

**ITEM 638 WATER MAIN, AS PER PLAN**

THIS ITEM OF WORK SHALL CONSIST OF THE WORK AS DESCRIBED IN OHIO DEPARTMENT OF TRANSPORTATION ITEM 638 WATER MAINS AND SERVICE BRANCHES, EXCEPT AS HEREIN MODIFIED.

ALL MATERIALS, PROCEDURES, AND TESTING USED SHALL CONFORM TO CITY OF GREENVILLE ENGINEERING STANDARDS AND SPECIFICATIONS.

THE CONTRACTOR WILL PERFORM THE CHLORINATION AND BACTERIA TESTING. THE CONTRACTOR IS RESPONSIBLE FOR THE DISINFECTION.

ANY WORK AND MATERIALS NECESSARY TO MAKE CONNECTION TO AN EXISTING WATER MAIN IS TO BE INCIDENTAL TO THIS ITEM, INCLUDING EXCAVATION, BACKFILL, CUTTING AND REMOVING PIPE, INSTALLING FITTINGS, AND CONNECTING TO EXISTING MAIN WITH SOLID SLEEVE.

ALL LENGTH OF PIPE INSTALLED TO MAKE CONNECTION IS TO BE PAID BASED ON THE LINEAL FOOT PRICE PROVIDED FOR THE SIZE OF PIPE INSTALLED. ANY VALVES AND CUT AND PLUGS INSTALLED AT CONNECTION POINTS ARE TO BE PAID UNDER THEIR RESPECTIVE ITEM NUMBERS.

PAVEMENT RESTORATION, CURB AND GUTTER AND PLAIN CONCRETE PAVEMENT, AND SIDEWALK REPLACEMENT SHALL BE PAID UNDER THEIR RESPECTIVE ITEM NUMBERS.

PAYMENT FOR ITEM 638 WATER MAIN, AS PER PLAN, FOR ALL OPERATIONS DESCRIBED ABOVE SHALL BE AT THE CONTRACT FOOT BID PRICE, MEASURED HORIZONTALLY, AND SHALL INCLUDE ALL LABOR, MATERIAL AND EQUIPMENT REQUIRED TO COMPLETE THIS ITEM OF WORK.

**ITEM 638 WATER MAIN, HORIZONTALLY DIRECTIONALLY DRILLED, AS PER PLAN**

THIS ITEM OF WORK SHALL CONSIST OF THE WORK AS DESCRIBED IN OHIO DEPARTMENT OF TRANSPORTATION ITEM 638 WATER MAINS AND SERVICE BRANCHES, EXCEPT AS HEREIN MODIFIED.

ALL MATERIALS, PROCEDURES, AND TESTING USED SHALL CONFORM TO CITY ENGINEERING STANDARDS AND SPECIFICATIONS.

THIS ITEM CONSISTS OF ALL WORK TO DIRECTIONAL DRILL WATER MAIN IN ACCORDANCE WITH THE PLANS, INCLUDING DRILLING, STRINGING AND INSTALLING PIPE, POT-HOLING ALL EXISTING UTILITIES AS NECESSARY.

ANY COST TO INSTALL MAIN LINE VALVES ON HORIZONTALLY DIRECTIONALLY DRILLED LINES SHALL BE PAID UNDER ITS RESPECTIVE ITEM NUMBER.

**DIRECTIONALLY DRILLED WATER MAIN MATERIAL SHALL BE 12" FUSIBLE PVC, AWWA C-900 DR-18 MIN. PIPE LENGTHS SHALL BE ASSEMBLED THE FIELD WITH BUTT-FUSED WELDED JOINTS.**

**DIRECTIONALLY DRILLED WATER MAIN SHALL BE PAID FOR THE LENGTH OF WATER MAIN PIPE INSTALLED BY HORIZONTALLY DIRECTIONALLY DRILLING, MEASURED HORIZONTALLY ALONG THE CENTERLINE OF THE BORE. ANY REQUIRED SEEDING AND MULCHING OR HARD SURFACE RESTORATION IS TO BE PAID UNDER ITS RESPECTIVE BID ITEM.**

ANY PAVEMENT RESTORATION ASSOCIATED WITH HORIZONTALLY DIRECTIONALLY DRILLING SHALL BE PAID UNDER ITS RESPECTIVE ITEM NUMBER.

PAYMENT FOR ITEM 638 WATER MAIN, HORIZONTALLY DIRECTIONALLY DRILLED, AS PER PLAN, FOR ALL OPERATIONS DESCRIBED ABOVE SHALL BE AT THE CONTRACT FOOT BID PRICE, MEASURED HORIZONTALLY, AND SHALL INCLUDE ALL LABOR, MATERIAL AND EQUIPMENT REQUIRED TO COMPLETE THIS ITEM OF WORK.

**ITEM 638 WATER SERVICE BRANCH, AS PER PLAN**

THIS ITEM OF WORK SHALL CONSIST OF THE WORK AS DESCRIBED IN OHIO DEPARTMENT OF TRANSPORTATION ITEM 638 WATER MAINS AND SERVICE BRANCHES, EXCEPT AS HEREIN MODIFIED.

THE PROPOSED SERVICES SHALL CONSIST OF FURNISHING AND INSTALLING 3/4" TYPE K COPPER SERVICE BRANCHES, AND SHALL INCLUDE NEW TAPPING SADDLES, COMPRESSION FITTINGS, CORPORATION STOPS, CURB STOPS, CURB BOXES AND CONNECTION TO THE EXISTING SERVICE AS SHOWN ON THE PLANS.

REMOVAL OF ANY EXISTING CURB STOPS AND/OR CURB BOXES IS INCIDENTAL TO THIS ITEM OF WORK.

PAYMENT FOR ITEM 638 WATER SERVICE BRANCH, AS PER PLAN, FOR ALL OPERATIONS DESCRIBED ABOVE SHALL BE AT THE CONTRACT FOOT BID PRICE AND SHALL INCLUDE ALL LABOR, MATERIAL, AND EQUIPMENT REQUIRED TO COMPLETE THIS ITEM OF WORK.

**ITEM 638 6-INCH FIRE HYDRANT ASSEMBLY, AS PER PLAN**

THIS ITEM OF WORK SHALL CONSIST OF THE WORK AS DESCRIBED IN OHIO DEPARTMENT OF TRANSPORTATION ITEM 638 WATER MAINS AND SERVICE BRANCHES, EXCEPT AS HEREIN MODIFIED.

THE ASSEMBLY WILL CONSIST OF THE FIRE HYDRANT AND PIPE BRANCH, INCLUDING ANCHORING PIPE/COUPLINGS AND ALL UNDERNEATH BLOCKING.

THE COST FOR INSTALLATION OF THE ANCHORING TEE AND WATCH VALVE WILL BE PAID UNDER SEPARATE ITEMS.

PAYMENT FOR ITEM 638 6-INCH FIRE HYDRANT ASSEMBLY, AS PER PLAN, FOR ALL OPERATIONS DESCRIBED ABOVE SHALL BE AT THE CONTRACT EACH BID PRICE AND SHALL INCLUDE ALL LABOR, MATERIAL, AND EQUIPMENT REQUIRED TO COMPLETE THIS ITEM OF WORK.

**ITEM 659 SEEDING AND MULCHING, CLASS 1, AS PER PLAN**

THIS ITEM OF WORK SHALL CONSIST OF THE WORK AS DESCRIBED IN OHIO DEPARTMENT OF TRANSPORTATION ITEM 659, SEEDING AND MULCHING, EXCEPT AS HEREIN MODIFIED.

ALL AREAS DESIGNATED FOR SEEDING SHALL HAVE A MINIMUM OF 6" OF TOPSOIL OVER THE ENTIRE AREA. TESTING THE PH OF ANY EXISTING OR IMPORTED TOPSOIL PER ODOT 659.02 SHALL BE WAIVED. THE AREA SHALL BE HAND-RAKED AND DRESSED READY FOR SEEDING. NO STONE OVER 1" IN SIZE PERMITTED IN THE TOP 6".

SEEDING AND MULCHING SHALL BE APPLIED TO ALL AREAS OF EXPOSED SOIL. QUANTITY CALCULATIONS FOR SEEDING AND MULCHING ARE BASED ON PROJECT WORK LIMITS.

IT'S THE CONTRACTOR'S SOLE RESPONSIBILITY TO PROVIDE THE REQUIRED GERMINATION RATES AND ENSURE THE GRASS IS ESTABLISHED TO THE SATISFACTION OF THE CITY WHICH MAY REQUIRE WATERING, REGRADING/ADDING TOPSOIL AND RESEEDING.

ANY AREAS THAT HAVE ERODED OR WHERE NEW GRASS DID NOT GERMINATE SHALL BE ADDRESSED BY THE CONTRACTOR UNTIL THE AREAS ARE STABILIZED, SHAPED, AND DRAINED, AS INDICATED IN THE PLANS.

ANY DISTURBED AREA, OUTSIDE OF THE PROJECT WORK LIMITS, CAUSED BY THE CONTRACTOR'S WORK, SHALL BE RESTORED TO THE SATISFACTION OF THE PROPERTY OWNER AND CITY, AT THE CONTRACTOR'S SOLE EXPENSE.

THIS ITEM INCLUDES: TOPSOIL, SEEDING, MULCHING, COMMERCIAL FERTILIZER, WATER, AND REPAIR SEEDING AND MULCHING.

PAYMENT FOR ITEM 659 SEEDING AND MULCHING, CLASS 1, AS PER PLAN, FOR ALL ABOVE OPERATIONS, SHALL BE AT THE CONTRACT SQUARE YARD BID PRICE AND SHALL INCLUDE ALL LABOR, MATERIAL, AND EQUIPMENT REQUIRED TO COMPLETE THIS ITEM OF WORK.

**ITEM SPECIAL WATER SAMPLING METER PIT, AS PER PLAN**

THIS ITEM INCLUDES ALL WORK TO INSTALL THE WATER SAMPLING METER PIT PER THE DETAIL IN THE PLANS. IT INCLUDES FURNISHING AND INSTALLING THE METER PIT AND ALL INTERNAL COMPONENTS, INCLUDING THE METER, INTERNAL PIPING, FITTINGS, BALL VALVE, DUAL CHECK VALVE AND SHUT-OFF VALVE. ALL METERS ARE TO BE FURNISHED BY THE CITY.

ALL EXCAVATION, BEDDING, BACKFILL AND SEEDING AND MULCHING REQUIRED FOR METER PIT INSTALLATION ARE TO BE INCIDENTAL TO THIS ITEM. PAVEMENT RESTORATION, CURB AND GUTTER REPAIR, SIDEWALK REPLACEMENT, AND SEEDING AND MULCHING SHALL BE PAID UNDER THEIR RESPECTIVE ITEM NUMBERS.

PAYMENT FOR ITEM SPECIAL WATER SAMPLING METER PIT, AS PER PLAN, FOR ALL OPERATIONS DESCRIBED ABOVE SHALL BE AT THE CONTRACT EACH BID PRICE AND SHALL INCLUDE ALL LABOR, MATERIAL, AND EQUIPMENT REQUIRED TO COMPLETE THIS ITEM OF WORK.

**ITEM SPECIAL CUT AND PLUG**

THIS CONSISTS OF ALL WORK TO CUT AND PLUG THE EXISTING WATER MAIN, PER THE DETAIL IN THE PLANS. IT INCLUDES ALL REQUIRED EXCAVATION, BACKFILL, CONCRETE, STEEL BEAM, CAPS, SHIMS, AND ANY OTHER MATERIAL REQUIRED.

PAVEMENT RESTORATION SHALL BE PAID FOR UNDER ITS RESPECTIVE BID ITEM.

ITEM SPECIAL CUT AND PLUG WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER EACH AND SHALL INCLUDE ALL LABOR, MATERIAL AND EQUIPMENT REQUIRED TO COMPLETE THIS ITEM OF WORK.

**ESTIMATED QUANTITIES**

ITEM NO.	DESCRIPTION	UNIT OF MEASURE	APPROX. QTY.
	<b>BASE BID</b>		
202	REMOVED, AS PER PLAN	LUMP	1
202	WALK REMOVED	S.F.	710
202	CURB REMOVED	FT.	25
301	4-1/2" ASPHALT CONCRETE BASE, PG64-22	C.Y.	63
304	AGGREGATE BASE, AS PER PLAN	C.Y.	90
407	TACK COAT, 0.10 GAL/S.Y.	GAL.	50
441	1-1/2" ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (448), PG64-22	C.Y.	21
608	4" CONCRETE WALK	S.F.	710
608	BARRIER CURB REPLACED, IN-KIND	FT.	25
611	4" CONDUIT, TYPE B, 707.45, AS PER PLAN	FT.	25
611	6" CONDUIT, TYPE B, 707.45, AS PER PLAN	FT.	25
611	8" CONDUIT, TYPE B, 707.45, AS PER PLAN	FT.	25
611	12" RCP CL-IV STORM SEWER, AS PER PLAN	FT.	28
611	4" SANITARY SEWER LATERAL REPAIR, AS PER PLAN	FT.	50
614	MAINTAINING TRAFFIC	LUMP	1
623	CONSTRUCTION LAYOUT STAKES AND SURVEYING, AS PER PLAN	LUMP	1
630	REMOVAL OF GROUND MOUNTED SIGN AND REERECTION	EACH	2
630	REMOVAL OF GROUND MOUNTED POST SUPPORT AND REERECTION	EACH	2
638	6" AWWA C-900 DR-18 WATER MAIN, AS PER PLAN	FT.	10
638	8" AWWA C-900 DR-18 WATER MAIN, AS PER PLAN	FT.	437
638	12" AWWA C-900 DR-18 WATER MAIN, AS PER PLAN	△ FT.	202
638	12" FUSIBLE PVC, AWWA C-900 DR-18 WATER MAIN INSTALLED BY HORIZONTAL DIRECTIONAL DRILLING, AS PER PLAN	FT.	777
638	6" GATE VALVE	EACH	1
638	8" GATE VALVE	EACH	2
638	12" GATE VALVE	EACH	2
638	3/4" TYPE "K" COPPER WATER SERVICE BRANCH, AS PER PLAN	△ FT.	466
638	1" TYPE "K" COPPER WATER SERVICE BRANCH, AS PER PLAN	△ FT.	48
638	FIRE HYDRANT REMOVED	EACH	1
638	6" FIRE HYDRANT ASSEMBLY, AS PER PLAN	EACH	2
659	SEEDING AND MULCHING, CLASS 1, AS PER PLAN	S.Y.	130
832	TEMPORARY EROSION CONTROL	EACH	2500
SPEC.	WATER SAMPLING METER PIT, AS PER PLAN	EACH	1
SPEC.	CUT AND PLUG	EACH	2
	<b>ALTERNATE #1</b>		
SPEC.	REPLACEMENT OF LEAD PRIVATE WATER SERVICE LINE	FT.	1

**ALTERNATE BID NOTE**

ALL BIDDERS MUST PROVIDE A PRICE FOR ALTERNATE #1, TO REPLACE PRIVATE WATER SERVICES FROM THE RIGHT OF WAY LINE INTO THE HOME. THE HOMEOWNER WILL HAVE THE OPTION TO HAVE THIS WORK PERFORMED BY THE CONTRACTOR, IF IT IS DETERMINED THAT THE EXISTING WATER SERVICE IS LEAD. THE CONTRACTOR WILL NOT NECESSARILY BE HELD TO ITS BID COST, BUT MAY NEGOTIATE PRICING WITH THE HOMEOWNER IF THE HOMEOWNER WISHES TO HAVE THE CONTRACTOR PERFORM THE WORK. THE BID PRICE IS ONLY TO BE PROVIDED SO THE CITY HAS AN APPROXIMATE PRICE TO QUOTE THE HOMEOWNER FOR THE WORK, IF A LEAD SERVICE IS ENCOUNTERED.

THIS ITEM IS TO BE BID PER FOOT, AND WILL INCLUDE WATER SERVICE INSTALLATION, INCLUDING EXCAVATION, BACKFILL, AND RESTORATION OF THE TRENCH. IT WILL ALSO INCLUDE INSTALLING THE WATER SERVICE INTO THE HOME, INCLUDING CORING THE HOUSE WALL (IF NEEDED), CONNECTION TO THE SERVICE LINE INSIDE OF THE HOME, ETC. THE SIZE OF THE SERVICE SHALL MATCH THE EXISTING, UNLESS OTHERWISE NEGOTIATED BETWEEN THE CONTRACTOR AND HOMEOWNER. ALL WORK MUST BE PERFORMED PER LOCAL PLUMBING CODE.

THE ALTERNATE BID PRICE WILL HAVE NO INFLUENCE ON BID AWARD. THE BID WILL BE AWARDED BASED ON THE LOWEST AND BEST BASE BID ONLY.



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GREENVILLE CREEK WATER MAIN CROSSING  
CITY OF GREENVILLE  
GENERAL NOTES AND ESTIMATED QUANTITIES

REVISIONS:  
△ ADDENDUM 1  
2-13-2020

FILE NAME  
GNC

DRAWN BY  
JLB

CHECKED BY  
JSP

PROJECT No.  
DARGRE1813

DATE  
11-05-2019

SHEET NUMBER

4 OF 11