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

Another year … and more accomplishments for our team!

As we approach the holiday season and the beginning of a new calendar year, we often find ourselves reflecting on the past year and thinking about the changes that have occurred in our lives. Within PPS, the changes have been many. Last summer our Grounds Team’s work introduced colorful tri-color plantings and hanging baskets on campus to let everyone know Queen’s is celebrating 175 years as a university. The Campus Security and Emergency Services Team performed a key role in ensuring a successful start to the school year and the following high profile homecoming events and nationally televised football game. Our Custodial Team has reorganized and is now delivering a more consistent level of service for our Queen’s clients and that is being noticed on a regular basis. Our maintenance management system was improved and now includes state of the art mobile technology for our trades which is helping our team deliver a more efficient building maintenance service. Within an environment of ever increasing demand for project services, the Project Team continues to improve project delivery including the successful opening of Richardson Stadium this past fall and the start of our new Innovation and Wellness Centre and Biomedical Research Revitalization Projects. Global Adjustment energy management efforts by the heating plant, controls, and engineering staff will avoid over $5M in electrical cost next year. The Sustainability Team is working successfully to implement many energy reduction initiatives with our ESCo partner Honeywell that will reduce our utilities bill by $1M per year.

It has been a busy time for all of us … the results have given us much to be proud of.

I would like to thank all PPS employees for their hard work and dedication to Queen’s over the past year. I hope that you will find some time over the holiday break to relax away from our busy work lives and to enjoy time with family and friends.
Construction Update
BY FRANCO LORA, PROJECT MANAGER, INNOVATION AND WELLNESS CENTRE

The former Physical Education Centre (PEC) building which was decommissioned in 2009, is finally being transformed into a bright and vibrant hub for student health and wellness, innovation and learning.

The building will become the new home for:

- Engineering and Applied Science
- Athletics and Recreation
- Student Wellness
- The Innovation Centre
- The International Centre
- Registrar’s Offices
- Chaplain’s Offices
- Student experiences and
- Town Gown Relations

The heritage aspects of the existing building façade will be incorporated into the new building in order to maintain Queen’s unique character.

Demolition began in September of this year, and by substantial completion in April 2018, the new facility will provide up to 160,000 square feet of state of the art space for students and faculty.
Safety First: Lock Out, Tag Out
BY: LARRY PATTISON, DIRECTOR, ENGINEERING & OPERATIONS

Using Lock Out Tag Out correctly is not only one of the simplest ways to improve safety in our workplace but it also the law.

The Ontario Health and Safety Act Regulation 851 section 42 requires electrical lock out and tag out while section 75 speaks to the locking out of systems or machinery under maintenance or repair.

Whether you are working with electricity, steam, natural gas, compressed air or a mechanical system in which energy is stored, there is a way to lock out and tag the equipment upon which you are working. Breaker lockouts, multi-locks, pad locks and tags are all available through Stores and Fixit. If you need a lock out device or accessory that we do not stock, please speak with your supervisor.

Refer to A.6 for our SOP covering lockout/tagout. In the event that you are working on a complex system or one with which you are not familiar, please speak with your supervisor about the correct way to make it safe and lock it out prior to beginning your work.
Grounds Update
BY: MATTHEW BARRETT, GROUNDS MANAGER

It’s been another busy season in the grounds department with the 175th anniversary of the University. The university’s colours were on display in our annual planting beds around campus this summer with some of these displays continuing on into the 2017 season.

As most people are aware this summer was one of the driest we have seen in the past 10 years. The crew was kept busy trying to keep up with the demand for watering trees and our annual displays around campus. We had two water tankers going every day watering trees at both the main and west campuses. This year the grounds department invested in Gator bags, a watering bag system that is placed at the base of the tree. The bags slowly release water to the root ball over a 5-8 hour period. The bags were moved around to problem areas and to trees that needed it the most.

There were trees on campus showing signs of stress, with some species handling the dry weather better than others. We have found that a lot of the Acer and Liriodendron genus’s started the dormancy process early and started to drop their leaves early to help conserve water and moisture.

Just like every other land owner in eastern Ontario, Queen’s continues to deal with the emerald ash borer. This insect is now widespread in our area and poses a serious threat to every ash tree. We have identified healthy ash trees and continue to treat them so that they will remain insect free. Trees which are not in favourable condition are being removed and replaced by more disease and pest resistant species.

It was also a busy summer for construction around campus, with sidewalk replacements, the completion of the restoration to the front porch of the yellow cottage on Stuart Street, and the repaving of Bader Lane. With fall now here and winter knocking on the door the crews are working on the last of the leaf collections and closing down of annual and perennial beds.
Hello and welcome to my first attempt at writing an article for our newsletter. A lot has changed over the last few months on how we run and deliver custodial services across campus. We held our first custodial town hall on October 5th which was very well attended. We will be hosting our next town hall in the New Year and once the date is finalized a notice will be sent to staff.

As we mentioned at the town hall our new office is up and running in the south end of BioSciences basement and I would like to take this opportunity to invite each and every one of you to stop by and say hello. Our new training area will be set up early in the New Year so more of our training can be completed on line.

Winter arrived with a vengeance on Sunday November 19th (golf clubs may have to be put away) and I would like to say Thank You to all of the custodial staff that started cleaning entrance ways Sunday night and continued throughout the day Monday.

As I look back on 2016 I believe we have accomplished a great deal. We have taken over several new buildings such as Haynes Hall and the Isabel Bader Center with good results. We successfully managed 25 spring convocations, 9 fall convocation and the clean-up of the Science Formal.

The Custodial Management group are working very well together and becoming a very effective team, Alberta Area “1”, Leah Area “2”, Tracy Area “3” and Will covering the evening and night shift. I would like to take this opportunity to thank them for their patience and their positive outlook.

Lastly, I would like to thank everyone in the Custodial Services team that have made such a positive impact in helping us move forward and implement the changes on how we clean the campus. We faced many challenges through the year but we did pull together as a team and we got through. I look forward to working with everyone in the New Year.

Have a safe and Happy Holiday!
CAPit, the energy performance contract that Queen’s has undertaken with Honeywell, is now fifty percent complete.

The summer witnessed an extremely successful endeavor perform all the targeted retrofits in our Residence buildings before students returned in September. Coordinating the work throughout all the buildings was a large undertaking and the support of Suzanne DeSousa and the rest of the Residence Facilities Control Centre helped make the project a success. The work involved replacing hundreds of new toilets, showerheads and faucet moderators. In addition, over 2000 lamps were replaced throughout the buildings.

Great progress was also made during the summer and into the fall in our academic buildings. Hundreds of more toilets, urinals and faucets were retrofitted, along with hundreds of windows re-caulked and several thousand lamps and lighting fixtures replaced.

These efforts are already showing results. In particular, the domestic water projects are providing significant consumption savings. Just within the Residence buildings, over a two month period we have reduced water consumption by more than 30,000 cubic meters. On a building by building basis, we are seeing reductions ranging from 15% to as much as 70%. These are great early results for CAPit!

The next major phase of the project will continue to be supported by PPS staff members Bob Polegato, Nathan Splinter and Aaron Ball. The remaining projects will now focus on HVAC systems within several buildings. Chernoff Hall is being targeted for a heat recovery system that will capture and reuse waste heat from the exhaust air, providing an 8500 klb reduction in steam consumption and a reduction in carbon emissions by over 600 MTCO2e. Other buildings such as McArthur, Dunning and Humphrey will benefit from the installation of new zone dampers that will allow better alignment between actual room occupancy and space conditioning. The result of these efforts is expected to reduce steam use by 7200 klb, electricity by 700,000 kWh and carbon by another 600 MTCO2e annually. Designs of these initiatives are currently being finalized, with installation targeted for next spring and summer.

The CAPit project was developed to support the campus Climate Action Plan (CAP) and will support an overall reduction to campus carbon emissions by roughly 2800 MTCO2e.

More information about CAPit can be found on the Queen’s Sustainability Office website.
Energy Management at Queen’s
BY: CONNOR REED BALEN, ENERGY ENGINEER INTERN

A Case Study: Abramsky Hall Fume Hood
Fume hoods that are not properly controlled are a significant source of energy waste. They also represent an opportunity to reduce energy costs and mitigate carbon impact related to university operations. A fume hood that is not only improperly controlled but that is also not being utilized is a double blow. This is the case for the fume hood in Abramsky Hall.

The Abramsky fume hood is the last of four fume hoods that were installed during a full building renovation in 1985. Three of four fume hoods have been decommissioned and removed over time, but one remains. The building is occupied by the Centre for Neuroscience Studies which now has no use for a fume hood. This underutilized piece of equipment was first noted by Tyler Macdonald at Environmental Health and Safety who contacted the PPS Energy Management team.

The Energy Management team proceeded by establishing a business case for the decommissioning and removal of the fume hood, along with a cost estimate based on feedback from PPS Steamfitter Russell Kish. After hearing the proposition put forward by PPS, the staff member using the space, Michael Lewis, was on board with having the equipment removed. The Centre for Neuroscience Studies was consulted to confirm that there was no intention to repurpose the hood in the foreseeable future. Both Kelly Moore, the Departmental Manager, and Doug Munoz, the Director, were patient and helpful during the process.

With a strong business case and support from all stakeholders the project to remove the fume hood has been approved and work will be completed in the New Year. The estimated payback period is 4.1 years.

This project could not have moved forward without the help of all of those mentioned above. We recognize that there remain a lot of opportunities for energy reduction on campus similar to this example. PPS employees are encouraged to bring ideas on any and all opportunities for energy savings to either Nathan Splinter (splinter@queensu.ca) or Connor Reed Balen (connor.reed@queensu.ca). All ideas are welcome.

A Deeper Look at the Energy Analysis
There are two factors that explain why this fume hood, and fume hoods in general, are such a concern with respect to energy usage. The purpose of a fume hood is to provide ventilation and limit exposure to potentially dangerous fumes. In the case of the Abramsky Hall fume hood, a ½ horsepower motor drives an exhaust fan at all hours of the day. The potential energy savings from removing this fan would amount to about $250 annually.

However the larger use of energy is to heat or cool the air that is exhausted by the fume hood during the summer and winter months. Energy that is consumed by a typical building is either in the form of heat or electricity. As with most buildings, Abramsky Hall requires more energy to heat the building than it does to supply all of the electrical needs including lighting, plug loads, ventilation equipment, pumps and motors, etc. (55% compared to 45% based on utility data over the past two years). Allowing a fume hood to run when it’s not needed is like opening the windows in your house in the middle of winter. Removing the fume hood would save the university an estimated $700 in heating costs annually, in addition to the electrical costs mentioned above.
Announcements

New Hires
Jordan Hollingsworth, Electrician Apprentice, November 14, 2016
William Hawes, Trades Helper, November 14, 2016

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/

Thank You, Thank You, Thank You

I work in the Old Medical building on the third floor.

Earlier this year we had a lot issues with cleanings on the third floor, and especially the bathroom was frequently forgotten. In the last couple months, we have regularly received service from a young woman named Cristy. She is an absolutely wonderful person; always friendly, very diligent, and always makes sure we have supplies. She does a good cleaning in our office space, especially the washroom (which throughout the week is used by close to 50 people), she never forgets to empty the communal garbage, and actually notices when something needs cleaning. In fact, she even mops the floor in the bathroom and out in the hall regularly, I do not remember the last time that was actually done before she started doing it.

She is a true asset to PPS and always a pleasure to see appear on our floor. I just wanted to pass along that we very much appreciate all she does, and I hope this note will be passed on to her supervisor. I am unsure if there is a program within PPS to reward those who do exceptional work, if there is, I would like to nominate Cristy for said honours.

Warm regards,
Josephina

Cristy Reynolds is a Caretaker in Area 3
I would like thanks extended to Randy and Kurt who are the custodians in Miller Hall and Bruce Wing (Geology Dept). They were in on Saturday and Sunday and stripped, scrubbed and waxed the front hallway on the first floor of Miller. We asked for this to be done for a special event we are having in that area this Friday. The floors look wonderful and will add greatly to the overall ambience for our event. Many thanks for their efforts.

Best regards,
Dianne

_Randy Scott and Kurt Pearson are Custodians in area 2_

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Before I provide the details of the two issues, I would like to say that Todd Hartrick is a gem and has been an excellent ambassador for PPS throughout!

Nancy

_Todd Hartrick is the FixIt Coordinator_

**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
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.