

April 5, 2022
Project No: 21043

Cambridge City Hall
50 Dickson Street
Cambridge, ON N1R 8S1

**Subject: Salt Management Plan
Residential Development at
149 Ainslie Street North, Cambridge, Ontario**

1. Introduction & Objectives

The proposed development consists of a new multi story residential building with below ground parking garage as shown in Drawing SP1

The salt management plan will suggest practical methods of winter maintenance that limit the chloride impact at the source.

2. Site Description & Storm Water Runoff

The site is irregular in shape with two driveway accesses from Market Street. The total area of the site is approximately 0.28 ha and is currently occupied by a building and two parking areas. It is proposed to construct an apartment building which occupies most of the site footprint. The pre development asphalt area is 820 m², whereas the post development asphalt area is 0 m². The pedestrian access will be the only area which will require application of deicing salt which is 230 m².

3. Identification of Traffic Areas and Sensitive Features

The parking area and driveway are below ground and do not require application of road salt. All driveways and sidewalks are kept clear of the snow with limited application of ice melting products.

The landscape areas are not connected to the asphalt areas, therefore infiltration of salt through landscaped areas will not happen in the proposed design.

4. Identification of Snow-Storage/Disposal Areas

The site does not have designated snow storage areas due to the limited footprint exposed to sky.

5. Best management Practices to reduce Salt Use

The following best management practices for snow removal and application of salt during the operational life of this development,

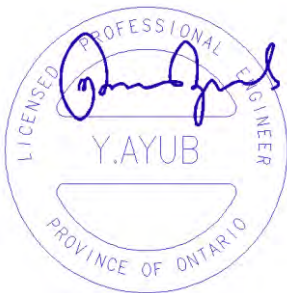
- Application Methods: In order to avoid excessive ice salt usage on the property, the primary winter maintenance method of the site will be timely removal of snow and ice from sidewalks.

Sodium Chloride is understood to have an effective temperature range for ice melting between +4 deg C and -1 deg C. Sodium Chloride application will be avoided outside these temperature ranges to avoid excessive chloride concentration.

- Drainage: All paved surfaces are collected by a piped storm drainage network, which collects and routes the runoff to an oil/grit separator. No direct infiltration of significant salt application surfaces expected in the proposed redevelopment.
- Application Rates: In order to mitigate over application of sodium chloride, the owner will follow the recommendations noted on this plan. The owner will hire a winter maintenance contractor who is familiar with salt management reduction practices and is familiar with best management practices.
- A key component of the Salt Management Plan is tracking of overall salt usage on site. Typical application rates in parking lots are 100 grams per square meter. The application rates will not be exceeded in areas that require salt application.
- Equipment for snow removal will be stored/kept off site.
- No snow removal equipment washing is to be carried out on site.
- Site inspections by winter maintenance staff will be carried out on a regular basis.
- Excess snow will be hauled to a properly designated snow disposal site if required.
- The winter maintenance contractor will be trained to handle a salt spill.

6. Summary

In conclusion, the proposed salt management plan will effectively reduce chloride salt use on the site. The areas where salt application is required for safety will be selected with a view to limit application. The owner and contractor will be made aware of this report and recommended salt management best practices.



Yours truly,
Reinders + Law Ltd.

Yasar Ayub, P,Eng.
Senior Municipal Engineer

