

HALIFAX

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Item No. 14.1.12
Halifax Regional Council
November 22, 2016

TO: Mayor Savage and Members of Halifax Regional Council

SUBMITTED BY: Original Signed by 

Jacques Dubé, Chief Administrative Officer

Original Signed by 

Jane Fraser, Acting Deputy Chief Administrative Officer

DATE: November 4th, 2016

SUBJECT: Winter Works Recommendations, Improvements and Changes

ORIGIN

On August 4, 2015 Committee of the Whole requested a staff report to consider the cost implications to revise the service standards with respect to: bus stops, sidewalks, and priority 2 (P2) streets to ensure public safety is met; and,

Committee of the Whole recommended that Halifax Regional Council improve sidewalk clearing by extending the remaining nine sidewalk service contract routes through the 2016/17 winter season and directed staff to return to Regional Council in November 2016 with recommendations on the sidewalk program commencing in the 2017/18 winter season.

On January 26, 2016 Halifax Regional Council directed staff to expand the scope of the report requested by Regional Council for November 2016 to include recommended changes to the Street Snow and Ice control contracts, in addition to the previously requested recommendations on the sidewalk program, commencing the 2017/18 winter season. The motion was further amended to include the following:

1. a) Reassessment of priority 2 streets with a slope greater than 10%, low lying natural streams or other circumstances which create public safety concerns, and that these streets be considered as priority 1 and;
b) Retaining current standards with revised wording to provide clarity on priority 2 streets, (initial cut-through within six (6) hours, after 10 cm has fallen) with increased enforcement to ensure standards are being met. Plowing is to be repeated every 8 hours after initial pass. And, that improved focus on delivery to current service standards be included when contracts are retendered after 2016/17 and;
2. That the following be included in the scope of the report requested by Regional Council to be presented November 2016:
 - a.) An increase in standard from 18 hrs to 12 hrs for priority 2 sidewalks; and increase standard from 36 hrs to 24 hrs for priority 3 sidewalks. Also include a mechanism by which residents can clear their sidewalk to our contractor-imposed standard before the contractors'

arrival, and to require the contractor to lift the blade, so as not to obstruct an already cleared sidewalk.

LEGISLATIVE AUTHORITY

The Halifax Regional Municipality Charter 2008, c. 39, s. 79 (1) (f) confers legislative authority to expend money required by the Municipality for snow and ice removal.

The Halifax Regional Municipality Charter 2008, c. 39, s. 320 (1), s. 320 (2) and s. 320 (3) confers legislative authority to make by-laws relating to snow and ice removal.

The Halifax Regional Municipality Charter 2008, c. 39, s. 322 (3) confers legislative authority to expend funds for the purpose of clearing snow and ice from the streets, sidewalks and public places in all, or part, of the Municipality.

RECOMMENDATIONS

It is recommended that Halifax Regional Council direct staff to:

1. Maintain existing sidewalk standards when current contracts are retendered in April 2017;
2. Consolidate the existing sidewalk contracts from routes to zones mirroring existing streets operation zones;
3. Combine the streets and sidewalks tenders for the areas of Fall River, Windsor Junction, Upper Sackville and Beaverbank, resulting in one contractor for one geographic zone; and
4. Improve communications with property owners regarding clearing of property and maintain existing sidewalk service.

BACKGROUND

As noted in the January 26, 2016 staff report to Regional Council on winter service standards, Halifax's service delivery standards are on par with, or exceed most major cities in Canada. During the winter of 2015/16 staff improved service delivery to meet those standards, through more attention to detail (particularly with respect to pedestrian mobility) and improved communications.

Appendix A provides information about the existing road and sidewalk priority standards.

There are several contracts set to expire in 2017 which presents the municipality with the opportunity to strengthen contract language to ensure performance standards are met. It also presents the opportunity to review existing geographic boundaries, to continue to address issues around accessibility and to introduce service delivery efficiencies.

This report identifies steps taken to date and additional measures to improve the provision of winter works services in the municipality.

DISCUSSION

Winter maintenance operations play an important role in assuring the safety, mobility and productivity of Halifax's multi-modal transportation network. Winter maintenance activities offer direct benefits to the public including fewer accidents, improved mobility and reduced travel times and costs. They also offer indirect benefits such as sustained economic productivity, reduction in accident claims, emergency services, and improved commuter experience. The municipality must balance expectations during inclement weather with resource constraints and environmental consequences inherent in the use of chemicals and abrasives for snow and ice control.

In response to Regional Council's motions staff have revisited service standards with respect to bus stops, sidewalks and streets; provided recommendations for improvements to the sidewalk program; and, included recommended changes to the street and sidewalk snow and ice control contracts.

Service Standards

On August 4, 2015 Committee of the Whole requested a staff report to consider the cost implications to revise the service standards with respect to: bus stops, sidewalks, and priority 2 (P2) streets to ensure public safety is met. On January 26, 2016 staff provided Regional Council with options for changes to service standards at bus stops and priority 2 streets in response to this motion (item no. 14.1.3). Report found here: <http://www.halifax.ca/council/agendasc/documents/160126ca1413.pdf>.

The Halifax Charter does not impose a statutory obligation to clear snow and ice from sidewalks to streets. Starting in 2006, Halifax expanded the residential sidewalk snow-clearing of the municipality resulting in the provision of full winter sidewalk service by 2012. Prior to this time, abutting properties were required to clear residential sidewalks under By-Law S-300 where the service was not provided. Some Canadian cities (e.g. Calgary, Edmonton, Hamilton, Waterloo, Moncton) require that residents clear their own sidewalks; while other cities (e.g. Toronto and Mississauga) only mechanically clear a subset of sidewalks.

Halifax clears all sidewalks and targets bare pavement, unlike many cities whose standards are to provide safe, passable snow-covered pavement.

Based on Regional Council direction, staff have compiled three options with respect to service delivery standards for sidewalks.

	Options for changes to service standards for sidewalks	Financial/Operational Impact	Recommendation
1	Maintain existing sidewalk standards when current contracts are retendered in April 2017	Cost neutral (inflation)	Staff recommend Option 1 to stay within existing operational budget to prioritize developing service improvements with the contracts and then consider savings
2	When current contracts are retendered in April 2017, Increase standards from 18 hrs to 12 hrs for priority 2 sidewalks; and Increase standard from 36 hrs to 24 hrs for priority 3 sidewalks	Approximate 66% increase of contracts for sidewalks (estimated additional \$2.9 million annually) Affects 567 of 869 km (66%) of sidewalks cleared by contractors. In-house resources are only allocated to Priority 1 sidewalks. Result: 73% of sidewalks would have a 12 hrs target 27% of sidewalks would have a 24 hr target	Staff do not recommend this option due to the estimated cost increase and the operational challenges with having streets and sidewalks completed within the same time frame.

	Options for changes to service standards for sidewalks	Financial/Operational Impact	Recommendation
3	When current contracts are retendered in April 2017 eliminate Priority 3 Residential/Rural sidewalk clearing – sidewalks be cleared by the abutting property owner	Approximately a \$1.4 million reduction in contracts (268km*\$5,122/km) however, additional education and enforcement costs to ensure compliance. Result 27% of sidewalks would be cleared by the abutter.*	Not recommended as this would pose challenges for accessibility and is contrary to our values of service excellence and of diversity and inclusion.

On January 26, 2016 Halifax Regional Council directed staff to expand the scope of this report requested by Regional Council for November 2016 to include recommended changes to the Street Snow and Ice control contracts, in addition to the previously requested recommendations on the sidewalk program, commencing the 2017/18 winter season. The motion was further amended to include the following:

1. a.) Reassessment of priority 2 streets with a slope great than 10%, low lying natural streams or other circumstances which create public safety concerns, and that these streets be considered as priority 1

Staff responded to this motion on June 21, 2016 item no.8. Since then, staff have expanded their review as requested by Regional Council. As a result of this review, the following streets were reclassified: Clovis, Park Hill, Forrest and Winchester Avenues. See Appendix B for the full Road Reclassification Review chart.

Sidewalks

Due to the timing of various past tenders there is an overlap of service providers in the same geographic area. For example, currently there are situations where one contractor services one side of a property and a different contractor services the other. The multiple small contracts have multiple vendors working in one area and in some situations could have a vendor operating in various geographical areas across the municipality instead of consolidating all of their resources to one area. Often vendors have to travel over another vendor’s area to complete the work that is identified within their tender contract. In addition, having more than one service provider assigned to a particular geographical area poses challenges when determining fault when damages occur to private property. The overlap of service causes confusion for Councillors and residents when trying to coordinate with multiple sidewalk vendors instead of one based on an area of operation.

Revisiting the format and composition of our sidewalk contracts in the spring of 2017 presents the opportunity to establish improved accessibility in our contracts, improve accountability and efficiency in service delivery; all while maintaining competitive advantage for smaller providers. Staff plan on clarifying responsibilities, definitions and expectations when revisiting the sidewalk contracts in 2017 including having strong, clear language in our contracts outlining what is acceptable with respect to accessibility standards and sidewalk clearing. Moving from 33 individual contracted sidewalk routes (see Appendix C “Overview Current SW Plow Areas”) to 10 contracted zones (Appendix D “NEW Proposed Plow Areas”) will mirror our existing street operation areas, which will improve coordination efforts and result in enhanced service delivery. See (Appendix E “Current and Proposed Sidewalk Kilometre Distribution”) for distribution of current sidewalk kilometres per route in comparison to proposed distribution of sidewalk kilometres per zone. Rezoning will allow for consolidation of areas and minimize vendors having smaller

contracts spread across a large geographical area, putting them in a better position to allocate their resources more efficiently; resulting in fair market prices in the tender process.

	Options for changes to the sidewalks contract	Financial/Operational impact	Recommendation
1	Consolidate existing sidewalk contracts from 33 routes to 10 zones, with more robust language pertaining to accessibility and service improvements	Staff anticipate that consolidation of geographical areas, resulting in more efficient routes for contractors will result in operational efficiencies and improvements to service delivery.	Staff recommend Option 1 consolidation of existing sidewalk contracts from 33 routes to 10 zones
2	Keep contracts as-is with multiple routes scattered across several geographical areas	No known change in cost implications, other than market adjustment.	Not recommended because it does not address opportunities to improve

Combined Street and Sidewalk Winter Service Provider – Pilot

In 2017 both the sidewalk (Tender number 13-048) and streets contracts (Tender numbers 13-051 and 13-050) for the areas of Fall River, Windsor Junction, Upper Sackville and Beaverbank are set to expire. There is an opportunity to have their winter snow and ice services completed by one vendor which could present numerous benefits for the municipality and the area:

1. One vendor who would coordinate the delivery of both services within the approved service timelines.
2. Enables HRM to address one vendor in removing accumulation of snow between the street and sidewalk- reducing sightline hazards.
3. Eliminates issues around determination of responsibility for snow damage between street and sidewalk vendors.

See Appendix F “Proposed Pilot Winter Service Contract Zone WSZ2”

	Options for renewing Tenders 13-048,13-051and 13-050	Financial/Operational Impact	Recommendation
1	Combine streets and sidewalks tender for this area	Resulting in one contractor for one geographic area with lower volume of sidewalks	Staff recommends Option 1 combining streets and sidewalks tender for this area improving quality of service and accountability
2	Separate streets and sidewalks for this area but with one vendor for each	Reduction in confusion with vendors.	Not recommended because it does not fully address coordination concern between sidewalk and street contractors
3	Re-issue tenders as-is	No known change in cost implications, other than market adjustment.	Not recommended because it retains multiple street and sidewalk vendors across a large geographical area.

Lift the Blade

On January 26, 2016 Regional Council directed staff to investigate a mechanism by which residents can clear their sidewalk to HRM's contractor-imposed standard before the contractor's arrival, and to require the contractor to lift the blade, so as to not obstruct an already cleared sidewalk.

Upon review staff have determined that this would prove operationally difficult. Lifting the blade of a plow could leave a deposit of snow blocking a sidewalk. Alterations to existing contracts could result in an increase in cost and would present an increased volume of enforcement from By-Law to enforce property owners provide the appropriate level of service. If the property owner is delayed in clearing snow it could present accessibility challenges. Further, staff brought the issue of Lift the Blade to the Accessibility Advisory Committee in September and the following are comments and observations from that meeting:

- Preference would be to have service provided to an area in one consistent format to ensure that an entire section of sidewalk was done if it appeared that way from any point
- Persons with visual impairments could become disorientated if they had to turn around due to encountering un-serviced sections.
- Mobility challenged persons would have to turn around which would be frustrating and difficult in some areas.
- Could present an individual becoming "trapped" between snow equipment and the section of sidewalk that has not been completed yet. This would be intimidating and the person would not necessarily be able to move out of the way causing the equipment to have back up potentially causing damages and other safety concerns
- Recommend Corporate Communications provide a better explanation to property owners why not to clear in front of their properties if the area is being serviced by other means.
- Personal clearing in front of private property would not eliminate the requirement of snow equipment needing to travel through due to liability.

	Options for implementing "Lift the Blade"	Financial/Operational Impact	Recommendation
1	Maintain service as-is, not implement "lift the blade procedures" and improve communications with property owners regarding clearing of property	No cost implications	Staff recommend Option 1 maintain service as-is, do not implement "lift the blade" procedures, and improve communications with property owners regarding clearing of property.
2	Implement "lift the blade" procedures for sidewalk snow clearing operations for some or all sidewalks.	Moderate risk for contractor-associated costs. Major risk for increased liability in the event that sidewalks are not cleared adequately.	Not recommended due to accessibility concerns/potential for inconsistent clearing

FINANCIAL IMPLICATIONS

There are no financial implications associated with the recommendations. Should Regional Council choose an alternative which is not recommended, staff will need to return with refined cost estimates and the resulting financial impact on the operating budget.

RISK CONSIDERATION

Service Standards

There are major financial risks (either able to accommodate within existing budget, but only with service cuts, or additional funding would be required) if Regional Council decides to make changes to the existing standards within HRM's sidewalk contracts.

Sidewalks

There would be limited to no risk if Regional Council were to approve staff's direction of consolidating routes.

Combined Street and Sidewalk Winter Service Provider – Pilot

There would be limited to no risk if Regional Council were to approve staff's recommendation to host a single street and sidewalk winter service provider; which would result in potential cost savings and efficiencies in administration of contracts.

Lift the Blade

Should Regional Council decide to implement "Lift the Blade" there is moderate risk for contractor-associated costs, major risk for increased liability in the event that sidewalks are not cleared and risk to our reputation for not having consistent clearing.

COMMUNITY ENGAGEMENT

Staff provided a presentation on accessibility improvements to the Accessibility Advisory Committee on September 19, 2016 at which point they solicited feedback on the concept of "Lift the Blade" full comments have been provided in the report.

ENVIRONMENTAL IMPLICATIONS

No recommendations or discussions provided in this report have environmental implications.

ALTERNATIVES

Service Standards

Staff have provided the following two (2) alternatives for reviewing service standards:

1. When current contracts are retendered in April 2017, increase standards from 18 hours to 12 hours for Priority 2 sidewalks; and increase standard from 36 hours to 24 hours for priority 3 sidewalks, at an estimated cost of \$2.9 million.
2. When current contracts are retendered in April 2017 eliminate Priority 3 residential/rural sidewalk clearing – sidewalks to be cleared by the abutting property owner. This would result in cost savings of approximately \$1.1 million, which would be partially offset by costs resulting from the requirement of increased enforcements.

Sidewalks

Staff have provided the following alternative should Regional Council wish not to consolidate contract routes:

Keep contracts as-is with multiple zones scattered across several geographical areas

Combined Street and Sidewalk Winter Service Provider – Pilot

Staff have provided the following two (2) alternatives for the street and sidewalk pilot recommendation:

1. Separate streets and sidewalk contracts for this area but limit to one vendor for each

2. Re-issue tenders as-is

"Lift the Blade"

Staff have provided the following alternative should Council wish to implement "Lift the Blade"







Implement "lift the blade" procedures for sidewalk snow clearing operations for some or all sidewalks.



ATTACHMENTS

Appendix A :	P1 and P2 Street and Sidewalk Clearing
Appendix B:	Road Reclassification review
Appendix C Map:	Overview Current SW Plow Areas
Appendix D Map:	NEW Proposed Plow Areas 16Sept2016
Appendix E:	Current and Proposed Sidewalk Kilometre Distribution
Appendix F Map:	Proposed Pilot Winter Service Contract Zone WSZ2

A copy of this report can be obtained online at <http://www.halifax.ca/council/agendasc/cagenda.php> then choose the appropriate meeting date, or by contacting the Office of the Municipal Clerk at 902.490.4210, or Fax 902.490.4208.

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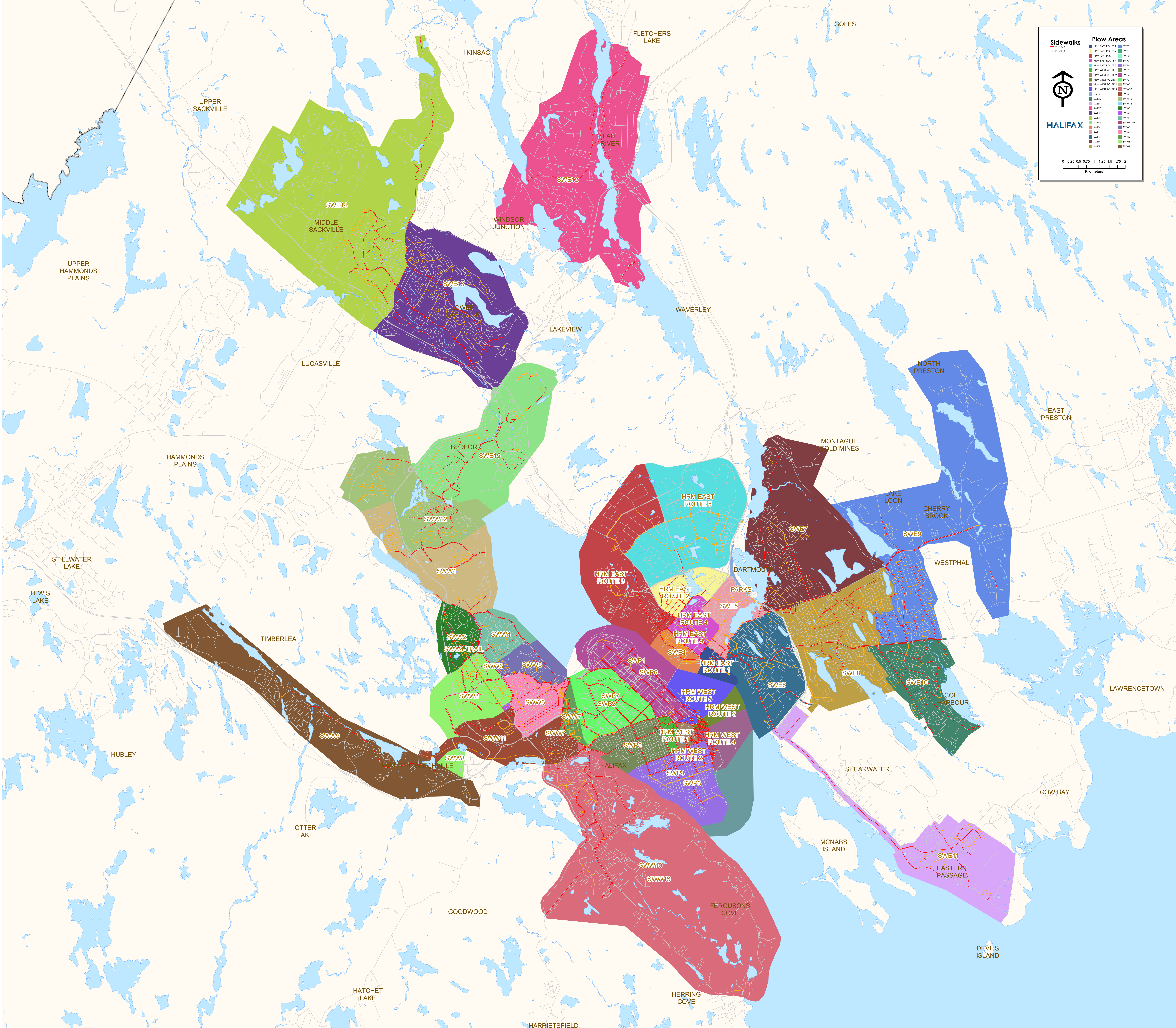
Street Clearing			
NOTE: Exceptional weather conditions may require more time for clearing than indicated in the chart.			
Street type	When clearing starts	When clearing should be completed	What clearing should look like
Main Arterials (Priority 1) For example: Robie Street, Sackville Street, Portland Street	After 2 cm of snowfall	12 hours following end of weather event to full driving lanes	Bare pavement driving lanes 
Transit Routes & Collector Roads (Priority 1) For example: Parkland, Caledonia Rd, Metropolitan Ave	After 2 cm of snowfall	12 hours from end of weather event to 3m centreline bare	3m centreline bare 
Residential Streets with greater than 10% slope that serve as snow routes for Halifax Transit (Priority 1) For example: Vestry Street, Joffre Street, Lindsay Hill	After 4 cm of snowfall	12 hours from end of weather event to centre line bare and 2 lane width	Centreline bare 
Residential Streets (Priority 2) For example: Cork Street, Anderson Street, Chandler Drive	After 10 cm of snowfall	6 hours from end of weather event to cut through lane widths	Cut through lanes 
	After 10 cm of snowfall	24 hours from end of weather event to 2 lane widths	Snow covered, passable 
Gravel Roads and Private Lanes (Priority 2)	After 10 cm of snowfall	24 hours from end of weather event to snow covered passable	Snow covered, passable 

Sidewalk Clearing			
Sidewalk type	When clearing starts	When clearing should be completed	What clearing should look like
Downtown Halifax & Dartmouth (Priority 1)	After 5 cm of snowfall	12 hours from end of weather event	<p>Before</p>  <p>After</p> 
Main Arterials (Priority 1)	After 15 cm of snowfall	12 hours from end of weather event	See above
School Drop Off Zones and Transit Routes (Priority 2)	After 15 cm of snowfall	18 hours from end of weather event	See above
Residential Streets / Walkways (Priority 3)	After 15 cm of snowfall	36 hours from end of weather event	See above
Intersections/ Bus Stops	After sidewalks are complete	48 hours from end of weather event	
<p>Exceptional Weather Conditions Streets and sidewalks are prioritized based on a number of criteria, including how often they're used by commuters, access to important infrastructure like hospitals and schools, and whether they're on major bus and transportation routes. Those priority levels and the timelines assigned to each are outlined in the charts above.</p> <p>Residents should note that in snowfalls greater than 30 centimetres, or in blizzard conditions, more time may be needed to complete clearing. The same exception may apply when there are rapidly changing weather conditions, like sudden freezes after rain, wet snow packed to ice and freezing rain. Crews will continue working until all streets and sidewalks are clear and safe from snow and ice.</p>			

Appendix B Reclassification

Street Name	Reason for Reclassification	District	Road Classification	Service Standard	Road Slope Eval	Change Required
Intersection of Sinclair and Joffre	Grade on both streets becomes winter hazard when not properly maintained	5	Sinclair: Minor collector Joffre: local	P1	Not required	No
Intersection of Lorne Ave & Sinclair St	Grade on both streets becomes winter hazard when not properly maintained	5	Lorne: Local	P1	Not required	No
Wyse Rd	Water Pooling in certain locations	5	Arterial	P1	Not required	No
Oxford St	Going south on Oxford towards water, road has a grade which frequently is impassable in winter.	7	Major Collector	P1	Not required	No
Beaufort Ave	Going south east on Beaufort Ave, grade may become slippery and even impassible in winter	7	South st to Inglis - Minor Collector Inglis to cul de sac - Local	P1	Not required	No
Francklyn	Grade on street may cause street to be dangerous or impassible in winter.	7	Local	P2	#430-376 - 9.2% to 2.8%	No
Acorn Ave	Requested by Councillor	9	Local	P2	#8-15 - 7.8% to 7.3% #19-20 - 13.4%	No
Anchor Dr	Requested by Councillor	9	Local	P2	Purcells Cove to Spinnaker - 3.3% to 1.3%	No

Street Name	Reason for Reclassification	District	Road Classification	Service Standard	Road Slope Eval	Change Required
Retreat Ave	Requested by Councillor	9	Local	P2	#14 to Joseph Howe Dr - 2.2% to 2%	No
Idlewylde Rd	Requested by Councillor	9	Local	P2	#24- 3 - 5.4% to 12.7%	No
Clovis Ave	Requested by Councillor	9	Local	P2	Circle Dr to Williams Lake - 9.8% to 10.9%	Yes
Parkhill	Requested by Councillor	9	Local	P2	#53 to Dingle Rd - 20.3%, #20-26 - 7.2% to 6.3%, #41-51 - 16.2% #41 - Kirk - 5.6% to 9.6%	Yes
Forrest Ave	Requested by Councillor	9	Local	P2	#12- Purcells Cove - 8.7% to 10.7%	Yes
Patricia St	Requested by Councillor	9	Local	P1		No
Winchester Ave	Requested by Councillor	9	Local	P2	Herring Cove Rd- #51 - 3.5% to 12.8%	Yes
Maplewood Dr	Requested by Councillor	9	Local	P1	#21 - Withrod - 16.8%, #18- Herring Cove - 10.1% to 21.9%	No

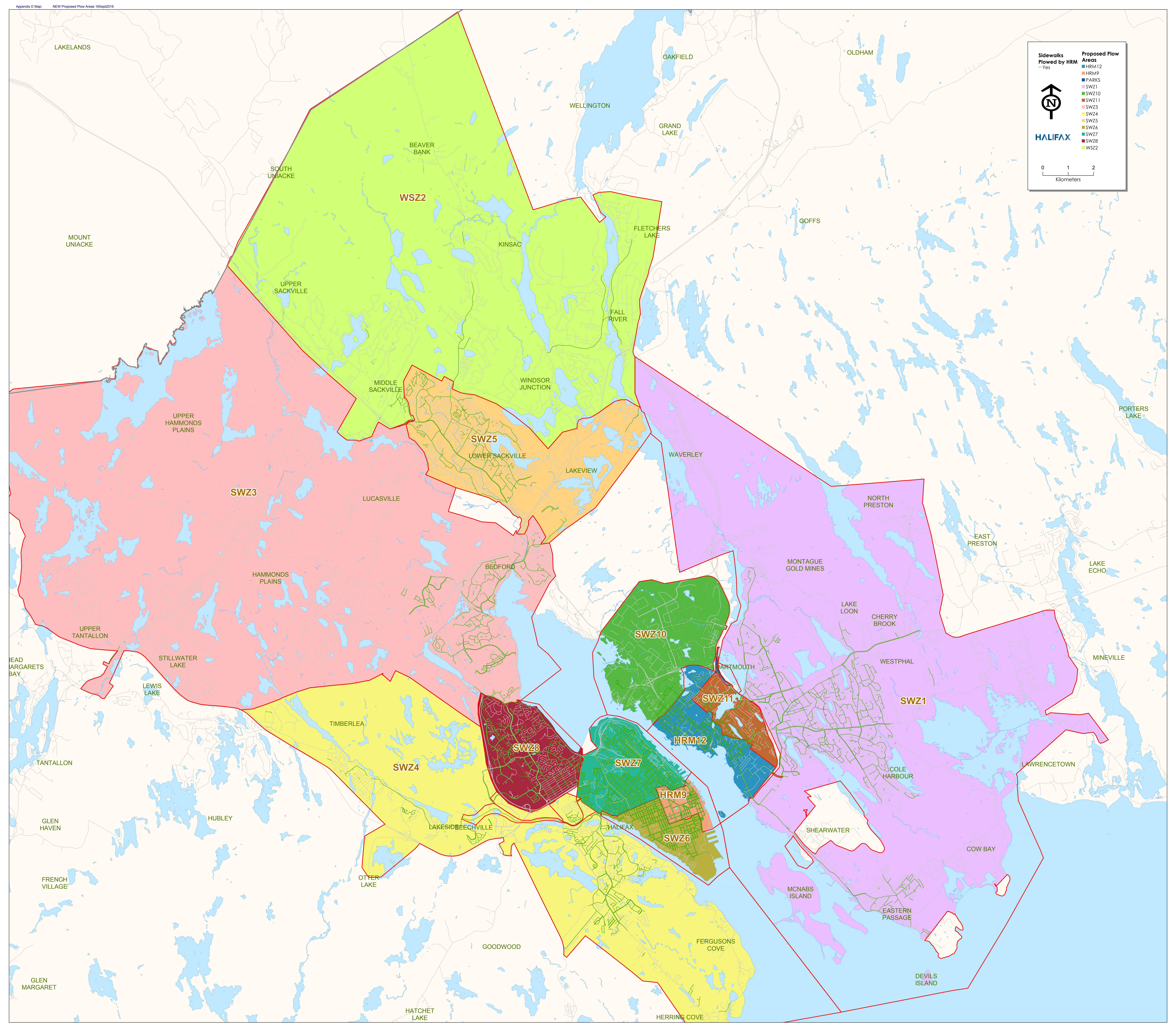


Sidewalks
Priority 2

Plow Areas

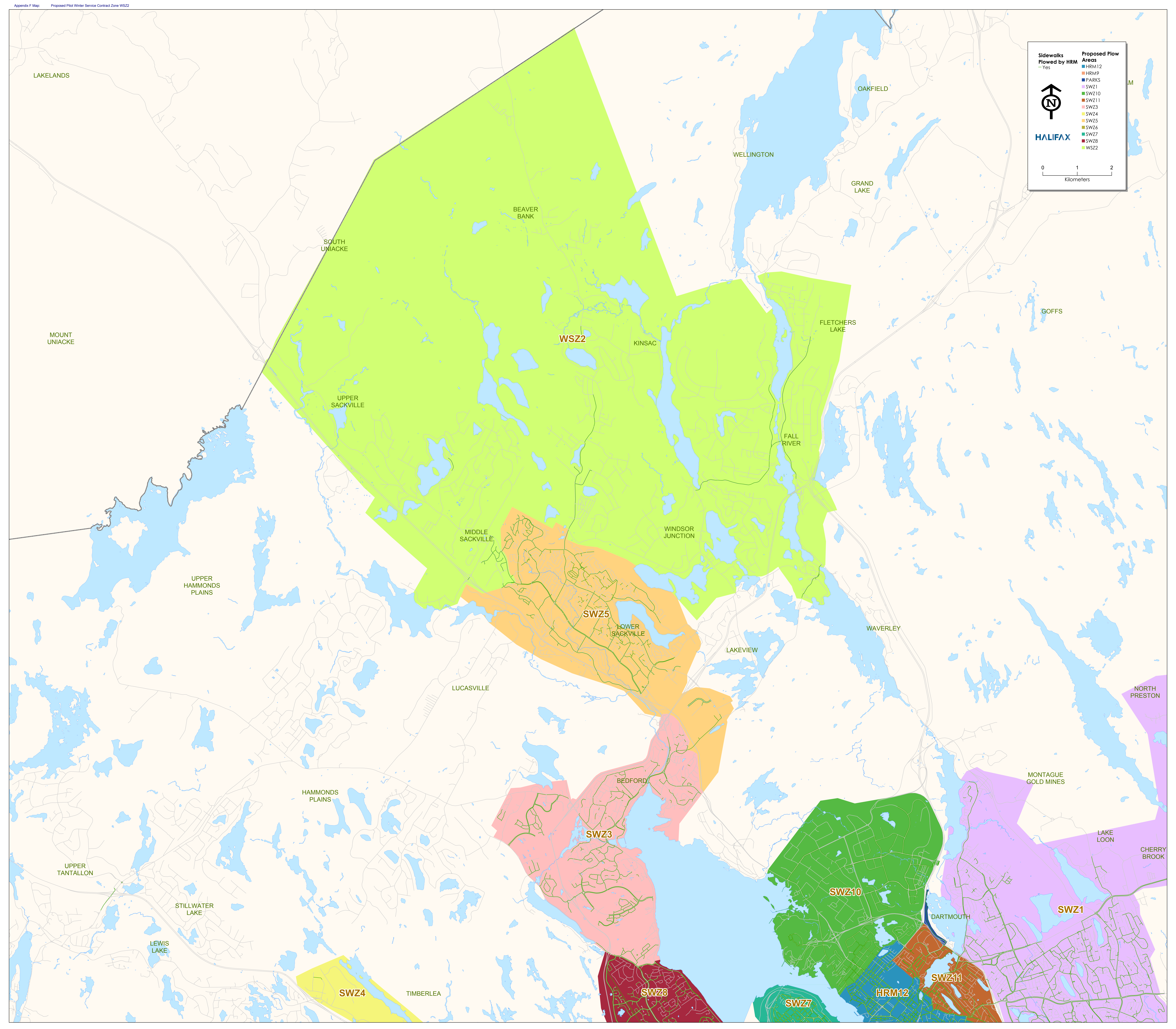
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HRM WEST ROUTE 10	SWE19
HRM WEST ROUTE 11	SWEA-TRAIL
HRM WEST ROUTE 12	SWEA
HRM WEST ROUTE 13	SWE5
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HRM WEST ROUTE 25	SWE17
HRM WEST ROUTE 26	SWE18
HRM WEST ROUTE 27	SWE19

0 0.25 0.5 0.75 1 1.25 1.5 1.75 2
Kilometers



NEW PROPOSED WINTER SIDEWALK SERVICE ZONES

ZONE	LOCATION	KMs
SWZ1	Cole Harbour, Eastern Passage, Waverley	166.83
SWZ2	PILOT - Beaverbank, Fall River	21.32
SWZ3	Bedford, Larry Uteck	73.57
SWZ4	Herring Cove, Timberlea, Cowie Hill	77.11
SWZ5	Lower Sackville	66.94
SWZ6	Penninsula Halifax - South	79.22
SWZ7	Penninsula Halifax - North and West	202.31
SWZ8	Clayton Park, Fairview	86.11
HRM9	Downtown Halifax	48.13
SWZ10	Burnside, Dartmouth Crossing	56.42
SWZ11	Lake Banook area	29.02
HRM12	Downtown Dartmouth	88.78



LAKELANDS

MOUNT UNIACKE

SOUTH UNIACKE

BEAVER BANK

WSZ2

KINSAC

WELLINGTON

OAKFIELD

GRAND LAKE

FLETCHERS LAKE

GOFFS

UPPER SACKVILLE

FALL RIVER

MIDDLE SACKVILLE

WINDSOR JUNCTION

UPPER HAMMONDS PLAINS

SWZ5

LOWER SACKVILLE

WAVERLEY

LAKEVIEW

LUCASVILLE

NORTH PRESTON

BEDFORD

MONTAGUE GOLD MINES

SWZ3

LAKE LOON

CHERRY BROOK

UPPER TANTALLON

STILLWATER LAKE

SWZ10

SWZ1

LEWIS LAKE

SWZ11

HRM12

SWZ4

TIMBERLEA

SWZ8

SWZ7

DARTMOUTH