

## FACILITIES NEWS

FALL 2006

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## A NOTE OF THANKS

## To All Staff,

Wow, what a busy summer. Thank you for the tremendous amount of work that was accomplished. This issue of *Facilities News* focuses on that work as well as what is on the horizon in the area of planning and projects. Also included in this issue is a focus article on the Grad Center power outage this past summer and the remarkable team effort that took place to restore the power. Great job!

In the coming weeks, look for the *Facilities E-News* (e-mail and postings) announcing a department-wide meeting (to be held in late January). As soon as The Friday Group completes their work on the positioning re-

view, a meeting will be scheduled with the entire Facilities staff to review the recommendations outlined in the report. Many of you, who participated in interviews or focus group sessions, have expressed to me your interest in finding out the outcome of the report. Stormy Friday has been invited to present the outcome of the process review to you as soon as the information is available.

It was nice seeing many of you enjoy the Thanksgiving pie gathering and department tailgate party last month and I hope you are looking forward to the Holiday Breakfast this month as much as I am. Check out the *Employee Corner* of this newsletter issue for upcoming event dates, including the breakfast.

Did you know that you need not wait for the newsletter to find out what's going on in the area of planning and projects—stop by and see the bulletin boards (in the lobby and on the 2nd and 3rd floors). Also, look for the revamped Facilities webpage to be released soon; thank you to all who provided input.

Again, thank you all for your hard work and dedication to the University and to the Department of Facilities Management.

Sincerely,

Stephen M. Maiorisi

Vice President Facilities

## FACILITIES NEWS:

This edition of *Facilities News* includes information regarding many of the efforts underway. It has been written to provide all FM employees with information regarding Department activities across the various Offices.

If you have any suggestions for articles or would like to contribute to *Facilities News* please contact FM Administration.



SIDNEY E. FRANK HALL FOR LIFE SCIENCES

## SAVE THE DATE: JANUARY 9TH AND 10TH, ANNUAL SAFETY FAIR

On January 9th and 10th experts will be on hand to provide briefings on compliance matters and safety training at the Facilities Management Annual Safety Fair.

Working with the offices of Environmental Health & Safety, Insurance and Risk, the University Fire Marshal, emergency medical personnel, and vendors the Facilities' Safety Fair has become an award winning event. During this two-day event, staff will be trained and briefed on a variety of topics ranging from hearing protection to laboratory safety and awareness training to an overview on bio-hazard awareness to safe-handling product demonstrations. This event is coordinated for Facilities Management bargaining unit employees; however, it is open to all Facilities staff. For more information look for the *Facilities News* e-mail and posting in the coming weeks.

## ADMINISTRATIVE AND BUSINESS SERVICES

In addition to the ongoing customer service provided by the **Service Response Center**, Facilities' staff are working on a number of ongoing projects.

**Stores Operations** recently coordinated the purchase of five replacement vehicles for Divisions 1, 3, 5, 6, and 8.

**Business Support** staff in the payroll area have been working diligently to fulfill the terms of the recently negotiated collective bargaining agreement between the University and the USAW-RI. Staff are concentrating on updating level and pay rates in the University's related systems in coordination with the Human Resources Department, the Controller's Office, and with bargaining unit employees directly and through their union representation.

In addition, Business Support has been working closely with Facilities' Plumbing Division,

Providence Water, and the Narragansett Bay Commission auditing the University's metering records. They have coordinated the changeover of 95 percent of the meters on campus that are used to measure water consumption and the related sewer charges incurred. The new meters can be read remotely, eliminating billing and consumption recordkeeping based on estimates. Savings to the University thus far have been estimated in the \$200K range on sewer fees alone with some associated savings projected in water usage billing. Information available for analysis of further potential cost savings has been vastly improved due to this effort.

As the holidays approach, Payroll staff are reviewing timecard processing procedures to ensure that paychecks, due throughout

the upcoming holiday season, are processed without disruption. Please be sure to watch for notifications from Facilities' Payroll Office regarding deadlines and processing changes.

**Custodial Services** is in the process of hiring new employees for assignments that are available at the new Life Sciences Building. The staffing will include AM Shift and day shift personnel.

In addition, as a result of the recent collective bargaining agreement an 11:00 PM to 7:00 AM shift will be established for custodial services. While this is being done, a new custodial supervisor began working on the AM Shift.

With continued focus on customer service and building maintenance, Custodial Services has purchased and

trained staff on the use of new "state-of-the-art" equipment to be used in the Life Sciences Building. They include the Tomcat ride-on auto scrubber and ride-on burnisher and four new Cart Master hepa, self-contained vacuums. See photos below.



## PLANNING DESIGN & CONSTRUCTION CONTINUED. ON PAGE 3

Not only are we celebrating the dedication and completion of the Sidney E. Frank Hall for Life Sciences, the most expensive and complex building Brown has built, but we are also enjoying the fruits of a very busy and successful summer. By the end of the summer we completed over \$17 million of fire code upgrades and leveraged several of these projects to make significant improvements in buildings that badly needed it. With only a handful of fire code related projects left to do (Fox

Point, Faculty Club, Meehan) we can be assured that the campus is now a much safer place. We have also completed nearly \$2 million of energy conservation projects, primarily by changing light fixtures, lamps, and ballasts. This effort will pay for itself in less than five years and has the added benefit of significantly improving the quality of light in all the affected spaces. We also made significant strides on our way to completing a \$41 million

replacement and expansion of our Campus Utilities. The digging will continue over the next two summers. Several projects were also completed over the summer that will directly improve the quality of students' life at Brown, including student lounge renovations and improvements at Sharpe Refectory.

These successes set the stage for another set of major projects that will be undertaken within the next

year. We expect to open two new significant spaces—the Friedman Study Center and Grant Recital Hall—this winter. The design of the Pembroke Hall Renovation has been approved by the Corporation Committee on Facilities and Design and is scheduled to begin construction next summer. The relocation and upgrade of the Peter Green House is set to begin next summer, clearing the way for the development of The Walk. We are also mak-



Rhode Island Hall renovation



154 Angell construction



## PHYSICAL PLANT & SERVICE OPERATIONS CONTINUED ON PAGE 4

Besides the daily maintenance duties Facilities' staff perform, staff are involved with a number of ongoing tasks and special projects.

**Grounds** and **Events** personnel helped setup, breakdown, and cleaned up more than 3 dozen events throughout campus for *Parent's Weekend* and many more in the past month. Some of the events are as small as a simple art display and others are as complex and big as the November 4th *President's Tailgate Party*.

The trades staff have undertaken a wide variety of projects ranging from those involving safety issues to special projects (small projects that can be completed with in-house staff).

It was recently discovered that the audio/visual booth in List Art was a safety concern. The original steps to the booth were designed to slide underneath the booth and there were no handrails. The **Structural Division** con-

structed new stairs and handrails to resolve the issue. The multitasking staff in this division are often called upon to fabricate and install custom furniture for locations where prefabricated furnishings will not adequately address our customer's needs, such as in University Hall, where staff are in the process of fabricating furniture for Room 417. When visiting that location one hundred years from now, it is hoped that one will get the impression that all of the work was part of the original building design.

Not only does the **Plumbing Division** have the responsibility of maintaining and replacing plumbing components throughout the campus, as do all of the trades divisions, the plumbers evaluate and redesign systems to meet our customer's needs. For example, the hot water system at

Marston Boathouse was unreliable and the volume of available water was an unending problem for the athletes who use the facility. The plumbing division designed and installed a new system that consist of a Burke Heater and storage tank. The new heater provides a constant flow of water.

From September through May, the major responsibility of the staff at the **Central Heat Plant (CHP)** is to provide heat and hot water to the major buildings and building complexes on campus. During the summer months, the CHP staff focus on maintenance of equipment and components relative to operation at the Plant and multiple sites throughout campus. At the close of the last heating season, staff were faced with the challenge of renewing the heating water



List Art entry to a/v booth



Marston Boathouse hot water system



J. Walter Wilson new heating water storage tank

## PLANNING DESIGN & CONSTRUCTION CONTINUED FROM PAGE 2

ing progress on the designs of the new Jonathan Nelson Fitness Center and 154 Angell Street (the gas station site), working toward design approval by this spring. All of this while we move forward with major renewal projects (BioMed, Rockefeller, Sciences Library, Wilson Hall, etc.) and nearly \$5 million of accessibility projects.

There are also several exciting projects emerging from the planning process. In October, the Corporation approved moving

forward with the architect selection and design for the renovation of Rhode Island Hall and a new Creative Arts Center to be located on The Walk adjacent to Waterman Street. Architect selection will proceed through the winter for both of these projects. The renovation of J. Walter Wilson as a Student Services/Advising Center is also beginning to take shape, with the hope of (re-) occupancy in the fall of 2008. This project, in con-

junction with a significant renovation and possible addition to Faunce House, will create a "student precinct" at the entrance to our campus. To polish things off, we are packaging a Campus Improvements project which will spruce up the historic campus core by cleaning up the landscape, improving the paving, installing new maps and signage, and most importantly completely replacing the exterior lighting throughout the core. Two

projects a little further off, but each with a significant impact are a potential new residence hall and a potential renovation of Hunter Lab.

Taken together the impact of these projects will be enormous. We should all enjoy and take pride in the transformation this campus is experiencing.



Sharpe Refectory renovation



Grant Fulton renovation





## ENGINEERING & ENERGY

This Engineering and Energy update focuses on the Site Utilities Systems Renewal and Upgrade Project and Preventive Maintenance.

**Hot Water and Chilled Water Piping Construction**—Since this past spring, about 5,000 linear feet of new piping has been installed from the Central Heat plant to the Alumnae Hall driveway. Next year, an additional 5,000 feet of pipe, for both hot water and chilled water, will be installed from Alumnae Hall through the Pembroke Campus to Bio-Med and to J. Walter Wilson.

**Electrical Distribution System Renewal**—The 5 KV distribution system has been the focus of the recent electrical systems upgrades, as it is generally the oldest part of the campus distribution system, and typically serves the older campus buildings. This work involves the replacement of the existing electrical

feeders between buildings, the building isolation switches and transformers. Recent work has concentrated on the system serving the southern portion of the Main Green. Work is getting underway on the systems serving the northern portion of the Main Green and the southwest portion of the campus. Work being planned for next year will include renovation of the campus distribution substations and upgrades to the 11 KV distribution system.

**CHP Renewal and Upgrades**—The renewal and upgrade of the Heat Plant is ongoing. Thus far, the boilers have been upgraded; the main distribution pumps and control valves were upgraded to improve control and reduce energy usage; and the wastewater system was modified to comply with new environmental regulations. Work in progress includes replace-

ment of the Plant cooling tower, fuel oil system components and a new boiler combustion control system. Future work will include construction of a new exhaust stack and a new smaller "pony" boiler to meet summer heating requirements, in addition to various electrical systems upgrades.

**Chiller Plant Construction**—A new "regional" chiller plant is being designed for installation within the J. Walter Wilson building. This chiller plant will be used to support the cooling loads from both new and renovated existing buildings located within the central campus area. An additional regional chiller plant is also being considered for the Athletics area.

**Preventive Maintenance Overview**—The goal of preventive maintenance as a component of a facilities maintenance system is to maximize

the useful life of all building systems. Preventive Maintenance (PM) can be defined as periodic, scheduled work on selected equipment, usually consisting of required inspection, lubrication, and minor adjustment. PM extends equipment life, reduces the number of service calls, and limits the potential collateral damage to facility systems, personnel, and mission from equipment failures.

In addition to the present PM program, the Department of Facilities Management has started PM support to the University's newest building, the Sidney E. Frank Hall for Life Sciences. This new building will add over 700 pieces of equipment to the FAMIS Equipment database. A detailed PM program is being defined to meet all operational and commissioning requirements.

## PHYSICAL PLANT & SERVICE OPERATIONS CONTINUED FROM PAGE 3

storage tank in the J. Walter Wilson building. The original tank was no longer serviceable and needed to be replaced. A new system was designed and the staff of Division 7 were assigned the task of disassembling the old tank and installing a new stainless steel tank, which is impervious to routine corrosion.

While we are once again into the heating season, did you know that the heating system start-ups for the HVAC/CONTROLS Divisions begins in mid-summer when everyone is still clamoring for cooling. During the summer months, HVAC/Controls staff begin to review long-range weather forecast, historical

data, and changes in customer use. Once that information is gathered the change-over schedule is developed. Since there are over 230 buildings with over 3,000 systems to service, the change-over from cooling to heating can only be accomplished as a combined effort, with staff from various divisions working together—Plumbing, Central Heat Plant, HVAC, Controls, and Second Shift.

### Speaking of heating and cooling, did you know?

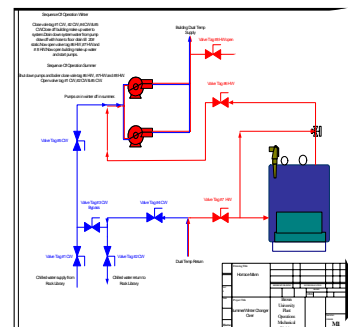
- Critical research facilities have heating and cooling available simultaneously to maintain accurate temperature control until the cooling systems can be safely shut

down late into the heating season.

- The switchover is often delayed in academic buildings to avoid the chance of overheating on warm Autumn days.
- There are over 100 independent heating boilers that are cleaned and tuned off in the summer and started again during October.
- During early October, the Central Heating Plant is "cycled" on and off for energy conservation. During this period, auxiliary "mini-boilers" are turned on to provide heat to places such as Sharpe Refectory, Bio-Med, J. Walter Wilson, OMAC, and the Swim Center. Auxiliary gas-fired water heaters are also activated in

the dorms to provide hot water while the systems heated by the Central Heat Plant are temporarily off-line.

- Later in October, as the weather gets cooler, the plant remains on "24/7"; and cycling is suspended until spring.



Horace Mann—Summer/Winter Change-over Diagram



## GRADUATE CENTER POWER OUTAGE

From Chris Cherau, Electrical Engineer, Office of Engineering

"It was a dark and stormy night..", so starts the story by Snoopy, the infamous Peanuts character. So too, does it start this story of how Facilities Management staff quickly came together to restore power to the Graduate Center, which suffered a power outage due to heavy rains on June 3rd. The roof of Grad Center E developed several leaks, letting water into the building, which eventually found its way into the basement electric room, and shorted out the 11KV-120/208-volt transformer, which supplies electrical power to the entire Graduate Center complex. The resulting transformer fault also shut down the campus distribution feeder, which supplies electrical power to several other residence halls and academic buildings on the campus.



Quick response in the early morning hours by Facilities' Electrical Division staff resulted in the isolation of the faulted transformer and restoration of power to the other affected buildings. But the Grad Center would remain without power until either the existing transformer was repaired or replaced. Given the unique campus distribution voltage of 11.5KV, replacement transformers of the required size are not readily available; new ones typically take over six months to be fabricated; and it would take a minimum of several weeks to remove and repair the existing damaged unit. As the existing transformer had failed previously, and its removal and reinstallation from the basement electric room

was difficult to say the least, alternative measures were required to restore power to the building, which was still occupied by a number of students.

Another transformer, but of smaller capacity than the existing unit, had just become spare from the ongoing campus Site Utilities renovation projects. This transformer was rigged into the Mail Services mailroom space over the electrical vault, wired up in place of the existing failed transformer, and placed into operation within the day, to restore full power to the entire complex. A great idea, but this transformer was too small to adequately power the summer air-conditioning load of the complex, so a larger-capacity transformer was still required.



A quick search found that the local power company, National Grid, had several surplus transformers of the right size and voltage for temporary use at the Grad Center. The "right-sized" replacement transformer was purchased, installed within the mailroom and placed into operation the next week, in time to meet the summer cooling season. Subsequently, this temporary transformer had an oil curb and safety fencing installed around it, so that most of the mail room could still be functional. A new replacement transformer has been ordered, and will be installed next summer.

For their results of quickly restoring power to the building and ensuring its continued operation for the academic year, thank you to Division 3 staff for the quick thinking and work efforts to restore power to the building; Custodial staff for the quick clean up; the members of the Carpentry Shops for their assistance in making the installation safe; the Mail Services staff for their patience in having a section of their room made off-limits for the year; and to K-Electric, the electrical contractor on the Site Utilities projects, for their fast response and heavy-equipment rigging expertise. What a team effort!

## Check Out The Facilities Web Site

[www.Brown.edu/Facilities/Facilities\\_Management](http://www.Brown.edu/Facilities/Facilities_Management)

### BROWN UNIVERSITY

Name label



**Brown Facilities**

## BUILDING AND MAINTAINING THE CAMPUS

### EMPLOYEE CORNER

#### Welcome New Employees

- Maria Ferreira, Custodian II
- Robert Garvey, Custodian II
- Kenneth Janzekovich, Manager, Mechanical/Electrical
- Rickard Kasper, Mechanical Engineer
- Karen Maldonado, Service Response Coordinator
- Anthony Marsella, Custodial Supervisor
- Robert Massi, Service Response Coordinator
- Paul Pelletier, Custodian II
- Christopher Powell, Energy Manager
- Michael Pratt, Custodian II
- Michael Ruggiero, Custodian II

#### Position Vacancies

We are recruiting for the following positions:

- Custodian II (1- overnight shift)
- Custodian II (4 - 2<sup>nd</sup> shift)
- Custodian II (2 - Day Shift)
- Equipment Mechanic (Div. 1)

- HVAC Mechanic (2, Div. 8)
- Mechanical Engineer
- Plumber (1st shift)
- Plumber (2nd shift)
- Project Manager
- Stationary Engineer Mechanic

#### Promotions

- Vincent Carvalho, Equipment Mechanic (2<sup>nd</sup> Shift)
- Jaime Cunha Equipment Mechanic Division 8
- Jeremiah Freeman, Equipment Mechanic (2<sup>nd</sup> Shift)
- Joe Gaspar, Controls Mechanic
- James Gonsalves, Bldg. Operator
- Vicky Hill, Equipment Mechanic (Div. 8)
- Manny Lima, Equipment Mechanic (2<sup>nd</sup> Shift)
- Michael Lopes, CAD Tech.
- Dan Paiva, HVAC Lead
- Emanuel Simas, Grounds Worker, Ice Rink
- Romeo Villanueva, Equipment Mechanic (2<sup>nd</sup> Shift)

#### Recently Retired

- William Cowen, Plumber

#### Reminders

- **University Holiday Bazaar**, December 7th.
- **Facilities Holiday Breakfast**, December 15th.
- **Winter Holiday/Break**, December 25th through January 2nd.
- **Safety Fair**, January 9th and 10th.
- **B.E.A.R.S. Day**, January 19th
- **Vacation/Sick Leave**, Non-bargaining unit staff can only carry over 12 days into the new calendar year.
- **Giving Tree**, Put a smile on the face of a child this year ! Pick an ornament from the Giving Tree—Third World Center, Bookstore, Sci Li, Sarah Doyle Women's Center, UH, (2nd Fl.), BOB, the Rockefeller Library, CIT. It will be donated to the children's gift program of a community organization. Deadline: 12/16/06.

#### Mission Statement

The mission of Facilities Management is to support the University, by enhancing the quality of physical facilities. We do this through planning, designing, constructing, and maintaining in a responsive, service-oriented, effective, and environmentally conscious manner.

#### Offices:

- Service Response
- Physical Plant
- Stores
- Events Support
- Planning Design & Construction
- Engineering
- Resource Management
- IT
- Business Support
- Administration

#### Facility Facts

*Did you know ...*

- In order for the grounds department to keep Brown clean, swept, mowed and snow and ice free an immense amount of equipment is assembled and disassembled, serviced and stored according to the spring and summer growing season, fall leaf season and winter.
- Some of this vast array of equipment includes 4 pick-up trucks, 2 dump trucks, 1 transport van, 14 plows, 5 sand/salt spreaders, backhoe, front end loader, 6 tractors, 3 utility trucks, 5 chain saws, 12 string trimmers, 11 leaf blowers, 14 hand mowers, 8 gas and electric shrub pruners, 6 ride on mowers, 4 athletic field paint machines, 2 Zamboni's, 2 ice edgers, and a assortment of pumps, sprayers, rototillers, sod cutters and generators.
- All of this behind-the-scenes-work is accomplished by Grounds equipment mechanic George Bell.