

CAPITAL PROJECT PROPOSALS 2023-2025

Multi-Cultural Center – Major Replacement Project

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CAPITAL PROJECT PROPOSALS 2023-25

Multi-Cultural Center
Replacement | Major

Please direct questions about this proposal to:
Steve Dupont, CWU Director of Government Relations
509-201-0528

July 12, 2022

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CAPITAL PROJECT PROPOSALS 2023-25

Multicultural Center Replacement – Major Project

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2022 PROJECT PROPOSAL CHECKLIST
2023-25 Biennium Four-year Higher Education Scoring Process

INSTITUTION	CAMPUS LOCATION
375 - Central Washington University	Ellensburg
PROJECT TITLE	OFM/CBS Project #
Multi-Cultural Center	40000123
PROJECT CATEGORY	FPMT UNIQUE FACILITY ID # (OR NA)
Replacement - Major	N/A
PROPOSAL IS	
New or Updated Proposal (for scoring)	Resubmitted Proposal (retain prior score)
<input checked="" type="checkbox"/> New proposal <input type="checkbox"/> Resubmittal to be scored (more than 2 biennia old or significantly changed)	<input type="checkbox"/> Resubmittal from 2018 (2019-21 biennium) <input type="checkbox"/> Resubmittal from 2020 (2021-23 biennium)
CONTACT	PHONE NUMBER
Steve Dupont	509-201-0528

Proposal content

- Project Proposal Checklist: this form; one for each proposal
- Project Proposal Form: Specific to category/subcategory (10-page limit)
- Appendices: templates, forms, exhibits and supporting/supplemental documentation for scoring.

Institutional priority

- Institutional Priority Form. Sent separately (not in this packet).

Check the corresponding boxes below if the proposed project meets the minimum threshold or if the item listed is provided in the proposal submittal.

Minimum thresholds

- Project is not an exclusive enterprise function such as a bookstore, dormitory, or contract food service.
- Project meets LEED Silver Standard requirements.
- Institution has a greenhouse gas emissions reduction policy in place in accordance with RCW 70A.45.050 and vehicle emissions reduction policy in place per RCW 47.01.440 or RCW 43.160.020 as applicable.
- A complete predesign report was submitted to OFM by July 1, 2022 and approved.
- Growth proposals: Based on solid enrollment projections and is more cost-effectively providing enrollment access than alternatives such as university centers and distance learning.
- Renovation proposals: Project should cost between 60 – 80% of current replacement value and extend the useful life of the facility by at least 25 years.
- Acquisition proposals: Land acquisition is not related to a current facility funding request.
- Infrastructure proposals: Project is not a facility repair project.
- Stand-alone, infrastructure and acquisition proposals is a single project requesting funds for one biennium.

2022 PROJECT PROPOSAL CHECKLIST
2023-25 Biennium Four-year Higher Education Scoring Process

Required appendices

- Project cost estimate: Excel C-100
- Degree Totals and Targets template to indicate the number of Bachelors, High Demand and Advanced degrees expected to be awarded in 2023. (Required for Overarching Criteria scoring criteria for Major Growth, Renovation, Replacement and Research proposals).
- Availability of Space/Campus Utilization template for the campus where the project is located. (Required for all categories/subcategories except Infrastructure and Acquisition proposals).
- Assignable Square Feet template to indicate program-related space allocation. (Required for Growth, Renovation and Replacement proposals, all categories/subcategories).

Optional appendices

Attach supplemental and supporting project documentation, *limit to materials directly related to and needed for the evaluation criteria*, such as:

- Degree and enrollment growth projections
- Selected excerpts from institutional plans
- Data on instructional and/or research space utilization
- Additional documentation for selected cost comparable (acquisition)
- Selected materials on facility conditions
- Selected materials on code compliance
- Tables supporting calculation of program space allocations, weighted average facility age, etc.
- Evidence of consistency of proposed research projects with state, regional, or local economic development plans
- Evidence of availability of non-state matching funds
- Selected documentation of prior facility failures, high-cost maintenance, and/or system unreliability for infrastructure projects
- Documentation of professional assessment of costs for land acquisition, land cleanup, and infrastructure projects
- Selected documentation of engineering studies, site survey and recommendations, or opinion letters for infrastructure and land cleanup projects
- Other: Multicultural Center Pre-design, and College of Arts & Humanities (CAH) Academic Plan

I certify that the above checked items indicate either that the proposed project meets the minimum thresholds, or the corresponding items have been included in this submittal.

Name: Delano Palmer

Title: Director of Capital Planning & Projects

Signature:  Click to sign here to enter text.

Date: 8/12/22

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INSTITUTION	CAMPUS
Central Washington University	Ellensburg, Washington
PROJECT TITLE	
Multi-Cultural Center	

SUMMARY NARRATIVE

Problem Statement *(short description of the project – the needs and the benefits):*

The CWU proposes to demolish the failing International Center and replace it with a 19,560 sq. ft. Multi-Cultural Center (MCC) in the heart of campus. CWU seeks \$6,000,000 in state support to supplement funding the university will generate by extending the commitment to bonds used to construct the student union and recreation center in 2006.

Needs - CWU is one of the most diverse public baccalaureate institutions in the state; approximately 42 percent of CWU students are people of color and half are first in their families to go to college. Yet CWU is the only public baccalaureate in the state without a facility dedicated to supporting the academic success of students of color and promoting cultural awareness and inclusion. Undergraduate programs that examine issues related to racial, ethnic, and gender identity lack dedicated office, classroom, and collaboration space. Similarly, student groups that wish to conduct educational or celebratory events or to host speakers have no dedicated space for these functions.

Project benefits.

Surveys of employers regularly demonstrate a need to increase the intercultural literacy of graduates to prepare them for the workforce of tomorrow. The MCC will draw people and diverse groups from campus, the local community, and the region for culturally rewarding programs, activities, and events. The facility will provide ideal collaborative and interactional environments for students with diverse backgrounds to work together in a space with optimal acoustics, visibility, adequate ventilation, and environmental control. Highly flexible gathering space will accommodate large events and can be configured for more than one group at a time. Office space for student organizations will be flexible and efficient, and easily shared or repurposed. The facility will be large enough to bring together services now splintered in several buildings: student organizations, the Diversity and Equity Center, and advising; administrative oversight of undergraduate programs and offices for academic programs that examine issues related to racial, ethnic, and gender identity.

The building is not historically or architecturally significant; it is almost entirely without value. Replacing the 74-year-old dorm with a new facility will reduce CWU’s maintenance/Minor Works backlog by \$4.2M and forestall to invest precious state capital resources in a failed structure.

History of the project or facility:

The International Center (originally Kennedy Hall) was built in 1948 as a new dormitory for women. It was a one-story, frame construction structure, which was cheaper to build than typical brick buildings. It has had no major renovations, and only sporadic maintenance upgrades, over the years.. In 1968

CWU constructed a new Kennedy Hall and the old facility was vacated. In 1970 the interior of the old dorm was remodeled, and the facility converted to use as the campus center for international programs. International programs moved out in 2017 and since then the building has been mostly vacant. The Facility Condition Index (FCI) ranks the building as a 4 out of 5, with 5 being marginal.

CWU requested but did not receive Pre-design funding for a Northwest Tribal Fisheries and Cultural Center in 2014. In 2019 students funded a pre-design for the renovation of a portion of the Old Heat boiler plant into a multicultural center but concluded the needed renovation would outstrip Association of Students at Central Washington University (ASCWU) reserves along with realization that its location is counter conducive to the universities focus on centralizing diversity and equity.

As a follow-up and commitment to ensuring a path to development, in 2021 CWU self-funded a pre-design for a free-standing facility centrally located where the International Center now sits. The Pre-design (See Appendix K) highlights the limitations of the 74-year-old International Center that was originally dormitory housing, preventing critical academic classrooms and event spaces. Based upon the age, and the various regulatory codes the current facility fails to meet (such as ADA, energy efficiency, and current building codes), the pre-design demonstrated that replacement was the best suited option to meet the pedagogical and cultural needs of this facility.

University programs addressed or encompassed by the project:

The MCC will enhance retention and degree-completion rates of under-represented students by creating space that provides community and academic support so vital to the persistence of non-traditional students. CWU has always had student clubs that support diverse students, as well as programs that provide education to the student body about different cultures. However, CWU has never had a center with resources that are tailored to the unique needs of under-represented students. Services provided at the MCC may include the following:

- Academic and peer mentoring for social and academic support
- Assistance in accessing basic-needs resources such as food pantry services
- Assistance completing documents, including financial aid and housing applications, and other documents essential to personal security and academic persistence and success
- Information to help with everyday college life such as financial literacy, class scheduling, choosing a major, finding a job, etc.
- Networking opportunities to connect students with faculty and staff of color.
- Diversity and Equity Center
- Academic programs: Ethnic Studies Office. Africana and Black Studies, Latinx and Latin American Studies; Women, Gender and Sexuality Studies; American Indian Studies, Asian Studies, Dean of Undergraduate Studies
- Flexible prayer room with foot washing

OVERARCHING SCORING CRITERIA

1. Integral to achieving statewide policy goals

A. Indicate the number of bachelor's degrees awarded at the close of the 2020-21 academic year, and the number targeted for 2023.

The project promotes improvement on the 2020-21 degree totals by enhancing capacity and providing safe and

modern learning space for social services programs. The most recent data available on the Statewide Public Four- Year Dashboard is 2019-20. In 2019-20 CWU awarded 2441 bachelor's degrees this number increased by 180 from the prior academic year.

CWU currently projected estimate for 2023 is that CWU will award 2,269 Bachelor's Degree's as we anticipate an 9% - 10% drop associated with ongoing pandemic conditions and the related social economic impacts.

The Multicultural Center is expected to directly contribute 72 Bachelor's Degrees to our overall projection.

B. Indicate the number of bachelor's degrees awarded in high-demand fields at the close of the 2020-21 academic year, and the number targeted for 2023.

The project promotes improvement on the 2020-21 degree totals by enhancing capacity and providing safe and modern learning space for high demand degrees associated social services programs such as Women & Gender Studies. The most recent data available on the Statewide Public Four- Year Dashboard is 2019-20. In 2019-20 CWU awarded 673 high demand bachelor's degrees this number increased by 31 from the prior academic year.

Since COVID-19 our awarded degrees has dropped and the number of anticipated 2023 bachelor's will be dependent on the future of the ongoing pandemic.

Current projected estimate for 2023 is that CWU will award 627 Bachelor's Degrees in high-demand fields as we anticipate an 9% - 10% drop associated with ongoing pandemic conditions and the related social economic impacts.

The Multicultural Center is expected to directly contribute 36 Bachelor's Degrees in high-demand fields to our overall projection.

C. Indicate the number of advanced degrees awarded at the close of the 2020-21 academic year, and the number targeted for 2023.

The most recent data available on the Statewide Public Four- Year Dashboard is 2019-20. In 2019-20 CWU awarded 269 advanced degrees. This number was down 45 from the prior academic year.

Current projected estimate for 2023 is that CWU will award 279 Bachelor's Degrees in high-demand fields as we anticipate an 8% drop associated with ongoing pandemic conditions and the related social economic impacts.

The Multicultural Center is expected to directly contribute 10 Advanced Degrees to our overall projection.

2. Integral to Campus/Facilities Master Plan:

A. Describe the proposed project's relationship and relative importance to the institution's most recent Campus/Facilities Master Plan or other applicable strategic plan.

The existing facility supports several minors and one major (American Indian Studies). Replacing the facility will meet all the goals of the Capital Master Plan by reducing the high energy usage facility with a more modern functional facility. In the process of design, we plan to look closely at alternative energy sources discussed throughout our Capital Master Plan. Many of the Master Plans Goals and Objectives will be met through the course of this project. The CWU 2019-2029 Capital Master Plan, prioritizes projects like the MCC that have the greatest positive effect on all stakeholders, improving quality and capacity at the same time. Previous plans called for a Multi-Cultural Center, but state funding was not provided. The 2022 plan identifies the International Building as a priority for replacement in 2023-25 biennium. (Please see Appendix F- 2019-2029 Capital Master Plan)

B. Does the project follow the sequencing laid out in the master plan (if applicable)? If not, explain why it is being requested now.

The proposed Multicultural center project is identified in the CWU 2019-2029 Capital Master Plan. This project along with all major campus capital projects are planned in accordance with the Growth Management Act (GMA) RCW 36.70A and coordinated with the City of Ellensburg and Kittitas County comprehensive plans. University updates to the Capital Master Plan and all proposed capital projects are planned and conducted with the public SEPA reviews, open planning forums, and workshops to provide opportunities for the community, the city and the county to provide input.

This Multicultural Center does follow the sequencing laid out in the current Campus Master Plan by emphasizing the need to ensure diverse and equitable academic programming is given a centralized home with the campus community allowing audiences of different ethnicities, cultures, religion, genders, and social economic backgrounds to converge to share knowledge of one another

3. Integral to institution's Academic Programs Plan:

A. Meet academic certification requirements?

This project is necessary to meet the following two accreditation requirements:

- CWU's accrediting agency is the Northwest Commission of Colleges and Universities.
 - Standard 2.G.1 "Student Support Resources," provides the following directive:

Consistent with the nature of its educational programs and methods of delivery, and with a particular focus on equity and closure of equity gaps in achievement, the institution creates and maintains effective learning environments with appropriate programs and services to support student learning and success."

This project creates the ability to create and maintain a central learning environment that is the symbolic and

literal means of closing equity gaps.

- o Standard 2.I.1 “Physical and Technology Infrastructure”, provides the following directive:

“Consistent with its mission, the institutions creates and maintains physical facilities and technology infrastructure that are accessible, safe, secure, and sufficient in quantity and quality to ensure healthful learning and working environments that support and sustain the institution’s missions, academic programs, and services.”

The International in its current state is woefully inadequate in the sufficiency of classroom or collaborative spaces as noted in the Facility Condition Report (See Appendix E). The proposed replaced would satisfy this accreditation directive.

B. Permit enrollment growth and/or specific quality improvements in current programs?

This project supports several interdisciplinary programs such as Africana and Black Studies, Asian Studies, Latino and Latin American Studies articulated in the “CAH Compact” (See Appendix I)

These goals include:

- Classroom Caliber: 100 percent of CAH students graduate from engaged, innovative classrooms, with a signature experience in their major.
- College Caliber: CAH gives students of diverse need individual advising, internships, undergraduate research, post-graduation enrichment, and mentoring from faculty, peers, and alumni.
- Career Caliber: We guarantee that students leave CWU ready to compete for the career of their choice, with market skills uniquely taught in CAH.
- Community Caliber: CAH graduates are ethical leaders who are creative, globally aware, culturally responsive, and problem-solvers.

This project will replace a dilapidated building and replace it with a modern space dedicated to modern pedagogy, technology, and flexible collaborative spaces to facilitate inquisitive learning that are necessary for high demand Social services fields of work.

This project also supports other interdisciplinary programs such as Women & Gender Studies within the College of Sciences (COTS), which support academic goals such as:

- Creating an environment of inclusive teaching excellence that leads to student graduation with understanding and skills to live, work, and play in an environment that is marked by diversity.

C. Permit initiation of new programs?

This project will provide diverse space to meet today's programming needs while also allowing for the creation of new programs and allowing for the new programs to be integrated with several academic programs within COTS & CAH offered by CWU.

The new building will provide opportunities for students to collaborate to acquire essential interpersonal and social problem-solving skills. These skills will help promote critical thinking, higher enrollment growth, ensure the retention of students of traditionally underrepresented backgrounds.

GENERAL CATEGORY SCORING CRITERIA

1. Age of building since last major remodel

Built in 1948, CWU's International Center has had no major renovation.

2. Condition of building

The International Center has a 2021 Relative FCI score of 4 and a weighted score of 3.7. A complete FCI list is attached as **Appendix F**.

The score is based largely on the fact that the building has not undergone renovation or major remodel since the building was constructed in 1948. Following are major structural and systems conditions that produced the score of 4:

- Electrical service is inadequate to support the use of modern technology of any kind.
- The HVAC system is 74 years old—original to the 1948 building. Controls systems are outdated and inefficient. Air supply is not adequate. Mechanical parts are unreliable with frequent breakdowns. The system is noisy making it difficult for students to concentrate in class and lab environments.
- The building exterior walls and windows are poorly insulated and energy inefficient.
- Lighting and lighting controls are poorly designed, do not support a proper learning environment, and must be replaced.
- The fire alarm system is outdated and needs to be replaced; there is no sprinkler fire protection.
- Interior finishes and doors are in poor condition.

3. Significant health, safety, and code issues

The 12,846 s.f. International Center does not meet any current code standards:

Accessibility requirements for people with disabilities:

- Washington State Law Against Discrimination (RCW49.60.222)
- Washington State Building Code (WAC 52-50)
- Americans with Disabilities Act of 1990 (2 U.S.C. Part B)

- Section 504 of the Rehabilitation Act of 1973 (29 U.S.C. 794)

Green Building Requirements:

- High Performance Building – LEED Silver Standard (RCW 39.35D)
- State Energy Standards for Clean Buildings, RCW 19.27A.210
- Per Executive Order 20-01 State Efficiency and Environmental Performance, New Facility Construction, dated January 23, 2020.
- Electric Car Charging Stations per RCW 19.27.540.
- Greenhouse Gas Reduction Strategies per RCW 70.235.070.

Infrastructure requirements:

- International Building Code (IBC)
- International Mechanical Code
- International Fire Code (IFC)
- Local Codes and Ordinances
- National Electric Code (NFPA 70)

Fire Protection Requirements:

- National Fire Protection Association (NFPA) Section 13
- International Fire Code (IFC)
- Regulations of the State Fire Marshal

4. Reasonableness of cost

The total project cost is estimated at \$22,797,000, with 74% of the funding coming from CWU bond refinancing. This Capital Funding request is for \$6,000,000 of the \$22,797,000 escalated Total Project Cost. **A C-100 estimate form is included in Attachment B.** A more detailed cost estimate will be developed early in the design phase.

The construction methodology will be design, bid, build.

5. Availability of Space/Utilization on Campus:

Describe the institution's plan for improving space utilization and how the project will impact the following:

CWU's 10-year capital plan consists of a series of projects that will eliminate, upgrade, or replace outdated instructional spaces with more relevant, efficient and flexible space. The International Center is an example of facilities CWU has held on to long past their life span, eroding academic quality and drawing down precious state capital resources.

A. The utilization of classroom space:

CWU currently exceeds the targeted 22-hour-per-week utilization standard for classroom space. Replacing inefficient, substandard, and inflexible space in the International Center will help to rebalance utilization rates

of classroom space.

B. The utilization of class laboratory space:

CWU class laboratory space is currently below targeted levels. The new project replaces 74-year-old space that is inflexible, cannot support any modern technology, and that will allow for maximum, high-quality utilization.

6. Efficiency of Space Allocation:

A. The utilization of classroom space:

CWU currently exceeds the targeted 22-hour-per-week utilization standard for classroom space. Replacing inefficient, substandard, and inflexible space in the International Center will help to rebalance utilization rates of classroom space.

B. Identify the following on form CBS002:

1. Usable square feet (USF) in the proposed facility, **11,961 ASF**
2. Gross square feet (GSF), **19,560 GSF**
3. Building efficiency (USF divided GSF). **61%**

7. Adequacy of Space:

Describe whether and the extent to which the project is needed to meet modern educational standards and/or to improve space configurations, and how it would accomplish that.

This project will replace a 74-year-old wood-framed dormitory structure with a modern, energy efficient facility, designed as a flexible, modern collaboration space that accommodates diverse cultural education activities and worship practices. The new facility will provide safe and relevant educational space, replacing aged facilities that meet no health and safety codes and are seven decades behind modern pedagogical standards.

The new facility will provide an appropriate mix of office, support, and gathering spaces for CWU students and it will have the modern acoustics, visibility, ventilation, and environmental controls that educational and collaborative environments demand.

Following are the modern space configurations and features that support effective and efficient educational activities.

- Highly flexible space that accommodates large events and can be configured for more than one group at a time. This space needs to include state-of-the-art virtual communications, audio and visual systems.
- Student offices that are flexible and efficient, easily shared or repurposed.
- Staff office space must accommodate people in the Diversity and Equity Center, counseling, and advising.
- Academic spaces to accommodate administrative oversight of undergraduate programs and offices for academic programs that examine issues related to racial, ethnic, and gender identity.
- A catering kitchen will support larger events where food is cooked on-site and will support food pantry needs for refrigeration and freezers for food distribution.

- Support spaces should be designed to allow for changes in use over time relying on systems furniture and avoiding fixed/built-in elements.
- Restrooms will accommodate multiple gender identities, meet ADA requirements, and offer diaper-changing stations.
- A prayer room will accommodate foot washing.
- A basic needs area includes showers, laundry equipment, and a food pantry.
- The facility must have a rich technology environment--audio, video, computing; smart boards and VR capability are desirable.

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CAPITAL PROJECT PROPOSALS 2023-25

Multicultural Center
Replacement – Major Project

Appendices List

Appendix A	Availability of Space
Appendix B	Project Cost Estimate Summary C100
Appendix C	Program-related Space Allocation
Appendix D	Degree Totals Targets / Enrollment Management Plan
Appendix E	Facility Condition Index
Appendix F	CWU Capital Master Plan 2019-2029
Appendix G	DAHP Consultation
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CAPITAL PROJECT PROPOSAL 2023-25

Multi-Cultural Center

Design

APPENDIX A

Availability of Space

Availability of Space/Campus Utilization Template

Project name:

CBS/OFM Project #:

Institution:

Scoring category:

Campus/Location:

Enrollment

2021 fall on-campus student FTE: <input type="text" value="9,520"/>	Expected 2022 fall on-campus student FTE: <input type="text" value="10,000"/>
	% increase budgeted: <input type="text" value="5.04%"/>

Enter the average number of hours per week each for (a) classroom seat and (b) classroom lab is expected to be utilized in Fall 2022 for the campus where the project is located.

(a) General University Classroom Utilization		(b) General University Lab Utilization	
Fall 2021 Weekly Contact Hours	<input type="text" value="111,118"/>	Fall 2021 Weekly Contact Hours	<input type="text" value="28,829"/>
Multiply by % FTE Increase Budgeted	<input type="text" value="5.04%"/>	Multiply by % FTE Increase Budgeted	<input type="text" value="5.04%"/>
Expected Fall 2022 Contact Hours	<input type="text" value="116,721"/>	Expected Fall 2022 Contact Hours	<input type="text" value="30,283"/>
Expected Fall 2022 Classroom Seats	<input type="text" value="6,462"/>	Expected Fall 2022 Class Lab Seats	<input type="text" value="3,357"/>
Expected Hours per Week Utilization	<input type="text" value="18.1"/>	Expected Hours per Week Utilization	<input type="text" value="9.0"/>
HECB utilization standard (hours/GUC seat)	<input type="text" value="22.0"/>	HECB utilization standard (hour/GUL seat)	<input type="text" value="16.0"/>
Difference in utilization standard	<input type="text" value="-17.9%"/>	Difference in utilization standard	<input type="text" value="-43.6%"/>

If the campus does not meet the 22 hours per classroom seat and/or the 16 hours per class lab HECB utilization standards, describe any institutional plans for achieving the utilization standard.

These utilization rates reflect reduced enrollments during COVID. CWU Master Plan and Strategic Plans project a return to normal enrollments along with modest enrollment increases. The Humanities and Social Sciences project includes a request to demolish Farrell Hall and L&L buildings which will take 1,032 seats of outdated instructional capacity out of service. This along with other capital projects will position CWU to "right-size" and re-balance our instructional capacity with teaching spaces that meet modern pedagogical demands.

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CAPITAL PROJECT PROPOSAL 2023-25

Multi-Cultural Center

APPENDIX B

Project Cost Estimate C100 / CBS002

C-100 FORM

The state of Washington’s C100 cost estimating model was used as the basis for this estimate, applying to the consultant and project management fees, contingencies and escalation.

STATE OF WASHINGTON AGENCY / INSTITUTION PROJECT COST SUMMARY <i>Updated June 2022</i>		
Agency	Central Washington University	
Project Name	Multi-Cultural Center (International Replacement)	
OFM Project Number	40000123	

Contact Information		
Name	Delano Palmer	
Phone Number	509-963-2906	
Email	Delano.Palmer@cwu.edu	

Statistics			
Gross Square Feet	19,560	MACC per Gross Square Foot	\$573
Usable Square Feet	16,230	Escalated MACC per Gross Square Foot	\$643
Alt Gross Unit of Measure			
Space Efficiency	83.0%	A/E Fee Class	A
Construction Type	Other Sch. A Projects	A/E Fee Percentage	8.95%
Remodel	No	Projected Life of Asset (Years)	
Additional Project Details			
Procurement Approach	DBB	Art Requirement Applies	Yes
Inflation Rate	4.90%	Higher Ed Institution	Yes
Sales Tax Rate %	8.40%	Location Used for Tax Rate	Ellensburg
Contingency Rate	5%		
Base Month (Estimate Date)	June-22	OFM UFI# (from FPMT, if available)	A04244
Project Administered By	Agency		

Schedule			
Predesign Start	May-22	Predesign End	June-22
Design Start	August-23	Design End	April-24
Construction Start	May-24	Construction End	June-25
Construction Duration	12 Months		

Green cells must be filled in by user

Project Cost Estimate			
Total Project	\$20,565,795	Total Project Escalated	\$22,797,032
		Rounded Escalated Total	\$22,797,000

C-100 FORM (CONTINUED)

Consultant Services			
Predesign Services		\$0	
Design Phase Services		\$1,897,801	
Extra Services		\$433,000	
Other Services		\$399,487	
Design Services Contingency		\$136,514	
Consultant Services Subtotal		\$2,866,803	Consultant Services Subtotal Escalated
			\$3,099,868

Construction			
Maximum Allowable Construction Cost (MACC)	\$11,211,308	Maximum Allowable Construction Cost (MACC) Escalated	\$12,569,536
DBB Risk Contingencies	\$0		
DBB Management	\$0		
Owner Construction Contingency	\$2,466,375		\$2,771,960
Non-Taxable Items	\$0		\$0
Sales Tax	\$1,148,925	Sales Tax Escalated	\$1,288,686
Construction Subtotal	\$14,826,609	Construction Subtotal Escalated	\$16,630,182

Equipment			
Equipment	\$161,183		
Sales Tax	\$13,539		
Non-Taxable Items	\$0		
Equipment Subtotal	\$174,722	Equipment Subtotal Escalated	\$196,371

Artwork			
Artwork Subtotal	\$113,418	Artwork Subtotal Escalated	\$113,418

Agency Project Administration			
Agency Project Administration Subtotal	\$1,074,242		
DES Additional Services Subtotal	\$0		
Other Project Admin Costs	\$0		
Project Administration Subtotal	\$1,074,242	Project Administration Subtotal Escalated	\$1,207,341

Other Costs			
Other Costs Subtotal	\$410,000	Other Costs Subtotal Escalated	\$449,852

C-100 FORM (CONTINUED)

Funding Summary

	Project Cost (Escalated)	Funded in Prior Biennia	New Approp Request 2023-2025	2025-2027	Out Years
Acquisition					
Acquisition Subtotal	\$1,100,000		\$1,000,000		\$100,000
Consultant Services					
Consultant Services Subtotal	\$3,099,868		\$1,000,000		\$2,099,868
Construction					
Construction Subtotal	\$16,630,182		\$2,300,000		\$14,330,182
Equipment					
Equipment Subtotal	\$196,371		\$700,000		-\$503,629
Artwork					
Artwork Subtotal	\$113,418		\$30,000		\$83,418
Agency Project Administration					
Project Administration Subtotal	\$1,207,341		\$900,000		\$307,341
Other Costs					
Other Costs Subtotal	\$449,852		\$70,000		\$379,852
Project Cost Estimate					
Total Project	\$22,797,032	\$0	\$6,000,000	\$0	\$16,797,032
	\$22,797,000	\$0	\$6,000,000	\$0	\$16,797,000
	Percentage requested as a new appropriation		26%		

What is planned for the requested new appropriation? (Ex. Acquisition and design, phase 1 construction, etc.)
 Design of a 19,560GSF Multi-Cultural Facility
 Insert Row Here

What has been completed or is underway with a previous appropriation?
 N/A
 Insert Row Here

What is planned with a future appropriation?
 Construction of the 19,560GSF Multi-Cultural Center
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CAPITAL PROJECT PROPOSAL 2023-25

Multi-Cultural Center
Design

APPENDIX C

Program-Related Space Allocation

Program Related Space Allocation Template

Project name: Multi-Cultural Center

CBS/OFM Project #: 40000123

Institution: Central WA University

Scoring category: Replacement - Major

Campus/Location: Ellensburg, Wa

Enter the assignable square feet for the proposed project for the applicable space types:

Type of Space	Points	Assignable Square Feet	Percentage of total	Score [Points x Percentage]
Instructional space (classroom, laboratories)	10	4,950	38.44	3.84
Research space	2	-	0.00	0.00
Office space	4	2,166	16.82	0.67
Library and study collaborative space	10	2,165	16.81	1.68
Other non-residential space	8	2,455	19.07	1.53
Support and physical plant space	6	1,140	8.85	0.53
Total:		12,876	100.0	8.26

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CAPITAL PROJECT PROPOSAL 2023-25

Multi-Cultural Center

Design

APPENDIX D

Degree Totals and Targets /
Enrollment Management Plan

Overarching Criteria: Degree Totals and Targets Template

Project name: Multi-Cultural Center

CBS/OFM Project #: 40000123

Institution: Central WA University

Scoring category: Replacement - Major

Campus/Location: Ellensburg, WA

		Bachelor degrees	Bachelor degree's in high-demand fields	Advanced degrees
2020-21 Public Four-Year Dashboard		2,441	673	269
Additional degrees generated by project		72	36	10
Projected degrees with building project	a	2,513	709	279
Projected growth above 2020-21 actual degrees		2.9%	5.3%	3.7%
Number of degrees targeted in 2023	b	2,269	642	279
Projected degrees as % of 2023 target	b/a =	90.3%	90.6%	100.0%

Score: 1 1 0

Comments:

Multicultural Center is a Replacement
2019-2020 is the latest data available on Public Four Year Dashboard.

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CAPITAL PROJECT PROPOSAL 2023-25

Multi-Cultural Center Design

APPENDIX E

International Center

Facility Condition Index (FCI)

Report

Building Detail

Central Washington University
CENTRAL WASHINGTON UNIVERSITY
INTERNATIONAL CENTER Facility
INTERNATIONAL CENTER

Institution ID 375
 Site ID 375

Building ID A04244

Building Size - Gross	12,846	Building Size- Assignable	8,175
Year Of Original Construction	1948	Year Of Last Renovation	
Building Use Type	Office		
Construction Type	Light		

Survey Date	05/13/22	Survey By	FMD
-------------	----------	-----------	-----

Building Condition Summary

Condition Index	0.27
Relative Condition Score	4
Weighted Avg Condition Score	3.7

Building Components

Systems	Scores	Comments
---------	--------	----------

A Substructure:	3.0	
------------------------	------------	--

Foundations

Standard Foundations	3	
Slab on Grade	3	

B Shell:	3.4	
-----------------	------------	--

Superstructure

Floor Construction	4	
Roof Construction	3	

Exterior Closure

Exterior Walls	3	
Exterior Windows	4	
Exterior Doors	4	

Roofing

Roof Coverings	3	
Roof Opening		DOES NOT EXIST
Projections	2	

C Interiors:	3.5	
---------------------	------------	--

Building Detail

Central Washington University
CENTRAL WASHINGTON UNIVERSITY
INTERNATIONAL CENTER Facility
INTERNATIONAL CENTER

Institution ID 375
 Site ID 375

Building ID A04244

Interior Construction		
Fixed and Moveable Partitions	4	
Interior Doors	4	
Specialties	4	
Staircases		
Stair Construction	3	
Stair Finishes	3	
Interior Finishes		
Wall Finishes	3	
Floor Finishes	3	
Ceiling Finishes	3	
D Services:	4.1	
Vertical Transportation		
Elevators and Lifts		DOES NOT EXIST
Plumbing		
Plumbing Fixtures	4	
Domestic Water Distribution	4	
Sanitary Waste	3	
Rain Water Drainage	4	
Special Plumbing Systems		DOES NOT EXIST
HVAC		
Energy Supply	4	
Heat Generating Systems		DOES NOT EXIST
Cooling Generating Systems		DOES NOT EXIST
Distribution Systems	4	
Terminal and Package Units	4	
Controls and Instrumentation	5	
Special HVAC Systems and Equipment		DOES NOT EXIST
Fire Protection		
Fire Protection Sprinkler Systems		DOES NOT EXIST
Stand-Pipe and Hose Systems		DOES NOT EXIST
Fire Protection Specialties		DOES NOT EXIST
Special Fire Protection Systems		DOES NOT EXIST
Electrical		
Electrical Service and Distribution	5	
Lighting and Branch Wiring	5	
Communication and Security Systems	2	
Special Electrical Systems	5	
E Equipment and Furnishings:	3.7	

Building Detail

Central Washington University
CENTRAL WASHINGTON UNIVERSITY
INTERNATIONAL CENTER Facility
INTERNATIONAL CENTER

Institution ID 375
Site ID 375
Building ID A04244

Equipment and Furnishings

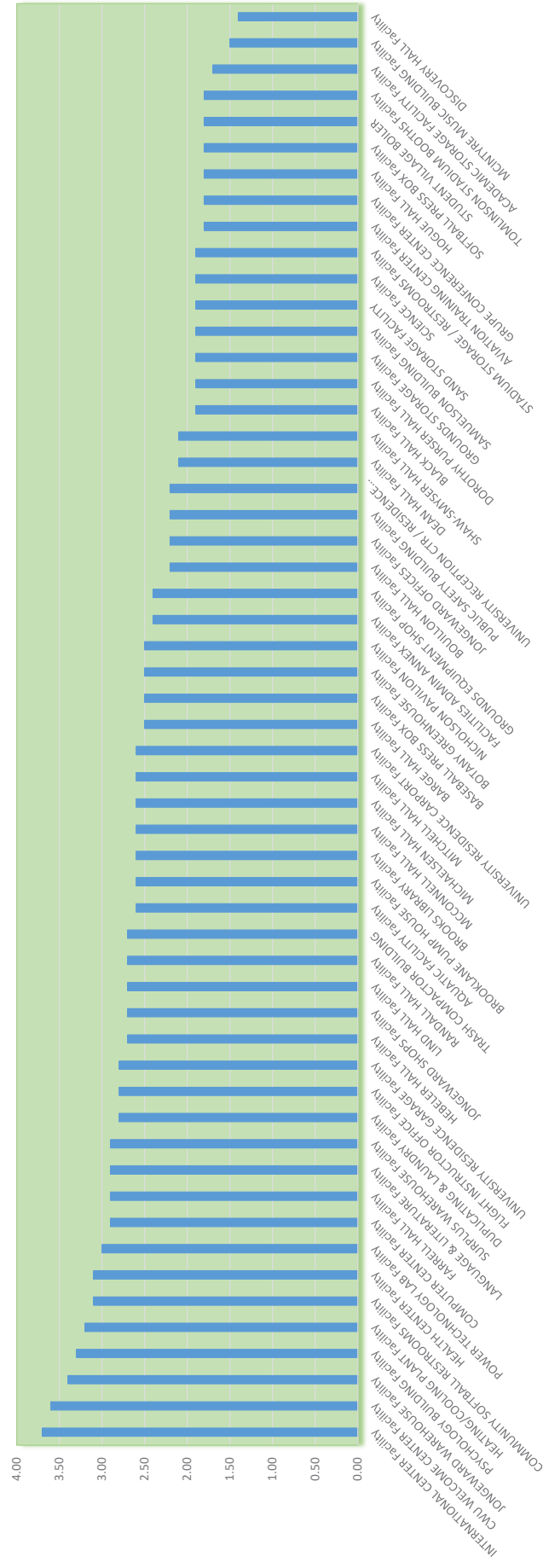
Fixed Furnishings and Equipment	4
Moveable Furnishings (Capital Funded Onl	3

E Special Construction:

Special Construction

Integrated Constr. & Special Constr. Syste	DOES NOT EXIST
Special Controls and Instrumentation	DOES NOT EXIST

ACADEMIC FACILITIES FCI SUMMARY



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CAPITAL PROJECT PROPOSAL 2023-25

Multi-Cultural Center

Design

APPENDIX F

CWU Capital Master Plan 2019-2029

CAPITAL PROJECT PROPOSAL 2023-25

Multi-Cultural Center

Design

APPENDIX F

Central Washington University

Capital Master Plan 2019-2029 with referenced

appendices are located at:

www.cwu/facility/master-plan

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CAPITAL PROJECT PROPOSAL 2023-25

Multi-Cultural Center

Design

APPENDIX G

DAHP Consultation



Allyson Brooks Ph.D., Director
State Historic Preservation Officer

June 16, 2022

Joanne Voute Hillemann, Senior Architect, LEED AP
Central Washington University
Capital Planning & Projects
400 E. University Way
Ellensburg, WA 98926-7523

In future correspondence please refer to:
Project Tracking Code: 2022-06-04031
Property: Central Washington University Multi-Cultural Center project
Re: Predesign

Dear Joanne Voute Hillemann:

Thank you for contacting the Washington State Department of Archaeology and Historic Preservation (DAHP). The above referenced project has been reviewed on behalf of the State Historic Preservation Officer (SHPO) under provisions of Governor's Executive Order 21-02. Our review is based upon documentation contained in your communication.

It is our current opinion that Property ID: 677108, the Central Washington University, Kennedy Hall building is not eligible for listing in the National Register of Historic Places. We understand that the current project is in the design phase and is technically exempt from review under 21-02. Should the construction phase of the project become obligated with Washington State capital funding, review under 21-02 by DAHP will be required. Please note that this project has not yet been reviewed by DAHP for archaeological concerns; this will need to occur at the construction, should it be funded.

Thank you for the opportunity to review and comment. Please ensure that the DAHP Project Number (a.k.a. Project Tracking Code) is shared with any hired cultural resource consultants and is attached to any communications or submitted reports. If you have any questions, please feel free to contact me.

Sincerely,

Holly Borth
Preservation Design Reviewer
(360) 890-0174
Holly.Borth@dahp.wa.gov

State of Washington • Department of Archaeology & Historic Preservation
P.O. Box 48343 • Olympia, Washington 98504-8343 • (360) 586-3065
www.dahp.wa.gov



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CAPITAL PROJECT PROPOSAL 2023-25

Multi-Cultural Center

Design

APPENDIX H

GOIA/Tribal Consultation



Chairman Andrew Joseph, Jr.
Colville Tribal Business Council
21 Colville Street
Nespelem, WA, 99155



DATE: June 21, 2022

TO: Chairman Andrew Joseph, Jr. - Colville Tribal Business Council

FROM: Delano Palmer, Director of Planning and Projects - Central Washington University

RE: Multi-Cultural Center (International Building Replacement)

Chairman Andrew Joseph, Jr.,

Central Washington University (CWU) is initiating consultation with the Confederated Tribes of the Colville Reservation pursuant to Executive Order 21-02 which requires that Tribal consultation occur early in the planning process prior to the expenditure of State funds. The proposed project is located at Township 18 North, Range 18 East, Section 36. CWU is currently planning demolition and replacement of one building located on the CWU campus. The International building is being prepared for demolition and replacement (See attached map). This building is 50 years or older and meet the minimum threshold for National Register of Historic Places (NRHP) eligibility. Eligibility determinations will be conducted in a different phase of this proposed project. Prior to analysis of the building, CWU would like to know if the Confederated Tribes of the Colville Reservation have any concerns or comments early in the planning process prior to the expenditure of state funds?

All comments and concerns regarding this project are welcome. Please contact Delano Palmer at (509) 963-2906 or by email at Delano.Palmer@cwu.edu to discuss concerns and/or comments. We look forward to hearing from you.

Thank you,

Delano Palmer

Cc: Dr. Patrick Lubinski
Dr. Steven Hackenberger
Jon Shellenberger
Guy Moura, CCT THPO
Jeremiah Eilers

Drafted by J.S. & J.E.



Allyson Brooks Ph.D., Director
State Historic Preservation Officer

June 16, 2022

Joanne Voute Hillemann, Senior Architect, LEED AP
Central Washington University
Capital Planning & Projects
400 E. University Way
Ellensburg, WA 98926-7523

In future correspondence please refer to:
Project Tracking Code: 2022-06-04031
Property: Central Washington University Multi-Cultural Center project
Re: Pre-design

Dear Joanne Voute Hillemann:

Thank you for contacting the Washington State Department of Archaeology and Historic Preservation (DAHP). The above referenced project has been reviewed on behalf of the State Historic Preservation Officer (SHPO) under provisions of Governor's Executive Order 21-02. Our review is based upon documentation contained in your communication.

It is our current opinion that Property ID: 677108, the Central Washington University, Kennedy Hall building is not eligible for listing in the National Register of Historic Places. We understand that the current project is in the design phase and is technically exempt from review under 21-02. Should the construction phase of the project become obligated with Washington State capital funding, review under 21-02 by DAHP will be required. Please note that this project has not yet been reviewed by DAHP for archaeological concerns; this will need to occur at the construction, should it be funded.

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Sincerely,

Holly Borth
Preservation Design Reviewer
(360) 890-0174
Holly.Borth@dahp.wa.gov

State of Washington • Department of Archaeology & Historic Preservation
P.O. Box 48343 • Olympia, Washington 98504-8343 • (360) 586-3065
www.dahp.wa.gov





Chairman Andrew Joseph, Jr.
Colville Tribal Business Council
21 Colville Street
Nespelem, WA, 99155



DATE: June 21, 2022

TO: Chairman Andrew Joseph, Jr. - Colville Tribal Business Council

FROM: Delano Palmer, Director of Planning and Projects - Central Washington University

RE: Multi-Cultural Center (International Building Replacement)

Chairman Andrew Joseph, Jr.,

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All comments and concerns regarding this project are welcome. Please contact Delano Palmer at (509) 963-2906 or by email at Delano.Palmer@cwu.edu to discuss concerns and/or comments. We look forward to hearing from you.

Thank you,

Delano Palmer

Cc: Dr. Patrick Lubinski
Dr. Steven Hackenberger
Jon Shellenberger
Guy Moura, CCT THPO
Jeremiah Eilers

Drafted by J.S. & J.E.

DEAN NICHOLSON BLVD.

DEAN NICHOLSON BLVD.

CHESTNUT STREET

RANDALL HALL

MICHAELSEN HALL

INTERNATIONAL CENTER

NEW MULTI-CULTURAL CENTER <20K GSF
(INTERNATIONAL REPLACEMENT)

LANGUAGE & LITERATURE BLDG

MOORE HALL

ANDERSON APT

STEPHENS-WHITNEY HALL

PLAN NORTH

MULTI-CULTURAL CENTER
(INTERNATIONAL REPLACEMENT)

SCALE: NTS
UPDATED: 06/12/2022
CWU FACILITIES MANAGEMENT DEPARTMENT



DEAN NICHOLSON BLVD.

DEAN NICHOLSON BLVD.

CHESTNUT STREET

RANDALL HALL

MICHAELSEN HALL

INTERNATIONAL CENTER

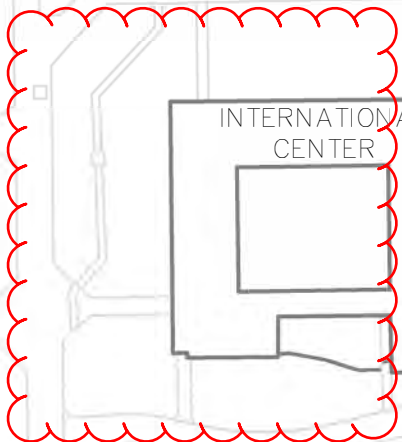
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MULTI-CULTURAL CENTER
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CWU FACILITIES MANAGEMENT DEPARTMENT



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Feedback



Chairman Robert de los Angeles
Snoqualmie Tribal Council
9571 Ethan Wade Way SE
Snoqualmie, WA 98065



DATE: June 21, 2022

TO: Chairman Robert de los Angeles – Snoqualmie Tribal Council

FROM: Delano Palmer, Director of Planning and Projects - Central Washington University

RE: Multi-Cultural Center (International Building Replacement)

Chairman Robert de los Angeles,

Central Washington University (CWU) is initiating consultation with the Snoqualmie Tribe pursuant to Executive Order 21-02 which requires that Tribal consultation occur early in the planning process prior to the expenditure of State funds. The proposed project is located at Township 18 North, Range 18 East, Section 36. CWU is currently planning demolition and replacement of one building located on the CWU campus. The International building is being prepared for demolition and replacement (See attached map). This building is 50 years or older and meet the minimum threshold for National Register of Historic Places (NRHP) eligibility. Eligibility determinations will be conducted in a different phase of this proposed project. Prior to analysis of the building, CWU would like to know if the Snoqualmie Tribe have any concerns or comments early in the planning process prior to the expenditure of state funds?

All comments and concerns regarding this project are welcome. Please contact Delano Palmer at (509) 963-2906 or by email at Delano.Palmer@cwu.edu to discuss concerns and/or comments. We look forward to hearing from you.

Thank you,

Delano Palmer

Cc: Dr. Patrick Lubinski
Dr. Steven Hackenberger
Jon Shellenberger
Steven Mullen Moses, Department of Archaeology and Historic Preservation
Jeremiah Eilers

Drafted by J.S. & J.E.

DEAN NICHOLSON BLVD.

DEAN NICHOLSON BLVD.

CHESTNUT STREET

RANDALL HALL

MICHAELSEN HALL

INTERNATIONAL CENTER

NEW MULTI-CULTURAL CENTER <20K GSF
(INTERNATIONAL REPLACEMENT)

LANGUAGE & LITERATURE BLDG

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ANDERSON APT

STEPHENS-WHITNEY HALL

PLAN NORTH

MULTI-CULTURAL CENTER
(INTERNATIONAL REPLACEMENT)

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CWU FACILITIES MANAGEMENT DEPARTMENT



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Feedback



Chairwoman M. Kathryn Brigham
CTUIR Board of Trustees
46411 Ti'míne Way
Pendleton, OR, 97801-0638



DATE: June 21, 2022

TO: Chairwoman M. Kathryn Brigham - CTUIR Board of Trustees

FROM: Delano Palmer, Director of Planning and Projects - Central Washington University

RE: Multi-Cultural Center (International Building Replacement)

Chairwoman M. Kathryn Brigham,

Central Washington University (CWU) is initiating consultation with the Confederated Tribes of the Umatilla Indian Reservation pursuant to Executive Order 21-02 which requires that Tribal consultation occur early in the planning process prior to the expenditure of State funds. The proposed project is located at Township 18 North, Range 18 East, Section 36. CWU is currently planning demolition and replacement of one building located on the CWU campus. The International building is being prepared for demolition and replacement (See attached map). This building is 50 years or older and meet the minimum threshold for National Register of Historic Places (NRHP) eligibility. Eligibility determinations will be conducted in a different phase of this proposed project.

Prior to analysis of the building, CWU would like to know if the Confederated Tribes of the Umatilla Indian Reservation have any concerns or comments early in the planning process prior to the expenditure of state funds?

All comments and concerns regarding this project are welcome. Please contact Delano Palmer at (509) 963-2906 or by email at Delano.Palmer@cwu.edu to discuss concerns and/or comments. We look forward to hearing from you.

Thank you,

Delano Palmer

Cc: Dr. Patrick Lubinski
Dr. Steven Hackenberger
Jon Shellenbergr
Teara Farrow, CTUIR Cultural Resources Protection Program Manager
Jeremiah Eilers

Drafted by J.S. & J.E.

DEAN NICHOLSON BLVD.

DEAN NICHOLSON BLVD.

CHESTNUT STREET

RANDALL HALL

MICHAELSEN HALL

INTERNATIONAL CENTER

NEW MULTI-CULTURAL CENTER <20K GSF
(INTERNATIONAL REPLACEMENT)

LANGUAGE & LITERATURE BLDG

MOORE HALL

ANDERSON APT

STEPHENS-WHITNEY HALL

PLAN NORTH

MULTI-CULTURAL CENTER
(INTERNATIONAL REPLACEMENT)

SCALE: NTS
UPDATED: 06/12/2022
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Feedback



Chairman Delano Saluskin
Yakama Nation Tribal Council
PO Box 151
Toppenish WA, 98948



DATE: June 21, 2022

TO: Chairman Delano Saluskin - Yakama Nation Tribal Council

FROM: Delano Palmer, Director of Planning and Projects - Central Washington University

RE: Multi-Cultural Center (International Building Replacement)

Chairman Delano Saluskin,

Central Washington University (CWU) is initiating consultation with the Confederated Tribes and Bands of the Yakama Nation pursuant to Executive Order 21-02 which requires that Tribal consultation occur early in the planning process prior to the expenditure of State funds. The proposed project is located at Township 18 North, Range 18 East, Section 36. CWU is currently planning demolition and replacement of one building located on the CWU campus. The International building is being prepared for demolition and replacement (See attached map). This building is 50 years or older and meet the minimum threshold for National Register of Historic Places (NRHP) eligibility. Eligibility determinations will be conducted in a different phase of this proposed project. Prior to analysis of the building, CWU would like to know if the Confederated Tribes and Bands of the Yakama Nation have any concerns or comments early in the planning process prior to the expenditure of state funds?

All comments and concerns regarding this project are welcome. Please contact Delano Palmer at (509) 963-2906 or by email at Delano.Palmer@cwu.edu to discuss concerns and/or comments. We look forward to hearing from you.

Thank you,

Delano Palmer

Cc: Dr. Patrick Lubinski
Dr. Steven Hackenberger
Jon Shellenberger
Casey Barney, YN Cultural Program Manager
Jeremiah Eilers

Drafted by J.S. & J.E.

DEAN NICHOLSON BLVD.

DEAN NICHOLSON BLVD.

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RANDALL HALL

MICHAELSEN HALL

INTERNATIONAL CENTER

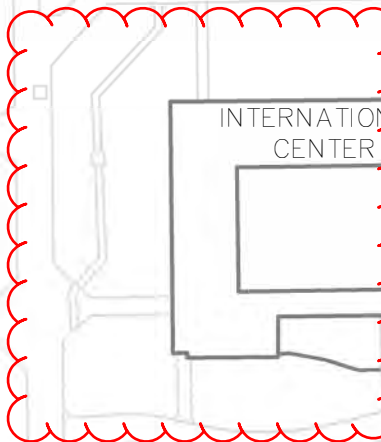
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STEPHENS-WHITNEY HALL

NEW MULTI-CULTURAL CENTER <20K GSF
(INTERNATIONAL REPLACEMENT)



MULTI-CULTURAL CENTER
(INTERNATIONAL REPLACEMENT)

SCALE: NTS
UPDATED: 06/12/2022
CWU FACILITIES MANAGEMENT DEPARTMENT



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CAPITAL PROJECT PROPOSAL 2023-25

Multi-Cultural Center

Design

APPENDIX I

Code Compliance

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CAPITAL PROJECT PROPOSAL 2023-25

Multi-Cultural Center

Design

APPENDIX J

Life Cycle Cost Analysis

Life Cycle Cost Analysis - Project Summary

Agency	Central Washington University
Project Title	Multi-Cultural Center
Existing Description	Currently CWU does not support a Multi-Cultural Center facility on campus. This predesign proposes the replacement or repurposing of an existing facility on the site of the International Center, a majority vacant building on main
Lease Option 1 Description	
Lease Option 2 Description	
Ownership Option 1 Description	Demolition of existing International Center facility and new construction of a 13,560 sq ft facility to support all program functions within the CWU Multi-Cultural Center.
Ownership Option 2 Description	Major renovation to the existing 12,500 sq ft International Center facility, with additional 7,500 sq ft addition to meet the full program requirements of the CWU Multi-Cultural Center.
Ownership Option 3 Description	

Lease Options Information	Existing Lease	Lease Option 1	Lease Option 2
Total Rentable Square Feet	13,560	13,560	13,560
Annual Lease Cost (Initial Term of Lease)	\$ -	\$ -	\$ -
Full Service Cost/PSF (Initial Term of Lease)	\$ -	\$ -	\$ -
Occupancy Date	N/A	N/A	N/A
Project Initial Costs	N/A	\$ -	\$ -
Personnel Relocating	-	-	-
PSF/Person Calculated	-	-	-

Ownership Information	Ownership 1	Ownership 2	Ownership 3
Total Rentable Square Feet	13,560	13,560	13,560
Total Rentable Square Feet	14,689	15,000	
Occupancy Date	9/15/2026	9/15/2026	
Initial Project Costs	\$ 30,000	\$ 30,000	
Est Construction YPC (\$/PSF)	\$ 2,210	\$ 2,240	
PSF/Person Calculated	-	-	

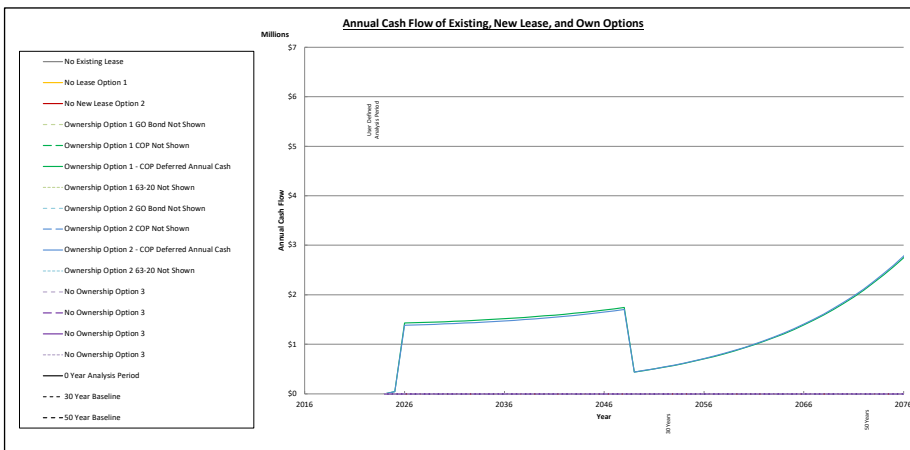
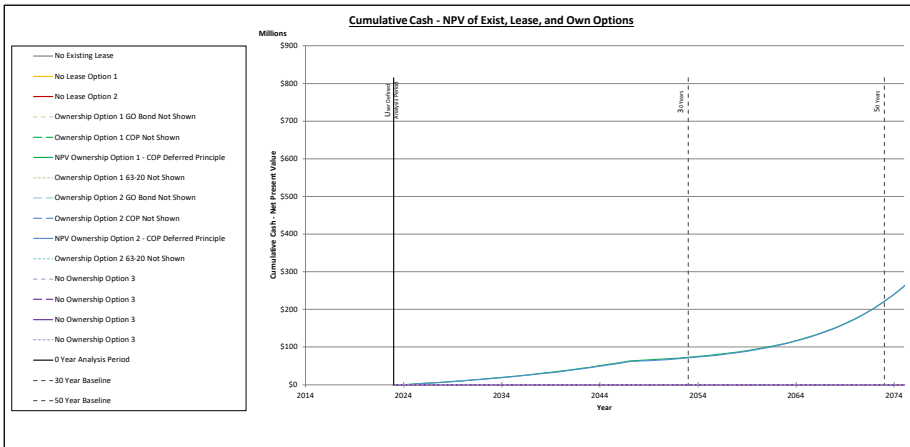
Financial Analysis of Options

Years	Financial Comparisons	Existing Lease		Lease 1		Lease 2		Ownership 1		Ownership 2		Ownership 3	
		Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No
0	Financing Means	Current	Current	Current	Current	GO Bond	GO Bond	COP	COP	COP	COP	COP	COP
0	5 Year Cumulative Cash	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
0	5 Year Net Present Value	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
	Present Cost Option (Analysis Period)												

Years	Financial Comparisons	Existing Lease		Lease 1		Lease 2		Ownership 1		Ownership 2		Ownership 3	
		Current	Current	Current	Current	GO Bond	GO Bond	COP <th>COP <th>COP <th>COP <th>COP <th>COP</th> </th></th></th></th>	COP <th>COP <th>COP <th>COP <th>COP</th> </th></th></th>	COP <th>COP <th>COP <th>COP</th> </th></th>	COP <th>COP <th>COP</th> </th>	COP <th>COP</th>	COP
30	50 Year Cumulative Cash	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 37,518,480	\$ 37,518,480	\$ -	\$ -	\$ -	\$ -
30	50 Year Net Present Value	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 202,818,409	\$ 202,818,409	\$ -	\$ -	\$ -	\$ -
	Present Cost Option (50 Years)												

Years	Financial Comparisons	Existing Lease		Lease 1		Lease 2		Ownership 1		Ownership 2		Ownership 3	
		Current	Current	Current	Current	GO Bond	GO Bond	COP <th>COP <th>COP <th>COP <th>COP <th>COP</th> </th></th></th></th>	COP <th>COP <th>COP <th>COP <th>COP</th> </th></th></th>	COP <th>COP <th>COP <th>COP</th> </th></th>	COP <th>COP <th>COP</th> </th>	COP <th>COP</th>	COP
50	50 Year Cumulative Cash	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 62,593,513	\$ 62,593,513	\$ -	\$ -	\$ -	\$ -
50	50 Year Net Present Value	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 202,818,409	\$ 202,818,409	\$ -	\$ -	\$ -	\$ -
	Present Cost Option (50 Years)												

* - Defers payment on principle for 2 years while the building is being constructed. See instructions on Capitalized Interest



Financial Assumptions

Ownership Option 1 Information Sheet

* Requires a user input Green Cell = Value can be entered by user. Yellow Cell = Calculated value.

* Project Description	Demolition of existing International Center facility and new construction of a 19,560 gsf facility to support all program functions within the CWU Multi-Cultural Center.
------------------------------	---

* Construction or Purchase/Remodel	Construction
---	--------------

* Project Location	Ellensburg	Market Area = Eastern Counties
---------------------------	------------	--------------------------------

Statistics	
Gross Sq Ft	19,560
Usable Sq Ft	16,689
Space Efficiency	85%
Estimated Acres Needed	2.00
MACC Cost per Sq Ft	\$573.18
Estimated Total Project Costs per Sq Ft	\$1,051.42
Escalated MACC Cost per Sq Ft	\$703.43
Escalated Total Project Costs per Sq Ft	\$1,290.36

* Move in Date	9/15/2025
-----------------------	-----------

Interim Lease Information		Start Date
Lease Start Date		
Length of Lease (in months)		
Square Feet (holdover/temp lease)		
Lease Rate- Full Serviced (\$/SF/Year)		
One Time Costs (if double move)		

Construction Cost Estimates (See Capital Budget System For Detail)				
	Known Costs	Estimated Costs	Cost to Use	
Acquisition Costs Total	\$ 1,100,000	\$ 500,000	\$ 1,100,000	
Consultant Services				
A & E Fee Percentage (if services not specified)		7.72% Std	7.72%	
Pre-Schematic Design services	\$ -			
Construction Documents	\$ 1,897,801			
Extra Services	\$ 433,000			
Other Services	\$ 399,487			
Design Services Contingency	\$ 136,514			
Consultant Services Total	\$ 2,866,802	\$ 1,081,795	\$ 2,866,802	
Construction Contracts				
Site Work	\$ 1,155,584			
Related Project Costs				
Facility Construction	\$ 10,055,724			
MACC SubTotal	\$ 11,211,308	\$ 7,078,373	\$ 11,211,308	
Construction Contingency (5% default)	\$ 2,466,375	\$ 560,565	\$ 2,466,375	
Non Taxable Items	\$ -		\$ -	
Sales Tax	\$ 1,148,925		\$ 1,148,925	
Construction Additional Items Total	\$ 3,615,300	\$ 560,565	\$ 3,615,300	
Equipment				
Equipment	\$ 174,722			
Non Taxable Items				
Sales Tax				
Equipment Total	\$ 174,722		\$ 174,722	
Art Work Total	\$ 113,418	\$ 56,057	\$ 113,418	
Other Costs				
Permitting (incl. traffic mitigation)	\$ 400,000			
Shop Support				
Historic/archeological	\$ 10,000			
Other Costs Total	\$ 410,000		\$ 410,000	
Project Management Total	\$ 1,074,242		\$ 1,074,242	
Grand Total Project Cost	\$ 20,565,792	\$ 9,276,790	\$ 20,565,792	

Construction One Time Project Costs		
	Estimate	Calculated
One Time Costs		
Moving Vendor and Supplies	\$ 30,000	\$ -
Other (not covered in construction)		\$300 / Person in FY22
Total	\$ 30,000	\$ 30,000

Ongoing Building Costs					
Added Services	New Building Operating Costs	Known Cost /GSF/ 2025	Estimated Cost /GSF/ 2025	Total Cost / Year	Cost / Month
<input checked="" type="checkbox"/>	Energy (Electricity, Natural Gas)	\$ 0.32	\$ 1.21	\$ 6,259	\$ 522
<input checked="" type="checkbox"/>	Janitorial Services	\$ 0.18	\$ 1.75	\$ 3,480	\$ 290
<input checked="" type="checkbox"/>	Utilities (Water, Sewer, & Garbage)	\$ 1.78	\$ 0.43	\$ 34,719	\$ 2,893
<input checked="" type="checkbox"/>	Grounds	\$ -	\$ 0.07	\$ 1,285	\$ 107
<input checked="" type="checkbox"/>	Pest Control	\$ -	\$ 0.12	\$ 2,313	\$ 193
<input checked="" type="checkbox"/>	Security	\$ -	\$ 0.12	\$ 2,313	\$ 193
<input checked="" type="checkbox"/>	Maintenance and Repair	\$ 0.46	\$ 6.82	\$ 8,994	\$ 749
<input checked="" type="checkbox"/>	Management	\$ -	\$ 0.99	\$ 19,276	\$ 1,606
<input checked="" type="checkbox"/>	Road Clearance	\$ -	\$ 0.17	\$ 3,341	\$ 278
<input checked="" type="checkbox"/>	Telecom	\$ 0.21	\$ -	\$ 4,049	\$ 337
	Additional Parking	\$ -	\$ -	\$ -	\$ -
	Other	\$ -	\$ -	\$ -	\$ -
	Total Operating Costs	\$ 2.94	\$ 11.67	\$ 86,029	\$ 7,169

Ownership Option 2 Information Sheet

* Requires a user input Green Cell = Value can be entered by user. Yellow Cell = Calculated value.

* Project Description	Major renovation to the existing 12,500 gsf International Center facility, with additional 7,500 gsf addition to meet the full program requirements of the CWU Multi-Cultural Center.
------------------------------	---

* Construction or Purchase/Remodel	Purchase/Remodel
---	------------------

* Project Location	Ellensburg	Market Area = Eastern Counties
---------------------------	------------	--------------------------------

Statistics	
Gross Sq Ft	19,560
Usable Sq Ft	15,500
Space Efficiency	79%
Estimated Acres Needed	2.00
MACC Cost per Sq Ft	\$607.46
Estimated Total Project Costs per Sq Ft	\$1,010.04
Escalated MACC Cost per Sq Ft	\$745.52
Escalated Total Project Costs per Sq Ft	\$1,239.58

* Move in Date	9/15/2025
-----------------------	-----------

Interim Lease Information	
Lease Start Date	Start Date
Length of Lease (in months)	
Square Feet (holdover/temp lease)	
Lease Rate- Full Serviced (\$/SF/Year)	
One Time Costs (if double move)	

Construction Cost Estimates (See Capital Budget System For Detail)				
		Known Costs	Estimated Costs	Cost to Use
Acquisition Costs Total		\$ 1,100,000	\$ 500,000	\$ 1,100,000
A & E	Consultant Services			
	A & E Fee Percentage (if services not specified)		9.65% Std	9.65%
	Pre-Schematic Design services	\$ -		
	Construction Documents	\$ 1,897,801		
	Extra Services	\$ 433,000		
	Other Services	\$ 399,487		
	Design Services Contingency	\$ 136,514		
Consultant Services Total		\$ 2,866,802	\$ 1,146,511	\$ 2,866,802
MACC	Construction Contracts			
	Site Work	\$ 1,120,000		
	Related Project Costs	\$ 1,612,000		
	Facility Construction	\$ 9,150,000		
	MACC SubTotal	\$ 11,882,000	\$ 7,078,373	\$ 11,882,000
	Construction Contingency (5% default)	\$ 1,984,000	\$ 1,984,000	\$ 1,984,000
	Non Taxable Items			\$ -
	Sales Tax	\$ 72,000		\$ 72,000
	Construction Additional Items Total	\$ 2,056,000	\$ 2,056,000	\$ 2,056,000
	Equipment			
Equipment	\$ 261,000			
Non Taxable Items	\$ 403,000			
Sales Tax				
Equipment Total	\$ 664,000		\$ 664,000	
Art Work Total	\$ 113,418	\$ 59,410	\$ 113,418	
Other Costs	Permitting (incl. traffic mitigation)			
	Shop Support			
	Historic/archeological			
	Other Costs Total	\$ -		\$ -
	Project Management Total	\$ 1,074,242		\$ 1,074,242
Grand Total Project Cost			\$ 10,840,294	\$ 19,756,462

Construction One Time Project Costs		
	Estimate	Calculated
One Time Costs		
Moving Vendor and Supplies	\$ 30,000	\$ -
Other (not covered in construction)		\$300 / Person in FY22
Total	\$ 30,000	\$ 30,000

Ongoing Building Costs					
Added Services	New Building Operating Costs	Known Cost /GSF/ 2025	Estimated Cost /GSF/ 2025	Total Cost / Year	Cost / Month
<input checked="" type="checkbox"/>	Energy (Electricity, Natural Gas)	\$ 0.36	\$ 1.21	\$ 7,042	\$ 587
<input checked="" type="checkbox"/>	Janitorial Services	\$ 0.18	\$ 1.75	\$ 3,521	\$ 293
<input checked="" type="checkbox"/>	Utilities (Water, Sewer, & Garbage)	\$ 1.78	\$ 0.43	\$ 34,817	\$ 2,901
<input checked="" type="checkbox"/>	Grounds	\$ -	\$ 0.07	\$ 1,285	\$ 107
<input checked="" type="checkbox"/>	Pest Control	\$ -	\$ 0.12	\$ 2,313	\$ 193
<input checked="" type="checkbox"/>	Security	\$ -	\$ 0.12	\$ 2,313	\$ 193
<input checked="" type="checkbox"/>	Maintenance and Repair	\$ 0.46	\$ 6.82	\$ 8,998	\$ 750
<input checked="" type="checkbox"/>	Management	\$ -	\$ 0.99	\$ 19,276	\$ 1,606
<input checked="" type="checkbox"/>	Road Clearance	\$ -	\$ 0.17	\$ 3,341	\$ 278
<input checked="" type="checkbox"/>	Telecom	\$ 0.21	\$ -	\$ 4,108	\$ 342
	Additional Parking	\$ -	\$ -	\$ -	\$ -
	Other	\$ -	\$ -	\$ -	\$ -
Total Operating Costs		\$ 2.99	\$ 11.67	\$ 87,013	\$ 7,251

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CAPITAL PROJECT PROPOSAL 2023-25

Multi-Cultural Center

Design

APPENDIX K

Self-Funded Predesign - 2022



CENTRAL WASHINGTON UNIVERSITY

**MULTI-CULTURAL
CENTER
PREDESIGN**

JULY 01, 2022



LAND ACKNOWLEDGMENT

Central Washington University acknowledges the people who have been on this land since time immemorial. The Ellensburg campus is on lands ceded by the Pshwanapum and other bands and tribes of the Yakama Nation in the Treaty of 1855. The Yakama people remain committed stewards of this land, cherishing it and protecting it, as instructed by elders through generations. We are honored and grateful to be here today on their traditional lands, and give thanks to the legacy of the original people, their lives, and their descendants.

CENTRAL WASHINGTON UNIVERSITY

**MULTI-CULTURAL
CENTER
PREDESIGN**

JULY 1, 2022
AGENCY CODE: 375
PROJECT IDENTIFIER NUMBER: 40000123

PREPARED FOR:

WASHINGTON STATE OFFICE OF FINANCIAL MANAGEMENT

BY:

CENTRAL WASHINGTON UNIVERSITY CAPITAL PLANNING & PROJECTS

IN COOPERATION WITH:

DLR GROUP
MW ENGINEERS
JMB CONSULTANTS

PROJECT TEAM

CENTRAL WASHINGTON UNIVERSITY

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Senior University Administration
Interim Vice President of Operations

Kandee Cleary
Senior University Administration
Vice President of Diversity, Equity, and Inclusivity

Jim Wohlpart
University President

ASCWU BOARD

Alejandra Cruz-Martinez
Director of Student Life & Facilities

Mariah Minjarez
Director of Equity and Multi-Cultural Affairs

Stephanie Mora
Student Life & Facilities Administrative Assistant

Edgar Espino
Director of Government Affairs

Madeline Koval
President

DIVERSITY AND EQUITY CENTER (DEC)

Janette Chien
Director

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1.0
**EXECUTIVE
SUMMARY**

CWU VISION

Central Washington University will be a model learning community of equity and belonging.

CWU MISSION

In order to build a community of equity and belonging, Central Washington University nurtures culturally sustaining practices that expand access and success to all students. We are committed to fostering high impact practices, sustainability, and authentic community partnerships that are grounded in meaningful relationships.



Message from the President

June 1, 2022



"...Last week, the student body at Central Washington University took an important vote to provide funding to build a Multicultural Center (MCC). The vote extended the bond for the Student Union and Recreation Center, providing significant funding for the design and construction of a new space located in the heart of the Ellensburg campus. Additionally, the administration will request funding from the state to expand the space to house our Office of Undergraduate Studies and our area and ethnic studies programs.

The MCC will act as a hub for students, staff, and faculty to build community, celebrate and sustain diverse identities and cultures, and elevate the talents and treasures of historically marginalized individuals—truly allowing us the opportunity to put our new Vision and Mission into practice. Ultimately, the goal of creating a Multicultural Center is to advance the diversity of the campus and, most importantly, to create a sense of belonging for traditionally underrepresented students, staff, and faculty.

Our Vision to create a community of equity and belonging cannot simply be words on a page; they must transform what we do as a university. And then, most importantly, our work must radiate out into the world to create a better, fairer, and more just place for everyone to live, work, and learn."

A handwritten signature in black ink that reads "A. James Wohlpart". The signature is written in a cursive, flowing style.

A. James Wohlpart
CWU President

The Multi-Cultural Center (MCC) has been referred to as “Center for Cultural Innovation” or CCI by students and faculty at CWU. The term has been used interchangeably, and for the purposes of this submission, the project will be referred to as the MCC.

INTRODUCTION

Central Washington University (CWU) proposes a new Multi-Cultural Center (MCC) to support the needs of the diverse campus community. This student-funded project seeks additional state funding to provide the full academic needs of the facility.

The MCC will hosting social gatherings and events that are culturally relevant alongside academic space supporting interdisciplinary program collaboration. The proximity within the core of campus and high degree of visibility and access will provide students a “home away from home” to support wholistic student success.

BACKGROUND

CWU is one of the most diverse public baccalaureate institutions in the state, an access-focused institution, providing opportunity to students of a very broad range of talent and economic and social qualities:

- Approximately 42 percent of CWU students identify as people of color
- One third of CWU students are the first in their families to go to college
- Half have transferred from other institutions

In 2018 and 2019, the ASCWU board of directors, facilities staff and others engaged in a planning study for the needs associated with a multicultural center. Planning was set aside pending the development of an operations plan for the building. Over the 2021-2022 academic year, the ASCWU officers have conducted numerous planning discussions with students, staff, and faculty, as well as with CWU administrators, to update the multicultural center plan to affirm those space needs and to add the need for space to accommodate faculty who lead minor programs in ethnic and gender studies, and staff in the Diversity and Equity Center (DEC).

PROBLEM

CWU is the only public baccalaureate in the state without a facility dedicated to supporting the academic success of students of color and promoting cultural awareness and inclusion. The campus severely lacks the capacity and concentration of spaces dedicated to these functions which support the whole campus community.

CWU’s role is to support student success by providing close faculty mentoring in excellent programs and facilities in alignment with Bill 5227 passed in 2021. The proposed Multi-Cultural Center supports the CWU mission and strategic plan by:

- building a learning community of equity and belonging
- nurturing culturally sustaining practices that expand access to all learners
- Fostering high impact practices, sustainability, and authentic community partnerships that are grounded in meaningful relationships.

The MCC will enhance retention and degree completion rates of underrepresented students by creating space that provides community and academic support so vital to the persistence of non-traditional students. CWU has always had student clubs that support diverse students, as well as programs that provide education to the student body about different cultures. However, CWU has never had a center with resources that are tailored to the unique needs of underrepresented and marginalized students.

MCC Values as developed by the ASCWU Board of Directors include:

High-Impact Education: The MCC supports student success by hosting transformative and participatory learning experiences.

Belonging: The MCC supports an inclusive and positive environment for all members of the CWU community.

Innovation: The MCC promotes new ways of working together, new ways of building equity, and strategies to enhance inclusion at CWU and in the broader community.

Equity and Social Justice: The MCC inspires individuals and groups to examine and to find new ways to address systems of privilege and oppression.

As of spring 2020, there were 4,511 (40.32%) students of color at CWU, with another 6,000 enrolled; current enrollment is below this level but expected to recover in fall 2022 with the implementation of relational enrollment recruitment practices and the conclusion of pandemic procedures and limitations. The MCC will be open and available to all students. Demand for multi-cultural education, support, and community is expected to increase as the university's student population and workforce gradually increase to historical levels, and the community of Ellensburg and the region become more diverse.

PROJECT ANALYSIS

CWU has considered three alternatives for a new Multi-Cultural Center:

1. **Alternate No. 1: No action** - this course is unacceptable because it compromises the health, safety and academic success of students, staff and faculty. No action on the proposed project would result in a missed opportunity to establish a central venue to facilitate CWU's implementation aspects of SB 5227 with instructional professional development focused on diversity, equity, inclusion and anti-racism for faculty and staff.
2. **Alternate No. 2: Demolition and New Construction of a New Stand Alone Facility (*Preferred Option*)** - this alternate was selected as the preferred option as it addresses the highest and best use of a site central to the campus to meet major master plan objectives, while ensuring the future success of campus community members and programs within a modern facility.
3. **Alternate No. 3: Major Renovation and Expansion of International Center** - this alternative explores options for repurposing the original 1948 women's dormitory facility and expanding the footprint to support alternative uses not suitable within the current footprint and beyond infrastructural capacity.

PREFERRED SOLUTION

The new facility described herein houses 19,560 gross square feet of general use, student support, and administrative functions. In addition to an appropriate mix of office, support, and gathering spaces for CWU students, there is an overall desire for this facility to “draw people from other places,” to be a place that attracts people and diverse groups from campus, the local community, and the region for culturally rewarding programs, activities, and events.

The nature of collaborative interactional environments demands good acoustics, visibility, adequate ventilation, and environmental control. The facility should provide the following kinds of space:

- A highly flexible gathering space that accommodates large events and can be configured for more than one group at a time. This space needs to include state-of-the-art virtual communications, audio and visual systems.
- Student offices that are flexible and efficient, easily shared or repurposed.
- Staff office space must accommodate people in the Diversity and Equity Center, counseling, and advising.
- Academic spaces to accommodate administrative oversight of undergraduate programs and offices for academic programs that examine issues related to racial, ethnic, and gender identity.
- A warming kitchen is needed in order to support larger events where food is cooked off-site and delivered to the facility. Students using the space throughout the day may need access to the kitchen simply to temporarily store take-out food or lunches or to heat food.
- Support spaces should be designed to allow for changes in use over time relying on systems furniture and avoiding fixed/built-in elements.
- Restrooms will accommodate multiple gender identifies, meet ADA requirements, and diaper-changing stations.
- A reflection room will accommodate an ablution station.
- A basic needs area includes showers, laundry equipment, and a food pantry.
- The facility must have a rich technology environment: audio, video, computing; smart boards and VR capability are desirable.

The delivery method will be **design-bid-build**. CWU's proven most cost-effective strategy for construction.

This project is a major priority for CWU campus community, receiving partial funding through student-approved appropriations. CWU requests an additional \$6M during the 2023-25 Biennium. The total project budget for the new Multi-Cultural Center is as follows:

2023-25 Design and Construction =	\$6,000,000
CWU Self Funded	= <u>\$16,797,000</u>
	\$22,797,000 *

Aligned with CWU climate commitments, this project will target LEED Gold Certification (V4.0) as a minimum baseline for achieving campus sustainability goals.

**Represents escalated cost*



*Figure 1.1
Perspective view looking east from
the pedestrian mall and campus green*



Project Website for More Information:



02

**PROBLEM
STATEMENT**



2A.

Identify the problem, opportunity or program requirement addressed by the project and how it will be accomplished.

2D.

Describe in general terms what is needed to solve the problem.

Central Washington University (CWU) proposes to build a new Multi-Cultural Center (MCC) facility, located prominently within the heart of campus, as a transformational project to house informal student spaces, student organizations, general academic and convening spaces, and administrative office functions as a collection of functions supporting student success and a new home for marginalized and under-represented communities on campus.

Funding for the student-driven project has been partially appropriated by CWU for non-academic functions, with support from the campus community including over 10,000 enrolled students. Over 93 percent of CWU students are Washington State residents, with 42 percent representing people of color and half are first-generation students. Traditionally under-represented student groups are expected to increase to 36 percent by 2024 as part of CWU's mission to become a more diverse, inclusive institution.

Currently, CWU does not provide a dedicated facility supporting the critical functions of a center for cultural innovation and inclusion. Student clubs that support diversity as well as programs providing support services and education to the student body are active, however they are not centralized within an existing facility as with peer WA State Universities. As of 2021, the university was the only WA State institution to receive the HEED award seven times, a prestigious recognition which measures institutional commitment to diversity through institutional initiative and processes. Current MCC programs are scattered across campus, including the Diversity and Equity Center (DEC) which is outgrowing a temporary space within Black Hall only accessible during operating hours.



*Figure 2.1
Existing DEC Space*



*Figure 2.2
Existing DEC Space, Black Hall 105*

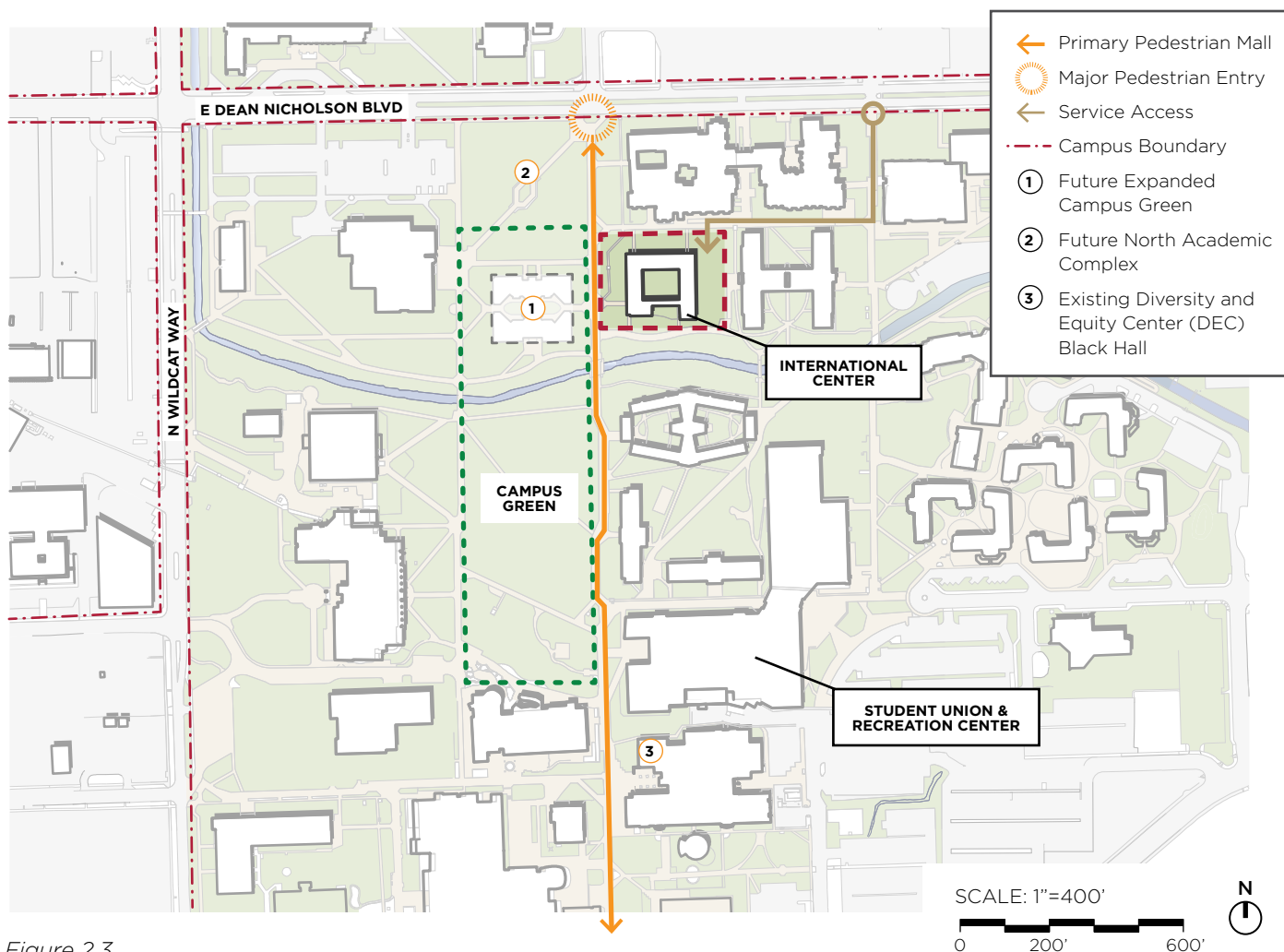


Figure 2.3
Campus Site Plan

The CWU Multi-Cultural Center will be a **visible, central and inclusive facility**, in support of the growing demand for multi-cultural education, awareness, support, and gathering on campus which is expected to increase as the student population and workforce gradually increase to historic levels, and the community of Ellensburg and the region become more diverse.

The approximately 19,560 gross square foot facility will strive to give diverse campus populations a sense of being in a “home away from home” by hosting gatherings and events that are culturally inclusive and relevant. In addition, the new facility will foster a sense of vibrancy and celebration of the diversity of the campus, local community and region. The 2019-2029 CWU Master Plan states “...the need is especially critical for space to

accommodate student organizations and multi-cultural activities.”

The nature of collaborative and inclusive environments demands focused attention to creating a sense of place, increasing accessibility and visibility, optimizing occupant comfort and capacity, and continuing a commitment to environmental sustainability and resiliency. The MCC is proposed in a central location that replaces the existing International Center, and aligns with primary campus pedestrian foot traffic as well as infrastructural upgrades planned to provide increased capacity on campus. The natural environment will drive aspects of the project, including natural ventilation, access to daylight, on-site energy generation, occupant comfort and wellness, and materiality.

“...BIPOC (Black Indigenous People of Color) healing and humanizing as/for racial justice. One of the questions we asked was - where do you locate healing on your body? We talked about what does healing our selves and our relationships look like? Specifically in an institution like higher education that has caused so much harm to BIPOC. One thing that will be critical to consider as this building gets further in its visioning... is who is part of the “we” of this multicultural center? And how does the “we” operate in relationship to other entities on campus in a way that is healing, nourishing, etc.

For this building, I feel like the main goal should really be coming together, communal, gathering, congregating, celebrating - in both collective spaces and smaller spaces. I think about how our spaces need to nurture us in order to feel sustained - so how is our gathering space nurturing us with natural light, comfort, space, colors, seating available for all different body types, multiple pathways that guide you to communal spaces, etc.”

-- Janette Chien
 Director, Diversity and Equity Center



Figure 2.4
 Resource literature in reception area
 of DEC Space



Figure 2.5
 Existing DEC Space

CWU EQUITY AND SERVICES COUNCIL (ESC)

The ESC represents students' diversity interests, needs and welfare within the University, and supplements and complements formal education on the Central Washington University campus. The ESC also maintains appreciation and understanding of diverse social and cultural heritage; promoting and coordinating the celebration of diversity; educating the associated students on issues affecting student equity; and establishes, promotes and implements community service programs beneficial to the entire associated body.

CWU DIVERSITY AND EQUITY CENTER (DEC)

The ESC offices are presently located in the DEC, located off of the lobby on the first floor of Black Hall. The DEC is home to five professional staff, two graduate assistants and provides space for prayer/reflection, meeting spaces for student organizations and storage for student programming supplies. Staff in the DEC provide counseling services for marginalized students, and a pro-bono lawyer is brought in for private conversations with undocumented students.

Although Black Hall is centrally located next door to the Student Union and Recreation Center, the DEC lacks visibility and identity in this temporary space. A new, larger space will allow the DEC to expand support services for first generation students, undocumented students and provide increased support LGBTQ+, gender-based and interfaith services, in addition to increasing its visibility and identity on campus.

ESC ORGANIZATIONS

BSU - Black Student Union

FASA - Filipino American Student Association

MECHA - Movimiento Estudiantil Chinana/o de Aztlan

FGSO - First Generation Student Organization

LSO - LatinX Student Organization

EQUAL - Equality Through Queers and Allies

CASA - Central African Student Organization



Figure 2.6
Existing DEC entrance in Black Hall

INCLUSION AND SERVICE

CWU enrolls a range of students from first-generation, academically-challenged, minority, low income and migrant and seasonal farmworkers. In support of the student-centered mission, **CWU began the initial exploration of a Multi-Cultural Center alongside the pursuit of Hispanic Serving Institution Status in 2018**, following the analysis of growing trends and commitment to supporting diversity through an inclusive community. As it currently serves in partnership in centers located at three of the four current HSI institutions, achieving HSI status would position CWU as the only public university in Washington State serving at least 25% LatinX/Hispanic student population.

COMMUNITY PARTNERSHIPS

CWU hosts inclusion and equity programming, with participation from people throughout the region. A Northwest Tribal event drew participants from throughout the region and included demonstrations, a social powwow, a science fair for high school students and traditional foods. Due to its central location, the campus is often a meeting place for the NW tribes, and is a historical place for tribal gatherings.



Figure 2.7
Campus banner outside Discovery Hall
(CWU Flickr)

PRESIDENTS UNITED TO SOLVE HUNGER (PUSH)

PUSH began as an international initiative across several campuses where university presidents signed on to commit prioritizing food and nutrition security, and came to CWU in 2015. As part of the University's mission and vision to be a model for equity and belonging, PUSH strives to foster and sustain an equitable learning environment and recognize the right to basic needs for the campus community and destigmatize these resources with a private but inviting, spacious but comforting and calm but colorful space.

PUSH is student-run and student initiated, overseen by a committee of professors, student officers and various faculty and staff and staffed entirely by student volunteers. It manages and operates Wildcat Pantry in the Library, with an additional location in Black Hall outside of the DEC. In addition, PUSH organizes drives and campus-wide events, oversees dining donation bins and fundraising, and manages inventory, restocking and signage for its pantries.

In reimagining a future space in the Multi-Cultural Center, PUSH developed the following needs:

- Separate office for pantry coordinator
- Clothing closet for career services - enough space for individuals to try on clothes privately
- Desk area for volunteers - away from the shopping area (for privacy) but enough to oversee
- Sink to wash produce and hands
- Supply closet - store cleaning supplies, office items, etc.
- Processing area for new donations, boxes, etc.
- First floor/very accessible - easy to unload large amounts of product
- Physical key/key fob for the coordinator and other staff
- Easy access to MCC directory and other staff in case of emergency/easy check-ins

“As we think of the sustainability of this project, we hope to further our impact on the community beyond free groceries. We would like to support the livelihood of our Wildcats in several ways - applying for SNAPs, utilities, education/leadership programs, amplifying other campus resources, and so on.” - *PUSH SOURCE presentation*



Figure 2.8
Existing Wildcat Pantry, Library 101



Figure 2.9
Wildcat Pantry in Black Hall,
outside of DEC entry



Figure 2.10
MCC Task Force Focus Group,
June 1, 2022

ENGAGEMENT PROCESS

The engagement process is crucial for understanding the priorities in the development of the Multicultural center. The consultant team lead engagement sessions across multiple modes including in-person, virtual - conducted over video - and email where all comments were noted and recorded for analysis. Important to note; engagement was not limited to defined sessions and extended throughout the project virtually.

Engagement with CWU stakeholders ranged from focused listening sessions to forum presentations to invite and gather inclusive input and solicit feedback of perspectives from across the campus community. The consultant team led visioning conversations and discussed project objectives and criteria for success as developed by the student body, intended to represent a wide variety of community, cultural and non-cultural identities.



Figure 2.11
Student Engagement Poster Session,
June 1, 2022

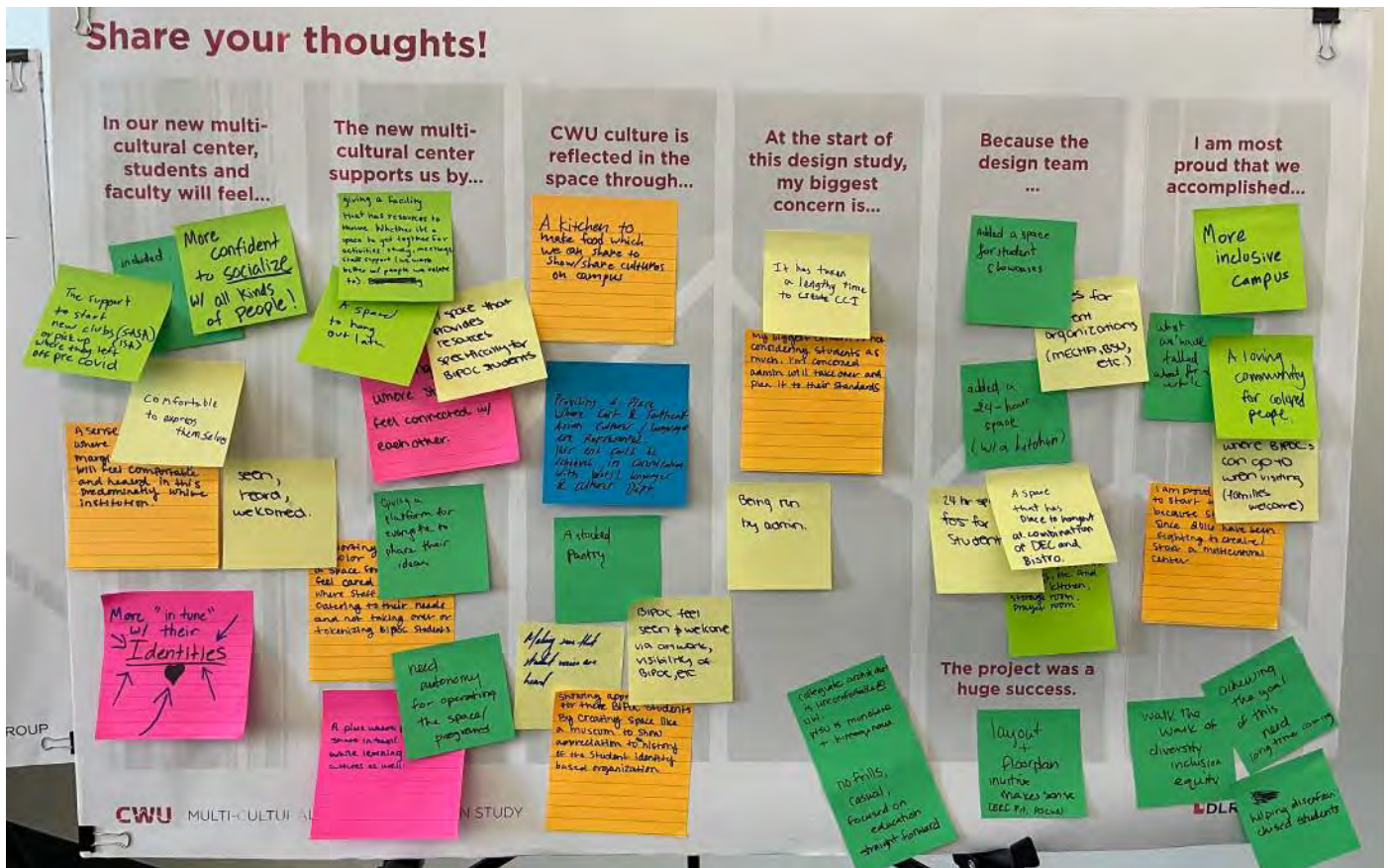


Figure 2.12
Student Engagement Poster Session,
June 1, 2022



Figure 2.13
Student Engagement Poster Session,
June 1, 2022

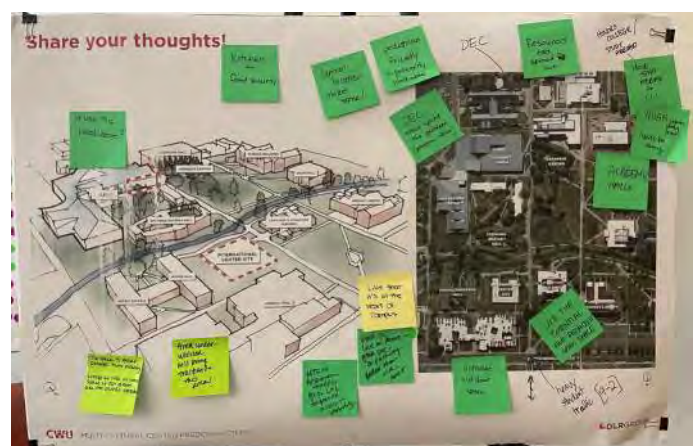


Figure 2.14
Student Engagement Poster Session,
June 1, 2022

ENGAGEMENT PROCESS (CONT'D)

On June 1, 2022, the ASCWU Student Government organized a peaceful campus demonstration in support of the project. The event brought attention to the benefits of creating a safe space for historically marginalized students, with appropriate resources to support student success. CWU President Wohlpart joined the event, contributing his support for the effort.

The same day, the MCC consultant team met with the ASCWU board of directors and students through a series of meetings and poster sessions to gather input on the planning and visioning for the new facility. Tours were conducted at the International Center facility site and the temporary Diversity and Equity Center in Black Hall. Public meetings were conducted to gather input on the process and share project goals and objectives with the consultant team.

Shortly thereafter, bonds were approved by student authorization to fund a portion of the design and construction. This proposal seeks to supplement this funding to design and construct additional academic space to accommodate an increasing need for capacity in the pool of general instructional space.

TOP THEMES

- Balance vibrancy of the diversity of CWU cultures and identities with the desire to be welcomed and included
- Student Groups seek autonomy in organizing and managing programs with the MCC
- Providing for the basic needs of all students are critical to the success of MCC



Figure 2.15
Student Demonstration to support the MCC project,
June 1, 2022



Figure 2.15
MCC focus group, June 1, 2022

FOCUS GROUP

In a focus group exercise, the MCC task-force organized by ASCWU thought of **news headlines** for the opening of the new MCC/CCI:

- CWU Opens a Brand New Multi-Cultural Center that is Welcoming and Embracing of Cultures in the Hidden Gem of Washington State
- CWU BIPOC Community Unifies and Celebrates a New Building at CCI
- CCI will be a Cultural Hub for Marginalized Communities to Come Together and Celebrate
- Bringing Culture to the Forefront, a New CCI Opens
- The CCI Ensures Critical Advances and Equity for Social Spaces, Scholarship, Student Research and Community Building
- After Decades of Effort, We Did It!

2B.

Identify and explain the statutory or other requirements that drive the project’s operational programs and how these affect the need for space, location or physical accommodation. Include anticipated caseload projections (growth or decline) and assumptions, if applicable.

In 2021, the State of Washington enacted Bill 5227 relating to diversity, equity, inclusion and antiracism training and assessments at institutions of higher education. Developing and maintaining a culture of belonging and support for students, faculty and staff at CWU is essential to student success, with faculty and staff playing a key role. The MCC accommodates this requirement as a central facility aligned in mission and purpose built to support ongoing programming.

It is the State’s intent to provide access to the learning, working, and living environment on campus that students, faculty, and staff experience, with CWU providing programming on diversity, equity, inclusion, and antiracism to students on or before the 2024-25 academic year.

TOWARD ANTI-RACIST, EQUITABLE, AND INCLUSIVE PRACTICES AT CWU

WA Bill 5227 specifically asks that “public institutions of higher education provide faculty and staff, as well as students, with training to give them tools to address matters related to antiracism, diversity, equity, and inclusion,” and that professional development programs are, “developed and delivered by individuals with innate and acquired experience and expertise in the field of diversity, equity, and inclusion,” and must be made available and regularly assessed for their effectiveness. CWU seeks to meet this charge by developing an innovative and curated program and educational initiative for faculty and staff at CWU that meets our institution’s distinct needs. To do so, we conceive of addressing three primary learning areas, though we acknowledge that any program structure may need to be augmented as we begin our work:

1. “Start Where You Are” training involves programmatic and interactive workshop opportunities for those who are just beginning to access current approaches to antiracism, inclusivity, and equity, as well as for those who have begun to educate themselves on antiracist and equitable practices but would benefit from further guidance so they can meaningfully implement these elements into their work at CWU.
2. For those with experiential knowledge or expertise related to antiracism and furthering equity at a diverse institution, a scholar-practitioner approach will allow individuals to access professional development and community-building practices.
3. The development of caucuses and affinity groups will create sites where individuals can come together in groups based on shared backgrounds, experiences, identities, and knowledge to learn together and educate one another in brave spaces.

2C.

Explain the connection between the agency's mission, goals and objectives, statutory requirements, and the problem, opportunity or program requirement.

The development of a new 2022 Strategic Plan is underway for CWU. The proposed project will support CWU's mission by:

1. Providing modern classroom and academic facilities
2. Enhancing service to under-served and first-generation students
3. Increasing opportunities for serendipitous interaction between students, faculty and staff
4. Strategically replace a facility at the end of its useful life with a new efficient and purpose-built facility serving the modern needs of CWU
5. Supporting enrollment growth through recruitment and retention of a growing body of prospective students, staff and faculty, meeting the demands of a growing deficiency in spaces supporting similar functions across campus.

DIVERSITY, EQUITY & INCLUSION INITIATIVES

CWU's Office of Diversity, Equity & Inclusion emphasizes equity and inclusion across the campus. This includes a focus on recruiting, retaining, and engaging BIPOC students and scholars, often with limited resources to cope with the continual disparities and injustices that occur in and outside of the classroom. The retention of marginalized scholars remains a significant issue at CWU, a Predominantly White Institution.

BIPOC stakeholders seek a space to create community, a sense of belonging, and is welcoming is meaningful and adds to the credibility of institutional support for DEI work. Students, faculty and staff of color on campus have continued to express a critical need for a space on campus for their safety and healing where they can find those who have had similar experiences of isolation, alienation, and microaggression stresses. The ability to address issues in the classroom, with

research, and in the office with those who have had similar experiences allows for networking, professional development, collaboration, and the space to build social capital. In addition, minoritized faculty and staff perform unique services to CWU, such as the implementation of Bill 5227, program building and curriculum development based on identity, workshop development, and research and publications based on making CWU a more inclusive space that retains a diversity of students.

Further, developing a safe, open, expansive, and anticolonial space for BIPOC campus community is inherently one that is inclusive of multiple identity positions, including a multiplicity of genders, sexualities, abilities, etc. CWU is invested in modeling and creating a larger network that attenuates the forces of institutional discrimination while also developing spaces that connect faculty and staff across multiple axes of identities and marginality. CWU seeks space where individuals experiencing these asymmetrical forces largely predicated on race can build community, and also feel free to express their identities rather than augment them to fit into Eurocentric, white-focused, heterosexist, cissexist, ableist spaces. As those who live at the intersection of multiple forms of exclusion at CWU feel free to express their whole selves and particular struggles, a physical space becomes far more than just an office or classroom; it can be paradigmatic of the ways CWU can create research-based solidarity and affinity networks grounded in research on best practices at Predominantly White Institutions.

2E.

Include any relevant history of the project, including previous predesigns or budget funding requests that did not go forward to design or construction

CWU takes pride in its diverse student population. The Associated Students of Central Washington University (ASCWU) has been actively involved in the development of this project since 2016.

Prior planning efforts attempted to fill existing space where available, including an estimated \$3.5M option to move into the Old Heat Plant building, with limited means to develop a vision for a comprehensive and cohesive space to support the required flexibility of the Multi-Cultural Center as envisioned herein.

Additionally, these efforts did not include the study of long-term investment and/or upgrades to major existing facility infrastructure to reduce long-term capital investments. Ultimately, a 2022 campaign run by the CWU student body gathered enough support to partially fund a more substantial and long-term facility on campus.



VOICE
NOT
VIOLENCE

BLA...
"THE TIME
IS ALWAYS
RIGHT TO
DO WHAT IS
RIGHT."
MLK JR.

03

ANALYSIS OF ALTERNATIVES

Alternatives Considered

Alternatives Advantages and Disadvantages

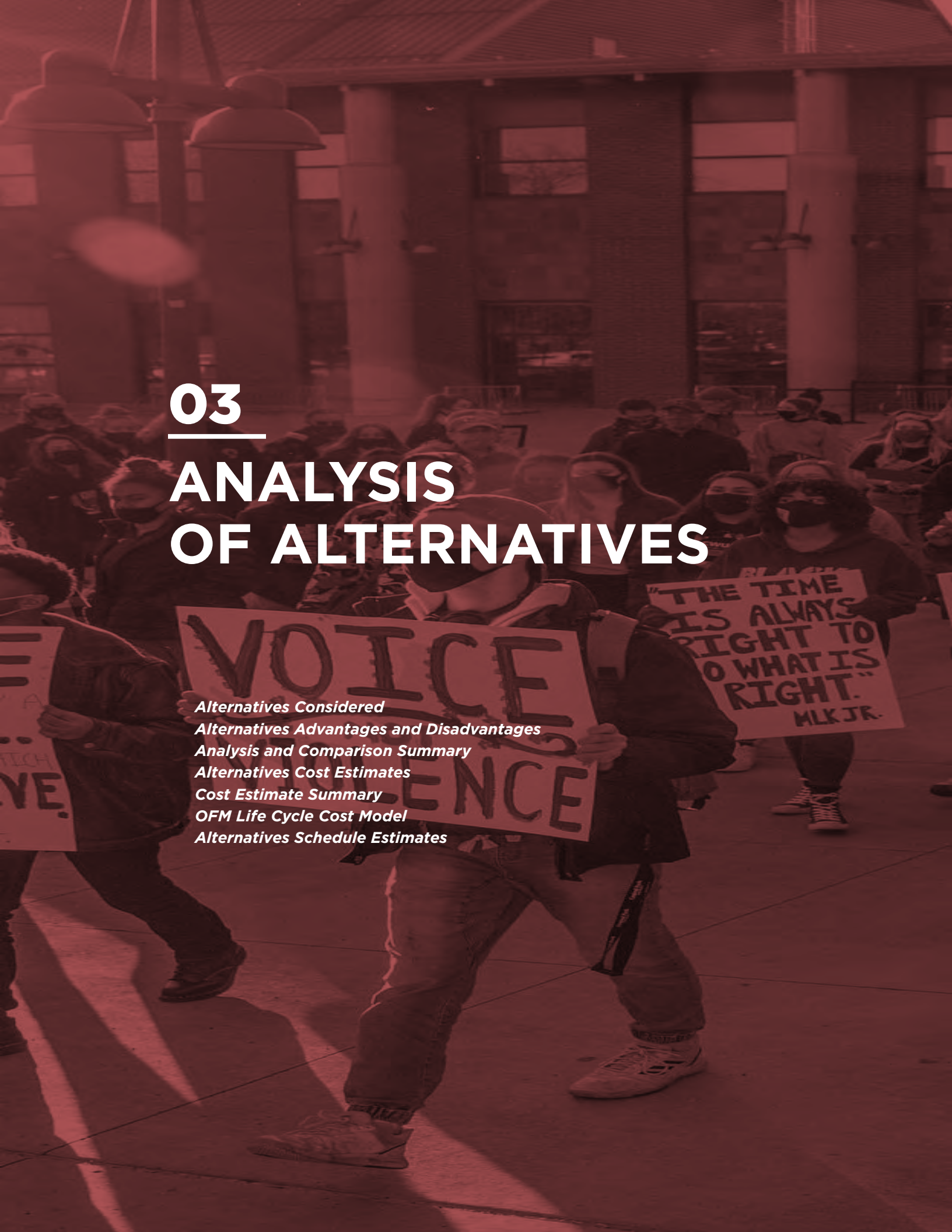
Analysis and Comparison Summary

Alternatives Cost Estimates

Cost Estimate Summary

OFM Life Cycle Cost Model

Alternatives Schedule Estimates



3A.

ANALYSIS OF ALTERNATIVES

CWU engaged a consultant team of DLR Group and MW Engineers to study three options to determine the recommended construction solution for the MCC programs and their space needs. A Life Cycle Cost Analysis (LCCA) incorporated initial capital costs, energy costs, maintenance costs, and component service life of each option to determine the 50-year net present value of each solution.

The preferred site is currently occupied by the International Center. The following describes the criteria for consideration.

SUMMARY ANALYSIS TABLE

	TOTAL PROJECT COST*	LIFE CYCLE COST	LENGTH OF PROJECT	ADVANTAGE	DISADVANTAGE
Alternative 01 No Action	\$0	n/a	n/a	No capital cost	Limit to CWU mission
Alternative 02 Demolition and New Construction of a New Stand-Alone Facility <i>(PREFERRED)</i>	\$20.56 M	\$4.3 M	12 months	Modern purpose-built replacement	Higher initial capital cost
Alternative 03 Renovation & Addition of Existing International Center Building	\$19.75 M	\$4.35 M	12 months	Lower initial capital cost	Limited flexibility for long-term reuse

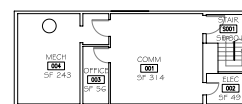
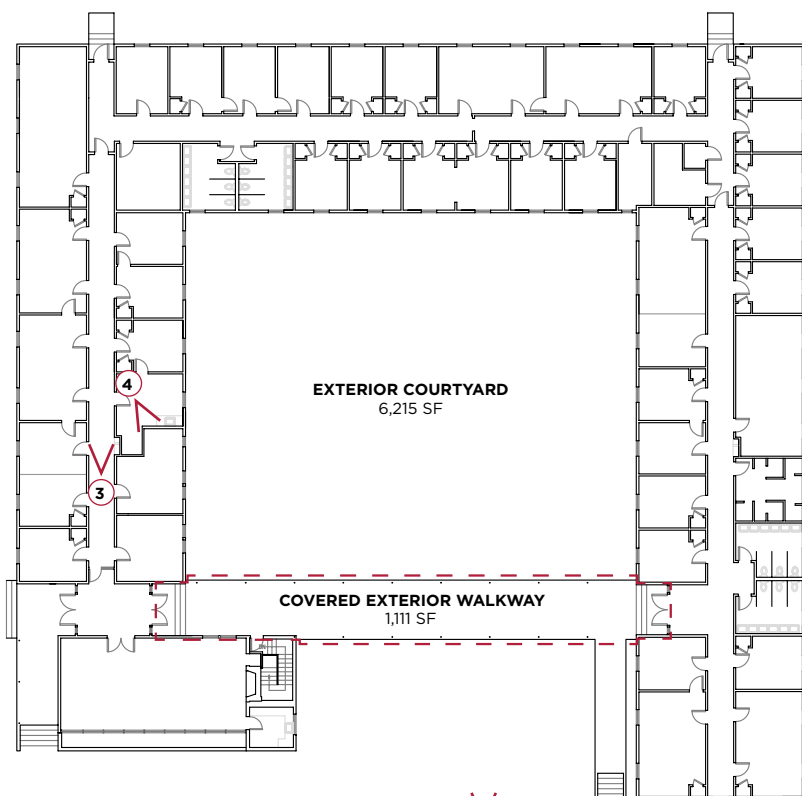
Note: The completed Life Cycle Cost Summary for Alternatives 02 and 03 are included in Appendix E.

**Represents current cost, not escalated*

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EVALUATION OF ALTERNATIVES
ALTERNATIVE 01: NO ACTION

Figure 3.1
 Existing International Center
 Floor Plans



1

INTERNATIONAL CENTER

EXISTING LEVEL 1 PLAN, 12,136 GSF

2

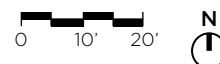
EXISTING BASEMENT PLAN, 863 GSF

NO ACTION

This course is unacceptable because it:

- Compromises the academic success, physical and emotional wellness of students and employees, and allows the interruption of student support functions due to limited capacity within current facilities.
- Prolongs the operating and maintenance burden of the International Center building, currently temporarily occupied until it's planned demolition in anticipation of a new MCC facility on site.
- Student support environments will continue to be insufficient.
- Appropriate inclusive campus environments will continue to be insufficient.

Estimated Total Project Cost: n/a
 Schedule: n/a



Existing space is not available for the functions required within the proposed MCC. No action would result in detrimental student impacts, limited access to critical resources that support student success. Maintaining the status-quo would cause long-term increases in student drop-out rates, staff and faculty attrition, and limit the achievement of CWU's mission objectives.

Planned for removal, the existing International Center facility was purpose-built for dormitory housing. The single width of each wing reaches a maximum of 32'-8", not suited for accommodating academic classrooms or event spaces. Additionally, the facility has seen minimal upgrades since it was built 74 years ago, and does not meet the current code minimum or support modern infrastructure.

EVALUATION OF ALTERNATIVES

ALTERNATIVE 01: NO ACTION (CONT'D)

The existing facility does not contribute to the highest and best use of the central campus location of this site. The majority of the facility sits unoccupied, unable to support campus needs.

Figure 3.2
Existing International Center Site,
view looking north



Figure 3.3
Existing International Center Site,
view from southwest corner

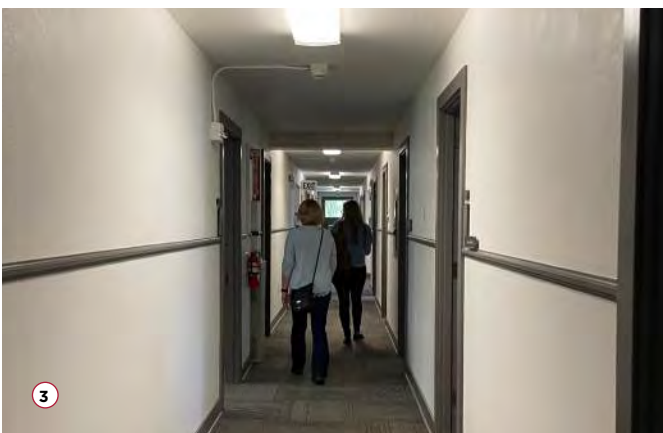


Figure 3.4
Existing International Center
Interior Corridor View, Looking north



Figure 3.5
Existing International Center Interior,
Room 108

EVALUATION OF ALTERNATIVES

ALTERNATIVE 02: NEW STAND-ALONE FACILITY (PREFERRED OPTION)

Figure 3.6
Site axonometric, preferred alternative

This alternate provides for a new and efficient facility to replace the existing partially occupied International Center Building. With the demolition of the existing facility, new construction increases instructional capacity to meet current space efficiency standards and campus needs. This option utilizes the campus owned electrical distribution systems and shares efficient heating and cooling from a new geothermal loop, funded separately. Alternate 02 is the preferred option for Central Washington University as it replaces a facility beyond its useful life with a new active facility that will serve future campus generations towards academic, community and personal success.

Estimated Total Project Cost: \$20,565,795 *
Schedule: 24 months, see page 59

This alternative explores CWU's planned step to raze the existing facility and rebuild without limitations of existing infrastructure. Guided by the 2019 Capital Master Plan, this alternative provides the greatest long-term flexibility and utilization of the building on a site ideally suited for MCC uses and programs.

Multiple sites were considered by CWU during the course of the planning effort. Ultimately, the preferred site met criteria determined by the core team to meet the needs of CWU campus access, proximity, visibility and features required for a new stand-alone facility to house the new Multi-Cultural Center.

**Represents current cost, unescalated*

EVALUATION OF ALTERNATIVES

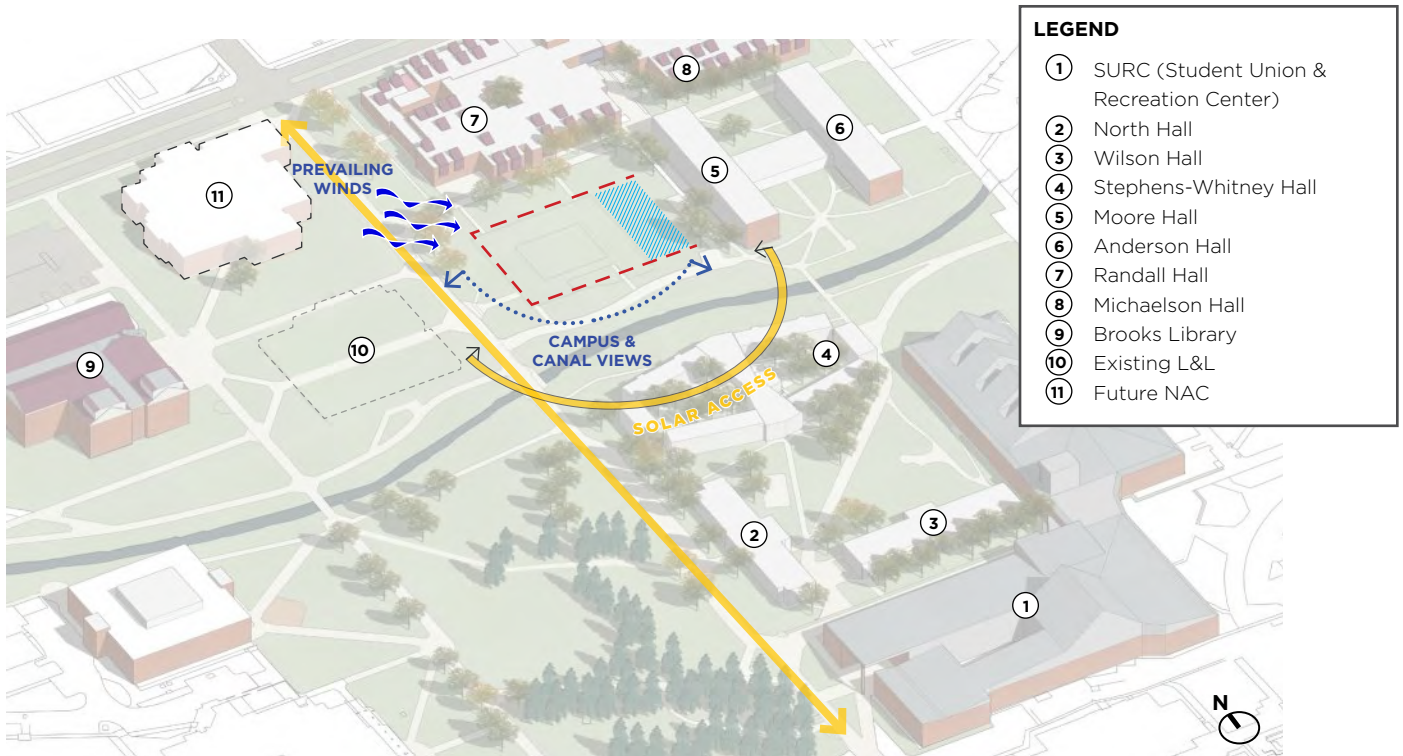
ALTERNATIVE 02: NEW STAND-ALONE FACILITY (PREFERRED OPTION) (CONT'D)

Figure 3.7
Site Analysis Diagram

OPPORTUNITIES

- **Visual prominence to Campus Green**
The future North Academic Complex will replace the Language and Literature Building providing the preferred site with ample access to natural daylight from the resulting open space expansion and exposure to prevailing winds from the west.
- **Proximity to open space**
existing International Center facility is located in the academic core, known as the Central Neighborhood of CWU.
- **Solar access** to support the anticipated sustainability targets for photovoltaic panels on new construction
- Adjacency to **primary pedestrian corridor** extending north from SURC.

CONSTRAINTS

- **Proximity to other student services**
Student Support Services are in the Student Services Center located in Bouillon Hall at the southern end of the Central Neighborhood of campus.

EVALUATION OF ALTERNATIVES

ALTERNATIVE 02: NEW STAND-ALONE FACILITY *(PREFERRED OPTION)* (CONT'D)

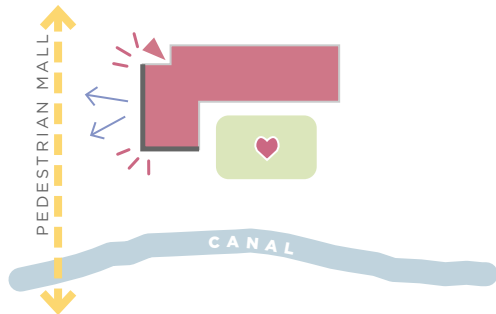
Considerations of the building mass and layout were developed through an application of a racial and gender equity lens, and engaged students in an open forum regarding input and feedback during the development of the vision and project goals. CWU intends to carry this approach into the design phase.

Early conceptual studies explored relationships to physical campus features, major circulation and juxtaposition to adjacent, campus facilities within the Central Neighborhood. The Open Embrace concept was selected as preferred.

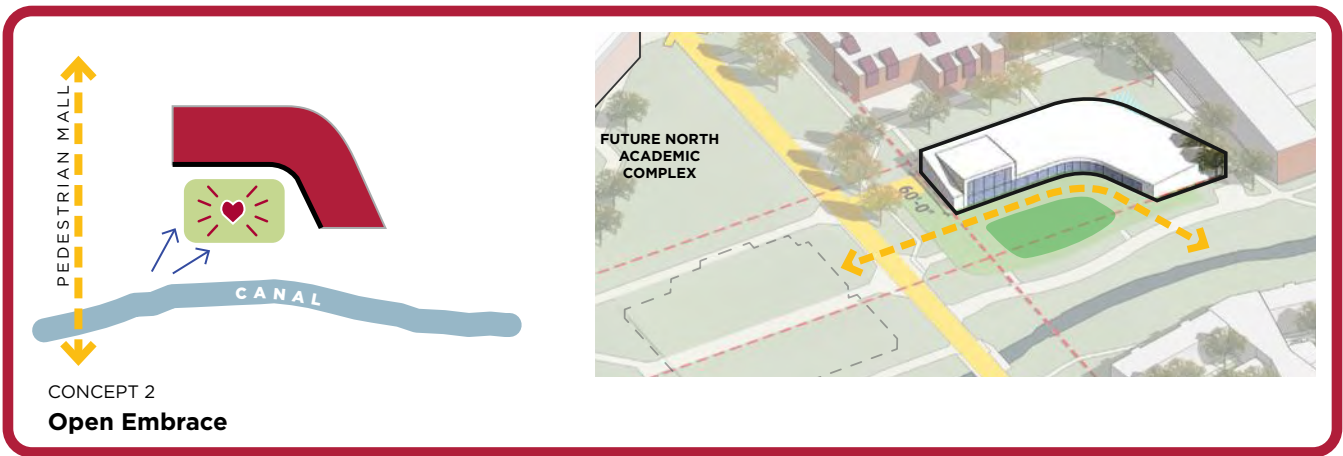
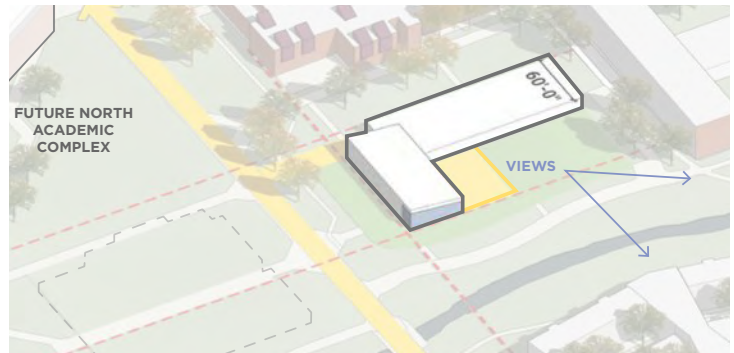
The configuration of a L-shaped massing defines an exterior gathering space, optimizes site views and solar orientation and provides interior and exterior programmatic relationships to the site such as visibility and prominence.

EVALUATION OF ALTERNATIVES

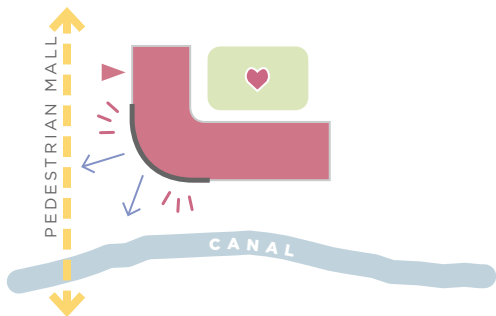
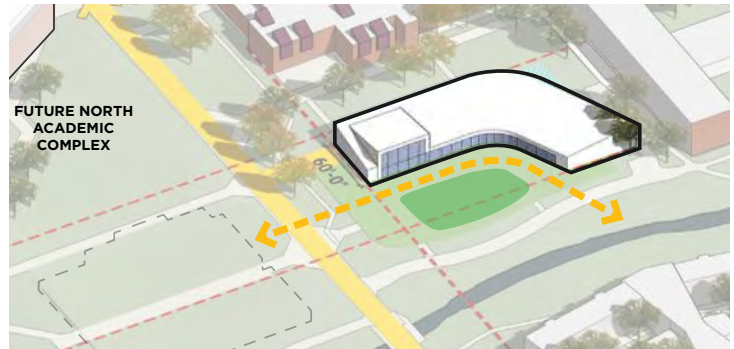
ALTERNATIVE 02: NEW STAND-ALONE FACILITY (PREFERRED OPTION) (CONT'D)



CONCEPT 1
Reach Out



CONCEPT 2
Open Embrace



CONCEPT 3
Wrap

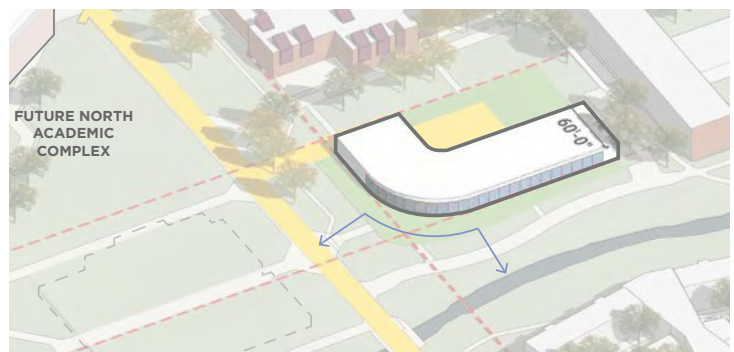
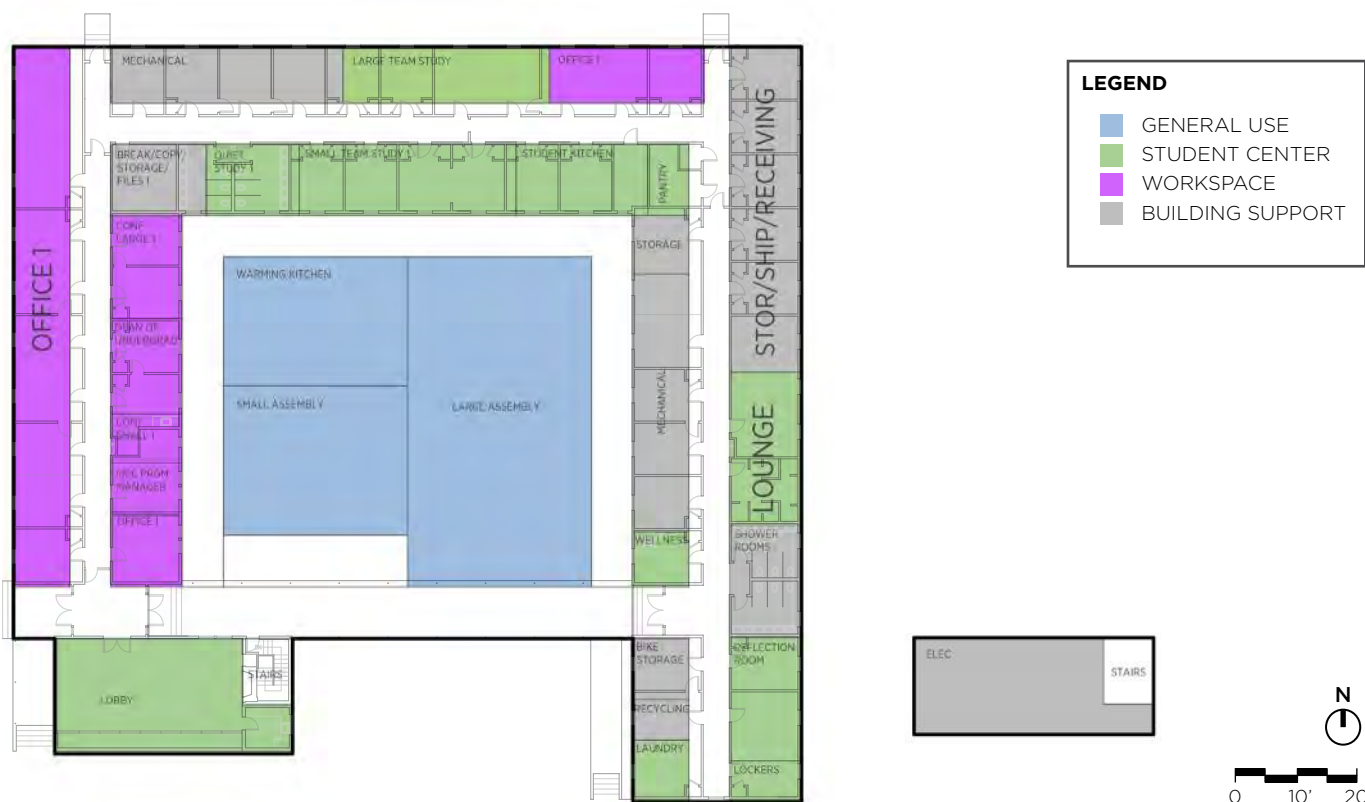


Figure 3.8
Preliminary Concept and Massing Diagrams

EVALUATION OF ALTERNATIVES

ALTERNATIVE 03: REPURPOSE INTERNATIONAL CENTER BUILDING



LEVEL 1 PLAN DIAGRAM OVERLAY

BASEMENT PLAN DIAGRAM OVERLAY

Figure 3.9
Diagram overlay of repurposing International Center Building

RENOVATION & ADDITION OF EXISTING INTERNATIONAL CENTER BUILDING

This alternative was rejected as wasteful and inefficient because it does not support the highest and best use of the site, lacks supporting infrastructure and does not contribute to an increase in academic capacity as envisioned in the current Campus Master Plan.

Originally built in 1948 and named “Kennedy Hall,” the International Center served as a women’s residence hall until it was converted to offices in 1970. The most recent improvements to the single-story facility include interior remodeling in 1970 and utility improvements in 2003. The potential for conversion of this facility for the MCC was studied and deemed not viable due to the existing floor-to-floor height, lack of building HVAC systems and difficulty in reconfiguring existing offices to flexible meeting, event, and academic uses.

Estimated Total Project Cost: \$19,756,462
Schedule: 24 months

The dimensions and configuration of the existing International Center facility footprint limit its ability to support a wide variety of alternative uses and adjacency needs. The current facility is not suitable for modern accommodations and cannot support MCC functions without significant renovation, addition, and infrastructural upgrade.

The diagram above demonstrates a potential layout that fits the total MCC space needs, however, it does not provide the flexibility, adaptability or program adjacency required for collaborative or serendipitous encounter. For example, long corridors with limited sight-lines are unwelcoming, and access to daylight is reduced to skylights in many infill areas.

EVALUATION OF ALTERNATIVES

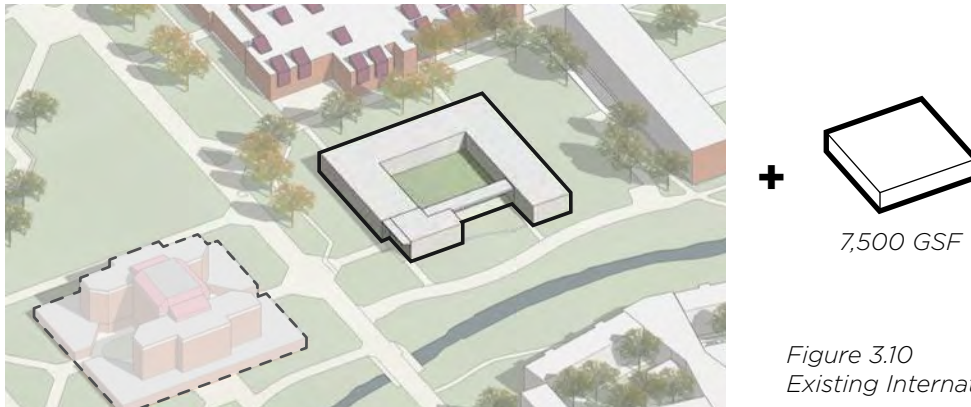
ALTERNATIVE 03: REPURPOSE INTERNATIONAL CENTER BUILDING (CONT'D)

Figure 3.10
Existing International Center Site

While the site is ideally located within the highly visible Central Neighborhood with direct adjacency to the future expanded Campus Green to the west, the current entry and orientation of the International Center facility is not ideal for creating a welcoming and inviting entry sequence. Accessibility to the main entrance is limited, and requires upgrades to the surrounding site to reach code compliance.

Views into and from the facility would likely not reflect the functional uses of MCC programs within, impacting CWU's objective for transparent and inclusive environments across campus.

OPPORTUNITIES

- Reuse of existing infrastructure
- Lower initial capital cost
- Ideal site location directly adjacent to primary pedestrian circulation routes and within the Central Neighborhood of campus

The current building footprint does not accommodate the size and scale of the full space needs for MCC. An addition of approximately 7,500 GSF will need to be incorporated, and is proposed as an infill in the center courtyard for the purposes of evaluating the option for this study.

CONSTRAINTS

Any major renovation of the existing International Center facility is problematic for academic uses:

- Lack of HVAC systems and infrastructure
- Original use not built to programmatic requirements
- Exterior ductwork required due to low floor-to-floor height (8'-6' to existing ceiling)
- Requires expansion of an additional 7,424 SF to meet the required program
- Higher long-term operations and maintenance costs, driven by configuration and existing infrastructure
- Narrow width and low floor-to-floor ceiling dimensions limits general functional use to few academic functions and a majority of small support spaces





04

**ANALYSIS
OF PREFERRED
ALTERNATIVE**

4A.

PREFERRED ALTERNATIVE

ALTERNATE 02

Demolition and New Construction of a New Stand-Alone Facility

CWU finds the life cycle costs and net present savings negligible between Alternate 02 and Alternate 03. The differentiation is the opportunity a new facility brings to the campus community and meeting the objectives of the MCC mission - increasing campus capacity for purpose-designed and purpose-built spaces to support a broader CWU mission. A new stand-alone facility represents the least impact to the campus and existing programs. The baseline option supports long-term and permanent relocation of occupants to the facility, and does not impact existing programs during construction. Additional information on the LCCA can be found in Appendix E.

A stand-alone facility to support student success by promoting and celebrating diversity, equity and inclusion. The building will provide flexible space for events and educational speakers that support the needs of multi-cultural student organizations, space for academic degree program needs for the College of the Sciences.

Following a thorough analysis of the existing facilities on site and supporting current MCC functions, the proposed facility will support the replacement of a deteriorated and non-contributing facility on site. It will be of permanent construction, meeting modern day codes, regulations and standards to meet a minimum of LEED Gold certification rating by the USGBC. It will have a minimum expected service life of 50 years. Spaces within the MCC will support student success, convening and formal academic instruction, and provide administrative office functions.



*Figure 4.1
Perspective view looking east from
the pedestrian mall and campus green*

The Multi-Cultural Center building will honor a variety of cultural traditions and will meet the project goals through three main components: student-learning spaces and support focused areas, community event and convening focus areas, and general academic program administration areas, in addition to an inspired site that connects the campus, bringing together cultures and identities in a welcoming, natural place that fosters stronger connections and deeper understanding throughout the entire CWU community.



- LEGEND**
- ① Moore Hall
 - ② Randall Hall
 - ③ Pedestrian Mall
 - ④ City of Ellensburg Irrigation Canal
 - ⑤ Future Campus Green

Figure 4.2
Proposed building axonometric southwest view

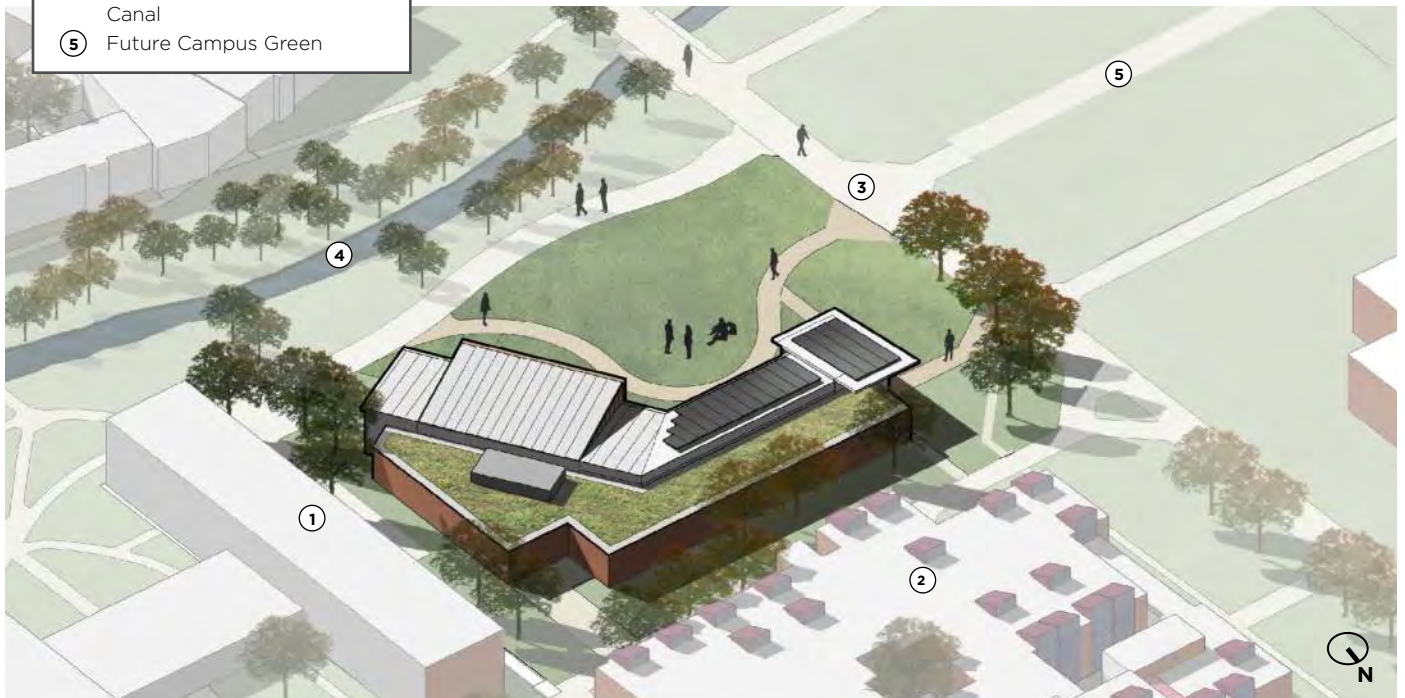


Figure 4.3
Proposed building axonometric northeast view

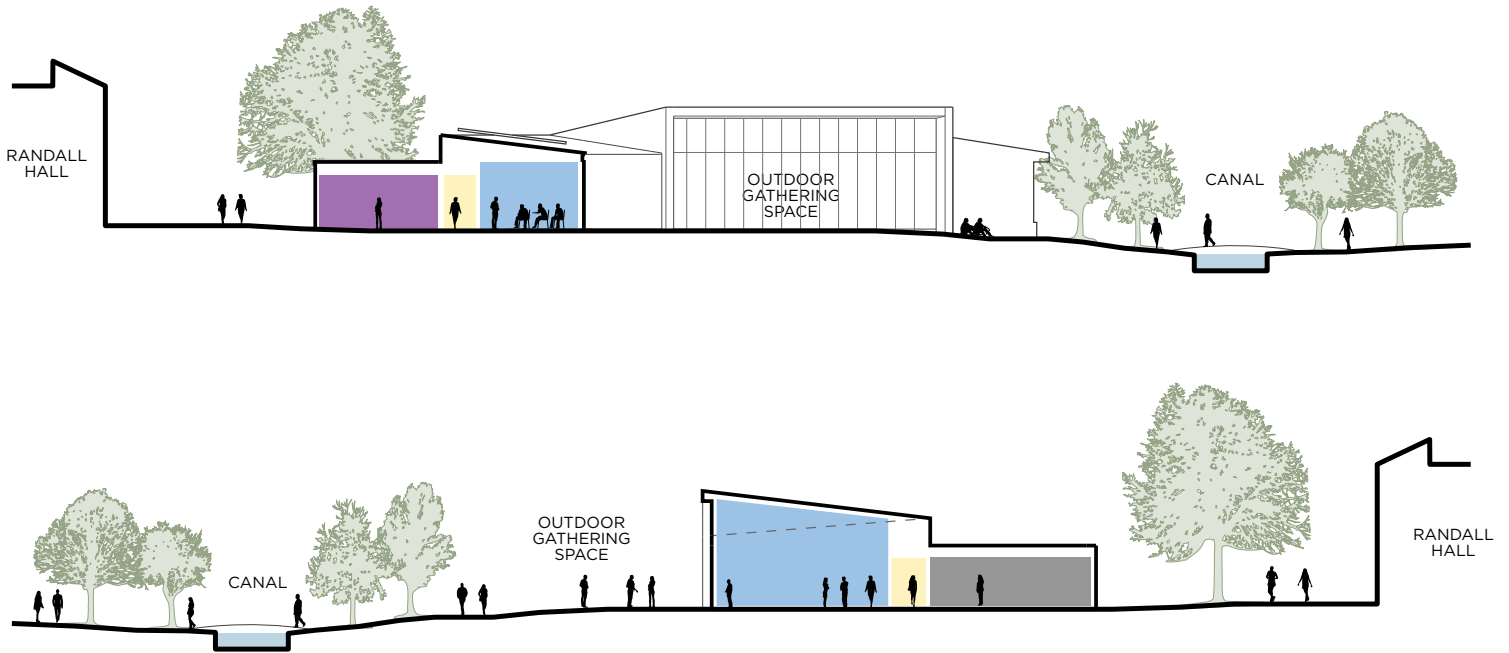
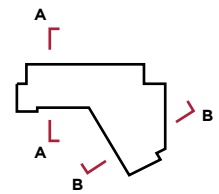


Figure 4.4
Site Sections



BUILDING CONFIGURATION

The proposed building is a one-story structure at approximately 19,560 GSF. The L-shaped configuration optimizes solar exposure while creating a defined outdoor space facing the campus green and creating a visual presence of the building to pedestrian walkways along the canal.

	Code	Space Type	Qty.	Occ. / Space	ASF	Total ASF
General Use	610	Assembly Space (small)	1	65	1,050	1,050
	610	Assembly Space (large)	1	135	2,100	2,100
	635	Warming Kitchen	1	6	300	300
	110	Classroom	2	45	900	1,800
	615	General storage	1	0	300	300
		Sub-total	6	251		5,550
Student Center	650	Entry/Reception	1	5	150	150
	410	Quiet Study Areas	1	15	375	375
	680	Small Team Study / Tutoring Room	5	6	120	600
	410	Large Team Study / Meeting Room	2	8	180	360
	610	Reflection Room (w/ Ablution Station)	2	8	300	600
	650	Student Lounge / Living Room	1	30	450	450
	655	Student Kitchenette	1	4	200	200
	635	Food Pantry	1	6	200	200
	635	Food Pantry Staging	1	1	75	75
	655	Laundry	1	1	75	75
	655	Student Lockers	1	0	50	50
	615	Large Lockers for Org. Storage	1	8	400	400
	610	Wellness Room	1	1	80	80
		Sub-total	19	93		3,615
Workspace	310	MCC Program Manager	1	1	80	80
	310	Office (DEC)	3	1	80	240
	310	Workstation (DEC)	7	1	64	448
	310	Workstation (ESC)	11	1	64	704
	310	Office (Interdisciplinary Studies)	6	1	80	480
	310	Office (Dean of Undergraduate Studies)	1	1	150	150
	310	Workstation (Dean of Undergraduate Studies)	1	1	64	64
	350	Conference Room (small)	1	6	120	120
	350	Conference Room (large)	1	10	180	180
	310	Hoteling Office / Private Meeting Room	1	2	80	80
	315	Break Room / Copy / Storage / Files	1	0	250	250
		Sub-total	34	25		2,796
		Net Assignable Sub-total				11,961
Building Support	655	Storage, Shipping and Receiving	1	0	750	750
	655	Recycling Room	1	0	75	75
	675	Bicycle Storage	1	0	75	75
	675	Shower Rooms (Gender Neutral)	2	1	120	240
	-	Circulation			30%	3,588
	-	Mechanical			10%	1,196
	-	Electrical			6%	718
-	Building Gross Factor			8%	957	
		Gross Building Total SF		370		19,560

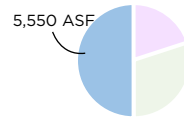
Each space can, and should, contribute to a sense of calmness, safety, dignity, empowerment, and well-being for all occupants.

OCCUPANCY

The verified program accounts for a total of 370 occupants in the new Multi-Cultural Center. This includes occupants in all programmed spaces throughout the building, including the Multi-Purpose assembly rooms.

Figure 4.5
MCC Proposed Space Program

NATURE OF SPACE



Approximately 50% of the total assignable space will be used for General Use Space.

The General Use category is comprised of two event spaces and two classrooms along with a warming kitchen to support events and gatherings.

Each of the event and classroom spaces engage with the planned exterior gathering space.

Engagement with the outdoors and the potential for a mass timber structure will position the Multicultural Center to employ biophilic design principles such as:

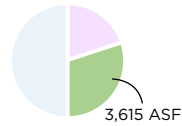
- Visual Connection with Nature
- Material Connection with Nature
- Prospect

Furnishings for the General Use spaces will support the programmatic needs of the events and pedagogy planned for the spaces:

- The furnishings will be functional, flexible, and durable and of the appropriate level of finish and quality for engagement with the outside community
- Agency and ease of configuration will be paramount in order to design spaces able to accommodate a wide range of uses
- Furnishings in the classrooms should include flip-top nesting tables on casters with power at the work surface, and armless height adjustable swivel chairs.
- Student connectivity will be supported by wireless access points and integrated power ports within walls and furniture.
- The level of finish in the event spaces will be appropriate for engagement with the outside community while the classrooms will meet or exceed campus design standards for modern learning, teaching and convening.
- Finishes for these spaces will focus on material transparency and durability while supporting the activities necessary to support the program.



*Figure 4.6
Event Space at University of Florida
Institute of Black Culture*



Approximately 30% of the total assignable space will be used for Student Center Space

The Student Center category is comprised of a Student Lounge/"Living Room", Kitchenette, open and enclosed study, Food/Clothing Pantry, Laundry, Wellness and Reflection Rooms, and Student Lockers.

The Living Room and Kitchenette are situated at the main entry with views/access to the planned exterior gather space and will serve as the heart of the building and will provide a variety of "postures" for study, lounge, and collaboration.

The Reflection Rooms each have an ablution station and are located on the east end of the building and should face East.

The remainder of the Student Center space is combined in a central location between the classrooms and event spaces with access and views to the planned exterior gathering space.

Furnishings for the Student Center spaces will be flexible and comfortable, to create a welcoming and inviting space, offering a wide variety of choice from casual lounge chairs and ancillary tables to seated height tables and chairs as well as standing height tables and stools for more short-term postures; access to power and/or data will be paramount and it will be determined at a later date to what extent the furniture will play a part in that access; the ultimate goal is the ability for the students to make the space their own.

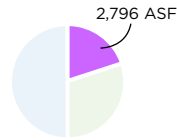
Finishes for these spaces will focus on material transparency and durability while supporting the activities necessary to support the program.



*Figure 4.7
Living Room at University of Florida
Institute of Hispanic and Latino Cultures*



*Figure 4.8
Kitchenette at University of Florida
Institute of Hispanic and Latino Cultures*



Approximately 20% of the total assignable space will be used for office functions

These functions are supported by office and meeting spaces for student serving and dedicated academic programs located within the building:

- MCC Program Office
- Diversity and Equity Center Office
- Equity and Services Council Office
- Interdisciplinary Studies (academic)
- Undergraduate Studies (academic)

Office functions occupy the space along the north side adjacent to the classrooms and southeast end of the building adjacent to the event spaces, and support open and enclosed office typologies to promote efficient use of space and collaborative and inclusive working environments for students and staff.

Furnishings for the office areas should accommodate a non-handed kit-of-parts in order to offer the widest variety; offices and workstations should be based on function in order to make future moves/adds/changes seamless and easy

Finishes for these spaces will focus on material transparency and durability while supporting the activities necessary to support the program. Finishes will reflect regional, historical materiality while providing opportunities to reference student diversity within pattern and color.



*Figure 4.9
Reception and workstations at University of Florida
Institute of Black Culture*

SPACE NEEDS ASSESSMENT

This report documents process and the specific space requirements that will shape the Multi-Cultural Center at CWU. During the predesign study, staffing counts, space allocations, building planning, adjacency concepts, and site test-fits have been verified and explored to inform future project design decisions.

Tours of existing spaces provided an understanding of existing operations and highlighted areas and opportunities for improvements. Multiple stakeholder meetings with student groups and staff further refined the space and operational requisites.

The assessment of space requirements accounts for current staffing with a perspective toward the future for flexibility of growth and operational changes. The space program reflects the size, quantity, and operational requirements for all necessary areas. The development of the program, proposed building organization, and planning test fits have been based on the Office of Financial Management's State Facility Space Use and Guidelines to right-size required spaces, and supplemented by industry standards for space planning.

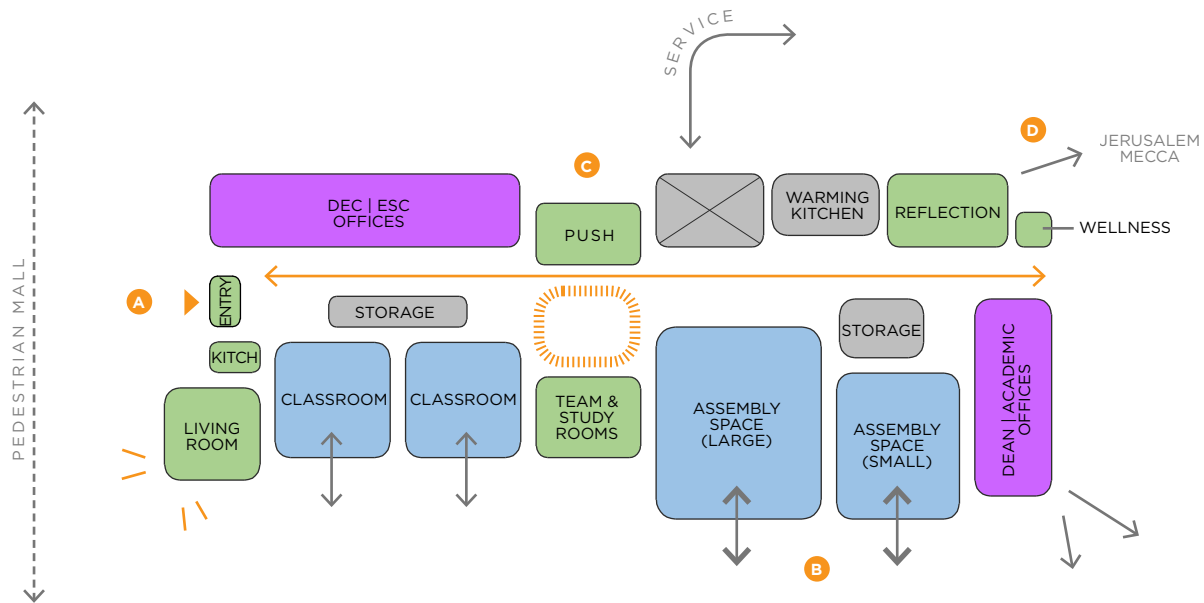
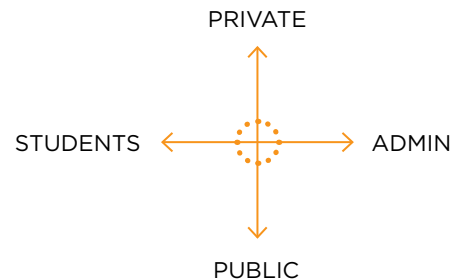


Figure 4.10
MCC Program Blocking Diagram

PROGRAM ORGANIZATION

This conceptual program organization provides a preliminary solution that informs how the building should be sited.

- A. The main entry, located on the west side of the building facing the pedestrian mall, provides visibility and a clear point of entry
- B. Event spaces and classrooms facing the outdoor gathering space promotes the opportunity for an inside-outside relationship and visibility from campus open space
- C. The food pantry and basic needs space is centrally located in the building while accessible from a separate entry and loading dock.
- D. Private spaces such as the reflection room and wellness room located at the end of the building provide quiet areas with access to daylight, views and facing the direction required for prayer.



During planning, it was noted that a wide variety of space typologies are included in the anticipated MCC. These typologies may converge within the spectrum that provide the opportunity to consider a “mixing zone” for occupants, while providing for divergent functions to maintain separation where functionally necessary.

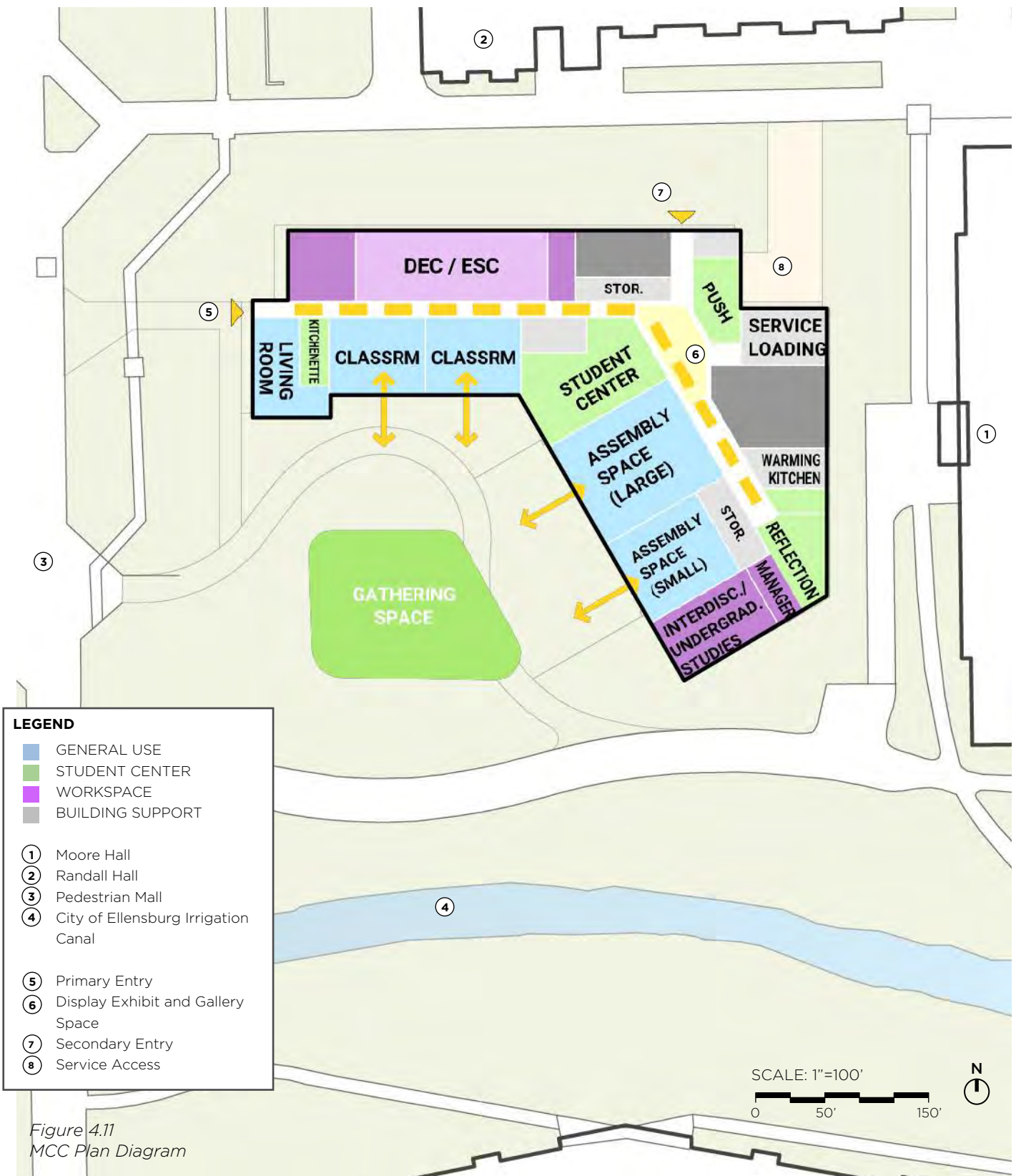


Figure 4.11
 MCC Plan Diagram

EXPERIENTIAL GRAPHICS

The presence of experiential graphics within the new Multi-Cultural Center space will be both a source of pride for day-to-day users and can be used as a tool during recruitment visits. The content of the graphics can range from highlighting school brand, recognizing student achievement, and paying tribute to prestigious alumni. This can be realized in the form of two-dimensional applied vinyl wall graphics, 3D installations, digital screens, and/or display cases for curated memorabilia. The aesthetic of this layer of the project is some of the most visible and impactful elements of the facilities design.

Developing the graphics for the CWU Multi-Cultural Center is a team effort and an opportunity for faculty, students, and selected alumni to participate in visioning sessions and initial design conversations. When various user groups will be using a space together, having the opportunity for all to be heard and their story to be told is critical to the success of the project.

BIPOC themed graphics, artwork and cultural elements will reflect equity objectives and are intended to be created by members of under-served groups.



Figure 4.12
Wall graphic at University of Florida
Institute of Black Culture



Figure 4.13
Traditional arts of tribes in the Plateau region include geometric designs and colors that depict cultural attributes

4B.

SITE ANALYSIS

SITE CIRCULATION

The massing approach provides for optimization of solar orientation with taller, larger volumes facing outdoor space, and an efficient programmatic layout for modular spaces such as offices, meeting rooms and support spaces.

Exterior circulation enhancements promote increased pedestrian experience and vibrancy along the canal and stretching east from the expanded Campus Green. Universal access for all campus visitors will ensure that all are able to enter and enjoy the services and programs within. Anticipated service access is available from the east and north, with limited vehicular access.

GREEN SPACE AND NATURAL AMENITIES

The 2018 Landscape Plan does not identify special treatment or preservation of adjacent open spaces, however the Campus Green and Ellensburg Water Company Irrigation Canal are major organizing elements that contribute to the unique character of large, dominant buildings sitting in a field of green. The 2019-2029 Capital Master Plan has identified an objective to restrict access to banks of the irrigation canal and the canal itself, in order to promote the safety and students, employees, and visitors to campus.

SITE MITIGATION

The 2019-2029 Capital Master Plan identifies flooding control and access on the Ellensburg Water Company Irrigation Canal, as well as the renovation of buildings north of the canal for seismic refitting, ADA compliance, HVAC upgrades and energy efficiency. It also specifically identifies the opportunity to replace the International Center facility.



Figure 4.14
Site Plan Diagram

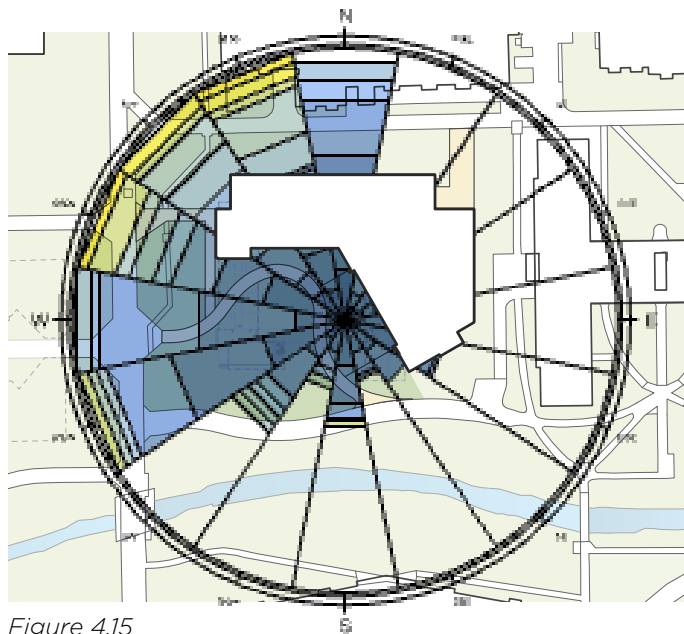


Figure 4.15
Prevailing Winds

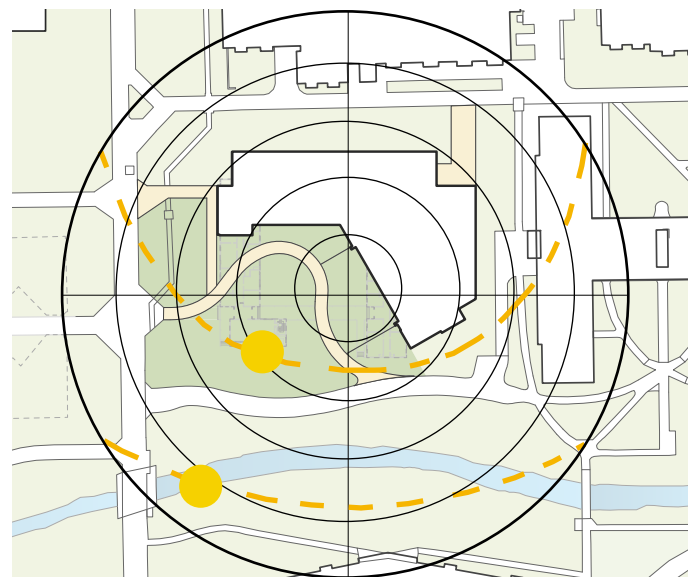


Figure 4.16
Solar Study

SITE ANALYSIS (CONT'D)

WATER

Domestic water service for the proposed building is available from an existing line to the north, which crosses through the northeast corner of the site to service Moore Hall.

Irrigation is existing and supplied via City of Ellensburg.

STORMWATER REQUIREMENTS

The proposed project will comply to CWU's Stormwater Management Program Plan which is permitted under the Eastern Washington Phase II Municipal Stormwater Permit and seeks to prevent or minimize stormwater pollution. Increased site permeability, vegetation and providing educational elements such as signage to increase campus community awareness of stormwater mitigation strategies is recommended and encouraged.

SURROUNDING NEIGHBORHOOD

The proposed site is central to the interior of campus and is not adjacent to public arterials or campus boundaries. The project will require substantial demolition of the existing facility on site. Abatement of hazardous materials will be required prior to demolition. Disruptions to adjacent buildings will be minimal, as site and demolition preparations can be isolated and scheduled during breaks in the academic calendar, to reduce campus impacts to operations and maintain student and staff health and safety.



*Figure 4.17
Canal greenspace, southeast of proposed site*

SITE SETBACKS

The proposed building setbacks adhere to the CWU Campus Master Plan guidelines for central campus which aim to define campus open spaces and enhance the pedestrian experience.

North and East Setback (50 Feet)

The proposed building is set back from Randall Hall to the north and Moore Hall to the east to maintain important access points and maintain flexibility for open space between this proposed building and a future replacement of Randall Hall.

West Setback (70 Feet)

The proposed building is set back from the existing pedestrian mall that extends E 11th Ave and E Dean Nicholson Blvd along the campus green, at approximately at the location of the existing International Center, clearing existing steam and chilled water lines which run parallel to the pedestrian mall.

South Setback (80-160 Feet)

The Ellensburg Water Company Irrigation Canal runs along the south edge of the proposed building site and is an iconic landscape feature of the campus, contributing to the character and beauty of the site. The proposed building setback varies from the banks of the canal to open up views of the campus green from the building and create an outdoor space connected to the adjacent open space along the canal. Pedestrian paths to connect to existing walkways that follow along the north side of the canal are proposed to bring pedestrians towards the building and increase its visibility and activity.

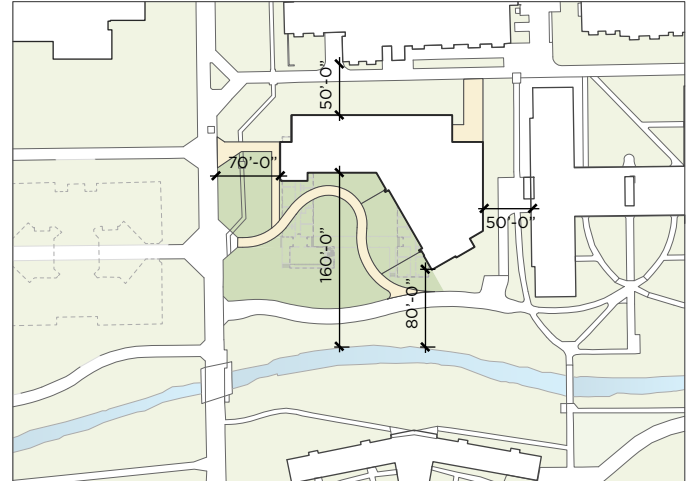


Figure 4.18
Site Plan, setback dimensions

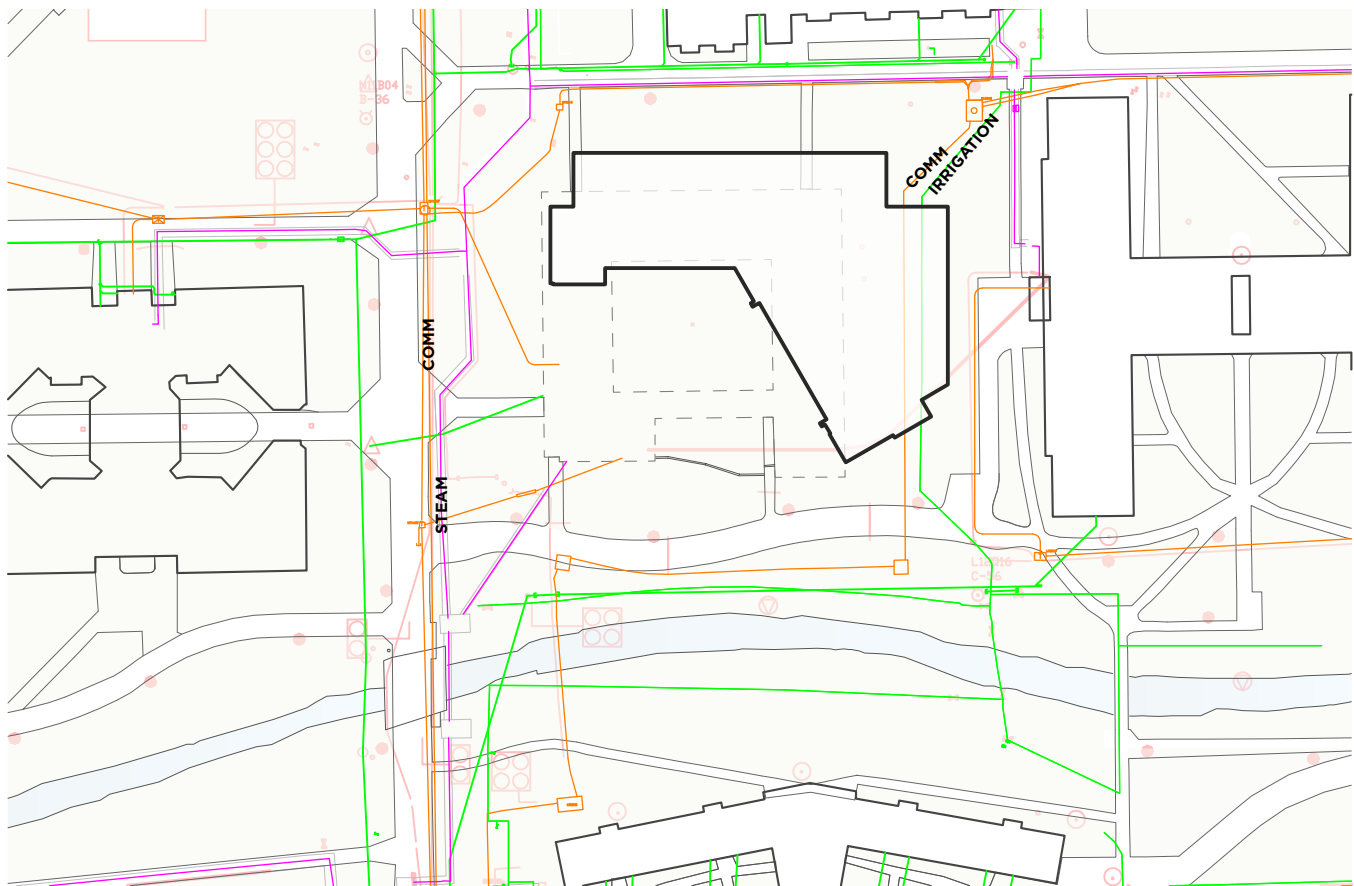


Figure 4.19
Below-Grade Utilities Site Plan

SCALE: 1"=200'



0 100' 300'

UTILITIES

- A concrete steam utility trench with an accessible lid traverses the west and north end of the site. Steam is serviced via a concrete utility trench to the southwest corner of the building. It is recommended that removal of the building from the steam system removes the utility tunnel back to the vault southwest of the existing building.
- A chilled water mains traverse the west and north end of the site. Currently no chilled water services the building, and the new building footprint is not anticipated to require relocation of existing utilities. New chilled water service to the building will be required for cooling.
- Sanitary sewer currently leaves the building to the west.
- Storm drain currently leaves the building to the west and the south.
- Domestic water traverses the site to the north and angles at the northeast corner of the site to service Moore Hall. Relocation may be required depending on the final location of the building.
- Buried campus owned primary power lines traverse the western and eastern boundaries of the site. The exiting lines do not appear to be in conflict with the location of the building. New buried primary service lines will be installed to extend the existing campus infrastructure for service to the building.
- Buried communications lines traverse the eastern edge of the site. Relocation may be required depending on the final location of the building. New buried comm service lines will be installed to extend the existing campus infrastructure for service to the building.

ENVIRONMENTAL IMPACTS

There are no known significant site mitigation or acquisition issues. The existing site has no known environmentally sensitive conditions.

The 2018 Landscape Plan does not identify special treatment or preservation of adjacent open spaces, however the Campus Green and Ellensburg Water Company Irrigation Canal are major organizing elements that contribute to the unique character of large, dominant buildings sitting in a field of green.

The closest open water distribution system is the Ellensburg Water Company Irrigation Canal easement for private irrigation water use. The canal runs full during spring, summer and early fall months. The 2019-2029 Capital Master Plan has identified an objective to restrict access to banks of the irrigation canal and the canal itself, in order to promote the safety and students, employees, and visitors to campus. The 2019-2029 Capital Master Plan identifies flooding control and access on the Ellensburg Water Company Irrigation Canal, as well as the renovation of buildings north of the canal for seismic refitting, ADA compliance, HVAC upgrades and energy efficiency. It also specifically identifies the opportunity to replace the International Center facility.

Environmental Permits

It is anticipated that the environmental review will result in a SEPA determination of non-significance for the project. As with any project disturbing more than 500-cyd of soil, a City of Ellensburg Site Development and storm water permit, and NDPES Permit from Washington Department of Ecology will be required.

Hazardous Materials Inventory

Past records do not identify any below-grade tanks or other hazardous substances on the site. The existing facility does contain limited quantities of asbestos-containing materials and lead paint, which will be bated prior to demolition.

Parking

This facility does not replace or require additional parking beyond existing capacity provided in nearby lots.

Access Analysis

The site is currently only accessible by pedestrian/bicycle from all directions. There is no vehicular access to the site, with the exception of the drivable path along the western edge extending north to E Dean Nicholson Blvd.

The site does not pose significant grades, and all building pathways and entrances will have easy compliance with accessibility regulations.

Archeological Assessment

The site has been developed since 1948. There have been no archeological or historical issues uncovered during execution of previous work therefore detailed assessment for the planned development is not anticipated.

Construction Access

Access to the site is possible from the north (E Dean Nicholson Blvd), with limitations due to primary pedestrian circulation routes, existing structures and the Ellensburg Water Company Irrigation Canal. There is ample room for contractor laydown and staging directly adjacent to the site.



Figure 4.20
CWU Campus Master Plan Zones

4C. LONG-TERM PLANS

This project meets objectives set out in the 2019-2029 Capital Master Plan that continue the commitment to standardize security systems, expansion of campus heating and cooling capacity, and elimination of backlogs in maintenance needs.

This project also supports the neighborhood vision for the Central Campus through the following objectives:

- Control flooding and access on the Ellensburg Water Company Irrigation Canal
- Renovate buildings north of the canal for seismic refitting, ADA compliance, HVAC upgrades, and energy efficiency
- Replace the International Center
- Create storage space

In addition to the physical planning at CWU, in May 2022, the CWU Board of Trustees approved the final Vision and Mission statements that align with the strategic vision for the Multi-Cultural Center.

Additional town and gown considerations are made through participation with planning efforts between CWU and the City of Ellensburg as well as Kittitas County.

The development of buildings and grounds is guided by the CWU Capital Master Plan. Master plans attempt to project facility needs by considering enrollment, technology, and pedagogical and research trends; plans analyze the goals, age and condition of existing facilities and project the needs for new ones. The outlook of the plan is ten years, but finance, teaching and learning needs, and other factors evolve much more rapidly than a decade-long vision can anticipate, so the plan is updated biennially or quadrennially. The last update to the plan was in 2018.

The 2019-2029 CWU Master plan states that, “Need is especially critical for space to accommodate student organizations and multicultural activities.” The plan also references the need to replace the International Center, “built in 1948 as a residence hall and remodeled in 1970 to house international programs .”

Soon CWU will undertake a comprehensive update of the Capital Master Plan and will articulate at greater length and in greater detail the justification for and description of a multicultural center.

The current master plan also cites the following overarching planning priorities:

- **Aesthetics:** Seek opportunities to screen or soften utility and materials-handling areas. Look for opportunities to preserve and enhance the quality and variety of green space. Support the expansion, variety, and accessibility of artistic elements in the landscape. Make campus borders safer, easier to maintain, and more consistent aesthetically by targeting for purchase strategic properties adjacent to campus. Establish consistent, visible, and attractive entrances to campus along city thoroughfares.
- **Pedestrian Access:** Provide ADA, pedestrian, and bicycle access along arterial pathways. Circulation paths that flow with overall campus circulation should continue through buildings. Functions and facilities should be located to minimize the need for vehicle traffic on campus. Make features that serve both the university and the larger community accessible to both. Maintain campus compactness to ensure that students can walk from one building to another in about 10 minutes.

- **Sustainability:** Promote energy conservation to support sustainability and cost efficiency. Use space efficiently, adding new gross square footage only when necessary. Building design and materials should be consistent, meet sustainability standards, and complement campus setting and regional climate. Open space outdoors should provide a respite from intellectual pursuits, provide inviting space for solitude or socialization, and feature interesting, diverse, well maintained plant life as well as complementary hardscapes.

The Capital Master Plan calls out the need for facilities specially design to serve multicultural education and literacy, noting “Need is especially critical for space to accommodate student organizations and multicultural activities” (p. 19). Priorities for teaching and learning include the objective, “provide greater flexibility in design of space in support of redesigned educational programs that suit the needs of diverse learners and a changing economy” (p. 36). The plan is designed to support the vision of the university as an “inclusive environment that promotes engaged learning and scholarship.” The plan acknowledges the need for employees and students to feel physically, professionally, and emotionally safe in order to fully engage in and benefit from the university.” Providing that environment is precisely the purpose of the Multi-Cultural Center.

Pending the initiation of a new master planning effort to determine the highest and best use of development sites across campus, additional sites may be considered worthy of additional study. However, further strategic direction will need to articulate why and how a site will best support the functions of the MCC at CWU.

4D. CONSISTENCY WITH LAWS & REGULATIONS

HIGH PERFORMANCE BUILDINGS

Central Washington University has a proven track dating back to 2007 of designing and constructing high-performance buildings using the LEED rating system. This project will utilize design consultants who embody CWU's sustainability objectives.

This project will be designed, constructed, and certified to the LEED Gold Standard in accordance with RCW 39.35D and the University's internal goals.

CWU has a goal to achieve LEED Gold , and the design team will do everything to achieve that. The team will also consider using a target-value design approach to determine the criteria for evaluating design decisions that will impact building and budget performance for the project, and the potential to achieve performance beyond LEED Gold .

A LEED Checklist, outlining a preliminary approach, has been included in the Appendix.

STATE EFFICIENCY AND ENVIRONMENTAL PERFORMANCE (EXECUTIVE ORDER 20-01)

The Governor's Executive Order 20-01 mandates high performance buildings for reduction of greenhouse gases, reduction of pollutants from fossil fuels, and the use of clean energy when technically and economically feasible. Central Washington University recognizes that the costs of constructing zero energy, or zero energy capable buildings is becoming closer to that of conventional buildings and will continue to advance their building construction towards this mandate using life-cycle cost analysis tools for decision making in the design process.

CWU has adopted an energy policy that supports the educational mission of the university, since the educational process is dependent upon a controlled environment, which utilizes energy. It is structured to provide adequate environmental quality while minimizing expenditures of energy. See CWU's Greenhouse Gas Emissions Reduction Strategy Report for specific energy policy details.

STATE STANDARDS FOR CLEAN BUILDINGS (RCW 19.27A.210)

Department of Commerce, through RCW 19.27A.210, has developed standards for reducing greenhouse gas emissions from the building sector as published in the Washington State Clean Buildings Performance Standard (2021). The Clean Building Standard has established energy use intensity targets. This building is anticipated to be under 20,000 square feet, and as a result is not required to comply with the Clean Building Standard.

The recently adopted 2021 Edition of the Washington State Energy Code will go into effect in July of 2023. The project will be in compliance with the State Energy Code in place at the time the building is permitted. With outcome-based targets, increasingly more stringent energy code requirements and mandated elimination of fossil fuels, public facilities will be on pace to achieve reductions of energy and associated greenhouse gas emissions as established for the state in the Greenhouse Gas Emissions Policy.

The energy policy supports the educational mission of the university, since the educational process is dependent upon a controlled environment, which utilizes energy. It is structured to provide adequate environmental quality while minimizing expenditures of energy. See CWU's Greenhouse Gas Emissions Reduction Strategy Report for specific energy policy details.

While it is not required that the building meets the net zero standards it is possible to achieve this, and the project team will assess the additional cost that would be associated with this choice. If net zero is not achievable within the project budget, the building will at least be designed to be net zero ready.

OTHER LAWS OR REGULATIONS

The Multi-Cultural Center is expected to comply with all local, state, and federal codes and regulations. At a minimum, a list of the codes should be followed:

- Accessibility: ADA, Accessible and Useable Buildings and Facilities, ICC/ANSI A117.1, current Washington State required edition;
- Air Quality: International Mechanical Code, latest edition with Washington State amendments, WAC 51-52;
- Building: International Building Code, latest edition, with Washington State amendments, WAC51-50;
- Electrical: National Electric Code, current Washington State required edition, WAC 296-46B;
- Energy: Washington State Non-Residential Energy Code, latest edition, WAC 51-11;
- Fire: International Fire Code, latest edition, with Washington State amendments, WAC 51-54;
- Mechanical: International Mechanical Code, latest edition with Washington State amendments, WAC 51-52;
- Plumbing: Uniform Plumbing Code, current Washington State required edition with amendments, WAC 51-56, 57;
- Seismic: American Society of Civil Engineers Minimum Design Loads for Buildings and Other Structures, ASCE 7-16; and
- Sustainability: High Performance Buildings, RCW 39.35D.

Additionally, MCC is expected to comply with the following standards:

- American Society of Heating, Refrigeration and Air Conditioning Engineers (ASHRAE)
- American Society of Plumbing Engineers
- ASHRAE Standard 55- Thermal Comfort
- ASHRAE Standard 62.1 - Ventilation for Acceptable Indoor Air Quality
- Sheet Metal Contractors Association of North America

DEPARTMENT OF COMMERCE GREENHOUSE GAS REDUCTION (RCW 19.27A.210)

The Department of Commerce, through RCW 19.27A.210, has developed standards for reducing greenhouse gas emissions from the building sector. These standards include energy efficiency targets by building type/use. These standards currently cover buildings over 50,000 square feet. A newly constructed building will be required to have energy performance that exceeds these amounts by 15% or greater. This building is currently programmed at less than 20,000 square feet, and although not required will target having an energy use index in alignment with the current requirements outlined in RCW 19.27A.210.

Where new parking is provided at the building, infrastructure for electric vehicle charging stations shall be provided for 10% of the offices in the building. The electric vehicle charging station infrastructure shall meet Level 2 charging capacity requirements with each charger rated for 40 amps at 208V, 1PH.

GREENHOUSE GAS EMISSIONS REDUCTION POLICY (RCW 70A.45.050)

The referenced Revised Code of Washington regarding the greenhouse gas emissions reductions requires all state agencies to reduce greenhouse gas emissions as follows:

- By 2020 to 1990 levels
- By 2030 to forty-five percent below 1990 levels
- By 2040 to seventy percent below 1990 levels
- By 2050 to ninety-five percent below 1990 levels

A key part of the University's strategy toward reducing greenhouse gas emissions is the reduction in the use of fossil fuels for building energy and power. This inclusion of energy-conserving HVAC and electrical systems in this proposed new facility is the best way for the project to assist in the goal of reducing overall campus use of fossil fuels. Since major capital projects are typically the greatest consumers of energy on a campus, discovering ways to make the new facility a lower energy consumer will be especially significant.

This project intends to comply with these goals first by reducing energy use through sensible building optimization strategies and energy conserving mechanical and electrical systems. Secondly this project will not utilize fossil fuels in the primary heating and cooling of this building. Also, this project will comply with the recently adopted energy code and will utilize a newly planned central campus geothermal heat pump heating water system for heating, localized heat pumps for domestic hot water, and chilled water from a high efficiency central campus chilled water system.

REDUCTION OF ANNUAL PER CAPITA VEHICLE MILES (RCW 47.01.440)

This project does not propose any improvements to existing parking lots or access roads, and is only accessible by pedestrians and bicycles. The use of campus is not changing due to construction of this building, and limited additional staff are coming to the new building. No additional parking is being added.

Existing parking will be provided to contractors for lay-down area during construction, but will be returned to the facility upon completion.

ARCHEOLOGICAL AND CULTURAL RESOURCES

International Center (formerly known as Kennedy Hall) has been reviewed by the Department of Archaeology and Historic Preservation (DAHP) and determined to be ineligible for listing on the National Register of Historic Places. Detailed archaeological assessment for the planned development is not anticipated. See Appendix E for Cultural Resources correspondence from DAHP.

COMPLIANCE WITH PLANNING UNDER CHAPTER 36.70A RCW AS REQUIRED BY RCW 43.88.0301

The proposed project is identified in and coordinated with CWU 2019-2029 Capital Master Plan. The proposed site is located entirely within the campus boundary and not adjacent to public arterials or neighboring uses.

4E. PROBLEMS FOR FURTHER STUDY

As part of a separate project, Central Washington University will be building a new open-source geothermal heating plant. The heating plant will generate heating hot water for building heating and domestic hot water generation. Funding for this new central plant will be requested separately from this project, and is the primary source of heating and domestic hot water generation for this project. If this central plant is not funded alongside this project, an alternative means of heating and domestic hot water generation for the building will be required.

4F. DISTINGUISHABLE COMPONENTS

Mass Timber Construction

Mass timber construction as a structural option for the project would distinguish it from typical buildings of similar occupancy on the campus. The use of Composite Laminated Timber (CLT), for main columns, beams and roof panel construction can be utilized as innovated construction helping to lower the overall carbon footprint of the structure and highlight sustainability in the project. Depending on future code cycle changes, CLT shear walls may also be available as the lateral framing elements as well.

Net Zero Energy

CWU does not yet have a net zero building on campus, so targeting a net zero building would be the next step in a history of environmental progress on the campus. Students in the Construction Management department have designed a net zero building in the past for a competition. It would be of educational benefit to students in several programs, such as Integrated Energy Management, to be able to study such a building in operation and see how behavior impacts the performance of the building.

4G. IT INFRASTRUCTURE

Campus owned outside plant cabling will be provided to the building from the existing campus IT infrastructure. New site communications pathways will be provided to connect the new facility to the existing site utility pathways near the site. Communications rooms will be located throughout the new facility in accordance with EIA/TIA 568 and 569. The main telecom room will be centrally located on the ground level of the building. Additional secondary communications rooms will be provided as needed to ensure that all station cabling distances will be less than 295 feet from the nearest closet. Cable trays will be provided at accessible ceilings on each floor to support horizontal cabling distribution. Design will follow CWU design and construction standards where applicable.

4H. SECURITY

Building Access

- Due to the dual operational nature of the building's intended use—both faculty and students will be in the space at varying hours of the day— it is recommended that a closer look be given to building security.
- The students require extended access to the Living Room, Kitchenette, Reflection Room, Study Spaces, PUSH Pantry, and Multipurpose spaces. These space functions are broadly open to the student body and the public.
- The faculty-run spaces, such as offices, meeting rooms, classrooms, and building support, will need to be secured after business hours.
- Both student space and faculty space can be secured through access control given to the users based on their affiliation with the university. Additional measures can include a timed schedule for opening/locking the open living room space, the multi-purpose living rooms, and the classrooms.

4I. BUILDING COMMISSIONING

A third-party commissioning agent, hired directly by Central Washington University, will conduct the project commissioning in compliance with WAC 51-115C-4801 and LEED requirements for energy and water-consuming systems. The consultant will be a member of the Building Commissioning Association and the U.S. Green Building Council. The consultant will act as the University's Commissioning Authority for the project. Commissioning services will enhance the facility's value, increase maintainability, save energy, and improve indoor environmental quality and comfort for the building occupants. In addition to the commissioning requirements identified in the Washington State Energy code, the commissioning agent will have the responsibilities of:

- Development of a commissioning plan.
- Identification of all the roles of the project members, including the University, the Architect/Engineering Consultants, sub-consultants, contractors, and sub-contractors.
- The plan will identify the needs of Central Washington University to ensure that functional building requirements are met and to establish the project design intent.
- The commissioning process will begin in the early phases of design and continue through construction to final completion, final acceptance, and the warranty phase.
- Commissioning services will include but not be limited to the following areas of the building operations: energy monitoring, building automation and energy management systems, heating, ventilating and air conditioning systems, light controls, plumbing, domestic heating water system, HVAC heating and cooling systems, building enclosure, and renewable power systems.
- If the net zero option is pursued then ongoing commissioning should be implemented to ensure that the net zero target is achieved

4J. FUTURE PHASES

There are no future phases or projects for the Multi-Cultural Center identified at this time that would impact Central Washington University's preferred alternative.

4K. DELIVERY METHOD & PROJECT MANAGEMENT

The proposed delivery method will be conventional design-bid-build, this is CWU's preferred method which has proven most cost-effective for construction.

Michelle DenBeste, Provost and Vice President of Academic and Student Life, is the responsible party on behalf of CWU for the Multi-Cultural Center project. The Vice President of Operations is responsible for overall facilities organizational management. The Operations Division provides oversight of programming, pre-design, cost estimating, design and construction services for building alterations, new construction, and grounds improvements for the CWU Ellensburg campus.

The university's Capital Planning and Projects Department will manage all aspects of the design and construction processes for this project. Project managers organize and administer the work of outside design consultants and public works contractors. They follow projects all the way through construction and work closely with clients, project architects, designers and consultants to ensure projects are on time and within budget. Project management staff have coordinated more than \$40 million in state- and university-funded capital projects over the past ten years, delivering each project on time and experiencing no cost overruns.

Joanne Hillemann, Senior Architect, will oversee the Multi-Cultural Center project on behalf of CWU's Capital Planning and Projects Department. The cost for CWU's management of the design and construction is included in the Project Cost Estimate form.

4L. SCHEDULE

- Budget Approval: May 2023
- Design: Sept '23 - Feb '24 (7 mos)
- Design Approval: February 2024
- Building Permit: Mar '24 - May '24 (3 mos)
- Value Engineering and Constructability Review: Jan '24 - Feb '24 (1-1.5 mos)
- Bid: June '24 (1 mo)
- Construction: June '24 - June ' 25 (12 mos)
- Construction Mid-point: December 2024
- FF+E Installation: July '25 - Aug '25 (2 mos)
- Occupancy + Full Operation: Sept 15, 2025

The construction of MCC will be conducted in a single phase, including demolition of the existing facility on site. Staff will be permanently relocated from the existing facility to elsewhere on campus. Asbestos abatement will be conducted prior to demolition of the existing facility.

The existing site will include an environmental analysis report. The design team should also consider testing for ground contamination, in addition to a new survey and geotechnical report. It is recommended that the team include a plan for mitigation of any hazardous substances found in the ground, such as radon.

Construction traffic will be managed along E Dean Nicholson Blvd.

Design review with CWU campus representatives, as well as campus community stakeholder meetings will continue throughout design to ensure alignment with the MCC values and objectives developed over the past several years. Local regulatory jurisdictions will be contacted early in the design phase to ensure alignment with applicable codes and regulations.





05

**PROJECT BUDGET
ANALYSIS FOR
PREFERRED
ALTERNATIVE**

5A. COST ESTIMATE

BASIS OF ESTIMATE AND ASSUMPTIONS

The Multi-Cultural Center will be of permanent construction type and exceed all current codes and standards. Construction will be of a high quality but reasonable cost, with a projected life span exceeding 40 years. The proposed project will be constructed to achieve a minimum of LEED Gold sustainability certification.

The following general assumptions have been made as the basis for the MCC preferred alternative project budget:

- The building will be constructed in a single phase;
- A start date of June 2024
- A construction period of 12 months
- The project delivery method will be Design/Bid/Build
- Pricing assumes a minimum of (3) bidders in all trades
- There will not be a small business set aside requirements
- The contractor will be required to pay prevailing wages
- A formal project specific topographic or geotechnical investigation for the preferred International Center site has not been completed. Subgrade soil conditions are assumed to be similar to those as outlined in a close proximity geotechnical report. Geotechnical reports from close proximity indicate that subgrade soils are generally comprised of 2 to 4.5 feet of fill underlain by a 9 to 12-foot-thick stratum of dense to very dense silty, sandy gravel, which in turn is underlain by very dense silty, sandy gravel. Groundwater occurs at depths of 8 to 10 feet.

The expectation is that the project will be designed to be long-lived, durable, and robust with a low expectation of frequent extensive maintenance or equipment failures. The design and construction shall provide an appropriate level of quality to ensure continued use of the building, site infrastructure, major equipment and other systems over their respective service lives with the application of reasonable preventive maintenance and repairs that would be expected from a similar university building.

SUMMARY TABLE OF UNIFORMAT LEVEL II COST ESTIMATE

The CWU Capital Planning & Projects Office developed a Total Project Cost estimate based on the Maximum Allowable Construction Cost (MACC) cost estimate prepared by the consultant.

The outline specifications on the following pages form the basis for construction costs.

See Appendix D for the complete construction cost estimate assumptions developed to provide a basis for the estimated construction cost summary.

5B. PROPOSED FUNDING

It is anticipated that a portion of funding for the project will be provided through the State of Washington by way of the capital budgeting process. The University requests state appropriation for design and construction in the 2023-2025 biennium.

2023-25 Design and Construction =	\$6,000,000
CWU Self Funded	= <u>\$16,797,000</u>
	\$22,797,000 *

C-100 FORM

The state of Washington’s C100 cost estimating model was used as the basis for this estimate, applying to the consultant and project management fees, contingencies and escalation.

STATE OF WASHINGTON AGENCY / INSTITUTION PROJECT COST SUMMARY <i>Updated June 2022</i>		
Agency	Central Washington University	
Project Name	Multi-Cultural Center (International Replacement)	
OFM Project Number	40000123	

Contact Information		
Name	Delano Palmer	
Phone Number	509-963-2906	
Email	Delano.Palmer@cwu.edu	

Statistics			
Gross Square Feet	19,560	MACC per Gross Square Foot	\$573
Usable Square Feet	16,230	Escalated MACC per Gross Square Foot	\$643
Alt Gross Unit of Measure			
Space Efficiency	83.0%	A/E Fee Class	A
Construction Type	Other Sch. A Projects	A/E Fee Percentage	8.95%
Remodel	No	Projected Life of Asset (Years)	
Additional Project Details			
Procurement Approach	DBB	Art Requirement Applies	Yes
Inflation Rate	4.90%	Higher Ed Institution	Yes
Sales Tax Rate %	8.40%	Location Used for Tax Rate	Ellensburg
Contingency Rate	5%		
Base Month (Estimate Date)	June-22	OFM UFI# (from FPMT, if available)	A04244
Project Administered By	Agency		

Schedule			
Predesign Start	May-22	Predesign End	June-22
Design Start	August-23	Design End	April-24
Construction Start	May-24	Construction End	June-25
Construction Duration	12 Months		

Green cells must be filled in by user

Project Cost Estimate			
Total Project	\$20,565,795	Total Project Escalated	\$22,797,032
		Rounded Escalated Total	\$22,797,000

C-100 FORM (CONTINUED)

Consultant Services			
Predesign Services		\$0	
Design Phase Services		\$1,897,801	
Extra Services		\$433,000	
Other Services		\$399,487	
Design Services Contingency		\$136,514	
Consultant Services Subtotal		\$2,866,803	Consultant Services Subtotal Escalated
			\$3,099,868

Construction			
Maximum Allowable Construction Cost (MACC)	\$11,211,308	Maximum Allowable Construction Cost (MACC) Escalated	\$12,569,536
DBB Risk Contingencies	\$0		
DBB Management	\$0		
Owner Construction Contingency	\$2,466,375		\$2,771,960
Non-Taxable Items	\$0		\$0
Sales Tax	\$1,148,925	Sales Tax Escalated	\$1,288,686
Construction Subtotal	\$14,826,609	Construction Subtotal Escalated	\$16,630,182

Equipment			
Equipment	\$161,183		
Sales Tax	\$13,539		
Non-Taxable Items	\$0		
Equipment Subtotal	\$174,722	Equipment Subtotal Escalated	\$196,371

Artwork			
Artwork Subtotal	\$113,418	Artwork Subtotal Escalated	\$113,418

Agency Project Administration			
Agency Project Administration Subtotal	\$1,074,242		
DES Additional Services Subtotal	\$0		
Other Project Admin Costs	\$0		
Project Administration Subtotal	\$1,074,242	Project Administration Subtotal Escalated	\$1,207,341

Other Costs			
Other Costs Subtotal	\$410,000	Other Costs Subtotal Escalated	\$449,852

C-100 FORM (CONTINUED)

Funding Summary

	Project Cost (Escalated)	Funded in Prior Biennia	New Approp Request 2023-2025	2025-2027	Out Years
Acquisition					
Acquisition Subtotal	\$1,100,000		\$1,000,000		\$100,000
Consultant Services					
Consultant Services Subtotal	\$3,099,868		\$1,000,000		\$2,099,868
Construction					
Construction Subtotal	\$16,630,182		\$2,300,000		\$14,330,182
Equipment					
Equipment Subtotal	\$196,371		\$700,000		-\$503,629
Artwork					
Artwork Subtotal	\$113,418		\$30,000		\$83,418
Agency Project Administration					
Project Administration Subtotal	\$1,207,341		\$900,000		\$307,341
Other Costs					
Other Costs Subtotal	\$449,852		\$70,000		\$379,852
Project Cost Estimate					
Total Project	\$22,797,032	\$0	\$6,000,000	\$0	\$16,797,032
	\$22,797,000	\$0	\$6,000,000	\$0	\$16,797,000
	Percentage requested as a new appropriation		26%		

What is planned for the requested new appropriation? (Ex. Acquisition and design, phase 1 construction, etc.)
 Design of a 19,560GSF Multi-Cultural Facility
 Insert Row Here

What has been completed or is underway with a previous appropriation?
 N/A
 Insert Row Here

What is planned with a future appropriation?
 Construction of the 19,560GSF Multi-Cultural Center
 Insert Row Here

A - SUBSTRUCTURE

Structural Building Systems

The building system is anticipated to be a structural steel frame. For an all-steel framing scheme, structural steel weight is anticipated to be approximately 25 pounds per gross square foot of the building.

Gravity framing may alternatively be framed with mass timber except for lateral frames which would remain structural steel (exception noted below). It should be noted that the cost of mass timber construction is particularly sensitive to curved geometries and will generate excess cost for floorplans with curved floorplates due to cutoff waste.

Lateral Force Resisting System

Under the current building code, resistance to lateral forces will be provided primarily by steel concentric braced frames. Lateral forces will be transferred to the braced frames through the roof diaphragm and resisted at grade by the structure's foundation system. Frames should be anticipated at all sides of each wing with an additional pair of frames at the central corner.

Under the current building code there is not a mass timber alternate for the lateral force resisting system. A series of stick framed sheathed shear walls could provide the lateral system but would have the potential to impact architectural floorplans more significantly than a braced frame system. The approval for Cross Laminated Timber (CLT) Shear Walls is anticipated to be approved as part of the 2024 IBC. Following approval, CLT shear walls could be used in place of braced frames to pair with the mass timber gravity system.

Foundations

Shallow reinforced concrete spread foundations are assumed. At the perimeter of the building, a continuous footing or thickened slab edge is anticipated to support below exterior walls. Floor slabs on grade will consist of a concrete slab-on-grade with deformed bar reinforcing over vapor barrier over aggregate/crushed rock base course.

Elevator Pit

Concrete elevator pits will be provided with below grade waterproofing and exterior insulation.

B - SHELL

Floor-to-floor Height

The building is expected to be a single-story structure slab on grade, with a typical minimum height of 12'-0" floor-to-floor and a height ranging from 16'-0" to 22'-0" at the small and large assembly spaces.

Roof Construction

Roof framing will consist of 1 ½" steel roof deck supported by open-web steel joists at flat roofs. Joist/beam spacing is anticipated to roughly 6'-0" O.C. Joists will be supported by wide flange girders. Joists and girders will be designed as non-composite members. Roofs shall be designed for additional load for future PV panels as required per code. All roof framing will be supported by tube steel columns (except at brace locations) transferring vertical loads to the building's foundations.

Alternatively, glulam roof beams at roughly 10'-0" supporting 3-ply CLT panels may be used. Lateral frames remain structural steel, but gravity columns and girders may be glulam construction.

EXTERIOR WALL ENCLOSURE

Exterior Walls

Exterior walls will be framed using non-bearing light gauge steel studs with exterior wall sheathing.

Exterior wall finishes will consist of masonry (brick or CMU veneer), metal wall panel and/or phenolic panel assembly.

Steel framing will support curtain walls and window systems in addition to metal panel and louvered enclosure walls.

Exterior Windows, Doors and Louvers

- Operable aluminum frame windows in stud wall system, and curtain walls at small and large assembly space.

- Glazed entrance doors will be aluminum and anodized finish. All glazing will be 1" insulated low-E performance glass.
- Provide horizontal and vertical sunshades at south and east exposed elevations.
- Hollow metal exterior doors and interior doors at mechanical spaces.
- Painted hollow metal doors and frames at service entrances, emergency exits.
- Louvers will be painted aluminum, fixed and drainable.

Roofing

Roofing material will be standing-seam metal at roofs with a greater than 4:12 slope and membrane roofing at low-slopes less than 4:12. Membrane roofing assembly will be over tapered insulation or consistent with campus standards. Roof parapets will be painted sheet metal coping.

Skylights

Skylights and clerestory windows will be provided at the roof to provide additional daylight to interior spaces. Glazing in skylights and clerestories will be 1" insulated low-e performance glass.

C - INTERIORS

The building interior is described to consist of materials that provide long life, reduced maintenance requirements and ease of replacement where beneficial in alignment with typical commercial construction standards.

INTERIOR FINISHES - GENERAL USE SPACE

Flooring

Adhesiveless installed carpet tile in the Event and Classrooms Spaces (carbon neutral preferred); PVC-free resilient flooring or porcelain tile in the Warming Kitchen.

Walls

Paint and Specialty Acoustical Treatment in the Event and Classroom Spaces and Paint in the Warming Kitchen.

Ceiling

Drywall Soffits, Acoustical Ceiling Tiles and/or Acoustical Baffles in the Event Space; Acoustical Ceiling Tiles in the Classrooms and the Warming Kitchen. Where possible, exposed mass timber structure along ceiling may be provided.

Millwork

Plastic Laminate cabinets and solid surface counters in the Event and Classroom Spaces as necessary; Plastic Laminate cabinets and Quartz counter tops and ceramic tile back splash in the Warming Kitchen.

INTERIOR FINISHES - WORKPLACE

Flooring

Adhesiveless installed carpet tile (carbon neutral preferred)

Walls

Paint in all areas with the addition of PVC-free graphic wallcovering as an option for 25% of the space

Ceiling

Acoustical Ceiling Tiles in all areas

INTERIOR FINISHES - STUDENT CENTER SPACE

Flooring

Adhesiveless installed carpet tile in the "Living Room", Study, Wellness, and Reflection areas (carbon neutral preferred); PVC-free resilient flooring or porcelain tile in the Kitchenette, Food/Clothing Pantry, and Student Locker areas

Walls

Paint in all areas with the addition of Environmental Graphics in the "Living Room" and Food/Clothing Pantry

Ceiling

Drywall Soffits, Acoustical Ceiling Tiles and/or Acoustical Baffles in the "Living Room" along with specialty lighting; Acoustical Ceiling Tiles in all other areas; Specialty lighting in the Wellness and Reflection Rooms

Millwork

Plastic Laminate cabinets and Quartz counter tops with ceramic tile back splash in the wet areas as needed.

C - INTERIORS (CONT'D)

ACOUSTIC DESIGN

There are multiple room types in the project, which will require varied acoustical approaches to satisfy their respective programming requirements. Generally, the acoustical design shall address the following:

Room Acoustics: Acoustically absorptive finishes will be coordinated with the design team to meet applicable criteria and satisfy aesthetic, durability, programming, and budgetary requirements.

Interior airborne and impact sound isolation:

- Minimize noise transfer into acoustically sensitive occupied areas and maintain appropriate levels of speech privacy.
- Utilize acoustical “buffers” and sound/light lock vestibules where possible.
- Coordinate partition types and floor/ceiling assemblies to meet sound isolation requirements.

Interior background noise levels due to MEP systems: Meet applicable noise criteria via sound isolating partition and roof assemblies, vibration isolation, interior duct lining, and duct silencers.

APPLICABLE CODES AND STANDARDS

ANSI/ASA S12.60-2010/Part 1 “American National Standard Acoustical Performance Criteria, Design Requirements, and Guidelines for Schools, Part 1: Permanent Schools.” (This version supersedes ANSI S12.60-2002 which was adopted by CWU.)

- LEED Gold
- ASTM C 423 “Standard Test Method for Sound Absorption and Sound Absorption Coefficients by the Reverberation Room Method”
- ASTM E 336 “Standard Test Method for Measurement of Airborne Sound Attenuation between Rooms in Buildings”
- ASTM E 413 “Classification for Rating Sound Insulation”
- ASHRAE Handbook - HVAC Applications, Chapter 49: “Noise and Vibration Control,” 2019

ROOM ACOUSTICS

The following table lists Reverberation Time targets for the programmed spaces. Reverberation Time (T60) is defined as the time it takes for sound to decay 60 dB in a room. For speech and amplified music programs, the acoustics need to be relatively “dry”, with a relatively low reverberation time. This environment supports the spoken word and amplified sound, providing a high level of speech intelligibility for the audience and greater audio system clarity. Acoustically absorptive materials will be incorporated to control loudness and promote speech intelligibility.

REVERBERATION TIME DESIGN TARGETS

SPACE	T60 (s)
Small Assembly Space	0.8
Large Assembly Space	1.0
Classrooms (Standard and Distance Education)	0.6
Quiet Study Areas	0.6
Team Study/Tutoring Rooms	0.6
Reflection Room	0.6
Student Lounge/Living Room	0.6
Wellness Room	0.6
Conference Rooms (Standard and Videoconference)	0.6
Enclosed Office	0.6
Open Workstation	0.8

C - INTERIORS (CONT'D)**SOUND ISOLATION**

The program contains acoustically sensitive occupied areas, including the Assembly Spaces, Classrooms, Conference Rooms, and Offices. Space plans shall utilize unoccupied buffer spaces such as circulation and storage to the extent practical. Where acoustically sensitive adjacencies are planned, sound isolating assemblies will be incorporated to control noise transfer.

Sound Transmission Class, or STC, is a single-number rating used to rate how well a building partition (wall, floor/ceiling assembly, door) attenuates airborne sound. Minimum partition STC requirements for airborne noise are provided in the following table.

AIRBORNE NOISE ISOLATION DESIGN GOALS

SPACE	SOUND ISOLATION GOAL
Small Assembly Space	STC 55
Large Assembly Space	STC 55
Classrooms (Standard and Distance Education)	STC 50
Quiet Study Areas	STC 45
Team Study/Tutoring Rooms	STC 45
Reflection Room	STC 45
Student Lounge/Living Room	STC 45
Wellness Room	STC 45
Conference Rooms (Standard and Videoconference)	STC 50
Enclosed Office	STC 45

MECHANICAL NOISE AND VIBRATION CONTROL

Criteria for maximum mechanical equipment noise levels based on ASHRAE guidelines, LEED, and best practices for the programmed spaces are provided in the table below. Noise control measures to be considered include selection of units with low noise levels, duct silencers, and interior duct lining. Ducts will need to be sized to limit maximum air velocities, to ensure that regenerated noise due to air movement does not cause the design noise criteria to be exceeded.

The roof, walls and floor-ceiling assemblies will need to have adequate mass to attenuate radiated airborne sound, and mechanical systems will need adequate vibration isolation to attenuate structure borne sound.

NOISE CRITERIA DESIGN GOALS

SPACE	NOISE CRITERIA
Assembly Spaces	NC 25 to NC 30
Classrooms	NC 35 Standard Classroom NC 25 Distance Education NC 30 LEED criterion
Entry/Reception	NC 40
Quiet Study Areas	NC 30
Team Study/Tutoring Rooms	NC 30
Reflection Room	NC 30
Student Lounge/Living Room	NC 35
Wellness Room	NC 35
Enclosed Office	STC 30
Open Workstation	STC 40
Conference Room	NC 35 Standard Classroom NC 25 Distance Education NC 30 LEED criterion

C - INTERIORS (CONT'D)

LIGHTING

Introduction and General Objectives of the Lighting Concepts

This Section defines the general and technical criteria for lighting and encompasses recommendations for best practices, energy efficiency, sustainability, and creating comfortable and productive environments that emphasize the dignity and importance of activities conducted on campus.

Lighting design within the campus will aid in the function of the various activities, enhance the architecture and landscape, be appropriate for many different users, be energy efficient, easy to maintain, and shall maximize use of appropriate technology.

Fixture Selection

- Lighting fixtures shall be selected on the basis of maintaining a long-life cycle within the campus. Fixtures will be evaluated based on effectiveness and long-term life cycle costs, especially characteristics and components that ensure longevity and quality, not only lowest first costs.
- Efficient light sources should be paired with high performance fixtures that are designed for these specific light sources, further enhancing the overall system efficiency. Fixtures that are selected will be energy efficient and provide visual comfort (minimize direct or reflected glare) necessary for the activity in each area.

Circadian Color-Tuning Lighting

Circadian or tunable lighting may not be feasible or practical in many cases, but it is a conversation that should be had with the design team, user groups, and other stakeholders during the early stages of design. Below are some initial points of interest with the technology that can be explored further as needed.

- “Circadian lighting” in this instance refers to the use of tunable white light fixtures and is a growing

trend in the marketplace to better align occupants’ circadian rhythm with the natural day and night cycle. While not as effective as natural daylight there are studies that have shown impressive impacts from using high quality tunable white LED fixtures in the workplace. Undoubtedly a beneficial system if deployed correctly, circadian lighting can be costly and complicated to install and operate when compared to a traditional high-quality lighting system.

- Another approach gaining market share, due to its lower costs and simple strategy, are light sources that do not change the color of the light but rather use a light source specifically tuned to behave more like natural light found outdoors. While it is possible that this type of system is slightly less effective for occupants than a fully tunable solution, it can present a large cost savings and is far simpler to deploy and maintain.

Maintenance Requirements

Lighting maintenance has greatly reduced with advancements in LED and power supply technologies, but routine maintenance is still required. Routine maintenance is part of ongoing building operating costs, and the following list shall be part of lighting maintenance:

- Clear access to all fixtures for relamping and power supply replacement.
- Removable shielding devices with cables or chains to hold the device to the fixture during relamping.
- Minimizing the distinct lamp types and variety of power supplies within the facility.
- A thorough Operations and Maintenance manual outlining all project fixtures, lamps and power supplies shall be provided at the end of construction
- Ceiling mounted or suspended fixtures shall not be located directly over stairs.

C - INTERIORS (CONT'D)**Lighting Design**

- The lighting design encompasses all lighting found throughout the site and building and is compiled into one complete set of lighting documents. The design and documentation is performed or supervised by a lighting practitioner with a minimum of 10 years full time experience in lighting design with at least two of the three following qualifications of Lighting Certification (LC), Illuminating Engineering Society (IES) member, or International Association of Lighting Designers (IALD) member, and who devotes the majority of their professional time to the design of architectural lighting.

Controls

- The lighting controls for the project will not only help save energy and extend the life of the lighting system but will also provide users with the ability to adjust the lighting to the task or desired look and feel. Many studies have shown the benefits of providing occupants control over their environments and have evidence that a robust control system can greatly reduce potential headaches, eye strain and other lighting-related HR issues.

Code Compliance

Codes containing information related to specific lighting applications and are the most prominent for this project are as follows:

- WSEC, current Washington State Energy Code which governs all aspects of energy and controls related to lighting systems.
- Illuminating Engineering Society publications govern most aspects as it relates to the recommended light levels and types of lighting recommended in specific applications.
- Applicable campus standards as they pertain to the lighting.

Building Lighting Criteria**Reflectances**

- In a majority of spaces, lighting systems that distribute light throughout the space shall be the preferred system for illumination. Indirect, direct/indirect, and lighting with wide but low glare distribution is key to helping bounce light off room surfaces to evenly distribute the illumination. In addition, reflectance of surrounding surfaces greatly impacts the quality of the lighting system and the amount of usable reflected light that can help fill a space. Surrounding surfaces shall adhere to criteria noted in the following table - Surface Reflectance, wherever practical, in order to maximize the spread of light and minimize the number of fixtures and amount of energy needed.

SURFACE REFLECTANCE

ROOM SURFACE	RECOMMENDED REFLECTANCE
Ceilings	Minimum reflectance for general spaces should not be below eighty-five percent (85%) where practical.
Walls, systems furniture partitions	Generally, walls should not be below sixty percent (60%) reflective, but occasional accent walls that are between forty percent (40%) and sixty percent (60%) reflective can be utilized. The interior finish schedule shall have a column indicating light reflectance of materials used in the major spaces.
Floors	Approximately twenty percent (20%) or higher.

C - INTERIORS (CONT'D)**Interior Light Levels**

The following table of interior light levels shows some preliminary project illumination targets for a myriad of different spaces within the building. Light levels listed are a mix of recommendations from the latest Illuminating Engineering Society (IES) publications and those used by similar institutions. Final targets should be discussed with the project team.

INTERIOR ILLUMINANCE LEVELS

SPACE DESCRIPTION	HORIZONTAL ILLUMINATION LEVEL (FC)	VERTICAL ILLUMINATION LEVEL (FC)
CLASSROOMS		
General Classrooms	30-40	15
Teaching Wall	-	30-50
OTHER AREAS		
Conference Rooms	10-40	5-20
Offices	30-50	15
Break Room/Warming Kitchen	30	15
Waiting Areas/Lounge/ Communal Spaces	10-20	-
Loading Dock	15	5
Storage	10-20	5-10
Circulation	15-25	-
Lobby/Vestibules	20	-
Restrooms	10-30	5-15
Mechanical/Plumbing Rooms	20	-
Electrical/AV/Telecom Rooms	30-50	15-20
Janitor	20	10

C - INTERIORS (CONT'D)

Classrooms

It is the intent of the lighting systems within the classrooms to ensure that fixture quality and appearance reflect the educational activities performed within these spaces. The following are some key attributes of a lighting system within these prominent spaces:

- Provide independently dimmable layers of light to maximize the flexibility of class uses. The control system will provide simple, user-friendly control of the layers of light to allow each space to adapt to personnel preferences and educational operations now and in the future.
- Audiovisual presentations are common in classrooms and lighting must be flexible enough to allow for dimmed ambient light levels, with sufficient light for notetaking. Flat-screen monitors and projector locations are to be carefully coordinated with the lighting to ensure both systems function as intended.
- Videoconferencing, video recording and other virtual operations are becoming standard in many classrooms. Good uniformity, low glare, and vertical light levels will be key considerations for ensuring a quality video environment.

Lobby

Lobby shape, dimension, finishes, and fixtures vary, but the lighting is intended to complement the materials and architectural features through the use of different lighting techniques. Techniques which will be employed include, but are not limited to: downlights, wall-washing, wall-grazing, accent fixtures, and possibility decorative lighting elements to act as a focal point to the space. Artwork within the lobby shall be incorporated into the overall design of the lighting.

Circulation

Circulation areas shall have even, diffuse illumination for wayfinding. Fixture selection and location shall be coordinated with directional signage and artwork/graphics.

Exit stair lighting shall incorporate the use of occupancy-sensed light fixtures to dim the lighting for energy savings when stairs are not in use.

Restrooms

Lighting at mirrors shall be adequate to see without creating facial shadows. Lighting shall be evenly distributed within the stall areas preferably with fixtures providing an indirect lighting component onto the ceiling. Bright color value wall and ceiling surfaces are preferred over darker values in order to keep the space feeling well-lit while keeping the number of fixtures reduced for energy conservation and maintenance reduction.

Open Offices and Private Offices

As with other spaces, minimizing glare and maximizing fixture efficiency are key considerations for open and private offices.

Dimming shall be provided for all office lighting in addition to code-required occupancy and daylighting controls were applicable.

Service Areas

Lighting for electrical and mechanical rooms, janitor closets, trash rooms, IT closets, and related areas shall consist of simple yet robust strip lighting.

Lighting Controls

The building shall employ a centralized lighting control system and if desired by the project team, the system shall be connected to a Building Automation System (BAS). Connection to a central security and fire detection system will also be required/recommended. It may be possible that not all spaces will need to be tied to a centralized lighting control system. While there is a networked lighting control system throughout the building, each space shall also operate as a standalone system that does not require the centralized system for day-to-day operations. If the central system were ever to fail or an emergency were to occur, all lighting controls would still function as individual systems.

Spaces such as mechanical, electrical, IT closets, janitor closets and storage spaces that are physically independent from one another could employ simple, cost-effective standalone lighting control systems.

C - INTERIORS (CONT'D)

It is intended that this facility utilize occupancy- and vacancy-sensing devices throughout, as required by current energy code. Most spaces shall utilize vacancy sensors that require lighting to be manually turned on but then automatically turn off once no motion is detected for a given amount of time. In some areas such as corridors, occupancy sensors shall be employed instead of vacancy sensors and will automatically turn the lighting on when motion is detected and off automatically once no motion is detected for a given period of time. See the Lighting Control table below for more information.

In spaces with natural light, luminaries located in daylight areas shall be zoned separately from other luminaries, as required by code. All luminaries connected to the daylight harvesting system shall be provided with continuous dimming photosensors which filter or calibrate to respond only to light in the visual range (no UV or IR) and adjusted for the human sensitivity spectral curve. Continuous dimming controls shall utilize a sliding setpoint algorithm. The design setpoint for daylight dimming shall be 1.2 times the nighttime designed light level. For example, if the electric lights alone provide 30 fc, the luminaries shall not start to dim until the combined daylight and electric light reaches or exceeds 36 fc (30fc x 1.2). See the Lighting Control table below for more information on where daylight sensing is anticipated.

C - INTERIORS (CONT'D)

Emergency Lighting

To maximize energy savings and maximize control of the lighting, all emergency lighting will be controlled along with normal lighting when in standard, non-emergency mode. Lighting designated as emergency will be controlled via dimmers, occupancy sensors, and daylighting sensors as applicable to the area. In the event of an emergency, all emergency lighting will be turn on to full brightness and will ignore all standard control inputs.

Connection shall be provided to an uninterruptible power source for select lights in the vicinity of the generator, within the generator enclosure, at the electrical service equipment, and at the main emergency electrical distribution equipment to maintain operability during a power outage. Individual fixture emergency battery packs are not recommended due to their poor performance, issues with sustainability and their difficulty in maintaining. Central or local inverters will be preferred to allow for multiple fixtures to share one inverter source and minimize needed maintenance.

General emergency lighting shall be fed by a backup battery power source as described within emergency power section.

All emergency egress lighting shall comply with current Federal, State, and City requirements. Exit signs shall identify path of egress and utilize LED technology with green or red signage/lamps. All exit signs are expected to be powered directly from the emergency generator. Three exit sign types are anticipated to be used on the project and are as follows:

- Architectural grade exit signs shall be used in the public areas to better align with the finish level within these spaces. Clear, mirrored or architecturally integrated exit signs will be the predominant architectural sign on the project.
- A more generic thermoplastic exit sign can be used in the back of house areas as a cost savings measure.
- A robust vandal/wet location style exit sign may be used in outdoor areas or in areas susceptible to exposure to water or vandalism.

C - INTERIORS (CONT'D)

The following table of Lighting Controls shows the current recommended control devices for different spaces within the building. Controls listed in each space are a mix of requirements from the WSEC - Washington State Energy Code and our experience with similar project types.

INTERIOR LIGHTING CONTROLS

SPACE DESCRIPTION	OCCUPANCY/VACANCY SENSORS	DAYLIGHT PHOTOSENSORS
CLASSROOMS		
General Classrooms	Vacancy	Yes - where applicable
OTHER AREAS		
Conference Rooms	Vacancy	Yes - where applicable
Offices	Vacancy	Yes - where applicable
Vestibules	Occupancy	Yes - where applicable
Break Rooms/Warming Kitchen	Vacancy	Yes - where applicable
Kitchen Prep	Occupancy	Unlikely - usually no daylight present
Waiting Areas/Lounge/Communal Spaces	Occupancy	Yes - where applicable
Loading Dock	Occupancy	Yes - where applicable
Storage	Occupancy	Unlikely - usually no daylight present
Circulation	Occupancy - but can be disabled by the networked system during normal hours	Yes - where applicable
Lobby	Occupancy - but can be disabled by the networked system during normal hours	Yes
Restrooms	Occupancy	No - no daylight present
Mechanical/Plumbing Rooms	None - due to safety issues	No - no daylight present
Electrical/AV/Telecom Rooms	None - due to safety issues	No - no daylight present
Janitor	Vacancy	No - no daylight present

D - SERVICES

Fire Protection Narrative

The building will be fully sprinklered in accordance with NFPA-13 requirements and the Central Washington University Campus Standards. The system will be a wet sprinkler system. Hydrants will be coordinated with the fire department and, where required, provided in the civil scope of work.

Plumbing Narrative

The building plumbing systems will comply with Central Washington University's campus standards.

The flat roof areas will be equipped with a primary and overflow drainage system that will be piped with interior roof drain leaders to a point five feet outside the building for connection to the site storm drainage system.

Water heating will be provided from heat pump water heaters and circulated throughout the building. The heat pump water heaters will extract heat from the division 23 heating water loop from the campus geothermal heat pump system.

A vacuum waste system will be utilized for water closet flushing fixtures to reduce the building's water use. A gravity sanitary sewer system will be utilized for all other flushing and flow fixtures with drain connections. Both the gravity and vacuum waste system will discharge the building via a gravity sanitary sewer system to five feet outside the building for connection to the site sanitary sewer.

System vibration isolation requirements will be provided in accordance with the space acoustical criteria.

HVAC Narrative

General

The building HVAC Systems comply with Central Washington University's campus standards. The proposed mechanical systems are designed for a balance between high energy performance, flexibility, and low maintenance. Systems with the lowest anticipated energy use are proposed. Campus utilities will be metered and interfaced with the division 23 building automation system.

Utilities

The building will be heated with low temperature water (120°F) supplied by a new open-source geothermal heating plant. The heat planting is being planned as a separate project. 3"Ø low temperature hot water will be routed from the geothermal plant to this building and will be insulated, jacketed, and fusion-welded HDPE pipe. The cost for the pipe from the plant to this building is included in this scope of work. The heating water will then be distributed through the building via fully redundant building heating water pumps. The building heating load is anticipated to be approximately 800 MBH at -10°F ambient conditions. An additional 60-70-ton heat pump with associated piping, primary power, and controls that is sized for heating and domestic hot water will be added within the central plant as part of this project.

This building will be cooled from campus chilled water provided by the existing campus central chilled water plant. Chilled water will be routed to the building from 14"Ø chilled water main that runs along the west end of the site and then distributed through the building via building chilled water pumps. The building connection size will be 3"Ø and all buried pipe will be insulated, jacketed, and fusion-welded HDPE pipe. The building cooling load is anticipated to be 50 tons/80 GPM at 105°F ambient conditions. A building level chiller of approximately 20 tons is anticipated for winter cooling. Additional central plant equipment is not anticipated to be required at the central chilled water plant as a new 1,200-ton chiller was installed in 2022.

D - SERVICES (CONT'D)**Ventilation Air**

Ventilation air will be ducted to each space via a dedicated outside air system (DOAS), preliminarily sized at 8,000 CFM. The DOAS unit will recover a minimum of 60% energy from the conditioned air that is exhausted from the building. Air will be regulated to each major zone through air terminal units and returned to the unit via return air ducting. Air regulators shall regulate ventilation air based upon occupancy and space CO2 levels. The terminal units will duct ventilation air directly to the space.

A solar wall will be considered to passively heat the ventilation air before entering the air handling units for heating and cooling. The solar wall will be equipped with louvers that bypass the solar wall when the air system is in cooling mode.

Space Conditioning

Radiant floor heating and cooling will be used as the primary source of heating and cooling in the assembly spaces, with active chilled beams as the primary source of heating and cooling in all other areas of the building. Each conference room, assembly space, and student center space will have their own thermostat. Offices will be provided with a minimum of one thermostat for every two offices.

Other

Dryer exhaust will be provided for a single washer and dryer set in the Laundry space. Dryer exhaust will terminate on the exterior independent of the DOAS exhaust system.

The building automation system will be an extension of the existing campus wide Alerton control system. This system will provide operational controls for all mechanical systems that includes system operation, alarm reporting, mechanical energy monitoring, water consumption monitoring, and unoccupied setback controls.

System vibration isolation requirements will be in accordance with the acoustical section.

Electrical Narrative

The building will receive electrical service from the campus owned medium voltage distribution system. New buried conduit pathways, vaults and cabling will be provided from the nearby existing campus medium voltage system to the new building service yard. A total of (2) pad mounted oil filled transformer will be installed on the site to provide normal electrical services to the building.

Electrical services will be derived from the (2) transformers with secondary voltages of 480Y/277V and 208Y/120V. The (2) services will have an estimated rating of 800 Amps and 1200 Amps respectively. The main service switchboards will be housed in a dedicated main electrical room on the ground floor. The proposed dual service approach is intended to remove heat producing transformer from inside the building, which will result in reduced energy for electrical room space conditioning.

Battery systems will be provided to supply NEC 700 emergency loads. This will be accomplished through the use of centralized inverters or distributed battery packs.

The building electrical distribution will originate from a main electrical room on the ground floor. The building electrical distribution will be designed to provide separation of lighting, mechanical, and general building loads. Circuit breaker panelboards shall be provided throughout the building as required to adequately serve the associated building loads. Each telecommunications room will be provided with a dedicated 120/208V power panelboard and an equipment ground bar. Surge protection shall be provided by installing surge protection devices at the main switchboard, distribution panelboards and appropriate branch panelboard locations.

Branch circuit distribution within each programmatic space will be closely coordinated with the specific function of each space. Additional spare electrical capacity will be designed for each panel to accommodate future potential changes to the building program. Wall mounted surface raceway with receptacles shall be considered for spaces with

D - SERVICES (CONT'D)

workstations such as computer labs. Floor boxes will be provided within meeting rooms and classrooms as required by the program and the code.

Owner metering shall be provided for the building's main electrical service equipment. Additional submeters shall be provided for lighting, mechanical and plug loads to allow separate metering for each end use type.

A complete system of photovoltaic arrays shall be provided for on-site renewable energy generation in compliance with the Washington State Energy Code (WSEC). The minimum system output shall be .5 watts per square foot of building.

Building interior and exterior lighting will LED type. Lighting illumination levels will be in conformance with IES standards. Lighting power densities will be in conformance with the Washington state energy code. Egress and exit lighting will be provided with backup power from battery systems.

A low voltage lighting control system shall be provided for time-based, sensor-based (both occupancy and daylight), and manual lighting control in compliance with the energy code, LEED and the building program needs. Fixtures with embedded controls shall be considered to allow for lighting zone control changes throughout the life of the building. Switching of receptacles based upon occupancy shall be provided in compliance with the energy code.

Communications

Existing buried campus communications lines are possibly in conflict with the proposed building location at the east side of the international building site. Relocation of the existing buried communications pathways and replacement of outside plant cabling would be required. New outside plant cabling will be provided as required to serve the new building from the existing campus infrastructure. Existing pathways in close proximity to the building will be extended for connection to the building's main telecom room (MDF).

Communications Distribution: Communications building distribution cabling, devices and pathways will be provided by the contractor. Communications riser cabling will be provided from the entrance location to each Communications room. Each Communications room shall be provided with a dedicated 120/208V power panelboard, branch circuits and an equipment ground bar.

Communication Cabling Pathways: Cable trays will be installed on each level to facilitate cabling installation. All horizontal distribution of Communications risers will occur on the main floor level. Vertical distribution of Communications risers will route vertically through the building via 4" conduit pathways between floors.

Communication Outlets: Communications outlets will be provided throughout the facility at locations such as work stations, computers, printers, projectors, lecterns and wireless access points. A horizontal station cable will be provided and routed to the nearest Communications room located on the associated floor. Category 6A copper twisted pair cabling will be routed through the communications raceway system to each communications outlet in the building. Typically, each outlet will be served with two Category 6A cables. WiFi Systems: WiFi system pathways, station cabling and outlets will be provided by the contractor. Required locations for indoor and outdoor wireless access points will be closely coordinated with CWU. All wireless access points will be provided and installed by CWU.

Audiovisual Systems: Audiovisual systems will be provided and installed by the contractor. Spaces requiring audiovisual systems shall include, but not be limited to, assembly spaces, classrooms and meeting rooms. The basis of design for assembly spaces and classrooms shall be a hybrid learning classroom which will include projectors, projection screens, overhead ceiling loudspeakers, wireless microphone systems, assistive listening systems, integrated control system, lecture capture system and wireless device connectivity. Large meeting rooms will require a projector and screen or large video displays, audio playback and reinforced sound system, as well as integrated control system. Small and medium-sized meeting rooms audiovisual

D - SERVICES (CONT'D)

equipment shall be owner furnished and installed. A video bar and/or camera and microphones to support cloud-based videoconferencing may be provided for selected meeting rooms as required. Computer labs will be treated as basic classrooms with either projectors and screens or wall mounted displays, overhead ceiling loudspeakers, wireless microphone systems, assistive listening systems, room control, and wireless device connectivity. Digital signage displays may be provided to entry/reception and lounge area for information display and events announcement. The audiovisual systems design will follow CWU's Audio/Visual Design Guide where applicable.

Clock System: A complete system of wireless clocks will be provided by the Owner.

Distributed Antenna System (DAS): A distributed antenna system for emergency responder radio use is not planned for the new building. This plan is in conformance with CWU standard approach for new construction projects.

Security & Fire Alarm

Access Control: A complete access control system will be provided in accordance with CWU campus standards. Required locations for miscellaneous access control devices will be closely coordinated with CWU. Typical spaces to be provided with access control include building office suites, exterior entries, classroom doors, telecom closets and AV closets. Additional access controls shall be considered for building areas that have unique 24/7 access needs for students.

Video Surveillance (IPCCTV): Video Surveillance system cabling and pathways will be provided by the contractor. Required locations for IPCCTV devices will be closely coordinated with CWU. Typical spaces with IPCCTV devices include building entrances and building exterior. All IPCCTV cameras, power supplies and active electronic equipment will be provided and installed by CWU.

Fire Alarm: A complete battery backed addressable fire alarm system with manual pull stations, automatic detection and ADA compliant speaker/strobes will be provided throughout the facility. Initiating and annunciation devices will be installed as required by the governing codes, and in accordance with CWU campus standards. The building fire sprinkler system will be monitored by the fire alarm system for system flow and shutoff valve tampering. Central reporting capabilities will also be provided with the fire alarm system. Optical smoke imaging devices shall be considered for detection in large multi-story atriums or other large volume spaces.

E - EQUIPMENT AND FURNISHINGS

FF&E is included in the project budget and the approach to the process is outlined in the narratives in Section A above.

G - SITEWORK

Sitework will consist of demolition of the existing building, concrete paving and landscaped areas. The topsoil and vegetative material will be removed, screening and saving it for re-use in landscaped areas. The subgrade will be prepared prior to placing structural fill or building foundations, per future geotechnical recommendations.

Site Illumination Objectives

- Exterior lighting provides safety and security for those entering and exiting the building and traversing the campus outside of daylight hours and enhances the building and site presence within the community and campus. As a design element, the exterior lighting highlights architectural and landscape elements and adds to the overall character of the campus, while also controlling unwanted glare. Exterior lighting shall be compatible with security cameras used onsite. Lighting levels do not need to be high if the light source is of good color quality, uniformity, and glare is minimized. Typically, a high uniformity ratio of 3:1 or 4:1 shall be used, with well-shielded fixtures.
- USGBC's LEED for New Construction (Sustainable Sites Credit 8) shall be used as a guideline for developing the exterior lighting plan, as shall the local code-required light pollution reduction measures.

Site Illumination Levels

- The Illuminating Engineering Society (IES) recommends different light levels based upon the type of exterior area being lit and not a single average across the entire site. It is the design team's recommendation that bike/pedestrian pathways target 1 footcandle average as stated in table 15.5.4 Lighting Levels. It would also be recommended that areas outside of vehicle and pedestrian areas remain lit with lower light levels. This strategy supports the effort to reduce light spill into surrounding areas and follows the International Dark-Sky Association (IDA) goals for illuminating only necessary site areas.
- The following table of exterior light levels shows some preliminary illumination targets for the site with final targets to be defined by the project team:

G - SITEWORK (CONT'D)**PRELIMINARY EXTERIOR ILLUMINATION TARGETS**

SPACE DESCRIPTION	HORIZONTAL ILLUMINATION LEVEL (FC)	VERTICAL ILLUMINATION LEVEL (FC)	UNIFORMITY RATIO
Primary Walkways	1	0.5	4:1
Secondary Walkways	.05	0.25	6:1
Stairs and Ramps	1	0.5	6:1
Building Primary Entrance	1-4	.6-2	4:1
Building Service Entrance	1-4	.6-2	4:1

Site Illumination**Pedestrian**

- Pedestrian and bicycle walkways and paths shall employ low glare LED lighting to match the look of the campus master plan and nearby existing fixtures. These shorter pole mounted fixtures will be at an appropriate pedestrian scale and will provide uniform lighting and good vertical illumination to aid in facial recognition and bicycle/pedestrian interaction.

Facade

- The lighting of the façade is intended to subtly highlight the building while not dominating the adjacent site. By highlighting a few key building elements, the building will be cemented within the landscape and will give the building the elegant prominence that it desires.

Natural Areas

- Areas outside of the building façade, bike paths, and pedestrian walkways will remain illuminated only from borrowed nearby light. This way the natural areas of the site and surrounding areas remain pristine. This aligns with the International Dark Sky Associations recommendations for keeping outdoor environments unlit where possible.

5C. FACILITY OPERATIONS AND MAINTENANCE REQUIREMENTS

Central Washington University will be responsible for all ongoing maintenance and operations. If funded, the building is anticipated to become operational in FY2026.

Most recent calculated campus operations and maintenance costs are shown in Table 1. Campus operations and maintenance assumptions for the Multi-Cultural Center are shown in the following tables.

Refer to Appendix L for the complete Operations and Maintenance Estimate.

TABLE 1 - OPERATIONS AND MAINTENANCE FOR FY2021

OPERATIONS	OPERATING COSTS/ GSF FY 2021
Academic Utilities	1.545
Maintenance	.4164
EMCS/BH	.1315
Custodial	.1611
IT	0.1875
TOTAL ANNUAL COST/GSF	\$2.44

TABLE 2 - OPERATIONS AND MAINTENANCE BY POSITIONS FOR FY2026

STAFFING	FTE	AMOUNT FTE BASE & BENEFITS FY2026
EMCS Technician	0.25	24,097.86
Maintenance	0.50	45,203.86
Custodial	0.25	16,168.70
IT	0.00	-
Police & Parking	0.25	24,582.46
TOTAL	1.00	110,052.88

TABLE 3 - OPERATIONS AND MAINTENANCE COSTS FOR MUTLI-CULTURAL CENTER FOR 2026

OPERATIONS	OPERATING COSTS/GSF FY 2026	GSF (NET ADDITION)	EST. COST FOR ADDITIONAL GSF/FY 2026
Utilities	1.775	19,560	34,719.00
Maintenance	.4598	19,560	8,993.69
EMCS/BH	.1452	19,560	2,840.11
Custodial	.1779	19,560	3,479.72
IT	0.2070	19,560	4,048.92
TOTAL	\$2.7649	19,560	\$54,081.44

TABLE 4 - FIVE BIENNIA CAPITAL AND OPERATING COSTS

SUMMARY	BIENNIA 1		BIENNIA 2		BIENNIA 3	
	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031
Utilities	34,726.08	35,420.60	36,129.01	36,851.59	37,588.63	38,340.40
Staffing	110,052.88	113,354.47	116,755.10	120,257.76	123,865.49	127,581.45
O&M	18,982	19,362	19,749	20,144	20,547	20,958
Fire Protection	33,475.14	33,475.14	33,475.14	33,475.14	33,475.14	33,475.14
One-Time FY 2027 Costs*	65,000					
TOTAL	262,236.39	201,612.14	206,108.43	210,728.65	215,476.29	220,354.97

SUMMARY	BIENNIA 4		BIENNIA 5	
	FY 2032	FY 2033	FY 2034	FY 2035
Utilities	39,107.21	39,889.35	40,687.14	41,500.88
Staffing	131,408.90	135,351.16	139,411.70	143,594.05
O&M	21,377	21,805	22,241	22,686
Fire Protection	33,475.14	33,475.14	33,475.14	33,475.14
TOTAL	225,368.38	230,520.34	235,814.75	241,255.66

* One-Time FY2027 Costs include non-bondable FF&E (Computers) and moving fund

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CENTRAL WASHINGTON UNIVERSITY

MULTI-CULTURAL
CENTER
PREDESIGN
APPENDIX

APPENDIX A

PREDESIGN CHECKLIST AND OUTLINE

8.3 Appendices

Appendix 1: Predesign checklist and outline

A predesign should include the content detailed here. OFM will approve limited scope predesigns on a case-by-case basis.

Executive summary

Problem statement, opportunity, or program requirement

- Identify the problem, opportunity, or program requirement that the project addresses and how it will be accomplished.
- Identify and explain the statutory or other requirements that drive the project's operational programs and how these affect the need for space, location, or physical accommodations. Include anticipated caseload projections (growth or decline) and assumptions, if applicable.
- Explain the connection between the agency's mission, goals, and objectives; statutory requirements; and the problem, opportunity, or program requirements.
- Describe in general terms what is needed to solve the problem.
- Include any relevant history of the project, including previous predesigns or budget funding requests that did not go forward to design or construction.

Analysis of alternatives (including the preferred alternative)

- Describe all alternatives that were considered, including the preferred alternative. Include:
 - A no action alternative.
 - Advantages and disadvantages of each alternative. Please include a high-level summary table with your analysis that compares the alternatives, including the anticipated cost for each alternative.
 - Cost estimates for each alternative:
 - Provide enough information so decision makers have a general understanding of the costs.
 - Complete OFM's Life Cycle Cost [Model](#) (RCW [39.35B.050](#)).
 - Schedule estimates for each alternative. Estimate the start, midpoint, and completion dates.

Detailed analysis of preferred alternative

- Nature of space – how much of the proposed space will be used for what purpose (i.e., office, lab, conference, classroom, etc.)
- Occupancy numbers.
- Basic configuration of the building, including square footage and the number of floors.
- Space needs assessment. Identify the guidelines used.
- Site analysis:
 - Identify site studies that are completed or under way and summarize their results.
 - Location.

- Building footprint and its relationship to adjacent facilities and site features. Provide aerial view, sketches of the building site and basic floorplans.
- Water rights and water availability.
- Stormwater requirements.
- Ownership of the site, easements, and any acquisition issues.
- Property setback requirements.
- Potential issues with the surrounding neighborhood, during construction and ongoing.
- Utility extension or relocation issues.
- Potential environmental impacts.
- Parking and access issues, including improvements required by local ordinances, local road impacts and parking demand.
- Impact on surroundings and existing development with construction lay-down areas and construction phasing.
- Consistency with applicable long-term plans (such as the Thurston County and Capitol campus master plans and agency or area master plans) as required by RCW [43.88.110](#).
- Consistency with other laws and regulations:
 - High-performance public buildings (Chapter [39.35D](#) RCW).
 - State efficiency and environmental performance, if applicable (Executive Order [20-01](#)).
 - State energy standards for clean buildings (RCW 19.27A.210).
 - Compliance with required vehicle charging capability for new buildings that provide on-site parking (RCW 19.27.540).
 - Greenhouse gas emissions reduction policy (RCW [70.235.070](#)).
 - Archeological and cultural resources (Executive Order [05-05](#) and [Section 106](#) of the National Historic Preservation Act of 1966). If mitigation is anticipated, please note this in the predesign with narrative about how mitigation is worked into the project schedule and budget.
 - Americans with Disabilities Act (ADA) implementation (Executive Order [96-04](#)).
 - Compliance with planning under Chapter [36.70A](#) RCW, as required by RCW [43.88.0301](#).
 - Information required by RCW [43.88.0301](#)(1).
 - Other codes or regulations.
- Identify problems that require further study. Evaluate identified problems to establish probable costs and risk.
- Identify significant or distinguishable components, including major equipment and ADA requirements in excess of existing code.
- Identify planned technology infrastructure and other related IT investments that affect the building plans.
- Identify any site-related and/or physical security measures for the project.
- Describe planned commissioning to ensure systems function as designed.
- Describe any future phases or other facilities that will affect this project, including impacts to current lease contracts. Include detail on the need to backfill space or cost assumptions for vacant space.

- Provide a comparative discussion of the pros and cons of the project delivery methods considered for this project and offer a recommendation of proposed procurement method for the preferred alternative. The proposed method of project delivery must be justified.
- Describe how the project will be managed within the agency.
- Schedule.
- Provide a high-level milestone schedule for the project, including key dates for budget approval, design, bid, acquisition, construction, equipment installation, testing, occupancy and full operation.
- Incorporate value-engineering analysis and constructability review into the project schedule, as required by RCW [43.88.110\(5\)\(c\)](#).
- Describe factors that may delay the project schedule.
- Describe the permitting or local government ordinances or neighborhood issues (such as location or parking compatibility) that could affect the schedule.
- Identify when the local jurisdiction will be contacted and whether community stakeholder meetings are a part of the process.

Project budget analysis for the preferred alternative

- Cost estimate.
 - Major assumptions used in preparing the cost estimate.
 - Summary table of Uniformat Level II cost estimates.
 - The [C-100](#).
- Proposed funding.
 - Identify the fund sources and expected receipt of the funds.
 - If alternatively financed, such as through a COP, provide the projected debt service and fund source. Include the assumptions used for calculating finance terms and interest rates.
- Facility operations and maintenance requirements.
 - Define the anticipated impact of the proposed project on the operating budget for the agency or institution. Include maintenance and operating assumptions (including FTEs) and moving costs.
 - Show five biennia of capital and operating costs from the time of occupancy, including an estimate of building repair, replacement, and maintenance.
 - Identify the agency responsible for ongoing maintenance and operations, if not maintained by the owner.
- Clarify whether furniture, fixtures and equipment are included in the project budget. If not included, explain why.

Predesign appendices

- Completed Life Cycle Cost [Model](#).
- A letter from DAHP.
- Title report for projects including proposed acquisition.

APPENDIX B

LEED SCORECARD



LEED v4 for BD+C: New Construction and Major Renovation

Project Checklist

Project Name: CWU Multicultural
Date: 6/17/2022

Y	?Y	?N	N	Credit	Integrative Process
1					

4	2	0	24	16	16
					16
1					1
2					2
					5
					5
					1
1					1
					1

7	2	1	0	10	10
					Required
1					1
2					2
1					1
					3
2					2
1					1

3	6	0	2	11	11
					Required
1					2
1					6
					2
1					1

15	11	5	2	33	33
					Required
					Required
					Required
					Required
4	2				6
10	4	4			18
1					1
					2
					3
					1
					2

5	0	6	3	13	13
					Required
					Required
1					5
1					2
					2
					2
					2

10	5	1	0	16	16
					Required
					Required
2					2
2					3
1					1
					2
					1
					2
					3
					1
					1

6	1	0	0	6	6
					Required
2					5
1					2
2					5
1					1

2	3	0	1	6	6
					Required
1					1
1					1
1					1
1					1
					1

53	30	13	32	TOTALS	112
					Certified: 40 to 49 points, Silver: 50 to 59 points, Gold: 60 to 79 points, Platinum: 80 to 110

APPENDIX C

COST ESTIMATE

Central Washington University
MULTI-CULTURAL CENTER
Ellensburg, Washington

PRE-DESIGN
COST ESTIMATE R2
June 25, 2022

JMB CONSULTING GROUP

June 25, 2022

Jackie Eckhardt
DLR Group
51 University Street
Suite 600
Seattle, Washington 98101

Re: Central Washington University
Subject: Multi-Cultural Center
Ellensburg, Washington

Dear Jackie:

In accordance with your instructions, we enclose our cost estimate for the project referenced above. This cost estimate is a statement of reasonable and probable construction cost. It is not a prediction of low bid.

We would be pleased to discuss this report with you further at your convenience.

Sincerely,

Jon Bayles

JMB Consulting Group LLC 22-033

Enclosures

BASIS OF COST ESTIMATE R2

Conditions of Construction

The pricing is based on the following general conditions of construction

A start date of June 2024

A construction period of 12 months

The project delivery method will be Design/Bid/Build

Pricing assumes a minimum of (3) bidders in all trades

There will not be small business set aside requirements

The contractor will be required to pay prevailing wages

EXCLUSIONS

Off-site utilities or off-site work of any kind

Allowance for Percent for Art

Adjustments for workforce training/PLA/MWESB

Owner supplied and installed furniture, fixtures and equipment

Hazardous material handling, disposal and abatement except as identified

Compression of schedule, premium or shift work, and restrictions on the contractor's working hours

Tap fees, street use fees, electrical consumption charges

Design, testing, inspection or construction management fees

Architectural and design fees

Third party commissioning

Assessments, taxes, finance, legal and development charges

Environmental impact mitigation

Builder's risk, project wrap-up and other owner provided insurance program except as identified

Land and easement acquisition

Also see detail of each estimate

OVERALL SUMMARY

	Enclosed Area	\$ / SF	\$x1,000
Alternative 1: New Construction	19,560 SF	821.21	16,063
Alternative 2: Renovation + Expansion	19,560 SF	798.94	15,627

ALTERNATIVE 1: NEW CONSTRUCTION AREAS

Areas	SF
Enclosed Areas	
Level 1	19,560
Level 2	
Roof Level/Penthouse	
SUBTOTAL, Enclosed Area	<u>19,560</u>
Covered area	
Canopies	
Allow	1,174
SUBTOTAL, Covered Area @ ½ Value	<u>587</u>
TOTAL GROSS FLOOR AREA	<u>20,147</u>

ALTERNATIVE 1: NEW CONSTRUCTION Construction Systems and Assemblies Summary

Enclosed Area 19,560 SF

		Base Bid	
		\$/SF	\$x1,000
A	Substructure		
A10	Foundations	22.10	432
A20	Basement construction	-	-
A	SUBSTRUCTURE	22.10	432
B	Shell		
B10	Superstructure	84.30	1,649
B20	Exterior enclosure	103.91	2,032
B30	Roofing	37.95	742
B	SHELL	226.15	4,424
C	Interiors		
C10	Interior construction	53.28	1,042
C20	Stairs	-	-
C30	Interior finishes	32.50	636
C	INTERIORS	85.78	1,678
D	Services		
D10	Conveying systems	-	-
D20	Plumbing	14.82	290
D30	Heating, Ventilation and Air Conditioning (HVAC)	69.94	1,368
D40	Fire protection systems	6.10	119
D50	Electrical	54.77	1,071
D	SERVICES	145.63	2,848
E	Equipment and furnishings		
E10	Equipment	5.19	101
E20	Furnishings	8.62	169
E	EQUIPMENT AND FURNISHINGS	13.80	270
F	Special construction and demolition		
F10	Special construction	-	-
F20	Selective demolition	-	-
F	SPECIAL CONSTRUCTION AND DEMOLITION	-	-
G	Building sitework		
G10	Site preparation	19.68	385
G20	Site improvements	11.36	222
G30	Site civil/Mechanical utilities	17.77	348
G40	Site electrical utilities	11.50	225
G90	Other site construction	-	-
G	BUILDING SITEWORK	60.31	1,180

ALTERNATIVE 1: NEW CONSTRUCTION Construction Systems and Assemblies Summary

Enclosed Area 19,560 SF

		Base Bid	
SUBTOTAL DIRECT COST		553.78	10,832
Contingencies			
Design & Estimating Contingency	10.00%	55.38	1,083
Construction/Risk Contingency	0.00%	-	-
Escalation Contingency	18.78%	104.02	2,035
SUBTOTAL SUBCONTRACT COST		713.18	13,950
General			
NSS/Job Services/Site Logistics	0.00%	-	-
SUBTOTAL		-	-
General			
General Conditions	9.87%	54.66	1,069
Fee	4.00%	28.53	558
Preconstruction Fees	0.00%	-	-
SUBTOTAL		83.18	1,627
SUBTOTAL CONSTRUCTION COST		796.36	15,577
Permits, Insurances, Bonds & Taxes			
Bid Document Reproduction	0.00%	-	-
GC/CM P&P Bond	1.00%	7.96	156
GL Insurance	1.00%	7.96	156
Builder's Risk Insurance	0.65%	5.18	101
Plan Review - EXCLUDED	0.00%	-	-
Permit fees - EXCLUDED	0.00%	-	-
B&O Tax, WA	0.47%	3.75	73
B&O Tax, COS	0.00%	-	-
WSST EXCLUDED	EXCLUDED		
TOTAL PROBABLE CONSTRUCTION COST		821.21	16,063

<i>Description</i>	<i>Quantity</i>	<i>Unit</i>	<i>Rate</i>	<i>Total</i>
<u>A - Substructure</u>				
A10 Foundations				
A1010 Standard foundations				
Continuous, spread and stem wall foundations	19,560	sf	7.50	146,700
Foundation drain				
Perforated drain pipe @ perimeter	676	lf	26.00	17,576
Insulation				
Insulation	4,056	sf	4.00	16,224
Structural excavation	19,560	sf	1.88	36,675
A1030 Slabs on grade				
Slab on grade	19,560	sf	11.00	215,160
				432,335
<u>B - Shell</u>				
B10 Superstructure				
B1010 Floor construction				
Columns	40	t	8,500.00	344,157
BRBs	14	ea	8,400.00	117,600
Misc metals	12,714	lb	5.00	63,570
Pads/curbs/misc concrete	19,560	gsf	0.20	3,912
B1020 Roof construction				
Roof framing				
Flat roof construction				
Beams/Joists assume predominantly GLB	19,560	sf	22.00	430,320
CLT, 5-ply	19,560	sf	32.00	625,920
Fireproofing, sprayed cementitious			EXCLUDED	
Canopy framing + decking	1,174	sf	54.00	63,374
PV array framing			Assume ballasted	
B20 Exterior enclosure				
B2010 Exterior walls				
Exterior wall construction				
Opaque wall finish, 60% laid-up brick or equal	8,923	sf	56.00	499,688
Rainscreen back-up wall section	8,923	sf	40.25	359,151
Detailing	8,923	sf	11.50	102,615
Mock-ups			EXCLUDED	

<i>Description</i>	<i>Quantity</i>	<i>Unit</i>	<i>Rate</i>	<i>Total</i>
Sealer/Graffiti coatings	8,923	sf	2.75	24,538
Roof Screens				
Perforated metal panel			EXCLUDED	
Soffits				
Allow for finish				
B2020 Exterior windows				
Glass & glazing				
Translucent wall finish, 40% assume 50% punched opngs/50% CW	5,949	sf	140.00	832,860
Operables/shading systems/detailing	5,949	sf	25.00	148,725
B2030 Exterior doors				
Solid exterior doors				
HM frame+door+hardware, per leaf	19,560	sf	0.35	6,846
OHDs	1	ea	14,000.00	14,000
Glazed entrances				
Per leaf	19,560	sf	2.25	44,010
B30 Roofing				
B3010 Roof coverings				
Roofing system including insulation	19,560	sf	26.50	518,340
Roofing system no insulation	1,174	sf	20.00	23,472
Sheetmetal flashings & trims	19,560	sf	2.50	48,900
Roof carpentry/tie-offs	19,560	sf	3.50	68,460
B3020 Roof openings				
Skylights	19,560	sf	4.25	83,130
				4,423,587

C - Interiors

C10 Interior construction

C1010 Partitions

Fixed partitions

CMU			EXCLUDED	
Metal stud+GWB	28,874	sf	26.25	757,943
GWB to interior of exterior	8,923	sf	5.00	44,615
Backing and blocking	19,560	sf	0.65	12,714
Sidelites/Transoms	19,560	sf	0.60	11,736

<i>Description</i>	<i>Quantity</i>	<i>Unit</i>	<i>Rate</i>	<i>Total</i>
Window wall/windows	19,560	sf	0.90	17,604
C1020 Interior doors				
Interior doors, frames & hardware				
HM/WD Frames+Doors+Hdwre, per leaf	19,560	sf	7.50	146,700
C1030 Fittings specialties				
Fabricated toilet partitions				
Toilet partitions, Plastic	19,560	sf	0.35	6,846
Protective guards, barriers & bumpers	19,560	sf	0.25	4,890
Identifying devices				
Signage & Graphics	19,560	gsf	0.75	14,670
Amenities and convenience items				
Toilet & bath accessories				
Toilet rooms	19,560	gsf	0.65	12,714
Storage room shelving			EXCLUDED	
Office shelving			EXCLUDED	
Lockers				
Day use incl. benches	19,560	sf	0.50	9,780
Fire extinguishers & Cabinets	19,560	sf	0.10	1,956
C30 Interior finishes				
C3010 Wall finishes				
Allow	19,560	sf	8.50	166,260
C3020 Floor finishes				
Flooring				
Allow	19,560	sf	11.00	215,160
C3020 Ceiling finishes				
Ceiling finishes				
Allow	19,560	sf	13.00	254,280
				1,677,868
<u>D - Services</u>				
D20 Plumbing				
Sanitary fixtures and connection piping	19,560	sf	3.60	70,416
Sanitary waste, vent and service piping	19,560	sf	4.60	89,976
Vacuum waste system	19,560	sf	3.07	60,049

<i>Description</i>	<i>Quantity</i>	<i>Unit</i>	<i>Rate</i>	<i>Total</i>
Water treatment, storage and circulation	19,560	sf	1.10	21,516
Surface water drainage	19,560	sf	2.10	41,076
Testing	19,560	sf	0.35	6,846
D30 Heating, Ventilation and Air Conditioning (HVAC)				
Geothermal heat pump system	SEPARATE PROJECT			
Heat generation and chilling	19,560	sf	10.20	199,512
Thermal storage and circulation pumps	19,560	sf	3.00	58,680
Piping, fittings, valves and insulation	19,560	sf	10.00	195,600
Air handling equipment	19,560	sf	10.00	195,600
Air distribution	19,560	sf	11.05	216,138
Grilles, registers and diffusers	19,560	sf	1.50	29,340
Controls	19,560	sf	12.00	234,720
Dryer exhaust	19,560	sf	0.10	1,956
Radiant floor	5,550	sf	12.00	66,600
Chilled beams	14,010	sf	8.75	122,588
24/7 cooling	2	ea	7,000.00	14,000
Testing, adjusting and balancing	19,560	sf	1.70	33,252
D40 Fire protection systems				
D4010 Fire protection sprinkler systems				
Fire sprinkler systems				
Wet pipe sprinkler systems	19,560	sf	5.65	110,514
Dry pipe sprinkler systems, to canopies and soffits $\geq 4'W$	1,174	sf	7.50	8,802
D50 Electrical				
D5010 Electrical service and distribution				
Main service and distribution etc.	19,560	sf	7.50	146,700
Central battery inverter system	1	ls	15,000.00	15,000
Photovoltaic system				
PV system, at 0.5W/sf	1	ls	50,000.00	50,000
Machine and equipment power	19,560	sf	3.25	63,570
User convenience power	19,560	sf	5.00	97,800
Grounding	19,560	sf	0.35	6,846
Testing	19,560	sf	1.15	22,494
D5020 Lighting and branch wiring				
Lighting fixtures including conduit and wire	19,560	sf	14.00	273,840

<i>Description</i>	<i>Quantity</i>	<i>Unit</i>	<i>Rate</i>	<i>Total</i>
Lighting controls	19,560	sf	3.50	68,460
D5030 Communications and security systems				
Telephone and communications systems				
Telephone/data systems	19,560	sf	7.15	139,854
AV systems				
AV equipment		FF&E		
AV, rough-in only	1	ls	40,000.00	40,000
DAS/ERRC		N/A		
Alarm and security systems				
Fire alarm system	19,560	sf	3.50	68,460
Access control/intruder detection	19,560	sf	2.00	39,120
CCTV systems	19,560	sf	2.00	39,120
				2,848,445
<u>E - Equipment and Furnishings</u>				
E10 Equipment				
E1010 Commercial equipment				
Laundry & drycleaning equipment				
Washer & dryer set	1	ls	3,000.00	3,000
E1020 Institutional equipment				
Writable surfaces	19,560	sf	1.00	19,560
AV equipment, screens/supports only	19,560	gsf	1.50	29,340
E1030 Vehicular equipment				
Loading dock equipment				
Dock leveler+truck restraints+bumpers			EXCLUDED	
E1090 Other equipment				
Food service equipment	1	ls	30,000.00	30,000
Residential kitchen equipment	19,560	sf	0.50	9,780
Allow for OFCI	19,560	sf	0.50	9,780
E20 Furnishings				
E2010 Fixed furnishings				
Casework	19,560	sf	3.50	68,460
Window treatments				
Mechoshades	5,949	sf	16.00	95,184

<i>Description</i>	<i>Quantity</i>	<i>Unit</i>	<i>Rate</i>	<i>Total</i>
Interior shades/privacy film	19,560	sf	0.25	4,890
Kiosks, carrels, etc	EXCLUDED			
				269,994
G - Building Sitework				
G10 Site preparation				
G1010 Site clearing				
Demolition of building & structures				
Demolish buildings	12,999	sf	7.00	90,993
Hazmat abatement	12,999	sf	4.50	58,496
Site protective construction				
TESC				
Set-up+Maintenance	62,000	sf	0.85	52,390
Site clearing and grading				
Site clearance	62,000	sf	0.65	40,300
Mass ex	62,000	sf	1.90	117,800
Demolish existing utilities	1	ls	25,000.00	25,000
G20 Site improvements				
G2010 Roadways				
Restoration for utility tie-ins	1	ls	10,000.00	10,000
G2040 Site development				
Allow for hardscape/softscape	42,440	sf	5.00	212,200
G30 Site civil/Mechanical utilities				
G3010 Water supply				
Water piping and fittings - main and fire service	1	ls	20,000.00	20,000
G3020 Sanitary sewer				
Sanitary sewer piping and fittings	1	ls	15,000.00	15,000
G3030 Storm sewer				
Storm drainage piping and fittings	1	ls	50,000.00	50,000
Heating distribution				

<i>Description</i>	<i>Quantity</i>	<i>Unit</i>	<i>Rate</i>	<i>Total</i>
Heating hot water distribution from Geothermal Heat Pump system - allow	2,000	lf	85.00	170,000
Cooling distribution				
Chilled water from campus distribution system - allow	500	lf	85.00	42,500
Connections to chilled water mains	2	ea	25,000.00	50,000
G3060 Fuel distribution				
Incoming gas service		N/A		
G40 Site electrical utilities				
G4010 Electrical distribution				
Medium voltage feeders - allow 2 @ 150lf	300	lf	200.00	60,000
Transformers	2	ea	50,000.00	100,000
EV charging stations		N/A		
G4020 Site lighting				
Site lighting fixtures including conduit and wire	1	ls	25,000.00	25,000
G4030 Site communications and security				
Incoming telecom service	1	ls	20,000.00	20,000
Site security	1	ls	20,000.00	20,000
				1,179,679

ALTERNATIVE 2: RENOVATION + EXPANSION AREAS

Areas	SF
Enclosed Areas	
Level B, Existing	863
Level 1, Existing	12,136
Level 1, New	6,561
SUBTOTAL, Enclosed Area	<u>19,560</u>
Covered area	
Canopies	
Allow	1,122
SUBTOTAL, Covered Area @ ½ Value	<u>561</u>
TOTAL GROSS FLOOR AREA	<u>20,121</u>

ALTERNATIVE 2: RENOVATION + EXPANSION Construction Systems and Assemblies Summary

Enclosed Area 19,560 SF

		Base Bid	
		\$/SF	\$x1,000
A	Substructure		
A10	Foundations	12.09	236
A20	Basement construction	-	-
A	SUBSTRUCTURE	12.09	236
B	Shell		
B10	Superstructure	72.58	1,420
B20	Exterior enclosure	110.41	2,160
B30	Roofing	37.90	741
B	SHELL	220.89	4,321
C	Interiors		
C10	Interior construction	36.46	713
C20	Stairs	-	-
C30	Interior finishes	32.50	636
C	INTERIORS	68.96	1,349
D	Services		
D10	Conveying systems	-	-
D20	Plumbing	16.32	319
D30	Heating, Ventilation and Air Conditioning (HVAC)	77.44	1,515
D40	Fire protection systems	7.33	143
D50	Electrical	57.27	1,120
D	SERVICES	158.36	3,097
E	Equipment and furnishings		
E10	Equipment	5.19	101
E20	Furnishings	8.13	159
E	EQUIPMENT AND FURNISHINGS	13.32	261
F	Special construction and demolition		
F10	Special construction	-	-
F20	Selective demolition	10.63	208
F	SPECIAL CONSTRUCTION AND DEMOLITION	10.63	208
G	Building sitework		
G10	Site preparation	12.55	245
G20	Site improvements	11.58	227
G30	Site civil/Mechanical utilities	17.77	348
G40	Site electrical utilities	11.50	225
G90	Other site construction	-	-
G	BUILDING SITEWORK	53.40	1,045

ALTERNATIVE 2: RENOVATION + EXPANSION Construction Systems and Assemblies Summary

Enclosed Area 19,560 SF

		Base Bid	
SUBTOTAL DIRECT COST		537.65	10,517
Contingencies			
Design & Estimating Contingency	10.00%	53.77	1,052
Construction/Risk Contingency	0.00%	-	-
Escalation Contingency	18.78%	100.99	1,975
SUBTOTAL SUBCONTRACT COST		692.41	13,544
General			
NSS/Job Services/Site Logistics	0.00%	-	-
SUBTOTAL		-	-
General			
General Conditions	10.17%	54.66	1,069
Fee	4.00%	27.70	542
Preconstruction Fees	0.00%	-	-
SUBTOTAL		82.35	1,611
SUBTOTAL CONSTRUCTION COST		774.76	15,154
Permits, Insurances, Bonds & Taxes			
Bid Document Reproduction	0.00%	-	-
GC/CM P&P Bond	1.00%	7.75	152
GL Insurance	1.00%	7.75	152
Builder's Risk Insurance	0.65%	5.04	99
Plan Review - EXCLUDED	0.00%	-	-
Permit fees - EXCLUDED	0.00%	-	-
B&O Tax, WA	0.47%	3.65	71
B&O Tax, COS	0.00%	-	-
WSST EXCLUDED	EXCLUDED		
TOTAL PROBABLE CONSTRUCTION COST		798.94	15,627

<i>Description</i>	<i>Quantity</i>	<i>Unit</i>	<i>Rate</i>	<i>Total</i>
<u>A - Substructure</u>				
A10 Foundations				
A1010 Standard foundations				
Continuous, spread and stem wall foundations	6,561	sf	7.50	49,208
Foundation drain				
Perforated drain pipe @ perimeter	885	lf	26.00	23,020
Insulation				
Insulation	5,312	sf	4.00	21,250
Structural excavation	6,561	sf	1.88	12,302
A1030 Slabs on grade				
SOG cut/patch/repair	12,999	sf	4.50	58,496
Slab on grade, new	6,561	sf	11.00	72,171
Trenches, pits & bases				
Elevator pits, concrete			EXCLUDED	
				236,446
<u>B - Shell</u>				
B10 Superstructure				
B1010 Floor construction				
Columns	14	t	8,500.00	115,443
BRBs	5	ea	8,400.00	42,000
Seismic upgrade	12,999	sf	60.00	779,940
Misc metals	12,714	lb	5.00	63,570
Pads/curbs/misc concrete	19,560	gsf	0.20	3,912
B1020 Roof construction				
Roof framing				
Flat roof construction				
Beams/Joists assume predominantly GLB	6,561	sf	22.00	144,342
CLT, 5-ply	6,561	sf	32.00	209,952
Fireproofing, sprayed cementitious			EXCLUDED	
Canopy framing + decking	1,122	sf	54.00	60,578
PV array framing			Assume ballasted	
B20 Exterior enclosure				
B2010 Exterior walls				
Exterior wall construction				

<i>Description</i>	<i>Quantity</i>	<i>Unit</i>	<i>Rate</i>	<i>Total</i>
Opaque wall finish, 60% laid-up brick or equal	10,957	sf	56.00	613,592
Rainscreen back-up wall section	10,957	sf	40.25	441,019
Detailing	10,957	sf	11.50	126,006
Mock-ups	EXCLUDED			
Sealer/Graffiti coatings	10,957	sf	2.75	30,132
Roof Screens	EXCLUDED			
Perforated metal panel	EXCLUDED			
Soffits	EXCLUDED			
Allow for finish	EXCLUDED			
B2020 Exterior windows				
Glass & glazing				
Translucent wall finish, 40% assume 50% punched opngs/50% CW	5,358	sf	140.00	750,120
Operables/shading systems/detailing	5,358	sf	25.00	133,950
B2030 Exterior doors				
Solid exterior doors				
HM frame+door+hardware, per leaf	19,560	sf	0.35	6,846
OHDs	1	ea	14,000.00	14,000
Glazed entrances				
Per leaf	19,560	sf	2.25	44,010
B30 Roofing				
B3010 Roof coverings				
Roofing system including insulation	19,560	sf	26.50	518,340
Roofing system no insulation	1,122	sf	20.00	22,436
Sheetmetal flashings & trims	19,560	sf	2.50	48,900
Roof carpentry/tie-offs	19,560	sf	3.50	68,460
B3020 Roof openings				
Skylights	19,560	sf	4.25	83,130
				4,320,678

C - Interiors

C10 Interior construction

C1010 Partitions
 Fixed partitions

<i>Description</i>	<i>Quantity</i>	<i>Unit</i>	<i>Rate</i>	<i>Total</i>
CMU	EXCLUDED			
Metal stud+GWB	11,778	sf	26.25	309,173
New batt+GWB to existing walls	10,467	sf	11.00	115,137
GWB+VB to interior of exterior	10,957	sf	4.50	49,307
Backing and blocking	19,560	sf	0.65	12,714
Sidelites/Transoms	19,560	sf	0.60	11,736
Window wall/windows	19,560	sf	0.90	17,604
C1020 Interior doors				
Interior doors, frames & hardware				
HM/WD Frames+Doors+Hdwre, per leaf	19,560	sf	7.50	146,700
C1030 Fittings specialties				
Fabricated toilet partitions				
Toilet partitions, Plastic	19,560	sf	0.35	6,846
Protective guards, barriers & bumpers	19,560	sf	0.25	4,890
Identifying devices				
Signage & Graphics	19,560	gsf	0.75	14,670
Amenities and convenience items				
Toilet & bath accessories				
Toilet rooms	19,560	gsf	0.65	12,714
Storage room shelving	EXCLUDED			
Office shelving	EXCLUDED			
Lockers				
Day use incl. benches	19,560	sf	0.50	9,780
Fire extinguishers & Cabinets	19,560	sf	0.10	1,956
C30 Interior finishes				
C3010 Wall finishes				
Allow	19,560	sf	8.50	166,260
C3020 Floor finishes				
Flooring				
Allow	19,560	sf	11.00	215,160
C3020 Ceiling finishes				
Ceiling finishes				
Allow	19,560	sf	13.00	254,280

<i>Description</i>	<i>Quantity</i>	<i>Unit</i>	<i>Rate</i>	<i>Total</i>
				1,348,926
<u>D - Services</u>				
D20 Plumbing				
Sanitary fixtures and connection piping	19,560	sf	3.60	70,416
Sanitary waste, vent and service piping	19,560	sf	4.60	89,976
Vacuum waste system	19,560	sf	3.07	60,049
Water treatment, storage and circulation	19,560	sf	1.10	21,516
Surface water drainage	19,560	sf	2.10	41,076
Testing	19,560	sf	0.35	6,846
Trade demolition	19,560	sf	1.50	29,340
D30 Heating, Ventilation and Air Conditioning (HVAC)				
Geothermal heat pump system	SEPARATE PROJECT			
Heat generation and chilling	19,560	sf	10.20	199,512
Thermal storage and circulation pumps	19,560	sf	3.00	58,680
Piping, fittings, valves and insulation	19,560	sf	10.00	195,600
Air handling equipment	19,560	sf	10.00	195,600
Air distribution	19,560	sf	11.05	216,138
Grilles, registers and diffusers	19,560	sf	1.50	29,340
Controls	19,560	sf	12.00	234,720
Dryer exhaust	19,560	sf	0.10	1,956
Radiant floor	5,550	sf	12.00	66,600
Chilled beams	14,010	sf	8.75	122,588
24/7 cooling	2	ea	7,000.00	14,000
Testing, adjusting and balancing	19,560	sf	1.70	33,252
HVAC premium for limited ceiling space	19,560	sf	5.00	97,800
Trade demolition	19,560	sf	2.50	48,900
D40 Fire protection systems				
D4010 Fire protection sprinkler systems				
Fire sprinkler systems				
Wet pipe sprinkler systems	19,560	sf	5.65	110,514
Dry pipe sprinkler systems, to canopies and soffits $\geq 4'W$	1,122	sf	7.50	8,414
Trade demolition	19,560	sf	1.25	24,450
D50 Electrical				
D5010 Electrical service and distribution				
Main service and distribution etc.	19,560	sf	7.50	146,700

<i>Description</i>	<i>Quantity</i>	<i>Unit</i>	<i>Rate</i>	<i>Total</i>
Central battery inverter system	1	ls	15,000.00	15,000
Photovoltaic system				
PV system, at 0.5W/sf	1	ls	50,000.00	50,000
Machine and equipment power	19,560	sf	3.25	63,570
User convenience power	19,560	sf	5.00	97,800
Grounding	19,560	sf	0.35	6,846
Testing	19,560	sf	1.15	22,494
Trade demolition	19,560	sf	2.50	48,900
D5020 Lighting and branch wiring				
Lighting fixtures including conduit and wire	19,560	sf	14.00	273,840
Lighting controls	19,560	sf	3.50	68,460
D5030 Communications and security systems				
Telephone and communications systems				
Telephone/data systems	19,560	sf	7.15	139,854
AV systems				
AV equipment		FF&E		
AV, rough-in only	1	ls	40,000.00	40,000
DAS/ERRC		N/A		
Alarm and security systems				
Fire alarm system	19,560	sf	3.50	68,460
Access control/intruder detection	19,560	sf	2.00	39,120
CCTV systems	19,560	sf	2.00	39,120
				3,097,446
<u>E - Equipment and Furnishings</u>				
E10 Equipment				
E1010 Commercial equipment				
Laundry & drycleaning equipment				
Washer & dryer set	1	ls	3,000.00	3,000
E1020 Institutional equipment				
Writable surfaces	19,560	sf	1.00	19,560
AV equipment, screens/supports only	19,560	gsf	1.50	29,340
E1030 Vehicular equipment				
Loading dock equipment				
Dock leveler+truck restraints+bumpers		EXCLUDED		

<i>Description</i>	<i>Quantity</i>	<i>Unit</i>	<i>Rate</i>	<i>Total</i>
E1090 Other equipment				
Food service equipment	1	ls	30,000.00	30,000
Residential kitchen equipment	19,560	sf	0.50	9,780
Allow for OFCI	19,560	sf	0.50	9,780
E20 Furnishings				
E2010 Fixed furnishings				
Casework	19,560	sf	3.50	68,460
Window treatments				
Mechoshades	5,358	sf	16.00	85,728
Interior shades/privacy film	19,560	sf	0.25	4,890
Kiosks, carrels, etc	EXCLUDED			
				260,538
<u>F - Special Construction and Demolition</u>				
Selective demolition				
Allow for selective demo+abatement	12,999	sf	16.00	207,984
				207,984
<u>G - Building Sitework</u>				
G10 Site preparation				
G1010 Site clearing				
Site protective construction				
TESC				
Set-up+Maintenance	62,000	sf	0.85	52,390
Site clearing and grading				
Site clearance	62,000	sf	0.65	40,300
Mass ex	62,000	sf	1.90	117,800
Demolish existing utilities	1	ls	10,000.00	10,000
Demolish steam utilidor	1	ls	25,000.00	25,000
G20 Site improvements				
G2010 Roadways				
Restoration for utility tie-ins	1	ls	10,000.00	10,000
G2040 Site development				
Allow for hardscape/softscape	43,303	sf	5.00	216,515

<i>Description</i>	<i>Quantity</i>	<i>Unit</i>	<i>Rate</i>	<i>Total</i>
G30 Site civil/Mechanical utilities				
G3010 Water supply				
Water piping and fittings - main and fire service	1	ls	20,000.00	20,000
G3020 Sanitary sewer				
Sanitary sewer piping and fittings	1	ls	15,000.00	15,000
G3030 Storm sewer				
Storm drainage piping and fittings	1	ls	50,000.00	50,000
Heating distribution				
Heating hot water distribution from Geothermal Heat Pump system - allow	2,000	lf	85.00	170,000
Cooling distribution				
Chilled water from campus distribution system - Connections to chilled water mains	500	lf	85.00	42,500
	2	ea	25,000.00	50,000
G3060 Fuel distribution				
Incoming gas service		N/A		
G40 Site electrical utilities				
G4010 Electrical distribution				
Medium voltage feeders - allow 2 @ 150lf	300	lf	200.00	60,000
Transformers	2	ea	50,000.00	100,000
EV charging stations		N/A		
G4020 Site lighting				
Site lighting fixtures including conduit and wire	1	ls	25,000.00	25,000
G4030 Site communications and security				
Incoming telecom service	1	ls	20,000.00	20,000
Site security	1	ls	20,000.00	20,000
				1,044,505

APPENDIX D

DEPARTMENT OF
ARCHAEOLOGY AND
HISTORIC RESOURCES
CONSULTATION

AND

LOCAL TRIBAL
CONSULTATIONS



Allyson Brooks Ph.D., Director
State Historic Preservation Officer

June 16, 2022

Joanne Voute Hillemann, Senior Architect, LEED AP
Central Washington University
Capital Planning & Projects
400 E. University Way
Ellensburg, WA 98926-7523

In future correspondence please refer to:
Project Tracking Code: 2022-06-04031
Property: Central Washington University Multi-Cultural Center project
Re: Predesign

Dear Joanne Voute Hillemann:

Thank you for contacting the Washington State Department of Archaeology and Historic Preservation (DAHP). The above referenced project has been reviewed on behalf of the State Historic Preservation Officer (SHPO) under provisions of Governor's Executive Order 21-02. Our review is based upon documentation contained in your communication.

It is our current opinion that Property ID: 677108, the Central Washington University, Kennedy Hall building is not eligible for listing in the National Register of Historic Places. We understand that the current project is in the design phase and is technically exempt from review under 21-02. Should the construction phase of the project become obligated with Washington State capital funding, review under 21-02 by DAHP will be required. Please note that this project has not yet been reviewed by DAHP for archaeological concerns; this will need to occur at the construction, should it be funded.

Thank you for the opportunity to review and comment. Please ensure that the DAHP Project Number (a.k.a. Project Tracking Code) is shared with any hired cultural resource consultants and is attached to any communications or submitted reports. If you have any questions, please feel free to contact me.

Sincerely,

Holly Borth
Preservation Design Reviewer
(360) 890-0174
Holly.Borth@dahp.wa.gov

State of Washington • Department of Archaeology & Historic Preservation
P.O. Box 48343 • Olympia, Washington 98504-8343 • (360) 586-3065
www.dahp.wa.gov





Chairman Andrew Joseph, Jr.
Colville Tribal Business Council
21 Colville Street
Nespelem, WA, 99155



DATE: June 21, 2022

TO: Chairman Andrew Joseph, Jr. - Colville Tribal Business Council

FROM: Delano Palmer, Director of Planning and Projects - Central Washington University

RE: Multi-Cultural Center (International Building Replacement)

Chairman Andrew Joseph, Jr.,

Central Washington University (CWU) is initiating consultation with the Confederated Tribes of the Colville Reservation pursuant to Executive Order 21-02 which requires that Tribal consultation occur early in the planning process prior to the expenditure of State funds. The proposed project is located at Township 18 North, Range 18 East, Section 36. CWU is currently planning demolition and replacement of one building located on the CWU campus. The International building is being prepared for demolition and replacement (See attached map). This building is 50 years or older and meet the minimum threshold for National Register of Historic Places (NRHP) eligibility. Eligibility determinations will be conducted in a different phase of this proposed project. Prior to analysis of the building, CWU would like to know if the Confederated Tribes of the Colville Reservation have any concerns or comments early in the planning process prior to the expenditure of state funds?

All comments and concerns regarding this project are welcome. Please contact Delano Palmer at (509) 963-2906 or by email at Delano.Palmer@cwu.edu to discuss concerns and/or comments. We look forward to hearing from you.

Thank you,

Delano Palmer

Cc: Dr. Patrick Lubinski
Dr. Steven Hackenberger
Jon Shellenberger
Guy Moura, CCT THPO
Jeremiah Eilers

Drafted by J.S. & J.E.

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CHESTNUT STREET

RANDALL HALL

MICHAELSEN HALL

INTERNATIONAL CENTER

NEW MULTI-CULTURAL CENTER <20K GSF
(INTERNATIONAL REPLACEMENT)

LANGUAGE & LITERATURE BLDG

MOORE HALL

ANDERSON APT

STEPHENS-WHITNEY HALL



MULTI-CULTURAL CENTER
(INTERNATIONAL REPLACEMENT)

SCALE: NTS
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Feedback



Chairman Robert de los Angeles
Snoqualmie Tribal Council
9571 Ethan Wade Way SE
Snoqualmie, WA 98065



DATE: June 21, 2022

TO: Chairman Robert de los Angeles – Snoqualmie Tribal Council

FROM: Delano Palmer, Director of Planning and Projects - Central Washington University

RE: Multi-Cultural Center (International Building Replacement)

Chairman Robert de los Angeles,

Central Washington University (CWU) is initiating consultation with the Snoqualmie Tribe pursuant to Executive Order 21-02 which requires that Tribal consultation occur early in the planning process prior to the expenditure of State funds. The proposed project is located at Township 18 North, Range 18 East, Section 36. CWU is currently planning demolition and replacement of one building located on the CWU campus. The International building is being prepared for demolition and replacement (See attached map). This building is 50 years or older and meet the minimum threshold for National Register of Historic Places (NRHP) eligibility. Eligibility determinations will be conducted in a different phase of this proposed project. Prior to analysis of the building, CWU would like to know if the Snoqualmie Tribe have any concerns or comments early in the planning process prior to the expenditure of state funds?

All comments and concerns regarding this project are welcome. Please contact Delano Palmer at (509) 963-2906 or by email at Delano.Palmer@cwu.edu to discuss concerns and/or comments. We look forward to hearing from you.

Thank you,

Delano Palmer

Cc: Dr. Patrick Lubinski
Dr. Steven Hackenberger
Jon Shellenbergr
Steven Mullen Moses, Department of Archaeology and Historic Preservation
Jeremiah Eilers

Drafted by J.S. & J.E.

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DEAN NICHOLSON BLVD.

CHESTNUT STREET

RANDALL HALL

MICHAELSEN HALL

INTERNATIONAL CENTER

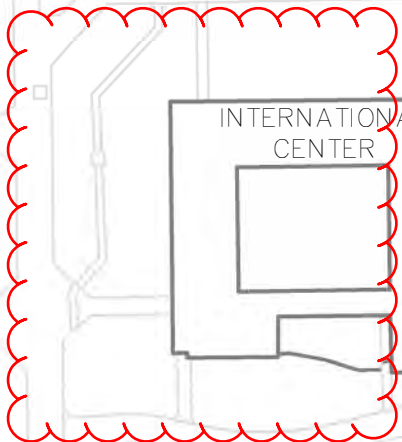
LANGUAGE & LITERATURE BLDG

MOORE HALL

ANDERSON APT

STEPHENS-WHITNEY HALL

NEW MULTI-CULTURAL CENTER <20K GSF
(INTERNATIONAL REPLACEMENT)



MULTI-CULTURAL CENTER
(INTERNATIONAL REPLACEMENT)

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CWU FACILITIES MANAGEMENT DEPARTMENT



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Feedback



Chairwoman M. Kathryn Brigham
CTUIR Board of Trustees
46411 Ti'míne Way
Pendleton, OR, 97801-0638



DATE: June 21, 2022

TO: Chairwoman M. Kathryn Brigham - CTUIR Board of Trustees

FROM: Delano Palmer, Director of Planning and Projects - Central Washington University

RE: Multi-Cultural Center (International Building Replacement)

Chairwoman M. Kathryn Brigham,

Central Washington University (CWU) is initiating consultation with the Confederated Tribes of the Umatilla Indian Reservation pursuant to Executive Order 21-02 which requires that Tribal consultation occur early in the planning process prior to the expenditure of State funds. The proposed project is located at Township 18 North, Range 18 East, Section 36. CWU is currently planning demolition and replacement of one building located on the CWU campus. The International building is being prepared for demolition and replacement (See attached map). This building is 50 years or older and meet the minimum threshold for National Register of Historic Places (NRHP) eligibility. Eligibility determinations will be conducted in a different phase of this proposed project.

Prior to analysis of the building, CWU would like to know if the Confederated Tribes of the Umatilla Indian Reservation have any concerns or comments early in the planning process prior to the expenditure of state funds?

All comments and concerns regarding this project are welcome. Please contact Delano Palmer at (509) 963-2906 or by email at Delano.Palmer@cwu.edu to discuss concerns and/or comments. We look forward to hearing from you.

Thank you,

Delano Palmer

Cc: Dr. Patrick Lubinski
Dr. Steven Hackenberger
Jon Shellenbergr
Teara Farrow, CTUIR Cultural Resources Protection Program Manager
Jeremiah Eilers

Drafted by J.S. & J.E.

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DEAN NICHOLSON BLVD.

CHESTNUT STREET

RANDALL HALL

MICHAELSEN HALL

INTERNATIONAL CENTER

NEW MULTI-CULTURAL CENTER <20K GSF
(INTERNATIONAL REPLACEMENT)

LANGUAGE & LITERATURE BLDG

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ANDERSON APT

STEPHENS-WHITNEY HALL

PLAN NORTH

MULTI-CULTURAL CENTER
(INTERNATIONAL REPLACEMENT)

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Feedback



Chairman Delano Saluskin
Yakama Nation Tribal Council
PO Box 151
Toppenish WA, 98948



DATE: June 21, 2022

TO: Chairman Delano Saluskin - Yakama Nation Tribal Council

FROM: Delano Palmer, Director of Planning and Projects - Central Washington University

RE: Multi-Cultural Center (International Building Replacement)

Chairman Delano Saluskin,

Central Washington University (CWU) is initiating consultation with the Confederated Tribes and Bands of the Yakama Nation pursuant to Executive Order 21-02 which requires that Tribal consultation occur early in the planning process prior to the expenditure of State funds. The proposed project is located at Township 18 North, Range 18 East, Section 36. CWU is currently planning demolition and replacement of one building located on the CWU campus. The International building is being prepared for demolition and replacement (See attached map). This building is 50 years or older and meet the minimum threshold for National Register of Historic Places (NRHP) eligibility. Eligibility determinations will be conducted in a different phase of this proposed project. Prior to analysis of the building, CWU would like to know if the Confederated Tribes and Bands of the Yakama Nation have any concerns or comments early in the planning process prior to the expenditure of state funds?

All comments and concerns regarding this project are welcome. Please contact Delano Palmer at (509) 963-2906 or by email at Delano.Palmer@cwu.edu to discuss concerns and/or comments. We look forward to hearing from you.

Thank you,

Delano Palmer

Cc: Dr. Patrick Lubinski
Dr. Steven Hackenberger
Jon Shellenberger
Casey Barney, YN Cultural Program Manager
Jeremiah Eilers

Drafted by J.S. & J.E.

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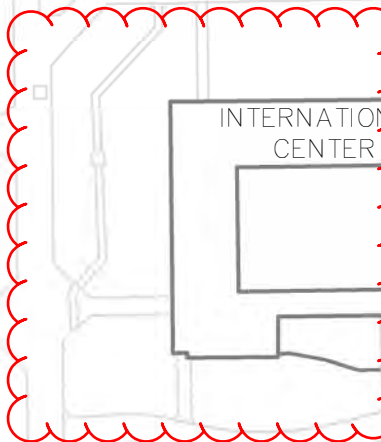
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APPENDIX E

**LIFE CYCLE
COST MODEL**

Life Cycle Cost Analysis - Project Summary

Agency	Central Washington University
Project Title	Multi-Cultural Center
Existing Description	Currently CWU does not support a Multi-Cultural Center facility on campus. This predesign proposes the replacement or repurposing of an existing facility on the site of the International Center, a majority vacant building on main
Lease Option 1 Description	
Lease Option 2 Description	
Ownership Option 1 Description	Demolition of existing International Center facility and new construction of a 13,560 sq ft facility to support all program functions within the CWU Multi-Cultural Center.
Ownership Option 2 Description	Major renovation to the existing 12,500 sq ft International Center facility, with additional 7,500 sq ft addition to meet the full program requirements of the CWU Multi-Cultural Center.
Ownership Option 3 Description	

Lease Options Information	Existing Lease	Lease Option 1	Lease Option 2
Total Rentable Square Feet	13,560	13,560	13,560
Annual Lease Cost (Initial Term of Lease)	\$ -	\$ -	\$ -
Full Service Cost/PSF (Initial Term of Lease)	\$ -	\$ -	\$ -
Occupancy Date	N/A	N/A	N/A
Project Initial Costs	N/A	\$ -	\$ -
Personnel Relocating	-	-	-
PSF/Person Calculated	-	-	-

Ownership Information	Ownership 1	Ownership 2	Ownership 3
Total Rentable Square Feet	13,560	13,560	13,560
Total Rentable Square Feet	14,689	15,000	
Occupancy Date	9/15/2026	9/15/2026	
Initial Project Costs	\$ 30,000	\$ 30,000	
Est Construction YPC (\$/PSF)	\$ 2,210	\$ 2,240	
PSF/Person Calculated	-	-	-

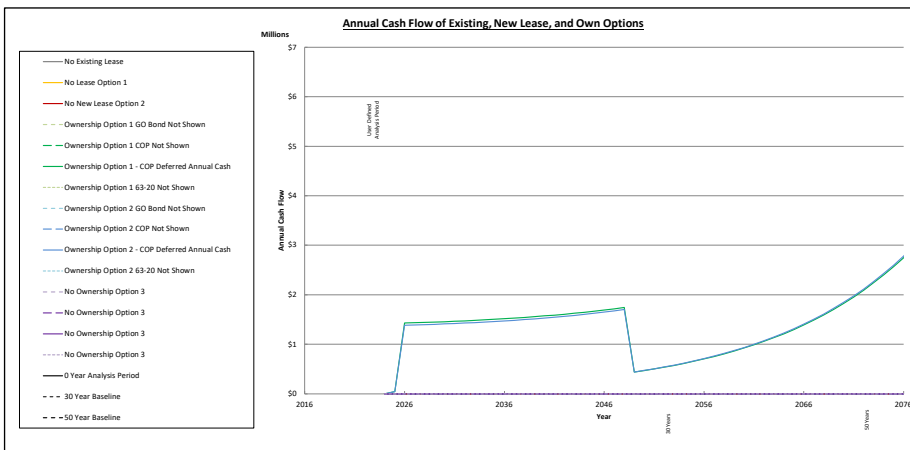
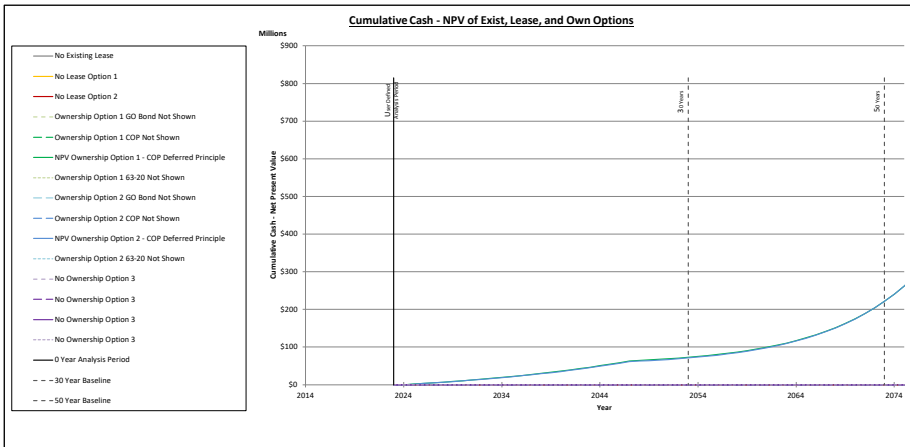
Financial Analysis of Options

Years	Financial Comparisons	Display Option?		Existing Lease		Lease 1		Lease 2		Ownership 1		Ownership 2		Ownership 3							
		Yes	No	Current	63-20	Current	63-20	GO Bond	COP	COP Deferred *	63-20	GO Bond	COP	COP Deferred	63-20	GO Bond	COP	COP Deferred	63-20		
0	0 Year Cumulative Cash			\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
0	0 Year Net Present Value			\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
	Present Cost Option (Analysis Period)																				

Years	Financial Comparisons	Existing Lease		Lease 1		Lease 2		Ownership 1		Ownership 2		Ownership 3		
		Current	63-20	Current	63-20	Current	63-20	GO Bond	COP	COP Deferred *	63-20	GO Bond	COP	COP Deferred
30	30 Year Cumulative Cash	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 38,130,318	\$ -	\$ 37,518,480	\$ -	\$ -	\$ -	\$ -
30	30 Year Net Present Value	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 20,495,110	\$ -	\$ 18,837,453	\$ -	\$ -	\$ -	
	Present Cost Option (30 Years)							2					1	

Years	Financial Comparisons	Existing Lease		Lease 1		Lease 2		Ownership 1		Ownership 2		Ownership 3	
		Current	63-20	Current	63-20	Current	63-20	GO Bond	COP	COP Deferred *	63-20	GO Bond	COP
50	50 Year Cumulative Cash	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 61,280,194	\$ -	\$ 62,593,513	\$ -	\$ -	\$ -
50	50 Year Net Present Value	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 202,981,006	\$ -	\$ 202,818,409	\$ -	\$ -	\$ -
	Present Cost Option (50 Years)							2				1	

* - Defers payment on principle for 2 years while the building is being constructed. See instructions on Capitalized Interest



Financial Assumptions

Ownership Option 1 Information Sheet

* **Requires a user input** Green Cell = Value can be entered by user. Yellow Cell = Calculated value.

Project Description	Demolition of existing International Center facility and new construction of a 19,560 gsf facility to support all program functions within the CWU Multi-Cultural Center.
----------------------------	---

Construction or Purchase/Remodel	Construction
---	--------------

Project Location	Ellensburg	Market Area = Eastern Counties
-------------------------	------------	--------------------------------

Statistics	
Gross Sq Ft	19,560
Usable Sq Ft	16,689
Space Efficiency	85%
Estimated Acres Needed	2.00
MACC Cost per Sq Ft	\$573.18
Estimated Total Project Costs per Sq Ft	\$1,051.42
Escalated MACC Cost per Sq Ft	\$703.43
Escalated Total Project Costs per Sq Ft	\$1,290.36

Move in Date	9/15/2025
---------------------	-----------

Interim Lease Information		Start Date
Lease Start Date		
Length of Lease (in months)		
Square Feet (holdover/temp lease)		
Lease Rate- Full Serviced (\$/SF/Year)		
One Time Costs (if double move)		

Construction Cost Estimates (See Capital Budget System For Detail)					
		Known Costs	Estimated Costs	Cost to Use	
Acquisition Costs Total		\$ 1,100,000	\$ 500,000	\$ 1,100,000	
A & E	Consultant Services				
	A & E Fee Percentage (if services not specified)		7.72% Std	7.72%	
	Pre-Schematic Design services	\$ -			
	Construction Documents	\$ 1,897,801			
	Extra Services	\$ 433,000			
	Other Services	\$ 399,487			
	Design Services Contingency	\$ 136,514			
Consultant Services Total		\$ 2,866,802	\$ 1,081,795	\$ 2,866,802	
MACC	Construction Contracts				
	Site Work	\$ 1,155,584			
	Related Project Costs				
	Facility Construction	\$ 10,055,724			
	MACC SubTotal		\$ 11,211,308	\$ 7,078,373	\$ 11,211,308
	Construction Contingency (5% default)	\$ 2,466,375	\$ 560,565	\$ 2,466,375	
	Non Taxable Items	\$ -		\$ -	
	Sales Tax	\$ 1,148,925		\$ 1,148,925	
	Construction Additional Items Total		\$ 3,615,300	\$ 560,565	\$ 3,615,300
	Equipment				
Equipment	\$ 174,722				
Non Taxable Items					
Sales Tax					
Equipment Total		\$ 174,722		\$ 174,722	
Art Work Total		\$ 113,418	\$ 56,057	\$ 113,418	
Other Costs	Other Costs				
	Permitting (incl. traffic mitigation)	\$ 400,000			
	Shop Support				
	Historic/archeological	\$ 10,000			
	Other Costs Total		\$ 410,000		\$ 410,000
Project Management Total		\$ 1,074,242		\$ 1,074,242	
Grand Total Project Cost		\$ 20,565,792	\$ 9,276,790	\$ 20,565,792	

Construction One Time Project Costs		
	Estimate	Calculated
One Time Costs		
Moving Vendor and Supplies	\$ 30,000	\$ -
Other (not covered in construction)		\$300 / Person in FY22
Total	\$ 30,000	\$ 30,000

Ongoing Building Costs					
Added Services	New Building Operating Costs	Known Cost /GSF/ 2025	Estimated Cost /GSF/ 2025	Total Cost / Year	Cost / Month
<input checked="" type="checkbox"/>	Energy (Electricity, Natural Gas)	\$ 0.32	\$ 1.21	\$ 6,259	\$ 522
<input checked="" type="checkbox"/>	Janitorial Services	\$ 0.18	\$ 1.75	\$ 3,480	\$ 290
<input checked="" type="checkbox"/>	Utilities (Water, Sewer, & Garbage)	\$ 1.78	\$ 0.43	\$ 34,719	\$ 2,893
<input checked="" type="checkbox"/>	Grounds	\$ -	\$ 0.07	\$ 1,285	\$ 107
<input checked="" type="checkbox"/>	Pest Control	\$ -	\$ 0.12	\$ 2,313	\$ 193
<input checked="" type="checkbox"/>	Security	\$ -	\$ 0.12	\$ 2,313	\$ 193
<input checked="" type="checkbox"/>	Maintenance and Repair	\$ 0.46	\$ 6.82	\$ 8,994	\$ 749
<input checked="" type="checkbox"/>	Management	\$ -	\$ 0.99	\$ 19,276	\$ 1,606
<input checked="" type="checkbox"/>	Road Clearance	\$ -	\$ 0.17	\$ 3,341	\$ 278
<input checked="" type="checkbox"/>	Telecom	\$ 0.21	\$ -	\$ 4,049	\$ 337
	Additional Parking	\$ -	\$ -	\$ -	\$ -
	Other	\$ -	\$ -	\$ -	\$ -
Total Operating Costs		\$ 2.94	\$ 11.67	\$ 86,029	\$ 7,169

Ownership Option 2 Information Sheet

* Requires a user input Green Cell = Value can be entered by user. Yellow Cell = Calculated value.

* Project Description	Major renovation to the existing 12,500 gsf International Center facility, with additional 7,500 gsf addition to meet the full program requirements of the CWU Multi-Cultural Center.
------------------------------	---

* Construction or Purchase/Remodel	Purchase/Remodel
---	------------------

* Project Location	Ellensburg	Market Area = Eastern Counties
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Statistics	
Gross Sq Ft	19,560
Usable Sq Ft	15,500
Space Efficiency	79%
Estimated Acres Needed	2.00
MACC Cost per Sq Ft	\$607.46
Estimated Total Project Costs per Sq Ft	\$1,010.04
Escalated MACC Cost per Sq Ft	\$745.52
Escalated Total Project Costs per Sq Ft	\$1,239.58

* Move in Date	9/15/2025
-----------------------	-----------

Interim Lease Information	
Lease Start Date	
Length of Lease (in months)	
Square Feet (holdover/temp lease)	
Lease Rate- Full Serviced (\$/SF/Year)	
One Time Costs (if double move)	

Construction Cost Estimates (See Capital Budget System For Detail)					
		Known Costs	Estimated Costs	Cost to Use	
Acquisition Costs Total		\$ 1,100,000	\$ 500,000	\$ 1,100,000	
A & E	Consultant Services				
	A & E Fee Percentage (if services not specified)		9.65% Std	9.65%	
	Pre-Schematic Design services	\$ -			
	Construction Documents	\$ 1,897,801			
	Extra Services	\$ 433,000			
	Other Services	\$ 399,487			
	Design Services Contingency	\$ 136,514			
Consultant Services Total		\$ 2,866,802	\$ 1,146,511	\$ 2,866,802	
MACC	Construction Contracts				
	Site Work	\$ 1,120,000			
	Related Project Costs	\$ 1,612,000			
	Facility Construction	\$ 9,150,000			
	MACC SubTotal		\$ 11,882,000	\$ 7,078,373	\$ 11,882,000
	Construction Contingency (5% default)	\$ 1,984,000	\$ 1,984,000	\$ 1,984,000	
	Non Taxable Items			\$ -	
	Sales Tax	\$ 72,000		\$ 72,000	
	Construction Additional Items Total		\$ 2,056,000	\$ 2,056,000	\$ 2,056,000
	Equipment				
Equipment	\$ 261,000				
Non Taxable Items	\$ 403,000				
Sales Tax					
Equipment Total		\$ 664,000		\$ 664,000	
Art Work Total		\$ 113,418	\$ 59,410	\$ 113,418	
Other Costs	Other Costs				
	Permitting (incl. traffic mitigation)				
	Shop Support				
	Historic/archeological				
	Other Costs Total		\$ -		\$ -
Project Management Total		\$ 1,074,242		\$ 1,074,242	
Grand Total Project Cost			\$ 10,840,294	\$ 19,756,462	

Construction One Time Project Costs		
	Estimate	Calculated
One Time Costs		
Moving Vendor and Supplies	\$ 30,000	\$ -
Other (not covered in construction)		\$300 / Person in FY22
Total	\$ 30,000	\$ 30,000

Ongoing Building Costs					
Added Services	New Building Operating Costs	Known Cost /GSF/ 2025	Estimated Cost /GSF/ 2025	Total Cost / Year	Cost / Month
<input checked="" type="checkbox"/>	Energy (Electricity, Natural Gas)	\$ 0.36	\$ 1.21	\$ 7,042	\$ 587
<input checked="" type="checkbox"/>	Janitorial Services	\$ 0.18	\$ 1.75	\$ 3,521	\$ 293
<input checked="" type="checkbox"/>	Utilities (Water, Sewer, & Garbage)	\$ 1.78	\$ 0.43	\$ 34,817	\$ 2,901
<input checked="" type="checkbox"/>	Grounds	\$ -	\$ 0.07	\$ 1,285	\$ 107
<input checked="" type="checkbox"/>	Pest Control	\$ -	\$ 0.12	\$ 2,313	\$ 193
<input checked="" type="checkbox"/>	Security	\$ -	\$ 0.12	\$ 2,313	\$ 193
<input checked="" type="checkbox"/>	Maintenance and Repair	\$ 0.46	\$ 6.82	\$ 8,998	\$ 750
<input checked="" type="checkbox"/>	Management	\$ -	\$ 0.99	\$ 19,276	\$ 1,606
<input checked="" type="checkbox"/>	Road Clearance	\$ -	\$ 0.17	\$ 3,341	\$ 278
<input checked="" type="checkbox"/>	Telecom	\$ 0.21	\$ -	\$ 4,108	\$ 342
	Additional Parking	\$ -	\$ -	\$ -	\$ -
	Other	\$ -	\$ -	\$ -	\$ -
Total Operating Costs		\$ 2.99	\$ 11.67	\$ 87,013	\$ 7,251

APPENDIX F

EMISSION OF
GREENHOUSE GASES

State Agency Greenhouse Gas Emissions Reduction Strategy 2021 Reporting Year

Background

In 2020, the Legislature and Governor updated the State Agency Climate Leadership Act codified in RCW [RCW 70A.45.050](#). The Act directs state agencies, including universities, colleges, and community and technical colleges to lead by example in reducing their greenhouse gas (GHG) emissions to:

- 15% below 2005 level by 2020
- 45% below 2005 by 2030
- 75% below 2005 by 2040
- 95% below 2005 by 2050, and achieve net zero

To track state agencies' progress toward meeting these limits, each covered agency must meet the following reporting requirements:

1. Each year, estimate emissions using an emissions calculator provided by the Department of Ecology, and;
2. Every even-numbered year, report on the following to the State Efficiency and Environmental Performance Office (SEEP) at the Department of Commerce:
 - a. Actions taken over the last biennium to meet these emission reduction targets
 - b. Actions planned for the next two biennia to meet emission limits;
 - c. Long-term strategy for meeting the emission limits.

This document is the template for reporting your agency's GHG emission reduction strategies to SEEP and is due by **May 20th, 2022. It may be submitted to SEEP via Ecology's SAGE portal, along with your agency's GHG Emissions Calculator and any supplemental documents you would like to submit. Instructions for completing and uploading all reporting documents may be found on Ecology's website for [State Agency GHG Emissions Reporting](#).**

Instructions:

- Using this document, enter your responses to the questions and topics in the boxes below. Use as much space as needed.
- Save your document using the following name convention:

"2021_[agency acronym]_Plan.doc" (example: 2021_ECY_Plan.doc)
- Upload your answers to Ecology's SAGE portal. Detailed instructions are in the **GHG Reporting Instructions** document on [Ecology's State Agency Emissions Reporting website](#).



For questions regarding this Emissions Reduction Strategy Template, please contact:

Hanna Waterstrat, Director, [State Efficiency and Environmental Performance Office](#), Energy Division, Washington State Department of Commerce, hanna.waterstrat@commerce.wa.gov, cell: 360-764-0015

Ian Kinder-Pyle, SEEP Analyst, Energy Division, Washington State Department of Commerce, ian.kinder-pyle@commerce.wa.gov, cell: 360-764-3555

For questions related to the GHG Emissions Calculator or uploading documents to SAGE, contact:

Stacey Waterman-Hoey, Greenhouse Gas Emissions Analyst, Air Quality Program, Washington Department of Ecology, swat461@ecy.wa.gov, cell: 360-764-6178

Greenhouse Gas Emissions Reduction Strategy Report

Agency Name: Central Washington University

Name of Reporting Contact: Jeremiah Eilers, PM, Capital Planning and Projects

Email address for Reporting Contact: Jeremiah.Eilers@cwu.edu

Name of Agency Approver: Shane Scott, AVP of Facilities Management

Date completed: May 12, 2022

1. What actions did your agency take to reduce GHG emissions during the 2020 and 2021 calendar years?

2020-2021 Actions:

1. Randall/Michaelson Heat Exchanger Replacement: the result of this project was a much more energy efficient heat exchanger for Heating Water.
2. Lind AC Installation of multiple zone split system with very high efficiency rating- This project reduces the load on the central chilled water system in areas of this building where air was not properly distributed.
3. Replacement of 3 main air handling units at the WA State Archives Building. Increased the efficiency of the cooling units from 1995 standards. Allows for much tighter control of building temperature and scheduling.

4. CWU Campus Electrical Metering Upgrades- This project will allow for us to easily track building level electricity usage. This is very beneficial with upcoming legislative goals. This is a phased project.
5. Boiler #3 Front Wall Rebuild- This project was completed on one of our large central plant water tube steam boilers. The rebuilding of this front wall includes adding all new firebrick and insulation to the front of the boiler increasing the efficiency of the boiler by allowing less heat to escape through the front shell of the boiler.
6. Exterior Lighting Upgrades- Work toward replacing all existing conventional outdoor lighting fixtures with low light polluting LED Fixtures.
7. Repaired large, chilled water leak on campus that was costing a substantial amount of electricity to cool make-up water. Also a eliminating a huge amount of wasted water.
8. New Heating Water Heat Exchangers at Anderson and Moore. Both were leaking thus wasting valuable return condensate that should have returned to the central plant.

2021-2023 Actions:

1. SURC Lighting Fixtures and Controls- Upgrade Lighting Fixtures to LED and add lighting controls to take advantage of daylight harvesting and scheduling.
2. Black Hall- Variable Speed Heating and Cooling Pump Control Replacement- Pumps are currently running at a consistent speed in manual mode due to failed controls. Replacement will allow for variably speed of energy intense pump packages.
3. Science 1- Variable Speed Heating and Cooling Pump Control Replacement- Pumps are currently running at a consistent speed in manual mode due to failed controls. Replacement will allow for variably speed of energy intense pump packages.
4. Clean Building Energy Project- This project was to help get a baseline of energy usage in 5 of our buildings over 50Ksqft to check against parameters of HB1257.
5. Building Automation Server Upgrade- Allow for more reliable modification of HVAC Schedules and Energy Monitoring. Allow for more disk drive space so we can trend more points moving forward to monitor energy for upcoming legislative requirements.
6. Geothermal Study- The results of this study will give a feasibility analysis associated with adding Geothermal to part or all our buildings. The intent would be to request funds from OFM to complete a recommended geothermal project.
7. Bouillon Hall HVAC Upgrade- Removal of old inefficient fan in buildings main air handling unit and replace with a fan wall that is fully controlled by variable frequency drives.
8. Correct Heat Recovery Units on Samuelson Hall. The units are currently configured with the Thermal Heat Wheel in a position that does not recover energy on the outgoing exhaust as it was intended to do.
9. Installation of a new 1200 Ton Chiller at the central plant. This chiller will be much more efficient than running the much older chillers from the 1980s and 90s.
10. Science Fume Hood Control Upgrade- This project will significantly decrease the amount of energy used by our building with the highest EUI on campus. The current exhaust control system is ran by pneumatics and has leaks throughout the system which leads to much more exhaust leaving the building than what the original design called for. This digital control upgrade will allow for the correction of this issue while also allowing for much tighter control to conserve energy.

11. The replacement of the Hertz Hall Building with a much more energy efficient Health Science Building that is heated mostly by waste heat from the flue stacks of the heating plant main boilers.
12. The renovation of our Nicholson Pavilion which will result in new much more efficient HVAC Equipment and Control Systems.

- 2. What are the priority actions your agency is planning to take during the 2023-25 and 2025-27 biennia to reduce GHG emissions?** Please describe your agency's near-term strategies and priorities for GHG emissions reductions. If possible, provide details on specific projects your agency plans to pursue funding for and complete in order to meet the limits established for 2030.

2023-25 Biennium:

1. Pending Office of Financial Management Funding- The demolition of two very old inefficient buildings (Language and Literature / Farrell Hall) and replacing with one much more efficient building (North Academic Complex).
2. Pending Office of Financial Management Funding- Installation of all new LED Lighting Fixtures at our State Archives Facility.
3. Complete a project to install or configure all metering of heating and cooling to all buildings over 50,000sqft. This will allow for more accurate reporting to bring buildings into compliance with HB 1257.
4. Update Campus Master Plan to reflect de-carbonization strategy.
5. Establish and fill Energy Manager/Engineer to oversee the development of de-carbonization strategy.
6. Establish enterprise Energy Management Program.
7. Launch Green Revolving Fund to support campus energy efficiency projects with define payback period.
8. Develop CWU Climate Action Plan and Sustainability Plan to direct and guide campus efforts.
9. Continue to work with Department of Ecology to set utility-specific emissions factors to properly account for GHG emissions tied to purchased electricity.
10. Integrating sustainability into the new mission statement of Central Washington University to help create an ethos of sustainability action that permeates decision making at the institution.
11. Apply for construction funding for a net-zero North Academic Complex building as one of the options for OFM to fund.
12. Apply for design funding for a net-zero Psychology building as one of the options for OFM to fund.
13. Seek out funding to revamp Hogue Hall solar array to increase production.

2025-27 Biennium:

1. Integrating funding for a geothermal system at the North Academic Complex and Psychology building into the capital request. (Assuming net-zero is not approved by OFM for original building construction funding)
2. Apply for construction funding for a net-zero Psychology replacement building.
3. Research suitability of existing campus buildings for PV arrays.

We plan to request funds for the above projects by justification of energy savings and preservation. We then will utilize the WA State DES ESCO project process for many of the projects. This process ensures to check progress in energy savings against the projects original design parameters.

3. Describe your agency's long-term strategy for meeting the emissions limits established in RCW 70A.45.050 for 2030, 2040, and 2050.

Overarching strategies that will be used to meet emissions limits (detailed plans in sections that follow):

45% below 2005 by 2030

- Retro commissioning of buildings
- Investment in geothermal system for new construction in north neighborhood
- Building envelope and mechanical upgrades
- No new fossil fuel hook-ups in new or existing buildings

75% below 2005 by 2040

- Fully move district heating and cooling system to renewable energy source, reducing emissions by over 65%.
- Move to 100% electric fleet vehicles
- Purchase offsets for aviation fuel
- Creating capacity for energy storage

95% below 2005 by 2050

- Rely on carbon offsets to account for any lingering emissions.

4. Executive Summary

Please summarize your agency's long-term emissions reduction strategy in 200 words or less, using highlights from the more detailed information provided below. We suggest doing this last!

CWU has worked hard to collaborate with individuals throughout CWU and OFM to look at our systems that are at end-of-life as a way to reduce our emissions by replacing the systems with new energy efficient systems. These projects can help our institution meet our GHG Reduction Goals. CWU Operations plans to continue to push sustainability and energy savings to help advocate for funding, spread awareness and ensure all stakeholders are headed in the same direction. As of May 1, 2022 our Sustainability Coordinator separated from the University. While working at CWU

she was extremely influential to the campus community and Capital Construction Team. We hope to fill her position quickly so we can continue to improve plans toward reducing our GHG Emissions.

We are currently undergoing a study associated with the WA Clean Building House Bill, (HB1257). This project applies to 5 buildings over 50,000 SqFt. Some of the deliverables of this project are: an audit of existing sub-metering, energy efficiency measure options and modeling associated with some of those EEM's. We believe that these deliverables will play a vital role in ensuring we stay focused on the projects with the largest impact in reducing CWU's GHG Emissions.

5. Transportation

If applicable, please refer to the fleet electrification targets and strategies in Executive Order 21-04 Key strategies for reducing GHG emissions from transportation. Include:

- Replacing internal combustion engine (ICE) vehicles with battery electric vehicles (BEVs)
- Electrifying vessels and equipment where possible

Complimentary strategies for incrementally reducing GHG emissions from transportation include:

- Limiting trips in state vehicles by replacing in-person meetings with remote options
- Utilizing biofuels or other alternative strategies to lower emissions where BEVs are not feasible

CWU has 219 fleet vehicles: 198 are ICE, 12 are hybrid and 9 are electric. Transitioning these vehicles to BEVs will be a critical step in reducing the emissions from our consumption of 29,907 gallons of gasoline, 6,188 gallons of diesel, and 375 gallons of propane (2021 consumption levels).

Strategies to reduce emissions from fleet and mobile equipment:

- Dissolve Motor Pool program and move program to commercial vendor (e.g. Enterprise) that has the resources to electrify their fleet more quickly than the university.
- Transition fleet to EV vehicles
 - Transition sedans and small passenger vehicles to BEVs.
- Develop CWU policy for vehicle replacement that prioritizes BEVs and hybrid vehicles over ICE vehicles.
- Follow EV technological developments for passenger vans and trucks.
- Transition to battery-powered leaf blowers, mowers, and snow blowers.
- Purchase carbon offsets to cover emissions from CWU Aviation Program. This program is predicted to grow in scope and scale, given the demand for airline and commercial pilots. Emissions will be difficult to reduce, given lack of viable alternative fuel sources at this time. Funding source: unknown.
- Implement new sustainable transportation projects to drive down transportation emissions
- Create opt-in program for departments to offset carbon emissions from Motor Pool rentals.
- Right-sizing fleet size and vehicle size

6. Facilities

Where applicable, include information related to performance standards in the Clean Buildings law and address strategies related to other existing requirements, including facility benchmarking and Zero Energy building standards (for agencies named in EO 20-01).

Key strategies for reducing GHG emissions from agency facilities:

- Electrifying building space heating, hot water and cooking
- Ensuring major renovations are all-electric, zero energy (ZE) or zero energy capable (ZEC), and very low embodied carbon emissions
- Avoiding new construction in favor of lower embodied emissions alternatives such as renovating existing space and using less building space.

Complimentary strategies for incrementally reducing GHG emissions from facilities:

- Improving building energy performance and energy efficiency using DES Energy Savings Performance Contracting or other proven building efficiency delivery methods
- Tracking building energy use by metering and benchmarking each building over 10,000 square feet.

Operational or organizational changes:

- Hiring a resource conservation manager (RCM), buy efficient IT equipment and appliances, consider organizational or service delivery changes that use less building space or energy, and encourage occupant behavior that reduces energy consumption
- Leveraging new leases and lease renewals to electrify heating and reduce energy use
- Changing space use allocations to reduce occupied square footage

Strategies to avoid adding more agency GHG emissions:

- Ensuring any new building is zero energy (ZE) or zero energy capable (ZEC), and very low embodied carbon emissions
- Ensure any new leased square footage is all-electric and energy efficient

Strategies to reduce emissions from conditioned spaces:

- Hire an energy manager to oversee campus decarbonization efforts and EUI reductions in campus buildings.
- Develop ENERGY STAR purchasing policy for all computers.
- **Improve existing building efficiency:** increase building efficiency by investing in Investment Grade Audits and implementing energy conservation measures and retrocommissioning.
- **Leverage capital funding** to improve energy efficiency in existing buildings.
- **Leverage capital funding** to replace buildings.
- **Decarbonize new major capital projects.** Build net-zero new construction: North Academic Complex, Psychology, Mitchell, and Randall Halls.
- Design all new building and renovation projects to be compatible with renewable energy-driven heating and cooling systems.
- **Launch occupant engagement programs** to drive down carbon emissions in buildings and residence halls, including energy savings competitions in residence halls and a Green Office program.
- **Decarbonize district energy system:** move to all-electric system or geothermal based system

- Conduct Scope-3 GHG inventory on leased CWU Centers spaces to understand the GHG emissions tied to this part of the university's operations.
- Optimize space utilization in existing buildings and new construction designs by developing space-use policies that support emissions reductions.
- Right-size new construction to meet the academic needs of the building. Reduce conference room space, right-size classrooms, and reduce storage space and duplicative work rooms.
- Utilize ENERGY STAR to benchmark all buildings to track impact of energy conservation measure on building energy performance.
- Implement fume hood energy use savings measures.

7. Clean and Renewable Electricity

- On-site renewable energy generation
- Power purchase agreements (PPAs) for renewable energy purchases (examples include PSE Green Direct and Avista Solar Select)

Strategies to reduce emissions from purchased electricity:

- **Purchase carbon offsets:** 2% of electricity that is 'mixed source'
- **Accurate Emissions Factors:** Accurately account for electricity emissions by using an emissions factor specific to the City of Ellensburg utility. This will reduce emissions from purchased electricity by 98%.
- **Expand on-site renewable energy:** install solar PV arrays on all new capital construction and install on existing buildings using the Solar Energy Grant.
- **Purchase off-site renewable energy:** purchase additional solar energy from City of Ellensburg utility program to support renewable energy generation in the Kittitas Valley and low-carbon electricity if hydroelectric power generation is reduced or distributed elsewhere.
- Lighting upgrades
- Efficient electric appliances
- Sustainable Labs program to reduce energy use in labs: Shut the Sash Program
- Computer power management, server consolidation and server virtualization

8. Equity and Environmental Justice

- How is your agency using equity and environmental justice considerations to help prioritize your GHG emissions reduction work and target improvements and beneficial outcomes in overburdened communities?
- Use EPA's EJ Screen tool to understand the environmental justice concerns in our region.
- As our campus electrifies, consider the implications of our continued and increased reliance on hydroelectric energy and the impact dams have had on Washington State tribes, salmon populations, and the livelihoods of indigenous people.
- Partner with the Diversity & Inclusivity Office and the Student Diversity and Equity Center to develop environmental justice trainings and outreach programs that engage our campus in these topics.

- Reduced reliance on natural gas will reduce emissions in our region and reduce the demand for natural gas to be transported to our community. This can reduce air pollution for high-risk populations and reduce the risk of disasters and negative health risks caused by pipelines and transporting fossil fuels.
- Invest in sustainable transportation programs that increase access to campus with commuter buses, provide electric vehicle charging, and provide safe routes to walk and bike.
- Transition to electric vehicles and maintenance equipment to reduce localized air pollution and increase air quality for CWU students.

9. Planning and Budget Development

- Facility or campus master plans
- Deferred maintenance and equipment replacement schedules
- Sustainability action plans
- Funding GHG emissions reduction priorities
- For SEEP agencies: Carbon Reduction Investment Budget (CRIB) priorities
- Revise CWU Capital Master Plan, which will include strategies for decarbonizing campus
- Integrate energy efficiency strategies into the Design and Construction Standards
- Co-create CWU Climate Action Plan with campus stakeholders
- Continue to implement deferred maintenance list
- Fund Minor Works energy efficiency projects

10. Agency-specific or Other Strategies

- Utilize the skills of in-house personnel and outside vendors to continue to update our construction standards and Capital Master Plan and look outside the box for CWU specific energy systems.

11. Challenges and Barriers

- Capital funding for net-zero building construction
- Continued reliance on a Washington-State averaged emissions factor that doesn't adequately represent the emissions of our utility.
- District heating and cooling system will require significant investments to move to a renewable energy driven system.
- The City of Ellensburg utility is small. Electrifying campus will have a significant impact on the electric grid and we haven't investigated or worked through the impacts.

12. Please list any supplemental plans or documents here.

Save your supplementary documents using the following file name convention:

"2021_[agency acronym]_[brief descriptive title]"

(Example: "2021_COM_FleetPlan" or "2021_DES_SustainabilityPlan")



CWU Capital Master Plan

When complete, all documents should be uploaded via Ecology’s SAGE portal. Detailed instructions are in the GHG Reporting Instructions document on [Ecology’s State Agency Emissions Reporting website](#).

APPENDIX G

INTERNATIONAL CENTER
FACILITY CONDITIONS
INDEX

Building Detail

Central Washington University
CENTRAL WASHINGTON UNIVERSITY
 INTERNATIONAL CENTER Facility
 INTERNATIONAL CENTER

Institution ID 375
 Site ID 375

Building ID A04244

Building Size - Gross	12,846	Building Size- Assignable	8,175
Year Of Original Construction	1948	Year Of Last Renovation	
Building Use Type	Office		
Construction Type	Light		

Survey Date	05/13/22	Survey By	FMD
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Building Condition Summary

Condition Index	0.27
Relative Condition Score	4
Weighted Avg Condition Score	3.7

Building Components

Systems	Scores	Comments
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A Substructure:	3.0	
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Foundations

Standard Foundations	3	
Slab on Grade	3	

B Shell:	3.4	
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Superstructure

Floor Construction	4	
Roof Construction	3	

Exterior Closure

Exterior Walls	3	
Exterior Windows	4	
Exterior Doors	4	

Roofing

Roof Coverings	3	
Roof Opening		DOES NOT EXIST
Projections	2	

C Interiors:	3.5	
---------------------	------------	--

Building Detail

Central Washington University
CENTRAL WASHINGTON UNIVERSITY
INTERNATIONAL CENTER Facility
INTERNATIONAL CENTER

Institution ID 375
Site ID 375

Building ID A04244

Interior Construction		
Fixed and Moveable Partitions	4	
Interior Doors	4	
Specialties	4	
Staircases		
Stair Construction	3	
Stair Finishes	3	
Interior Finishes		
Wall Finishes	3	
Floor Finishes	3	
Ceiling Finishes	3	
<hr/>		
D Services:	4.1	
<hr/>		
Vertical Transportation		
Elevators and Lifts		DOES NOT EXIST
Plumbing		
Plumbing Fixtures	4	
Domestic Water Distribution	4	
Sanitary Waste	3	
Rain Water Drainage	4	
Special Plumbing Systems		DOES NOT EXIST
HVAC		
Energy Supply	4	
Heat Generating Systems		DOES NOT EXIST
Cooling Generating Systems		DOES NOT EXIST
Distribution Systems	4	
Terminal and Package Units	4	
Controls and Instrumentation	5	
Special HVAC Systems and Equipment		DOES NOT EXIST
Fire Protection		
Fire Protection Sprinkler Systems		DOES NOT EXIST
Stand-Pipe and Hose Systems		DOES NOT EXIST
Fire Protection Specialties		DOES NOT EXIST
Special Fire Protection Systems		DOES NOT EXIST
Electrical		
Electrical Service and Distribution	5	
Lighting and Branch Wiring	5	
Communication and Security Systems	2	
Special Electrical Systems	5	
<hr/>		
E Equipment and Furnishings:	3.7	
<hr/>		

Building Detail

Central Washington University
CENTRAL WASHINGTON UNIVERSITY
INTERNATIONAL CENTER Facility
INTERNATIONAL CENTER

Institution ID 375
Site ID 375
Building ID A04244

Equipment and Furnishings

Fixed Furnishings and Equipment	4
Moveable Furnishings (Capital Funded Onl	3

E Special Construction:

Special Construction

Integrated Constr. & Special Constr. Syste	DOES NOT EXIST
Special Controls and Instrumentation	DOES NOT EXIST

APPENDIX H

FACILITIES CONDITION SUMMARY REPORT

ACADEMIC FACILITIES FCI SUMMARY



APPENDIX I

ASCWU MATERIALS

ASCWU



CCI DEMONSTRATION JUNE 1, 2022

Center for Cultural Innovation - Itinerary.

12:00PM | MEET AT SURC EAST PATIO
• POSTER MAKING AND GATHERING
OTHER MATERIALS

12:30PM | HEAD TO BARGE HALL
• MARCH AS A GROUP

12:45PM | SURROUND BARGE HALL
• DEMONSTRATE (CHANTS)
• SNACKS

1:45PM | HEAD OUT
• MARCH BACK
• CLEANUP

Office of Equity & Multicultural Affairs

DIRECTOR MARIAH MINJAREZ (SHE/HERS)
EMAIL ASCWU.EQUITY@CWU.EDU
LOCATION SURC 239 (INSIDE SURC 236)

Office of Governmental Affairs

DIRECTOR EDGAR ESPINO (HE/HIS)
EMAIL ASCWU.GOVERNMENTAL@CWU.EDU
LOCATION SURC 243 (INSIDE SURC 236)



ASCWU STUDENT GOVERNMENT

Statement Resolution on Establishing the Center for Cultural Innovation (Multicultural Center) on Campus on 06/01/2022

WHEREAS CWU continues to be the only remaining public four-year institution of higher education in the state without a multicultural center on campus,

WHEREAS this institution continues to claim to be the most diverse institution in the state, yet still lacks one of the most crucial spaces and resources to support our diverse student body,

WHEREAS the constant struggle between the university administration and ASCWU, on the establishment of this space on campus, for over 10 years,

WHEREAS progress to advance the multicultural center project on campus has been made and having been halted at the last minute by the previous university president,

WHEREAS the demand from the student body to implement a space like this on campus has been ongoing for the past 10 years,

WHEREAS ASCWU has faith in the university administration, under the direction of President Jim Wohlpart, the Vice President, the Provost, Vice President of Diversity, Equity, and Inclusivity, Chief Financial Officer, Vice President of Public Affairs, Vice President of Operations, and the Board of Trustees,

IT BE THEREFORE RESOLVED that we hold the university administration accountable in their mission and vision of CWU; to make this institution a more accessible and inclusive place, to ensure equity and belonging,

IT BE FINALLY RESOLVED that the administration continues to work with the present and future ASCWU boards to include a multicultural center in the university's strategic plan. Any setbacks on this project once again will result in ASCWU mobilizing the student body to hold the administration account on said decision.

Madeline Koval
President

Geoffery Odoch
Executive Vice President

Rachael Medalia
Senate Speaker

Alejandra Cruz-Martinez
Director
Student Life & Facilities

Mariah Minjarrez
Director
Equity & Multicultural
Affairs

Edgar Espino
Director
Governmental Affairs

Central Washington University

CCI Open Forum Agenda

Tuesday, May 31st, 2022

Call to Order:

Roll Call Introductions:

Alejandra Cruz-Martinez (she/her) ASCWU Director of Student Life & Facilities

Mariah Minjarez (she/her/hers) ASCWU Director of Equity and Multicultural Affairs

Stephanie Mora (she/her) ASCWU Student Life & Facilities Administrative Assistant

Edgar Espino (He/him/his) ASCWU Director of Gov. Affairs

Madeline Koval (she/her) ASCWU President

Land Acknowledgement:

Central Washington University acknowledges the people who have been on this land since time immemorial. The Ellensburg campus is on lands ceded by the Pshwanapum and other bands and tribes of the Yakama Nation in the Treaty of 1855. The Yakama people remain committed stewards of this land, cherishing it and protecting it, as instructed by elders through generations. We are honored and grateful to be here today on their traditional lands, and give thanks to the legacy of the original people, their lives, and their descendants.

Community Guidelines

- Brave space
- Inclusive language
- One mic One voice
- Using I statement
- Off record/on record
- Mic is open to anyone

Old Business:

- Would Anyone like to bring up old business from previous meetings?

New Business:

- Capitol Updates - (Alejandra, Stephanie, Mariah)
 - Just met with CCI Architects. We have some updates!
- CCI Voting Iteam - (Maddy)
 - Results are in for preferred funding methods are in
- Written Resolution Update –(Edgar)
 - ASCWU has written

- CCI Taskforce tomorrow 6/1 at 5PM (Mariah)
 - Location: SURC 202
 - Last meeting we covered the following:
 - Goals of the CCI Taskforce
 - Solidify mission/statement
 - Develop CCI Constitution and operating guidelines
 - Establish funding and construction plans for CCI
 - Google submission form
 - The President's plan
 - Locations for a CCI
 - Extension of the SURC Bond
 - How will it be incorporated into Student Senate Elections?
 - Mission/Statement Activity
 - What to expect:
 - We will be continuing our activity from the last meeting to help guide us with establishing the vision and mission for CCI
- Peaceful Demonstration tomorrow (6/1) -(Edgar)
 - Meet at SURC patio by the wildcat statue to create posters. March to Barge Hall starts at 12:45PM

What to expect for the next years CCI Open Forum:

- Incoming ASCWU board

Public Comments/Announcements/Concerns:

- Here is the link to the CCI Open Forum feedback
<https://forms.office.com/Pages/DesignPage.aspx?FormId=wdaR-NaRS0SnANNxkQcWx5eJRHvUANBApYrFObitmjVUNTRVODdLR1IIRlpLMFBGU05PTEw2TUtaSS4u&Token=6423d1cc2a28457d833ba9185d669a0c>



Adjournment:

CCI (Center for Cultural Innovation) Taskforce

Agenda

June 1, 2022, 5 PM

1. Call to Order:

2. Attendance:

3. Land Acknowledgment

4. Introduction

- 4.1. Name, pronouns, major

5. Public Comment

6. Old Business

- 6.1. The CCI Taskforce
- 6.1.1. Mission/Statement
 - 6.1.2. Taskforce Structure
 - 6.1.3. Frequency of meetings
 - 6.1.4. Plans
- 6.2. Google submission form
- 6.3. The President's plan
- 6.3.1. Locations for a CCI
 - 6.3.2. Extension of the SURC Bond
 - 6.3.3. How will it be incorporated into Student Senate Elections?
- 6.4. CCI Open Forum May 31st in the SURC Pit at 5PM
- 6.5. Where should we communicate? What platform does everyone prefer?
- 6.6. Upcoming event

7. New Business

- 7.1. Debrief Senate Election Results

- 7.2. Debrief of CCI Demonstration
- 7.3. What would you all like to see for next year?
 - 7.3.1. Formality
 - 7.3.2. Communications
 - 7.3.3. How often do we want to meet?
- 7.4. Meeting with the CCI Architects

8. Public Comment

- Here is the link to the CCI Open Forum feedback
<https://forms.office.com/Pages/DesignPage.aspx#FormId=wdaR-NaRS0SnANNxkQcWx5cJRHvUANBApYrFObtmjVUNTRVODdLR1IIRlpLMFBGU05PTEw2TUtaSS4u&Token=6423d1ce2a28457d833ba9185d669a0c>



9. Issues/Concerns/Announcements

10. Adjournment:



Frequently Asked Questions

What is the difference between the DEC and the CCI?

Students have surpassed the DEC and our ESC Organizations do not have the adequate space anymore to continue being in that space. ESC Orgs handle many diverse events on campus, and they have 5 graduations at the end of the year, with Latinx having over 100 graduates. Orgs do not have an adequate space in the DEC to keep their supplies there and it is not easily accessible. The DEC provides resources to BIPOC students, but they are only accessible for certain days of the week or month. The CCI would be the representation students need to feel safe surrounded by other BIPOC students and know they are being seen, heard, and not be managed by staff or faculty.

We have the DEC, why do we need a CCI?

The Diversity and Equity Center (DEC) in Black Hall is a temporary space. The long-term goal was for the DEC to expand and take advantage of a SURC expansion. This space in Black Hall is not enough, and students deserve more. CWU's marginalized student population is increasing, requiring; an increase in resources on campus. The CCI will provide much more space and resources to students.

What specific needs are not being met on campus?

CWU has a large population of marginalized students from various ethnic and cultural backgrounds. Students need more space to cook their cultural foods with self-government. A CCI could allow students more kitchen space to do so. Students also need more space for programming, gathering, etc.

How would a CCI be able to enrich CWU?

CWU takes pride in its diverse student population. The university has received the HEED award, which measures institutional commitment to diversity through institutional initiatives and processes. Given this, it should be the universities priority to put the needs of marginalized students at the forefront of the university. A CCI at CWU would serve as a cultural hub for students and faculty to learn and celebrate cultural backgrounds and heritage.

What qualifications does a group need to meet to have a designated space at the CCI?

The CCI will prioritize space for identify based groups such as organizations on campus.

How will CCI space prevent hate crimes on campus?

It will ensure that students have a space to convene and organize initiatives to combat these issues and challenge those who stand idly by. A CCI will serve as a permanent space that will show solidarity with students of diverse backgrounds and allow them to control this space and congregate.

Where will the CCI be located?

Students feedback will be utilized to help decide where the CCI would best fit. Many have expressed that having it in the heart of campus would be the most beneficial. As of right now, there is a discussion if the CCI should be at the international center, in the SURC expansion, or the L&L building.





Center of Cultural Innovation

Associated Students of Central Washington University



What is the CCI?

The CCI stands for Center for Cultural Innovation. The work done for this initiative has been in the works for 5 years. The CCI is to create a safe space for historically marginalized students that do not have a safe space, resources, or a place to voice concerns. The CCI gives BIPOC students a space to voice issues in a predominantly white institution.

Why is the CCI Necessary?

CWU has been a recipient for the award Higher Education Excellence in Diversity (HEED) for the past 5 years yet is the only public 4-year university in WA to not have a multicultural center. Student led organizations that represent underrepresented identities on campus would also have a space of their own.



Who will this Benefit?

Everyone. This space is primarily created for marginalized students that do not have a safe space. Some of them are BIPOC students (Black, Latinx, Asian, and Indigenous), including Muslim and LGBTQIA2S+ students. Additionally, student-led organizations such as AIJAP, BSU, CASA, EQUAL, FASA, FGSO, ISO, MECHA, and potential future organizations that represent underrepresented identities on campus would have a place they can call their own.

What is the Timeline?

ASCWU has been working towards the initiative of a CCI for CWU for five years and counting. The CCI project is currently in the process of finding proper funding for the appropriate building of a center that will best suit CWU's students needs. The completion of the project can range from 2-10 years. All depending on ASCWU and the CWU administration.



How can we Support?

ASCWU Student Government board officers, students, and the CWU administration need to maintain the momentum from year to year by emphasizing the needs of underrepresented students that are not being met.



ITINERARY



JUNE 1, 2022

12:00PM | MEET AT SURC EAST PATIO

- POSTER MAKING AND GATHERING OTHER MATERIALS

12:30PM | HEAD TO BARGE HALL

- MARCH AS A GROUP

12:45PM | SURROUND BARGE HALL

- DEMONSTRATE (CHANTS)
- AVOID PROPERTY DAMAGE
- REFRESHMENTS

1:45PM | HEAD OUT

- MARCH BACK
- CLEANUP

CONTACT US



ASCWU STUDENT GOVERNMENT

OFFICE OF EQUITY & MULTICULTURAL AFFAIRS

DIRECTOR

MARIAH MINJAREZ (SHE/HER/HERS)

EMAIL

ASCWU.EQUITY@CWU.EDU

LOCATION

SURC 239 (INSIDE SURC 236)

OFFICE OF GOVERNMENTAL AFFAIRS

DIRECTOR

EDGAR ESPINO (HE/HIM/HIS)

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LOCATION

SURC 243 (INSIDE SURC 236)

ASCWU OFFICE

EMAIL

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LOCATION

SURC 236

CONTACT US



ASSOCIATED STUDENTS OF
CENTRAL WASHINGTON UNIVERSITY
CENTER FOR CULTURAL INNOVATION DEMONSTRATION

CCI QUICK FACTS

WHAT IT STANDS FOR

- CCI STANDS FOR CENTER FOR CULTURAL INNOVATION.

THIS BENEFITS EVERYONE

- THIS PROJECT ASPIRES TO CREATE A SAFE SPACE FOR HISTORICALLY MARGINALIZED STUDENTS, PROVIDING APPROPRIATE RESOURCES AND A PLACE TO VOICE CONCERNS.
- SOME OF THEM ARE BIPOC (BLACK, INDIGENOUS, LATINX, ASIAN), INCLUDING MUSLIM AND LGBTQIA2+ STUDENTS.

THE TIMELINE

- ASCWJ HAS BEEN WORKING TOWARDS THIS INITIATIVE OF A CCI FOR FIVE YEARS AND COUNTING. THIS PROJECT IS CURRENTLY IN THE PROCESS OF FINDING PROPER FUNDING.
- THE COMPLETION OF A CCI COULD RANGE FROM 2 TO 10 YEARS DEPENDING ON ASCWJ AND THE CWU ADMINISTRATION.



CENTER FOR CULTURAL INNOVATION FREQUENTLY ASKED QUESTIONS

CENTER FOR CULTURAL INNOVATION + FAQ + CENTER FOR CULTURAL INNOVATION + FAQ + CENTER FOR CULTURAL INNOVATION + FAQ + CENTER FOR CULTURAL INNOVATION + FAQ

WE HAVE THE DEC, WHY DO WE NEED THE CCI?

- THE DIVERSITY AND EQUITY CENTER (DEC) IN BLACK HALL IS A TEMPORARY SPACE. AS SUCH, RESOURCES ARE ONLY ACCESSIBLE FOR CERTAIN DAYS OF THE WEEK AND/OR MONTH.

WHAT-SPECIFIC NEEDS ARE NOT BEING MET ON CAMPUS?

- CWU HAS A LARGE POPULATION OF MARGINALIZED STUDENTS FROM VARIOUS ETHNIC AND CULTURAL BACKGROUNDS. A CCI WOULD FACILITATE AN AREA FOR COOKING, PROGRAMMING, GATHERING, ETC.

HOW WOULD A CCI BE ABLE TO ENRICH CWU?

- CWU TAKES PRIDE IN ITS DIVERSE POPULATION. THE UNIVERSITY HAS RECEIVED THE HEED AWARD SEVEN TIMES AS OF 2021 - AN AWARD BESTOWED ANNUALLY TO UNIVERSITIES THAT DEMONSTRATE AN OUTSTANDING COMMITMENT TO DIVERSITY AND INCLUSION.

- A CCI AT CWU WOULD SERVE AS A CULTURAL HUB FOR STUDENTS AND FACULTY TO LEARN AND CELEBRATE CULTURAL BACKGROUNDS AND HERITAGES.

WHAT ARE THE QUALIFICATIONS TO HAVE A DESIGNATED SPACE IN THE CCI?

- THE CCI WILL PRIORITIZE SPACE FOR IDENTITY BASED GROUPS SUCH AS ORGANIZATIONS ON CAMPUS.

CENTER FOR CULTURAL INNOVATION FREQUENTLY ASKED QUESTIONS



CHANTS

CHANT I

- DIVERSIFY WITH CCI, CENTRAL NEEDS TO RECOGNIZE

CHANT II

- CCI MAKES ADMIN CRY

CHANT III

- CCI, ¿SÍ SE PUEDE
- (CCI, YES YOU CAN)

CHANT IV

- IS CENTRAL DIVERSE? YES
- DO WE HAVE ANYTHING TO SHOW FOR IT? NO
- WHAT CAN WE DO? CCI

APPENDIX J

**STUDENT ENGAGEMENT
SIGN-IN SHEETS**

Multi-Cultural Center Predesign Study

CENTRAL WASHINGTON UNIVERSITY

Name	Student (check one)	Faculty/Staff	Year (Freshman, sophomore etc.)	Student Group/Organization
Edgar Espino	✓		4 th	ASCWU
Solomon Kaim	✓		3 rd	BSU
Yaritza Granados	✓		2 nd	MECHA
April Yabes	✓		3 rd	FASA
Brandon Weir-Grimm		✓	Alum	Accounting
Luis Reyes	✓		3 rd	ASCWU
Malik Carter	✓		1 st	ASCWU
Justin Santol		✓	—	DEC/ESC
Katrina Whitney		✓	-	DEC
Andrew Ustas	✓		Sr	—
Rachael Meekins	✓		3 rd	ASCWU
JOANNE ALLENMAN		✓		OPP
Delano Palmer		✓		CPP
Alyxandra Gomez	✓		3 rd	ASCWU
Mariah Minjariz	✓		3 rd JUNIOR	ASCWU
Stephanie Mora	✓		5 th	ASCWU
Madelaine Koval	✓		5 th	ASCWU
Andrea Garcia	✓	✓	5 th	ASCWU
TANJIAN LIANG		✓	—	DEI Faculty fellow
Ediz Konylasyoglu		✓	—	Dean Extended and Global Education

Date:

 DLR GROUP

APPENDIX K

**OPERATIONS AND
MAINTENANCE
ASSUMPTIONS**

CWU - Multi-Cultural Center (International Replacement)
 FY2025-2035 Preliminary Operating Budget
 O&M Estimate

Please note: if funded this building will not be operating until July 1, 2025.

	2021	2022	2023	2024	2025	Biennia 1		Biennia 2		Biennia 3		Biennia 4	
						2026	2027	2028	2029	2030	2031	2032	2033
Utilities													
Incremental Square Feet	19,560												
Annual Inflation	2%												
Academic Utilities	CY 2019												
July - December 2021	1,376,523.74												
January - June 2021	1,720,692.24												
Total CY 2021 Utilities	3,097,215.98	31,452.48	32,081.53	32,723.16	33,377.62	34,045.18	34,726.08	35,420.60	36,129.01	36,851.59	37,588.63	38,340.40	39,107.21
Academic Aq Ft	2,004,494	19,560	19,560	19,560	19,560	19,560	19,560	19,560	19,560	19,560	19,560	19,560	19,560
2019 \$/Sq Ft	1.545	1.608	1.640	1.673	1.706	1.741	1.775	1.811	1.847	1.884	1.922	1.960	1.999

	FY 22	FY 23	FY 24	FY 25	FY 26	FY 27	FY 28
	Wages	Benefits	Other Bens	Health Ins	Annual Hours	Step K Rate	FTE
EMCS Technician (Y-Rated Rate)	15,267.20	6,143.44	20%	2080	29.36	0.25	0.25
Maintenance (MM2)	28,319.20	11,843.84	20%	2080	27.23	0.50	0.50
Custodian 1	9,396.40	4,969.28	20%	2080	18.07	0.25	0.25
IT	15,626.00	6,215.20	20%	2080	34.02	0.00	0.25
Police and Parking	68,608.80	29,171.76	20%	2080	30.05	1.00	1.00
Total	97,780.56	100,713.98	103,735.40	106,847.46	110,052.88	113,354.47	116,755.10
COLA Assumption	3%						

	Biennia 1		Biennia 2		Biennia 3		Biennia 4	
	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	FY 27	FY 28
Operations & Maintenance								
Maintenance	834,745							
EMCS/BH	263,588							
Custodial	322,938							
IT	375,877							
Total	1,797,148	17,537	17,887	18,245	18,610	18,982	19,362	19,749
\$/Sq Ft	0.8966	0.8966	0.9145	0.9328	0.9514	0.9705	0.9899	1.0097
Fire Protection AHJ Contract								
International Building	1948							
Multi-Cultural Center	2025-27	22,762,000						
Equipment		(174,722)						
Artwork		(99,519)						
Building		22,487,759						
Cost Differential		22,316,759						
\$1.50 per \$1,000		33,475						
One-Time FY2028 Costs								
Escalated Estimate 2027								
One-Time Non-Bondable FF&E (Computers)								
One-Time Moving Fund								
Total								

	Year	Escalated '25	Orig Cost
International Building	1948		171,000
Multi-Cultural Center	2025-27	22,762,000	
Equipment		(174,722)	
Artwork		(99,519)	
Building		22,487,759	
Cost Differential		22,316,759	
\$1.50 per \$1,000		33,475	

	Biennia 1		Biennia 2		Biennia 3		Biennia 4		Biennia 5	
	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	FY 2032	FY 2033	FY 2034	FY 2035
Summary										
Utilities	34,726.08	35,420.60	36,129.01	36,851.59	37,588.63	38,340.40	39,107.21	39,889.35	40,687.14	41,500.88
Staffing	110,052.88	113,354.47	116,755.10	120,257.76	123,865.49	127,581.45	131,408.90	135,351.16	139,411.70	143,594.05
O&M	18,982	19,362	19,749	20,144	20,547	20,958	21,377	21,805	22,241	22,686
Fire Protection	\$33,475.14	33,475.14	33,475.14	33,475.14	33,475.14	33,475.14	33,475.14	33,475.14	33,475.14	33,475.14
One-Time FY2026 Costs	65,000									
Total	262,236.39	\$201,612.14	206,108.43	\$210,728.65	\$215,476.29	\$220,354.97	\$225,368.38	\$230,520.34	\$235,814.75	\$241,255.66

APPENDIX L

SUMMARY OF
SENATE BILL 5227

2021 DIVERSITY, EQUITY, INCLUSION AND ANTIRACISM TRAINING LEGISLATION

Bill Summary of SENATE BILL 5227

Chief Sponsor: Senator Emily Randall, Chair
Senate Higher Education & Workforce Development Committee

How is the bill funded?

The legislature provided funding for diversity, equity, inclusion, and antiracism training for public universities and community colleges. The funding increases in 2023-2025 to reflect additional requirements.

2021-2023 Biennium: \$262K for the biennium

- \$121K for the FTE to develop and deliver the faculty/staff training and the data collection
- \$10K for the student compensation for the listening & feedback sessions

2023-25 Biennium: \$305K for the biennium

- \$151K per year in the second biennium to continue the faculty/staff training and data collection, which includes an additional \$40K to deliver the student online training which is split as \$20K per year (the student training isn't required until academic year 2024-2025).

What work does CWU have to do in 2022-2023?

1.) Faculty and Staff Training: CWU must begin offering new or existing professional development training on diversity, equity, inclusion, and antiracism.

- a. The training must provide all employees professional development focused on diversity, equity, inclusion (DEI), and antiracism.
- b. The program must be rooted in eliminating structural racism against all races and promote DEI, while improving outcomes for students from historically marginalized communities and include elements that focus on commonalities and humanity.

2.) Every new employee must participate in the program regardless of full-time or part-time status.

- a. All employees participating in the program must complete an evaluation of the program.
- b. At least 80 percent of total faculty and staff must complete the professional development every two-years
- c. Report on the progress to the Council of Presidents.
- d. Individuals employed at more than one institution are only required to complete one training, as long as they show proof to the other institution.

3.) Reporting: Beginning July 1, 2023, CWU must submit a program evaluation, curriculum, and other information related to this training to the Council of Presidents. CWU must develop an evaluation for professional development participants. CWU's evaluation must capture:

- a. a participant's level of satisfaction with the professional development opportunity,
- b. the degree learning objectives were achieved, and
- c. how the knowledge gained may be applied to work.

Requirements for 2024-2025

1.) Employee Training: Beginning with the 2024-2025 academic year, 35 percent of tenured faculty and 35 percent of administrators at CWU complete the program every two years regardless of FTE status.

2.) Student Training Program: CWU must provide a program focused on DEI and antiracism for all matriculated students, regardless of student credit hours, beginning with the 2024-2025 academic year.

Requirements for 2025-2026

1.) Student Training Program: Beginning in 2025-2026, the program is only required for degree-seeking students who are new or have transferred to the institution and have not participated in DEI and antiracism program. The program must be rooted in eliminating structural racism against all races and promote DEI, while improving outcomes for students from historically marginalized communities and include elements that focus on commonalities and humanity.

The program should be:

- Developed in partnership with university administration, faculty, staff, and student leadership groups.
- Developed and delivered by individuals with innate acquired experience and expertise in the field of DEI.
- CWU must post on *cwu.edu*, for parents and community members, the content framework for each program, and create an evaluation for program participants which captures (1) a person's level of satisfaction and (2) how they apply the program to their education.
- Students may opt out of the program if they self-attest to completing a DEI and antiracism training within the previous five years.

Climate Assessment and Feedback Sessions (ongoing)

1.) Every five years, administer a Climate Assessment to understand the current state of diversity, equity, and inclusion in the learning, working, and living environment on campus for students and employees. CWU may use its current climate assessment, but any new design must engage students, diversity officers, faculty, and staff. The results should be used to inform the DEI and antiracism professional development.

2.) Conduct annual listening and feedback sessions for diversity, equity, and inclusion for the entire campus community during periods between campus climate assessments. CWU already holds focus groups/listening sessions with students, faculty, and staff.

3.) CWU to compensate students to the maximum extent practicable for their participation in the annual listening and feedback sessions, and CWU received funding for this provision.

4.) Beginning July 1, 2022, report findings or progress in the campus climate assessment, and information on their listening and feedback sessions annually to the Council of Presidents. It requires CWU to publish on *cwu.edu* annually the results of either the campus climate assessment or listening and feedback sessions, which we already publish on our website.

APPENDIX M

ANTIRACISM
FACULTY AND STAFF
DEVELOPMENT

Faculty Senate
May 25, 2022
M. O'Brien
Sigrid Davison
VP DEI, Kandee Cleary

Antiracism Faculty and Staff Development

Toward Anti-Racist, Equitable, and Inclusive Practices at CWU

Recent events within our country and communities have underscored that higher education is failing in fulfilling the promises of opportunity, access, and achievement for all. In response, the state of WA has passed Bill 5227, which requires, beginning in Fall 2022, that staff and faculty have access to training that covers diversity, inclusion, equity, and anti-racism. This Bill allows individual institutions to develop and implement this training, which means we at CWU have an opportunity to identify and develop resources-- ones that will deepen our commitment to providing for our students and each other access, engagement, inclusiveness, shared governance, and a sense of physical and emotional safety.

We recognize not every individual is at the same place when it comes to equitably engage with people of different races, ethnicities, sexualities, and identities face; we hope to provide spaces for people to educate themselves and others as a community, and to move towards making CWU a welcoming place where all have a sense of belonging and an opportunity to achieve.

WA Bill 5227 specifically asks that “public institutions of higher education provide faculty and staff, as well as students, with training to give them tools to address matters related to antiracism, diversity, equity, and inclusion,” and that professional development programs are, “developed and delivered by individuals with innate and acquired experience and expertise in the field of diversity, equity, and inclusion,” and must be made available and regularly assessed for their effectiveness. This committee seeks to meet this charge by developing an innovative and curated program and educational initiative for faculty and staff at CWU that meets our institution’s distinct needs. To do so, we conceive of addressing three primary learning areas, though we acknowledge that any program structure may need to be augmented as we begin our work:

1. “Start Where You Are” training involves programmatic and interactive workshop opportunities for those who are just beginning to access current approaches to antiracism, inclusivity, and equity, as well as for those who have begun to educate themselves on antiracist and equitable practices but would benefit from further guidance so they can meaningfully implement these elements into their work at CWU.

will allow individuals to access professional development and community-building practices

3. The development of caucuses and affinity groups will create sites where individuals can come together in groups based on shared backgrounds, experiences, identities, and knowledge to learn together and educate one another in brave spaces.

Purpose of Development Design group: This group will develop the basis of the 5227 implementation and will be comprised of those “with innate and acquired experience and expertise in the field of diversity, equity, and inclusion” to ensure our programs are rigorous, research-based, appropriate for CWU’s needs, and are innovative rather than rudimentary.

Purpose of Stakeholder group: 5227 requires that all programs are “developed in partnership with the institution's administration, faculty, staff, and student leadership groups.” The Stakeholder group will ensure that the initiatives and programs developed respond to specific institutional and community-based needs and will communicate regularly with their colleagues and representatives from across the institution to collaborate on this initiative; in doing so, this group will foster collaboration between colleagues invested in developing practical anti-racist, inclusive, and equitable practices within their units.

Ongoing communication between these groups will be vital for the requisite assessments and evaluations of these programs at CWU.

Leadership group

- Michel O’Brien (co-chair)
- Sigrid Davison (co-chair)
- Lucinda Carnell (faculty fellow representative)
- Anderson Parks (faculty fellow representative)
- Tanjian Liang (faculty fellow representative)

Development Design Group

- Teresa Francis
- Elvin Delgado
- Bobby Cummings
- Nelson Pichardo
- Christina Garcia
- Joy Fuqua
- Leah Valverde
- John Vasquez

Shareholder Group

- Planning Group+
- Jeff Stinson (Dean) or Tim Englund
- Laura Brant (Civil Rights/TitleIX)
- Veratta Pegram Floyd (exempt)
- Bradley Moen-Hamm (classified, dining)
- Gail Mackin (ASL)

- **ASCWU (president, legislative, or equity)**
- Dale Lanowski, HR Representative
- Sayantani Mukherjee (Antiracism Diversity and Inclusion, Faculty Senate)
- Liz Vidaurri
- Darin Knapp
- Alethia Miller

Model

There will be a 3 part workshop each Fall, Winter and Spring quarters. These workshops will be multimodal so that all faculty and staff have the opportunity to take part in the workshops. The workshops will also be on Canvas and provide the opportunity for individuals to come together in groups to educate one another. There will be readings, videos, and other tools to provide opportunities to engage with difficult material. Workshops will be facilitated by teams with discipline expertise in the area of anti-racism teaching and scholarship.

Blue: introductory level

Living social justice

Primary development process: self-reflection, identifying assumptions

- Discuss and explain terminology connected to antiracist action
 1. Race, racism, racist-antiracist
 2. Bias (explicit/ implicit), discrimination, power, oppression
 3. Social (ethno-racial) identity, intersectionality, positionality
 4. Diversity, equity/ equality, inclusion, belonging
 5. Individual, institutional, structural/ systemic inequalities
 6. Whiteness, anti-Blackness
- Explain the history of racism and its intersections injustice in the academy
- Express one's own bias and triggers and the experiences that shaped them
- Recognize the impacts of racial inequality and its intersections
- Recognize the connection between bias and relationships and trust

Racial identity

Primary development process: recognizing injustice in wider environment and one's participation

- Relate one's identity(ies) with inequality and whiteness
- Identify the ways positionality has framed and constructed one's own experiences and knowledge
- Interpret the impact of one's positionality on others and other's positionality on self
- Identify how hierarchies of race and other forms of identity impact one's workspace (e.g., classroom, department, unit)

Antiracist emotional intelligence

Primary development process: Transformation and action

- Develop and utilize the skills and strategies to transform inequitable behavior
- Build community and cultivate safe and brave spaces
- Model sustainable actions to bring about a more inclusive and anti-racist climate

Green: leadership/advanced level (This will be done by outside consultants)

Trauma in the Academy

self-reflection

- Examine critical experiences that damaged one's trust and connections to others
- Identify the critical actions to building trust and relationships
- Develop collective and collaboratory relationships with colleagues
- Identify and apply actions for healing and liberatory racial experiences

On being included

recognizing injustice in wider environment

- Identify and examine exclusionary areas for inclusionary climate change (e.g. in learning, working, and living environment)
- Deconstruct the ways positionality has framed and constrained one's successes and fortified and intensified one's challenges in the academy
- Build spaces of community for self and other marginalized identities
- Strategize to weaken the barriers to our collective success

Decolonizing the Academy

Transformation and action

- Model collaborative and inclusive leadership and action

Canvas

- Cohort throughout the training
- Creation of discussion communities
- Course material on CANVAS
- Year one and Year two training
- Considering sequencing to include starting each quarter
 - Looking at sustainability

Build capacity and sustainability through Train the Trainer

Assessment (In progress – will be completed this summer)

APPENDIX N

VISION FOR DEI BARGE 204M



Vision for DEI Barge 204M

The DEI Office has continued to emphasize equity and inclusion across the campus. This includes a focus on recruiting, retaining, and engaging BIPOC scholars, often with limited resources to cope with the continual disparities and injustices that occur in and outside of the classroom.

The retention of marginalized scholars remains a significant issue at CWU, a PWI. Central is a predominately white institution that engages in systems that perpetuate institutional racism; we now have an opportunity to implement systems, programs, and spaces that protect the social being of BIPOC faculty and staff. There is a profound cultural mismatch between the BIPOC and minoritized students we serve at CWU and the Faculty and Staff of color we have recruited and retained to date.

BIPOC faculty and staff experience unique challenges in the ability to thrive primarily due to the myriad of personal and professional barriers. The recent events have exacerbated their experience and led to non-inclusive workplaces for BIPOC faculty. They are likely to experience increased stress due to a lack of support and representation and an unwelcoming campus environment.

Current events in the U.S. have had an exhausting impact on our faculty and staff of color. These groups have been more impacted by COVID, deaths from police brutality, and the continual threats of violence. In addition to navigating what all of us are navigating, they have watched their family and friends die at a higher rate from COVID, witnessed deaths from violence, and carry a higher burden of emotional and educational labor at work. BIPOC faculty and staff advocate for students; carry the burden of educating their white peers; and lack support for career advancement, leadership opportunities, and the tenure process. All significantly impact their well-being.

We have an ethical obligation to support our faculty and staff from marginalized groups and to provide them a space where they can thrive. The vision for the DEI office is to build authentic, long-lasting, impactful solidarity among BIPOC faculty and staff to increase retention and advance racial justice. This space will allow a platform where BIPOC faculty and staff can learn, share, and affirm the experiences of communities of color on campus; develop a deeper understanding of the experiences of BIPOC faculty and staff on campus; provide connections, mentorship, and relationships; practice cultural community and individual care; and provide a distinct space for support and healing.

Faculty and staff of color on campus have continued to express a critical need for a space on campus for their safety and healing where they can find those who have had similar experiences of isolation, alienation, and microaggression stresses. The ability to address issues in the classroom, with research, and in the office with those who have had similar

development based on identity, workshop development, and research and publications based on making CWU a more inclusive space that retains a diversity of students.

Further, developing a safe, open, expansive, and anticolonial space for BIPOC faculty and staff is inherently one that is inclusive of multiple identity positions, including a multiplicity of genders, sexualities, abilities, and so forth. The DEI office is invested in modeling and creating a larger network that attenuates the forces of institutionalized discrimination while also developing spaces that connect faculty and staff across multiple axes of identities and marginality. In doing so, we need a visible physical space where individuals experiencing these asymmetrical forces largely predicated on race can build community, and also feel free to express their identities rather than augment them to fit into Eurocentric, white-focused, heterosexist, cissexist, ableist spaces. As those who live at the intersection of multiple forms of exclusion at CWU feel free to express their whole selves and particular struggles, a physical space becomes far more than just an office; it can be paradigmatic of the ways we can create research-based solidarity and affinity networks grounded in research on best practices at PWIs.

The DEI office is working to promote a vision of the office that provides a "hub" of services for faculty and staff and creates and promotes a culture of belonging providing an environment of shared purpose and mutual support where faculty and staff can collaborate in their teaching, research, and service. In addition, an environment that will create and nurture a culture of dialogue that fosters successful and effective mentoring relationships. CWU is uniquely poised to develop an inclusive space that would attract faculty and staff invested in building community at a PWI and in a community that lacks many forms of diversity. For faculty and staff who cannot find community in their departments or units given a lack of diversity, the Barge DEI Hub would provide a vital space.

The space that is provided to BIPOC faculty and staff to create community, a sense of belonging, and is welcoming is meaningful and adds to the credibility of institutional support for DEI work. The spaces in Barge 204M can meet those needs. I expect that the space in Barge will help to break down the silos between faculty/staff and administration and reduce the "us vs. them" attitudes that exist that exacerbate the lack of broad interaction.

There is a need for designated space for faculty and staff visiting from the Centers and those that teach online, which will address the disconnect between faculty and staff on campus and those at the centers and online. It will show that we value their presence here on campus, rather than have them search for open space. For those who are in hybrid or online roles, we envision they will be able to access this physical space virtually and be active participants in these projects and conversations, with the sense that they are still helping to build this active physical community.

There is a need for confidential and multimodal space where members of affinity groups can meet and discuss experiences and issues to get advice, vent, and feel heard.



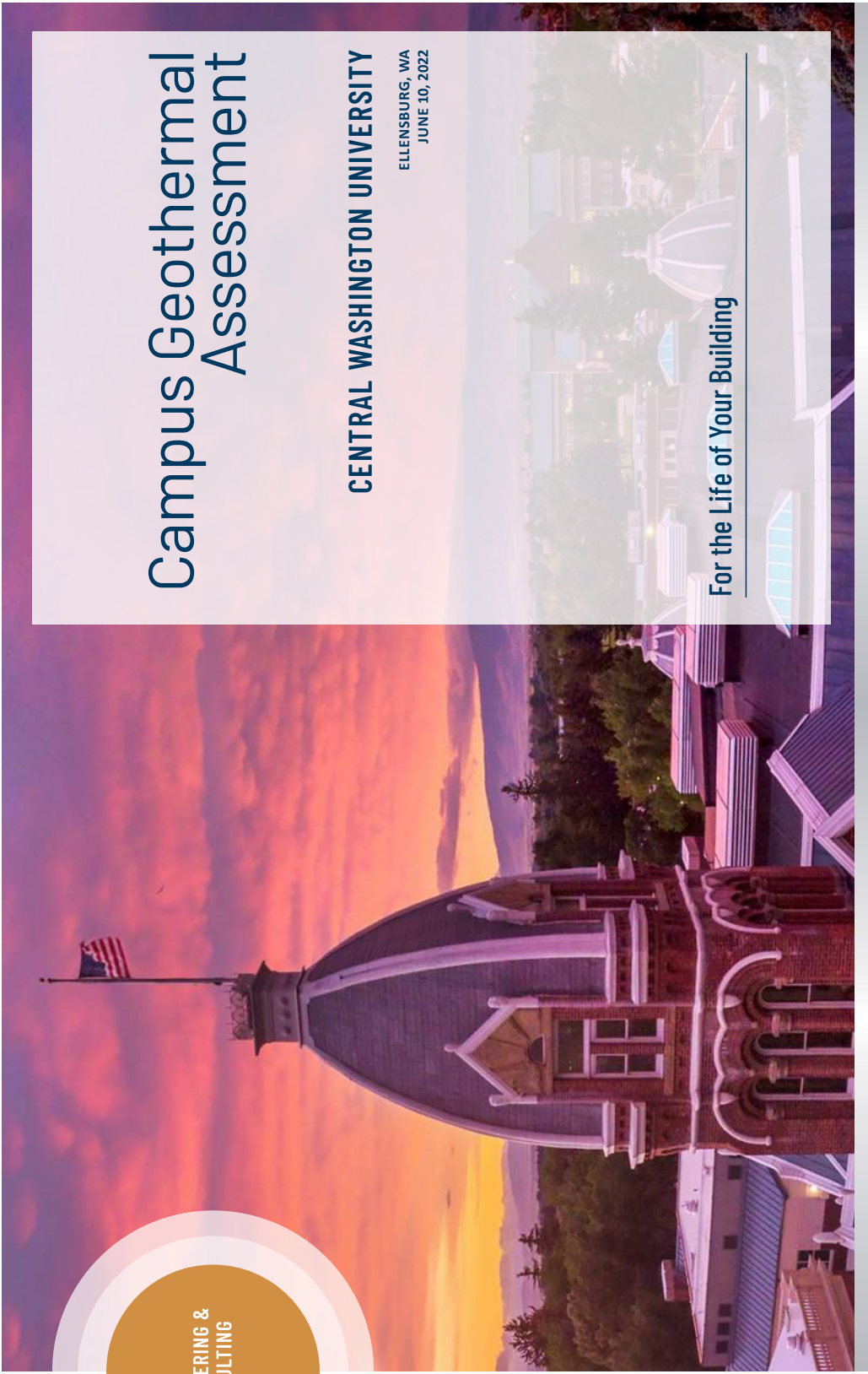
There is a need for space for intersectional collaboration, especially post-pandemic, where small side conversations can grow into new projects and energy.

There is a need for a private mentoring space where faculty and staff can get advice on submitting promotion materials, tenure processes, and other evaluation mechanisms. In addition, the mentoring space can provide a place to discuss the myriad of microaggressions experienced daily and get some help navigating those unfriendly spaces.

Barge 204 has the dedicated space to meet this vision and will provide a place of belonging that has been needed.

APPENDIX O

CAMPUS GEOTHERMAL ASSESSMENT



ENGINEERING &
CONSULTING

Campus Geothermal Assessment

CENTRAL WASHINGTON UNIVERSITY

ELLENSBURG, WA
JUNE 10, 2022

For the Life of Your Building



Background | Process and Content

PURPOSE

This report summarizes the **findings** and provides **recommendations** from exploring the feasibility options of an open-loop Ground Source Heat Pump system for the CWU Ellensburg campus.

The goal is to provide key information to CWU on how to reduce fossil fuel use at the central utility plant and ultimately achieve an **Energy Efficient Zero-Carbon** campus.

REPORT CONTENT

BACKGROUND	2
STUDY OPTIONS	3
WELL CONDITIONS	4
RESULTS SUMMARY	5
APPENDIX	6

WHY STUDY A GEOTHERMAL SYSTEM?

Geothermal systems eliminate the combustion of fossil fuels on site and dramatically lower the need to generate power by using the ground as a heat source and sink. They can significantly reduce the emission of greenhouse gases and the environmental damage associated with nonrenewable resource extraction.



WHY NOT CLOSED LOOP GEOTHERMAL WELLS?

Closed loop systems circulate water through buried piping to exchange heat with the ground versus an open loop system which pumps water directly in/out of the ground and through a heat exchanger. Closed loop systems require significantly more bore holes to have a similar capacity to that of an open loop, which can meet large capacities with only a few wells.



HIGH-LEVEL FINDINGS

- The Ellensburg Aquifer is productive and can support several buildings for heating and cooling demands
- With appropriate infrastructure, the aquifer could support most of the campus
- Cost is high for individual wells, so grouping buildings and sharing heat will improve economics
- Carbon and energy savings are significant compared to the existing steam heating system
- Many buildings on campus utilize steam and will need to be retrofitted to utilize heat pump systems in the future with implications of Washington Clean Building Performance Standard.

RECOMMENDED NEXT STEPS

CWU is sitting on a unique resource in the Kittitas Valley and has the special opportunity to consider **de-carbonization** unlike other universities. With proper long term planning the geothermal heat exchange can be maximized and leveraged to help CWU stand out as a public university in Washington State.

CAMPUS PHASED APPROACH

Create a playbook to achieve a zero carbon campus, leveraging geothermal

TEST WELL

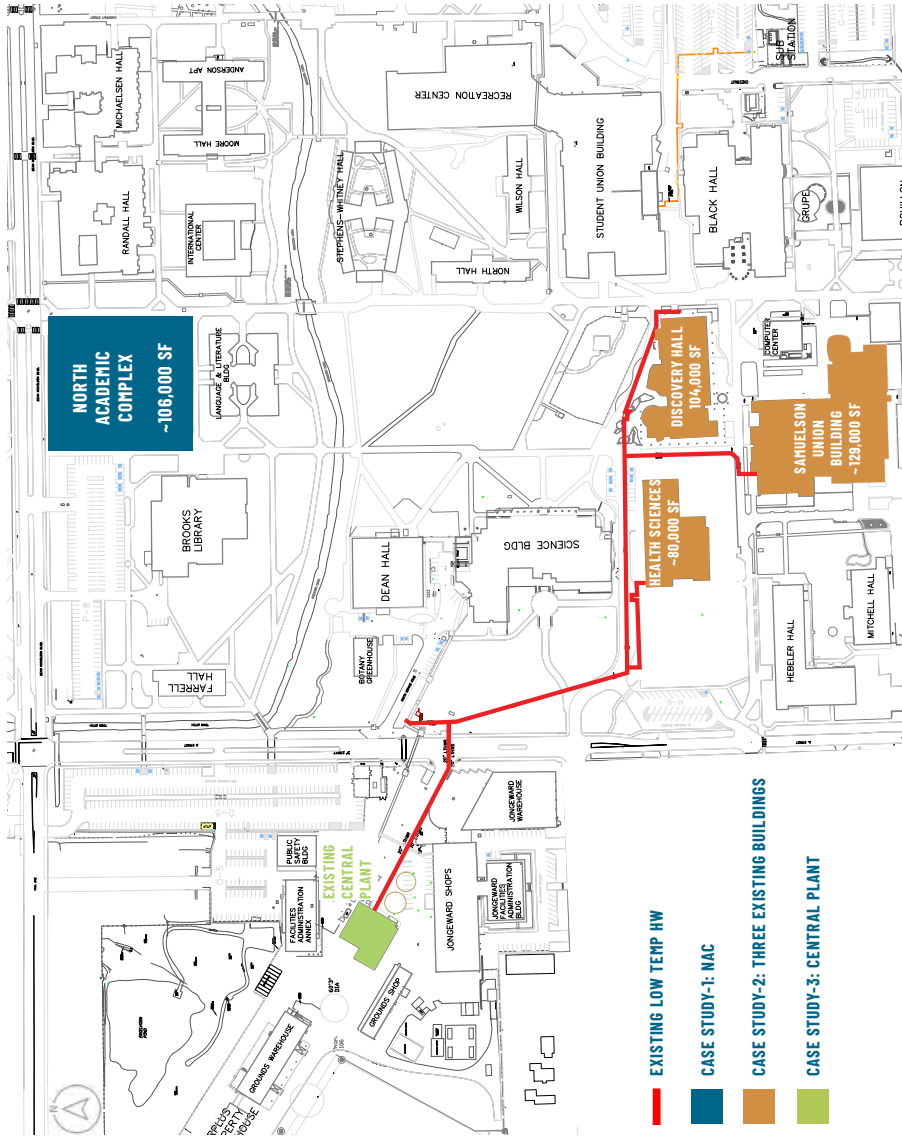
Proceed with test well as part of the NAC building construction

MEP CONTRACT

New contract per the phased project approach

Geothermal Case Studies | Selection Process

CAMPUS SITE PLAN | EXISTING HYDRONIC LINES



Site Selection Case Studies | CRITERIA

Three discreet project options were chosen as case studies for this initial feasibility study that varied in size from one building, to campus wide. The options were chosen based on the ease of application for geothermal and the relative benefit to the buildings and systems. We utilized information about existing heating and cooling infrastructure on campus for almost 200 buildings over 4.6 million square feet. Buildings that required high temperature (>140F) water or steam were ruled out. Current heat pump technology favors heating water temperatures around 120F and retrofits of existing steam buildings to accept cooler water would likely be costly.

CASE STUDY - 1: NORTH ACADEMIC COMPLEX (NAC)

The easiest application of a geothermal system is to new construction before site work has been complete and HVAC systems are installed. The NAC is currently in design so it is an opportune time to assess the feasibility of a ground source system for this single new construction building. Additionally, based on communicated development plans, the infrastructure to support the building could possibly extend to future adjacent buildings.

CASE STUDY - 2: THREE EXISTING BUILDINGS

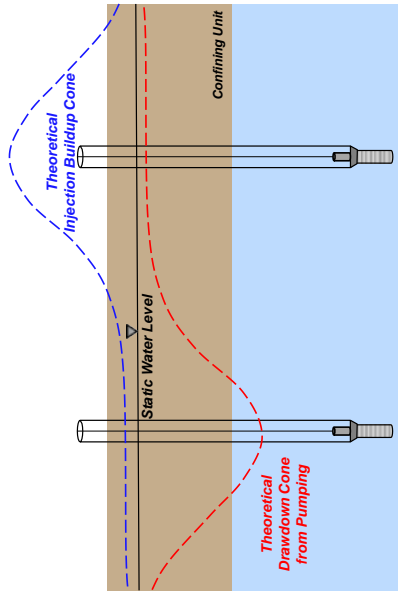
Health Sciences, Discovery Hall and Samuelson Union building are currently served by a single low temp HW loop from the central plant. In conversations with CWU, this 3-building cluster was selected as it provides the possibility for an easier connection between the required wells with a new heat exchanger to the existing HW piping network. Additionally, this site location also has several adjacent open green fields for proposed well locations.

CASE STUDY - 3: EXISTING CENTRAL PLANT

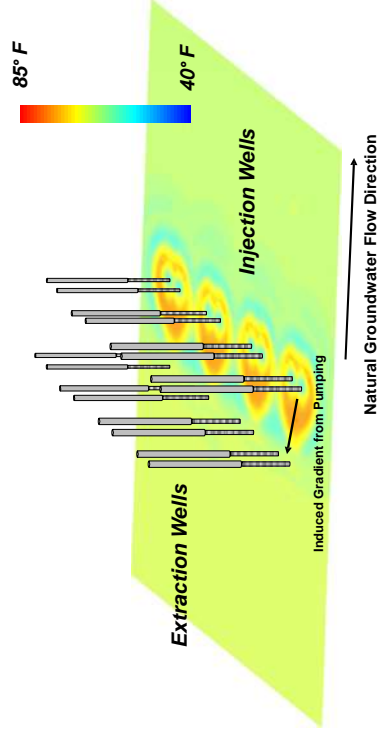
The existing central plant consists of 3-water cooled chillers and 4-steam-HW boilers. This option was selected as an upper boundary for the study, to provide an initial analysis on the number of wells required to meet the system capacity currently served by the central heating & cooling plant.

Hydro-geological Conditions | Ellensburg Aquifer

HYDRAULIC MODELING | THEORETICAL PUMPING IMPACTS



THERMAL MODELING | AQUIFER CONDITIONS



ELLENSBURG AQUIFER | EXISTING CONDITIONS

Based on the information available from the city of Ellensburg, following are the existing conditions for the aquifer:

- Regional groundwater flow direction follows Yakima river (North West to South East)
- It is the primary source for city of Ellensburg wells
- Shallow well completion zone (Unit A) - 300 to 600 ft deep (transmissivity 2,000 to 2,5000 SF/day)
- Deep well completion zone (Unit C) - 900 to 1,200 ft deep (transmissivity 3,000 to 4,5000 SF/day)
- Confined aquifer - no impact to surface water

MODELING RESULTS | DESIGN CONSIDERATIONS

Based on the early model analysis conducted by Aspect, following are the takeaways at this stage:

- Aquifer can supply more water than each of the scenarios require
- Case Studies-1 & 2 can be supported by 1-extraction well (paired with 1-injection well), completed in the shallow completion zone
- Case Study-3 can be supported by 8-extraction wells (paired with 8-injection wells), completed in the deeper completion zone
- Simulated well-field operation yielded no thermal breakthrough for Case Studies-1 & 2 and minor thermal breakthrough for Case Study-3
- Further modeling will take place during the design phase to optimize well spacing



Results Summary | Geothermal Case Studies

	CASE STUDY - 1 ONE NEW BUILDING (MAC)	CASE STUDY - 2 THREE EXISTING BUILDINGS	CASE STUDY - 3 EXISTING CENTRAL PLANT
EXISTING CENTRAL PLANT Heating by Natural Gas to Steam Boilers (85% eff) & Cooling by WC-Chillers (COP - 7) Heat rejection via Cooling Towers	Stand-alone open-loop GSHP system for heating (COP - 4) and cooling (COP - 6.5)	Open-loop GSHP system for heating (COP - 4) & supplemental cooling provided to existing WC Chillers (COP - 7) Heat rejection via Cooling Towers	Open-loop GSHP system for heating (COP - 4) & supplemental cooling provided to existing WC Chillers (COP - 7) Heat rejection via Cooling Towers
ROM Mechanical First Costs* [\$]	\$3.7M	\$7.0M	TBD
Utility Cost Savings [\$ /yr]	~\$6,000/yr (26%)	~20,000/yr (27%)	~640,000/yr (30%)
Heating EUI Reduction [Kbtu/SF/yr]	~25	~20	~66
GHG Reduction [lbs of CO2e]	170 Tons/yr = 34 gas cars	400 Tons/yr = 80 gas cars	11,200 Tons/yr = 2,195 gas cars
Zero Carbon Heating and Cooling	✓	✓	✓
Water Savings [gal/yr]	~40,000	~120,000	~5,000,000
No. of Wells Required	One - 10" Extraction One - 10" Injection	One - 14" Extraction One - 14" Injection	Eight - 16" Extraction Eight - 16" Injection
Building Area Served (SF)	106,000 SF	313,500 SF	2,576,000 SF
Well Depth (ft)	500'	500'	1000'
Target System Capacity (tons /gpm)	100 tons / 250 gpm	300 tons / 750 gpm	3,320 tons / 8,300 gpm
Pros & Cons	<ul style="list-style-type: none"> ✓ Easier design application for a new building ✗ Well sized for a single building limits the opportunity to expand 	<ul style="list-style-type: none"> ✓ Well sized for multiple buildings provides better ROI ✗ Difficult to add a new htg/cls system to an existing building 	<ul style="list-style-type: none"> ✓ Provides an opportunity for a zero carbon & energy efficient campus ✗ Complex design to retrofit an entire campus with a longer project duration

Next Steps

Based on the preliminary analysis of the three case studies, it is recommended to follow the design approach of case study-2 and apply this methodology for a cluster of new buildings.

Given the North Academic Complex is under the design process, the test well should be located on the proposed site under case study-1 and sized to meet the loads of future building additions.

* Costs provided are conceptual in nature and to be used for directional decision making only. Building modification and other major GC scope has not been included. Prices are in today's dollars without escalation



Appendix
Case Study Details
Hydro-geology Analysis Memo



Existing Design | Central Plant

DESIGN DESCRIPTION | Existing Central Plant Diagram

EXISTING EQUIPMENT LIST

GAS TO STEAM BOILERS WITH STACK RECOVERY (CONDEX SYSTEM)

- 3-units (60 Klb/HR Steam)
- 1-unit (30 Klb/HR Steam)
- Assumed Efficiency - 85%

WATER COOLED CHILLERS

- 3-units (1,200 tons each)
- Assumed Efficiency
- 2015 WSEC - 0.5 kW/Ton

COOLING TOWERS

- 3-units

2021 UTILITY RATES

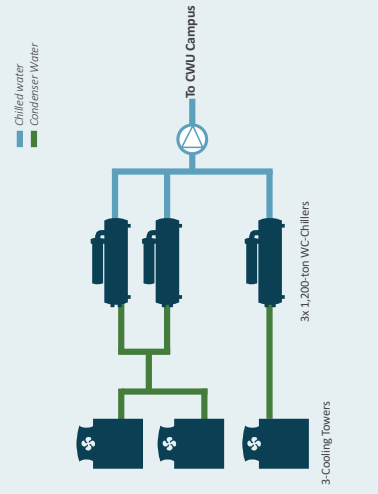
- Electricity**
 - Consumption Rate - \$0.047/kWh
 - Demand Rate - \$5.30/KW
 - Customer Charge - \$3.78/day
- Natural Gas**
 - Consumption Rate - \$0.67/Therm
 - Fixed Charge - \$71/day

E-GRID WA STATE CO₂E FACTORS

- Electricity CO₂e = 0.212 lb/kWh
- Natural Gas CO₂e = 11.7 lb/Therm

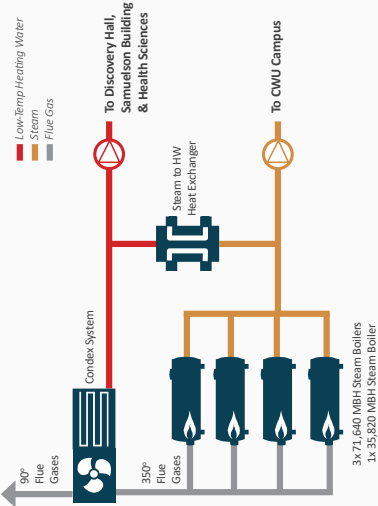
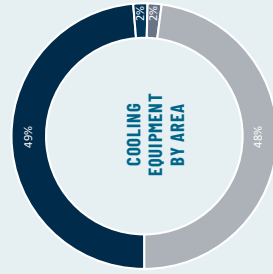
CENTRAL PLANT AREA SERVED

- Heating - 2,576,156 SF
- Cooling - 2,239,717 SF



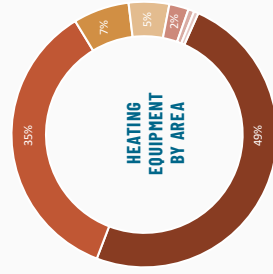
CAMPUS COOLING

About half of the occupied square footage is cooled by water cooled chillers with cooling towers. An additional chiller is planned to be added soon, to increase the capacity of the existing chiller-water system. A 1-million gallon thermal storage tank provides additional peak shaving and efficiency gains. There are a small number of buildings that have their own cooling systems, but about 50% of the campus does not have mechanical cooling of any kind.

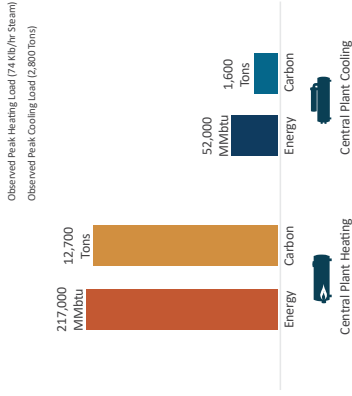


CAMPUS HEATING

Heating and Cooling for the CWU campus is provided by both central and distributed systems. About half of the occupied square footage is heated with steam produced from natural gas-powered boilers at the central plant. The remaining buildings are heated with non-centralized systems (electric resistance, heat pumps, gas boilers). Additionally, three buildings are served by a low temperature hot water loop, that is in part generated with recovered boiler stack heat (CONDEX System).



ENERGY & CARBON ANALYSIS



TARGET CARBON REDUCTIONS

Given the cold winter months of Ellensburg and the inefficient gas powered steam boilers, 72% of the total energy and 88% of carbon emissions from the central plant are from heating. This study focuses on reducing the heating energy while providing options to reduce the carbon impacts of the central plant equipment.

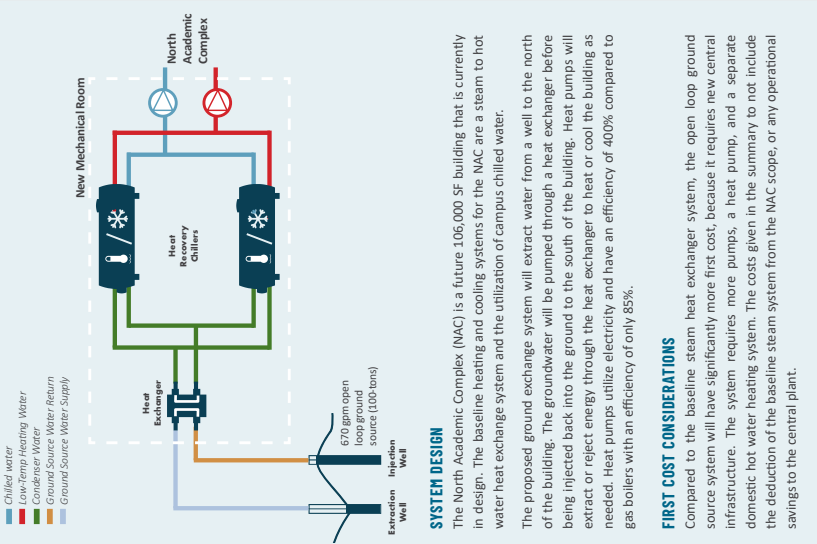
EXISTING CENTRAL PLANT METRICS

- Htg EUI - 84 kBtu/sf/yr**
- Cig EUI - 23 kBtu/sf/yr**
- Natural Gas - \$1,282,762/yr**
- Electricity - \$886,208/yr**
- Natural Gas - 2,470 gas cars/yr**
- Electricity - 320 gas cars/yr**

Case Study - 1 | North Academic Complex

DESIGN DESCRIPTION | Proposed System Diagram

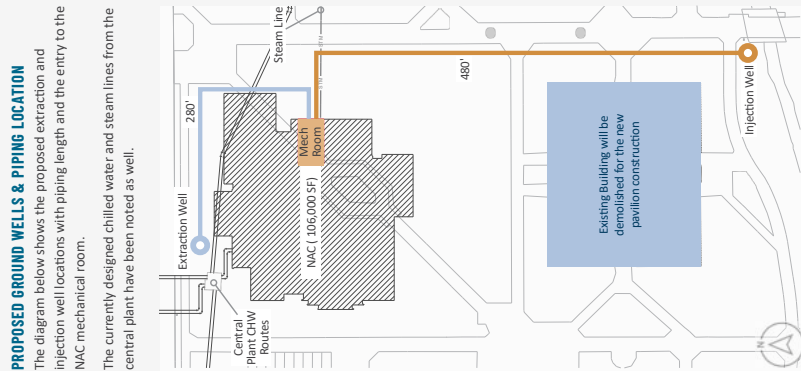
NEW EQUIPMENT LIST PLATE & FRAME HEAT EXCHANGER 1 Unit (2,800 MBH, 450 gpm) 8-PIPE HEAT RECOVERY CHILLERS 2 Units (1,400 MBH, 4x30 ton module) 2-GROUND WELLS 760 ft of 6" PVC piping to/from wells PUMPS Heating/Chilled water distribution, Condenser Water Pumps, Well pumps
GROUND WELL CHARACTERISTICS Target system capacity 100 tons Ground water exchange flow 250 gpm Spacing b/w extraction & injection well 670 ft Total well depth 500 ft Average injection pressure 5.5 PSI



SYSTEM DESIGN
 The North Academic Complex (NAC) is a future 106,000 SF building that is currently in design. The baseline heating and cooling systems for the NAC are a steam to hot water heat exchange system and the utilization of campus chilled water.

The proposed ground exchange system will extract water from a well to the north of the building. The groundwater will be pumped through a heat exchanger before being injected back into the ground to the south of the building. Heat pumps will extract or reject energy through the heat exchanger to heat or cool the building as needed. Heat pumps utilize electricity and have an efficiency of 400% compared to gas boilers with an efficiency of only 85%.

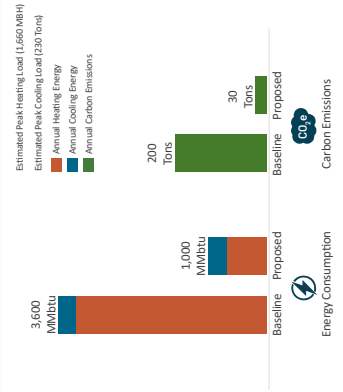
FIRST COST CONSIDERATIONS
 Compared to the baseline steam heat exchanger system, the open loop ground source system will have significantly more first cost, because it requires new central infrastructure. The system requires more pumps, a heat pump, and a separate domestic hot water heating system. The costs given in the summary to not include the deduction of the baseline steam system from the NAC scope, or any operational savings to the central plant.



PROPOSED GROUND WELLS & PIPING LOCATION
 The diagram below shows the proposed extraction and injection well locations with piping length and the entry to the NAC mechanical room.

The currently designed chilled water and steam lines from the central plant have been noted as well.

ENERGY & CARBON ANALYSIS



RESULTS SUMMARY

The open loop ground source system reduces the heating energy by 80% compared to the existing design. Cooling energy remains about the same. Additionally, it reduces the steam and chilled water loads imposed on the central system, thereby freeing up that capacity for other uses.

SAVINGS FROM EXISTING BASELINE DESIGN

- Htg EUI - 25/sf/yr**
- Utility Cost- \$8,000/yr**
- Carbon Emissions - 170 Tons/yr (34 gas cars off the road)**

Case Study - 2 | Three Existing Buildings

DESIGN DESCRIPTION | Proposed System Diagram

NEW EQUIPMENT LIST

PLATE & FRAME HEAT EXCHANGER

1 unit (4,000 MBH, 665 gpm)

6-PIPE HEAT RECOVERY CHILLERS

2 units (8,400 MBH, 5x70 ton module)

2-GROUND WELLS

800 ft/8" PVC piping to/fro wells

PUMPS

Heating/Chilled water distribution
Condenser Water Pumps
Well pumps

WELL CHARACTERISTICS

Target system capacity

300 tons

Ground water exchange flow

750 gpm

Spacing b/w extraction & injection well **715 ft**

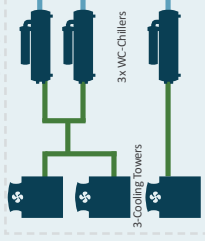
Total well depth

500 ft

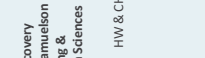
Average injection pressure

32 PSI

Existing Central Plant Cooling Equipment



To Discovery Hall, Samuelson Building & Health Sciences



PROPOSED GROUND WELLS & PIPING LOCATION

The diagram below shows the proposed extraction and injection well locations with piping length and the entry to the proposed mechanical room that hosts the new equipment.



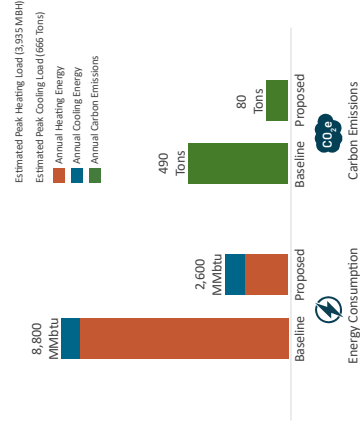
123' Mech Room



750 gpm open loop ground source (300-tons)



ENERGY & CARBON ANALYSIS



RESULTS SUMMARY

The open loop ground source system reduces the heating energy by 80%. Additional energy benefit could be seen with the heat recovery modules of the heat recovery chillers depending on further analysis of the actual existing building load distribution for the next stage of this study.

SAVINGS FROM EXISTING BASELINE DESIGN

Htg EUI - 20/sf/yr

Utility Cost - \$20,000/yr

Carbon Emissions - 400 Tons/yr
(80 gas cars off the road)

SYSTEM DESIGN

Health Sciences, Discovery Hall & Samuelson Union building are currently served by a single low temperature hot water (LTHW) loop from the central plant. Heat for this loop is provided by a combination of stack heat recovery and steam to HW heat exchangers. The proposed ground exchange system will extract water from a well to the north of this building cluster. The ground water will be pumped through a heat exchanger before being injected back into the ground near the Health Sciences building. Heat pumps will extract heat from the heat exchanger and produce low temperature hot water to offset the steam use associated with the current LTHW.

CONSIDERATIONS FOR EXISTING STACK HEAT RECOVERY

Based on the metered data it is unclear how much of the current LTHW loop's heat is provided by the heat recovery off the boiler stacks versus steam. The flue gas heat is recovered and considered "free" heat from an energy perspective, while the supplemental steam heat requires additional natural gas. We calculated savings based on zero free heat from the boilers, to show the maximum potential. The more "free" heat there is, the less benefit a ground source system will provide; assuming 30% of the load is served by the condenser system the savings drop to ~\$5,000/yr in energy cost and ~12 Kbtu/sf/yr in energy use.

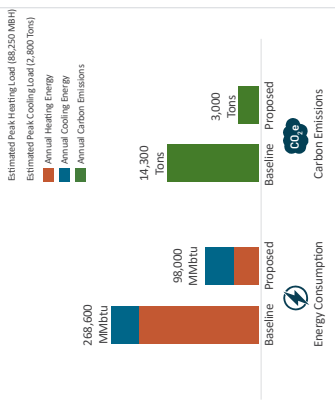
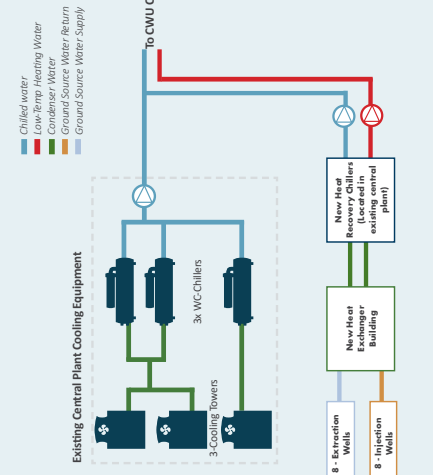
FIRST COST CONSIDERATIONS

The economics of a ground source system improve when paired with more than one building. This option still only requires two total wells, but serves three times the square footage of case study-1.

Case Study - 3 | Existing Central Plant

DESIGN DESCRIPTION | Proposed Central Plant Diagram

NEW EQUIPMENT LIST HEAT EXCHANGE CENTER Size & Units - TBD 6-PIPE HEAT RECOVERY CHILLERS Size & Units - TBD 16-GROUND WELLS Pipe size & length - TBD PUMPS Heating/Chilled water distribution Condenser Water Pumps Well pumps
WELL CHARACTERISTICS Target system capacity 3,320 tons Ground water exchange flow 8,500 gpm Spacing b/w extraction & injection well 700 ft Total well depth 1000 ft Average injection pressure 235PSI



RESULTS SUMMARY

The open loop ground source system reduces the heating energy by 80%. Additional energy benefit could be seen with the heat recovery modules of the heat recovery chillers depending on further analysis of the actual existing building load distribution for the next stage of this study. This is a significant reduction in on-site carbon emissions only possible with a large steam conversion project.

SAVINGS FROM EXISTING BASELINE DESIGN

- Htg EUI - 66/sf/yr**
- Utility Cost - \$640,000/yr**
- CO₂e - 11,200 Tons/yr**
(2.195 gas cars off the road)

SYSTEM DESIGN

This option is a full replacement of the steam system with a new central plant system that is based on open loop ground source. In reality, this will be a phased project, but we evaluated feasibility on a more simplistic large project level. The scope is not well developed as it is complex and spans over a million square feet of conditioned area.

Hydro-geology has determined that 16 wells (8 injection and 8 extraction) will be able to meet the current peak demands of the campus. It may be prudent to downsize this, add thermal storage or other peaking capacity to reduce upfront cost. The scope below does not consider that. The most free open space that CWU owns is north of campus. Wells would be drilled at that location and piped to a heat exchange building that contains heat exchangers and condenser water distribution pumps.

Condenser water would be pumped from the heat exchange building north of campus to the central plant, so current piping and chilled water infrastructure can be utilized. This is a significant amount of large pipe (16,000 linear feet of ~28" pipe), with areas routing on non CWU owned property.

The current steam system will be demolished and replaced with a heat recovery system. Large heat pumps would provide low temperature hot water (it's possible to utilize large ammonia machines to generate hot water, possibly reducing the need for in building retrofits). New hot water piping across campus would need to be distributed to replace aging steam infrastructure. The current chilled water plant would be re-piped to utilize the new condenser water loop as a sink for heat, in addition to the current cooling towers. Current chilled water piping, pumping, and building level systems could all be re-used.

The existing chiller plant has a peak load of 2,800 tons, and includes redundancy. The current steam peak for heating is about 88 million Btu/h - this equates to around 7,500 "tons" of heating.



MEMORANDUM

Project No. 210270

June 10, 2022

To: Devon Powell and Tanvi Dhar, McKinstry Co.

From:

Andrew Austreng, LHG
Associate Hydrogeologist
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Re: Central Washington University Ground Source Heat Pump Hydrogeologic Evaluation

This memo documents an initial hydrogeologic evaluation by Aspect Consulting, LLC (Aspect) of open-loop ground source heat pump (GSHP) wellfield alternatives for the Central Washington University (CWU) campus in Ellensburg, Washington (Site). The wellfield alternatives presented herein are based on three potential heat pump demand scenarios developed by McKinstry to represent a range of system sizes (i.e., supply to a single building, multiple buildings, or the entire campus).

The scope of this work was limited to a desktop hydrogeologic investigation of GSHP wellfield alternatives. A summary of findings is provided in the following section, with details of this work and future considerations provided throughout the remainder of this memo.

Summary of Findings

The following findings are supported by the existing aquifer characterization and modeling efforts described herein:

- The primary permitting requirements for construction and operation of the wellfield¹ include obtaining a new water right and registration of all injection (return) wells with the Department of Ecology's (Ecology) Underground Injection Control Program. No concerns were identified with obtaining either of these permits. Ecology guidance allows for priority processing of non-consumptive water right applications for GSHP systems.
 - The Site is underlain by a productive aquifer, often referred to as the upper Ellensburg Formation, which has potential to supply a high yield GSHP system. This aquifer system is expected to have 'shallow' (e.g., 300-600 feet) and 'deep' (e.g., 800-1,100 feet) production zones. The deeper production zone is expected to provide particularly

¹ City of Ellensburg building permit compliance would also be required for facility construction.



high water yields suitable for larger GSHP buildout scenarios (e.g., campus-wide), while the shallow system can likely supply a multi-building GSHP system, this is if aquifer conditions are similar to what has been encountered in the Site vicinity.

- Shallow and deep production zones of the Ellensburg Formation are confined by overlying impermeable silt/siltstone layers. These confining layers isolate the Site's productive aquifer system from nearby surface water, simplifying the permitting pathway and minimizing variability in water supply temperature. Both the deep and shallow production zones exhibit water temperatures that are considered ideal for efficient GSHP operation (i.e., 55 to 65 degrees F, depending on completion zone).
- Heating and cooling loads associated with multiple buildings (e.g., Scenario 2 described below) can likely be met by a single extraction and injection well pair completed within the shallow system (two wells total), but this will need to be confirmed as part of a future phase of work. Based on our analytical modeling (Section 4), the separation requirements between the extraction (supply) and injection (return) wells is less than 715 feet, allowing for flexibility in well placement and minimizing pipeline costs.
- Modeling suggests that a campus-wide GSHP wellfield (referred to as Scenario 3 below) would require eight paired extraction and injection wells (16 wells total) completed in the deep production zone to supply the entire heating and cooling loads.
- The costs for wellfield construction increase with well completion depth and well size (rough order-of-magnitude costs are presented in Section 5 of this memorandum). Therefore, to minimize the construction costs per ton of heating and cooling, multiple buildings should utilize a shared wellfield system, which could target the shallow completion zone. Depending on the size of the shared system and the actual geologic conditions encountered at the Site, completing fewer wells within the deep system may be necessary and cost-effective (compared to a greater number of shallow wells separated by a greater distance).

Overall, this study identified favorable conditions for a high capacity open-loop GSHP wellfield at the Site. Additional Site-specific information is needed to advance design, including well construction and pumping tests to verify aquifer yields and wellfield spacing and depth. A cost-effective solution for assessing hydrogeologic conditions and optimizing construction costs could involve drilling a deep boring (e.g., 800-1,100) that is either completed as an operational well or, depending on conditions identified, completed within the shallow production zone (e.g., 300-600 foot deep).

1 Project Background

In coordination with CWU, McKinstry identified open-loop GSHP as an alternative to supply heating and cooling to portions of the campus. At the Site, an open-loop GSHP system would pump groundwater from one or more supply wells, pass water through a heat exchanger, and return the water to the same groundwater system via a paired injection (return) well or wells.

Based on a preliminary hydrogeologic review in June 2021, Aspect found that hydrogeologic conditions on-Site may support a high yielding open-loop GSHP system but that uncertainties in associated wellfield requirements (depth, yield, and spacing) and costs exist for small to medium

scale (e.g., 1 building) systems. Given this analysis, McKinstry sought to consider wellfield requirements over a range of system sizes, as this Site is likely to benefit from the economy of scale under certain buildout scenarios.

McKinstry provided Aspect with three scenarios representing a range of system sizes and loading profiles to evaluate a range in open-loop GSHP wellfield requirements. The analysis aimed to determine the feasibility and relative cost of installing each demand scenario so CWU may be well informed about possibilities and limitations of a GSHP system ahead of investments. Each McKinstry-provided GSHP scenario is described below and shown conceptually on Figure 1 and includes the following facility sizes considered for supply:

- **Scenario 1:** A new building at the North Academic Complex (NAC). This option would support one building.
- **Scenario 2:** A three building cluster comprising the Health Sciences, Science II, and Samuelson Buildings.
- **Scenario 3:** The entire campus, centered around the Central Plant.

2 Permitting Considerations

Based on recent experience with similar projects and an initial desktop evaluation of hydrogeologic, geologic, and surrounding site conditions, Aspect conducted a preliminary permitting assessment to evaluate 1) permitting requirements, 2) the permitting process, and 3) the anticipated outcomes of permitting efforts. Further details related to applying for a water right and registration with Ecology's Underground Injection Control (UIC) program are described below.

2.1 Water Right Permitting

Open-loop GSHP systems require a water right under RCW 90.44.050. An open-loop GSHP system is a beneficial use of groundwater that meets the definition of "non-consumptive" use, as defined by Ecology policy POL-1020, as it will not diminish water availability, is water budget neutral, and meets the criterion for expedited review under Washington Administrative Code (WAC) 173-152-050(2)(c) and Ecology policy POL-2020. These policies would allow the Washington State Department of Ecology (Ecology) to issue a water right to CWU, even though it is within an area where new consumptive water rights cannot be obtained without mitigation.

The main consideration for water right processing of open-loop systems is temperature impact considerations, which Ecology would evaluate after a water right application is submitted. The indirect temperature effect on surface water bodies in hydraulic continuity with groundwater underlying the Site is regulated under WAC 173-201A, which does not allow thermal discharges to any temperature-impaired surface water body. The closest temperature regulated surface water to the Site is a reach of Wilson Creek (located about 1.3 miles southwest of Scenario 2 in Figure 1), which is listed as a Category 2 impaired water.² This allows Ecology more flexibility in issuing a water right in consideration of Wilson Creek temperature impacts.

² The Category 2 water is characterized as "having some evidence" for temperature impairment but "does not show persistent impairment" to categorize the water as impaired under the listing policy [Ecology 2022]).

While our hydrogeologic assessment (Section 3) indicates a hydraulic gradient that directs groundwater generally from the northwest to the southeast to the south (toward the impaired reach of Wilson Creek), the creek flows as perched water on top of impermeable silt/siltstone layers of the Ellensburg Formation, which vertically isolates the creek from any potential thermal impacts. Furthermore, our preliminary thermal modeling (Section 4) suggests that thermal impacts on groundwater from GSHP operation do not migrate far from the Site and would dissipate before reaching the impacted reach of Wilson Creek even if the perched condition did not occur. This fact pattern is expected to provide relatively straightforward permit approval.

Although not a typical water rights permitting consideration, no groundwater temperature impairment is expected to occur to other groundwater users, including the City of Ellensburg.

2.2 UIC Registration

All injection wells (e.g., “return” wells for open-loop GSHP systems) in Washington State must be registered with Ecology’s Underground Injection Control (UIC) program. The UIC registration process is relatively simple and is typically initiated after well construction. If open-loop construction and implementation is advanced, any injection well will need to be registered in the State’s program.

Registration involves an application process separate from the Water Right Permit. The UIC registration, among other criteria, requires the applicant to identify any nearby groundwater cleanup actions from public records if the HAC (heating and cooling) system is within one mile of surface water and uses 5,000 gallons per day or greater. The purpose of this requirement is to evaluate if an extraction or injection well could either “pull” or “push” a nearby groundwater contaminant plume into an extraction well or mobilize a contaminant plume through injection. Our preliminary review of active contaminated sites indicates that they are too distant from the campus and/or would be vertically isolated by several hundred feet of confining material to negatively impact UIC permitting.

3 Hydrogeologic Assessment

The details provided in the following sections document Aspect’s desktop assessment of hydrogeologic conditions at the Site, with the overall findings incorporated into the preceding sections of this memo.

3.1 Geologic Setting

The Site is located within the Kittitas Valley, a geologically complex area that is structurally and topographically bound by the Taneum Monocline to the west, the Wenatchee Mountains to the north, the Naneum-Hog Ranch anticline to the east, and the Manastash Ridge to the south. Valley infill includes mid-Miocene aged Columbia River Basalts that are overlaid and interfingered with sedimentary units of the Ellensburg Formation. The Ellensburg Formation is typically blanketed by a thin layer (less than 50 feet) of Quaternary-aged alluvial sediments associated with deposition of the Yakima River (GeoEngineers, 1999).

3.2 Hydrogeologic Units

The Ellensburg Formation includes fluvial sand and gravel deposits, sandstone, and volcanoclastic sedimentary rocks that are up to thousands of feet thick near the center of Ellensburg (GeoEngineers, 1999). The formation is divided into the upper and lower Ellensburg Formations

(Owens, 1995). The lower is comprised of finer-grained, non-marine, clastic sediments that interfinger the Columbia River Basalts, while the upper is characterized by mudflow debris, much of which was reworked by streams with significant sand and gravel lenses.

The upper Ellensburg Formation contains multiple water-bearing zones that are heterogenous in texture (e.g., sand and gravel content) across the Ellensburg area. In many areas, it can be generally grouped into units corresponding to 'shallow' (e.g., 300-600 feet below ground surface [bgs]) and 'deep' (800-1,100 feet bgs) production zones. With the exception of its Ranney collector well completed in the shallow alluvial aquifer, all City of Ellensburg production wells are completed within the upper Ellensburg Formation, the aquifer central to this investigation. The generalized shallow and deep production zones within the upper Ellensburg are "confined" by overlying low-permeability sediments and are described in greater detail below.

- **Shallow Zone:** Wells completed within the shallow completion zone of the upper Ellensburg Formation are generally on the order of 300-600 feet deep. Aquifer material in this zone is generally composed of sand/sandstone and gravel/conglomerate interbedded with lenses of silt/siltstone. The City's Memorial Well (PW-3) is completed in this zone approximately 1,500 feet southeast of Scenario 2 shown in Figure 1. A safe yield of approximately 420 gallons per minute (gpm) was identified during well construction (Robinson & Noble, 1986).
- **Deep Zone:** The shallow and deep water-bearing zones have been identified in local well logs and past studies as being separated by an impermeable layer of silt/siltstone that ranges from 50 to 150 feet thick. Below this confining layer, several water-bearing zones exist comprising the 'deeper' completion zone of the upper Ellensburg Formation. Similar to the shallow zone, the deep completion zone is composed of sand/sandstone and gravel/conglomerate interbedded with lenses of silt/siltstone. Wells completed in this zone are generally 800-1,100 feet deep and include nine City water supply wells. The closest of these wells are the Kiwanis Well (located approximately 950 feet northwest of Scenario 3 shown in Figure 1, upgradient to the Site) and the Rodeo Well (located approximately 2,000 feet southeast of Scenario 2 shown in Figure 1). Robinson & Noble (1986) reported a safe yield of 1,000 gpm for the Kiwanis Well and 800 gpm for the Rodeo Well.

Groundwater contour maps created by GeoEngineers (1999) show groundwater in the shallow and deep completion zones, and show groundwater flow paralleling local Yakima River flow from the north/northwest to the south/southeast.

3.3 Aquifer Hydraulic Parameters

Well testing and hydrogeologic reports were reviewed to estimate hydraulic parameters for the shallow and deep completion zones of the upper Ellensburg Formation and are described in Table 1. A discussion on each parameter is included below the table.

Table 1. Hydraulic Parameters

Model Parameter	Shallow	Deep
Aquifer Transmissivity (ft ² /day)	2,000	3,000
Aquifer Storativity (unitless)	0.005	0.0004
Static Water Level (ft bgs)	18	50
Assumed Well Efficiency (%)	85	

3.3.1 Aquifer Transmissivity

- Aquifer transmissivity (T) is the ability of an aquifer to transmit groundwater throughout its entire saturated thickness. It is the product of hydraulic conductivity (soil permeability) multiplied by the saturated aquifer thickness (Transmissivity [T] = Hydraulic Conductivity [k] x Aquifer Thickness [b]). It can also be estimated through evaluation of pumping test data using conventional analytical techniques (e.g., Theis, 1935; Cooper and Jacob, 1946).
- Transmissivity was estimated through evaluation of existing pumping test analysis for the City. Robinson and Noble (1986) estimated an aquifer transmissivity value of 2,400 ft²/day for the shallow production zone, based on analysis of pumping test data from the Memorial Well. For conservatism, the estimate was reduced by approximately 15 percent, and a value of **2,000 ft²/day** was selected for modeling purposes.
- In the deeper production zone, Robinson and Noble (1986) reported transmissivity values ranging from 2,200-3,200 ft²/day from analysis of pumping tests at the Mt. Stuart, Kiwanis, and Whitney wells, while Coho (2020) reported an aquifer transmissivity value of 4,000 ft²/day based on analysis of the Illinois Well pumping test. We expect the large range in transmissivity estimates to be related to the number of water-bearing zones (e.g., saturated aquifer thickness depth) encountered by each well, which is related to the depth of the well. The Illinois Well, for example, is at least 100 feet deeper than the other three listed and appears to have encountered a greater number of water-bearing zones within the deeper production zone. For conservatism, a value of **3,000 ft²/day** was selected for modeling purposes, but a well completed at least 1,100 feet deep at the Site could encounter a higher transmissivity.

3.3.2 Aquifer Storativity

- Aquifer storativity (S) is a unitless value, defined as the volume of water released from storage per unit surface area of the aquifer or aquitard per unit decline in hydraulic head for a confined aquifer. It can also be estimated through analysis of pumping test data if water level drawdown is measured in both a pumping and observation well.
- A storativity value of 0.005 was selected for the shallow production zone by averaging the values provided by GeoEngineers (1999). A value of 0.0004 was selected for the

deep production zone based on analysis by Coho (2020) of the Illinois Well pumping test data.

3.3.3 Static Water Level

- The static water level is expected to experience limited seasonal variation. Static water levels of 18 and 50 feet bgs were selected for the shallow and deep production zones, respectively, based on static water levels of City wells.

3.3.4 Well Efficiency

- Well efficiency accounts for the turbulent head losses in an injection or extraction well that includes effects from imperfect well completion (e.g., screen design/placement and well development). A well efficiency of 85 percent was assumed in the model, although in practice, thoroughly developed wells that are properly constructed in sands and gravels often exceed 90 percent efficiency at their designed flow rate.

4 Modeling

Open-loop GSHP potential of the Ellensburg aquifer (i.e., extraction and reinjection of groundwater) was analyzed by creating a hydraulic model³ from estimated aquifer parameters. The analytical hydraulic model provides an evaluation of well drawdown and pressure buildup in extraction and injection wells, respectively. This part of the analysis provides an estimate of maximum wellfield yields under different well separation arrangements corresponding to Scenarios 1-3 at the Site. The results of the hydraulic model were then considered iteratively within a preliminary two-dimensional thermal model. The thermal model⁴ considers the well spacing from the hydraulic model to determine if “thermal breakthrough” or if thermal conditioning would occur within the wellfield. Thermal breakthrough indicates that some fraction of heated or cooled groundwater from the injection wells has migrated to the extraction well (thermal breakthrough could reduce GSHP performance if the system isn’t adjusted accordingly).

Hydraulic and thermal modeling were conducted within the Site footprint for each scenario to provide a preliminary estimate of total wellfield yield to supply a GSHP. Results of these analyses are described in greater detail in the following sections.

4.1 Hydraulic Modeling

Based on well yields and hydraulic parameters estimated from evaluation of hydrogeologic reports, well logs, cross-sections, and pumping tests, a hydraulic model was created to simulate changes in well water levels resulting from groundwater extraction and injection (water supply and return). The capacity of an open-loop wellfield is ultimately determined by:

- Availability of a sufficient water column in the extraction well during pumping (water column corresponds to the pump submergence below the water level in the aquifer, where the pump can typically be set only as low as the top of the well screen)
- Groundwater injection pressures (water level buildup) at the injection wells

³ The hydraulic model is based on conventional analytical methods for a confined aquifer by Cooper-Jacob (1946).

⁴ VS2DI Version 1.3, USGS (2018)

If the water level draws down too close to the pump in the extraction well, the risk for well pump cavitation increases (a pump submergence of 10 feet or more during pumping is typically targeted for safe operation). This can cause decreased pump performance and/or premature pump wear, so pumping rates are limited to those that maintain adequate pump submergence.

In confined aquifers, as is found at the Site, injection pressures (backpressure at the injection wellhead) in excess of 20 pounds per square inch (or more, depending on the size of installed pump) may be considered prohibitive due to added pumping lift and elevated pressure buildup in the aquifer. Pressures can be mitigated by dividing injection water among multiple injection wells or with the addition of a booster pump to overcome injection pressure buildup. To the extent practical, the system should be designed to avoid excess backpressures.

The Site's hydraulic model is based on conventional analytical methods by Cooper-Jacob (1946) simulating the effects from combined extraction and injection on the water level in the wells and aquifer. The model predicts water level drawdown in extraction wells and injection wells located a distance away from the pumping well. Drawdown in extraction wells is then offset by the return of groundwater through the injection wells, which has the opposite effect on the water level than pumping (i.e., water is replenished to the aquifer and water level rises). The available water column in extraction wells and injection pressures in the injection wells are ultimately determined by well spacing, extraction/injection rates, and aquifer parameters.

Aspect ran the model for an array of wellfield configurations to determine appropriate combinations of pumping rate, number of wells, and well spacing for each scenario outlined by McKinstry. Aspect based this model on the wellfield's ability to support the maximum flow rate identified for each option based on McKinstry's average loading profiles⁵. Along with loading profiles, McKinstry provided Aspect with site maps that delineated "drillable areas" for each option to assist with spacing and identify potential locations for future production wells. Hydraulic modeling results are summarized in Table 2. Modeled wellfield configurations are shown in Figures 2-4.

⁵ McKinstry provided Aspect with daily load curves representing an average day across each month for Scenarios 1-3. The hydraulic model was built to accommodate the maximum hourly flow rate identified for each option. Scenarios 1, 2 and 3 correspond to maximum wellfield flowrates of approximately 250 gpm, 750 gpm, and 8,300 gpm, respectively.

Table 2. Hydraulic Model Results

	Scenario 1	Scenario 2	Scenario 3
No. of Extraction Wells (No. of Injection Wells)	1 (1)	1 (1)	8 (8)
Well Completion Zone	Shallow	Shallow	Deep
Well Spacing Between Extraction and Injection Well (ft)	670	715	700
Average Water Column in Extraction Well Above Pump (ft) ¹	200 ²	140 ²	240 ³
Average Injection Pressure (PSI) ⁴	6 ⁵	30 ^{5,6}	20 ^{6,7}
Estimated Heating and Cooling Capacity (tons) ⁸	100	300	3,320

Notes:

¹ The combined result of water level drawdown from extraction and water level buildup in the extraction well from injection.

² Assumes the pump is set at 350 feet bgs.

³ Assumes the pump is set at 390 feet bgs based on the screened intervals in the Illinois Well.

⁴ The combined result of water level drawdown in the injection well from extraction and pressure buildup in the injection well.

⁵ Assumes a static water level of 18 ft bgs, based on the City's Memorial Park Well.

⁶ This value could be mitigated by the addition of a second injection well to attenuate the pressure buildup throughout the aquifer or with the addition of a booster pump to overcome injection pressures.

⁷ Assumes a static water level of 50 feet bgs.

⁸ Assumes 2.5 gpm/ton. This value is dependent on the selected heat exchanger and other mechanical components and should be verified by a mechanical engineer.

Within the drillable areas of the Site footprint identified by McKinstry, one extraction well (paired with one injection well) was found to be the number of wells needed to achieve the target yield within the drillable footprint for Scenarios 1 and 2. Eight extraction wells (paired with 8 injection wells) were found to be the number of wells needed to achieve maximum wellfield yield within the drillable footprint for Scenario 3.

Due to the large flow rates needed to meet the loading profiles associated with Scenario 3, wells completed in the deeper production zone are expected. Aquifer transmissivity is likely greater in the deeper production zone, allowing the wells to be pumped at higher flow rates. Deeper wells also allow for more "available water column" which would also allow the wells to be pumped at higher rates.

Importantly, **the well spacing described in Table 2 does not represent the minimum well spacing required to accommodate the flow rates** associated with each scenario. Rather, spacing was based on placing wells in areas determined by McKinstry as "potential well locations." Actual well spacing and placement would be refined in a later design phase. Preliminary well spacing and mapped locations are intended to support planning level cost considerations and a conceptual system design.

4.2 Thermal Modeling

A numerical two-dimensional groundwater heat flow model was created in VS2DHI (Version 1.3) to simulate flow and heat energy transport associated with GSHP wellfield operation. Model inputs were based on McKinstry's anticipated energy modeling results for average monthly loading profiles, provided to Aspect in April 2022 for each scenario.

Thermal modeling considered average loading scenarios as presented in the following sections.

4.2.1 Model Assumptions

The model was designed to represent the monthly average system load profile across the year through the following assumptions:

- The daily load curve (flow rates) for each month was averaged over a 24-hour period and kept constant across the month (the model operates on a daily time step).
- Background groundwater temperature was kept constant throughout the year at 66 °F, based on the temperature of water encountered during testing of the City's Illinois Well.
- Injection (return water) temperatures are based on a 12°F ΔT when the system is in cooling mode (i.e., cooling the building/heating the ground; assumes a 78-degree reinjection temperature) and an 8°F ΔT when the system is in heating mode (i.e., heating the building/cooling the ground; assumes a reinjection temperature of 58 degrees).
- The model assumes the system is in heating mode from October through April and in cooling mode from May through September.
- All energy from reinjection wells is directly transferred to groundwater.⁶
- The model considered the same wellfield configuration depicted in Figures 2-4. Open-loop operation was simulated for three years based on the average loading profile for each option provided by McKinstry.

Modeling results are summarized and shown conceptually in Attachment 1. The model predicts no thermal breakthrough after three years of operation for Scenarios 1 and 2 and a minor to moderate degree of thermal breakthrough (e.g., ±6°F) after three years of operation for Scenario 3. The degree of thermal breakthrough could be lessened by increasing the spacing between injection and extraction wells, however, injection pressures would increase as a result. Thermal breakthrough or high injection pressures could be managed during the design phase through the selection of heat exchangers that can support a range of entering temperatures, additional injection wells, or addition of booster pumps to overcome head pressures.

4.3 Sensitivity Analysis

Sensitivity analyses of estimated hydraulic parameters were also completed to assess dependence of the thermal model results on estimated aquifer properties. Aquifer transmissivity and groundwater gradient were individually varied by plus or minus 25 percent from the initial input values and

⁶ During actual system operation, some energy is lost to conveyance piping and well casing.

resulting changes in temperatures of extraction water were assessed. To observe the effects of sensitivity analysis, this assessment was only conducted for the Scenario 3 (deep production zone), because it was the only simulation to show any thermal breakthrough. The result of varying each parameter is described below.

Aquifer transmissivity. The transmissivity estimate used in the model (3,000 ft²) is a critical factor in determining aquifer productivity and is based on permeability, soil type, and aquifer thickness. The estimates are within the typical range for the upper Ellensburg Formation aquifer, but transmissivity can vary locally depending on the amount of silt, clay, and the saturated aquifer thickness, and is expected to show some variation across the Site. Transmissivity values 25 percent less and greater than the initial estimate were modeled to assess the effect on thermal impairment. This analysis showed no discernable impact on thermal breakthrough.

Groundwater flow gradient. The groundwater flow gradient influences the rate in which ambient groundwater can “wash away” a thermal plume when the system is not operating. The higher the gradient, the greater the aquifer’s ability to recover from thermal impairment. This analysis also showed that altering the groundwater gradient had no discernable impact on thermal impairment.

Because the flow rates associated with Scenario 3 are so large relative to the Site footprint, altering the transmissivity and groundwater gradient by small margins did not have a discernable impact on thermal impairment. The model is most sensitive to flow rate in this case.

5 Cost Considerations

Aspect solicited bids from drillers between the Spring of 2021 and 2022 to assist with rough order of magnitude (ROM) well construction costs. These bids were reviewed and adjusted based on estimated well depths. Costs of wellfield construction⁷ for Scenarios 1-3 were compared to anticipated system yields. This analysis is summarized in Table 3 and discussed below.

Table 3. Cost Comparison Summary

	Scenario 1	Scenario 2	Scenario 3
Well Depth	Shallow (assumed 500 ft bgs)		Deep (assumed 1,000 ft bgs)
Well Production Casing Depth (ft) / Diameter (inches)	300 / 10	300 / 14	400 / 16
Screen Length (ft) / Diameter (inches)	200 / 8	200 / 10	200 ¹ / 12
System Capacity, gpm (tons)	250 (100)	750 (300)	8,300 (3,320)
ROM Well and Pump Cost	\$550,000	\$800,000	\$20 million
Approx. ROM Well Cost Per Ton	5,500	2,700	6,000

Notes: ¹ Additional solid casing of the same diameter as the screen will be included in the screen assembly (the balance of the difference between, assumed to be 400 feet in length for the example shown). Does not include wellhouse.

⁷ These estimates only consider the costs associated with well drilling and testing. The estimate does not include costs associated with trenching/piping, mechanical equipment, well appurtenances, or maintenance.

6 Summary and Recommendations

The hydrogeologic system anticipated at the Site is well-suited to support a high yield open-loop GSHP system. Aspect's analysis of the Site and surrounding geologic and hydrogeologic information indicates that the upper Ellensburg Formation aquifer is present beneath this Site with significant extent and could support a range of system sizes, including the entire campus.

Based on this desktop evaluation, a mid-range system supplying multiple campus buildings is expected to be high performing, permittable, and cost efficient. Site explorations are needed to advance design and can be tailored to also provide operational GSHP infrastructure (a "usable" well). Well construction and pumping tests should be considered to verify aquifer yields and wellfield spacing and depth. A cost-effective solution to assessing hydrogeologic conditions and optimizing construction costs could involve drilling a deep boring (e.g., 800-1,100) that is either completed as an operational well or, depending on conditions identified, completed within the shallow production zone (e.g., 300-600 foot deep).

7 References

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https://apps.ecology.wa.gov/approvedwqa/approvedpages/viewapprovedlisting.aspx?LISTING_ID=15061

McKinstry
June 10, 2022

MEMORANDUM
Project No. 210270

8 Limitations

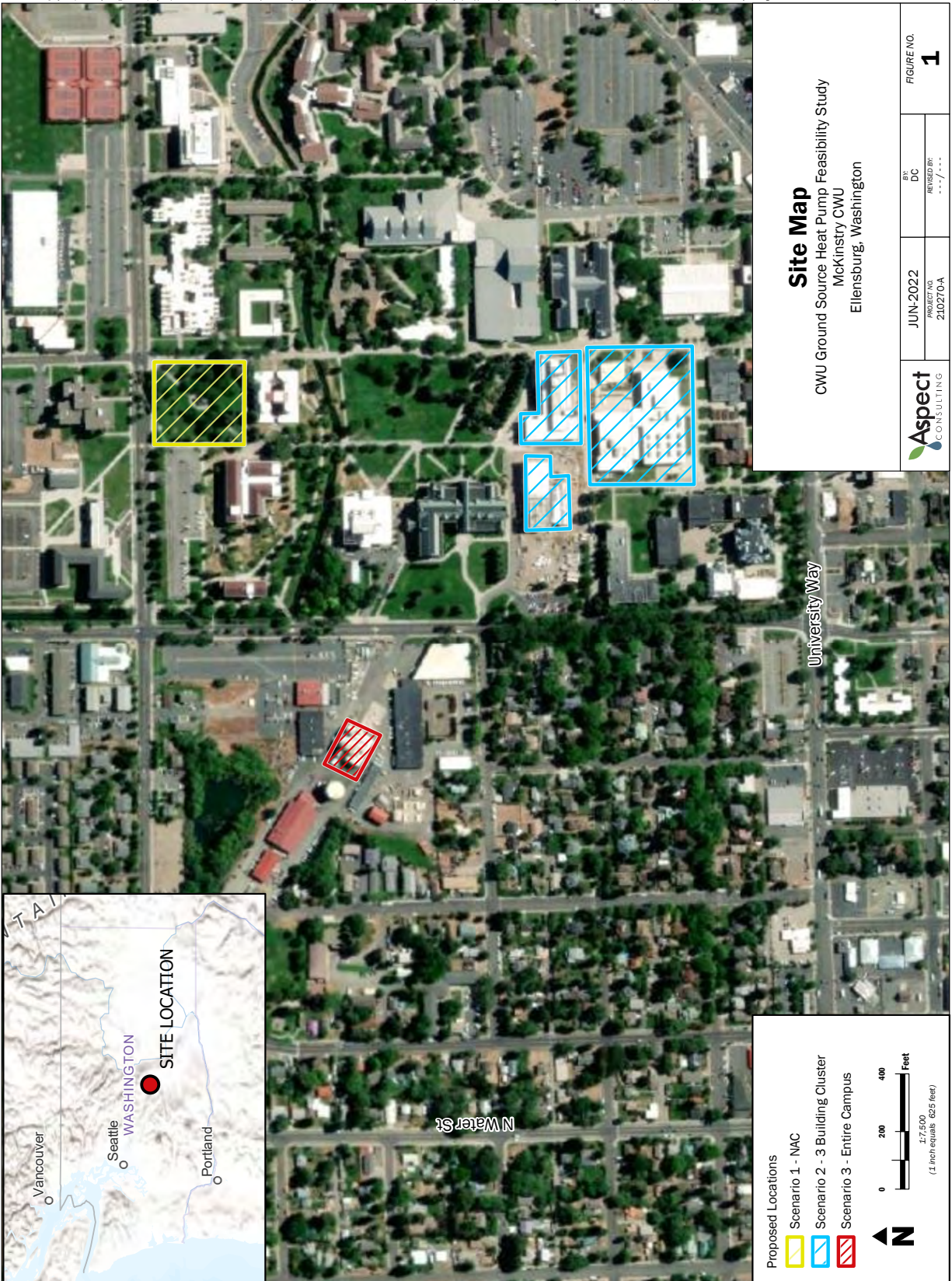
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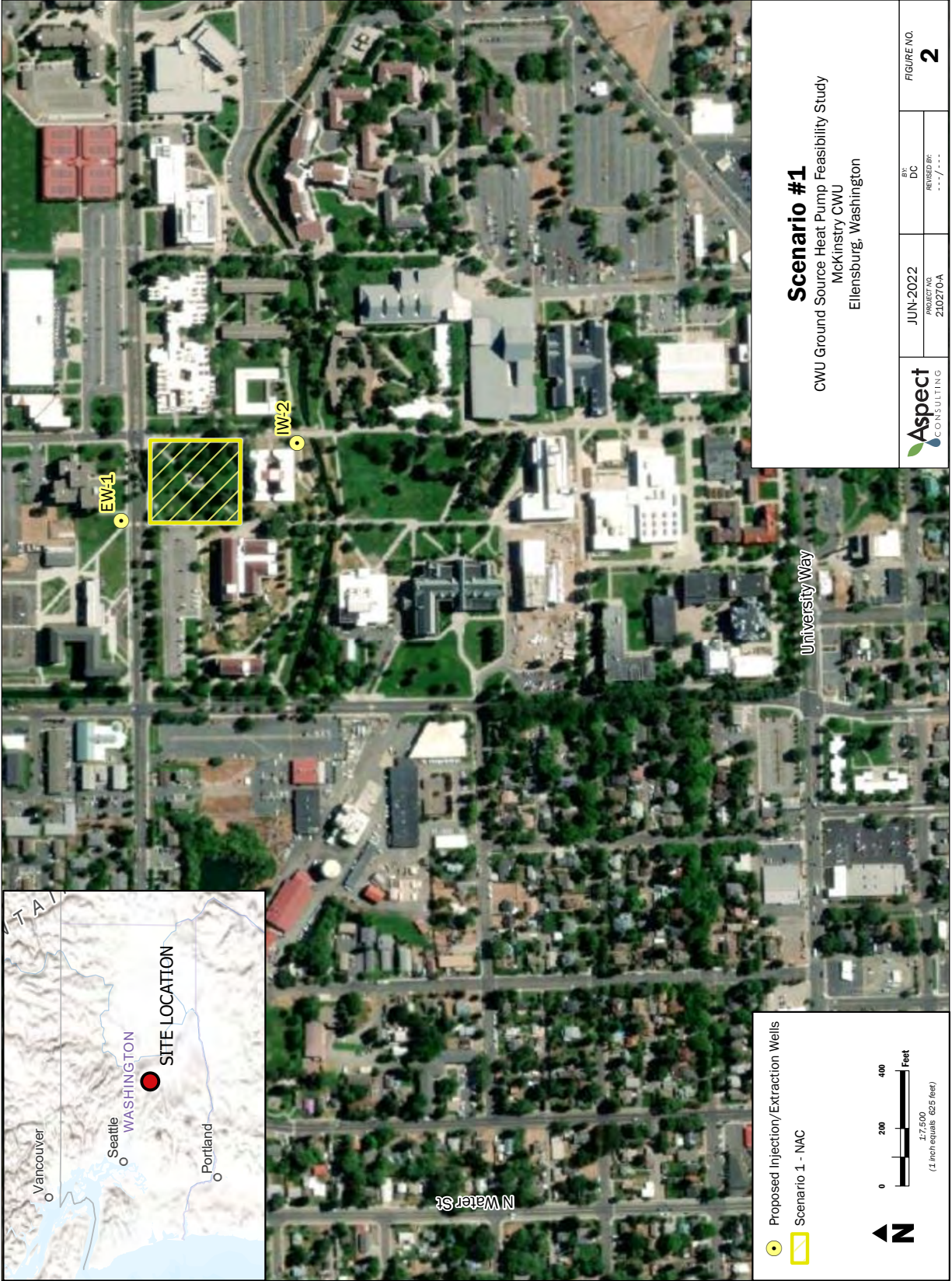
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Attachments: Figure 1 – Site Map
Figure 2 – Option 1
Figure 3 – Option 2
Figure 4 – Option 3
Attachment A – Thermal Modeling Results

V:\210270 McKinstry CWU\Deliverables\GSHP Feasibility Memo\CWU GSHP Feasibility Memo_2022.06.10.docx

ArGIS Pro: G:\projects\McKinstryCWU_210270\Project\CWU Ground Source Heat Pump Feasibility Study\CWU Ground Source Heat Pump Feasibility Study.aprx || No Projected Coordinate System || Date Saved: 6/6/2022 || Exported 6/6/2022 16:01 by dchang







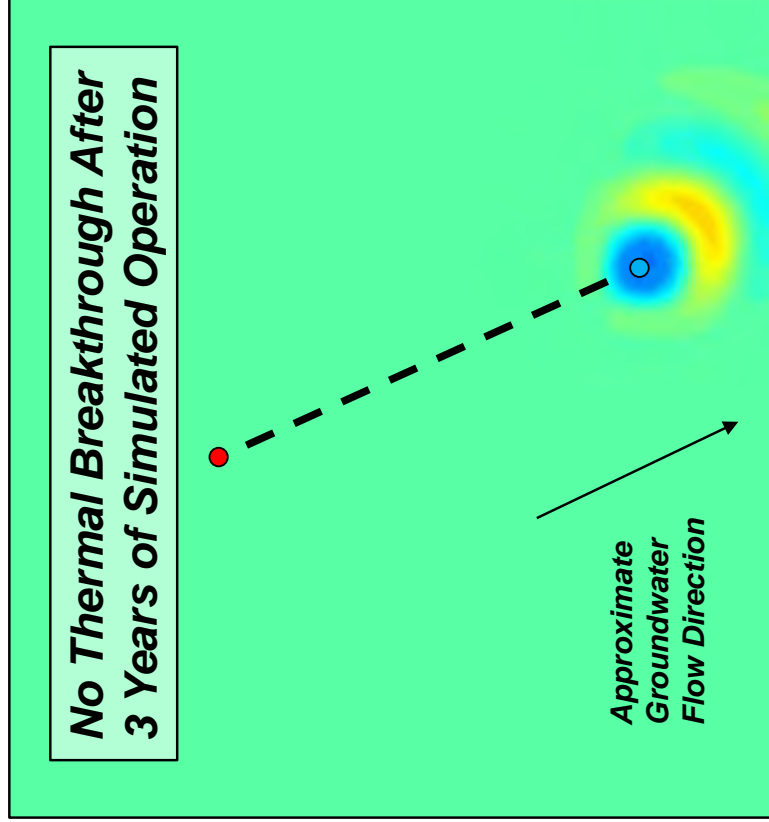
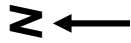
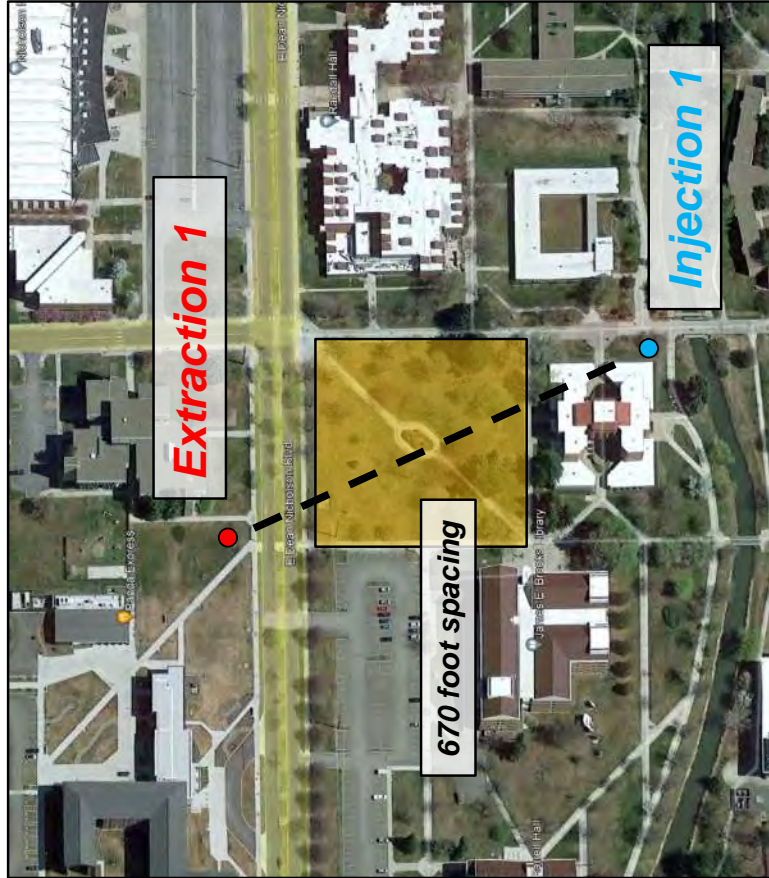
Attachment A

Project No. 210270, Ellensburg, Washington

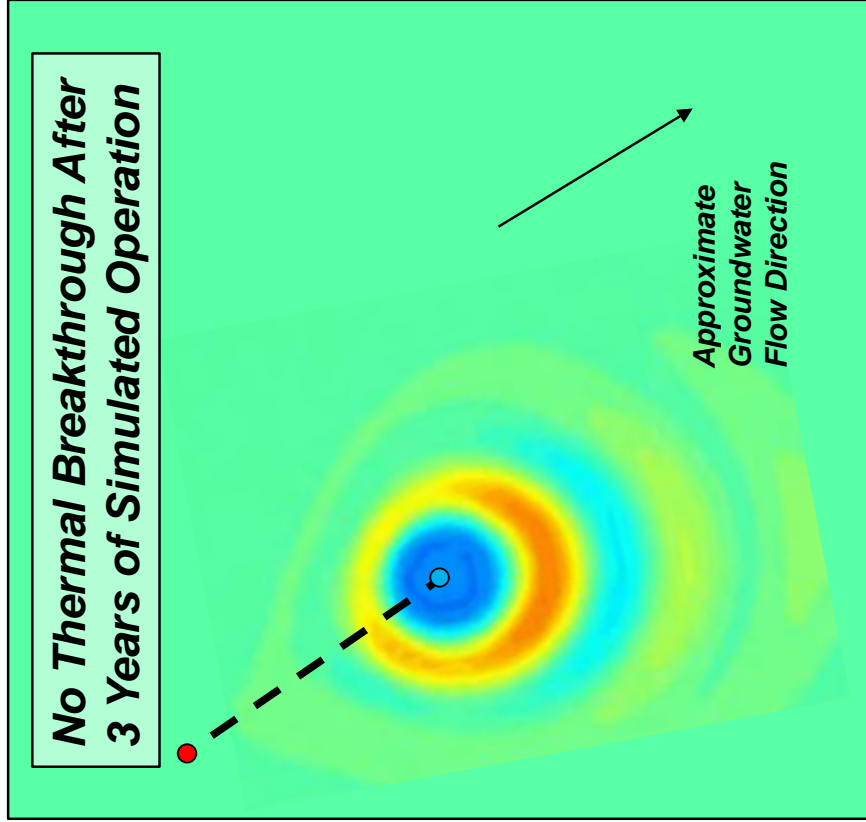
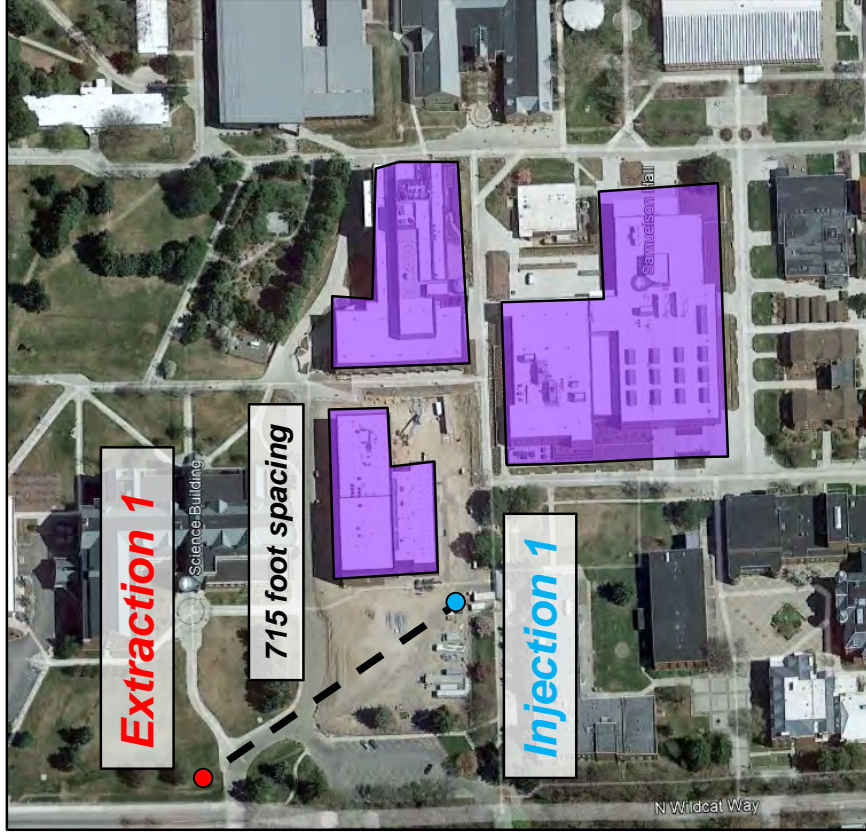
Year	Month	Avg. Extraction Well Temp (degrees F)		
		Option 1	Option 2	Option 3 ¹
1	January	66	66	66
	February	66	66	66
	March	66	66	65
	April	66	66	64
	May	66	66	63
	June	66	66	62
	July	66	66	62
	August	66	66	63
	September	66	66	66
	October	66	66	69
	November	66	66	72
	December	66	66	69
2	January	66	66	64
	February	66	66	62
	March	66	66	62
	April	66	66	62
	May	66	66	62
	June	66	66	61
	July	66	66	62
	August	66	66	63
	September	66	66	65
	October	66	66	69
	November	66	66	72
	December	66	66	69
3	January	66	66	64
	February	66	66	62
	March	66	66	62
	April	66	66	62
	May	66	66	62
	June	66	66	61
	July	66	66	62
	August	66	66	63
	September	66	66	65
	October	66	66	69
	November	66	66	71
	December	66	66	69

Note: ¹ Temperatures were averaged across the 8 extraction wells for each time step. Extraction wells in the center generally experience a greater degree of thermal impairment as the capture zone for those wells pulls less ambient (66°F) groundwater than those on the edges.

Option 1: NAC



Option 2: 3 Building Cluster

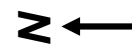


**No Thermal Breakthrough After
3 Years of Simulated Operation**

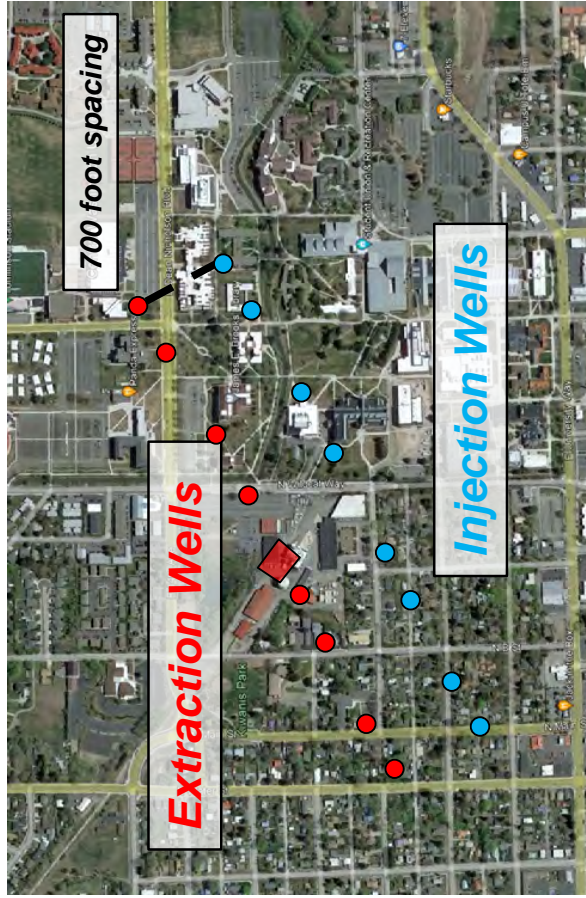
Approximate
Groundwater
Flow Direction



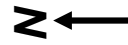
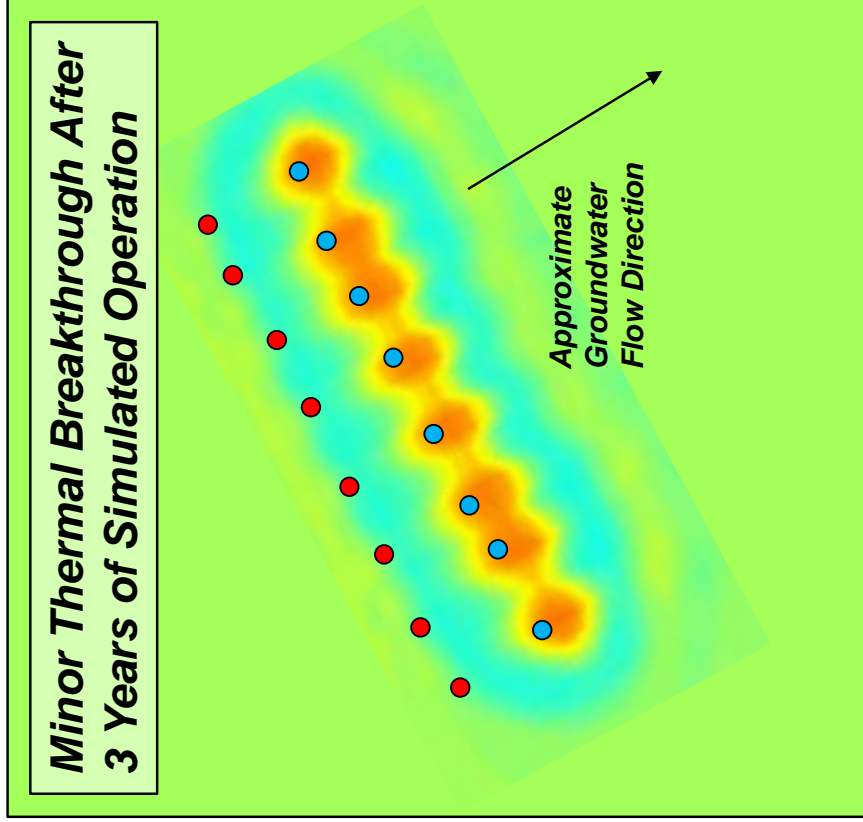
55° F 80° F

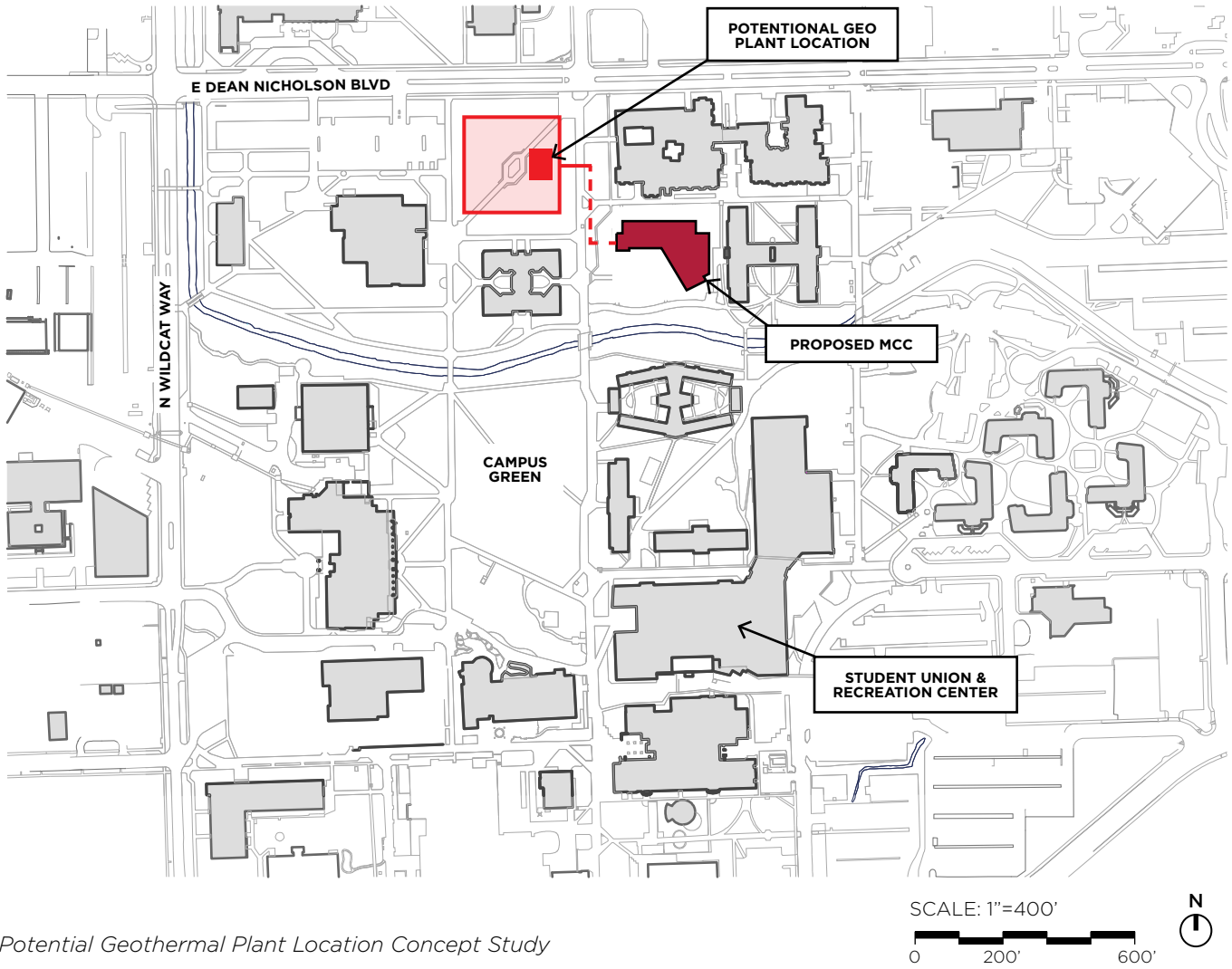


Option 3: Entire Campus



NOTE: Due to scale, wellfield design does not consider current or planned buildings or utilities. Design was developed with regard to well spacing and groundwater flow direction.





Potential Geothermal Plant Location Concept Study

- - - Potential Hardwire Routing
- - - Potential Hardwire Routing
*Install as part of North Academic Complex
- North Academic Complex
- Future Multi-Cultural Center Building

DLRGROUP

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Seattle, WA 98101



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Ellemburg, WA

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CAPITAL PROJECT PROPOSALS 2023-25

Multicultural Center
Replacement – Major Project

APPENDIX L

College of Arts and Humanities Academic Plan



The CAH Compact

The CAH Compact promises every CAH student a personal path to high-caliber success, through innovative pedagogy and distinctive mentoring. We launch students into meaningful futures, where purposeful careers meet community impact.



Classroom Caliber

100% of CAH students graduate from engaged, innovative classrooms, with a signature experience in their major.



College Caliber

CAH gives students of diverse need individual advising, internships, undergraduate research, post-graduation enrichment, and mentoring from faculty, peers, and alumni.



Career Caliber

We guarantee that students leave CWU ready to compete for the career of their choice, with market skills uniquely taught in CAH.



Community Caliber

CAH graduates are ethical leaders who are creative, globally aware, culturally responsive, and problem-solvers.