

# PROJECT UPDATE

## DOWNTOWN INTENSIFICATION PROJECT

### Project Overview

The Downtown Intensification Storm Tunnel (DTI) project is part of the Capital City Downtown Plan (CCDP). With the increased density in downtown Edmonton (new condominiums, office towers and the arena district), there is a need to upgrade the stormwater system, including the construction of a new storm tunnel.

### What's happening?

At the end of August, the tunneling machine unexpectedly encountered unidentified metal material that damaged the cutting teeth on the machine. While attempts were made to continue work at the site, it was determined that an alternate solution was required to continue the work without further damaging the tunneling machine.

The tunneling machine is stopped underneath 105 Street, approximately 15m south of Jasper Avenue. Due to the necessary repairs to the tunneling machine, it is now anticipated that the road closure on 105 Street south of Jasper Avenue will now extend until the **end of April 2019**. The work site on 105 Street north of Jasper Avenue will remain active until **July 2019**.

**The current lane closures and work sites will remain unchanged.**

EPCOR investigated and analyzed multiple options on how to move forward with the tunneling. This included drilling three boreholes to identify the location of additional metal objects, determine the potential options to access and repair the tunneling machine and engineer and design the final solution.

The boreholes were drilled in one meter intervals moving north from the location of the tunneling machine. This was done to understand if there are more objects underground with potential to impact the tunneling again, and to understand where normal ground conditions start. The first borehole confirmed more metal objects in the ground. The second and third boreholes showed no signs

of metal objects. While not definitive, we believe the metal objects are part of an old construction dumpsite and are limited to this one area.

It was determined that in order to continue tunneling, the metals objects need to be removed and the teeth on the tunneling machine needed to be replaced to complete the last section of tunneling without further delay. This will be done by building a second, smaller access shaft within the current fenced worksite on 105 Street to remove the debris and gain access to the face of the tunneling machine and replace the teeth. The boreholes helped define the location for the new shaft and the area that will need to be cleared of material.

EPCOR has completed 2.4km of the 2.5km required tunneling for this project without ground issues. The final 67 meters of tunneling will be completed once these repairs have been made.

### Schedule

The overall project schedule will be impacted and is now expected to be completed by the **end of July 2019**.

**Please note: These timelines are estimates and may change based on weather and construction conditions.**

### Access Shaft #1 - on 105 Street, just north of the alley between the 10405 Jasper Avenue building and the ATCO building

- Access Shaft #1 will continue to be used for lowering the tunnel material to the bottom of the shaft.
- Once tunneling is complete, manhole installation and shaft backfill will begin **end of February 2019** and is expected to be completed by the **end of April 2019**, weather permitting.
- Once work is completed, the road will be paved as soon as possible and be re-opened to traffic.

## Access Shaft #2 - on 105 Street, ~15m south of Jasper Avenue within Access Shaft #1 work site

- Access Shaft #2 will be approximately 27m north of Access Shaft #1.
- While Access Shaft #2 is being drilled:
  - The typical hours of construction will be **Monday to Saturday starting at 7:00am to 7:00pm**. If required, these hours may be extended, and construction may occur on Sundays from 9:00am to 7:00pm.
  - The drilling is scheduled to start in **early November 2018** and is expected to be completed by the **end of December 2018**, weather permitting.
- Once Access Shaft #2 is built and the teeth replaced, tunneling will continue along 105 Street past Jasper Avenue.
  - There will be continuous work **24 hours a day, 7 days a week**.
  - Tunneling is scheduled to start in **early January 2019** and is expected to be completed by the **end of February 2019**, weather permitting.
- Once tunneling is complete, manhole installation and shaft backfill will begin.
  - The typical hours of construction will be **Monday to Saturday 7:00am – 7:00pm**. If required, these hours may be extended, and construction may occur on Sundays from 9:00am to 7:00pm.
  - Manhole installation and shaft backfill is scheduled to start **end of February 2019** and is expected to be completed by the **end of April 2019**, weather permitting.
- Once work is completed, the road will be paved as soon as possible and be re-opened to traffic.

## 100 Avenue/105 Street Shaft

- The 100 Avenue/105 Street shaft remains an active work site. This shaft will continue to be used to lower down construction material and for the ventilation system.
- Manhole installation and shaft backfill of this shaft will begin **end of April 2019** and is expected to be completed by the **end of July 2019**, weather permitting.
- Once work is completed, the road will be paved as soon as possible and be re-opened to traffic.

## North of Jasper Avenue/105 Street Shaft

- The Jasper Avenue/105 Street shaft remains an active work site. This shaft will be used to remove the tunneling equipment once tunneling is completed. It will also be used to connect the existing catch basin and storm line.

- Manhole installation and shaft backfill of this shaft will begin **end of April 2019** and is expected to be completed by the **end of July 2019**, weather permitting.
- Once work is completed, the road will be paved as soon as possible and be re-opened to traffic.

To complete the upgrade to the stormwater system in downtown, this new tunnel will be connected to the improved stormwater system in Central McDougall. The connection is expected to be completed in **summer 2019**.

All affected landscaping, pavements, sidewalks, and alleyways will be restored to their original condition. Restorations will be completed as weather permits. Permanent road and surface restoration will be scheduled and completed by the City of Edmonton.

EPCOR will do everything possible to manage the noise associated with the construction. We will work to ensure that the construction is completed within the requirements of the City of Edmonton Noise Bylaw.

## Traffic accommodation

The size of the existing work site for Access Shaft #1 will not change.

The traffic disruption on 105 Street south of Jasper Avenue will continue to be:

- 105 Street southbound will be closed from Jasper Avenue to the alley between the Academy Dental building and First Class Cleaners.
- Northbound traffic on 105 Street will be reduced to one lane from approximately 100m south of Jasper Avenue to Jasper Avenue.
- No parking along the east and west curb lanes of 105 Street from Jasper Avenue to approximately 100m south of Jasper Avenue.
- Left turn from 105 Street northbound onto Jasper Avenue heading westbound will remain open.

## Safety

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

We thank you for your patience and understanding as we continue this necessary work.

## Who do I contact for more information?

EPCOR Drainage Services

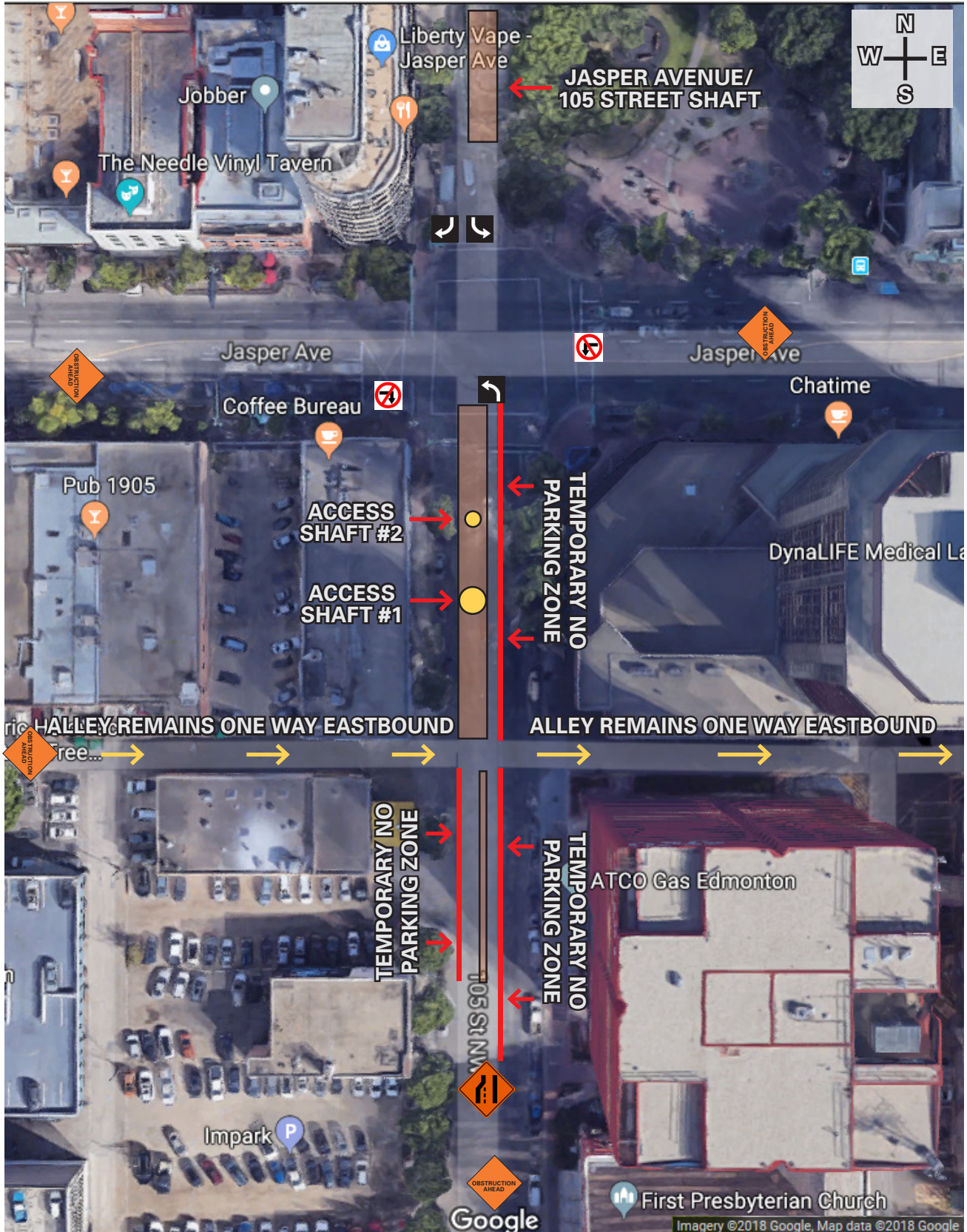
Tel: (780) 509-8080

E-mail: [EPCORdrainage@epcor.com](mailto:EPCORdrainage@epcor.com)



## Traffic accommodations map

The current lane closures and work sites will remain unchanged.





Overall project map

