

Email From: Rob Peachey

Sent: Monday, March 21, 2011 4:27 PM

Subject: RE: BurlingtonGreen input re Artificial turf in Burlington

Staff would like to acknowledge receipt of the concerns presented by BurlingtonGreen in their letters of January 20th and reiterated in the letters of March 9th and March 20, 2011. Concerns raised were considered in the recommendation to use artificial turf for park projects.

Environmental considerations are provided as background to report PR 01-11, recommending the tender award for Norton Community Park-Award of Contract. Greater detail is contained in report PR-01-11.

The following are highlights related to BurlingtonGreen's concerns:

Are there any health risks associated with installation, player use, maintenance and disposal?

- **Health Risks**

Through the procurement of artificial turf, environmental considerations were a component of the selection criteria and suppliers were required to provide appropriate documentation stating compliance.

- Chemical Analysis – Artificial turf and infill materials proposed for this and future city projects are in compliance with Ministry of Environment regulations for chemical content and exposure to the environment and users.
- Expert Witness Statements are provided in as Appendix D in Report PR-01-11. These statements were received for the Environmental and Land Tribunals Ontario hearing, regarding the proposed use of artificial turf at City Park. The consultant was provided all information regarding the proposed product and system. The turf proposed for Norton Community Park is the same as City Park

Kerrie Beckett Ph.D Senior Scientist, Toxicologist with Stantec Consulting Services provided the following conclusion:

“ Therefore in conclusion, it is my opinion that synthetic turf does not pose unacceptable risks to human health or the environment. Additionally, it is my opinion that synthetic turf fields can be viewed as a sustainable solution to requirements of athletic fields. This would include things such as problem waste material which can be safely recycled and used, pesticides and herbicides are not required and therefore are not entering the environment, and maintenance costs and resources are minimal in comparison to natural grass fields.”

- **Player use** – Artificial turf provides a high quality, consistent playing surface that can withstand continuous use. Staff has considered the heating of fields and have planned infrastructure that allows spraying of the field if required.
- **Maintenance** – Artificial turf fields require less use of fuel burning equipment for maintenance requirements. Artificial turf doesn't need to be irrigated realizing a reduction in the use of water
- **Disposal** – The rubber crumble infill material can be vacuumed and re-used during replacement.
 - Artificial turf currently comes to the end of its life-cycle in approximately 12 years.

- City staff has connected with the Region of Halton's Waste Management department with the purpose of setting up dialogue on alternative solutions to divert artificial turf from landfill at the end of its life cycle.

Does artificial turf include greater or less environment implications over its life cycle?

What are the life cycle financial costs associated with artificial turf vs. natural turf?

To answer these questions, an Eco-Efficiency Analysis (EFC) would be required. An EFC examines the entire life cycle of a product or process all the way from raw materials sourcing, to product manufacture and use to disposal. The analysis looks at the environmental impact in proportion to a product's cost-effectiveness.

Considering EFC's, represents a broader topic than artificial turf when considering procurement of products and construction. Currently, the City of Burlington does not undertake EFC's as part of its procurement process.

Report PR- 05-08 presented as Appendix B to report PR-01-11, provides a high level Net Present Value analysis of artificial turf to natural grass over a twelve year period

Is there information available to the public on where the recommended supplier's product manufactured and on their production process?

- The product proposed is manufactured in Atlanta Georgia by Ten Cate. Their web site is www.tencate.com

As per our January 20, 2011 letter, does the city plan to include the use of artificial turf for residential and park use in the upcoming strategic plan process?

- The use of artificial turf is supported in the Parks, Recreation and Cultural Assets Master Plan
 - Sport field Capacity and Development: The use of artificial turf for soccer, field lacrosse, football and other sports, both existing or new, be considered in order to provide enhanced capacity, playability and quality where evident need and economic benefit justify the investment.
- Report PR-01-11 only refers to the installation of artificial turf in a sport field application at Norton Park.
- Planning staff will be reporting on a proposal to use artificial turf in residential settings in the second quarter of 2011.

Conclusion

Artificial turf is a common surface used by different jurisdictions in Canada. BurlingtonGreen has raised similar questions and concerns regarding health and environmental that have been the subject of research and study. Studies that have been undertaken have concluded there is no significant health or environmental implications for the application of artificial turf for sport field use. Artificial turf continues to be a viable and sustainable application to providing quality and reliable sports field surfaces.

Next Steps

Rob Peachey, Manager Parks & Open Space will offer arrange for appropriate staff to meet with representatives of BurlingtonGreen and user groups who have asked for and use artificial turf to further discuss this topic.

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