

**WINTER CONTROL
PLAN**

**The Corporation of the
Township of South Frontenac**

**PUBLIC WORKS
DEPARTMENT**

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1.0 Overview

Winter operations are normally carried out within the Township of South Frontenac from approximately November 15th of the current year through April 15th of the following year. Winter events occurring before or after this time period will follow the procedures and guidelines outlined in this document.

Service Delivery Responsibilities

The Public Works Department is responsible for providing and delivering winter maintenance service for the municipal road operations within the boundaries of the Township of South Frontenac and neighboring municipalities through cross boundary agreements.

This involves:

- Design of the Winter Maintenance Plan
- Annual review, production and distribution of the Winter Maintenance Plan
- Establishing treatment priorities for roadways
- Establish application rates for the different routes
- Ensuring availability of equipment, staff, and materials
- Maintenance of operation equipment
- Ensuring availability of weather forecast service and condition monitoring systems
- Monitoring of roadway condition
- Day to day direction of operations
- Monitoring performance
- Providing accurate and timely information to relevant parties as required
- Maintaining comprehensive records for winter maintenance operations and activities
- Where necessary liaise with other Highway Authorities, Emergency Services and Police
- Implementing annual reviews of the service

To facilitate planning, winter operations activities encompass two categories:

Scheduled	<ul style="list-style-type: none">• Guided by the Winter Operations Plan and the Minimum Maintenance Standards• Includes weather monitoring, winter road Patrol And winter preparation
Event Response	<ul style="list-style-type: none">• Guided by activation triggers defined in the Minimum Maintenance Standards or by practical considerations• Includes snow plowing, de-icing and snow removal

2.0 Resources

Facilities:

The Township of South Frontenac maintains 4 facilities to carry out winter operations during the winter control period. These facilities are as follows and house the following staff and contracted operators:

Keeley Road Patrol Yard – 2490 Keeley Road, Sydenham

Public Works Headquarters

Employees include Public Works Manager, Operations Supervisor, Technical Supervisor, Facilities/Solid Waste Supervisor, 1 Lead Hand, 1 Mechanic, 8 Driver Laborers, 6 Contracted Operators

Hartington Patrol Yard – 5286 Hinchinbrooke Road, Hartington

Employees include 1 Lead Hand, 4 Driver Laborers, 4 Contracted Operators, 1 Garbage/Light Equipment Operator

Bedford Patrol Yard – 1389 Westport Road, Godfrey

Employees include 1 Lead Hand, 3 Driver Laborers, 3 Contracted Operators

Sunbury Patrol Yard – 3910 Battersea Road, Sunbury

Employees include 1 Lead Hand, 2 Driver Laborers, 4 Contracted Operators

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Fleet Inventory Listing:

The following vehicles are owned, operated and maintained by the Public Works Department which are typically harnessed, equipped and used in winter maintenance operations (does not include patrol vehicles).

Equipment ID	Description	Class	Year	Location
F-3	Chevrolet 2500	4X4 Plow Truck	2016	Sunbury
F-41	Chevrolet 2500	4X4 Plow Truck	2016	Keeley Rd
F-2	Chevrolet 2500	4X4 Plow Truck	2017	Westport Road
F-8	Ford 250	4X4 Plow Truck	2013	Hartington
FT-14	Sterling LT9513	Tandem Plow Truck	2001	Westport Road
FT-16	Western Star	Tandem Plow Truck	2017	Keeley Road
FT-26	Sterling LT9513	Tandem Plow Truck	2003	Keeley Road
FT-27	Sterling LT9513	Tandem Plow Truck	2002	Hartington
FT-29	International 7600	Tandem Plow Truck	2005	Keeley Road
FT-30	Sterling LT9513	Tandem Plow Truck	2004	Hartington
FT-36	Sterling LT9513	Tandem Plow Truck	2006	Hartington
FT-38	International 7600	Tandem Plow Truck	2007	Westport Road
FT-42	Ford F550 4X4	1 ½ ton Plow Truck	2008	Keeley Road
FT-43	Sterling LT9513	Tandem Plow Truck	2008	Keeley Road
FT-44	Sterling LT9513	Tandem Plow Truck	2009	Hartington
FT-45	Sterling LT9513	Tandem Plow Truck	2009	Sunbury
FT-46	International 7600	Tandem Plow Truck	2010	Keeley Road
FT-47	International 7600	Tandem Plow Truck	2010	Westport Road
FT-53	International 7600	Tandem Plow Truck	2012	Sunbury
FT-57	International 7600	Tandem Plow Truck	2014	Hartington
FT-60	Mack Gu7 Tri-Axle	Tri-Axle Plow Truck	2013	Keeley Road
FT-69	International 7600	Tandem Plow Truck	2016	Keeley Road
BT-90	John Deere 544K	Loader	2011	Westport Road
FT-94	Caterpillar 930G	Loader	2006	Keeley Road
14-24	Hyundai HL-740 9A	Loader	2014	Hartington
Rented	Loader 3yd Bucket	Loader	New	Sunbury
In case of extreme winter events:				
FG-22	Champion 740	Grader	2000	Westport Road
FG-23	John Deere 870G	Grader	2009	Hartington
FG-24	John Deere 772 GP	Grader	2012	Keeley Road
14-25	Trackless	Blower/Blade/Sander	2014	TWP Wide
420	Caterpillar Backhoe	Loader	2015	Keeley Road
580	Case Backhoe	Loader	2016	Westport Road

Location of Vehicles and Other Equipment

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Vehicles as listed in the table above are housed at their stated Patrol Yards. However, in the case of an emergency, these vehicles may be deployed to one of the other patrol sites but will be returned to their normal operational site once the emergency has ceased.

Calibration Procedures

Calibration of the sanding/salting equipment (Dickey-John, application rates for sanding and salting equipment) will be carried out annually before the start of the winter maintenance season and re-checked as deemed necessary. The calibration will normally be completed by a qualified technician or in house by a licensed mechanic.

Staffing:

The Township of South Frontenac’s Public Works department uses the tiered organization structure shown in the following figure.

Public Works Manager	Responsible for management of the department and ultimately, the results of all winter operations
Operations Supervisor	Operations and Staffing Responsible for front line management and directing winter operations and staff include Lead Hands
Lead Hands	Roads & Streets, Parking Lots, certain Fire Halls, Cemeteries and Sidewalks Responsible for directing winter operations and staff including both the contracted operators & driver laborers
Patrolman	Roads & Streets, Sidewalks, Night Shift Responsible for monitoring the day-to-day winter operations night and weekend shifts, including the contracted operators & driver laborers
Truck Drivers & Light Equipment Operators	Responsible for performing winter operations as directed by the Lead Hands and patrolmen.

List of Township Public Works Employees, Contract & Casual Contacts:

The Township Public Works Department keeps a copy of all Township Public Works Employees, Full time and Part time driver’s license and performs, at its discretion, a license verification and license abstract on each employee operating a township vehicle.

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This list will be held by the Township Public Works Department's administration for verification of employee name, location and signature.

Training:

The Township Public Works Department will endeavor to provide the following training to its staff:

- (a) Operators and staff will be trained in First Aid Training and CPR **every Three (3) years**
- (b) Operators and staff will be given WHMIS training Annually
- (c) Operators and staff will be provided with access and knowledge on Occupational Health and Safety, including the Township's Health & Safety Policies and Procedures
- (d) Operators will attend a Snow Plow Driver Course Annually
- (e) Operators will be given training on Traffic Control Safety (Book 7) Every Two (2) Years
- (f) Hours of work

Material Availability:

Salt is tendered as a part of the City of Kingston's tender early in the year once the previous winter maintenance season has ended. The successful suppliers must supply the Township on an as needed basis over the course of the winter season (November thru April). Storage Facilities are located at each of the Patrol Facilities and filled prior to the winter period. Environmentally sound Storage Facilities are monitored closely and usage is documented so that the facilities may be refilled prior to depletion.

List of Storage Facilities/ # Routes per Yard/ Capacity:

Facility	Sunbury	Keeley Road	Hartington	Westport
Pre-mixed Capacity	7,000 tonnes	11,000 tonnes	6,000 tonnes	7,000 tonnes
Local Roads	5 Routes	10 Routes	8 Routes	6 Routes
Arterial Roads	1 Route (a)	3 Routes (b)	1 Route (a)	1 Route (a)

South Frontenac applies three different material mixes on the road system.

Road Type	Salt	Sand	MgCl	Number of Routes
Local Roads (Former Township Roads)	5%	95%	0%	17 In house routes & 12 Contracted Routes
Arterial Roads (Former County Rds. & Hwy 38)	30%	70%	0%	(a)3 of 6 Arterial Rds.
Arterial Roads (Former County Rds. & Hwy 38)	15%	70%	15%	(b)3 of 6 Arterial Rds.

****Note- When freezing rain events occur, all routes are "sweetened" to help the clearing process*

Fuel Stock and Locations:

Each of the 4 Patrol Yards has re-fueling facilities for diesel fuel. Gasoline is only available at Keeley Rd and Westport Rd yards. Fuel usage is monitored electronically.

3.0 Operational Procedures

Activity List

Key activities are needed to provide a full winter maintenance service. The following is a brief summary of these activities:

- 3.1 Route Planning and Treatment Priorities**
- 3.2 Weather Monitoring**
- 3.3 Road Patrol**
- 3.4 Snow and Ice Clearing**
- 3.5 Snow and Ice Treatment**
- 3.6 Contracted Routes**
- 3.7 Sidewalk Plowing and Sanding**
- 3.8 Village Snow Removal**
- 3.9 Record Keeping**
- 3.10 Winter Maintenance Procedural Plan Distribution**
- 3.11 Hours of Service Documentation**

Route Planning and Treatment Priorities:

General: Treatment priorities for the roadways within the Township of South Frontenac have been devised to ensure effective, efficient coverage within the timescales defined in the Minimum Maintenance Standards. This system of coverage is readily adaptable to prevailing conditions.

For the purposes of this policy, the *highways* under the jurisdiction (for the purposes of winter maintenance) of the Township of South Frontenac are classified according to the Table in Section 1(2) of O. Reg. 239/02, as follows:

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Classification of Roadways

Posted Speed Average Annual Daily Traffic (AADT)	100km	90km	80km	70km	60km	50km	40km
15000 or more	1	1	1	2	2	2	2
12000 – 14999	1	1	1	2	2	3	3
10000 – 11999	1	1	2	2	3	3	3
8000 – 9999	1	1	2	3	3	3	3
6000 – 7999	1	2	2	3	3	3	3
5000 – 5999	1	2	2	3	3	3	3
4000 – 4999	1	2	3	3	3	3	4
3000 – 3999	1	2	3	3	3	4	4
2000 – 2999	1	2	3	3	4	4	4
1000 – 1999	1	3	3	3	4	4	5
500 – 999	1	3	4	4	4	4	5
200 – 499	1	3	4	4	5	5	5
50 – 199	1	3	4	5	5	5	5
0 – 49	1	3	6	6	6	6	6

Please see Appendix “B” for Map of Road Classifications as Determined by Posted Speed and AADT (actual and/or estimated) (page 25). South Frontenac Township only has class 2 to 6 roads in their road system.

Weather Monitoring:

The information used in decision making will be a combination of a road weather forecast and manual road condition checks (monitored 3 times per calendar day).

Information Provided/Available

24 Hour Weather Forecast – Environment Canada- Electronically Documented
Hourly Weather Network forecast

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Weekend – Weather watch by Patrolmen

Manual Road Check by Patrolman or designate using infra-red pavement temperature thermometers and visual inspection.

The Operations Supervisor will discuss possible actions with the equipment operators and Lead Hands. Further discussions may ensue should the forecast suggest extreme weather conditions.

The Operations Supervisor assesses the conditions on a continuing basis with the aid of the forecast and upon the completion of each route will consider the potential need for additional resources and deploy action accordingly.

Road Patrol:

Routine Road Patrol shall be carried out by driving on and visually inspected for events by the patrolman or lead hand. Employees electronically monitor the road and air by a Road Watch System that is mounted in the trucks which gives accurate information to air and road temperature. Each lead hand patrols and monitors his own area during his hours of work. Night and weekend patrol, Patrol According to the patrol route map.

Please see Appendix “C” for Winter Control Patrol Route Map (page 26)

Night Patrol will commence approximately November 15th, and end on April 15th or as decided by the Operations Supervisor. Night patrol hours will be from 6 pm and 6 am, 7 days a week. The Night Patrol personnel will monitor the weather forecasts, current weather conditions, and make winter call outs to the respective contractors for arterial roads from approximately 5 pm to 5 am. Lead Hands will be called in early morning hours, by the night patrolman, for local roads in their respective area to alert them of a change in a winter weather pattern or event and then make call outs to day time operators as required. Call out timing is determined as per the Minimum Maintenance Standards.

Road Patrol Schedule and Calendar see **Appendix H.**

Snow and Ice Clearing:

Snow Clearing

When the snow accumulation on a roadway is greater than the depth set out in Table 3, the Public Works Department will deploy winter maintenance forces to clear the snow as soon as practicable.

Arterial roads are plowed by both contractors and in house operators to the severity of the event. Local roads are plowed once the drivers are called in by the patrolman or lead hand. Ideally, the plow routes would be completed prior to school bus traffic in the morning and later in the day to ease evening traffic.

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The municipality has adopted the minimum maintenance standards, <http://www.ontariocanada.com/registry/view.do?postingId=4146> for snow and ice clearing practices. The municipality strives to maintain surface levels to a higher degree with dispatch often sooner than is called for in The Plan. After the snow has ended the Public Works Departments desire is to clear the snow until the depth is equal to or less than that set out in Table 1.

Table 1 Snow Clearing

Class	Response to Snow Accumulation		Surface Condition		
	Depth	Time	Lag time	Desired Condition	Minimum Condition
2	5 cm	6 hours	12 hours	Bare	Centre/Track Bare
3	8 cm	12 hours	18 hours	Bare	Centre/Track Bare
4*	8 cm	16 hours	24 hours	Centre/Track Bare	Centre/Track Bare
5	10 cm	24 hours	24 hours	Snow packed	Snow packed
6	10 cm	24 hours	24 hours	Snow packed	Snow packed

() Notwithstanding the desired and minimum conditions stated above for Class 4 Roads, in the case of loose top (gravel) roads, the desired and minimum conditions shall be "Snow packed" due to the nature of this type of road surface.*

The Township has the following number of centerline kilometers for the three different road surfaces. (Table 2)

Table 2 - Centerline Distance

Arterial Road Centerline	
Surface	Length (Km)
Asphalt	129.80
Surface Treatment	64.70
Local Road Centerline	
Asphalt	35.64
Surface Treatment	366.63
Gravel	207.30

Total Centerline Kilometers	
Surface Type	Length (Km)
Asphalt	165.44
Surface Treatment	431.33
Gravel	207.30
Total Road Length	804.07
Total Hard Top Length	596.77

Ice Clearing

The Public Works Department shall, deploy winter maintenance forces to treat an icy roadway as soon as practicable after becoming aware that the roadway is icy; and treat the icy roadway within the time set out in Table 3.

Table 3 Ice Clearing

CLASS	RESPONSE TIME
2	4 hours
3	8 hours
4	12 hours
5	14 hours
6	16 hours

Snow and Ice Treatment Procedures:

Central to the success of any plan are the personnel involved. The Public Works Department Winter Maintenance Operators, including contractors, will be responsible for the Winter Maintenance Operation 24 hours per day throughout the winter period for both arterial and local roads. Local roads are typically maintained from 4 am to 6 pm unless the event is in the form of freezing rain in which dispatch of forces are called promptly. Arterial roads are plowed 24 hours per day as required. Contractors typically plow from 5 pm to 5am with township forces plowing from 5 am to 5 pm with the exception of routes 503 and 504 being done by the contractor 24/7.

Code of Practice: Road Salts Environmental Management

<https://www.canada.ca/en/environment-climate-change/services/pollutants/road-salts/code-practice-environmental-management.html>

Conventional Sander

- one way sanding/salting shall be the township standard unless it is freezing rain or considered to be an emergency circumstance.
- not more than 400 kg/Km of material is to be applied on local roads when travelling one way, extra application must be pre-approved by Lead Hand. Normal use is 5% salt.

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- not more than 200 kg/Km of material is to be applied on Arterial roads when travelling both ways, extra application must be pre-approved by Lead Hand.
- the above application rates are considered to be the top limits and lower settings are to be used in appropriate conditions (i.e.: warm temperature, light snow conditions).
- ice treatments are typically stronger mixes with the salt percentage being at the discretion of the patrolman or lead hand with mix reflecting the severity of the ice.
- some events require different application rates, i.e. temperature, severity, wind etc. these application rates will be at the discretion of the lead hand or patrol man

Procedures for Specific Weather Conditions:

- when freezing rain conditions coincide with rain then sanding/salting operations will commence as soon as possible or upon becoming knowledgeable of the conditions.
- during high wind conditions material may be held. The mix application becomes a sticky substance that traps snow blowing across the roadway, increasing the size of snowdrifts.
- in the event of a storm it is a township practice to distribute material on the roadway as soon as it becomes practical to allow the snow/ice accumulation to “melt up”. It is essential to continue to plow the roadway without administering more material.

Procedures for Once a Storm Event has ended or the Roadway Meets Minimum Maintenance Standards:

- once the storm has ended and roadways are cleared including shoulders. Routes will be patrolled and inspected by the lead hand and/or patrolman. The snow plow units will then be parked at their respective patrol yards. The operators will perform a visual inspection to be sure the unit is ready to go for the next event.
- each storm has individual characteristics and must be dealt with accordingly. Therefore, exceptions to this procedural plan may occasionally be necessary. While the township may implement winter maintenance procedures and follow Provincial Minimum Maintenance Standards it is also the responsibility of the traveling public to acknowledge adverse weather conditions and drive accordingly. (Highway Traffic Act)

Contracted Routes:

- The contracted routes are awarded by tender process. The Township currently has six (6) Arterial Road contracts and twelve (12) Local Road Contracts for the designated routes. Contract trucks will be called out by the Patrolman or Lead Hand or his/her designate and supervision will be by the Patrolman or Lead Hand or his/her designate.
- Contract trucks when called out shall complete one trip and return to the Patrol site. The Patrolman, lead Hand or his/her designate shall check the roadway prior to the contractor going out again to see if another trip is called for, if another trip is not called for the contractor will be sent home
- A list of Contractor Arterial and Local Routes can be found in **Appendix F**.

Sidewalk Plowing and Sanding:

The Public Works Department is responsible for plowing and sanding snow from sidewalks. The priority for winter maintenance of sidewalks is to keep them safe and clear of hazards caused by snow and ice accumulation. The following table describes the maintenance quality standards for snow and ice control on sidewalks within the Township.

Sidewalk	Depth of Snow Accumulation for Service Standard	Time to Clear Snow from the end of Snow event or Time to Treat Icy Conditions	Treatment standard	
			Bare Surface	Snow Packed
All	0-2.5 cm	No maintenance scheduled, sand applied as necessary		
All	2.5-5 cm	10 hours		All locations
All	5-10 cm	12 hours		All locations
All	10+ cm	24 hours		All locations

Typically during a winter storm event, roadways are maintained first and sidewalks, although priority are dependent on staff availability due to the severity of the weather event. Sidewalk maintenance generally involves clearing of the snow by plow or snow blower followed with an application of sand or other material for traction. Public Works strives to clear sidewalks in the areas around schools first before proceeding with the remainder of sidewalks.

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Sidewalk clearing is done by tendered contractors on 4 sidewalk plow routes. There is a designated snow removal unit for each of the 4 routes.

In addition to the Minimum Maintenance Standards as set out by the Township the following procedures are provided as a guideline for winter maintenance operations for sidewalk plowing and sanding.

Appendix “G” List of Winter Maintained Sidewalks (page 77).

Village Snow Removal:

Removal of snow will take place on streets taking into consideration public safety, snow storage capability, emergency detour routes, street parking requirements, vehicle and pedestrian traffic volumes and parking lot capacity. Snow is removed in accordance with the Snow Removal listing below:

- 1) Sydenham Arterial (Evening)
- 2) Verona Arterial (Evening)
- 3) Harrowsmith Arterial (Daytime)
- 4) Battersea Complete (Daytime)
- 5) Sydenham Local (Daytime)
- 6) Verona Local (Daytime)
- 7) Bellrock Complete (Daytime)
- 8) Hartington Complete (Daytime)
- 9) Harrowsmith Local (Daytime)
- 10) Perth Road Complete (Daytime)
- 11) Inverary Complete (Daytime)
- 12) Sunbury Complete (Daytime)

Village snow removal usually commences as soon as is practicable after a storm. Normal practice for removal is when snow windrows reach a height of 45cm and width at the base of 60cm. Deviation from windrow removal may occur due to parked vehicles on streets within the Villages. As equipment is required to windrow snow for removal purposes, this operation may require the removal of vehicles parked in contravention of the “No Parking By-Law”.

The most efficient snow removal operation requires the use of road snow blowers, road graders, ¾ ton trucks. This work is carried out in the time frames noted in the Snow Removal Listing above. Typically the municipality does not remove any snow after 1 am in any Village. Salt or winter sand is applied to the street after snow removal to fully restore safe conditions.

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Snow is hauled to a designated snow storage site (Snow Dump), located in the village of Harrowsmith, on the West Side of Centennial Park Drive behind tennis courts. This storage site has been approved by the Ministry of Environment as an acceptable snow disposal location. This snow disposal platform is constructed of limestone base that is sloped to the rear, with a berm around the two sides and rear, 2m high by 2.5m in depth.

Record Keeping:

Supervisor Responsibilities:

The Operations Supervisor will ensure that all Lead Hands, Patrolman, and Operators, including contractors, receive the appropriate Winter Control training prior to the Winter Maintenance Period and keep a record of this training.

The Operations Supervisor will make certain that Operators are knowledgeable in how to complete a circle check of their vehicle(s).

The Operations Supervisor also will maintain a record of the following:

- *Hours of Work Record* – the Lead Hand/Supervisor or his/her designate will be responsible for scheduling his Operators in such a manner that the Operators' hours of work will comply with the maximum hours of service as per the Highway Traffic Act, Amendment of Regulation under Order of Council O.Reg 555/06, dated December 13, 2006.
- *Material Usage Records* – the Supervisor will review any adjustments to the records with the lead hand. The Supervisor will use the Dickey-John & GPS information when reviewing the material usage which will be used when a discrepancy exists with a manual entry.

Lead Hand Responsibilities:

The Lead Hand or his/her designate will maintain a Daily Log and Patrol Record which will contain details of phone calls, decisions made and associated times. This log will be held on file by the Operations Supervisor.

As an example, the Lead hands or his/her designate is responsible for at a minimum the following documentation:

- *Lead Hand's Diary and Patrolmen's Diary* – will be kept up to-date on a daily basis and once the diary is completed it will be retained by the Lead Hand for a retention period of ten (10) years. The Lead Hand's diary will be made accessible for documentation in the event of a damage claim. Entries in the diary will be clear, concise and legible.

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- *Winter Patrol Record* – the Lead Hand or his/her designate will complete this record for roads patrolled. This document will provide the date patrolled, roads completed, time, weather and road conditions, any accidents that are observed, who it was patrolled by and when the patrol was completed.
- *Material Usage Records* – the Lead Hand or his/her designate must ensure that usage of material is recorded for each call out and reviewed for accuracy. Adjustments to these records must be completed and agreed upon by the Supervisor.
- *Winter Operation Record* – the Lead Hand must complete a Winter Operation Record for each call out event. This record will provide date, operator identification, call out person, the quantity of sand and/or salt used, time in and time out. The Lead Hand and/or Patrolman will record weather conditions. GPS will identify route taken, type of application used, kilometers from start to finish, which Patrol operated from, application amount of material applied and road & air temperature.

Operator Responsibilities:

Operators must inspect their vehicle and sanding/salting equipment prior to every individual call out operation.

The Operator will ensure that their vehicle and sanding/salting equipment is cleaned sufficiently after each individual call out operation.

The Operators at a minimum must complete the following records:

- Vehicle Inspection Report (Circle Check)
- Hours of Work Record
- Sand and Salt Use

Vehicle Inspection Report (Circle Check) - The Operator must perform a circle check prior to leaving the yard for each call out and complete a Vehicle Inspection Report. The Supervisor will keep this report on file for potential audit purposes. No Operator will knowingly leave the yard if their vehicle or equipment has an identified mechanical/operational failure resulting from the completion of the circle check. Failure to complete the circle check and/or the Vehicle Inspection Report may result in a fine issued to the Operator as well as the Township. Failure to comply with the Vehicle Inspection Report and the vehicle is found to be mechanically faulty on the roadway may result in a fine issued to the Operator as well as the Township.

If the vehicle develops a minor mechanical failure while in operation but is determined to not be a safety hazard, the Operator is allowed to return the vehicle to the Patrol Yard for repair.

If the vehicle develops a major mechanical failure (as outlined in the Vehicle Inspection Report) while in operation, the Operator must find a safe place to pull over and contact immediate supervisor for further instruction.

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Hours of Work Record - must show driving time, down time, time off, etc.

Requirements for the Completion of Documents:

Please note that the above noted records which are to be completed by the Lead Hands and Operator(s) are not to be considered discretionary but mandatory.

Full and accurate completion of these documents, according to the applicable procedures, ensures that staff is protected from personal liability by providing solid documentation that Township procedure has been followed.

However, it is duly noted that the Lead Hands/Operator will **not** sustain “personal liability” for recording Township information. In a case of a legal proceeding the Lead Hands/Operator information will be covered by the Township and the Township Solicitor.

Always retain the original copy of documents regardless of their appearance. If a document requires correction then a line is to be placed through the incorrect information without making it illegible and continue writing on the original document. Initial corrections or change in the color of ink in the case where you change writing pens. Please assure that your writing is legible for others to read.

Winter Maintenance Procedural Plan Distribution:

The Winter Maintenance Procedure Plan is a key document and will be issued to those shown in the distribution list in **Appendix “H” Distribution List** (page 79).

The Winter Maintenance Procedural Plan is a living document. Amendments and updates will be issued by the Area Supervisor or his/her designate.

Hours of Service Documentation

Position	Week	Arrival	Departure
Lead Hand	Mon to Fri	7:00 am	3:30 pm
Driver	Mon to Fri	7:00 am	3:30 pm
Light Equipment Operator	Mon to Fri	7:00 am	3:30 pm
Night patrolman (2 staff rotating shift)	Mon to Sun	6:00 pm	6:00 am
Daytime Weekend Patrol Shift (staff#1)	Saturday	6:00 am	12:00 pm (noon)
Daytime Weekend Patrol Shift (staff#2)	Saturday	12:00 pm (noon)	6:00 pm
Daytime Weekend Patrol Shift (staff#3)	Sunday	6:00 am	12:00 pm (noon)
Daytime Weekend Patrol Shift (staff#4)	Sunday	12:00 pm (noon)	6:00 pm

*Hours of service are documented daily as per the Ontario Highway Traffic Act.
South Frontenac Township uses the 7 day/70 hrs cycle*

Hours of Service Ontario Regulation 555/06

Application – Highway Traffic Act

190 (2) No person shall drive a commercial motor vehicle on a highway except in accordance with this section and the regulations made under this section.

190 (6) No operator shall permit a person to drive a commercial motor vehicle on a highway except in accordance with this section or the regulations made under this section.

- For any driver, means a 24-hour period that starts at midnight or at such other hour designated by the operator for the driver

On-duty time

2) A driver is on duty when he or she drives a commercial motor vehicle for an operator or performs any other work for an operator, including time spent,

- a) inspecting, servicing, repairing, cleaning and warming up a commercial motor vehicle;
- b) travelling in a commercial motor vehicle as a co-driver, when the time is not spent in the sleeper berth;
- c) participating in the loading and unloading of a commercial motor vehicle;
- d) inspecting and checking the load of a commercial motor vehicle;
- e) waiting for a commercial motor vehicle to be serviced, loaded, unloaded and dispatched
- f) waiting for a commercial motor vehicle or its load to be inspected; and
- g) waiting at an en-route point because of an accident or other unplanned occurrence or situation

2. (1) There are four categories of duty status time for the purpose of this regulation;
 1. Off-duty time, other than time spent in a sleeper berth.

2. Off-duty time spent in a sleeper berth.
3. On-duty time spent driving.
4. On-duty time, other than time spent driving.

A declared state of emergency by head of Municipality;

“emergency” means a situation or an impending situation that constitutes a danger of major proportions to life or property, whether caused by forces of nature, an accident, an intentional act or otherwise;

In a declared emergency the regulation is not in effect during the emergency but comes back into effect the minute the emergency is over.

Daily Driving Time

5. (1) After a driver has accumulated 13 hours of driving time in a day, the driver shall not drive again on the same day.
- (2) After a driver has accumulated 14 hours of on-duty time in a day, the driver shall not drive again on the same day.

Daily Off-Duty Time

6. (1) A driver shall take at least 10 hours of off-duty time in a day.
- (2) Off-duty time under subsection (1) that is in addition to the mandatory eight consecutive hours of off-duty time required by Section 9 may be distributed throughout the day in blocks on no less than 30 minutes each.
- (3) The off-duty time referred to in subsection (2) shall be at least two hours and may be added to the mandatory eight consecutive hours of off-duty time but cannot form part of it.

Mandatory Off-Duty Time

9. (1) After a driver has accumulated 13 hours of driving time from the end of the most recent period of eight or more consecutive hours of off-duty time, the driver shall not drive again unless he or she takes at least eight consecutive hours of off-duty time.

Cycle Requirements

7 or 14-day cycle; (you are following the 7 day cycle which is the best for your operation)

12. (1) An operator shall require that all drivers follow either a 7-day or 14-day cycle, as designated by the operator for each driver.
- (2) A driver shall follow the cycle designated for him or her by the operator.
- (3) An operator shall not change a driver's cycle except as provided by section 14.

A driver who is following a 7-day cycle shall not drive again in that cycle after accumulating 70 hours of on-duty time during any period of seven days or during the period beginning on the day of which the cycle was reset under section 14, whichever is less

Mandatory 24 Hours Off-Duty

13. (1) SuPatrol Bect to section 14, a driver shall not drive unless the driver has taken at least 24 consecutive hours of off-duty time in the preceding 14 days. (in other words if a driver is driving continuously day after day, they must take 24 hours off every 14 days)

Recap:

1. A driver must stop driving after accumulating 13 hours of driving in a 24 hour day
2. A driver cannot drive after accumulating 14 hours of on duty time in a day
3. A driver cannot drive after accumulating 70 hours in a 7 day cycle
4. A driver cannot drive continuously without being off duty 24 hours once in the preceding 14 days

Ref:

[Http://www.mto.gov.on.ca/english/trucks/handbook/secion1-7-4.shtml](http://www.mto.gov.on.ca/english/trucks/handbook/secion1-7-4.shtml)

4.0 Road Closures

Road Closures and Liaison with the OPP:

When visibility declines to a point that it is hazardous to the driving public or snowplow operators to be on the roadway, snowplowing or ice control operations may be suspended. Suspended operations shall be resumed when visibility improves.

When weather conditions have rendered a route or roadway unsafe for use and the Public Works Manager or his/her designate determines the road must be closed to all traffic then this decision shall be provided to the Ontario Provincial Police and Emergency Services. The closure of a road in these circumstances must be carried out in conjunction with the Ontario Provincial Police. Accordingly, close liaison must be maintained with the Police to confirm a decision to close a route. Routes closed by Township instruction must be re-opened on Township instruction.

The Public Works Manager, Supervisor, Lead Hand, Patrolmen, Emergency Services (Fire and Ambulance), Ontario Provincial Police, Elected Officials and CAO, must be informed as soon as possible of roads closed by weather conditions. The Township will provide “Road Closure” signs and/or barricades to alert the public of the closed road. If at all possible, detours or diversion routes will be decided upon as a result of such a closure. In the event that a detour or diversion is not possible or will further endanger the travelling public by re-routing the traffic to a lesser travelled road, the Township will be held harmless from any motorist continuing forward on the “closed road” once so notified. The Township Public Works Department will be responsible for contacting the local media to notify the travelling public of the closed road(s).

Winter Parking Restrictions

The parking of vehicles on Township roads and village streets from 1:00 a.m. to 7:00 a.m. is not permitted from December 1, 2017 to March 31, 2018.

5.0 Conclusion

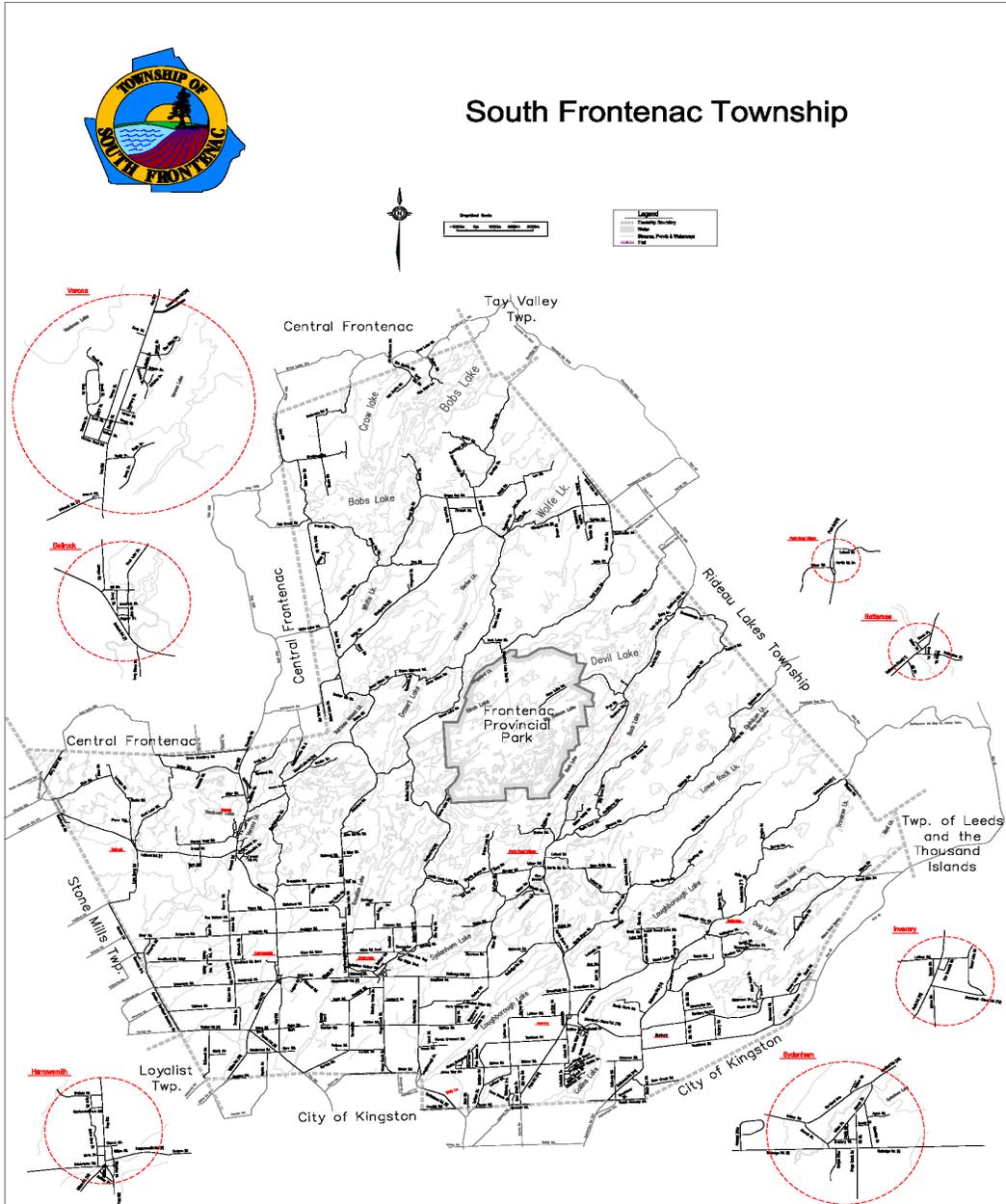
Final Statement:

The Winter Maintenance Procedural Plan laid out above is to establish goals and procedural guidelines for the Township of South Frontenac Public Works Department employees regarding winter maintenance of snow and ice control. It is not to be construed to create any duty to a specific individual or employee but is to act as a guideline for winter maintenance operations for the Township of South Frontenac. This plan is also designed for the public as well as township staff to better understand the winter control operations being done by the municipality.

6.0 Appendices

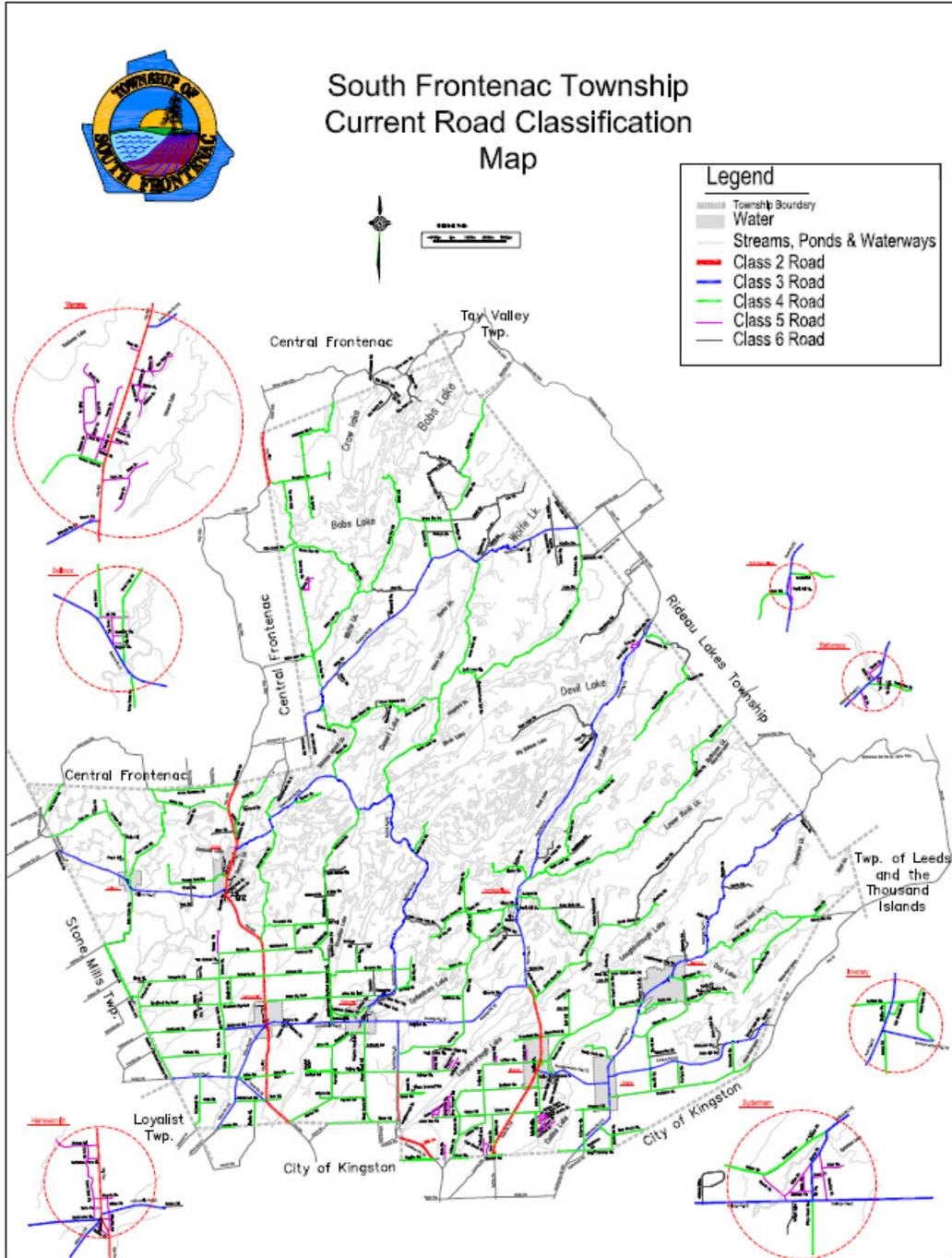
6.1 Appendix “A”

Map of South Frontenac



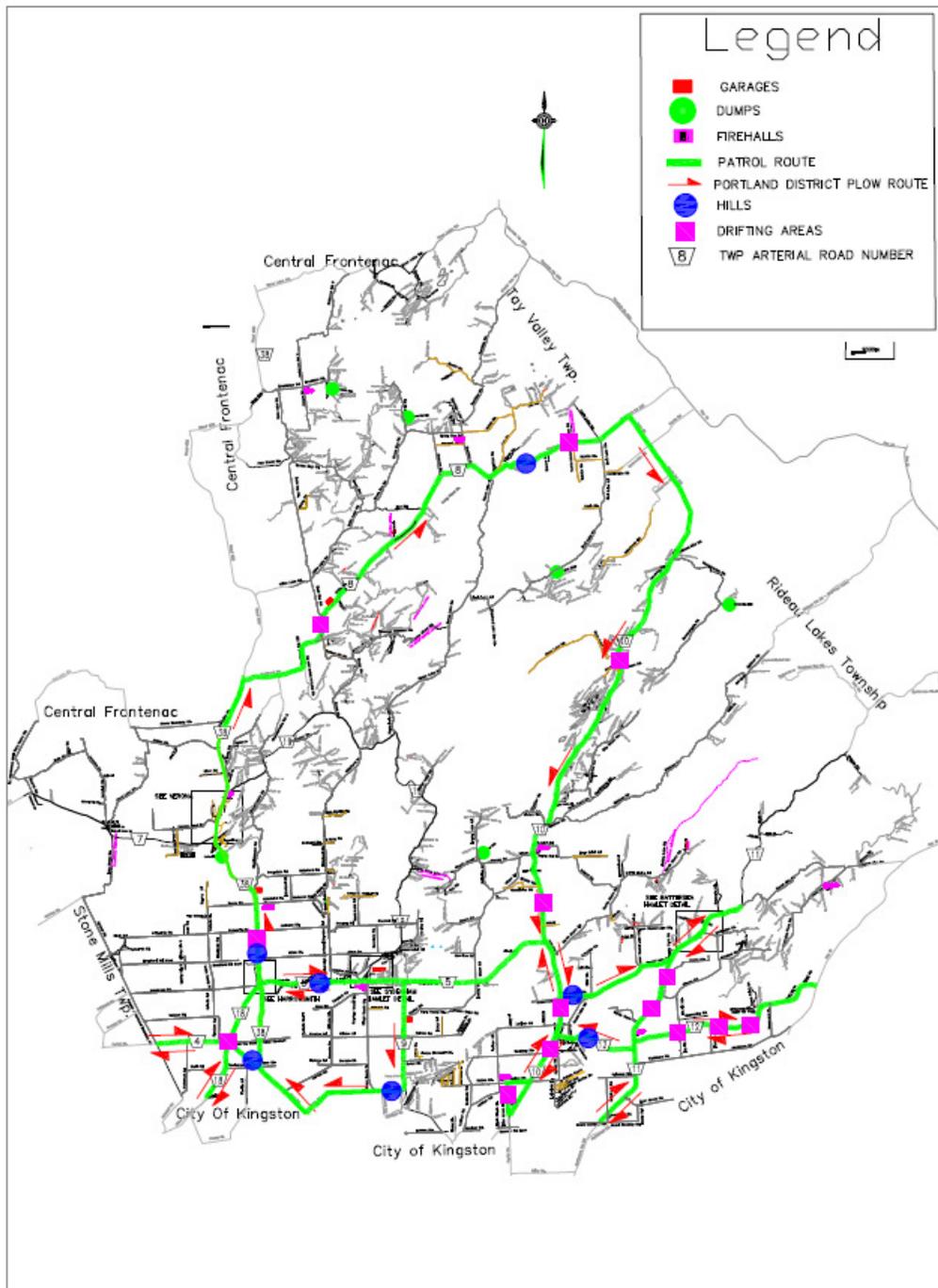
6.2 Appendix “B”

Road Classification Map



6.3 Appendix “C”

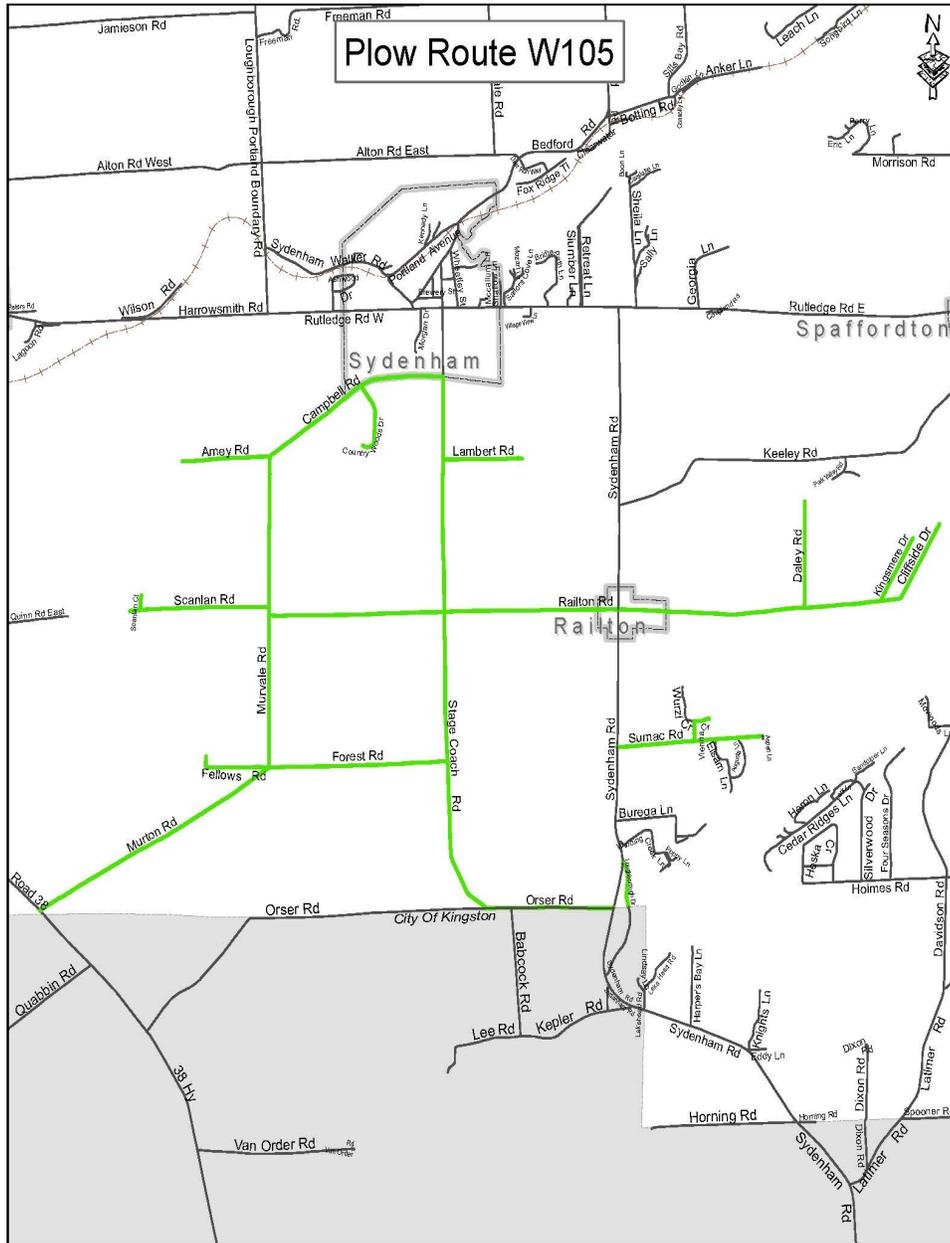
Winter Operations Patrol Route Map



6.5 Appendix “E”

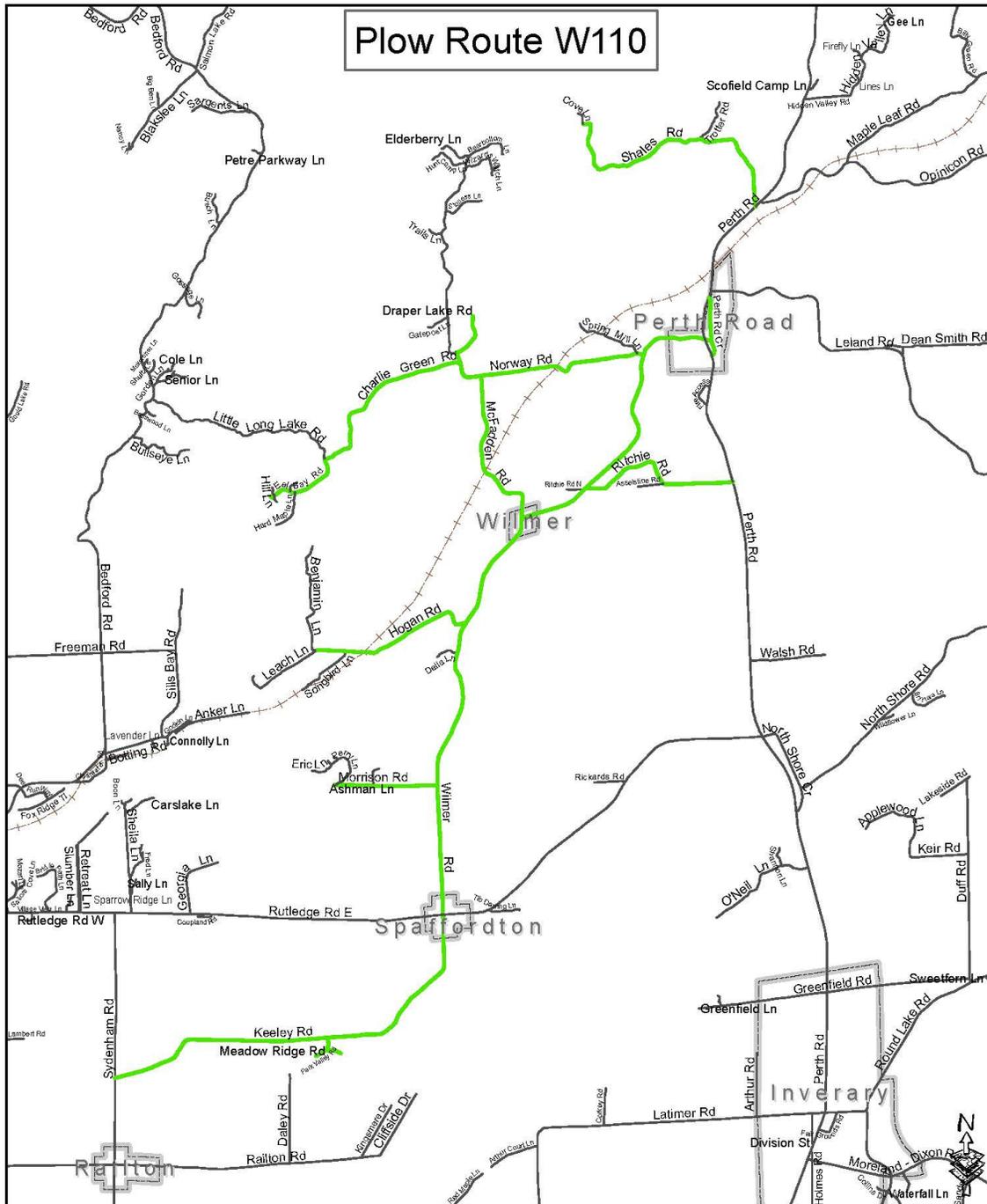
South Frontenac Township
Winter Maintenance Operations

Keeley Yard



South Frontenac Township
Winter Maintenance Operations

Keeley Yard



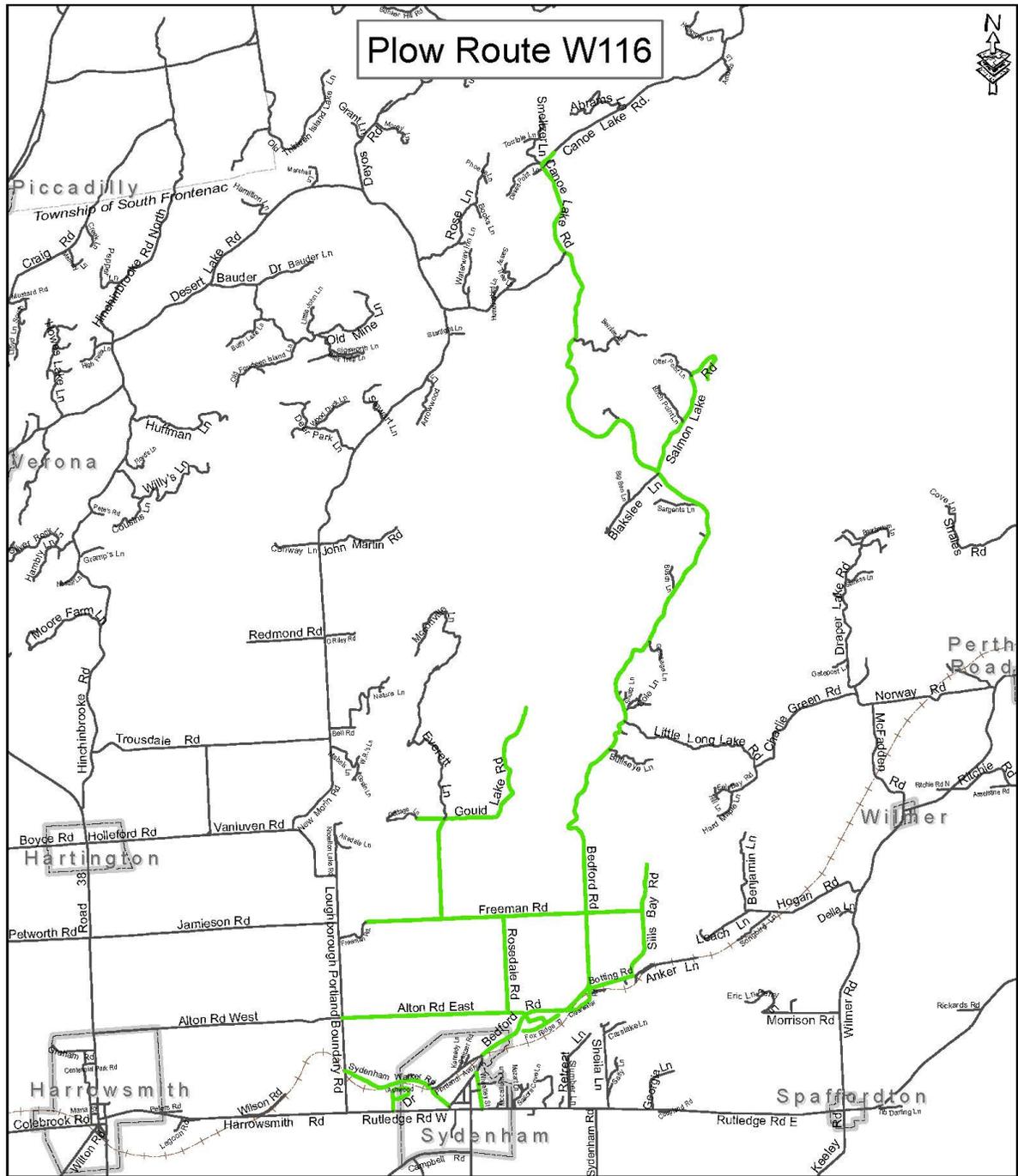
Plow Route W110

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Winter Maintenance Procedural Plan – May 2018

South Frontenac Township
Winter Maintenance Operations

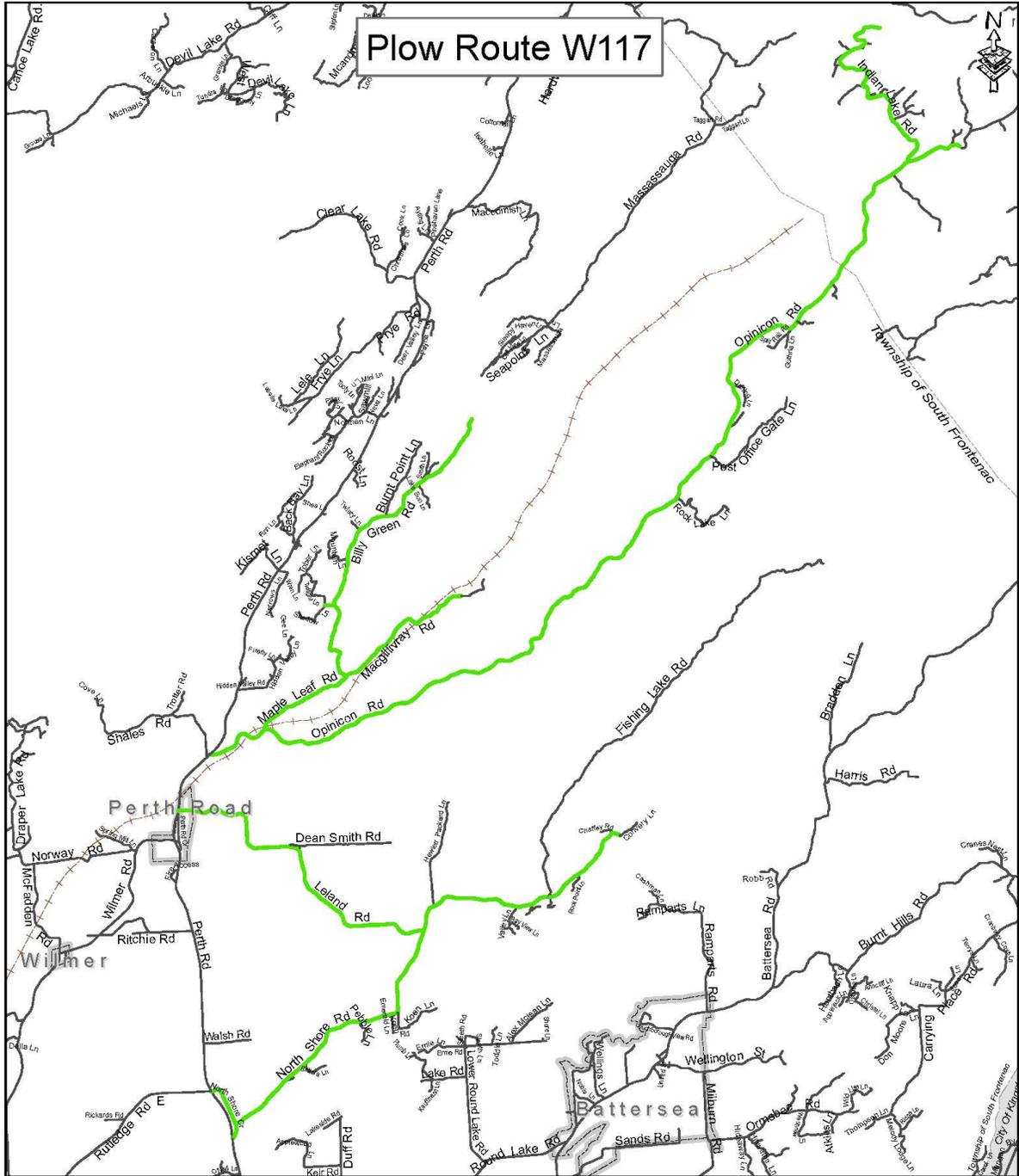
Keeley Yard



Winter Maintenance Procedural Plan – May 2018

South Frontenac Township
Winter Maintenance Operations

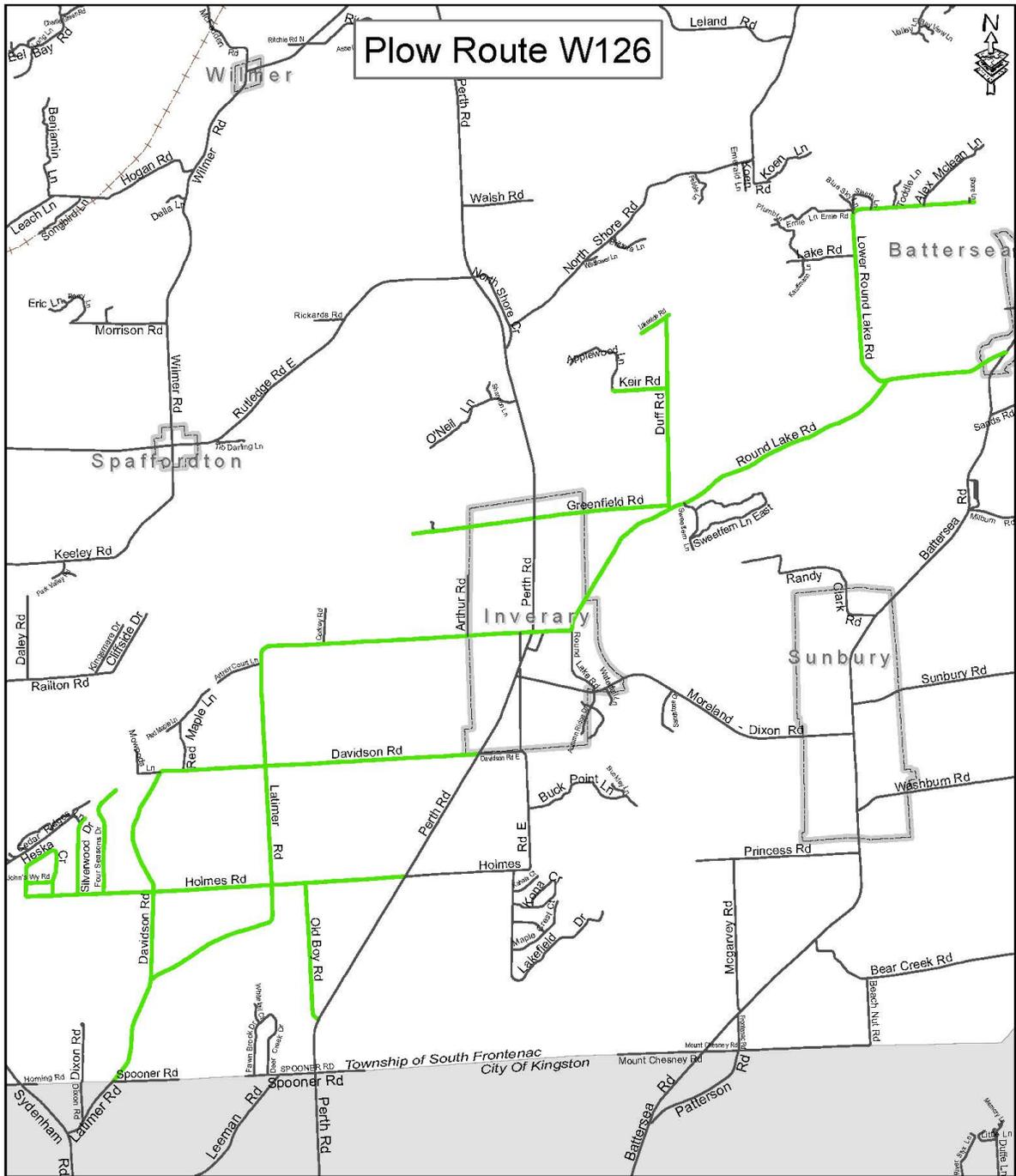
Keeley Yard



Winter Maintenance Procedural Plan – May 2018

South Frontenac Township
Winter Maintenance Operations

Keeley Yard

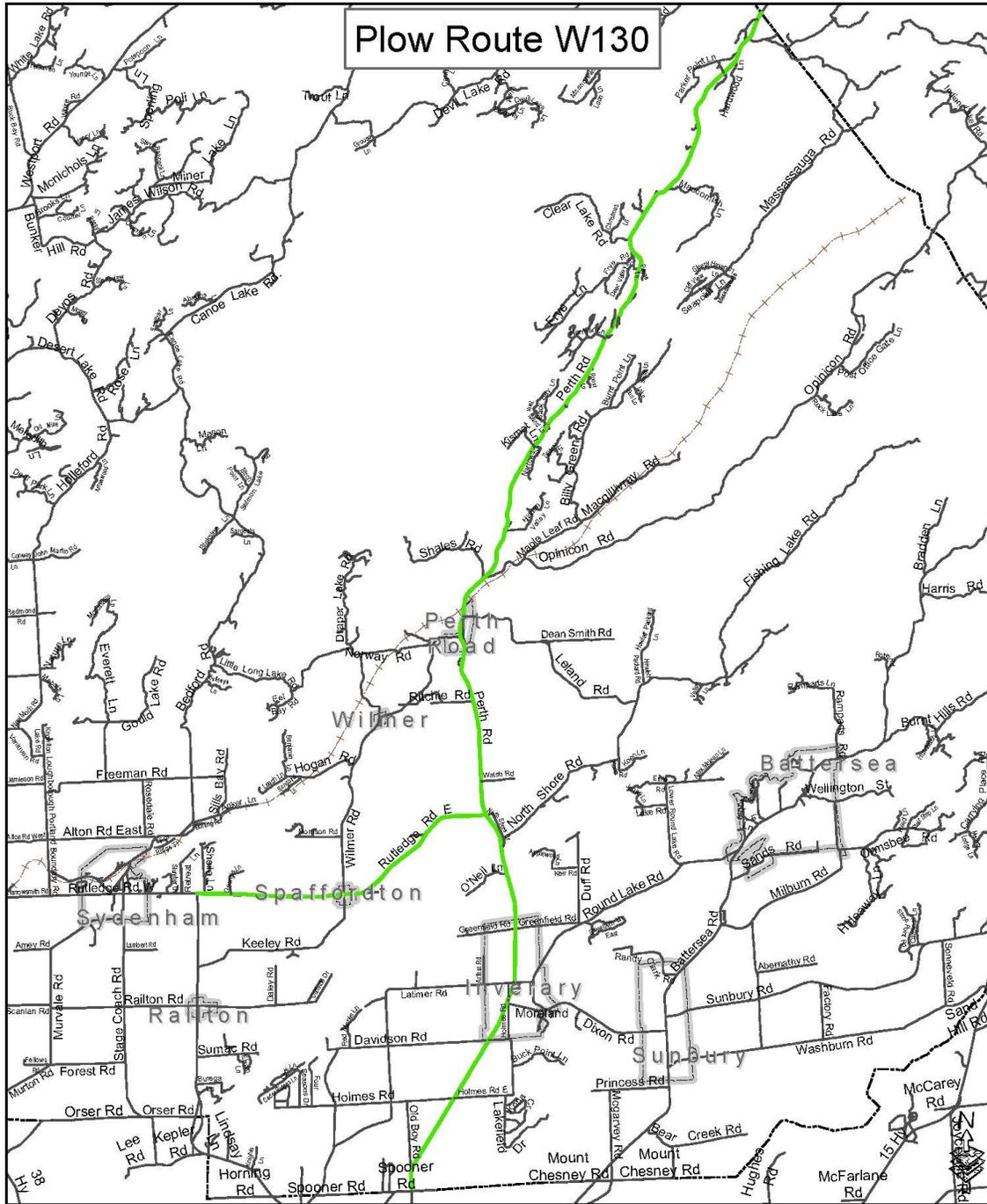


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Winter Maintenance Procedural Plan – May 2018

South Frontenac Township
Winter Maintenance Operations

Keeley Yard

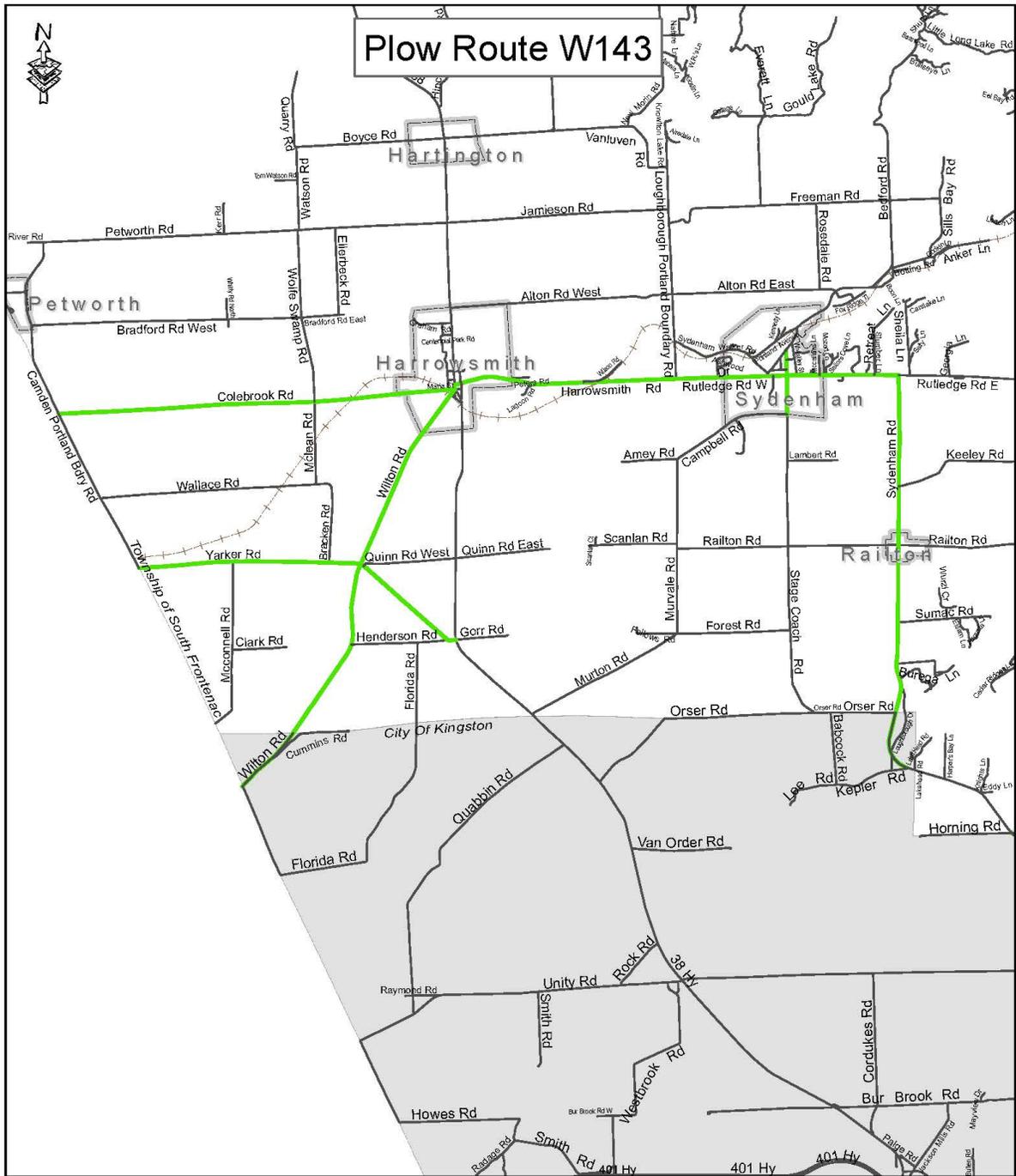


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Winter Maintenance Procedural Plan – May 2018

South Frontenac Township
Winter Maintenance Operations

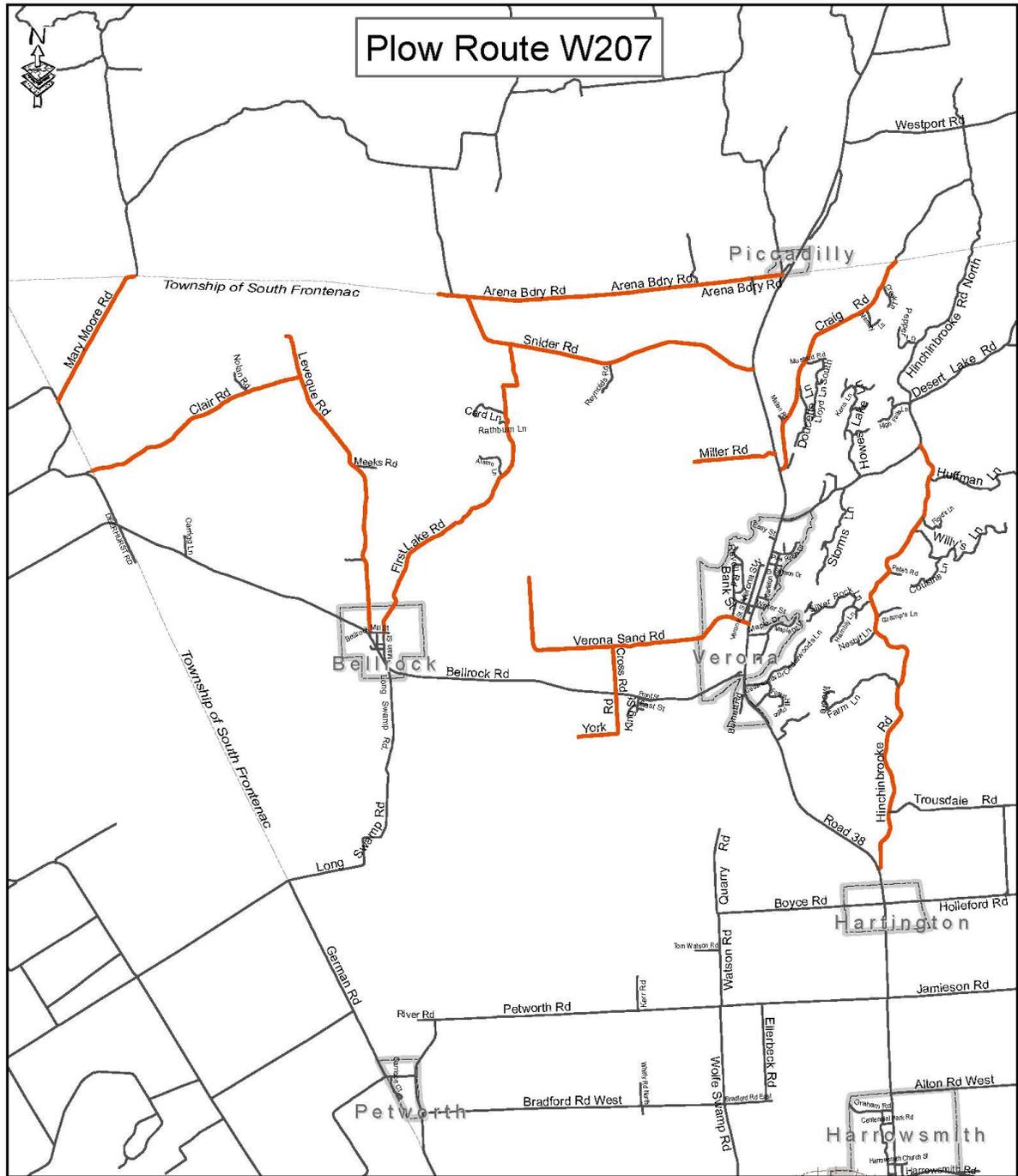
Keeley Yard



Winter Maintenance Procedural Plan – May 2018

South Frontenac Township
Winter Maintenance Operations

Hartington Yard

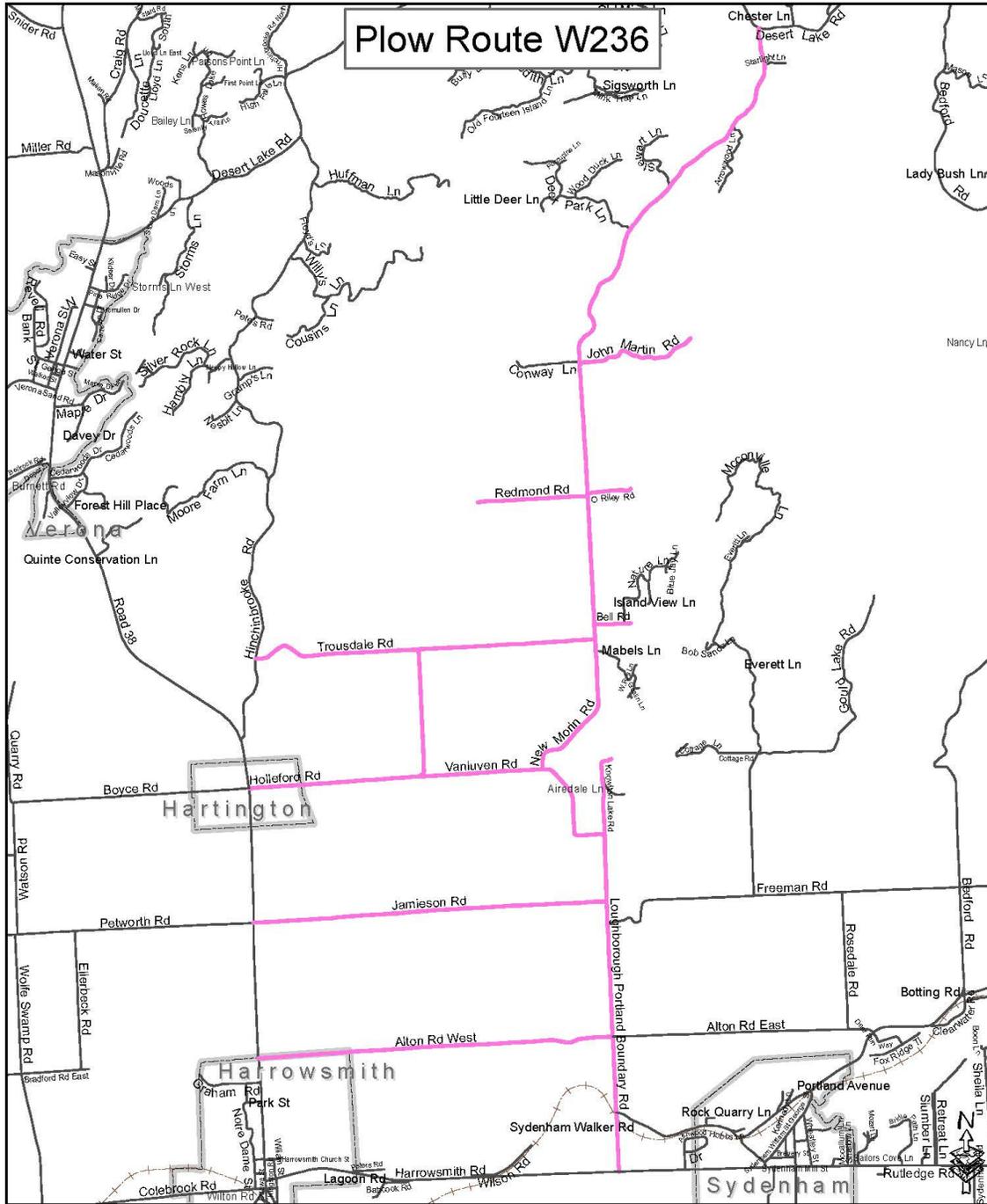


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Winter Maintenance Procedural Plan – May 2018

South Frontenac Township
Winter Maintenance Operations

Hartington Yard

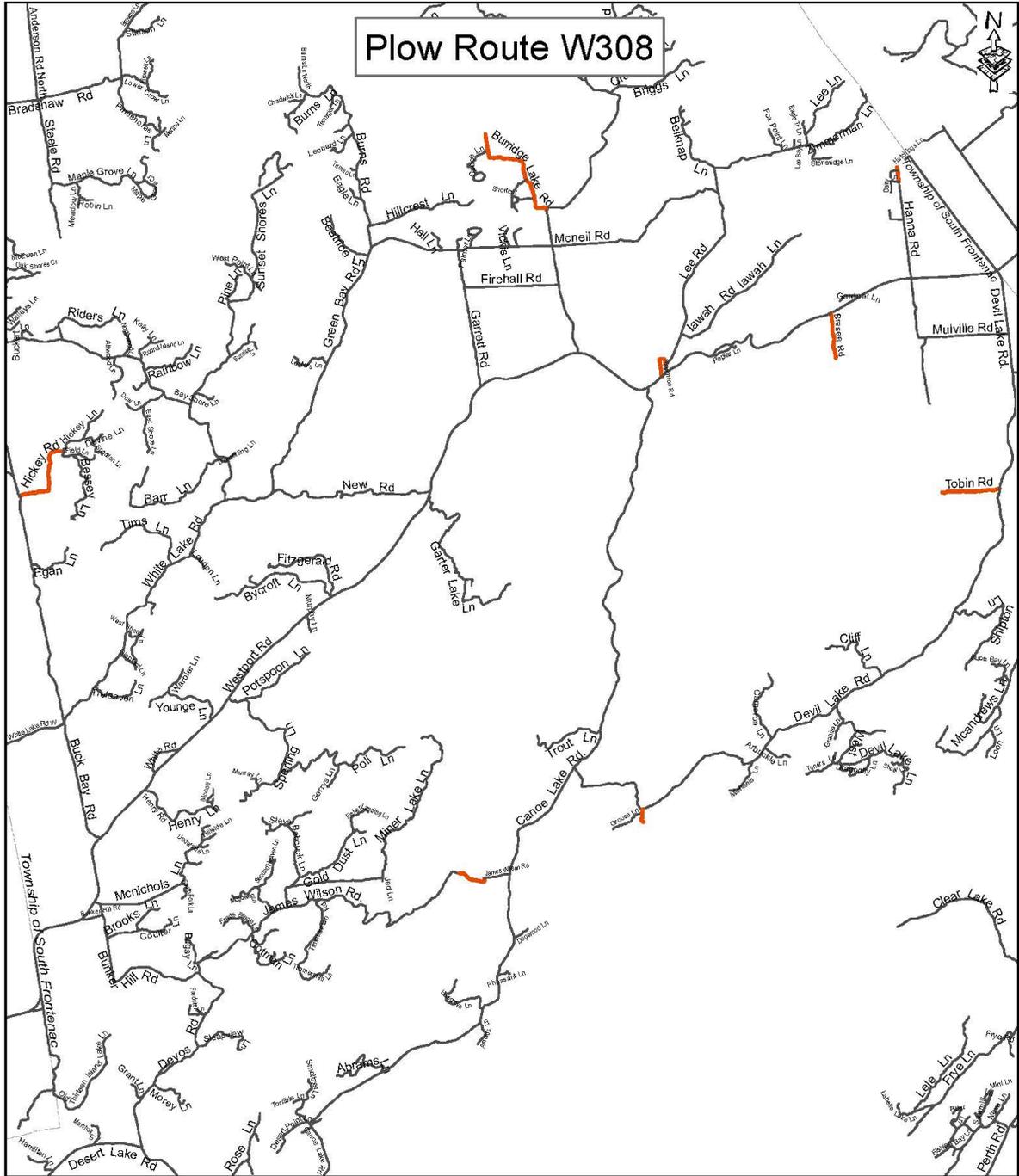


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Winter Maintenance Procedural Plan – May 2018

South Frontenac Township
Winter Maintenance Operations

Westport Yard

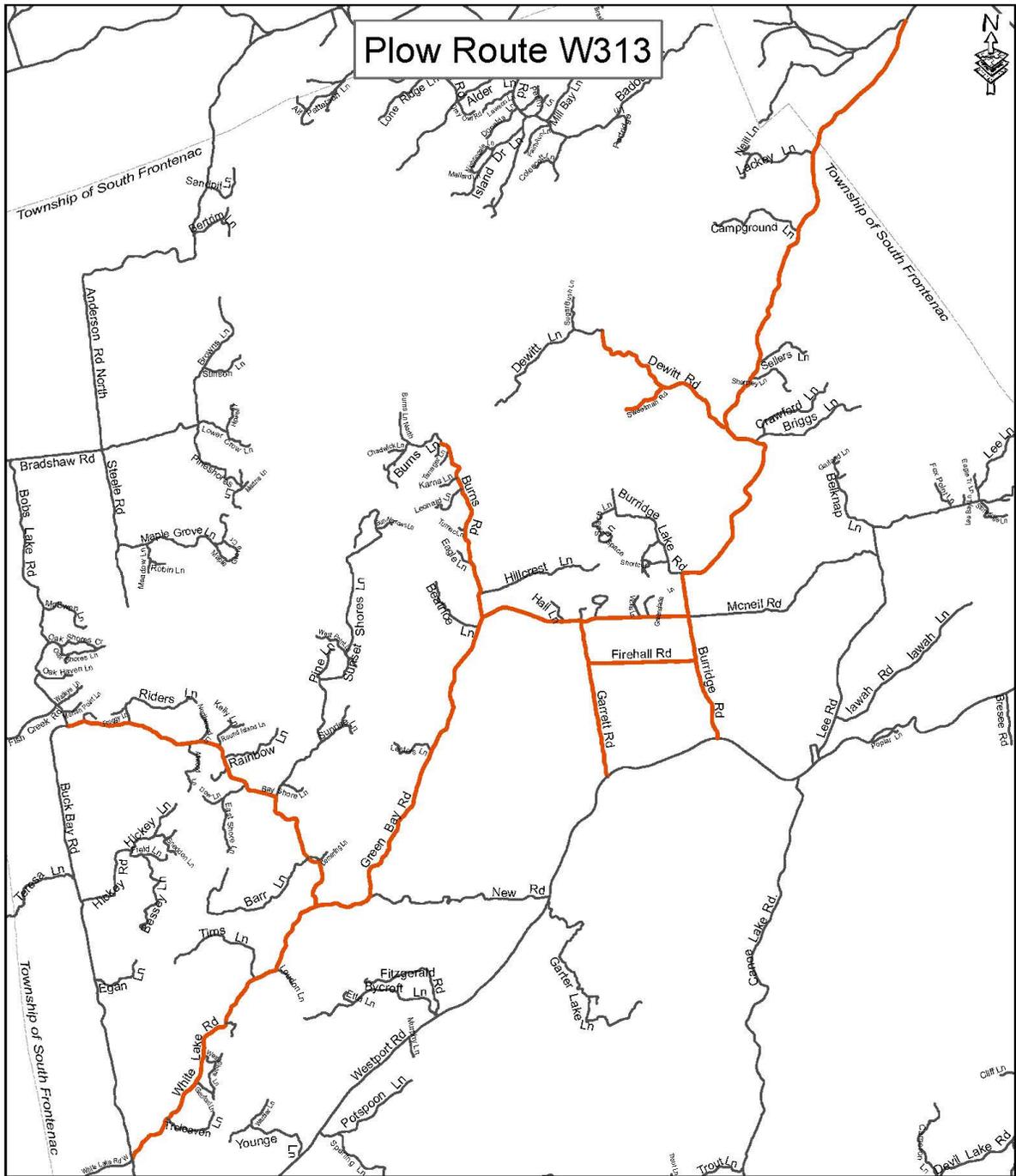


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Winter Maintenance Procedural Plan – May 2018

South Frontenac Township
Winter Maintenance Operations

Westport Yard

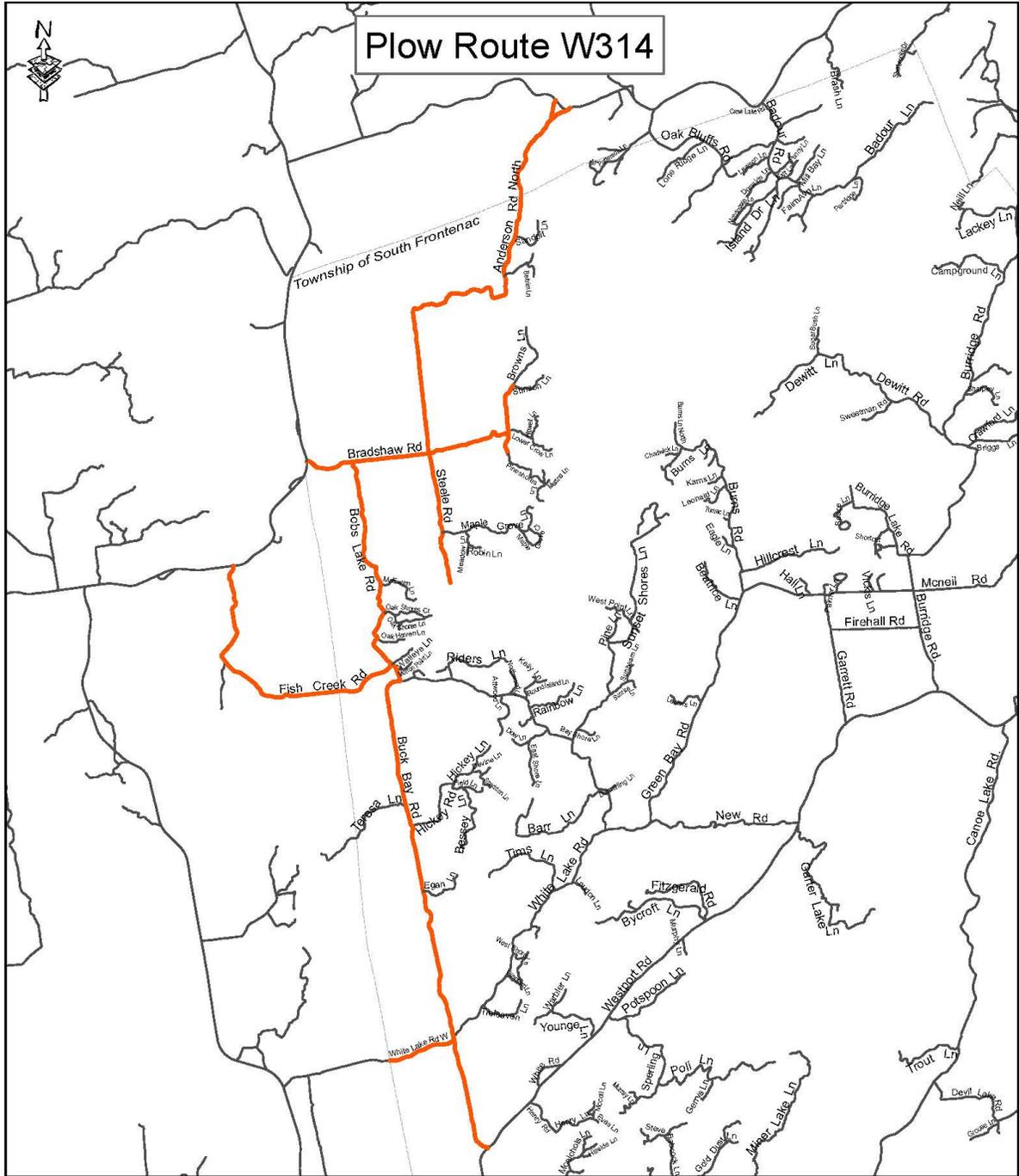


Plow Route W313

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South Frontenac Township
Winter Maintenance Operations

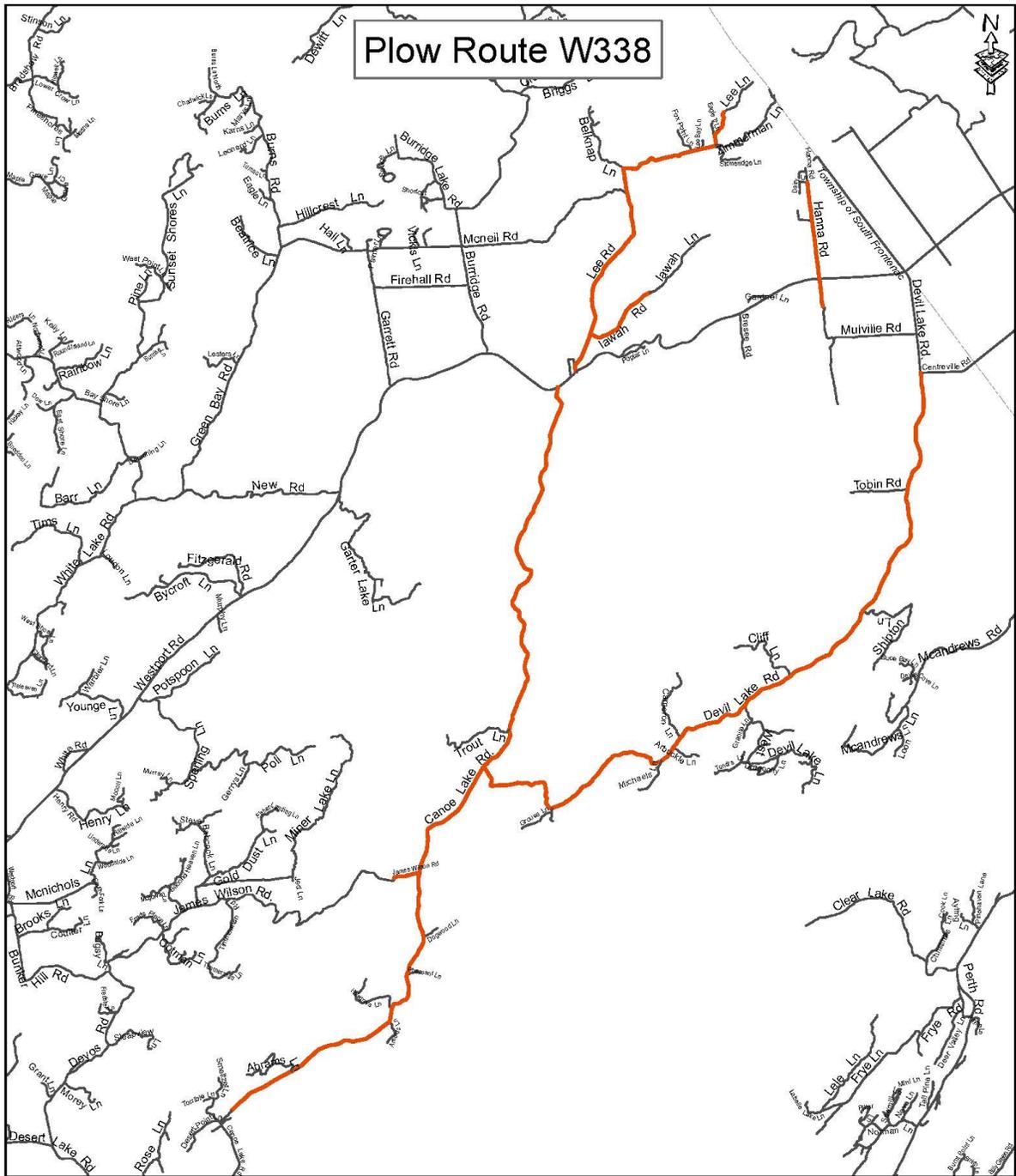
Westport Yard



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South Frontenac Township Winter Maintenance Operations

Westport Yard

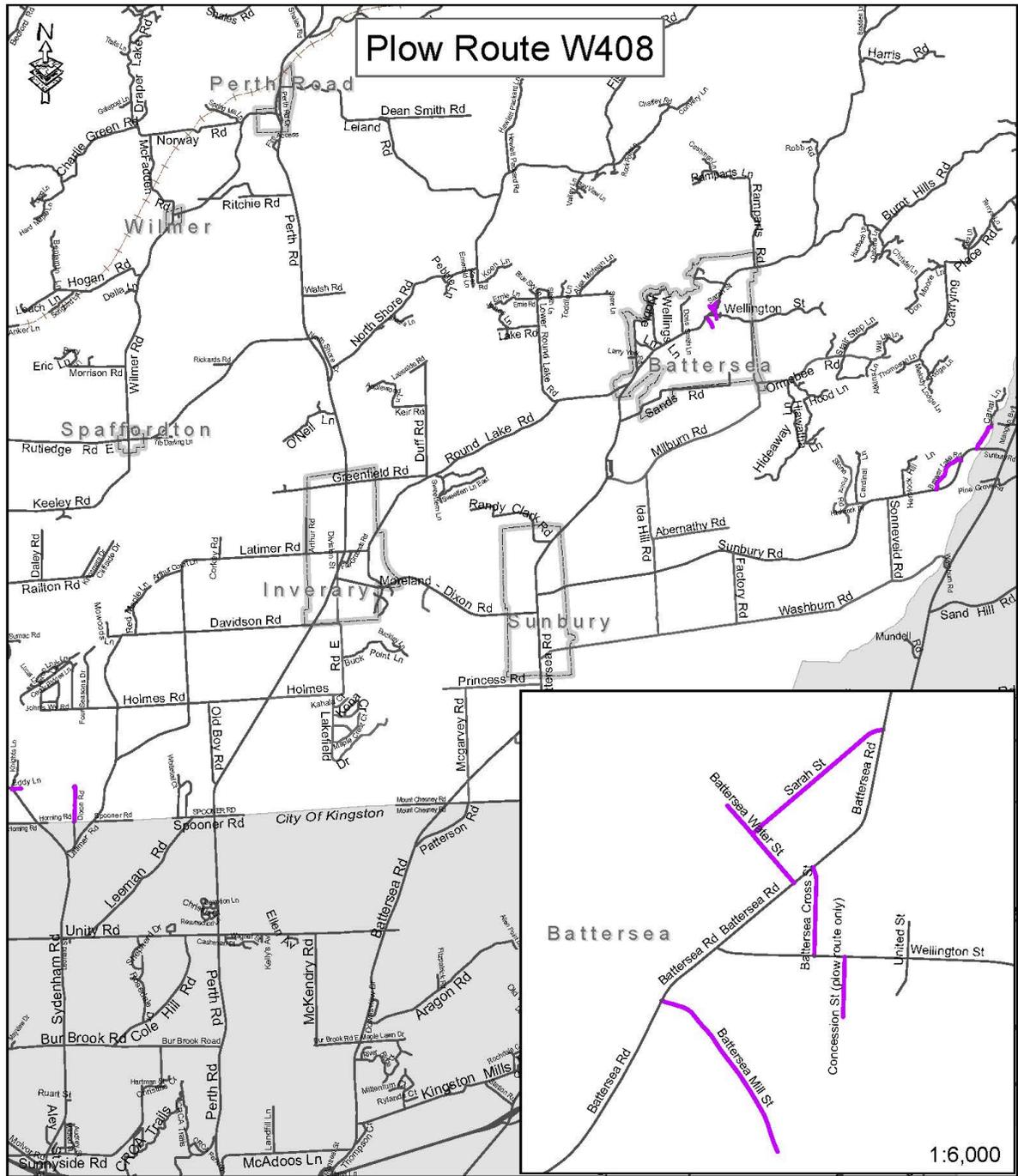


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Winter Maintenance Procedural Plan – May 2018

South Frontenac Township Winter Maintenance Operations

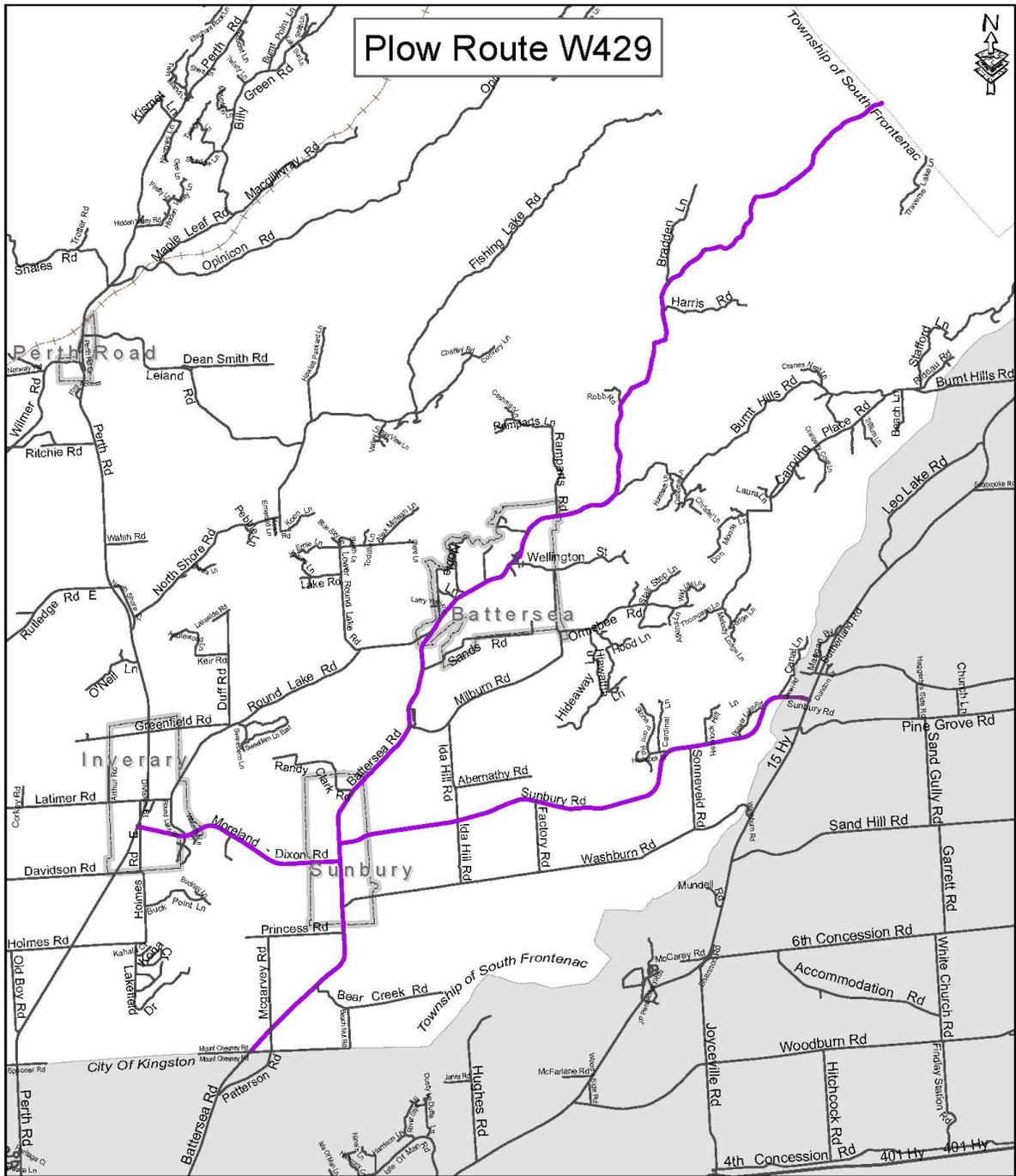
Sunbury Yard



Winter Maintenance Procedural Plan – May 2018

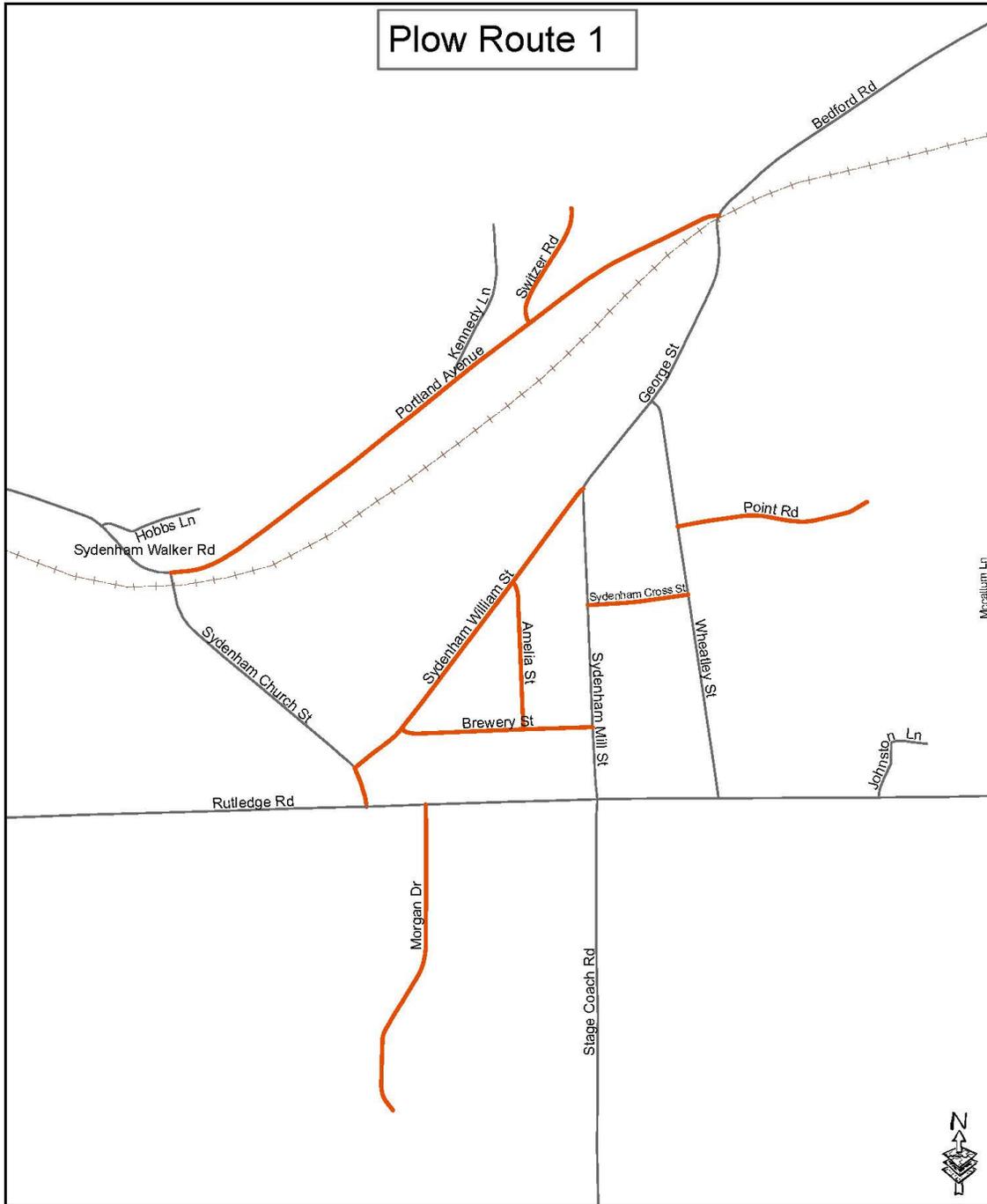
South Frontenac Township
Winter Maintenance Operations

Sunbury Yard



South Frontenac Township
Winter Maintenance Operations

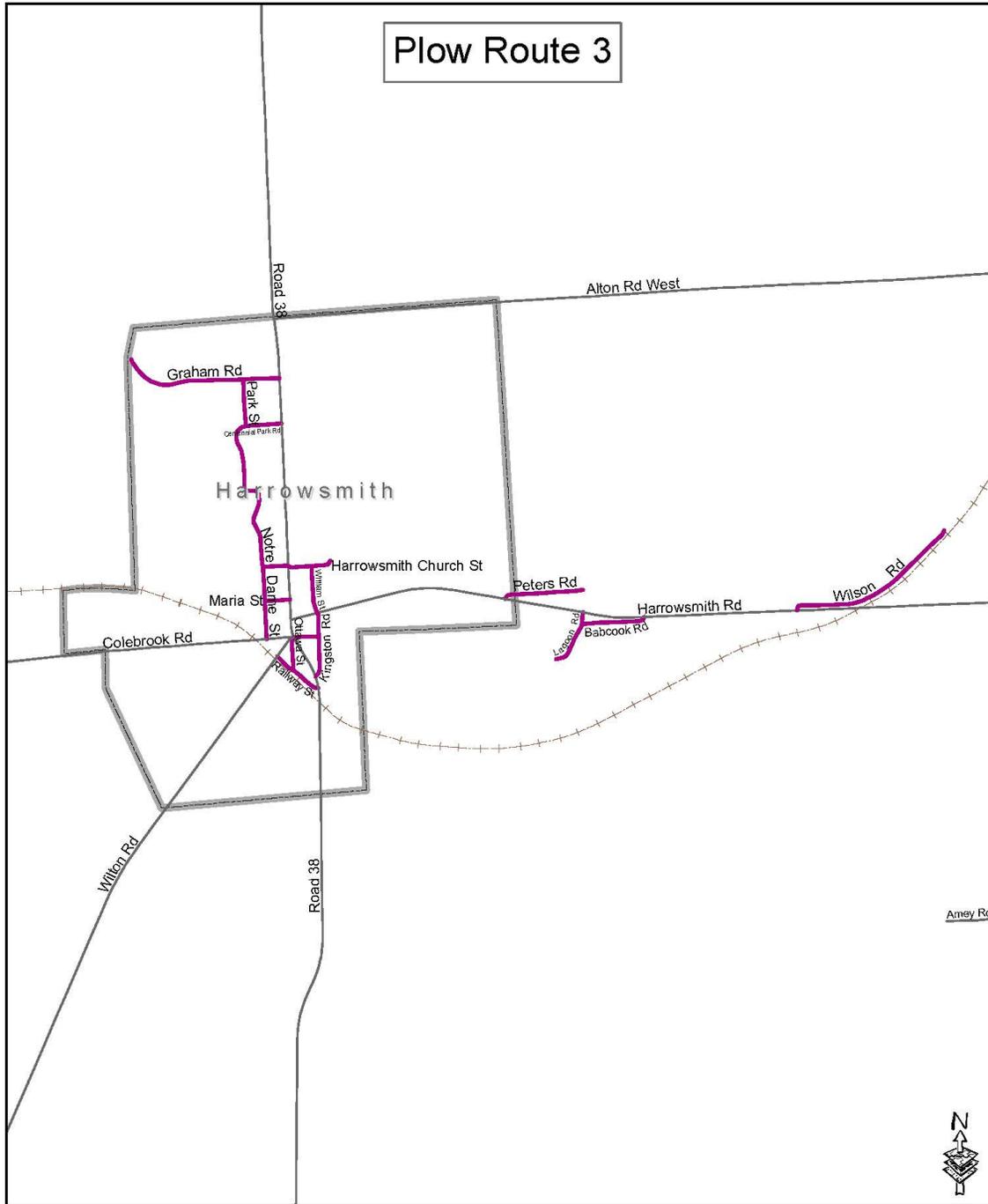
Keeley Yard



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Winter Maintenance Procedural Plan – May 2018

South Frontenac Township
Winter Maintenance Operations
Portland District



Plow Route 3

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Winter Maintenance Procedural Plan – May 2018

South Frontenac Township
Winter Maintenance Operations

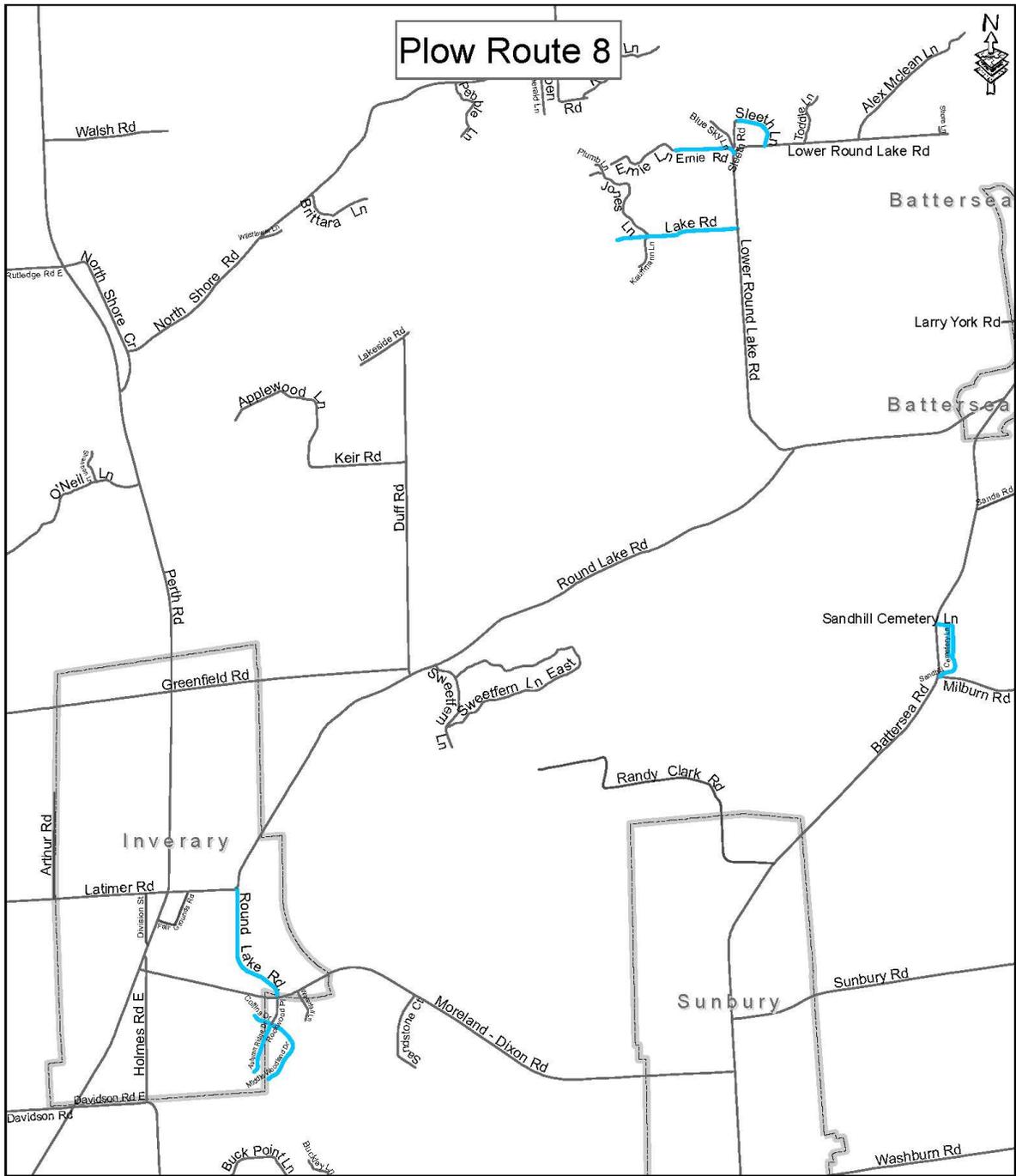
Storrington District



Winter Maintenance Procedural Plan – May 2018

South Frontenac Township
Winter Maintenance Operations

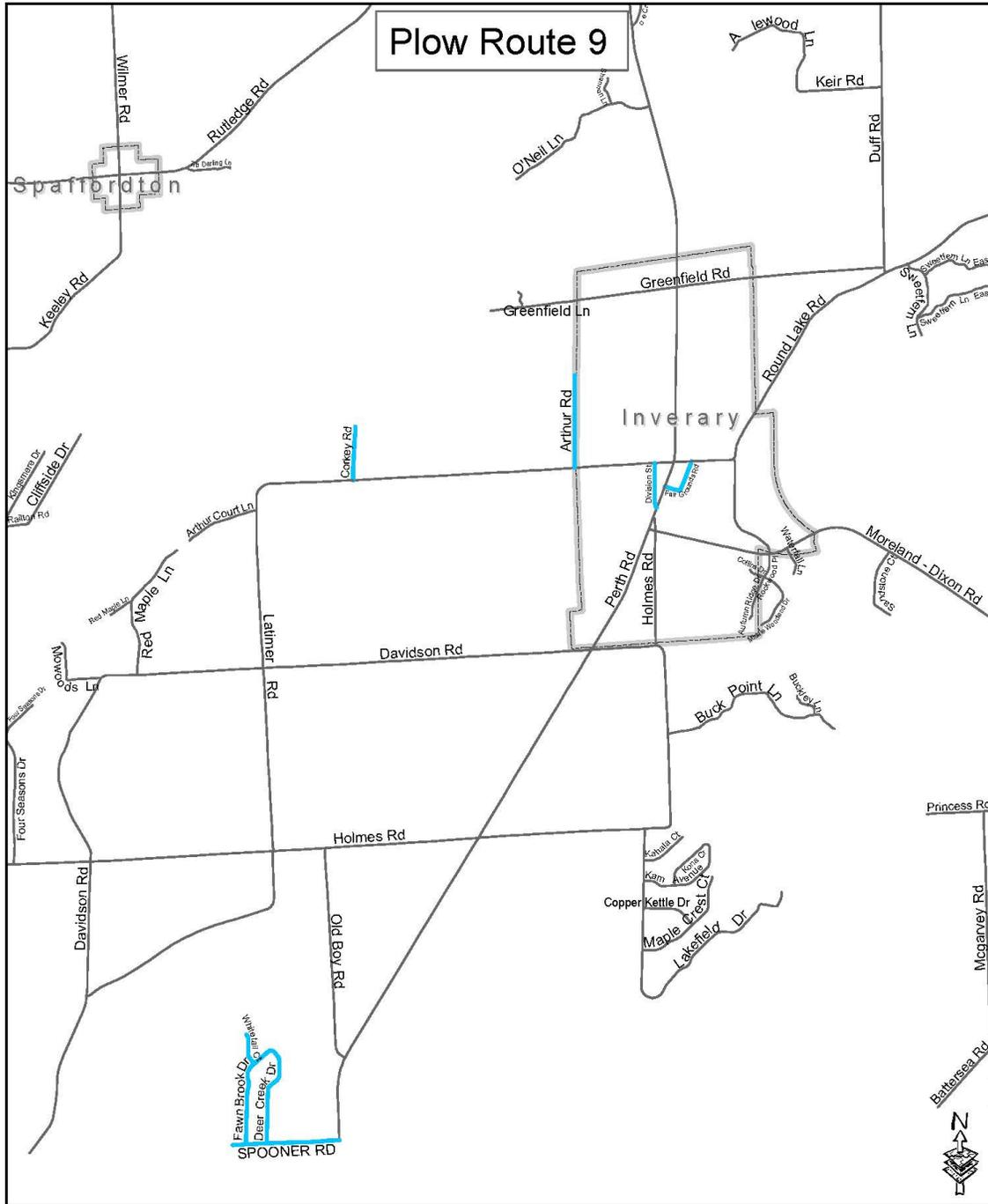
Storrington District



Winter Maintenance Procedural Plan – May 2018

South Frontenac Township
Winter Maintenance Operations

Storrington District



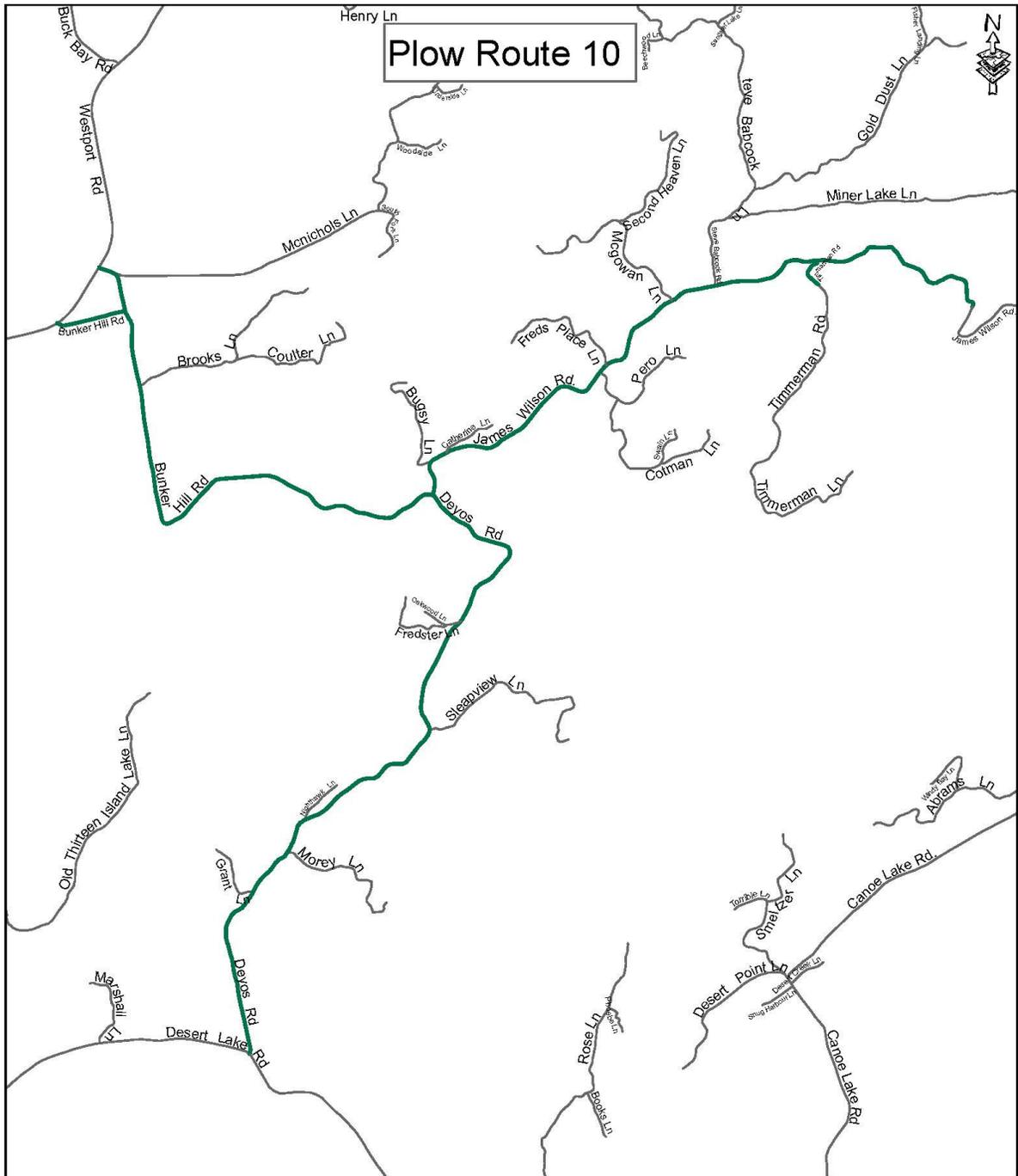
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Winter Maintenance Procedural Plan – May 2018

South Frontenac Township
Winter Maintenance Operations

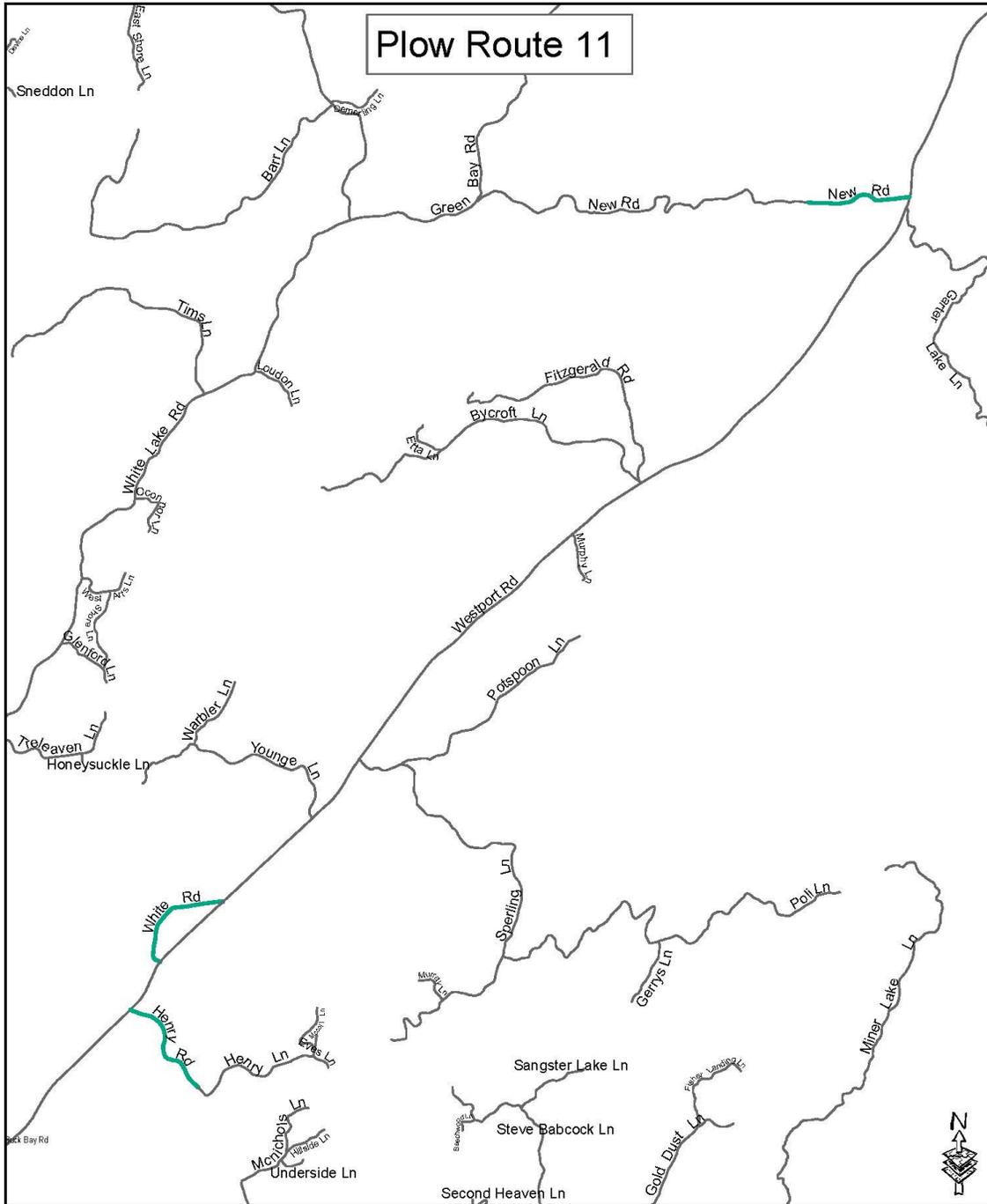
Bedford District



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South Frontenac Township
Winter Maintenance Operations

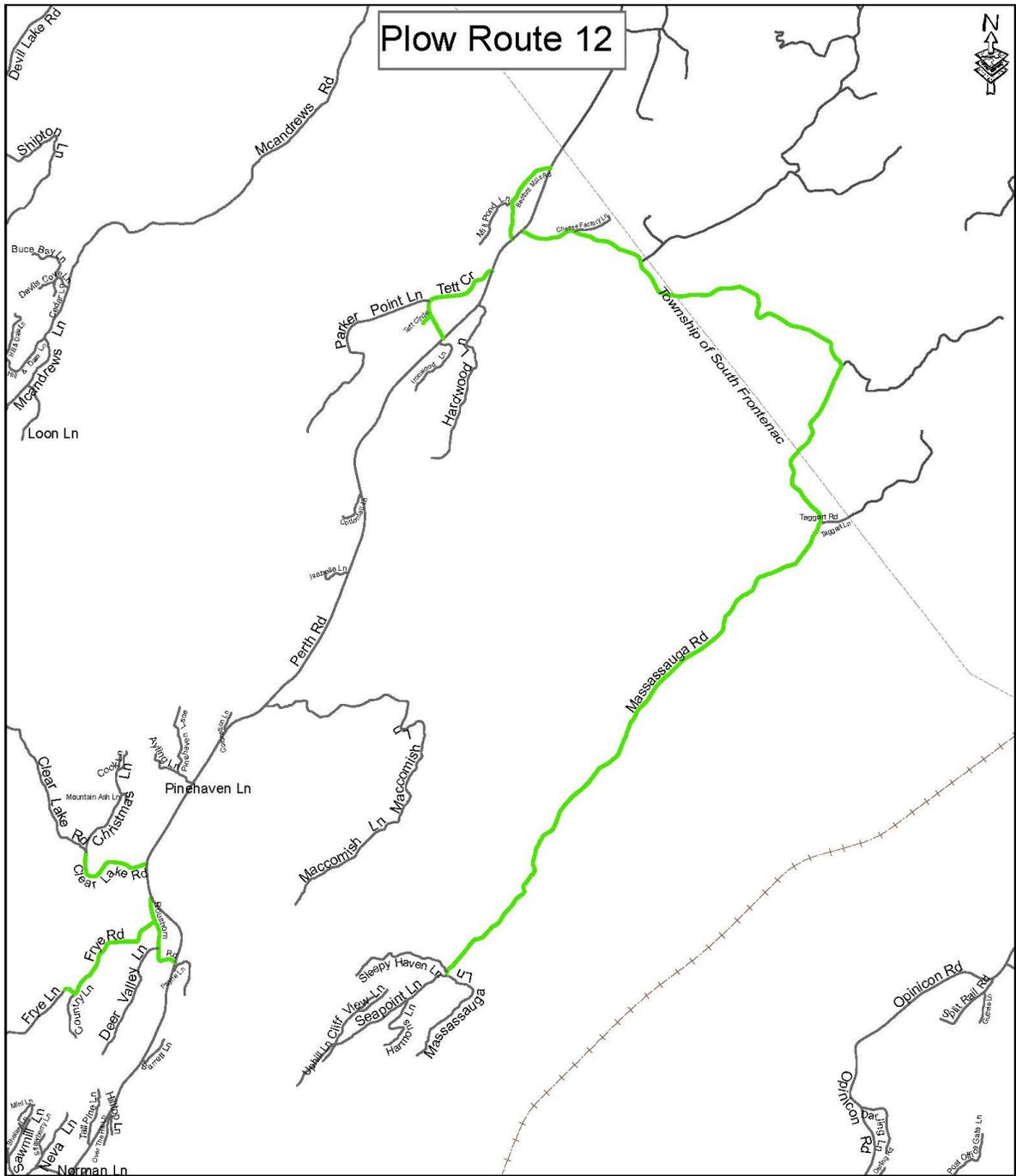
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South Frontenac Township Winter Maintenance Operations

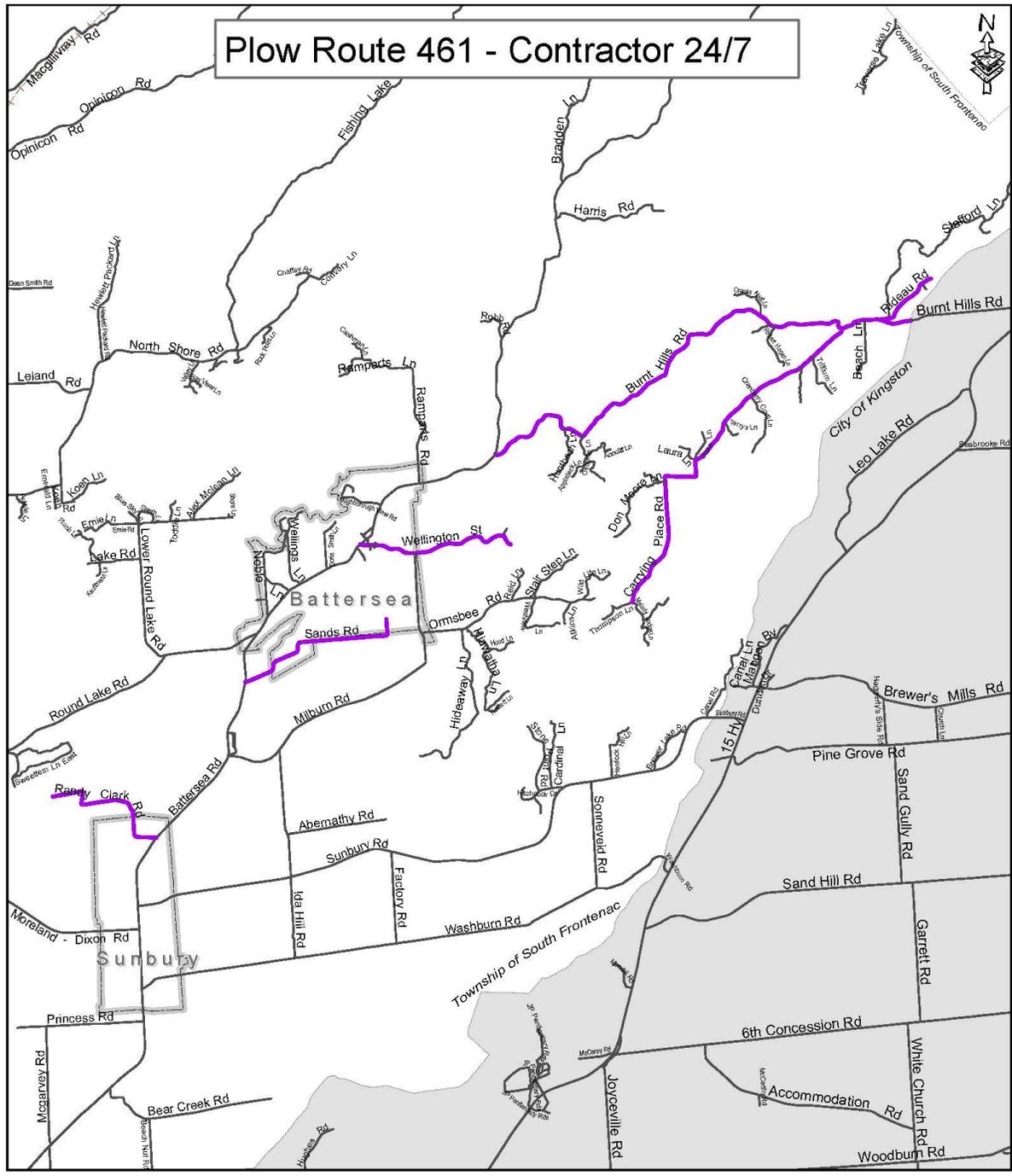
Bedford District



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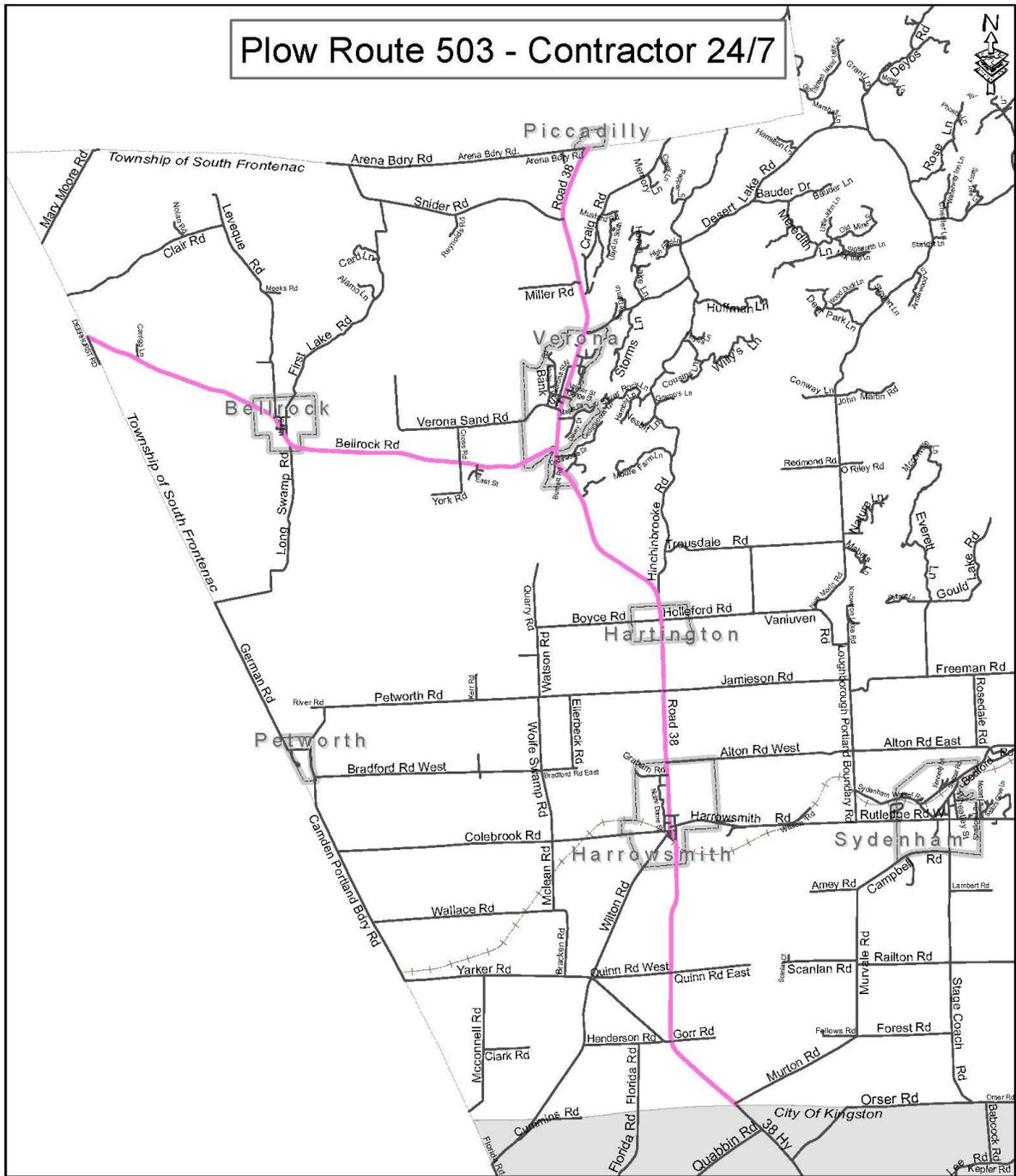
Winter Maintenance Procedural Plan – May 2018

South Frontenac Township
Winter Maintenance Operations
Sunbury Yard



Winter Maintenance Procedural Plan – May 2018

South Frontenac Township
Winter Maintenance Operations
Hartington Yard

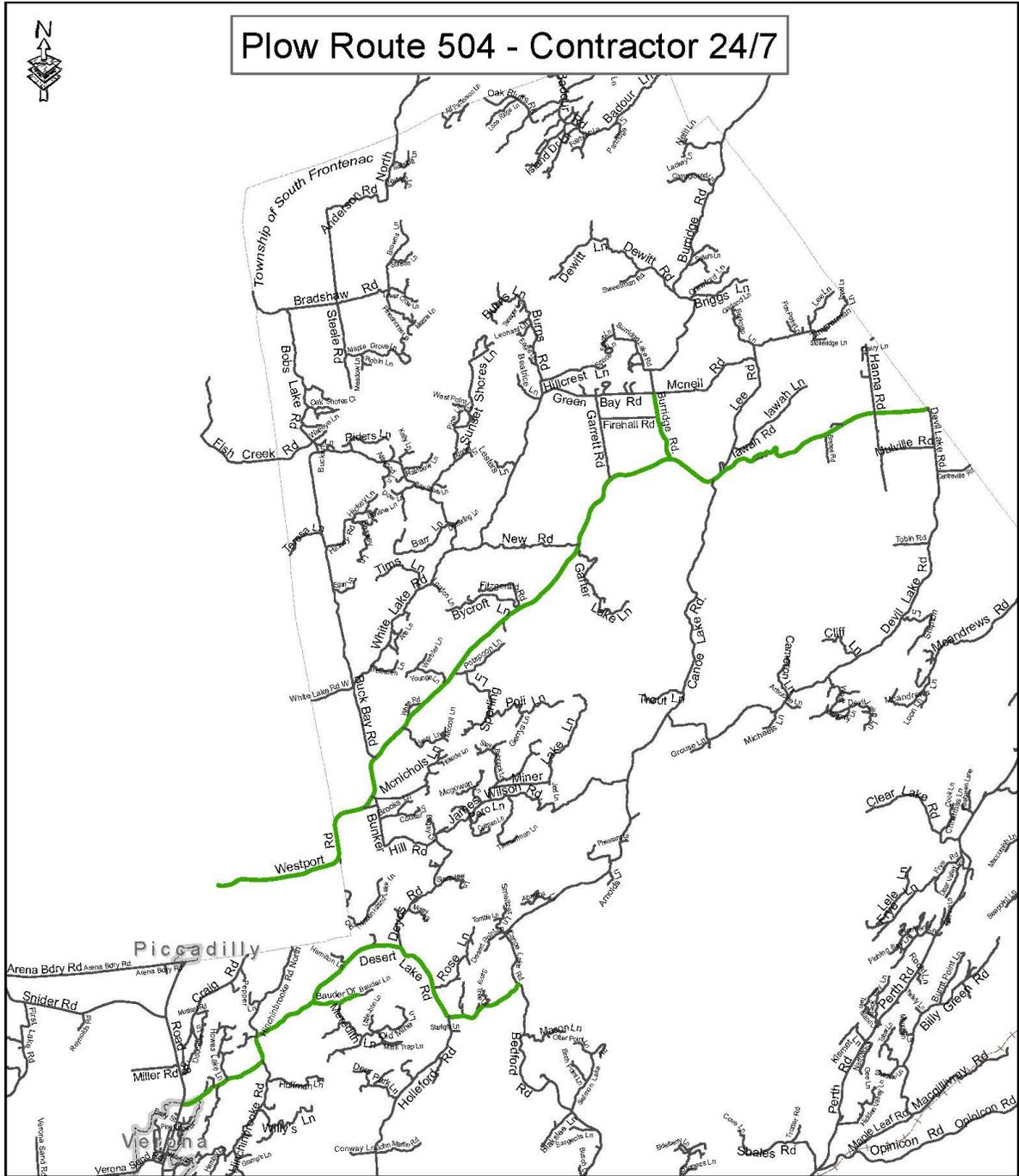


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Winter Maintenance Procedural Plan – May 2018

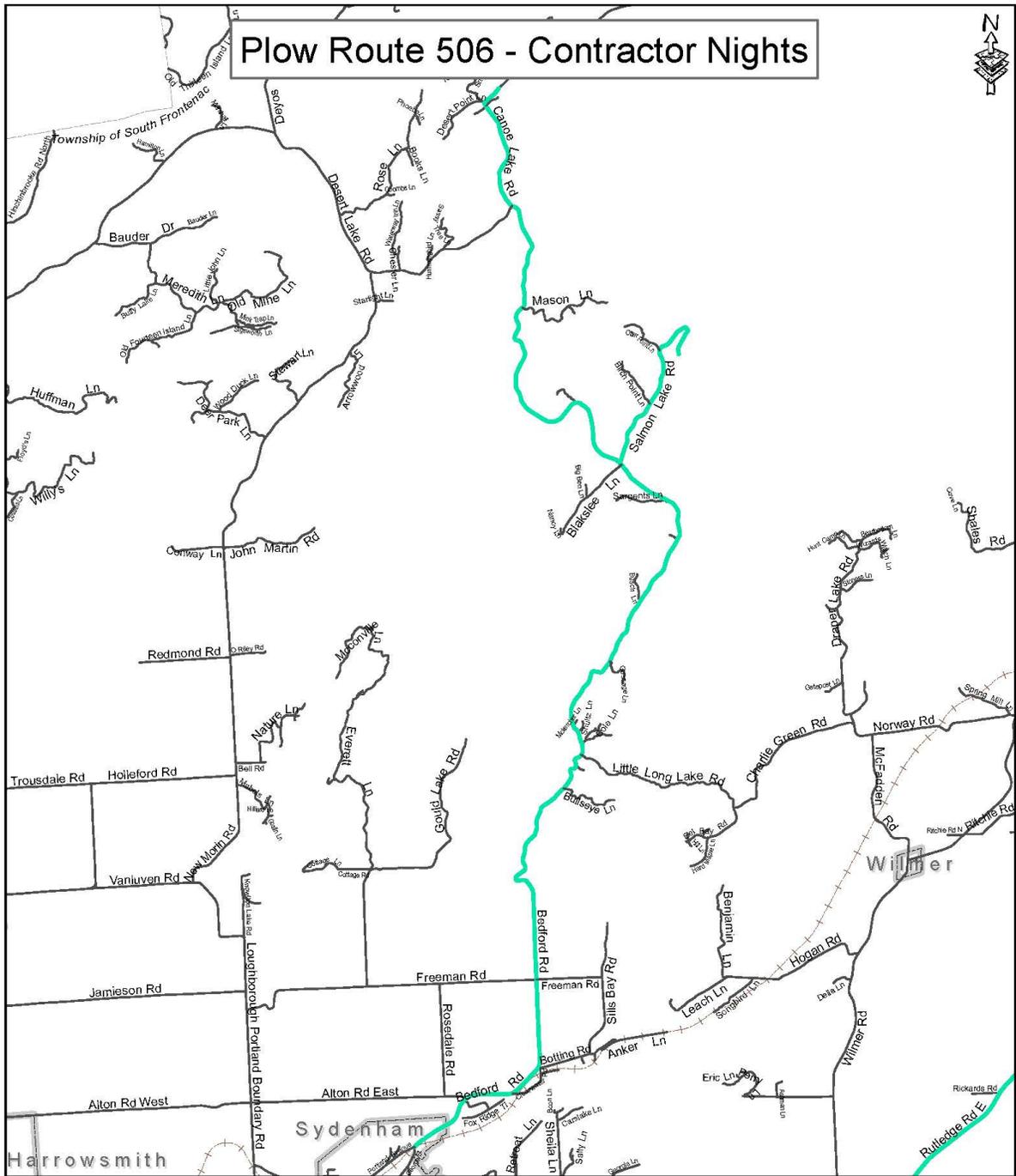
South Frontenac Township
Winter Maintenance Operations

Westport Yard



Winter Maintenance Procedural Plan – May 2018

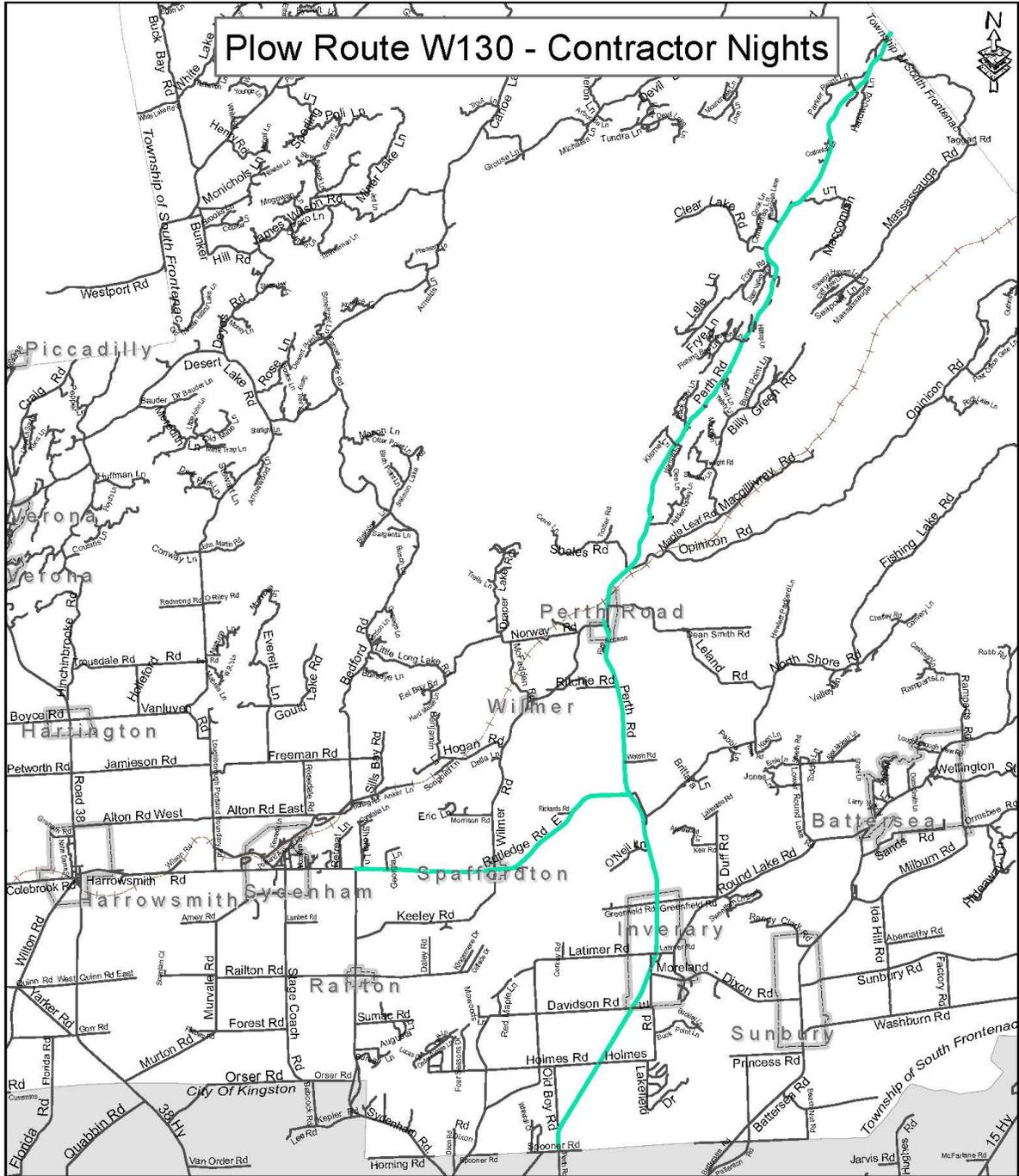
South Frontenac Township
Winter Maintenance Operations
Keeley Yard



Winter Maintenance Procedural Plan – May 2018

South Frontenac Township
Winter Maintenance Operations

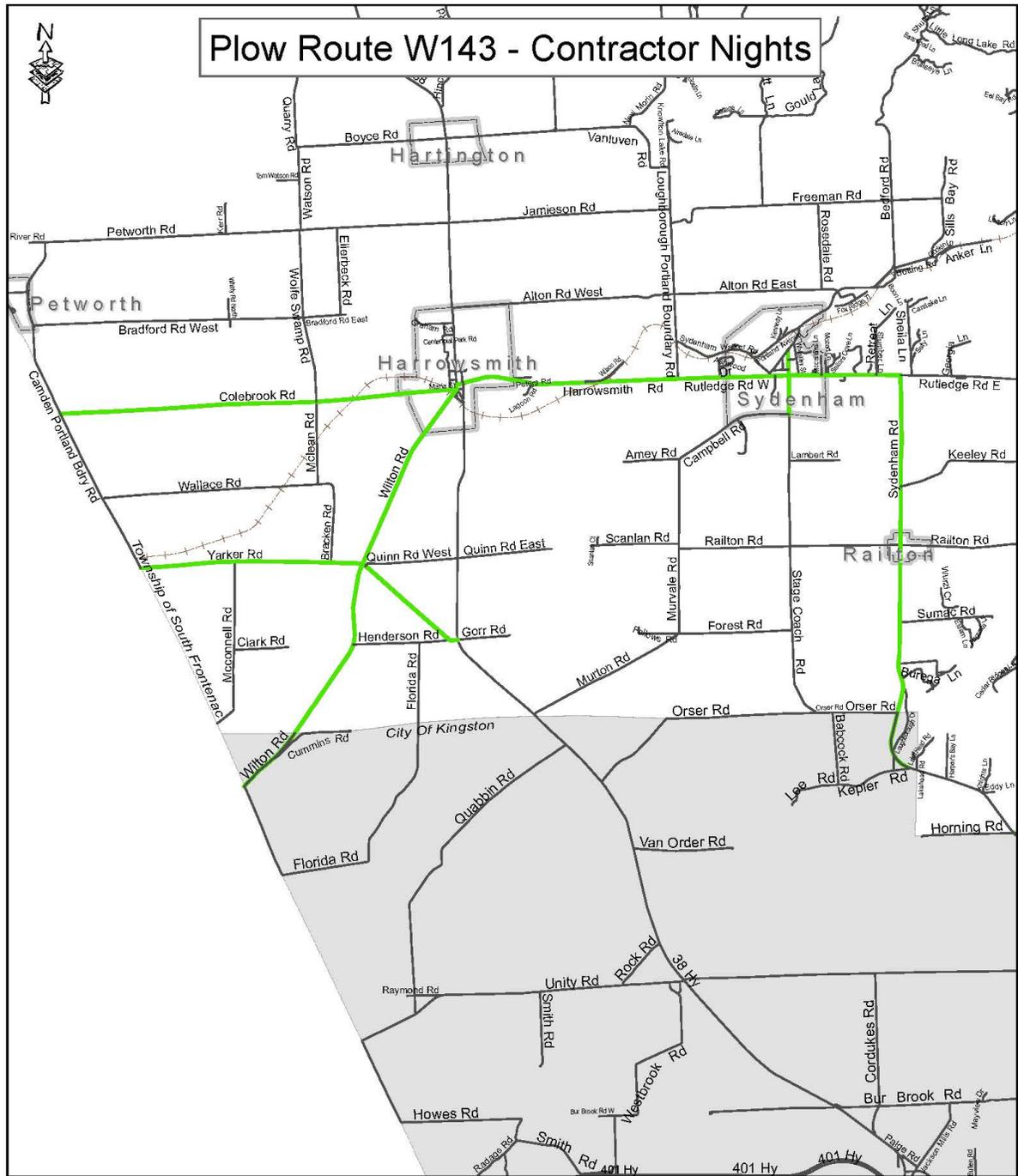
Keeley Yard



Winter Maintenance Procedural Plan – May 2018

South Frontenac Township
Winter Maintenance Operations

Keeley Yard

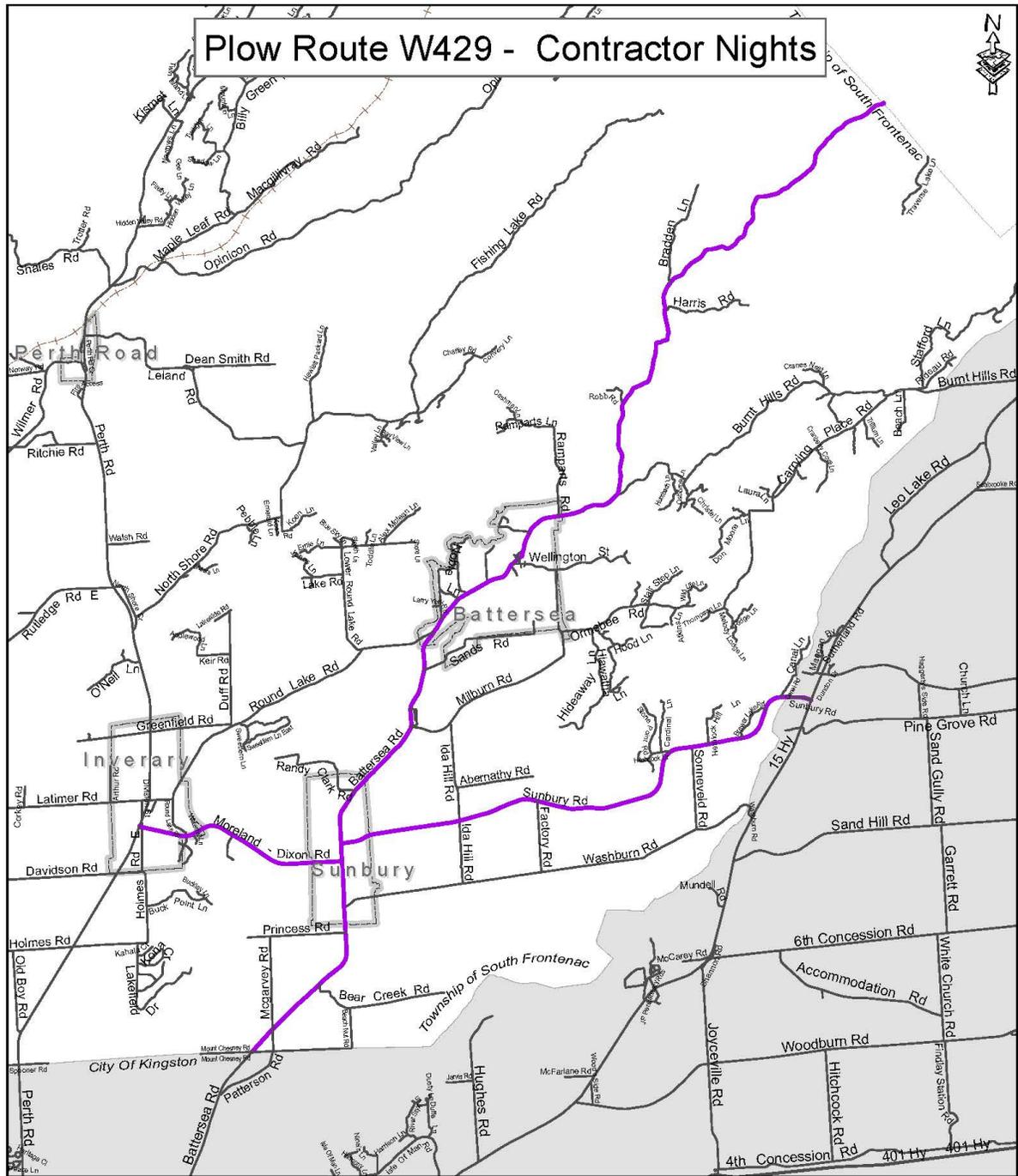


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Winter Maintenance Procedural Plan – May 2018

South Frontenac Township
Winter Maintenance Operations

Sunbury Yard



Insert Snow plow Route W combined

Appendix “F”

Snow Plow Routes and Road Names in House and Contractor

SNOW PLOW ROUTES

KEELEY YARD

W105 Unit #26

W126 Unit #46

W110 Unit #29

W128 Unit #42

W116 Unit #69

W130 Unit #60

W117 Unit #16

W143 Unit #43

W101 SIDE WALKS (SYDENHAM)

W102 Unit #41

PORTLAND YARD

W201 Unit #36

W227 Unit #27

W207 Unit #44

W237 SIDEWALKS (VERONA)

W236 Unit #57

W238 SIDEWALKS (H'SMITH)

W242 Unit #8

BEDFORD YARD

W313 Unit #14

W338 Unit #38

W314 Unit #47

W308 Unit #2

SUNBURY YARD

W429 Unit #45

W408 Unit #41

W423 Unit #53

W401 SIDEWALKS (SUNBURY/BATTERSEA)

W402 SIDEWALKS (INVERARY)

SNOW PLOW ROUTES KEELEY YARD

IN HOUSE

W105 #26 - Orser Rd (Rd 9 to Stagecoach Rd), Stagecoach Rd, Railton Rd, Lambert Rd, Campbell Rd, Amey Rd, Scanlan Rd, Fellows Rd, Murvale Rd, Murton Rd, Forest Rd, Country Woods Drive, Loughborough Drive, Sumac Rd, Vienna Crescent, Dailey Rd, Cliffside Drive, Kingsmere Drive

W110 #29 - Keeley Rd, Park Valley Rd, Meadow Ridge Drive, Wilmer Rd, Ritchie Rd, McFadden Rd, Norway Rd, Charlie Green Rd, Eel Bay Rd, Shales Rd, Perth Rd Crescent, Hogan Rd, Morrison rd.

W116 #69 - Wheatley Street, Bedford Rd, Salmon Lk Rd, Canoe Lk Rd (from rd. 19 to Snug Harbour Church), Cemetary Rd, Walker Rd, Alton Rd East, Fox Ridge Drive, Deer Runway Drive, Clearwater Rd, Botting Rd, Sills Bay Rd, Freeman Rd, Gould Lk Rd, Cottage Lane, Rosedale rd.

W117 #16 - North Shore Crescent, North Shore Rd, Leland Rd, Opinicon Rd, Indian Lk Rd, Maple Leaf Rd, MacGillivery Rd, Billy Green Rd

W126 #46 - Latimer Rd, Holmes Rd West, Old Boy Rd, Davidson Rd West, Round Lk Rd, Lower Round Lk Rd, Duff Rd, Lakeside Rd, Greenfield Rd, Four Season Drive, Silverwood Estate Drive, Johns Way Rd, Heska Crescent

W128 #42 - Coupland Rd, Rickards Rd, Walsh Rd, Asselstine Rd, Ritchie Rd North, Trotter Rd, Hidden Valley Rd, Dean Smith Rd, Hewlett Packard Rd, Keon Rd

W130 #60 - Rutledge Rd (Rd 9 East), Perth Rd

W143 #43 - Sydenham Rd, Rutledge Rd (Rd 9 West), Mill St (to Beer Store), Stagecoach Rd (from Rd 5 to Firehall), Harrowsmith Rd, Wilton Rd, Yarker Rd, Colebrooke Rd West

W102 #41- Sydenham Cemetery, Darling Rd, Cat Trail Parking, Buck & Loughborough Lk Boat Ramp & Dry Hydrant

**SNOW PLOW ROUTES
HARTINGTON YARD
IN HOUSE**

W201 #36 - Quinn Rd West, Henderson Rd, Florida Rd, Gorr Rd, Quinn Rd East Boyce rd., Quarry rd. & Fire Hydrant, Watson Rd, Tom Watson, Cedarwood Drive, Valleyview Drive, Forest Hill Place, Maple Drive, Davey Drive, Carleton Drive, Lakeview Drive, Pine Ridge Drive, Bank Street, Revell Rd, McMahon Drive, Verona St South

W207 #44 - Hinchinbrooke Rd, Craig Rd, Arena Boundary, Snider Rd, Miller Rd, Verona Sands Rd, Cross Rd, First Lk Rd, Leveque Rd, Clair Rd, Mary Moore Rd, York Rd

W236 #57 - Trousdale Rd, Holleford Rd, New Morin Rd, Vanluven Rd, Jamieson Rd, Alton Rd, Loughborough/Portland Boundary Rd, Redmond Rd, John Martin Rd, O'reilly Rd, Bell Rd

W227 #27 - Petworth Rd, Kerr Rd, River Rd, Long Swamp Rd, Garrison Court, Camden/Portland Boundary Rd, McConnell Rd, Clarke Rd, Wallace Rd, Bracken Rd, Mclean Rd, Bradford Rd, Whittey Rd, Wolfe Swamp Rd, Ellerbeck Rd

W242 #8 - Burnett Rd, Genge Street, Water Street, Cemetery Rd, Salmon Drive, Killdeer Drive, Easy Street, Verona Street North, Short Street, Station Street, Walker Street, Robinson Rd, Harrowsmith Cemetery, Hartington Parking Lot, Parking Lot Verona, Verona Dry Hydrant, Verona Cemetery

**SNOW PLOW ROUTES
WESTPORT ROAD YARD
IN HOUSE**

W313 #14 - White Lk Rd, Green Bay Rd, Burns Rd, Garrett Rd, Firehall Rd, Burr ridge Rd, Dewitt Rd, Sweetman Rd

W314 #47 - Buck Bay Rd, Bobs Lk Rd, Bradshaw Rd, Steele Rd, Pine Shores Lane, Anderson Rd, Fish Creek Rd, White Lk Rd West

W338 #38 - Canoe Lk Rd, James Wilson Rd East, Devil Lk Rd, Hanna Rd, 12 Concession Rd, Lee Rd, Iawah Rd

W308 #2 - Burr ridge Lk Rd, Haughton Rd, Breese Rd, Hanna Rd (last 300 m), Tobin Rd, James Wilson Rd (last 600m), Hickey Rd, Bradshaw Firehall, Burr ridge Firehall, Fermoy Hall, Glendower Hall

SNOW PLOW ROUTES

SUNBURY YARD

IN HOUSE

W429 # 45 - Battersea Rd, Moreland Dixon Rd, Sunbury Rd

W423 #53 - Holmes Rd East, Davidson Rd East, Lakefield Drive, Copper Kettle Drive, Maple Crest Drive, Kam Ave, Kahala Court, Sandstone Court, Milburn Rd, Ormsbee Rd, Ida Hill North, Abernathy Rd, Washburn Rd, Sonneveld Rd, Factory Rd, Ida Hill Rd South, Princess Rd, McGarvey Rd, Frontenac Rd, Mount Chesney Rd, Bear Creek Rd, Hitchcock Rd, Stone Point Rd, Maple Hill Way Rd

W408 #3 - Eddie Lane, Dixon Rd, Willowbrooke Dr, Summerside Dr, Water St, Sarah St, Cross St, Concession St, Canal Rd, Brewer Lk Rd

SNOW PLOW ROUTES CONTRACTOR LOCAL ROADS
24/7

Plow Route 1- Portland Avenue, William Street, Amelia Street, Brewery Street, Cross Street, Point Rd, Morgan Rd, Switzer Rd

Plow Route 2- Draper Lake Rd, Little Long Lake Rd (East&West)

Plow Route 3- Wilson Rd, Babcock Rd, Lagoon Rd, Peters Rd, Kingston Rd, Maria Street, Park Street, William Street, Railway Street, Notre Dame Street, Ottawa Street, Harrowsmith Church Street, Colebrooke Rd East, Centennial Park Rd, Graham Rd

Plow Route 4- Depot Street, Percy Street, Goodrich Street, Bellrock Mill Street (East&West), Bellrock Pepper Street(East&West), Nolan Rd, Meeks Rd, Bellrock Pero Rd, Deerhurst Rd, Leveque Rd North

Plow Route 5- Hinchinbrooke Rd North, Masonville Rd, Mallen Rd, Mustard Rd, Reynolds Rd

Plow Route 6- Ramparts Rd, Loughborough View Dr, United St, Bradden Rd, Harris Rd, Larry York Rd, Kellar Rd, Sandhill Cemetery Rd

Plow Route 7- Wellington Street, Burnt Hills Rd, Carrying Place Rd, Rideau Rd, Sands Rd, Randy Clarke Rd

Plow Route 8- Round Lk Rd (from rd. 12 to Latimer), Middle Woodland Drive, Autumn Ridge Drive, Collins Drive, Sleeth Lane (In 50 M from Lower Round Lk Rd), Lake Rd, Ernie Rd

Plow Route 9- Fair Grounds Rd, Division Street, Arthur Rd, Corkey Rd (In 100m from Latimer Rd), Spooner Rd West, Deer Creek Drive, Fawn Brooke Drive, White Tail Court,

Plow Route 10- Bunker Hill Rd, Deyos Rd, James Wilson Rd (to civic #697 from Deyo, Rd), Timmerman Rd (in 200m from James Wilson Rd)

Plow Route 11- Henry Rd, White Rd, New Rd (in 800m from Rd8)

Plow Route 12- Massassauga Rd, Roushorn Rd, Frye Rd, Clear Lk Rd, Bedford Mills Rd

MULROONEY TRUCKING - CONTRACTOR ROUTES

Route #	Patrol Yard
W130	Keeley Yard
W143	Keeley Yard
503A	Hartington Yard
503B	Hartington Yard
504A	Bedford Yard
504B	Bedford Yard
506	Keeley Yard
429	Storrington Yard
461	Storrington Yard
151	Keeley Yard
Spares	Keeley Yard

**SNOW PLOW ROUTES
KEELEY RD YARD
CONTRACTOR ARTERIAL ROADS
MULROONEY NIGHTS**

5:00PM TO 5AM

ROUTE W130 Rutledge Rd (from RD 9 East), Perth Rd

ROUTE W143 Sydenham Rd, Rutledge Rd West, Mill Street (to Beer Store), Stagecoach Rd (from Rd 5 to Firehall), Harrowsmith Rd, Wilton Rd, Yarker Rd, Colebrooke Rd West

ROUTE 506 Wheatley Street, Bedford Rd, Salmon Lk Rd. Canoe Lk Rd (from Rd19 to Snug Harbour Church)

**SNOW PLOW ROUTES
HARTINGTON YARD
ARTERIAL RD CONTRACTOR
MULROONEY NIGHTS**

24/7

ROUTE 503 Rd 38, Bellrock Rd

**SNOW PLOW ROUTE
WESTPORT RD YARD
ATERIAL RD CONTRACTORS
MULROONEY**

24/7

ROUTE 504 Westport Rd, Burr ridge Rd (in to Green Bay Rd) Desert Lk Rd, Bauer Drive,

**SNOW PLOW ROUTES
SUNBURY YARD**

ARTERIAL RD CONTRACTOR

**MULROONEY NIGHTS
5:00PM TO 5:00AM**

ROUTE 429 Battersea Rd, Moreland Dixon Rd, Sunbury Rd

Winter Maintenance Procedural Plan – May 2018

6.7 Appendix “G” Winter Maintained Sidewalks

Village	Street	Side of Road	Length (m)	From	To
Battersea	Battersea Road	East	124	Battersea Cross	Sarah Street
	Battersea Road	West	138	Wellington St	Battersea Water St
	Battersea Road	West	207	Battersea Water St	Sarah Street
	Wellington St	South	169	Battersea Road	Battersea Cross
	Battersea Cross St	East	76	Battersea Road	Wellington St
	Battersea Water St	West	114	Battersea Road	Sarah Street
Bellrock	Main Street	West	335	Bellrock Road	First Lake Road
	Mill Street	North	203	Bellrock Road	Mill Street
	Leveque Street	East	88	Mill Street	Leveque Street
Harrowsmith	Road 38	East	85	Colebrook Road E	Harrowsmith Rd
	Road 38	East	71	Harrowsmith Rd	Church St (Harrow)
	Road 38	East	50	Church St (Harrow)	50m N of Church St
	Road 38	West	50	Church St (Harrow)	50m N of Church St
	Road 38	West	150	Colebrook Road	Maria Street
	Road 38	West	137	Maria Street	Church St (Harrow)
	Colebrook Road	North	92	Road 38	Notre Dame St
	Colebrook Road	North	49	Notre Dame St	Notre Dame St
	Colebrook Road	South	640	Road 38	Notre Dame St
	Harrowsmith Rd	North	228	William Street	William Street
	Harrowsmith Rd	North	94	William Street	Road 38
	Harrowsmith Rd	South	226	William Street	William Street
	Harrowsmith Rd	South	105	William Street	Road 38
	Church St (Harrow)	North	152	Road 38	William Street
	Church St (Harrow)	North	83	Notre Dame St	Road 38
	Church St (Harrow)	South	83	Notre Dame St	Road 38
	William Street	East	190	Church Street	William Street
	Maria Street	South	95	Road 38	Notre Dame St
	Notre Dame St	West	151	Maria Street	Colebrooke
	Kingston Rd	East	128	Colebrook Rd E	Road 38
	Robinson Rd	East	85	Colebrook Rd W	Wilton Rd
Wilton Rd	West	299	Hwy 38	Catholic School	
Hartington	Road 38	West	99	Boyce Road	Boyce Road
	Boyce Road	South	184	Road 38	Boyce Road
	Holleford Road	North	149	Road 38	Road 38

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Inverary	Perth Road 10	East	325	Holmes Road	Fairgrounds Rd
	Perth Road 10	East	241	Fairgrounds Rd	Latimer Road
	Perth Road 10	West	187	Division Street	Latimer Road
	Latimer Road	South	119	Perth Road 10	Fairgrounds Rd
	Latimer Road	South	125	Perth Road 10	Division Street
Perth Rd Village	Perth Road Cres	West	150	Perth Road 10	Wilmer Road
	Perth Road Cres	East	450	Wilmer Road	Perth Road 10
	Wilmer Road	South	50	Perth Road 10	Perth Road 10
Sunbury	Battersea Road	East	505	Moreland Dixon	Sunbury Road
	Battersea Road	West	213	Moreland Dixon	Moreland Dixon
	Battersea Road	West	283	Moreland Dixon	Sunbury Road
Sydenham	Amelia Street	East	196	Brewery Street	Syd William
	Amelia Street	West	185	Brewery Street	Syd William St
	Brewery Street	South	256	Syd William St	Sydenham Mill
	Wheatley Street	West	260	Rutledge Road	Sydenham Cross
	Wheatley Street	West	249	Sydenham Cross	George Street
	Syd William St	North	415	Brewery Street	Sydenham Mill
	Syd William St	South	45	Syd Church St	Rutledge Road
	Sydenham Cross	North	125	Wheatley	Sydenham Mill
	George Street	North	377	Portland	Sydenham Mill
	George Street	South	296	Bedford Road	Wheatley
	Sydenham Mill	East	85	Rutledge Road	Sydenham Cross
	Sydenham Mill	East	247	Sydenham Cross	Syd William St
	Sydenham Mill	West	154	Rutledge Road	Brewery Street
	Sydenham Mill	West	293	Brewery Street	Syd William St
	Rutledge Road	South	300	Syd William St	Stage Coach Rd
	Rutledge Road	North	298	Syd William St	Stage Coach Rd
	Morgan Dr	West	300	Rutledge Rd	End
	Rutledge Road	North	148	Stage Coach Rd	Wheatley St
	Stage Coach Rd	West	242	Rutledge Road	Syd Church St
	Syd William St	North	63	Syd Church St	Brewery Street
Syd William St	South	68	Syd Church St	Brewery Street	
Verona	Road 38	East	147	Sand Road	George Street
	Road 38	East	293	George Street	Water Street
	Road 38	East	139	Water Street	Carleton Drive
	Road 38	East	508	Carleton Drive	Pine Ridge Rd
	Road 38	West	174	Sand Road	Walker Street
	Road 38	West	111	Walker Street	Bank Street
	Road 38	West	783	Bank Street	Pine Ridge Rd
	Road 38	West	103	Pine Ridge Rd	Pine Ridge Rd
	Water Street	North	101	Road 38	Cemetery Road
	Water Street	North	21	Cemetery Road	Cemetery Road

Winter Maintenance Procedural Plan – May 2018

	Genge Street	South	92	Road 38	Road 38
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6.8 Appendix “H”

Road Patrol Schedule and Calendar

November 2017						
Sun	Mon	Tue	Wed	Thu	Fri	Sat
			1	2	3	4
	6	7	8	9	10	11
	13	14	15	16	17	18
19 Night- Patrol A	20 Nights- Patrol A	21 Nights- Patrol A	22 Nights- Patrol B	23 Nights- Patrol B	24 Nights- Patrol B	25 Morn- Patrol C Afternoon- Patrol D Night- Patrol A
26 Morn- Patrol E Afternoon-Patrol F Night- Patrol A	27 Nights- Patrol A	28 Nights- Patrol A	29 Nights- Patrol B	30 Nights- Patrol B	Notes: Daily 6pm to 6 am – Patrol A/B Saturday Morning 6am – 12 pm Patrol C Saturday Afternoon 12 pm – 6 pm – Patrol D Sunday Morning 6am – 12 pm Patrol E Sunday Afternoon 12 pm – 6 pm – Patrol F	

Winter Maintenance Procedural Plan – May 2018

December 2017						
Sun	Mon	Tue	Wed	Thu	Fri	Sat
					1 Nights- Patrol B	2 Morn- Patrol C Aft- Patrol D Night- Patrol B
3 Morn- Patrol E Aft- Patrol F Night- Patrol A	4 Nights- Patrol A	5 Nights- Patrol A	6 Nights- Patrol B	7 Nights- Patrol B	8 Nights- Patrol B	9 Morn- Patrol C Aft- Patrol D Night- Patrol A
10 Morn- Patrol E Aft- Patrol F Night- Patrol A	11 Nights- Patrol A	12 Nights- Patrol A	13 Nights- Patrol B	14 Nights- Patrol B	15 Nights- Patrol B	16 Morn- Patrol C Aft- Patrol D Night- Patrol B
17 Morn- Patrol E Aft- Patrol F Night- Patrol A	18 Nights- Patrol A	19 Nights- Patrol A	20 Nights- Patrol B	21 Nights- Patrol B	22 Nights- Patrol B	23 Morn- Patrol C Aft- Patrol D Night- PATROL A
24 Morn- Patrol E Aft- Patrol F Night- Patrol A	25 Morn-Patrol Draw Aft – Patrol Draw Nights- Patrol A	26 Morn- Patrol Draw Aft- Patrol Draw Nights- Patrol A	27 Nights- Patrol B	28 Nights- Patrol B	29 Nights- Patrol B	30 Morn- Patrol C Aft- Patrol D Night- Patrol B
31 Morn- Patrol E Aft- Patrol F Night- Patrol A	Notes: Daily 6pm – 6am – Patrol A/B Saturday Morning 6am – 12 pm Patrol C Saturday Afternoon 12 pm – 6 pm – Patrol D Sunday Morning 6am – 12 pm Patrol E Sunday Afternoon 12 pm – 6 pm – Patrol F					

Winter Maintenance Procedural Plan – May 2018

◀ Dec 2017 January 2018 Feb 2018 ▶						
Sun	Mon	Tue	Wed	Thu	Fri	Sat
	1 Morn- Patrol Draw After- Patrol Draw Nights- Patrol A	2 Nights- Patrol A	3 Nights- Patrol B	4 Nights- Patrol B	5 Nights- Patrol B	6 Morn- Patrol C Aft- Patrol D Night- Patrol A
7 Morn- Patrol E Aft- Patrol F Night- Patrol A	8 Nights- Patrol A	9 Nights- Patrol A	10 Nights- Patrol B	11 Nights- Patrol B	12 Nights- Patrol B	13 Morn- Patrol C Aft- Patrol D Night- Patrol B
14 Morn- Patrol E Aft- Patrol F Night- Patrol A	15 Nights- Patrol A	16 Nights- Patrol A	17 Nights- Patrol B	18 Nights- Patrol B	19 Nights- Patrol B	20 Morn- Patrol C Aft- Patrol D Night- Patrol A
21 Morn- Patrol E Aft- Patrol F Night- Patrol A	22 Nights- Patrol A	23 Nights- Patrol A	24 Nights- Patrol B	25 Nights- Patrol B	26 Nights- Patrol B	27 Morn- Patrol C Aft- Patrol D Night- Patrol B
28 Morn- Patrol E Aft- Patrol F Night- Patrol A	29 Nights- Patrol A	30 Nights- Patrol A	31 Nights- Patrol A	Notes: Daily 6pm – 6am – Patrol A/B Saturday Morning 6am – 12 pm Patrol C Saturday Afternoon 12 pm – 6 pm – Patrol D Sunday Morning 6am – 12 pm Patrol E Sunday Afternoon 12 pm – 6 pm – Patrol F		

Winter Maintenance Procedural Plan – May 2018

◀ Jan 2018		February 2018					Mrz 2018 ▶
Sun	Mon	Tue	Wed	Thu	Fri	Sat	
				1 Nights- Patrol B	2 Nights- Patrol B	3 Morn- Patrol C Aft- Patrol D Night- Patrol A	
4 Morn- Patrol E Aft- Patrol F Night- Patrol A	5 Nights- Patrol A	6 Nights- Patrol A	7 Nights- Patrol B	8 Nights- Patrol B	9 Nights- Patrol B	10 Morn- Patrol C Aft- Patrol D Night- Patrol B	
11 Morn- Patrol E Aft- Patrol F Night- Patrol A	12 Nights- Patrol A	13 Nights- Patrol A	14 Nights- Patrol B	15 Nights- Patrol B	16 Nights- Patrol B	17 Morn- Patrol C Aft- Patrol D Night- Patrol A	
18 Morn- Patrol E Aft- Patrol F Night- Patrol A	19 Morn- Patrol Draw Aft- Patrol Draw Nights-Patrol A	20 Nights- Patrol A	21 Nights- Patrol B	22 Nights- Patrol B	23 Nights- Patrol B	24 Morn- Patrol C Aft- Patrol D Night- Patrol B	
25 Morn- Patrol E Aft- Patrol F Night- Patrol A	26 Nights- Patrol A	27 Nights- Patrol A	28 Nights- Patrol A	Notes: Daily 6pm – 6 am – Patrol A/B Saturday Morning 6am – 12 pm Patrol C Saturday Afternoon 12 pm – 6 pm – Patrol D Sunday Morning 6am – 12 pm Patrol E Sunday Afternoon 12 pm – 6 pm – Patrol F			

Winter Maintenance Procedural Plan – May 2018

March 2018						
◀ Feb 2018						Apr 2018 ▶
Sun	Mon	Tue	Wed	Thu	Fri	Sat
Notes: Daily 6pm – 6 am – Patrol A/B Saturday Morning 6am – 12 pm Patrol C Saturday Afternoon 12 pm – 6 pm – Patrol D Sunday Morning 6am – 12 pm Patrol E Sunday Afternoon 12 pm – 6 pm – Patrol F				1 Nights- Patrol B	2 Nights- Patrol B	3 Morn- Patrol C Aft- Patrol D Night- Patrol A
4 Morn- Patrol E Aft- Patrol F Night- Patrol A	5 Nights- Patrol A	6 Nights- Patrol A	7 Nights- Patrol B	8 Nights- Patrol B	9 Nights- Patrol B	10 Morn- Patrol C Aft- Patrol D Night Patrol B
11 Morn- Patrol E Aft- Patrol F Night- Patrol A	12 Nights- Patrol A	13 Nights- Patrol A	14 Nights- Patrol B	15 Nights- Patrol B	16 Nights- Patrol B	17 Morn- Patrol C Aft- Patrol D Night- PATROL A
18 Morn- Patrol E Aft- Patrol F Night- Patrol A	19 Nights- Patrol A	20 Nights- Patrol A	21 Nights- Patrol B	22 Nights- Patrol B	23 Nights- Patrol B	24 Morn- Patrol C Aft- Patrol D Night- PATROL B
25 Morn- Patrol E Aft- Patrol F Night- Patrol A	26 Nights- Patrol A	27 Nights- Patrol A	28 Nights- Patrol B	29 Nights- Patrol B	30 Morn- Patrol Draw Aft- Patrol Draw Nights- Patrol B	31 Morn- Patrol C Aft- Patrol D Night- Patrol A

Winter Maintenance Procedural Plan – May 2018

◀ Mrz 2018 April 2018 Mai 2018 ▶						
Sun	Mon	Tue	Wed	Thu	Fri	Sat
1 Morn- Patrol E Aft- Patrol F Night- Patrol A	2 Morn- Patrol Draw Aft- Patrol Draw Nights- Patrol A	3 Nights- Patrol A	4 Nights- Patrol B	5 Nights- Patrol B	6 Nights- Patrol B	7 Morn- Patrol C Aft- Patrol D Night- Patrol B
8 Morn- Patrol E Aft- Patrol F Night- Patrol A	9 Nights- Patrol A	10 Nights- Patrol A	11 Nights- Patrol B	12 Nights- Patrol B	13 Nights- Patrol B	14 Morn- Patrol C Aft- Patrol D Night- Patrol A
15	16	17	18	19	20	21
22	23 -	24	25	26	27 -	28
29	30	Notes: Daily 6pm – 6 am – Patrol A/B Saturday Morning 6am – 12 pm Patrol C Saturday Afternoon 12 pm – 6 pm – Patrol D Sunday Morning 6am – 12 pm Patrol E Sunday Afternoon 12 pm – 6 pm – Patrol F				

***Note: Patrol Subject to Change

6.9 Appendix “I”

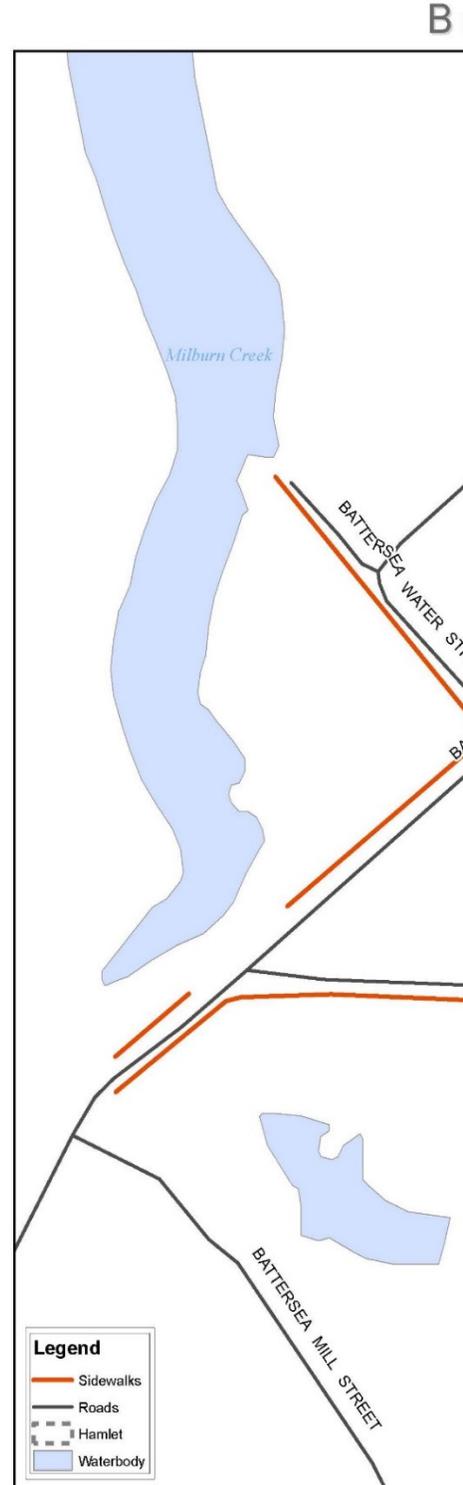
Distribution / Contact List

Name	Position	Phone/Email
Mark Segsworth	Public Works Manager	Phone: 613-376-3027 X 3322 msegsworth@southfrontenac.net
Brian Kirk	Public Works Operations Supervisor	Phone: 613-376-3027 X 4347 bkirk@southfrontenac.net
David Holliday	Public Works Technical Supervisor	Phone: 613-376-3027 X 3333 dholliday@southfrontenac.net
Jamie Brash	Public Works Facilities/Solid Waste Supervisor	Phone: 613-376-3027 X 3350 jbrash@southfrontenac.net
Ed Legrow	Public Works Lead Hand	Phone: 613-376-3027 X4329 elegrow@southfrontenac.net
Dennis McEwen	Public Works Lead Hand	Phone: 613-376-3027 X 4348 dmcewen@southfrontenac.net
Bill Jones	Public Works Lead Hand	Phone: 613-376-3027 X 4363 bjones@southfrontenac.net
Trevor Greene	Public Works Lead Hand	Phone: 613-376-3027 X 4360 tgreene@southfrontenac.net

7.0 Appendix “J” Surrounding Municipality Contact List

Municipality	Name	Phone
City of Kingston	Darrell Townsend	Phone: 613-546-4291
	Kyle Bolton	Phone: 613-546-4291
	Bill Linnen	Phone: 613-546-4291
Stone Mills Township	Jeff Thompson	Phone: 613-378-1435
	Jason Ashley	Phone: 613-378-1435
Central Frontenac Township	Brad Thake	Phone: 613-279-2935
	Steve Gould	Phone: 613-279-2935
	Rick Commodore	Phone: 613-279-2935
Rideau Lakes Township	Dan Chant	Phone: 613-928-2251
	Clarence Donnelly	Phone: 613-928-2251
	After Hours	Phone: 613-802-2104
	Bruce Steacy	Phone: 613-928-2251
	Harry Merkley	Phone: 613-928-2251
Tay Valley Township	Steve Keeley	Phone: 613-267-5353
	Bob Ritchie	Phone: 613-267-5353
	Carl Wright	Phone: 613-267-5353
Loyalist Township	Scott Lawler	Phone: 613-386-7351
	Dave McPherson	Phone: 613-386-7351
	Bill Craig	Phone: 613-386-7351

7.1 Appendix “K” Village Sidewalks

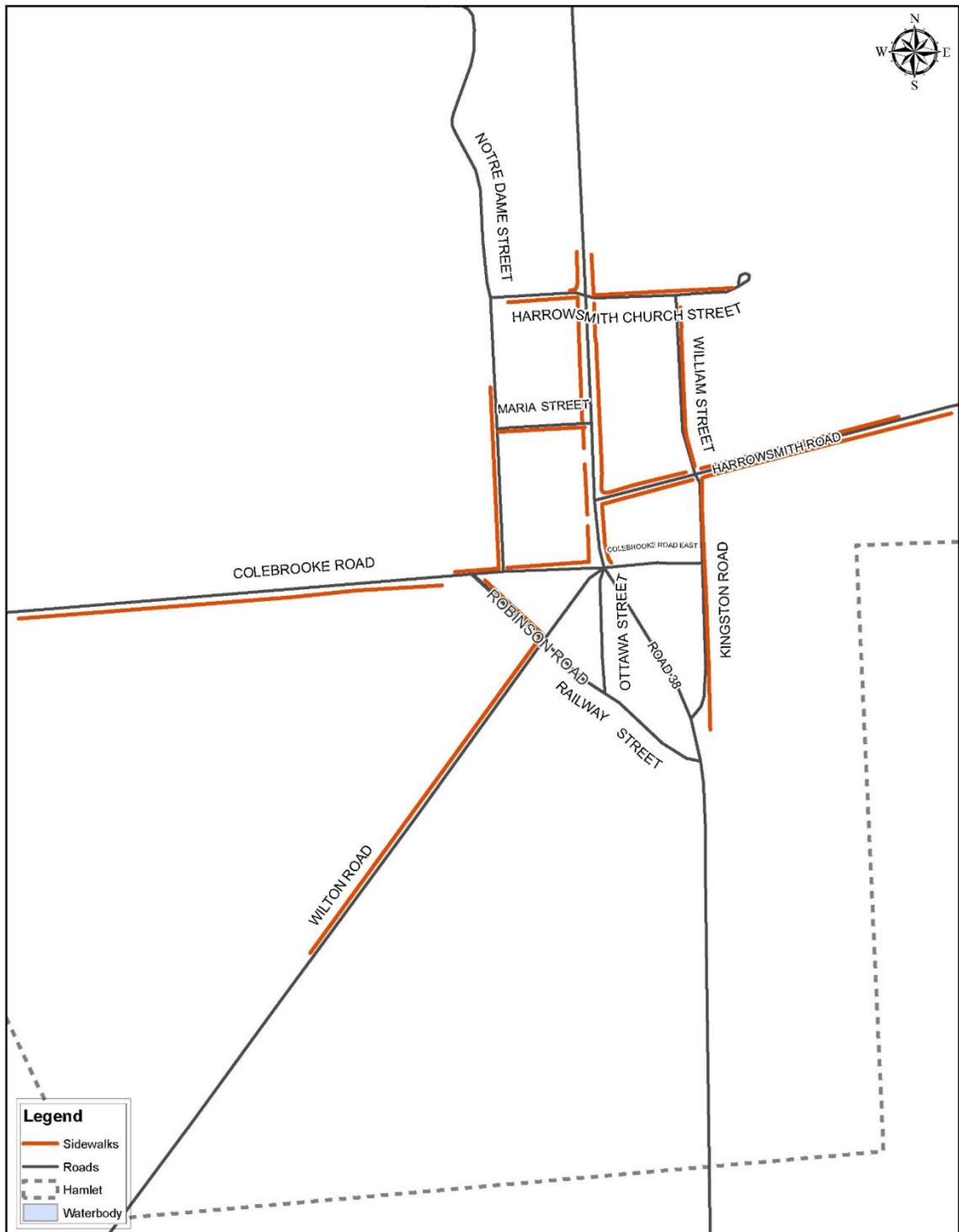


Bellrock



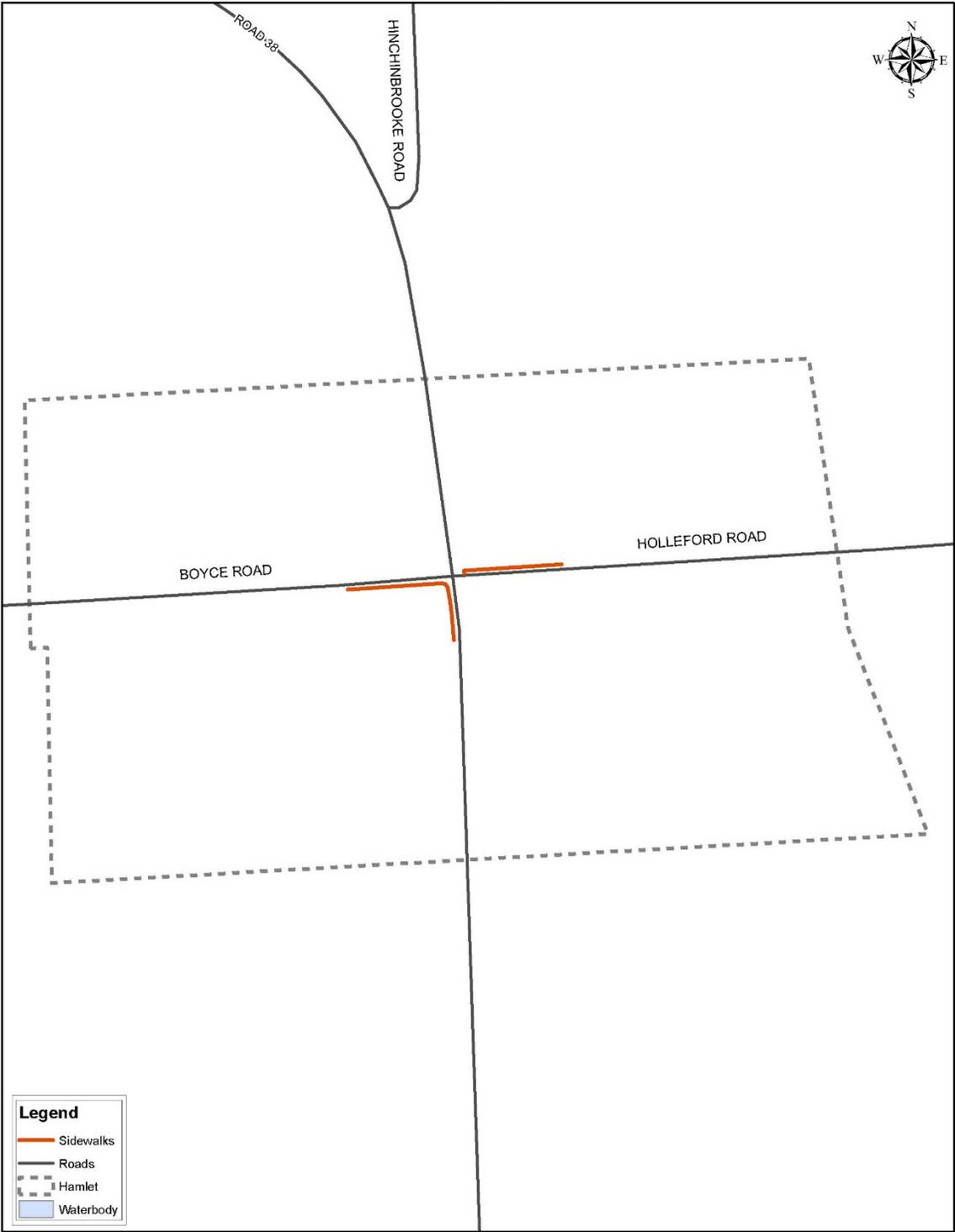
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Harrowsmith



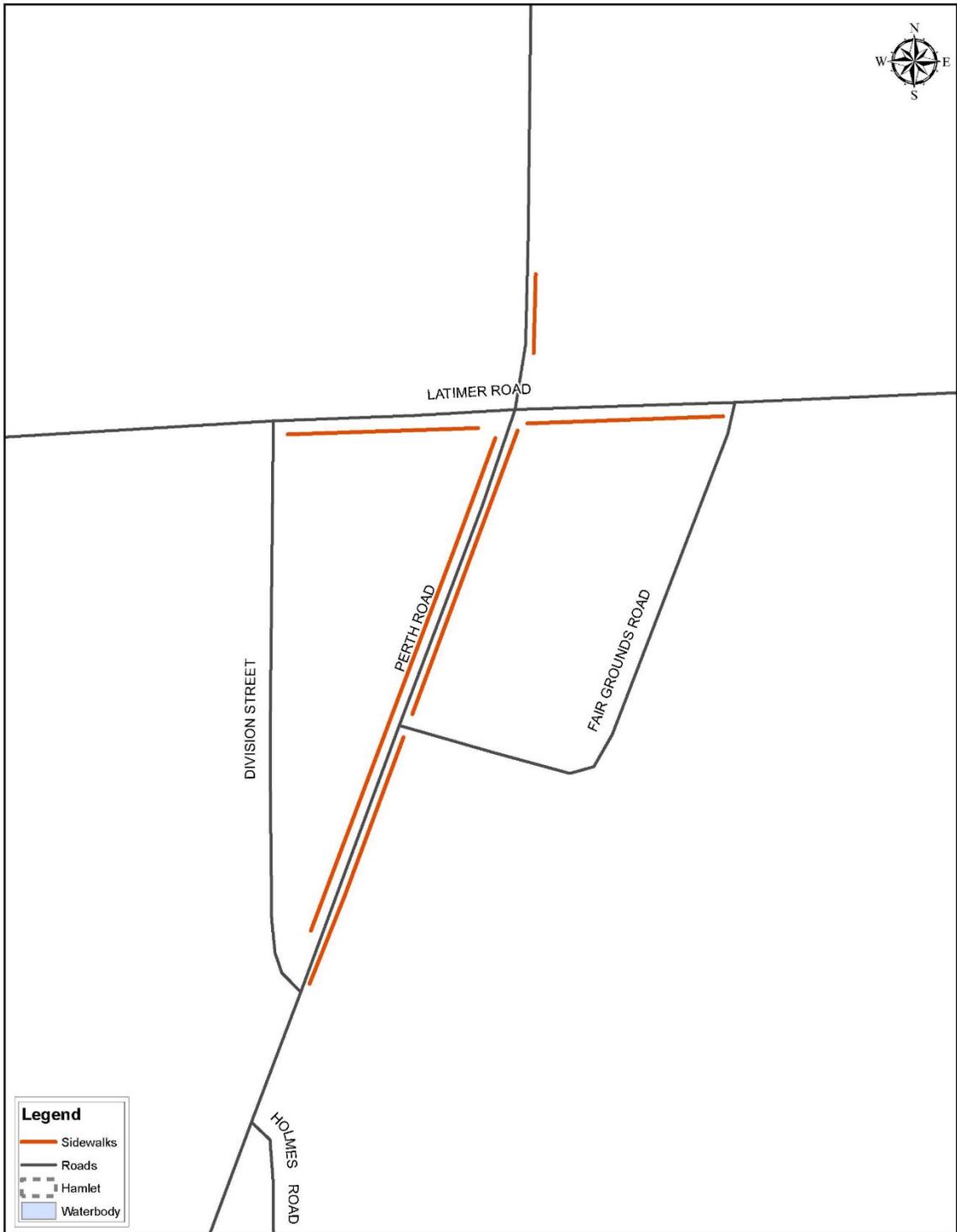
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Hartington



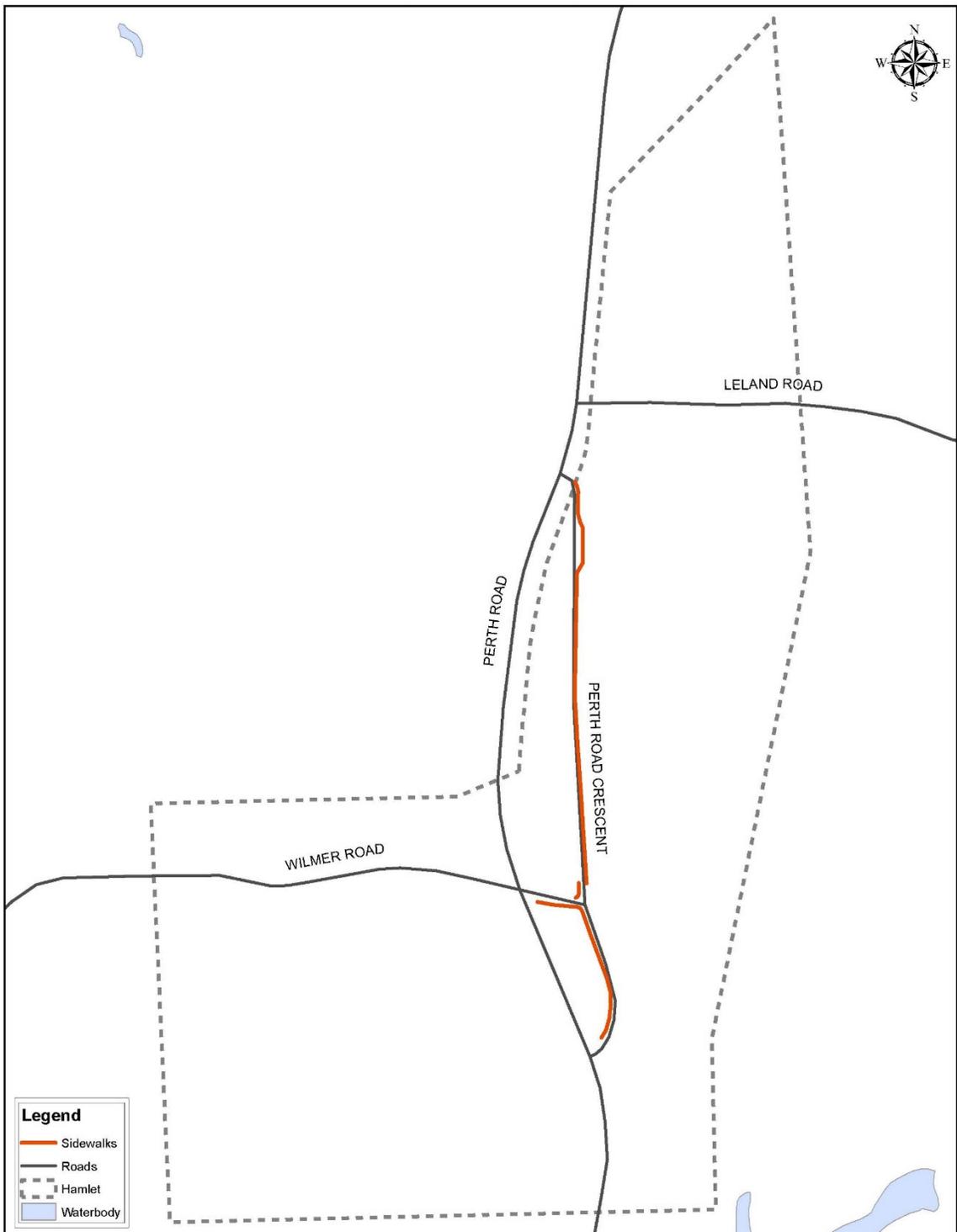
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Inverary



1:3,000

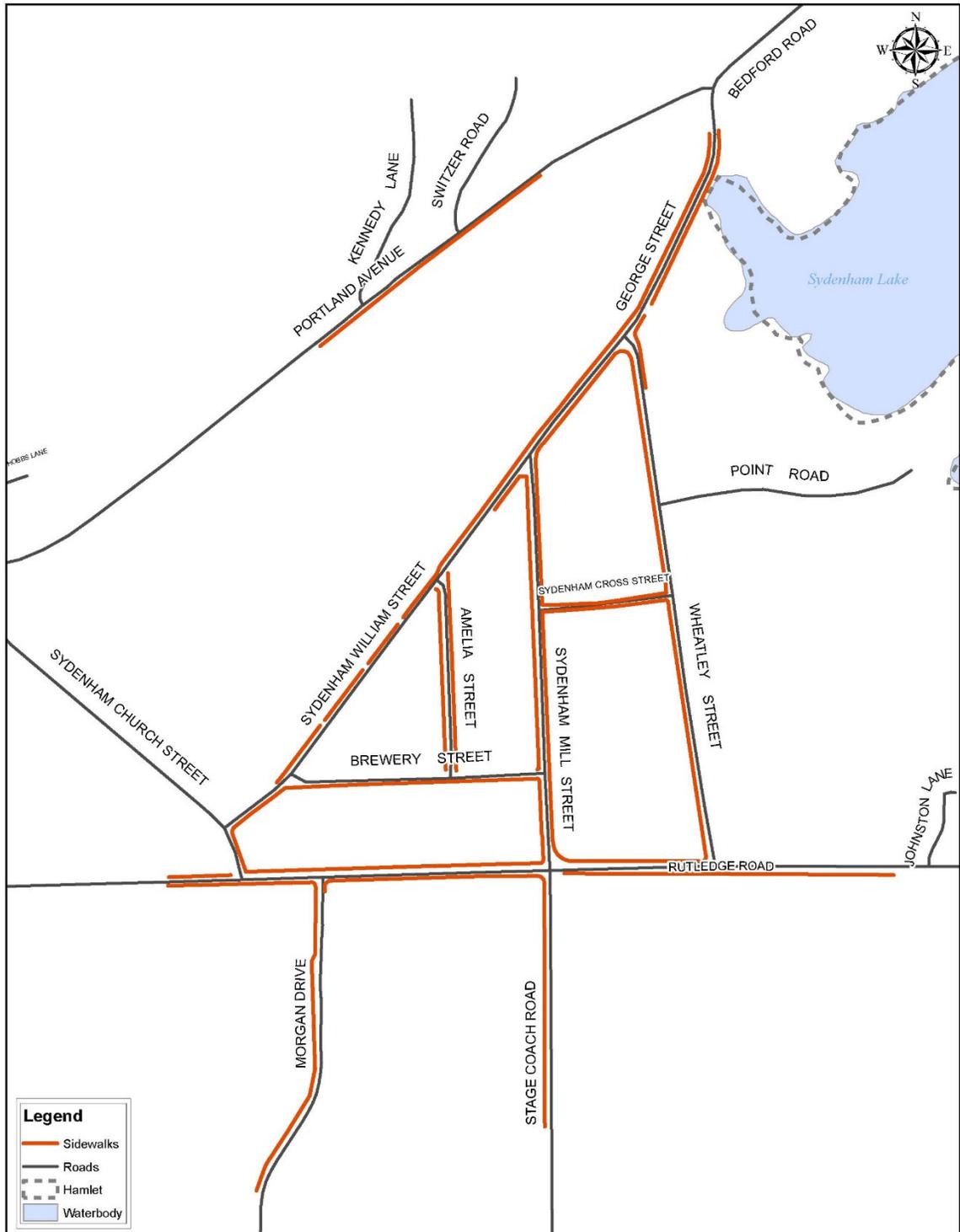
Perth Road



1:5,500

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Sydenham



1:5,000

Winter Maintenance Procedural Plan – May 2018

Verona



1:8,000

End of Document