



MUNICIPALITY OF

North Perth

Winter Operations Plan

Date: May 29, 2026

Winter Season: 2025-2026

Prepared By: Matt Ropp

Table of Contents

Purpose	1
Definitions	2
1.0 Winter Operations – Objective	4
2.0 Policy Statement	4
3.0 Overview of the Municipality of North Perth	4
3.1 Winter Contacts	5
4.0 Winter Maintenance Program	6
4.1 The System Maintained	6
4.1.1 Boundary Street Jurisdiction and Responsibility	6
4.2 Winter Maintenance Period.....	6
4.3 Winter Preparations	7
4.3.1 Prior to the Winter Maintenance Period	7
4.3.2 One Month Prior to the Winter Maintenance Period	7
4.3.3 Two Weeks Prior to the Winter Maintenance Period	8
4.3.4 At the Start of the Winter Maintenance Period.....	8
4.4 Level of Service	8
4.4.1 Winter Patrol.....	8
4.5 Operations	9
4.5.1 Staffing and Hours of Work.....	10
4.5.2 Equipment - Winter Maintenance Fleet.....	11
4.5.3 Winter Material.....	12
4.5.4 Application Rates.....	12
4.5.5 Operational Speeds	13
4.5.6 Snow Removal and Disposal.....	13
4.5.7 Vulnerable Areas	13
4.5.8 Weather Monitoring	14
4.5.9 Significant Weather Event.....	14
4.5.10 Communications	14
4.5.11 Call Out Procedures - Staff.....	15
4.5.12 Call Out Procedure – Contracted Services	15
4.5.13 Road Closure Procedures.....	15
4.5.14 Operation Instructions and Safety Rules	16
4.6 Patrol Yard Facilities	16
4.6.1 Listowel Patrol Shop	16

4.6.2	MTO Yard	17
4.6.3	Atwood Patrol Yard.....	17
4.6.4	Gowanstown Patrol Yard	18
4.7	Decommissioning Winter Operations.....	19
4.7.1	Two Weeks After the Winter Season Ends.....	19
4.7.2	One Month After the Winter Season Ends	19
4.8	Training.....	19
4.9	Record Keeping	20
5.0	Monitoring and Updating	21
6.0	Distribution of This Plan	22
7.0	Disclaimer	22
8.0	Appendix List.....	22

Purpose

This Winter Operations Plan sets out a policy and procedural framework for ensuring that the Municipality of North Perth continuously improves on the safe and sustainable delivery of winter maintenance services and the effective and efficient use of road salt in their winter maintenance operations. This plan supersedes all previous plans for the Municipality of North Perth.

The plan is meant to be dynamic, to allow the Municipality to evaluate and phase-in any changes, new approaches and technologies in winter maintenance activities in a fiscally sound manner. At the same time, any modifications to municipal winter maintenance activities must ensure that roadway safety is not compromised.

This Winter Operations Plan for the Municipality of North Perth was endorsed by:

Matt Ropp

(Director of Infrastructure Services)

on the 29th day of May 2026

Signature:

A handwritten signature in black ink, appearing to read "Matt Ropp", written over a horizontal line.

Definitions

De-icing: The application of solids or pre-treated material to highway, sidewalk or multi-use path surface at the on-set of and during a winter event.

Director Of Infrastructure Services: The primary responsible for making decisions regarding the most efficient use of available resources, directing the snow/ice removal operations of the Municipality of North Perth. The Operations Supervisor directly reports to the Director of Infrastructure Services.

Highway: Includes a common and public highway, street, avenue, parkway, driveway, square, place, bridge, viaduct or trestle, any part of which is intended for or used by the general public for the passage of vehicles and includes the area between the lateral property lines thereof.

MMS: Refers to Ontario Regulation 239/02 or current Minimum Maintenance Standards for Municipal Highways as amended from time to time.

Multi-Use Path: A paved trail located adjacent to a roadway within a road allowance or located outside the road allowance. Multi-Use Paths are intended to be shared by pedestrians and cyclists, often connecting from roadways to local schools, greenspaces and parks.

Paved Road: A road with an asphalt surface, concrete surface, composite pavement, or portland cement.

Route(s):

Paved and Surface Treated Roads

- A collection of paved or surface treated road segments, which during a winter storm will be mechanically plowed and may receive material application to prevent or break the formation of a bond between snow and pavement or provide temporary grip.

Unpaved Roads

- A collection of gravel surface road segments, which during a winter storm will be mechanically plowed by motor graders.

Sidewalks

- A collection of sidewalk and multi-use path segments, which during a winter storm will be mechanically plowed and may receive material application to provide temporary grip prevent or break the formation of a bond between snow and sidewalk.

Route of Representative Roads: A predefined route of roads that offers the patroller / Operations Supervisor a general condition of the entire municipal roadway network.

Sidewalk: A paved, dedicated pathway for pedestrian use which is typically adjacent to a roadway, separated by a curb and/or a landscaped boulevard.

Significant Weather Event: An approaching or occurring weather hazard with the potential to pose a significant danger to users of the highways within a municipality.

Surface Treated Road: A road with bituminous surface treatment comprised of one or two applications of asphalt emulsion and stone chips over a gravel road.

Unpaved Road: A road with a gravel, stone or other loose traveling surface.

Winter Control: Activities undertaken by the municipality to maintain municipal roads in a condition that comply with the standards set out in MMS table (snow accumulation and icy roadways).

Winter Event: A weather condition with a beginning and ending period affecting roads such as snowfall, wind blown snow, freezing rain, frost or ice to which, a winter event response is required.

Winter Event Response: A series of winter control activities performed in response to a winter event.

- **Continuous Winter Event Response:** A response to a winter event with full deployment of operators and equipment that plow/salt/sand the defined network.
- **Spot Winter Event Response:** A response to a winter event with only a part deployment of operators and equipment or with full deployment to only part of the network.

Winter Event Response Days: The total number of days (plowing, salting/sanding, winging back, etc.) to respond to winter events.

Winter Maintenance Period: Shall commence November 15th and end March 31st. Hours of operation during this period will be 3:00am to 8:00pm.

1.0 Winter Operations – Objective

The Municipality of North Perth is committed to providing safe and sustainable winter maintenance operations while continuing to improve those operations to ensure safety and mobility for the traveling public. As an integral part of this effort, the Municipality of North Perth will strive to optimize the use of all winter maintenance materials as they pursue the goal of a safe and sustainable transportation system.

The Municipality of North Perth's Infrastructure Services team will strive, insofar as reasonably practicable, to provide safe winter road conditions for vehicular and pedestrian traffic as set out in this Winter Operations Plan and within the resources established by the Council of the Municipality of North Perth.

2.0 Policy Statement

The Municipality of North Perth will provide efficient and cost-effective winter maintenance to ensure, insofar as reasonably practicable, compliance with applicable provincial legislation and accepted standards while striving to minimize adverse impacts to the environment. These commitments will be met by:

- Adhering to the procedures contained within the Winter Operations Plan.
- Optimizing the use of winter maintenance materials on all municipal highways, sidewalks and multi-use paths to minimize negative impacts to the environment.
- Committing to ongoing winter maintenance staff training and education.
- Annually monitoring winter maintenance operations, as well as the effectiveness of the Winter Operations Plan to allow the Municipality to evaluate and phase-in any changes, new approaches and technologies in winter maintenance activities in a fiscally sound manner.
- Ensuring any modifications to winter maintenance activities do not compromise roadway safety while confirming the management of road salt used in winter maintenance operations, complies with Environment Canada's Code of Practice for the Environmental Management of Road Salts.

3.0 Overview of the Municipality of North Perth

Type of Organization: Municipal

Structural Level: Local

Estimated Population: 15,538 in the 2021 census

Total Area: 493.1 Square kilometers

Street Address: 330 Wallace Ave N, Listowel, ON N4W 1L3, Canada

Telephone: 519-291-2950

Website: <https://www.northperth.ca>

3.1 Winter Contacts

North Perth Winter Call List

- **Operations Supervisor:**
Martin Bajtos 519-492-0201
- **Infrastructure Supervisor:**
Paul Hinsperger 519-573-1089
- **Director of Infrastructure Services:**
Matt Ropp 519-573-1061
- Patrol Phone 519-444-4076
- On-Call Phone 519-492-3736
- Atwood Cell 519-444-4078
- Gowanstown Cell 519-573-1077
- North Perth Admin Office 519-291-2950

Perth County Call List

Hours 4:30 to 24:00

- Mitchell Patrol 519-274-1918
- Stratford Patrol 519-301-2579
- Milverton Patrol 519-274-3640

If not available

- Bill Morrison 519-301-3592
- Chuck Blancher 519-274 -0672

North Perth After-Hours Contact Service (Extend Communications)

- 1-866-660-3649

After Hour Contacts Service (IMOS agent of the MTO)

- Patrol 21 -Mitchell to Atwood – Miller Group 519-377-0585
- Patrol 27 – Harriston to Atwood – Miller Group 519-377-4856

OPP

519-680-4600
1-888-310-1122

4.0 Winter Maintenance Program

4.1 The System Maintained

The Municipality of North Perth is responsible for winter maintenance on the following infrastructure, as outlined in The Municipality of North Perth By-law 118-2025 [Appendix 1]. This list is subject to change throughout the season due to various factors, such as construction.

Roads:

Urban hard surface: 158 lane km
Urban gravel (laneways) maintained: 590 m

Rural hard surface: 320 lane km
Rural gravel maintained: 168.5 kms
Rural gravel not maintained (No Winter Maintenance): 37.5 km

Sidewalks and Multi-Use Paths:

(Listowel, Atwood and Monkton) maintained: 41.8 km
(Listowel, Atwood and Monkton) non-maintained: 23.4 km

Parking lots: (Listowel): 16,035.69 m²

The Municipality of North Perth does not maintain private properties as they are the responsibility of their respective owners, unless previously agreed upon.

4.1.1 Boundary Street Jurisdiction and Responsibility

[Appendix 2, Schedule A and B] outline the boundary road agreements for roads bordering the Municipality of North Perth. Agencies with roads running through The Municipality of North Perth include:

- Perth County
- MTO Provincial Highways

[Appendix 2, Schedule C] is a map outlining the North Perth boundary roads jurisdictions and maintenance responsibilities.

4.2 Winter Maintenance Period

The winter maintenance period referred to within this Winter Operations Plan commences on November 15th each year and concludes on March 31st the following year. Hours of operation during this period will be 3:00am to 8:00pm.

If a winter event occurs outside the winter maintenance period the Municipality of North Perth will be prepared for the winter event by complying with sections 4.3.2, 4.3.3, 4.7.1 and 4.7.2 of this plan.

4.3 Winter Preparations

In the months prior to the start of the winter maintenance period, as identified in 4.2, the Municipality of North Perth undertakes the following tasks to prepare for the upcoming winter season.

4.3.1 Prior to the Winter Maintenance Period

Sometime prior to the winter season the Municipality of North Perth will:

- Prepare and call tenders for supply of materials (salt and sand), and contract equipment (plow trucks, sidewalk plows, etc.), if required.
- Ensure replacement parts (for plows, plow trucks, and graders) are replenished.
- Conduct a mandatory pre-winter meeting for all staff where all policies, procedures, schedules, reporting procedures for callout, route maps, record keeping, equipment training, and safety precautions will be discussed. Any issues resulting from the meeting regarding the policies, procedures, schedules, reporting procedures for callout, route maps, record keeping, equipment training, and safety precautions will be resolved either at the meeting or prior to the winter season.
- Ensure operators and patrol persons will receive additional training on the route of representative roads to be patrolled, their duties during a winter event, record keeping requirements, callout procedures and the de-icing materials to be applied for the forecast weather conditions.
- Inspect equipment to ensure proper working order. All repairs will be completed one month in advance of the start of the winter season (4.2).
- Confirm that staff have inspected all guiderail, catch basin, hazard and fire hydrant markers, are in place. Missing or damaged signs and markers will be replaced prior to the winter season.

4.3.2 One Month Prior to the Winter Maintenance Period

The Municipality of North Perth will:

- Post the winter shift schedule.
- Assign equipment to staff.
- Calibrate material application equipment.
- Ensure all operators are given sufficient time to familiarize themselves with any new equipment, material application rates, material application equipment and their route. Obstacles, route specifics and general note changes should be highlighted to operators.

- Arrange for the delivery of materials (salt and sand) and begin filling storage facilities.
- Assign staff to monitor and record weather forecasts as defined in MMS O. Reg 239/02 S. 31. Upon the forecast of an approaching winter event, schedule a patrol of a route of representative roads. If a winter event is forecasted prior to the start of the next scheduled shift, a night and/or weekend patrol(s) of a route of representative roads should be scheduled [Appendix 3]. If a night or weekend patrol is scheduled the patroller should monitor and record the weather forecast and road conditions. The patrol person should be authorized to initiate a winter event response if conditions warrant a response or have direct contact with management personnel that can.
- Have 25% of the fleet ready to respond to a winter event.
- Have sufficient staff available to operate the fleet if conditions warrant a winter event response.

4.3.3 Two Weeks Prior to the Winter Maintenance Period

The Municipality of North Perth will:

- Have the full complement of the fleet ready to respond to a winter event.
- Begin the winter representative patrol as outlined in section 4.4.1 of this Winter Operations Plan
- Have staff available to operate the required complement of the fleet if conditions warrant a winter event response.

4.3.4 At the Start of the Winter Maintenance Period

The Municipality of North Perth will:

- Implement the winter shift schedule.
- Ensure that weather monitoring, patrolling and the response to winter events are completed as per this Winter Operations Plan.

4.4 Level of Service

The Municipality of North Perth provides a level of service in response to a winter event that meets the requirements of Municipality of North Perth By-Law 118-2025 and Ontario Regulation 239/02 Minimum Maintenance Standards for Municipal Roads as amended from time to time, included in [Appendix 1].

4.4.1 Winter Patrol

During the winter maintenance period, outlined in section 4.2, the Municipality of North Perth carries out winter patrol on routes of representative roads two times per day of the week (including weekends and Statutory Holidays). The patrols are to occur starting at

2am and 4pm. The purpose of the patrol is to monitor and record weather and road conditions as well as mobilize winter maintenance operators and equipment should a winter event be observed, and a winter event response is required. Maps of the routes of representative roads is included in [Appendix 3].

During the initial phase of the representative tour, if conditions indicate that municipal roads require winter control response, the patroller will initiate a call out as outlined in 4.5.11 and 4.5.12. The patroller's actions shall be documented in the patrol software. The note will indicate the action taken. If there is a full callout, there is no need to continue the patrol. If there is only a partial or no-call out, continue the patrol.

If ambient conditions are such that the formation of ice and snow are not possible, or drifting is not possible, the tour may be shortened or eliminated. (i.e. ambient temperature is plus 5°C and pavement temperature is plus 5°C, and the forecast indicates static or warming conditions.)

At the end of the patrol, the patroller should confirm road conditions with the Operations Supervisor.

If a winter event response is underway, there is no need to complete the representative tour.

Schedule Summary

Winter Representative Patrol	Days Performed	Time Performed	Route	Assignment
Early Morning	Monday - Sunday	2am	Appendix 3	Appendix 9 - Winter Patrol Record
Afternoon	Monday - Sunday	4pm	Appendix 3	Appendix 9 - Winter Patrol Record

4.5 Operations

The major activities related to winter maintenance are:

- Snow plowing, roads, sidewalks, multi-use paths and parking lots
- Applying materials to, roads, sidewalks, multi-use paths and parking lots

- Salt and sand storage
- Snow removal
- Snow storage

4.5.1 Staffing and Hours of Work

The Municipality of North Perth assigns a routine patroller for the early morning patrol shift, typically starting the call out procedure by 3am if applicable. Standard operations are available Monday to Friday, 7am to 3pm. An afternoon shift runs Monday to Sunday 12:00pm to 8:00pm. Staffing includes full-time employees and/or temporary staff.

The afternoon shift oversees the completion of the afternoon winter patrol and operations.

Outside these hours, a full-time employee is on-call on a 24-hour basis, from Friday to Friday.

If additional employees are needed, a call-out will be initiated according to 4.5.11. The Municipality of North Perth adheres to the hours of service as dictated by Highway Traffic Safety Act, Reg. 555/06 (Ontario, Canada).

North Perth maintains a real-time winter schedule that contains a full list of the employee winter schedule with equipment, for the winter maintenance period.

Some of the key responsibilities associated with the management and oversight of winter operations are as below:

Operations Supervisor

- Will receive and respond to issues and concerns from citizens regarding snow and ice control efforts.
- Will be responsible for making operational decisions.
- Will be the authority to which the field staff will communicate the field conditions.
- Will be responsible for shift scheduling.
- Will direct staff to place appropriate signage and or barricades in case a road closure is required due to a severe winter storm.
- Will inform the Director of Infrastructure Services if conditions warrant a severe weather event.

Director of Infrastructure Services

- Will ensure all pre-planning is complete as per the Winter Operations Plan and will continually monitor operations as required throughout the winter season.
- Will inform the CAO/DCAO and Strategic Initiatives Department of a severe weather event when necessary.

4.5.2 Equipment - Winter Maintenance Fleet

The Municipality provides winter maintenance services on:

- 4 rural unpaved routes
- 3 rural paved routes
- 3 Listowel paved routes (2 routes completed by contractors)
- 1 Atwood paved route
- 3 sidewalk routes
- 8 municipal parking lots

The routes are completed with the equipment listed in [Appendix 4].

Equipment owned by the Municipality of North Perth is maintained by Infrastructure Services staff at four facility locations:

Listowel Patrol Yard:

- Operations Supervisor
- 4 in-house Full-Time Operators
- Fleet storage facility for 4 pieces of equipment (x1 single axle plow, x2 trackless units, x1 spare single axle plow)
- On site parts warehouse

MTO Yard:

- Storage facility for road salts and sand
- Fleet storage facility for 3 pieces of equipment (x1 tractor/loader, x1 spare grader, 1 tandem axle plow)

Atwood Patrol Yard:

- 3 in-house Full-Time Operators
- Fleet storage facility for 5 pieces of equipment (x1 tandem axle plow, x2 graders, x1 trackless unit, x1 tractor/loader)
- On site parts warehouse

Gowanstown Patrol Yard:

- 2 in-house Full-Time Operators
- Fleet storage facility for 5 pieces of equipment (x2 tandem axle plows, x2 graders, x1 tractor/loader)
- On site parts warehouse

Equipment owned by contractors is maintained according to the terms outlined in the applicable contracts.

4.5.3 Winter Material

- **Primary Solid Material** – Sand with 10-15% salt
Supplier: Hanna and Hamilton Construction
(519) 291-3400

2025-2026 Winter Season: Delivery of 3,750 Tonnes dispersed through the municipality.

- **Secondary Solid Material** – Rock Salt
Supplier: Compass Minerals
<https://www.compassminerals.com>
Ontario: 1-905-567-0235

2025-2026 Winter Season: Delivery of 1,500 Metric Tonne dispersed between MTO Dome, Atwood and Gowanstown Patrol Yards.

4.5.4 Application Rates

All winter operation vehicles are equipped with electronic spreader control systems that are calibrated at the beginning and mid-season and again at other times when necessary.

Sand

The application rates of sand are defined in the table below.

Description	Sand Application Rate (kg/km)
Light	200
Normal	350
Heavy	450

Salt

The application rates of salt are defined in the table below.

Description	Salt Application Rate (kg/km)
Light	60
Moderate	90

Description	Salt Application Rate (kg/km)
Normal	120
Heavy	170

4.5.5 Operational Speeds

Activity	Speed km/hr (mph)
Travel	65km/hr (40mph)
Plowing on pavement	60km/hr (36mph)
Plowing with wing down	45km/hr (30mph)
Plowing on gravel	45km/hr (30mph)
Plowing urban areas with curb-face sidewalks	15-20km/hr (9-12mph)
Salting	40km/hr (25mph)
Sanding	25km/hr (15mph)

Posted speed limit should be obeyed if lower than recommended maximum speed

4.5.6 Snow Removal and Disposal

The Municipality of North Perth uses a combination of in-house staff along with contracted forces (when required), to remove and dispose of snow. Snow removal is a reactive and coordinated process that will be determined by the Operations Supervisor and/or the Director of Infrastructure Services. Removal criteria will be dependent on the operational priority, snow depth, operational availability, and current or forecasted winter events.

Under normal circumstances, hauling of the snow will be conducted during evening/overnight hours.

The Municipality of North Perth does not use snow melters.

4.5.7 Vulnerable Areas

Certain locations within the area of responsibility of the Municipality of North Perth have been identified as being potentially vulnerable to the over-application of road salt. Salt vulnerable areas are shown in [Appendix 5]. All municipal water supply wells within salt vulnerable areas have protection measures in place and are monitored for chloride concentration.

4.5.8 Weather Monitoring

To determine an effective winter event response and allocate the appropriate resources, the Municipality of North Perth supplements their general observations with weather information from various sources, which include:

- Weather Forecasting System:
 - The Weather Network <https://www.theweathernetwork.com/en>
 - Environment Canada: Weather Information <https://weather.gc.ca/>
- 8 Vehicle Mounted Infrared Thermometers
- Observations from municipal staff, communication with staff of adjacent municipalities.

4.5.9 Significant Weather Event

A significant weather event can be declared in accordance with MMS, when the weather forecast and/or actual weather conditions meet hazardous conditions such as:

- 20 cm of snow within 24 hours
- Ice accumulation of 20 mm
- High Winds greater than 60km/h

The Operations Supervisor will assess whether a significant weather event should be declared and will notify the Director of Infrastructure Services, who will make official declaration. The Director will then inform the CAO/DCAO and Strategic Initiatives Department to initiate notifying the public using the method outlined in section 4.5.10.

Once the winter event has ended and staff can meet the service levels detailed in sections 4, 5, and the timeframes in sections 16.3, 16.5, and 16.6 of the MMS, the Operations Supervisor will inform the Director of Infrastructure Services, who will then notify the CAO/DCAO and Strategic Initiatives Department to declare the end of the significant weather event and issue public notification as per section 4.5.10.

4.5.10 Communications

Maintaining reliable internal communication is a critical component of winter operations. The Municipality of North Perth uses the following:

- All winter maintenance vehicles are equipped with two-way communications (radios, cell phone, etc.).

All citizen issues concerning snow and ice control efforts will be routed to the Operations Supervisor. The Operations Supervisor will determine appropriate follow-up responses to citizen inquiries.

The Municipality provides external communication to the public via:

- Media releases
- Social media accounts
- Information posted on the Municipality's web site www.northperth.ca
- Municipal 511 Website

4.5.11 Call Out Procedures - Staff

Operational decisions will be made by Operations Supervisor and/or Patroller with the aid of current observations, weather forecasts, and patrols. However, it should be emphasized that decisions can be subjective to external input, whether in this plan or elsewhere, merely acting as an aid in determining if staff and equipment are warranted to respond to a winter event. It is therefore vital that the Operations Supervisor and/or Patroller keep records of the prevalent conditions and relevant information. The Operations Supervisor or Patroller will contact municipal operators directly when a response to a winter event is required. Operator's contact information is in [Appendix 6].

4.5.12 Call Out Procedure – Contracted Services

The Operations Supervisor or Patroller will contact the contractor's operators directly when needed as outlined in the contract. Operator's contact information is in Appendix 6.

The Municipality's expectation for contracted operators is to remain on their designated route until complete. Once the route is complete, the Municipality requires the contractor to contact the Operations Supervisor or Patroller to await further instructions.

4.5.13 Road Closure Procedures

In the event a highway must be closed at the request of OPP, MTO or Perth County, the corresponding agency shall request signs be placed to close the road by contacting the Municipality during office hours of 8:30am to 3:30pm, Monday to Friday. Outside of these hours, they will contact the Infrastructure Services after-hours phone number, which will be answered by the after-hours contact agency. The agency will contact the appropriate municipal personnel. Upon receiving a request, the on-call staff will respond to place the signs and/or barricades. Appropriate signage and barricades will be available at the patrol yards.

The OPP have the authority to close any road, which should be coordinated with the proper road authority. If mutual aid is requested by MTO or Perth County to erect barricades on roads under their authority, the following locations shall be utilized as per [Appendix 7]:

- Perth Line 86 and Road 165
- Perth Line 86 and Tremaine Avenue South
- Hwy 23 and Line 87
- Hwy 23 and Barnett Street

During office hours, the Operations Supervisor will contact the Infrastructure Services Assistant to include road closure(s) notices on the public-facing Municipal 511 website. This will notify specific municipal staff, tiered agencies such as emergency services, bordering municipalities and local media. Outside business hours, OPP will post road closure notices on the Municipal 511 website.

Once the road closure is no longer needed, the corresponding agency will contact the Infrastructure Services Department or the after-hours answering service requesting to reopen the road. Dependent on the day of the week and time of day, the on-call or Operations Supervisor will organize the removal of signs and barricades.

4.5.14 Operation Instructions and Safety Rules

All individuals (whether municipal staff or contracted) shall abide by the “Health & Safety Safe Operating Procedures” as outlined in [Appendix 8].

4.6 Patrol Yard Facilities

The Municipality of North Perth provides winter maintenance services from the following facilities:

4.6.1 Listowel Patrol Shop

Facility Operations: Municipality of North Perth, Listowel

Facility Type: Combination Patrol Yard/Offices

Facility Address: 580 Main Street W, Listowel, Ontario N4W 1A8, Canada

Facility Phone: 519-291-9432

Design and Logistics

- Equipment is in place to prevent overloading of trucks.
- System is in place for collection and/or treatment of wastewater from cleaning of trucks.
- Control and diversion of external waters (not impacted by salt) is in place.
- Ongoing cleanup of the site surfaces and spilled material is swept up.
- Risk management and emergency measures plans are in place.

Material Storage Details

- There is no storage space for material at this facility.

Equipment Washing Details

- Wash Setup:
 - 1 Bay total.
 - High Pressure, Low Volume - Low Pressure, High Volume.

Site Drainage Details

- There are drainage and collection systems for runoff of salt-contaminated waters at this facility.
- The chloride concentration in the runoff is not monitored.
- This site discharges to the municipal sewer system.

4.6.2 MTO Yard

Facility Operations: Municipality of North Perth, Listowel

Facility Type: Storage Site

Facility Address: 245 McDonald Street E, Listowel, Ontario N4W 2X4, Canada

Design and Logistics

- All materials are handled in designated storage areas characterized by an impermeable surface.
- Equipment is in place to prevent overloading of trucks.
- Control and diversion of external waters (not impacted by salt) is not in place.
- Ongoing cleanup of the site surfaces and spilled material is swept up.
- Risk management and emergency measures plans are in place.

Material Storage Details

There is storage space available inside of this facility- As follows:

- Granular Salt/Sand Mix Storage Dome: approx. 2500 Tonne
- Salt Shed: approx. 200 Tonne

4.6.3 Atwood Patrol Yard

Facility Operations: Municipality of North Perth, Elma

Facility Type: Combination Patrol Yard/Offices

Facility Address: 171 Monument Road, Atwood, Ontario N0G 1B0, Canada

Facility Phone: 519-356-2564

Design and Logistics

- All materials are handled in a designated area.
- Equipment is in place to prevent overloading of trucks.
- Control and diversion of external waters (not impacted by salt) is not in place.
- Ongoing cleanup of the site surfaces and spilled material is swept up quickly.
- Risk management and emergency measures plans are in place.

Material Storage Details

There is storage space available inside of this facility- As follows:

- Granular Salt/Sand Mix Storage Dome: approx. 400 Tonne

Equipment Washing Details

- Wash Setup:
 - Dedicated oil-and-grit separators.
 - High Pressure, Low Volume - Low Pressure, High Volume.

Site Drainage Details

- In-floor drainage and collection system for runoff of salt-contaminated waters is at this facility.
- The chloride concentration in the runoff is not monitored.

4.6.4 Gowanstown Patrol Yard

Facility Operations: Municipality of North Perth, Wallace

Facility Type: Combination Patrol Yard/Offices

Facility Address: 5882 Line 88, Gowanstown, Ontario N0G 1Y0, Canada

Facility Phone: 519-291-1211

Design and Logistics

- All materials are handled in designated storage areas characterized by an impermeable surface.
- Equipment is in place to prevent overloading of trucks.
- System is in place for collection and/or treatment of wastewater from cleaning of trucks.
- Control and diversion of external waters (not impacted by salt) is not in place.
- Ongoing cleanup of the site surfaces and spilled material is swept up.
- Risk management and emergency measures plans are in place.

Material Storage Details

There is storage space available inside of this facility- As follows:

- Granular Salt/Sand Mix Storage Dome: approx. 850 Tonne

Equipment Washing Details

- Wash Setup:
 - Dedicated oil-and-grit separators.
 - High Pressure, Low Volume - Low Pressure, High Volume.

Site Drainage Details

- No drainage and collection system for runoff of salt- contaminated waters is at this facility.
- The chloride concentration in the runoff is not monitored.

4.7 Decommissioning Winter Operations

When the winter maintenance period identified in 4.2 expires the Municipality of North Perth will undertake the following tasks to decommission winter operations.

- The regular winter shift schedule will cease.
- Staff will continue to monitor and record weather forecasts.
- Staff will continue to patrol the representative roads according to the procedure outlined in 4.4.1.
- The fleet of equipment will remain ready to respond to a winter event.
- Staff will be available on call after normal work hours if conditions warrant a winter event response.

4.7.1 Two Weeks After the Winter Season Ends

Two weeks after the winter season ends:

- Cease regularly scheduled winter night patrols.
- Continue monitoring and recording weather forecasts.
- Cease patrol shifts.
- Begin decommissioning of winter maintenance equipment.

4.7.2 One Month After the Winter Season Ends

One month after the winter season ends:

- Cease all winter maintenance operations on highways.
- Continue monitoring and recording weather forecasts.
- Decommission the remainder of the equipment if weather forecasts warrant.

4.8 Training

The Municipality of North Perth provides winter operations training for all staff involved in the delivery of winter services.

Individuals in the following positions within and outside of the organization have been trained:

- Director
- Supervisor
- Operators
- Patrollers
- Contractors

It is compulsory for the organization's in-house staff to be trained for winter services. New staff will participate in a training course hosted by Perth County.

Current winter operations training(s) for in-house staff:

- New Staff Orientation (North Perth) and a Plow Operator Day Training Course (Perth County).
- Citywide Patrol (Patroller staff only)

4.9 Record Keeping

Full and accurate completion of the documents listed below and included in [Appendix 9] ensures that the Municipality is protected from liability by providing solid documentation that procedures have been followed.

Staff are responsible for keeping the following records:

Operations Supervisor:

- Weather monitoring
- Journal entry
- Call out status

Patrol Person:

- Weather monitoring
- Journal entry
- Call out status
- Logging their patrol with patrol software
- Logging the Winter Patrol Record

Equipment Operators:

- Logging the Winter Operations Record-Roads
- Logging the Winter Operations Record-Sidewalks
- CVOR Hours of Service

- Materials used
- Equipment used
- Specific route locations maintained
- Digital work orders

To help improve decision-making for maintenance strategy, the Municipality of North Perth:

- Retains records of salt application rates
- Has Automatic Vehicle Location (AVL) system installed on fleet
- Uses work management software (Citywide)
- Plans and reviews winter operations regularly
- Implements standard operating procedures

5.0 Monitoring and Updating

The purpose of monitoring and updating winter operations is to provide a basis for continuously improving winter maintenance policies, practices, and procedures. To ensure consistent monitoring of operations a series of performance measures, as shown in the table below, will be used to determine whether the objectives of the Winter Operations Plan and/or winter maintenance policies, practices, and procedures have been met. The performance measures will be used to demonstrate year over year changes in policies, practices, and procedures have improved operations.

At the end of the winter season, as identified in 4.2, a meeting to review winter operations will be held each year with all winter operations staff. The purpose of this meeting is to itemize all issues that arose during the winter season and discuss how these issues may be resolved. Prior to the start of the next winter season and with sufficient lead time to implement any changes, the Municipality of North Perth shall:

- Revise policies, practices, and procedures in accordance with changing legislation and input received from staff.
- Revise this plan to reflect the changes to policies, practices, and procedures.
- Have changes to policies, practices, procedures, and plan approved by the Director of Infrastructure Services.
- Train staff on changes to policies, practices, procedures, and plan.

Winter Operations Performance Measurement Program

% change (+/-) in the total annual centimetres of snow accumulation from the benchmark year	2025-2026	5-year Average	% Change
	179		
	Source – Canada Weather Stats.ca	147	+21.8%

% change (+/-) in the total number of winter event response days	65	Calculated average to start 2026	N/A
% change (+/-) in the total tons of salt applied	1400	1532	-8.6%
% change (+/-) in the total tonnes of sand applied	2825	Calculated average to start 2026	N/A

6.0 Distribution of This Plan

This Plan shall be distributed to the following:

- Posted at each shops for all Public Works Equipment Operators
- Operations Supervisor
- Director of Infrastructure Services
- The Municipality of North Perth CAO and DCAO
- Annually on the Municipality of North Perth website

7.0 Disclaimer

This manual may be affected by at least one or more of the following events, which could delay or alter snow and ice control by the Municipality of North Perth:

- Equipment/Technology breakdown or malfunction.
- Vehicles disabled for mechanical reasons.
- Weather so severe as to cause work to be stopped for the safety of all personnel.
- Unforeseen conditions and emergencies.
- Significant medical related emergencies.

8.0 Appendix List

Appendix details have been redacted from this document to help manage size constraints of the file. Furthermore, this allows the ability to maintain confidentiality of sensitive employee information.

A list of appendices is as follows:

- Appendix 1 – Bylaws

The Municipality of North Perth By-law 118-2025

Schedule 'A' – No Winter Maintenance Roads

Schedule 'B' – Road Maintenance Routes – Plow Beats – Full Operations

Map
 Listowel Road Plowing Map
 Atwood Road Plowing Map

Schedule 'C' – Sidewalk Maintenance Routes – Listowel Map
 Sidewalk Maintenance Routes – Atwood Map
 Sidewalk Maintenance Routes – Monkton Map

Schedule 'D' – Core Business Area Map

Schedule 'E' – Municipal Parking Lots Maintenance - Map

- Appendix 2 – Boundary Agreements

Schedule 'A' – Huron East

Schedule 'B' – Perth East

Schedule 'C' – North Perth Roads – Boundary Road Jurisdiction and Responsibility Map

- Appendix 3 – Patrol Maps

2025 – 2026 North Perth Patrol Map

2025 – 2026 Class 3 Afternoon Patrol Shift Map

- Appendix 4 - Winter Maintenance Fleet List

- Appendix 5 – Well Head Protection Areas

Listowel, Atwood, Gowanstown and Molesworth Maps

- Appendix 6 – Winter Operator Phone List

- Appendix 7 – Winter Weather Road Closures Map – 'Road Closed' Sign Locations for Highway 23 and Perth Line 86

- Appendix 8 – Health & Safety Safe Operating Procedures

SOP 006 – Lifting and Material Handling

SOP 006 – Mobile Communication and Driving

SOP 007 – Dump Truck

SOP 008 – Fueling of Equipment

SOP 009 – Backhoe Loader Safety

SOP010 – Grader Operation

SOP 010 – On-Road Vehicles
SOP 011 – New or Modified Equipment
SOP 017 – Electric Operating Tools and Equipment
SOP 021 – Working Around Hydro Lines

- Appendix 9 – Record Keeping

Weather Monitoring Report
Winter Patrol Record
Afternoon Winter Patrol Record
Winter Operations Record – Roads
Winter Operations Record – Sidewalks

