
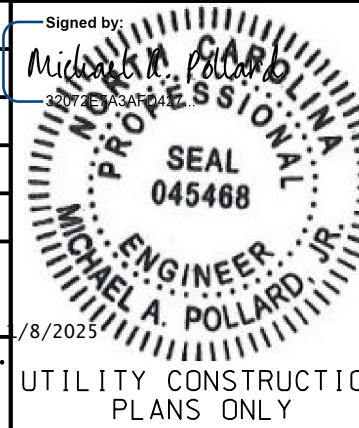


UTILITY CONSTRUCTION

PROJECT REFERENCE NO. U-5536		SHEET NO. UC-03	
DESIGNED BY: PRJ	Drawn by: 		
DRAWN BY: SSM			
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APPROVED BY:			
REVISED:			
NORTH CAROLINA DEPARTMENT OF TRANSPORTATION		UTILITIES ENGINEERING SECTION PHONE: (919) 707-6690 FAX: (919) 250-4151	

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 AND THE PROJECT SPECIAL PROVISIONS.

2. THE EXISTING UTILITIES BELONG TO WINSTON-SALEM / FORSYTH COUNTY UTILITIES.

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. ALL PROPOSED SERVICES TO BE ASSUMED AS 1" SERVICE WITH 5/8" METER UNLESS OTHER NOTED

7. 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.

8. 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.

9. 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.

10. 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.

11. ALL EROSION CONTROL DEVICES SHALL BE CONSTRUCTED AND MAINTAINED IN ACCORDANCE WITH THE MOST CURRENT STANDARDS OF THE LAND QUALITY SECTION OF THE NCDEQ.

12. ALL WORK MUST CARRY ONE-YEAR WARRANTY TO COVER ALL DEFECTIVE MATERIALS AND WORKMANSHIP.

13. CROSS-CONNECTION CONTROL PROTECTION DEVICES ARE REQUIRED BASED ON DEGREE OF HEALTH HAZARD INVOLVED AS LISTED IN APPENDIX B OF THE RULES GOVERNING PUBLIC WATER SYSTEMS OF NORTH CAROLINA. THESE GUIDELINES ARE THE MINIMUM REQUIREMENTS. THE DEVICES SHALL MEET AMERICAN SOCIETY OF SANITARY ENGINEERING (ASSE) STANDARDS OR BE ON THE UNIVERSITY OF SOUTHERN CALIFORNIA APPROVAL LIST. THE DEVICES SHALL BE INSTALLED AND TESTED (BOTH INITIAL AND PERIODIC TESTING THEREAFTER) IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS OR THE LOCAL CROSS-SECTION CONTROL PROGRAM, WHICH EVER IS MORE STRINGENT

PROJECT SPECIFIC NOTES:

1. PROPOSED RESTRAINED DIP WATER LINE:

#	STA	STA
WL1:	10+00	- 10+50
WL1:	11+50	- 14+30
WL1:	30+00	- 31+70
WL1:	34+80	- 36+20
WL1:	37+50	- 41+50
WL1:	44+00	- 45+25
WL1:	46+25	- 47+25
WL1:	56+00	- 60+00
WL2:	10+00	- 15+18
WL3:	10+00	- 11+00
WL3:	13+50	- 14+09
WL4:	10+00	- 11+60
WL5:	10+00	- 14+55
WL6:	10+00	- 10+30
WL6:	12+40	- 12+80
WL6:	13+30	- 13+60
WL7:	10+00	- 15+70
WL7:	18+60	- 20+33
WL8:	10+00	- 15+30
WL9:	10+00	- 10+70
WL9:	13+50	- 14+50
WL10:	10+00	- 12+62
WL11:	10+00	- 10+61
WL13:	10+00	- 16+39
WL14:	10+00	- 13+18
WL16:	10+00	- 10+72

2. 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.

3. UNLESS OTHERWISE NOTED: PIPE FOR PROPOSED WATER MAINS 4" THRU 16" DIAMETER SHALL BE DUCTILE IRON, PC 350. PIPE FOR PROPOSED WATER MAINS 18" THRU 36" DIAMETER SHALL BE DUCTILE IRON, PC 250. PIPE FOR PROPOSED SANITARY SEWER WITH DEPTH OF COVER 3' - 22' SHALL BE VCP. ALL OTHER GRAVITY SEWER SHALL BE DUCTILE IRON, MINIMUM THICKNESS CLASS 50.

4. WATER LINE VALVES SHALL BE RESILIENT - SEAT GATE VALVES CONFORMING TO ANSI/AWWA C509 OR ANSI/AWWA C515, AND SHALL BE RATED FOR A MINIMUM WORKING PRESSURE OF 250 PSI.

5. THE INTERIOR OF PROPOSED SANITARY SEWER LINES <3' COVER OR >22' COVER SHALL BE LINED WITH A MINIMUM OF 40 MILS OF CORROSION - RESISTANT CERAMIC EPOXY COATING AS DESCRIBED IN THE UC PROJECT SPECIAL PROVISIONS. ALL BELLS AND SPIGOTS FOR SANITARY SEWER PIPE MUST BE LINED WITH A MINIMUM OF 8 MILS OF JOINT COMPOUND.

6. PROVIDE CONCRETE THRUST BLOCKS AT ALL WATER MAIN BENDS, TEES, AND CAP UNLESS OTHERWISE NOTED.

7. STABILIZATION STONE UNDER PIPING TO BE PLACED AS REQUIRED BY CITY INSPECTOR WHEN CONDITIONS WARRANT.

8. PRIOR TO REQUESTING A FINAL INSPECTION, THE CONTACTOR MUST SUBMIT RECORD DRAWINGS AND ENGINEER'S CERTIFICATION TO THE ENGINEERING DIVISIONS RECORD CENTER. THE OWNER MUST ALSO SUBMIT THE CONSTRUCTION CHECKLIST TO THE CITY INSPECTOR.

9. CONTACT UTILITIES FIELD OPERATIONS AT 336-462-2199 TO ARRANGE FOR CONSTRUCTION INSPECTION. A CITY INSPECTOR WILL APPROVE BACKFLOW PREVENTER TYPE, VAULT, EXACT LOCATION, AND INSPECTION REQUIREMENTS PRIOR TO INSTALLATION. A CITY INSPECTOR SHALL BE PRESENT WHEN MAKING OR TERMINATING WATER AND SEWER CONNECTIONS INTO NEW OR EXISTING WATER AND SEWER LINE.

10. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING THE ENGINEER WITH A SET OF SURVEY RECORD (AS-BUILT) DRAWINGS PREPARED BY A NORTH CAROLINA REGISTERED LAND SURVEYOR CERTIFYING THE ACCURACY OF THE SURVEY HORIZONTAL AND VERTICAL LOCATIONS TO ONE TENTH (.10) OF A FOOT, SURVEY SHALL BE TIED TO THE NORTH CAROLINA STATE PLANS COORDINATE SYSTEM (NAD83 FEET) HORIZONTALLY, AND ELEVATIONS SHALL BE NORTH AMERICAN VERTICAL DATUM (NAVD88). SURVEY POINT INFORMATION SHALL BE PROVIDED IN AN ELECTRONIC FORMAT FILE OR AN ASCII POINT TEXT FILE [X-Y COORDINATES].

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DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED