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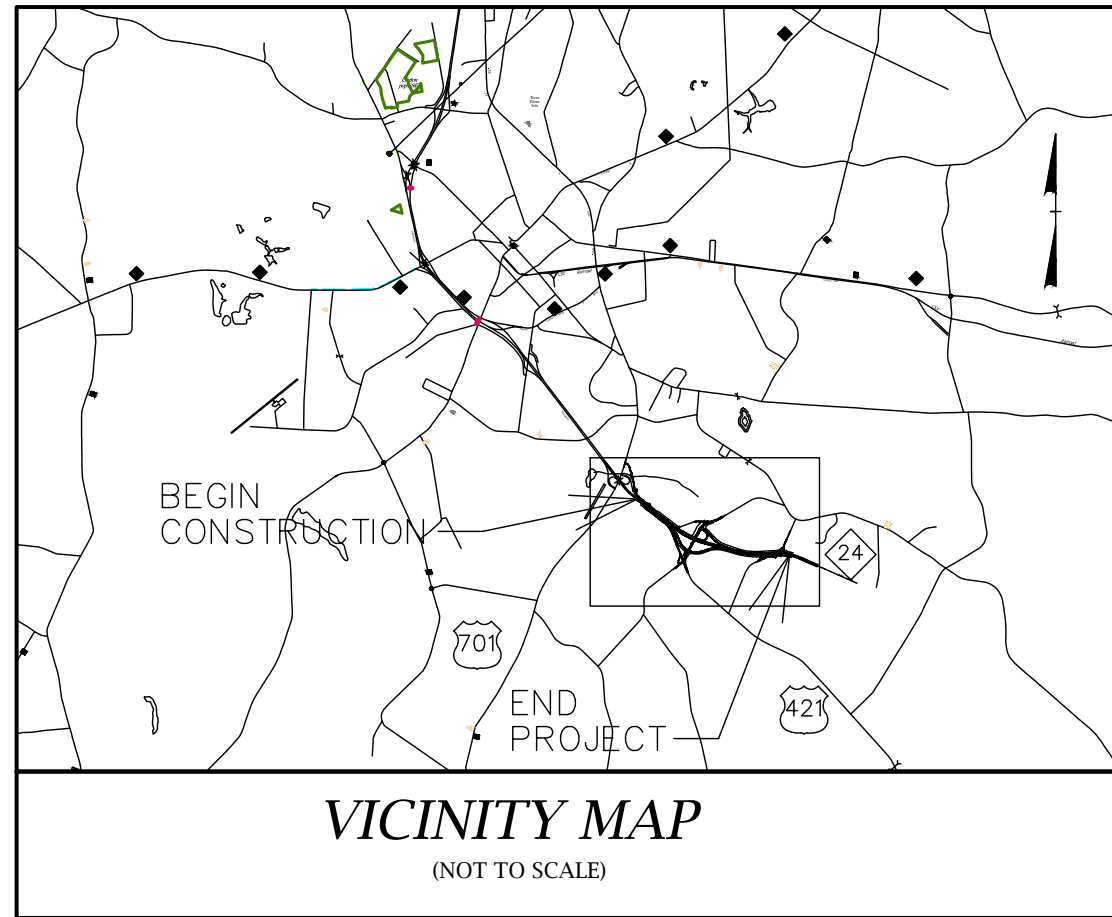
TIP PROJECT: R-2303E

CONTRACT:

T.I.P. NO.	SHEET NO.
<b>R-2303E</b>	UC-1

STATE OF NORTH CAROLINA  
DIVISION OF HIGHWAYS

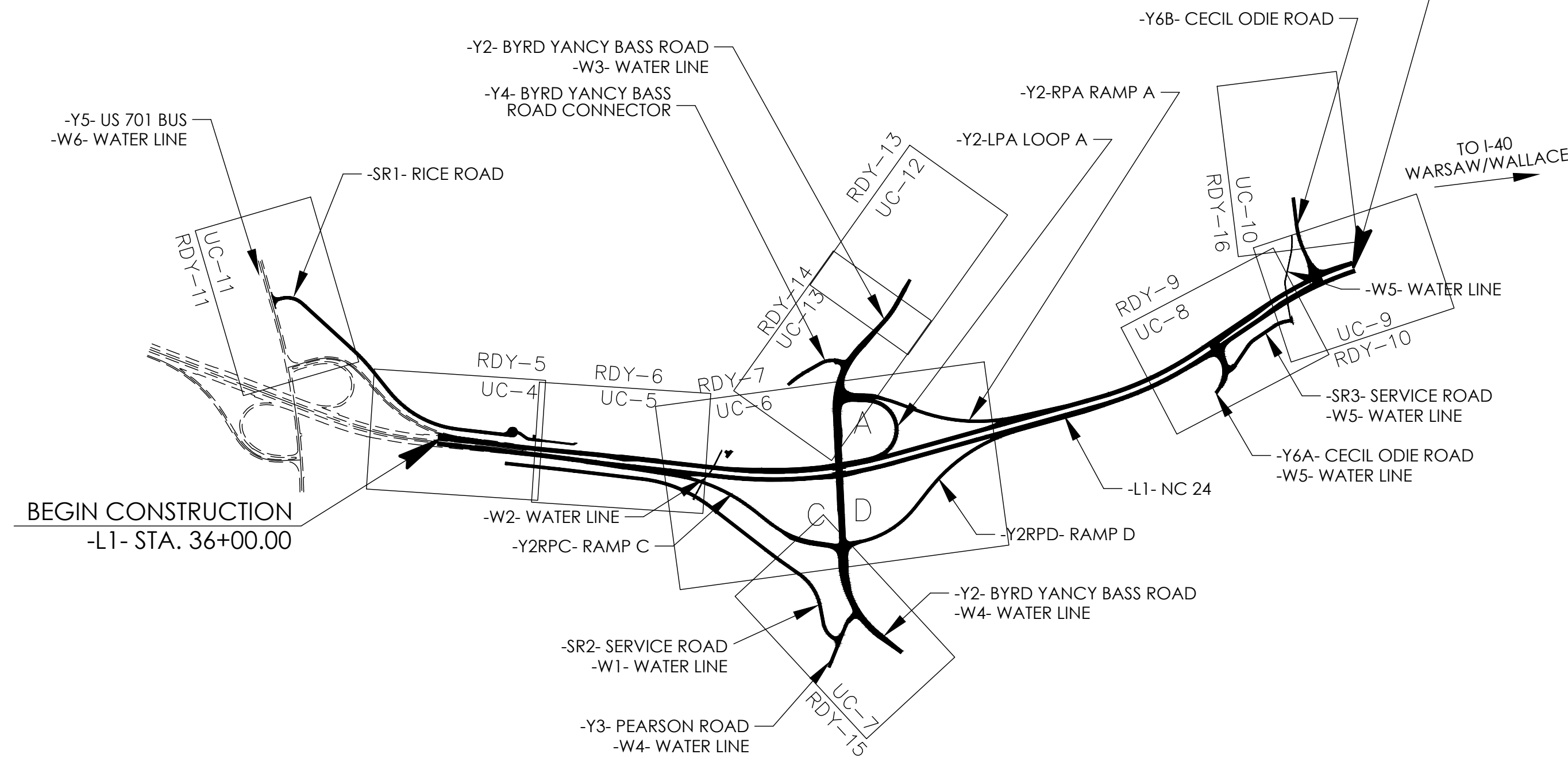
**UTILITY CONSTRUCTION PLANS  
SAMPSON COUNTY**



LOCATION: NC 24 FROM US 701 (SOUTHEAST BLVD.) TO  
EAST OF SR 1935 (CECIL-ODIE RD)

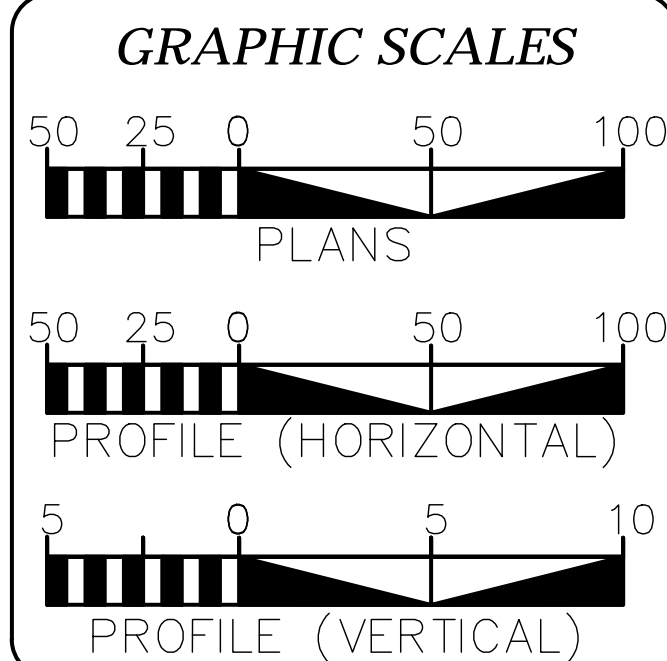
TYPE OF WORK: WATER LINE RELOCATION

-L1- STA. 120+00.00 END TIP PROJECT R-2303E  
-L1- PROJECT LIMITS BASED ON NAD 83 NA 2011 DATUM



NCDOT CONTACT: BRIAN HARDING, P.E.  
NCDOT - HIGHWAY DIVISION 3

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SHEET NO.:	DESCRIPTION:
UC-1	TITLE SHEET
UC-2	UTILITY SYMBOLOGY
UC-3A THRU UC-3B	NOTES
UC-3C	DETAILS
UC-4 THRU UC-13	UTILITY CONSTRUCTION SHEETS AND PROFILES

WATER OWNER  
ON PROJECT

SAMPSON COUNTY PUBLIC WORKS

PREPARED IN THE OFFICE OF

**ESP**

CONSULTANT  
INFO  
2200 GATEWAY CENTRE  
BLVD.  
SUITE 216  
MORRISVILLE, NC 27560  
919.678.1070  
NCBELS: NO. F-1407

SALMAN MOAZZAM, P.E. CONSULTANT CONTACT #1  
ADAM FREEMAN, P.E. CONSULTANT CONTACT #2  
CONNOR LINTON CONSULTANT CONTACT #3

SEAL

11/6/2019

DIVISION OF HIGHWAYS  
UTILITIES UNIT  
1555 MAIL SERVICES CENTER  
RALEIGH NC 27699-1555  
PHONE (919) 707-6690  
FAX (919) 250-4151

NABIL HAMDAN UTILITIES REGIONAL ENGINEER  
LONNY SLEEPER DIVISION UTILITIES ENGINEER  
KYLE PLEASANT UTILITIES AREA COORDINATOR  
STEVE DAVIS DIVISION UTILITIES COORDINATOR



5/14/99

# STATE OF NORTH CAROLINA DIVISION OF HIGHWAYS

## UTILITIES PLAN SHEET SYMBOLS

### PROPOSED WATER SYMBOLS

Water Line (Sized as Shown)	
11 1/4 Degree Bend	
22 1/2 Degree Bend	
45 Degree Bend	
90 Degree Bend	
Plug	
Tee	
Cross	
Reducer	
Gate Valve	
Butterfly Valve	
Tapping Valve	
Line Stop	
Line Stop with Bypass	
Blow Off	
Fire Hydrant	
Relocate Fire Hydrant	
Remove Fire Hydrant	
Water Meter	
Relocate Water Meter	
Remove Water Meter	
Water Pump Station	
RPZ Backflow Preventer	
DCV Backflow Preventer	
Relocate RPZ Backflow Preventer	
Relocate DCV Backflow Preventer	

### PROPOSED SEWER SYMBOLS

Gravity Sewer Line (Sized as Shown)	
Force Main Sewer Line (Sized as Shown)	
Manhole (Sized per Note)	
Sewer Pump Station	

### PROPOSED MISCELLANEOUS UTILITIES SYMBOLS

Power Pole	
Telephone Pole	
Joint Use Pole	
Telephone Pedestal	
Utility Line by Others (Type as Shown)	
Trenchless Installation	
Encasement by Open Cut	
Encasement	

Thrust Block	
Air Release Valve	
Utility Vault	
Concrete Pier	
Steel Pier	
Plan Note	
Pay Item Note	

### EXISTING UTILITIES SYMBOLS

Power Pole		*Underground Power Line	
Telephone Pole		*Underground Telephone Cable	
Joint Use Pole		*Underground Telephone Conduit	
Utility Pole		*Underground Fiber Optics Telephone Cable	
Utility Pole with Base		*Underground TV Cable	
H-Frame Pole		*Underground Fiber Optics TV Cable	
Power Transmission Line Tower		*Underground Gas Pipeline	
Water Manhole		Aboveground Gas Pipeline	
Power Manhole		*Underground Water Line	
Telephone Manhole		Aboveground Water Line	
Sanitary Sewer Manhole		*Underground Gravity Sanitary Sewer Line	
Hand Hole for Cable		Aboveground Gravity Sanitary Sewer Line	
Power Transformer		*Underground SS Forced Main Line	
Telephone Pedestal		Underground Unknown Utility Line	
CATV Pedestal		SUE Test Hole	
Gas Valve		Water Meter	
Gas Meter		Water Valve	
Located Miscellaneous Utility Object		Fire Hydrant	
Abandoned According to Utility Records	AATUR	Sanitary Sewer Cleanout	
End of Information	E.O.I.		

\*For Existing Utilities  
 Utility Line Drawn from Record (Type as Shown)   
 Designated Utility Line (Type as Shown)

**STANDARD NOTIFICATIONS, VALVE OPERATIONS,  
CONSTRUCTION WATER, & AS-BUILTS**

**NOTICE:**

1. COMPLAINTS SHALL BE CORRECTED WITHIN 7 DAYS FROM NOTIFICATION BY SAMPSON COUNTY. SAMPSON COUNTY HAS THE RIGHT TO HAVE COMPLAINTS/REPAIRS NOT CORRECTED IN 7 DAYS TO BE COMPLETED AT THE CONTRACTOR'S EXPENSE.

**WATER SHUTOFFS:**

1. NO WATER SHUTOFFS SHALL OCCUR WITHOUT FOLLOWING THE PROCEDURES OUTLINED BELOW. THE CONTRACTOR SHOULD BE AWARE THAT THE COUNTY REGARDS VIOLATIONS OF THESE REQUIREMENTS AS JUSTIFYING PUNITIVE MEASURES.
2. NOTIFICATION PROCEDURES ARE AS FOLLOWS:
  - 2.1 THE CONTRACTOR SHALL NOTIFY THE SAMPSON COUNTY DEPARTMENT OF PUBLIC WORKS AT (910) 592-0188 IN ORDER TO REQUEST A WATER SHUTOFF. AT LEAST FORTY-EIGHT HOURS NOTICE SHOULD BE GIVEN TO THE COUNTY, AND AT LEAST FORTY-EIGHT HOURS NOTICE MUST BE GIVEN TO EACH CONSUMER AFFECTED BY A WATER CUT-OFF. THE CONTRACTOR IS RESPONSIBLE FOR NOTIFYING THE AFFECTED CONSUMERS.
3. HYDRANTS SHALL NOT BE OPERATED WITHOUT FOLLOWING THE NOTIFICATION PROCEDURES FOR A WATER SHUTOFF.

**AS-BUILTS:**

1. THE CONTRACTOR SHALL FURNISH SAMPSON COUNTY WITH DRAWINGS PROVIDING THE AS-BUILT CONDITION OF THE NEW AND RELOCATED WATER MAINS. THE AS-BUILTS SHALL INCLUDE AND X, Y, Z COORDINATE FOR ALL VALVES, FIRE HYDRANTS, METERS, AND BORE LOCATIONS. IN ADDITION, AN X, Y, Z COORDINATION SHALL BE PROVIDED EVERY 100 FEET ALONG THE WATER MAIN ALIGNMENT. COORDINATE SYSTEM SHALL BE NC STATE PLAN, NAD 83 AND NAVD 88 DATUMS. DELIVERABLES SHALL BE PAPER COPY SIGNED AND SEALED BY AN NC PROFESSIONAL ENGINEER AND AUTOCAD .DWG FORMAT.

**GENERAL NOTES**

1. THE PROPOSED UTILITY CONSTRUCTION SHALL MEET THE APPLICABLE REQUIREMENTS OF THE NC DEPARTMENT OF TRANSPORTATION'S "STANDARD SPECIFICATIONS FOR ROADS AND STRUCTURES" DATED JANUARY 2018.
2. THE EXISTING UTILITIES BELONG TO SAMPSON COUNTY PUBLIC WORKS.
3. ALL WATER LINES TO BE INSTALLED WITHIN COMPLIANCE OF THE RULES AND REGULATIONS OF THE NORTH CAROLINA DEPARTMENT OF ENVIRONMENTAL QUALITY, DIVISION OF WATER RESOURCES, PUBLIC WATER SUPPLY SECTION. ALL SEWER LINES TO BE INSTALLED WITHIN COMPLIANCE OF THE RULES AND REGULATIONS OF THE NORTH CAROLINA DEPARTMENT OF ENVIRONMENT QUALITY, DIVISION OF WATER RESOURCES, WATER QUALITY SECTION. PERFORM ALL WORK IN ACCORDANCE WITH THE APPLICABLE PLUMBING CODES.
4. THE UTILITY OWNER OWNS THE EXISTING UTILITY FACILITIES AND WILL OWN THE NEW UTILITY FACILITIES AFTER ACCEPTANCE BY THE DEPARTMENT. THE DEPARTMENT OWNS THE CONSTRUCTION CONTRACT AND HAS ADMINISTRATIVE AUTHORITY. COMMUNICATIONS AND DECISIONS BETWEEN THE CONTRACTOR AND UTILITY OWNER ARE NOT BINDING UPON THE DEPARTMENT OR THIS CONTRACT UNLESS AUTHORIZED BY THE ENGINEER. AGREEMENTS BETWEEN THE UTILITY OWNER AND CONTRACTOR FOR THE WORK THAT IS NOT PART OF THIS CONTRACT OR IS SECONDARY TO THIS CONTRACT ARE ALLOWED, BUT ARE NOT BINDING UPON THE DEPARTMENT.
5. PROVIDE ACCESS FOR THE DEPARTMENT PERSONNEL AND THE OWNER'S REPRESENTATIVES TO ALL PHASES OF CONSTRUCTION. NOTIFY DEPARTMENT PERSONNEL AND THE UTILITY OWNER TWO WEEKS PRIOR TO COMMENCEMENT OF ANY WORK AND ONE WEEK PRIOR TO SERVICE INTERRUPTION. KEEP UTILITY OWNERS' REPRESENTATIVES INFORMED OF WORK PROGRESS AND PROVIDE OPPORTUNITY FOR INSPECTION OF CONSTRUCTION AND TESTING.
6. THE PLANS DEPICT THE BEST AVAILABLE INFORMATION FOR THE LOCATION, SIZE, AND TYPE OF MATERIAL FOR ALL EXISTING UTILITIES. MAKE INVESTIGATIONS FOR DETERMINING THE EXACT LOCATION, SIZE, AND TYPE OF MATERIAL OF THE EXISTING FACILITIES AS NECESSARY FOR THE CONSTRUCTION OF THE PROPOSED UTILITIES AND FOR AVOIDING DAMAGE TO EXISTING FACILITIES. REPAIR ANY DAMAGE INCURRED TO EXISTING FACILITIES TO THE ORIGINAL OR BETTER CONDITION AT NOT ADDITIONAL COST TO THE DEPARTMENT.
7. MAKE FINAL CONNECTIONS OF THE NEW WORK TO THE EXISTING SYSTEM WHERE INDICATED ON THE PLANS, AS REQUIRED TO FIT THE ACTUAL CONDITIONS, OR AS DIRECTED.
8. MAKE CONNECTIONS BETWEEN EXISTING AND PROPOSED UTILITIES AT TIMES MOST CONVENIENT TO THE PUBLIC, WITHOUT ENDANGERING THE UTILITY SERVICE, AND IN ACCORDANCE WITH THE UTILITY OWNER'S REQUIREMENTS. MAKE CONNECTIONS ON WEEKENDS, AT NIGHT, AND ON HOLIDAYS IF NECESSARY.
9. ALL UTILITY MATERIALS SHALL BE APPROVED PRIOR TO DELIVERY TO THE PROJECT. SEE 1500-7, "SUBMITTALS AND RECORDS" IN SECTION 1500 OF THE STANDARD SPECIFICATIONS.

**PROJECT SPECIFIC NOTES**

1. CONTRACTOR'S ATTENTION IS DIRECTED TO SECTIONS 102, 107, AND 1550 OF THE STANDARD SPECIFICATIONS CONCERNING TRENCHLESS INSTALLATION. IT IS CONTRACTOR'S RESPONSIBILITY TO HAVE BORE DESIGNED AND SEALED BY A LICENSED NORTH CAROLINA PROFESSIONAL ENGINEER. NO DAMAGE IS ALLOWED TO RIVER, WETLANDS, OR BUFFER ZONES.
2. IF HDPE PIPE IS INSTALLED BY DIRECTIONAL DRILL. IT SHALL BE FILLED WITH WATER AND NOT TO BE CONNECTED TO ANY OTHER PIPE OR FITTINGS FOR ONE WEEK FROM THE TIME OF INSTALLATION.

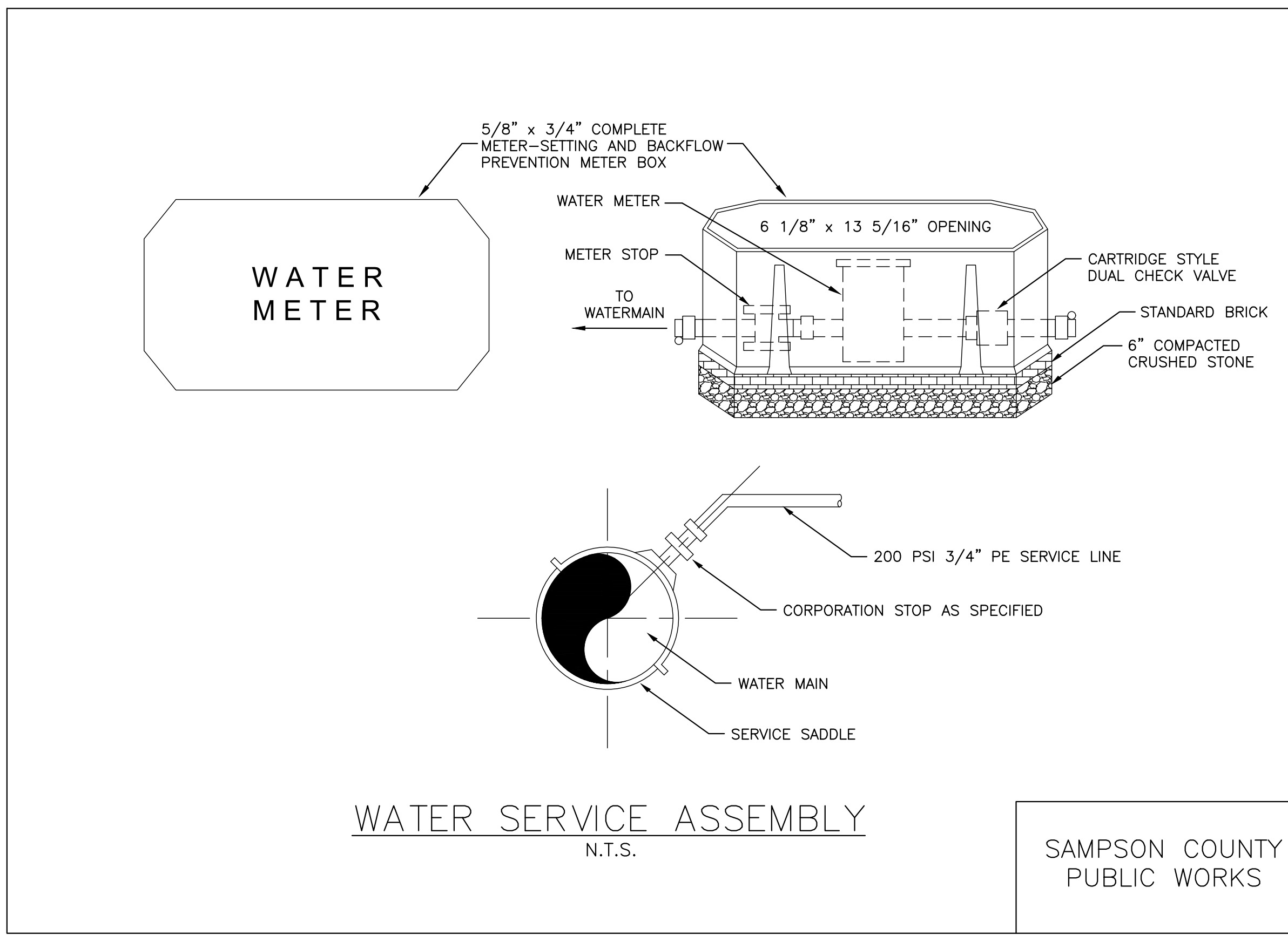
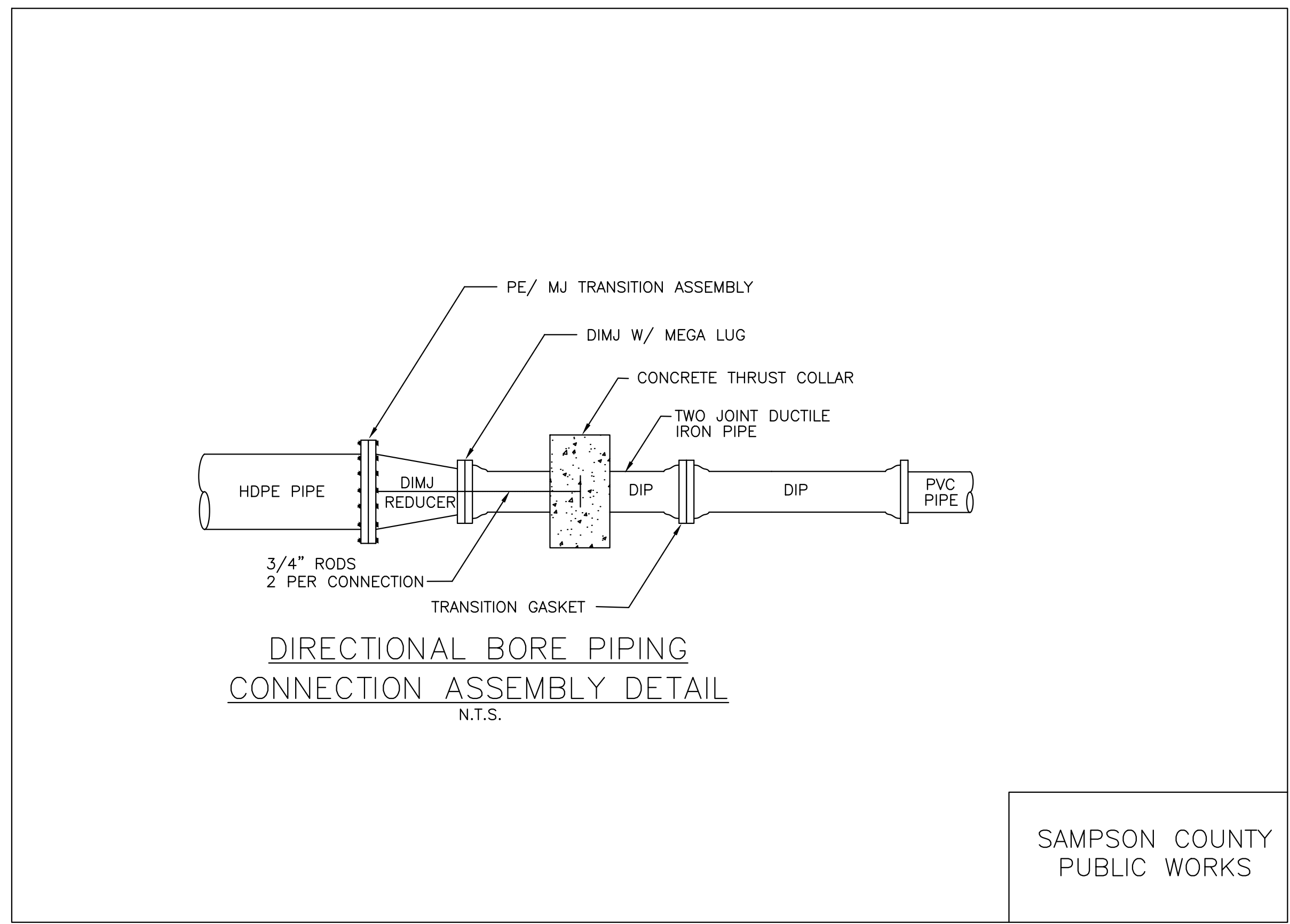
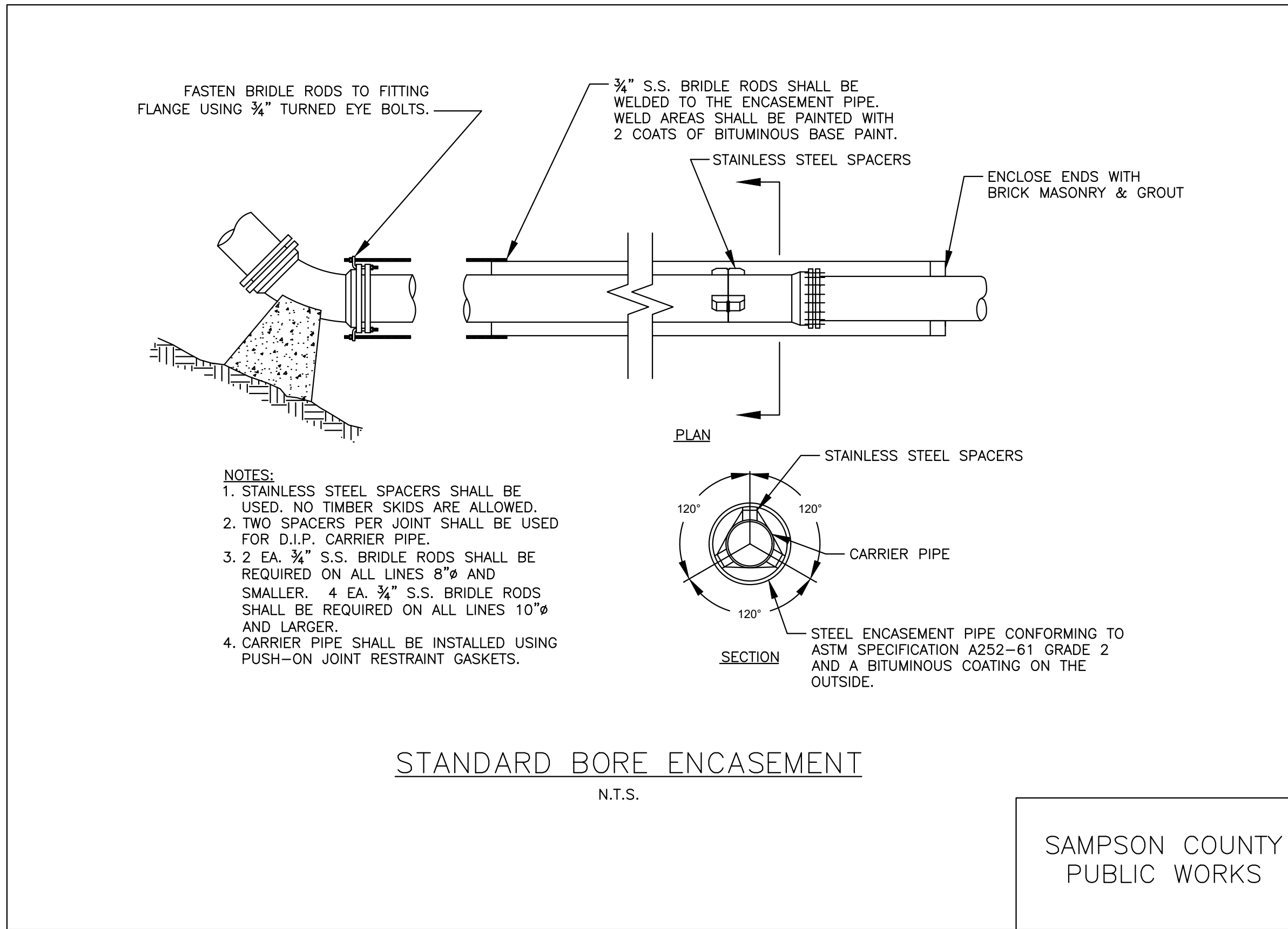
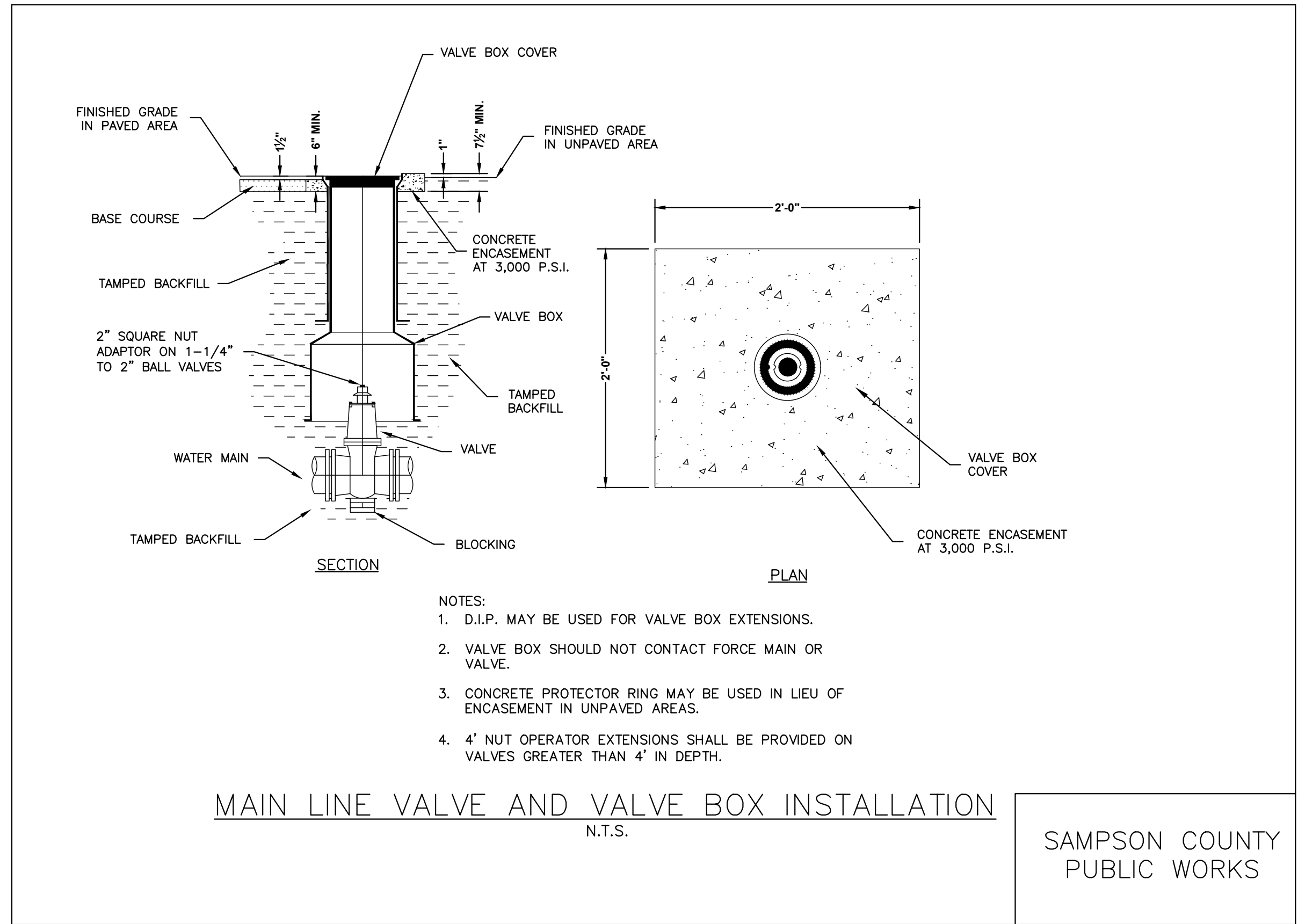
PROJECT REFERENCE NO. R-2303E	SHEET NO. UC-3A
DESIGNED BY: AEF	
DRAWN BY: AEF	
CHECKED BY: SSM	
APPROVED BY: SSM	
REVISED:	
NORTH CAROLINA DEPARTMENT OF TRANSPORTATION UTILITIES ENGINEERING SEC. PHONE: (919)707-6690 FAX: (919)250-4151	
<b>DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED</b>	
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UTILITY CONSTRUCTION

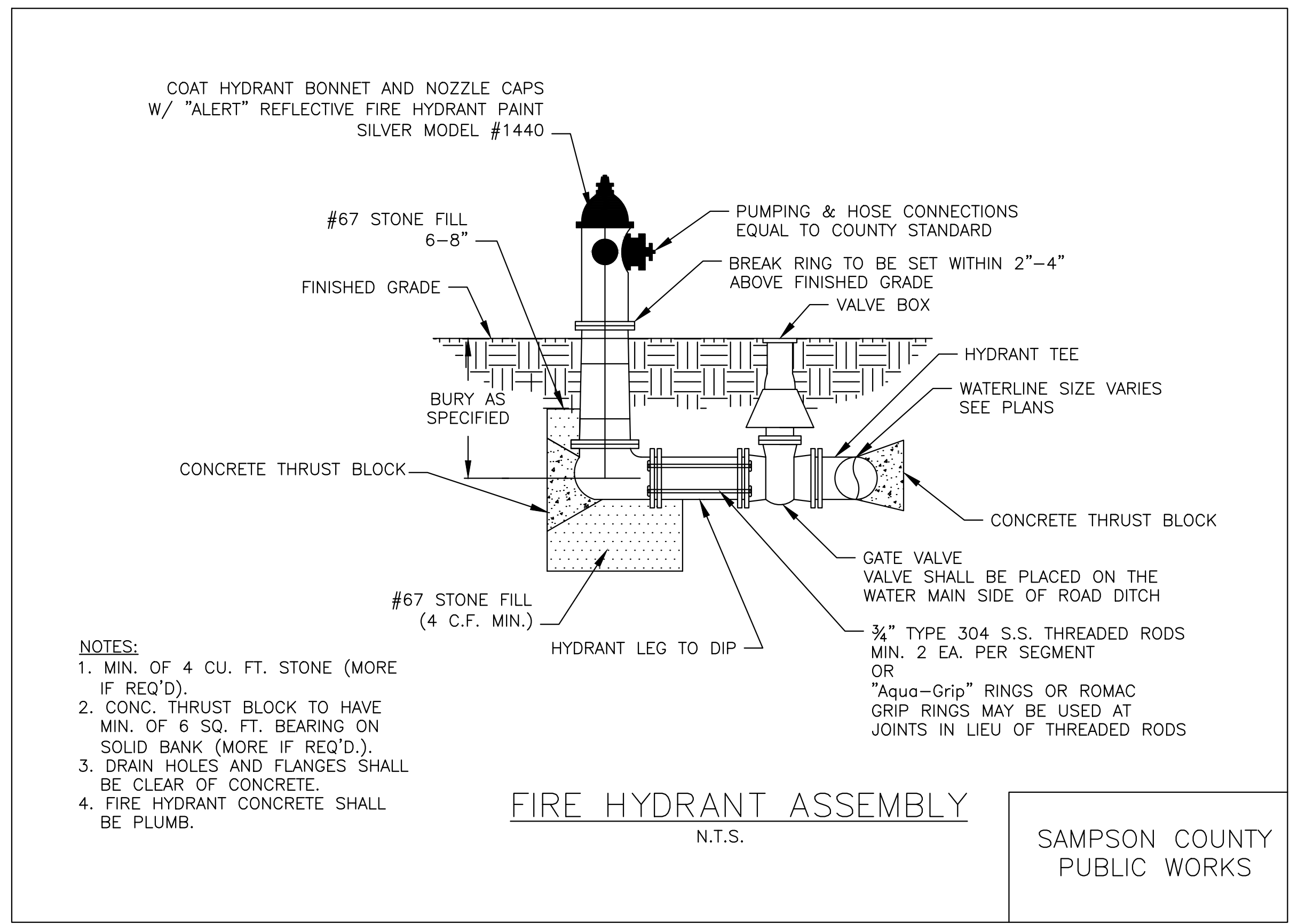
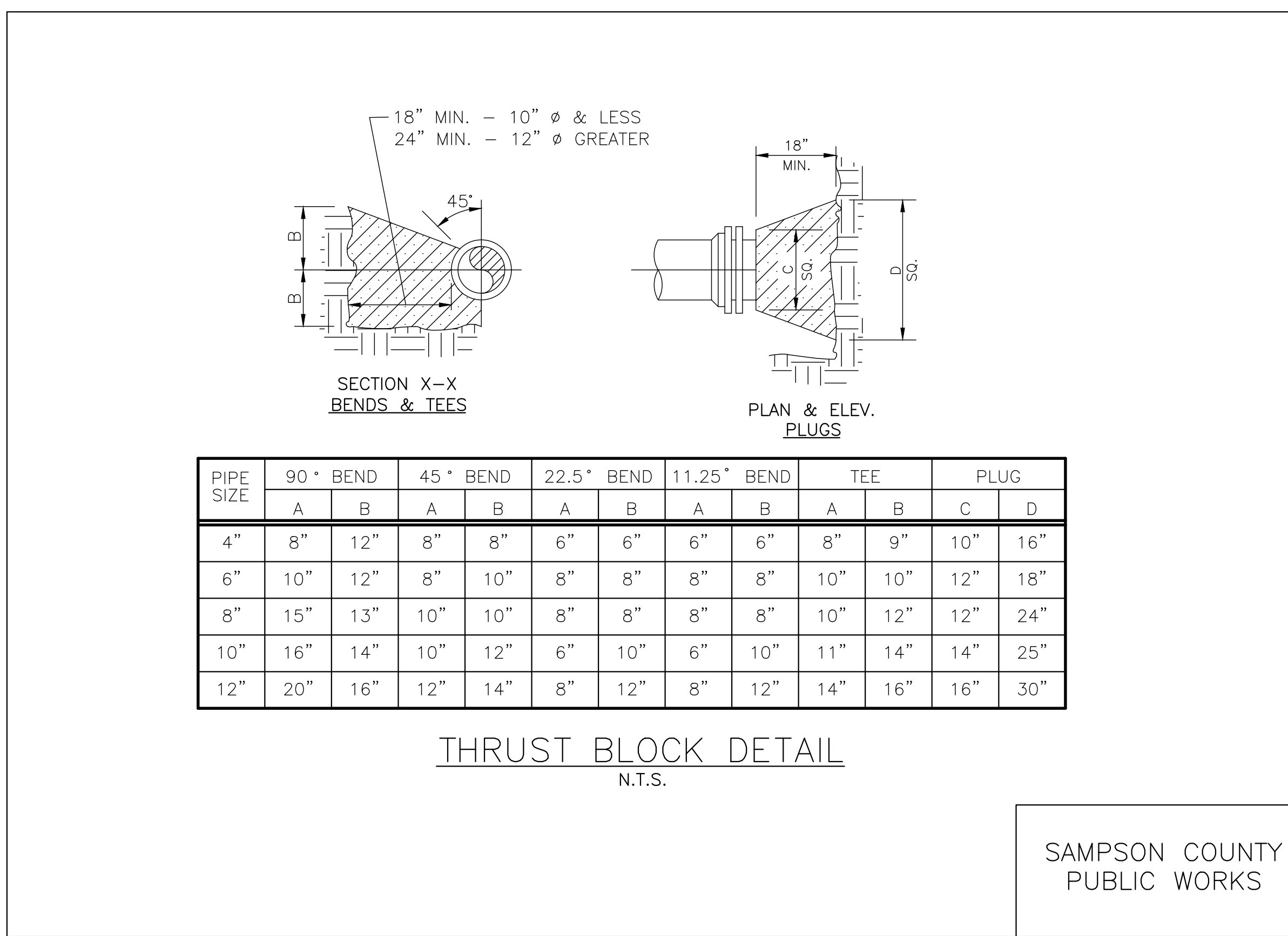
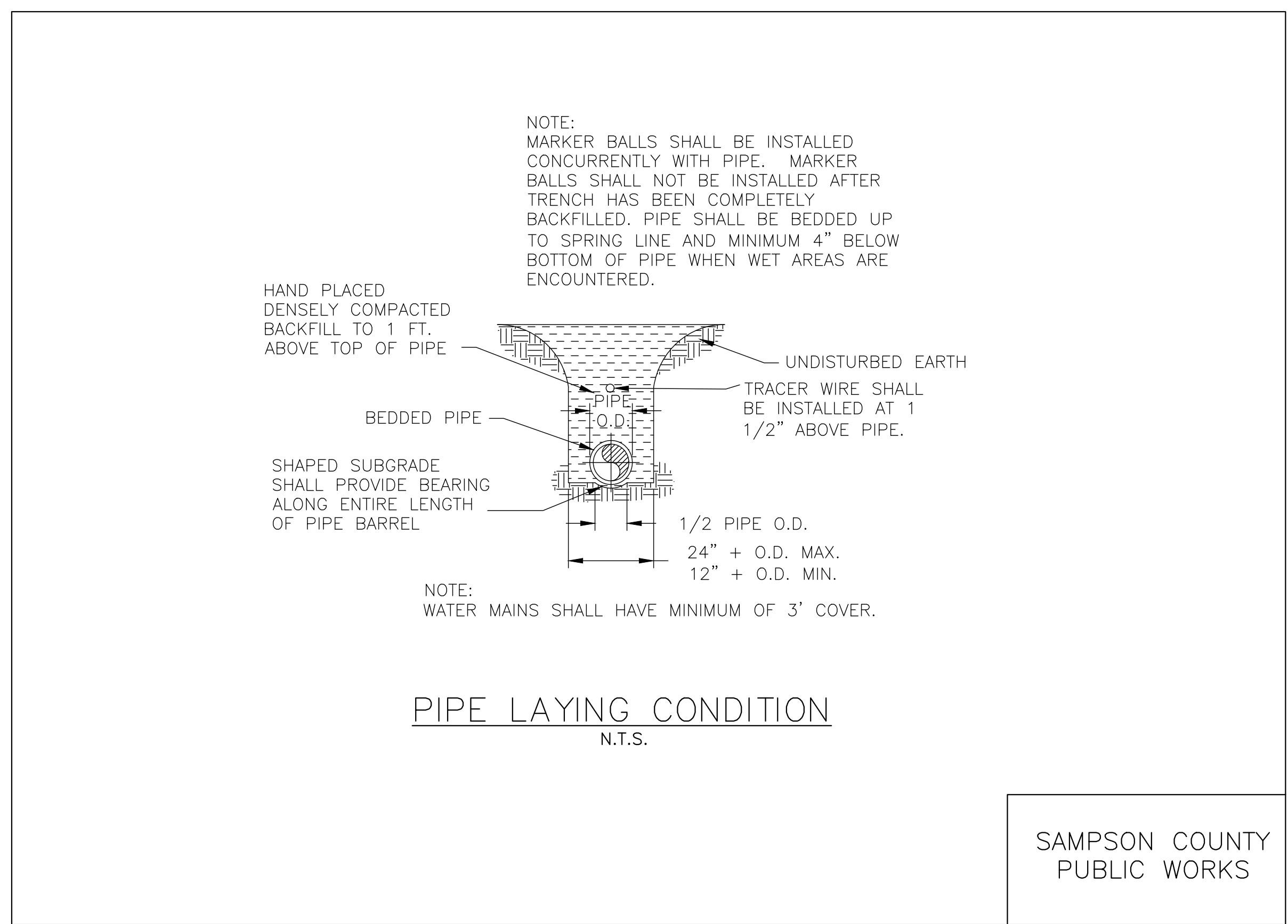


PROJECT REFERENCE NO. R-2303E	SHEET NO. UC-3B
DESIGNED BY: AEF	
DRAWN BY: AEF	
CHECKED BY: SSM	
APPROVED BY: SSM	
REVISED:	UTILITY CONSTRUCTION PLANS ONLY
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UTILITY CONSTRUCTION



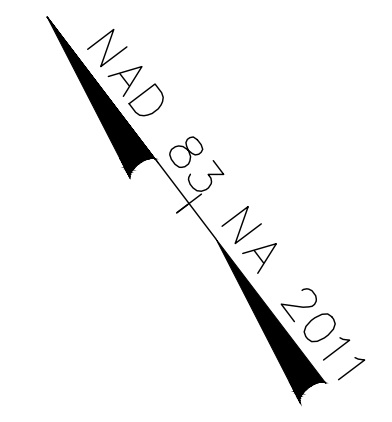
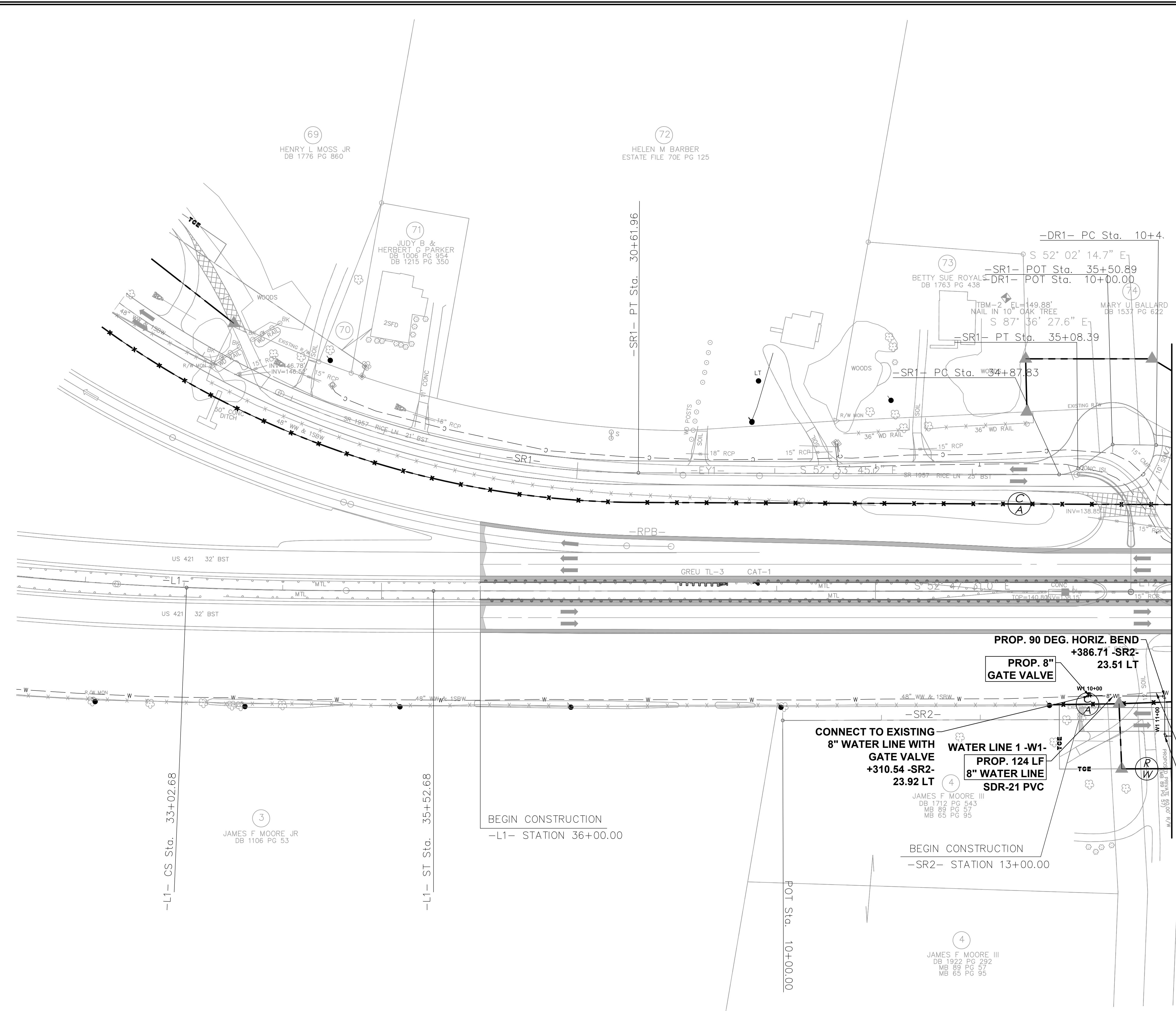
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DESIGNED BY: AEF	
DRAWN BY: AEF	
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PROJECT REFERENCE NO. R-2303E	SHEET NO. UC-4
R/W SHEET NO. RDY-5	
DESIGNED BY: AEF	
DRAWN BY: AEF	
CHECKED BY: SSM	
APPROVED BY: SSM	
REVISER:	
NORTH CAROLINA DEPARTMENT OF TRANSPORTATION UTILITIES ENGINEERING SEC. PHONE: (919)707-6690 FAX: (919)250-4151	
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# UTILITY CONSTRUCTION



MATCHLINE -L1- RDY STA. 43+00.00  
 UC STA. 11+23.78  
 SEE SHEET RDY-6 / UC-5

NOTE:  
THRUST BLOCKING SHALL BE PROVIDED AT ALL HORIZONTAL AND VERTICAL BENDS.

PROP. 107 LF ABANDON 8" UTILITY PIPE

PROP. 90 DEG. HORIZ. BEND +386.71 -SR2- 17.00 RT

NOTE:  
THE ESTIMATED QUANTITY OF DUCTILE IRON WATER PIPE FITTINGS ON THIS PLAN SHEET IS 300 POUNDS. THE ACTUAL QUANTITY AND TYPE OF FITTINGS WILL VARY BASED ON FIELD CONDITIONS.

REFER TO SHEET UC-14 FOR -W1- PROFILE

-L1- CS Sta. 33+02.68

-L1- ST Sta. 35+52.68

-SR1- PT Sta. 30+61.96

POT Sta. 10+00.00

BEGIN CONSTRUCTION  
-L1- STATION 36+00.00

BEGIN CONSTRUCTION  
-SR2- STATION 13+00.00

PROP. 90 DEG. HORIZ. BEND  
+386.71 -SR2-  
23.51 LT

PROP. 8" GATE VALVE

CONNECT TO EXISTING 8" WATER LINE WITH GATE VALVE  
+310.54 -SR2- 23.92 LT

WATER LINE 1 -W1-  
PROP. 124 LF 8" WATER LINE  
SDR-21 PVC

JAMES F. MOORE III  
DB 1712 PG 543  
MB 89 PG 57  
MB 65 PG 95

JAMES F. MOORE III  
DB 1922 PG 292  
MB 89 PG 57  
MB 65 PG 95

69  
HENRY L. MOSS JR  
DB 1776 PG 860

72  
HELEN M. BARBER  
ESTATE FILE 70E PG 125


71  
JUDY B. & HERBERT G. PARKER  
DB 1006 PG 954  
DB 1215 PG 350

73  
BETTY SUE ROYAL  
DB 1763 PG 438

74  
MARY U. BALLARD  
DB 1537 PG 622

3  
JAMES F. MOORE JR  
DB 1106 PG 53



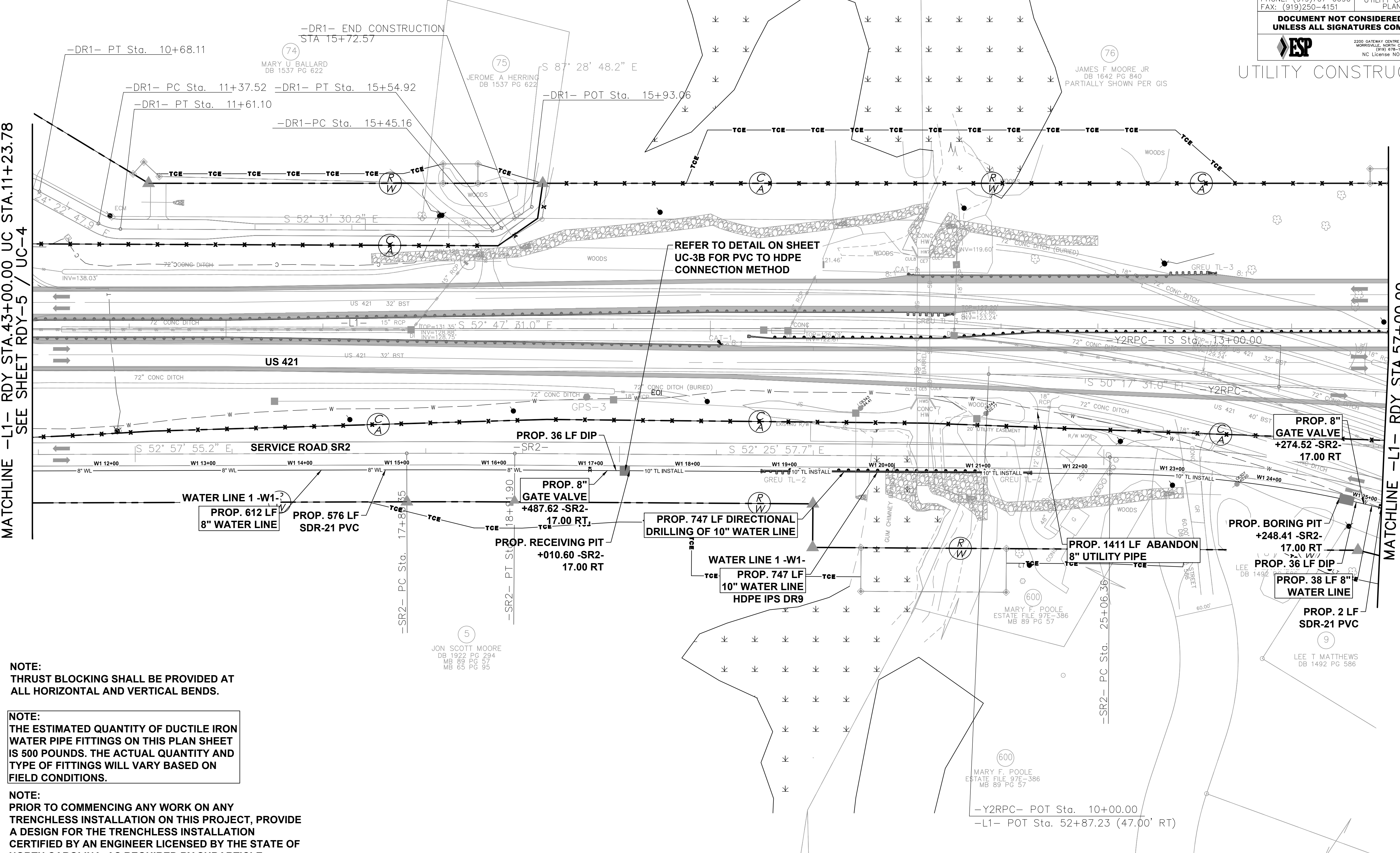
PROJECT REFERENCE NO.	R-2303E	SHEET NO.	UC-5
R/W SHEET NO.	RDY-6		
DESIGNED BY:	AEF		
DRAWN BY:	AEF		
CHECKED BY:	SSM		
APPROVED BY:	SSM		
REVISOR:			
NORTH CAROLINA DEPARTMENT OF TRANSPORTATION			
UTILITIES ENGINEERING SEC.			
PHONE: (919)707-6690			
FAX: (919)250-4151			
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# UTILITY CONSTRUCTION

MATCHLINE -L1- RDY STA.43+00.00 UC STA.11+23.78  
SEE SHEET RDY-5 / UC-4

MATCHLINE -L1- RDY STA.57+00.00  
UC STA.25+19.62  
SEE SHEET RDY-7 / UC-6

7



**NOTE:**  
THRUST BLOCKING SHALL BE PROVIDED AT ALL HORIZONTAL AND VERTICAL BENDS.

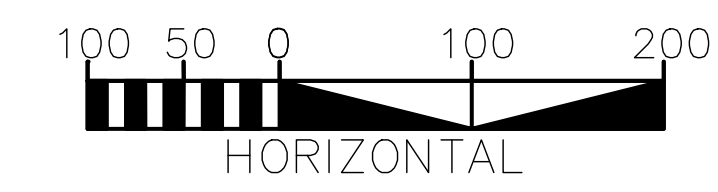
**NOTE:**  
THE ESTIMATED QUANTITY OF DUCTILE IRON WATER PIPE FITTINGS ON THIS PLAN SHEET IS 500 POUNDS. THE ACTUAL QUANTITY AND TYPE OF FITTINGS WILL VARY BASED ON FIELD CONDITIONS.

**NOTE:**  
PRIOR TO COMMENCING ANY WORK ON ANY TRENCHLESS INSTALLATION ON THIS PROJECT, PROVIDE A DESIGN FOR THE TRENCHLESS INSTALLATION CERTIFIED BY AN ENGINEER LICENSED BY THE STATE OF NORTH CAROLINA, AS REQUIRED BY SUBARTICLE 1550-3(B) OF THE STANDARD SPECIFICATIONS.

REFER TO DETAIL ON SHEET UC-3B FOR PVC TO HDPE CONNECTION METHOD

REFER TO SHEET UC-14 FOR -W1- PROFILE

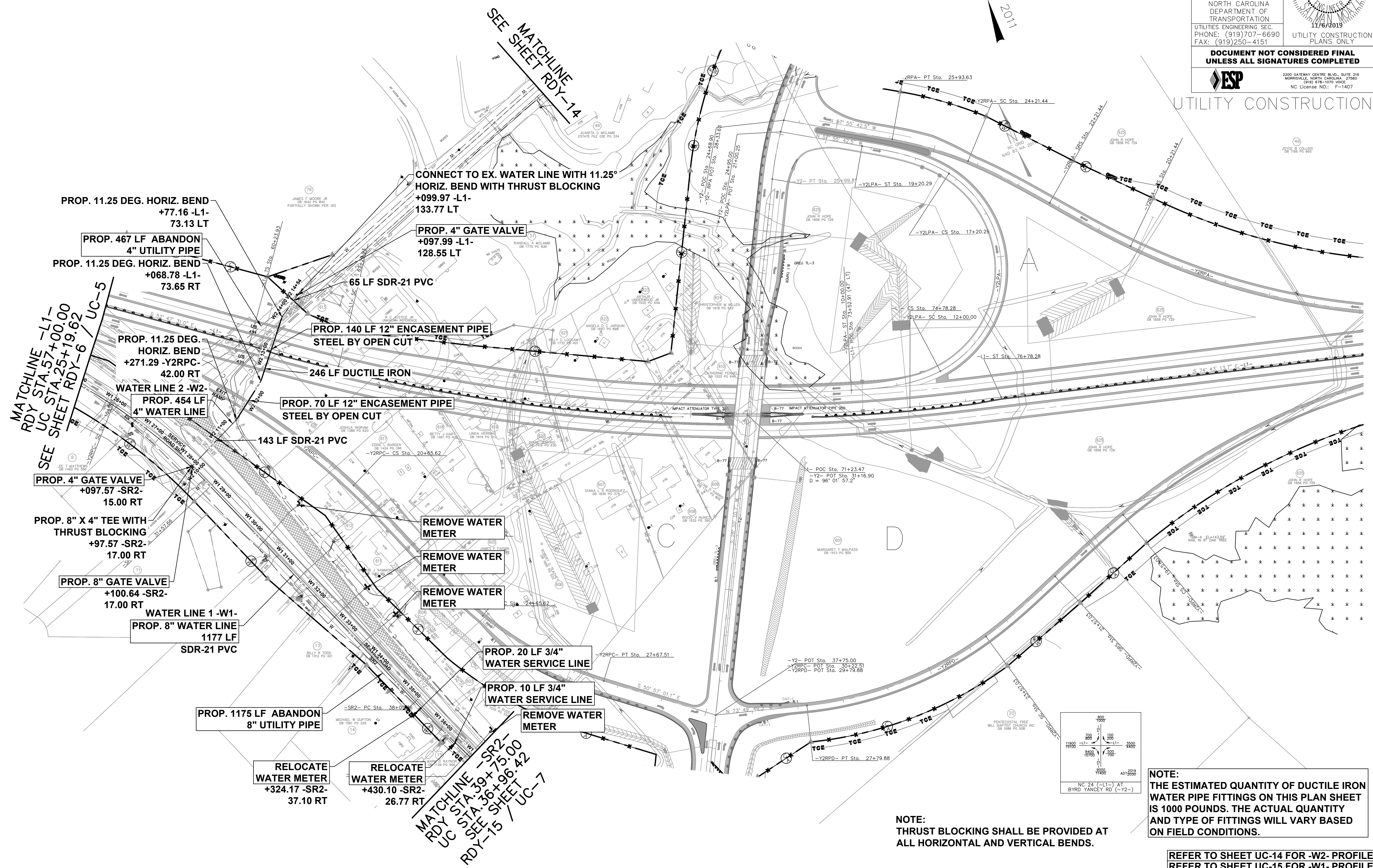




NAD 83 NA 2011

PROJECT REFERENCE NO. R-2303E	SHEET NO. UC-6
R/W SHEET NO. RDY-7	
DESIGNED BY: AEF	
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APPROVED BY: SSM	
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# UTILITY CONSTRUCTION



MATCHLINE -L1-  
RDY STA. 57+00.00  
UC STA. 25+19.62  
SEE SHEET RDY-6 / UC-5

MATCHLINE -L1-  
RDY STA. 39+75.00  
UC STA. 36+42.00  
SEE SHEET RDY-15 / UC-7

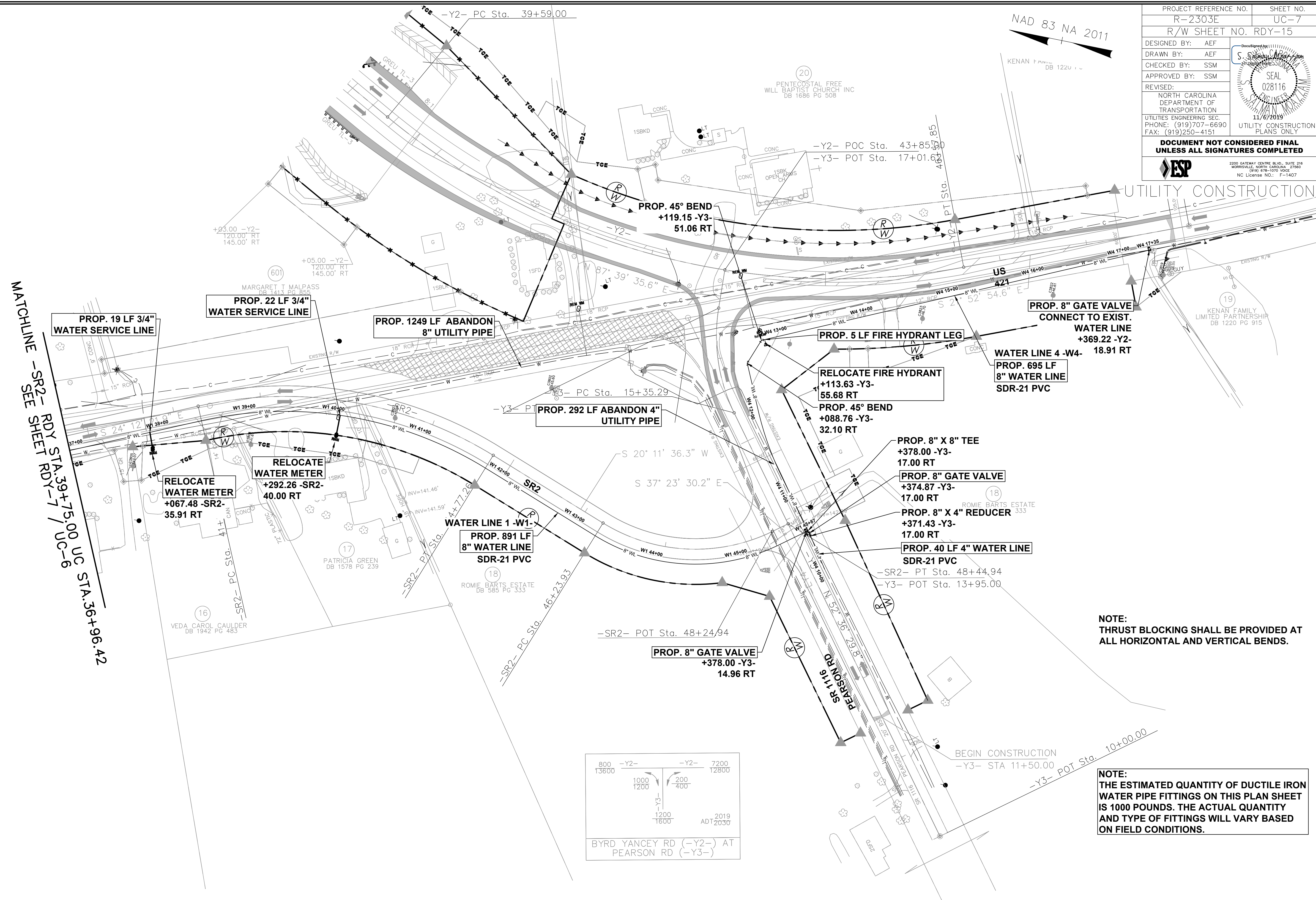
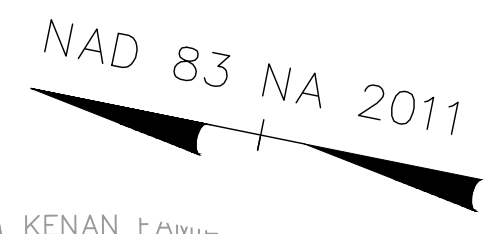
**NOTE:**  
THE ESTIMATED QUANTITY OF DUCTILE IRON WATER PIPE FITTINGS ON THIS PLAN SHEET IS 1000 POUNDS. THE ACTUAL QUANTITY AND TYPE OF FITTINGS WILL VARY BASED ON FIELD CONDITIONS.

**NOTE:**  
THRUST BLOCKING SHALL BE PROVIDED AT ALL HORIZONTAL AND VERTICAL BENDS.

REFER TO SHEET UC-14 FOR -W2- PROFILE  
REFER TO SHEET UC-15 FOR -W1- PROFILE



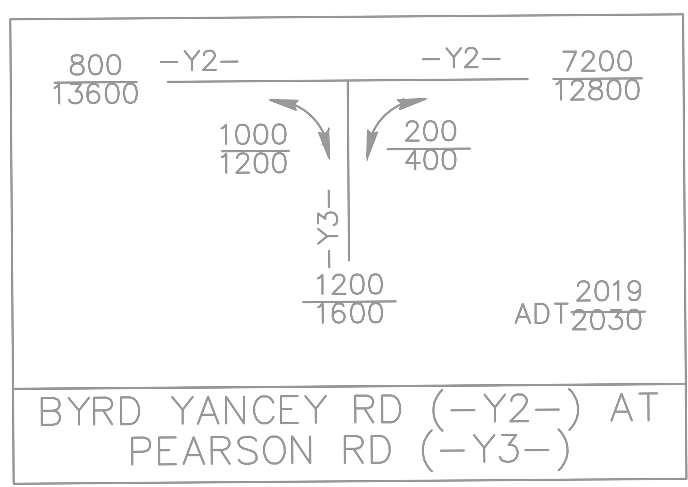
PROJECT REFERENCE NO. R-2303E	SHEET NO. UC-7
R/W SHEET NO. RDY-15	
DESIGNED BY: AEF	SEAL 028116 11/6/2019
DRAWN BY: AEF	UTILITY CONSTRUCTION PLANS ONLY
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APPROVED BY: SSM	
REVISER:	
NORTH CAROLINA DEPARTMENT OF TRANSPORTATION	
UTILITIES ENGINEERING SEC. PHONE: (919) 707-6690 FAX: (919) 250-4151	
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<b>ESP</b> 2200 GATEWAY CENTRE BLVD., SUITE 216 MORRISVILLE, NORTH CAROLINA 27560 (919) 878-1070 VOICE NC License NO.: F-1407	



MATCHLINE -SR2- RDY STA. 39+75.00 UC STA. 36+96.42  
 SEE SHEET RDY-7 / UC-6

NOTE:  
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NOTE:  
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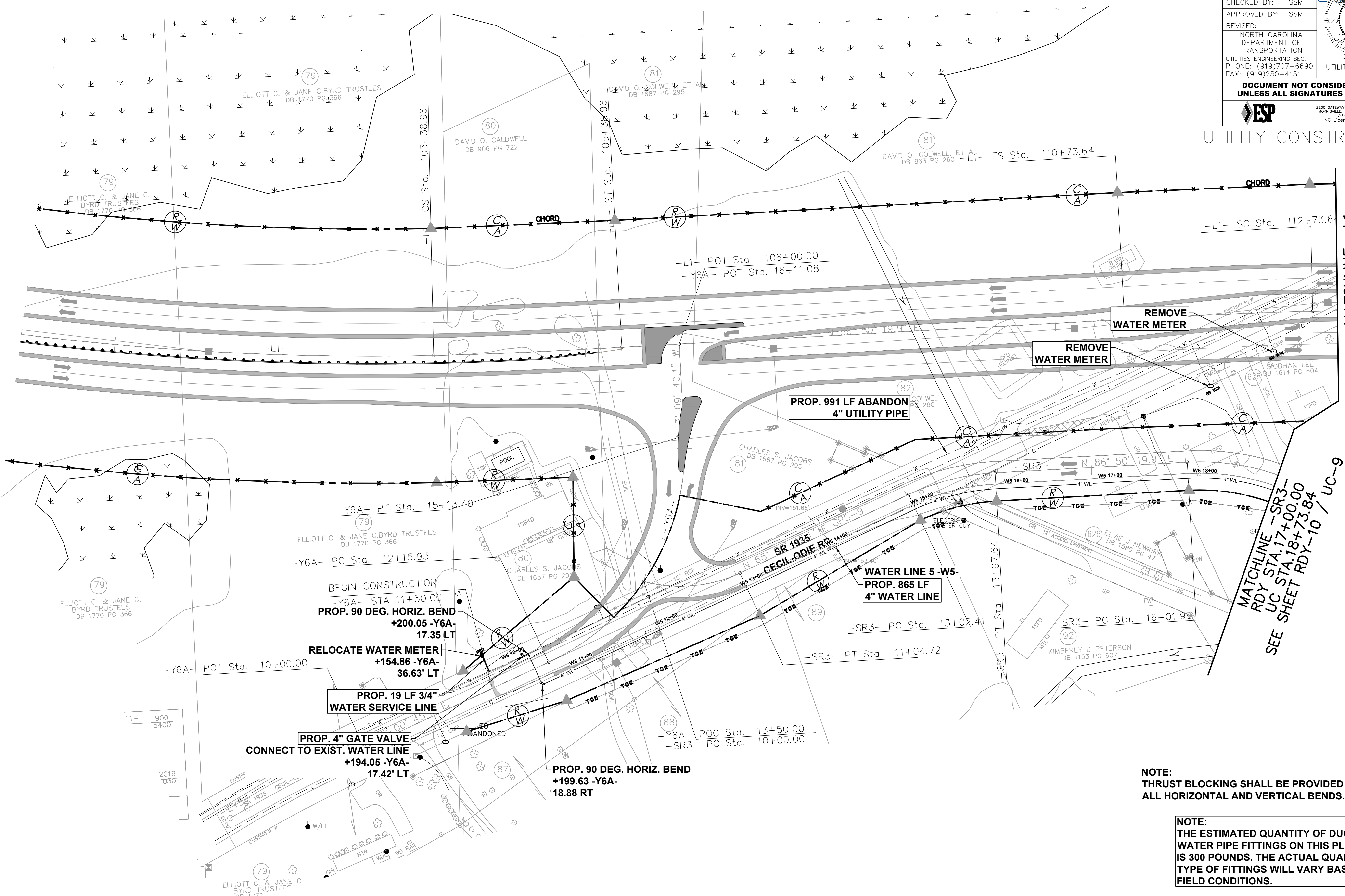


REFER TO SHEET UC-15 FOR -W1- PROFILE  
REFER TO SHEET UC-16 FOR -W4- PROFILE



PROJECT REFERENCE NO. R-2303E	SHEET NO. UC-8
R/W SHEET NO. RDY-9	
DESIGNED BY: AEF	
DRAWN BY: AEF	
CHECKED BY: SSM	
APPROVED BY: SSM	
REVISER:	
NORTH CAROLINA DEPARTMENT OF TRANSPORTATION UTILITIES ENGINEERING SEC. PHONE: (919) 707-6690 FAX: (919) 250-4151 UTILITY CONSTRUCTION PLANS ONLY	
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# UTILITY CONSTRUCTION



**NOTE:**  
THRUST BLOCKING SHALL BE PROVIDED AT ALL HORIZONTAL AND VERTICAL BENDS.

**NOTE:**  
THE ESTIMATED QUANTITY OF DUCTILE IRON WATER PIPE FITTINGS ON THIS PLAN SHEET IS 300 POUNDS. THE ACTUAL QUANTITY AND TYPE OF FITTINGS WILL VARY BASED ON FIELD CONDITIONS.

REFER TO SHEET UC-16 FOR -W5- PROFILE

MATCHLINE -L1- RDY STA. 113+00.00 / UC-9  
SEE SHEET RDY-10 / UC-9

MATCHLINE -SR3- RDY STA. 17+00.00 / UC-9  
SEE SHEET RDY-10 / UC-9

NAD 83 NA 2011

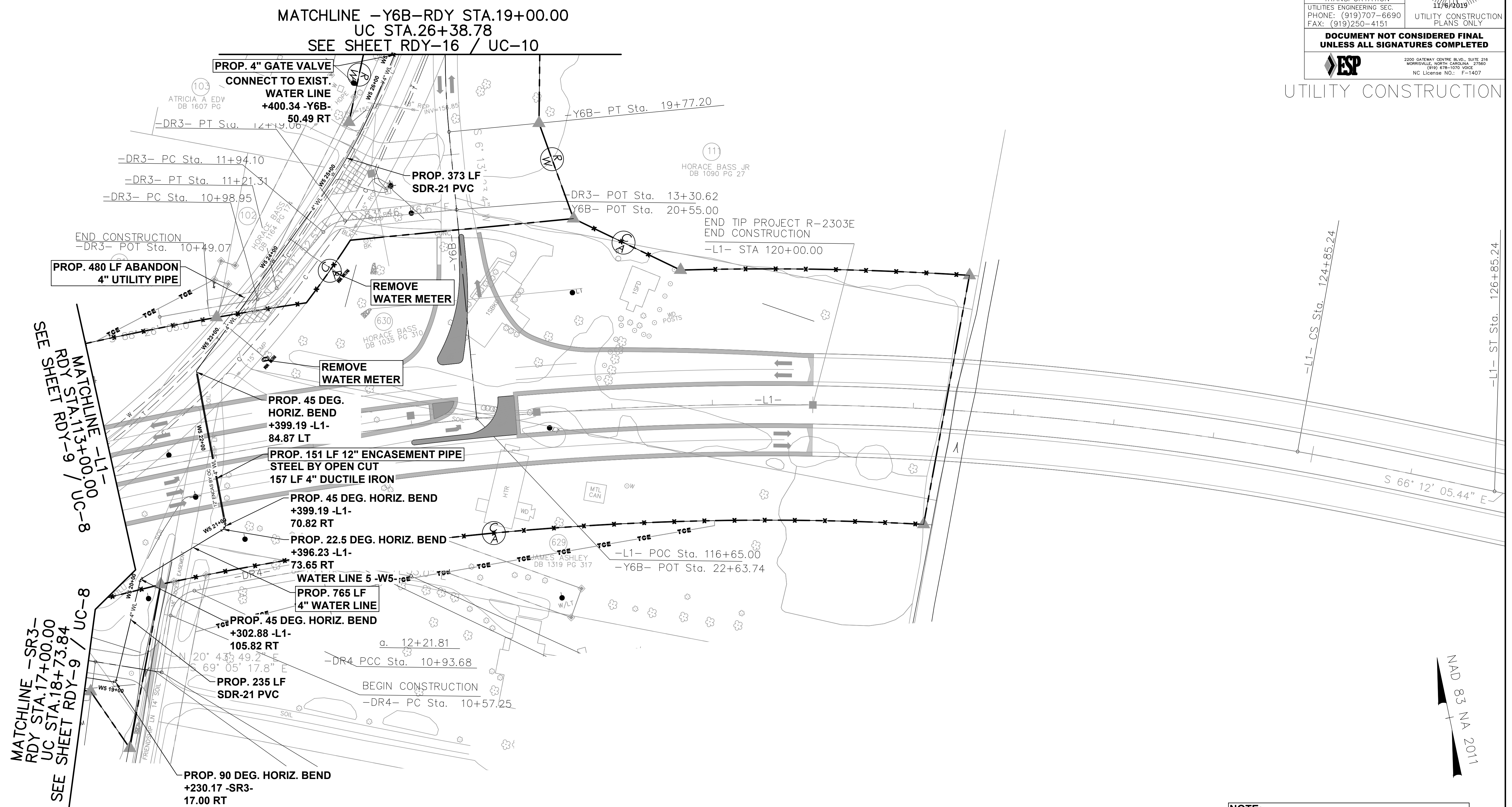


PROJECT REFERENCE NO. R-2303E	SHEET NO. UC-9
R/W SHEET NO. RDY-10	
DESIGNED BY: AEF	
DRAWN BY: AEF	
CHECKED BY: SSM	
APPROVED BY: SSM	
REVISER:	
NORTH CAROLINA DEPARTMENT OF TRANSPORTATION UTILITIES ENGINEERING SEC. PHONE: (919)707-6690 FAX: (919)250-4151	
UTILITY CONSTRUCTION PLANS ONLY	

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2200 GATEWAY CENTRE BLVD., SUITE 216  
MORRISVILLE, NORTH CAROLINA 27660  
(919) 778-1075 VOICE  
NC License NO.: F-1407

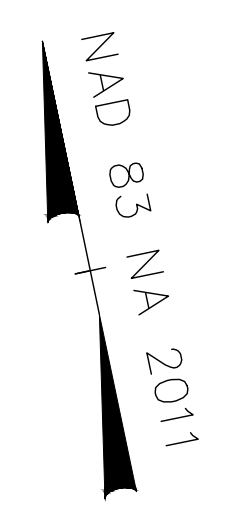
UTILITY CONSTRUCTION



**NOTE:**  
THRUST BLOCKING SHALL BE PROVIDED AT ALL HORIZONTAL AND VERTICAL BENDS.

**NOTE:**  
THE ESTIMATED QUANTITY OF DUCTILE IRON WATER PIPE FITTINGS ON THIS PLAN SHEET IS 500 POUNDS. THE ACTUAL QUANTITY AND TYPE OF FITTINGS WILL VARY BASED ON FIELD CONDITIONS.

REFER TO SHEET UC-17 FOR -W5- PROFILE



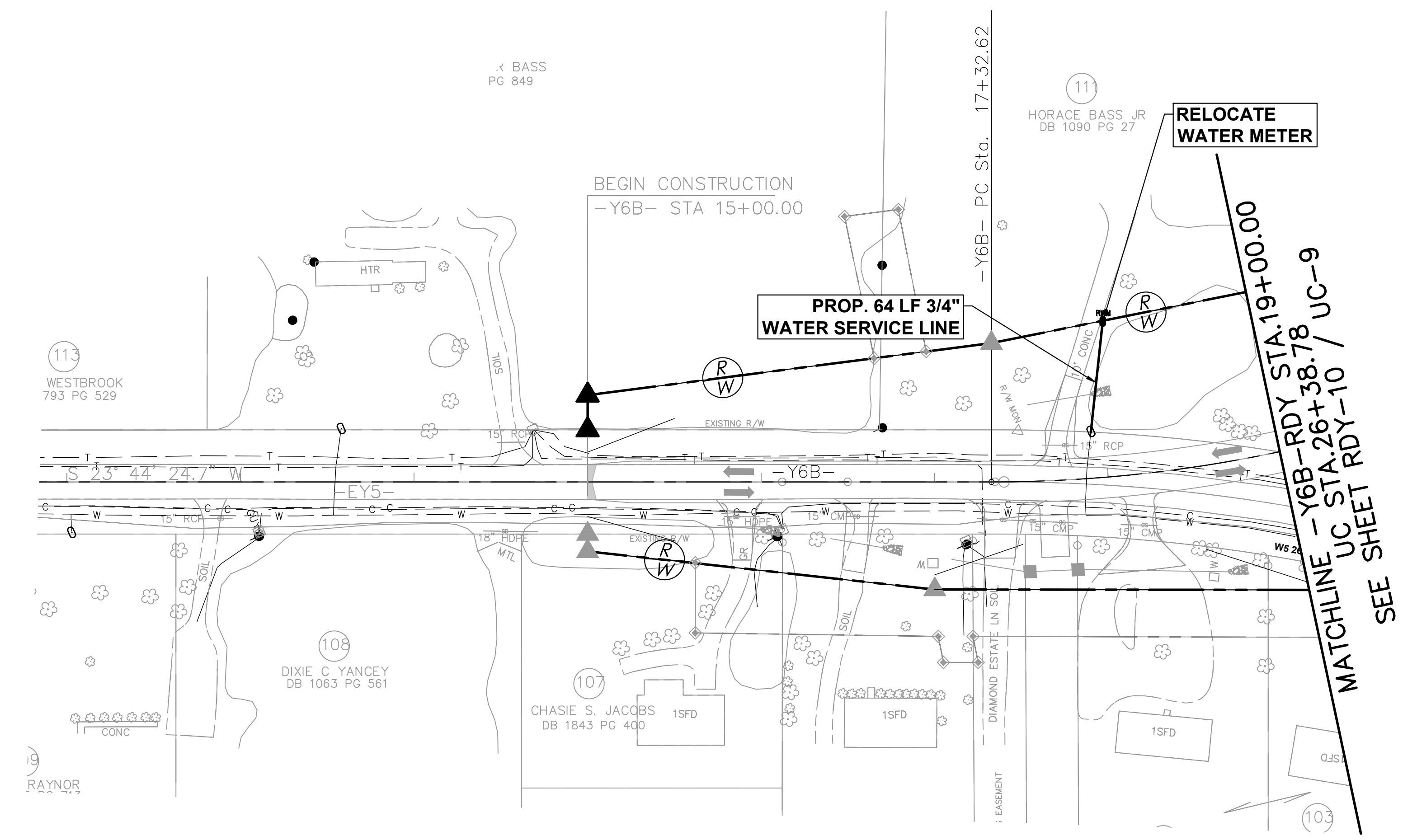


PROJECT REFERENCE NO. R-2303E	SHEET NO. UC-10
R/W SHEET NO. RDY-16	
DESIGNED BY: AEF	
DRAWN BY: AEF	
CHECKED BY: SSM	
APPROVED BY: SSM	
REVISER:	
NORTH CAROLINA DEPARTMENT OF TRANSPORTATION UTILITIES ENGINEERING SEC. PHONE: (919)707-6690 FAX: (919)250-4151	
UTILITY CONSTRUCTION PLANS ONLY	

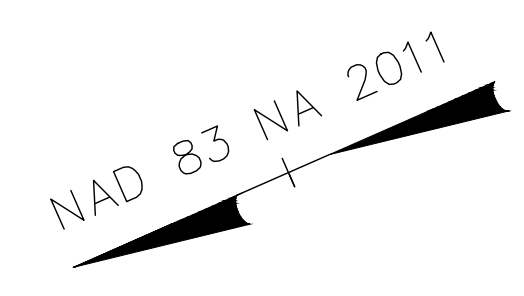
**DOCUMENT NOT CONSIDERED FINAL  
UNLESS ALL SIGNATURES COMPLETED**

**ESP**  
 2200 GATEWAY CENTRE BLVD., SUITE 216  
 MORRISVILLE, NORTH CAROLINA 27560  
 (919) 978-1070 VOICE  
 NC License NO.: F-1407

UTILITY CONSTRUCTION



RELOCATE WATER METER  
 MATCHLINE -Y6B- RDY STA. 19+00.00  
 UC STA. 26+38.78 / UC-9  
 SEE SHEET RDY-10



PROJECT REFERENCE NO. R-2303E	SHEET NO. UC-11
R/W SHEET NO. RDY-11	
DESIGNED BY: AEF	
DRAWN BY: AEF	
CHECKED BY: SSM	
APPROVED BY: SSM	
REVISOR:	
NORTH CAROLINA DEPARTMENT OF TRANSPORTATION UTILITIES ENGINEERING SEC. PHONE: (919)707-6690 FAX: (919)250-4151	
UTILITY CONSTRUCTION PLANS ONLY	

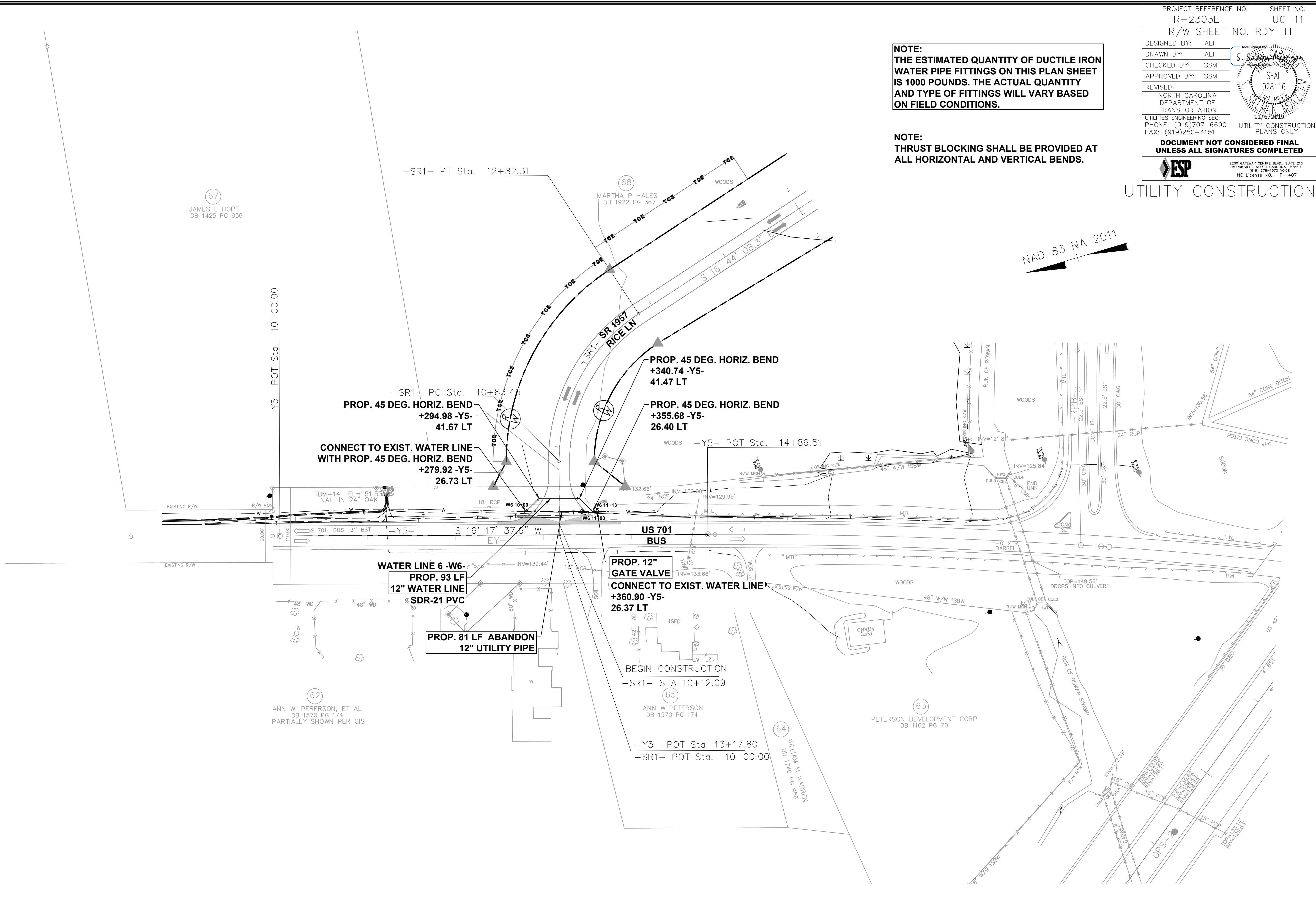
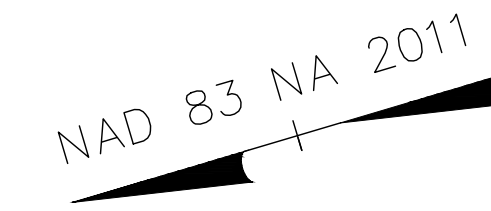
**NOTE:**  
 THE ESTIMATED QUANTITY OF DUCTILE IRON  
 WATER PIPE FITTINGS ON THIS PLAN SHEET  
 IS 1000 POUNDS. THE ACTUAL QUANTITY  
 AND TYPE OF FITTINGS WILL VARY BASED  
 ON FIELD CONDITIONS.

**NOTE:**  
 THRUST BLOCKING SHALL BE PROVIDED AT  
 ALL HORIZONTAL AND VERTICAL BENDS.

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

2200 GATEWAY CENTRE BLVD., SUITE 216  
 MORRISVILLE, NORTH CAROLINA 27560  
 (919) 978-1070 VOICE  
 NC License NO.: F-1407

UTILITY CONSTRUCTION

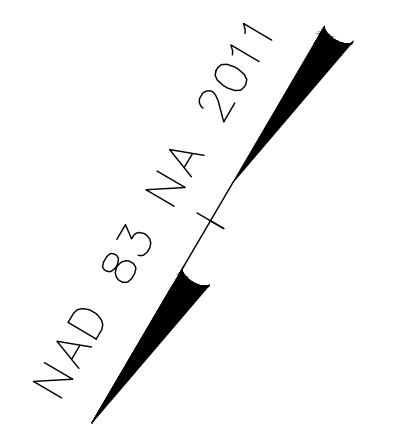
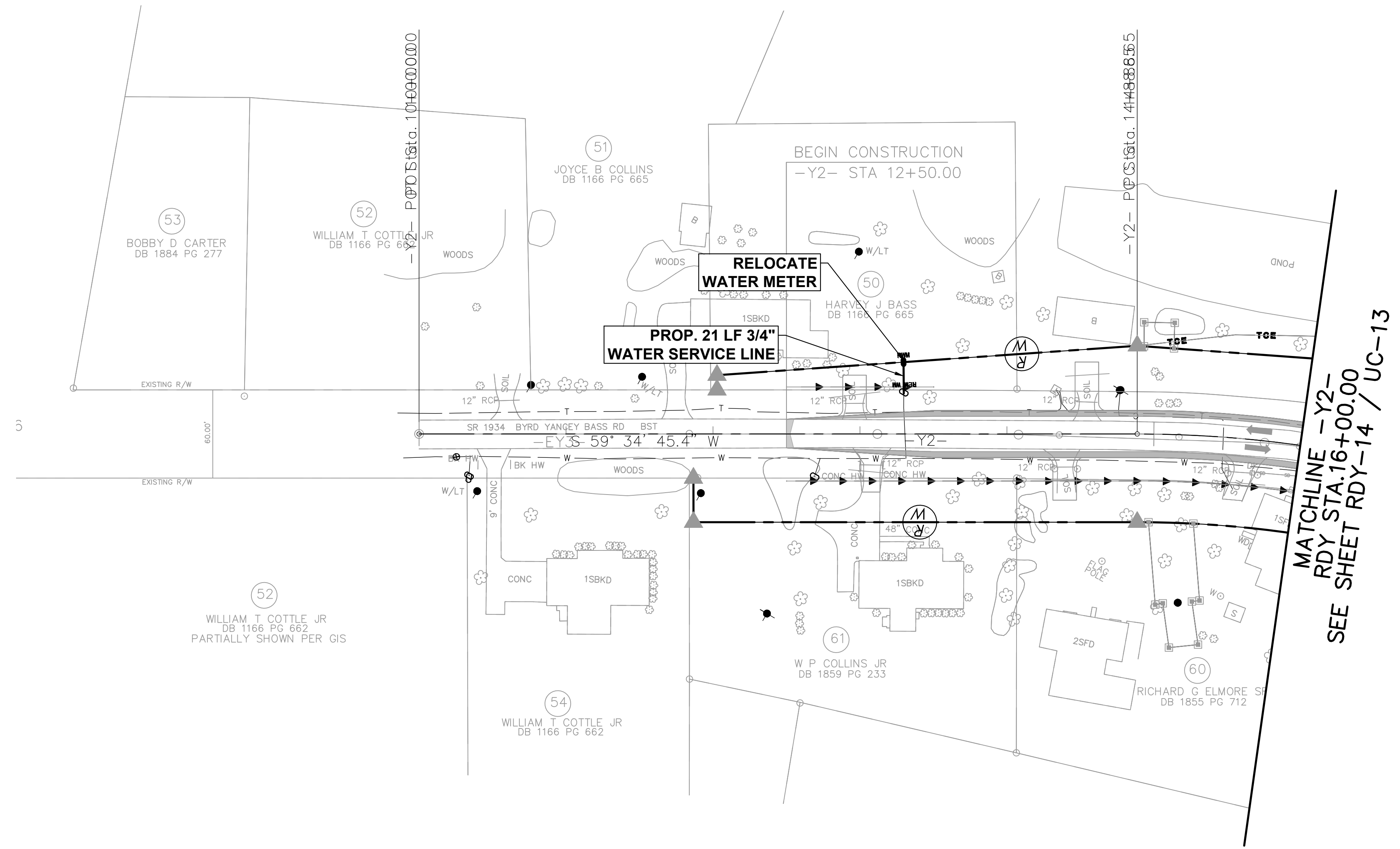


REFER TO SHEET UC-17 FOR -W6- PROFILE



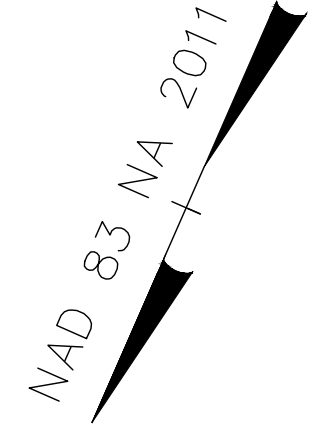
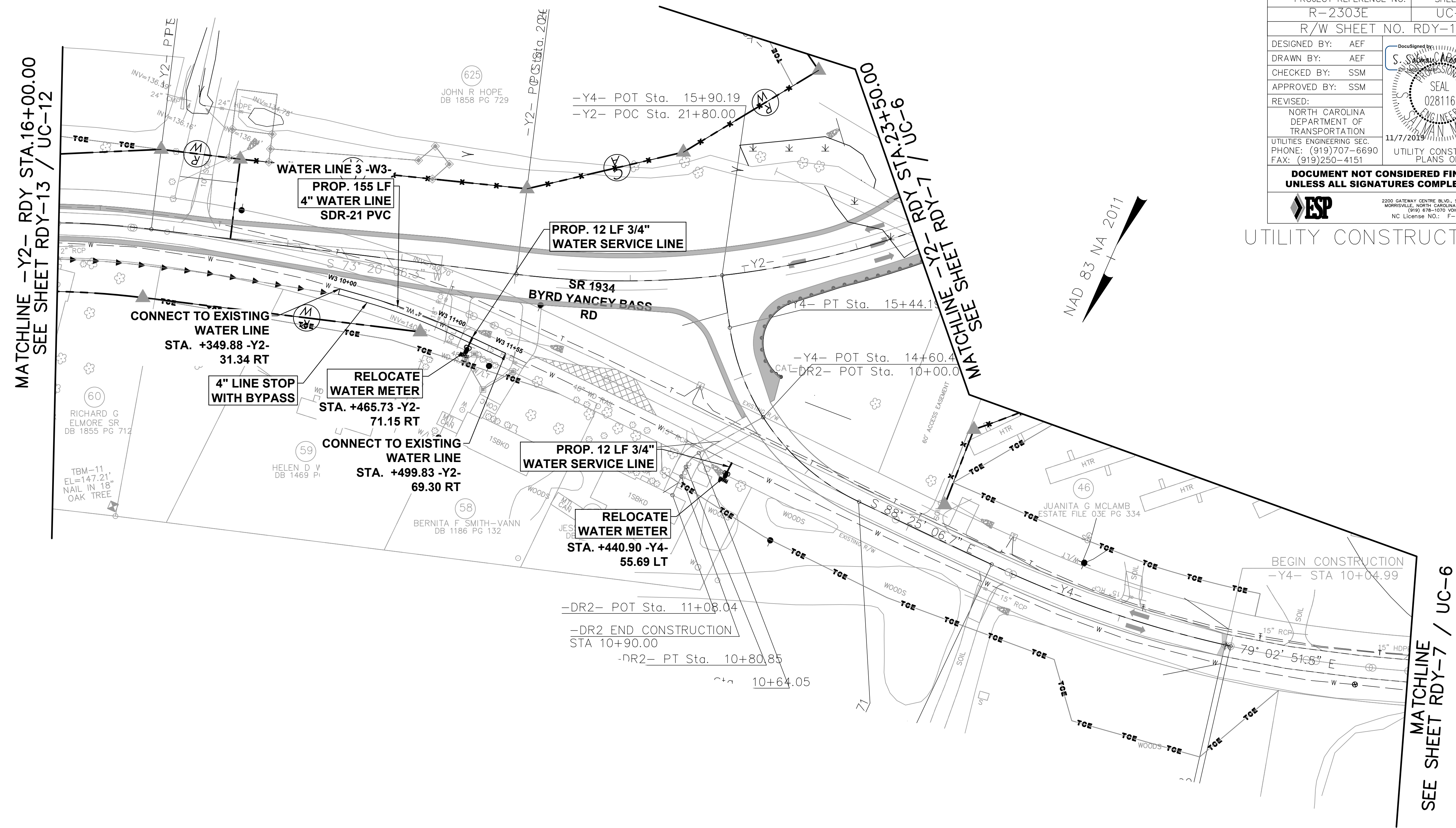
PROJECT REFERENCE NO. R-2303E	SHEET NO. UC-12
R/W SHEET NO. RDY-13	
DESIGNED BY: AEF	
DRAWN BY: AEF	
CHECKED BY: SSM	
APPROVED BY: SSM	
REVISER:	
NORTH CAROLINA DEPARTMENT OF TRANSPORTATION UTILITIES ENGINEERING SEC. PHONE: (919)707-6690 FAX: (919)250-4151	
UTILITY CONSTRUCTION PLANS ONLY	
<b>DOCUMENT NOT CONSIDERED FINAL          UNLESS ALL SIGNATURES COMPLETED</b>	

# UTILITY CONSTRUCTION



PROJECT REFERENCE NO. R-2303E	SHEET NO. UC-13
R/W SHEET NO. RDY-14	
DESIGNED BY: AEF	
DRAWN BY: AEF	
CHECKED BY: SSM	
APPROVED BY: SSM	
REVISOR:	11/7/2019
NORTH CAROLINA DEPARTMENT OF TRANSPORTATION UTILITIES ENGINEERING SEC. PHONE: (919)707-6690 FAX: (919)250-4151	
<b>DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED</b>	

UTILITY CONSTRUCTION



**NOTE:**  
 THE ESTIMATED QUANTITY OF DUCTILE IRON WATER PIPE FITTINGS ON THIS PLAN SHEET IS 300 POUNDS. THE ACTUAL QUANTITY AND TYPE OF FITTINGS WILL VARY BASED ON FIELD CONDITIONS.



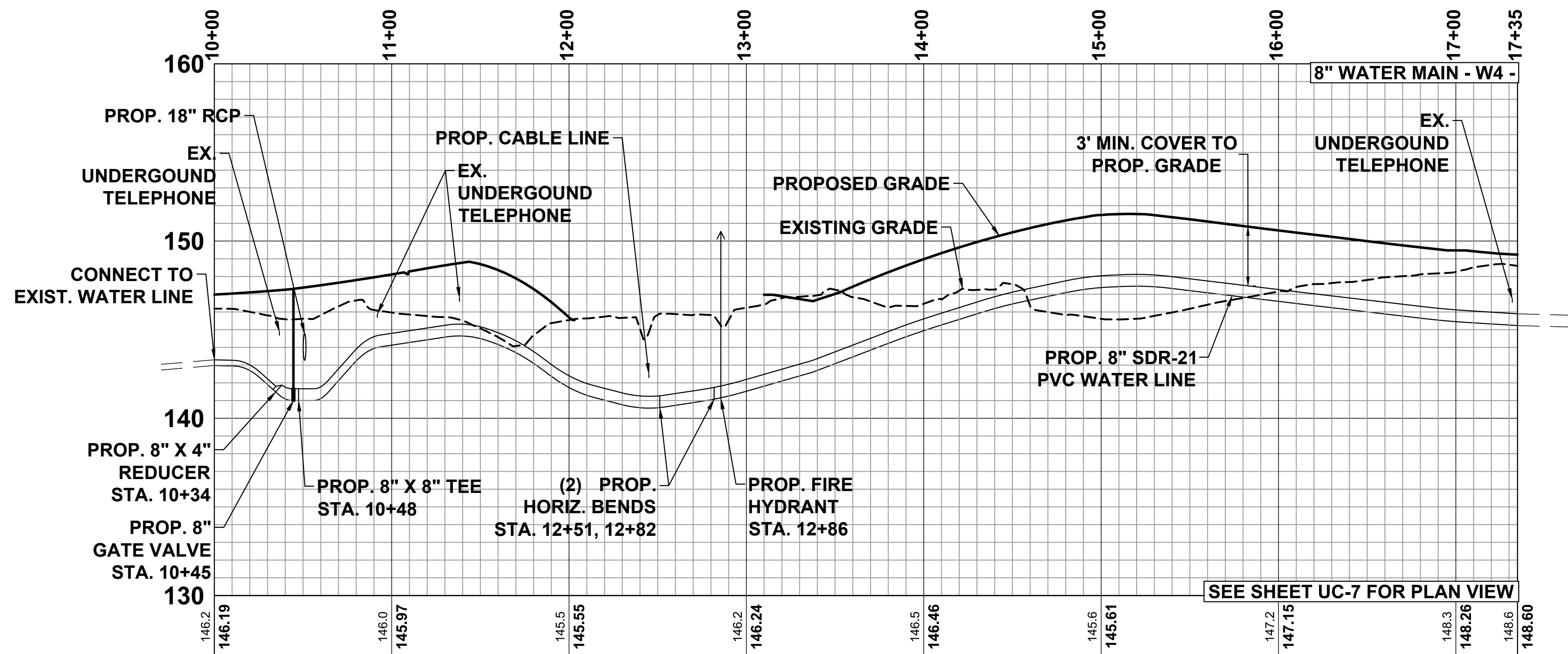




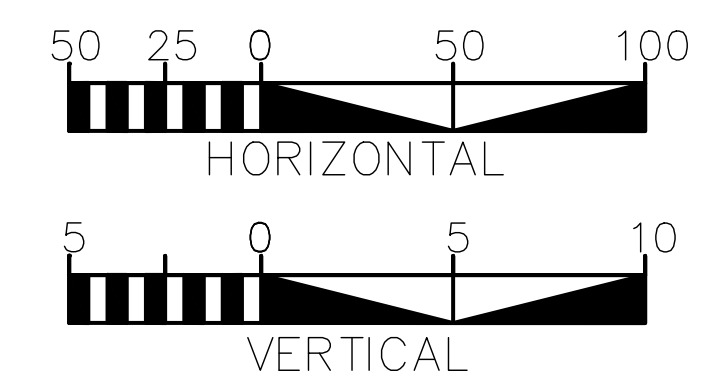




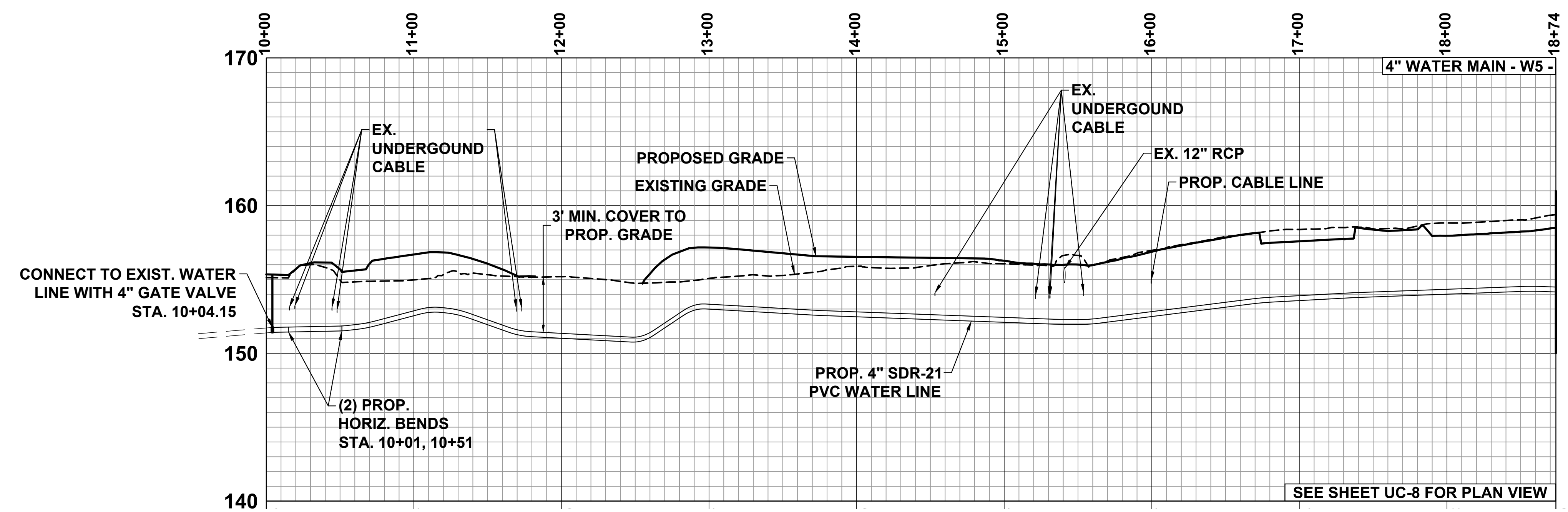
PROJECT REFERENCE NO. R-2303E	SHEET NO. UC-16
DESIGNED BY: AEF	
DRAWN BY: AEF	
CHECKED BY: SSM	
APPROVED BY: SSM	
REVISER:	
NORTH CAROLINA DEPARTMENT OF TRANSPORTATION UTILITIES ENGINEERING SEC. PHONE: (919)707-6690 FAX: (919)250-4151 UTILITY CONSTRUCTION PLANS ONLY	
<b>DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED</b>	



UTILITY CONSTRUCTION



- GENERAL NOTES:**
- EXISTING PIPE ELEVATIONS ARE ESTIMATED. CONTRACTOR SHALL VERIFY PIPE LOCATION BEFORE STARTING WORK.
  - THRUST BLOCKING SHALL BE PROVIDED AT ALL HORIZONTAL AND VERTICAL BENDS.



MATCHLINE STA. 18+73.84  
SEE SHEET UC-17



