



CONSTRUCTION NOTICE

99 Avenue Sanitary Trunk Rehabilitation Project JULY 2020

PROJECT BACKGROUND

The 99 Avenue sanitary sewer conveys wastewater from west Edmonton to the Gold Bar Wastewater Treatment Plant. The sewer is approximately 30 metres deep and services approximately 117,000 customers. For this project, the sewer is in need of rehabilitation between 142 Street and 151 Street.

Inspections have identified the existing trunk varies from fair to very poor condition and is in need of rehabilitation to ensure it continues to meet the current needs and growth for west Edmonton.

PROJECT OVERVIEW

This project has been broken down into two stages:

Stage One: Bypass Sewer Construction

Along 99 Avenue, north on 148 Street and east on 101 Avenue (construction from 2020-2022)

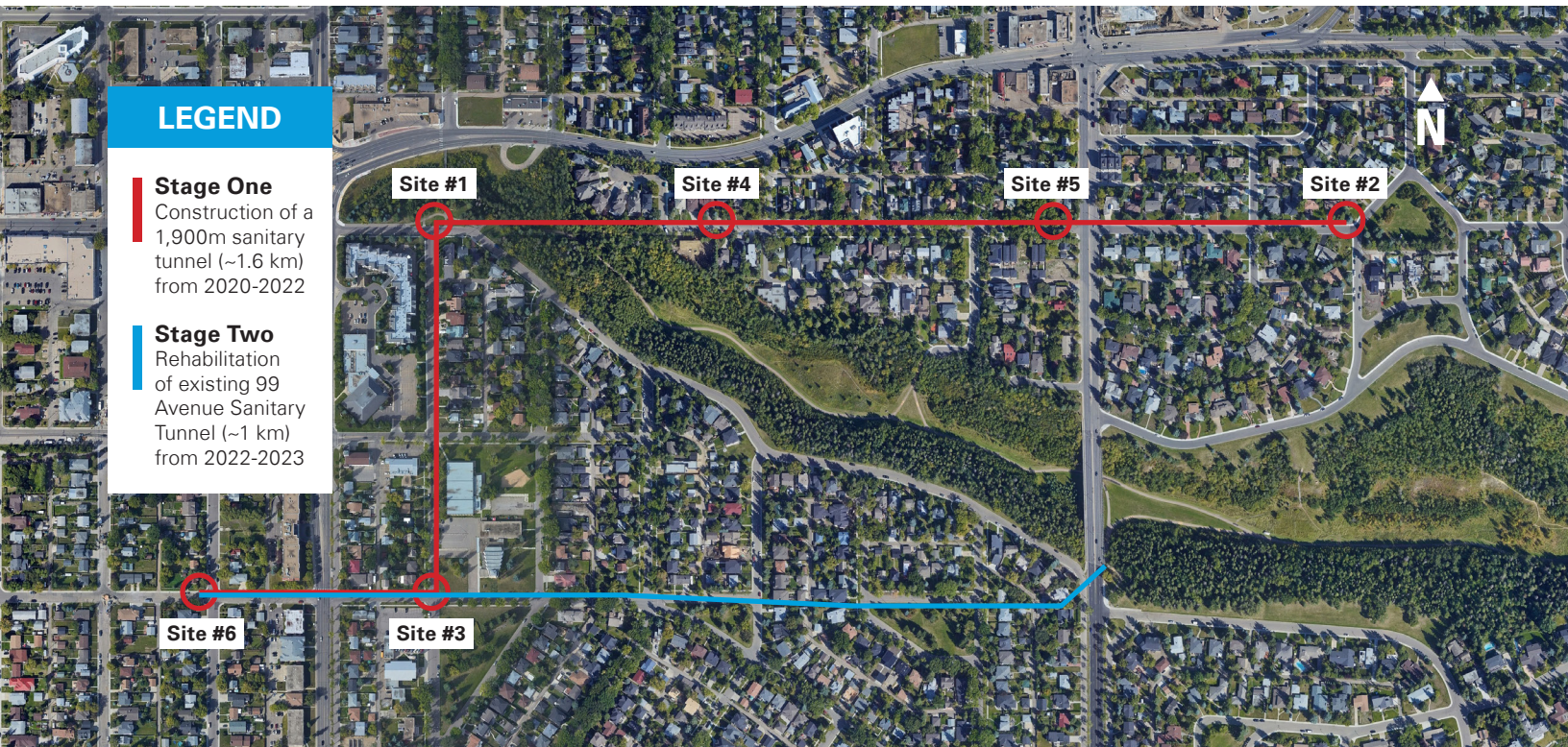
Stage Two: Rehabilitation of 99 Avenue Sanitary Trunk

Along 99 Avenue, from 142 Street to 151 Street (construction in 2022-2023)

Upon completion of the new construction and rehabilitation, both tunnels will be in service, which will increase capacity.

WORKSITES OVERVIEW

Six worksites will be used to facilitate the construction of the bypass sewer for the first stage of this project. The worksites (shaft locations) will allow a large tunnel boring machine to be lowered underground to excavate, and also exit when tunneling is complete. The sites are indicated on the map below - please note, Site #1 and Site #2 will be the first areas due to start construction this summer/fall. Construction will only occur at the six worksite shaft locations with the remainder of the work occurring underground.



UPCOMING WORK

Site #1 - 148 Street and Summit Drive

Construction is expected to start the week of July 13, 2020 and is expected to be completed by early 2022.

Traffic Impacts:

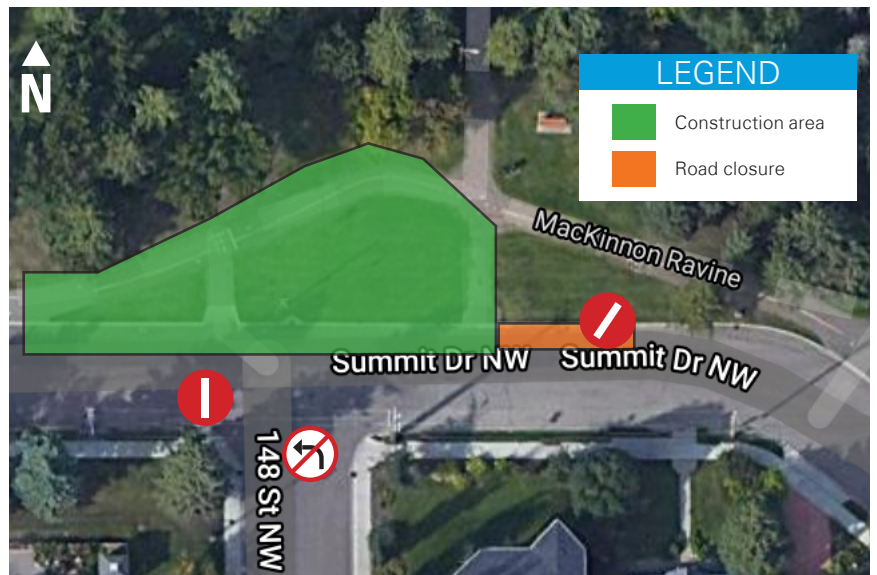
- The westbound lane on Summit Drive will be closed.
- Trucks will enter the worksite on Summit Drive from 149 Street.
- Trucks will exit the worksite at 148 Street going south and exit to 149 Street via 100 Avenue.

Pedestrian Impacts:

- The sidewalk on the north side of Summit Drive will be closed from 149 Street to the east of 148 Street.
- A detour will be created on the east side to allow for crossing Summit Drive.

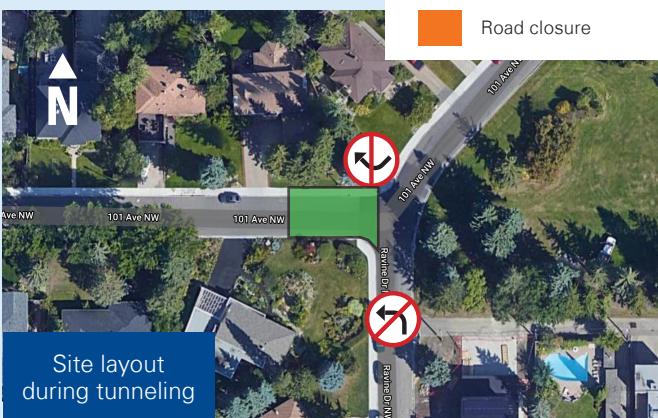
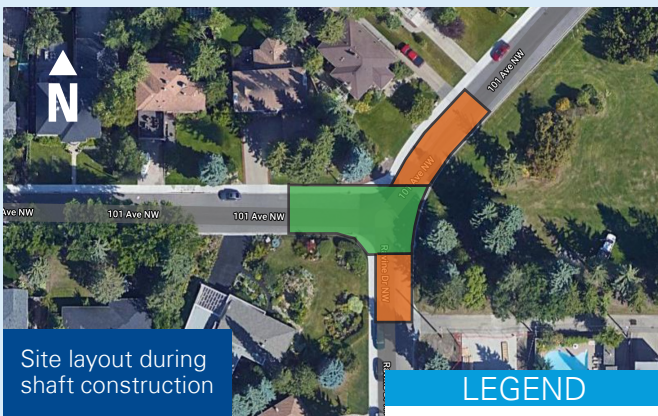
Other:

- Regular working hours are 7:00am to 6:00pm Monday to Saturday.



Please note: 24 hours a day work will occur approximately three months after the start of construction. There are three phases to the 24 hours a day tunneling. The estimated timeframes are:

- Fall 2020 to Spring 2021 - 147 days
- Spring 2021 to Summer 2021 - 66 days
- Fall 2021 - 41 days



Site #2 - 101 and Ravine Drive

Estimated construction from late Summer 2020 to Summer 2021.

- Shaft construction is expected to take four months (estimated construction is from late Summer 2020 to Fall 2020).
- Tunneling construction is estimated to take place in Fall 2020 to Summer 2021.

Traffic Impacts:

- Access to 101 Avenue will be closed at Ravine Drive. One lane of traffic will be allowed from Ravine Drive during the tunneling phase; however, there may be short duration closures of Ravine Drive in Summer 2021 for manhole rehabilitation work.
- Trucks will enter the worksite from 102 Avenue through 138 Street. Trucks will exit the worksite down 101 Avenue east of Ravine Drive onto 142 Street.

Pedestrian Impacts:

- The pedestrian crossing at 101 Avenue and Ravine Drive will be closed.

Other:

- Regular working hours are 7:00am to 6:00pm Monday to Saturday.

SCHEDULE

The first phase of this project is scheduled to begin on July 15, 2020 and is expected to be completed by early 2022, barring any unforeseen circumstances. Please note: Timelines are estimates and may change based on weather and construction conditions.

Details regarding timelines, traffic impacts and access restrictions will be provided for other worksites in a future notice as we get closer to the start of construction at those worksites and confirm those details with the contractor.

Information about the other worksites is available at: <https://www.epcor.com/99ave>.

WHAT TO EXPECT TO SEE ON SITE

Shaft Construction Site and Tunnel Boring Machine

A Tunnel Boring Machine (TBM) will be used to construct the new sewer. First a large shaft is built which will facilitate lowering of the TBM into the ground. The TBM then grinds through soil and other ground conditions. Pipe is then installed behind the micro-tunneling machine to create the tunnel.

The TBM operates under a pressure system to move forward and requires pipe lubrication. When tunneling stops the lubrication may harden causing the pipes and the TBM to be unable to be pushed forward – this is why 24/7 tunneling is necessary.

The tunneling process occurs underground; however, shafts are required along the alignment and placed in engineered distances. During tunneling, it may appear not much work is occurring; however, this is being done underground.

Slurry Separation Machine

The Tunnel Boring Machine (TBM) tunnels through the ground by breaking up the soil, mixing it with the drilling fluid to form a slurry and then pumping this slurry to the surface.

At the surface, the slurry is pumped into a slurry separation machine which separates the tunneled soil from the drilling fluid.

The tunneled soil is then loaded into dump trucks and hauled away and the drilling fluid is pumped back to the TBM to be reused.

The slurry separation machine will be utilized at the Summit Drive and 148 Street site only.



PROJECT UPDATES

Projects updates will be delivered to the community as major milestones are achieved. However, if you would like to receive more frequent updates on the project, including traffic accommodations and timelines, please send your email address to EPCORdrainage@epcor.com.

FUTURE WORK

The following locations will be used as worksites. More information is available at epcor.com and will be distributed in a public notice prior to work starting at these sites.

Site #3 - 99 Avenue and 148 Street

Estimated construction from Fall 2020 to early 2022

Site #4 - 101 Avenue and 145 Street

Estimated construction from Spring 2021 to Fall 2021

Site #5 - 101 Avenue west of 142 Street

Estimated construction from Spring 2021 to Fall 2021

Site #6 - 99 Avenue and 150 Street

Estimated construction from Summer 2021 to early 2022

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.

ADJACENT WORK - MACKINNON RAVINE STORM SEWER REHABILITATION PROJECT

The existing storm sewer under 149 Street and the west end of MacKinnon Ravine has been identified as requiring rehabilitation.

Work is currently underway to rehabilitate the storm system and is expected to be complete by the end of 2020, weather permitting.



COVID-19

EPCOR is closely monitoring the situation related to the COVID-19 outbreak. Protocols have been put in place for our employees while performing essential work to protect the health of our teams and our customers. We also request homeowners take precautionary measures by maintaining a safe, two met distance from our crews.

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

CONSTRUCTION ART HOARDING

We're proposing that some of the construction sites for this project incorporate artwork construction hoarding at Summit Drive and 148 Street, 99 Avenue and 148 Street and possibly other worksites.

Construction site hoarding can be creative, eye-catching printed art displays installed to a fence on a construction site perimeter. The hoarding helps keep the site safe and also provides an aesthetically appealing display.

Here is an example:



We're proposing a community art contest for both children and adults. More information will be distributed in a community update in the near future.

FOR MORE INFORMATION

EPCOR Drainage Services

Phone: 780-509-8080

Email: EPCORdrainage@epcor.com

Visit: <https://www.epcor.com/99ave>