

Department of Social and Health Services

2020 Supplemental Capital Budget Request

September 20, 2019

Cheryl Strange, Secretary

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Department of Social and Health Services 2020 Supplemental Capital Budget Request

TABLE OF CONTENTS

	Page
Title Page	i
Table of Contents	iii
Memo from the Assistant Secretary	v

Tab A ~ Ten-Year Plan Summary

Capital Program Summary	1
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Tab B ~ Preservation Projects

1 Fircrest School-Nursing Facilities: Replacement	3
2 Rainier School-Multiple Buildings: Roofing Replacement & Repairs	21
3 DOC/DSHS McNeil Island-Main Dock: Float & Dolphin Replacement	137
4 DOC/DSHS McNeil Island-Still Harbor Dock: Replacement	153
5 Minor Works Preservation Projects: Statewide 2019-21	183

Tab C ~ Programmatic Projects

6 Minor Works Program Projects: Statewide 2019-21	213
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Tab D ~ Grant Programs

Tab E ~ Other Materials



STATE OF WASHINGTON
DEPARTMENT OF SOCIAL AND HEALTH SERVICES

September 20, 2019

To: David Schumacher, Director
Office of Financial Management

From: Judy Fitzgerald, Assistant Secretary/Chief Financial Officer
Facilities, Finance, and Analytics Administration

Re: **Submittal of the DSHS 2020 Supplemental Capital Budget Request**

I am pleased to submit the DSHS 2020 Supplemental Capital Budget request. The Secretary of DSHS, Cheryl Strange, has laid out five strategic goals to guide the Department through our transformation and through the challenges that face our clients and providers in the coming years.

The agency requested \$481.2 million in our 2019-21 Capital Budget Request as part of our \$2.1 billion Ten-Year Capital Plan. DSHS received \$153.5 million in new appropriations. This 2020 Supplemental Capital Budget Request includes high priority projects that were not funded during the regular session, but are still very important issues we need to address this biennia.

This additional funding will support the DSHS Strategic Plan and the Secretary's five themes:

- Prepare for aging Washingtonians
- Support people in our care and custody
- Serve people in their home communities
- Provide a pathway out of poverty and to become healthier
- Increase organizational efficiency, performance, and effectiveness

Supporting people in our care and custody is the primary responsibility of our capital program. This budget request funds roofing replacements on several campuses, essential repairs to the ferry docks on McNeil Island, and other important upgrades to multiple building systems. These upgrades are necessary to avoid failures in our facilities which adversely impact our clients and staff.

Because most of the buildings on our campuses are over 50 years old, we realize that continued capital efforts to keep these aging buildings compliant with current codes have low returns on the investment. For this reason, we have included a request to fund the design effort for a new 120-Bed Nursing Facility at Fircrest School. The Department is looking into alternative financing methods to fund the construction effort outside the capital budget. This is a very complex financial and service-delivery situation.

We appreciate your consideration of the DSHS 2020 Supplemental Capital Budget Request and we look forward to working with your staff in the development of the Governor's budget.

300 - Department of Social and Health Services Ten Year Capital Plan by Project Class

2019-21 Biennium

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Version: BB 2020 Supplemental Submittal to OFM

Report Number: CBS001

Date Run: 9/19/2019 12:34AM

Project Class: Preservation										
Agency Priority	Project by Account-EA Type	Estimated Total	Prior Expenditures	Current Expenditures	Reapprop 2019-21	New Approp 2019-21	Estimated 2021-23	Estimated 2023-25	Estimated 2025-27	Estimated 2027-29
1	30002755 Fircrest School-Nursing Facilities: Replacement 057-1 State Bldg Constr-State	6,950,000		300,000		6,650,000				
2	30002752 Rainier School-Multiple Buildings: Roofing Replacement & Repairs 057-1 State Bldg Constr-State	4,800,000		600,000		4,200,000				
3	30003234 DOC/DSHS McNeil Island-Main Dock: Float & Dolphin Replacement 057-1 State Bldg Constr-State	3,085,000				3,085,000				
4	40000413 DOC/DSHS McNeil Island-Still Harbor Dock: Replacement 057-1 State Bldg Constr-State	3,965,000				3,965,000				
5	40000381 Minor Works Preservation Projects: Statewide 2019-21 042-1 C E P and R I Acct-State 057-1 State Bldg Constr-State	6,500,000				6,500,000				
Project Total:		6,500,000				6,500,000				
Total: Preservation		25,300,000		900,000		24,400,000				

Project Class: Program										
Agency Priority	Project by Account-EA Type	Estimated Total	Prior Expenditures	Current Expenditures	Reapprop 2019-21	New Approp 2019-21	Estimated 2021-23	Estimated 2023-25	Estimated 2025-27	Estimated 2027-29
6	40000382 Minor Works Program Projects: Statewide 2019-21 042-1 C E P and R I Acct-State 057-1 State Bldg Constr-State	3,500,000				3,500,000				
Project Total:		3,500,000				3,500,000				

300 - Department of Social and Health Services
 Ten Year Capital Plan by Project Class
 2019-21 Biennium *

Version: BB 2020 Supplemental Submittal to OFM

Report Number: CBS001
 Date Run: 9/19/2019 12:34AM

Total Account Summary									
Account-Expenditure Authority Type	Estimated Total	Prior Expenditures	Current Expenditures	Reapprop 2019-21	New Approp 2019-21	Estimated 2021-23	Estimated 2023-25	Estimated 2025-27	Estimated 2027-29
042-1 C E P and R I Acct-State									
057-1 State Bldg Constr-State	28,800,000		900,000		27,900,000				
Total	28,800,000		900,000		27,900,000				

Capital Project Request

2019-21 Biennium

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Version: BB 2020 Supplemental Submittal to OFM

Report Number: CBS002

Date Run: 9/19/2019 2:02PM

Project Number: 30002755

Project Title: Fircrest School-Nursing Facilities: Replacement

Description

Starting Fiscal Year: 2021

Project Class: Preservation

Agency Priority: 1

Program: 040

Project Summary

This project replaces the existing nursing facilities at Fircrest School - the six Y-Buildings - with a new, efficient building complying with all current nursing home regulations resulting in significantly improved conditions for residents and staff. DSHS requests funding in the 2020 Supplemental Capital Budget for design services while pursuing alternate financing outside the capital budget for construction.

Project Description**1. WHAT IS THE PROBLEM OR OPPORTUNITY?**

The DSHS Developmental Disabilities Administration (DDA) operates four Residential Habilitation Centers (RHC) across the State providing residential care, training, and habilitation for individuals with developmental disabilities. Fircrest School, located on the site of a former WWII naval hospital in Shoreline, provides services in both Nursing Facility and Intermediate Care Facility settings. Staff at Fircrest School provides skilled nursing, medical, and dental services; physical and speech therapy; and skills development opportunities for clients with intellectual and physical disabilities.

While it is DDA's mission to help the clients develop skills and independence to be able to thrive in their community, many clients with severe developmental disabilities and physical limitations call Fircrest School their home.

The six existing nursing buildings at Fircrest School - commonly called the Y-Buildings because of their three-legged floor plan - provide care for approximately 110 residents. Many clients in nursing care are medically fragile and have lived at Fircrest School for many years. While DDA anticipates the dominant need for the RHCs in the future will be to provide short-term stabilization and respite care, DDA also anticipates there will always be a need for specialized nursing care for clients with complex medical needs and challenging behaviors not well accommodated in private nursing homes.

The six Y-Buildings (Hickory, Junkin, Elm, Cherry, Birch, and Aspen) were constructed in 1963, each with 13,135 square feet. The buildings are poorly configured for contemporary nursing care and do not meet current nursing home standards. Most major building systems are well past their typical life span compromising client care and requiring excessive maintenance. Failing systems include:

- + Sleeping areas are partitioned with curtains and storage closets instead of private and semi-private bedroom.
- + Toilet and bathing areas do not meet current requirements for client accessibility.
- + Water and sewer piping fail frequently requiring weekly maintenance work orders for immediate corrective action.
- + Indoor air quality is difficult to maintain and correct due to original design and installation practices.
- + Single wythe masonry walls do not meet current seismic codes.
- + Exterior masonry walls, windows, and ceilings are uninsulated; temperature control (both heating and cooling) is difficult to maintain.
- + Electrical systems are inadequate to serve today's needs, especially with a high demand for medical equipment.
- + The campus water system does not meet current fire flow requirements as per the Fire Marshal.

2. WHAT IS THE PROJECT?

This project designs and constructs a new, modern, 120-bed nursing facility at Fircrest School for Individuals with development disabilities. The new nursing facility will be approximately 110,000 gross square feet and includes a mixture of private and communal living spaces. The predesign identified private and semi-private bedrooms in close proximity to toilet and bathing facilities; shared living areas; access to the outside environment; treatment rooms; meeting rooms and multipurpose rooms; spaces designed for nursing staff, family visitation, and maintenance staff; and storage space for adequate for ever-changing equipment needs.

Capital Project Request

2019-21 Biennium

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Description

The project also includes the demolition of the six Y-Buildings to make room for on-site parking for staff, visitors, and maintenance vehicles. The project will also assess the condition and capacity of the domestic water system onsite and add improvements necessary to assure reliable domestic water and fire flows.

While the six Y-Buildings each have a capacity of about 18 beds (108 beds maximum capacity), DSHS seeks to construct the new facility for 120 beds designed around 20-bed modules which are both neighborly in character and staff efficient.

DSHS completed the predesign phase in early 2019. We seek design funding in the 2020 Supplemental Capital Budget to carry the project through Schematic Design, Design Development, Construction Documents, and permitting. We anticipate using a Progressive Design Build or Design Build approach coordinating all planning, design, construction, and permit issues into a single effort.

3. HOW DOES THE PROJECT ADDRESS THE PROBLEM OR OPPORTUNITY?

This project constructs a new 120-bed nursing facility for the care, treatment, and habilitation of 120 clients at Fircrest School to replace the six aging, failing, and noncompliant Y-Buildings. This new building will bring Fircrest School's nursing facilities into operational and code compliance. The new building will be constructed around Person-Centered Care which promotes choice, purpose, and meaning in daily life.

If this project is not funded, our exceptional nursing and support staff will continue to provide the highest quality of care despite the limitations and failings of the exiting Y-Buildings. Additionally, building systems will continue to require extraordinary maintenance and emergency repairs to keep residents and staff safe. For example, DSHS recently completed emergency repairs to replace the sewer lines in one half of Birch Hall where rusted sewer lines allowed raw sewage to contaminate the interstitial space between floor slabs used as the heating supply plenum. Since all six Y-Building are of similar age and construction, we assume this failure is likely to in the other buildings. All six of the Y-Buildings are currently occupied following the recent relocation of clients from Rainier School; Fircrest School has no unoccupied space to temporarily relocate residents in the event of a similar facilities failure.

4. WHAT ALTERNATIVES WERE EXPLORED?

Four alternatives were explored in the predesign. Each alternative strives to include all components needed to provide services for a contemporary nursing facility. Each alternative excludes a commercial kitchen (already onsite) and laundry services (currently provided by Rainier School in Buckley). All options assumed a design start in August 2019; the costs shown below come from the predesign and have not been escalated to account for the delay in starting the project.

Alternative 1: Renovate Building 66 with a One-Story Addition

Renovate a 48-year old, three story brick building with 60,500 gross square feet. This alternative locates administrative and service spaces on the first floor and remodels the second and third floors to include 44 beds with a central living core. The building will need two new elevators, fire sprinklers, and a new fire access road excavated into the hillside above the building. This alternative also constructs a single story 37,400 square foot addition immediately north of the existing building to provide an additional 46 beds. This alternative also demolishes three occupied ICF cottages to make room for vehicle access to the nursing facility. Note: This option only provides for 90 beds.

MACC for 90-Bed Facility = \$45.7 million for Net Zero Capable or \$49,400,000 for Net Zero Energy

Alternative 2: New Construction at Existing Site of the Adult Training Program in the NE Corner of the FS Property

Construct a new two story, 100-bed nursing facility with 101,300 gross square feet on the site of the existing Adult Training Program(ATP) building and construct a new 60-bed single story building with 48,000 gross square feet east of the main road. Two piped streams constrain this site with environmental impact buffers that make the design and construction effort more difficult.

Capital Project Request

2019-21 Biennium

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Date Run: 9/19/2019 2:02PM

Project Number: 30002755

Project Title: Fircrest School-Nursing Facilities: Replacement

Description

The existing Adult Training Program currently operates on this site in a WWII-era building. The ATP is a critical component for providing active treatment for our FS residents in the ICF cottages. The ATP would need to be relocated to temporary space or a new ATP would need to be constructed prior to the construction of Alternative 2. The budget and schedule impacts to relocate the ATP were not taken into account during the predesign effort.

MACC for 100-Bed Facility = \$54.6 million for Net Zero Capable or \$58.8 million for Net Zero Energy

MACC for 160-Bed Facility = \$78.1 million for Net Zero Capable or \$84.8 million for Net Zero Energy

Alternative 3: New Construction at the Old Madrona Site in the NW Corner of the FS Property - Preferred Option for 120 Beds

Construct a single story 100-bed nursing facility with 93,200 gross square feet or construct a 160-bed nursing facility with 140,006 gross square feet immediately south of the existing Y-Buildings and north of the Activities Building. No demolition is required prior to construction though demolition debris may be buried at the old Madrona Building site. This alternative provides closer access to programs in the Activities Building.

MACC for 100-Bed Facility = \$51.0 million for Net Zero Capable or \$54.9 million for Net Zero Energy

MACC for 160-Bed Facility = \$73.6 million for Net Zero Capable or \$79.6 million for Net Zero Energy

Alternative 4: Renovation of the Ten ICF Cottages

Renovate all ten of the ICF Cottages constructed in 1972 to meet contemporary nursing facility standards. Renovations will only result 80 nursing beds. This alternative eliminates the ICF program and does not meet the current housing needs at Fircrest School. Renovation of the cottages includes:

- + Significant demolition of interior walls to open up hallways to widths required in nursing facilities
- + Reduced number of bedrooms from ten to only eight per cottage
- + Construction of new living areas on the back of the each cottage
- + Limited storage for equipment
- + No programming spaces for occupational therapy, clinical areas, etc.

The predesign did not estimate the MACC for this option because the alternative did not meet program requirements due to the elimination of the ICF cottages.

5. WHO BENEFITS FROM THE PROJECT?

This project provides a modern, state-of-the-art nursing facility to providing resident centered nursing care for 120 individual with both developmental disabilities and nursing needs. Additionally, over 200 nursing and support staff benefit from a new facility.

The new nursing facility will be constructed to meet LEED Silver standards. Additionally, as per the Governor's Executive Order, the project will be designed and constructed to be the first Net Zero Energy nursing facility in the country, if feasible, or at least Net Zero Capable.

The investment in the construction of a new nursing facility on the Fircrest School campus provides a long-term commitment to the Fircrest School community which has lived with the threat of closure for nearly 20 years. The broader Fircrest School campus also benefits from the water system improvements prompted by this new facility.

6. WILL OTHER FUNDING BE USED TO COMPLETE THE PROJECT?

Yes.

Under federal rules for financial participation, certain capital expenditures are eligible for inclusion in the daily rates billed to the Centers for Medicare and Medicaid Services (CMS) by DSHS institutions. DSHS budget and rate staff are currently working

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Description

with the State Treasurer's Office and the Attorney General's Office to develop an appropriate and allowable financing mechanism that would be funded through the department's operating budget and incorporate federal financial participation at the state's current rate of 50%.

To avoid a significant funding commitment from the State's Capital Budget beyond Fiscal Year 2021, the DSHS will explore the following alternative funding strategies for the construction effort include:

Certificate of Participation (COP) through the Office of the State Treasurer

The COP financing method is the most familiar and widely used alternative financing mechanism in the State. In this scenario, DSHS enters into a financing contract (lease) with the Office of the State Treasurer (OST) via a Trustee, such as the Washington Finance Officers Association. The OST packages the agreement and sells securities to the public and DSHS utilizes those funds to finance equipment and capital purchases. The life of the financing contract is typically 25 years and the state takes full ownership after the liability is fully paid. Ongoing maintenance and upkeep of the capital asset must be funded through operating budget appropriations.

501(c)(3)

The 501(c)(3) financing method is similar to a COP in that securities are sold by a private entity - not the Treasurer's Office. Funding is raised and subsequently used for equipment and capital purchases by the State. The debt is paid down over the useful life of the asset.

63-20 Public Private Partnership

The 63-20 Public Private Partnership was the financing mechanism used for the 1500 Jefferson Street Building in Olympia and the Edna Goodrich Building in Tumwater. This approach blends tax-exempt financing incurred by a single member not-for-profit Special Purpose Entity (SPE) with private project development and delivery. It also encourages the use of private facility management and maintenance in order to maximize the public sector's benefit and minimize costs. It offers private guarantees of both cost and schedule, and it includes built-in safeguards which allow the public agency to secure ultimate project control, if desired.

7. HOW DOES THIS PROJECT SUPPORT THE DSHS STRATEGIC PLAN OR IMPROVE AGENCY PERFORMANCE?

This project supports the Department's vision for the Residential Habilitation Centers to move toward nursing and end-of-life care for individuals with developmental disabilities and complex medical needs. DSHS has seen an increased need for a safety net for a segment of this community as parents or guardians age to the point where they cannot take care of their loved ones as they once could. DSHS has seen a reluctance of private nursing homes admitting individuals into their care facilities due to the demanding mental and physical needs of our clients.

At DSHS, we transform lives. We created our current Strategic Plan to set measurable goals to ensure DSHS serves our clients and Washington State to the best of our ability. The following strategic objectives have impacts on our 2,100 clients in residential care and the 6,800 staff working in our hospitals, residential habilitation centers, institutions, and community facilities:

Each strategic objective in this strategic plan supports one or more of the five broad goals for DSHS:

- + Health: Each individual and each community will be healthy.
- + Safety: Each individual and community will be safe.
- + Protection: Each individual who is vulnerable will be protected.
- + Quality of Life: Each individual in need will be supported to attain the highest possible quality of life.
- + Public Trust: Strong management practices will ensure quality and efficiency.

In addition, each strategic objective supports one of the Secretary's strategic priorities:

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2019-21 Biennium

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Description

- + Prepare for aging Washingtonians
- + Support those in our care and custody
- + Serve people in their home community
- + Provide a pathway out of poverty and become healthier
- + Increase organizational efficiency, performance and effectiveness

Both the DSHS goals and Secretary's priorities align with:

- + Results Washington's objective of better results for Washingtonians
- + Governor's goal of Healthy and Safe Communities
- + Governor's goal of Efficient, Effective, and Accountable Government

This project replaces six inefficient, obsolete, energy consuming buildings with a new state-of-the-art nursing facility. The services provided in this facility supports a variety of activities benefitting clients and can be directly or indirectly tied to the following Results Washington objectives:

Goal 4: Healthy and Safe Communities . Healthy People

- 1.2) Healthy Youth and Adults: Decrease percentage of adults reporting fair or poor health.

Goal 4: Healthy and Safe Communities . Safe People

- 2.5) Worker Safety: Decrease workplace injury rates that result in missing three or more days from work.

Goal 5: Efficient, Effective and Accountable Government . Customer Satisfaction and Confidence

- 1.2) Customer Satisfaction: Increase Washington as an employer of choice.
- 1.3) Customer Confidence: Increase/maintain timely delivery for state services.

Goal 5: Efficient, Effective and Accountable Government . Resource Stewardship

- 2.2) Cost-Effective Government: Reduce the statewide energy use index of state facilities.

8. DOES THE PROJECT HAVE IT-RELATED COSTS?

No, though this project will be designed to accommodate an Electronic Medical Records system.

9. IS THIS PROJECT LINKED TO THE PUGET SOUND ACTION AGENDA?

No.

10. HOW DOES THIS PROJECT CONTRIBUTE TO THE STATEWIDE GOALS TO REDUCE CARBON POLLUTION AND/OR IMPROVE ENERGY EFFICIENCY?

This project will meet the objectives of the Governor's Executive Order 18-01 by constructing a nursing facility that will be Net Zero or Net Zero Capable. To meet this Executive Order, the project will be designed to decrease energy consumption significantly by nearly 40% of the current Washington State Energy Code.

The pre design study included allowances for highly efficient heating, ventilation, and air conditioning systems plus highly efficient building envelope systems.

11. WHAT ELSE SHOULD DECISION MAKERS KNOW TO EVALUATE THIS FUNDING REQUEST?

The Predesign Study and the amendment to the Predesign can be found here:

<https://www.dshs.wa.gov/ffa/office-capital-programs>

No additional capital funding will be requested for construction in future biennia. It is DSHS's intent to seek alternative financing for the construction effort.

Capital Project Request

2019-21 Biennium

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Version: BB 2020 Supplemental Submittal to OFM

Report Number: CBS002

Date Run: 9/19/2019 2:02PM

Project Number: 30002755

Project Title: Fircrest School-Nursing Facilities: Replacement

Description

Location

City: Shoreline

County: King

Legislative District: 032

Project Type

Infrastructure (Major Projects)

New Facilities/Additions (Major Projects)

Growth Management impacts

This project replaces existing facilities with new construction. Overall, the census and staffing levels may increase 20%. At this time, DSHS is working to finalize a Master Development Plan which will help identify potential Growth Management impacts. During the design phase, we will review other potential impacts with the City of Shoreline.

Funding

Acct Code	Account Title	Estimated Total	Expenditures		2019-21 Fiscal Period	
			Prior Biennium	Current Biennium	Reappropriations	New Appropriations
057-1	State Bldg Constr-State	6,950,000		300,000		6,650,000
	Total	6,950,000	0	300,000	0	6,650,000
Future Fiscal Periods						
		<u>2021-23</u>	<u>2023-25</u>	<u>2025-27</u>	<u>2027-29</u>	
057-1	State Bldg Constr-State					
	Total	0	0	0	0	

Operating Impacts

No Operating Impact

Narrative

If the construction effort is funded by one of the alternative financing methods there will be an ongoing operating expense to pay back the construction costs, some of which will be reimbursed with federal funds. An increase in the census will also drive additional staffing costs, though those costs cannot be identified at this time.

STATE OF WASHINGTON
AGENCY / INSTITUTION PROJECT COST SUMMARY

Updated July 2019

Agency	Department of Social and Health Services	
Project Name	Fircrest Nursing Facility - Option A3 - 120 Beds Zero Energy	
OFM Project Number	30002755	

Contact Information

Name	Larry Covey	
Phone Number	(360) 664-6181	
Email	coveylg@dshs.wa.gov	

Statistics

Gross Square Feet	110,000	MACC per Square Foot	\$586
Usable Square Feet	75,130	Escalated MACC per Square Foot	\$668
Space Efficiency	68.3%	A/E Fee Class	B
Construction Type	Nursing homes	A/E Fee Percentage	5.83%
Remodel	No	Projected Life of Asset (Years)	50

Additional Project Details

Alternative Public Works Project	Yes	Art Requirement Applies	yes
Inflation Rate	3.18%	Higher Ed Institution	No
Sales Tax Rate %	10.20%	Location Used for Tax Rate	Shoreline
Contingency Rate	5%		
Base Month	June-18		
Project Administered By	Agency		

Schedule

Predesign Start	June-18	Predesign End	November-18
Design Start	August-20	Design End	August-21
Construction Start	January-22	Construction End	July-23
Construction Duration	18 Months		

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Project Cost Estimate

Total Project	\$96,632,585	Total Project Escalated	\$109,860,000
		Rounded Escalated Total	\$109,860,000

STATE OF WASHINGTON
AGENCY / INSTITUTION PROJECT COST SUMMARY

Updated July 2019

Agency	Department of Social and Health Services	
Project Name	Fircrest Nursing Facility - Option A3 - 120 Beds Zero Energy	
OFM Project Number	30002755	

Cost Estimate Summary

Acquisition			
Acquisition Subtotal	\$0	Acquisition Subtotal Escalated	\$0

Consultant Services			
Predesign Services	\$280,295		
A/E Basic Design Services	\$2,723,282		
Extra Services	\$2,343,000		
Other Services	\$1,443,503		
Design Services Contingency	\$339,504		
Consultant Services Subtotal	\$7,129,584	Consultant Services Subtotal Escalated	\$7,850,320

Construction			
GC/CM Risk Contingency	\$2,063,173		
GC/CM or D/B Costs	\$4,913,191		
Construction Contingencies	\$3,223,708	Construction Contingencies Escalated	\$3,692,435
Maximum Allowable Construction Cost (MACC)	\$64,474,154	Maximum Allowable Construction Cost (MACC) Escalated	\$73,451,454
Sales Tax	\$7,616,771	Sales Tax Escalated	\$8,683,731
Construction Subtotal	\$82,290,996	Construction Subtotal Escalated	\$93,818,348

Equipment			
Equipment	\$3,961,000		
Sales Tax	\$404,022		
Non-Taxable Items	\$0		
Equipment Subtotal	\$4,365,022	Equipment Subtotal Escalated	\$4,999,697

Artwork			
Artwork Subtotal	\$367,257	Artwork Subtotal Escalated	\$367,257

Agency Project Administration			
Agency Project Administration Subtotal	\$1,380,322		
DES Additional Services Subtotal	\$0		
Other Project Admin Costs	\$0		
Project Administration Subtotal	\$1,879,725	Project Administration Subtotal Escalated	\$2,153,038

Other Costs			
Other Costs Subtotal	\$600,000	Other Costs Subtotal Escalated	\$671,340

Project Cost Estimate

Total Project	\$96,632,585	Total Project Escalated	\$109,860,000
		Rounded Escalated Total	\$109,860,000

Cost Estimate Details

Acquisition Costs						
Item	Base Amount		Escalation Factor	Escalated Cost	Notes	
Purchase/Lease						
Appraisal and Closing						
Right of Way						
Demolition						
Pre-Site Development						
Other						
Insert Row Here						
ACQUISITION TOTAL	\$0		NA	\$0		

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Cost Estimate Details

Consultant Services				
Item	Base Amount	Escalation Factor	Escalated Cost	Notes
1) Pre-Schematic Design Services				
Programming/Site Analysis				
Environmental Analysis				
Predesign Study	\$280,295			
Other				
Insert Row Here				
Sub TOTAL	\$280,295	1.0703	\$300,000	Escalated to Design Start
2) Construction Documents				
A/E Basic Design Services	\$2,723,282			69% of A/E Basic Services
Other				
Insert Row Here				
Sub TOTAL	\$2,723,282	1.0872	\$2,960,753	Escalated to Mid-Design
3) Extra Services				
Civil Design (Above Basic Svcs)	\$70,000			
Geotechnical Investigation	\$55,000			
Commissioning	\$52,000			
Site Survey	\$75,000			
Testing	\$150,000			
LEED Services	\$170,000			
Voice/Data Consultant	\$35,000			
Value Engineering	\$80,000			
Constructability Review	\$85,000			
Environmental Mitigation (EIS)	\$55,000			
Landscape Consultant	\$85,000			
ELCCA	\$50,000			
LCCT	\$75,000			
Reimbursables Including Reprographics prior to bid	\$100,000			
Advertising	\$3,000			
Traffic Analysis	\$65,000			
Evelop Consultant	\$65,000			
Interior Design	\$90,000			
Acoustic Design	\$50,000			
Security Consultant	\$60,000			
Audio Visual Consultant	\$25,000			
Cost and Scheduling	\$65,000			
Value Engineering Participation	\$65,000			
Constructability Review Participation	\$60,000			
Environmental Graphics/Signage	\$40,000			
Lighting Consultant	\$50,000			
Healthcare Services Consultant	\$58,000			
Door Hardware Consultant	\$15,000			
SEPA/Land Use	\$35,000			
Net Zero Energy Consultant	\$150,000			
Water System Assessment	\$125,000			
Additional Services for Water System Improvements	\$185,000			

Insert Row Here					
Sub TOTAL		\$2,343,000	1.0872	\$2,547,310	Escalated to Mid-Design
4) Other Services					
Bid/Construction/Closeout	\$1,223,503				31% of A/E Basic Services
HVAC Balancing					
Staffing					
Comissioning and Training	\$100,000				
Reimbursables/Reprographics for Bid and Construction	\$45,000				
Construction Materials Testing	\$75,000				
Insert Row Here					
Sub TOTAL		\$1,443,503	1.1454	\$1,653,389	Escalated to Mid-Const.
5) Design Services Contingency					
Design Services Contingency	\$339,504				
Other					
Insert Row Here					
Sub TOTAL		\$339,504	1.1454	\$388,868	Escalated to Mid-Const.
CONSULTANT SERVICES TOTAL		\$7,129,584		\$7,850,320	

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Cost Estimate Details

Construction Contracts				
Item	Base Amount	Escalation Factor	Escalated Cost	Notes
1) Site Work				
G10 - Site Preparation	\$4,727,808			
G20 - Site Improvements	\$1,699,056			
G30 - Site Mechanical Utilities	\$3,213,432			
G40 - Site Electrical Utilities				
G60 - Other Site Construction	\$1,250,000			
Water Main Improvements	\$2,800,000			
Insert Row Here				
Sub TOTAL	\$13,690,296	1.1189	\$15,318,073	
2) Related Project Costs				
Offsite Improvements	\$650,000			
City Utilities Relocation				
Parking Mitigation	\$0			
Stormwater Retention/Detention	\$650,000			
Other				
Insert Row Here				
Sub TOTAL	\$1,300,000	1.1189	\$1,454,570	
3) Facility Construction				
A10 - Foundations	\$2,617,998			
A20 - Basement Construction	\$527,002			
B10 - Superstructure	\$5,489,320			
B20 - Exterior Closure	\$6,812,003			
B30 - Roofing	\$2,299,182			
C10 - Interior Construction	\$5,627,117			
C20 - Stairs				
C30 - Interior Finishes	\$4,997,097			
D10 - Conveying				
D20 - Plumbing Systems	\$2,667,084			
D30 - HVAC Systems	\$2,611,546			
D40 - Fire Protection Systems	\$848,044			
D50 - Electrical Systems	\$8,676,167			
F10 - Special Construction				
F20 - Selective Demolition				
General Conditions	\$2,559,661			
Building Related Site Improvements	\$191,005			
PV Panels	\$1,999,671			
Building Demolition	\$1,560,960			Building Demolition, Abatement, and Site Restoration
Insert Row Here				
Sub TOTAL	\$49,483,858	1.1454	\$56,678,811	
4) Maximum Allowable Construction Cost				
MACC Sub TOTAL	\$64,474,154		\$73,451,454	

5) GCCM Risk Contingency				
GCCM Risk Contingency	\$2,063,173			
Other				
Insert Row Here				
Sub TOTAL	\$2,063,173	1.1454	\$2,363,159	
6) GCCM or Design Build Costs				
GCCM Fee	\$1,289,483			
Bid General Conditions	\$3,223,708			
GCCM Preconstruction Services	\$400,000			
Other				
Insert Row Here				
Sub TOTAL	\$4,913,191	1.1454	\$5,627,569	
7) Construction Contingency				
Allowance for Change Orders	\$3,223,708			
Other				
Insert Row Here				
Sub TOTAL	\$3,223,708	1.1454	\$3,692,435	
8) Non-Taxable Items				
Other				
Insert Row Here				
Sub TOTAL	\$0	1.1454	\$0	
Sales Tax				
Sub TOTAL	\$7,616,771		\$8,683,731	
CONSTRUCTION CONTRACTS TOTAL				
	\$82,290,996		\$93,818,348	

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Cost Estimate Details

Equipment					
Item	Base Amount		Escalation Factor	Escalated Cost	Notes
E10 - Equipment	\$1,165,000				
E20 - Furnishings	\$1,398,000				
F10 - Special Construction					
IT Equipment/Computers/Printers	\$1,398,000				
Insert Row Here					
Sub TOTAL	\$3,961,000		1.1454	\$4,536,930	
1) Non Taxable Items					
Other					
Insert Row Here					
Sub TOTAL	\$0				
Sales Tax					
Sub TOTAL	\$404,022			\$462,767	
EQUIPMENT TOTAL	\$4,365,022			\$4,999,697	

Green cells must be filled in by user

Cost Estimate Details

Artwork					
Item	Base Amount		Escalation Factor	Escalated Cost	Notes
Project Artwork	\$367,257				0.5% of Escalated MACC for new construction
Higher Ed Artwork	\$0				0.5% of Escalated MACC for new and renewal construction
Other					
Insert Row Here					
ARTWORK TOTAL	\$367,257				NA

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Cost Estimate Details

Project Management				
Item	Base Amount	Escalation Factor	Escalated Cost	Notes
Agency Project Management	\$1,380,322			
Additional Services				
Additional Management/Administration	\$499,403			
Insert Row Here				
PROJECT MANAGEMENT TOTAL	\$1,879,725	1.1454	\$2,153,038	

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Cost Estimate Details

Other Costs						
Item	Base Amount		Escalation Factor	Escalated Cost	Notes	
Mitigation Costs						
Hazardous Material Remediation/Removal	\$100,000					
Historic and Archeological Mitigation						
Permit and Plan Review Fees	\$500,000					
Insert Row Here						
OTHER COSTS TOTAL	\$600,000		1.1189	\$671,340		

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Capital Project Request

2019-21 Biennium

*

Version: BB 2020 Supplemental Submittal to OFM

Report Number: CBS002

Date Run: 9/18/2019 9:54PM

Project Number: 30002752

Project Title: Rainier School-Multiple Buildings: Roofing Replacement & Repairs

Description

Starting Fiscal Year: 2021

Project Class: Preservation

Agency Priority: 2

Program: 040

Project Summary

This project repairs damaged roof decking and installs new roofing on the 2010 4th Avenue Building and the Spruce & Hemlock Complex at Rainier School to restore the roofing systems to a weather tight condition. Currently, rain water leaks into the occupied space resulting in an increased risk of mold contamination and physical damage to the building structure. These buildings house services and active treatment programs for clients.

Project Description**1. WHAT IS THE PROBLEM OR OPPORTUNITY?**

DSHS recognizes the uncertain future of the Residential Habilitation Centers over the past two decades has resulted in a lack of capital investment in these facilities. This results in a significant backlog of critical deferred maintenance. Consequently, many of the roofs at Rainier School are well past their life expectancy. Rain water intrusion into an occupied facility creates health hazards and deteriorates the physical environment. Over an extended period of time, exposure to mold and structural decay negatively affects the safety and well-being of clients and staff and prematurely lessens the facility's value. Maintenance staff currently place dozens of buckets in the attics and workspaces to collect dripping water. Water soaking into wallboard or hard ceilings is generally not addressed and left to dry-out under ambient conditions. Water intrusion into the attics and occupied spaces is prevalent in two buildings at Rainier School where client services are provided:

2010 4th Avenue Building

This 40,000 square foot building was constructed in 1954 to house medically fragile clients. The building contains resident sleeping rooms, living space, nursing stations, occupational and physical therapy, and administrative staff for the Program Area Treatment unit. The building has a clay tile roof. About 14,000 square feet of this building was re-roofed over the past five years due to storm damage causing leaks into resident living space. In addition, about 400 square feet of roof on the north side was replaced to address rotted and sagging roof decking. This year, significant water intrusion adjacent to this north side repair started and began running into the stairwell. There are many smaller leaks puddling on the attic floor throughout the building. Another roof section is showing signs of buckling similar to that previously repaired. This roof is considered in the worst condition of any high occupancy program support building at Rainier School. We estimate the construction cost at \$1.3 million.

Spruce & Hemlock Complex

These two connected buildings have a combined footprint of 45,000 square feet. Constructed in 1954, the buildings support resident art and woodwork active treatment programs, occupational and physical therapy, recreation therapy, investigators, the quality assurance program, and administrative staff offices. The roof is a combination of asphalt shingle on sloped sections and membrane roofing over the low slope sections. About 5,000 square feet of asphalt shingles were replaced in 2019 to address the most severe leaks at roof valleys and wall transitions. The remaining shingles are brittle and have lost much of their outer layer grit. Securing new shingle patch over the old shingle area is nearly impossible as the old shingle breaks so easily. Repairing the severely deteriorated membrane sections is not feasible. We estimate the construction cost at \$1.3 million.

2. WHAT IS THE PROJECT?

The project repairs structural damage at the roof decking and installs new roofing on those areas of the 2010 Building and Spruce/Hemlock not previously addressed. Our intent is to replace the clay tile, asphalt, and membrane roofing with similar materials to achieve weather tight roofs.

If funded in the 2020 Supplemental Capital Budget, the design work will begin as soon as funds are available. Construction is expected to start in early 2021. With a favorable bidding environment, this project would be completed by the fall of 2021.

Capital Project Request

2019-21 Biennium

*

Version: BB 2020 Supplemental Submittal to OFM

Report Number: CBS002

Date Run: 9/18/2019 9:54PM

Project Number: 30002752

Project Title: Rainier School-Multiple Buildings: Roofing Replacement & Repairs

Description

As proposed, this is the third and final phase of roofing repairs and roofing replacement to bring these two buildings back into full service. Previous emergency repairs and a minor works project have addressed the most serious deterioration – to the extent that funding allowed.

3. HOW DOES THE PROJECT ADDRESS THE PROBLEM OR OPPORTUNITY?

This project continues necessary efforts to slow the disintegration of facilities across the Rainier School campus due to seriously deteriorated roofs. This project replaces rotted roof decking and installs new weather tight roofing on two buildings critical to client services. Once repaired, the buildings will provide safer living conditions for clients, a safer working environment for staff, and an overall reduction in needed maintenance and repairs.

If this project is not funded, our residents and staff will continue to be exposed to rain water intrusion and potentially harmful mold. The building asset will continue to degrade at an accelerated rate. At least one area of roofing on the 2010 Building shows signs of structural sagging and buckling; a heavy snowfall could cause a localized roof collapse.

4. WHAT ALTERNATIVES WERE EXPLORED?

Program, maintenance, and capital staff have considered four alternatives:

1. Do Nothing

Continue with the current process of responding to leaks by placing and emptying buckets, mopping-up puddles on the floor, and letting the water dry out on its own. Water will continue to infiltrate the buildings, create a potentially hazardous environment, and require a heavy maintenance effort.

2. Relocate Clients and/or Program Staff

There are no realistic alternative locations on campus for the relocation of resident services provided in these buildings. These buildings provide essential spaces for specialized resident needs and staff requirements. Even with a reduction in census and an associated reduction in support space, other than the condition of the roofs, the rest of these two buildings are best suited for the services provided.

3. Continue to Address Roof Leaks through Emergency and Minor Works Projects

This approach allows roofing deterioration to continue until it has a critical impact on the programs housed in the two buildings. Responding to severe weather events with emergency contracting or performing limited repairs on the worst sections through Minor Works projects can't move fast enough to stay ahead of the problems. It is exactly this ineffective approach that has brought us to where we are today.

4. Repair and Replace the Leaking Roofs

This is our preferred alternative. Considering the severe conditions at the existing roofs, this approach is the only practical and feasible alternative to protect our clients, provide workspace free of water intrusion, and preserve these public assets.

5. WHO BENEFITS FROM THE PROJECT?

This project benefits the 56 clients and 116 staff which occupy these buildings. The proposed repairs extend the life span of these two buildings and allows the facilities to continue with daily programs and services without having to relocating residents or program to different buildings because of water intrusion into occupied spaces.

Weather tight roofing frees-up the time of the housekeeping and maintenance staff who continuously respond during the wet season to puddles on the floor and damage caused rain water intrusion. This allows these staff to focus on other housekeeping and preventative maintenance priorities.

Capital Project Request

2019-21 Biennium

*

Version: BB 2020 Supplemental Submittal to OFM

Report Number: CBS002

Date Run: 9/18/2019 9:54PM

Project Number: 30002752

Project Title: Rainier School-Multiple Buildings: Roofing Replacement & Repairs

Description**6. WILL OTHER FUNDING BE USED TO COMPLETE THE PROJECT?**

No. DSHS requests funding from the State Building Construction Account –Fund 057.

7. HOW DOES THIS PROJECT SUPPORT THE DSHS STRATEGIC PLAN OR IMPROVE AGENCY PERFORMANCE?

At DSHS, we transform lives. We created our current Strategic Plan to set measurable goals to ensure DSHS serves our clients and Washington State to the best of our ability. The following strategic objectives have impacts on our 2,100 clients in residential care and the 6,800 staff working in our hospitals, residential habilitation centers, institutions, and community facilities:

Each strategic objective in this strategic plan supports one or more of the five broad goals for DSHS:

- + Health: Each individual and each community will be healthy.
- + Safety: Each individual and community will be safe.
- + Protection: Each individual who is vulnerable will be protected.
- + Quality of Life: Each individual in need will be supported to attain the highest possible quality of life.
- + Public Trust: Strong management practices will ensure quality and efficiency.

In addition, each strategic objective supports one of the Secretary's strategic priorities:

- + Prepare for aging Washingtonians
- + Care for those in our care
- + Serve people in their home community
- + Provide a pathway out of poverty and becoming healthier
- + Increase organizational efficiency, performance and effectiveness

Both the DSHS goals and Secretary's priorities align with:

- + Results Washington's objective of better results for Washingtonians
- + Governor's goal of Healthy and Safe Communities
- + Governor's goal of Efficient, Effective, and Accountable Government

This project replaces failing roofing on several campus support buildings. The services provided in these facilities support a variety of campus activities benefitting clients and can be directly or indirectly tied to the following Results Washington objectives:

Goal 4: Healthy and Safe Communities . Healthy People

- 1.2) Healthy Youth and Adults: Decrease percentage of adults reporting fair or poor health.

Goal 4: Healthy and Safe Communities . Safe People

- 2.5) Worker Safety: Decrease workplace injury rates that result in missing three or more days from work.

Goal 5: Efficient, Effective and Accountable Government . Customer Satisfaction and Confidence

- 1.2) Customer Satisfaction: Increase Washington as an employer of choice.
- 1.3) Customer Confidence: Increase/maintain timely delivery for state services.

Goal 5: Efficient, Effective and Accountable Government . Resource Stewardship

- 2.2) Cost-Effective Government: Reduce the statewide energy use index of state facilities.

8. DOES THE PROJECT HAVE IT-RELATED COSTS?

Capital Project Request

2019-21 Biennium

*

Version: BB 2020 Supplemental Submittal to OFM

Report Number: CBS002

Date Run: 9/18/2019 9:54PM

Project Number: 30002752

Project Title: Rainier School-Multiple Buildings: Roofing Replacement & Repairs

Description

No.

9. IS THIS PROJECT LINKED TO THE PUGET SOUND ACTION AGENDA?

No.

10. HOW DOES THIS PROJECT CONTRIBUTE TO THE STATEWIDE GOALS TO REDUCE CARBON POLLUTION AND/OR IMPROVE ENERGY EFFICIENCY?

This project does not contribute to the reduction of energy consumption and carbon pollution.

11. WHAT ELSE SHOULD DECISION MAKERS KNOW TO EVALUATE THIS FUNDING REQUEST?

Despite the uncertainty of the long-term future of the Residential Habilitation Centers and the institutional care of individuals with intellectual and developmental disabilities, it is certain that Rainier School will still be serving clients for many years. The existing housing and support services buildings will need to continue to provide shelter and services for years to come. If these assets are not preserved today, they will deteriorate until they are uninhabitable and the programmatic and cost impact will be significant.

DSHS requested \$2.19 million in capital funding in the 2017-19 biennium for roofing repairs and roofing replacement at Rainier School. The Legislature appropriated only \$600,000 which we used to address the most immediate and consequential roofing issues. A \$10 million capital appropriation is anticipated in the 2021-23 biennium to address other known roofing issues on other buildings at Rainier School.

Two reports are attached in CBS:

- + Roof Survey Report for Rainier School Building 2010 by Building Envelope Technology & Research - dated June 28, 2019
- + Survey Findings & Recommendations by Building Envelope Technology & Research - not dated

These reports can also be found at: <https://www.dshs.wa.gov/ffa/office-capital-programs>

Note: No reappropriation is requested in the 2019-21 biennium.

Location

City: Buckley

County: Pierce

Legislative District: 031

Project Type

Remodel/Renovate/Modernize (Major Projects)

Growth Management impacts

This project will not change census capacity or the number of FTEs. No Growth Management impacts are anticipated.

Funding

Acct Code	Account Title	Estimated Total	Expenditures		2019-21 Fiscal Period	
			Prior Biennium	Current Biennium	Reapprops	New Approps
057-1	State Bldg Constr-State	4,800,000		600,000		4,200,000
	Total	4,800,000	0	600,000	0	4,200,000

Future Fiscal Periods

Capital Project Request

2019-21 Biennium

*

Version: BB 2020 Supplemental Submittal to OFM

Report Number: CBS002

Date Run: 9/18/2019 9:54PM

Project Number: 30002752

Project Title: Rainier School-Multiple Buildings: Roofing Replacement & Repairs

Funding

	<u>2021-23</u>	<u>2023-25</u>	<u>2025-27</u>	<u>2027-29</u>
057-1 State Bldg Constr-State				
Total	0	0	0	0

Operating Impacts

No Operating Impact

Narrative

This project does not increase the census on campus nor the number of FTEs. No operating impacts are anticipated.

STATE OF WASHINGTON
AGENCY / INSTITUTION PROJECT COST SUMMARY

Updated July 2019

Agency	Department of Social and Health Services	
Project Name	RS-2010 and Spruce/Hemlock: Roofing Replacement & Repairs	
OFM Project Number	30002752	

Contact Information

Name	Dean Heglund	
Phone Number	(360) 902-8158	
Email	hegluda@dshs.wa.gov	

Statistics

Gross Square Feet	85,000	MACC per Square Foot	\$31
Usable Square Feet	85,000	Escalated MACC per Square Foot	\$33
Space Efficiency	100.0%	A/E Fee Class	A
Construction Type	Extended care facilities	A/E Fee Percentage	13.75%
Remodel	Yes	Projected Life of Asset (Years)	30

Additional Project Details

Alternative Public Works Project	No	Art Requirement Applies	No
Inflation Rate	3.18%	Higher Ed Institution	No
Sales Tax Rate %	7.90%	Location Used for Tax Rate	Pierce Co
Contingency Rate	10%		
Base Month	September-19		
Project Administered By	Agency		

Schedule

Predesign Start		Predesign End	
Design Start	August-20	Design End	November-20
Construction Start	February-21	Construction End	December-21
Construction Duration	10 Months		

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Project Cost Estimate

Total Project	\$3,974,776	Total Project Escalated	\$4,200,000
		Rounded Escalated Total	\$4,200,000

STATE OF WASHINGTON
AGENCY / INSTITUTION PROJECT COST SUMMARY

Updated July 2019

Agency	Department of Social and Health Services	
Project Name	RS-2010 and Spruce/Hemlock: Roofing Replacement & Repairs	
OFM Project Number	30002752	

Cost Estimate Summary

Acquisition			
Acquisition Subtotal	\$0	Acquisition Subtotal Escalated	\$0

Consultant Services			
Predesign Services	\$50,000		
A/E Basic Design Services	\$279,170		
Extra Services	\$35,000		
Other Services	\$125,424		
Design Services Contingency	\$48,959		
Consultant Services Subtotal	\$538,553	Consultant Services Subtotal Escalated	\$560,764

Construction			
Construction Contingencies	\$267,500	Construction Contingencies Escalated	\$283,336
Maximum Allowable Construction Cost (MACC)	\$2,675,000	Maximum Allowable Construction Cost (MACC) Escalated	\$2,833,360
Sales Tax	\$232,458	Sales Tax Escalated	\$246,219
Construction Subtotal	\$3,174,958	Construction Subtotal Escalated	\$3,362,915

Equipment			
Equipment	\$0		
Sales Tax	\$0		
Non-Taxable Items	\$0		
Equipment Subtotal	\$0	Equipment Subtotal Escalated	\$0

Artwork			
Artwork Subtotal	\$0	Artwork Subtotal Escalated	\$0

Agency Project Administration			
Agency Project Administration Subtotal	\$236,996		
DES Additional Services Subtotal	\$0		
Other Project Admin Costs	\$0		
Project Administration Subtotal	\$231,265	Project Administration Subtotal Escalated	\$244,956

Other Costs			
Other Costs Subtotal	\$30,000	Other Costs Subtotal Escalated	\$31,365

Project Cost Estimate			
Total Project	\$3,974,776	Total Project Escalated	\$4,200,000
		Rounded Escalated Total	\$4,200,000

Cost Estimate Details

Acquisition Costs						
Item	Base Amount		Escalation Factor	Escalated Cost	Notes	
Purchase/Lease						
Appraisal and Closing						
Right of Way						
Demolition						
Pre-Site Development						
Other						
Insert Row Here						
ACQUISITION TOTAL	\$0		NA	\$0		

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Cost Estimate Details

Consultant Services				
Item	Base Amount	Escalation Factor	Escalated Cost	Notes
1) Pre-Schematic Design Services				
Programming/Site Analysis				
Environmental Analysis				
Predesign Study				
Scoping & Analysis	\$50,000			
Other				
Insert Row Here				
Sub TOTAL	\$50,000	1.0291	\$51,455	Escalated to Design Start
2) Construction Documents				
A/E Basic Design Services	\$279,170			69% of A/E Basic Services
Other				
Insert Row Here				
Sub TOTAL	\$279,170	1.0332	\$288,439	Escalated to Mid-Design
3) Extra Services				
Civil Design (Above Basic Svcs)				
Geotechnical Investigation				
Commissioning				
Site Survey				
Testing				
LEED Services				
Voice/Data Consultant				
Value Engineering				
Constructability Review				
Environmental Mitigation (EIS)				
Landscape Consultant				
Structural Engineering	\$35,000			
Other				
Insert Row Here				
Sub TOTAL	\$35,000	1.0332	\$36,162	Escalated to Mid-Design
4) Other Services				
Bid/Construction/Closeout	\$125,424			31% of A/E Basic Services
HVAC Balancing				
Staffing				
Other				
Insert Row Here				
Sub TOTAL	\$125,424	1.0592	\$132,850	Escalated to Mid-Const.
5) Design Services Contingency				
Design Services Contingency	\$48,959			
Other				
Insert Row Here				
Sub TOTAL	\$48,959	1.0592	\$51,858	Escalated to Mid-Const.
CONSULTANT SERVICES TOTAL	\$538,553		\$560,764	

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Cost Estimate Details

Construction Contracts				
Item	Base Amount	Escalation Factor	Escalated Cost	Notes
1) Site Work				
G10 - Site Preparation				
G20 - Site Improvements				
G30 - Site Mechanical Utilities				
G40 - Site Electrical Utilities				
G60 - Other Site Construction				
Other				
Insert Row Here				
Sub TOTAL	\$0	1.0455	\$0	
2) Related Project Costs				
Offsite Improvements				
City Utilities Relocation				
Parking Mitigation				
Stormwater Retention/Detention				
Other				
Insert Row Here				
Sub TOTAL	\$0	1.0455	\$0	
3) Facility Construction				
A10 - Foundations				
A20 - Basement Construction				
B10 - Superstructure				
B20 - Exterior Closure				
B30 - Roofing	\$2,600,000			
C10 - Interior Construction				
C20 - Stairs				
C30 - Interior Finishes				
D10 - Conveying				
D20 - Plumbing Systems				
D30 - HVAC Systems				
D40 - Fire Protection Systems				
D50 - Electrical Systems				
F10 - Special Construction				
F20 - Selective Demolition				
General Conditions	\$75,000			
Other				
Insert Row Here				
Sub TOTAL	\$2,675,000	1.0592	\$2,833,360	
4) Maximum Allowable Construction Cost				
MACC Sub TOTAL	\$2,675,000		\$2,833,360	

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7) Construction Contingency

Allowance for Change Orders	\$267,500		
Other			
Insert Row Here			
Sub TOTAL	\$267,500	1.0592	\$283,336

8) Non-Taxable Items

Other			
Insert Row Here			
Sub TOTAL	\$0	1.0592	\$0

Sales Tax

Sub TOTAL	\$232,458		\$246,219
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CONSTRUCTION CONTRACTS TOTAL	\$3,174,958		\$3,362,915
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Cost Estimate Details

Equipment					
Item	Base Amount		Escalation Factor	Escalated Cost	Notes
E10 - Equipment					
E20 - Furnishings					
F10 - Special Construction					
Other					
Insert Row Here					
Sub TOTAL	\$0		1.0592	\$0	
1) Non Taxable Items					
Other					
Insert Row Here					
Sub TOTAL	\$0		1.0592	\$0	
Sales Tax					
Sub TOTAL	\$0			\$0	
EQUIPMENT TOTAL	\$0			\$0	

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Cost Estimate Details

Artwork					
Item	Base Amount		Escalation Factor	Escalated Cost	Notes
Project Artwork	\$0				0.5% of Escalated MACC for new construction
Higher Ed Artwork	\$0				0.5% of Escalated MACC for new and renewal construction
Other					
Insert Row Here					
ARTWORK TOTAL	\$0		NA	\$0	

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<div>Cost Estimate Details</div>

Project Management					
Item	Base Amount		Escalation Factor	Escalated Cost	Notes
Agency Project Management	\$236,996				
Additional Services					
Rounding Adjustment	-\$5,731				
Insert Row Here					
PROJECT MANAGEMENT TOTAL	\$231,265		1.0592	\$244,956	

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Cost Estimate Details

Other Costs					
Item	Base Amount		Escalation Factor	Escalated Cost	Notes
Mitigation Costs					
Hazardous Material Remediation/Removal	\$20,000				
Historic and Archeological Mitigation					
Building Permit	\$10,000				
Insert Row Here					
OTHER COSTS TOTAL	\$30,000		1.0455	\$31,365	

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Roof SURVEY REPORT

Limited Roof Survey and Leak Investigation

For

Rainier School Building 2010

Buckley, Washington



Client:

State of Washington DSHS
Olympia, Washington

Prepared by: **Building Envelope Technology & Research [BET&R]**

4000 Delridge Way SW First Floor Seattle, WA 98106
Phone: 206-405-3455 Fax: 206-405-3458 www.bet-r.com



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RAINIER SCHOOL: BUILDING 2010 ROOF SURVEY AND REPORT

DATE OF REPORT	Friday, June 28, 2019	PROJECT:	Rainier School – Building 2010 Limited Roof Survey and Report
TO	Dean Heglund, DSHS Project Manager	CC:	Scott Ward, Rainier School
CLIENT	State of Washington DSHS		Pat Bockelman, Rainier School
TEL	360-902-8158		Sean Yates, Rainier School
E-MAIL	hegluda@dshs.wa.gov		Nat Stiles, Rainier School
FROM	Scott Vlotho BET&R Architect		Darren Johnston, Harbor Engineers
SUBJECT	RAINIER SCHOOL – BUILDING 2010 LIMITED ROOF SURVEY PRELIMINARY OBSERVATIONS, FINDINGS, AND RECOMMENDATIONS		

Greetings,

BET&R is pleased to provide the following Building 2010 Limited Roof Survey Preliminary Observations, Findings, and Recommendations Report, including a schematic rough order of magnitude (ROM) budget cost estimate for potential repairs.

Dean Heglund, DSHS Project Manager, requested a proposal from BET&R to conduct the limited roof survey at select areas of the Building 2010 roofs that have a history of reported water intrusion. The primary focus of this roof survey is directed at the north slope of the gable roof area. Previous repairs have reportedly been conducted at this roof area to address water intrusion, resultant wood decay, and roof structural framing damage. The purpose of this Limited Roof Survey was to examine existing conditions, document findings, and provide preliminary recommendations for potential repairs or reroofing, along with a schematic ROM budget cost estimate.

BET&R has assisted Washington Department of Social & Health Services (DSHS) with other Rainier School buildings on the Buckley, Washington campus, performing on-site exterior envelope surveys, providing survey and condition assessment reports, and preparing Construction Documents including reroofing and roof repair specifications and drawings for the subject projects, as well as administering construction of several roof replacements, repairs, and retrofit projects. We look forward to continuing our relationship with the State of Washington DSHS and Rainier School.

Sincerely,
Building Envelope Technology and Research (BET&R)

	TABLE OF CONTENTS	PAGE
A	INTRODUCTION	2 - 3
B	EXECUTIVE SUMMARY	4 - 10
	Testing and Survey Overview	
	Summary of Findings at 2010 Building	
	Summary of Recommendations at 2010 Building	
C	2010 BUILDING TESTING AND SURVEY	20 - 35
	Survey and Observations	
D	CONCLUSION	36 - 56
	Summary of Findings	
	Recommendations	
E	APPENDIX EXHIBITS	57 – 63
	Exhibit A Harbor Consulting Engineer’s Site Visit Report	15 Pages
	Exhibit B Preliminary ROM Matrix	1 Page
	Exhibit C Other Campus Buildings Identified with water intrusion for priority repairs	11 Pages

A. INTRODUCTION

At the request of Dean Heglund, Project Manager for Washington State Department of Social and Health Services (DSHS) at Rainier School, Building Envelope Technology & Research (BET&R) was engaged to perform a preliminary visual and tactile survey of select roof areas and related attic conditions at the 2010 Building, located on the campus of Rainier School. BET&R was also requested to provide potential repair, retrofit, and roof replacement options, along with preliminary Rough Order of Magnitude (ROM) budget cost estimates based on the preliminary findings of our survey.



BET&R's Survey of select roof areas at the 2010 Building was conducted on Friday, June 7, 2019, by BET&R's Architect Scott Vlotho, and Building Envelope Technologist, Zephyr Delahunt. Darren Johnston, Structural Engineer, from Harbor Consulting Engineers (HCE), assisted with the survey and provided preliminary analysis of the existing wood roof framing and structural system. Mr. Johnston's structural analysis and Site Visit Report is attached as an appendix to BET&R's Roof Survey Report. The intent of this preliminary survey was to provide an initial condition assessment of select roof areas and was not intended to provide a complete analysis for the preparation of full design documents for any roof retrofit or replacement options that may be considered by the State of Washington, DSHS, and Rainier School officials.

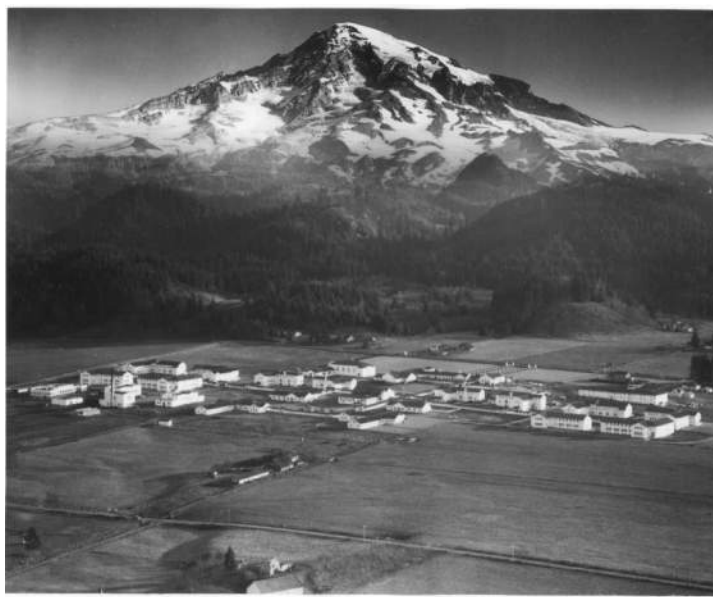
On-going water intrusion at the 2010 Building stemming from the roof system and leaking into the attic cavity has been reported at numerous areas within the attic space. Visual evidence of leak water staining on the underlying roof structural framing members observed during our roof attic survey indicated that water intrusion appears to be widespread throughout the subject roof attic area. Many of the original buildings on campus have been constructed of cast-in-place concrete, forming the floors, walls, and ceiling structures. An approximately 6-inch thick concrete slab exists at the Building 2010 ceiling level, providing the floor level for the attic. As a result of the thick concrete ceiling/attic floor, water intrusion may occur for some time before leaks may be reported within the occupied interior spaces of the buildings.

BET&R has been privileged to work on a number of buildings on the Rainier School campus, providing us with valuable experience and technical information specifically related to the building envelope systems of these historic buildings as well as the construction methods, roofing system materials, and structural framing systems observed on these buildings. Our history on-site includes work on the following buildings:

- Auditorium Building: Reroofing Project of the steep-slope pan and cover clay roof tile areas and low-slope reroofing with a new multiple-ply SBS modified-asphalt roofing membrane system;
- Oakley Hall: Roofing repairs and retrofit of the valleys and select mechanical curb and roof penetrations at the existing clay tile roofing system;
- Meyer Hall: Roofing repairs and retrofit of the valleys and select mechanical curb and roof penetrations at the existing clay tile roofing system;
- Hemlock-Spruce Hall: Select roofing repairs at select valleys and roof replacement of select roof areas with new SBS-modified asphalt shingle roofing to tie into an existing asphalt shingle roof areas;
- P-43 Maintenance Building: Tear-off of an existing problematic exposed-fastener metal panel roof system and replacement with a new SBS-modified asphalt shingle roofing system.

BRIEF HISTORY OF 2010 BUILDING AND BACKGROUND INFORMATION FOR RAINIER SCHOOL:

The Rainier School campus is located in Buckley, Washington in a valley at the base of the foot hills leading up to Mount Rainier. The primary campus buildings were generally designed and constructed from the late 1930's through the mid 1950's. The geographic location of the campus creates its own unique micro-climate type weather conditions and challenges for the building envelope systems of the buildings. The weather is often more extreme than that experienced at adjacent areas and communities. Higher wind levels and velocities are often experienced, and larger amounts of precipitation, including both rain and snow fall, can be heavier and more pronounced than typical weather conditions for the region.



The subject of this roof survey, the 2010 Building, appears to have been designed in 1952 by the Seattle architectural office of Naramore, Bain, Brady and Johanson (NBBJ). The first phase of the original buildings constructed on-site were designed by noted Seattle architect, Graham and Painter Architects. Historic campus maps of Rainier School appear to indicate that the 2010 Building was under construction in 1953.

Like many of the original Rainier School campus buildings, the 2010 Building utilizes a thick cast-in-place concrete structure for the primary walls and floor/ceiling components. With readily available timbers and old-growth wood, the roof structures are framed with large-dimension, high-quality wood, milled

from the nearby forests. On top of the main structure, roof decking consists of 2x6 tongue-and-groove “car decking” lumber. For the 2010 Building, the tongue-and-groove wood-roof decking was installed in alignment running parallel to the slope of the roof, extending from the downslope eave, up to the ridge of the roof areas, and supported by intermittent shaped 4x10 wood beams within the attic space. The roofing systems consists of one layer of underlayment and mechanically-attached interlocking S-shaped style red clay roofing tiles. The older original buildings at Rainier School incorporated more traditional pan-and-cover clay tile roofing.

The 2010 Building today serves as Rainier School’s health clinic space, housing medical functions and support spaces for the clients of the facility. At the north side roof area where BET&R was asked to focus our survey work, it was reported that that portion of the building is occupied by offices and other administrative functions.



Figure 1 -- In this overview map, the red dashed rectangle highlights the location of the 2010 Building on the Rainier School campus. This survey focused on the north side gable roof, shown by the arrow.

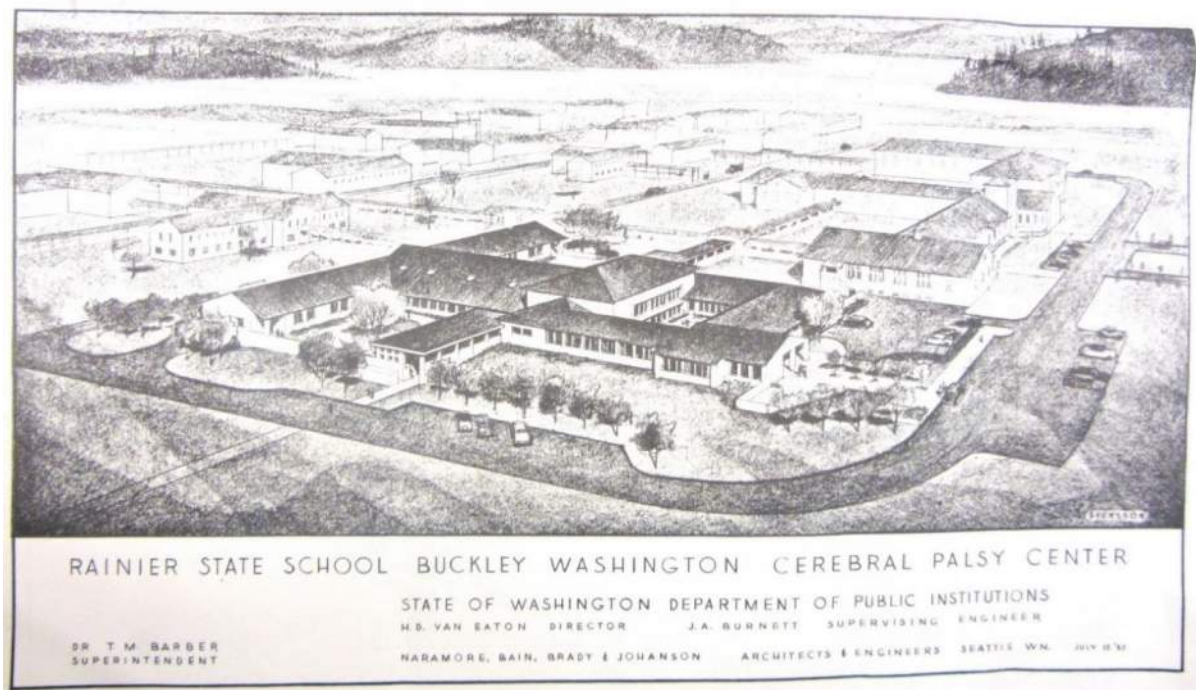


Photo No. 1 - Depicts rendering of the 2010 building prepared by the Architect, NBBJ, as part of the design drawing documents dated July 15, 1952.

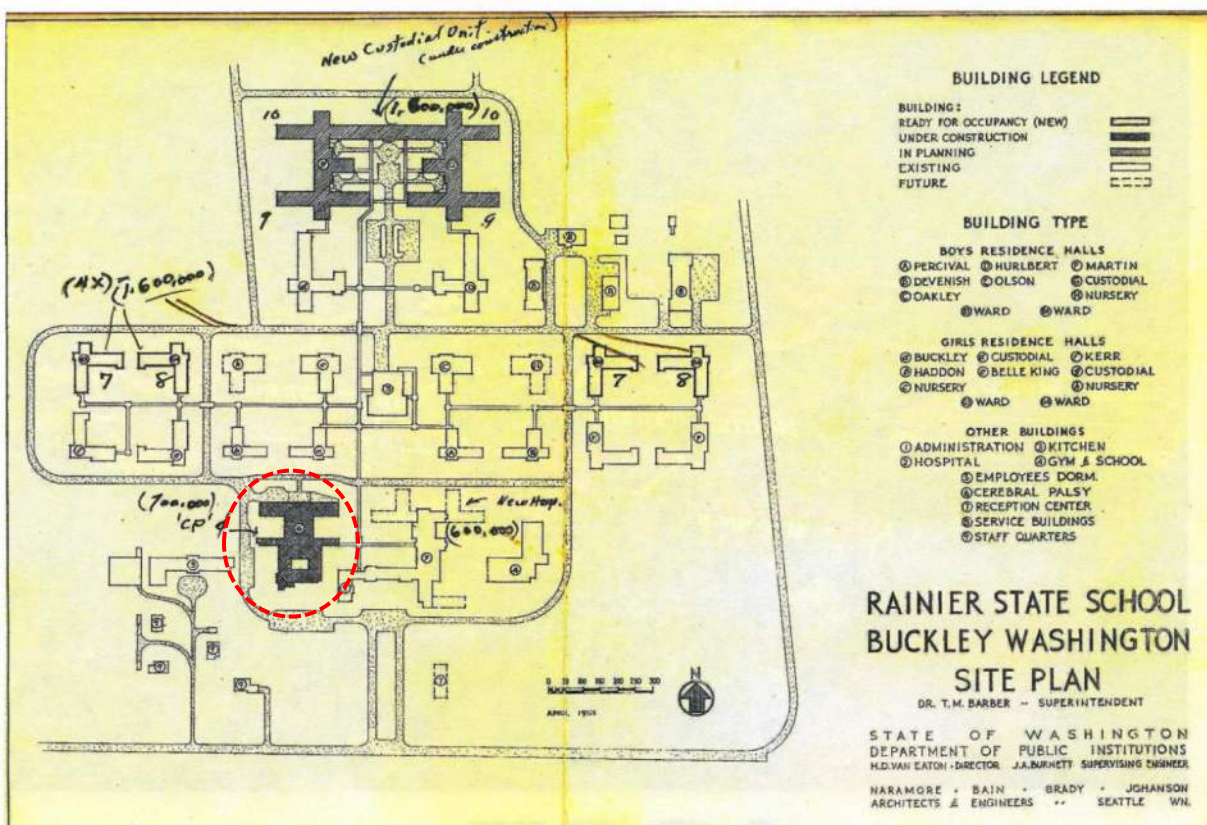


Photo No. 2 - Campus map dated April 1953 that was prepared by NBBJ Architects. The Building Legend indicates that the 2010 building was under construction at the time of this map.



Photo No. 3 - Building 2010 Construction Photo

Photo depicts construction of the 2010 building. Note the main Administration Building in the background.

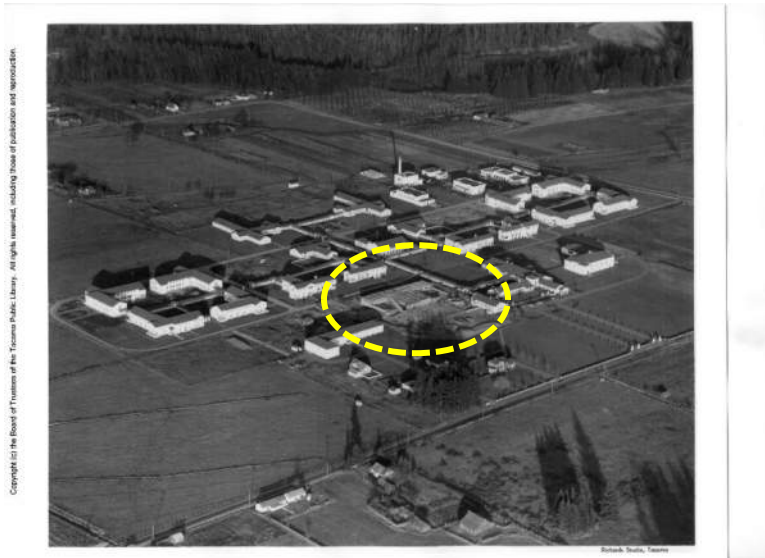


Photo No. 4 - Building 2010 Construction Photo

Aerial photograph of the Rainier School site during construction of Building 2010, identified with the yellow circle. No date was provided on the photo; however, other documents appear to indicate construction was underway in 1953.



1967

Photo No. 5 - Building 2010 1967 Aerial Campus View

Aerial photo of the Rainier School campus as shown in 1967. Building 2010 is circled near the middle of the photo.

B. EXECUTIVE SUMMARY

BET&R was engaged to assess the general roof condition limited to the north facing slope of the gable roof area at the 2010 Building as a result of reported water intrusion. The purpose of our limited roof survey was to promptly provide an initial condition assessment to assist the Washington State DSHS better understand the existing conditions on-site and to assist with prioritizing of future repair, retrofit, and roof replacement work at Rainier School. On-going water intrusion from the roof system into the attic has been reported and continues to be an issue for Rainier School maintenance personnel.

BET&R was asked to provide a report of initial findings at the select roof area, and preliminary recommendations related to the roof system, as well as a preliminary Rough Order of Magnitude budget cost estimate for potential repairs or reroofing options. Through visual and tactile observations, BET&R along with Darren Johnston, Structural Engineer from Harbor Consulting Engineers surveyed the general roof system and attic conditions at the select roof area(s). The following provides an Executive Summary of our initial findings.

LIMITED ROOF SURVEY OVERVIEW:

The survey, including visual observations and tactile examination of the existing roof system at the 2010 Building included:

- Visual and tactile examination to review existing conditions within the attic cavity at the north end gable roof area. This survey was primarily limited to the north-side gable roof area; however, following on-roof visual observations at an adjacent roof area, the survey team conducted initial visual observations within the attic cavity beneath the adjacent gable roof that intersected the south slope of the subject roof area;
- Visual and tactile observations of the existing interlocking clay tile roofing system. While on the roof, the survey team examined the existing interlocking S-shaped clay tiles, roofing underlayment, and securement method for the tile system;
- Visual and tactile examination of the wood-framed structural support system within the attic space. The Project Structural Engineer, Darren Johnston, from Harbor Consulting Engineers, conducted the general survey of structural components for the select roof areas.
- Visual observation around the building perimeter to determine the roof system at other roof areas to assess if the observed conditions appeared generally consistent at other roof areas.

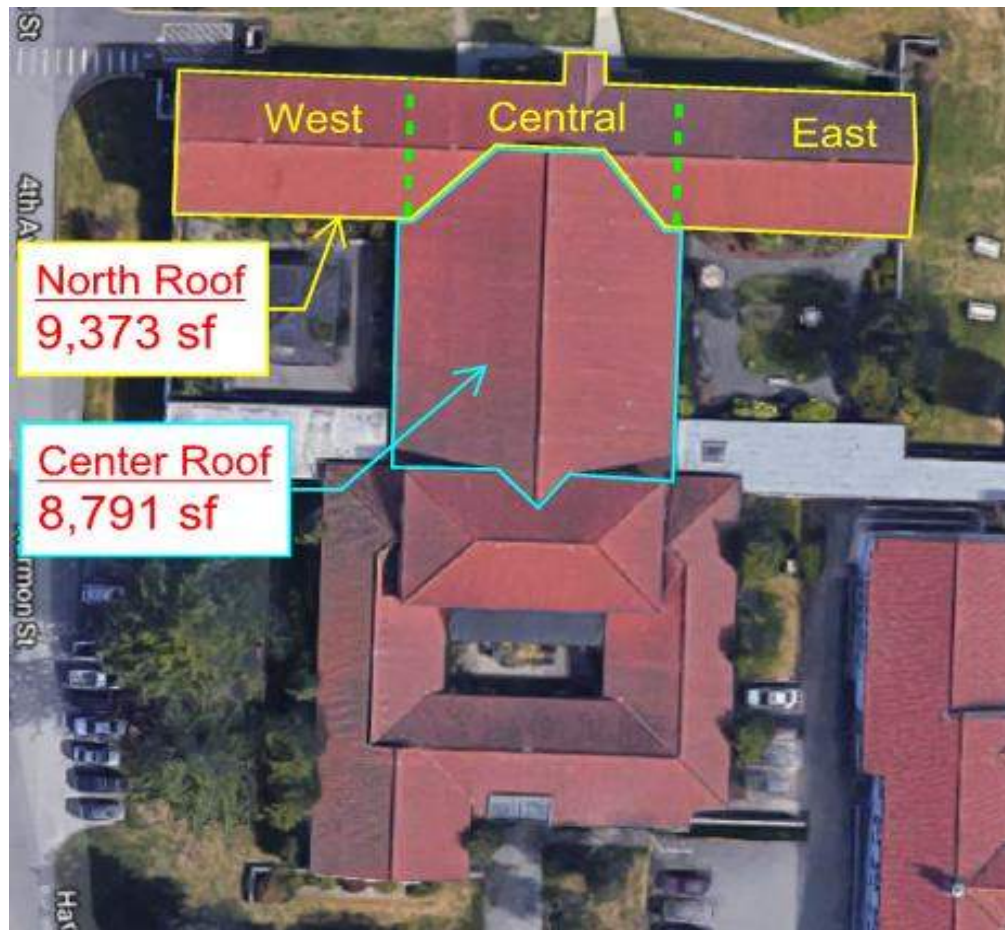


Photo No. 6 - Depicts an overview of the roof areas at the 2010 Building. The yellow outlined roof area at the north end of the building represents the requested area of roof to be included in the roof survey. The north end (yellow) roof area, as the focus of our survey, measures approximately 9,373 square feet. The roof area outlined in blue represents the additional roof area recommended to be included into a reroofing project as a result of visual deficiencies observed as part of our preliminary roof survey. The additional roof area, outlined in blue, measures approx. 8,791 square feet.



Photo No. 7 - View of the north-facing gable end roof area at the 2010 Building that was the primary focus of our roofing survey. Area separation walls built within the attic break the space into sections identified here as East, central, and West, as indicated in this photo.

SUMMARY OF OBSERVATIONS AND FINDINGS:

The existing roofing system from the top down includes: interlocking S-shaped clay tile roofing system, one layer of No. 30 asphalt-saturated felt roofing underlayment, and 2x6 tongue-and groove-wood roof decking that is supported in the attic from a wood post and beam structural framing system over a concrete attic-floor deck. The attic space contains mechanical units for the building that assists with air movement within the attic cavity; however, there is no other means of effective attic ventilation, as currently configured, such as eave and ridge ventilation, or gable-end vents that are otherwise present on some of the other campus buildings.

As a more recent retrofit, 4-inch thick foil-faced polyisocyanurate rigid insulation panels were mechanically attached to the underside of the roof decking, blocking the ventilation openings. In addition to apparent condensation issues, the installation of the rigid insulation directly to the underside of the wood roof decking acts to trap rain water that has come through the roof assembly, therefore exacerbating water-related damage and decay of the wood-roof decking. There is visual evidence of water staining on the wood beams supporting the roof decking; however, there does not yet appear to currently be significant damage to the primary structural members observed as part of the survey, and potential repairs or replacement of the larger structural components may be limited if reroofing can be undertaken relatively soon. Darren Johnston, Structural Engineer, from Harbor Consulting Engineers, evaluated the structural system and has provided a brief summary of his initial findings. Please see Appendix Exhibit A of this Report, regarding additional information related to structural components at observed areas, prepared by Mr. Johnston.

Following our preliminary survey, it was evident that water intrusion is a pervasive issue that affects numerous locations throughout the observed roof cavity attic spaces that were reviewed as part of this survey. Water stains were evident along the length of the wood support beams located below the wood roof decking, as well as evidence of staining and ponding water on the surface of the attic concrete floor slab. The presence of the rigid insulation, applied directly to the underside of the wood roof decking, poses challenges to identifying specific roof leak locations, as the insulation can trap and hold water on the underside of the wood roof decking, causing biological growth (i.e. fungal growth/mold) to form and grow, and residual rain water then flows down the facing of the insulation and drains out at insulation seams or cut ends of the panels.

Due to the observed evidence of systemic water intrusion, BET&R recommends a reroofing project be implemented soon (e.g., Summer 2020), and sufficient budgets allocated to address the on-going water intrusion. The reroofing project is recommended to include: removal of the existing interlocking 'S' clay tile, and roofing underlayment, to expose the T&G wood roof decking to allow for replacement of water-damaged and decayed wood roof decking. The project would also include removal of the rigid insulation at the underside of the roof decking, as it is currently detrimental to the long-term performance of the framing and roof decking system. In other buildings, un-faced batt insulation has been loose laid on the attic floor with wood-framed walking surfaces fabricated to provide access to attic areas, which can also be considered for this building.

Following removal and replacement of the roof decking and related substrate components, we recommend installation of a new roofing system consisting of 2-ply asphalt-based roofing underlayment and new primary roof covering. Although we have reused and reinstalled the more traditional pan-and-cover clay roofing tiles at other campus buildings, the existing mechanically-attached interlocking S-profile clay tile roofing at the 2010 Building will be difficult to salvage for reinstallation without breaking large numbers of them during removal. As such, we recommend installation of new sheet metal panel roofing as a prudent roof system that will provide a long-term, weather-tight roofing solution. The lighter metal panel roof system is also more appropriate for the existing, relatively wide span, structural framing. While a reroofing project obviously entails all the associated costs of reroofing, the exterior areas of the building itself appears to be in great condition, and the primary roof structural members observed during this roof survey appear to still be in good serviceable condition. A correctly designed roof replacement project, to be conducted as soon as possible, will protect the structure and building into the future and reduce much larger costs that will be necessary if reroofing is postponed. If water intrusion continues to be allowed, it will result in further damage, fungal growth, and decay to persist and expand. As the primary clinic for medical services on the Rainier School campus, the 2010 Building is a critical facility that should be prioritized for proper reroofing, to be correctly designed in order to maintain the Building function and operability.

During our survey we also observed an area of deflected/sagging roof-related components at the center roof area adjacent the valley on the east side of the roof areas. Several large electrical conduits are located below the area and attached to the underside of the roof decking. This area is an area of critical concern and is recommended to be repaired immediately.

The layout of the 2010 Building allows for reroofing to be planned out, prioritized, and conducted in phases as budgets become available. For an initial phase it is recommended that the north-side gable roof, along with the adjacent north-south oriented roof area, extending perpendicular to the subject roof area, both be included in the first phase of reroofing. Please Note: The two valleys where the roof areas intersect appear to be particular systemic zones of water intrusion and are in poor condition including extensive wood decay. Select areas of the adjacent north-south extending roof area also showed visual evidence of deflection/sagging of the roof system and existing affected wood roof decking, and is recommended to be further evaluated and included in a reroofing project. It appears there are water-damaged and decayed roof decking that needs to be replaced in order to maintain the integrity of the building. Although the observed deflection/sagging this subject roof area described was outside of your requested primary roof survey area, the area in question requires further in-depth evaluation and is recommended to be invasively investigated, evaluated, and repaired soon as a potential emergency repair scenario. A number of large electrical conduits were attached to the underside of the roof decking at this general location, and further degradation of the roof system may lead to partial roof collapse and potential disruption to critical services and functions of the building.



Photo No. 8 - View of the north-facing gable roof area at the 2010 Building that was the primary focus of our roofing survey.



Photo No. 9 - View of the north-facing gable end roof area at the 2010 Building showing the west end of the roof area. It was reported that a portion of the roof area, shown by the red hatched line identified area, was previously repaired to address water-intrusions and water-damaged T&G roof decking.

SUMMARY OF RECOMMENDATIONS AT 2010 BUILDING:

■ Existing Clay Tile Roofing System at North End Roof Area(s)

Due to systemic water intrusion observed throughout numerous areas of the north end gable roof as well as the adjacent intersecting roof areas, BET&R recommends removal and replacement of the existing roofing system. The 2010 Building, which serves as the campus health clinic and also houses clients that require acute care, is a critical facility and any disruption of services due to issues related to on-going water intrusion would be detrimental to the operation and mission of Rainier School. Given the systemic issues, and difficulty to pin point specific origins of the water leaks partly due to the existing rigid insulation fixed directly below the wood roof decking, it is our opinion that attempting to perform targeted repairs, as we have done on some of the buildings on campus, is not feasible as an efficient nor cost effective repair and thus not a prudent use of budget resources. As part of the retrofit and reroofing project, the rigid insulation should be removed from the underside of the decking, abated, and new un-faced-batt insulation placed at the attic floor level, as has been done on other campus buildings. A wood-framed walkway system can be constructed to provide access to attic areas of the building. Ventilation of the attic spaces should also be addressed during reroofing design, so it can be properly provided for with any reroofing work.

The existing interlocking S-profile clay roof tiles are more difficult to carefully remove, stack, and store for reinstallation, as has been done on other campus buildings with the more traditional pan-and-cover clay roofing tiles, and as such it may be prudent to consider installation of a sheet metal panel roofing system, such as a standing-seam roof system installed over new plywood roof sheathing and roofing underlayment. If it is the State of Washington's desire to maintain the look of the clay tile, sheet metal panel manufacturers also fabricate metal panel systems to more closely replicate the look of clay tile, which may be an option to consider.

Select structural repair and retrofit may also be needed within the attic cavities, and a lighter metal panel roof system that does not weigh as much as the existing heavy clay roofing tiles may assist to limit the level of retrofit needed, based upon the Project Structural Engineer's recommendations.

A reroofing project can be phased at the 2010 Building, and we recommend starting at the north end gable roof area, extending in the east-west direction, as well as the transverse center roof area extending north-south. The two recommended roof areas form a T-shape and could be transitioned at the valley areas of adjacent roof areas for additional future phases of work. This work can be achieved while the building is occupied, and completed so as not to interfere with the function and operation of the facility. We have worked on other Rainier School campus projects to ensure that the work is performed in a safe

manner that protects the safety and welfare of the clients, staff, and roofing personnel while maintaining the integrity of the existing building, with the goal of delivering a high-performance, water-tight building that can serve the campus for many years to come.

TABLE 1 RAINIER SCHOOL: 2010 BUILDING				
Condition	Recommendation	Location	Test Performed	ROM
A. North Roof Area <ul style="list-style-type: none"> ▪ Systemic water intrusion observed throughout attic spaces, ▪ Existing rigid insulation is problematic and traps leak water against wood decking, ▪ Numerous broken tiles throughout field of roof area. 	<ul style="list-style-type: none"> ▪ Remove interlocking Spanish clay tile roofing ▪ Retrofit and repair roof structure members, as needed; ▪ Install new plywood sheathing, underlayment and roofing system. 	North end wing gable roof area as shown in roof plan below (Requested roof area of primary focus)	<ul style="list-style-type: none"> ▪ Tactile and visual testing 	See attached ROM Matrix
B. Center Roof Area <ul style="list-style-type: none"> ▪ Systemic water intrusion observed throughout attic spaces, ▪ Existing rigid insulation is problematic and traps leak water against wood decking, ▪ Numerous broken tiles throughout field of roof area. 	<ul style="list-style-type: none"> ▪ Remove interlocking Spanish clay tile roofing ▪ Retrofit and repair roof structure members, as needed; ▪ Install new plywood sheathing, underlayment and roofing system 	Center wing gable roof area as shown in roof plan below (Included in survey due to observed deficiencies)	<ul style="list-style-type: none"> ▪ Tactile and visual testing 	See attached ROM Matrix

C. 2010 LIMITED ROOF AREA AND ATTIC SURVEY

The following section provides a more detailed description of the survey work performed and assessment of the conditions observed. This Report also includes information related to the initial assessment of the roofing and attic structural components surveyed by Darren Johnston, from Harbor Consulting Engineer's. The end of this Report also includes a preliminary Rough Order of Magnitude (ROM) estimate for potential reroofing options for further discussion and consideration.

On Friday June 7, 2019, BET&R, along with Harbor Consulting Engineer's performed a roofing survey at the north end roof area. The survey team performed visual and tactile observations within the attic cavity as well as at the roof level. While on the roof to survey the subject north end roof area, visual signs of roof sagging at the adjacent center roof area extending towards the south prompted the Team to note the observations and conduct additional interior visual survey within the attic near the affected area(s). No destructive test openings were conducted as part of this survey. The preliminary nature of this initial survey and assessment was not conducted to serve as a design survey and additional investigation will be needed as any potential future project proceeds. The following is a summary of the observations and examination performed by BET&R at the select roof and attic areas:



Photo No. 10 - Interlocking Clay Roof Tile Profile

Photo depicting the profile of the existing interlocking S-shaped profile clay tile roofing system installed at the 2010 Building.



Photo No. 11 - Observations at Typical Valley

The copper valley flashing liner is in poor condition at this time. The center rib has been creased and pressed down flat in several locations and should be replaced with a new sheet metal valley as part of a reroofing project. Several cracked, and/or displaced roofing tiles were also identified along the valleys and field of the roof areas.



Photo No. 12 - Example of Cracked and Broken Roof Tiles Observed in Field of the Roof Areas

Close-up of typical cracked clay roofing tiles observed at the subject roof areas. The photo shows the exposed 1-ply underlayment beneath the tiles leading to the potential of water intrusion. UV exposure accelerates the aging of the underlayment, causing deterioration and potential failure of the underlayment.



**Photo No. 13 - Building 2010 Attic
Photo in West Roof Area**

Area separation walls within the attic break the overall space into three separate attic sections. This photo depicts existing attic conditions within the west side of the subject roof area looking west. Foil-faced polyisocyanurate insulation is mechanically-attached to the underside of the tongue-and-groove wood roof decking.



**Photo No. 14 - Building 2010 Attic
Photo in Center Roof Area**

Depicts conditions at the west section of the attic near the area separation wall within the center attic area. The arrows show evidence of water staining on the wood beams. The insulation inhibits identification of leak sources and acts to trap rain water against the wood decking, causing further damage and decay to wood framing components.



**Photo No. 15 - Building 2010 Attic
Photo in West Roof Area**

The 2x6 T&G wood decking runs parallel with the roof slope and is supported along the ridge line, two intermediate beams that extend the length of the attic and along the downslope eave edge. The two arrows identify the two intermediate beams that have been framed at approximate 10'-3" spacing intervals. The general test opening area is also shown.



Photo No. 16 - Building 2010 North End Roof Area

As part of our roof survey, we removed select areas of interior insulation under the roof deck to observe conditions at the wood decking. The arrow depicts the general location of the testing and survey area at the west side area of the attic. The arrow points to a ridge vent that is shown in photos below.



Photo No. 17 - North End Roof Area and Ridge Vent at Test Area

Closer photo of ridge vent location and general area where observations of the wood decking were documented from within the attic space.



Photo No. 18 - Attic view at Ridge Vent Location

The arrow depicts the cut-out of the wood decking at the location of the small ridge vent that was blocked by the insulation. The wood at the vent appears to be in good, dry condition. Evidence of water intrusion and staining was observed downslope. The following photos depict those conditions.



Photo No. 19 - Systemic Water Staining at Attic Wood Beams

Downslope of the ridge vent at the beam located closest to the eave, extensive evidence of water intrusion was observed. As we worked to remove the insulation, water that had been trapped against the wood decking by the 4-inch insulation panels actively dripped onto the concrete below.



Photo No. 20 - Water Staining at Attic Structural Members

With insulation panels removed, this photo shows water staining running down the roof decking. The arrow at the top of the photo shows an area of biological growth on the wood surface. Water staining was observed along most of the length of the downslope wood beam indicating systemic water intrusion.

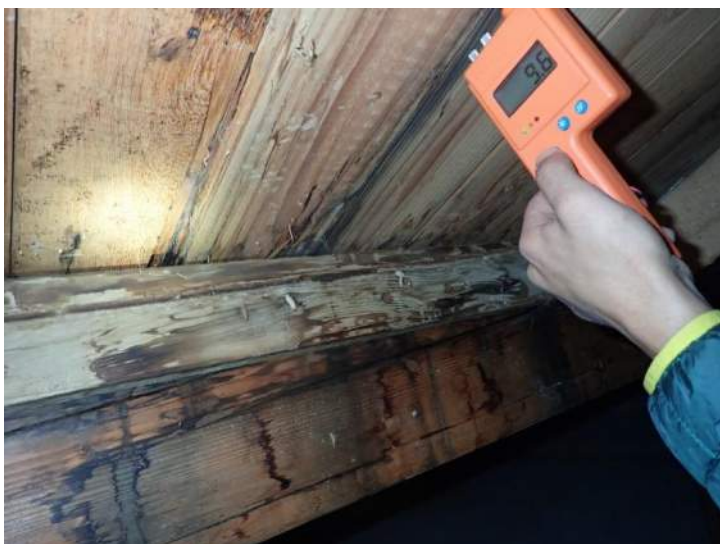


Photo No. 21 - Moisture Meter Readings at Roof Deck

Photo of water staining on the T&G wood decking and 4x10 wood beam. Water staining was observed throughout the attic. The photo shows a Delmhorst BD-2100 Moisture Meter used to measure moisture content of the wood. This photo shows a reading 9.6%, during an unusually on-going dry spring season, while others measured approx. 20%, which is considered significantly elevated and will promote further fungal growth and wood decay.



Photo No. 22 - Water Staining and Biological Growth Trapped by Insulation

As other insulation panels upslope where removed, the water staining continued. The white colored substance appeared to be biological growth (i.e. mold). Water staining on the top-surface of the insulation against the wood decking, showed signs of staining on the foil-facer.



Photo No. 23 - Water Staining and Biological Growth on Wood Structure

Closer photo of water staining and biological growth which had been in contact with the intermediate beam closest to the ridge.



Photo No. 24 - Attic Conditions Downslope from Ridge Vent

The water staining shown in previous photos continued to extend upslope and appeared to originate near the point of the arrow. For reference, the cutout for the ridge vent is shown in the upper left corner.



Photo No. 25 - North-facing gable end roof looking west

View of the north-facing side of the gable roof looking west. The arrow shows the approx. location of the test area shown in previous photos.



Photo No. 26 - North-facing gable end roof near test area

Closer photo showing location of the ridge vent location and BET&R roofing technician conducting roof level observations.



Photo No. 27 - Example gable vent at north end roof area

At the ridge vent, the openings were protected with a sheet metal flashing hood. As a general note, the small ridge vents do not appear to be effective for providing adequate roof ventilation, particularly as the rigid insulation fully blocks the vent opening. It also appeared that no downslope eave intake vents were provided.



Photo No. 28 - Attic View within West Section of Roof

Photo looking east within the west attic area. The photo shows several areas of water staining along the supporting posts and beams.



Photo No. 29 - Attic View within Central Section of Roof

Photo near the stair access of the central area in the attic. Again, several areas of water staining on beams were observed.



Photo No. 30 - Attic View within East Section of Roof

Depicts evidence of water staining near the east gable end of the east attic area. Please refer to Site Visit Report prepared by Harbor Consulting Engineer's regarding structural components.



Photo No. 31 - East Courtyard showing Valley at Area of Concern

Following our initial interior observations, we accessed the roof from the central courtyard on the east side of the building, going up the valley identified by the arrow. The yellow box identifies an area of concern at the adjacent roof area where visual signs of sagging of roof components were observed.



Photo No. 32 - Area of Visual Sagging of Roof Components at Center Wing of Building

View of area of concern as photographed from the valley. A large section of the clay tile roofing appears to be sagging. This area was not part of our initial survey area; however, we recommend additional survey effort take place along with potential emergency repairs to address the noted issues.



Photo No. 33 - Attic View Below Area of Concern

At the interior of the area of concern, where deflected/sagging roof-related components were visually observed, several electrical conduits and mechanical services were located and supported by the roof decking. This is an area of critical concern and is recommended to be repaired and corrected immediately.



Photo No. 34 - Valley at East Side of Roof Survey Area

Water intrusion was also identified to be problematic at the two valley locations observed during the survey. The valley shown in this photo is located in the courtyard space between the north and center roof sections on the eastern side of the building. The valley flashing was in poor condition and evidence of water intrusion within the attic was prevalent.



Photo No. 35 - Evidence of Water-Staining at Valleys

Systemic observations of water intrusion were noted along both of the valley's that intersect the north wing roof area. Select wood framing members may also need to be replaced due to water-damage and decay at the valley locations. Evidence of staining on the concrete floor was also evident.



Photo No. 36 - Evidence of Water-Staining at Valleys

The west side valley also showed evidence of water intrusion. On other campus buildings, the existing valleys have been problematic with on-going water intrusion issues. Redesign and retrofit of the valleys and flashing systems is recommended.



**Photo No. 37 - Rain-water leaks
Following Brief Storm During Survey**

Following a brief, but heavy rainfall during our survey, rain water was observed dripping from the roof at a minimum of three locations observed during a cursory walk through. This is example is located in the central roof area towards the west of the stairs.



**Photo No. 38 - Rain-water leaks
Following Brief Storm During Survey**

Closer view of rain water collecting on the concrete attic floor following the rain storm.



**Photo No. 39 - Rain-water leaks
Following Brief Storm During Survey**

Rain water was also observed dripping from the 4x10 wood beam in the east attic area and dripping on the 2x4 wood sill plate below.

D. CONCLUSION

Survey Summary and General Findings:

During on-site roof survey work by BET&R and HCE, we discovered numerous deficiencies, and active water intrusion was observed within the roof level and roof attic space of the 2010 Building during a brief rain event. Rainier School personnel has reported that rain water leaks into the attic space of the north end roof area at several locations, requiring buckets to contain and then empty out on a regular basis. (Note: We observed water dripping out of the roof system and onto the attic floor following a brief rain storm.)

Based upon our roof survey observations, systemic water intrusion appears to be widespread throughout the roof attic areas requested for BET&R to survey. Signs of water intrusion were observed in the field of the roof as well as at critical transitions and flashing intersections, and adjacent roof areas' valleys. While much of the visual evidence presented as surface staining on the wood framing (e.g., wood roof beams) and other structural members, it is suspected that several areas of the tongue-and-groove wood decking are very decayed, and will need to be replaced. Select areas of deteriorated wood sill plates will also require replacement, based upon evaluation by the structural engineer we engaged in the roof survey. We believe it is imperative to conduct repairs and reroofing as soon as possible and prior to additional significant damage and degradation of wood structural members, as the costs of future repairs and replacement will only multiply as damaged areas continue to expand and further deteriorate.

As requested by DSHS based upon reports of on-going water intrusion from Rainier School personnel, BET&R focused the limited roofing survey approved for the north end roof area of the 2010 Building. While that was our primary focus, other areas of concern were briefly reviewed as part of a general building walk-around and on-roof observations, and select areas have been identified in this Report for further investigation followed by recommended repairs and retrofit.

As many of the central Rainier School campus buildings were constructed from the late 1930's through the mid 1950's, the buildings have reached an age where more intense roof repair and retrofit (e.g., reroofing) projects are prudent and needed to extend the service life of the buildings. The quality of original construction and level of craftsmanship and materials was extremely high, resulting in structures that were built to last. With proper repair and retrofit now, the core campus buildings can provide many more years of service life. We are also aware of several other campus buildings, with long-active roofing-related water intrusion issues, and it is our opinion that retrofit and reroofing projects can cost-effectively and efficiently be conducted to continue the storied history of the core campus buildings and important functions that they serve.

Recommendations:

Repairs at the 2010 Building, due to the critical health-care functions provided for Rainier School clients, are considered to have a high level of importance for urgent attention to correct deficient roof-related and envelope systems observed during this survey.

In general, repairs and retrofit recommendations include:

- A. Removal of the existing direct-fastened clay-tile roofing and underlayment system at the north and center roof areas, as identified in this Report.
- B. With the existing primary roof system sequentially removed, replacement of water-damaged wood decking and any related structural components (e.g., wood beams) would need to be replaced with new wood-framing members.
- C. In order to provide a smoothing layer for a new roofing system, we recommend installation of new minimum 3/8-inch or 1/2-inch thick plywood sheathing over the existing, repaired/replaced tongue-and-groove wood roof decking.
- D. As new wood roof decking and plywood sheathing are sequentially installed, a new, thoroughly designed (with appropriate technical specifications and drawings) high-quality roofing system with 2-ply of underlayment should be installed. Recommended roof systems for the 2010 Building include considerations to provide a new sheet metal panel roofing system. A sheet metal panel roofing system can be designed to be consistent with the historic aesthetics of the campus and can provide for a long-term watertight, lighter-weight (e.g., due to relatively long roof decking spans), and low-maintenance roofing system. A reroofing project can be conducted in phases if needed, and we recommend an initial phase to address water intrusion issues at the north and center roof areas be planned for Summer 2020. Watertight corrective-action roofing transitions between new and old roofing systems can be achieved at valleys in order to effectively phase the work as budget allows. Select areas, where sagging/deflecting roof decking and overlying roofing components were observed require more urgent emergency repairs Summer/Fall 2019 to halt leaks, limit further wood decay and damage, and maintain the integrity of the building and functions of the facility.

Within the roof attic, recommendations include careful removal and abatement of the water-damaged and fungal growth (i.e., mold) affected rigid insulation panels from the underside of the wood roof decking. And, that incorrectly placed insulation should be replaced with un-faced fiberglass or basalt-rock wool batt insulation loose laid on the attic floor. Elevated wood-framed walk-ways can be easily constructed to provide access to the various attic areas. Ventilation of the roof attic requires additional analysis and should be addressed during a reroofing project's Pre-design Phase.

BET&R can work with Washington State and Rainier School to prepare a prioritized campus-wide plan for this building and others to recommend appropriate and timely repairs and retrofit, to aid in accurate budgeting. Specific recommendations for structural repairs and/or retrofit shall be addressed and provided by the Project Team Structural Engineer.

REGARDING THIS REPORT:

On Site Survey, Report with Conclusions, and Recommendations:

This report, including initial conclusions and recommendations, is based upon observations of the visible and apparent condition of the building, and the primary exterior components viewed and examined on the date of this preliminary survey. Although care has been taken in the performance of the survey, Building Envelope Technology & Research, Inc. (BET&R) makes no representations regarding latent or concealed defects that may exist, and no warranty or guarantee is expressed or implied.

This report is made in the best exercise of our technical ability, industry exposure, the time allotted, and professional judgment. Conclusions in this summary report are based on estimates of the age and normal service life of the various materials, components, and/or systems surveyed. Predictions of life expectancy and the balance of useful service life are generally based on industry and regional experienced comparisons. It is essential to understand that future weather (e.g., rain, snow and ice accumulation, etc.) and compounding conditions (e.g., additional leakage, seismic event, etc.) can alter the useful life of any material, item or building component. The weather exposure, (e.g., wetting and drying, freeze-thaw cycling, etc.), use and misuse, irregularity of servicing, faulty manufacture and/or construction, unfavorable conditions and installation, natural disasters (e.g., high-wind events, earthquakes, etc.), and unforeseen circumstances make it impossible to state precisely, to the day, when each item will require replacement.

Moisture Intrusion, Mold Growth, and Human Exposure to Mold

Persistent moisture intrusion, repetitive wetting, and/or the resulting elevated moisture content and relative humidity in some situations can lead to the proliferation of biological and/or fungal growth (e.g., mold) and other potentially hazardous contaminants and/or can spread fungus into interior spaces, which can lead to allergic reactions in susceptible individuals and already compromised persons, as well as other potential problems (hypersensitivity, etc.).

Limitations

This preliminary initial summary report is prepared for the exclusive use of the named Client and may not be relied upon or used by any other party. In preparing this report for the named Client, the authors assume no duty to lenders or other parties, none of whom are authorized to rely on its contents.

Photographs were taken with the intent to document conditions and to help the Client understand the actual conditions on-site. The photographs included in this summary report, were also taken to show example areas, related conditions and situations; they are not inclusive of every situation, but of general/typical conditions, and certain specific conditions.

This report provides an assessment/evaluation of the observed on-site conditions. It cannot be used as specifications or written instructions for bidding, conducting repair or construction work. However, if

authorized by the Client, BET&R would be pleased to utilize this report to efficiently assemble a written scope of work, or technical specifications and detail drawings from which to solicit bids and conduct the necessary repairs and/or reroofing by quality-oriented contractors for the much-needed roof repair and related work.

We trust the information is of assistance. Should you have any questions, comments or concerns regarding the above initial Roof Survey, or if we may be of additional assistance, please do not hesitate to contact me.

Respectfully,



Scott Vlotho, AIA

BET&R Architect | Building Envelope Technologist

BUILDING ENVELOPE TECHNOLOGY AND RESEARCH



SITE VISIT REPORT

TO: Mr. Scott Vlotho, A.I.A.
Building Envelope Technology and Research

25 June 2019

RE: Rainier School Building 2010 Roof Framing Condition Assessment Report of Findings and
Recommendations for Repair and Rehabilitation
2120 Ryan Road Buckley, Washington

Dear Mr. Vlotho:

INTRODUCTION AND BACKGROUND

Harbor Consulting Engineers, Inc. (Harbor) attended a one day on-site condition assessment of the timber roof framing of Building 2010 on the Rainier School Campus on 7 June 2019. In attendance during the site visit were Building Envelope Technology and Research (B.E.T. & R.) personnel Mr. Scott Vlotho, A.I.A. and Mr. Zephyr Delahunt. Harbor's senior structural engineer Darren S. Johnston, P.E., S.E. performed the structural condition assessment. The building reviewed was a two story concrete framed early 1950's era structure situated west of the main campus entry and administration offices. Record drawings for the building were not available at the time of our site visit and it is our understanding that record drawings cannot be located. Rainier School facility manager Mr. Scott Ward reported long term roof leakage in the attic of Building 2010.

The focus of the structural assessment by Harbor is to determine the general structural condition of the timber roof framing and its serviceability to support superimposed roof dead and live loads. The building has complex and multi-level roof construction. The northern section of the building with an east-west dimension of approximately 224 feet and a north-south dimension of approximately 42 feet was reviewed in detail from the attic space.

The attic of Building 2010 is accessible by an interior stairway. The attic space is partitioned into three areas separated by fire resistive barrier walls with an integral man door. The ceiling of the building was framed using reinforced concrete with structural slabs with upturned concrete beams loading concrete columns and bearing walls. The exterior walls of the building are constructed using exposed structural concrete and the second floor of the building appears to be a concrete structural slab. The lower floor of the structure is suspected to be a concrete slab on grade. Foundations appear to be conventional reinforced concrete strip footings and spread footings.

The roof of the building is covered with manufactured thin Spanish-style roof tiles over roofing substrate. The roof framing over this portion of the building consists of 2X6 tongue and groove wood decking loading plumb 4X10 beams with shaped tops to support the decking slope. The shaped beam lines are placed at 1/6 points of the building short dimension with the central beam serving as ridge beam.



Timber beams are supported by 4X4 and 4X6 posts. Evidence of added post supports was noted in each of the three attic spaces. The central attic served by the access stairway houses a large air handler with ducting extending into the adjacent attic spaces. At some point following original construction the soffit of the roof decking was covered with foil-faced insulation panels anchored with annular shank nails with plate washers. The majority of the insulation panels were in place. Select locations had insulation panels removed during the site visit to view the underlying roof decking.

SITE VISIT OBSERVATIONS

The attic was accessed and reviewed with personnel from B.E.T. & R. Selected locations in the northern attic section had rigid insulation panels removed to view the underlying roof decking condition. Harbor prepared field sketches of the three attic chambers showing the roof support beams, posts, upturned concrete beams, and dimensions. The three attic chambers were visually reviewed and digital photographs were taken to record conditions found. Harbor used a probe tool to evaluate timber framing exhibiting signs of deterioration. The roof was also accessed and briefly surveyed. Many roof tiles were loose and broken. The roofing assessment will be addressed by B.E.T. & R. in their written report. The following observations were made with respect to the timber roof framing of the northern section of Building 2010 based on visual and tactile methods of evaluation.

1. Overall orientation view of the building's north elevation depicting the approximate 224 foot wide dimension. *See photograph # 1*
2. View of the north-east corner of the building. *See photograph # 2.*
3. View of the north-west corner of the building. *See photograph # 3.*
4. Roof decking exposed at corner porch recesses. *See photograph # 4.*
5. View of the west half of the northern section of roof just in front of the gable end vent. *See photograph # 5.*
6. View of the east half of the roof just beyond the gable end vent. *See photograph # 6.*
7. Example of water seepage staining noted on the soffit of the timber roof decking. *See photograph # 7.*
8. Example of water seepage staining noted on the beam and post supporting the roof. *See photograph # 8.*
9. Typical rigid insulation installed below the roof decking with beam and post. *See photograph # 9.*
10. Timber post not in contact with ridge beam in the western attic chamber. *See photograph # 10.*



11. Timber post not in contact with the ridge beam in the western attic chamber.
See photograph # 11.
12. Fungal decay growth noted at removed insulation panel at the western attic chamber.
See photograph # 12.
13. Timber post not in contact with ridge beam in the western attic chamber. *See photograph # 13.*
14. View of roof and support framing in the central attic chamber note the non-plumb posts and curved beams. *See photograph # 14.*
15. Decayed and deteriorated sill plate below the western valley of the central roof chamber.
See photograph # 15.
16. Example of plumb installation of 4X10 beams shaped at the top to receive roof decking.
See photograph # 16.
17. Example of roof seepage staining noted at the western attic chamber. *See photograph # 17.*
18. Example of short post repair at upturned concrete beam in the western attic chamber.
See photograph # 18.
19. High separation of ridge beam from supporting post found in the western attic chamber.
See photograph # 19.
20. The attic roof vents were covered by post-original construction installed rigid insulation panels.
No attic ventilation was noted in the northern attic section.

ADDITIONAL SITE VISIT ITEMS AND DISCUSSION

The deformation of the shaped 4X10 nominal roof beams and the added post supports indicates a long term framing member creep issue with the roof structure. Harbor has performed structural evaluation analysis of the roof decking, roof beams, and support posts to determine member performance level. The structural analysis performed by Harbor is attached. The structural analysis revealed that the timber roof decking is adequate for bending stress and shear stress. However, the 2X6 tongue and groove roof decking is marginally over-deflected. With creep effects considered the long term total load deflection of the 2X6 roof decking is L/157 in a simple span installation. The shaped 4X10 support beams were determined to be adequate for locations with added post supports on a maximum 7 foot span in a simple span installation. The shaped 4X10 ridge beam was found to be 11.5 percent over-stressed in bending on a 10.5 foot span in a simple span installation. Observed beam deformations are higher than predicted by structural analysis due to high moisture content in the wood at roof leak areas over time resulting in increased deflections. Support posts are adequate by inspection but should be installed plumb in both directions. Locations where roof decking and support beams are installed as a continuous member over intermediate supports will result in decreased calculated deflections.



The incomplete ridge beam bearing on support posts is also an unusual framing member deformation. Some possible explanations for the observed upward vertical displacement of the ridge beam are as follows:

- 1) The roof decking has sufficient stiffness to deflect upwards.
- 2) The ridge beam has contracted over time from its full installed dimension due to long term and high degree of wood shrinkage.
- 3) The posts were installed loose and short.
- 4) Roof decking is functioning as an unintended force triangle tied by the concrete ceiling and braced by the intermediate supports at 1/6 points of the short building dimension.

The likely explanation is item #4 above the force triangle. As the main sections of the roof framing settle downward on their beam support lines, each heel is restrained at the side walls. Compression at the ridge is balanced and since the roof slope is moderate the vertical component of ridge compression is greater than the dead load of the roof resulting in a net upward movement. If the roof decking were cut over the first beam at each side of the ridge the decking would slide down the roof plane and bear on the ridge beam.

Many of the support beams lines show pronounced curvature deformation even with the added timber posts. The range of movement the roof has experienced may have damaged the roofing underlayment materials leading to leakage and water damage. During the site visit a rain storm passed over the campus and active water leaks in the attic were noted. A section of the north elevation of the roof downslope from the Dutch hip containing the gable end louver was found to have sections of replaced roof decking and roof tiles.

RECOMMENDATIONS FOR REPAIR AND REHABILITATION

Suggested structural repairs for the timber roof framing made in this report are intended to improve the structural performance of the timber roof system to support superimposed dead and live loads. There are several areas to address in the repair and rehabilitation of the roof framing system, these consist of the following:

- 1) Replace decayed or damaged roof decking and timber support beams. In conjunction with a re-roofing project the roof decking should be exposed and reviewed for signs of fungal decay. Damaged decking members should be replaced with preservative treated decking matching the dimensions of the original decking. Replacement decking should be installed in a minimum two-span layup with bearing on supports only. Support beams in the attic where deteriorated or severely deformed should be replaced with shaped 4X12 Douglas-Fir # 1 and Better to help stiffen the roof support.
- 2) Stiffen roof support beams to reduce deflection. In conjunction with a re-roofing project the existing shaped 4X10 roof beams could be replaced with shaped 4X12 Douglas-Fir # 1 and Better members to reduce deflections of the roof. Alternately, the existing shaped 4X10 roof beams could have 2X10 members sistered on each side with support cleats on posts to increase the support beam stiffness and reduce roof framing deflections. The 2X10 sistering will only help

4 of 18

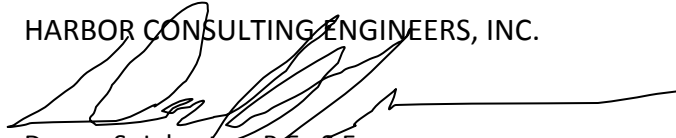


with applied loads since long term stress has already deformed the shaped 4X10 members.

- 3) Install positive connection hardware to resist uplift and lateral displacement of support beams. Economical light gauge post caps can be installed between the roof beams and posts.
- 4) Install positive connection hardware to resist uplift and lateral displacement of posts at the concrete attic support slab. Post bases can be installed at the base of posts to sill plates and the concrete structural ceiling slab to anchor the post against uplift and lateral displacement.
- 5) Retrofit the attic space with ventilation meeting the requirements of the 2015 International Building Code to protect the timber roof framing members from deterioration.

Please call our office should you have any questions regarding this report or any of its recommendations.

HARBOR CONSULTING ENGINEERS, INC.



Darren S. Johnston, P.E., S.E.
Senior Project Manager

PHOTOGRAPHIC REFERENCES



Photograph # 1: Overall view of building north elevation.



Photograph # 2: View of north-east corner of north elevation.

PHOTOGRAPHIC REFERENCES



Photograph # 3: View of north-west corner of north elevation.



Photograph # 4: Exposed roof decking at corner porch recesses.

PHOTOGRAPHIC REFERENCES



Photograph # 5: View of west roof section of north elevation.



Photograph # 6: View of east roof section of north elevation.

PHOTOGRAPHIC REFERENCES



Photograph # 7: Example for water seepage staining on soffit of decking.



Photograph # 8: Example of water seepage staining on beam and post.

PHOTOGRAPHIC REFERENCES



Photograph # 9: Rigid insulation at decking soffit abutting beams and posts.



Photograph # 10: Ridge beam not in contact with support post.

PHOTOGRAPHIC REFERENCES



Photograph # 11: Ridge beam not in contact with support post.



Photograph # 12: Example of timber roof deck decay at soffit.

PHOTOGRAPHIC REFERENCES



Photograph # 13: Ridge beam not in contact with support post.



Photograph # 14: View of attic framing with rigid insulation (note non-plumb posts)

PHOTOGRAPHIC REFERENCES



Photograph # 15: Deteriorated wood sill plate below valley on upturned concrete beam.



Photograph # 16: Example of plumb shaped 4X roof support beam.

PHOTOGRAPHIC REFERENCES



Photograph # 17: Example of seepage staining on soffit of roof decking and support beams.



Photograph # 18: Repair of short timber post on upturned concrete beam.

PHOTOGRAPHIC REFERENCES



Photograph # 19: High beam separation from post of 3/4 inch.

CHECK ADEQUACY OF ROOF DECKING

DECKING:

$$L = 6'-8"$$

$$W = (15 \text{ PSF} + 12 \text{ PSF} + 25 \text{ PSF}) = 52 \text{ PSF}$$

$$W_{\text{DECKING}} = W \left(\frac{5.5}{12} \right) = 24 \text{ \#/ft}$$

$$M_{\text{MAX.}} = \frac{W L^2}{8} = \frac{24 (6.66)^2 12}{8} = 1597 \text{ \#-ft}$$

$$V_{\text{MAX.}} = \frac{W L}{2} = \frac{24 (6.66)}{2} = 80 \text{ \#}$$

$$S_{\text{REQ'D}} = \frac{M_{\text{MAX.}}}{F_b} = \frac{1597}{1650 (1.1) (1.15)} = 0.765 \text{ in}^3 < S_y = 2.063 \text{ in}^3 \checkmark_{OK}$$

$$A_{\text{REQ'D}} = \frac{3V}{2F_v} = \frac{3(80)}{2(180)(1.15)} = 0.579 \text{ in}^2 < A = 8.25 \text{ in}^2 \checkmark_{OK}$$

DEFLECTION:

$$\Delta_{\text{D+L}} = \frac{5 W L^4}{384 E I} = \frac{5 (24) (6.66)^4 1723}{384 (1.7 \times 10^6) 1.597} = 0.4070 \text{ in} = \frac{l}{197} \text{ DL}$$

$$\Delta_{\text{CREEP}} = 0.5 \Delta_D = 0.5 \left(\frac{27}{52} \right) 0.4070 \text{ in} = 0.1079 \text{ in CREEP}$$

$$\Delta_{\text{D+L+CREEP}} = 0.4070 \text{ in} + 0.1079 \text{ in} = 0.5089 \text{ in} = \frac{l}{157} > \frac{l}{270} < \frac{l}{120}$$

∴ (E) 2x6 DF COMMERCIAL DECKING IS ADEQUATE FOR STRESS AND MARGINAL FOR DEFLECTION

COMMERCIAL 2x6 DF DECKING

$$S_y = 2.063 \text{ in}^3$$

$$I_y = 1.547 \text{ in}^4$$

$$A = 8.25 \text{ in}^2$$

$$F_b = 1650 \text{ psi}$$

$$F_v = 180 \text{ psi}$$

$$E = 1.7 \times 10^6 \text{ psi}$$

$$C_F = 1.10$$

$$C_D = 1.15$$

RAINIER SCHOOL BLDG 2010
ROOF FRAMING

By: DS. JOHNSTON Date: 19 JUN '19

Checked: Date:

Job #:

Scale:

Sheet: 16 / 18



HARBOR CONSULTING ENGINEERS, INC.

Seattle, Washington

Phone: (206) 323-6000

www.harborengineers.com

CHECK ADEQUACY OF ROOF SUPPORT BEAMS

BEAMS: (NON-RIDGE BEAM)

$$L = 7'-0"$$

$$W = (15 \text{ PSF} + 12 \text{ PSF} + 25 \text{ PSF}) 6.66 = 347 \text{ \#/'}$$

$$M_{\text{max}} = \frac{wL^2}{8} = \frac{347(7)^2 12}{8} = 2550 \text{ \#-in}$$

$$V_{\text{max}} = \frac{wL}{2} = \frac{347(7)}{2} = 1215 \text{ \#}$$

$$S_{\text{REQ'D}} = \frac{M_{\text{max}}}{F_b} = \frac{2550 \text{ \#-in}}{1000(1.2)(1.15)} = 18.48 \text{ in}^3$$

$$S_{\text{REQ'D}} = 18.48 \text{ in}^3 < S_x = 37.3 \text{ in}^3 \quad \checkmark_{\text{OK}}$$

$$A_{\text{REQ'D}} = \frac{3V}{2F_v} = \frac{3(1215)}{2(180)(1.15)} = 8.80 \text{ in}^2 < A = 28.0 \text{ in}^2 \quad \checkmark_{\text{OK}}$$

DEFLECTION:

$$\Delta = \frac{5wL^4}{384EI} = \frac{5(347)(7)^4 12}{384(1.7 \times 10^6)(179.3)} = 0.0739 \text{ in} = \frac{l}{1137} \text{ in} \quad \checkmark_{\text{OK}}$$

∴ 1E) SHAPED 4x10 DF #1 ROOF SUPPORT BEAM IS ADEQUATE

SHAPED 4x10 DF #1

$$S_x = 37.3 \text{ in}^3$$

$$I_x = 179.3 \text{ in}^4$$

$$A = 28.0 \text{ in}^2$$

$$F_b = 1000 \text{ psi}$$

$$F_v = 180 \text{ psi}$$

$$E = 1.7 \times 10^6 \text{ psi}$$

$$C_F = 1.2$$

$$C_D = 1.15$$

RAINIER SCHOOL BLDG 2010
ROOF FRAMING



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By: D.S. JOHNSTON Date: 19 JUN '19

Checked: Date:

Job #:

Scale:

Sheet: 17/18

CHECK ADEQUACY OF RIDGE BEAM

BEAM:

$$L = 10' - 6"$$

$$W = (15 \text{ PSF} + 12 \text{ PSF} + 25 \text{ PSF}) 6.66 = 347 \text{ \#/ft}$$

$$M_{\max} = \frac{wL^2}{8} = \frac{347(10.5)^2 12}{8} = 57,385 \text{ \#-ft}$$

$$V_{\max} = \frac{wL}{2} = \frac{347(10.5)}{2} = 1821 \text{ \#}$$

$$S_{\text{REQ'D}} = \frac{M_{\max}}{F_b} = \frac{57385}{1000(12)(1.15)} = 41.58 \text{ in}^3$$

$$S_{\text{REQ'D}} = 41.58 \text{ in}^3 > S_x = 37.3 \text{ in}^3 \times \text{NO GOOD (11.5\% OVERSTRESSED)}$$

$$A_{\text{REQ'D}} = \frac{3V}{2F_v} = \frac{3(1821)}{2(180)(1.15)} = 13.19 \text{ in}^2 < A = 28.0 \text{ in}^2 \checkmark_{\text{OK}}$$

DEFLECTION:

$$\Delta = \frac{5wL^4}{384EI} = \frac{5(347)(10.5)^4 1728}{384(1.7 \times 10^6)(149.3)} = 0.3739 \text{ in} = \frac{1}{337} \text{ TL} \checkmark_{\text{OK}}$$

∴ (E) SHAPED 4X10 DF #1 RIDGE BEAM IS 11.5% OVERSTRESSED IN BENDING

SHAPED

4X10 DF #1

$$S_x = 37.3 \text{ in}^3$$

$$I_x = 149.3 \text{ in}^4$$

$$A = 28.0 \text{ in}^2$$

$$F_b = 1000 \text{ psi}$$

$$F_v = 180 \text{ psi}$$

$$E = 1.7 \times 10^6 \text{ psi}$$

$$C_F = 1.2$$

$$C_D = 1.15$$

RAINIER SCHOOL BLDG 2010
ROOF FRAMING

By: D.S. JOHNSTON Date: 19 JUN '19

Checked: Date:

Job #:

Scale: Sheet:

18/18



HARBOR CONSULTING ENGINEERS, INC.

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Schematic ROM Estimate-- Rainier School Roof Retrofit

2010 BUILDING - North Gable Roof Area

Division	Description	Quantity	Unit	Unit Cost	Subtotals	Base Bid: Standing-Seam S.M. Reroofing	Options: New Clay Tile Roofing
Roofing Retrofit at 2010 Building - NORTH GABLE ROOF AREA							
02.070.00	Demolition						
	Remove existing interlocking clay tile roofing including underlayment	9373	sf	7.00	\$ 65,611.00	\$ 65,611.00	
	Remove water damaged wood decking (estimated at 20% of roof area)	1875	sf	2.75	\$ 5,156.25	\$ 5,156.25	
	Sheet metal valley liners	130	lf	3.00	\$ 390.00	\$ 390.00	
	Sheet metal flashings	485	lf	3.00	\$ 1,455.00	\$ 1,455.00	
	Remove gutters, label, and store for reuse	485	lf	2.00	\$ 970.00	\$ 970.00	
	Dumping fees	38	ton	300.00	\$ 11,400.00		
	02. Section Subtotal			\$	\$ 84,982.25	\$ 73,582.25	
05.50.00	Metal Assemblies						
	Retrofit flashings at existing copper gable end fresh air intake louver	1	ea.	750.00	\$ 750.00	\$ 750.00	
	05. Section Subtotal			\$	\$ 750.00	\$ 750.00	
06.10.00	Miscellaneous Carpentry						
	Wood framing repair (e.g., sistering with new attachment connectors) in	750	lf	26.50	\$ 19,875.00	\$ 19,875.00	
	Wood T&G Decking replacement (estimated at 20% of roof area)	1875	sf	8.00	\$ 15,000.00	\$ 15,000.00	
	3/8" Plywood sheathing overlayment (i.e., to provide smooth substrate)	9373	sf	4.00	\$ 37,492.00	\$ 37,492.00	
	06. Section Subtotal			\$	\$ 72,367.00	\$ 72,367.00	
07.32.13	Steep-Slope Roofing Assembly						
	Installation of 2-ply underlayment system	9373	sf	4.50	\$ 42,178.50	\$ 42,178.50	
	Installation of new steep-slope sheet metal panel roofing system	9373	lf	28.00	\$ 262,444.00	\$ 262,444.00	
	Installation of new steep-slope roof system utilizing ALL NEW MCA OR OTHER MODERATE-PRICED CLAY TILE ROOFING	9373	sf	22.75	\$ 213,235.75	N/A	\$ 213,235.75
	07.3 Section Subtotal				\$	\$ 304,622.50	
07.60.00	Sheet Metal						
	24 gauge S.S Saddle flashings at roof details	5	ea.	250.00	\$ 1,250.00		
	Clean & reinstall copper gutter and downspouts	485	lf	22.00	\$ 10,670.00		
	Install new drip edge flashing at downslope roof edge	485	lf	19.00	\$ 9,215.00		
	4 lb. sheet lead flashings (each pipe penetration flashing)	5	ea.	50.00	\$ 250.00		
	07.6 Section Subtotal			\$	\$ 21,385.00	\$ 21,385.00	
	Subtotal of Reroofing Project					\$	\$ 423,498.50
Schematic Budget Cost Estimate for 2019 Reroofing Project							
Subtotal of Reroofing Project (from above)							
Mobilization and Demobilization		10%		\$	472,706.75	\$	423,498.50
Staging and Safety		5%		\$	47,270.68	\$	42,349.85
Overhead and Profit		10%		\$	23,635.34	\$	21,174.93
Construction Contingency		14%		\$	47,270.68	\$	42,349.85
				\$	66,178.95	\$	59,289.79
Schematic Reroofing Cost Estimate for 2019 Construction Cost							
				\$	657,062.38	\$	588,662.92



Schematic ROM Estimate-- Rainier School Roof Retrofit

2010 BUILDING - Center Gable Roof Area

Division	Description	Quantity	Unit	Unit Cost	Subtotals	Base Bid: Standing-Seam S.M. Reroofing	Options: New Clay Tile Roofing
Roofing Retrofit at 2010 Building - CENTER GABLE ROOF AREA							
02.070.00	Demolition						
	Remove existing interlocking clay tile roofing including underlayment	8791	sf	2.50	\$ 21,977.50	\$ 21,977.50	
	Remove water damaged wood decking (estimated at 20% of roof area)	1758	sf	2.75	\$ 4,834.50	\$ 4,834.50	
	Sheet metal valley liners	40	lf	3.00	\$ 120.00	\$ 120.00	
	Sheet metal flashings	220	lf	3.00	\$ 660.00	\$ 660.00	
	Remove gutters, label, and store for reuse	160	lf	2.00	\$ 320.00	\$ 320.00	
	Dumping fees	35	ton	300.00	\$ 10,500.00		
	02. Section Subtotal				\$ 38,412.00	\$ 27,912.00	
05.50.00	Metal Assemblies						
	Retrofit flashings at existing copper gable end fresh air intake louver	1	ea.	750.00	\$ 750.00	\$ 750.00	
	05. Section Subtotal				\$ 750.00	\$ 750.00	
06.10.00	Miscellaneous Carpentry						
	Wood framing repair (e.g., sistering with new attachment connectors) in attic	500	lf	26.00	\$ 13,000.00	\$ 13,000.00	
	Wood T&G Decking replacement (estimated at 20% of roof area)	1758	sf	8.00	\$ 14,064.00	\$ 14,064.00	
	3/8" Plywood sheathing overlayment (i.e., to provide smooth substrate)	8791	sf	4.00	\$ 35,164.00	\$ 35,164.00	
	06. Section Subtotal				\$ 62,228.00	\$ 62,228.00	
07.32.13	Steep-Slope Roofing Assembly						
	Installation of 2-ply underlayment system	8791	sf	4.50	\$ 39,559.50	\$ 39,559.50	
	Installation of new steep-slope sheet metal panel roofing system	8791	lf	28.00	\$ 246,148.00	\$ 246,148.00	
	Installation of new steep-slope roof system utilizing ALL NEW MCA OR OTHER MODERATE-PRICED CLAY TILE ROOFING	8791	sf	22.75	\$ 199,995.25	N/A	\$ 199,995.25
	07.3 Section Subtotal				\$ 285,707.50	\$ 285,707.50	
07.60.00	Sheet Metal						
	24 gauge S.S Saddle flashings at roof details	5	ea.	250.00	\$ 1,250.00		
	Clean & reinstall copper gutter and downspouts	160	lf	22.00	\$ 3,520.00		
	Install new drip edge flashing at downslope roof edge	160	lf	19.00	\$ 3,040.00		
	New receiver and counter-flashing at rising walls	60	lf	18.00	\$ 1,080.00		
	4 lb. sheet lead flashings (each pipe penetration flashing)	7	ea.	50.00	\$ 350.00		
	07.6 Section Subtotal				\$ 9,240.00	\$ 9,240.00	
	Subtotal of Reroofing Project					\$ 385,837.50	\$ 339,684.75
Schematic Budget Cost Estimate for 2019 Reroofing Project							
Subtotal of Reroofing Project							
Subtotal of Reroofing Project (from above)							
Mobilization and Demobilization				10%		\$ 385,837.50	\$ 339,684.75
Staging and Safety				5%		\$ 38,583.75	\$ 33,968.48
Overhead and Profit				12%		\$ 19,291.88	\$ 16,984.24
Construction Contingency				14%		\$ 46,300.50	\$ 40,762.17
						\$ 54,017.25	\$ 47,555.87
Schematic Reroofing Cost Estimate for 2019 Construction Cost						\$ 544,030.88	\$ 478,955.50

APPENDIX C: ADDITIONAL CAMPUS BUILDINGS IDENTIFIED WITH SEVERE WATER INTRUSION ISSUES NEEDING REPAIR, RETROFIT, AND REPLACEMENT

Along with the roof survey of the 2010 Building, Rainier School personnel and the State of Washington DSHS PM, provided a partial list of other campus buildings that have experienced severe long-term water intrusion issues. Although a survey has not been conducted to determine the leak sources and assessment of potential roofing and interior damages, this writer conducted an exterior walk-around survey to photograph exterior conditions in order to compile a partial list of other campus buildings requiring additional survey and condition assessment work. BET&R can assist Rainier School and the DSHS with preparing a prioritized list of repair, retrofit, or reroofing projects following more in-depth survey and analysis of these and other buildings. The following set of photos identifies and provides a brief description of the individual buildings including preliminary information related to the subject buildings and potential prioritization of importance.

In general, the campus buildings that have low-slope roof areas are currently roofed with aged, single-ply roof membranes that are at the end of their useful service life. From previous surveys on other buildings, and reports from Rainier School personnel, the existing low-slope roof areas consist of a Hypalon single-ply roofing membrane. It appears that many of these low-slope roof membranes were installed at least 20-30 years ago, have reached the end of their service life, and are in need of replacement in the near future as budget allows. As Hypalon ages, the roof membrane surface coating typically deteriorates, exposing the internal reinforcing scrim within the single-ply membrane sheet, which may allow rain water to wick into and through the roofing membrane system. It is recommended that these single-ply roof membranes be replaced before complete failure of the aged membranes occur. BET&R recommends replacement of the single-ply roof membranes with a multiple-ply SBS-modified asphalt roof membrane system. We have successfully reroofed the low-slope roof area at the Auditorium in 2017 with a multi-ply SBS-modified asphalt roofing membrane system, manufactured by Soprema, that is economical and could serve as a baseline benchmark roofing system that Rainier School could rely on for many years of weather and water-tight service. With proper maintenance and application of a coating system at appropriate intervals of the service life, multiple-ply SBS-modified asphalt roofing membranes are capable of providing 40-plus years of successful service life.

For campus buildings with steep-slopes roofs consisting of clay roofing tiles, BET&R has successfully worked with Rainier School to reroof buildings, including the steep-slope portions of the Auditorium Building, or repaired select portions of the roofs by carefully removing existing pan-and-cover clay tile roofing, conducting repairs as needed, and then installing a new underlayment system followed by reinstalling the existing clay roof tiles. This has proved to be an effective method to repair and renew the older pan-and-cover clay tile roof areas. We have also replaced building roofs and select roof areas with SBS-modified asphalt shingles, and have also considered sheet metal panel standing seam roof systems for potential roof replacement.

Depending on the building and existing roof system on specific campus buildings, appropriate cost-effective, long-term roofing system can be selected, designed, and installed to extend the service life of these campus buildings. The high-quality original construction for the older campus buildings is evident and with economical roof repair and replacement projects, where needed, the buildings can remain functional for many more years. Conducting roof repairs and replacement before further water-damage, decay, and deterioration occurs is critical to preserve the buildings and is a prudent use of resources as future repair and replacement costs will only escalate as deterioration persists and is allowed to continue. Having a leak-free roof system is one of the first and most critical building envelope components that needs to be maintained to sustain the service life of any building, as roofs are the first line of defense in the Pacific Northwest's often rainy, temperate climate.



Figure 1 -- In this overview map, campus buildings photographed for this appendix have been identified for reference.

HURLBERT HALL

Hurlbert Hall is one of the original core campus building at Rainier School. It has been reported that water-intrusion and leaking has been a long-term problem for this building. During previous retrofit attempts, the section of roofing on the north wing of the building had the original pan-and-cover clay roofing tiles removed and replaced with an asphalt shingle roof system. Water intrusion has continued, and it is our opinion that extensive roof repairs and replacement is critically needed to prolong the service life of this significant campus building.



Photo No. 1 - Hurlbert Hall

View of the main south-facing entry and elevation of Hurlbert Hall.



Photo No. 2 - Hurlbert Hall

Photo of Hurlbert Hall looking southeast from the backside of the building. The arrows identify the north gable end wing of the building that has been reroofed with asphalt shingles during previous repair projects. Reroofing is recommended to preserve this architecturally significant building for the Rainier School campus.

MAIN KITCHEN BUILDING

The Kitchen Building, located at the center of the campus, provides the main food service functions for the Rainier School campus. The south end of the building consists of a steep-slope pan-and-cover clay tile roof system and the northern half of the building is a mix of steep-slope clay tile roof area at the perimeter, and larger low-slope roof areas at the central roof areas. It was reported that the existing low-slope roof membranes are Hypalon, consistent with those observed at other campus buildings. Persistent water-intrusion has been reported at this building. Providing a leak free and watertight building envelope system is needed for this critical food preparation facility.



Photo No. 3 - Main Kitchen Building

Overview from the north showing the perimeter steep-slope mansard style roof areas with pan-and-cover clay tiles with the low-slope roof areas located near the center of the building.



Photo No. 4 - Main Kitchen Building

Photo of the south side of the building where the café is located. The ornate concrete exterior walls are roofed with a steep-slope pan-and-cover clay roofing tile system, similar to other buildings.

MAINTENANCE BUILDING

Similar to the older, original campus buildings, the Maintenance Building is a largely composed of concrete. The existing low-slope roof membrane is reportedly an aged single-ply Hypalon roofing membrane. Rain water leaks have been reported at numerous areas and it is our opinion that due to the age, existing membrane condition, and reports of water intrusion, it is prudent to consider roof replacement with a new multiple-ply roofing membrane system. This Project Team has successfully designed, specified, and administered the construction phase and installation, in conjunction with qualified roofing contractors, with a new low-slope multiple-ply SBS-modified asphalt roofing membrane system. Replacement of the aged single-ply Hypalon roof membranes should be prioritized as high importance.



Photo No. 5 - Maintenance Building

Overview looking east towards the Maintenance Building.



Photo No. 6 - Maintenance Building

Photo depicting the series of low-slope roof areas needing replacement prior to failure of the existing roof membrane system. The building currently experiences rain water intrusion leaks at several locations.

POWER HOUSE

The Power House also consists of a single-ply Hypalon roofing membrane at the various roof levels of the building. Although we have not closely surveyed the roof areas, it is evident from a distance that the existing roof membrane has deteriorated and is in need of replacement. Providing power to the campus, this building serves a critical function for the entire facility.



Photo No. 7 - Power House Building

Overview from the P-43 Building looking southwest towards the Power House. The low-slope single-ply Hypalon membrane was extended and rolled over the perimeter edge of the identified roof area. Visual evidence, even from this distance, showed that the existing membrane is aged, has deteriorated, and is recommended for replacement, as the membrane has reached the end of its useful service life.



Photo No. 8 - Power House Building Low-Slope Roof

Close-up view of the existing single-ply Hypalon membrane at the east end roof area, identified above. Areas of ponding are evident and the edge of the membrane shows signs of deterioration and is recommended for replacement.

COMMISSARY BUILDING

The Commissary Building serves as the primary warehouse and distribution facility for goods and services for the clients of Rainier School. The roof is reported to also consist of a single-ply Hypalon membrane at the upper low-slope roof area. Although the roofing membrane has not been surveyed, we believe that the age and condition of the membrane is likely consistent with other low-slope roof systems on other buildings.



Photo No. 9 - Commissary Building

Overview showing the south and west elevations of the Commissary Building. The concrete-farmed exterior of the building is part of the original campus buildings.



Photo No. 10 - Commissary Building

Photo depicting the north elevation of the Commissary Building.

LAUNDRY BUILDING

The Laundry Building consist of the original two-story building, and has been surrounded by a lower one-story addition during a later construction project. It appears that both the lower and upper roof areas consist of a single-ply Hypalon roof membrane. Although the roofing membrane has not been surveyed at this building, we believe that the age and condition of the membrane is likely consistent with other low-slope roof systems on other buildings. It has been reported that the Rainier School Laundry Building provides laundry services for Rainier School along with at least two other state facilities.



Photo No. 11 - Laundry Building

Overview showing the original two-story Laundry Building near the center and later one-story addition that surrounds the original building.



Photo No. 12 - Laundry Building

Photo looking northwest towards the Laundry Building. The later single-story addition that surrounds the original building appears to have been constructed of tilt-up concrete wall panels and low-slope roof areas.

CARPENTRY SHOP

The Carpentry Shop is currently roofed with a low-slope sheet metal panel standing seam roof system. Numerous interior leaks have been reported and are recommended to be addressed. Additional survey is needed to better understand the source or water intrusion to assist with proper design and specification of roofing related repairs.



Photo No. 13 - Carpentry Shop

Overview depicting the existing Carpentry Shop at Rainier School showing the low-slope roof profile at the gable end.



Photo No. 14 - Carpentry Shop Interior

Several interior leak locations were reported. This photo shows interior ceiling damage due to on-going water intrusion.

ADLER HALL AND OTHER BUIDLINGS WITHIN THIS RESIDENTIAL QUAD

BET&R has been privileged to work on a number of buildings on the Rainier School campus, providing us with valuable experience and technical information specifically related to the building envelope systems of these historic buildings as well as the construction methods and structural framing systems observed on other buildings. Our history on-site includes work on the following buildings.



Photo No. 15 - Adler Hall and other Residence Buildings

Photo depicting extensive roof damage at Adler Hall. Reroofing and replacement of damaged roof structure members is recommended for this building and the other buildings that create a four-building quad. While roof replacement work may be extensive, the high-quality construction of the main building structure is worth protecting on our opinion.



Photo No. 16 - Adler Hall and other Residence Buildings

Photo provided by the State of Washington from the attic spaces within these residential buildings. Note that the tongue-and-groove roof decking runs parallel with the slope of the roof. It is likely that much of the damage and decay is isolated to the roof decking and the primary, large-dimension wood framed structural support members remain largely intact and serviceable for reroofing.

MOTOR POOL BUILDING

The Motor Pool, similar to the original roof system of the recently reroofed P-43 Maintenance Building, consists of sheet metal panel roofing system. Water intrusion leaks have been reported and should be addressed as budget allows for the campus.



Photo No. 17 - Motor Pool Building

Photo from the P-43 Building looking east towards the Motor Pool Building.

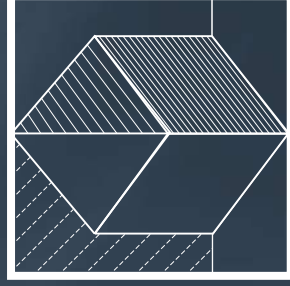


Photo No. 18 - Motor Pool Building

View showing the west and south elevations to the Motor Pool Building.

SURVEY FINDINGS & RECOMMENDATIONS

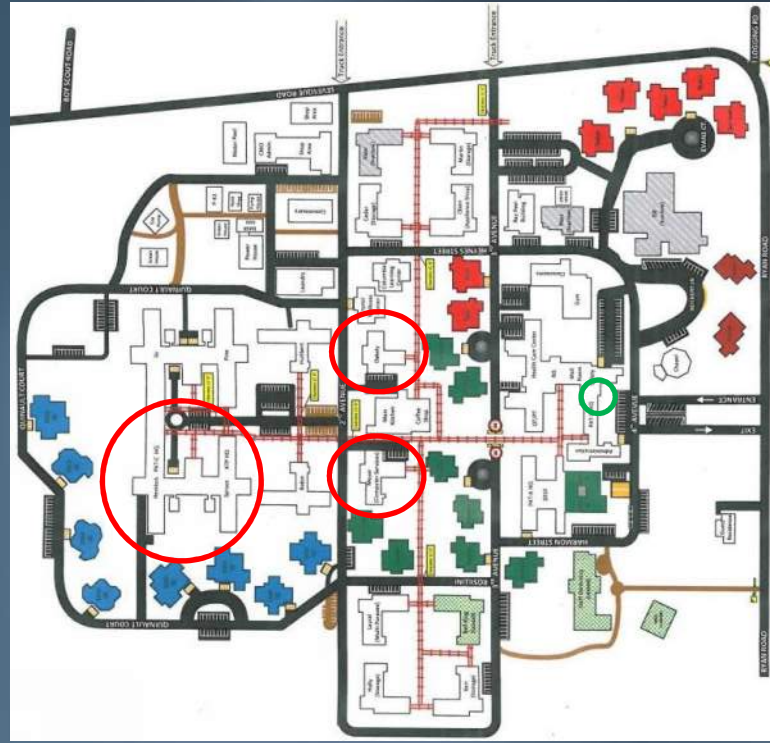
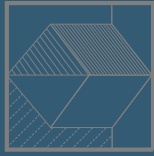
RAINIER SCHOOL – BUCKLEY, WA OAKLEY HALL AND MEYER HALL ROOFING REPAIRS AND HEMLOCK-SPRUCE HALL PARTIAL REROOFING AND REPAIR PROJECT



Building Envelope Technology & Research

Roofing, Waterproofing, Cladding, and Fenestration Consultants, Architects, Testing, & Research

AUDITORIUM BUILDING & ROOF AREA OVERVIEW



Overview showing the general layout of the Rainier School Campus.



HEMLOCK -
SPRUCE HALL

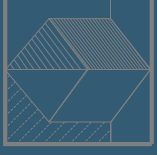


OAKLEY HALL



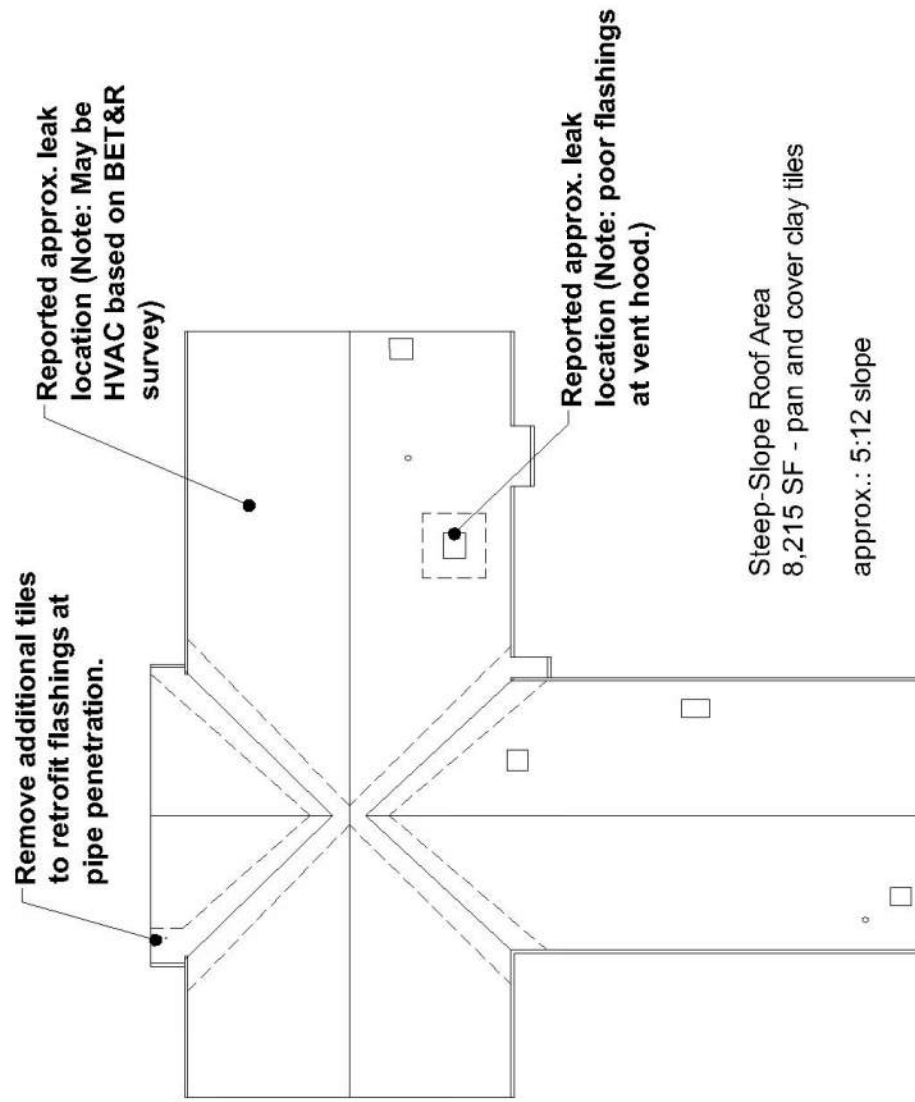
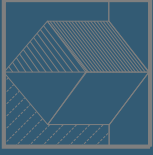
MEYER HALL

OAKLEY HALL-- OVERVIEW



Overview of Conditions at Oakley Hall
Reports of water intrusion primarily appear to be related to aged valley flashing conditions and defective flashings at select HVAC related penetrations.

OAKLEY HALL ROOF PLAN



OAKLEY HALL -- ROOF PLAN

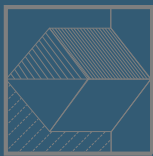
1/8" = 1' - 0"



NORTH

OAKLEY HALL ---

GENERAL ROOF FINDINGS AND CONDITIONS



Overview of Oakley Hall pan-and-cover clay tile roofing and general survey findings.

OAKLEY HALL

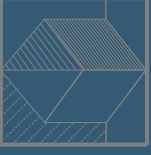


View of water staining on underside of wood car decking from attic space



Deficient lead flashing at soil stack pipe penetration

OAKLEY HALL

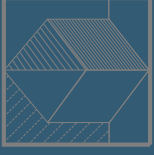


Depicts generally dry and good condition of 2x car decking and wood-framed structure



While the roofing structure appears dry, water intrusion as reported in an office below select HVAC units. The leak in office 128 appears to be related to this HVAC unit.

OAKLEY HALL- VENT HOOD FLASHINGS



Photos of conditions at HVAC Hood at related leak location where curb not correctly flashed.

OAKLEY HALL- VALLEY FLASHINGS



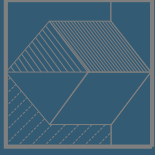
Photos of conditions at typical valley

OAKLEY HALL- PIPE PENETRATION FLASHINGS



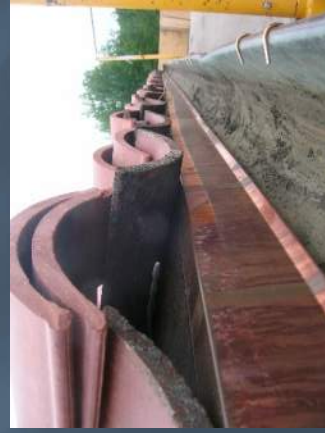
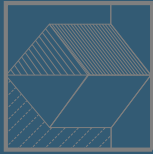
Photos of conditions at pipe penetration near northwest corner of building

OAKLEY HALL- DOWNSLOPE EAVE EDGE CONDITIONS



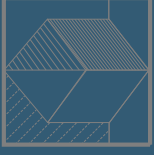
Photos of conditions at downslope eave edge flashings.

GYMNASIUM REROOFING PROJECT SAMPLE PHOTOS – DOWNSLOPE EAVE EDGE CONDITIONS



Gymnasium/Office Wing downslope eave edge at retrofit copper gutters.

OAKLEY HALL – BROKEN AND DEGRADED TILES

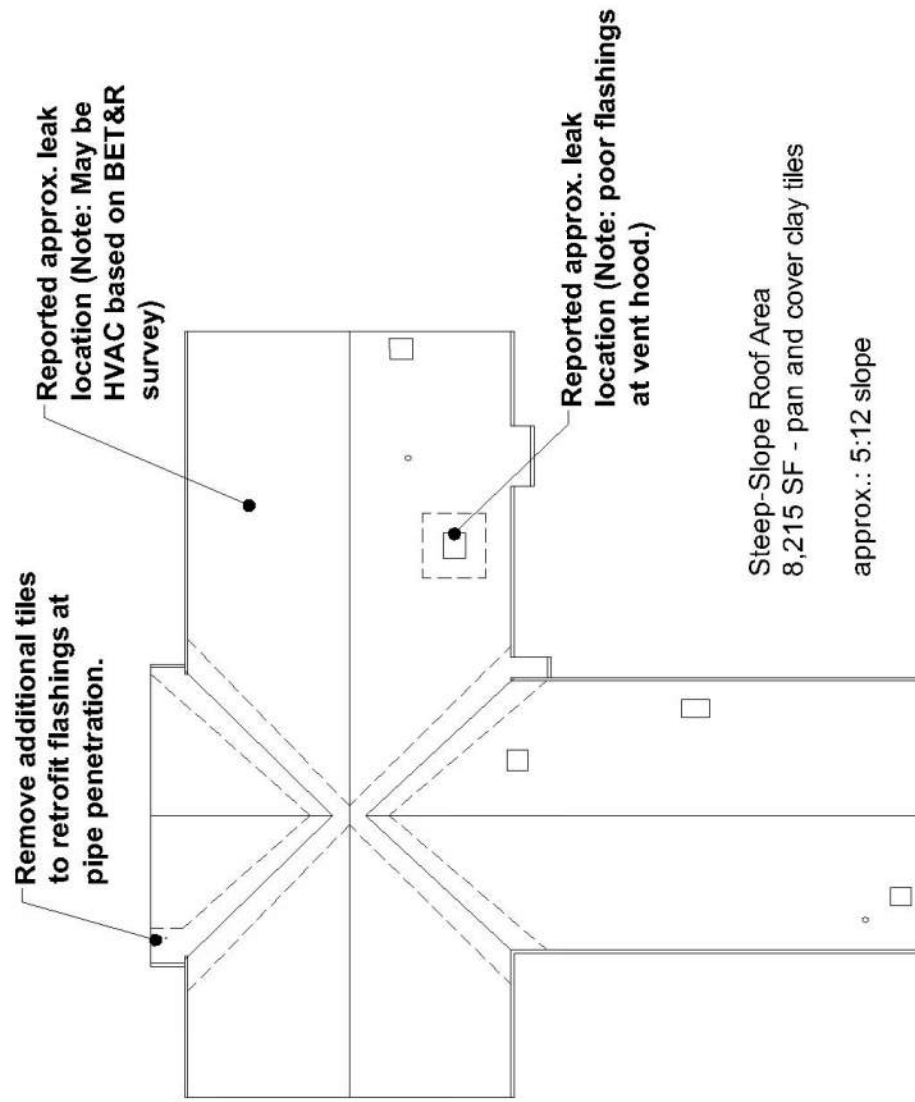
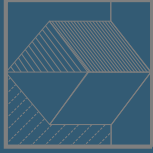


View of broken clay tile needing replacement



Apparent freeze-thaw damage eroding edges of select clay tiles

OAKLEY HALL ROOF PLAN AND GENERAL REPAIR RECOMMENDATIONS



OAKLEY HALL -- ROOF PLAN
1/8" = 1' - 0"

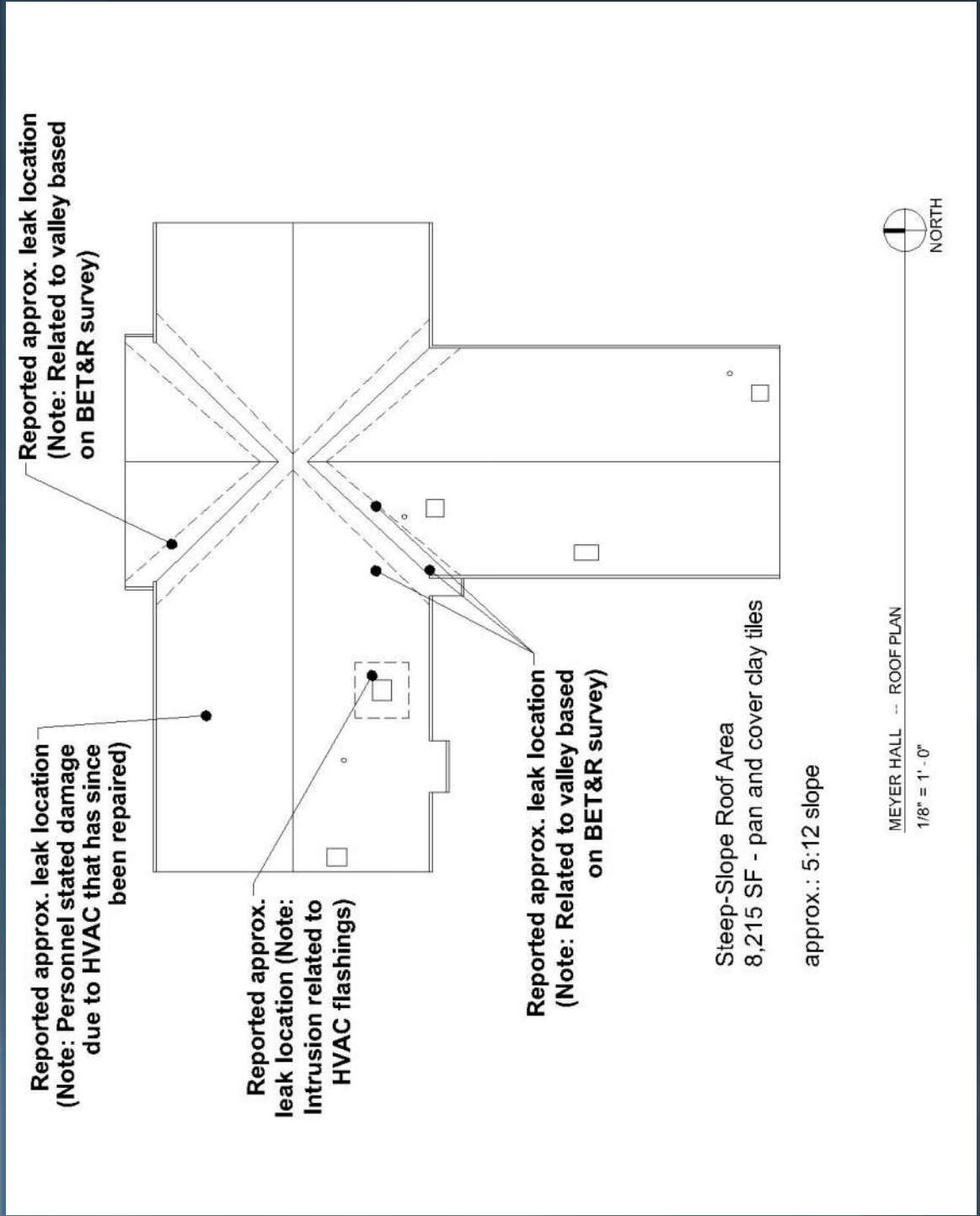


MEYER HALL-- OVERVIEW



Overview of Conditions at Meyer Hall
Reports of water intrusion also appear to be primarily related to valley flashing conditions and flashings at select HVAC units' penetrations.

MEYER HALL ROOF PLAN AND GENERAL REPAIR RECOMMENDATIONS



MEYER HALL – WET AND WATER STAINED DECKING NEAR VALLEYS

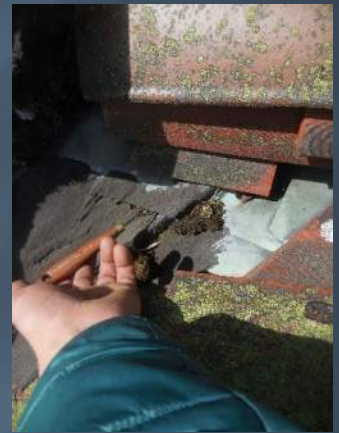
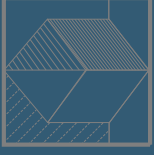


View of water stained and decayed car decking and adjacent framing members at a valley transition.



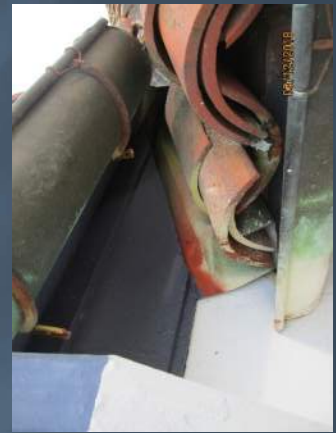
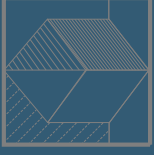
Placement of buckets to collect rain water run-off leaks. Note: insulation has been displaced on concrete ceiling due to previous water intrusion.

MEYER HALL- ROOFING OVERVIEW



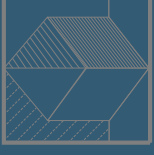
Overview of Roof Level Conditions

MEYER HALL- VALLEY CONDITIONS



Overview of Roof Level Valley Conditions

MEYER HALL – BROKEN AND MISPLACED TILES



View of broken clay tile needing replacement



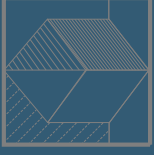
Misplaced tiles at valley-to-ridge transitions.

MEYER HALL- VENT HOOD FLASHINGS



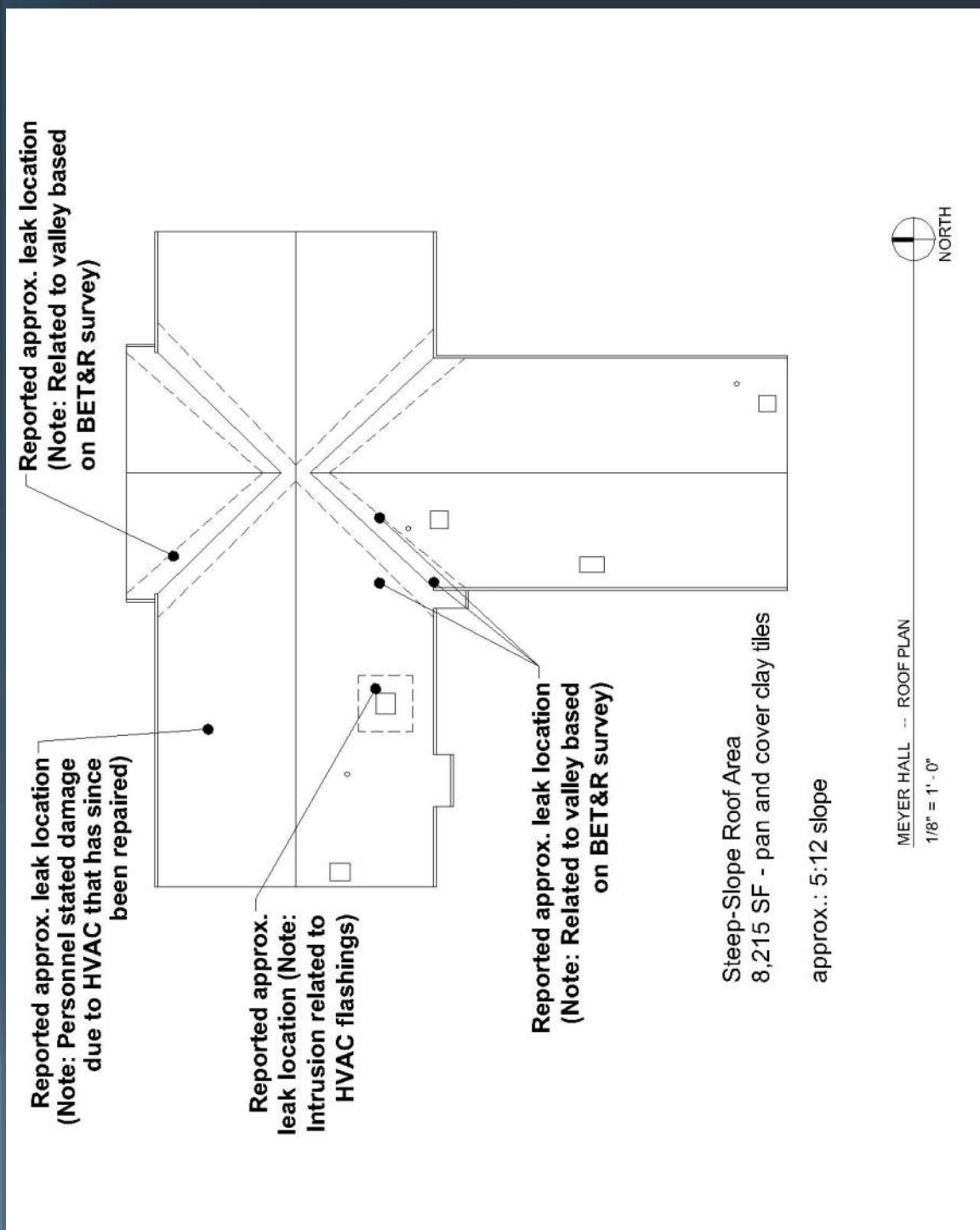
Photos of flashing conditions at typical HVAC Hood.

MEYER HALL- DOWNSLOPE EAVE EDGE CONDITIONS

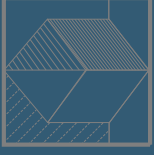


Photos of conditions at downslope eave edge flashings.

MEYER HALL ROOF PLAN AND GENERAL REPAIR RECOMMENDATIONS



GYMNASIUM REROOFING PROJECT SAMPLE PHOTOS – TYPICAL DETAIL CONDITIONS AT VALLEYS & TRANSITIONS



Gymnasium/Office Wing Reroofing Project Sample
Photos of typical details.

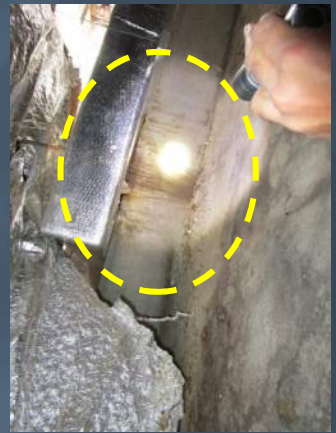
HEMLOCK-SPRUCE- OVERVIEW OF ROOF CONDITIONS



Overview of Conditions at hemlock-Spruce Hall
The existing 3-tab asphalt shingles appear to be approaching 26+ years of service life, are cracking and are generally in need of replacement.



HEMLOCK-SPRUCE- CONDITIONS AT CUPOLAS



General Conditions at Cupolas

Water intrusion appears to be occurring at roof-to-wall transition at areas related to valley flashings.

HEMLOCK-SPRUCE- REPORTED LEAK LOCATIONS



Water Intrusion Beneath Woven Valleys
Water intrusion reported in hallway near wood shop appears to be emanating from asphalt shingle woven valley.

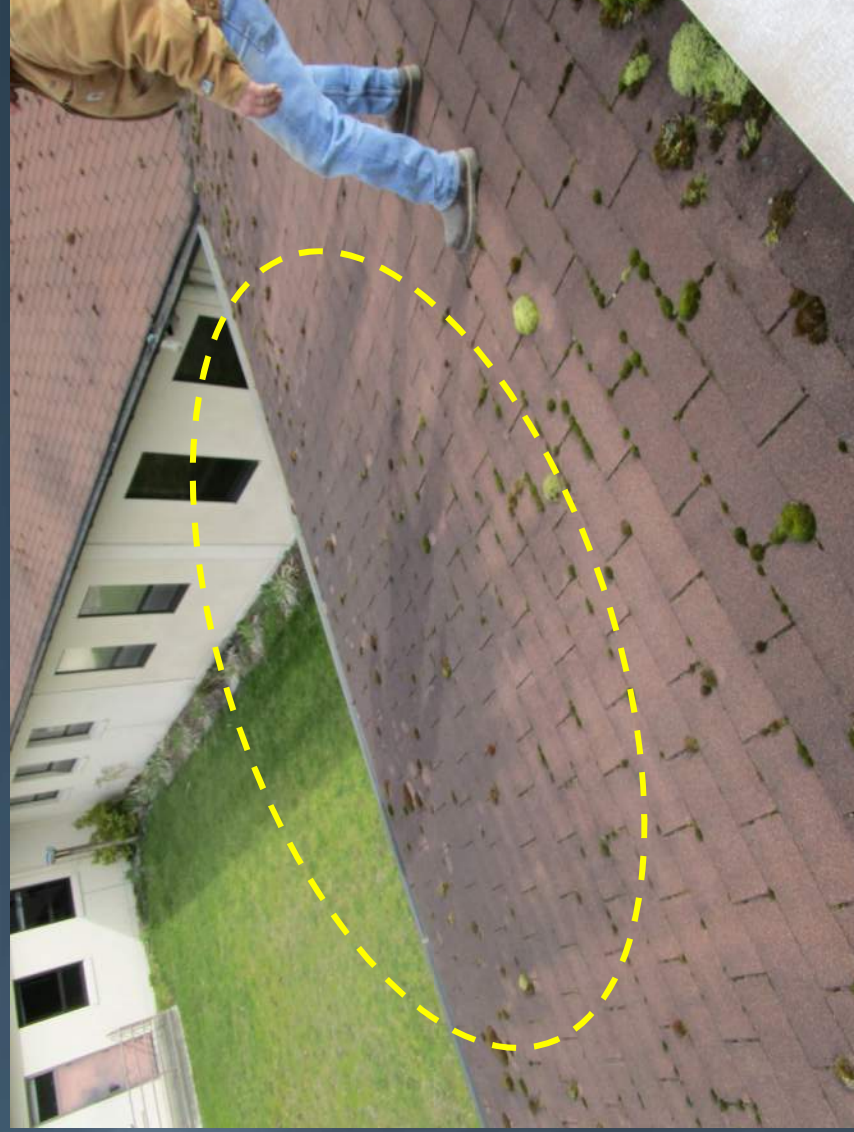


HEMLOCK-SPRUCE- REPORTED LEAK LOCATIONS



Water Intrusion at Valley-to-Roof Transition at Art Room
Water intrusion reported in the Arts Classroom appears to be related to valley-to-intersecting roof transition. ²⁹

HEMLOCK-SPRUCE- REPORTED DECAYED SHEATHING



Soft, Decayed Sheathing Beneath Shingles
Although no interior leaks have been reported at this area, the sheathing is decayed / degraded and quite soft. Replacement of sheathing is needed.

HEMLOCK-SPRUCE- SHINGLE CONDITION



Overall Condition of Existing 3-tab Asphalt Shingles
The existing 3-tab asphalt shingles are generally in poor condition. Extensive granule loss is widespread with reinforcing degrading from long-term exposure.

HEMLOCK-SPRUCE- CONDITIONS AT CUPOLA



General Conditions at Cupolas

Water intrusion appears to be occurring at roof-to-wall transition at areas related to valley flashings.

HEMLOCK-SPRUCE- CONDITIONS AT CUPOLA



General Conditions at Cupolas
Stucco repairs and proper integration with weather-resistive barrier are needed as part of the retrofit of roof-to-wall flashing details.

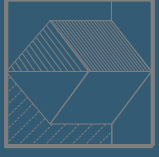


HEMLOCK-SPRUCE- RIDGE VENT OBSERVATIONS



General Conditions at Ridge Vents

Wood-framed ridge vents have experienced shingles being blown off and are susceptible to water intrusion and wind-driven rain.



HEMLOCK-SPRUCE- SOFFIT VENT OBSERVATIONS



General Conditions at Soffit Vents

Downslope eave in-take air ventilation provided by intermittent 6" diameter soffit vents at some locations, and strip vents at others.

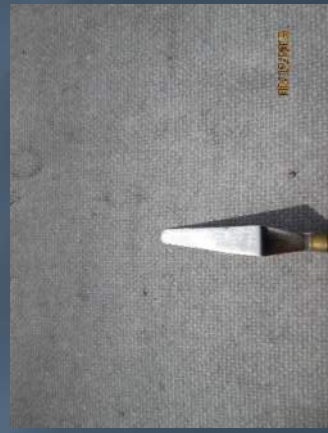
HEMLOCK-SPRUCE- SHINGLE TEST OPENING



Observations at Test Opening

Select shingles were carefully removed, which revealed just one layer of No. 15 asphalt-saturated underlayment over plywood sheathing.

HEMLOCK-SPRUCE- LOW-SLOPE ROOF OBSERVATIONS



General Conditions at Low-Slope Roof Areas

Debris needs to be removed from the roof areas. We believe the life of the membrane can be extended with careful cleaning, proper prep, priming, and polyurethane coating application.

HEMLOCK-SPRUCE- LOW-SLOPE ROOF OBSERVATIONS



General Conditions at Low-Slope Roof Areas

Debris needs to be removed from the roof areas. We believe the life of the membrane can be extended with careful cleaning, prep, and coating application.

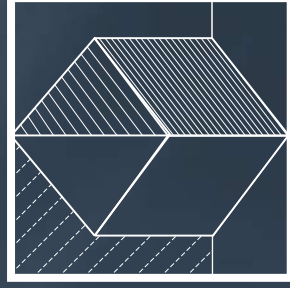
38



RAINIER SCHOOL – REROOFING AND REPAIR PROJECT

Questions? Open for Discussion

Please contact BET&R with any questions, comments, or concerns.



Building Envelope Technology & Research

Roofing, Waterproofing, Cladding, and Fenestration Consultants, Architects, Testing, & Research

Capital Project Request

2019-21 Biennium

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Version: NN 2020 Supplemental - Working Version

Report Number: CBS002

Date Run: 9/18/2019 9:15PM

Project Number: 30003234

Project Title: DOC/DSHS McNeil Island-Main Dock: Float & Dolphin Replacement

Description

Starting Fiscal Year: 2021

Project Class: Preservation

Agency Priority: 3

Program: 135

Project Summary

The Main Dock at McNeil Island is the primary loading point for all staff and visitors traveling to and from the Special Commitment Center. The existing float is cracked and damaged beyond repair. This project replaces the damaged float and pilings with a one-piece concrete float with heavy-duty fenders to accommodate the larger ferries and the smaller patrol boats.

Project Description**1. WHAT IS THE PROBLEM OR OPPORTUNITY?**

The Special Commitment Center (SCC) houses civilly committed sexually violent predators in two facilities on McNeil Island - the Total Confinement Facility and the Pierce County Secure Community Transition Facility. Passenger ferries, operated by the Department of Corrections (DOC) transport staff and visitors to and from the island. A safe and reliable dock is required to on/off load DSHS and DOC employees who ferry to McNeil Island for the SCC's daily operations several times a day, every day.

The Main Dock is supported on pilings and extends 600 feet from the shore into Puget Sound. A gangplank extends about 35 feet from the dock to a concrete float platform that rises and falls with the tide, held in position by dolphins (pilings extending above the high tide level). The passenger ferries tie-up to the float to load and unload passengers. Steel fenders with rubber padding are located at the edge of the float and act as bumpers to keep the ferry from hitting the float.

The float is more than 20 years old, in poor condition, and incorrectly sized for the larger passenger ferries currently serving the island. Severe winter storms have cracked the sides and top of the float and the fenders are separating from the concrete deck, creating a hazard for docked ships. The top of the dock is full of holes from previous fender repairs and there are very few structurally stable places on the dock to attach new fenders. Previously, cracks and leaks have temporarily closed access to the float. The condition of the float is beyond repair and the float needs to be replaced.

When the main dock is out of service, the passenger ferries are detoured to the Still Harbor dock several miles away on the northeast side of the island. This detour adds 15 minutes to the commute, consuming more fuel, and adversely impacting staff shift change schedules.

2. WHAT IS THE PROJECT?

This project replaces the float at the Main Dock and the two northeast pilings. The new float will be built with one-piece concrete construction with heavy duty fenders to berth the large passenger ferries and the patrol boats. The two deteriorated pilings will be removed and replaced with new pilings. Fenders will be installed on all sides to berth the smaller patrol and rescue boats opposite of the ferry.

3. HOW DOES THE PROJECT ADDRESS THE PROBLEM OR OPPORTUNITY?

The project replaces the existing deteriorated and broken concrete float with a new concrete float right-sized for the larger ferries. The new float assures safe ferry berthing, protects the ferries from impact damage, and improves passenger safety. The new float will perform better during severe weather and better support reliable daily transportation of passengers to and from McNeil Island in support of the SCC's daily operations.

4. WHAT ALTERNATIVES WERE EXPLORED?**1. Do Nothing**

The existing conditions are not sustainable. This alternative was rejected because the float at the Main Dock is beyond repair.

Capital Project Request

2019-21 Biennium

*

Version: NN 2020 Supplemental - Working Version

Report Number: CBS002

Date Run: 9/18/2019 9:15PM

Project Number: 30003234

Project Title: DOC/DSHS McNeil Island-Main Dock: Float & Dolphin Replacement

Description

The dock is incorrectly sized for the existing ferries which compounds the fenders inability to adequately protect the ship from damage at the concrete float.

2. Use the Still Harbor Dock in lieu of the Main Dock

Still Harbor, including Gertrude Island, is a protected seal habitat and rookery. Though the Still Harbor dock is the only alternative landing option during construction in the Main Dock, this option was rejected because federal deed restrictions limit use of the Still Harbor dock to emergency weather situations. Additionally, the Still Harbor dock is located several miles further from the mainland than the Main Dock, requiring an additional 15 minutes of travel time which consumes more fuel and adversely impacts staff shift change schedules.

3. Repair the Float at the Main Dock - Preferred Option

This option is the most efficient transportation option and assures continued passenger service to McNeil Island for many years into the future.

5. WHO BENEFITS FROM THE PROJECT?

SCC residents, SCC visitors, and DSHS and DOC staff benefit from a safer dock, especially during inclement weather. DOC will also benefit from reduced damages and repairs to both the passenger ferries, the float, and the fenders.

6. WILL OTHER FUNDING BE USED TO COMPLETE THE PROJECT?

No. DOC/DSHS request funding from the State Building Construction Account - Fund 057-1.

7. HOW DOES THIS PROJECT SUPPORT THE DSHS STRATEGIC PLAN OR IMPROVE AGENCY PERFORMANCE?

At DSHS, we transform lives. We created our current Strategic Plan to set measurable goals to ensure DSHS serves our clients and Washington State to the best of our ability. The following strategic objectives have impacts on our 2,100 clients in residential care and the 6,800 staff working in our hospitals, residential habilitation centers, institutions, and community facilities:

Each strategic objective in this strategic plan supports one or more of the five broad goals for DSHS:

- + Health: Each individual and each community will be healthy.
- + Safety: Each individual and community will be safe.
- + Protection: Each individual who is vulnerable will be protected.
- + Quality of Life: Each individual in need will be supported to attain the highest possible quality of life.
- + Public Trust: Strong management practices will ensure quality and efficiency.

In addition, each strategic objective supports one of the Secretary's strategic priorities:

- + Prepare for aging Washingtonians
- + Support people in our care and custody
- + Serve people in their home community
- + Provide a pathway out of poverty and become healthier
- + Increase organizational efficiency, performance and effectiveness

Both the DSHS goals and Secretary's priorities align with:

- + Results Washington's objective of better results for Washingtonians
- + Governor's goal of Healthy and Safe Communities
- + Governor's goal of Efficient, Effective, and Accountable Government

Capital Project Request

2019-21 Biennium

*

Version: NN 2020 Supplemental - Working Version

Report Number: CBS002

Date Run: 9/18/2019 9:15PM

Project Number: 30003234

Project Title: DOC/DSHS McNeil Island-Main Dock: Float & Dolphin Replacement

Description

This project replaces the float and dolphins at the main dock to assure safe and reliable passenger ferry service to McNeil Island. This marine facility supports a variety of DOC and DSHS activities and can be directly or indirectly tied to the following Results Washington objectives:

Goal 2: Prosperous Economy - Sustainable, Efficient Infrastructure

3.1) Maintain the percent of Washington infrastructure assets in satisfactory condition.

Goal 4: Healthy and Safe Communities – Healthy People

2.3) Public: Decrease rate of return to institutions for offenders.

2.5) Worker Safety: Decrease workplace injury rates that result in missing three or more days from work.

Goal 5: Efficient, Effective, and Accountable Government – Customer Satisfaction and Employee Engagement

1.3) Customer Satisfaction: Increase Washington as an employer of choice.

8. DOES THE PROJECT HAVE IT-RELATED COSTS?

No.

9. IS THIS PROJECT LINKED TO THE PUGET SOUND ACTION AGENDA?

No, though the project is located in Puget Sound.

10. HOW DOES THIS PROJECT CONTRIBUTE TO THE STATEWIDE GOALS TO REDUCE CARBON POLLUTION AND/OR IMPROVE ENERGY EFFICIENCY?

The passenger ferries burn diesel fuel which contributes to carbon pollution. Having a reliable float at the Main Dock avoids the need for emergency docking at Still Harbor, several miles away, thus avoiding additional carbon pollution.

11. WHAT ELSE SHOULD DECISION MAKERS KNOW TO EVALUATE THIS FUNDING REQUEST?

The Special Commitment Center is located on McNeil Island for the care and treatment of sexually violent predators. The Department of Corrections, through Correctional Industries, provides maintenance and operations support for the island including marine services, water treatment, wastewater treatment, and fuel receipt and delivery. This project is submitted jointly by DOC and DSHS so that essential services provided by DOC to DSHS can be sustained for the long-term operation of the SCC program.

Photos showing the main dock in severe weather conditions are attached in CBS. These pictures can also be found here:

<https://www.dshs.wa.gov/ffa/office-capital-programs>

Location

City: Unincorporated

County: Pierce

Legislative District: 028

Project Type

Infrastructure (Major Projects)

Remodel/Renovate/Modernize (Major Projects)

Growth Management impacts

This project will not change census capacity or the number of facility staff. No Growth Management impacts are anticipated.

Funding

Capital Project Request

2019-21 Biennium

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Version: NN 2020 Supplemental - Working Version

Report Number: CBS002

Date Run: 9/18/2019 9:15PM

Project Number: 30003234

Project Title: DOC/DSHS McNeil Island-Main Dock: Float & Dolphin Replacement

Funding

Acct Code	Account Title	Estimated Total	Expenditures		2019-21 Fiscal Period	
			Prior Biennium	Current Biennium	Reappropriates	New Appropriates
057-1	State Bldg Constr-State	3,085,000				3,085,000
	Total	3,085,000	0	0	0	3,085,000

		Future Fiscal Periods			
		2021-23	2023-25	2025-27	2027-29
057-1	State Bldg Constr-State				
	Total	0	0	0	0

Operating Impacts

No Operating Impact

Narrative

This project addresses the preservation of existing facilities. This project adds no new square footage and no additional operating budget FTEs.

STATE OF WASHINGTON
AGENCY / INSTITUTION PROJECT COST SUMMARY

Updated July 2019

Agency	DOC/DSHS	
Project Name	McNeil Island-Main Dock: Float & Dolphin Replacement	
OFM Project Number	30003234	

Contact Information

Name	Aaron Young	
Phone Number	(360) 489-5880	
Email	aaron.young@des.wa.gov	

Statistics

Gross Square Feet	800	MACC per Square Foot	\$2,031
Usable Square Feet	800	Escalated MACC per Square Foot	\$2,402
Space Efficiency	100.0%	A/E Fee Class	A
Construction Type	Other Sch. A Projects	A/E Fee Percentage	14.24%
Remodel	Yes	Projected Life of Asset (Years)	

Additional Project Details

Alternative Public Works Project	No	Art Requirement Applies	No
Inflation Rate	3.18%	Higher Ed Institution	No
Sales Tax Rate %	7.90%	Location Used for Tax Rate	McNeil Island
Contingency Rate	10%		
Base Month	July-16		
Project Administered By	Agency		

Schedule

Predesign Start		Predesign End	
Design Start	August-20	Design End	April-21
Construction Start	July-21	Construction End	June-22
Construction Duration	11 Months		

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Project Cost Estimate

Total Project	\$2,615,789	Total Project Escalated	\$3,085,000
		Rounded Escalated Total	\$3,085,000

STATE OF WASHINGTON
AGENCY / INSTITUTION PROJECT COST SUMMARY

Updated July 2019

Agency	DOC/DSHS	
Project Name	McNeil Island-Main Dock: Float & Dolphin Replacement	
OFM Project Number	30003234	

Cost Estimate Summary

Acquisition			
Acquisition Subtotal	\$0	Acquisition Subtotal Escalated	\$0

Consultant Services			
Predesign Services	\$0		
A/E Basic Design Services	\$175,633		
Extra Services	\$50,926		
Other Services	\$78,907		
Design Services Contingency	\$30,547		
Consultant Services Subtotal	\$336,013	Consultant Services Subtotal Escalated	\$390,049

Construction			
Construction Contingencies	\$162,500	Construction Contingencies Escalated	\$192,807
Maximum Allowable Construction Cost (MACC)	\$1,625,000	Maximum Allowable Construction Cost (MACC) Escalated	\$1,921,688
Sales Tax	\$141,213	Sales Tax Escalated	\$167,046
Construction Subtotal	\$1,928,713	Construction Subtotal Escalated	\$2,281,541

Equipment			
Equipment	\$0		
Sales Tax	\$0		
Non-Taxable Items	\$0		
Equipment Subtotal	\$0	Equipment Subtotal Escalated	\$0

Artwork			
Artwork Subtotal	\$0	Artwork Subtotal Escalated	\$0

Agency Project Administration			
Agency Project Administration Subtotal	\$167,064		
DES Additional Services Subtotal	\$0		
Other Project Admin Costs	\$0		
Project Administration Subtotal	\$167,064	Project Administration Subtotal Escalated	\$198,222

Other Costs			
Other Costs Subtotal	\$184,000	Other Costs Subtotal Escalated	\$215,188

Project Cost Estimate

Total Project	\$2,615,789	Total Project Escalated	\$3,085,000
		Rounded Escalated Total	\$3,085,000

Cost Estimate Details

Acquisition Costs						
Item	Base Amount		Escalation Factor	Escalated Cost	Notes	
Purchase/Lease						
Appraisal and Closing						
Right of Way						
Demolition						
Pre-Site Development						
Other						
Insert Row Here						
ACQUISITION TOTAL	\$0		NA	\$0		

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Cost Estimate Details

Consultant Services				
Item	Base Amount	Escalation Factor	Escalated Cost	Notes
1) Pre-Schematic Design Services				
Programming/Site Analysis				
Environmental Analysis				
Predesign Study				
Other				
Insert Row Here				
Sub TOTAL	\$0	1.1365	\$0	Escalated to Design Start
2) Construction Documents				
A/E Basic Design Services	\$175,633			69% of A/E Basic Services
Other				
Insert Row Here				
Sub TOTAL	\$175,633	1.1484	\$201,697	Escalated to Mid-Design
3) Extra Services				
Civil Design (Above Basic Svcs)				
Geotechnical Investigation	\$22,000			
Commissioning				
Site Survey	\$8,926			
Testing				
LEED Services				
Voice/Data Consultant				
Value Engineering				
Constructability Review				
Environmental Mitigation (EIS)				
Landscape Consultant				
Bathymetric Survey	\$20,000			
Insert Row Here				
Sub TOTAL	\$50,926	1.1484	\$58,484	Escalated to Mid-Design
4) Other Services				
Bid/Construction/Closeout	\$78,907			31% of A/E Basic Services
HVAC Balancing				
Staffing				
Other				
Insert Row Here				
Sub TOTAL	\$78,907	1.1865	\$93,624	Escalated to Mid-Const.
5) Design Services Contingency				
Design Services Contingency	\$30,547			
Other				
Insert Row Here				
Sub TOTAL	\$30,547	1.1865	\$36,244	Escalated to Mid-Const.
CONSULTANT SERVICES TOTAL	\$336,013		\$390,049	

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Cost Estimate Details

Construction Contracts				
Item	Base Amount	Escalation Factor	Escalated Cost	Notes
1) Site Work				
G10 - Site Preparation				
G20 - Site Improvements				
G30 - Site Mechanical Utilities				
G40 - Site Electrical Utilities				
G60 - Other Site Construction				
Other				
Insert Row Here				
Sub TOTAL	\$0	1.1695	\$0	
2) Related Project Costs				
Offsite Improvements				
City Utilities Relocation				
Parking Mitigation				
Stormwater Retention/Detention				
Island Factor @ 30%	\$375,000			
Insert Row Here				
Sub TOTAL	\$375,000	1.1695	\$438,563	
3) Facility Construction				
A10 - Foundations				
A20 - Basement Construction				
B10 - Superstructure				
B20 - Exterior Closure				
B30 - Roofing				
C10 - Interior Construction				
C20 - Stairs				
C30 - Interior Finishes				
D10 - Conveying				
D20 - Plumbing Systems				
D30 - HVAC Systems				
D40 - Fire Protection Systems				
D50 - Electrical Systems				
F10 - Special Construction	\$1,250,000			
F20 - Selective Demolition				
General Conditions				
Other				
Insert Row Here				
Sub TOTAL	\$1,250,000	1.1865	\$1,483,125	
4) Maximum Allowable Construction Cost				
MACC Sub TOTAL	\$1,625,000		\$1,921,688	

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7) Construction Contingency

Allowance for Change Orders	\$162,500		
Other			
Insert Row Here			
Sub TOTAL	\$162,500	1.1865	\$192,807

8) Non-Taxable Items

Other			
Insert Row Here			
Sub TOTAL	\$0	1.1865	\$0

Sales Tax

Sub TOTAL	\$141,213		\$167,046
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CONSTRUCTION CONTRACTS TOTAL	\$1,928,713		\$2,281,541
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Cost Estimate Details

Equipment				
Item	Base Amount	Escalation Factor	Escalated Cost	Notes
E10 - Equipment				
E20 - Furnishings				
F10 - Special Construction				
Other				
Insert Row Here				
Sub TOTAL	\$0	1.1865	\$0	
1) Non Taxable Items				
Other				
Insert Row Here				
Sub TOTAL	\$0	1.1865	\$0	
Sales Tax				
Sub TOTAL	\$0		\$0	
EQUIPMENT TOTAL				
	\$0		\$0	

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Cost Estimate Details

Artwork					
Item	Base Amount		Escalation Factor	Escalated Cost	Notes
Project Artwork	\$0				0.5% of Escalated MACC for new construction
Higher Ed Artwork	\$0				0.5% of Escalated MACC for new and renewal construction
Other					
Insert Row Here					
ARTWORK TOTAL	\$0		NA	\$0	

Green cells must be filled in by user

Cost Estimate Details

Project Management					
Item	Base Amount		Escalation Factor	Escalated Cost	Notes
Agency Project Management	\$167,064				
Additional Services					
Other					
Insert Row Here					
PROJECT MANAGEMENT TOTAL	\$167,064		1.1865	\$198,222	

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Cost Estimate Details

Other Costs					
Item	Base Amount		Escalation Factor	Escalated Cost	Notes
Mitigation Costs					
Hazardous Material Remediation/Removal					
Historic and Archeological Mitigation					
Special Inspection	\$56,000				
Tariffs (1.5% of MACC)	\$28,000				
Permit, Fees, and Plan Reviews	\$100,000				
OTHER COSTS TOTAL	\$184,000		1.1695	\$215,188	

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Photo Gallery



The main dock is subjected to extreme forces during rough seas.



The ramp & dock can be hazardous in rough seas & inclement weather.

Capital Project Request

2019-21 Biennium

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Version: NN 2020 Supplemental - Working Version

Report Number: CBS002

Date Run: 9/18/2019 9:45PM

Project Number: 40000413

Project Title: DOC/DSHS McNeil Island-Still Harbor Dock: Replacement

Description

Starting Fiscal Year: 2021

Project Class: Preservation

Agency Priority: 4

Program: 135

Project Summary

The Still Harbor Dock at McNeil Island is the only back-up and heavy weather loading point for all staff and visitors traveling to and from the Special Commitment Center. The existing floats and pilings are damaged beyond repair. This project replaces the existing floats with a new, stable, sturdy docking system.

Project Description**1. WHAT IS THE PROBLEM OR OPPORTUNITY?**

The Special Commitment Center (SCC) houses civilly committed sexually violent predators in two facilities on McNeil Island - the Total Confinement Facility and the Pierce County Secure Community Transition Facility. Passenger ferries, operated by the Department of Corrections (DOC) transport staff and visitors to and from the island. Safe and reliable docks are required to on/off load DSHS and DOC employees who ferry to McNeil Island for the SCC's daily operations several times a day, every day. The Main Dock on the south side of the island near the old prison is the primary dock for the passenger ferries. The Still Harbor dock on the northeast side of the island is more protected and utilized when the Main Dock is out of services and when heavy weather conditions and rough seas prevent berthing at the Main Dock.

The Still Harbor dock is constructed different sized concrete floats which are bolted together end-to-end. In rough seas, the different-sized floats experience mismatched buoyancy forces which stress the float connections and ultimately lead to connection failures. This design flaw is attributed to the storm damages experienced in 2014, 2015, and 2019, which closed the dock and required emergency repairs to restore the dock to service. Additionally, a WSDOT inspection of the steel pipe pilings which secure the Still Harbor Dock in position rates the pilings as "fair" and "poor" condition.

Loss of the Still Harbor Dock would adversely impact staff shift changes and could temporarily strand DOC and DSHS employees on McNeil Island during heavy weather.

2. WHAT IS THE PROJECT?

This project replaces the failing Still Harbor Dock with a new, redesigned float system. A new, completely redesigned float system will correct the failure-prone design of mismatched concrete floats with a new docking system which will on/off load passenger ferries in all weather conditions.

3. HOW DOES THE PROJECT ADDRESS THE PROBLEM OR OPPORTUNITY?

This project corrects the flawed design of the failure-prone Still Harbor Dock by replacing the mismatched concrete floats with a properly designed all-weather dock system. This project corrects the mismatched concrete floats with differential buoyancy forces which are prone to failure in rough seas.

This project also ensures continued passenger ferry service to McNeil Island for DSHS and DOC employees who are directly supporting SCC's operations.

4. WHAT ALTERNATIVES WERE EXPLORED?**1. Do Nothing**

The existing conditions are not sustainable. This alternative was rejected because the floats at the floats at the Still Harbor Dock are inherently a flawed design and the pilings are rusting out. Doing nothing guarantees ongoing failures and emergency repairs.

Capital Project Request

2019-21 Biennium

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Version: NN 2020 Supplemental - Working Version

Report Number: CBS002

Date Run: 9/18/2019 9:45PM

Project Number: 40000413

Project Title: DOC/DSHS McNeil Island-Still Harbor Dock: Replacement

Description2. Replace the Still Harbor Dock - Preferred Option

This option was chosen as it provides a safest passenger ferry on/off loading point for DSHS and DOC employees during rough seas and ensures continued operation of the SCC during inclement weather.

5. WHO BENEFITS FROM THE PROJECT?

The DSHS and DOC employees on McNeil Island benefit from having an inclement weather dock to safely on/off load from. Minimized disruptions to staff shift changes benefit the SCC residents by providing consistent programming and care. An all-weather dock also mitigates the risk of stranding employees on McNeil Island during high seas when the ferries cannot berth at the Main Dock.

6. WILL OTHER FUNDING BE USED TO COMPLETE THE PROJECT?

No. DOC/DSHS request funding from the State Building Construction Account - Fund 057-1.

7. HOW DOES THIS PROJECT SUPPORT THE DSHS STRATEGIC PLAN OR IMPROVE AGENCY PERFORMANCE?

At DSHS, we transform lives. We created our current Strategic Plan to set measurable goals to ensure DSHS serves our clients and Washington State to the best of our ability. The following strategic objectives have impacts on our 2,100 clients in residential care and the 6,800 staff working in our hospitals, residential habilitation centers, institutions, and community facilities:

Each strategic objective in this strategic plan supports one or more of the five broad goals for DSHS:

- + Health: Each individual and each community will be healthy.
- + Safety: Each individual and community will be safe.
- + Protection: Each individual who is vulnerable will be protected.
- + Quality of Life: Each individual in need will be supported to attain the highest possible quality of life.
- + Public Trust: Strong management practices will ensure quality and efficiency.

In addition, each strategic objective supports one of the Secretary's strategic priorities:

- + Prepare for aging Washingtonians
- + Support people in our care and custody
- + Serve people in their home community
- + Provide a pathway out of poverty and become healthier
- + Increase organizational efficiency, performance and effectiveness

Both the DSHS goals and Secretary's priorities align with:

- + Results Washington's objective of better results for Washingtonians
- + Governor's goal of Healthy and Safe Communities
- + Governor's goal of Efficient, Effective, and Accountable Government

This project replaces the floats and pilings at the Still Harbor Dock to assure safe and reliable passenger ferry service to McNeil Island during heavy weather. This marine facility supports a variety of DOC and DSHS activities and can be directly or indirectly tied to the following Results Washington objectives:

Goal 2: Prosperous Economy - Sustainable, Efficient Infrastructure

- 3.1) Maintain the percent of Washington infrastructure assets in satisfactory condition.

Goal 4: Healthy and Safe Communities – Healthy People

Capital Project Request

2019-21 Biennium

*

Version: NN 2020 Supplemental - Working Version

Report Number: CBS002

Date Run: 9/18/2019 9:45PM

Project Number: 40000413

Project Title: DOC/DSHS McNeil Island-Still Harbor Dock: Replacement

Description

2.3) Public: Decrease rate of return to institutions for offenders.

2.5) Worker Safety: Decrease workplace injury rates that result in missing three or more days from work.

Goal 5: Efficient, Effective, and Accountable Government – Customer Satisfaction and Employee Engagement

1.3) Customer Satisfaction: Increase Washington as an employer of choice.

8. DOES THE PROJECT HAVE IT-RELATED COSTS?

No.

9. IS THIS PROJECT LINKED TO THE PUGET SOUND ACTION AGENDA?

No, though the project is located in Puget Sound.

10. HOW DOES THIS PROJECT CONTRIBUTE TO THE STATEWIDE GOALS TO REDUCE CARBON POLLUTION AND/OR IMPROVE ENERGY EFFICIENCY?

Not applicable.

11. WHAT ELSE SHOULD DECISION MAKERS KNOW TO EVALUATE THIS FUNDING REQUEST?

The Special Commitment Center is located on McNeil Island for the care and treatment of sexually violent predators. The Department of Corrections, through Correctional Industries, provides maintenance and operations support for the island including marine services, water treatment, wastewater treatment, and fuel receipt and delivery. This project is submitted jointly by DOC and DSHS so that essential services provided by DOC to DSHS can be sustained for the long-term operation of the SCC program.

The WSDOT Underwater Inspection Report for the Still Harbor Dock dated April 26, 2017. is attached in CBS. The document can also be found here:

<https://www.dshs.wa.gov/ffa/office-capital-programs>

Location

City: Steilacoom

County: Pierce

Legislative District: 028

Project Type

Infrastructure (Major Projects)

Growth Management impacts

This project will not change census capacity or the number of facility staff. No Growth Management impacts are anticipated.

Funding

Acct Code	Account Title	Estimated Total	Expenditures		2019-21 Fiscal Period	
			Prior Biennium	Current Biennium	Reappropriations	New Appropriations
057-1	State Bldg Constr-State	3,965,000				3,965,000
	Total	3,965,000	0	0	0	3,965,000
Future Fiscal Periods						
		2021-23	2023-25	2025-27	2027-29	

Capital Project Request

2019-21 Biennium

*

Version: NN 2020 Supplemental - Working Version

Report Number: CBS002

Date Run: 9/18/2019 9:45PM

Project Number: 40000413

Project Title: DOC/DSHS McNeil Island-Still Harbor Dock: Replacement

Funding

		Future Fiscal Periods			
		<u>2021-23</u>	<u>2023-25</u>	<u>2025-27</u>	<u>2027-29</u>
057-1	State Bldg Constr-State				
	Total	0	0	0	0

Operating Impacts

No Operating Impact

Narrative

This project addresses the preservation of existing facilities. This project adds no new square footage and no additional operating budget FTEs.

STATE OF WASHINGTON
AGENCY / INSTITUTION PROJECT COST SUMMARY

Updated July 2019

Agency	DOC/DSHS	
Project Name	McNeil Island-Still Harbor Dock: Replacement	
OFM Project Number	40000413	

Contact Information

Name	Aaron Young	
Phone Number	(360) 489-5880	
Email	aaron.young@des.wa.gov	

Statistics

Gross Square Feet	2,000	MACC per Square Foot	\$1,040
Usable Square Feet	2,000	Escalated MACC per Square Foot	\$1,250
Space Efficiency	100.0%	A/E Fee Class	A
Construction Type	Other Sch. A Projects	A/E Fee Percentage	14.00%
Remodel	Yes	Projected Life of Asset (Years)	

Additional Project Details

Alternative Public Works Project	No	Art Requirement Applies	No
Inflation Rate	3.18%	Higher Ed Institution	No
Sales Tax Rate %	7.90%	Location Used for Tax Rate	McNeil Island
Contingency Rate	10%		
Base Month	January-18		
Project Administered By	Agency		

Schedule

Predesign Start		Predesign End	
Design Start	August-22	Design End	April-23
Construction Start	July-23	Construction End	July-24
Construction Duration	12 Months		

Green cells must be filled in by user

Project Cost Estimate

Total Project	\$3,307,058	Total Project Escalated	\$3,965,000
		Rounded Escalated Total	\$3,965,000

STATE OF WASHINGTON
AGENCY / INSTITUTION PROJECT COST SUMMARY

Updated July 2019

Agency	DOC/DSHS	
Project Name	McNeil Island-Still Harbor Dock: Replacement	
OFM Project Number	40000413	

Cost Estimate Summary

Acquisition			
Acquisition Subtotal	\$0	Acquisition Subtotal Escalated	\$0

Consultant Services			
Predesign Services	\$0		
A/E Basic Design Services	\$221,021		
Extra Services	\$71,027		
Other Services	\$99,299		
Design Services Contingency	\$39,135		
Consultant Services Subtotal	\$430,482	Consultant Services Subtotal Escalated	\$507,680

Construction			
Construction Contingencies	\$208,000	Construction Contingencies Escalated	\$250,973
Maximum Allowable Construction Cost (MACC)	\$2,080,000	Maximum Allowable Construction Cost (MACC) Escalated	\$2,500,704
Sales Tax	\$180,752	Sales Tax Escalated	\$217,383
Construction Subtotal	\$2,468,752	Construction Subtotal Escalated	\$2,969,060

Equipment			
Equipment	\$0		
Sales Tax	\$0		
Non-Taxable Items	\$0		
Equipment Subtotal	\$0	Equipment Subtotal Escalated	\$0

Artwork			
Artwork Subtotal	\$0	Artwork Subtotal Escalated	\$0

Agency Project Administration			
Agency Project Administration Subtotal	\$204,525		
DES Additional Services Subtotal	\$0		
Other Project Admin Costs	\$0		
Project Administration Subtotal	\$204,525	Project Administration Subtotal Escalated	\$246,780

Other Costs			
Other Costs Subtotal	\$203,300	Other Costs Subtotal Escalated	\$241,480

Project Cost Estimate

Total Project	\$3,307,058	Total Project Escalated	\$3,965,000
		Rounded Escalated Total	\$3,965,000

Cost Estimate Details

Acquisition Costs						
Item	Base Amount		Escalation Factor	Escalated Cost	Notes	
Purchase/Lease						
Appraisal and Closing						
Right of Way						
Demolition						
Pre-Site Development						
Other						
Insert Row Here						
ACQUISITION TOTAL	\$0		NA	\$0		

Green cells must be filled in by user

Cost Estimate Details

Consultant Services				
Item	Base Amount	Escalation Factor	Escalated Cost	Notes
1) Pre-Schematic Design Services				
Programming/Site Analysis				
Environmental Analysis				
Predesign Study				
Other				
Insert Row Here				
Sub TOTAL	\$0	1.1543	\$0	Escalated to Design Start
2) Construction Documents				
A/E Basic Design Services	\$221,021			69% of A/E Basic Services
Other				
Insert Row Here				
Sub TOTAL	\$221,021	1.1664	\$257,799	Escalated to Mid-Design
3) Extra Services				
Civil Design (Above Basic Svcs)				
Geotechnical Investigation	\$36,500			
Commissioning				
Site Survey	\$14,527			
Testing				
LEED Services				
Voice/Data Consultant				
Value Engineering				
Constructability Review				
Environmental Mitigation (EIS)				
Landscape Consultant				
Bathymetric Survey	\$20,000			
Insert Row Here				
Sub TOTAL	\$71,027	1.1664	\$82,846	Escalated to Mid-Design
4) Other Services				
Bid/Construction/Closeout	\$99,299			31% of A/E Basic Services
HVAC Balancing				
Staffing				
Other				
Insert Row Here				
Sub TOTAL	\$99,299	1.2066	\$119,815	Escalated to Mid-Const.
5) Design Services Contingency				
Design Services Contingency	\$39,135			
Other				
Insert Row Here				
Sub TOTAL	\$39,135	1.2066	\$47,220	Escalated to Mid-Const.
CONSULTANT SERVICES TOTAL	\$430,482		\$507,680	

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Cost Estimate Details

Construction Contracts				
Item	Base Amount	Escalation Factor	Escalated Cost	Notes
1) Site Work				
G10 - Site Preparation				
G20 - Site Improvements				
G30 - Site Mechanical Utilities				
G40 - Site Electrical Utilities				
G60 - Other Site Construction				
Other				
Insert Row Here				
Sub TOTAL	\$0	1.1878	\$0	
2) Related Project Costs				
Offsite Improvements				
City Utilities Relocation				
Parking Mitigation				
Stormwater Retention/Detention				
Island Factor @ 30%	\$480,000			
Insert Row Here				
Sub TOTAL	\$480,000	1.1878	\$570,144	
3) Facility Construction				
A10 - Foundations				
A20 - Basement Construction				
B10 - Superstructure				
B20 - Exterior Closure				
B30 - Roofing				
C10 - Interior Construction				
C20 - Stairs				
C30 - Interior Finishes				
D10 - Conveying				
D20 - Plumbing Systems				
D30 - HVAC Systems				
D40 - Fire Protection Systems				
D50 - Electrical Systems				
F10 - Special Construction	\$1,600,000			
F20 - Selective Demolition				
General Conditions				
Other				
Insert Row Here				
Sub TOTAL	\$1,600,000	1.2066	\$1,930,560	
4) Maximum Allowable Construction Cost				
MACC Sub TOTAL	\$2,080,000		\$2,500,704	

This Section is Intentionally Left Blank

7) Construction Contingency

Allowance for Change Orders	\$208,000		
Other			
Insert Row Here			
Sub TOTAL	\$208,000	1.2066	\$250,973

8) Non-Taxable Items

Other			
Insert Row Here			
Sub TOTAL	\$0	1.2066	\$0

Sales Tax

Sub TOTAL	\$180,752		\$217,383
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CONSTRUCTION CONTRACTS TOTAL	\$2,468,752		\$2,969,060
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Green cells must be filled in by user

Cost Estimate Details

Equipment				
Item	Base Amount	Escalation Factor	Escalated Cost	Notes
E10 - Equipment				
E20 - Furnishings				
F10 - Special Construction				
Other				
Insert Row Here				
Sub TOTAL	\$0	1.2066	\$0	
1) Non Taxable Items				
Other				
Insert Row Here				
Sub TOTAL	\$0	1.2066	\$0	
Sales Tax				
Sub TOTAL	\$0		\$0	
EQUIPMENT TOTAL	\$0		\$0	

Green cells must be filled in by user

Cost Estimate Details

Artwork					
Item	Base Amount		Escalation Factor	Escalated Cost	Notes
Project Artwork	\$0				0.5% of Escalated MACC for new construction
Higher Ed Artwork	\$0				0.5% of Escalated MACC for new and renewal construction
Other					
Insert Row Here					
ARTWORK TOTAL	\$0		NA	\$0	

Green cells must be filled in by user

Cost Estimate Details

Project Management					
Item	Base Amount		Escalation Factor	Escalated Cost	Notes
Agency Project Management	\$204,525				
Additional Services					
Other					
Insert Row Here					
PROJECT MANAGEMENT TOTAL	\$204,525		1.2066	\$246,780	

Green cells must be filled in by user

Cost Estimate Details

Other Costs					
Item	Base Amount		Escalation Factor	Escalated Cost	Notes
Mitigation Costs					
Hazardous Material Remediation/Removal					
Historic and Archeological Mitigation					
Special Inspection	\$67,500				
Tariffs (1.5% of MACC)	\$35,800				
Permit, Fees, and Plan Reviews	\$100,000				
OTHER COSTS TOTAL	\$203,300		1.1878	\$241,480	

Green cells must be filled in by user



Washington State
Department of Transportation
Bridge Preservation Dive Team

UNDERWATER INSPECTION REPORT
FOR THE
MCNEIL IS. STILL HARBOR DOCK

BRIDGE NO. DOC-6
STRUCTURE ID 00200441



Prepared For WA State Dept. of Corrections (DOC)

Inspection Date April 26, 2017

Lead Inspector/Diver Darren O. Nebergall
Cert. # G0314

Inspector/Diver Michael B. Smith

Report Status Released



UNDERWATER INSPECTION REPORT
FOR THE
MCNEIL IS. STILL HARBOR DOCK

BRIDGE NO. DOC-6
STRUCTURE ID 00200441

EXECUTIVE SUMMARY

The WSDOT Bridge Preservation Dive Team performed an underwater inspection of the subject facility on April 26, 2017. A total of 37 steel pipe piles and the concrete floats exteriors were inspected by diving.

In general, the steel pipe piles that position the floating docks (spud piles) are in fair to poor condition. The zinc paint coating on the piles is failing in large areas from the splash zone down to mudline. Missing areas of coating have exposed the steel substrate which now has large areas of surface corrosion and section loss. The overall pitting of the metal made it difficult to obtain accurate thickness readings with the ultrasonic thickness meter. Some pits are 0.25" deep and plans indicate a 0.5" nominal wall thickness. Twelve of the piles had holes through the full thickness of the pile caused by constant mechanical abrasion of several UHMW "log" booms tethered to the piles. These holes have increased in size and number since the previous underwater inspection. Since these piles do not carry vertical loads, this condition does not warrant immediate repair, but from a serviceability standpoint should be closely monitored during future inspections. The concrete floating pontoons had thick marine growth covering nearly 100% of the surface area. Spot cleaning revealed no defects.

No underwater repairs are required at this time. Recommend retaining the 48-month frequency for underwater inspections.

Daily Site Dive Log

Inspector	Darren O. Nebergall		Date	4/26/2017
Bridge No.	DOC-6	Bridge Name	MCNEIL IS. STILL HARBOR DOCK	
Bridge Type		Waterway Name	STILL HARBOR (P. SOUND)	
Dive Objective	Inspection of submerged substructure elements.			

Diving Operation

Type of Operation ☒ SCUBA ☐ Surface Supplied Air ☐ Snorkel ☐ ROV ☐ Other _____

Equipment

Suit	Dry suit
Air Supply	LP95 + Pony
Site Access	Duckworth boat - launched from Zittle's Marina
Inspection Tools	Hammer/scrapper, probe, u/w light, GoPro camera

Conditions

Water	<input checked="" type="checkbox"/> Salt <input type="checkbox"/> Fresh <input type="checkbox"/> Brackish	Temperature	48 °F	Visibility	10-15 ft
Surface	<input type="checkbox"/> Calm <input checked="" type="checkbox"/> Choppy <input type="checkbox"/> Rough				
Tide	<input type="checkbox"/> High <input checked="" type="checkbox"/> Low <input checked="" type="checkbox"/> Flood <input type="checkbox"/> Ebb <input type="checkbox"/> N/A				
Current	<input type="checkbox"/> Fast <input type="checkbox"/> Moderate <input checked="" type="checkbox"/> Slow	Velocity	< 1 ft/sec		
Weather	<input type="checkbox"/> Clear <input type="checkbox"/> Cloudy <input checked="" type="checkbox"/> Overcast <input checked="" type="checkbox"/> Rain <input type="checkbox"/> Windy	Air Temp	48 °F		

Diver Checks

<input checked="" type="checkbox"/> First Aid Equipment on Site	<input checked="" type="checkbox"/> Physical Condition of Diver(s) Checked
<input checked="" type="checkbox"/> Communication for EMS	<input checked="" type="checkbox"/> Communications for Diver(s) Checked
<input checked="" type="checkbox"/> Dive Gear Inspected	<input checked="" type="checkbox"/> Team Briefed and Understands Dive Plan
<input checked="" type="checkbox"/> Air Source Checked	<input checked="" type="checkbox"/> Special Site Hazards Noted
<input checked="" type="checkbox"/> Pre-Activity Safety Plan Reviewed	<input checked="" type="checkbox"/> Line-Tending Procedures Reviewed
<input type="checkbox"/> _____	<input type="checkbox"/> _____

Dive Plan and Dive Team Procedures

Assess site conditions and determine type of dive operation. Hold on-site pre-dive safety meeting to discuss and plan dive operation, determine roles and responsibilities, review emergency procedures, and check physical condition of diver(s). Assemble and check dive gear. Check communication for diver(s). After completion of dive, review notes, check condition of diver(s), take soundings and photos as required.

Dive Schedule

Dive No.	Entry Time	Exit Time	Total Time in Water	Maximum Depth	Remarks
1	12:09:00	13:05:00	00:56:00	13 fsw *	MBS dive T-dock piles A-Y and 1-12.

Dive Narrative

The team arrived at the boat ramp at Zittle's Marina and proceeded to discuss the pre-activity safety plan (PASP) and determine team member roles for the operation. A single line-tended diver operation as decided upon due to only having three team members for the day. Gear was loaded into the boat and it was launched. After a short boat ride, the team arrived at the facility on the northeast side of McNeil Island. The diving inspection began offshore at the west end of the T-dock and proceeded east to the end of the dock. The inshore side of the dock was also inspected. The diver performed a thorough visual/tactile inspection of the piling and relayed notes and findings to support personnel via hardwired communications. Depths and photos were taken as necessary. At the completion of the diving operations, the diver's condition was checked. Notes and photos were reviewed for completeness prior to leaving the site.

Air IN / OUT
MBS 2200 / 1000

* fsw = feet sea water

Dive Team Members

Darren Nebergall, P.E. (DON)

(Name)

DPIC / notes

(Role)

Richard Pawelka, P.E. (RMP)

(Name)

Stand-by diver

(Role)

Michael Smith, P.E. (MBS)

(Name)

Diver

(Role)

Underwater Inspection Report

Inspector	Darren O. Nebergall	Agency/Owner	WA State Dept. of Corrections (DOC)	Date	4/26/2017
Bridge No.	DOC-6	Bridge Name	MCNEIL IS. STILL HARBOR DOCK		
Bridge Type		Waterway Name	STILL HARBOR (P. SOUND)		
Substructure	Steel Pipe Piles	Foundation	Steel Pipe Piles		
No. Spans	1	No. Piers Dived	2	Inspection Hours	2.5

5	<input type="checkbox"/> Substructure Condition (1676)	8	<input type="checkbox"/> Chan/Protection (1677)	U	<input type="checkbox"/> T	Scour Code (1680)
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BMS Elements							
Element	Element Description	Total	Units	State 1	State 2	State 3	State 4
8361	Scour	2	EA	2	0	0	0
8701	Ferry Concrete Floating Pontoon	38	CELL	31	7	0	0
8703	Spud Piling & Wells	37	EA	21	4	12	0
8902	Inorganic Zinc Vinyl Paint	7400	SF	6525	200	675	0

Notes	
0	<p>ORIENTATION: The McNeil Island Still Harbor Dock includes the concrete floats, gangplank, and the steel spud piles. For location reference: Offshore is north, shore is south, left side is west, and right side is east. See the attached layout drawing for reference and additional findings.</p>
1676	<p>SUBSTRUCTURE: Substructure coded to '5' due to holes in steel piling.</p>
1677	<p>CHANNEL: This structure abuts another structure and does not connect to the shoreline directly. No bank issues noted. No restrictions to water flow past the structure.</p>
1680	<p>SCOUR: Structure is in tidal waters with weak and variable tidal currents. Scour code set to "T - tidal" and is considered a low risk for scour. See note 8361.</p>
8361	<p>SCOUR (Field): There are two lines of spud piles, 1 - 12 and A - Y.</p> <p>Underwater Inspection Findings: Water flow in the vicinity is tidal. No scour patterns or scour countermeasures were observed.</p>
8701	<p>CONCRETE FLOATING PONTOON: The previous inspections found dock float A listing upwards of 5" was measured close to level in 2017 due to timber water repairs. Trip hazards between floats have been reduced greatly. Prior to the repair, the listing of the pontoon segments indicates the pontoon polystyrene has degraded and taken on water through the water bolt holes. There is a serviceability issue which may reappear after a significant storm from the north. Seven of the dock segments have been repaired since the 2013 inspection, Condition State 2.</p> <p>Underwater Inspection Findings: The submerged surfaces of the pontoons are covered in heavy marine growth, making a detailed inspection very difficult. Spot cleaning revealed no defects. See Photo #UW-1.</p>

Underwater Inspection Report

Inspector	Darren O. Nebergall	Agency/Owner	WA State Dept. of Corrections (DOC)	Date	4/26/2017
Bridge No.	DOC-6	Bridge Name	MCNEIL IS. STILL HARBOR DOCK		
Bridge Type		Waterway Name	STILL HARBOR (P. SOUND)		
Substructure	Steel Pipe Piles	Foundation	Steel Pipe Piles		
No. Spans	1	No. Piers Dived	2	Inspection Hours	2.5

Notes (Continued)

8703	<p>SPUD PILING & WELLS: Spud pile rollers are all intact, some are bent from storm events, see photo #27.</p> <p>Underwater Inspection Findings: The spud piles that position the floats are in generally fair condition underwater. The coating has generally failed from the intertidal zone (ITZ) down to mudline, exposing the steel underneath (Photo #UW-2). These exposed areas have surface corrosion with pitting and section losses of up to 0.25" in localized areas (plans indicate 0.5" nominal wall thickness). Moderate marine growth is present but attempts to clean for inspection also removed any coating left as well. Twelve of the spud piling have holed through in the lower ITZ due to mechanical abrasion damage from the UHMW plastic "log" booms that contact the piles (Photos #UW-3 thru #UW-7). These holes have grown significantly larger in size since the previous underwater inspection and new holes were observed where only flat spots were seen before. Since these piles do not bear vertical loads, this condition does not warrant immediate repair, but from a serviceability standpoint should be closely monitored during future inspections. See attached Layout and Pile Data Sheets for more detailed defect descriptions and locations.</p>
8902	<p>INORGANIC ZINC VINYL PAINT: Many of the spud piles have rust blisters and seam rust, see photo #3.</p> <p>Underwater Inspection Findings: Much of the spud pile coating has failed underwater. Pile metal substrate is exposed between 25% and 50% of the pile surface area underwater. See Photos #UW-2 and #UW-8 for typical underwater coating condition.</p>

Repairs

Repair No	Pr	R	Repair Description	Noted	Maint	Verified
			(No repairs for this structure)			

Inspections Performed and Resources Required

Report Type	Date	Freq	Hrs	Insp	CertNo	Coinsp	Note		
Underwater	4/26/2017	48	2.5	DON	G0314	MBS	Underwater inspection by WSDOT Dive Team. Frequency set at 48 months to correspond with every-other routine inspection. (Set values for codes 1232, 1533, 1538 & 1541 in an effort to populate blank fields in the UW Report – NAF)		
Resources	Hours	Min	Pref	Max	Freq	Date	Need Date	Override	Notes
Boat		D	D	D					Used Duckworth boat for access during 2017 inspections.
Safety	4/26/2017	24	1.5	JHL	D2016	KGH			
Resources	Hours	Min	Pref	Max	Freq	Date	Need Date	Override	Notes



Underwater Inspection Report

Inspector	Darren O. Nebergall	Agency/Owner	WA State Dept. of Corrections (DOC)	Date	4/26/2017
Bridge No.	DOC-6	Bridge Name	MCNEIL IS. STILL HARBOR DOCK		
Bridge Type		Waterway Name	STILL HARBOR (P. SOUND)		
Substructure	Steel Pipe Piles	Foundation	Steel Pipe Piles		
No. Spans	1	No. Piers Dived	2	Inspection Hours	2.5
Third Party Notification			Schedule inspection with Greg Bukeima (DOC) 253-328-3229 or 253-588-5281 (cell). A security clearance must be done for all inspectors prior to landing on the island. This can be done via Greg, provide full name, SS#, and date of birth (DOB).		

BRIDGE INSPECTION REPORT

Page 1 of 5

Status: Released
CD Guid: fb60ddab-1c9e-4b44-936b-114a7713500f

Printed On: 7/26/2017
CD Date: 7/25/2017

Agency: Other State Agencies
Program Mgr: Harvey L. Coffman

Br. No. DOC-6
Carrying
Intersecting STILL HARBOR (P. SOUND)

SID 00200441

Br. Name MCNEIL IS. STILL HARBOR DOCK

Route On
Route Under

Mile Post
Mile Post

UW-1

8701 Ferry Concrete Floating Pontoon

Photo Type: G - General

Orientation:

Date: 5/23/2013

Repairs:

Typical heavy marine growth on floating dock sections.



SI-27

8703 Spud Piling & Wells

Photo Type: G - General

Orientation:

Date: 4/26/2017

Repairs:

Spud pile rollers are all intact, some are bent from storm events.



BRIDGE INSPECTION REPORT

Page 2 of 5

Status: Released
CD Guid: fb60ddab-1c9e-4b44-936b-114a7713500f

Printed On: 7/26/2017
CD Date: 7/25/2017

Agency: Other State Agencies
Program Mgr: Harvey L. Coffman

Br. No. DOC-6
SID 00200441
Carrying
Intersecting STILL HARBOR (P. SOUND)

Br. Name MCNEIL IS. STILL HARBOR DOCK

Route On
Route Under
Mile Post
Mile Post

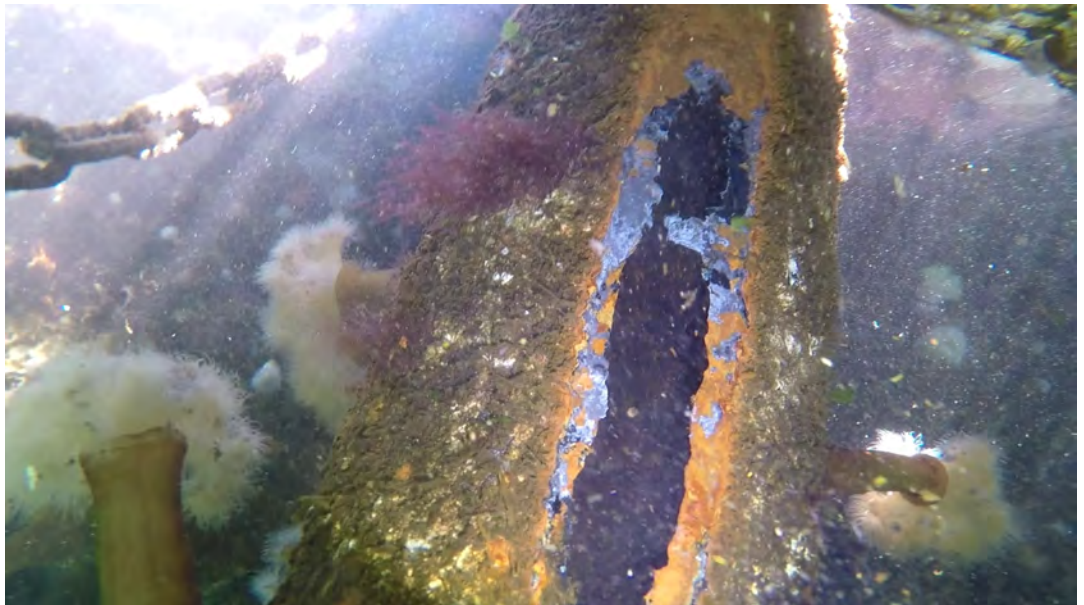
UW-2

8703 Spud Piling & Wells
Photo Type: I - In Depth
Orientation:
Date: 5/23/2013
Repairs:
T-dock Pile S; general coating failure and rusting with section loss. Typical of T-dock piles.



UW-3

8703 Spud Piling & Wells
Photo Type: I - In Depth
Orientation:
Date: 4/27/2017
Repairs:
T-dock, Pile A: 18" H x 4" W hole from mechanical damage.



BRIDGE INSPECTION REPORT

Page 3 of 5

Status: Released
CD Guid: fb60ddab-1c9e-4b44-936b-114a7713500f

Printed On: 7/26/2017
CD Date: 7/25/2017

Agency: Other State Agencies
Program Mgr: Harvey L. Coffman

Br. No. DOC-6
Carrying
Intersecting STILL HARBOR (P. SOUND)

SID 00200441

Br. Name MCNEIL IS. STILL HARBOR DOCK

Route On
Route Under

Mile Post
Mile Post

UW-4

8703 Spud Piling & Wells

Photo Type: I - In Depth

Orientation:

Date: 5/23/2013

Repairs:

T-dock Pile J; 4" wide mechanical damage (flat spot). 2013 photo; compare to UW-5 for 2017 photo to see progression.



UW-5

8703 Spud Piling & Wells

Photo Type: I - In Depth

Orientation:

Date: 4/27/2017

Repairs:

T-dock Pile J: 12" H x 2.5" W hole (was just a flat spot in 2013, see UW-4).



BRIDGE INSPECTION REPORT

Page 4 of 5

Status: Released
CD Guid: fb60ddab-1c9e-4b44-936b-114a7713500f

Printed On: 7/26/2017
CD Date: 7/25/2017

Agency: Other State Agencies
Program Mgr: Harvey L. Coffman

Br. No. DOC-6
SID 00200441
Carrying
Intersecting STILL HARBOR (P. SOUND)

Br. Name MCNEIL IS. STILL HARBOR DOCK

Route On
Route Under
Mile Post
Mile Post

UW-6

8703 Spud Piling & Wells
Photo Type: I - In Depth
Orientation:
Date: 4/27/2017
Repairs:
T-dock Pile O: 18" H x 4" W (up to) hole from mechanical damage.



UW-7

8703 Spud Piling & Wells
Photo Type: I - In Depth
Orientation:
Date: 4/27/2017
Repairs:
T-dock Pile P: Large 3-ft. vertical hole from mechanical damage.



BRIDGE INSPECTION REPORT

Page 5 of 5

Status: Released
CD Guid: fb60ddab-1c9e-4b44-936b-114a7713500f

Printed On: 7/26/2017
CD Date: 7/25/2017

Agency: Other State Agencies
Program Mgr: Harvey L. Coffman

Br. No. DOC-6
SID 00200441
Carrying
Intersecting STILL HARBOR (P. SOUND)

Br. Name MCNEIL IS. STILL HARBOR DOCK

Route On
Route Under
Mile Post
Mile Post

SI-3

8902 Inorganic Zinc Vinyl Paint

Photo Type: G - General

Orientation: Right

Date: 5/23/2013

Repairs:

Typical shot of spud piles. Seam rust on welds are breaking through the paint.



UW-8

8902 Inorganic Zinc Vinyl Paint

Photo Type: I - In Depth

Orientation:

Date: 4/27/2017

Repairs:

Typical pile condition underwater.
Coating has failed over 25%-50% of the surface area on the piles below water.
Example of ~25% exposed metal shown.





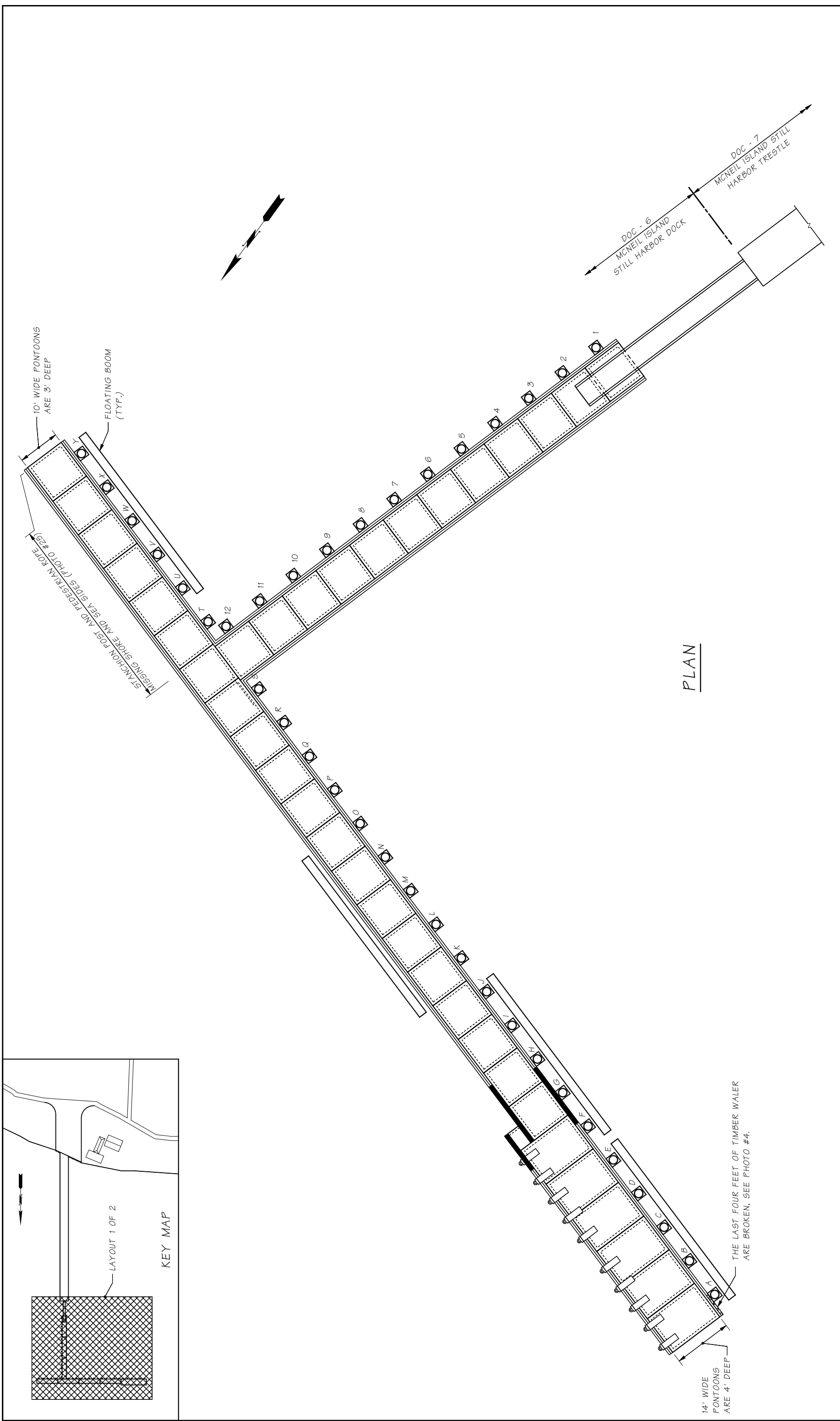
Underwater Routine		4/26/2017	Lead: DON	Co: MBS			
		4/27/2017	Lead: JHL	Co: LAW			
Pile Location		Condition/Damage					
Bent	Pile	% Area Remaining	RT or YT	RT Pile Circum. (in)	Elevation	Details/Remarks	Inspection Type
PILE INSPECTION DATA - Dock Spud Piles							
	1	90		Steel	MDL - ITZ	50% area surface rust / 50% area marine growth (typical). Corrosion with pitting 0.25" deep. Thickness 0.395" (2013)	UW
	2	95		Steel	MDL - ITZ	25% area surface rust / 75% area marine growth coverage.	UW
	3	95		Steel	MDL - ITZ	25% area surface rust / 75% area marine growth coverage. Thickness 0.370" (2013)	UW
	4	95		Steel	MDL - ITZ	25% area surface corrosion with pitting up to 0.25" deep.	UW
	5	90		Steel	MDL - ITZ	50% area surface rust / 50% area marine growth (typical).	UW
	6	95		Steel	MDL - ITZ	25% area surface rust / 75% area marine growth (typical).	UW
	7	95		Steel	MDL - ITZ	25% area surface rust / 75% area marine growth (typical).	UW
	8	95		Steel	MDL - ITZ	25% area surface rust / 75% area marine growth (typical). Localized pitting. Thickness 0.375" (2013)	UW
	9	95		Steel	MDL - ITZ	25% area surface rust / 75% area marine growth (typical).	UW
	10	95		Steel	MDL - ITZ	25% area surface rust / 75% area marine growth (typical).	UW
	11	90		Steel	MDL - ITZ	50% area surface rust / 50% area marine growth (typical).	UW
	12	90		Steel	MDL - ITZ	50% area surface rust / 50% area marine growth (typical). Thickness 0.270" in localized deep pit. (2013)	UW
T	A	75		Steel	MDL - ITZ MDL+9	25% area surface rust / 75% area marine growth (typical). 18" H x 4" W hole from mechanical abrasion (log boom). See Photo #UW-3	UW
	B	90		Steel	MDL - ITZ	50% area surface rust / 50% area marine growth (typical). 0.375" deep localized pit (2013),	UW
	C	90		Steel	MDL - ITZ MDL+10 to +12	50% area surface rust / 50% area marine growth (typical). 4" wide flat spot (mech abrasion; log boom); no holes.	UW
	D	75		Steel	MDL - ITZ MDL+8 MDL+9 MDL+10	50% area surface rust / 50% area marine growth (typical). 1" dia. hole from mechanical abrasion (log boom). 12" H x 3" W hole from mechanical abrasion (log boom). 18" H x 4" W hole from mechanical abrasion (log boom).	UW
	E	75		Steel	MDL - ITZ MDL+8 to +12 MDL+9 MDL+10	25% area surface rust / 75% area marine growth (typical). 4" wide flat spot (mech abrasion; log boom). 1/2" diam. hole from mech. abrasion (log boom). 3" H x 1" W hole from mech. abrasion (log boom).	UW





Underwater Routine		4/26/2017	Lead: DON	Co: MBS	Condition/Damage		Inspection Type	
Pile Location		4/27/2017	Lead: JHL	Co: LAW				
Bent	Pile	% Area Remaining	RT or YT	RT Pile Circum. (in)	Elevation	Details/Remarks	Routine/UW	Date
	F	75		Steel	MDL - ITZ MDL+8 to +12 MDL+9 MDL+10	25% area surface rust / 75% area marine growth (typical). 4" wide flat spot (mech abrasion; log boom). 12" H x 3" W hole from mech. abrasion (log boom). 3/4" diam. hole from mech. abrasion (log boom).	UW	4/26/2017
	G	95		Steel	MDL - ITZ	25% area surface rust / 75% area marine growth (typical).	UW	4/26/2017
	H	95		Steel	MDL - ITZ	25% area surface rust / 75% area marine growth (typical).	UW	4/26/2017
	I	95		Steel	MDL - ITZ	25% area surface rust / 75% area marine growth (typical).	UW	4/26/2017
	J	75		Steel	MDL - ITZ MDL+7 to +11 MDL+7 MDL+11	25% area surface rust / 75% area marine growth (typical). 4" wide flat spot (mech abrasion; log boom). 3" H x 1" W hole from mech. abrasion (log boom). 12" H x 2.5" W hole from mech. abrasion (log boom). See Photos #UW-4 (2013) and #UW-5 (2017)	UW	4/26/2017
	K	95		Steel	MDL - ITZ MDL+9 - ITZ	25% area surface rust / 75% area marine growth (typical). 4" wide flat spot (mech abrasion; log boom); no holes.	UW	4/26/2017
	L	75		Steel	MDL - ITZ MDL+6 - ITZ MDL+8	25% area surface rust / 75% area marine growth (typical). 5" wide flat spot (mech abrasion; log boom). 18" H x 2.5" W hole from mech. abrasion (log boom).	UW	4/26/2017
	M	75		Steel	MDL - ITZ MDL+8 - ITZ MDL+9	25% area surface rust / 75% area marine growth (typical). 3" - 4" wide flat spot (mech damage; log boom). 1" diam. hole from mech. abrasion (log boom).	UW	4/26/2017
	N	90		Steel	MDL - ITZ	50% area surface rust / 50% area marine growth (typical).	UW	4/26/2017
	O	75		Steel	MDL - ITZ MDL+5 to +9 MDL+6	25% area surface rust / 75% area marine growth (typical). 4" wide flat spot (mech damage; log boom). 18" H x 4" W hole from mech. abrasion (log boom). See Photo #UW-6	UW	4/26/2017
	P	75		Steel	MDL - ITZ MDL+4 MDL+5	25% area surface rust / 75% area marine growth (typical). 4" H x 2" W hole from mech. abrasion (log boom). 36" H x 5" W large hole from mech. abrasion (log boom). See Photo #UW-7	UW	4/26/2017
	Q	95		Steel	MDL - ITZ	25% area surface rust / 75% area marine growth (typical).	UW	4/26/2017
	R	95		Steel	MDL - ITZ	25% area surface rust / 75% area marine growth (typical).	UW	4/26/2017
	S	90		Steel	MDL - ITZ	50% area surface rust / 50% area marine growth (typical) Photo #UW-2 shows typical pile condition underwater.	UW	4/26/2017



Underwater Routine		4/26/2017	Lead: DON	Co: MBS			
Pile Location		4/27/2017	Lead: JHL	Co: LAW			
		Condition/Damage					
Bent	Pile	% Area Remaining	RT or YT	RT Pile Circum. (in)	Elevation	Details/Remarks	Inspection Type
	T	90		Steel	MDL - ITZ	50% area surface rust / 50% area marine growth (typical).	UW
	U	90		Steel	MDL - ITZ	50% area surface rust / 50% area marine growth (typical).	UW
	V	75		Steel	MDL - ITZ	50% area surface rust / 50% area marine growth (typical).	UW
					MDL+4	10" H x 3" W hole from mech. abrasion (log boom).	
					MDL+6	18" H x 3" W hole from mech. abrasion (log boom).	
	W	75		Steel	MDL - ITZ	50% area surface rust / 50% area marine growth (typical).	UW
					MDL+3	8" H x 3" W hole from mech. abrasion (log boom).	
					MDL+4	4" H x 2" W hole from mech. abrasion (log boom).	
					MDL+5	18" H x 4" W hole from mech. abrasion (log boom).	
	X	90		Steel	MDL - ITZ	50% area surface rust / 50% area marine growth (typical).	UW
	Y	75		Steel	MDL - ITZ	50% area surface rust / 50% area marine growth (typical).	UW
					MDL+3	6" H x 3" W hole from mech. abrasion (log boom).	
					MDL+5	9" H x 3" W hole from mech. abrasion (log boom).	
					MDL+6	6" H x 3" W hole from mech. abrasion (log boom).	
counts	steel	37					



<div>LEGEND:</div> <div><div><div></div><div>VERTICAL ROUND STEEL PILE</div></div><div><div></div><div>STEEL CHANNEL WALER REPAIR</div></div></div>	ROUTINE INSPECTION	UNDERWATER INSPECTION	<div><div><div><div><div><div>Washington State Department of Transportation</div><div>Bridge and Structures Office</div></div></div><div><div><div><div>WSDOT</div><div>BRIDGE PRESERVATION OFFICE</div></div></div></div></div></div></div>	<div><div><div>DOC - 6</div><div>MCNEIL ISLAND STILL HARBOR DOCK</div></div><div>LAYOUT</div></div>	SHEET NO. 1	SHEETS
	Date: 4/26/2017	Date: 4/26/2017				
	Scale: NA	Scale: NA				
	Inspected by: JHL/JSW	Inspected by: DON/MBS				

Capital Project Request

2019-21 Biennium

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Version: NN 2020 Supplemental - Working Version

Report Number: CBS002

Date Run: 9/19/2019 1:37PM

Project Number: 40000381

Project Title: Minor Works Preservation Projects: Statewide 2019-21

Description

Starting Fiscal Year: 2021

Project Class: Preservation

Agency Priority: 5

Project Summary

DSHS provides care, treatment, training, and rehabilitation for 2,100 of Washington's most vulnerable citizens. More than 6,800 DSHS employees provide these services in 330 buildings with 4.3 million square feet of space on 11 institutional campuses. DSHS requests an appropriation to address our highest priorities for critical renewal, repair, and replacement projects to protect life; comply with life safety codes and regulations; maintain certification and licensing standards; and preserve existing buildings, structures, infrastructure, and site features.

Project Description**1. WHAT IS THE PROBLEM OR OPPORTUNITY?**

DSHS operates 11 hospitals, residential habilitation centers, institutions, and community facilities with 4.3 million square feet of space in 330 buildings on approximately 600 developed acres. These facilities support a variety of residential programs for the care, treatment, training, and rehabilitation of 2,100 clients. Nearly two-thirds of these buildings and much of this infrastructure are older than 50 years of age.

These buildings and infrastructure require maintenance, repair, renewal, and upgrades to meet the ongoing needs of our programs. The failure to fund necessary renewal and improvement projects results in a growing preservation backlog with facilities that deteriorate faster than we can maintain them. DSHS capital and facilities staff prioritized these various preservation needs in relation to OFM guidelines and the impacts to clients, staff, and services.

Timely attention to failing building components, building systems, and infrastructure minimizes disruptions to on-going institutional operations providing services to clients. Completion of these subprojects allows our hospitals, residential habilitation centers, institutions, and community facilities to maintain operations at their current levels of service.

The 2018 update to our Facilities Condition Assessment database identifies nearly 8,000 facility and infrastructure deficiencies with an estimated cost of \$700 million. Reduction of our preservation backlog directs more of the institution's maintenance effort to preventative maintenance, which extends the life of our buildings and reduces the need for major capital preservation projects.

In 2019, DSHS requested \$40 million for Minor Works Preservation projects; the Legislature funded only \$12.68 million. Consequently, many failing building systems scheduled for replacement remain in service without necessary upgrades. Over time, these systems ultimately fail, requiring immediate attention to repair, upgrade, or replace these systems to avoid disruption to essential client services. Without adequate capital resources, we have had to look to the operating budget for a share of their limited resources.

2. WHAT IS THE PROJECT?

This project addresses our highest priorities for critical renewal, repair, and replacement projects to protect life; comply with life safety codes and regulations; maintain certification and licensing standards; and preserve existing buildings, structures, infrastructure, and site features at 11 hospitals, residential facilities, and institutions. DSHS will use these funds to address a prioritized list of critical repair, renewal, and replacement projects for failing building elements, building systems, infrastructure, and site features.

3. HOW DOES THE PROJECT ADDRESS THE PROBLEM OR OPPORTUNITY?

This project provides funding to address identified health, safety, code, building, and infrastructure deficiencies in the DSHS built environment. Generally, each of these subprojects addresses specific deficiencies rated as "poor" or "unsatisfactory/failing" in the 2018 update to our Facilities Condition Assessment database. Because these projects systematically target the worst preservation backlog issues, each project has a proportionally significant impact on reducing the

Capital Project Request

2019-21 Biennium

*

Version: NN 2020 Supplemental - Working Version

Report Number: CBS002

Date Run: 9/19/2019 1:37PM

Project Number: 40000381

Project Title: Minor Works Preservation Projects: Statewide 2019-21

Description

agency's preservation backlog. A dedicated funding source aimed at reducing the preservation backlog:

- + Preserves healthy and safe facilities where clients live and receive services
- + Preserves health and efficient facilities where staff work.
- + Minimizes disruption to client services due to failures and downtime in facility systems.
- + Avoids additional damage to compromised building components, building systems, infrastructure, and site features.

Capital and facility staff prioritized these preservation subprojects to address the Department's most critical facility needs as identified in the 2018 update to the Facility Condition Assessment database. The preservation of failing facilities and structures reduces the agency's preservation backlog. This effort allows the programs to direct more of the operating budget to the institution's preventative maintenance effort, which extends the life of our buildings and reduces the need and urgency for future major capital preservation projects.

Generally, these preservation subprojects change a system's rating from "poor" or "unsatisfactory/failing" to "good" or "new" in the Facility Condition Assessment database. Once completed, staff will upgrade the overall rating for the specific building. The completed project extends the life of the building or infrastructure system.

4. WHAT ALTERNATIVES WERE EXPLORED?**1) Do Nothing**

This option relies solely on the maintenance effort funded in the operating budget to preserve our existing campuses. With the significant preservation backlog and the limited resources available to the Maintenance and Operations Division, this is not a sustainable practice for any period of time.

2) Fund Major Preservation Projects from the Operating Budget

Though DSHS may be able to cover minor repairs in the operating budget for maintenance and operations, this is not a reliable funding source for major capital improvements that take many months to design, bid, and construct.

3) Appropriate Minor Works Preservation Funding to Address the DSHS Preservation Backlog - Preferred Option

DSHS prefers this option - a specific capital appropriation. Funding this Minor Works Preservation project addresses our highest priorities for critical renewal, repair, and replacement projects to protect life; comply with life safety codes and regulations; maintain certification and licensing standards; and preserve existing buildings, structures, infrastructure, and site features. This option provides the best outcomes for the clients in our care.

5. WHO BENEFITS FROM THE PROJECT?

DSHS provides a wide variety of essential services. For 2,100 clients, the programs provide the services in hospitals, residential habilitation centers, institutions, and community facilities operated by the Behavioral Health Administration, Developmental Disabilities Administration, and the Special Commitment Center. These preservation improvements provide continuity in the care and treatment of our clients.

6. WILL OTHER FUNDING BE USED TO COMPLETE THE PROJECT?

No. DSHS requests funding from the State Building Construction Account - Fund 057-1.

7. HOW DOES THIS PROJECT SUPPORT THE DSHS STRATEGIC PLAN OR IMPROVE AGENCY PERFORMANCE?

At DSHS, we transform lives. We created our current Strategic Plan to set measureable goals to ensure DSHS serves our clients and Washington state to the best of our ability. The following strategic objectives have impacts on our 2,100 clients in

Capital Project Request

2019-21 Biennium

*

Version: NN 2020 Supplemental - Working Version

Report Number: CBS002

Date Run: 9/19/2019 1:37PM

Project Number: 40000381

Project Title: Minor Works Preservation Projects: Statewide 2019-21

Description

residential care and the 6,800 staff working in our hospitals, residential habilitation centers, institutions, and community facilities:

Each strategic objective in this strategic plan supports one or more of the five broad goals for DSHS:

- + Health: Each individual and each community will be healthy.
- + Safety: Each individual and community will be safe.
- + Protection: Each individual who is vulnerable will be protected.
- + Quality of Life: Each individual in need will be supported to attain the highest possible quality of life.
- + Public Trust: Strong management practices will ensure quality and efficiency.

In addition, each strategic objective supports one of the Secretary's strategic priorities:

- + Prepare for aging Washingtonians
- + Care for those in our care
- + Serve people in their home community
- + Provide a pathway out of poverty and becoming healthier
- + Increase organizational efficiency, performance and effectiveness

Both the DSHS goals and Secretary's priorities align with:

- + Results Washington's objective of better results for Washingtonians
- + Governor's goal of Healthy and Safe Communities
- + Governor's goal of Efficient, Effective, and Accountable Government

This project preserves capital assets at many of our DSHS campuses. These facilities house clients and programs that are directly or indirectly tied to the following Results Washington objectives:

Goal 1: World-Class Education – Access and Success

- 1.2) K-12: Increase percentage of students who graduate high school.

Goal 2: Prosperous Economy - Sustainable, Efficient Infrastructure

- 3.1) Maintain the percent of Washington infrastructure assets in satisfactory condition.

Goal 3: Sustainable Energy and a Clean Environment – Sustainable and Clean Environment

- 1.2) Clean Electricity: Reduce greenhouse gas emissions from electrical energy consumption.
- 1.3) Efficient Buildings and Industrial Processes: Improve non-electrical energy efficiency of buildings to reduce greenhouse gas emissions.

Goal 4: Healthy and Safe Communities – Healthy People

- 1.2) Healthy Youth and Adults: Decrease percentage of adults reporting fair or poor health.
- 2.3) Public: Decrease rate of return to institutions for offenders.
- 2.5) Worker Safety: Decrease workplace injury rates that result in missing three or more days from work.

Goal 5: Efficient, Effective, and Accountable Government – Customer Satisfaction and Employee Engagement

- 1.3) Customer Satisfaction: Increase Washington as an employer of choice.

Goal 5: Efficient, Effective, and Accountable Government – Resource Stewardship

- 2.2) Cost-Effective Government: Reduce the cost of energy used by state owned facilities.

8. DOES THE PROJECT HAVE IT-RELATED COSTS?

Maybe. Projects with IT-related costs have been accounted for in the project budget.

Capital Project Request

2019-21 Biennium

*

Version: NN 2020 Supplemental - Working Version

Report Number: CBS002

Date Run: 9/19/2019 1:37PM

Project Number: 40000381

Project Title: Minor Works Preservation Projects: Statewide 2019-21

Description**9. IS THIS PROJECT LINKED TO THE PUGET SOUND ACTION AGENDA?**

No.

10. HOW DOES THIS PROJECT CONTRIBUTE TO THE STATEWIDE GOALS TO REDUCE CARBON POLLUTION AND/OR IMPROVE ENERGY EFFICIENCY?

The preservation projects funded with this appropriation address a prioritized list of critical repair, renewal, and replacement projects for failing building elements, building systems, infrastructure, and site features. To the greatest extent possible, DSHS will take advantage of any opportunities to reduce carbon emissions, improve energy efficiency, and/or enhance maintainability through these projects.

11. WHAT ELSE SHOULD DECISION MAKERS KNOW TO EVALUATE THIS FUNDING REQUEST?

The effects of not funding these subprojects depend on the criticality of the affected building component or building system. If the limited maintenance resources available in the operating budget cannot patch or mend these failing systems, any of the following consequences are possible:

- + Building systems that fail must be temporarily patched. Such failures disrupt regular maintenance activities and services to clients may be temporarily, or permanently, adversely impacted.
- + Buildings with critical building components that reach a point of absolute failure may need to be vacated or abandoned.
- + Displaced functions or services must be accommodated elsewhere with significant impacts to staff, client services, community safety, and the operating budget.
- + Buildings may be closed by the local jurisdiction if serious code and life safety deficiencies are not corrected.
- + Federal funding supporting the hospitals and residential habilitation centers may be withdrawn in the facilities do not meet strict facility standards.

Location

City: Buckley	County: Pierce	Legislative District: 031
City: Lakewood	County: Pierce	Legislative District: 028
City: Lakewood	County: Pierce	Legislative District: 028
City: Medical Lake	County: Spokane	Legislative District: 006
City: Medical Lake	County: Spokane	Legislative District: 006
City: Shoreline	County: King	Legislative District: 032
City: Unincorporated	County: Pierce	Legislative District: 028

Project Type

Facility Preservation (Minor Works)
 Health, Safety and Code Requirements (Minor Works)
 Infrastructure Preservation (Minor Works)

Growth Management impacts

This project either preserves or repairs existing buildings, structures, and infrastructure. No Growth Management impacts are anticipated.

Funding

Expenditures

2019-21 Fiscal Period

Capital Project Request

2019-21 Biennium

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Version: NN 2020 Supplemental - Working Version

Report Number: CBS002

Date Run: 9/19/2019 1:37PM

Project Number: 40000381

Project Title: Minor Works Preservation Projects: Statewide 2019-21

Funding

Acct Code	Account Title	Estimated Total	Prior Biennium	Current Biennium	Reappropriations	New Appropriations
042-1	C E P and R I Acct-State					
057-1	State Bldg Constr-State					
057-1	State Bldg Constr-State	6,500,000				6,500,000
	Total	6,500,000	0	0	0	6,500,000

Future Fiscal Periods

	2021-23	2023-25	2025-27	2027-29
042-1 C E P and R I Acct-State				
057-1 State Bldg Constr-State				
057-1 State Bldg Constr-State				
Total	0	0	0	0

Operating Impacts

No Operating Impact

Narrative

This project either preserves or repairs existing buildings, structures, and infrastructure. Generally, these subprojects add no new square footage and no additional operating budget FTEs are required. While some campus activities and programs may be disrupted during construction, such impacts are typically absorbed without additional operating funds.

SubProjects

SubProject Number: 40000513

SubProject Title: LV-Mason Memorial Building: Improvements

Capital Project Request

2019-21 Biennium

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Version: NN 2020 Supplemental - Working Version

Report Number: CBS002

Date Run: 9/19/2019 1:37PM

Project Number: 40000381

Project Title: Minor Works Preservation Projects: Statewide 2019-21

SubProjects

SubProject Number: 40000513

SubProject Title: LV-Mason Memorial Building: Improvements

Project Phase Title: LV-Mason Memorial Building: Improvements

Starting Fiscal Year: 2021

Project Class: Preservation

Agency Priority: 5

Project Summary

This project is proposed to improve the Mason Memorial Building by: installing insulation, installing an HVAC system, upgrade the existing elevator, and to modify existing windows to make them more energy efficient.

Project DescriptionBACKGROUND

Lakeland Village (LV) is a Residential Habilitation Center for individuals with intellectual and developmental disabilities, many with co-occurring physical disabilities and medical fragility. Located in Medical Lake, the program operates as a Nursing Facility, an Intermediate Care Facility, and a provider of short-term respite services. Mason Memorial Building provides office space for Lakeland Village staff.

PROBLEM STATEMENT

The existing building is in need of several updates to maintain the function and integrity of the building. The 14,358 square foot building does not have a centralized HVAC system, causing significant interior temperature swings depending on the weather outside. The existing insulation is insufficient and does not meet code. The elevator is 55 years old and has reached its end of life cycle. Windows need to be replaced where failing window AC units have been installed.

PROPOSED PROJECT

This project is proposed to provide a new gas heat HVAC system to the ground floor and basement of the Mason Memorial Building. Replace the existing elevator, which has reached the end of its design life. Replace windows which have broken down air conditioning units in them. Install insulation to meet code requirements.

CONSEQUENCES OF NOT FUNDING

If this project is not funded, the building will continue to see temperature swings due to insufficient insulation and a lack of AC and gas HVAC system. The windows with the AC units in them prevent the windows to properly seal, allowing for additional heated or cooled air to leave the building. The current set up is not energy efficient.

ENERGY EFFICIENCIES

This project will improve the energy efficiency of one of the office building on the Lakeland Village campus. By conducting these building improvements, less energy will be lost in heating and cooling the building.

Location

City: Medical Lake

County: Spokane

Legislative District: 006

Project Type

Facility Preservation (Minor Works)

Capital Project Request

2019-21 Biennium

*

Version: NN 2020 Supplemental - Working Version

Report Number: CBS002

Date Run: 9/19/2019 1:37PM

Project Number: 40000381

Project Title: Minor Works Preservation Projects: Statewide 2019-21

SubProjects

SubProject Number: 40000513

SubProject Title: LV-Mason Memorial Building: Improvements

Growth Management impacts

This project will not change census capacity or the number of facility staff. No Growth Management impacts are anticipated.

Funding

Acct Code	Account Title	Expenditures		2019-21 Fiscal Period	
		Estimated Total	Prior Biennium	Current Biennium	New Approps
057-1	State Bldg Constr-State	940,000			940,000
	Total	940,000	0	0	940,000

		Future Fiscal Periods			
		2021-23	2023-25	2025-27	2027-29
057-1	State Bldg Constr-State				
	Total	0	0	0	0

Operating Impacts

No Operating Impact

Narrative

This project addresses the preservation of existing facilities. This project adds no new square footage and no additional operating budget FTEs.

SubProject Number: 30003670

SubProject Title: CSTC-Ketron: Interior Door and Hardware Replacements

Capital Project Request

2019-21 Biennium

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Version: NN 2020 Supplemental - Working Version

Report Number: CBS002

Date Run: 9/19/2019 1:37PM

Project Number: 40000381

Project Title: Minor Works Preservation Projects: Statewide 2019-21

SubProjects

SubProject Number: 30003670

SubProject Title: CSTC-Ketron: Interior Door and Hardware Replacements

Starting Fiscal Year: 2021

Project Class: Preservation

Agency Priority: 5

Program: 030

Project Summary

This project replaces the damaged sleeping room doors with heavier detention grade doors and hardware that will better hold up to sustained abuse by violent children and youth.

Project DescriptionBACKGROUND

The Child Study and Treatment Center (CSTC) is the only state psychiatric hospital for children and youth aged 6 to 18 years old. Accredited by The Joint Commission, the 47-bed facility located in Lakewood, provides culturally competent care to children and youth with severe emotional and behavioral disorders that are typically complicated by medical, social, legal, and developmental issues.

CSTC treats children who cannot be safely served in less restrictive settings in the community. Ketron houses 16 children aged 12-14 at CSTC. Children in distress display extremely violent and destructive behavior. Patients have kicked and beat the interior doors to the point where the doors have become a safety and security concern. Doors are warped and the hardware barely holds under the abuse by deregulated children.

PROBLEM STATEMENT

CSTC receives an ever increasing number of very violent children. Sleeping room Interior doors suffer from extreme abuse, are warped, severely damaged, and need to be replaced with more durable patient resistant doors for safety and security concerns. Existing pivot hinges present safety hazards for patients by pinching and crushing of fingers or hands.

PROPOSED PROJECT

Replace interior sleeping room doors with 16 gauge steel doors and solid grouted frames. Replace pivot hinges with anti-ligature continuous hinges and appropriate hardware. Provide concealed closers at the tops of the doors to prevent patients from freely slamming and banging the doors. The work will be done in occupied space during regular business hours requiring a great deal of watchful diligence by contractors around these children. In the end the cottage will be safer for both staff and patients. It will end, or at least greatly reduce, repetitive maintenance calls for damaged doors.

CONSEQUENCE FOR NOT FUNDING

Staff will become more concerned for the patient and staff safety as the doors sustain structural damage and require repairs. Continued safety pinching hazards continue to cause harm to patients. Non-functioning doors put all the cottage occupants at the mercy of violent patients. Doors will continue to sustain damaged until there is no choice but to replace.

ENERGY EFFECIENCIES

The interior doors do not contribute to energy efficiency or net zero energy goals. However, it will greatly reduce the time that maintenance spends repairing doors allowing them to perform other tasks. This project neither increases nor decreases the overall CSTC staffing model but will enable staff to more effectively manage patients. There should be no cost increase to the operating budget.

Capital Project Request

2019-21 Biennium

*

Version: NN 2020 Supplemental - Working Version

Report Number: CBS002

Date Run: 9/19/2019 1:37PM

Project Number: 40000381

Project Title: Minor Works Preservation Projects: Statewide 2019-21

SubProjects

SubProject Number: 30003670

SubProject Title: CSTC-Ketron: Interior Door and Hardware Replacements

Location

City: Lakewood

County: Pierce

Legislative District: 028

Project Type

Facility Preservation (Minor Works)

Health, Safety and Code Requirements (Minor Works)

Growth Management impacts

This project will not change census capacity or the number of facility staff. No Growth Management impacts are anticipated.

Funding

Acct Code	Account Title	Expenditures		2019-21 Fiscal Period	
		Estimated Total	Prior Biennium	Current Biennium	New Approps
057-1	State Bldg Constr-State	530,000			530,000
	Total	530,000	0	0	530,000

Future Fiscal Periods

	2021-23	2023-25	2025-27	2027-29
057-1 State Bldg Constr-State				
Total	0	0	0	0

Operating Impacts**No Operating Impact****Narrative**

This project addresses the preservation of existing facilities. This project adds no new square footage and no additional operating budget FTEs.

SubProject Number: 30003790

SubProject Title: SW-Medical Lake: Fire Road Development

Capital Project Request

2019-21 Biennium

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Version: NN 2020 Supplemental - Working Version

Report Number: CBS002

Date Run: 9/19/2019 1:37PM

Project Number: 40000381

Project Title: Minor Works Preservation Projects: Statewide 2019-21

SubProjects

SubProject Number: 30003790

SubProject Title: SW-Medical Lake: Fire Road Development

Starting Fiscal Year: 2021

Project Class: Preservation

Agency Priority: 5

Program: 030

Project Summary

This project improves fire control and electrical line access roads, and trims trees in electrical line right-of-way.

Project DescriptionBACKGROUND

Medical Lake is the home of Eastern State Hospital, Lakeland Village, and Pine Lodge. Eastern State Hospital provides evaluation and in-patient treatment for individuals with serious or long-term mental illness that have been referred to the hospital through the Behavioral Health Organizations or through the criminal justice system. Lakeland Village is a Residential Habilitation center for 210 individuals with intellectual and developmental disabilities, many co-occurring physical disabilities and medical fragility. Pine Lodge provides shops and work space for the maintenance support services for the Medical Lake Campus. The Medical Lake Campus is in a rural area and downed trees and power outages are common. In the last few years, there have been a number of wild fires that have come dangerously close to the campus.

PROBLEM STATEMENT

Trees that are growing in the power line right-of-way can fall on power lines. Trees growing too close to fire access roads can fall over roads and impede access. In the last few years, there have been a number of wild fires that come dangerously close to the Medical Lake Campus.

PROPOSED PROJECT

This project improves fire control and electrical line access roads, and trims trees in electrical line right-of-way.

CONSEQUENCES OF NOT FUNDING

Risk of trees falling across power lines and fire roads will continue.

Location

City: Medical Lake

County: Spokane

Legislative District: 006

City: Medical Lake

County: Spokane

Legislative District: 006

City: Medical Lake

County: Spokane

Legislative District: 006

Project Type

Infrastructure Preservation (Minor Works)

Capital Project Request

2019-21 Biennium

*

Version: NN 2020 Supplemental - Working Version

Report Number: CBS002

Date Run: 9/19/2019 1:37PM

Project Number: 40000381

Project Title: Minor Works Preservation Projects: Statewide 2019-21

SubProjects

SubProject Number: 30003790

SubProject Title: SW-Medical Lake: Fire Road Development

Growth Management impacts

This project will not change census capacity of the number of facility staff. No Growth Management impacts are anticipated.

Funding

Acct Code	Account Title	Expenditures		2019-21 Fiscal Period	
		Estimated Total	Prior Biennium	Current Biennium	New Approps
057-1	State Bldg Constr-State	565,000			565,000
	Total	565,000	0	0	565,000
Future Fiscal Periods					
		2021-23	2023-25	2025-27	2027-29
057-1	State Bldg Constr-State				
	Total	0	0	0	0

Operating Impacts**No Operating Impact****Narrative**

This project addresses the preservation of existing facilities. This project adds no new square footage and no additional operating budget FTEs.

SubProject Number: 40000514

SubProject Title: LV-Laundry: Roofing Replacement

Capital Project Request

2019-21 Biennium

*

Version: NN 2020 Supplemental - Working Version

Report Number: CBS002

Date Run: 9/19/2019 1:37PM

Project Number: 40000381

Project Title: Minor Works Preservation Projects: Statewide 2019-21

SubProjects

SubProject Number: 40000514

SubProject Title: LV-Laundry: Roofing Replacement

Project Phase Title: LV-Laundry: Roofing Replacement

Starting Fiscal Year: 2021

Project Class: Preservation

Agency Priority: 5

Program: 040

Project Summary

This project modifies the existing Laundry Building roof rainwater release pattern to eliminate the leakage hot spots, and install a new heat weldable single ply thermoplastic polyolefin roof membrane over the modified roof surface.

Project DescriptionBACKGROUND

Lakeland Village (LV) is a Residential Habilitation Center for individuals with intellectual and developmental disabilities, many with co-occurring physical disabilities and medical fragility. Located in Medical Lake, the program operates as a Nursing Facility, an Intermediate Care Facility, and a provider of short-term respite services. The Laundry Building provides laundry services for Lakeland Village, Eastern State Hospital, and Pine Lodge.

PROBLEM STATEMENT

The existing roof rain water is released through roof drains within the drain valleys at different levels on the roof. Without a direct route from the roof to the building exterior, pooling water has created weak spots in the membrane creating leaks and clogging roof drains.

PROPOSED PROJECT

Remove the parapet walls along the dome roof. Extend the dome roof line to eliminate the drain valleys at dome level. Modify the flat roof area drain valleys by remove existing roof drains and slope the drain valley to each end of roof.

CONSEQUENCES OF NOT FUNDING

The existing building roof system will continue to deteriorate from the pooling water increasing maintenance repairs. The intrusion of water into the building will cause mold issues that will slow or halt operations laundry and disrupt the processing of over 8000 pounds of laundry a month. Repairing the roof is a stop-gap measure until a new laundry facility is built.

Location

City: Medical Lake

County: Spokane

Legislative District: 006

Project Type

Facility Preservation (Minor Works)

Growth Management impacts

This project will not change census capacity or the number of facility staff. No Growth Management impacts are anticipated.

Capital Project Request

2019-21 Biennium

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Version: NN 2020 Supplemental - Working Version

Report Number: CBS002

Date Run: 9/19/2019 1:37PM

Project Number: 40000381

Project Title: Minor Works Preservation Projects: Statewide 2019-21

SubProjects

SubProject Number: 40000514

SubProject Title: LV-Laundry: Roofing Replacement

Funding

Acct Code	Account Title	Expenditures		2019-21 Fiscal Period	
		Estimated Total	Prior Biennium	Current Biennium	New Approps
057-1	State Bldg Constr-State	400,000			400,000
	Total	400,000	0	0	400,000

Future Fiscal Periods

	Account Title	2021-23	2023-25	2025-27	2027-29
057-1	State Bldg Constr-State				
	Total	0	0	0	0

Operating Impacts

No Operating Impact

Narrative

This project addresses the preservation of existing facilities. This project adds no new square footage and no additional operating budget FTEs.

SubProject Number: 40000516

SubProject Title: WSH-Chiller Bldg: Cooling Tower Replacement

Capital Project Request

2019-21 Biennium

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Version: NN 2020 Supplemental - Working Version

Report Number: CBS002

Date Run: 9/19/2019 1:37PM

Project Number: 40000381

Project Title: Minor Works Preservation Projects: Statewide 2019-21

SubProjects

SubProject Number: 40000516

SubProject Title: WSH-Chiller Bldg: Cooling Tower Replacement

Project Phase Title: WSH-Chiller Bldg: Cooling Tower Replacement

Starting Fiscal Year: 2021

Project Class: Preservation

Agency Priority: 5

Project Summary

This project replaces the Chiller Building's aged and failing cooling tower.

Project DescriptionBACKGROUND

Established in 1871, Western State Hospital (WSH) is an 850-bed state psychiatric hospital serving adults from Western Washington counties. Located in Lakewood, the hospital provides evaluation and in-patient treatment for individuals with serious or long-term mental illness that have been referred to the hospital through the Behavioral Health Organizations, the civil court system, or the criminal justice system.

The cooling tower is an integral part of the chiller system which provides cooling for the WSH Campus. While the equipment is being nursed along, the tower is expected to fail within the next two years.

PROBLEM STATEMENT

The cooling tower is an integral part of WSH's chiller system which provides needed cooling for several WSH buildings. The cooling tower has outlived its useful service life and is starting to fail. Without the cooling tower, the chiller system can't provide needed cooling to several WSH facilities and jeopardizes the hospital's ability to provide adequate care to patients as well as risk of failure of information technology, fire alarm equipment, and spoilage of pharmaceutical supplies due to excessive heat build-up.

At the expense of preventative maintenance on equally critical systems at WSH, maintenance staff will continue to spend limited resources repairing the cooling tower to keep it operational, however the tower is beyond repair and is expected to fail completely within two years.

This project is a priority due to the program due to the risk to life safety systems, program data management systems, and pharmaceutical commodity storage.

PROPOSED PROJECT

This project will provide design documents, a bid package, and construction to replace the failing cooling tower. The end result will be a more efficient chilled water system and will enable the existing chiller to operate more effectively.

The direct benefit to the facility will be restoration of capacity of the cooling on the campus HVAC system and direct reduced risk of failure of information technology, fire alarm equipment, and spoilage of pharmaceutical supplies due to excessive heat build-up in hospital's program areas.

At least 250 patients and 500 staff will also benefit by having cooling capacity restored on the wards served by the campus chilled water system.

CONSEQUENCES OF NOT FUNDING

The imminent loss of capability to cool the hospital's program space drives this request. Maintenance staff will continue to spend time and resources to try and keep the cooling tower operational while neglecting needed preventative maintenance on

Capital Project Request

2019-21 Biennium

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Version: NN 2020 Supplemental - Working Version

Report Number: CBS002

Date Run: 9/19/2019 1:37PM

Project Number: 40000381

Project Title: Minor Works Preservation Projects: Statewide 2019-21

SubProjects

SubProject Number: 40000516

SubProject Title: WSH-Chiller Bldg: Cooling Tower Replacement

other areas of the campus. The tower will eventually fail and the chiller won't be able to provide adequate cooling to several campus buildings, including hospital wards.

ENERGY EFFECIENCIES:

New cooling tower equipment will be more energy efficient and require far less maintenance. Additionally, some energy savings may be expected with modern cooling tower design technology, directly addressing Governor Inslee's Executive Order 18.01, Item #1c.

This project restores the efficiency of the existing chiller plant's ability to deliver chilled water as originally designed; to remain operational; and frees maintenance staff to perform needed preventative maintenance on other areas of the campus.

Location

City: Lakewood

County: Pierce

Legislative District: 028

Project Type

Facility Preservation (Minor Works)

Health, Safety and Code Requirements (Minor Works)

Infrastructure Preservation (Minor Works)

Growth Management impacts

This project will not change census capacity or the number of facility staff. No Growth Management impacts are anticipated.

Funding

Acct Code	Account Title	Expenditures		2019-21 Fiscal Period		
		Estimated Total	Prior Biennium	Current Biennium	Reappropriations	New Appropriations
057-1	State Bldg Constr-State	440,000				440,000
	Total	440,000	0	0	0	440,000
Future Fiscal Periods						
		2021-23	2023-25	2025-27	2027-29	
057-1	State Bldg Constr-State					
	Total	0	0	0	0	

Operating Impacts**No Operating Impact****Narrative**

This project addresses the preservation of existing facilities. This project adds no new square footage and no additional operating budget FTEs.

SubProject Number: 40000476

SubProject Title: FS-Multiple Bldgs: Roofing Replacement 48-51

Capital Project Request

2019-21 Biennium

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Version: NN 2020 Supplemental - Working Version

Report Number: CBS002

Date Run: 9/19/2019 1:37PM

Project Number: 40000381

Project Title: Minor Works Preservation Projects: Statewide 2019-21

SubProjects

SubProject Number: 40000476

SubProject Title: FS-Multiple Bldgs: Roofing Replacement 48-51

Starting Fiscal Year: 2021

Project Class: Preservation

Agency Priority: 5

Project Summary

This project replaces the existing asphalt shingle roofing on four ICF residential cottages at Fircrest School.

Project DescriptionBACKGROUND

Fircrest School (FS) is a Residential Habilitation Center providing support to individuals with intellectual and developmental disabilities. Located in Shoreline on the site of a former WWII navy hospital, the program operates as both a Nursing Facility and an Intermediate Care Facility. The Intermediate Care Facility for Individuals with Intellectual Disabilities (ICF/ID) provides individualized habilitative services that support and enhance individual skills and strengths.

The Intermediate Care Facility (ICF) cottage roofs were replaced in 1997 as part of an eight building reroofing project. The roofs are now over 20 years old. The typical life expectancy for asphalt roofing systems are 20-25 years.

PROBLEM STATEMENT

Multiple residential cottages have experienced water intrusion due deteriorating roofing systems.

Over the past year, the Maintenance and Operations Division (MOD) has performed an increasing number of work orders to repair roofing systems, mainly around existing skylights, due to deterioration of roofing systems and poor flashing details. The increase in maintenance calls indicates the roofing material is reaching its end of life. Water penetration puts clients at risk of mold and disrupts client care.

PROPOSED PROJECT

This project will replace asphalt shingle roofing systems; remove and inspect gutters and downspouts; correct flashing details around skylights and other penetrations; and replace any damaged sheathing due to water damage.

CONSEQUENCES OF NOT FUNDING

If this project is not funded MOD will continue to provide emergency repairs on the roofing system, water intrusion will continue creating a potential health issue in the attic spaces, water intrusion may be found in common areas and sleeping rooms, and premature failure of structural components of the building.

All these items can be avoided with the swift replacement of an aging roofing system.

ENERGY AND MAINTENANCE EFFECIENCIES

This project does not contribute to Executive Order 18.01.

Emergency repairs due to water intrusion will be eliminated eliminating MOD work orders. MOD will be able to focus on preventative maintenance efforts with the residential cottages.

Location

City: Shoreline

County: King

Legislative District: 032

Capital Project Request

2019-21 Biennium

*

Version: NN 2020 Supplemental - Working Version

Report Number: CBS002

Date Run: 9/19/2019 1:37PM

Project Number: 40000381

Project Title: Minor Works Preservation Projects: Statewide 2019-21

SubProjects**Project Type**

SubProject Number: 40000476

SubProject Title: FS-Multiple Bldgs: Roofing Replacement 48-51

Project Type

Facility Preservation (Minor Works)

Growth Management impacts

This project either preserves or repairs existing buildings, structures, and infrastructure. No Growth Management impacts are anticipated.

Funding

Acct Code	Account Title	Expenditures		2019-21 Fiscal Period	
		Estimated Total	Prior Biennium	Current Biennium	New Reappropriations
057-1	State Bldg Constr-State	800,000			800,000
	Total	800,000	0	0	800,000

		Future Fiscal Periods			
		2021-23	2023-25	2025-27	2027-29
057-1	State Bldg Constr-State				
	Total	0	0	0	0

Operating Impacts**No Operating Impact****Narrative**

This project addresses the preservation of existing facilities. This project adds no new square footage and no additional operating budget FTEs.

SubProject Number: 40000482

SubProject Title: FS-Multiple Bldgs: Mechanical Room Steam Line Replacement

Capital Project Request

2019-21 Biennium

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Version: NN 2020 Supplemental - Working Version

Report Number: CBS002

Date Run: 9/19/2019 1:37PM

Project Number: 40000381

Project Title: Minor Works Preservation Projects: Statewide 2019-21

SubProjects

SubProject Number: 40000482

SubProject Title: FS-Multiple Bldgs: Mechanical Room Steam Line Replacement

Starting Fiscal Year: 2021

Project Class: Preservation

Agency Priority: 5

Project Summary

This project replaces the steam and hot water piping and valves in the mechanical rooms at Fircrest School.

Project DescriptionBACKGROUND

Fircrest School (FS) is a Residential Habilitation Center providing support to individuals with intellectual and developmental disabilities. Located in Shoreline on the site of a former WWII navy hospital, the program operates as both a Nursing Facility and an Intermediate Care Facility.

The Fircrest School campus heating needs are served by a central heating plant. The steam piping enters into each cottage underground into a mechanical room. This piping is past the expected life expectancy. Over time the pipes have become fragile and prone to leaks and failures. Valves are found not to be functional and reliable to work around.

PROBLEM STATEMENT

The mechanical spaces that serve the residential cottages are unsafe. Piping is frail and valves are unreliable.

Maintenance workers work within a room no larger than 10' x 4' to work on the heating and hot water systems. These rooms are often filled with heating system components that restrict maintenance. Reliability of the piping and valves is paramount for health and safety purposes. The current mechanical rooms are unsafe resulting in additional workers to support general maintenance activities.

In order to keep maintenance staff safe when working on the system, the system needs to be completely shut down at the cottage for preventative maintenance work versus insulating the issue to make needed repairs.

This project is needed to protect maintenance staff. The systems have become unreliable where significant repairs and shut downs are needed to serve those individuals that live in these cottages.

PROPOSED PROJECT

This project will replace all of frail piping and unreliable valves, install new insulation on all piping and valves, secure all systems properly to meet current codes, and install safety measures to ensure worker safety.

CONSEQUENCES OF NOT FUNDING

If this project is not funded critical heating and hot water system will be susceptible to the failure, additional maintenance cost for repairs, additional staffing will be needed for worker safety purposes, and energy loss will continued due to a lack of piping insulation.

ENERGY EFFECIENCIES

This project shows a favorable simple payback opportunity with the installation of pipe and valve insulation.

Location

City: Shoreline

County: King

Legislative District: 032

Capital Project Request

2019-21 Biennium

*

Version: NN 2020 Supplemental - Working Version

Report Number: CBS002

Date Run: 9/19/2019 1:37PM

Project Number: 40000381

Project Title: Minor Works Preservation Projects: Statewide 2019-21

SubProjects**Project Type**

SubProject Number: 40000482

SubProject Title: FS-Multiple Bldgs: Mechanical Room Steam Line Replacement

Project Type

Health, Safety and Code Requirements (Minor Works)

Infrastructure Preservation (Minor Works)

Growth Management impacts

This project either preserves or repairs existing buildings, structures, and infrastructure. No Growth Management impacts are anticipated.

Funding

Acct Code	Account Title	Expenditures		2019-21 Fiscal Period	
		Estimated Total	Prior Biennium	Current Biennium	New Approps
057-1	State Bldg Constr-State	800,000			800,000
	Total	800,000	0	0	800,000

Future Fiscal Periods

	2021-23	2023-25	2025-27	2027-29
057-1 State Bldg Constr-State				
Total	0	0	0	0

Operating Impacts**No Operating Impact****Narrative**

This project addresses the preservation of existing facilities. This project adds no new square footage and no additional operating budget FTEs.

SubProject Number: 30003798

SubProject Title: ESH-Westlake: Refrigeration Equipment Replacement

Capital Project Request

2019-21 Biennium

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Version: NN 2020 Supplemental - Working Version

Report Number: CBS002

Date Run: 9/19/2019 1:37PM

Project Number: 40000381

Project Title: Minor Works Preservation Projects: Statewide 2019-21

SubProjects

SubProject Number: 30003798

SubProject Title: ESH-Westlake: Refrigeration Equipment Replacement

Starting Fiscal Year: 2021

Project Class: Preservation

Agency Priority: 5

Program: 030

Project Summary

This project replaces refrigeration and freezer equipment and walk-in boxes in the Westlake Kitchen. It will also diagnose moisture overload in the HVAC system and modify it as needed to lower humidity in the kitchen.

Project DescriptionBACKGROUND

Eastern State Hospital is a state psychiatric hospital for adults. Located in Medical Lake, the hospital provides evaluation and in-patient treatment for individuals with serious or long-term mental illness that have been referred to the hospital through the Behavioral Health Organizations or through the criminal justice system. The Westlake Kitchen provides reheating/warming food service to over 110 patients three times a day.

PROBLEM STATEMENT

The refrigeration/freezer equipment and walk-in boxes in the Westlake Kitchen are failing due to high moisture in the kitchen area. This has been a long-term problem as all equipment protection coatings have outlived their useful service life causing additional maintenance. Moisture has been detected in the walls and the continuous freeze-thaw cycle from the refrigeration equipment is damaging the walls.

PROPOSED PROJECT

This project replaces refrigeration/freezer equipment and walk-in boxes in the Westlake Kitchen. It will also provide a solution for the de-humidification of the kitchen.

CONSEQUENCES OF NOT FUNDING

The refrigeration and freezer equipment and boxes will fail. Westlake Hospital kitchen will be without refrigeration. The excessive humidity will lead to eventual mold and mildew growth.

Location

City: Medical Lake

County: Spokane

Legislative District: 006

Project Type

Facility Preservation (Minor Works)

Growth Management impacts

This project will not change census capacity of the number of facility staff. No Growth Management impacts are anticipated.

Capital Project Request

2019-21 Biennium

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Version: NN 2020 Supplemental - Working Version

Report Number: CBS002

Date Run: 9/19/2019 1:37PM

Project Number: 40000381

Project Title: Minor Works Preservation Projects: Statewide 2019-21

SubProjects

SubProject Number: 30003798

SubProject Title: ESH-Westlake: Refrigeration Equipment Replacement

Funding

Acct Code	Account Title	Expenditures		2019-21 Fiscal Period	
		Estimated Total	Prior Biennium	Current Biennium	New Approps
057-1	State Bldg Constr-State	225,000			225,000
	Total	225,000	0	0	225,000

Future Fiscal Periods

	<u>2021-23</u>	<u>2023-25</u>	<u>2025-27</u>	<u>2027-29</u>
057-1 State Bldg Constr-State				
Total	0	0	0	0

Operating Impacts

No Operating Impact

Narrative

This project addresses the preservation of existing facilities. This project adds no new square footage and no additional operating budget FTEs.

SubProject Number: 40000501

SubProject Title: SCC King Hall: Server Room Cooling Upgrade

Capital Project Request

2019-21 Biennium

*

Version: NN 2020 Supplemental - Working Version

Report Number: CBS002

Date Run: 9/19/2019 1:37PM

Project Number: 40000381

Project Title: Minor Works Preservation Projects: Statewide 2019-21

SubProjects

SubProject Number: 40000501

SubProject Title: SCC King Hall: Server Room Cooling Upgrade

Starting Fiscal Year: 2021

Project Class: Preservation

Agency Priority: 5

Project Summary

This project repairs and upgrades the cooling system to provide the proper environment for data and security servers at the Special Commitment Center on McNeil Island.

Project DescriptionBACKGROUND

The Department of Social and Health Services (DSHS) operates the Special Commitment Center (SCC) on McNeil Island for the care and treatment of sexually violent predators. King Hall is the administrative building within the SCC campus and houses the campus data and security controlling servers.

PROBLEM STATEMENT

The cooling capacity for the computer server room is inadequate for the equipment. This is causing the equipment to operate at higher than recommended temperatures. This condition increases the risk of computer network failures.

PROPOSED PROJECT

This project increases the cooling capacity to the server room by replacing the air conditioning unit.

CONSEQUENCES OF NOT FUNDING

If this project is not funded, the computer server room will continue to operate at higher than recommended temperatures. The servers will degrade at a more rapid rate and have a higher risk of failure.

ENERGY EFFICIENCIES

A properly sized air conditioning unit may consume more energy, but will provide an appropriate environment for the computer server equipment.

Location

City: Unincorporated

County: Pierce

Legislative District: 028

Project Type

Facility Preservation (Minor Works)

Growth Management impacts

This project will not change census capacity or the number of facility staff. No Growth Management impacts are anticipated.

Capital Project Request

2019-21 Biennium

*

Version: NN 2020 Supplemental - Working Version

Report Number: CBS002

Date Run: 9/19/2019 1:37PM

Project Number: 40000381

Project Title: Minor Works Preservation Projects: Statewide 2019-21

SubProjects

SubProject Number: 40000501

SubProject Title: SCC King Hall: Server Room Cooling Upgrade

Funding

Acct Code	Account Title	Expenditures		2019-21 Fiscal Period	
		Estimated Total	Prior Biennium	Current Biennium	New Approps
057-1	State Bldg Constr-State	250,000			250,000
	Total	250,000	0	0	250,000

Future Fiscal Periods

	<u>2021-23</u>	<u>2023-25</u>	<u>2025-27</u>	<u>2027-29</u>
057-1 State Bldg Constr-State				
Total	0	0	0	0

Operating Impacts

No Operating Impact

Narrative

This project addresses the preservation of existing facilities. This project adds no new square footage and no additional operating budget FTEs.

SubProject Number: 30003023

SubProject Title: RS-Water System: Water Line Replacement

Capital Project Request

2019-21 Biennium

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Version: NN 2020 Supplemental - Working Version

Report Number: CBS002

Date Run: 9/19/2019 1:37PM

Project Number: 40000381

Project Title: Minor Works Preservation Projects: Statewide 2019-21

SubProjects

SubProject Number: 30003023

SubProject Title: RS-Water System: Water Line Replacement

Starting Fiscal Year: 2021

Project Class: Preservation

Agency Priority: 5

Program: 040

Project Summary

Clean, safe drinking water is basic to the health and wellbeing of the clients and staff at RS. This project replaces and repairs very old drinking water piping with safer, hazardous material-free and long lasting materials.

Project DescriptionBACKGROUND

Rainier School is a residential habilitation center for individuals with developmental disabilities. Located on a rural site in Buckley, the program provides a wide variety of care as an intermediate care facility for individuals with intellectual disabilities. The domestic water lines provides the potable water throughout the campus.

PROBLEM STATEMENT

Some of the existing pipes have become brittle and contain concrete and asbestos which can get into the drinking water. The piping has developed leaks causing loss of the resource. It is to repair the piping with hazardous materials present.

PROPOSED PROJECT

This project replaces and repairs very old drinking water piping with safer, hazardous material-free, and long lasting materials.

CONSEQUENCE OF NOT FUNDING

If this project is not funded, the existing piping will continue to repair, will lose excessive amounts of water and the health hazard will escalate from the permeation of hazardous material into the drinking water.

Location

City: Buckley

County: Pierce

Legislative District: 031

Project Type

Health, Safety and Code Requirements (Minor Works)

Infrastructure Preservation (Minor Works)

Growth Management impacts

This project will not change census capacity or the number of facility staff. No Growth Management impacts are anticipated.

Funding

Acct Code	Account Title	Expenditures		2019-21 Fiscal Period	
		Estimated Total	Prior Biennium	Current Biennium	New Approps
057-1	State Bldg Constr-State	805,000			805,000
	Total	805,000	0	0	805,000

Capital Project Request

2019-21 Biennium

*

Version: NN 2020 Supplemental - Working Version

Report Number: CBS002

Date Run: 9/19/2019 1:37PM

Project Number: 40000381

Project Title: Minor Works Preservation Projects: Statewide 2019-21

SubProjects

SubProject Number: 30003023

SubProject Title: RS-Water System: Water Line Replacement

		Future Fiscal Periods			
		2021-23	2023-25	2025-27	2027-29
057-1	State Bldg Constr-State				
Total		0	0	0	0

Operating Impacts

No Operating Impact

Narrative

This project addresses the preservation of existing facilities. This project adds no new square footage and no additional operating budget FTEs.

SubProject Number: 40000507

SubProject Title: RS-Laundry: Mangle Refurbishment

Capital Project Request

2019-21 Biennium

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Version: NN 2020 Supplemental - Working Version

Report Number: CBS002

Date Run: 9/19/2019 1:37PM

Project Number: 40000381

Project Title: Minor Works Preservation Projects: Statewide 2019-21

SubProjects

SubProject Number: 40000507

SubProject Title: RS-Laundry: Mangle Refurbishment

Starting Fiscal Year: 2021

Project Class: Preservation

Agency Priority: 5

Project Summary

This project replaces major components of the Rainier School Laundry mangle which dries, irons, and folds linens.

Project DescriptionBACKGROUND

Rainier School (RS) is a Residential Habilitation Center for individuals with intellectual and developmental disabilities. Located on a rural site in Buckley, the program provides a wide variety of care as an Intermediate Care Facility (ICF) and provides individualized habilitative services that support and enhance an individual's skills and strengths. The central laundry provides service to all residents of Rainier School and since 2017, also supports the laundry needs of Echo Glen Children's center and Fircrest school. The Rainier School laundry processes approximately 125,000 pounds of resident clothing each month

The machine that dries and folds the over 2000 clean bed sheets a month is called a mangle and is over 25 years old. Yet this machine can operate for 20 more years with proper maintenance and component replacement.

PROBLEM STATEMENT

The mangle is 25 years old. Overall, the machine structure is in fair shape. However, components like rollers, bearings, motors, and valves are failing due to increased use. The increased usage is due to the laundry taking on about 65% more work by assuming laundry responsibilities from Fircrest School and Echo Glen Children's Center. Maintenance completes individual repairs as components fail. However, the repair time is increasing and preventing maintenance from responding to other maintenance needs.

The mangle is an essential piece of equipment for laundry operations. Drying, folding, and stacking bedsheets is a labor-intensive process. Laundry staff do not have the capacity to complete a manual process nor would the final product be of similar quality.

PROPOSED PROJECT

This project provides contract refurbishment services to replace failing components and restore original machine performance. This includes replacement of motors, switches, drive wheels, and belts. Machine reliability will increase and a busy laundry operation will not be hindered by an increasing number of breakdowns.

CONSEQUENCES OF NOT FUNDING

If not funded, maintenance will increase their time and expense to keep the mangle operational. Machine downtime will increase as maintenance locates repair parts or a specialized repair technician. A significant machine component failure is expected within two years. This expected failure will trigger an immediate need to find a repair contractor under an expedited procurement process. Even in a short-term outage, laundry staffing will increase to complete the sheet drying, folding, and stacking process.

ENERGY EFFICIENCIES

Energy efficiency gains are not expected in this project. This project does improve efficiency in laundry and maintenance operations due to improved mangle reliability.

Capital Project Request

2019-21 Biennium

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Version: NN 2020 Supplemental - Working Version

Report Number: CBS002

Date Run: 9/19/2019 1:37PM

Project Number: 40000381

Project Title: Minor Works Preservation Projects: Statewide 2019-21

SubProjects

SubProject Number: 40000507

SubProject Title: RS-Laundry: Mangle Refurbishment

Location

City: Buckley

County: Pierce

Legislative District: 031

Project Type

Facility Preservation (Minor Works)

Growth Management impacts

This project either preserves or repairs existing buildings, structures, and infrastructure. No Growth Management impacts are anticipated.

Funding

Acct Code	Account Title	Expenditures			2019-21 Fiscal Period	
		Estimated Total	Prior Biennium	Current Biennium	Reappropriates	New Appropriates
057-1	State Bldg Constr-State	140,000				140,000
	Total	140,000	0	0	0	140,000

Future Fiscal Periods

	Account Title	2021-23	2023-25	2025-27	2027-29
057-1	State Bldg Constr-State				
	Total	0	0	0	0

Operating Impacts**No Operating Impact****Narrative**

This project addresses the preservation of existing facilities. This project adds no new square footage and no additional operating budget FTEs.

SubProject Number: 30003810

SubProject Title: ESH-Administration: Fire Alarm

Capital Project Request

2019-21 Biennium

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Version: NN 2020 Supplemental - Working Version

Report Number: CBS002

Date Run: 9/19/2019 1:37PM

Project Number: 40000381

Project Title: Minor Works Preservation Projects: Statewide 2019-21

SubProjects

SubProject Number: 30003810

SubProject Title: ESH-Administration: Fire Alarm

Starting Fiscal Year: 2021

Project Class: Preservation

Agency Priority: 5

Program: 030

Project Summary

This project installs a fire alarm system in the Administration Building at Eastern State Hospital.

Project DescriptionBACKGROUND

Eastern State Hospital (ESH) is a state psychiatric hospital serving adults from Eastern Washington counties. Located in Medical Lake, the hospital provides evaluation and in-patient treatment for individuals with serious or long-term mental illness that have been referred to the hospital through the Behavioral Health Organizations, the civil court system, or through the criminal justice system.

Built in 1933, the Administration Building houses the majority of Eastern State Hospital administrative staff and emergency services including 24-hour switchboard, telecommunications hub, and fire alarm reporting.

PROBLEM STATEMENT

The ESH Administration Building does not have a fire alarm system. The headend equipment for telecommunications, Eastlake fire alarm and annunciators, and 24-hour switchboard are all located in the Administration Building.

PROPOSED PROJECT

This project installs a fire alarm system in the Administration Building.

CONSEQUENCES OF NOT FUNDING

If this project is not funded, critical administrative and emergency services and the telecommunications hub will be at risk in case of a fire.

Location

City: Medical Lake

County: Spokane

Legislative District: 006

Project Type

Health, Safety and Code Requirements (Minor Works)

Capital Project Request

2019-21 Biennium

*

Version: NN 2020 Supplemental - Working Version

Report Number: CBS002

Date Run: 9/19/2019 1:37PM

Project Number: 40000381

Project Title: Minor Works Preservation Projects: Statewide 2019-21

SubProjects

SubProject Number: 30003810

SubProject Title: ESH-Administration: Fire Alarm

Growth Management impacts

This project will not change census capacity of the number of facility staff. No Growth Management impacts are anticipated.

Funding

Acct Code	Account Title	Expenditures		2019-21 Fiscal Period	
		Estimated Total	Prior Biennium	Current Biennium	New Approps
057-1	State Bldg Constr-State	605,000			605,000
	Total	605,000	0	0	0
Future Fiscal Periods					
		2021-23	2023-25	2025-27	2027-29
057-1	State Bldg Constr-State				
	Total	0	0	0	0

Operating Impacts**No Operating Impact****Narrative**

This project addresses the preservation of existing facilities. This project adds no new square footage and no additional operating budget FTEs.

Capital Project Request

2019-21 Biennium

*

Version: BB 2020 Supplemental Submittal to OFM

Report Number: CBS002

Date Run: 9/18/2019 11:45PM

Project Number: 40000382

Project Title: Minor Works Program Projects: Statewide 2019-21

Description

Starting Fiscal Year: 2021

Project Class: Program

Agency Priority: 6

Project Summary

DSHS provides care, treatment, training, and rehabilitation for 2,100 of Washington's most vulnerable citizens. The DSHS Office of Capital Programs receives many requests from the programs to modify space in our hospitals, residential habilitation centers, institutions, and community facilities to improve campus security, assure client safety, improve the treatment milieu. This project modifies existing buildings or site features to meet these programmatic needs for effective care, training, treatment, and rehabilitation, and comply with new regulations.

Project Description**1. WHAT IS THE PROBLEM OR OPPORTUNITY?**

DSHS operates 11 hospitals, residential habilitation centers, institutions, and community facilities with more than 4.3 million square feet of space in 300 buildings. More than 6,800 DSHS employees provide these services in support of a variety of programs for the care, treatment, training, and rehabilitation of approximately 2,100 clients. More than half of these buildings are older than 50 years of age and inadequate for today's needs.

The specific needs of our clients have changed in the past twenty years. Our treatment programs and therapies are constantly evolving to meet these needs. Some of our buildings and site features are no longer appropriate for current program needs. Some facilities simply lack the space for the current census. Remodeled space, and in some cases, new space or facilities are needed to meet our current and future needs.

Completion of these subprojects allows our hospitals, residential habilitation centers, institutions, and community facilities to provide the best possible care and treatment in safe, secure, and appropriately appointed facilities.

2. WHAT IS THE PROJECT?

The subprojects listed here represent the Department's highest priority minor works programmatic projects. These subprojects address the changing needs and requirements to house, counsel, train, and rehabilitate clients in the Department's 20 hospitals, residential habilitation centers, institutions, and community facilities operated by the:

- + Behavioral Health Administration
- + Developmental Disabilities Administration
- + Special Commitment Center

The programs in these facilities are dynamic, ever-changing to:

- + Meet the needs of persons with mental health issues, individuals with developmentally disabilities, juvenile offenders, and sexually violent predators.
- + Adapt programs to be responsive to new treatment models or new legislation.
- + Remodel or add space to accommodate changing facility or program requirements.

Program supervisors at every facility identified these programmatic needs to improve client care, training, and rehabilitation. Staff in the Office of Capital Programs provided a technical review of each of these subprojects.

3. HOW DOES THE PROJECT ADDRESS THE PROBLEM OR OPPORTUNITY?

These subprojects support programmatic enhancements to improve services for persons with mental health issues, individuals with developmentally disabilities, juvenile offenders, and sexually violent predators by:

- + Providing or upgrading facilities for enhanced client care and services.

Capital Project Request

2019-21 Biennium

*

Version: BB 2020 Supplemental Submittal to OFM

Report Number: CBS002

Date Run: 9/18/2019 11:45PM

Project Number: 40000382

Project Title: Minor Works Program Projects: Statewide 2019-21

Description

- + Promoting safe, secure, and appropriate facilities for clients and staff.
- + Accommodating efficiencies in counseling, training, and vocational programs.
- + Accommodating efficiencies in institutional operations.
- + Complying with requirements of Authorities Having Jurisdiction (AHJs).
- + Assuring continuity of institutional operations during emergency conditions.

Generally, the intent of these subprojects is to enhance existing programs and operations rather than expand capacity.

4. WHAT ALTERNATIVES WERE EXPLORED?**1. Do Nothing**

This option relies on the creativity and resourcefulness of our staff to offer the best programs possible in inadequate space - inadequate in terms of size, configuration, environmental controls, and availability. This option is not a sustainable practice for any period of time.

2. Fund Programmatic Projects from the Operating Budget

Though the Department's operating budget may be able to cover some high priority projects, this is not a reliable funding source for capital improvements. Funding in the operating budget is frequently tied to specific programs (community programs vs. institutional programs) and may be inappropriate for the specific programmatic need.

3. Appropriate Minor Works Programmatic Funding to Address Evolving Program Requirements - Preferred Option

DSHS prefers this option - a specific capital appropriation. Funding this Minor Works Programmatic project addresses the Department's highest priorities for adequate and appropriate residential, treatment, and support space. This option provides the best outcomes for the clients in our care.

5. WHO BENEFITS FROM THE PROJECT?

The programmatic improvements funded with this appropriation enhance the care, training, and rehabilitation of clients in our hospitals, residential habilitation centers, institutions, and community facilities. Clients benefit directly when we conduct educational classes, training, and habilitation in facilities appropriate to the program's needs.

Overall, other than the benefits of each specific subproject, existing services will not be materially altered.

6. WILL OTHER FUNDING BE USED TO COMPLETE THE PROJECT?

No. DSHS requests funding from the State Building Construction Account - Fund 057.

7. HOW DOES THIS PROJECT SUPPORT THE DSHS STRATEGIC PLAN OR IMPROVE AGENCY PERFORMANCE?

At DSHS, we transform lives. We created our current Strategic Plan to set measureable goals to ensure DSHS serves our clients and Washington state to the best of our ability. The following strategic objectives have impacts on our 2,100 clients in residential care and the 6,800 staff working in our hospitals, residential habilitation centers, institutions, and community facilities:

Each strategic objective in this strategic plan supports one or more of the five broad goals for DSHS:

- + Health: Each individual and each community will be healthy.
- + Safety: Each individual and community will be safe.

Capital Project Request

2019-21 Biennium

*

Version: BB 2020 Supplemental Submittal to OFM

Report Number: CBS002

Date Run: 9/18/2019 11:45PM

Project Number: 40000382

Project Title: Minor Works Program Projects: Statewide 2019-21

Description

- + Protection: Each individual who is vulnerable will be protected.
- + Quality of Life: Each individual in need will be supported to attain the highest possible quality of life.
- + Public Trust: Strong management practices will ensure quality and efficiency.

In addition, each strategic objective supports one of the Secretary's strategic priorities:

- + Prepare for aging Washingtonians
- + Care for those in our care
- + Serve people in their home community
- + Provide a pathway out of poverty and becoming healthier
- + Increase organizational efficiency, performance and effectiveness

Both the DSHS goals and Secretary's priorities align with:

- + Results Washington's objective of better results for Washingtonians
- + Governor's goal of Healthy and Safe Communities
- + Governor's goal of Efficient, Effective, and Accountable Government

Additionally, this project addresses programmatic facility enhancements at many DSHS campuses. These facilities house clients and programs that are directly or indirectly tied to the following Results Washington objectives:

Goal 1: World-Class Education – Access and Success

- 1.2) K-12: Increase percentage of students who graduate high school.

Goal 2: Prosperous Economy - Sustainable, Efficient Infrastructure

- 3.1) Maintain the percent of Washington infrastructure assets in satisfactory condition.

Goal 3: Sustainable Energy and a Clean Environment – Sustainable and Clean Environment

- 1.2) Clean Electricity: Reduce greenhouse gas emissions from electrical energy consumption.
- 1.3) Efficient Buildings and Industrial Processes: Improve non-electrical energy efficiency of buildings to reduce greenhouse gas emissions.

Goal 4: Healthy and Safe Communities – Healthy People

- 1.2) Healthy Youth and Adults: Decrease percentage of adults reporting fair or poor health.
- 2.3) Public: Decrease rate of return to institutions for offenders.
- 2.5) Worker Safety: Decrease workplace injury rates that result in missing three or more days from work.

Goal 5: Efficient, Effective, and Accountable Government – Customer Satisfaction and Employee Engagement

- 1.3) Customer Satisfaction: Increase Washington as an employer of choice.

Goal 5: Efficient, Effective, and Accountable Government – Resource Stewardship

- 2.2) Cost-Effective Government: Reduce the statewide energy use index of state facilities.

8. DOES THE PROJECT HAVE IT-RELATED COSTS?

Maybe. Known IT-related costs have been rolled into the total project cost shown here.

9. IS THIS PROJECT LINKED TO THE PUGET SOUND ACTION AGENDA?

No.

10. HOW DOES THIS PROJECT CONTRIBUTE TO THE STATEWIDE GOALS TO REDUCE CARBON POLLUTION AND/OR

Capital Project Request

2019-21 Biennium

*

Version: BB 2020 Supplemental Submittal to OFM

Report Number: CBS002

Date Run: 9/18/2019 11:45PM

Project Number: 40000382

Project Title: Minor Works Program Projects: Statewide 2019-21

Description**IMPROVE ENERGY EFFICIENCY?**

The programmatic projects funded with this appropriation address a prioritized list of projects that improve the care and programming space for the patients, clients, and residents in our care. To the greatest extent possible, DSHS will take advantage of any opportunities to reduce carbon emissions, improve energy efficiency, and/or enhance maintainability through these projects.

11. WHAT ELSE SHOULD DECISION MAKERS KNOW TO EVALUATE THIS FUNDING REQUEST?

Not funding these projects will put a damper on these proposed enhancements. Consequences include:

- + Lost opportunities to improve care and services for clients.
- + Lost opportunities to improve site safety and security.
- + Ongoing operational inefficiencies resulting from inadequate space and inappropriate facilities.
- + Unsatisfactory living conditions in housing units.
- + Lack of timely compliance with Authorities Having Jurisdiction.

Location

City: Buckley

County: Pierce

Legislative District: 031

City: Lakewood

County: Pierce

Legislative District: 028

City: Medical Lake

County: Spokane

Legislative District: 006

Project Type

Program (Minor Works)

Growth Management impacts

Generally, the subprojects included in the request will not change census capacity nor the number of institutional staff. No Growth Management impacts are anticipated.

New Facility: No

Funding

Acct Code	Account Title	Estimated Total	Expenditures		2019-21 Fiscal Period	
			Prior Biennium	Current Biennium	Reappropriations	New Appropriations
042-1	C E P and R Acct-State					
042-1	C E P and R Acct-State					
057-1	State Bldg Constr-State					
057-1	State Bldg Constr-State	3,500,000				3,500,000
	Total	3,500,000	0	0	0	3,500,000
Future Fiscal Periods						
		2021-23	2023-25	2025-27	2027-29	
042-1	C E P and R Acct-State					
042-1	C E P and R Acct-State					

Capital Project Request

2019-21 Biennium

*

Version: BB 2020 Supplemental Submittal to OFM

Report Number: CBS002

Date Run: 9/18/2019 11:45PM

Project Number: 40000382

Project Title: Minor Works Program Projects: Statewide 2019-21

Funding

		Future Fiscal Periods			
		2021-23	2023-25	2025-27	2027-29
057-1	State Bldg Constr-State				
057-1	State Bldg Constr-State				
	Total	0	0	0	0

Operating Impacts

No Operating Impact

Narrative

Generally, these subprojects will not change census capacity or the number of institutional staff. However, some additional space is developed or underutilized space is remodeled for more productive purposes. No additional operating FTEs are anticipated in the next biennium, but a slight increase in utilities and maintenance attention is likely in future biennium. These impacts will be addressed in future operating budget requests as they are identified.

SubProjects

SubProject Number: 40000458

SubProject Title: RS-ISB Building: Partial Restoration

Capital Project Request

2019-21 Biennium

*

Version: BB 2020 Supplemental Submittal to OFM

Report Number: CBS002

Date Run: 9/18/2019 11:45PM

Project Number: 40000382

Project Title: Minor Works Program Projects: Statewide 2019-21

SubProjects

SubProject Number: 40000458

SubProject Title: RS-ISB Building: Partial Restoration

Project Phase Title: RS-ISB Building: Partial Restoration

Starting Fiscal Year: 2021

Project Class: Program

Agency Priority: 6

Program: 040

Project Summary

This project restores therapy services in the warm-closed Instructional Services Building.

Project DescriptionBACKGROUND

Rainier School is a Residential Habilitation Center for individuals with intellectual and developmental disabilities. Located on a rural site in Buckley, the program provides a wide variety of care as an Intermediate Care Facility (ICF) and provides individualized habilitative services that support and enhance an individual's skills and strengths. Many treatment programs were previously delivered from the Instructional Services Building (ISB).

PROBLEM STATEMENT

A common theme of the Centers for Medicare and Medicaid Services' surveys is the lack of active treatment for residents. Two treatment areas that would improve resident treatment are learning kitchen skills and basic woodworking. In 2015 a decision was made to close the ISB due to a failing heating system significantly reducing the area available for learning kitchen skills and basic woodworking.

PROPOSED PROJECT

This project restores about 20% of the ISB to establish kitchen and woodworking skills training space. Specific work will include replacement of rooftop ventilation units and restoring interior finishes to accommodate these two treatment programs. The end result will create two specialized treatment spaces providing effective training space for residents and providing a space for resident families may be part of a therapy intended to assist and return the resident to a community setting.

CONSEQUENCES OF NOT FUNDING

Resident therapy will remain lacking and potentially out of compliance with the Centers for Medicare and Medicaid Services' expectation.

ENERGY EFFICIENCIES:

New, energy efficient heating units and appliances will be installed where possible.

Location

City: Buckley

County: Pierce

Legislative District: 031

Project Type

Program (Minor Works)

Capital Project Request

2019-21 Biennium

*

Version: BB 2020 Supplemental Submittal to OFM

Report Number: CBS002

Date Run: 9/18/2019 11:45PM

Project Number: 40000382

Project Title: Minor Works Program Projects: Statewide 2019-21

SubProjects

SubProject Number: 40000458

SubProject Title: RS-ISB Building: Partial Restoration

Growth Management impacts

This project will not change census capacity or the number of facility staff. No Growth Management Impacts are anticipated.

New Facility: No

Funding

Acct Code	Account Title	Expenditures		2019-21 Fiscal Period	
		Estimated Total	Prior Biennium	Current Biennium	New Approps
057-1	State Bldg Constr-State	950,000			950,000
	Total	950,000	0	0	950,000

		Future Fiscal Periods			
		2021-23	2023-25	2025-27	2027-29
057-1	State Bldg Constr-State				
	Total	0	0	0	0

Operating Impacts

No Operating Impact

Narrative

This project addresses the preservation of existing facilities. This project adds no new square footage and no additional operating budget FTEs.

SubProject Number: 40000459

SubProject Title: ESH-Eastlake & Westlake: Seclusion Room Modifications

Capital Project Request

2019-21 Biennium

*

Version: BB 2020 Supplemental Submittal to OFM

Report Number: CBS002

Date Run: 9/18/2019 11:45PM

Project Number: 40000382

Project Title: Minor Works Program Projects: Statewide 2019-21

SubProjects

SubProject Number: 40000459

SubProject Title: ESH-Eastlake & Westlake: Seclusion Room Modifications

Project Phase Title: ESH-Eastlake & Westlake: Seclusion Room Modifications

Starting Fiscal Year: 2021

Project Class: Program

Agency Priority: 6

Program: 030

Project Summary

This project remodels bathrooms and seclusion rooms to reduce nonproductive and risky interactions between patients moving between their sleeping rooms and the bathroom.

Project DescriptionBACKGROUND

Eastern State Hospital (ESH) is a state psychiatric hospital serving adults from Eastern Washington counties. Located in Medical Lake, the hospital provides evaluation and in-patient treatment for individuals with serious or long-term mental illness that have been referred to the hospital through the Behavioral Health Organizations, the civil court system, or through the criminal justice system.

PROBLEM STATEMENT

The current sleeping room to bathroom layout requires patients in seclusion rooms to be escorted down the hallway, past the other patients, to access the restroom facilities. This causes privacy concerns for the patients and potential for patient-to-patient conflict.

PROPOSED PROJECT

Remodel six bathrooms and relocate three seclusion rooms to meet current code requirements. Additionally, there are 13 seclusion rooms which are proposed to be remodeled to incorporate padding standards.

CONSEQUENCES OF NOT FUNDING

Not funding this project will continue the risk of conflict between patients and loss of privacy as the patients in the isolation rooms are walked past the other patients' rooms to utilize the bathroom facilities down the hall.

Location

City: Medical Lake

County: Spokane

Legislative District: 006

Project Type

Program (Minor Works)

Growth Management impacts

This project will not change census capacity or the number of facility staff. No Growth Management impacts are anticipated.

New Facility: No

Capital Project Request

2019-21 Biennium

*

Version: BB 2020 Supplemental Submittal to OFM

Report Number: CBS002

Date Run: 9/18/2019 11:45PM

Project Number: 40000382

Project Title: Minor Works Program Projects: Statewide 2019-21

SubProjects

SubProject Number: 40000459

SubProject Title: ESH-Eastlake & Westlake: Seclusion Room Modifications

Funding

Acct Code	Account Title	Expenditures		2019-21 Fiscal Period	
		Estimated Total	Prior Biennium	Current Biennium	New Approps
057-1	State Bldg Constr-State	990,000			990,000
	Total	990,000	0	0	990,000

Future Fiscal Periods

	<u>2021-23</u>	<u>2023-25</u>	<u>2025-27</u>	<u>2027-29</u>
057-1 State Bldg Constr-State				
Total	0	0	0	0

Operating Impacts

No Operating Impact

Narrative

This project addresses the preservation of existing facilities. This project adds no new square footage and no additional operating budget FTEs.

SubProject Number: 40000462

SubProject Title: ESH-Eastlake: 2N3 Ward Arjo Tub

Capital Project Request

2019-21 Biennium

*

Version: BB 2020 Supplemental Submittal to OFM

Report Number: CBS002

Date Run: 9/18/2019 11:45PM

Project Number: 40000382

Project Title: Minor Works Program Projects: Statewide 2019-21

SubProjects

SubProject Number: 40000462

SubProject Title: ESH-Eastlake: 2N3 Ward Arjo Tub

Project Phase Title: ESH-Eastlake: 2N3 Ward Arjo Tub

Starting Fiscal Year: 2021

Project Class: Program

Agency Priority: 6

Program: 030

Project Summary

This project adds an Arjo Tub with patient lift system to the Ward 2N3 to accommodate patients that cannot bathe in a standard bathtub.

Project DescriptionBACKGROUND

Eastern State Hospital (ESH) is a state psychiatric hospital serving adults from Eastern Washington counties. Located in Medical Lake, the hospital provides evaluation and in-patient treatment for individuals with serious or long-term mental illness that have been referred to the hospital through the Behavioral Health Organizations, the civil court system, or through the criminal justice system. Patients often need assistance entering and exiting the tub.

PROBLEM STATEMENT

There is no tub with patient lift system on the 2N3 Ward. Many patients live on the ward that cannot lower and raise themselves into and out of a standard tub.

PROPOSED PROJECT

This project installs an Arjo tub with a patient lift in the tub room on the Ward 2N3 in the Eastlake Building.

CONSEQUENCES OF NOT FUNDING

Not funding this project leaves some patients unable to bathe in a tub suited for their physical limitations.

Location

City: Medical Lake

County: Spokane

Legislative District: 006

Project Type

Program (Minor Works)

Growth Management impacts

This project will not change census capacity or the number of facility staff. No Growth Management impacts are anticipated.

New Facility: No

Capital Project Request

2019-21 Biennium

*

Version: BB 2020 Supplemental Submittal to OFM

Report Number: CBS002

Date Run: 9/18/2019 11:45PM

Project Number: 40000382

Project Title: Minor Works Program Projects: Statewide 2019-21

SubProjects

SubProject Number: 40000462

SubProject Title: ESH-Eastlake: 2N3 Ward Arjo Tub

Funding

Acct Code	Account Title	Expenditures		2019-21 Fiscal Period	
		Estimated Total	Prior Biennium	Current Biennium	New Approps
057-1	State Bldg Constr-State	60,000			60,000
	Total	60,000	0	0	60,000

Future Fiscal Periods

	<u>2021-23</u>	<u>2023-25</u>	<u>2025-27</u>	<u>2027-29</u>
057-1 State Bldg Constr-State				
Total	0	0	0	0

Operating Impacts

No Operating Impact

Narrative

This project addresses the preservation of existing facilities. This project adds no new square footage and no additional operating budget FTEs.

SubProject Number: 40000495

SubProject Title: CSTC-Ketron: Courtyard Enhancements

Capital Project Request

2019-21 Biennium

*

Version: BB 2020 Supplemental Submittal to OFM

Report Number: CBS002

Date Run: 9/18/2019 11:45PM

Project Number: 40000382

Project Title: Minor Works Program Projects: Statewide 2019-21

SubProjects

SubProject Number: 40000495

SubProject Title: CSTC-Ketron: Courtyard Enhancements

Starting Fiscal Year: 2021

Project Class: Program

Agency Priority: 6

Program: 030

Project Summary

This project refurbishes and encloses the play area around Ketron Cottage so children have a safe and secure area to play.

Project DescriptionBACKGROUND

The Child Study and Treatment Center (CSTC) is the only state operated psychiatric hospital for children and youth aged 5 to 18 years. Accredited by The Joint Commission, the 47-bed facility located in Lakewood, provides culturally competent care to children and youth with severe emotional and behavioral disorders typically complicated by medical, social, legal, and developmental issues. CSTC treats children who cannot be safely served in less restrictive settings in the community.

Children 12-15 years old live at Ketron Cottage. This project intends to secure the courtyard at Ketron Cottage so that these youth can freely and safely exercise and play outdoors. While always staff supervised, children often run off the designated play area and are difficult to catch.

PROBLEM STATEMENT

Regulations require CSTC to provide access to fresh air and exercise to all patients. All three cottages as well as the Elementary School have their own designated play area with age appropriate playground equipment. At Ketron Cottage, the play area lacks esignated boundaries. Even with staff present, children will bolt off into the road or attempt to escape off campus. Staff often finds it difficult to catch these children. The situation requires one staff to monitor each child. It becomes problematic to have multiple children in the play area at the same time.

PROPOSED PROJECT

This project provides a fence to enclose the playground to create the boundaries these children need. This allows children to run as much as they can without staff fearing they will run into the street or off the campus. One staff person will be able to monitor multiple children at one time. The fence will be chain link, approximately eight feet tall.

CONSEQUENCES OF NOT FUNDING

If this project is not funded, Ketron Cottage will be the only cottage without a free range play area. It's not a safe or secure situation.

Location

City: Lakewood

County: Pierce

Legislative District: 028

Project Type

Program (Minor Works)

Capital Project Request

2019-21 Biennium

*

Version: BB 2020 Supplemental Submittal to OFM

Report Number: CBS002

Date Run: 9/18/2019 11:45PM

Project Number: 40000382

Project Title: Minor Works Program Projects: Statewide 2019-21

SubProjects

SubProject Number: 40000495

SubProject Title: CSTC-Ketron: Courtyard Enhancements

Growth Management impacts

This project will not change census capacity or the number of facility staff. No Growth Management impacts are anticipated.

New Facility: No

Funding

Acct Code	Account Title	Expenditures		2019-21 Fiscal Period	
		Estimated Total	Prior Biennium	Current Biennium	New Approps
057-1	State Bldg Constr-State	300,000			300,000
	Total	300,000	0	0	300,000

		Future Fiscal Periods			
		2021-23	2023-25	2025-27	2027-29
057-1	State Bldg Constr-State				
	Total	0	0	0	0

Operating Impacts

No Operating Impact

Narrative

This project addresses the preservation of existing facilities. This project adds no new square footage and no additional operating budget FTEs.

SubProject Number: 30003784

SubProject Title: ESH-Westlake: Security Camera Installation

Capital Project Request

2019-21 Biennium

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Version: BB 2020 Supplemental Submittal to OFM

Report Number: CBS002

Date Run: 9/18/2019 11:45PM

Project Number: 40000382

Project Title: Minor Works Program Projects: Statewide 2019-21

SubProjects

SubProject Number: 30003784

SubProject Title: ESH-Westlake: Security Camera Installation

Starting Fiscal Year: 2021

Project Class: Program

Agency Priority: 6

Program: 030

Project Summary

This project installs security cameras in four patient wards in Westlake Hospital.

Project DescriptionBACKGROUND

Eastern State Hospital (ESH) is a state psychiatric hospital serving adults from Eastern Washington counties. Located in Medical Lake, the hospital provides evaluation and in-patient treatment for individuals with serious or long-term mental illness that have been referred to the hospital through the Behavioral Health Organizations, the civil court system, or through the criminal justice system.

The Geropsychiatric Unit (GPU) is a 101-bed unit in Westlake Building providing inpatient psychiatric evaluation and treatment for individuals 50 years of age and older, or persons under 50 years of age with medical issues. Included in the GPU is the Habilitation Mental Health (HMH) Unit. The HMH consists of individuals who are dually diagnosed with a mental illness and a developmental disability.

PROBLEM STATEMENT

There are no security cameras on the wards at Westlake Hospital. Staff can only monitor patients that are in their direct line of sight and the ward configuration limits direct lines of sight. Patient behavior incidents cannot be recorded and reviewed.

PROPOSED PROJECT

This project installs security cameras in the four patient wards in Westlake Hospital where there are no security cameras.

CONSEQUENCES OF NOT FUNDING:

Staff will only be able to monitor patients in their direct line of sight. Patient and staff safety will be compromised. Security will be compromised.

Location

City: Medical Lake

County: Spokane

Legislative District: 006

Project Type

Program (Minor Works)

Capital Project Request

2019-21 Biennium

*

Version: BB 2020 Supplemental Submittal to OFM

Report Number: CBS002

Date Run: 9/18/2019 11:45PM

Project Number: 40000382

Project Title: Minor Works Program Projects: Statewide 2019-21

SubProjects

SubProject Number: 30003784

SubProject Title: ESH-Westlake: Security Camera Installation

Growth Management impacts

This project will not change census capacity of the number of facility staff. No Growth Management impacts are anticipated.

New Facility: No

Funding

Acct Code	Account Title	Expenditures		2019-21 Fiscal Period	
		Estimated Total	Prior Biennium	Current Biennium	New Approps
057-1	State Bldg Constr-State	450,000			450,000
	Total	450,000	0	0	450,000

		Future Fiscal Periods			
		2021-23	2023-25	2025-27	2027-29
057-1	State Bldg Constr-State				
	Total	0	0	0	0

Operating Impacts

No Operating Impact

Narrative

This project addresses the preservation of existing facilities. This project adds no new square footage and no additional operating budget FTEs.

SubProject Number: 40000478

SubProject Title: ESH-Windows: Security Improvements

Capital Project Request

2019-21 Biennium

*

Version: BB 2020 Supplemental Submittal to OFM

Report Number: CBS002

Date Run: 9/18/2019 11:45PM

Project Number: 40000382

Project Title: Minor Works Program Projects: Statewide 2019-21

SubProjects

SubProject Number: 40000478

SubProject Title: ESH-Windows: Security Improvements

Project Phase Title: ESH-Windows: Security Improvements

Starting Fiscal Year: 2021

Project Class: Program

Agency Priority: 6

Program: 030

Project Summary

This project installs added security closures to the inside of 400+ windows in patient occupied areas in the Eastlake Building North Wards, Westlake Building, and the Activity Therapy Building.

Project DescriptionBACKGROUND

Eastern State Hospital (ESH) is a state psychiatric hospital serving adults from Eastern Washington counties. Located in Medical Lake, the hospital provides evaluation and in-patient treatment for individuals with serious or long-term mental illness that have been referred to the hospital through the Behavioral Health Organizations, the civil court system, or through the criminal justice system.

PROBLEM STATEMENT

Windows in patient rooms and patient activity areas require heightened security features due to the nature of the patient population. Windows without heightened security features create a patient flight risk.

PROPOSED PROJECT

This project installs added security closures to the inside of 400+ windows in patient occupied areas in the Eastlake Building North Wards, Westlake Building, and the AT Building.

CONSEQUENCES OF NOT FUNDING

Windows without heightened security features create a patient flight risk.

Location

City: Medical Lake

County: Spokane

Legislative District: 006

Project Type

Program (Minor Works)

Growth Management impacts

This project will not change census capacity or the number of facility staff. No Growth Management impacts are anticipated.

New Facility: No

Capital Project Request

2019-21 Biennium

*

Version: BB 2020 Supplemental Submittal to OFM

Report Number: CBS002

Date Run: 9/18/2019 11:45PM

Project Number: 40000382

Project Title: Minor Works Program Projects: Statewide 2019-21

SubProjects

SubProject Number: 40000478

SubProject Title: ESH-Windows: Security Improvements

Funding

Acct Code	Account Title	Expenditures		2019-21 Fiscal Period	
		Estimated Total	Prior Biennium	Current Biennium	New Approps
042-1	C E P and R I Acct-State				
	Total	0	0	0	0

Funding

Acct Code	Account Title	Expenditures		2019-21 Fiscal Period	
		Estimated Total	Prior Biennium	Current Biennium	New Approps
057-1	State Bldg Constr-State	365,000			365,000
	Total	365,000	0	0	365,000

Future Fiscal Periods

	2021-23	2023-25	2025-27	2027-29
042-1 C E P and R I Acct-State				
Total	0	0	0	0

Future Fiscal Periods

	2021-23	2023-25	2025-27	2027-29
057-1 State Bldg Constr-State				
Total	0	0	0	0

Operating Impacts

No Operating Impact

Narrative

This project addresses the preservation of existing facilities. This project adds no new square footage and no additional operating budget FTEs.

SubProject Number: 30003828

SubProject Title: ESH-Westlake: Switchboard Security Relocation

Capital Project Request

2019-21 Biennium

*

Version: BB 2020 Supplemental Submittal to OFM

Report Number: CBS002

Date Run: 9/18/2019 11:45PM

Project Number: 40000382

Project Title: Minor Works Program Projects: Statewide 2019-21

SubProjects

SubProject Number: 30003828

SubProject Title: ESH-Westlake: Switchboard Security Relocation

Starting Fiscal Year: 2021

Project Class: Program

Agency Priority: 6

Program: 030

Project Summary

This project relocates the Westlake Hospital switchboard to a secure location with good sightlines to the exterior doors.

Project DescriptionBACKGROUND

Eastern State Hospital is a state psychiatric hospital for adults. Located in Medical Lake, the hospital provides evaluation and in-patient treatment for individuals with serious or long-term mental illness that have been referred to the hospital through the Behavioral Health Organizations or through the criminal justice system. The Westlake Hospital houses three geropsychiatric unit (GPU) and one Habilitative Mental Health unit (HMH). The switch board houses the door access controls, the fire alarm panel, a computer station, and hospital-wide communications. A security report completed in 2012 identified this switchboard location as a high risk location.

PROBLEM STATEMENT

The Westlake Hospital switchboard is located in the center of the front lobby in a horseshoe shaped counter. The counter is open and exposed on all four sides - to the driveway through plate glass windows on one side, to entry doors on two sides, and to the hospital hallways on the fourth side. The switchboard operator cannot monitor the two entry doors at the same time and does not have any defensible space.

PROPOSED PROJECT

This project relocates the switchboard to a secure location with sightlines to both entry doors. It also relocates the fire alarm reporting panel, the door access controls, a computer station, and hospital-wide communications equipment.

CONSEQUENCES OF NOT FUNDING

If this project is not funded, the switchboard operator and all associated equipment will continue to be at risk.

Location

City: Medical Lake

County: Spokane

Legislative District: 006

Project Type

Program (Minor Works)

Capital Project Request

2019-21 Biennium

*

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Project Title: Minor Works Program Projects: Statewide 2019-21

SubProjects

SubProject Number: 30003828

SubProject Title: ESH-Westlake: Switchboard Security Relocation

Growth Management impacts

This project will not change census capacity of the number of facility staff. No Growth Management impacts are anticipated.

New Facility: No

Funding

Acct Code	Account Title	Expenditures		2019-21 Fiscal Period	
		Estimated Total	Prior Biennium	Current Biennium	New Approps
057-1	State Bldg Constr-State	385,000			385,000
	Total	385,000	0	0	385,000

		Future Fiscal Periods			
		2021-23	2023-25	2025-27	2027-29
057-1	State Bldg Constr-State				
	Total	0	0	0	0

Operating Impacts

No Operating Impact

Narrative

This project addresses the preservation of existing facilities. This project adds no new square footage and no additional operating budget FTEs.

