

Volunteer Water Meter Installation Guideline

Application and Scope

This guideline applies to residential dwellings with 19mm to 25mm water services. The Plumbing Contractor retained by the Owner or Applicant will carry out all the necessary preparatory work for the water meter system installation and the City of Surrey will be responsible for the installation of the water meter.

Irrespective of the presence and involvement of other parties, it is the responsibility of the Owner of the property to ensure these requirements for the installation of water meter are met.

Meter Box Location

The meter box must be located on private property within 300mm to 800mm from the property line in line with the existing water service.

The top of the box must be at finished grade. To facilitate future maintenance of the meter assembly, an area of at least 1.0 meter horizontal and 2.0-meter vertical around the meter box must be kept free of any improvements including but not limited to flower beds, shrubs, fences, gate tracks, curbs, retaining walls, and similar, that would prevent reasonable access to the meter box at any time.

Approved materials

Meter setters must meet NSF 61 Annex F/G requirements and be equipped with a full port inlet ball valve and dual check valve on the outlet.

Meter boxes located in hard surfaces such as driveways are to be concrete or composite material that is rated H-20 for dynamic loading. Lids of cast iron or composite material rated H-20 dynamic loading are to be installed. Concrete lids are not acceptable.

Meter boxes located in soft surfaces such as the lawn are to be concrete or light-weight composite material (irrigation pits are not acceptable) and lids are to be cast iron or composite material. Concrete lids are not acceptable.

Prework

The Plumbing Contractor is to place a BC1 Call before any digging or excavation.

The Plumbing Contractor is responsible for locating the curb stop (City water shut-off), prior to requesting a Temporary Water Turn-off.

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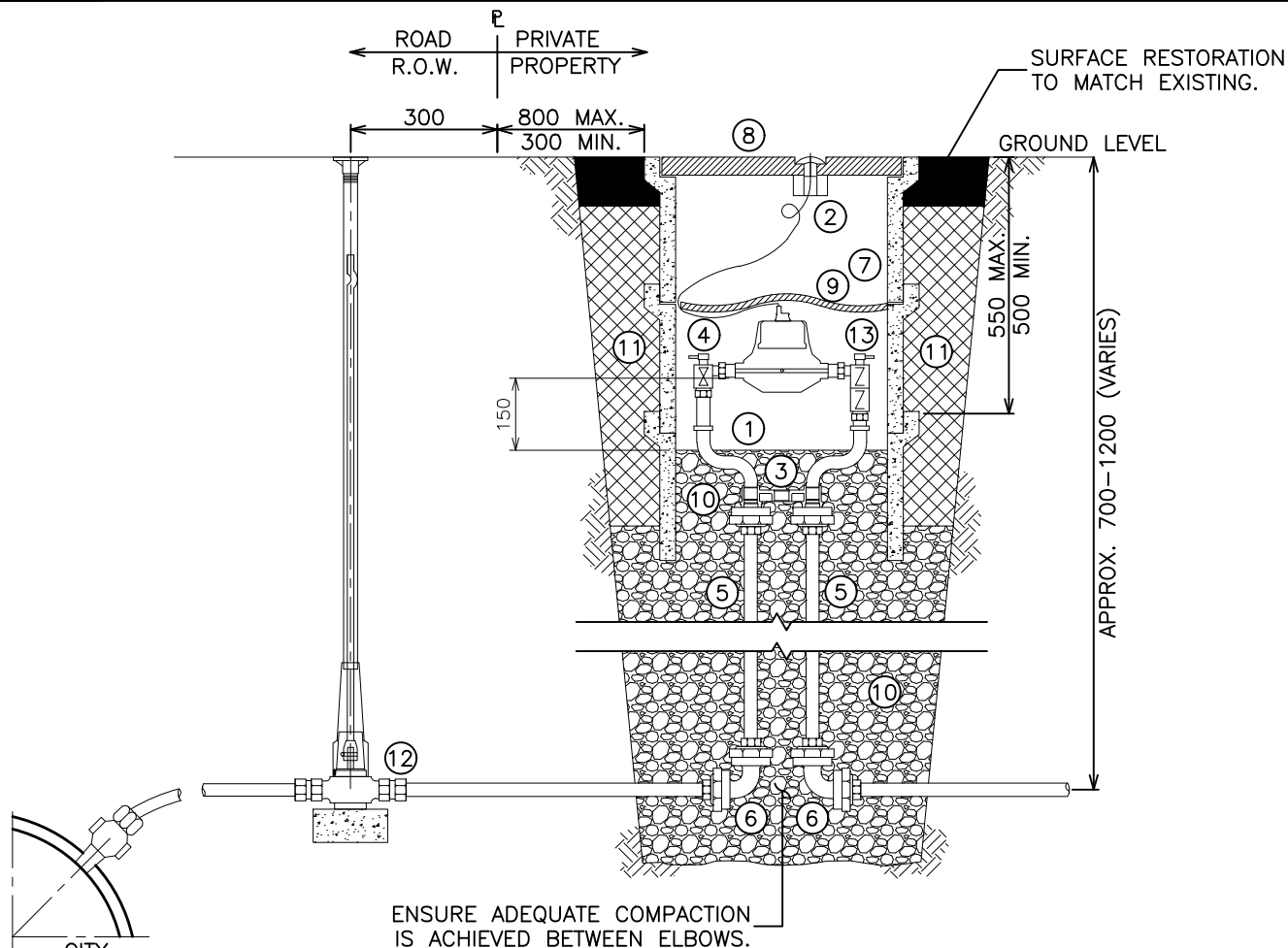
Installation

For all scenarios where the meter is within 1.0 m of the existing curb stop assembly, all piping between the curb stop and setter inlet shall be replaced with new piping.

If the Plumbing Contractor determines that the existing water service connection is comprised of Q-Line or “purple pipe”, the City Water Operations Section is to be notified prior to proceeding with the meter installation.

For any installations where the water service connection pipe exceeds a depth of 1.2 metres, the Plumbing Contractor must comply with WorksafeBC Occupational Health & Safety Regulations where approved shoring and any other procedures are required.

To prevent future settling, the meter box must be located on undisturbed soil. Refer to **SSD-WM3** drawing for detailed meter box installation requirements.



NOTES:

1. THIS DRAWING SHOULD BE REVIEWED IN CONJUNCTION WITH THE CITY OF SURREY WATER METER DESIGN CRITERIA MANUAL & SUPPLEMENTARY SPECIFICATIONS.
2. MINIMUM 1.0m HORIZONTAL AND 2.0m VERTICAL CLEARANCE AROUND METER BOX TO REMAIN FREE OF LANDSCAPING OR OTHER OBSTRUCTIONS.

ITEM	DESCRIPTION	ITEM	DESCRIPTION
①	WATER METER (AS PER APPROVED METER PRODUCTS LIST)	⑦	H2O RATED #37 METER BOX (PRE-CAST CONCRETE OR LIGHT-WEIGHT COMPOSITE)
②	REMOTE RECEPTACLE	⑧	CAST IRON LID (C/W RECESSED HOLE FOR REMOTE RECEPTACLE)
③	METER SETTER 6040NL-307H3H3-UU (19mm) (CAMBRIDGE BRASS) 6040NL-407H4H4-UU (25mm)	⑨	FOIL BUBBLE WRAP INSULATION BLANKET (CUT TO FIT METER BOX OPENING)
④	BALL VALVE – FULL PORT (PART OF SETTER)	⑩	19mm MINUS GRANULAR (PLACED INSIDE BOX TO STABILIZE SETTER)
⑤	PEX PIPE OR MUNICIPAL/POLYETHYLENE TUBING (NSF 61)	⑪	SELECT NATIVE BACKFILL OR 19mm MINUS GRANULAR
⑥	COMPRESSION x COMPRESSION 90° BRASS ELBOW	⑫	CURB STOP C/W RISER
		⑬	DUAL CHECK VALVE

3	
2	MARCH 2022
1	OCTOBER 2021
	Revision Date Approved

All Dimensions Shown In millimetres, Unless Otherwise Noted

Title: INSTALLATION DETAIL FOR EXTERIOR VOLUNTEER METERS 25mm DIAMETER AND SMALLER (RETROFIT TO EXISTING WATER SERVICE)



WATER METER SUPPLEMENTARY DETAIL DRAWINGS

Approved	
Date	OCTOBER 2021
Drawn By	Urban Systems Ltd.

DRAWING NUMBER
SSD-WM3