

# Arbor Creek Sound Wall Project

## Frequently Asked Questions



### What is the Arbor Creek Sound Wall Project?

This project consists of the construction of sound attenuation walls on the north side of College Drive. The existing stucco fence will be removed and replaced with a concrete sound wall. Construction of the wall (including extensions/expansions) is needed to minimize the noise impacts of traffic resulting from the new interchange.

This project was included within the City of Saskatoon's Traffic Noise Sound Attenuation (TNSA) program as it was beyond the scope of the College Drive/McOrmond Drive interchange construction. The TNSA program was created to help maintain the quality of the outdoor amenity space in residential areas located adjacent to high speed roadways.

### What are sound attenuation walls?

Sound attenuation walls are solid obstructions built between roadways and residential areas to reduce noise. These walls do not block all noise; they only reduce the overall noise level.

### Where are sound attenuation walls being constructed?

Sound attenuation walls will be installed on the north side of College Drive. The sound walls will be installed along a similar or identical alignment to the existing stucco fence behind rear lots, extending from 507 Guenter Crescent to Buckwold Cove.

### Who qualifies for a sound attenuation wall?

Only existing residential sites with a rear or side lot adjacent to high traffic roadways are considered for a sound attenuation wall. Apartment style residential, commercial, or industrial land uses do not qualify for sound attenuation measures.

### What are the design criteria for the sound attenuation wall?

The start and end points, as well as the height of the wall, were determined through detailed sound modelling of the existing and proposed infrastructure. The specifications were determined in accordance with the City of Saskatoon policies for traffic sound attenuation. The modelling took into account the height and location of the existing berm and stucco fence, the layout of the new interchange, and the proximity of the residential yards to the new roadways and structures.

Functional design is underway to confirm the final placement of the sound attenuation walls. Detailed design of the wall foundations will follow.

### What are the impacts of this work?

Construction of access roads and other preparatory work on the public side of the fence will be required. The existing stucco fence will be removed and a temporary fence will be installed to ensure the security of your property until the new sound wall is installed.

Access to the back few meters of your property will be required to ensure existing conditions are documented and debris is appropriately cleaned up.

Residents must remove any and all landscaping or yard features currently within this buffer zone. Any remaining features still present upon start of construction may be damaged during construction, including but not limited to: sheds, plants, bushes and stones.

All trees on the public side of the existing stucco fence will need to be removed and will be replaced with the same species upon completion of the sound wall installation. Some trees on the private side of the existing fence may have to be removed depending on the type and alignment of wall being installed; the contractor will remove these trees if necessary.

## How loud is too loud?

Experts agree that continued exposure to noise above **85 dBA** will cause hearing loss. To know if a sound is loud enough to damage your ears, it is important to know both the loudness level (dBA) and the length of exposure to the sound. In general, the louder the noise, the less time required before hearing loss will occur. According to the National Institute for Occupational Safety and Health (1998), the maximum exposure time at 85 dBA is 8 hours. At 100 dBA, the maximum exposure time is one minute and 29 seconds.

The following are decibel levels of common noise sources around us. These are typical levels — actual noise levels may vary depending on the particular item.

### IN THE HOME

- › **50-75:** Washing Machine
- › **55-70:** Dishwasher
- › **60-85:** Vacuum Cleaner
- › **60-95:** Hair Dryer
- › **80:** Doorbell
- › **80:** Ringing Telephone
- › **110:** Baby Crying

### AT WORK

- › **65-95:** Power Lawn Mower
- › **90:** Tractor
- › **105:** Snow Blower
- › **110:** Leaf Blower
- › **120:** Ambulance Siren
- › **140:** Airplane Taking Off

### GENERAL

- › **70:** Freeway Traffic
- › **85:** Noisy Restaurant
- › **90:** Truck, Shouted Conversation
- › **95-110:** Motorcycle
- › **100:** Snowmobile
- › **110:** Car Horn
- › **125:** Auto Stereo (Factory Installed)
- › **130:** Stock Car Races
- › **157:** Balloon Pop
- › **170:** Shotgun

## What are the next steps?

Once the placement and height of the sound attenuation walls are finalized, detailed design and tendering will proceed in winter 2018/2019. Construction is expected to begin early in spring 2019 and to take approximately four to six months to complete.

For more information, visit [saskatoon.ca/trafficnoise](http://saskatoon.ca/trafficnoise) or email [transportation@saskatoon.ca](mailto:transportation@saskatoon.ca)