

PROJECT UPDATE

Duggan Tunnel Replacement Project

FEBRUARY 2023

PROJECT OVERVIEW

Having safe, reliable utility services is a critical part of day-to-day life in the community. As part of this, EPCOR is sharing an important update on an essential project in your area. The current Duggan sanitary tunnel provides service to neighbourhoods in southwest Edmonton and has been identified for replacement. This will see construction of a new sanitary sewer tunnel to service neighbourhoods from Steinhauer up to Bonnie Doon.

The alignment of the new tunnel is along 111 Street from Saddleback Road/29A Avenue, east along 34 Avenue, and then north on 106 Street to north of L.Y. Cairns School, and approximately 37 metres below the surface.

This project is part of EPCOR's Corrosion and Odour Reduction Strategy (CORe), initiated in 2019 and focused on understanding and mitigating sewer odour issues.

The majority of the work will be underground using a tunnel boring machine (TBM). However, there will be multiple work sites (shaft locations) along the tunnel alignment to allow the TBM to be lowered underground to excavate, turn corners, and be removed when tunneling is complete.

This project is broken down geographically into five zones which follow the alignment of the relocations:

- **Zone A** – 111 Street from Saddleback Road/29A Avenue to 34 Avenue
- **Zone B** – 34 Avenue from 111 Street to 106 Street
- **Zone C** – 106 Street from 36A Avenue to 38 Avenue
- **Zone D** – 106 Street from 40 Avenue to Whitemud Drive
- **Zone E** – 106 Street and 45 Avenue to L.Y. Cairns

JOIN US FOR A PUBLIC INFORMATION SESSION

EPCOR is hosting public information session to introduce the project to the community and answer questions:

Date: Tuesday, February 21, 2023

Time: 7:00pm to 9:00pm

Location: Ermineskin Community League,
10709 32A Avenue

WHAT'S HAPPENING

One worksite in Zone A and two worksites in Zone B will begin construction in Spring 2023. The locations are:

- Eastbound on 34 Avenue, between 111 Street and 106 Street
- In the green space east of 111 Street and south of 34 Avenue
- Northbound on 106 Street and north of 34 Avenue

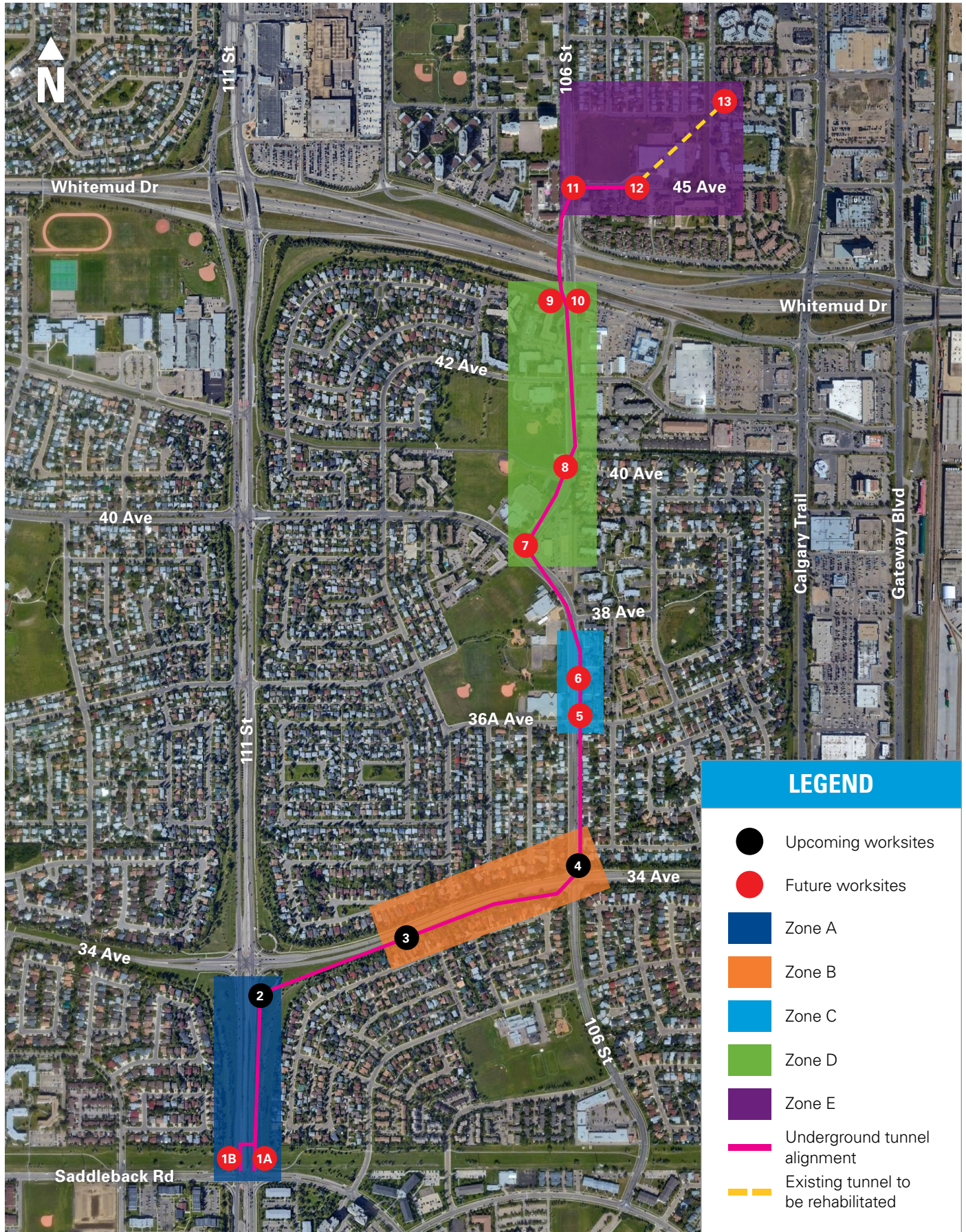
More information, including traffic impacts and timelines, will be shared with residents adjacent to the work areas in a construction notice prior to work starting.

ODOUR MITIGATION

EPCOR has completed several projects for sewer odour efforts in communities along the tunnel alignment, including construction of six access manholes, rehabilitation of three pump stations, and installation of manhole seals and airflow devices. **With construction of the new tunnel, odour issues are expected to improve.**

As we continue to pursue short-term and long-term odour mitigation options, EPCOR encourages residents to call our general EPCOR Trouble Line to report sewer odours any time they are overly strong. The Trouble Line is 780-412-4500 (press 4 and then 3 when promoted). Your reports help us track the odour to look for patterns, and consider solutions.

OVERALL PROJECT AREA



UPCOMING WORKSITES

The following locations will be used as upcoming tunneling worksites. More information on tunneling is included on Page 4 of this notice.

Please note: While the upcoming worksite references may seem out of order, they are being provided based on order of timing for work.

Zone B: 34 Avenue from 111 Street to 106 Street

- **Worksite #3** – Eastbound on 34 Avenue, between 111 Street and 106 Street
 - Construction of the TBM entry shaft is anticipated to start in March 2023 with completion in Spring 2024.
 - Once the shaft construction is complete, tunneling will begin to Worksite #2, followed by Worksite #4.

Zone A: 111 Street from Saddleback Road/ 29A Avenue to 34 Avenue

- **Worksite #2** – In the green space east of 111 Street and south of 34 Avenue
 - Construction of the TBM entry and retrieval shaft is anticipated to start in April 2023 with completion in Spring 2024.
 - Once the shaft construction is complete, the TBM will be retrieved following a tunneling run from Worksite #3.
 - Once complete, tunneling from Worksite #2 to Worksite #1A will begin.

Zone B: 34 Avenue from 111 Street to 106 Street

- **Worksite #4** – Northbound on 106 Street and north of 34 Avenue
 - Construction of the TBM retrieval shaft is anticipated to start in April 2023 with completion in Spring 2024.
 - Once shaft construction is complete, the TBM will be retrieved following a tunneling run from Worksite #3.

More information, including traffic impacts and timelines, will be shared with residents adjacent to the work areas in a construction notice prior to work starting.

FUTURE WORKSITES

The following locations will be used as future tunneling worksites:

Zone A: 111 Street from Saddleback Road/ 29A Avenue to 34 Avenue

- **Worksite #1A** – Westbound on 29A Avenue and east of 111 Street
 - Construction of the TBM retrieval shaft is anticipated to start in Spring 2023 with completion in Spring 2024.
- **Worksite #1B** – 111 Street southbound, left turn lane onto 29A Avenue
 - Construction of the TBM retrieval shaft is anticipated to start in Fall 2023 with completion in Summer 2024.

Zone C: 106 Street from 36A Avenue to 38 Avenue

- **Worksite #5** – Intersection of 106 Street and 36A Avenue
 - Construction of the TBM entry shaft is anticipated to start in Summer 2023 with completion in Spring 2024.
- **Worksite #6** – Northbound on 106 Street and north of 36A Avenue
 - Construction of the TBM retrieval shaft is anticipated to start in Summer 2023 with completion in Spring 2024.

Zone D: 106 Street from 40 Avenue to Whitemud Drive

- **Worksite #7** – Intersection of 106 Street and 40 Avenue
 - Construction of the TBM retrieval shaft is anticipated to start in Summer 2023 with completion in Spring 2024.
- **Worksite #8** – Southbound on 106 Street and south of 41 Avenue
 - Construction of the TBM entry shaft is anticipated to start in Summer 2023 with completion in Summer 2024.
- **Worksite #9** – Southbound on 106 Street and south of Whitemud Drive
 - Construction of the TBM retrieval shaft is anticipated to start in Fall 2023 with completion in Summer 2024.
- **Worksite #10** – Northbound on 106 Street and south of Whitemud Drive
 - Construction of the TBM retrieval shaft is anticipated to start in early 2024 with completion in Summer 2024.

Zone E: 106 Street and 45 Avenue to L.Y. Cairns

- **Worksite #11** – Intersection of 45 Avenue and 106 Street
 - Construction of the TBM entry shaft is anticipated to start in Fall 2023 with completion in Summer 2024.
- **Worksite #12** – 45 Avenue east of 106 Street
 - Construction of the TBM retrieval shaft is anticipated to start in Fall 2023 with completion in Fall 2024.
- **Worksite #13** – 104A Street north of 45 Avenue
 - Construction to rehabilitate the existing tunnel is anticipated to start in early 2024 with completion in Fall 2024.

Please note, timelines are estimates and may change based on work progress, material procurement, unforeseen delays, weather and construction conditions.

More information, including traffic impacts and timelines, will be shared with residents adjacent to the work areas in a construction notice prior to work starting.

WORK ACTIVITIES

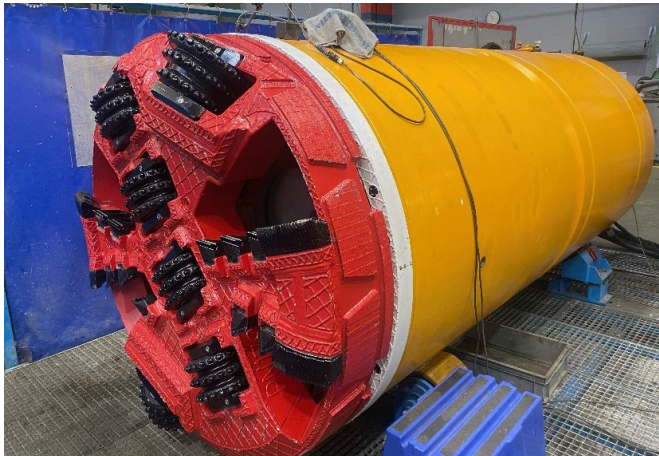
You may see some of the following work activities in your area.

Tunneling

Tunneling is a method used to construct new sewer tunnels. First a large shaft is built, which will facilitate lowering of a tunnel boring machine (TBM) into the ground. The TBM then grinds through soil and other ground conditions along the alignment of the new tunnel. Pipe is then installed behind the tunneling machine to create the tunnel.

The tunneling process occurs underground; however, shafts are required at the surface along the alignment of the tunnel (worksites locations). These shafts are placed at engineered start and end points (used to retrieve or turn the TBM). Due to the size of the shaft locations, impacts usually include road/sidewalk closures. A large machine used to manage soil will also be located at worksites #2, #3, #5, #7 and #11.

In some situations, 24-hours-a-day, 7-days-a-week (24/7) tunneling work is required to reduce the risk of the TBM becoming stuck underground. Residents and businesses in the area of the work will be notified before this activity begins.



Tunneling Boring Machine (TBM)

FOR MORE INFORMATION

EPCOR Drainage Services

Phone: (780) 509-8080

E-mail: epcordrainage@epcor.com

Open Trench Construction/Excavation

Open trench construction is a method in which surface area is excavated to install new infrastructure. All worksites on this project will include open trench construction to build shafts used to insert or extract the TBM.

Open trench construction requires a large trenched area; therefore, impacts usually include road and/or sidewalk closures.

Water Main Relocation

Some shaft locations may require a water main to be relocated. This requires open trench excavation where an existing water main is moved to an alternate location. In addition customers affected by water main relocations may require a temporary water connection supplied by EPCOR while work is ongoing. Customers will be notified in advance if there will be impacts to water service.

Material Hauling

Large tandem trucks will be used to haul materials to and from worksites. As construction work takes place in close proximity to several schools, no haul times will be implemented at certain hours of the workday. EPCOR is working closely with the Edmonton Public School Board and the Edmonton Catholic School Board to mitigate impacts.

PROJECT IMPACTS

Traffic

Depending on the work location, residents and businesses will see activity that is typical to construction, including company/contractor vehicles and equipment. Road/lane and sidewalk closures are anticipated. Signage will indicate closures along with parking restrictions. We will work with the City of Edmonton to relocate bus stops as needed. Construction vehicles and tandem dump trucks will be used for hauling along roadways in work areas.

Noise

EPCOR will do everything possible to manage noise associated with the construction. We will work to ensure that construction is completed within requirements of the City of Edmonton Noise Bylaw. Work outside the noise bylaw hours may occur, in which case additional information will be distributed to residents.

SAFETY

The construction areas will be fenced and/or marked as restricted areas. We will take every precaution to ensure public safety, and we request your assistance in keeping children and pets at a safe distance from the construction site and equipment.