Procedure

Pressure Sewerage Systems – Connections and Extensions

1. Purpose

Pressure Sewerage Systems (PSS) are in areas where occupied properties use a pump to move their wastewater from their home or building to a smaller diameter pressure reticulation system usually located in the street. This then flows to a larger pumping station or gravity wastewater system.
PS are generally used in areas where a conventional gravity system is not a viable servicing option. For example, flat, wet, rocky, hilly terrain or environmental sensitive areas.
They have been installed as part of our Priority Sewerage Program (PSP) in unsewered urban villages. However, PSS are also installed in areas not covered by the PSP.

2. Scope

This procedure is to help us process customer applications that need an extension from a PSS.

3. Procedure in detail

3.1 Pressure Sewer System equipment

PSS whether they are in a PSP area or not, generally consist of the following infrastructure:

- Small diameter pressure reticulation pipes – these pipes are usually located in the street
- Wastewater flows under pressure to a larger pumping station or gravity wastewater system
- A sewer lateral and a boundary assembly kit - every property within a pressure sewer area requires this infrastructure, which Sydney Water owns and maintains
- On-property equipment including a collection tank, pump and alarm control panel - Every property connecting to the PSS requires this equipment.

Refer to Appendices B, C and D for more details about the PSS equipment and how it works.

3.2 Ownership and maintenance responsibilities

The on-property equipment may be owned and maintained by Sydney Water or the property owner – this depends on the type of property and how the job was managed.

Industrial, commercial and publicly owned properties

The on-property PSS equipment is owned and maintained by the property owner.
EXCEPTION - if the property uses less than one equivalent tenement (1ET) or 450 litres per day), Sydney Water will own and maintain the PSS equipment.

Refer to Appendix O – example of a fact sheet, 'Pressure Sewer Systems connection guide for commercial and industrial properties'.

Residential properties in PSP areas

The property owner can choose to:
1. Own and maintain the on-property PSS equipment themselves – they must apply to connect through the Sydney Water Tapin™ process as a 'Pump to Sewer' application and the equipment is installed using their own licensed plumber.

Note: After the Sydney Water approved equipment is installed and approved by NSW Fair Trading, the property owner will enter into an 'Additional Services Agreement' with Sydney Water. This is issued to the property owner from the Sydney Water Tapin™ team.

2. Have Sydney Water own and maintain the on-property PSS equipment – they must apply to connect using a Water Service Coordinator (WSC), who manages their application

Other notes

1. Once the PSS on-property equipment is installed and approved by Sydney Water, a 'Homeowner's Manual – Pressure Sewerage System' and a copy of Sydney Water's PSS Agreement must be provided by the DSO to the WSC for the property owner. The property owner must use the PSS equipment on their property in accordance with these documents.

The property owner must sign a copy of the PSS Agreement and provide this to the WSC for the DSOs file.

Refer to Appendix J to see examples of the PSS Agreement template.

In most applications to connect, the property owner is responsible for all costs including licensed plumbers, WSCs, on-property equipment, installation and final connection.

2. There are exceptions regarding reimbursement to property owners for on-property equipment in PSP areas. This depends on the scheme and whether or not the property was part of the original scheme.

For connection applications where the property is located in a PSP area, refer to Appendix A for more information about scheme rules.

Refer to Appendix E and F fact sheets which provide details for property owners about their connection choices and costs. These are stored in e-Developer templates if the customer or WSC need more information about connection choices for the property. (WSCs can contact their case Manager for a copy.)

Note: For all property connections - i.e. only all on-property equipment installations - to a PSS that are not within a PSP scheme area, the property owner must apply for a 'Pump to Sewer' connection through Sydney Water Tapin™. Customers will be responsible for owning and maintaining the PSS on-property equipment.

1.1 Initial customer enquiries – Contact Centre and Community Relations roles

The initial customer enquiry may come through Sydney Water's Contact Centre and/or the Community Relations Team.

- The Community Relations Team manages the initial PSP enquiries after each scheme is completed and handed over to Sydney Water
- Community Relations has developed a table that sets out the rules and variations for each scheme including ownership/maintenance of PSS on-property equipment and funding models that have been agreed for all PSP schemes – refer to Appendix A for details.

The WSC and Case Manager should liaise with the Community Relations Team if the rules for a PSP scheme need to be confirmed.

The Community Relations Team will direct the property owner to:

Sydney Water's Tapin™ team - for 'Pump to Sewer' applications, PSS on-property equipment to be installed by a licensed plumber and an extension of a PSS reticulation main outside a PSP area (where property owners require a 'Pump to Sewer' application) - a WSC - for an extension of a PSS reticulation main in a PSP area, lateral and boundary assembly kit, as well as PSS on-property equipment install through a WSC.
Due to the many types and variation of enquiries received, the Community Relations Team may also need to direct the property owner to City Growth and Development when required.

2. Overview of the PSS connection and extension application phase

Phase one – enquiry and requirements

Step	Description	Responsibility
1	Initial customer enquiry	WSC and Case Manager
2	Lodge customer's application	WSC
3	Manage application and investigation	Case Manager
4	Issue response letter to WSC	Case Manager
5	Accept response letter and sign Deed	Case Manager
6	Process Deed and complete Business Case for funding approval – if applicable	WSC and Case Manager

Phase two – design

Step	Description	Responsibility
1	Manage design of PSS works	WSC
2	Manage design review and complete procurement approval if applicable	Case Manager

Phase three – construct

Step	Description	Responsibility
1	Manage construction	WSC
2	Construction process	Case Manager

Phase four – construct

Step	Description	Responsibility
1	Finalise construction	WSC
2	Receive Work as Constructed (WAC) package	Case Manager
2	Finalise funding payment if applicable and finalise case	Case Manager

3. Details steps of the PSS connection and extension application procedure

Phase 1 – Step 1 enquiry and requirements

Step 1.1 WSC

The initial enquiry (before the e-Developer application) could be about an extension or adjustment:
a PSS reticulation extension
adjusting an existing PSS, some examples of this is a knock down and rebuild of a home where the original PSS equipment needs to be retained and moved to another location when construction is complete. A deviation to an existing PSS 40 mm PE line on the property, to allow a new structure to be built.

Please note

When you do lodge your application for this in e-Developer both types of cases above, must be lodged as a Minor Extension application and with an accredited PSS provider. This is because Sydney Water are responsible for ownership and maintenance of the original PSS equipment.

or

The initial enquiry (before the e-Developer application) could be Installation of a lateral and boundary assembly kit or the on-property equipment, with the property either:

connecting to and within a PSP area
adjacent and connecting in a PSP area
completely outside/separate to a PSP area.

Please Note

The enquiry may or may not be a part of a S73 application.

Your response could be:

Yes, it's part of a Section 73 application, answer the enquiry and if appropriate lodge the application as normal then go to step 2.

No, it's not a Section 73 application and the property requires a PSS reticulation main extension you'll need to contact a Case Manager in the relevant LGA team to see if it can be a Minor Service Extension (MSE) application. If:

it can be an MSE give the Case Manager all the application information and they will manage the application from here. The Case Manager will follow the Minor service extension procedure

it isn't then it will require a Minor extension application through e-Developer, go to step 2

or

If the property doesn't need a PSS reticulation main extension but needs a lateral and boundary assembly kit and / or the on-property equipment will be owned by Sydney Water, there are three scenarios, if:

it's located within a PSP area, check the details in Appendix A to see what rules apply and apply then as necessary and answer the enquiry. If required make a Minor extension application and go to step 2

it's located adjacent and connecting to a PSP area, check the details in Appendix A to see what rules apply and apply then as necessary and answer the enquiry. If required make a Minor extension application and go to step 2

it's not in a PSP area, answer the enquiry and if required make a Minor extension application and go to step 2.

Please remember If the property owner wants to own and maintain the on-property PSS equipment and only that equipment is required you as the WSC is not required. Advise the owner to lodge a Pump to Sewer application in Sydney Water Tapin™. The property owner must engage a licensed plumber to install the equipment will be responsible for owning and maintaining the on-property equipment.

Step 1.2 Case Manager

Before the e-Developer application, the enquiry can be split into two types.

1. Whether a PSS reticulation extension application should be a 'Minor Service Extension' (managed under the MSE policy and procedure) or a 'Minor extension' managed by the WSC and fully funded by the customer.

Look at the Minor Service Extension Policy and the Minor Service Extension Procedure and decide if it falls within the scope and criteria for that application type.

If it does, take over the enquiry from the WSC and manage the request using the Minor Service Extension Procedure – go to Minor Service Extension Procedure.
Or
If it doesn't, leave the enquiry with the WSC to manage - refer to step 1.1 above.

Please note individual properties can't connect to a PSS transfer main.

2. If the enquiry is about the installation of a lateral and boundary assembly kit or the on-property equipment.

Within a PSP area - If they're connecting to and within a PSP area - check the details in Appendix A regarding scheme rules and ask the property owner if they intend to own and maintain the on-property equipment.

Sydney Water owned and maintained PSS equipment - WSC application go to step 1.1 above

Property owner to own and maintain the PSS equipment – WSC not required. Refer property owner to Sydney Water Tapin™ to make a 'Pump to Sewer' application

Outside a PSP area - If they're connecting to a PSS system completely separate to a PSP area and the enquiry is about on-property equipment, a WSC is not required. Refer property owner to Sydney Water Tapin™ to make a 'Pump to Sewer' application.

Outside a PSP area and a WSC is not required

If they're connecting to a PSS system completely separate to a PSP area and the enquiry is about on-property equipment, a WSC is not required. Refer property owner to Sydney Water Tapin™ to make a 'Pump to Sewer' application.

Outside a PSP area and a WSC is required

If they're connecting to a PSS system completely separate to a PSP area and their enquiry is about installing a lateral and boundary assembly kit, direct them to a WSC - go to Step 1.1 above.

Phase 1 – Step 2 enquiry and requirements

Step 2 WSC lodge application

2.1 Lodge either the 'Section 73 Compliance Certificate' or 'Minor extension' application in e-Developer – use Step 1.1 above to decide the application type.

2.2 Go to Step 3. Phase 1 –Step 3 enquiry and requirements

Step 3 Case Manager manages the application and investigation

3.1 Review the application and decide if it's complete and correct. If not, reject the application and send back to the WSC to re-submit. The DSO must repeat this step until the application is accepted.

3.2 When the application is complete and correct, use HYDRA to determine if the property is in a PSS area and whether it is within a PSP area or not.
Tip: HYDRA highlights PSP areas by cross-hatching and a notation, existing PSS mains and infrastructure are also shown.

3.3 Use the 'Checklist for referring S73 applications to internal stakeholders' template stored in e-Developer to decide where to send the application.

3.4 The checklist will advise the appropriate PSS system requirements. The advice will automatically upload into the Notice of Requirements (NOR)/ Letter of Conditions (LoC).

Note - For help with progressing the following steps through e-Developer go to iConnect > Asset Creation Developer Process > e-Developer Online Help.

3.5 Go to Step 4.

Phase 1 – Step 4 enquiry and requirements

Step 4 Case Manager issues response letter to WSC

4.1 At the e-Developer 'Determine Requirements' work item, the DSO must select 'Asset Creation' (i.e. all PSS work is 'Major works') and the wastewater service stream. Refer to: e-Developer Online Help / Define Assets / Determine Requirements.

4.2 The DSO response depends on the application type:

4.2.1 For 'Section 73 Certificate' applications - first use the information outlined in Steps 2.1 and 2.2 above to decide if the developer needs to construct one or more of the following:

PSS main extension

PSS lateral and boundary assembly kit – this is the connection into the PSS reticulation main, similar to a junction in a gravity sewer

On-property equipment – this ONLY applies if there's a house currently on the property or is being built on the lot(s) and is at lock up stage. The on-property equipment can't be installed otherwise.

As detailed in step 2.1 above, there are two options for how the on-property PSS equipment is owned and Maintained.

Option 1 the equipment is owned and maintained by us

The equipment must be installed before the Section 73 Certificate can be issued. However, because the equipment can't be installed until house 'lock-up' stage and when a permanent electricity supply is supplied for the property, a bond for early release of the Section 73 Certificate issue can be lodge The WSC will also need to submit a design package as Sydney Water Mech/Elec (as well as AIS) will need to inspect the work.

Option 2 the equipment is owned and maintained by the property owner

The WSC does not submit a design package for the equipment because the application is handled in Sydney Water Tapin™. Sydney Water Mech/Elec in not involved with the final inspection. If a main extension and or sewer lateral and boundary assembly kit is required, the Case Manager must issue the Section 73 Certificate after they are installed. There is no need to wait for the on-property equipment to be installed. The Case Manager the issues the Notice of Requirements (NOR) and Developer works deed for all applications that require the PSS works, whether the property is in a PSS area or not. The Case Manager must use either the PSS NOR with building template or the PSS NOR without building from the e-Developer templates. If there is on-property equipment makes sure the correct on-property equipment wording is inserted. This depends on whether Sydney Water will allow own/maintain the equipment or not.

Within the NOR generated by e-Developer, there are also words that must be used and tailored for the application. **It's important that you select the correct pump type words if there is on-property equipment. Refer to appendix A for pump types in PSP areas.**

Please note if the development Consent (DA) involves the construction of a building, select the PSS NOR with building template and include the building plan approval requirements.

The Case Manager will need to find out who will own and maintain and pay for the on-property equipment so the correct wording can be inserted. Check the details in Appendix A to find out.

Check that the rules for the scheme matches what was provided by the WSC in the application – see step 1.1 above.

4.2.2 Minor works extension applications

How much you handle the application depends on what's required.

For PSS main extension and or lateral and boundary assembly kit and on-property equipment

For a property either within a PSP area but not originally served or adjacent to a PSP area. If the application includes the installation of on-property equipment you'll need to find out whether Sydney Water will own and maintain (and fund sometimes) the equipment. To find out check **Appendix A**. If applicable check that the advice provided by the WSC with the application is the same as what you find out.

Compile the Letter of Conditions (LoC) and Developer Works Deed using the e-Developer templates **Letter of approval – Pressure sewer** and auto generated words. If there's on-property equipment make sure you insert the correct on-property equipment wording i.e. depends on whether Sydney Water is to own the equipment or not as well as the correct pump details. Refer to **Appendix A** for pump types in PSP areas.

Please note individual properties can't connect to a PSS transfer main.

On-property equipment only that is to be owned and maintained by Sydney Water

A LoC and Developer works deed must be issued for this application type because it requires a design.

Use the e-Developer template 'Letter of approval – Pressure sewer' and auto-generated words. Make sure you insert the correct On-property equipment wording as well as the correct pump-type details.
Refer to **Appendix A** for pump types in PSP areas.

4.3 Complete the draft NOR or LoC and Deed. Refer to e-Developer / Help / Define Assets / Create Draft Notice.

4.4 Review the draft NOR/ LoC and Deed. Refer to: e-Developer / Help / Define Assets / Review Draft Notice.

4.5 Issue NOR/ LoC and Deed to the WSC. Go to step 5.

Phase 1 –Step 5 enquiry and requirements

Step 5 WSC accept response letter and sign deed

5.1 Review the response letter either NOR or LoC and Deed and reject to Case Manager if you have any concerns.

5.2 Explain the response letter and deed to the customer and seek their acceptance to the details. If not accepted talk to the Case Manager to reach an acceptable outcome.

Tip Use the advice shown above to answer any enquiries.

5.3 Once the response letter is accepted get all the required signatures to the Deed then submit to case Manager. Go to step 6.

Please remember only providers list with LP capabilities can coordinate, design and construct PS works. If you're not listed with LP capabilities you need to tell the customer to engage another WSC who is.

Phase 1 – Step 6 enquiry and requirements

Step 6 WSC and Case Manager process Deed and business case for funding (if required)

Follow the process within e-Developer and do the following:

6.1 WSC submits Deed. Refer to: e-Developer / Help / Process Major Works Agreement / Submit Major Works Agreement. (If applicable (most Stage 1 PSP areas), WSC submits Project Brief (copy of the quotation for the on-property equipment) to start procurement funding process.).

6.2 Case Manager ensures that the nominated WSC and Providers are listed with PSS capabilities.

6.3 Either the Case Manager or WSC:

If the nominated WSC is listed for PSS (i.e. designated with an 'LP' listing category), the DSO executes the Deed (but not if funding is required). Refer to: e-Developer / Help / Process Major Works Agreement / Execute Major Works Agreement. Go to step 6.4

Or:

If the nominated WSC is not listed for PSS, the Case Manager doesn't execute the Deed. Case Manager keeps the Execute Agreement work item and advises the WSC that the Deed cannot be executed, and the case needs to be transferred to a PSS listed WSC (or the WSC applies to be listed for PSS)

DSO re-issues the Deed. This is processed outside of e-Developer

The WSC must advise the developer and organise for the case to be transferred to a PSS listed WSC. Refer to: Systems Access Licence for Water Servicing Coordinators, Section S-05 Transfer of Information.

When all actions, including transfer of WSC has been completed go to step 6.4.

6.4 Follow the steps shown in the Managing agreements for Complex, Major and Minor works work instruction.

6.5 If applicable, DSO follows procurement guidelines for funding the on-property equipment. When the project brief is accepted, the DSO can initiate a 'Business case for Funding Approval' and execute the Deed through e-Developer.

When you have completed these instructions go to **Phase 2 - Design**.

Phase 2 – Step 1 Design

Step 1 WSC manages design of PSS works

Only WSCs listed with LP capabilities can coordinate the design and construction of PSS works.
If you are not listed with LP capabilities, you need to advise the Developer / applicant to engage another WSC who is. Alternatively, contact Sydney Water and arrange to be listed.

For those situations described below, WSCs are required to submit a design in e-Developer showing the proposed works. Also, all works (designed, constructed and tested) must also comply with the current versions of the following publications:

Provider instructions

Pressure Sewerage Code of Australia WSA 07

Polyethylene Pipeline Code WSA 01
Plumbing Code of Australia / AS 3500.

Tips
Also use the AIS and Mech/ Elec checklists shown in **Attachment K** to compile your ITP.

For FIFM remember:

If there's a Tee to be cut-in - FIFM is required for isolation of sewer pressure main

If there's an Under Pressure Cut-in – No FIFM

If the design calls for clamping as a means of blocking flow on either side and for a period less than one hour for small DN PE main (less than DN 100) – No FIFM.

1.1 PSS main extension and/ or sewer lateral and boundary assembly kit works design
WSC's are required to submit a design for this work. The design proceeds the same as for a standard major works case before going to construction.

Remember if a deed poll is being signed make sure that the Constructor is listed for PSS (LP category)

1.2 On-property equipment works design

The need for the on-property equipment to be designed depends on whether the equipment is to be owned and maintained by Sydney Water. That is:

If the on-property equipment is to be owned and maintained by Sydney Water, the WSC must design the equipment or include it in their design (for Step 1.1 above)

Because the house must be at lock-up stage and a permanent electricity supply provided for the property before the on-property equipment can be installed, the WSC must liaise regularly with the property owner regarding house construction time. It is the WSC's responsibility to make sure that the PSS works are ready for use when they are needed

You must first email the Case Manager and request Sewer Low (SL) number(s) for each new lot. SL Numbers identify Sydney Water assets in our MAXIMO system (and enable our Mech/ Elec area to do the inspections for works shown in **Appendix K**)

The Case Manager will give you the SL number(s) in the Job Specific Schedule Letter (JSL). You must include the SL numbers in the Work-As-Constructed plan – see the samples in **Appendices M and N**

The Case Manager will also attach a 'Facility Maximo (FMX) – New assets listing' spreadsheet which you will need to complete and return with the Project Completion Package (PCP)

Note: It can take up to 14 days for the Case Manager to receive the numbers so you need to make this task your first design activity

As soon as you get the SL number(s), you need to arrange the purchase of the SL stickers for the amount of alarm panels you'll be installing – these stickers help the customer identify the property etc to Sydney Water's Contact Centre if there is a fault with the on-property equipment.

Notes
1. The stickers are to be ordered from Scope Automotive Accessories P/L – see steps below - contact details:

5/377 Newbridge Road, Moorebank NSW 2170 PO Box 73, Moorebank DC NSW 1875 Phone: (02) 9601-0222/ Fax: (02) 9601-5233 ABN: 17 068 221 287/ ACN: 068-221-287 Email: sales@scopesigns.com.au

2. The number of stickers will be based on how many lots you're providing on-property equipment. You will also need to provide the SL number to go on each sticker

3. Scope Automotive already have the specification (and template) which is:

5 year UV resistant digitally printed stickers

160mm X 140mm with clear over laminate

Individually numbered with the SL number.

See an example of the template in **Appendix H**.

4. The expected turnaround time for Scope Automotive to produce the stickers after step 3 below is between 3 and 7 days, depending on how many you order.

To order the stickers do the following:

Step 1: Email *Scope Automotive Accessories P/L* at sales@scopesigns.com.au. The order will state that you'd like to order X amount of Water SL decals with SL numbers XXX and XXX individually shown on the respective stickers.

Step 2: They will confirm the cost for you to accept.

Step 3: Either they can send you the invoice or you can send a Purchase Order. If they send you an invoice, you'll need to pay before they proceed further.

Step 4: Receive stickers (either by express post or by hand – your choice). (If payment was by Purchase Order, pay for stickers.)

Step 5: You must print and laminate the WAC drawing of the installed PSS equipment and attach it inside the customer's electrical meter box. This will assist Sydney Water crews in locating equipment during emergency or maintenance issues. The drawing is also helpful for any contractors that complete work on the customer's property.

Before the alarm panel is inspected by Mech / Elec, you will need to make sure that the sticker is placed on the front lid of the control/ alarm panel.

When the on-property equipment is owned and maintained by Sydney Water a 'Homeowner's Manual – Pressure Sewerage System' and Sydney Water's PSS Agreement must be given to the property owner during the connection process

The Case Manager will send you the 'Homeowner's Manual – Pressure Sewerage System' (Appendix I) and the PSS Agreement (Appendix J) with the JSL. The Case Manager will have talked about this earlier in the requirements letter sent to the customer. **The property owner must sign the PSS Agreement and provide this to the WSC – the Case Manager must file this document and save it in CRM for the property**

If the on-property equipment is not to be owned and maintained by Sydney Water, the WSC must not show 'the on-property equipment' works in their design (and NO SL number is required or 'Facility Maximo (FMX) – New assets listing' spreadsheet completed).

Notes:

1. If Sydney Water is contributing to the cost of the on-property equipment, the WSC should continue to follow Sydney Water's Procurement guidelines.

2. WSC's are to carefully read the Job Specific Letter because there may be important specific instructions for you to follow.

Go **Phase 3 - Construction - Step 1**.

Phase 3 – Step 1 Construct

Step 1 WSC Manages the construction

1.1 Construction commencement notification
Notification varies depending on whether there is on-property equipment being installed and whether it is to be owned and maintained by Sydney Water.

1. Inspection of new PSS reticulation mains, sewer laterals and boundary assembly kits (and on-property equipment regardless of who is to own and maintain it) will be carried out by Asset Integrity Services (AIS) inspectors – see Appendix K. The WSC must submit the Construction Commencement Notice for Major Works (CCN) form to AIS in the standard way.

2. If on-property equipment is being installed and it is to be owned and maintained by Sydney Water, an inspection will also be carried out by Sydney Water Mechanical/ Electrical (Mech/Elec) inspector – see Appendix K.

Before the inspection by Mech/ Elec, you will need to make sure that the SL sticker is placed on the front lid of the control/alarm panel.

The Mech/ Elec inspection is only needed when all the on-property equipment has been completed AND is ready to be inspected, connected and tested.
To ensure that the Maintenance Service Technician (MST) inspector who performs the Mech/ Elec sign off has sufficient notification for this inspection, the WSC must email msthelpdesk@sydneywater.com.au (and cc the case DSO) giving five working days' notice. The WSC must also provide:

1. photos that clearly show all inspection items on the Mech/ Elec inspection sheet in Appendix L have been completed satisfactorily and
2. a copy of the certificate of compliance of electrical works (see Appendix K).

In the event that the desktop review of the photos does not pass inspection the WSC will be notified of any concerns and the need for rectification before a field inspection will be scheduled by the MST planner - this will result in delays.

Remember You don't need to be onsite for the **Mech/ Elec inspection,** but you MUST ensure safe access for the Mech/ Elec inspector on the day.

1.2 WSC construction activities

During construction, the WSC must make sure that:

IMPORTANT! The pump equipment being installed is the same make and type as advised in the Notice of Requirements / Letter of Conditions

If the control panel is an E-one type it must have external generator capability (Mono units don't currently have this facility)

The Pressure Sewer Construction Check list is completed by AIS (and, where applicable, the Mechanical/ Electrical Inspector) and is included with the PCP. (These inspection sheets are shown in Appendix K for your information only.)

Notes

1. The MST inspector will complete the Mech/ Elec checklist and email it to the WSC and cc the Case Manager. The checklist will only be signed off and emailed once all relevant check points are deemed acceptable to the Sydney Water inspection team.

2. If the works inspections result in the need for a Corrective Action Request (CAR) to be raised, AIS will raise their own CAR while the Case Manager will raise any CAR for Mech/ Elec. Any CAR must be closed-off before Sydney Water will accept the works.

3. House owners do not move into the house (for new houses) or start using the PSS system (for existing houses) until the pressure sewer infrastructure is accepted by Sydney Water and the customer drain is connected to the PS system.

1.3 Work-as-Constructed requirements

Follow the standard requirements set down in the Provider Instructions except where Sydney Water owned and maintained on-property equipment is installed.
For a Sydney Water owned and maintained on-property equipment installation, you must also ensure that the:

SL numbers are shown on the Work as Constructed plan for all new lots

Completed 'Facility Maximo (FMX) – New assets listing' spreadsheet is attached

Inspection sheets approved by both AIS and MST are attached

Note
The MST responsible for the Mech/ Elec inspection will email the checklist to the WSC and cc the Case Manager.

A WAC drawing of the installed PSS equipment must also be printed, laminated and inserted into the customer's electrical meter box. This will assist Sydney Water crews in locating equipment during emergency or maintenance issues. The drawing is also helpful for any contractors that complete work on the customer's property.

Go to **Phase 4 – Finalise construction and application - Step 1.**

Phase 3 – Step 2 Construct

Step 2 Case Manager construction process

The Case Manager only gets directly involved in this part of the process if the on-property equipment is to be owned and maintained by Sydney Water, that is Construction commencement notification:

Inspection of new PSS reticulation mains, sewer laterals and boundary assembly kits (and on-property equipment) will be carried out by Asset Inspection Services (AIS) – see Appendix K.

The WSC will submit the Construction Commencement Notice for Major Works (CCN) form to AIS in the standard way.

If the on-property equipment being installed is to be owned and maintained by Sydney Water, an inspection will also be carried out by the Sydney Water MST Mechanical/ Electrical Inspector.

This inspection is only needed when all the on-property equipment has been completed AND is ready to be inspected, connected and tested.

To ensure that the inspector has sufficient notification for this inspection, the WSC must email msthelpdesk@sydneywater.com.au (and cc. the Case Manager for your information only) giving five working days' notice.

The WSC must also provide:
1. photos that clearly show all inspection items on the Mech/ Elec inspection sheet in Appendix L have been completed satisfactorily and
2. a copy of the certificate of compliance of electrical works. See Appendix K.
Appendix K shows you more details of what is inspected by AIS and MST Mech/Elec.

Notes
1. MST Mech/ Elec will email the checklist to the WSC and cc you – this is for your information only.
2. If the works inspections result in the need for a Corrective Action Request (CAR) to be raised, AIS will raise their own CAR while the DSO will raise any CAR for Mech/Elec. Any CAR must be closed-off before Sydney Water will accept the works.

Go to **Phase 4 – Finalise construction and application - Step 2.**

Phase 4 – Step 1 Finalise construction and application

Step 1 WSC Finalise construction

Step 1 Work-as-Constructed requirements
Follow the standard requirements set down in the Provider Instructions except where Sydney Water owned and maintained on-property equipment is installed.
For a Sydney Water owned and maintained on-property equipment installation, you must also ensure that the:

SL numbers are shown on the Work as Constructed plan for all new lots

completed 'Facility Maximo (FMX) – New assets listing' spreadsheet is attached

inspection sheets approved by both AIS and MST Mech/ Elec are attached.

End of WSC process.

Phase 4 – Step 2 Finalise construction and application

Step 2 Case Manager receives WAC package and finalises funding payment if applicable and finalise case

2.1 Receive Project Completion Package

Option	Procedure
The development includes vacant lot	Following completion of the PSS main extension and or pressure sewer lateral and the boundary kit for all vacant lots, the: • WSC is required to submit a Work As Constructed (WAC) drawing. The WAC must conform to the Sewerage Code of Australia (Sydney Water Edition). See Appendices M and N – sample WAC drawings • WAC is submitted with the Project Completion. Go to step 2.2

The development includes construction of building	Following completion of all on-property works for these buildings the WSC is required to submit a WAC drawing. This must confirm to the Sewerage Code of Australia (Sydney Water edition). See Appendices M and N – sample WAC drawings. The WAC may include a PS main extension and lateral and boundary assembly kit. The WAC is submitted with the PCP. This may include the: • PSS Construction Checklist shown in Appendix K completed and signed by both the AIS and MST Mech/Elec inspector • Completed 'Facility Maximo (FMX) New asset listing' spreadsheet which the Case Manager must email this to AssetDataMgmt@sydneywater.com.au Go to step 2.2

2.2 Finalisation process

2.2.1. Create a Section 73 Certificate (for S73 Certificate applications):
Follow the process in e-Developer.

Note In some cases the developer may have bonded the works for the early release of the S73 Certificate due to the time delay caused by the house needing to be at 'lock-up' stage before the on-property equipment works can be installed. Ensure you review the Financial/Securities panel in e-Developer for details.

Option	Procedure
The development includes vacant lot	On completion of all PSS works up to and including boundary assembly kit and when all outstanding requirements have been met you the Case Manager can issue the S73 Certificate. Process ends.
The development includes construction of building	On completion of all PSS works up to and including boundary assembly kit and when all outstanding requirements have been met you the Case Manager can issue the S73 Certificate or releases the bond if early release of the S73 Certificate. Process ends.

2.2.2 Release the bond (for Minor Extension applications)

Follow the process in e-Developer.

Option	Procedure

The development includes vacant lot	On completion of all PSS works up to and including boundary assembly kit and when all outstanding requirements have been met you the Case Manager can release the bond. Process ends.
The development includes construction of building	On completion of all PSS works up to and including boundary assembly kit and when all outstanding requirements have been met you the Case Manager can release the bond – any bond can be released at this stage. Process ends.

2.2.3 Finalise funding (if applicable)

Follow the process in e-developer.

After the PCP package has been accepted and invoice must be provided from the developer for the on-property equipment (collection tank, pump and alarm control panel only) for you as the Case Manager to complete a payment submission. Follow the Sydney Water Funding infrastructure to service growth Policy and Procurement guideline.

End of process.

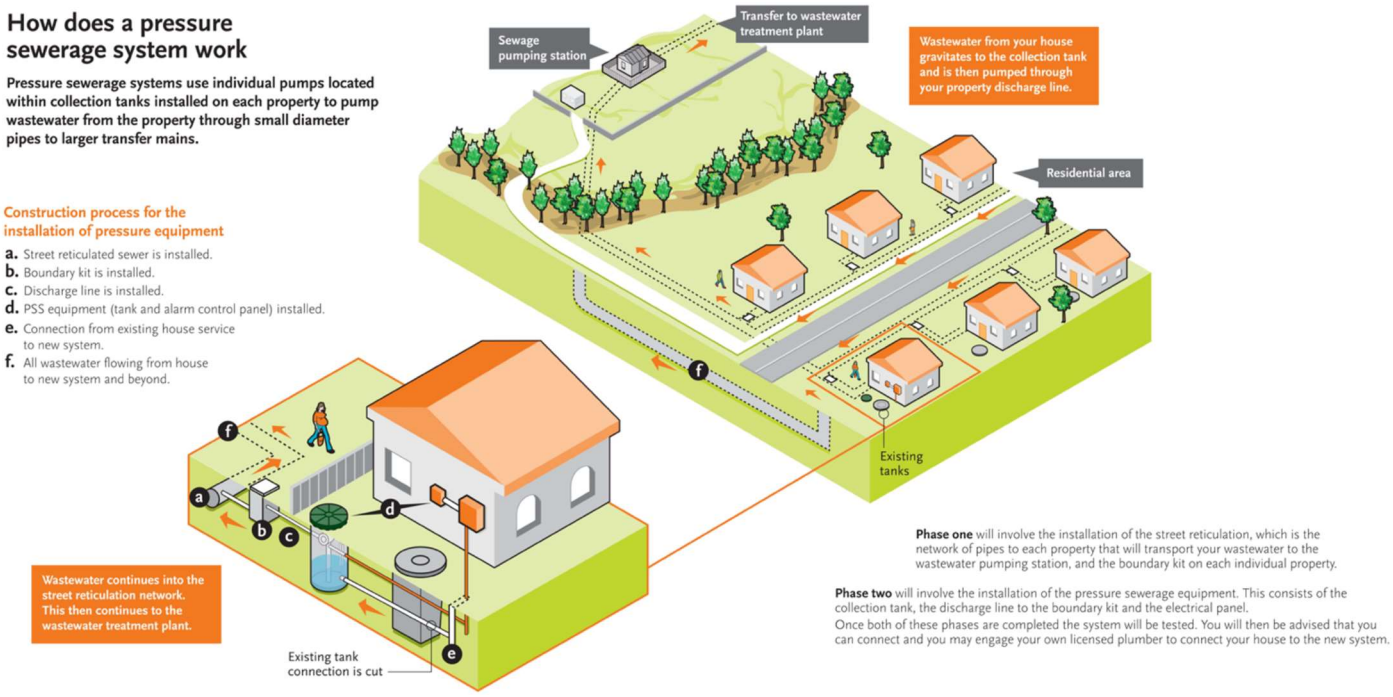
Appendix A – Priority Sewerage Program overview of schemes

Priority Sewerage Program – schemes overview for residential properties								
Scheme	**Village**	**System type - pressure or gravity**	**Equipment type**	**Free equipment for eligible* properties within subsidised service areas?**	**Date connections became available**	**LGA**	**Customer costs - rules**	**Scheme service area - rules**
STAGE 1								
Northern Towns	Coalcliff	Pressure	EOne	Yes	3 Jun 2005	Wollongong	• If customer wants Sydney Water to own and maintain equipment - customer must connect using a WSC. • No cut-off period for free equipment. • Customer pays for PSS equipment up front and is reimbursed through the WSC when work is completed and approved by Sydney Water. • Business Case required for reimbursement of PSS equipment – this is managed by Urban Growth through WSC application. • Customer pays for all connection/ installation costs, including WSC costs.	• The subsidised service area and eligible properties were determined during planning of the scheme and based on criteria of Council land zonings and lot size. Lots need to have existed when the scheme was approved by the Minister. • For single dwellings - customers signed Sydney Water agreement to receive free PSS equipment during construction of the scheme. • Vacant land - customers only eligible for Boundary Kit (connection point). • Dwellings under construction - Customers only received equipment if home was at lock-up stage with permanent electricity supply by the scheme's connection deadline (generally 12 months after connections became available).
	Stanwell Park	Pressure	EOne	Yes	22 Dec 2004			
	Stanwell Tops	**Gravity**	NA	NA	22 Dec 2004			
	Otford	Pressure	EOne	Yes	22 Dec 2004			
Jamberoo	Jamberoo	Pressure	EOne	Yes	May 2005	Kiama		
The Oaks, Oakdale & Belimbla Park	The Oaks	**Gravity**	NA	NA	Aug 2003	Wollondilly		
	Oakdale	**Gravity**	NA	NA	Aug 2003			
	Belimbla Park	Pressure	EOne	Yes	Nov 2003			
Mulgoa, Wallacia & Silverdale	Mulgoa	**Gravity**	NA	NA	Jul 2006	Penrith		
	Wallacia	**Gravity**	NA	NA	Jul 2006	Penrith & Wollondilly		
	Silverdale	**Gravity**	NA	NA	Jul 2006	Wollondilly		
Brooklyn & Dangar Island	Brooklyn	Pressure	EOne	Yes	Oct 2007	Hornsby		
	Dangar Island	Pressure	EOne	Yes	Feb 2008			
Mt Kuring-gai Industrial Estate	Mt Kuring-gai commercial properties	Pressure	EOne	Yes	Jun 2008	Hornsby		
Upper Blue Mountains	Medlow Bath	Pressure	EOne	Yes	Jul 2008	Blue Mountains		
	Blackheath	Pressure & Gravity	EOne	Yes	Jun 2008			
	Mount Victoria	Pressure	EOne	Yes	Jul 2008			

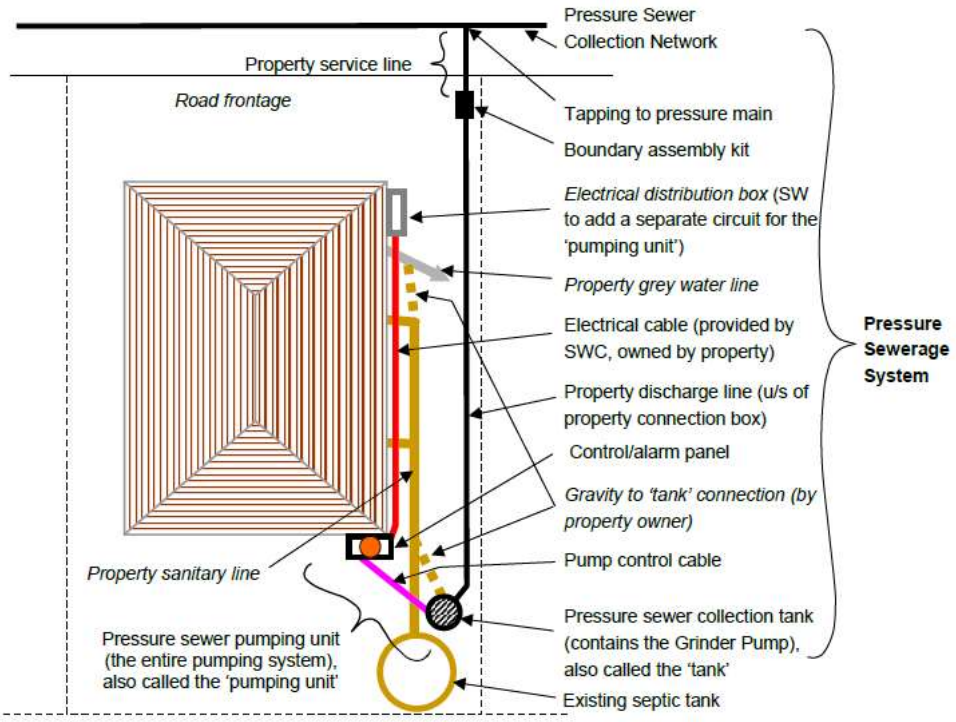
Priority Sewerage Program – schemes overview for residential properties								
Scheme	**Village**	**System type - pressure or gravity**	**Equipment type**	**Free equipment for eligible* properties within subsidised service areas?**	**Date connections became available**	**LGA**	**Customer costs - rules**	**Scheme service area - rules**
STAGE 2								
Three Towns	Glossodia	Pressure	EOne	No	26 Jul 2010	Hawkesbury	• If customer wants Sydney Water to own and maintain equipment - customer must connect using a WSC. • No free equipment. • Customer pays for PSS equipment and all connection/ installation costs, including WSC costs.	• The subsidised service area and eligible properties were determined during planning of the scheme and based on criteria of Council land zonings and lot size. Lots need to have existed when the scheme was approved by the Minister. • For single dwellings - customers signed Sydney Water agreement to receive free PSS equipment during construction of the scheme. • Vacant land - customers only eligible for Boundary Kit (connection point). • Dwellings under construction - Customers only received equipment if home was at lock-up stage with permanent electricity supply by the scheme's connection deadline (generally 12 months after connections became available).
	Freemans Reach	Pressure	EOne	No	23 Mar 2010			
	Wilberforce	Pressure	EOne	No	25 Oct 2010			
Hawkesbury Heights & Yellow Rock	Hawkesbury Heights	Pressure	EOne	No	30 Apr 2010	Hawkesbury		
	Yellow Rock	Pressure	EOne	No	31 May 2010	Blue Mountains		
	Yellow Rock extension	Pressure	EOne	No	1 Dec 2010	Blue Mountains		
Agnes Banks & Londonderry	Agnes Banks	Pressure	Mono	No	30 Mar 2010	Hawkesbury		
	Londonderry	Pressure	Mono	No	31 Dec 2010			
Appin	Appin	Pressure	Mono	No	12 Jul 2012	Wollondilly		

Priority Sewerage Program – schemes overview for residential properties								
Scheme	**Village**	**System type - pressure or gravity**	**Equipment type**	**Free equipment for eligible* properties within subsidised service areas?**	**Date connections became available**	**LGA**	**Customer costs - rules**	**Scheme service area - rules**
STAGE 3								
West Hoxton	West Hoxton	**Gravity**	NA	NA	16 Nov 2013	Liverpool	• If customer wants Sydney Water to own and maintain equipment - customer must connect using a WSC. • No free equipment. • Customer pays for PSS equipment and all connection/ installation costs, including WSC costs.	• The subsidised service area and eligible properties were determined during planning of the scheme and based on criteria of Council land zonings and lot size. Lots need to have existed when the scheme was approved by the Minister. • For single dwellings - customers signed Sydney Water agreement to receive free PSS equipment during construction of the scheme. • Vacant land - customers only eligible for Boundary Kit (connection point). • Dwellings under construction - Customers only received equipment if home was at lock-up stage with permanent electricity supply by the scheme's connection deadline (generally 12 months after connections became available).
Cowan	Cowan	Pressure	EOne	No	9 Dec 2013	Hornsby		
Bargo & Buxton	Bargo	Pressure	EOne	No	30 Jun 2014	Wollondilly		
	Buxton	Pressure	EOne	No				
Wilton & Douglas Park	Wilton	Pressure	EOne	No	30 Jun 2014	Wollondilly		
	Douglas Park	Pressure	EOne	No				
Galston & Glenorie	Galston	Pressure	EOne	No	30 Jun 2015. All properties by 30 Jun 2016.	Hornsby		
	Glenorie	Pressure	EOne	No	30 Jun 2015. All properties by 30 Jun 2016.			

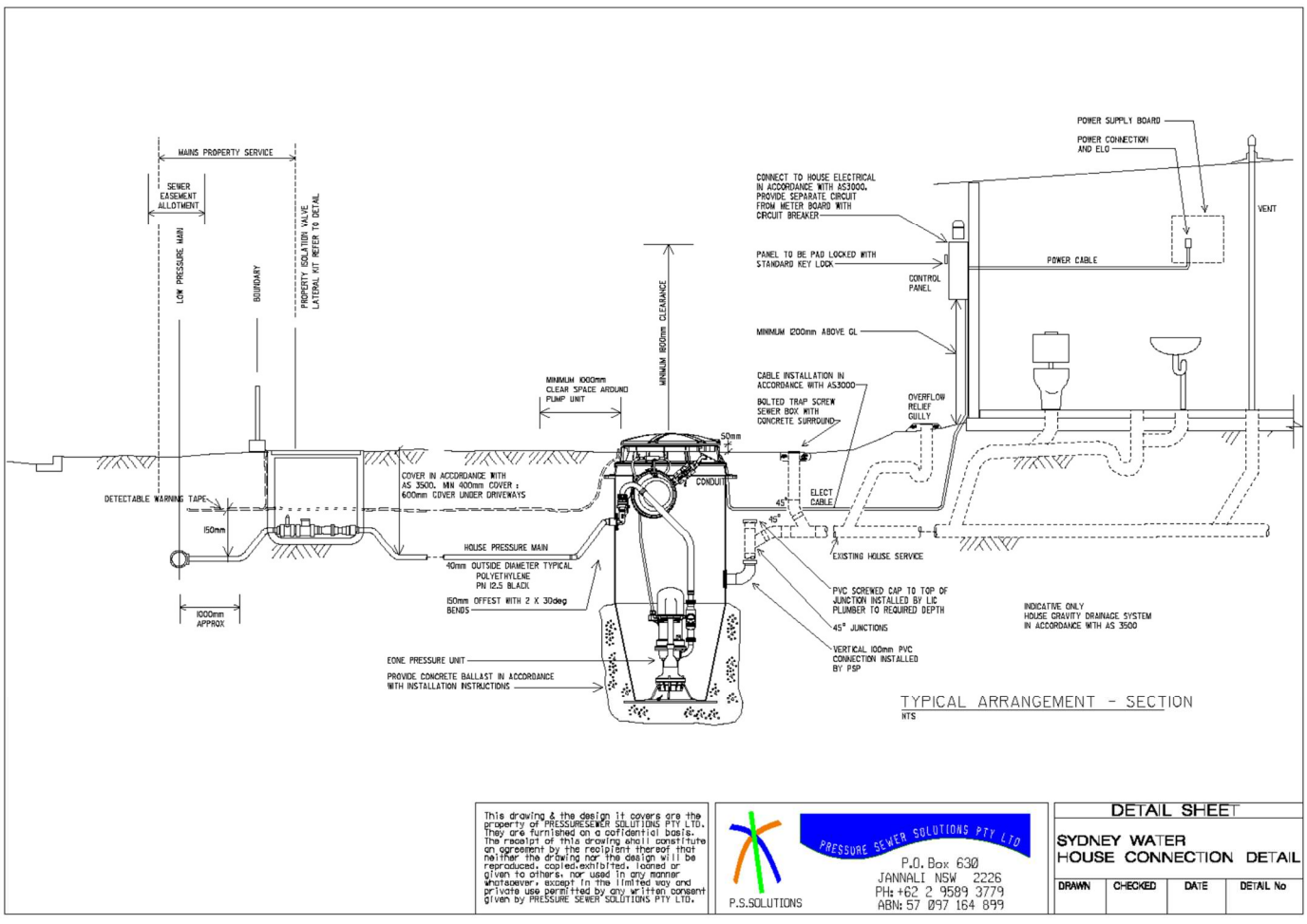
Appendix B - How does a Pressure Sewerage system work?



Appendix C - Pressure Sewerage System - property components



Appendix D - Pressure Sewerage System - on-property equipment



Appendix F – PSP Stage 2 and 3 schemes fact sheet

Pressure sewer systems – residential connections

Sydney WATER

Pressure sewerage systems

Residential property connections – Buxton Wastewater Scheme

To connect to Sydney Water's pressure sewerage system, residential property owners need to install on-property pressure sewerage system equipment – this includes the pot, pump and alarm control panel.

There are two choices available for property owners when connecting to the pressure sewerage system in Buxton.

	Option 1 **Pressure sewerage equipment owned and maintained by Sydney Water – engaging a Water Servicing Coordinator (WSC)**	Option 2 **Pressure sewerage equipment owned and maintained by the property owner – engaging a licensed plumber / accredited constructor**
Description and responsibilities	If the property owner would like Sydney Water to take over ownership and maintenance of the pressure sewerage equipment on their property, the property owner will need to engage a Water Servicing Coordinator (WSC). The WSC will guide the property owner through the process and requirements of connecting including providing information on design, costs, timeframes and responsibilities. A list of WSCs is available on Sydney Water's website, sydneywater.com.au, under Plumbing, building & developing > Building > Providers > Lists > Water Servicing Coordinators. We suggest that property owners contact a few WSCs on the list to get more information on their costs and experience. WSCs that are capable of working on pressure systems have a code of 'LP' under the 'Capabilities' column of the list.	With this option, property owners will own and be responsible for maintaining their on-property pressure sewerage equipment. Property owners can directly engage an accredited constructor or licensed plumber to do the work for them. If property owners choose this option and engage a constructor or plumber for their connection, they will not need to go through a WSC. This option involves getting quotes for the cost and installation of the on-property pressure sewerage equipment (pot, pump etc), as well as the plumber's fees. The property owner will need to check with the plumber as to whether they can source the equipment and organise delivery, or whether this is something the property owner will need to do. The property owner or their licensed plumber must apply for the wastewater connection using the Sydney Water Tap in™ service. Visit sydneywater.com.au under Plumbing, building & developing > Connections & disconnections > Apply to connect. Follow the steps to complete the user registration and online application form. We will then review the application and provide feedback, advising of the outcome. Applications are processed electronically. To know more about connecting and using this online service, please call 13 000 TAP IN (82746) or email swtapin@sydneywater.com.au. We suggest that property owners obtain quotes from a licensed plumber that is on Sydney Water's list of accredited Constructors for Major Works. The list is available on our website, sydneywater.com.au, under Plumbing, building & developing > Building > Providers > Lists > Construction (major works). We are not able to recommend anyone on the list. The property owner should choose whoever they think will do the job well and at a fair price.

	Option 1 Pressure sewerage equipment owned and maintained by Sydney Water – engaging a Water Servicing Coordinator (WSC)	Option 2 Pressure sewerage equipment owned and maintained by the property owner – engaging a licensed plumber / accredited constructor
Installation	The WSC manages installation of the pressure sewerage equipment on the property, which includes engaging the certified constructor, electrician and plumber. The property owner can co-ordinate with the WSC to use their own licensed plumber for the connection to the pressure sewerage equipment if they prefer.	For this option, property owners will need to purchase and manage the installation of the pressure sewerage equipment for the property. This includes engaging the certified constructor, electrician and licensed plumber.
Pump and pot type	For Sydney Water to take over ownership and maintenance of the pressure sewerage equipment on the residential property, EOne equipment needs to be used. This is the same type of equipment used for other residential properties in Buxton.	If the property owner prefers to own and maintain the pressure sewerage equipment on their property, it is not necessary to use an EOne pump. However, an equivalent positive displacement pump must be used. When the property owner or licensed plumber submits the application through the Sydney Water Tap in™ service, they will need to provide details such as the pump type and flow rates.
Operation and maintenance of the pressure sewerage equipment	Property owners need to engage a Water Servicing Coordinator (WSC) for Sydney Water to take over ownership and maintenance of the pressure sewerage equipment. Sydney Water will only take over the pressure sewerage equipment once the installation is complete and Sydney Water's inspectors have verified that the work complies with the required standards.	With this option, the property owner will own and be responsible for maintaining their on-property pressure sewerage equipment.
Cost of pressure sewerage system equipment and connection	For both options, the property owner needs to pay for all of the on-property pressure sewerage system equipment (including the pot, pump and alarm control panel). This also includes the connection from the new home to the on-property pressure sewerage equipment.	
Quarterly wastewater service charges	For both options, the property owner will need to pay Sydney Water's quarterly wastewater service charge. This is the same as all other properties that are connected to our system. This charge will be added to the property owner's Sydney Water bill when the property is connected to our wastewater system. Please call our Customer Contact Centre on 13 20 92 for details of the current wastewater service charges.	

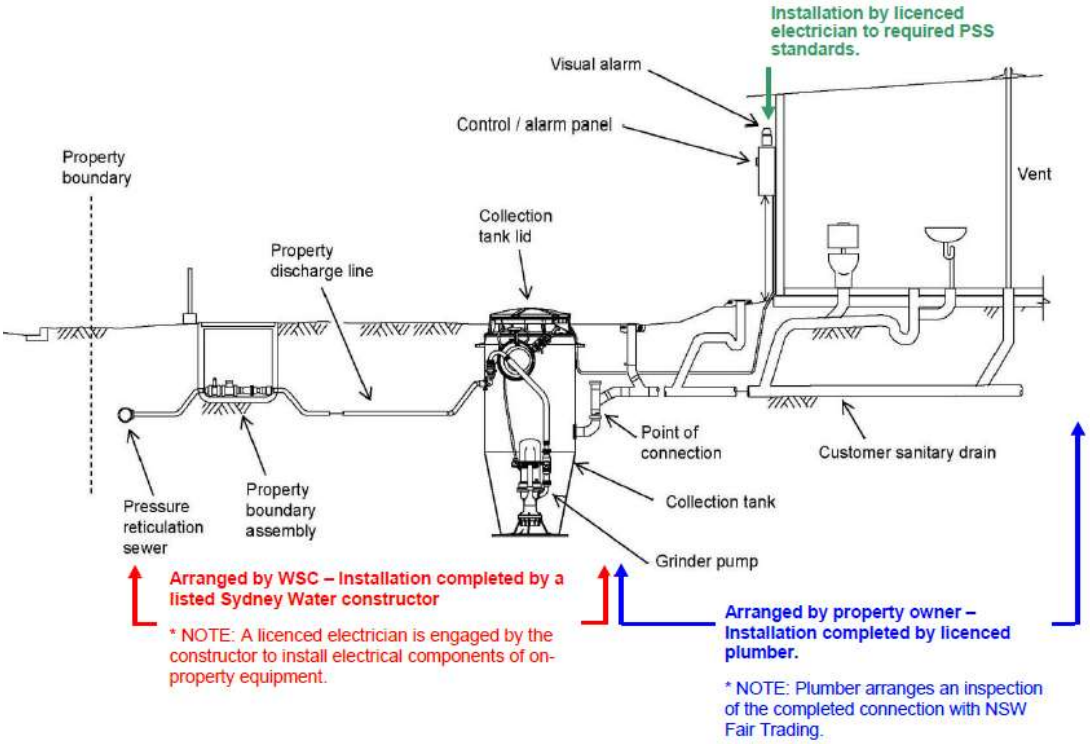
Learn more

More information about pressure sewerage systems is available on Sydney Water's website, sydneywater.com.au, under Water & the environment > How we manage Sydney's water > Wastewater network > Types of wastewater systems > Pressure.

To know more about connecting to Sydney Water's pressure sewerage system, please call our Community Relations Team on 1800 006 326.

Appendix G Pressure Sewerage System equipment owned and maintained by Sydney Water

- Installation responsibilities and inspections



Sydney Water inspections

- **Sydney Water Field Representative (AIS)**
  - inspects new reticulation mains and up to the collection tank including the boundary assembly kit, tank bedding / base, equipment location and pipework.

- **Sydney Water Mechanical / Electrical Representative (MST)**
  - tests and inspects the alarm control panel, grinder pump and collection tank electricals.

Appendix H - Template – SL stickers

Sydney WATER

If the audible alarm or light is on:

1. Stop the audible alarm by pressing the button underneath the alarm panel.
2. Call Sydney Water on **13 20 90** and inform the operator that you have pressure sewerage system equipment installed on your property.

   Advise the operator that your asset number is

   SL _ _ _ _ _
3. Avoid using large amounts of water.

For more information, refer to your **Home Owner's Manual**.

Appendix I - Homeowner's Manual - Pressure Sewerage System

Refer to separate Homeowner's Manual documents for E-One and Mono type systems saved in e-Developer templates. WSCs can contact their Case Manager to get a copy of the relevant manual.

Appendix J: Priority Sewerage Program Pressure Sewerage System Agreement – Licence terms for residential, commercial and publicly owned properties

Refer to separate documents for residential and commercial properties saved in e-Developer templates. Example for residential properties shown below. WSCs can contact their case DSO to get a copy of the relevant agreement.

Sydney Water offers to grant You a licence for the use of its pressure sewerage equipment, which is installed on Your property. This equipment is solely for the purpose of pumping domestic sewage from a single dwelling on Your property, subject to the following terms:

1. Definitions

   Customer Contract means the customer contract referred to in Section 55 of the Sydney Water Act, which can be found at www.sydneywater.com.au

   Home Owner's Manual for Pressure Sewerage Systems means the manual given to you by Sydney Water, prior to connection of your property to Sydney Water's pressure sewerage system.

   Pressure Sewerage System (PSS) equipment means the pressure sewer pump, collection tank and cover, alarm control panel, electrical connections and ancillary equipment.

   You means the registered owner(s) of Your property- **Your** has a corresponding meaning.

2. You will ensure that electricity is continuously supplied (at no cost to Sydney Water) by Your electricity supplier to enable the PSS equipment to function properly.

   This obligation is subject to Your electricity supplier's ability to maintain the continuous supply. If the PSS equipment is damaged as a result of irregular or incorrect electricity supply, Sydney Water may act on your behalf to recover the repair costs from Your electricity supplier.

3. You will allow the PSS equipment to be connected and remain continuously connected to Your electrical circuitry on Your side of the electricity meter. You will ensure (at Your expense) that Your electrical circuit is suitable for the connection. You will own and be responsible for the maintenance of any extension to Your electrical circuit necessary - to permit Sydney Water to connect its alarm control panel and PSS equipment to Your electrical circuit.

4. You must not do anything that will interfere with the proper functioning of the PSS equipment or Sydney Water's ability to access and service the PSS equipment.

5. Sydney Water will be responsible for the cost of maintenance and repairs to the PSS equipment arising from normal use in accordance with the Home Owner's Manual – please refer to the manual for specific details about how to protect and use the PSS correctly. You will be responsible for costs resulting from damage caused by You or the occupiers of Your property. Only Sydney Water can carry out maintenance and repairs on the PSS equipment.

6. You will ensure that occupiers of Your property are aware of the terms of this agreement and that they agree not to breach it.

7. In the event of the sale of Your property, You will fully disclose the terms of this agreement to the purchaser(s) and their solicitor, and request that they contact Sydney Water to enter into a new agreement as per the Section 66 conveyancing certificate for the property. Alternatively, subject to Clause 8, the purchaser(s) can notify Sydney Water in writing that they wish to cancel this agreement.

8. You may terminate this agreement if You obtain approval from Your local government authority to install an on-site sanitary treatment system on Your property.

9. Termination of this agreement by You does not affect Your obligations under Clauses 4 and 7 of this agreement, and You will cooperate with Sydney Water to remove its PSS equipment installed on Your property.

10. If You want the PSS equipment to be relocated after it has been installed, you must engage a Water Servicing Coordinator certified by Sydney Water - a list is provided on Sydney Water's website. Sydney Water will impose conditions and You will be responsible for all costs associated with any relocation.

11. Your new and existing household sanitary drainage must meet the NSW Code of Practice and Australian Plumbing Standards. This includes ensuring that there is no inflow or infiltration of stormwater into the pressure sewerage system. All household plumbing and drainage must be inspected by a NSW Fair Trading plumbing inspector before Your connection to Sydney Water's pressure sewerage system is approved.

12. You must connect Your household sanitary drainage to Sydney Water's pressure sewerage system connection point within twelve months of Sydney Water's advice that You can connect. Should You not connect within this time, Sydney Water may engage a licensed plumber and have the work done at Your expense. This cost and any interest charges will be added to Your Sydney Water account and will be subject to Sydney Water's debt recovery process.

13. Sydney Water retains an ongoing and irrevocable right to revoke this agreement and to disconnect and remove the PSS equipment if You breach any of the terms of this agreement and to do so in its unfettered discretion.

14. This is not an agreement for or with respect to the sale of goods, the provision of services or the bailment of goods to You. Wastewater services are provided to You under Sydney Water's Customer Contract. If there is any inconsistency between the terms of this agreement and the Customer Contract the terms of this agreement prevail.

Acceptance

Completion of this acceptance form by any one of the registered owners of Your property and its return to Sydney Water at the nominated address represents an acceptance by You of the above terms.

The formation of this agreement, being a specific agreement under Section 57 of the *Sydney Water Act 1994*, will be taken to have occurred on the date of Sydney Water's receipt of the completed acceptance form.

Name (print): _____

Property address: _____

I acknowledge I have read and understood this Pressure Sewerage System Agreement and accept its terms and conditions.

Signed (joint owners if applicable):

1. _____ Date _____ / _____ / _____

2. _____ Date _____ / _____ / _____

This signed Pressure Sewerage System Agreement should be returned to your Water Servicing Coordinator.

(Sydney Water only): e-Developer case number – XXXXXXX

Appendix K: Template - AIS and Mech/Elec PSS inspection sheet

Pressure Sewer Construction check list

Case No…… **Address**……

WSC……..…….. **Constructor**…….……..……

Pipework and boundary assembly kit – Civil inspection (AIS)

Item number	Detailed requirements	Approved?
1	Check connection has been made correctly to main sewer line. **Groundwork can be backfilled leaving bends & connection exposed for Civil inspection.** Boundary assembly kit must not be constructed in trafficable area. If an existing boundary assembly kit is in a trafficable area it must be moved. NB. Check what stage connection? Hold point (i.e.. specified in ITP)?	
2	Check pipe type and size: **min 40mm OD class PN 16** for pressure sewer lateral and property discharge line (PDL).	
3	Check pipe cover: **min 450mm in private property; min 600mm in footpaths and roads**. In rock can be reduced to **300mm cover but within conduit.**	
4	Property discharge line (PDL) location: within **1 metre** from side boundary; **min 450mm** from house.	
5	Pipe bedding should be gravel (e.g. 10mm gravel) or compaction sand.	
6	Backfill material (e.g. Compaction sand as per code) to be suitable i.e.. No large rocks.	
7	Detectable marking tape with **316S/S** (316 grade stainless steel) tracer wire **150mm** above pipe. NB. Tracer wire should be visible inside the boundary assembly kit to the main & back to collection tank.	
8	**Minimum 300mm** clearance from other parallel services, and **minimum 100mm** vertical clearance when crossing other services. NB. Designer/constructor to check Code requirements eg. Depending on which service).	
9	**90-degree** deflections must be long radius bend, or **2 x 45-degree** bends with **300mm** straight section in between.	
10	Is boundary valve (i.e. reflux valve) assembly correctly installed and facing correct direction?	

Item number	Detailed requirements	Approved?
11	Property boundary assembly should be **1m (minimum 600mm)** inside front boundary and **1m (minimum 600mm)** from side boundary. For battle- axe lots it must be close to the street.	
12	Property discharge line (PDL) under a driveway can be in a 75mm diameter conduit.	
13	Verify that pipe work has been pressure tested to **1000KPa (100mh)**. NB. WSC to supply test results.	

Pipework and tank – Civil inspection (AIS)

Item number	Detailed requirements	Approved?
1	**75mm thick** gravel bedding under tank. NB. Only when applicable.	
2	Concrete anchor ballast to extend minimum **180mm** above the base of tank. Ensure lid is on tank before pouring concrete or backfilling hole. Tank to be filled with water up to invert level of inlet pipe before pouring concrete.	
3	Connection pipe to be **minimum 760mm above base of tank for E-One and 715mm for Mono systems.** NB. There may be exceptions – inspector to check Design plan.	
4	Hole in tank for connection pipe to be **127mm diameter**, and grommet correctly installed.	
5	Connection pipe to extend **90mm** into tank.	
6	Check **100mm** customer-to-tank pipework extending at least up to the vertical riser as shown on diagram below, but preferably up to and including the backward facing gully fitting.	
7	Check burial line mark near top of tank only when applicable.	
8	Collection tank location: If possible it should be minimum 2m from house, 2m from side boundary, 3m from opening windows and min 2.5m headroom over tank. Collection tank vent to be on lower side of ground slope. (NB. Check only when visible.)	
9	**For E-One system only** – check/sight the constructor's E-One Start-Up sheet.	

AIS ……..……..Signature……..……..Date……

Please note this report must be forwarded to the Water Servicing Coordinator.

Pressure Sewer Construction check list

Case No…… **Address**……

WSC……..…….. **Constructor**…….……..……

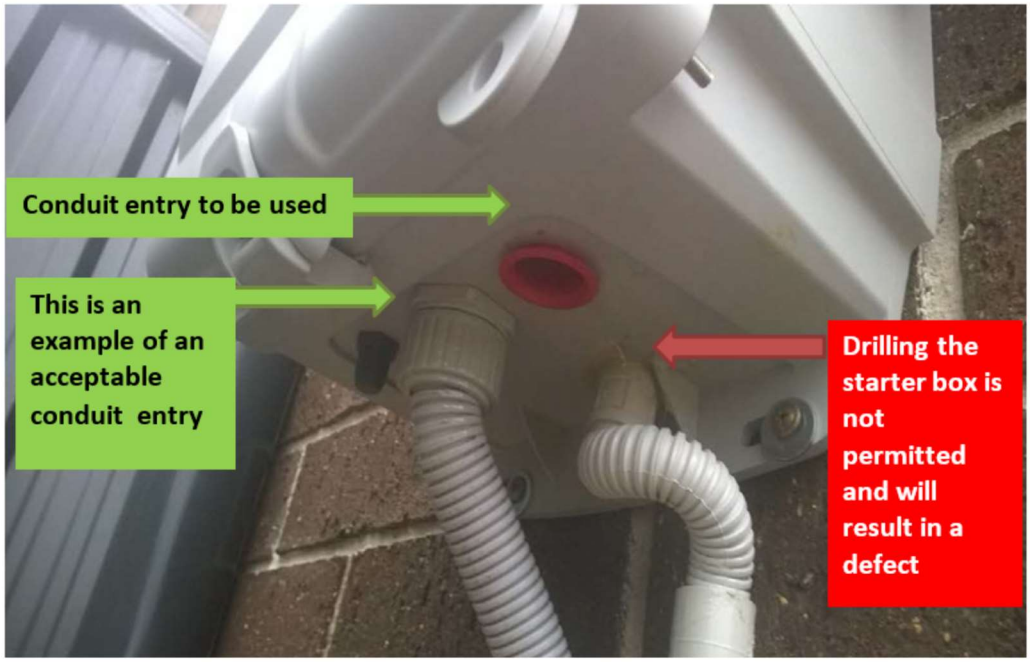
Tank and pump requirements – MECH/ELEC inspection

Item number	Detailed requirements	Approved?
1	Is check valve inside the tank correctly installed ie facing the correct direction? NB. E-One only.	
2	Electrical conduit to be **min 500mm deep**, and not to share trenches with house service line or discharge line.	
3	Electrical conduits below the control panel to have additional mechanical protection.	
4	Control alarm panel to be **maximum 15m** from tank, and in line sight.	
5	Control alarm panel should be attached to house or on approved galvanised steel support, and **between 1.2 m and 1.5m** above ground level.	
6	**Max 610mm** of electric cable to remain inside tank.	
7	Control/alarm panel to have its own circuit clearly identified in electric meter box. NB. Proof that a licenced electrician has performed the necessary safety checks (ie a copy of the certificate of compliance of electrical works) must be provided with the photos when requesting inspection.	
8	If E-One type (only), control/alarm panel to have generator capability.	
9	Check pump and alarm operation ie pour water into tank and check operation of pump and alarm. **NB. Ensure Mono pump is primed prior to operation.**	
10	Pump must be the same make and type as used in the surrounding area.	
11	Ensure that the Control/alarm panel enclosure has not been drilled or modified in anyway, and the manufacturer's conduit cable entries at the bottom of the Control/alarm panel enclosure have been used. Ensure the conduit entering the Control/alarm panel enclosure is of a corrugated type with approved conduit terminations – see Appendix 7. NB. This is required for uniformity when replacing faulty equipment.	
12	Ensure that the approved SL sticker is attached to the front of the Control/alarm panel with the correct SL number printed on it.	

Mech/ Elec Inspector……..**Signature**……..……..**Date**……

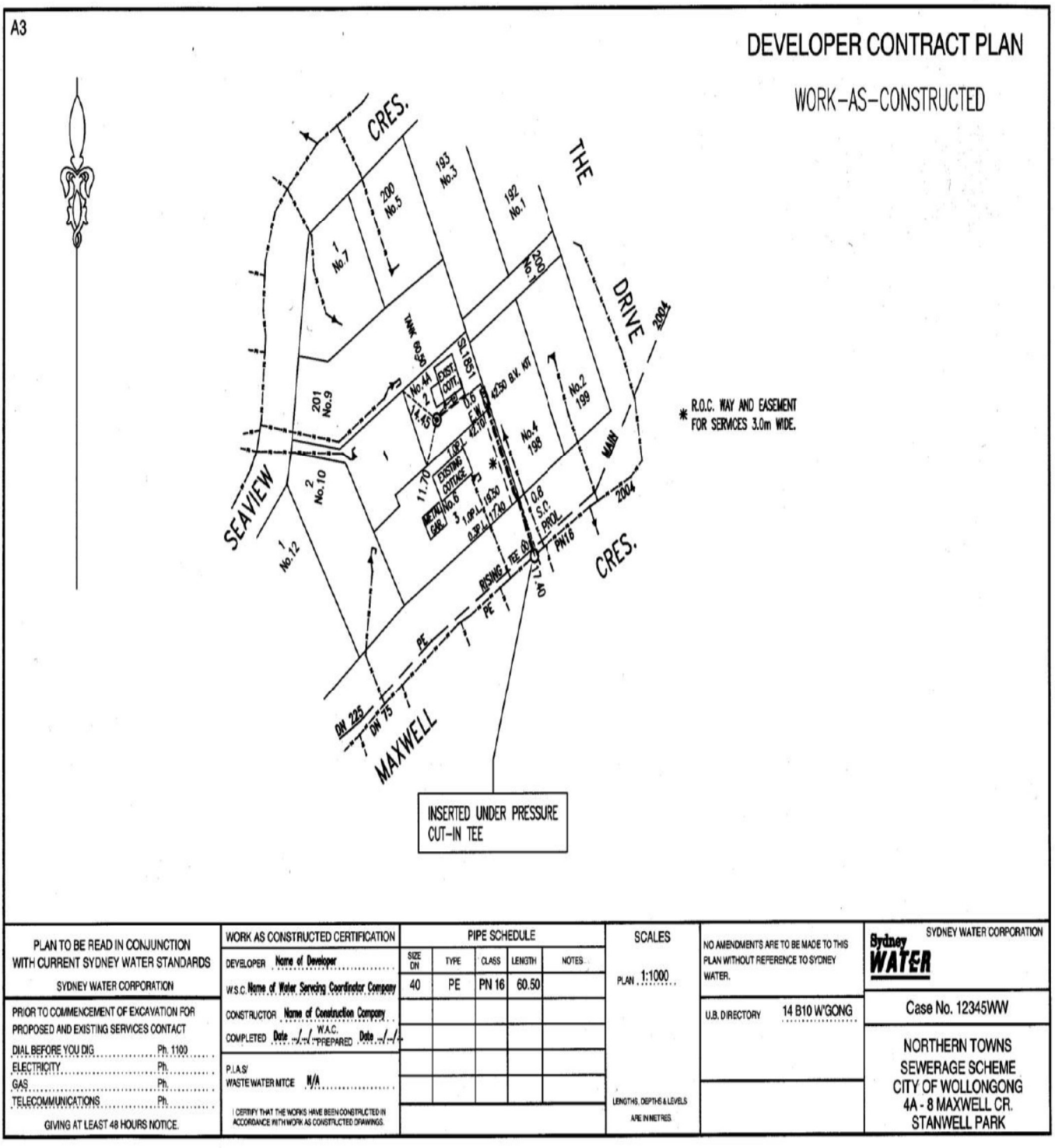
Note This report must be forwarded to the Water Servicing Coordinator.

Appendix L – Alarm Control Panel specifications



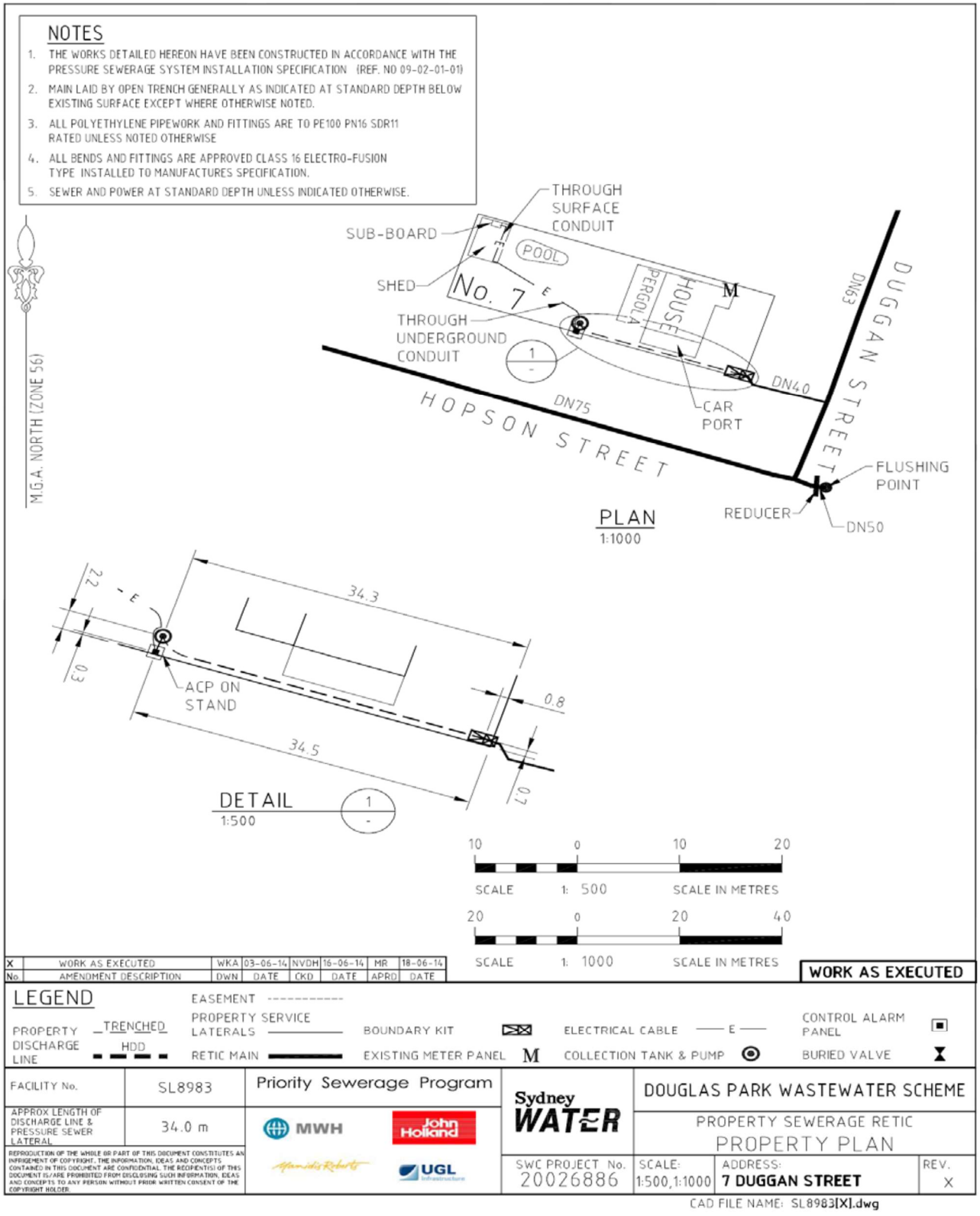
Appendix M – Example of a Work-As-Constructed diagram

Street overview with PSS on-property equipment owned and maintained by Sydney Water



Appendix N: Example of Work-As-Constructed diagram

Individual property overview with PSS on-property equipment owned and maintained by Sydney Water



4. Appendix O: Example of fact sheet

Pressure Sewerage Systems – Connection guide for commercial and industrial properties

Refer to separate document saved in e-Developer templates. WSCs can contact their case Manager to get a copy of the fact sheet.