Meeting Synopsis:

1. Call to order
2. Approval of agenda
3. Review of the minutes from April 20th, 2017
4. Chair’s remarks
5. Capital Projects, Delivering the Most Value – Mike McCormick
6. Sound Transit Update – Victoria Morris, Kate Lichtenstein
7. Good of the Order
8. Adjourn

1) Call to order

Christie called the meeting to order at 10:00 a.m.

2) Approval of agenda

The agenda was approved as written.

3) Review of the minutes from April 20th, 2017

The minutes from April 20th, 2017 were approved as written.

4) Chair’s remarks

Christie reported the Population Health Building site will be “site B” – the Guthrie Hall Annex site, and will be presented to the UW Board of Regents (BoR) at that body’s May 2017 meeting. The building is large (300,000 sq. feet) and may have workspace for 500-600 people.

5) Capital Projects, Delivering the Most Value – Mike McCormick, CPD

Mike McCormick (Associate Vice President, Capital Planning and Development) discussed new procedures (“Delivering the Most Value”) for UW construction projects using a PowerPoint as part of his presentation (Exhibit 1). The plan is to minimize cost overruns. The item has been presented to the Senate Committee on Planning and Budgeting (SCPB) and the Board of Deans and Chancellors, and will be presented to the BoR. In a booming construction market, UW has had $50 million of cost overruns in the past 18 months. This is 3 percent of 1.6 billion dollars of work. Significant overruns occurred with the Animal Research Center Facility (ARCF) and remodeling at the UW Medical Center. UW and Washington State University (WSU) had a conference with major developers and corporations to explore better organization of construction projects. Two conclusions have emerged. One is to build fewer new
buildings in favor of remodeling existing space. The other is to reduce stakeholder claims to new projects to drive costs down.

The Population Health Building will be the first large project built using the new method. The plan is to maximize space utilization in order to eliminate as much present rental space as possible. Projects need to be considered in relation to adjacent buildings in a building portfolio approach instead of considering each building as a stand-alone project. Buildings should be designed as a shell and core with flexible future interior rearrangements depending upon changing needs. Downstream operating costs need to be included from the beginning of a project. The governance structure for the project needs to bring all stakeholders into the process early in the building design. An executive committee representing stakeholders broadly will be in charge of all large projects. Population Health will be built as a shell that fits its central campus location and can be reconfigured for different uses at a later date. Permits for the shell will be sought early on, while interior decisions can be deferred until later. The most important aspects of the new method are programmatic flexibility, long-term vision, and fiscal reality.

Design/build puts the architect/contractor on the same side, but it still leaves UW as the building owner in an adversarial relationship with both. Under the new Integrated Project method, the UW, associated architect and contractor will all share in cost savings and jointly pool losses. Subcontractors also participate in pooled profits and losses.

Borys noted that the life expectancy of the shell is the key issue, and McCormick agreed. McCormick added that Population Health will seek LEEDS platinum certification.

6) Sound Transit Update – Victoria Morris, Kate Lichtenstein

Victoria Morris (UW Sound Transit Coordinator) noted the tunnel under UW was completed in September 2016. The tunnel will be fitted by 2019, and train service to the U-District and Northgate is expected to be completed in 2021. Restoration work around the UW Stadium station is nearly complete, as is restoration at small sites along Mason-Jefferson Road and at the Cunningham Hall lawn. Vibration monitoring for the link to Northgate is underway mostly due to concerns from UW Mechanical Engineering. The plan is to put 28 monitors beneath the campus.

Kate Lichtenstein (Sound Transit Sr. Project Manager) noted platforms are 400 feet and will accommodate four-car trains. Presently, ST mostly operates two-car trains. In 2016, ST served 43 million riders, which was a 26 percent increase with the opening of the Capitol Hill and UW stations. Further increases are expected when ST opens the Northgate link in 2021.

Maitland asked how ST planned to handle heavy use during UW football games. Lichtenstein remarked that ST is already running extra trains during games.

7) Good of the Order

Nothing was stated for the good of the order.

8) Adjourn

Christie adjourned the meeting at 11:30 am.
Minutes by Bill Rorabaugh, rorabaug@uw.edu, Professor of History

Present: Faculty: Bruce Balick, Rich Christie (chair), Laura Little, Murray Maitland, Bill Rorabaugh, AnnMarie Borys
Ex-officio rep: Chris Byrne
President’s designee: Charles Kennedy
Guests: Mike McCormick, Victoria Morris, Kate Lichtenstein

Absent: Faculty: Ashley Emery, Ann Mescher, Giovanni Migliaccio, Jan Whittington, Bill Erdly
Ex-officio reps: Carly Bainbridge, John Carroll, Steve Goldblatt, JoAnn Taricani

Exhibits
Exhibit 1 – Capital Projects - Delivering the Best Value.pdf
Capital Projects: Delivering the Best Value

May 4, 2017
Construction and Non-Farm Labor Productivity Index (1964 = 100%)
US Department of Commerce, Bureau of Labor Statistics
Background

- Seattle construction market is one of the hottest in the country – more cranes than New York and Chicago combined
- In past 18 months, UW has been subjected to ~$50M in capital project budget overruns
- Perception of university capital programs across the state needs to be improved
- State of Washington’s two research universities engaged the industry to investigate how to deliver more value to our capital projects
What Can **We** Do Better?

- Project definition and set up
- Programming and design
- Project governance and decision making
- Team creation and encouragement
- Design and construction procurement
- Honest examination of underlying causes of high costs and exploration of different approaches
What Can We Do Better: Convening the Best inds

• 25 ideas from industry leaders

**What we build**
- Build Less - Utilize Existing Space More
- Create Project Business Plans
- Align Capex and Opex
- Meet User Needs, Not Expectations
- More Generic Less, Specialized Space
- Design to Adaptability
- TI and Shell Paradigm
- Standardize Building Components
- Challenge/Scrap Standard Specifications
- Design Buildings to Shorter Life as appropriate

**How we build**
- Reduce Stakeholders / improve decision-making
- Assemble Full Team Early
- Qualifications based Selection
- Integrating Out of Industry Expertise
- Establish Team Coach / Implementation Manager
- Raise Expectations of and Support of Owner
- Project Managers as Team Leaders
- Build Moments of Innovation Into Projects
- More Research /Lessons Learned
- Commit to VDC In Big Room Format
- Align Goals at Start For Entire Team
- BHAG (big hairy audacious goal) for Projects
- Use of Progressive Design-Build
- Share Risk/Reward – Cost savings incentives
- Employ More Manufacturing Models
- Change Funding Cycle
WHAT CAN WE DO BETTER?

Convening the best minds to re-imagine capital construction at UW and WSU

CAPITAL PLANNING AND DEVELOPMENT
University of Washington & Washington State University

CENTER FOR EDUCATION AND RESEARCH IN
Department of Construction Management
What did UW take away (action items)?

- Focus on space utilization (minimize new construction)
- Portfolio approach to projects
- Shell & Core / TI approach
- Business case written at pre-project stage
- Projects scored to prioritize and focus on objectives
- Strong project governance structure
- Goals documented in Project Charter with team
- Coach / facilitator as part of project team
- New collaborative approach to standards
- Change management consultant part of project team
- Integrated design build contract with shared risk reward
Shared Risk / Reward Contract

**Design / Bid / Build**
- OWNER
- A/E
- GC

**CM-At-Risk**
- OWNER
- A/E
- CM

**Design / Build**
- OWNER
- A/E
- CM

**Integrated Project**
- OWNER
- DESIGNER
- CONTRACTOR
**Shared Risk / Reward Contract**

**Target Cost**

- **Planned**
- **Below Target**
- **Above Target**
- **Catastrophic failure**

**ICL**

**Owner’s Risk**

**Mitigation**
- Pull planning
- Decision Map
- Risk Analysis
- Forecasting
- Cash flow
- EVA

Exhibit 1
<table>
<thead>
<tr>
<th>Project Name</th>
<th>Financial Details</th>
<th>Schedule</th>
<th>Business Equity</th>
<th>Project Health Trending</th>
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<tbody>
<tr>
<td>NanoEngineering and Sciences Building * ZGF / Hoffman</td>
<td>$87.84 / $85.55 / $64.22 / $82.55</td>
<td>10/16</td>
<td>7/17</td>
<td>$7.17 / 11.2%</td>
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<td>Animal Research and Care Facility ZGF / Skanska</td>
<td>$142.00 / $142.00 / $122.51 / $141.97</td>
<td>5/17</td>
<td>5/17</td>
<td>$0.86 / 10.0%</td>
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<td>UWMC Expansion Phase II * NBBJ / Mortenson</td>
<td>$186.30 / $198.40 / $136.54 / $142.55</td>
<td>5/17</td>
<td>4/17</td>
<td>$30.11 / 22.1%</td>
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<td>HR Payroll Modernization</td>
<td>$75.90 / $75.90 / $61.15 / $75.90</td>
<td>6/17</td>
<td>6/17</td>
<td>N/A</td>
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<td>Fluke Hall Renovation HDR/Hoffman</td>
<td>$37.00 / $37.00 / $21.99 / $34.11</td>
<td>7/17</td>
<td>11/17</td>
<td>$1.25 / 5.7%</td>
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<td>UW Medicine South Lake Union 3.2 * Vulcan / Perkins &amp; Will / Sellen</td>
<td>$143.00 / $148.70 / $24.29 / $143.00</td>
<td>9/17</td>
<td>8/18</td>
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<td>Tacoma Urban Solutions Center Miller Hall/Mortensen</td>
<td>$26.50 / $26.50 / $21.87 / $26.50</td>
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<td>4/17</td>
<td>$2.10 / 9.6%</td>
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<td>UWMCE ED East Expansion * LMN/Skanska</td>
<td>$14.90 / $14.90 / $1.75 / $2.95</td>
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<td>$10.58 / 20.5%</td>
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<td>Computer Science and Engineering Exp. LMN Architects / Mortensen</td>
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<td>$0.11 / 1.3%</td>
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<td>New Burke Museum Olsen Kundig / Skanska</td>
<td>$79.00 / $78.86 / $27.09 / $57.40</td>
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<td>North Campus Housing Phase 4b Kieran Timberlake / W.G. Clark</td>
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<td>Population Health Facility Lease Crutcher Lewis / Miller Hull</td>
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<td>Totals</td>
<td>$1,708.96 / $1,748.07 / $595.18 / $1,490.85</td>
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