



MADRONA BATHHOUSE
SEATTLE PARKS AND RECREATION
ARCHITECTURAL AND ENGINEERING
MAINTENANCE EVALUATION STUDY

City of Seattle, Washington
September 2017



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A. EXECUTIVE SUMMARY

MADRONA BATH HOUSE EVALUATION

BACKGROUND

GENERAL RECOMMENDATIONS



executive summary



DESCRIPTION OF PROCESS

INNOVA Architects, Inc. was hired by the Seattle Parks and Recreation (SPR) in March of 2017 to perform an architectural and engineering evaluation study, which is summarized in this report. Additional engineering partners for the study include AHBL for Civil and Structural engineering and WSP for Mechanical, Plumbing, and Electrical engineering.

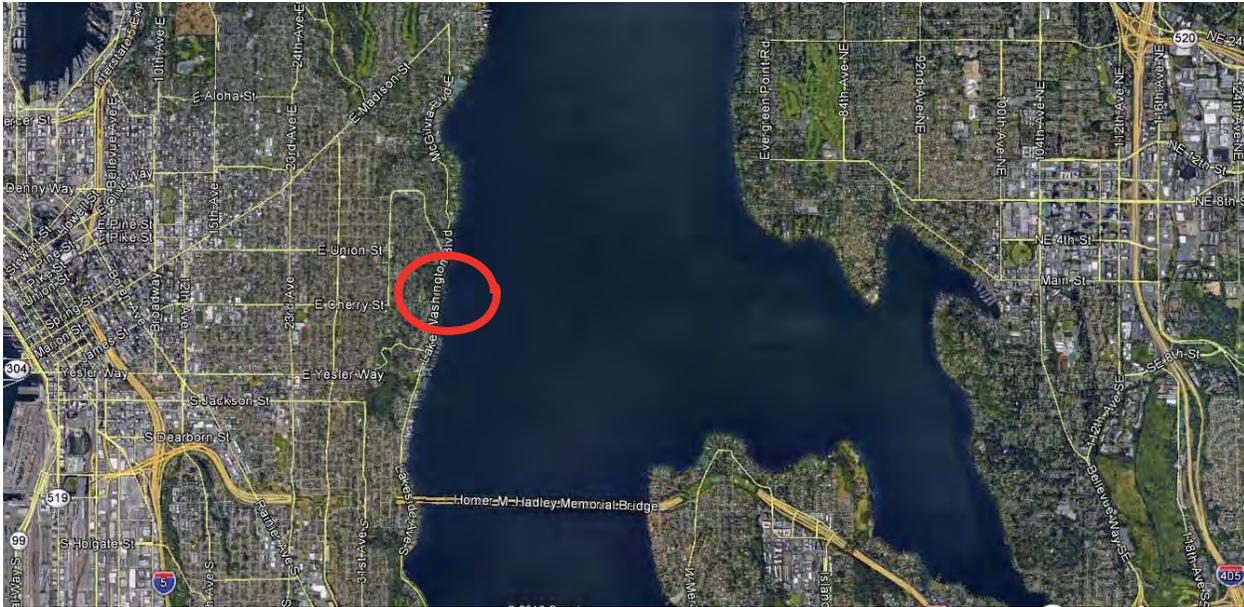
The purpose of this evaluation study is to summarize the current condition of the Madrona Bathhouse and to provide a working tool for identifying and planning necessary upgrades and maintenance improvements. Specifically, this report is intended to help support future improvement projects as part of the Major Project Challenge Fund Initiative for SPR. The purpose of the Major Project Challenge Fund is to provide a funding match to fund a “major project” on (SPR) property. The Major Project Challenge Fund will provide City funding to leverage community-generated funding for renovation of parks and park facilities where other City funding is unavailable.

This evaluation study identifies code compliance and design needs; particularly those related to the Americans with Disabilities Act (ADA). Area of Magnitude Cost Estimates are provided for the recommendations. Our team visited the Madrona Bathhouse on April 7th, 2017 to meet with SPR Staff as well as personnel from the Spectrum Dance Studio, including Sherley Wong, Operations Manager for the studio. We reviewed the history, current operations, and known issues for the building. Our team spent a couple hours touring the building.

The Record Drawings that are available for the Madrona Bathhouse include the 1971 renovation drawings by Arne Bystrom AIA, 1983 renovation drawings by Church-Suzuki as well as the 2000 Roof Replacement and 2010 HVAC Replacement drawings, both by S.M. Stemper Architects. Staff from the Spectrum Dance Studio also provided a hard copy set of the 1999 renovation by JPC Architects. The drawings provide a fairly accurate record of what is existing currently.

ASSESSMENT

Based on the initial investigations, we observed that the Bathhouse is in good shape and well used, with an expected level of wear-and-tear. It is evident that the size is a limiting factor for the dance studio, but they have made good use of the building. The original bathhouse functions have evolved to become less of a necessity, which this report evaluates.



MADRONA BATHHOUSE BACKGROUND

In 1925, the Seattle Engineering Department initiated substantial improvements to the boulevard in the vicinity of Madrona Park, which improved access to the park but also increased its popularity.

By 1927, it was necessary to replace the temporary wood frame bath house with a permanent brick building, and this architecturally distinctive brick building was constructed in two phases between 1927 and 1928 to serve swimmers at Madrona Park. Initially, only the north and south ends containing the dressing room and restroom facilities for men and women were constructed. The following year, the central portion was completed, which contained a public lobby and locker room.

This building features Classical Revival stylistic details and was one of the first permanent improvements at Madrona Park. Due to its age, it is potentially eligible for listing as a Seattle Landmark. Over the years, the popularity of the beach at Madrona Park remained constant, however demand for the bathhouse facilities decreased dramatically.

At the same time, SPR was expanding its cultural arts programs and needed larger and better-equipped facilities. As a result, the underused bathhouse was rehabilitated to provide space for Dance programs. In 1971, a large second-story addition was made to the bath house, creating a Dance Studio for children and adults. The newly renovated building housed two large studios as well as a dance library. In 2002 another renovation was performed to the south end of the building, adding men's and women's locker rooms, office spaces and a conference room.

Currently, the bathhouse serves as the home for Spectrum Dance Theater, Seattle's premier jazz dance company, presenting the work of contemporary American choreographers. Since 1985, Spectrum has successfully run the dance education program at Madrona Dance Studio in cooperation with SPR through a long-term lease.

general recommendations



RECOMMENDATIONS

Based on our team's evaluations of the Madrona Bathhouse, we have generated a proposed breakdown of short-term needs and long-term needs as described below. The breakdown of recommendations further identifies those items which fall under the following categories:

- Code and Life Safety Related
- Program Improvement Opportunity
- Operational Cost Savings Potential

SHORT-TERM NEEDS

The short-term needs of the facility include those items which we have categorized as relating to health, safety, and welfare. This includes accessibility requirements in order to comply with the Americans with Disabilities Act (ADA).

Where a recommendation is considered cost prohibitive and able to be considered a "grand-fathered" condition, we have classified some health, safety, and welfare items as long-term recommendations which should be completed as part of a comprehensive, major renovation project.

In general we estimate that the short-term needs of the facility are those that need to be done as soon as possible, or within the next 5 years.

LONG-TERM NEEDS

Long-Term needs include more significant items at the facility that may not have favorable economic pay-back, but rather extend the community benefit and are less tangible. It would include things like significant upgrades to the systems for increased energy efficiency, bringing the building up to more current codes, as well as architectural/interior changes and seismic upgrades to the buildings.

general recommendations



SUMMARY OF RECOMMENDATIONS

We broke down our list of recommendations by discipline. The General Categories with Subtotal Construction Costs* are as follows:

	<u>Short-Term Need</u>	<u>Long-Term Need</u>
Building Enclosure / Structure	\$218,000	\$42,000
Buildings Interiors	\$30,000	\$445,000
Americans with Disabilities Act (ADA)	\$65,000	\$0
Site / Civil	\$13,000	\$14,000
Mechanical - HVAC	\$0	\$95,000
Mechanical - Plumbing	\$20,000	\$257,000
Electrical	\$73,000	\$131,000

AREA OF MAGNITUDE COST ESTIMATE SUMMARY

TOTAL CONSTRUCTION COST	\$419,000	\$984,000
SP&R COST AND SALES TAX	\$255,590	\$600,240
TOTAL PROJECT COSTS	\$674,590	\$1,584,240
GRAND TOTAL ALL COSTS		\$2,258,830

* See Section G - Cost Estimate for all markup details.

Madrona Bathhouse Evaluation

Building Maintenance and Improvement Recommendations

	Recommended Task	Short-Term Need	Long-Term Need	Code / ADA / Life-Safety	Program Improvement	Operational Cost Savings	Construction Cost Totals
Building Enclosure /Structure							
1	Repair brick mortar joints as needed	X			X		\$5,000
2	Power wash brick and seal. Remove ivy from exterior walls and trim back 12" min from wall face	X			X		\$54,000
3	Structural: Lateral reinforcing for second floor, anchor walls to floor slab	X			X		\$59,000
4	Structural: Roof to wall ties at N & S bays	X			X	X	\$45,000
5	Power wash cedar roof shakes and apply wood preservative	X			X		\$14,000
6	Replace windows to match historic style	X				X	\$33,000
7	Repair and Refinish east and west decorative building doors. Replace weather seals	X			X		\$2,000
8	Replace weather seals, repair and refinish all exterior HM doors.	X			X	X	\$5,000
9	Replace Exterior HM doors		X		X		\$42,000
10	Remove deadbolts from all egress doors. Install latch guards	X		X	X		\$1,000
SUBTOTALS		\$218,000	\$42,000				
Building Interiors							
1	Clean and refinish interior stairs	X			X		\$2,000
2	Replace damaged acoustic ceiling tiles	X			X		\$1,000
3	Reconfigure the Reception area with built-in casework		X	X	X		\$20,000
4	Replace damaged vinyl tile floor in the Unisex and Men's restrooms	X			X		\$2,000
5	Replace the vinyl tile floors in the restrooms and locker rooms with sheet vinyl and integral cove		X		X		\$10,000
6	Clean and apply sealer to changing room and boat storage floors	X			X		\$5,000
7	Re-coat lifeguard room with epoxy floor paint	X			X		\$2,000
8	Replace painted floor in Lifeguard room with an epoxy floor system		X		X		\$15,000
9	Repair carpet seams as needed	X			X		\$1,000
10	Install walk-off mats at building entry	X			X		\$3,000
11	Replace the Lobby, Reception and Corridor carpet		X		X		\$8,000
12	Install rubber tread covers at back stairwell		X		X		\$2,000
13	Replace missing floor transitions	Maintenance Item			X		
14	Replace hardware at (6) doors not part of the 2002 renovation	X			X		\$9,000
15	Replace (6) doors not part of the 2002 renovation		X		X		\$21,000
16	Provide a Cypher lock system at ext restroom doors	X			X		\$3,000
17	Re-fasten countertop in Women's restroom and repair laminate top	X			X		\$2,000
18	Provide "All Gender" signage at single stall restroom	By owner		X			By owner
19	Reconfigure existing bathhouse space for studio expansion & changing rooms		X		X		\$369,000
SUBTOTALS		\$30,000	\$445,000				
ADA							
1	Provide accessible path from street right-of-way	See Site/ Civil Item #3		X			Included below
2	Provide two designated ADA parking spots; at least one that is van accessible	See Site/ Civil Item #2		X			Included below
3	Add push-button operators to Main Entry Doors	X		X			\$20,000
4	Add vertical grab bars to accessible toilets	X		X			\$1,000
5	Install a Platform Lift	X		X			\$44,000
SUBTOTALS		\$65,000	\$0				
Site / Civil							
1	Clean out area drains and catch basins and "TV" existing drain lines to determine condition	X			X		\$3,000
2	Restripe and paint (2) handicapped parking stalls to meet ADA standards. Handicapped parking signs to be installed and/or relocated to front of stalls.	X		X			\$5,000
3	Remove and clean moss from walkways	X		X			\$1,000
4	Demolish and re-level the beach vehicle access to have less than a 2.0% cross slope. Replace concrete vehicle access and provide a painted crosswalk		X	X			\$8,000
5	Construct curb ramp for ADA stalls and connect to sidewalk		X	X			\$6,000
6	Clean and seal the cracks in the asphalt path along the west face of the building	X			X		\$2,000
7	Install downspouts and splashblocks at all roof top scuppers	X			X		\$2,000
8	Provide 4" water line for fire sprinkler system	See Plumbing Item 13		X			Included below
SUBTOTALS		\$13,000	\$14,000				

Continued on next page

Madrona Bathhouse Evaluation

Building Maintenance and Improvement Recommendations

	Recommended Task	Short-Term Need	Long-Term Need	Code / ADA / Life-Safety	Program Improvement	Operational Cost Savings	Construction Cost Totals
Mechanical - HVAC							
1	Remove the chairs which block the return air grilles served for Studio II	Maintenance Item				X	Maintenance
2	Clean return air grilles. Many were observed to be partially clogged in office and conference room	Maintenance Item				X	Maintenance
3a	Studios - Replace HVAC-1&2 with (2) Gas-fired Furnaces w/ integral heat pump capability, (2) Zones, each w/ Heating, Cooling and Ventilation*		X			X	\$35,000
3b	Studios - Replace HVAC-1&2 w/ a VRF Heat Pump System with DOAS, Two (2) Zones, Heating and Cooling*		X			X	\$218,000
4a	Offices/ Conference room - Replace RTU-1 with a Gas-fired Rooftop unit w/ Heat Pump, Single Zone, Heating and Cooling*		X			X	\$45,000
4b	Offices/ Conference room - Replace RTU-1 with a VRF Heat Pump System w/ DOAS, Multiple Zones, Heating and Cooling*		X			X	\$36,000
5	Replace HVAC-1&2 and RTU-1 with a single VRF Heat Pump System with DOAS, Multiple Zones, Heating and Cooling, serving the entire building*		X			X	\$521,000
6a	Replace existing exhaust fans by new exhaust fans*		X			X	\$15,000
6b	Connect exhaust of restrooms to DOAS system proposed above*		X			X	\$6,000
7a	Renovation space - Gas-fired Rooftop unit with Heat Pump, Single Zone, Heating and Cooling*	See Building Interiors Item 19				X	Included above
7b	Renovation space - Combine space with Mechanical Item 3b above*	See HVAC Item #3b				X	Included above
8a	Changing rooms - roof mounted exhaust fan to serve both rooms*	See Building Interiors Item 19				X	Included above
8b	Changing rooms - connect to both rooms to DOAS system proposed in item 6b above*	See HVAC Item #3b				X	Included above
*Items 3a, 4a and 6a included in SUBTOTAL (3b, 4b, and 6b excluded). 7a and 8a included in Building Interiors item #19. Item 5 is excluded from all options							
SUBTOTALS		\$0	\$95,000				
Mechanical - Plumbing							
1	Test potable water system for lead-free status	By owner			X		By owner
2	Install seismic shutoff at gas meter	By owner		X			By owner
3	Inspect restroom floor drains	By owner			X		By owner
4	Upgrade Toilets and Urinals to low-flow types	X				X	\$6,000
5	Replace drinking fountains as required by Mechanical item #1	X			X		\$8,000
6	Replace faucets in center wing toilet rooms as required by Mechanical item #1	X			X		\$6,000
7	Replace electric water heater w/ high efficiency gas		X			X	\$3,000
8	Exterior gas piping should be galvanized or painted	By owner	X	X			By owner
9	Revise plumbing to support the reconfigured toilet rooms and studio area	See Building Interiors Item 19		X	X		Included above
10	Renovation space - reroute (2) 4" rainleaders connected to sewer line serving north wing	See Building Interiors Item 19			X	X	Included above
11	Replace water piping and components as required by Mechanical item #1	X			X		\$30,000
12	Replace water piping and components regardless of Mechanical item #1		X				\$30,000
13	Fire Protection - Provide new fire protection system to sprinkler all occupied areas of the facility.		X	X			\$257,000
SUBTOTALS		\$20,000	\$257,000				
Electrical							
1	Replace panels if proposed reconfiguration is performed	See Building Interiors Item 19			X		Included above
2	Install emergency egress lighting from the Studio and Office areas, 1 ft candle min	X		X			\$37,000
3	Provide new fire alarm devices connected to the existing fire alarm control panel system to cover the proposed reconfigured spaces	See Building Interiors Item 19		X			Included above
4	Provide receptacles to match new space layout if proposed reconfiguration is performed	See Building Interiors Item 19		X			Included above
5	Provide new LED lighting fixtures with lighting control system that meets 2015 Seattle energy code requirement if proposed reconfiguration is performed	See Building Interiors Item 19			X	X	Included above
6	Replace exterior building mounted lighting	X		X		X	\$36,000
7	Replace interior lighting throughout building with contemporary luminaires and automated control to provide building energy conservation.		X			X	\$131,000
SUBTOTALS		\$73,000	\$131,000				
TOTAL ALL SCOPE ITEMS		\$419,000	\$984,000				\$1,403,000

B. ARCHITECTURAL ASSESSMENT

FACILITY DESCRIPTION

BUILDING CODE ASSUMPTIONS

BUILDING ENCLOSURE

BUILDING INTERIORS

BUILDING ACCESSIBILITY (ADA)



architectural assessment



FACILITY DESCRIPTION

The Madrona Bathhouse was constructed in 1928, replacing a smaller temporary wood frame bathhouse on the site. To the immediate north of the bathhouse, on the same block, is the Madrona Park and to the south is the Leschi Marina with restaurants and shopping.

There are approximately 114 parking stalls in the lot directly to the south with two accessible spaces. This parking lot services the building and also the adjacent public park.

The main entry to the building faces west and is accessed from the sidewalk in front of the building. Upon entering the building, you are in a lobby space facing Studio I, accompanied by high ceilings with exposed wood framing. This lobby space is actively used during the times of high building turnover between sessions at the dance studio. The Reception desk is to the left of the entry door at the north end of the lobby space.

To the east of the lobby is Studio I, with the Spectrum Dance Studio offices located to the south. Beyond the reception area to the south is a staircase leading up to Studio II, located directly above Studio I. Restrooms are located in the same corridor where the staircase is located. Additionally, there are two Restroom/Changing Rooms accessible from the outside, servicing the adjacent public beach during the summer months.

The building has a brick exterior with decorative horizontal banding for the main level. The central portion of the building that extends above this level is treated with a cedar shingle. Most trim elements and parapets are a cast concrete with decorative designs, a common motif around the building.

While the building currently is not listed as a Seattle Landmark Building, it should be noted that due to its age, the Madrona Bathhouse building is potentially eligible for listing as a Seattle Landmark.

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BUILDING CODE ASSUMPTIONS

Seattle Building Code, 2015 edition

Occupancy: A-3 - Assembly, B - Business

Construction Type: V-B, (Noted as V-N on 2002 construction drawings under the UBC)

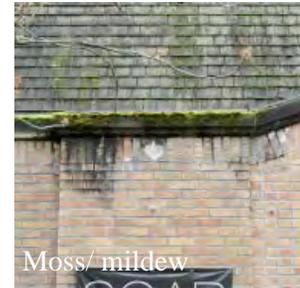
The allowable building area for a Type V-B building with mixed occupancy is 3,000 SF per floor with 2-stories. Because most of the building perimeter has a minimum of 20 feet of public way and open space, the increased allowable area for the building is calculated to be about 10,500 SF. The building does not have a Fire Protection Sprinkler system.

Based on the Record Drawings, the total building gross area is 9,768 SF. This is under the allowable area, which still complies with the current International Building Code as amended by the City of Seattle.

A significant focus of our evaluations look at the accessibility for the building and potential upgrade recommendations to provide better access for users. The Madrona Bathhouse was designed and built at a time that the Americans with Disabilities Act (ADA) was yet to be considered during the design process, so it appears that consideration for much of these requirements will need to be addressed at the facility. The ADA code has evolved over the past couple of decades, so current requirements will need to be considered in the evaluation process. Several improvements within the building have been added by Spectrum Dance Studio to accommodate some of their clients, but most of the improvements are not fully ADA compliant.

We analyzed the plumbing fixture requirements since that seems to be an area of significant change in the codes. Based on our calculations of the current building configuration, the building occupancy load is 118. We calculate that 2 Female and 2 Male Water Closets/Urinals are required. The current accommodations provide 2 for each gender. There are additional men's and women's facilities located in the changing rooms accessible from the outside for users of the park, which were not included in this calculation. Additionally, recent code interpretations related to gender use of restrooms has resulted in recommendations for a universal, single stall restroom at community centers that could provide a convenient and comfortable bathroom for those that might want it. Currently, the facility provides (1) all gender restroom adjacent to Studio I.

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Since this is an existing facility, and we do not believe that any of the changes or upgrades to the building would approach a value deeming it compulsory to upgrade the entire building to current codes. As part of our team's analysis, we prioritized our code deficiency comments and recommendations to those that relate to ADA and those that we believe are critically important to life safety at a facility like this.

The following review is based on a visual site inspection performed on April 7th, 2017.

No testing was performed to determine if hazardous materials are present. Having been constructed in 1928, we should assume the possibility of lead based paint and asbestos containing materials located within the Center. Further testing is recommended before any construction related activities take place.

On the morning of our site visit the weather was slightly overcast, which had turned to wind and rain by the time we finished.

BUILDING ENCLOSURE

Exterior Walls – The main level of the building is brick masonry with a soldier course along the top and decorative coursing approximately 3'-0" down from the parapet and exposed foundation all the way around the building. The height of the exposed concrete foundation wall varies around the building, from ground level at the northwest corner to +/- 48" at the southeast corner. Signs of settlement were evident at the doors to the changing rooms on the east side of the building, with repaired mortar joints noted at these locations. Per the 1983 renovation drawings, the north wall at the changing rooms was replaced with a 6" concrete wall. This wall remained exposed concrete with no brick veneer. Both moss and mildew are present on all exterior walls, high and low. Ivy was observed starting to move up the concrete wall on the north end of the building and attached to the brick and climbing at several locations.

Recommended Action: Monitor settlement at doors and repair mortar joints as needed.

Recommended Action: Power wash brick to remove moss and mildew, being careful not to damage existing mortar joints and apply a quality masonry sealer, such as Prosoco Sure Klean Weather Seal, or similar that will not alter the appearance and allow the masonry to "breathe." Remove ivy from exterior walls and trim back 12" min from building exterior. Ivy can be particularly destructive to brick, damaging mortar joints as it attaches to the wall.

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Clay Block Wall



Low roof scupper



Painted window



Drain Channel

Structure: Per the 1983 renovation drawings, the exterior walls of the building are comprised of brick veneer to the exterior, clay block and lath & plaster to the inside. The south wing of the building was renovated into office spaces in 2002. The exterior brick veneer and clay block remained, with furring walls constructed of metal studs with batt insulation between and gypsum wall board. The second floor above the central portion of the building is wood framed with exposed studs to the inside. The roof structure at the center of the building consists of glulam beams and wood framing.

Recommended Action: See Structural regarding seismic recommendations.

Roofing: The 2000 roof replacement drawings indicate that existing low-slope roofs were replaced with a built up system, with all new flashings and copings. Cedar shingles were replaced on the north, east and west sides of the building, with only damaged shingles replaced on the south side. Additionally, skylights incorporating passive ventilation louvers and a fall protection system was added to the high roof over the central portion of the building.

Recommended Action: No leaks were reported by staff. Regular maintenance for low-slope roof areas. Cedar shakes at high roof show signs of moss and mildew and should be cleaned and have a wood preservative applied. Consider replacing with a more durable product.

Gutters/ Scuppers: The high roof drains to a built-in perimeter gutter through scupper drain channels mounted to the side of the roof. It was raining on the day of our site visit and we observed water flowing down the channels. The low roof drains through a series of through-wall scuppers located on the east side of the building

Recommended Action: Regular maintenance - inspect the built-in gutter at the high roof, flashings and drains twice yearly (minimum) due to the trees located in close proximity to the building. Consider having the roof inspected every five years by a qualified roofing company

Windows: There are very few windows in the building, and several of them are blocked off on the inside and/or painted over on the outside. They all appear to be single pane, steel frame windows and are most likely original to the building. Any replacement options will need to take into consideration the historic designation of the building.

Recommended Action: Replace all windows, adding thermal panes, matching the current historical style.

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East door



Exterior Changing Room Doors



Exit door w/ deadbolt

Exterior Doors - Decorative Entry: The main entry door is a pair of divided lite doors with small sidelites and a decorative arched top with glazing above. The door appears to be in good condition and was noted on the 2002 renovation drawings to be "painted to achieve a like new appearance" on the inside. Door seals should be inspected and replaced as required. The entry door on the east side of the building, servicing the lifeguard room, is a metal clad dutch-door that does not appear to be original to the building. Wood infills to either side of the door along with the brick infill above indicate that at one time there may have been glazing, similar to the west entry door

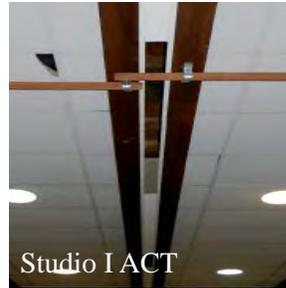
Recommended Action: Repair and Refinish east and west decorative building doors, replace weather seals. .

Exterior Doors – Metal: The remaining exterior doors are hollow metal doors in various conditions. All appear to be in good operating condition, but show signs of abuse and wear. There are two doors on the east side of the building used to access the changing rooms and one door on the same wall used to access the boat storage. All three of these doors are primarily used in the summer months during the time that the beach is open for public use. There are four doors located on the corners of the central core of the building. The northeast door is used for the back stairwell and has no exterior hardware. The southeast door is not regularly used and has a security grille and padlock on the exterior. The northwest door is accessed from a small office space in the front of the building and has panic hardware and a deadbolt installed. The southwest door at the south end of the lobby is labeled as an exit door with panic hardware, but also has a sliding dead bolt in place on the inside. The sliding deadbolt should be removed, as this is not allowed by code for an exit door.

Recommended Action: Short-term recommendations is to repair and repaint all exterior doors. Inspect and replace gasket seals as required. Long-term recommendation is to replace all exterior doors. We suggest using a door and frame suitable for wet areas at the entrances to the changing rooms, such as an FRP product.

Recommended Action: Remove deadbolts from all egress doors. If security from the exterior is a concern, consider installing latch guards to prevent doors from being pried open from the outside.

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SUMMARY OF RECOMMENDATIONS - BUILDING ENCLOSURE

1. Repair brick mortar joints as needed
2. Power wash brick and apply masonry sealer. Remove ivy from exterior walls and trim back 12" min from exterior walls
3. Structural Recommendation - Lateral reinforcing for second floor, anchor walls to floor slab.
4. Structural Recommendation - New wall ties at unreinforced masonry walls.
5. Power wash cedar roof shakes and apply wood preservative
6. Replace all windows, adding thermal panes, matching the current historical style.
7. Repair and Refinish east and west decorative building doors, replace weather seals.
8. Replace weather seals and repair and refinish all exterior HM doors
9. Replace Exterior HM doors
10. Remove deadbolts from all egress doors. Install latch guards

BUILDING INTERIORS

Interior walls - There are various interior wall conditions throughout the building:

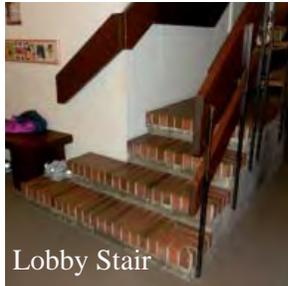
Walls - CMU: North changing rooms are painted CMU to 8'-0" with painted lath & plaster over wood studs above the 8'-0" line. All walls appear to be in good condition

Recommended Action: No Action, maintenance as required

Walls - Metal framed: Spectrum Dance Studio offices were part of the 2002 renovation and are constructed of painted 5/8" gypsum wall board over metal stud framing. All walls appear to be in good condition

Recommended Action: No Action, maintenance as required

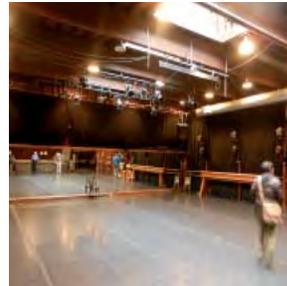
architectural assessment



Lobby Stair



Changing Room



Walls - Wood framed: Studio I is located on the first floor and has exposed wood framing painted white throughout most of the space. Wall mounted mirrors, approximately 6'-0" in height, are located on the east wall. Permanent Barre are mounted at various locations on the remaining three walls. All walls, even though they are not "finished", appear to be in good condition. Studio II is located on the second floor and has exposed wood framing that has been stained throughout most of the space. Wall mounted mirrors, approximately 6'-0" in height, are located on the south wall. Black cloth has been hung from the east, south and west walls and permanent Barre are mounted at various locations on these walls. All walls, even though they are not "finished", appear to be in good condition

Recommended Action: No Action, maintenance as required

Interior Stairs: Adjacent to the south end of the Lobby is a stair constructed of wood stringers and treads, leading to Studio II. There is also a wooden stair on the north side of Studio I that leads up to Studio II, with access to the mechanical room provided at an intermediate landing. Both stairs appear to be in good condition and require only minor refinishing. The stair on the south side has a concrete pad with brick inlays forming the first few stair treads. This also appears to be in good condition.

Recommended Action: Regular maintenance. Clean and refinish as required.

Ceiling Finishes - Similar to the walls, there are various ceiling conditions noted throughout the building:

Ceiling - Exposed framing: Studio II is all exposed to the roof structure above with a series of large skylights located down the middle of the room, running east to west. Staff noted that the passive ventilation louvers located within the skylight do not always work. The Lobby has stained wood, exposed to the roof structure above, similar to Studio II and appears to be in good condition.

Recommended Action: Maintenance as required. See mechanical and electrical reports for action at louver vents in Studio II.

Ceiling - Lath & Plaster: Ceilings in the north changing rooms have areas of painted lath & plaster and appear to be in good condition

Recommended Action: No Action, maintenance as required

Ceiling - Wood tongue and groove: Ceilings in the north changing rooms have areas of wood T&G and appear to be in good condition

Recommended Action: No Action, maintenance as required

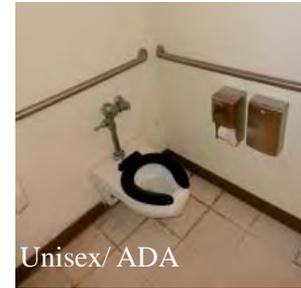
architectural assessment



Men's Restroom



Spectrum Offices



Unisex/ ADA

Ceiling - Acoustic Ceiling Tile (ACT): Spectrum Dance Studio offices, Studio I. The common areas and offices of Spectrum Dance Studio were part of the 2002 renovation and all ceilings appear to be in good condition. Studio I has a series of exposed beams with acoustic ceiling tile in between. The ceiling appears to be in generally good condition, although several of the ceiling tiles were noted to be broken.

Recommended Action: Replace damaged acoustic ceiling tiles as needed

Ceiling - GWB: Spectrum Dance Studio offices. Wet areas (men's and women's restrooms, men's and women's changing rooms, staff shower room) have painted GWB ceilings. All were part of the 2002 renovation and appear to be in good condition

Recommended Action: No Action, maintenance as required

Reception / Office - The existing reception area consists of a movable desk, located north of the main building entry. There are no ADA provisions at the reception area. The reception area office is located through a door behind the reception desk and shares much of its space with electrical panels and storage racks.

Recommendation: Consider reconfiguring the reception area with built-in casework incorporating an ADA compliant surface and added storage space.

Floors – Vinyl Tile: All Gender, Men's and Women's restrooms, Men's and Women's locker rooms. There is also vinyl wall base used throughout and appears to be in good condition. The tile floor appears to be in good shape in the Men's and Women's locker rooms as well as the Women's restroom. The tile floor in the All Gender and Men's restrooms is in poor condition, particularly around the sink and toilet.

Recommended Action: Short-term is to replace the damaged tile floor in the All Gender and Men's restrooms. Long-term consider replacing the tile floors in the restrooms and locker rooms with welded sheet vinyl with an integral cove base.

Floors - Concrete: Lifeguard room, changing rooms, boat storage. The floor in the Lifeguard room appears to have been painted. The floor itself looks to be in good condition, but the paint is worn and faded. The floors in the changing rooms are bare concrete and look to be in good condition. The floor in the boat storage is bare concrete as well and looks to be in good shape given its use. Some minor cracking was noted, but should not be of concern.

Recommended Action: Regular maintenance. Clean and apply a quality concrete sealer to the changing room and boat storage floors. Re-coat the lifeguard room floor with a quality epoxy paint. Long-Term consider an epoxy floor system in all rooms for ease of maintenance

architectural assessment



Floors - Carpet: Lobby, Reception area and Office, Corridor and Spectrum offices. The carpet in the lobby, reception area and corridor is showing signs of wear given it's use. The carpet in the Spectrum office space appears to be in good condition, with only a couple of areas noted that are in need of re-seaming

Recommended Action: Short-term recommendation is to repair carpet seams as required and to install walk-off mats at the building entry. Long-term consider replacing the Lobby, Reception and Corridor carpet with carpet tiles with a fixed area of walk-off carpet at the building entry.

Floors - Wood: Back stairwell, Mechanical room. Neither of these areas are high-traffic areas and are out of public view.

Recommended Action: Short-term recommendation is to provide maintenance as required. Long-term consider installing rubber tread material at the back stairwell.

Floors - Rubber: Rubber Impact flooring is installed in Studio I and Studio II and appears to be in good condition. There is a transition piece missing in the doorway separating the Lobby from Studio I

Recommended Action: Regular maintenance. Replace missing transition

Doors: Interior doors throughout are wood with wood frames. there are (6) doors that were not replaced during the 2002 renovation that are chipped and show signs of their age, all others appear to be in good condition. All hardware installed on doors that were replaced during the 2002 renovation appear to be a lever type that does not require gripping to operate. The doors not replaced in the 2002 renovation have round knob type hardware.

Recommended Action: Short-term replace the hardware at the (6) doors not replaced during the 2002 renovation. Long-term replace the (6) interior doors.

Break Area: There is a small employee break area within the Spectrum Dance Studio offices with a small under-counter refrigerator, sink, microwave, base and wall cabinets. This area is only open to employees and looks to be in good condition and serve it's purpose well.

Recommended Action: Maintenance as required.

architectural assessment



Exterior Restroom



Damaged Countertop



Women's Restroom

Restrooms: The existing restrooms do not have enough fixtures to meet current code although they seem to meet the needs of the facility. Additionally, the changing rooms accessed from the exterior contain restroom facilities that primarily serve the adjacent public beach during the summer months. The grounds crew helps to operate these restrooms by keeping them open when the bathhouse is closed for those required usage times. This poses an operational difficulty for the parks department. The countertop in the Women's restroom was noted to have broken free from its mounts on one side, causing the laminate finish to delaminate.

Recommended Action: Provide a Cypher locking system (electronic controls) at the exterior restrooms to help with operational controls.

Recommended Action: Re-fasten countertop and repair or replace laminate.

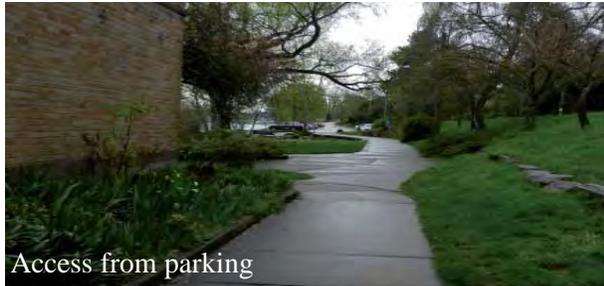
The City of Seattle and Seattle Parks has been working to adopt policies that are more inclusive for the LGBT community. Seattle's LGBT Commission Recommendations on the Parks Investment Initiative includes suggestions, such as including single stall/universal restrooms.

Recommended Action: Provide "All Gender" signage to existing single stall restroom

SUMMARY OF RECOMMENDATIONS - BUILDING INTERIORS

1. Clean and refinish interior stairs
2. Replace damaged acoustic ceiling tiles as needed
3. Reconfigure the Reception area with built-in casework incorporating an ADA compliant surface and added storage space
4. Replace the damaged vinyl tile floor in the All Gender and Men's restrooms in kind
5. Replace the vinyl tile floors in the restrooms and locker rooms with welded sheet vinyl with an integral cove base
6. Clean and apply concrete sealer to north changing rooms and boat storage floors
7. Re-coat lifeguard room with epoxy floor paint
8. Replace painted floor in Lifeguard room with an epoxy floor system
9. Repair carpet seams as needed
10. Install walk-off mats at building entry

architectural assessment



11. Replace the Lobby, Reception and Corridor carpet with carpet tile with a fixed area of walk-off carpet at the building entry
12. Install rubber tread covers at back stairwell
13. Replace missing floor transitions
14. Replace hardware at (6) doors not part of the 2002 renovation
15. Replace (6) doors not part of the 2002 renovation
16. Provide a Cypher locking system (electronic controls) at the exterior restroom doors
17. Re-fasten countertop in Women's restroom and repair laminate top
18. Provide "All Gender" signage to existing single stall restroom

BUILDING ACCESSIBILITY (ADA)

Due to the nature of a community facility, Seattle Parks & Recreation puts an emphasis on accessibility. Some of these items could be “grandfathered” conditions, but ideally for a facility that's goal includes serving everyone in greater community, providing fair access for all is understandably a top priority.

Site Access - See the Civil Assessment.

Recommended Action: Provide an accessible access pathway from the north to the building entry from the street right-of-way with a new sidewalk.

Parking – Currently the Madrona Bath House has two ADA drop-off parking spaces, located in the parking lot to the south of the building.

Recommended Action: Improve accessible route from each of the designated ADA Parking spots to the building entrance. See civil assessment.

Building Entry – The exterior main entry doors facing west and nearest to the accessible parking, appear to be accessible, although the sidewalk is in poor condition with multiple slope angles.

Recommended Action: In the long-term we recommend a push button operator be added at the main entry for facilities of this type for increased accessibility

Building Circulation: The first floor has an accessible entrance on the west side of the building. Studio II is located on the second floor and has no accessible route. Studio I has a concrete ramp added to the south doorway to aid in accessing the ADA restroom on the east side of the building.

Recommended Action: Install a platform lift serving Studio I and Studio II

architectural assessment



Restroom Accessibility: The existing single-stall and Women's restrooms do have ADA accommodations. The Exterior changing rooms have restroom accommodations that appear to be ADA compliant.

Recommended Action: Add vertical grab bars to accessible toilets and covers to undercounter plumbing

SUMMARY OF RECOMMENDATIONS - ADA

1. Provide an accessible access pathway to the building entry from the street right-of-way.
2. Provide two designated ADA parking spots; at least one that is van accessible
3. Add push-button operators to the Main Entry Doors
4. Add vertical grab bars to accessible toilets
5. Install a Platform Lift serving Studio I and Studio II

PROPOSED IMPROVEMENTS

A portion of this study was to also assess the Changing Rooms on the north end of the building to see if there was an opportunity to better utilize the space. Spectrum Dance Theater is at capacity and often is forced to turn customers away for lack of space to run certain classes. Parks staff noted that the Changing Rooms are under utilized during the time of year that they are open. Our team reviewed the space on-site and also through various as-built documentation and feel that the plan referenced in Section F will meet the needs of both Spectrum Dance Studio and Seattle Parks.

- 1,000 square feet of studio space (47'-0" x 20'-0")
- 280 square foot Women's changing room
- 190 square foot Men's changing room
- 190 square foot Boat Storage remains unchanged

The existing bathhouse changing/ restrooms are very large and exceed the space needs for most modern bathhouses. Most patrons come to these beaches already wearing their swimsuits or recreational clothing, causing much of the space designated to be underutilized. The proposed plan still allows for functional use with showers and changing areas, but in a more efficient plan.

Prior to the approval of this concept, we recommend SPR conduct bathhouse user surveys and counts to verify actual use and program needs

C. CIVIL ASSESSMENT

SITE / CIVIL



site / civil



EXISTING CONDITIONS

PARKING LOT:

- There is one main parking lot area associated with the site, located to the south of the building and accessed from Lake Washington Blvd. Pavement is in good condition with very little spalling and some cracking, but no visual evidence of subgrade failure. Parking stalls average 9' in width. There are two handicap stalls, (1) Handicapped Parking Stall and (1) Van Accessible Handicapped Parking Stall (8.0' minimum width with 4.67' aisle between). Stall striping is in good condition and clear, however the Handicapped parking stall markings are in poor condition and no longer visible

PEDESTRIAN ACCESS:

- The main pedestrian entrance to the building is located on the west side of the building. Other pedestrian access points are located adjacent to the main entry on the west side of the building, and on the east side of the structure. During the summer when a lifeguard is on duty beach goers use the restroom facilities adjacent to the main structure through doors on the east side.
- The main entry is in good condition and appears to meet ADA access requirements. Access from the parking area to the main entry is not compliant with ADA standards. There is no curb ramp from the handicapped parking stall to the sidewalk. The sidewalk from the parking lot crosses a vehicle access route to the beach that has a cross slope greater than 2.0% and is not adequately aligned and striped. The vehicle access route has heavy longitudinal cracking, and also depresses in the pedestrian access route that are walking hazards. The curb ramp adjacent to the vehicle access appears to be in fair condition with some aesthetic cracking but is missing truncated domes. The ADA pedestrian path from the curb ramp to the main entry appears to be in good condition with little spalling and minor cracking.
- A concrete sidewalk and paver path surrounds the facility and provides pedestrian access to the beach located to the east. The majority of the concrete walk is in fair condition, however, in some areas there is heavy longitudinal cracking and depressions that are a walking hazard. The paver paths appear to be in good condition. The surrounding walkways do not meet ADA standards due to stairs and walkway slopes being greater than 5.0%.



SITE GRADING/DRAINAGE:

- The west edge of the site is steeply sloped from Lake Washington Blvd toward the building to the east and is retained by a 2 foot stone wall. The remainder of the site gently slopes to the east. While meeting with the building coordinate site maintenance staff, there aren't any on-going drainage problems.
- Stormwater runoff from the landscape and hardscape west of the building is collected in area drains and discharged into Lake Washington. The remainder of the site sheet flows stormwater to the east into Lake Washington.
- Stormwater from the roof of the facility is discharged via scuppers to the landscape. No downspouts are provided.

SANITARY SEWER:

- According to the City of Seattle side sewer information, the building has two sewer discharge points. Both locations discharge to the north west to a sewer manhole located at the north west corner of the site. From the manhole the sewer connections into the 21" clay mainline under Lake Washington Blvd.
- Talking with the facility manager there have not been any backup issues reported.

DOMESTIC WATER & FIRE SERVICE:

- There is no record of the size and/or material of the domestic service or the fire service. A request for this information has been put in with Seattle Public Utilities.
- The nearest hydrant is located on the west side of Lake Washington Blvd across the street from the structure.
- No fire department connection or post indicator valves were observed onsite for the facility.

site / civil

RECOMMENDATIONS

MAINTENANCE:

1. Clean out area drains and catch basins and TV existing drain lines to determine condition.
2. Restripe and paint the two handicapped parking stalls to meet ADA standards. Handicapped parking signs to be installed and/or relocated to in front of stalls.



3. Remove and clean moss from walkways.



CODE AND LIFE SAFETY:

- 4. Demolish and relevel the beach vehicle access to have less than a 2.0% cross slope. Replace concrete vehicle access and provide a painted crosswalk.



- 5. Construct curb ramp for ADA stalls and connect to sidewalk.



site / civil

6. Clean and crack-seal the cracks in the asphalt path along the west face of the building.



7. Install downspouts and splashblocks at all roof top scuppers.



D. STRUCTURAL ASSESSMENT

BUILDING ASSESSMENT / DESIGN CRITERIA

EARTHQUAKE / WIND LATERAL FORCES



building assessment / design criteria



BUILDING DESCRIPTION

This section summarizes the existing structural conditions at the Madrona Bath House-Spectrum Dance and minimum recommended improvements to improve life safety code requirements for lateral loading and ensure proper functioning of the facility.

BUILDING ASSESSMENT/DESIGN CRITERIA

Codes: International Building Code, 2015 edition (IBC)

International Existing Building Code, 2015 edition (IEBC)

ASCE/SEI 7-10 Minimum Design Loads for Buildings and Other Structures

- Building Risk Category II
- Seismic Design Category D
- Wind: 110 MPH (ultimate); Exposure C; Wind Speed-up, $K_{zt} = 1.00$

BUILDING DESCRIPTION

As can be seen in the aerial plan view above, the Madrona Bath House-Spectrum Dance facility consists of three separate building volumes. The north portion is a one-story structure which houses the changing rooms and showers for beach use, the center portion is a two-story structure housing Spectrum Dance, and the south portion is a one-story building that includes offices and dressing rooms.

building assessment / design criteria



ORIGINAL STRUCTURE:

Original drawings for the Madrona Bath House were not available for this study, but the building appears to have been built sometime during the first half of the 20TH century, approximately 1910 to 1930. The original building was a one-story building throughout. Foundations were shallow concrete spread footings and floor was a standard concrete slab on grade. The wood framed roof structure was supported on timber columns on the interior and unreinforced masonry walls at the exterior and interior between the three sections of the building.

1971 ADDITIONS:

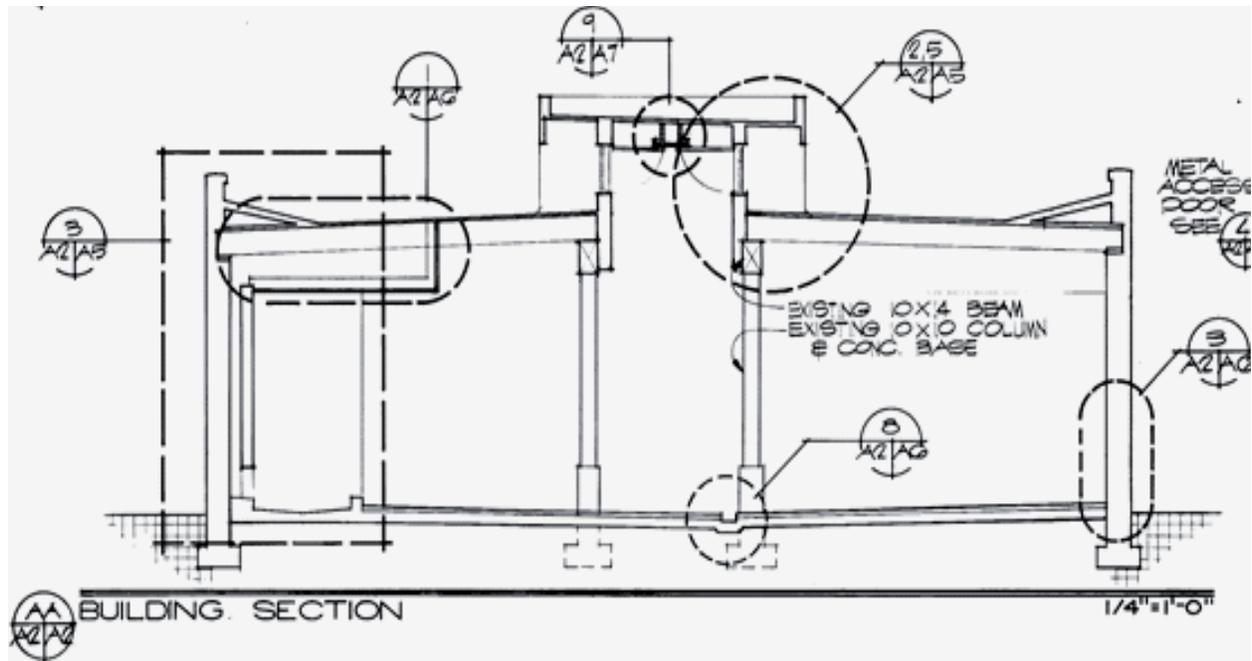
In 1971 the center portion of the building was completely remodeled and converted into a dance studio. The original roof and floor were removed to install new foundations for a new second floor and higher roof. The only portions of the original structure that remain are the unreinforced masonry (URM) walls around the perimeter and the URM wall between the dance studio and the life guard station on the east side of the space.

According to the As-Built drawings for the 1971 additions, the footings are shallow concrete spread footings designed for an allowable soil bearing pressure of 3,500 pounds per square foot. The ground floor is a conventional slab on grade reinforced with welded wire mesh. The second floor and roof structure is supported on interior 6x6 timber columns and the perimeter URM walls. The timber columns are located approximately 7'-1" on center in the east-west direction, and 6'-3" from the interior faces of the north and south URM walls. Therefore, the loads on the URM walls from the new second floor and roof are minimized.

The second floor consists primarily of 2x8 floor joists at 16" on center spanning approximately 6 feet over double 5.25 x 26 glulam beams. The glulam beams are attached to either side of the 6x6 timber columns with three 7/8" diameter bolts with 4" diameter split ring shear connectors. The second floor is sheathed with 5/8" plywood.

The Dance Studio roof is framed flat over the second floor area enclosed by the new 6x6 timber columns, and then slopes down sharply to the perimeter URM walls, giving the appearance of a mansard. The flat portion of roof is approximately 17 feet above the top of the original URM walls. The flat roof is framed with 2x6 joists at 16" on center spanning over 5.25 x 22.75 glulam beams at 7'-1" on center. The glulam roof beams are supported on the new 6x6 timber columns. The perimeter mansard roof is also framed with 2x6 rafters at 16" on center. The entire roof is sheathed with 1/2" plywood.

structural recommendations



1983 MADRONA BATHHOUSE REMODEL:

In 1983 the north portion of the building was structurally modified. The entire roof structure, except for the existing 10x14 roof beams and 10x10 timber support columns, was removed and replaced. The exterior URM walls remain, except for the north exterior wall. This wall was removed and replaced with a 6" reinforced concrete wall which retains approximately three feet of soil.

The roof over the north portion is approximately 38 feet wide in the east-west direction. There are two rows of existing 10x10 timber columns along the centerline in the north-south direction. These are centered 6'-10" apart in the east-west direction and located approximately 16'-8" on center in the north-south direction. The existing 10x14 roof beams run in the north-south direction and are supported on top of the existing 10x10 columns. The 1983 roof structure is framed as follows:

- Roof deck consists of 1/2" plywood sheathing over 2x6 T&G wood decking spanning roughly 4'-6" over double 2x6 rafters.
- The double 2x6 rafters are located at 4'-7 1/2" and 4'-6" on center are spaced 5.5" apart. The double 2x6 rafters are supported on the east and west exterior URM walls, and on the existing 10x14 roof beams either side of the centerline of the building. They do not continue across the center of the building, but stop 5.5" past the timber beams. 6x6 posts are bolted between each pair of rafters and extend up approximately 3'-6" to support a monitor roof along the centerline of the building.
- The monitor roof is supported similar to the lower roof with the double 2x6 rafters bolted either side of the 6x6 posts.

This framing system is illustrated in the section above, looking north.

structural recommendations



EARTHQUAKE / WIND LATERAL FORCE RESISTING SYSTEM

Lateral wind and seismic forces are distributed through the roof and floor diaphragms to the exterior and interior shearwalls and into the foundation. The floor and roof diaphragms are wood framed as described above. The available shearwalls are limited to the URM perimeter shearwalls around each portion, except for the north exterior wall. This wall is a 6" reinforced concrete wall that was built in the 1983 remodel.

Of primary concern is the fact that the only attachment for the high roof, that was added over the center portion in 1971, to the perimeter URM walls to transfer lateral forces are the sloped mansard roofs around the perimeter. The new second floor diaphragm, also, is marginally attached to the URM walls that resist loads in the east-west direction, since much of the floor on these sides is open for the stairs.

Of lesser concern is the fact that the exterior URM walls are not adequately tied into the floor and roof diaphragms to resist out-of-plane seismic forces, as described below under Recommendations.

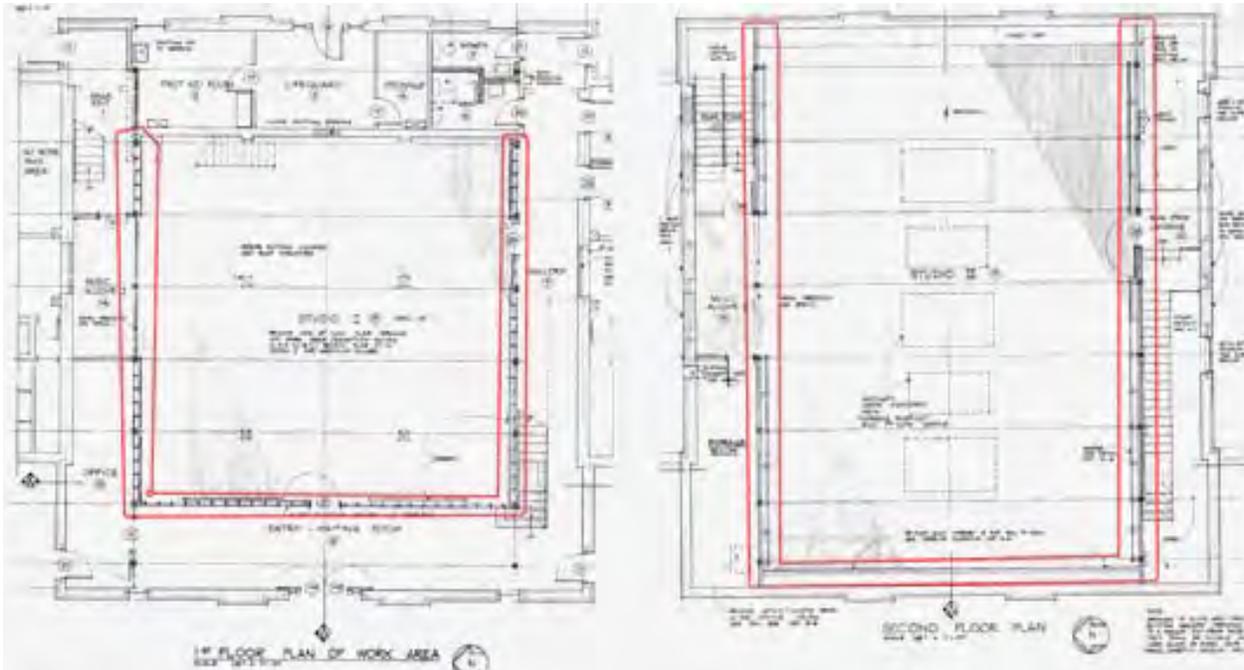
RECOMMENDATIONS

The Madrona Bath House facility appears to be generally in good structural condition. Although the brick exterior was thoroughly cleaned in 1983, and the roofing was replaced in 2001, it is due for some maintenance and cleaning. There are several signs of dirt and moss growth on the brick exterior and on the cedar shake roofing on the mansard around the center portion. There is also a large evergreen tree located very close at the northeast corner of the building. We recommend removal of this tree and the moss and debris should be thoroughly cleaned from the exterior of the building. Cedar shingles on the mansards may require patching or replacement if the moss is too deep.

Seismic upgrade recommendations are as follows:

- The second floor and roof of the 1971 remodel are not adequately tied into the perimeter URM walls to resist lateral earthquake forces. The weakest direction is in the east-west direction. There are relatively continuous wood stud walls around both the first and second floor studios that are sheathed with 3/4" plywood, but these walls were not nailed nor detailed as shearwalls. We recommend the sheathing on these walls be re-nailed with 10d common nails and properly attached to the roof and floor diaphragms to resist lateral wind and seismic forces. The wall sill plates shall also be properly anchored to the floor slab on grade with 1/2" diameter expansion anchors no more than 48" on center. These walls are shown in plan on the following page.

structural concept drawing



- Currently, the exterior URM walls are tied to the floor and roof framing with shallow embedded expansion anchors. These anchors are not rated for tension loads in Unreinforced Masonry (URM). We recommend new wall ties utilizing either 15 degree bent threaded rods embedded in the URM walls with screen tube and anchoring adhesive, or through-wall anchor rods with exterior rosettes, washers and nuts. These anchors would be located at 48" on center. Additional blocking may be required to tie these anchors into the floor and roof diaphragms.

The maintenance recommendations are an ongoing condition that should be implemented and maintained. The Seismic Upgrade Recommendations are equally as important should we experience the design earthquake specified by current code requirements. Although we consider the seismic recommendations a high priority for this building, according to the International Existing Building Code, 2015 edition (IEBC) these upgrades are optional since there will be no change in occupancy and no structural modifications or additions will be made to the building.

E. MEP SYSTEMS ASSESSMENT

HEATING VENTILATION AND AIR CONDITIONING

PLUMBING SYSTEMS

ELECTRICAL SYSTEM



heating, ventilation and air conditioning

EXISTING HVAC SYSTEM

All occupied spaces are provided heating and ventilation by two (2) gas-fired forced air furnaces and one (1) rooftop unit. One furnace (HVAC-1) serves the studio on the first floor. It provides ventilation and heating only and appears to be 25 years old. Another furnace (HVAC-2) serves the studio on second floor. This unit provides ventilation and heating as well as cooling, which appears to have been added as part of an upgrade in c. 2000. A refrigerant evaporator (DX) cooling coil and a condenser unit appear to have been part of this upgrade. The offices and conference room are served by a separate dedicated rooftop unit (RTU-1) that provides heating/cooling and ventilation.

Furnace HVAC-1 includes a supply fan, gas-fired heating coil, MERV-8 filter bank and a mixing box including motorized mixing dampers that mixes return air with outdoor air for ventilation. Furnace HVAC-2 includes a supply fan, gas-fired heating coil, DX cooling coil, MERV-8 filter bank and a mixing box including motorized mixing dampers that mixes return air with outdoor air for ventilation. Rooftop unit RTU-1 includes a supply fan, gas-fired heating coil, filter bank and a mixing box that mixes return air with outdoor air for ventilation.

Two (2) exhaust fans are provided to serve restrooms in order to provide odor control.

Natural gas is available on site and has been used as the heating source.

There is no central DDC control system to serve the building. The thermostat controls for each furnace appear to have been upgraded in c. 2000. In addition to replacing the thermostats, this control upgrade included damper-actuators, and relays to trigger damper positioning. The upgraded control includes the following control features:

- Occupied/unoccupied mode
- Occupied mode: positioner of outside air damper to be set for 30% open.
- Night setback/unoccupied mode: outside air dampers to be fully closed.
- Ventilation only mode (thermostat set to fan “ON”): outside air dampers to be 100% open (economizer).
- Return air dampers and actuators to operate opposite of outside air dampers.

What follows is a room-by-room summary.

STUDIO I – FIRST FLOOR

Served by:

- One gas-fired furnace HVAC-1 (2000 CFM) mounted in the mechanical room with heating output capacity of 82MBH. There is no cooling equipment to serve this studio. Supply air is distributed to the space via concealed duct to sidewall. Return air is routed back to furnace through two (2) sidewall grilles.
- Ventilation is provided via HVAC-1, which is equipped with an air mixing plenum that combines outdoor air with return air.
- Air relief is via four (4) transfer air grilles on the wall to an adjacent entry waiting room.
- One Honeywell programmable thermostat located in Studio I controls furnace HVAC-1.

heating, ventilation and air conditioning

Notes:

- The space temperature setpoint on the wall thermostat was 70F; the registered space temperature on thermostat was 70F.



Gas-fired furnace



Supply and return air

STUDIO II – SECOND FLOOR

Served by:

- One gas-fired furnace HVAC-2 (1420 CFM) mounted in the mechanical room with heating output capacity of 114.8 MBH and cooling capacity of 5 Tons. Supply air is distributed to the space via exposed duct to ceiling registers. Return air is routed back to furnace through four (4) floor grilles.
- Ventilation is provided via HVAC-2, which is equipped with an air mixing plenum that combines outdoor air with return air.
- Air relief is via four (4) transfer air grilles on the wall of the adjacent hallway.
- One Honeywell programmable thermostat located in Studio II to control the furnace HVAC-2.
- One 5 Ton Condenser Unit COND-1 located on roof of south wing.

Notes:

- The space temperature setpoint on the wall thermostat was 70F; the registered space temperature on thermostat was 71F, which is within control tolerance.
- There are three (3) skylight backdraft dampers, all set in a fixed open position.
- The floor return grilles were found to be blocked by chairs.

heating, ventilation and air conditioning



Gas-fired furnace



Return air blocked by chair storage



Skylight dampers locked in fixed open position

ENTRY WAITING ROOM – FIRST FLOOR

Served by:

- The gas-fired furnace HVAC-1 serving Studio I also serves this space. Supply air is distributed to the space via concealed duct to two (2) ceiling diffusers.
- Electric baseboard was observed and presumed to be used as supplemental heat.

Notes:

- The electric baseboard appears to not be working properly and this space is mainly heated from ceiling diffusers and transfer air from Studio I.

heating, ventilation and air conditioning

OFFICES AND CONFERENCE ROOM – FIRST FLOOR

Served by:

- One rooftop unit RTU-1 mounted on the lower roof. Supply air is distributed to the space via concealed duct to ceiling diffusers.
- Ventilation is provided via the RTU-1, which is equipped with an air mixing plenum that combines outdoor air with return air.
- One Honeywell programmable thermostat located in the Corridor of the First Floor is used to control the furnace RTU-1.

Notes:

- The space temperature setpoint on the wall thermostat was 70F; the registered space temperature on thermostat was 70F.
- Most of the return grilles are clogged by dust, cleaning of these return grilles is recommended.



Rooftop HVAC unit



Dust clogged air return grilles

MEN'S AND UNISEX RESTROOM – FIRST FLOOR

Served by:

- One exhaust fan EF-1 located in ceiling, discharge exhaust via a roof cap. The exhaust fan is controlled by a wall switch.

WOMEN'S RESTROOM AND LOCKERS ROOM – FIRST FLOOR

Served by:

- One mushroom exhaust fan EF-2 is located on the roof. The exhaust fan is controlled by a wall switch.

heating, ventilation and air conditioning

SUMMARY OF EXISTING MECHANICAL EQUIPMENT

ID	Location	Service	Manuf. Model	Airflow	Heating Capacity	Cooling Capacity	Approx. Year of Installation
HVAC-1	Mech. Room	Studio I	Lennox G4M3/4X-100	1420 CFM	82MBH	N/A	Unknown
HVAC-2	Mech. Room	Studio II	Lennox G24M/5-140S	2000 CFM	114.8MBH	5 Tons	2000
COND-1	Mech. Room	Roof of South Wing	Lennox HS29-060	3010 CFM	N/A	5 Tons	2000
RTU-1	Lower Roof	Office & Conference	Trane	Unknown	Unknown	Unknown	2002
Exhaust Fan EX-1	Unknown	Ceiling	Unknown	Unknown	N/A	N/A	Unknown
Exhaust Fan EX-2	Unknown	Roof	Unknown	Unknown	N/A	N/A	Unknown

HVAC ASSESSMENT AND RECOMMENDATIONS

Most of the mechanical equipment has reached the end of service life and consideration should be given to either replace or upgrade to more energy efficient systems.

LOW-COST/NO-COST SUGGESTIONS

1. Remove the chairs in Studio II on the second floor blocking the return air grilles served for Studio II.

DEFERRED MAINTENANCE (DO NOW)

2. Clean return air grilles. Many were observed to be partially clogged in the office and conference room on the first floor.

CAPITAL PLANNING

3. Studios: consider upgrading the existing mechanical systems. The following options should be considered:

Option 3A: Replace HVAC-1&2 by Two (2) Gas-fired Furnaces with integral heat pump capability, resulting in two (2) Zones, each with Heating, Cooling and Ventilation.

The two (2) new Constant Air Volume (CAV) gas-fired furnaces are similar to the existing HVAC-2 in that they provide cooling, heating and ventilation, but with the advantage of the DX coil also serving as a heat pump that can stage with the gas-fired for high cost savings and energy efficient operation. The space temperature of each studio is individually controlled by a programmable thermostat.

Pros: Simple system with low first cost, low operational complexity.

Cons: Lower energy efficiency than other options.

heating, ventilation and air conditioning

Option 3B: Replace HVAC-1&2 by a VRF Heat Pump System with DOAS, Two (2) Zones, Heating and Cooling

A Variable Refrigerant Flow (VRF) system is an all-electric system that uses heat pumps to provide heating and cooling to spaces served. It has the ability to modulate the amount of refrigerant sent to each zone in accordance with conditioning requirements. A single heat pump VRF condensing unit is to be installed on south wing roof that connects to two (2) indoor fan coil units. Each studio to be served by one of the fan coil units. A Dedicated Outdoor Air System (DOAS) with integral heat recovery of exhaust is installed on the south wing roof to provide ventilation to each space.

Pros: Higher energy efficiency, higher indoor air quantity with DOAS system.

Cons: Higher cost compared to Option 3A.

4. Offices and Conference Room: consider upgrade the existing mechanical systems with one of the following options:

Option 4A: Replace RTU-1 by a Gas-fired Rooftop unit with Heat Pump, Single Zone, Heating and Cooling.

A new Constant Air Volume (CAV) gas-fired rooftop unit similar to the existing rooftop unit to provide cooling, heating and ventilation. One single zone thermostat to control the space temperature.

Pros: Simple system with low first cost, simple operational complexity.

Cons: Only single zone temperature control, may impact occupant comfort.

Option 4B: Replace RTU-1 by a VRF Heat Pump System with DOAS, Multiple Zones, Heating and Cooling

A heat pump VRF condensing unit is to be installed on south wing roof and connect to multiple indoor fan coil units. The fan coil units can be wall-mounted, concealed ducted or ceiling cassette depending on space needs. A Dedicated Outdoor Air System (DOAS) installed on south wing roof to provide ventilation to each space.

Pros: Higher energy efficiency, higher indoor air quantity with DOAS system.

Cons: Higher cost compared to Option 4A.

heating, ventilation and air conditioning

5. Studios, Offices and Conference Room: another option is to consider the building to be served by one (1) mechanical system.

Option 5: Replace HVAC-1&2 and RTU-1 by a single VRF Heat Pump System with DOAS, Multiple Zones, Heating and Cooling.

A heat pump VRF condensing unit is to be installed on south wing roof and connect to multiple indoor fan coil units to serve studios as well as offices and conference room. The fan coil units can be wall-mounted, concealed ducted or ceiling cassette depending on space needs. A Dedicated Outdoor Air System (DOAS) installed on south wing roof to provide ventilation to each space.

Pros: Higher energy efficiency, higher indoor air quantity with DOAS system, lower cost compared to Option 3B+4B.

Cons: Higher operational complexity.

6. Restrooms exhaust: consider the following upgrade options depending on future configuration of space and the type of mechanical system to serve spaces.

Option 6A: Replace existing exhaust fans by new exhaust fans.

Option 6B: Consider connecting exhaust of restrooms to DOAS system proposed for options above to provide heat recovery from exhaust air when DOAS system is installed.

7. New Studio Space: consider the following mechanical options to service this space.

Option 7A: Add a new Gas-fired Rooftop unit with Heat Pump, Single Zone, Heating and Cooling.

A new Constant Air Volume (CAV) gas-fired rooftop unit to provide cooling, heating and ventilation, but with the advantage of the DX coil serving also as a heat pump that can stage with the gas-fired for high cost savings and energy efficient operation. The space temperature of the studio is individually controlled by a programmable thermostat.

Pros: Simple system with low first cost, low operational complexity, and system is separated from rest of building.

Cons: Lower energy efficiency.

Option 7B: Combined with Option 3B by a VRF Heat Pump System with DOAS, Three (3) Zones, Heating and Cooling.

Pros: Higher energy efficiency, higher indoor air quantity with DOAS system.

Cons: Higher cost compared to Option 7A, this option should be not considered if this space needs to be done as a separate project.

heating, ventilation and air conditioning

8. New Restrooms exhaust: consider the following mechanical options to service spaces.

Option 8A: add a new roof mounted exhaust fan to serve both restrooms.

Option 8B: Consider connecting exhaust of restrooms to DOAS system proposed for options above to provide heat recovery from exhaust air when DOAS system to be installed.

plumbing system

EXISTING PLUMBING SYSTEMS

DOMESTIC WATER SERVICE

Per an older site plan, the water service enters the building near the southwest corner of the center section. The main building shut off was not observed. It may be located in the chase area behind the south toilet rooms; the chase is blocked by items stored in this area. A 2" branch line was added as part of the 1983 remodel of the bathhouse area. This line enters the building next to the gas meter and has a below grade external shut off. Hot water for the Spectrum Theater portion of the building is supplied by an A.O. Smith electric water heater, model ECT 52 210, 50 gallon capacity, manufactured in 2015.

NATURAL GAS SERVICE

Gas service to the building is from a diaphragm type meter located on the west side of the building. Natural gas is supplied to mechanical equipment.



SANITARY WASTE AND VENT

Existing sanitary lines drain by gravity to the city sewer system. Some older vent piping is visible, but painted, possibly galvanized.

STORM DRAINAGE

Roof drains connect to rainleaders enclosed in walls. Scuppers are provided for overflow.

plumbing system

PLUMBING FIXTURES

Fixtures installed during the 2002 renovation are in good condition. Toilet rooms have 1.6 gpf water closets. A residential type stainless steel counter set sink has a single lever faucet.

Older fixtures have rusty flush valves, toilets are not 1.6 gpf.

A room by room summary of Plumbing Fixtures follows:

PIPE "ALLEY"

An electric water heater just inside the door serves lavatories and the kitchenette sink. The water heater is an A.O. Smith model ECT 52 210, 50 gallon capacity, installed in 2015.



Pipe alley

WOMEN'S ROOM

Toilet room fixtures are generally in good condition, with 1.6 gpf (gallons per flush) water closets and single lever handle faucets on the lavatories.

MEN'S ROOM

Fixtures are older. Water closet is not 1.6 gpf, flush valve shows considerable wear.

VISITOR/ ALL GENDER/ HC TOILET ROOM

Fixtures are older. Water closet is not 1.6 gpf, Urinal is not labeled for gpf. Flush valves are worn and corroded.

plumbing system

BUILDING EXTERIOR (EAST SIDE)

Older, very worn stainless steel drinking fountain. Water supply pipe is galvanized. Fixture and piping are corroded.



PLUMBING ASSESSMENT AND RECOMMENDATIONS

DEFERRED MAINTENANCE (DO NOW)

1. Test potable water system for lead-free status.
2. Install seismic shutoff at gas meter.
3. Verify restrooms have functional floor drains with trap primers.

CAPITAL PLANNING

Short term:

4. Upgrade water closets to a 1.28 gpf model and urinal to a .125 gpf model.
5. Replace drinking fountains as necessary to provide lead-free drinking water if fixtures are not lead free. Re-pipe with copper pipe.
6. Replace faucets in center wing toilet rooms with lead-free, low flow models.
7. Consider replacing electric water heater with high efficiency gas.
8. Exterior gas piping should be galvanized or painted per IFGC.

plumbing system

Long term:

9. Revise and extend existing water, waste and vent systems as necessary to support toilet room relocation proposed under Architectural Building Interiors section of this Report.
10. As part of the proposed toilet room revision, reroute (2) 4” rainleaders currently connected to sewer line serving north wing. Reroute to site storm water system or alternate connection point acceptable to code authorities.
11. Replace existing water system piping and components as necessary and provide lead-free, copper piping for all fixtures and drinking water if lead is found in system.
12. Consider replacing existing water system with lead-free, copper piping and components regardless of lead-free status.

FIRE PROTECTION

The building does not have sprinklers, a dedicated fire line to the building or standpipes.

FIRE PROTECTION ASSESSMENT AND RECOMMENDATIONS

Long term:

13. Provide a new water-based fire protection system to sprinkler all occupied areas. System would consist of a 4” fire entry, backflow prevention, Fire Department Connection and an interior network of distribution piping to serve sprinkler heads throughout the facility.

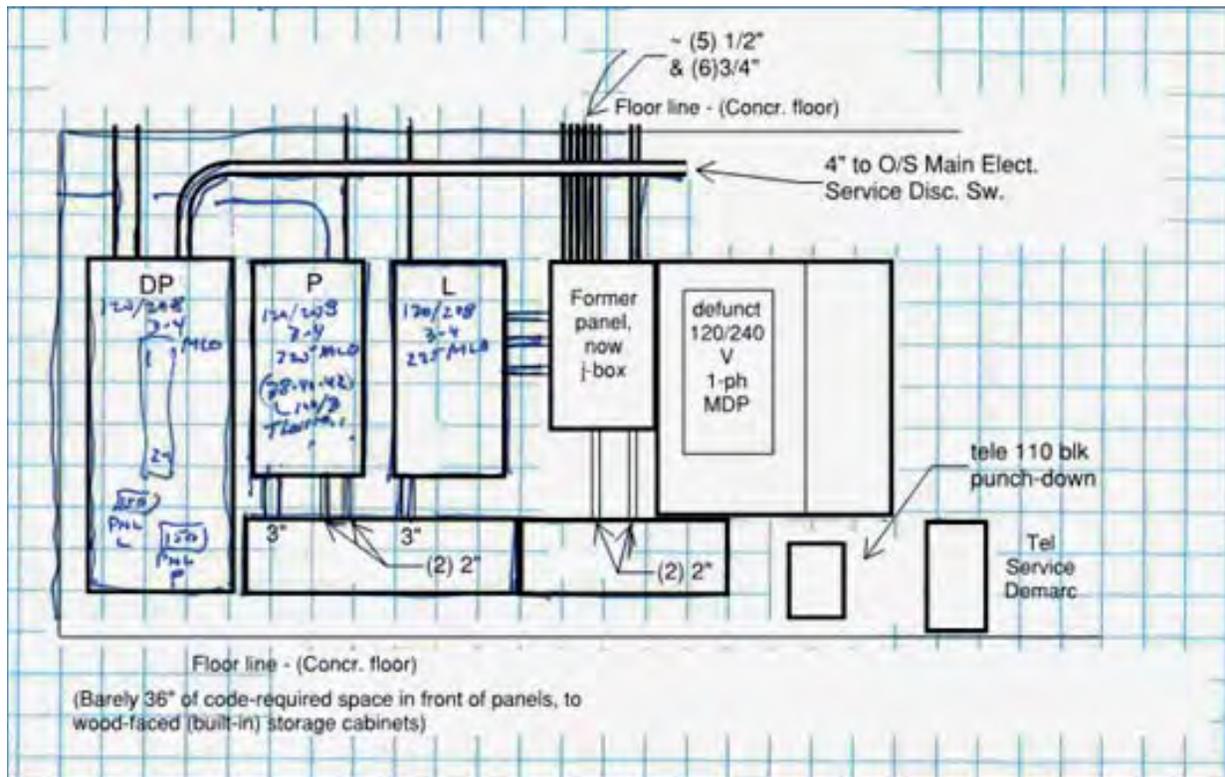
electrical system

CONDITION ASSESSMENT

NORMAL POWER

As-built drawings indicate that the building was constructed in 1941, with an electrical service upgrade for the theatre in 2000.

The existing electrical service is 600A 120/208V 3ph 4W, with the existing former single-phase main service panel serving as a large wireway/junction box.



Panel DP is reasonably new and in good, serviceable condition, as are Panels 'P' and 'L'. There appears to be adequate power capacity for future renovations, however additional panel circuit breaker space will be required, and with the space being limited within the main electrical room, the recommendation is to provide a feeder from Panel 'DP' to a new branch circuit panel located in a convenient location on the main floor, to serve new lighting and power needs.

electrical system

The Main electrical service metering CT enclosure and adjacent meter, with the Main Service Disconnect switch to the right is shown on the photo below.

Existing Distribution panel, now used as wiring junction box, is shown in the foreground of the photo below, and Main Distribution Panel 'DP', and Panels 'L' and 'P' in the background. This room is highly constrained – just marginally in compliance with code working space clearance requirements of 36” in front of the panels.



Main electrical service



Existing panels

The building systems assessment limits of the study are focused on the area of the building occupied by and as the Dance Studio and offices. There are shower rooms and storage rooms accessed on the beach side of the facility, which could be utilized as part of the program, with significant renovation upgrades.

- There is no electrical panelboard observed inside this space.

EMERGENCY/STANDBY POWER

There is no central emergency power system installed in facility

electrical system

LIGHTING

Interior lighting in Studios I is HID lighting. This was a standard for high-ceiling spaces 20 to 30 years ago, but is very harsh, with excessive glare for this application. Studio II on the second floor incorporates Performance Lighting, mounted to battens.



The means of egress from the spaces are marked with illuminated exit signs, however, with no discernible emergency power backup.



electrical system

Exterior wall pack luminaires are located on the Beach (east) side of the building. There was no lighting control panel observed during our visit, and the exterior controls do not appear to be in calibration.



FIRE ALARM SYSTEM

The building has an auto sprinkler system, but it does not cover the proposed scope of work area.

The fire alarm control panel is a Siemens MXL-IQ and was installed in the electrical vault room. It is an intelligent addressable fully programmable fire alarm control panel. The fire alarm system is inspected annually by Guardian security, and the latest result has no deficiencies found in August of 2016. No fire alarm remote annunciator (FARA) is observed in the building.

Wall mounted fire alarm horns/strobe are observed in the proposed scope of work area, the current coverage meets code requirement.

TELECOMMUNICATIONS

The existing building telecommunications backboard is located in electrical vault room. The system was renovated during the 2003 remodel and is in good shape.

SECURITY

The existing building security panel is located in electrical vault room. The system was renovated during the 2003 remodel and is in good shape

electrical system

ELECTRICAL ASSESSMENT AND RECOMMENDATIONS

The building electrical system was upgraded with a conversion to three-phase power, and a new feeder and panel serving the upstairs performance lighting approximately 10 years ago, however most electrical devices are old and in need of replacement and/or addition to provide better coverage of convenience outlet power.

IMMEDIATE NEEDS (FOR NEW SPACE RENOVATION):

1. Install new Panels.
2. Install new emergency egress lighting to ensure safe egress in the event of loss of power (a semi-frequent occurrence in this neighborhood) from the studio and office areas to outside the building. An illuminance of 1 foot-candle minimum coverage will bring this facility to current life safety code requirements.
3. Provide new fire alarm devices to cover the proposed scope of work space and connect to existing fire alarm control panel system.
4. Provide receptacles to match new space layout.
5. Provide new LED lighting fixtures with lighting control system that meets 2015 Seattle energy code requirement to suit new space layout.

SHORT TERM NEEDS

6. Replace exterior building mounted lighting to improve lighting levels, uniformity about the facility, and control of glare for security and safety.

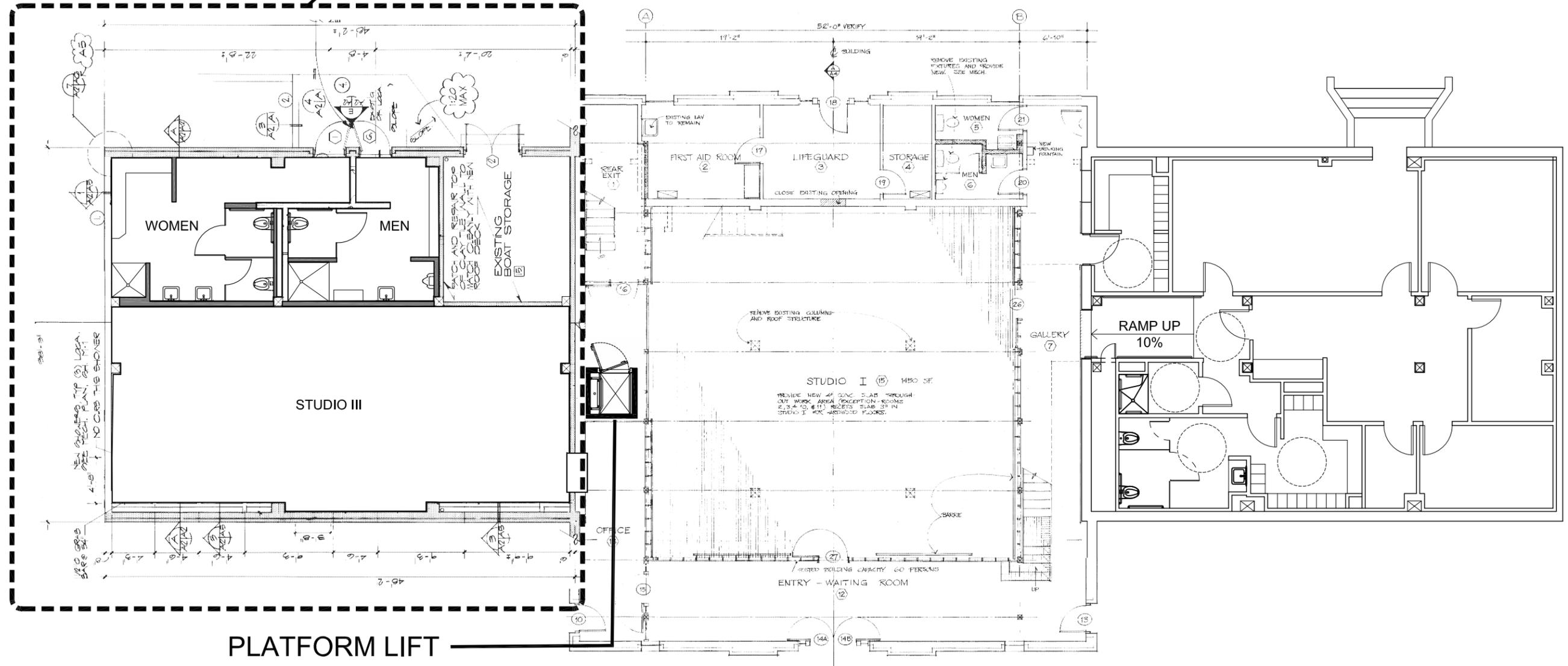
LONG TERM NEEDS

7. The current interior lighting in the building is in serviceable condition, however we recommend replacement with contemporary luminaires and automated control to provide building energy conservation.

F. DRAWINGS

LEGEND
 ——— NEW WALL

RECONFIGURE CHANGING ROOMS
 INTO ADDITIONAL STUDIO SPACE AND
 SMALLER CHANGING ROOMS



PRELIMINARY DESIGN - NOT FOR CONSTRUCTION

FIRST FLOOR CONCEPT PLAN
 SD1.0
 29 JULY 2017
 NOT TO SCALE

>>>>CAUTION - CALL 811<<<<
 UTILITY NOTIFICATION CENTER
 BEFORE YOU DIG!
 WWW.CALLBEFOREYOUTDIG.ORG

NOT LESS THAN 2 OR MORE THAN 10 BUSINESS DAYS PRIOR TO COMMENCING EXCAVATION OR DEMOLITION, SECURE THE SERVICES OF A COMMERCIAL UNDERGROUND UTILITIES LOCATOR SERVICE TO IDENTIFY BELOW-GROUND IMPROVEMENTS THAT MAY NOT BE INDICATED ON THE DRAWINGS. ADDITIONALLY, TO REQUEST ON-SITE UNDERGROUND UTILITY SYSTEMS LOCATES, CALL SPR INSPECTION REQUEST LINE @ (206) 684-7034. REFER TO SECTIONS 02100 & 02120 OF THE SPECIFICATIONS FOR INSTRUCTIONS FOR HOW TO PROCEED.

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NO.	REVISION - AS BUILT	DATE

REVIEWED BY: PARK ENGINEER DATE _____
 All work shall be done in accordance with the City of Seattle Standard Plans and Specifications in effect on the date shown above, and supplemented by the Special Provisions.



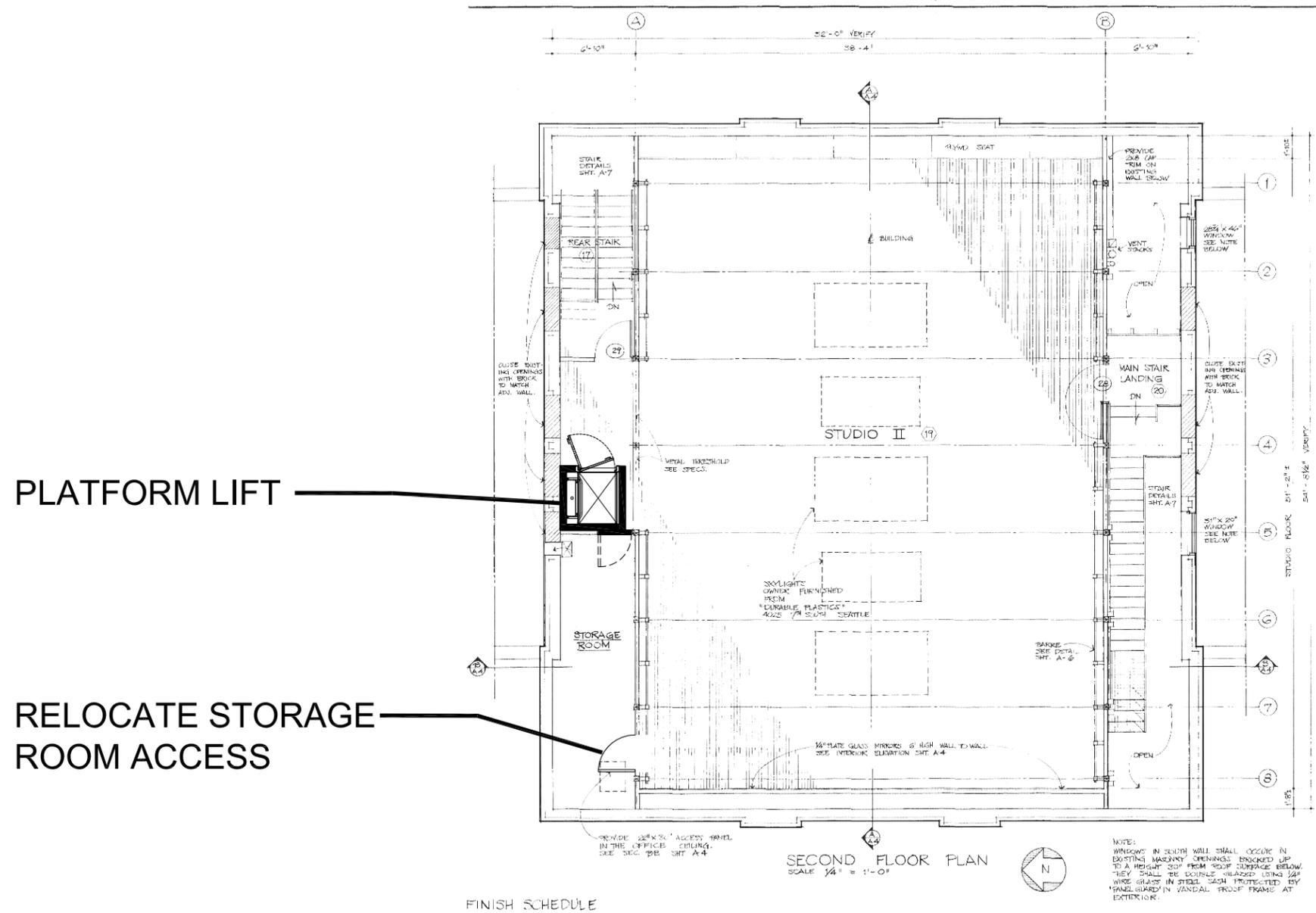
INNOVA architects
 950 Pacific Avenue, Suite 450
 Tacoma, WA 98402

MADRONA BATHHOUSE
 COMMUNITY CENTER
 CONCEPT PLAN

DESIGNED . . .	DATE JULY 2017
DRAWN . . . SES	SHEET 1 OF 2
CHECKED . . . GEA	SD1.0
ORDINANCE NO. . .	
CONTRACT NO. . .	
SCALE . . . AS SHOWN	

LEGEND

NEW WALL



PLATFORM LIFT

RELOCATE STORAGE ROOM ACCESS

SECOND FLOOR CONCEPT PLAN
SD1.0
29 JULY 2017
NOT TO SCALE

PRELIMINARY DESIGN - NOT FOR CONSTRUCTION

>>>>CAUTION - CALL 811<<<<
UTILITY NOTIFICATION CENTER
BEFORE YOU DIG!
WWW.CALLBEFOREYOUTDIG.ORG

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5		
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NO.	REVISION - AS BUILT	DATE

REVIEWED BY: PARK ENGINEER DATE _____
All work shall be done in accordance with the City of Seattle Standard Plans and Specifications in effect on the date shown above, and supplemented by the Special Provisions.



INNOVA architects
950 Pacific Avenue, Suite 450
Tacoma, WA 98402

MADRONA BATHHOUSE
COMMUNITY CENTER
CONCEPT PLAN

DESIGNED . . .	DATE JULY 2017
DRAWN SES	SHEET 2 OF 2
CHECKED GEA	
ORDINANCE NO. . .	SD1.1
CONTRACT NO. . .	
SCALE AS SHOWN	

G. COST ESTIMATE

Madrona Bathhouse Evaluation - Cost Estimates
Seattle, Washington

Scoping Study
 INNOVA JOB NUMBER 17-015

Pricing is based on the following general conditions for construction:

- A construction start date of Early -Year 2018 is assumed for all items (No costs escalated to a future date).
- The work will be competitively bid with qualified general contractors and subcontractors.
- There will not be small business or minority business set aside requirements.
- The contractors will be required to pay prevailing wages for the respective trades based on location of work.
- Phasing of work is not assumed, normal work hours are assumed.
- The facility will not be in operation for the duration of construction activities.
- The contractor will have full access to the areas of work during normal business hours.

Pricing excludes the following items unless specifically noted otherwise:

- Hazardous material testing, handling, abatement and disposal.

Contingencies and Markups

Subcontractor markups may vary to reflect the various trades differences in overhead. The markups are listed for each item.
 General contractor overhead and fees are assumed for a project with a scope of \$1,000,000 or larger.
 The GC Renovation Contingency below is a contractor contingency.
 Contingencies & Markups are broken down as follows:

Design Contingency	15%
GC Renovation Contingency	3%
Home Office Overhead	4%
General Conditions	7%
Site Overhead	9%
General Contractor Fee	8%
Bonds	1.50%
Insurance	2.50%
Sales Tax (included below)	0.00%
General Markups Total	50.00%

Rounding of Subtotals

For ease of cross reference, scope item subtotals are rounded up to the nearest \$1,000

Concept Costs

Scope items identified here may have line item costs included in the scope item that are also identified in other scope headings.
 Costs for that item may be duplicated in two scope headings to represent a total cost for each heading representing the full scope.
 The "bottom line" below is not necessarily the total that would be representative of the project if all scope items are approved for construction. The "option items" and duplicate line items need to be fine tuned as the overall project scope is further defined.

Total estimated CONSTRUCTION cost for all scope items on the following pages		\$2,247,000
	SP&R Cost & Sales Tax	61.00%
		\$1,370,670
Total estimated PROJECT cost for all scope items on the following pages		\$3,617,670

ARCHITECTURAL SCOPE ITEMS

Building Enclosure /Structure

<u>Item Description</u>	<u>Qty.</u>	<u>Unit</u>	<u>\$/Unit</u>	<u>Total</u>
<u>1 - Repair brick mortar joints as needed</u>				
Repoint mortar joints, allowance	380	SF	5.81	2,208
		SUBTOTAL		\$2,208
		SUBCONTRACTOR OH&P	25%	\$552
		TOTAL SUBCONTRACTED		\$2,760
		GENERAL MARKUPS	50.00%	\$1,380
		1 - Repair brick mortar joints as needed TOTAL		\$5,000

<u>Item Description</u>	<u>Qty.</u>	<u>Unit</u>	<u>\$/Unit</u>	<u>Total</u>
<u>2 - Power wash brick and seal. Remove ivy from exterior walls and trim back 12" min from wall face</u>				
Remove ivy allowance	3,800	SF	0.25	950
Pressure wash brick & concrete	6,800	SF	1.60	10,880
Apply sealer at upper brick walls	3,000	SF	0.90	2,700
Apply graffiti resistant sealer at lower brick & concrete walls	3,800	SF	3.67	13,946
		SUBTOTAL		\$28,476
		SUBCONTRACTOR OH&P	25%	\$7,119
		TOTAL SUBCONTRACTED		\$35,595
		GENERAL MARKUPS	50.00%	\$17,798
		2 - Power wash brick and seal. Remove ivy from exterior walls and trim back 12" min from wall face TOTAL		\$54,000

<u>Item Description</u>	<u>Qty.</u>	<u>Unit</u>	<u>\$/Unit</u>	<u>Total</u>
<u>3 - Structural: Lateral reinforcing for second floor, anchor walls to floor slab</u>				
Shear wall plywood, blocking, anchor bolts	3,464	SF	7.00	24,248
Re-finish surfaces	3,464	SF	2.00	6,928
		SUBTOTAL		\$31,176
		SUBCONTRACTOR OH&P	25%	\$7,794
		TOTAL SUBCONTRACTED		\$38,970
		GENERAL MARKUPS	50.00%	\$19,485
		3 - Structural: Lateral reinforcing for second floor, anchor walls to floor slab TOTAL		\$59,000

<u>Item Description</u>	<u>Qty.</u>	<u>Unit</u>	<u>\$/Unit</u>	<u>Total</u>
<u>4 - Structural: Roof to wall ties at N & S bays</u>				
Through wall 3/4" threaded rod with rosette washers	96	EA	150.00	14,325
4x blocking, assume 50% of perimeter	170	LF	22.00	3,740
Thru wall drilling & patch surfaces	96	EA	60.00	5,760
		SUBTOTAL		\$23,825
		SUBCONTRACTOR OH&P	25%	\$5,956
		TOTAL SUBCONTRACTED		\$29,781
		GENERAL MARKUPS	50.00%	\$14,891
		4 - Structural: Roof to wall ties at N & S bays TOTAL		\$45,000

ARCHITECTURAL SCOPE ITEMS

<u>Item Description</u>	<u>Qty.</u>	<u>Unit</u>	<u>\$/Unit</u>	<u>Total</u>
5 - Power wash cedar roof shakes and apply wood preservative				
Clean surfaces with wood restorer & pressure wash (low pressure)	2,730	SF	0.80	2,184
Seal with preservative	2,730	SF	1.80	4,914
		SUBTOTAL		\$7,098
		SUBCONTRACTOR OH&P	25%	\$1,775
		TOTAL SUBCONTRACTED		\$8,873
		GENERAL MARKUPS	50.00%	\$4,436
5 - Power wash cedar roof shakes and apply wood preservative		TOTAL		\$14,000

<u>Item Description</u>	<u>Qty.</u>	<u>Unit</u>	<u>\$/Unit</u>	<u>Total</u>
6 – Replace windows to match historic style				
Remove windows & prep openings	200	SF	5.00	1,000
Replace windows to historically match existing style	200	SF	52.50	10,500
Interior casing and glass "storm pane" for insulating qualities	200	SF	24.00	4,800
Sealant joints & paint finish on casing	400	SF	2.39	958
		SUBTOTAL		\$17,258
		SUBCONTRACTOR OH&P	25%	\$4,314
		TOTAL SUBCONTRACTED		\$21,572
		GENERAL MARKUPS	50.00%	\$10,786
6 – Replace windows to match historic style		TOTAL		\$33,000

<u>Item Description</u>	<u>Qty.</u>	<u>Unit</u>	<u>\$/Unit</u>	<u>Total</u>
7 - Repair and Refinish east and west decorative building doors. Replace weather seals				
Sand & prep exterior wood door & frame faces	70	SF	2.00	140
Painted finish	70	SF	1.80	126
Remove exist seal	40	LF	1.80	72
Replace seal	40	LF	6.90	276
Add exterior face bottom sweep	10	LF	11.70	117
		SUBTOTAL		\$731
		SUBCONTRACTOR OH&P	25%	\$183
		TOTAL SUBCONTRACTED		\$914
		GENERAL MARKUPS	50.00%	\$457
7 - Repair and Refinish east and west decorative building doors. Replace weather seals		TOTAL		\$2,000

<u>Item Description</u>	<u>Qty.</u>	<u>Unit</u>	<u>\$/Unit</u>	<u>Total</u>
8 - Replace weather seals, repair and refinish all exterior HM doors.				
Sand & prep exterior door & frame faces	240	SF	2.00	480
Painted finish	240	SF	1.80	432
Remove exist seal	139	LF	1.80	250
Replace seal	139	LF	6.90	959
Add exterior face bottom sweep	24	LF	11.70	281
		SUBTOTAL		\$2,402
		SUBCONTRACTOR OH&P	25%	\$601
		TOTAL SUBCONTRACTED		\$3,003
		GENERAL MARKUPS	50.00%	\$1,501
8 - Replace weather seals, repair and refinish all exterior HM doors.		TOTAL		\$5,000

ARCHITECTURAL SCOPE ITEMS

<u>Item Description</u>	<u>Qty.</u>	<u>Unit</u>	<u>\$/Unit</u>	<u>Total</u>
9 - Replace Exterior HM doors				
Remove door & frame (per leaf)	8	EA	90.00	720
FRP door frame - single, prefinished	7	EA	450.00	3,150
FRP door frame - double, prefinished	7	EA	600.00	4,200
FRP door, prefinished (by leaf)	8	EA	900.00	7,200
Add for vision panel or louver	2	EA	200.00	400
Door hardware	8	EA	800.00	6,400
		SUBTOTAL		\$22,070
		SUBCONTRACTOR OH&P	25%	\$5,518
		TOTAL SUBCONTRACTED		\$27,588
		GENERAL MARKUPS	50.00%	\$13,794
		9 - Replace Exterior HM doors TOTAL		\$42,000

<u>Item Description</u>	<u>Qty.</u>	<u>Unit</u>	<u>\$/Unit</u>	<u>Total</u>
10 - Remove deadbolts from all egress doors. Install latch guards				
Remove deadbolt	2	EA	40.00	80
Install coverplate & latchguard	2	EA	180.00	360
		SUBTOTAL		\$440
		SUBCONTRACTOR OH&P	25%	\$110
		TOTAL SUBCONTRACTED		\$550
		GENERAL MARKUPS	50.00%	\$275
		10 - Remove deadbolts from all egress doors. Install latch guards TOTAL		\$1,000

Building Enclosure /Structure	SUBTOTAL	\$260,000
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ARCHITECTURAL SCOPE ITEMS

Building Interiors

<u>Item Description</u>	<u>Qty.</u>	<u>Unit</u>	<u>\$/Unit</u>	<u>Total</u>
<u>1 - Clean and refinish interior stairs</u>				
Sand & prep surfaces (wear surface areas)	160	SF	2.00	320
Stain / seal	160	SF	3.60	576
				<u>\$896</u>
				SUBTOTAL
			25%	<u>\$224</u>
				SUBCONTRACTOR OH&P
				<u>\$1,120</u>
				TOTAL SUBCONTRACTED
			50.00%	<u>\$560</u>
				GENERAL MARKUPS
1 - Clean and refinish interior stairs	TOTAL			<u>\$2,000</u>

<u>Item Description</u>	<u>Qty.</u>	<u>Unit</u>	<u>\$/Unit</u>	<u>Total</u>
<u>2 - Replace damaged acoustic ceiling tiles</u>				
Allowance for replacement of tiles	100	SF	3.60	360
				<u>\$360</u>
				SUBTOTAL
			25%	<u>\$90</u>
				SUBCONTRACTOR OH&P
				<u>\$450</u>
				TOTAL SUBCONTRACTED
			50.00%	<u>\$225</u>
				GENERAL MARKUPS
2 - Replace damaged acoustic ceiling tiles	TOTAL			<u>\$1,000</u>

<u>Item Description</u>	<u>Qty.</u>	<u>Unit</u>	<u>\$/Unit</u>	<u>Total</u>
<u>3 - Reconfigure the Reception area with built-in casework</u>				
Remove misc construction	9	LF	12.00	108
Base cabinet / countertop	18	LF	350.00	6,300
Raised transaction counter	5	LF	150.00	750
Low walls & gate	3	LF	70.00	210
Dropped soffit walls	18	LF	16.00	288
ACT ceilings	70	SF	5.70	399
Power & data	3	EA	720.00	2,160
				<u>\$10,215</u>
				SUBTOTAL
			25%	<u>\$2,554</u>
				SUBCONTRACTOR OH&P
				<u>\$12,769</u>
				TOTAL SUBCONTRACTED
			50.00%	<u>\$6,384</u>
				GENERAL MARKUPS
3 - Reconfigure the Reception area with built-in casework	TOTAL			<u>\$20,000</u>

<u>Item Description</u>	<u>Qty.</u>	<u>Unit</u>	<u>\$/Unit</u>	<u>Total</u>
<u>4 - Replace damaged vinyl tile floor in the Unisex and Men's restrooms</u>				
Replacement of VCT	90	SF	6.18	556
				<u>\$556</u>
				SUBTOTAL
			25%	<u>\$139</u>
				SUBCONTRACTOR OH&P
				<u>\$695</u>
				TOTAL SUBCONTRACTED
			50.00%	<u>\$348</u>
				GENERAL MARKUPS
4 - Replace damaged vinyl tile floor in the Unisex and Men's restrooms	TOTAL			<u>\$2,000</u>

<u>Item Description</u>	<u>Qty.</u>	<u>Unit</u>	<u>\$/Unit</u>	<u>Total</u>
<u>5 - Replace the vinyl tile floors in the restrooms and locker rooms with sheet vinyl & integral coved base</u>				
Remove flooring & prep for weldable sheet vinyl	450	SF	3.24	1,458
Weldable sheet vinyl	450	SF	5.60	2,520
Integral sheet vinyl wall base	190	LF	6.80	1,292
				<u>\$5,270</u>
				SUBTOTAL
			25%	<u>\$1,318</u>
				SUBCONTRACTOR OH&P
				<u>\$6,588</u>
				TOTAL SUBCONTRACTED
			50.00%	<u>\$3,294</u>
				GENERAL MARKUPS
5 - Replace the vinyl tile floors in the restrooms and locker rooms with sheet vinyl & integral coved base	TOTAL			<u>\$10,000</u>

ARCHITECTURAL SCOPE ITEMS

<u>Item Description</u>	<u>Qty.</u>	<u>Unit</u>	<u>\$/Unit</u>	<u>Total</u>
<u>6 - Clean and apply sealer to changing room and boat storage floors</u>				
Clean surfaces & pressure wash	1,550	SF	0.80	1,240
Sealer	1,550	SF	0.90	1,395
		SUBTOTAL		\$2,635
		SUBCONTRACTOR OH&P	25%	\$659
		TOTAL SUBCONTRACTED		\$3,294
		GENERAL MARKUPS	50.00%	\$1,647
6 - Clean and apply sealer to changing room and boat storage floors		TOTAL		\$5,000

<u>Item Description</u>	<u>Qty.</u>	<u>Unit</u>	<u>\$/Unit</u>	<u>Total</u>
<u>7 - Re-coat lifeguard room with epoxy floor paint</u>				
Clean surfaces & pressure wash floor & stem wall	410	SF	0.80	328
Epoxy paint	410	SF	1.80	738
		SUBTOTAL		\$1,066
		SUBCONTRACTOR OH&P	25%	\$267
		TOTAL SUBCONTRACTED		\$1,333
		GENERAL MARKUPS	50.00%	\$666
7 - Re-coat lifeguard room with epoxy floor paint		TOTAL		\$2,000

<u>Item Description</u>	<u>Qty.</u>	<u>Unit</u>	<u>\$/Unit</u>	<u>Total</u>
<u>8 - Replace painted floor in Lifeguard room with an epoxy floor system</u>				
Sand blast painted coating	300	SF	1.50	450
Resin flooring	300	SF	17.00	5,100
Resin flooring covered base	105	LF	13.00	1,365
Flooring mfr's inspections & installer warranty	1	LS	969.75	970
		SUBTOTAL		\$7,885
		SUBCONTRACTOR OH&P	25%	\$1,971
		TOTAL SUBCONTRACTED		\$9,856
		GENERAL MARKUPS	50.00%	\$4,928
8 - Replace painted floor in Lifeguard room with an epoxy floor system		TOTAL		\$15,000

<u>Item Description</u>	<u>Qty.</u>	<u>Unit</u>	<u>\$/Unit</u>	<u>Total</u>
<u>9 - Repair carpet seams as needed</u>				
Allowance	1	EA	450.00	450
		SUBTOTAL		\$450
		SUBCONTRACTOR OH&P	25%	\$113
		TOTAL SUBCONTRACTED		\$563
		GENERAL MARKUPS	50.00%	\$281
9 - Repair carpet seams as needed		TOTAL		\$1,000

<u>Item Description</u>	<u>Qty.</u>	<u>Unit</u>	<u>\$/Unit</u>	<u>Total</u>
<u>10 - Install walk-off mats at building entry</u>				
Cut out carpet & install walk off carpet tiles	70	SF	17.50	1,225
Edging to exist flooring	30	LF	4.50	135
		SUBTOTAL		\$1,360
		SUBCONTRACTOR OH&P	25%	\$340
		TOTAL SUBCONTRACTED		\$1,700
		GENERAL MARKUPS	50.00%	\$850
10 - Install walk-off mats at building entry		TOTAL		\$3,000

ARCHITECTURAL SCOPE ITEMS

<u>Item Description</u>	<u>Qty.</u>	<u>Unit</u>	<u>\$/Unit</u>	<u>Total</u>
<u>11 - Replace the Lobby, Reception and Corridor carpet</u>				
Remove carpet	90	SY	4.50	405
Replace carpet	90	SY	42.00	3,780
				<u>SUBTOTAL</u>
				\$4,185
			25%	<u>SUBCONTRACTOR OH&P</u>
				\$1,046
				<u>TOTAL SUBCONTRACTED</u>
				\$5,231
			50.00%	<u>GENERAL MARKUPS</u>
				\$2,616
				<u>TOTAL</u>
				\$8,000

<u>Item Description</u>	<u>Qty.</u>	<u>Unit</u>	<u>\$/Unit</u>	<u>Total</u>
<u>12 - Install rubber tread covers at back stairwell</u>				
Rubber treads	22	EA	32.10	706
				<u>SUBTOTAL</u>
				\$706
			25%	<u>SUBCONTRACTOR OH&P</u>
				\$177
				<u>TOTAL SUBCONTRACTED</u>
				\$883
			50.00%	<u>GENERAL MARKUPS</u>
				\$441
				<u>TOTAL</u>
				\$2,000

<u>Item Description</u>	<u>Qty.</u>	<u>Unit</u>	<u>\$/Unit</u>	<u>Total</u>
<u>13 - Replace missing floor transitions</u>				
				Maintenance Item

<u>Item Description</u>	<u>Qty.</u>	<u>Unit</u>	<u>\$/Unit</u>	<u>Total</u>
<u>14 - Replace hardware at (6) doors not part of the 2002 renovation</u>				
Remove & replace hardware	6	EA	800.00	4,800
				<u>SUBTOTAL</u>
				\$4,800
			25%	<u>SUBCONTRACTOR OH&P</u>
				\$1,200
				<u>TOTAL SUBCONTRACTED</u>
				\$6,000
			50.00%	<u>GENERAL MARKUPS</u>
				\$3,000
				<u>TOTAL</u>
				\$9,000

<u>Item Description</u>	<u>Qty.</u>	<u>Unit</u>	<u>\$/Unit</u>	<u>Total</u>
<u>15 - Replace (6) doors not part of the 2002 renovation</u>				
Remove door & frame (per leaf)	6	EA	90.00	540
Wood door frame - single, prefinished	6	EA	300.00	1,800
Wood door, prefinished (by leaf)	6	EA	600.00	3,600
Add for vision panel or louver	2	EA	120.00	240
Door hardware	6	EA	800.00	4,800
				<u>SUBTOTAL</u>
				\$10,980
			25%	<u>SUBCONTRACTOR OH&P</u>
				\$2,745
				<u>TOTAL SUBCONTRACTED</u>
				\$13,725
			50.00%	<u>GENERAL MARKUPS</u>
				\$6,863
				<u>TOTAL</u>
				\$21,000

<u>Item Description</u>	<u>Qty.</u>	<u>Unit</u>	<u>\$/Unit</u>	<u>Total</u>
<u>16 - Provide a Cypher lock system at ext restroom doors</u>				
Remove locksets & replace with cypher locksets	2	EA	450.00	900
Misc drilling of doors for new latchset	2	EA	100.00	200
				<u>SUBTOTAL</u>
				\$1,100
			25%	<u>SUBCONTRACTOR OH&P</u>
				\$275
				<u>TOTAL SUBCONTRACTED</u>
				\$1,375
			50.00%	<u>GENERAL MARKUPS</u>
				\$688
				<u>TOTAL</u>
				\$3,000

ARCHITECTURAL SCOPE ITEMS

<u>Item Description</u>	<u>Qty.</u>	<u>Unit</u>	<u>\$/Unit</u>	<u>Total</u>
<u>17 - Re-fasten countertop in Women's restroom and repair laminate top</u>				
Countertop repair allowance	4	LF	80.00	320
Remove & reset lav for laminate work	1	EA	280.00	280
		SUBTOTAL		\$600
		SUBCONTRACTOR OH&P	25%	\$150
		TOTAL SUBCONTRACTED		\$750
		GENERAL MARKUPS	50.00%	\$375
17 - Re-fasten countertop in Women's restroom and repair laminate top		TOTAL		\$2,000

<u>Item Description</u>	<u>Qty.</u>	<u>Unit</u>	<u>\$/Unit</u>	<u>Total</u>
<u>18 - Provide "All Gender" signage at single stall restroom</u>		By Owner		

<u>Item Description</u>	<u>Qty.</u>	<u>Unit</u>	<u>\$/Unit</u>	<u>Total</u>
<u>19 - Reconfigure existing bathhouse space for studio expansion & changing rooms</u>				
Remove roof hoods	2	EA	60.00	120
Framing in roof opening with cement bd interior, VR, sheathing & insul	12	SF	19.00	228
New hood flash on exist curb	22	SF	12.00	264
Remove door & frame (per leaf)	3	EA	90.00	270
Sawcut opening to connect studio spaces	36	LF	14.51	522
Sawcut CMU walls	40	LF	14.51	581
Remove walls	1,382	SF	4.64	6,406
Remove ceilings	1,500	SF	4.64	6,953
Remove benches, partitions, accessories etc	1,500	SF	1.50	2,250
Sawcut conc slabs	170	LF	8.00	1,360
Remove conc slabs (original & overlay w/ thickened footings)	1,500	SF	6.77	10,148
Excavate for footing	12	CY	45.00	550
Backfill footing	2	CY	30.00	60
Footings complete with rebar	10	CY	500.00	5,000
Floor slabs complete with rebar	28	CY	300.00	8,333
Patch CMU walls	88	SF	18.00	1,584
6" CMU walls, reinforced	1,026	SF	10.30	10,571
8" CMU walls, reinforced	168	SF	12.60	2,116

continued on next page

ARCHITECTURAL SCOPE ITEMS

ADA

<u>Item Description</u>	<u>Qty.</u>	<u>Unit</u>	<u>\$/Unit</u>	<u>Total</u>
<u>1 - Provide accessible path from street right-of-way</u>	See Site/Civil Item #3			

<u>Item Description</u>	<u>Qty.</u>	<u>Unit</u>	<u>\$/Unit</u>	<u>Total</u>
<u>2 - Provide two designated ADA parking spots; at least one that is van accessible</u>	See Site/Civil Item #2			

<u>Item Description</u>	<u>Qty.</u>	<u>Unit</u>	<u>\$/Unit</u>	<u>Total</u>
<u>3 - Add push-button operators to Main Entry Doors</u>				
ADA operator	2	EA	4,500.00	9,000
Wireless pushbutton on bollard	2	EA	500.00	1,000
Electrical service to operators	2	EA	150.00	300
		SUBTOTAL		\$10,300
		SUBCONTRACTOR OH&P	25%	\$2,575
		TOTAL SUBCONTRACTED		\$12,875
		GENERAL MARKUPS	50.00%	\$6,438
3 - Add push-button operators to Main Entry Doors	TOTAL			\$20,000

<u>Item Description</u>	<u>Qty.</u>	<u>Unit</u>	<u>\$/Unit</u>	<u>Total</u>
<u>4 - Add vertical grab bars to accessible toilets</u>				
Vertical grab bar above exist horiz bar	4	EA	80.00	320
		SUBTOTAL		\$320
		SUBCONTRACTOR OH&P	25%	\$80
		TOTAL SUBCONTRACTED		\$400
		GENERAL MARKUPS	50.00%	\$200
4 - Add vertical grab bars to accessible toilets	TOTAL			\$1,000

<u>Item Description</u>	<u>Qty.</u>	<u>Unit</u>	<u>\$/Unit</u>	<u>Total</u>
<u>5 - Install a platform lift</u>				
Prep structure for lift	1	EA	2,000.00	2,000
Platform lift	1	EA	18,000.00	18,000
Electrical service	1	EA	3,000.00	3,000
		SUBTOTAL		\$23,000
		SUBCONTRACTOR OH&P	25%	\$5,750
		TOTAL SUBCONTRACTED		\$28,750
		GENERAL MARKUPS	50.00%	\$14,375
5 - Install a platform lift	TOTAL			\$44,000

ADA	SUBTOTAL	\$65,000
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MECHANICAL SCOPE ITEMS

Mechanical - HVAC

<u>Item Description</u>	<u>Qty.</u>	<u>Unit</u>	<u>\$/Unit</u>	<u>Total</u>
<u>1 - Remove the chairs which block the return air grilles served for Studio II</u>		Maintenance Item		

<u>Item Description</u>	<u>Qty.</u>	<u>Unit</u>	<u>\$/Unit</u>	<u>Total</u>
<u>2 - Clean return air grilles. Many were observed to be partially clogged in office and conference room</u>		Maintenance Item		

<u>Item Description</u>	<u>Qty.</u>	<u>Unit</u>	<u>\$/Unit</u>	<u>Total</u>
<u>3a - Studios - Replace HVAC-1&2 with (2) Gas-fired Furnaces w/ integral heat pump capability, resulting in two (2) Zones, each w/ Heating, Cooling and Ventilation</u>				
Misc cut & patch	1	EA	1,500.00	1,500
CAV Rooftop unit w/ DX condensing unit	2	EA	6,200.00	12,400
Controls	3,500	SF	0.80	2,800
Equipment connections	1	LS	1,500.00	1,500
		SUBTOTAL		\$18,200
		SUBCONTRACTOR OH&P	25%	\$4,550
		TOTAL SUBCONTRACTED		\$22,750
		GENERAL MARKUPS	50.00%	\$11,375
<u>3a - Studios - Replace HVAC-1&2 with (2) Gas-fired Furnaces w/ integral heat pump capability, resulting in two (2) Zones, each w/ Heating, Cooling and Ventilation</u>		TOTAL		\$35,000

<u>Item Description</u>	<u>Qty.</u>	<u>Unit</u>	<u>\$/Unit</u>	<u>Total</u>
<u>3b - Studios - Replace HVAC-1&2 w/ a VRF Heat Pump System with DOAS, Two (2) Zones, Heating and Cooling</u>				
Misc cut & patch	1	EA	1,500.00	1,500
DOAS System w/Supply/return fans	3,400	CFM	19.48	66,232
Fan coil units	2	EA	1,650.00	3,300
Heat pump condenser unit- VRF	8	TN	900.00	7,200
Ductwork, hangers and insulation	3,885	LBs	5.00	19,425
Sound attenuation	5,828	SF	0.80	4,662
Controls	3,500	SF	3.45	12,075
Equipment connections	1	LS	1,500.00	1,500
		SUBTOTAL		\$115,894
		SUBCONTRACTOR OH&P	25%	\$28,974
		TOTAL SUBCONTRACTED		\$144,868
		GENERAL MARKUPS	50.00%	\$72,434
<u>3b - Studios - Replace HVAC-1&2 w/ a VRF Heat Pump System with DOAS, Two (2) Zones, Heating and Cooling</u>		TOTAL		\$218,000

<u>Item Description</u>	<u>Qty.</u>	<u>Unit</u>	<u>\$/Unit</u>	<u>Total</u>
<u>4a - Offices/ Conference room - Replace RTU-1 with a Gas-fired Rooftop unit w/ Heat Pump, Single Zone, Heating and Cooling</u>				
Misc cut & patch	1	EA	1,500.00	1,500
CAV Rooftop unit w/ DX condensing unit	1	EA	6,200.00	6,200
Controls	3,000	SF	2.15	6,450
Gas piping and meters	100	LF	42.00	4,200
Condensate piping	150	LF	25.00	3,750
Equipment connections	4	EA	400.00	1,600
		SUBTOTAL		\$23,700
		SUBCONTRACTOR OH&P	25%	\$5,925
		TOTAL SUBCONTRACTED		\$29,625
		GENERAL MARKUPS	50.00%	\$14,813
<u>4a - Offices/ Conference room - Replace RTU-1 with a Gas-fired Rooftop unit w/ Heat Pump, Single Zone, Heating and Cooling</u>		TOTAL		\$45,000

MECHANICAL SCOPE ITEMS

<u>Item Description</u>	<u>Qty.</u>	<u>Unit</u>	<u>\$/Unit</u>	<u>Total</u>
<u>4b - Offices/ Conference room - Replace RTU-1 with a VRF Heat Pump System w/ DOAS, Multiple Zones, Heating and Cooling</u>				
Misc cut & patch	1	EA	2,800.00	2,800
Remove/replace with VRF unit	1	EA	6,500.00	6,500
VAV terminals	2	EA	1,850.00	3,700
Gas piping and meters	50	LF	42.00	2,100
Condensate piping	100	LF	25.00	2,500
Equipment connections	4	EA	400.00	1,600
				<u>19,200</u>
				SUBTOTAL
			25%	<u>\$4,800</u>
				SUBCONTRACTOR OH&P
				<u>\$24,000</u>
				TOTAL SUBCONTRACTED
			50.00%	<u>\$12,000</u>
				GENERAL MARKUPS
4b - Offices/ Conference room - Replace RTU-1 with a VRF Heat Pump System w/ DOAS, Multiple Zones, Heating and Cooling				TOTAL
				\$36,000

<u>Item Description</u>	<u>Qty.</u>	<u>Unit</u>	<u>\$/Unit</u>	<u>Total</u>
<u>5 - Replace HVAC-1&2 and RTU-1 with a single VRF Heat Pump System with DOAS, Multiple Zones, Heating and Cooling, serving the entire building</u>				
Misc cut & patch	1	EA	1,500.00	1,500
DOAS System w/Supply/return fans	6,500	CFM	19.48	126,620
Heat pump condenser unit- VRF	16	TN	900.00	14,400
Fan coil units	2	EA	1,650.00	3,300
Ductwork, hangers and insulation	13,320	LBs	5.00	66,600
Sound attenuation	19,980	SF	0.80	15,984
Controls	12,000	SF	3.45	41,400
Gas piping	50	LF	42.00	2,100
Condensate piping	100	LF	25.00	2,500
Equipment connections	8	EA	400.00	3,200
				<u>277,604</u>
				SUBTOTAL
			25%	<u>\$69,401</u>
				SUBCONTRACTOR OH&P
				<u>\$347,005</u>
				TOTAL SUBCONTRACTED
			50.00%	<u>\$173,503</u>
				GENERAL MARKUPS
5 - Replace HVAC-1&2 and RTU-1 with a single VRF Heat Pump System with DOAS, Multiple Zones, Heating and Cooling, serving the entire building				TOTAL
				\$521,000

<u>Item Description</u>	<u>Qty.</u>	<u>Unit</u>	<u>\$/Unit</u>	<u>Total</u>
<u>6a - Replace existing exhaust fans by new exhaust fans</u>				
Misc cut & patch	1	EA	1,500.00	1,500
Remove/Replace exhaust fans	6	EA	880.00	5,280
Equipment connections	6	EA	175.00	1,050
				<u>7,830</u>
				SUBTOTAL
			25%	<u>\$1,958</u>
				SUBCONTRACTOR OH&P
				<u>\$9,788</u>
				TOTAL SUBCONTRACTED
			50.00%	<u>\$4,894</u>
				GENERAL MARKUPS
6a - Replace existing exhaust fans by new exhaust fans				TOTAL
				\$15,000

<u>Item Description</u>	<u>Qty.</u>	<u>Unit</u>	<u>\$/Unit</u>	<u>Total</u>
<u>6b - Connect exhaust of restrooms to DOAS system proposed above</u>				
DOAS connections for exhaust fans	6	EA	475.00	2,850
				<u>2,850</u>
				SUBTOTAL
			25%	<u>\$713</u>
				SUBCONTRACTOR OH&P
				<u>\$3,563</u>
				TOTAL SUBCONTRACTED
			50.00%	<u>\$1,781</u>
				GENERAL MARKUPS
6b - Connect exhaust of restrooms to DOAS system proposed above				TOTAL
				\$6,000

MECHANICAL SCOPE ITEMS

<u>Item Description</u>	<u>Qty.</u>	<u>Unit</u>	<u>\$/Unit</u>	<u>Total</u>
<u>7a - Renovation space- Gas fired rooftop unit with heat pump, single zone, heating & cooling</u>			See Building Interiors Item 19	

<u>Item Description</u>	<u>Qty.</u>	<u>Unit</u>	<u>\$/Unit</u>	<u>Total</u>
<u>7b - Renovation space- Combine space with Mechanical item 3b above</u>			See HVAC Item 3b	

<u>Item Description</u>	<u>Qty.</u>	<u>Unit</u>	<u>\$/Unit</u>	<u>Total</u>
<u>8a - Changing rooms - roof mounted exhaust fan to serve both rooms</u>			See Building Interiors Item 19	

<u>Item Description</u>	<u>Qty.</u>	<u>Unit</u>	<u>\$/Unit</u>	<u>Total</u>
<u>8b - Changing rooms - connect both rooms to DOAS system proposed in item 6b above</u>			See HVAC Item 3b	

Mechanical - HVAC	SUBTOTAL			\$876,000
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PLUMBING SCOPE ITEMS

Mechanical - Plumbing

<u>Item Description</u>	<u>Qty.</u>	<u>Unit</u>	<u>\$/Unit</u>	<u>Total</u>
<u>1 - Test potable water system for lead-free status</u>				
		By Owner		

<u>Item Description</u>	<u>Qty.</u>	<u>Unit</u>	<u>\$/Unit</u>	<u>Total</u>
<u>2 - Install seismic shutoff at gas meter</u>				
		By Owner		

<u>Item Description</u>	<u>Qty.</u>	<u>Unit</u>	<u>\$/Unit</u>	<u>Total</u>
<u>3 - Inspect restroom floor drains</u>				
		By Owner		

<u>Item Description</u>	<u>Qty.</u>	<u>Unit</u>	<u>\$/Unit</u>	<u>Total</u>
<u>4 - Upgrade Toilets and Urinals to low-flow types</u>				
Remove/ replace with low flow toilets	3	EA	760.00	2,280
Remove/ replace with low flow urinals	1	EA	590.00	590
		SUBTOTAL		\$2,870
		SUBCONTRACTOR OH&P	25%	\$718
		TOTAL SUBCONTRACTED		\$3,588
		GENERAL MARKUPS	50.00%	\$1,794
4 - Upgrade Toilets and Urinals to low-flow types	TOTAL			\$6,000

<u>Item Description</u>	<u>Qty.</u>	<u>Unit</u>	<u>\$/Unit</u>	<u>Total</u>
<u>5 - Replace exterior drinking fountain as required by Item 1</u>				
Core drill wall & patch exist holes	1	EA	400.00	400
Install drinking fountain -bi-level	1	EA	3,170.00	3,170
Piping and connections	26	LF	21.00	546
		SUBTOTAL		\$4,116
		SUBCONTRACTOR OH&P	25%	\$1,029
		TOTAL SUBCONTRACTED		\$5,145
		GENERAL MARKUPS	50.00%	\$2,573
5 - Replace exterior drinking fountain as required by Item 1	TOTAL			\$8,000

<u>Item Description</u>	<u>Qty.</u>	<u>Unit</u>	<u>\$/Unit</u>	<u>Total</u>
<u>6 - Replace faucets in center wing toilet rooms as required by Item 1</u>				
Remove/replace Sink faucets w/sensors	4	EA	688.00	2,752
		SUBTOTAL		\$2,752
		SUBCONTRACTOR OH&P	25%	\$688
		TOTAL SUBCONTRACTED		\$3,440
		GENERAL MARKUPS	50.00%	\$1,720
6 - Replace faucets in center wing toilet rooms as required by Item 1	TOTAL			\$6,000

<u>Item Description</u>	<u>Qty.</u>	<u>Unit</u>	<u>\$/Unit</u>	<u>Total</u>
<u>7 - Replace electric water heater with high efficiency gas</u>				
Gas water heater	1	EA	1,350.00	1,350
		SUBTOTAL		\$1,350
		SUBCONTRACTOR OH&P	25%	\$338
		TOTAL SUBCONTRACTED		\$1,688
		GENERAL MARKUPS	50.00%	\$844
7 - Replace electric water heater with high efficiency gas	TOTAL			\$3,000

<u>Item Description</u>	<u>Qty.</u>	<u>Unit</u>	<u>\$/Unit</u>	<u>Total</u>
<u>8 - Exterior gas piping should be galvanized or painted</u>				
		By Owner		

PLUMBING SCOPE ITEMS

<u>Item Description</u>	<u>Qty.</u>	<u>Unit</u>	<u>\$/Unit</u>	<u>Total</u>
<u>9 - Revise plumbing to support the reconfigured toilet rooms & studio area</u>				
				See Building Interiors Item 19

<u>Item Description</u>	<u>Qty.</u>	<u>Unit</u>	<u>\$/Unit</u>	<u>Total</u>
<u>10 - Renovation space - reroute (2) 4" rainleaders connected to sewer line serving north wing</u>				
				See Building Interiors Item 19

<u>Item Description</u>	<u>Qty.</u>	<u>Unit</u>	<u>\$/Unit</u>	<u>Total</u>
<u>11 - Replace water piping and components as required by Item 1</u>				
Replace water piping & components with lead-free type	1	EA	8,000.00	8,000
Cut & patch walls & ceilings for access	1	EA	8,000.00	8,000
				<u>\$16,000</u>
				SUBTOTAL
			25%	<u>\$4,000</u>
				TOTAL SUBCONTRACTED
			50.00%	<u>\$10,000</u>
				GENERAL MARKUPS
11 - Replace water piping and components as required by Item 1				TOTAL
				\$30,000

<u>Item Description</u>	<u>Qty.</u>	<u>Unit</u>	<u>\$/Unit</u>	<u>Total</u>
<u>12 - Replace water piping and components regardless of Item 1</u>				
Replace water piping & components with lead-free type	1	EA	8,000.00	8,000
Cut & patch walls & ceilings for access	1	EA	8,000.00	8,000
				<u>\$16,000</u>
				SUBTOTAL
			25%	<u>\$4,000</u>
				TOTAL SUBCONTRACTED
			50.00%	<u>\$10,000</u>
				GENERAL MARKUPS
12 - Replace water piping and components regardless of Item 1				TOTAL
				\$30,000

<u>Item Description</u>	<u>Qty.</u>	<u>Unit</u>	<u>\$/Unit</u>	<u>Total</u>
<u>13 - Fire Protection - Provide a new water-based fire protection system to sprinkler all occupied areas. This would include a 4" fire entry, backflow prevention, FDC and an interior network of distribution piping to serve sprinkler heads throughout the facility</u>				
Cut & patch walls & ceilings for pipes & heads	9,768	GSF	2.10	20,513
Fire protection system complete	9,768	GSF	6.21	60,659
Testing	16	HRS	125.00	2,000
4" water service line	75	LF	60.00	4,500
Fire Department Connection	1	EA	5,000.00	5,000
Tap connection at main	1	EA	4,000.00	4,000
4" meter	1	EA	10,000.00	10,000
Double Check Detector Assembly w/ Vault (4" Fire Service)	1	EA	20,000.00	20,000
Site Restoration	1	EA	10,000.00	10,000
				<u>\$136,672</u>
				SUBTOTAL
			25%	<u>\$34,168</u>
				TOTAL SUBCONTRACTED
			50.00%	<u>\$85,420</u>
				GENERAL MARKUPS
13 - Fire Protection - Provide a new water-based fire protection system to sprinkler all occupied areas. This would include a 4" fire entry, backflow prevention, FDC and an interior network of distribution piping to serve sprinkler heads throughout the facility				TOTAL
				\$257,000

Mechanical - Plumbing SUBTOTAL \$340,000

SITE / CIVIL SCOPE ITEMS

<u>Item Description</u>	<u>Qty.</u>	<u>Unit</u>	<u>\$/Unit</u>	<u>Total</u>
<u>1 - Clean out area drains and catch basins and "TV" existing drain lines to determine condition</u>				
Clean out area drains and catch basins	5	EA	200.00	1,000
"TV" existing drain lines	100	LF	5.00	500
		SUBTOTAL		\$1,500
		SUBCONTRACTOR OH&P	25%	\$375
		TOTAL SUBCONTRACTED		\$1,875
		GENERAL MARKUPS	50.00%	\$938
1 - Clean out area drains and catch basins and "TV" existing drain lines to determine condition		TOTAL		\$3,000

<u>Item Description</u>	<u>Qty.</u>	<u>Unit</u>	<u>\$/Unit</u>	<u>Total</u>
<u>2 - Restripe and paint (2) handicapped parking stalls to meet ADA standards. Handicapped parking signs to be installed and/or relocated to front of stalls</u>				
Gind and remove existing paint from stall	360	SF	4.00	1,440
Restripe and paint handicapped parking stall	2	EA	250.00	500
Install new handicapped parking sign	1	EA	300.00	300
Relocate existing handicapped parking sign	1	EA	150.00	150
		SUBTOTAL		\$2,390
		SUBCONTRACTOR OH&P	25%	\$598
		TOTAL SUBCONTRACTED		\$2,988
		GENERAL MARKUPS	50.00%	\$1,494
2 - Restripe and paint (2) handicapped parking stalls to meet ADA standards. Handicapped parking signs to be installed and/or relocated to front of stalls		TOTAL		\$5,000

<u>Item Description</u>	<u>Qty.</u>	<u>Unit</u>	<u>\$/Unit</u>	<u>Total</u>
<u>3 - Remove and clean moss from walkways</u>				
Remove and clean moss from walkway	600	SF	0.50	300
		SUBTOTAL		\$300
		SUBCONTRACTOR OH&P	25%	\$75
		TOTAL SUBCONTRACTED		\$375
		GENERAL MARKUPS	50.00%	\$188
3 - Remove and clean moss from walkways		TOTAL		\$1,000

<u>Item Description</u>	<u>Qty.</u>	<u>Unit</u>	<u>\$/Unit</u>	<u>Total</u>
<u>4 - Demolish and re-level the beach vehicle access to have less than a 2.0% cross slope. Replace concrete vehicle access and provide a painted crosswalk</u>				
Demolish existing asphalt	150	SF	6.00	900
Regrade surface to less than 2.0%	150	SF	6.00	900
Place new asphalt: 6" base course 2" asphalt	150	SF	8.00	1,200
Paint crosswalk	20	LF	10.00	200
Install detectible warning	2	EA	300.00	600
		SUBTOTAL		\$3,800
		SUBCONTRACTOR OH&P	25%	\$950
		TOTAL SUBCONTRACTED		\$4,750
		GENERAL MARKUPS	50.00%	\$2,375
4 - Demolish and re-level the beach vehicle access to have less than a 2.0% cross slope. Replace concrete vehicle access and provide a painted crosswalk		TOTAL		\$8,000

<u>Item Description</u>	<u>Qty.</u>	<u>Unit</u>	<u>\$/Unit</u>	<u>Total</u>
5 - Construct curb ramp for ADA stalls and connect to sidewalk				
Demolish existing concrete sidewalk and curb	120	SF	6.00	720
Construct parallel curb ramp	1	EA	2,000.00	<u>2,000</u>
		SUBTOTAL		\$2,720
		SUBCONTRACTOR OH&P	25%	<u>\$680</u>
		TOTAL SUBCONTRACTED		\$3,400
		GENERAL MARKUPS	50.00%	<u>\$1,700</u>
5 - Construct curb ramp for ADA stalls and connect to sidewalk		TOTAL		\$6,000

<u>Item Description</u>	<u>Qty.</u>	<u>Unit</u>	<u>\$/Unit</u>	<u>Total</u>
6 - Clean and seal the cracks in the asphalt path along the west face of the building				
Clean cracks in asphalt	75	LF	5.00	375
Seal cracks with rubberized asphalt crack sealant	75	LF	7.50	<u>563</u>
		SUBTOTAL		\$938
		SUBCONTRACTOR OH&P	25%	<u>\$234</u>
		TOTAL SUBCONTRACTED		\$1,172
		GENERAL MARKUPS	50.00%	<u>\$586</u>
6 - Clean and seal the cracks in the asphalt path along the west face of the building		TOTAL		\$2,000

<u>Item Description</u>	<u>Qty.</u>	<u>Unit</u>	<u>\$/Unit</u>	<u>Total</u>
7 - Install downspouts and splashblocks at all roof top scuppers				
Install downspouts	8	EA	50.00	400
Install splashplocks	8	EA	25.00	<u>200</u>
		SUBTOTAL		\$600
		SUBCONTRACTOR OH&P	25%	<u>\$150</u>
		TOTAL SUBCONTRACTED		\$750
		GENERAL MARKUPS	50.00%	<u>\$375</u>
7 - Install downspouts and splashblocks at all roof top scuppers		TOTAL		\$2,000

<u>Item Description</u>	<u>Qty.</u>	<u>Unit</u>	<u>\$/Unit</u>	<u>Total</u>
8 - Provide 4" water line for fire sprinkler system				
				See Plumbing Item 13

SITE / CIVIL SCOPE ITEMS	SUBTOTAL	\$27,000
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H. ASSET MANAGEMENT DATA

Seattle Parks & Recreation

Madrona Bathhouse - Spectrum Dance Theater

Facility Components

	Original System Date	Last Major System Renewal	Condition Scores (Low 0 to High 5)	Remaining Useful Life - Years	Surveyor & Date	Comments
Systems						
A. Substructure			4.0			
Foundations						
Conc. Foundation	1928	1971	4	40	4/7/2017	concrete spread footings, with concrete slab on grade. 1971 2nd floor addition replaced foundations. Some settlement observed.
B. Shell			3.4			
Exterior Closure						
Exterior Walls - Masonry	1928		3	40	4/7/2017	Original unreinforced masonry structural walls remain. Needs seismic upgrades. Clean & Seal, and keep ivy from growing on it.
Framing - Timber	1928	1971	4	40	4/7/2017	Wood roof structure with timber columns. Changed in 1971 addition. Upgrade seismic
Exterior Windows	1928		3	5	4/7/2017	Very few windows. Appear to be original, uninsulated. Some painted over. Historic?
Exterior Doors	1928		3	5 to 10	4/7/2017	Hollow metal. Various conditions - need paint and seals, update hardware.
Roofing						
Roof Coverings	1928	2000	4	5 to 10	4/7/2017	The slopes roofs are cedar wood shingles; replaced in 200 on N, E, & S. West only repairs. Low-slope is built-up. The shingles need to be cleaned.
C. Interiors			3.8			
Interior Construction						
Interior Doors	1928	2002	4	10	4/7/2017	Doors and frames throughout are wood with wood frames. Most replaced in 2002. Remaining doors have non-compliant hardware
Interior Finishes						
Wall Finishes - CMU	1928		4	10	4/7/2017	Area associated with the Bathhouse and lifeguards is CMU with lath & plaster finish

Seattle Parks & Recreation

Madrona Bathhouse - Spectrum Dance Theater

Facility Components

Systems	Original System Date	Last Major System Renewal	Condition Scores (Low 0 to High 5)	Remaining Useful Life - Years	Surveyor & Date	Comments
Wall Finishes - GWB	2002		5	25	4/7/2017	2002 offices; metal framed with GWB are in good condition.
Wall Finishes - Wood	1928	1971	4	10	4/7/2017	Studio spaces - painted exposed framing/panels.
Floor Finishes - Concrete	1928		4	40	4/7/2017	Bathroom floors are painted concrete. Paint is peeling
Floor Finishes - Vinyl	1928		2	5	4/7/2017	Vinyl in restrooms/locker rooms. Base is failing in some places
Floor Finishes - Carpet	1928	2002	2	5 to 10	4/7/2017	Carpet in lobby, reception and 2002 offices. Seems need repair. Heavily worn in entry
Floor Finishes - Rubber	unknown		4	5 to 10	4/7/2017	Used in dance studios. A transition piece is missing.
Ceiling Finishes - Changing	1928		4	10	4/7/2017	In north bathhouse there's a mix of lath & plaster and wood T&G
Ceiling Finishes - ACT	2002		4	15	4/7/2017	In 2002 offices and in Studio I
Ceiling Finishes - GWB	2002		5	15	4/7/2017	Studio Offices and wet areas.
Ceiling Finishes - Wood	1928		4	40	4/7/2017	Second Floor studio is exposed wood framing

Seattle Parks & Recreation

Madrona Bathhouse - Spectrum Dance Theater

Facility Components

Systems	Original System Date	Last Major System Renewal	Condition Scores (Low 0 to High 5)	Remaining Useful Life - Years	Surveyor & Date	Comments
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Skylights	1971		3	5 to 10	4/7/2017	Passive ventilation louvers don't always work.
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D. Services

2.5

Plumbing

Plumbing Fixtures	1928	2002	3	5	4/7/2017	Plumbing fixtures installed in 2002 are in good condition, but should be updated to meet current code for water efficiency. Older fixtures are in fair to poor condition, would need replacement to meet current water efficiency and lead-free regulations.
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Domestic Water Distribution	1928		3	20	4/7/2017	Domestic water piping is in good condition and has adequate capacity to supply the fixtures proposed to be added. Some galvanized branch piping remains and should be replaced.
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Sanitary Waste	1928		4	40	4/7/2017	Sanitary waste lines are original construction cast iron and hav adequate capacity to supply the fixtures proposed to be added.
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Natural Gas	1928		3	20	4/7/2017	The existing gas service to the building does not have a seismic shut-off valve. Installation of a valve is recommended.
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HVAC

The furnace HVAC-1 serves the studio on the first floor. It provides ventilation and heating only and appears to be 25 years old. The thermostat controls for each furnace appear to have been upgraded in c. 2000, control upgrade also includes damper-actuators, and relays to trigger damper positioning.

Furnace HVAC-1	c. 1992	2000	3	5	4/7/2017	
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The furnace HVAC-2 serves the studio on second floor. This unit provides ventilation, heating as well as cooling, which appears to have been added as part of an upgrade in c. 2000. The thermostat controls for each furnace appear to have been upgraded in c. 2000, control upgrade also includes damper-actuators, and relays to trigger damper positioning.

Furnace HVAC-2	2000		3	5 to 10	4/7/2017	
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Facility Condition Summary
Seattle Parks & Recreation
Madrona Bathhouse - Spectrum Dance Theater

Facility Components	Original System Date	Last Major System Renewal	Condition Scores (Low 0 to High 5)	Remaining Useful Life - Years	Surveyor & Date	Comments
Systems						
Condenser Unit COND-1	2000		3	5 to 10	4/7/2017	The condenser unit serves the DX cooling coil on HVAC-2 and appears to have been part of an upgrade in c. 2000.
Rooftop Unit RTU-1	2002		3	5 to 10	4/7/2017	The offices and conference room are served by a rooftop unit RTU-1 that provides heating/cooling and ventilation. The exhaust fan is provided to serve men's restrooms on first floor in order to provide odor control. It is controlled by a wall switch.
Exhaust Fan EX-1	Unknown		2	1 to 5	4/7/2017	The exhaust fan is provided to serve women's restrooms on first floor in order to provide odor control. It is controlled by a wall switch.
Exhaust Fan EX-2	Unknown		2	1 to 5	4/7/2017	
Electrical						
Electrical Distribution	1928		2	10	4/7/2017	Main and sub panels looks appearantly at least 40-50 years old, the panelboards are in fairly condition, we expect it will last 10 years.
Lighting Systems Control panel	1928	1987	2	10	4/7/2017 4/7/2017	Interior lighting in the Dance Studio: HID lighting was a standard for high-ceiling spaces 20 to 30 years ago, but is very harsh, with excessive glare for this application, we estimate the fixtures can last 10 years, no lighting control system is observed during site visit.
Fire Alarm	1928	2003	4	20	4/7/2017	Fire alarm was installed not too long ago, maybe 2003, and is tested yearly, it appears to be in good working order, we expect it will last 20 years.
Telephone & Data	1928	2003	3	20	4/7/2017	Telephone & data systems seems using current standard equipment across the City all community centers. It may be replaced with other city community centers, no estimated timeline.
Fire Protection						
Fire Sprinklers	1928		0	0	4/7/2017	The building is not fire sprinklered.
End Of Summary						