

Pressure Sewer System Procedure

1 Purpose

Where Council has permitted the use of a Pressure Sewer System this procedure outlines the requirements of design, construction and operational responsibilities of all parties.

2 Scope

This Procedure applies to any developer or contractor, undertaking installation of a Pressure Sewer System. This procedure also applies to all property owners where a Pressure Sewer System is installed.

3 Procedure

3.1 Design of Pressure Sewer Systems in New Development Subdivisions

The following sections indicate Council's general conditions which will apply to provision of pressure sewerage in new subdivision developments. Council's Private Sewer Pump Station Policy and Procedure covers smaller developments, such as 2 Lot or dual occupancy etc. that cannot access Council's conventional sewer system and are not suitable for pressure sewer.

3.1.1 General Requirements

Where specifically requested at the Development Application stage, Council will assess whether a pressure sewer system would be applicable and approved for a particular development. Specific conditions may be applied in the development consent. Such conditions would in general terms require the Developer (but not necessarily be limited) to:

- a) Meet all costs associated with the design and construction of the pressure sewer reticulation system, including any changes required to the existing sewerage system.
- b) Design, supply and install, at their own cost, "On-Property" works. "On-Property" works may only be commenced after the issue of a construction certificate for building works on each allotment, and shall be completed prior to the issue of the occupation certificate for the building works.
- c) The "On-Property" works, while subject to point (b) above, shall be completed prior to the issue of the linen plan for a subdivision certificate. Where the "On-Property" works are not installed before the linen plan release Council will collect a bond, equivalent to the current fee in Council's Fees & Charges for the undertaking of these works when building works for each allotment is applied for.
- d) Council will utilise the bond to administer the install of the "On-Property" works in order to enable the issue of an occupation certificate for the related building works.
- e) Payment of applicable Sewerage Developer Contribution.
- f) Place a Positive Covenant on the title of the property under the provisions of the Conveyancing Act: referencing Coffs Harbour City Council's Registered Memorandum AM953813M at NSW Land Registry Services.
- g) Landowners (of the individual subdivided lots) are to make an application to Council with submission of a development application for a dwelling for installation of the remaining "On-Property" works.
- h) Provide to Council "work as executed drawings" in an electronic format acceptable to Council.

i) Provide Council with all “On-Property” designs where these occurred during the sub division development phase.

3.1.2 Collection/Pumping Units

Only Council approved technology will be accepted for handover to Council and this will cover not just the pumping unit but also the boundary kits and the flushing points.

Council will only support a limited number of different types of pressure sewer system technologies. This is to overcome the high costs of maintaining a wide range of different pumping units, to avoid the risk of placing the wrong pump in the wrong application and to minimise possible delays in repairs. For approved technology suppliers see Council’s Pressure Sewer System – Technical Specification.

3.1.3 Pressure Sewerage Reticulation System Design

Council will only approve designs submitted by persons with appropriate skills and experience in pressure sewer system design. Any such designs may be verified by Council’s technical supplier.

Whilst the Developer will be responsible for the Design of the proposed pressure sewerage reticulation service, the design will be subject to formal approval by Council’s Development Engineering section. Council will require that the Developer also undertake analysis of the receiving sewers to ensure that the additional subdivision will not subsequently require an augmentation of existing receiving sewers. Council may alternatively advise the Developer of an appropriate connection point based upon its own analysis of its own system.

The need for appropriate design is critical to the success of the individual units, the overall pressure sewer system and its functioning as part of the Council reticulation system.

3.1.4 Pressure Sewerage Reticulation Construction

The Developer will be required to undertake the following works during the construction phase:

- Construction of the pressure sewerage reticulation lines including all lines and laterals, valves, flushing points and a property boundary kit assembly for each property. This will include some flushing of the lines. It will also include the provision to Council of “work as executed” information/drawings and the provision of an as constructed information package as detailed in Council’s Pressure Sewerage Technical Specification.
- Construct any changes to Council’s existing reticulation system which are required by the development.
- Construction of a rising main from the new subdivision into Council’s reticulation system. This includes the provision to Council of “work as executed” information/drawings and the provision of an as constructed information package also as required by Council’s Pressure Sewerage Technical Specification.
- Demonstrate to Council that the valves provided are as recommended by the pressure sewerage supplier.
- Formally hand over the reticulation mains to Council for maintenance of the lines as per Council’s Technical Specification on pressure sewer system. Also provide Council with a 12-month defects liability period for the pipelines.

3.1.5 “On-Property” Works

“On-Property” works shall only be undertaken by accredited installers, as outlined in Section 5.10 of this procedure.

Developers will be responsible for the installation of all “On-Property” works if carried out at the subdivision development stage. Installation of “On-Property” works will not be permitted prior to the issue of a construction certificate for building works on the property because:

- The location of buildings will influence the location of the pumping unit, and
- The warranty on the pumping units commences when the unit is installed.
- There is a need to avoid damage to the collection/pumping unit as a result of construction activities as well as ensuring that the property sanitary drains are clean before connecting the pumping unit to these lines.

3.1.5.1 Developer “On-Property” Installation Requirements

Developers installing units on properties (in lieu of paying a bond to Council for future installation) will be required to undertake the following works:

- Procurement of collection/pumping units shall be in accordance with Section 3.1.2 of this procedure; the developer shall purchase, supply and store for use all pumping units for “On-Property” installation.
- Installation of the pumping units on each property, including a formal household design, installation of the unit and delivery line from the property boundary assembly to the pumping unit, installation of a one (1) metre stub of sanitary drain and provision of a works a set information package for Council.
- Fully test the units and certify they are fully operational. Replace any units that fail during the warranty period.
- Fully test the reticulation design as per the Council’s Pressure Sewer System – Technical Specification.
- Formally have the pumping units commissioned by qualified person, handing over the commissioning certificates to Council as well as the warranties for the pumps, which will have been transferred into Council’s name.

Installation and testing of units and service lines shall be completed prior to issue of an occupation certificate for building works. Principal Certifying Authorities should note that sewerage works may not be commissioned or used until they have been inspected and certified by Council, or a person authorised by Council to undertake such inspection and certification, in accordance with Section 21(a)(i) of the Local Government (General) Regulation, 2005.

Where a Developer wishes to engage a third party to undertake “On-Property” works on their behalf, an appropriate bond equivalent to the current fee in Council’s Fees & Charges will be required as a guarantee that the works will occur.

3.1.6 Connection of Sanitary Drains

The property owner shall be responsible for engaging a plumber to connect the property sanitary drain to the one (1) metre stub extending from the collection tank.

3.2 Use of Pressure Sewer Systems

Where a Pressure sewer system is installed the following outlines Council and the property owners responsibilities:

- The pumping units and the property delivery line remain the property of Council
- Council will maintain the pumping unit in perpetuity in accordance with the levels of service set out in this document
- The property resident is expected to operate the pumping unit in accordance with the Home Owners Manual
- The property owner is expected to contact Council if the system alarm sounds or the unit breaks down on the phone number included in the Home Owners Manual

- Council will charge as Pressure Sewer System properties a set sewerage rate aggregating the cost over the whole individual scheme. In short pressure sewerage will be charged for on a similar basis to conventional sewerage, with the rate set each year as part of Council's normal fees and charges.

3.2.1 Ownership of “On-Property” Works

Conditions of connection to Council's pressure sewer systems under Clause 18(1) of the Local Government (General) Regulation 2005 are that:

Ownership of “On-Property” works, which include the following components, shall reside with Council:

- Collection/Pump unit
- Property discharge line/s from the pump to the property boundary assembly
- Control/Alarm panel
- Property Boundary Kit assembly
- Pump control/power cable
- A one (1) metre stub of sanitary drain extending outside the pressure sewerage collection tank

Pressure sewer systems do not have any resident serviceable parts, and under Section 635 of the Local Government Act it is an offence to wilfully or negligently remove, damage, destroy or interfere with a sewer system. Property owners should note that the property discharge line is also defined as part of the system. In particular, property owners/residents should locate the property discharge line before commencing any excavation works which may damage the line. Council may attempt to recover costs for any wilful or negligent damage to pressure sewer systems.

3.2.2 Requirements for Easements over “On-Property” Works

Easements will generally not be required over any part of the “On-Property” works, so as to enable property owners to subsequently relocate “On-Property” works (normally the property discharge line) as required to accommodate future property modifications etc. However, an easement will be required if the property discharge line is required to pass through a neighbouring property. Council reserves the right to create an easement (if required) on a particular property, so as to ensure the safe ongoing operation of the system, the minimisation of any health concerns or the protection of any Council Property.

3.2.3 Power for the Pumping Unit

Pumping units shall be connected to a property's switchboard as part of the “On-Property” installation, and a separate circuit shall be added to the property switchboard so as not to interfere with the normal electrical operation of the house. However, while this installation will be undertaken as part of the “On-Property” works, the property owner will be responsible for any maintenance of the electrical cable between the property switchboard and the control/alarm panel and the property switchboard.

The pumping unit will not be metered separately as this would increase operational costs (reading meter, sending out bills and other general administration by the energy supplier). Residents will meet the individual power costs as part of their electricity bill.

3.2.4 Number of Pump Units per Residential Property

Generally, only a single pumping unit shall be permitted for each residential property. For multiple dwellings on the same property, a single unit (if of sufficient capacity) may be approved to serve more than one dwelling; however this unit may have more than one pump.

However, Council may consider approving more than one pumping unit on a property if the general property layout or the layout of the different dwellings on the property requires more than one unit. **In these cases, each pumping unit will attract a sewer assessment charge.**

3.2.5 Property owners required to connect to Pressure Sewerage

Once Council has formally determined that pressure sewer systems are applicable to a development area, all properties serviced by the system will be required to connect to Council's system by pressure sewerage.

3.2.6 Discovering the Property has a Pressure Sewer System

The property's Sewer Service Diagram (SSD) and the Section 88 instrument will be marked to indicate that the property is served by a pressure sewer system. This is specifically to allow the prospective land purchaser to discover prior to their purchase that the property is serviced by a pressure sewerage unit.

In addition to the Sewer Service Diagram the Positive Covenant reinforcing Council's right of access onto the property to service the units will also be required as a condition of consent for new subdivisions serviced by pressure sewerage.

3.3 The Roles of Council, the Developer and the Home Owner in New Subdivisions being serviced by a Pressure Sewer System

The Developer

Developers may propose to provide pressure sewer infrastructure to service a proposed development in accordance with the policy statement. Such proposals would be subject to:

- Lodgement of a development application in accordance with Part 4 of the Environmental Planning and Assessment Act.
- Lodgement of an application to carry out sewer work and to connect a private sewer to a public sewer under the control of Council; in accordance with Section 68 of the Local Government Act.
- Council approval of the above applications.

Any proposal would also require justification, as per the policy as to why the provision of conventional gravity sewer systems was infeasible or why the provision of pressure sewer systems was preferable.

In all such developments the developer is responsible for the provision of the whole pressure sewer system as detailed in the policy and this procedure. This will include the developer carrying out the following:

- The design for the reticulation sewers and its submission to Council before proceeding. Only pressure sewer experienced designers are to be used.
- The construction of all necessary pressure sewer reticulation infrastructure, including the connection to the property, and
- The payment of an "On-Property" bond to allow for those "On-Property" works to be carried out in conjunction with a home being built. This bond is set out in Council's current annual fees and charges. This cost will be notified to the developer as at the time of approval of the development application.
- Ensuring all real estate agents have basic information on what a pressure sewer system is, and what it will mean for the future home buyer.

The developer will also be required to meet the other typical developer charges to Council such as the Section 64 contributions and these will be outside of the property bond.

In some instances Council may be the Developer and will be required to meet all of the above provisions.

3.3.1 Council

Council will in respect to any pressure sewer development application initially advise the developer as to whether pressure sewer will be allowed for their particular development.

Subject to the pressure sewer system being allowed, Council will further be responsible for:

- Ensuring that the design is adequate to what Council sees as the minimum requirements for a pressure sewer system.
- Providing the minimum technical standards for the consistent construction of any pressure sewer application in the Coffs Harbour LGA.
- Acceptance of the reticulation system subject to it meeting the handover requirements as set out in the technical standards.
- Maintenance of the whole pressure sewer system.
- Administering the ultimate installation of the pressure sewer units on the vacant blocks as these are developed.
- Maintaining all reticulation and property records into the future.
- Ensuring the property owners are provided with a Home Owner's Manual for the pressure sewer system.

3.3.2 Individual Property owners

Individual property owners will lodge a building application to construct on the property and will be provided with the names of accredited installers of the pressure sewer technology. Thereafter the property owner will be required to organise with one of these accredited installers to carry out the installation on the property.

Once these works have been carried out and the plans have been provided to Council they can make application to Council for refund of that part of the property bond put aside for their "On-Property" installation.

The individual property owner is responsible for the costs to connect the pumping unit to the dwelling itself plus any additional installation requirements they may have for their unique installation.

The installation of the pumping unit can only be carried out by an accredited installer using approved technology. Any individual who fails to comply with this requirement will not be issued with a certificate of occupancy and will be made to replace the pumping unit with one that is approved by Council, entirely at their costs.

3.4 Who is responsible for the Operation, Maintenance and Replacement of Pressure Sewer Infrastructure?

The responsibility for the operation, maintenance and possible replacement of pressure sewer infrastructure, following its installation, is a joint responsibility; shared between Council, individual property owners and residents where these differ from the property owners, as outlined below. In the case of infrastructure provided by developers, the developers also share the responsibility for a limited time following its installation up until its eventual handover to Council.

3.4.1 Council Responsibilities

Council shall be responsible for the operation and maintenance of the following items of infrastructure after it has assumed responsibility for them:

- Individual Sewage Pump Stations on each property, including the pump well, pump, electrical control cabinet and associated fittings.

- All pressurised sewer mains and associated fittings, including boundary kits and boundary kit boxes.
- Ongoing flushing of the pressure sewer mains.
- The discharge point.

Council shall be responsible for the replacement of these items as part of the resident's ongoing maintenance agreement with Council.

Property owners shall be required to inform real estate agents, or prospective purchasers, of the nature of the pressure sewer system located on their property.

3.4.2 Developer Responsibilities

Until handover is affected, the developer will be responsible for all of the responsibilities in 3.4.1 above, normally attributed to Council.

This will particularly include the ongoing flushing of the mains until sufficient development has occurred. After handover, Council shall assume these responsibilities.

The developer however will be required to provide a Positive Covenant on each property title that allows Council access to service the units at all times. All costs associated with the creation of covenants shall be borne by the developer. The need for creation of covenants shall be addressed through placement of appropriate conditions of development consent on the proposed subdivision.

See Section 3.1.1f) for details of covenant requirements.

3.4.3 Property Owner's Responsibilities

Individual property owners shall be responsible for the following activities with their roles in respect to pressure sewer systems defined in greater detail in the home owner's manual:

- Maintenance of the electrical connection to the electrical control cabinet of the sewage pumping unit located on the property.
- Making the connection of the internal plumbing to the sewage pumping unit.
- Maintenance of the gravity plumbing on the property, up to the inlet point of the pumping unit.
- The Positive Covenant on the property will outline the responsibilities of the property owner in relation to the operations and maintenance of pressure sewer infrastructure located on the property. This will cover the continued operation and maintenance of pressure sewer infrastructure located on the property.
- Payment of the annual sewer charges, applicable from the time the connection to the sewer is made.

3.4.4 Resident's Responsibilities

Recognising that the resident will not always be the property owner, those residents on the property will be responsible for the following activities:

- Provision of electrical power to the pump station, including payment of associated power costs.
- Providing Council access to the property, for the purpose of operation, maintenance or replacement of pressure sewer infrastructure located on their property.
- Notifying Council immediately if any alarms are generated within the electrical control cabinet of the pump station, or of any other problems with the performance of the pressure sewer system.
- Ensuring no deleterious material is discharged to the sewer

The property owner shall be responsible for communicating the above responsibilities to the tenant and will ensure that a copy of the home owner's manual is available to the tenant at the time of occupancy.

3.5 General Requirements

Council's intent is that residents with pressure sewer systems should not be required to carry out significantly more operational input than for other sewerage systems. The infrequent reporting of an alarm is not seen as a significant impost and is offset by other advantages offered by pressure sewerage.

Council will achieve these goals by:

- Being responsible for the maintenance and repair of the collection/pumping units, this will be funded through the annual sewerage charges.
- Providing a 24 hour emergency response line.
- Providing residents with a Home Owner's Manual to guide them in the operation of the pumping unit and tell them what to do when the unit requires maintenance.

3.5.1 Normal Operation of the Collection/Pumping Unit

The collection/pumping units operate automatically and do not require any specific input from the resident. The collection tank is sized to provide sufficient storage to cater for power outages that might be experienced as part of normal operation. The resident Home Owners Manual sets out how the units operate and what resident should do if an alarm occurs.

3.5.2 Power Operation

Residents are not permitted to interfere with the electrical operation of the collection/pumping units. To facilitate this, Council requires the collection/pumping units to be wired into the household switchboard in such a manner so as not to interfere with the normal electrical operation of the property, nor be accessible by the residents.

3.5.3 Maintenance of the Pumping Unit

Council will maintain collection/pumping units within the system as part of its normal sewerage maintenance. As the "On-Property" works are owned by Council, it is necessary for Council staff or agents to access properties for maintenance purposes. Section 191A of the Local Government Act, 1993, gives Council authority to enter private property to undertake maintenance of works on its sewerage systems.

3.5.4 Levels of Services

In general Council will endeavour to provide the same level of service as provided in gravity sewerage systems, particularly during business hours. For after-hours service, Council will specifically provide the following additional services:

- Next day repairs or replacement of the pumps for after-hours responses to high level alarms.
- This is to minimise inconvenience to the resident by utilising the emergency storage in the collection tank.
- Immediate response to any emergency situation with the potential for an overflow.

The Home Owner's Manual will detail Service Standards between Council and the Property owner, as well as what the home owner should do in response to any emergency (or alarm) situation.

3.5.5 Home Owner's Manual

Council will supply (and keep up to date) a Home Owner's Manual to all owners of properties where pressure systems are installed. The Manual will outline operation and maintenance requirements of the pumping units. The Manual will include:

- Details on the operation of pressure sewer systems including appropriate contact numbers and/or web site details for further enquires
- Emergency contact phone numbers
- What to do if the alarm sounds
- What to do in the case of a power failure
- How to minimise waste generation in the case of emergencies
- How to install and operate swimming pools, spas etc. in pressure sewerage areas, and detail requirements for design and installation of any new pools or spas
- What can be safely discharged into the sewerage system

3.5.6 How Will the Home Owner/Resident Know How to Operate the Pumping Unit?

A Home Owner's Manual will be provided by Council to all home owners to outline the operation and maintenance requirements of the pumping units. The Home Owners Manual is to include:

- Emergency contact numbers and/or website details for further enquires in respect to this technology.
- What to do if the alarm sounds?
- What to do in the case of a power failure?
- Ensuring access to the unit for operation and maintenance.
- What can be safely discharged into the sewerage system?

The Home Owner/Resident is expected to familiarise themselves with this document and use it when required. It will be supported by further detail on pressure sewer systems contained on Council's website.

3.5.7 Can the Home Owner/Resident Repair the Pumping Unit?

The unit is Council property and under no circumstances is to be touched by the resident.

3.5.8 Maintaining the Overflow Relief Gully

The property sanitary drain shall be connected to a controlled overflow mechanism such as an overflow relief gully trap. These will be identified as overflow relief gully traps on the Sewer Service Diagram.

Properties are not permitted, under any circumstances, to block any overflow relief gullies such that they are unable to perform their normal operation. Properties blocking overflow gully traps may be charged the full costs of damage and repairs to the pressurised sewerage system, both inside and outside the property.

In flood prone areas special arrangements are required in relation to overflow relief gully traps in order to prevent the intrusion of floodwater and damage to the system. Gully trap arrangements for these circumstances are detailed in the Pressure Sewerage Technical Specification.

3.5.9 Special Requirement for Swimming Pools and Spas

While Pressure sewer systems do not prohibit high discharge applications such as swimming pools and spas, appropriate provisions need to be made to accommodate these discharges.

Swimming Pools

Council requires that any property owner within a pressure sewer system installing a swimming pool regulate their pool backwash volumes and rates so as not to exceed the capacity of the pumping unit

and to avoid alarms being needlessly generated. The same provisions shall apply to persons wanting to drain their swimming pools.

There are a number of ways to drain or backwashing pools without causing an alarm, and in general these will be dealt with on a case by case basis. For any proposed pools, the agreed format of discharge will be covered by a condition of consent for the dwelling or pool.

Spas

Sudden discharges from Spas could either trigger the pumping unit high level alarm or, in a worst case scenario, result in an overflow at the residential overflow relief gully. Council may therefore impose special requirements on properties which are proposing the installation of spas, which may include time delays on alarms, provision of a non-standard collection/pumping unit with additional storage in the collection tank or a buffering tank.

The special requirements for spas will be determined on a case by case basis. Spa owners within pressure sewerage areas need to contact Council's Water Services section, who will advise on the correct way to discharge the spa into the collection tank. Formal approval will also need to be given to any agreed format of discharge and further approval will be required to vary this at any future stage.

Cost of special modifications for spas and swimming pools

The costs for any additional equipment over and above the basic collection/pumping unit that is required to be installed to accommodate large sudden discharges from spas and/or swimming pools shall be met by the property owner. Owners proposing new spas or swimming pools are advised to contact Council prior to installation, to ensure that the rate of discharge will not cause any problems with the operation of the pressure sewer systems.

3.5.10 Why Does the Property Owner/Developer need to Use an Accredited Installer?

A number of installers in the LGA will be formally accredited by the Technology Supplier and a list of these will be provided to all persons wishing to install a pressure sewer unit on their property. Use of these installers will ensure the warranty provisions provided by the manufacturer are guaranteed and the installer will also be trained in the service diagrams required by Council as a permanent record of the works on the properties that will be stored by Council. Please contact Council for a list of these installers.

3.6 Administration

This section outlines how Council will support the operation, maintenance and supply of pressure sewer systems in the Coffs Harbour City Council LGA.

3.6.1 Sewer Charges and Repairs

Operation and maintenance of pressure sewer systems, including "On-Property" works will be undertaken by Council and funded through its sewer assessment charges.

As outlined in Section 3.2.1 of this policy, there are no resident serviceable components in a pressure sewer system. In cases of neglect, failure to undertake the requirements set out in the Home Owner's Manual or where the pumping unit or service line is deliberately damaged, Council may seek costs from the property owner and this may be done before effecting repairs.

3.6.2 Property Diagrams

As part of the initial installation of “On-Property” works a property layout drawing will be produced, and modified to reflect the final “as constructed” drawings. Council will maintain a copy of the house Sewer Service Diagram, which can be obtained from Council during normal office hours. Costs associated with obtaining copies of these diagrams will be included in Council’s annual fees and charges.

During the construction/installation phase Council will require that a package of information be compiled together with Work as Executed drawings. Such things as the date of installation, commissioning date etc. are required and that information will also be available upon request.

3.6.3 Spare Pumps

Council will maintain a quantity of replacement pumps and other spare components for emergency maintenance purposes. No resident should be without their service for a period that will unduly affect the amenity of their property.

3.6.4 Accredited Installers

Design and installation of “On-Property” works shall only be undertaken by installers accredited by Council. Accreditation will be available to local plumbers and contractors.

Council will maintain an up to date list of accredited installers, and will make the list available to property owners and their builders, on request.

3.6.5 Home Owners Manual

Council will monitor and keep up to date the Home Owner Manual so that residents who lose the manual can obtain another copy from Council. Residents will be able to purchase additional copies of this manual at any time.

Council will maintain an abbreviation version of the Home Owners Manual so that a copy can be given out by real estate agents to persons renting a property or on taking up holiday occupants.

3.7 Modifications to “On-Property” Works

An advantage of pressure sewer systems is that they allow property owners flexibility in terms of property modifications. For example, the property discharge line can be quickly re-laid downstream of the pumping unit at relatively minimal costs, thereby eliminating problems of constructing structures over the sewer.

3.7.1 Relocating Collection/Pumping Units and Property discharge Lines

If a property owner wishes to relocate the “On-Property” pipelines or the collection/pumping unit, Council may allow such relocations subject to:

- The hydraulics on the property allowing the unit to be moved.
- The associated costs with the relocation being met by the owner.
- The works being undertaken only by accredited installers in accordance with Section 3.6.4 of this policy, or Council
- Any other technical requirements as specified in Council’s Pressure Sewer System Technical Specification.

Any relocation of the pumping unit or property discharge line shall be at the property owner’s expense. Property owners proposing to relocate the pumping unit or the property discharge line are required to contact Council’s Water Services section, and officers will advise the property owner of Council’s requirements. If an accredited installer is used for relocation works then written Council

approval must be obtained prior to work commencing. The “On-Property” works remain Council’s property.

Full details of the as constructed works (Work as Executed information dates of construction etc.) shall be provided to Council, including a modified property layout drawing showing the new location of the delivery line and unit, and the Homeowner’s Manual updated.

Residents interfering with delivery lines or pumping units without Council’s approval may be subject to action under Section 635 of the Local Government Act 1993. This is in addition to meeting any costs arising from the loss of warranty on that pumping unit, and/or damage to that unit and/or, any costs associated with such unauthorised works.

4 Definitions

Accredited Installer – an installer accredited for undertaking “On-Property” works in accordance with the Pressure Sewer System Policy and Procedures

Actual Pump Head – This is the actual static head plus the frictional losses that the pump has to meet in discharging the collection tank’s contents. The final or actual pump head is determined from field measurement, to confirm previous design calculations of the pump head.

Alarm Volume – This is the volume that is stored in the on-property collection tank, before the collection tank alarm activities.

As constructed drawings – see work as executed drawings

Backlog area - existing residential areas that do not currently have a centralised (or reticulated) sewerage system

Boundary Kit – see Property Boundary Kit Assembly

Collection/Pump unit – a collection tank and associated pumping equipment including grinder pump, level switches, pipework and valves

Collection/Pump unit supplier – a company that supplies collection/pump units, technology (primarily Grinder pumps) and knowledge and guarantees the performance of the individual items within the collection/pumping unit

Collection Tank – that part of a collection/pump unit which collects and stores flows from sanitary drains

Control/Alarm Panel – The power and control panel which controls operation of the Grinder pump and which contains audible and visual alarm components. The panel also contains a dedicated circuit breaker for power disconnection.

Council – This term should be interpreted to mean Coffs Harbour City Council and its successors.

Designer – This is the individual responsible for the design of either the pressure sewerage reticulation system or the “On-Property” works (or both).

Emergency Volume- This is the volume which is stored in the pressure sewerage collection tank from just above the alarm activation level to just before the overflow relief gully begins to discharge.

Flushing Point – This is a formal point in the reticulation to which a large supply of water can be connected under pressure to flush out the reticulation pipelines, or alternatively to remove sewage from the reticulation system.

Grinder Pump - a mechanical device designed to pump liquid and in the process reduce the size of solids contained in the sewage

High Level Alarm – This is both an audio and visual alarm system activated when the level of the sewage in the on-property pressure sewer collection tank reaches the alarm volume level.

Home Owners Manual – a manual informing resident of what they can and cannot do in relation to the pressure sewerage system on their property, as well as what to do if their system should fail.

Installer – This is the company/ individual responsible for carrying out all of the “On-Property” works. Council will only permit accredited installers to undertake works.

Low Pressure Sewer Scheme – This is a different name also often used to describe pressure sewer schemes.

On-Property Works – These are the total works undertaken on a property, including any excavation, installation, compaction and restoration associated with the Collection/Pump unit, Property discharge line/s, Control/Alarm panel, Property boundary assembly, Pump control/power cable and a one (1) metre stub of gravity sanitary drain extending outside the pressure sewerage collection tank.

Overflow Relief Gully – This is a control overflow device to prevent overflows occurring inside the dwellings on the property, by ensuring that as such overflows occur outside of the dwelling. Its arrangements and dimensions are contained in the National Construction Code 2016 – Volume 3 – Plumbing Code of Australia.

Construction Contractor – This is the company/ individuals responsible for constructing the off property works, such as the reticulation system and the property boundary assemblies. This company/ individuals might also be the Installer.

Pressure Sewerage Lateral– This is the continuation of the property discharge line from the property boundary assembly to the reticulation system pipeline and includes any road crossings (where applicable).

Pressure Sewerage Reticulation System – the series of pipelines laid in the streets connecting the properties to either a treatment plant or some designated discharge point in an existing sewerage system, and includes the property boundary assemblies.

Pressure Sewer Systems – This is a specialist system wherein all of the property sewage is connected to an “On-Property” pumping station (or series of pumping steps). This dedicated pumping unit incorporates a grinder to reduce solids in the sewage to watery slurry. The pumping station then discharges through small diameter pipelines laid at minimum depth. Council’s pressure main reticulation systems rely on the pressure generated by all the “On Property” pumps in the system to move sewage from the pumping unit to the treatment plant or the set discharge point in a gravity reticulation network.

Pressure Zone – This is a collection of properties that are capable of being isolated from upstream and downstream areas during the construction phase and are clearly marked as such on the reticulation drawings. The zones are used to allow one area to become operational whilst the upstream areas are still being constructed.

Property Boundary Kit Assembly - This is a valve box at the property boundary incorporating an isolating valve, flow directional valve and an inspection tee piece.

Property Sewer Service Diagram (SSD) – A drawings showing the “on property” works in conjunction with the gravity house drains.

Property discharge Line – The pipeline that connects the on-property pumping station to the property boundary kit assembly.

Pumping Units (or Station) – this includes the pumps, collection tank, alarm system, pump pressure switches, etc. and is installed on the property.

Sanitary Drains – pipelines installed by licenced plumbers which convey sewage from buildings to a connection point (also called house drains, house sewer or house service line).

Work as Executed (WAE) Drawings – These are the Work as Executed or as Constructed Drawings.

5 Key Responsibilities

General Manager

To lead staff through delegated authority in their understanding of this Policy.

Director Sustainable Infrastructure and Group Leader Strategic Asset Management

To ensure the commitment made within this Policy is implemented and met.

Water Services Team Leader

To oversee compliance with, and coordination of the Policy.

Council Officers

To promote the use of, and knowledge of this Policy.

6 References

- *Local Government Act 1993;*
- *Local Government (General) Regulation 2005;*
- *AS / NZS 3500 National Plumbing and Drainage Code;*
- *National Construction Code 2016 – Volume 3 – Plumbing Code of Australia;*
- *Pressure Sewer System Procedures;*
- *Pressure Sewer System Technical Specification;*
- *Pressure Sewer Systems - Home Owner’s Manual;*
- *Pressure Sewerage Code of Australia WSA 07–2007;*
- *Water Directorate Pressure Sewer Systems Operations & Maintenance Manual 2017*
- *Water Metering Service Installation Policy;*
- *Backflow Prevention and Cross Connection Control Policy - Containment Only*
- *Section 80A Real Property Act 1900 – Memorandum AM953813M*

7 Details of Approval and revision

- **Approval date: 13/02/2018**
- **Responsible Section: Asset Project Delivery**
- **Superseded policies/procedures:**
- **Next review date: 13/02/2022**

Table of amendments

Amendment	Authoriser	Approval ref	Date

8 Appendices

- Pressure Sewer System Policy
- Pressure Sewer System – Technical Specification
- Pressure Sewer Systems Home – Owner’s Manual