

VII. STANDING COMMITTEES

B. Finance, Audit and Facilities Committee

UW Seattle SW Campus Central Utility Plant Phase 1 Project – Approve Site Selection, Adopt Project Budget, Approve Use of Internal Lending Program, Authorize Use of Design/Build Contracting Method, Delegate Authority to Award Design/Build Contract

Regents Action and Information Review Timeline

INFORMATION	JFMAMJJASOND 2013	JFMAMJJASOND 2014	JFMAMJJASOND 2015	JFMAMJJASOND 2016	JFMAMJJASOND 2017
PHASES					
ACTION	JFMAMJJASOND	JFMAMJJASOND	JFMAMJJASOND	JFMAMJJASOND	JFMAMJJASOND

September 2013
 Approve Site Selection, Adopt Project Budget,
 Approve Use of Internal Lending Program,
 Authorize Use of Design-Build Contracting Method,
 Delegate Authority to Award Design-Build Contract

*Note for duration of project:
 Written semi-annual reports in December & May
 Oral semi-annual updates in March & September*

RECOMMENDED ACTIONS

It is the recommendation of the administration and the Finance, Audit and Facilities Committee that the Board of Regents:

- 1) approve the recommended site for the new Southwest Campus Central Utility Plant (SW CUP);
- 2) adopt a project budget of \$30.5 million for the SW CUP Phase 1 project;
- 3) approve the use of the Internal Lending Program (ILP) to fund up to \$23.0 million for design, construction and financing costs;
- 4) authorize the use of the Alternative Public Works Design/Build contracting method; and

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- 5) delegate authority to the President or his designee to award a Design/Build contract, subject to the contract sum being within the approved project budget.

BACKGROUND

In 2010-2011, the University engaged the engineering firm URS in a study to develop a feasible approach to upgrading the condition and reliability of the emergency power and processed chilled water (PCW) systems serving the Magnuson Health Sciences Center and other research facilities on the south campus. The scope of the study was limited to defining and estimating the cost of a facility of such location and capacity to generate and distribute emergency power and PCW to a specific list of existing and potential future research facilities that require these services to be stable and reliable. The URS study recommended the development of a new central utility plant (CUP) on a parcel immediately west of the Seattle City Light West Receiving Station near the intersection of University Way NE and NE Pacific Street.

In the spring of 2013, the UW evaluated the feasibility and estimated cost of three alternative conceptual solutions for the construction of a new Animal Research and Care Facility (ARCF) in the Portage Bay Vista. Given the large and operationally critical emergency power and PCW loads of the prospective ARCF, it was decided to re-open the URS study to determine if the CUP should be built in conjunction with the ARCF to serve their requirements, rather than burdening them with the cost of self-contained services. URS was re-engaged to determine the maximum capacity of the CUP site and to develop potential phasing, cost and schedule alternatives that would provide emergency power and PCW to the ARCF.

The new URS study concluded that a CUP can be constructed with sufficient capacity to serve the needs of the ARCF, a potential future ARCF expansion, a future research building envisioned to be built above the ARCF and additional existing or future facilities on the south and southwest campus. It was also determined that if the CUP were built to provide emergency power and PCW to the ARCF, it would enable selection of the lowest cost alternative of the three ARCF concepts under consideration. In addition to generating ARCF cost savings, the CUP would allow the elimination of large mechanical systems that would have been constructed on grade, just east of the Portage Bay Vista. Elimination of these systems will better serve the UW's commitment to preservation of the Vista and will reduce the cost and increase programmatic flexibility of the future research building

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to be located adjacent to the Vista. The ARCF cost savings will partially offset the cost of a new CUP, which along with other considerations make it the right time to invest in the first phase of a new CUP.

PROJECT DESCRIPTION

The recommended site for the new SW CUP is the parcel identified in the URS feasibility study noted above and referred to in the UW Seattle Campus Master Plan as development site 41W (see Attachment 1).

The SW CUP is envisioned to be a building of approximately 17,200 gross square feet (GSF) containing generators, chillers, cooling towers and associated equipment. The building will be constructed above the existing campus utility tunnel, allowing direct access to the tunnel for distribution of electrical cabling and PCW piping. The tunnel distribution route is shown on Attachment 1. When fully built out, the plant will have a capacity to produce 12 megawatts (MW) of emergency power and 6,000 tons of PCW. Phase 1 will construct the CUP building, install equipment to produce approximately half of the full capacity (6 MW and 3,000 tons), provide space and infrastructure for the future full build-out and run distribution systems sized for the full capacity to the south campus. Emergency power and PCW will be distributed to the ARCF, at which point the ARCF project will pick up those services for connection and distribution within the facility. Services will also be provided to the new UW Police Department (UWPD) facility to be constructed immediately to the north of the SW CUP.

The SW CUP is envisioned to be an architecturally significant building, given its prominent location on the southwest campus. Careful attention will be given to ensuring that the design fits contextually with the surrounding community and is representative of its importance as a gateway building at the southwest approach to the campus. The design will incorporate a demonstration display element that will enable access by students and the public to gain an understanding of the University's commitment to the environment and energy conservation.

CONTRACTING STRATEGY

The recommendation of the Capital Projects Office is to use the Design/Build alternate public works contracting procedure, as authorized by RCW 39.10, for the design and construction of this project. The Design/Build method is well-suited to meet the objectives and circumstances of the SW CUP Phase 1 project.

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Design/Build offers the opportunity for a compressed design and construction schedule once the selection of the design builder is made. This is necessary to achieve the schedule commitment to have the SW CUP Phase 1 on line in time to serve the ARCF and the new UWPD facility. The Design/Build method allows the award of both the design and construction phases of the project almost immediately after selection of the contractor. This will be particularly important to enable procurement of the chillers and emergency generators, which may take up to a year to purchase and deliver.

Design/Build will provide a guaranteed price relatively early in the design phase, which will give the UW a high degree of confidence that the final cost will be within the project budget. Recent changes to RCW 39.10 allow for the selection of the contractor based largely on qualifications, which will enable a compressed, low-cost selection process. Design review by the Architectural Commission, the University Architect, and the University Landscape Architect will be integrated to ensure design goals are met.

SCHEDULE

Design/Build Selection	September 2013 – December 2013
Design and Construction	January 2014 – May 2016
Plant in Service	June 2016

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BUDGET AND FINANCING PLAN

The proposed project budget is \$30.5 million, exclusive of financing costs (see Attachment 2). The funding sources and uses for the project are as follows:

Sources of Funds

Internal Lending Program	\$22,725,000
Central Funds	\$8,000,000
Total, Sources of Funds	\$30,725,000

Uses of Funds

Project Design and Construction	\$30,500,000
Financing Costs	\$225,000
Total, Uses of Funds	\$30,725,000

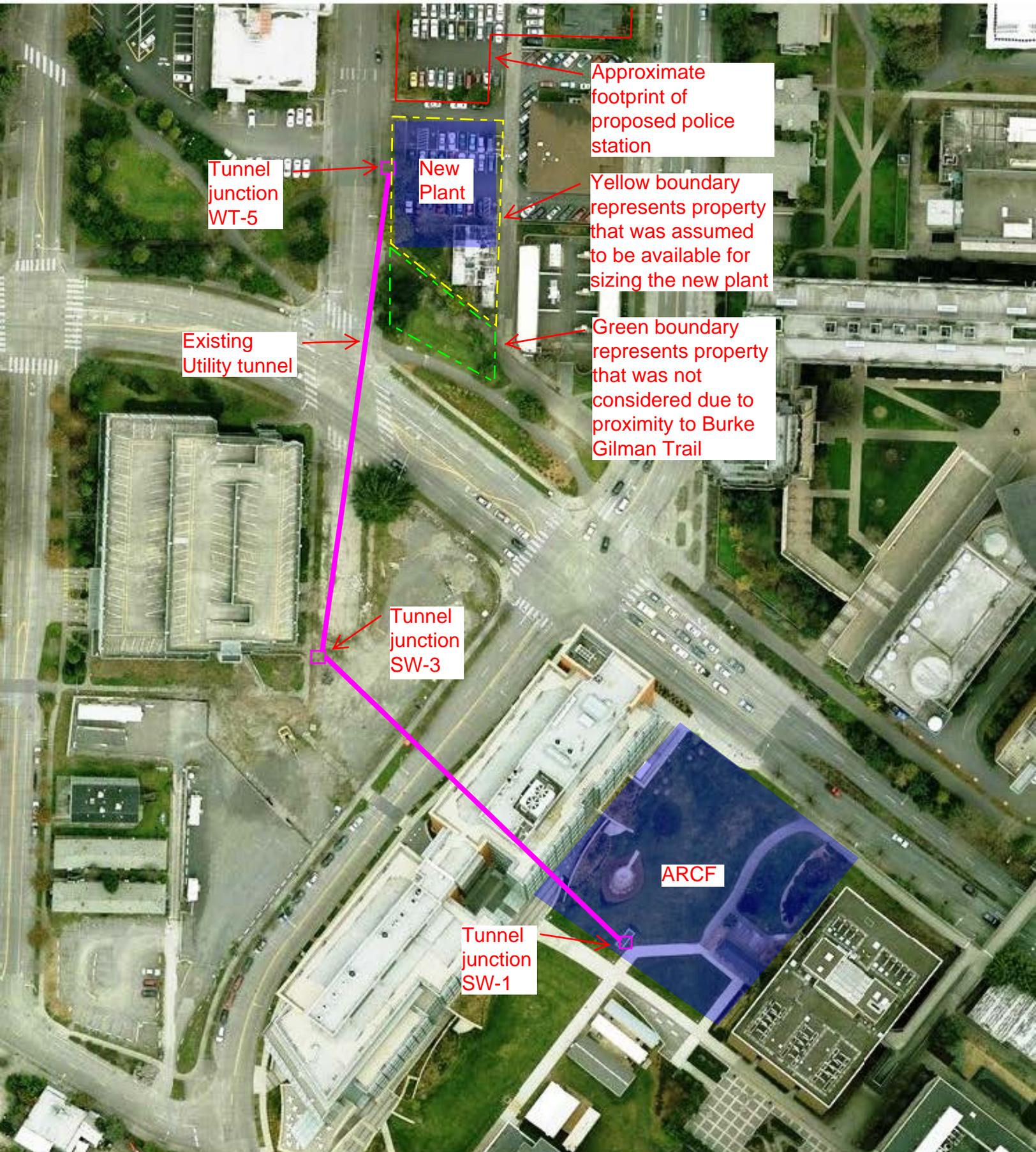
Annual Debt Service for ILP Loan (30 Years, 5.5%)

ICR Revenues and Tuition Operating Funds	\$1,600,000
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The SW CUP has been identified as a Tier 1 Priority project on the One Capital Plan and the debt associated with the project has been factored into institutional debt capacity analysis. This project does not directly generate incremental revenue, but is critical to performing the University's research and educational missions.

Attachments

1. Aerial Photo Site Plan
2. SW CUP Summary Project Budget



Tunnel junction WT-5

New Plant

Approximate footprint of proposed police station

Yellow boundary represents property that was assumed to be available for sizing the new plant

Green boundary represents property that was not considered due to proximity to Burke Gilman Trail

Existing Utility tunnel

Tunnel junction SW-3

ARCF

Tunnel junction SW-1

**UNIVERSITY OF WASHINGTON
CAPITAL PROJECTS OFFICE - SUMMARY PROJECT BUDGET
ALTERNATIVE PROCUREMENT (Design Build)**

PROJECT: SW Central Utility Plant Phase 1

Project Number:

ESTIMATED DATE OF COMPLETION: May 2016

<u>Project Budget</u>	<u>Total Escalated Cost</u>	<u>% of TPC*</u>
Pre-Schematic Design Services	\$ 51,000	0.2%
A/E Basic Design Services	\$ -	0.0%
Extra Services	\$ 243,000	0.8%
Other Services	\$ 265,000	0.9%
Design Services Contingency	\$ -	0.0%
Consultant Services	\$ 559,000	1.8%
Design and Construction Cost	\$ 24,742,000	81.1%
Other Contracts		0.0%
Design and Construction Contingencies	\$ 1,151,000	3.8%
Sales Tax	\$ 2,458,000	8.1%
Total Design and Construction Cost	\$ 28,351,000	93.0%
Equipment & Furnishings		0.0%
Other Costs	\$ 534,000	1.8%
Project Management	\$ 1,056,000	3.5%
Other	\$ 1,590,000	5.2%
Total Project Cost (TPC)*	\$ 30,500,000	100.0%
<u>Included in Above:</u>		
Escalation at 3.5% per year through August 2015	\$ 1,576,000	5.4%