

## PROCEDURES FOR TAPPING OF WATER MAIN

THE CONTRACTOR SHALL MAKE ALL SADDLES, TAPPING COUPLINGS, SLEEVES, AND VALVES (IF REQUIRED) AVAILABLE FOR INSPECTION BY PCWR PRIOR TO INSTALLATION. ITEMS SUBJECT TO INSPECTION SHALL CONSIST OF, BUT NOT BE LIMITED TO, EXCAVATION FOR THE CONNECTION, TAPPING THE MAIN, CLEANING THE OUTSIDE OF THE PIPE, INSTALLING THE SADDLE OR SLEEVE AND VALVE, IF NECESSARY, TESTING THE SLEEVE, MAKING THE WET-TAP, APPLYING CORROSION PROTECTION, CONNECTING AND WRAPPING THE LOCATING WIRE, BACKFILLING, AND SURFACE RESTORATION. INSTALLATION OF TAPPING SLEEVES SHALL BE IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS AND THESE SPECIFICATIONS. A CALIBRATED TORQUE WRENCH SHALL BE USED TO ACHIEVE ALL RECOMMENDED TORQUES. AFTER EXCAVATING THE WATER MAIN AND IMMEDIATELY PRIOR TO INSTALLING THE SLEEVE, REMOVE ALL DIRT, GREASE, OIL AND FOREIGN MATERIAL FROM THE OUTSIDE OF THE WATER MAIN. THE WATER MAIN SHALL THEN BE THEN RINSED THOROUGHLY WITH WATER. INSTALL THE TAPPING SLEEVE WITH PARTICULAR ATTENTION TO POSITION OF GASKETS, "O" RINGS, AND SEALS. BOLTS SHALL BE DRAWN UP AND TORQUED TO MANUFACTURER'S SPECIFICATIONS IN A UNIFORM AND ACCEPTED PATTERN. THE TAPPING VALVE SHALL BE INSTALLED ON THE FLANGE, AS RECOMMENDED BY THE VALVE MANUFACTURER. THE DOWNSTREAM FLANGE OF THE VALVE SHALL BE BLOCKED TEMPORARILY SO AS TO ACCEPT THE WEIGHT OF THE VALVE AND THE TAPPING MACHINE. THE SLEEVE AND VALVE INSTALLATION SHALL BE HYDRAULICLY TESTED FOR LEAKS PRIOR TO INSTALLING THE TAPPING MACHINE. THE SLEEVE SHALL BE PRESSURIZED WITH WATER THROUGH THE TEST COUPLING TO AT LEAST 100% OF THE SYSTEM WORKING PRESSURE AT THE POINT OF THE TAP. CARE SHALL BE TAKEN TO INSURE THAT WORKING PRESSURE IS MAINTAINED IN THE WATER MAIN FOR THE DURATION OF THE TEST. THE TESTING EQUIPMENT SHALL BE FITTED WITH AN APPROPRIATE GAUGE. AFTER TEST PRESSURE IS ACHIEVED, THE COMPLETE INSTALLATION SHALL BE INSPECTED VISUALLY FOR LEAKS. THEN, ALL JOINTS SHALL BE TESTED WITH A SOLUTION OF SOAP AND WATER. ALL VISIBLE LEAKS SHALL BE REPAIRED IN A MANNER APPROVED BY PCWR. THE TEST PRESSURE SHALL THEN BE MAINTAINED ON THE GAUGE WITHOUT ANY FURTHER AID FROM THE PRESSURE SOURCE, FOR A PERIOD OF 10 MINUTES WITHOUT ANY PERCEIVABLE DECLINE IN PRESSURE. IF THE PRESSURE DECLINES, THE VISUAL TEST SHALL BE REPEATED. THE WATER MAIN SHALL NOT BE TAPPED IF A LEAK IS PRESENT. IF THE TAPPING VALVE IS THE SUSPECTED SOURCE OF LEAKAGE, THE VALVE SHALL BE REPLACED AND THE TEST REPEATED. THE CONCRETE BLOCK SHALL BE FORMED AND EXTENDED UNDERNEATH THE SLEEVE AND THE VALVE SO AS TO PROVIDE SUPPORT ONCE THE TEMPORARY BLOCKS ARE REMOVED. ALL BOLTS AND CONNECTORS SHALL BE PROTECTED AGAINST CONTACT WITH THE CONCRETE BY WRAPPING WITH POLYETHYLENE FILM, AS REQUIRED FOR CORROSION PROTECTION. THE TAP SHALL BE PERFORMED IN ACCORDANCE WITH THE TAPPING MACHINE MANUFACTURER'S RECOMMENDATIONS. THE TAPPING MACHINE SHALL BE SUPPORTED AND BLOCKED SO AS TO REDUCE STRAIN ON THE SLEEVE, VALVE, OR WATER MAIN. NOTE: PVC PIPE SHALL BE TAPPED USING A RIBBON CUTTING BIT ONLY. DO NOT USE A DRILL OR HOLE SAW-TYPE BIT. THE COUPON SHALL BE REMOVED WITH THE TAPPING MACHINE. IF, FOR WHATEVER REASON, THE COUPON IS NOT RECOVERED WITH THE MACHINE, THE CONTRACTOR SHALL BE RESPONSIBLE FOR COUPON RETRIEVAL FROM THE SYSTEM AND SHALL COOPERATE FULLY WITH DIRECTIONS GIVEN BY PCWR WHILE LOCATING AND REMOVING THE COUPON. UPON REMOVAL OF THE TAPPING MACHINE, THE ENTIRE TAPPING SLEEVE AND VALVE ASSEMBLY SHALL BE INSPECTED FOR WATER LEAKS. ALL VISUAL LEAKS SHALL BE REPAIRED. ALL REPAIR METHODS SHALL BE SUBJECT TO PCWR APPROVAL. THE VALVE SHALL BE OPENED ENOUGH TO FLUSH ANY SHAVINGS, CHIPS, AND DEBRIS FROM THE WATER MAIN.



### PORTAGE COUNTY WATER RESOURCES

PVC PRESSURE PIPE  
TAPPING STANDARDS

9-1-2023  
APPROVED DATE

WS-10C