

Welcome



**Wastewater
Treatment Project**
Treated for a cleaner future

Welcome to the Wastewater Treatment Project's community meeting about Niagara Street.

Thank you for coming to the community meeting. We are here to provide information and answer questions about the pipe assembly and pipe pull along Niagara Street.

This work is anticipated to begin the first week of March and will take approximately six weeks.



Niagara Street

Wastewater Treatment Project



Wastewater Treatment Project
Treated for a cleaner future

The Wastewater Treatment Project will provide tertiary treatment for wastewater from the core area municipalities of Victoria, Esquimalt, Saanich, Oak Bay, View Royal, Langford and Colwood, and the Esquimalt and Songhees Nations. The Project will be built so we comply with federal regulations by the end of 2020.

The Wastewater Treatment Project consists of three main elements:

MCLOUGHLIN POINT WASTEWATER TREATMENT PLANT

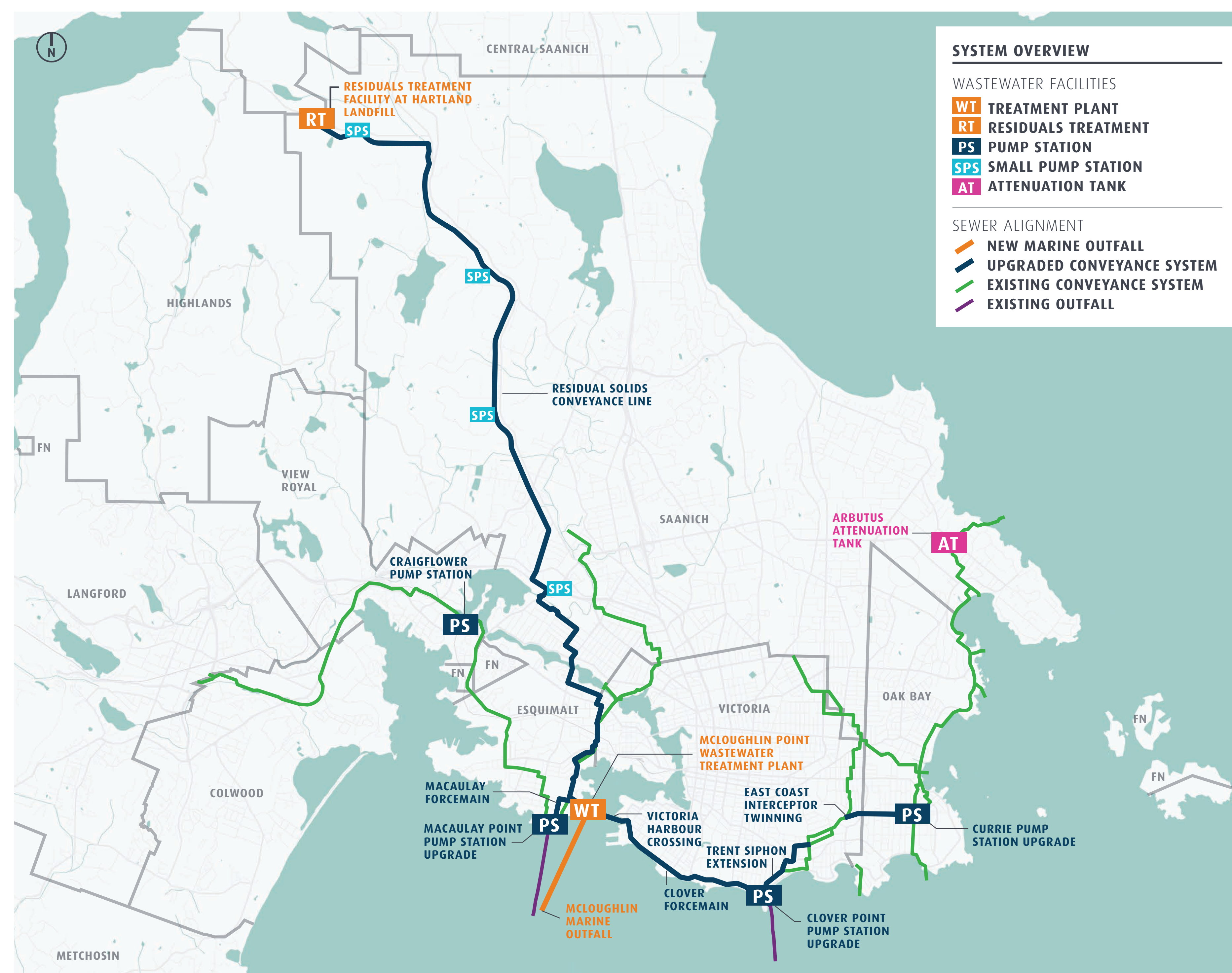
Located at McLoughlin Point, the wastewater treatment plant will provide tertiary treatment to the core area's wastewater.

RESIDUALS TREATMENT FACILITY

Residual solids from the wastewater treatment plant will be piped to Hartland Landfill, where they will be turned into what are known as Class A biosolids. These biosolids are a high quality by-product treated such that it is safe for further use.

CONVEYANCE SYSTEM

The conveyance system refers to the "pumps and pipes" of the Wastewater Treatment Project. This system will carry wastewater from across the core area to the treatment plant, and carry residual solids from the wastewater treatment plant to the residuals treatment facility.



Niagara Street Construction Overview

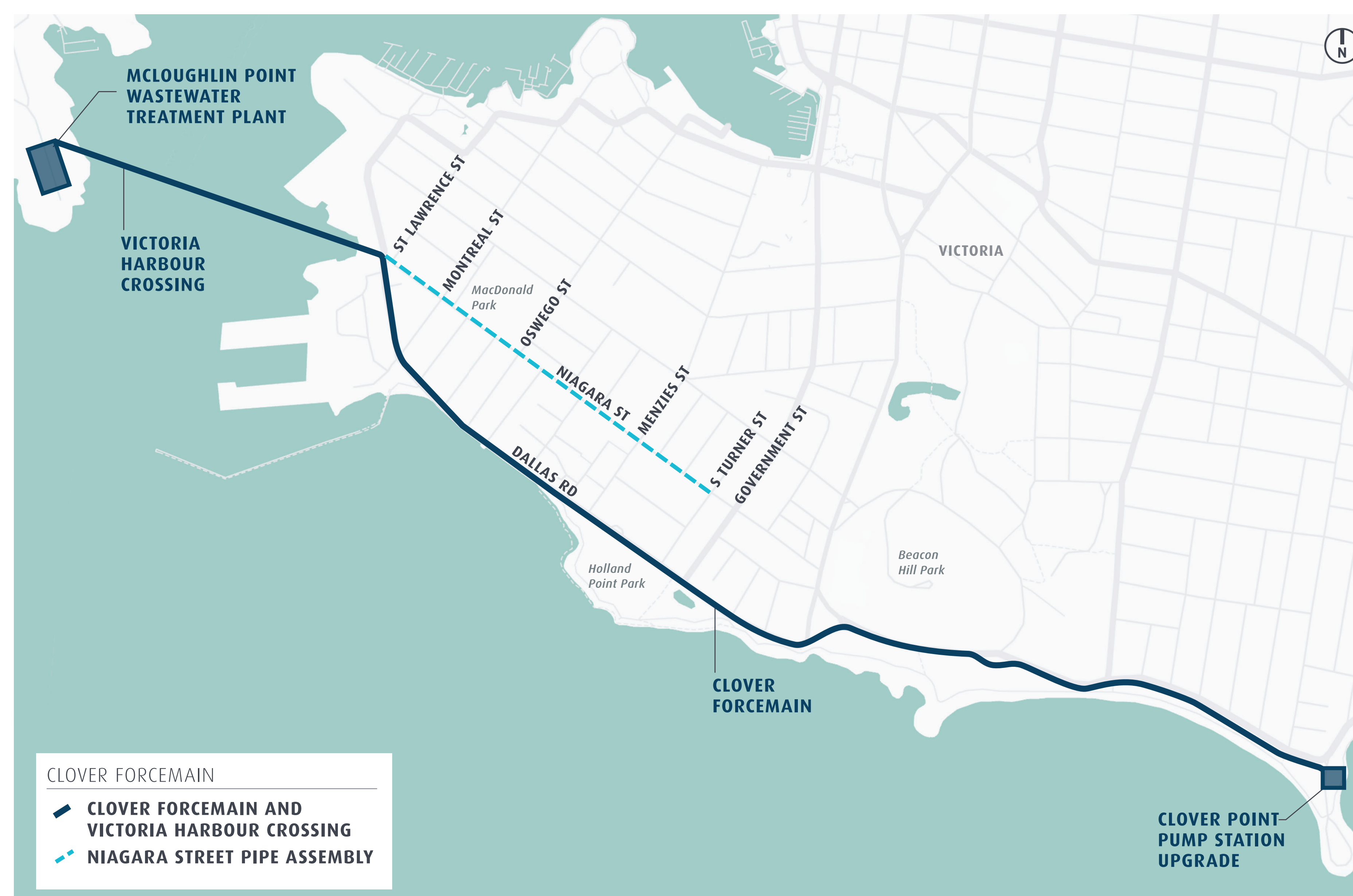


Wastewater Treatment Project
Treated for a cleaner future

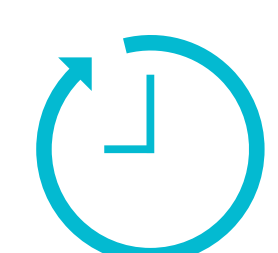
The McLoughlin Point Wastewater Treatment Plant includes the construction of a cross-harbour undersea pipe from Ogden Point to McLoughlin Point, using a process called horizontal directional drilling.

The pipe will transport wastewater from the Clover Point Pump Station to the treatment plant for tertiary treatment.

The cross-harbour pipe will be assembled above ground along Niagara Street. Once the drilling is complete, the pipe will be pulled through the drill passage between Ogden Point and McLoughlin Point.



Clover Forcemain and Victoria Harbour Crossing



HOURS OF WORK – PIPE ASSEMBLY (FIRST 5 WEEKS)*

Monday – Friday

7:00 a.m. – 7:00 p.m.

Saturday

10:00 a.m. – 7:00 p.m.



HOURS OF WORK – PIPE PULL (FINAL WEEK)

Work will take place 24 hours a day

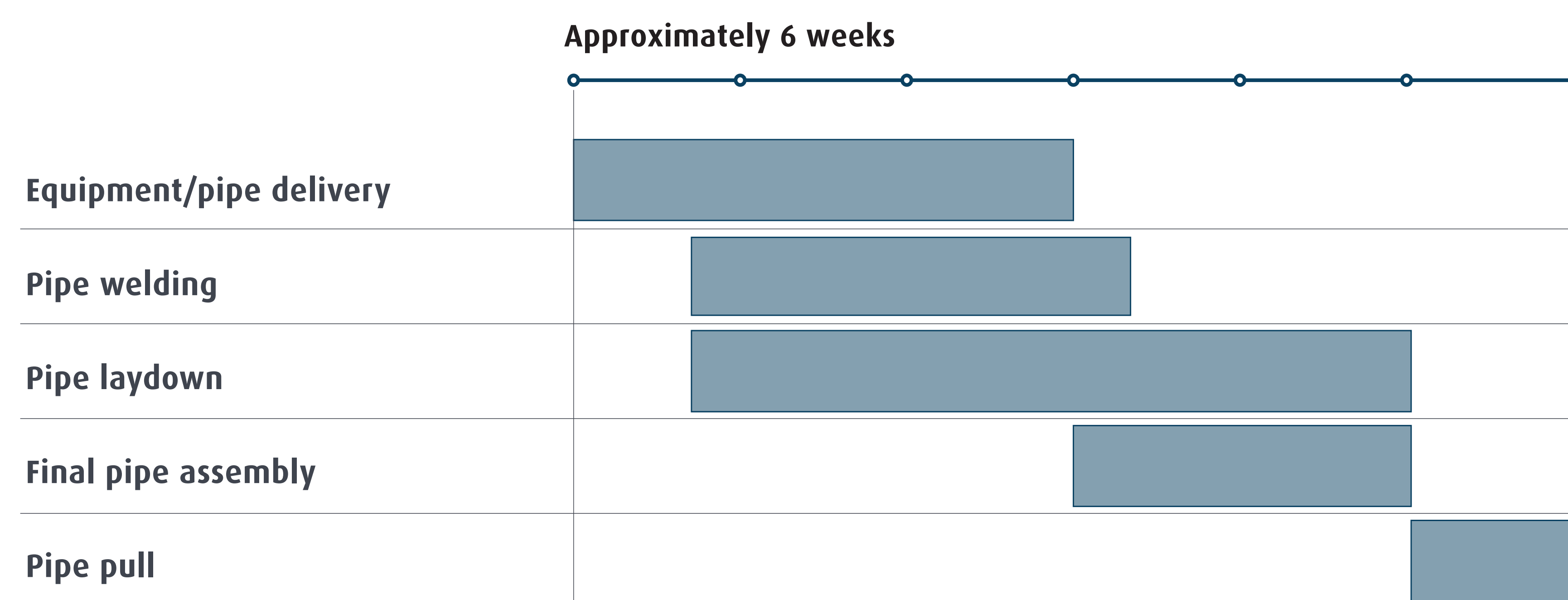
*Work may occur outside of these hours as allowed under the City of Victoria noise bylaw.

Key Construction Activities



The pipe assembly and pipe pull are anticipated to take about six weeks.

There are five main activities you will see along Niagara Street as the work is completed. The exact timing of these activities is subject to updates as construction progresses.



OVERVIEW – NIAGARA STREET WORK

- Niagara Street will be closed to vehicles for the duration of this work. The majority of work will take place on Niagara between Dallas and South Turner.
- There will be pedestrian access to all residences and businesses at all times.
- There will be emergency services access at all times.
- Niagara Street residents will be able to park on side streets during construction.
- Side streets intersecting Niagara Street will be generally closed to vehicles during this work; they will have a resident loading zone to assist with deliveries and pick-up/drop-off.
- Arrangements have been made to preserve existing parking where possible as well as allow access to alternate parking.
- Best efforts will be made to mitigate construction noise as this work is completed.

Equipment/Pipe Delivery



Wastewater
Treatment Project
Treated for a cleaner future



Truck traffic map

The equipment/pipe delivery will take approximately three weeks. Construction activities will consist of:

- Installing construction fencing around active work areas.
- Trucks bringing equipment to the temporary work space and welding site in front of the White Eagle Polish Hall.
- Trucks delivering sections of pipe to the temporary work space.
- A crane off-loading pipe.
- Work crews travelling to/from the temporary work space.



Example of a truck carrying pipe

Pipe Welding



**Wastewater
Treatment Project**
Treated for a cleaner future

The pipe welding will take approximately three weeks. Pipe segments will be welded together in an enclosure on Niagara Street in front of the White Eagle Polish Hall.

- There will be a crane off-loading pipe from trucks in the work area.
- Welding will take place on rollers, so completed sections can be rolled to another area.
- Welding will take place within the welding enclosure. Welding equipment will be powered by generators with noise mufflers.



Location of temporary work space and welding enclosure



Example of a welding enclosure

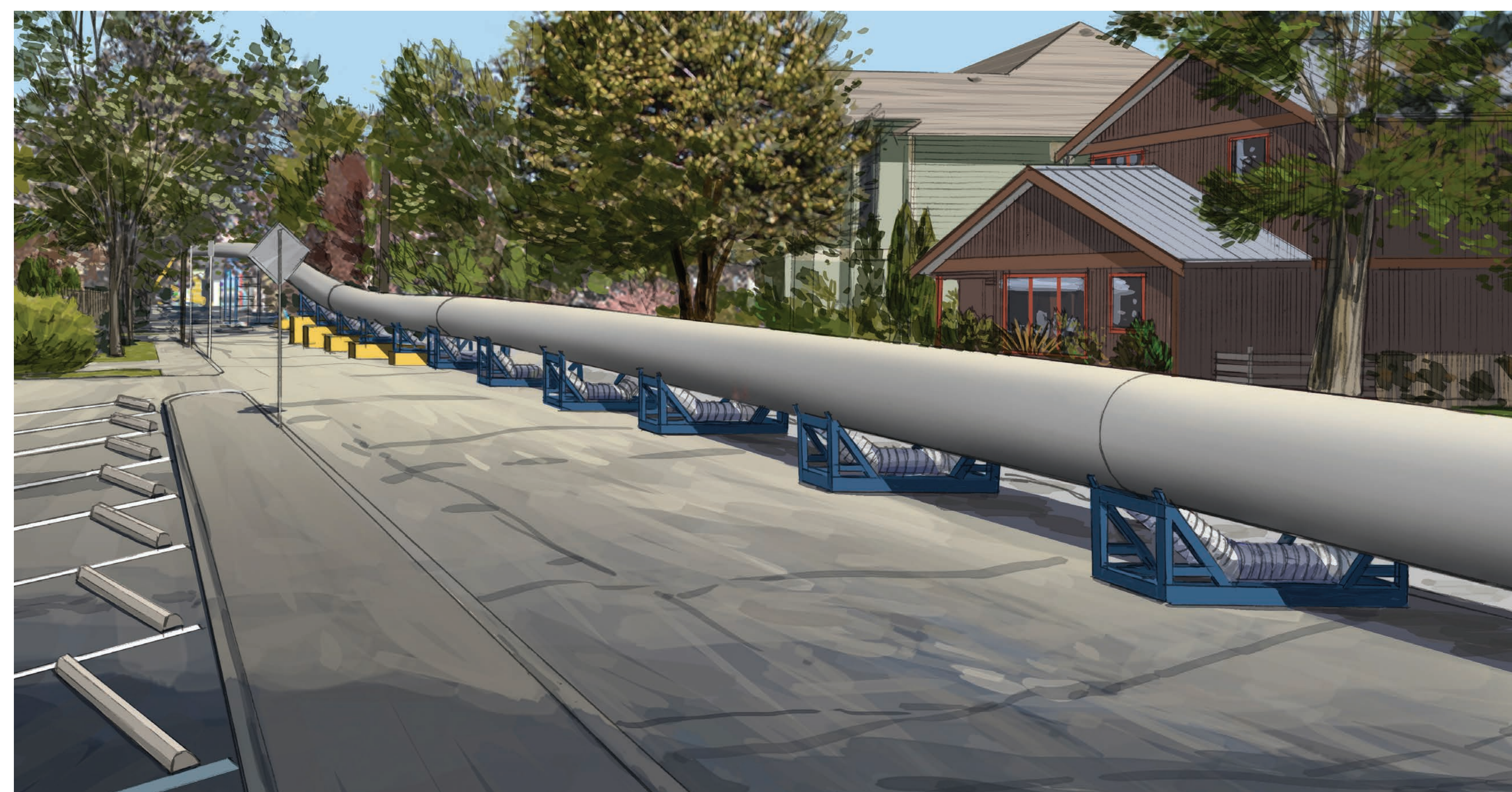
Pipe Laydown



**Wastewater
Treatment Project**
Treated for a cleaner future

The pipe laydown will take approximately four weeks. Once pipe sections are welded together, they will be moved to another area of Niagara Street while other sections are laid on rollers and welded together.

- A section of pipe will be laid along the 100 block of Niagara between St. Lawrence and Montreal.
- A section of pipe will be laid along the 200 block of Niagara between Montreal and Oswego.
- A section of pipe will be laid in the 300/400 block of Niagara between Oswego and Menzies.
- A section of pipe will be laid along the 500 block of Niagara between Menzies and South Turner.
- Equipment will be set up on either end of the pipe sections.
- The welds inside the pipe will be coated to make them more durable.



Pipe laydown along Niagara Street

Final Pipe Assembly



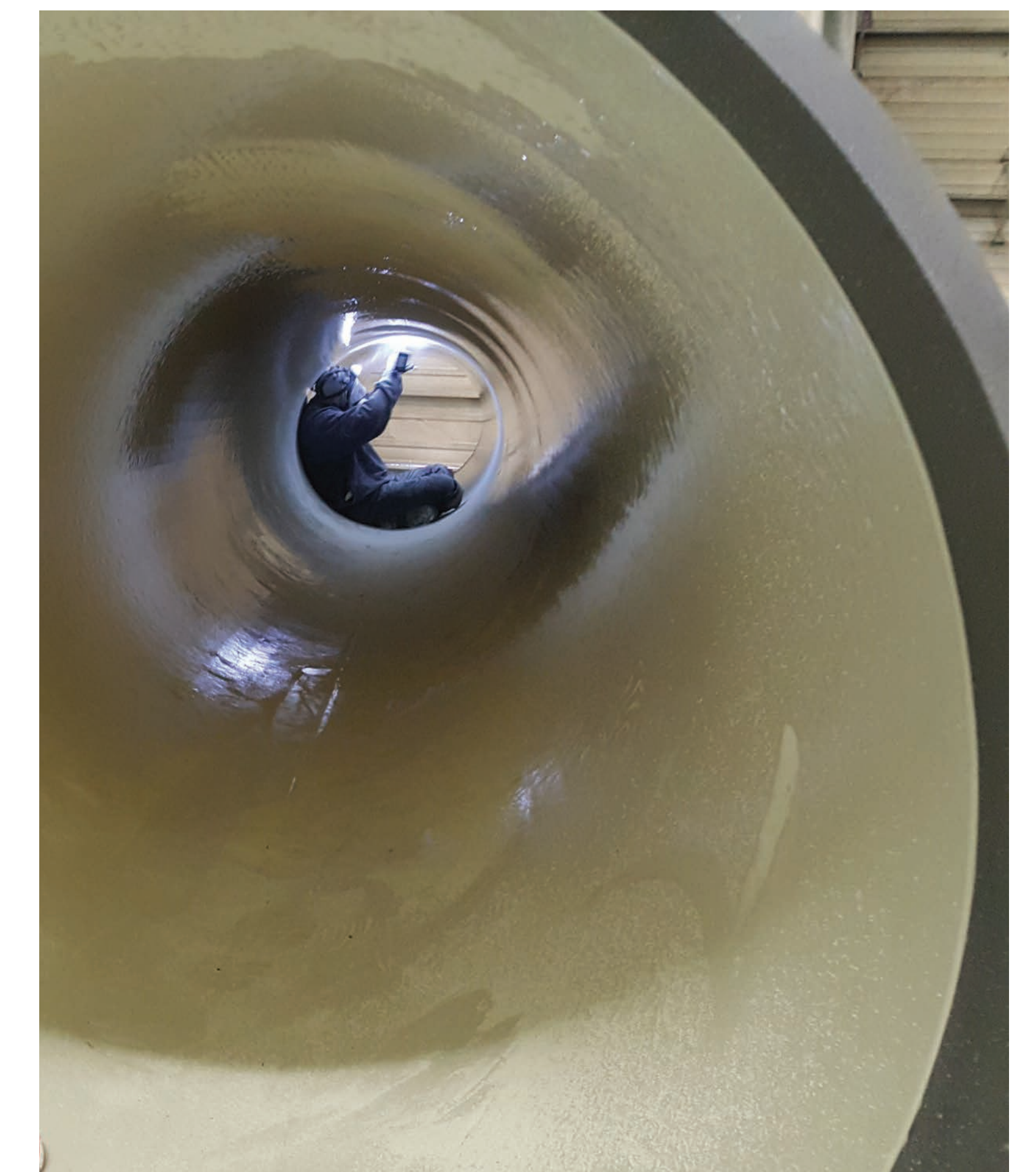
**Wastewater
Treatment Project**
Treated for a cleaner future

The final pipe assembly will take approximately two weeks. Once the pipe sections are laid on rollers along Niagara Street, the welds will be checked and coated and the larger sections of pipe will be welded together.

- Equipment will be set up on either end of the pipe sections.
- The welds inside the pipe will be coated to make them more durable.
- The larger sections of pipe will then be welded together to create one long pipe.
- The final welds will then be checked and coated.



Welding of the sections of pipe will take place within an enclosure



Example of a pipe being coated

Pipe Pull



**Wastewater
Treatment Project**
Treated for a cleaner future



The pipe pull will take place 24 hours a day

Once the 940 metre long pipe is welded together, the pipe pull (anticipated to take six days) will begin. Activities associated with this work include:

Site set up – regular hours of work

- Dallas will be closed to vehicle and pedestrian traffic at Niagara. There will be local traffic only on Dallas between Montreal and Niagara and between Simcoe and Niagara.
- Cranes and side booms will be mobilized on the 100 block of Niagara.
- Part of the sound wall at Ogden Point will be removed so the pipe can be threaded through the pipe passage.

Continuous pipe pull – 24 hours a day

- Cranes will pick up the pipe on the 100 block of Niagara and thread it into the pipe passage at Ogden Point.
- The equipment pulling the pipe will be located at the McLoughlin Point side of the harbour.
- During the pipe pull there will be hydrovac trucks and other equipment running at the Ogden Point worksite. Noise levels will be higher than they are currently, because part of the sound wall will be removed to accommodate the pipe.

Site restoration – regular hours of work

- Once the pipe is pulled through the passage, equipment will be removed and the site area will be restored.
- This will complete the Project's work on Niagara.

Safety First



**Wastewater
Treatment Project**
Treated for a cleaner future

HRP and the Project Team are committed to ensuring the safety of the public and our workers.

A number of measures will be put in place to ensure public and worker safety. Please follow all posted construction signage.

Emergency Services Access

There will be emergency services access at all times.

Construction Fencing

There will be fencing around active construction work areas.

Traffic Management

- Traffic management personnel will be in place around active work equipment.
- “Local traffic only” signage will be posted to deter traffic on side streets.
- Information will be provided to the James Bay Community School regarding access and alternate routes.

Parking



HRP and the Project Team have worked with the City of Victoria to provide alternate parking options for Niagara Street residents.

HRP has also adjusted construction staging plans to preserve parking for the condo / apartment buildings where possible, to minimize impacts on other local streets.

OVERVIEW – PARKING

- No parking on Niagara Street between Dallas Road and South Turner Street.
- Each side street will have a resident loading zone to assist with deliveries and pick-up/drop-off.
- Signage will be placed on side streets to deter non-local traffic.
- Niagara Street residents will be able to park on side streets during construction.
- Alternate parking arrangements have been made for residents of high-density buildings.
- One-way residential traffic will be maintained on the south side of the 500 block of Niagara Street to preserve parking for high-density buildings.






St Lawrence St. to Montreal St.






Wastewater Treatment Project
Treated for a cleaner future



Traffic and Access

-  Pedestrian and emergency service access maintained at all times.
-  Niagara closed to vehicle traffic.
-  During the approx. six day pipe pull, Dallas will be closed to vehicle and pedestrian traffic at Niagara. There will be local traffic only on Dallas between Montreal and Niagara, and Simcoe and Niagara.
-  During the approx. six day pipe pull, St. Lawrence via Ladysmith will be local traffic only.
-  Montreal will be open intermittently throughout this work. When it is closed, there will be a turnaround area and a resident loading zone to assist with deliveries and pick-up/drop-off. Traffic signs will advise when Montreal is open.

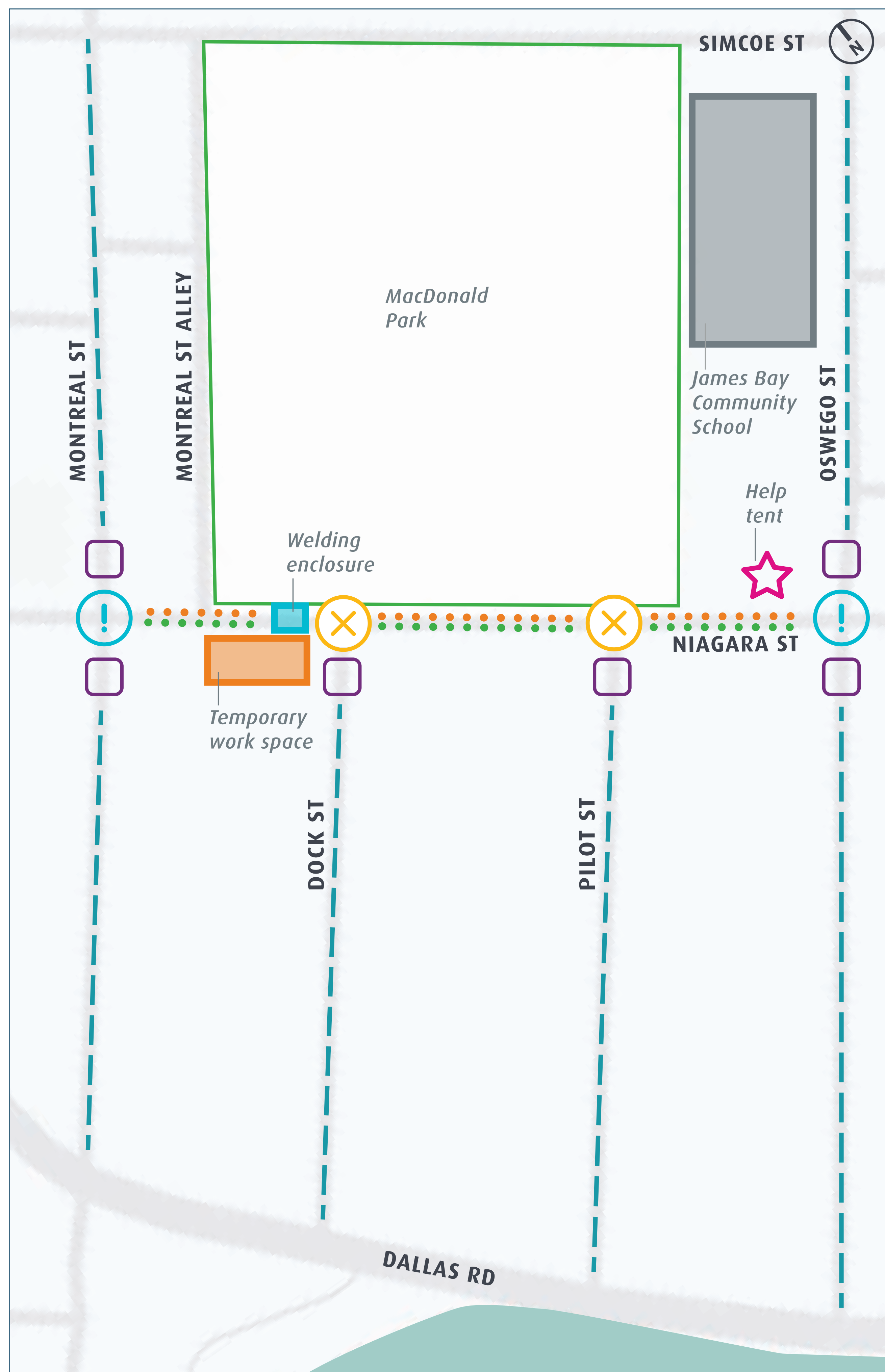
Parking

-  No parking along Niagara.
-  Niagara Street residents will be able to park on side streets during construction.
-  Alternate parking arrangements have been made for residents and businesses of the 100 block of Niagara, including high-density buildings.






Montreal St. to Oswego St.





Wastewater Treatment Project
Treated for a cleaner future



Traffic and Access

-  Pedestrian and emergency service access maintained at all times.
-  Niagara closed to vehicle traffic.
-  Montreal and Oswego will be open intermittently throughout this work. When they are closed, there will be a turnaround area and a resident loading zone to assist with deliveries and pick-up/drop-off. Traffic signs will advise when they are open.
-  Dock and Pilot will have a turnaround area and pick-up/drop-off zone for Niagara residents.
-  Information will be provided to the James Bay Community School regarding access and alternate routes.

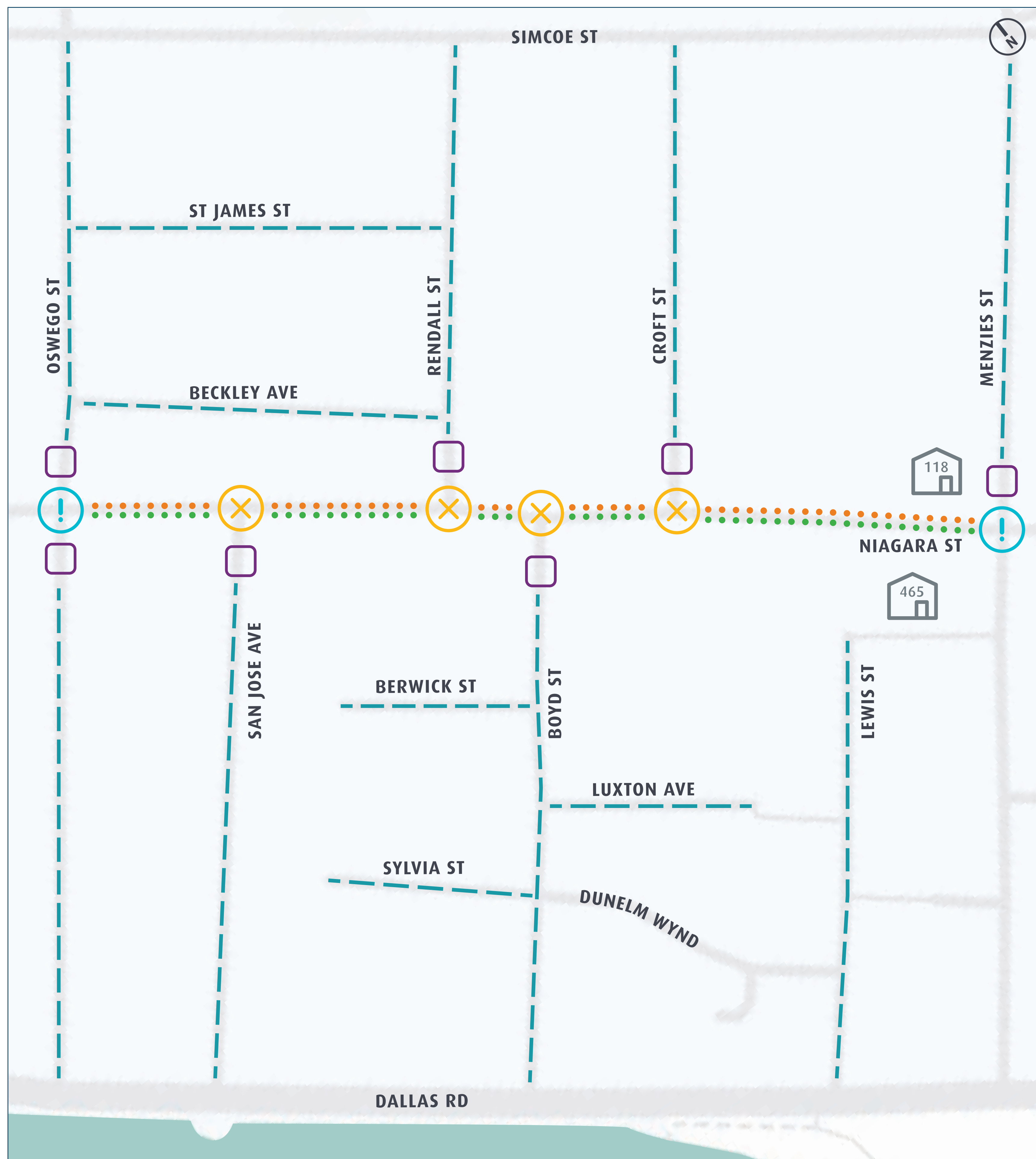
Parking

-  No parking along Niagara.
-  Niagara Street residents will be able to park on side streets during construction.






Oswego St. to Menzies St.






Wastewater Treatment Project
Treated for a cleaner future



Traffic and Access

-  Pedestrian and emergency service access maintained at all times.
-  Niagara closed to vehicle traffic.
-  Residents of 465 Niagara will access their building via Lewis, and exit onto Menzies.
-  Oswego and Menzies will be open intermittently throughout this work. When they are closed, there will be a turnaround area and a resident loading zone to assist with deliveries and pick-up/drop-off. Traffic signs will advise when they are open.
-  Croft, Rendall, Boyd and San Jose will have a turnaround area and pick-up/drop off zone for Niagara residents.

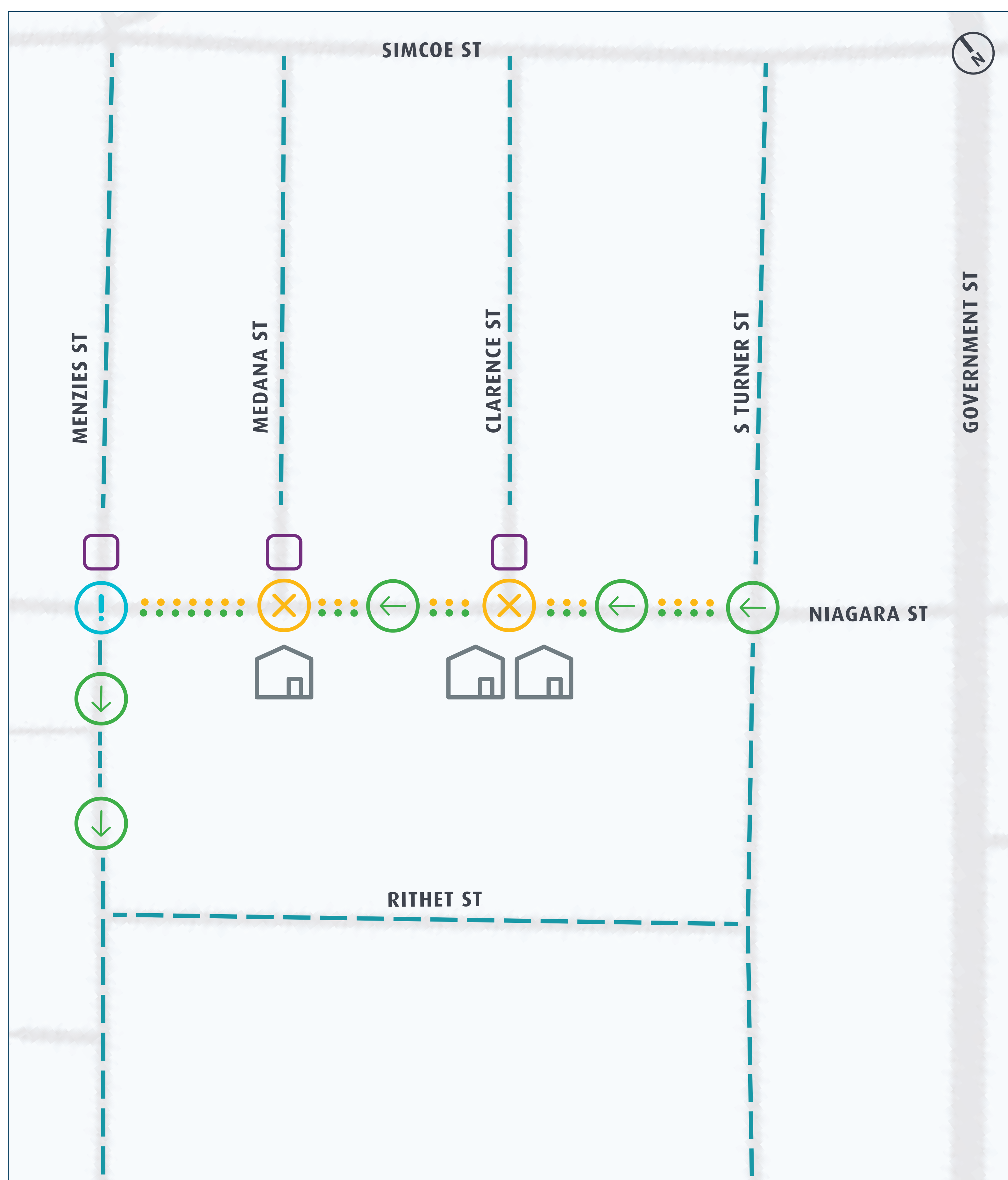
Parking

-  No parking along Niagara.
-  Niagara Street residents will be able to park on side streets during construction.
-  Residents of 118 Menzies will be able to park in designated reserved parking on Menzies north of Niagara (currently a "no parking" zone).





Menzies St. to South Turner St.






Wastewater Treatment Project
Treated for a cleaner future



Traffic and Access

-  Pedestrian and emergency service access maintained at all times.
-  The westbound (south) lane on Niagara will be open to local traffic between South Turner and Menzies, with traffic turning left on Menzies (south of Niagara).
 - › Residents on the south side of Niagara will be able to access their driveways from Niagara.
-  Menzies north of Niagara will be open intermittently throughout this work. When it is closed, there will be a turnaround area and a loading zone to assist with deliveries and pick-up/drop-off. Traffic signs will advise when it is open.
-  Medana and Clarence will have a turnaround area and pick-up/drop off zone for Niagara residents.

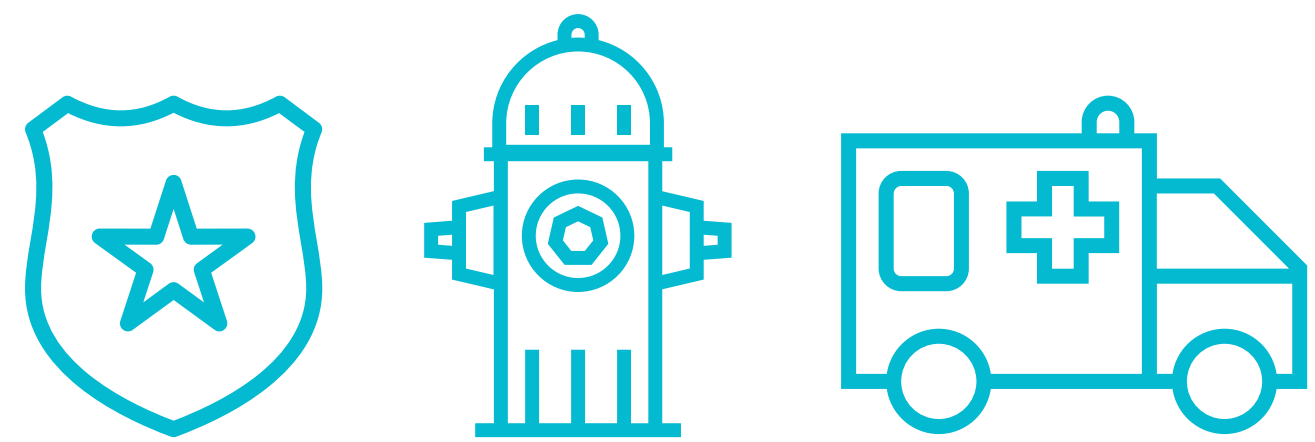
Parking

-  No parking along Niagara.
-  Niagara Street residents will be able to park on side streets during construction.
-  One-way residential traffic will be maintained on the south side of the 500 block of Niagara to preserve parking for high-density buildings.

Key Services

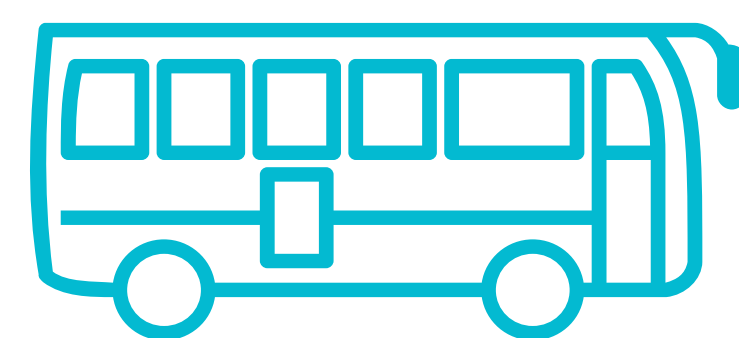


**Wastewater
Treatment Project**
Treated for a cleaner future



Fire, Police and Ambulance

- There will be emergency services access at all times.



BC Transit

- HRP and the Project Team have worked with BC Transit to re-route bus routes in the area.
- Bus #2, #3 and #10 travelling down Oswego will be rerouted.
- For more information, please visit bctransit.com/victoria.



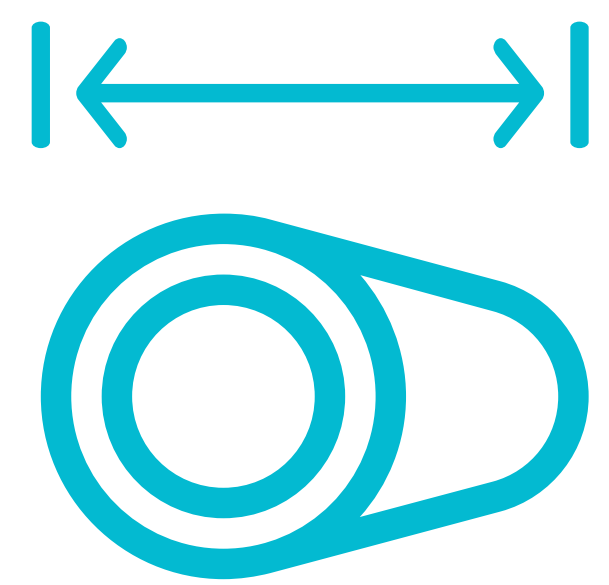
Garbage / Recycling

- Residents along Niagara Street can put out their garbage as usual and it will be picked up by the City of Victoria.
- Residents along Niagara Street can put out their recycling as usual and it will be picked up by the CRD.

Pipe 101

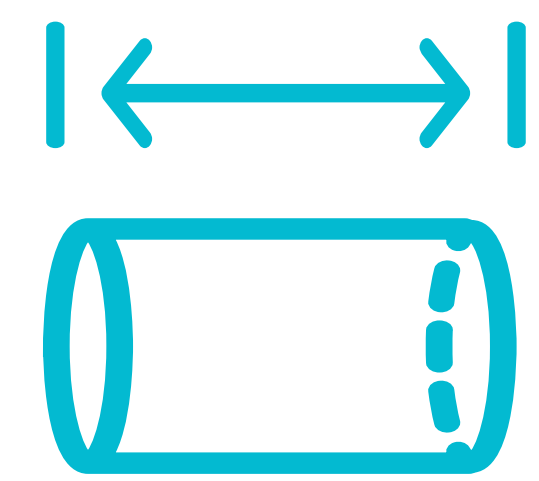


**Wastewater
Treatment Project**
Treated for a cleaner future



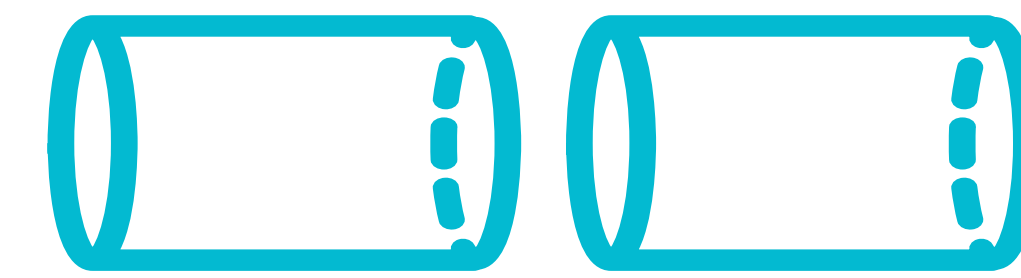
Harbour crossing pipe length

940 metres (3,084 feet)



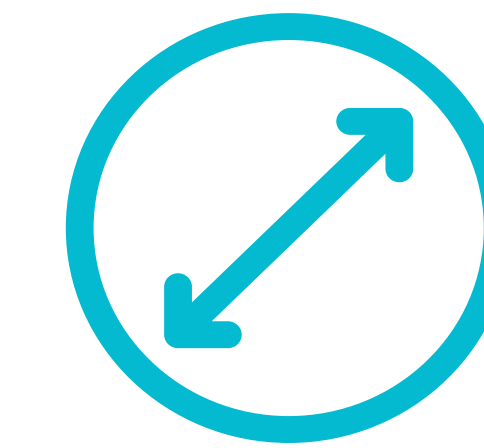
Length of pipe section

12.2 metres (40 feet)



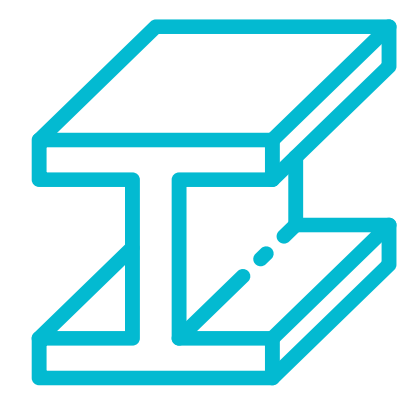
Number of sections

78



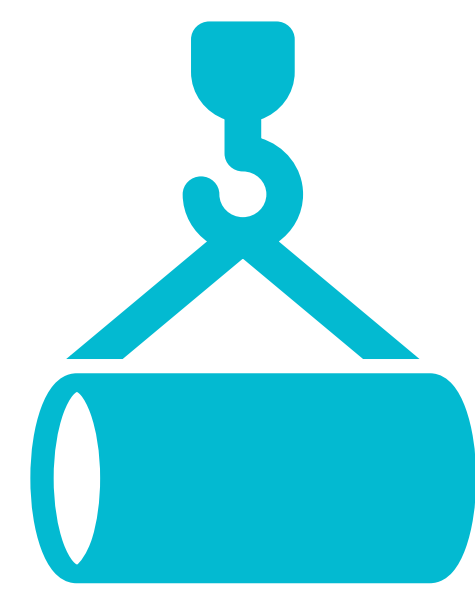
Pipe diameter

1.1 metres (3.5 feet)



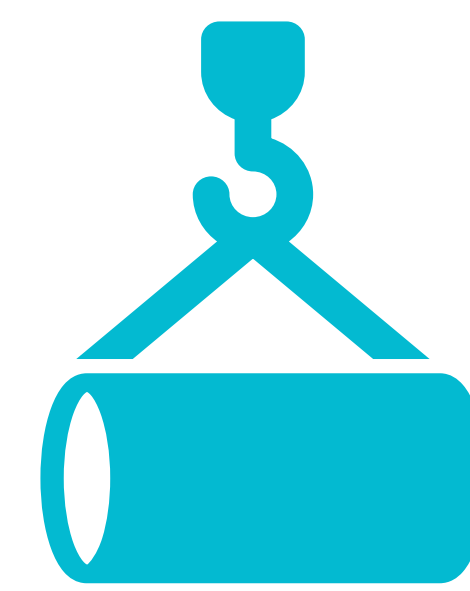
Pipe material

Steel
with a polyurethane liner



Pipe weight per section

7,900 kilograms
(17,600 pounds)



Total pipe weight

615,300 kilograms
(1,355,200 pounds)



Total pipe volume

762 cubic metres
About one third the volume of an
Olympic swimming pool

Community Engagement and Notification



Wastewater Treatment Project
Treated for a cleaner future

COMMUNITY OUTREACH



- Door-to-door visits to provide initial information to Niagara residents in May 2017.
- Door-to-door survey conducted with Niagara residents to provide updated information and a resident "needs assessment" in December 2017.

COMMUNITY MEETING NOTIFICATION



- Hand-delivered to almost 1,000 residents on Niagara and side streets intersecting Niagara.
- Emailed to over 40 people who signed up for project updates.



- Posted on the Wastewater Treatment Project website.

wastewaterproject.ca

HOW TO GET MORE INFORMATION



Help Tent

A help tent will be located in the 200 block of Niagara, by the school. A Project representative will be available during working hours each day to provide information and answer questions.



Niagara Street Web Page

wastewaterproject.ca

Will be updated regularly with construction and traffic information.



24-7 Phone Line

Residents can call to receive information or report a concern.

1.844.815.6132

Thank you for your patience as this work is completed.

We have reached out to Niagara residents to speak directly about this work. If you haven't already spoken to a team member we're here to provide information and answer questions. You can also call or email us anytime.