

Minutes, PUP Committee Meeting [DRAFT v2]

With appendices from Joe Fink, Facilities Management

9-27-2012

Present: Nancy Baker, James Becker, Janine Buchanich, Joe Fink, Irene Frieze, Suzanna Leers, Paul Munro, Mark Scott, Eli Shorak, Paul Supowitz, Patricia Weiss, Amy Williams, Laura Zullo

1. The Mission Statement was reviewed. After a brief discussion, the committee decided to leave it with no alterations (unanimous).
2. New officers were elected. Suzanna Leers and Patricia Weiss are the new co-chairs, and Amy Williams is the secretary.
3. Paul Munro will continue as the PUP representative to the Classroom Management Team
4. Joe Fink gave an update on recent projects around campus (Appendix A is his detailed report).
 - a. New Freshman Housing (5th Avenue)
 - b. University Book Center
 - c. Chevron Science Center Renovation
 - d. Benedum Hall Renovations
 - e. Parran Hall and Crabtree Hall
 - f. Salk Hall
 - g. Nationality Rooms – Switzerland and Turkey
5. Joe Fink reported on Sustainability Issues (Joe submitted a more detailed report -- Appendices B, C, D)
 - a. Energy Initialtives
 - b. Storm Water Management
 - c. Sustainability Highlights
 - i. Recognition from Princeton Review
 - ii. Leed Certifications on many buildings and renovation projects
6. Agenda items for the coming academic year were discussed.
 - a. Proposed tour of freshman dorm and book center in the spring
 - b. Perhaps a broader tour of campus projects
 - c. Landscaping presentation
 - d. Classroom technology presentation
7. The next meeting is scheduled for October 25 at 3PM in the Martin Room.

Appendix A: New Construction (from Joe Fink)

New Freshmen Student Housing

One of the most visible and notable additions to the Pitt campus is the ongoing construction of the ten-story Freshmen Student Housing facility on Fifth Avenue and University Place. Scheduled for completion for the fall 2013 term, this 200,500 gross square foot facility will also include upper floor support areas and amenities such as study rooms, lounges, laundry and fitness rooms.

Fifth Avenue Freshmen Housing Wellness Center

In order to provide more comprehensive health-related services to students in a single location, the new Freshmen Student Housing Facility will also house a Student Pharmacy and Student Health Services Center, along with a Student Counseling center. Approximately 1,500 square feet of the first floor will be dedicated to the Student Pharmacy, currently located in the Medical Arts Building. The second floor will include 18,800 square feet dedicated to the Student Health Services Center (currently in the Medical Arts Building), and the Counseling Center (currently housed in the William Pitt Union.) The second floor space will also include a health education classroom, waiting areas, offices and ancillary support space.

University Book Center Temporary Relocation

While the University Book Center located at 4000 Fifth Avenue is undergoing extensive renovations, its temporary location is the corner of Forbes and Meyran Avenues. Once completed, the renovation of the Fifth Avenue location will transform the space to provide a welcoming, stimulating, and pleasant shopping experience for the University community and campus visitors. Circulation and flow throughout the sales floor will be improved with a new layout, the addition of a stair and elevator and the relocation of the main entry on Fifth Avenue. Updated sales floor display areas will be created for textbooks, trade books, school supplies, gifts and clothing. A new sales and service area will be created for digital technology, and a small café will be added to the street level. Restrooms, dressing rooms, office and conference spaces, information centers and check-out areas will be updated and relocated within the space. The textbook area which is in the lower level will be redesigned to improve service and security, and the Copy Cat center, currently off-site, will be relocated to this level. Look for this to open in May 2013.

Chevron Science Center – 3rd Floor Instructional Labs

This new 3,500 gross square foot renovation of the Chevron Science Center modernizes valuable instructional chemistry space for multidisciplinary teaching needs. To provide additional flexibility, the labs have been designed to accommodate both organic chemistry and general chemistry teaching needs. The

work includes complete replacement of an inefficient and ineffective laboratory ventilation system with a heating ventilating and air conditioning system tailored to the research needs of the classroom. Similar to renovations on other floors in Chevron, previously wasted circulation areas have been reclaimed to expand the useable teaching areas. Energy and water conserving upgrades and ADA improvements are included.

Benedum Hall Renovations

Renovations are underway of the 3rd and 7th floors of Benedum Hall. The 3rd floor is completely renovated and houses the Innovation Floor, which includes four computer classrooms, a distance learning classroom, design rooms and faculty offices located on the south side of the floor. In addition, a 19,000 square foot area of the 7th floor been renovated and is the home of the Civil and Environmental Engineering Department. This floor consists of wet labs, undergraduate instructional and computer labs, post-doctoral offices, an IT office, the ASCE group and faculty offices. A renovation has also been undertaken in the sub-basement to house Mechanical Engineering and Material Science labs. Completion of the Benedum Hall renovations is scheduled for March of 2013.

Parran and Crabtree Halls Addition and Renovation Phase I

In order to allow for continuing growth and flexibility in the Graduate School of Public Health's research program, the university is undertaking a 57,000 gross square foot, five story addition to Parran Hall which is scheduled for completion at the end of 2013. This addition comprises three floors of laboratory and laboratory support space and will tie into the existing Parran Hall building on floors 2, 3, and 4 to link existing office space to newly created laboratory space. Additionally, this phase of the project will renovate 13,000 gross square feet in Parran Hall including the lobby, restrooms, student commons area and ground floor building support spaces. The addition is registered to achieve LEED Certification.

Salk Hall Addition and Renovation

Another highly visible renovation and addition is underway at Salk Hall to support the Schools of Dental Medicine and Pharmacy. An 81,000 square foot, six story addition is scheduled for completion in 2014. The School of Dental Medicine's Center for Craniofacial Regeneration and the School of Pharmacy's Center of Pharmacogenetics and Center for Clinical Pharmaceutical Sciences will benefit from the additional research and administrative space, the open "ballroom" laboratory plan, and contiguous linear equipment corridor, as well as conference rooms, faculty offices and ancillary support space. A large retaining wall on the site was recently completed.

Nationality Rooms

The Cathedral of Learning now proudly houses two additional Nationality Rooms to add to the over two dozen international classrooms which represent the ethnic and cultural diversity of the people of western Pennsylvania. The construction of these rooms originally began in 1938 and has continued through the following two new additions.

Swiss Nationality Room

The Swiss Nationality Room is located on the third floor in room 321 and is dedicated to two great Swiss educators, Johann Heinrich Pestalozzi (1746-1827) and Jean-Jacques Rousseau (1712—1778). The room is modeled after an historic 16th century room in Zurich, Switzerland and is furnished with wooden tables and “Stabellen” chairs. It contains an historic map of Switzerland and round stained-glass windows among other ethnic amenities.

Turkish Nationality Room

The Turkish Nationality room is now complete and is located in room 339 of the Cathedral of Learning. The room is designed after a “main room” in a traditional Turkish house with seating along the walls. Amenities include four ceramic panels depicting life in Turkey in the 9th, 14th and 16th centuries, intricate native woodwork and a window designed by master artisans in Turkey.

Sustainability

In keeping with our ongoing efforts at “greening” the campus, the University has been recognized in the 2012 edition of the Princeton Review’s Guide to 322 Green Colleges, earning a Green Rating of 92 of a possible 99. The Guide includes profiles of “the nation’s most eco-friendly campuses”, noting features such as sustainable construction, waste diversion rates, alternative transportation, and academic offerings.

Energy saving projects are implemented on a continuous basis to reduce the University’s energy consumption, costs, and impact on the environment. Eleven recent projects resulted in an annual energy savings of 4.8 million kilowatt hours, enough to power more than 260 typical homes for a year. These projects also received more than \$327,000 in Duquesne Light Act 129 rebate funds, which will be reinvested in additional energy saving projects.

Appendix B: Energy Initiatives (from Joe Fink)

University of Pittsburgh Energy Conservation Initiatives

1. Demand Reductions

- The University recently received \$327,000 in Act 129 rebates from Duquesne Light.
- Rebates were attributed to eleven (11) projects.
- Estimated demand reduction of approximately 1,550 kW.
- Annual energy savings of approximately 4.8 million kWh (approx. \$350,000/year).
- Projects included:
 - VFD installations
 - Aircurity
 - Lighting upgrades
 - HVAC upgrades
 - Chilled water distribution system upgrades
 - Chiller replacements
 - Large fan motor replacements/VFD's
- Pitt is also participating in a voluntary Act 129 curtailment program through ClearChoice Energy. Our program is activated through our Automated Logic system (building setpoints are automatically adjusted during curtailment hours), reducing both usage and demand. Curtailment is activated in response to a DLCO Act 129 request. We exceeded our commitment to this program by approximately 24% in the summer of 2012.
- Pitt has also implemented curtailment even when not asked to do so. The University has made the decision to reduce load on most days above 85 degrees. In all, Pitt curtailed on 35 individual days for a total of 288 hours during the summer of 2012.

2. Lighting Retrofits

- The University has upgraded the lighting in most buildings to a standard T-8 fixture with electronic ballasts.
- Programmable logic control (PLC) has been installed to control lighting in selected areas, particularly in difficult to control areas (i.e. Posvar Hall)
- Lighting is upgraded in all renovation projects
- Two upgrades recently approved – Cost Sports Center & Fitzgerald Field House
- Occupancy sensors are installed in most common areas and renovated areas.

3. Window Replacements

- Low-E glazing has been installed in most new construction and certain renovation projects.

- The Benedum Hall windows were replaced as part of an ongoing comprehensive renovation to the building.
- Planned replacements at Parran, Crabtree, and Mid-Campus Research Complex

4. Other Initiatives

- McKinstry Enterprise Energy Management System (implementation to be completed this fall)
- AirCuity (Benedum, GSPH, Mid-Campus, Salk) - Standardizing the Installation of the AirCuity System in research facilities (single pass air). AirCuity is a Demand Control Ventilation system that reduces ventilation rates based on the actual air quality within a space, thus reducing the energy demand.
- Standardizing the design and installation of heating and cooling recovery systems in research and science facilities.
- HVAC upgrades (Thackeray, Bellefield)
- VAV/VFD installations (Posvar)
- Capacitor and harmonic filter installation (Biotech)
- Radiator control upgrades (Cathedral of Learning)
- Residence Hall energy competition scheduled for October
- 5-year electric generation rate lock – First Energy
- Gas purchasing – favorable pricing

Appendix C: Storm Water Management Initiatives

Storm Water Management Initiatives

- **New Construction** – storm water management plans are developed for all new facilities.
- **Benedum Hall** – green roof
- **Benedum Hall** – green plaza
- **Falk School** – green roof
- **Petersen Events Center** – rain garden
- **Salk Hall Addition**- A bioswale system and rain garden will be installed to mitigate storm water at this new facility. The bioswale will collect rain water from the hillside behind the building and the roof, allowing the water to drain slowly before collecting overflow in an underground tank. This tank will be designed to gradually release water into the city sewer system to avoid overflow. A medicinal garden is also being installed with this project.
- **Cassell Hall** – This new facility on the Greensburg Campus includes two green roofs and roof drains are connected to underground cisterns that collect the water and reuse it for grey water (toilet flushing). A bioswale system is also in place to collect rainwater and allow it to drain gradually to the city sewer system.
- **Music Building** – Installed interior and exterior French drains and re-sloped sidewalks to mitigate water infiltration.
- **Stephen Foster Memorial** – Installed new drains and sump pump
- **Clapp Hall** – constructed a retaining wall and storm water drainage system to capture and divert water from the building.
- **Bellefield Hall** – a project has been approved to separate rain leaders from the sanitary system.
- **SIS** – sealed windows to prevent water infiltration
- **Thackeray Hall** – separated rain leaders from sanitary system, foundation work
- **Salk Hall** – replaced and rerouted rain conductors, eliminating the surge of storm water that was backing up into the Dental School. This has improved building safety and indoor air quality.
- **Craig Hall** – a backflow preventer has been installed to prevent sewage back-up
- **University Drive** – Mid campus – created a storm water maintenance program where storm conductors are inspected and cleaned on a routine basis, greatly reducing the possibility of overflows that result in flooding of our facilities.
- **Increased roof inspections and repairs** – to prevent roof leaks and ensure that drains are working properly

Appendix D: Sustainability Highlights

LEED Buildings

LEED Certified Facilities:

McGowan Institute for Regenerative Medicine – LEED Gold, 2005

- First LEED Gold laboratory in Pennsylvania

Mascaro Center for Sustainable Innovation – LEED Gold, December 2011

- Energy saving strategies
- High performance glazing
- Low flow plumbing fixtures
- Daylighting features

Benedum Hall Renovation, Phase I – LEED Gold, December 2011

- Installed the University's first green vegetative roof
- Heat recovery equipment to reduce energy losses
- Low-VOC paints, carpets, adhesives
- Over 75% of construction & demolition waste recycled

Projects Pursuing LEED Certification:

Chevron Science Center Addition – pursuing LEED Gold

- Energy saving strategies
- Heat recovery and variable frequency drives
- Low-flow fume hoods and plumbing fixtures
- Over 97.5% of construction & demolition waste recycled

Greensburg Campus Cassell Hall – Pursuing LEED Silver

- Designed to realize 30% annually energy savings and reduce water usage by 50%
- Two “green” vegetative roofs
- A rainwater harvesting cistern provides non-potable grey water for the flushing of toilets and a irrigation for the building's landscaping.
- Rain gardens and storm water bioswales provide on-site storm water management

Fifth Avenue Freshman Housing – pursuing LEED Silver

GSPH Addition – pursuing Certification

GSPH Renovation – pursuing Certification

Salk Hall Addition – pursuing LEED Silver

Benedum Hall Renovation, Phase 2A – pursuing LEED Gold

Mid-Campus Complex – Nuclear Physics Renovation – pursuing Certification

UPJ School of Nursing – pursuing LEED Silver

BST 10th Floor Renovation – pursuing LEED Gold

Energy Conservation

- Building Automation
- Many lighting upgrades
- Occupancy sensors
- Extensive metering system
- Recently received over \$325,000 in Duquesne Light Act 129 Energy rebates for energy conservation projects. Additional rebates are being pursued.
- An estimated energy cost avoidance of nearly \$40 million has been achieved via energy conservation initiatives since 1996.

Emissions Reductions

- Carrillo Street Steam Plant began operation in 2009
- Equipped with state of the art emissions control technology
- To our knowledge, Pitt is the only University in the nation to have achieved an ultra-low NOx emissions limit of 9 parts per million.
- Currently serves approximately 50% of Pitt/UPMC's steam load.
- Upon full transfer of load from the Bellefield Boiler Plant, the Carrillo plant is projected to reduce annual steam-related CO2 emissions by 47% (from 2008 baseline levels).

Recycling

- The percentage of Pitt's waste stream that's recycled has steadily increased over the years, rising from 7.8% in FY2004 to 43.2% in FY11.
- 2012 marked Pitt's 4th year of participation in the national RecycleMania competition.
 - Pitt ranked #33 out of 296 schools in total weight recycled (top 11%)
 - Ranked 1st in Big East Conference for Corrugated Cardboard and Paper categories

Recognition

- Princeton Review – Recognized for the first time in the 2012 “Guide to 322 Green Colleges”, earning a score of 92 of a possible 99. Recently learned that Pitt will be recognized once again in the 2013 Guide, with an improved score of **97** of a possible 99.
- Recognized by the Allegheny County Health Department as an Enviro-Star Award Recipient in both 2007 and 2009.
- Recognized by Sierra Magazine as one of “America’s Coolest Schools” in 2011, ranking #52 of 118 schools featured.
- Recognized by the Professional Recyclers of Pennsylvania with a 2012 Pennsylvania Waste Watcher Award. The award recognizes the University for its “outstanding commitment to recycling, waste reduction, and reuse in the state of Pennsylvania”.
- The University is honoring Pitt Alumna and Nobel Peace Prize recipient Wangari Maathai by dedicating two new red maple trees near the Fifth Avenue entrance to the Cathedral of Learning. Ms. Maathai was an environmentalist who founded the Green Belt Movement in her native Kenya, planting trees and promoting environmental conservation and women’s rights.