SECTION F : INSTALLATION OF SERVICE CONNECTIONS

1.0 INTRODUCTION

All watermain pipe laying and associated fitting installation shall only be carried out by a qualified Water Service Person holding the qualification of National Certificate in Water Reticulation.

2.0 SCOPE

This specification covers the installation of all service and firemain connections for use within the Council water reticulation network and is to be read in conjunction with the following documents:

i. Installations and drawings pertaining to the work to be done (including service drawings).

ii. Manufacturers instructions for the handling, storage and laying of the pipe being used.

iii. Hamilton City Council Water Supply Bylaw 2008 or other District Council bylaws (if relevant).

3.0 CONNECTIONS TO CUSTOMERS

3.1 General

Connections shall be made under pressure wherever possible.

Domestic supplies will not be metered unless specified by Council, but are required to have backflow protection as per required under NZ Building Code — Clause G12 "Water Supplies".

3.2 Point of Supply to Consumer

(a) Services shall be located at the centre of each front allotment or close to one side boundary of the accessways to rear allotments. See Drawing TS622.

(b) The service connection shall be located in the road reserve, 300mm from the boundary and be extend 300 mm inside the boundary. Installation of the extension should be timed to avoid damage by other service trenches. See Drawing TS627or TS629.

For location requirements in rural areas refer to Volume 5 Part 6.

(c) A permanent notch or mark shall be inscribed on the concrete kerb (where applicable) to indicate the position of the toby box.

(d) Meters on supplies to commercial properties which are located in service areas or other areas which are subject to vehicular movement should be housed in a cast iron manifold box.

(e) Should back-flow prevention be necessary, refer to the HCC Water Supply Bylaw 2008 or other District Council bylaws (if relevant)..

(f) Service connection pipes shall have minimum cover of 350mm.

(g) Service isolation valves (manifold assembly) shall be installed in the service pipeline as indicated in drawing TS627.

3.3 Services up Accessways Lots or Right of Ways

(a) Where there are 2 or more services in a common right of way a standard meter box and lid may be used to house up to 4 gate valves per box. See Drawing TS629 for connection details.

(b) Service pipes crossing the access to lots shall be minimum 25mm O.D. and shall be placed in 50mm I.D. ducts.

(c) Service connections, meters (where applicable), manifold boxes and gate valves shall be laid and marked as shown in Drawing No. TS627.

3.4 Diameter of service connections

All service pipes, ferrules and gate valves shall be 20mm internal diameter unless otherwise specified (Refer also to Volume 2, Part 6, Clause 6.13.3).

3.5 Tapping Bands, Ferrules and Service Pipes

Service connections to principal mains shall be by means of a tapping band and a ferrule. Service connections to rider mains shall be by means of a tee-joint or Tapping Saddle. Ferrules are to be left fully opened and gate valves fully closed.

All service pipes shall be laid at right angles to the street. Refer Drawing TS627.

Tapping bands shall be in accordance with Section A of this Specification.

3.6 Construction

Tapping bands and ferrules on the water main shall be fitted when the mains are first laid.

In Industrial and Commercial Subdivisions, it is normal to omit tapping bands and service connections until the specific requirements of the consumer are known. Refer to the 'Hamilton City Council Water Supply Bylaw 2008' or other District Council bylaws (if relevant) for matters relating to the customer's point of supply including, backflow protection, flow meters and connections for fire protection systems.

The service shall not be extended to the boundary until after any other reticulation between the water main and the boundary has been laid. Service connections shall normally be laid at right angles to the frontage.

3.7 Service Connection Materials

Refer to Section A of this Specification.

3.8 Toby Boxes

Manifold boxes shall be in accordance with Drawing TS627. Metal meter boxes are to be used for commercial and industrial access ways, or whenever the manifold assembly is located in a constant trafficable area.

4.0 CONNECTIONS TO INDUSTRIAL/COMMERCIAL USERS

Refer to the 'Hamilton City Council Water Supply Bylaw 2008' or other District Council bylaws (if relevant). for matters relating to the customer's point of supply including, backflow protection, flow meters and connections for fire protection systems.

5.0 FIREMAIN CONNECTIONS

Refer to the 'Hamilton City Council Water Supply Bylaw 2008' or other District Council bylaws (if relevant). for matters relating to the customer's point of supply including, backflow protection, flow meters and connections for fire protection systems."

6.0 INSTALLATION

Refer to Clause 5 of Section B.

7.0 METER INSTALLATION

Refer to the 'Hamilton City Council Water Supply Bylaw 2008' or other District Council bylaws (if relevant). for matters relating to the customer's point of supply including, backflow protection, flow meters and connections for fire protection systems.

Meters shall be installed on most supplies to Industrial and Commercial premises as well as on domestic connections where specified. The following drawings shall refer as necessary:

i. TS630 : Standard meter installation : 20mm up to 80mm diameter
ii. TS631 : Standard meter and double non-return valve backflow preventer: 80mm up to 150mm diameter
iii. TS632 : Standard meter pit : 100mm and 150mm diameters
iv. TS633 : Above ground meter and backflow device: 80mm up to 200mm diameter

Care shall be taken during installation of the meter to ensure that no foreign matter enters the pipes or meter. All meters shall be checked by the Contractor after installation to ensure that the meter is recording the flow passing through it.