



Procedure: Water Shut Down Plan

Introduction:

When a disruption to service is required for a watermain tie-in (or similar), a Water Shut Down Plan (the plan) must be submitted to the City for review.

The plan should be submitted to the city project manager a minimum of 7 days prior to the planned date. If the disruption to service is part of the first stage of a project then the plan should be submitted prior to the preconstruction meeting.

The Contractor must have an approved Water Shut Down Plan prior to City crews operating valves. Failure to prepare a satisfactory plan resulting in request for revisions or will not be cause for consideration for additional contract cost or time.

Submission Details:

The plan should be submitted as a comprehensive report under a single title, and should include the following at a minimum:

- A general description of the work and the date of the service disruption;
- A detailed plan in sequential order which includes, but is not limited to:
 - Dates when notices to the public will be distributed;
 - Any preparatory activities such as meeting with the water operations
 - Date to exercise the required valves and confirm whether they are working/ seal
 - Date for a pre-shut down meeting of all parties
 - Work associated with the disruption such as tie-in, pipe cap etc,;
 - Water service switch overs;
 - Cleaning procedures, including swabbing;
 - Flush station locations and plan;
 - ID of impacted hydrants;
 - Relevant pressure reducing valves (PRVs);
 - When valves will be open/closed.
- A list of everything affected by the disruption accompanied by a map and or drawing showing tie-in details to support the plan which identifies and locates the following:
 - Relevant valves, flush out locations, watermain connections, flush out stations, etc;
 - Hydrants, including identification numbers, that will be out of service; hydrant outages require notice to Public Works and the Fire Department;
 - Indicates the time of any critical actions such as valve closures as part of the label;
 - Identifies any pressure reducer valves and any different pressure zones;
 - Identifies affected properties;
 - Closed valves between boundaries.

- Copy of the Notice to Residents for City Approval which includes:
 - Include time, date, and duration when services will be impacted;
 - How services will be impacted;
 - Instructions to turn off hot water tanks when necessary;
 - Emergency and general enquiry contact information;
 - Any other relevant information.

Requirements:

- Installation of all water lines shall be in accordance with the City of Nanaimo's Manual of Engineering Standards and Specifications (MOESS);
- All impacted residents shall be notified by the contractor a minimum of 48 hours in advance of the shut down;
- Safework procedures will be developed as required,
- City crews shall operate all valves, however the contractor shall have a valve key on site in case of emergency. Contacts for emergencies shall be identified and recorded at the preconstruction meeting;
- Flushing, pressure testing, chlorination and acceptance of any line shall be completed in accordance with the City of Nanaimo's MOESS prior to connection to existing lines;
- The plan shall be designed to minimize disruption of service to residents;
- The plan shall be reflected in the most up to date construction schedule.

Other Considerations:

- When distributing notices to multifamily buildings, the property manager should be contacted to ensure that all residents are aware of the shutdown, in addition to posting a notice in the common area of the building;
- If providing temporary service from a hydrant, the hydrant needs to be pressurized, flushed, and sampled prior to putting in service. Positive pressures must be maintained during the shut down to ensure suitable water quality.

Resources:

City of Nanaimo HubMap: <https://nanmap.nanaimo.ca/Html5Viewer/index.html?viewer=NanaimoMap>

EXAMPLE

Water Main Shutdown Plan: Nottingham Drive and Arrow Way Utility Upgrade

Prepared by: XXX Contractors **Date:** March 15th, 2022

Project: Nottingham Drive and Arrow Way Utility Upgrade (C1247)

Tie In Location(s): Cross Bow drive and Nottingham Drive

Introduction:

This Water Shut Down Plan has been designed for the water tie in at Cross Bow Drive and Nottingham Drive, as show on attached map. The purpose of the plan is to provide a detailed description of the procedures related to the water shut down and tie in for City approval. The intent of the plan is to minimize disruption to service to residents, while performing a safe and efficient tie in in accordance with the City of Nanaimo's Manual of Engineering Standards and Specifications (MOESS).

Notice to Residents:

A notice to all affected properties will be distributed to residents on March 30th, as per the construction schedule. A draft copy of the notice is attached for City approval.

Testing:

Flushing, pressure testing, chlorination and acceptance of new line shall be completed in accordance with the City of Nanaimo's MOESS prior to the water shut down and connection to existing lines. During the tie in, all materials will be chlorine swabbed to reduce contamination of the active line.

Impacted Hydrants:

One hydrant will be impacted by the water shut down:

- Hydrant 2798 adjacent 112 Cross Bow Drive Drive.

Shut Down Procedure:

1. Notices Distributed (March 30th, 2022)
 - Affected properties include 13 single family homes;
 - 101, 115, 133, 155, 177, 181, 197, 112, 132, 152, 166, 182, and 184 Cross Bow Drive;
 - See map for details.
2. Tie in at Nottingham St. (April 1st, 2022)
 - Isolate tie in works at Cross Bow Drive by having the City crew slowly closing water system valve 55807 at the intersection of Cross Bow Drive and Nottingham Drive, and 55811 located in front of 184 Cross Bow Drive and south of the air valve;
 - Complete the tie in;
 - Have City crew open valves 55807 and 55811;
 - Close off service valves for homes between the tie in and hydrant 2798;
 - Flush the system from hydrant 2798 until water runs clear;
 - Have City crew open all valves.

EXAMPLE:

101-184 Cross Bow Drive

Hydrants: 2798



WATER SERVICE SHUT-OFF NOTICE

The City of Nanaimo wishes to notify you that while improvements to the water system are in process, your water service will be shut off to allow the new water system to be connected to the City System on;

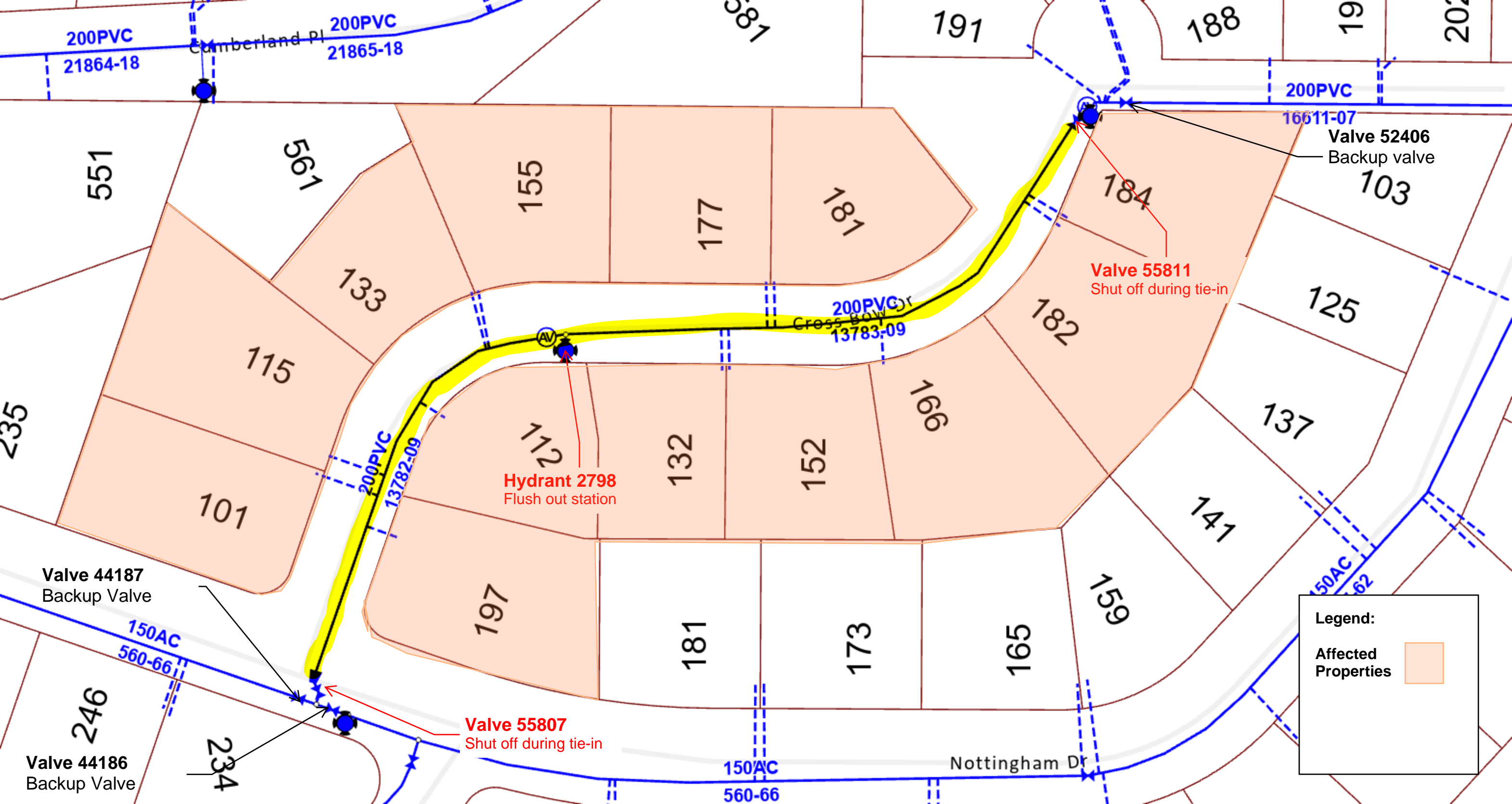
Tuesday April 1st, 2022
9:00 AM to 1:00 PM

This time period is not definite, as the Contractor will endeavor to keep you in service for as long as possible and have the water back in service as quickly as possible after the initial shutdown occurs.

This work is being done by: **Contractor Name. XXX-XXX-XXXX**

Please ascertain that all automatic equipment, whether electrical or otherwise, is suitably protected for the shut down. i.e.: For your own protection we suggest you shut off your electrical switch for the hot water tank until water pressure is normal. If you have a natural gas hot water tank a protection system for the unit is in place and shutting off the unit is not necessary. The City accepts no liability for damage resulting from interrupted service.

March 30th, 2022 < Date Notice is distributed
PH: 250-XXX-XXX for further information



Legend:

Affected Properties