Minutes of the Monthly Meeting of the Council for the Built Environment
September 8, 2015

I. Attendance

A. Voting Members
   2. Absent: Christopher Lyons

B. Non-voting Members
   1. Present: Bill Dugas, Jim Grau, Bob Strawser, Leslie Uptain, Hannah Wimberly
   2. Absent: Paul Ogden

C. Ex-officio Members
   1. Present: Karan Watson, Jerry Strawser, Marty Scholtz, Lilia Gonzales, Peter Lange (for Tom Reber), Ralph Davila, Deborah Wright, David Morrison, Richard Gentry, Bettyann Zito
   2. Absent: Kevin Hurley

D. Guests
   1. Shelly Janac, Paul Wellman, Misty Skaggs, Matt Fry

(*office/organization representation for the Vice Presidents, Agencies, CPI, USC, Graduate Students and SGA have voting and non-voting members; in meetings where the voting member is absent, the non-voting member assumes voting status.)

II. Welcome

A. Co-Chair Watson called the meeting to order at 3:00 p.m.

B. New CBE Members were welcomed and introductions were made.

C. The July 2015 minutes were declared approved as drafted.

III. Presentations by Sub-Councils

A. TEES/TTI Center for Infrastructure Renewal

The College of Engineering submitted a request for concept approval of a new TEES/TTI Center for Infrastructure Renewal (CIR) Building in Research Park.

The Texas Legislature recently approved funding for the construction of the TEES/TTI Center for Infrastructure Renewal (CIR). This large scale research testing and training facility will focus on infrastructure materials, structures and construction research, and will train construction professionals to use these new materials and technologies in the
field. The research results generated in this facility will lead to lower infrastructure construction costs and better design and reliability for long-term infrastructure projects. The cost of this 132,470 square foot research and training facility is estimated to be $65 million with $35 million in equipment costs. The legislature will be providing $5 million per year to TEES for the debt service to construct this new building and private donations will be used to purchase the necessary equipment. The TTI personnel currently located on main campus in the CE/TTI building will be moved into the new CIR.

**Recommendations:**

The Design Review Sub-Council (DRsc) unanimously voted for approval of the TEES/TTI Center for Infrastructure Renewal (CIR) Building as presented at Concept Design, with the following caveats:

- Concept approval is for the use of this general site location only, and does not include actual building placement/footprint, its relationship to the street, the location of parking, or any other specifics.
- Consideration of a design that responds contextually with its surroundings in regards to building footprint, scale, proportions and parking.
- Coordination with the planning firm for the Campus Master Plan Update to ensure that the site and building design are coordinated with the long-term vision for future development of Research Park.
- Further design details are to be presented at 100% Schematic Design and 100% Design Development, in accordance with DRsc procedures.

The Facilities Utilization and Planning Sub-Council (FUPsc) unanimously voted to support the request to construct the TEES/TTI Center for Infrastructure Renewal, provided the following concern is addressed:

- Define how to get the heavy trucks in and out of Research Park since the current infrastructure appears not to be sufficient.

The Technical Review Sub-Council (TRsc) supports the proposed request for the construction of TEES/TTI Center for infrastructure renewal and recommends approval, provided the following issues/concerns are addressed and funded.

- The design team needs to ensure that the project does not increase the rate of storm runoff into local creeks.
- The project team should coordinate with Grounds Management for landscaping and irrigation concerns.
- The project team should ensure that the facility is designed to minimize, as much as practical, the effort needed for future maintenance. It is preferred that items requiring maintenance be easy to service, be easily accessible from ground or floor level, have generous clearances and be easy to isolate from energy sources with minimal impact to the rest of the facility. Elevated items requiring maintenance that are difficult to service by ladder or lift should have permanent maintenance access platforms with permanent stairs or ladders, built-in fall prevention, and davits for hoisting parts and tools.
- There is a significant duct bank system carrying fiber optic and Verizon copper telephone cable across the proposed footprint of this facility. The fiber and copper cables serve the George Bush Presidential Library, TEEX Disaster City &
the Fire Field, as well as Easterwood Airport. If the facility sits exactly as proposed, relocating this duct bank will be required.

Action: The CBE voted to recommend the President’s approval, with noted caveats, the request from the College of Engineering to review the TEES/TTI Center for Infrastructure Renewal (CIR) construction plan and for placement on the university capital plan.

Responsible Parties: Co-Chairs Watson and Strawser

B. Peterson Renovation

The Peterson Building (#0444) is a general purpose academic building with 84,831 gross square feet on the Texas A&M main campus. There are currently three small classrooms in the building (<35 student maximum each), and the rest of the building is used for offices and laboratories. The building is currently occupied by the Department of Plant Pathology and Microbiology (Agriculture) and a brain research laboratory (Liberal Arts). The deans of engineering, agriculture and liberal arts have agreed to a space transfer plan in which the Dwight Look College of Engineering will be assigned the Peterson Building after the College of Agriculture and the brain laboratory have vacated the space in the 2017/18 academic year.

The faculty, students and staff of the Department of Plant Pathology and Microbiology will be moved to a new building on west campus, and the brain laboratory will be moved to equivalent space in the Teague building vacated by the college of engineering. President Hussey approved this space transfer in April of 2015. This new assignment is necessary due to the anticipated growth of the college of engineering. The Peterson building will become the new home of the Department of Computer Science and Engineering.

The Peterson building is currently in poor operational and aesthetic condition. Therefore, a renovation is needed before the Department of Computer Science and Engineering can occupy the building. There are approved existing Texas A&M University plans for deferred maintenance repairs and replacements for the Peterson building over the next few years.

The request is for all of Texas A&M University-approved deferred maintenance tasks be performed during the 2017/18 academic year while the building is vacated, rather than over a multi-year period. One change requested is to remove the fume hood replacement from the deferred maintenance list because fume hoods will not be required in the future. However, there have been a number of flooding events in the basement of Peterson recently during heavy rain, so it is requested that the funds designated for hood replacement ($130,900) be used to reroute storm water runoff away from the building exterior.

In addition to the deferred maintenance tasks listed above, the building will need aesthetic updates including expansion of windows; removal of wet laboratory equipment, the majority of which is outdated or nonfunctional; placement of server rooms; and reorganization of the floor plan to be more appropriate for the Peterson buildings new
use. These updates will be performed at the same time as the deferred maintenance while the building is vacated during the 2017/18 academic year. Based on a recent estimate, it is anticipated that these aesthetic tasks will cost $6.5 million. The college of engineering will be responsible for this $6.5 million expense, which will be funded through revenue financing debt service over 20 years.

The only change in the exterior appearance will be vertical expansion of the windows into the metal siding area below the windows and placement of clear glass rather aluminum siding over the two entrances to lighten the interior of the building.

**Recommendations:**

The Design Review Sub-council (DRsc) voted for approval of the Peterson Building renovation as presented at Concept Design, with the following caveats:

- When designing the vertical expansion of the glazing area, please note and consider that the Campus Master Plan design guidelines state that total window area is to be in the range of 18% to 50% of the wall area of major facades and elevations.
- Further design details are to be presented at 100% Schematic Design and 100% Design Development, in accordance with DRsc procedures.

The Maintenance Sub-council (Msc) recommends approval for delay of the FY16 projects, adjustment to the FY18 and adjustment to the FY19 project to a schedule when the building is vacated for renovations. Funds to be used for Peterson deferred maintenance projects.

The Technical Review Sub-council (TRsc) supports the proposed request for the Peterson renovation and recommends approval, provided the following issues/concerns are addressed and funded.

- The project team should coordinate with Grounds Management for landscaping and irrigation concerns.
- The project team should ensure that the facility is designed to minimize, as much as practical, the effort needed for future maintenance. It is preferred that items requiring maintenance be easy to service, be easily accessible from ground or floor level, have generous clearances and be easy to isolate from energy sources with minimal impact to the rest of the facility. Elevated items requiring maintenance that are difficult to service by ladder or lift should have permanent maintenance access platforms with permanent stairs or ladders, built-in fall prevention, and davits for hoisting parts and tools.
- Based on the understanding of who will be occupying the building, it is recommended that new fiber optic cable be pulled into the building as part of this project. This will allow additional capacity and higher speed services for the department.

**Action:** The CBE voted to recommend, with noted caveats, the President’s approval of the request from the College of Engineering to renovate the Peterson Building.

**Responsible Parties:** Co-Chair Watson and Strawser
C. Occupancy of Riverside Building #7535

The Facilities Utilization and Planning Sub-Council (FUPsc) met to hear presentations and consider the requests from both the College of Engineering and the College of Veterinary Medicine and Biomedical Sciences (CVM) to occupy the space in Riverside Building #7535. The CVM currently occupies the space for its Veterinary Emergency Team (VET).

VET uses the building to store and maintain its equipment used for their veterinary medical disaster response team. The program has amassed a sizable cache of equipment worth over $1.7 million to provide a mobile hospital capable of supporting up to 50 veterinary personnel in times of disaster. The location and configuration of the equipment allows the team to mobilize within 3 hours of a request for assistance. The building is also utilized to conduct training sessions for senior veterinary medicine students as well as for faculty, staff and students involved in the Veterinary Emergency Response Program. In addition, modifications to the building have already been completed or are near completion with costs born by the VET program.

Engineering would like to locate a new major engineering research initiative, The Center for Autonomous Vehicles and Sensor Systems (CANVASS). Over 30 faculty and 120 grad students from engineering, architecture, and agriculture and life sciences will be involved in CANVASS and research awards are expected to exceed $8 million annually. Currently, the CANVASS operations are spread across various locations and are not in proximity to a dedicated flying zone facility. To be effective, they need contiguous space near a runway. Additionally, the college has hired two National Academy of Engineering members who both require high ceilings and large lab space. The building in question would satisfy space needs for both researchers. Further, CANVASS complements the Lone Star Unmanned Aircraft Systems Center of Excellence and Innovation for which the airplane runways at Riverside are integral. Finally, the proximity of the space to Agri-Life-owned crops facilitates the research collaboration between CANVASS and Agri-Life to apply unmanned aerial system technology and data analytics to precision agriculture.

**Recommendation**

The FUPsc believes that while both the CANVASS and VET initiatives are of great importance, and the Riverside Campus seems like a suitable location for both, the FUPsc unanimously voted to recommend the request by the VET program to continue to occupy the space in Riverside Building #7535. Furthermore, they suggest that the CANVASS program receive strong consideration for any new or newly vacated space at the Riverside Campus.

**Discussion**

Dr. Watson spoke of a trade recently made between the President and the System Offices on various locations that the University oversees and what they don’t oversee, for example, the airport. As part of the trade, the System now controls the operation of Riverside. The University had decided many years ago to not invest in Riverside other
than the utilities. There are several colleges that have storage and/or testing/training facilities at Riverside that are mostly System/Agency related. Future recommendations regarding Riverside may no longer be brought to CBE, however, a recommendation will be made to the President at this time even though it is unclear as to who has the authority to approve the recommendation given that it is now under System management.

Action: The CBE voted to recommend the President approve the request from the College of Veterinary Medicine and Biomedical Sciences to occupy the space in Riverside Building #7535.

Responsible Parties: Co-Chair Watson and Strawser

D. Demolition of Concrete Laboratory, McNew Laboratory, and High Bay Testing Laboratory

The new Zachry Engineering Education Complex (EEC) will be an innovative undergraduate educational facility. On the first floor is the Engineering Design Center, a hands-on design-oriented learning environment. As part of the educational activities, the College of Engineering (COE) is proposing an extensive south greenspace area for technology demonstrations, testing, recruiting, and student gathering spaces. The multiple donors for the EEC also expressed a strong desire to create and support a greenspace south of the building for student activities.

Given recent funding from the legislature, COE now has a plan to create such a space. With the construction of the Center for Infrastructure Renewal (CIR) in Texas A&M University Research Park, the civil engineering infrastructure laboratories will be moving to the CIR. Therefore, COE will be able to demolish three older facilities in poor condition currently used for infrastructure research on main campus to create the south EEC greenspace.

COE is requesting permission to demolish the Concrete Laboratory (#501), McNew Laboratory (#740), and the High Bay Testing Laboratory (back section of #682).

The Concrete Materials Laboratory (#501) has 9,600 gsf (gross square feet) and was built in 1932. The first floor is occupied by the American Society of Civil Engineers student organization, concrete canoe and steel bridge construction areas, research projects, concrete mixing and materials storage. The second floor contains the ocean engineering submarine project and storage for concrete samples. The exterior finish of the building is brick veneer with significant deterioration of mortar and expansion joints. The facility requires a modern fire alarm system upgrade including all devices, automatic fire sprinkler system throughout, and complete replacement of exterior doors and windows.

The McNew Laboratory (#740), 20,904 gsf and built in 1968, has testing/research laboratories on the ground floor for aggregate processing. The building has testing/research laboratories on the first floor for binder asphalt research with eight curing chambers. The exterior finish of the building is brick veneer and in fair/poor condition. The windows are single pane and need to be replaced along with the exterior doors and the roof system. To maintain reliable services for the occupants, the central compressed air system, HVAC system and controls in entirety, specific fume hoods, and lab vacuum
and air need replacement. An automatic fire sprinkler system is required. Replacement of the sump pump system, including all controls, is needed.

The High Bay Structural and Materials Testing Laboratory is 24,185 gsf and was built in 1983. It is attached to the back of the Wisenbaker Engineering Building (#682). In this laboratory, several test systems measure large sample material fatigue, compressive loads, shear and pressure loading. The laboratory has a 20 ton electric hoist that travels the length of the bay. The exterior is skinned with dark brown pre-finished interlocking metal panels, which do not conform to the historical architecture on main campus. The HVAC system is in poor operating condition, and its controls need to be replaced along with all exhaust fans. The roofing also needs replacement.

Although the demolition and greenspace creation plan will result in a loss of approximately 20 reserved parking spaces, this change will increase the impact of the EEC and will significantly improve the aesthetics of the area. Access to the Wisenbaker Engineering Building for deliveries will be maintained in this plan. The estimate for the demolition of these three buildings is $831,814 and the green space creation is $1,000,000. The COE will be responsible for these costs and will pursue naming opportunities for this greenspace area.

**Recommendations**

The Design Review Sub-council (DRsc) members voted to recommend approval of the demolition of the existing Concrete Materials Laboratory, McNew Laboratory, and High Bay Testing Laboratory.

DRsc also voted to recommend concept approval of the creation of a greenspace south of the Zachry Engineering Education Complex, with the following caveats:

- Consideration that the design of the greenspace maximize the relationships between the buildings and its surroundings.
- Consideration of turf grass to plant ratios, and exploration of how to address the greenspace relationship to the aesthetics of the surrounding buildings which were never intended to be focal points.
- Resolution and coordination on issues related to vehicular traffic, circulation, emergency vehicles and parking.
- Future development of public art should adhere to the newly adopted TAMU Procedures for Public Art, which includes a preference for art selection through a competitive process.
- The DRsc looks forward to further development of the conceptual design of the greenspace. Further design details should be presented at 100% Schematic Design and 100% Design Development, in accordance with DRsc procedures.

The Facilities Utilization and Planning Sub-council (FUPsc) unanimously voted to support the request to demolish the Concrete Lab (#501), McNew Lab (#740) and High Bay Testing Lab (#682), provided the following issues/concerns are confirmed:

- There is not a problem with the demolition of a named building (McNew Lab).
- No groups outside of Engineering will be impacted by the demolition of the labs.
The Maintenance Sub-council (Msc) recommends approval to demolish the Concrete Laboratory (#501), McNew Laboratory (#740), and High Bay Testing Laboratory (#682).

The Technical Review Sub-council (TRsc) supports the proposed request for demolition of the Concrete laboratory (#501), McNew Laboratory (#740), and High Bay Testing Laboratory (#682) and recommends approval, provided the following issues/concerns are addressed and funded.

- The project team should coordinate with Grounds Management for landscaping and irrigation concerns.
- In building 501: The concrete lab currently has multi-mode fiber optic cable and when demolishing, proper disconnect of that cable will be required. No connectivity of fiber optic in other buildings.

Discussion

Under Foundation guidelines, when demolishing a named building, a plaque it typically placed around the space commemorating the building.

Any buildings over 50 years of age will have to be reported to the State Historical Commission to be documented. DRsc will be responsible for contacting the Commission.

Action: The CBE voted to recommend, with noted caveats, the President’s approval of the request from the College of Engineering to demolish the Concrete Laboratory, McNew Laboratory, and High Bay Testing Laboratory.

Responsible Parties: Co-Chair Watson and Strawser

IV. Miscellaneous

A. Renaming FURsc to FUPsc
   Facilities Utilization Review Sub-council has been renamed to Facilities Utilization and Planning Sub-council (FUPsc). In addition to their current responsibilities of promoting the efficient use of current space on campus, FUPS will also continue to hone a planning process for proposed major renovations and new facilities not yet on the capital plan.

B. CBE Meetings are scheduled for the 2015-2016 year on the 2nd Tuesday of the month, at 1:30.

V. Meeting adjourned 2:30 p.m.