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 2018 OR CAPE FEAR PUBLIC UTILITY AUTHORITY SPECIFICATIONS DATED 1/1/2021, WHICHEVER IS MORE STRINGENT.

2. THE EXISTING UTILITIES BELONG TO CAPE FEAR PUBLIC UTILITY AUTHORITY, CONTACT IS DAVID DAILEY AT (910)-332-6626.

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. 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. 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.

9. PROPOSED WATER LINE SHALL BE D.I. (DUCTILE IRON PIPE).

10. 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.

11. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR SITE SAFETY ASSOCIATED WITH THE WORK UNDER THIS PROJECT AND FOR COMPLIANCE WITH ALL FEDERAL, STATE, AND LOCAL HEALTH AND SAFETY LAWS, CODES, REGULATIONS, AND ORDINANCES INCLUDING BUT NOT LIMITED TO THOSE CURRENTLY MANDATED BY THE OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA).

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

13. STABILIZATION STONE UNDER PIPING TO BE PLACED AS REQUIRED BY CAPE FEAR PUBLIC UTILITY AUTHORITY INSPECTOR WHEN CONDITIONS WARRANT.

14. AS A MINIMUM REQUIREMENT, ALL GRADED AREAS NOT UNDER PAVEMENT AND WITHIN THE RIGHT-OF-WAY AND/OR EASEMENTS SHALL BE PREPARED, FERTILIZED AND LIMED, SEEDED, AND MULCHED IMMEDIATELY UPON COMPLETION OF CONSTRUCTION AS FOLLOWS (APPLICATION RATE PER 1,000 SQUARE FEET):

15. PRIOR TO REQUESTING A FINAL INSPECTION. THE CONTRACTOR MUST SUBMIT RECORD DRAWINGS AND ENGINEER'S CERTIFICATION TO THE ENGINEERING DIVISION'S RECORD CENTER. THE OWNER MUST ALSO SUBMIT THE CONSTRUCTION CHECKLIST TO THE CAPE FEAR PUBLIC UTILITY AUTHORITY INSPECTOR.

16. ALL WORK MUST CARRY A ONE-YEAR WARRANTY TO COVER ALL DEFECTS IN MATERIALS AND WORKMANSHIP.

17. A CAPE FEAR PUBLIC UTILITY AUTHORITY INSPECTOR SHALL BE PRESENT WHEN MAKING OR TERMINATING WATER AND SEWER CONNECTIONS INTO NEW OR EXISTING WATER AND SEWER LINES.

18. 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 IN 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 THERAFTER) IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS OR THE LOCAL CROSS-CONNECTION CONTROL PROGRAM, WHICHEVER IS MORE STRINGENT.

PROJECT SPECIFIC NOTES:

1. REMOVAL OF EXCAVATED MATERIALS AND DAILY CLEANUP OPERATIONS SHALL BE PERFORMED IN COMPLIANCE WITH THE SPECIFICATIONS AND TO THE SATISFACTION OF THE OWNER/ENGINEER, AND/OR NCDOT.

2. ALL DEBRIS SHALL BE REMOVED FROM THE

3. ALL TREE PROTECTION AND EROSION AND SEDIMENTATION CONTROLS SHALL BE IMPLEMENTED BEFORE CONSTRUCTION COMMENCES AND SHALL NOT BE REMOVED UNTIL RE-VEGETATION HAS BEEN ESTABLISHED.

4. ANY AGREEMENT BETWEEN THE CONTRACTOR AND PROPERTY OWNERS SHALL BE MADE IN WRITING AND COPIED TO THE OWNER.

5. 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 (0.10) OF A FOOT. SURVEY SHALL BE TIED TO THE NORTH CAROLINA STATE PLANE 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-Z COORDINATES].

THESE DRAWINGS SHALL AT A MINIMUM SHOW THE FINAL ELEVATIONS AND HORIZONTAL LOCATIONS FOR THE FOLLOWING:

ALL RELOCATIONS, INCLUDING VAULTS, BELOW GRADE FITTINGS, VALVES, WATER METERS AND BACKFLOW PREVENTION DEVICES ALONG THE WATER LINE ALIGNMENT CONTRACTOR SHALL PROVIDE THE ENGINEER WITH A LETTER CERTIFYING TO THEIR COMPLIANCE WITH THE CONTRACT DRAWINGS.

6. CONTRACTOR IS RESPONSIBLE FOR ALL CONSTRUCTION STAKING.

7. BORE PITS, TRENCHES AND ALL OTHER EXCAVATIONS WHERE SLOPE IS 1:1 OR STEEPER FROM EDGE OF ROADWAY MUST INCLUDE POSITIVE SHORING MEETING NCDOT AND OSHA REQUIREMENTS, ALL SHORING SYSTEMS MUST BE DESIGNED AND SEALED BY A REGISTERED PROFESSIONAL ENGINEER LICENSED IN NORTH CAROLINA.

8. NOT ALL TREES OR VEGETATION ARE SHOWN ON DRAWINGS. DO NOT REMOVE VEGETATION OUTSIDE LIMITS OF DISTURBANCE. ANY TREES SCARRED DURING CONSTRUCTION SHALL HAVE THE SCARS TRIMMED AND PAINTED WITH ASPHALT-BASE

9. BASE TOPOGRAPHIC SURVEY AND SUE SERVICES PROVIDED BY NCDOT.

10. BASE GEOTECHNICAL INVESTIGATION

SERVICES PROVIDED BY NCDOT.

11. RELOCATE ALL MAIL BOXES WITHIN LIMITS OF DISTURBANCE AS REQUIRED BY SECTION 107-11 OF THE NCDOT STANDARD SPECIFICATIONS FOR ROADS AND STRUCTURES. COORDINATE THIS WORK WITH THE U.S. POSTAL SERVICE.

12. REMOVE AND RESET FENCES AS NOTED ON THE PLANS AND/OR AS DIRECTED BY THE ENGINEER.

13. PROTECT ALL TREES AND SHRUBS OUTSIDE OF CUT/FILL LINES. IN ADDITION TO THOSE THAT RECEIVE TREE/SHRUB PROTECTION BARRIERS. THE CONTRACTOR IS ALSO REQUESTED TO SAVE OTHER EXISTING TREES AND SHRUBS AS DIRECTED BY THE ENGINEER. WHEN ROOT PRUNING IS NECESSARY, CUT ROOTS CLEANLY USING A DISC TRENCHER. ALL TREE PROTECTION AND EROSION AND SEDIMENTATION CONTROLS SHALL BE IMPLEMENTED BEFORE CONSTRUCTION COMMENCES AND SHALL NOT BE REMOVED UNTIL RE-VEGETATION HAS BEEN ESTABLISHED.

14. SAWCUT EXISTING ASPHALT AND/OR CONCRETE SURFACES PRIOR TO REMOVAL UNLESS OTHERWISE DIRECTED BY THE ENGINEER. SAW CUT WIDTH SHALL BE 1 FOOT MINIMUM FROM THE EXISTING EDGE OF PAVEMENT. SAW CUT PAVEMENT SHALL BE REPLACED AS WELL AS ADDITIONAL PAVEMENT REQUIRED TO TIE-IN TO FACE OF CURB AND GUTTER.

15. REPLACE ANY DISTURBED PAVEMENT FROM FINISHED GRADE TO THE SUB-GRADE. THE CONTRACTOR WILL CONSTRUCT THE BASE AND BINDER COURSES IN ACCORDANCE WITH THE TYPICAL PAVEMENT SECTION.THE CONTRACTOR SHALL PROVIDE TRANSITIONS (RAMPED ASPHALT) TO THE FINISH GRADE, TO PREVENT ABRUPT CHANGES IN THE RIDING SURFACE, IN CASE THE PLANTS ARE CLOSED AND ASPHALT IS UNAVAILABLE FOR THE FINAL SURFACE COURSE UNTIL LATE

WINTER/EARLY SPRING. CONTRACTOR SHALL

BE RESPONSIBLE FOR FINAL SURFACE COURSE.

16. TRAFFIC CONTROL SHALL BE IN ACCORDANCE WITH THE PLANS AND NOTES HEREIN, CAPE FEAR PUBLIC UTILITY AUTHORITY CRITERIA INCLUDING NCDOT STANDARDS, AND THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (MUTCD).

17. CONTRACTOR SHALL INCLUDE REPLACEMENT OF DRIVEWAYS IN THE LIMITS OF DISTURBANCE BACK TO EDGE OF RIGHT-OF-WAY.

18. CONTRACTOR SHALL USE ADEQUATE SHORING METHODS TO ENSURE: A. COMPLIANCE WITH OSHA REGULATIONS. B. PROTECTION OF EXISTING PAVEMENT AND ROAD SHOULDERS C. CONSTRUCTION ACTIVITIES ARE CONFINED TO RIGHTS-OF-WAY OR EASEMENTS AS INDICATED.

19. CONTRACTOR TO REPAIR/REPLACE ALL MAINTAINED PAVEMENT DAMAGED BY CONSTRUCTION ACTIVITIES TO SATISFACTION OF NCDOT AND CAPE FEAR PUBLIC UTILITY AUTHORITY.

20. THE CONTRACTOR SHALL RECONSTRUCT ALL ROAD SHOULDERS, DRAINAGE DITCHES AND SWALES DISTURBED BY CONSTRUCTION ACTIVITIES TO THEIR ORIGINAL GRADE AND LOCATION.

21. TRAFFIC CONTROL SHALL BE MAINTAINED IN ACCORDANCE WITH NCDOT SPECIFICATIONS AND REQUIREMENTS.

22. ALL HOLES, TRENCHES, AND OTHER HAZARDOUS AREAS SHALL BE ADEQUATELY PROTECTED BY BARRICADES, LIGHTS OR OTHER PROTECTIVE DEVICES.

23. TAKE PROPER PRECAUTIONS NOT TO DISTURB EXISTING PROPERTY CORNERS. ANY NECESSARY REMOVAL AND RESETTING OF PROPERTY IRONS SHALL BE DONE BY A REGISTERED LAND SURVEYOR LICENSED IN NORTH CAROLINA.

1. PRIOR TO CONSTRUCTION. NOTIFY ALL UTILITY OWNERS WHOSE FACILITIES MAY BE AFFECTED TO DETERMINE UTILITY LOCATIONS. THE CONTRACTOR SHALL PROTECT ALL UTILITIES FROM DAMAGE CAUSED BY HIS OPERATIONS OR THOSE OF HIS AGENTS. THE CONTRACTOR SHALL HOLD THE CAPE FEAR PUBLIC UTILITY AUTHORITY HARMLESS FOR ANY THIRD-PARTY INCONVENIENCE CREATED BY WORK OF HIS OWN FORCES OR THAT OF HIS AGENTS.

2. IN THE EVENT OF DAMAGE TO EXISTING UTILITIES, CONTRACTOR SHALL STOP WORK IMMEDIATELY, TAKE NECESSARY PRECAUTIONS TO PREVENT INJURY OR FURTHER DAMAGE. AND NOTIFY PROPER AUTHORITIES CONTRACTOR SHALL BE RESPONSIBLE FOR RESTORING/REPAIRING ALL EXISTING STRUCTURES, CONDUITS, OR OTHER UTILITIES DAMAGED BY CONTRACTOR'S OPERATIONS AT NO ADDITIONAL COST TO THE DEPARTMENT

FOR UTILITY LOCATE MEMBERS, CALL NORTH CAROLINA ONE-CALL (NC811) @ 1-800-632-4949. FOR LOCATES OF UTILITIES NOT MEMBERS OF NORTH CAROLINA ONE-CALL (NC811) CONTACT THE SPECIFIC

3. CONTRACTOR SHALL ANTICIPATE HAND DIGGING AROUND EXISTING WATER SERVICES, SANITARY SEWER LATERALS, AND OTHER UTILITIES.

UTILITY COMPANY DIRECTLY.

4. FOR EROSION CONTROL MEASURES, SEE EROSION CONTROL PLANS. SUBMITTED SEPARATELY.

5. FOR TRAFFIC CONTROL PLANS, SEE TRANSPORTATION MANAGEMENT PLANS. SUBMITTED SEPARATELY.

6. WATER DISTRIBUTION SHALL BE INSTALLED AT A MINIMUM OF 3' DEEP.

7. CONTRACTOR SHALL COORDINATE CONNECTIONS AND ANY WATER SERVICE SHUT DOWNS AND PROVIDE 24 HOURS OF NOTICE TO CAPE FEAR PUBLIC UTILITY AUTHORITY.

8. MAINTAIN SANITARY SEWER SERVICE AT ALL TIMES, ANY NECESSARY SERVICE INTERRUPTIONS SHALLBE PRECEEDED BY A 24 HOUR ADVANCE NOTICE TO CAPE FEAR PUBLIC UTILITY AUTHORITY.

9. PLUG ALL PIPE OPENINGS AND FILL ANY EXPOSED TRENCHES AT THE END OF THE DAY.

WATER AND SEWER

1. ALL MATERIAL AND CONSTRUCTION METHODS SHALL BE IN ACCORDANCE WITH CAPE FEAR PUBLIC UTILITY AUTHORITY, OR NCDOT DESIGN STANDARDS, DETAILS AND SPECIFICATIONS

2. UTILITY SEPARATION REQUIREMENTS:

a) A DISTANCE OF 100' SHALL BE MAINTAINED BETWEEN SANITARY SEWER AND ANY PRIVATE OR PUBLIC WATER SUPPLY SOURCE SUCH AS AN IMPOUNDED RESERVIOR USED AS A SOURCE OF DRINKING WATER. IF ADEQUATE LATERAL SEPERATION CANNOT BE ACHIEVED, FERROUS SANITARY SEWER PIPE SHALL BE SPECIFIED AND INSTALLED TO WATERLINE SPECIFICATIONS. HOWEVER, THE MINIMUM SEPERATION SHALL NOT BE LESS THAN 25' FROM A PRIVATE WELL OR 50' FROM A PUBLIC WELL.

b) WHEN INSTALLING WATER AND/OR SEWER MAINS, THE LATERAL SEPARATION BETWEEN UTILITIES SHALL BE 10'. IF THIS **EQUATION CANNOT BE MAINTAINED DUE TO** EXISTING CONDITIONS, THE VARIATION ALLOWED IS THE WATER MAIN IN A SEPERATE TRENCH WITH THE ELEVATION OF THE WATER MAIN AT LEAST 18" ABOVE THE TOP OF THE SEWER, OR IN THE SAME TRENCH ON A BENCH OF UNDISTURBED EARTH AND MUST BE APPROVED BY THE CAPE FEAR PUBLIC UTILITY AUTHORITY. ALL DISTANCES ARE MEASURED FROM OUTSIDE DIAMETER TO OUTSIDE DIAMETER.

c) WHERE IT IS IMPOSSIBLE TO OBTAIN PROPER SEPARATION, OR ANYTIME A SANITARY SEWER PASSES OVER A WATERMAIN, DIP MATERIALS OR STEEL ENCASEMENT EXTENDED 10' ON EACH SIDE OF CROSSING MUST BE SPECIFIED AND INSTALLED TO WATERLINE SPECIFICATIONS.

d) MAINTAIN 18" MIN. VERTICAL SEPARATION AT ALL WATER MAIN AND RCP STORM DRAIN CROSSINGS: MAINTAIN 24" MIN. VERTICAL SEPARATION AT ALL SANITARY SEWER AND RCP STORM DRAIN CROSSINGS. WHERE ADEQUATE SEPARATIONS CANNOT BE ACHIEVED, SPECIFY DIP MATERIALS AND A CONCRETE CRADLE HAVING 6" MIN. CLEARANCE.

e) ALL OTHER UNDERGROUND UTILITIES SHALL CROSS WATER AND SEWER FACILITIES WITH 18" MIN. VERTICAL SEPARATION REQUIRED.

3. ANY NECESSARY FIELD REVISIONS ARE SUBJECT TO REVIEW AND APPROVAL OF AN AMENDED PLAN AND/OR PROFILE BY CAPE FEAR PUBLIC UTILITY AUTHORITY PRIOR TO CONSTRUCTION.

4. CONTRACTOR SHALL MAINTAIN CONTINOUS WATER AND SEWER SERVICE TO EXISTING RESIDENCES, BUSINESSES THROUGHOUT CONSTRUCTION OF PROJECT . ANY NECESSARY SERVICE INTERRRUPTIONS SHALL BE PRECEDED BY A 24 HOUR ADVANCE NOTICE TO CAPE FEAR PUBLIC UTILITY AUTHORITY.

5. 3.0' MINIMUM COVER IS REQUIRED ON ALL WATER MAINS AND SEWER FORCE MAINS.

6. IT IS THE DEVELOPER'S RESPONSIBILITY TO ABANDON OR REMOVE EXISTING WATER AND SEWER SERVICES NOT BEING USED IN REDEVELOPMENT OF A SITE UNLESS OTHERWISE DIRECTED BY CAPE FEAR PUBLIC UTILITY AUTHORITY THIS INCLUDES ABANDONING TAP AT MAIN AND REMOVAL OF SERVICE FROM ROW OR ENCASEMENT.

7. INSTALL WATER SERVICE LINES WITH METERS LOCATED AT ROW - REFER TO CAPE FEAR PUBLIC UTILITY AUTHORITY STANDARD DETAILS AND/OR SPECIFICATIONS, NOTE: IT IS THE APPLICANT'S RESPONSIBILITY TO PROPERLY SIZE THE WATER SERVICE FOR EACH CONNECTION TO PROVIDE ADEQUATE FLOW AND PRESSURE.

WATER

1. CONTRACTOR SHALL ABANDON EXISTING WATER MAIN IN PLACE EXCEPT WHERE REMOVAL IS REQUIRED FOR PROPOSED WORK OR WHERE NOTED. WITHIN THE RIGHT-OF-WAY OF NCDOT MAINTAINED ROADS, CONTRACTOR SHALL FILL ABANDONED WATER MAINS WITH GROUT OR FLOWABLE FILL. ABANDON **EXISTING WATER MAINS PER NCDOT 2018** STANDARD SPECIFICATION SECTION 1530-3A

2. EXISTING WATER MAIN SHALL REMAIN IN SERVICE UNTIL PROPOSED WATER MAIN HAS BEEN TESTED, DISINFECTED AND APPROVED.

3. EXISTING WATER SERVICES AND FIRE HYDRANTS SHALL BE CONNECTED TO PROPOSED WATER MAIN AFTER PROPOSED WATER MAIN HAS BEEN TESTED, DISINFECTED AND APPROVED.

4. FOR ALL WATER SERVICES TO BE CONNECTED TO THE PROPOSED WATER MAIN, CONTRACTOR SHALL REPLACE ALL WATER SERVICE PIPING WHICH IS NOT TYPE K COPPER OR IS IN POOR CONDITION, AS DIRECTED BY THE ENGINEER. TO DETERMINE WATER SERVICE PIPING MATERIAL AND CONDITION, CONTRACTOR SHALL EXPOSE, IN THE PRESENCE OF THE ENGINEER. EACH WATER SERVICE AT THE TIE TO THE EXISTING MAIN, APPROXIMATELY TWO FEET FROM THE METER ON THE WATER MAIN SIDE AND APPROXIMATELY TWO FEET FROM THE METER BOXES ON THE SERVICE SIDE.

5. WATER VALVES ABANDONED IN PLACE SHALL BE ABANDONED IN THE CLOSED POSITION. ABANDON VALVES BY REMOVING VALVE BOX AND BACKFILLING WITH APPROVED MATERIAL.

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

7. FOR ALL WATER SERVICES DISTURBED BY CONSTRUCTION, IF THE WATER SERVICE IS ACTIVE. THEN RECONNECT: IF THE WATER SERVICE IS INACTIVE, THEN REMOVE. REMOVAL SHALL INCLUDE TURNING OFF CORPORATION COCK AT THE MAIN AND PHYSICALLY CUTTING THE PIPE AT THE MAIN.

LIST OF STANDARD DRAWINGS

WS-10 S-1 WS-4 WS-14 W-7 WS-13

PROJECT REFERENCE NO. SHEET NO. U-5710A UC-3 DESIGNED BY: MWW DRAWN BY: KSR CHECKED BY: SEAL APPROVED BY: 037518 REVISED: Matthew Watt NORTH CAROLINA 3 NGINEE DEPARTMENT OF HEW W. N. TRANSPORTATION ITILITIES ENGINEERING SEC. 4/21/2022 PLANS ONLY FAX:(919)250-4151 **UNLESS ALL SIGNATURES COMPLETED**

PHONE: (919)707-6690 UTILITY CONSTRUCTION **DOCUMENT NOT CONSIDERED FINAL**

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