

# PRESSURE SEWER SYSTEM GUIDELINES



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## ABOUT THIS MANUAL

### INTRODUCTION

This guideline document sets out South Gippsland Water's (South Gippsland Water) business rules for land development works that require servicing through a pressure sewer collection system.

The guideline contains details of the servicing requirements, design, construction, quality and audit processes for any land development activities within the townships of Alberton, Loch, Nyora and Poowong. However the use of pressure sewer infrastructure in other townships may be considered on a case by case basis.

The business rules, guidelines and processes contained in this guideline are applicable to sub-division type developments that seek to use pressure sewer infrastructure. Where the guidelines and requirements are inappropriate for a specific development, then South Gippsland Water will determine development requirements on a case by case basis.

### INTENDED AUDIENCE

This manual has been written and developed for all developers, consultants, contractors, surveyors, land owners, local councils and South Gippsland Water personnel involved with land development functions within the South Gippsland Water serviced areas. In particular this guideline focuses on providing guidance on South Gippsland Water requirements for developing land within our designated townships that are serviced by pressure sewer infrastructure.

### RELATED REFERENCE MATERIAL

The following references provide guidelines and support documentation which should be read in conjunction with the South Gippsland Water Land Development Manual. Developers, engineers and contractors should also inform themselves of all other legislation, standards and guidelines that may apply to any proposed land development project.

#### Legislation:

- Subdivision Act 1988
- Subdivision (Procedures) Regulation 1989
- Owners Corporation Act 2006
- Water Act 1989
- Water Industry Act 1994
- Planning and Environment Act 1987
- Environment Protection Act 1970
- Environment Protection and Biodiversity Conservation Act 1999
- Occupational Health and Safety Act 2004
- Equipment (Public Safety) Act 1994

#### South Gippsland Water Reference Documents:

South Gippsland Water's Land Development Manual

<http://www.sgwwater.com.au/wp-content/uploads/2014/03/Land-Development-Manual-Final.pdf>

"Your Pressure Sewer System – A Homeowner's Guide", South Gippsland Water

<http://www.sgwwater.com.au/residential/faults-leaks/>

## DEFINITIONS

The following definitions apply in the document:

**12 (1) Easement** - an easement shown by dimensions on the property title plan, specifying what and to whom an acquired right or privilege is given which conforms to section 12 (1) of the *Subdivisional Act 1988*.

**12 (2) Easement** - an easement for the benefit of lots necessary to provide passage or provision of water supply, recycled water or sewerage over land or buildings in a subdivision. The easement is specified in words, not dimensions, on a plan of subdivision and conforms to section 12 (2) of the *Subdivisional Act 1988*.

**Accredited Consultant** - a consultant approved, whether on a probationary or final basis in accordance with South Gippsland Water's Consultants and Contractors List process.

**Accredited Contractor** - a contractor approved, whether on a probationary or final basis in accordance with South Gippsland Water's Consultants and Contractors List process.

**As-constructed Information** - survey information describing the type, size and location of the newly completed development works.

**Asset** - a South Gippsland Water main, recycled water main, sewer pipeline or associated structure (e.g. pump station or water tank).

**Consultant** - has the same meaning as accredited consultant.

**Contractor** - the water contractor and sewer contractor and has the same meaning as Accredited Contractor.

**Design Documents** - the drawings, specifications and other information, samples, models, patterns and the like required and created (and including, where the context so requires, those to be created by the consultant or contractor) for the construction of the development works.

**Design Requirements** - any design requirements specified by South Gippsland Water.

**Developer** - the person/company entitled to execute a transfer of the land. The developer may be the land owner, developer or the subdivision owner.

**Development** - the land development project undertaken by the developer.

**Development Works** - the works to be designed and for the supply of water, recycled water (where applicable) and sewerage assets and infrastructure to service each lot, and includes any works undertaken in response to a notice issued by South Gippsland Water during the defects liability and warranty periods.

**Dual Occupancy** - two dwellings on a one lot title.

**Easement** - has the meaning described under 12 (1) and 12 (2) easements.

**ESC** – Essential Services Commission

**Internal Service** - assets that are owned and maintained by the landholder

**Live Asset** - any pipe or other infrastructure which, at the relevant time:

a) is carrying water, recycled water or sewage, and

b) is in operation, and has not been isolated from other live assets by means of a plug, break, and other blocking device or otherwise in accordance with South Gippsland Water's confined space procedure.

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**Lot** - an area within the development that is capable of being separately metered for water supply purposes.

**Main** - any pipe vested in, belonging to, or under the control of South Gippsland Water and used for conveying potable or recycled water, also known as the water or recycled water main.

**Multi-Unit Development** - more than two dwellings on one lot.

**New Customer Contributions (NCC)** are a one-off, upfront charge that is levied when a new connection is made to SGW's water or sewerage network. NCC's are payable where a new property can be or is separately metered, or is separately titled.

**OH&S** - occupational health and safety.

**On Property Assets** - components of the pressure sewer system within the private allotment including collection tank, pump unit and control box, property discharge line, boundary valve kit, telemetry connection.

**Owners Corporation** - the entity that is created as part of a plan of subdivision in accordance with the *Owners Corporations Act 2006*. The Owners Corporation is responsible for the maintenance and administration of any common property and / or common services. For example, the Owners Corporation is responsible for any private water / recycled water or sewers within the plan of subdivision.

**Owner** - has the same meaning as developer.

**Pressure Sewer System (PSS)** - pressure sewer system infrastructure.

**Private Services** - has the same meaning as internal services.

**SGW** - South Gippsland Water Corporation.

**Tapping** - the connection of the internal water service to South Gippsland Water's water and/or recycled water main.

**WSAA** - Water Services Association of Australia.

# Pressure Sewer Systems Guidelines



## 1 BACKGROUND

These guidelines describe the requirements for the provision of pressure sewerage services to land developments within Alberton, Loch, Nyora and Poowong. However the use of pressure sewer infrastructure in other townships may be considered on a case by case basis.

Land developers must arrange and pay for the design, project management, construction, survey and asset recording of the works in accordance with South Gippsland Water's technical requirements, specification and developer agreement.

All works must be designed and constructed in accordance with Occupational Health and Safety legislation, and the State Environment Protection Policy requirements.

### 1.1 Pressure Sewerage Schemes

South Gippsland Water currently own and operate two dedicated pressure sewer collection schemes which service the following townships:

- Alberton
- Loch
- Poowong
- Nyora

Land developers seeking to subdivide and service land within the declared sewerage districts of these townships will need to plan, design and deliver sewerage collection infrastructure in accordance with this guideline document.

### 1.2 Gravity Sewerage Schemes

All other townships with the exception of those listed in Section 1.1 and Port Albert (serviced by a vacuum system), are serviced with traditional gravity schemes.

To enquire about connection of pressure sewer infrastructure within designated townships serviced by gravity infrastructure please contact South Gippsland Water's Land Development Team.



## 2 PRESSURE SEWER DESIGN REQUIREMENTS

Where the provision of pressure sewer servicing to a new land development is determined to be appropriate the following design criteria and requirements apply.

### 2.1 Design Standards

All new or upgraded pressure sewer infrastructure will be designed by a South Gippsland Water accredited design consultant in accordance with the relevant pressure sewer standards listed below.

- WSA 01-2004 Polyethylene Pipeline Code
- WSA 02--2014-3.1 Gravity Sewerage Code of Australia - (MRW Agencies Edition – Version 2);
- WSA 04-2005 Sewerage Pumping Code of Australia
- MRWA WSA Pressure Sewerage Supplement
- WSA 07-2007 Pressure Sewer Pumping Code V1.1

### 2.2 Design Report

Submission of an appropriate design report and/or drawings to South Gippsland Water for review and approval is required prior to any procurement or construction activity occurring. The design report will be a succinct report summarising key design elements, calculations and any other supporting information required. The design report allows South Gippsland Water to assess and sign off on key design elements, assumptions and supporting information and to ensure the proposed infrastructure meets South Gippsland Water requirements.

When developing the design for a new pressure sewer infrastructure there are some key items that need to be considered.

Design work will include but not be limited to the following:

- Site considerations
  - Main location in relation to other services and properties
  - Accessibility of pressure sewer pump stations and control boxes for future maintenance
  - Site drainage including access road drainage
  - Likely dwelling locations
  - Possible surface water, groundwater/seawater intrusion
  - Siting of trade waste pre-treatment apparatus for commercial properties.
- Hydraulic design
  - Pressure main sizing
  - Number of connections
  - Connection type (residential, commercial or industrial)
  - Rising main design (pressure rating)
  - Emergency flow relief provisions and locations
  - Surge assessment and mitigation
  - Size of trade waste pre-treatment apparatus for commercial properties.
- Supporting drawings
- Supporting calculations.

The design report, review and sign off ensures developers, designers, contractors and South Gippsland Water have a common understanding of the project and reduces the potential for errors during construction and handover which can be costly and time consuming for all stakeholders involved.

## 2.3 Accredited Design Consultants

Pressure sewer infrastructure becomes long term assets for Water Corporations and therefore we require design in accordance with strict design and construction standards. As such, South Gippsland Water has a list of accredited design consultants that have demonstrated competency and experience to design pressure sewer infrastructure in accordance with this specification and WSAA standards WSA07-2007 1.1 and the MRWA Pressure Sewerage Supplement. Developers will need to engage one of these design consultants to undertake works that meet South Gippsland Water and WSAA requirements.

South Gippsland Water's list of accredited design consultants is contained on our website and can be found at

<http://www.sgwater.com.au/wp-content/uploads/2014/03/SGW-Approved-Consultants-List.pdf>

## 2.4 Reticulation Network Design Requirements

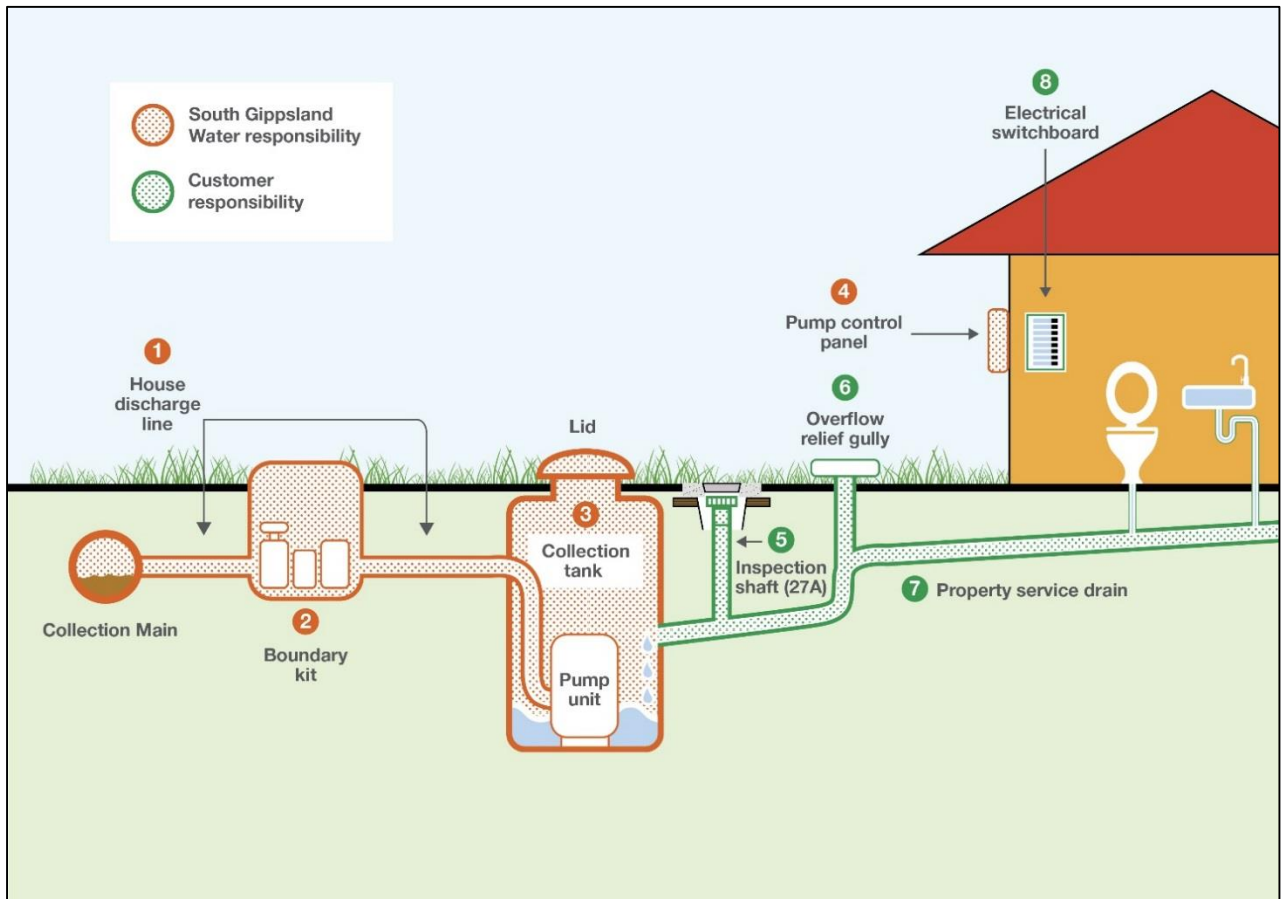
The reticulation network has the following components:

- Pressure reticulation mains sized in accordance with WSAA Standards to suit current and future flows typically comprising PN16 PE100 HDPE pipe to provide a completely sealed network.
- The pipe is to be installed with a cream coloured detectable marker tape (including tracer wire), in accordance with Clause 18.10 of WSA 07-2007-1.1. The tape must be laid immediately above the pipe embedment for open trench construction and taped to the pipe at two metre intervals for trenchless construction.
- Isolation valve, air valve and flushing point assemblies installed in appropriate locations to manage the operation and maintenance of the network.
- Marker posts must be installed at all valve and flushing point assemblies and at all changes of direction of the reticulation main.
- The sewer reticulation main cannot be constructed through private land. The only pipe allowed through private land is the property service line within the property being sewered.
- Unlike a gravity sewer reticulation system, developers will not be required to "cut in" sewer connection points. This will be carried out at a later date by SGW when an application to connect has been lodged at the stage that land is to be developed. However the developer will be required to pay SGW's Cut-in Fee.

## 2.5 On Property Asset Design Requirements

### 2.5.1 Pressure Pump System Overview

An overview showing the key components connecting the property service drain through a South Gippsland Water approved pressure pump unit to the South Gippsland Water collection main is shown in Figure 1 below



**Figure 1: Typical Layout of a Property Pressure Pump System**

### 2.5.2 Property Service Drain

A property service drain is the drain that connects the dwelling/building to upstream of the pump assembly collection tank.

The drain shall comply with AS3500 and the Victorian Plumbing Regulations 1996 and have a flexible connection to the upstream side of the pump assembly, in accordance with the pump supplier’s recommendations, and will have an inspection shaft.

## 2.5.3 Collection Tank Assembly

A collection tank and pump unit assembly, comprising one or more submersible pumps (depending on the requirements of the property) housed in a moulded polyethylene collection tank.

The pump(s) outlet will be fitted with a non-return valve, isolating valve and a quick coupling for disconnection. All components must be contained within the pump well.

The pump(s) will be fitted with appropriate disconnection and lifting facilities, so removal of the pump(s) is possible without the need for confined space entry.

The pump and system components available for use are defined in the South Gippsland Water Preferred Equipment Manufacturers List for Pressure Sewer.

In general, the pump assembly will comply with South Gippsland Water standards and will be:

- Fitted with an alarm system, which is activated by a high-level alarm switch which notifies South Gippsland Water through our remote Supervisory Control and Data Acquisition (SCADA) system for response.
- Fitted with a pressure switch to stop the pump operation when the downstream pressure head gets excessive.
- Wired from a separate Residual Current Device (RCD) circuit breaker on the property switchboard with all wiring complying with AS 3000.
- The pump control panel (Onebox) will be connected into South Gippsland Water telemetry system which enables communication with the South Gippsland Water SCADA system for alarms, monitoring and control of the on-property pumping station.

## 2.5.4 Pump Unit Sizing

Designers, developers and customers connecting to a pressure sewer system need to ensure they select an appropriate sized unit to service the property. Sizing of a suitable pressure pumping system should be based on WSA 07-2007 and selection of final tank and pump assembly shall be suitable for dwelling type, occupancy rates and the use and type of wastewater generating appliances used.

Typically the following broad guidance will apply.

- For a standard residential property with a mean daily discharge of <700 litres, a single progressing cavity grinder-pump unit, which has operating parameters between 0.4 litres/sec @ 50 metre head and 0.8 litres/sec @ 10 metre head, housed in a 1,100-litre collection tank is considered appropriate.
- For a residential dwelling with high-water usage fixtures such as a spa bath and swimming pool backwash, a 1,500-litre collection tank should be considered.
- For commercial/industrial and public/community facilities, the mean daily discharge must be assessed and the pump capacity, number of pumps and pit volume selected accordingly.
- If the daily discharge is significantly greater than 700 litres, a larger capacity pump, which has higher output operating parameters, is considered appropriate.

Developers and connectors need to be in discussion with South Gippsland Water during the design, construction and connections phase of the servicing of any new property to ensure that the selected pump station is fit for purpose.

The new customer contribution South Gippsland Water will charge land developers will be cost recovery and therefore may vary depending on the size of the pump system installed on each property and the connection arrangements.

Information on South Gippsland Water preferred pressure sewer pump station assemblies can be found at <http://www.aquatecenviro.com.au/products/simplex-pressure-sewer>

## 2.5.5 Supervisory Control And Data Acquisition (SCADA)

South Gippsland Water utilise the OneBox Supervisory Control & Data Acquisition (SCADA) and control system which allows real time monitoring, control and alarming of on-property pump stations. The control boxes also assist in managing the flow of wastewater into the network.

New developments will need to install South Gippsland Water preferred pump station assemblies and control boxes which will allow connection of the new pump station to the South Gippsland Water SCADA system.

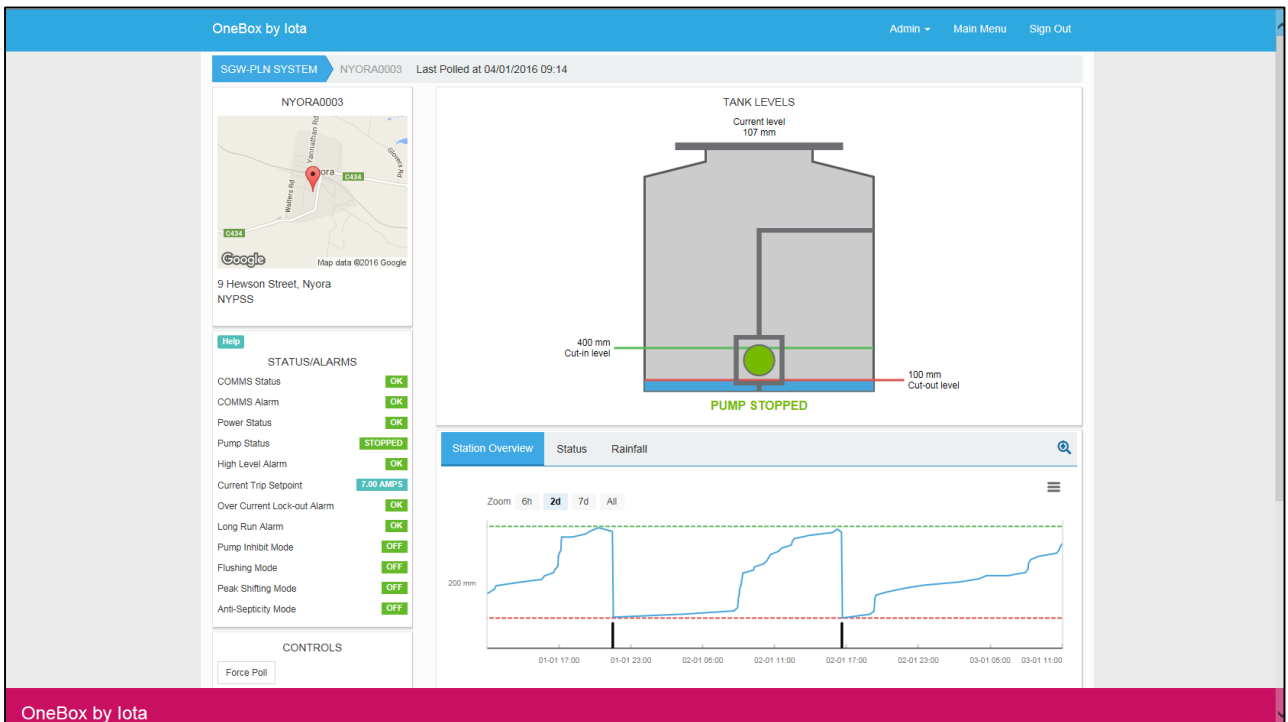


Figure 2: South Gippsland Water One Box SCADA Software

## 2.5.6 Location Of Collection Tank

Accessibility for South Gippsland Water maintenance personnel is an important consideration in selecting the location of the collection tank on the property. The owner is to determine their preferred position for the location of the collection tank and submit to South Gippsland Water for approval during the connections process.

Factors to be included in the positioning are:

- Whilst it will be site specific, South Gippsland Water prefers the collection tank to be located at the front of each property for:
  - ease of future access for maintenance and repair
  - Accessibility, unless drainage direction prevents this location.
- The collection tank is to be positioned to be close to the sewer plumbing from the residence/serviced building.
- The collection tank is to be close to power supply meter box to allow simple connection.
- The collection tank is to be located close to a fence or structure to allow mounting of the vents and control box.
- The collection tank is to be located so that it is not in the vicinity of vehicular traffic or landscaped areas.

# Pressure Sewer Systems Guidelines

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## 2.5.7 Boundary Kit

A Boundary valve kit creates the interface or boundary between the on-property assets and the reticulation network. The boundary kit allows isolation of the on-property assets from the pressurised collection network to allow maintenance and other operational functions.

The assembly includes a DN40 stainless steel ball valve, a DN40 stainless steel check valve and a DN40 stainless steel flushing tee housed within a below-ground polypropylene pit in accordance with WSA Drawing PSS-1114-M.

## 2.5.8 On Property House Discharge LINE

The house discharge line from the pump unit to the boundary kit connection assembly will be a DN40 PN16 PE 100 HDPE pipe, installed with a cream coloured detectable marker tape, in accordance with Clause 18.10 of WSA 07-2007-1.1.

No easements are required over this pipeline but the owner is to provide a clear, direct and perpendicular alignment for the discharge pipeline to connect to the pressure sewer collection main. Owners are also required to provide one metre clearance around the collection tank, house discharge line and boundary kit to ensure accessibility for South Gippsland Water operations and maintenance staff.

New Customer Contribution for a standard allotment only entitles the property owner for the installation of 30 metres of on property house discharge line. Landowners who choose to construct their dwelling further back on an allotment shall be liable for the costs to supply and install additional house discharge line beyond the 30 metres in length.

## 2.6 Owners Corporation Connections

Developers and design consultants seeking to connect multiple dwellings to a pressure sewer system under an Owners Corporation will need to liaise with the South Gippsland Water's Land Development Team on how to best service the development. Key steps and considerations will include:

- Submit a concept plan of the development including:
  - Size, layout and configuration of dwellings
  - Location and access of shared assets.
- Calculate the number, size and occupancy rates to determine waste volumes of the development based on WSAA standards.
- Evaluate, size and select the most suitable wastewater pumping solution to suit the body corporate development;
- Liaise with South Gippsland Water and obtain relevant advice and approvals to obtain the most appropriate servicing solution for the development.

## 3 INSTALLATION OF RETICULATION INFRASTRUCTURE

### 3.1 New Developments

For new developments the installation of all reticulation infrastructure, beyond the property boundary, shall be arranged by the developer, under the terms of the Corporation’s Developer Construct Agreement.

Under the terms of the agreement, the developer shall engage an accredited consultant to prepare a feasibility report for the project and undertake the design, documentation and project management of the installation of the works by an accredited contractor.

The South Gippsland Water Land Development Manual sets out the procedural and administrative requirements for undertaking new developments within South Gippsland Water service regions.

All costs associated with the installation of this PSS infrastructure, will be the responsibility of the developer.

### 3.2 New Customer Contributions

In addition to the reticulation installation costs, the developer is required to pay the new customer contribution (NCC) charges, applicable at the time, in respect of all newly created allotments.

For South Gippsland Water to consider lots in a proposed subdivision to be “serviced for sewerage” and to consent to a statement of compliance being issued, a charge must be collected from the developer which recovers the costs of installing the collection tank and pressure sewer pumping units at some time in the future.

The NCC paid by the developer will be held by South Gippsland Water until the customer’s dwelling is ready to connect. Upon receiving a connection application, South Gippsland Water will arrange its accredited contractors to supply and install the pumping unit to the on-property drainage infrastructure.

The NCC costs per allotment will include the items outlined in Table 1.

**Table 1: NCC Inclusions and Exclusions Listing**

Inclusions	Exclusions
Supply and installation of <b>standard (simplex)</b> pressure sewer infrastructure; <ol style="list-style-type: none"> <li>1. Collection tank (including pump unit and ancillaries)</li> <li>2. Pump control panel</li> <li>3. House discharge line (Limited to 30m)</li> <li>4. Boundary kit</li> </ol>	The property owner is responsible for the supply and installation of the following; <ol style="list-style-type: none"> <li>5. Property service drain</li> <li>6. Overflow relief gully</li> <li>7. Electrical switchboard</li> <li>8. Inspection shaft (27A)</li> <li>9. House discharge line &gt;30m length</li> </ol> Connections requiring road boring connection or larger pressure collection systems will be calculated and funded by the land developer prior to Statement of Compliance being issued.



The standard NCC for pressure sewer connection provides for connection of a standard residential pressure sewer infrastructure **only**. Where a development or connection requires larger infrastructure (i.e. body corporate, commercial, industrial or public facility), an NCC will need to be determined in consultation with South Gippsland Water to ensure the contribution amount equals the cost of the infrastructure and installation.

Connection of on-property pressure sewer infrastructure is not undertaken during the land development phase, rather during property connection process. This ensures location, alignment and access to the on-property infrastructure appropriately services the dwelling/facility. This avoids potential clashes between driveways, other services and the on-property pressure sewer infrastructure.

South Gippsland Water's New Customer Contribution list of charges can be found on its website; <http://www.sgwater.com.au/wp-content/uploads/2014/03/Tariffs-and-Prices-2015-2016.pdf>

### 3.3 Intervening Properties

Where reticulation infrastructure, installed by the developer, fronts properties outside the development that could benefit from the works, the owners of those properties will not be under an obligation to contribute to the cost of the works but shall be entitled to connect to the works (at their cost) in due course.

The developer is encouraged however to negotiate with intervening landowners to seek their cooperation in contributing to the cost of the works.

### 3.4 Existing Developed Properties

If a PSS is to be implemented to service a single or group of existing developed properties, the reticulation infrastructure installation arrangements shall be the same as those for a new development under a Developer Construct Agreement between the Corporation and the property owner(s).

The complete cost of installation of the works will be the responsibility of the individual property owner, in the case of a single property, or by the group of property owners, by mutual agreement, in the case of a group of properties.

A New Customer Contribution charge will be applicable to each property to be serviced by the PSS, but payment of the charge, by each individual property owner, will be deferred until each property connects to the system.

For any intervening properties likely to benefit from the works, the same arrangements as for new developments apply and they are not required to contribute to the costs of the rising main.

The instigator of new development works is encouraged to negotiate with intervening landowners to seek their cooperation in contributing to the cost of the works.

### 3.5 Odour Control

All feasibility reports submitted are to address the generation of odour from the PSS and provide approved engineering solutions, at the developer's expense, to mitigate any odours. This may also include a contribution to the ongoing maintenance of these systems.

To assist with odour control, the preferred discharge point for a pressure sewer main is to be directly into the wet well of an existing sewage pump station.

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## 3.6 Alignment of Pressure Sewer Mains

Pressure sewer mains are to be located in road reserves or public land only – the sewer reticulation main cannot be constructed through private land. The only pipe allowed through private land is the property service line within the property being “sewered”.

Where pressure sewer mains are to be constructed through public land, permission is to be obtained from the relevant body and easements are to be created over the infrastructure.

## 4 INSTALLATION OF ON-PROPERTY ASSETS

The installation of all on-property assets shall be co-ordinated between the property owner and South Gippsland Water.

### 4.1 Connection Requirements

To enable connection of newly developed properties with sewerage services, the following actions are required:

- The developer has installed the pressure sewer collection pipeline that fronts the property and it is connected to the South Gippsland Water sewer reticulation system.
- The developer has paid both the New Customer Contribution and any site specific connection costs associated with the installation of the pressure sewer unit on the property by South Gippsland Water and the owner;
- The property is regarded as a serviced property by South Gippsland Water and as such the property will attract an access fee (tariff) for sewer services.
- South Gippsland Water’s Information Statement provided for the sale of the property to a prospective owner will have indicated that the property is to be serviced by a pressure sewer system when connected to the sewer in the future;
- The status of the property connection should be identified on the Corporation’s GIS systems as being a vacant lot, pressure sewer terms and conditions applying, with the status of charges previously paid for New Customer Contribution and development charges; and
- For commercial properties producing trade waste, appropriate pre-treatment must be in place, and the occupier must have a current trade waste agreement with South Gippsland Water.

### 4.2 Connection Sequence

To arrange for the installation of the pressure sewer system and connection to the Corporation’s sewer reticulation system the following is required:

1. The property owner is to apply to South Gippsland Water for connection to sewer with a pressure sewer system pursuant to Section 145 of the Water Act 1989;
2. For commercial properties producing trade waste, the owner or occupier is to apply to South Gippsland Water for a trade waste agreement to discharge trade waste from the premises.
3. South Gippsland Water and the property owner shall co-ordinate the installation of the pressure unit and boundary kit to the Corporation’s standard by an South Gippsland Water accredited contractor (including a licensed plumber and a qualified electrician) that has current installation accreditation and technical competencies;
4. The property owner and private plumber shall submit to South Gippsland Water a preliminary design plan and approved building plan showing the proposed location of the dwelling (serviced structure), pump unit, trade waste pre-treatment if required, control panel and discharge pipeline.

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5. South Gippsland Water shall review, comment/modify (if required) and approve the design plan once detail meets The Corporation's operations and maintenance requirements.
6. The owner's plumber shall;
  - Apply and pay the fees for a Plumbing Industry Commission (PIC) consent number for the installation of the property service drains for the property;
  - Complete the on-property service drain, trade waste pre-treatment if required and plumbing work as approved on the design sketch; and
  - At the completion of the works, supply "as-constructed" information to South Gippsland Water in accordance with the Building Act 1993, Clause 22170.
7. South Gippsland Water and accredited contractor shall complete the on-property installation of the pressure sewer infrastructure.
8. South Gippsland Water shall record all as-constructed information regarding connection to update records for future maintenance and shall commission the pump unit.

**Note -** The isolation valve in the boundary kit is not to be opened until this process is finalised.

## 4.3 Existing Developed Properties

For existing developed properties, the property owner will be responsible for the installation of the property service drain between the dwelling and the collection tank, which is to be installed by a licensed plumber in accordance with AS3500 and the Corporation's requirements. Requirements include the submission of a drainage plan detailing all the property service drains, the location of the PSS and the house discharge line to the property boundary as set out in Clause 4.2 above.

## 4.4 Build Over Easement/Asset

If any proposed structure or earthworks will encroach over an easement set aside for the purposes of sewerage or within 1 metre of any South Gippsland Water sewerage asset, an application for approval to build over must be lodged with the Corporation in accordance with Clause 148 of the Water Act 1989.

See further information contained on the website

<http://www.sgwwater.com.au/development/land-development/>

# Pressure Sewer Systems Guidelines

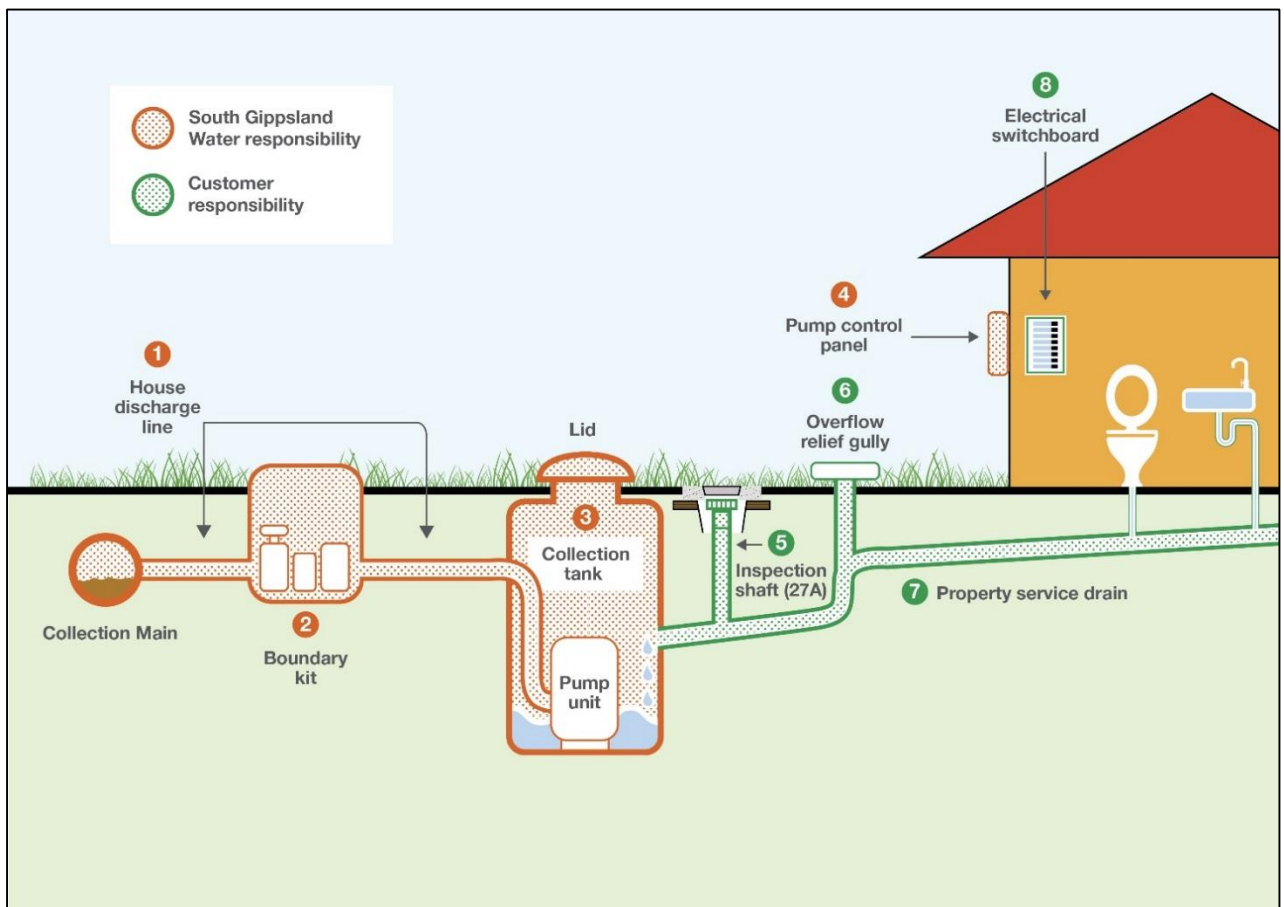
## 5 OWNERSHIP OF PRESSURE SEWER INFRASTRUCTURE

### 5.1 Corporation

The Corporation will assume ownership of the entire system infrastructure downstream of and including the collection tank, pump unit and associated electrics as shown in Figure 3 below.

### 5.2 Property Owner

Ownership of the gravity property service drain between the dwelling and the collection tank/pump unit will rest with the property owner.



**Figure 3: Pressure Sewer Infrastructure Ownership Diagram**

South Gippsland Water	Property Owner
South Gippsland Water is responsible for the ownership, maintenance and renewal of the following pressure sewer infrastructure: <ol style="list-style-type: none"> <li>1. House discharge line;</li> <li>2. Boundary Kit;</li> <li>3. Collection tank (including pump and ancillaries);</li> <li>4. Pump Control Panel.</li> </ol>	The property owner is responsible for; <ol style="list-style-type: none"> <li>5. Inspection Shaft (27A);</li> <li>6. Overflow Relief Gully;</li> <li>7. Property service drain;</li> <li>8. Electrical Switchboard;</li> </ol> The property owner is responsible for power supply costs to operate the pressure sewer collection system on the property.

## 6 OPERATIONS AND MAINTENANCE REQUIREMENTS

### 6.1 General Operations and Maintenance

General operation and maintenance costs associated with the PSS will be borne by the Corporation.

As stated in South Gippsland Water's terms and conditions within "Your Pressure Sewer System – A Homeowner's Guide" the property owner is responsible for the cost of supplying power and maintenance of the property's electrical system sufficient to operate the pump.

The Corporation will levy sewerage service fees on PSS customers in the same manner as customers connected to a gravity sewer system.

### 6.2 Damage to On Property Assets

The property owner will reimburse the Corporation for the full cost incurred by it in repairing damage to PSS assets installed on the property, caused by the property owner or people other than the Corporation or its agents acting on its behalf.

### 6.3 Accessibility of on Property Assets

South Gippsland Water from time to time will need to access on-property assets for operations and maintenance functions. Property owners are to avoid any structures and objects from impeding South Gippsland Water access to the infrastructure. South Gippsland Water may seek reimbursement of costs where customers have without authorisation impeded South Gippsland Water access causing unnecessary time and costs to access the PSS infrastructure.

## 7 SHARING OF ON-PROPERTY ASSETS

All residential and commercial properties shall have separate on-property assets upstream of the property boundary kit. The Corporation will not allow the sharing of on-property assets for residential and commercial properties.

The Corporation however, will consider the sharing of pump units for unit or body corporate type developments. The ownership, loadings, subdivision easements, reserves, etc., need to be included in the feasibility report provided for the proposal.

## 8 RELOCATION OF ON-PROPERTY PSS ASSETS

A property owner must obtain the written approval of the Corporation before any PSS assets are relocated and South Gippsland Water consents to the issuing of a PIC number. This will require the submission of a preliminary design plan showing the proposed relocation works required, including dwelling (serviced structure), pump unit, control panel and discharge pipeline.

The Corporation will not contribute financially to the cost of any relocation.

The relocation is to be completed by a contractor (including a licensed plumber and a qualified electrician) that has current installation accreditation with South Gippsland Water, in accordance with the installation instructions.

An "as constructed" drainage plan showing the location of all internal service drains, collection tank with pump unit, control panel, house discharge line and boundary kit is to be provided by the plumber at the completion of the works. This is to include provision of tie distances, depths, off set distances, structure outlines, property boundaries, etc., to enable location of all pipework and fixtures in the future.

## 9 CHANGE OF OWNERSHIP

The Corporation will indicate within the Information Statement all relevant information for a property connected to a PSS including:

- That the property is serviced by a PSS;
- That Special Conditions of Connection apply to the property, including the Owner's responsibility for on-going power costs;
- That these terms and conditions will bind any subsequent owner of the property; and

The Customer will also be provided with all other relevant information about South Gippsland Water services, Customer Charter during the change of ownership process

Where change of ownership occurs and new landowners change the use of a dwelling or business the following items need consideration;

- Size and suitability of the existing pressure sewer collection system for the proposed future use
- Trade waste considerations if land use or change of use occurs (i.e. dwelling to commercial take away or increases in size of a commercial use dwelling)
- Increases in density, occupancy or visitation at a dwelling

It is the property purchaser's responsibility upon change of ownership of a property to fully inform themselves of the on-property pressure sewer infrastructure, its capacity and their ownership obligation before purchasing the property.

The landholder is also responsible for the full cost of upgrading any existing pressure sewer unit on a property that is triggered by a change in land or business use.