

5/28/99

SEW-B
8" & 12" GRAVITY SEWER PROFILE
ALONG -L- & -Y8-,
SHEETS UC-07 & UC-08

CH ENGINEERING

DIVISION OF PENNONI

5430 WADE PARK BLVD., SUITE 106,
RALEIGH, NC 27607 PHONE: 919.929.1173
FAX: 919.493.6548 NC LICENSE #P-0189

PROJECT REFERENCE NO.

U-6018

SHEET NO.

UC-14

DESIGNED BY: EMT

DRAWN BY: EMT

CHECKED BY: BAW

APPROVED BY:

REVISED:

NORTH CAROLINA
DEPARTMENT OF
TRANSPORTATION

UTILITIES ENGINEERING SEC.
PHONE: (919) 707-6690
FAX: (919) 250-4151

1/30/2023

1/30/2023

SEAL

028912

PROF. M. TWEED

1/30/2023

UTILITY CONSTRUCTION

DOCUMENT NOT CONSIDERED FINAL
UNLESS ALL SIGNATURES COMPLETED

This profile shows the vertical alignment of an 8-inch and 12-inch gravity sewer system. The vertical axis represents elevation in feet, ranging from 810 to 850. The horizontal axis represents stationing from 30+00 to 40+50. The profile includes several manholes: STA 30+00 (4' dia, top 841.40, inv out 830.90), STA 33+30 (4' dia, top 836.25, inv in 825.95, inv out 825.75), STA 36+30 (4' dia, top 822.97, inv in 812.67, inv out 812.47), STA 37+60.43 (4' dia, top 816.46, inv in 811.96, inv out 811.96), and STA 40+88.40 (5' dia, top 823.04, inv in 811.04, inv out 811.04). The sewer consists of three segments: 330' of 8" DIP at 1.56%, 300' of 8" at 4.36%, and 327.97' of 12" at 0.28%. A 30" RCP pipe is shown at the bottom with a bottom elevation of 813.04. The profile also shows existing and proposed grades, driveway pipes, and a reconnect to an existing 6" gravity sewer service from a gas station.

14" FSS
14" FORCEMAIN PROFILE ALONG -Y6-
SHEETS UC-10

16" FSS
16" FORCEMAIN PROFILE ALONG -Y6-
SHEETS UC-10

NOTE:
INSTALL 14" AND 16" FORCEMAINS 6-7 FEET
DEEP TO ACCOMMODATE FUTURE CONSTRUCTION
ON EAST SIDE OF THE ROUNDABOUT.

This profile shows the vertical alignment of a 14-inch forcemain system. The vertical axis represents elevation in feet, ranging from 800 to 840. The horizontal axis represents stationing from 20+00 to 25+50. The profile includes a tie to an existing 14" FSS at STA 20+66 with a 45-degree bend. It shows a new 14" FSS with several 45-degree bends and a 22.5-degree bend. A new 12" water line is shown with an 18" minimum separation from the FSS. The profile also shows existing and proposed grades, cover, and a tie to an existing ARV at STA 25+50.

This profile shows the vertical alignment of a 16-inch forcemain system. The vertical axis represents elevation in feet, ranging from 800 to 840. The horizontal axis represents stationing from 90+00 to 95+00. The profile includes a tie to an existing 16" FSS at STA 90+87 with a 45-degree bend. It shows a new 16" FSS with several 45-degree bends and a 22.5-degree bend. A new 12" water line is shown with an 18" minimum separation from the FSS. The profile also shows existing and proposed grades, cover, and a tie to an existing ARV at STA 95+00.

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5/28/2024

WL - E
8" WATER LINE PROFILE
ALONG -Y9- ,
SHEET UC-10

CH ENGINEERING

DIVISION OF PENNONI

5430 WADE PARK BLVD., SUITE 106,
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PROJECT REFERENCE NO.

U-6018

SHEET NO.

UC-15

DESIGNED BY: EMT

DRAWN BY: EMT

CHECKED BY: BAW

APPROVED BY:

REVISED:

NORTH CAROLINA
DEPARTMENT OF
TRANSPORTATION

SEAL
028912
ERIC M. WHEED
ENGINEER

6/28/2024

NORTH CAROLINA
DEPARTMENT OF
TRANSPORTATION

UTILITIES ENGINEERING SECTION

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UTILITY CONSTRUCTION

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Labels in profile:

- PROP. 8" VALVE
- PROVIDE 3' OF COVER (TYP)
- 8" PLUG WITH BLOCKING
- EX. GRADE (TYP)
- PROP. GRADE (TYP)
- NEW 30" RCP
- NEW 15" RCP
- NEW 18" RCP
- NEW 36" RCP
- 12"X8" TEE
- PROP. FH TEE

WL - E
8" WATER LINE PROFILE
ALONG -Y9- ,
SHEETS UC-08 & UC-10

Labels in profile:

- PROP. 12"X8" TEE
- PROP. 8" GV
- PROP. 45° BEND
- PROVIDE 3' OF COVER (TYP)
- PROP. 45° BEND
- 8" PLUG WITH BLOCKING
- PROP. FH TEE
- PROP. 8" WATER LINE

WL - D
12" WATER LINE PROFILE ALONG -Y6-
SHEET UC-10

Labels in profile:

- EX. GRADE (TYP)
- PROP. GRADE (TYP)
- PROP. 45° BEND
- NEW 15" RCP
- PROP. 45° BEND
- PROP. 45° BEND
- STA 10+80 WL-D
PROP. 45° BEND
TIE TO EXISTING
- PROVIDE 12" SEPARATION
- VALVE
- 12"X8" TEE (WL-E)
- PROVIDE 3' OF COVER (TYP)
- PROP. 12" WATER LINE (WL-D)
- NEW 15" RCP
- PROVIDE 12" SEPARATION
- PROP. 45° BEND & TIE TO EX. PIPE, END WL-D
- PROP. 45° BEND
- PROP. FH TEE
- PROP. 12" TEE TO WL-H

5/20/2024
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5/28/99

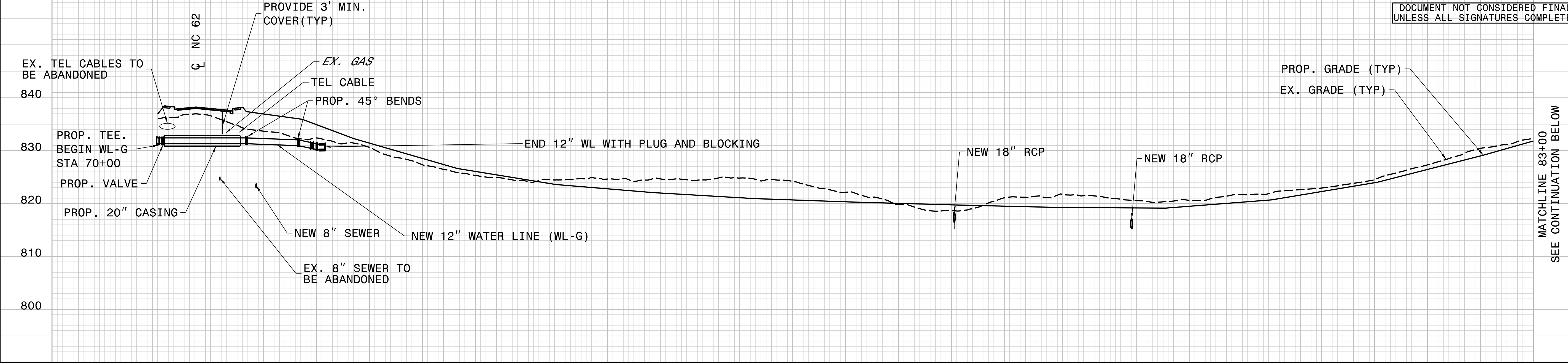
WL-G
12" WATER LINE PROFILE
ALONG -Y3- ,
SHEET UC-05

CH ENGINEERING
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FAX: 919.493.6548 NC LICENSE #P-0189

PROJECT REFERENCE NO.		SHEET NO.	
U-6018		UC-16	
DESIGNED BY:	EMT	NORTH CAROLINA PROFESSIONAL SEAL 028912 EVT/ M. TWEED 6/28/2024 6/28/2024	
DRAWN BY:	EMT		
CHECKED BY:	BAW		
APPROVED BY:			
REVISED:			
NORTH CAROLINA DEPARTMENT OF TRANSPORTATION		UTILITY CONSTRUCTION PLANS ONLY	
UTILITIES ENGINEERING SEC. PHONE: (919) 707-6690 FAX: (919) 250-4151			

UTILITY CONSTRUCTION

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70+00 70+50 71+00 71+50 72+00 72+50 73+00 73+50 74+00 74+50 75+00 75+50 76+00 76+50 77+00 77+50 78+00 78+50 79+00 79+50 80+00 80+50 81+00 81+50 82+00 82+50 83+00

MATCHLINE 83+00
SEE CONTINUATION BELOW