END PROJECT

U-4709

BEGIN PROJECT U-4709

Hope Mills

Pop. 11,925

VICINITY MAP

THIS PROJECT IS WITHIN THE MUNICIPAL BOUNDARIES OF HOPE MILLS.

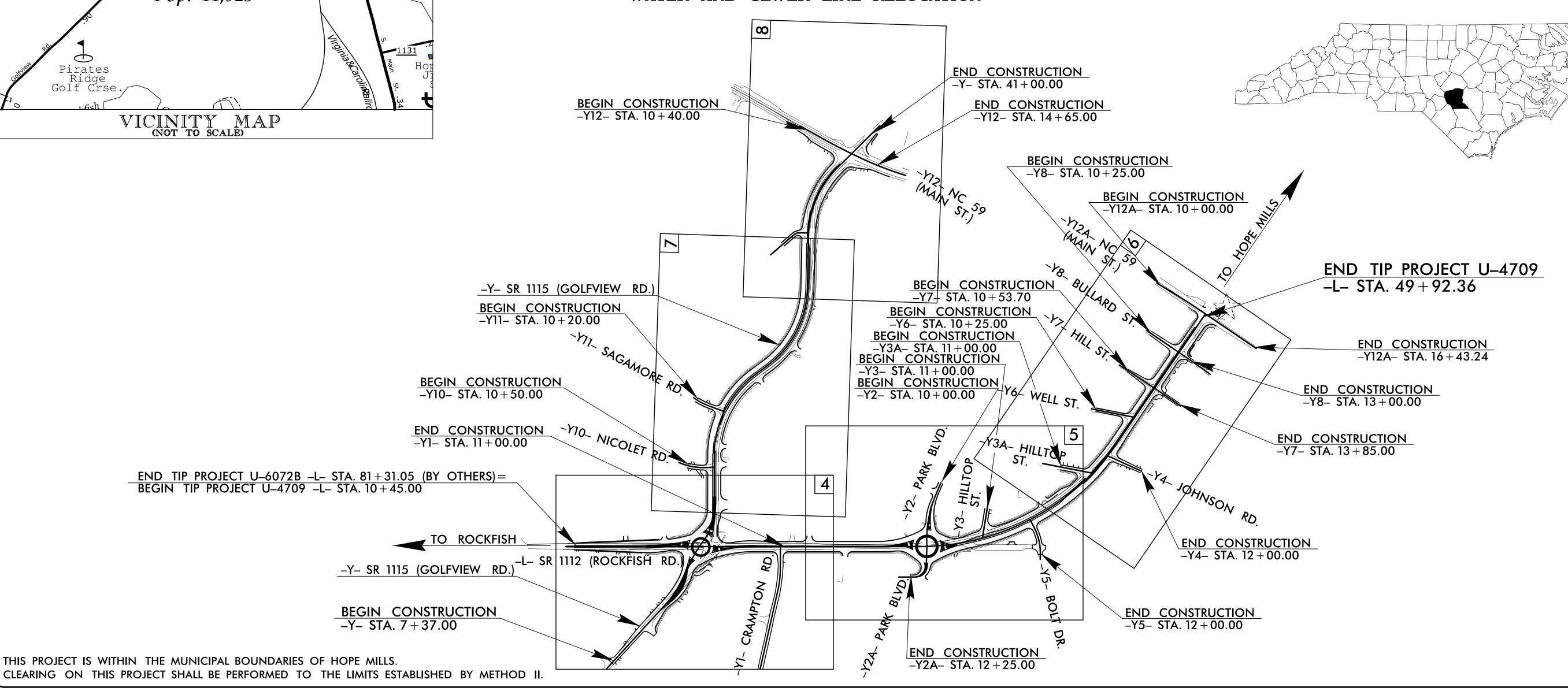
STATE OF NORTH CAROLINA DIVISION OF HIGHWAYS

# CUMBERLAND COUNTY

LOCATION: SR 1112 (ROCKFISH ROAD) FROM WEST OF SR 1115 (GOLFVIEW ROAD) TO NC 59 (MAIN STREET) AND SR 1115 (GOLFVIEW ROAD)

FROM SR 1112 (ROCKFISH ROAD) TO NC 59 (MAIN STREET)

TYPE OF WORK: WATER AND SEWER LINE RELOCATION



# **GRAPHIC SCALES** PLANS PROFILE (HORIZONTAL) PROFILE (VERTICAL)

#### INDEX OF SHEETS

END PROJECT

(59)

U-4709

**DESCRIPTION:** SHEET NO.: TITLE SHEET *UC–1 UC-2* UTILITY SYMBOLOGY **NOTES DETAILS** UC-3AUC-4 THRU UC-8A UTILITY CONSTRUCTION SHEETS UC-9 THRU UC-17 PROFILE SHEETS

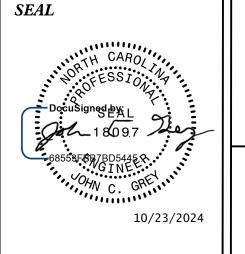
#### WATER AND SEWER OWNERS ON PROJECT

(A) WATER FAYETTEVILLE PUBLIC WORKS COMMISSION (B) SANITARY SEWER FAYETTEVILLE PUBLIC WORKS COMMISSION



(336) 722-5326 • thewootencompany.com License Number : F-0115

JOHN C. GREY, P.E. CONSULTANT CONTACT #1





T.I.P. NO.

U-4709

SHEET NO.

UC-1

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

RICK HANDLIN JOHN WALTERS

UTILITIES ENGINEER UTILITIES COORDINATOR

DocuSign Envelope ID: F6939BDD-DCD4-4562-B197-A9EC00BCF54A

Gate Valve

Line Stop

Butterfly Valve

Line Stop with Bypass

Relocate Fire Hydrant

Remove Fire Hydrant

Relocate Water Meter

Remove Water Meter

Water Pump Station

RPZ Backflow Preventer

DCV Backflow Preventer

Relocate RPZ Backflow Preventer

Relocate DCV Backflow Preventer...

Tapping Valve

Fire Hydrant

Water Meter

SHEET NO. PROJECT REFERENCE NO. UC-2 U-4709

# UTILITIES PLAN SHEET SYMBOLS

## PROPOSED WATER SYMBOLS

## PROPOSED MISCELLANOUS UTILITIES SYMBOLS

NEW RIGHT OF WAY	$\frac{R}{W}$
NEW PUBLIC UTILITY	PUE
NEW PERMANENT DRAINAGE	PDE PI
NEW TEMPORARY CONSTRUCTION EASEMENT	·····E
EXISTING RIGHT OF WAY	EXISTING R/W
EXISTING PERMANENTEASEMENT	ESMT.(TYPE & REF)
CUT AND FILL SLOPE	C F

RIGHT OF WAY, EASEMENT AND

MISCELLANEOUS SYMBOLS

ter Line (Sized as Shown)	12″ WL€	Power Pole	Ь
1⁄4 Degree Bend	<del>++</del>	Telephone Pole	- <del></del>
½ Degree Bend	+ <del>-</del>	Joint Use Pole	
Degree Bend	+×	Telephone Pedestal	TEL PED
Degree Bend		Utility Line by Others(Type as Shown)	PROP O/H POW LINES
ug ·····		Trenchless Installation	12" TL INSTALL
e	······ <del>-</del>	Encasement by Open Cut	24" FNCAS BY OC
oss	···················· <del>1</del> ‡1	Encasement	24" ENCASEMENT
ducer	······		

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

## EXISTING UTILITIES SYMBOLS

Power Pole	•
Telephone Pole	-
Joint Use Pole	<b>-</b>
Utility Pole	•
Utility Pole with Base	
H-Frame Pole	•—•
Power Transmission Line Tower	
Water Manhole	<b>W</b>
Power Manhole	P
Telephone Manhole	$\bigcirc$
Sanitary Sewer Manhole	<b>(</b>
Hand Hole for Cable	НН
Power Transformer	ot M
Telephone Pedestal	T
CATV Pedestal	C
Gas Valve ·····	$\Diamond$
Gas Meter	$\Diamond$
Located Miscellaneous Utility Object	⊙
Abandoned According to Utility Records	AATUR
End of Information	E.O.I.
UTILITY TRAFFIC SIGNAL BOX	S

*Underground Power Line	
*Underground Telephone Cable	
*Underground Telephone Conduit	
*Underground Fiber Optics Telephone Cable	
*Underground TV Cable	
*Underground Fiber Optics TV Cable	
*Underground Gas Pipeline	
Aboveground Gas Pipeline	A/G Gas
*Underground Water Line	
Aboveground Water Line	A/G Water
*Underground Gravity Sanitary Sewer Line	
Aboveground Gravity Sanitary Sewer Line	A/G Sanitary Sewer
*Underground SS Forced Main Line	
Underground Unknown Utility Line	?UTL
SUE Test Hole	•
Water Meter	
Water Valve	$\oplus$
Fire Hydrant ·····	¢
Sanitary Sewer Cleanout	<b>(</b>

# PROPOSED SEWER SYMBOLS

REM FH

Gravity Sewer Line(Sized as Shown)	SS€
Force Main Sewer Line(Sized as Shown)	FSS
Manhole (Sized per Note)	
Sewer Pump StationPS(SS)	

\*For Existing Utilities

Utility Line Drawn from Record (Type as Shown) Designated Utility Line (Type as Shown)

# 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.
- 2. THE EXISTING UTILITIES BELONG TO FAYETTEVILLE PUBLIC WORKS COMMISSION. CONTACT MISTY MANNING, 910-223-4736.
- 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 FAYETTEVILLE PUBLIC WORKS COMMISSION 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 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.
- 10. PRIOR TO PLACEMENT OF PROPOSED WATERLINE, THE CONTRACTOR SHALL LOCATE ALL EXISTING WATER SERVICE LATERALS (DEPTH AND PIPE DIAMETER) AND NOTIFY THE RESIDENT ENGINEER IF THERE ARE COMPLICATIONS WITH CONNECTING TO THE PROPOSED WATERLINE. THE CONTRACTOR'S COST FOR ALL WORK ASSOCIATED WITH WATER SERVICES IS INCIDENTAL TO WATER.
- 11. THE CONTRACTOR SHALL REFER TO THE "UTILITIES BY OTHERS" PLANS FOR PROPOSED GAS, TELECOMMUNICATIONS AQUA AMERICA WATER, AND POWER UTILITY.

#### PROJECT SPECIFIC NOTES:

1. CONTRACTOR SHALL PROVIDE RECORD DRAWINGS INCLUDING GPS LOCATION OF WATER LINE FITTINGS, VALVES, FIRE HYDRANTS AND METERS. CONTRACTOR SHALL ALSO PROVIDE AT MIN 250' INTERVALS THE DISTANCE BETWEEN WATER LINE AND FINAL EDGE OF PAVEMENT OR OTHER STRUCTURES THAT WILL REMAIN IN PLACE AFTER CONSTRUCTION IS COMPLETE. THIS INFORMATION SHALLBE PROVIDED TO THE FAYETTEVILLE PUBLIC WORKS COMMISSION AND THE WOOTEN COMPANY.

#### **UTILITY CONSTRUCTION NOTES:**

- 1. ALL WATER MAINS, LATERALS AND APPURTENANCES SHALL BE INSTALLED AND TESTED IN ACCORDANCE WITH FAYETTEVILLE PWC STANDARDS.
- 2. ALL SEWER MAINS, LATERALS, AND APPURTENANCES SHALL BE INSTALLED AND TESTED IN ACCORDANCE WITH FAYETTEVILLE PWC STANDARDS.
- 3. ALL CONSTRUCTION TO BE IN ACCORDANCE WITH FAYETTEVILLE PWC STANDARDS.
- 4. CONTRACTOR SHALL FIELD VERIFY THE LOCATION OF EXISTING UTILITIES PRIOR TO CONSTRUCTION.
- 5. CONTRACTOR SHALL PROVIDE A MINIMUM OF 48 HOURS NOTICE FOR ALL WATER OUTAGES.
- 6. CONSTRUCTION STAKING IS REQUIRED FOR ALL PWC WATER AND SEWER UTILITY INSTALLATIONS, CUT SHEETS, SIGNED AND SEALED BY A NC PLS, SHALL BE PROVIDED TO THE PWC WATER RESOURCES ENGINEERING DEPARTMENT AND THE CONTRACTOR IN ADVANCE OF CONSTRUCTION FOR PWC WATER AND SEWER UTILITIES.
- 7. CONTRACTOR SHALL MAINTAIN A COPY OF THE SIGNED AND SEALED CUT SHEET ON THE JOB SITE. CONSTRUCTION ON PWC WATER AND SEWER UTILITIES CANNOT BEGIN UNTIL THE CONTACTOR POSSESSES, ON SITE, A SIGNED AND SEALED CUT SHEET FROM THE PROFESSIONAL LAND SURVEYOR.
- 8. ALL NEW WATER AND SEWER MAINS, LATERALS, AND APPURTENANCES SHALL BE TESTED AND/OR DISINFECTED IN ACCORDANCE WITH FAYETTEVILLE PWC STANDARDS PRIOR TO PLACING INTO SERVICE.

PROJECT REFERENCE NO. SHEET NO. U-4709 UC<sub>-3</sub> ESIGNED BY: JCG DRAWN BY: CGL CHECKED BY: PLL Docusigned by L John 18097 JCG APPROVED BY: REVISED: 5' 0 5' 10' 25' 0 25' 5 NORTH CAROLINA DEPARTMENT OF TRANSPORTATION WATER LINE AND SEWER LINE CONSTRUCTION
SHOWN ON THIS SHEET TILITIES ENGINEERING SEC. PHONE:(919)707-6690 UTILITY CONSTRUCTION PLANS ONLY

UTILITY CONSTRUCTION

FAX:(919)250-4151

- 9. CONTRACTOR SHALL COORDINATE TESTING AND INSPECTION WITH THE FAYETTEVILLE PWC PROJECT COORDINATOR.
- 10.ALL DUCTILE IRON PIPE IN SANITARY SEWER SERVICE SHALL HAVE AN INTERIOR LINING OF PROTECTO 401 OR APPROVED EQUAL.
- 11.ALL NEW MANHOLES ARE TO BE VACUUM-TESTED IN ACCORDANCE WITH FAYETTEVILLE PWC STANDARDS.
- 12.CONTRACTOR SHALL ABANDON ("KILL-OUT") ANY EXISTING WATER SERVICES THAT WILL NOT BE UTILIZED BY CUTTING THE SERVICE AT THE MAIN, PLUGGING THE CORPORATION, AND TURNING OFF THE CORPORATION. AT THE METER BOX, THE ABANDONED SERVICE IS TO BE CUT OR CRIMPED, AND BURIED A MINIMUM OF 3 FEET BELOW GRADE.
- 13.CONTRACTOR SHALL ABANDON ("KILL-OUT") ANY EXISTING SEWER SERVICES THAT WILL NOT BE UTILIZED BY UNCOVERING THE EXISTING LATERAL AT THE MAIN, CUT AND PLUG AT BOTH ENDS, REMOVE THE EXISTING CLEANOUT AND COMBINATION. AND PLUG THE TAP OR TEE AT THE MAIN. FOR LATERALS THAT CONNECT TO A MANHOLE AND ARE TO BE ABANDONED ("KILLED-OUT"). THE LATERAL SHALL BE REMOVED FROM THE MANHOLE AND THE REMAINING VOID IN THE MANHOLE SHALL BE FILLED WITH BLOCK AND MORTAR.
- 14. ALL EXISTING UTILITIES IMPACTED BY CONSTRUCTION SHALL BE ADJUSTED TO FINISHED GRADE IN ACCORDANCE WITH PWC REQUIREMENTS.

# PROJECT TYPICAL DETAILS



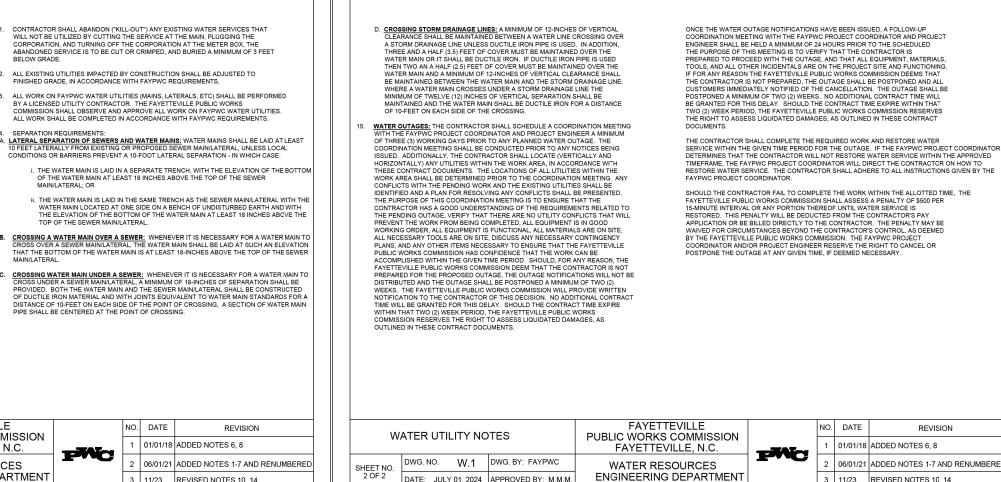
. ALL WORK ON FAYPWC WATER UTILITIES (MAINS, LATERALS, ETC) SHALL BE PERFORMED BY A LICENSED UTILITY CONTRACTOR. THE FAYETTEVILLE PUBLIC WORKS COMMISSION SHALL OBSERVE AND APPROVE ALL WORK ON FAYPWC WATER UTILITIES. ALL WORK SHALL BE COMPLETED IN ACCORDANCE WITH FAYPWC REQUIREMENTS.

ERALLY FROM EXISTING OR PROPOSED SEWER MAIN/LATERAL, UNLESS LOCAL FOR BARRIERS PREVENT A 10-FOOT LATERAL SEPARATION - IN WHICH CASE:

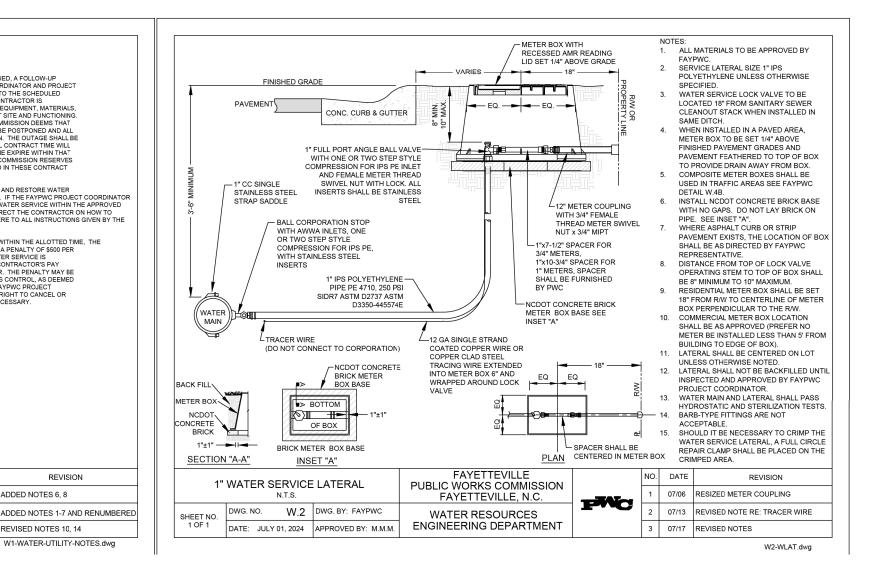
- CONTRACTOR SHALL FIELD VERIFY THE LOCATION OF EXISTING UTILITIES PRIOR TO CONSTRUCTION CONTRACTOR SHALL PROVIDE A MINIMUM OF 48 HOURS NOTICE FOR ALL WATER OUTAGES.
- CONSTRUCTION STAKING IS REQUIRED FOR ALL FAYPWC WATER AND SEWER UTILITY INSTALLATIONS. CUT SHEETS, SIGNED AND SEALED BY A NC PLS, SHALL BE PROVIDED TO THE FAYPWC WATER RESOURCES ENGINEERING DEPARTMENT AND THE CONTRACTOR IN ADVANCE OF CONSTRUCTION FOR FAYPWC WATER AND SEWER UTILITIES.
- CONTRACTOR SHALL MAINTAIN A COPY OF THE SIGNED AND SEALED CUT SHEET ON THE JOB SITE. CONSTRUCTION ON FAYPWC WATER AND SEWER UTILITIES CANNOT BEGIN UNTIL THE CONTRACTOR POSSESSES, ON SITE, A SIGNED AND SEALED CUT SHEET FROM THE PROFESSIONAL LAND SURVEYOR.
- ALL NEW WATER AND SEWER MAINS, LATERALS, AND APPURTENANCES SHALL BE TESTED AND/OR DISINFECTED IN ACCORDANCE WITH FAYPWC STANDARDS PRIOR TO PLACING INTO SERVICE.
- CONTRACTOR SHALL COORDINATE TESTING AND INSPECTION WITH THE FAYPWC PROJECT CONTRACTOR SHALL REPAIR ALL WATER LATERALS AND MAINS DAMAGED DURING CONSTRUCTION. THE CONTRACTOR SHALL REPORT IMMEDIATELY ALL WATER MAIN AND LATERAL BREAKS TO THE FAYPWC PROJECT COORDINATOR. THE CONTRACTOR SHALL INITIATE IMMEDIATE REPAIRS IN ACCORDANCE WITH FAYPWC STANDARDS. CONTRACTOR SHALL NOT OPERATE FAYPWC WATER MAIN VALVES WITHOUT FAYPWC APPROVAL AND SHALL COORDINATE ALL VALVE CLOSINGS WITH FAYPWC
- 9. THE CONTRACTOR SHALL NOT USE HOUSE HOSE BIBBS OR ANY OTHER METHOD OF BLOW OFF WHICH ALLOWS DOMESTIC WATER CONTAINING SEDIMENTS OR HIGH LEVELS OF CHLORINE TO PASS THRU RESIDENT'S METERS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL DAWAGES RESULTING FROM ALLOWING "DIRTY" WATER TO ENTER RESIDENT'S PLUMBING SYSTEM, SUCH AS WATER HEATERS, STAINED CLOTHING, CLOGGED SCREENS, ETC.
- TRANSFER OF WATER SERVICES SHALL BE ACCOMPLISHED AS FOLLOWS:
  A. INSTALL, TEST AND STERILIZE NEW MAIN AND LATERALS. LATERALS SHALL BE
  INSTALLED 18" INSIDE RIGHT-OF-WAY JUNLESS OTHERWISE DIRECTED BY FAYPW.
  B. TRANSFER EXISTING METER TO NEW METER BOX AND TIE NEW WATER LATERAL
  TO VEW METER SHALL S NUMBER SHALL BE INSTALLED ON SAME ADDRESS AND/OR CUSTOMER. BLOW OFF SERVICE AT HOSE BIBB ON HOUSE ONLY AFTER METER HAS BEEN
- AFTER ALL SERVICES ARE TRANSFERRED TO THE NEW SYSTEM, SHUT OFF VALVE ON EXISTING SYSTEM AND ABANDON EXISTING MAINS IN ACCORDANCE WITH FAYPWC REQUIREMENTS.

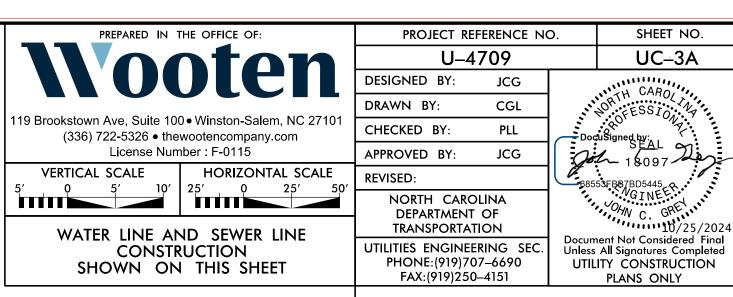
  CONTRACTOR SHALL SUPPLY NEW METER BOXES AND DISPOSE OF EXISTING METER BOXES.

	10/	WATER UTILITY NOTES		TES	FAYETTEVILLE PUBLIC WORKS COMMISSION FAYETTEVILLE, N.C.	<b>PWC</b>	NO.	DATE	REVISION
	WATER OTILITIN		IILIII INC	7123			1	01/01/18	ADDED NOTES 6, 8
	SHEET NO. 1 OF 2	DWG. NO. W.1 DWG. BY: FAYPWC		DWG. BY: FAYPWC	WATER RESOURCES		2	06/01/21	ADDED NOTES 1-7 AND RENUMBER
		DATE: JU	JLY 01, 2024	APPROVED BY: M.M.M.	ENGINEERING DEPARTMENT		3	11/23	REVISED NOTES 10, 14
								W1-V	VATER-UTILITY-NOTES.dwg

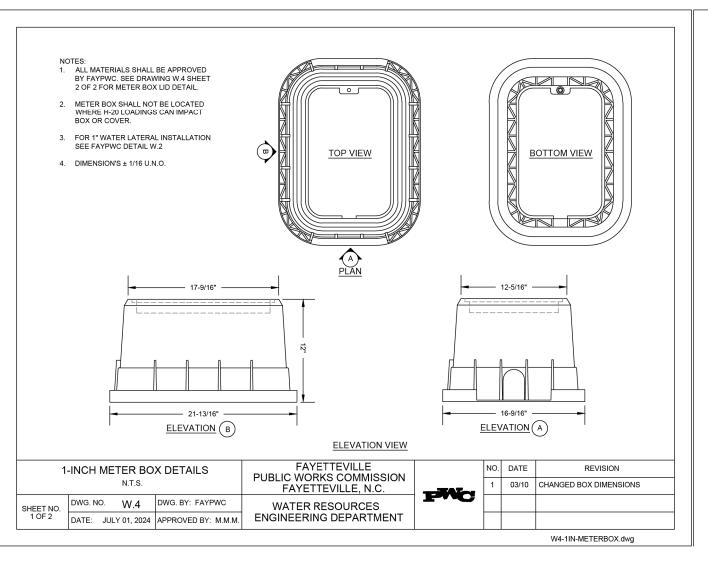


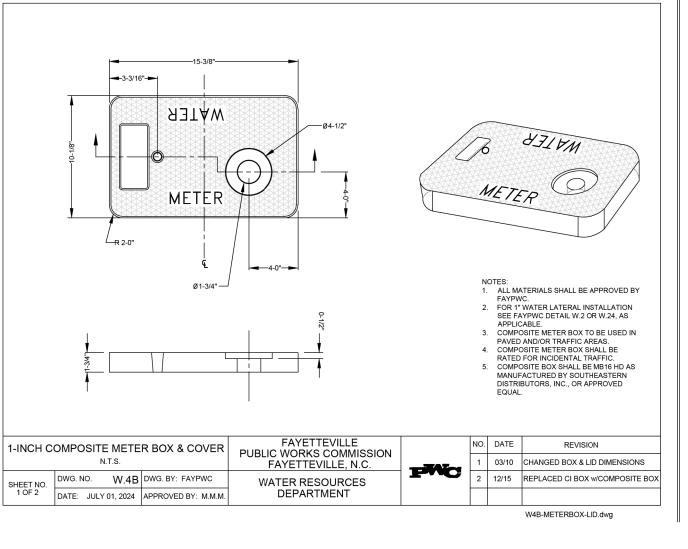
DATE: JULY 01, 2024 APPROVED BY: M.M.M.



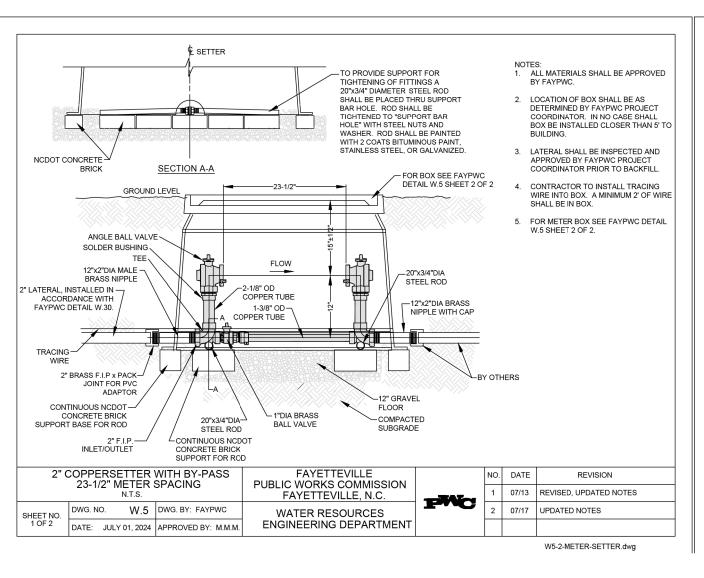


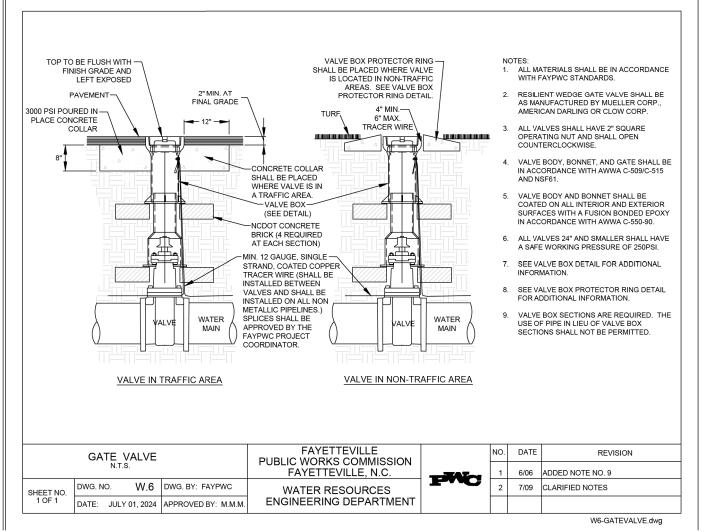
UTILITY CONSTRUCTION

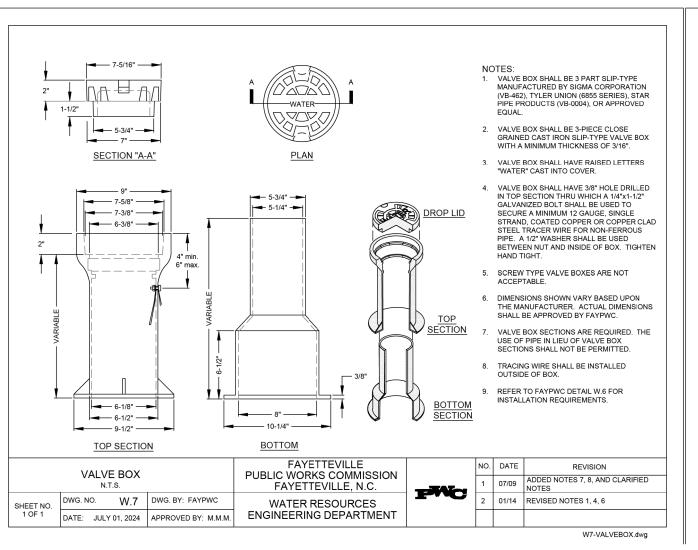


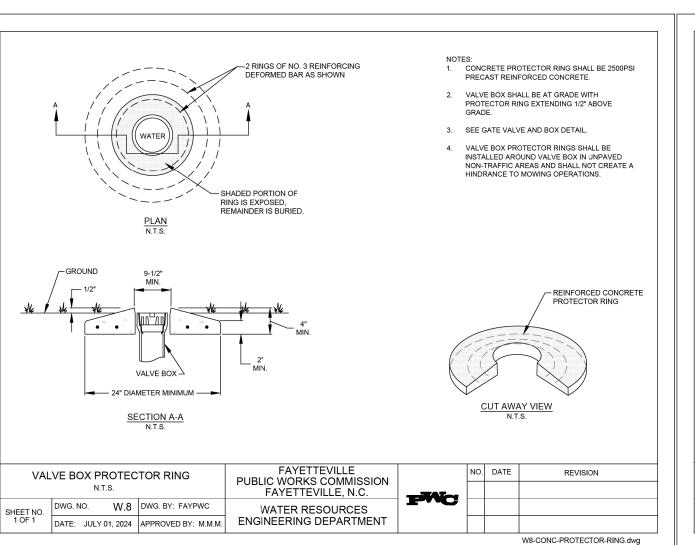


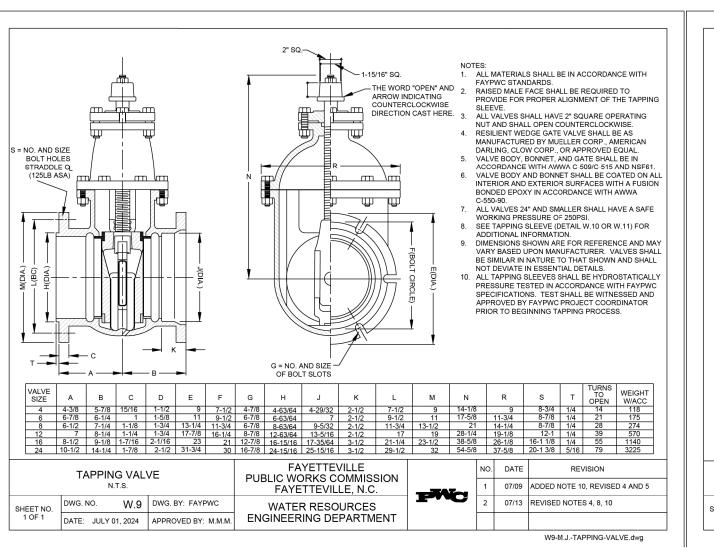
11/23 REVISED NOTES 10, 14

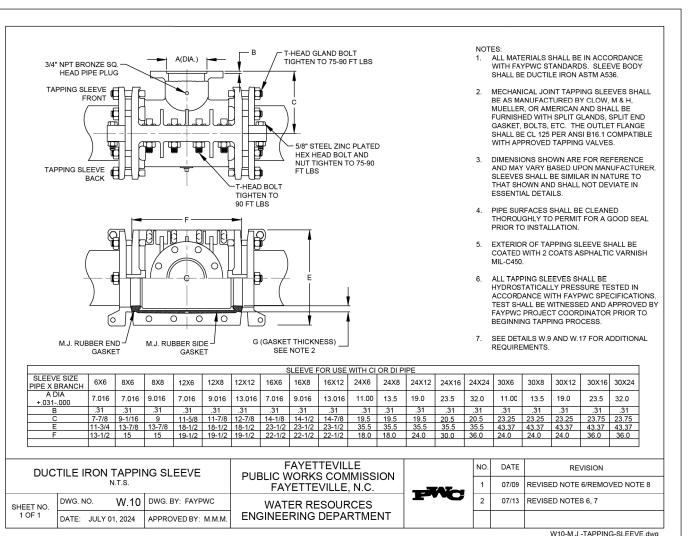




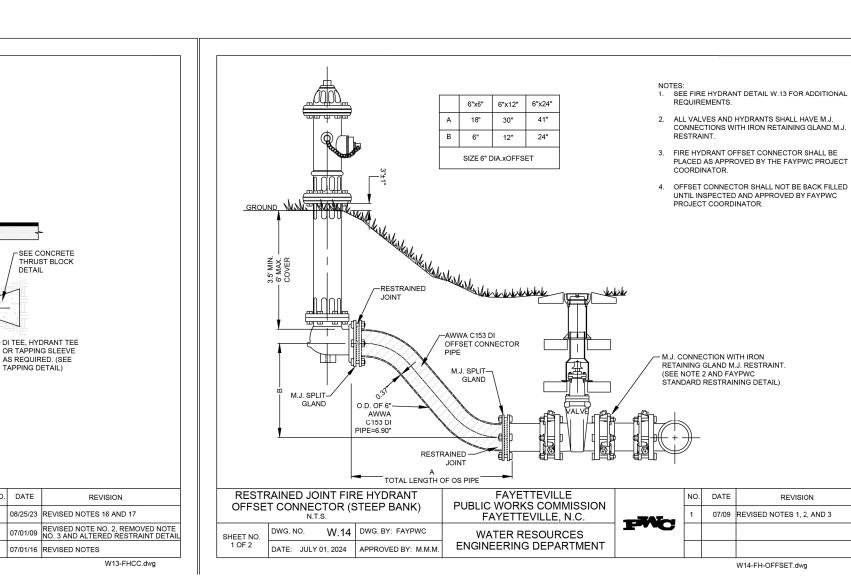


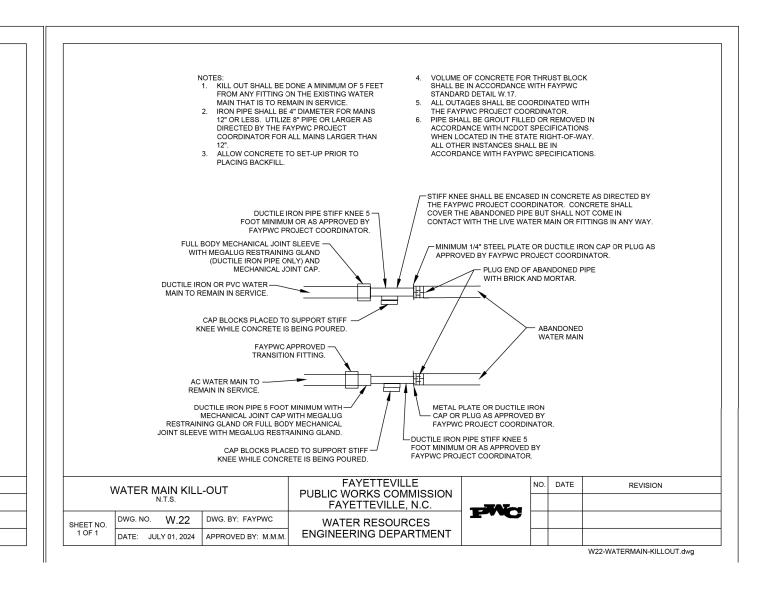


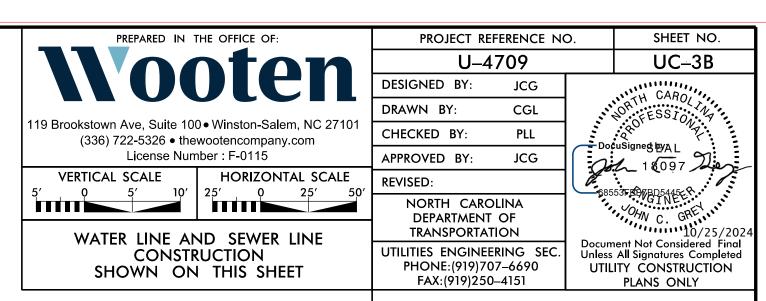




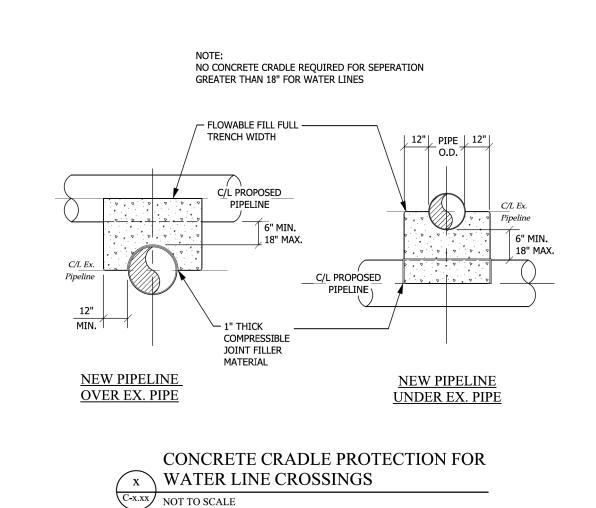
# PROJECT TYPICAL DETAILS







UTILITY CONSTRUCTION



FAYPWC STANDARD PENTAGONA

6" RJDI PIPE

RETAINING GLAND M.J RESTRAINT SEE NOTE 2 AND

RESTRAINING DETAIL

FAYETTEVILLE

FAYETTEVILLE, N.C.

PUBLIC WORKS COMMISSION

WATER RESOURCES

ENGINEERING DEPARTMENT

STONE PLACED TO A LEVEL 4" ABOVE

FIRE HYDRANT AND

N.T.S.

VALVE INSTALLATION

DWG. NO. W.13 DWG. BY: FAYPWC

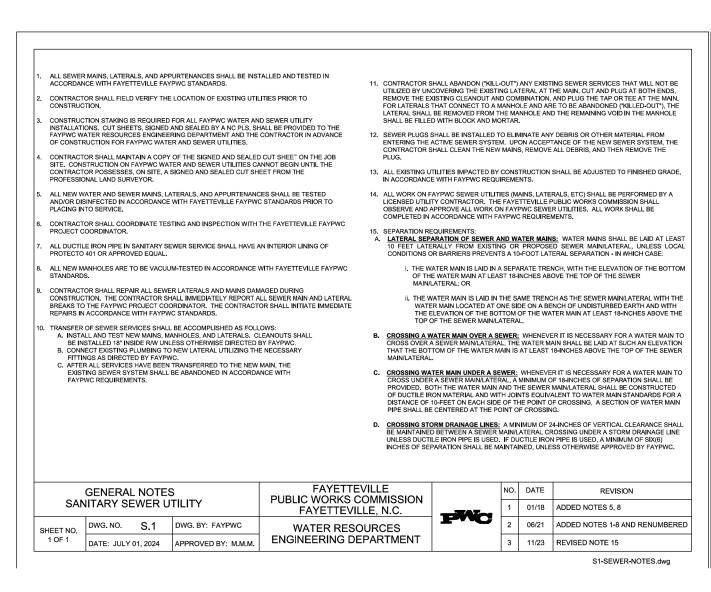
DATE: JULY 01, 2024 APPROVED BY: M.M.M.

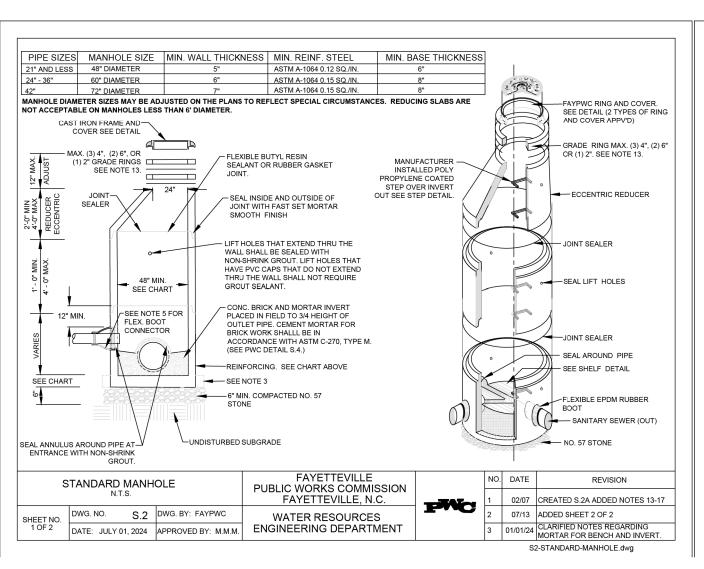
OPERATING NUT OPEN COUNTER

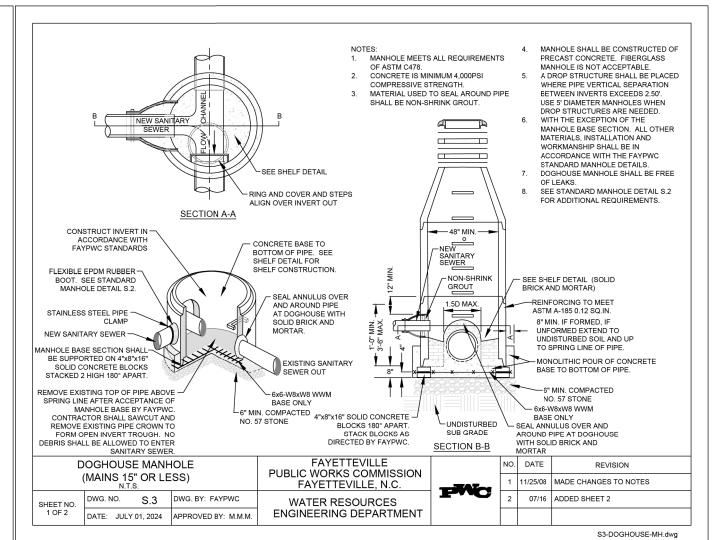
NOZZLE WITH FIRE HOSE COUPLING

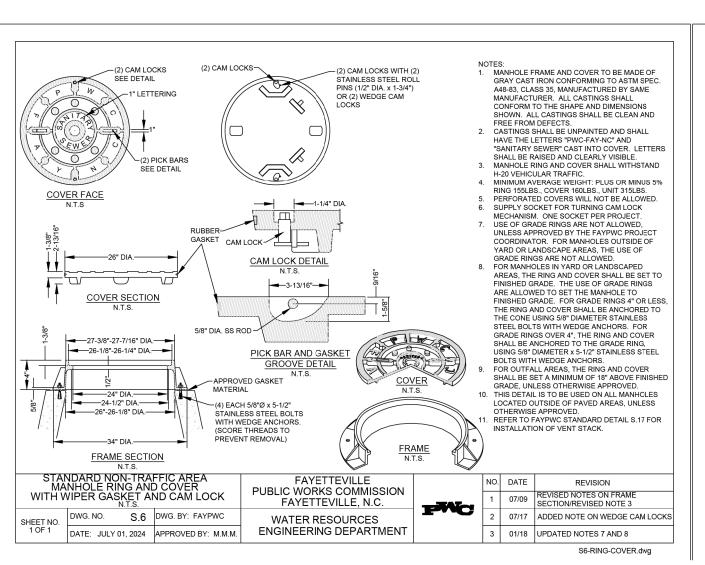
THREAD IN ACCORDANCE WITH FAYPWC STANDARD. NOZZLE CAPS

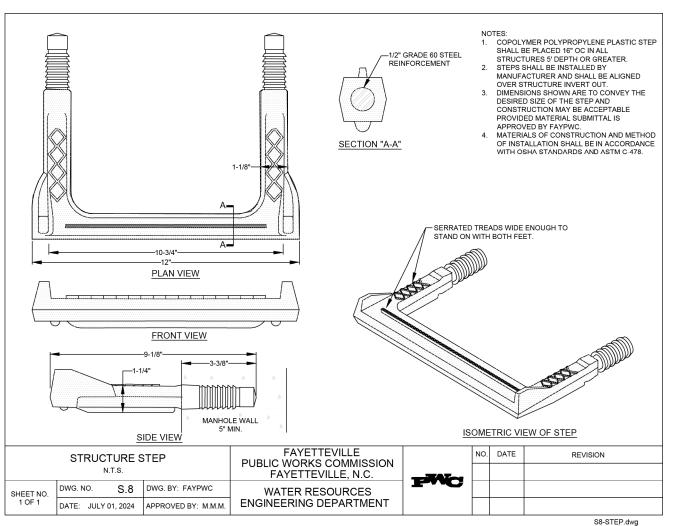
SEE NOTE NO. 4

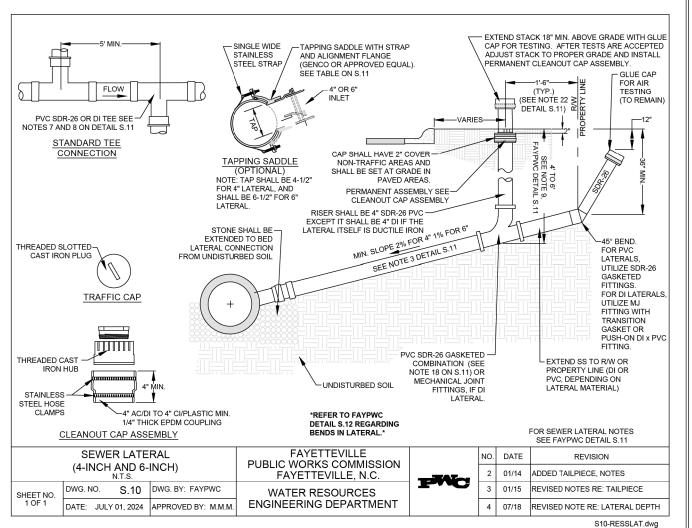


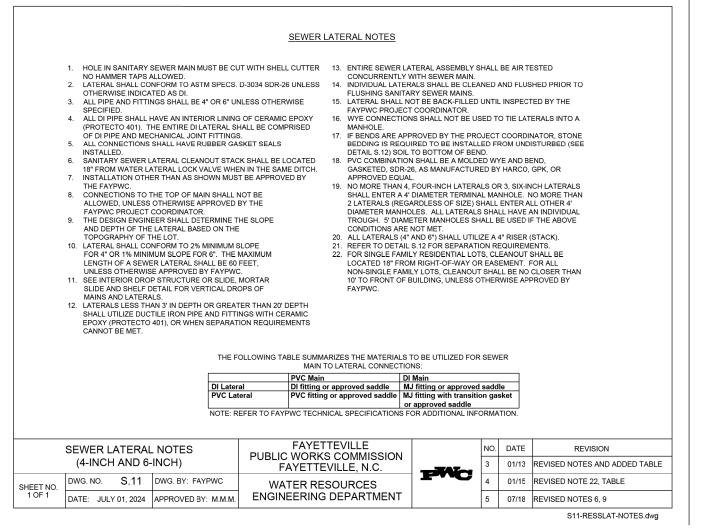




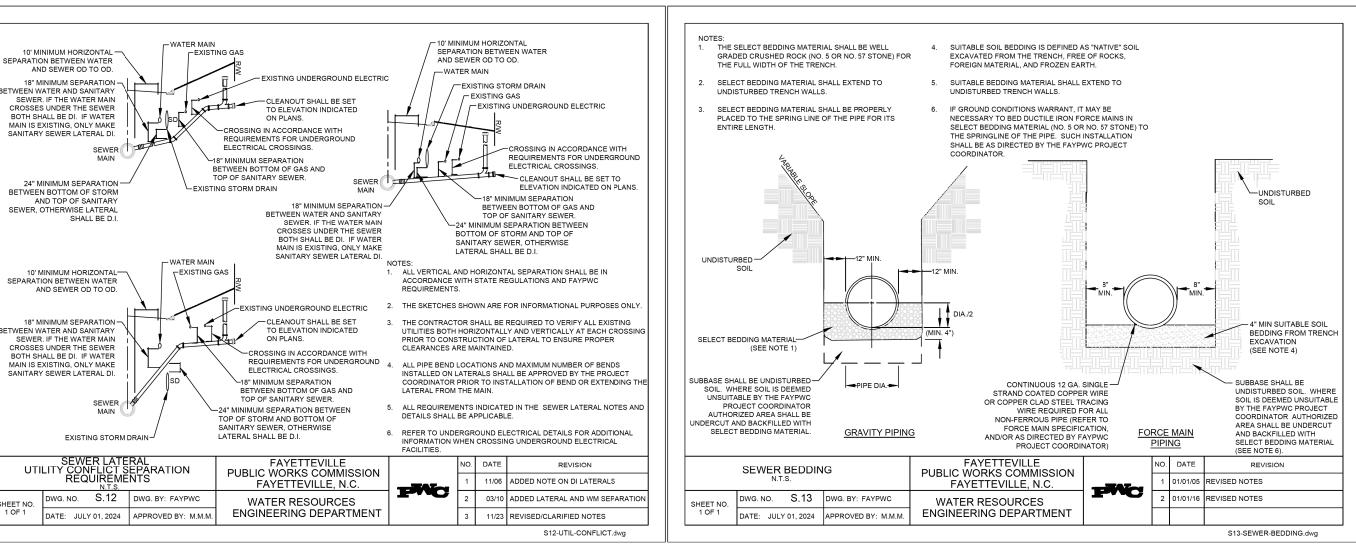


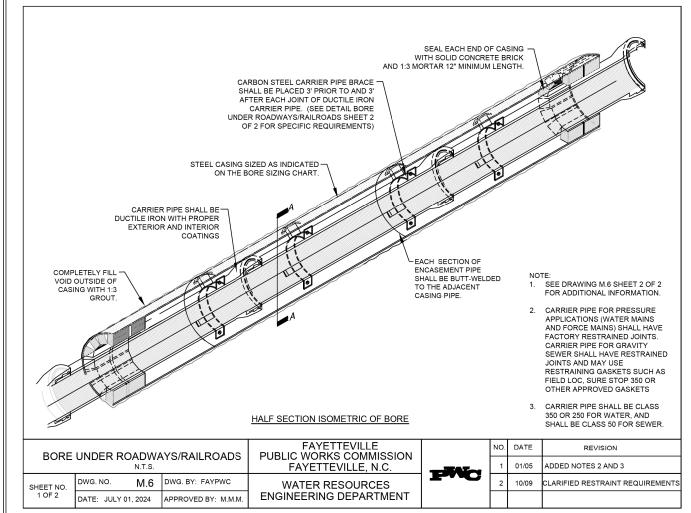


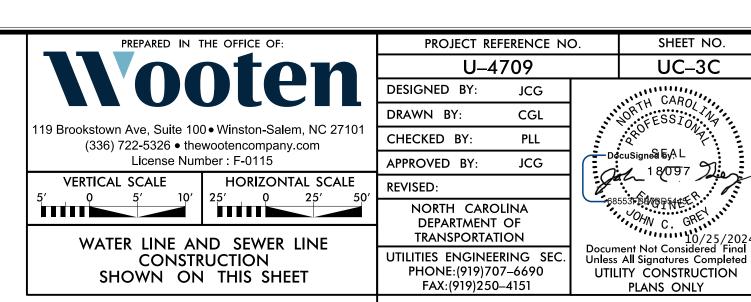




# PROJECT TYPICAL DETAILS







UTILITY CONSTRUCTION

