



Report to: General Committee

Meeting Date: 20 February 2018

SUBJECT: Grass Cutting and Maintenance - Service Level Options
PREPARED BY: David Plant, Manager, Parks Operation, Ext. 4893

RECOMMENDATION:

- 1) That the report entitled "Grass Cutting and Maintenance- Service Level Options" be received;
- 2) That staff maintain the current grass cutting and maintenance service levels.

PURPOSE:

The purpose of this report is to provide further information to Council resolution (7) of the 116-T-16 Report entitled Grass Cutting and Maintenance Services which was presented to Council on April 18, 2017. Council requested, "That staff be directed to report back on the budget implications to change the grass cutting service levels for those parks with playing fields to once a week cutting schedule for the remaining components of the park (non-sports fields) and the non-residential boulevards with sports fields align to park maintenance practices and get cut at the same time as the park."

In exploring the feasibility of this request, staff identified four options for consideration as possible alternatives which will be defined herein.

BACKGROUND:

Turf growth cycles in the spring and fall are challenging to manage within the timelines of the current Council approved service levels of 12-14 days per grass cutting rotation. However, these service levels are currently being met. Increased growth is stimulated by rainfall at the onset of warmer weather in the spring, and rainfall with more moderate temperatures in the fall. This accelerated growth when not addressed with an accelerated cutting cycle presents several problems. In addition to grass growth, dandelions flourish in the early spring and fall with growth that can easily reach 6 inches per week. When left unmanaged for more than 7 days, these weeds are difficult to cut and are typically pushed over by mowers only to spring back up and present an appearance that is unacceptable to residents. As of the end of October 2017, Parks (excluding forestry) received a total of 1869 ACRs with 389 or 21% directly related to grass cutting or weeds issues. The issues of grass cutting frequency and weeds is the subject of a great deal of resident dissatisfaction and consumes a great deal of time for staff and Ward Councillors every spring.

Adding to the accelerated growth cycles of grass and weeds, seasonal rainfall can create extremely wet conditions often impeding staff from utilizing commercial maintenance equipment on site at the risk of leaving wheel ruts which will then become a trip hazard when the ground dries. Delays in addressing the already rapidly growing grass, results in

heavy grass clippings being left in place which impedes resident's ability to use parks and leaves an appearance of poor maintenance practices.

City athletic fields are typically cut with wide area mowers which range in size from 10 – 16 feet in width which are designed for open areas and high productivity. The practice of having a wide area mower attend a park and cut the sports fields without cutting the entire park has created confusion with some residents with respect to Council approved service levels for grass cutting maintenance within parks. This confusion is most evident during the spring and fall when it appears to some residents that staff are only maintaining a small portion of the park when they should be maintaining the whole park.

City parks require an entire suite of equipment to effectively and efficiently maintain all areas. Our fleet of wide area mowers (10' to 16' wide) cut extensive open spaces such as athletic fields and open spaces in large community parks while the smaller more maneuverable zero turn mowers (5' wide) cut the smaller spaces and trim around trees, playgrounds and structures. In order to cut all grass in the park, regardless of the size of space, we need to use small and large equipment together. Given that athletic fields are currently cut with wide area mowers only, cutting the entire park at the same time requires additional equipment to be brought to the site. Attempting to cut entire parks using only a wide area mower will create an even more fragmented level of service.

DISCUSSION:

Parks and Athletic Fields Service Level Comparison					
	# Parks	# Fields	Hectares	Acres	Service Levels
2017	285		448	1107	12-14 Days
		168	70	173	2x/Week

Challenges and Logistics of Service

- Student staff are not available until May and come with increasingly limited experience due to increasing high turnover – 90% turnover in 2017
- We do not have the ability to hire staff for spring and fall only as we compete with surrounding municipalities for our seasonal staff
- Seasonal 150 day staff come with minimum 3 years' experience which reduces our learning curve and training costs significantly

Facts about Grass Cutting and Dandelion Growth

The athletic fields within the City of Markham are some of the best playing fields in the GTA according to the City's sports field user group survey results from November 2017. City athletic fields are used every day of the week with no rest periods allowing approximately 48,000 permitted players per week to use our facilities. As it is not

practical to use natural pesticides on this scale to assist with weed control, the City employs a comprehensive cultural practices program which includes aeration, fertilizing, seeding, topdressing, and in many cases irrigation. This program promotes healthy turf and fast repairing turf which requires frequent cutting. Sustaining City fields at a premium playable level throughout the season requires that we mow them twice within a 7 day period to address rapid growth and disperse clippings so they do not impede play.

The dandelion stem is hollow yet very strong and pliable. When allowed to grow on athletic fields, tall stems bend flat to the ground before the mower can cut them. Shorter stems are less likely to bend flat and more likely to be cut off presenting an appearance of cut grass with the yellow flower removed. It should be noted that while dandelions are a great source of complaint, the season is much limited to the spring and fall for about 4 weeks each.

Benchmarking Service Levels Frequency of Cutting			
Municipality	Athletic Fields	Parks	Boulevards
Richmond Hill	1x/week	1x/week-every 2 weeks	15 cuts/year
East Gwillimbury	1x/week	1x/week	15 cuts/year
Newmarket	1x/week	1x/week-every 2 weeks*	15 cuts/year
Markham	2x/week	every 2 weeks	15 cuts/year
Vaughan	2x/week	7-9 days, variable	15 cuts/year

*Large and active parks cut weekly, small less used parks are cut every 2 weeks or as required

Service Level Options for Parks Grass Cutting Maintenance

Option 1: Provide Weekly Maintenance to Parks with Athletic Fields per Council resolution (7) of 116-T-16

- Cutting all City parks associated with athletic fields on a weekly basis would add approximately 70 hectares of cutting to current crew lists.
- Maintenance routes would become fragmented as trim crews would have to be dispatched to these locations in addition to maintaining an existing route based on 12-14 days creating inefficiencies.
- Our 168 athletic fields Citywide are contained within 65 park locations meaning that only 23% of City parks would be cut weekly if linked specifically to athletic field cutting which does not serve all residents equitably.

- Some of our most active splash pad/playground locations are in parks with no athletic fields (Ray Street, McQuay Park, Millennium Park, Roseberry Park) and will still remain on the 12-14 grass maintenance schedule. With nearby parks with athletic fields being cut weekly, this will potentially add further confusion for residents understanding of parks maintenance.
- In order to increase the volume of work, 2 additional 150 day staff will be required at an incremental cost of \$71,664.
- This option presents a challenge for staff as it does not equitably represent all parks across all eight wards or all of the residents in the City and is an inefficient way of deploying staff.

Option 2: Providing Weekly Maintenance to All Parks Spring and Fall Only to address seasonal complaints

- Cutting all City parks weekly in spring and fall would require that existing route lists be modified spring and fall and that crews/routes change seasonally affecting quality and productivity not to mention the additional time required to monitor and track results.
- Cutting all City parks in spring and fall would allow more effective management of heavy growth periods for both grass and weeds which are the source approximately of 21% of our total ACR's related to parks maintenance
- The City does not have the ability to hire additional staff for the shoulder seasons only. Staffing will have to be increased throughout the entire season with the hiring of 3 additional 150 day staff at an incremental cost of \$112,048 . These additional staff will be deployed to other maintenance activities within the parks business unit when maximum growth cycles subside.

Option 3: Providing Weekly Maintenance to All Parks

- Cutting all City parks weekly would require existing route lists be reduced in total area by creating 3 additional crews/routes to ensure a 7-10 day schedule. These crews will be established from the first cut and remain intact until the season ends. The consistency and efficiencies gained with this method of deployment will allow staff to focus on the miscellaneous tasks such as trimming hard surfaces, weeding playgrounds and planting beds, and letter and debris collection when heavy growth cycles of grass are reduced.
- Weekly grass maintenance scheduling will provide consistency of care in all parks regardless of the size of amenities along with efficiencies in maintaining the same routes all season and not having to juggle staff and equipment in the summer months.

- At present our staff are in our parks effectively twice a month (12-14 day schedule) for grass cutting and intermittently for litter collection and other tasks. Weekly visits will increase staff presence and monitoring of waste receptacles and other park related issues which will be dealt with much more proactively.
- Weekly grass cutting maintenance in all City parks will improve the resident user experience and the appearance of City parks maintenance while reducing the confusion often created by our current bi-weekly athletic field maintenance program.
- Athletic field cutting for one visit per week will be incorporated into the crew route to maximize efficiencies and reduce down time on wide area mowers due to wear from travelling the City road network.
- 3 additional 150 day staff will be required at an incremental cost of \$112,048 . If Council are to consider a change in the current service level, staff recommends this option of improving the current service level for grass maintenance at all City parks from a 12-14 day schedule to a 7-10 day schedule for a maximum of 28 weeks in the year.

Option 4: Maintain the current level of service with no changes

- Based on the survey results from athletic field user groups in the fall of 2017, our current program meets and in many cases exceeds the expectations of user groups indicating that this current level of service is adequate.
- Neighboring and similar sizes municipalities are in the process of evaluating their service levels. Feedback indicates that many will shift their service level to weekly service to address similar issues that Markham is facing.
- There is no financial impact to the City to maintain current service levels.
- Better communication pieces would need to be developed to help residents understand our level of service and deal with the complaints about long grass and dandelions seasonally.

FINANCIAL CONSIDERATIONS

The financial implications for options 1-4 are outlined below, and to be considered as part of the 2019 operating budget process.

Option	Change in Service Level	Additional Resources Required	Cost including benefits	Impact to Residents	Environmental Impact
1	Parks with fields cut weekly	2 x 150 day staff	\$ 71,664	Service level confusion	15% increase in equipment time Partial reduction of weed growth
2	Weekly spring/fall	3 x 150 day staff Rental truck - additional 3 months rental	\$ 112,048	Spring and Fall improvement	35% increase in equipment time Increased reduction of weed growth
3	Weekly service all season	3 x 150 day staff Rental truck - additional 3 months rental	\$ 112,048	Seasonal improvement	65% increase in equipment time Substantial reduction of weed growth
4	Status Quo	None	\$ -	Service level confusion	0% increase in equipment time No reduction of weed growth

HUMAN RESOURCES CONSIDERATIONS

Staff recruitment for seasonal staff will include additional 150 day seasonal staff

ALIGNMENT WITH STRATEGIC PRIORITIES

If Council are to consider a change to the current service level for grass cutting, staff recommend option 3 which addresses an increased service level within our City parks to proactively improve the overall resident parks user experience and thus improve customer satisfaction. With the enhanced routes and blending of athletic field cutting with regular parks maintenance, the City will reduce the impacts of equipment failures and thus maximize operational excellence. Staff believe that this service level change positions Markham in a leadership role with respect to parks maintenance standards at a minimal increase to current costs.

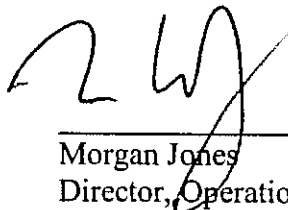
BUSINESS UNITS CONSULTED AND AFFECTED:

Operations - Parks

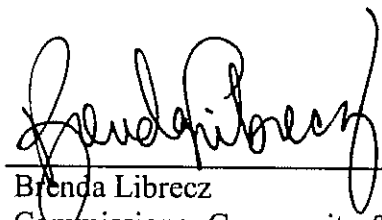
Finance

Human Resources

RECOMMENDED BY:



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Director, Operations



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