


UTILITY CONSTRUCTION

PROJECT REFERENCE NO. <i>BR-0160</i>	SHEET NO. UC-3
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UTILITY CONSTRUCTION
PLANS ONLY

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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 2018.
2. THE EXISTING UTILITIES BELONG TO BRUNSWICK COUNTY WATER AND SEWER.
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 ENVIRONMENTAL 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. 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.

PROJECT SPECIFIC NOTES:

1. WORK PERFORMED ON BRUNSWICK COUNTY UTILITIES WATER AND SEWER SYSTEMS SHALL CONFORM WITH THE 2018 NCDOT STANDARD SPECIFICATIONS AND THE ADDITIONAL REQUIREMENTS OF THE BRUNSWICK COUNTY ENGINEERING DESIGN MANUAL STANDARD SPECIFICATIONS AND GENERAL DETAILS (MAY 2020) THAT ARE PROVIDED IN THE FOLLOWING PLANS NOTES AND SPECIAL PROVISIONS.
2. ALL PROPOSED WATER & SEWER LINES SHALL BE PVC (C-900) PIPE FOR TRENCHED INSTALLATION AND HDPE (SDR-9) FOR TRENCHLESS. ALL FITTINGS SHALL BE DUCTILE IRON PRESSURE CLASS 311.
3. THE CONTRACTOR SHALL NOTIFY THE ENGINEER AND OWNER A MINIMUM OF 7 DAYS IN ADVANCE OF A PLANNED SERVICE INTERRUPTION. THE BRUNSWICK COUNTY POINT OF CONTACT TO SCHEDULE SERVICE INTERRUPTIONS IS BRENT LOCKAMY, DEPUTY DIRECTOR DESIGN AND CONSTRUCTION AT (910) 253-2460.
4. 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.
5. ALL FORCE MAINS SHALL BE SUCCESSFULLY HYDROSTATICALLY PRESSURE TESTED PER AWWA STANDARDS AT A PRESSURE OF ONE AND ONE-HALF TIMES THE RATED WORKING PRESSURE, BUT IN NO CASE SHALL THE TEST PRESSURE BE LESS THAN ONE HUNDRED FIFTY PSIG FOR A MINIMUM OF TWO HOURS. ALL FORCE MAIN PRESSURE TESTING SHALL BE WITNESSED AND APPROVED BY BOTH COUNTY STAFF AND THE ENGINEER. MINIMUM FORTY-EIGHT HOURS' NOTICE IS REQUIRED TO SCHEDULE A FORCE MAIN PRESSURE TEST WITH COUNTY STAFF. HORIZONTAL DIRECTIONAL DRILLS SHALL BE PRESSURE TESTED AS NOTED ON THE COUNTY HDD STANDARD DETAILS AND WILL BE TESTED A SECOND TIME AS PART OF THE OVERALL SYSTEM PRESSURE TEST ONCE THE HDD FORCE MAIN HAS BEEN CONNECTED TO THE INSTALLED FORCE MAIN SYSTEM WITH THE REQUIRED VALVES IN PLACE AT EACH END OF THE HDD.

6. REFERENCE THE CONNECTION OF THE NEW 8-INCH WATER MAIN AND THE EXISTING 8-INCH WATER MAIN ON UTILITIES PLAN SHEET UC-4 AND UC-5: THE CONNECTION SHALL BE MADE WITHIN A 4-HOUR PERIOD, AT NIGHT, ON A WEEKEND. THE CONNECTION WILL NOT BE ALLOWED DURING THE PEAK USAGE PERIOD FROM MEMORIAL DAY THROUGH LABOR DAY.
7. REFERENCE THE CONNECTION OF THE NEW 8-INCH FORCE MAIN AND THE EXISTING 8-INCH FORCE MAIN SHOWN ON UTILITIES PLAN SHEET UC-6 AND UC-7: THE EXISTING FORCE MAIN CONVEYS AN AVERAGE OF APPROXIMATELY 85,000 GALLONS PER DAY DURING THE NON -TOURIST SEASON. CONTRACTOR SHALL DEVELOP PUMP AROUND PLAN AND SUBMIT TO BRUNSWICK COUNTY PUBLIC UTILITIES AND NCDOT DIVISION 3 FOR APPROVAL NO LATER THAN JUNE 30TH, 2023. THE BRUNSWICK COUNTY POINT OF CONTACT FOR BYPASS OPERATION PLAN REVIEW IS BRENT LOCKAMY, DEPUTY DIRECTOR DESIGN AND CONSTRUCTION AT (910) 253-2460. THE NCDOT DIVISION 3 POINT OF CONTACT FOR BYPASS OPERATION PLAN REVIEW IS JOSHUA T. PRATT, PE, DIVISION RESIDENT ENGINEER AT (910) 398-9130.
8. TRACER WIRE, TRACER TAPE, AND RADIO MARKER BALLS ARE REQUIRED TO BE USED ON PROPOSED WATER AND SEWER LINES IN ACCORDANCE WITH THE BRUNSWICK COUNTY DESGIN MANUAL. TAPE SHALL BE THREE INCHES WIDE, BLUE IN COLOR, BEARING CONTINUOUS MESSAGE "CAUTION WATER(SEWER) LINE BURIED BELOW". TAPE SHALL BE MADE OF PLASTIC OR OTHER PERMANENT MATERIAL AND SHALL BE BURIED CONTINUOUSLY ABOVE THE WATER(SEWER) MAIN AT A DEPTH OF EIGHTEEN INCHES BELOW FINISHED GRADE. ALL WATER(SEWER) MAINS SHALL HAVE A #12 AWG, HIGH STRENGTH COPPER CLAD STEEL CONDUCTOR (HS-CCS) WITH HPDE INSULATION, AND RATED FOR DIRECT BURIAL. THE WIRE SHALL BE BROUGHT UP IN VALVE BOXES PER COUNTY STANDARD DETAIL.
9. REFERENCE THE RELOCATION OF THE WATER METERS SHOWN ON UTILITIES PLAN SHEET UC-5: CONTRACTOR SHALL MOVE EXISTING WATER METERS FROM THE EXISTING METER BOXES TO THE CORRESPONDING NEW METER BOXES. THE CONTRACTOR SHALL REMOVE THE OLD METER BOXES WHEN NO LONGER IN SERVICE.