

ALL PROVISIONS OF ITEM 638 FROM THE OHIO DEPARTMENT OF TRANSPORTATION CONSTRUCTION AND MATERIALS SPECIFICATIONS 2023 EDITION SHALL APPLY WITH THE FOLLOWING MODIFICATIONS. INFORMATION ON APPROVED PLANS AND CITY OF WADSWORTH STANDARD DETAILS WILL TAKE PRECEDENCE IF THERE ARE ANY CONFLICTS WITH THIS ITEM.

- 638.01 DESCRIPTION
 - A) FOR CONTRACTS THAT ARE NOT CITY ADMINISTERED, ALL REFERENCES TO MEASUREMENT OR QUANTITIES AND PAYMENT DO NOT APPLY.
- 638.02 MATERIALS
 - A) SEE SECTION ODOT ITEM 748 WATER MAIN AND SERVICE BRANCH MATERIAL (MODIFIED) FOR MODIFICATIONS TO ODOT 748 ITEMS
 - B) ONLY ENGLISH DIMENSIONS WILL BE USED
 - C) ALL MATERIALS SHALL BE MANUFACTURED IN THE USA OR CANADA.
- 638.05 PIPE BEDDING
 - A) SEE CITY OF WADSWORTH STANDARD DETAIL TYPICAL WATER MAIN TRENCH SECTION FOR ACCEPTABLE MATERIALS
- 638.06 PIPE LAYING
 - A) TRACER TAPE IS REQUIRED OVER ALL WATER LINES
- 638.08 BACKFILLING
 - A) ALL PIPE WILL BE BACKFILLED PRIOR TO TESTING.
- 638.09 HYDROSTATIC TESTS
 - A) SEE SECTION WATERLINE AND SERVICE TESTING PROCEDURES FOR SPECIFIC PROCEDURES
- 638.10 DISINFECTION OF COMPLETED WATER WORK
 - A) SEE CITY OF WADSWORTH DETAIL WAT-04 FOR SPECIFIC PROCEDURES
- 638.12 POLYETHYLENE ENCASEMENT
 - A) REQUIRED ONLY AS INDICATED PER PLAN OR UNDER DIRECTION OF THE CITY ENGINEER

ODOT ITEM 748 WATER MAIN AND SERVICE BRANCH MATERIAL (MODIFIED)

ALL PROVISIONS OF ITEM 748 FROM THE OHIO DEPARTMENT OF TRANSPORTATION CONSTRUCTION AND MATERIALS SPECIFICATIONS 2023 EDITION SHALL APPLY WITH THE FOLLOWING MODIFICATIONS. INFORMATION ON APPROVED PLANS AND CITY OF WADSWORTH STANDARD DETAILS WILL TAKE PRECEDENCE IF THERE ARE ANY CONFLICTS WITH THIS ITEM.

- 748.01 DUCTILE IRON PIPE, JOINTS, AND FITTINGS, IN ADDITION TO THE FOLLOWING REQUIREMENTS:
 - A) DUCTILE IRON PIPE SHALL BE CLASS 52 WITH PUSH-ON JOINTS.
 - B) FITTINGS AND ACCESSORIES SHALL HAVE MECHANICAL TYPE JOINTS.
 - C) RESTRAINED JOINTS ARE REQUIRED AT TEES VALVES, BENDS, PLUGS, ETC., USING MEGA-LUGS AS MANUFACTURED BY EBAA IRON, OR APPROVED EQUAL.
 - D) ALL BOLTS MUST BE COMPLETELY COVERED WITH A SPRAY-ON RUBBERIZED UNDERCOATING MATERIAL. STAINLESS STEEL BOLTS DO NOT NEED TO BE SPRAYED.
 - E) JOINTS WITHIN 25 FEET OF ANY FITTING, VALVE, OR PLUG SHALL HAVE FIELD-LOK GASKETS, OR APPROVED EQUAL.
- 748.02 POLYVINYL CHLORIDE (PVC) PIPE, JOINTS, AND FITTINGS (UPON APPROVAL) IN ADDITION TO THE FOLLOWING REQUIREMENTS
 - A) PVC PIPE SHALL CONFORM TO AWWA C909 WITH PUSH ON JOINTS.
 - B) FITTINGS AND ACCESSORIES SHALL BE DUCTILE IRON CONFORMING TO ITEM 748.01.
 - C) RESTRAINED JOINTS ARE REQUIRED AT ALL FITTINGS AND WHERE SHOWN ON THE PLANS, USING SERIES 1900 RESTRAINT HARNESS AS MANUFACTURED BY EBAA IRON, OR APPROVED EQUAL.
- 748.03 POLYETHYLENE (PE) SERVICE BRANCHES AND FITTINGS – NOT ALLOWED
- 748.04 GLASS-FIBER REINFORCED POLYMER MORTAR PIPE (RPMP), JOINTS, AND FITTINGS – NOT ALLOWED
- 748.05 COPPER SERVICE BRANCHES AND FITTINGS, WITH THE FOLLOWING MODIFICATIONS:
 - A) FLARE-TYPE FITTINGS ARE NOT ALLOWED
 - B) REFER TO CITY OF WADSWORTH STANDARD DETAIL TYPICAL WATER SERVICE INSTALLATION FOR INSTALLATION AND ACCEPTABLE MATERIALS
- 748.06 STEEL PIPE ENCASEMENT, WITH THE FOLLOWING MODIFICATIONS:
 - A) REFER TO CITY OF WADSWORTH STANDARD DETAIL TYPICAL BORING & CASING DETAIL FOR INSTALLATION AND ACCEPTABLE MATERIALS
- 748.07 POLYETHYLENE ENCASEMENT
 - A) REQUIRED ONLY AS INDICATED PER PLAN OR UNDER DIRECTION OF THE CITY ENGINEER.
- 748.08 GATE VALVE AND VALVE BOX, IN ADDITION TO THE FOLLOWING REQUIREMENTS:
 - A) GATE VALVES TO BE USED ON 16 IN. AND SMALLER MAINS SHALL BE PER APPROVED WATERLINE MATERIALS OR APPROVED EQUAL.
 - B) ALL HAND OPERATED GATE VALVES SHALL OPEN BY TURNING COUNTER-CLOCKWISE AND HAVE AN ARROW ON THE OPERATING NUT THAT INDICATES THE DIRECTION OF OPENING.
 - C) VALVES SHALL HAVE MECHANICAL JOINT CONNECTIONS.
 - D) ALL VALVES SHALL BE DESIGNED FOR A WORKING PRESSURE OF 200 POUNDS PER SQUARE INCH, UNLESS OTHERWISE NOTED ON THE PLANS OR DIRECTED BY THE ENGINEER.
 - E) VALVE BOXES SHALL BE BUFFALO STYLE 5-1/4 IN., TWO PIECE, SCREW TYPE CONSTRUCTION PER APPROVED WATERLINE MATERIALS
 - F) VALVE BOXES SHALL BE OF STANDARD, ADJUSTABLE, HEAVY PATTERN, CAST IRON EXTENSION TYPE OF SUCH LENGTH AS IS REQUIRED TO PROVIDE FOR A COVER OF NOT LESS THAN 4 FEET.
 - G) THE VALVE BOX SHALL NOT TRANSMIT SHOCK OR STRESS TO THE VALVE AND SHALL BE CENTERED AND PLUMB OVER THE WRENCH NUT OF THE VALVE, WITH THE BOX COVER FLUSH WITH THE SURFACE OF THE FINISHED PAVEMENT OR OTHER LEVEL AS DIRECTED BY THE ENGINEER.
 - H) EXTENSION SECTIONS SHALL BE PROVIDED WHERE REQUIRED.
 - I) FOR VALVES THAT WILL BE PLACED IN THE PAVEMENT, THE TOP OF THE VALVE BOX SHALL BE LEFT 1 IN. BELOW FINISHED PAVEMENT GRADE AND A 1 IN. RISER INSTALLED TO BRING THE VALVE BOX TO FINAL GRADE.
- 748.11 TAPPING SLEEVE, VALVE AND VALVE BOX, IN ADDITION TO THE FOLLOWING REQUIREMENTS:
 - A) MECHANICAL JOINT TAPPING SLEEVES SHALL BE PER APPROVED WATERLINE MATERIALS OR APPROVED EQUAL IN ACCORDANCE WITH ANSI/AWWA C153 WITH A 3/4 IN. NPT TEST PLUG. TAPPING SLEEVES WITH FLANGED OUTLETS WILL NOT BE ACCEPTED.
 - B) AFTER THE TAPPING SLEEVE AND VALVE ARE IN PLACE, A HYDROSTATIC PRESSURE AND LEAKAGE TEST IS REQUIRED WITH A CITY REPRESENTATIVE PRESENT. THE DURATION OF THE TEST IS 5 MINUTES AT 150 PSI OR 1-1/2 TIMES THE STATIC PRESSURE OF THE WATER LINE, WHICHEVER IS GREATER WITH NO LOSS IN PRESSURE.
- 748.12 TAPPING SADDLE AND CORPORATION STOP, WITH THE FOLLOWING MODIFICATIONS:
 - A) REFER TO CITY OF WADSWORTH STANDARD DETAIL TYPICAL WATER SERVICE INSTALLATION FOR INSTALLATION AND ACCEPTABLE MATERIALS.
- 748.13 SERVICE STOP AND SERVICE BOX, WITH THE FOLLOWING MODIFICATIONS:
 - A) REFER TO CITY OF WADSWORTH STANDARD DETAIL TYPICAL WATER SERVICE INSTALLATION FOR INSTALLATION AND ACCEPTABLE MATERIALS.
- 748.14 FIRE HYDRANT, WITH THE FOLLOWING MODIFICATIONS:
 - A) REFER TO CITY OF WADSWORTH STANDARD DETAILS TYPICAL HYDRANT INSTALLATION (PERPENDICULAR & PARALLEL) FOR INSTALLATION AND ACCEPTABLE MATERIALS.

GENERAL NOTES:

1. THE CONTRACTOR SHALL PROVIDE AMPLE TIME IN THEIR SCHEDULE FOR WATERLINE TESTING. THE TYPICAL TESTING OF A SECTION OF PIPE TAKES 5 WORKING DAYS FROM THE INITIAL FILLING OF THE MAIN TO THE COMPLETION OF BACTERIA TESTING. THIS ASSUMES NO ISSUES OR FAILED TESTS.

DISINFECTION:

1. CHLORINE GRANULES WILL BE USED DURING CONSTRUCTION TO OBTAIN AN INITIAL READING OF 50 MG/L WHEN THE PIPE IS INITIALLY FILLED. CHLORINE TABLETS ARE NOT ALLOWED.
2. ANY PIPE THAT WILL NOT FALL UNDER THE LIMITS OF A BACTERIA TEST MUST BE CLEANED THOROUGHLY WITH A CHLORINE SOLUTION IN THE PRESENCE OF CITY PERSONNEL.

MAIN LINE PRESSURE TESTING:

1. ALL SERVICE TAPS SHALL BE INSTALLED PRIOR TO PRESSURE TESTING.
2. THE WATER DEPT. WILL FILL THE MAIN PRIOR TO PRESSURE TESTING. AFTER 24 HOURS, A SAMPLE WILL BE TAKEN BY THE WATER DEPT. THE CHLORINE RESIDUAL MUST BE AT LEAST 25 MG/L.
3. A FLUSH OF THE MAIN WILL BE CONDUCTED BY WATER DEPT. WITH THE HELP OF THE CONTRACTOR. THE CONTRACTOR SHALL PROVIDE ALL NECESSARY HOSES AND APPURTENANCES TO FLUSH HIGHLY CHLORINATED WATER INTO THE NEAREST SANITARY SEWER. ALL WADSWORTH HYDRANTS ARE AKRON STANDARD THREADS AND THE CONTRACTOR SHALL SUPPLY HOSES AND ADAPTORS TO ATTACH TO SAID HYDRANTS. ALL DEAD-END LINES MUST HAVE A MEANS TO ADEQUATELY FLUSH TO REMOVE THE HIGH CHLORINE CONTENT AND HELP REMOVE AIR TRAPPED IN THE MAIN. ANY ALTERNATE METHODS TO ELIMINATE HIGHLY CHLORINATED WATER MUST BE APPROVED BY THE CITY ENGINEER OR WATER DEPARTMENT.
4. CLEAN WATER TUBS, HOSES, ETC. MUST BE USED FOR ALL PHASES OF TESTING. THE CONTRACTOR IS REQUIRED TO SANITIZE ALL EQUIPMENT IN THE PRESENCE OF CITY PERSONNEL PRIOR TO BEGINNING.
5. THE WATER MAIN SHOULD HOLD STATIC PRESSURE BEFORE CALLING THE WATER DEPT TO INITIATE THE PRESSURE TEST.
6. A PRESSURE TEST WILL BE CONDUCTED BY THE CONTRACTOR WITH A REPRESENTATIVE FROM THE WATER DEPT. PRESENT. THE WATER DEPT. WILL PROVIDE THE TEST GAUGE AND HOSE CONNECTIONS. THE CONTRACTOR IS REQUIRED TO PROVIDE AN APPROPRIATE PUMP AND A CLEAN WATER TUB.
7. THE TEST PRESSURE SHALL BE 150 PSI OR 1-1/2 TIMES THE STATIC PRESSURE OF THE CONNECTING WATERLINE, WHICHEVER IS GREATER. ALL MAINLINE VALVES, HYDRANT VALVES AND HYDRANTS MUST BE IN THE OPEN POSITION AND INCLUDED IN THE TEST.
8. THE PRESSURE TEST WILL BE TWO HOURS IN DURATION. THE PRESSURE DURING THE TEST SHOULD NOT DEVIATE BY MORE THAN 5 PSI AND WILL NOT FALL BELOW THE REQUIRED TEST PRESSURE. THE ALLOWABLE LEAKAGE IS CALCULATED AS 1/2 GALLON PER DIAMETER INCH PER MILE OF PIPE.

FIRE LINE PRESSURE TESTING:

1. ALL FIRE LINES WILL BE FLUSHED AND PRESSURE TESTED AT 200 PSI WITH THE WADSWORTH FIRE DEPT. PRESENT. IT IS THE CONTRACTOR'S RESPONSIBILITY TO COORDINATE WITH THE FIRE AND WATER DEPTS. FOR THESE TESTS. SEE PHONE NUMBERS BELOW.

BACTERIA TESTING:

1. A BACTERIA TEST WILL BE CONDUCTED BY THE CITY WATER DEPT. THE TEST CAN BEGIN 24 HOURS AFTER PASSING THE PRESSURE TEST. THE CHLORINE RESIDUAL MUST BE AT 1.0 MG/L OR LESS BEFORE THE FIRST BACTERIA SAMPLE IS TAKEN.
2. ONE STERILE SAMPLE WILL BE TAKEN AT LEAST EVERY 1200 LINEAL FEET OF PIPE AND AT ALL DEAD-END RUNS. THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING ADEQUATE ACCESS TO A TESTING SITE. STUBBED SERVICES WILL HAVE A VALVE OR OTHER MEANS TO CONTROL THE FLOW OF WATER WHILE COLLECTING THE SAMPLE. SAMPLE SITES SHALL HAVE 1" OR SMALLER FITTING AT THE POINT OF COLLECTION AND POSITIONED HORIZONTALLY TO ELIMINATE POSSIBLE CONTAMINATION. HYDRANTS CANNOT BE USED FOR BACTERIA TESTING.
3. TWO SAMPLES WILL BE TAKEN FROM EACH SAMPLE LOCATION. ONE INITIAL SET, THEN 24 HOURS LATER ANOTHER SET WILL BE TAKEN.
4. SAMPLES WILL BE COLLECTED BY THE WATER DEPARTMENT AND TAKEN TO THE CITY WATER TREATMENT PLANT WHERE LAB PERSONNEL WILL CONDUCT THE TEST. TWO CONSECUTIVE CLEAN SETS ARE REQUIRED TO PASS BACTERIA TESTING.

INDIVIDUAL WATER SERVICE TESTING (REPLACED):

1. NEW WATER SERVICES SHALL NOT BE CONNECTED TO EXISTING SERVICES PRIOR TO PASSING ALL BACTERIA TESTING REQUIREMENTS.
2. A VISUAL INSPECTION WILL BE CONDUCTED BY THE CITY AFTER THE CONNECTION IS MADE TO THE EXISTING SERVICE. ALL FITTINGS SHALL REMAIN EXPOSED UNTIL APPROVAL.

INDIVIDUAL WATER SERVICE TESTING (NEW HOME CONSTRUCTION):

1. THE CONTRACTOR SHALL INSTALL THE CORPORATION AND CURB STOPS WITH COPPER STUBBED OUT OF THE CURB STOP TO USE FOR TESTING.
2. SERVICES SHALL BE TESTED BY THE CITY UTILITY DEPARTMENT AT 150 PSI FOR 5 MINUTES WITH THE CORPORATION STOP IN THE "OFF" POSITION AND CURB STOP IN THE "ON" POSITION.

SCHEDULING INSPECTIONS OR ANY QUESTIONS REGARDING TESTING ARE TO BE DIRECTED TO THE WATER DEPARTMENT AT 330-335-2830 OR THE FIRE DEPARTMENT AT 330-335-2849

REFERENCE: OEPA MANUAL, AWWA STANDARD C600-93, C651-92

NEW RESIDENTIAL WATER SERVICE REGULATIONS

SEE CITY OF WADSWORTH STANDARD DETAIL TYPICAL WATER SERVICE INSTALLATION FOR ACCEPTABLE MATERIALS AND ADDITIONAL INFORMATION.

ALL NEW WATER SERVICE LINES SHALL BE AT LEAST 1 IN. TYPE K COPPER. DEPTH OF LINES AFTER FINAL GRADE SHALL BE 48 IN. MIN. TO 60 IN. MAX. ALL FITTINGS SHALL BE COMPRESSION TYPE. BACKFILL SHALL BE #9 OR #9 STONE.

NEW WATER SERVICES WILL REQUIRE A LINE HYDROSTATIC TEST OF 200 PSI FOR A DURATION OF 5 MINUTES. ALL FITTINGS AND COPPER LINES WILL BE EXPOSED FOR INSPECTION. THE SITE WILL BE AT FINAL GRADE OR STAKED FOR FINAL GRADE TO DETERMINE DEPTH OF COVER. AT NO TIME WILL AN APPROVAL BE GIVEN WITHOUT FOLLOWING THIS PROCEDURE. REQUESTS FOR INSPECTION SHALL BE MADE ONE WORKING DAY PRIOR TO TIME OF INSPECTION. CONTACT THE UTILITY OFFICE AT 330-335-2700 OR THE METER SERVICE DEPARTMENT AT 330-335-2831 TO SCHEDULE AN INSPECTION.

CURB BOXES SHALL REST ON A CONCRETE BLOCK OR BRICK AND NO PART OF THE BOX SHALL TOUCH THE VALVE OR COPPER WATER SERVICE LINE. RISERS WILL NOT BE ALLOWED. THE LOCATION OF NEW CURB BOX VALVES WILL NOT BE IN THE SIDEWALK OR CLOSER THAN ONE FOOT FROM THE SIDEWALK OR BACK OF CURB. ALL EFFORTS SHOULD BE MADE TO KEEP THE SERVICE OUT OF THE DRIVE APRON WHEN POSSIBLE.

ANY EXISTING CURB STOPS OR MAINLINE VALVES ARE TO BE OPERATED BY AUTHORIZED CITY PERSONNEL ONLY.

NEW WATER METER REGULATIONS

THE METER LOCATION SHALL BE SUCH THAT THE METER IS READILY AVAILABLE FOR MAINTENANCE, REPLACEMENT, AND READING. ALL NEW SERVICES ARE REQUIRED TO HAVE A REMOTE READER WHICH REQUIRES A WIRE FROM THE METER TO THE REMOTE READER LOCATION. IT IS RECOMMENDED THE REMOTE READER BE LOCATED NEAR THE ELECTRIC METER; HOWEVER THE WATER DEPARTMENT MAY SUGGEST ANOTHER LOCATION. THIS WIRE CAN BE INSTALLED PRIOR TO FINISHING TO AVOID DRILLING THROUGH FINISHED WALLS BY CALLING THE UTILITY OFFICE AT 330-335-2700 OR THE METER SERVICE DEPARTMENT AT 330-335-2831 ONE WORKING DAY PRIOR TO INSPECTION.

METER SETTINGS AND BACKFLOW DEVICES WILL BE DETERMINED BY THE UTILITY OFFICE OR METER SERVICE DEPARTMENT. METERS FOR SERVICE LINES GREATER THAN 1" SHALL BE PURCHASED AND SUPPLIED BY THE OWNER'S CONTRACTOR. METER IS TO BE SENSUS CORDONAL STATIC FLOW WATER METER.

OCCUPANCY PRIOR TO FINAL INSPECTION AND APPROVAL OF THE WATER SERVICE AND WATER METER INSTALLATION IS PROHIBITED.

CONSTRUCTION WATER

METERED CONSTRUCTION WATER IS AVAILABLE BY REQUEST BY CONTACTING THE UTILITY OFFICE.

FINAL ACCEPTANCE

THE FINAL ACCEPTANCE OF THE CURB STOP WILL BE AFTER FINAL GRADING, SEEDING, AND SIDEWALK AND THE WATER DEPARTMENT IS SATISFIED WITH THE PRESSURE TEST, BURY DEPTH, OFFSET FROM THE CURB AND SIDEWALK, AND A WATER KEY CAN EASILY GET ON THE VALVE WITHIN A VERTICAL CURB BOX. ANY DAMAGE TO CURB BOXES AND STOPS PRIOR TO FINAL ACCEPTANCE IS THE RESPONSIBILITY OF THE CONTRACTOR/PROPERTY OWNER. NO PERMANENT SERVICE WILL BE ESTABLISHED OR METER SET UNLESS THE CURB STOP IS ACCEPTED, ACCESSIBLE, OPERATIONAL, AND ALL FEES PERTAINING TO THE WATER SERVICE ARE PAID. SEE PLANS FOR ADDITIONAL INFORMATION (IF APPLICABLE).

QUESTIONS ARE TO BE DIRECTED TO THE UTILITY OFFICE AT 330-335-2700 OR METER SERVICE DEPARTMENT AT 330-335-2831.



WATERLINE NOTES