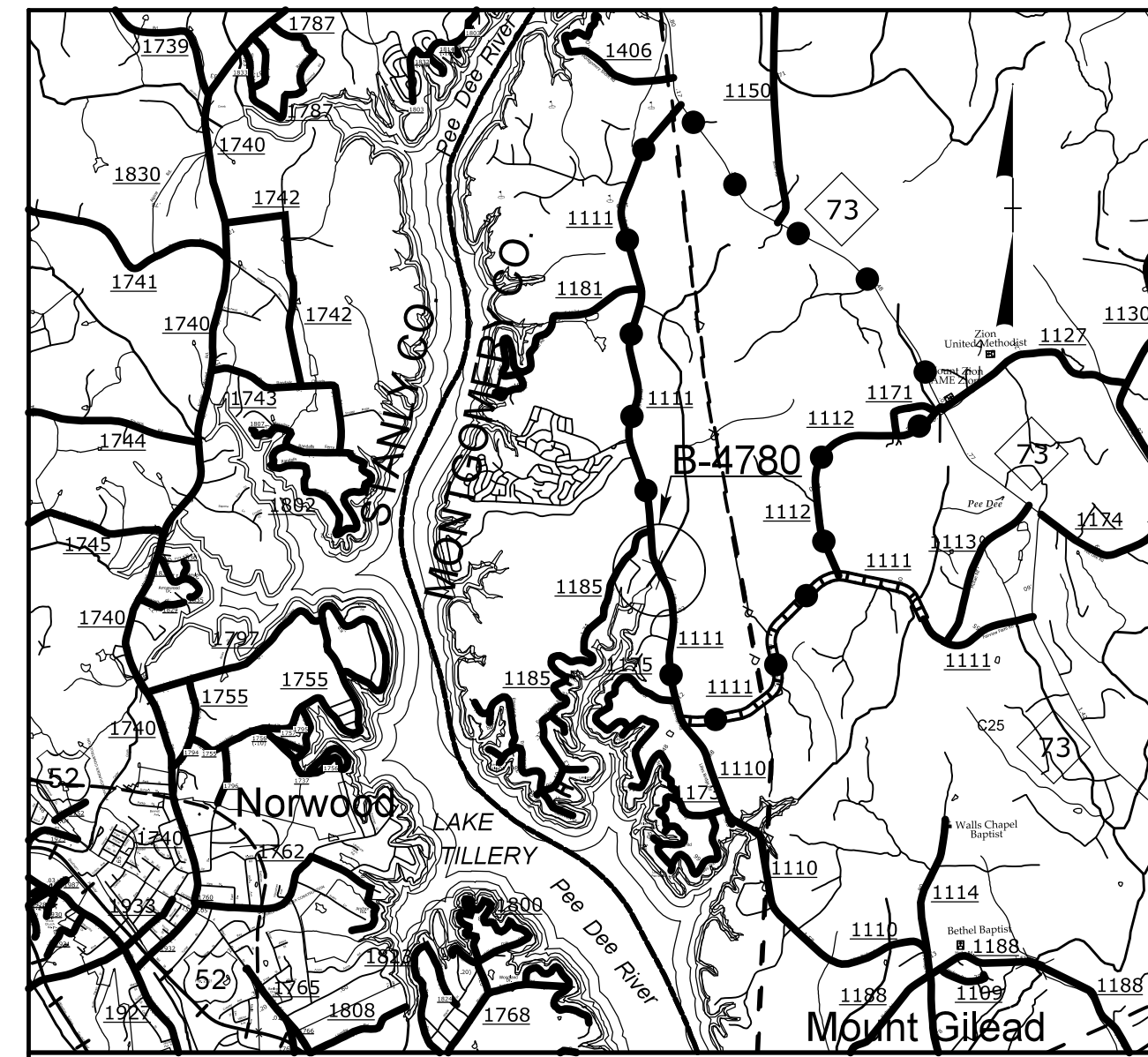


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**TIP PROJECT: B-4780**



VICINITY MAP

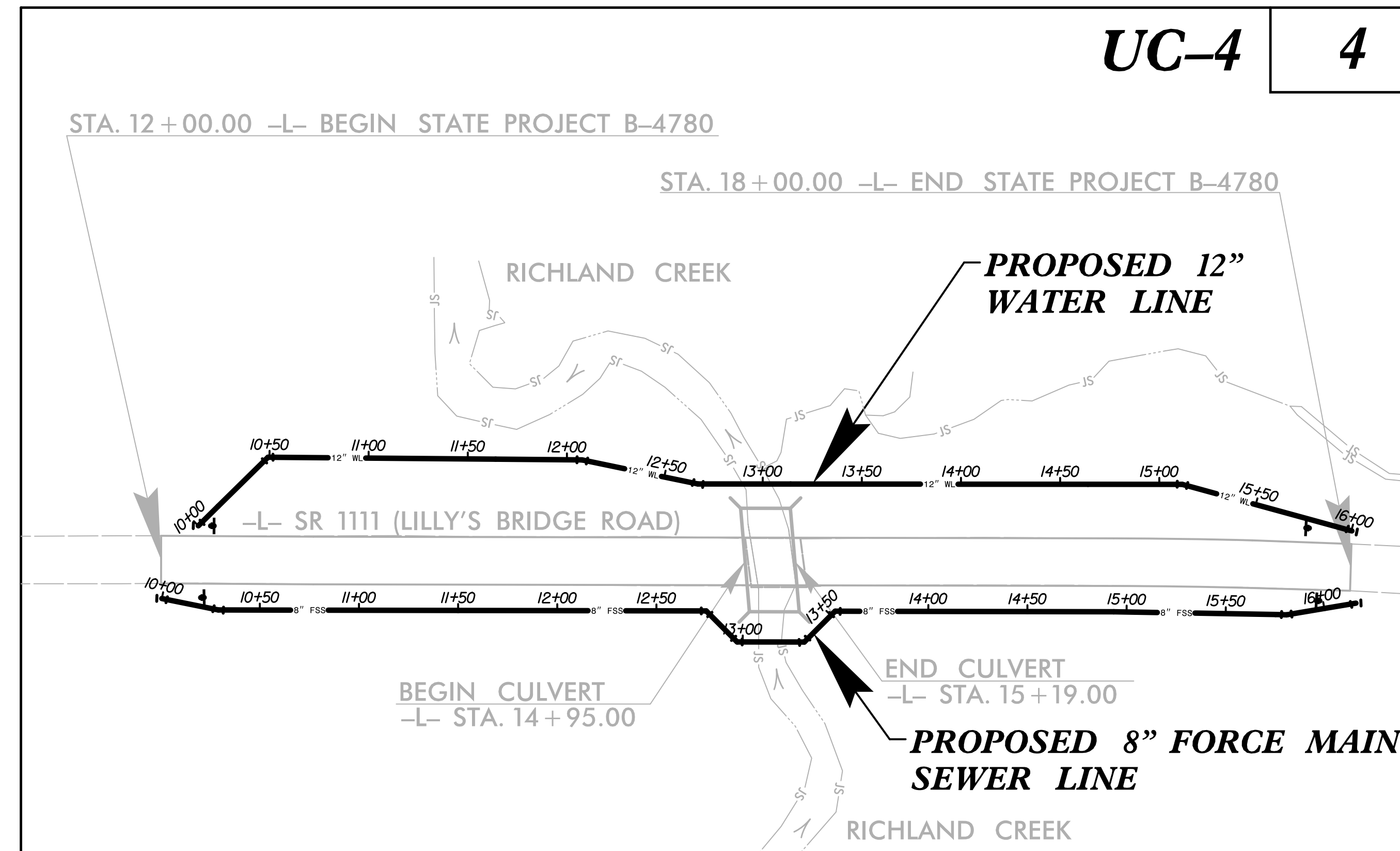
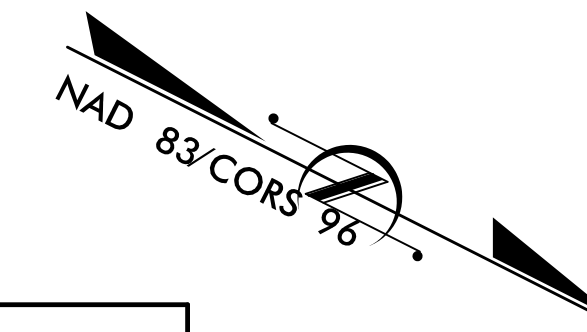
●—●—● OFFSITE DETOUR

STATE OF NORTH CAROLINA  
DIVISION OF HIGHWAYS

**UTILITY CONSTRUCTION PLANS  
MONTGOMERY COUNTY**

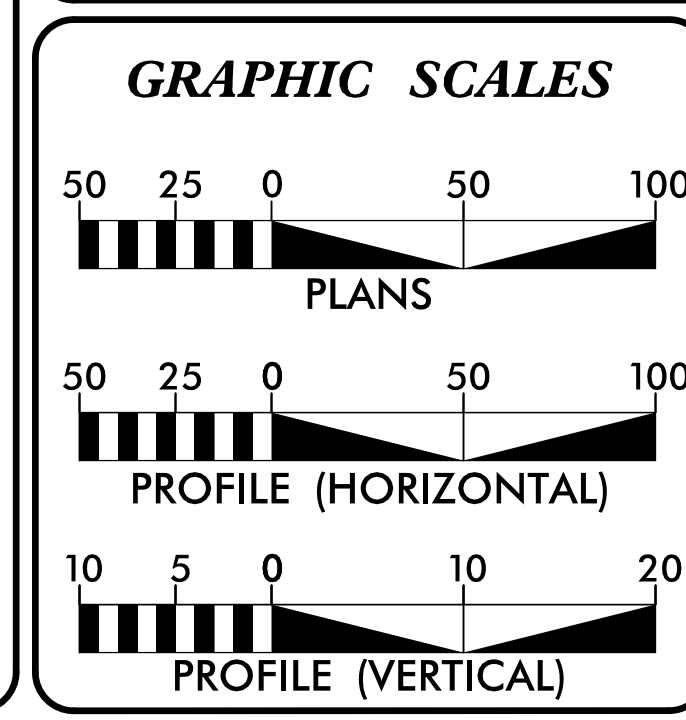
LOCATION: BRIDGE NO. 22 ON SR 1111 (LILLY'S BRIDGE ROAD)  
OVER RICHLAND CREEK  
TYPE OF WORK: UTILITY CONSTRUCTION

T.I.P. NO.	SHEET NO.
B-4780	UC-1



**UC-4 4**

THIS PROJECT IS NOT WITHIN ANY MUNICIPAL BOUNDARIES.  
CLEARING ON THIS PROJECT SHALL BE PERFORMED TO THE LIMITS ESTABLISHED BY METHOD III.



INDEX OF SHEETS	
SHEET NO.	DESCRIPTION
UC-1	TITLE SHEET
UC-2	SYMBOLGY SHEET
UC-3	GENERAL NOTES SHEET
UC-4	UTILITY PLAN SHEET
UC-5	PROFILE SHEET

**WATER AND SEWER OWNERS ON PROJECT**

(1) WATER - MONTGOMERY COUNTY PUBLIC UTILITIES DEPARTMENT

(2) SEWER - TOWN OF MT. GILEAD PUBLIC WORKS DEPARTMENT

SEAL:

02/05/2015

**HINDE ENGINEERING**

License No. C-2639  
7520 E. Independence Blvd., Suite 230 Charlotte, NC 28227

DIVISION OF HIGHWAYS  
PROJECT SERVICES  
UTILITY SECTION

1591 MAIL SERVICES CENTER  
RALEIGH NC 27699-1591  
PHONE (919) 250-4128  
FAX (919) 250-4119

Roger Worthington, P.E. UTILITIES SECTION ENGINEER  
Steve Mckee, P.E. UTILITIES SQUAD LEADER PROJECT ENGINEER  
Don Proper UTILITIES PROJECT DESIGN ENGINEER  
Kevin S. Hinde, P.E. HINDE ENGINEERING PROJECT ENGINEER

# STATE OF NORTH CAROLINA DIVISION OF HIGHWAYS



PROJECT REFERENCE NO. B-4780	SHEET NO. UC-2
DESIGNED BY: JNA	
DRAWN BY: JNA	
CHECKED BY: KSH	
APPROVED BY:	
REVISED:	
NORTH CAROLINA DEPARTMENT OF TRANSPORTATION	
UTILITIES ENGINEERING SEC. PHONE: (919) 707-6690 FAX: (919) 250-4151	02/05/2015 UTILITY CONSTRUCTION PLANS ONLY

## 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 .....	REM FH
Water Meter .....	
Relocate Water Meter .....	
Remove Water Meter .....	REM WM
Water Pump Station .....	
RPZ Backflow Preventer .....	
DCV Backflow Preventer .....	
Relocate RPZ Backflow Preventer .....	
Relocate DCV Backflow Preventer .....	

### PROPOSED SEWER SYMBOLS

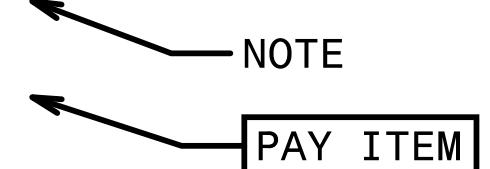
Gravity Sewer Line (Sized as Shown) .....	
Force Main Sewer Line (Sized as Shown) .....	
Manhole (Sized per Note) .....	
Sewer Pump Station .....	

### 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 .....	

### UTILITY CONSTRUCTION



### EXISTING UTILITIES SYMBOLS

Power Pole .....	
Telephone Pole .....	
Joint Use Pole .....	
Utility Pole .....	
Utility Pole with Base .....	
H-Frame Pole .....	
Power Transmission Line Tower .....	
Water Manhole .....	
Power Manhole .....	
Telephone Manhole .....	
Sanitary Sewer Manhole .....	
Hand Hole for Cable .....	
Power Transformer .....	
Telephone Pedestal .....	
CATV Pedestal .....	
Gas Valve .....	
Gas Meter .....	
Located Miscellaneous Utility Object .....	
Abandoned According to Utility Records .....	AATUR
End of Information .....	E.O.I.

*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 .....	
*Underground Water Line .....	
Aboveground Water Line .....	
*Underground Gravity Sanitary Sewer Line .....	
Aboveground Gravity Sanitary Sewer Line .....	
*Underground SS Forced Main Line .....	
Underground Unknown Utility Line .....	
SUE Test Hole .....	
Water Meter .....	
Water Valve .....	
Fire Hydrant .....	
Sanitary Sewer Cleanout .....	

\*For Existing Utilities

Utility Line Drawn from Record .....

(Type as Shown)

Designated Utility Line .....

(Type as Shown)



PROJECT REFERENCE NO. B-4780	SHEET NO. UC-3
DESIGNED BY: JNA	
DRAWN BY: JNA	
CHECKED BY: KSH	
APPROVED BY:	
REVISED:	
NORTH CAROLINA DEPARTMENT OF TRANSPORTATION UTILITIES ENGINEERING SEC. PHONE: (919) 707-6690 FAX: (919) 250-4151	
02/05/2015 UTILITY CONSTRUCTION PLANS ONLY	

# 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 2012.
2. THE EXISTING WATER FACILITIES BELONG TO THE MONTGOMERY COUNTY PUBLIC UTILITIES DEPARTMENT. THE EXISTING SEWER FACILITIES BELONG TO THE TOWN OF MT. GILEAD PUBLIC WORKS DEPARTMENT.
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 ENVIRONMENTAL HEALTH. 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 QUALITY. 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 OPPROTUNITY 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.
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.

## LIST OF STANDARD DRAWINGS

- 1515.01 WATER METER
- 1515.02 FIRE HYDRANT

## PROJECT SPECIFIC NOTES:

1. ALL 12-INCH AND SMALLER DIAMETER WATER PIPE SHALL BE DUCTILE IRON PRESSURE CLASS 350, UNLESS OTHERWISE NOTED ON THE UTILITY CONSTRUCTION PLANS.
2. ALL 16-INCH AND LARGER DIAMETER WATER PIPE SHALL BE DUCTILE IRON PRESSURE CLASS 250, UNLESS OTHERWISE NOTED ON THE UTILITY CONSTRUCTION PLANS.
3. ALL FORCE MAIN SEWER PIPE SHALL BE PVC C900 OR SDR 21, UNLESS OTHERWISE NOTED ON THE UTILITY CONSTRUCTION PLANS.
4. VALVES ON WATER MAINS AND FORCE MAIN SEWER SMALLER THAN 16-INCH IN DIAMETER SHALL BE DIRECT BURY GATE VALVES, UNLESS OTHERWISE NOTED ON THE UTILITY CONSTRUCTION PLANS.
5. VALVES ON WATER MAINS AND FORCE MAIN SEWER 16-INCHES IN DIAMETER AND LARGER SHALL BE BUTTERFLY VALVES, UNLESS OTHERWISE NOTED ON THE UTILITY CONSTRUCTION PLANS.
6. WALL BLOCKING SHALL BE USED ON EXISTING WATER AND FORCE MAIN SEWER LINES AT THE PROPOSED RELOCATION TIE-IN POINTS.
7. CONTRACTOR SHALL CONNECT ALL WATER AND FORCE MAIN SEWER LINES AND SERVICE CONNECTIONS USING NECESSARY FITTINGS.
8. ALL BACKFLOW PREVENTORS ARE THE RESPONSIBILITY OF THE PROPERTY OWNER.
9. CONTRACTOR IS REQUIRED TO CONTACT CHRIS HILDRETH, OF MONTGOMERY COUNTY PUBLIC UTILITIES DEPARTMENT, AT (910) 439-6197 AND KATRINA TATUM, OF TOWN OF MT. GILEAD PUBLIC WORKS DEPARTMENT, AT (910) 439-5111 AT LEAST 2 WEEKS PRIOR TO ANY WATER AND SEWER CONSTRUCTION.

## UTILITY CONSTRUCTION



PROJECT REFERENCE NO.	SHEET NO.
B-4780	UC-5
DESIGNED BY: JNA	
DRAWN BY: JNA	
CHECKED BY: KSH	
APPROVED BY:	
REVISED:	
NORTH CAROLINA DEPARTMENT OF TRANSPORTATION	
UTILITIES ENGINEERING SEC. PHONE: (919) 707-6690 FAX: (919) 250-4151	UTILITY CONSTRUCTION PLANS ONLY

