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5/14/99

UTILITY CONSTRUCTION

PROJECT REFERENCE NO.	SHEET NO.
U-3621A	UC-3A

DESIGNED BY: GJB
DRAWN BY: GJB
CHECKED BY: KCZ
APPROVED BY: KCZ
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NORTH CAROLINA DEPARTMENT OF TRANSPORTATION

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Kevin C. Zolb
3/22/2017

UTILITY CONSTRUCTION PLANS ONLY

UTILITY CONSTRUCTION

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

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PROJECT SPECIFIC NOTES (CONTINUED):

16. ALL HYDRANTS, PROPOSED OR RELOCATED, SHALL BE INSTALLED 2 FEET BEHIND THE SIDEWALK, OR AS NOTED PER THE HYDRANT DETAIL, OR AS DIRECTED BY THE RESIDENT ENGINEER.

17. EXISTING WATER SERVICE LINES BETWEEN THE EXISTING WATER LINE AND THE REMOVED WATER METER SHALL BE ABANDONED IN PLACE OR REMOVED AS NEEDED AS PER SECTION 1530 OF THE NCDOT SPECIFICATIONS OR AS DIRECTED BY THE RESIDENT ENGINEER.

18. WATER SERVICE PIPE SHALL BE TYPE K SOFT COPPER CONFORMING TO ASTM B-88 OR CLASS 200 SP WATER SERVICE TUBING (C.T.S. - O.D.) MEETING THE REQUIREMENTS OF TYPE III, GRADE 3, CLASS C MATERIAL FOR POLYETHYLENE (PE) PLASTIC PIPE (SDR-PR), ASTM D-2239.

19. ALL WATER SERVICE FITTINGS, COMPRESSION JOINTS, END CONNECTORS, AND COUPLINGS SHALL BE IN ACCORDANCE WITH AWWA C800.

20. ALL WATER METER BOXES SHALL BE CAST IRON BODY WITH BITUMINOUS COATED, CAST IRON BASE, INNER BARREL, AND OUTER BARREL WITH 1-7/8" TOUCH-READ HOLE IN LID.

21. WATER METER BOXES SHALL NOT BE INSTALLED WITHIN PAVED OR SIDEWALK AREA UNLESS APPROVED BY UTILITY OWNER.

22. SANITARY GRAVITY SEWER PIPE SHALL BE EITHER PVC OR DUCTILE IRON PIPE.

23. ALL PVC SANITARY GRAVITY SEWER PIPE SHALL BE INSTALLED WITH A MINIMUM COVER OF FOUR (4) FEET. WHERE COVER IS LESS THAN FOUR (4) FEET, CONTRACTOR SHALL USE DUCTILE IRON PIPE UNLESS OTHERWISE DIRECTED BY THE UTILITY OWNER AND/OR THE RESIDENT ENGINEER.

24. PVC SANITARY GRAVITY SEWER PIPE 4-INCH TO 24-INCH SHALL ONLY BE USED ON DEPTHS OF COVER NOT TO EXCEED 22 FEET.

25. PVC PIPE SHALL HAVE PUSH-ON TYPE JOINTS CONFORMING TO ASTM D3212 OR D3139 WITH ELASTOMERIC GASKETS CONFORMING TO ASTM F477.

26. DUCTILE IRON PIPE FOR GRAVITY SEWER SHALL CONFORM TO AWWA C150 AND C151 WITH A MINIMUM PRESSURE CLASS OF 350 AND THICKNESS CLASS 50. PIPE SHALL BE BITUMINOUS COATED OUTSIDE AND CEMENT MORTAR LINED CONFORMING TO ANSI / AWWA STANDARD C104 / A21.4.

27. ALL SANITARY GRAVITY SEWER PIPE SHALL BE CONSTRUCTED IN A STRAIGHT LINE BETWEEN MANHOLES.

28. CONTRACTOR SHALL EMPLOY A PUMP AND HAUL METHOD TO BYPASS SECTIONS OF GRAVITY SEWER MAIN UNDER CONSTRUCTION. CONTRACOTR SHALL PUMP WASTE FROM A MANHOLE UPSTREAM OF THE CONSTRUCTION INTO A TANKER TRUCK AND REINTRODUCE THE WASTE BACK INTO THE SAME SYSTEM AT A MANHOLE DOWNSTREAM OF THE CONSTRUCTION. CONTRACTOR SHALL COORDINATE ALL ASPECTS OF THIS OPERATION WITH THE UTILITY OWNER PRIOR TO BEGINNING ANY SAID WORK. ALL TRANSPORTING OF WASTEWATER SHALL BE IN ACCORDANCE WITH THE RULES AND REGULATIONS OF NCDOT, THE LOCAL MUNICIPALITY, AND OTHER AGENCIES WITH JURISDICTION. CONTRACTOR IS RESPONSIBLE FOR OBTAINING ALL REQUIRED PERMITS ASSOCIATED WITH PROPOSED PUMP AND HAUL OPERATIONS.

PROJECT QUANTITIES

ITEM NUMBER	DESCRIPTION	QUANTITY	
5325600000-E	6" WATER LINE	32	LF
5325800000-E	8" WATER LINE	175	LF
5326600000-E	16" WATER LINE	763	LF
5329000000-E	DUCTILE IRON WATER PIPE FITTINGS	11,490	LBS
5546000000-E	8" VALVE	2	EA
5558600000-E	16" VALVE	1	EA
5571600000-E	6" TAPPING VALVE	1	EA
5648000000-N	RELOCATE WATER METER	28	EA
5649000000-N	RECONNECT WATER METER	19	EA
5666000000-N	FIRE HYDRANT	4	EA
5672000000-N	RELOCATE FIRE HYDRANT	5	EA
5691200000-E	6" SANITARY GRAVITY SEWER	94	LF
5691300000-E	8" SANITARY GRAVITY SEWER	472	LF
5768000000-E	SANITARY SEWER CLEAN-OUT	30	EA
5775000000-E	4' DIA UTILITY MANHOLE	5	EA
5781000000-E	UTILITY MANHOLE WALL, 4' DIA	30.2	LF
5800000000-E	ABANDON 6" UTILITY PIPE	27	LF
5801000000-E	ABANDON 8" UTILITY PIPE	675	LF
5810000000-E	ABANDON 16" UTILITY PIPE	693	LF
5816000000-N	ABANDON UTILITY MANHOLE	3	EA
5815000000-N	REMOVE WATER METER	8	EA
5815500000-N	REMOVE FIRE HYDRANT	4	EA
5817000000-N	REMOVE SANITARY SEWER CLEAN-OUT	8	EA
5828000000-N	REMOVE UTILITY MANHOLE	1	EA
5835700000-E	16" ENCASEMENT PIPE	90	LF
5871900000-E	TRENCHLESS INSTALLATION OF 16" IN SOIL	22	LF
5871910000-E	TRENCHLESS INSTALLATION OF 16" NOT IN SOIL	23	LF
5882000000-N	SPECIAL PAY ITEM: RELOCATE WATER VAULT	1	EA