

ITEM SPECIAL -WATER MAIN AND SERVICE BRANCHES (CONT'D)

H. BASIS OF PAYMENT - THE ACCEPTED QUANTITIES OF WATER MAINS AND APPURTENANCES WILL BE PAID FOR AT THE CONTRACT PRICE DESIGNATED FOR EACH OF THE PAY ITEMS LISTED BELOW AND INCLUDES IN THE PROPOSAL. THE PRICES SHALL BE FULL COMPENSATION FOR ALL MATERIALS INCLUDING EXCAVATION, BACKFILL, DISPOSAL OF SURPLUS MATERIALS, REINFORCING STEEL WHERE SPECIFIED AND FOR OTHER INCIDENTALS NECESSARY FOR THE COMPLETION OF THE ITEMS.

I. QUANTITIES - THE FOLLOWING ESTIMATED QUANTITIES ARE INCLUDED IN THE GENERAL SUMMARY TO BE USED AS SHOWN ON THE DETAILED DRAWINGS AND AS DIRECTED BY THE ENGINEER.

J. WATER MAIN MUST BE STAKED OUT BY A PROFESSIONAL SURVEYOR AND CUT SHEETS UTILIZED. NEW AND RELOCATED SERVICE LINES MUST HAVE A MINIMUM 5'-0" COVER AND PROVIDE MINIMUM 18" INCHES VERTICAL SEPARATION FROM ALL STORM/SANITARY SEWERS, GAS LINES AND OTHER WATERLINES. PROVIDE CONCRETE CRADLES WHERE THE 18" INCH VERTICAL SEPARATION CAN NOT BE PROVIDED TO A POINT 5' FEET EITHER SIDE OF CROSSING.

K. THE CONTRACTOR SHALL NOTIFY THE LAKE COUNTY DEPARTMENT OF UTILITIES AT THE FOLLOWING LOCATION AT LEAST THREE (3) WORKING DAYS PRIOR TO THE START OF THE WATER MAIN RELOCATION WORK:

LAKE COUNTY DEPARTMENT OF UTILITIES
LAKE COUNTY ADMINISTRATION CENTER
105 MAIN STREET
PAINESVILLE, OHIO 44077
(440) 350-2652

L. CONNECTION SEQUENCE OF CONSTRUCTION SHALL BE SUBMITTED TO LAKE COUNTY UTILITY FOR APPROVAL BY THE CONTRACTOR. THE WATER MAIN SHALL BE COMPLETELY LAID, TESTED AND ACCEPTED BEFORE ANY BRANCH CONNECTIONS AND/OR INTERRUPTIONS IN SERVICE OCCUR.

SERVICE INTERRUPTIONS SHALL BE KEPT TO A MINIMUM FOR WATER MAIN CONNECTIONS. FOR PROJECT CONSTRUCTION RESTRICTION LIST, SEE MAINTENANCE OF TRAFFIC NOTES.

THE EXISTING WATER SERVICE MAY BE TAKEN OFF SERVICE FOR TWO (2) HOURS MAXIMUM, COORDINATED WITH LAKE COUNTY. IF THE EXISTING WATER SERVICE MUST BE TAKEN OFF LINE FOR GREATER THAN TWO (2) HOURS WITHOUT THE PROPOSED WATER MAIN BEING OPERATIONAL, THE CONTRACTOR SHALL PROVIDE TEMPORARY WATER SERVICE USING CERTAIN TEED YELOMINE OR APPROVED EQUAL. SUBMIT PLAN TO ENGINEER. THE PERMANENT WATER MAIN SHALL BE MADE OPERATIONAL WITHIN TWELVE (12) HOURS AFTER EXISTING WATER MAIN IS SHUT DOWN. THE COST SHALL BE INCLUDED IN THE UNIT BID FOR WATER MAIN INSTALLATION.

ALL WATER SERVICE CONNECTIONS WHICH ARE BROKEN BY THE CONTRACTOR SHALL BE REPAIRED

BY THE LAKE COUNTY WATER DEPARTMENT OR THE CONTRACTOR, ALL AT THE CONTRACTOR'S EXPENSE. ALL RECONNECTED WATER SERVICE CONNECTIONS SHALL BE TAPPED INTO THE NEW WATER MAIN AND DOCUMENTED AS SUCH. ALL NEW SERVICE CONNECTIONS SHALL BE MINIMUM 3/4" TYPE K COPPER, REGARDLESS OF THE BROKEN SERVICE CONNECTION MATERIAL. ALL EXISTING WATER SERVICE CONNECTIONS SHALL BE REPLACED WITH NEW TYPE K COOPER FROM PROPOSED MAIN TO CURB BOX OR OUTSIDE WATER METER.

M. HYDRANTS DESIGNATED FOR REMOVAL SHALL BE REMOVED UNDER LAKE COUNTY WATER DEPARTMENT SUPERVISION. SPECIAL CARE IN REMOVAL AND HANDLING OF EXISTING HYDRANTS SHALL BE MAINTAINED AT ALL TIMES AND REMOVAL OF EXISTING HYDRANTS SHALL BE DONE BY EXCAVATION OF HYDRANT ASSEMBLY ONLY. ALL REMOVED HYDRANTS SHALL BECOME THE PROPERTY OF THE LAKE COUNTY WATER DEPARTMENT. REMOVED HYDRANTS ARE TO BE STORED ON JOB SITE FOR PICK UP BY THE LAKE COUNTY WATER DEPARTMENT. THE EXISTING HYDRANTS AND WATER MAIN SHALL NOT BE TAKEN OUT OF SERVICE UNTIL ALL THE PROPOSED HYDRANTS AND WATER MAIN FOR A GIVEN STREET ARE OPERATIONAL.

CONTRACTOR SHALL SUBMIT FOR APPROVAL TO LAKE COUNTY DEPARTMENT OF UTILITIES MEANS AND METHOD TO RESTRAIN EXISTING HYDRANTS DURING INSTALLATION OF PROPOSED WATER MAIN PRIOR TO EXCAVATION.

EXCAVATION, BACKFILL AND COMPACTION

ALL EXCAVATION WILL BE CONSIDERED UNCLASSIFIED, NO COMPENSATION WILL BE ALLOWED THE CONTRACTOR FOR ROCK OR SHALE EXCAVATION.

ALL BACKFILL WILL BE AS DESCRIBED IN SPECIFICATION SECTION 02234 "COMPACTED BACKFILL", USING MACHINE MOUNTED COMPACTION EQUIPMENT TO MEET THE COMPACTION REQUIREMENT OF 100% OF MAXIMUM LABORATORY DRY DENSITY PER ASTM D 698.

THE OWNER AND THE ENGINEER DO NOT GUARANTEE NOR SUGGEST THE IN-SITU MATERIAL TO BE EXCAVATED WILL BE SUITABLE OR IN ITS PRESENT STATE WILL CONSIST OF THE PROPER MOISTURE CONTENT TO ACHIEVE THE COMPACTION REQUIREMENTS. THE CONTRACTOR SHALL MAKE HIS OWN DETERMINATION AS TO THE BACKFILL MATERIAL HE WILL USE. UPON REQUEST, THE OWNER WILL PROVIDE ACCESS TO THE SITE FOR THE CONTRACTOR TO CONDUCT SUCH INVESTIGATION AND TESTS DEEMED NECESSARY TO MAKE HIS DETERMINATION. NO EXTRA PAYMENT WILL BE MADE TO DISPOSE OF UNSUITABLE MATERIAL, OR FURNISH AND PLACE SUITABLE MATERIAL MEETING THE REQUIREMENTS OF SECTION 02234 "COMPACTED BACKFILL".

BACKFILLING OF ANY TRENCHES OR EXCAVATIONS WILL NOT BE PERMITTED WITHOUT MACHINE MOUNTED COMPACTION EQUIPMENT BEING USED.

SLAG PRODUCTS WILL NOT BE PERMITTED FOR BEDDING, BACKFILL, OR TRAFFIC COMPACTED SURFACE.

ALL UTILITY LINES CROSSING THE NEW WATERLINE TRENCH. (i.e. STORM SEWERS, STORM LATERALS, SANITARY SEWERS, SANITARY LATERALS, WATER MAINS, WATER SERVICE CONNECTIONS, GAS MAINS, GAS SERVICE CONNECTIONS, UNDERGROUND OCT CONDUITS, CABLE T.V. LINES) SHALL BE PROTECTED AND SUPPORTED WITH HARDWOOD PLANKS OR REMOVED AND REPLACED, RECONNECTED AND SUPPORTED ACROSS THE ENTIRE WIDTH OF THE TRENCH. NO ADDITIONAL COMPENSATION WILL BE PAID FOR THE ABOVE WORK UNLESS ANY OF THE ABOVE UTILITIES ARE ENCOUNTERED AND NOT SHOWN ON THE DRAWINGS.

WATER WORKS

EACH PROPOSAL MUST BE ACCOMPANIED BY A COPY OF THE BIDDERS CURRENT SEWER/WATER BUILDERS LICENSE WHICH HAS BEEN ISSUED BY THE LAKE COUNTY DEPARTMENT OF UTILITIES

WATER MAINS WITHIN THE PROJECT AREA BELONG TO THE LAKE COUNTY DEPARTMENT OF UTILITIES AND FALL UNDER THE CONTROL OF THEIR WATER DEPARTMENT. ANY AND ALL CONSTRUCTION OF WATER MAIN FACILITIES REQUIRED BY THIS PROJECT IS TO BE GOVERNED BY THE DRAWINGS AND SPECIFICATIONS FOR THIS JOB WHICH, IN THE EVENT OF A DISCREPANCY, SUPERSEDE THE LAKE COUNTY STANDARD WATERLINE SPECIFICATIONS.

THE CONTRACTOR WILL SCHEDULE WITH THE LAKE COUNTY WATER DEPARTMENT, AT LEAST FORTY-EIGHT (48) HOURS IN ADVANCE OF ANY WORK ON THEIR SYSTEMS.

ALL SHOP DRAWINGS SHALL BE SUBMITTED TO THE ENGINEER FOR PRELIMINARY CHECKING. THE ENGINEER SHALL FORWARD CHECKED SHOP DRAWINGS TO THE LAKE COUNTY WATER DEPARTMENT FOR FINAL CHECKING AND APPROVAL.

A REPRESENTATIVE OF THE LAKE COUNTY DEPARTMENT OF UTILITIES SHALL BE PRESENT AT ALL TIMES FOR INSTALLATION AND TESTING OF ANY WATERLINE ITEMS. THE VARIOUS WATERLINE PAY ITEMS SHALL INCLUDE INSPECTION COSTS TO THE LAKE COUNTY DEPARTMENT OF UTILITIES AT THEIR CURRENT RATE AND OVERTIME RATE. PRIOR TO ANY WATERLINE WORK, THE CONTRACTOR SHALL POST A DEPOSIT WITH THE LAKE COUNTY DEPARTMENT OF UTILITIES FOR THE ESTIMATED INSPECTION COST BASED ON NUMBER OF DAYS AND HOURS TO BE WORKED.

ALL WATER MAINS ON THIS PROJECT WILL BE LAID AT THE ELEVATIONS AND GRADES SHOWN ON THE DRAWINGS.

ALL WATER MAIN PIPE WILL BE DUCTILE IRON PIPE, ANSI A21.51, THICKNESS CLASS 53, WITH PUSH-ON JOINTS, CEMENT LINED ANSI A21.4. ALL FITTINGS WILL BE DUCTILE IRON MECHANICAL JOINTS ANSI 21.11 UNLESS OTHERWISE SHOWN ON THE PLANS. ALL DUCTILE IRON FITTINGS SHALL BE STANDARD FULL BODY LENGTH.

ALL FITTINGS, INCLUDING BENDS, TEES OFFSETS, REDUCERS, AND PLUGS WILL BE RESTRAINED WITH MEGALUG SERIES 1100 MECHANICAL JOINT RESTRAINS OR APPROVED EQUAL. ALL PIPE JOINTS WITHIN THE RESTRAINING DISTANCES SHOWN ON THE PLANS WILL BE MECHANICAL JOINT ANSI A21.11 AND WILL BE RESTRAINED IN THE SAME MANNER. THRUST BLOCKS WILL NOT BE PERMITTED. ALL BOLTS UTILIZED ON WATER MAIN IMPROVEMENTS WILL HAVE THREADED, 14-OUNCE ZINC ANODE CAPS. COST OF FURNISHING AND PLACING ZINC ANODE CAPS WILL BE INCLUDED IN THE UNIT BID PRICES FOR OTHER WATER MAIN ITEMS OF WORK.

ALL WATER SERVICE CONNECTIONS WHICH ARE BROKEN BY THE CONTRACTOR WILL BE REPAIRED BY THE LAKE COUNTY - WATER DEPARTMENT OR THE CONTRACTOR, ALL AT THE CONTRACTOR'S EXPENSE. THE DUCTILE IRON PIPE, FITTING AND APPURTENANCES BURIED UNDERGROUND, SHALL BE ENCASED WITH 8 MIL POLYETHYLENE FILM CONFORMING TO AWWA C105, METHOD B, UNLESS OTHERWISE NOTED. THE LAKE COUNTY WATER DEPARTMENT SHALL PROVIDE WATER FOR FILLING THE NEW WATER MAIN WITHOUT COST TO THE CONTRACTOR FOR THE INITIAL FILLING OPERATION. ALL WATER FOR ANY FLUSHING OPERATIONS WILL BE PAID FOR BY THE CONTRACTOR AT LAKE COUNTY'S CURRENT RATE FOR WATER USED.

AFTER SATISFACTORY HYDROSTATIC TESTING, THE COMPLETED WATER WORK SHALL BE DISINFECTED IN ACCORDANCE WITH AWWA C 651. LOCATION OF STERILIZATION AND TESTING CONNECTIONS AT VALVES SHALL BE AS DIRECTED BY THE LAKE COUNTY WATER DEPARTMENT AND ALL COSTS ASSOCIATED WITH PLACING AND UTILIZING SAID STERILIZATION AND TESTING CONNECTIONS WILL BE INCLUDED IN THE PRICE BID PER LINEAL FOOT OF THE WATER MAINS.

THE PROPOSED WATER MAIN WILL HAVE 5'-0" MINIMUM COVER OR COVER AS INDICATED ON THE PLANS OVER THE TOP OF PIPE AT ALL PLACES, UNLESS OTHERWISE SPECIFICALLY SHOWN ON THE PLANS. ALL VALVE BOXES, ETC. WILL BE SET AS SHOWN ON THE PLANS. RIMS WILL BE RAISED OR LOWERED AND BOXES PLUMBED BY THE CONTRACTOR AS REQUIRED PRIOR TO PAVEMENT REPLACEMENT. ALL VALVES SHALL BE OPERATED BY THE LAKE COUNTY UTILITIES DEPARTMENT ONLY. THE CONTRACTOR SHALL SCHEDULE WITH THE LAKE COUNTY UTILITIES DEPARTMENT 24 HOURS IN ADVANCE.

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WATER WORK NOTES

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