

2020 - SECTION 92
METER LIFT ASSEMBLIES

92.1 GENERAL

This section of the specifications shall form a part of the contract documents and should be read in conjunction with them.

The work shall include the installation of meter lift assemblies (meter lifts).

Meter lifts shall be installed in accordance with these detailed specifications, drawing 92-01 and other related sections.

Marker posts shall be installed at a distance to allow valve key operation and no obstruction to meter lift lids.

All meter lifts shall be purchased through Aquatera’s supplier.

Meter lifts will be requested through Aquatera at connections@aquatera.ca

Written approval is required from Aquatera prior to purchase and installation of all meter lifts.

92.2 MATERIALS

92.2.1 Meter Lift Assembly is to be in accordance with Mueller Canada product Drawing. (see section 300)

Meter Pit: 203CT18120FVBS000667N.

Cast Iron Locking Lid: 282925-TR2

Foam Insulation Plug: 790153

92.2.2 Water Meter to be supplied and installed by Aquatera.

92.2.3 Washed, crushed gravel meeting the following specifications:

Sieve Size	% Passing
25000	100
12500	40-65
5000	25-45
2000	10-30
400	7-15
80	0-5

92.2.4 150 X 150 X 900 pressure-treated timber supports (two per meter lift assembly).

- 92.2.5 63mm diameter standard steel pipe marker post, painted blue. The pipe shall be 2.6 m in length.
- 92.2.6 Approved water works fittings necessary to adapt the water service pipe(s) to the bulkhead nut(s) on the meter lift housing.
- 92.2.7 Water service pipe shall be 25mm DR11 HDPE certified for potable water.

92.3 INSTALLATION

- 92.3.1 Excavation shall be in accordance with Section 88 of the Construction Manual.
- 92.3.2 Meter lifts shall be supported by 2 - 150 X 150 X 900 long pressure treated timbers placed on stable, undisturbed soil or washed, crushed gravel.
- 92.3.3 Unstable soils shall be over-excavated and backfilled with 200mm of washed, crushed gravel, meeting the gradation specified in Section 92.2, and placed on a 2 mil filter fabric. The full depth of stabilized base shall extend a minimum of 150mm beyond the outer edge of the meter lift housing.
- 92.3.4 The meter lift shall be installed in accordance with the recommendations of the manufacturer of Weholite pipe, ASTM standard D2321 and ASCE/WPCF Manuals of Practice.
- 92.3.5 The meter lift shall be installed in accordance with design elevations established by the Engineer. All meter lifts are to be installed vertically plumb and to provide a minimum depth of cover of 2.75m from finished grade to the water service line.
- 92.3.6 In general, backfilling shall take place in accordance with the requirements of Section 88 of the Construction Manual.

The area around the meter lift is to be backfilled with select native material, placed in a manner that minimizes settlement and freezing due to excessive voids in the backfill material.

Select native material shall be well graded soil selected by the Contractor from the excavated trench material. It shall have no particles larger than 32mm in its largest dimension. It shall contain no frozen soil, roots, organics or other objectionable material in quantities that might cause damage to the meter lift.

The meter lift is to be braced and supported to prevent movement during the backfilling operation.

Excess backfill material is to be placed around the top of the meter lift such that the cover is at ground level with positive drainage away from the meter lift assembly and mounded to allow for settlement of the backfill material.

- 92.3.7 Each meter lift installed shall be marked with a 63mm X 2600 steel marker post, painted blue. The post shall be embedded between 900mm and 1200mm below finished ground level.
- 92.3.8 The water service lines are to be connected to the bulkhead nuts on the meter lift using approved water works fittings. All connections are to be made such that they

are watertight at an equivalent pressure to which the water service pipe is rated.

92.4 TESTING REQUIREMENTS OF THE CONTRACTOR

92.4.1 PRE-INSTALLATION

a) Materials

None required.

b) Systems

The Contractor must examine the meter lifts and all materials used in completing the work to ensure they are in new condition and meeting the requirements of this and other related specifications.

92.4.2 INSTALLATION

a) Materials

None required.

b) Systems

It is recommended that a static pressure test be completed prior to backfill to visually inspect the meter lift connections for leaks.

92.4.3 POST-INSTALLATION

a) Materials

None required.

b) Systems

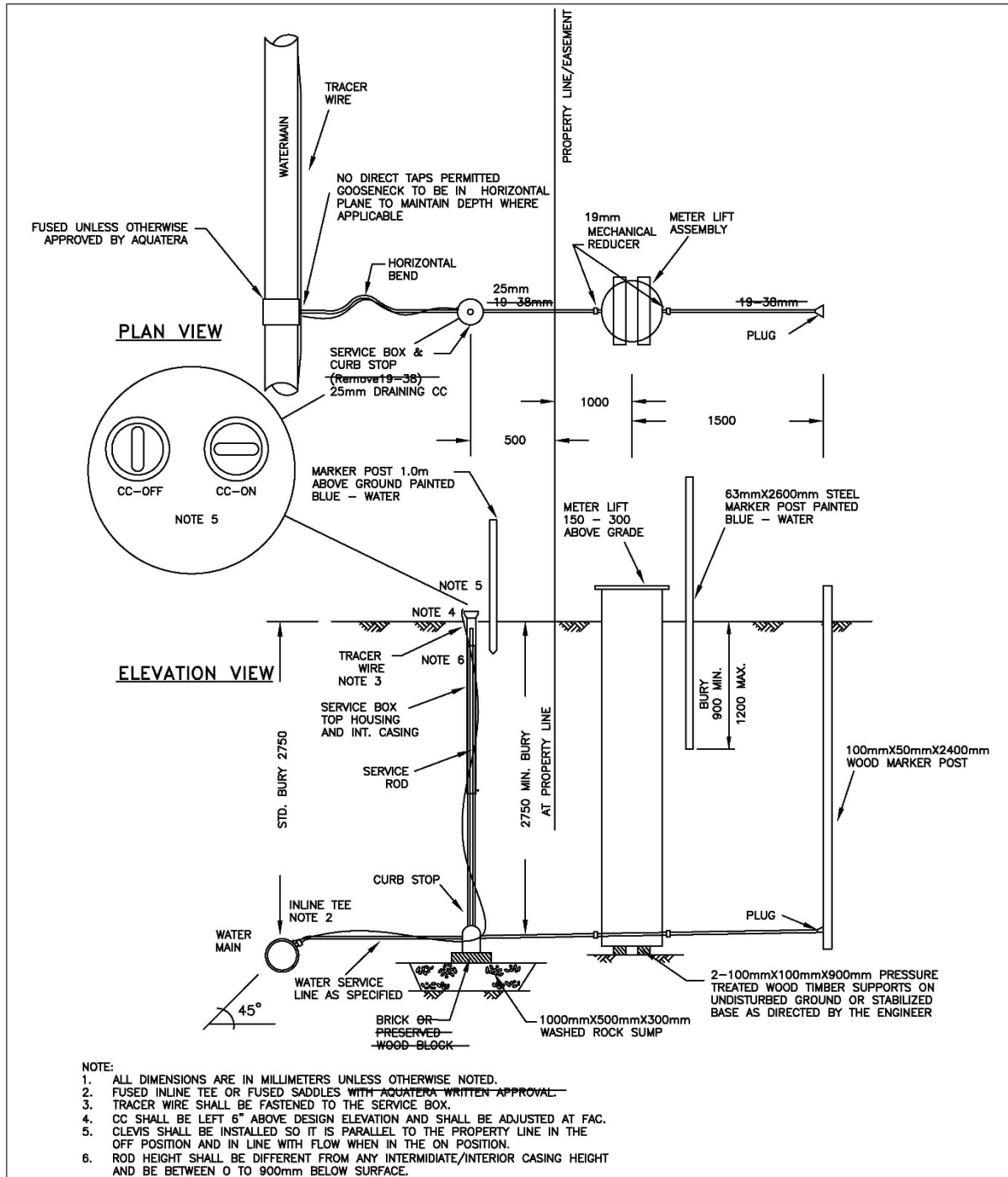
None required unless otherwise specified. A pressure test may be requested by Aquatera.

c) Meter lifts are to be included as part of the subdivision pressure test.

92.5 PAYMENT

92.5.1 Payment shall be full compensation for the procurement of all permits and processes, the supply and the installation of all materials, equipment, labour, supervision and incidentals necessary to complete the work to these specifications.

92.5.2 Where testing is specified as a requirement of the Contract, there shall be no separate payment. Where testing requirements are not specified in the Contract, the Contractor shall be responsible for costs associated with failed tests and payment would be made for successful tests, based on an agreed rate.



Revisions		AQUATERA METER LIFT ASSEMBLY INSTALLATION DETAILS		Standard Detail
Date	Details	Approved by	Date	92-01
11/28/13	IMPROVED METER LIFT CLARITY	Brad Vall C.E.T.	12/07/12	
11/14/13	CHANGED CONNECTION TO FUSED ONLY	Checked by	Scale	
10/15/15	REMOVE CITY FILE #	Troy Smith C.E.T.	N.T.S.	
10/13/16	ADD LINE SIZES, REMOVE CORP. STOP & POST GRD. NOTES, ADD NOTE 3	Drawn by		
12/30/18	MODIFY SER. SIZE, NOTE 2 & VLV. SUPPORT ADDED NOTE 4,5,6 & CLEVIS DIAGRAM	Scott Walls		