CAMPUS DESIGN REVIEW

July 25, 2012
Primrose Hall Conference Room

Attendees:	Robin Abrams	Lisa Johnson
	Carolyn Axtman	Sumayya Jones-Humienny
	Tim Blair	Chris Kingston
	Gene Bressler	Jason Low
	Mike Davidson	Kevin MacNaughton
	Mike Harwood	Randy Ramsey
		Julie Sherk

Additional Distribution: Jack Cozort, Gerold Mohn and Tom Skolnicki

Approval of the Minutes:
The April 25, 2012 meeting minutes were approved.

Projects for Review:

1. Broughton Hall Addition and Renovation Submittal #126

Site Location: North Campus, Intersection of Stinson Dr. and Broughton Dr.
Architect: O'Brien Atkins Architects
Landscape Architect: O'Brien Atkins Architects
NC State Project Manager: David Hammock

- This is the first Panel review for this project.
- K. MacNaughton introduced the project by noting the following:
  - The project is only funded through the Schematic Design phase and will subsequently go on hold. The 2008 state budget shortfall relinquished funding for the remainder of the project; however, when funding is restored, full design should start swiftly.
  - Broughton Hall was vacated by Mechanical and Aerospace Engineering with the completion of Engineering Building III. This will allow the Chemistry Department to occupy the Broughton renovation/addition.
  - A Yarborough Drive study is underway to determine how best to extend the road through to Pullen Dr. while allowing truck clearance under the Broughton-Talley pedestrian bridge.
- The project involves demolition of the Diesel Wing and southwest addition (approximately 51,000 gsf), the renovation of the original building (approximately 45,000 gsf), and a new wing to the south, connected by an atrium (approximately 112,000 gsf).
- The Design Team stated five goals for this project:
  - Contextualism: for sensitivity to the existing building and its neighborhood
  - Functionality: for accommodating research programmatic and infrastructure needs
  - Flexibility: for adaptability to future uses in the next 50 years
  - Interaction: for opportunities for occupants to interact with each other, the building and the surroundings
  - Sustainability: for complying with 30% energy savings over the baseline and meeting LEED Silver requirements
- The site is tight and constrained by a 200-foot Railroad right-of-way with a steep grade drop to the south, a steam tunnel under the new wing, the Broughton-Talley pedestrian bridge landing point adjacent to Mann Hall to the east, and Stinson Dr. to the north and west.

- The outdoor area between Broughton and Mann will be a new exterior hearth and arrival point from the Broughton-Talley pedestrian bridge. It mitigates the grade differential from the landing point (high) to the building entry (low) via steps and a universally accessible 5% slope walk. It also connects down to Yarborough Dr with straight-run steps.
- The tall, vertical CO_2 and nitrogen storage tanks and evaporator set are located on the west side, which helps the building screen them from the bridge and north Stinson Dr. approach.
- The proposed new emergency generator is located on the east side of the Bureau of Mines since it should not be co-located with the air-intake louvers on the south side of Broughton; however, the transformer is located to the south for a short-run connection to the ductbank under Yarborough Dr.
- The service access to the loading dock is from the south, off of Yarborough Dr.
- The existing building will be completely gutted, except for the stairs that will be maintained for reuse. The existing entry from Stinson Dr. north will be kept for the Administration / Conference area access. The exterior windows will all be replaced with more energy-efficient units.
- The new connecting atrium mitigates the floor level differences between existing and new and provides an interior hearth plus pre-function space for the central auditorium. It also houses the new elevator for the existing building.
- The service area is located on the 1st floor SW corner of the new addition. Computational Theory is located on the 2nd floor NW corner next to the Administration and Conference area at the NE corner of the existing building. The remainder of the building houses Laboratory groupings of 2 adjacent lab modules (4 people/lab), each with its own graduate office (with separate air and circulation) and support spaces, with perimeter circulation to maximize lab use/size flexibility. Faculty Offices are located on the east and west perimeters.
- The penthouse houses the HVAC equipment. The roof will be zinc (it wears better than other types) near the roof exhaust vents.

Discussion:
The Panel commented on a good design effort and presentation by O'Brien Atkins. Discussion ensued regarding site and Master Plan issues of place-making, transparency of activities within and identification of this as a Chemistry building. The lab layout was debated for the merits of perimeter vs. internal circulation regarding direct access of program space to daylight.

Action:
The Panel requested the following design directives be incorporated:

1) *With the new north-south pedestrian path created as part of this project, consider the opportunity for a special moment, place making, or sense of arrival in the new exterior Hearth space.*
    - *The entire space between Broughton Hall and Mann Hall should be a unified space. As designed, the path appears to be the dominant feature which passes along side a smaller Hearth space.*
    - *The path width should be fairly uniform allowing a variety of seating options along the way. The path is too wide where it meets Stinson Drive.*
    - *The path should stretch across Stinson and be informed by its connection to Hillsborough Street.*
2) *Explore sun shade devices for all south, east and west windows.*
3) *Verify that turning radii at the loading dock are adequate for the size vehicles that will be using the dock and backing in.*
4) *Look for opportunities to open the building up so activities within the building are more visible.*
5) *Use brick detailing/patterning to break up large expanses of brick on the new wing.*
6) *The curtain wall should have a layering of mullion depths that create a rich layered pattern.*

7) *Incorporate bike troughs at the exterior stair that leads from the exterior Hearth to Yarbrough Drive.*
8) *Provide samples of the exterior building materials at the next review.*

Status of Projects in Planning:
L. Johnson noted that there are not many upcoming projects in planning and some CDRP meetings may be canceled due to lack of agenda items.

Next Meeting:
The next Panel meeting is August 29th from 1:30 – 3:30.

CAMPUS DESIGN REVIEW

April 25, 2012

Primrose Hall Conference Room

Attendees:	Robin Abrams	Chris Kingston
	Carolyn Axtman	Jason Low
	Tim Blair	Kevin MacNaughton
	Jack Cozort	Gerold Mohn
	Lisa Johnson	Julie Sherk
	Sumayya Jones-Humienny	Tom Skolnicki

Additional Distribution: Gene Bressler, Mike Davidson, Michael Harwood, and Randy Ramsey

Approval of the Minutes:
The March 28, 2012 meeting minutes stand as presented and will be posted with the correction under the "Next Meeting" being April 25th, not May 30th.

Projects for Review:

1. **Gregg Museum of Art + Design Submittal #123**
   Site Location: North Campus, historic Chancellor's Residence, Intersection of Hillsborough St. & Pullen Rd.
   Architect: The Freelon Group
   Landscape Architect: Lappas + Havener
   NC State Project Manager: Rachel Patrick

   - The goal of this project is to relocate the Gregg Museum to the future Pullen Arts Plaza, thereby becoming the third venue with the existing Pullen Arts Center and the Theater in the Park. The master plan goals are to allow strategic views into the site from Hillsborough Street and Pullen Road, to design an addition that complements the existing residence, and to unify the landscape, which blends campus and park lands. It will also provide a meandering drive with a destination drop-off and parking for the Museum and the Pullen Arts Center.
   - The Design Team explained that the existing heavy landscape screening on site was appropriate for a private residence but not for a public museum; therefore, the landscaping is being modified to reinforce connections from the building to Pullen Park, Hillsborough St. and the future Arts Plaza. Specific plantings will be removed along Hillsborough St. for strategic views in to the site.
   - A landscape design goal is to exemplify best management practices: 2 bio-retention cells are located and designed to hold up to 9 inches of water and will incorporate diverse plantings; and the downspouts will drain into water entrapment trays that make storm water management visible at the building as a teaching opportunity.
   - The former hardscape plinth has been replaced by a lawn that sweeps up to the building. The hardscape adjacent to the building has been reduced and simplified substantially. The plantings at the front are more formal, contained and Georgian in style.
   - The rear grade has been stepped to avoid the need for a guard rail and retaining wall.
   - The overall massing / scale of the addition has been reduced to better relate to the existing residence. The massing his higher around the gallery spaces and lower at the lobby and ancillary spaces.
   - The gross square footage has been reduced for a more compact floor plan. A simplified Lobby now doubles as the fourth Gallery.

- The base of the addition has changed to match the existing brick. The base also doubles as a seat wall at the front and includes recessed banding where the grade drops at the rear.
- The exterior material has changed to a stained, smooth wood siding at the top, with projecting shadow shelves every 13" to define the middle. The wood will either be cypress or white cedar.
- The entry element has changed to all-glass with an overhead see-through wood screen that bridges wood siding of the addition to the brick of the house to emphasize the entrance.
- Existing brick pavers will be salvaged and reused. New pavers at the entry plaza will be linear concrete that blends with the polished concrete interior floor surface.

Discussion:
Discussion ensued about the improvements to the design in response to the previous comments.
The Panel also made the following comments: views to the adjacent Church should be opened by limbing up existing trees; the base brick banding should extend around to the south elevation; the color of the wood stain is important in complementing the existing house and should not be too yellow; the landscape is critical to tying the project together and should be a contemporary natural style, especially if art gets placed in it; consideration should be given to eliminating the wall between the walled garden and the building on the west side over time to make a stronger connection; and more vertical expression is needed in the detailing of the addition.

Action:
The Panel recommended **approval** of the design subject to the following design directives:

1) *Continue the horizontal brick banding on the south elevation.*
2) *The landscape is critical to tying the new gallery addition to the existing residence. Considering modernizing the landscaping in front of the residence so that it better relates to the landscaping around the new addition.*
3) *Include more vertical lines in the design that relate in some way to the scale of the residence. The vertical elements don't have to be equally spaced.*
4) *The color of the exterior wood stain needs further review. The color presented to the Panel appears too yellow.*
5) *Final exterior material selections will be based on mock-up panels reviewed and approved by the Office of the University Architect.*

Status of Projects in Planning:
Broughton Hall Addition & Renovation will be reviewed next.

Next Meeting:
The next Panel meeting is May 30th from 1:30 – 4:30.

CAMPUS DESIGN REVIEW
March 28, 2012
Primrose Hall Conference Room

Attendees:		
	Robin Abrams	Lisa Johnson
	Carolyn Axtman	Sumayya Jones-Humienny
	Tim Blair	Jason Low
	Gene Bressler	Kevin MacNaughton
	Jack Cozort	Julie Sherk
	Mike Davidson	Tom Skolnicki

Additional Distribution: Michael Harwood, Chris Kingston, Gerold Mohn, and Randy Ramsey

Approval of the Minutes:
The February 29, 2012 meeting minutes stand after a "dangling" item #4 was removed on the Alliance Building, and will be posted.

General Business:
1. After polling the committee, Lisa Johnson reported that Wednesday afternoon is the preferred meeting time.
2. As part of NC State's 125th Anniversary celebration, Riddick Stadium will be commemorated with the installation of a plaque with the history, aerial views of the stadium, and a portrait of Dean / Coach Riddick.

Architecture 2030 Challenge:
Robin Abrams presented the "Architecture 2030 Challenge," an initiative started by architect Ed Mazria, a colleague of Professor Wayne Place, in the 1970's to respond to the problem of how much energy buildings consume before, during and after construction. The American Institute of Architects adopted this challenge in January 2006 with the goal of achieving carbon neutrality by the year 2030. NC State's School of Architecture is also adopting these principles and classes will be taught on designing passive buildings for optimization of energy and how to make buildings that produce energy. For more information, see: http://www.architecture2030.org/. Robin recommends that the Campus Design Review Panel incorporate these principles into its review and inform vendors accordingly so that we are in a position to meet this goal.

Discussion:
1. Kevin MacNaughton noted that Chancellor Oblinger adopted the American College & University Presidents' Climate Commitment (ACUPCC) in 2008 to reach climate neutrality by 2050, using incremental steps. (One example is the new co-gen technology now being used at the Cates Avenue Plant.) The Chancellor also mandated that all projects with 20,000 or more gsf meet LEED Silver Certification at a minimum. For more information, see:
   a. http://www.presidentsclimatecommitment.org/about/mission-history
   b. http://sustainability.ncsu.edu/team/plan
2. Kevin MacNaughton stated this also requires optimizing use of our buildings, e.g., not wasting air-conditioning of empty buildings during the summer and being mindful that the most energy efficient building is the one we don't build.

3. Julie Sherk wants to see landscape-focused sustainable initiatives included across campus as well.
4. To the question of building sustainable new projects, Lisa Johnson replied that the costs for sustainability must be included in the capital projects budgets and scope statements. Robin Abrams offered that Dr. Soolyeon Cho, a building optimization specialist professor, can address what we should be including, e.g., super-insulation, triple glazing, etc. Carolyn Axtman reiterated that we can't build the same amount of square footage with additional sustainable features for the same cost without those features.
5. Kevin MacNaughton noted that UNC System President Tom Ross met with Amory Lovins of the Rocky Mountain Institute at the Institute for Emerging Issues (IEI) and they have planned a conclave for Chancellors at Appalachian State this July for UNC System universities to be the leaders of sustainability applications and research. For more information, see http://sustain.appstate.edu/energysummit.
6. Jack Cozort suggested sharing space as one way to be better stewards of energy, such as the common library used by the Schools of Law and Management at Wake Forest University.
7. Senate Bill 668 applies only to state-appropriated buildings.
8. The next big opportunity to integrate sustainable design is for the Centennial Campus Town Center.

Action:
1. Invite Dr. Soolyeon Cho and Dr. Wayne Place to present their findings at a Facilities lunch and learn seminar in the near future.

Projects for Review:

2. Witherspoon Façade & Entrance Improvements #125 – New Project
Site Location: Central Campus, Intersection of Cates Avenue and Dan Allen Drive
Architect/Landscape Architect: JDavis Architects
NC State Project Manager: Angkana Bode

1. The goals of this phased project are to create a new, more interesting focus at the plain façade on the western side of the building, to rework the entrance areas and hardscape for better planting areas, drainage, circulation and a bandstand area, and to remodel the hallways to allow for more student lounge space.
2. The space between the entrances will continued to be used for outdoor banners and a suspended movie screen with seating on Harris Field.
3. Neil Gray and Marty Lynn presented a somewhat translucent, tensile fabric screen design, reminiscent of sails, with bamboo behind and a movie screen in front of the steel framework.
4. The framework ties into the horizontal datum lines of the building and the sails may be backlit at night for a more dramatic effect.

Discussion:
Some discussion ensued regarding the composition and material of the tensile membrane structure and hardscape.

Action:

The Panel recommended **approval** of the design subject to the following design directives that will be followed through with the University Architect's Office:

1. *Center the composition of tensile membranes (sails) within the space between the two building entrances. It currently appears to be two separate compositions divided by a central post. Consider reducing the number of sails so there are more glimpses through the sails to the new plants (bamboo) beyond. Prefer more 'red' sails in the triangular shape in lieu of the square shape to emphasis the building entrances.*
2. *If the structure allows for it, consider moving the composition higher to screen more of the concrete block wall and adding understory planting below the composition.*
3. *Consider using photovoltaic fabric for some of the membrane panels so the screen wall is more than artwork. If the project schedule and budget do not allow for this change in scope, installation of the infrastructure should at least be considered to allow for a future installation.*
4. *Use pervious pavement for new walkways.*
5. *Exterior material samples shall be submitted to the University Architect's Office for approval.*
6. *Consider a material more durable than lawn between the treads near the stage.*

Physical Master Plan Update

Lisa Johnson explained that the Physical Master Plan (PMP) is updated every 5 years, and is starting this spring with focus group activities. Tom Skolnicki reviewed the schedule, indicating it is a year-and-a-half long process. The start time is based on the academic year and next involves precinct meetings in September, 2012. Lisa Johnson asked what issues should be addressed in this next iteration.

Discussion:

1. Gene Bressler noted that NC State suffers from benign neglect and recommended including maintainability as a goal and/or guideline. He also recommended that it tie into the Architecture 2030 Challenge.
2. Julie Sherk added that landscape also needs to address maintainability.
3. Tom Skolnicki indicated the plan is to achieve "the most bang for the buck," especially in high-traffic and high-visibility areas.
4. Gene Bressler requested that jogging paths, benches and outdoor classrooms be included and how NC State's paths tie into the City of Raleigh's greenway trails be addressed.
5. Tom Skolnicki proposed that more sketches be included to communicate the intent of the design or character of features.
6. Gene Bressler recommended looking at different times of the year for portals to welcome the community to campus to forge a strategic connection to the community. He suggested including City of Raleigh's Parks and Recreation department and including his class in the PMP workshops.
7. Lisa informed everyone that the PMP updates will be brought to the CDRP on a regular basis.

Action:

1. Forward aerial views of Hunt and Centennial Campus Student Housing.
2. Schedule a tour of: Hunt; Talley; Chancellor's Residence; and the Artist's Backyard.

Status of Projects in Planning:
Broughton Hall Addition & Renovation and Non-Wovens Pilot Facility will be reviewed next.

Next Meeting:
The next Panel meeting is April 25th from 1:30 to 4:00 PM.