



Network Access Permit Guidelines

CONTENTS

Version control/updates	4
Quick Links	4
Email addresses.....	4
Weblinks	4
Phone number	4
Terms, acronyms and definitions	5
Pre Design Approval Network Investigations	5
Major Works Only	5
What is a Network Access Permit?.....	6
Types of Network Access Permits	6
Water Shut Plans and Sewer Flow Control Plans	6
Under Pressure Cut-in Connections (live taps).....	7
Major Water Asset Shut Plans (complex / trunk shuts).....	8
Confirmed Major Asset Shut Plans.....	8
Key timeframes	9
NAP currency period & extensions.....	9
Processing times	9
Water Outage Notifications	10
How to apply for a NAP?	11
1 Download the form	11
2. Supporting information.....	11
3. Payment of all fees and charges.....	12
4. Upload application package	12
5. Advise us	12
Following submission of your request.....	12
Once you have received your NAP... ..	13
Trial valve shuts	13
Trial valve shut requirements.....	13
Accredited valve operators	14
Revision of Water Shut Plan due to failure	14
Process for managing failed shuts.....	14
Failure Report	14
Alternate Isolation Methods	15
Live works connection.....	16
Prior to live works connection	16
Network Access Permit Guidelines V2.2 March 2021	2

On the day of live works connection	17
Upon completion of works.....	17
If the shut plan fails or extends beyond approved timeframes.....	17
Plugging Instructions for DN100 – 225 sewers.....	18
Temporary Water Outage Notification Template	19

Version control/updates

V1.0	Creation of document	B Brentzell	April 2019
V2.1	Formatting changes	B Brentzell	November 2020
V2.2	Changes and updates include more detail about : <ul style="list-style-type: none"> • Under Pressure Cut in Connection (UPCIC) • Live tap clarification - when and how • Pre-Design Approval Network Investigations • Failed Shuts process – How to manage • Alternate Isolation methods (Aquistops etc) • When network shuts fail or there are mitigating circumstances like critical customers. 	B Brentzell	March 2021

We welcome feedback on these guidelines. Send your comments to:

developmentenquiries@urbanutilities.com.au

Quick Links

Email addresses

Audit bookings: development.audit@urbanutilities.com.au

Network Access Permit applications: development.permits@urbanutilities.com.au

Urban Utilities **Critical Customer Team:** commercialcustomerteam@urbanutilities.com.au

Urban Utilities **Community Engagement:** community.feedback@urbanutilities.com.au

Weblinks

Developer Services **website** – <https://urbanutilities.com.au/development>

Developer Services **forms** - <https://urbanutilities.com.au/development/help-and-advice/development-forms>

Developer Applications Portal - <http://www.urbanutilities.com.au/development/developer-applications-portal>

Accredited valve operators - <https://urbanutilities.com.au/development/help-and-advice/find-a-contractor>

Phone number

Urban Utilities 24/7 Control Room: **3856 7179**

Terms, acronyms and definitions

TERM	DEFINITION
Connection Certificate	Certificate issued by Urban Utilities which confirms all conditions of a Water Approval have been met.
Development Approval (DA)	A Development Approval is a permit issued by a local council for development works. Where a Development Approval is required (e.g. reconfiguration of a lot/subdivision, or material change of use), a Water Approval is also typically required.
GIS	Geographic Information System
NAP	Network Access Permit
SEQ Code	South East Queensland Water Supply and Sewerage Design and Construction Code
UPCIC	Under-Pressure Cut-In Connection

Pre Design Approval Network Investigations

If your proposed development works will, or are likely to, interact with a trunk water asset or has complex shut requirements, and you need to validate network shut plan options or network conditions prior to design approval, then it is recommended you engage with the Design Approving Officer during the 'Design' phase of the Urban Utilities development process to investigate options.

Depending on the scale of investigations – the Design Approving Officer will liaise with the Urban Utilities Network Management team to coordinate an investigation. If large scale investigations are required (data logging, site investigations, engineering review) then a Design Advice (lodged via the portal as a SAN) may be required; additional fees and charges may apply.

Major Works Only

Following issue of the Urban Utilities Design Approval, book a 'prestart meeting' with the Engineer and an Urban Utilities Assurance Officer. A minimum of three (3) business days is required to book a meeting bookings by email to development.audit@urbanutilities.com.au

What is a Network Access Permit?

A Network Access Permit (NAP) is permission for working, or conducting testing, on or within two metres (<2 m) of the Urban Utilities water and/or wastewater infrastructure.

A NAP also provides approval conditions specific to a development, such as a Water Shut Plan, Sewer Flow Control Plan, local community notification, and/or alternative water supply requirements. Within the Urban Utilities development process, a NAP is required at the 'Construct' stage.



Figure 1: Urban Utilities Water Approval Process Overview

Types of Network Access Permits

There are three (3) types of Network Access Permits:

Type 1	Permission to undertake work near, i.e. within 2 metres, of the Urban Utilities network <u>with no contact</u> with the Urban Utilities infrastructure.
Type 2	Permission to access and/or alter the Urban Utilities network <u>without interruption</u> to water or sewer operation.
Type 3 (Water)	Permission to access and/or alter the Urban Utilities network <u>with an interruption</u> to water operation. Type 3 Water NAPs will require a Water Shut Plan.
Type 3 (Sewer)	Permission to access and/or alter the Urban Utilities network <u>with an interruption</u> to sewer operation. Type 3 Sewer NAPs may require a Sewer Flow Control Plan.

Water Shut Plans and Sewer Flow Control Plans

Water Shut Plans and Sewer Flow Control Plans are network isolation plans that outline the terms, conditions and requirements to operate on Urban Utilities infrastructure. Performing work or testing on/near Urban Utilities infrastructure may require partial isolation of the water/sewerage network to ensure safe and efficient works. Urban Utilities will determine the requirement for a Water Shut Plan or Sewer Flow Control Plan during assessment of your NAP request.

As a guide:

- **Water Shut Plans** are typically required to install a new hydrant or water main or service connection with a diameter of 100mm or larger.
- **Sewer Flow Control Plans** are typically required where the existing sewer main or service is a rising main, pump, or is larger than 160mm in diameter.
- **Sewer Flow Control Plans** may not be required for the following (based on individual assessment):
 - connection to an existing/unused stub or junction

- connection to a manhole above the flow, with benching modification completed above the flow
- installation of a junction or construction of a manhole over a sewer up to 225mm diameter. It is assumed the contractor will work through the flow, or undertake simple plug, monitor and release. [Plugging instructions for DN100-225 sewer lines](#) are included in this document.

Note: Where a sewer pump station exists upstream, Urban Utilities will review the request and confirm isolation of the sewer pump station for the duration of the works.

Water Shut Plans are created from the data in our Geographic Information System (GIS). In some cases, such as with greenfield projects, GIS data may not be current because of network changes or submission of as-constructed packages from other developers. Therefore, it is important to provide as much information as possible to assist with the development of successful Water Shut Plans or Sewer Flow Control Plans, and reduce the likelihood of delays.

Under Pressure Cut-in Connections (live taps)

For new water property and network connections greater than or equal to DN 100mm, an under pressure cut-in connection (UPCIC), also known as a live tap or hot tap, may be requested. UPCICs allow new service pipes to be connected to a live (i.e. under pressure) host pipe, minimising the disruption to surrounding customers.

Due to the additional risk working on a live network imposes, UPCICs are not the preferred method of connection and **approvals for an UPCIC will be only considered when traditional cut-in methods (i.e. through a Shut Plan) may not be practical.** Requests for an UPCIC are considered when the [Under Pressure Cut-In Connection \(Live Tap\) Application](#) is submitted with the [NAP Application](#); they are processed as Type 2 Water NAPs.

Urban Utilities will assess Consultant/Contractor requests for UPCICs against the South East Queensland Water Supply and Sewerage Design and Construction Code (*SEQ Code*). UPCICs are assessed for:

- branch capacity and hydraulic performance (new connections are smaller than the host connection and have pipe diameter restrictions)
- valving requirements on the host main, based on the number of dwellings that would be isolated during a water shut
- host and connection pipes suitability (pipe age, material type & flanged off-take clamp size).

Where feasible, Urban Utilities will provide a theoretical approval, conditional on the suitability of the host pipe. Host pipe conditions need to be verified in the field by the consulting RPEQ engineer prior to connection. If the UPCIC cannot be approved by Urban Utilities or the host pipe is unsuitable for connection, the consultant will need to amend their design and re-submit for a Type 3 Water NAP (i.e. shut plan).

IMPORTANT NOTE: For approved UPCICs, an Urban Utilities Assurance Officer will need to be booked at least 3 days prior to connection to verify the host pipes' condition (development.audit@urbanutilities.com.au). While it is the sole responsibility of the RPEQ engineer to evaluate whether to proceed with the UPCIC, the Assurance Officer may only deny the connection if the host pipe is determined to be unsuitable.

To apply for an UPCIC, download the [Under Pressure Cut-In Connection \(Live Tap\) Application](#) from the Development forms section of the Urban Utilities website.

For UPCIC enquiries, email development.permits@urbanutilities.com.au.

Major Water Asset Shut Plans (complex / trunk shuts)

Major Water Asset Shut Plans are a sub-category of shut plan that involves isolating Urban Utilities infrastructure critical to a zone's water supply (i.e. reservoirs, pump stations and trunk mains). Typically for development works, Major Water Asset Shut Plans will involve trunk mains greater than 300mm in diameter (trunk shuts).

When a trunk main is isolated, portions of the zone's water service must be redirected to ensure contingency of supply to the broader network. Due to the potential for large customer impacts downstream, connecting to trunk mains requires a much higher degree of planning & scheduling, due diligence and risk assessment from the Urban Utilities Water Network Management (WNM) team. In this process, our WNM team will model the network isolation, organise additional field network checks, pressure and data logging prior to executing the actual shut plan.

IMPORTANT NOTE: Due to the requirement of additional planning and due diligence, the timeframes to create and execute major asset shut plans can be up to three months longer than normal shut plans.

Confirmed Major Asset Shut Plans

If your works have been identified to connect to a trunk main or other major water asset, please provide a detailed construction methodology with your [NAP application](#) that includes the following:

- scope of works (construction process and staging to complete works)
- time duration to complete connection/works (excluding the network shut down duration)
- 'contingency time' (time if works take longer than expected)
- other mitigating conditions or circumstances.

For Developers, it is important to recognise that construction designs may require amendment to moderate potential impacts to Urban Utilities customers. As such, it is recommended your budget and timeframe allocated for construction accounts for a degree of uncertainty.

Key timeframes

NAP currency period & extensions

Urban Utilities water and sewer networks are constantly evolving due to modifications, maintenance and small- and large-scale capital improvements. As a result, NAPs are valid for a currency period of **180 days (approx. 6 months) from the date of issue**.

Where the currency has lapsed, the NAP must be reviewed to assess network changes that may have occurred since the original request. Contact development.permits@urbanutilities.com.au with your NAP reference to organise an extension.

Processing times

The following table summarises the standard timeframes for NAP processing. These timeframes apply from the receipt of a complete and accurate NAP application. Ensuring your NAP application is complete and accurate avoids delay and additional expense.

Type 1	10 business days
Type 2	10 business days
Type 3 (Water - not involving major water assets)	10 business days
Type 3 (Water – involving major water assets ie trunk mains >300mm)	Up to 3 months
Type 3 (Sewer)	15 business days

IMPORTANT NOTE: Urban Utilities **will not** endorse a Network Access Permit for connections to infrastructure where that infrastructure is not yet compliant (i.e. where a Connection Certificate has not been issued). This usually impacts major multi stage developments, though may also affect adjacent, non-related projects of other developers.

Water Outage Notifications

When a section of the water main is isolated under a Water Shut Plan (i.e. Type 3 Water NAPs), other properties may lose water temporarily while a trial shut or live works are completed.

Prior to carrying out a Water Shut Plan, it is critical that **all affected properties are notified, by the contractor, with at least three (3) business days notice**, e.g. a property must be notified by Monday 5:00pm for a water shut occurring on Thursday in the same week. This is a condition for Urban Utilities network access. As a result of the notifications, if a customer requests water for the period of the outage then it is a requirement that the contractor to provide water for that customer, at the contractor's expense.

In addition to supplying a water outage notification, Urban Utilities-identified critical customers (including large commercial properties such as hospitals, schools and manufacturers) **must also be engaged as early as possible**, by the contractor, to provide an alternative water supply during the trial and live shut.

It is strongly recommended the isolation area is scoped for water reliant businesses (e.g. hairdressers, cafes etc.) and they are engaged to negotiate suitable timing for the trial or live works shut. This will help mitigate unnecessary complaints on the day of isolation.

The Urban Utilities Community Engagement community.feedback@urbanutilities.com.au and Commercial Customer teams commercialcustomerteam@urbanutilities.com.au **must also be provided with five (5) business days notice**. All timeframes for customer and Urban Utilities notifications may change based on the conditions of the shut plan, so it is important to read all of the conditions once it has been issued.

All impacted properties are to be notified through a letter drop using a standard Urban Utilities water outage notification template. As an indication of proof of delivery, it is recommended that GIS mapping software (or other recording software) is used to record the 'streets walked' within the area to be isolated during the shut plan.

The Urban Utilities water outage notification can be found at the end of this guideline or downloaded from [Urban Utilities Development Forms](#).

How to apply for a NAP?

1 Download the form

Download the [Network Access Permit Application](#) from the Urban Utilities website.

- The **Contractor (licensed plumber)** is to complete **sections 1-9** of the application before sending to the Endorsed or Consulting Engineer responsible for certifying the construction.
- The **Endorsed or Consulting Engineer** reviews **sections 1-9** and completes **sections 10-16** of the application.

*Notes: the application **requires a signature from the Consulting Engineer responsible for certifying the works**, to certify all information is correct and in accordance with certified designs.*

Urban Utilities preference is for separate NAP requests for each/different connection/stage of works.

2. Supporting information

The following information is required for a NAP application:

- **Minor Works Applications**
 - 'For Construction' drawing, with live works table and locality plan overview
 - Complete and accurate Network Access Permit Application.
- **Major Works Applications**
 - Brownfield sites (i.e. sites that have been previously developed)
 - 'For Construction' drawing, with a live works table and locality plan overview
 - Complete and accurate Network Access Permit Application Form.
 - Greenfield sites (i.e. sites that have not been built on prior)
As per brownfield sites, plus:
 - Urban Utilities approved design drawing with proposed valves to be operated to enable isolation
 - Commissioning plan for multi stage developments and developments where GIS is not available for connecting infrastructure. Commissioning plan must include:
 1. coded status of mains (i.e. live vs. not live)
 2. status of completion summary (are field audits complete?)
 3. Scope of Works Plan including mark-ups of Urban Utilities GIS water and/or sewer network and GIS reference point. If GIS is not available then a detailed map is required
 4. detailed map clearly indicating boundaries of relevant Property and Network Connection (PNT) applications
 5. sequencing of works to indicate go live staging
 6. detailed commissioning summary of scope of works, including commentary.

- **Under pressure cut-in connections**
 - Complete and accurate Under-Pressure Cut-In Connection (Live tap) Application
 - Complete and accurate Network Access Permit Application.

- **Major water asset/trunk shuts**
 - Scope of Works (construction process and staging to complete works)
 - Time duration to complete connection/works (excluding the network shut down duration)
 - 'Contingency time' i.e. time if works take longer than expected
 - Complete and accurate Network Access Permit Application.

Note: Only submit drawings of the relevant asset type e.g. if the NAP asset type is only water, ensure only water drawing/s is/are provided.

3. Payment of all fees and charges

All outstanding fees and charges are to be paid via the [Urban Utilities Developer Applications Portal](#).

4. Upload application package

The **Endorsed or Consulting Engineer** is to upload the complete NAP Application package to the Urban Utilities Developer Applications Portal. *Contractors are not permitted to submit NAP requests.*

Note: The Developer Application Portal refers to this as Pre-Construction Package Form.

5. Advise us

Notify us by email that your application package has been uploaded to the Portal development.permits@urbanutilities.com.au.

Note: NAP requests cannot be processed without an email notification from the applicant.

Following submission of your request

Following notification by email that your NAP application has been uploaded, we will undertake an initial check to confirm all required information has been included. If the application is missing information, Urban Utilities will email an Information Request (IR). Processing of your NAP application will be stopped until all relevant material has been received. Where required information is not provided, the application may also be rejected, requiring resubmission of a full and complete NAP package.

Once your application is complete and accurate, your NAP will be processed. Throughout this process, Urban Utilities will endeavour to update all involved parties of the status of your NAP application.

Once you have received your NAP

1. Review your NAP and the conditions in your Water Shut Plan or Sewer Flow Control Plan. If the permit does not meet your requirements or if you notice unexpected details please contact development.permits@urbanutilities.com.au as soon as possible.
2. Confirm the classification (Major works or Minor works) of your new or altered connection. This will identify who is to audit, supervisor and certify the construction.
 - *Major works:* construction audited by an Urban Utilities Assurance Officer and certified by the Consulting Engineer
 - *Minor works:* construction supervised and certified by an Urban Utilities Endorsed Consultant.

If you are unaware of the classification, contact the Endorsed Consultant or Consulting Engineer.

If you are unsure how the classification affects the site audit requirements, refer to either the:

- [Major Works Construction and Compliance Guidelines or](#)
- [Minor Works Construction and Compliance Guidelines.](#)

3. Contact the Engineer to discuss connection design and construction.

*Note: The **Contractor** is responsible for informing the Engineer of the conditions of the NAP including construction details, working times, when they need to be onsite and potential issues with design. Start and finish times, including special conditions for works outside of hours (i.e. nights or weekends), are stated in the Shut Plan/Flow Control Plan.*

4. Arrange a trial valve shut with an Urban Utilities accredited valve operator (see below).

Trial valve shuts

All **Type 3 Water Shut Plan NAPs** include the condition for a trial valve shut to test the shut plan before live works, and ensure all impacted customers have been identified. The trial helps to resolve potential issues and enables the live connection to take place without incident.

Trial valve shut requirements

The contractor is responsible for booking an Urban Utilities-accredited valve operator (see below) and undertaking a trial water shut prior to the day of live works connection. NAP conditions also apply to trial shuts, including providing at least three (3) business days notice to properties impacted by the disruption to supply, and arranging alternative water supply for Urban Utilities-identified critical customers and any other customers who request it.

Unless specified in the NAP, an Urban Utilities Assurance Officer or the Endorsed or Consulting Engineer is not required to be onsite during the trial shut.

Accredited valve operators

Only accredited valve operators (authorised by Urban Utilities) are permitted to turn valves on our network. Accredited valve operators will be able to assist with:

- review of Water Shut Plans
- isolation services
- trial shuts and valve audits
- report trial findings
- water off notice delivery
- liaison with Urban Utilities regarding critical customers.

Please contact the [accredited valve turners](#) listed on our website for current service rates and inclusions, minimum charge requirements and cancellation fees.

Revision of Water Shut Plan due to failure

Occasionally, a Water Shut Plan may fail to completely isolate the water from the area of works, either during a trial shut or live works.

These failures are usually due to the following:

- discovery of assets or network infrastructure different to the information in Urban Utilities GIS/mapping data
- damaged or broken valves allowing water into the main(s) isolated by the shut plan
- unauthorised changes to the network in the field.

Process for managing failed shuts

For all failed development Water Shut Plans, the **Valve Operator must:**

- **call Urban Utilities Control Room immediately** on 3856 7179 (The Control Room may also advise you to contact further Urban Utilities departments)
- **within two (2) business days** of the attempted shut notify network.access@urbanutilities.com.au and development.permits@urbanutilities.com.au with a PDF failure report (see below).

Failure Report

The failure report should include:

- the site address
- NAP & Shut Plan reference
- customer (company) name, responsible party & contact information
- date and time of attempted isolation
- IDs of all assets operated, with an indication of damaged asset(s) & description of failure
- marked-up copy of the GIS Shut Plan overview with indication of 'failed asset' i.e. valve missing, broken valve, low pressure outside of boundary
- photos of the damaged asset where applicable.

Failed shut plans are then reassigned to the Urban Utilities WNM team for amendment. The shut plan is then expanded to include nearby valves where the increase to affected customers is minimal or issued for investigation/repair in higher customer impact zones. The NAP will then be re-issued to the contractor with an amended shut plan design by the Urban Utilities Development Permits team.

Note: Failed shut plans are prioritised by Urban Utilities to minimise delays.

Alternate Isolation Methods

If it is not possible to execute a shut plan due to network conditions, critical customers or other issues then it is reasonable to consider an alternate network isolation solution. These can include the following:

Company & Website	Product & Size range	Contact
K&J Civil	S-Gate Valve DN80 - 450	sgatevalve@kandjcivil.com.au
Interflow	INFRASTOP® DN80 - 150	mail@interflow.com.au
AVK Australia Civil	AquaStop™, HydraStop, Insta Valve DN80 - 500	sales@avkcts.com.au

Consultants or Contractors requesting to use alternate network isolation solutions to complete their live works will need to engage the particular technology supplier and supply amended design drawings (including alternate isolation solution detail) for Shut Plan approval from Urban Utilities.

The use of alternate isolation solutions will be assessed on a case-by-case basis, with any associated costs, including hardware and installation, covered by the Developer/Consulting Engineer/Contractor. Following shut plan approval and completion of live works, any alternate isolation solutions remaining in the network will also need to be represented in the as-constructed package.

Live works connection

Prior to live works connection

1. To ensure Urban Utilities is aware of planned network activities, you must register your proposed live works by emailing development.audit@urbanutilities.com.au prior to commencement (as per conditions of the NAP). A **minimum of three (3) business days notice** is required to make audit bookings. The following information is required:
 - estimated construction start date and time
 - anticipated construction completion date and time
 - anticipated live works date
 - specified hold points
 - NAP number
 - indication of minor (possible live works audit) or major works (mandatory live works audit).

2. The contractor is responsible for booking an Urban Utilities accredited valve turner for the day of live works connection.

3. **You must provide outage notification to all affected customers. See the Water Outage Notification section**

Note: It is recommended that the isolation area is scoped for water reliant businesses (e.g. hairdressers, cafes etc.) and they are engaged to negotiate suitable timing for the trial or live works shut. This will help mitigate unnecessary complaints on the day of isolation.

4. **You must also engage with Urban Utilities-identified critical customers See the Water Outage Notification section**

5. If the development is serviced by any new water mains, perform quality assurance (bacterial and pressure tests*). The results of these tests must be provided to Development Audits development.audit@urbanutilities.com.au for review and acceptance **one (1) business day prior to connection.**

**Both bacterial and pressure tests must be taken by a National Association of Testing Authorities, Australia (NATA) Accredited Tester. Please refer to SEQ Code for testing parameters.*

IMPORTANT NOTE: Pressure testing must be noted as “Pass” on the test result documents provided. Bacterial test results must also be current (no more than 14 days old) and pass within the parameters provided on the SEQ Code.

If the results are outside these parameters the connection cannot proceed.

On the day of live works connection

Type 2 Water NAPs (Under Pressure Cut-In Connections)

Prior to undertaking an UPCIC, the host pipe must be verified by the on-site RPEQ Engineer to be structurally sound. If the host pipe is not in a condition suitable for an UPCIC, you will need to reapply for a Type 3 Water NAP (i.e. Shut Plan).

Type 3 NAPs

For Type 3 NAPs with either a Water Shut Plan or Sewer Flow Control Plan, you **must notify Urban Utilities Control Room** on [3856 7179](tel:38567179) to quote the NAP number and anticipated completion time prior to live works commencing, **each day**.

Ensure you are fully prepared with alternative water sources (if you have a shut plan) as per conditions of the NAP and/or customer requests.

Upon completion of works

On the day of work and prior to leaving the site on the day of live works connection you must:

- contact the Urban Utilities Control Room to advise works are complete
- provide As-constructed survey data to the Endorsed or Consulting Engineer.

If the shut plan fails or extends beyond approved timeframes

Contractors must phone the Urban Utilities Control Room on [3856 7179](tel:38567179) to provide:

- estimated timeframe to complete the works
- detail of site issues
- contact telephone number of site personnel.

Plugging Instructions for DN100 – 225 sewers

Where required, plug the manhole upstream of the job site. Monitor the appropriate upstream manhole and ensure the **maximum flow depth remains at or below 500mm** from the invert level **AND** a **minimum freeboard of 500mm** is achieved (Refer to Figure 2).

If either condition cannot be satisfied, contact networkaccess@urbanutilities.com.au.

These instructions can only be used when there is no pump station upstream of the job site.

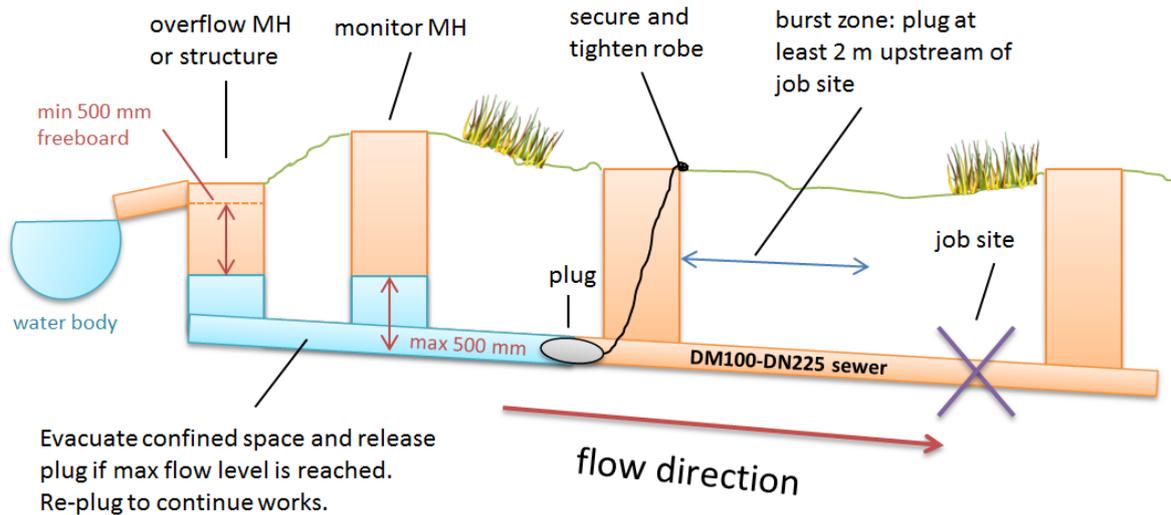


Figure 2: Plugging of DN100-225 sewers

In addition, the following conditions must be satisfied:

- person installing the plug must satisfy themselves that installing this plug and monitoring will not cause a surcharge
- install a plug suitable for the size of pipe to be plugged
- confirm the pipe the plug is to be installed into, is clean and free of defects: i.e. cracks, broken bits of pipe and/or debris
- ensure safe inflation pressure of the plug is known
- ensure the safe back pressure, the plug can hold unrestrained, is known
- ensure a good quality air pressure gauge is used to ensure the plug is inflated to pressure and not over inflated
- monitor air pressure gauge inside the plug
- confirm restraint cable or rope is secured and is under tension, rather than slack, to ensure the plug does not get washed into the downstream sewer pipe, particularly during deflation
- special care must be taken in the use of Schrader valves to ensure the inflation hose is securely attached and the hose is not pulled to retrieve the plug and
- when the maximum flow level is reached, evacuate the confined space and release (deflate) the plug. Re-plug (inflate) to continue works. Refer to Figure 2 for further details.

In the event of a forecast of rain within the catchment in excess of 10mm, work must not proceed. In the event of actual rainfall exceeding 10mm (as indicated from the nearest BOM rain gauge), work must be delayed until the flow has visually returned to normal conditions and can be confirmed on SCADA, else work must be delayed until three (3) days after the rain event.

TEMPORARY WATER OUTAGE

We will soon connect property services to the water network in your local area.

This work will mean you experience a **temporary water outage** for all or some of the time period outlined below. There may also be **noise, dust and changed traffic conditions**.

Start Start

Finish Finish

Contact name Contact name

Contact number Contact number

Urban Utilities permit numbers:

NAP NAP

SP SP

- Before the water is turned off, please ensure you store enough water to meet your needs, and taps or appliances which use water are not operating.
- Following this work, there might be air in the pipes and minor water discolouration. If this occurs, slowly turn on an outside tap to allow any air to escape and run until the water clears.

Thank you for your patience while these works are underway.

Q01842-2021 © Urban Utilities

TEMPORARY WATER OUTAGE

We will soon connect property services to the water network in your local area.

This work will mean you experience a **temporary water outage** for all or some of the time period outlined below. There may also be **noise, dust and changed traffic conditions**.

Start Start

Finish Finish

Contact name Contact name

Contact number Contact number

Urban Utilities permit numbers:

NAP NAP

SP SP

- Before the water is turned off, please ensure you store enough water to meet your needs, and taps or appliances which use water are not operating.
- Following this work, there might be air in the pipes and minor water discolouration. If this occurs, slowly turn on an outside tap to allow any air to escape and run until the water clears.

Thank you for your patience while these works are underway.

Q01842-2021 © Urban Utilities

TEMPORARY WATER OUTAGE

We will soon connect property services to the water network in your local area.

This work will mean you experience a **temporary water outage** for all or some of the time period outlined below. There may also be **noise, dust and changed traffic conditions**.

Start Start

Finish Finish

Contact name Contact name

Contact number Contact number

Urban Utilities permit numbers:

NAP NAP

SP SP

- Before the water is turned off, please ensure you store enough water to meet your needs, and taps or appliances which use water are not operating.
- Following this work, there might be air in the pipes and minor water discolouration. If this occurs, slowly turn on an outside tap to allow any air to escape and run until the water clears.

Thank you for your patience while these works are underway.

Q01842-2021 © Urban Utilities