



Gladstone Regional Council

Council Policy

Title	DIRECT CONNECTION OF BOOSTER PUMPS TO COUNCIL'S RETICULATED WATER NETWORK
Policy Number	P-2015/17
Responsible Directorate	ENGINEERING SERVICES
Responsible Officer	MANAGER WATER SERVICES
Date of Adoption	17 NOVEMBER 2015
Resolution Number	G/15/2648
Date Review Due	17 NOVEMBER 2018

1.0 PURPOSE:

The purpose of this policy is to restrict the direct connection of booster pumps to Council's Reticulated Water Network.

2.0 SCOPE:

This policy applies to all new booster pumps proposed by a developer/owner (to be either privately owned or Council owned) and existing privately owned booster pumps requiring replacing/modifying, which connect directly to Gladstone Regional Council's Reticulated Water Network. It does not apply to booster pumps connecting directly to Gladstone Regional Council's bulk water network or Gladstone Area Water Board's water network.

3.0 RELATED LEGISLATION:

- Water Supply (Safety and Reliability) Act 2008 (**WSA**)
- Plumbing and Drainage Act 2002 (**PDA**)
- Sustainable Planning Act 2009 (**SPA**)

4.0 RELATED DOCUMENTS:

- AS 2419.1-2005 Fire hydrant installations - System design, installation and commissioning
- Capricorn Municipal Development Guidelines (**CMDG**)

5.0 DEFINITIONS:

To assist in interpretation of this policy the following definitions apply:-

"Applicant" - Person or company submitting the plumbing application

"Break Tank" - A break tank is a water tank apparatus that uses an air gap to stop backflow into the system that could contaminate the drinking water. The purpose of the break tank is to protect Council's Reticulated Water Network and is not to be confused with the on-site fire storage tank requirements as mentioned in AS 2419.1-2005.

"Council" - Gladstone Regional Council.

"Reticulated Water Network" - Council water mains with a primary purpose of conveying water to service property connections.

"Bulk Water Network" - Council water mains with a primary purpose of conveying water to service Council's water reservoirs.

"Booster Pump" - This is a mechanical device and associated equipment that is installed to increase the pressure or flow of a water network. In this policy "booster pump" refers to both singular and multiple sets of pumps.

"Privately Owned Booster Pump" - This is a booster pump that is installed on a service line, after the master water meter from Council's Reticulated Water Network.

"Council Owned Booster Pump" - This is a booster pump that is installed directly on Council's Reticulated Water Network.

6.0 POLICY STATEMENT:

Council undertakes water network planning to ensure the future sustainability of Council's water network and utilises design criteria set out in the Capricorn Municipal Development Guidelines (CMDG). Where water pressures available on a site serviced by Council's Reticulated Water Network are insufficient to meet the required design criteria and a booster pump is required, Council approval needs to be sought for the installation of that booster pump (either at the Development Application stage under SPA or through a subsequent Plumbing Application under PDA).

It is recommended that proposals (including proposed designs) are discussed with Council Officers prior to any applications being lodged to ensure that Council's requirements are properly understood and reflected in applications made for approval.

6.1 Requests to Install a Booster Pump Directly on Council's Reticulated Water Network (Council Owned Booster Pump)

Council will not approve applications to install a booster pump directly on Council's Reticulated Water Network.

6.2 Requests to Install a Booster Pump on a Service Line Connected to Council's Reticulated Water Network (Privately Owned Booster Pump)

Council will consider applications for approval for a booster pump to be installed on service lines connected to Council's Reticulated Water Network where the booster pump is required to increase flow and pressure to achieve compliance with either internal fire hydrant system requirements or operational flow requirements. Where such approval is granted it will be a requirement of any such approval that a privately owned break tank must be installed downstream of the master water meter and upstream of the booster pump to the satisfaction of Council's Chief Executive Officer (or delegate), to protect Council's water network. All water assets downstream of the master water meter are to be privately owned, except for any Council approved sub meters.

Where a property has an existing booster pump directly connected to Council's Reticulated Water Network and a plumbing application is required to be made to alter the internal water plumbing on the property, or to undertake works on the booster pump, that increases the water demand by more than 10%, then this policy will be applied. Therefore the applicant will be required, in any approval issued, to ensure that a privately owned break tank is installed in compliance with this part of the policy.

The design of water network internal to a property is to consider how the internal water network will operate when provided with the minimum water standard set out in Council's design criteria (as stated in the Capricorn Municipal Development Guidelines). *Note: Onsite pressure/flow testing is not an appropriate method for long term design as it does not account for decrease in network pressure caused by increased demand on Council's reticulated water network.*

6.2.1 Break Tank and Booster Pump System Requirements

The requirements for a privately owned break tank and booster pump system are:-

- (a) The break tank is to achieve an air gap at the inlet to the tank.
- (b) The master water meter is to be situated in a location which achieves the Council's design criteria (as stated in the Capricorn Municipal Development Guidelines).
- (c) All water meters, break tanks and booster pumps are to be located adjacent to the connection point to Council's water reticulation network and to a road reserve.
- (d) The break tank is to be at ground level or buried (partially or fully).
- (e) The break tank and booster pump system is to be appropriately sized for operational and/or fire-fighting and emergency scenarios. Emergency scenarios include shut down of upstream water mains or failure of booster pumps.
- (f) Operational flows into the break tank are to be controlled by a flow control valve (located immediately downstream of the master water meter). The owner is responsible for maintenance of this flow control valve. The size of this flow control valve is to be based on the peak hour demand.
- (g) A testable non-return valve is to be provided (immediately downstream of the meter) to prevent backflow from the development into Council's Reticulated Water Network.
- (h) Any bypass main around the onsite tanks (which is to be used for emergency situations only) is required to have a separate water meter/sub-meter installed on it with a testable backflow prevention valve. Additionally, the bypass main shall not be connected to the upstream side of the booster pump.

6.3 Unauthorised works and works approved by other authorities

Unauthorised work will not be maintained or improved in any manner by Council, and the Chief Executive Officer (or delegate) may, in accordance with WSA, direct Council staff to remove unauthorised material, obstructions and/or connections, or control access if a safety risk to the public or environment has been identified.

No maintenance responsibility or liability will be accepted by Council for works approved by other authorities.

7.0 ATTACHMENTS:

Nil

8.0 REVIEW TRIGGER:

This policy will be reviewed when any of the following occur:-

1. The related legislation/documents are amended or replaced.
2. Other circumstances as determined from time to time by a resolution of Council.
3. Periodic Review – 3 years from date of adoption.

TABLE OF AMENDMENTS		
Originally Adopted	19 February 2013	G/13/1418 (formerly Policy P-6.01.07)
Amendment 1	17 November 2015	G/15/2648
Amendment 2	<INSERT DATE COUNCIL MEETING>	<INSERT RESOLUTION NUMBER>
Amendment 3	<INSERT DATE COUNCIL MEETING>	<INSERT RESOLUTION NUMBER>

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STUART RANDLE
CHIEF EXECUTIVE OFFICER