University of Colorado
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University of Colorado Design Review Board
and Research Park Design Review Board
Meeting Notes

Date: Friday, March 10, 2017
Time: 9:00 a.m. – 4:00 p.m.
Location: Conference Rooms 502 & 503, 1800 Grant Street, Denver, Colorado

DRB members present: Sarah Brown, Rick Epstein, Victor Olgyay (by phone), Michael Winters, Teresa Osborne (ex officio), Bill Haverly, campus DRB member for the University of Colorado Boulder campus ("CU Boulder"), and André Vite, AIA, campus DRB member for the University of Colorado Denver campus ("CU Denver").

Others in attendance not otherwise noted:
Linda Money, CU Real Estate Services, CU System employee / DRB note taker.

Mr. Winters, Acting Chair, determined a quorum and called the meeting of the Design Review Board to order at 9:12 a.m., at which time the Board held a private work session as noted below.

9:00 – 10:30 Work Session – Board Only

The Board met in a private session to discuss the items on the agenda prior to convening the public portion of the meeting. After the work session, the meeting of the Design Review Board was temporarily adjourned and the Research Park Design Review Board meeting was called to order at 10:27 a.m.

10:30 - 12:30 Aerospace Engineering Sciences ("AES") Building – CU Boulder

Architects: Hord Coplan Macht, Inc., Denver, Colorado, architects
RATIO Architects, Denver, Colorado
PLOT Project, LLC, Denver, Colorado, landscape architects,

Presenters: Jennifer Cordes, Principal, Hord Coplan Macht
Kent Freed, Principal, PLOT Landscape Architecture
Chris Boardman, Principal, RATIO Architects

CU Boulder Campus Presenter:
Wayne Northcutt, Architect – Facilities Planner
Richelle Reilly, Landscape Architect, Facilities Planning

Others Present:
Anthony Mazzeo, Principal, PLOT Landscape Architecture
Ro-Tien Lang, Architect, Hord Coplan Macht, Inc.

Other CU Boulder Campus Representatives Present:
Penina Axelrad, Chair, Aerospace Engineering Sciences
Tom Goodhew, Assistant Director, Facilities Planning
Bill Haverly, Campus Architect and Director of Planning, Design and Construction, and
Matthew Rhode, Aerospace Engineering Sciences
Douglas Smith, Assistant Dean, College of Engineering, CU Boulder

Description: Schematic Design ("SD") for New Building on East Campus
Review and Approval

Presentation to the Board/Discussion:

Mr. Winters thanked the design team and staff for participating in the workshop session with the Board held earlier in March and indicated that the workshop was very helpful.

Mr. Northcutt and Ms. Reilly began the presentation by providing a brief update regarding the progress made on the project to date.

Ms. Cordes elaborated on the current progress and reviewed the design team's proposed agenda for the meeting. She also noted that the north edge of the scope of work had changed slightly and was being modified.

Mr. Freed reviewed the updated site and landscape architecture plan including the following updates to the south side:

- A drop off that had been added to the parking round-about located at the southeast corner of the site;
- Relocating trees that had been planned for the west side of the front lawn to the east side of the front lawn creating a grove on the east and an open area of lawn on the west;
- A redesign of the south walk where it meets the driveway for the service bay;
- The location of the porous landscape detention ("PLD") area, the grading, and the new storm water drainage plan for the south side;
- Circulation diagrams; and
- An updated planting plan on the south side and corresponding renderings.

Additionally, Mr. Freed indicated that the PLD on the north side was being updated so it was more linear in its design. He also briefly reviewed the lighting plan for the site.

Mr. Boardman presented the updated building plans and an updated *SketchUp* model, including:

- The connection between the outreach plaza and the east classroom (discussed, not yet complete in the plans submitted);
- The south side elevation including two versions of the window design made up of a westerly view with the window bays facing west, and the easterly view with the bays facing east, and the front door expression;
- Internal lighting studies;

- Proposed glass and shading features in the windows on the south side;
- Four different options for the window design and treatments on all other sides of the building; and
- Updated colors and materiality options for the roof, window trim, shading louvers.

The Board reviewed and discussed the four design options for the windows located on the north side of the building, noting an overall preference for the fourth option whereby the appearance of the window arrangement is more vertical and more similar in design to the windows on the south side. Additionally, however, the Board requested that the design team investigate the following regarding the windows:

- Canting the windows on the north side inward in order to subtly create commonality with the windows on the south side and define one expression of the whole building as a relationship;
- Regarding the cantilevered windows at the north entry of the atrium, reversing the glass and solid fritted panes for the windows which would provide a more efficient design for the west façade in terms of shading, heat gain and glare issues; and
- In order to make the building elevations for these three sides appear more delicate and refined, less massive, and to reduce the appearance of punched windows, consider:
  - reducing the proportion of brick to window space;
  - making the width of the windows narrower and placing two windows in one office rather than one wider window;
  - modifying the size of the window header vs. the height of the upper panel of glass in order to extend the glass upward; and
  - using stone trim around all sides of the windows in order to reduce the volume of brick between the windows in the elevations.

The color of the roof vs. the color(s) of the window frames, mullions, louvered shades; the color of the frit in the window glass; and the use and color of the limestone were also discussed. Overall, the Board preferred the dark gray as the primary color for the roof and the color of the Indiana Limestone.

Additionally, the Board suggested that the performance of the louvered sunshades be reviewed to ensure that the appropriate placement for the desired function has been made.

The Board met in a private session with staff to discuss the current status of the SD submittal, after which the Board thanked the design team for the progress they have made on the AES building project, for the effort they have made to provide the 3D study models and the other visual aids for their presentations, and for providing opportunities for Mr. Olgyay to communicate with Group 14 Engineering, their energy efficiency/sustainability consultant, regarding the project.

The Board summarized their comments as follows:

<u>Site and Landscape Architectural Comments/Direction:</u>

- In order to make the lawn on the south side a more usable space, proceed with the suggestion of moving the drainage inlet to the south edge of the lawn at the seam between the lawn and the more natural landscape to the south; this allows the grading of the lawn with a gentler slope while the natural zone to the south will be steeper;

- The connectivity between the outreach plaza and the east classroom should be articulated in more detail;
- Determine the best way to light the grove of trees on the south side so that safety isn't a concern, as well as creating a special ambiance; and
- In order to better enhance the architecture of the building, washing the walls with more diffused light; also, determine if other lighting options beyond using recessed can lights in the soffits, such as linear lighting, could be used.

Architectural Comments/Direction:

- Review color studies in order to determine the best color and materials palette for the mullions and trim on the windows and bring a recommendation back to the Board for the Design Development ("DD") submittal;
- Regarding the window design, the fourth window elevation option is preferred but it should be studied in order to determine the appropriate details and proportions of brick to glass in order to make the north, east, and west façades feel more delicate, less massive and work in harmony with each other;
- In order to support the final recommendations regarding the window design and color(s), bring to the Board at the DD submittal the precedents related to neighboring buildings on East Campus and buildings on Main Campus; and
- Consider making the stair tower on the northeast corner a brick element instead of a stone element.

Sustainability and Environmental Comments/Direction:

- The lighting study showed the extensive amount of direct light from the west-facing windows that will penetrate the occupied areas of the building every sunny afternoon of the year. Something more than frit in the window glass will be necessary to control the penetration of sunlight glare and direct heat gain. An architectural shading solution is needed for this problem; and
- Discussions with the design team and their consultant, Group 14, regarding performance and mechanical concerns will continue outside of the normal review process. The design team has done a good job considering the issues of building performance and integrating them into the design of an attractive building.

Mr. Epstein moved approval of the Aerospace Engineering Building SD submittal, taking into consideration the comments noted above. Ms. Brown seconded the motion which unanimously passed.

The Board requested that another workshop (which can be a remote video conference) be scheduled for its next meeting in April 2017, for the purpose of reviewing additional information regarding sustainability and efficiency, the north elevation, and the west elevation. A review of colors and materials can be completed with the DD submittal anticipated to occur at the Board meeting in May 2017.

After this agenda item, the public meeting of the Research Park Design Review Board was adjourned. The Board took a brief break for lunch, after which the public portion of the Design Review Board was convened at 1:05 p.m., and the Board and the individuals present for the meeting introduced themselves.

1:00 - 3:00 **Williams Village East Residence Hall – CU Boulder**

Architects: Whiting-Turner Contracting Company, Denver, Colorado
alm2s, Fort Collins, Colorado, design principals/local architects
KWK Architects, St. Louis, Missouri, lead design architects
Bruce Hendee, BHA Design Incorporated, Fort Collins, Colorado, landscape architects

Presenters: Bruce Hendee, Landscape Architect, BHA
Brad Massey, Principal, alm2s, architects, Fort Collins
Paul Wuennenberg, Principal, KWK Architects
Javier Esteban, Principal, KWK Architects

CU Boulder Campus Presenters:
Tom Goodhew, Assistant Director and Planning Manager, Facilities Planning

Others Present:
Henry Ehrgott, Whiting-Turner Contracting
Heather Heiland, Whiting-Turner Contracting
Chad Koscinski, Project Architect, alm2s
Rebecca Reel, NORESCO, LLC
Matt Leach, NORESCO, LLC

Other CU Boulder Campus Representatives Present:
Bill Haverly, Campus Architect and Director of Planning, Design and Construction
Curt Huetson, Director, Facilities Planning and Operations, Housing Administration
Richelle Reilly, Landscape Architect, Facilities Planning
Heidi Roge, Project Manager, Housing and Dining

Description: Workshop for Schematic Design ("SD") Submittal

Presentation to the Board/Discussion:

Mr. Goodhew began the presentation to the Board by indicating that they would like to begin the workshop by reviewing the status of the studies and potential options regarding sustainability and energy performance issues for the proposed Williams Village East building ("Will Vill East"). Some of the studies being performed by NORESCO have not yet been completed. Additionally, the design team is considering energy conservation/sustainability programs that will teach the students residing in the building about these issues.

It was also noted that the Board had some concerns regarding the massing and building layout, the degree to which the architecture of Will Vill North is being copied and that Will Vill East does not yet have its own identity, the north courtyard, the floorplan, and access for ingress/egress/

control. Mr. Winters briefly reviewed the summary meeting notes from the last time this matter was before the Board.

Mr. Massey talked about the LEED v4 BD&C New Construction checklist. To date, 63 points have been identified which puts the project in the gold level. He noted that some items in the list may change by the completion of the project. Although still open to all ideas, three key concepts had been identified for the project's focus, which included energy use reduction, water use reduction, and occupant education. Details regarding how to achieve these concepts were reviewed. Other considerations regarding sustainability were also discussed.

Additionally, Mr. Massey reviewed shadow and daylighting studies, window glazing study, and a roof plan, including potential areas for photovoltaic units.

Mr. Olgyay responded to the sustainability report by indicating that he was happy with the current "resiliency" concept approach being taken by the design team as it was a good way of looking at the economic value of some of the sustainability issues. He noted that due to the proximity of the building to Skunk Creek, issues relating to flooding, locations of electrical gear, etc., should be considered and that the team should also consider ways of passively surviving a disaster event and how this may work into the resiliency approach.

Mr. Massey indicated that the orientation of the utilities and core electrical equipment has already been located at the highest point of the sites and the building. He also indicated that they have met with the fire department regarding the location of the fire lane. The fire department directed the team to locate the fire lane between 15' and 30' from the edge of the building, which has now been done.

Mr. Hendee reviewed the current plans for the site and landscape architecture, including: overall campus context, site analysis and considerations, site program and overall site plan, pedestrian circulation and bicycle parking. He noted that, to date, 512 bicycle parking spaces have been located surrounding the building and an additional 190 spaces are still needed. He continued by reviewing emergency access & service, water use zones, rainwater drainage and storage, a schematic conceptual grading plan, plant palette, site materials, site analysis, signage, design inspiration, schematic site plan, plans for the north courtyard, west pedestrian path, east garden, and the south sundeck/promenade. The massing and volumetric concept, conceptual design, aerial views, and various elevation renderings were also reviewed.

The Board discussed the access into the building, the identified circulation routes, bicycle parking locations, and socialization areas, especially along the west side between Will Vill North and Will Vill East and the sun deck space on the southwest corner. Staff and the design team responded regarding the need for students to be directed to the main access door for control and connection purposes, the creation of two cores to access the individual building communities, and the design of the hallways to help with daylighting.

Also discussed were the anticipated use of the courtyards, possible options regarding their layouts and related connections, and the pathways surrounding the building.

The Board had the following comments and/or suggestions:

- Use care so that the requirements for control and security do not overwhelm all other considerations at the expense of the experience of the students living in the building and

their interaction with each other; the student experience needs to be primarily considered in the design approach.

- Revisit the access control for the building:
    - In addition to other modifications suggested below, consider modifying the purpose of the north courtyard from a garden area into a bicycle parking area to consolidate the required 700 bike spaces in order to improve access control to a single point;
    - Study other ways to reduce uninvited and unwelcomed intrusions by non-residents; and
    - The Board questioned the north courtyard entry and the related curbside drop off. With the "Campus Gateway" entry off of Baseline Road at the east side of the building, the perceived main entry will visually be one on the east side of the building, not the one hidden from view in the north courtyard. Current design shows the terminus to this "Campus Gateway" entry into 90 bike parking stalls.

- Regarding the paths and courtyards surrounding the building:
    - They are currently curvilinear which is separating them from the building;
    - Consider a geometry that is more connected to the building and provides a greater quality of place consistent with the architectural approach;
    - Differentiate the areas that are "about the building" and the ones that are not;
    - For example, consider making the design of the north courtyard more of a grid and the design of the south courtyard more linear and perhaps terraced;
    - The walkway at the south should engage the south "sun deck" to help activate it. Reference the similar condition which occurs at the new dining hall; and
    - Study how the natural landscape of the creek engages with the urban edge of the new built environment.

- Consider modifying the massing of the building sections:
    - As designed, there is currently no visual break between Will Vill North and Will Vill East from certain viewpoints and with the tallest section of the building on the western most side, it will eliminate daylight in the north courtyard for a large portion of the day;
    - Study ways to reorient the tallest section of the building in order to help the visual scale of the building and help separate it from Will Vill North;
    - With the tallest section in the center, it might help emphasize the center of the building from control and access perspectives and also perhaps from a community perspective, allowing the massing to step down to the north and south;
    - Consider sliding the western wing to the south which may help open up the north courtyard, mitigate the issue of a western entry, provide a site line and improve internal and external visibility, and improve access and control issues;
    - These changes to the massing may help expand and emphasize the courtyard on the south by providing more opportunities for a terraced, linear design; and
    - Consider where you would want to live in this building. The current design and massing places a great number of units facing directly onto the parking lot to the north. The south and west views are some of the best, so care should be taken of the views and sun access to the units and the common spaces.

- Consider using a flat roof design instead of the peaked roofs that match Will Vill North:

  - Help create a separate and distinctive identity for Will Vill East while allowing it to be a part of the overall Will Vill community;
  - Using a different architectural language, such as giving Will Vill East a stronger vertical striation, may be helpful; and
  - Consider using the towers as a reference – not Will Vill North.

- Regarding the façades of the building:
  - The repetition of the regular grid of windows contributes to a monotonous appearance;
  - Study ways that may break up the patterning of the windows by linking them vertically;
  - The shading devices on the south windows add a layer of detail and help break up the façade on that side of the building;
  - The low, cantilevered canopy roofs on the south side provide good pedestrian scale to the south courtyard;
  - Since shading devices aren't necessary on the north side, creating an interesting façade will need to be done through architectural design;
  - Moving the tallest section of the building to the center may help visually eliminate the appearance of the building-wide wall of windows; and
  - The design team is encouraged to break from Will Vill North architectural design regarding the design of the façade and look instead at the towers as a reference.

- Concerning the design of the windows:
  - Although the color of the metal for the window trim and mullions for the Will Vill community has been established as black and bronze, if the mullions were a lighter color, it would help break up the visual aspect of the windows and provide more patterning;
  - As designed, with the window headers being a light color next to the dark color of the windows resulting in a dark/light/dark/light appearance on a building of this scale, it creates an intense contrast which is not successful and needs to be studied further; and
  - Consider recessing the return of the windows.

- Regarding other design elements:
  - The sun shades, vertical elements, and secondary and tertiary scaling elements help the south elevation;
  - The entry isn't as successful or welcoming – it is over scaled as presented; it needs some articulation and detail and currently feels more institutional in its design; think of how students will inhabit it and what will make them feel comfortable; look at the successful entries to the dorms on the main campus as a "place"; and
  - Provide more indoor/outdoor connections.

- Regarding the SD submittal:
  - In order to study the massing options for Will Vill East compared to the surrounding areas and its relationship to Will Vill North, it would be helpful if a simple, physical 3D model could be created and brought to the next Board meeting;
  - Simple elevations would also be helpful:

- to study the patterning and proportions for the elevations incorporating the various suggested changes, beginning with a smaller portion of the elevation may be helpful;
- define what the kit-of-parts will be for the elevation, approach it by looking at a smaller bundle of the building in order to determine the kit-of-parts detail and then incorporate that detail into the remaining vocabulary; and
- for the taller elevations, study ways to make a base, middle, and top that will help break down the massive flat walls.

[Mr. Olgyay left the meeting at approximately 3:00 p.m. due to a previously scheduled conflict.]

Mr. Massey noted that the project schedule includes starting demolition, site preparations and tying into the utilities between August and September 2017, with the foundation work beginning in January 2018. The targeted occupancy date is July 2019.

Also, with the planned design-build construction method, the design team will be starting civil and construction documents before the completion of the DD approval by the Board. This anticipated project schedule will necessitate that the SD submittal and review be more articulated than the subsequent DD submittal and review. The SD submittal is anticipated to be presented to the Board at its meeting on April 13, 2017. Additionally, another workshop session will likely be required after the SD submittal.

The Board thanked the design team and staff for participating in the workshop and indicated that the information provided at the meeting was very helpful.

3:15 - 4:00 **CU Denver Master Plan – CU Denver**

Architects: SmithGroupJJR, Ann Arbor, Michigan
Paulien & Associates, Inc., Denver, Colorado
Brailsford & Dunlavey, Chicago, Illinois

Presenter: Jon Hoffman, SmithGroupJJR (by phone)

CU Denver Campus Presenter:
Cary Weatherford, Associate Director, Institutional Planning, CU Denver

Others Present:
André Vite, AIA, Campus Architect, Office of Institutional Planning, CU Denver
Erik Balsley, Senior Institutional Planner, Office of Institutional Planning, CU Denver

Description: CU Denver is in the initial phases of a ten-year master plan for the Denver campus which is expected to conclude in March 2017. Assisting CU Denver in this effort are SmithGroupJJR, Paulien and Associates, and Brailsford and Dunlavey. This second of three presentations to the Board will involve a presentation of findings to date and is

intended to be a work session to gain the Board's input on physical planning strategies.

Presentation to the Board/Discussion:

Mr. Hoffman began the presentation by reporting that the goals of the master plan include meeting anticipated space needs for new academic, research, administrative, and student housing space. These needs have been based on a projection for a future student enrollment overall headcount of 25,000. It is anticipated that over time, the CU Denver campus will change from a commuter campus to a residential campus.

The need for this new academic, research, and administrative space has been estimated at approximately 500,000 SF, although this number is still under review and may change. The estimated number of new beds needed for student housing is approximately 1,000.

In addition to the shared space at the Tivoli Student Union, additional space will also be needed for student life facilities. In order to fulfill this need, the current plan is to distribute these facilities among the new multi-use buildings created for the CU Denver campus, including new residential and new academic buildings. Expanded sports activities will also necessitate new outdoor recreational fields.

Mr. Hoffman reviewed a number of scenarios representing various options regarding the potential character of the CU Denver campus in the future. These scenarios, A, B, and C, were reviewed by members of an advisory group and members of a steering committee. Scenario A represented no major changes or expansions compared to the existing conditions of the campus. There was little or no support of many of the concepts included within this scenario. Portions of Scenarios B and C received some support from the advisory group and the steering committee. Scenario B concentrates campus growth along Speer Boulevard ("Speer"), and Scenario C continues growth along Speer Boulevard but also shifts and expands the campus into Downtown Denver and is much more urban in its design. The planning team took direction from this feedback and has focused its planning efforts on a combination of Scenario B and Scenario C. Mr. Weatherford noted that the concepts from the scenarios were divided into different time frames, those being from zero to five years, five to ten years, and matters that would need to be considered now for the period beyond ten years.

Mr. Weatherford reviewed a ten-year land bank site plan currently proposed by the planning team and presented several questions for which staff and the planning team were requesting input from the Board. In general, the Board felt these questions were all good questions. However, the Board felt somewhat uninformed because the master plan has been focusing more on the programmatic growth and required classroom space and less on the physical planning of these spaces.

Looking at potential connections between the CU Denver campus and Downtown Denver is a dynamic opportunity. In order to drive this process and fully consider these questions and provide informed answers, completing a detailed study regarding where students gather, the academic buildings, the connections between the buildings, how students get from place to place, and the experience and opportunities for interactions and connections to the urban environment, the creek, the overall campus, the Performing Arts Center, etc., should be considered.

Taking this and the goal of moving CU Denver into an urban campus with connectivity and place making into consideration, comments from the Board included, but were not limited to, the following:

- With the advisory group and steering committee's preferences to Scenarios B and C, the pedestrian crossing at Larimer and Speer becomes even more critical for both the growth of the CU campus and the safety issues for the City of Denver.

- The proposed bridge across Speer is just one option for crossing Speer. The connection should be activated correctly, intentionally, and programmatically, and will need the right amenities and elements to be included within this place.

- The bridge proposed by the September 2016, H3 study is not a preferred design by the DRB. The DRB proposes a process for evaluating the connections and issuing preferred analysis options which should be coordinated with this Master Plan.

- Regarding the potential use of the site located north of the North Classroom building and Speer, known as the Nexus site, while a building could be built on the site which could accommodate a connection for the proposed bridge crossing and while the site is a prime location to join both sides of the campus, the site could be developed into a focal point for the campus. It could include a multi-purpose building housing a CU Denver student union, student housing, along with other retail or social purposes and the site could include other elements at every level of the site such as a tiered plaza, a multi-level river walk park at Cherry Creek, elements at the street level along Speer in conjunction with the proposed road diet, elements at a small bridge which could be built to connect the site to the eastern-most area of the campus, and underpass connections between the campus buildings on both sides of Speer, all of which could help create a very visible, iconic sense of place and a strong identity for the campus.

- Student housing could also be placed in front of the North Classroom building adjacent to Larimer Street, and if private vehicular access on Larimer could be eliminated, it may be possible to capture some of the existing right-of-way to use for this purpose.

- A plaza could be included to facilitate a creek-level connection under Speer at the SE corner of Speer and Larimer in front of the North Classroom building. If a building is located here, it should be a smaller building closer to Lawrence to maintain the view axis to the clock tower of the North Classroom building and provide room for the plaza that could facilitate the crossing.

- The proposed athletic field next to the existing Student Commons building could possibly be switched with the Engineering building proposed for eastern-most site on the campus along the south side of Speer. Making this switch would help keep the building density and campus energy along the Larimer Street spine, provide greater visibility of the Engineering building from multiple locations, and maintain the existing view of the historical St. Elizabeth Catholic Church located at 11th Street on the campus.

The Board also briefly discussed the alley enhancements planned in Larimer Square and the potential alley connections with existing CU buildings on the east side of Speer and the use of

alleys for campus connectivity and the potential development on surrounding parcels which could influence the edges of the campus.

Mr. Weatherford indicated that the planning team will think about the connections; how are they being created; if these connections, new buildings, and other elements are being created intentionally; the alley connections; and possibilities which may be outside the zero to ten-year timeframe horizon.

This matter will be brought back before the Board at its meeting in April for the last of the three planned review sessions.

There being no further business, the public meeting of the Design Review Board was adjourned at 4:35 p.m.