

 <b>Carleton</b> UNIVERSITY <i>Facilities Management          and Planning</i>	<i>Standard Operating Procedure</i>		<i>Issued</i>	<i>Reviewed</i>	<i>Page</i>
	<b>Winter Maintenance of Walking, Driving &amp; Parking Surfaces</b>	<b>SOP 004</b>	September 29 2011	September 23 2011	1/4
			Approved by: <i>D. Boyce</i>		

## 1 Purpose

The purpose of this procedure is to ensure that snow or ice accumulation on campus walking, road and parking surfaces are quickly and strategically addressed to ensure safe passage for both pedestrians and vehicles.

## 2 Roles & Responsibilities

### 2.1 Department of Facilities Management and Planning(FMP) - Grounds Maintenance

- 2.1.1 Grounds maintenance personnel will ensure that snow or ice accumulation is quickly and strategically addressed throughout campus in order of priority as follows:
- Primary pedestrian walkways & roads
  - Parking lots
  - Exterior fire hydrants & Fire Department building connections
  - Secondary pedestrian walkways & roads
- 2.1.2 During normal business hours, Monday to Friday, Grounds Maintenance personnel will regularly monitor the condition of walking, road and parking surfaces and take action as required to ensure safe passage for both pedestrians and vehicles.
- 2.1.3 Prior to forecasted accumulations of precipitation, Grounds Maintenance personnel or contractor may pre-apply snow melting products and/or grit to walking, road and parking surfaces if the weather conditions are such that the pre-application will be effective.
- 2.1.4 A snow removal contractor will automatically clear the campus road & parking lots whenever 5cm or more of snow falls, however, Grounds Maintenance staff may also call in the snow removal contractor as required to clear accumulated snow & ice from campus parking lots and roads.
- 2.1.5 Grounds Maintenance staff will advise the Central Heating Plant (CHP) when they are scheduled for an early start due to forecasted severe weather.
- 2.1.6 Outside of normal business hours (i.e. evenings, weekends & holidays) Grounds Maintenance personnel will respond to call-ins from CHP to attend to walking, road and parking surface concerns as follows:
- 2.1.6.1 CHP will refer to the Grounds Maintenance call-in list and call the scheduled person on the list to attend to the concern. Grounds Maintenance personnel who receive a call must call the CHP within 15 minutes to indicate they are able to travel to campus to attend to the concern.
- 2.1.6.2 If CHP does not receive a call-back within 15 minutes, the next person on the call-in list will be contacted.
- 2.1.6.3 The Grounds Maintenance person who arrives to tend to the concern will also assess overall campus walking, roads and parking surface conditions and may ask the CHP to call in additional Grounds Maintenance personnel or snow removal contractors as required.
- 2.1.6.4 If severe weather creates conditions that require the attention of more than one person, CHP or the Grounds Maintenance staff member who receives the initial call may immediately call in additional Grounds Maintenance personnel or snow removal contractors.
- 2.1.7 When the Department of University Safety calls the CHP to report a road or parking lot in poor condition, the CHP will immediately call in the snow removal contractor.

### 2.2 Department of Facilities Management and Planning - Custodial & Ancillary Services

Custodial personnel are responsible for ensuring that snow is removed from the first 3 metres of pedestrian walkway outside all building entrances & exits. Custodial personnel on day shift (Monday – Friday) will begin clearing entrances at 7:15am. The targeted completion time for main building entrances is 8:00am and for secondary entrances & exits is 12:00 noon.

 <b>Carleton</b> UNIVERSITY Facilities Management and Planning	<i>Standard Operating Procedure</i>		<i>Issued</i>	<i>Reviewed</i>	<i>Page</i>
	<b>Winter Maintenance of Walking, Driving &amp; Parking Surfaces</b>	<b>SOP 004</b>	September 29 2011	September 23 2011	2/4
			Approved by: <i>D. Boyce</i>		

### 2.3 Department of University Safety - Parking Services

Parking Services personnel are responsible for the following activities:

- 2.3.1 Enforce parking restrictions and tow vehicles as required to ensure snow removal is not impeded.
- 2.3.2 Provide snow removal contractors with access to parking lots via security gates.
- 2.3.3 Install and maintain snow removal signage in parking lots.

### 2.4 Department of University Safety - Patrol Services

Patrol Services will regularly monitor walking, road and parking surfaces during normal patrol rounds. Ice build-up or snow accumulation in excess of 5 cm will be reported to the Department of University (DUS) dispatcher. The DUS dispatcher will in turn call the Maintenance Control Centre (MCC) during regular business hours or the Central Heating Plant (CHP) after hours to request that Grounds Maintenance personnel or snow removal contractors attend to the areas of concern.

### 2.5 Maintenance Control Centre (MCC)

During normal business hours, Monday to Friday, the MCC will forward concerns about walking, road or parking surface conditions directly to Manager of Grounds Maintenance.

### 2.6 Central Heating Plant (CHP)

Outside of normal business hours (i.e. evenings, weekends & holidays) concerns about walking, driving or parking surface conditions will be forwarded to the Central Heating Plant (CHP). CHP will in turn call in Grounds Maintenance personnel or snow removal contractors as follows :

- 2.6.1 Refer to the Grounds Maintenance call-in list and call the scheduled person to attend to the concern.
- 2.6.2 Wait 15 minutes for a call-back. If no call-back is received, call the next person on the list.
- 2.6.3 The Grounds Maintenance person who arrives to tend to the concern will also assess overall campus walking, driving and parking surface conditions and may ask the CHP to call in additional Grounds Maintenance personnel or snow removal contractors as required.
- 2.6.4 If severe weather creates conditions that require the attention of more than one person, CHP or the Grounds Maintenance staff member who receives the initial call may immediately call in additional Grounds Maintenance personnel or snow removal contractors.
- 2.6.5 If the Department of University Safety calls to report a parking lot in poor condition, immediately call in the snow removal contractor.

## 3 **Winter Maintenance Procedures for Grounds Maintenance personnel or Contractor**

### 3.1 During normal business hours (7:00am - 3:30pm, Monday - Friday)

- 3.1.1 Monitor walking, road and parking surface conditions.
- 3.1.2 Respond to concerns about walking, road and parking surface conditions.
- 3.1.3 Scrape snow or ice from surfaces as required.
- 3.1.4 Apply snow melting products or grit to surfaces as required.
- 3.1.5 Remove accumulated piles of snow and transport to the snow dump area.
- 3.1.6 Restock snow melting products & grit bins.
- 3.1.7 Prior to forecasted accumulations of precipitation, pre-apply snow melting products / grit to walking, driving and parking surfaces if the weather conditions are such that the pre-application will be effective.
- 3.1.8 Pre-schedule personnel to arrive early in anticipation of forecasted precipitation and notify CHP of the early start.

 <b>Carleton</b> UNIVERSITY Facilities Management and Planning	<i>Standard Operating Procedure</i>		<i>Issued</i>	<i>Reviewed</i>	<i>Page</i>
	<b>Winter Maintenance of Walking, Driving &amp; Parking Surfaces</b>		<b>SOP</b>		<b>004</b>
			September 29 2011	September 23 2011	3/4
			Approved by:		
			<i>D. Boyce</i>		

### 3.2 Outside of normal business hours (3:30pm - 7:00am, Monday – Friday including weekends and holidays)

From 3:30pm - 7:00am, Monday - Friday, including weekends and holidays, winter maintenance is accomplished as follows:

- 3.2.1 Scheduled Overtime - Prior to forecasts of major accumulations of snow or ice, Grounds Maintenance personnel may be scheduled to arrive early (typically 2:00 am) to begin snow & ice removal activities. During this overtime period and then throughout the remainder of normal business hours, the Grounds Maintenance personnel will carry out their normal winter maintenance duties as detailed in section 3.1 above.
- 3.2.2 Call In - Grounds Maintenance personnel respond to walking, road and parking surface concerns forwarded from CHP on a call-in basis as follows:
  - 3.2.2.1 Response to localised walking, road and parking surface concerns-  
Grounds Maintenance will respond to calls from CHP to attend to localised walking, road or parking surface concerns by dispatching the scheduled Grounds Maintenance person from the call-in list to attend to the area of concern. In addition to tending to the area of concern, the Grounds Maintenance staff member called in will assess primary campus roads and walkways and plow and / or apply snow melting products as required to walking surfaces. The Grounds Maintenance staff member may ask the CHP to call in additional Grounds Maintenance personnel or snow removal contractors as required for roads and parking lots.
  - 3.2.2.2 Response to campus-wide walking, driving or parking surface concerns -  
When severe weather creates campus-wide walking, driving and parking surface concerns, Grounds Maintenance will respond by calling-in the entire crew after receiving an initial call from CHP. In addition, snow removal contractors will be called to clear campus parking lots & roads. During this call-in overtime period and then throughout the remainder of normal business hours, the Grounds Maintenance personnel will carry out their normal snow & ice removal duties as detailed in section 3.1 above.
- 3.3 Roads & Parking Lots  
Large parking lots are cleaned between 1:00am and 7:00am by a snow removal contractor. The contractor will attend to the parking lots as follows:
  - 3.2.1 The contractor will monitor snowfall and clean the parking lots whenever the accumulation of snow exceeds 5cm.
  - 3.2.2 Grounds Maintenance or CHP personnel may call the contractor as required to ensure roads and parking lots remain clear of accumulated snow and ice.  
The Department of University Safety - Parking Services will enforce parking restrictions to ensure that illegally parked vehicles do not impede snow-clearing operations.
  - 3.2.3 The contractor will monitor snowfall and clean roads or apply snow melting products whenever the accumulation exceeds 5cm.

## 4 Winter Maintenance Location Priorities

In order to most effectively utilise available winter maintenance resources, walking, driving and parking surfaces are prioritised into primary and secondary routes. The objective of route prioritisation is to ensure that primary pedestrian and vehicle arteries such as main roads, main pedestrian walkways and main building entrances are effectively maintained. Consequently, during periods of heavy snowfall or rapid temperature change, routes designated as secondary priority may temporarily experience snow & ice accumulation while the primary routes are serviced. Route designations are detailed below and on the map entitled “Winter Maintenance Routes”.

### Primary Routes

#### 1. Main campus entrances & roadways

 <b>Carleton UNIVERSITY</b> <i>Facilities Management and Planning</i>	<i>Standard Operating Procedure</i>		<i>Issued</i>	<i>Reviewed</i>	<i>Page</i>	
	<b>Winter Maintenance of Walking, Driving &amp; Parking Surfaces</b>		<b>SOP</b>	September 29 2011	September 23 2011	4/4
			<b>004</b>	Approved by: <i>D. Boyce</i>		

- Bronson Ave. entrance
  - Colonel By Dr. entrance
  - University Dr.
  - Campus Ave.
  - Library Rd.
  - Daycare Road
  - Raven Road
  - Lane through Lanark to Leeds & St.Patricks
  - Lane to Loeb / SSRB / HCI / VSIM buildings.
  - Lane from Lot #1 through Loeb & Southam Hall around to Paterson Hall.
- 2. Main pedestrian walkway spine including main building entrances and exterior stairs.**
- Main path from Bronson Ave. to the O-Train underpass.
  - Main path from O-Train underpass to Azrieli Theatre.
  - Azrieli Theatre to University Drive to Colonel By Dr. via Library Rd. walkway.
  - Azrieli Theatre to Lot #6 (past Mackenzie Building, through Residence Quad and past Leeds Residence)
  - Upper Quad walkways including stairs and building entrances.
- 3. All fire & emergency access routes**
- Athletics lot #5 access
  - Herzberg Quad access via UniCentre loading dock
  - Mackenzie / Architecture to UniCentre route
- 4. Main parking lots and lot access to the pedestrian spine**
- P1 including walkway access to Library Rd. walkway.
  - P2 including walkway to Campus Ave.
  - P6 including walkway to Leeds, tunnel entrance & main spine.
  - P7 including walkway from overpass to Leeds & main spine.
  - P9 and ML garage entrances and pathways to main entrances.
- 5. Main building entrances**

**Secondary Routes**

- 1. All routes to fire hydrants & building fire protection standpipes.**
- 2. All remaining roadways & lanes**
- Access lane to back of Ice House (both sides)
  - Bronson Ave. substation and pumphouse
  - Lane into Maintenance Building compound
- 3. All remaining parking lots**
- All R lots
  - P3, P4, P8, P11, P12, P14,
  - Top of P9
  - Remaining parking areas.
- 4. Remaining loading docks**
- 5. Secondary building entrances & exits**

<b>Operator</b>	<i>Name (please print)</i>	<i>Date</i>	<b>Reviewer</b>	<i>Name (please print)</i>	<i>Date</i>
	<i>Signature</i>			<i>Signature</i>	