University of Nebraska Lincoln

FACILITIES QUARTERLY

Inside this Issue:

Nischhal KC
(Student Worker)

Business Operations

Pictured L to R Back:
Manager Dori Smidt, Lori Thomas,
Kathy Thompson, Tammie Moore, Judy Douthit,
Danielle Staats, Amanda Beutelschies
Front: Cathy Leazer

Facts About the Employees in Business Operations

Lori Thomas completes time entry for BSM. Lori loves junk food!
Judy Douthit reconciles purchasing cards. Judy keeps the office laughing.
Kathy Thompson does time entry for Landscape Services and Utilities. Kathy loves spending time with her grandsons and is an avid quilter!
Tammie Moore processes project invoices and handles utility reporting and billing. She has 3 children in college so she reports that she has no money.
Dani Staats collects bills and sends them to accounting. She helps keep the office laughing with Judy. Her coworkers state that she hogs the copy machine.
Temporary Office Staff Amanda Beutelschies has moved on to another area of the University.
Dori Smidt is the Business Operations Manager. She also is a soon to be mother of two. Her second child is due this April.
Cathy Leazer –Helps new employees plan their benefits package and all that goes with being a new hire. She enjoys designing and creating stained glass art.
Student Nischhal KC does filing, time entry and whatever he is told to do. He was in Times Square for the 2010 ball drop and was interviewed by MTV. Did you see him?

Customers Receive Bills Online

As Facilities Management and Planning continues to move forward into the technology era, Business Operations decided it was time to stop printing and mailing billings. Instead we put our heads together and figured out a way to deliver the billings online!

In August, the FMP customers received a notice about the change in billing format. The bills are now available to be viewed from any computer on the University campus at the following web link, http://scsapps.unl.edu/Facilities-BusinessOperationsReporting. This allows our customers to see their billings on a timely basis rather than waiting for the report to come in the mail. Additionally, the online format allows our customers the flexibility to view individual reports by Service Request or to view a single report containing all service requests by SAP document number. They can then choose to print the bill, if needed.

This website also displays the Customer Project Accounting Report for all customers who have a project in process with Facilities Planning and Construction. This report is updated daily and shows the customer the phase of the project along with the budget and current expenses of the project. We are excited to offer this up-to-date and readily accessible information to our clients. This and the added bonus of saving a few bucks and a few trees make online billing a huge process improvement!

BSM

Innovation: Campus

The last of the livestock is gone. Display cases that a few months ago held crafts and 4-H projects stand empty. State Fair Park is poised to become Innovation Campus – UNL's new area to be dedicated to technology and research. The transition has begun and BSM is taking an active role in decommissioning the buildings and preparing them for the next step in the transformation. As BSM Assistant Director, Jim Jackson, puts it, "We are preparing the buildings to be unoccupied, and at the same time, making sure they are secure, yet readily accessible for inspection."

Barry Christensen, BSM Structural Manager, has had the responsibility for overseeing this effort. Barry has had a crew of people disconnecting utilities and limiting access to the buildings. Christensen said the goal is to secure the doors to each building from the inside, leaving a single door available for access. The designated access door is identified by a yellow rectangle painted on the outside. New locks have been installed on these doors. All other doors have been screwed or bolted shut. Christensen said that some of the metal doors have even been welded shut to prevent unauthorized entry.

Fourteen buildings have been identified for demolition in the first phase of getting the park ready for new construction. "Even though these buildings are going to be torn down first," he said, " in the interest of safety, it is important to control who goes in and out." Not all of the buildings are being prepared for vacancy right now. There are 25 buildings supporting horse racing that will be left operational until 2012, and the Ice Box, home to the Lincoln Stars hockey team, is still fully functional.

Heat and water have been shut off to the rest of the buildings. Power is being disconnected from those buildings, but the process takes some time. "It's not as easy as just pulling a switch," said Jeff Lamp, BSM Assistant Manager for electrical systems. "We need to maintain area lighting and it is possible that power for outside lights has been routed through the buildings. We have to determine if anything else will be affected each time we shut off a building". A lot of things were left in the buildings when the State Fair left. Christensen said his crew worked with EHS to clear the buildings of cleaning chemicals and other items that need to be disposed of properly. Appliances were also left behind. Many of them, like air conditioners and refrigerators, need to have the refrigerant removed before they can be discarded. Christensen has been working with local companies to salvage these items, at no cost to the University. Building air conditioning systems have been disconnected and the refrigerant has been removed by BSM personnel. Berry Scott, lead technician for the refrigeration crew, says he has reclaimed more than 300 pounds of refrigerant from approximately 68 cooling units.

Christensen said that, while securing the buildings has been a lot of work, it has been a bit of an adventure as well. One of the most surprising discoveries was the number of living quarters he found tucked away. These ranged from small apartment like spaces to dormitory style rooms with rows of bunk beds. He said the living quarters must have been from the days when families would come to the fair to exhibit their projects or livestock, and stay for several days. BSM Director Jim Hines noted that moving the State Fair to Grand Island marks the end of an era. Hines, a native of Grand Island, said he is excited to see the new buildings being constructed. "I am sure we will look back and see that moving the fair to a more central location and opening up the space for future technological development and innovation near the existing UNL campus will have been very good for both UNL and the community of Grand Island." "My family has always supported the State Fair, and we look forward to seeing it in its new home."

Structural Manager: Barry Christensen

Lead Technician: Barry Scott

Carpenter Steve Childers

Locksmith David Torquati

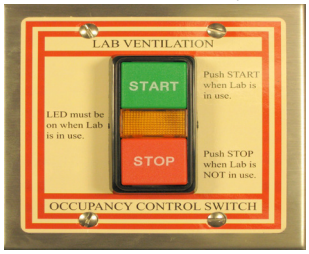
Campus Energy Savings

Operational changes by BSM at Hamilton Hall will result in energy savings of $194,000 per year. Kirk Conger, Energy Projects Engineer for BSM, said that about a year ago BSM began installing hardware in the undergraduate laboratories on the second, third, and fourth floors of Hamilton Hall that would allow the users to reduce the amount of airflow through the spaces when the rooms were not being used.

Energy Engineer Matt Stamm

Automatic occupancy sensors were also installed in offices and classrooms to expand the scope of airflow control. This reduction in airflow yields great benefits because, as a laboratory building, none of the air is recirculated. That means all of the more that 200,000 cubic feet of air that enters the building each minute has to be either heated or cooled through most of the year, although there is an energy recovery system in place to reclaim some of the energy from the building exhaust. Conger noted, "It takes the average air molecule eight minutes from the time it enters the air handler to the time it exits the exhaust fan".

BSM Energy Engineer, Matt Stamm, has been responsible for developing the controls and coordinating training with the Chemistry Department. Stamm said the Chemistry Department has been very helpful in training their staff and making them aware of the importance of this energy saving initiative. He said he began deploying the new control system during the first summer session last year and it became fully operational in September. Conger said the September energy use dropped "dramatically". He said the 21% annual cost savings are based on calculations, but as he has watched the actual energy use trends, he believes the trends have continued long enough that the savings are real and will continue.



The project was funded by Vice Chancellor Christine Jackson's energy conservation funds. A similar project is being installed in Hardin Hall, but has not been fully deployed. Savings in Hardin Hall are not expected to be quite as dramatic because laboratories comprise a much smaller portion of the building.

Heating System Analysis

BSM has recently engaged the services of a water management company to do analyses of the water and the glycol in the heating systems of 160 buildings on City and East Campus. The consultants will take fluid samples, put them through a series of tests, and make recommendations of actions necessary to restore the fluids to their proper chemistry. "We have needed something like this for a very long time," said Steve Holland, BSM's plumbing crew supervisor. "When we make repairs to heating piping, we find all sorts of problems. Pipes can be scaled, corroded, or nearly plugged. With their help we will be able to identify what is happening in each system and get it back to normal condition." The pipes can degrade quickly if the acidity level of the fluid gets too high. Bacterial corrosion is another form of damage.

With the information derived from the analysis, a proper remediation program can be established. Holland said recommendations for remediation can vary from treatment and filtration to a complete replacement of the fluid. When the testing is done, all of the information will be stored in a secure web based data filing system. This tool allows data to be securely stored while allowing on-line access to designated personnel. Future data input will build a database for trend and graph analysis of individual systems.

Custodial Services

Steve Shumake
Shared Computing Services
Desktop Support Associate

Steve Shumake is the go-to-guy for all of Facilities Management & Planning's computer problems. When Custodial Employees have computer problems they report them directly to their manager or supervisor. The manager or supervisor then contacts Steve. Employees outside of Custodial Services can contact Steve on his cell phone at (402) 219-3912 or email him: sshumake1@unl.edu. He has worked at UNL for 15 years. Attending to approximately 200 computers within FMP, his job definitely keeps him on his toes. Desktop Support Associates Allan Henrichs and Andrew Amen provide back up when Steve is out of the office. The Director of Shared Computing Services is Kathy Notter. The department is located in the Business Services Complex at 1700 Y Street. Additional staff in Computing Services consists of System Administrators, a Database Analyst Specialist, a Software Systems Architect, Programmers, and a Web Developer.

Steve has an ongoing work list that includes setting up new computers, replacing printers, addressing hardware needs and performing inventory. Most of his time is spent attending to the day to day problems that come up between computers and their human counterparts. Steve's work hours are 8-5 but he is on call for emergencies 24/7. He only responds to afterhours calls for job critical needs. One thing that he would like all computer users to know, is that many problems can be solved by simply restarting (rebooting) your computer. It helps if the user tries this before they call him but do not hesitate to do so. One of the most interesting things he has encountered out in the field is a computer that was being held together by black duct tape. It was still working! When he brought it to his work area he found some interesting mold cultures inside. Needless to say he did not return it to the area but replaced it with a newer model.

In his off time, Steve plays the guitar in a rock band called Knuckle Deep. Drew Ehrisman, another Facilities Management employee, sings lead in the band. When he is not playing head-banger music, Steve enjoys astronomy and spending time with his wife Lynn, daughter Aubrey and his two dogs and two cats. He is a self proclaimed computer "geek". He likes to design web sites and catalog his collection of over 2000 music CDs. What Steve likes most about his job is the people he meets and the flexibility of his daily tasks. He claims that his job is never boring and that computer technology is constantly changing. Just when you think you have a computer problem figured out a new problem comes along.

Steve says he learns something new every day. He solves problems and that is what makes his job satisfying. Computer support is an ever changing field. Steve remembers 15 years ago when a computer went down you could continue working on tasks that did not require a computer. Now if your computer goes down you're out of luck because for many people, all the tools to perform their job are on that computer.


Custodial Services
Holiday Luncheon
December 23, 2009

Spring/Summer Severe Weather Information

Tornado *watches* and *warnings* are issued by the National Weather Service when the probability exists that a significant weather threat could develop over a wide area. *Warnings* are issued for much smaller areas and periods of time than *Watches*. When either the Lincoln-Lancaster County Department of Emergency Management or National Weather Service issues a warning, the UNL Telecommunications Center activate internal warning systems across UNL. At the University, the following systems are used for alerting building occupants:

1. Voice Announcement
2. Intermittent tone
3. Weather Radios
4. Designated Staff Communications

Upon hearing the civil defense sirens and/or the internal warning system, use the following procedures for employee safety:

1. Move immediately from the classroom, work area, or office to an interior place of greater safety, close and secure doors when leaving. The Tornado Shelter Area for each building is indicated on a poster on the building's bulletin board. Be familiar with its location.
2. Move quickly to the designated shelter area and stay away from windows. DO NOT USE ELEVATORS!
3. If time permits, take a cushioning object for protection from potential flying debris and take a battery operated radio for up-to-date weather information.
4. When in the shelter, stay close to the floor and cover upper body and head with jackets, etc.
5. Remain in the shelter area until the warning has expired.

Notification that severe weather has passed will occur in one of these ways:

1. A pager held by the Building Maintenance Reporter
2. Amplified voice announcements over the public address system
3. Announcements held on local radio or television

If employees are outdoors:

1. Seek indoor shelter if possible. Parked motor vehicles are not safe!
2. If an indoor shelter is not available and there is no time for escape, lie flat in a ditch or a low spot.
3. If on flat ground and caught in the path of a tornado, always move at right angles to it's path.

If a tornado does hit the University, use a telephone only for emergency purposes. During disaster situations, telephone overloads make coordination of emergency recovery operations very difficult.

Daylight Saving Time

On Sunday, March 14, 2010, at 2 a.m., Daylight Saving Time begins in the United States. Every spring we move our clocks one hour ahead and "lose" an hour during the night and each fall we move our clocks back one hour and "gain" an extra hour. But Daylight Saving Time (and not Daylight Savings Time with an "s") wasn't just created to confuse our schedules.

The phrase "Spring forward, fall back" helps people remember how Daylight Saving Time affects their clocks. At 2 a.m. on the second Sunday in March, we set our clocks forward one hour ahead of standard time ("spring forward"). We "fall back" at 2 a.m. on the first Sunday in November by setting our clock back one hour and thus returning to standard time. The change to Daylight Saving Time allows us to use less energy by taking advantage of the longer and later daylight hours.

Daylight Saving Time was instituted in the United States during World War I in order to save energy for war production by taking advantage of the later hours of daylight between April and October. During World War II the federal government again required the states to observe the time change. In 1966, Congress passed the Uniform Time Act which standardized the length of Daylight Saving Time.

Congratulations to our Custodial Services Training School Graduates!

Acie Bettinger
Evan Brunkow
Calvin Foster
Bibiana Koang
Phat Le
Andrew Leeds
Brad Moser
Steven Paul
Nancy Schwarzenbach

Larry Schmid, APPA Institute Graduate

Custodial Assistant Director, Larry Schmid, graduated from APPA's Institute for Facilities Management on January 15, 2010. APPA's mission is to support educational excellence with quality leadership and professional management through education, research, and recognition. The education for the Institute consists of four-track core groups: Energy and Utilities, Planning, Design, and Construction, General Administration and Management, and Operations and Maintenance.

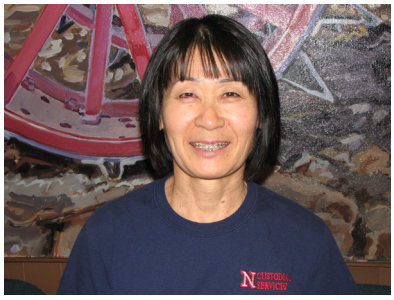
APPA was founded in Chicago in 1914 by representatives from fourteen Midwest institutions. Over the past 35 years membership has grown exponentially, from 100 in 1970, more than 2,000 in 1980, over 3,700 by 1990, to the current membership levels which exceed 4,800. Association name changes have reflected the expanding responsibilities of facilities management departments. Organized originally as the Association of Superintendents of Buildings and Grounds, the association later became the Association of Physical Plant Administrators of Universities and Colleges. In 1991, the name APPA: The Association of Higher Education Facilities Officers was adopted to reflect increased higher education-based campus responsibilities. In 2005, the association focused on APPA, the letters only, adding the tag line "serving educational facilities professionals". In 2007, the APPA Brand Team introduced a new logo and tagline representing APPA's new brand personality. The name remained as APPA, the letters only, and the new tagline is "Leadership in Educational Facilities".

(Above information obtained from the APPA website at www.appa.org).

Meet our New Custodial Supervisor

Hello! My name is Scott Foltz. I was promoted to Custodial Supervisor December 2009. I started my career in Custodial Services April 2008 and did hard floor care in Burnett and Oldfather Hall. I then was promoted to Custodial Leader of the Alpha Team September 2009. I have been married to my wife Susan for 19 years. We have 3 children, 2 girls and 1 boy. We are also proud to say we have a 3 year old grandson. When not at work, I enjoy watching my 2 favorite football teams, the Huskers and the Dallas Cowboys. I also enjoy Hunting, Fishing, NHRA Drag Racing and weekends playing poker with friends. Before UNL, I spent 23 years in the commercial printing business as a Crew Leader and Machine Operator. UNL has been a great experience so far and I look forward to a long career here in Custodial Services.

EEVACS Award Nominee



Custodian Myong Schabloski has been nominated by her Manager, Ken Ziems, for an EEVACS Award. While the Ruth Leverton building is under renovation, Myong has taken on the extra responsibility of making sure the doors are secured at night. On the evening of February 23, 2010, she was doing this task and heard water running from within the building. Myong quickly contacted her manager, who then was able to contact a UNL Operator to dispatch a plumber from BSM. Such a quick response led to the water in the building being shut off in a short period of time. Thanks to Myong's findings and quick actions, a much worse situation was avoided. Instead of thousands of gallons of water that would have gushed through the night, Custodial Staff cleaned up 150 gallons of water in about 2 hours.
Thank you Myong!

Q & A with Director Zainudeen Popoola

Q: Tell us about your first 6 months here at UNL.
A: It has been wonderful. I came to a very stable department. I have been fortunate to work in various environments and I am very lucky to be a part of the Custodial Services team.
Q: What makes it stable?
A: Number one is the staff. During the interview process most of the Custodial staff expressed the desire to see more of the director in their areas. I have done this and this month I intend to go out and see second and third shifts again. This is to make myself available. Not to run the shift but to go out and be a support to the custodial staff as well as the supervisors and managers. Number two is the in-house equipment repair. I have never experienced that before. There is no down time when equipment needs repair. We have professional staff going out to fix our equipment. We have the best equipment for our staff to do their job. It is important to provide the staff with the tools they need.
Q: How do you like living in Lincoln Nebraska so far?
A: Lincoln is a wonderful family town. I have lived in Oregon, Washington State, Maryland, North Carolina and Minnesota. Lincoln reminds me of Oregon. It is a laid back, clean atmosphere. I came from Duluth so Lincoln is a lot more cosmopolitan. My wife and kids were excited to come here. We are enjoying Lincoln. Ron and Larry have been very supportive. They are very professional.
Q: Tell us about your family.
A: You can google me on the internet! I am very lucky. I came from a royal home in Lagos, Nigeria. My great grandfather was the sixth king of Lagos. Lagos was the federal capitol of Nigeria. You can read about my family history by searching the internet for Aromire of Lagos-King Eshilokun of Lagos. My family owned the country of Lagos but the British took it away in 1861. My wife was a police officer in Maryland and Duluth. She no longer wants to do that kind of work. She now works for Lincoln Public Schools. She is a Custodial Supervisor at Lakeview Elementary School. Her name is Marquita. I have 3 young kids at home. Two sons, Anthony is 9 and Raheem is 3 and my daughter Rashidat is 4. I also have 3 grown up children. All 3 are graduating in May. Ali is graduating from Morgan State with a Masters in Criminal Justice and Security Administration. Saidat is graduating from Dental School at the University of Maryland. And Asisat is graduating from High School. She will be going to Maryland State to obtain her degree in Nursing. We will have a big celebration in May!
Q: What has been your biggest challenge so far?
A: First I would like to say that Dr. Ted Weidner is a leader who strives to educate the people that work for him. He has allowed me to attend APPA training so that I may become a facilitator of the Supervisors Tool Kit training. This is a wonderful opportunity for me. The biggest challenge for me so far has been realigning the Manager and Supervisor areas. Even when you know that what you are doing is the right thing there is still some apprehension about making a change as a new person. This realignment will provide opportunity for the custodial staff to promote Custodial Leaders into Supervisor positions. An accomplishment has been getting our manual produced into electronic form. This will impact our ability to train people and will also give us an opportunity to promote our department to other Universities. Another accomplishment has been getting the Tough Book lap-top computers up and running. This will reduce our paper consumption greatly.
Q: How does UNL compare to other Universities you have worked at?
A: Well of course there is football. And the women's sports as well. There is Ndamukong Suh. I know his family and the first game I ever attended at Memorial Stadium last season I was sitting right next to his sister. She played soccer with my daughter when we lived in Oregon. It was amazing! Out of 80,000 people the person next to me was a person I was looking for. I have followed the Cornhuskers since 1981 because of Dr. Tom Osborne. To be in the stadium and to be part of the people who manage it is wonderful.
Q: Weren't you a soccer player?
A: I used to play soccer very well. I played for Nigeria in the 1970s. I was on the team that went to the Olympics in Montreal Canada in 1976. We did not win unfortunately.
Q: What would you like to see from the Custodial staff over the next several months?
A: Continue to perform at the highest level. Continue to satisfy our customers. And when I say customers I mean students, staff, faculty and our own staff. If the custodial staff have any ideas as to what we can do to better our department they need to talk to me.
Q: Is the on-line suggestion box helping with this?
A: It is helpful because if a staff person sends in an anonymous suggestion it helps us know what concerns there are out there and where we may be lacking. Also, if anyone has a suggestion and they put their name to it I would be very happy to meet with them. Good or bad it is our department and we want to be open to any suggestions to make it better.
Q: Are there any short term goals you would like to discuss?
A: We need to revamp Quality Control and Improvement and Blood Borne Pathogen training. In addition we need to work on our Customer Service Training.
Q: You are a country music fan?
A: I love Dolly Parton, Crystal Gayle, Don Williams, Charlie Pride, Alabama and the Gatlin Brothers. When Don Williams sings "Heartbreak and Darkness" or the "Lady From El Paso" that is wonderful.
To end I would like to thank all of the Custodial staff for the job they are doing for UNL and for giving me the opportunity to be a part of the family. The supervisors and managers have welcomed me into the position and I am very grateful for the opportunity.

The Temple Building

(Written by Custodial Supervisor, Dwight Duchek)

The Temple Building has a long, rich history, dating back to 1904. The funds were raised by then Chancellor Benjamin Andrews with the help of John D. Rockefeller, who contributed $66, 666, with the remaining $33, 333 to be Andrew's responsibility. Chancellor Andrews had earlier purchased the lots for the building from Rockefeller and donated them to the University. Andrew's vision of a student activities center had become a reality when he secured the money through private funding by mid 1904. The Board of Regents officially approved construction in December 1904.

Construction of the Temple Building started in 1906 and was completed by early 1908. After a recommendation by E. M. Barkley, Dean of Women, the second floor was converted to provide on campus space for student's social functions, and to control the unsupervised parties and dances which were being held in downtown halls and hotels. The main floor was set aside for the YMCA and YWCA, with the Temple Theatre being the main attraction. Its appeal would make it "one of the coziest little theatres in the west." according to The Daily Nebraskan. The theatre was later renovated and renamed Howell Theatre in honor of H. Alice Howell, the founder of Theatre Arts at the University.

The late 1970's marked a turning point in the Temple Building's history. It was in constant need of repair, had been declared a fire hazard, and had been condemned more than once. When the question came whether to demolish or renovate the building, a lack of funds and public fondness for the building supported renovation. Renovation took place from 1980-1982, and involved the removal and restructuring of all interior floors, walls, and staircases. The main lobby also saw extensive changes, with the Howell Theatre only receiving updates in carpet, paint, and refurbished seating. The next major changes occurred recently when the late Johnny Carson, a UNL graduate in 1949 and host of television's The Tonight Show from 1962-1992 gave $4.3 million to support the renovation and expansion of the Temple Building in 2004. Through Carson's thoughtfulness and generosity, today there are three Theatres in the building, with those being the renovated Howell Theatre, a new, state of the art Studio Theatre, and another Lab Theatre. To honor Carson, the Department of Theatre Arts was renamed the Johnny Carson School of Theatre and Film.

Some of the rich history of the Temple Building may involve ghosts. Accounts and stories of odd noises with no source, footsteps in the attic, articles being rearranged in rooms, noises of chairs crashing against each other, and lights flashing on and off randomly in the Theatre areas add to the lore and mystery of the building. One of the past custodians, the late Howard Lange (who I knew) supposedly sat in a chair on stage in one of the Theatres and the lights went on and off with no explanation. Do YOU believe in ghosts?

Employees Greg Topp and Sherry Waynick (pictured right) provide Custodial services within Temple on a daily basis. Some of the things that make Greg's job enjoyable are interactions with the younger crowds and working in a learning environment. Sherry enjoys working at Temple because she has learned about how a dramatic play develops and becomes a performance for the public. She also enjoys working with the staff at Temple. Nathan Walla is the Temple Building Custodial Manager and Dwight Duchek is the Supervisor.

Facilities Planning & Construction

FPC Profile: Richard Firebaugh

As the University Building Official for all UNL capital expenditures, Richard Firebaugh reviews all projects for compliance with state building codes and life safety requirements. This is a sizeable task because his work not only involves all new projects; he also oversees issues involving all buildings on campus. The use of buildings changes over time and often requires building code and life safety review. Rich also is the liaison with the State Fire Marshal's Office. In this capacity, he becomes an important person to consult with regarding new construction and the remodel or alteration of existing facilities. In his 13 years as Building Official, Rich's greatest satisfaction is aiding everyone in bringing successful projects to completion and use at the University. He is a key member of our design and construction program.

John D. "Jackie" Gaughan Multicultural Center

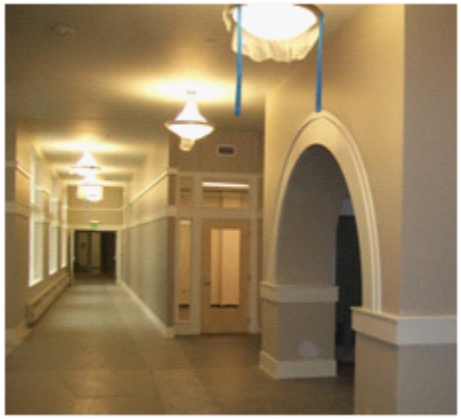
The Gaughan Multicultural Center, a new wing of the Nebraska Union on City Campus, will open its doors this March. The $8.7 million building was funded with a combination of student fees and a donation from Jackie Gaughan. The building, constructed by Hausmann Company, was designed by DLR Group in association with Moody-Nolan and the Rocky Mountain Institute Built Environment Team. Brooke Hay has been the project manager for most of the construction, and Alan Wedige is handling the completion of the project while Brooke is on maternity leave.

The site next to the City Union was selected to be central to the UNL community while maintaining a separate identity. The new three-level 34,000 gross square foot building will have a separate entrance that reinforces its separate identity and allows the Multicultural Center to be accessible beyond normal Union hours. A covered, direct access to the Union encourages use by the general university community. Designing and constructing a building with it's own identity while maintaining compatability with the adjacent collegiate Georgian theme of the City Union was a challenge for the project team. Site restrictions presented the following challenges:

- Limited space for building footprint.
- Difficult access for construction vehicles.
- Need to maintain access for service to City Union and State Historical Society.
- Residence halls to the north and Greek houses to the east.

The Associated Students requested that the building become Leadership in Energy and Environmental Design (LEED) certified after the project was approved by the Board of Regents. While the cost of certification was **not** included in the original budget, Brooke Hay managed to apply for LEED silver certification without exceeding the project budget. Features of the center include: Offices for student organizations, administrators and Office of Academic Support and Intercultural Services (OASIS); meeting rooms; educational space and social areas. The educational area includes the Kawasaki Reading Room.

Special design features include an atrium and a curved grand stair at the building entry. The circle at the center of the stair is a pure geometric form that transcends all cultures and is the unifying element of the building.



Historic Whittier Building Re-opens as a Research Center

Over thirty years since it closed its doors as a junior high school, the renovated Whittier Building will open as a research center March 8, 2010. The $24 million project renovated the building infrastructure (envelope, plumbing, HVAC, electrical) of the former Whittier Junior High School and fully finished approximately 50% of the main building spaces to provide dry research laboratories, offices and conference rooms for the Nebraska Center for Energy Research and the Nebraska Transportation Center. The project architect is Sinclair Hille, the contractor is Sampson Construction, and Alan Wedige is the UNL project manager.

The Whittier Building was constructed in 1923 as the first structure specifically designated as a junior high school facility in the United States and was used by the Lincoln Public Schools. In 1990 the building was acquired by UNL. Renovation of the building has been conducted in a manner sensitive to the historical nature of the building.

- Exterior masonry has been preserved to maintain the original character of the building.
- The design of the window profiles mimics the original construction.
- Infilled window openings have been re-opened and new window units installed to restore the general design intent of the building.
- Key interior architectural elements and details in public spaces (such as the existing open stairs at the main entry, the east and west "interior" open public stairs, and the various ornamental plaster decorative moldings in the corridors) have been preserved.

The interior design takes advantage of the two existing light courts to bring daylight into the interior corridors, public lobbies and lab spaces, allowing for public viewing into various research activity areas. Materials and interior spaces reflect a high-tech collaborative and energetic environment that mirrors the progressive entrepreneurial nature of the new research labs.

One of the energy saving features of the building is use of the geothermal heat pump as a green energy source. The earth, which is warmed by the sun, is a great insulator. Water from the building will be pumped into the earth and heated in the winter or cooled in the summer to a constant temperature of around 50 degrees Fahrenheit. This earth-friendly energy source requires only electricity to operate the pumps, uses free renewable energy, and produces no emissions.

State Deferred Maintenance Funds Replaces Obsolete Physical Sciences Space

The new Physical Sciences Building is being constructed on the southwest corner of North 16 and W Streets. This building replaces the deteriorated and obsolete physical sciences facilities located in Behlen Laboratory, Brace Laboratory, and Ferguson Hall. An evaluation of the cost to renovate these buildings to provide up-to-date teaching and research labs indicated that it would be more cost effective to construct a new building. Ferguson Hall will be demolished and Behlen and Brace Laboratories will be remodeled for uses that do not require a major upgrade in the HVAC systems.

The Physical Sciences Building basement, three floors, and mechanical penthouse have a total of approximately 124,000 gsf of space. More than half of the space is research and teaching labs with the rest used for classrooms and offices. This large building had to be placed on a relatively small site in order to allow space for the future addition of the Nanoscience Building. The Physical Sciences Building includes unfinished generic space that will become part of the Nanoscience project, which was recently funded by a grant through the American Recovery and Reinvestment Act.

The project is seeking the Leadership in Energy and Environmental Design (LEED) silver certification. The design includes four large atria that connect the first floor to the penthouse on the fourth floor and brings natural light into the interior of the building. This design feature promotes collaboration since ambience of space and light in each atrium will encourage students, faculty, and researchers to use these spaces after classes.

Construction on the Physical Sciences Building began April 2008, and is scheduled to be completed in April 2010. The total project cost is $38 million. The project was designed by Perkins & Will of San Francisco in partnership with the Lincoln firm of Baer Vermeer & Haecker. The construction contractor is Sampson Construction. Brad Muehling is the project manager.

Landscape Services

Employee Spotlight: Stan Paczkowski, Area Supervisor and In-House Weather Forecaster

Stan Paczkowski is an East Campus Area Supervisor providing landscape maintenance and snow removal for an area that has open space of approximately 24 acres on East Campus. This area is from 38th Street east, north of Loop Road and extends north from Loop Road to Dead Mans Run. It includes the Animal Science complex, the greenhouses and the Leighton bike path.

Stan came to Nebraska from South Amboy, New Jersey. After high school he attended Valparaiso University in Valparaiso, Indiana. Stan received his bachelor's degree in Meteorology in 1996. Stan then applied and was accepted into the graduate Climatology program at UNL in the fall of 1996, his emphasis was on the Ocean's Influences on climate change/variability. In the spring of 1997, Stan started working at Landscape Services as a student employee and continued in school until 1999. It was during this time that Stan developed an interest in plants and how they can modify local weather conditions. In January of 2000, Stan began working fulltime as Landscape Assistant working with an Area Supervisor. In 2006, he became the Area Supervisor in his current area on East Campus. During much of this time, Stan has provided our department with winter weather forecasts.

In 2005, Landscape Services decided to not pay for a Weather Forecasting Service and have Stan provide the weather forecasts for our department. He provides these forecasts from November to April, whenever we may have inclement winter weather. If the storm appears to be significant, Stan will also predict the timing of the storm. Below is an example of the snow storm that occurred over holiday break in December. Lincoln received 13" of snow December 24th through the 26th.

Outlook:

Generally dry today (December 22nd) across Nebraska. Some light freezing drizzle for Lincoln. An area of precipitation develops tomorrow morning across central Nebraska. This should bring mostly snow to areas from Grand Island and north, with an accumulation of 3"-6" possible. Lincoln could see some sleet from this; but it appears the best freezing rain chances will be in far southeast Nebraska Wednesday night. Snow develops Thursday morning and becomes heavy throughout Thursday. Winds increase out of the north at 30-45 mph creating very difficult travel conditions. By Thursday evening blizzard conditions should be expected across eastern Nebraska. Snowfall amounts of 10"-16" will be possible from Lincoln to Omaha by Friday morning. Light snow and blowing and drifting snow should continue through Christmas Day.

Forecast for Lincoln area:

	time	temp	weather	wind	gusts	precip	snowfall
Tues	6am	25F	cloudy/mist	north 8 mph	10 mph	.0"	
12-22	noon	29F	cloudy	northeast 10 mph	13 mph	.0"	
	6pm	28F	cloudy	northeast 11 mph	14 mph	.0"	
Wed	12am	28F	freezing drizzle	northeast 12 mph	15mph	.0"	
12-23	6am	28F	sleet	northeast 13 mph	16 mph	.05"	
	noon	28F	sleet	northeast 15 mph	17mph	.10 "	
	6pm	27F	sleet	northeast 15 mph	18 mph	.05"	
Thurs	12am	26 F	cloudy	northeast 17mph	20 mph	.0"	
12-24	6am	27 F	light snow	northeast 20mph	25 mph	.05"	.5"
	12pm	26 F	snow	NNE 25mph	32 mph	.3"	3.5"
	6pm	23 F	heavy snow	north 30 mph	45 mph	.65"	7"
Fri	12am	20 F	snow	north 32 mph	40 mph	. 2"	2"
12-25	6am	17 F	light snow	NNW 28 mph	38 mph	.1"	1"

Total snowfall 10"-16" from Lincoln to Omaha with 6"-10" for Fall city area and 8"-12" northwest in central Nebraska.

Stan uses computer models, current weather trends, ocean temperatures and historical weather information to help form his forecasts. Long term, Stan sees a subtle change in the weather in the Midwest. He feels the increased carbon dioxide will result in a thicker atmosphere which will increase the water cycle. This will result in greater precipitation events combined with extended dry periods. We are entering into a period of increasing winter snowfall. This could impact the global warming effect on the jet stream pattern enough to mean our springs will be cooler but dry; with slightly below normal temperatures during the summertime. Overall the growing season should increase but plants could be more prone to early and late freezes which could injure more susceptible plants and affect the harvest as well. East Campus Landscape Manager Jeff Culbertson said "Stan's forecasts improve our response time to winter conditions helping our department prepare in advance for snow and ice." "Our department is extremely aware of the weather and many times, our daily tasks are determined because of the weather," said Landscape Services Director, Eileen Bergt. "We thank Stan for sharing his meteorology skills with us."

"GO GREEN FOR BIG RED!"

Landscape Services takes steps to recycle among tailgaters during Husker Home Games

This fall, Landscape Services, along with the City of Lincoln, AmeriCorps and Recycling Enterprise, lead a group of volunteers to initiate recycling at several on-campus tailgating locations. This effort is the first of its kind at the University of Nebraska-Lincoln. People from all around the country tailgate near the stadium during the Husker home games and generate large quantities of recyclable materials such as aluminum cans, plastic bottles, and cups. Most of these easily recyclable materials end up in the landfill. We motivated and challenged the volunteers to make a difference and work towards making our university a cleaner, greener, and sustainable campus.

Volunteers from different community and university groups joined us during these seven home games. On each Husker game day, volunteers were grouped into 3-5 person groups and assigned to different parking lots. Once there, they would pass out green recycling bags, inform tailgaters of recycling bin and dumpster locations, collect recyclables, and educate the tailgaters about the university recycling program. The volunteers collected full bags of recycled material from people or recycling containers and deposited them in nearby recycling dumpsters. Once the games were over, the tailgaters and volunteers would tie the full bags and leave for Recycling Enterprises to pick up. A volunteer would work from 2 to 4 hours during each game day.

Over the stretch of seven home games, 5,734 lbs. of plastic and aluminum were collected. A total of 54 volunteers participated averaging 18 per game and contributing 479 volunteer hours. On October 24, coinciding with the International Day of Climate Action, we collaborated with Progressive Student Coalition and recycled inside the stadium. This single effort resulted in 5,740 lbs. of recyclables, which were mostly plastic bottles.

Tailgating in Lincoln during the Husker game days has always been a fun event as well as a great event to witness. However, very few think about the amount of recyclable items that are generated during these events which eventually ends up in the landfill. With this project and great volunteer support, we were able to instill this notion among the tailgaters. Towards the end of the program, we found the people to be quite receptive of our initiative. They would recognize us and ask for the green bags. Overall, we feel the 2009 Go Green for Big Red was a huge success. We started with small expectations and found that the satisfaction of doing the right thing resonated well with each one of the volunteers who were a part of this effort.

Utility Services

Utility Master Plan Study

April 2005, a request for proposal went out to several engineering firms requesting qualifications for performing utility master plan studies and a description of the process they would institute to complete the project. Lutz, Daily & Brain Consulting, engineers from Kansas City, was selected to perform the energy portion of the study (steam, chilled water, and electricity), and HDR of Lincoln was selected to perform the water/sewer for the city campus portion of the study.

The University's Board of Regents approved a physical master plan April of 2006. This master plan lays out a vision for the Lincoln campuses in terms of land use, open space, circulation, entryways and identity, and provides a framework for the development of the campuses for the next seven to ten years. In this master plan it identifies that the Utility Services division of Facilities Management and Planning was performing a separate utility master planning process to determine future electric, steam and chilled water needs for both campuses.

Over the next several years the consultants gathered data, received input from utilities staff, inspected the physical condition of the infrastructure, built models, and produced detailed reports of each system. This effort has been extremely beneficial to understanding the complexity of the systems and how to utilize the existing infrastructure to serve the campus as it grows and develops. Models of each system are now in place to help analyze effects of new loads on the system and what modifications are required to support the new loads.

The general result of the master plan work has identified that UNL infrastructure is in relatively fair shape, but continuing to defer maintenance could result in equipment failures and loss of services to campuses. An example of this is the cooling capacity at the east campus plant. While we currently have enough capacity to handle the peak summer load with all of the cooling equipment working, the loss of the largest chilling unit would leave the campus unable to meet cooling demands. This was important to identify since the largest cooling unit at the east plant is also the oldest. We are also close to this point at city campus; the original chillers installed in the plant are still in use and are needed to meet firm capacity. These original city campus chillers have a 20 to 25 year life expectancy and they were installed in 1964.

A result of the master plan work was to produce a capital plan to help determine the sequencing and capital requirements for the utility infrastructure. The capital plan includes a list of projects that are needed to continue to serve the campuses with reliable services and to handle growth and development of the campuses. There were over $65 million (2009 dollars) in projects identified that need to be completed over the next ten years in order to keep service to campuses reliable and have enough capacity to handle mild load growth. The majority of the projects are to replace equipment that has been serving campus much longer than it was intended to. Benefits of replacing the aged equipment in the plant include: better equipment efficiency which translates into lower operating costs, reduced maintenance required to keep the equipment operational, and continued reliable services to campus buildings.

The first round of projects will include infrastructure work upgrading steam and chilled water production and distribution for each campus. Projects on the city campus list include: replacement of the 1964 chillers at the city campus plant to increase reliability and efficiency of chilled water production, and replacing the steam line to the Devaney Center for the new addition. East Campus projects include adding a thermal energy storage tank to store chilled water, upgrading some chilled water piping to improve flow to the eastern half of campus, and installing a new steam line to improve service to the eastern half of campus.

City Plant

Then

&

Now

City Campus Chilled Water to Have An Additional Treatment

The chilled water system on City Campus is a closed loop system that cools the majority of the buildings on campus. This system contains close to three million gallons of water. In the past, bacterial tests were run monthly and the system was treated with hydrogen peroxide, which is an oxidizer used to burn up bacteria. We have experienced problems with bacterial growth in the system when large sections are shut down over the winter months and the water reintroduced to the rest of the distribution.

Bob Parham, Utilities Services water treatment chemist, researched using Chlorine Dioxide, a highly effective environmentally-friendly biocide. It is a selective oxidant that attacks planktonic and sessile bacteria, disinfects surfaces, and rapidly reduces biofilm. Chlorine dioxide is a stable dissolved gas that is very effective penetrating biofilms with short contact time. It is also effective over a wide pH range, does not form carcinogenic disinfectant byproducts, and is much less corrosive than other oxidants used for bacterial control. With the help of our supplier, Bob was able to develop the injection equipment station necessary to introduce the chemical into the chilled water system at the plant. (See photo right)

The dates of proposed treatment injections are February 17, 18 & 19. As the process occurs, filters and strainers will need to be monitored over a couple of weeks and low spots blown down. This will create initial maintenance problems but our hope is to reduce the overall bacteria in the chilled water system, make it more energy transfer efficient, and require less maintenance in the long run. If this process has good results, we are looking into performing two treatments each year.

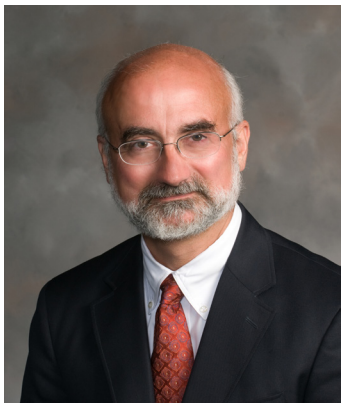
Ancient Steam Pumps?

Wilson was President, the doughboys hadn't gone over there yet, and East Campus Utility Plant took shipment on two American Marsh steam simplex condensate return pumps. These twins have operated through the roaring 20's, the great depression, two world wars and the development and demise of the Edsel and still provide the dependable transfer of steam condensate from the campus to the storage tank completing the water, steam, condensate cycle that maintains heat and process steam throughout the 60 buildings of East Campus.

It's a mechanic's delight to be able to fix something and these old pumps were meant to be maintained by folks that like to fix things. Hand tools, sweat, busted knuckles, stubbornness, pride, a few spare parts and 90 plus years later they are still pumping tens of thousands of pounds of water day in and day out. The curses of the ghosts of generations of maintenance men hang about in the space and give you a connection to a tradition that doesn't get reported or praised, it just keeps the campus alive for future traditions and praises.

They have paid for themselves in longevity and dependability. They die when we can't find canvas and rubber laminated hydraulic packing and phenolic (hard fiber) valves anymore. Good luck posting that to E- bay or Craig's list. It's been a good ride and you will still find folks that will walk by them and give them a pat.

A Message from Ted Weidner



I have had the good fortune of seeing many campuses over my career; occasionally I am invited to visit other campuses to provide some recommendations. It's flattering to have these opportunities; I seldom think that I know everything, or even very much. I relish the opportunity to get an in depth look at other campuses.

I visited a campus in Indiana that has a similar mission to UNL. While the campus is larger and serves more students, it faces many of the same challenges including budget cuts, customer service demands, and the need to provide facilities that will be attractive to students coming from recently constructed high schools. Academic departments want new-looking facilities so students don't feel as if they are "stepping down" when they go to college; that's a big challenge when the state has limited resources.

The campus was interested in getting recommendations on how to make the planning, design, and construction organization more customer-focused and efficient. We have the similar challenges. An academic department may not participate in a major construction project in a 30-year timeframe; the process is unfamiliar to them and they need a lot of help to foresee the issues and complexity of the project. The amount of money spent on capital construction seems so large - usually more than $250/square foot or $10 million for a 40,000 square foot building (about the size of Canfield North). Compare that with our annual operating budget that's less than $2.25/square foot. Construction projects are "big targets" because they are so easily identifiable. Construction projects are important to everyone in FMP due to how they affect us before, during, and after construction.

Higher education facilities provide support for the academic mission: teaching, research, and outreach. They separate faculty and students from the variable conditions of nature; imagine taking a class outside, right now – brrr. They provide a safe environment for laboratory courses where chemicals or biological hazards are used; they provide an environment for plants and animals researched at UNL. Faculty and students make use of collaborative spaces in the libraries to research and learn or simply get access to campus and world resources via the web. UNL facilities provide an environment for Nebraskans to learn!

So how do we explain to a one-time customer for a construction project or a regular customer getting cleaning services what we do for them and make the experience positive? It takes time and communication, lots of communication. Your director and I visit with campus administrators to keep in touch and identify what we do to provide good learning environments.

As we look forward to our own challenges, let's keep a positive outlook on what we do for the faculty, staff, and students. Don't forget the future students who see the value in the University of Nebraska – Lincoln and their parents. Spring is just around the corner along with a new batch of students eager to attend UNL.