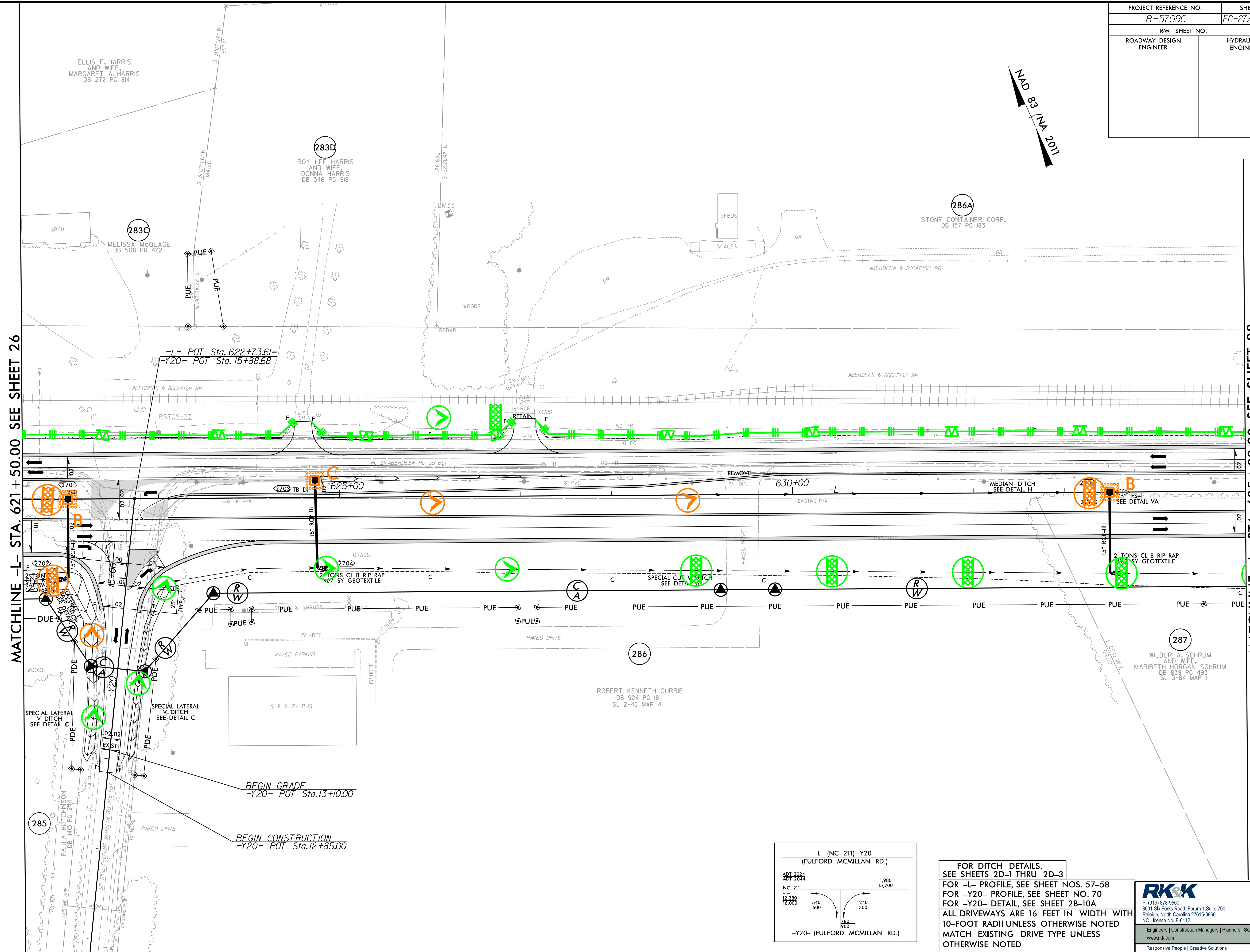
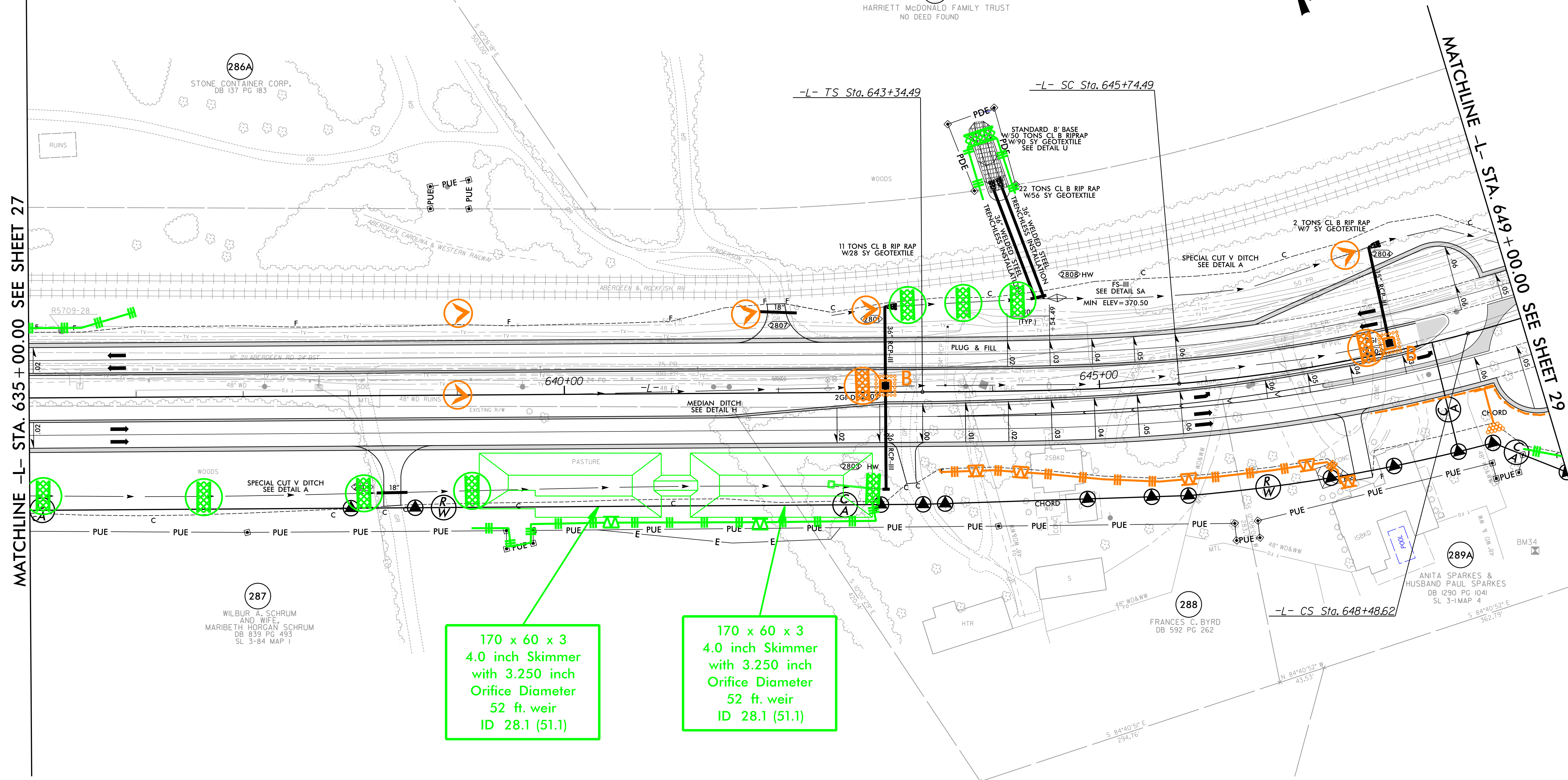
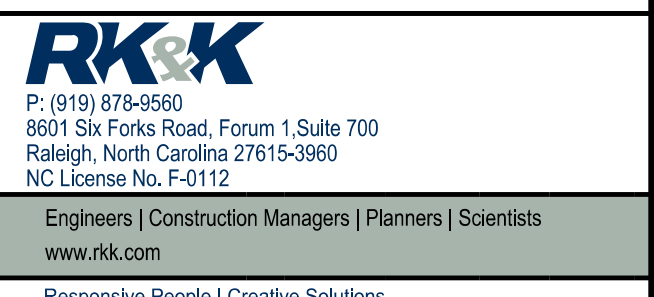


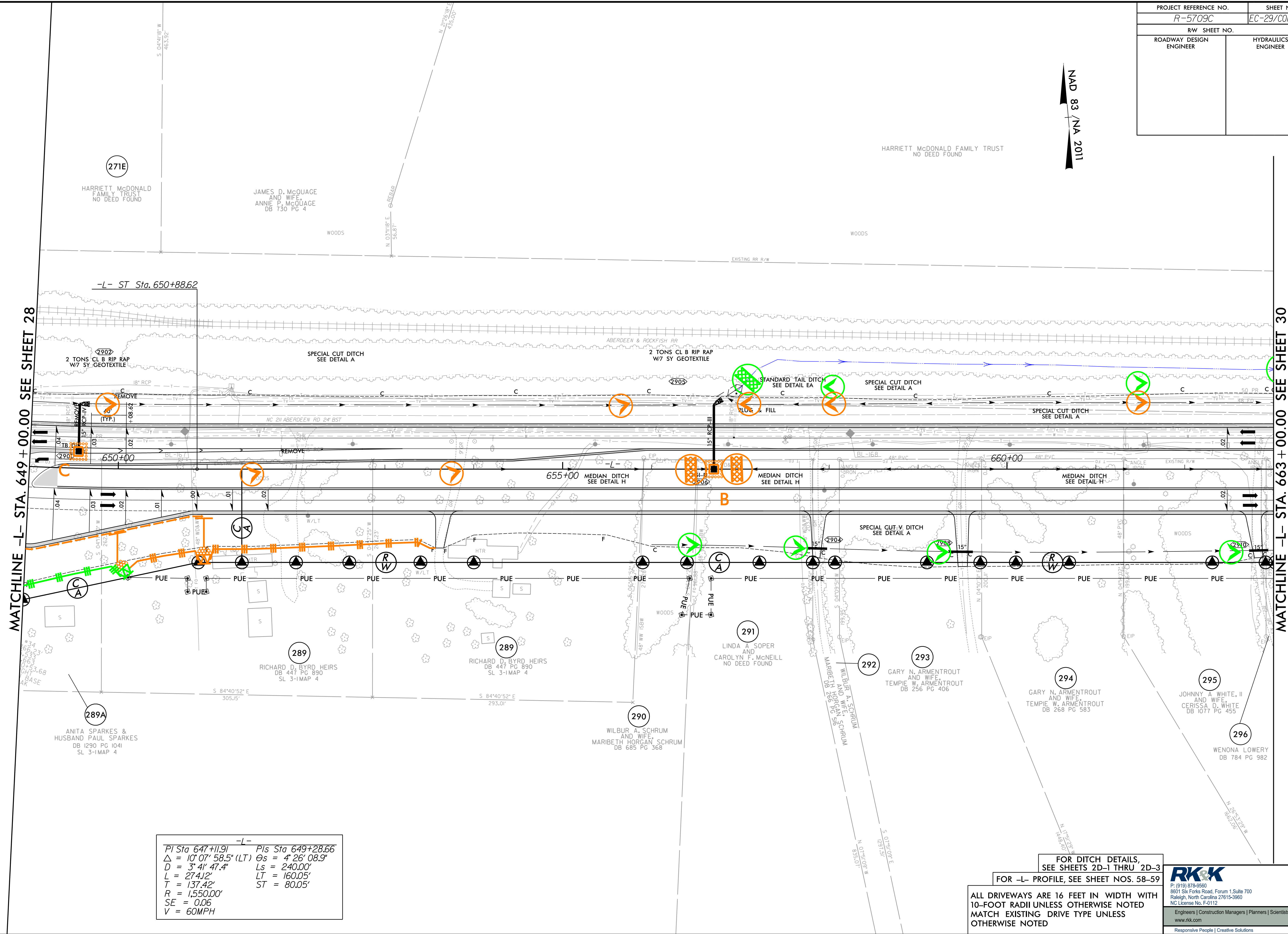




-I-	
<i>Pls Sta</i> 644+94.55'	<i>PI Sta</i> 647+11.91'
$\Theta_s = 4^{\circ} 26' 08.9''$	$\Delta = 10^{\circ} 07' 58.5''$ (LT)
$L_s = 240.00'$	$D = 3^{\circ} 41' 47.4''$
$LT = 160.05'$	$L = 274.12'$
$ST = 80.05'$	$T = 137.42'$
	$R = 1,550.00'$
	$SE = 0.06$
	$V = 60MPH$

FOR DITCH DETAILS, SEE SHEETS 2D-1 THRU 2D-3	
FOR -L- PROFILE, SEE SHEET NO. 58	
ALL DRIVEWAYS ARE 16 FEET IN WIDTH WITH 10-FOOT RADII UNLESS OTHERWISE NOTED MATCH EXISTING DRIVE TYPE UNLESS OTHERWISE NOTED	





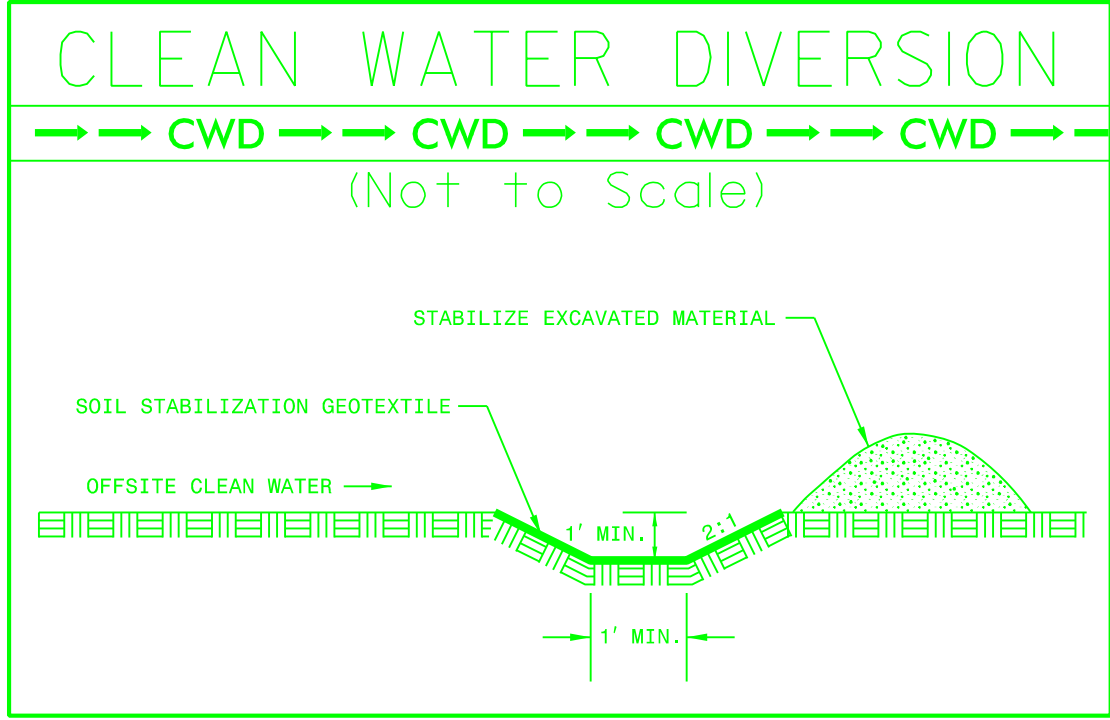
ALL DRIVEWAYS ARE 16 FEET IN WIDTH WITH
10-FOOT RADII UNLESS OTHERWISE NOTED
MATCH EXISTING DRIVE TYPE UNLESS
OTHERWISE NOTED

3	 P: (919) 878-9560 8601 Six Forks Road, Forum 1, Suite 700 Raleigh, North Carolina 27615-3960 NC License No. F-0112	
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MATCHLINE -L- STA. 663+00.00 SEE SHEET 29

99 x 33 x 3
2.0 inch Skimmer
with 1.625 inch
Orifice Diameter
12 ft. weir
ID 30.3 (53.3)

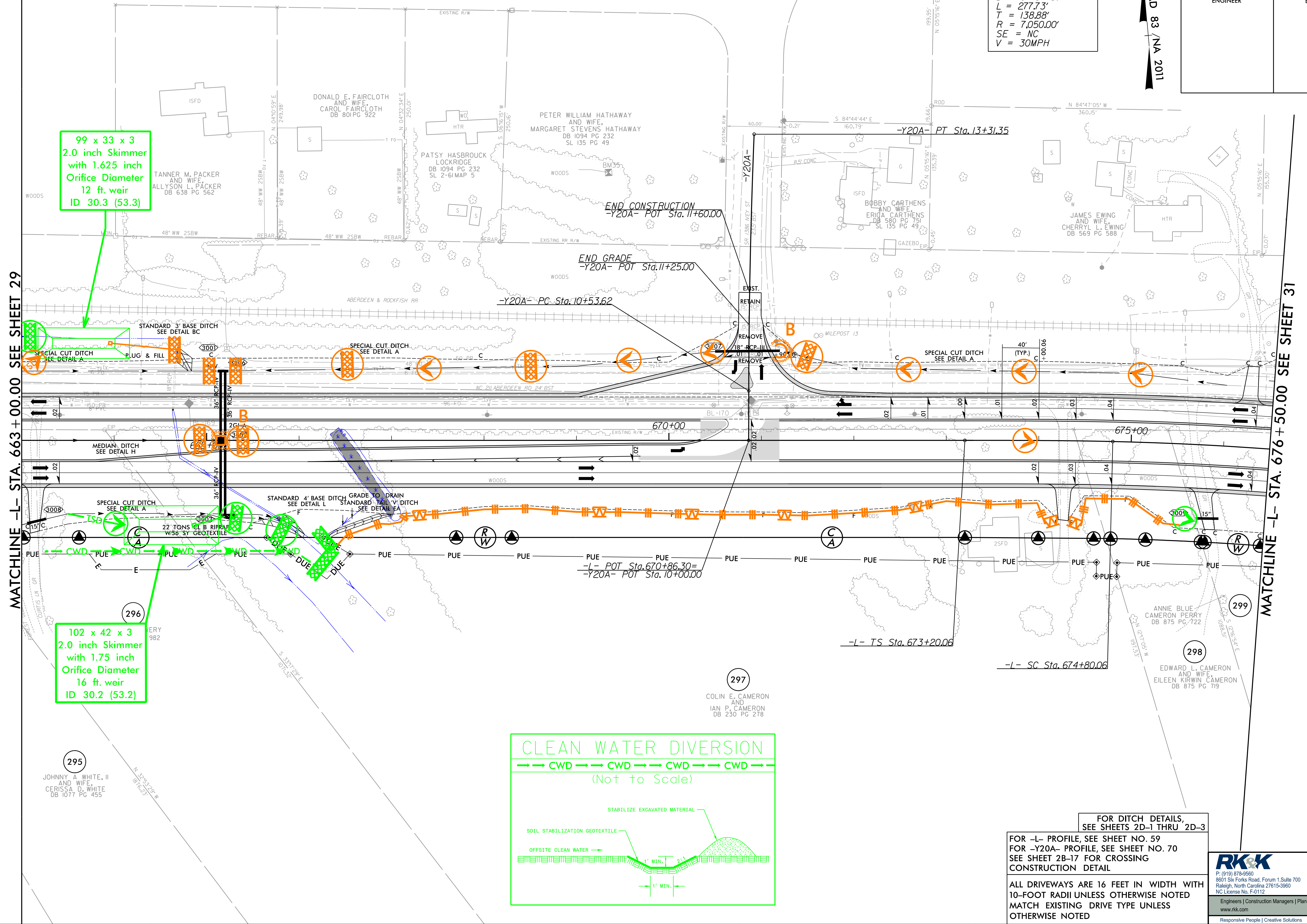
102 x 42 x 3
2.0 inch Skimmer
with 1.75 inch
Orifice Diameter
16 ft. weir
ID 30.2 (53.2)



-Y20A-
PI Sta 11+92+50
 $\Delta = 2' 15" 25.6" (RT)$
 $D = 0' 48" 45.7"$
 $L = 277.73'$
 $T = 138.88'$
 $R = 7,050.00'$
 $SE = NC$
 $V = 30MPH$

NAD 83 / NA 2011

PROJECT REFERENCE NO.		SHEET NO.
R-5709C		EC-30/CONST. 30
RW SHEET NO.		
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER	



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

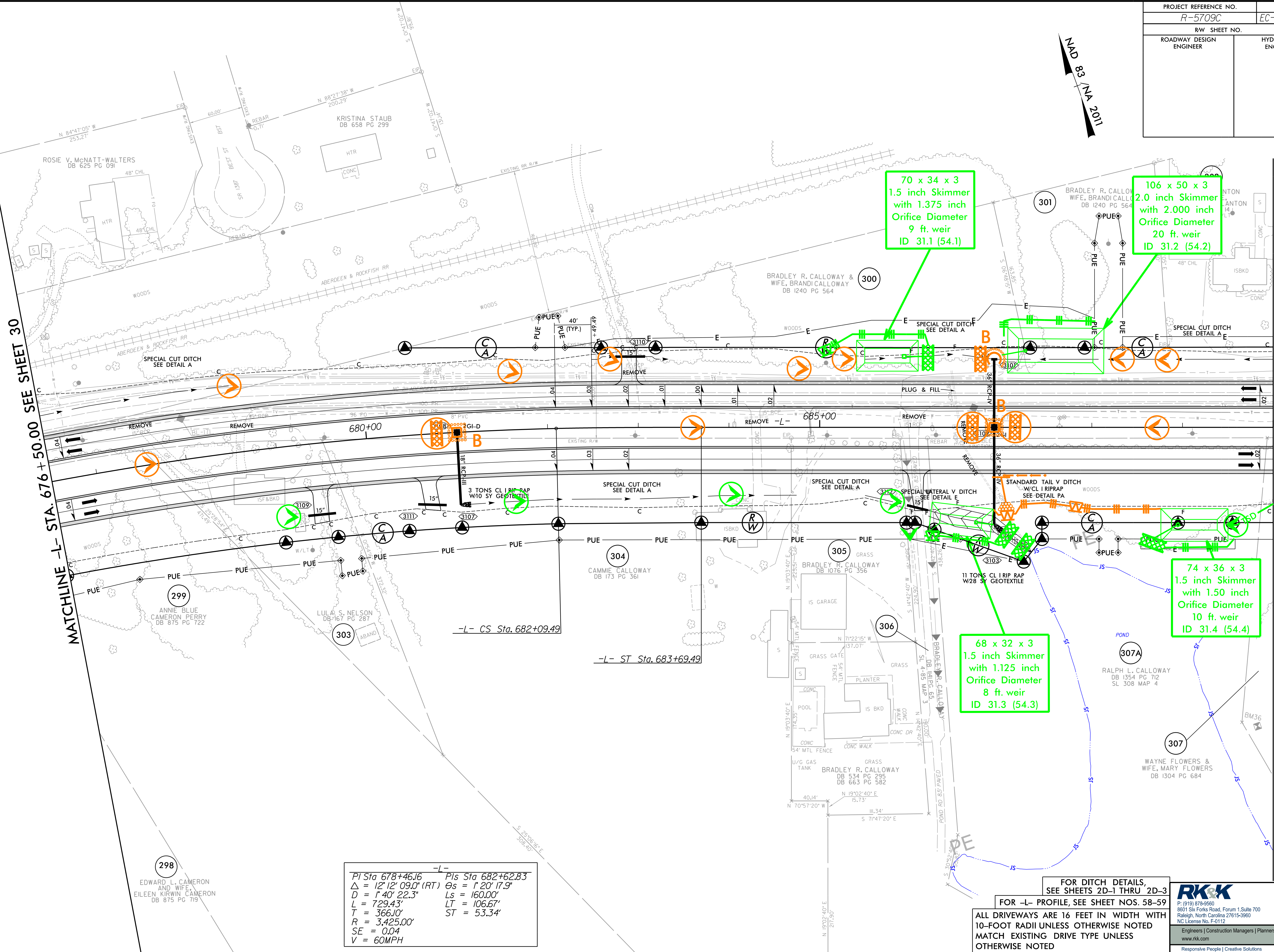
FOR -L- PROFILE, SEE SHEET NO. 59
FOR -Y20A- PROFILE, SEE SHEET NO. 70
SEE SHEET 2B-17 FOR CROSSING
CONSTRUCTION DETAIL

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

8/17/99
8/28/2024
C:\CADD\PSH\EC\R-5709C\R5709C_EC_psh31.dgn
8/28/2024
C:\CADD\PSH\EC\R-5709C\R5709C_EC_psh31.dgn

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

NAD 83 / N/A 2011



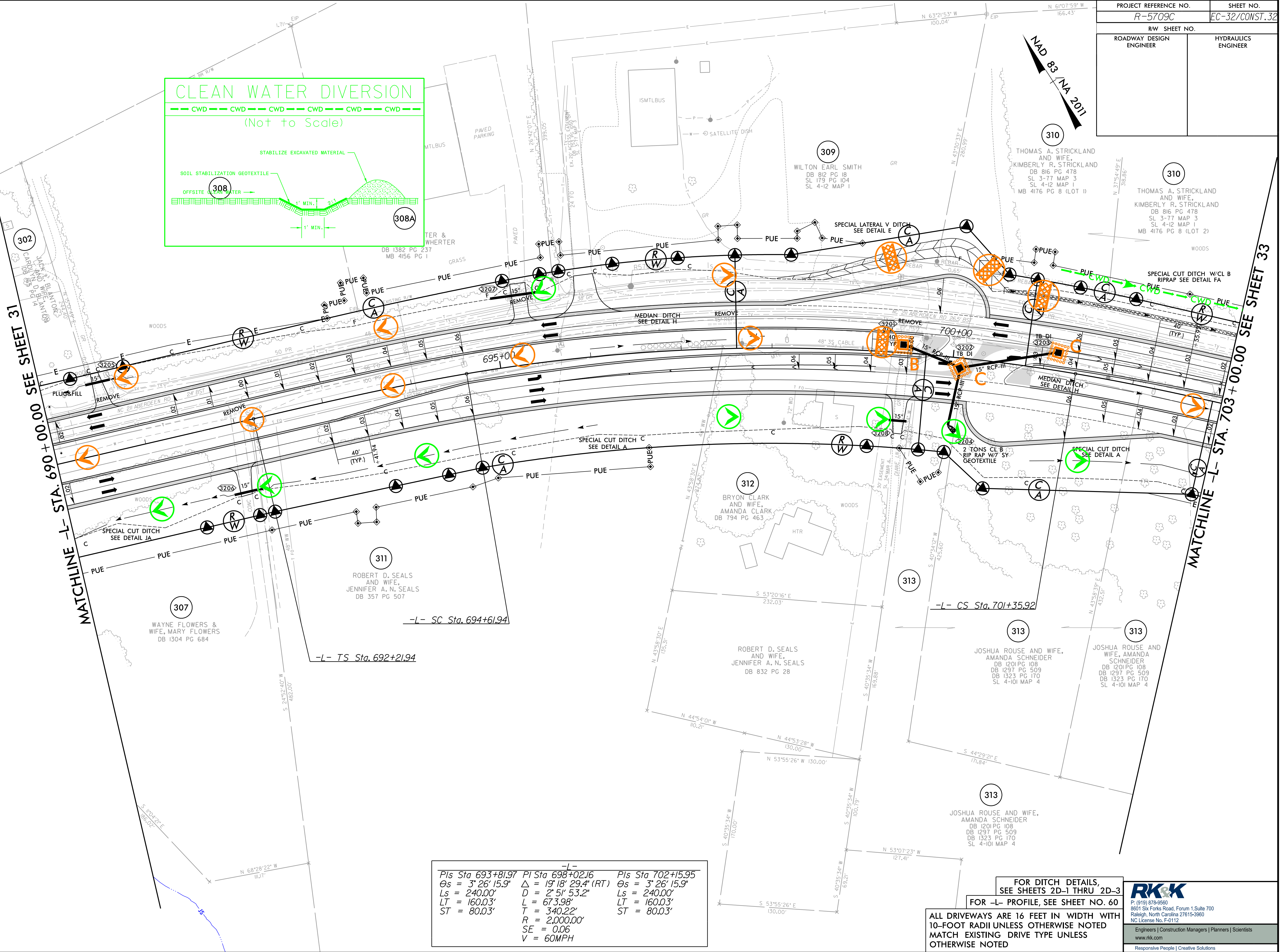
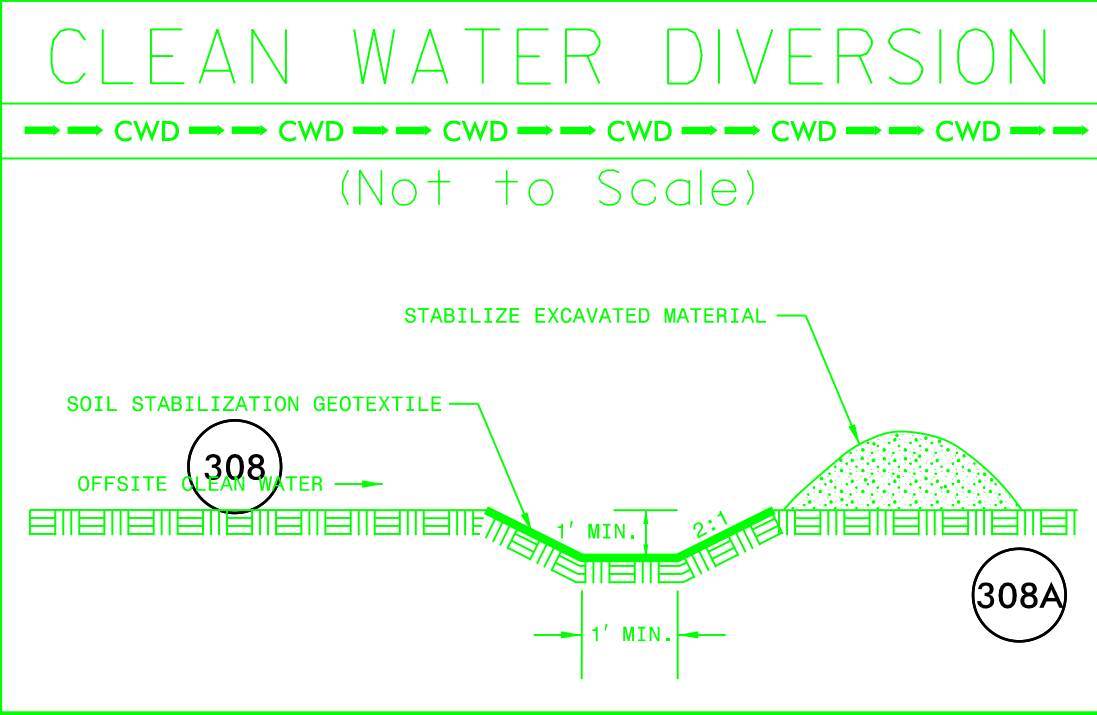
P/L Sta 678+46.16	P/Ls Sta 682+62.83
$\Delta = 12^\circ 12' 09.0''$ (RT)	$\Theta_s = 1^\circ 20' 17.9''$
$D = 1^\circ 40' 22.3''$	$L_s = 160.00'$
$L = 729.43'$	$LT = 106.67'$
$T = 366.10'$	$ST = 53.34'$
$R = 3,425.00'$	
$SE = 0.04$	
$V = 60MPH$	

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8/28/2024
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choffman

PROJECT REFERENCE NO.	SHEET NO.
R-5709C	EC-32/CONST.32
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER



Pls Sta 693+81.97 Pls Sta 698+02.16 Pls Sta 702+15.95
 $\theta_s = 3^\circ 26' 15.9''$ $\Delta = 19^\circ 18' 29.4''$ (RT) $\theta_s = 3^\circ 26' 15.9''$
 $L_s = 240.00'$ $D = 2^\circ 51' 53.2''$ $L_s = 240.00'$
 $LT = 160.03'$ $L = 673.98'$ $LT = 160.03'$
 $ST = 80.03'$ $T = 340.22'$ $ST = 80.03'$
 $R = 2,000.00'$
 $SE = 0.06$
 $V = 60MPH$

FOR DITCH DETAILS,
SEE SHEETS 2D-1 THRU 2D-3
FOR -L- PROFILE, SEE SHEET NO. 60

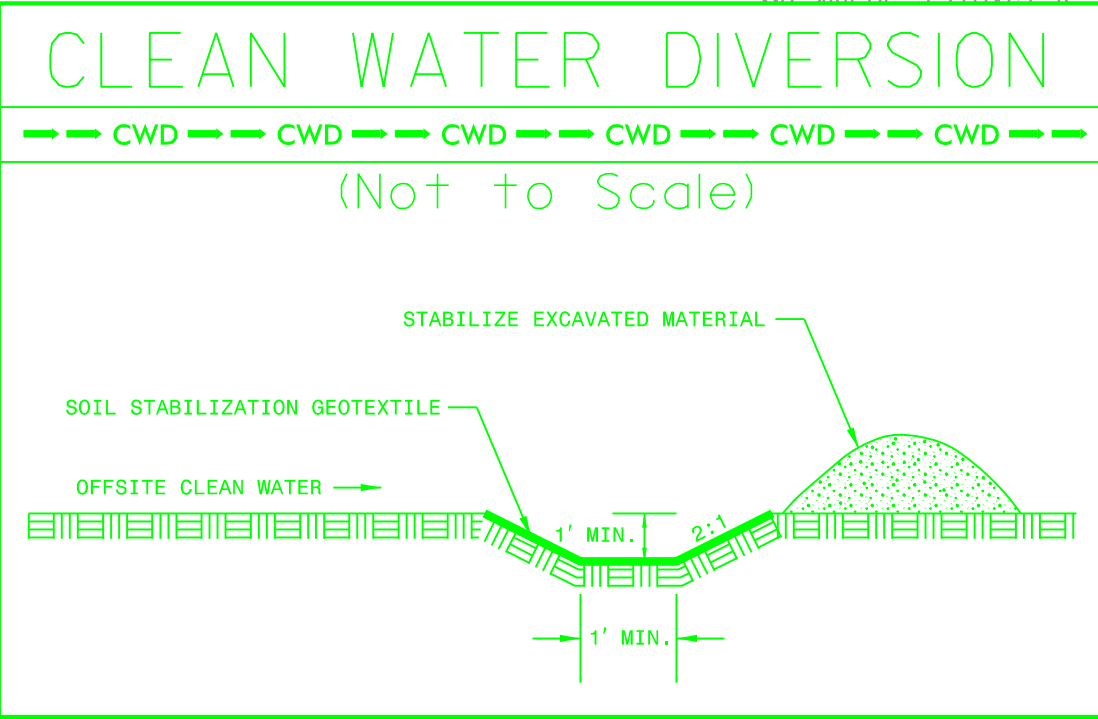
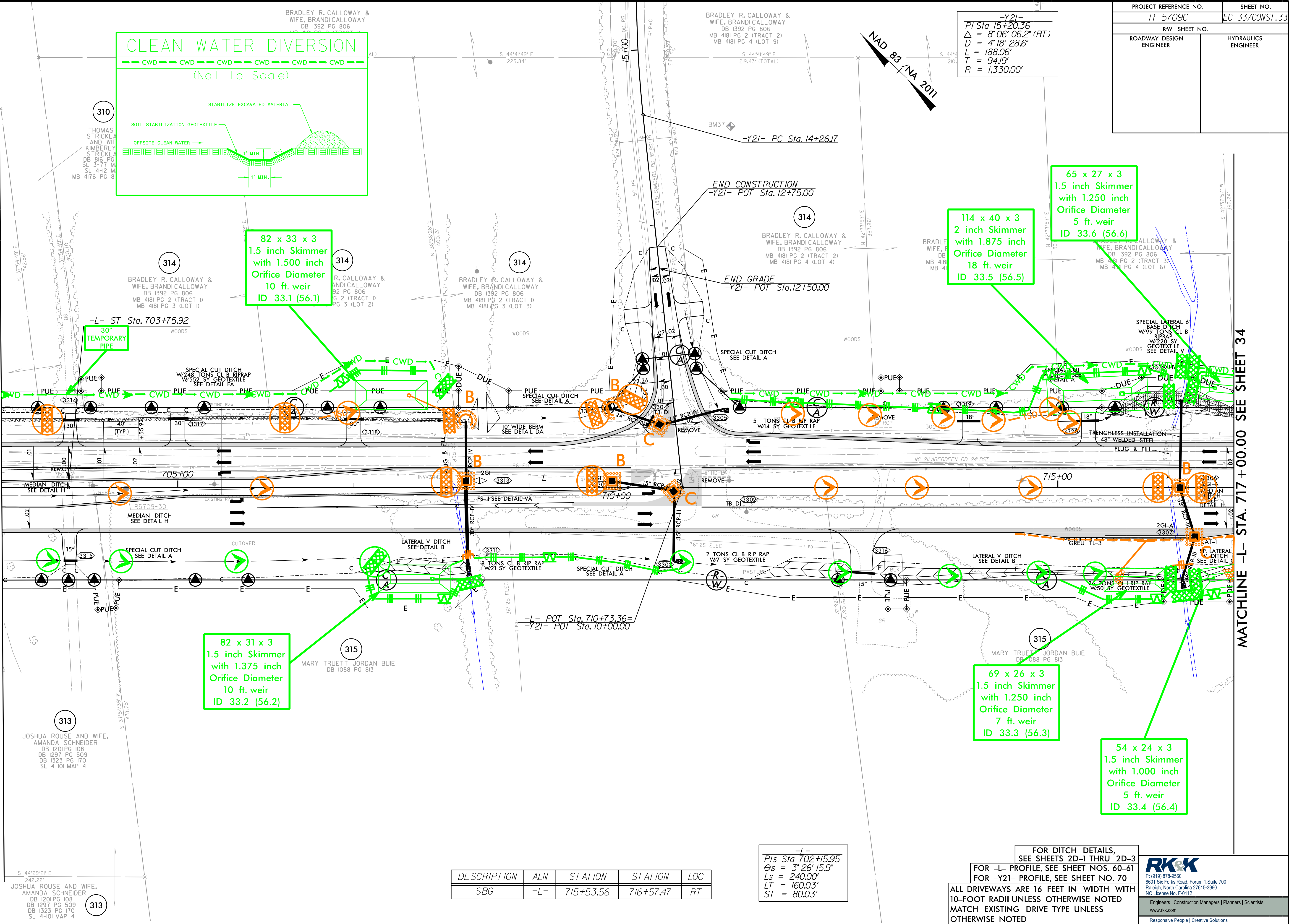
ALL DRIVEWAYS ARE 16 FEET IN WIDTH WITH
10-FOOT RADII UNLESS OTHERWISE NOTED
MATCH EXISTING DRIVE TYPE UNLESS
OTHERWISE NOTED

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8/28/2024
C:\Users\jordan\OneDrive\Documents\Projects\5709C\5709C_EC.pst33.dgn
jordan

MATCHLINE -L- STA. 703 + 00.00 SEE SHEET 32

MATCHLINE -L- STA. 717 + 00.00 SEE SHEET 34



82 x 33 x 3
1.5 inch Skimmer
with 1.500 inch
Orifice Diameter
10 ft. weir
ID 33.1 (56.1)

114 x 40 x 3
2 inch Skimmer
with 1.875 inch
Orifice Diameter
18 ft. weir
ID 33.5 (56.5)

65 x 27 x 3
1.5 inch Skimmer
with 1.250 inch
Orifice Diameter
5 ft. weir
ID 33.6 (56.6)

82 x 31 x 3
1.5 inch Skimmer
with 1.375 inch
Orifice Diameter
10 ft. weir
ID 33.2 (56.2)

69 x 26 x 3
1.5 inch Skimmer
with 1.250 inch
Orifice Diameter
7 ft. weir
ID 33.3 (56.3)

54 x 24 x 3
1.5 inch Skimmer
with 1.000 inch
Orifice Diameter
5 ft. weir
ID 33.4 (56.4)

DESCRIPTION	ALN	STATION	STATION	LOC
SBG	-L-	715+53.56	716+57.47	RT

-L-
Pis Sta 702+15.95
Os = 3' 26' 15.9"
Ls = 240.00'
LT = 160.03'
ST = 80.03'

FOR DITCH DETAILS,
SEE SHEETS 2D-1 THRU 2D-3
FOR -L- PROFILE, SEE SHEET NOS. 60-61
FOR -Y2I- 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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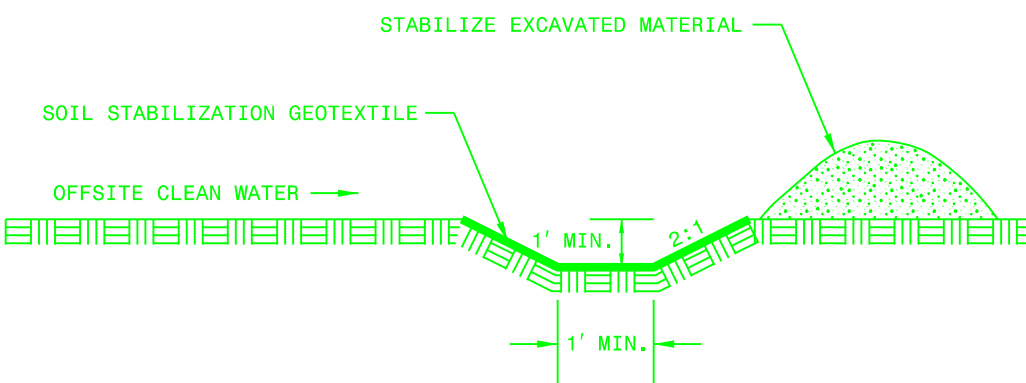
8/17/99

8/28/2024
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challan

PROJECT REFERENCE NO.	SHEET NO.
R-5709C	EC-34/CONST.34
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

MATCHLINE -L- STA. 717+00.00 SEE SHEET 33

MATCHLINE -L- STA. 731+00.00 SEE SHEET 35

65 x 27 x 3
1.5 inch Skimmer
with 1.250 inch
Orifice Diameter
4 ft. weir
ID 33.6 (56.6)

66 x 29 x 3
1.5 inch Skimmer
with 1.250 inch
Orifice Diameter
7 ft. weir
ID 34.1 (57.1)

54 x 24 x 3
1.5 inch Skimmer
with 1.000 inch
Orifice Diameter
5 ft. weir
ID 33.4 (56.4)

-DR7-
PT Sta. 11+28.45
 $\Delta = 23^{\circ}19'06.0''$ (RT)
 $D = 57^{\circ}17'44.8''$
 $L = 40.70'$
 $T = 20.63'$
 $R = 100.00'$

FOR DITCH DETAILS,
SEE SHEETS 2D-1 THRU 2D-3
FOR -L- PROFILE, SEE SHEET NO. 61
FOR -DR7- 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

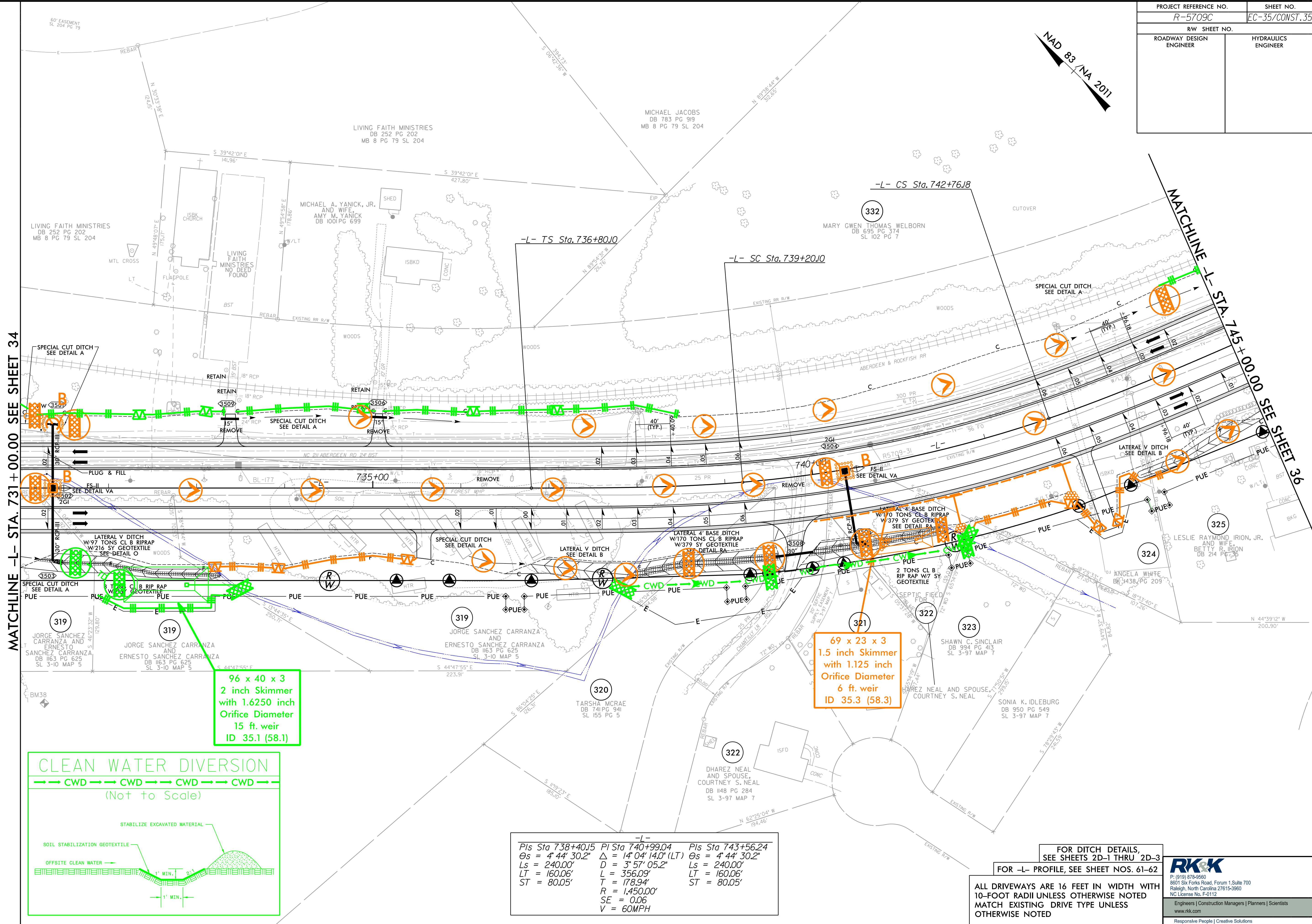
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8/23/2024
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chadman

PROJECT REFERENCE NO.	SHEET NO.
R-5709C	EC-35/CONST.35
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

NAD 83 /NA 2011



Pls Sta 738+40.15	Pls Sta 740+99.04	Pls Sta 743+56.24
$\theta_s = 4^\circ 44' 30.2''$	$\Delta = 14^\circ 04' 14.0''$ (LT)	$\theta_s = 4^\circ 44' 30.2''$
$L_s = 240.00'$	$D = 3^\circ 57' 05.2''$	$L_s = 240.00'$
$LT = 160.06'$	$L = 356.09'$	$LT = 160.06'$
$ST = 80.05'$	$T = 178.94'$	$ST = 80.05'$
	$R = 1,450.00'$	
	$SE = 0.06$	
	$V = 60MPH$	

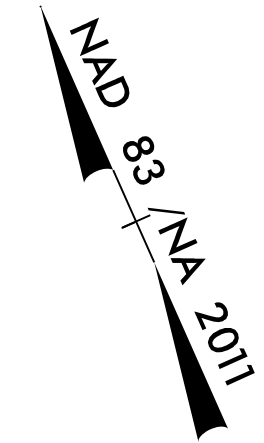
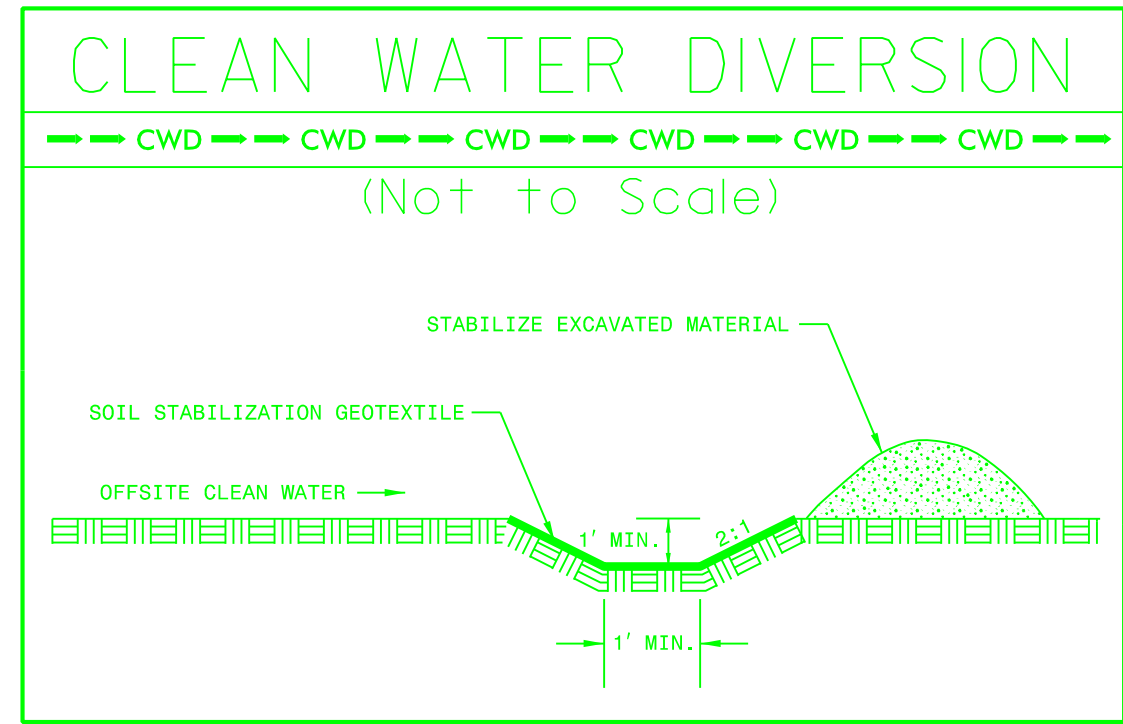
FOR DITCH DETAILS,
SEE SHEETS 2D-1 THRU 2D-3
FOR -L- PROFILE, SEE SHEET NOS. 61-62
ALL DRIVEWAYS ARE 16 FEET IN WIDTH WITH
10-FOOT RADII UNLESS OTHERWISE NOTED
MATCH EXISTING DRIVE TYPE UNLESS
OTHERWISE NOTED

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8/23/2024
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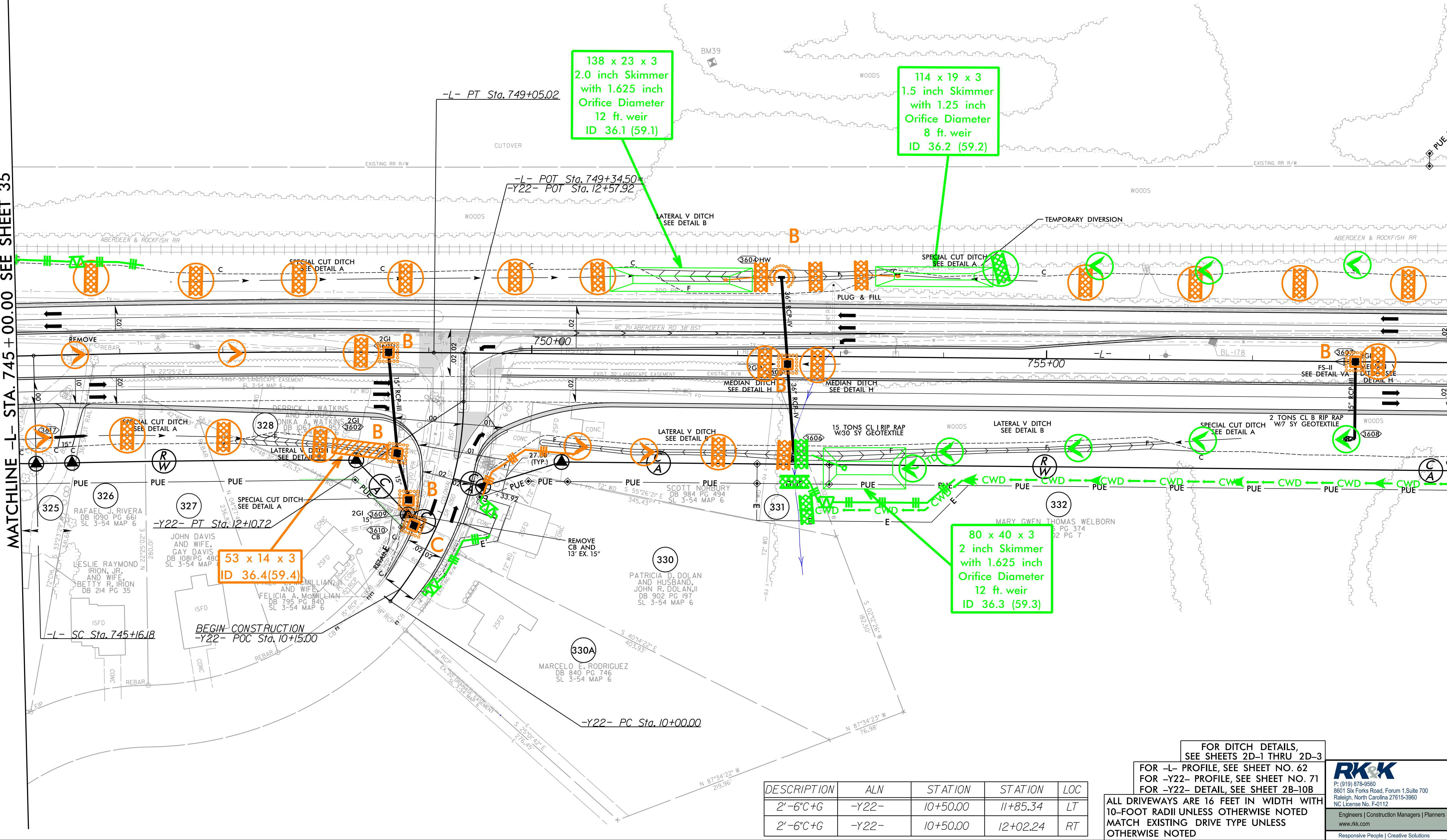
-L-		-Y22-
Pls Sta 743+56.24	PI Sta 747+10.62	PI Sta 11+09.61
Os = 4' 44' 30.2"	Δ = 1' 59' 20.9" (RT)	Δ = 38' 56' 48.0" (LT)
Ls = 240.00'	D = 0' 30' 41.7"	D = 18' 28' 57.0"
LT = 160.06'	L = 388.83'	L = 210.72'
ST = 80.05'	T = 194.44'	T = 109.61'
	R = 11,200.00'	R = 310.00'
	SE = NC	SE = NC
	V = 60MPH	V = <15 MPH (STOP)



PROJECT REFERENCE NO.		SHEET NO.
R-5709C		EC-36/CONST.36
RW SHEET NO.		
ROADWAY DESIGN ENGINEER		HYDRAULICS ENGINEER

MATCHLINE -L- STA. 745+00.00 SEE SHEET 35

MATCHLINE -L- STA. 759+00.00 SEE SHEET 37



DESCRIPTION	ALN	STATION	STATION	LOC
2'-6"C+G	-Y22-	10+50.00	11+85.34	LT
2'-6"C+G	-Y22-	10+50.00	12+02.24	RT

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

FOR -L- PROFILE, SEE SHEET NO. 62

FOR -Y22- PROFILE, SEE SHEET NO. 71

FOR -Y22- DETAIL, SEE SHEET 2B-10B

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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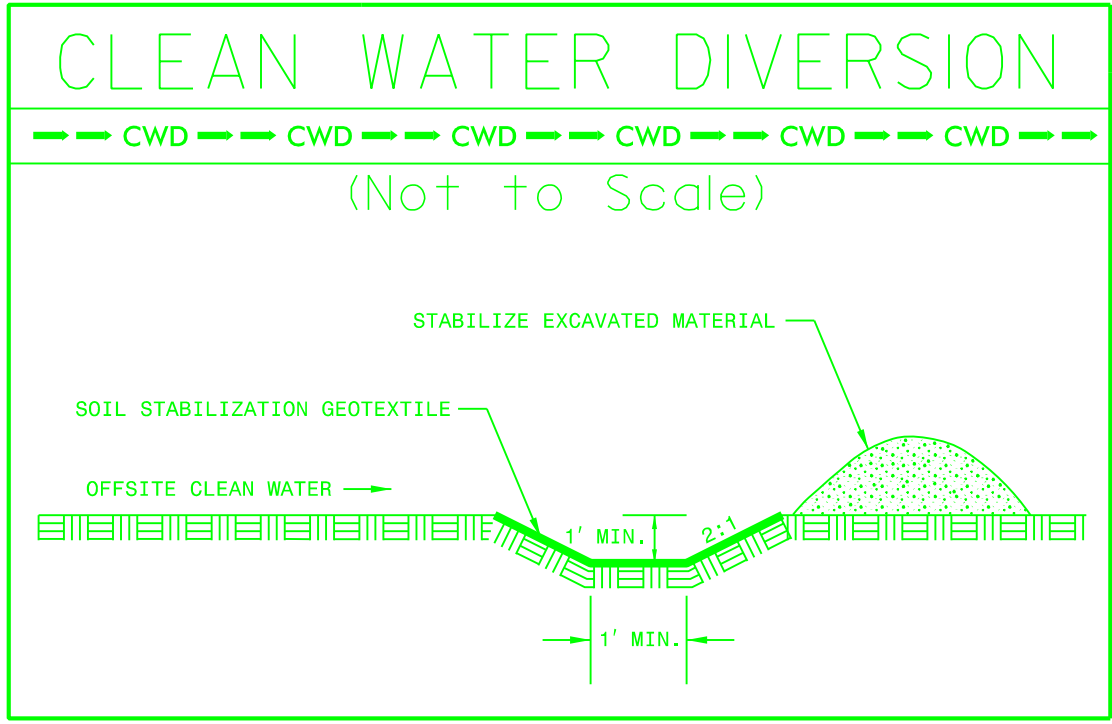
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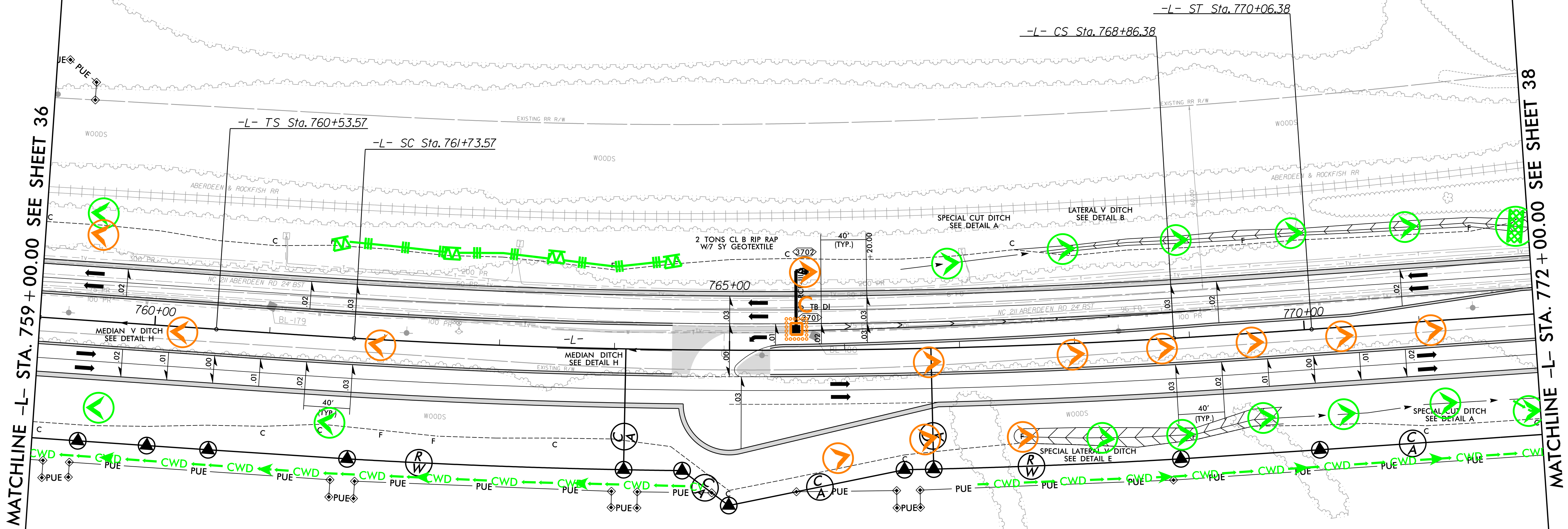
8/17/99
8/28/2024
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chadman

PROJECT REFERENCE NO.	SHEET NO.
R-5709C	EC-37/CONST.37
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER



332

MARY GWEN THOMAS WELBORN
DB 695 PG 374
SL 102 PG 7



PI Sta 761+33.57	PI Sta 765+30.38	PI Sta 769+26.38
$\theta_s = 0^\circ 33' 57.2''$	$\Delta = 6^\circ 43' 21.9'' (LT)$	$\theta_s = 0^\circ 33' 57.2''$
$L_s = 120.00'$	$D = 0^\circ 56' 35.3''$	$L_s = 120.00'$
$LT = 80.00'$	$L = 712.80'$	$LT = 80.00'$
$ST = 40.00'$	$T = 356.81'$	$ST = 40.00'$
	$R = 6,075.00'$	
	$SE = 0.03$	
	$V = 60MPH$	

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

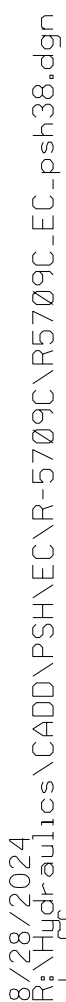
FOR -L- PROFILE, SEE SHEET NOS. 62-63

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MATCH EXISTING DRIVE TYPE UNLESS
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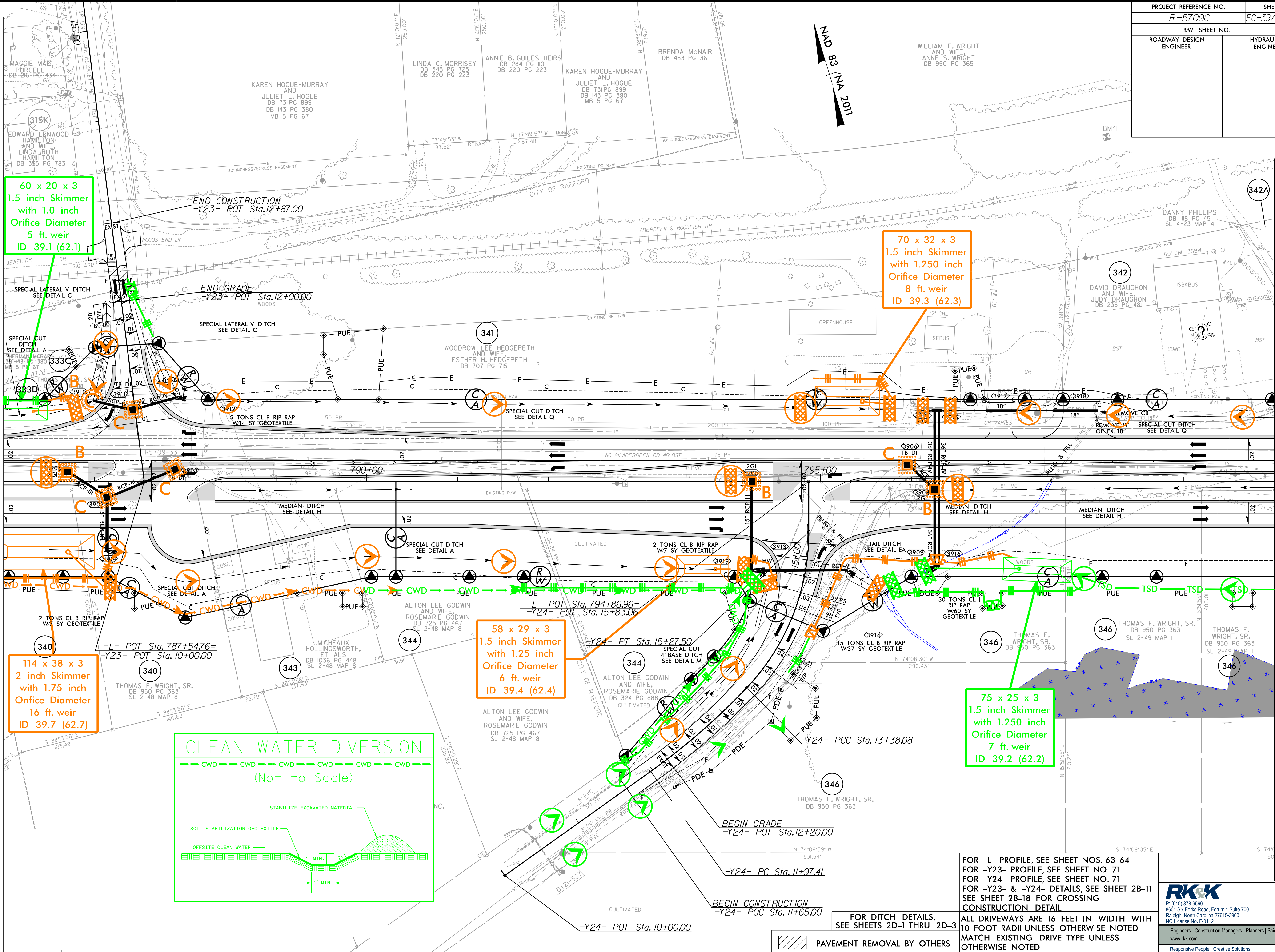
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chaffman

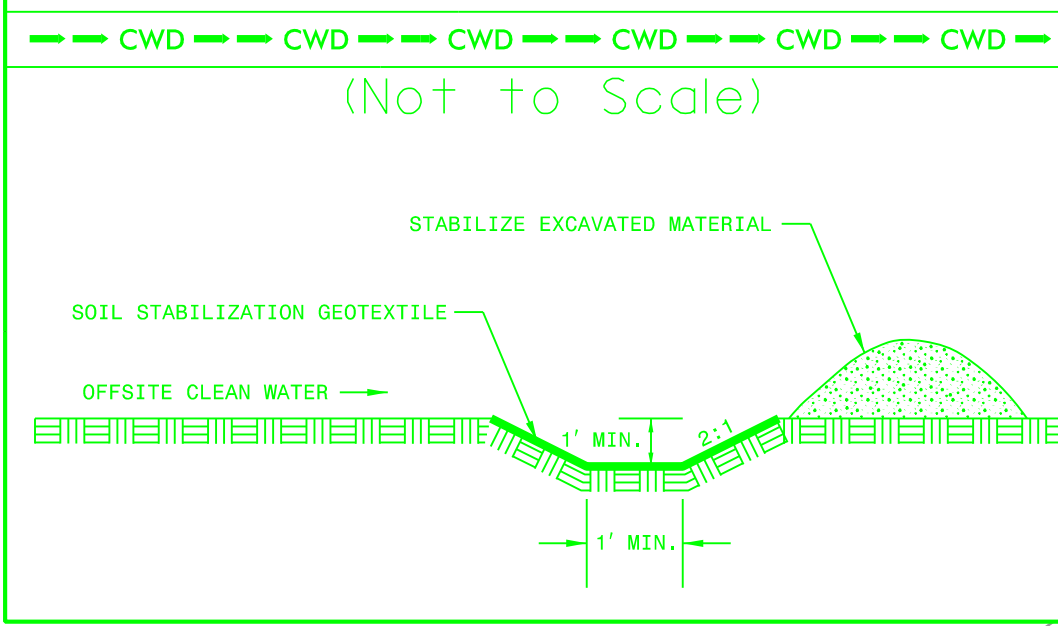
PROJECT REFERENCE NO.	SHEET NO.
R-5709C	EC-39/CONST.39
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

MATCHLINE -L- STA. 786 + 00.00 SEE SHEET 38

MATCHLINE -L- STA. 800 + 00.00 SEE SHEET 40

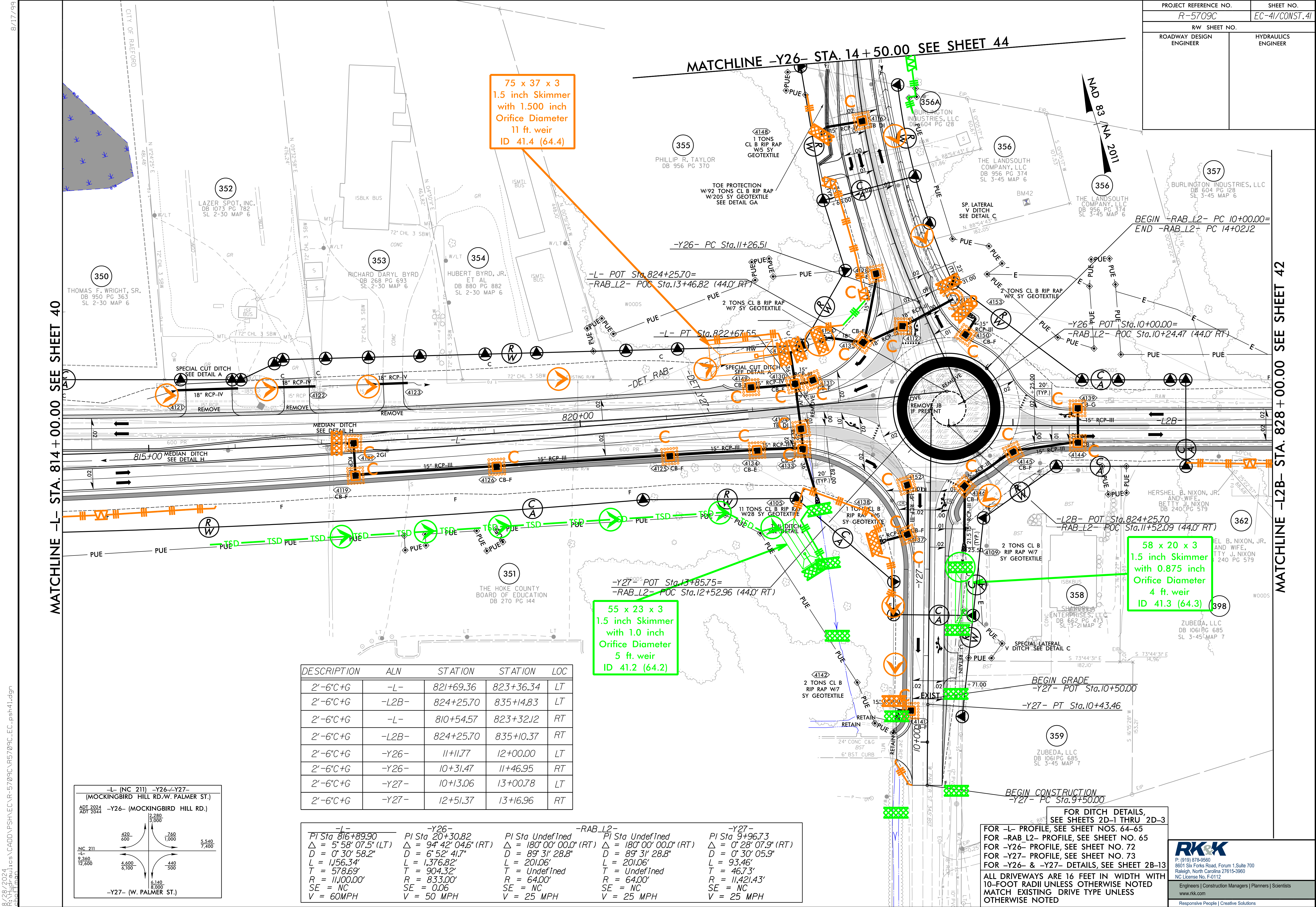


CLEAN WATER DIVERSION



FOR -L- PROFILE, SEE SHEET NOS. 63-64
FOR -Y23- PROFILE, SEE SHEET NO. 71
FOR -Y24- PROFILE, SEE SHEET NO. 71
FOR -Y23- & -Y24- DETAILS, SEE SHEET 2B-11
SEE SHEET 2B-18 FOR CROSSING
CONSTRUCTION DETAIL
ALL DRIVEWAYS ARE 16 FEET IN WIDTH WITH
10-FOOT RADII UNLESS OTHERWISE NOTED
MATCH EXISTING DRIVE TYPE UNLESS
OTHERWISE NOTED

FOR DITCH DETAILS,
SEE SHEETS 2D-1 THRU 2D-3
PAVEMENT REMOVAL BY OTHERS



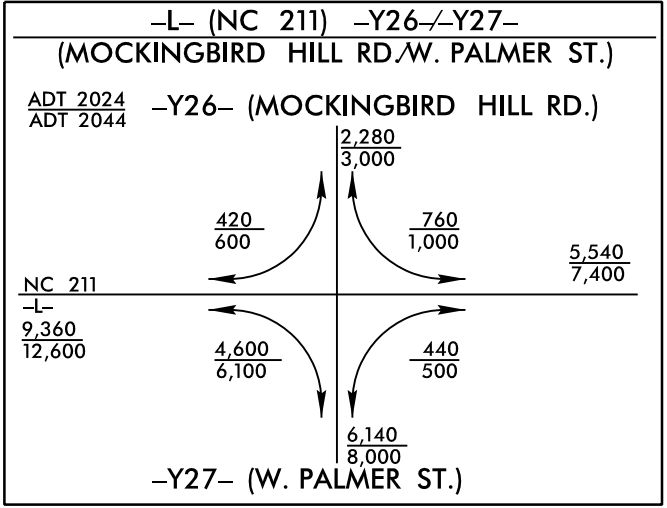
PROJECT REFERENCE NO.	SHEET NO.
R-5709C	EC-41/CONST.41
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

MATCHLINE -L- STA. 814+00.00 SEE SHEET 40

MATCHLINE -L2B- STA. 828+00.00 SEE SHEET 42

DESCRIPTION	ALN	STATION	STATION	LOC
2'-6"C+G	-L-	821+69.36	823+36.34	LT
2'-6"C+G	-L2B-	824+25.70	835+14.83	LT
2'-6"C+G	-L-	810+54.57	823+32.12	RT
2'-6"C+G	-L2B-	824+25.70	835+10.37	RT
2'-6"C+G	-Y26-	11+11.77	12+00.00	LT
2'-6"C+G	-Y26-	10+31.47	11+46.95	RT
2'-6"C+G	-Y27-	10+13.06	13+00.78	LT
2'-6"C+G	-Y27-	12+51.37	13+16.96	RT

ALN	STATION	STATION	LOC
-L-	PI Sta 816+89.90	-Y26-	PI Sta 20+30.82
-L-	$\Delta = 5^{\circ} 58' 07.5"$ (LT)	-Y26-	$\Delta = 94^{\circ} 42' 04.6"$ (RT)
-L-	$D = 0^{\circ} 30' 58.2"$	-Y26-	$D = 6^{\circ} 52' 41.7"$
-L-	$L = 1,156.34'$	-Y26-	$L = 1,376.82'$
-L-	$T = 578.69'$	-Y26-	$T = 904.32'$
-L-	$R = 11,100.00'$	-Y26-	$R = 833.00'$
-L-	$SE = NC$	-Y26-	$SE = 0.06$
-L-	$V = 60MPH$	-Y26-	$V = 50 MPH$



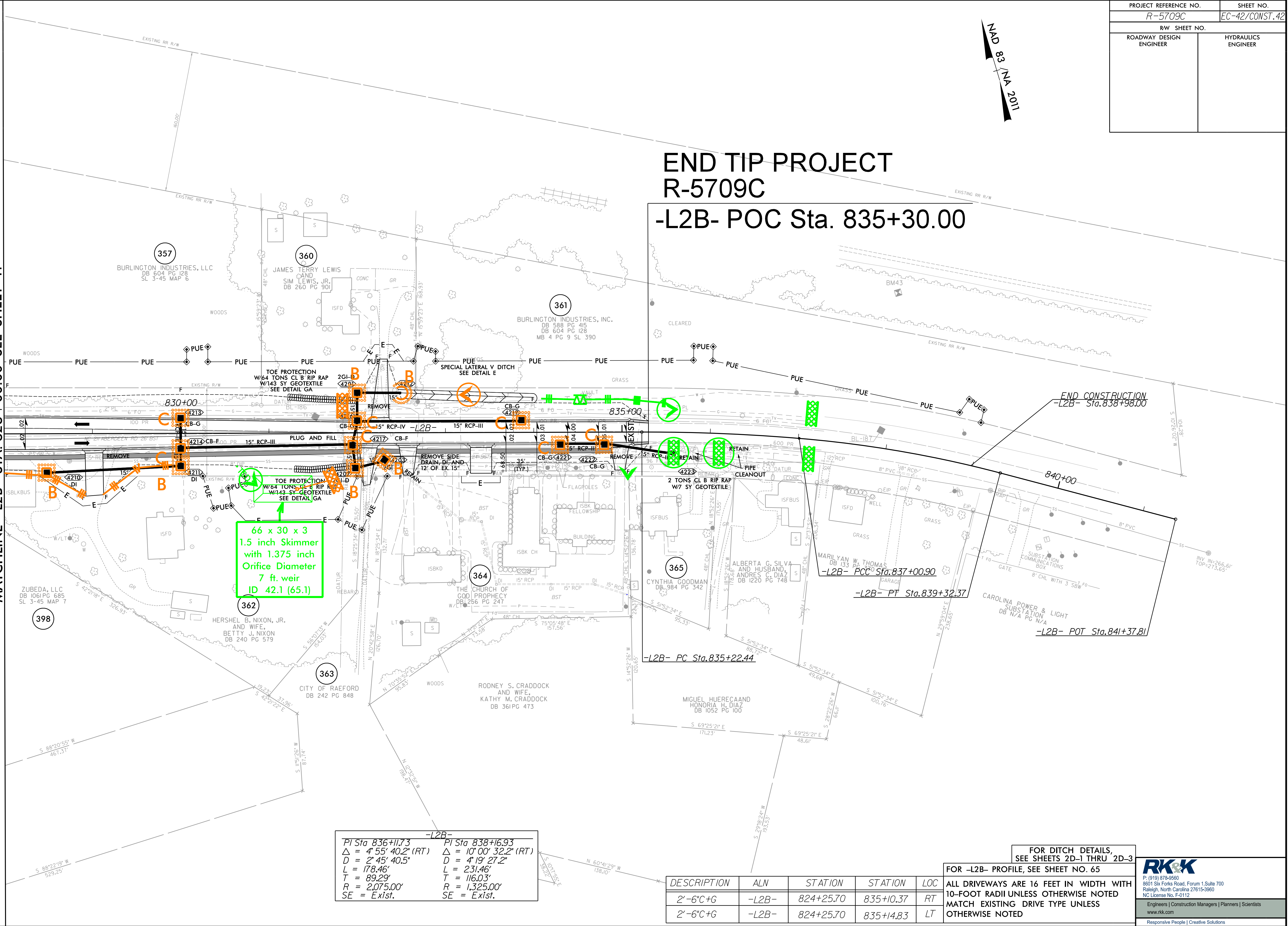
FOR DITCH DETAILS, SEE SHEETS 2D-1 THRU 2D-3
FOR -L- PROFILE, SEE SHEET NOS. 64-65
FOR -RAB L2- PROFILE, SEE SHEET NO. 65
FOR -Y26- PROFILE, SEE SHEET NO. 72
FOR -Y27- PROFILE, SEE SHEET NO. 73
FOR -Y26- & -Y27- DETAILS, SEE SHEET 2B-13
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MATCH EXISTING DRIVE TYPE UNLESS OTHERWISE NOTED

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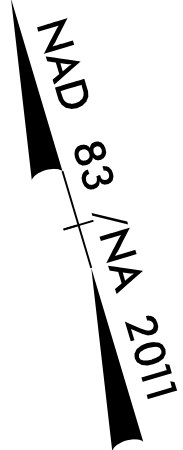
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8/28/2024
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choffman

MATCHLINE -L2B- STA. 828+00.00 SEE SHEET 41



END TIP PROJECT R-5709C -L2B- POC Sta. 835+30.00



PROJECT REFERENCE NO.	SHEET NO.
R-5709C	EC-42/CONST.42
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

-L2B-	
PI Sta 836+11.73	PI Sta 838+16.93
$\Delta = 4^{\circ}55'40.2''$ (RT)	$\Delta = 10^{\circ}00'32.2''$ (RT)
$D = 2^{\circ}45'40.5''$	$D = 4^{\circ}19'27.2''$
$L = 178.46'$	$L = 231.46'$
$T = 89.29'$	$T = 116.03'$
$R = 2,075.00'$	$R = 1,325.00'$
SE = Exlst.	SE = Exlst.

DESCRIPTION	ALN	STATION	STATION	LOC
2'-6"C+G	-L2B-	824+25.70	835+10.37	RT
2'-6"C+G	-L2B-	824+25.70	835+14.83	LT

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

FOR -L2B- PROFILE, SEE SHEET NO. 65

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

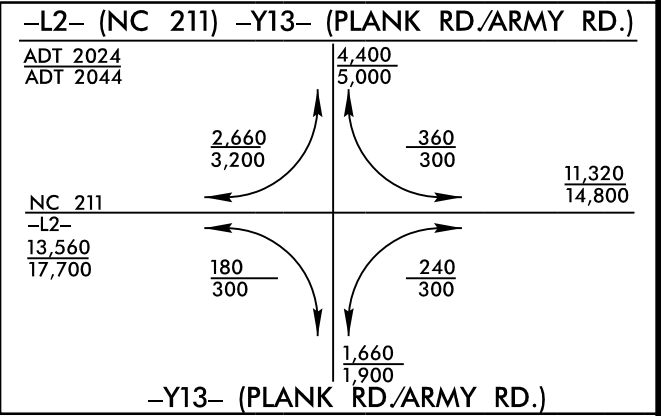
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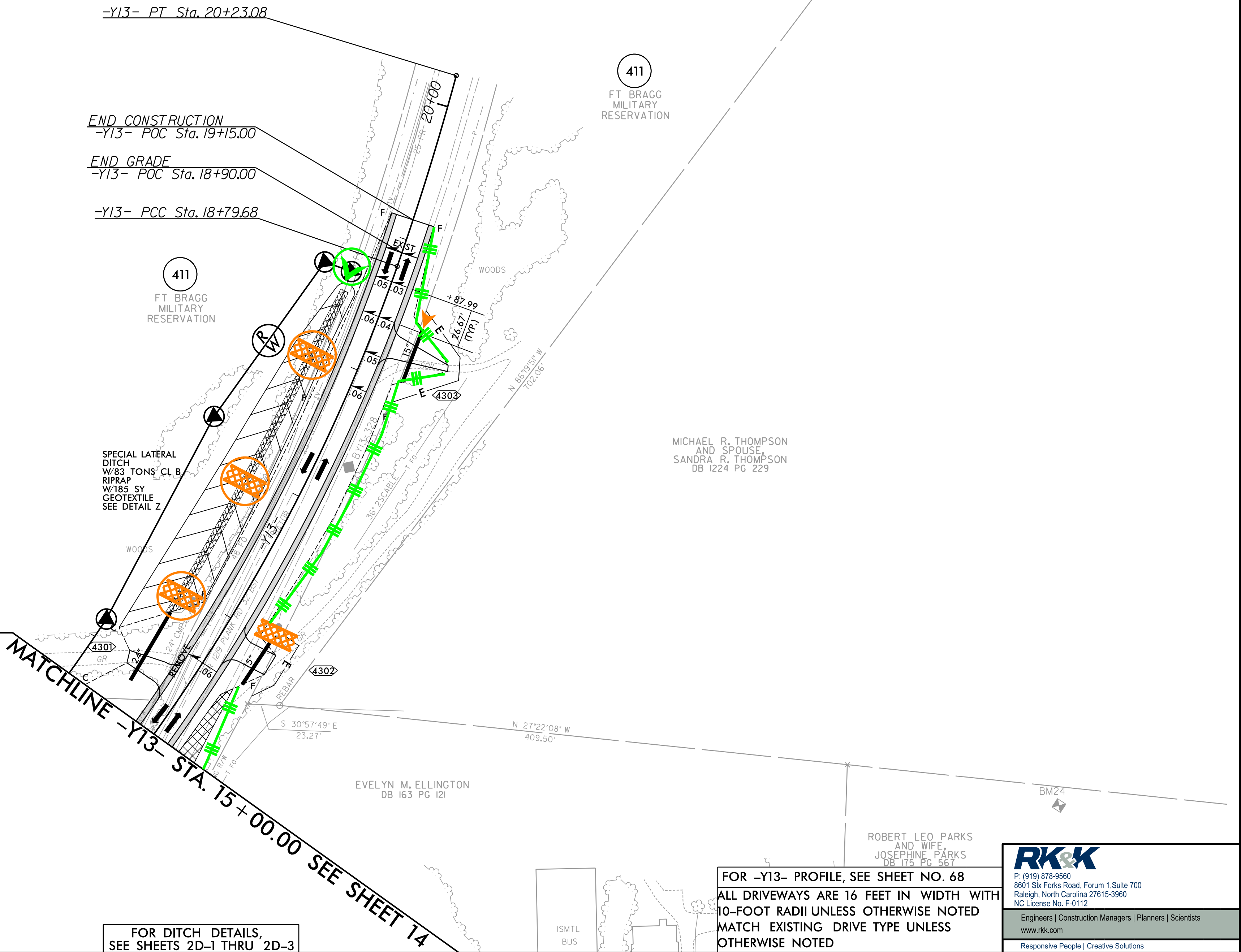
8/17/99

8/23/2024
C:\Users\chadman\OneDrive\Documents\Projects\Roadway\EC-R-5709C\EC-R-5709C-EC-psht43.dgn
chadman

PROJECT REFERENCE NO.		SHEET NO.
R-5709C		EC-43/CONST.43
R/W SHEET NO.		
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER	



-Y13-	
PI Sta 15+98.84	PI Sta 19+51.41
$\Delta = 24^{\circ} 34' 53.4''$ (LT)	$\Delta = 4^{\circ} 12' 48.2''$ (LT)
$D = 4^{\circ} 18' 28.6''$	$D = 2^{\circ} 56' 17.7''$
$L = 570.61'$	$L = 143.40'$
$T = 289.76'$	$T = 71.73'$
$R = 1,330.00'$	$R = 1,950.00'$
$SE = 0.06$	
$V = 60$ MPH	



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

FOR -Y13- PROFILE, SEE SHEET NO. 68
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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FOR DITCH DETAILS, SEE SHEETS 2D-1 THRU 2D-3	
	PAVEMENT REMOVAL BY OTHERS
SEE SHEET 2B-19 FOR CROSSING CONSTRUCTION DETAIL	
FOR -Y26- PROFILE, SEE SHEET NO. 72 FOR -Y26A- PROFILE, SEE SHEET NO. 73 FOR -SR1- PROFILE, SEE SHEET NO. 73	
ALL DRIVEWAYS ARE 16 FEET IN WIDTH WITH 10-FOOT RADII UNLESS OTHERWISE NOTED MATCH EXISTING DRIVE TYPE UNLESS OTHERWISE NOTED	

