



# Hamilton

*Municipal Grass Cutting - Service  
Levels & Impacts of the Cosmetic  
Pesticides Ban*

*Public Works Committee - June 4, 2012*



- Discussion at May 26<sup>th</sup> City Council Meeting on service issues relating to grass cutting
  - Grass cutting is a core seasonal service - what's changing?
  - Service Levels
  - How services are provided
  - Cosmetic Pesticide Ban
  - Opportunities for improvement
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## What's changing?

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- Not service levels - grass cutting is provided on City properties and lands at a variety of service levels, depending on the use and program objectives
  - Infrastructure growth
  - Weather
    - Weather variability
    - Climate change
  - Weeds
    - Increasing number of complaints about weeds on municipal lands
    - Policy changes (ban on cosmetic pesticide use)
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## Where do we cut grass?

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- Roads (linear assets)
- Parks & Cemeteries
- Golf Courses
- Around municipal facilities and properties



# Grass Cutting Services - Overview

Municipal Property / Facility Type	Number	Service Level
Boulevards	939 locations (1,035,855 m <sup>2</sup> )	9 cuts per season Linc / Red Hill Valley Parkway – 9 cuts per season for overpasses, centre boulevards – 2 cuts and shoulders – 3 cuts per season
Traffic Islands	178 locations (65,203 m <sup>2</sup> )	3 cuts per season
Rural Roadside	324 locations (2,213 km)	2 cuts per season
Parks	481 sites (15,168,698 m <sup>2</sup> )	17-18 cuts per season (1 x every 7 working days)
Sports Fields	451 fields (1,810,802 m <sup>2</sup> )	Class A & B Fields: 21-22 cuts per season (1x every 5 working days) Class C & D Fields: 17-18 cuts per season (1x every 7 working days)
Cemeteries	67 sites (1,606,602 m <sup>2</sup> )	Active – 21-22 cuts per season Inactive – 17 cuts per season



Hamilton

# Grass Cutting Services - Overview

<b>Municipal Property / Facility Type</b>	<b>Number</b>	<b>Service Level</b>
Golf Courses	3	Daily, April 1 – November 15 Greens, 5x per week, Tees 3x per week, Fairways 3x per week, rough 1x per week
Public Works Facilities - operations centres & yards (23); water & waste water (79); waste management (9)	111 sites	Various service levels ranging from 2 to 17 cuts per year
Corporate Facilities (7) & Libraries (4)	11 sites	Approx 20-25 cuts per year
Arenas (20), Recreation & Community Centres (32)	52 sites	17-22 cuts per year
Lodges	2 sites	20-24 cuts per year
City Housing	62 locations	13 cuts per year
Fire & EMS Buildings	28 sites	14 cuts per year (1x every 10 working days); As required (10)
Museums and Cultural Properties	13	17-20 cuts per year
Police	5 sites	Approx 20 cuts per year



## Public Works – Urban Roadside Mowing: Boulevards

<b>Service Description:</b>	Fine cutting of municipal boulevards Fine cutting Lincoln Alexander Parkway (Linc) and Red Hill Valley Parkway (RHVP)
<b>Number of locations:</b>	939 locations for a total of 1,035,855 sq. m.
<b>Service Level:</b>	<ul style="list-style-type: none"><li>• Boulevards are cut 9 times annually</li><li>• Linc &amp; RHVP:<ul style="list-style-type: none"><li>– Overpasses receive 9 cuts annually</li><li>– Center Boulevards receive 2 cuts annually</li><li>– Shoulders receive 3 cuts annually</li></ul></li></ul>
<b>Service Provider:</b>	Contracted (3 providers)
<b>Contract Management:</b>	PW - Road Operations Staff



## Public Works – Urban Roadside Mowing: Traffic Island Pavement Weed Cutting

<b>Service Description:</b>	Mechanical cutting of weeds of City owned islands
<b>Number of locations:</b>	178 for a total of 65,203 sq. m.
<b>Service Level:</b>	3 cuts per year June, September & October
<b>Service Provider:</b>	Contracted (2 providers)
<b>Contract Management:</b>	PW - Road Operations Staff





## Public Works – Rural Roadside Mowing

<b>Service Description:</b>	Mechanical mowing of the City's rural ditch lines
<b>Number of locations:</b>	324 locations for a total of 2,213 kilometers
<b>Service Level:</b>	2 cuts annually <ul style="list-style-type: none"><li>• Spring cut extends from road shoulder to centre line of ditch</li><li>• Fall cut extends from road shoulder to edge of Road Allowance</li></ul>
<b>Service Provider:</b>	Contracted
<b>Contract Management:</b>	PW - Road Operations Staff



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<b>Service Description:</b>	Mowing and trimming of City Parks (Citywide, Community, Neighbourhood, Parkettes and some schools and open spaces)
<b>Number of locations:</b>	481 parks 15,167,698 m <sup>2</sup>
<b>Service Level:</b>	1 x every 7 working days, 17-18 cycles per season
<b>Service Provider:</b>	City staff (permanent and summer students) PW – Parks & Cemeteries Section



## Public Works – Sports Fields

<b>Service Description:</b>	Mowing and trimming of turf at sports fields (soccer, baseball, lawn bowling, football, cricket)
<b>Number of locations:</b>	451 fields 1,810,802 m <sup>2</sup>
<b>Service Level:</b>	Class A & B Fields – 1 x every 5 working days, 21-22 cycles per season Class C & D Fields – 1 x every 7 working days, 17-18 cycles per season
<b>Service Provider:</b>	City staff (permanent and summer students) Public Works (PW) – Parks & Cemeteries Section



## Public Works – Active Cemeteries

<b>Service Description:</b>	Mowing and trimming of turf at active cemeteries including around monuments and head stones
<b>Number of locations:</b>	20
<b>Service Level:</b>	1 x every 5 business days, 21 – 22 cycles per season
<b>Service Provider:</b>	City staff (permanent and summer students) PW – Parks & Cemeteries Section



## Public Works – Inactive Cemeteries

<b>Service Description:</b>	Mowing and trimming of turf at inactive cemeteries including around monuments and head stones
<b>Number of locations:</b>	47
<b>Service Level:</b>	4 x in each of May and June, 2 x in each of July and August, 2 x in September, 3 x in October 17 cycles per season
<b>Service Provider:</b>	Contractors
<b>Contract Management:</b>	PW – Parks & Cemeteries Section



## Public Works – Corporate Facilities

<b>Service Description:</b>	Mowing and trimming of turf at corporate facilities (municipal service centres, operations centres, libraries)
<b>Number of locations:</b>	16
<b>Service Level:</b>	Approx. 20 cuts per season Approx. 25 cuts per season for Libraries
<b>Service Provider:</b>	Contracted, expires at end of 2013
<b>Contract Management:</b>	PW – Facility Services



## Public Works – Water & Wastewater Facilities

<b>Service Description:</b>	Mowing and trimming of turf at water and waste water facilities
<b>Number of locations:</b>	79
<b>Service Level:</b>	Ranges from 2 to 17 cuts per season, depending on the location, between May 1 and Oct 31.
<b>Service Provider:</b>	Contracted (3 providers), expires at the end of 2014
<b>Contract Management:</b>	PW – Water & Wastewater



## Public Works – Waste Management Facilities

<b>Service Description:</b>	Mowing and trimming of turf at Community Recycling Centres, Transfer Stations, Materials Recycling Facility, Central Composting Facility and Glanbrook Landfill site
<b>Number of locations:</b>	9
<b>Service Level:</b>	1 x every 5 business days - except for Glanbrook Landfill which is done as-needed, 21-22 cycles per season
<b>Service Provider:</b>	Site operations contractor
<b>Contract Management:</b>	PW – Processing & Disposal





## Community Services – Recreation Facilities

<b>Service Description:</b>	Mowing and trimming of turf at community centres, arenas and golf courses
<b>Number of locations:</b>	55 sites (3 golf courses, 16 community centres, 4 senior centres, 20 arenas)
<b>Service Level:</b>	Golf Courses – Daily (April 1 – Nov 15), rotation of cutting tees (5x week), greens (3x week), fairways (3x week) and rough (1x week) Community Centres & Arenas by Public Works - 1x every 7 working days, 17-18 cycles per season Other – 22 cuts per season
<b>Service Provider:</b>	Golf Courses – Community Services Community Centres & Arenas – Public Works staff (28); Community Associations (12); School Board (8); Community Services staff (2); Contract (2)



## Community Services – Lodges

<b>Service Description:</b>	Mowing and trimming of turf at Macassa and Wentworth Lodges
<b>Number of locations:</b>	2
<b>Service Level:</b>	20-24 cuts per season
<b>Service Provider:</b>	Contracted
<b>Contract Management:</b>	Community Services – Lodge Administrators



## Community Services – Hamilton Housing

<b>Service Description:</b>	Mowing and trimming of turf at Hamilton Housing properties
<b>Number of locations:</b>	62
<b>Service Level:</b>	13 cuts per season
<b>Service Provider:</b>	Contracted
<b>Contract Management:</b>	Community Services – Hamilton Housing



## City Manager's Office – Fire & EMS

<b>Service Description:</b>	Mowing and trimming of turf at Fire/EMS Stations
<b>Number of locations:</b>	28 sites
<b>Service Level:</b>	Public Works locations 1 x every 10 working days, 14 cycles per season (PW)
<b>Service Provider:</b>	Public Works Horticulture staff (19 locations) Volunteer Fire Fighters (9)



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<b>Service Description:</b>	Mowing and trimming of turf at cultural facilities
<b>Number of locations:</b>	13
<b>Service Level:</b>	Contracted – approx. 20 cuts per season Public Works Locations – 1x every 7 working days, 17-18 cuts per season
<b>Service Provider:</b>	Contracted (4), expires at the end of 2013 Public Works in house staff (8) Tenant (1)



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<b>Service Description:</b>	Mowing and trimming of turf at Police facilities
<b>Number of locations:</b>	5
<b>Service Level:</b>	Approx 20 cuts per season
<b>Service Provider:</b>	Contracted
<b>Contract Administration:</b>	Hamilton Police Services

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- Reliance on temporary workforce (students) due to seasonal demands
- In-house grass cutting services
- Contracts
  - Specifications
  - Contract Management (ensuring work is being done as specified)



## What is a pesticide?

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- Pesticide - means any organism or substance sold or used as a means of controlling, preventing, destroying, mitigating, attracting or repelling any pest or of altering the growth, development or characteristics of any plant life
  - The term “pesticide” includes all forms of herbicides, insecticides, fungicides, rodenticides etc.
  - Types include:
    - Selective, Non-selective, Synthetic, Organic
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## History of Pesticide Debate

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- Long standing debate respecting the risk vs. the benefits of pesticide use
  - Municipalities began banning use of cosmetic pesticides in 1991 (Hudson, PQ)
  - Hamilton implemented a by-law that limited the use of pesticides in 2007 (By-Law 07-282)
  - Provincial ban of cosmetic pesticide use (Ontario Reg. 63/09) took effect April 2009
  - Private Member's Bill 88 introduced May 2012 to allow use of cosmetic pesticides by licenced operators
  - Pesticides are one of a range of techniques available to manage pests and weeds
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# Integrated Pest Management (IPM)

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- IPM is a planned approach that focuses on appropriately managing plant care, promoting plant vigor, and maintaining healthy balanced growth
  - Core components include:
    - Appropriate plant selection
    - Proper planting techniques
    - Soil management (fertility, pH, aeration porosity)
    - Nutrient management (fertilization)
    - Irrigation and water management
    - Cultural practices (pruning, mowing, dethatching, overseeding, topdressing, aerification etc.)
    - Monitoring & Identification of potential turf pests & diseases
    - Application of control measures (cultural, physical, biological, behavioral and chemical control) to maintain pest populations below threshold levels
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## Pesticide Use by the City

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- Began reduction of pesticide use in 2002, with the approval of a Pesticide Use Policy for Municipal Parks and Properties (PW03155)
  - Development of an IPM program initiated in 2003 and costs identified
  - Cosmetic pesticides have not been used on municipal lands since 2007
  - Dramatic increase in amount of weed infestations impacting public lands
  - Pesticides are still used on golf courses and for control of noxious weeds (eg. Poison ivy, Giant Hogweed)
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## Opportunities for Improvement

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- Review of service levels and how services are provided (eg. tiered service levels, standardization by asset class, flexible start dates)
- Improvements to contract specifications (eg. standardization, performance measures, equipment pre-qualification)
- Improvements to contract management practices
- Continuous improvement for optimal value



Thank you

