



November 14, 2019
Our File: 318034

Township of Guelph-Eramosa
8348 Wellington Road 124
PO Box 700
Rockwood, ON N0B 2K0

Attention: Mr. Harry Niemi, P. Eng.
Director of Public Works

Re: North Rockwood Developments Inc.
5150 Wellington Rd 27, Rockwood
Revised Salt Management Plan

Dear Mr. Niemi,

The following revised Salt Management Plan has been prepared for a proposed residential development at 5150 Wellington Road 27 in the north end of the community of Rockwood in the Township of Guelph-Eramosa.

1.0 Introduction & Objectives

GM BluePlan Engineering Limited has been retained by the Owner (North Rockwood Developments Inc.) to prepare a Salt Management Plan as a part of a Site Plan Application submission for a proposed 51-unit condominium development consisting of cluster townhouse units to be constructed at 5150 Wellington Road 27 in the community of Rockwood in Guelph-Eramosa Township.

This Salt Management Plan will present an overview of the recommended road salt management practices to be implemented on site in an effort to reduce or minimize sodium-chloride impacts to the surrounding natural environment. The best management practices for salt management will include the consideration of alternative products, use of controlled application rates, recommended operations, and proper supervision, implementation and monitoring of the Salt Management Plan which is the responsibility of the Owner and/or Condominium Corporation.

2.0 Identification of Traffic Areas and Sensitive Features

It is anticipated that due to common foreseeable winter icing conditions the owner / condominium corporation will need or wish to apply traction and/or de-icing agents to areas that will primarily see vehicular or pedestrian traffic. The areas that will see frequent traffic are limited to the internal laneway, walkways and individual driveways.

3.0 Identification of Snow-Storage/Disposal Areas

The Site Plan includes a dedicated on-site snow storage area. Depending on accumulations, it is anticipated this area may not provide sufficient space for the predicted snow volumes and therefore occasional snow removal off-site is expected during the winter season.

4.0 Use of Alternative Products

The proposed selection of winter de-icing agents is limited to the use of sand, salt, and alternative de-icing products, to minimize the potential concentrations of sodium and chloride in meltwater. In order to employ the most effective method in salt reduction, it is recommended to utilize a variety of products consisting of sand, sand/salt mixture, and environmentally friendly de-icers (i.e. salt-free) depending on location and site and weather conditions. The use of alternative products is subject to authorization by the Owner and/or the Condominium Corporation.

5.0 Engineered Measures

In order to minimize the infiltration of runoff with high concentration of chloride and sodium, runoff from impervious surfaces has been directed to the on-site storm sewer and runoff from building downspouts has been diverted to pervious areas to promote the infiltration of “clean” runoff and dilution of any sodium concentrations as a result of snow storage.

6.0 Operational Measures

The following operational measures are recommended to minimize the use and application of road salt:

- Plowing of snow as required on driveways, walkways and internal roads following snowfall events or as required to ensure safe passage for motorists and pedestrians.
- Application of a ratio of sand/salt mixture or alternative salt-free de-icer immediately following plowing *if required*. The application is not mandatory after each snow clearing operation.
- A sand/salt mixture will not be applied unless icy conditions develop or are anticipated to develop.
- Monitoring and documenting the application of sand/salt mixtures used (i.e. frequency, concentration, total amount, etc.).
- Storage space for plowed snow is quite limited due to the site layout, and the height of snow banks along boulevard areas should be limited so as to avoid blocking the view of motorists and pedestrians.
- Snow will be removed typically with mechanical methods only by a Contractor when required. A winter maintenance Contractor will be retained for this work by the condominium corporation / owner.
- Large equipment for snow removal will be stored off site and only brought to site during/after a snow event. Equipment should have snow and salt accumulations removed before entering the site.
- No liquid de-icers or large quantities of salt are to be stored on site.
- No snow removal equipment washing is to occur on site.
- Site inspections by the winter maintenance Contractor will be conducted regularly.
- Excess snow will be hauled to a properly designed offsite snow disposal facility/site.
- Snowdrifts will be controlled by frequent plowing as needed in order to minimize the opportunity for icy conditions requiring de-icers / salt.
- The winter maintenance Contractor will be required to monitor local weather forecasts and be prepared before an event occurs.
- The winter maintenance Contractor is to be trained in winter maintenance practices.
- The winter maintenance Contractor is to be trained in the handling of salt spills.
- The winter maintenance Contractor should be certified by the ‘Smart about Salt’ council and should be familiar with similar (but not necessarily applicable) provincial minimum maintenance standards (MMS) required for public rights-of-way.

7.0 Adaptive Monitoring/Management

A review of the Salt Management Plan for 5150 Wellington Road 27 is recommended to be completed by the Owner and/or Condominium Contractor on an annual basis to identify the effectiveness of the Salt Management Plan and mitigate/adjust any components of the Plan (i.e. a change in application area or rate).

8.0 Summary

GM BluePlan Engineering Limited has prepared this Salt Management Report for the Site Plan Approval application associated with 5150 Wellington Road 27. This Salt Management Plan has identified high traffic areas and has developed a number of precautions including snow-storage/disposal, alternative products, engineered measures, and operational measures in order to mitigate the negative effects associated with winter salt application. This Salt Management Plan is to be implemented by the Owner and/or Condominium Contractor accordingly.

9.0 Site Plan Drawing

Details of the Salt Management Plan are shown on the site plan which illustrates the following:

- North arrow and scale
- Building envelopes and driveway locations
- Paved areas including common laneways
- Walkways and any wheelchair access areas
- Site entrances and exits and surrounding streets
- Designated on-site snow storage locations

The foregoing is the recommended salt management practices for the development. This salt management plan is to be used as a guide only, and is not a prescriptive methodology for safe winter condition maintenance. Implementation of this plan is the responsibility of the owner / condominium corporation, and GM BluePlan Engineering does not assume any responsibility or liability for associated site safety or environmental damages through the reference or use of this plan, as the sole intent and purpose of this plan is to help reduce or minimize sodium-chloride impacts to the surrounding natural environment.

Yours truly,

GM BLUEPLAN ENGINEERING LIMITED

Per:

A handwritten signature in blue ink, appearing to read 'John Kerr', written over a faint blue circular stamp.

John Kerr, P. Eng.
Sr. Project Manager, Partner

JK/
Encl.

c:
C. Matson – Matson Planning and Development Inc.
C. Kuiken – North Rockwood Developments Inc.
A. Clos – Astrid J Clos Planning Consultants