PROJECT REFERENCE NO.	SHEET NO.
U-5935	UC-5
DESIGNED BY:	
DRAWN BY:	
CHECKED BY:	
APPROVED BY:	
REVISED:	
NORTH CAROLINA DEPARTMENT OF TRANSPORTATION	
UTILITIES ENGINEERING SEC. PHONE:(919)707-6690 FAX:(919)250-4151	UTILITY CONSTRUCTION PLANS ONLY

NORTH CAROLINA PROFESSIONAL SEAL 034367 ENGINEER TODD H. BUCKNER

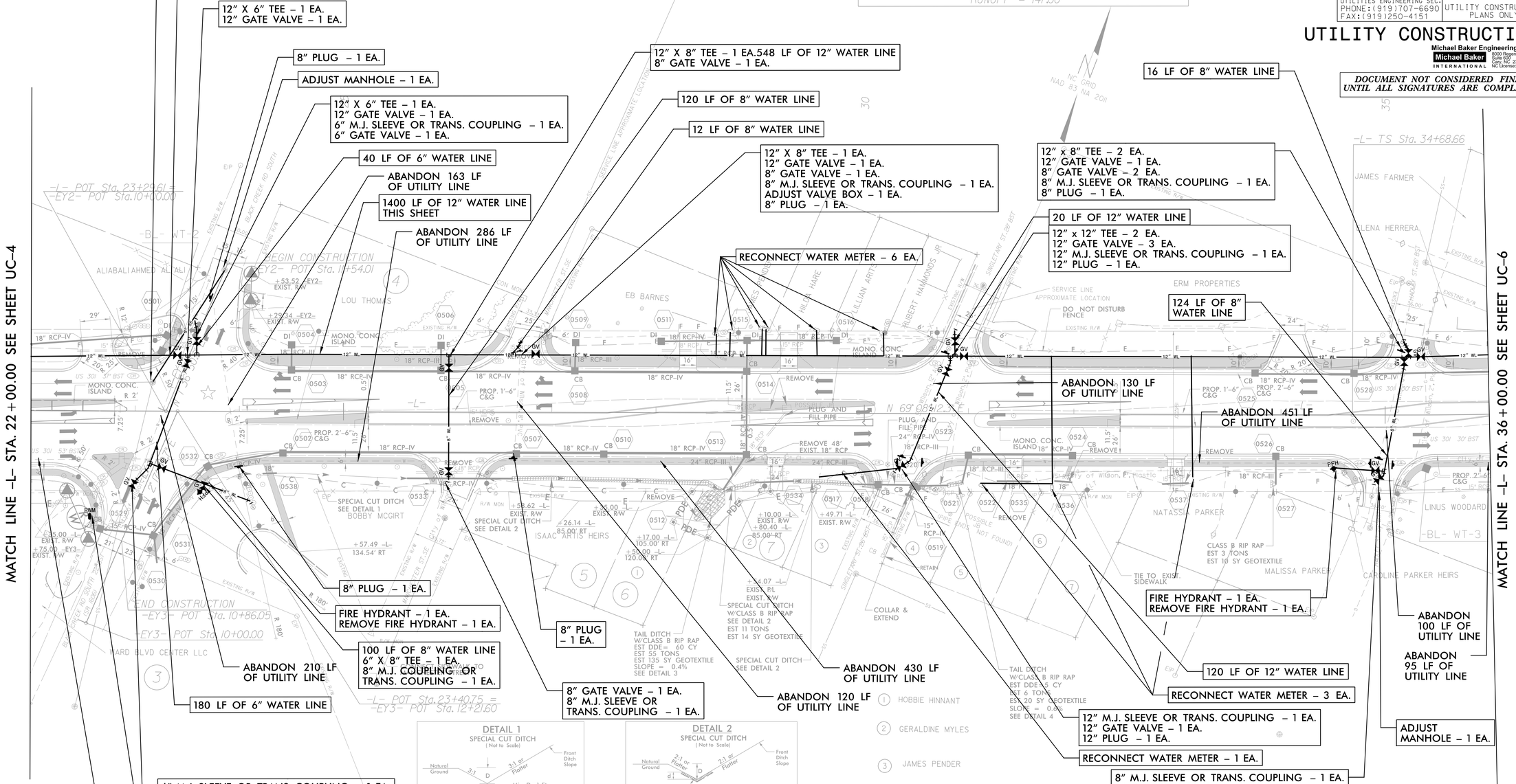
DocuSigned by: 108701E67F5435... 8/4/2017

UTILITY CONSTRUCTION

Michael Baker Engineering, Inc.
Michael Baker INTERNATIONAL
8000 Regency Pkwy Suite 600 Cary, NC 27518 NC License: F-1084

DOCUMENT NOT CONSIDERED FINAL UNTIL ALL SIGNATURES ARE COMPLETED

-L-		
PIs Sta 35+66.66	PI Sta 44+91.24	PIs Sta 53+43.81
Θs = 1° 45' 16.9"	△ = 40° 05' 11.7" (LT)	Θs = 1° 45' 16.9"
Ls = 147.00'	D = 2° 23' 14.4"	Ls = 147.00'
LT = 98.00'	L = 1,679.14'	LT = 98.00'
ST = 49.00'	T = 875.58'	ST = 49.00'
	R = 2,400.00'	
	Ds = 50 MPH	
	SE = 0.04	
	RUNOFF = 147.00'	



DETAIL 1
SPECIAL CUT DITCH
(Not to Scale)
Natural Ground, 3:1, D, 3:1 or Flatter, Front Ditch Slope
Min. D=1 Ft.
FROM -L- STA. 24+00 TO STA. 25+62 RT.

DETAIL 2
SPECIAL CUT DITCH
(Not to Scale)
Natural Ground, 2:1 or Flatter, D, d, 2:1 or Flatter, Front Ditch Slope, Geotextile
Min. D=2 Ft. Max. d=1 Ft.
Type of Liner= Class B Rip-Rap
FROM -L- STA. 26+62 TO STA. 29+90 RT.

DETAIL 3
STANDARD BASE DITCH
(Not to Scale)
Natural Ground, 2:1, D, d, 2:1, Natural Ground, Geotextile, B
Min. D=4.5 Ft. Max. d=1.0 Ft. B=3.0 Ft.
*When B is < 6.0'
Type of Liner= Class B Rip-Rap
FROM STA. 28+37 TO STA. 28+66 -L- RT

DETAIL 4
STANDARD 'V' DITCH
(Not to Scale)
Natural Ground, 2:1, D, d, 2:1, Natural Ground, Geotextile
Min. D=1 Ft. Max. d=1 Ft.
Type of Liner= B Rip-Rap
FROM STA. 30+80 TO STA. 30+95 -L- RT

THE ESTIMATED QUANTITY OF DUCTILE IRON WATER PIPE FITTINGS ON THIS PLAN SHEET IS 1966 POUNDS. THE ACTUAL QUANTITY AND TYPE OF FITTINGS WILL VARY BASED ON THE ACTUAL FIELD CONDITIONS.

THE ESTIMATED QUANTITY OF RESTRAINED JOINT WATER PIPE FOR THIS PLAN SHEET IS:
6" – 166 LF
8" – 272 LF
12" – 1068 LF
THE ACTUAL QUANTITY WILL VARY BASED ON FIELD CONDITIONS. SEE SHEET UC-3E FOR LENGTHS FOR FITTINGS.

5/14/99

8/4/2017 1:03:29 PM
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USER: toddbuckner