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PROJECT REFERENCE NO.	SHEET NO.
U-5748	7
R/W SHEET NO.	

ROADWAY DESIGN ENGINEER: NORTH CAROLINA PROFESSIONAL SEAL 18470 ENGINEER EDWARD GLENN EDENS, JR. — 6/7/2023

HYDRAULICS ENGINEER: NORTH CAROLINA PROFESSIONAL SEAL 037631 ENGINEER RENE D. BUSCEMI — 6/9/2023

Prepared in the Office of: AECOM — NC FIRM LICENSE Nos F-0342, 5438 Wade Park Blvd., Suite 200, Raleigh, NC 27607 (919)946-1100

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

-DRIVE1-
PI Sta 11+43.79
Δ = 33° 51' 28.6" (LT)
D = 23° 52' 23.7"
L = 141.82'
T = 73.05'
R = 240.00'
e = 0.04 FT/FT

-DRIVE3-
PI Sta 11+04.98
Δ = 11° 20' 55.3" (LT)
D = 15° 54' 55.8"
L = 71.31'
T = 35.77'
R = 360.00'

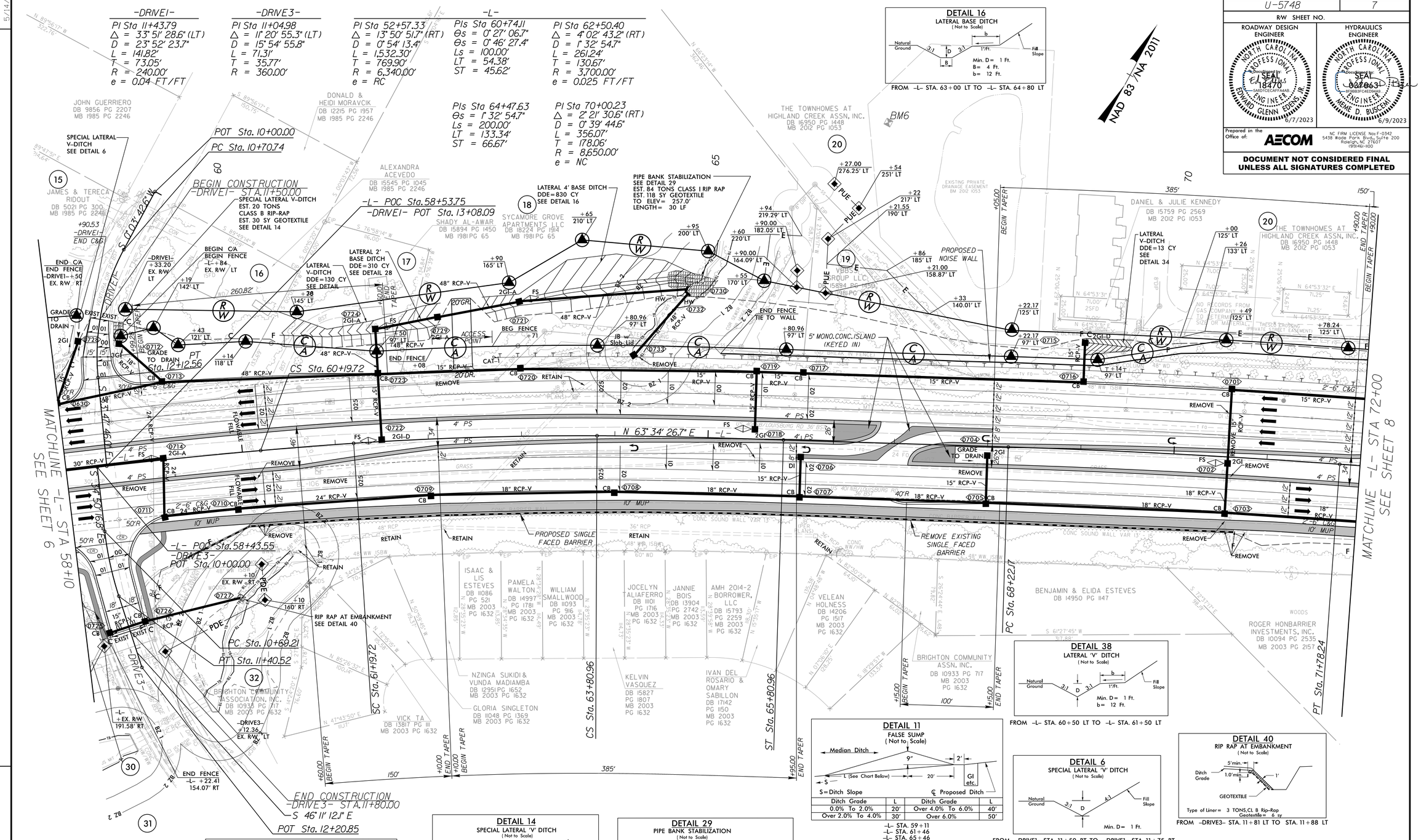
-L-
PI Sta 52+57.33
Δ = 13° 50' 51.7" (RT)
D = 0° 54' 13.4"
L = 1,532.30'
T = 769.90'
R = 6,340.00'
e = RC

PIs Sta 60+74.11
Θs = 0° 27' 06.7"
Θs = 0° 46' 27.4"
Ls = 100.00'
LT = 54.38'
ST = 45.62'

PI Sta 62+50.40
Δ = 4° 02' 43.2" (RT)
D = 1° 32' 54.7"
L = 261.24'
T = 130.67'
R = 3,700.00'
e = 0.025 FT/FT

PIs Sta 64+47.63
Θs = 1° 32' 54.7"
Ls = 200.00'
LT = 133.34'
ST = 66.67'

PI Sta 70+00.23
Δ = 2° 21' 30.6" (RT)
D = 0° 39' 44.6"
L = 356.07'
T = 178.06'
R = 8,650.00'
e = NC



DETAIL 16
LATERAL BASE DITCH (Not to Scale)
Natural Ground, 3:1, D, 3:1, b, 1'/Ft., Fill Slope, B
Min. D= 1 Ft.
B= 4 Ft.
b= 12 Ft.
FROM -L- STA. 63+00 LT TO -L- STA. 64+80 LT

DETAIL 38
LATERAL 'V' DITCH (Not to Scale)
Natural Ground, 3:1, D, 3:1, b, 1'/Ft., Fill Slope
Min. D= 1 Ft.
b= 12 Ft.
FROM -L- STA. 60+50 LT TO -L- STA. 61+50 LT

DETAIL 11
FALSE SUMP (Not to Scale)
Median Ditch, 9", 2', L (See Chart Below), 20', GI etc., S
S=Ditch Slope ℄ Proposed Ditch

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

-L- STA. 59+11
-L- STA. 61+46
-L- STA. 65+46
-L- STA. 70+54

DETAIL 40
RIP RAP AT EMBANKMENT (Not to Scale)
5' min., 1.0' min., Ditch Grade, 1', GEOTEXTILE
Type of Liner= 3 TONS,CL B Rip-Rap
Geotextile= 6 sy
FROM -DRIVE3- STA. 11+81 LT TO STA. 11+88 LT

DETAIL 6
SPECIAL LATERAL 'V' DITCH (Not to Scale)
Natural Ground, 3:1, D, 4:1, Fill Slope
Min. D= 1 Ft.
FROM -DRIVE1- STA. 11+50 RT TO -DRIVE1- STA. 11+75 RT

DETAIL 21
FALSE SUMP (Not to Scale)
Outside Ditch Traffic Flow, 0.5' Min. 1.0' Max., 20:1, 10:1, 2', GI etc., S
S=Ditch Slope ℄ Proposed Ditch
-L- STA. 61+54 LT
-L- STA. 63+05 LT

DETAIL 14
SPECIAL LATERAL 'V' DITCH (Not to Scale)
Natural Ground, 3:1, D, d, Geotextile, 4:1, Fill Slope
Type of Liner= Class B Rip-Rap
Min. D= 1.5 Ft.
Max. d= 1.5 Ft.
FROM -DRIVE1- STA. 11+50 LT TO -DRIVE1- STA. 11+75 LT

DETAIL 29
PIPE BANK STABILIZATION (Not to Scale)
3' min., 1.0' min., 1.5', d, Natural Ground, GEOTEXTILE, STREAM BED ELEVATION, 1.25', CHANNEL BED (Variable)
d= Varies (See label)
Type of Liner= Class I Rip Rap
-L STA. 64+75 LT

DETAIL 28
LATERAL BASE DITCH (Not to Scale)
Natural Ground, 3:1, D, 3:1, b, 1'/Ft., B, Fill Slope
Min. D= 1 Ft.
B= 2 Ft.
b= 12 Ft.
FROM -L- STA. 61+50 LT TO -L- STA. 63+00 LT

DETAIL 34
LATERAL 'V' DITCH (Not to Scale)
Natural Ground, 4:1, D, 6:1, b, 0.020 ft/ft, Prop. Noise Wall
Min. D= 1 Ft.
b= 10 Ft.
FROM -L- STA. 69+00 LT TO -L- STA. 69+50 LT

FOR NOISE WALL DETAILS, SEE SHEET 2N-3
FOR -L- PROFILE, SEE SHEET NO. 20
FOR -DRIVE1- PROFILE, SEE SHEET NO. 25
FOR -DRIVE3- PROFILE, SEE SHEET NO. 26

REVISIONS

5/14/99

6/7/2023
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elizabethbrinter