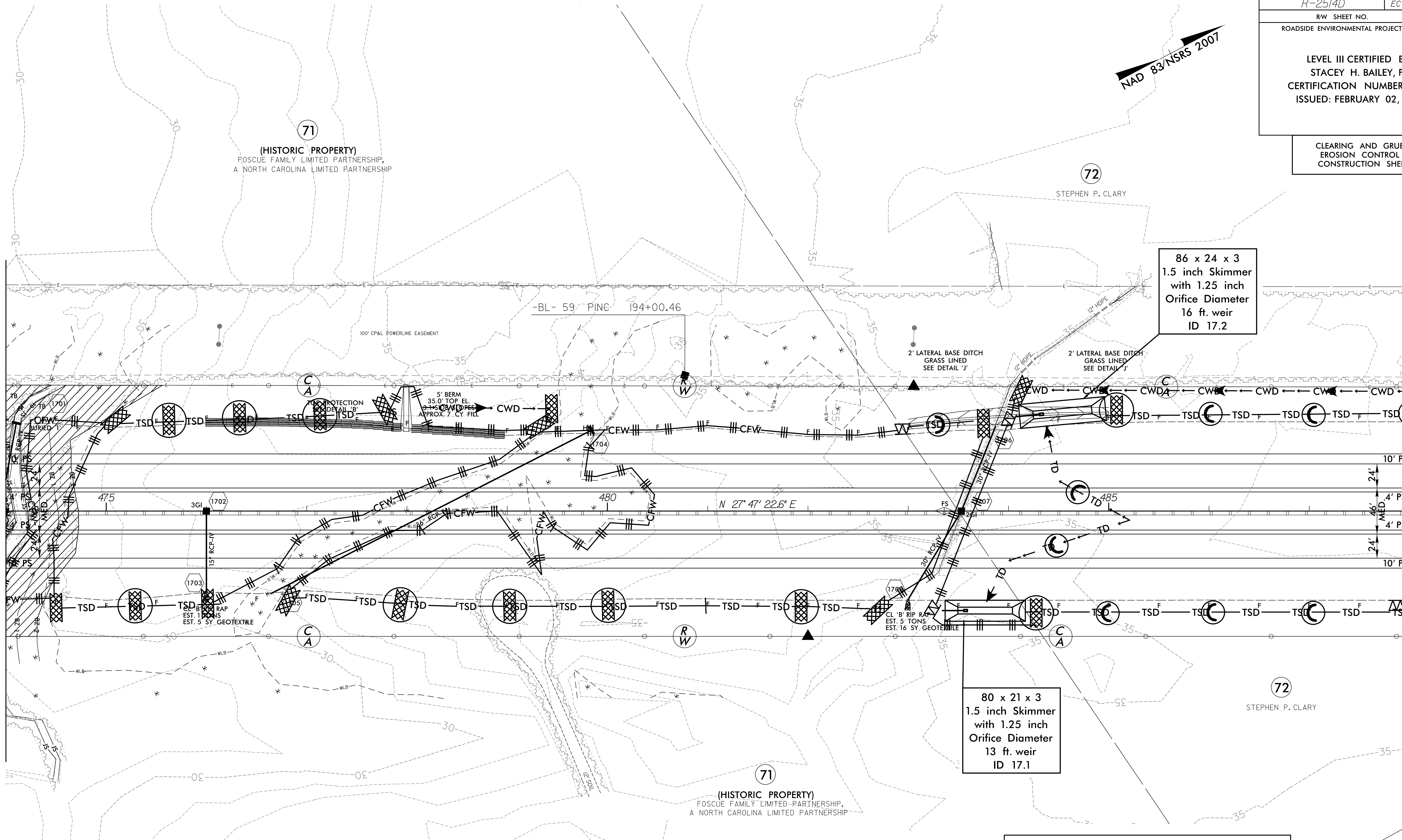
8/17/99

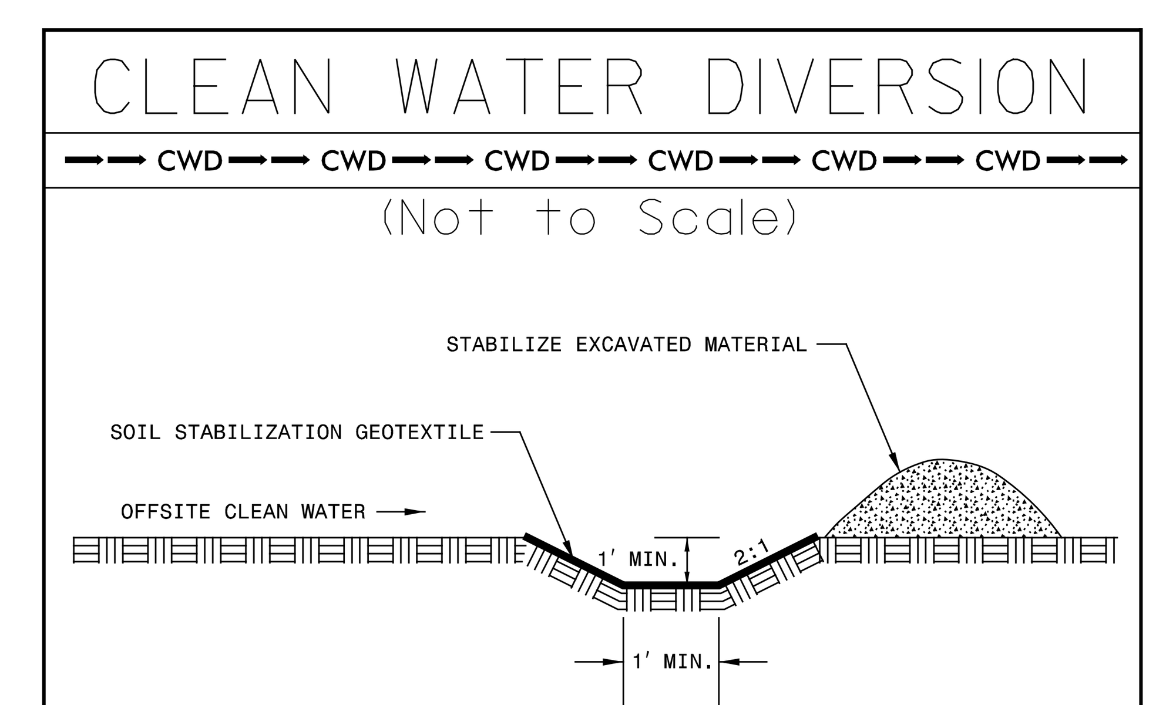
$$$$$$SYSTIME$$$$$
R:\Hydraulics\Erosion Control\CADD\R2514D_hyd_c&g_psh_16.dgn

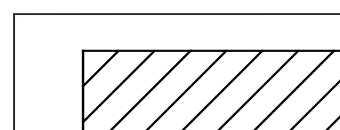
ROADSIDE ENVIRONMENTAL PROJECT ENGINEER

LEVEL III CERTIFIED BY:
STACEY H. BAILEY, PE
CERTIFICATION NUMBER: 3074
ISSUED: FEBRUARY 02, 2015

CLEARING AND GRUBBING
EROSION CONTROL FOR
CONSTRUCTION SHEET 17







ENVIRONMENTALLY SENSITIVE AREA
SEE PROJECT SPECIAL PROVISIONS

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

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

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

NOTE:
ESTABLISH SUFFICIENT BUFFER FOR WATER COURSE.

SEE SHEET 39 FOR -L- PROFILE

REVISIONS

8/17/99
$$$$$$SYSTIME$$$$$
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PROJECT REFERENCE NO.	SHEET NO.
R-2514D	EC-18/CONST.18
R/W SHEET NO.	

ROADSIDE ENVIRONMENTAL PROJECT ENGINEER

LEVEL III CERTIFIED BY:
STACEY H. BAILEY, PE
CERTIFICATION NUMBER: 3074
ISSUED: FEBRUARY 02, 2015

CLEARING AND GRUBBING
EROSION CONTROL FOR
CONSTRUCTION SHEET 18

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:
ALL EROSION CONTROL DEVICES SHOWN ARE LOCATED WITHIN EXISTING R/W OR EASEMENT.

NOTE:
ESTABLISH SUFFICIENT BUFFER FOR WATER COURSE.

CLEAN WATER DIVERSION

→ → CWD → → CWD → → CWD → → CWD → → CWD → → CWD → →

(Not to Scale)

SEE SHEET 39 FOR -L- PROFILE

REVISIONS

8/17/99

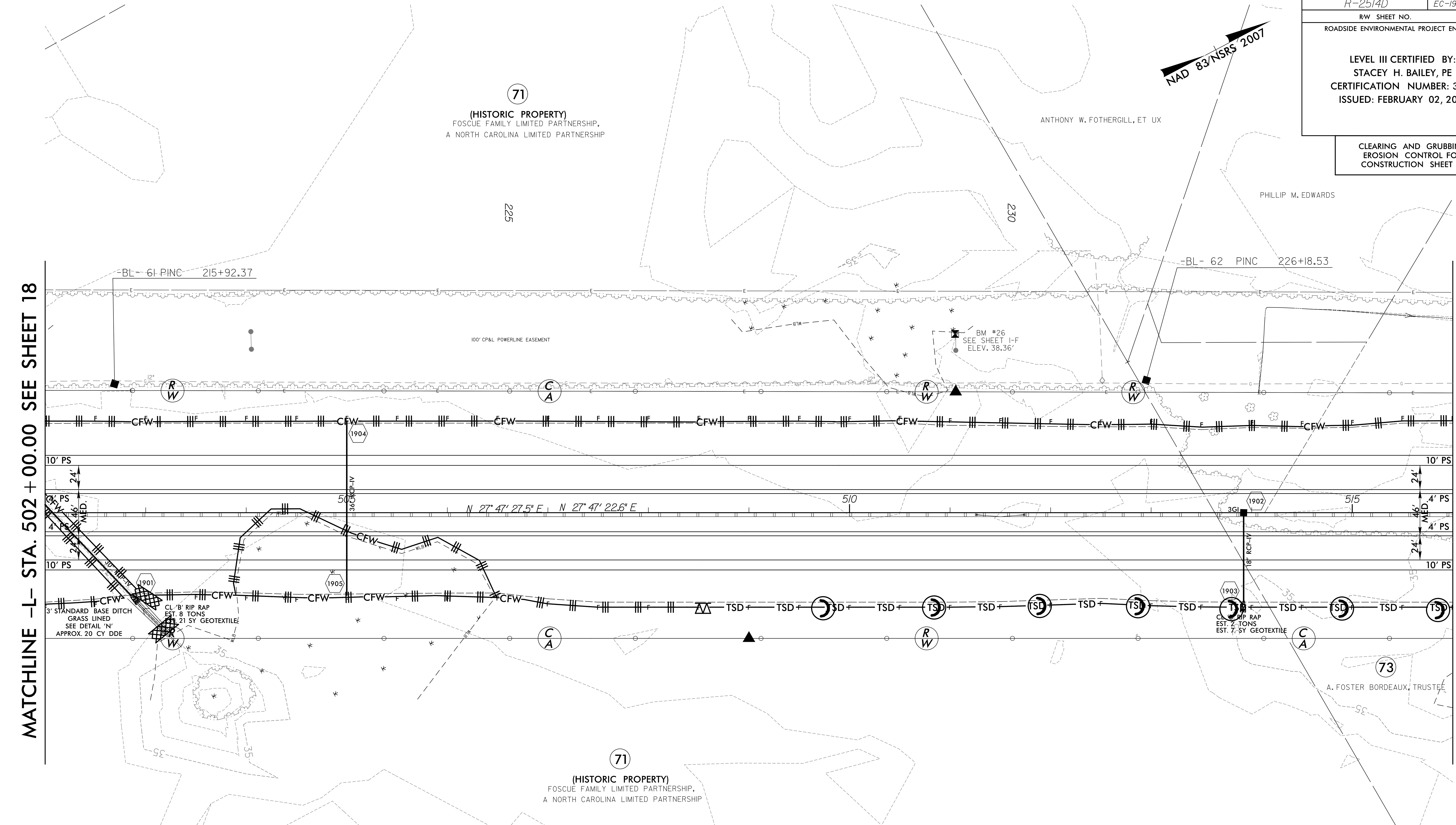
$$$$$$SYSTIME$$$$$
R:\Hydraulics\Erosion Control\CADD\R2514D_hyd_c&g_psh_18.dgn
ICA ENGINEERING, INC.

PROJECT REFERENCE NO.	SHEET NO.
R-2514D	EC-19/CONST.19
R/W SHEET NO.	
ROADSIDE ENVIRONMENTAL PROJECT ENGINEER	

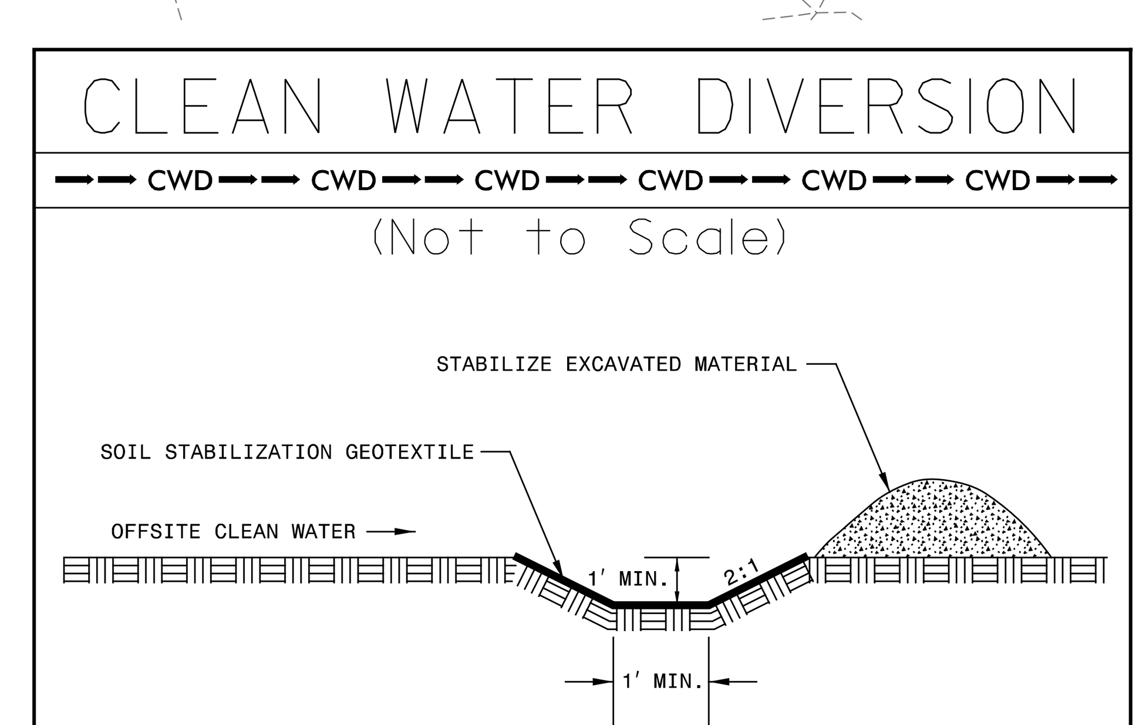
LEVEL III CERTIFIED BY:
STACEY H. BAILEY, PE
CERTIFICATION NUMBER: 3074
ISSUED: FEBRUARY 02, 2015

CLEARING AND GRUBBING
EROSION CONTROL FOR
CONSTRUCTION SHEET 19

REVISIONS



NAD 83/NSRS 2007
MATCHLINE -L- STA. 502+00.00 SEE SHEET 18
MATCHLINE -L- STA. 516+00.00 SEE SHEET 20
(HISTORIC PROPERTY)
FOSCUE FAMILY LIMITED PARTNERSHIP,
A NORTH CAROLINA LIMITED PARTNERSHIP
ANTHONY W. FOTHERGILL, ET UX
PHILLIP M. EDWARDS
A. FOSTER BORDEAUX, TRUSTEE
-BL- 61 PINC 215+92.37
-BL- 62 PINC 226+18.53
100' CP&L POWERLINE EASEMENT
BM #26
SEE SHEET 1-F
ELEV. 38.36'
N 27° 47' 27.5" E
N 27° 47' 22.6" E
10' PS
4' PS
46' MED.
3' STANDARD BASE DITCH
GRASS LINED
SEE DETAIL 'N'
APPROX. 20 CY DDE
CL 'B' RIP RAP
EST. 8 TONS
EST. 21 SY GEOTEXTILE
EST. 2 TONS
EST. 7 SY GEOTEXTILE
CFW
TSD



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:
ALL EROSION CONTROL DEVICES SHOWN ARE LOCATED WITHIN EXISTING R/W OR EASEMENT.

NOTE:
ESTABLISH SUFFICIENT BUFFER FOR WATER COURSE.

SEE SHEET 40 FOR -L- PROFILE

8/17/99

PROJECT REFERENCE NO.	SHEET NO.
R-2514D	EC-20/CONST.20
R/W SHEET NO.	

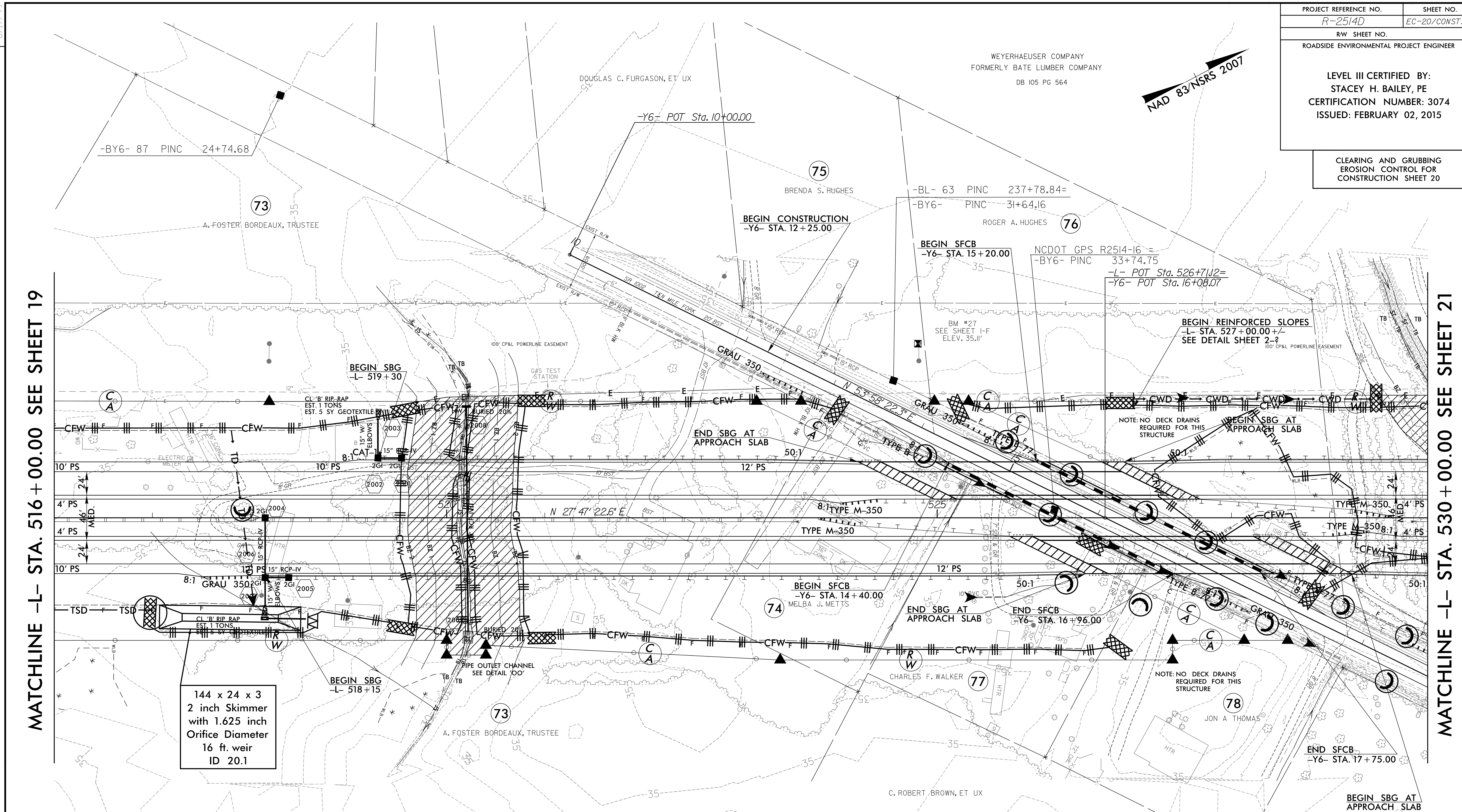
ROADSIDE ENVIRONMENTAL PROJECT ENGINEER

LEVEL III CERTIFIED BY:
STACEY H. BAILEY, PE
CERTIFICATION NUMBER: 3074
ISSUED: FEBRUARY 02, 2015

CLEARING AND GRUBBING
EROSION CONTROL FOR
CONSTRUCTION SHEET 20

REVISIONS

R/W REVISION 03-11-14 (DWG) - THE TDE AT -L- STA. 520+20.00 RT. WAS ELIMINATED FROM PARCEL 73 (A. FOSTER BORDEAUX, TRUSTEE).



MATCHLINE -L- STA. 516+00.00 SEE SHEET 19
MATCHLINE -L- STA. 530+00.00 SEE SHEET 21
NAD 83/NSRS 2007
WEYERHAEUSER COMPANY
FORMERLY BATE LUMBER COMPANY
DB 105 PG 564
DOUGLAS C. FURGASON, ET UX
-BY6- 87 PINC 24+74.68
-Y6- POT Sta. 10+00.00
A. FOSTER BORDEAUX, TRUSTEE
BRENDA S. HUGHES
-BL- 63 PINC 237+78.84=
-BY6- PINC 31+64.16
ROGER A. HUGHES
BEGIN CONSTRUCTION
-Y6- STA. 12+25.00
BEGIN SFCB
-Y6- STA. 15+20.00
NCDOT GPS R2514-16 =
-BY6- PINC 33+74.75
-L- POT Sta. 526+71.12=
-Y6- POT Sta. 16+08.07
BEGIN REINFORCED SLOPES
-L- STA. 527+00.00+/-
SEE DETAIL SHEET 2-?
BEGIN SBG
-L- 519+30
CL 'B' RIP-RAP
EST. 1 TONS
EST. 5 SY GEOTEXTILE
END SBG AT
APPROACH SLAB
NOTE: NO DECK DRAINS REQUIRED FOR THIS STRUCTURE
BEGIN SBG AT
APPROACH SLAB
N 53°58'22.3" E
N 27°47'22.6" E
TYPE M-350
BEGIN SFCB
-Y6- STA. 14+40.00
MELBA J. METTS
END SBG AT
APPROACH SLAB
END SFCB
-Y6- STA. 16+96.00
144 x 24 x 3
2 inch Skimmer
with 1.625 inch
Orifice Diameter
16 ft. weir
ID 20.1
BEGIN SBG
-L- 518+15
PIPE OUTLET CHANNEL
SEE DETAIL 'OO'
CHARLES F. WALKER
JON A THOMAS
END SFCB
-Y6- STA. 17+75.00
BEGIN SBG AT
APPROACH SLAB
STEPHANIE S. KEECH
C. ROBERT BROWN, ET UX

CLEAN WATER DIVERSION

(Not to Scale)

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

NOTE:
ESTABLISH SUFFICIENT BUFFER FOR WATER COURSE.

ENVIRONMENTALLY SENSITIVE AREA
SEE PROJECT SPECIAL PROVISIONS

SBG - "SHOULDER BERM GUTTER"
SFCB - "SINGLE FACED CONCRETE BARRIER"

SEE SHEET 40 FOR -L- PROFILE
SEE SHEET 53 FOR -Y6- PROFILE
SEE SHEETS S-1 THRU S-? FOR STRUCTURE PLANS

8/17/99
$$$$$$SYSTIME$$$$$
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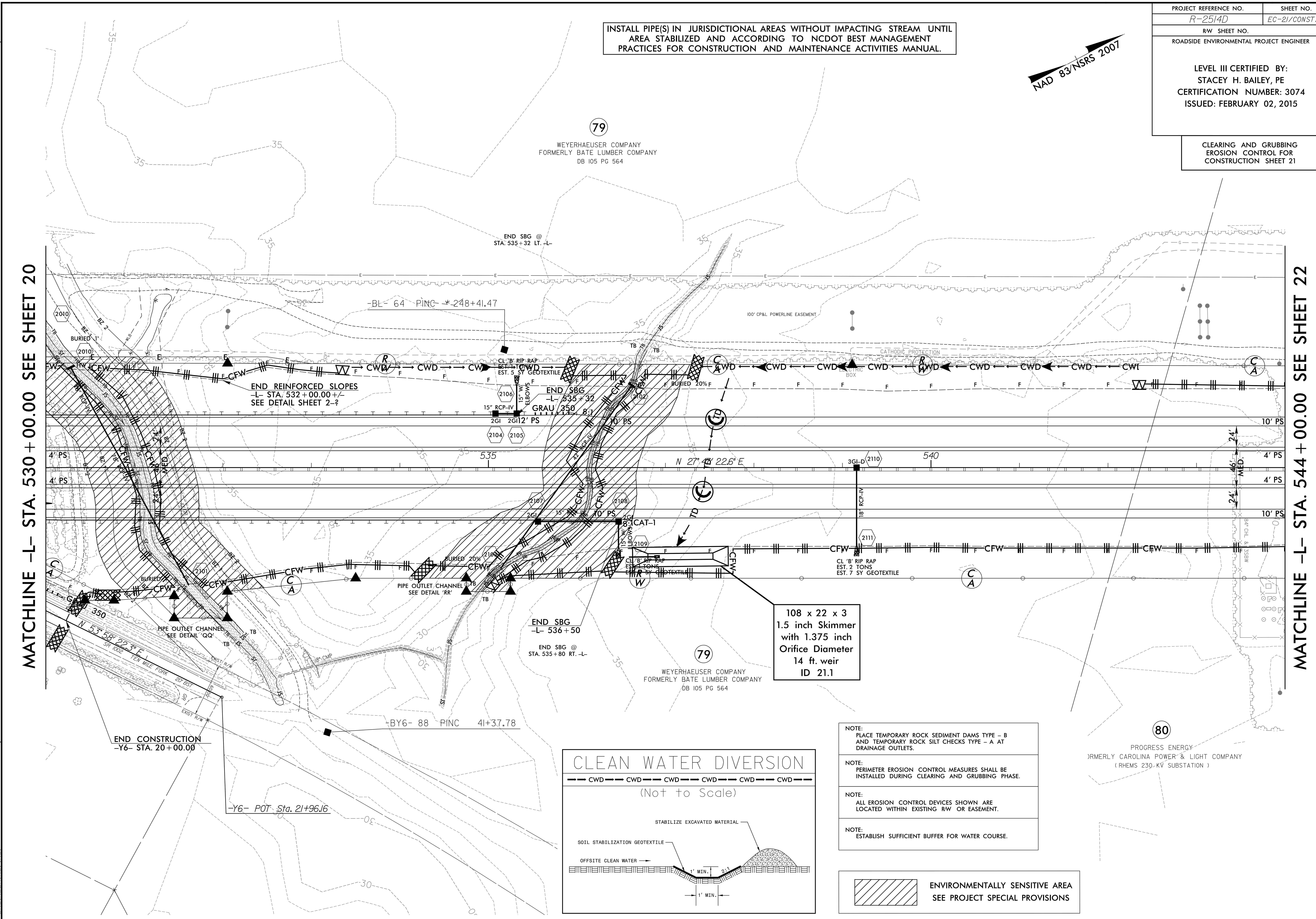
PROJECT REFERENCE NO.	SHEET NO.
R-2514D	EC-21/CONST.21
R/W SHEET NO.	
ROADSIDE ENVIRONMENTAL PROJECT ENGINEER	

LEVEL III CERTIFIED BY:
STACEY H. BAILEY, PE
CERTIFICATION NUMBER: 3074
ISSUED: FEBRUARY 02, 2015

CLEARING AND GRUBBING
EROSION CONTROL FOR
CONSTRUCTION SHEET 21

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.



CLEAN WATER DIVERSION

(Not to Scale)

STABILIZE EXCAVATED MATERIAL
SOIL STABILIZATION GEOTEXTILE
OFFSITE CLEAN WATER
1' MIN.
2:1

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:
ALL EROSION CONTROL DEVICES SHOWN ARE LOCATED WITHIN EXISTING R/W OR EASEMENT.

NOTE:
ESTABLISH SUFFICIENT BUFFER FOR WATER COURSE.

ENVIRONMENTALLY SENSITIVE AREA
SEE PROJECT SPECIAL PROVISIONS

SBG - "SHOULDER BERM GUTTER"

SEE SHEET 41 FOR -L- PROFILE

REVISIONS

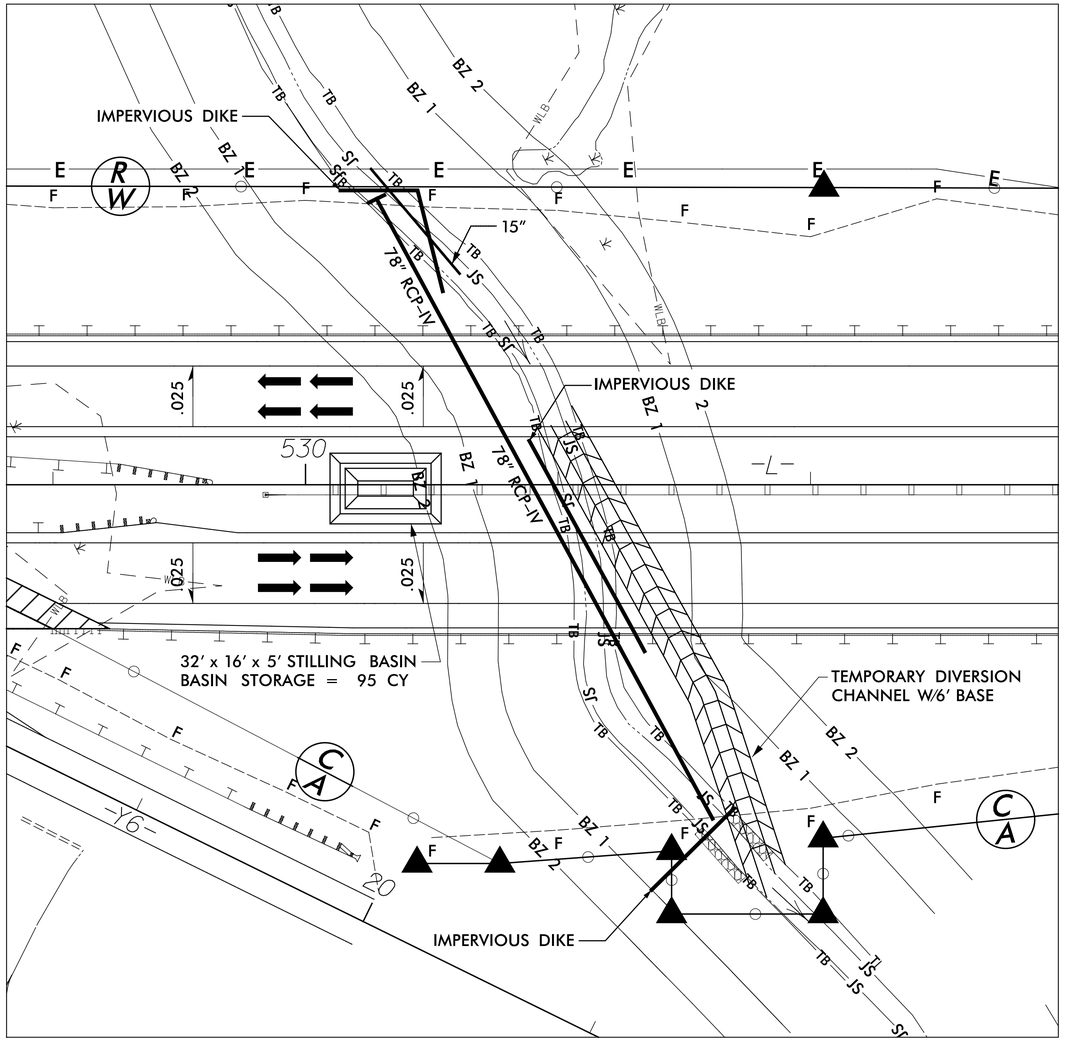
R/W REVISION 03-11-14 (DWG) - THE TDE AT -L- STA. 531+75.00 RT. AND -L- STA. 535+00.00 RT. WAS ELIMINATED FROM PARCEL 79 (WEYERHAEUSER COMPANY FORMERLY BATE LUMBER COMPANY).

8/17/99

PROJECT REFERENCE NO.	SHEET NO.
R-2514D	EC-21A/CONST.21
R/W SHEET NO.	
ROADSIDE ENVIRONMENTAL PROJECT ENGINEER	

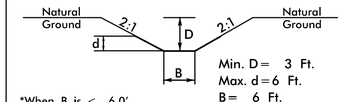
LEVEL III CERTIFIED BY:
STACEY H. BAILEY, PE
CERTIFICATION NUMBER: 3074
ISSUED: FEBRUARY 02, 2015

PIPE CONSTRUCTION SEQUENCE STA. 530+90 –L–



NAD 83/NSRS 2007

DETAIL
CULVERT DIVERSION CHANNEL
(Not to Scale)



*When B is < 6.0'

Type of Liner = FILTER FABRIC – TYPE IV

NOTES

1. CULVERT CONSTRUCTION SHALL BE PERFORMED IN ONLY DRY OR ISOLATED SECTIONS OF CHANNEL.
2. IMPERVIOUS DIKES ARE TO BE USED TO ISOLATE WORK FROM STREAM FLOW AS NECESSARY.
3. ALL GRADED AREAS SHALL BE STABILIZED WITHIN 24 HOURS.
4. MAINTENANCE OF STREAM FLOW OPERATIONS SHALL BE INCIDENTAL TO THE WORK. THIS INCLUDES POLYETHYLENE SHEETING, DIVERSION PIPES, PUMPS AND HOSES.
5. PUMPS AND HOSES SHALL BE SUFFICIENT SIZE TO DEWATER THE WORK AREA.
6. THE CONTRACTOR SHALL NOT PUMP SEDIMENT-LADEN WATER DIRECTLY INTO STREAM. FOR DEWATERING OF CULVERT SITES, THE CONTRACTOR SHALL FILTER SEDIMENT-LADEN WATER THROUGH STILLING BASIN AND/OR SPECIAL STILLING BASIN.

CONSTRUCTION SEQUENCE

1. EXCAVATE TEMPORARY DIVERSION CHANNEL (~185 LF), INSTALL 15" TEMPORARY PIPE (60 LF) AND IMPERVIOUS DIKES (190 LF) AS SHOWN. DIVERT CHANNEL FLOW THROUGH TEMPORARY DIVERSION DITCHES AND TEMPORARY PIPE.
2. CONSTRUCT STILLING BASIN TO SIZE SPECIFIED AT LOCATION SHOWN.
3. CONSTRUCT 78" RCP-IV w/HW.
4. CONSTRUCT ANY UPSTREAM AND DOWNSTREAM CHANNEL IMPROVEMENTS AND PLACE REQUIRED RIP RAP.
5. REMOVE IMPERVIOUS DIKES, STILLING BASIN, TEMPORARY PIPE, AND TEMPORARY DITCHES.
6. CONSTRUCT PROPOSED ROADWAY.

30 0
15 30
SCALE: 1"= 30'

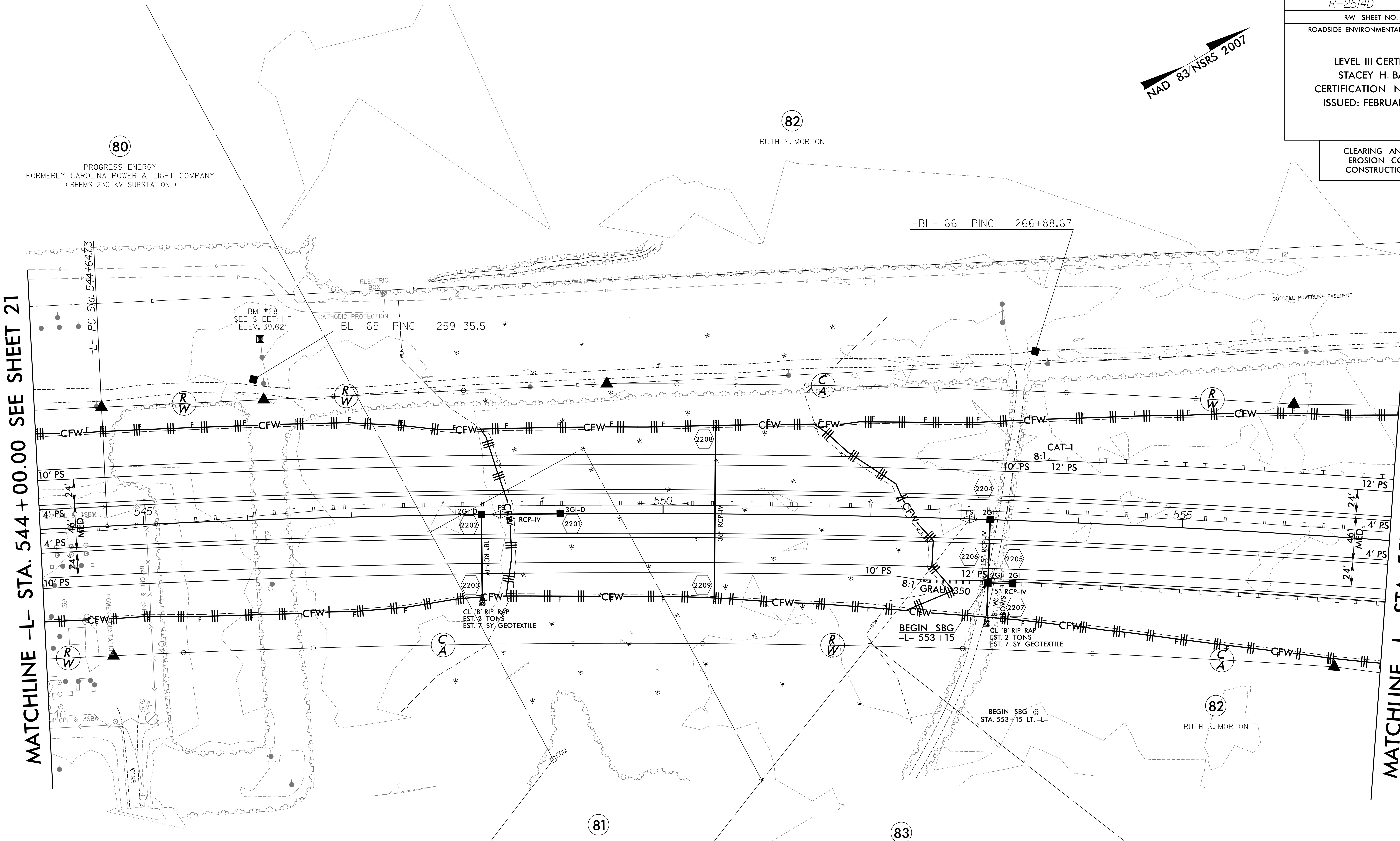
REVISIONS 8/17/99

$$$$$$$SYSTIME$$$$$$
P:\Hydraulics\Erosion Control\CADD\R2514D_hyd_const_seq_psh21A.dgn
TGA ENGINEERING INC

PROJECT REFERENCE NO.	SHEET NO.
R-2514D	EC-22/CONST.22
R/W SHEET NO.	
ROADSIDE ENVIRONMENTAL PROJECT ENGINEER	

LEVEL III CERTIFIED BY:
STACEY H. BAILEY, PE
CERTIFICATION NUMBER: 3074
ISSUED: FEBRUARY 02, 2015

CLEARING AND GRUBBING
EROSION CONTROL FOR
CONSTRUCTION SHEET 22



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.

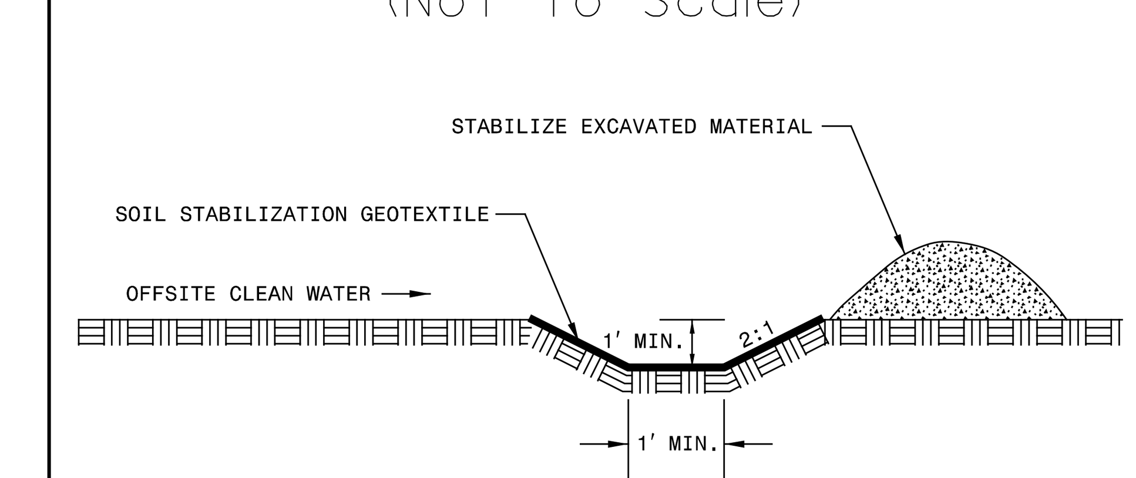
NOTE:
ALL EROSION CONTROL DEVICES SHOWN ARE LOCATED WITHIN EXISTING R/W OR EASEMENT.

NOTE:
ESTABLISH SUFFICIENT BUFFER FOR WATER COURSE.

CLEAN WATER DIVERSION

— CWD — CWD — CWD — CWD — CWD — CWD —

(Not to Scale)



SBG - "SHOULDER BERM GUTTER"

SEE SHEET 41 FOR -L- PROFILE

REVISIONS

8/17/99

ROADSIDE ENVIRONMENTAL PROJECT ENGINEER

LEVEL III CERTIFIED BY:
STACEY H. BAILEY, PE
CERTIFICATION NUMBER: 3074
ISSUED: FEBRUARY 02, 2015

CLEARING AND GRUBBING
EROSION CONTROL FOR
CONSTRUCTION SHEET 23

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

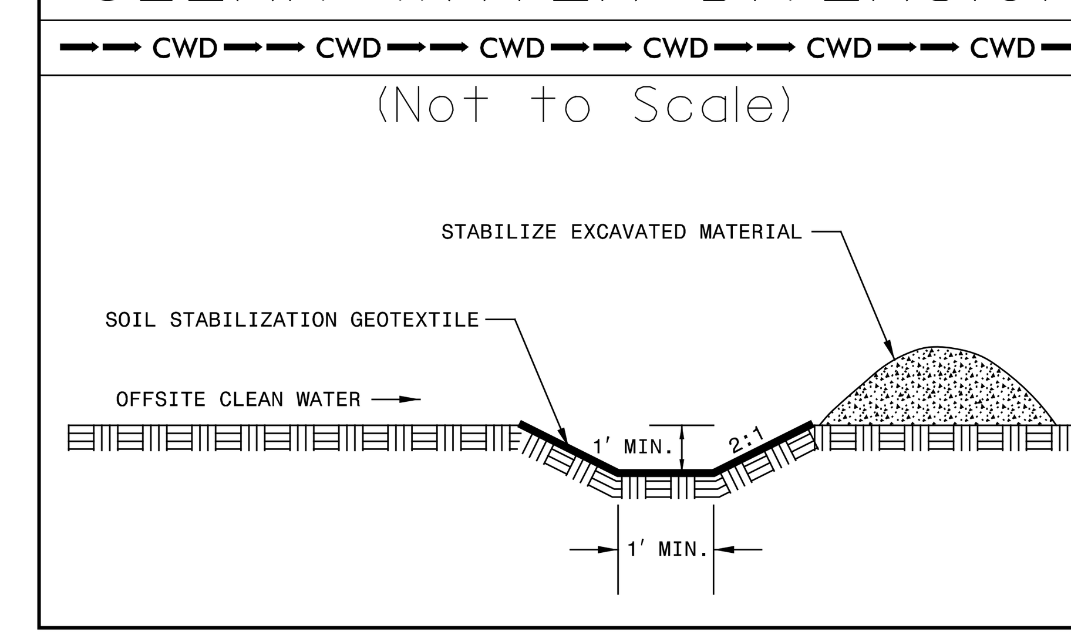
NOTE:
PERIMETER EROSION CONTROL MEASURES SHALL BE INSTALLED DURING CLEARING AND GRUBBING PHASE.

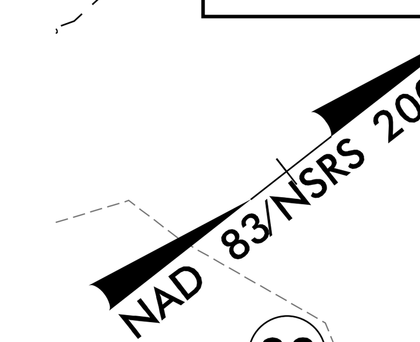
NOTE:
ALL EROSION CONTROL DEVICES SHOWN ARE LOCATED WITHIN EXISTING R/W OR EASEMENT.

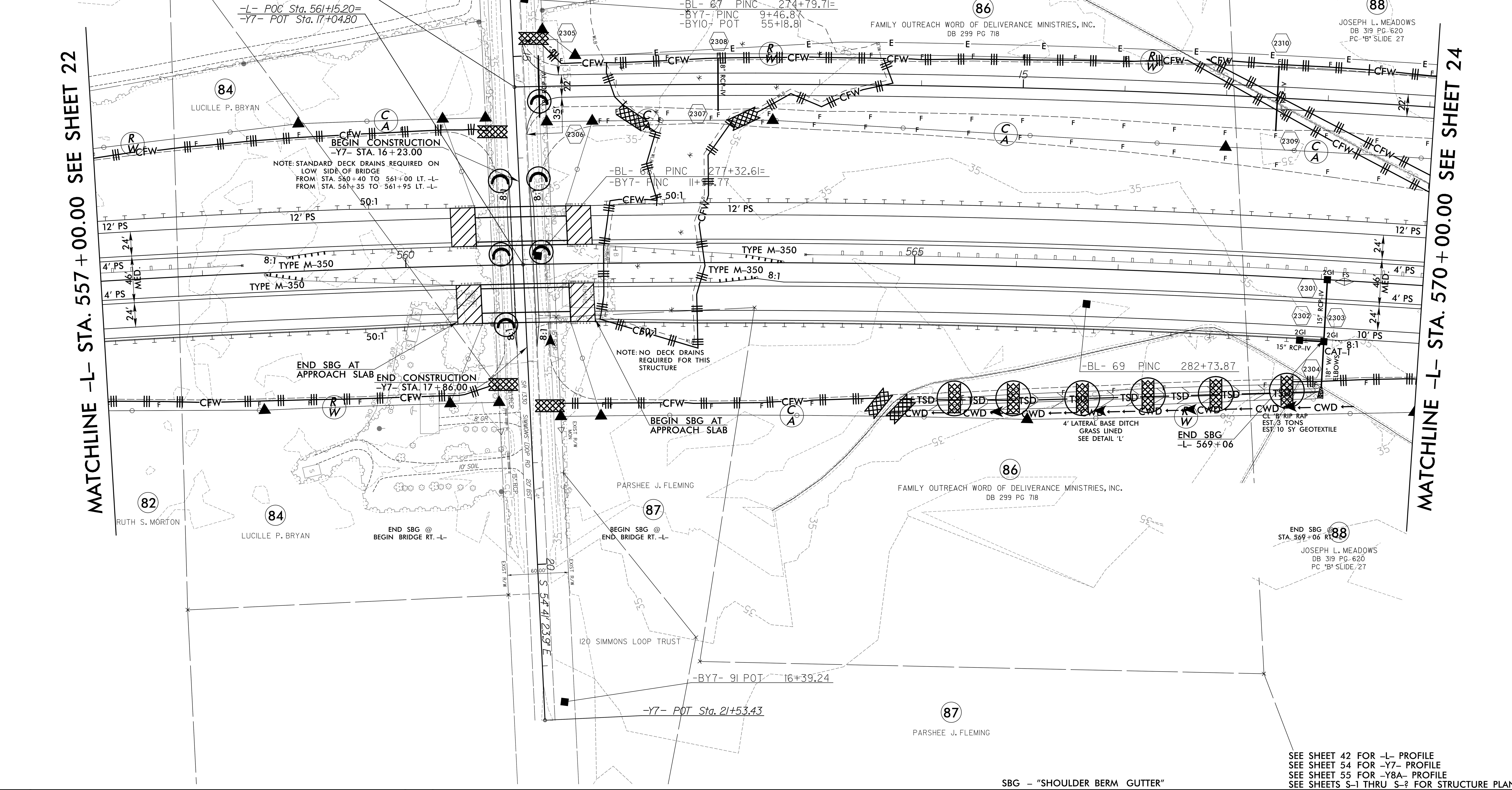
NOTE:
ESTABLISH SUFFICIENT BUFFER FOR WATER COURSE.

CLEAN WATER DIVERSION

(Not to Scale)






MATCHLINE -L- STA. 557+00.00 SEE SHEET 22
MATCHLINE -L- STA. 570+00.00 SEE SHEET 24
MOSES D. LASITTER
DB 303 PG 790
ESTATE OF CLENNIE L. BROWN
& SEYMOUR C. BROWN
RUTH S. MORTON
LUCILLE P. BRYAN
BM #29
SEE SHEET 1-F
ELEV. 37.70'
-Y7- POT Sta. 15+30.00=
-Y8A- PC Sta. 10+00.00
-L- POC Sta. 561+15.20=
-Y7- POT Sta. 17+04.80
-BL- 67 PINC 274+79.71=
-BY7- PINC 9+46.87
-BY10- POT 55+18.81
FAMILY OUTREACH WORD OF DELIVERANCE MINISTRIES, INC.
DB 299 PG 718
JOSEPH L. MEADOWS
DB 319 PG 620
PC "B" SLIDE 27
BEGIN CONSTRUCTION
-Y7- STA. 16+23.00
NOTE: STANDARD DECK DRAINS REQUIRED ON LOW SIDE OF BRIDGE
FROM STA. 560+40 TO 561+00 LT. -L-
FROM STA. 561+35 TO 561+95 LT. -L-
-BL- 67 PINC 277+32.61=
-BY7- PINC 11+77
TYPE M-350
NOTE: NO DECK DRAINS REQUIRED FOR THIS STRUCTURE
END SBG AT APPROACH SLAB
END CONSTRUCTION
-Y7- STA. 17+86.00
BEGIN SBG AT APPROACH SLAB
-BL- 69 PINC 282+73.87
4' LATERAL BASE DITCH
GRASS LINED
SEE DETAIL 'L'
END SBG
-L- 569+06
CL 'B' RIP RAP
EST. 3 TONS
EST. 10 SY GEOTEXTILE
PARSHEE J. FLEMING
END SBG @ BEGIN BRIDGE RT. -L-
BEGIN SBG @ END BRIDGE RT. -L-
END SBG @ STA. 569+06 RT.
120 SIMMONS LOOP TRUST
-BY7- 91 POT 16+39.24
-Y7- POT Sta. 21+53.43
S 54°41'23.9" E
SR 1330 SIMMONS LOOP RD

SEE SHEET 42 FOR -L- PROFILE
SEE SHEET 54 FOR -Y7- PROFILE
SEE SHEET 55 FOR -Y8A- PROFILE
SEE SHEETS S-1 THRU S-? FOR STRUCTURE PLANS

SBG - "SHOULDER BERM GUTTER"

REVISIONS

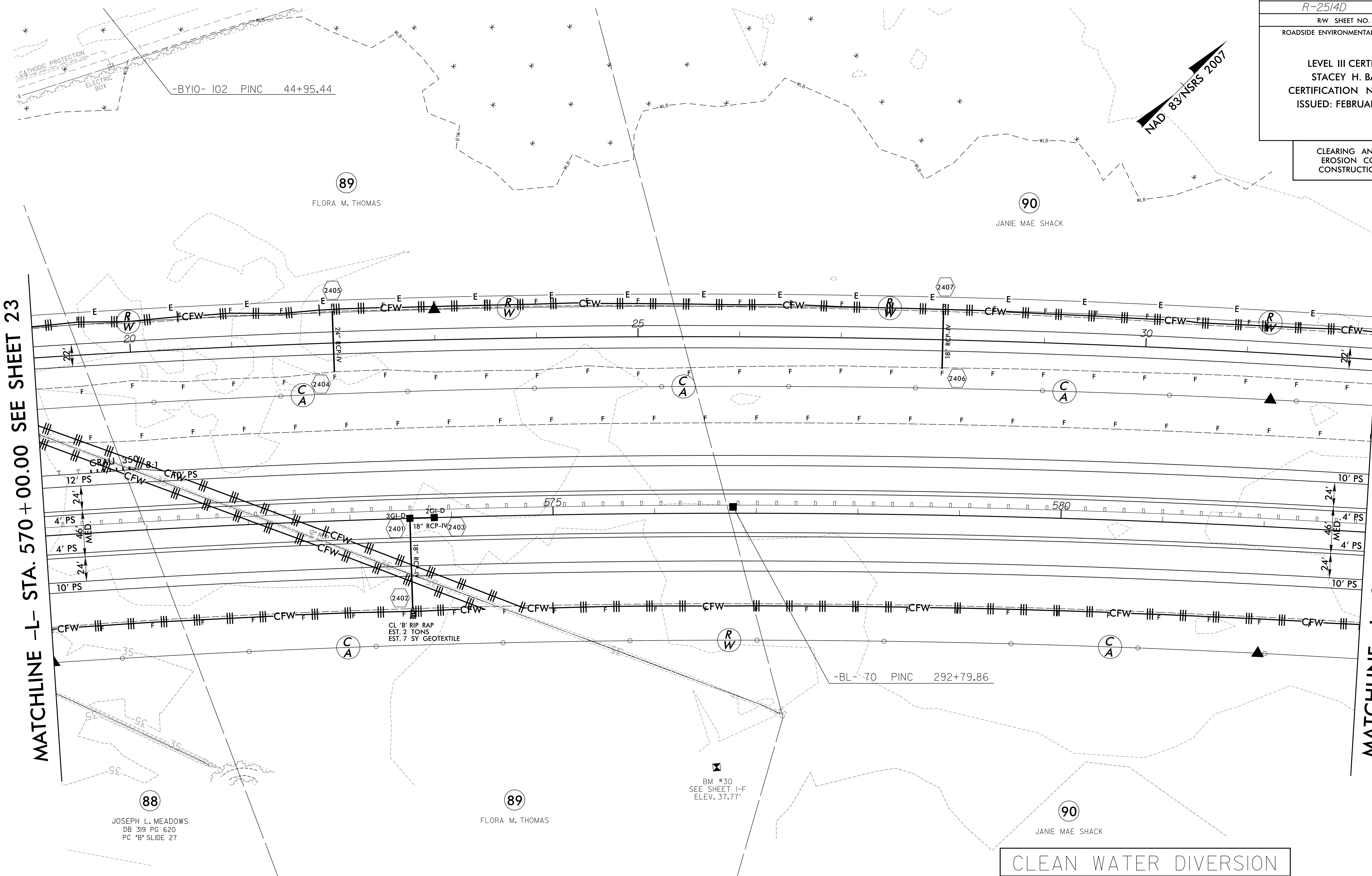
8/17/99

PROJECT REFERENCE NO.	SHEET NO.
R-2514D	EC-24/CONST.24
R/W SHEET NO.	

ROADSIDE ENVIRONMENTAL PROJECT ENGINEER

LEVEL III CERTIFIED BY:
STACEY H. BAILEY, PE
CERTIFICATION NUMBER: 3074
ISSUED: FEBRUARY 02, 2015

CLEARING AND GRUBBING
EROSION CONTROL FOR
CONSTRUCTION SHEET 24



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

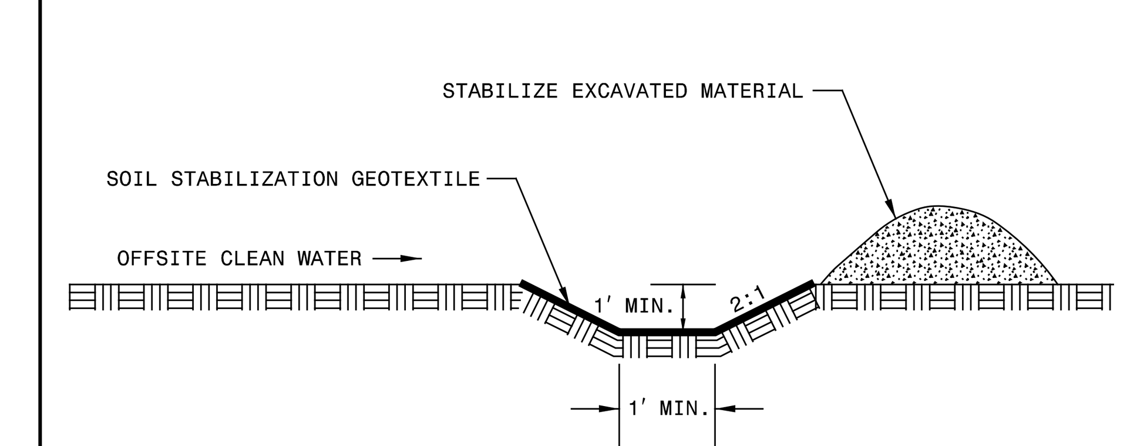
NOTE:
PERIMETER EROSION CONTROL MEASURES SHALL BE INSTALLED DURING CLEARING AND GRUBBING PHASE.

NOTE:
ALL EROSION CONTROL DEVICES SHOWN ARE LOCATED WITHIN EXISTING R/W OR EASEMENT.

NOTE:
ESTABLISH SUFFICIENT BUFFER FOR WATER COURSE.

CLEAN WATER DIVERSION

(Not to Scale)



SEE SHEET 42 FOR -L- PROFILE
SEE SHEET 55 FOR -Y8A- PROFILE

REVISIONS

8/17/99

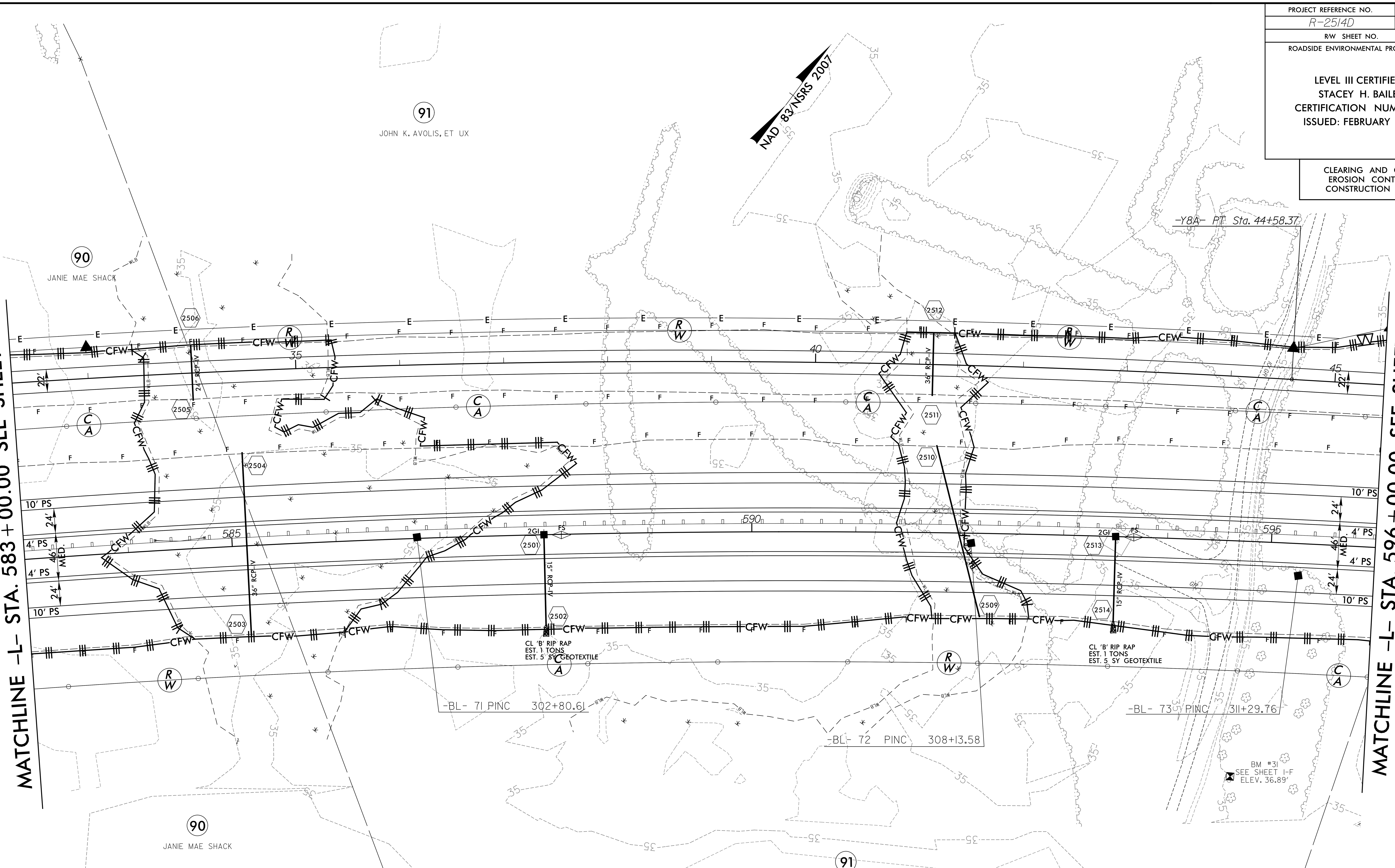
$$$$$$SYSTIME$$$$$
R:\Hydraulics\Erosion Control\CADD\R2514D_hyd_c&g_psh_24.dgn

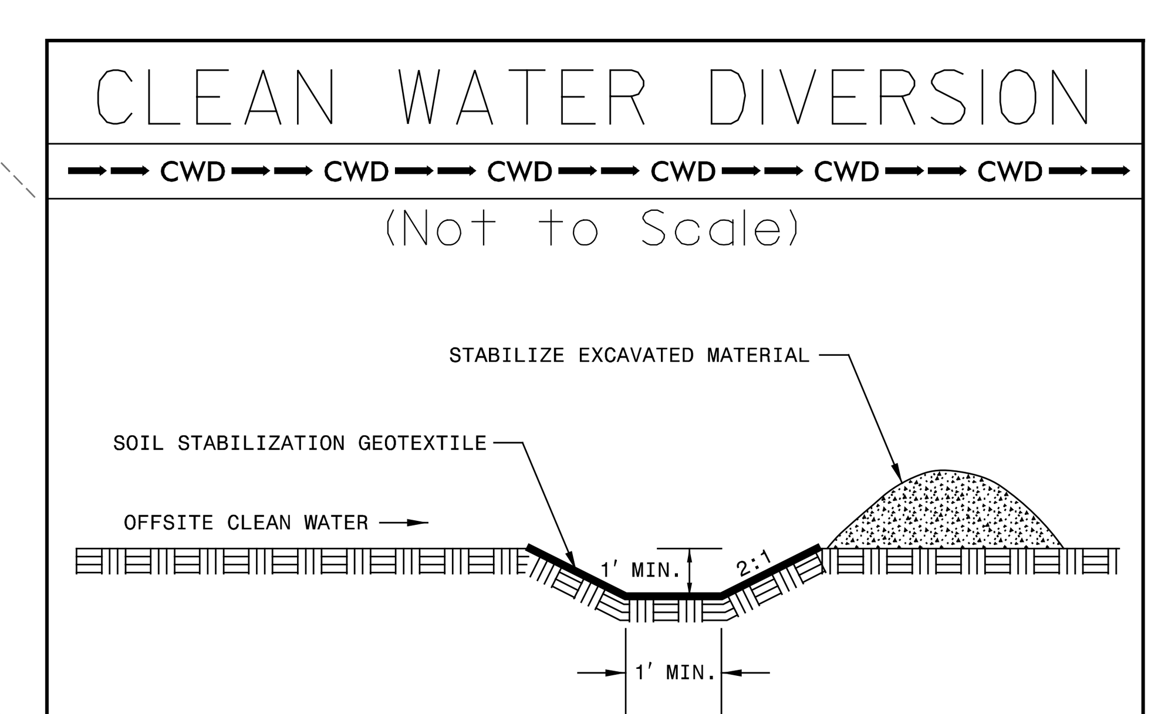
PROJECT REFERENCE NO.	SHEET NO.
R-2514D	EC-25/CONST.25
R/W SHEET NO.	

ROADSIDE ENVIRONMENTAL PROJECT ENGINEER

LEVEL III CERTIFIED BY:
STACEY H. BAILEY, PE
CERTIFICATION NUMBER: 3074
ISSUED: FEBRUARY 02, 2015

CLEARING AND GRUBBING
EROSION CONTROL FOR
CONSTRUCTION SHEET 25





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:
ALL EROSION CONTROL DEVICES SHOWN ARE LOCATED WITHIN EXISTING R/W OR EASEMENT.

NOTE:
ESTABLISH SUFFICIENT BUFFER FOR WATER COURSE.

SEE SHEET 43 FOR -L- PROFILE
SEE SHEET 55 AND 56 FOR -Y8A- PROFILE

REVISIONS

8/17/99

$$$$$$SYSTIME$$$$$
R:\Hydraulics\Erosion Control\CADD\R2514D_hyd_ec&g_psh_25.dgn

PROJECT REFERENCE NO.	SHEET NO.
R-2514D	EC-26/CONST.26
R/W SHEET NO.	

ROADSIDE ENVIRONMENTAL PROJECT ENGINEER

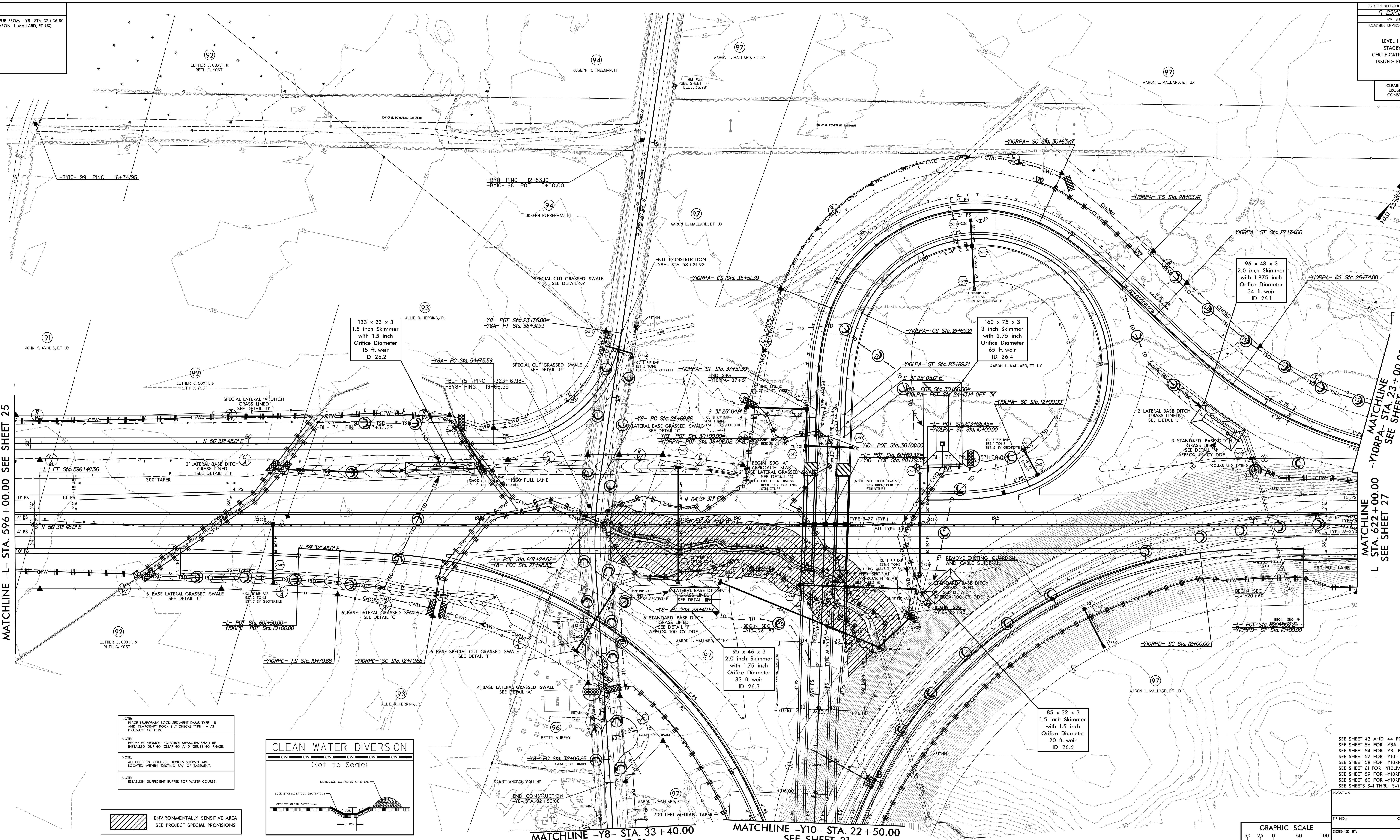
LEVEL III CERTIFIED BY:
STACEY H. BAILEY, PE
CERTIFICATION NUMBER: 3074
ISSUED: FEBRUARY 02, 2015

CLEARING AND GRUBBING
EROSION CONTROL FOR
CONSTRUCTION SHEET 26

6/2/99

REVISIONS

R/W REVISION 6-24-14 (DWG) – ADDED PUE FROM –Y8– STA. 32+35.80 TO STA. 35+43.00 LT. ON PARCEL 97 (AARON L. MALLARD, ET UX).



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:
ALL EROSION CONTROL DEVICES SHOWN ARE LOCATED WITHIN EXISTING R/W OR EASEMENT.

NOTE:
ESTABLISH SUFFICIENT BUFFER FOR WATER COURSE.

ENVIRONMENTALLY SENSITIVE AREA
SEE PROJECT SPECIAL PROVISIONS

CLEAN WATER DIVERSION

(Not to Scale)

SEE SHEET 43 AND 44 FOR –L– PROFILE
SEE SHEET 56 FOR –Y8A– PROFILE
SEE SHEET 54 FOR –Y8– PROFILE
SEE SHEET 57 FOR –Y10– PROFILE
SEE SHEET 58 FOR –Y10RPA– PROFILE
SEE SHEET 61 FOR –Y10LPA– PROFILE
SEE SHEET 59 FOR –Y10RPC– PROFILE
SEE SHEET 60 FOR –Y10RPD– PROFILE
SEE SHEETS S–1 THRU S–? FOR STRUCTURE PLANS

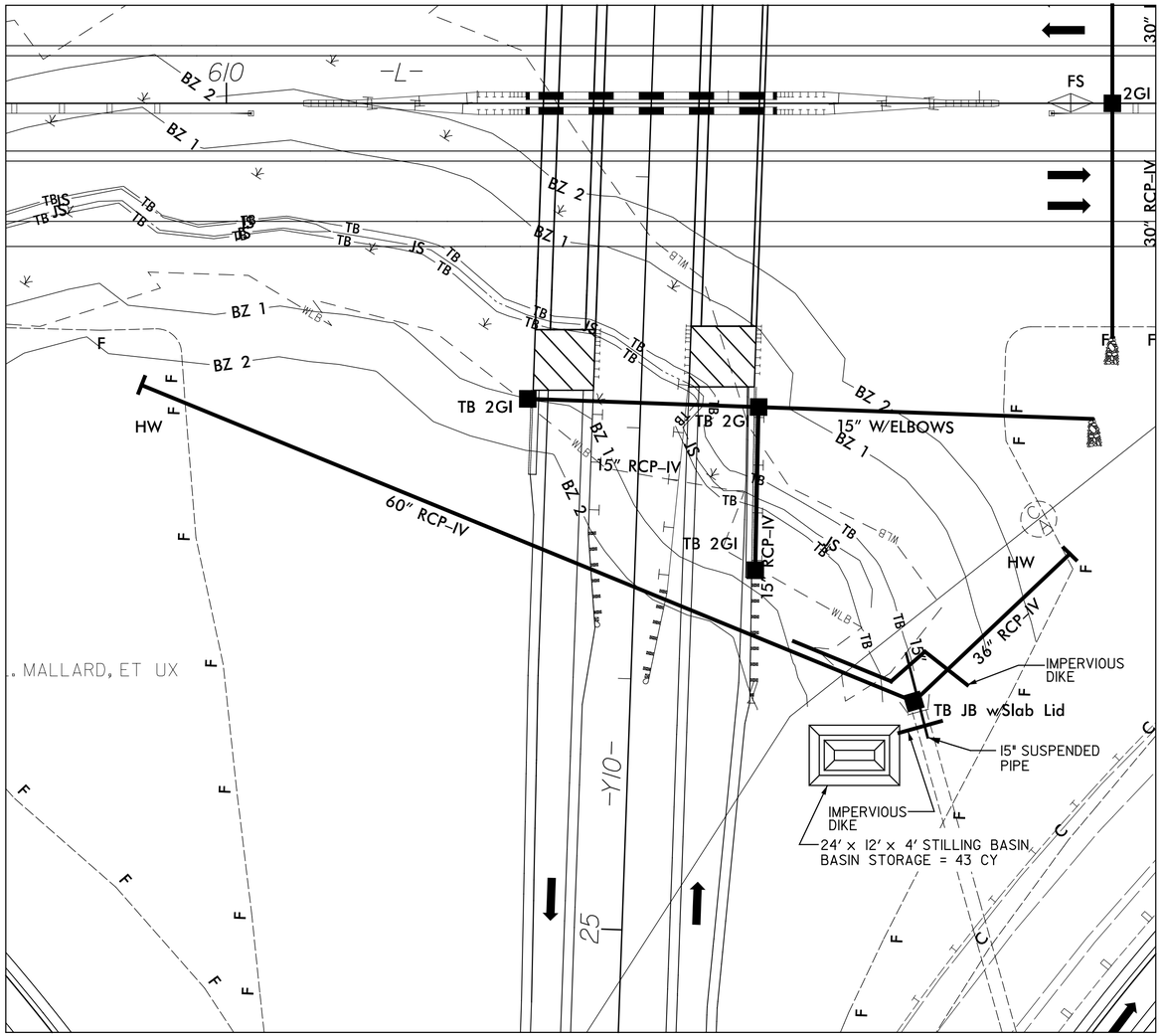
GRAPHIC SCALE
50 25 0 50 100
PLANS

LOCATION:	
TIP NO.:	COUNTY:
DESIGNED BY:	
CHECKED BY:	DATE:

PROJECT REFERENCE NO.	SHEET NO.
R-2514D	EC-26A/CONST.26
R/W SHEET NO.	
ROADSIDE ENVIRONMENTAL PROJECT ENGINEER	

LEVEL III CERTIFIED BY:
STACEY H. BAILEY, PE
CERTIFICATION NUMBER: 3074
ISSUED: FEBRUARY 02, 2015

PIPE CONSTRUCTION SEQUENCE STA. 26+35 –Y10–



NAD 83/NSRS 2007

NOTES

1. CULVERT CONSTRUCTION SHALL BE PERFORMED IN ONLY DRY OR ISOLATED SECTIONS OF CHANNEL.
2. IMPERVIOUS DIKES ARE TO BE USED TO ISOLATE WORK FROM STREAM FLOW AS NECESSARY.
3. ALL GRADED AREAS SHALL BE STABILIZED WITHIN 24 HOURS.
4. MAINTENANCE OF STREAM FLOW OPERATIONS SHALL BE INCIDENTAL TO THE WORK. THIS INCLUDES POLYETHYLENE SHEETING, DIVERSION PIPES, PUMPS AND HOSES.
5. PUMPS AND HOSES SHALL BE SUFFICIENT SIZE TO DEWATER THE WORK AREA.
6. THE CONTRACTOR SHALL NOT PUMP SEDIMENT-LADEN WATER DIRECTLY INTO STREAM. FOR DEWATERING OF CULVERT SITES, THE CONTRACTOR SHALL FILTER SEDIMENT-LADEN WATER THROUGH STILLING BASIN AND/OR SPECIAL STILLING BASIN.

CONSTRUCTION SEQUENCE

1. INSTALL 15" TEMPORARY PIPE (38 LF) AND IMPERVIOUS DIKES (93 LF) AS SHOWN. DIVERT CHANNEL FLOW THROUGH TEMPORARY PIPE.
2. CONSTRUCT STILLING BASIN TO SIZE SPECIFIED AT LOCATION SHOWN.
3. CONSTRUCT TBJB w/SLAB LID AND TIES TO 60" RCP-IV w/HW.
4. INSTALL PERMANENT DRAINAGE UPSTREAM OF 60" RCP-IV TO REDIRECT STREAM INTO 60" RCP-IV.
5. REMOVE IMPERVIOUS DIKES, STILLING BASIN, AND TEMPORARY PIPE,
6. CONSTRUCT PROPOSED ROADWAY.

30 0
15 30
SCALE: 1"= 30'

REVISIONS 8/17/99

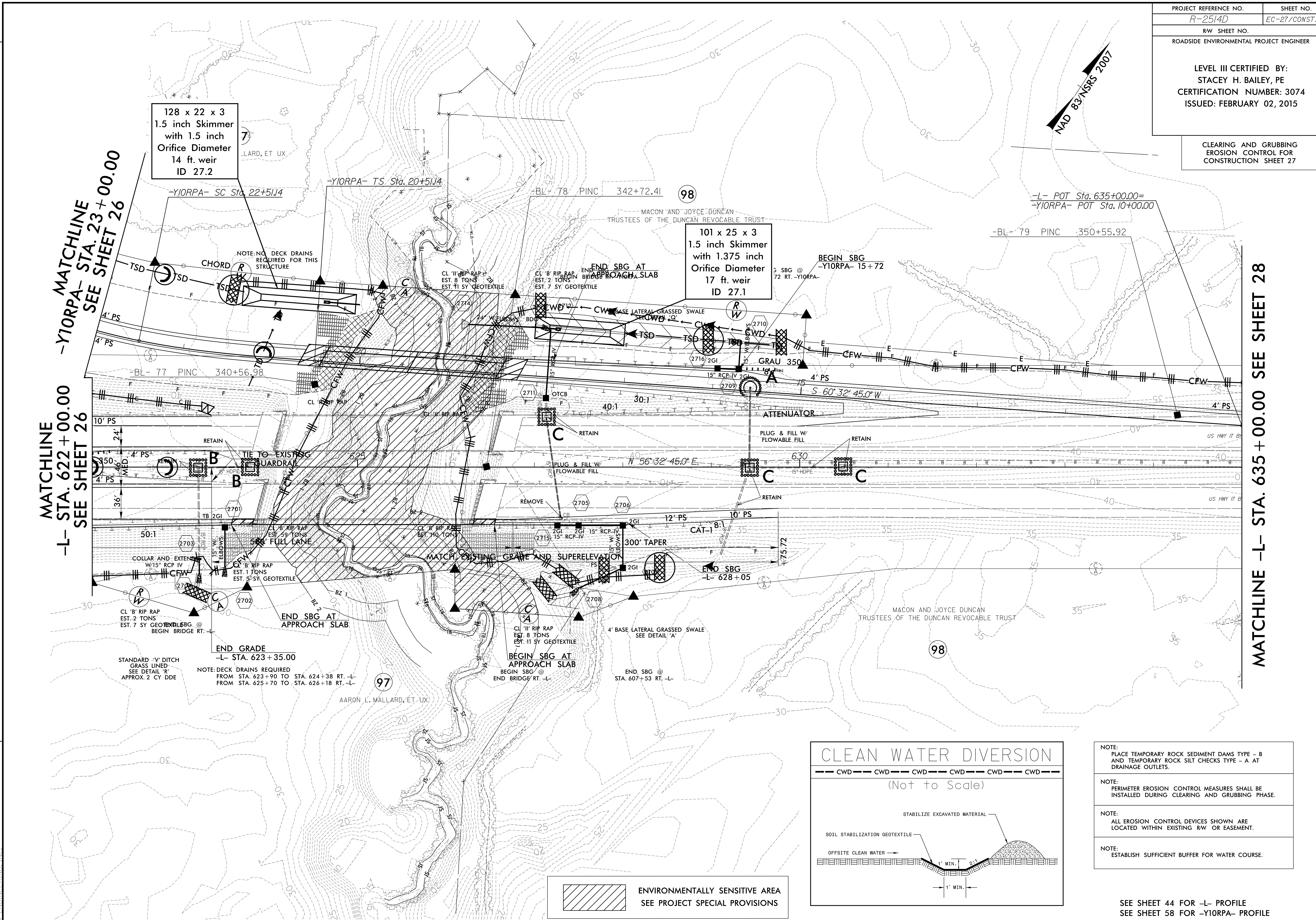
$$$$$$SYSTIME$$$$$$
R:\Hydraulics\Erosion Control\CADD\R2514D_hyd_const_seq_psh26A.dgn
LA ENGINEERING, INC.

PROJECT REFERENCE NO.	SHEET NO.
R-2514D	EC-27/CONST.27
R/W SHEET NO.	

ROADSIDE ENVIRONMENTAL PROJECT ENGINEER

LEVEL III CERTIFIED BY:
STACEY H. BAILEY, PE
CERTIFICATION NUMBER: 3074
ISSUED: FEBRUARY 02, 2015

CLEARING AND GRUBBING
EROSION CONTROL FOR
CONSTRUCTION SHEET 27



NAD 83/NSRS 2007
MATCHLINE -Y10RPA- STA. 23+00.00 SEE SHEET 26
MATCHLINE -L- STA. 622+00.00 SEE SHEET 26
MATCHLINE -L- STA. 635+00.00 SEE SHEET 28
128 x 22 x 3
1.5 inch Skimmer
with 1.5 inch
Orifice Diameter
14 ft. weir
ID 27.2
101 x 25 x 3
1.5 inch Skimmer
with 1.375 inch
Orifice Diameter
17 ft. weir
ID 27.1
-Y10RPA- SC Sta. 22+51.14
-Y10RPA- TS Sta. 20+51.14
-BL- 78 PINC 342+72.41
-BL- 77 PINC 340+56.98
-BL- 79 PINC 350+55.92
-L- POT Sta. 635+00.00=
-Y10RPA- POT Sta. 10+00.00
MACON AND JOYCE DUNCAN
TRUSTEES OF THE DUNCAN REVOCABLE TRUST
AARON L. MALLARD, ET UX
NOTE: NO DECK DRAINS REQUIRED FOR THIS STRUCTURE
END SBG AT APPROACH SLAB
BEGIN SBG -Y10RPA- 15+72
ATTENUATOR
S 60°32'45.0" W
N 56°32'45.0" E
PLUG & FILL W/ FLOWABLE FILL
RETAIN
REMOVE
TIE TO EXISTING GUARDRAIL
568' FULL LANE
300' TAPER
MATCH EXISTING GRADE AND SUPERELEVATION
END SBG -L- 628+05
END SBG AT APPROACH SLAB
BEGIN SBG AT APPROACH SLAB
END GRADE -L- STA. 623+35.00
CL 'B' RIP RAP EST. 2 TONS EST. 7 SY GEOTEXTILE
CL 'II' RIP RAP EST. 8 TONS EST. 11 SY GEOTEXTILE
CL 'B' RIP RAP EST. 59 TONS
CL 'B' RIP RAP EST. 110 TONS
CL 'B' RIP RAP EST. 1 TONS EST. 5 SY GEOTEXTILE
COLLAR AND EXTEND W/15" RCP IV
4' BASE LATERAL GRASSED SWALE SEE DETAIL 'A'
STANDARD 'V' DITCH GRASS LINED SEE DETAIL 'R' APPROX. 2 CY DDE
NOTE: DECK DRAINS REQUIRED FROM STA. 623+90 TO STA. 624+38 RT. -L- FROM STA. 625+70 TO STA. 626+18 RT. -L-
END SBG @ STA. 607+53 RT. -L-
BEGIN SBG @ END BRIDGE RT. -L-
END SBG @ BEGIN BRIDGE RT. -L-

ENVIRONMENTALLY SENSITIVE AREA
SEE PROJECT SPECIAL PROVISIONS

CLEAN WATER DIVERSION

(Not to Scale)

STABILIZE EXCAVATED MATERIAL
SOIL STABILIZATION GEOTEXTILE
OFFSITE CLEAN WATER

SBG - "SHOULDER BERM GUTTER"

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:
ALL EROSION CONTROL DEVICES SHOWN ARE LOCATED WITHIN EXISTING R/W OR EASEMENT.

NOTE:
ESTABLISH SUFFICIENT BUFFER FOR WATER COURSE.

SEE SHEET 44 FOR -L- PROFILE
SEE SHEET 58 FOR -Y10RPA- PROFILE
SEE SHEETS S-1 THRU S-? FOR STRUCTURE PLANS

REVISIONS

8/17/99

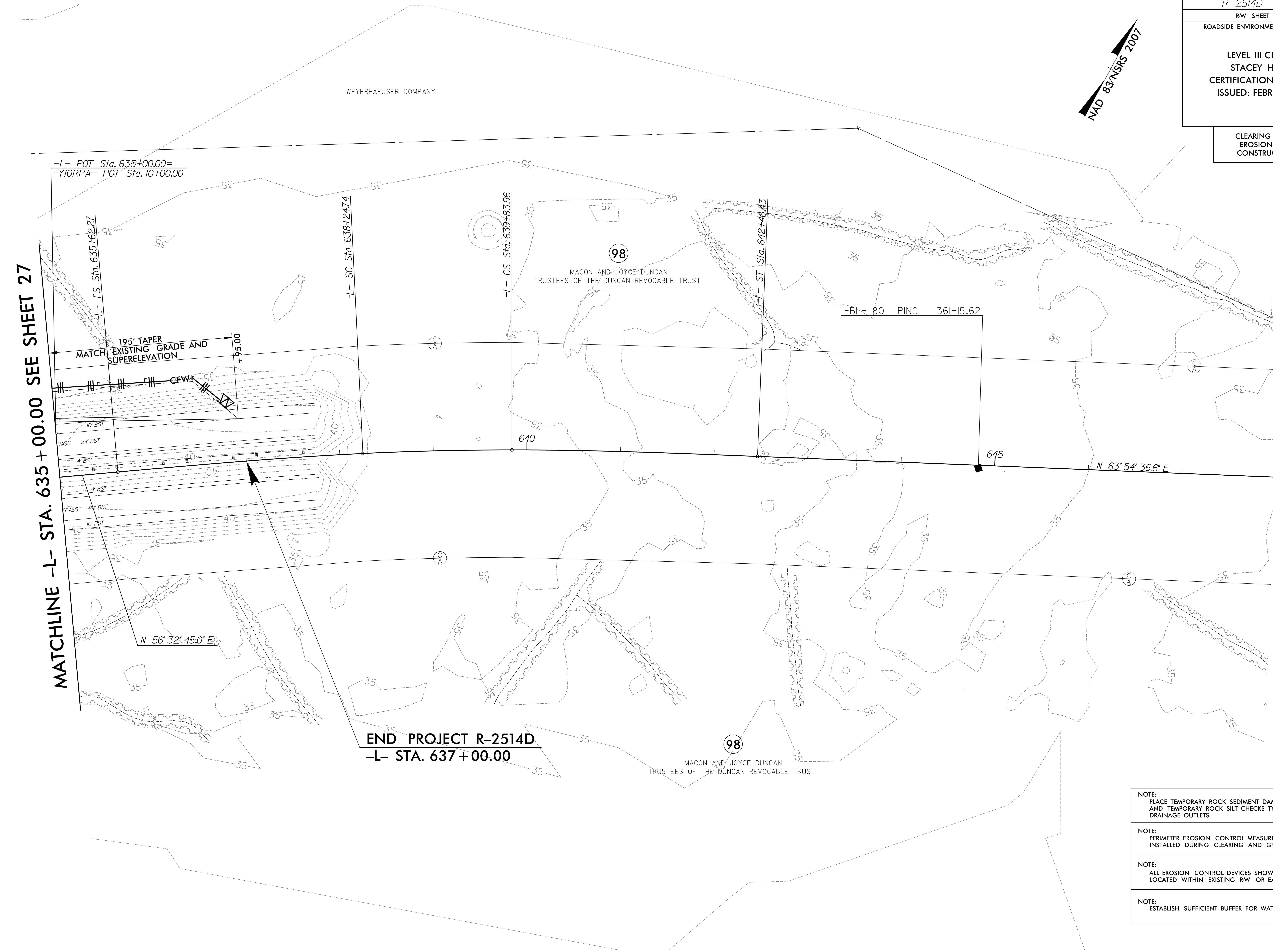
PROJECT REFERENCE NO.	SHEET NO.
R-2514D	EC-28/CONST.28
R/W SHEET NO.	

ROADSIDE ENVIRONMENTAL PROJECT ENGINEER

LEVEL III CERTIFIED BY:
STACEY H. BAILEY, PE
CERTIFICATION NUMBER: 3074
ISSUED: FEBRUARY 02, 2015

CLEARING AND GRUBBING
EROSION CONTROL FOR
CONSTRUCTION SHEET 28

REVISIONS



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

NOTE:
ESTABLISH SUFFICIENT BUFFER FOR WATER COURSE.

SEE SHEET 45 FOR -L- PROFILE

PROJECT REFERENCE NO.	SHEET NO.
R-2514D	EC-29/CONST.29
R/W SHEET NO.	

ROADSIDE ENVIRONMENTAL PROJECT ENGINEER

LEVEL III CERTIFIED BY:
STACEY H. BAILEY, PE
CERTIFICATION NUMBER: 3074
ISSUED: FEBRUARY 02, 2015

CLEARING AND GRUBBING
EROSION CONTROL FOR
CONSTRUCTION SHEET 29

NAD 83/NSRS 2007

REVISIONS

8/17/99 R/W REVISION 6-24-14 (DW6) - ADDED ADDITIONAL PUE AT -Y3- STA.18+50.00 RT.ON PARCEL 1(BELL BROTHERS FARM,LLC).

$$$$SYSTIME$$$$
P:\Roadway Design Control\CADD\R2514D_hydr_c&g_psh_29.dgn
TEA ENGINEERING, PLLC

-Y3A- POT Sta. 10+00.00

BEGIN CONSTRUCTION
-Y3A- STA. 13+75.00

MATCHLINE -Y3A- STA. 15+50.00
SEE SHEET 6

BM #15
SEE SHEET 1-F
ELEV. 28.34'

S 75°58'09.6" E

SR 1338 BELL LOOP RD.

12" RCP

6"

R=50'

R=35'

+65.00

GRADE TO DRAIN

1

BELL BROTHERS FARM, INC

-Y3- POT Sta. 10+00.00

BEGIN CONSTRUCTION
-Y3- STA. 14+50.00

PUE PUE PUE PUE

400' LANE TRANSITION LT. & RT.

+50.00

EXIST R/W

15" RCP

30" C&G

N 89°16'21.5" E

NC 58 24' BST

2' BST

72" CONC

CONC HW

6"

MATCHLINE -Y3- STA. 18+50.00
SEE SHEET 6

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:
ALL EROSION CONTROL DEVICES SHOWN ARE LOCATED WITHIN EXISTING R/W OR EASEMENT.

NOTE:
ESTABLISH SUFFICIENT BUFFER FOR WATER COURSE.

SEE SHEET 46 FOR -Y3- PROFILE
SEE SHEET 50 FOR -Y3A- PROFILE

PROJECT REFERENCE NO.	SHEET NO.
R-2514D	EC-30/CONST.30
R/W SHEET NO.	
ROADSIDE ENVIRONMENTAL PROJECT ENGINEER	

LEVEL III CERTIFIED BY:
STACEY H. BAILEY, PE
CERTIFICATION NUMBER: 3074
ISSUED: FEBRUARY 02, 2015

CLEARING AND GRUBBING
EROSION CONTROL FOR
CONSTRUCTION SHEET 30

NAD 83/NSRS 2007

REVISIONS

R/W REVISION 6-24-14 (DWG) - REVISED THE PUE ON PARCEL 22 (MILTON GARDNER) AND PARCEL 38 (SARAH W.RUCKER C/O AGNES CONTRERAS).

8/17/99

MATCHLINE -Y3- STA. 34+00.00 SEE SHEET 6

53 ECIM PROPERTIES, LLC

40.50' R/W OLD TRENTON ROAD

TOWN OF POLLOCKSVILLE

38 SARAH W. RUCKER C/O AGNES CONTRERAS

39 GUY BROWN

40 BARBARA STRAYHORN

101 LEE MORRIS

-Y3- POT Sta. 38+37.83

200' ELVA COURT

100' TAPER

350' LANE TRANSITION LT. & RT.

+34.00

+00.00

PUE

RETAIN S 80° 10' 40.3" E

REMOVE

RETAIN

END CONSTRUCTION
-Y3- STA. 38+00.00

END 5' CONC. SIDEWALK
-Y3- STA. 38+00.00 RT.

-BY3- 33 POT 38+12.96

22 23 24 25 UNKNOWN

MILTON GARDNER

BRUCE L. FREEMAN

ROBERT M. JONES, ET UX

GARDNER LN

24" C&G

MOULTRY L. SPENCER, ET AL

TT A. EMANUEL

BRITT A. EMANUEL

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:
ALL EROSION CONTROL DEVICES SHOWN ARE LOCATED WITHIN EXISTING R/W OR EASEMENT.

NOTE:
ESTABLISH SUFFICIENT BUFFER FOR WATER COURSE.

SEE SHEET 46 FOR -Y3- PROFILE

$$$$$SYSTIME$$$$$
R:\Roadway Design Control\CADD\R2514D_hyd_c&g_psh_30.dgn
DGN ENGINEERING ONE

PROJECT REFERENCE NO.	SHEET NO.
R-2514D	EC-31/CONST.31
R/W SHEET NO.	

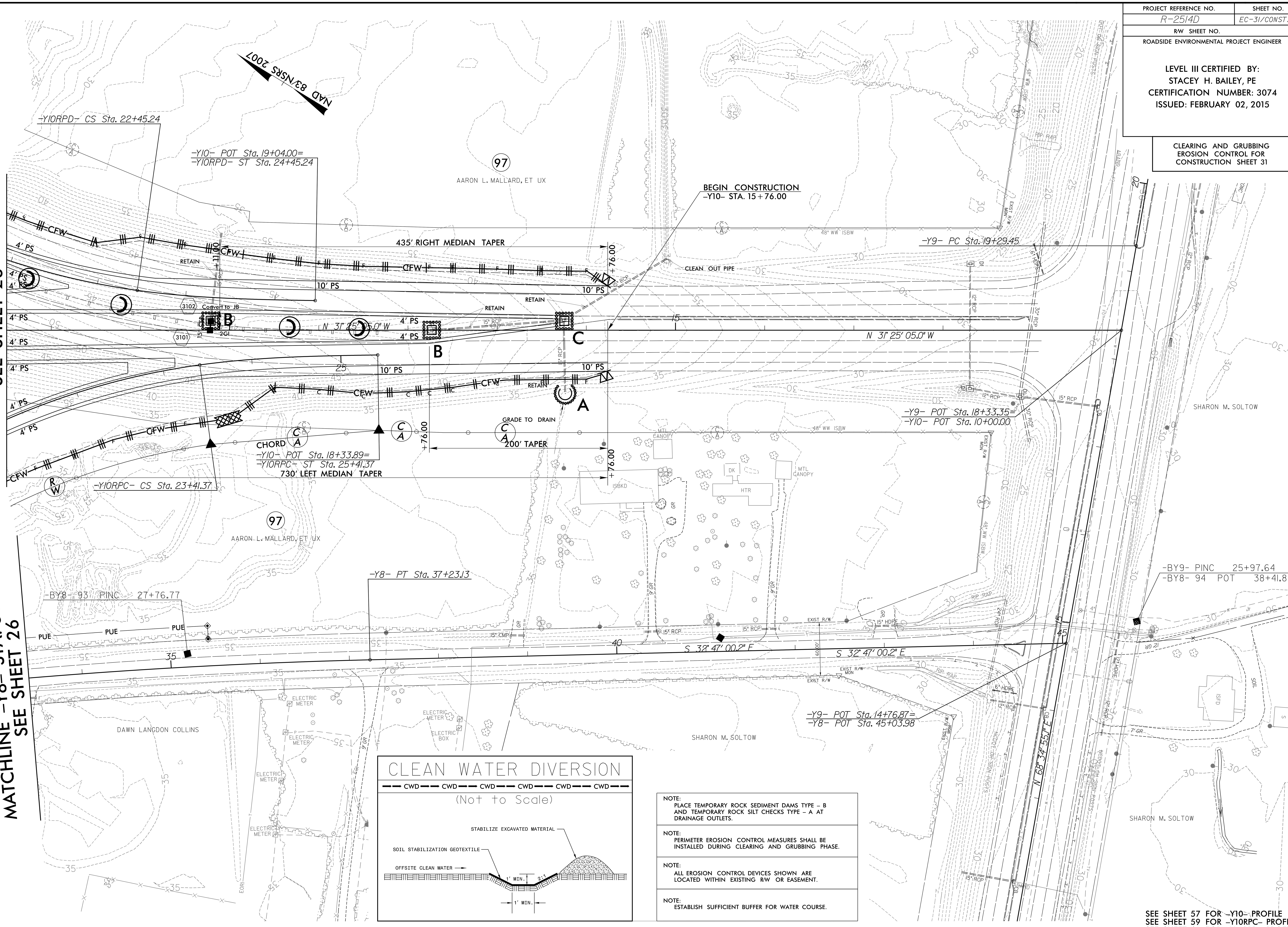
ROADSIDE ENVIRONMENTAL PROJECT ENGINEER

LEVEL III CERTIFIED BY:
STACEY H. BAILEY, PE
CERTIFICATION NUMBER: 3074
ISSUED: FEBRUARY 02, 2015

CLEARING AND GRUBBING
EROSION CONTROL FOR
CONSTRUCTION SHEET 31

REVISIONS

R/W REVISION 6-24-14 (DWG) - ADDED PUE FROM -Y8- STA.32+36.00 TO STA.35+43.00 LT.ON PARCEL 97 (AARON L.MALLARD,ET UX).



CLEAN WATER DIVERSION

(Not to Scale)

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:
ALL EROSION CONTROL DEVICES SHOWN ARE LOCATED WITHIN EXISTING R/W OR EASEMENT.

NOTE:
ESTABLISH SUFFICIENT BUFFER FOR WATER COURSE.

SEE SHEET 57 FOR -Y10- PROFILE
SEE SHEET 59 FOR -Y10RPC- PROFILE
SEE SHEET 60 FOR -Y10RPD- PROFILE

8/17/99

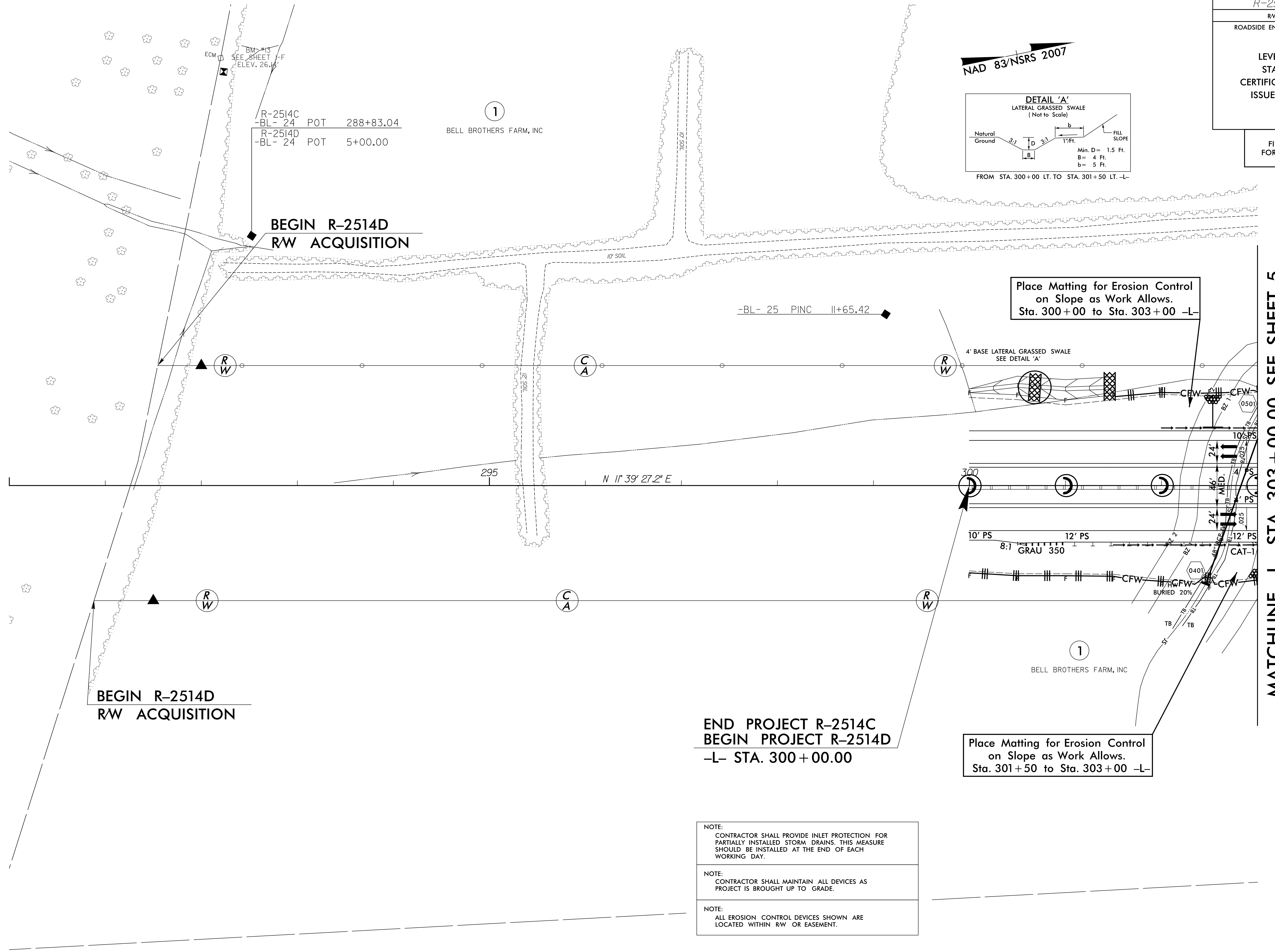
PROJECT REFERENCE NO.	SHEET NO.
R-2514D	EC-32/CONST.4
R/W SHEET NO.	

ROADSIDE ENVIRONMENTAL PROJECT ENGINEER

LEVEL III CERTIFIED BY:
STACEY H. BAILEY, PE
CERTIFICATION NUMBER: 3074
ISSUED: FEBRUARY 2, 2015

FINAL EROSION CONTROL
FOR CONSTRUCTION SHEET 4

REVISIONS



NAD 83/NSRS 2007
DETAIL 'A'
LATERAL GRASSED SWALE
(Not to Scale)
Natural Ground
FILL SLOPE
Min. D= 1.5 Ft.
B= 4 Ft.
b= 5 Ft.
FROM STA. 300+00 LT. TO STA. 301+50 LT. -L-
BM #13 SEE SHEET 1-F ELEV. 26.16'
ECM
R-2514C -BL- 24 POT 288+83.04
R-2514D -BL- 24 POT 5+00.00
BELL BROTHERS FARM, INC
BEGIN R-2514D R/W ACQUISITION
10' SOIL
-BL- 25 PINC 11+65.42
Place Matting for Erosion Control on Slope as Work Allows. Sta. 300+00 to Sta. 303+00 -L-
4' BASE LATERAL GRASSED SWALE SEE DETAIL 'A'
CFW
0501
10' PS
24'
46' MED.
4' PS
12' PS
295
N 11° 39' 27.2" E
300
10' PS
8:1
GRAU 350
CAT-1
0401
BURIED 20%
BELL BROTHERS FARM, INC
BEGIN R-2514D R/W ACQUISITION
END PROJECT R-2514C
BEGIN PROJECT R-2514D
-L- STA. 300+00.00
Place Matting for Erosion Control on Slope as Work Allows. Sta. 301+50 to Sta. 303+00 -L-
MATCHLINE -L- STA. 303+00.00 SEE SHEET 5

NOTE:
CONTRACTOR SHALL PROVIDE INLET PROTECTION FOR PARTIALLY INSTALLED STORM DRAINS. 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:
ALL EROSION CONTROL DEVICES SHOWN ARE LOCATED WITHIN R/W OR EASEMENT.

SEE SHEET 32 FOR -L- PROFILE

8/17/99

$$$$$$SYSTIME$$$$$ R:\Hydraulics\Erosion Control\CADD\R2514D_hyd_final_psh_(04)32.dgn

PROJECT REFERENCE NO.	SHEET NO.
R-2514D	EC-33/CONST.5
R/W SHEET NO.	

ROADSIDE ENVIRONMENTAL PROJECT ENGINEER

LEVEL III CERTIFIED BY:
STACEY H. BAILEY, PE
CERTIFICATION NUMBER: 3074
ISSUED: FEBRUARY 2, 2015

FINAL EROSION CONTROL
FOR CONSTRUCTION SHEET 5

DETAIL 'LL'

PIPE OUTLET CHANNEL
(Not to Scale)

Natural Ground — MIN. 2:1 TO TIE, EXISTING BANK — CHANNEL BED (Variable) — MIN. 2:1 TO TIE, EXISTING BANK — d — Natural Ground

Length = 16 Ft.
d = 1.5 Ft.
Est. = 8 Tons of Class I Rip-Rap
Est. = 16 SY Geotextile

FROM STA. 303+16 TO STA. 303+34 -L-

DETAIL 'U'

FALSE SUMP
(Not to Scale)

Median Ditch — 9" — 2' — L (See Chart Below) — 20' — GI etc. — S — S = Ditch Slope — ℄ Proposed Ditch

Ditch Grade	L	Ditch Grade	L
0.0% To 2.0%	20'	Over 4.0% To 6.0%	40'
Over 2.0% To 4.0%	30'	Over 6.0%	50'

DETAIL 'B'

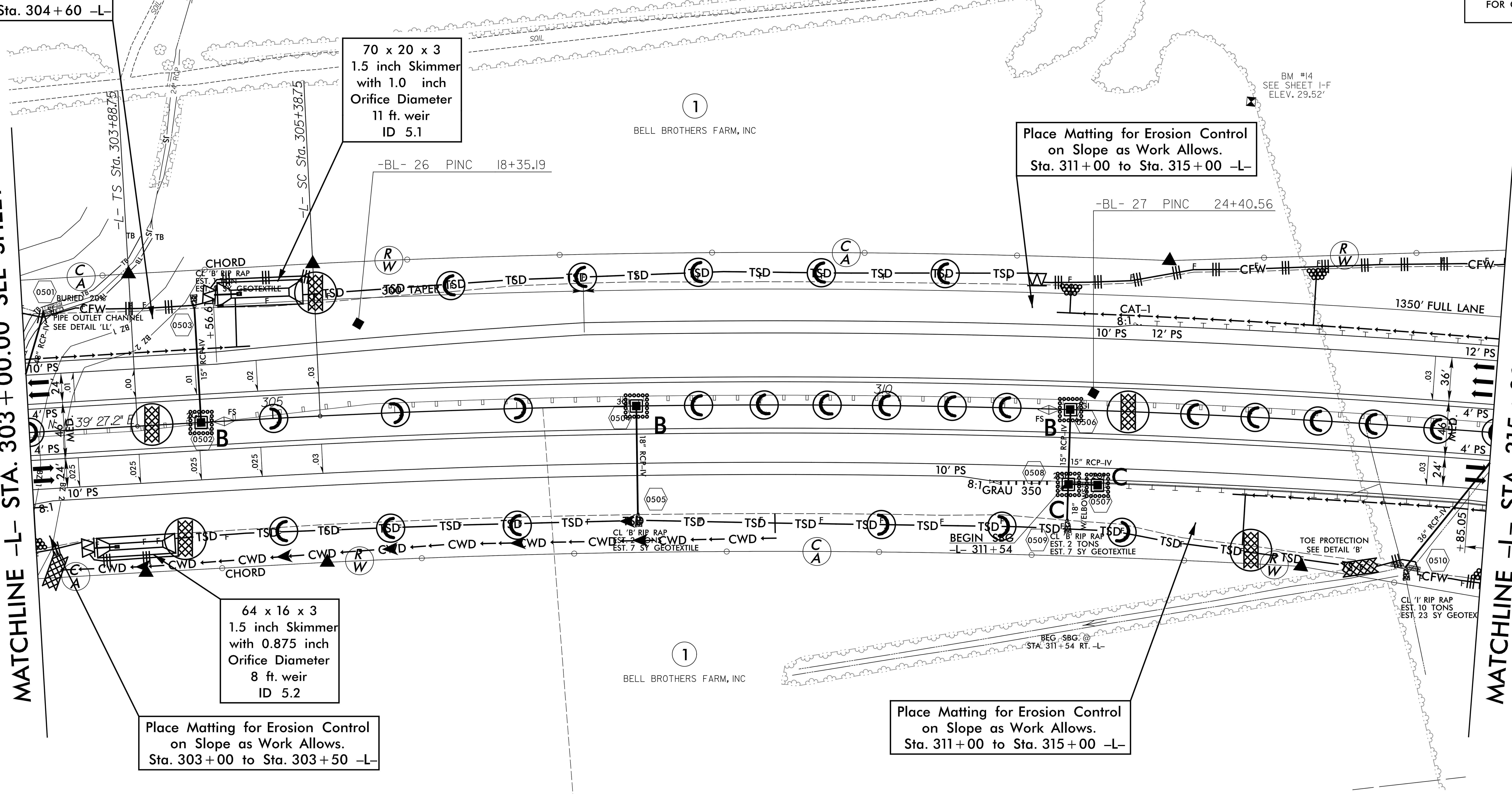
TOE PROTECTION
(Not to Scale)

NATURAL GROUND — d — 3:1 OR FLATTER — FILL SLOPE — FILTER FABRIC

d = 1.5 Ft.

Type of Liner = CL. 'B' Rip-Rap

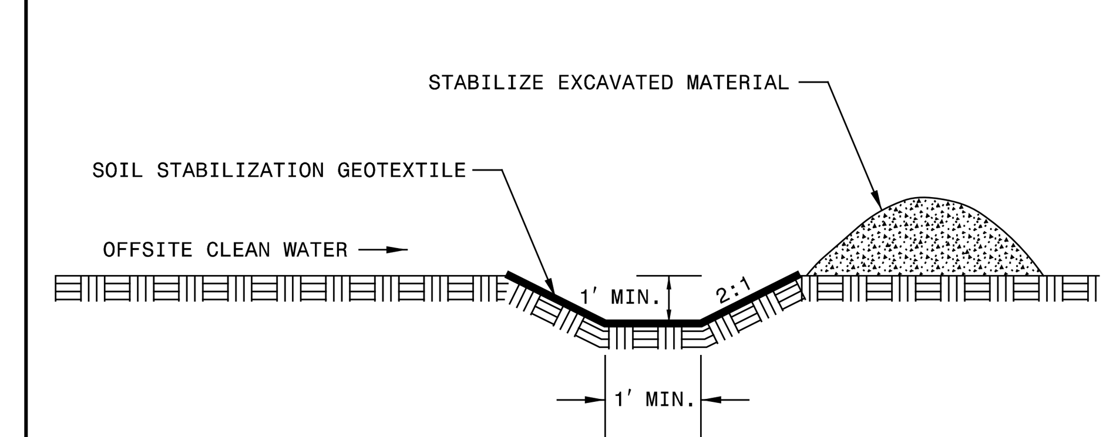
FROM STA. 314+15 TO STA. 314+55 RT. -L-



CLEAN WATER DIVERSION

—— CWD —— CWD —— CWD —— CWD —— CWD —— CWD ——

(Not to Scale)



NOTE:
CONTRACTOR SHALL PROVIDE INLET PROTECTION FOR PARTIALLY INSTALLED STORM DRAINS. 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:
ALL EROSION CONTROL DEVICES SHOWN ARE LOCATED WITHIN RW OR EASEMENT.

SBG - "SHOULDER BERM GUTTER"

SEE SHEET 32 FOR -L- PROFILE

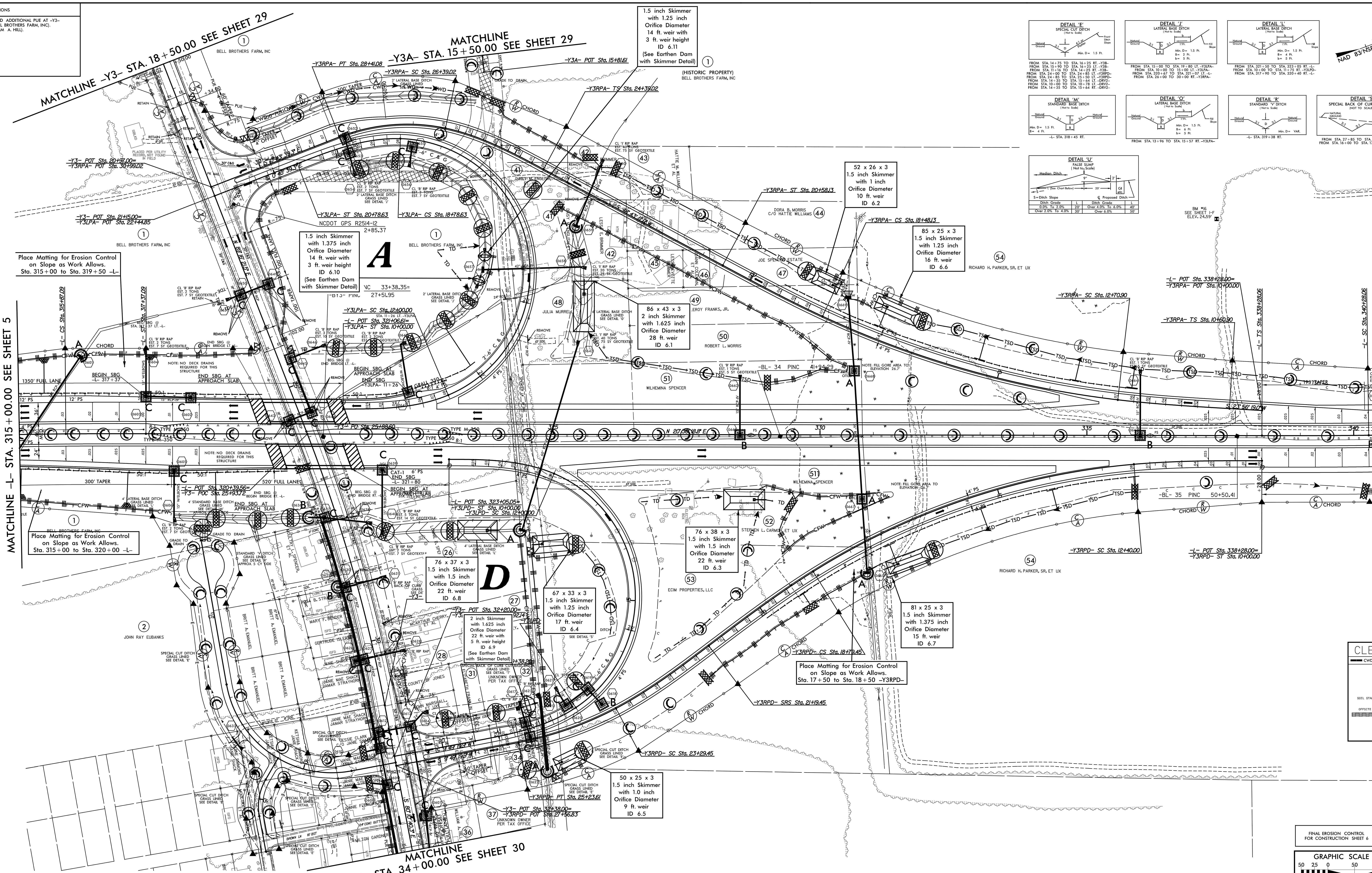
REVISIONS

8/17/99

$$$$$$SYSTIME$$$$$
R:\Hydraulics\Erosion Control\CADD\R2514D_hyd_final_psh_(05)33.dgn

REVISIONS

R/W REVISION 6-24-14 (DWG) ADDED ADDITIONAL PUE AT -Y3- STA. 18+68.00 RT. ON PARCEL 1 (BELL BROTHERS FARM, INC). REVISED PUE ON PARCEL 36 (WILLIAM A. HILL).



MATCHLINE -Y3- STA. 18+50.00 SEE SHEET 29
MATCHLINE -Y3A- STA. 15+50.00 SEE SHEET 29
MATCHLINE -L- STA. 315+00.00 SEE SHEET 5
MATCHLINE -L- STA. 341+00.00 SEE SHEET 7
MATCHLINE -Y3- STA. 34+00.00 SEE SHEET 30
1.5 inch Skimmer with 1.25 inch Orifice Diameter 14 ft. weir with 3 ft. weir height ID 6.11 (See Earthen Dam with Skimmer Detail)
1.5 inch Skimmer with 1.375 inch Orifice Diameter 14 ft. weir with 3 ft. weir height ID 6.10 (See Earthen Dam with Skimmer Detail)
52 x 26 x 3 1.5 inch Skimmer with 1 inch Orifice Diameter 10 ft. weir ID 6.2
85 x 25 x 3 1.5 inch Skimmer with 1.25 inch Orifice Diameter 16 ft. weir ID 6.6
86 x 43 x 3 2 inch Skimmer with 1.625 inch Orifice Diameter 28 ft. weir ID 6.1
76 x 38 x 3 1.5 inch Skimmer with 1.5 inch Orifice Diameter 22 ft. weir ID 6.3
76 x 37 x 3 1.5 inch Skimmer with 1.5 inch Orifice Diameter 22 ft. weir ID 6.8
67 x 33 x 3 1.5 inch Skimmer with 1.25 inch Orifice Diameter 17 ft. weir ID 6.4
2 inch Skimmer with 1.625 inch Orifice Diameter 22 ft. weir with 5 ft. weir height ID 6.9 (See Earthen Dam with Skimmer Detail)
81 x 25 x 3 1.5 inch Skimmer with 1.375 inch Orifice Diameter 15 ft. weir ID 6.7
50 x 25 x 3 1.5 inch Skimmer with 1.0 inch Orifice Diameter 9 ft. weir ID 6.5
Place Matting for Erosion Control on Slope as Work Allows. Sta. 315+00 to Sta. 319+50 -L-
Place Matting for Erosion Control on Slope as Work Allows. Sta. 315+00 to Sta. 320+00 -L-
Place Matting for Erosion Control on Slope as Work Allows. Sta. 17+50 to Sta. 18+50 -Y3RPD-
A
D
BELL BROTHERS FARM, INC
(HISTORIC PROPERTY) BELL BROTHERS FARM, INC
JOHN RAY EUBANKS
RICHARD H. PARKER, SR. ET UX
ECM PROPERTIES, LLC
NAD 83/NSRS 2007
DETAIL 'S' SPECIAL BACK OF CURB CUT DITCH (NOT TO SCALE)
FROM STA. 27+85 TO STA. 30+30 LT. -Y3-
DETAIL 'T' SPECIAL BACK OF CURB CUT BASE DITCH (NOT TO SCALE)
NATURAL GROUND
Min. D= 1.5 Ft.
FROM STA. 17+95 TO STA. 20+25 RT. -Y3LPD-
CLEAN WATER DIVERSION
(Not to Scale)
SOIL STABILIZATION GEOTEXTILE
OFFSITE CLEAN WATER
1' MIN.
SBG - "SHOULDER BERM GUTTER"

PROJECT REFERENCE NO.	SHEET NO.
R-2514D	EC-34/CONST.6

R/W SHEET NO.

ROADSIDE ENVIRONMENTAL PROJECT ENGINEER

LEVEL III CERTIFIED BY:
STACEY H. BAILEY, PE
CERTIFICATION NUMBER: 3074
ISSUED: FEBRUARY 2, 2015

NOTE:
CONTRACTOR SHALL PROVIDE INLET PROTECTION FOR PARTIALLY INSTALLED STORM DRAINS. 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:
ALL EROSION CONTROL DEVICES SHOWN ARE LOCATED WITHIN R/W OR EASEMENT.

SEE SHEET 6-A FOR -Y3B- & -DRV2- DESIGN AND R/W DETAILS
SEE SHEET 33 FOR -L- PROFILE
SEE SHEET 46 FOR -Y3- PROFILE
SEE SHEET 47 FOR -Y3RPA- PROFILE
SEE SHEET 49 FOR -Y3LPA- PROFILE
SEE SHEET 48 FOR -Y3RPD- PROFILE
SEE SHEET 49 FOR -Y3LPD- PROFILE
SEE SHEET 50 FOR -Y3B- PROFILE
SEE SHEET 50 FOR -DRV2- PROFILE
SEE SHEETS S-1 THRU S-? FOR STRUCTURE PLANS

FINAL EROSION CONTROL FOR CONSTRUCTION SHEET 6

GRAPHIC SCALE
50 25 0 50 100
PLANS

LOCATION:

TIP NO.: COUNTY:

DESIGNED BY:

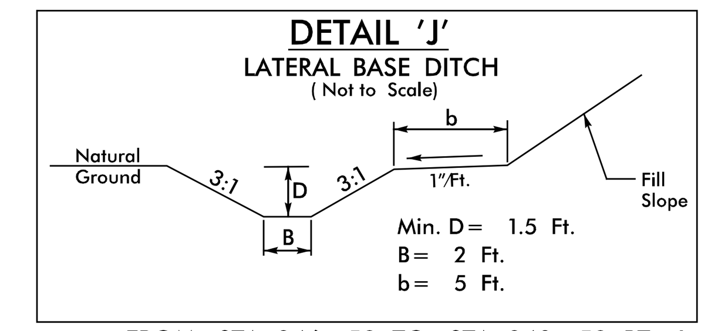
CHECKED BY: DATE:

PROJECT REFERENCE NO.	SHEET NO.
R-2514D	EC-35/CONST.7
R/W SHEET NO.	
ROADSIDE ENVIRONMENTAL PROJECT ENGINEER	

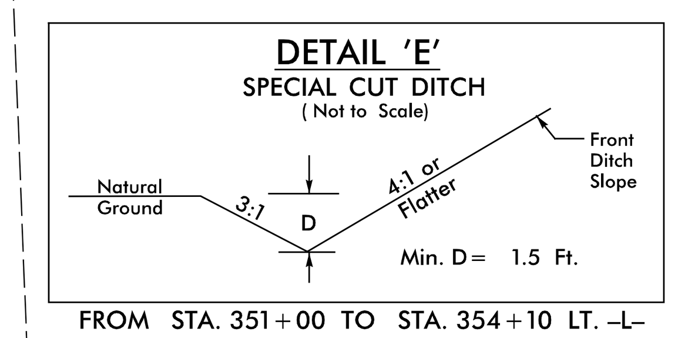
LEVEL III CERTIFIED BY:
STACEY H. BAILEY, PE
CERTIFICATION NUMBER: 3074
ISSUED: FEBRUARY 2, 2015

FINAL EROSION CONTROL
FOR CONSTRUCTION SHEET 7

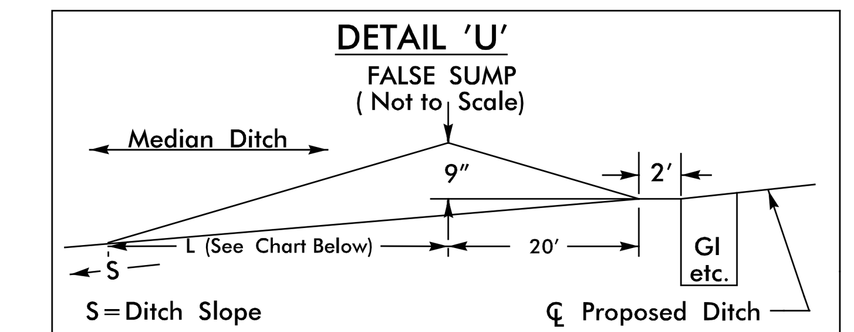
NAD 83/NSRS 2007



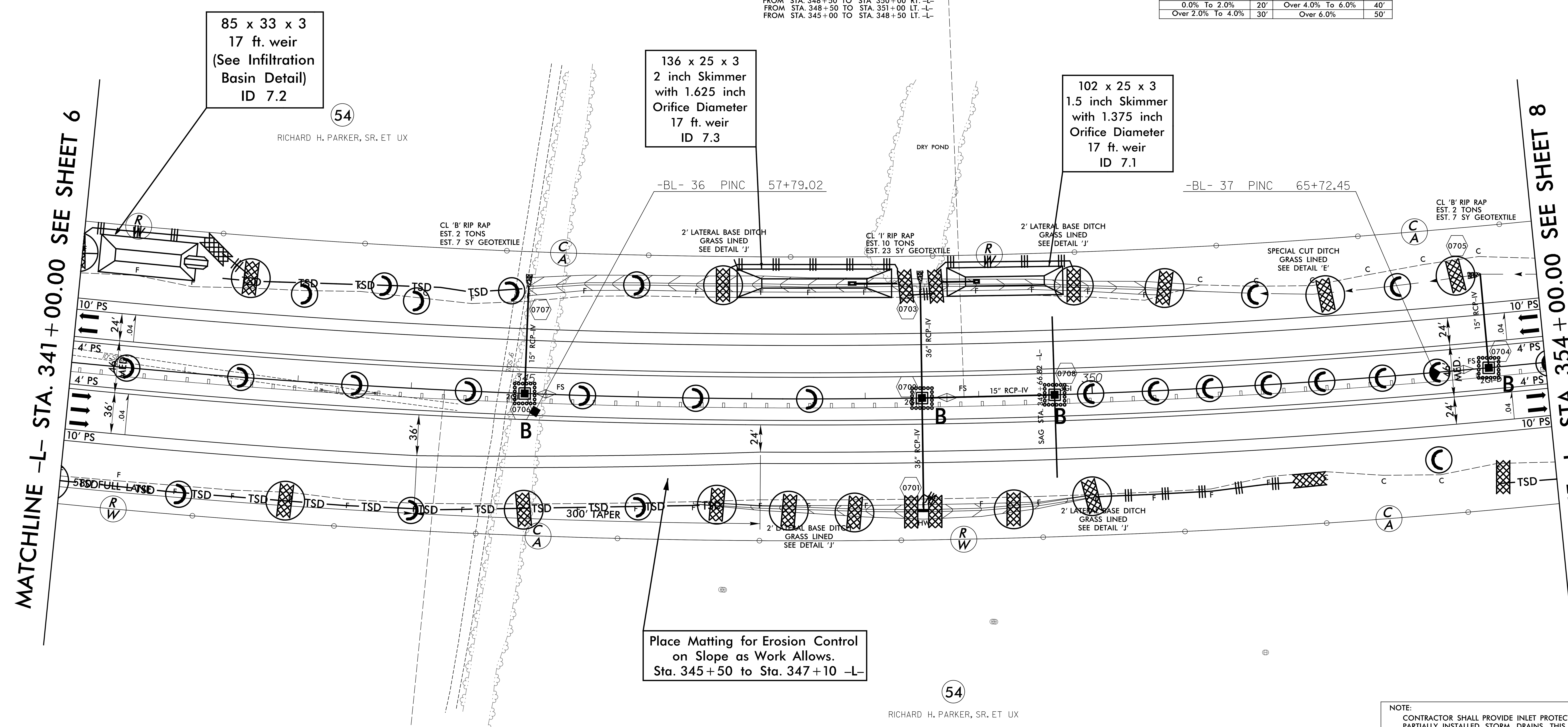
FROM STA. 346+50 TO STA. 348+50 RT. –L–
FROM STA. 348+50 TO STA 350+00 RT. –L–
FROM STA. 348+50 TO STA. 351+00 LT. –L–
FROM STA. 345+00 TO STA. 348+50 LT. –L–



FROM STA. 351+00 TO STA. 354+10 LT. –L–



Ditch Grade	L	Ditch Grade	L
0.0% To 2.0%	20'	Over 4.0% To 6.0%	40'
Over 2.0% To 4.0%	30'	Over 6.0%	50'



85 x 33 x 3
17 ft. weir
(See Infiltration Basin Detail)
ID 7.2
136 x 25 x 3
2 inch Skimmer
with 1.625 inch
Orifice Diameter
17 ft. weir
ID 7.3
102 x 25 x 3
1.5 inch Skimmer
with 1.375 inch
Orifice Diameter
17 ft. weir
ID 7.1
54
RICHARD H. PARKER, SR. ET UX
DRY POND
-BL- 36 PINC 57+79.02
-BL- 37 PINC 65+72.45
CL 'B' RIP RAP
EST. 2 TONS
EST. 7 SY GEOTEXTILE
2' LATERAL BASE DITCH
GRASS LINED
SEE DETAIL 'J'
CL 'I' RIP RAP
EST. 10 TONS
EST. 23 SY GEOTEXTILE
SPECIAL CUT DITCH
GRASS LINED
SEE DETAIL 'E'
MATCHLINE –L– STA. 341+00.00 SEE SHEET 6
MATCHLINE –L– STA. 354+00.00 SEE SHEET 8
10' PS
4' PS
15" RCP-IV
36" RCP-IV
SAG STA. 349+66.82 –L–
300' TAPER
FULL LANE
TSD
Place Matting for Erosion Control
on Slope as Work Allows.
Sta. 345+50 to Sta. 347+10 –L–
54
RICHARD H. PARKER, SR. ET UX

NOTE:
CONTRACTOR SHALL PROVIDE INLET PROTECTION FOR PARTIALLY INSTALLED STORM DRAINS. 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:
ALL EROSION CONTROL DEVICES SHOWN ARE LOCATED WITHIN R/W OR EASEMENT.

SEE SHEET 34 FOR –L– PROFILE

REVISIONS

8/17/99

$$$$$$SYSTIME$$$$$
R:\Hydraulics\Erosion Control\CADD\R2514D_hyd_final_psh_(07)35.dgn

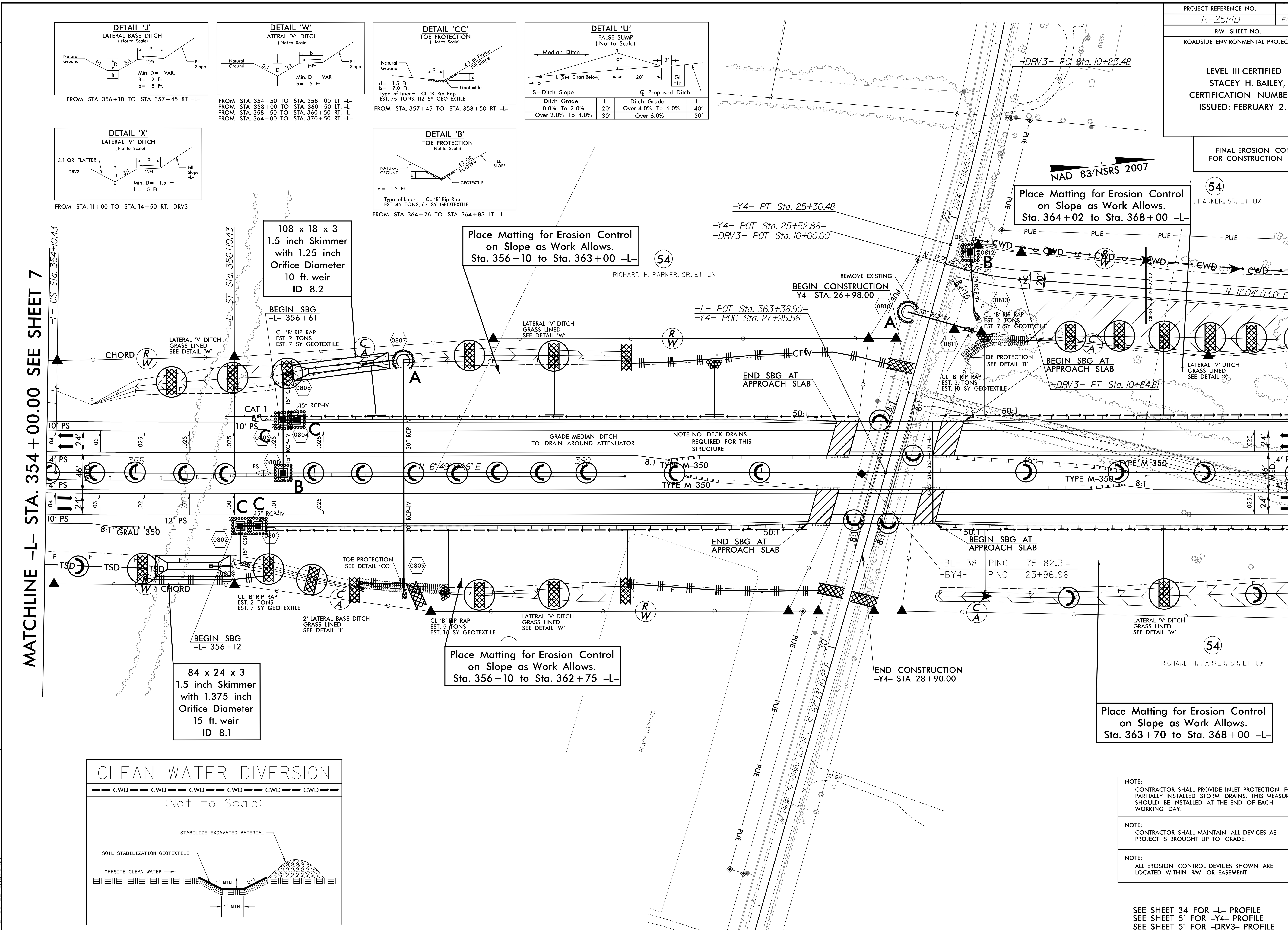
PROJECT REFERENCE NO.	SHEET NO.
R-2514D	EC-36/CONST.8
R/W SHEET NO.	
ROADSIDE ENVIRONMENTAL PROJECT ENGINEER	

LEVEL III CERTIFIED BY:
STACEY H. BAILEY, PE
CERTIFICATION NUMBER: 3074
ISSUED: FEBRUARY 2, 2015

FINAL EROSION CONTROL
FOR CONSTRUCTION SHEET 8

REVISIONS

R/W REVISION 6-24-14 (DWG) - ADDED PUE TO PARCEL 54 (RICHARD H. PARKER,SR.ET UX) AT THE FOLLOWING LOCATIONS: -Y4- STA. 25+57.00 TO STA. 26+57.00 RT., -Y4- STA. 29+70.00 TO STA. 32+70.00 RT. AND -DRV3- STA. 10+31.00 TO STA. 16+50.72 LT. REVISED THE TCE FROM -DRV3- STA. 10+30.00 TO STA. 16+50.72 LT. ON PARCEL 54 (RICHARD H. PARKER,SR.ET UX).



DETAIL 'J'
LATERAL BASE DITCH
(Not to Scale)
Min. D= VAR.
B= 2 Ft.
b= 5 Ft.
FROM STA. 356+10 TO STA. 357+45 RT. -L-
DETAIL 'W'
LATERAL 'V' DITCH
(Not to Scale)
Min. D= VAR
b= 5 Ft.
FROM STA. 354+50 TO STA. 358+00 LT. -L-
FROM STA. 358+00 TO STA. 360+50 LT. -L-
FROM STA. 358+50 TO STA. 360+50 RT. -L-
FROM STA. 364+00 TO STA. 370+50 RT. -L-
DETAIL 'CC'
TOE PROTECTION
(Not to Scale)
d= 1.5 Ft.
b= 7.0 Ft.
Type of Liner= CL 'B' Rip-Rap
EST. 75 TONS, 112 SY GEOTEXTILE
FROM STA. 357+45 TO STA. 358+50 RT. -L-
DETAIL 'U'
FALSE SUMP
(Not to Scale)
S=Ditch Slope
Proposed Ditch
Ditch Grade | L | Ditch Grade | L
0.0% To 2.0% | 20' | Over 4.0% To 6.0% | 40'
Over 2.0% To 4.0% | 30' | Over 6.0% | 50'
DETAIL 'X'
LATERAL 'V' DITCH
(Not to Scale)
Min. D= 1.5 Ft
b= 5 Ft.
FROM STA. 11+00 TO STA. 14+50 RT. -DRV3-
DETAIL 'B'
TOE PROTECTION
(Not to Scale)
d= 1.5 Ft.
Type of Liner= CL 'B' Rip-Rap
EST. 45 TONS, 67 SY GEOTEXTILE
FROM STA. 364+26 TO STA. 364+83 LT. -L-
108 x 18 x 3
1.5 inch Skimmer
with 1.25 inch
Orifice Diameter
10 ft. weir
ID 8.2
Place Matting for Erosion Control
on Slope as Work Allows.
Sta. 356+10 to Sta. 363+00 -L-
RICHARD H. PARKER, SR. ET UX
-DRV3- PC Sta. 10+23.48
NAD 83/NSRS 2007
Place Matting for Erosion Control
on Slope as Work Allows.
Sta. 364+02 to Sta. 368+00 -L-
-Y4- PT Sta. 25+30.48
-Y4- POT Sta. 25+52.88=
-DRV3- POT Sta. 10+00.00
BEGIN CONSTRUCTION
-Y4- STA. 26+98.00
REMOVE EXISTING
-L- POT Sta. 363+38.90=
-Y4- POC Sta. 27+95.56
BEGIN SBG
-L- 356+61
END SBG AT
APPROACH SLAB
BEGIN SBG AT
APPROACH SLAB
-DRV3- PT Sta. 10+84.81
MATCHLINE -L- STA. 354+00.00 SEE SHEET 7
MATCHLINE -L- STA. 368+00.00 SEE SHEET 9 STA. 14+00.00 -DRV3-
GRADE MEDIAN DITCH
TO DRAIN AROUND ATTENUATOR
NOTE: NO DECK DRAINS
REQUIRED FOR THIS
STRUCTURE
TYPE M-350
END SBG AT
APPROACH SLAB
BEGIN SBG AT
APPROACH SLAB
-BL- 38 PINC 75+82.31=
-BY4- PINC 23+96.96
TOE PROTECTION
SEE DETAIL 'CC'
2' LATERAL BASE DITCH
GRASS LINED
SEE DETAIL 'J'
BEGIN SBG
-L- 356+12
84 x 24 x 3
1.5 inch Skimmer
with 1.375 inch
Orifice Diameter
15 ft. weir
ID 8.1
Place Matting for Erosion Control
on Slope as Work Allows.
Sta. 356+10 to Sta. 362+75 -L-
END CONSTRUCTION
-Y4- STA. 28+90.00
Place Matting for Erosion Control
on Slope as Work Allows.
Sta. 363+70 to Sta. 368+00 -L-
PEACH ORCHARD
CLEAN WATER DIVERSION
(Not to Scale)
STABILIZE EXCAVATED MATERIAL
SOIL STABILIZATION GEOTEXTILE
OFFSITE CLEAN WATER

NOTE:
CONTRACTOR SHALL PROVIDE INLET PROTECTION FOR PARTIALLY INSTALLED STORM DRAINS. 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:
ALL EROSION CONTROL DEVICES SHOWN ARE LOCATED WITHIN R/W OR EASEMENT.

SEE SHEET 34 FOR -L- PROFILE
SEE SHEET 51 FOR -Y4- PROFILE
SEE SHEET 51 FOR -DRV3- PROFILE
SEE SHEETS S-1 THRU S-? FOR STRUCTURE PLANS

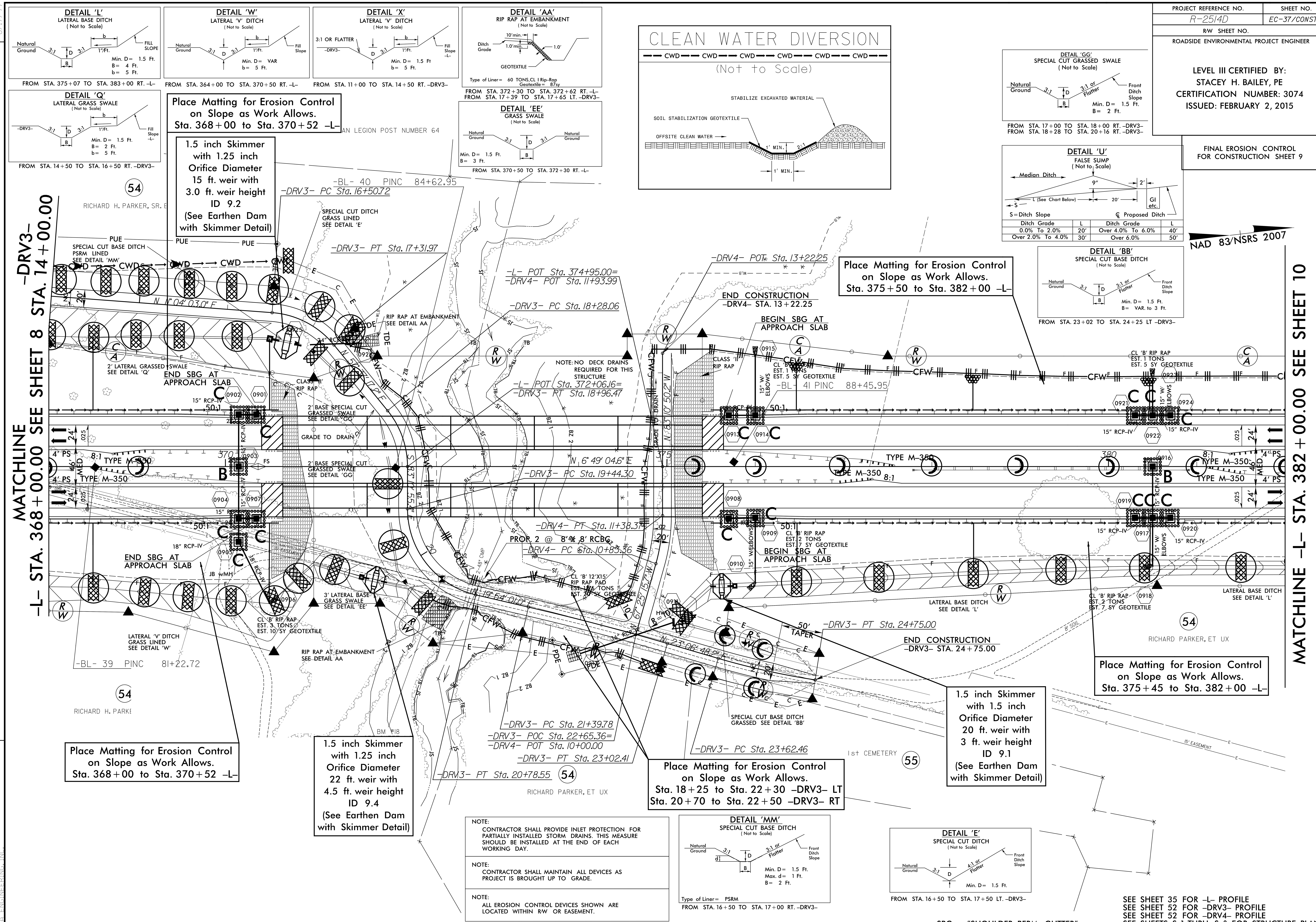
PROJECT REFERENCE NO.	SHEET NO.
R-2514D	EC-37/CONST.9
R/W SHEET NO.	
ROADSIDE ENVIRONMENTAL PROJECT ENGINEER	

LEVEL III CERTIFIED BY:
STACEY H. BAILEY, PE
CERTIFICATION NUMBER: 3074
ISSUED: FEBRUARY 2, 2015

FINAL EROSION CONTROL
FOR CONSTRUCTION SHEET 9

REVISIONS

R/W REVISION 6-24-14 (DWG) - ADDED PUE TO PARCEL 54 (RICHARD H. PARKER,SR.ET UX) AT THE FOLLOWING LOCATIONS: -Y4- STA. 25+57.00 TO STA. 26+57.00 RT., -Y4- STA. 29+70.00 TO STA. 32+70.00 RT. AND -DRV3- STA. 10+30.00 TO STA. 16+50.72 LT. REVISED THE TCE FROM -DRV3- STA. 10+3.00 TO STA. 16+50.72 LT. ON PARCEL 54 (RICHARD H. PARKER,SR.ET UX).



Place Matting for Erosion Control on Slope as Work Allows.
Sta. 368+00 to Sta. 370+52 -L-

1.5 inch Skimmer with 1.25 inch Orifice Diameter 15 ft. weir with 3.0 ft. weir height ID 9.2 (See Earthen Dam with Skimmer Detail)

Place Matting for Erosion Control on Slope as Work Allows.
Sta. 375+50 to Sta. 382+00 -L-

Place Matting for Erosion Control on Slope as Work Allows.
Sta. 375+45 to Sta. 382+00 -L-

1.5 inch Skimmer with 1.5 inch Orifice Diameter 20 ft. weir with 3 ft. weir height ID 9.1 (See Earthen Dam with Skimmer Detail)

Place Matting for Erosion Control on Slope as Work Allows.
Sta. 18+25 to Sta. 22+30 -DRV3- LT
Sta. 20+70 to Sta. 22+50 -DRV3- RT

1.5 inch Skimmer with 1.25 inch Orifice Diameter 22 ft. weir with 4.5 ft. weir height ID 9.4 (See Earthen Dam with Skimmer Detail)

Place Matting for Erosion Control on Slope as Work Allows.
Sta. 368+00 to Sta. 370+52 -L-

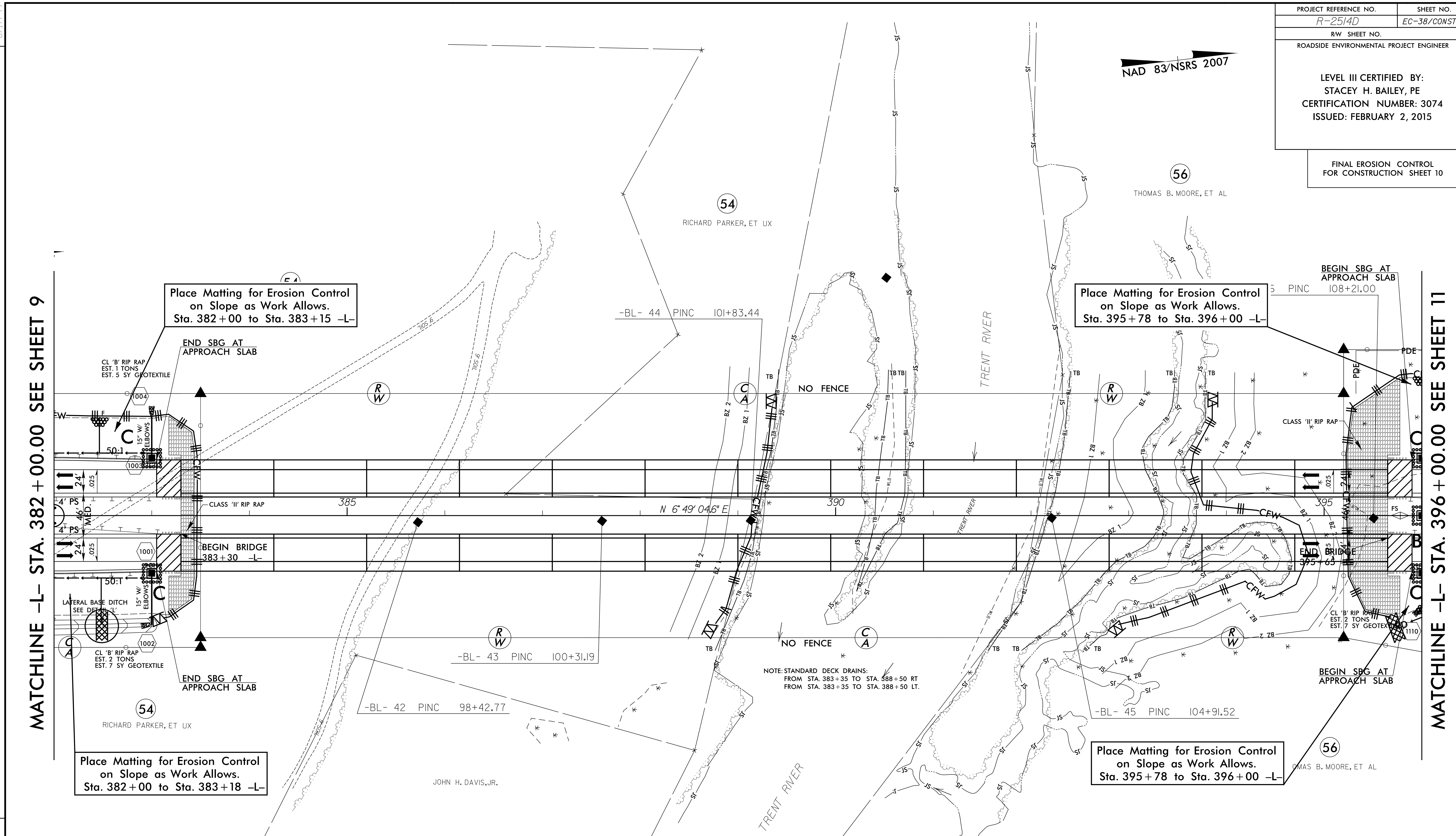
NOTE:
CONTRACTOR SHALL PROVIDE INLET PROTECTION FOR PARTIALLY INSTALLED STORM DRAINS. THIS MEASURE SHOULD BE INSTALLED AT THE END OF EACH WORKING DAY.

NOTE:
CONTRACTOR SHALL MAINTAIN ALL DEVICES AS PROJECT IS BROUGHT UP TO GRADE.

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

SBG - "SHOULDER BERM GUTTER"

SEE SHEET 35 FOR -L- PROFILE
SEE SHEET 52 FOR -DRV3- PROFILE
SEE SHEET 52 FOR -DRV4- PROFILE
SEE SHEETS S-1 THRU S-? FOR STRUCTURE PLANS


PROJECT REFERENCE NO. R-2514D
SHEET NO. EC-38/CONSTJO
R/W SHEET NO.
ROADSIDE ENVIRONMENTAL PROJECT ENGINEER
LEVEL III CERTIFIED BY:
STACEY H. BAILEY, PE
CERTIFICATION NUMBER: 3074
ISSUED: FEBRUARY 2, 2015
FINAL EROSION CONTROL FOR CONSTRUCTION SHEET 10
NAD 83/NSRS 2007
REVISIONS
MATCHLINE -L- STA. 382+00.00 SEE SHEET 9
MATCHLINE -L- STA. 396+00.00 SEE SHEET 11
Place Matting for Erosion Control on Slope as Work Allows. Sta. 382+00 to Sta. 383+15 -L-
Place Matting for Erosion Control on Slope as Work Allows. Sta. 382+00 to Sta. 383+18 -L-
Place Matting for Erosion Control on Slope as Work Allows. Sta. 395+78 to Sta. 396+00 -L-
Place Matting for Erosion Control on Slope as Work Allows. Sta. 395+78 to Sta. 396+00 -L-
END SBG AT APPROACH SLAB
BEGIN SBG AT APPROACH SLAB
CL 'B' RIP RAP EST. 1 TONS EST. 5 SY GEOTEXTILE
CL 'B' RIP RAP EST. 2 TONS EST. 7 SY GEOTEXTILE
CLASS 'II' RIP RAP
LATERAL BASE DITCH SEE DETAIL 'L'
15" W/ ELBOWS
BEGIN BRIDGE 383+30 -L-
END BRIDGE 395+65
N 6°49'04.6" E
385
390
395
-BL- 42 PINC 98+42.77
-BL- 43 PINC 100+31.19
-BL- 44 PINC 101+83.44
-BL- 45 PINC 104+91.52
PINC 108+21.00
NO FENCE
TRENT RIVER
54 RICHARD PARKER, ET UX
56 THOMAS B. MOORE, ET AL
JOHN H. DAVIS, JR.
BM #19 SEE SHEET 1-F ELEV. 13.46'
NOTE: STANDARD DECK DRAINS: FROM STA. 383+35 TO STA. 388+50 RT FROM STA. 383+35 TO STA. 388+50 LT.
DETAIL 'L'
LATERAL BASE DITCH (Not to Scale)
Natural Ground
FILL SLOPE
Min. D= 1.5 Ft. B= 4 Ft. b= 5 Ft.
FROM STA. 375+07 LT. TO STA. 383+00 RT. -L-

NOTE:
CONTRACTOR SHALL PROVIDE INLET PROTECTION FOR PARTIALLY INSTALLED STORM DRAINS. 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:
ALL EROSION CONTROL DEVICES SHOWN ARE LOCATED WITHIN R/W OR EASEMENT.

SBG - "SHOULDER BERM GUTTER"

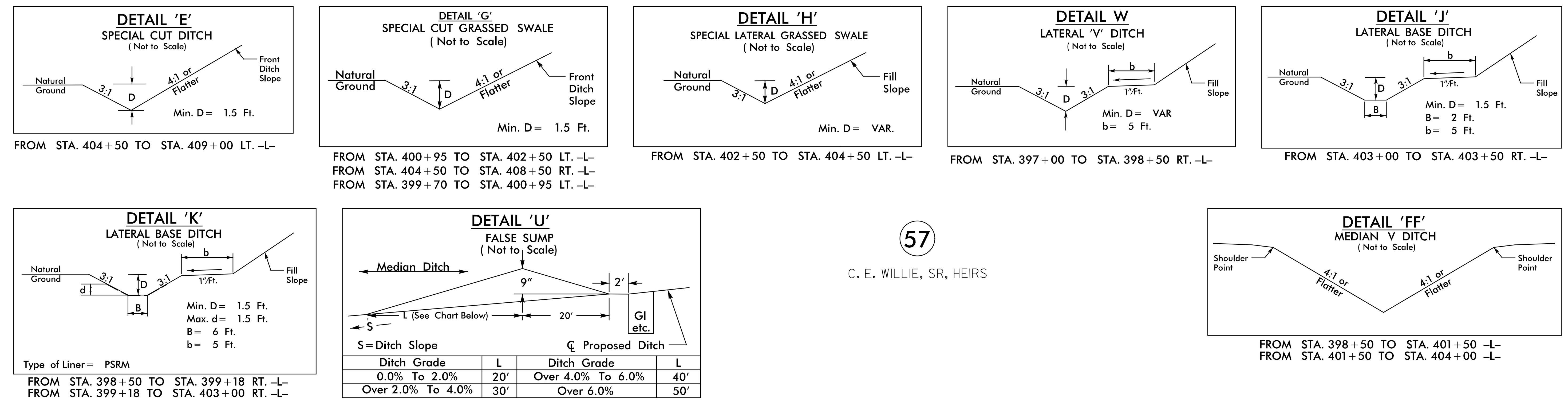
SEE SHEET 35 FOR -L- PROFILE
SEE SHEETS S-1 THRU S-? FOR STRUCTURE PLANS

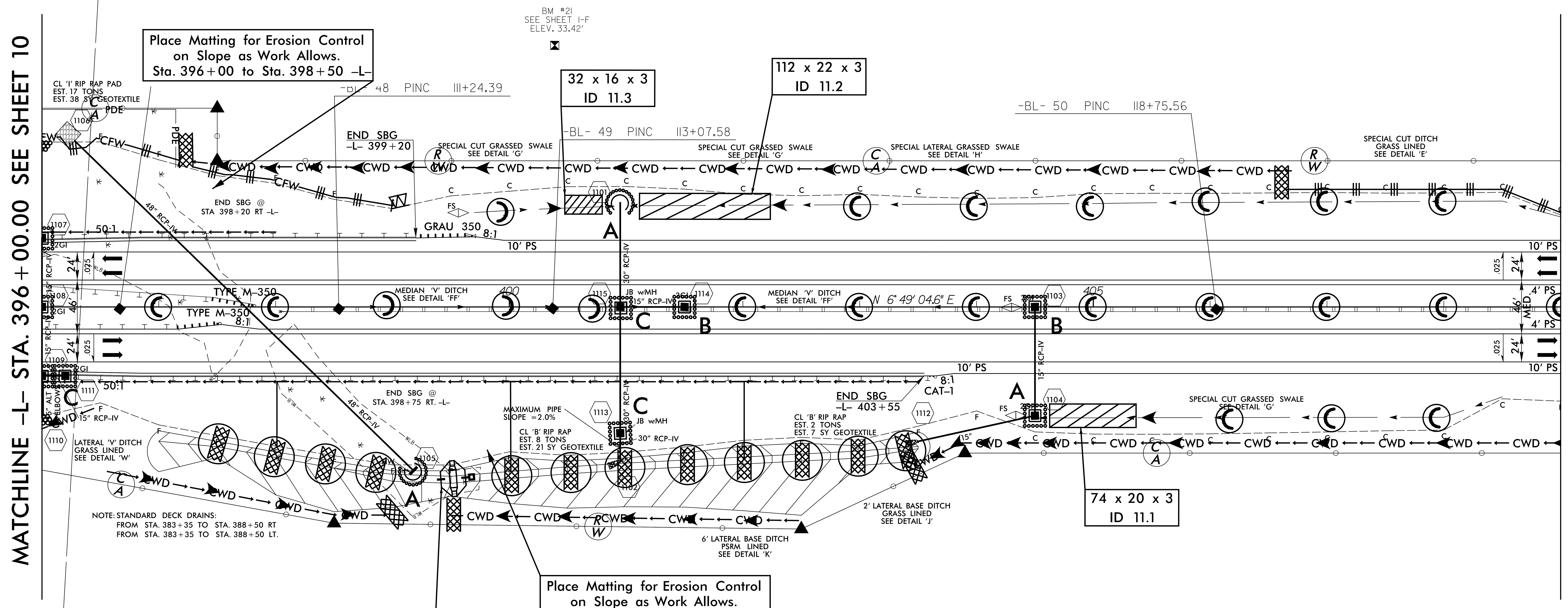
PROJECT REFERENCE NO.	SHEET NO.
R-2514D	EC-39/CONST11
R/W SHEET NO.	

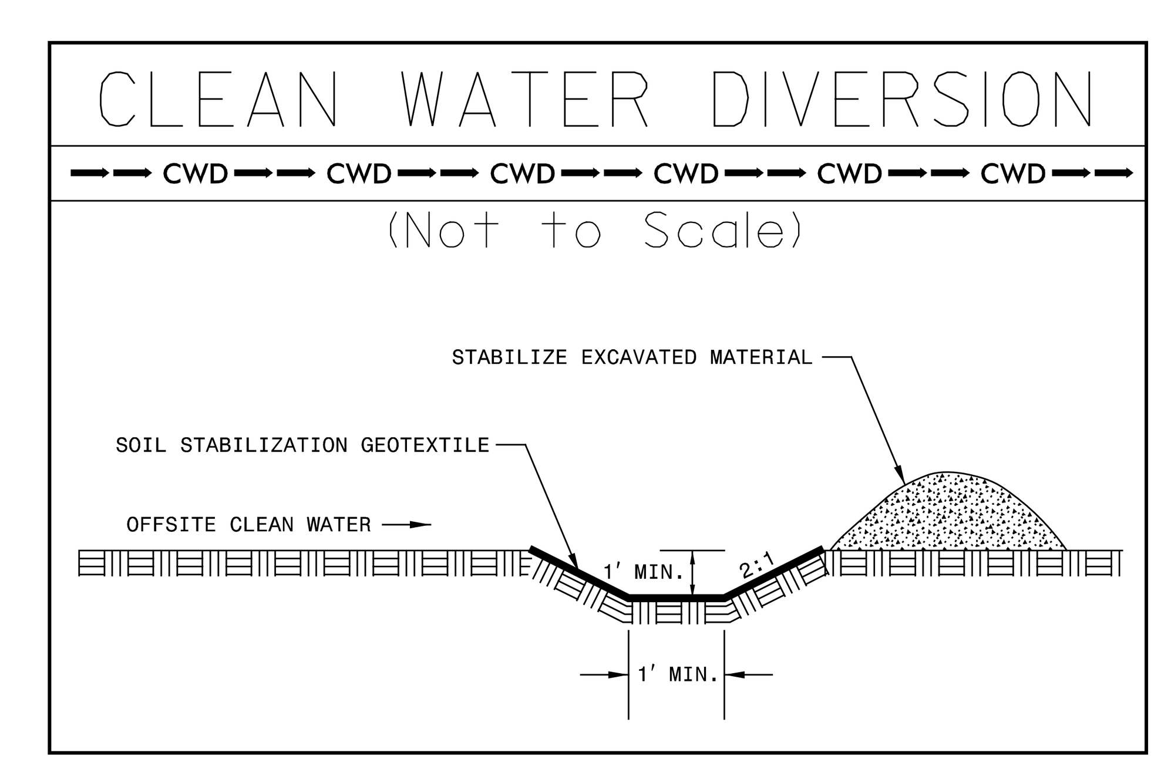
ROADSIDE ENVIRONMENTAL PROJECT ENGINEER

LEVEL III CERTIFIED BY:
STACEY H. BAILEY, PE
CERTIFICATION NUMBER: 3074
ISSUED: FEBRUARY 2, 2015

FINAL EROSION CONTROL FOR CONSTRUCTION SHEET 11







NOTE:
CONTRACTOR SHALL PROVIDE INLET PROTECTION FOR PARTIALLY INSTALLED STORM DRAINS. 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:
ALL EROSION CONTROL DEVICES SHOWN ARE LOCATED WITHIN R/W OR EASEMENT.

SBG - "SHOULDER BERM GUTTER"

SEE SHEET 36 FOR -L- PROFILE
SEE SHEETS S-1 THRU S-? FOR STRUCTURE PLANS

PROJECT REFERENCE NO.	SHEET NO.
R-2514D	EC-40/CONST12
R/W SHEET NO.	

ROADSIDE ENVIRONMENTAL PROJECT ENGINEER

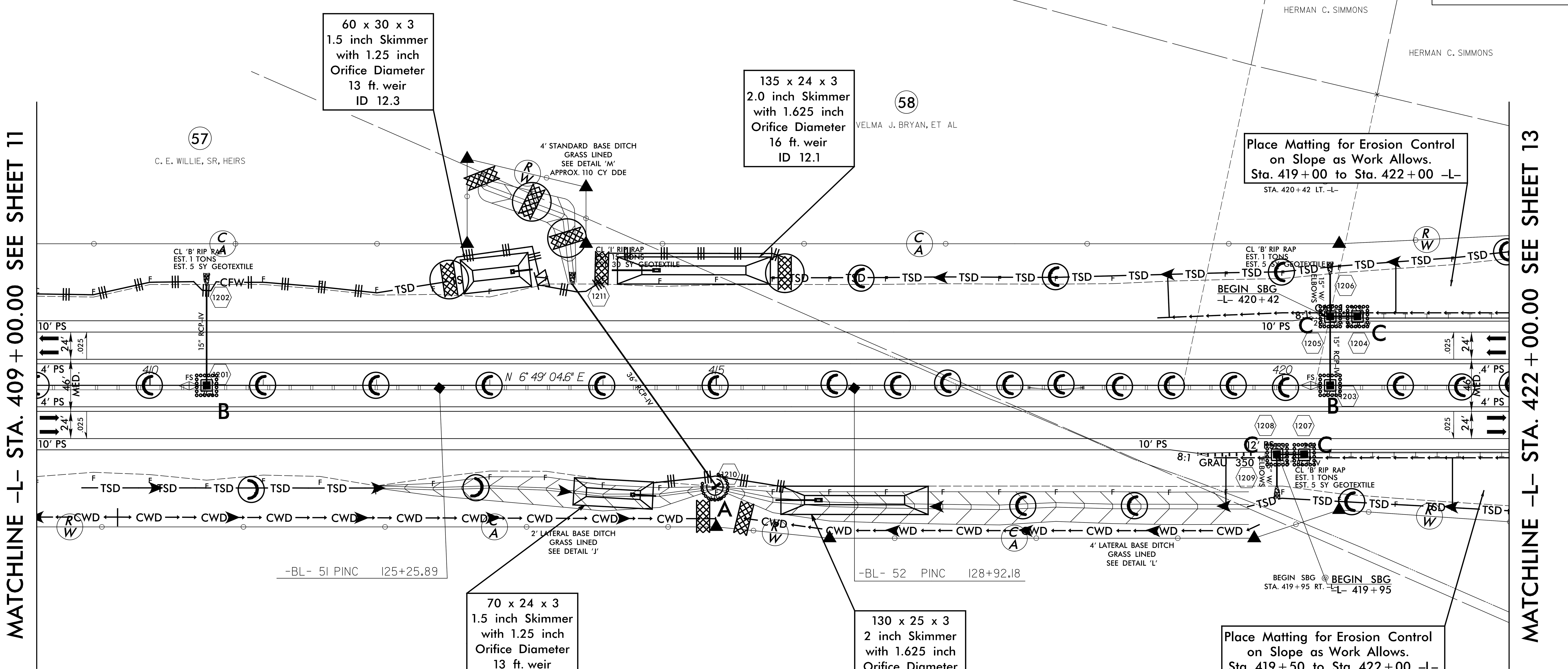
LEVEL III CERTIFIED BY:
STACEY H. BAILEY, PE
CERTIFICATION NUMBER: 3074
ISSUED: FEBRUARY 2, 2015

FINAL EROSION CONTROL FOR CONSTRUCTION SHEET 12

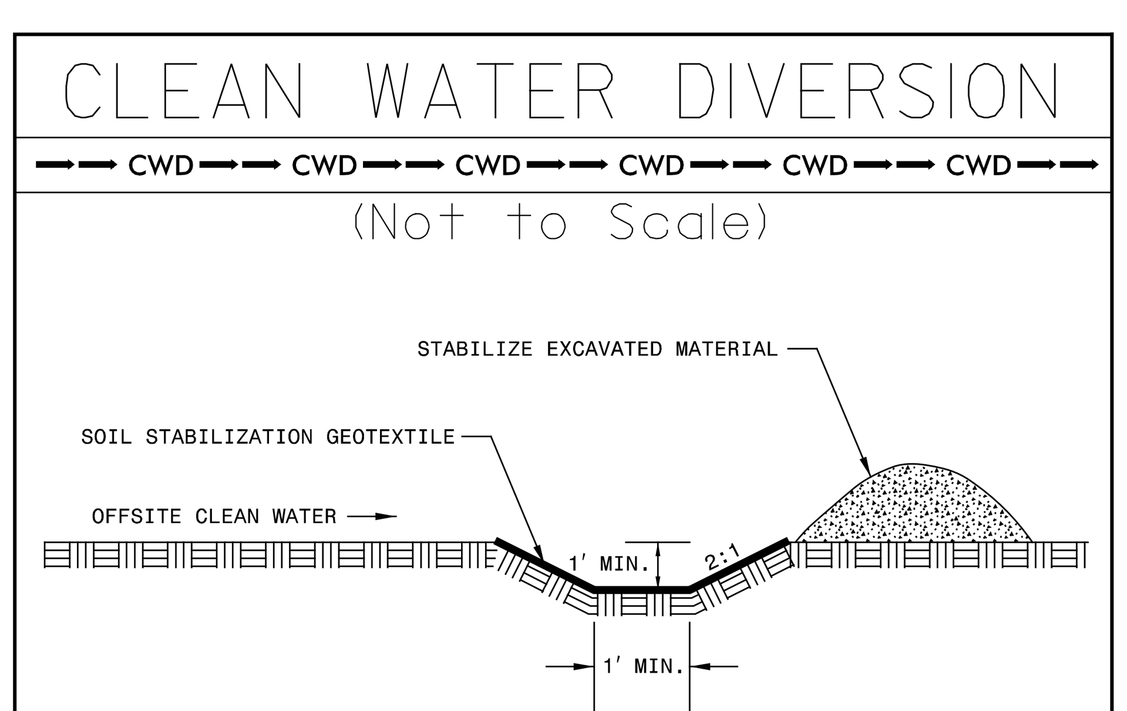
NOTE:
CONTRACTOR SHALL PROVIDE INLET PROTECTION FOR PARTIALLY INSTALLED STORM DRAINS. THIS MEASURE SHOULD BE INSTALLED AT THE END OF EACH WORKING DAY.

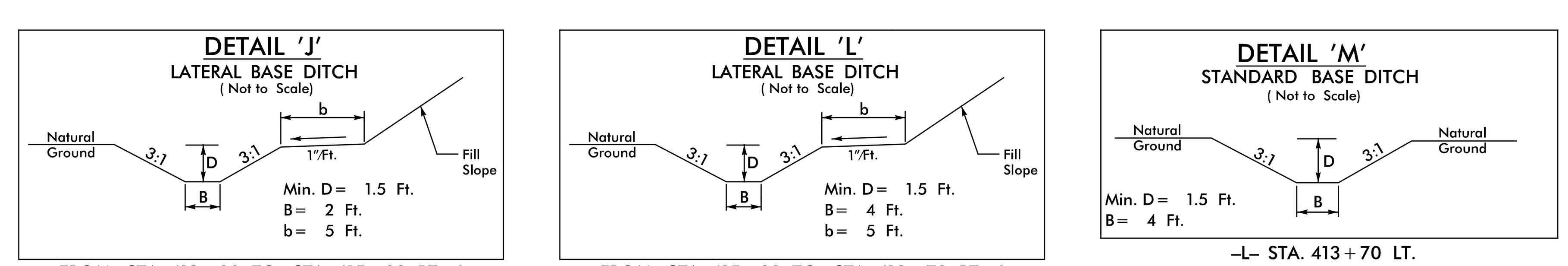
NOTE:
CONTRACTOR SHALL MAINTAIN ALL DEVICES AS PROJECT IS BROUGHT UP TO GRADE.

NOTE:
ALL EROSION CONTROL DEVICES SHOWN ARE LOCATED WITHIN R/W OR EASEMENT.

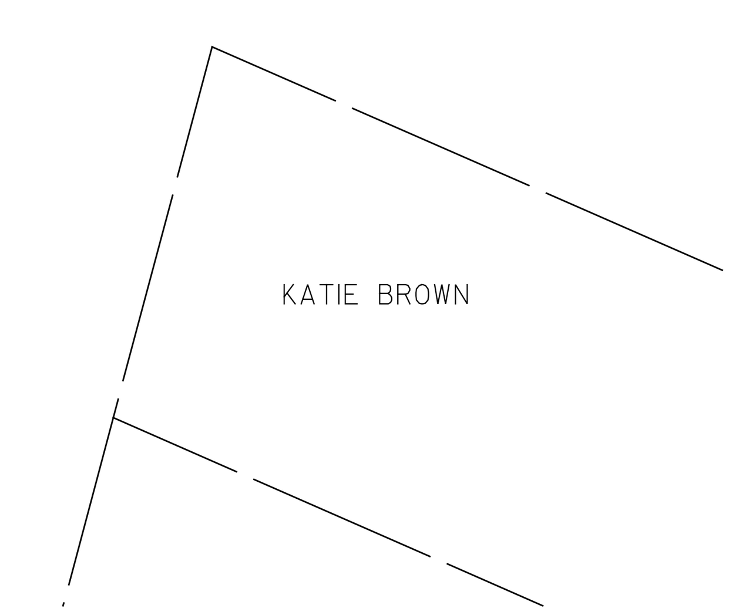


NAD 83/NSRS 2007
NATHANIEL SIMMONS HEIRS C/O KATHERINE S. WAY
HERMAN C. SIMMONS
HERMAN C. SIMMONS
MATCHLINE -L- STA. 409+00.00 SEE SHEET 11
MATCHLINE -L- STA. 422+00.00 SEE SHEET 13
60 x 30 x 3
1.5 inch Skimmer
with 1.25 inch
Orifice Diameter
13 ft. weir
ID 12.3
135 x 24 x 3
2.0 inch Skimmer
with 1.625 inch
Orifice Diameter
16 ft. weir
ID 12.1
58
VELMA J. BRYAN, ET AL
57
C. E. WILLIE, SR, HEIRS
4' STANDARD BASE DITCH
GRASS LINED
SEE DETAIL 'M'
APPROX. 110 CY DDE
Place Matting for Erosion Control
on Slope as Work Allows.
Sta. 419+00 to Sta. 422+00 -L-
STA. 420+42 LT. -L-
CL 'B' RIP RAP
EST. 1 TONS
EST. 5 SY GEOTEXTILE
BEGIN SBG
-L- 420+42
N 6° 49' 04.6" E
10' PS
4' PS
24'
46' MED.
15" RCP-IV
36" RCP-IV
2' LATERAL BASE DITCH
GRASS LINED
SEE DETAIL 'J'
4' LATERAL BASE DITCH
GRASS LINED
SEE DETAIL 'L'
-BL- 51 PINC 125+25.89
-BL- 52 PINC 128+92.18
BEGIN SBG
STA. 419+95 RT. -L-
BEGIN SBG
-L- 419+95
70 x 24 x 3
1.5 inch Skimmer
with 1.25 inch
Orifice Diameter
13 ft. weir
ID 12.4
130 x 25 x 3
2 inch Skimmer
with 1.625 inch
Orifice Diameter
17 ft. weir
ID 12.2
Place Matting for Erosion Control
on Slope as Work Allows.
Sta. 419+50 to Sta. 422+00 -L-
57
C. E. WILLIE, SR, HEIRS
TSD
CWD
CFW





DETAIL 'J'
LATERAL BASE DITCH
(Not to Scale)
Natural Ground
Fill Slope
Min. D = 1.5 Ft.
B = 2 Ft.
b = 5 Ft.
FROM STA. 412+00 TO STA. 415+00 RT. -L-
DETAIL 'L'
LATERAL BASE DITCH
(Not to Scale)
Min. D = 1.5 Ft.
B = 4 Ft.
b = 5 Ft.
FROM STA. 415+00 TO STA. 419+70 RT. -L-
DETAIL 'M'
STANDARD BASE DITCH
(Not to Scale)
Min. D = 1.5 Ft.
B = 4 Ft.
-L- STA. 413+70 LT.



REVISIONS

SEE SHEET 36 FOR -L- PROFILE

8/17/99

$$$$$$SYSTIME$$$$$
R:\Hydraulics\Erosion Control\CADD\R2514D_hyd_final_psh_(12)40.dgn

PROJECT REFERENCE NO.	SHEET NO.
R-2514D	EC-41/CONSTJ3
R/W SHEET NO.	

ROADSIDE ENVIRONMENTAL PROJECT ENGINEER

LEVEL III CERTIFIED BY:
STACEY H. BAILEY, PE
CERTIFICATION NUMBER: 3074
ISSUED: FEBRUARY 2, 2015

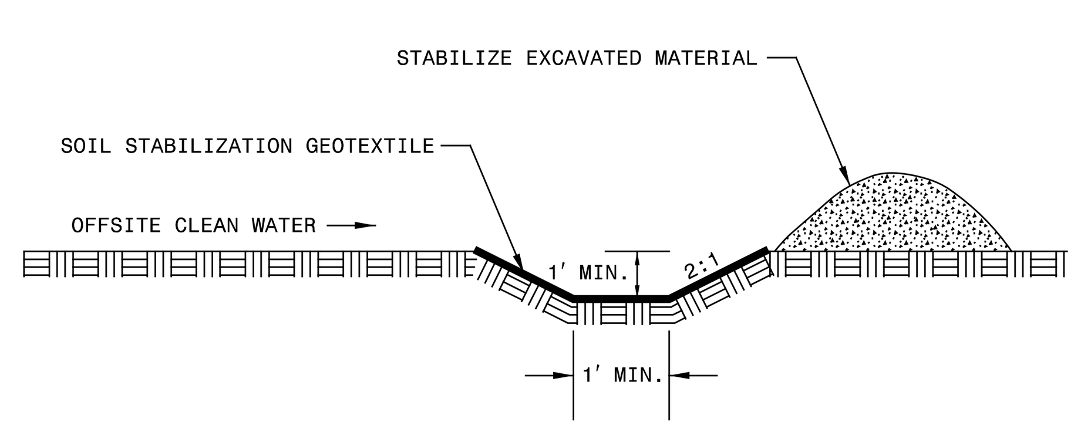
FINAL EROSION CONTROL FOR CONSTRUCTION SHEET 13

REVISIONS

R/W REVISION 7-23-14 (DWG) - ADDED A SECOND CLAIM OF PUE ON PARCEL 62Z (FLORENCE STRAYHORN) AND PARCEL 65Z (WILLIAM MURPHY, ET UX).

CLEAN WATER DIVERSION

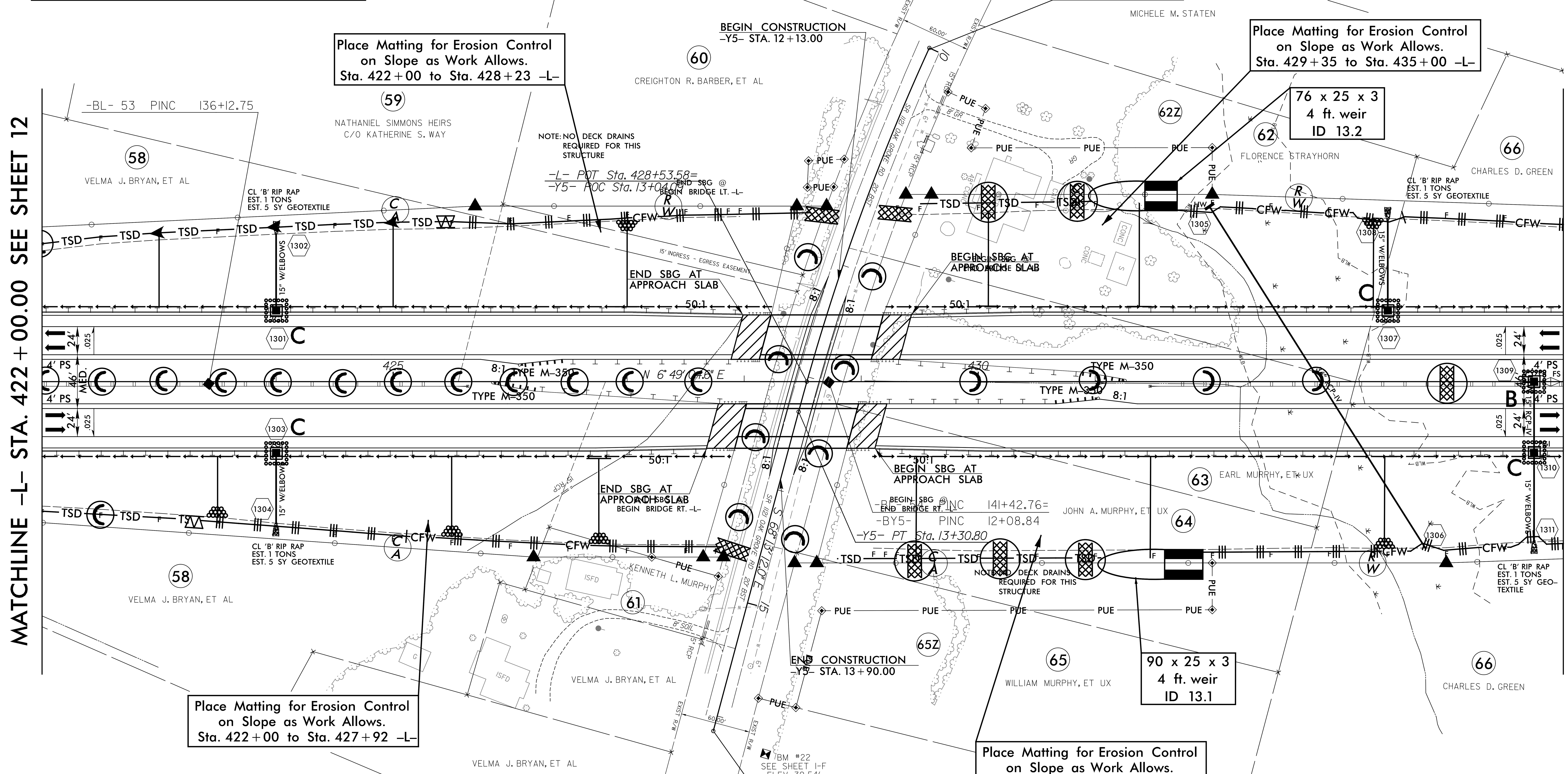
(Not to Scale)



NOTE:
CONTRACTOR SHALL PROVIDE INLET PROTECTION FOR PARTIALLY INSTALLED STORM DRAINS. 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.

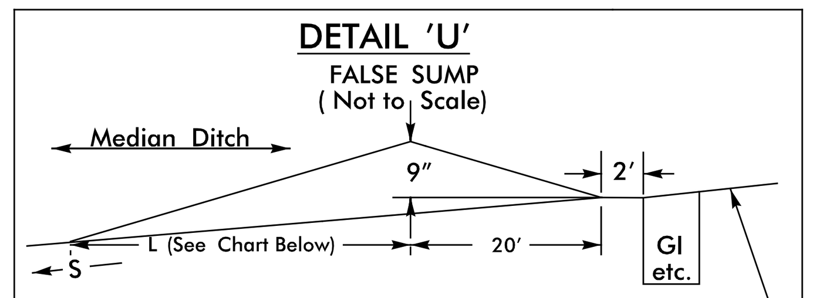
NOTE:
ALL EROSION CONTROL DEVICES SHOWN ARE LOCATED WITHIN R/W OR EASEMENT.



NAD 83/NSRS 2007
MATCHLINE -L- STA. 422+00.00 SEE SHEET 12
MATCHLINE -L- STA. 435+00.00 SEE SHEET 14
Place Matting for Erosion Control on Slope as Work Allows. Sta. 422+00 to Sta. 428+23 -L-
Place Matting for Erosion Control on Slope as Work Allows. Sta. 429+35 to Sta. 435+00 -L-
Place Matting for Erosion Control on Slope as Work Allows. Sta. 422+00 to Sta. 427+92 -L-
Place Matting for Erosion Control on Slope as Work Allows. Sta. 429+12 to Sta. 435+00 -L-
76 x 25 x 3 4 ft. weir ID 13.2
90 x 25 x 3 4 ft. weir ID 13.1
LEROY WAY, JR.
CELIA W. HADDOCK, ESTATE
MICHELE M. STATEN
-Y5- PC Sta. 10+00.00
BEGIN CONSTRUCTION -Y5- STA. 12+13.00
END CONSTRUCTION -Y5- STA. 13+90.00
CREIGHTON R. BARBER, ET AL
NATHANIEL SIMMONS HEIRS C/O KATHERINE S. WAY
VELMA J. BRYAN, ET AL
FLORENCE STRAYHORN
CHARLES D. GREEN
EARL MURPHY, ET UX
JOHN A. MURPHY, ET UX
KENNETH L. MURPHY
WILLIAM MURPHY, ET UX
ERIC K. KENYEAR
JAMES H. WILSON, ET UX
-BL- 53 PINC 136+12.75
NOTE: NO DECK DRAINS REQUIRED FOR THIS STRUCTURE
-L- POT Sta. 428+53.58= -Y5- POC Sta. 13+04.00
BEGIN SBG @ BEGIN BRIDGE LT. -L-
END SBG AT APPROACH SLAB
BEGIN SBG AT APPROACH SLAB
-BL- PINC 141+42.76= -BY5- PINC 12+08.84
-Y5- PT Sta. 13+30.80
CL 'B' RIP RAP EST. 1 TONS EST. 5 SY GEOTEXTILE
TYPE M-350
N 6°49'08.8" E
BM #22 SEE SHEET 1-F ELEV. 39.54'
-Y5- POT Sta. 16+13.22
15' WELBOWS
TSD
CFW
PUE
50:1
8:1

DETAIL 'U'

FALSE SUMP
(Not to Scale)



Ditch Grade	L	Ditch Grade	L
0.0% To 2.0%	20'	Over 4.0% To 6.0%	40'
Over 2.0% To 4.0%	30'	Over 6.0%	50'

SBG - "SHOULDER BERM GUTTER"

SEE SHEET 37 FOR -L- PROFILE
SEE SHEET 53 FOR -Y5- PROFILE
SEE SHEETS S-1 THRU S-? FOR STRUCTURE PLANS

8/17/99

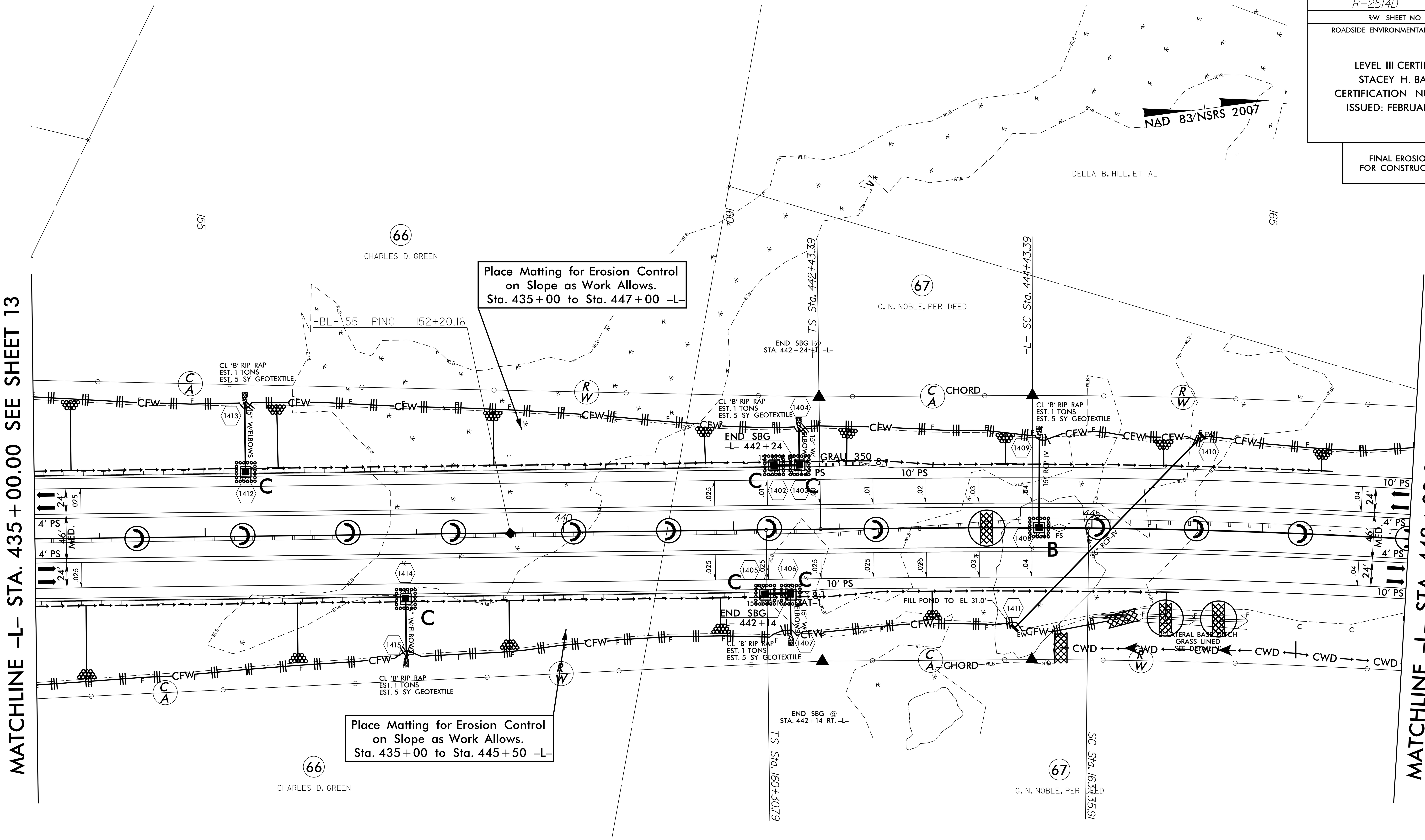
$$$$$$SYSTIME$$$$$
R:\Hydraulics\Erosion Control\CADD\R2514D_hyd_final_psh_(13)41.dgn

PROJECT REFERENCE NO.	SHEET NO.
R-2514D	EC-42/CONST14
R/W SHEET NO.	

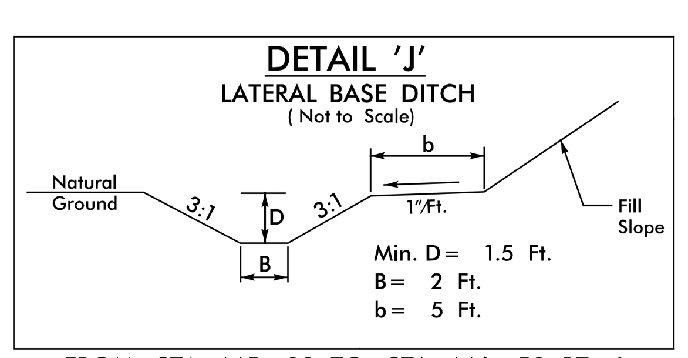
ROADSIDE ENVIRONMENTAL PROJECT ENGINEER

LEVEL III CERTIFIED BY:
STACEY H. BAILEY, PE
CERTIFICATION NUMBER: 3074
ISSUED: FEBRUARY 2, 2015

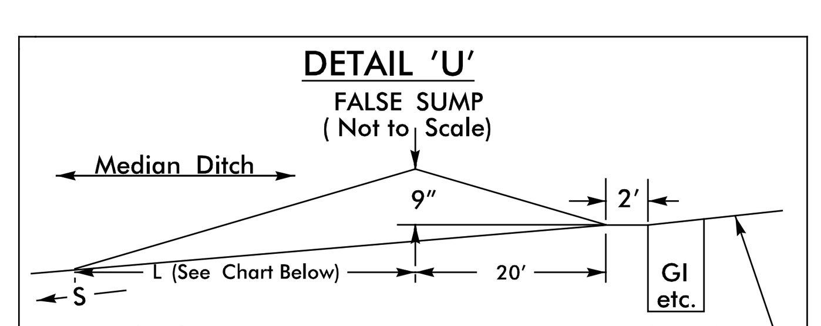
FINAL EROSION CONTROL
FOR CONSTRUCTION SHEET 14



MATCHLINE -L- STA. 435+00.00 SEE SHEET 13
MATCHLINE -L- STA. 448+00.00 SEE SHEET 15
NAD 83/NSRS 2007
DELLA B. HILL, ET AL
CHARLES D. GREEN
G. N. NOBLE, PER DEED
Place Matting for Erosion Control on Slope as Work Allows. Sta. 435+00 to Sta. 447+00 -L-
Place Matting for Erosion Control on Slope as Work Allows. Sta. 435+00 to Sta. 445+50 -L-
-BL-55 PINC 152+20.16
CL 'B' RIP RAP EST. 1 TONS EST. 5 SY GEOTEXTILE
END SBG @ STA. 442+24 LT. -L-
END SBG -L- 442+24
END SBG -L- 442+14
END SBG @ STA. 442+14 RT. -L-
TS Sta. 442+43.39
-L- SC Sta. 444+43.39
TS Sta. 160+30.79
SC Sta. 163+35.91
FILL POND TO EL. 31.0'
LATERAL BASE DITCH GRASS LINED SEE DETAIL 'J'
CHORD
10' PS
4' PS
24'
46' MED.
CFW
CWD



FROM STA. 445+00 TO STA. 446+50 RT. -L-



Ditch Grade	L	Ditch Grade	L
0.0% To 2.0%	20'	Over 4.0% To 6.0%	40'
Over 2.0% To 4.0%	30'	Over 6.0%	50'

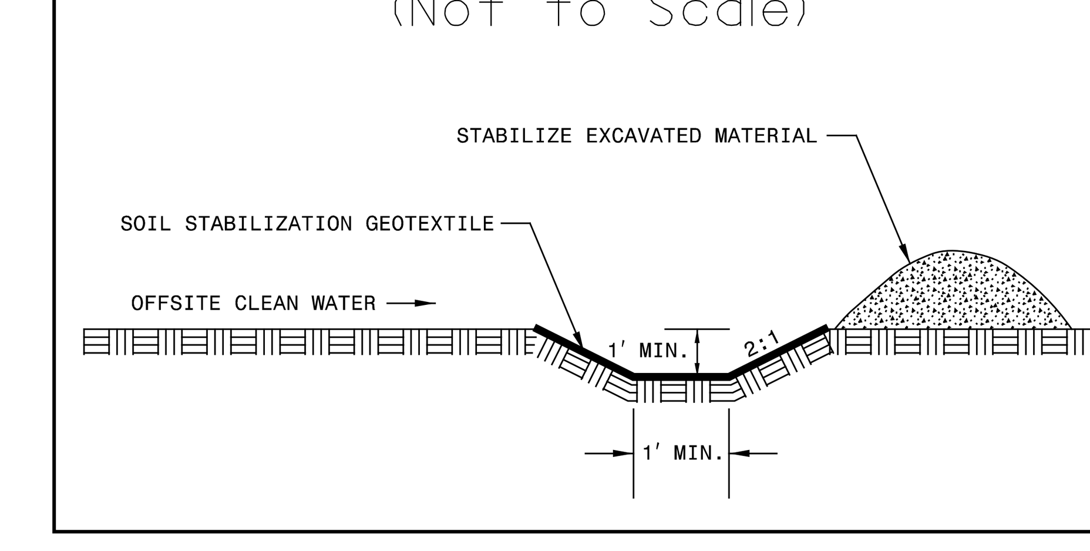
NOTE:
CONTRACTOR SHALL PROVIDE INLET PROTECTION FOR PARTIALLY INSTALLED STORM DRAINS. THIS MEASURE SHOULD BE INSTALLED AT THE END OF EACH WORKING DAY.

NOTE:
CONTRACTOR SHALL MAINTAIN ALL DEVICES AS PROJECT IS BROUGHT UP TO GRADE.

NOTE:
ALL EROSION CONTROL DEVICES SHOWN ARE LOCATED WITHIN R/W OR EASEMENT.

CLEAN WATER DIVERSION

(Not to Scale)



SBG - "SHOULDER BERM GUTTER"

SEE SHEET 37 FOR -L- PROFILE

PROJECT REFERENCE NO.	SHEET NO.
R-2514D	EC-43/CONSTJ5
R/W SHEET NO.	

LEVEL III CERTIFIED BY:
STACEY H. BAILEY, PE
CERTIFICATION NUMBER: 3074
ISSUED: FEBRUARY 2, 2015

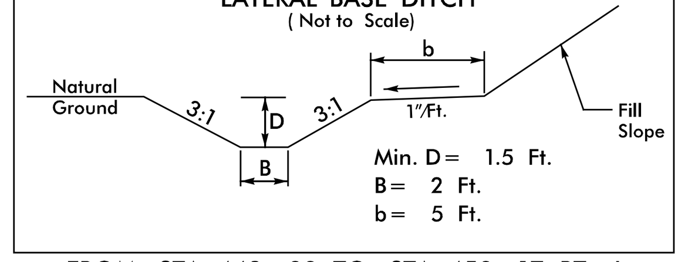
FINAL EROSION CONTROL
FOR CONSTRUCTION SHEET 15

REVISIONS

8/17/99

DETAIL 'J'

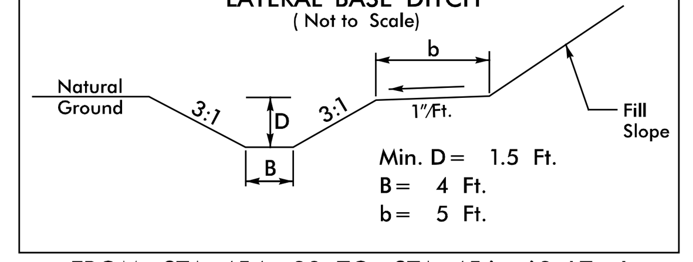
LATERAL BASE DITCH
(Not to Scale)



FROM STA. 448+00 TO STA. 450+17 RT. -L-

DETAIL 'L'

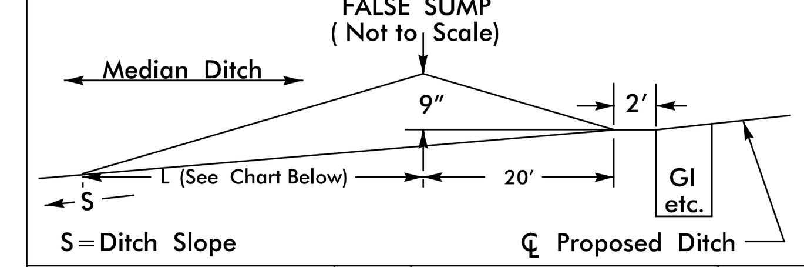
LATERAL BASE DITCH
(Not to Scale)



FROM STA. 454+00 TO STA. 456+60 LT. -L-
FROM STA. 456+60 TO STA. 457+80 LT. -L-
FROM STA. 450+17 TO STA. 457+50 RT. -L-

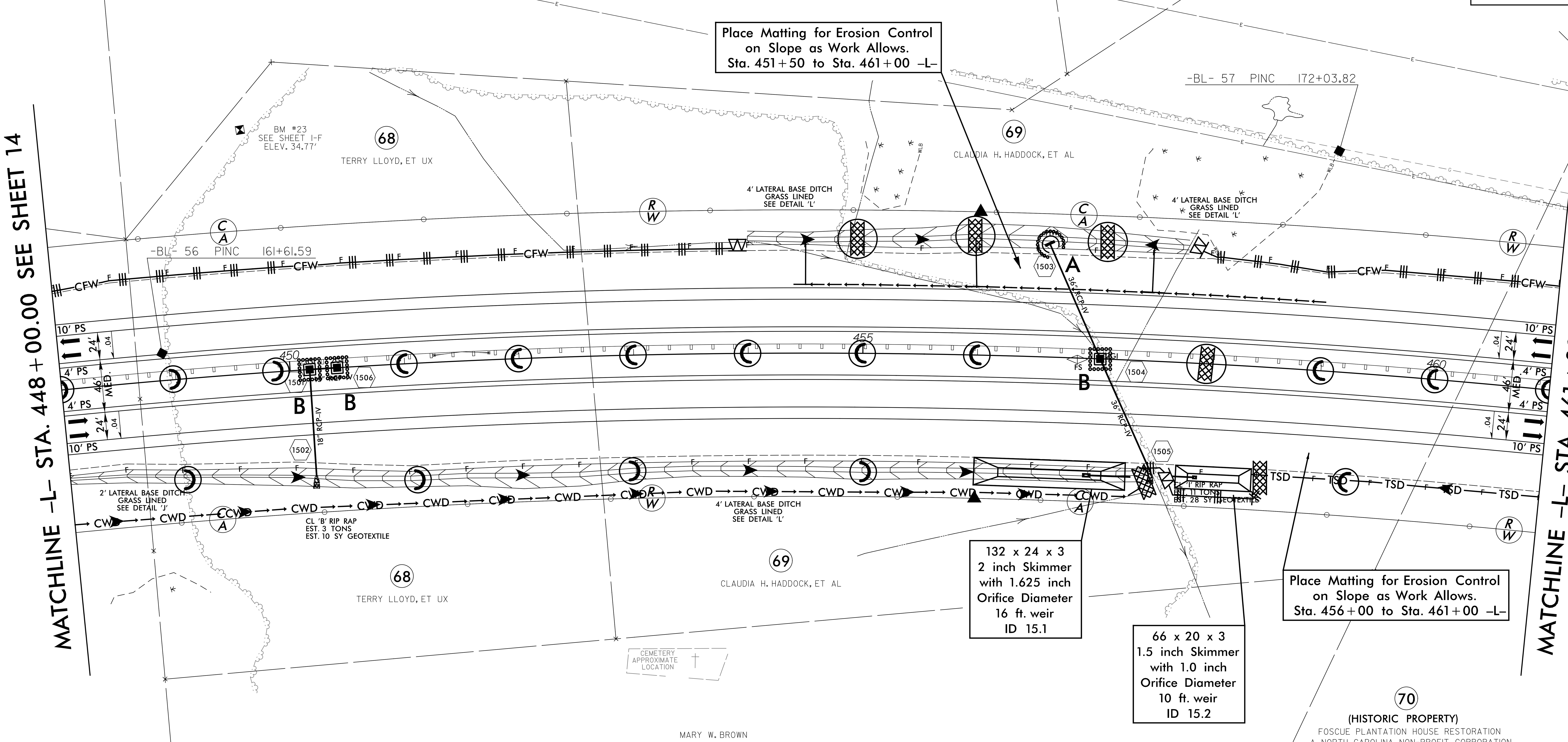
DETAIL 'U'

FALSE SUMP
(Not to Scale)



Ditch Grade	L	Ditch Grade	L
0.0% To 2.0%	20'	Over 4.0% To 6.0%	40'
Over 2.0% To 4.0%	30'	Over 6.0%	50'

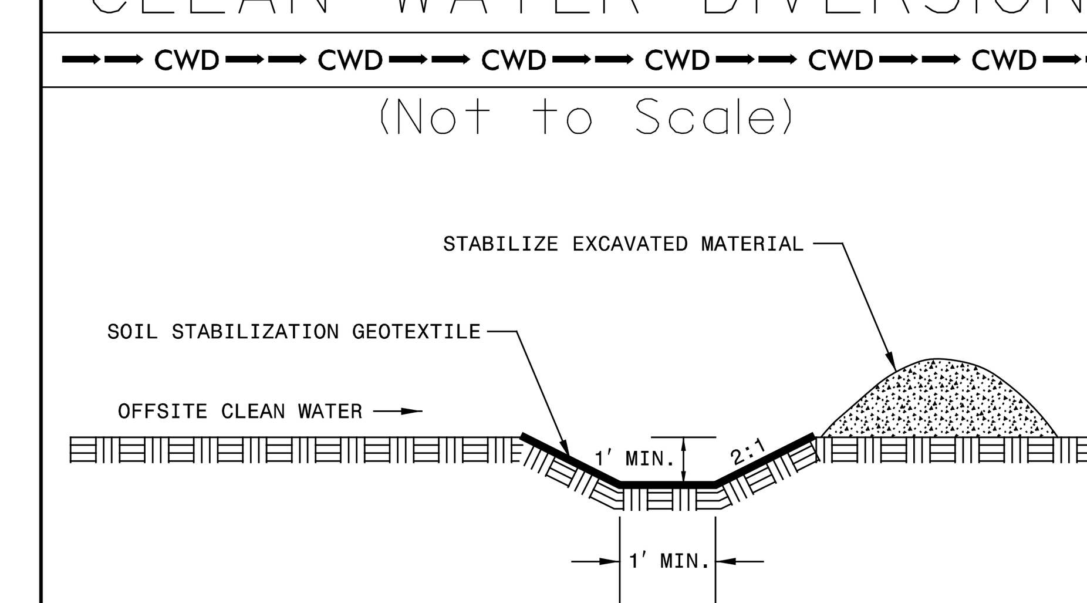
NAD 83/NSRS 2007



WRIGHT A. HILL HEIRS
100' CP&L POWERLINE EASEMENT
Place Matting for Erosion Control on Slope as Work Allows. Sta. 451+50 to Sta. 461+00 -L-
-BL- 57 PINC 172+03.82
BM #23 SEE SHEET 1-F ELEV. 34.77'
68
TERRY LLOYD, ET UX
69
CLAUDIA H. HADDOCK, ET AL
4' LATERAL BASE DITCH GRASS LINED SEE DETAIL 'L'
-BL- 56 PINC 161+61.59
CFW
MATCHLINE -L- STA. 448+00.00 SEE SHEET 14
MATCHLINE -L- STA. 461+00.00 SEE SHEET 16
10' PS
4' PS
24'
46' MED.
450
455
460
1501
1502
1503
1504
1505
1506
A
B
18" RCP-IV
36" RCP-IV
2' LATERAL BASE DITCH GRASS LINED SEE DETAIL 'J'
CWD
TSD
CL 'B' RIP RAP EST. 3 TONS EST. 10 SY GEOTEXTILE
CL 'B' RIP RAP EST. 11 TONS EST. 28 SY GEOTEXTILE
132 x 24 x 3 2 inch Skimmer with 1.625 inch Orifice Diameter 16 ft. weir ID 15.1
66 x 20 x 3 1.5 inch Skimmer with 1.0 inch Orifice Diameter 10 ft. weir ID 15.2
Place Matting for Erosion Control on Slope as Work Allows. Sta. 456+00 to Sta. 461+00 -L-
CEMETERY APPROXIMATE LOCATION
MARY W. BROWN
LUCY HILL
70
(HISTORIC PROPERTY)
FOSCUE PLANTATION HOUSE RESTORATION A NORTH CAROLINA NON-PROFIT CORPORATION

CLEAN WATER DIVERSION

(Not to Scale)



NOTE:
CONTRACTOR SHALL PROVIDE INLET PROTECTION FOR PARTIALLY INSTALLED STORM DRAINS. 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:
ALL EROSION CONTROL DEVICES SHOWN ARE LOCATED WITHIN RW OR EASEMENT.

SEE SHEET FOR 38 -L- PROFILE

$$$$SYSTIME$$$$
R:\Hydraulics\Erosion Control\CADD\R2514D_hyd_final_psh_(15)43.dgn

PROJECT REFERENCE NO.	SHEET NO.
R-2514D	EC-44/CONSTJ6
R/W SHEET NO.	

ROADSIDE ENVIRONMENTAL PROJECT ENGINEER

LEVEL III CERTIFIED BY:
STACEY H. BAILEY, PE
CERTIFICATION NUMBER: 3074
ISSUED: FEBRUARY 2, 2015

FINAL EROSION CONTROL FOR CONSTRUCTION SHEET 16

DETAIL 'U'
FALSE SUMP
(Not to Scale)

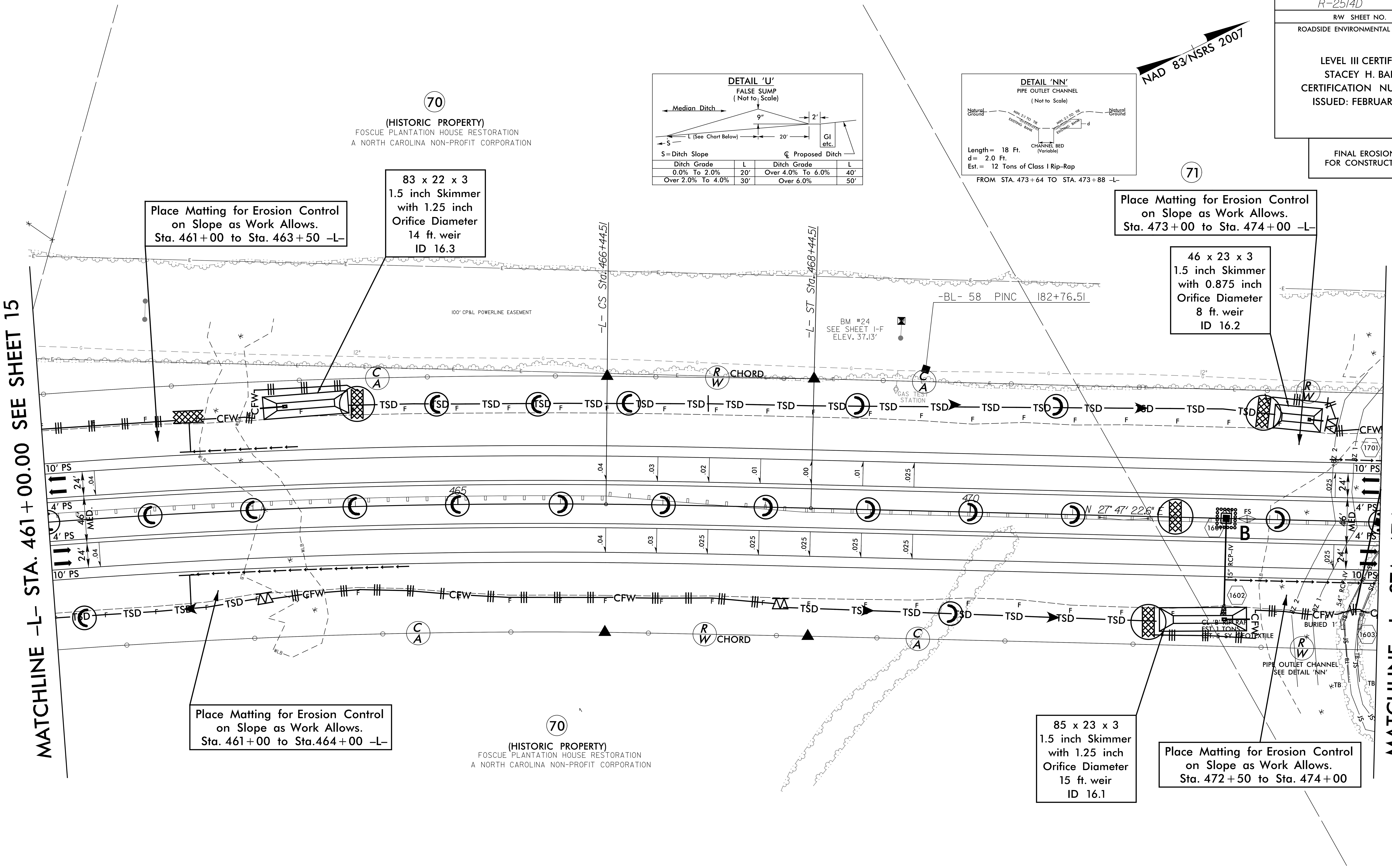
S=Ditch Slope

Ditch Grade	L	Ditch Grade	L
0.0% To 2.0%	20'	Over 4.0% To 6.0%	40'
Over 2.0% To 4.0%	30'	Over 6.0%	50'

DETAIL 'NN'
PIPE OUTLET CHANNEL
(Not to Scale)

Length = 18 Ft.
d = 2.0 Ft.
Est. = 12 Tons of Class I Rip-Rap

FROM STA. 473+64 TO STA. 473+88 -L-



NAD 83/NSRS 2007
70
(HISTORIC PROPERTY)
FOSCUE PLANTATION HOUSE RESTORATION
A NORTH CAROLINA NON-PROFIT CORPORATION
Place Matting for Erosion Control on Slope as Work Allows. Sta. 461+00 to Sta. 463+50 -L-
83 x 22 x 3
1.5 inch Skimmer
with 1.25 inch
Orifice Diameter
14 ft. weir
ID 16.3
71
Place Matting for Erosion Control on Slope as Work Allows. Sta. 473+00 to Sta. 474+00 -L-
46 x 23 x 3
1.5 inch Skimmer
with 0.875 inch
Orifice Diameter
8 ft. weir
ID 16.2
-L- CS Sta. 466+44.51
-L- ST Sta. 468+44.51
BM #24
SEE SHEET 1-F
ELEV. 37.13'
-BL- 58 PINC 182+76.51
100' CP&L POWERLINE EASEMENT
GAS TEST STATION
CHORD
N 27° 47' 22.6" E
MATCHLINE -L- STA. 461+00.00 SEE SHEET 15
MATCHLINE -L- STA. 474+00.00 SEE SHEET 17
10' PS
4' PS
24'
46' MED.
465
470
TSD
CFW
PIPE OUTLET CHANNEL
SEE DETAIL 'NN'
BURIED 1'
Place Matting for Erosion Control on Slope as Work Allows. Sta. 461+00 to Sta.464+00 -L-
70
(HISTORIC PROPERTY)
FOSCUE PLANTATION HOUSE RESTORATION
A NORTH CAROLINA NON-PROFIT CORPORATION
85 x 23 x 3
1.5 inch Skimmer
with 1.25 inch
Orifice Diameter
15 ft. weir
ID 16.1
Place Matting for Erosion Control on Slope as Work Allows. Sta. 472+50 to Sta. 474+00

NOTE:
CONTRACTOR SHALL PROVIDE INLET PROTECTION FOR PARTIALLY INSTALLED STORM DRAINS. 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:
ALL EROSION CONTROL DEVICES SHOWN ARE LOCATED WITHIN R/W OR EASEMENT.

SEE SHEET 38 FOR -L- PROFILE

REVISIONS

8/17/99

$$$$$$SYSTIME$$$$$
R:\Hydraulics\Erosion Control\CADD\R2514D_hyd_final_psh_(16)44.dgn

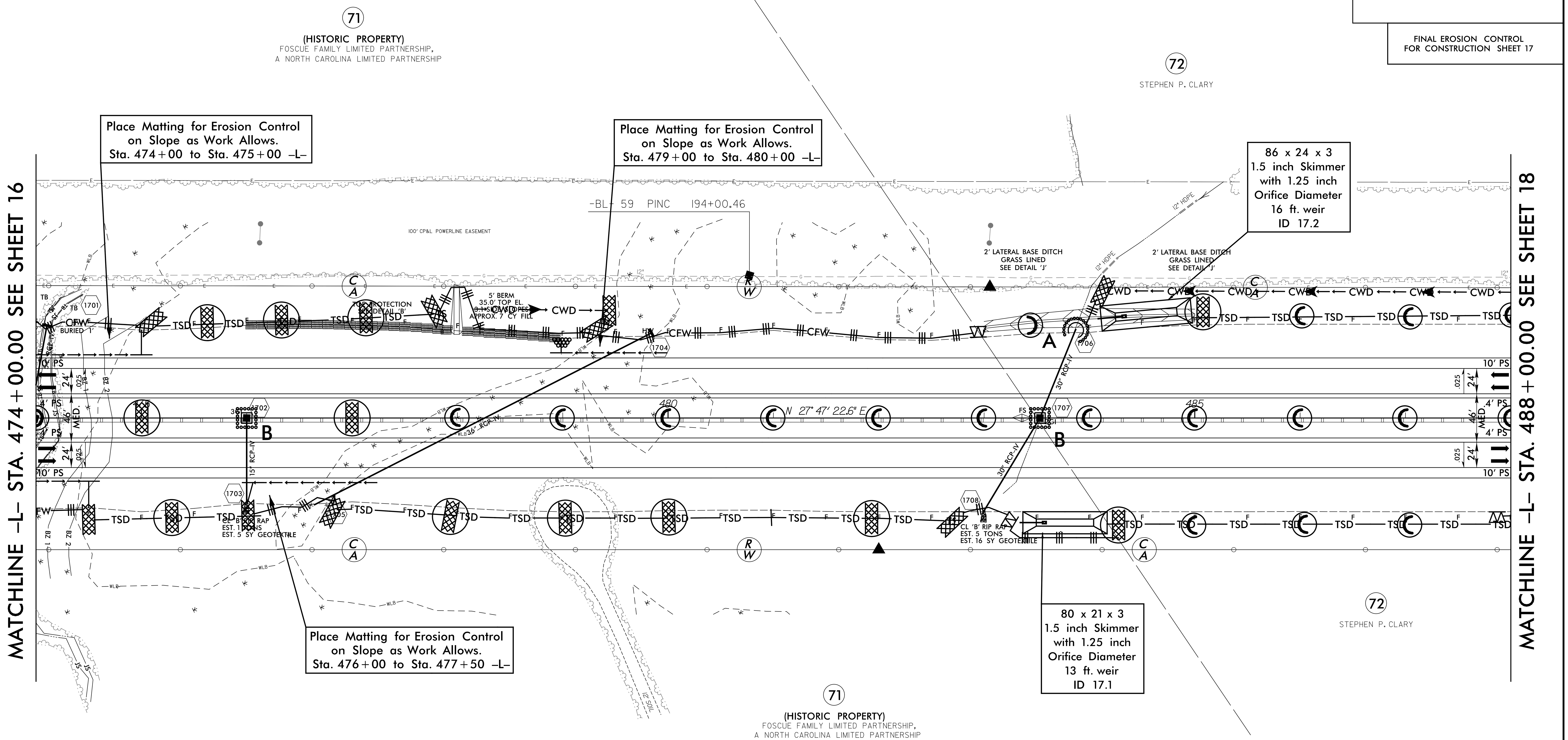
PROJECT REFERENCE NO.	SHEET NO.
R-2514D	EC-45/CONST17
R/W SHEET NO.	

ROADSIDE ENVIRONMENTAL PROJECT ENGINEER

LEVEL III CERTIFIED BY:
STACEY H. BAILEY, PE
CERTIFICATION NUMBER: 3074
ISSUED: FEBRUARY 2, 2015

FINAL EROSION CONTROL FOR CONSTRUCTION SHEET 17

NAD 83/NSRS 2007



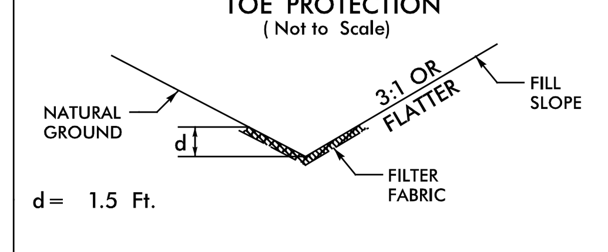
NOTE:
CONTRACTOR SHALL PROVIDE INLET PROTECTION FOR PARTIALLY INSTALLED STORM DRAINS. THIS MEASURE SHOULD BE INSTALLED AT THE END OF EACH WORKING DAY.

NOTE:
CONTRACTOR SHALL MAINTAIN ALL DEVICES AS PROJECT IS BROUGHT UP TO GRADE.

NOTE:
ALL EROSION CONTROL DEVICES SHOWN ARE LOCATED WITHIN R/W OR EASEMENT.

DETAIL 'B'

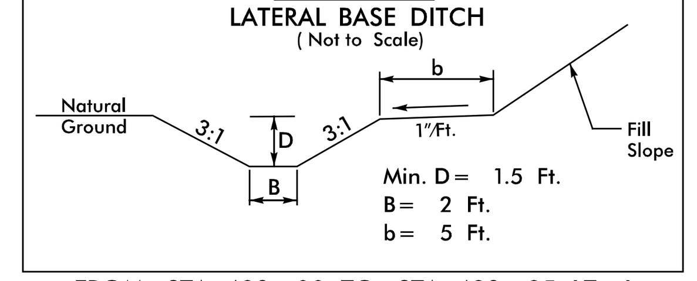
TOE PROTECTION
(Not to Scale)



FROM STA. 476+00 TO STA. 479+00 LT. -L-

DETAIL 'J'

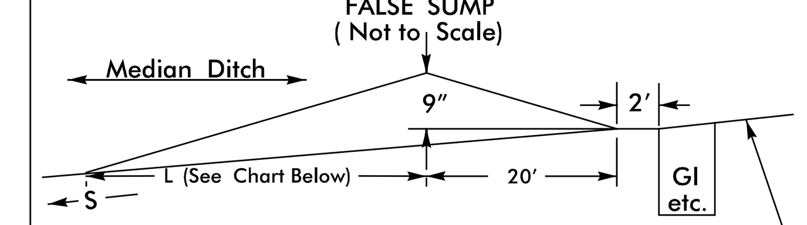
LATERAL BASE DITCH
(Not to Scale)



FROM STA. 483+00 TO STA. 483+85 LT. -L-
FROM STA. 483+85 TO STA. 485+00 LT. -L-

DETAIL 'U'

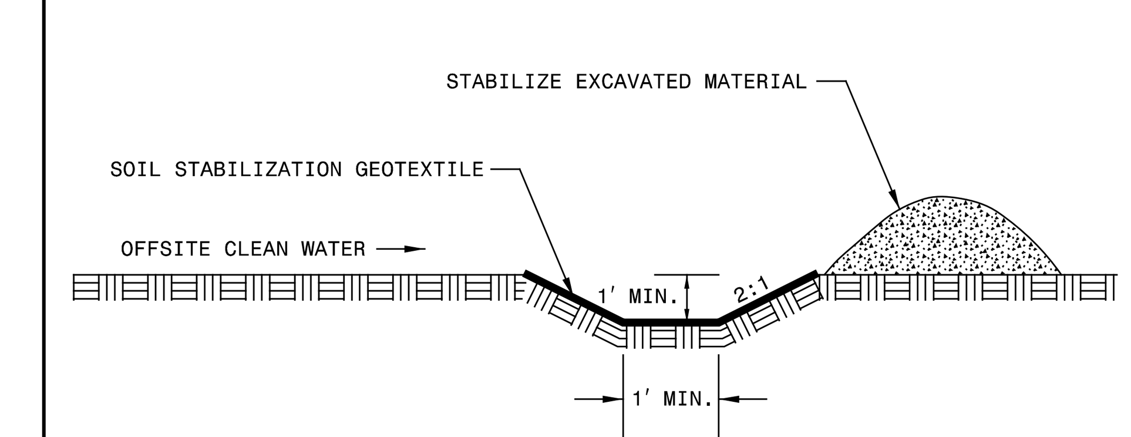
FALSE SUMP
(Not to Scale)



Ditch Grade	L	Ditch Grade	L
0.0% To 2.0%	20'	Over 4.0% To 6.0%	40'
Over 2.0% To 4.0%	30'	Over 6.0%	50'

CLEAN WATER DIVERSION

(Not to Scale)



SEE SHEET 39 FOR -L- PROFILE

REVISIONS

8/17/99

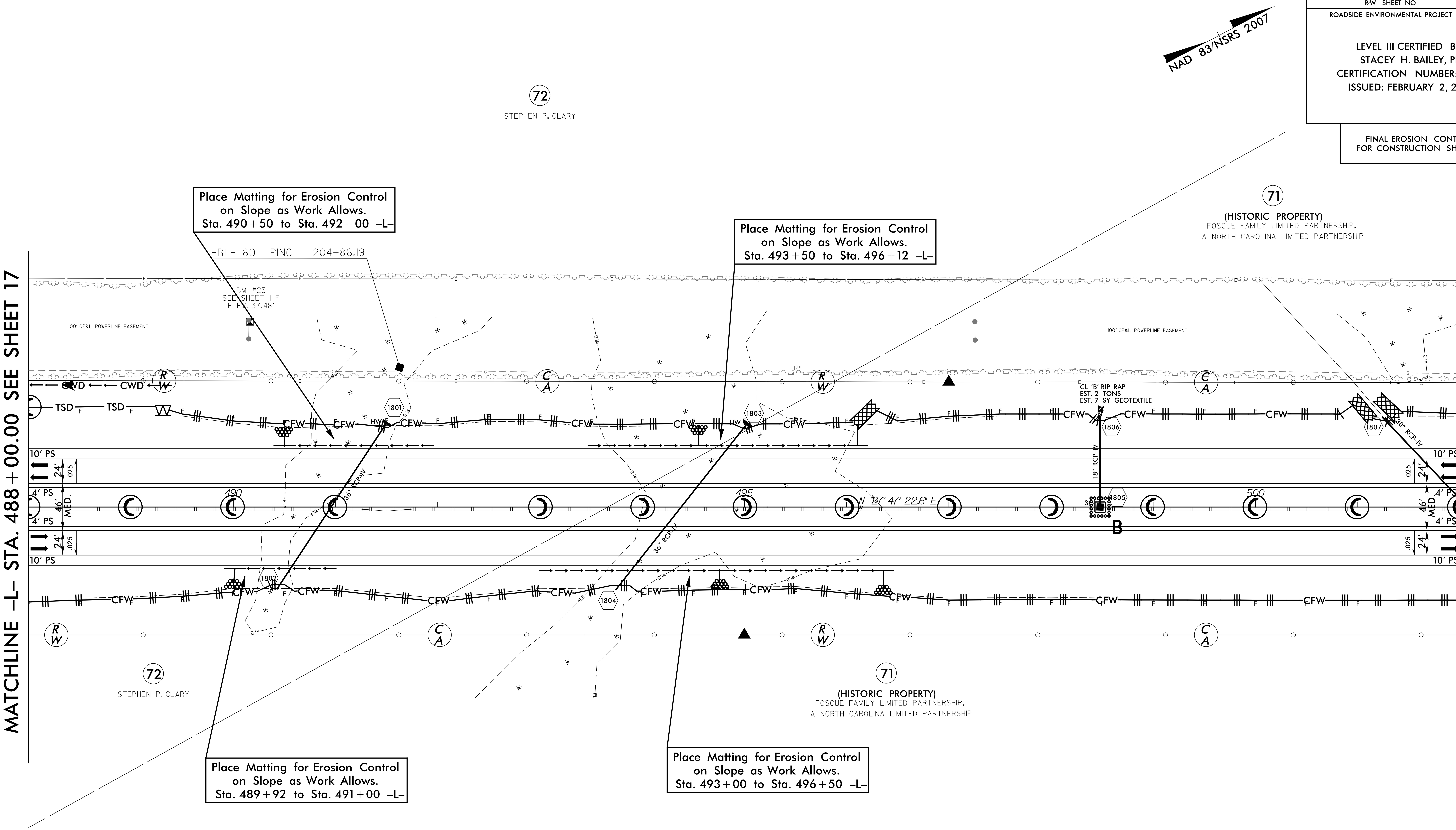
$$$$$$SYSTIME$$$$$
R:\Hydraulics\Erosion Control\CADD\R2514D_hyd_final_psh_(17)45.dgn

PROJECT REFERENCE NO.	SHEET NO.
R-2514D	EC-46/CONST18
R/W SHEET NO.	

ROADSIDE ENVIRONMENTAL PROJECT ENGINEER

LEVEL III CERTIFIED BY:
STACEY H. BAILEY, PE
CERTIFICATION NUMBER: 3074
ISSUED: FEBRUARY 2, 2015

FINAL EROSION CONTROL
FOR CONSTRUCTION SHEET 18



NAD 83/NSRS 2007
72
STEPHEN P. CLARY
71
(HISTORIC PROPERTY)
FOSCUE FAMILY LIMITED PARTNERSHIP,
A NORTH CAROLINA LIMITED PARTNERSHIP
Place Matting for Erosion Control on Slope as Work Allows. Sta. 490+50 to Sta. 492+00 -L-
Place Matting for Erosion Control on Slope as Work Allows. Sta. 493+50 to Sta. 496+12 -L-
Place Matting for Erosion Control on Slope as Work Allows. Sta. 489+92 to Sta. 491+00 -L-
Place Matting for Erosion Control on Slope as Work Allows. Sta. 493+00 to Sta. 496+50 -L-
-BL- 60 PINC 204+86.19
BM #25
SEE SHEET 1-F
ELEV. 37.48'
100' CP&L POWERLINE EASEMENT
CL 'B' RIP RAP
EST. 2 TONS
EST. 7 SY GEOTEXTILE
CWD
TSD
CFW
10' PS
4' PS
24'
.025
46' MED.
490
495
500
N 27° 47' 22.6" E
1801
1802
1803
1804
1805
1806
1807
36" RCP-IV
18" RCP-IV
B
MATCHLINE -L- STA. 488+00.00 SEE SHEET 17
MATCHLINE -L- STA. 502+00.00 SEE SHEET 19

NOTE:
CONTRACTOR SHALL PROVIDE INLET PROTECTION FOR PARTIALLY INSTALLED STORM DRAINS. THIS MEASURE SHOULD BE INSTALLED AT THE END OF EACH WORKING DAY.

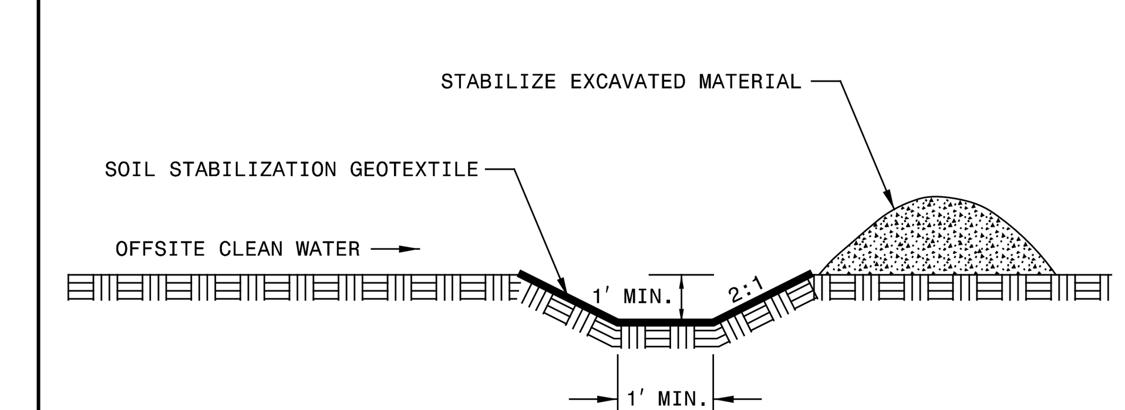
NOTE:
CONTRACTOR SHALL MAINTAIN ALL DEVICES AS PROJECT IS BROUGHT UP TO GRADE.

NOTE:
ALL EROSION CONTROL DEVICES SHOWN ARE LOCATED WITHIN R/W OR EASEMENT.

CLEAN WATER DIVERSION

— CWD — CWD — CWD — CWD — CWD — CWD —

(Not to Scale)



SEE SHEET 39 FOR -L- PROFILE

REVISIONS

8/17/99

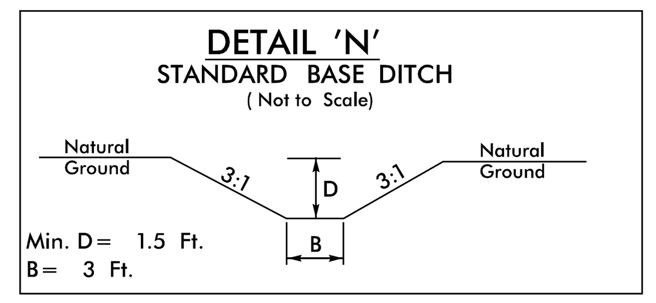
$$$$$$SYSTIME$$$$$
R:\Hydraulics\Erosion Control\CADD\R2514D_hyd_final_psh_(18)46.dgn

PROJECT REFERENCE NO.	SHEET NO.
R-2514D	EC-47/CONSTJ9
R/W SHEET NO.	

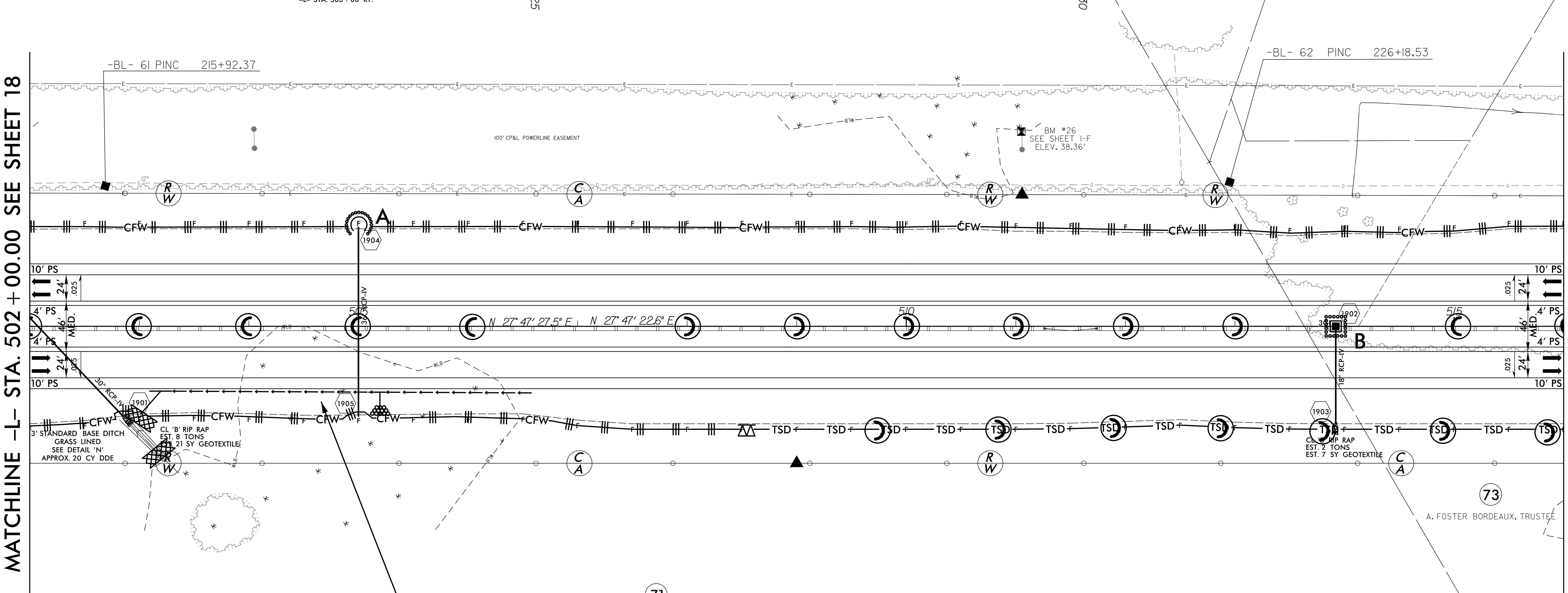
ROADSIDE ENVIRONMENTAL PROJECT ENGINEER

LEVEL III CERTIFIED BY:
STACEY H. BAILEY, PE
CERTIFICATION NUMBER: 3074
ISSUED: FEBRUARY 2, 2015

FINAL EROSION CONTROL FOR CONSTRUCTION SHEET 4



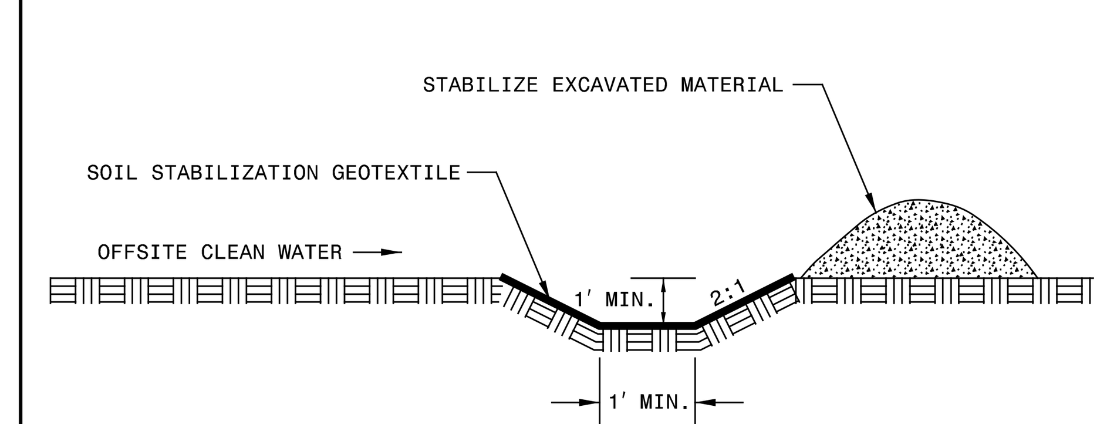
-L- STA. 503+00 RT.



Place Matting for Erosion Control on Slope as Work Allows.
Sta. 503+23 to Sta. 506+50 -L-

CLEAN WATER DIVERSION

(Not to Scale)



NOTE:
CONTRACTOR SHALL PROVIDE INLET PROTECTION FOR PARTIALLY INSTALLED STORM DRAINS. 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:
ALL EROSION CONTROL DEVICES SHOWN ARE LOCATED WITHIN R/W OR EASEMENT.

REVISIONS

8/17/99

$$$$$$SYSTIME$$$$$
R:\Hydraulics\Erosion Control\CADD\R2514D_hyd_final_psh_(19)47.dgn

SEE SHEET 40 FOR -L- PROFILE

PROJECT REFERENCE NO.	SHEET NO.
R-2514D	EC-48/CONST.20
R/W SHEET NO.	
ROADSIDE ENVIRONMENTAL PROJECT ENGINEER	

LEVEL III CERTIFIED BY:
STACEY H. BAILEY, PE
CERTIFICATION NUMBER: 3074
ISSUED: FEBRUARY 2, 2015

FINAL EROSION CONTROL FOR CONSTRUCTION SHEET 20

NAD 83/NSRS 2007

MATCHLINE –L– STA. 516+00.00 SEE SHEET 19

MATCHLINE –L– STA. 530+00.00 SEE SHEET 21

REVISIONS

8/17/99

R/W REVISION 03-11-14 (DWG) - THE TDE AT –L– STA. 520+20.00 RT. WAS ELIMINATED FROM PARCEL 73 (A. FOSTER BORDEAUX, TRUSTEE).

$$$$$SYSTIME$$$$$
$$$$$USERNAME$$$$$
H:\Erosion Control\CADD\R2514D_hyd_final_esh_(20148.dgn
FILE ENGINEERING, INC.

WEYERHAEUSER COMPANY
FORMERLY BATE LUMBER COMPANY
DB 105 PG 564

DOUGLAS C. FURGASON, ET UX

-BY6- 87 PINC 24+74.68

-Y6- POT Sta. 10+00.00

73 A. FOSTER BORDEAUX, TRUSTEE

75 BRENDA S. HUGHES

-BL- 63 PINC 237+78.84=
-BY6- PINC 31+64.16

76 ROGER A. HUGHES

NCDOT GPS R2514-16 =
-BY6- PINC 33+74.75
-L- POT Sta. 526+71.12=
-Y6- POT Sta. 16+08.07

BM #27
SEE SHEET 1-F
ELEV. 35.11'

Place Matting for Erosion Control on Slope as Work Allows. Sta. 518+50 to Sta. 524+42 –L–

Place Matting for Erosion Control on Slope as Work Allows. Sta. 525+50 to Sta. 530+00 –L–

BEGIN CONSTRUCTION
–Y6– STA. 12+25.00

BEGIN SFCB
–Y6– STA. 15+20.00

BEGIN SBG
–L– 519+30

BEGIN REINFORCED SLOPES
–L– STA. 527+00.00 +/–
SEE DETAIL SHEET 2-8

BEGIN SBG AT APPROACH SLAB

END SBG AT APPROACH SLAB

END SFCB
–Y6– STA. 16+96.00

NOTE: NO DECK DRAINS REQUIRED FOR THIS STRUCTURE

CL 'B' RIP RAP
EST. 1 TONS
EST. 5 SY GEOTEXTILE

144 x 24 x 3
2 inch Skimmer
with 1.625 inch
Orifice Diameter
16 ft. weir
ID 20.1

BEGIN SBG
–L– 518+15

PIPE OUTLET CHANNEL
SEE DETAIL 'OO'

74 MELBA J. METTS

77 CHARLES F. WALKER

78 JON A THOMAS

73 A. FOSTER BORDEAUX, TRUSTEE

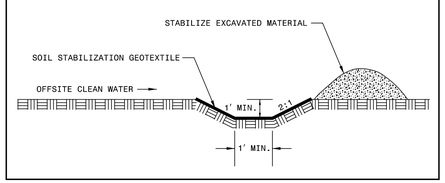
C. ROBERT BROWN, ET UX

STEPHANIE S. KEECH

CLEAN WATER DIVERSION

CWD CWD CWD CWD CWD CWD

(Not to Scale)

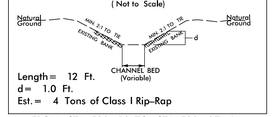


NOTE:
CONTRACTOR SHALL PROVIDE INLET PROTECTION FOR PARTIALLY INSTALLED STORM DRAINS. THIS MEASURE SHOULD BE INSTALLED AT THE END OF EACH WORKING DAY.

NOTE:
CONTRACTOR SHALL MAINTAIN ALL DEVICES AS PROJECT IS BROUGHT UP TO GRADE.

NOTE:
ALL EROSION CONTROL DEVICES SHOWN ARE LOCATED WITHIN R/W OR EASEMENT.

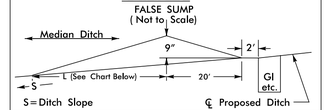
DETAIL 'OO'
PIPE OUTLET CHANNEL
(Not to Scale)



Length = 12 Ft.
d = 1.0 Ft.
Est. = 4 Tons of Class I Rip-Rap

FROM STA. 520+16 TO STA. 520+27 –L–

DETAIL 'U'
FALSE SUMP
(Not to Scale)



S = Ditch Slope
℄ Proposed Ditch

Ditch Grade	L	Ditch Grade	L
0.0% To 2.0%	20'	Over 4.0% To 6.0%	40'
Over 2.0% To 4.0%	30'	Over 6.0%	50'

SBG – "SHOULDER BERM GUTTER"
SFCB – "SINGLE FACED CONCRETE BARRIER"

SEE SHEET 40 FOR –L– PROFILE
SEE SHEET 53 FOR –Y6– PROFILE
SEE SHEETS S-1 THRU S-? FOR STRUCTURE PLANS

PROJECT REFERENCE NO.	SHEET NO.
R-2514D	EC-49/CONST.21
R/W SHEET NO.	

ROADSIDE ENVIRONMENTAL PROJECT ENGINEER

LEVEL III CERTIFIED BY:
STACEY H. BAILEY, PE
CERTIFICATION NUMBER: 3074
ISSUED: FEBRUARY 2, 2015

FINAL EROSION CONTROL
FOR CONSTRUCTION SHEET 21

NAD 83/NSRS 2007

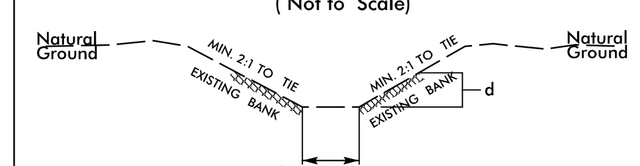
REVISIONS

R/W REVISION 03-11-14 (DWG) - THE TDE AT -L- STA. 531+75.00 RT. AND -L- STA. 535+00.00 RT. WAS ELIMINATED FROM PARCEL 79 (WEYERHAEUSER COMPANY FORMERLY BATE LUMBER COMPANY).

8/17/99

DETAIL 'QQ'

PIPE OUTLET CHANNEL
(Not to Scale)

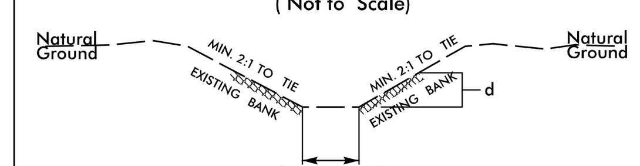


Length = 26 Ft.
d = 3.0 Ft.
Est. = 25 Tons of Class I Rip-Rap

FROM STA. 531+54 TO STA. 531+85 -L-

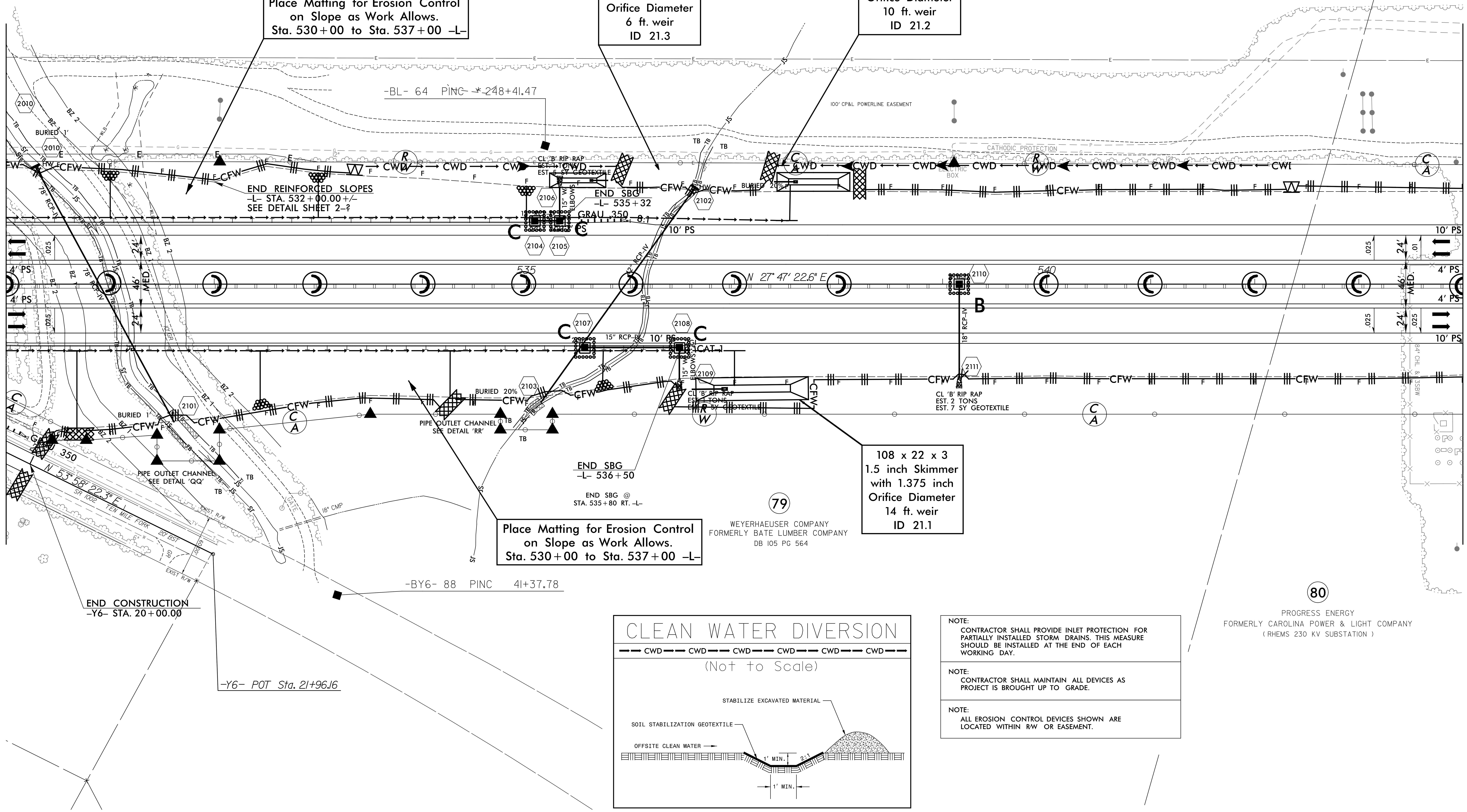
DETAIL 'RR'

PIPE OUTLET CHANNEL
(Not to Scale)



Length = 14 Ft.
d = 2.0 Ft.
Est. = 9 Tons of Class I Rip-Rap

FROM STA. 534+99 TO STA. 535+18 -L-



CLEAN WATER DIVERSION

— CWD — CWD — CWD — CWD — CWD — CWD —

(Not to Scale)

NOTE:
CONTRACTOR SHALL PROVIDE INLET PROTECTION FOR PARTIALLY INSTALLED STORM DRAINS. 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:
ALL EROSION CONTROL DEVICES SHOWN ARE LOCATED WITHIN R/W OR EASEMENT.

SBG - "SHOULDER BERM GUTTER"

SEE SHEET 41 FOR -L- PROFILE

$$$$$$SYSTIME$$$$$
R:\Hydraulics\Erosion Control\CADD\R2514D_hyd_final_psh_(21)49.dgn

PROJECT REFERENCE NO.	SHEET NO.
R-2514D	EC-50/CONST.22
R/W SHEET NO.	

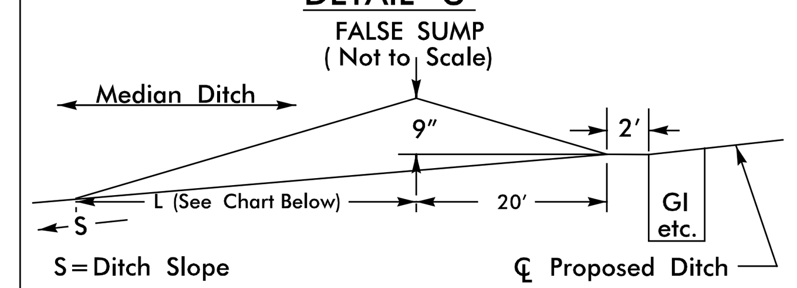
ROADSIDE ENVIRONMENTAL PROJECT ENGINEER

LEVEL III CERTIFIED BY:
STACEY H. BAILEY, PE
CERTIFICATION NUMBER: 3074
ISSUED: FEBRUARY 2, 2015

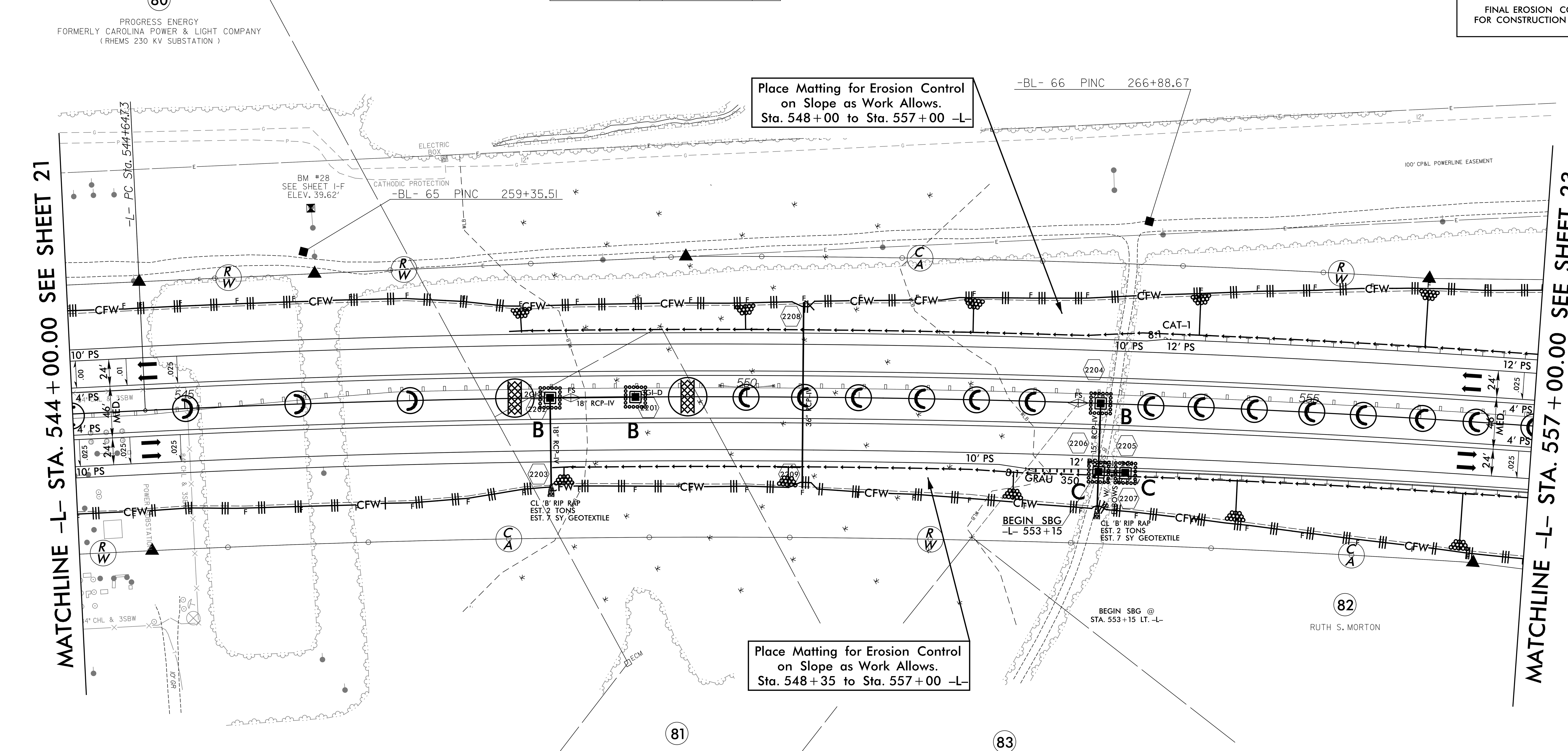
FINAL EROSION CONTROL
FOR CONSTRUCTION SHEET 22

DETAIL 'U'

FALSE SUMP
(Not to Scale)



Ditch Grade	L	Ditch Grade	L
0.0% To 2.0%	20'	Over 4.0% To 6.0%	40'
Over 2.0% To 4.0%	30'	Over 6.0%	50'



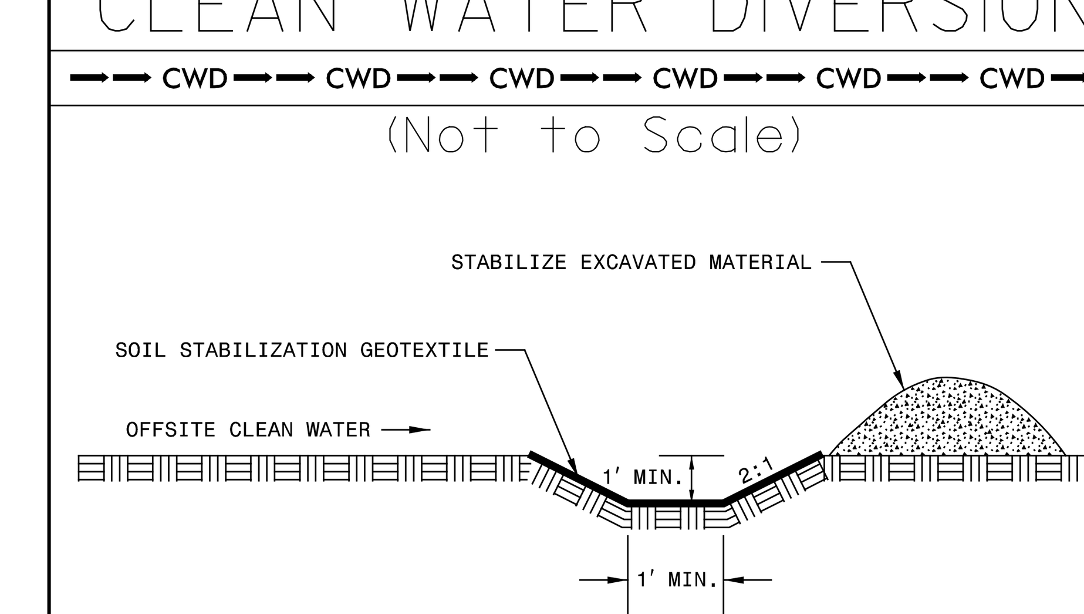
NOTE:
CONTRACTOR SHALL PROVIDE INLET PROTECTION FOR PARTIALLY INSTALLED STORM DRAINS. THIS MEASURE SHOULD BE INSTALLED AT THE END OF EACH WORKING DAY.

NOTE:
CONTRACTOR SHALL MAINTAIN ALL DEVICES AS PROJECT IS BROUGHT UP TO GRADE.

NOTE:
ALL EROSION CONTROL DEVICES SHOWN ARE LOCATED WITHIN R/W OR EASEMENT.

CLEAN WATER DIVERSION

(Not to Scale)



SBG - "SHOULDER BERM GUTTER"

SEE SHEET 41 FOR -L- PROFILE

REVISIONS

8/17/99

$$$$$$SYSTIME$$$$ R:\Hydraulics\Erosion Control\CADD\R2514D_hyd_final_psh_(22)50.dgn

8/17/99

REVISIONS

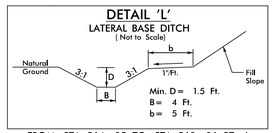
PROJECT REFERENCE NO.	SHEET NO.
R-2514D	EC-5I/CONST.23
R/W SHEET NO.	

ROADSIDE ENVIRONMENTAL PROJECT ENGINEER

LEVEL III CERTIFIED BY:
STACEY H. BAILEY, PE
CERTIFICATION NUMBER: 3074
ISSUED: FEBRUARY 2, 2015

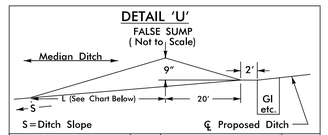
FINAL EROSION CONTROL FOR CONSTRUCTION SHEET 23

DETAIL 'L'
LATERAL BASE DITCH
(Not to Scale)



FROM STA. 564+85 TO STA. 569+06 RT. –L–

DETAIL 'U'
FALSE SUMP
(Not to Scale)



S = Ditch Slope

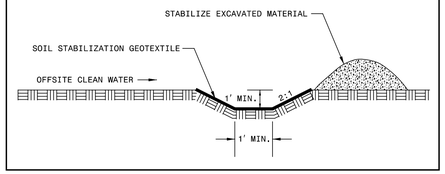
Ditch Grade	L	Ditch Grade	L
0.0% To 2.0%	20'	Over 4.0% To 6.0%	40'
Over 2.0% To 4.0%	30'	Over 6.0%	50'

NOTE:
CONTRACTOR SHALL PROVIDE INLET PROTECTION FOR PARTIALLY INSTALLED STORM DRAINS. 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:
ALL EROSION CONTROL DEVICES SHOWN ARE LOCATED WITHIN R/W OR EASEMENT.

CLEAN WATER DIVERSION
CWD — CWD — CWD — CWD — CWD — CWD
(Not to Scale)



NAD 83/NSRS 2007

MATCHLINE –L– STA. 557+00.00 SEE SHEET 22

MATCHLINE –L– STA. 570+00.00 SEE SHEET 24

85 ESTATE OF CLENNIE L. BROWN & SEYMOUR C. BROWN

82 RUTH S. MORTC

84 LUCILLE P. BRYAN

86 FAMILY OUTREACH WORD OF DELIVERANCE MINISTRIES, INC. DB 299 PG 718

88 JOSEPH L. MEADOWS DB 319 PG 620 PC "B" SLIDE 27

BM #29 SEE SHEET 1-F ELEV. 37.70'

GAS TEST STATION

ELECTRIC BOX

CATHODIC PROTECTION

MOSES D. LASITTER DB 303 PG 790

S 54° 41' 23.9" E

Place Matting for Erosion Control on Slope as Work Allows. Sta. 557+00 to Sta. 560+69 –L–

Place Matting for Erosion Control on Slope as Work Allows. Sta. 561+58 to Sta. 570+00 –L–

-Y7- POT Sta. 15+30.00=
-Y8A- PC Sta. 10+00.00

-L- POC Sta. 561+15.20=
-Y7- POT Sta. 17+04.80

-BL- 67 PINC 274+79.71=
-BY7- PINC 9+46.87
-BY10- POT 55+18.81

-BL- 68 PINC 277+32.61=
-BY7- PINC 11+99.77

-BL- 69 PINC 282+73.87

BEGIN CONSTRUCTION
-Y7- STA. 16+23.00

NOTE: STANDARD DECK DRAINS REQUIRED ON LOW SIDE OF BRIDGE
FROM STA. 560+40 TO 561+00 LT. –L–
FROM STA. 561+35 TO 561+95 LT. –L–

END CONSTRUCTION
–Y7– STA. 17+86.00

END SBG AT APPROACH SLAB

BEGIN SBG AT APPROACH SLAB

NOTE: NO DECK DRAINS REQUIRED FOR THIS STRUCTURE

END SBG @ STA. 569+06 RT. –L–

4' LATERAL BASE DITCH GRASS LINED SEE DETAIL 'L'

CL B RIP RAP EST. 3 TONS
EST. 10 SY GEOTEXTILE

END SBG –L– 569+06

END SBG @ N BRIDGE RT. –L–

BEGIN SBG @ END BRIDGE RT. –L–

PARSHEE J. FLEMING

I20 SIMMONS LOOP TRUST

-BY7- 91 POT 16+39.24

-Y7- POT Sta. 21+53.43

SIMMONS LOOP RD. 22' EST.

TYPE M-350

SBG – "SHOULDER BERM GUTTER"

SEE SHEET 42 FOR –L– PROFILE
SEE SHEET 54 FOR –Y7– PROFILE
SEE SHEET 55 FOR –Y8A– PROFILE
SEE SHEETS S-1 THRU S-? FOR STRUCTURE PLANS

$$$$$SYSTIME$$$$$
$$$$$USERNAME$$$$$
H:\Erosion Control\CADD\R2514D_hyd_final_psh_(2315).dgn
HDR ENGINEERING, INC.

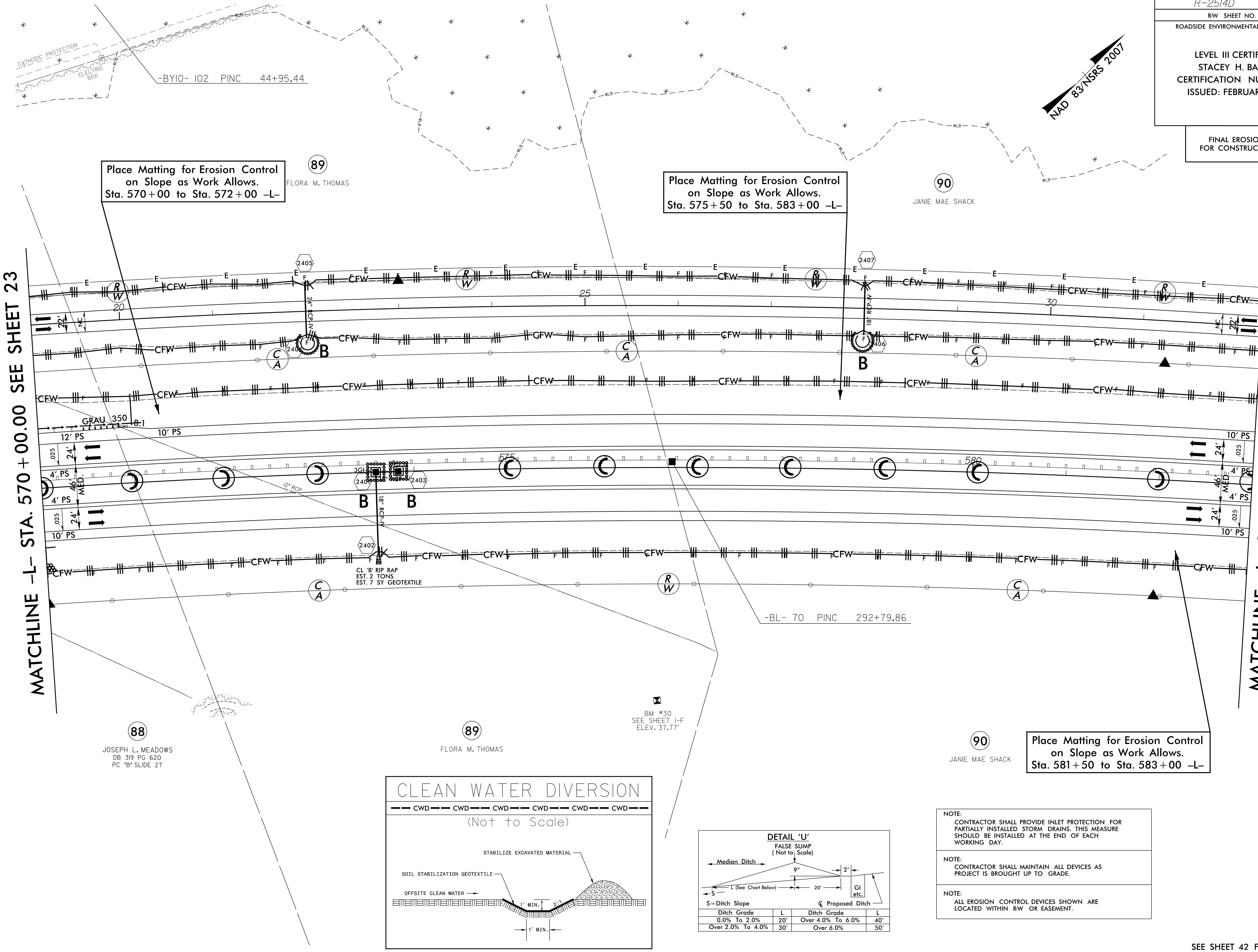
PROJECT REFERENCE NO.	SHEET NO.
R-2514D	EC-52/CONST.24

R/W SHEET NO.

ROADSIDE ENVIRONMENTAL PROJECT ENGINEER

LEVEL III CERTIFIED BY:
STACEY H. BAILEY, PE
CERTIFICATION NUMBER: 3074
ISSUED: FEBRUARY 2, 2015

FINAL EROSION CONTROL FOR CONSTRUCTION SHEET 24



CLEAN WATER DIVERSION

— CWD — CWD — CWD — CWD — CWD — CWD —

(Not to Scale)

STABILIZE EXCAVATED MATERIAL
SOIL STABILIZATION GEOTEXTILE
OFFSITE CLEAN WATER
1' MIN.
2:1
1' MIN.

DETAIL 'U'

FALSE SUMP
(Not to Scale)

Median Ditch
9"
2'
L (See Chart Below)
20'
GI etc.
S
S=Ditch Slope
℄ Proposed Ditch

Ditch Grade	L	Ditch Grade	L
0.0% To 2.0%	20'	Over 4.0% To 6.0%	40'
Over 2.0% To 4.0%	30'	Over 6.0%	50'

NOTE:
CONTRACTOR SHALL PROVIDE INLET PROTECTION FOR PARTIALLY INSTALLED STORM DRAINS. 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:
ALL EROSION CONTROL DEVICES SHOWN ARE LOCATED WITHIN R/W OR EASEMENT.

SEE SHEET 42 FOR -L- PROFILE
SEE SHEET 55 FOR -Y8A- PROFILE

REVISIONS

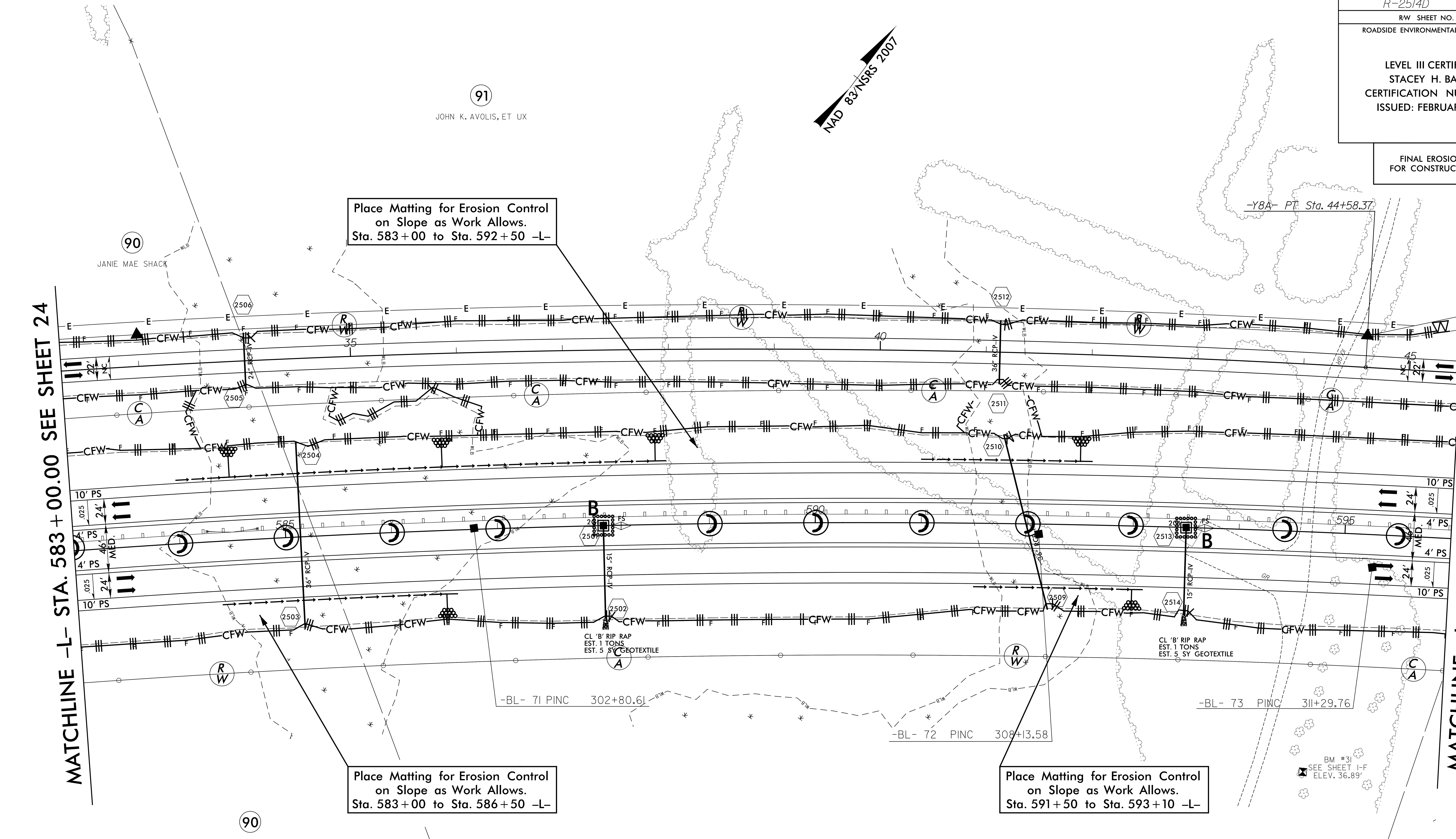
8/17/99

PROJECT REFERENCE NO.	SHEET NO.
R-2514D	EC-53/CONST.25
R/W SHEET NO.	

ROADSIDE ENVIRONMENTAL PROJECT ENGINEER

LEVEL III CERTIFIED BY:
STACEY H. BAILEY, PE
CERTIFICATION NUMBER: 3074
ISSUED: FEBRUARY 2, 2015

FINAL EROSION CONTROL
FOR CONSTRUCTION SHEET 25



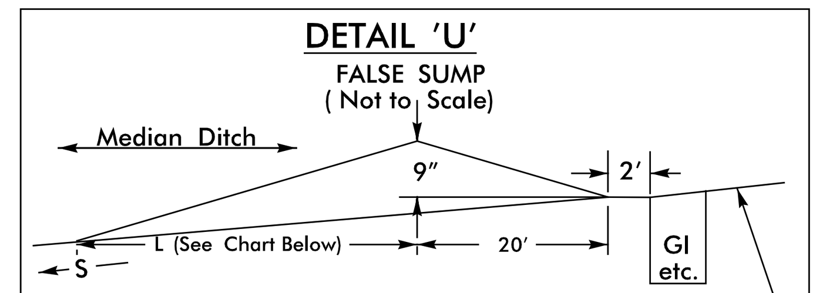
NOTE:
CONTRACTOR SHALL PROVIDE INLET PROTECTION FOR PARTIALLY INSTALLED STORM DRAINS. THIS MEASURE SHOULD BE INSTALLED AT THE END OF EACH WORKING DAY.

NOTE:
CONTRACTOR SHALL MAINTAIN ALL DEVICES AS PROJECT IS BROUGHT UP TO GRADE.

NOTE:
ALL EROSION CONTROL DEVICES SHOWN ARE LOCATED WITHIN R/W OR EASEMENT.

DETAIL 'U'

FALSE SUMP
(Not to Scale)

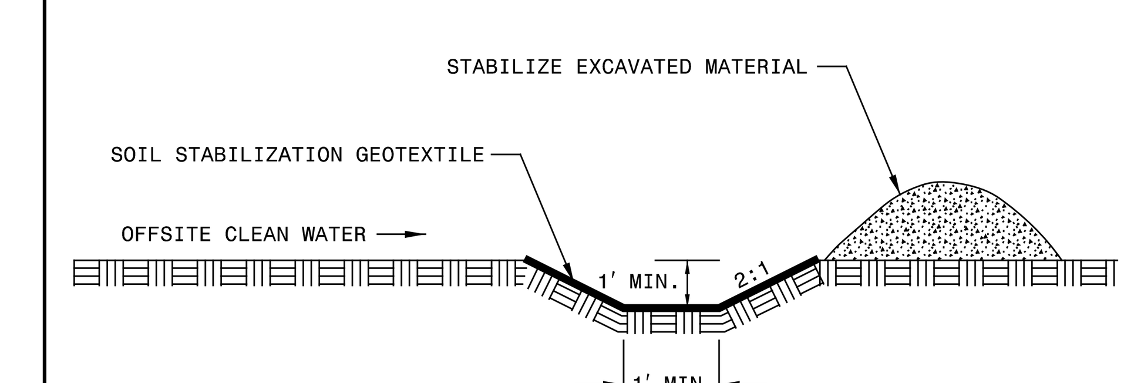


Ditch Grade	L	Ditch Grade	L
0.0% To 2.0%	20'	Over 4.0% To 6.0%	40'
Over 2.0% To 4.0%	30'	Over 6.0%	50'

CLEAN WATER DIVERSION

— CWD — CWD — CWD — CWD — CWD — CWD —

(Not to Scale)



SEE SHEET 43 FOR -L- PROFILE
SEE SHEET 55 AND 56 FOR -Y8A- PROFILE

REVISIONS

REVISIONS

R/W REVISION 6–24–14 (DWG) – ADDED PUE FROM –Y8– STA. 32+35.80 TO STA. 35+43.00 LT. ON PARCEL 97 (AARON L. MALLARD, ET UX).

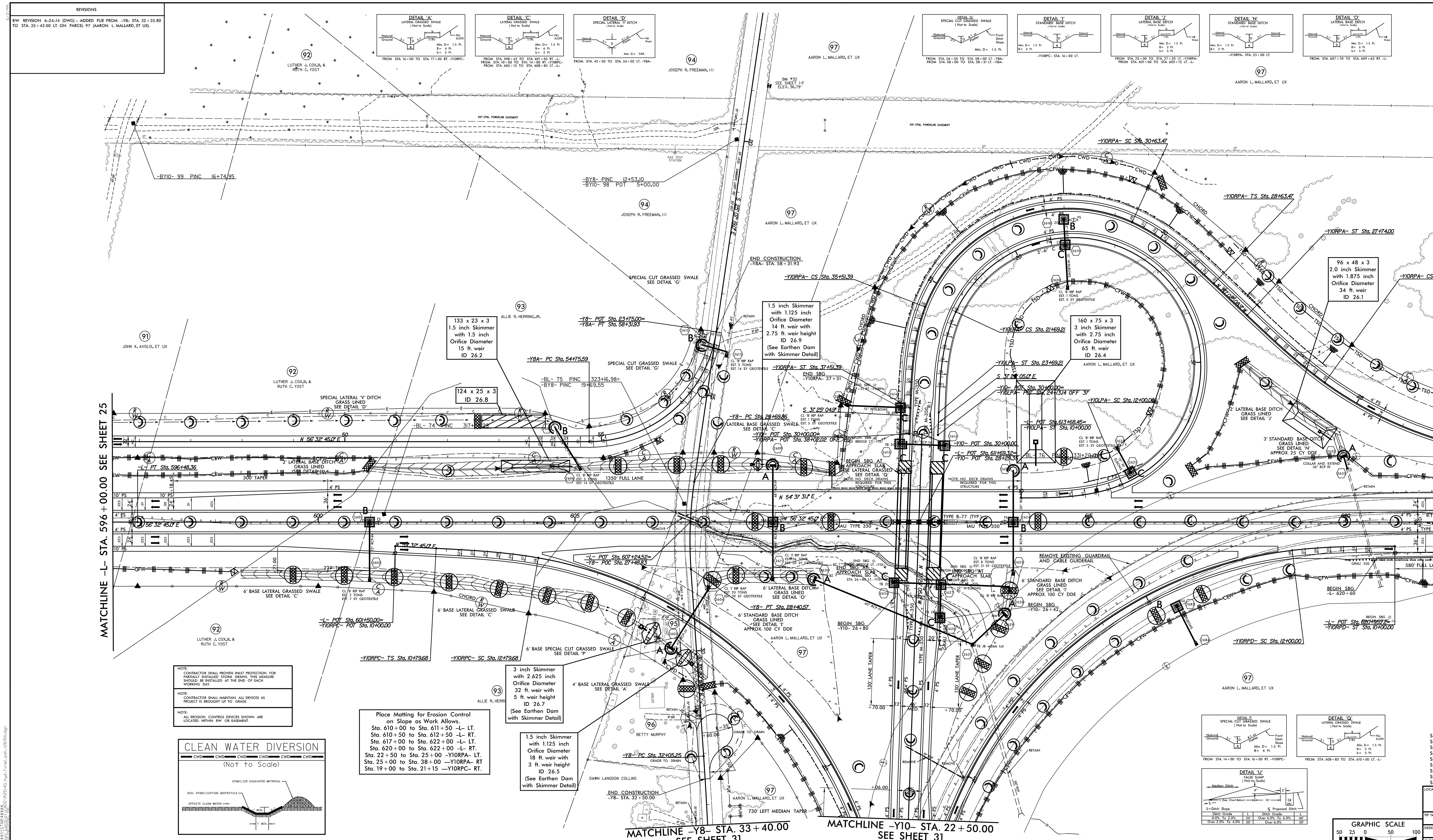
PROJECT REFERENCE NO.	SHEET NO.
R-2514D	EC-54/CONST.26

R/W SHEET NO.

ROADSIDE ENVIRONMENTAL PROJECT ENGINEER

LEVEL III CERTIFIED BY:
STACEY H. BAILEY, PE
CERTIFICATION NUMBER: 3074
ISSUED: FEBRUARY 02, 2015

FINAL EROSION CONTROL FOR CONSTRUCTION SHEET 26



NOTE:
CONTRACTOR SHALL PROVIDE INLET PROTECTION FOR PARTIALLY INSTALLED STORM DRAINS. 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:
ALL EROSION CONTROL DEVICES SHOWN ARE LOCATED WITHIN R/W OR EASEMENT.

Place Matting for Erosion Control on Slope as Work Allows.
Sta. 610+00 to Sta. 611+50 –L– LT.
Sta. 610+50 to Sta. 612+50 –L– RT.
Sta. 617+00 to Sta. 622+00 –L– LT.
Sta. 620+00 to Sta. 622+00 –L– RT.
Sta. 22+50 to Sta. 25+00 –Y10RPA– LT.
Sta. 25+00 to Sta. 38+00 —Y10RPA– RT
Sta. 19+00 to Sta. 21+15 —Y10RPC– RT.

SEE SHEET 43 AND 44 FOR –L– PROFILE
SEE SHEET 56 FOR –Y8A– PROFILE
SEE SHEET 54 FOR –Y8– PROFILE
SEE SHEET 57 FOR –Y10– PROFILE
SEE SHEET 58 FOR –Y10RPA– PROFILE
SEE SHEET 61 FOR –Y10LPA– PROFILE
SEE SHEET 59 FOR –Y10RPC– PROFILE
SEE SHEET 60 FOR –Y10RPD– PROFILE
SEE SHEETS S–1 THRU S–? FOR STRUCTURE PLANS

LOCATION:

TIP NO.: COUNTY:

DESIGNED BY:

CHECKED BY: DATE:

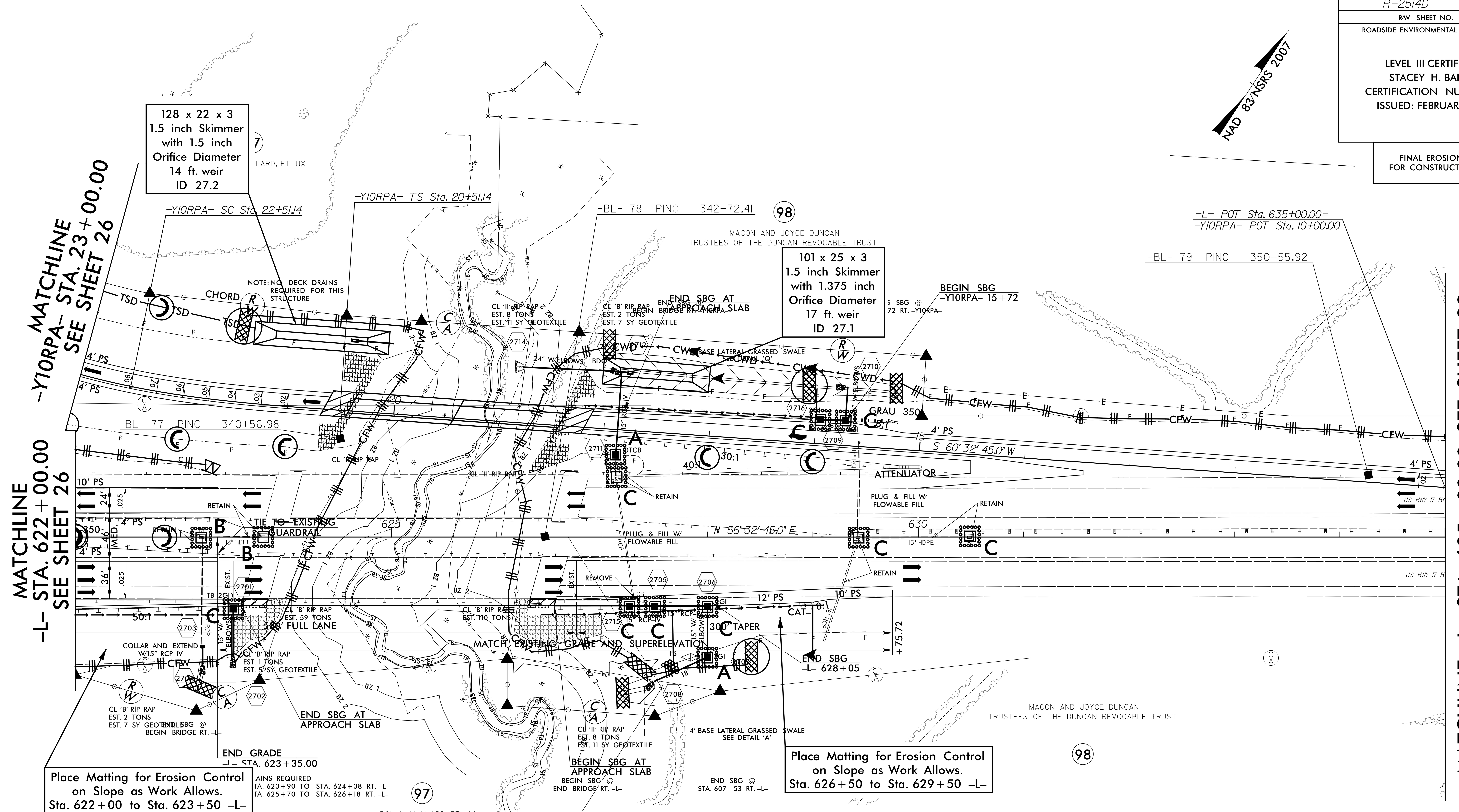
PROJECT REFERENCE NO.	SHEET NO.
R-2514D	EC-55/CONST.27

R/W SHEET NO.

ROADSIDE ENVIRONMENTAL PROJECT ENGINEER

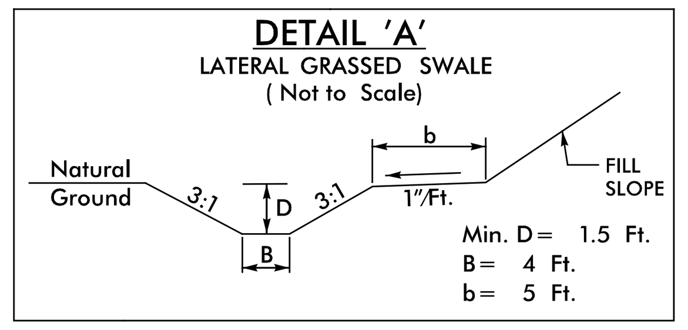
LEVEL III CERTIFIED BY:
STACEY H. BAILEY, PE
CERTIFICATION NUMBER: 3074
ISSUED: FEBRUARY 2, 2015

FINAL EROSION CONTROL
FOR CONSTRUCTION SHEET 27



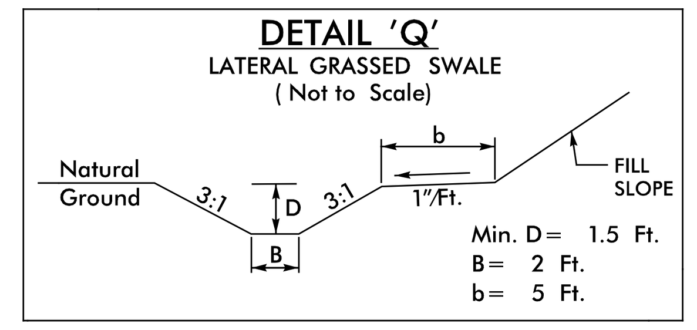
NAD 83/NSRS 2007
MATCHLINE -Y10RPA- STA. 23+00.00 SEE SHEET 26
MATCHLINE -L- STA. 622+00.00 SEE SHEET 26
MATCHLINE -L- STA. 635+00.00 SEE SHEET 28
128 x 22 x 3
1.5 inch Skimmer
with 1.5 inch
Orifice Diameter
14 ft. weir
ID 27.2
101 x 25 x 3
1.5 inch Skimmer
with 1.375 inch
Orifice Diameter
17 ft. weir
ID 27.1
-Y10RPA- SC Sta. 22+51.14
-Y10RPA- TS Sta. 20+51.14
-BL- 78 PINC 342+72.41
-BL- 79 PINC 350+55.92
-BL- 77 PINC 340+56.98
-L- POT Sta. 635+00.00=
-Y10RPA- POT Sta. 10+00.00
MACON AND JOYCE DUNCAN
TRUSTEES OF THE DUNCAN REVOCABLE TRUST
AARON L. MALLARD, ET UX
NOTE: NO DECK DRAINS REQUIRED FOR THIS STRUCTURE
END SBG AT APPROACH SLAB
BEGIN SBG -Y10RPA- 15+72
BEGIN SBG AT APPROACH SLAB
4' BASE LATERAL GRASSED SWALE SEE DETAIL 'A'
TIE TO EXISTING GUARDRAIL
ATTENUATOR
PLUG & FILL W/ FLOWABLE FILL
RETAIN
REMOVE
S 60° 32' 45.0" W
N 56° 32' 45.0" E
300' TAPER
565' FULL LANE
MATCH EXISTING GRADE AND SUPERELEVATION
END SBG -L- 628+05
END GRADE -L- STA. 623+35.00
COLLAR AND EXTEND W/15" RCP IV
CL 'B' RIP RAP EST. 59 TONS
CL 'B' RIP RAP EST. 110 TONS
CL 'II' RIP RAP EST. 8 TONS EST. 11 SY GEOTEXTILE
END SBG @ STA. 607+53 RT. -L-
Place Matting for Erosion Control on Slope as Work Allows. Sta. 622+00 to Sta. 623+50 -L-
Place Matting for Erosion Control on Slope as Work Allows. Sta. 626+50 to Sta. 629+50 -L-

DETAIL 'A'
LATERAL GRASSED SWALE
(Not to Scale)



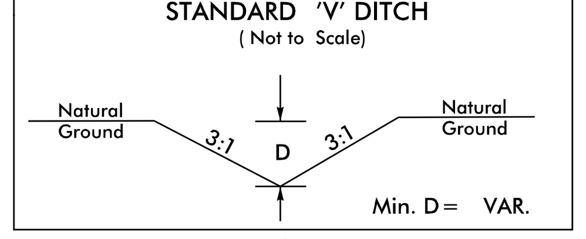
FROM STA. 627+15 TO STA. 627+50 RT. -L-

DETAIL 'Q'
LATERAL GRASSED SWALE
(Not to Scale)



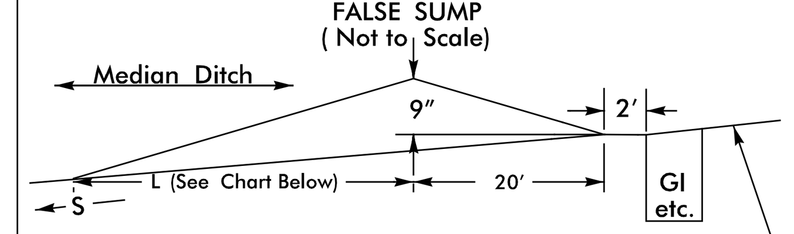
FROM STA. 15+25 TO STA. 18+05 RT. -Y10RPA-

DETAIL 'R'
STANDARD 'V' DITCH
(Not to Scale)



-L- STA. 623+20 RT.

DETAIL 'U'
FALSE SUMP
(Not to Scale)



Ditch Grade	L	Ditch Grade	L
0.0% To 2.0%	20'	Over 4.0% To 6.0%	40'
Over 2.0% To 4.0%	30'	Over 6.0%	50'

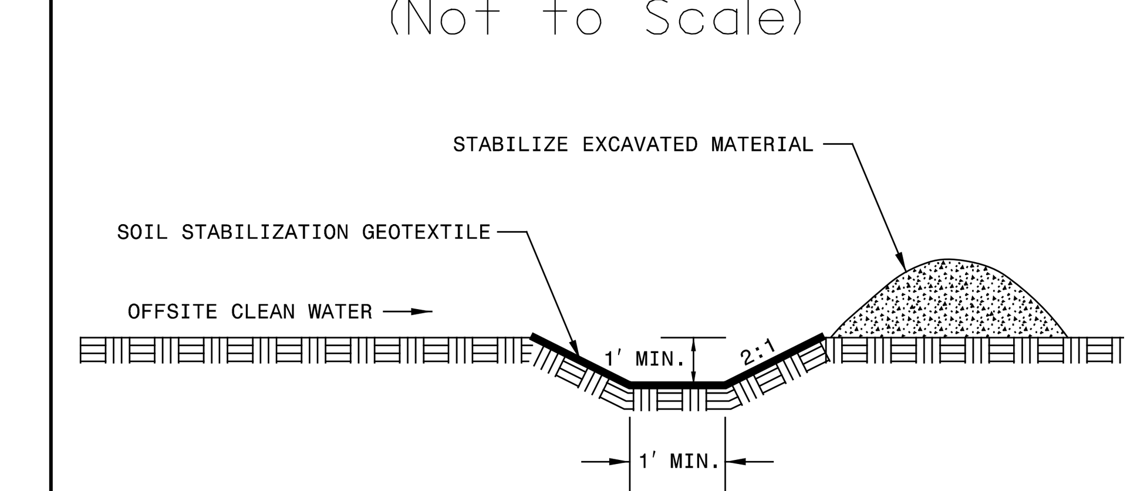
NOTE:
CONTRACTOR SHALL PROVIDE INLET PROTECTION FOR PARTIALLY INSTALLED STORM DRAINS. THIS MEASURE SHOULD BE INSTALLED AT THE END OF EACH WORKING DAY.

NOTE:
CONTRACTOR SHALL MAINTAIN ALL DEVICES AS PROJECT IS BROUGHT UP TO GRADE.

NOTE:
ALL EROSION CONTROL DEVICES SHOWN ARE LOCATED WITHIN R/W OR EASEMENT.

CLEAN WATER DIVERSION

(Not to Scale)



SBG - "SHOULDER BERM GUTTER"

SEE SHEET 44 FOR -L- PROFILE
SEE SHEET 58 FOR -Y10RPA- PROFILE
SEE SHEETS S-1 THRU S-? FOR STRUCTURE PLANS

REVISIONS

8/17/99

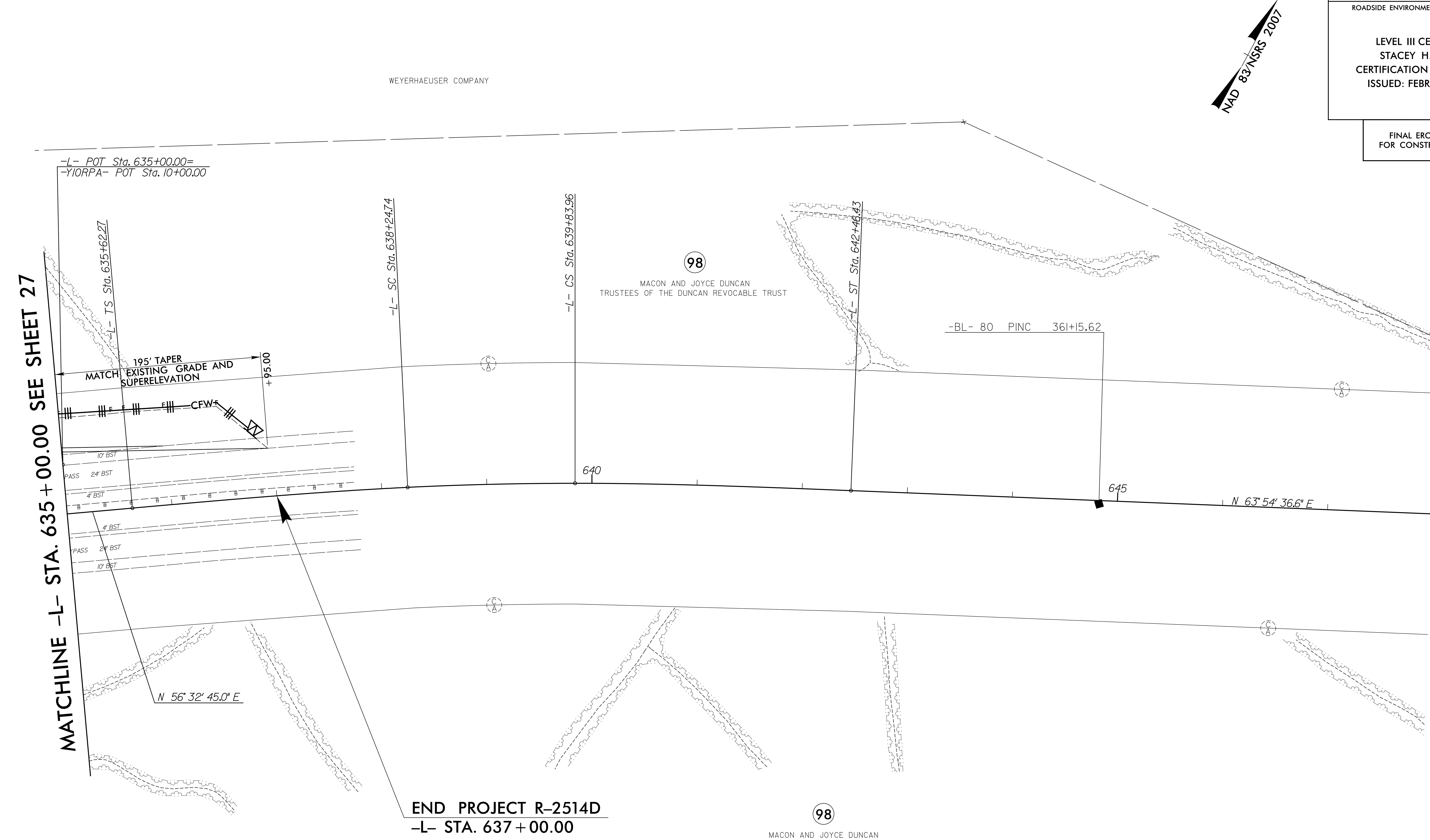
$$$$$$SYSTIME$$$$$
R:\Hydraulics\Erosion Control\CADD\R2514D_hyd_final_psh_(27)55.dgn

PROJECT REFERENCE NO.	SHEET NO.
R-2514D	EC-56/CONST.28
R/W SHEET NO.	

ROADSIDE ENVIRONMENTAL PROJECT ENGINEER

LEVEL III CERTIFIED BY:
STACEY H. BAILEY, PE
CERTIFICATION NUMBER: 3074
ISSUED: FEBRUARY 2, 2015

FINAL EROSION CONTROL
FOR CONSTRUCTION SHEET 28



NAD 83/NSRS 2007
WEYERHAEUSER COMPANY
-L- POT Sta. 635+00.00=
-Y10RPA- POT Sta. 10+00.00
MATCHLINE -L- STA. 635+00.00 SEE SHEET 27
-L- TS Sta. 635+62.27
-L- SC Sta. 638+24.74
-L- CS Sta. 639+83.96
-L- ST Sta. 642+46.43
98
MACON AND JOYCE DUNCAN
TRUSTEES OF THE DUNCAN REVOCABLE TRUST
-BL- 80 PINC 361+15.62
195' TAPER
MATCH EXISTING GRADE AND SUPERELEVATION
+95.00
CFW
640
645
N 63° 54' 36.6" E
N 56° 32' 45.0" E
10' BST
24' BST
4' BST
END PROJECT R-2514D
-L- STA. 637+00.00
98
MACON AND JOYCE DUNCAN
TRUSTEES OF THE DUNCAN REVOCABLE TRUST

NOTE:
CONTRACTOR SHALL PROVIDE INLET PROTECTION FOR PARTIALLY INSTALLED STORM DRAINS. 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:
ALL EROSION CONTROL DEVICES SHOWN ARE LOCATED WITHIN R/W OR EASEMENT.

SEE SHEET 45 FOR -L- PROFILE

REVISIONS

8/17/99

PROJECT REFERENCE NO.	SHEET NO.
R-2514D	EC-57/CONST.29
R/W SHEET NO.	

ROADSIDE ENVIRONMENTAL PROJECT ENGINEER

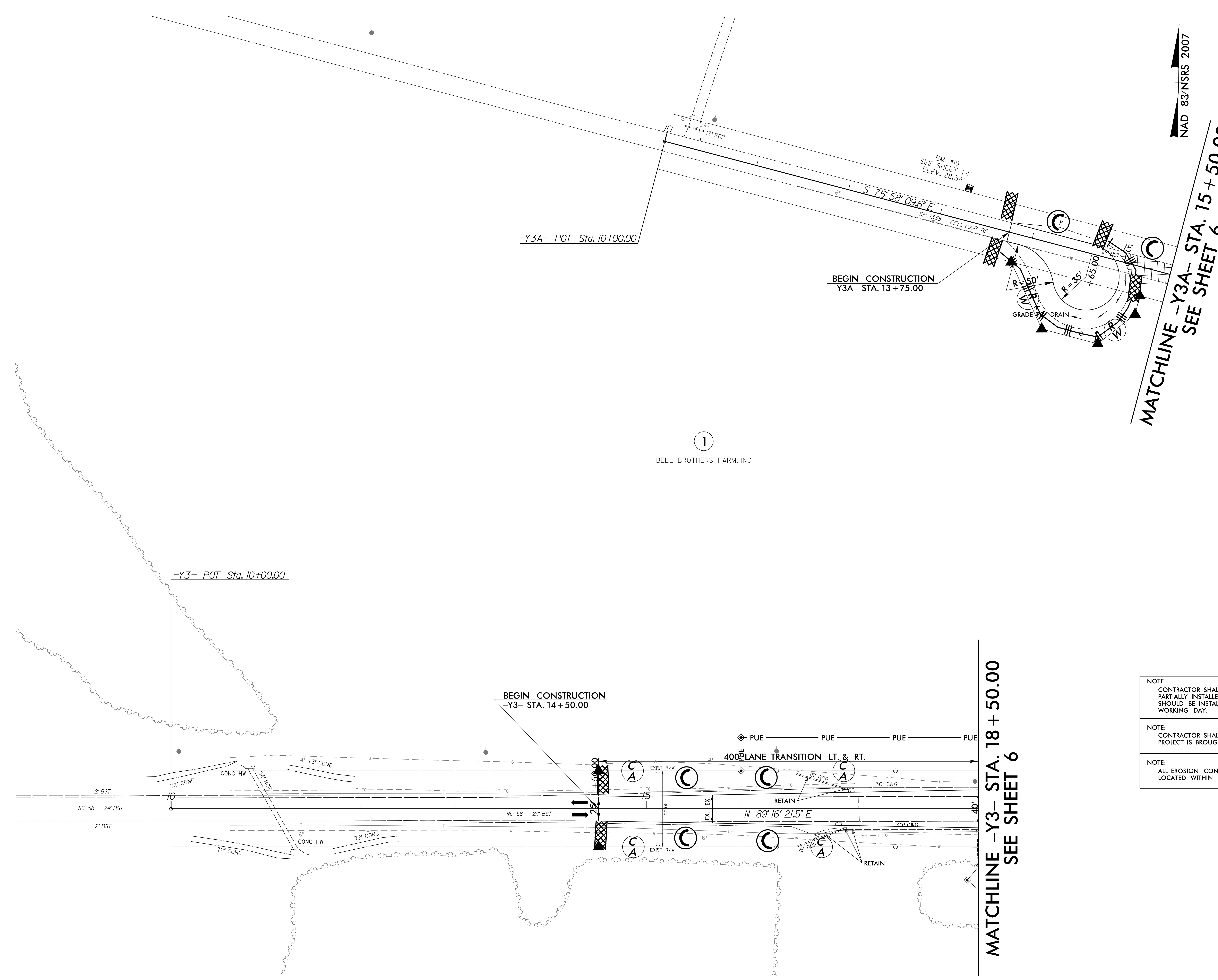
LEVEL III CERTIFIED BY:
STACEY H. BAILEY, PE
CERTIFICATION NUMBER: 3074
ISSUED: FEBRUARY 2, 2015

FINAL EROSION CONTROL
FOR CONSTRUCTION SHEET 29

REVISIONS

R/W REVISION 6-24-14 (DWG) - ADDED ADDITIONAL PUE AT -Y3- STA.18+50.00 RT.ON PARCEL 1 (BELL BROTHERS FARM,LLC).

8/17/99



NOTE:
CONTRACTOR SHALL PROVIDE INLET PROTECTION FOR PARTIALLY INSTALLED STORM DRAINS. 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:
ALL EROSION CONTROL DEVICES SHOWN ARE LOCATED WITHIN R/W OR EASEMENT.

SEE SHEET 46 FOR -Y3- PROFILE
SEE SHEET 50 FOR -Y3A- PROFILE

PROJECT REFERENCE NO.	SHEET NO.
R-2514D	EC-58/CONST.30
R/W SHEET NO.	

ROADSIDE ENVIRONMENTAL PROJECT ENGINEER

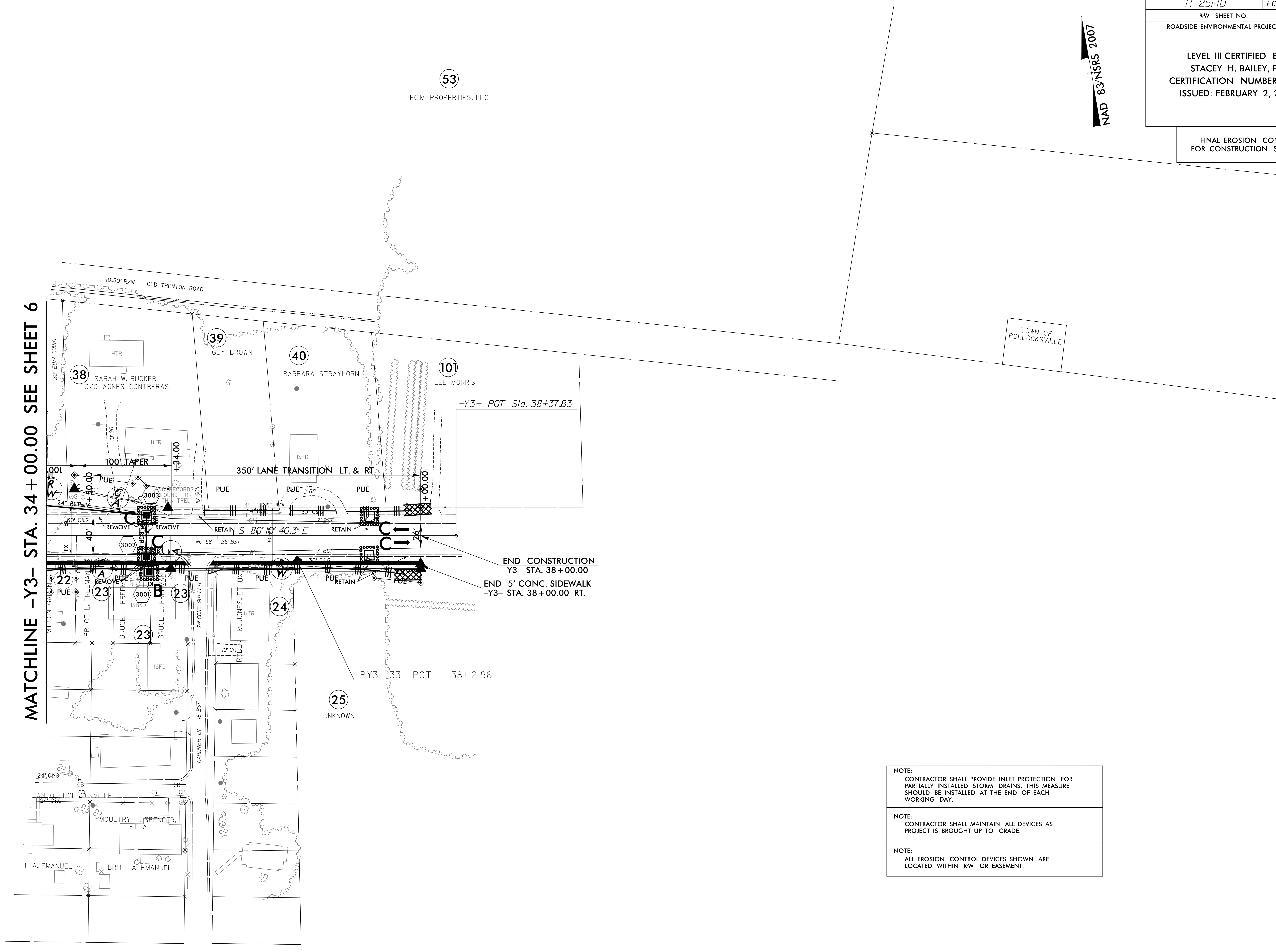
LEVEL III CERTIFIED BY:
STACEY H. BAILEY, PE
CERTIFICATION NUMBER: 3074
ISSUED: FEBRUARY 2, 2015

FINAL EROSION CONTROL
FOR CONSTRUCTION SHEET 30

REVISIONS

R/W REVISION 6-24-14 (DWG) - REVISED THE PUE ON PARCEL 22 (MILTON GARDNER) AND PARCEL 38 (SARAH W.RUCKER C/O AGNES CONTRERAS).

8/17/99



NAD 83/NSRS 2007
53
ECIM PROPERTIES, LLC
40.50' R/W
OLD TRENTON ROAD
39
GUY BROWN
40
BARBARA STRAYHORN
101
LEE MORRIS
38
SARAH W. RUCKER
C/O AGNES CONTRERAS
TOWN OF POLLOCKSVILLE
-Y3- POT Sta. 38+37.83
100' TAPER
350' LANE TRANSITION LT. & RT.
S 80°10' 40.3" E
NC 58
26' BST
REMOVE
RETAIN
PUE
END CONSTRUCTION
-Y3- STA. 38+00.00
END 5' CONC. SIDEWALK
-Y3- STA. 38+00.00 RT.
22
23
24
BRUCE L. FREEMAN
ROBERT M. JONES, ET UX
-BY3-33 POT 38+12.96
25
UNKNOWN
GARDNER LN
MOULTRY L. SPENCER, ET AL
BRITT A. EMANUEL
MATCHLINE -Y3- STA. 34+00.00 SEE SHEET 6

NOTE:
CONTRACTOR SHALL PROVIDE INLET PROTECTION FOR PARTIALLY INSTALLED STORM DRAINS. 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:
ALL EROSION CONTROL DEVICES SHOWN ARE LOCATED WITHIN R/W OR EASEMENT.

SEE SHEET 46 FOR -Y3- PROFILE

PROJECT REFERENCE NO.	SHEET NO.
R-2514D	EC-59/CONST.31
R/W SHEET NO.	

ROADSIDE ENVIRONMENTAL PROJECT ENGINEER

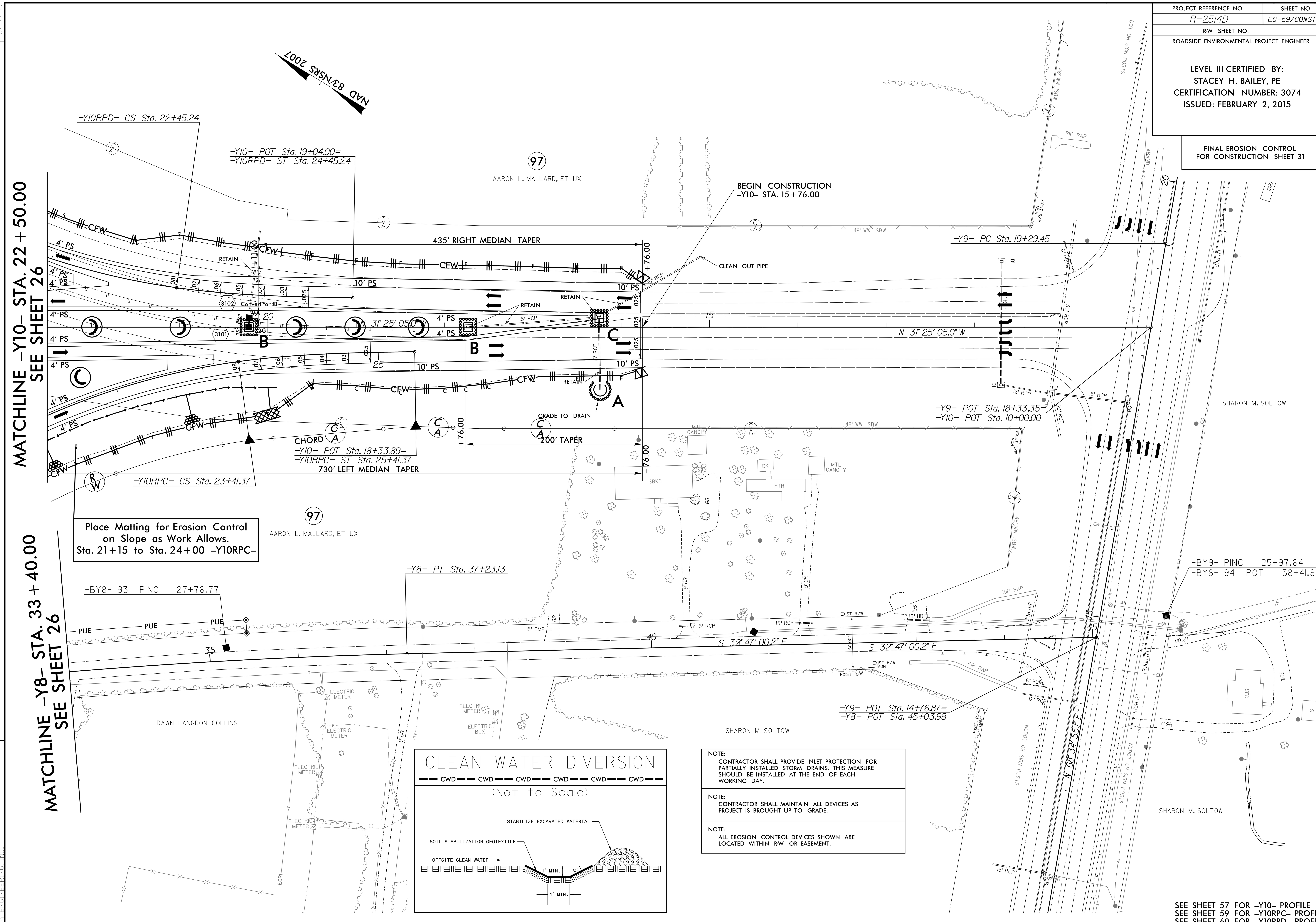
LEVEL III CERTIFIED BY:
STACEY H. BAILEY, PE
CERTIFICATION NUMBER: 3074
ISSUED: FEBRUARY 2, 2015

FINAL EROSION CONTROL
FOR CONSTRUCTION SHEET 31

REVISIONS

R/W REVISION 6-24-14 (DWG) - ADDED PUE FROM -Y8- STA.32+36.00 TO STA.35+43.00 LT.ON PARCEL 97 (AARON L.MALLARD,ET UX).

8/17/99



CLEAN WATER DIVERSION

(Not to Scale)

NOTE:
CONTRACTOR SHALL PROVIDE INLET PROTECTION FOR PARTIALLY INSTALLED STORM DRAINS. 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:
ALL EROSION CONTROL DEVICES SHOWN ARE LOCATED WITHIN R/W OR EASEMENT.

SEE SHEET 57 FOR -Y10- PROFILE
SEE SHEET 59 FOR -Y10RPC- PROFILE
SEE SHEET 60 FOR -Y10RPD- PROFILE