TIP PROJECT: R-5709C

STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	R-5709C	EC-1	
STATE PROJ. NO.	F. A. PROJ. NO.	DESCRIPTION	
50138.184	HSIP-0017 (158)	PE	

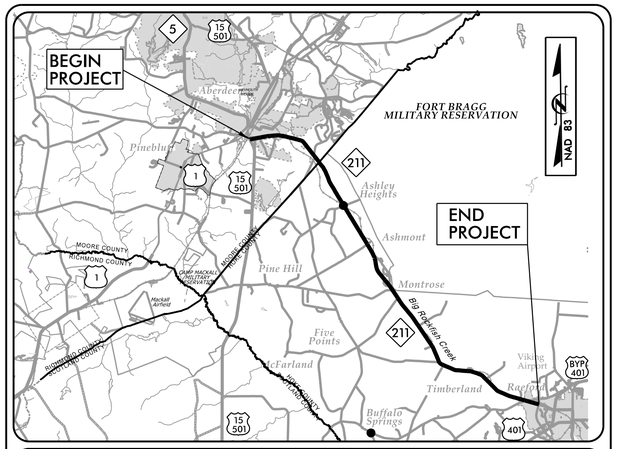
STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

PLAN FOR PROPOSED
HIGHWAY EROSION CONTROL

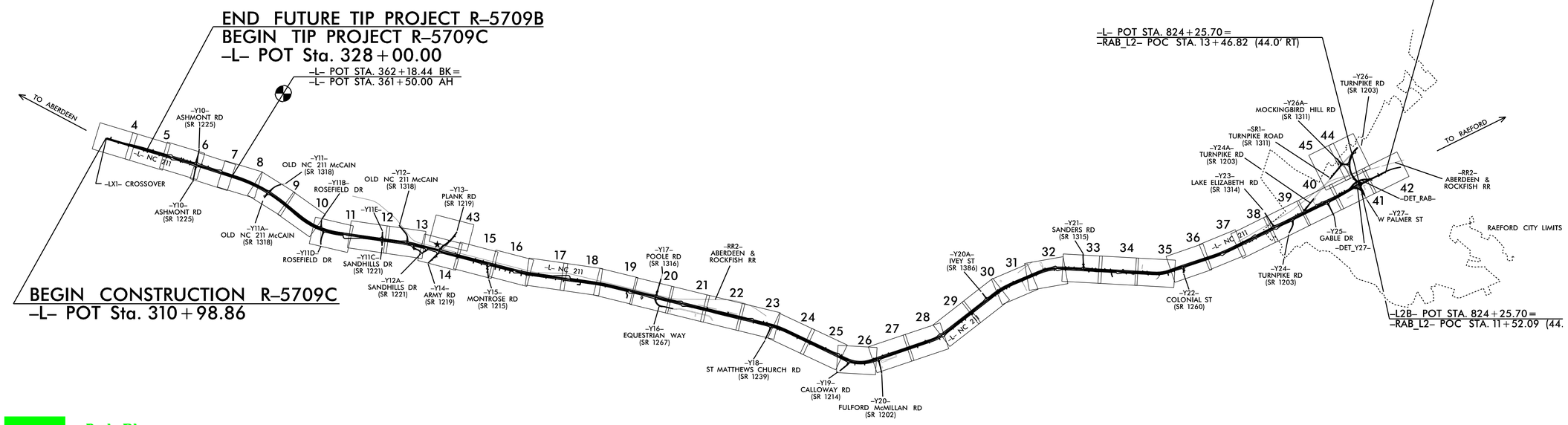
HOKE COUNTY

LOCATION: *NC 211 FROM US 15/US 501 IN ABERDEEN TO SR 1244 (WEST PALMER ST) /SR 1311 (MOCKINGBIRD HILL RD) IN RAEFORD*

TYPE OF WORK: *GRADING, DRAINAGE, PAVING, STRUCTURES AND SIGNALS*



VICINITY MAP
NOT TO SCALE



Both Phases

Final Phase

Matting For Erosion Control

GRAPHIC SCALE

50 25 0 50 100

PLANS

THESE EROSION AND SEDIMENT CONTROL PLANS COMPLY WITH THE REGULATIONS SET FORTH BY THE NCG 010000 GENERAL STORMWATER CONSTRUCTION PERMIT ISSUED BY THE NORTH CAROLINA DEPARTMENT OF ENVIRONMENTAL QUALITY DIVISION OF ENERGY, MINERAL, AND LAND RESOURCES.

RK&K

Prepared in the Office of:

RK&K, LLP

8601 SIX FORKS ROAD, SUITE 700
RALEIGH, NORTH CAROLINA 27609
NC LINCENSE NO. F-0112
1-888-521-4455 OR 919-878-9560

Designed by:

COURTLAND HOFFMAN, PE 4312
NAME LEVEL III CERTIFICATION NO.

Roadway Standard Drawings

The "Roadway Standard Drawings"- Roadway Design Unit - N. C. Department of Transportation - Raleigh, N. C., dated January 2024 and the latest revision thereto are applicable to this project and by reference hereby are considered a part of these plans.

9/25/2024
C:\Hydraulics\SHEC\R-5709C\R5709C_EC_tsh.dgn

PROJECT REFERENCE NO.	SHEET NO.
R-5709C	EC-02
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

DIVISION OF HIGHWAYS
STATE OF NORTH CAROLINA

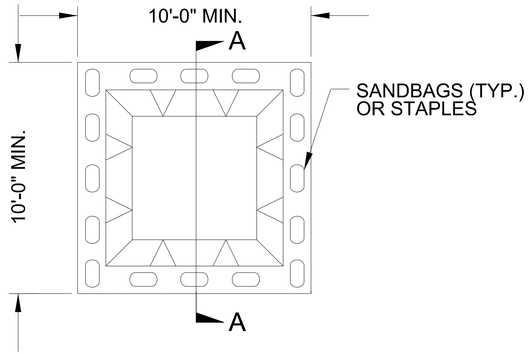
EROSION & SEDIMENT CONTROL LEGEND

Std. #	Description	Symbol
1605.01	Temporary Silt Fence	
1606.01	Special Sediment Control Fence	
1622.01	Temporary Berms and Slope Drains	
1630.02	Silt Basin Type B	
1630.03	Temporary Silt Ditch	TSD
1630.04	Stilling Basin	
1630.05	Temporary Diversion	TD
1630.06	Special Stilling Basin	
1630.07	Skimmer Basin	
1630.08	Tiered Skimmer Basin	
1630.09	Earthen Dam with Skimmer	
	Infiltration Basin	
	Rock Inlet Sediment Trap:	
1632.01	Type A	A
1632.02	Type B	B
1632.03	Type C	C

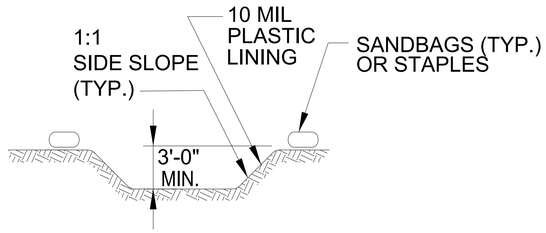
Std. #	Description	Symbol
1633.01	Temporary Rock Silt Check Type A	
1633.02	Temporary Rock Silt Check Type B	
1633.03	Temporary Rock Silt Check Type A with Excelsior Matting and Flocculant	
1634.01	Temporary Rock Sediment Dam Type A	
1634.02	Temporary Rock Sediment Dam Type B	
1635.01	Rock Pipe Inlet Sediment Trap Type A	A
1635.02	Rock Pipe Inlet Sediment Trap Type B	B
1636.01	Excelsior Wattle Check	
1636.01	Excelsior Wattle Check with Flocculant	
1636.01	Coir Fiber Wattle Check	
1636.01	Coir Fiber Wattle Check with Flocculant	
1636.02	Silt Fence Excelsior Wattle Break	EW
	Silt Fence Coir Fiber Wattle Break	CFW
1636.03	Excelsior Wattle Barrier	—EW—EW—EW—
1636.03	Coir Fiber Wattle Barrier	—CFW—CFW—CFW—

PROJECT REFERENCE NO.	SHEET NO.
R-5709C	EC-02A
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

ONSITE CONCRETE WASHOUT STRUCTURE WITH LINER



PLAN



SECTION A-A

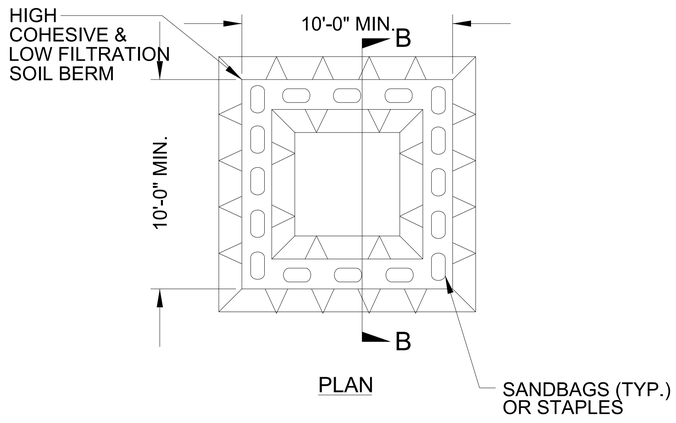
NOTES:
1. ACTUAL LOCATION DETERMINED IN FIELD

2. THE CONCRETE WASHOUT STRUCTURES SHALL BE MAINTAINED WHEN THE LIQUID AND/OR SOLID REACHES 75% OF THE STRUCTURES CAPACITY TO PROVIDE ADEQUATE HOLDING CAPACITY WITH A MINIMUM 12 INCHES OF FREEBOARD.

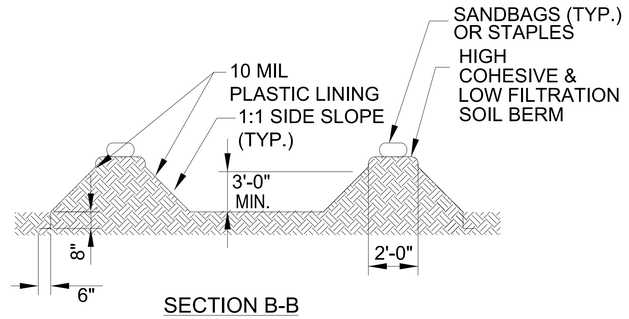
3.CONCRETE WASHOUT STRUCTURE NEEDS TO BE CLEARY MARKED WITH SIGNAGE NOTING DEVICE.

BELOW GRADE WASHOUT STRUCTURE

NOT TO SCALE



PLAN



SECTION B-B

NOTES:
1. ACTUAL LOCATION DETERMINED IN FIELD

2. THE CONCRETE WASHOUT STRUCTURES SHALL BE MAINTAINED WHEN THE LIQUID AND/OR SOLID REACHES 75% OF THE STRUCTURES CAPACITY TO PROVIDE ADEQUATE HOLDING CAPACITY WITH A MINIMUM 12 INCHES OF FREEBOARD.

3.CONCRETE WASHOUT STRUCTURE NEEDS TO BE CLEARY MARKED WITH SIGNAGE NOTING DEVICE.

ABOVE GRADE WASHOUT STRUCTURE

NOT TO SCALE

PROJECT REFERENCE NO.	SHEET NO.
R-5709C	EC-03
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

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)
4	-レXI-	10+00	12+68	LT	745
6	-レ-	338+50	339+00	LT	75
8	-レ-	361+50	362+00	RT	55
9	-レ-	381+50	384+50	LT	320
9	-YII-	11+08	11+50	RT	35
10	-レ-	385+00	385+80	LT	120
10	-レ-	385+80	386+00	LT	30
10	-レ-	389+50	390+50	LT	125
10	-レ-	390+50	391+00	LT	65
10	-レ-	391+00	391+50	LT	65
10	-L-	393+00	393+50	LT	60
11	-L-	409+50	410+00	LT	60
12	-L-	418+00	419+15	LT	160
12	-L-	419+15	420+50	LT	185
12	-L-	424+00	424+82	LT	75
12	-YIIC-	10+67	11+28	RT	80
13	-L-	431+00	432+50	LT	190
13	-Y12-	11+07	12+00	RT	95
15	-Y15-	13+30	13+65	RT	30
16	-L-	471+00	471+50	LT	75
16	-L-	479+00	479+18	RT	20
16	-L-	480+50	481+00	RT	90
17	-L-	489+50	490+00	RT	80
18	-L-	497+50	498+00	RT	60
18	-L-	498+00	499+37	RT	160
18	-L-	506+00	507+50	RT	265
20	-L-	526+91	527+36	RT	45
20	-L-	527+84	528+41	RT	60
21	-L-	541+00	542+00	RT	150
21	-L-	543+00	544+50	RT	190

PERMANENT SOIL REINFORCEMENT MAT

CONST SHEET NO.	LINE	FROM STATION	TO STATION	SIDE	ESTIMATE (SY)
22	-L-	557+00	557+75	LT	130
23	-L-	568+50	569+00	LT	65
28	-L-	642+50	643+00	LT	45
33	-L-	715+50	716+38	LT	145
38	-L-	773+48	775+50	RT	180
40	-L-	812+30	812+33	RT	120
41	-L-	644+46	645+06	M	100
11-12	-L-	412+00	413+50	LT	175
12-13	-L-	426+00	431+00	LT	625
17-18	-L-	495+50	498+00	RT	290
				SUBTOTAL	5,640
				ADDITIONAL PSRM TO BE INSTALLED	0
				TOTAL	5,640
				SAY	6,000

PROJECT REFERENCE NO.	SHEET NO.
R-5709C	EC-03A
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

DIVISION OF HIGHWAYS
STATE OF NORTH CAROLINA

SOIL STABILIZATION SUMMARY SHEET

EROSION CONTROL MATTING

CONST SHEET NO.	LINE	FROM STATION	TO STATION	SIDE	ESTIMATE (SY)
4-5	-LX1-	18+68	22+69	LT	805
5	-LX1-	22+69	24+19	LT	300
5	-LX1-	24+19	26+19	LT	400
5	-L-	321+00	330+00	RT	900
5	-L-	328+00	329+00	LT	150
5	-L-	330+50	333+50	LT	300
6	-L-	337+50	338+25	LT	115
6	-L-	338+25	338+50	LT	40
6	-Y10-	15+00	16+00	RT	150
7	-L-	358+00	358+88	RT	135
8	-L-	360+50	361+50	RT	105
8	-L-	368+00	370+00	LT	180
8	-L-	368+50	370+00	RT	105
8	-L-	370+00	371+00	LT	90
8	-L-	370+00	370+50	RT	35
9	-L-	376+00	376+39	RT	35
9	-L-	376+00	376+36	LT	35
9	-Y11A-	11+00	11+50	LT	40
11	-L-	399+50	400+50	LT	90
12	-L-	392+00	393+00	RT	70
13	-L-	428+00	428+50	RT	45
13	-L-	435+44	436+50	LT	95
13	-L-	436+50	438+00	LT	135
13	-L-	437+50	438+28	LT	160
14	-L-	445+50	447+00	LT	205
14	-Y13-	11+50	12+00	LT	80
14	-Y13-	12+00	12+44	RT	35
14	-Y13-	15+50	18+00	LT	280
14	-Y14-	10+50	11+00	LT	145
14	-Y13-	12+00	12+44	RT	35

EROSION CONTROL MATTING

CONST SHEET NO.	LINE	FROM STATION	TO STATION	SIDE	ESTIMATE (SY)
14	-Y13-	15+50	18+00	LT	280
14	-Y14-	10+50	11+00	LT	145
14	-Y14-	11+00	11+50	LT	85
14	-Y14-	12+00	14+00	RT	155
15	-L-	467+49	468+04	RT	45
15	-Y15-	11+75	12+25	LT	40
15	-Y15-	12+25	12+75	LT	40
15	-Y15-	12+50	13+30	RT	65
15	-Y15-	12+75	14+50	LT	135
16	-L-	476+50	477+75	LT	115
16	-L-	477+75	479+00	LT	115
16	-L-	479+00	480+50	RT	115
16	-L-	480+50	481+00	LT	45
16	-L-	481+00	483+00	LT	180
17	-L-	484+00	485+50	LT	135
17	-L-	485+50	487+00	LT	135
17	-L-	487+00	487+50	LT	45
18	-L-	497+50	498+00	LT	45
18	-L-	498+00	499+34	LT	120
18	-L-	499+50	500+00	RT	35
18	-L-	500+00	501+00	RT	70
18	-L-	502+00	503+00	RT	80
18	-L-	507+50	511+50	LT	355
19	-L-	511+50	512+00	LT	45
20	-L-	524+50	528+61	LT	365
20	-L-	524+50	526+00	RT	135
20	-L-	525+50	526+00	LT	45
20	-L-	526+00	527+50	LT	135
20	-L-	526+00	526+50	RT	45
20	-L-	526+50	526+91	RT	40

PROJECT REFERENCE NO.	SHEET NO.
R-5709C	EC-03B
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

DIVISION OF HIGHWAYS
STATE OF NORTH CAROLINA

SOIL STABILIZATION SUMMARY SHEET

EROSION CONTROL MATTING

CONST SHEET NO.	LINE	FROM STATION	TO STATION	SIDE	ESTIMATE (SY)
20	-L-	529+00	532+00	LT	265
21	-L-	544+50	545+48	RT	125
21	-L-	545+48	546+00	RT	40
21	-L-	544+00	54550	LT	175
21	-L-	551+50	55200	LT	60
22	-L-	562+50	563+50	MED	200
23	-L-	573+50	575+50	LT	180
23	-L-	575+50	576+83	LT	120
24	-L-	582+50	585+00	MED	500
24	-L-	585+00	587+61	MED	395
25	-L-	595+00	596+00	RT	80
25	-L-	596+00	607+00	RT	1630
26	-L-	607+00	610+77	RT	475
26	-L-	612+00	616+50	RT	565
27	-Y20-	13+00	13+50	LT	40
27	-Y20-	13+00	13+50	RT	40
27	-Y20-	13+50	14+90	LT	110
29	-L-	654+00	656+70	MED	270
29	-L-	656+70	659+19	LT	220
29	-L-	656+70	657+09	LT	30
30	-L-	665+15	670+50	LT	475
31	-L-	681+00	684+00	RT	265
31	-L-	685+50	686+92	LT	130
31	-L-	686+92	690+00	LT	275
32	-L-	690+00	691+00	RT	80
32	-L-	692+00	696+00	RT	355
32	-L-	699+00	699+50	RT	45
32	-L-	699+50	700+00	RT	45
32	-L-	705+00	707+50	RT	225
32	-L-	707+50	708+27	RT	55

EROSION CONTROL MATTING

CONST SHEET NO.	LINE	FROM STATION	TO STATION	SIDE	ESTIMATE (SY)
33	-L-	705+00	706+00	MED	50
33	-L-	708+66	710+03	LT	125
33	-L-	710+00	711+50	RT	135
33	-L-	715+00	715+50	LT	45
33	-L-	715+00	716+40	RT	100
33	-Y21-	10+71	12+00	RT	115
33	-Y21-	10+81	11+50	LT	65
34	-L-	717+00	717+50	LT	70
34	-L-	717+50	718+50	LT	140
34	-L-	718+50	719+00	LT	75
34	-L-	726+50	727+00	LT	45
34	-L-	729+00	730+00	LT	90
35	-L-	731+36	731+50	LT	15
35	-L-	733+50	734+50	LT	90
35	-L-	734+50	736+00	LT	135
35	-L-	736+00	736+50	RT	45
35	-L-	743+00	745+00	LT	180
35	-L-	743+50	745+00	RT	105
36	-L-	745+00	747+50	RT	225
36	-L-	746+50	750+50	LT	355
36	-L-	747+50	748+50	RT	70
36	-L-	751+00	752+42	LT	100
36	-L-	751+00	752+00	RT	70
36	-L-	752+00	752+48	RT	35
36	-L-	752+42	753+50	LT	75
36	-L-	753+50	755+00	LT	135
36	-L-	756+50	757+00	RT	45
36	-Y22-	11+00	11+59	LT	55
37	-L-	766+50	768+00	LT	135
37	-L-	767+50	769+00	RT	135

PROJECT REFERENCE NO.	SHEET NO.
R-5709C	EC-03C
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

DIVISION OF HIGHWAYS
STATE OF NORTH CAROLINA

SOIL STABILIZATION SUMMARY SHEET

EROSION CONTROL MATTING

CONST SHEET NO.	LINE	FROM STATION	TO STATION	SIDE	ESTIMATE (SY)
37	-L-	768+00	770+00	LT	140
37	-L-	769+00	769+50	RT	45
37	-L-	770+50	772+50	RT	180
38	-L-	778+50	779+50	RT	90
39	-L-	786+00	786+97	LT	90
39	-L-	786+50	788+00	RT	135
39	-L-	787+79	796+28	LT	1500
39	-L-	788+00	794+32	RT	560
39	-L-	796+28	797+16	LT	160
39	-Y23-	10+85	11+50	RT	50
39	-Y24-	12+50	13+00	LT	65
39	-Y24-	13+00	13+50	LT	65
39	-Y24-	13+50	15+00	LT	190
40	-L-	800+00	803+50	M	350
40	-L-	806+50	808+00	RT	105
40	-L-	808+00	809+54	RT	140
40	-L-	809+00	809+95	LT	85
40	-L-	809+95	811+00	LT	95
40	-L-	810+49	810+98	RT	70
40	-L-	810+98	812+30	RT	185
41	-L-	818+50	820+50	RT	180
41	-L-	820+50	822+50	RT	180
41	-L-	821+50	822+50	LT	90
41	-L-	822+50	822+96	LT	45
41	-L-	822+96	823+30	LT	30
41	-L-	825+00	826+50	RT	115
41	-Y26-	10+45	11+13	RT	55
41	-Y26-	11+13	13+00	RT	145
41	-Y26-	11+41	12+48	LT	95
41	-Y26-	13+00	14+00	RT	80

EROSION CONTROL MATTING

CONST SHEET NO.	LINE	FROM STATION	TO STATION	SIDE	ESTIMATE (SY)
41	-Y26-	14+00	14+50	RT	45
41	-Y26-	18+50	23+50	RT	445
41	-Y27-	11+12	13+00	RT	145
42	-L2B-	832+50	834+00	LT	135
44	-Y26-	15+00	18+50	RT	270
44	-Y26-	19+50	21+50	LT	155
44	-Y26A-	10+50	11+00	LT	40
44	-Y26A-	10+50	11+00	RT	40
44	-Y26A-	11+00	13+19	RT	220
44	-Y26A-	11+00	12+50	LT	115
44	-Y26A-	13+00	15+10	RT	190
4-5	-L-	320+00	322+00	LT	300
6-7	-L-	349+00	352+00	RT	450
7-8	-L-	359+50	360+50	LT	150
8-9	-L-	370+50	371+50	RT	70
10-11	-L-	398+50	399+50	LT	90
27-28	-L-	623+50	643+00	RT	1720
28-29	-L-	647+75	656+70	LT	790
29-30	-L-	656+00	665+15	RT	810
29-30	-L-	659+19	665+15	LT	530
31-32	-L-	701+00	705+00	RT	355
32-33	-L-	700+50	704+00	LT	310
33-34	-L-	716+39	720+50	RT	315
34-35	-L-	730+00	731+36	LT	120
36-37	-L-	758+00	760+00	MED	400
39-40	-L-	797+16	800+50	LT	590
				SUBTOTAL	32,570
MISCELLANEOUS MATTING TO BE INSTALLED AS DIRECTED BY THE ENGINEER					251,630
				TOTAL	284,200
				SAY	285,000

PROJECT REFERENCE NO.	SHEET NO.
R-5709C	EC-03D
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

DIVISION OF HIGHWAYS
STATE OF NORTH CAROLINA

SOIL STABILIZATION SUMMARY SHEET

EROSION CONTROL EXCELSIOR MATTING

CONST SHEET NO.	LINE	FROM STATION	TO STATION	SIDE	ESTIMATE (SY)
4	-LX1-	12+68	18+68	LT	900
5	-L-	329+00	329+50	LT	75
6	-L-	336+00	337+00	LT	150
6	-L-	337+00	337+50	LT	75
6	-Y10-	18+00	19+50	RT	225
8	-L-	367+50	368+50	RT	70
9	-L-	378+50	381+50	LT	345
10	-L-	387+50	389+50	LT	200
10	-L-	391+50	393+00	LT	190
10	-L-	393+50	396+00	LT	175
11	-L-	402+50	403+50	LT	125
11	-L-	403+50	404+00	LT	65
11	-L-	404+00	406+84	LT	355
11	-L-	406+84	407+50	LT	85
11	-L-	407+50	409+50	LT	230
11	-L-	410+00	412+00	LT	230
12	-L-	391+00	392+00	RT	70
12	-L-	426+00	427+00	RT	90
12	-L-	413+50	415+64	LT	250
12	-L-	415+64	417+00	LT	225
12	-Y11E-	10+64	11+50	RT	110
13	-L-	427+00	428+00	RT	90
14	-Y13-	18+00	19+00	LT	115
14	-Y14-	11+50	13+00	LT	250
14	-Y14-	13+00	14+50	LT	190
14	-Y14-	14+00	14+50	RT	40
15	-L-	458+50	460+00	LT	115
15	-Y15-	13+65	14+50	RT	70
17	-L-	490+00	495+00	RT	575
17	-L-	495+00	495+50	RT	60

EROSION CONTROL EXCELSIOR MATTING

CONST SHEET NO.	LINE	FROM STATION	TO STATION	SIDE	ESTIMATE (SY)
17	-L-	496+00	497+50	LT	175
18	-L-	497+00	497+50	LT	45
18	-L-	499+34	500+50	LT	160
18	-L-	500+50	501+00	LT	70
18	-L-	501+00	502+00	RT	70
18	-L-	505+35	506+00	RT	50
21	-L-	542+00	543+00	RT	100
21	-L-	546+00	547+00	RT	80
28	-L-	643+00	644+50	LT	135
31	-L-	685+50	686+25	RT	70
31	-L-	686+92	687+42	RT	40
32	-L-	691+00	692+00	RT	80
32	-L-	698+00	700+50	LT	225
33	-L-	704+00	706+00	LT	180
33	-L-	706+00	708+27	LT	205
33	-L-	711+50	715+00	RT	245
33	-L-	716+38	717+00	LT	105
34	-L-	720+50	722+50	RT	155
34	-L-	722+50	723+50	RT	80
34	-L-	723+50	724+00	RT	40
34	-L-	727+00	729+00	LT	180
35	-L-	731+50	732+50	RT	115
35	-L-	732+50	733+27	RT	90
35	-L-	736+50	737+93	RT	100
35	-L-	737+93	741+34	RT	345
36	-L-	750+11	751+00	RT	65
36	-L-	750+50	751+00	LT	45
36	-L-	752+48	755+00	RT	175
36	-L-	755+00	756+00	RT	70
36	-L-	756+00	756+50	RT	35

PROJECT REFERENCE NO.	SHEET NO.
R-5709C	EC-03E
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

DIVISION OF HIGHWAYS
STATE OF NORTH CAROLINA

SOIL STABILIZATION SUMMARY SHEET

EROSION CONTROL EXCELSIOR MATTING

CONST SHEET NO.	LINE	FROM STATION	TO STATION	SIDE	ESTIMATE (SY)
37	-L-	769+50	770+50	RT	90
37	-L-	770+00	772+00	LT	140
37	-L-	772+00	773+36	LT	205
39	-L-	795+28	795+65	RT	40
39	-Y23-	10+96	12+00	LT	80
40	-L-	812+30	813+50	RT	85
41	-L-	822+50	822+64	RT	35
34-35	-L-	730+00	731+50	RT	135
37-38	-L-	772+50	773+48	RT	150
				SUBTOTAL	10,235
MISCELLANEOUS MATTING TO BE INSTALLED AS DIRECTED BY THE ENGINEER					0
				TOTAL	10,235
				SAY	10,500

EROSION CONTROL EXCELSIOR MATTING

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

PROJECT REFERENCE NO.	SHEET NO.
R-5709C	EC-3F
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

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 TO 4:1	14 DAYS	7 DAYS FOR SLOPES GREATER THAN 50' IN LENGTH WITH SLOPES STEEPER THAN 4:1. 7 DAYS FOR PERIMETER DIKES, SWALES, DITCHES PERIMETER SLOPES, AND HQW ZONES
ALL OTHER AREAS WITH SLOPES FLATTER THAN 4:1	14 DAYS	7 DAYS FOR PERIMETER DIKES, SWALES, DITCHES PERIMETER SLOPES, AND HQW ZONES

DETAIL OF TEMPORARY ROUNDABOUT CONSTRUCTION DETOUR

PROJECT REFERENCE NO.	SHEET NO.
R-5709C	EC-3G/CONST 2B-1
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

NAD 83 /NA 2011

-DET_RAB- POT Sta. 10+00.00
BEGIN CONSTRUCTION
-DET_RAB- POT Sta. 11+40.00=
-L- POC Sta.816+66.47 (14.19' LT)
S 74° 11' 03.2" E
-DET_RAB- PC Sta. 13+12.88
-DET_RAB- PRC Sta. 16+09.73
-DET_Y27- POT Sta. 16+54.13=
-DET_RAB- POC Sta. 15+98.81
100' TAPER
S 11° 18' 44.8" E
-DET_Y27- PT Sta. 15+93.10
-DET_Y27- PRC Sta. 15+00.09
-DET_Y27- PRC Sta. 11+17.17
BEGIN CONSTRUCTION
-DET_Y27- POC Sta. 10+70.00
-DET_Y27- PC Sta. 10+00.00
-DET_RAB- PRC Sta. 22+06.81
-DET_RAB- STA. 22+50.00
SEE SHEET 2B-4
15+00
20+00
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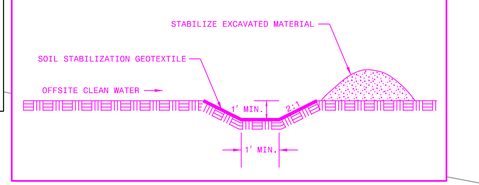
PROJECT REFERENCE NO.	SHEET NO.
R-5709C	EC-3H/CONST.2B-2
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

DETAIL OF TEMPORARY ROUNDABOUT CONSTRUCTION DETOUR

CLEAN WATER DIVERSION

CWD → CWD → CWD → CWD

(Not to Scale)



NAD 83 NA 2011

-DET_RAB-
PI Sta 23+60.33
Δ = 26° 34' 40.8" (LT)
D = 8° 48' 53.0"
L = 301.52'
T = 153.52'
R = 650.00'
SE = 0.03
V = 35MPH

END TIP PROJECT R-5709C

-L2B- POC Sta. 835+30.00

-DET_RAB- PT Sta. 25+08.33=
-L2B- POT Sta.829+93.06 (00.00' LT)

-DET_RAB- MATCHLINE STA. 22+50.00 SEE SHEET 2B-3

300' LANE TAPER RT & LT

TEMPORARY SP CUT DITCH SEE DETAIL TEMP C

PROP.2'-6" C&G

TOE PROTECTION W/64 TONS CL B RIP RAP W/143 SY GEOTEXTILE SEE DETAIL GA

SPECIAL LATERAL V DITCH SEE DETAIL E

-DET_RAB- POT Sta. 28+15.26

25' BLEND TO EXIST.

END CONSTRUCTION -L2B- Sta.838+98.00

830+00

835+00

840+00

S 74°17'50.0" E -L2B-

S 59°21'37.5" E

25+00

RETAIN

CWD

TOE PROTECTION SEE DETAIL TEMP D

REMOVE SIDE DRAIN, DI, AND 12' OF EX. 15"

REMOVE

RETAIN

PIPE CLEANOUT

2 TONS CL B RIP RAP W/7 SY GEOTEXTILE

DO NOT DISTURB SIGNS, LIGHT POLES, OR FLAGPOLES

END CONSTRUCTION
-DET_RAB- POT Sta. 26+70.00=
-L2B- POT Sta.831+54.74 (00.00' LT)

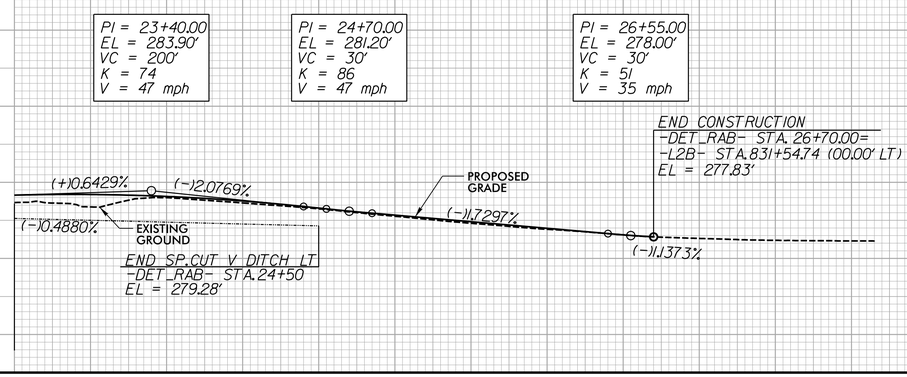
-L2B- PCC Sta.837+00.90

-L2B- PT Sta.839+32.37

-L2B- POT Sta.841+37.81

-L2B- PC Sta.835+22.44

-DET_RAB-



FOR -L2B- PLANS SEE SHTS. 41 & 42

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chartman

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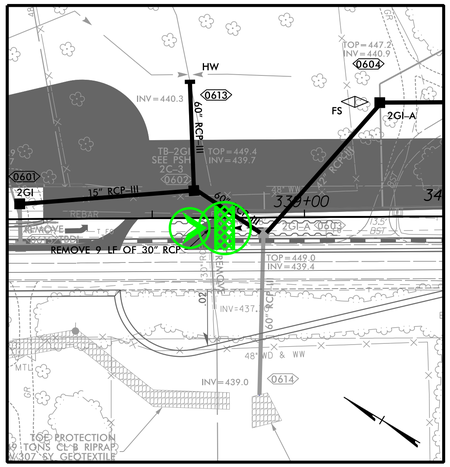

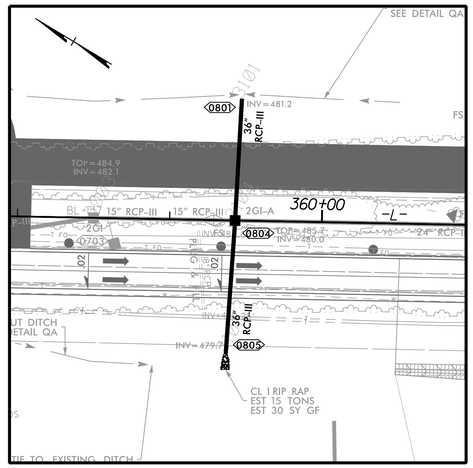

PROJECT REFERENCE NO.	SHEET NO.
R-5709C	EC-31/CONST 2B-18
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

TEMPORARY DRAINAGE PIPE LOCATION DETAILS FOR INFORMATION USE

SCALE
50 25 0 50 100

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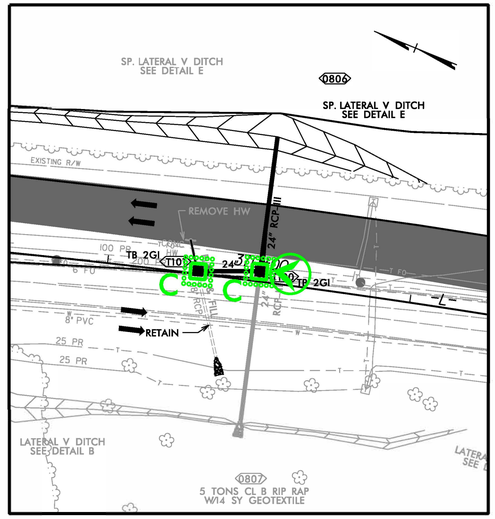
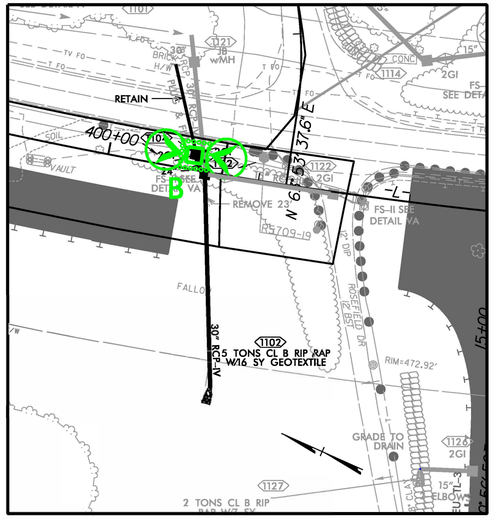
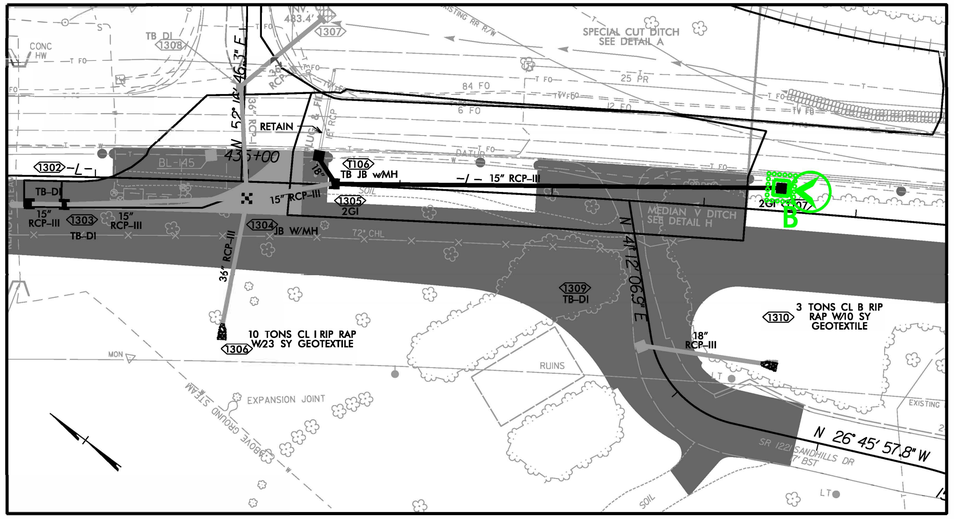
shellman

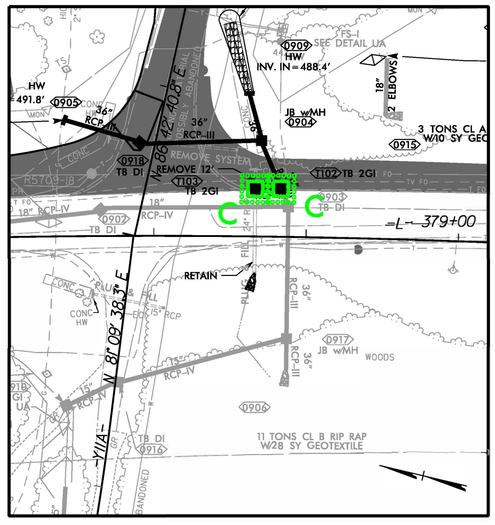
PROJECT REFERENCE NO.	SHEET NO.
R-5709C	EC-3J/CONST.2B-19
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

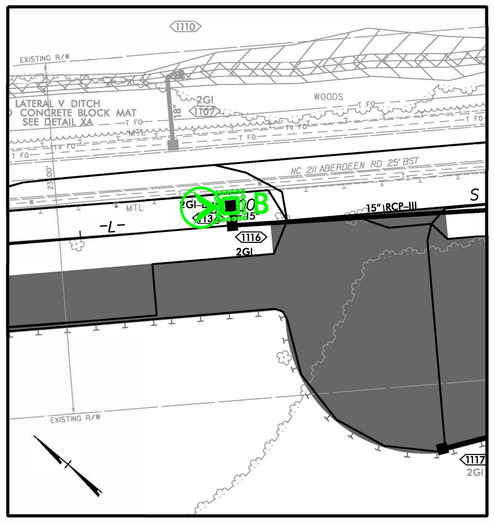
TEMPORARY DRAINAGE PIPE LOCATION DETAILS FOR INFORMATION USE

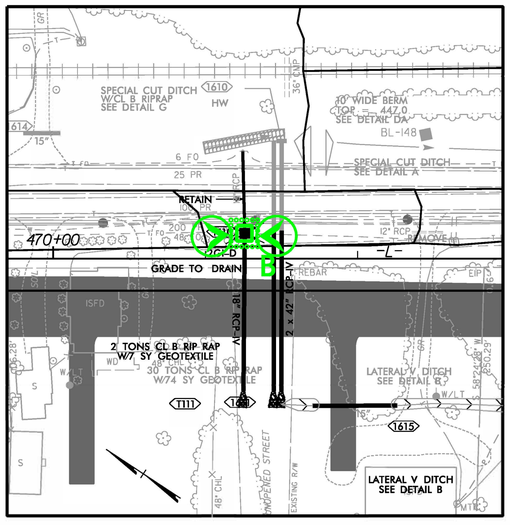


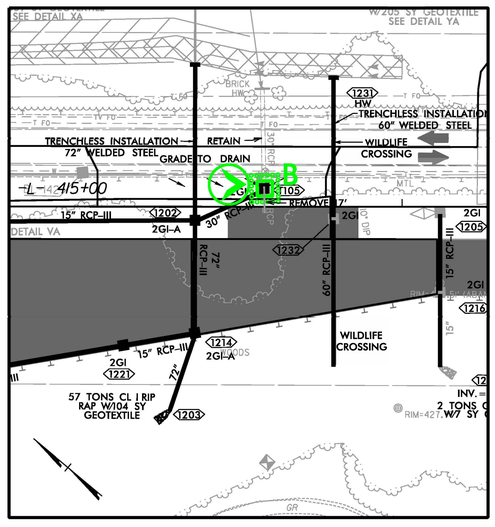


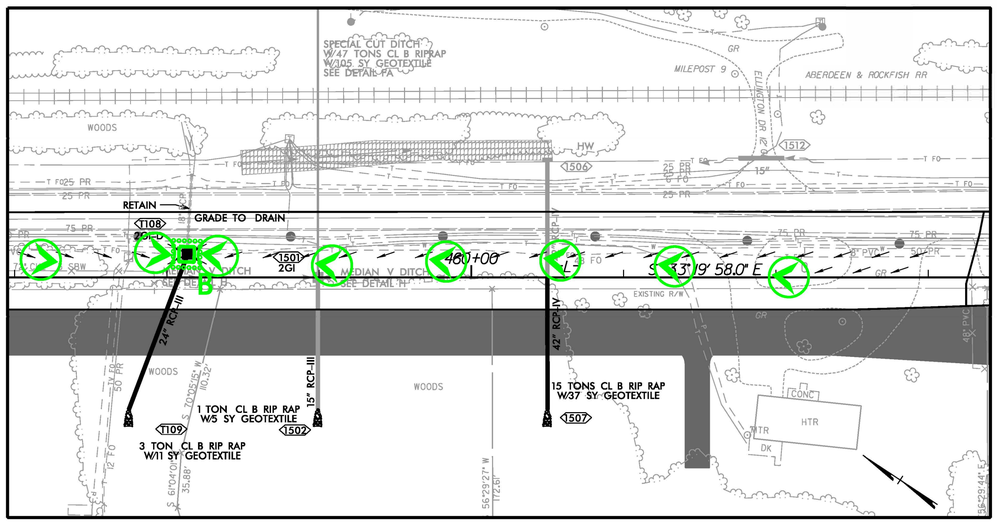












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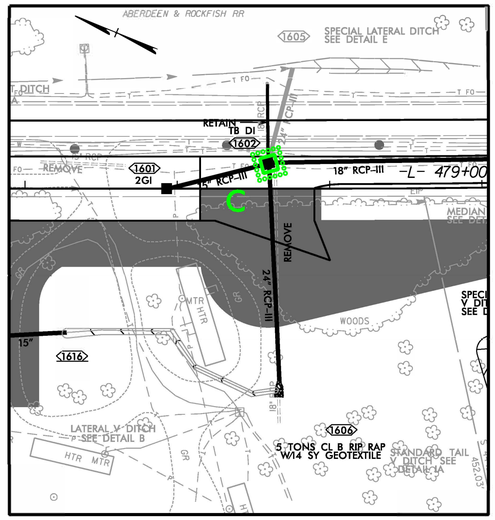
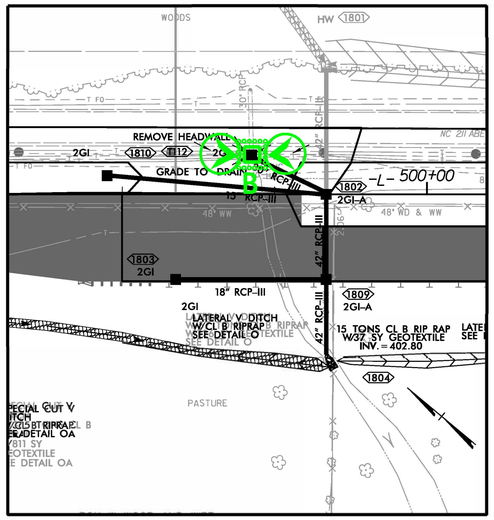
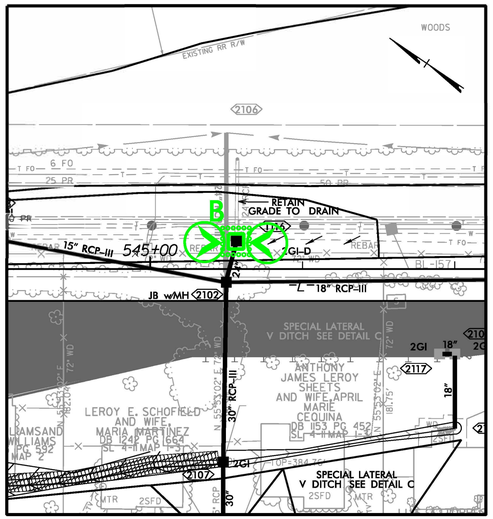
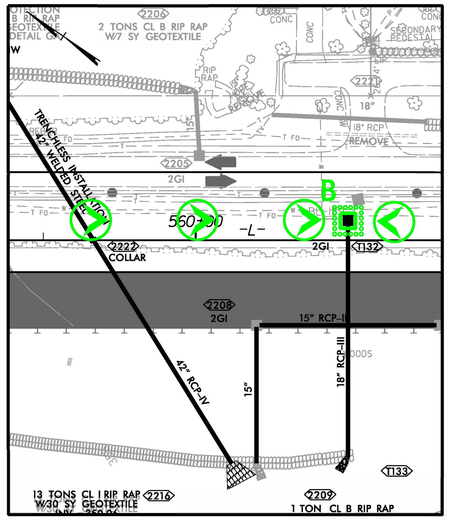
PROJECT REFERENCE NO.	SHEET NO.
R-5709C	EC-3K/CONST.2B-20
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

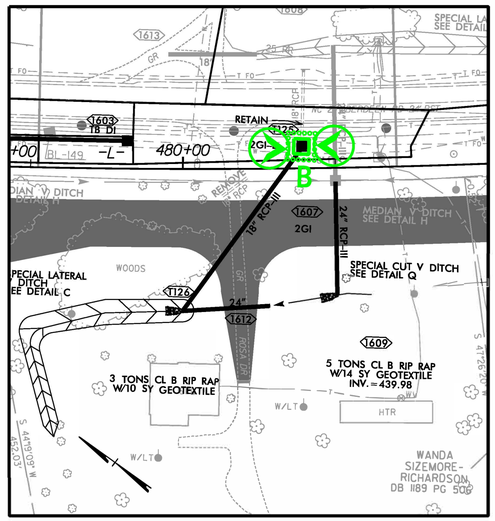
TEMPORARY DRAINAGE PIPE LOCATION DETAILS FOR INFORMATION USE

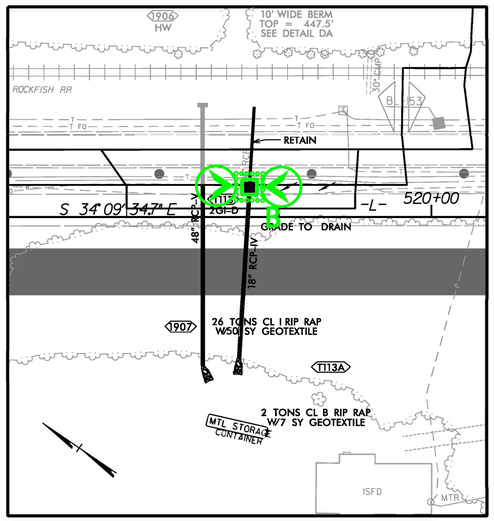


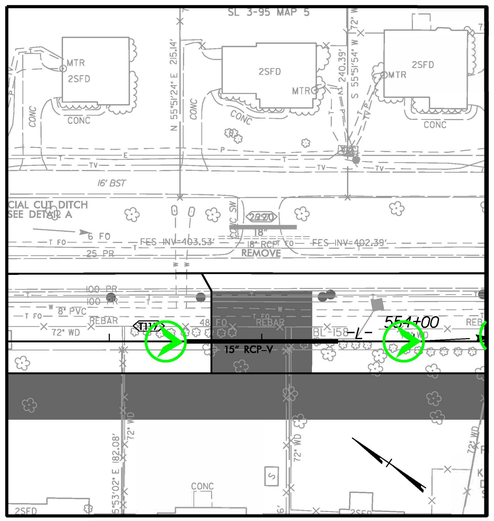


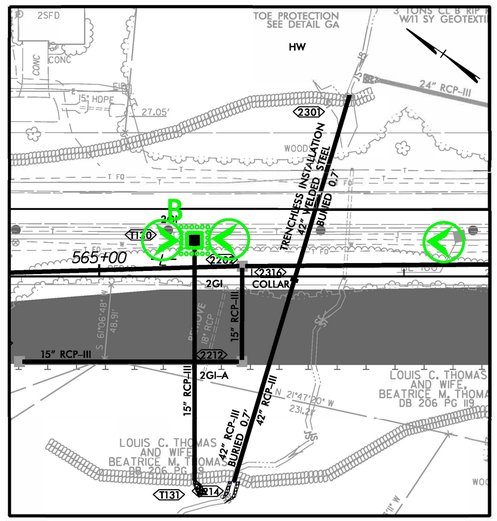


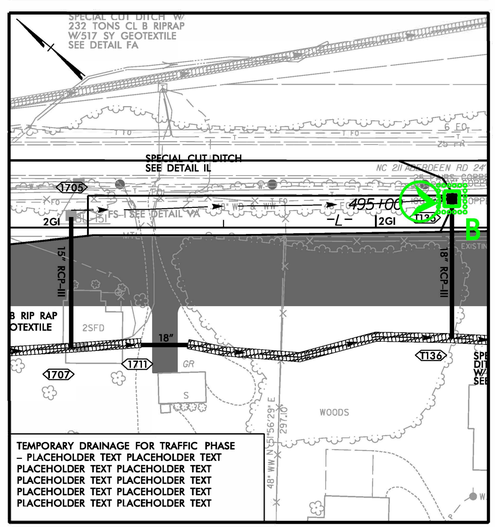


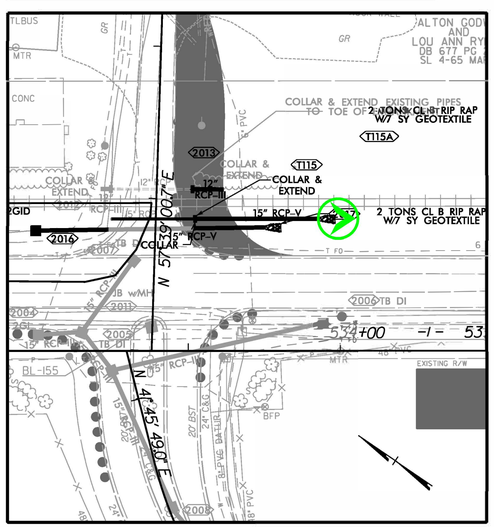


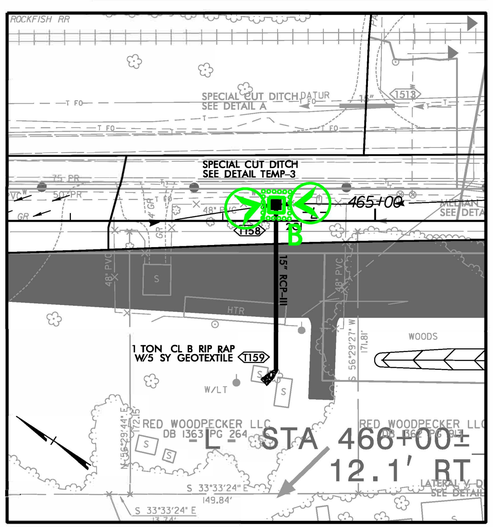


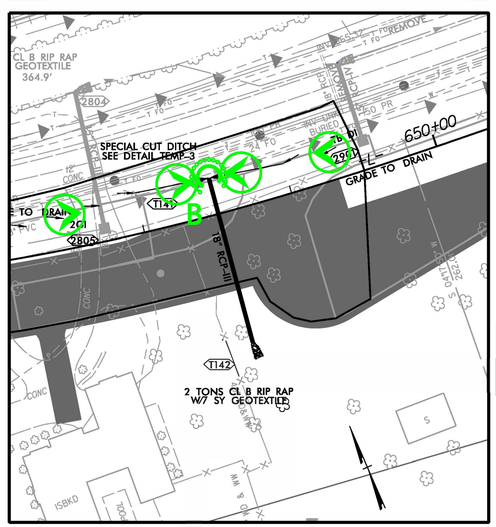












SCALE
50 25 0 50 100

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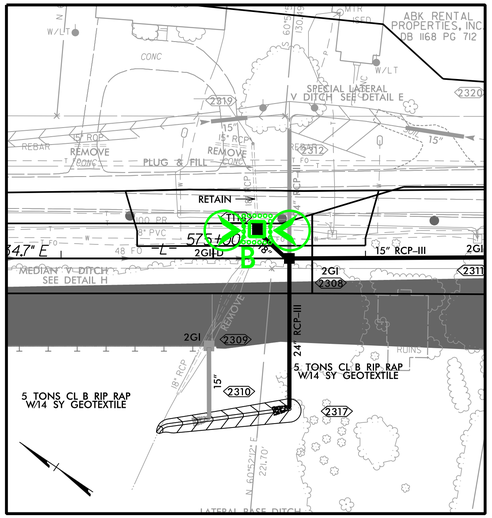
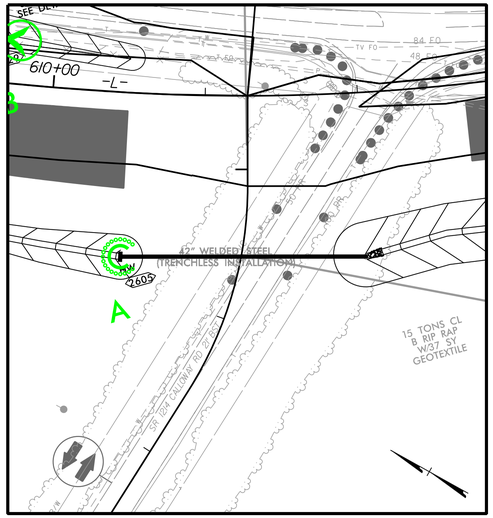
chartman

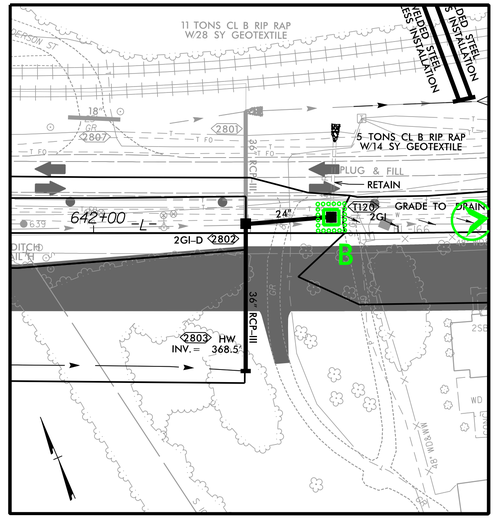
8/17/99

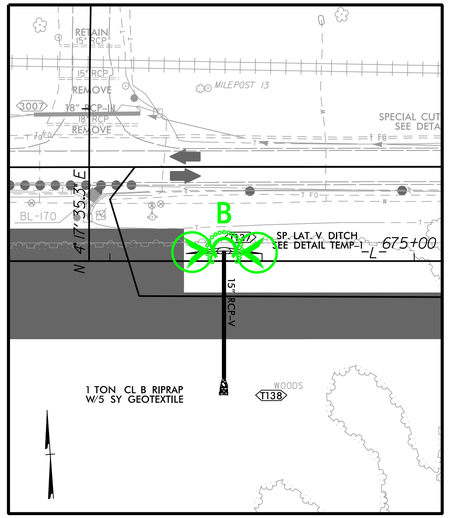
PROJECT REFERENCE NO.	SHEET NO.
R-5709C	EC-3L/CONST.2B-2I
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

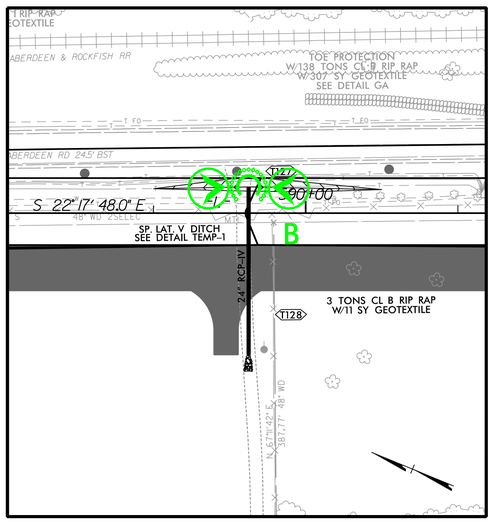
TEMPORARY DRAINAGE PIPE LOCATION DETAILS FOR INFORMATION USE

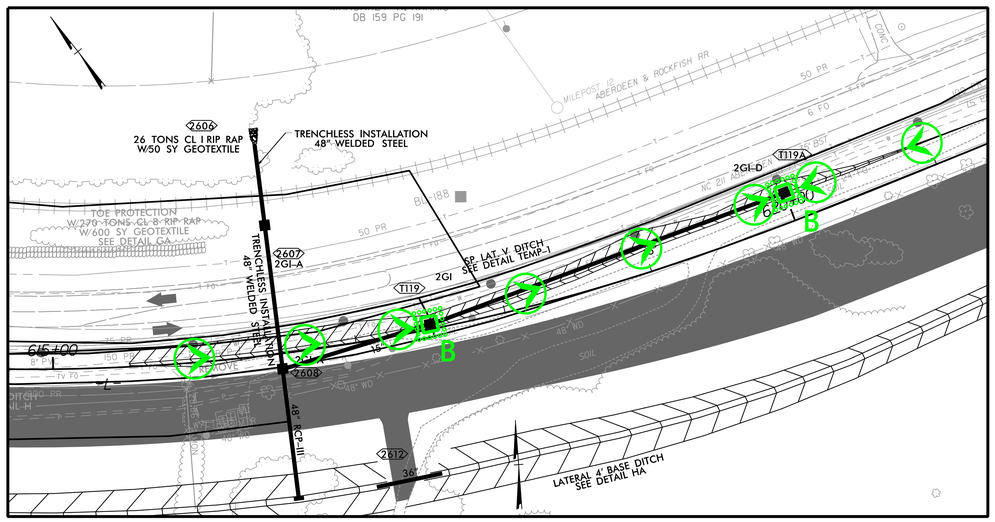


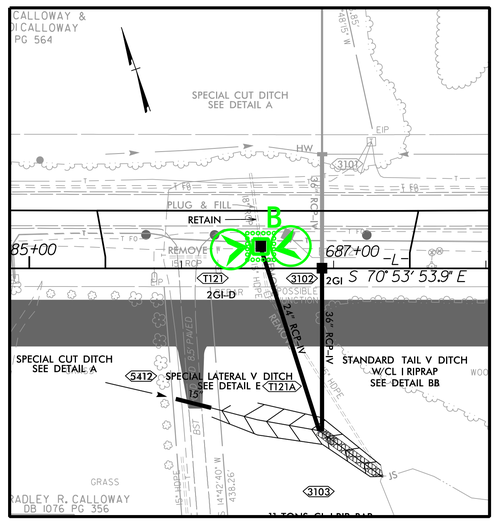


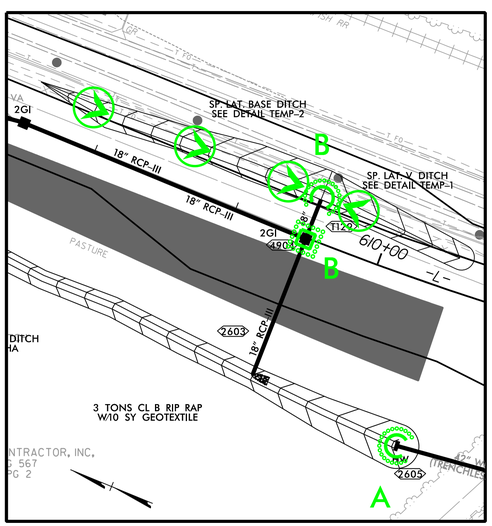


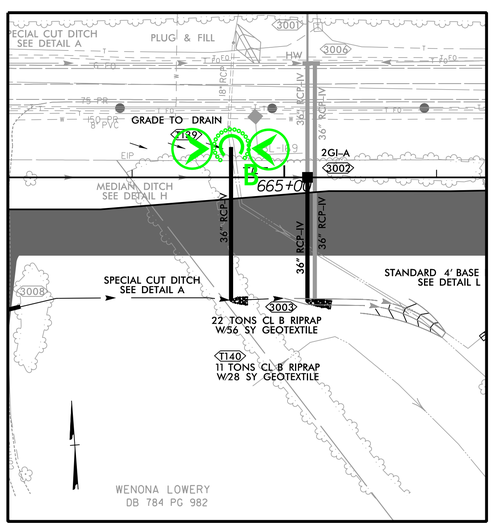


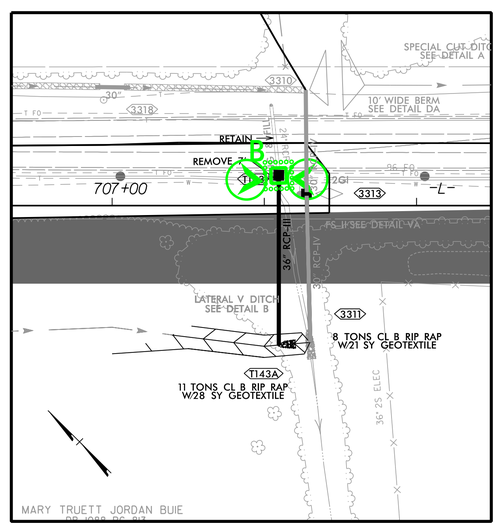












SCALE
50 25 0 50 100

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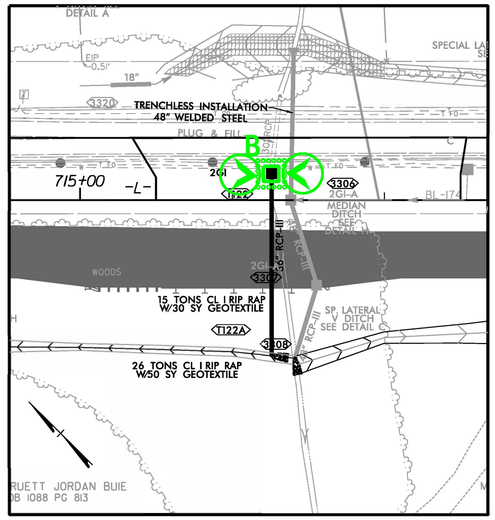
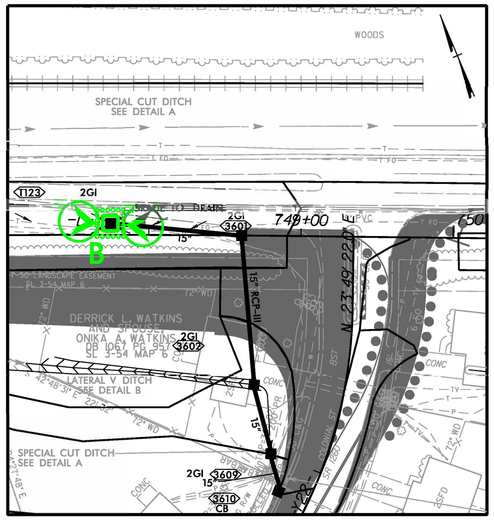
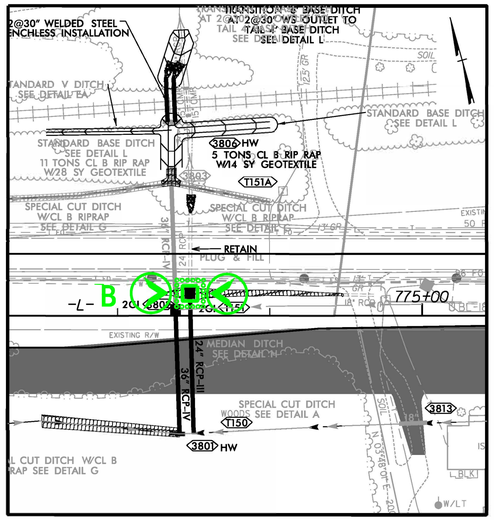
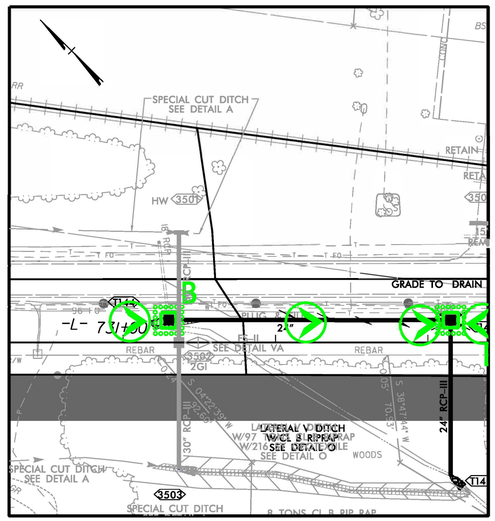
PROJECT REFERENCE NO.	SHEET NO.
R-5709C	EC-3M/CONST.2B-22
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

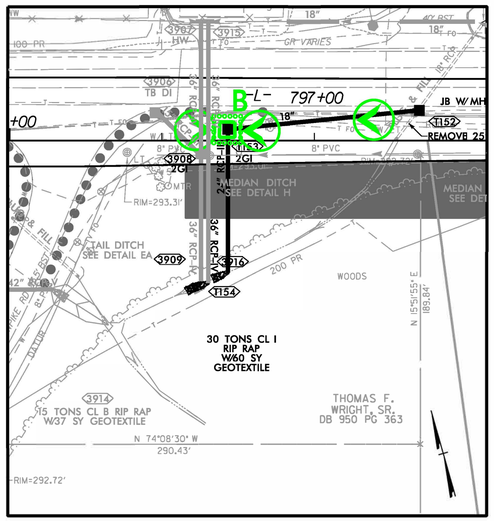
TEMPORARY DRAINAGE PIPE LOCATION DETAILS FOR INFORMATION USE

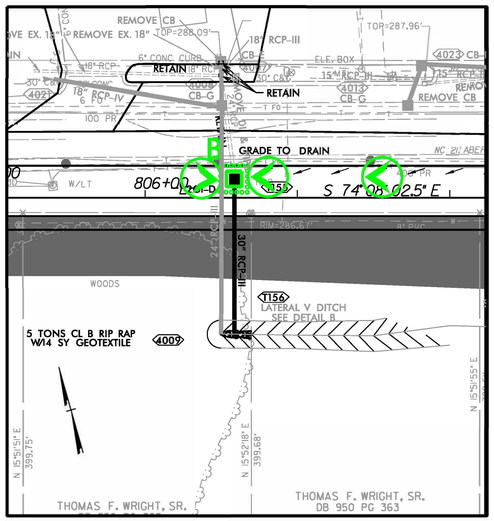


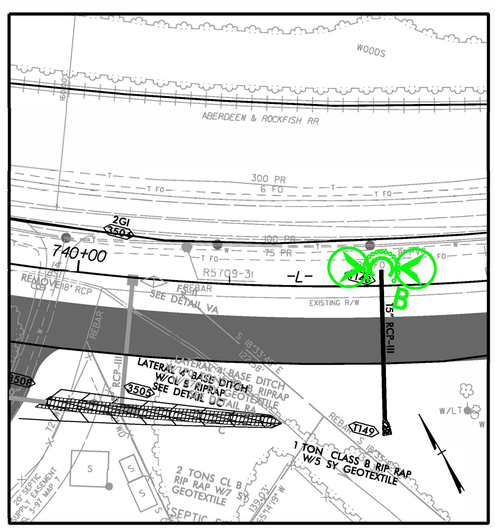


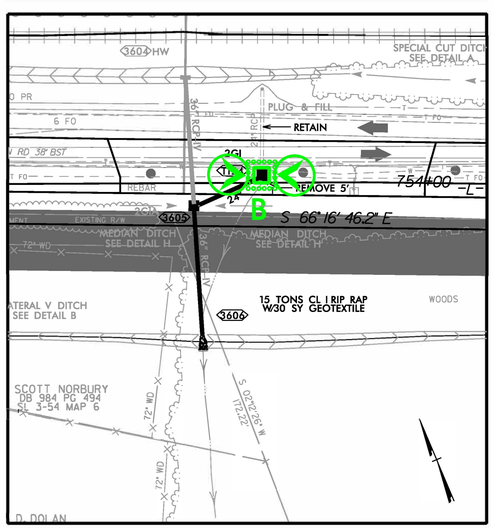


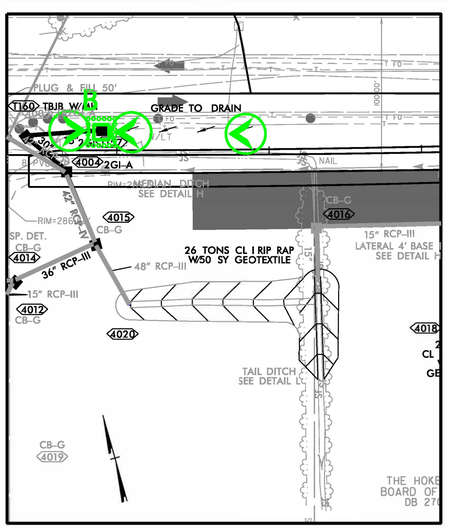












SCALE
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chad.man

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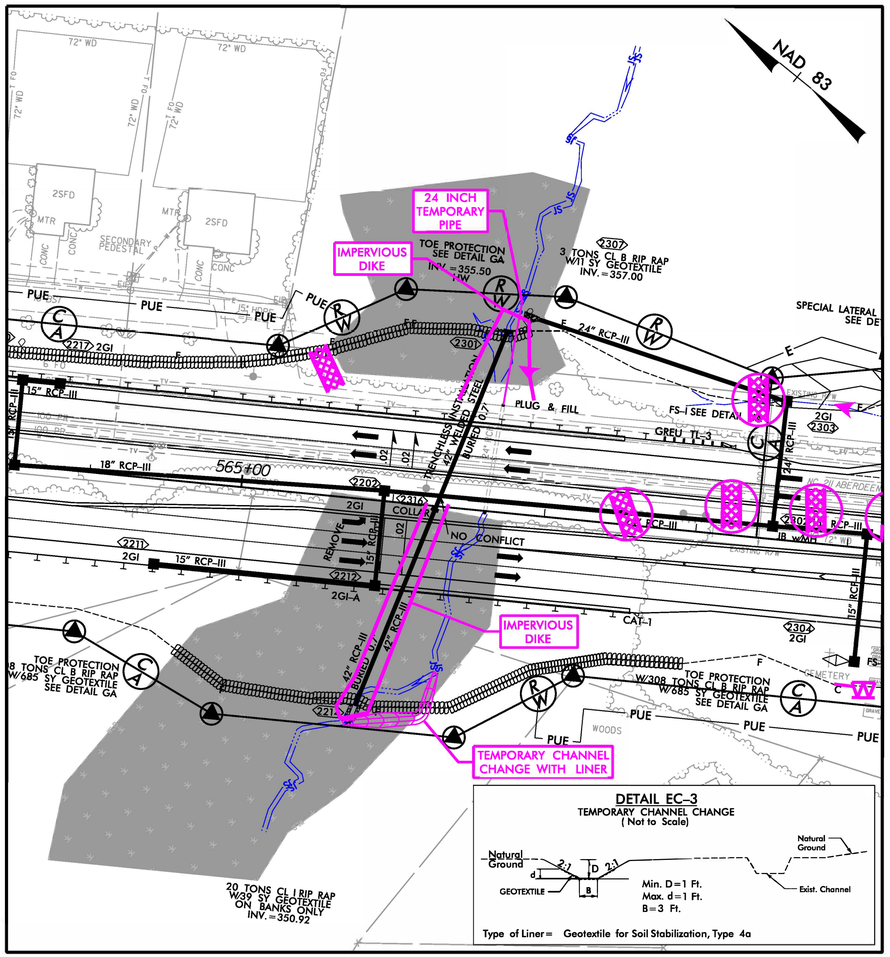
PROJECT REFERENCE NO.	SHEET NO.
R-5709C	EC-3N/CONST.23
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER



DETAIL EC-3
TEMPORARY CHANNEL CHANGE
(Not to Scale)

Type of Liner= Geotextile for Soil Stabilization, Type 4a

42" WS TRENCHLESS INSTALLATION STA. 565+88 –L2–

1. MAINTAIN TRAFFIC ON EXISTING ROADWAY.
2. CONSTRUCT TEMPORARY CHANNEL CHANGE OUTSIDE SLOPE STAKE LINE PRIOR TO CLEARING AND GRUBBING PHASE FOR USE WITH CLEAN WATER DIVERSION.
3. UTILIZE SPECIAL STILLING BASIN FOR DEWATERING.
4. INSTALL 24" TEMPORARY PIPE AND REMAINDER OF TEMPORARY CHANNEL CHANGE TO MAINTAIN FLOW THROUGH EXISTING PIPE.
5. INSTALL IMPERVIOUS DIKES AND DEWATER WORK AREAS.
6. INSTALL 42" WELDED STEEL PIPE VIA TRENCHLESS INSTALLATION.
7. INSTALL COLLARS AND RCP SECTIONS TO EXTEND 42" WELDED STEEL PIPE.
8. COMPLETE CHANNEL WORK AND STABILIZATION.
9. REMOVE IMPERVIOUS DIKES, TEMPORARY PIPE, AND SECTION OF TEMPORARY CHANNEL CHANGE WITHIN SLOPE STAKE LINE TO ROUTE FLOW THROUGH 42" PIPE. MAINTAIN TEMPORARY CHANNEL CHANGE OUTSIDE OF SLOPE STAKE LINE FOR USE WITH CLEAN WATER DIVERSION IN FINAL PHASE.
10. REMOVE ACCESSIBLE SECTIONS OF EXISTING 24" CMP. PLUG AND FILL SECTION UNDER EXISTING ROAD.
11. COMPLETE ANY OUTSTANDING CHANNEL WORK AND STABILIZATION.
12. COMPLETE ROADWAY WORK.

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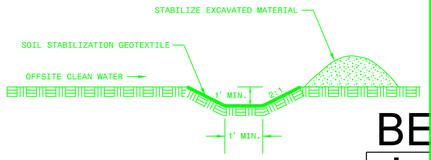
PROJECT REFERENCE NO.	SHEET NO.
R-5709C	EC-4/CONST.4
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

CLEAN WATER DIVERSION

CWD — CWD — CWD — CWD — CWD — CWD

(Not to Scale)



NAD 83 /NA 2011

BEGIN CONSTRUCTION
-L- Sta. 310+98.86

189
PALM COMMERCIAL MANAGEMENT, LLC
DB 1086 PG 114

126 x 63 x 3
2.5 inch Skimmer
with 2.375 inch
Orifice Diameter
30 ft. weir
ID 4.1 (27.1)

188
JESUS RIVERA AND WIFE, PAULA P. RIVERA
DB 770 PG 001

187 187
J. K. McNEIL, SR HEIRS
NO DEED FOUND

-LX1- PC Sta.10+00.00=
-L- POT Sta.311+82.88 (31.46' RT)

30 INCH TEMPORARY PIPE

ACCESS BREAK

BEGIN GRADE
-LX1- POC Sta.14+93.46

-LX1- PRC Sta.18+23.87

190
THE NATURE CONSERVANCY
DB 1109 PG 1033
SL 4-74 MAP 8

SPECIAL CUT DITCH SEE DETAIL QA

SPECIAL CUT DITCH W/CL B RIP RAP SEE DETAIL G

30" RCP-III
27.12

LATERAL 4' BASE DITCH W/CL B RIP RAP SEE DETAIL T

STANDARD V DITCH SEE DETAIL EA

REMOVE

24" RCP-III

15" RCP-III

TRENCHLESS INSTALLATION 54" WELDED STEEL

PLUG & FILL W/ FLOWABLE FILL

COVER PIPES WITH FILL

RIP RAP ENERGY DISSIPATOR SEE DETAIL ZA W/CL B RIPRAP

90 x 45 x 3
2.0 inch Skimmer
with 1.750 inch
Orifice Diameter
15 ft. weir
ID 4.2 (27.2)

191
PAUL A. KING
DB 252 PG 409
DB 1051PG 332
PC 4054 PG 5

192
PAUL A. KING
DB 1051PG 332
PC 4054 MAP 5

193
GWINDOLYN GARRETT WILLIAMSON
DB 1403 PG 341

193
GWINDOLYN GARRETT WILLIAMSON
DB 1403 PG 341

195
JOHN M. KING, TRUSTEE OF THE JOHN M. KING REVOCABLE TRUST U/A DATED MAY 18, 2017, A½UNDIVIDED INTEREST
AND VERITA B. KING, TRUSTEE OF THE VERITA B. KING REVOCABLE TRUST U/A DATED MAY 18, 2017, A½UNDIVIDED INTEREST
DB 1219 PG 234

183
CEDAR HALL FARMS, LLC
DB 1214 PG 474
PC 4108 PG 7

MATCHLINE -L- STA. 322+00.00
SEE SHEET 5

-LX1-	
PI Sta 14+12.19	PI Sta 22+21.65
△ = 4° 58' 07.8" (LT)	△ = 4° 47' 43.4" (RT)
D = 0° 36' 11.2"	D = 0° 36' 11.2"
L = 823.87'	L = 795.11'
T = 412.19'	T = 397.79'
R = 9,500.00'	R = 9,500.00'
SE = RC	SE = RC
V = 55 MPH	V = 55 MPH

FOR -LX1- PROFILE, SEE SHEET NO. 46

ALL DRIVEWAYS ARE 16 FEET IN WIDTH WITH 10-FOOT RADII UNLESS OTHERWISE NOTED MATCH EXISTING DRIVE TYPE UNLESS OTHERWISE NOTED

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PROJECT REFERENCE NO.	SHEET NO.
R-5709C	EC-5/CONST.5
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

END FUTURE TIP PROJECT R-5709B (TO BE CONSTRUCTED BY OTHERS)

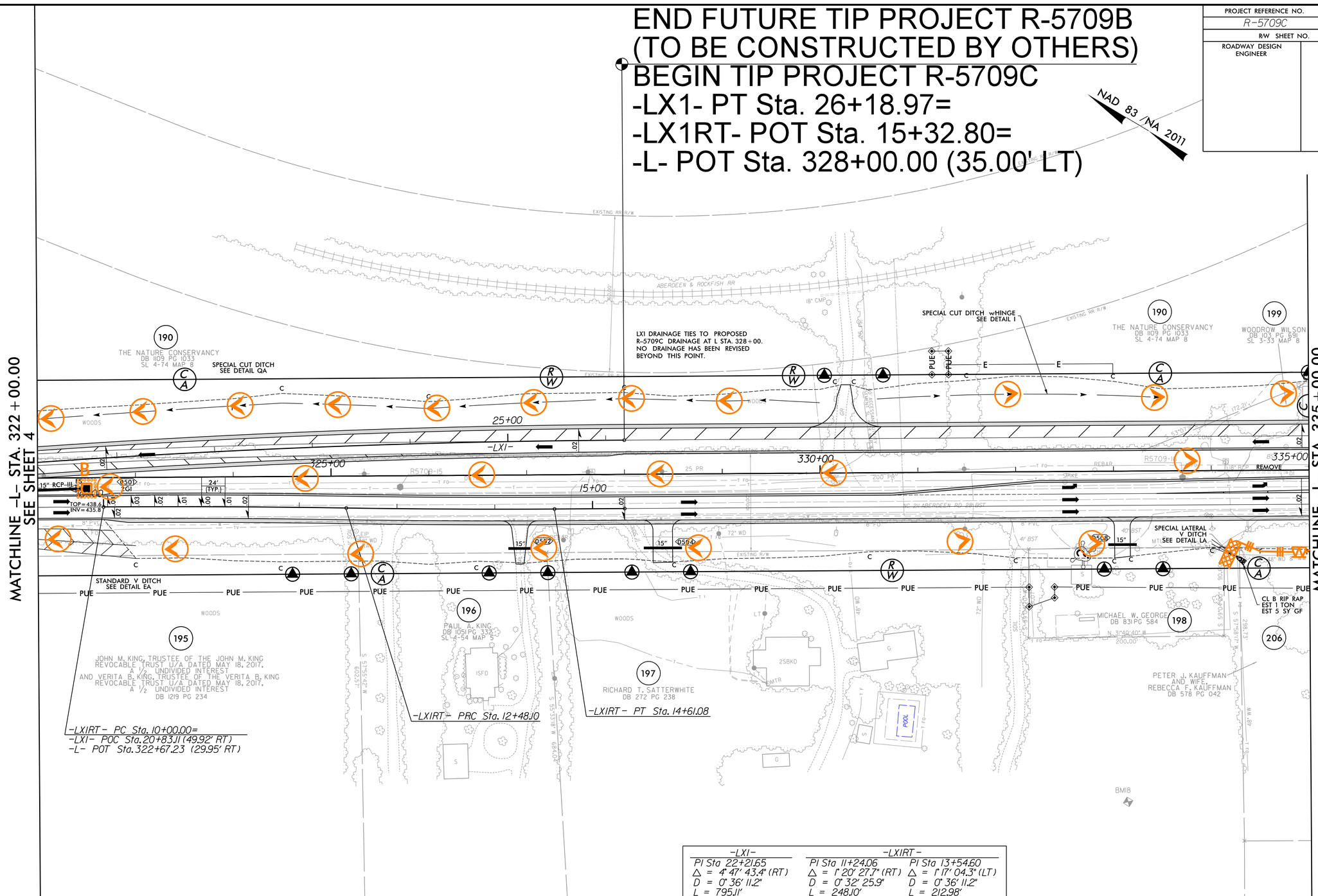
BEGIN TIP PROJECT R-5709C

-LX1- PT Sta. 26+18.97=

-LX1RT- POT Sta. 15+32.80=

-L- POT Sta. 328+00.00 (35.00' LT)

NAD 83 /NA 2011



-LX1-	-LX1RT-	
PI Sta 22+21.65	PI Sta 11+24.06	PI Sta 13+54.60
Δ = 4° 47' 43.4" (RT)	Δ = 1° 20' 27.7" (RT)	Δ = 1° 17' 04.3" (LT)
D = 0° 36' 11.2"	D = 0° 32' 25.9"	D = 0° 36' 11.2"
L = 795.11'	L = 248.10'	L = 212.98'
T = 397.79'	T = 124.06'	T = 106.50'
R = 9,500.00'	R = 10,600.00'	R = 9,500.00'
SE = RC	SE = RC	SE = RC
V = 55 MPH	V = 55 MPH	V = 55 MPH

USE METHOD II CLEARING STA. 333+00 TO 335+00

FOR -L- PROFILE, SEE SHEET NO. 47
FOR -LX1- PROFILE, SEE SHEET NO. 46
FOR -LX1RT- PROFILE, SEE SHEET NO. 46

ALL DRIVEWAYS ARE 16 FEET IN WIDTH WITH 10-FOOT RADII UNLESS OTHERWISE NOTED MATCH EXISTING DRIVE TYPE UNLESS OTHERWISE NOTED

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8/28/2024
Plotted By: Hannah Jones
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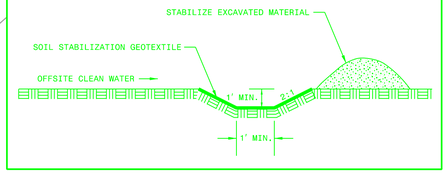
PROJECT REFERENCE NO.	SHEET NO.
R-5709C	EC-6/CONST.6
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

CLEAN WATER DIVERSION

CWD — CWD — CWD — CWD — CWD — CWD

(Not to Scale)



NAD 83/NA 2011

82 x 41 x 3
2 inch Skimmer
with 1.625 inch
Orifice Diameter
13 ft. weir
ID 6.4 (29.4)

45 x 22 x 2
ID 6.5 (29.5)

40 x 20 x 2
ID 6.6 (29.6)

78 x 13 x 3
1.5 inch Skimmer
with 0.750 inch
Orifice Diameter
4 ft. weir
ID 6.3 (29.3)

END CONSTRUCTION
-Y10- POT Sta. 19+75.00

END GRADE
-Y10- POT Sta. 19+50.00

MICHAEL P. AARON AND WIFE, BEVERLY C. AARON
DB 204 PG 573

ROBERT W. HUBER
DB 909 PG 898

SAMUEL CORNOT AND WIFE, SHERRYL CORNOT
DB 407 PG 834
SL 2330 MAP 1

GENTRY RESTORATION, LLC
DB 1122 PG 564
SL 3-37 MAP 1

DEAN R. WALLACE
DB 346 PG 303

GARY B. THOMAS REAL ESTATE REVOCABLE TRUST
DB 1045 PG 940

JOHN WATSON AND WIFE, REATHA S. WATSON
DB 248 PG 907

MERVIN MULLET AND WIFE, MAGDALENA MULLET
DB 260 PG 671

THE NATURE CONSERVANCY
DB 1109 PG 1033
SL 4-74 MAP 8

WOODROW WILSON
DB 103 PG 891
SL 3-33 MAP 8

JAMES R. SCHIELER AND WIFE, DOROTHY JENNE WRENN SCHIELER
DB 695 PG 879
SL 3-33 MAP 8

PETER J. KAUFFMAN AND WIFE, REBECCA F. KAUFFMAN
DB 578 PG 042

DEBRA STEPHENSON
DB 928 PG 2

HOPE AMANDA HARRIS
DB 1395 PG 0898

ALBERT LEWIS HASKINS, III AND WIFE, YVONNE WILSON HASKINS
DB 262 PG 505

ALBERT LEWIS HASKINS, III AND WIFE, YVONNE WILSON HASKINS
DB 553 PG 664

NCDA
DB 38 PG 297
SL 62 PG 51

MATCHLINE -L- STA. 335+00.00
SEE SHEET 5

MATCHLINE -L- STA. 349+00.00
SEE SHEET 7

-L- PC Sta. 344+00.28

-L- POC Sta. 347+74.38=
-Y10- POT Sta. 16+71.07

BEGIN GRADE
-Y10- POT Sta. 14+00.00

BEGIN CONSTRUCTION
-Y10- POT Sta. 12+92.00

Q(10) = 27 cfs, HWD=0.83
Q(25) = 31 cfs, HWD=0.9
SPECIAL CUT DITCH
SEE DETAIL QA

SPECIAL CUT DITCH
SEE DETAIL QA

TOE PROTECTION
W/149 TONS CL B RIPRAP
W/307 SY GEOTEXTILE
SEE DETAIL GA

CL I RIP RAP
EST 40 TON
EST 73 SY GF

-L-
PI Sta 349+02.97
Δ = 1° 26' 24.1" (RT)
D = 0° 08' 35.7"
L = 1,005.33'
T = 502.69'
R = 40,000.00'
SE = NC
V > 80 MPH

FOR DITCH DETAILS, SEE SHEETS 2D-1 THRU 2D-2

USE METHOD II CLEARING
STA. 335+00 TO 349+00

FOR -L- PROFILE, SEE SHEET NOS. 47 & 48
FOR -Y10- PROFILE, SEE SHEET NO. 66
FOR -Y10- DETAILS, SEE SHEET NO. 2B-5

ALL DRIVEWAYS ARE 16 FEET IN WIDTH WITH 10-FOOT RADII UNLESS OTHERWISE NOTED MATCH EXISTING DRIVE TYPE UNLESS OTHERWISE NOTED

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PROJECT REFERENCE NO.	SHEET NO.
R-5709C	EC-7/CONST.7
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

NAD 83 /NA 2011

63 x 25 x 3
1.5 inch Skimmer
with 1.125 inch
Orifice Diameter
6 ft. weir
ID 7.2 (30.2)

100 x 30 x 3
2.0 inch Skimmer
with 1.875 inch
Orifice Diameter
22 ft. weir
ID 7.3 (30.3)

100 x 30 x 3
2.0 inch Skimmer
with 1.875 inch
Orifice Diameter
22 ft. weir
ID 7.3 (30.3)

MATCHLINE –L– STA. 349+00.00
SEE SHEET 6

MATCHLINE –L– STA. 359+00.00
SEE SHEET 8

205A
SAMUEL CORNOG
AND WIFE,
SHERRY CORNOG
DB 407 PG 634
SL 2-30 MAP 1

GENTRY RESTORATION, LLC
DB 1122 PG 564
SL 3-37 MAP 1
SL 2-30 MAP 1

205

RUINS

ISMTL BUS

24" RCP-III

<0715> 2GI-A

350+00

355+00

NC 211 ABERDEEN RD 24' BST

SPECIAL CUT DITCH w/HINGE
SEE DETAIL 1

<0701> 2GI

15" RCP-III

<0702> TS-2GI

15" RCP-III

<0703>

SPECIAL CUT DITCH
SEE DETAIL QA

TIE TO EXISTING DITCH

WOODS

SPECIAL CUT DITCH
SEE DETAIL QA

NCDA
DB 38 PG 297
SL 62 PG 51

211

–L– PT Sta. 354+05.60

BMI9

PUE

PI Sta 349+02.97
△ = 1° 26' 24.1" (RT)
D = 0° 08' 35.7"
L = 1,005.33'
T = 502.69'
R = 40,000.00'
SE = NC
V > 80 MPH

USE METHOD II CLEARING
STA. 349+00 TO 359+00

FOR –L– PROFILE, SEE SHEET NO. 48

ALL DRIVEWAYS ARE 16 FEET IN WIDTH WITH 10–FOOT RADII UNLESS OTHERWISE NOTED MATCH EXISTING DRIVE TYPE UNLESS OTHERWISE NOTED

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Heather.Sellers
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PROJECT REFERENCE NO.	SHEET NO.
R-5709C	EC-8/CONST.8
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

NAD 83/NA 2011

MATCHLINE –L– STA. 359+00.00
SEE SHEET 7

MATCHLINE –L– STA. 371+00.00
SEE SHEET 9

100 x 30 x 3
2.0 inch Skimmer
with 1.875 inch
Orifice Diameter
22 ft. weir
ID 7.3 (30.3)

64 x 32 x 3
1.5 inch Skimmer
with 1.250 inch
Orifice Diameter
8 ft. weir
ID 8.1 (31.1)

211 NCDA
DB 38 PG 297
SL 62 PG 51

211A DPS
NO DEED FOUND
SL 62 PG 51

NOTE: PROPERTY LINE MAPPED FROM DPS GIS INFORMATION PROVIDED BY CHEYENNE FRANKLIN, ENG. SPEC. II CENTRAL ENGINEERING DEPARTMENT

–L– POT Sta. 362+18.44 BK=
–L– POT Sta. 361+50.00 AH

–L– SC Sta. 363+62.58

–L– TS Sta. 362+42.58

SPECIAL CUT DITCH
SEE DETAIL QA

SP. LATERAL V DITCH
SEE DETAIL E

LATERAL V DITCH
SEE DETAIL B

LATERAL 2' BASE DITCH
W/65 TONS CL I RIP RAP
W/144 SY GEOTEXTILE
SEE DETAIL NA

CL I RIP RAP
EST 15 TONS
EST 30 SY GF

TIE TO EXISTING DITCH

5 TONS CL I RIP RAP
W/14 SY GEOTEXTILE

REMOVE HW

INV. OUT = 494.2'

–L–

PIs Sta 363+22.58	PI Sta 373+94.34
θs = 0° 36' 11.2"	Δ = 20° 31' 12.3" (RT)
Ls = 120.00'	D = 1° 00' 18.7"
LT = 80.00'	L = 2,041.41'
ST = 40.00'	T = 1,031.76'
	R = 5,700.00'
	SE = 0.03
	V = 60MPH

USE METHOD II CLEARING
STA. 359+00 TO 371+00

FOR DITCH DETAILS,
SEE SHEETS 2D–1 THRU 2D–2

FOR –L– PROFILE, SEE SHEET NOS. 48–49

ALL DRIVEWAYS ARE 16 FEET IN WIDTH WITH 10–FOOT RADII UNLESS OTHERWISE NOTED MATCH EXISTING DRIVE TYPE UNLESS OTHERWISE NOTED

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PROJECT REFERENCE NO.	SHEET NO.
R-5709C	EC-9/CONST.9
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

-Y11-	-Y11A-
PI Sta 13+71.71	PI Sta 10+95.50
Δ = 34° 29' 45.8" (RT)	Δ = 2° 57' 36.3" (RT)
D = 8° 18' 13.5"	D = 3° 02' 51.5"
L = 415.43'	L = 97.13'
T = 214.22'	T = 48.57'
R = 690.00'	R = 1,880.00'
SE = 0.04	SE = 0.02
V = 30MPH (STOP)	V = 30MPH

NAD 83 /NA 2011

-L- (NC 211) -Y11- (OLD NC 211)

-Y11- (OLD NC 211) ADT 2024 ADT 2044

NC 211 -L- 3,460 17,600

-Y11- PT Sta. 15+72.92

96 x 32 x 3
1.5 inch Skimmer
with 1.5 inch
Orifice Diameter
12 ft. weir
ID 9.1 (32.1)

96 x 32 x 3
2.0 inch Skimmer
with 1.875 inch
Orifice Diameter
23 ft. weir
ID 9.2 (32.2)

96 x 32 x 3
2.0 inch Skimmer
with 1.875 inch
Orifice Diameter
23 ft. weir
ID 9.2 (32.2)

40 x 20 x 3
ID 9.5 (32.5)

44 x 21 x 3
ID 9.4 (32.4)

-Y11- PC Sta. 11+57.49

END CONSTRUCTION
-Y11- POC Sta. 12+45.00

END GRADE
-Y11- POC Sta. 12+20.00

SPECIAL LATERAL DITCH W/16 TONS CL I RIP RAP W/34 SY GEOTEXTILE SEE DETAIL TA

-L- POC Sta. 376+87.34=
-Y11- POT Sta. 10+00.00

3 TONS CL A RIP RAP W/10 SY GEOTEXTILE

-L- POC Sta. 376+86.70=
-Y11A- POT Sta.12+66.07

11 TONS CL B RIP RAP W/28 SY GEOTEXTILE

-Y11A- PT Sta. 11+44.05

BEGIN GRADE
-Y11A- POT Sta. 10+50.00
-Y11A- PC Sta. 10+46.92

BEGIN CONSTRUCTION
-Y11A- POT Sta. 10+15.00
-Y11A- POT Sta. 10+00.00

-L- CS Sta. 384+03.99

N 84° 07' 45" E

211A

211

NO DEED FOUND
SL 62 PG 51

DB 38 PG 297
SL 62 PG 51

WOODS

FALLOW

EXISTING R/W

PROPOSED R/W

PUE

MATCHLINE -L- STA. 371+00.00 SEE SHEET 8

MATCHLINE -L- STA. 385+00.00 SEE SHEET 10

-L-	
PI Sta 373+94.34	PIs Sta 384+43.99
Δ = 20° 31' 12.3" (RT)	Θs = 0° 36' 11.2"
D = 1° 00' 18.7"	Ls = 120.00'
L = 2,041.41'	LT = 80.00'
T = 1,031.76'	ST = 40.00'
R = 5,700.00'	
SE = 0.03	
V = 60MPH	

USE METHOD II CLEARING
STA. 371+00 TO 385+00
FOR DITCH DETAILS,
SEE SHEETS 2D-1 THRU 2D-3

FOR -L- PROFILE, SEE SHEET NO. 49
FOR -Y11- PROFILE, SEE SHEET NO. 66
FOR -Y11A- PROFILE, SEE SHEET NO. 66
FOR -Y11- & -Y11A- DETAILS, SEE SHEET 2B-6

ALL DRIVEWAYS ARE 16 FEET IN WIDTH WITH 10-FOOT RADII UNLESS OTHERWISE NOTED
MATCH EXISTING DRIVE TYPE UNLESS OTHERWISE NOTED

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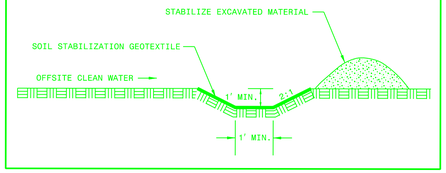
PROJECT REFERENCE NO.	SHEET NO.
R-5709C	EC-10/CONST.10
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

CLEAN WATER DIVERSION

CWD — CWD — CWD — CWD — CWD — CWD

(Not to Scale)



NAD 83 /NA 2011

96 x 32 x 3
2.0 inch Skimmer
with 1.875 inch
Orifice Diameter
23 ft. weir
ID 9.2 (32.2)

101 x 49 x 3
2.5 inch Skimmer
with 2.375 inch
Orifice Diameter
38 ft. weir
ID 10.5 (33.5)

101 x 49 x 3
2.5 inch Skimmer
with 2.375 inch
Orifice Diameter
38 ft. weir
ID 10.5 (33.5)

49 x 23 x 3
1.5 inch Skimmer
with 0.875 inch
Orifice Diameter
4 ft. weir
ID 10.6 (33.6)

36 x 17 x 3
D 10.7 (33.7

92 x 45 x 3
2 inch Skimmer
with 1.750 inch
Orifice Diameter
16 ft. weir
ID 10.3 (33.3)

60 x 30 x 3
1.5 inch Skimmer
with 1.250 inch
Orifice Diameter
7 ft. weir
ID 10.4 (33.4)

MATCHLINE –L– STA. 385+00.00 SEE SHEET 9

MATCHLINE –L– STA. 399+00.00 SEE SHEET 11

–L– TS Sta. 390+69.02

–L– SC Sta. 392+69.02

–L– ST Sta. 385+23.99

SPECIAL CUT DITCH (W/CL B RIPRAP) SEE DETAIL G

REMOVE HW

10' WIDE BERM SEE DETAIL DA

BEGIN WILDLIFE FENCE STA. 450.00 101.87' LT

SPECIAL LATERAL DITCH SEE DETAIL

TRENCHLESS INSTALLATION 42" WELDED STEEL

REMOVE & PLUG 42" RCP

FS-II SEE DETAIL MA

FS-II SEE DETAIL MB W/MH

42" RCP-III

15" RCP-III

BL-140

390+00

V DITCH SEE DETAIL H

REMOVE EX. GUARDRAIL

CAT-1

18" RCP-III

FS-I SEE DETAIL UA

GREU TL-3

BEGIN WILDLIFE FENCE STA. 450.00 105.66' RT

EXISTING R/W

TOE PROTECTION SEE DETAIL GA

LATERAL V DITCH W/467 SY TIED CONCRETE BLOCK MAT W/402 SY GEOTEXTILE SEE DETAIL WA

LATERAL V DITCH W/56 SY TIED CONCRETE BLOCK MAT W/64 SY GEOTEXTILE SEE DETAIL XA

LATERAL V DITCH SEE DETAIL B

SPECIAL CUT DITCH SEE DETAIL A

4 ELBOWS

TOE PROTECTION W/138 TONS CL B RIP RAP W/307 SY GEOTEXTILE GREU TL-3 SEE DETAIL GA

NC 211 RAEFORD RD 26' BST

395+00

BL-141

100 PR

8" P.V.C.

REMOVE EX. GUARDRAIL

TRENCHLESS INSTALLATION 60" WELDED STEEL

WILDLIFE CROSSING

COLLAR

40' (TYP.)

60" RCP-IV

69" RCP-IV

WOODS

BRICK H/W

8" P.V.C.

TSD

EW

211

DB SL

LINE LOCATED PER VERBAL EVIDENCE FROM MAINTENANCE JAMES SCHELEPS 8/28/24

DESCRIPTION	ALN	STATION	STATION	LOC
SBG	–L–	389+95.00	396+00.00	LT
SBG	–L–	389+95.00	397+00.00	RT

USE METHOD II CLEARING STA. 385+00 TO 399+00

FOR DITCH DETAILS, SEE SHEETS 2D–1 THRU 2D–3

FOR –L– PROFILE, SEE SHEET NOS. 49–50

ALL DRIVEWAYS ARE 16 FEET IN WIDTH WITH 10–FOOT RADII UNLESS OTHERWISE NOTED MATCH EXISTING DRIVE TYPE UNLESS OTHERWISE NOTED

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8/17/99

PROJECT REFERENCE NO.	SHEET NO.
R-5709C	EC-11/CONST.11
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

-L- (NC 211) -Y12- (OLD NC 211)
ADT 2024 13,320
ADT 2044 17,400
-Y12- (OLD NC 211)
100/100 440/500 340/400 13,560/17,700
NC 211 -L-

NAD 83 /NA 2011

MATCHLINE -L- STA. 399+00.00 SEE SHEET 10

MATCHLINE -L- STA. 413+00.00 SEE SHEET 12

-YIIB- POT Sta. 13+61.71
END CONSTRUCTION
-YIIB- POT Sta. 13+35.00
END GRADE
-YIIB- POT Sta. 13+00.00

-YIIB- PT Sta. 11+32.35

-YIIB- PC Sta. 10+47.54

-L- CS Sta. 407+45.51

-L- ST Sta. 409+45.51

63 x 31 x 3
1.5 inch Skimmer
with 1.250 inch
Orifice Diameter
7 ft. weir
ID 11.1 (34.1)

66 x 32 x 3
1.5 inch Skimmer
with 1.250 inch
Orifice Diameter
8 ft. weir
ID 11.2 (34.2)

211A
DPS
NO DEED FOUND
SL 62 PG 51

END WILDLIFE FENCE
STA. 11+64.30
106.43' LT

SPECIAL CUT DITCH
SEE DETAIL A

TOE PROTECTION
W/97 TONS CL B RIP RAP
W/215 SY GEOTEXTILE
SEE DETAIL GA

LATERAL 4' BASE DITCH
W/249 TONS CL B RIPRAP
W/554 SY GEOTEXTILE
SEE DETAIL RA

3 TONS CL B RIP
RAP W/10 SY
GEOTEXTILE

10' WIDE BERM
SEE DETAIL DA

LATERAL V DITCH
W/TIED CONCRETE BLOCK MAT
SEE DETAIL XA

2 TONS CL B RIP
RAP W/7 SY
GEOTEXTILE

FS-I
SEE DETAIL UA
CAT-1

REMOVE EX.
GUARDRAIL

REMOVE HW
REMOVE 20'

FS-II SEE
DETAIL VA

REMOVE 23'

REMOVE EX.
GUARDRAIL

-L- POC Sta. 402+74.71=
-YIID- POT Sta. 15+72.90

2.5 TONS CL B RIP RAP
W/16 SY GEOTEXTILE

GRADE TO
DRAIN

-L- POC Sta. 401+18.38=
-YIIB- POT Sta. 10+00.00

2 TONS CL B RIP
RAP W/7 SY
GEOTEXTILE

TOE PROTECTION
W/204 TONS CL B RIP RAP
W/454 SY GEOTEXTILE
SEE DETAIL GA

END WILDLIFE
FENCE
STA. 17+53
166.30' RT

-YIID- PT Sta. 12+53.05

APPROX. LOCATION OF EOP
BASED ON PLANNING SURVEY

LINE LOCATED PER VERBAL EVIDENCE FROM
JAMES SCHIELER, DPS MAINTENANCE TECHICIAN

-YIID- PC Sta. 10+48.01

BEGIN GRADE
-YIID- POT Sta. 10+25.00

BEGIN CONSTRUCTION
-YIID- POT Sta. 10+00.00

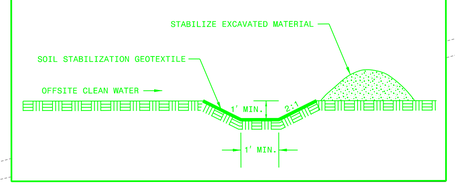
23' SOIL

211
NCDA
DB 38 PG 297
SL 62 PG 51

CLEAN WATER DIVERSION

CWD CWD CWD CWD CWD CWD

(Not to Scale)



-L-
PI Sta 400+22.13
Δ = 27° 49' 39.9" (LT)
D = 1° 53' 05.0"
L = 1,476.49'
T = 753.11'
R = 3,040.00'
SE = 0.05
V = 60MPH

PIs Sta 408+12.18
Θs = 1° 53' 05.0"
Ls = 200.00'
LT = 133.34'
ST = 66.67'

FOR DITCH DETAILS,
SEE SHEETS 2D-1 THRU 2D-3

★ PROPOSED SIGNAL

FOR -L- PROFILE, SEE SHEET NO. 50
FOR -Y11B- PROFILE, SEE SHEET NO. 67
FOR -Y11D- PROFILE, SEE SHEET NO. 67
FOR -Y11B- AND -Y11D- DETAILS,
SEE SHEET 2B-6A

ALL DRIVEWAYS ARE 16 FEET IN WIDTH
WITH 10-FOOT RADII UNLESS OTHERWISE NOTED
MATCH EXISTING DRIVE TYPE UNLESS
OTHERWISE NOTED

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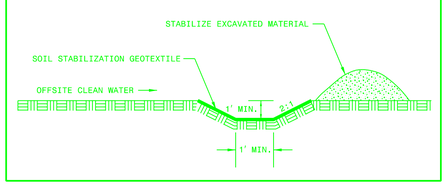
PROJECT REFERENCE NO.	SHEET NO.
R-5709C	EC-12/CONST.12
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

CLEAN WATER DIVERSION

CWD — CWD — CWD — CWD — CWD — CWD

(Not to Scale)



-YIIE-
PI Sta 12+71.09
△ = 12° 35' 43.7" (RT)
D = 15° 16' 43.9"
L = 82.44'
T = 41.39'
R = 375.00'
SE = 0.04
V = 30 MPH

NAD 83 /NA 2011

111 x 37 x 3
2.5 inch Skimmer
with 2.125 inch
Orifice Diameter
30 ft. weir
ID 12.5 (35.5)

28 x 14 x 3
ID 12.6(35.6)

62 x 30 x 3
1.5 inch Skimmer
with 1.250 inch
Orifice Diameter
7 ft. weir
ID 12.3 (35.3)

55 x 27 x 3
ID 12.7(35.7)

47 x 23 x 3
1.5 inch Skimmer
with 0.875 inch
Orifice Diameter
4 ft. weir
ID 12.2 (35.2)

57 x 28 x 3
1.5 inch Skimmer
with 1.125 inch
Orifice Diameter
4 ft. weir
ID 12.4 (35.4)

MATCHLINE -L- STA. 413+00.00 SEE SHEET 11

MATCHLINE -L- STA. 427+00.00 SEE SHEET 13

-YIIE- PT Sta. 13+12.14

END CONSTRUCTION
-YIIE- POC Sta. 13+00.00

END GRADE
-YIIE- POC Sta. 12+75.00

-YIIE- PC Sta. 12+29.71

-L- POT Sta. 425+40.59=
-YIIE- POT Sta. 10+00.00
-YIIC- POT Sta. 12+32.73

-YIIC- PT Sta. 11+81.47

-YIIC- PC Sta. 10+73.57

BEGIN GRADE
-YIIC- POT Sta. 10+40.00

BEGIN CONSTRUCTION
-YIIC- POT Sta. 10+15.00

-YIIC- POT Sta. 10+00.00

-YIIC-
PI Sta 11+27.54
△ = 4° 07' 17.7" (RT)
D = 3° 49' 11.0"
L = 107.90'
T = 53.97'
R = 1,500.00'
SE = NC
V = 30 MPH

FOR DITCH DETAILS,
SEE SHEETS 2D-1 THRU 2D-3

FOR -L- PROFILE, SEE SHEET NOS. 50-51
FOR -Y11C- PROFILE, SEE SHEET NO. 67
FOR -Y11E- PROFILE, SEE SHEET NO. 67
FOR -Y11C- AND -Y11E- DETAILS,
SEE SHEET 2B-6B

ALL DRIVEWAYS ARE 16 FEET IN WIDTH WITH 10-FOOT RADII UNLESS OTHERWISE NOTED MATCH EXISTING DRIVE TYPE UNLESS OTHERWISE NOTED

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PROJECT REFERENCE NO.	SHEET NO.
R-5709C	EC-13/CONST.13
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

NAD 83 /NA 2011

MATCHLINE –L– STA. 427+20.00 SEE SHEET 12

MATCHLINE –L– STA. 441+00.00 SEE SHEET 14

–Y12–
PI Sta 12+73.05
Δ = 49° 21' 48.7" (LT)
D = 15° 04' 40.2"
L = 327.39'
T = 174.63'
R = 380.00'
SE = 0.04
V = 35 MPH (STOP)

111 x 37 x 3
2.5 inch Skimmer
with 2.125 inch
Orifice Diameter
30 ft. weir
ID 12.5 (35.5)

111 x 37 x 3
2.5 inch Skimmer
with 2.125 inch
Orifice Diameter
30 ft. weir
ID 12.5 (35.5)

46 x 23 x 3
1.5 inch Skimmer
with 0.875 inch
Orifice Diameter
4 ft. weir
ID 13.1 (36.1)

–Y12– PT Sta. 14+25.81

END CONSTRUCTION
–Y12– POC Sta. 12+25.00

END GRADE
–Y12– POC Sta. 12+00.00

–Y12– PC Sta. 10+98.42

–L– POC Sta. 437+50.85=
–Y12A– POT Sta. 18+31.41

–L– (NC 211) –Y12– (OLD NC 211)
–Y12– (OLD NC 211) ADT 2024 ADT 2044
440/500 100/100 340/400 13,560/17,700 NC 211 –L– 13,320/17,400

SPECIAL CUT 4' BASE DITCH
W/275 TONS CL B RIPRAP
W/611 SY GEOTEXTILE
SEE DETAIL F

SPECIAL LATERAL 4' BASE DITCH
W/61 TONS CL B RIPRAP
W/135 SY GEOTEXTILE
SEE DETAIL S

SPECIAL LATERAL V DITCH
W/49 TONS CL B RIPRAP
W/108 SY GEOTEXTILE
SEE DETAIL P

SPECIAL CUT DITCH
SEE DETAIL A

SPECIAL LATERAL V DITCH
SEE DETAIL E

MEDIAN V DITCH
SEE DETAIL H

TOE PROTECTION
W/691 TONS CL B RIP RAP
W/1535 SY GEOTEXTILE
SEE DETAIL GA

3 TONS CL B RIP RAP W/10 SY GEOTEXTILE

TB DI <1308>
TB-DI <1302>
TB-DI <1303>
TB W/MH <1304>
TB-DI <1309>
TB-DI <1310>
TOE WALL <1306>

15" RCP-III
18" RCP-III
36" RCP-III
REMOVE

211A
DPS
NO DEED FOUND
SL 62 PG 51

211
NCDA
DB 38 PG 297
SL 62 PG 51

NOTE: PROPERTY LINE MAPPED FROM DPS GIS INFORMATION PROVIDED BY CHEYENNE FRANKLIN, ENG. SPEC. II CENTRAL ENGINEERING DEPARTMENT

–L– SC Sta. 432+27.31

–L– TS Sta. 431+47.31

–L– POC Sta. 434+95.45=
–Y12– POT Sta. 10+00.00

–Y12A–PT Sta. 17+40.88

–Y12A– PC Sta. 16+57.84

BEGIN GRADE
–Y12A– POT Sta.16+15.00

BEGIN CONSTRUCTION
–Y12A– POT Sta.16+10.00

–Y12A– PT Sta. 15+34.62

–Y12A– PC Sta. 14+08.56

DESCRIPTION	ALN	STATION	STATION	LOC
2'-6"C+G	–Y12A–	16+50.00	16+98.99	RT

–L–
PIs Sta 432+00.64
Θs = 0° 16' 15.2"
Ls = 80.00'
LT = 53.33'
ST = 26.67'

PI Sta 436+65.95
Δ = 5° 56' 10.0" (RT)
D = 0° 40' 38.1"
L = 876.50'
T = 438.64'
R = 8,460.00'
SE = RC
V = 60MPH

–Y12A–
PI Sta 14+72.96
Δ = 28° 53' 20.5" (LT)
D = 22° 55' 05.9"
L = 126.05'
T = 64.40'
R = 250.00'

PI Sta 17+05.03
Δ = 67° 58' 04.7" (RT)
D = 81° 51' 04.0"
L = 83.04'
T = 47.19'
R = 70.00'
SE = 0.02
V = <15MPH (STOP)

USE METHOD II CLEARING
STA. 433+00 TO 441+00
FOR DITCH DETAILS,
SEE SHEETS 2D-1 THRU 2D-3

FOR –L– PROFILE, SEE SHEET NO. 51
FOR –Y12– PROFILE, SEE SHEET NO. 68
FOR –Y12A– PROFILE, SEE SHEET NO. 68
FOR –Y12– & –Y12A– DETAILS, SEE SHEET 2B-7

ALL DRIVEWAYS ARE 16 FEET IN WIDTH WITH 10-FOOT RADII UNLESS OTHERWISE NOTED MATCH EXISTING DRIVE TYPE UNLESS OTHERWISE NOTED

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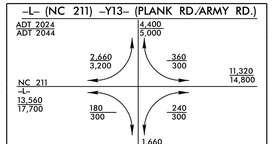
PROJECT REFERENCE NO.	SHEET NO.
R-5709C	EC-14/CONST.14
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
	.....

NAD 83 /NA 2011

–L– (NC 211) –Y13– (PLANK RD./ARMY RD.)



–L–		–Y13–	
PI Sta 436+65.95	PIs Sta 441+30.47	PI Sta 11+95.69	PI Sta 15+98.84
△ = 5° 56' 10.0" (RT)	Θs = 0° 16' 15.2"	△ = 28° 52' 26.2" (RT)	△ = 24° 34' 53.4" (LT)
D = 0° 40' 38.1"	Ls = 80.00'	D = 12° 27' 20.2"	D = 4° 18' 28.6"
L = 876.50'	LT = 53.33'	L = 231.81'	L = 570.61'
T = 438.64'	ST = 26.67'	T = 118.42'	T = 289.76'
R = 8,460.00'		R = 460.00'	R = 1,330.00'
SE = RC		SE = 0.03	SE = 0.06
V = 60MPH		V = 15 MPH (STOP)	V = 60 MPH

MATCHLINE –Y13– STA. 15+00.00
SEE SHEET 43

411 FT BRAGG MILITARY RESERVATION

–Y13– PRC Sta. 13+09.08

63 x 20 x 3
1.5 inch Skimmer
with 1.000 inch
Orifice Diameter
5 ft. weir
ID 14.1 (37.1)

–L– POT Sta.443+22.29=
–Y12A– POT Sta. 9+97.87

–Y13– PC Sta. 10+77.26

–L– POT Sta. 447+69.88=
–Y13– POT Sta. 10+00.00
–Y14– POT Sta. 16+23.19

–L– CS Sta. 441+03.80

–L– ST Sta. 441+83.80

–Y12A– PC Sta. 10+46.85

211A DPS NO DEED FOUND SL 62 PG 51

EVELYN M. ELLINGTON DB 163 PG 121

GRADE TO DRAIN –Y13– CUT DITCH THROUGH EXISTING SR 1219 TO EXISTING RAILROAD DITCH. DO NOT DISTURB RAIL.

SPECIAL CUT V DITCH SEE DETAIL AA

NOTE:WARP SUPER TO EXISTING RAILROAD GRADE

1411 3 TONS CL B RIP RAP W/10 SY GEOTEXTILE

TOE PROTECTION W/691 TONS CL B RIP RAP W/1535 SY GEOTEXTILE SEE DETAIL GA

SPECIAL CUT 4' BASE DITCH SEE DETAIL M

ABERDEEN & ROCKFISH RR

445+00 –L– 450+00

1401 1402 1403 1404 1405 1406 1407 1408 1409 1410 1412 1413 1414 1415

2GI-A

2 TONS CL B RIP RAP W/7 SY GEOTEXTILE

15 TONS CL B RIP RAP W/37 SY GEOTEXTILE

–Y14– PC Sta. 14+77.09

SPECIAL LATERAL 4' BASE DITCH W/77 TONS CL B RIPRAP W/172 SY GEOTEXTILE SEE DETAIL S

–Y12A– PT Sta. 11+24.47

END GRADE
–Y12A– POC Sta. 12+00.00

–Y12A– PC Sta. 12+15.50

END CONSTRUCTION
–Y12A– POC Sta. 12+30.00

–Y12A– PT Sta. 13+15.98

211A DPS NO DEED FOUND SL 62 PG 51

SPECIAL CUT 6' BASE DITCH W/170 TONS CL B RIPRAP W/377 SY GEOTEXTILE SEE DETAIL BA

BEGIN GRADE
–Y14– POT Sta. 11+20.00

TIE TO EXISTING
–Y14– POT Sta. 10+95.00

SPECIAL CUT 8' BASE DITCH W/63 TONS CL B RIPRAP W/141 SY GEOTEXTILE SEE DETAIL CA

BEGIN CONSTRUCTION
–Y14– POT Sta. 10+40.00

ADAM T. CHEATHAM, SR. DB 737 PG 753 SSL 3IPG 243

MITCHELL BAKER AND WIFE, LENA BAKER DB 402 PG 715 SSL 3IPG 243

211B JOSE ANDRES CIRACO SANCHEZ DB 1329 PG 55

211C ADDIE McCRIMMON HEIRS NO DEED FOUND

211D FAUSTO TORRES MEDEROS AND WIFE SARA GARCIA ALIZAR DB 1388 PG 372 SSL 3IPG 243

211E

212 MUBARAK ALI AHMED SHAHBAIN DB 1028 PG 965

213 JOHN R. CAGLE, JR AND MONA CAGLE DB 183 PG 293 SL 2-9 MAP 7

–Y14– PT Sta. 15+70.45

194 x 40 x 3
2.5 inch Skimmer
with 2.375 inch
Orifice Diameter
29 ft. weir
ID 14.2 (37.2)

MATCHLINE –L– STA. 441+00.00 SEE SHEET 13

MATCHLINE –L– STA. 455+00.00 SEE SHEET 15

–Y14–		–Y12A–	
PI Sta 15+24.65		PI Sta 10+86.55	PI Sta 12+66.09
△ = 21° 32' 23.7" (LT)		△ = 29° 39' 02.3" (RT)	△ = 16° 26' 58.9" (LT)
D = 23° 04' 26.1"		D = 38° 11' 49.9"	D = 16° 22' 12.8"
L = 93.35'		L = 77.63'	L = 100.49'
T = 47.55'		T = 39.70'	T = 50.59'
R = 250.00'		R = 150.00'	R = 350.00'
SE = 0.04		SE = 0.04	
V = 30 MPH (STOP)		V= 20 MPH (STOP)	

USE METHOD II CLEARING STA. 441+00 TO 455+00

FOR DITCH DETAILS, SEE SHEETS 2D–1 THRU 2D–3

★ PROPOSED SIGNAL

PAVEMENT REMOVAL BY OTHERS

FOR –L– PROFILE, SEE SHEET NOS. 51–52
FOR –Y12A– PROFILE, SEE SHEET NO. 68
FOR –Y13– PROFILE, SEE SHEET NO. 68
FOR –Y14– PROFILE, SEE SHEET NO. 69
FOR –Y13– & –Y14– DETAILS, SEE SHEET 2B–8
SEE SHEET 2B–15 FOR CROSSING CONSTRUCTION DETAILS

ALL DRIVEWAYS ARE 16 FEET IN WIDTH WITH 10–FOOT RADII UNLESS OTHERWISE NOTED MATCH EXISTING DRIVE TYPE UNLESS OTHERWISE NOTED

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8/17/99

PROJECT REFERENCE NO.	SHEET NO.
R-5709C	EC-15/CONST.15
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

NAD 83 /NA 2011

MATCHLINE –L– STA. 455+00.00 SEE SHEET 14

MATCHLINE –L– STA. 469+00.00 SEE SHEET 16

KASEY S. CARR AND WIFE, MELANIE CARR DB 818 PG 617

ROBERT LEO PARKS AND WIFE, JOSEPHINE PARKS DB 175 PG 567

EVELYN M. ELLINGTON DB 163 PG 121

MICHAEL R. THOMPSON AND SPOUSE, SANDRA R. THOMPSON DB 1224 PG 229

LORI M. ARNOLD DB 1053 PG 773

BM24

N 27°22'08" W 898.11'

N 58°45'35" E 201.82'

N 30°09'08" E 105.45'

N 14°18'38" E 316.29'

R=2537.21'

EXISTING RR R/W

ABERDEEN & ROCKFISH RR

MILEPOST 9

PARKS MILLAGE GP 6PH

60' WD

S 62°58'23" W 15.51'

0.63'

REBAR

RUINS

WOODS

FALLOW

GR

-L- POT Sta. 467+05.58=
-Y15- POT Sta. 15+68.60

SPECIAL CUT DITCH
W/47 TONS CL B RIPRAP
W/105 SY GEOTEXTILE
SEE DETAIL FA

460+00

465+00

PLUG & FILL

MEDIAN V DITCH SEE DETAIL H

42" RCP-IV

48" PVC

72" CHL

72" SBW

MTL

-Y15- PT Sta. 15+05.09

SPECIAL CUT DITCH SEE DETAIL A

15" RCP-III

15 TONS CL B RIP RAP W/37 SY GEOTEXTILE

1 TON CL B RIP RAP W/5 SY GEOTEXTILE

213 JOHN R. CAGLE, JR AND MONA CAGLE DB 183 PG 293 SL 2-9 MAP 7

214 DAVID B. LINTHICUM DB 246 PG 670

215 NORMAN MORRIS DB 317 PG 478

216 RED WOODPECKER LLC DB 1363 PG 264

RED WOODPECKER LLC DB 1362 PG 913

217A KIM CUMMINGS AND WIFE, ANNETTE J. CUMMINGS DB 319 PG 15

217B ADA McKEE DB 356 PG 322

218 SHARON BULLARD DB 1072 PG 623

218A RUSSELL McNEILL DB 268 PG 515

RUSSELL McNEILL DB 268 PG 515

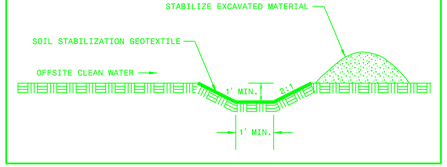
30' ACCESS EASEMENT SL 2-9 MAP 7

63 x 31 x 3
1.5 inch Skimmer
with 1.250 inch
Orifice Diameter
7 ft. weir
ID 15.2 (38.2)

CLEAN WATER DIVERSION

CWD — CWD — CWD — CWD — CWD — CWD

(Not to Scale)



SPECIAL LATERAL V DITCH SEE DETAIL C
2 TON CL B RIP RAP W/7 SY GEOTEXTILE

LATERAL V DITCH SEE DETAIL B

DO NOT DISTURB EXIST. POWER POLE

-Y15- PC Sta. 13+63.69

SPECIAL LATERAL V DITCH SEE DETAIL C

UNOPENED STREET

BEGIN GRADE -Y15- POT Sta. 11+00.00

BEGIN CONSTRUCTION -Y15- POT Sta. 11+75.00

USE METHOD II CLEARING STA. 455+00 TO 459+00

FOR –L– PROFILE, SEE SHEET NO. 52
FOR –Y15– PROFILE, SEE SHEET NO. 69
FOR –Y15– DETAILS, SEE SHEET NO. 2B–9

FOR DITCH DETAILS, SEE SHEETS 2D–1 THRU 2D–3

ALL DRIVEWAYS ARE 16 FEET IN WIDTH WITH 10–FOOT RADII UNLESS OTHERWISE NOTED MATCH EXISTING DRIVE TYPE UNLESS OTHERWISE NOTED

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chris.hall

8/17/99

PROJECT REFERENCE NO.	SHEET NO.
R-5709C	EC-16/CONST.16
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

NAD 83 (NA 2011)

70 x 16 x 3
1.5 inch Skimmer
with 0.875 inch
Orifice Diameter
4 ft. weir
ID 16.2 (39.2)

68 x 18 x 3
1.5 inch Skimmer
with 1.0 inch
Orifice Diameter
4 ft. weir
ID 16.3 (39.3)

61 x 27 x 3
1.5 inch Skimmer
with 1.125 inch
Orifice Diameter
6 ft. weir
ID 16.1 (39.1)

MATCHLINE –L– STA. 469+00.00 SEE SHEET 15

MATCHLINE –L– STA. 483+00.00 SEE SHEET 17

JENNIFER PARKS JOHNSON AND AARON WILSON DB 1026 PG 519

LORI M. ARNOLD DB 1053 PG 773

226A JOHNNY D. DAVIS DB 718 PG 762

–L– SC Sta. 478+83.93

–L– TS Sta. 477+63.93

ABERDEEN & ROCKFISH RR

EXISTING RR R/W

WOODS

REBAR

ANGLE IRON

ABAND POOL

48" CHL

I.S SBKD

SPECIAL CUT DITCH W/CL B RIPRAP SEE DETAIL G

10' WIDE BERM TOP = 447.0 SEE DETAIL DA

SPECIAL CUT DITCH SEE DETAIL A

SPECIAL LATERAL DITCH SEE DETAIL E

SPECIAL LATERAL V DITCH SEE DETAIL E

PLUG & FILL

REMOVE

470+00

475+00

480+00

–L–

MEDIAN DITCH SEE DETAIL H

MEDIAN V DITCH SEE DETAIL H

30 TONS CL B RIP RAP W/74 SY GEOTEXTILE

LATERAL V DITCH SEE DETAIL B

LATERAL V DITCH SEE DETAIL B

LATERAL V DITCH SEE DETAIL B

SPECIAL LATERAL V DITCH SEE DETAIL C

5 TONS CL B RIP RAP W/14 SY GEOTEXTILE

STANDARD TAIL V DITCH SEE DETAIL IA

SPECIAL CUT V DITCH SEE DETAIL Q

PROP. EXPRESSWAY 15' GUTTER

2 TONS CL B RIP RAP W/14 SY GEOTEXTILE

218 SHARON BULLARD DB 1073 PG 623

219 EDDIE LASHLEY, JR. AND WIFE, BARBARA A. LASHLEY DB 306 PG 750

218A RUSSELL McNEILL DB 268 PG 515

220 S & H RENTAL, INC. DB 1177 PG 479 SL 4-74 MAP 5

221 MARSHA PARKS BROADWAY DB 1026 PG 516 SL 386 MAP 3

222 MUBARAK SHAHBAIN DB 1108 PG 858 SL 386 MAP 3

225 WANDA SIZEMORE-RICHARDSON DB 1189 PG 506

30' ACCESS EASEMENT DB 1167 PG 27

226 SHILOH PRESBYTERIAN CHURCH DB 295 PG 473

DESCRIPTION	ALN	STATION	STATION	LOC
EXP.GUTTER	–L–	482+53.89	489+16.12	RT

–L–
PIs Sta 478+43.93
Θs = 0° 40' 36.2"
Ls = 120.00'
LT = 80.00'
ST = 40.00'

PI Sta 481+07.26
Δ = 5° 02' 04.1" (LT)
D = 1° 07' 40.3"
L = 446.37'
T = 223.33'
R = 5,080.00'
SE = 0.03
V = 60MPH

FOR DITCH DETAILS, SEE SHEETS 2D-1 THRU 2D-3

FOR –L– PROFILE, SEE SHEET NOS. 52–53

ALL DRIVEWAYS ARE 16 FEET IN WIDTH WITH 10-FOOT RADII UNLESS OTHERWISE NOTED MATCH EXISTING DRIVE TYPE UNLESS OTHERWISE NOTED

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PROJECT REFERENCE NO.	SHEET NO.
R-5709C	EC-17/CONST.17
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

NAD 83 (NA 2011)

MATCHLINE -L- STA. 483+00.00 SEE SHEET 16

MATCHLINE -L- STA. 497+00.00 SEE SHEET 18

-L- CS Sta. 483+30.30

-L- ST Sta. 484+50.30

ROBERT ERLE DOWNING AND WIFE ALICE R. DOWNING DB 716 PG 1034 DB 262 PG 21

226A JOHNNY D. DAVIS DB 718 PG 762

226B ROBERT ERLE DOWNING AND WIFE ALICE R. DOWNING DB 194 PG 488 DB 716 PG 1034 DB 262 PG 21

JAMES M. STRICKLAND, JR AND WIFE, WENDY M. STRICKLAND DB 373 PG 894

S 39°51'56" W 696.82

300.00' N 19°48'34" E

N 20°36'34" W 247.30'

S 78°39'26" W 238.60'

S 78°39'26" W 93.19'

N 22°01'01" E 65.77'

N 46°38'22" E 134.75'

EXISTING RR R/W

ABERDEEN & ROCKFISH RR

WOODS

PUE

GR

SPECIAL CUT DITCH SEE DETAIL A

SPECIAL CUT DITCH W/ 232 TONS CL B RIPRAP W/517 SY GEOTEXTILE SEE DETAIL FA C

PLUG & FILL

NC 211 ABERDEEN RD 24' BST

MEDIAN V DITCH SEE DETAIL H

FS-I SEE DETAIL VA

REMOVE

PROP. EXPRESSWAY GUTTER

SPECIAL CUT V-DITCH W/365 TONS CL B RIPRAP W/811 SY GEOTEXTILE SEE DETAIL OA

485+00

490+00

495+00

SHILOH PRESBYTERIAN CHURCH DB 295 PG 473

CEMETERY

ISBLK CH

2SBLK

MTR

CONC

BK

226 SHILOH PRESBYTERIAN CHURCH DB 295 PG 473

227 LARRY K. SHERLING, JR. AND MARIE E. SATKOSKI DB 1046 PG 664

228 HARRY F. BROMLEY DB 1038 PG 792

229 ROY W. WOOD AND WIFE, PATRICIA H. WOOD DB 326 PG 494

BM26

S 36°40'31" E 340.25'

S 35°23'31" E 203.73'

S 69°00'49" W 262.74'

N 48°44'29" E 281.79'

N 37°46'40" W 200.00'

N 20°20'32" W 162.15'

N 34°39'03" W 269.01'

ROBERT A. SIZEMORE DB 236 PG 548

-L-

PI Sta 481+07.26	PIs Sta 483+70.30
Δ = 5° 02' 04.1" (LT)	Θs = 0° 40' 36.2"
D = 1° 07' 40.3"	Ls = 120.00'
L = 446.37'	LT = 80.00'
T = 223.33'	ST = 40.00'
R = 5,080.00'	
SE = 0.03	
V = 60MPH	

DESCRIPTION	ALN	STATION	STATION	LOC
EXP.GUTTER	-L-	482+53.89	489+16.12	RT

FOR DITCH DETAILS, SEE SHEETS 2D-1 THRU 2D-3

FOR -L- PROFILE, SEE SHEET NO. 53

ALL DRIVEWAYS ARE 16 FEET IN WIDTH WITH 10-FOOT RADII UNLESS OTHERWISE NOTED MATCH EXISTING DRIVE TYPE UNLESS OTHERWISE NOTED

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PROJECT REFERENCE NO.	SHEET NO.
R-5709C	EC-18/CONST.18
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

NAD 83 /NA 2011

80 x 40 x 3
2.0 inch Skimmer
with 1.625 inch
Orifice Diameter
12 ft. weir
ID 18.6 (41.6)

85 x 42 x 3
2.0 inch Skimmer
with 1.750 inch
Orifice Diameter
13 ft. weir
ID 18.2 (41.2)

107 x 40 x 3
2 inch Skimmer
with 1.750 inch
Orifice Diameter
16 ft. weir
ID 18.3 (41.3)

52 x 25 x 3
1.5 inch Skimmer
with 1.000 inch
Orifice Diameter
5 ft. weir
ID 18.4 (41.4)

84 x 30 x 3
1.5 inch Skimmer
with 1.375 inch
Orifice Diameter
9 ft. weir
ID 18.5 (41.5)

MATCHLINE –L– STA. 497+00.00 SEE SHEET 17

MATCHLINE –L– STA. 510+00.00 SEE SHEET 19

JAMES M. STRICKLAND, JR AND WIFE, WENDY M. STRICKLAND DB 373 PG 894

ROBERT ERLE DOWNING AND WIFE ALICE R. DOWNING DB 716 PG 1034 DB 262 PG 21

MICHAEL LLOYD PARKS NO DEED FOUND

BM27

ROY W WOOD AND WIFE, PATRICIA H. WOOD DB 326 PG 494 — 229

JAMES P. LUCE AND WIFE, GABRIELLE B. LUCE DB 513 PG 506 — 230

DANIEL ADAM COUTURE DB 1174 PG 914 — 231

SPECIAL CUT DITCH W/ CL B RIPRAP SEE DETAIL FA

SPECIAL LATERAL 4' BASE DITCH SEE DETAIL K

SPECIAL LATERAL V DITCH SEE DETAIL E

SPECIAL LATERAL V DITCH SEE DETAIL C

SPECIAL CUT V DITCH SEE DETAIL Q

LATERAL V DITCH W/57 TONS CL B RIPRAP W/126 SY GEOTEXTILE SEE DETAIL O

LATERAL V DITCH SEE DETAIL B

SPECIAL CUT V DITCH W/365 TONS CL B RIPRAP W/811 SY GEOTEXTILE SEE DETAIL OA

2 TONS CL B RIP RAP W/2 SY GEOTEXTILE

PLUG & FILL

REMOVE HEADWALL

REMOVE

42" RCP-III

24" RCP

18" RCP-III

15" RCP-III

8" PVC

-L- PT Sta. 503+25.00
-DR8- PT Sta. 12+61.60

-DR8- PT Sta. 11+47.13

-DR8- POT Sta. 10+00.00

BEGIN CONSTRUCTION
-DR8- POT Sta. 10+85.00

-DR8- PC Sta. 11+00.00

-L- TS Sta. 508+44.05

-L- SC Sta. 509+64.05

DESCRIPTION	ALN	STATION	STATION	LOC
SBG	-L-	497+99.88	501+47.28	RT

-L-		-DR8-
PIs Sta 509+24.05	PI Sta 511+91.94	PI Sta 11+30.00
Θs = 0° 34' 47.0"	Δ = 4° 24' 05.7" (RT)	Δ = 90° 00' 28.1" (LT)
Ls = 120.00'	D = 0° 57' 58.3"	D = 190° 59' 09.4"
LT = 80.00'	L = 455.56'	L = 47.13'
ST = 40.00'	T = 227.89'	T = 30.00'
	R = 5,930.00'	R = 30.00'
	SE = 0.03	
	V = 60MPH	

FOR DITCH DETAILS, SEE SHEETS 2D-1 THRU 2D-3

★ PROPOSED SIGNAL

FOR –L– PROFILE, SEE SHEET NO. 53
FOR –DR8– PROFILE, SEE SHEET NO. 74

ALL DRIVEWAYS ARE 16 FEET IN WIDTH WITH 10-FOOT RADII UNLESS OTHERWISE NOTED MATCH EXISTING DRIVE TYPE UNLESS OTHERWISE NOTED

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PROJECT REFERENCE NO.	SHEET NO.
R-5709C	EC-19/CONST.19
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

8/17/99

NAD 83 /NA 2011

S 34°15'18" E
549.63'

N 85°03'17" E
410.84'

MICHAEL LLOYD PARKS
NO DEED FOUND

234A
ALBERT PARKS
DB 976 PG 207

EXISTING RR R/W

EIP

WOODS

WOODS

SPECIAL LATERAL V DITCH
SEE DETAIL E

1906
HW

10' WIDE BERM
TOP = 447.5'
SEE DETAIL DA

-L- POT Sta. 521+50.00 =
-DRI0- POT Sta. 13+21.50

SHEET 18

MATCHLINE -L- STA. 510+00.00 SEE SHEET

SHEET 20

MATCHLINE -L- STA. 524+00.00 SEE SHEE

RC09-24

ABERDEEN & ROCKFISH RR

40' (TYP.)

99.6'

6 FO

NC 211 ABERDEEN RD 24' BST

REBAR

NAIL

CONC

515+00

-L-

MEDIAN V DITCH
SEE DETAIL H

48" WD

ISFBUS

520+00

PLUG & FILL

48" RCP-V

15" RCP-III

1903 TB DI

1907

26 TONS CL I RIP RAP
W/50 SY GEOTEXTILE

CHORD

PUE

TD

-DRI0- PT Sta. 12+22.42

-L- CS Sta. 514+19.61

-L- ST Sta. 515+39.61

52 x 26 x 3
1.5 inch Skimmer
with 1.0 inch
Orifice Diameter
5 ft. weir
ID 19.1 (42.1)

STORAGE CONTAINER

ISFD

MTR

S&G

-DRI0- PRC Sta. 11+59.35

-DRI0- PC Sta. 10+96.29

BEGIN CONSTRUCTION
-DRI0- PRC Sta. 10+60.00

10+00

-DRI0- POT Sta. 10+00.00

1904

1 TON CL B RIP RAP
W/5 SY GEOTEXTILE

231
DANIEL ADAM COUTURE
DB 1174 PG 914

232
HERBERT L. JONES
AND WIFE,
JENNIFER L. JONES
DB 314 PG 233

234
LUKE P. HAYWARD
AND WIFE,
CONNIE L. HAYWARD
DB 724 PG 156
SL 3-34 MAP 8

N 47°59'57" E
398.02'

S 59°57'58" W
149.99'

N 38°55'03" W
137.56'

N 47°06'03" W
257.50'

S 35°22'07" W
149.99'

N 27°07' W
63.00'

-L-

PI Sta 511+91.94	PIs Sta 514+59.61
Δ = 4° 24' 05.7" (RT)	Θs = 0° 34' 47.0"
D = 0° 57' 58.3"	Ls = 120.00'
L = 455.56'	LT = 80.00'
T = 227.89'	ST = 40.00'
R = 5,930.00'	
SE = 0.03	
V = 60MPH	

FOR DITCH DETAILS,
SEE SHEETS 2D-1 THRU 2D-3

FOR -L- PROFILE, SEE SHEET NO. 54
FOR -DRI0- PROFILE, SEE SHEET NO. 74

ALL DRIVEWAYS ARE 16 FEET IN WIDTH WITH 10-FOOT RADII UNLESS OTHERWISE NOTED MATCH EXISTING DRIVE TYPE UNLESS OTHERWISE NOTED

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PROJECT REFERENCE NO.	SHEET NO.
R-5709C	EC-20/CONST.20
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

-Y17-
PI Sta 13+17.54
△ = 0° 24' 30.5" (RT)
D = 0° 15' 02.7"
L = 162.90'
T = 81.45'
R = 22,850.00'
SE = 0.02
V = 30 MPH (STOP)

NAD 83 /NA 2011

-L- (NC 211) -Y17-/-Y16-
(POOLE RD./EQUESTRIAN WAY)
-Y17- (POOLE RD.)
ADT 2024 16600 DHV 400 340 400 340 400 11,060 14,400 NC 211 10,440 14,300 380 500 380 500 1,460 1,900
ADT 2044
-Y16- (EQUESTRIAN WAY)

MATCHLINE -L- STA. 524+00.00 SEE SHEET 19

MATCHLINE -L- STA. 538+00.00 SEE SHEET 21

234A
ALBERT PARKS
DB 976 PG 207

BM28

-Y17- PT Sta. 13+98.98

END CONSTRUCTION
-Y17- POT Sta.13+65.00

END GRADE
-Y17- POT Sta.13+00.00

-Y17- PC Sta. 12+36.09

78 x 20 x 3
1.5 inch Skimmer
with 1.125 inch
Orifice Diameter
6 ft. weir
ID 20.1 (43.1)

-L- POT Sta.532+76.00=
-Y17- POT Sta. 10+00.00

ALTON GODWIN
AND
LOU ANN RYDER
DB 677 PG 290

ISMTLBUS

235
ALTON GODWIN
AND
LOU ANN RYDER
DB 677 PG 290
SL 4-65 MAP 4

SPECIAL CUT DITCH
SEE DETAIL A

COLLAR & EXTEND EXISTING PIPES
TO TOE OF EMBANKMENT
NOTE:WARP SUPER
TO EXISTING
RAILROAD GRADE

PLUG & FILL
2 TONS CL B RIP RAP
W/7 SY GEOTEXTILE

525+00

530+00

-L- 535+00

MEDIAN V DITCH
SEE DETAIL H

SPECIAL LATERAL V DITCH
SEE DETAIL W

5 TONS CL B RIP RAP
W/14 SY GEOTEXTILE

STANDARD TAIL
V DITCH
SEE DETAIL IA

234
LUKE P. HAYWARD AND
WIFE, CONNIE L. HAYWARD
DB 724 PG 154
SL 3-34 MAP 8

236
RON PHILLIP
COLWELL
DB 1099 PG 448
SL 3-34 MAP 8

237
MELISSA L. HOAGLIN
AND HUSBAND,
DENNIS R. HOAGLIN
DB 720 PG 1010
SL 3-34 MAP 8

238
STEEPLECHASE HOA
DB 1131 PG 1044
SL 3-65 MAP 2

239
LESLIE E. TRAYLOR
AND WIFE,
REBECCA G. TRAYLOR
DB 885 PG 580
SL 3-65 MAP 2

240
JOHN CHAMBERS
AND WIFE,
EVELYN CHAMBERS
DB 846 PG 702
SL 3-65 MAP 2

241
WILLIAM W. CAMERON, JR
AND WIFE,
CORNELIA P. CAMERON
DB 709 PG 1964

-L- POT Sta. 532+59.57=
-Y16- POT Sta. 19+32.62

-Y16- PT Sta. 18+58.18

REMOVE CATCH BASINS

REMOVE CATCH BASIN

REPLACE STRUCTURES

ADJUST EXISTING
CATCH BASIN
TO TIE IN TO
EXISTING STORM DRAIN

-Y16- PRC Sta. 14+35.42

BEGIN GRADE
-Y16- POC Sta. 14+25.00

BEGIN CONSTRUCTION
-Y16- POC Sta. 13+45.00

-Y16- PC Sta. 12+78.64

DESCRIPTION	ALN	STATION	STATION	LOC
2'-6"C+G	-Y16-	14+25.00	18+35.94	RT
2'-6"C+G	-Y16-	14+25.00	18+63.13	LT

-Y16-

PI Sta 13+57.20	PI Sta 16+96.54
△ = 9° 09' 58.1" (LT)	△ = 84° 59' 30.4" (RT)
D = 5° 50' 47.4"	D = 20° 06' 13.6"
L = 156.78'	L = 422.77'
T = 78.56'	T = 261.12'
R = 980.00'	R = 285.00'
	SE = 0.04
	V = 30 MPH

PAVEMENT REMOVAL BY OTHERS

FOR -L- PROFILE, SEE SHEET NO. 54
FOR -Y16- PROFILE, SEE SHEET NO. 69
FOR -Y17- PROFILE, SEE SHEET NO. 69
FOR -Y16- & -Y17- DETAILS, SEE SHEET 2B-10
SEE SHEET 2B-16 FOR CROSSING CONSTRUCTION DETAILS

FOR DITCH DETAILS,
SEE SHEETS 2D-1 THRU 2D-3

ALL DRIVEWAYS ARE 16 FEET IN WIDTH WITH 10-FOOT RADII UNLESS OTHERWISE NOTED
MATCH EXISTING DRIVE TYPE UNLESS OTHERWISE NOTED

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PROJECT REFERENCE NO.	SHEET NO.
R-5709C	EC-21/CONST.21
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

NAD 83 / NA 2011

MATCHLINE –L– STA. 538+00.00 SEE SHEET 20

MATCHLINE –L– STA. 552+00.00 SEE SHEET 22

69 x 32 x 3
1.5 inch Skimmer
with 1.250 inch
Orifice Diameter
8 ft. weir
ID 21.3 (44.3)

52 x 25 x 3
1.5 inch Skimmer
with 1.000 inch
Orifice Diameter
5 ft. weir
ID 21.4 (44.4)

62 x 31 x 3
1.5 inch Skimmer
with 1.250 inch
Orifice Diameter
7 ft. weir
ID 21.1 (44.1)

42 x 18 x 3
1.5 inch Skimmer
with 0.875 inch
Orifice Diameter
4 ft. weir
ID 21.2 (44.2)

ALTON GODWIN AND LOU ANN RYDER DB 677 PG 290

WILLIAM W. CAMERON, JR. AND WIFE, RHENDA P. CAMERON DB 709 PG 964

ASHLEY J. SHAFFERMAN DB 953 PG 465 SL 4-II MAP 2

TAMEKA L. LLOYD AND HUSBAND, CHRISTOPHER M. LLOYD DB 974 PG 293 SL 4-II MAP 2

CHRISTOPHER D. COBOS AND WIFE, ARNIE JO COBOS DB 937 PG 968 SL 3-65 MAP 2

DERICK WILLIAMSAND HARRIET WILLIAMS DB 1171 PG 355

LEROY E. SCHOFIELD AND WIFE, MARIA MARTINEZ DB 124P PG 186 SL 4-I MAP 5

ANTHONY JAMES LEROY SWEETS AND WIFE, APRIL MARIE CELLINA DB 1158 PG 811 SL 4-II MAPS 1-3

LUIS A. TORRES AND WIFE, NANCY TORRES DB 953 PG 598 SL 4-II MAPS 1-3

CHARLES WILLIAM KARLESKINT AND WIFE, SARAH M. KARLESKINT DB 1016 PG 884 SL 4-II MAP 2

ENRIQUE RODRIGUEZ, III AND WIFE, DAWN ELIZABETH RODRIGUEZ DB 1051 PG 96 SL 4-II MAP 2

BRIAN LEE SHAW AND WIFE, ANNA SHAW DB 1173 PG 50 SL 4-II MAP 2

CORBY L. CLARK AND WIFE, TAWANDA N. CLARK DB 944 PG 778 SL 4-II MAP 1-3

211P THOMAS RAY ASKEW AND WIFE, JUANESHIA D. ASKEW DB 920 PG 335 SL 3-95 MAP 5

211Q STEVEN G. GENEVISH AND WIFE, HILARY A. GENEVISH DB 952 PG 874 SL 3-95 MAP 5

211R ROBERT W. LEE AND WIFE, SYLVIA D. LEE DB 1133 PG 282 SL 3-95 MAP 5

GENE R. KEAVENEY AND WIFE, KIMBERLY A. KEAVENEY DB 963 PG 857 SL 4-II MAPS 1-3

THOMAS JACOB RUSSELL AND WIFE, JAMIE LEIGH RUSSELL DB 1114 PG 154 SL 4-II MAPS 1-3 SL 4-12 MAP 5

HARDY PAUL MERRILL AND WIFE, EMILY HUGO DB 1163 PG 722 SL 4-II MAPS 1-3

ERIC BAST JR. AND WIFE, TERRAN NICOLE BAST DB 1158 PG 811 SL 4-II MAPS 1-3

ANDREW DOSH AND WIFE, CAROL DOSH DB 930 PG 344 SL 3-65 MAP 2

JOHN EDWARD SKELLY AND WIFE, DANIELLE MARIE SKELLY DB 1138 PG 43 SL 3-65 MAP 2

HUNTER GADD AND WIFE, JENNIFER GADD DB 1115 PG 931 SL 3-65 MAP 2

JASON R. HANSON AND WIFE, GINNY FLYNN HANSON DB 834 PG 790 SL 3-65 MAP 2

-Y16- POT Sta. 10+00.00

BY15-346

BY15-347

BM29

DESCRIPTION	ALN	STATION	STATION	LOC
SBG	-L-	543+45.02	547+04.39	RT

FOR DITCH DETAILS, SEE SHEETS 2D-1 THRU 2D-3

FOR –L– PROFILE, SEE SHEET NO. 55

ALL DRIVEWAYS ARE 16 FEET IN WIDTH WITH 10-FOOT RADII UNLESS OTHERWISE NOTED MATCH EXISTING DRIVE TYPE UNLESS OTHERWISE NOTED

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PROJECT REFERENCE NO.	SHEET NO.
R-5709C	EC-22/CONST.22
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

NAD 83 /NA 2011

MATCHLINE –L– STA. 552+00.00 SEE SHEET 21

MATCHLINE –L– STA. 566+00.00 SEE SHEET 23

62 x 30 x 3
1.5 inch Skimmer
with 1.250 inch
Orifice Diameter
7 ft. weir
ID 22.1 (45.1)

40 x 20 x 3
ID 22.2(45.2)

211R ROBERT W. LEE AND WIFE, SYLVIA D. LEE DB 1133 PG 282 SL 3-95 MAP 5

253 JOSEPH SMITH AND WIFE, KELLY SMITH DB 948 PG 268 SL 3-95 MAP 5

254 ANGELA P. JACKSON DB 941PG 108 SL 3-95 MAP 5

255 JORGE M. FERNANDEZ AND WIFE, LEAANNA L. FERNANDEZ DB 911PG 617 SL 3-95 MAP 5

256 JOHN GANLEY AND WIFE, JULIE A. GANLEY DB 900 PG 204 SL 3-95 MAP 5

257 MAURICE A. SHANNON JR. AND WIFE, LILY SHANNON-NEGRON DB 1131PG 998 SL 3-100 MAP 4

258 MICHEAL R. WALLACE AND WIFE, DEBORAH L. WALLACE DB 936 PG 348 SL 3-100 MAP 4

259 JOSE CARLOS COMETTANT AND WIFE, KRISTIE COMETTANT DB 965 PG 1 SL 3-100 MAP 4

260 BRIAN W. JONES AND WIFE, AMY E. JONES DB 962 PG 242 SL 3-100 MAP 4

261 JARROD MURPHY AND WIFE, CYNTHIA MURPHY DB 1116 PG 986 SL 3-100 MAP 4

269 KENNETH McNEILL & DARRIN McNEILL LOUIS C. THOMAS DB 402 PG 857

263 SHEREME D. SCOTT AND SPOUSE, JERMAINE B. SCOTT DB 1134 PG 481 SL 4-II MAP I-3

264 DAVID F. KUMMERFELDT AND WIFE, ROBIN L. K. KUMMERFELDT DB 1023 PG 610 SL 4-II MAP I-3 BY15-348

265 PHILLIP E. MARTIN AND WIFE, KRISTEN L. MARTIN DB 1067 PG 220 SL 4-II MAP I-3

266 MARK A. PULLEY AND WIFE, TERIN L. PULLEY DB 1155 PG 210 SL 4-78 MAP 1

267 UNKNOWN OWNER

268 20 TONS CL I RIP RAP W/39 SY GEOTEXTILE ON BANKS ONLY

252 COREY L. CLARK AND WIFE, TAMANDA N. CLARK DB 944 PG 778 SL 4-II MAP I-3

CASH E. SUTTON AND WIFE, KIMBERLY T. SUTTON DB 1007 PG 1007 SL 4-II MAPS I-3

DAVID H. DIOKNO AND WIFE, NATASHA DIOKNO DB 983 PG 1041 SL 4-II MAPS I-3

MICHAEL J. SCHNEIDER AND WIFE, TARA K. SCHNEIDER DB 1010 PG 721 SL 4-II MAPS I-3

LAT 4' BASE DITCH W/40 TONS CL B RIPRAP W/88 SY GEOTEXTILE SEE DETAIL RA

3 TONS CL B RIP RAP W/10 SY GEOTEXTILE

TOE PROTECTION W/180 TONS CL B RIP RAP W/399 SY GEOTEXTILE SEE DETAIL GA

2 TONS CL B RIP RAP W/7 SY GEOTEXTILE

TOE PROTECTION W/368 TONS CL B RIP RAP W/819 SY GEOTEXTILE SEE DETAIL GA

TOE PROTECTION W/322 TONS CL B RIP RAP W/716 SY GEOTEXTILE SEE DETAIL GA

TOE PROTECTION W/308 TONS CL B RIP RAP W/685 SY GEOTEXTILE SEE DETAIL GA

13 TONS CL I RIP RAP W/30 SY GEOTEXTILE

1 TON CL B RIP RAP W/5 SY GEOTEXTILE

2223 COLLAR AND EXTEND

2218 2GI

2219 19" HDPE

2220 18" REMOVE

2215 18" RCP

2221 18" REMOVE

2217 2GI

2222 COLLAR

2204 2GI

2205 2GI

2206 2GI

2208 2GI

2207 2GI

2211 2GI

2212 2GI-A

2214 2GI-A

2216 PDE

2209

18" RCP-III

15" RCP-III

42" RCP-III

FES-I SEE DETAIL GA

FES-II SEE DETAIL VA

GREU TL-3

FS-III SEE DETAIL SA

SPECIAL MEDIAN DITCH SEE DETAIL H

TRENCHLESS INSTALLATION OF 42" RELINED STEEL

LIGHT DITCH TO WETLAND

PLUG & FILL

CAT-1

DESCRIPTION	ALN	STATION	STATION	LOC
SBG	–L–	557+47.59	560+41.69	LT
SBG	–L–	557+49.41	561+62.05	RT
SBG	–L–	561+34.25	566+00.00	LT
SBG	–L–	564+47.22	566+00.00	RT

FOR DITCH DETAILS, SEE SHEETS 2D–1 THRU 2D–3

FOR –L– PROFILE, SEE SHEET NO. 55

ALL DRIVEWAYS ARE 16 FEET IN WIDTH WITH 10–FOOT RADII UNLESS OTHERWISE NOTED MATCH EXISTING DRIVE TYPE UNLESS OTHERWISE NOTED

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PROJECT REFERENCE NO.	SHEET NO.
R-5709C	EC-23/CONST.23
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

NAD 83 / NA 2011

MATCHLINE –L– STA. 566+00.00 SEE SHEET 22

MATCHLINE –L– STA. 580+00.00 SEE SHEET 24

55 x 20 x 3
1.5 inch Skimmer
with 0.875 inch
Orifice Diameter
4 ft. weir
ID 23.3 (46.3)

33 x 15 x 3
ID 23.4(46.4)

82 x 28 x 3
1.5 inch Skimmer
with 1.375 inch
Orifice Diameter
10 ft. weir
ID 23.2 (46.2)

269 KENNETH McNEILL, DARRIN McNEILL, LOUIS C. THOMAS, DB 402 PG 857

270 DARRIN McNEILL, DB 1044 PG 994

270A QUENZELL THOMAS AND WIFE, KAREN RAY THOMAS, DB 370 PG 89

271 ABK RENTAL PROPERTIES, INC., DB 1168 PG 712

283A THE NATURE CONSERVANCY, DB 512 PG 245

268 GARY McMILLAN, DB 286 PG 708

268A LOUIS C. THOMAS AND WIFE, BEATRICE M. THOMAS, DB 663 PG 289

272 TOTAL PRAISE AND DELIVERANCE CHURCH OF GOD, DB 1093 PG 433 (WRONG DEED)

273 TOTAL PRAISE AND DELIVERANCE CHURCH OF GOD, DB 821 PG 76, SL 3-79 MAP 5

ELBERT MARSHAL GREENE, DB 262 PG 451

274 WILLIAM ARTHUR MCGREGOR, DB 167 PG 27

275 SARAH GILMORE, SL 178 PG 101

276 RUDOLPH S. BALDWIN AND WIFE, MARY G. BALDWIN, DB 189 PG 112

277 MARY C. HARRIS, DB 226 PG 526, SL 315 MAP 2

277A LOUIS C. THOMAS AND WIFE, BEATRICE M. THOMAS, DB 663 PG 289

MARY E. BALDWIN, DB 248 PG 365

–L– POC Sta. 578+53.30=
–Y18– POT Sta. 15+76.81

–L– SC Sta. 577+85.14

–L– TS Sta. 576+25.14

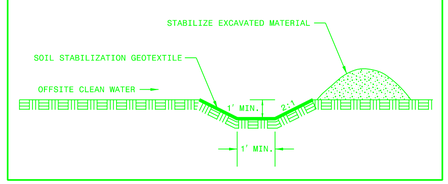
BEGIN GRADE
–Y18– POT Sta. 12+50.00

BEGIN CONSTRUCTION
–Y18– Sta. 11+65.00

CLEAN WATER DIVERSION

CWD CWD CWD CWD

(Not to Scale)



–L–	
PIs Sta 577+31.81	PI Sta 581+14.82
Θs = 1° 09' 37.5"	Δ = 9° 32' 31.7" (RT)
Ls = 160.00'	D = 1° 27' 01.9"
LT = 106.67'	L = 657.84'
ST = 53.34'	T = 329.68'
	R = 3,950.00'
	SE = 0.04
	V = 60MPH

FOR DITCH DETAILS, SEE SHEETS 2D-1 THRU 2D-3

FOR –L– PROFILE, SEE SHEET NO. 56
FOR –Y18– PROFILE, SEE SHEET NO. 70

ALL DRIVEWAYS ARE 16 FEET IN WIDTH WITH 10-FOOT RADII UNLESS OTHERWISE NOTED MATCH EXISTING DRIVE TYPE UNLESS OTHERWISE NOTED

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PROJECT REFERENCE NO.	SHEET NO.
R-5709C	EC-24/CONST.24
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

NAD 83 /NA 2011

MATCHLINE –L– STA. 580+00.00 SEE SHEET 23

MATCHLINE –L– STA. 593+50.00 SEE SHEET 25

BM31

283A
THE NATURE CONSERVANCY
DB 512 PG 245

WOODS

TOE PROTECTION
SEE DETAIL GA

240Z
3 TONS CL I RIP RAP
W/10 SY GEOTEXTILE

ABERDEEN & ROCKFISH RR

TOE PROTECTION
W/239 TONS CL B RIP RAP
W/532 SY GEOTEXTILE
SEE DETAIL GA

TOE PROTECTION
W/138 TONS CL B RIP RAP
W/307 SY GEOTEXTILE
SEE DETAIL GA

NC 211 ABERDEEN RD 24.5' BST

585+00

590+00

–L–

REMOVE

DRIVE SHAFT

EXISTING R/W

PASTURE

1 TON CL I RIP RAP
W/5 SY GEOTEXTILE

PUE

277
MARY C. HARRIS
DB 226 PG 526
SL 195 MAP 2

279
PAULINE HARRIS
DB 82 PG 222

280
GLORIA M. VINEY
DB 1174 PG 138

277A
LOUIS C. THOMAS
AND WIFE,
BEATRICE M. THOMAS
DB 663 PG 289

281
WILLIAM W. CAMERON
AND WIFE,
RHENDA P. CAMERON
DB 278 PG 257

282
DANIEL T. POTTS, JR.
AND WIFE,
DENISE M. POTTS
DB 685 PG 31

–L– CS Sta. 584+42.98

–L– ST Sta. 586+02.98

–L–	
PI Sta 581+14.82	PIs Sta 584+96.32
Δ = 9° 32' 31.7" (RT)	θs = 1° 09' 37.5"
D = 1° 27' 01.9"	Ls = 160.00'
L = 657.84'	LT = 106.67'
T = 329.68'	ST = 53.34'
R = 3,950.00'	
SE = 0.04	
V = 60MPH	

FOR DITCH DETAILS, SEE SHEETS 2D–1 THRU 2D–3

FOR –L– PROFILE, SEE SHEET NO. 56

ALL DRIVEWAYS ARE 16 FEET IN WIDTH WITH 10–FOOT RADII UNLESS OTHERWISE NOTED MATCH EXISTING DRIVE TYPE UNLESS OTHERWISE NOTED

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8/28/2024
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chuffman

8/17/99

PROJECT REFERENCE NO.	SHEET NO.
R-5709C	EC-25/CONST.25
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

NAD 83 /NA 2011

MATCHLINE –L– STA. 593+50.00 SEE SHEET 24

MATCHLINE –L– STA. 607+00.00 SEE SHEET 26

595+00 600+00 605+00

283A THE NATURE CONSERVANCY DB 512 PG 245

WOODS

ABERDEEN & ROCKFISH RR

NC 211 ABERDEEN RD 24' BST

ISMTL

TB CHL 35BW

GR

PUE

BL-163

2508 REMOVE 15"

MEDIAN DITCH SEE DETAIL H

283 TIMBERLAND RANCH LLC DB 1337 PG 461 PB 4151 PG 6 (COMMON AREA)

283 TIMBERLAND RANCH LLC DB 1337 PG 461 (40' ACCESS EASEMENT)

283 TIMBERLAND RANCH LLC DB 1337 PG 461 PB 4151 PG 6 (COMMON AREA)

SPECIAL CUT V DITCH SEE DETAIL A

2507 15"

2506 TB DI

15" RCP-III

SPECIAL CUT 4' BASE DITCH CL B RIP RAP SEE DETAIL J

LATERAL 4' BASE DITCH SEE DETAIL HA

283 TIMBERLAND RANCH LLC DB 1337 PG 461 PB 4151 PG 6 (LOT 74)

283 TIMBERLAND RANCH LLC DB 1337 PG 461 PB 4151 PG 6 (LOT 73)

283 TIMBERLAND RANCH LLC DB 1337 PG 461 PB 4151 PG 6 (15' SIGN EASEMENT)

283 TIMBERLAND RANCH LLC DB 1337 PG 461 PB 4151 PG 6 (LOT 72)

283 TIMBERLAND RANCH LLC DB 1337 PG 461 PB 4151 PG 6 (LOT 71)

283 TIMBERLAND RANCH LLC DB 1337 PG 461 PB 4151 PG 6

283E J & K GENERAL CONTRACTOR, INC. DB 1375 PG 567 PB 4150 PG 2

282 DANIEL T. POTTS, JR. AND WIFE, DENISE M. POTTS DB 685 PG 31

PASTURE

ISFD

WD

N 22°48'15" W 277.79'

N 22°47'00" W 285.46'

N 25°52'45" W 280.01'

N 25°52'33" W 280.24'

N 22°50'01" W 281.52'

S 22°50'01" E 285.48'

S 22°54'10" E 280.04'

S 22°55'01" E 280.33'

N 25°18'29" W 118.59'

N 25°18'29" W 56.95'

S 64°15'08" W 295.71'

S 69°02'17" W 72.81'

S 69°02'17" W 200.07'

S 67°06'40" W 195.82'

S 67°05'49" W 195.57'

S 67°05'15" W 195.45'

S 67°03'47" W 195.25'

S 67°02'19" W 178.49'

EIP

EP (BENT)

FOR DITCH DETAILS, SEE SHEETS 2D–1 THRU 2D–3

FOR –L– PROFILE, SEE SHEET NOS. 56–57

ALL DRIVEWAYS ARE 16 FEET IN WIDTH WITH 10–FOOT RADII UNLESS OTHERWISE NOTED MATCH EXISTING DRIVE TYPE UNLESS OTHERWISE NOTED

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8/17/99

PROJECT REFERENCE NO.	SHEET NO.
R-5709C	EC-26/CONST.26
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

MATCHLINE –L– STA. 607+00.00 SEE SHEET 25

MATCHLINE –L– STA. 621+50.00 SEE SHEET 27

NAD 83 /NA 2011

BM32

–L– TS Sta. 608+47.25

–L– SC Sta. 610+87.25

–L– POC Sta. 611+27.80=
–Y19– POT Sta. 15+48.35

–L– CS Sta. 618+79.67

–L– ST Sta. 621+19.67

–Y19– PT Sta. 14+89.16

–Y19– PC Sta. 13

BEGIN GRADE
–Y19– POT Sta. 11+00.00

BEGIN CONSTRUCTION
–Y19– POT Sta. 10+75.00

–Y19– POT Sta. 10+00.00

283A
THE NATURE CONSERVANCY
DB 512 PG 245

283B
ELLIS F. HARRIS
AND WIFE,
MARGARET A. HARRIS
DB 159 PG 191

283C
MELISSA MCQUAGE
DB 5208 PG 422

283E
J & K GENERAL CONTRACTOR, INC.
DB 1375 PG 567
PB 4150 PG 2

28
NETTE
DB 124

WOODS

PASTURE

ISBKD

ABERDEEN & ROCKFISH RR

PUE

DUE

2610 – 15" RCP

FS–II
SEE DETAIL VA

2601 – 30LF

18" RCP–III

2GI
2602

2603 – 18" RCP–III

LATERAL 4' BASE DITCH
SEE DETAIL HA

3 TONS CL B RIP RAP
W/10 SY GEOTEXTILE

CHORD

2604 – 48" WELDED STEEL
(TRENCHLESS INSTALLATION)

2605 – HW

15 TONS CL
B RIP RAP
W/37 SY
GEOTEXTILE

2611 – 36"

2606
26 TONS CL I RIP RAP
W/50 SY GEOTEXTILE

TRENCHLESS INSTALLATION
48" WELDED STEEL

TOE PROTECTION
W/270 TONS CL B RIP RAP
W/600 SY GEOTEXTILE
SEE DETAIL GA

2607 – 48" WELDED STEEL
(TRENCHLESS INSTALLATION)

2GI–A
2608

48" RCP–III

MEDIAN DITCH
SEE DETAIL H

REMOVE

2612 – 36"

94 x 35 x 3
2 inch Skimmer
with 1.625 inch
Orifice Diameter
13 ft. weir
ID 26.2 (49.2)

117 x 39 x 3
2.5 inch Skimmer
with 2.250 inch
Orifice Diameter
31 ft. weir
ID 26.1 (49.1)

117 x 39 x 3
2.5 inch Skimmer
with 2.250 inch
Orifice Diameter
31 ft. weir
ID 26.1 (49.1)

610+00

615+00

620+00

–L– (NC 211) –Y19– (CALLOWAY RD.)

ADT 2024
ADT 2044

NC 211

12,280
16,000

–L–
11,040
14,400

60
0

1,300
1,600

1,360
1,600

–Y19– (CALLOWAY RD.)

–Y19–	–L–		
PI Sta 14+20.50	PIs Sta 610+07.32	PI Sta 614+95.62	PIs Sta 619+59.74
Δ = 32° 21' 26.1" (LT)	Θs = 5° 10' 10.4"	Δ = 34° 08' 13.6" (LT)	Θs = 5° 10' 10.4"
D = 22° 55' 05.9"	Ls = 240.00'	D = 4° 18' 28.6"	Ls = 240.00'
L = 141.19'	LT = 160.07'	L = 792.42'	LT = 160.07'
T = 72.53'	ST = 80.06'	T = 408.36'	ST = 80.06'
R = 250.00'		R = 1,330.00'	
SE = RC		SE = 0.06	
V = 30 MPH (STOP)		V = 60MPH	

FOR DITCH DETAILS,
SEE SHEETS 2D–1 THRU 2D–3

FOR –L– PROFILE, SEE SHEET NO. 57

FOR –Y19– PROFILE, SEE SHEET NO. 70

ALL DRIVEWAYS ARE 16 FEET IN WIDTH WITH 10–FOOT RADII UNLESS OTHERWISE NOTED MATCH EXISTING DRIVE TYPE UNLESS OTHERWISE NOTED

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