

# CITY OF HIGH POINT

## AGENDA ITEM



**Title:** Utility Construction Agreement – Bridge #400052 on SR 1332 (Scientific Street)

**From:** Terry Houk – Public Services Director  
Derrick Boone – Public Services Asst. Director

**Meeting Date:** September 20, 2021

**Public Hearing:** N/A

**Advertising Date:** N/A

**Advertised By:** N/A

**Attachments:** Attachment A – Utility Construction Agreement and Cost Estimate  
Attachment B – Utility Construction Drawing- Vicinity and Project Limits

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### PURPOSE:

The City has budgeted for the utility construction costs associated with the upcoming NCDOT bridge replacement project on Scientific Street (SR 1332).

### BACKGROUND:

The North Carolina Department of Transportation (NCDOT) has prepared plans to replace bridge #400052 which consists of installing a new culvert downstream of the existing culvert and shifting Scientific Street to the east of the existing alignment (see attached drawing). The City of High Point owns water and sewer utilities that will be impacted by the project's construction and will be responsible for a portion of the utility construction costs in the estimated amount of \$707,737.90. This amount is representative of non-betterment utility construction on water and sewer utilities that were previously located in NCDOT right-of-way. All utility work will be performed by the NCDOT's construction contractor. The project is scheduled to open for bid December 2021, and construction could begin as early as February 2022.

### BUDGET IMPACT:

Funds for this project are available in the FY 2021/2022 budget.

### RECOMMENDATION / ACTION REQUESTED:

The Public Services Department recommends approval of the Utility Construction Agreement and that the appropriate City official and/or employee be authorized to execute all necessary documents to finalize the agreement with the NCDOT in the estimated amount of \$707,737.90.

# Executive Summary

**Entity:** City of High Point

**County:** Guilford

**TIP / WBS Element:**

**WBS Element:** 17BP.7.R.114

**Scope:** The Project consists of utility construction for replacement of Bridge #400052 on SR 1332 (Scientific Street) in High Point.

**Funding:**

**Type:** Receivable

**Total Cost:** \$1,094,610.90

**Responsibilities:**

**Adjustment and relocation of utility lines:**

The City of High Point shall be responsible for water and sewer lines costs as well as assume normal maintenance operations for these utility lines once project is complete.

NORTH CAROLINA  
GUILFORD COUNTY

**UTILITY CONSTRUCTION AGREEMENT (UCA)**

DATE: 7/30/2021

NORTH CAROLINA DEPARTMENT OF  
TRANSPORTATION

AND

WBS Elements: PE 17BP.7.PE.114  
ROW 17BP.7.ROW.114  
17BP.7.R.114

CITY OF HIGH POINT

THIS AGREEMENT is made and entered into on the last date executed below, by and between the North Carolina Department of Transportation, an agency of the State of North Carolina, hereinafter referred to as the "Department" and the City of High Point, hereinafter referred to as the "Municipality."

**WITNESSETH:**

WHEREAS, the Department has prepared and adopted plans to make certain bridge improvements under Project 17BP.7.R.114 in Guilford County, said plans consists of replacement of Bridge #400052 on SR 1332 (Scientific Street) in High Point, Guilford County; said project having a right-of-way width as shown on the project plans on file with the Department's office in Raleigh, North Carolina; and,

WHEREAS, the parties hereto wish to enter into an agreement for certain utility work to be performed by the Department's construction contractor with full reimbursement by the Municipality for the costs thereof as hereinafter set out.

NOW, THEREFORE, it is agreed as follows:

**CONSTRUCTION**

1. The Department shall place provisions in the construction contract for Project 17BP.7.R.114 Guilford County, for the contractor to adjust and relocate water and sewer lines. Said work shall be accomplished in accordance with plan sheets, attached hereto as Exhibit "A", cost estimate attached hereto as Exhibit "B", and project specific provisions, if applicable, attached hereto as Exhibit "C".

2. The Municipality shall be responsible for water and sewer lines cost as shown on the attached Exhibit "A". The estimated cost to the Municipality is \$707,737.90 as shown on the attached Exhibit "B". It is understood by both parties that this is an estimated cost and is subject to change. The Municipality shall reimburse the Department for said costs as follows:

#### **REIMBURSEMENT TO THE DEPARTMENT – FINAL BILLING**

3. The Municipality shall reimburse the Department for said costs as follows:
  - A. Upon completion of the highway work, the Department shall submit an itemized invoice to the Municipality for costs incurred. Billing will be based upon the actual bid prices and actual quantities used.
  - B. Reimbursement shall be made by the Municipality in one final payment within sixty (60) days of said invoice.
  - C. If the Municipality does not pay said invoice within sixty (60) days of the date of the invoice, the Department shall charge interest on any unpaid balance at a variable rate of the prime plus (1%) in accordance with G.S. 136-27.3.
  - D. Said interest rate shall be set upon final execution of the Agreement by the Department. The Municipality will be notified of the set interest rate by the Department's approval letter upon receipt of the fully executed agreement.
  - E. Any cost incurred due to additional utility work requested by the Municipality after award of the construction contract, shall be solely the responsibility of the Municipality. The Municipality shall reimburse the Department 100% of the additional utility cost.
  - F. In the event the Municipality fails for any reason to pay the Department in accordance with the provisions for payment hereinabove provided, North Carolina General Statute 136-41.3 authorizes the Department to withhold so much of the Municipality's share of funds allocated to said Municipality by North Carolina General Statute, Section 136-41.1, until such time as the Department has received payment in full.

- G. At any time prior to final billing by the Department, the Municipality may prepay any portion of the estimated cost by sending a check with the WBS Element noted to the below address. The Department will provide a final billing based on actual costs, less any previous payments that have been made.

REMITTANCE ADDRESS:

NC Department of Transportation  
ATTN: Accounts Receivable  
1514 Mail Service Center  
Raleigh, NC 27699-1514

4. Upon the satisfactory completion of the relocations and adjustments of the utility lines covered under this Agreement, the Municipality shall assume normal maintenance operations to the said utility lines. Upon completion of the construction of the highway project, the Municipality shall release the Department from any and all claims for damages in connection with adjustments made to its utility lines; and, further, the Municipality shall release the Department of any future responsibility for the cost of maintenance to said utility lines. Said releases shall be deemed to be given by the Municipality upon completion of construction of the project and its acceptance by the Department from its contractor unless the Municipality notifies the Department, in writing, to the contrary prior to the Department's acceptance of the project.
5. It is further agreed that the following provisions shall apply regarding the utilities covered in this Agreement.
- H. The Municipality obligates itself to service and to maintain its facilities to be retained and installed over and along the highway within the Department's right-of-way limits in accordance with the mandate of the North Carolina General Statutes and such other laws, rules, and regulations as have been or may be validly enacted or adopted, now or hereafter.
- I. If at any time the Department shall require the removal of or changes in the location of the encroaching facilities which are being relocated at the Municipality's expense, the Municipality binds itself, its successors and assigns, to promptly remove or alter said facilities, in order to conform to the said requirement (if applicable per G.S. 136-27.1), without any cost to the Department.

6. The other party to this Agreement shall comply with Title VI of the Civil Rights Act of 1964 (Title 49 CFR, Subtitle A, Part 21) and related nondiscrimination authorities. Title VI and related authorities prohibit discrimination on the basis of race, color, national origin, disability, gender, and age in all programs or activities of any recipient of Federal assistance.
7. A copy or facsimile copy of the signature of any party shall be deemed an original with each fully executed copy of the Agreement as binding as an original, and the parties agree that this Agreement can be executed in counterparts, as duplicate originals, with facsimile signatures sufficient to evidence an agreement to be bound by the terms of the Agreement.
8. By Executive Order 24, issued by Governor Perdue, and N.C. G.S. § 133-32, it is unlawful for any vendor or contractor ( i.e. architect, bidder, contractor, construction manager, design professional, engineer, landlord, offeror, seller, subcontractor, supplier, or vendor), to make gifts or to give favors to any State employee of the Governor's Cabinet Agencies (i.e., Administration, Commerce, Environmental Quality, Health and Human Services, Information Technology, Military and Veterans Affairs, Natural and Cultural Resources, Public Safety, Revenue, Transportation, and the Office of the Governor).

IN WITNESS WHEREOF, this Agreement has been executed, in duplicate, the day and year heretofore set out, on the part of the Department and the Municipality by authority duly given.

L.S. ATTEST:

CITY OF HIGH POINT

BY: \_\_\_\_\_ BY: \_\_\_\_\_

TITLE: \_\_\_\_\_ TITLE: \_\_\_\_\_

DATE: \_\_\_\_\_

N.C.G.S. § 133-32 and Executive Order 24 prohibit the offer to, or acceptance by, any State Employee of any gift from anyone with a contract with the State, or from any person seeking to do business with the State. By execution of any response in this procurement, you attest, for your entire organization and its employees or agents, that you are not aware that any such gift has been offered, accepted, or promised by any employees of your organization.

This instrument has been pre-audited in the manner required by the Local Government Budget and Fiscal Control Act.

(SEAL)

\_\_\_\_\_  
(FINANCE OFFICER)

Federal Tax Identification Number

Remittance Address:

City of High Point

DEPARTMENT OF TRANSPORTATION

BY: \_\_\_\_\_  
(CHIEF ENGINEER)

DATE: \_\_\_\_\_

APPROVED BY BOARD OF TRANSPORTATION ITEM O: 7/1/2021 (Date)




5/14/2019

Exhibit A

NOTES:

- NOT ALL SANITARY SEWER SERVICE CLEAN OUTS WERE LOCATED ON FINAL SURVEY. CONTRACTOR TO FIELD VERIFY ACTUAL LOCATION OF SEWER SERVICE BEFORE CONSTRUCTION OF ANY PROPOSED SEWER LINE AND NOTIFY ENGINEER OF ANY CONFLICTS.
- LOCATION OF 36" RAW WATER LINE IN 48" ENCASEMENT SHOWN PER RECORD DWG# B4, SH. 6 FROM PROJECT #141570, CONTRACT 2. DEPTH OF EXISTING PIPE TO BE FIELD VERIFIED BEFORE INSTALLATION OF 53.43 LF OF 8" SANITARY SEWER LINE BETWEEN PROPMH-6C AND PROPMH-13. IF EXISTING 36" RAW WATER LINE FOUND TO BE IN CONFLICT WITH PROPOSED SEWER LINE, ABANDON THE SECTION OF 36" WL TO BE REMOVED AND GROUT FILL ONLY AFTER NEW 8" SANITARY SEWER REACH HAS BEEN INSTALLED.

PREPARED IN THE OFFICE OF:




THE WOOTEN COMPANY  
300 S. Main Street Winston-Salem, NC 27101  
336.722.5325 fax 336.722.2340  
License Number: F-0115

PROJECT REFERENCE NO.  
**17BP.7.R.114**

SHEET NO.  
**UC-5**

DESIGNED BY: JCG  
DRAWN BY: BTH  
CHECKED BY: CMG  
APPROVED BY: JCG  
REVISED:



NORTH CAROLINA  
DEPARTMENT OF  
TRANSPORTATION

UTILITIES ENGINEERING SEC.  
PHONE: (919) 707-6690  
FAX: (919) 250-4151

VER TICAL SCALE  
5' 0" 5' 10' 25' 50'

HORIZONTAL SCALE  
5' 10' 25' 50'

WATER LINE AND SEWER LINE  
CONSTRUCTION  
SHOWN ON THIS SHEET

**EXHIBIT A**

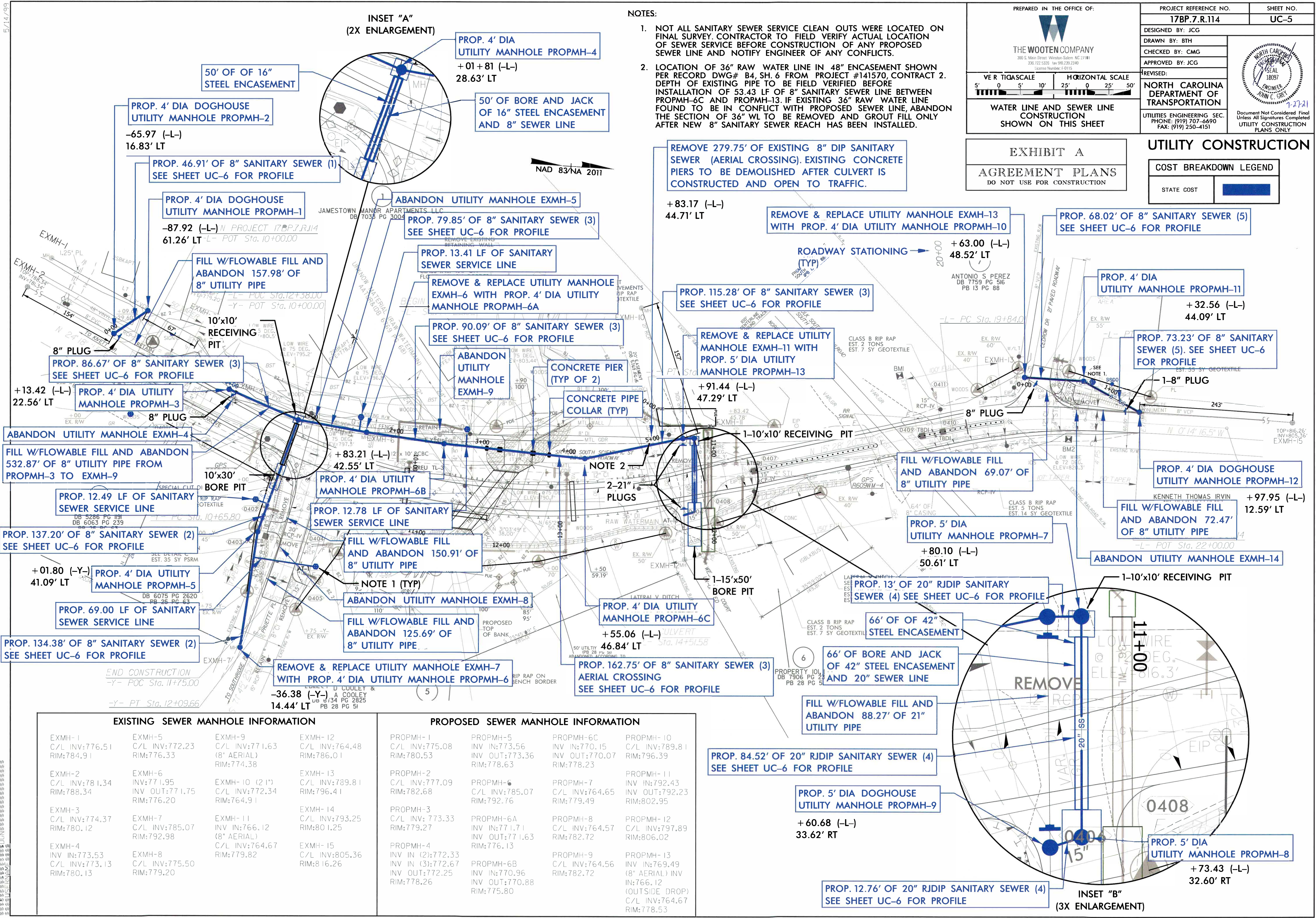
**AGREEMENT PLANS**

DO NOT USE FOR CONSTRUCTION

**UTILITY CONSTRUCTION**

**COST BREAKDOWN LEGEND**

|            |  |
|------------|--|
| STATE COST |  |
|------------|--|



EXISTING SEWER MANHOLE INFORMATION

|   |  |  |   |
|---|--|--|---|
| EXMH-1<br>C/L INV:776.51<br>RIM:784.91                  | EXMH-5<br>C/L INV:772.23<br>RIM:776.33               | EXMH-9<br>C/L INV:771.63<br>(8" AERIAL)<br>RIM:774.38    | EXMH-12<br>C/L INV:764.48<br>RIM:786.01 |
| EXMH-2<br>C/L INV:781.34<br>RIM:788.34                  | EXMH-6<br>INV:771.95<br>INV OUT:771.75<br>RIM:776.20 | EXMH-10 (2")<br>C/L INV:772.34<br>RIM:764.91             | EXMH-13<br>C/L INV:789.81<br>RIM:796.41 |
| EXMH-3<br>C/L INV:774.37<br>RIM:780.12                  | EXMH-7<br>C/L INV:785.07<br>RIM:792.98               | EXMH-11<br>INV IN:766.12<br>C/L INV:764.67<br>RIM:779.82 | EXMH-14<br>C/L INV:793.25<br>RIM:801.25 |
| EXMH-4<br>INV IN:773.53<br>C/L INV:773.13<br>RIM:780.13 | EXMH-8<br>C/L INV:775.50<br>RIM:779.20               |  | EXMH-15<br>C/L INV:805.36<br>RIM:816.26 |

PROPOSED SEWER MANHOLE INFORMATION

|  |  |  |   |
|--|--|--|---|
| PROPMH-1<br>C/L INV:775.08<br>RIM:780.53   | PROPMH-5<br>INV IN:773.56<br>INV OUT:773.36<br>RIM:778.63  | PROPMH-6C<br>INV IN:770.15<br>INV OUT:770.07<br>RIM:778.23 | PROPMH-10<br>C/L INV:789.81<br>RIM:796.39   |
| PROPMH-2<br>C/L INV:777.09<br>RIM:782.68   | PROPMH-6<br>C/L INV:785.07<br>RIM:792.76                   | PROPMH-7<br>C/L INV:764.65<br>RIM:779.49                   | PROPMH-11<br>INV IN:792.43<br>INV OUT:792.23<br>RIM:802.95  |
| PROPMH-3<br>C/L INV:773.33<br>RIM:779.27   | PROPMH-6A<br>INV IN:771.71<br>INV OUT:771.63<br>RIM:776.13 | PROPMH-8<br>C/L INV:764.57<br>RIM:782.72                   | PROPMH-12<br>C/L INV:797.89<br>RIM:806.02   |
| PROPMH-4<br>INV IN (2):772.33<br>INV IN (3):772.67<br>INV OUT:772.25<br>RIM:778.26 | PROPMH-6B<br>INV IN:770.96<br>INV OUT:770.88<br>RIM:775.80 | PROPMH-9<br>C/L INV:764.56<br>RIM:782.72                   | PROPMH-13<br>INV IN:769.49<br>(8" AERIAL) INV IN:766.12<br>(OUTSIDE DROP)<br>C/L INV:764.67<br>RIM:778.53 |



5/14/99

NOTE:  
THE ESTIMATED QUANTITY OF DUCTILE IRON WATER PIPE FITTINGS ON THIS PLAN SHEET IS 14,875 POUNDS. THE ACTUAL QUANTITY AND TYPE OF FITTINGS WILL VARY BASED ON FIELD CONDITIONS.

PROP. 12" TAPPING SLEEVE AND VALVE

WATER LINE INSTALLED BY OPEN CUT

40' OF OF 24" STEEL ENCASEMENT

INSET "A"  
(2X ENLARGEMENT)

PROP. THRUST COLLAR  
INSTALL 1-12" PLUG AND REMOVE PIPE AS NEEDED TO INSTALL NEW CULVERT

INSET "B"  
(2X ENLARGEMENT)

PROP. 12" TAPPING SLEEVE AND VALVE

WATER LINE INSTALLED BY OPEN CUT

40' OF OF 24" STEEL ENCASEMENT

PROP. 118' OF 2" WATER SERVICE LINE

JAMESTOWN MANOR APARTMENTS LLC  
DB 7033 PG 3004

RECONNECT WATER METER

INSTALL 12" PLUG AND REMOVE PIPE AS NEEDED TO INSTALL NEW CULVERT

ABANDON 162' OF UTILITY PIPE

PROP. 365' OF 12" WATER LINE W/MARKER BALLS AT EVERY ±30'

SEE INSET B (THIS SHEET)

SEE NOTE

INSET "C"  
(3X ENLARGEMENT)

PROP. 36" VALVE

+56.59 (-L-)  
71.79' LT  
22.5 DEGREE RJDI BEND

1-36" PLUG

ROADWAY STATIONING (TYP)

PREPARED IN THE OFFICE OF:

**THE WOOTEN COMPANY**  
300 S. Main Street Winston-Salem, NC 27101  
336.722.5328 fax 336.728.2349  
License Number: F-6115

VERTICAL SCALE  
5' 10' 15' 20' 25' 30'

HORIZONTAL SCALE  
25' 50' 75' 100'

WATER LINE CONSTRUCTION SHOWN ON THIS SHEET

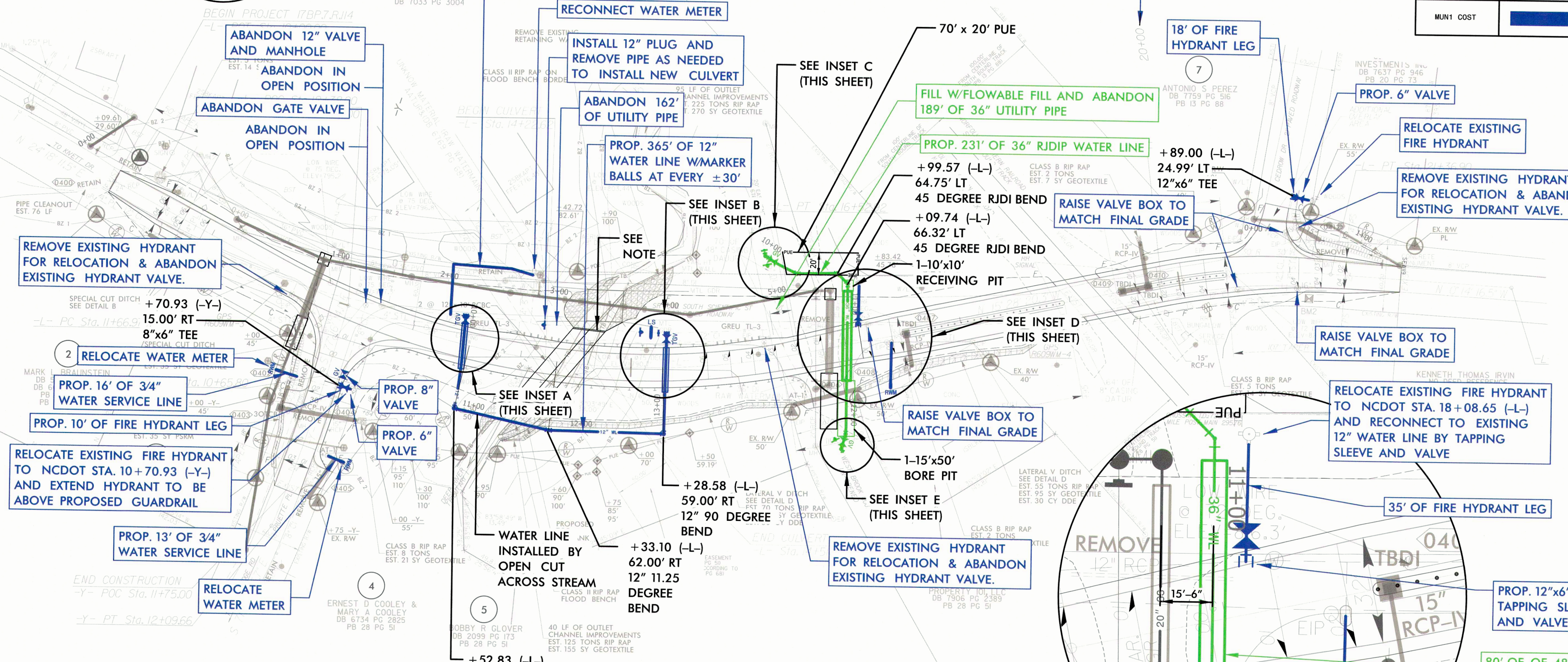
|  |  |                   |
|--|--|-------------------|
| PROJECT REFERENCE NO.<br>17BP.7.R.114                                      |  | SHEET NO.<br>UC-4 |
| DESIGNED BY: JCG   |  |                   |
| DRAWN BY: BTH  |  |                   |
| CHECKED BY: CMG  |  |                   |
| APPROVED BY: JCG   |  |                   |
| REVISED: 7/14/2021   |  |                   |
| NORTH CAROLINA DEPARTMENT OF TRANSPORTATION                                |  |                   |
| UTILITIES ENGINEERING SEC.<br>PHONE: (919) 707-6690<br>FAX: (919) 250-4151 |  |                   |

Document Not Considered Final  
Unless All Signatures Completed  
UTILITY CONSTRUCTION PLANS ONLY

EXHIBIT A  
AGREEMENT PLANS  
DO NOT USE FOR CONSTRUCTION

UTILITY CONSTRUCTION

| COST BREAKDOWN LEGEND |  |
|-----------------------|--|
| STATE COST            |  |
| MUN1 COST             |  |



NOTE:  
EXISTING 12" WATER LINE TO REMAIN IN SERVICE UNTIL NEW 12" WATER LINE IS CONSTRUCTED AND TESTED. NEW 12" TAPPING SLEEVES AND VALVES ARE TO BE INSTALLED ONCE TEMPORARY STREAM PIPING HAS BEEN CONSTRUCTED. NEW 12" WATER LINE TO BE INSTALLED BY OPEN CUT ACROSS STREAM AND BY OPEN CUT IN CASINGS ACROSS PROPOSED REROUTE OF SCIENTIFIC ST. TEMPORARY TAPS ARE TO BE INSTALLED ON NEW LINE FOR THE PURPOSE OF TESTING AND DISINFECTING. ONCE LINE HAS PASSED TESTING AND DISINFECTION AND HAS BEEN CERTIFIED, OPEN TAPPING VALVES, INSTALL LINE STOP AND ABANDON TEMPORARY TAPS. NOTED EXISTING GATE VALVE TO BE PLACED IN CLOSED POSITION AND ABANDONED. EXISTING LINE TO THEN BE ABANDONED BETWEEN STA 14+17 TO 15+07 AND MAY BE REMOVED AS NECESSARY FOR INSTALLATION OF NEW CULVERT.

+54.67 (-L-)  
78.54' RT  
11.25 DEGREE RJDI BEND

36" PLUG

PROP. 36" VALVE

+61.29 (-L-)  
91.72' RT  
45 DEGREE RJDI BEND

(CONNECT TO EXISTING 36" RJDI RAW WATER LINE)

INSET "E"  
(3X ENLARGEMENT)

INSET "D"  
(3X ENLARGEMENT)

80' OF BORE AND JACK OF 48" STEEL ENCASEMENT AND 36" WATER LINE

PROP. 38' OF 3/4" WATER SERVICE LINE

RELOCATE WATER METER

PROP. 12"x6" TAPPING SLEEVE AND VALVE

35' OF FIRE HYDRANT LEG

RELOCATE EXISTING FIRE HYDRANT TO NCDOT STA. 18+08.65 (-L-) AND RECONNECT TO EXISTING 12" WATER LINE BY TAPPING SLEEVE AND VALVE

RAISE VALVE BOX TO MATCH FINAL GRADE

REMOVE EXISTING HYDRANT FOR RELOCATION & ABANDON EXISTING HYDRANT VALVE.

RELOCATE EXISTING FIRE HYDRANT

PROP. 6" VALVE

18' OF FIRE HYDRANT LEG

+89.00 (-L-)  
24.99' LT  
12"x6" TEE

RAISE VALVE BOX TO MATCH FINAL GRADE

PROP. 231' OF 36" RJDI WATER LINE

FILL W/FLOWABLE FILL AND ABANDON 189' OF 36" UTILITY PIPE

70' x 20' PUE

+99.57 (-L-)  
64.75' LT  
45 DEGREE RJDI BEND

+09.74 (-L-)  
66.32' LT  
45 DEGREE RJDI BEND

1-10"x10' RECEIVING PIT

SEE INSET C (THIS SHEET)

SEE INSET D (THIS SHEET)

RAISE VALVE BOX TO MATCH FINAL GRADE

1-15"x50' BORE PIT

SEE INSET E (THIS SHEET)

REMOVE EXISTING HYDRANT FOR RELOCATION & ABANDON EXISTING HYDRANT VALVE.

+28.58 (-L-)  
59.00' RT  
12" 90 DEGREE BEND

+33.10 (-L-)  
62.00' RT  
12" 11.25 DEGREE BEND

WATER LINE INSTALLED BY OPEN CUT ACROSS STREAM

CLASS II RIP RAP FLOOD BENCH

+52.83 (-L-)  
58.00' RT  
12" 90 DEGREE BEND

BOBBY R GLOVER  
DB 2099 PG 173  
PB 28 PG 51

40 LF OF OUTLET CHANNEL IMPROVEMENTS  
EST. 125 TONS RIP RAP  
EST. 155 SY GEOTEXTILE

ERNEST D COOLEY & MARY A COOLEY  
DB 6734 PG 2825  
PB 28 PG 51

END CONSTRUCTION  
-Y- POC Sta. 11+75.00

-Y- PT Sta. 12+09.66

MARK DB 6 PG 51

MARK DB 6 PG 51



# Exhibit B

## ESTIMATE OF PROJECT QUANTITIES AND COST OPINION NCDOT Project No. 17BP.7.R.114 Utility Relocation on Scientific St Guilford County, NC

THE WOOTEN COMPANY

7/27/2021

| ITEM #       | Section | ITEM DESCRIPTION   | UNITS | NCDOT | City of High Point | TOTAL ITEM QUANTITY | UNIT PRICE  | Cost to NCDOT | Cost to High Point | Total Cost     |
|--------------|---------|--|-------|-------|--------------------|---------------------|-------------|---------------|--------------------|----------------|
| 5326200000-E | 1510    | 12" WATER LINE   | LF    | 0     | 365                | 365                 | \$120.00    | \$0.00        | \$43,800.00        | \$43,800.00    |
| 5328500000-E | 1510    | 36" WATER LINE   | LF    | 231   | 0                  | 231                 | \$450.00    | \$103,950.00  | \$0.00             | \$103,950.00   |
| 5329000000-E | 1510    | DUCTILE IRON WATER PIPE FITTINGS                                   | LBS   | 14290 | 1400               | 15,690              | \$10.18     | \$145,472.20  | \$14,252.00        | \$159,724.20   |
| 5540000000-E | 1515    | 6" VALVE   | EA    | 0     | 3                  | 3                   | \$2,060.00  | \$0.00        | \$6,180.00         | \$6,180.00     |
| 5546000000-E | 1515    | 8" VALVE   | EA    | 0     | 1                  | 1                   | \$2,869.00  | \$0.00        | \$2,869.00         | \$2,869.00     |
| 5565000000-E | 1515    | 36" VALVE  | EA    | 2     | 0                  | 2                   | \$40,000.00 | \$80,000.00   | \$0.00             | \$80,000.00    |
| 5572200000-E | 1515    | 12" TAPPING SLEEVE & VALVE   | EA    | 0     | 3                  | 3                   | \$14,000.00 | \$0.00        | \$42,000.00        | \$42,000.00    |
| 5648000000-N | 1515    | RELOCATE WATER METER   | EA    | 0     | 3                  | 3                   | \$2,000.00  | \$0.00        | \$6,000.00         | \$6,000.00     |
| 5649000000-N | 1515    | RECONNECT WATER METER  | EA    | 0     | 1                  | 1                   | \$3,000.00  | \$0.00        | \$3,000.00         | \$3,000.00     |
| 5672000000-N | 1515    | RELOCATE FIRE HYDRANT  | EA    | 0     | 3                  | 3                   | \$4,500.00  | \$0.00        | \$13,500.00        | \$13,500.00    |
| 5673000000-E | 1515    | FIRE HYDRANT LEG   | LF    | 0     | 63                 | 63                  | \$75.00     | \$0.00        | \$4,725.00         | \$4,725.00     |
| 5679000000-E | 1515    | 12" LINE STOP  | EA    | 0     | 1                  | 1                   | \$20,000.00 | \$0.00        | \$20,000.00        | \$20,000.00    |
| 5686000000-E | 1515    | 2" WATER SERVICE LINE  | LF    | 0     | 118                | 118                 | \$50.00     | \$0.00        | \$5,900.00         | \$5,900.00     |
| 5686500000-E | 1515    | WATER SERVICE LINE   | LF    | 0     | 67                 | 67                  | \$25.00     | \$0.00        | \$1,675.00         | \$1,675.00     |
| 5689000000-E | 1515    | GENERIC UTILITY ITEM - ABANDON 12" VALVE                           | EA    | 0     | 2                  | 2                   | \$1,500.00  | \$0.00        | \$3,000.00         | \$3,000.00     |
| 5689000000-E | 1515    | GENERIC UTILITY ITEM - ABANDON 6" VALVE                            | EA    | 0     | 2                  | 2                   | \$1,500.00  | \$0.00        | \$3,000.00         | \$3,000.00     |
| 5689000000-E | 1515    | GENERIC UTILITY ITEM - CONNECTION TO EXISTING MANHOLE              | EA    | 0     | 2                  | 2                   | \$2,500.00  | \$0.00        | \$5,000.00         | \$5,000.00     |
| 5689000000-E | 1515    | GENERIC UTILITY ITEM - RAISE EXISTING WV BOX TO FINAL GRADE        | EA    | 0     | 4                  | 4                   | \$500.00    | \$0.00        | \$2,000.00         | \$2,000.00     |
| 5689000000-E | 1515    | GENERIC UTILITY ITEM - RAISE FIRE HYDRANT TO ABOVE GUARDRAIL       | EA    | 0     | 1                  | 1                   | \$1,000.00  | \$0.00        | \$1,000.00         | \$1,000.00     |
| 5691300000-E | 1520    | 8" SANITARY GRAVITY SEWER  | LF    | 0     | 994.38             | 994                 | \$185.00    | \$0.00        | \$183,960.30       | \$183,960.30   |
| 5691800000-E | 1520    | 20" SANITARY GRAVITY SEWER   | LF    | 0     | 110.28             | 110                 | \$350.00    | \$0.00        | \$38,598.00        | \$38,598.00    |
| 5768000000-N | 1520    | SANITARY SEWER CLEAN-OUT   | EA    | 0     | 4                  | 4                   | \$1,446.00  | \$0.00        | \$5,784.00         | \$5,784.00     |
| 5768500000-E | 1520    | SEWER SERVICE LINE   | LF    | 0     | 107.68             | 108                 | \$45.00     | \$0.00        | \$4,845.60         | \$4,845.60     |
| 5775000000-E | 1525    | 4' DIA UTILITY MANHOLE   | EA    | 0     | 12                 | 12                  | \$4,000.00  | \$0.00        | \$48,000.00        | \$48,000.00    |
| 5776000000-E | 1525    | 5' DIA UTILITY MANHOLE   | EA    | 0     | 4                  | 4                   | \$6,260.00  | \$0.00        | \$25,040.00        | \$25,040.00    |
| 5781000000-E | 1525    | UTILITY MANHOLE WALL 4' DIA  | LF    | 0     | 8.75               | 9                   | \$350.00    | \$0.00        | \$3,062.50         | \$3,062.50     |
| 5781000000-E | 1525    | UTILITY MANHOLE WALL 5' DIA  | LF    | 0     | 41.02              | 41                  | \$475.00    | \$0.00        | \$19,484.50        | \$19,484.50    |
| 5800000000-E | 1530    | ABANDON 6" UTILITY PIPE  | LF    | 0     | 37.85              | 38                  | \$15.00     | \$0.00        | \$567.75           | \$567.75       |
| 5801000000-E | 1530    | ABANDON 8" UTILITY PIPE  | LF    | 0     | 1038.6             | 1,039               | \$18.00     | \$0.00        | \$18,694.80        | \$18,694.80    |
| 5804000000-E | 1530    | ABANDON 12" UTILITY PIPE   | LF    | 0     | 162                | 162                 | \$24.00     | \$0.00        | \$3,888.00         | \$3,888.00     |
| 5812000000-E | 1530    | ABANDON 20" UTILITY PIPE   | LF    | 0     | 88.27              | 88                  | \$35.00     | \$0.00        | \$3,089.45         | \$3,089.45     |
| 5814500000-E | 1530    | ABANDON 36" UTILITY PIPE   | LF    | 189   | 0                  | 189                 | \$50.00     | \$9,450.00    | \$0.00             | \$9,450.00     |
| 5816000000-N | 1530    | ABANDON UTILITY MANHOLE (WATER VALVE AND SSMH)                     | EA    | 0     | 6                  | 6                   | \$3,657.00  | \$0.00        | \$21,942.00        | \$21,942.00    |
| 5828000000-N | 1530    | REMOVE UTILITY MANHOLE   | EA    | 0     | 4                  | 4                   | \$2,000.00  | \$0.00        | \$8,000.00         | \$8,000.00     |
| 5835700000-E | 1540    | 16" ENCASEMENT PIPE  | LF    | 0     | 50                 | 50                  | \$150.00    | \$0.00        | \$7,500.00         | \$7,500.00     |
| 5836000000-E | 1540    | 24" ENCASEMENT PIPE  | LF    | 0     | 80                 | 80                  | \$200.00    | \$0.00        | \$16,000.00        | \$16,000.00    |
| 5836450000-E | 1540    | 42" ENCASEMENT PIPE  | LF    | 0     | 66                 | 66                  | \$400.00    | \$0.00        | \$26,400.00        | \$26,400.00    |
| 5836460000-E | 1540    | 48" ENCASEMENT PIPE  | LF    | 80    | 0                  | 80                  | \$600.00    | \$48,000.00   | \$0.00             | \$48,000.00    |
| 5872500000-E | 1550    | BORE AND JACK OF 16" ENCASEMENT                                    | LF    | 0     | 50                 | 50                  | \$300.00    | \$0.00        | \$15,000.00        | \$15,000.00    |
| 5872500000-E | 1550    | BORE AND JACK OF 42" ENCASEMENT                                    | LF    | 0     | 66                 | 66                  | \$400.00    | \$0.00        | \$26,400.00        | \$26,400.00    |
| 5872500000-E | 1550    | BORE AND JACK OF 48" ENCASEMENT                                    | LF    | 0     | 80                 | 80                  | \$450.00    | \$0.00        | \$36,000.00        | \$36,000.00    |
| 5875000000-N | SP      | CONCRETE PIERS   | EA    | 0     | 2                  | 2                   | \$5,000.00  | \$0.00        | \$10,000.00        | \$10,000.00    |
| 5882000000-E | SP      | GENERIC UTILITY ITEM - CONCRETE COLLAR                             | EA    | 0     | 2                  | 2                   | \$500.00    | \$0.00        | \$1,000.00         | \$1,000.00     |
| 5882000000-E | SP      | GENERIC UTILITY ITEM - DEMOLITION OF EXISTING CONCRETE PIERS       | EA    | 0     | 2                  | 2                   | \$500.00    | \$0.00        | \$1,000.00         | \$1,000.00     |
| 5888000000-E | SP      | GENERIC UTILITY ITEM - REMOVE UTILITY PIPE - 8" SANITARY GRAVITY S | LF    | 0     | 69.75              | 70                  | \$80.00     | \$0.00        | \$5,580.00         | \$5,580.00     |
| TOTAL        |         |  |       |       |                    |                     |             | \$386,872.20  | \$707,737.90       | \$1,094,610.10 |

### NOTES:

Items are quantified for payment in accordance with the NCDOT Standard Specifications for Roads and Structures dated January 2018

Existing utilities shall be removed as necessary when in conflict with proposed infrastructure.

Unit price was based on 2019 NCDOT Statewide bid pricing with markup for project considerations



Project: 17BP.7.R.114

UC-1

County: Guilford

PROJECT SPECIAL PROVISIONS

Utility Construction



UTILITY OWNER

City of High Point  
Tom Becket  
Assistant Water and Sewer Superintendent

Physical Address:  
211 South Hamilton Street  
High Point, NC 27261

Mailing Address:  
P.O. Box 230  
High Point, NC 27261  
Phone 336-883-3219  
Fax 336-883-3248  
Email: tom.beckett@highpointnc.gov  
Website: <https://www.highpointnc.gov/>

**PROJECT SPECIAL PROVISIONS**  
Utility Construction

**Revise the 2018 NCDOT Standard Specifications as follows:**

**Page 1-68, Sub-Article 108-2 Progress Schedule:**

Add the following sentences:

In consideration of the 12-inch water line relocation work, the sequencing of construction must support continual use of the existing 12-inch water line. The existing 12-inch water line is to remain in continuous service until the relocation, 12-Inch Water Line (1) on UC-6, is fully installed, tested and connected via tapping sleeve and valves. Once the relocation, 12-Inch Water Line (1) is operational, the existing valve and line stop can be used to isolate the portion in conflict with the proposed culvert and shoring and allow for abandonment without loss of service to the north and south of the new culvert.

In consideration of the sewer relocation work, the design engineer developed a possible sequence for the work. This sequence is only for reference and the Contractor is still responsible for developing the project schedule and managing the sequence of the sewer relocations, bypass pumping and maintaining active sewer service for the customers and preventing any spilling of sewer. The following sequence is based on the sewer designations as shown on the drawings.

**Sanitary Sewer (1)**

1. Doghouse PROPMH-1 onto Ex. 8" VCP line & Doghouse PROPMH-2 onto Ex. 8" PVC line
2. Install & Connect Prop. 8" Sanitary Sewer (1) between PROPMH-1 & PROPMH-2
3. Plug (N) Invert of PROPMH-2 (old invert out toward EXMH-4)

**Sanitary Sewer (2) & (3) Phase 1**

1. Install Prop. 8" Sanitary Sewer (2) from PROPMH-4 to PROPMH-5, Install PROPMH-4 with connections including stub out for new 8" Sanitary Sewer toward EXMH-6 (PROPMH-6A), Install & connect PROPMH-5
2. Install Prop. 8" Sanitary Sewer (3) from PROPMH-5 toward PROPMH-6, Stop before reaching EXMH-7 (PROPMH-6) and/or interference with the Ex. 8" VCP line
3. Set up & Bypass from EXMH-3 to EXMH-5
4. Install 8" Sanitary Sewer from PROPMH-4 to PROPMH-3  
Removing/Abandoning EXMH-4 & 8" VCP line, leaving EXMH-5 operable for the (E) Inv In & (N) Inv Out and install PROPMH-3 onto Ex. 8" VCP line
5. Set up & Bypass from PROPMH-4 to EXMH-9, Temp. Plug (N) PROPMH-4  
Stub Out, and remove bypass set up from EXMH-3



**PROJECT SPECIAL PROVISIONS****Utility Construction**

6. Set up & Bypass from nearest-EXMH upstream of EXMH-7 (PROPMH-6) to PROPMH-5
7. Install last joints to line from PROPMH-5 to PROPMH-6 and install PROPMH-6 (by replacing EXMH-7) & connect, once active remove bypass set up from upstream EXMH
8. Remove/Abandon EXMH-8 & EXMH-5, Remove/Abandon/fill 8" VCP line between PROPMH-6 to EXMH-5
9. Install PROPMH-6A with stubout toward PROPMH-6B. Install & Connect Prop. 8" Sanitary Sewer (3) from PROPMH-6A to stub out at PROPMH-4 and Remove/Abandon 8" VCP between EXMH-4 & EXMH-6 (PROPMH-6A) as needed
10. Remove Bypass from PROPMH-4 to EXMH-9 and install bypass from PROPMH-6A to EXMH-9 until culvert is constructed and aerial sewer can be replaced (See Sanitary Sewer (3) Phase 2 - below)

**Sanitary Sewer (4)**

1. Doghouse PROPMH-9 onto Ex. 21" RCP line
2. Install Prop. 20" DIP & RJDIP Sanitary Sewer (4) from PROPMH-9 to PROPMH-7, including PROPMH-8 and encasement, Install PROPMH-7 with a stub out toward EXMH-11 (PROPMH-13)

**Sanitary Sewer (5)**

1. Install PROPMH-11, Doghouse PROPMH-12 onto Ex. 8" VCP line and Install Prop. 8" Sanitary Sewer (6) between PROPMH-12 & PROPMH-11
2. Set up & Bypass from PROPMH-12 to nearest-EXMH downstream of EXMH-13, Plug (S) 8" Invert of PROPMH-12 (toward EXMH-14)
3. Replace EXMH-13 with PROPMH-10 and install remainder of Prop. 8" Sanitary Sewer (6), remove EXMH-14, Plug & Abandon inactive portions of 8" VCP line

**Sanitary Sewer (3) Phase 2**

1. Relocate discharge of Bypass starting at PROPMH-6A from discharging EXMH-9 to discharge at PROPMH-7
2. Set up & Bypass from EXMH-10 to PROPMH-7
3. Install Prop. 8" Sanitary Sewer (3) including Aerial Crossing (replacement) PROPMH-6A to PROPMH-7 include piers and PROPMH-6B & PROPMH-6C, remove/abandon remaining sewer and manholes from EXMH-6 to EXMH-11
4. Connect 20" DIP from PROPMH-13 to previously installed Stub-out to PROPMH-7
5. Plug & Abandon old 21" RCP line between PROPMH-13 (EXMH-11) & PROPMH-9
6. Remove bypass setups

**PROJECT SPECIAL PROVISIONS**

**Utility Construction**

**Page 10-63, Sub-Article 1036-7 (A) Gate Valves:**

Add the following sentences:

Gate valves for utility lines larger than 24-inches shall be equipped for horizontal installation with bevel gear actuator.

**Page 15-1, Sub-Article 1500-2 Cooperation with the Utility Owner, paragraph 2:**

Add the following sentences:

The utility owner is the City of High Point. Contact information is listed above on page UC-1.

**Page 15-1, Sub-Article 1500-2 Cooperation with the Utility Owner, paragraph 4:**

Delete “24 hours” and replace with “48 hours”.

Add the following to paragraph 4:

The utility owner will be notified at least two (2) weeks in advance of temporary service disruptions 36-inch water line shown on UC-4. This water line shall not be out of service longer than 72 hours unless written authorization is provided by the utility owner. Utility owner point of contact is Derrick Boone (cell: 336-491-8696, office: 336-883-3279).

**Page 15-2, Sub-Article 1500-8 Locating and Marking**

Add the following to the end of the paragraph:

Install electronic location markers every 30 linear feet along 12” Water Line (1) shown in plan view on Sheet UC-4 and profile view on UC-6. Electronic location markers shall consist of 4-inch marker balls having a passive device capable of reflecting a specifically designated repulse frequency, unique to the utility being installed. Marker ball shall contain a passive-tuned antenna, molded inside a plastic disk, which is free-floating inside a water-resistant polyethylene shell. The shell shall be impervious to minerals, chemicals and temperature extremes. Marker balls shall be color coded in accordance with the American Public Works Association’s utility location and coordinating council standards. Electronic marker balls shall be as manufactured by 3M Telecom Systems or approved equal.

**Page 15-2, Sub-Article 1500-9 Placing Pipelines into Service**

Add the following to the second paragraph:

Water utility owner must witness pressure testing and obtain their own bacteriological samples. Chlorinated water must be neutralized in accordance with State of North Carolina requirements prior to being discharged into the environment.



PROJECT SPECIAL PROVISIONS

## Utility Construction

**Page 15-4, Sub-Article 1505-3 (E), Thrust Restraint**

Revise the first Sentence as follows: Provide thrust restraint for pipelines and appurtenances.

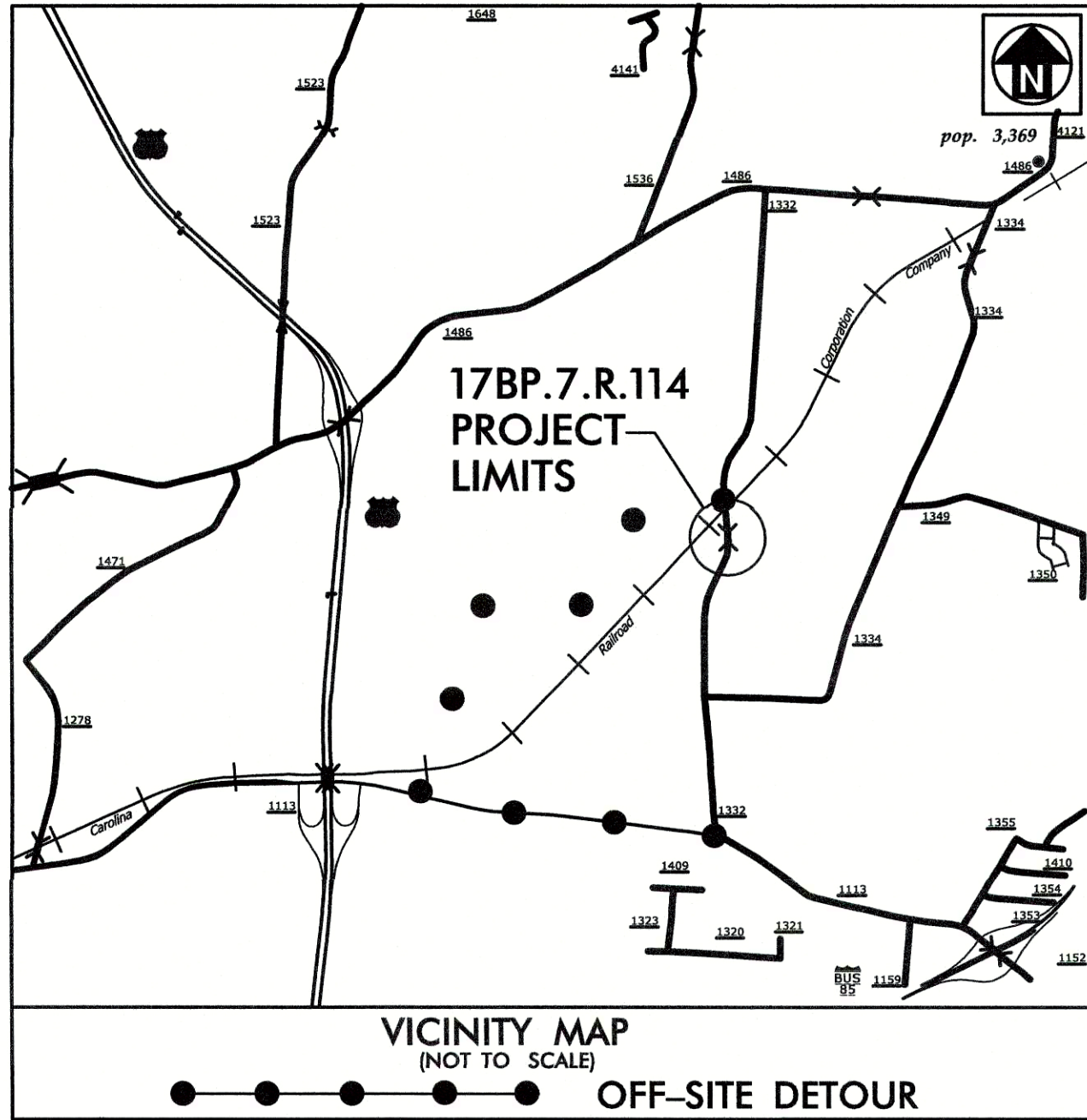
Note: Thrust restraints shall be installed as shown on the drawings.

**Page 15-6, Sub-Article 1510-3 (B), Testing and Sterilization**

Change the allowable leakage formula to this allowable leakage per 1,000 linear feet of pipe per two hours shall be as indicated in the following table:

| Pipe Size (in) | Allowable Leakage<br>(Gallons) |
|----------------|--------------------------------|
| 4              | 0.73                           |
| 6              | 1.11                           |
| 8              | 1.47                           |
| 10             | 1.84                           |
| 12             | 2.21                           |
| 14             | 2.57                           |
| 16             | 2.94                           |
| 20             | 3.68                           |
| 24             | 4.41                           |
| 30             | 5.52                           |
| 36             | 6.62                           |
| 48             | 8.83                           |

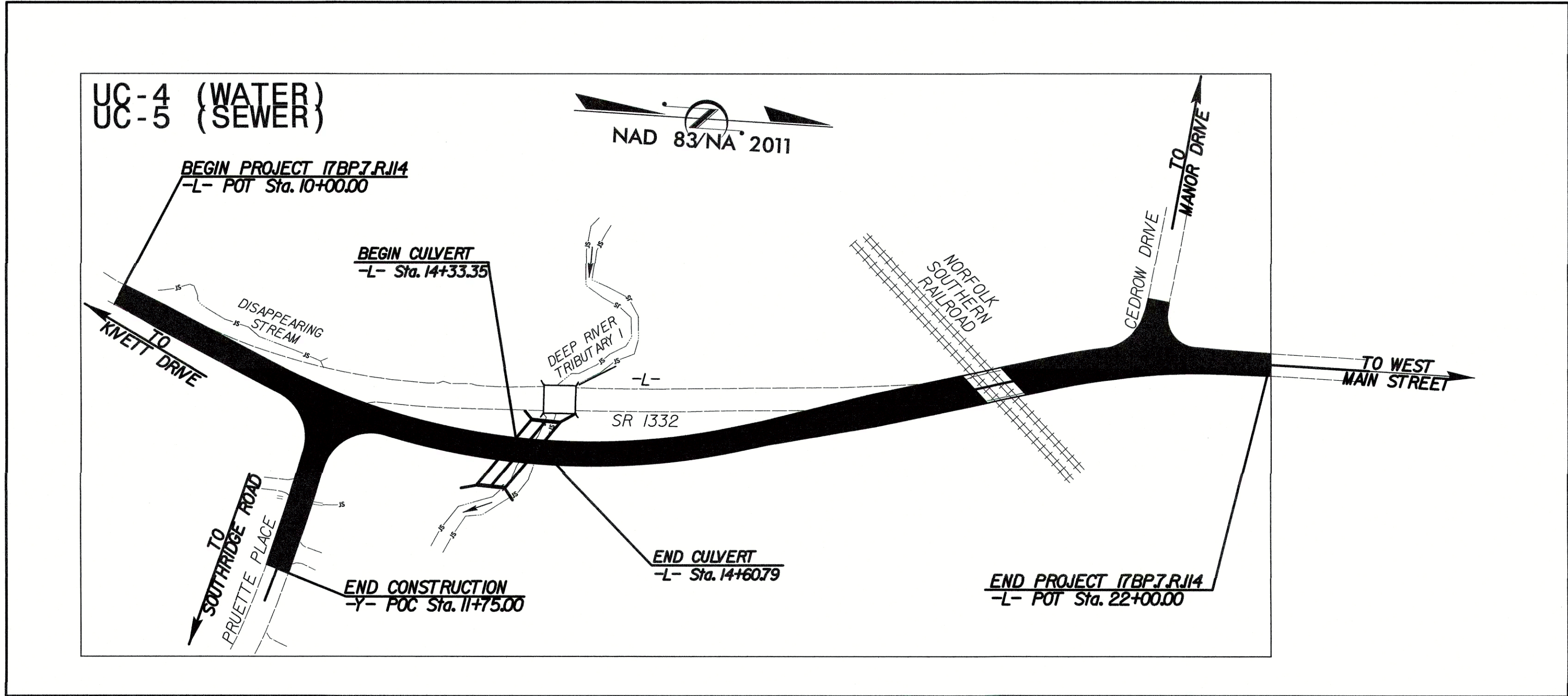




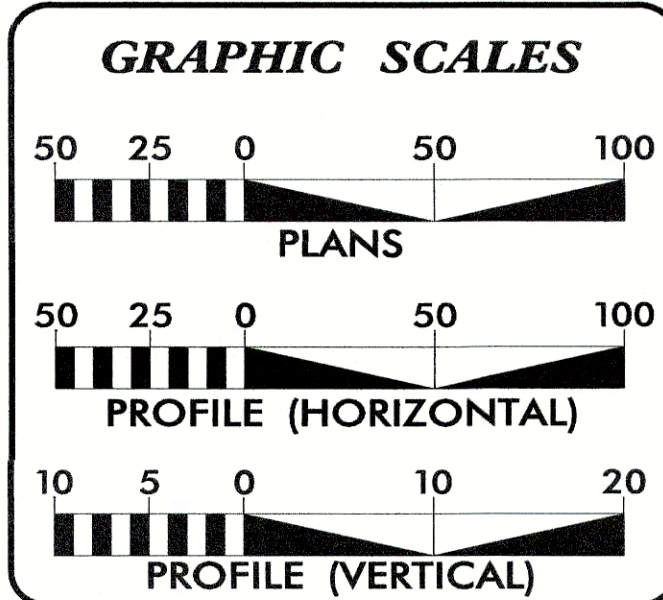
# UTILITY CONSTRUCTION PLANS GUILFORD COUNTY

LOCATION: BRIDGE NO. 52 OVER DEEP RIVER TRIBUTARY 1 ON SR 1332 (SCIENTIFIC STREET)

TYPE OF WORK: WATER AND SEWER LINE RELOCATION



DOCUMENT NOT CONSIDERED FINAL  
UNTIL ALL SIGNATURES ARE COMPLETED



| SHEET NO.:       | INDEX OF SHEETS | DESCRIPTION:                |
|------------------|-----------------|-----------------------------|
|                  |                 | TITLE SHEET                 |
| UC-1             |                 | UTILITY SYMBOLOGY           |
| UC-2             |                 | NOTES                       |
| UC-3             |                 | DETAILS                     |
| UC-3A THRU UC-3D |                 | UTILITY CONSTRUCTION SHEETS |
| UC-4             |                 | UTILITY CONSTRUCTION SHEETS |
| UC-5             |                 | PROFILE SHEETS              |
| UG-6             |                 |                             |

## UTILITY OWNERS ON PROJECT

- (A) SANITARY SEWER (CITY OF HIGH POINT)  
(B) WATER (CITY OF HIGH POINT)

PREPARED IN THE OFFICE OF



John C. Grey, P.E. CONSULTANT CONTACT #1  
Courtney M. Gamble, P.E. CONSULTANT CONTACT #2  
CONSULTANT CONTACT #3

SEAL



Document Not Considered Final  
Unless All Signatures Completed  
UTILITY CONSTRUCTION  
PLANS ONLY



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Ed Reams UTILITIES COORDINATOR