

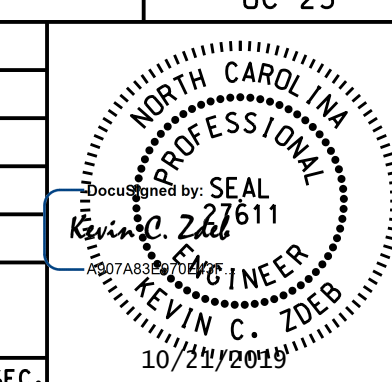
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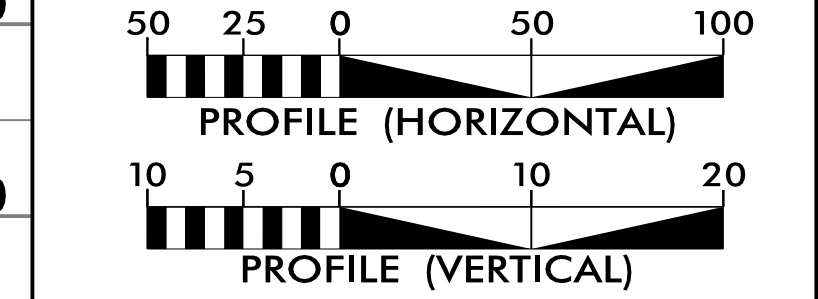
### 12" WATER LINE -WL1-

PROJECT REFERENCE NO. A-0011C	SHEET NO. UC-23
DESIGNED BY: KCZ	
DRAWN BY: VW	
CHECKED BY: SHF	
APPROVED BY: KCZ	
REVISED:	
NORTH CAROLINA DEPARTMENT OF TRANSPORTATION UTILITIES ENGINEERING SEC. PHONE: (919) 707-6690 FAX: (919) 250-4151	
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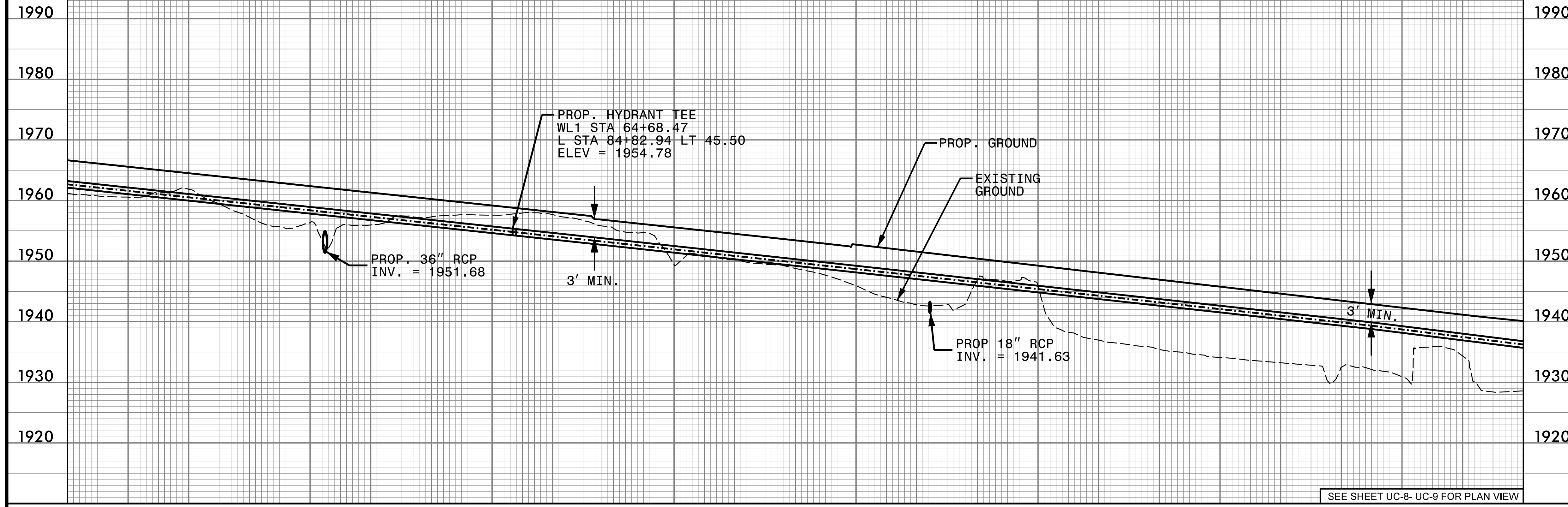
### UTILITY CONSTRUCTION

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Weston Sampson  
 WSE of North Carolina, PC  
 598 East Chatham Street Suite 137 Cary, NC 27511  
 Phone: 919.297.0220 Fax: 919.297.0221

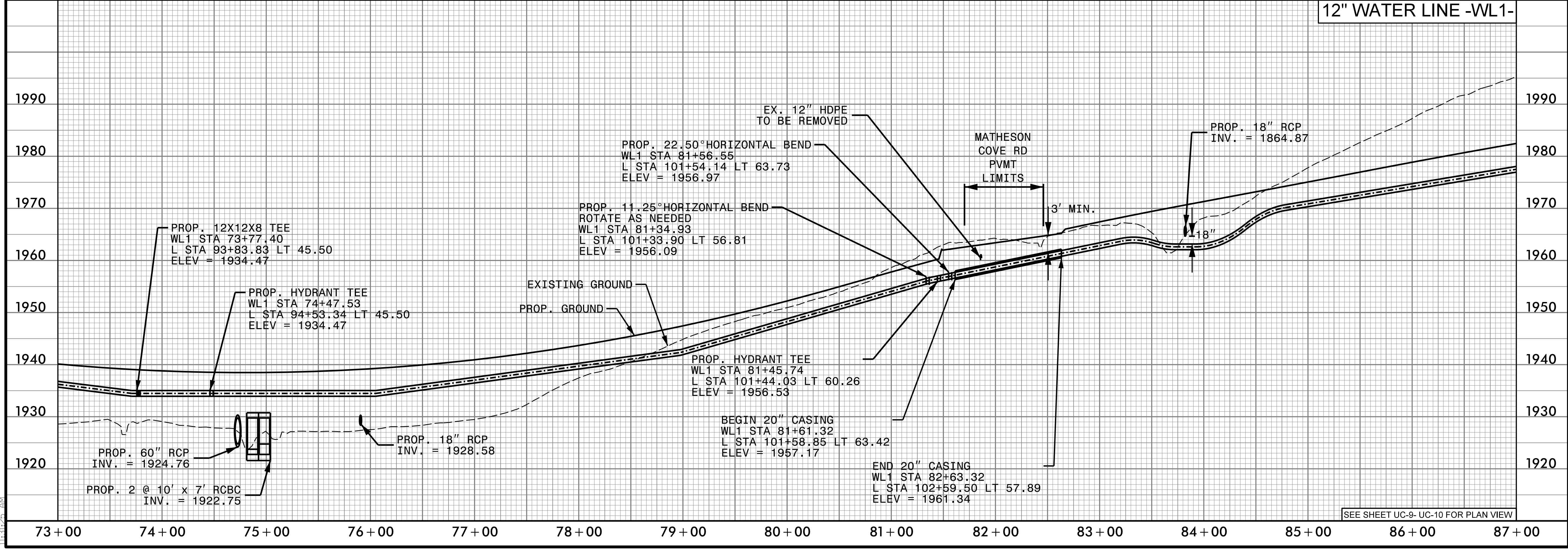


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  - OPEN TRENCH CONSTRUCTION SHALL PROVIDE 3 FEET MINIMUM COVER FROM FINAL GRADE TO TOP OF PIPE.



SEE SHEET UC-8- UC-9 FOR PLAN VIEW

### 12" WATER LINE -WL1-



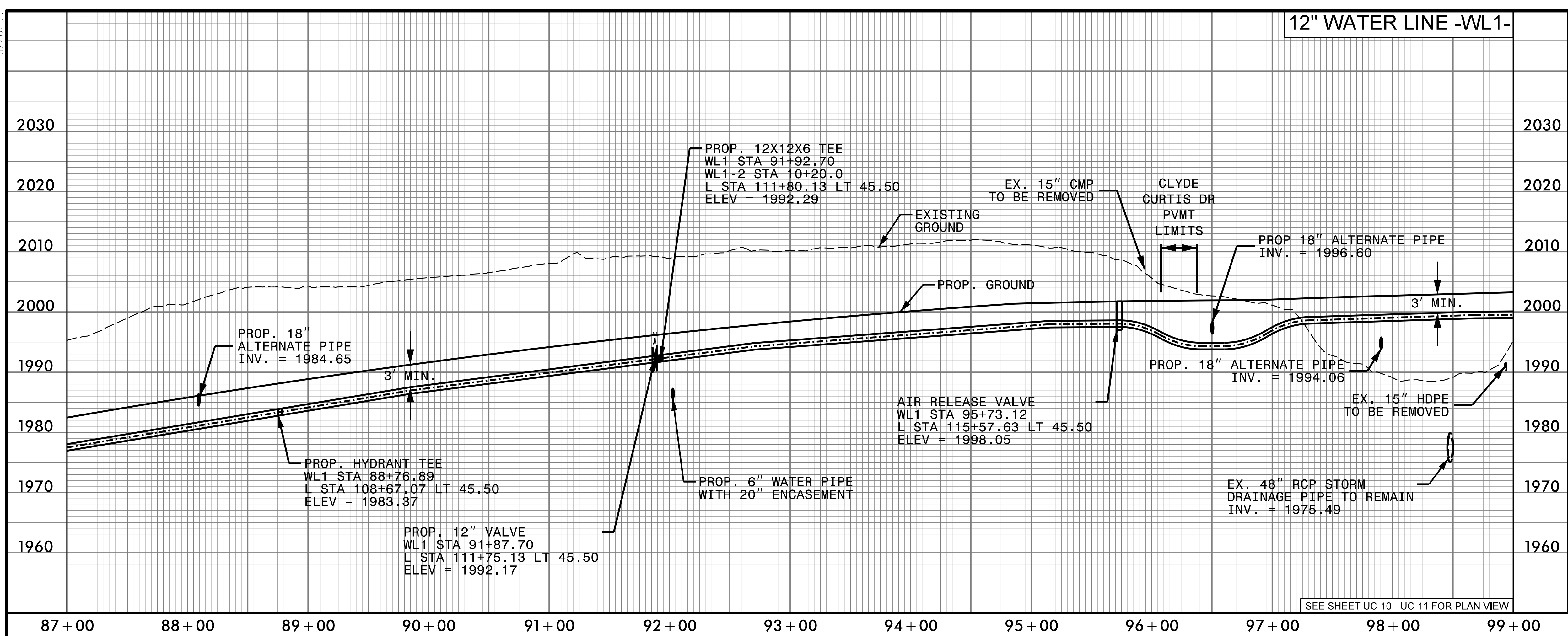
SEE SHEET UC-9- UC-10 FOR PLAN VIEW

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### 12" WATER LINE -WL1-

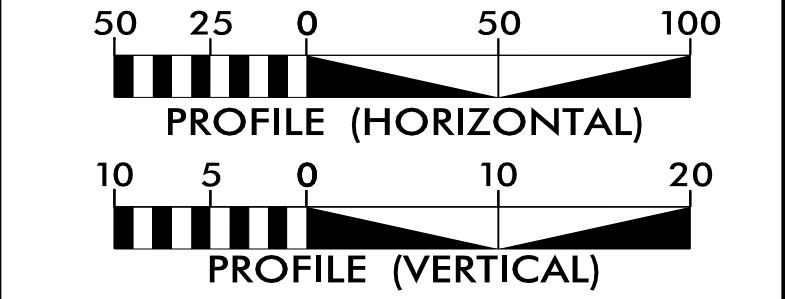


PROJECT REFERENCE NO. A-0011C	SHEET NO. UC-24
DESIGNED BY: KCZ	
DRAWN BY: VW	
CHECKED BY: SHF	
APPROVED BY: KCZ	
REVISOR:	
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### UTILITY CONSTRUCTION

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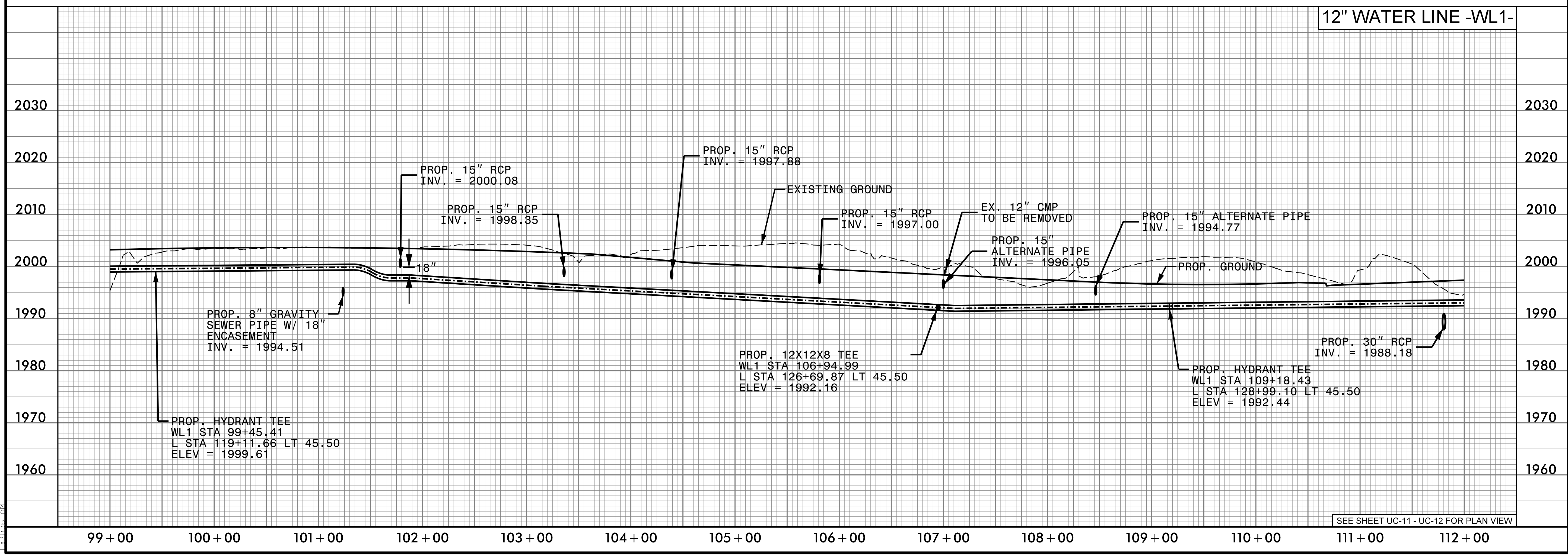
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 598 East Chatham Street Suite 137 Cary, NC 27511  
 Phone: 919.297.0220 License: C-4647 Fax: 919.297.0221



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SEE SHEET UC-10 - UC-11 FOR PLAN VIEW

### 12" WATER LINE -WL1-



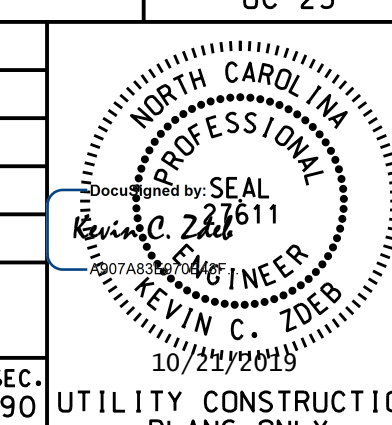
SEE SHEET UC-11 - UC-12 FOR PLAN VIEW

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### 12" WATER LINE -WL1-

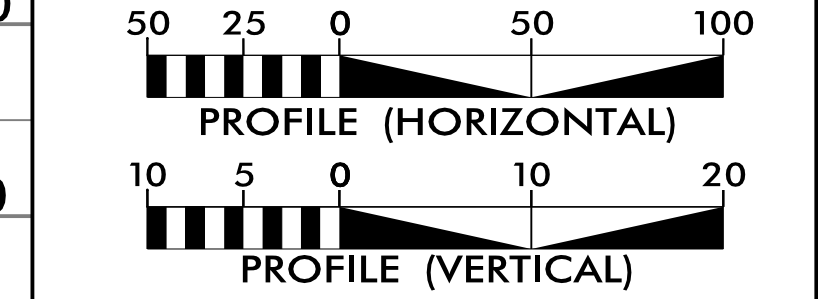
PROJECT REFERENCE NO. A-0011C	SHEET NO. UC-25
DESIGNED BY: KCZ	
DRAWN BY: VW	
CHECKED BY: SHF	
APPROVED BY: KCZ	
REVISED:	
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### UTILITY CONSTRUCTION

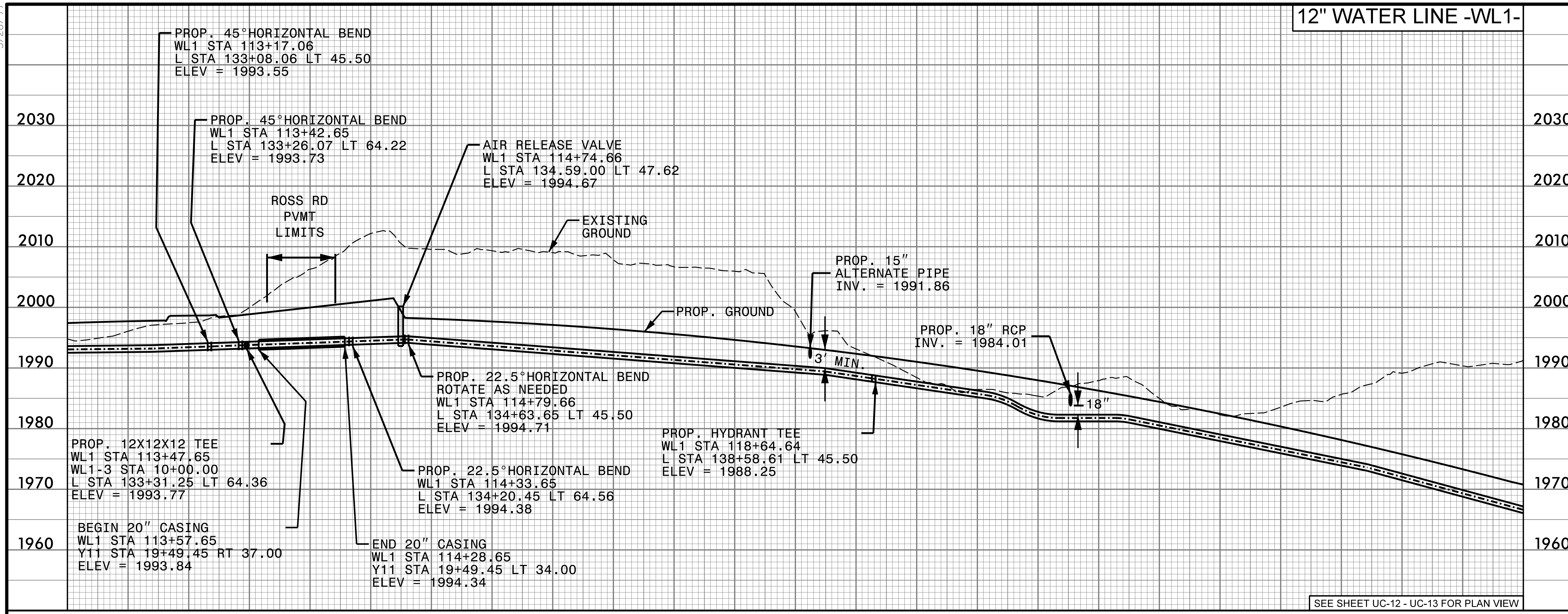
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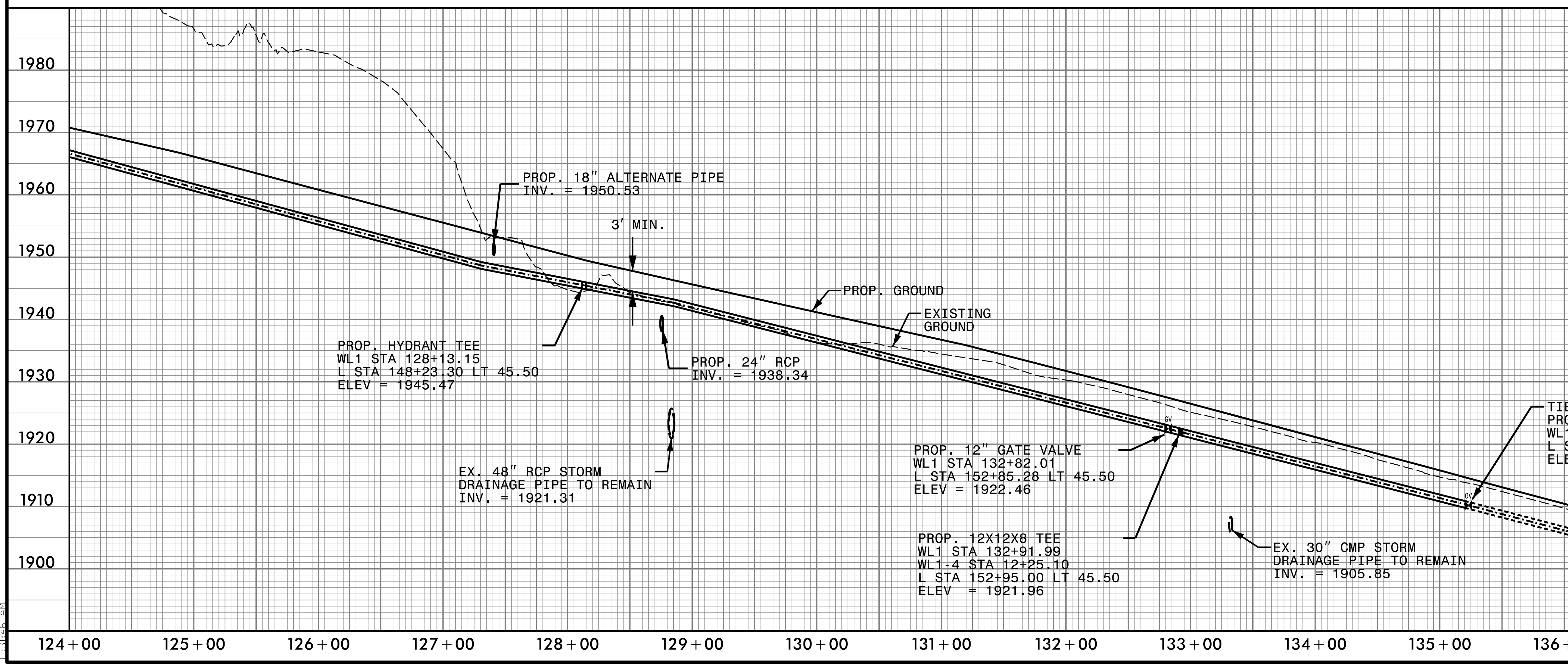


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SEE SHEET UC-12 - UC-13 FOR PLAN VIEW

### 12" WATER LINE -WL1-

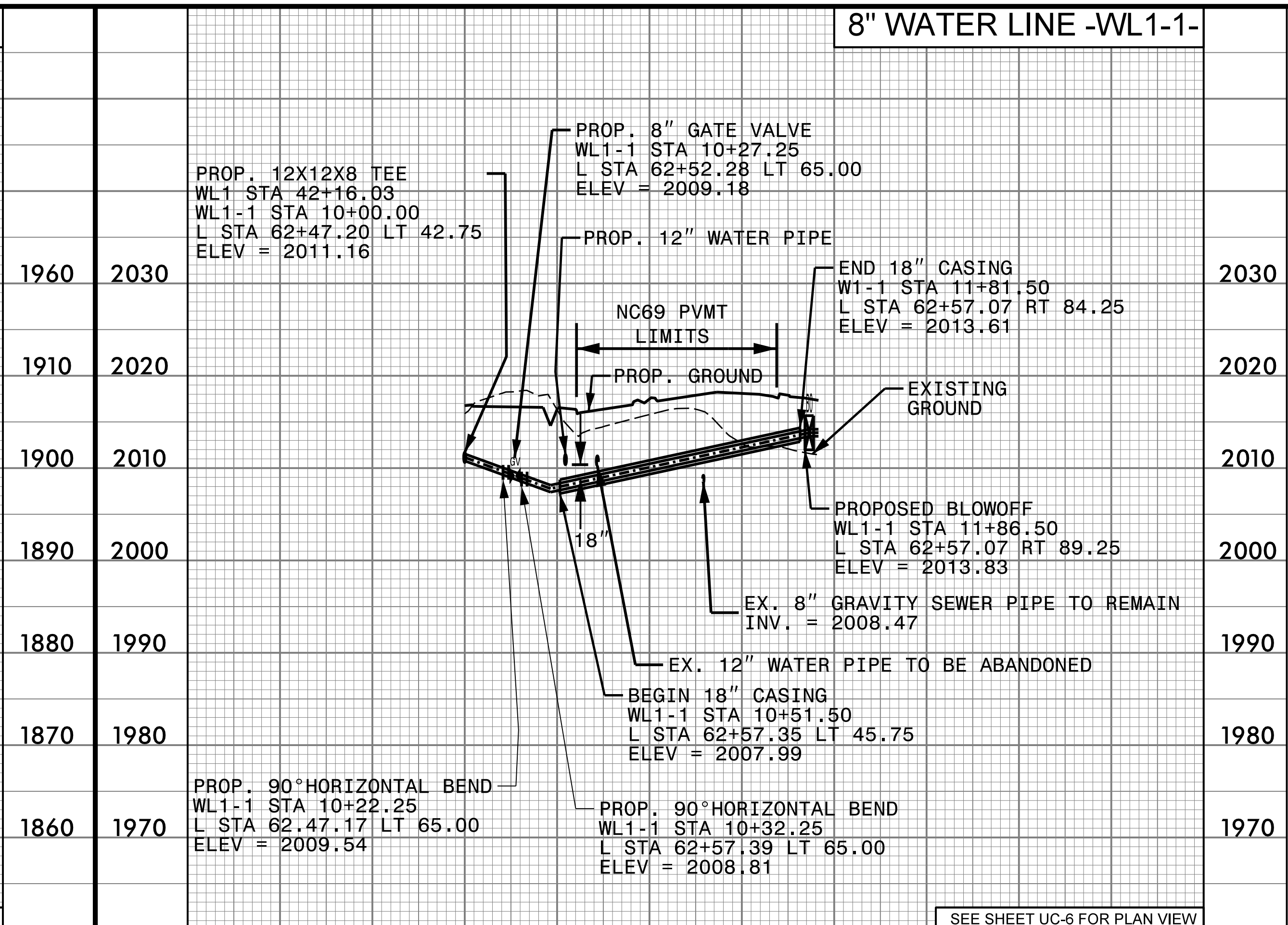
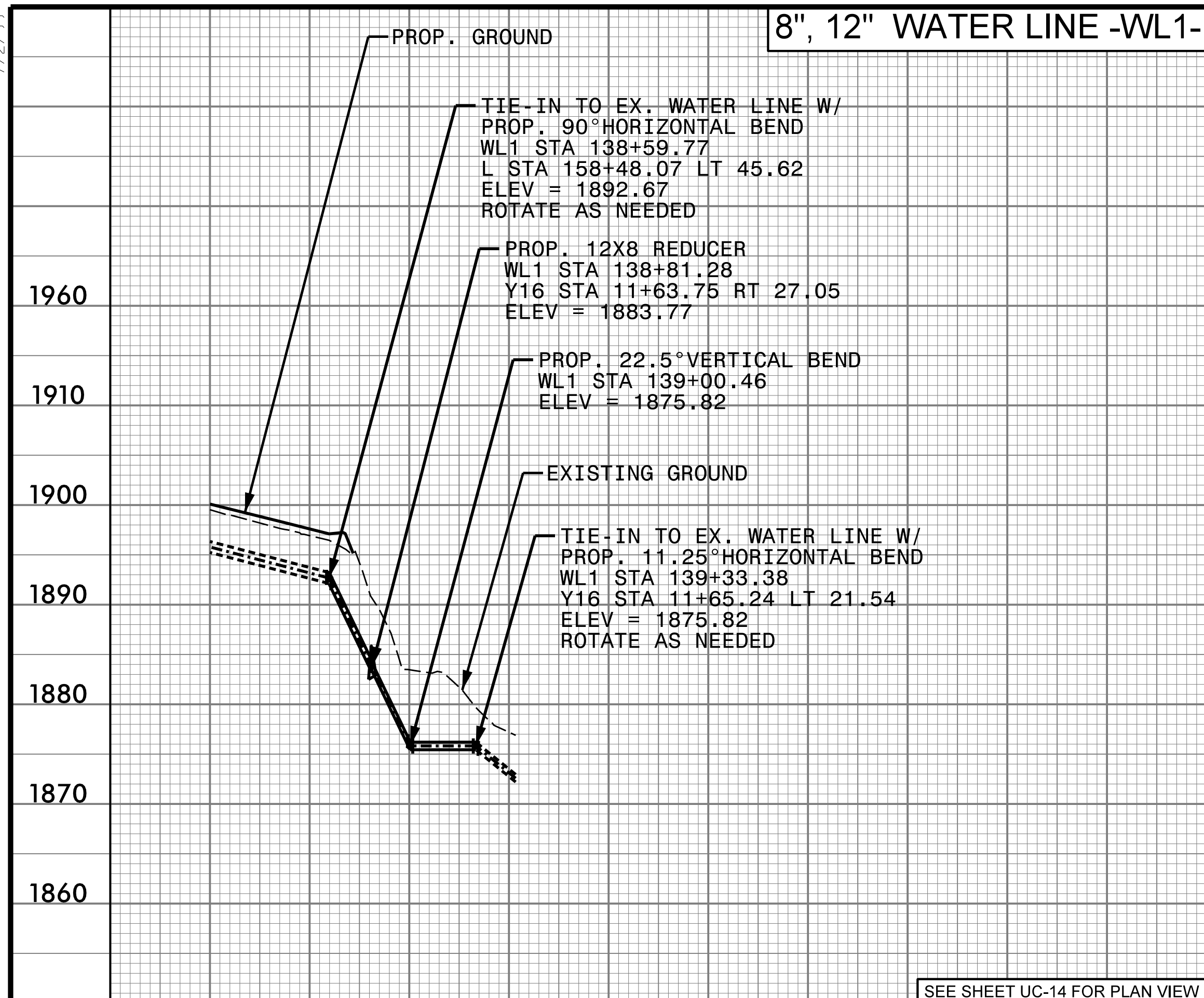


SEE SHEET UC-13 - UC-14 FOR PLAN VIEW

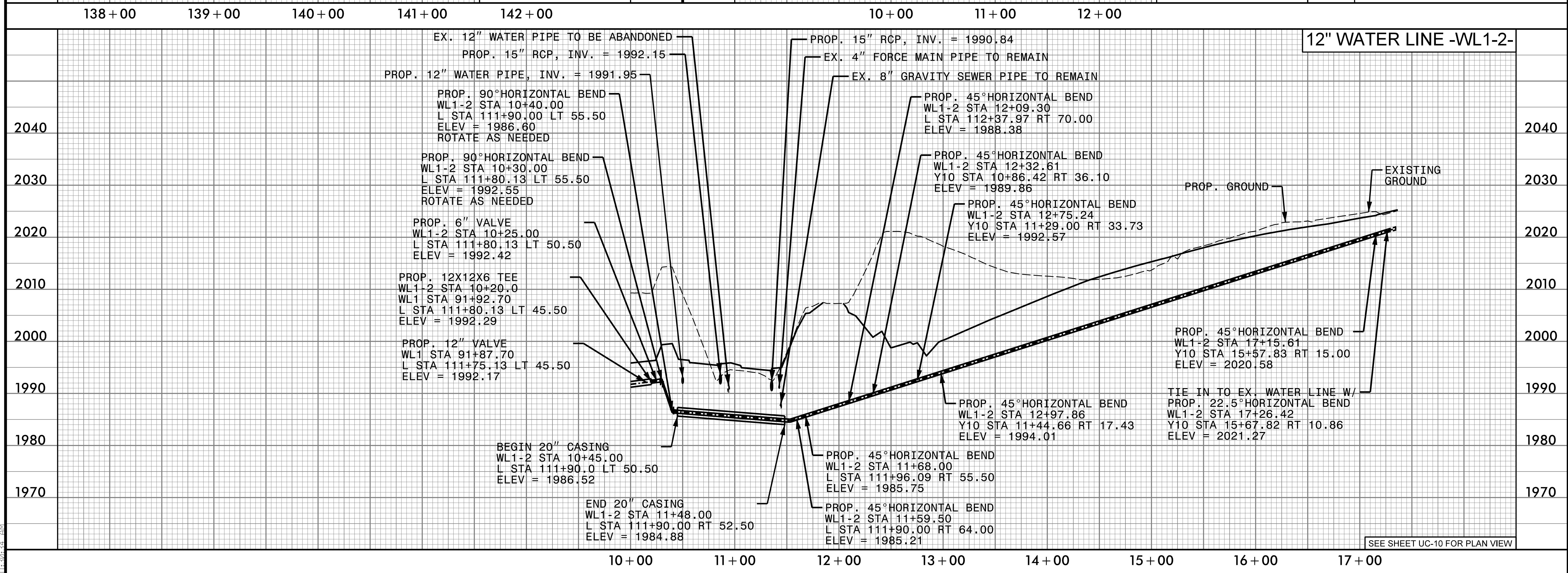
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7/27/99



PROJECT REFERENCE NO. A-0011C	SHEET NO. UC-26
DESIGNED BY: KCZ	
DRAWN BY: VW	
CHECKED BY: SHF	
APPROVED BY: KCZ	
REVISED:	
NORTH CAROLINA DEPARTMENT OF TRANSPORTATION 10/21/2019	
UTILITIES ENGINEERING SEC. PHONE: (919) 707-6690 FAX: (919) 250-4151	
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<b>UTILITY CONSTRUCTION</b>	
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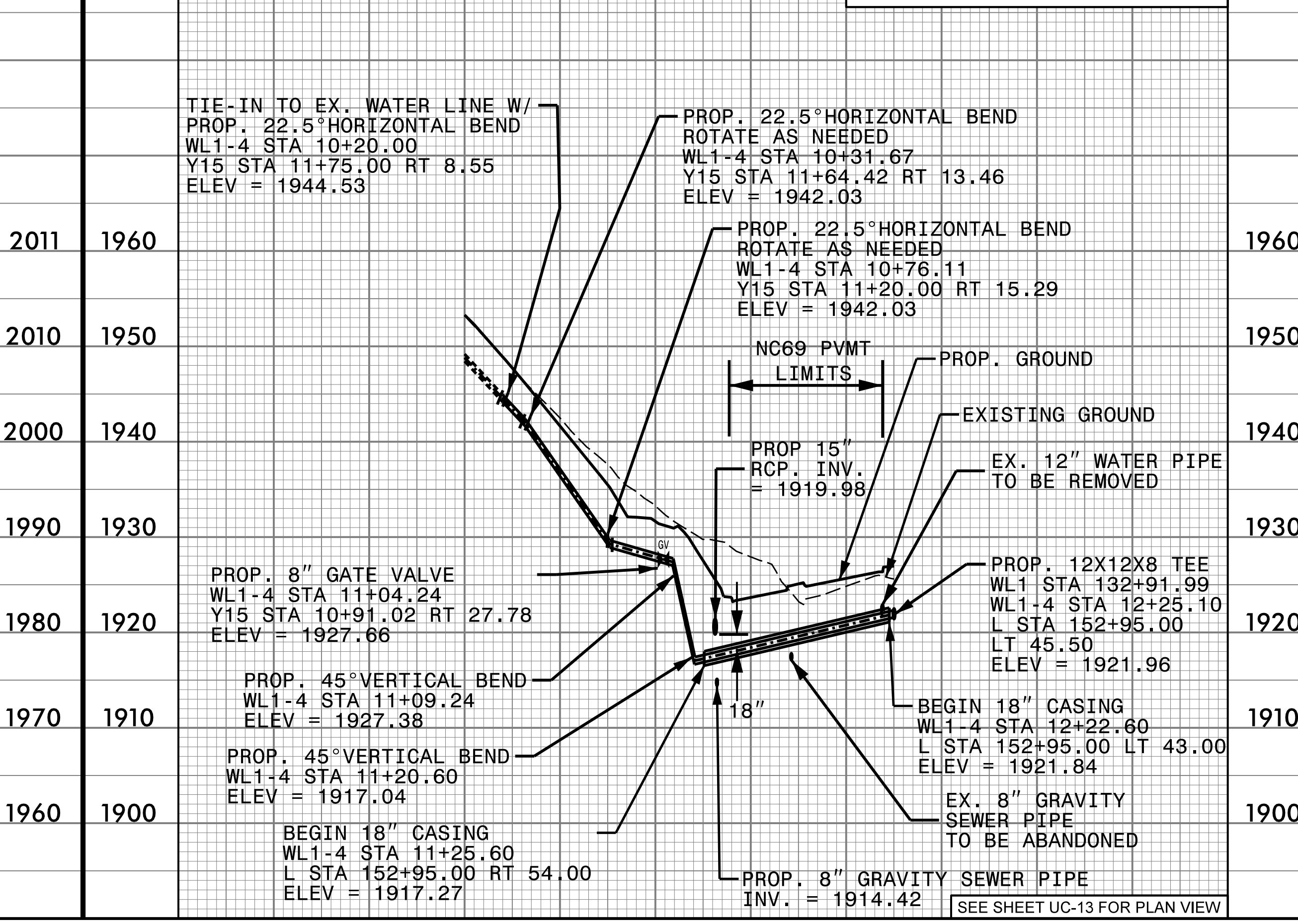
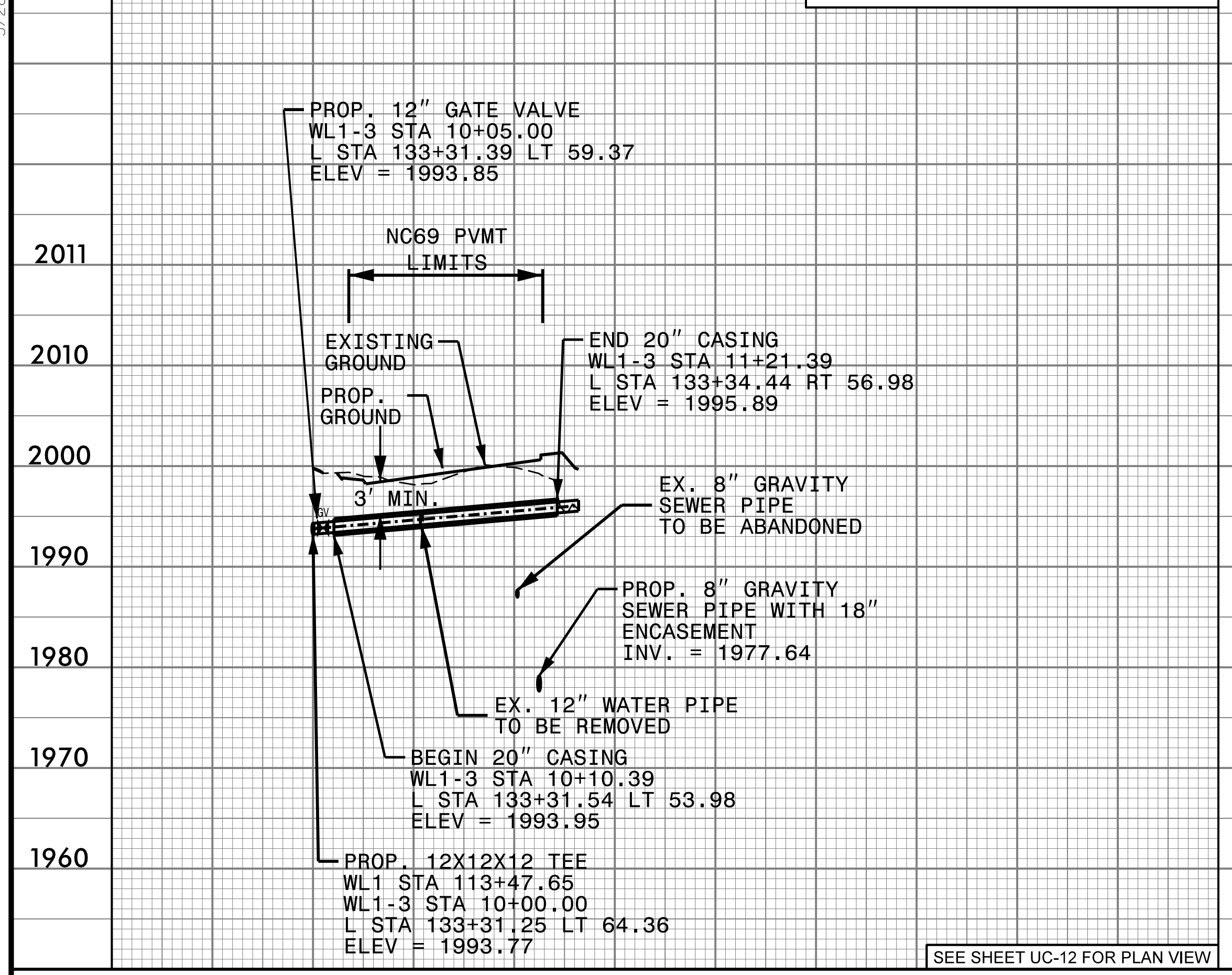
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### 12" WATER LINE -WL1-3-

### 8" WATER LINE -WL1-4-

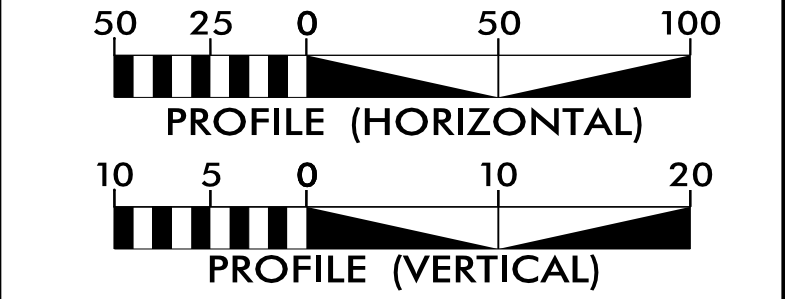


PROJECT REFERENCE NO. A-0011C	SHEET NO. UC-27
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DRAWN BY: VW	
CHECKED BY: SHF	
APPROVED BY: KCZ	
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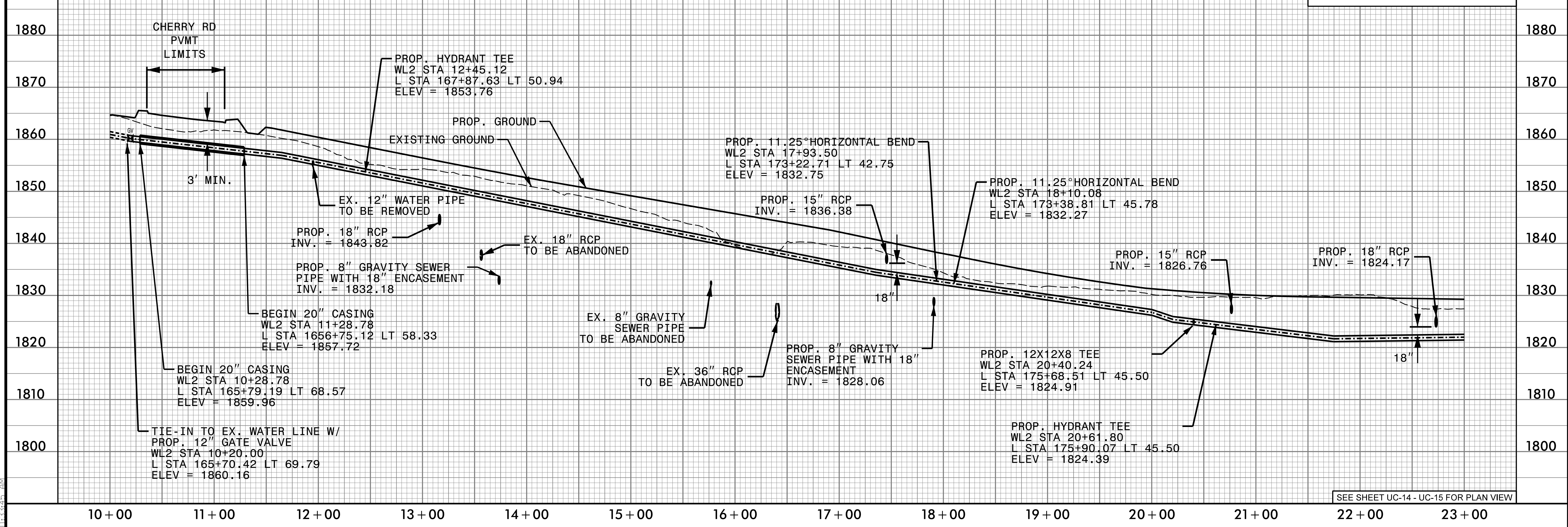
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10+00 11+00 12+00

SEE SHEET UC-12 FOR PLAN VIEW

SEE SHEET UC-13 FOR PLAN VIEW

### 12" WATER LINE -WL2-



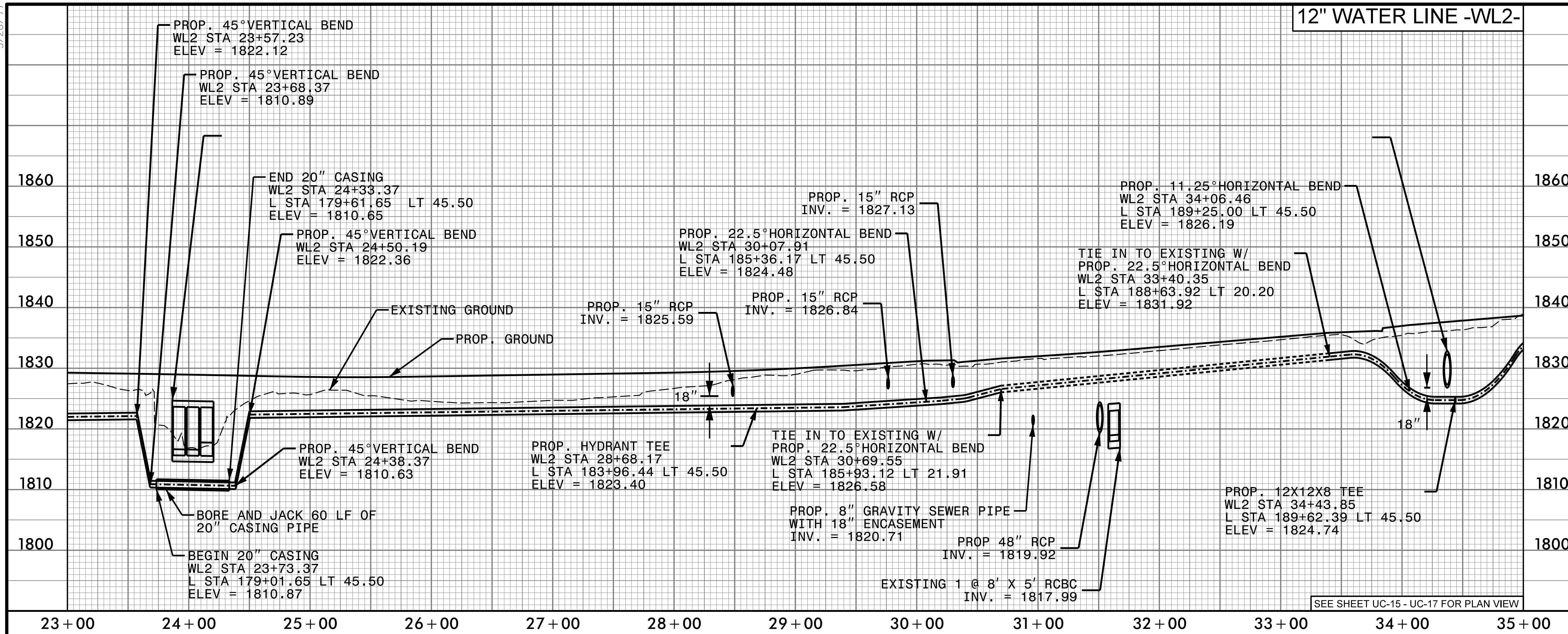
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SEE SHEET UC-14 - UC-15 FOR PLAN VIEW

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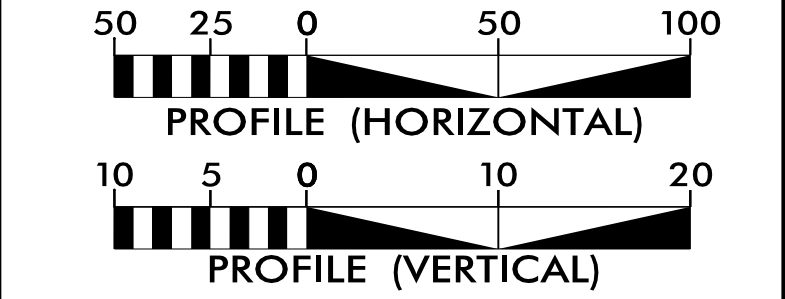
PROJECT REFERENCE NO. A-0011C	SHEET NO. UC-28
DESIGNED BY: KCZ	
DRAWN BY: VW	
CHECKED BY: SHF	
APPROVED BY: KCZ	
REVISED:	
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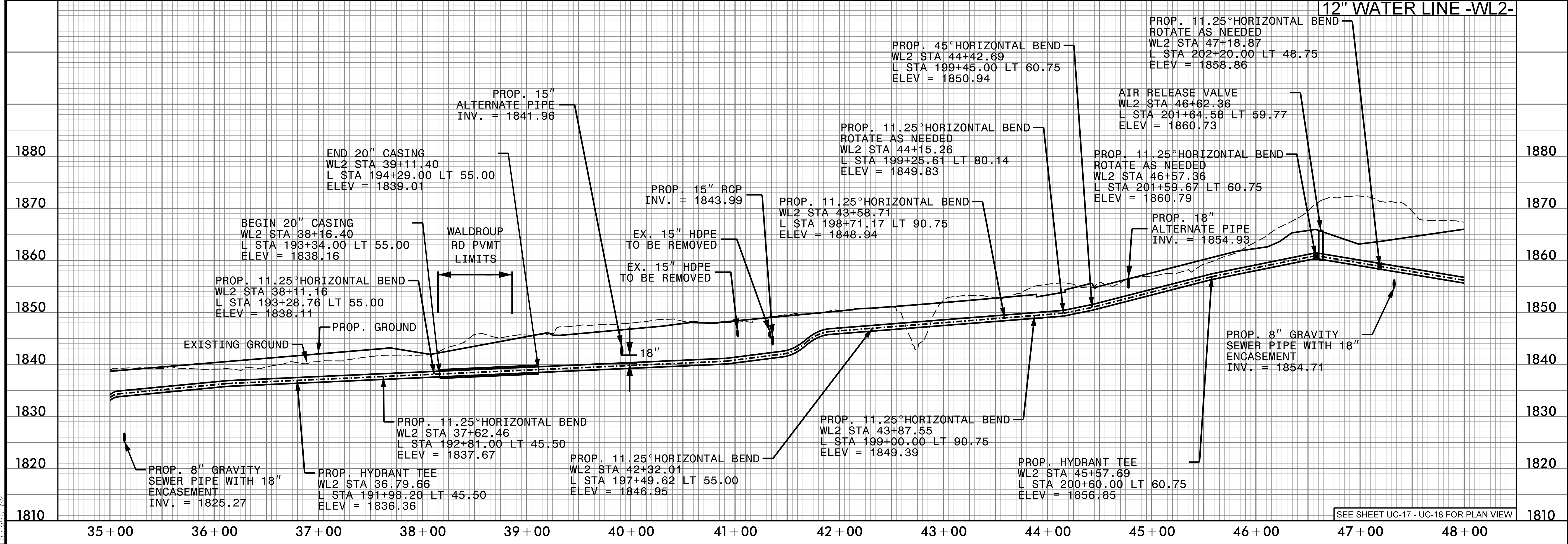
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 WSE of North Carolina, PC  
 598 East Chatham Street Suite 137 Cary, NC 27511  
 Phone: 919.297.0220 Fax: 919.297.0221

NC License: C-4647



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SEE SHEET UC-15 - UC-17 FOR PLAN VIEW



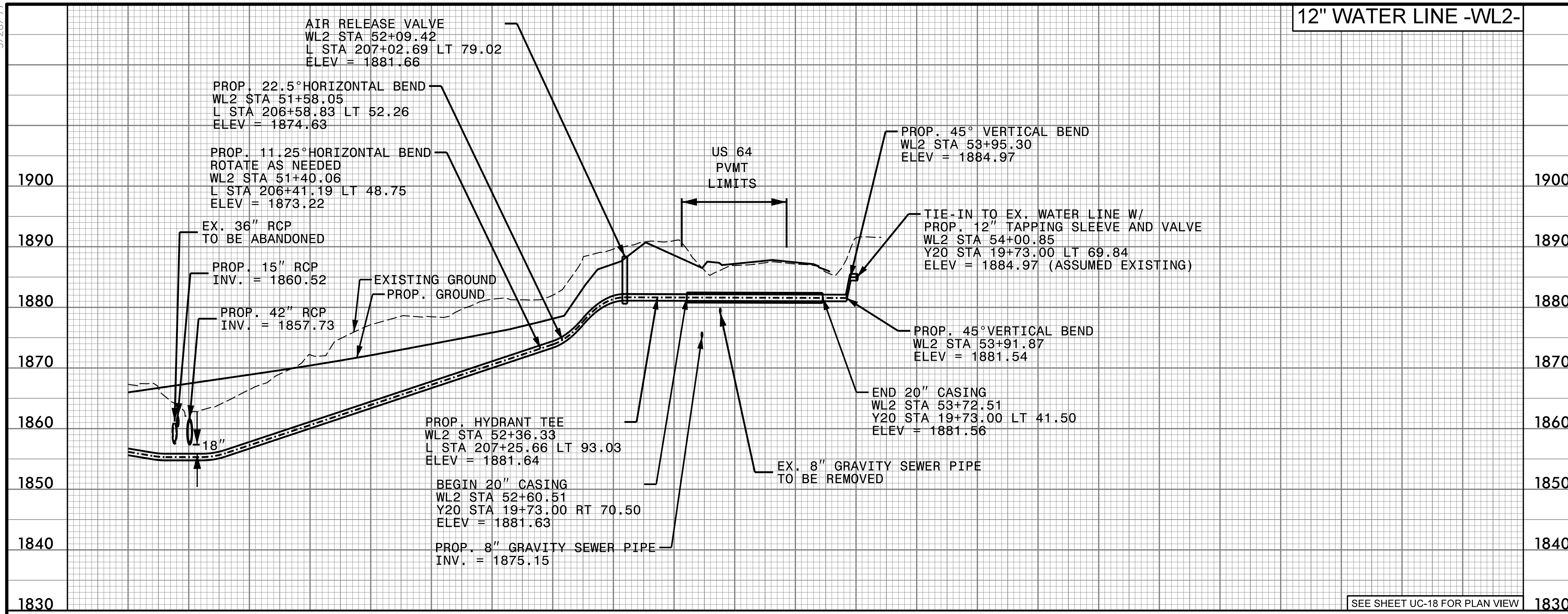
SEE SHEET UC-17 - UC-18 FOR PLAN VIEW

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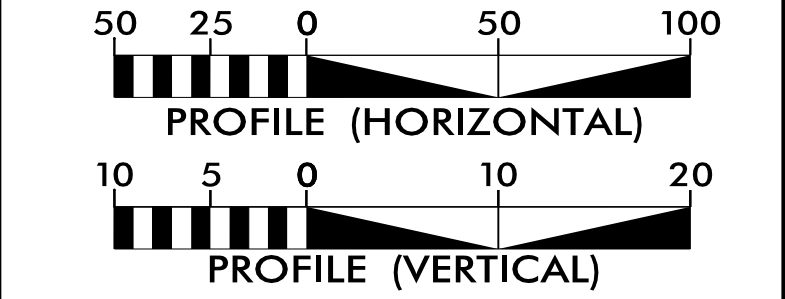
### 12" WATER LINE -WL2-



PROJECT REFERENCE NO. A-0011C	SHEET NO. UC-29
DESIGNED BY: KCZ	
DRAWN BY: VW	
CHECKED BY: SHF	
APPROVED BY: KCZ	
REVISOR:	NORTH CAROLINA DEPARTMENT OF TRANSPORTATION UTILITIES ENGINEERING SEC. PHONE: (919) 707-6690 FAX: (919) 250-4151
<b>UTILITY CONSTRUCTION</b>	

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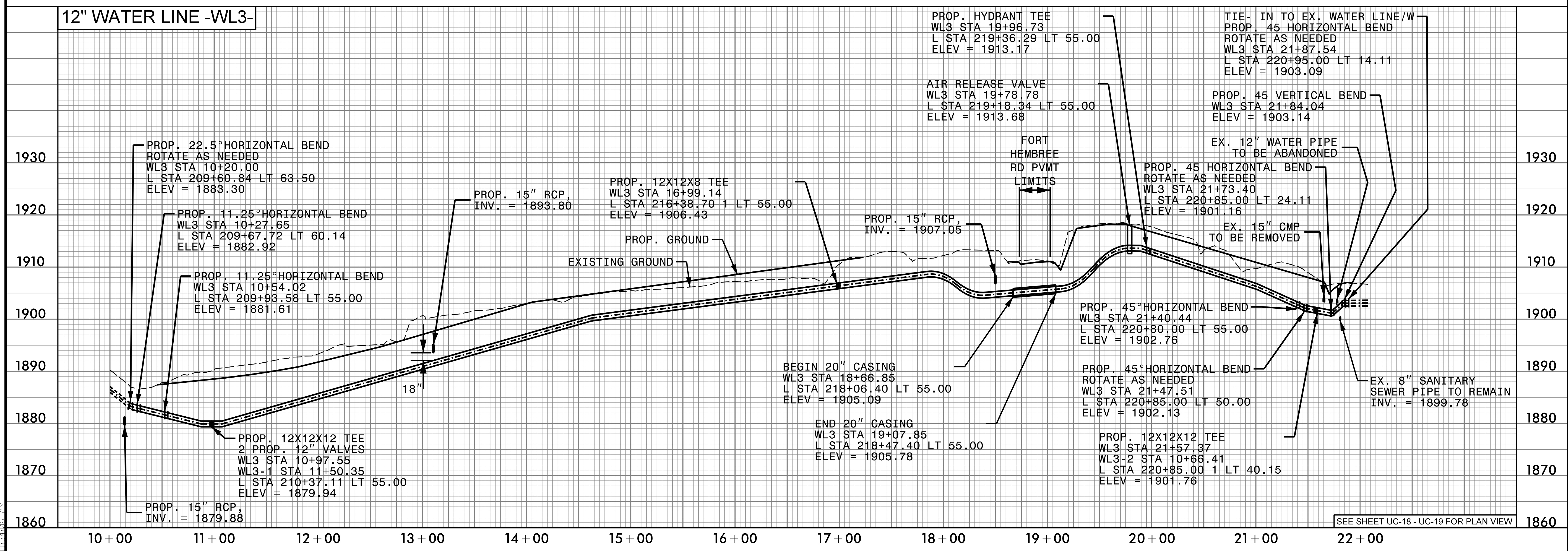
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 WSE of North Carolina, PC  
 598 East Chatham Street Suite 137 Cary, NC 27511  
 Phone: 919.297.0220 Fax: 919.297.0221



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SEE SHEET UC-18 FOR PLAN VIEW

### 12" WATER LINE -WL3-



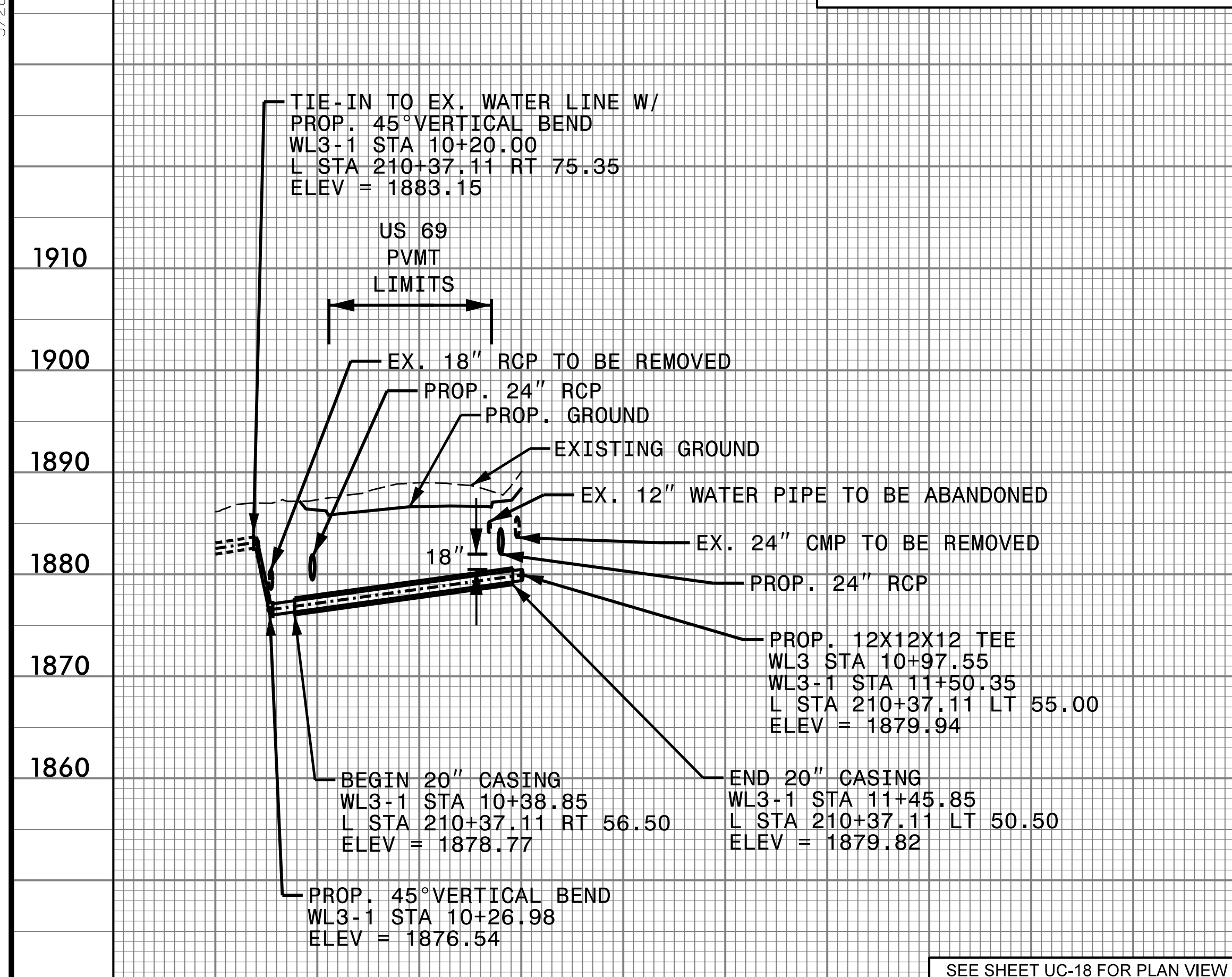
SEE SHEET UC-18 - UC-19 FOR PLAN VIEW

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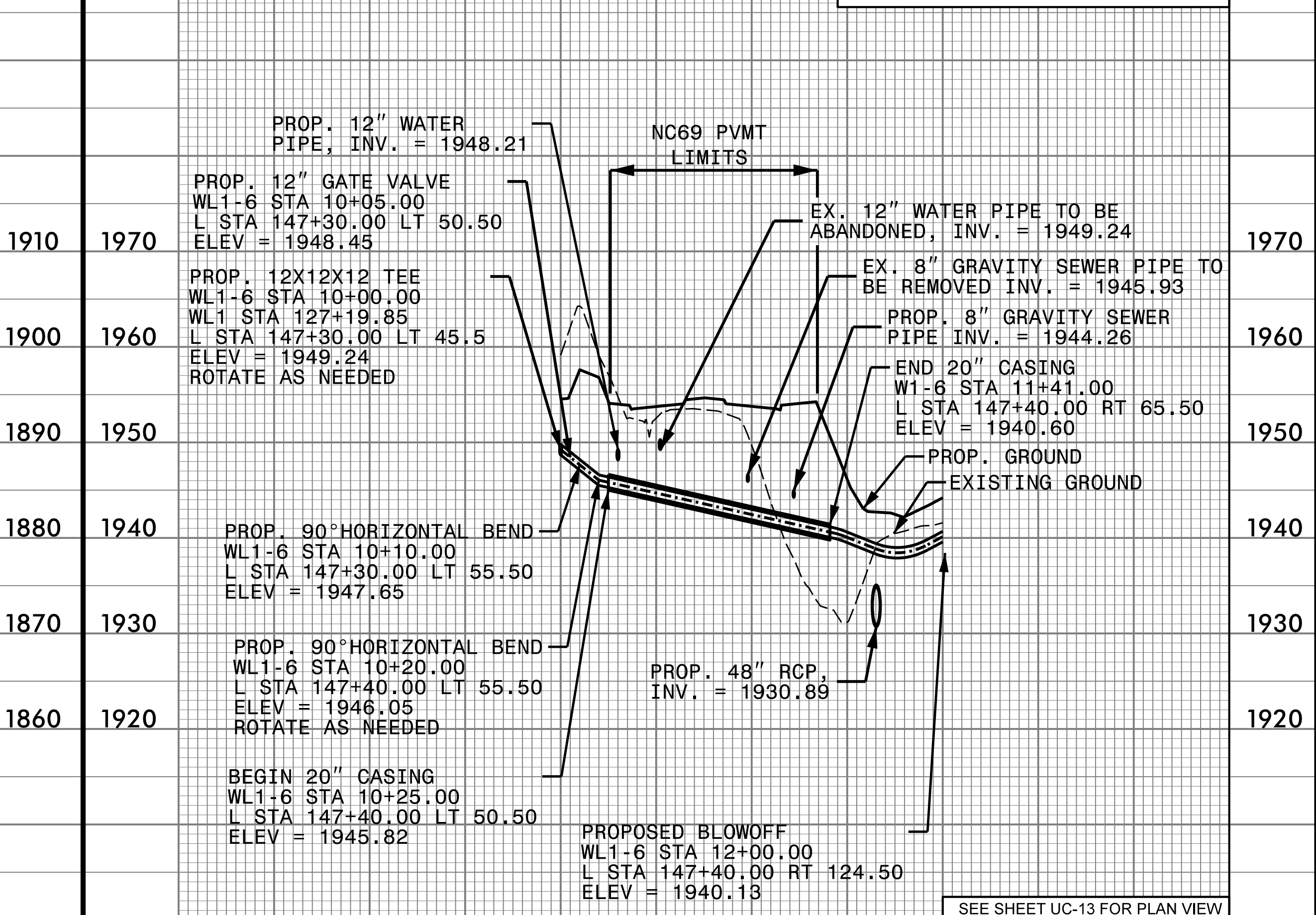


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### 12" WATER LINE -WL3-1-

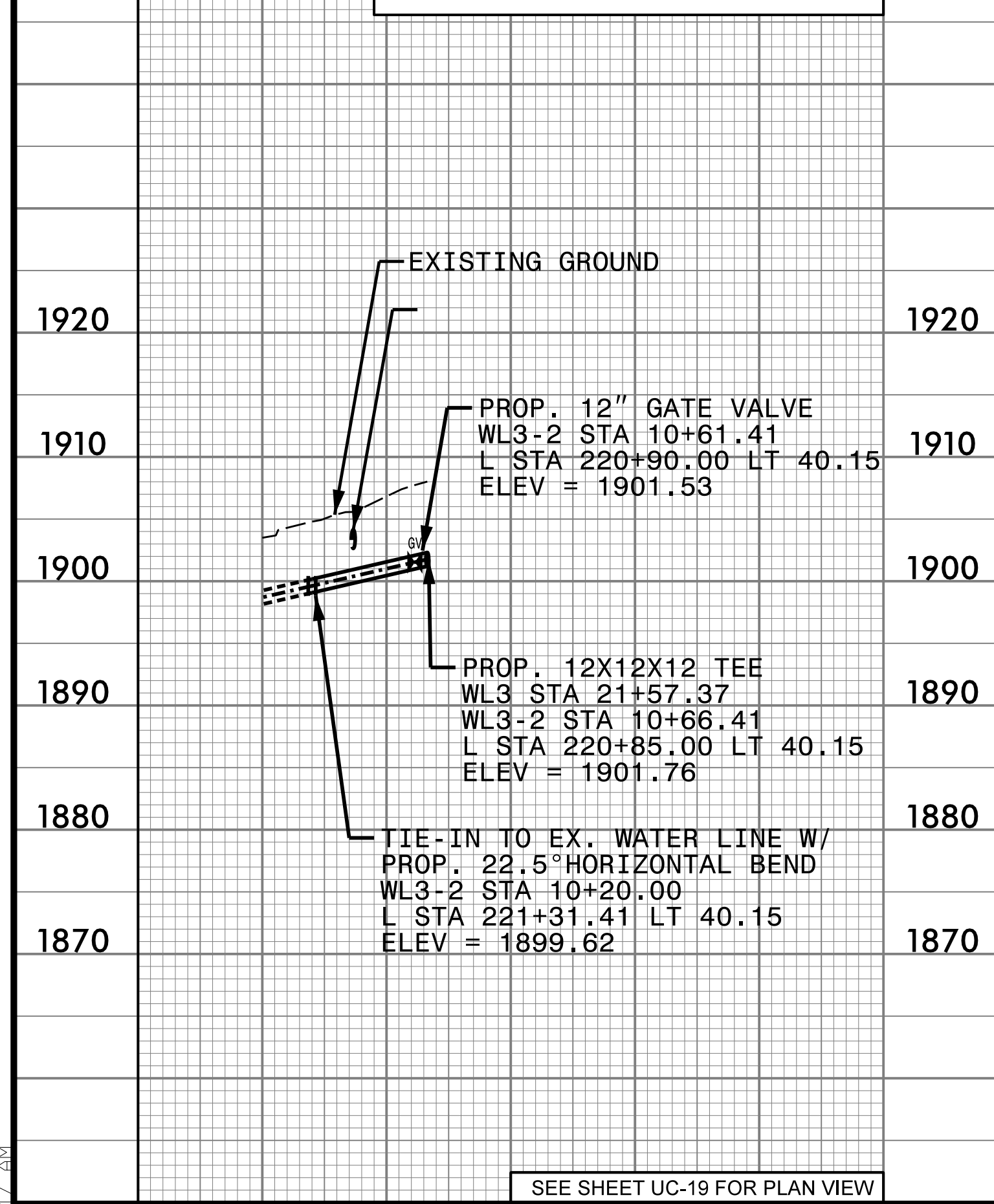


### 12" WATER LINE -WL1-6-

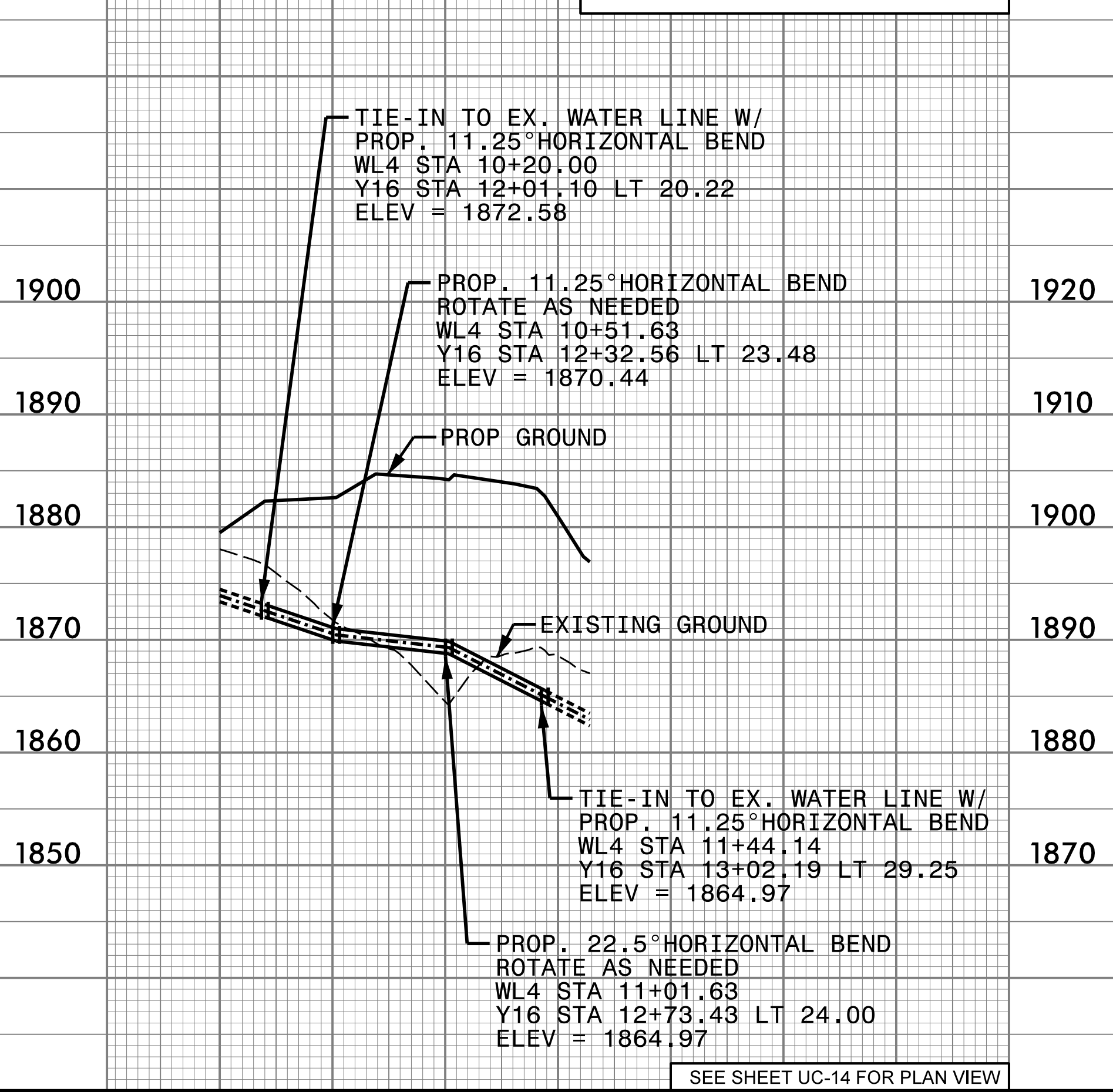


PROJECT REFERENCE NO. A-0011C	SHEET NO. UC-30
DESIGNED BY: KCZ	
DRAWN BY: VW	
CHECKED BY: SHF	
APPROVED BY: KCZ	
REVISED:	NORTH CAROLINA DEPARTMENT OF TRANSPORTATION 10/21/2019 KEVIN C. ZOLNER ENGINEER
UTILITIES ENGINEERING SEC. PHONE: (919) 707-6690 FAX: (919) 250-4151	UTILITY CONSTRUCTION PLANS ONLY
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WSE of North Carolina, PC 598 East Chatham Street Suite 137 Cary, NC 27511 Phone: 919.297.0220 Fax: 919.297.0221	
<p>PROFILE (HORIZONTAL)</p> <p>PROFILE (VERTICAL)</p>	
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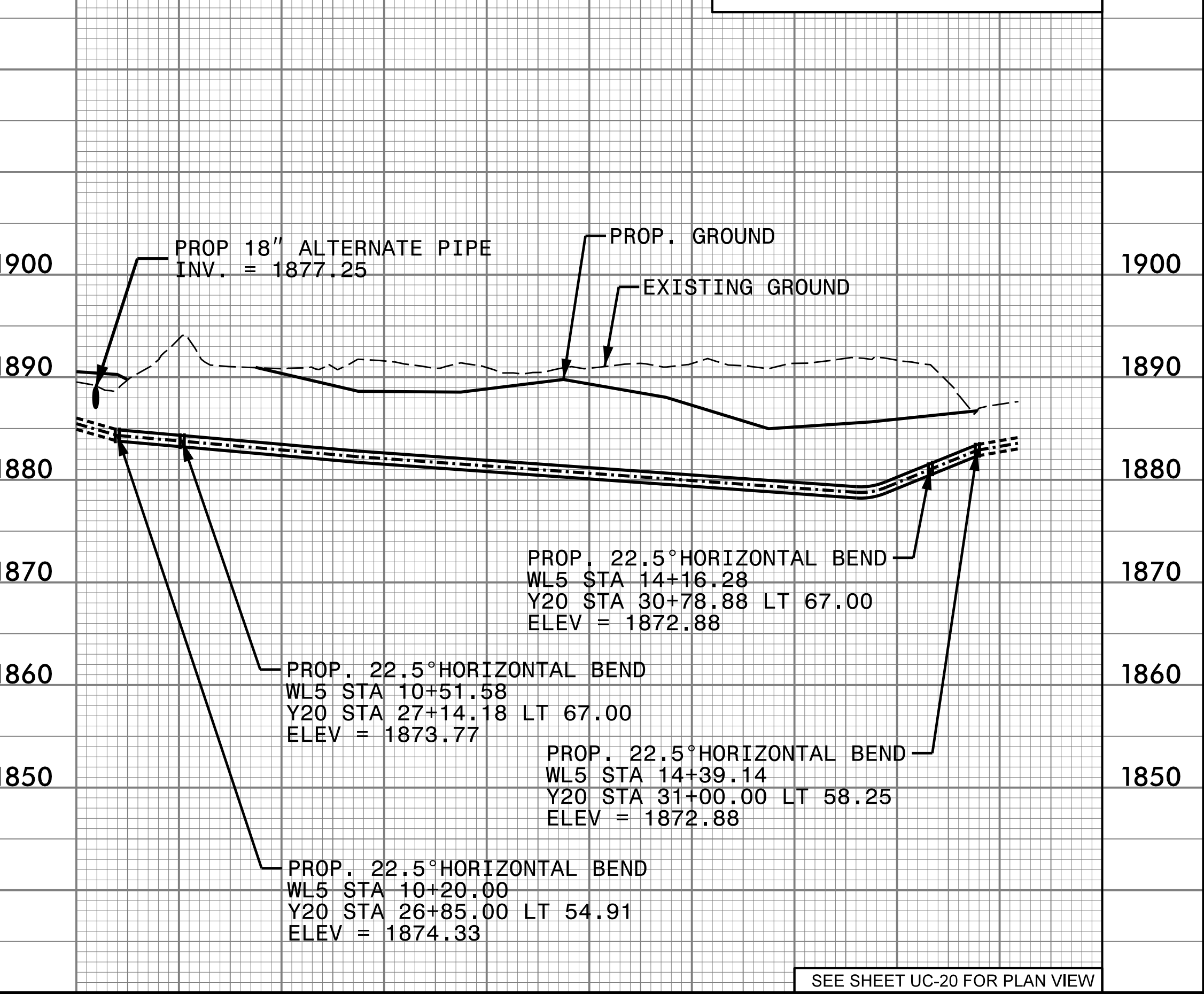
### 12" WATER LINE -WL3-2-



### 12" WATER LINE -WL4-



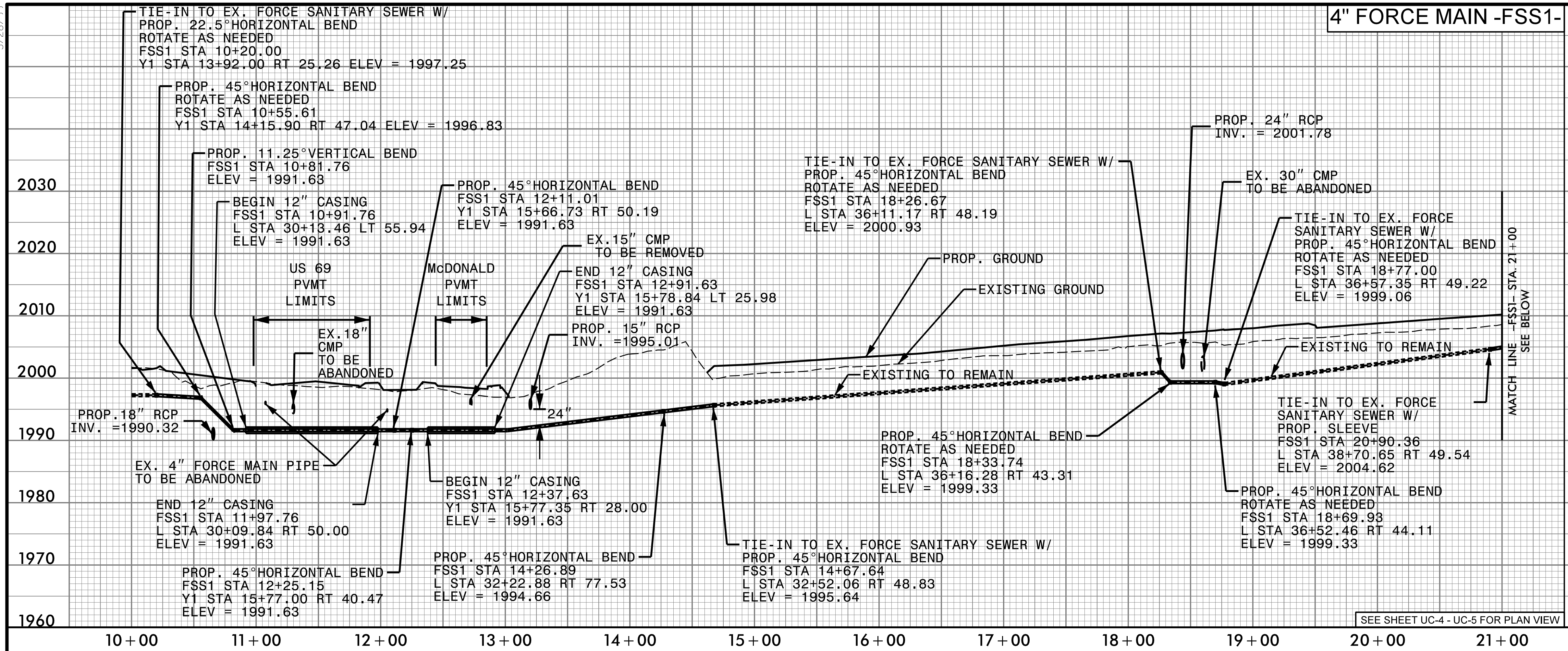
### 12" WATER LINE -WL5-



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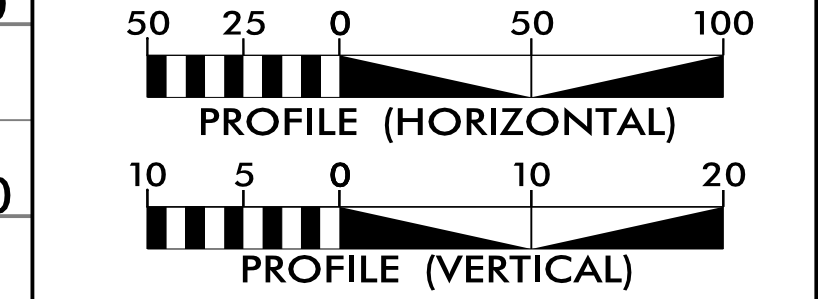
4" FORCE MAIN -FSS1-

PROJECT REFERENCE NO. A-0011C	SHEET NO. UC-31
DESIGNED BY: KCZ	
DRAWN BY: VW	
CHECKED BY: SHF	
APPROVED BY: KCZ	
REVISED:	NORTH CAROLINA DEPARTMENT OF TRANSPORTATION UTILITIES ENGINEERING SEC. PHONE: (919) 707-6690 FAX: (919) 250-4151

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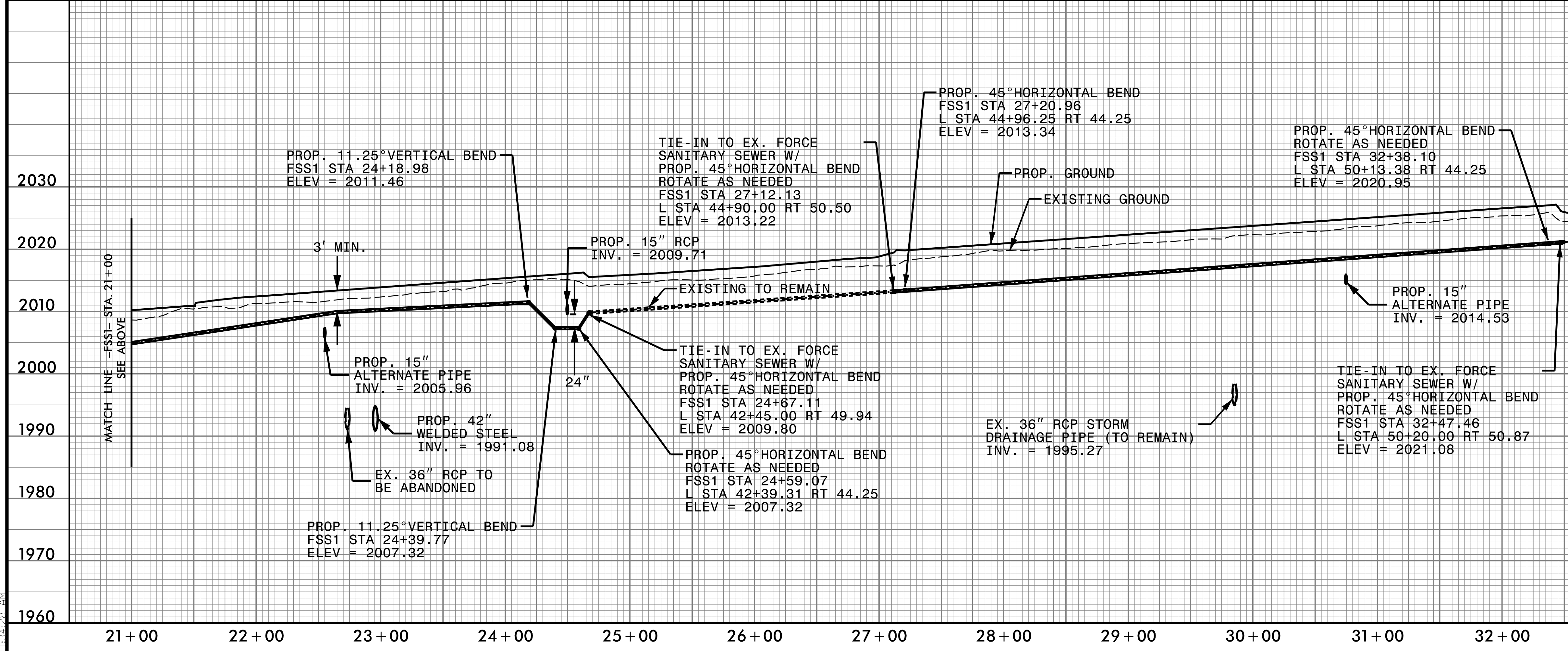
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SEE SHEET UC-4 - UC-5 FOR PLAN VIEW



4" FORCE MAIN -FSS1-

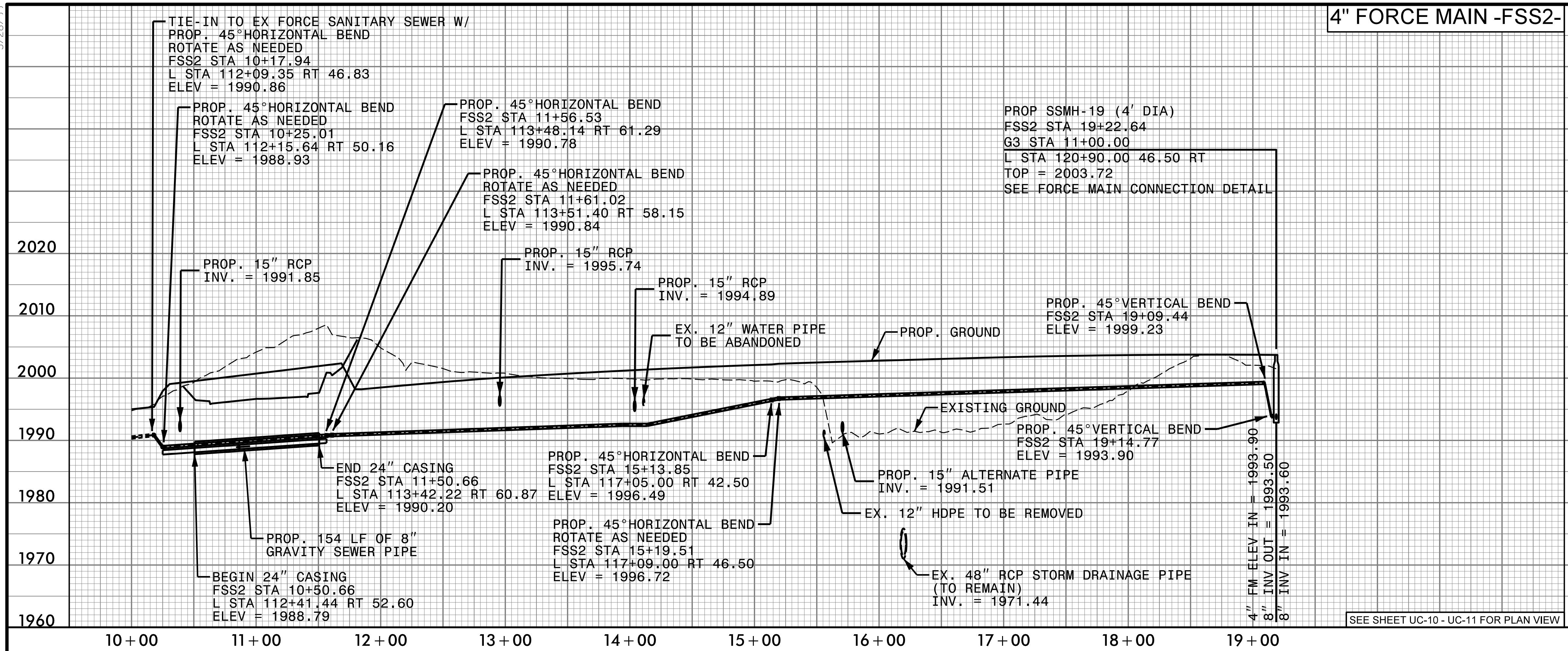
SEE SHEET UC-5 FOR PLAN VIEW

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# 4" FORCE MAIN -FSS2-

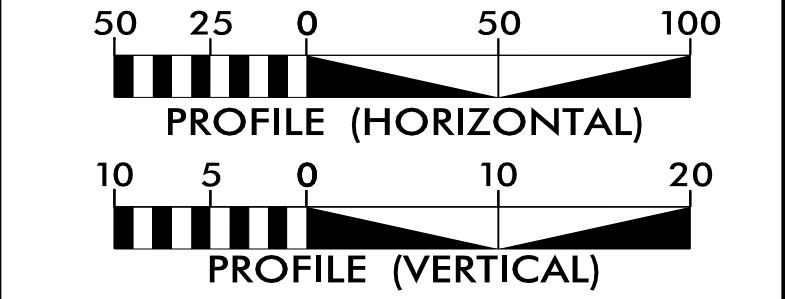


PROJECT REFERENCE NO. A-0011C	SHEET NO. UC-32
DESIGNED BY: KCZ	
DRAWN BY: VW	
CHECKED BY: SHF	
APPROVED BY: KCZ	
REVISED:	
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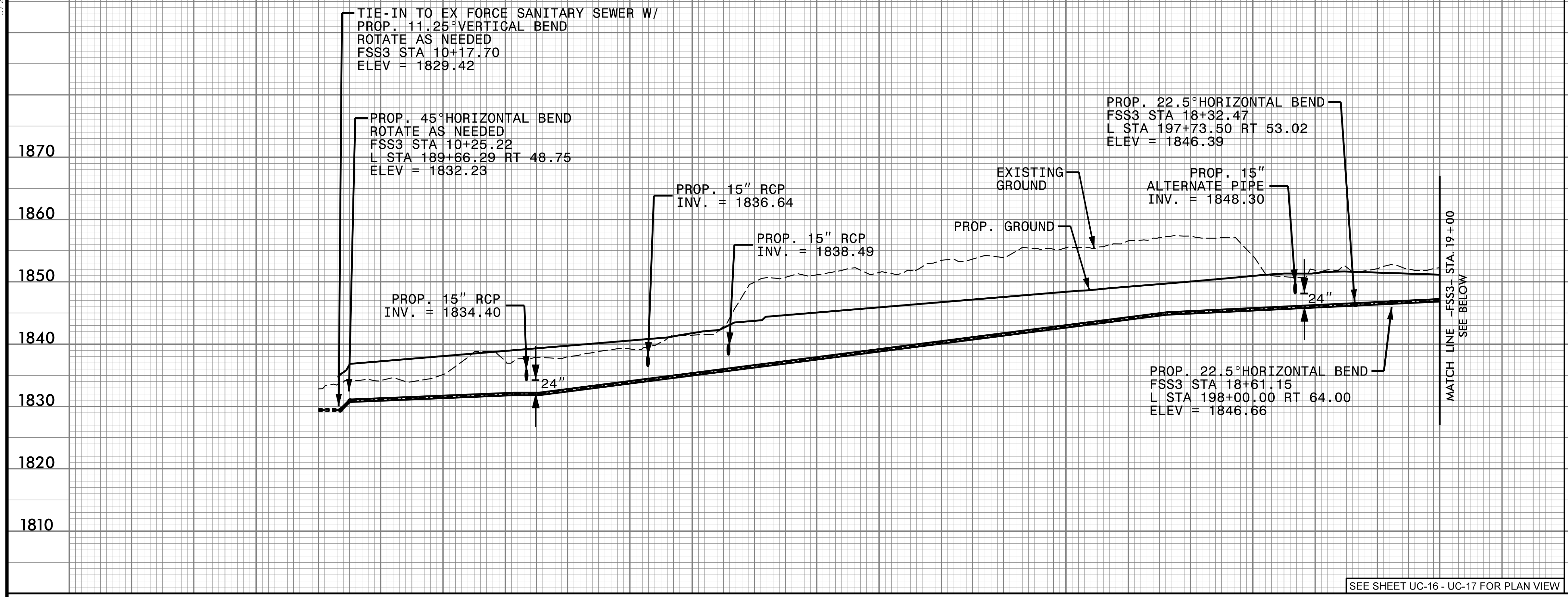
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### 4" FORCE MAIN -FSS3-

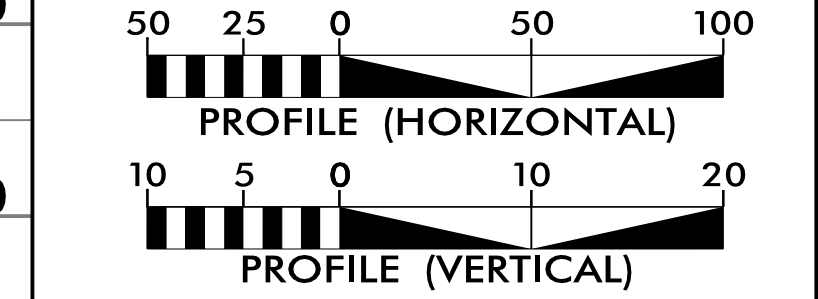


PROJECT REFERENCE NO. A-0011C	SHEET NO. UC-33
DESIGNED BY: KCZ	
DRAWN BY: VW	
CHECKED BY: SHF	
APPROVED BY: KCZ	
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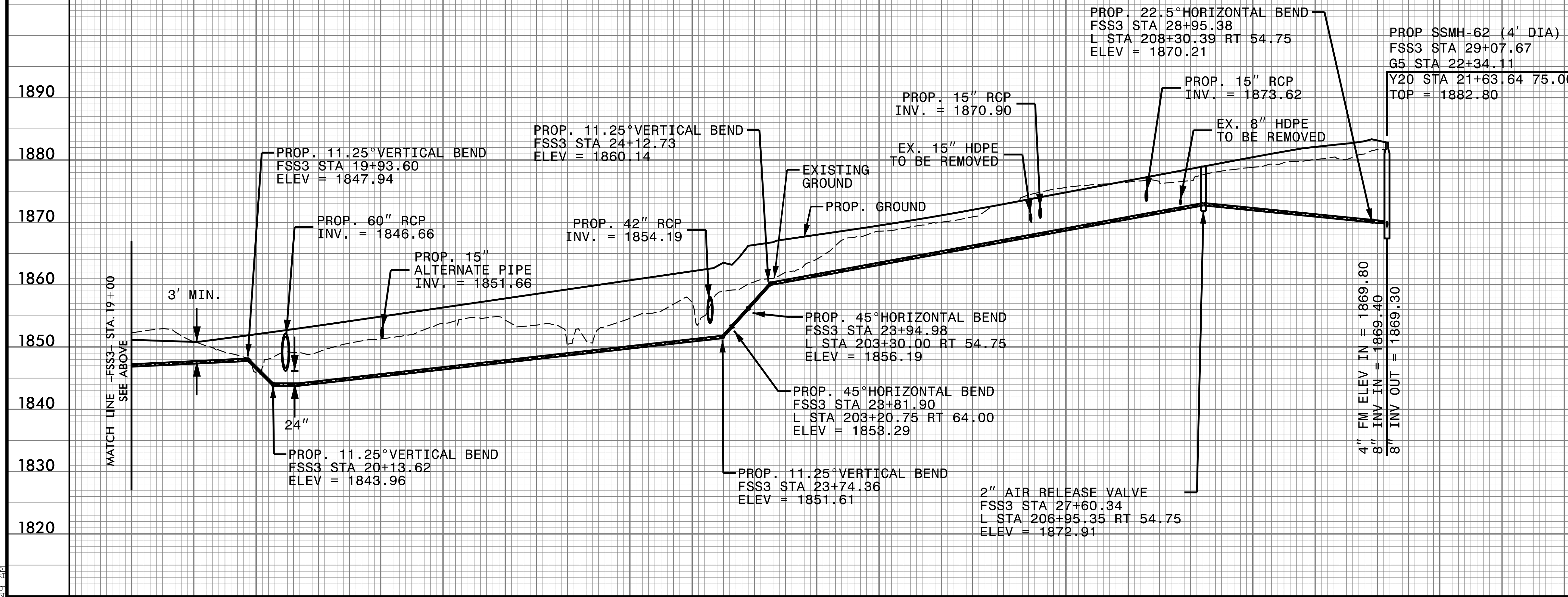


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- EXISTING PIPE AT TIE-IN LOCATIONS ARE ESTIMATED BASED ON TEST HOLE INFORMATION PROVIDED BY OTHERS OR ASSUMED TO HAVE 3 FEET OF COVER. CONTRACTOR SHALL FIELD VERIFY PIPE LOCATION BEFORE STARTING WORK.
  - ALL PROPOSED PIPE ELEVATIONS IN PROFILE REFER TO CENTER OF PIPE UNLESS INDICATED AS INVERT.
  - OPEN TRENCH CONSTRUCTION SHALL PROVIDE 3 FEET MINIMUM COVER FROM FINAL GRADE TO TOP OF PIPE.

SEE SHEET UC-16 - UC-17 FOR PLAN VIEW

10+00 11+00 12+00 13+00 14+00 15+00 16+00 17+00 18+00 19+00

### 4" FORCE MAIN -FSS3-



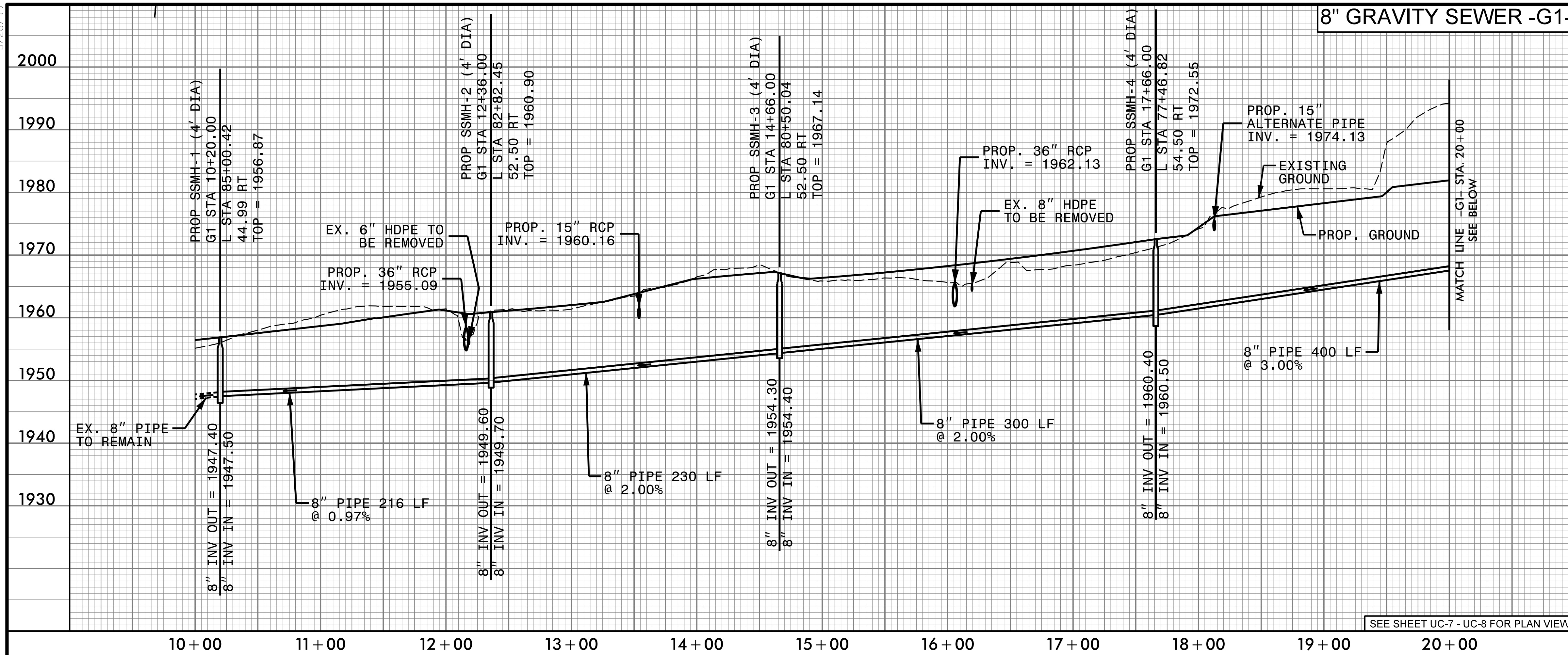
SEE SHEET UC-17 - UC-18 FOR PLAN VIEW

19+00 20+00 21+00 22+00 23+00 24+00 25+00 26+00 27+00 28+00 29+00

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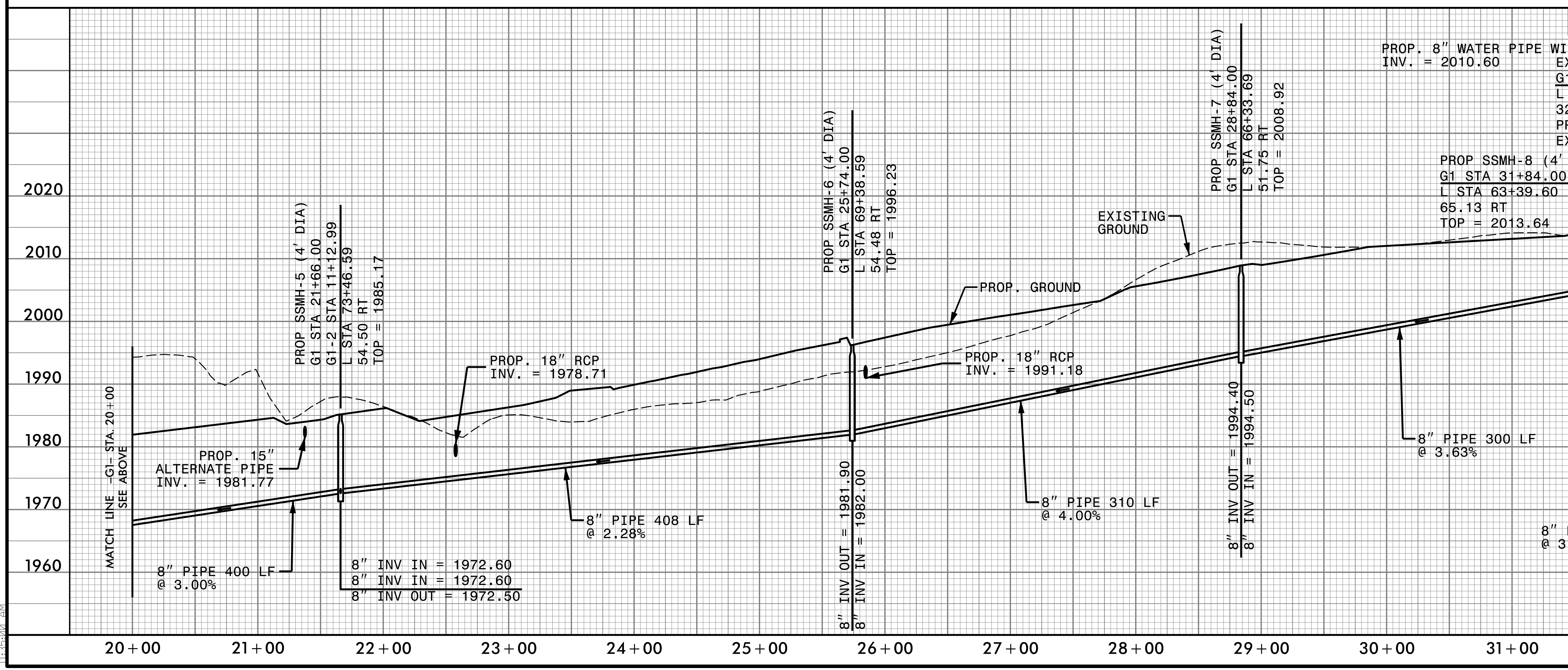


5/28/99



**8" GRAVITY SEWER -G1-**

PROJECT REFERENCE NO. A-0011C	SHEET NO. UC-34
DESIGNED BY: KCZ	
DRAWN BY: VW	
CHECKED BY: SHF	
APPROVED BY: KCZ	
REVISED:	NORTH CAROLINA DEPARTMENT OF TRANSPORTATION UTILITIES ENGINEERING SEC. PHONE: (919) 707-6690 FAX: (919) 250-4151
UTILITY CONSTRUCTION PLANS ONLY	
<b>UTILITY CONSTRUCTION</b>	
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	
NC License: C-4647 598 East Chatham Street Suite 137 Cary, NC 27511 Phone: 919.297.0220 Fax: 919.297.0221	
NOTES: 1. EXISTING PIPE INVERTS AT TIE-IN LOCATIONS ARE ESTIMATED BASED ON SURVEY INFORMATION. 2. ALL PROPOSED GRAVITY SEWER ELEVATIONS ARE INVERT OF PIPE. 3. PIPE LENGTHS ARE MEASURED FROM CENTER TO CENTER OF MANHOLE. 4. PIPE INVERTS ARE CALCULATED AT CENTER OF MANHOLE. 5. WHERE GRAVITY SEWER HAS LESS THAN 3 FEET OF COVER FROM FINAL GRADE TO TOP OF PIPE, THE PIPE SHALL BE OF DUCTILE IRON MATERIAL.	



**8" GRAVITY SEWER -G1-**

PROP. 8" WATER PIPE WITH 18" ENCASUREMENT  
 EX SSMH-9  
 G1 STA 32+56.00  
 L STA 62+76.33  
 32.73 RT  
 PR TOP = 2017.48  
 EX TOP = 2014.40

PROP SSMH-8 (4' DIA)  
 G1 STA 31+84.00  
 L STA 63+39.60  
 65.13 RT  
 TOP = 2013.64

PROP SSMH-7 (4' DIA)  
 G1 STA 28+84.00  
 L STA 66+33.69  
 51.75 RT  
 TOP = 2008.92

PROP SSMH-6 (4' DIA)  
 G1 STA 25+74.00  
 L STA 69+38.59  
 54.48 RT  
 TOP = 1996.23

PROP SSMH-5 (4' DIA)  
 G1 STA 21+66.00  
 G1-2 STA 11+12.99  
 L STA 73+46.59  
 54.50 RT  
 TOP = 1985.17

PROP. 18" RCP INV. = 1978.71

PROP. 15" ALTERNATE PIPE INV. = 1981.77

8" INV IN = 1972.60  
 8" INV IN = 1972.60  
 8" INV OUT = 1972.50

8" PIPE 408 LF @ 2.28%

8" PIPE 310 LF @ 4.00%

8" INV OUT = 1994.40  
 8" INV IN = 1994.50

8" PIPE 300 LF @ 3.63%

8" INV OUT = 2005.40  
 8" INV IN = 2005.50

8" PIPE 72 LF @ 3.51%

8" INV OUT = 2008.03  
 8" INV IN = 2008.13

PROP. 8" WATER PIPE WITH 18" ENCASUREMENT  
 INV. = 2010.60

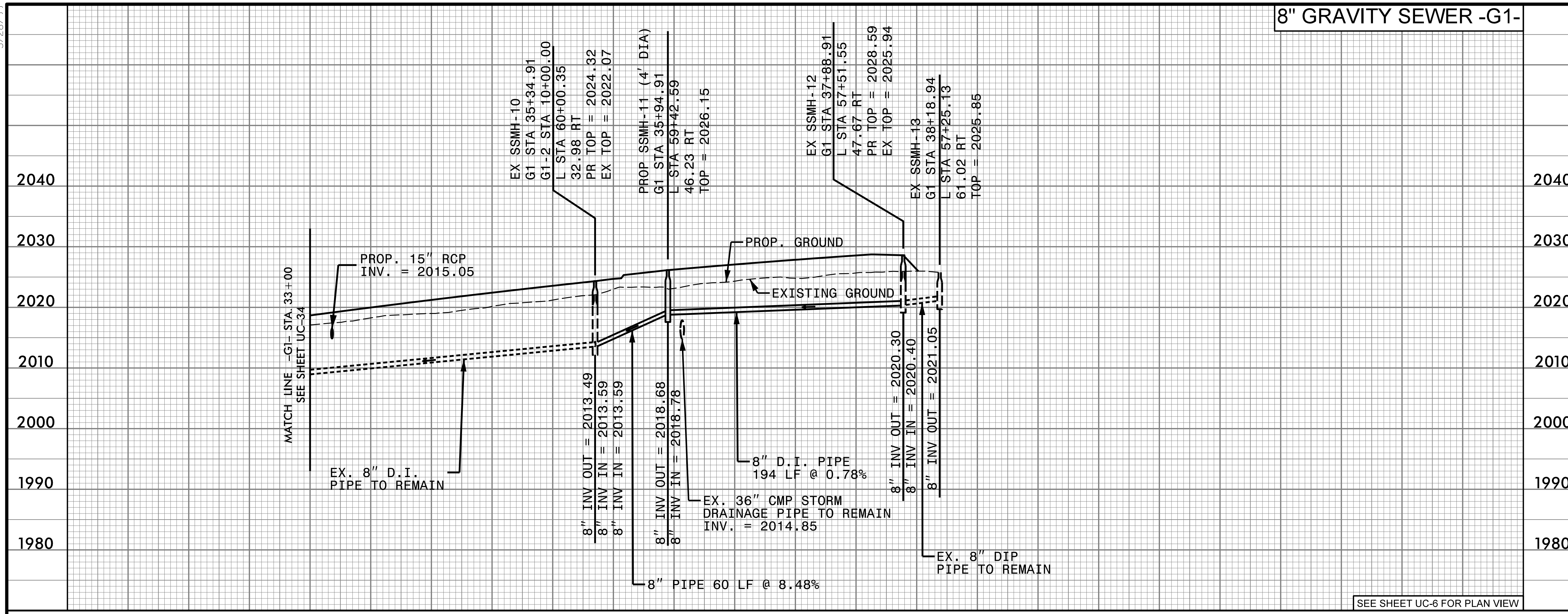
SEE SHEET UC-6, UC-7 FOR PLAN VIEW

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5/28/99

### 8" GRAVITY SEWER -G1-

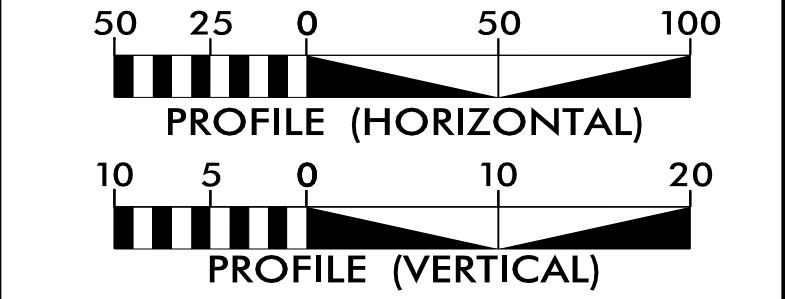


PROJECT REFERENCE NO. A-0011C	SHEET NO. UC-35
DESIGNED BY: KCZ	
DRAWN BY: VW	
CHECKED BY: SHF	
APPROVED BY: KCZ	
REVISED:	NORTH CAROLINA DEPARTMENT OF TRANSPORTATION UTILITIES ENGINEERING SEC. PHONE: (919) 707-6690 FAX: (919) 250-4151

### UTILITY CONSTRUCTION

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

Weston Sampson  
 WSE of North Carolina, PC  
 598 East Chatham Street Suite 137 Cary, NC 27511  
 Phone: 919.297.0220 Fax: 919.297.0221

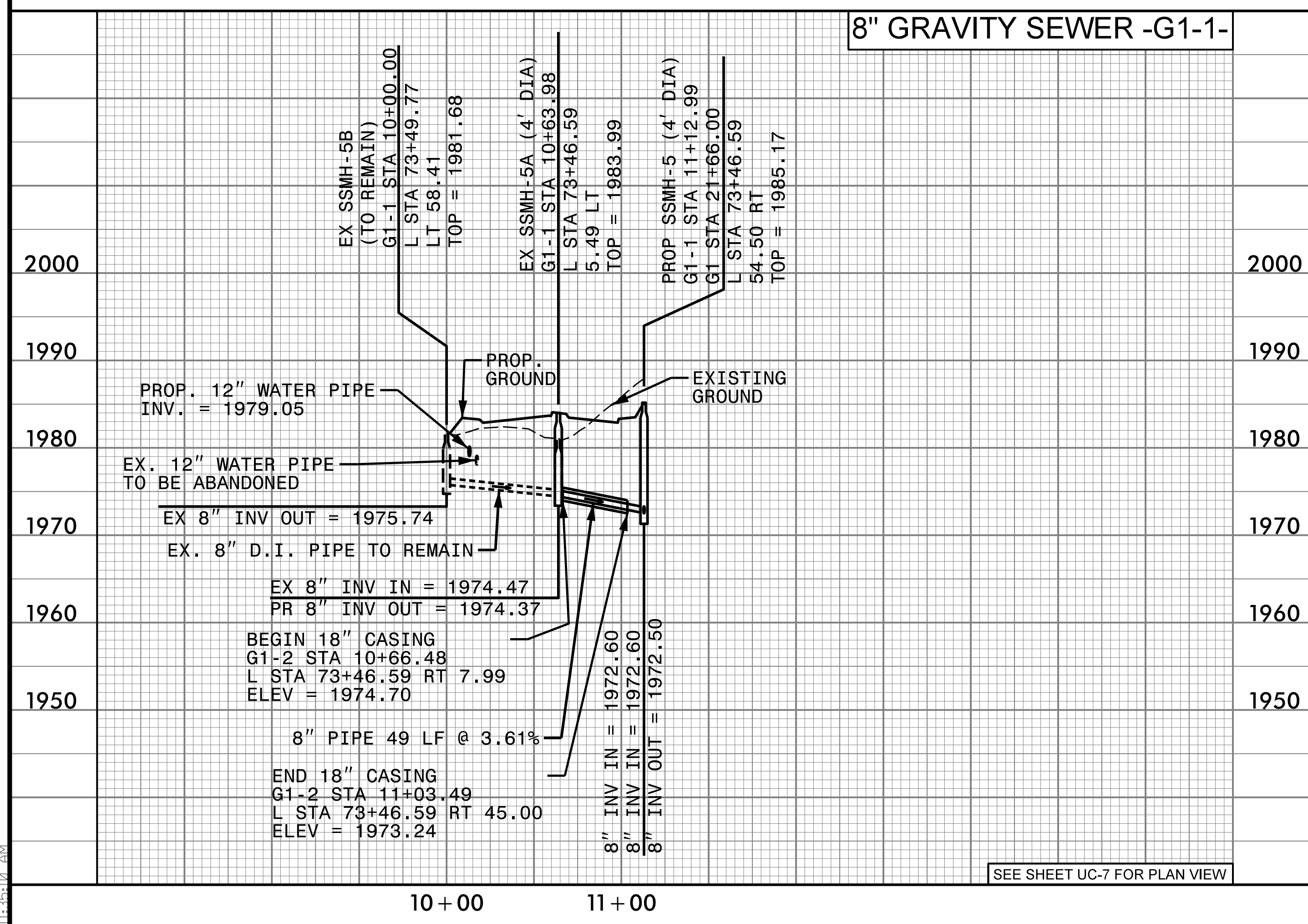


- NOTES:
- EXISTING PIPE INVERTS AT TIE-IN LOCATIONS ARE ESTIMATED BASED ON SURVEY INFORMATION.
  - ALL PROPOSED GRAVITY SEWER ELEVATIONS ARE INVERT OF PIPE.
  - PIPE LENGTHS ARE MEASURED FROM CENTER TO CENTER OF MANHOLE.
  - PIPE INVERTS ARE CALCULATED AT CENTER OF MANHOLE.
  - WHERE GRAVITY SEWER HAS LESS THAN 3 FEET OF COVER FROM FINAL GRADE TO TOP OF PIPE, THE PIPE SHALL BE OF DUCTILE IRON MATERIAL.

SEE SHEET UC-6 FOR PLAN VIEW

33+00 34+00 35+00 36+00 37+00 38+00

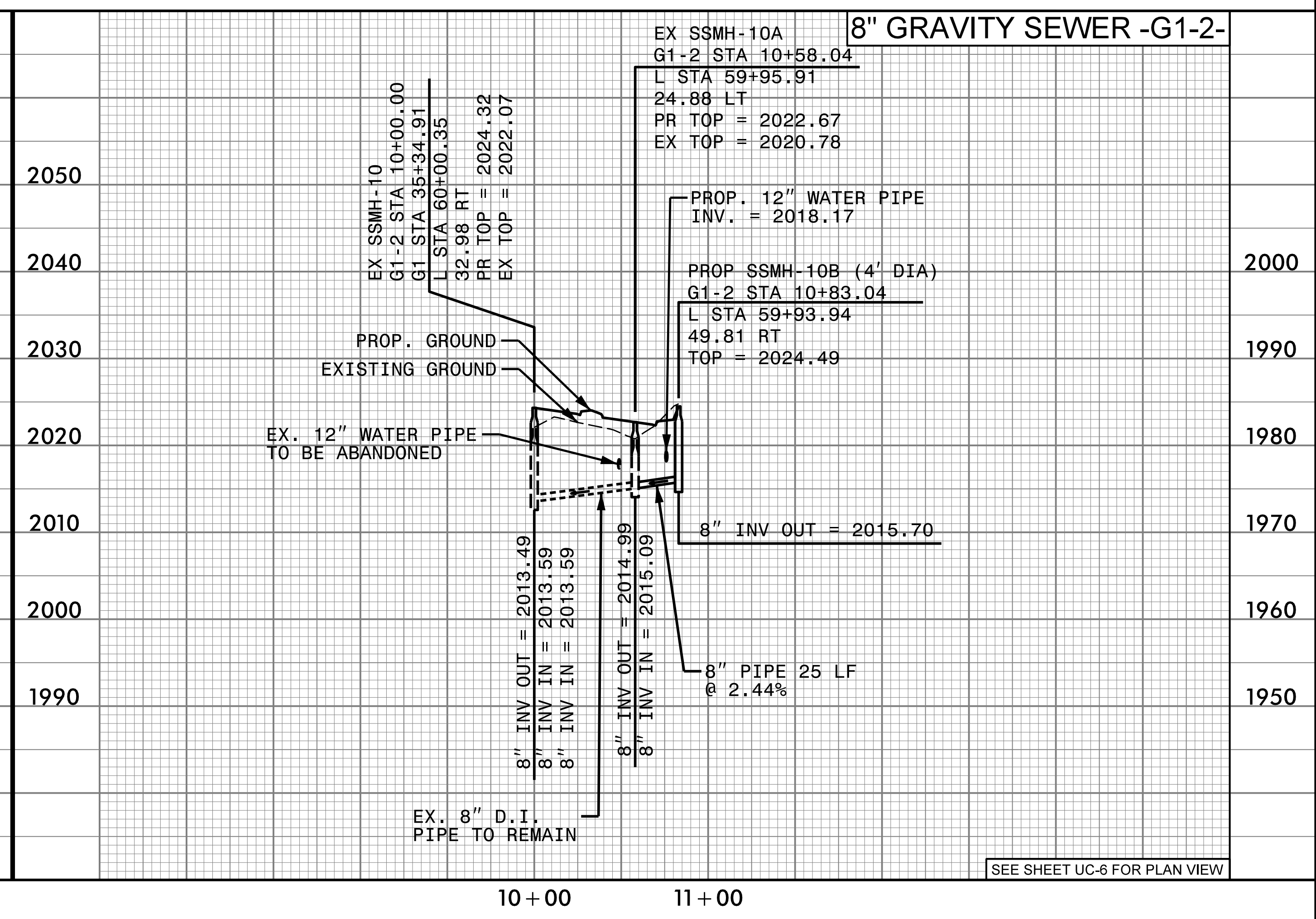
### 8" GRAVITY SEWER -G1-1-



SEE SHEET UC-7 FOR PLAN VIEW

10+00 11+00

### 8" GRAVITY SEWER -G1-2-



SEE SHEET UC-6 FOR PLAN VIEW

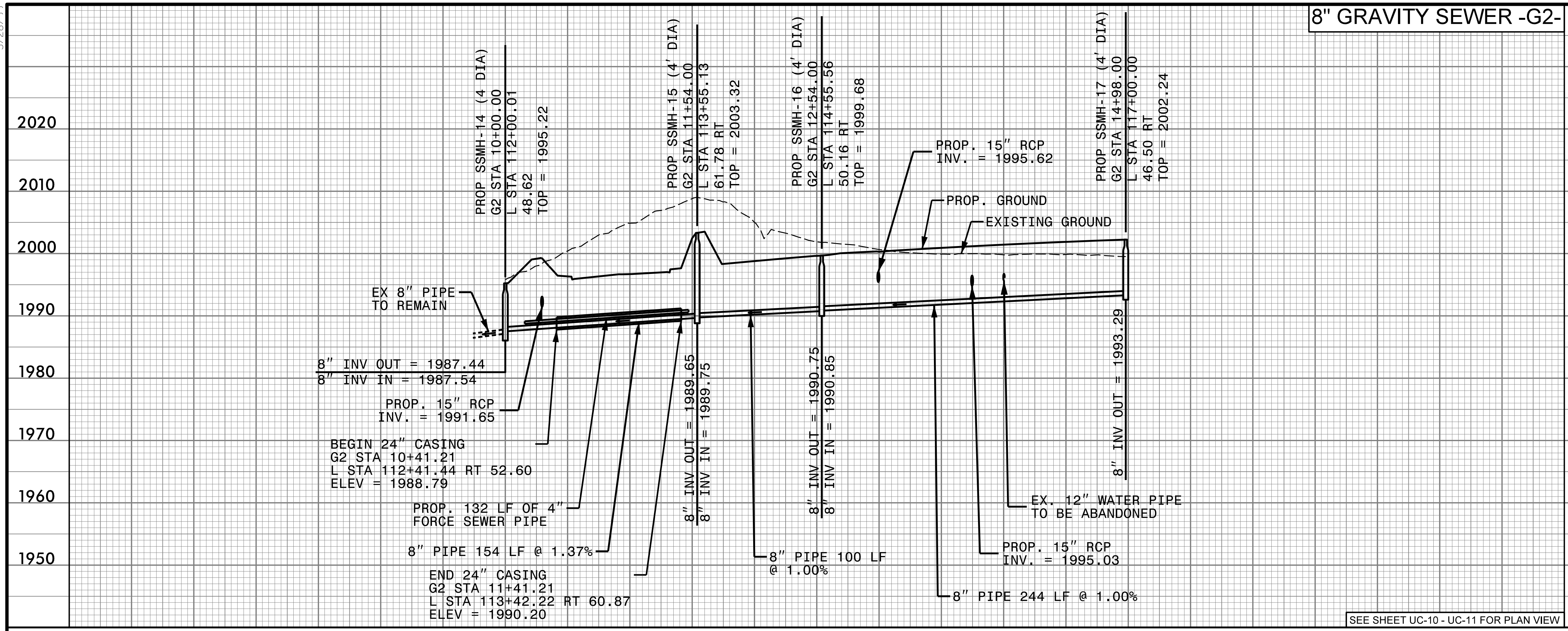
10+00 11+00

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5/28/99

### 8" GRAVITY SEWER -G2-

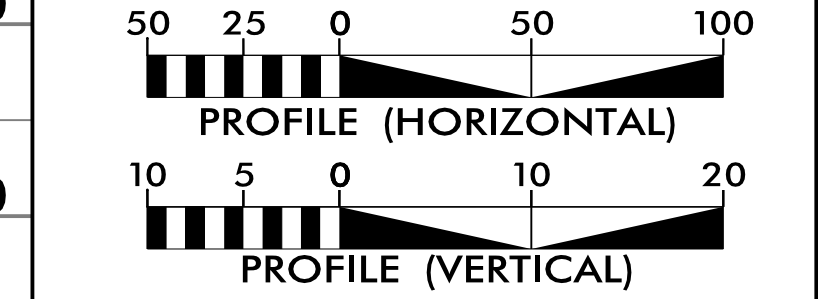


PROJECT REFERENCE NO.	SHEET NO.
A-0011C	UC-36
DESIGNED BY: KCZ	
DRAWN BY: VW	
CHECKED BY: SHF	
APPROVED BY: KCZ	
REVISED:	
UTILITIES ENGINEERING SEC. PHONE: (919) 707-6690 FAX: (919) 250-4151	
NORTH CAROLINA DEPARTMENT OF TRANSPORTATION UTILITY CONSTRUCTION PLANS ONLY	

### UTILITY CONSTRUCTION

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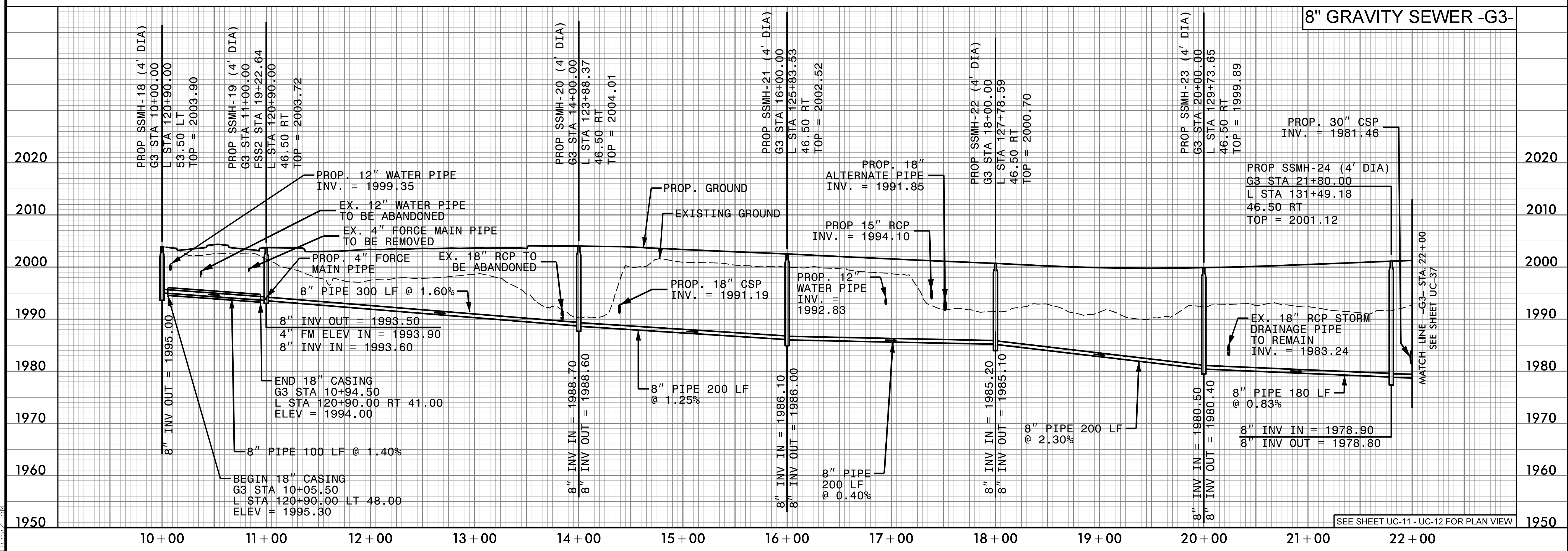
Weston Sampson  
 WSE of North Carolina, PC  
 598 East Chatham Street Suite 137 Cary, NC 27511  
 Phone: 919.297.0220 License: C-4647 Fax: 919.297.0221



- NOTES:
- EXISTING PIPE INVERTS AT TIE-IN LOCATIONS ARE ESTIMATED BASED ON SURVEY INFORMATION.
  - ALL PROPOSED GRAVITY SEWER ELEVATIONS ARE INVERT OF PIPE.
  - PIPE LENGTHS ARE MEASURED FROM CENTER TO CENTER OF MANHOLE.
  - PIPE INVERTS ARE CALCULATED AT CENTER OF MANHOLE.
  - WHERE GRAVITY SEWER HAS LESS THAN 3 FEET OF COVER FROM FINAL GRADE TO TOP OF PIPE, THE PIPE SHALL BE OF DUCTILE IRON MATERIAL.
  - REFER TO BORE AND JACK DETAIL.

SEE SHEET UC-10 - UC-11 FOR PLAN VIEW

### 8" GRAVITY SEWER -G3-



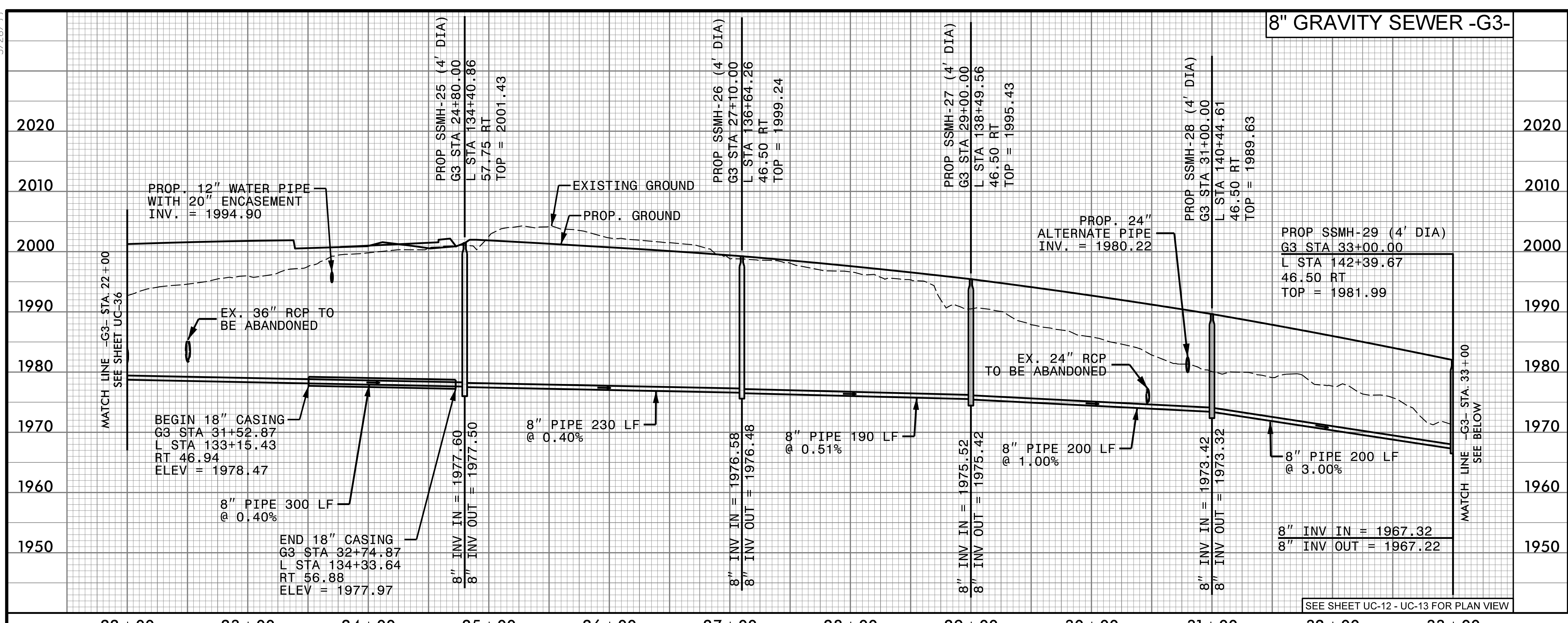
SEE SHEET UC-11 - UC-12 FOR PLAN VIEW

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5/28/99

### 8" GRAVITY SEWER -G3-

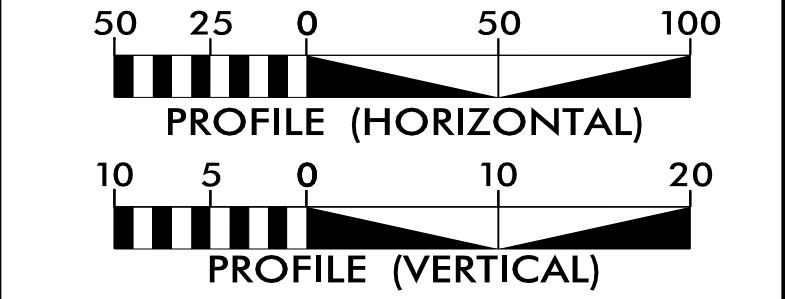


PROJECT REFERENCE NO.	SHEET NO.
A-0011C	UC-37
DESIGNED BY: KCZ	
DRAWN BY: VW	
CHECKED BY: SHF	
APPROVED BY: KCZ	
REVISED:	NORTH CAROLINA DEPARTMENT OF TRANSPORTATION UTILITIES ENGINEERING SEC. PHONE: (919) 707-6690 FAX: (919) 250-4151
UTILITY CONSTRUCTION PLANS ONLY	

### UTILITY CONSTRUCTION

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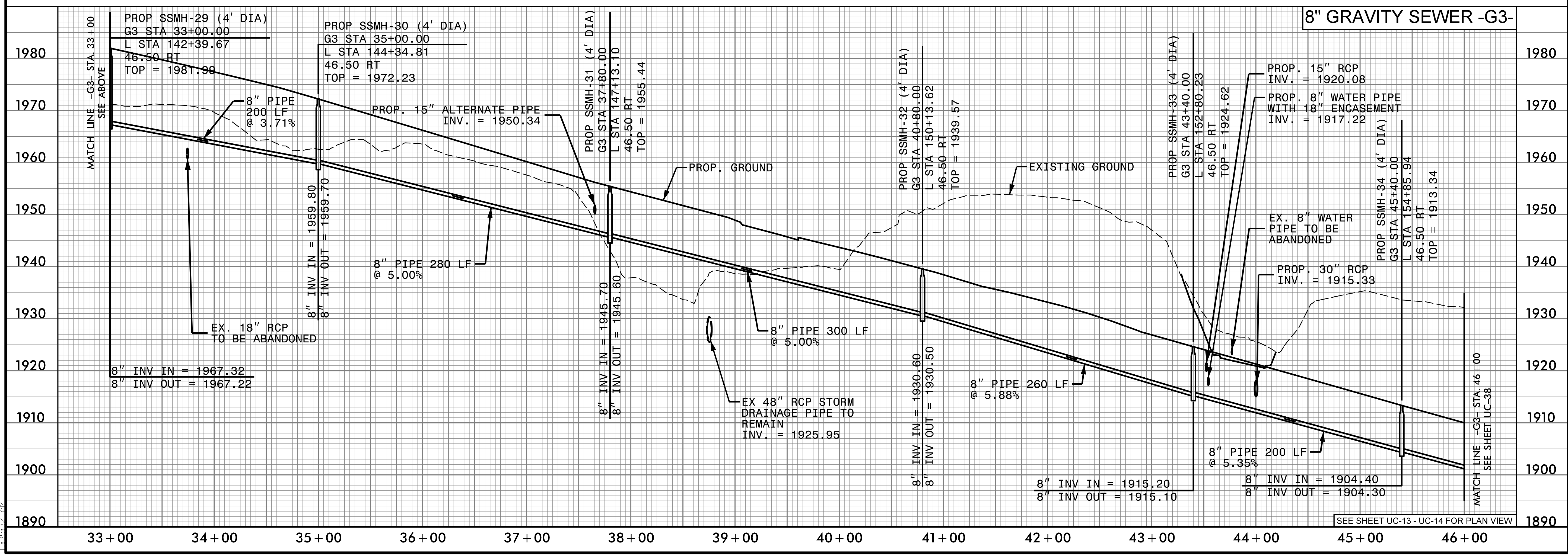
Weston Sampson  
 WSE of North Carolina, PC  
 598 East Chatham Street Suite 137 Cary, NC 27511  
 Phone: 919.297.0220 License: C-4647 Fax: 919.297.0221



- NOTES:
- EXISTING PIPE INVERTS AT TIE-IN LOCATIONS ARE ESTIMATED BASED ON SURVEY INFORMATION.
  - ALL PROPOSED GRAVITY SEWER ELEVATIONS ARE INVERT OF PIPE.
  - PIPE LENGTHS ARE MEASURED FROM CENTER TO CENTER OF MANHOLE.
  - PIPE INVERTS ARE CALCULATED AT CENTER OF MANHOLE.
  - WHERE GRAVITY SEWER HAS LESS THAN 3 FEET OF COVER FROM FINAL GRADE TO TOP OF PIPE, THE PIPE SHALL BE OF DUCTILE IRON MATERIAL.

SEE SHEET UC-12 - UC-13 FOR PLAN VIEW

### 8" GRAVITY SEWER -G3-



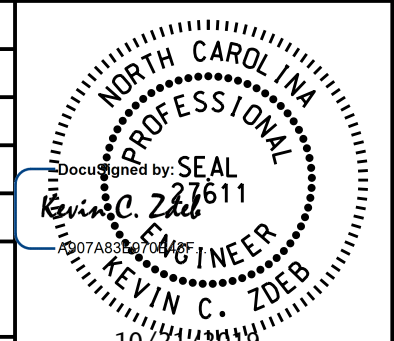
SEE SHEET UC-13 - UC-14 FOR PLAN VIEW

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5/28/2019

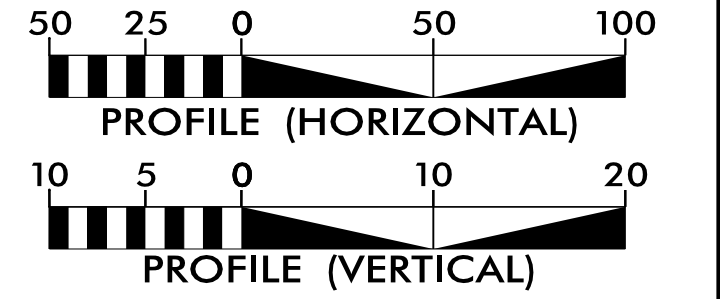
# 8" GRAVITY SEWER -G3-

PROJECT REFERENCE NO.	SHEET NO.
A-0011C	UC-38
DESIGNED BY: KCZ	
DRAWN BY: VW	
CHECKED BY: SHF	
APPROVED BY: KCZ	
REVISOR:	NORTH CAROLINA DEPARTMENT OF TRANSPORTATION UTILITIES ENGINEERING SEC. PHONE: (919) 707-6690 FAX: (919) 250-4151
UTILITY CONSTRUCTION PLANS ONLY	

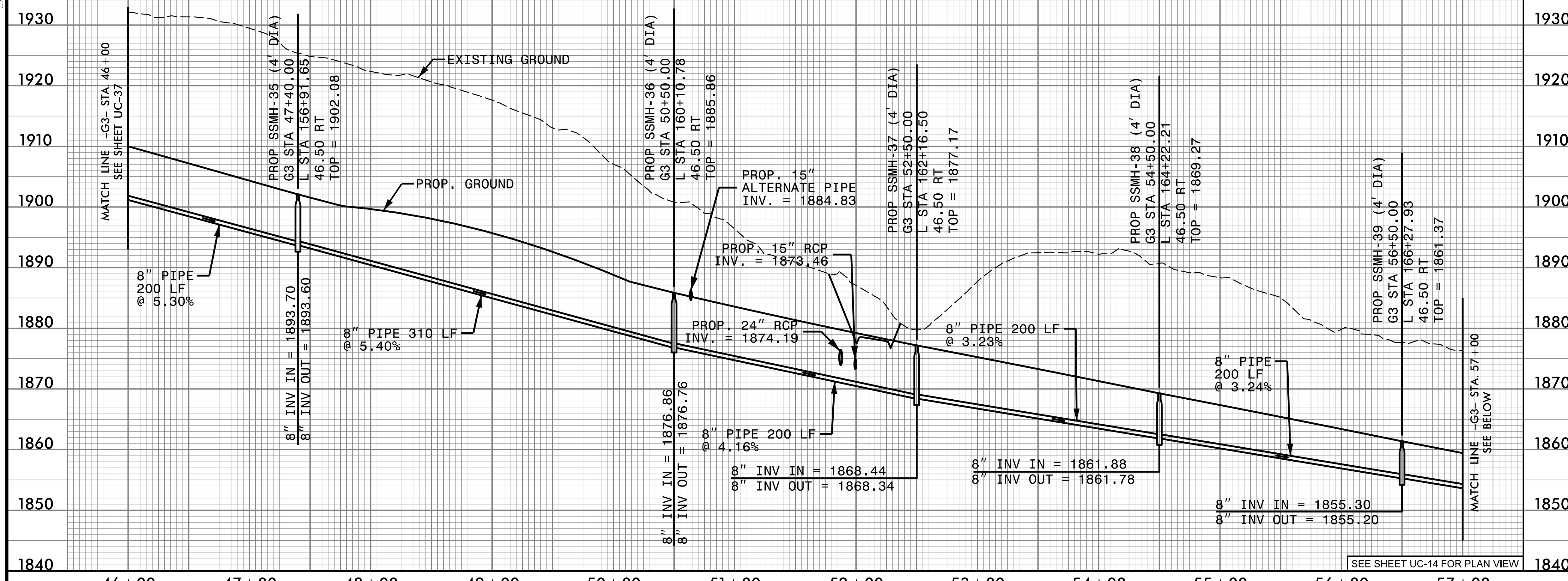
## UTILITY CONSTRUCTION

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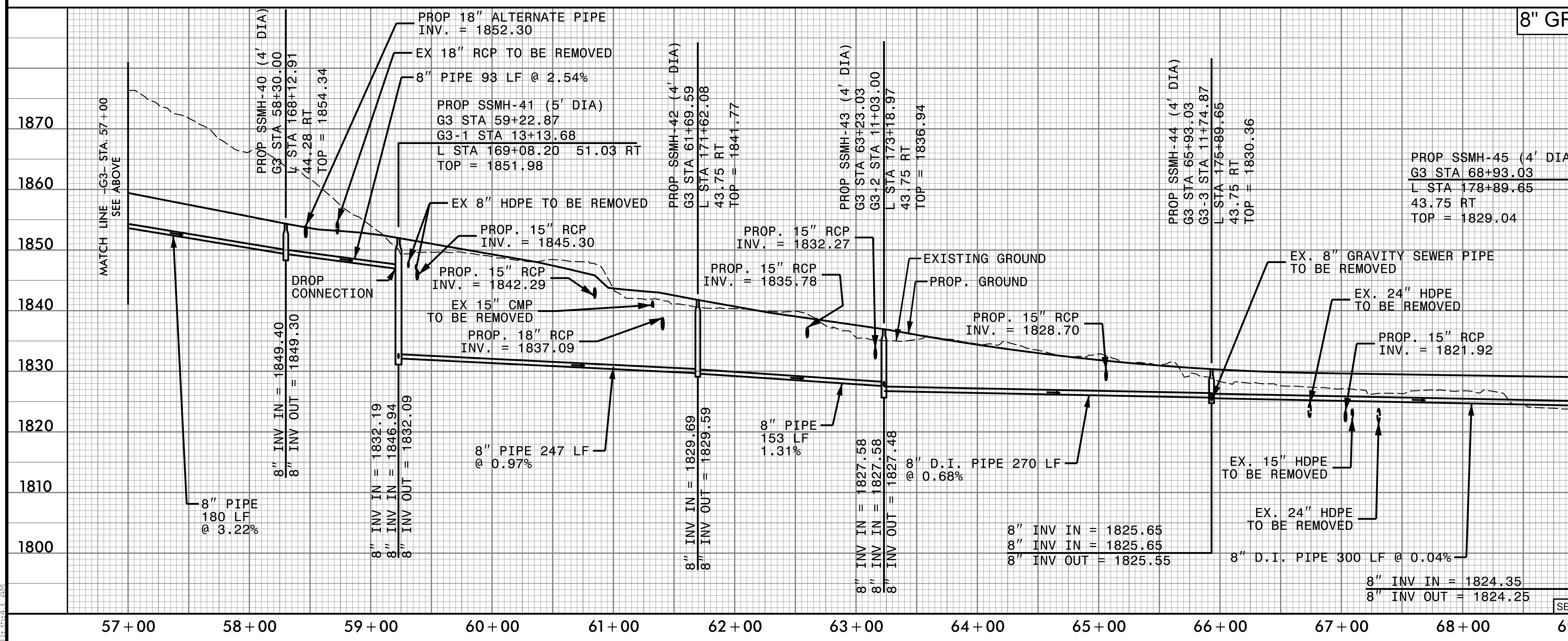
Weston Sampson  
 WSE of North Carolina, PC  
 598 East Chatham Street Suite 137 Cary, NC 27511  
 Phone: 919.297.0220 License: C-4647  
 Fax: 919.297.0221



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  - ALL PROPOSED GRAVITY SEWER ELEVATIONS ARE INVERT OF PIPE.
  - PIPE LENGTHS ARE MEASURED FROM CENTER TO CENTER OF MANHOLE.
  - PIPE INVERTS ARE CALCULATED AT CENTER OF MANHOLE.
  - WHERE GRAVITY SEWER HAS LESS THAN 3 FEET OF COVER FROM FINAL GRADE TO TOP OF PIPE, THE PIPE SHALL BE OF DUCTILE IRON MATERIAL.



# 8" GRAVITY SEWER -G3-

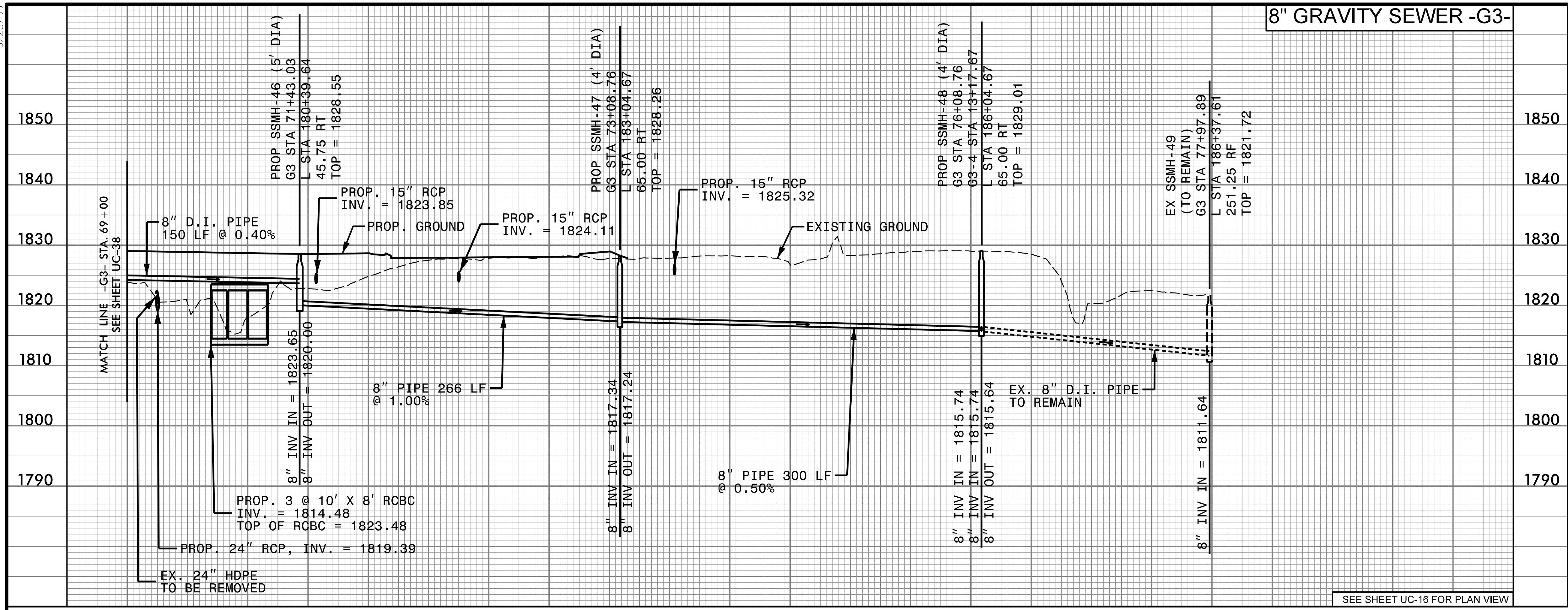


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### 8" GRAVITY SEWER -G3-

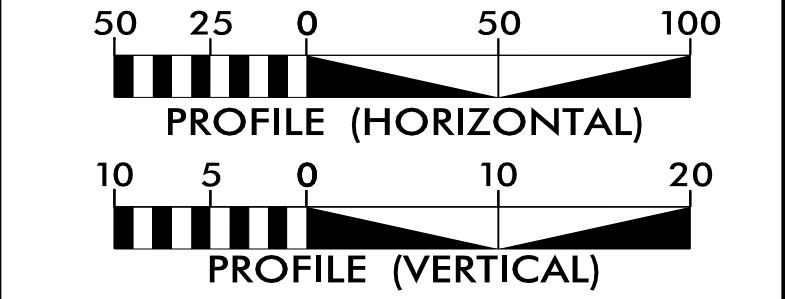


PROJECT REFERENCE NO. A-0011C	SHEET NO. UC-39
DESIGNED BY: KCZ	
DRAWN BY: VW	
CHECKED BY: SHF	
APPROVED BY: KCZ	
REVISED:	NORTH CAROLINA DEPARTMENT OF TRANSPORTATION UTILITIES ENGINEERING SEC. PHONE: (919) 707-6690 FAX: (919) 250-4151

### UTILITY CONSTRUCTION

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UNLESS ALL SIGNATURES COMPLETED**

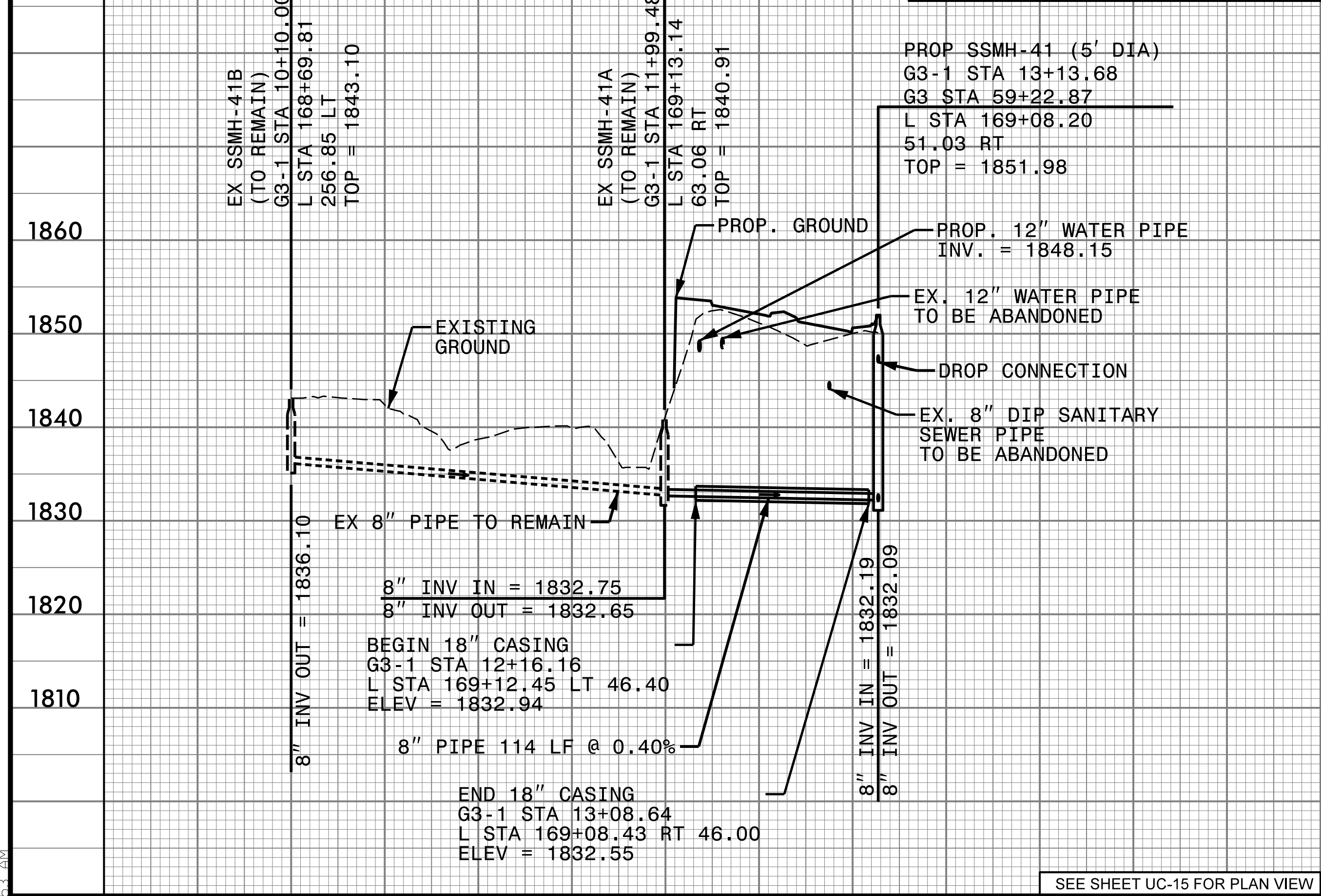
Weston Sampson  
 WSE of North Carolina, PC  
 598 East Chatham Street Suite 137 Cary, NC 27511  
 Phone: 919.297.0220 Fax: 919.297.0221



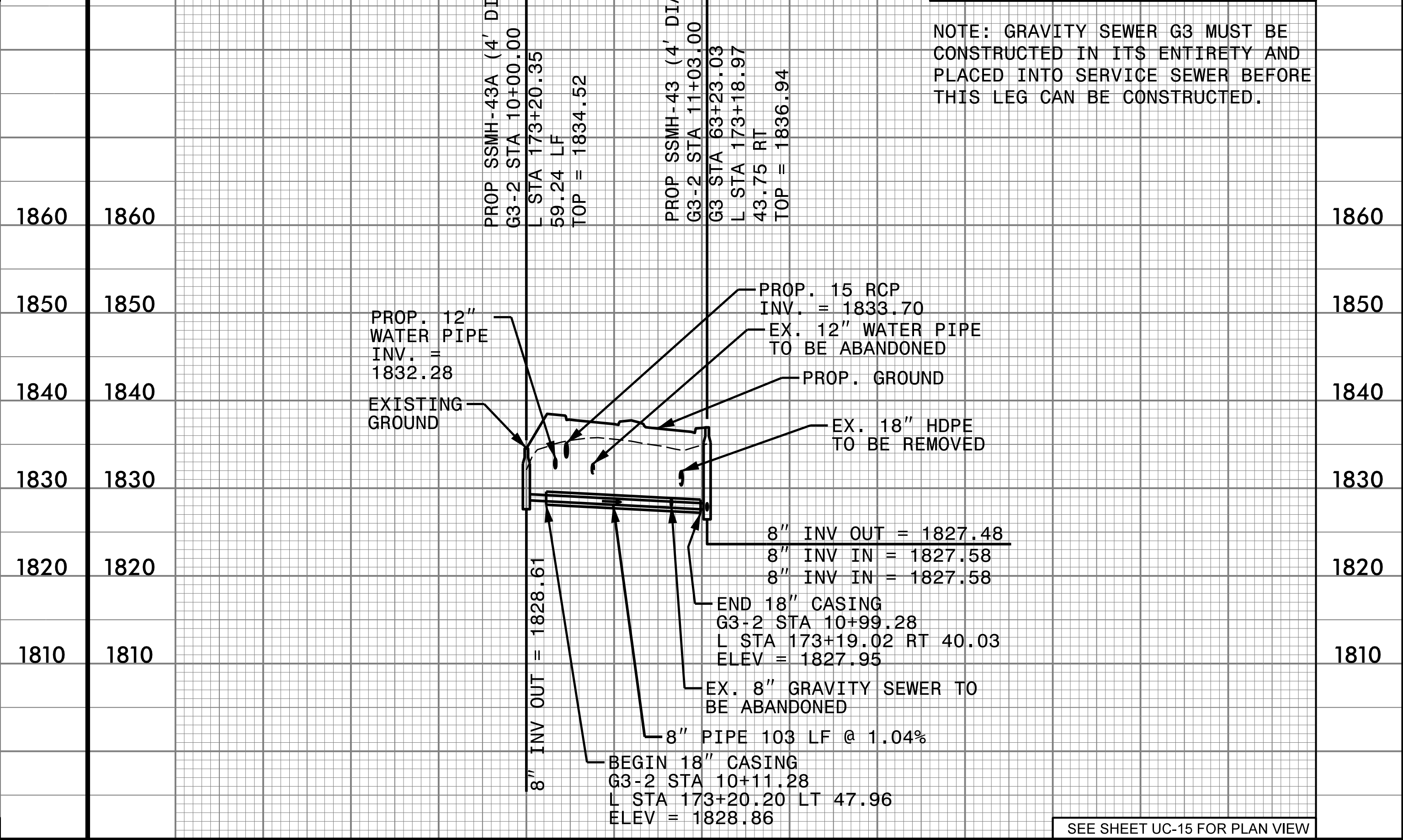
- NOTES:
- EXISTING PIPE INVERTS AT TIE-IN LOCATIONS ARE ESTIMATED BASED ON SURVEY INFORMATION.
  - ALL PROPOSED GRAVITY SEWER ELEVATIONS ARE INVERT OF PIPE.
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  - PIPE INVERTS ARE CALCULATED AT CENTER OF MANHOLE.
  - WHERE GRAVITY SEWER HAS LESS THAN 3 FEET OF COVER FROM FINAL GRADE TO TOP OF PIPE, THE PIPE SHALL BE OF DUCTILE IRON MATERIAL. REFER TO BORE AND JACK DETAIL.

69+00 70+00 71+00 72+00 73+00 74+00 75+00 76+00 77+00 78+00

### 8" GRAVITY SEWER -G3-1-



### 8" GRAVITY SEWER -G3-2-



NOTE: GRAVITY SEWER G3 MUST BE CONSTRUCTED IN ITS ENTIRETY AND PLACED INTO SERVICE SEWER BEFORE THIS LEG CAN BE CONSTRUCTED.

10+00 11+00 12+00 13+00 10+00 11+00

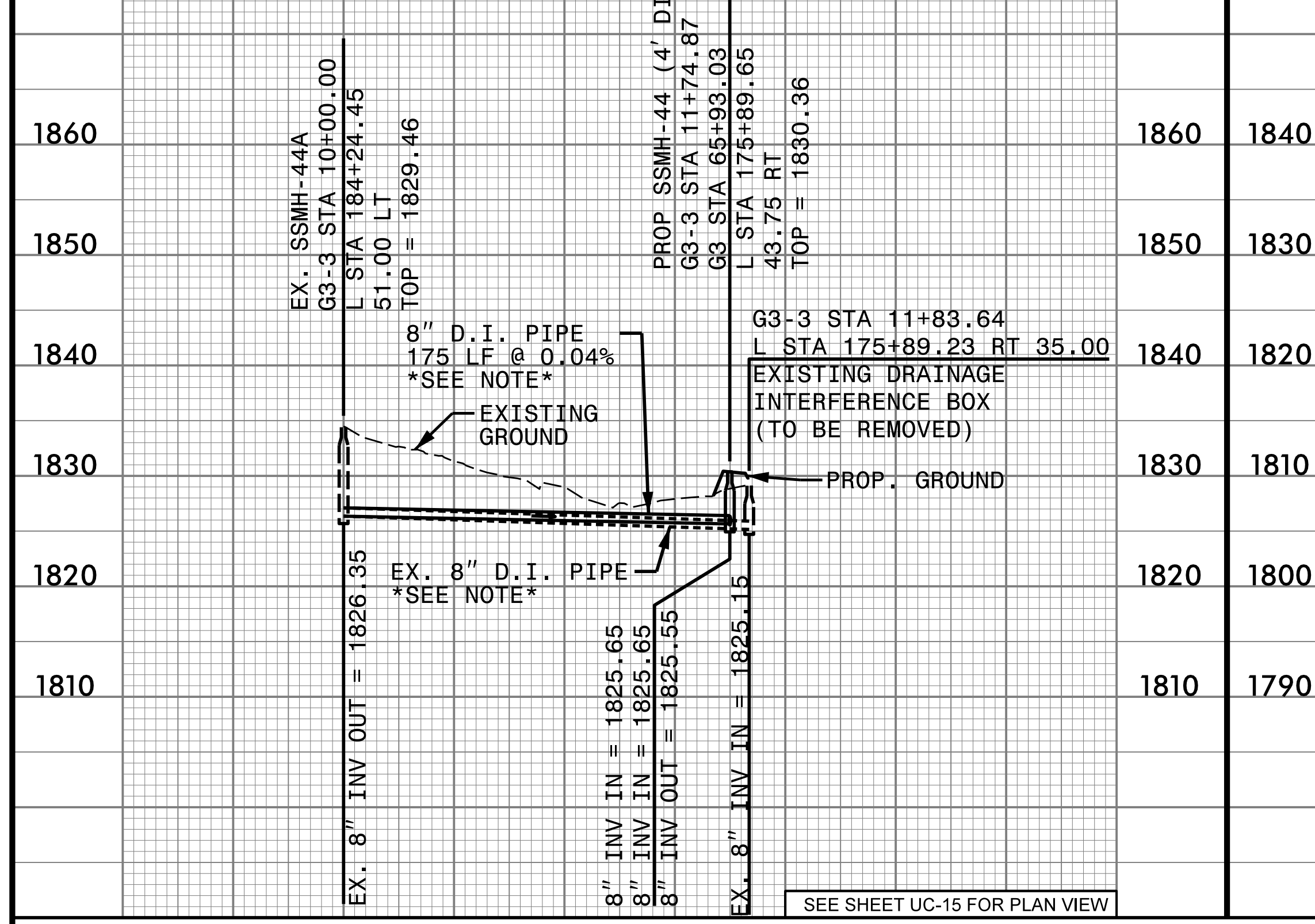
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5/28/2019

NOTE:  
CONTRACTOR SHALL EXCAVATE EXISTING SEWER  
LINE & RE-INSTALL LINE AT NEW GRADE

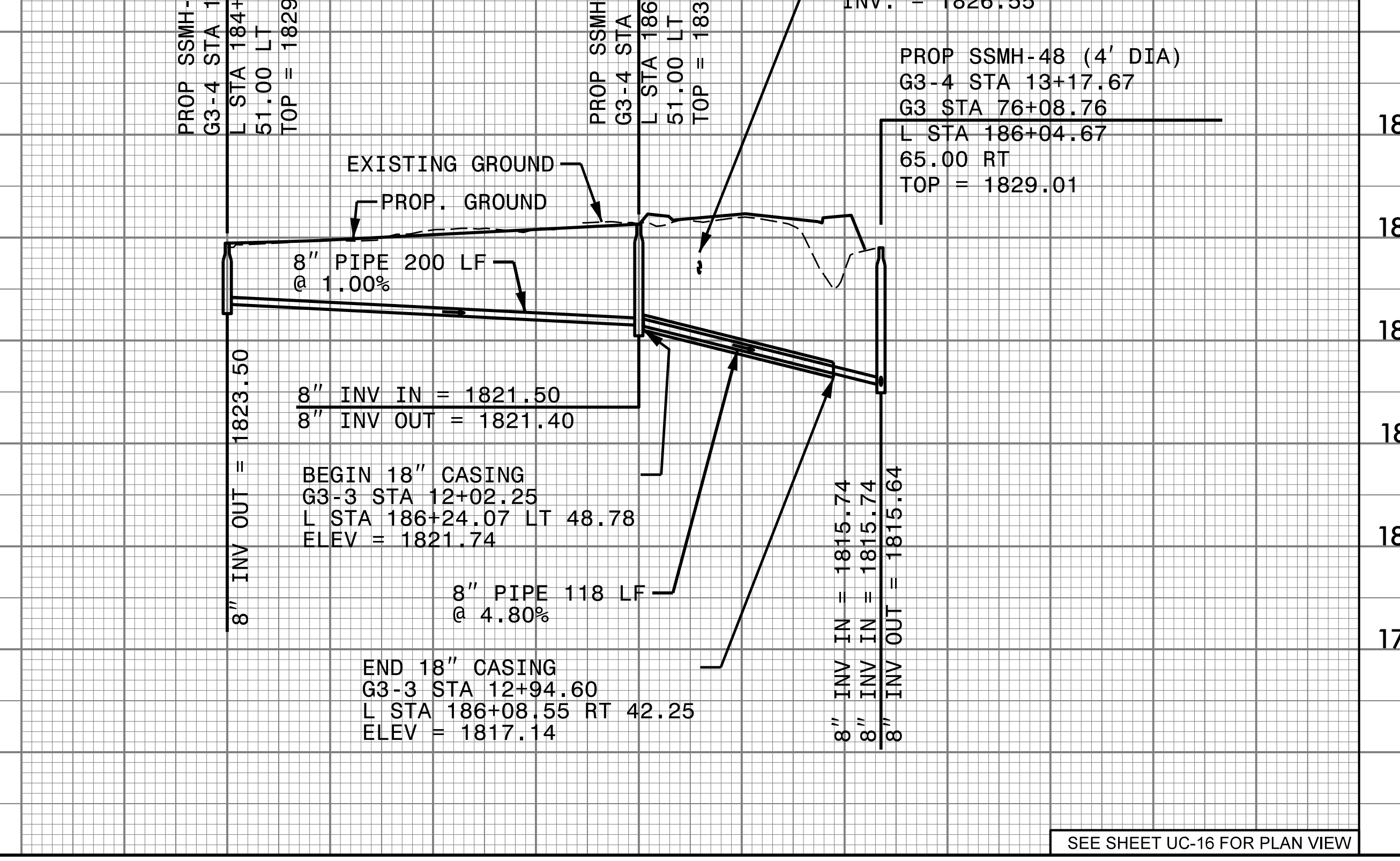
### 8" GRAVITY SEWER -G3-3-



10 + 00      11 + 00

SEE SHEET UC-15 FOR PLAN VIEW

### 8" GRAVITY SEWER -G3-4-



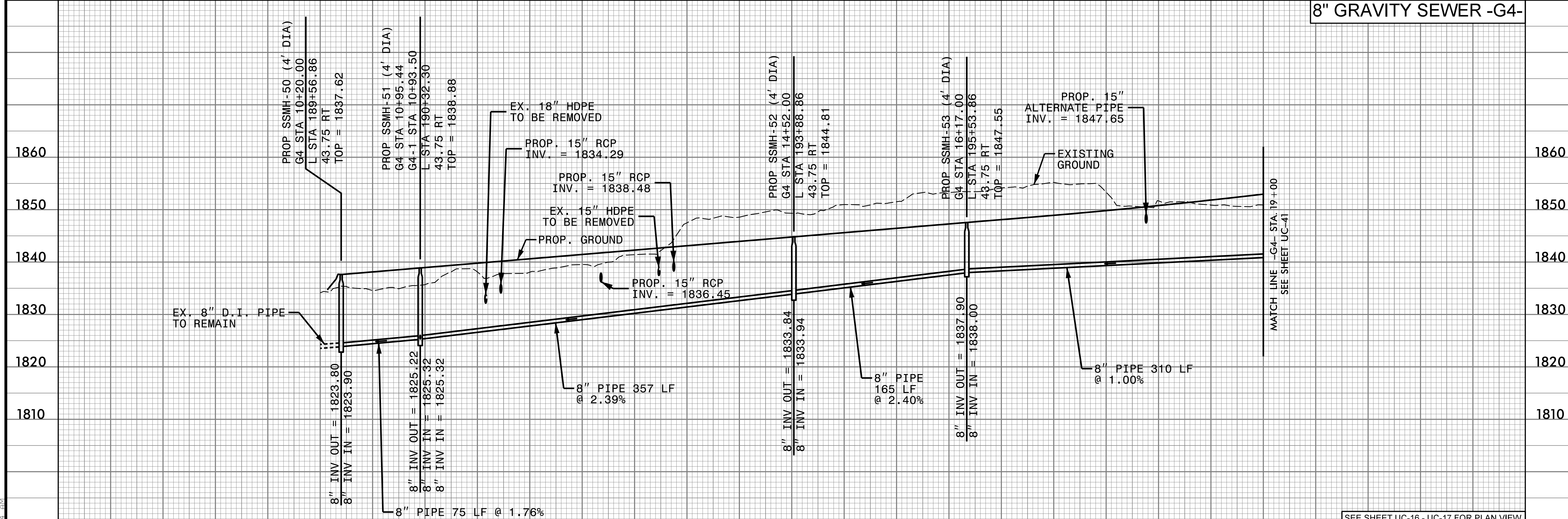
10 + 00      11 + 00      12 + 00      13 + 00

SEE SHEET UC-16 FOR PLAN VIEW

PROJECT REFERENCE NO. A-0011C	SHEET NO. UC-40
DESIGNED BY: KCZ	
DRAWN BY: VW	
CHECKED BY: SHF	
APPROVED BY: KCZ	
REVISED:	NORTH CAROLINA DEPARTMENT OF TRANSPORTATION UTILITIES ENGINEERING SEC. PHONE: (919) 707-6690 FAX: (919) 250-4151
<b>UTILITY CONSTRUCTION</b>	
<b>DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED</b>	

- NOTES:
- EXISTING PIPE INVERTS AT TIE-IN LOCATIONS ARE ESTIMATED BASED ON SURVEY INFORMATION.
  - ALL PROPOSED GRAVITY SEWER ELEVATIONS ARE INVERT OF PIPE.
  - PIPE LENGTHS ARE MEASURED FROM CENTER TO CENTER OF MANHOLE.
  - PIPE INVERTS ARE CALCULATED AT CENTER OF MANHOLE.
  - WHERE GRAVITY SEWER HAS LESS THAN 3 FEET OF COVER FROM FINAL GRADE TO TOP OF PIPE, THE PIPE SHALL BE OF DUCTILE IRON MATERIAL.

### 8" GRAVITY SEWER -G4-



10 + 00      11 + 00      12 + 00      13 + 00      14 + 00      15 + 00      16 + 00      17 + 00      18 + 00      19 + 00

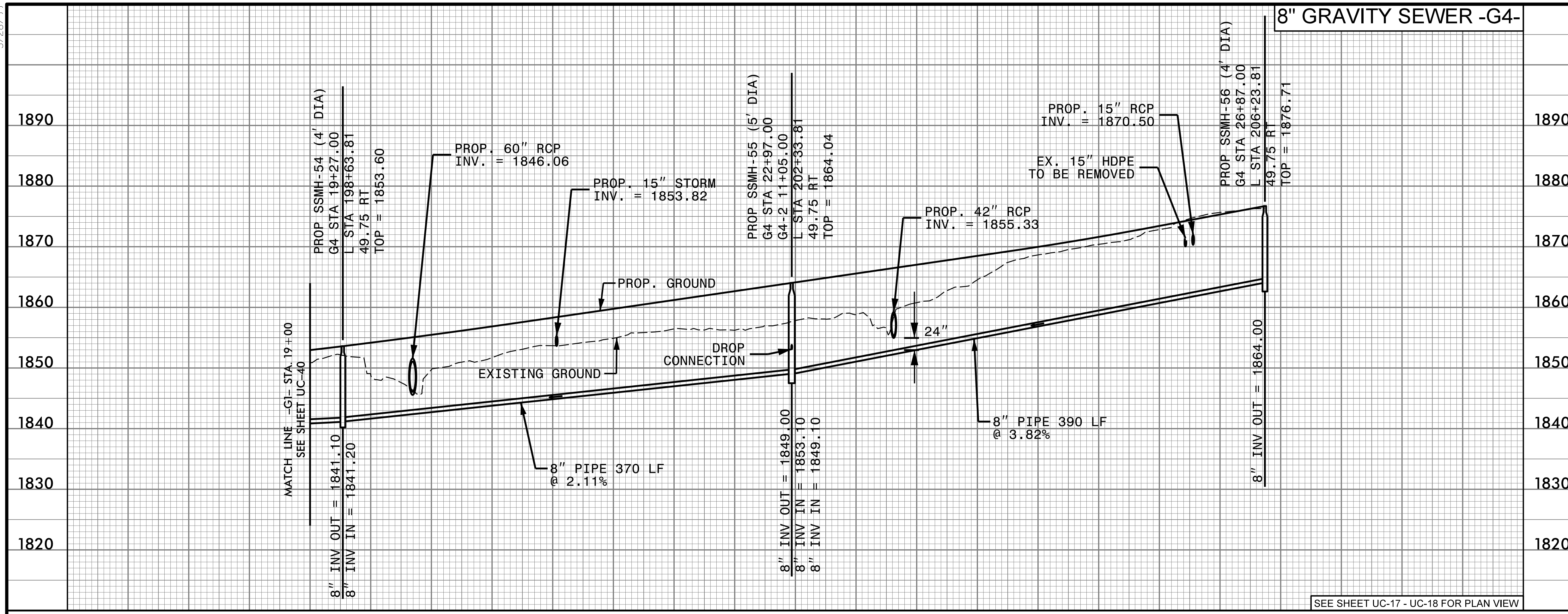
SEE SHEET UC-16 - UC-17 FOR PLAN VIEW

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5/28/2019

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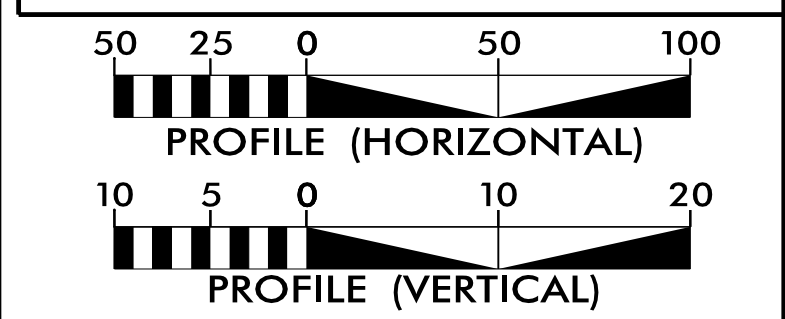
PROJECT REFERENCE NO. A-0011C SHEET NO. UC-41

DESIGNED BY: KCZ  
 DRAWN BY: VW  
 CHECKED BY: SHF  
 APPROVED BY: KCZ  
 REVISED:

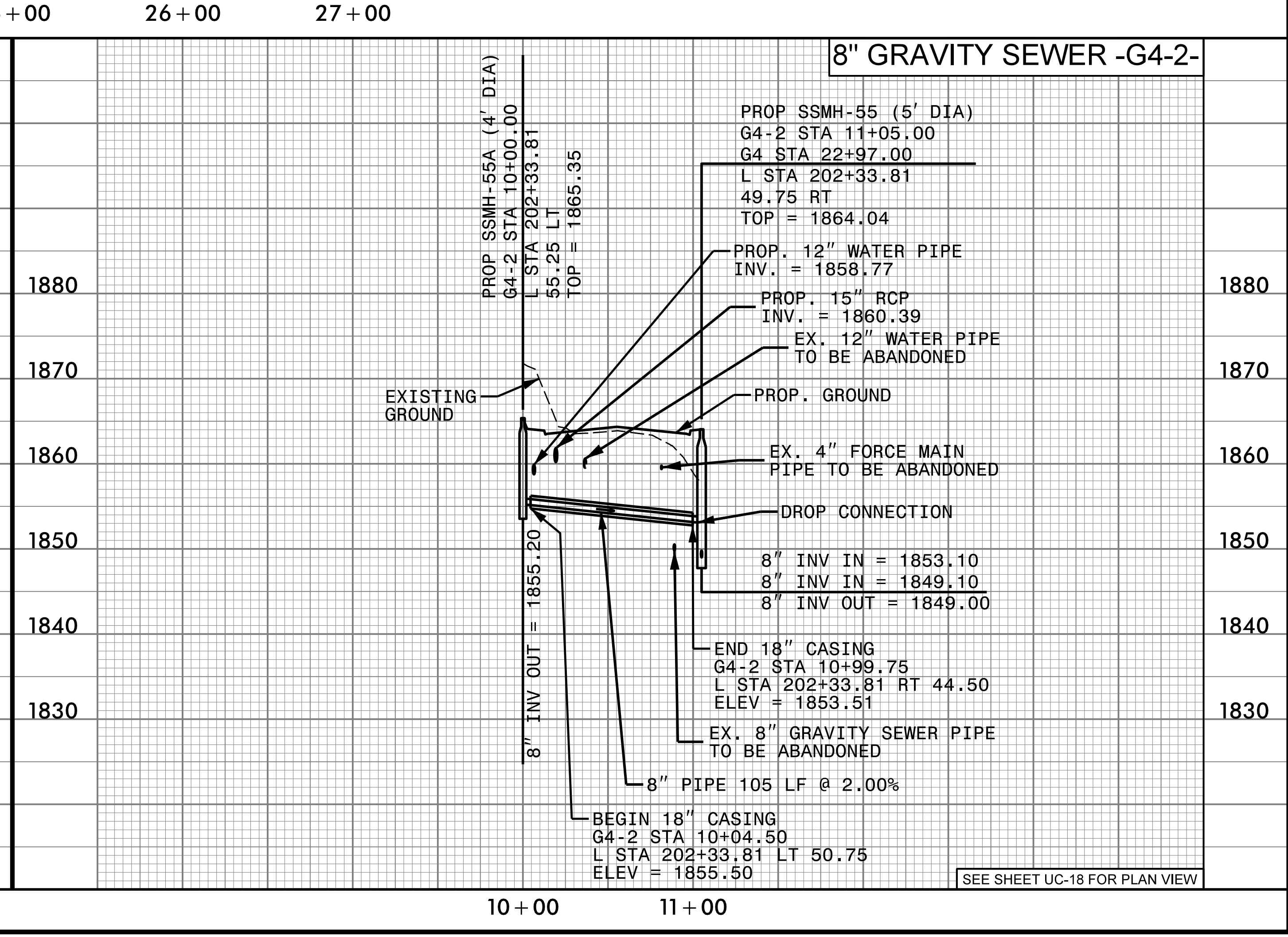
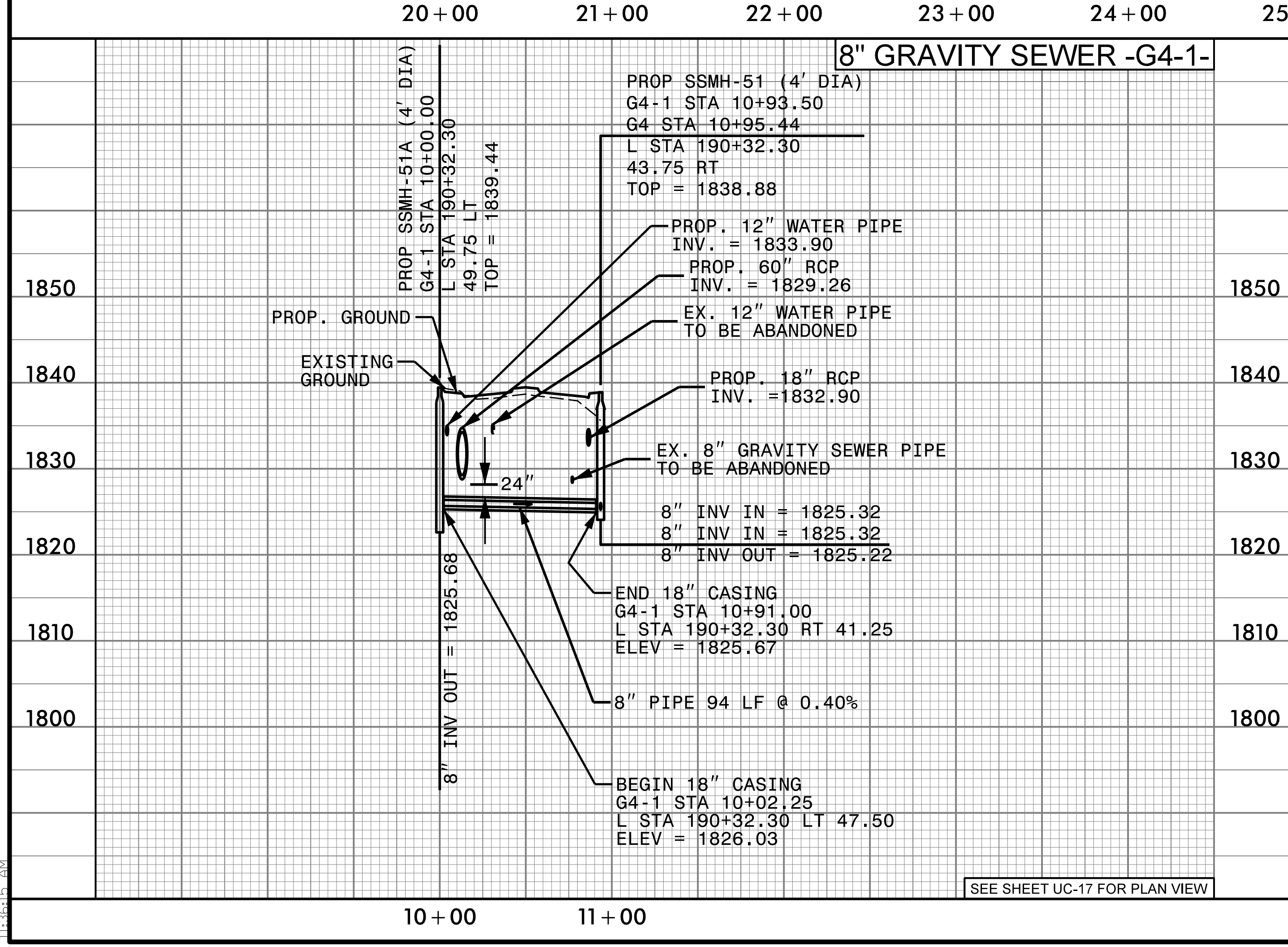
**WESTON & SAMPSON**  
 PROFESSIONAL ENGINEER  
 NORTH CAROLINA DEPARTMENT OF TRANSPORTATION  
 UTILITIES ENGINEERING SEC. PHONE: (919) 707-6690 FAX: (919) 250-4151  
 KEVIN C. ZOB  
 10/22/2018  
 ENGINEER  
 UTILITY CONSTRUCTION PLANS ONLY

**UTILITY CONSTRUCTION**

**DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED**



- NOTES:
- EXISTING PIPE INVERTS AT TIE-IN LOCATIONS ARE ESTIMATED BASED ON SURVEY INFORMATION.
  - ALL PROPOSED GRAVITY SEWER ELEVATIONS ARE INVERT OF PIPE.
  - PIPE LENGTHS ARE MEASURED FROM CENTER TO CENTER OF MANHOLE.
  - PIPE INVERTS ARE CALCULATED AT CENTER OF MANHOLE.
  - WHERE GRAVITY SEWER HAS LESS THAN 3 FEET OF COVER FROM FINAL GRADE TO TOP OF PIPE, THE PIPE SHALL BE OF DUCTILE IRON MATERIAL. REFER TO BORE AND JACK DETAIL.



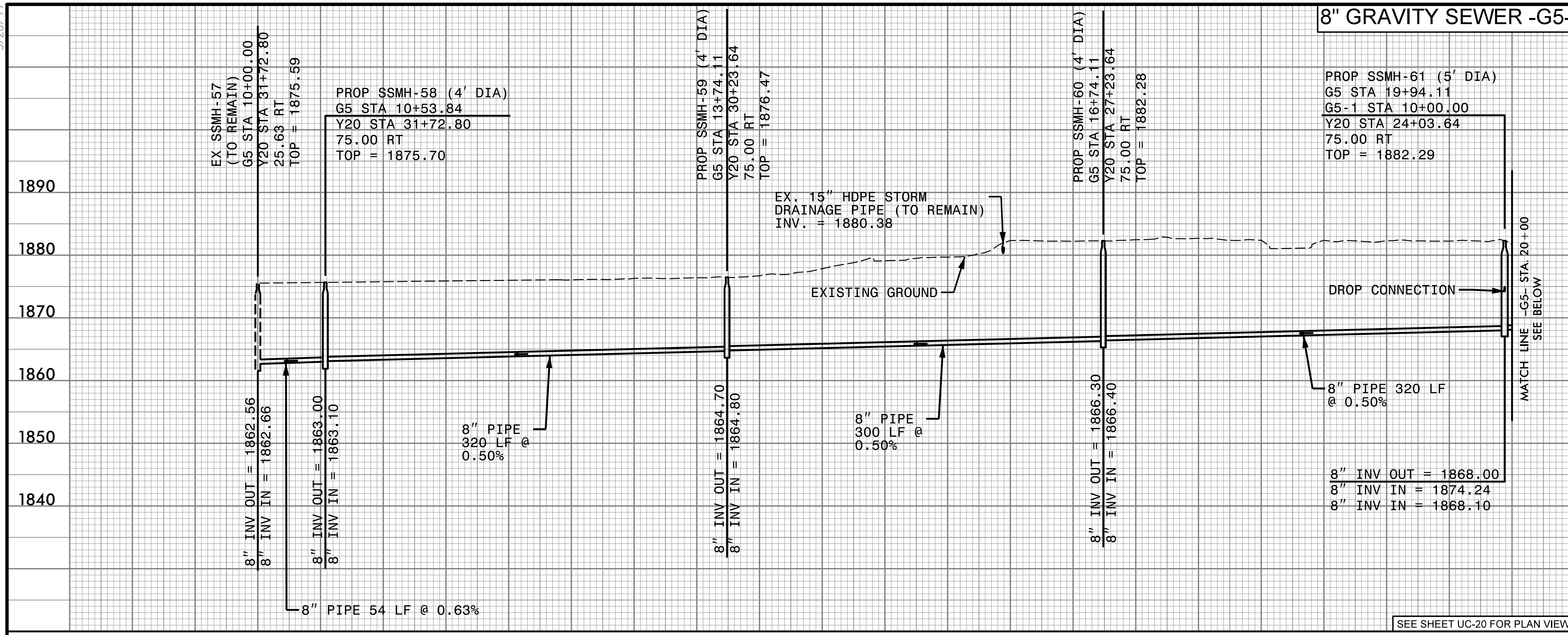
SEE SHEET UC-17 FOR PLAN VIEW

SEE SHEET UC-18 FOR PLAN VIEW



5/28/2019

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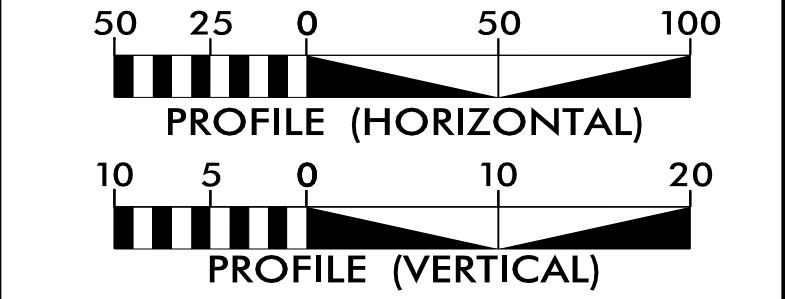


PROJECT REFERENCE NO. A-0011C	SHEET NO. UC-42
DESIGNED BY: KCZ	
DRAWN BY: VW	
CHECKED BY: SHF	
APPROVED BY: KCZ	
REVISER:	NORTH CAROLINA DEPARTMENT OF TRANSPORTATION 10/22/2018 10/22/2018
UTILITIES ENGINEERING SEC. PHONE: (919) 707-6690 FAX: (919) 250-4151	UTILITY CONSTRUCTION PLANS ONLY

### UTILITY CONSTRUCTION

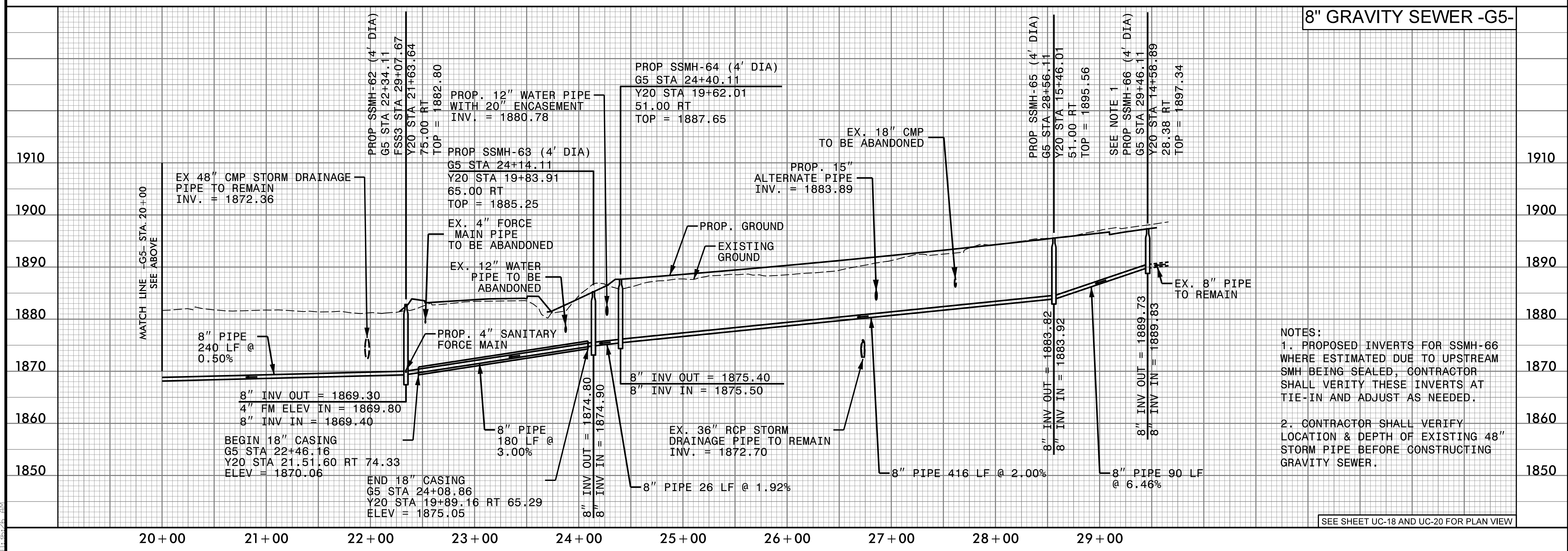
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Weston Sampson  
 WSE of North Carolina, PC  
 598 East Chatham Street Suite 137 Cary, NC 27511  
 Phone: 919.297.0220 License: C-4647  
 Fax: 919.297.0221



- NOTES:
- EXISTING PIPE INVERTS AT TIE-IN LOCATIONS ARE ESTIMATED BASED ON SURVEY INFORMATION.
  - ALL PROPOSED GRAVITY SEWER ELEVATIONS ARE INVERT OF PIPE.
  - PIPE LENGTHS ARE MEASURED FROM CENTER TO CENTER OF MANHOLE.
  - PIPE INVERTS ARE CALCULATED AT CENTER OF MANHOLE.
  - WHERE GRAVITY SEWER HAS LESS THAN 3 FEET OF COVER FROM FINAL GRADE TO TOP OF PIPE, THE PIPE SHALL BE OF DUCTILE IRON MATERIAL.

10+00 11+00 12+00 13+00 14+00 15+00 16+00 17+00 18+00 19+00 20+00



### 8" GRAVITY SEWER -G5-

- NOTES:
- PROPOSED INVERTS FOR SSMH-66 WHERE ESTIMATED DUE TO UPSTREAM SMH BEING SEALED, CONTRACTOR SHALL VERIFY THESE INVERTS AT TIE-IN AND ADJUST AS NEEDED.
  - CONTRACTOR SHALL VERIFY LOCATION & DEPTH OF EXISTING 48" STORM PIPE BEFORE CONSTRUCTING GRAVITY SEWER.

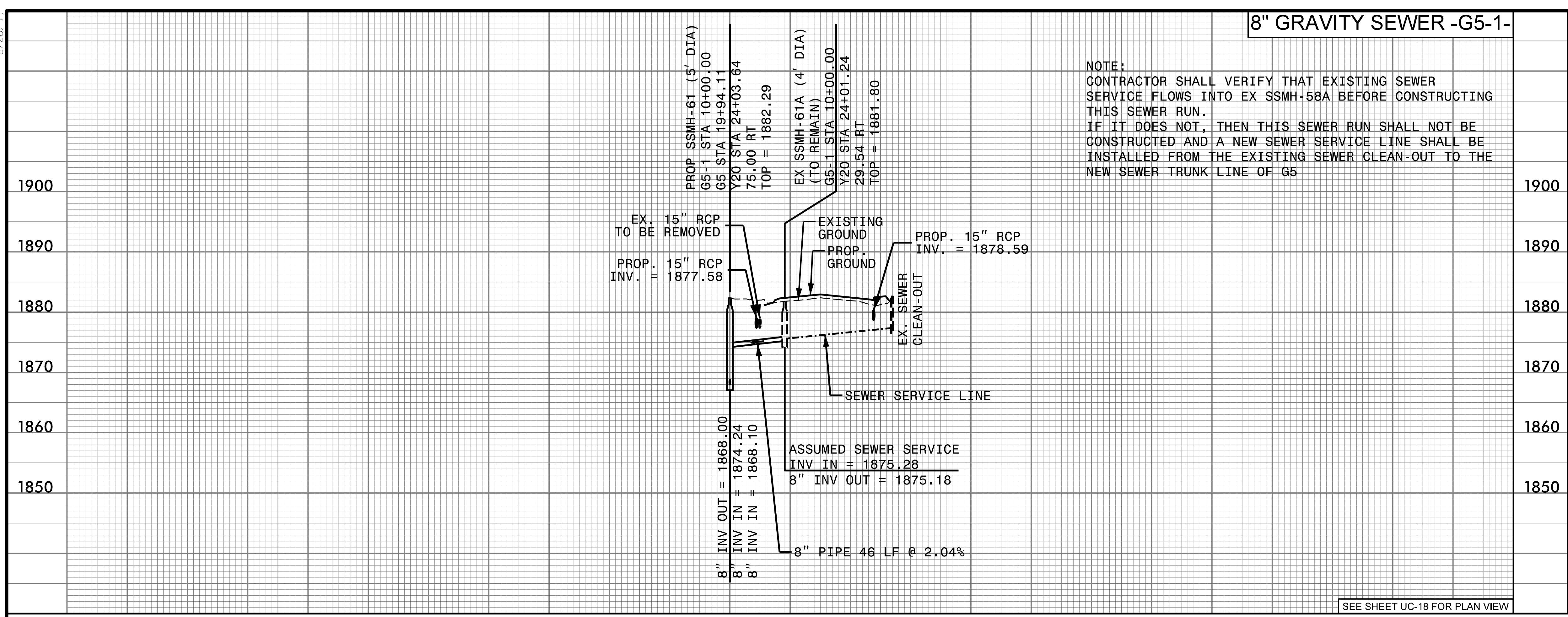
20+00 21+00 22+00 23+00 24+00 25+00 26+00 27+00 28+00 29+00

SEE SHEET UC-18 AND UC-20 FOR PLAN VIEW



5/28/99

### 8" GRAVITY SEWER -G5-1-



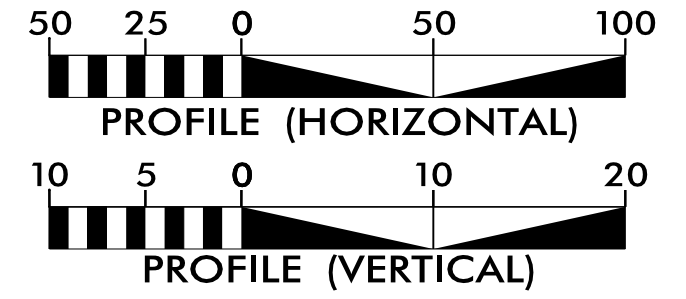
**NOTE:**  
 CONTRACTOR SHALL VERIFY THAT EXISTING SEWER SERVICE FLOWS INTO EX SSMH-58A BEFORE CONSTRUCTING THIS SEWER RUN.  
 IF IT DOES NOT, THEN THIS SEWER RUN SHALL NOT BE CONSTRUCTED AND A NEW SEWER SERVICE LINE SHALL BE INSTALLED FROM THE EXISTING SEWER CLEAN-OUT TO THE NEW SEWER TRUNK LINE OF G5

PROJECT REFERENCE NO. A-0011C	SHEET NO. UC-43
DESIGNED BY: KCZ	
DRAWN BY: VW	
CHECKED BY: SHF	
APPROVED BY: KCZ	
REVISED:	NORTH CAROLINA DEPARTMENT OF TRANSPORTATION UTILITIES ENGINEERING SEC. PHONE: (919) 707-6690 FAX: (919) 250-4151

### UTILITY CONSTRUCTION

**DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED**

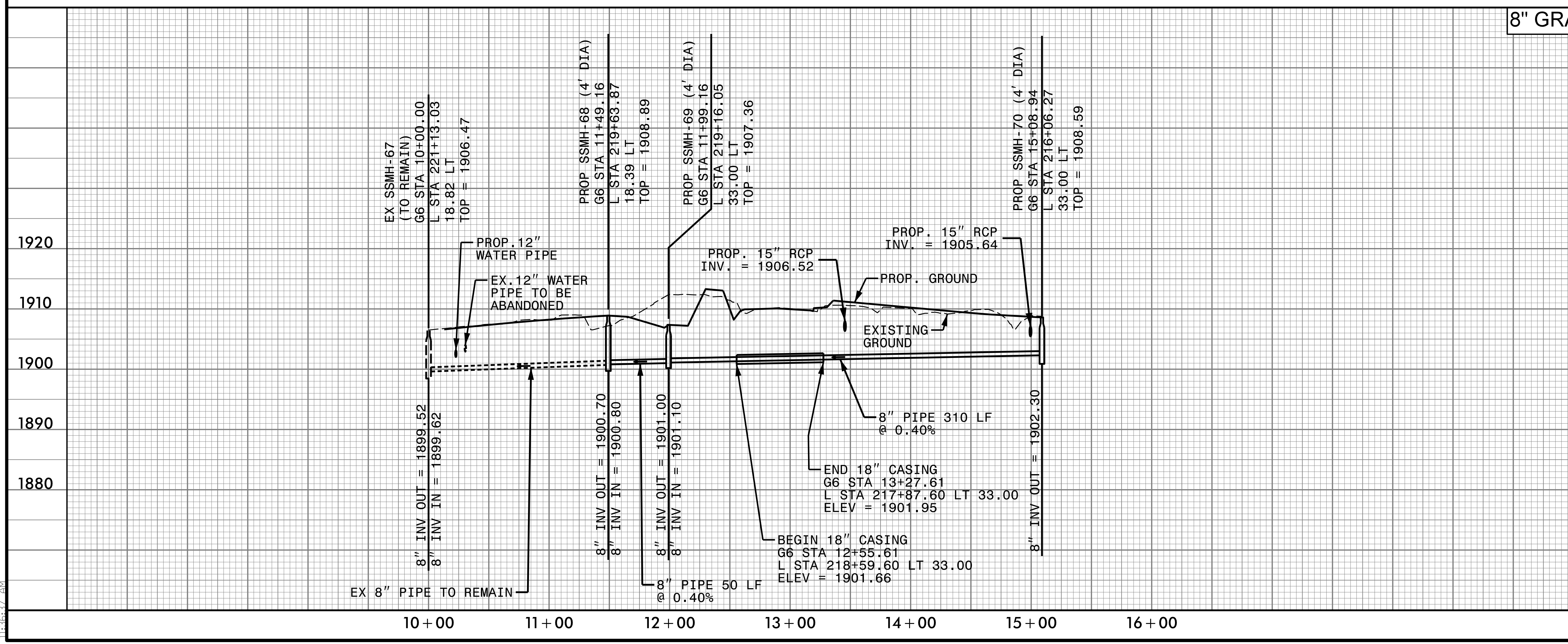
Weston Sampson  
 WSE of North Carolina, PC  
 598 East Chatham Street Suite 137 Cary, NC 27511  
 Phone: 919.297.0220 License: C-4647 Fax: 919.297.0221



- NOTES:**
- EXISTING PIPE INVERTS AT TIE-IN LOCATIONS ARE ESTIMATED BASED ON SURVEY INFORMATION.
  - ALL PROPOSED GRAVITY SEWER ELEVATIONS ARE INVERT OF PIPE.
  - PIPE LENGTHS ARE MEASURED FROM CENTER TO CENTER OF MANHOLE.
  - PIPE INVERTS ARE CALCULATED AT CENTER OF MANHOLE.
  - WHERE GRAVITY SEWER HAS LESS THAN 3 FEET OF COVER FROM FINAL GRADE TO TOP OF PIPE, THE PIPE SHALL BE OF DUCTILE IRON MATERIAL.

SEE SHEET UC-18 FOR PLAN VIEW

### 8" GRAVITY SEWER -G6-



SEE SHEET UC-19 FOR PLAN VIEW

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