SUMMARY OF WATER QUANTITIES

ITEM NO.	ITEM DESCRIPTION	UNIT	QUANTITY
500-3101	CLASS A CONCRETE (FOR THRUST RESTRAINTS)	CY	5
615-1100	DIRECTIONAL BORE - PVC C900, DR 14 CLASS 305, 10 IN	LF	200
670-1060	WATER MAIN, 6 IN, PVC	LF	10
670-1100	WATER MAIN, 10 IN, PVC	LF	2,370
670-1500	CAP OR REMOVE EXISTING WATER MAIN	EA	2
670-2060	GATE VALVE, 6 IN	EA	2
670-2100	GATE VALVE, 10 IN	EA	2
670-4000	FIRE HYDRANT	EA	2
670-9910	REMOVE EXIST WATER VALVE, INCL BOX	EA	4
670-9920	REMOVE EXIST FIRE HYDRANT	EA	2
(SEE NOTE A)	CONNECT TO EXIST WATER MAIN	EA	2
	PIPE DETECTION WIRE	LF	2,580
	10-INCH PVC 45° BEND, WITH THRUST RESTRAINT	EA	10
	10-INCH X 6-INCH PVC TEE, W/ THRUST RESTRAINT	EA	2
	6-INCH PVC 90° BEND, WITH THRUST RESTRAINT	EA	2

GENERAL CONSTRUCTION NOTES

1. LOCATIONS OF UNDERGROUND UTILITIES SHOWN ON THE PLANS ARE NOT GUARANTEED AS TO ACCURACY NOR COMPLETENESS. ALL UNDERGROUND UTILITIES THAT MAY BE AFFECTED BY THE WORK MUST BE ACCURATELY LOCATED PRIOR TO COMMENCING WORK. REQUEST FIELD LOCATIONS OF UNDERGROUND FACILITIES THROUGH THE UTILITY PROTECTION CENTER AND ANY UTILITY OWNERS THOUGHT TO HAVE FACILITIES IN THE AREA. FOR UTILITY MARKING, CALL 811 OF THE UTILITY PROTECTION CENTER, INC. AT LEAST 72 HOURS PRIOR TO BEGINNING EXCAVATION. MAINTAIN A MINIMUM 18-INCH SEPARATION BETWEEN THE PROPOSED PIPE LINE AND EXISTING UTILITIES.
2. ALL AREAS OF NEW UTILITIES INSTALLATION SHALL BE GRADED TO ENSURE POSITIVE DRAINAGE. CONTRACTOR TO MAINTAIN DITCHES AND OTHER DRAINAGE FEATURES.
3. CONTRACTOR IS RESPONSIBLE FOR PROPERLY DISPOSING OF ALL CONSTRUCTION DEBRIS.
4. ALL TRENCHES ARE TO BE CLOSED AT THE END OF EACH WORK DAY.
5. ANY FENCING, GUARDRAILS OR HIGHWAY SIGNAGE REMOVED DURING CONSTRUCTION MUST BE RESTORED TO ORIGINAL CONDITION AS SOON AS POSSIBLE AFTER PIPE INSTALLATION.
6. MAINTAIN A SUPERINTENDENT/FOREMAN ON THE PROJECT AT ALL TIMES DURING CONSTRUCTION WITH A THOROUGH KNOWLEDGE AND UNDERSTANDING OF THE CONTRACT DOCUMENTS.
7. THE CONTRACTOR WILL BE REQUIRED TO FURNISH GDOT AND HANCOCK COUNTY WITH CONSTRUCTION RECORD DRAWINGS OF THE RELOCATED UTI LITIES.
8. ALL EXISTING PIPELINES, 6-INCHES IN DIAMETER OR GREATER, THAT ARE SCHEDULED TO BE ABANDONED-IN-PLACE SHALL BE FILLED WITH FLOWABLE FILL AND CAPPED PER GDOT SPECIFICATIONS. ALL COSTS FOR ABANDONING-IN-PLACE SHALL BE INCLUDED IN UNIT PRICE FOR NEW REPLACEMENT OF WATER PIPELINE.
9. EROSION AND SEDIMENTATION CONTROL MEASURES AND PRACTICES MUST BE INSTALLED PRIOR TO OR CONCURRENT WITH ANY LAND DISTURBING ACTIVITIES. MAINTAIN EROSION AND SEDIMENTATION CONTROL FACILITIES AT ALL TIMES. SHOULD PROPOSED MEASURES BE DEEMED INADEQUATE BY ON-SITE INSPECTION, MODIFY AND INSTALL ADDITIONAL MEASURES AS NECESSARY.
10. ALL EROSION AND SEDIMENT CONTROL MEASURES WILL BE CHECKED DAILY AND DEFICIENCIES NOTED WILL BE CORRECTED BY THE END OF EACH DAY. ADDITIONAL EROSION AND SEDIMENT CONTROL MEASURES WILL BE INSTALLED IF DEEMED NECESSARY AFTER ON-SITE INSPECTION BY THE ISSUING AUTHORITY.

DEPARTMENT OF TRANSPORTATION NOTES

1. IT IS THE CONTRACTOR'S RESPONSIBILITY TO KEEP THE ROADS FREE OF DIRT AND DEBRIS AT ALL TIMES.
2. CONSTRUCTION EQUIPMENT SHALL NOT BE PARKED IN AREAS WHICH RESTRICT SIGHT DISTANCE.
3. CONTRACTOR SHALL MAINTAIN DRIVEWAY ACCESS AND POSTAL SERVICE THROUGHOUT THE DURATION OF THE PROJECT.
4. THE ROADWAY AND SHOULDERS SHALL BE SHORED PROPERLY DURING ANY TRENCHING ACTIVITY WITHIN RIGHT-OF-WAY. BACKFILLING OF ROADWAY AND SHOULDERS ARE TO MEET MINIMUM GDOT REQUIREMENTS FOR COMPACTION.
5. IT IS THE CONTRACTOR'S RESPONSIBILITY TO PROVIDE ALL TRAFFIC CONTROL DEVICES AND INSTALLATIONS IN ACCORDANCE WITH REQUIREMENTS OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES AND GEORGIA DEPARTMENT OF TRANSPORTATION.
6. CONTRACTOR SHALL COORDINATE WITH HANCOCK COUNTY 72-HOURS IN ADVANCE OF ANY LANE CLOSURES OR OTHER ACTIVITIES THAT DISRUPT TRAFFIC FLOW.

WATER LINE FACILITIES RELOCATION NOTES

A. CONNECTIONS TO EXISTING WATER MAINS, PIPE FITTINGS, & PIPE DETECTION WIRE ARE CONSIDERED INCIDENTAL TO WATER MAIN CONSTRUCTION & WILL NOT BE MEASURED FOR PAYMENT OR PAID FOR SEPARATELY, BUT SHALL BE INCLUDED IN THE BID PRICE FOR "WATER MAIN OF VARIOUS SIZES AND MATERIALS".

B. CONTRACTOR SHALL PROVIDE CONCRETE BLOCKING OR METAL TIE RODS, BANDS, & ACCESSOREIS (MECHANICAL JOINT RESTRAINT) AT ALL BENDS, FITTINGS, FIRE HYDRANTS, & OTHER LOCAITONS ACCORDING TO THE PLANS OR INDICATED BY THE PROJECT COORDINATOR.

C. EXISTING VALVES, VALVE BOXES, & FIRE HYDRANTS ENCOUNTERED ON LINES TO BE ABANDONED WITHIN THE PROJECT LIMITS SHALL BE REMOVED, SALVAGED, & DELIVERED TO THE OWNER'S DESIGNATED LOCATION. REMOVAL & SALVAGING OF VALVES, VALVE BOXES, & HYDRANTS SHALL BE INCLUDED IN UNIT PRICE OF "REMOVE EXIST WATER VALVE, INCL BOX" & "REMOVE EXIST FIRE HYDRANT". HYDRANT REMOVAL INCLUDES REMOVING THE BURIED BASE ELBOW FITTING.

D. WATER MAINS INSTALLED BY HORIZONTAL DIRECTIONAL DRILLING METHODS SHALL BE MEASURED AND PAID FOR AS PART OF BID ITEM 615-1100, FOR VARIOUS WATER MAIN TYPES, SIZES, AND MATERIALS. PAYMENT SHALL INCLUDE ALL MATERIALS AND INSTALLATION COSTS FOR HORIZONTAL DIRECTIONAL DRILL INSTALLATIONS.

E. PROVIDE PROPOSED WATER LINES WITH A MINIMUM COVER OF 48-INCHES BELOW FINAL GRADES, UNLESS INDICATED OTHERWISE. INCREASE DEPTH AT CONFLICTS WITH PROPOSED UTILITIES & STORM DRAINS TO PROVIDE MINIMUM SEPARATION OF 18-INCHES ABOVE OR BELOW STORM DRAIN OR UTILITY INVERT, WHILE MAINTAINING MIN. 48-INCH COVER BELOW FINAL GRADES. INSTALL WATER LINES A MINIMUM 18-INCHES ABOVE SANITARY SEWERS. MAXIMUM ALLOWABLE DEPTH OF COVER IS 6.5-FEET, UNLESS NOTED OTHERWISE.

F. BENDS INDICATED IN THE DRAWINGS ARE ESTIMATED ONLY. CONTRACTOR SHALL BE RESPONSIBLE FOR THE INSTALLATION OF BENDS & OTHER FITTINGS DEEMED NECESSARY TO AVOID CONFLICTS AND ADJUST WATER LINE DEPTH AS NECESSARY. CONTRACTOR SHALL NOT EXCEED MANUFACTURER'S MAXIMUM DEFLECTION ANGLE BETWEEN JOINTS.

G. CONTRACTOR SHALL PROVIDE LINE STOP FITTINGS AS INDICATED & NECESSARY WHEN CUTTING, PLUGGING, AND CONNECTING TO EXISTING WATER MAINS TO PREVENT SERVICE INTERRUPTIONS AND PRESSURE LOSS. PROVIDE 150 PSI RATED STAINLESS STEEL LINE STOP FITTINGS TO ACCOMPANY LINE PLUGS. LINE STOP FITTINGS ARE CONSIDERED INCIDENTAL, & SHALL BE PAID FOR AS PART OF THE BID PRICE FOR "CAP OR REMOVE EXISTING WATER MAIN".

H. ALL WATER MAINS SHALL BE BACKFILLED AND COMPACTED, PRESSURE TESTED, STERILIZED, PASS THE BACTERIA TEST, AND BE ACCEPTED BY THE COUNTY PRIOR TO TIE-IN. THE CONTRACTOR SHALL NOTIFY HANCOCK COUNTY'S WATER DEPARTMENT 72-HOURS IN ADVANCE OF ANY CUTTING, PLUGGING, AND CONNECTING TO EXISTING WATER MAINS. THE CONTRACTOR SHALL COORDINATE CONNECTIONS AND PLUGGING TO MINIMIZE SERVICE INTERRUPTIONS. CUTTING, PLUGGING, AND CONNECTING OPERATIONS MAY REQUIRE BEING DONE DURING EVENINGS OR ON WEEKENDS.

I. THE CONTRACTOR SHALL COORDINATE WITH HANCOCK COUNTY'S PROJECT COORDINATOR FOR ALL WATER FACILITY WORK: CURTIS WALKER, WATER DEPARTMENT DIRECTOR (PHONE: 706-444-5746)

J. DURING ALL TIMES OF CONSTRUCTION, CONTRACTOR IS TO HAVE ON HAND ALL MATERIALS AND EQUIPMENT NECESSARY TO COMPLETE A REPAIR OF ANY POTENTIAL AND/OR UNFORESEEN EXISTING WATER MAIN AND/OR SERVICE LINE BREAK.