

## SALT MANAGEMENT BRIEF

Skyline Retail Assessment Inc.  
26-40 Carden Street & 27-39 MacDonell Street  
Project No.: 2023-0862-10

February 2, 2024

The subject development is a 0.105 ha property located at 26-40 Carden and 27-39 MacDonell Street in Guelph. The site is proposed to be developed with into a mixed use development, primarily a residential condominium with ground floor retail. The property falls within the Grand River Source Protection Area, and the source protection details for the site are provided in Table 1. The property is not within any intake protection areas but it is located within an issue contributing area and a wellhead protection area.

**Table 1: Source Protection Details**

Source Protection Area	Grand River
Wellhead Protection Area	No
Wellhead Protection Area (WHPA-E)	No
Intake Protection Zone	No
Issue Contributing Area	Yes
Significant Groundwater Recharge Area	No
Highly Vulnerable Aquifer	No
Event Based Area	No
Wellhead Protection Area	Yes
Intake Protection Zone Q	No

Given the proposed use and source protection details, only sodium chloride, through the use of deicing salt, is expected to be of concern to ground water sources as a result of this development.

This salt management plan has been prepared to protect such groundwater resources from impacts of deicing salt and provides information on proven practices and important principles of salt to ensure that salt is handled effectively and efficiently. The main objective of the Salt Management Plan is to achieve a reduction in salt impacts through the promotion and adoption of best management practices. This document outlines recommended salt management principles outlined in Transportation Association of Canada's "Best Management Practices of Road Salt Management".

The design of the proposed development has taken into account salt and impacts of salt to neighboring features. The development is proposed to extend to the limits of the property with no exterior at grade elements requiring deicing salts within the property. Loading is proposed within covered areas of the building and does not require the application of deicing salts.

The stormwater management measures on the site also respect the objective to protect ground water sources. The City of Kitchener's stormwater management criteria is met without the need of subsurface infiltration from the site. A cistern within the building is proposed to retain the required volume of water, which will be utilized for irrigation or other means, or otherwise discharged to the storm sewer system after a rain event.

Salt application within the development will be limited to amenity areas above grade that may be required to remain operational during the winter months. The specific locations of salt application will be coordinated as the design progresses on the development.

Salt application and handling will be coordinated with a private contractor who will be expected to meet basic operational requirements such as proper storage and handling to reduce spillage of salt. Preference should be given to contractors who are Smart About Salt™ Certified. Materials and equipment used to spread salt in these areas will not be washed outside. It is expected that the private contractor will keep track of application rates and adjust these rates to suit weather forecasts. Direct application of liquid materials or pre-wetted sand and salt have been proven methods to achieve salt reductions, and will be communicated to the contractor.

The site is not expected to receive bulk salt deliveries and salt will not be stored on site (beyond small covered bins around the main entrance with a salt and sand mixture). The Condominium Corporation is to ensure that any salt spills are cleaned up immediately, using a broom and shovel, before the salt has a chance to dissolve and enter the storm system.

Snow storage is also not proposed within the site limits which also limits the possibility of melt water re-freezing at night with cooler temperature, therefore minimizing the total required amount of salt.

Other best management practices include keeping records of salt use and periodically review practices to reduce salt use. It is recommended that the Owner create an emergency salt spill response and management plan with the private contractor that addresses the action items in the event of a salt spill. These records of salt and the emergency spill response and management plan (should it be created), should be made available to the Region of Waterloo for review and comment upon request.

## **WALTERFEDY**

**Erika Valecillos, EIT**  
Project Coordinator

evalecillos@walterfedy.com  
519.576.2150 x387

**Rushin Khakharia, P.Eng.**  
Site Development Practice Lead  
Partner

rkhakharia@walterfedy.com  
519.576.2150 x469