



PROJECT MEETING

PROJECT NAME: **GRAYS HARBOR COLLEGE (GHC)
 SCIENCE, MATH, ART AND NURSING BUILDING**

SRG PROJECT NO.: **#2932S**

DATE: **05/20/2011**

WA E&AS PROJECT NO.: **2006-069**

MEETING DATE/TIME: **Monday, May 16, 2011: 2pm- 4:30pm**

LOCATION: **ROOM 2255**

PREPARED BY: **Barney Mansavage**

GHC:	Ed Brewster Keith Foster Laurie Clary Sandy Lloyd John Hillier Russ Jones Aleta Fuhrer Arlene Torgerson Penny James Todd Bates Diane Carter Laura Ratcliff	Mohammad Ibrahim Tom Kuester Erik Sandgren Penny Woodruff Corrie Hightower Jane Wilson Linda Dickman Tony Simone Lynn Siedenstrang Ann Birch Julie Nelson	Carol O'Neal Monica Todd Barbara McCullough Gloria Fenton Jeff Koskola Julie Miller John Rajcich Diane Smith Brenda Miller Rich Wenke Stan Horton	Dave Halverstadt Mat Carlisle Brittney Fruchella Jennifer Hubbard Bridgette Franks Scott Arhaus Mark Weeks Dustin Izatt CaraBeth Stevenson Matt Crollard Teresa Bravenec
WA E&AS:	Stacy Simpson Jim Copland			
SRG:	Barney Mansavage, Project Manager Uwe Bergk, Project Designer Neil Piispanen, Project Architect			
SRG Consultants	Henri Digregorio, WSP F+K			
Other:				

*Denotes not present

**Minute recipients shall distribute to others within their organizations

Images of presentation material from this meeting will be included in final DD package of documents that will be forwarded to the college. Included here is a brief summary of the meeting. Please refer to the complete DD package of materials which will be made available through Keith Foster at GHC for those interested in reviewing in detail.

ITEMS REVIEWED AND DISCUSSED:

SCHEDULE:

This is conclusion of Design Development (DD) Phase and kick off to Construction Documents (CD) Phase. CD [phase is planned to last through October 2011, and then sit until permit and bid time and a summer 2013 construction start. Construction completion is planned fro June 2015.

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PROJECT HISTORY AND PLANNING: (MASTER PLAN BACKGROUND) SRG reviewed Master Plan history and Design concept development:

1. The “Podium and tower” configuration/shape of the building and its future relationship to a new HUB.
2. The project is both a “bookend” to the south end of campus as well as a new entry “Gateway” from south
3. SRG review exterior #D views with images on boards and with 3D Sketch-UP model views

BUILDING PROGRAM AND ARRANGEMENT: (PROGRAM FLOOR PLANS) SRG reviewed floor plans, departments by floor, and general configuration of the program elements.

SITE DEVELOPMENT: SRG reviewed Site and landscape development and concepts with boards and 3D Sketch-UP model views :

1. Diagonal organizational axis set in place by master plan
2. Log Jam Concept that influences arrangement of both exterior space and interior space
3. Creation of a major 2 story north entry experience at the end of the diagonal campus axis
4. Creation of a major west entry from the roof garden of the podium and new south parking
5. Creation of a south garden area and south entry behind the building as a more contemplative amenity
6. Creation of site stairs and ramps that allow access around building if building were closed.
7. Creation of new south parking with small gain of stalls compared to today, but a significant gain as compared to time prior to 600 building demolition.
8. To maximize parking, has been development of a new rain garden to the north of the building to replace rain garden previously conceived in the parking area . Still used to treat runoff from parking and also creates an amenity that defines the secondary entries from the north into the first floor podium spaces.

EXTERIOR DEVELOPMENT: SRG reviewed development and concepts with boards and 3D Sketch-UP model views :

1. ENTRY: Development of significant and clear entry from all sides (North South West primarily)
2. MATERIALS: Brick, metal panels and glass. Silver Horizontal Metal panels used at upper level lab volumes and brick exterior materials exist along the ground floor volumes and also up through the central stair and elevator core - and in some places bringing brick in to interior spaces. Brick color to match Manspeaker. Colored vertical metal panels used at the south faculty office volume and the plane that extends as north and west canopy element.
3. EXTERIOR METAL COLOR. Include hint of color but be timeless. The material of the canopy and vertical folded plane are in contrast to the smooth silver metal of the north facing metal volume. Rich metallic silver with subtle purple, plum, and blue tones. Similar metal panel as the silver lab volume, but with a variation in texture and in a vertical orientation.
4. BRIGHT COLORS: Concept to bring brighter/bolder color accents using colors at major interior walls which then can be seen from outside and can simply be changed (repainted) on interior surfaces over time if desired. This allows permanent colors of exterior materials to remain more timeless, but still adds bright splashes.

SUSTAINABLE DESIGN AND SYSTEMS:

1. SRG reviewed significant sustainable design elements incorporated in the project - please refer to sustainable design summary and LEED checklist in project descriptions to be included with complete DD materials.
2. Project at this stage is at comfortable Gold level LEED rating, with some potential for achieving Platinum
3. SRG described the 2030 challenge targets to reduce energy used by buildings to reach a target for zero use of carbon-based fuels by 2030. Meeting the 2030 challenge is not a stated project requirement, but it will be used as a benchmark. The 2030 challenge identifies reduction benchmarks in 5 year steps to the year 2030-

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to reduce fossil fuel/carbon based **Energy Use Intensity**, or EUI (measured as KBTU/SF/YR) when compared to national average EUI of similar building types.

4. WSP F+K engineers described Mechanical, Electrical and Plumbing systems and rough estimate of the project's EUI and how that might compare to other lab spaces. Laboratory spaces do not have a single national average benchmark to compare against, but there are similar relative examples to compare against. Nationally, Laboratory EUI average is about 370 KBTU/SF/YR. Nationally, general higher education buildings EUI average is about 120 KBTU/SF/YR. Nationally, general office building EUI average is about 77 KBTU/SF/YR. This project is anticipated in the range of 60-70 EUI. There are other local examples to compare against as we move ahead in refining the system's energy model calculations.
5. A significant part of mechanical heating and cooling system is use of a ground source heat exchange in a field of wells drilled to significant depth below south parking and the use of *active chilled beam* units to provide heating and cooling in non-lab spaces. Active chilled beams utilize a very small amount of ducted air and a water loop rather than moving large amounts of heated and cooled air through large ducts and are significantly more efficient in energy used. There was a concern expressed on chilled beams providing heat from above and if hot air naturally rises - does that result in cold air at the floor level where people are? The "active" chilled beam with small ducted air creates an induced loop of air movement which circulates the air to the ground in heating mode and in that sense is not unlike more traditional air systems that provide heat from above, but the beams are much more efficient by using a water loop to provide the hot or cold. WSP F+K will provide GHC a list of other local/regional projects where such technology is already in use.

INTERIOR DEVELOPMENT: SRG reviewed development and concepts with image boards:

1. Field trips and other examples of similar related spaces to inform what are labs like, classrooms like, offices like? What is the space in between like? How do faculty and students interact?
2. Put the Programs on display – invite cross disciplinary interaction.
3. Make use of every space – LEARNING HAPPENS EVERYWHERE

INTERIOR DEVELOPMENT: CLASSROOM FLEXIBILITY: SRG reviewed development and concepts with image boards:

1. Plan classrooms to help ease future changes to integrate future display technology and Multiple projection surfaces over time :
 - Raised floor Access
 - White board surfaces that can also be projection surfaces.
 - Projector mount fro daylight deflector allows added projectors over time
2. Multiple uses:
 - o Flat floors: Tier the furniture if needed, not the floor
 - o Easy accessible storage spaces at each room to "clear the decks" and reconfigure when needed.

INTERIOR MATERIALS: SRG reviewed development and concepts with boards, 3D Sketch-UP model views & samples

1. INTERIOR CONCEPT : Interior public/corridor spaces would be generally neutral in color: exterior brick cladding and "folded plane"/canopy metals would come inside in places - as extension of exterior materials, concrete is exposed where it exists (in places with added formwork texture), terrazzo floors, and neutral colors on other painted walls along corridors - warmed up with light on the wood ceilings and walls and further enlivened by wood benches, potential colorful furniture and whiteboards and tack boards located along corridor gathering spaces.
2. INTERIOR CONCRETE WALLS: Level 01 general classroom areas are structured with concrete bearing walls and SRG described a finish concept to expose the structural concrete with a horizontal texture with a form

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liner - to relate to an idea of horizontal layers of sediment inspired again by concept of water flow and log jam through the public spaces.

3. SKYLIGHTS: clear glass to public areas – Electronic dimming Sage glass at classrooms – with daylight deflector and light fixtures above the daylight deflector. Colored LED lighting at circular oculus skylight provides color accent with lighting around the ring.
4. LIGHTING: Generally in rooms without skylights, the lighting is composed of linear suspended pendants with both an up and down component. Offices integrate a wall mounted up-light along one wall.
5. CORRIDOR CEILINGS: showed samples and imagery for a simple wood slat ceilings as well as lighting images for concept to up light the wood ceiling with pendant fixtures arranged in a playful way along circulation areas (inspired by moving water flows and log jam concepts described previously) Light fixtures also have a smaller down light component in addition to the up-light on the wood ceiling.
6. FLOORS: terrazzo flooring in public spaces, carpet in classrooms and offices and resilient floor tiles in labs. Terrazzo samples intended as representative of river bed stone materials, but also could inlay metals in the terrazzo that create other patterns (inspired by eddy currents, water flows, log jams) and even inlay metal pieces or implements that relate to art, nursing or sciences if appropriate. Carpet pattern samples displayed also have potential similar alternating linear pattern effects. Of carpets displayed, there was some comment that the tighter weave carpet with less-strong alternating linear patterns was preferred for offices.
7. OTHER INTERIOR WALLS: SRG described a “gunmetal” steel sheet wall finish at elevator shaft walls and as finish of walls that enclosed other shaft spaces along the upper level corridors. SRG also described wood wall treatments along corridors to be made from reclaimed glue laminated timbers that could be salvaged from demolition of 400 bldg - and create a wall cladding at major areas along the corridors through the 4 story tower portion of the building. These walls are further enhance by electric lighting to graze/wash the surface.
8. SRG also described that the use of salvaged glue lam beams could be used to create the bench seating at corridor gathering areas with white boards and tack boards. (Salvaged glue-lams could also be considered for exterior benches as well)
9. CLASSROOM AND LAB WALLS: As noted in exterior development above, include some bright colors on side walls where can be seen from exterior. SRG described colors might be inspired by a conceptual palette of colors derived from materials ranging in a spectrum from earth/ground to water, to trees, to sky - as one moves up through the building. SRG further discussed classrooms at level 01 podium area with visibility to adjacent public spaces to have a similar concept for bright color an interior classroom wall to be viewed from adjacent corridor spaces.
10. Acoustic performance of glass portions of classroom walls achieves a fairly good rating given that the design does not place doors within the glass wall. Glass wall sound transmission would be roughly equivalent to the same one would get from a typical solid classroom door in a typical stud wall.
11. LARGE MEETING ROOM: As an extension of the adjacent public space at times, it has the same wood ceiling & some terrazzo floor. SRG described us of two overhead sky-fold doors which have quite good acoustic performance that allow the room to be used as 2 rooms, 1 large room or be completely open and contiguous with the corridor common space. SRG further noted that the sky-fold wall to the corridor side would be glass. All agreed that glass portion should integrate the same band of translucent film.

BUDGET AND COST ESTIMATING: On Target for an assumed MACC of \$34.4 million in 2013. Detailed Cost estimate can be reviewed in complete package of DD materials.