

1.0 GENERAL

1.1 Scope

1.1.1 This section provides specifications for the supply of 16 mm (5/8") to 300 mm (12") water meters with encoder registers for the measurement of cold water flowing in one direction that will be used for water billing purposes.

1.1.2 This section applies to water meters are located within the City of Regina City Limits as well as connected to the Buffalo Pound Water Treatment Supply lines, or other rural water mains operated and maintained by the City of Regina.

1.2 Related Sections

1.2.1 Section 15408 Installation of Water Meters and Meter Interface Units

2.0 PRODUCTS

- Use only those products in the Approved Products List, Product ID:
 - WP – 21: Water Meters
 - WP – 22: Meter interface units

2.1 Water Meters

Water meters to conform to AWWA C715 latest revision and ANSI/NSF 61.

2.1.1 Water meters must be no lead brass.

2.1.2 Water meters 16 mm to 25 mm to have externally threaded ends. Water meters 40 mm to 300 mm to have flanged ends.

2.1.3 Water meters to have a serial number permanently stamped on either the inlet or outlet port side or on either side of the body. Main case markings to be raised and include the size, model, and "IN" on the top of the inlet port. On the main case outlet port an arrow shall be affixed on top of the main case to indicate the outlet port.

2.1.4 Measuring chamber must be non mechanical.

2.1.5 The manufacturer or vendor shall furnish a certificate showing that each meter was tested for accuracy of registration and that it complies with the accuracy and capacity requirements of AWWAC715.

2.1.6 The City of Regina retains the right to test all meters submitted to confirm operating characteristics and to approve those that meet the City's specifications.

2.1.7 Water meters shall be from the approved manufacturers in the approved products list and shall be supplied with an encoder type register as specified in this section.

2.2 Encoder Registers

2.2.1 Encoder registers to conform to AWWA C707 latest edition and will be an integral part of the water meter.

2.2.2 Water meter register to be hermetically sealed to eliminate dirt and moisture contamination, tampering and lens fogging. Register to include a straight reading from a digital reader and have a low flow indicator-and have provision for seal wires to prevent tampering.

2.2.3 Registers must continuously encode the eight most significant digits of the volume registration in digital format compatible with remote interrogation or automatic meter reading. The most significant meter registration digits are defined as those digits on the register wheels that denote the highest recorded values of water consumption. A quick referencing mechanism shall be employed to prevent ambiguous readings.

2.2.4 All meters shall have an electronic register.

2.2.5 Measurement and registration to be in cubic metres.

2.2.6 The operation of the unit shall not induce drag that causes accelerated wear of the meter, volume registration below the accuracy requirements of the applicable AWWA standard or excessive head loss.

2.2.7 The materials used in the construction of the register shall be compatible with the normal water meter environment and with each other.

2.2.8 The operation of the register shall not be affected by temperature variations from 0° to 55 °Celsius.

2.2.9 Registers using pulse generation or conversion of pulses to digital output are not permitted.

3.0 EXECUTION

None in this section