Physical Plant Services

2018 Winter Newsletter

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Message from the AVP
BY JOHN WITJES, AVP (FACILITIES)

I hope you found time this past weekend to enjoy the extra-long weekend and share time with family and friends while taking a break from our often full and busy work lives. I managed to find some time myself to take a long hike with some friends and it was easy to tell by the signs of spring along the way that favourable weather is just around the corner. This past year has been very busy and productive for our Facilities team. With just a few short weeks left in the academic year, we are once again focusing on preparation for our busy summer work season on campus.

We continue to develop and build a stronger team to ensure our clients on campus receive the best customer services we are capable of providing. I would like to welcome Raj Shekhar, Small Works Project Manager, to our Project Management Office, Mathias Ng, Electrical Engineer, to our Engineering team, and Gord Meacher, Area Manager, to our Area Operations team. I would also like to welcome to the Operations team, carpenters Cory Burns, Justin Clancy, and Benjamin DeBoer, trades helpers Brad Amell and Keith Wilde, refrigeration mechanic James Clark, and electrician Jesse Bambrick.

In December, with the help of many Facilities team members, we put together and submitted a project into the Province’s Greenhouse Gas Retrofit Program (GGRP) Innovation Fund. The project will significantly reduce the campus GHG emissions by installing several natural gas boilers at the Donald Gordon Centre, the St. Mary’s of the Lake property and west campus and also allow for the decommissioning of the west campus steam line. This $9M project received approval from the Province earlier this year and will be complete by March 2019.

I want to thank each of you for all your hard work and support this past year as we continue to ensure that our Facilities team provides the campus with the best services possible. I hope you enjoy this edition of our Facilities newsletter!
Having just joined Queen’s University at the beginning of November, I am still getting up to speed, but I am incredibly impressed by the volume of work that our project managers and designers are responsible for.

One would think that winter is the quiet time for Facilities Design and Construction, but we are very busy finishing up projects, including the new Innovation and Wellness Centre, planning some new and exciting projects at Queen’s, and organizing the approximately $15 million worth of deferred maintenance projects that will be undertaken this year.

Recently Completed Projects

Various Classrooms Upgrades, including Duncan McArthur Hall, Walter Light Hall, Mackintosh-Corry Hall, Kingston Hall – consisting of complete renovation of the 700 seat auditorium, active learning classrooms, and informal study spaces along Student Street.

Upcoming Projects and Initiatives

Queen’s is making the development of the Physics+ Building, a new centre for discovery, learning and application, its key academic and research priority. We have initiated the consultant selection process for the new Physics+ Building, and will be working over the next few months to confirm the detailed functional needs for this building, and then preparing a conceptual design.
Energy Management @ Queen’s

BY: NATHAN SPLINTER, ENERGY ENGINEER
and CONNOR REED BALEN, ENERGY ENGINEER INTERN

Metering Means Managing

This past winter the Central Heating Plant (CHP) had to once again increase steam production to meet the heating needs of nearly the entire campus. Did you know the CHP provides heat to over 80 Campus buildings as well as the Kingston Health Sciences Centre and the West Campus?

Steam is a very effective heating medium and after it delivers its energy to campus buildings it condenses into a liquid and is returned to the CHP. We call this liquid condensate, and after it returns to the CHP, it is recycled back into steam to deliver heating energy back out through the distribution system.

The Energy Management team is currently working with a local contractor to upgrade metering in over 40 of the buildings on campus. In some cases new meters are being installed and in other the meters are being upgraded to digital from analog to increase reliability and accuracy. The new meters will provide data and readings on a more frequent time basis allowing Physical Plant Services to respond faster to any issues but also to review historical data to identify opportunities for energy savings and changes to building operations.

In the profession of Energy Management, a commonly used adage is “you can’t manage what you don’t meter”. When complete this project will open the doors to several opportunities for building improvement and will support the University’s Climate Action Plan targets for greenhouse gas reductions.
Winter Sustainability Review
BY: AARON BALL, SUSTAINABILITY MANAGER

Electric Vehicle Charging Stations

In December, Queen’s installed the university’s first ever, electric vehicle charging stations.

A key component of the University’s broader objective to create a sustainable campus is developing a safe, inviting and convenient alternative transportation network. The average Queen’s commuter emits roughly 1 MT of carbon annually. By providing appropriate infrastructure to support alternative modes of transportation, Queen’s can reduce help reduce this carbon impact.

One such alternative transportation option is the use of electric vehicles, which is a growing trend in North America, as most car manufacturers are now offering such vehicles. However, one of the remaining barriers to wider uptake is the lack of charging facilities. Over the past year, the Ontario government has signaled significant interest in this field, by establishing several granting programs intended to enhance the provincial charging infrastructure.

In this spirit, two charging stations have been installed in front of the School of Kinesiology to accommodate the small, but growing community of electric vehicle users on campus. The charging stations will be available without additional cost to Queen’s permit holders and guests using a pay-and-display ticket. Provisions are also in place to monitor the power consumption of the units. The monitoring will allow the university to track the frequency of usage at the stations and assess the financial impacts of the energy consumption.

Finally, this project benefitted from the generous support of several contributors, including an alumni group from Applied Science class of 1989 and from Hospitality Services on behalf of Coca-Cola.
The most engaging Keynote Speaker was Mr. Rick Hansen discussing ‘Removing Barriers and Unleashing Potential’. Mr. Hansen was reflecting on the 30\textsuperscript{th} anniversary of his ‘Man In Motion World Tour’ which covered 34 countries and raised $26 million for spinal cord research and quality of life initiatives. Mr. Hansen discussed his current work with the Rick Hansen Foundation to make the built environment more inclusive and accessible for all, both in Canada and worldwide. What was inspiring was Mr. Hansen’s passionate reflections of the tour, his life, and his hopes for the future. His words resonated with me and I left the conference feeling his ‘spirit of optimism’. I also got to meet with Mr. Hansen after his speech which was a highlight of the conference.
The 2018 Winter “Tool of the Quarter” is:

SPER Scientific Digital Sound Meter Model 840029.

The digital sound meter is a useful tool when trouble shooting noise issues around campus. The meter offers a wide variety of measuring options including A and C decibel frequency weighting scales with fast or slow response. The meter can be used to capture spikes in noise using its peak function. The digital display has a resolution of 0.1 dB and also indicates low battery and over or under load. The meter covers a range of 30 to 130 dB in the A scale and 35 to 130 dB in the C scale, with an accuracy of ±1.5 dB.

The SPER Scientific Digital Sound Meter is available from the engineering group for use by all PPS personnel.
Announcements

New Hires

Gord Meacher, Area Manager - November 21, 2017
Cory Burns, Carpenter – December 1, 2017
Justin Clancy, Carpenter – December 1, 2017
James Clark, Refrigeration Mechanic – January 2, 2018
Brad Amell, Trades Helper – January 3, 2018
Keith Wilde, Trades Helper – January 3, 2018
Raj Shekhar, Small Works PM – January 22, 2018
Benjamin DeBoer, Carpenter – March 5, 2018
Mathias Ng, Electrical Engineer – March 5, 2018
Jesse Bambrick, Electrician– April 2, 2018

Retired

Chris Mayo, Carpenter – January 31, 2018
Rick Knowles, Electrician – April 30, 2018

Thinking of Retirement?
Queen’s Human Resources offers a Series of Pre-Retirement planning courses designed to encourage Queen’s employees to begin planning earlier in their lives so that they can live the way they want to when they retire. For more information, check the online catalogue located at http://www.queensu.ca/humanresources/apps/training/

We Want To Hear From You!

Do you have a news story or an announcement you would like to make, a cartoon or photograph you’d like to share? We’re always looking for submissions for future publications.

Have an idea on what we should name our newsletter. All suggestions are welcome. Submit your ideas to any of the newsletter committee members:

Tracy Elliott, tracy.elliott@queensu.ca and/or Larry Pattison, pattison@queensu.ca

If you would like to start receiving an electronic version of the PPS Newsletter send an email to one of the newsletter committee members and you will be added to the email distribution list.