

## UTILITY CONSTRUCTION

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. BURIED FORCEMAIN SHALL BE RESTRAINED** JOINT C900 PVC PIPE. THE AERIAL SUSPENDED PORTION OF THE FORCEMAIN SHALL BE RESTRAINED JOINT DIP. WATER PIPE SHALL BE RJ DIP.

2. CONSTRUCTION OF THE AERIAL SUSPENDED PORTION OF THE FORCEMAIN: EACH RJ PIPE SECTION SHALL BE PULLED DURING INSTALLATION IN ORDER TO FULLY EXTEND THE JOINT AND REMOVE SLACK. PIPE SHALL **BE HYDROSTATICALLY TESTED PRIOR TO** MAKING OFF-BRIDGE CONNECTIONS. FAILURE TO DO SO MAY RESULT IN DEFLECTION OF PIPE WHEN PRESSURE IS APPLIED. CONTRACTOR SHALL BE RESPONSIBLE FOR CORRECTING DEFLECTION.

**3. 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.

- 2. CONCRETE SHALL BE 4000 PSI AT 28 DAYS MINIMUM.

4. STANDARD JOINTS SHALL BE; SEALED WITH PUTTY TYPE PLASTIC CEMENT PER FED. SPEC. SS-C-153 OR AN O-RING TYPE JOINT CONFORMING TO THE LATEST REVISION OF ASTM-C443.

**REVISION OF ASTM-C923**.

6. INVERTS TO BE CONSTRUCTED OF A CONCRETE BENCH.

7. THE MAXIMUM SEPARATION OR INVERT IN TO INVERT OUT WITHIN A MANHOLE IS 0.50 FEET. WHEN THE SEPARATION IS GREATER THAN 0.5 FEET A DROP MANHOLE MUST BE USED.

8. MANHOLES GREATER THAN 18 FEET IN DEPTH SHALL HAVE AN INSIDE DIAMETER OR 5'-0". FOR SANITARY SEWER MAINS GREATER THAN EIGHTEEN INCHES (18") IN DIAMETER, MANHOLES SHALL BE A MINIMUM OF 5'-0" IN DIAMETER.

9. RIM ELEVATIONS SHALL BE AT GRADE IN STREETS & PARKING LOTS.

10. RIM ELEVATIONS ALONG OUTFALLS SHALL BE A MINIMUM OF 3' ABOVE EXISTING GROUND ELEVATION. IF THE OUTFALL IS LOCATED WITHIN THE FLOOD PLAIN, RIM ELEVATIONS SHALL BE 2' ABOVE THE 100-YEAR FLOOD ELEVATION (WHILE STILL MAINTAINING THE 3' ABOVE THE EXISTING GROUND ELEVATION MINIMUM REQUIREMENT). THE 100-YEAR FLOOD ELEVATION SHALL BE NOTED ON THE CONSTRUCTION DRAWINGS.

	PROJECT REFERENCE NO.			SHEET NO.
	B-5766			UC-3
	DESIGNED BY:	EMT		ANNI IIIII
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UTILITY CONSTRUCTION				
DOCUMENT NOT	CONSID	EREI	DF	-INAL
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## MANHOLE NOTES

ALL PRE CAST CONCRETE MANHOLES SHALL CONFORM TO THE LATEST REVISION OF ASTM C478.

3. STEEL REINFORCEMENT SHALL BE GRADE 40 BILLET STEEL CONFORMING TO THE LATEST REVISION OF ASTM-A-185 FOR WALL REINFORCEMENT, AND THE LATEST REVISION OF ASTM-A615 FOR THE BASE REINFORCEMENT.

5. MANHOLE INLETS AND OUTLETS SHALL BE CAST IN PLACE FLEXIBLE RUBBER SLEEVES BOOTS PER THE LATEST