

SUMMARY OF WATER QUANTITIES

ITEM NO.	ITEM DESCRIPTION	UNIT	QUANTITY
500-3101	CLASS A CONCRETE (FOR THRUST RESTRAINTS)	CY	3
610-1840	REMOVE ASBESTOS CEMENT PIPE	LF	705
615-1100	DIRECTIONAL BORE - PVC C900, DR 14 CLASS 305, 8 IN	LF	216
670-1060	WATER MAIN, 6 IN, DUCTILE	LF	10
670-1100	WATER MAIN, 8 IN, DUCTILE	LF	3,034
670-1500	CAP OR REMOVE EXISTING WATER MAIN	EA	2
670-2060	GATE VALVE, 6 IN	EA	2
670-2080	GATE VALVE, 8 IN	EA	2
670-4000	FIRE HYDRANT	EA	2
670-5010	WATER SERVICE LINE, 1 IN, PE	LF	10
670-5620	WATER SERVICE LINE, 3/4 IN, PE	LF	50
670-5620	WATER SERVICE LINE, 3/4 IN, COPPER	LF	10
670-8310	DBL STRAP SADDLE, 8 IN X 3/4 IN	EA	4
670-8320	DBL STRAP SADDLE, 8 IN X 1 IN	EA	1
670-9730	RELOCATE EXIST WATER METER, INCL BOX	EA	5
(SEE NOTE A)	SERVICE CONNECTION ASSEMBLY	EA	5
(SEE NOTE B)	INSTALL NEW WATER METER	EA	5
(SEE NOTE C)	CONNECT TO EXISTING WATER MAIN	EA	2
	NON-METALLIC WARNING TAPE	LF	3,044
	PIPE DETECTION WIRE	LF	216
	8-INCH DIP 11.25° BEND, WITH THRUST RESTRAINT	EA	1
	8-INCH DIP 45° BEND, WITH THRUST RESTRAINT	EA	10
	8-INCH BY 6-INCH DIP TEE, WITH THRUST RESTRAINT	EA	2
6-INCH DIP 90° BEND, WITH THRUST RESTRAINT	EA	2	

WATER LINE FACILITIES RELOCATION NOTES

- A. SERVICE CONNECTION ASSEMBLIES SHALL BE PROVIDED FOR ALL NEW SERVICE LINE CONNECTIONS TO EXIST. SERVICE LINES & SHALL BE LOCATED ACCORDING TO THE PLANS & PROJECT COORDINATOR. EXIST. SERVICE LINES SHALL BE REPLACED WITH NEW MATERIALS FROM THE WATER MAIN TO EXIST. OR NEW WATER METER, INCLUDING DOUBLE STRAP SERVICE SADDLE (SEPARATE PAY ITEM), SERVICE LINE (MATERIAL & SIZE INDICATED ON PLANS), CORPORATION STOP, ADAPTER FITTINGS AS REQUIRED, CURB STOP, & WATER METER BOX (IF WATER METER IS PROVIDED). SERVICE CONNECTION ASSEMBLIES ARE CONSIDERED INCIDENTAL TO SERVICE LINE CONSTRUCTION & WILL NOT BE MEASURED FOR PAYMENT OR PAID FOR SEPARATELY. ALL MATERIALS EXCEPT DOUBLE STRAP SERVICE SADDLE & WATER METER BOX SHALL BE INCLUDED IN THE UNIT PRICE OF "WATER SERVICE LINE OF VARIOUS SIZES & MATERIALS" (L.F.).
- B. REMOVAL OF EXIST. WATER METERS & METER BOXES & RE-INSTALLATION OR INSTALLATION OF NEW WATER METERS & METER BOXES ARE CONSIDERED INCIDENTAL TO SERVICE LINE CONSTRUCTION & METER RELOCATIONS & WILL NOT BE MEASURED FOR PAYMENT OR PAID FOR SEPARATELY, BUT SHALL BE INCLUDED IN THE BID PRICE FOR "RELOCATE EXIST WATER METER, INCL BOX". NEW WATER METERS SHALL BE FURNISHED BY THE CITY OF SPARTA TO REPLACE INOPERABLE OR DAMAGED METERS & AS DETERMINED NECESSARY FOR SERVICE CONNECTION ASSEMBLIES. CONTRACTOR SHALL PROVIDE NEW METER BOXES & COORDINATE DELIVERY OF WATER METERS TO CORRESPOND WITH CONSTRUCTION OPERATIONS TO MINIMIZE SERVICE INTERRUPTIONS.
- C. CONNECTIONS TO EXISTING WATER MAINS, PIPE FITTINGS, WARNING TAPE, & 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".
- D. CONTRACTOR SHALL PROVIDE CONCRETE BLOCKING OR METAL TIE RODS, BANDS, & ACCESSORIES (MECHANICAL JOINT RESTRAINT) AT ALL BENDS, FITTINGS, FIRE HYDRANTS, & OTHER LOCATIONS ACCORDING TO THE PLANS OR INDICATED BY THE PROJECT COORDINATOR.
- E. WATER MAINS INSTALLED BY HORIZONTAL DIRECTIONAL DRILLING METHODS SHALL BE MEASURED & PAID FOR AS PART OF BID ITEM 615-1100, FOR VARIOUS WATER MAIN TYPES, SIZES, & MATERIALS. PAYMENT SHALL INCLUDE ALL MATERIAL & INSTALLATION COSTS.
- F. PROVIDE WATER LINES WITH A MIN. 48-INCHES COVER TO MAX. 78-INCHES COVER BELOW FINAL GRADES, UNLESS INDICATED OTHERWISE. INCREASE DEPTH AT CONFLICTS WITH PROPOSED & EXIST. UTILITIES & STORM DRAINS TO PROVIDE MIN. 18-INCHES SEPARATION, WHILE MAINTAINING MIN. 48-INCH COVER. INSTALL WATER LINES MIN. 18-INCHES ABOVE SANITARY SEWERS.
- G. BENDS INDICATED IN THE DRAWINGS ARE ESTIMATED ONLY. CONTRACTOR SHALL BE RESPONSIBLE FOR INSTALLATION OF BENDS & OTHER FITTINGS DEEMED NECESSARY TO AVOID CONFLICTS & ADJUST WATER LINE DEPTH AS NECESSARY. CONTRACTOR SHALL NOT EXCEED MANUFACTURER'S MAXIMUM DEFLECTION ANGLE BETWEEN JOINTS.
- H. CONTRACTOR SHALL PROVIDE LINE STOP FITTINGS AS INDICATED & NECESSARY WHEN CUTTING, PLUGGING, & CONNECTING TO EXISTING WATER MAINS TO PREVENT SERVICE INTERRUPTIONS & PRESSURE LOSS. LINE STOP FITTINGS ARE CONSIDERED INCIDENTAL, & SHALL BE PAID FOR AS PART OF THE BID PRICE FOR "CAP OR REMOVE EXISTING WATER MAIN".
- I. CONTRACTOR SHALL MAKE SERVICE TAP ON NEW WATER MAIN & EXTEND SERVICE LINE TO TERMINATE EITHER IMMEDIATELY ADJACENT TO THE EXIST. METER BOX OR TO REQUIRED RIGHT-OF-WAY & PARALLEL TO THE EXIST. SERVICE LINE, AS DIRECTED BY THE CITY OF SPARTA. CONTRACTOR SHALL ALSO COORDINATE WITH THE CITY & PROVIDE SERVICE CONNECTION ASSEMBLIES FOR PROPERTIES WHICH DO NOT CURRENTLY HAVE WATER METER BOXES ALONG THE RIGHT-OF-WAY & IN FRONT OF INDIVIDUAL PROPERTIES.
- J. ALL WATER MAINS & SERVICE LINES SHALL BE BACKFILLED & COMPACTED, PRESSURE TESTED, STERILIZED, PASS THE BACTERIA TEST, & BE ACCEPTED BY THE CITY PRIOR TO TIE-IN. CUSTOMER TIE-INS REQUIRE 72-HOURS ADVANCED NOTIFICATION OF SERVICE INTERRUPTIONS. TIE-INS MAY REQUIRE BEING DONE DURING EVENINGS OR ON WEEKENDS.
- K. FOR CUSTOMER TIE-INS WHERE THE NEW SERVICE LINE WAS EXTENDED TO THE EXISTING METER BOX, NEW METER BOX, OR TO THE REQUIRED RIGHT-OF-WAY, THE CONTRACTOR SHALL SHUT-OFF THE EXISTING SUPPLY TO THE EXISTING METER, THE METER & METER BOX MAY THEN BE REMOVED, SERVICE LINES SHALL BE INSTALLED & ADJUSTED AS REQUIRED TO FINAL GRADE, & EXISTING SERVICE LINES SHALL BE CONNECTED TO NEW SERVICE LINES WITHIN NEW METER BOX. THE CONTRACTOR SHALL PROVIDE ALL COUPLINGS, FITTINGS, AND ADAPTORS NECESSARY TO TRANSITION TO VARIOUS EXISTING SERVICE LINE MATERIALS THAT MAY BE ENCOUNTERED.
- L. THE CONTRACTOR SHALL COORDINATE WITH THE CITY OF SPARTA'S PROJECT COORDINATOR FOR ALL WATER FACILITY WORK: CHRISTOPHER EDWARDS, PUBLIC WORKS SUPERINTENDENT (PHONE: 478-223-1790)
- M. DURING ALL TIMES OF CONSTRUCTION, CONTRACTOR IS TO HAVE ON HAND ALL MATERIALS & EQUIPMENT NECESSARY TO COMPLETE A REPAIR OF ANY POTENTIAL AND/OR UNFORESEEN EXIST. WATER MAIN AND/OR SERVICE LINE BREAK. MAINTAIN A SUPERINTENDENT ON THE PROJECT AT ALL TIMES DURING CONSTRUCTION WITH A THOROUGH KNOWLEDGE & UNDERSTANDING OF THE CONTRACT DOCUMENTS.
- N. ROAD & SHOULDERS SHALL BE SHORED PROPERLY DURING TRENCHING ACTIVITIES WITHIN RIGHT-OF-WAY. BACKFILLING OF ROAD & SHOULDERS SHALL MEET MIN. GDOT REQUIREMENTS FOR COMPACTION. TRENCHES ARE TO BE CLOSED AT THE END OF EACH WORK DAY.
- O. CONTRACTOR SHALL FURNISH GDOT & THE CITY OF SPARTA WITH CONSTRUCTION RECORD DRAWINGS OF RELOCATED UTILITIES.
- P. 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.
- Q. CONTRACTOR IS RESPONSIBLE FOR PROPERLY DISPOSING OF ALL CONSTRUCTION DEBRIS. CONTRACTOR SHALL KEEP ROADS FREE OF DIRT & DEBRIS AT ALL TIMES. CONSTRUCTION EQUIPMENT SHALL NOT BE PARKED IN AREAS WHICH RESTRICT SIGHT DISTANCE.

GENERAL CONSTRUCTION AND DEPARTMENT OF TRANSPORTATION 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. ANY FENCING, GUARDRAILS OR HIGHWAY SIGNAGE REMOVED DURING CONSTRUCTION MUST BE RESTORED TO ORIGINAL CONDITION AS SOON AS POSSIBLE AFTER PIPE INSTALLATION.
3. 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.
4. 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.
5. CONTRACTOR IS RESPONSIBLE FOR PROVIDING ALL TRAFFIC CONTROL DEVICES & INSTALLATIONS IN ACCORDANCE WITH REQUIREMENTS OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES & GDOT.
6. CONTRACTOR SHALL COORDINATE WITH THE CITY OF SPARTA 72-HOURS IN ADVANCE OF ANY LANE CLOSURES OR OTHER ACTIVITIES THAT DISRUPT TRAFFIC FLOW.
7. CONTRACTOR SHALL MAINTAIN DRIVEWAY ACCESS & POSTAL SERVICE THROUGHOUT PROJECT DURATION.
8. MAINTAIN DITCHES, DRAINAGE FEATURES, & GRADE DISTURBED AREAS TO ENSURE POSITIVE DRAINAGE.

REVISIONS

REVISIONS

REVISIONS

GEORGIA
DEPARTMENT
OF
TRANSPORTATION



ENGINEERS SURVEYORS
PLANNERS
2750 PREMIERE PARKWAY
SUITE 500
DULUTH, GEORGIA 30087
PHONE (678) 417-4000
FAX (678) 417-4055
www.keckwood.com

REVISION DATES

NO.	DATE	DESCRIPTION

STATE OF GEORGIA
DEPARTMENT OF TRANSPORTATION
OFFICE: DISTRICT 2 DESIGN - TENNILLE
WATER RELOCATION PLANS

NOTES AND SUMMARY OF
QUANTITIES

DRAWING No
44-003