

# Fish Creek West Sanitary Upgrade

### February 15, 2023

#### Background

The City of Calgary is building a significant upgrade to the underground sanitary system in your area. When complete, the new sanitary line will transport sanitary flows (wastewater) from the communities of Woodbine, Woodlands, and Canyon Meadows, and wastewater from Tsuut'ina Nation, as well as provide increased sanitary sewer capacity to Woodbine and Woodlands. This wastewater will travel through Calgary's wastewater collection system to the Fish Creek wastewater treatment plant. As part of construction for this project The City will need to build an odour control building near the LRT/CP tracks at 490 Canyon Meadows Drive S.W.

#### Why is this building needed?

As part of the design for the sanitary trunk system, The City conducted studies and modelling which showed the siphon and surrounding area was susceptible to odour migration. To reduce the migration of odours in the area The City will be building an odor control building (see map below) to the west of the LRT/CP tracks.

#### What is a siphon?

A siphon is a sewer used to carry wastewater flowing in a gravity collection system through u-shape depression, in this case beneath the LRT/CP tracks.

#### How does the odour control building work?

A scrubber odour control unit is mounted indoors and designed to remove vapours and sewage odours from the sanitary sewage collection system. The scrubber odour control unit is equipped with a blower unit to eliminate the odour collected from the sanitary sewage collection system. The scrubber odour control unit removes odours and vapours by capturing and neutralizing odour molecules.

#### What happens if the system breaks down?

This building will have alarms installed, which will be triggered if the scrubber odour control unit fails. The City of Calgary operations staff will follow standard procedures to access the building, make repairs and restart the scrubber odour control unit to resume removing odours and vapours from the sanitary sewage collection system.

#### How often will the filter for this unit be changed?

The scrubber odour control unit manufacturer indicated an approximate lifespan of 2 years after which time it should be replaced.

#### How are you controlling access to the building?

There will be a climb-resistant fence to prevent public access or approach to the building. The building complies with the City of Calgary - Physical Security Standards for Buildings, Sites & Infrastructure.

#### How often will this building be inspected?

The City of Calgary has a maintenance program for different parts of the system, and inspections will be every two weeks.

#### Can the building be built on the other side of the tracks?

The purpose of the scrubber building is to mitigate the odours near residential areas. The odour control building is located on the west side of the tracks as this area is more susceptible to odours. Locating the building on the other side of the tracks would not be beneficial as the modelled buildup of odour is on the west side of the LRT/CP tracks.

#### What will the building look like?

The building is 6 metres x 4.6 metres (20' x 16') and will have a sloped metal roof with cement siding (HardiePlank). The building roof is one consistent slope to allow for the possibility of solar panel installation in the future.

#### Will there be more lighting in the area?

The building will feature two lights, one at the front of the building and another on the northeast face of the building. Lighting will have shields to prevent light trespassing onto neighbouring properties. We will also be installing a new light on the mulituse pathway to the southeast of the building.

#### Will there be any trees removed?

There are no plans to remove any trees during construction of the building.

#### Is it possible to build a smaller building?

The building is at the minimum size to be able to accommodate the odour control system, meet building codes and provide a safe working environment for maintenance workers.

#### What guarantee do the homeowners have the scrubber building will eliminate all odours?

The City completed a study to determine the best option to mitigate odours in the area and identified installing the scrubber where it would be the most effective. We also made changes during the design of the sanitary system to reduce turbulence in the system and include the scrubber building at this location.

#### If this scrubber building isn't installed will odours be periodic or continuous?

During design, The City completed a study that predicted odours would be consistent where the siphon is located. The siphon's location had a high risk of odour generation due to the geometry and space restriction.

#### Are there similar buildings like this in Calgary?

Yes, in Lake Bonavista, along Lake Sylvan Drive S.E.

#### **Project information or questions**

If you have any questions about this work, or the project you can contact 311 or visit calgary.ca/fcwsanitary.

**Project area** Address: 490 Canyon Meadows Drive S.W.



## Building

