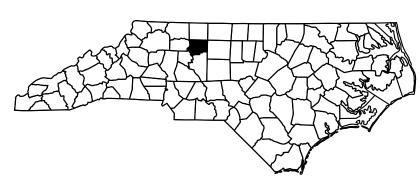
STATE OF NORTH CAROLINA DIVISION OF HIGHWAYS

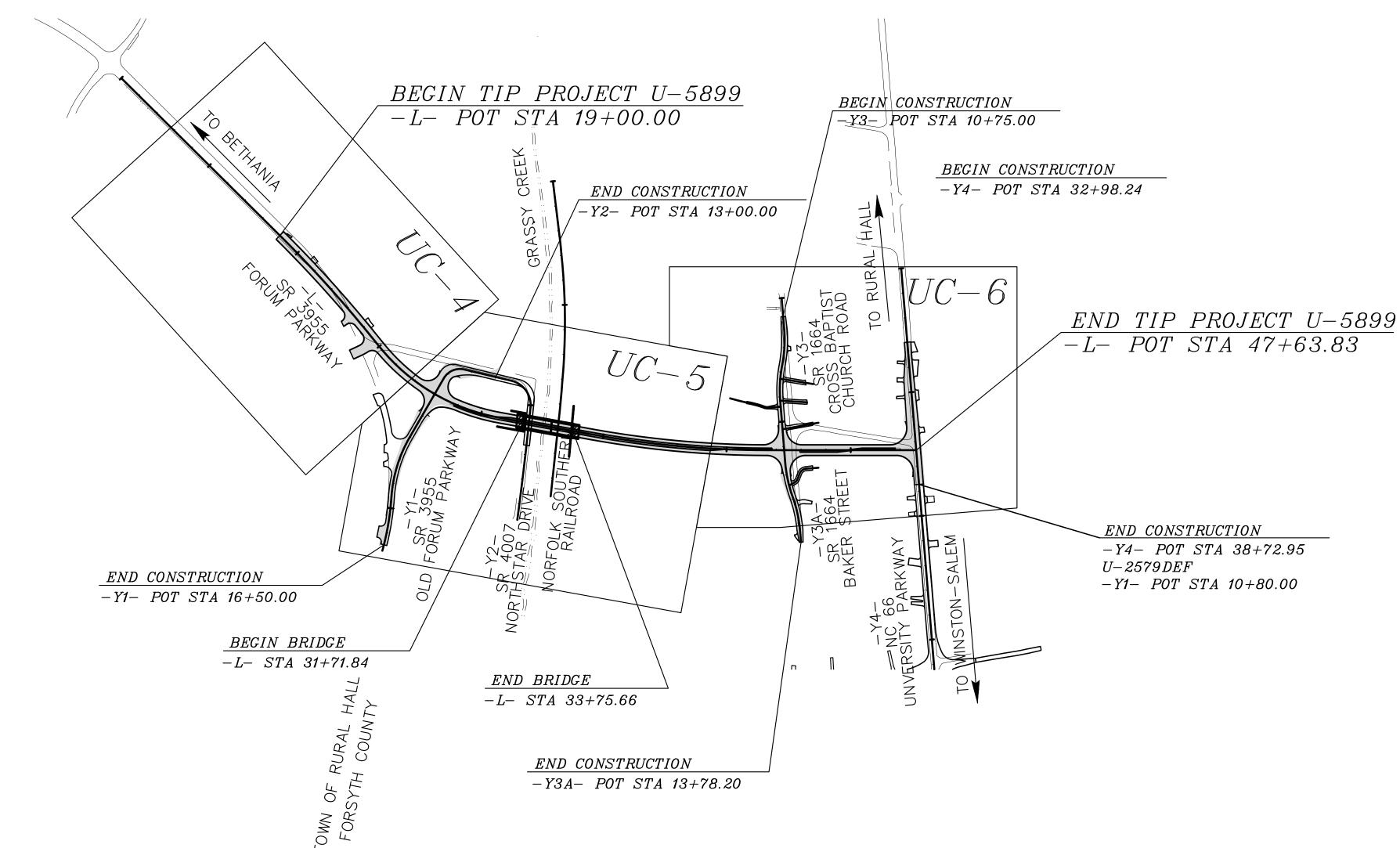
T.I.P. NO. UC-U - 5899

FORSYTH COUNTY

LOCATION: FORUM PARKWAY CONNECTOR FROM SR 3955 (FORUM PARKWAY) TO NC 66 (UNIVERSITY PARKWAY) IN RURAL HALL

TYPE OF WORK: GRADING, PAVING, DRAINAGE, AND STRUCTURE

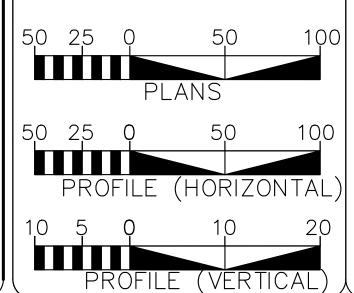




A PORTION OF THIS PROJECT IS WITHIN THE MUNICIPAL LIMITS OF RURAL HALL, NC.

UC-7 THRU UC-8

GRAPHIC SCALES



INDEX OF SHEETS

UTILITY PLAN SHEETS

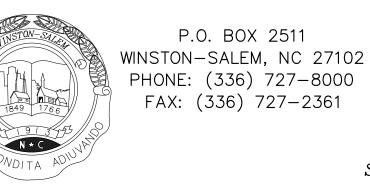
PROFILE SHEETS

SHEET NO. DESCRIPTION UC-1TITLE SHEET UTILITY SYMBOLOGY UC-2UC-3NOTES UC-3A THRU UC-3B DETAILS UC-4 THRU UC-6

WATER AND SEWER OWNERS ON PROJECT

WATER AND SANITARY SEWER -WINSTON-SALEM/FORSYTH COUNTY UTILITIES COMMISSION

PREPARED IN THE OFFICE OF: ENGINEERING DIVISION CITY OF WINSTON—SALEM



Signed by: 10 Todd Lewis 027441 SEAL 3/22/2025

DIVISION OF HIGHWAYS UTILITIES UNIT

1555 MAIL SERVICES CENTER RALEIGH, NC 27699-1555 PHONE: (919) 707-6690 FAX: (919) 250-4151

AMY DUPREE YORK ALI KOCHCKI, PE

JOSH McMAHAN

CENTRAL UTILITIES MANAGER REGIONAL UTILITIES ENGINEER

SENIOR UTILITY COORDINATOR

TODD LEWIS, PE

PROJECT UTILITY ENGINEER

Docusign Envelope ID: 8DBC8FAA-0BCE-4F93-BEC0-CCF4DCC06356

PROJECT REFERENCE NO. SHEET NO.

STATE OF NORTH CAROLINA DIVISION OF HIGHWAYS

UTILITIES PLAN SHEET SYMBOLS

PROPOSED WATER SYMBOLS

Water Line (Sized as Shown) ------22½ Degree Bend ------45 Degree Bend ------90 Degree Bend -----Plug -----Cross ------ ++ Reducer ------Gate Valve-----Butterfly Valve ------Tapping Valve -----Line Stop Line Stop with Bypass -----Blow Off------Fire Hydrant ----- PFH Relocate Fire Hydrant ----- 🕌 Remove Fire Hydrant ------Water Meter -----Relocate Water Meter -----Remove Water Meter.------Water Pump Station ----- PS(W) 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 StationPS(SS)

PROPOSED MISCELLANOUS UTILITIES SYMBOLS

Power Pole 6	Thrust Block	
Telephone Pole ·	Air Release Valve·	
Joint Use Pole ·	Utility Vault	
Telephone Pedestal	Concrete Pier	
Utility Line by Others	Steel Pier	
Trenchless Installation ·	Plan Note	_
Encasement by Open Cut	Pay Item Note	
Encasement	PAY	ITEM

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 Liness
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 o	Fire Hydrant �
Abandoned According to Utility Records AATUR	Sanitary Sewer Cleanout ⊕
End of Information E.O.I.	

*For Existing Utiliti	ies
Utility Line Drawn f (Type as Shown)	from Record
Designated Utility L (Type as Shown)	_ine

A CONTRACTOR OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY AND THE PROPERTY OF THE PROPERTY

Docusign Envelope ID: 874DCEE9-CB6A-45F1-A74C-327B66EA87

SHEET NO.

UC-3

UTILITY CONSTRUCTION

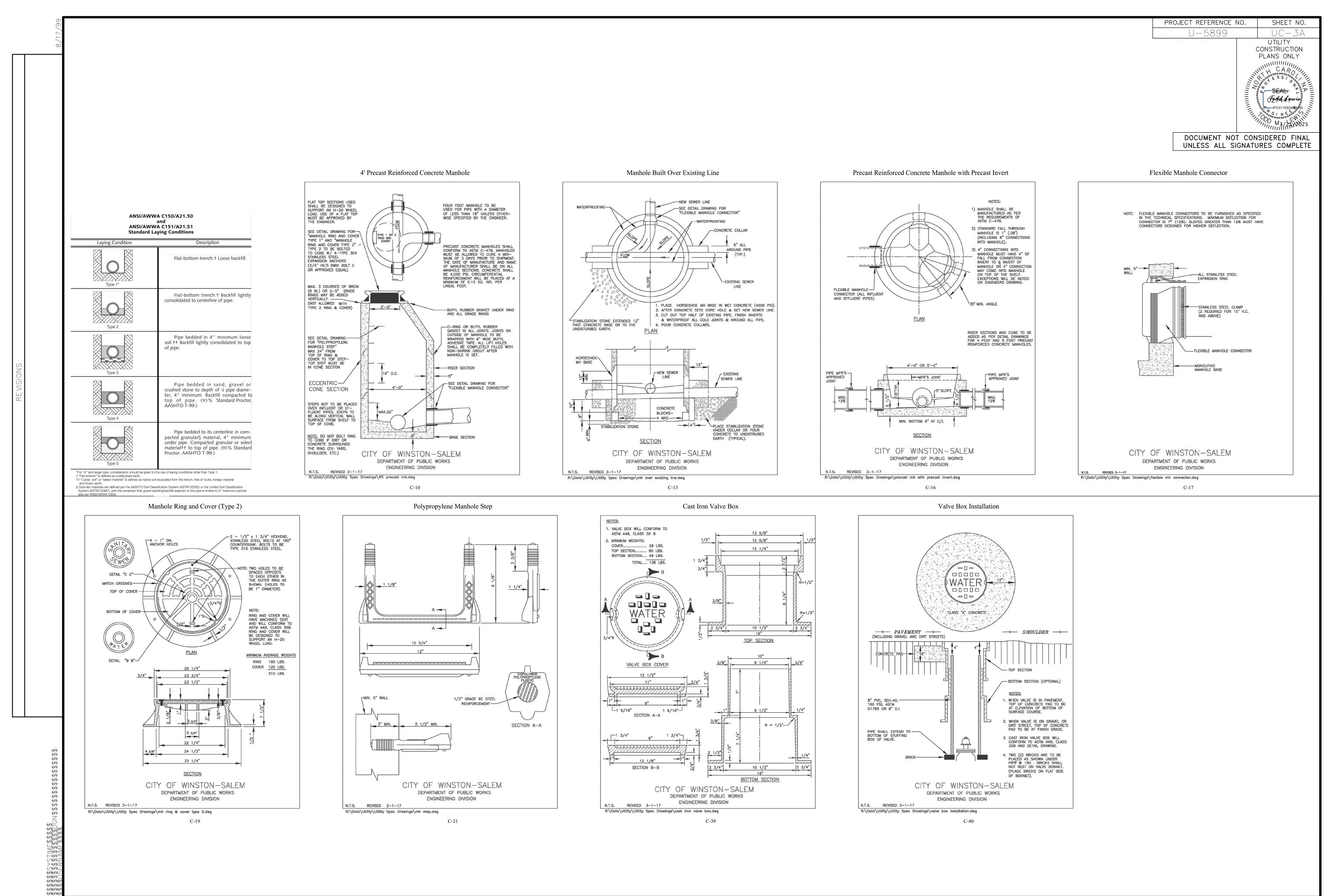
GENERAL NOTES:

- 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 2024 OR THE PROJECT SPECIAL PROVISIONS UTILITY CONSTRUCTION.
- 2. THE EXISTING UTILITIES BELONG TO WINSTON-SALEM / FORSYTH COUNTY UTILITY COMMISSION.
- 3. ALL WATER LINES TO BE INSTALLED WITHIN COMPLIANCE OF THE RULES AND REGULATIONS OF THE NORTH CAROLINA DEPARTMENT OF ENVIRONMENTAL AND NATURAL RESOURCES. 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 AND NATURAL RESOURCES, 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 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 NO ADDITONAL COST TO THE DEPARTMENT.
- 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.
- 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 AND APPROVED BY THE DEPARTMENT AND THE UTILITY OWNER.
- 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 SHALL MAINTAIN CONTINUOUS WATER AND SEWER SERVICE TO EXISTING RESIDENCES AND BUSINESSES THROUGHOUT CONSTRUCTION OF THE PROJECT, ANY NECESSARY SERVICE INTERRUPTIONS SHALL BE PRECEDED BY A 24-HOUR ADVANCE NOTICE TO THE WINSTON-SALEM / FORSYTH COUNTRY UTILITIES DEPARTMENT.
- 2. ANY NECESSARY FIELD REVISIONS ARE SUBJECT TO REVIEW AND APPROVAL OF AN AMENDED PLAN AND/OR PROFILE BY THE WINSTON-SALEM / FORSYTH COUNTRY UTILITIES DEPARTMENT PRIOR TO CONSTRUCTION.
- 3. ALL VALVES 3" THROUGH 16" SHALL BE GATE VALVES.
- 4. THE CONTRACTOR SHALL CHECK THE INSIDE OF ALL SERVICE CONNECTION METER BOXES THAT ARE WITHIN THE LIMITS OF WATER MAINS TO BE ABANDONED. IF ANY METER BOX CONTAINS A METER. THE METER SHALL BE REMOVED AND RETURNED TO THE CITY OF WINSTON-SALEM'S UTILITIES CONSTRUCTION AND MAINTENANCE DIVISION AT 1550-B MARTIN LUTHER KING JR DRIVE. THE INVESTIGATION OF METERS AND ANY REMOVAL AND SUBSEQUENT DELIVERY TO THE CITY SHALL BE CONSIDERED INCIDENTAL TO THE WORK OF CLEARING AND GRUBBING.
- 5. MANHOLE RINGS AND COVERS SHALL BE TYPE 2. AS SHOWN IN THE DETAIL DRAWINGS, UNLESS OTHERWISE INDICATED ON THE PLANS.
- 6. ANY FIRE HYDRANT REMOVED FOR RELOCATION PURPOSES SHALL BE DELIVERED BY THE CONTRACTOR TO THE UTILITY OWNER'S CONSTRUCTION AND MAINTENANCE DEPARTMENT. THE CONTRACTOR SHALL FURNISH AND INSTALL A NEW HYDRANT.



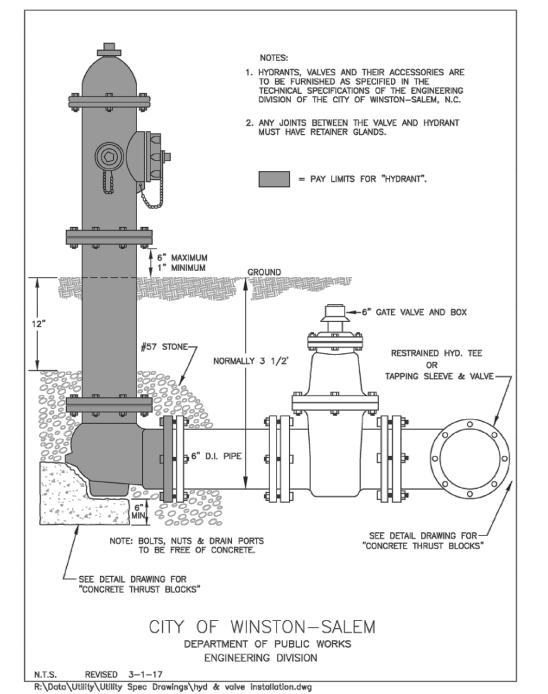
PROJECT REFERENCE NO. U-5899

UC-3BUTILITY CONSTRUCTION PLANS ONLY

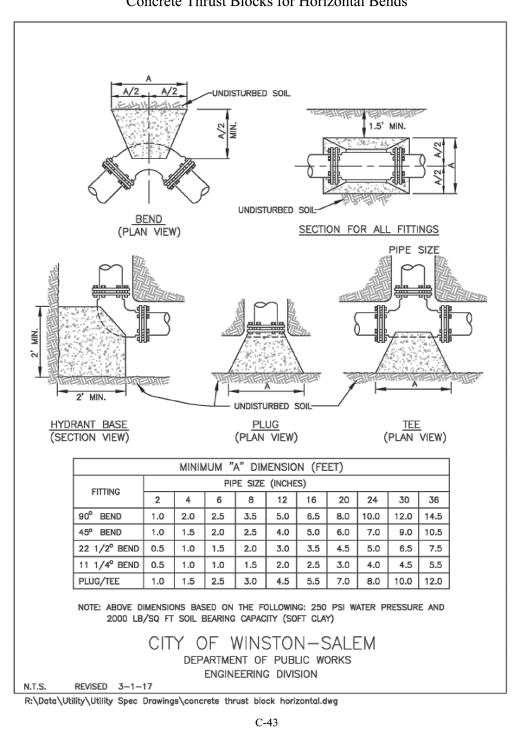
SHEET NO.

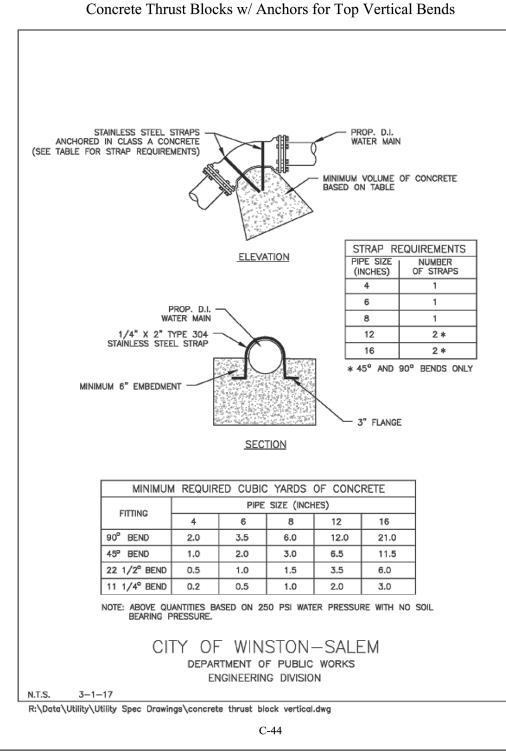
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETE

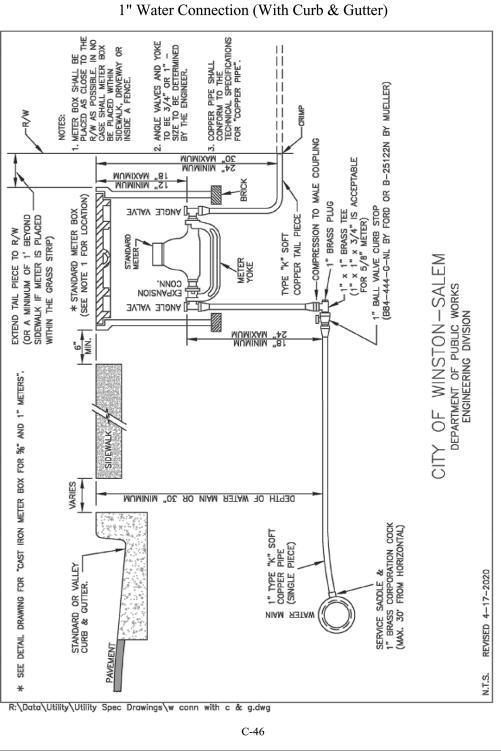
Hydrant and Valve Installation



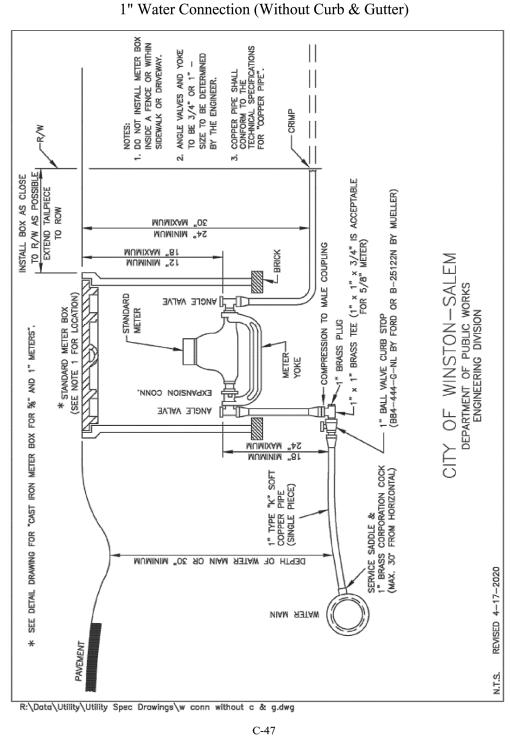
Concrete Thrust Blocks for Horizontal Bends

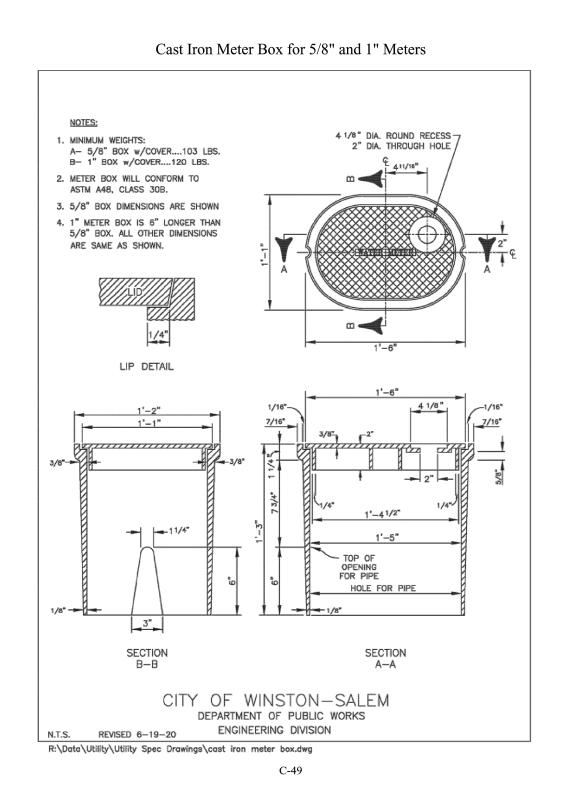




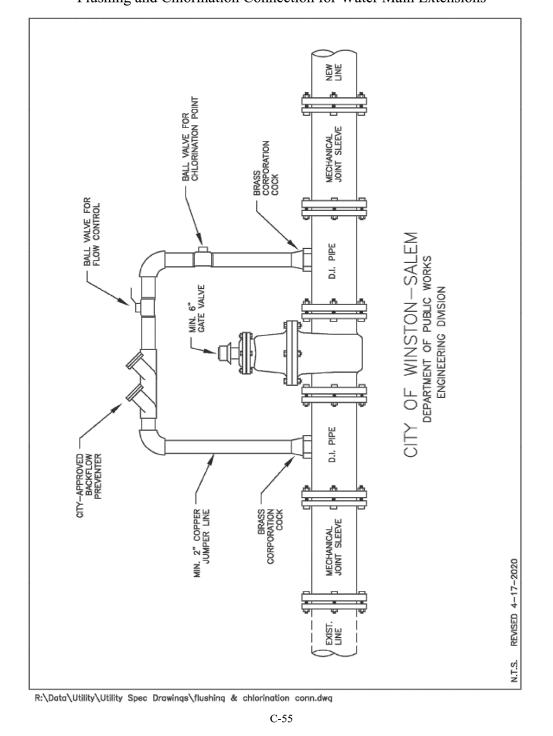


C-41

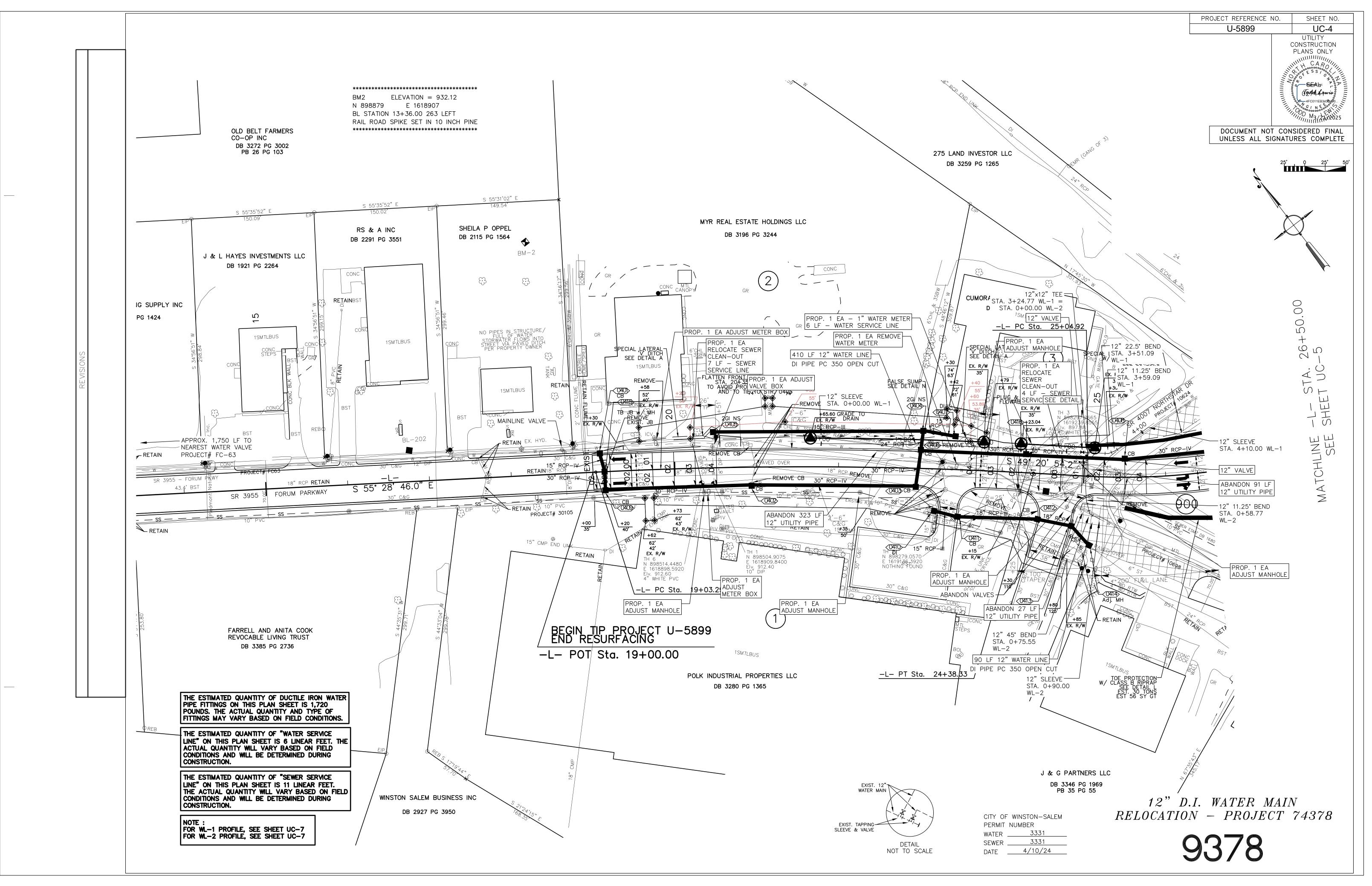


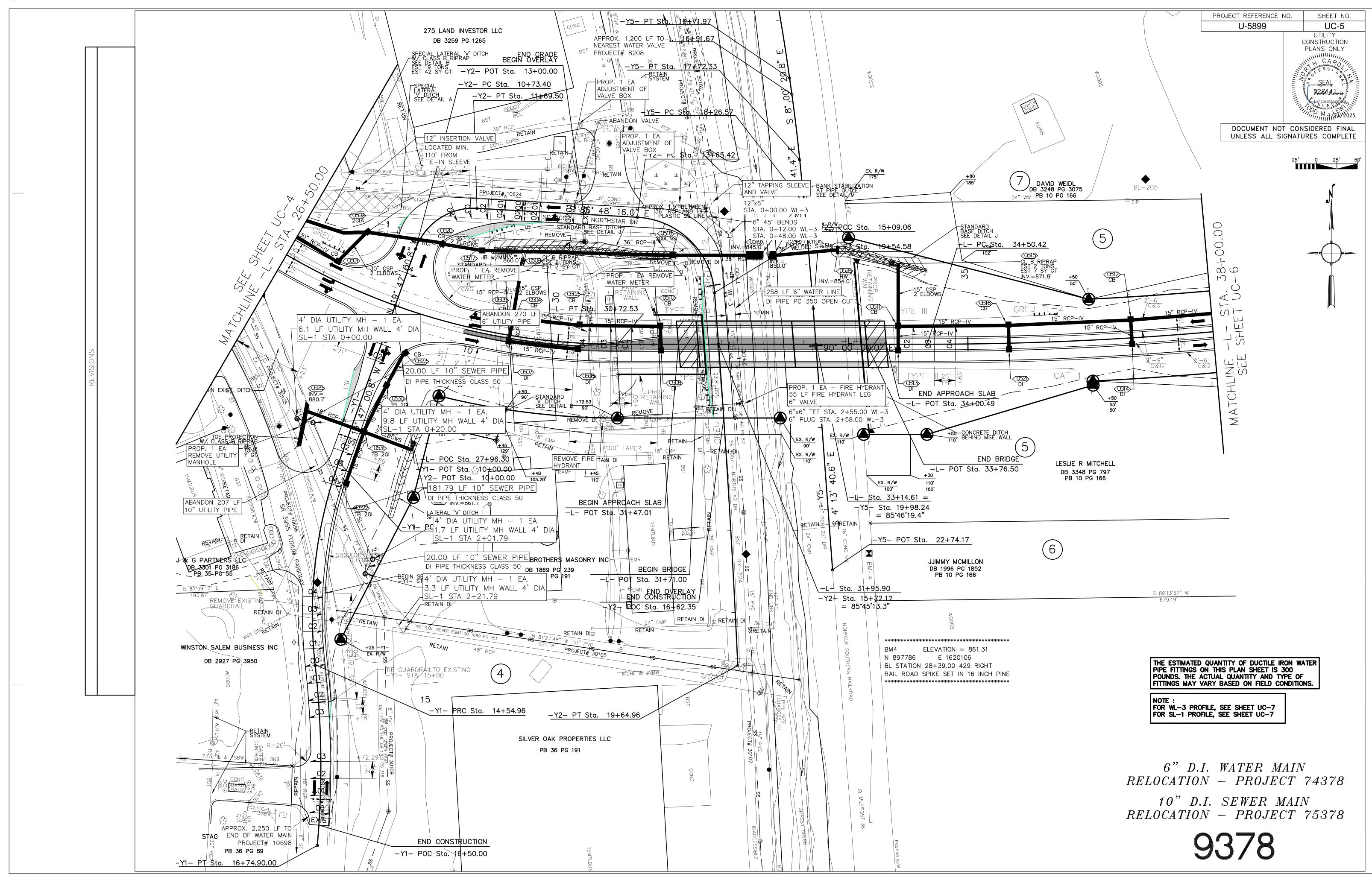


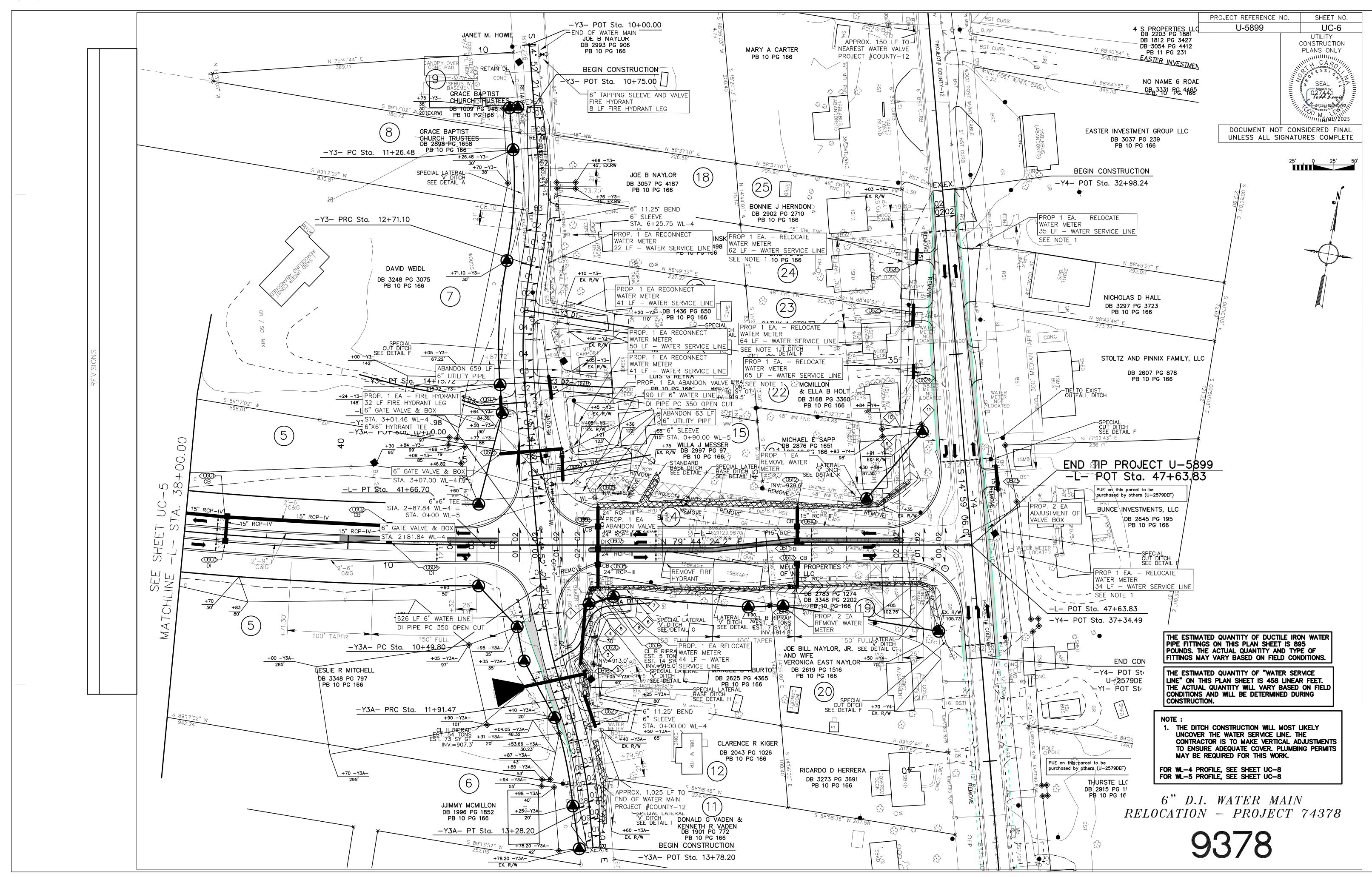
Flushing and Chlorination Connection for Water Main Extensions



MAXIMUM TRENCH WIDTH AT TOP OF PIPE					
NOMINAL PIPE SIZE (INCHES)	TRENCH WIDTH (INCHES)	NOMINAL PIPE SIZE (INCHES)	TRENCH WIDTH (INCHES)		
4	28	20	44		
6	30	24	48		
8	32	30	54		
10	34	36	60		
12	36	42	66		
14	38	48	72		
16	40	54	78		
18	42				

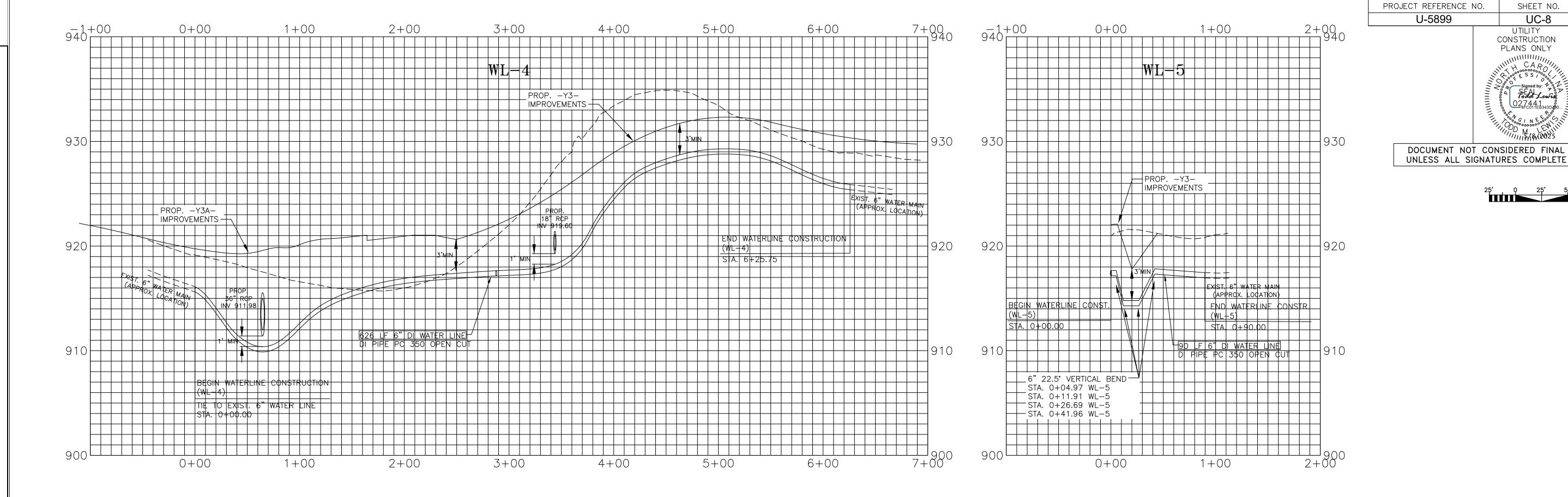






Docusign Envelope ID: 8DBC8FAA-0BCE-4F93-BEC0-CCF4DCC06356 PROJECT REFERENCE NO. SHEET NO. U-5899 UTILITY CONSTRUCTION PLANS ONLY 1+004+00 5+00 5+50 0+001+002+00 3+00 0+002+00 3+00 DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETE $oldsymbol{\perp}$ IMPROVEMENTS improvements 1+002+00 3+00 5+00 4+00 0+001 + 002+00 3+00 NOTE: FOR WL-1 PLAN, SEE SHEET UC-4 FOR WL-2 PLAN, SEE SHEET UC-4 FOR WL-3 PLAN, SEE SHEET UC-5 FOR SL-1 PLAN, SEE SHEET UC-5 12" & 6" D.I. WATER MAIN RELOCATION - PROJECT 74378 10" D.I. SEWER MAIN RELOCATION - PROJECT 75378 2+00 1+00 0+001+002+00

Docusign Envelope ID: 874DCEE9-CB6A-45F1-A74C-327B66EA8731



NOTE:
FOR WL-4 PLAN, SEE SHEET UC-6
FOR WL-5 PLAN, SEE SHEET UC-6

6" D.I. WATER MAIN RELOCATION - PROJECT 74378

SHEET NO.

UC-8

UTILITY CONSTRUCTION PLANS ONLY

CARO

25' 0 25' 50'