



DAYBREAK STAR INDIAN CULTURAL CENTER
SEATTLE PARKS AND RECREATION
ARCHITECTURAL AND ENGINEERING
MAINTENANCE EVALUATION STUDY
City of Seattle, Washington
September 2017



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A. EXECUTIVE SUMMARY

DAYBREAK STAR INDIAN CULTURAL CENTER EVALUATION

BACKGROUND

GENERAL RECOMMENDATIONS



executive summary



DESCRIPTION OF PROCESS

INNOVA Architects, Inc. was hired by 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 Daybreak Star Indian Cultural Center as well as to serve as an update to the 2005 Architectural Asset Management Plan prepared by Environmental Works. This will provide a working tool for identifying and planning necessary upgrades and maintenance improvements. Area of Magnitude Cost Estimates are provided for the recommendations.

Our team visited the Daybreak Star Indian Cultural Center on April 5th, 2017 to meet with SPR staff as well as personnel from the center, including Mike Tulee, Executive Director for the Center and Abraham who is the on-site Maintenance Supervisor for the center. We reviewed the history, current operations, and known issues for the building. Our team spent a couple of hours touring the building.

The Record Drawings that are available for the Center include the 1977 original construction drawings by Arai/Jackson/Reyes, as well as the 2007 restoration drawings by Arai Jackson Ellison Murakami, LLP. These drawings provide a fairly accurate record of the original construction and what is existing currently.

background



ASSESSMENT

Based on the initial investigations, we observed that the Center is in good shape, with an expected level of wear-and-tear given its age and use. In general, the building demonstrates that it is able to serve the community well

DAYBREAK STAR INDIAN CULTURAL CENTER CENTER BACKGROUND

The Center was built in 1976 on a portion of the area transferred from Fort Lawton military reserve to the City of Seattle and is operated by the United Indians of All Tribes as an Arts and Cultural Center.

Daybreak Star was designed by Colville sculptor Lawney Reyes with architects Clifford Jackson and Yoshio Arai and built with the intent to serve and educate others about the region's Indigenous peoples. It serves as a longhouse, a cultural gathering space essential to Native community building where relationships are created and maintained. Multiple sister organizations as well as community and cultural leaders gather here to connect and share stories. It reflects history, and celebrates multifaceted diversity through the display of spectacular Indigenous art from the four corners of America.

Thousands of Native people frequent Daybreak Star annually for social services and cultural programming. Members of the general public also have the opportunity to visit five days a week and some weekends year-round to enjoy the array of Native artwork on permanent display and visit the rotating exhibits in the Sacred Circle Gallery, and attend both community and private events.

Daybreak Star also partners with the Seattle Preschool Program (SPP) in their early learning programs to offer high-quality, affordable preschool to children in the area.

general recommendations



RECOMMENDATIONS

Based on our team's evaluations of the Daybreak Star Indian Cultural Center, 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 as well as items addressed in the 2005 facilities report that have not yet been completed. 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	\$437,000	\$210,000
Buildings Interiors	\$176,000	\$365,000
Americans with Disabilities Act (ADA)	\$284,000	\$21,000
Site / Civil	\$77,000	\$23,000
Mechanical - HVAC	\$5,000	\$254,000
Mechanical - Plumbing	\$30,000	\$26,000
Electrical	\$38,000	\$491,000

AREA OF MAGNITUDE COST ESTIMATE SUMMARY

TOTAL CONSTRUCTION COST	\$1,047,000	\$1,390,000
SP&R COST AND SALES TAX	\$638,670	\$847,900
TOTAL PROJECT COSTS	\$1,685,670	\$2,237,900
GRAND TOTAL ALL COSTS		\$3,923,570

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

Daybreak Star Indian Cultural Center 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	Maintenance of painted conc walls and joints	Maintenance Item			X		Maintenance
2	Replace wood siding and weather barrier	X			X		\$20,000
3	Inspect all window flashings	Included in Item 2 above			X		Included above
4	Clean and seal decorative paired timbers	X			X		\$21,000
5	Repair/ replace flashing at beam gutter/ downspout connections	X			X		\$5,000
6	Install drip flashing between beams at gutter locations	X			X		\$20,000
7	Provide counterflashing at wall/ beam intersections	X			X		\$8,000
8	Treat beam ends with wood preservative	X			X		\$4,000
9	Structural: Convert interior partition walls in halls at lower level to shearwalls		X		X		\$100,000
10	Structural: Provide dragstrut/ ties across plaza/ roof diaphragm		X				\$110,000
11	Replace areas of wood soffit showing signs of rot, install insect screen as required	X			X		\$18,000
12	Continue with needed window replacements (approximately 75% remain)	X				X	\$176,000
13	Clean and seal exterior wood doors	X			X	X	\$16,000
14	Replace seals at exterior doors	X				X	\$15,000
15	Replace door glazing and sidelites	X				X	\$134,000
16	Patch stair nosings at east exterior stair	See Site/ Civil item #9			X		Included below
17	Add handrails to east stair	See Site/ Civil item #9			X		Included below
SUBTOTALS		\$437,000	\$210,000				
Building Interiors							
1	Clean and refinish interior stairs	X			X		\$8,000
2	Replace acoustic ceiling tiles as needed	X			X		\$5,000
3	Structural: Tighten bolts at west stair to help close crack, additional bolts may be required	X			X		\$12,000
4	Re-weld seams of sheet vinyl flooring	X			X		\$2,000
5	Replace vinyl base in Kitchen with quarry tile base	X			X		\$2,000
6	Replace sheet vinyl floors in the Restrooms and Kitchen		X		X		\$27,000
7	Replace vinyl wall base as needed	X			X		\$2,000
8	Repair VCT flooring as needed	X			X		\$5,000
9	Replace VCT with carpet tiles or vinyl plank flooring		X		X		\$25,000
10	Repair parquet flooring and refinish as needed	X			X		\$68,000
11	Repair and refinish entire parquet floor area		X		X		\$174,000
12	Replace knob style door hardware with lever type	X		X			\$38,000
13	Refinish doors as needed	X			X		\$20,000
14	Replace interior doors		X		X		\$139,000
15	Replace electric range with gas range if gas is run to the building	See HVAC item #9			X		Included below
16	Add privacy stalls to toilets located at classrooms	X			X		\$14,000
SUBTOTALS		\$176,000	\$365,000				
ADA							
1	Add push-button operators to the main entry doors		X	X			\$21,000
2	Install a two stop hydraulic elevator to service both floors	X		X			\$283,000
3	Add vertical grab bars to accessible toilets	X		X			\$1,000
4	Install plumbing covers to all plumbing under restroom counters	See Plumbing item #3		X			Included below
SUBTOTALS		\$284,000	\$21,000				

Continued on next page

Daybreak Star Indian Cultural Center 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
Site / Civil							
1	Clean catch basins and trench drains, "TV" existing drain lines	X			X		\$9,000
2	Grind root heave areas & repave cracked walkways	X		X			\$14,000
3	Clean and rechannel biofiltration swale at northwest entrance	X			X		\$4,000
4	Restripe and paint parking lot and two handicapped parking stalls.	X		X			\$7,000
5	Install handicap parking signs	X		X			\$2,000
6	Add fall protection to 9' wall at southwest entrance	X		X			\$7,000
7	Fix and reconnect downspout on the north side	X			X		\$1,000
8	Remove and reconstruct ramp and pedestrian walk to east entrance	X		X			\$12,000
9	Add handrails and patch concrete nosings at east stair	X		X			\$12,000
10	Extend downspout along external roof beam and provide splashblock	X			X		\$1,000
11	Add fall protection to 6' wall at northwest entrance	X		X			\$5,000
12	Excavate around fire hydrant to provide 2' min clearance. Remove curb stops and provide bollards to protect hydrant		X	X			\$3,000
13	Lower and/or landscape around catchbasin so that the rim matches the surrounding grades.	X		X			\$3,000
14	Reconstruct curb adjacent to the parking area, 5'-0" clear required		X	X			\$11,000
15	Remove and replace concrete at north entrance, stripe as handicapped parking stalls		X	X			\$9,000
SUBTOTALS		\$77,000	\$23,000				
Mechanical - HVAC							
1	Adjust thermostat and clear blocked supply and return grilles in storage areas	Maintenance Item				X	Maintenance
2	Clean supply and return air grilles	Maintenance Item				X	Maintenance
3	Separate return grilles from toilets at classrooms	See Building Interiors item #16			X		Included above
4	Remove or abandon the AC-1 unit	X				X	\$3,000
5	Replace deformed grilles	X				X	\$2,000
6	Replace H&V units with a VRF heat pump system		X			X	\$39,000
7a	Replace Kitchen MAU and hood exhaust fan with equipment similar to existing*		X			X	\$19,000
7b	Provide VFD on Kitchen MAU and hood exhaust fan*		X			X	\$7,000
7c	If VRF system (item 6 above), provide a DX coil in the MAU and connect to the building VRF system.*		X			X	\$10,000
8a	Replace all unit ventilators with similar to existing*		X			X	\$80,000
8b	If the VRF system is used (item 6 above), replace all* unit ventilators with VRF indoor fan coil units		X	X		X	\$108,000
9	If a propane tank is brought to the site, the following could be considered to reduce energy costs. *Replace electric stoves in kitchen with propane stoves. *Use propane fired MAUs instead of electric. *Replace H&V units w/ high-efficiency propane fired furnaces. *Replace unit ventilators w/ high-efficiency propane fired unit ventilators.		X			X	\$116,000
SUBTOTALS		\$5,000	\$254,000	*Items 7a & 8a included in SUBTOTAL (7b & 8b excluded)			

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Daybreak Star Indian Cultural Center 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 - Plumbing							
1	Test potable water for lead-free status	By owner				X	Owner
2	Inspect restroom floor drains	By owner				X	Owner
3	Upgrade Toilets and Urinals to low-flow types	X				X	\$17,000
4	Replace sink faucets with low flow models	X				X	\$11,000
5	Add trap primers based on Plumbing item #2 above	X				X	\$9,000
6	Insulate exposed sink and lavatory waste and stops	X		X			\$3,000
7	Install undersink grease trap at 3-compartment sink		X	X			\$9,000
8	Install propane distribution piping - See HVAC item #9 above	See HVAC item #9	X			X	Included above
9	Change out Drinking Fountain for dual type - ADA	X		X			\$7,000
10	Fire Protection: Drain, flush and test system	Included in item 11 below		X			Included below
11	Fire Protection: Replace sprinkler heads		X	X			\$17,000
SUBTOTALS		\$30,000	\$26,000				
Electrical							
1	Replace all receptacles in rooms designated as daycare facility with tamper-resistant receptacles	X		X			\$3,000
2	Review egress path lighting for the entire building	X		X			\$26,000
3a	Relocate electrical panels/ equipment in room 109 to a code compliant space	Not Feasible - Recommend item #3b below		X			N/A
3b	Provide access door to Mechanical room 109	X		X			\$5,000
4	Relocate FACP	X		X			\$4,000
5	Recommend replacement of electrical distribution system if major renovations are planned.		X			X	\$360,000
6	Replace fire alarm detection system		X	X		X	\$71,000
7	Provide a central lighting control system.		X			X	\$60,000
SUBTOTALS		\$38,000	\$491,000				
TOTAL ALL SCOPE ITEMS		\$1,047,000	\$1,390,000				\$2,437,000

B. ARCHITECTURAL ASSESSMENT

FACILITY DESCRIPTION

BUILDING CODE ASSUMPTIONS

BUILDING ENCLOSURE

BUILDING INTERIORS

BUILDING ACCESSIBILITY (ADA)



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FACILITY DESCRIPTION

The Center was built in 1976 on a portion of the area transferred from Fort Lawton military reserve to the City of Seattle and is operated by the United Indians of All Tribes as an Arts and Cultural Center. The site is located close to the bluff in the north section of Discovery Park and overlooks Shilshole Marina and Puget Sound.

The building is a two story structure, set into the side of a low sloping hill extending to the south. It is comprised of cast-in-place concrete foundation, walls and first floor slab with wood framed infill walls, second floor and roof. There are large expanses of glass in skywalls and windows as well as extensive banks of wood framed, glazed double doors on the first floor. The building is roughly octagonal with two floors and totals approximately 26,400 square feet. The first floor is at grade on the northwest, north and northeast sides and below grade for the remainder, the second floor is at grade on the southwest and west sides and above grade for the remainder. A large monumental stair to the second floor is located on the east side. The main low slope roof was previously at grade on the south side and originally designed as a plaza/ gathering space, though it was never used as such. The earth against the building on the south side has been excavated and the walls waterproofed as part of an effort to stop water intrusion into below grade areas of the first floor. Steeply pitched roofs surrounding the main low slope roof and are clad with cedar shakes.

Approximately one half of the first floor is a single large multi-purpose space, used for large gatherings and rented for events such as weddings. The remainder of the first floor is used for offices, kitchen, restroom, storage and mechanical space. The second floor houses classrooms used in affiliation with the Seattle Preschool Program (SPP), office space and restrooms. Several of the classroom spaces on the northeast and southeast sides are unused at this time and are being utilized as storage space.

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BUILDING CODE ASSUMPTIONS

Seattle Building Code, 2015 edition

Occupancy: A-3-Assembly, B-Business, E-Education (Noted as B-2 occupancy on the Original Construction Drawings under the UBC)

Construction Type: V-A, (Noted as V-1HR on the Original Construction Drawings under the UBC)

The allowable building area for a Type V-A building with mixed occupancy is 17,250 SF per floor with 2-stories. Because most of the building perimeter has a minimum of 30 feet of public way and open space, the increased allowable area for the building is calculated to be about 43,125 SF. The building is equipped with a Fire Protection Sprinkler system.

Based on the Record Drawings, the total building gross area is 26,400 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 Daybreak Star Indian Cultural Center 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.

We analyzed the plumbing fixture requirements since that seems to be an area of significant change in the codes. Building occupancy load was not noted on the original record drawings, but based on the current code, the building occupancy load is 615. We calculate that 7 Female and 6 Male Water Closets/Urinals are required. The Center currently provides 7 for each gender, with 2 being dedicated to the preschool program and located within the classrooms. Additionally, recent code interpretations related to gender use of restrooms has resulted in recommendations for a universal, single stall restroom at community facilities. Given the current toilet room configurations, adding a universal restroom will be difficult and may not be feasible at this time.

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 have limited our code deficiency comments and recommendations to those that relate to the 2005 facilities report and any additional items we believe are critically important to life safety at a facility like this.

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The following review is based on a visual site inspection performed on April 5th, 2017. Prior to our site visit, we reviewed the 2005 Architectural Asset Management Plan items completed and/or in progress are noted in the following.

No testing was performed to determine if hazardous materials are present. Having been constructed in 1977, 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 overcast and raining, which allowed us to observe roof runoff and site drainage. The spring weather has been relatively cool this year, and some of the unused interior spaces have had their HVAC systems turned off and remained cool.

BUILDING ENCLOSURE

Exterior Walls – the exterior walls consist of cast-in-place concrete and wood framed walls with rough-sawn plywood and tongue and groove siding installed horizontally. The concrete walls have been painted with the walls flanking the east entry stair painted with large murals. All areas of paint appear to be in good condition. Several locations of the wood siding, both plywood and horizontal T&G, show signs of rot and should be replaced. Staff noted that the siding at the clerestory windows was of concern.

Recommended Action: Regular Maintenance of painted concrete walls and sealant joints

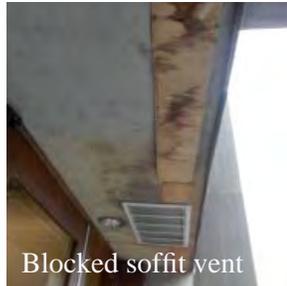
Recommended Action: Replace areas of wood siding showing signs of rot. Consider replacing areas with cement board siding, either a horizontal lap, panel system, or a combination of both. Weather resistive barrier and all window flashings should be evaluated at the time of replacement

Structure: The building is constructed with concrete foundation walls and wood framed walls above. The roof structure of the building is wood framed at both the central low-slope roof and the steep pitched roof areas. The roof framing is supported by a system of large timber beams. There are large decorative paired 6" x 16" timbers spliced to roof beams extending outside to concrete footings on four sides of the building. These beams show signs of surface cracking and checking, but appear to be structurally sound. Several of the beams have gutters located between the pairs, draining water from the pitched roof above. Water was noted running past the gutter flashing and following the bottom of the beam to drain at random locations. The ends of several interior log beams supporting the roof framing project through the exterior walls at the north, east and west entries and show signs of weathering. The tops of these beams are protected with metal cap flashing, but the lower portion of the beam ends are exposed and show signs of surface cracking but appear to be structurally sound.

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Gutter end



Blocked soffit vent



Reconfigured Gutter



Flat Roof

Recommended Action: Clean decorative paired timbers and apply a quality water sealer to prolong lifespan

Recommended Action: Evaluate flashing at gutter/ downspout connection and repair or replace as necessary. Install drip flashing at existing gutter locations between beams to direct water away from the beam and toward the areas of washed rock between the beam ends.

Recommended Action: Evaluate cap flashing at exposed beam ends and provide counterflashing at wall/ beam intersections to prevent water from running behind the siding. Treat beam ends with wood preservative.

Recommended Action: See Structural assessment.

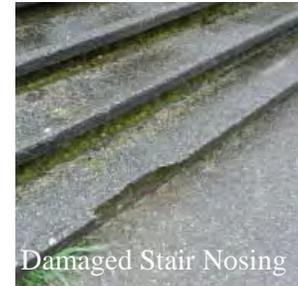
Roofing: The 2005 report noted that both the low slope roof and the pitched roof materials were in poor condition and had reached the end of their useful life. In our meeting with Center staff, they noted that all roofing materials had been replaced 3-4 years ago. At the time of replacement, roof insulation was also added and the gutter on the southeast pitched roof had been reconfigured to use one downspout instead of the downspouts located within the heavy timber beams.

Recommended Action: Regular maintenance - inspect the roof gutters, flashings, drains and downspouts twice yearly (minimum). Consider having the roof inspected every five years by a qualified roofing company

Soffits: There are soffits enclosed with painted cedar plywood above the doors on the northeast and northwest sides of the building. Located within those soffits are several recessed lights, mechanical louvers and soffit venting at the outer edge. The mechanical vents appear to be blocked off, along with the soffit venting. It was unclear if the mechanical vents are no longer in use or if they had been blocked off because the heating units servicing the unoccupied rooms above had been turned off to save energy. The soffit venting had recently been blocked off in an attempt to keep cold air out of the soffit adjacent to the unoccupied spaces. There appears to be several areas of rot near the ends of the soffit and no insect screen was visible at the soffit vent

Recommended Action: Replace areas of wood soffit showing signs of rot. Remove wood covering soffit vent and install insect screen as required. Consider replacing material with cement board soffit board (perforated 6" in from edge of soffit and edge of building, solid for remainder). See Mechanical and Electrical assessments for guidance on louvers and recessed lighting

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Windows: The windows consist of aluminum frame clerestory and skywall systems, as well as operable aluminum framed windows in the office areas of the second floor. The 2005 report noted the flashings around the skywall systems to be deteriorating and of poor design and recommended replacement of both the flashing and the skywall system. Center staff indicated that 25% of the windows and skywall had been replaced per the 2005 report (two classrooms, offices, large window over entry)

Recommended Action: Continue with remaining 75% of window replacements

The preschool classroom on the second floor has clerestory windows high on the inner classroom wall. This was the only location noted. The clerestory windows appear to be in good shape and were noted to have been included in the 25% replaced to date

Recommended Action: No Action

Exterior Doors - Storefront: The main entry is a wood storefront system that appears to be structurally sound

Recommended Action: Clean wood at exterior and apply a quality water sealer. Replace window panes with thermally insulated units and replace worn gasket seals around door as needed.

Exterior Doors – Double doors: There are extensive banks of wood framed, glazed double doors at the grade level entrances on the northeast and northwest sides of the building with wood framed sidelites in between. There are also double doors with pairs of sidelites flanking each side. The doors themselves appear to be in good condition, but the hardware is in need of adjustment or replacement and the gasket seals around the doors are worn and should be replaced

Recommended Action: Adjust all doors and replace hardware as necessary for proper operation, replace all seals and re-finish. Replace door glazing and sidelites with insulated units

Exterior Stair: There are several areas where the nosings of the concrete stair are broken off or cracking. Staff also noted that there are not enough handrails to accommodate their aging, but mobile, visitors at peak times.

Recommended Action: Consider adding handrails on each end of the large center portion of the stair, for a total of (4) handrails - (2) existing and (2) new. Patch stair nosings with cementitious stair repair product, such as NU-STAIR

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SUMMARY OF RECOMMENDATIONS - BUILDING ENCLOSURE

1. Regular Maintenance of painted concrete walls and sealant joints
2. Replace areas of wood siding showing signs of rot
3. Inspect weather resistive barrier and all window flashings
4. Clean and seal decorative paired timbers
5. Repair or replace flashing at gutter/ downspout connection as needed
6. Install drip flashing between beams at gutter locations
7. Provide counterflashing at wall/ beam intersections
8. Treat beam ends with wood preservative
9. Structural recommendation - Convert interior partition walls in halls at lower level to shearwalls
10. Structural recommendation - Provide dragstrut/ ties across plaza/ roof diaphragm
11. Replace areas of wood soffit showing signs of rot, install insect screen as required
12. Continue with needed window replacements (approximately 75% remain)
13. Clean and seal exterior wood doors
14. Replace seals at exterior doors
15. Replace door glazing and sidelites with insulated units
16. Patch stair nosings at east exterior stair
17. Add handrails on each end of the large center portion of the stair located on the east side of the building

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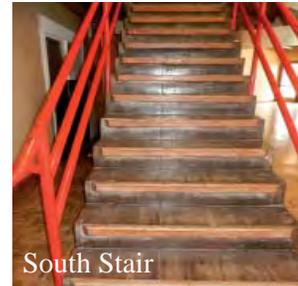
Acoustic Ceiling Tile



Accordion Wall



Log Column



South Stair

BUILDING INTERIORS

Interior Walls – interior construction is comprised of massive logs (most without bark) used for columns and large heavy timber beams supporting the second floor and roof. Floor and roof framing are covered with 3x6 tongue and groove decking. The logs, timbers and decking is exposed to view in most interior areas and appears to be in good condition. Framed interior walls and some exterior concrete walls are covered with painted drywall. Moisture was noted in the 2005 report as being an issue at the below grade concrete walls. This appears to have been remedied by the excavation and waterproofing of the south foundation walls and improvements to site drainage. Laminate wainscot was present in both Men's and Women's restrooms and appeared to be in good condition. All walls appear to be in good condition.

Recommended Action: No Action. Maintenance as required

Interior Stairs: The Lobby includes a pair of wood stairs constructed of 2x lumber laminated together. The stair on the north side of the Lobby appear to be in good condition and require only minor refinishing. The stair on the south side matches the quality appearance of the stair to the north, however there is a large crack running the length of the stair where the lumber has delaminated. Center staff noted that the crack appeared after the Nisqually earthquake in 2001 and does not appear to be getting worse.

Recommended Action: Clean and refinish as required. See structural assessment for repairs at south stair.

Ceiling Finishes: Framed drywall ceilings appear to be in good condition. Areas with suspended ceilings have areas of stained or missing tiles and should be replaced.

Recommended Action: No action at framed drywall ceilings. Replace ceiling tiles at areas of suspended ceiling.

Folding Partition Walls - There are accordion style partition walls located in the classrooms that can divide the large classroom spaces into two spaces. When closed it divides the space equally in half. It would appear that the closed configuration is the most common, default condition, creating the individual classrooms. The partition was noted to be open slightly in the middle, possibly to allow access between areas, as there is no operable access door. The wall appears to be in good operating condition, with some minor staining of the fabric noted.

Recommendation: No Action. Clean as required and perform regular maintenance to the track to assure proper operation.

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Men's Restroom



Walk-off Mats



Damaged VCT



Missing Transition



Patched Wood Floor

Floors – Vinyl: Restrooms and Kitchen. The vinyl flooring itself appears to be in good condition, although there are several seams that have begun coming apart and several floor transition pieces missing at the room entries. Restrooms have an integral cove base while the Kitchen appears to have a vinyl base. Vinyl base was also noted a several locations throughout the Center.

Recommended Action: Short-term recommendation is to re-weld the seams of the vinyl sheet flooring and replace the missing floor transitions. Replace vinyl base in Kitchen with a Quarry Tile base. Long-Term consider replacing the sheet vinyl floors in the restrooms and Kitchen with an epoxy floor system for ease of maintenance.

Floors – Vinyl composition tile (VCT): Offices and Storage (1st floor). The VCT looks to be in poor condition with areas of vinyl base missing in several areas.

Recommended Action: Short-term recommendation is to replace areas of missing vinyl base and repair VCT as necessary (assume 20% replacement). Long-term is to consider replacing the VCT with something more appropriate for Office locations, such as carpet tiles or vinyl plank flooring.

Floors - Wood: First floor and Second floor common spaces, Corridors, Offices and Classrooms. The majority of the flooring throughout the Center is wood parquet flooring that appears to be original to the building. The floor is heavily worn with areas noted to have been repaired and areas around the entry doors showing significant signs of wear and slight water damage. There are also areas throughout the building where flooring removed for repair has not yet been replaced.

Recommended Action: Short-term recommendation is to complete repairs with flooring to match what is currently installed and re-finish as required. Long-Term consider repairing and refinishing the entire floor area.

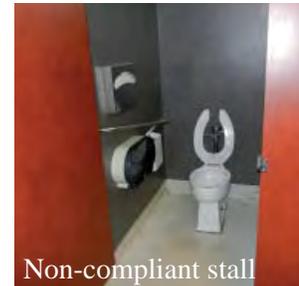
Floors - Walk-off Carpet: At each of the three building entries and the banks of double doors on the first floor there is a walk-off carpet. They appear to be in good shape, although some curling at the corners was noted on a few of them.

Recommended Action: No action.

Doors: Interior doors throughout are wood with wood frames. Some of the veneers on the doors are chipped and show signs of their age. Hardware appears to be a mix of lever type that does not require gripping to operate and round knobs.

Recommended Action: Short-term replace the knob type hardware with lever type, refinish doors as required. Long-term replace the interior doors.

architectural assessment



Kitchen: The kitchen is currently utilized to meet the needs of the preschool program only and according to staff on site, satisfies those needs. Events are only allowed to use the kitchen for warming. If gas is ever extended to the building, a gas range would be desired. The cabinets are wood and countertops are laminate, both appear to be in good condition. Appliances (electric range and dishwasher) look to be in good working condition and the sinks (3-compartment and handwashing) are adequate for a kitchen of this size.

Recommended Action: Maintenance as required, flooring repairs as noted in this report. Long-term replace the oven/range with a gas unit if gas is ever extended to the building

Restrooms: The existing bathrooms on the first floor look to have been remodeled to include an accessible toilet stall by removing one toilet. The bathrooms on the second floor currently do not meet accessibility requirements. Removing a toilet in the second floor bathrooms, similar to what was done on the first floor, will leave the Center short on fixtures to meet current code.

Recommended Action: No action

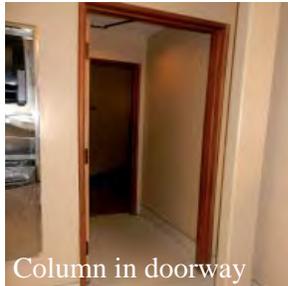
The preschool rooms currently have two toilets located within the classroom in close proximity to each other with little to no privacy.

Recommended Action: Consider providing privacy screening to the toilets in these areas.

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 for Community Facilities such as including single stall/universal restrooms.

Recommended Action: Consider converting one of the storage rooms adjacent to the first floor restrooms into a universal restroom

architectural assessment



Column in doorway



Seam pulling apart

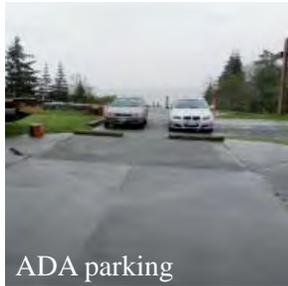


Preschool Toilet

SUMMARY OF RECOMMENDATIONS - BUILDING INTERIORS

1. Clean and refinish interior stairs
2. Replace acoustic ceiling tiles as needed
3. Structural recommendation - At west stair, tighten existing bolts to help close crack. Additional bolts may be required. At the landing, provide (3) threaded rods, nuts and washers to clamp the landing laminations together and close the split.
4. Re-weld seams of sheet vinyl flooring
5. Replace vinyl base in Kitchen with quarry tile base
6. Replace sheet vinyl floors in the Restrooms and Kitchen
7. Replace vinyl wall base as needed
8. Repair VCT flooring as needed
9. Replace VCT flooring with carpet tiles or vinyl plank flooring
10. Repair parquet flooring and refinish as needed
11. Repair and refinish entire parquet floor area
12. Replace knob style door hardware with lever type
13. Refinish doors as needed
14. Replace interior doors
15. Replace electric range with gas range if gas is run to the building
16. Add privacy stalls to toilets located in classrooms

architectural assessment



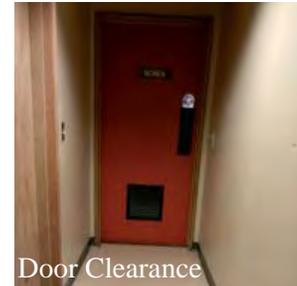
ADA parking



Exposed Plumbing



Entry Doors



Door Clearance

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.

Parking: Daybreak Star Center has two ADA spaces near the curb closest to each entry, serving each floor.

Recommended Action: See Civil assessment

Building Entry: The exterior main entry doors facing north on the first floor and west on the second floor, both nearest to the accessible parking, appear to be ADA compliant.

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: Each floor has accessible entrances from the outside, however there is no accessible means of connivance between floors once inside the building.

Recommended Action: Install a two stop hydraulic elevator to service both floors

Restroom Accessibility: The existing bathrooms on the first floor appear to be large enough to be ADA compliant, however there are clearance limitations at the entry door to the restroom. No ADA compliant restrooms are present on the second floor. Plumbing under the counter is exposed and not compliant with current ADA codes in both first and second floor restrooms.

Recommended Action: Add vertical grab bars to accessible toilets on the first floor. Install ADA compliant plumbing covers to all sink plumbing located under bathroom counters.

SUMMARY OF RECOMMENDATIONS - ADA

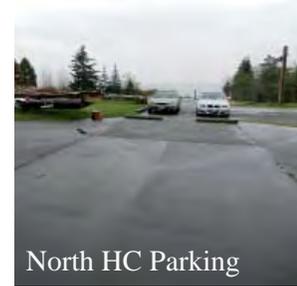
1. Add push-button operators to the main entry doors (LT)
2. Install a two stop hydraulic elevator to service both floors
3. Add vertical grab bars to accessible toilets
4. Install plumbing covers to all plumbing under restroom counters

C. CIVIL ASSESSMENT

SITE / CIVIL



site / civil



EXISTING CONDITIONS

PARKING LOT:

- There is one main parking area associated with the site, located to the west of the building and accessed from Bernie Whitebear Way. Parking stalls have an average width of 8.5', with (2) Handicapped Parking Stalls (8.0' minimum width with 4.67' aisle between). Stall striping is in poor condition and is no longer clearly visible, handicapped parking stall markings are in poor condition and no longer clearly visible. Pavement is in fair condition with some spalling and some cracking, but no visual evidence of subgrade failure. There are isolated areas at the entrance of the parking with heavy cracking that are most likely due to wear.

PEDESTRIAN ACCESS:

- The main pedestrian entrances to the building are located on the west and north side of the building. The west entrance provides access to the second floor of the facility and north entrance provides access to the first floor of the facility.
- The western entry is in good condition and, other than pavement striping being in poor condition, appears to meet ADA access requirement. The northern entry is also in good condition and appears to be ADA compliant. However, the access route to this entry is not ADA compliant. The path from the parking lot to the north entrance is only 3.5' in some areas and the slope of the path exceeds the maximum of 5.00%. The facility currently provides ADA parking for the north entrance on the north plaza walkway and at a graveled area adjacent the north plaza. Both parking areas for the north entrance were not originally intended to be used for parking and do not meet ADA requirements.
- The building has five other entry points at which able-bodied pedestrians can access from:
 - Northwest entrance provides access to the first floor and appears to be in good condition. This entrance is accessed via the plaza in front of the north entrance.
 - Northeast entrance provides access to the first floor and the pavers appear to be in good condition. There is no ADA compliant access from the north plaza area to the northeast entrance due to a graveled parking area.



Paving at East



Ramp to east entry



- East entrance provides access to the second floor and is in fair condition. There is a large asphalt plaza adjacent to the northeast entrance and from the asphalt plaza there is a large staircase to the second floor. The asphalt plaza is lightly to heavily worn, with many cracks and areas of major root heaving. The staircase from the plaza to the second floor is missing handrails. There is also a ramp from a trail in Discovery Park to the east entrance. The ramp does not meet ADA requirements. The ramp has a cross slope greater than 2.00%, the subgrade has settled beneath the ramp and asphalt path causing the asphalt path and ramp to no longer match at the transition, and the path to the ramp has areas of major root heaving.
- Southeast entrance provides access to a meeting room and is in good condition. Outside the southeast entrance there is a small concrete plaza surrounded by grass. There is no walkway from the entrance to any of the adjacent paths.
- Southwest entrance provides access to the teaching facility and is in good condition. The entryway outside the entrance is paved and leads to a playground area. The pavement outside the entrance is in good condition.
- The site's sidewalks are in fair condition in general. There are isolated areas of heavy wearing and heavy root upheaving.

SITE GRADING/DRAINAGE:

- The site is moderately sloped from the southwest to the northeast. There are no apparent drainage problem areas at the surface. In the parking lot there are four drainage structures that collect water and discharge to a biofiltration swale located to the north of the structure. The swale needs to be cleaned and rechanneled to better contain the flows. From the swale the drainage flows to a catch basin located at the northeast corner of the site and then continues in a public system along Bernie Whitebear Way. The catch basin at the northeast corner is not set at the correct elevation and the rim and riser of the structure is exposed causing a vehicle hazard.
- The playground area to the southwest of the structure drains to the parking lot via trench drains in the plaza. The trench drains outside the southwest entrance appear to be full of debris from the play area and should be cleaned.
- There is a french drain along the south face of the structure that collects storm water from the hillside above the facility. The french drain was installed in the summer of 2016 and is in good condition. The french drain collects water and outlets to a structure located to the southeast of the facility that then connects into the public storm system in Discovery Park.

site / civil

- Downspouts are located around the perimeter of the building. Along the north face of the facility there are downspouts that connect into the french drain. Some of the downspouts are no longer in place and need to be reconnected. The remainder of the downspouts discharges along the northwest, northeast, southwest, and southeast side of the structure. These downspouts flow on top of the external roof beam extensions and daylight to the surrounding surface. From the beam to the surface there is a drop where the water falls from that is causing erosion at the base of the support.

SANITARY SEWER:

- According to the City of Seattle side sewer information, the building has one sewer discharge point. The side sewer leaves the facility to the northeast in a 6" service line that connects to the public main in W Cramer St. No sewer backups were reported on the work order list.

DOMESTIC WATER & FIRE SERVICE:

- Domestic water service is provided by a 6" ductile iron service pipe to the south of the building. This service was recently installed in 2016.
- A fire department connection is located at the southeast corner of the site and provides fire suppression to the building.
- There are two hydrants located near the Daybreak Star facility one is located to the northeast near Bernie Whitebear Way and the other is located to the southeast near a paved trail in Discovery Park.

RECOMMENDATIONS

MAINTENANCE:

1. Clean out catch basins and TV existing drain lines to determine condition.
2. Grind the root heave areas and repave the cracked walkways that are surround the Daybreak Star Cultural Center.



- 3. Clean and rechannel biofiltration swale located outside the northwest entrance.



- 4. Restripe and paint parking lot and two handicapped parking stalls to meet ADA standards.



- 5. Handicapped parking signs to be installed in front of stalls.

site / civil

CODE AND LIFE SAFETY:

6. Provide fall protection from the existing 9' wall located outside of southwest entrance.



7. Fix and reconnect downspout to french drain on the north side of the facility.



- 8. Subgrade beneath ramp to the east entrance is failing. Remove ramp and pedestrian walk, excavate 1' of unsuitable material, recompact and reconstruct concrete and asphalt pedestrian walk and ramp to ADA standards.



- 9. Install handrails for stairs outside of the east entrance.



site / civil

- Downspouts from roof discharge along external roof beam extensions and discharge to base of structure with no splashblock or storm connection causing erosion. Extend downspout and provide splashblock.



- Provide fall protection from the existing 6' wall located adjacent to northwest entrance.



12. Excavate around fire hydrant to provide 2” minimum clearance from the hydrant’s flange connection to grade, remove curb stops and provide bollards to protect hydrant per City of Seattle details.



13. Exposed catch basin rim and structure needs to be lowered and/or landscaped so that the rim matches the surrounding grades.



site / civil

14. Demolish and reconstruct extruded curb approximately 1.5' to the north to allow the walkway that is adjacent to the parking area to meet the minimum 5' width requirement.



15. The walkway located outside the north entrance is currently being used as parking and/or ADA parking. Observing the site and plans, this area was not originally intended to be used as parking and was supposed to be used primarily as a pedestrian walkway. If the pedestrian access is going to be continued to be used as parking, the concrete should be removed and replaced with 6" of concrete and 4" of crushed surfacing to handle the vehicular loads. The new parking area should be marked and striped as a handicapped parking stall or stalls.



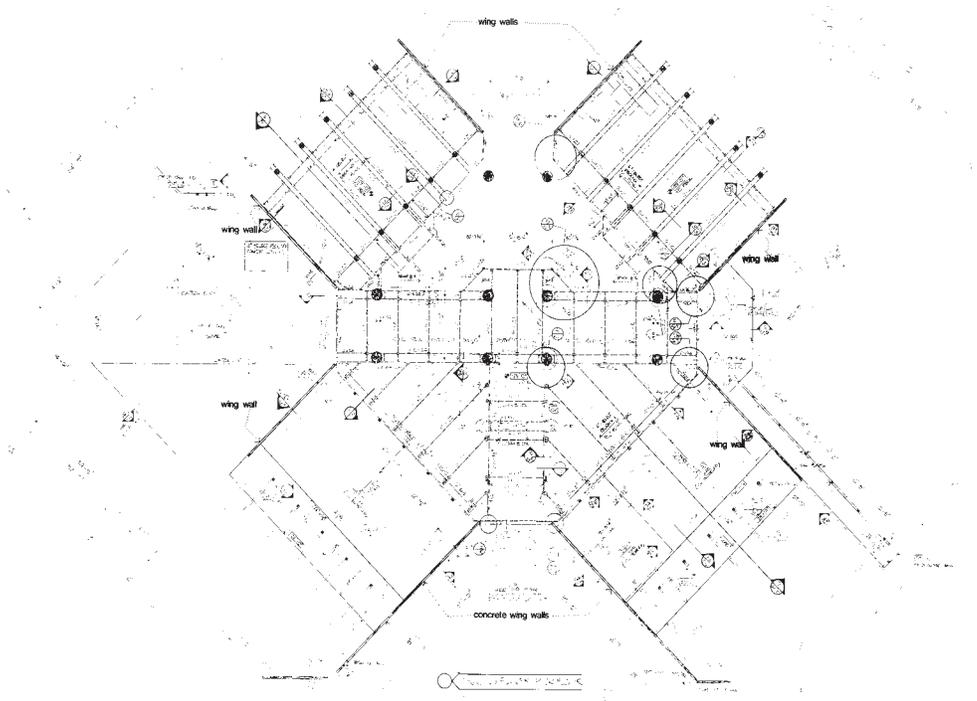
D. STRUCTURAL ASSESSMENT

BUILDING ASSESSMENT / DESIGN CRITERIA

EARTHQUAKE / WIND LATERAL FORCES



building assessment / design criteria



BUILDING DESCRIPTION

This section summarizes the existing structural conditions at the DayBreak Star Indian Cultural Center 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, $K_{zt} = 2.00$ (Based on City of Seattle Wind Speed Maps)

building assessment / design criteria

BUILDING DESCRIPTION

As can be seen in the aerial plan view below, the DayBreak Star Indian Cultural Center is approximately octagonal in shape with 4 “wings” extending out from the northwest, northeast, southeast and southwest sides. These wings have a sloped roof while the center portion has a flat roof. The flat roof was originally designed to be used as a plaza, and was designed for a live load of 100 pounds per square foot. The Center is a two-story building of heavy timber construction.



ORIGINAL STRUCTURE:

According to the As-Built drawings for the original building, the structure was originally designed and built circa 1976. In 2007, Civil and architectural modifications and upgrades were made, but no structural upgrades have occurred since the date of original construction. According to the record drawings the size of the building is 15,400 square feet.

Foundations consist of typical shallow spread footings and grade beams designed for an allowable soil bearing pressure of 8,000 pounds per square foot. The ground floor is a conventional 4” thick slab on grade reinforced with welded wire mesh. Interior and exterior columns are round, peeled logs that extend full height of the structure. These columns are 15” to 18” diameter, except for 10 columns along the central axis of the building, which are 27” diameter. Typical connection between foundations and peeled log columns is a single drift pin located at the center of the column, and embedded 6” to 8” into the foundation and into the column. Concrete basement walls around the southern portion of the first floor are 8” thick. Non-retaining walls at each end of the 4 “wings are full-height, 6” thick concrete bearing walls.

building assessment / design criteria



The Main floor has a 1,969 square foot opening that looks down to the ground floor below. The floors at the southeast and southwest wings are 4" thick slabs on grade. The remaining floor is framed with 5/16" thick plywood sheathing over 4" nominal tongue & groove decking spanning over heavy timber beams approximately 10 feet on center. The timber beams vary in size from 10 x 20 to 6 x 20. Beam/column connections consist of beams dapped into the sides of the round timber columns and through-bolted. Beam-to-beam connections consist of custom-made steel hangers attached to the supporting member with 6" long lag screws and steel shear plates, 4" diameter.

The flat Plaza/Roof over the center portion of the building is framed similar to the main floor. This level is framed with 5/16" plywood sheathing over 3" nominal tongue & groove decking spanning over heavy timber beams approximately 5'-7" on center. However, there are 8 large round timber beams along the central axis of the building consisting of 27" diameter peeled logs. These beams are supported on the 27" diameter columns described above under Foundations. Connections between round timber beams and columns consist of a single drift pin, #8 rebar, driven through the 27" diameter beam and embedded down the center of the 27" diameter column 1'-8". Where the round timber beams intersect over the 4 columns at the center of the building, only one of the beams is continuous over the column. It is attached with a single drift pin consisting of a 3.5" diameter steel pipe, embedded 1'-6" into the column. The two beams framing orthogonally into the column rest on the column and are tied together with a steel tie strap on top attached with 8" long lag screws.

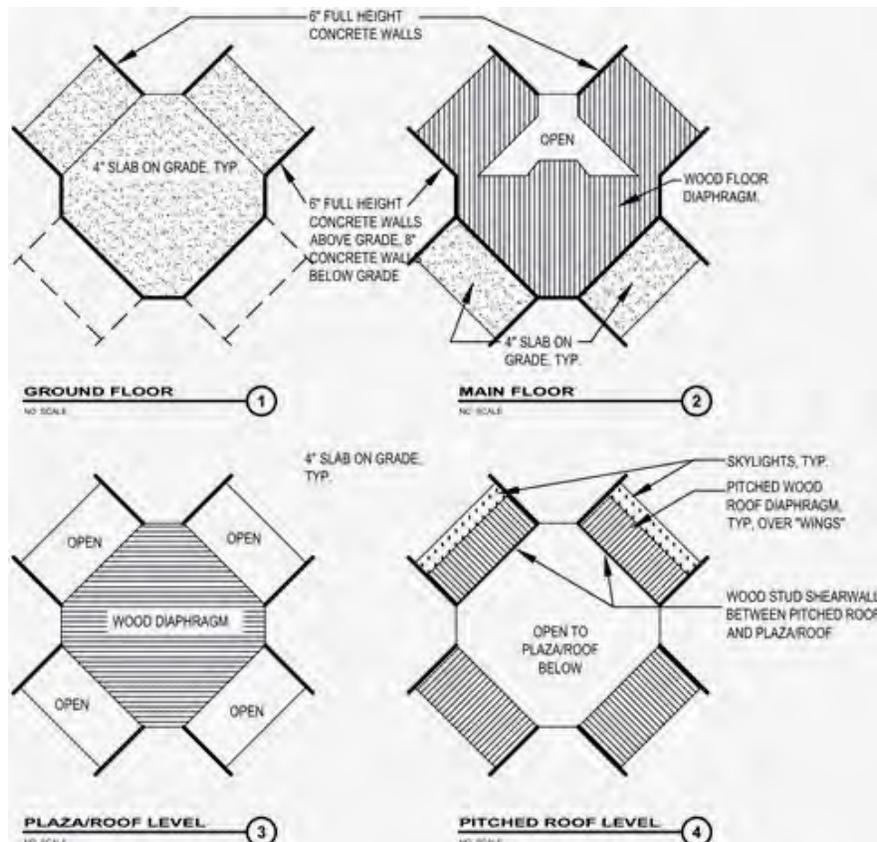
The pitched roofs over the 4 "wings" have a 6:12 slope and are framed similar to the Plaza roof with 5/16" plywood sheathing over 3" nominal tongue & groove decking. The deck spans approximately 10 feet over double 6 x 16 heavy timber beams, and to the 6" concrete walls at each end of each wing. The record drawings call out a 2 x 4 wood stud shearwall at the southern edges of the roof for the northwest and northeast wings. However, there is very little detail for these walls showing connections to diaphragms, etc.

building assessment / design criteria



EARTHQUAKE / WIND LATERAL FORCE RESISTING SYSTEM

Although the original record drawings do not call out the type of lateral force resisting system for the Daybreak Star Center, it is obvious that this is a bearing/shearwall system. Lateral wind and seismic forces are distributed through the roof and floor diaphragms to the exterior and interior shearwalls and into the foundation. (Note the higher wind load mentioned at the beginning of this report.) The floor and roof diaphragms are wood framed. Plywood was added to the diaphragms to enhance their lateral load carrying capacity. The shearwalls consist mainly of the reinforced concrete walls described above. The only wood stud shearwalls are the walls between the high, pitched roofs and the Plaza/Roof at the south edges of the northwest and northeast wings. This is illustrated below.



structural recommendations

RECOMMENDATIONS

The DayBreak Star Indian Cultural Center facility appears to be generally in good structural condition, showing only a few signs of structural distress or deterioration. However, the building is severely lacking any seismic detailing. Therefore, the structural deficiencies and recommended repairs are split into two categories: Maintenance Recommendations and Seismic Upgrades.

Maintenance Recommendations are as follows:

- The structural roof framing and the floor framing both extend out beyond the face of the building in many areas around the exterior of the building, and are exposed to exterior weathering conditions. Both roof and floor beams extend out to exterior round support columns or peeled logs. It is critical that the flashing and waterproofing around these members and connections be monitored and maintained to prevent rot and deterioration of the structure. Exposed wood members should be kept clean and periodically re-coated with wood preservative for protection. Preservative and metal flashing shall be compatible. Most preservatives are corrosive and require either hot-dip galvanized metal flashing and fasteners, or stainless steel.
- The west stair and landing between the ground and main floors has split along the laminations in the structural material. In speaking with staff, apparently this happened during the Nisqually Earthquake in 2001. The stairs are laminated 2x12's notched to form the treads and risers. The landing is laminated 2x8's. According to the record drawings, the stair laminations are bolted together with at least three 3/8" diameter threaded rods with recessed nuts and washers each end. These should be tightened to help close the crack. Additional through-bolted threaded rods may be required. There are no threaded rods shown for the landing, however. We recommend adding at least three 3/8" diameter threaded rods with nuts and washers each end to clamp the landing laminations together and close the split, similar to the stairs.

Seismic Upgrade Recommendations:

Due to the lack of seismic detailing seismic upgrades will be extremely disruptive and most likely require closing the building for an extended period of time during construction. These recommendations are as follows:

- Main Floor: The opening in the main floor causes a discontinuity in the floor diaphragm and there are no ties or drag struts to tie the various segments of floor together. Additionally, there are no drag struts to drag the diaphragm forces into the 45 degree walls at each end of the "wings". These drag struts would be diagonal to most of the floor beams and need to be bolted to the concrete shearwalls. The laterally stability of the northeast and northwest "wing" diaphragms require shearwalls that are orthogonal to the concrete walls at each end. We recommend converting the interior partition walls in the hall below this floor into wood stud shearwalls sheathed with plywood. These walls will require a new footing, requiring saw-cutting and excavation to pour a new, thickened slab footing.
- Plaza/Roof Level: This diaphragm appears to be adequate, but its attachment to the concrete shearwalls at the 45 degree "wings" is inadequate. Dragstrut/Ties are required across the diaphragm in both directions to drag the diaphragm shear forces into the concrete shearwalls.

structural recommendations

- **Pitched Roof Level:** The pitched roof diaphragms at the southwest and southeast wings appear to be adequate, and are laterally stable in the direction of the concrete wing shearwalls. Stability in the direction perpendicular to the concrete walls, however, is nonexistent. As described for the Main Floor, we recommend converting the hallway partitions below the interior edges of these diaphragms into wood stud shearwalls sheathed with plywood. These walls would then be continuous from the underside of the pitched roof diaphragms, to the Plaza/Roof diaphragm, to the Main Floor diaphragm and down to new foundations. This will eliminate the clerestory windows between the pitched roof and the Plaza/Roof at the southwest and southeast wings.

In summary, 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 or wind loads specified by current code requirements. However, 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 four (4) electrically powered draw thru heating and ventilation (H&V) units with electric resistance heaters and various unit ventilators with electric resistance heaters which appear to be original (c. 1977).

Each H&V unit includes a supply fan, electric resistance heater, FPR-7 (MERV-8+) filter bank and a mixing box that mixes return air with outdoor air that provides ventilation. There are no motorized dampers observed for air-side economizer. There are four (4) steps of control for each electrical resistance heater. All the fan motor appear to have been replaced recently (c. 2013) with new ABB Variable Frequency Drive (VFD).

An exhaust fan is provided for building air relief and to serve restrooms in order to provide odor control.

Each unit ventilator (1800 CFM) includes a supply fan, 36KW electric resistance heater filters and an outside air base connection for outside air intake.

There is no air-conditioning system except at the former Video Studio (now a storage space). This system is water cooled using a direct connection to domestic water, a code violation by today's standards. The system uses R-22 refrigerant and appears to be original (c. 1977). This unit appears to be seldom put into operation given the change in use of the space.

All other spaces of the building are cooled with outdoor air via operable windows.

The control system for the four (4) H&V units appears to have been upgraded c. 2014. There is a Honeywell Controller (WEB-600E-O) to provide operation schedules for the four (4) H&V units. New Honeywell controllers for each H&V unit appear to have been part of this upgrade to convert single zone CAV systems to single zone VAV systems, and those components of the control system are in good condition.

New wall mounted temperature sensors and/or thermostats are used by the H&V units control.

There is no natural gas supply on site. The only heating source is currently electric.

The outdoor air intake needed for ventilation for all the four (4) H&V units is via penthouse louvers which appears to have been installed c. 2006.



Outdoor Air Intake

heating, ventilation and air conditioning

A room by room summary of the HVAC Systems follows:

LOBBY - LOWER LEVEL & DISPLAY HALL – UPPER LEVEL

Served by:

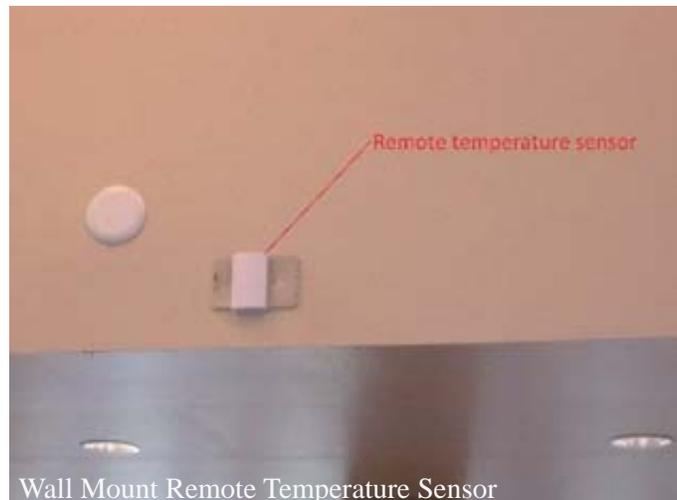
- One 8300 CFM draw thru heating and ventilation H&V Unit No.1 mounted in the mechanical room. It is equipped with a 65KW electric resistance heater. Supply air is distributed to spaces via underfloor duct to floor registers.
- Ventilation is provided via the H&V Unit No. 1, which is equipped with an air mixing plenum that combines outdoor air with return air.
- Air relief is via one (1) toilet exhaust that serves the restrooms.
- The programmable thermostat for this H&V Unit is located in the lobby on the lower level. There are also two remote temperature sensors connected to the thermostat to average space temperature, one on the lower level and one on the upper level.
- Two (2) additional electric resistance heaters are installed in the distribution duct on the upper level to provide zone temperature control. One with 33KW heating capacity serves the Display Hall wall thermostat and another with 10KW heating capacity serves the Work Room and Display Room with a thermostat located in the Display Room.

Notes:

- The space temperature setpoint on the wall thermostat was 70F; the registered space temperature on thermostat was 69.8F.
- Deformed grilles were observed in some locations.



Wall Mount Thermostat



Wall Mount Remote Temperature Sensor

heating, ventilation and air conditioning



CLASSROOMS – UPPER LEVEL SOUTHWEST WING

Served by:

- One 3800 CFM draw thru heating and ventilation H&V Unit No.3 mounted in the mechanical room. It is equipped with a 65KW electric resistance heater. Supply air is distributed to spaces via underfloor duct to floor registers.
- Ventilation is provided via this H&V Unit, which is equipped with an air mixing plenum that combines outdoor air with return air.

Notes:

- Fan motor was replaced around three (3) years ago with a new ABB Variable Frequency Driver (VFD).
- It was observed in some classrooms that the floor return grille is located near the toilet, so it is likely some odors will be distributed to spaces via return air to the H&V unit it serves.



heating, ventilation and air conditioning

CLASSROOMS – UPPER LEVEL SOUTHEAST WING

Served by:

- One 3800 CFM draw thru heating and ventilation H&V Unit No.2 mounted in mechanical room. It is equipped with a 65KW electric resistance heater. Supply air is distributed to space via underfloor duct to floor registers.
- Ventilation is provided via this H&V Unit, which is equipped with an air mixing plenum that combines outdoor air with return air.

Notes:

- Fan motor was replaced around three (3) years ago with a new ABB Variable Frequency Driver (VFD).

CLASSROOMS – UPPER LEVEL NORTHEAST AND NORTHWEST WING

Served By:

- A recessed unit ventilator mounted under the windows for each space. Each is equipped with a 36KW electric heater for each unit ventilator.
- Ventilation is provided via an outside air intake register through the floor below (connecting to outdoors) that connects into each unit ventilator.
- Air relief is via a register in a soffit with a backdraft damper to outside.



MISC. SPACES – LOWER LEVEL SOUTHEAST AND SOUTHWEST WING

Served by:

- One 2240 CFM draw thru heating and ventilation H&V Unit No.4 mounted in the mechanical room. It is equipped with an 18KW electric resistance heater. Supply air is distributed to the space via overhead ducts to ceiling diffusers and wall grilles.
- Ventilation is provided via this H&V Unit, which is equipped with an air mixing plenum that combines outdoor air with return air.

Notes:

- The fan motor was replaced around three (3) years ago with a new ABB Variable Frequency Driver (VFD).

heating, ventilation and air conditioning

KITCHEN

Served by:

- One Make-up Air Unit (MAU) is mounted on the roof to serve the commercial kitchen hoods.
- Ventilation is provided via the make-up air unit, which is 100% outside air.
- There are two commercial kitchen hoods. The exhaust of both kitchen hoods is via an exhaust fan on the roof.

Notes:

- The make-up air unit and hood exhaust fan were installed approximately 15 to 20 years ago and have reached their end of life, replacement should be considered.
- Electric stoves appear to be used for cooking.
- A fire suppression system appears to be installed for each kitchen hood.



MEN'S AND WOMAN'S RESTROOM – LOWER AND UPPER LEVEL

Served by:

- Exhaust fan tagged No. 1, located in the ceiling of the upper level Men's Restroom. Transfer door grilles between the Lobby and Restrooms provide make-up air to Exhaust Fan No.1.

Notes:

- No operational issues were observed.

FORMER VIDEO STUDIO AND CONTROL ROOM – LOWER LEVEL

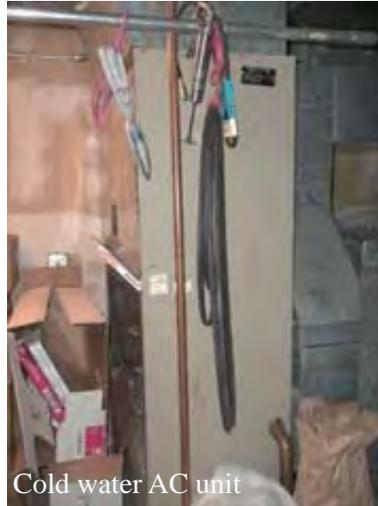
Served by:

- One 1600 CFM domestic cold water-cooled packaged air conditioning unit mounted in the mechanical room.
- Ventilation is provided via this AC Unit, which is equipped with an air mixing plenum that combines outdoor air with return air.
- Start/stop of the unit is by a wall switch.

heating, ventilation and air conditioning

Notes:

- Apparently, this unit is seldom in operation.
- This Domestic cold water-cooled AC unit no longer complies with current Seattle Energy Code and the space which it serves is no longer used. Consider either removing or abandoning (decommissioning) this unit.



Cold water AC unit

SUMMARY OF EXISTING MECHANICAL EQUIPMENT

ID	Location	Service	Manuf. Model	Capacity	Electric Heater	Approx. Year of Installation
H&V UNIT NO.1	Mech. Room	Lower Level Lobby	Trane	8300 CFM	65KW	1977
H&V UNIT NO.2	Mech. Room	Lower Level SW and SE Wing	Trane	8300 CFM	65KW	1977
H&V UNIT NO.3	Mech. Room	Upper Level Southwest Wing	Trane	8300 CFM	65KW	1977
H&V UNIT NO.4	Mech. Room	Upper Level Southeast Wing	Trane	2240 CFM	18KW	1977
AC-1	Mech. Room	Former Video Studio	<u>Climatrol</u> UWH05-0002	Unknown	N/A	1977
MAU-1	Roof	Kitchen hood	Unknown	Unknown	Unknown	15-20 years ago
Exhaust Fan No.2	Roof	Kitchen hood	Unknown	Unknown	N/A	15-20 years ago
Unit Ventilators	Each Served Space	Each Served Space	Unknown	1800CFM	36KW	1977
Exhaust Fan No.1	Restroom Upper Level	Restrooms – Upper and Lower Level	Unknown	3020CFM	N/A	1977

heating, ventilation and air conditioning

HVAC ASSESSMENT AND RECOMMENDATIONS

The new fan motors with VFDs and control panels for all the four (4) furnaces appear to have been upgraded recently and are in good condition. Though these systems are operating properly, it was reported that the annual operating cost is quite high due to the inefficient systems, a poor building envelope and the use of all electric heat. It is therefore recommended that Energy Efficiency Measure (EEM) be considered to reduce the cost of operation.

The unit ventilators appear to be original and operate with a noise level exceeding recommended levels for the served spaces and have reached their end of life. The make-up air unit and hood exhaust fan for the kitchen have also reached their end of life, although no operational issues have been reported. Replacement of the kitchen ventilation system is recommended.

It would be not feasible to bring natural gas service to the building, thus the option to use natural-gas as a heating source for mechanical equipment would not be considered.

DEFERRED MAINTENANCE (DO NOW)

1. It was observed in one unused classroom (currently utilized for storage), that condensation was heavily formed on windows. Consider adjusting the thermostat setpoint and clearing away the storage goods blocking the supply and return grilles.
2. Clean supply and return air grilles. Some were observed to be partially clogged.
3. Classrooms with floor return grille located near toilets: In order to avoid the issue of odors from toilets being recirculated back to the occupied space, it is recommended to either relocate the return grilles away from the toilet or install a partition wall to separate the toilet from return grilles.

CAPITAL PLANNING

4. Remove or abandon the AC-1 unit serving the former Video Studio.
5. Replace deformed grilles.
6. H&V Units: consider implementing the following Energy Efficiency Measure (EEM) by replacing existing H&V Units

Option : A VRF Heat Pump System with DOAS, Multiple Zones, Heating and Cooling

A Variable Refrigerant Flow (VRF) system is a typical all-electric system that uses heat pumps to provide space heating and cooling to space. It has the ability to modulate the amount of refrigerant sent to each zone in accordance with conditioning requirements. A heat pump VRF condensing unit is to be installed on roof and connected to multiple indoor fan coil units. The fan coil units would be installed in the existing mechanical room. A Dedicated Outdoor Air System (DOAS) would be installed on the roof to provide ventilation to all spaces.

heating, ventilation and air conditioning

7. Kitchen: consider replacing existing MAU

Option 7A: Replace MAU and Hood Exhaust Fan

Replace the existing MAU and hood exhaust fan with equipment similar to existing.

Option 7B: Consider implementation of the following Energy Efficiency Measure (EEM) to reduce operating costs for the MAU and Hood Exhaust Fan

Provide a Variable Frequency Driver (VFD) on MAU and hood exhaust fan for better control and improved energy efficiency.

Option 7C: Consider installation of a VRF DX COIL in MAU

If the VRF system is to be implemented in the building (Option 1 above), provide a DX coil in the MAU and connect the DX coil to the building VRF system.

8. Unit Ventilators:

Option 8A: Replace all unit ventilators

Replace all unit ventilators with similar to existing.

Option 8B: Consider implementation the following Energy Efficiency Measure (EEM)

If the VRF system is to be implemented in the building (Option 1), replace all unit ventilators with VRF indoor fan coil units.

9. If a propane tank is brought to the site, the following upgrades could be considered to reduce energy costs.

Option 9A: Replace the existing electric stoves in kitchen with propane stoves.

Option 9B: Use propane fired MAUs instead of units with electric heating.

Option 9C: Replace all existing H&V units with high-efficiency propane-fired furnaces.

Option 9D: Replace all existing unit ventilators with high-efficiency propane-fired unit ventilators.

plumbing system

EXISTING PLUMBING SYSTEMS

The Daybreak Star Cultural Center was built in 1977. Some minor updates have been done to the interior, but much of the building's systems and finishes are original. A 2007 regrading of the property on the south side was done to eliminate persistent water leaks into the building at the exterior walls

DOMESTIC WATER SERVICE

Most existing piping is hidden in walls and not visible. Visible piping at the water entry is copper.



Site supply.

NATURAL GAS SERVICE

Building is not served by natural gas

SANITARY WASTE AND VENT

The existing waste system within the building is hidden in walls or below slab. The building sewer flows by gravity to the city sewer system.

STORM DRAINAGE

Rain water collected on the roof flows to downspouts in exterior walls and from there to an exterior building perimeter drain header that flows to a city storm connection.

PLUMBING FIXTURES

Fixtures show signs of heavy use. Some flushing fixtures meet current code on water consumption.

A room by room summary of Plumbing Fixtures follows:

plumbing system

HEAD START CLASSROOM

This room has two toilet areas separated from the larger room by low walls. Each space has a toddler size toilet (American Standard Baby Devoro) and lavatory for handwashing. The flush valves are scratched and worn with heavy rust on the spud couplings. The room also has a residential size drop-in stainless steel sink with a single lever handle.

UPPER FLOOR TOILET ROOMS

Porcelain fixtures (urinals, toilets and lavatories) are in relatively good condition. Toilets do not have 1.6 gpf stamp. Flush valves are worn. The lavatories have wrist blade handles. Lavatory p-traps and stops are rusty, worn, discolored, and not insulated.

UPPER FLOOR CORRIDOR

The older stainless steel single bowl drinking fountain is not per ADA standards.

UPPER FLOOR LOUNGE KITCHEN

The kitchenette area includes a residential size single compartment drop-in stainless steel sink with a single handle faucet and garbage disposal. Sink and faucet shows signs of extensive use.

MAIN KITCHEN

Fixtures include a three compartment sink with pre-rinse, commercial grade corner type dishwasher with auto chemical/detergent feed, a separate stainless steel handwash sink, and a grease hood with fire protection system.



Toddler size toilet



Main Kitchen

plumbing system

LOWER LEVEL TOILET ROOMS

Fixtures have been partially updated. Flush valves are newer sensor type. The water closet in the Men's room is tagged 1.6 gpf; the water closet in the Women's has no tag and could be higher water use than currently allowed.

MECHANICAL ROOM

The facility's two domestic water heaters are located in this room: the water heaters are Rheem model PE65T09AAH, 65 gallon, manufactured in 2008. A Powers thermostatic mixing valve controls the temperature of the outgoing water.

STORAGE CLOSET/WATER ENTRY

Domestic water shut-off, filters, meter and PRV are located in this room. Exact function of all the piping is not clear since it is a mix of functioning and abandoned pipe. Per gauge reading the water supply is at 90 psi; the staff member responsible for building maintenance reports inadequate water pressure problems in upper level fixtures when the dishwasher is running. Further investigation would be appropriate since these two observations are contradictory. In addition, 90 psi exceeds the 80 psi allowed pressure for service to fixtures.

PLUMBING ASSESSMENT AND RECOMMENDATIONS

DEFERRED MAINTENANCE (DO NOW)

1. Test potable water system for lead-free status.
2. Check restroom floor drains for functionality and equipped with trap primers.

CAPITAL PLANNING

Short Term:

3. Upgrade water closets to a 1.28 gpf model and urinals to a .125 gpf model.
4. Replace sink and lavatory faucets with low flow models.
5. Replace restroom drains and add trap primers if found non-functional.
6. Insulate exposed sink and lavatory waste and stops per ADA requirements.

Long Term:

7. Provide undersink grease trap at three compartment sink.

plumbing system

8. Provide an alternative to electricity as a power source for domestic water heaters, mechanical equipment, and cooking equipment. Extending natural gas to serve the site may not be economically feasible; tank liquid propane (LP) is suggested as a cost effective option.
 - Provide LP distribution piping within the building.
 - Replace electric powered water heaters, mechanical equipment, and cooking equipment with LP powered equivalents.
9. Change out drinking fountain for a dual type complying iwth ADA standards.

FIRE PROTECTION

The building is served by a 6" fire line. Fire system control valves, including a 6" double check valve, are located in a dedicated closet on the lower level.



Fire line with double check valve assembly

FIRE PROTECTION ASSESSMENT AND RECOMMENDATIONS

A recommendation to replace sprinkler heads was noted in the 2005 Architectural Asset Management Plan.

NFPA 25 requires replacement or testing of sprinkler heads after 50 years of service.

Short Term:

10. Drain, flush and test system.

Long Term:

11. Possible building wide replacement of heads is recommended pending test results of system test.

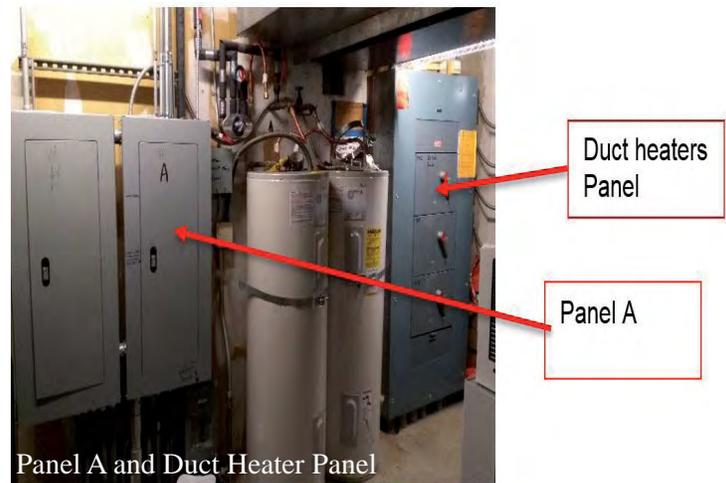
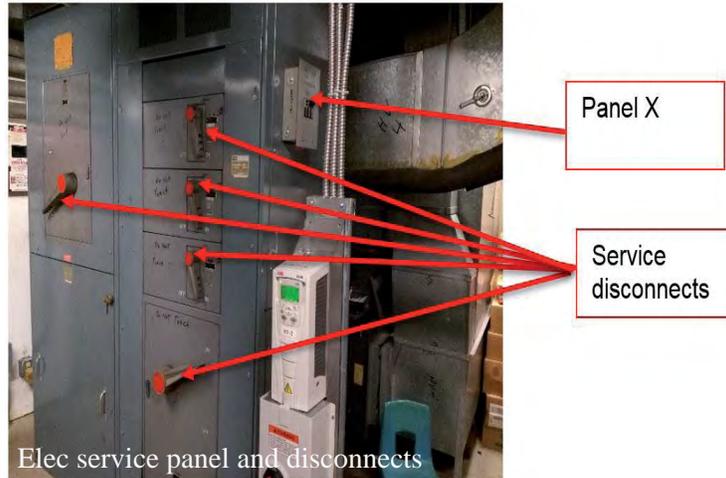
electrical system

CONDITION ASSESSMENT

The electrical service for Daybreak Star cultural center is fed from a utility transformer to the south of the building in-ground vault. The secondary service raceway from the Seattle City Light (SCL) transformer vault to the building was replaced in 2008. The electrical distribution system observed on-site mostly matches the as-built drawings provided by the owner, dated 4/12/1977.

NORMAL POWER

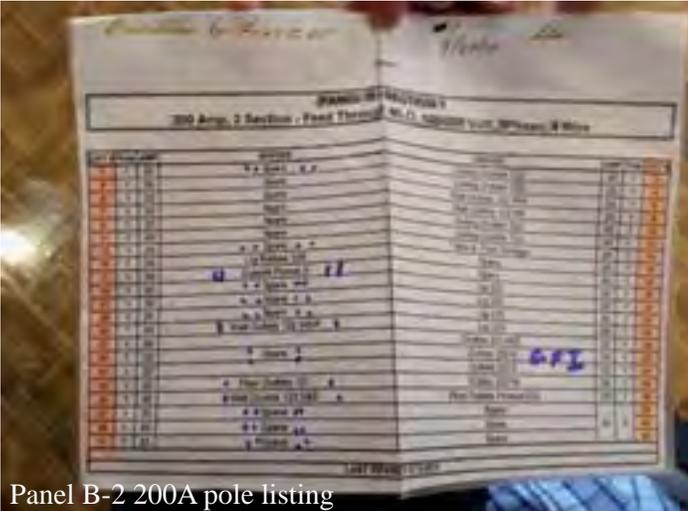
The 1600A 120/208V 3phase 4 wire SCL service incoming conductors from the exterior utility vault directly terminate at the main distribution panel with a 2000A bussing rate, and (5) service rated disconnects feed Duct heater panels A, B, C and D plus direct attached panel X for exit signs. All of these panels except panel B are located in Mechanical room #109. Panel B is located in the Lobby assembling area. The remote SCL meter is in a separate room



electrical system



The panelboard B is 208/120V 3phase 4 wires, 100A according to the original as-built drawings, however we found it was upgraded to a (2) section panel in 2010 to a 200A rating (the panel rating is shown on the directory, and it matches the service disconnect rating). It was recess mounted in the lower lobby next to the assembly area



electrical system

There is a kitchen located behind the reception desk on the lower level, which accommodates an electric range and exhaust hood. The exhaust hoods are type I commercial hoods with a fire suppression system.



Commercial Kitchen hood



Fire Suppression system

Per the as built drawings, there is a main grounding wire located in mechanical room #109, however we were not able to identify it during our site visit. It may be concealed in the conduit directing down to the grounding rods.

Receptacles throughout the building are mixed with different types of coverplates and of varying condition, but most are in fair condition and usable. We were not able to confirm if all of the receptacles in the Daycare classrooms are tamper-resistant type. These should be provided in childcare facilities per current electrical code.

electrical system

EMERGENCY/STANDBY POWER

There was no emergency/standby power generator observed during our site visit.

Per the as-built drawings, we believe panel X was used as a designated panel that feeds only emergency loads and the fire alarm control panel, although it has no backup power source.

Battery backup bug-eye lighting fixtures are powered by integrated battery throughout the building and also feed the exit signs. Egress lighting and exit signs are observed in some rooms, but not all areas. We think the coverage is not sufficient to meet current code requirement. Also in some rooms, there are no illuminated exit signs, only temporary paper exit signs observed.



Egress lights and Exit signs



Paper Exit signs were observed

electrical system

LIGHTING

Interior lighting fixtures were originally installed in 1977, however the most current lighting layout does not match 1977 as-built drawings. Only a few track lights are observed on the mezzanine level, which are abandoned but not removed yet. In the Lobby atrium, there are modern grouped pendant lights observed and in the Classrooms, pendant and wall mounted fixtures are in good working condition. In the Lobby assembly space, there are more surface mounted lights observed, which are still in good shape. We observed the lighting fixtures in the rest of the building have been replaced since 1977, but without record drawings, we are not sure when the renovations happened.



electrical system

Exterior lighting was observed around the building perimeter and at the south side field. There are perimeter downlights installed at each building entrance which appear to be original to the building. Square shape pole lighting was observed at the pathway around building.



South side field (Great Circle) event lighting matches the 1977 as-built drawings. These lights are directly fed from the SCL vault via a pole mounted transformer and controller.

There was no lighting control panel observed during our site visit. Based on the group lighting switches observed at the lobby entrance, we think the building lighting is controlled by group fixtures via the line voltage switch at the entrance.



electrical system

FIRE ALARM SYSTEM

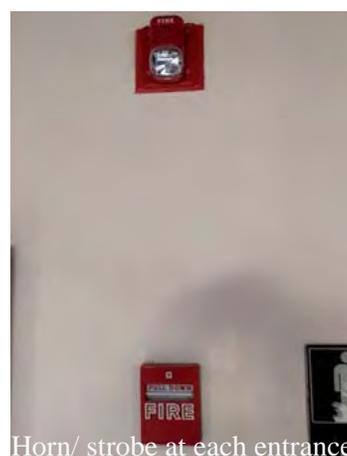
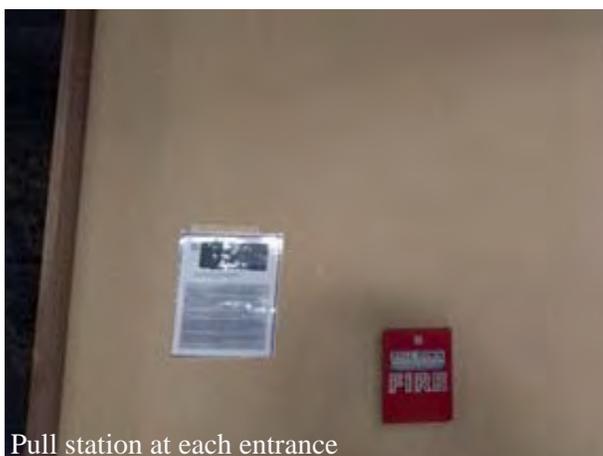
The building has full coverage of auto sprinkler system.

The fire alarm control panel is installed in Mechanical room 109. It is an (8) zone, non-addressable fire alarm control panel (only 5 zones shown on front door) manufactured by Honeywell. This fire alarm panel has been discontinued by manufacturer. The fire alarm system is inspected annually by Fire Protection Inc (FPI) and the latest result has no deficiencies found in July of 2016. No fire alarm remote annunciator (FARA) is observed in the building.



Fire alarm manual pull stations are observed at the entrance and each exit door, which meets code requirements. We didn't find smoke detector coverage as the building is fully sprinklered and smoke detectors were not required when it was built.

Wall mounted fire alarm horns/strobe and fire alarm bell are mixed and observed in public areas.



electrical system

TELECOMMUNICATIONS

The existing building telecommunications backboard is located in mechanical room 109 next to panel A; the service is fed from telecom box nearby north main entrance road.

SECURITY

Security panel is not observed during our site visit.

ELECTRICAL ASSESSMENT AND RECOMMENDATIONS

The building systems were built about 40 years ago. Most electrical distribution equipment is original to the building and has not been very well maintained. We believe the electrical distribution systems may have a maximum 10 years life left, if they are maintained per manufacturer's recommendation. No electrical complaints were reported by facility staff during the site visit.

IMMEDIATE NEEDS:

1. Replace all receptacles in rooms that are designated as daycare facility with tamper-resistance type receptacles to meet current code requirement for child care facilities.
2. Replace paper exit signs with illuminated exit signs fed from battery backup unit. Add egress lights required by building code to cover all areas within the building.

SHORT TERM NEEDS

3. Relocate the electrical distribution equipment to a new space that meets code requirement OR provide a new exit door to room 109, since most existing electrical panels are installed in this room. The working clearance to access this room is about 30", which does not meet current NEC code.
4. Relocate the fire alarm control panel to a different room, as there is not enough working clearance in front of the control panel for proper operation.

LONG TERM NEEDS

5. Replace the whole building electrical distribution system if there will be a major renovation happening within the next 10 years. The electrical distribution system will reach the end of service life at that time.
6. Replace the whole fire alarm detection system for the building, since the system will be discontinued by the manufacturer in the long term, and it will be hard to find replacement parts on the market for maintenance.
7. Provide a central lighting control system to respond to daylighting as well as occupancy condition to save building energy.

F. DRAWINGS

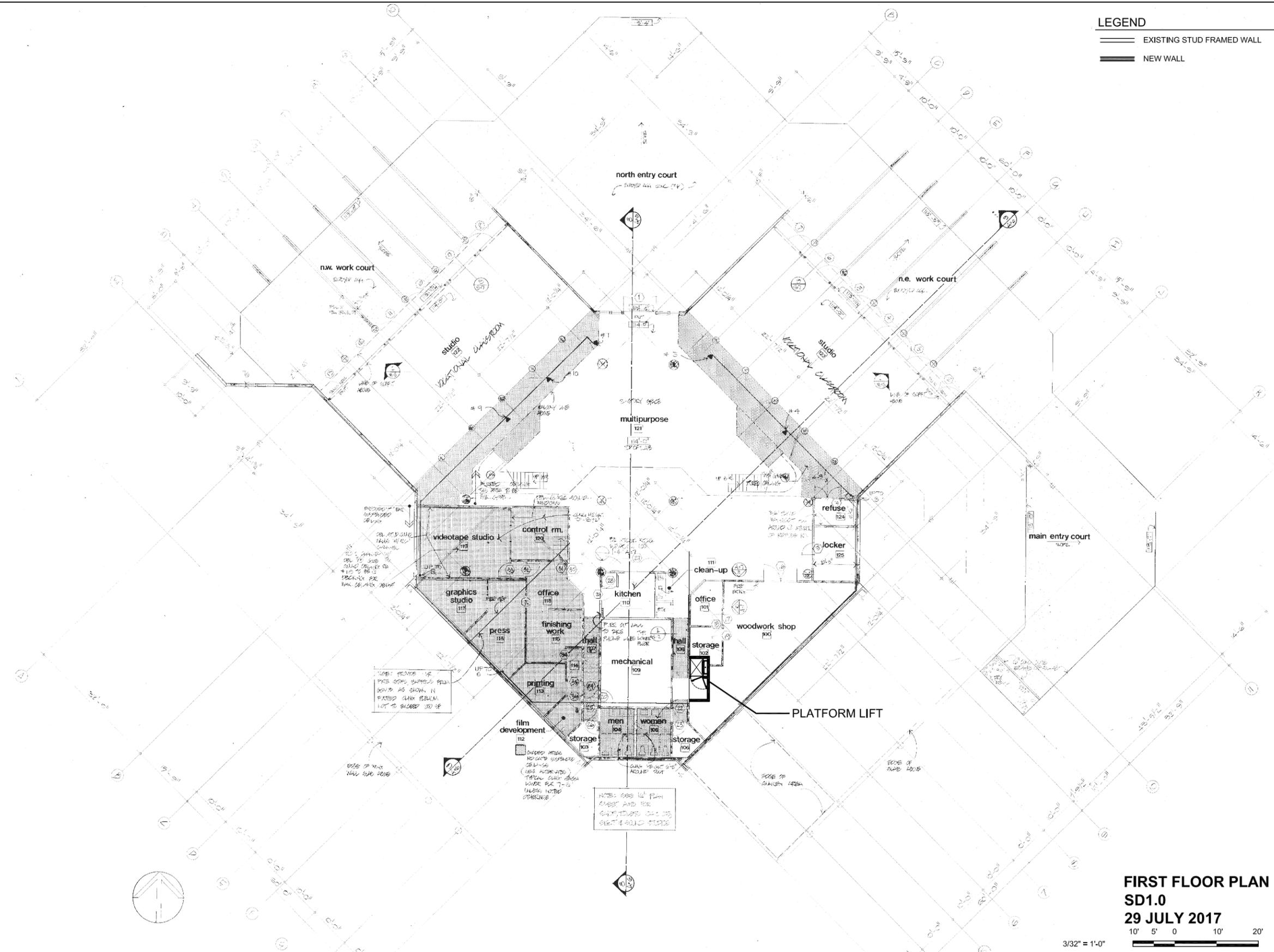
SD1.0 FLOOR PLAN RECOMMENDATIONS

STRUCTURAL SEISMIC (*SEE PAGE D|5*)

LEGEND

EXISTING STUD FRAMED WALL

NEW WALL



FIRST FLOOR PLAN

SD1.0

29 JULY 2017

10' 5' 0 10' 20'

3/32" = 1'-0"

PRELIMINARY DESIGN - NOT FOR CONSTRUCTION

>>>>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.

5		
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3		
2		
1		
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

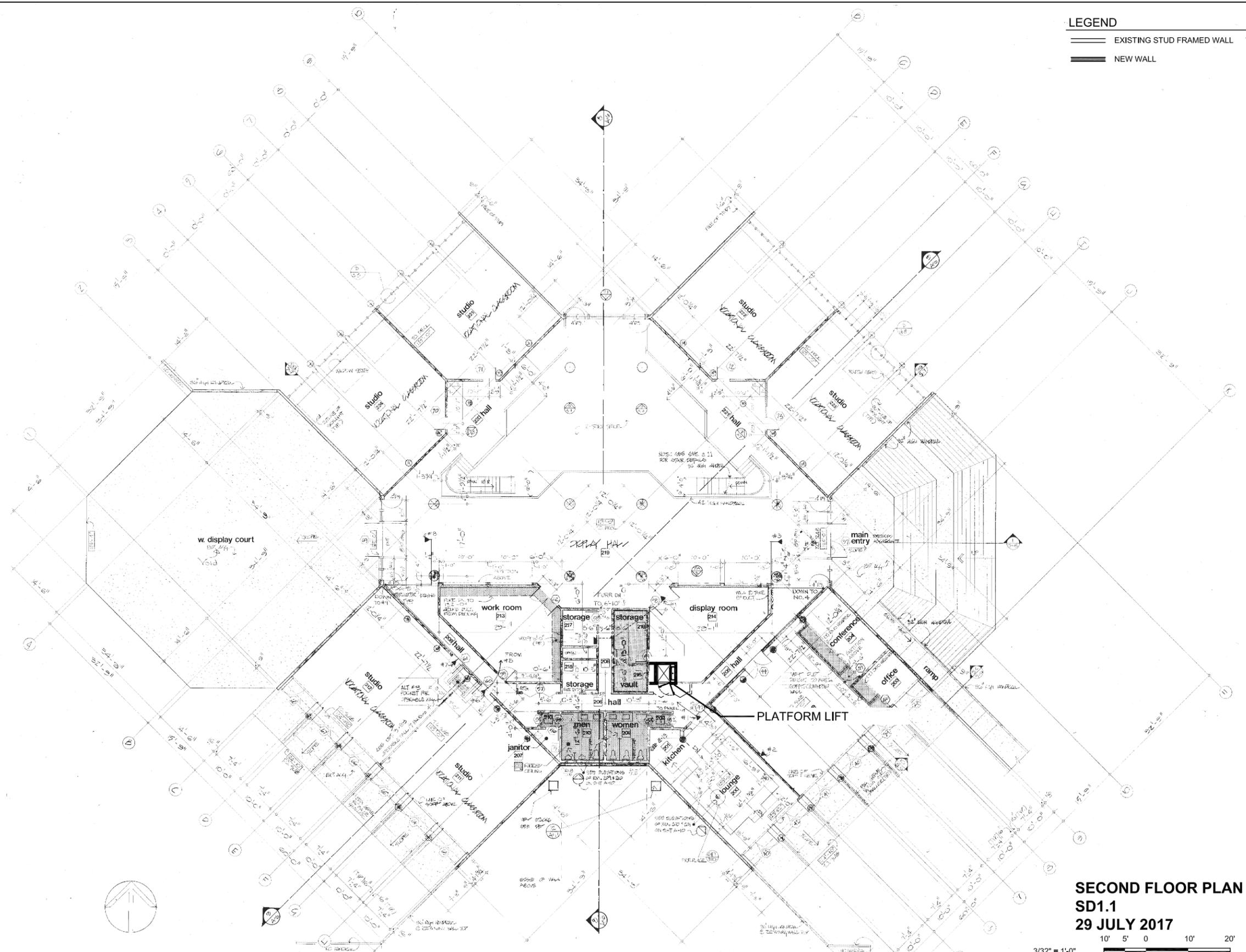
DAYBREAK STAR INDIAN CULTURAL CENTER
FIRST FLOOR PLAN

DESIGNED	SES	DATE	JULY 2017
DRAWN	SES		
CHECKED	GEA		
ORDINANCE NO.			SD1.0
CONTRACT NO.			SHEET 1 OF 3
SCALE	AS SHOWN		

LEGEND

EXISTING STUD FRAMED WALL

NEW WALL



SECOND FLOOR PLAN
SD1.1
29 JULY 2017

10' 5' 0' 10' 20'
 3/32" = 1'-0"

PRELIMINARY DESIGN - NOT FOR CONSTRUCTION

>>>>CAUTION - CALL 811<<<<
UTILITY NOTIFICATION CENTER
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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.



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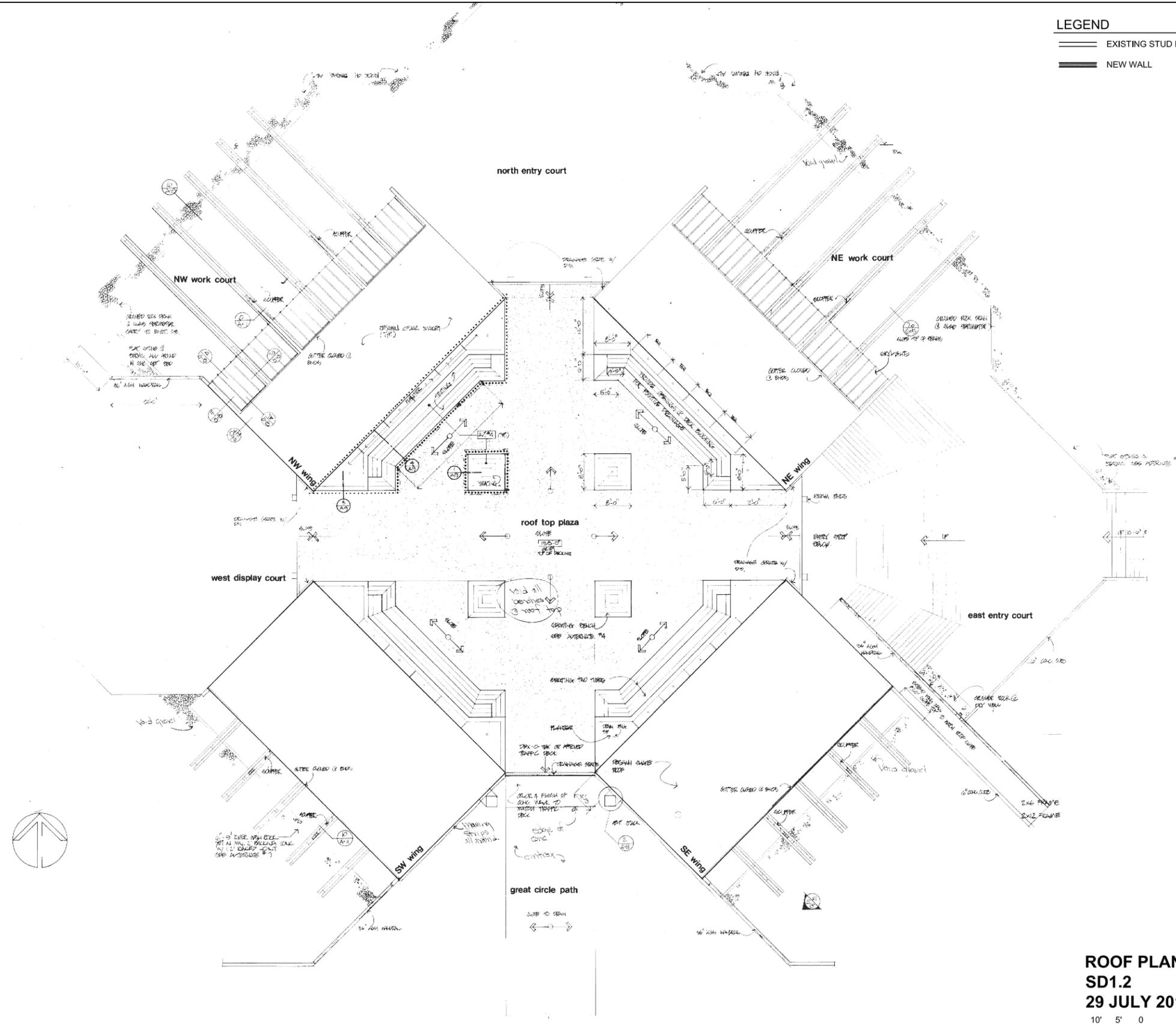
DAYBREAK STAR INDIAN CULTURAL CENTER
SECOND FLOOR PLAN

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

LEGEND

EXISTING STUD FRAMED WALL

NEW WALL



**ROOF PLAN
SD1.2
29 JULY 2017**

3/32" = 1'-0"



PRELIMINARY DESIGN - NOT FOR CONSTRUCTION

**>>>>CAUTION - CALL 811<<<<
UTILITY NOTIFICATION CENTER
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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.



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**DAYBREAK STAR INDIAN
CULTURAL CENTER**
ROOF PLAN

DESIGNED	SES	DATE	JULY 2017
DRAWN	SES	SHEET	3 OF 3
CHECKED	GEA		
ORDINANCE NO.			SD1.2
CONTRACT NO.			
SCALE	AS SHOWN		

G. COST ESTIMATE

Daybreak Star Indian Cultural Center 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		\$2,579,000
SP&R Cost & Sales Tax	61.00%	\$1,573,190
Total estimated PROJECT cost for all scope items on the following pages		\$4,152,190

ARCHITECTURAL SCOPE ITEMS

Building Enclosure /Structure

<u>Item Description</u>	<u>Qty.</u>	<u>Unit</u>	<u>\$/Unit</u>	<u>Total</u>
<u>1 - Maintenance of painted conc walls and joints</u>				
		Maintenance Item		

<u>Item Description</u>	<u>Qty.</u>	<u>Unit</u>	<u>\$/Unit</u>	<u>Total</u>
<u>2 - Replace wood siding and weather barrier</u>				
Remove siding & weather barrier	1,210	SF	1.05	1,271
Head & sill drip flash	300	LF	2.05	615
Weather barrier	1,210	SF	0.23	278
Replace with cement board	1,210	SF	5.15	6,232
Sealant at edges	340	LF	1.80	612
Paint	1,210	SF	0.60	726
Inspect all window flashing to document needed repairs	1	EA	350.00	350
Demolition load out & disposal	4	CY	53.20	191
		SUBTOTAL		\$10,274
		SUBCONTRACTOR OH&P	25%	\$2,569
		TOTAL SUBCONTRACTED		\$12,843
		GENERAL MARKUPS	50.00%	\$6,421
		2 - Replace wood siding and weather barrier TOTAL		\$20,000

<u>Item Description</u>	<u>Qty.</u>	<u>Unit</u>	<u>\$/Unit</u>	<u>Total</u>
<u>3 - Inspect all window flashings</u>				
		Include in Item 2 above		

<u>Item Description</u>	<u>Qty.</u>	<u>Unit</u>	<u>\$/Unit</u>	<u>Total</u>
<u>4 - Clean and seal decorative paired timbers</u>				
Clean surfaces with wood restorer & pressure wash	1,060	LF	3.20	3,392
Seal with preservative	4,240	SF	1.80	7,632
		SUBTOTAL		\$11,024
		SUBCONTRACTOR OH&P	25%	\$2,756
		TOTAL SUBCONTRACTED		\$13,780
		GENERAL MARKUPS	50.00%	\$6,890
		4 - Clean and seal decorative paired timbers TOTAL		\$21,000

<u>Item Description</u>	<u>Qty.</u>	<u>Unit</u>	<u>\$/Unit</u>	<u>Total</u>
<u>5 - Repair/ replace flashing at beam gutter/ downspout connections</u>				
Add collector for directing drip off of beams (see civil for splash block)	20	EA	120.00	2,400
		SUBTOTAL		\$2,400
		SUBCONTRACTOR OH&P	25%	\$600
		TOTAL SUBCONTRACTED		\$3,000
		GENERAL MARKUPS	50.00%	\$1,500
		5 - Repair/ replace flashing at beam gutter/ downspout connections TOTAL		\$5,000

<u>Item Description</u>	<u>Qty.</u>	<u>Unit</u>	<u>\$/Unit</u>	<u>Total</u>
<u>6 - Install drip flashing between beams at gutter locations</u>				
Add to exist flash for proper drip full length of beams	424	LF	24.00	10,176
		SUBTOTAL		\$10,176
		SUBCONTRACTOR OH&P	25%	\$2,544
		TOTAL SUBCONTRACTED		\$12,720
		GENERAL MARKUPS	50.00%	\$6,360
		6 - Install drip flashing between beams at gutter locations TOTAL		\$20,000

ARCHITECTURAL SCOPE ITEMS

<u>Item Description</u>	<u>Qty.</u>	<u>Unit</u>	<u>\$/Unit</u>	<u>Total</u>
7 - Provide counterflashing at wall/ beam intersections				
Two piece applied flashing, custom soldered, scribed to beam	12	EA	250.00	3,000
Set in sealant below each flange	12	EA	60.00	720
Paint	12	EA	35.00	420
				<u>420</u>
				SUBTOTAL
				\$4,140
			25%	SUBCONTRACTOR OH&P
				\$1,035
				TOTAL SUBCONTRACTED
				\$5,175
			50.00%	GENERAL MARKUPS
				\$2,588
				<u>\$2,588</u>
7 - Provide counterflashing at wall/ beam intersections	TOTAL			\$8,000

<u>Item Description</u>	<u>Qty.</u>	<u>Unit</u>	<u>\$/Unit</u>	<u>Total</u>
8 - Treat beam ends with wood preservative				
Clean surfaces with wood restorer & pressure wash	12	EA	72.00	864
Seal with preservative	12	EA	81.00	972
				<u>972</u>
				SUBTOTAL
				\$1,836
			25%	SUBCONTRACTOR OH&P
				\$459
				TOTAL SUBCONTRACTED
				\$2,295
			50.00%	GENERAL MARKUPS
				\$1,148
				<u>\$1,148</u>
8 - Treat beam ends with wood preservative	TOTAL			\$4,000

<u>Item Description</u>	<u>Qty.</u>	<u>Unit</u>	<u>\$/Unit</u>	<u>Total</u>
9 - Structural: Convert interior partition walls in halls at lower level to shearwalls				
Shear wall plywood, blocking, anchor bolts	5,900	SF	7.00	41,300
Re-finish surfaces	5,900	SF	2.00	11,800
				<u>11,800</u>
				SUBTOTAL
				\$53,100
			25%	SUBCONTRACTOR OH&P
				\$13,275
				TOTAL SUBCONTRACTED
				\$66,375
			50.00%	GENERAL MARKUPS
				\$33,188
				<u>\$33,188</u>
9 - Structural: Convert interior partition walls in halls at lower level to shearwalls	TOTAL			\$100,000

<u>Item Description</u>	<u>Qty.</u>	<u>Unit</u>	<u>\$/Unit</u>	<u>Total</u>
10 - Structural: Provide dragstrut/ ties across plaza/ roof diaphragm				
Drag struct angles, blocking and threaded rods	376	LF	126.00	47,376
Attachment to conc walls	8	EA	300.00	2,400
Lift access	10	DAY	800.00	8,000
Finishes	376	LF	1.80	677
				<u>677</u>
				SUBTOTAL
				\$58,453
			25%	SUBCONTRACTOR OH&P
				\$14,613
				TOTAL SUBCONTRACTED
				\$73,066
			50.00%	GENERAL MARKUPS
				\$36,533
				<u>\$36,533</u>
10 - Structural: Provide dragstrut/ ties across plaza/ roof diaphragm	TOTAL			\$110,000

<u>Item Description</u>	<u>Qty.</u>	<u>Unit</u>	<u>\$/Unit</u>	<u>Total</u>
11 - Replace areas of wood soffit showing signs of rot, install insect screen as required				
Remove soffit	720	SF	1.20	864
Install screened vent	240	LF	0.60	144
Replace soffit w/ cement board	720	SF	4.60	3,312
Edge trim & batten strips	1,080	SF	3.14	3,391
Paint	720	SF	0.90	648
Remove & reset soffit lighting fixtures	9	EA	100.00	900
				<u>900</u>
				SUBTOTAL
				\$9,259
			25%	SUBCONTRACTOR OH&P
				\$2,315
				TOTAL SUBCONTRACTED
				\$11,574
			50.00%	GENERAL MARKUPS
				\$5,787
				<u>\$5,787</u>
11 - Replace areas of wood soffit showing signs of rot, install insect screen as required	TOTAL			\$18,000

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 (all exposed areas)	672	SF	2.00	1,344
Stain / seal	672	SF	3.60	2,419
				<u>\$3,763</u>
				SUBTOTAL
			25%	<u>\$941</u>
				TOTAL SUBCONTRACTED
			50.00%	<u>\$2,352</u>
				GENERAL MARKUPS
1 - Clean and refinish interior stairs	TOTAL			<u>\$8,000</u>

<u>Item Description</u>	<u>Qty.</u>	<u>Unit</u>	<u>\$/Unit</u>	<u>Total</u>
<u>2 - Replace acoustic ceiling tiles as needed</u>				
Allow for 20% replacement of tiles	670	SF	3.60	2,412
				<u>\$2,412</u>
				SUBTOTAL
			25%	<u>\$603</u>
				TOTAL SUBCONTRACTED
			50.00%	<u>\$1,508</u>
				GENERAL MARKUPS
2 - Replace acoustic ceiling tiles as needed	TOTAL			<u>\$5,000</u>

<u>Item Description</u>	<u>Qty.</u>	<u>Unit</u>	<u>\$/Unit</u>	<u>Total</u>
<u>3 - Structural: Tighten bolts at west stair to help close crack, additional bolts</u>				
Drill stair treads and install threaded rods (allowance as reqd)	20	EA	100.00	2,000
Drill landings and install threaded rods	9	EA	300.00	2,700
Tighten existing rods where joints are visibly separating	2	EA	400.00	800
Plug exposed ends with wood	58	EA	10.00	580
				<u>\$6,080</u>
				SUBTOTAL
			25%	<u>\$1,520</u>
				TOTAL SUBCONTRACTED
			50.00%	<u>\$3,800</u>
				GENERAL MARKUPS
3 - Structural: Tighten bolts at west stair to help close crack, additional bolts	TOTAL			<u>\$12,000</u>

<u>Item Description</u>	<u>Qty.</u>	<u>Unit</u>	<u>\$/Unit</u>	<u>Total</u>
<u>4 - Re-weld seams of sheet vinyl flooring</u>				
Allowance, minimum call out job	1	EA	800.00	800
				<u>\$800</u>
				SUBTOTAL
			25%	<u>\$200</u>
				TOTAL SUBCONTRACTED
			50.00%	<u>\$500</u>
				GENERAL MARKUPS
4 - Re-weld seams of sheet vinyl flooring	TOTAL			<u>\$2,000</u>

<u>Item Description</u>	<u>Qty.</u>	<u>Unit</u>	<u>\$/Unit</u>	<u>Total</u>
<u>5 - Replace vinyl base in Kitchen with quarry tile base</u>				
Remove vinyl & prep for tile	50	LF	4.00	200
Quarry tile base	50	LF	15.00	750
				<u>\$950</u>
				SUBTOTAL
			25%	<u>\$238</u>
				TOTAL SUBCONTRACTED
			50.00%	<u>\$594</u>
				GENERAL MARKUPS
5 - Replace vinyl base in Kitchen with quarry tile base	TOTAL			<u>\$2,000</u>

ARCHITECTURAL SCOPE ITEMS

<u>Item Description</u>	<u>Qty.</u>	<u>Unit</u>	<u>\$/Unit</u>	<u>Total</u>
6 - Replace sheet vinyl floors in the Restrooms and Kitchen				
Remove & reset floor mounted equipment	3	EA	400.00	1,200
Remove flooring & prep for weldable sheet vinyl	580	SF	3.24	1,879
Weldable sheet vinyl	580	SF	5.60	3,248
Integral sheet vinyl wall base	238	LF	6.80	1,618
Remove & reset floor mounted kitchen fixtures	2	EA	500.00	1,000
Remove & reset floor mounted toilet fixtures	10	EA	500.00	5,000
				SUBTOTAL
				\$13,946
			25%	SUBCONTRACTOR OH&P
				\$3,486
				TOTAL SUBCONTRACTED
				\$17,432
			50.00%	GENERAL MARKUPS
				\$8,716
				TOTAL
				\$27,000

6 - Replace sheet vinyl floors in the Restrooms and Kitchen

<u>Item Description</u>	<u>Qty.</u>	<u>Unit</u>	<u>\$/Unit</u>	<u>Total</u>
7 - Replace vinyl wall base as needed				
Allow for 20% replacement of base	300	LF	3.30	989
				SUBTOTAL
				\$989
			25%	SUBCONTRACTOR OH&P
				\$247
				TOTAL SUBCONTRACTED
				\$1,236
			50.00%	GENERAL MARKUPS
				\$618
				TOTAL
				\$2,000

7 - Replace vinyl wall base as needed

<u>Item Description</u>	<u>Qty.</u>	<u>Unit</u>	<u>\$/Unit</u>	<u>Total</u>
8 - Repair VCT flooring as needed				
Allow for 20% replacement of VCT	420	SF	6.18	2,596
				SUBTOTAL
				\$2,596
			25%	SUBCONTRACTOR OH&P
				\$649
				TOTAL SUBCONTRACTED
				\$3,245
			50.00%	GENERAL MARKUPS
				\$1,622
				TOTAL
				\$5,000

8 - Repair VCT flooring as needed

<u>Item Description</u>	<u>Qty.</u>	<u>Unit</u>	<u>\$/Unit</u>	<u>Total</u>
9 - Replace VCT with carpet tiles or vinyl plank flooring				
Remove VCT & prep surfaces	2,100	SF	1.47	3,087
Carpet tiles or vinyl plank	2,100	SF	4.71	9,891
				SUBTOTAL
				\$12,978
			25%	SUBCONTRACTOR OH&P
				\$3,245
				TOTAL SUBCONTRACTED
				\$16,223
			50.00%	GENERAL MARKUPS
				\$8,111
				TOTAL
				\$25,000

9 - Replace VCT with carpet tiles or vinyl plank flooring

<u>Item Description</u>	<u>Qty.</u>	<u>Unit</u>	<u>\$/Unit</u>	<u>Total</u>
10 - Repair parquet flooring and refinish as needed				
Remove & prep floor, allow for 20% of exist parquet areas	2,940	SF	1.40	4,116
Replace parquet flooring at removal areas	2,940	SF	8.10	23,814
Refinish an additional 10% of existing parquet flooring	1,470	SF	5.50	8,085
				SUBTOTAL
				\$36,015
			25%	SUBCONTRACTOR OH&P
				\$9,004
				TOTAL SUBCONTRACTED
				\$45,019
			50.00%	GENERAL MARKUPS
				\$22,509
				TOTAL
				\$68,000

10 - Repair parquet flooring and refinish as needed

ARCHITECTURAL SCOPE ITEMS

<u>Item Description</u>	<u>Qty.</u>	<u>Unit</u>	<u>\$/Unit</u>	<u>Total</u>
11 - Repair and refinish entire parquet floor area				
Replace 20% of areas per item 9 above	2,940	SF	9.50	27,930
Refinish balance of existing parquet flooring	11,760	SF	5.50	64,680
				\$92,610
			25%	\$23,153
				\$115,763
			50.00%	\$57,881
				\$174,000

<u>Item Description</u>	<u>Qty.</u>	<u>Unit</u>	<u>\$/Unit</u>	<u>Total</u>
12 - Replace knob style door hardware with lever type				
Replace lockset with lever type, approx 80% of total	40	EA	500.00	20,000
				\$20,000
			25%	\$5,000
				\$25,000
			50.00%	\$12,500
				\$38,000

<u>Item Description</u>	<u>Qty.</u>	<u>Unit</u>	<u>\$/Unit</u>	<u>Total</u>
13 - Refinish doors as needed				
Sand & prep wood door & frame faces	2,760	SF	2.00	5,520
Stain/sealer finish	2,760	SF	1.80	4,968
				\$10,488
			25%	\$2,622
				\$13,110
			50.00%	\$6,555
				\$20,000

<u>Item Description</u>	<u>Qty.</u>	<u>Unit</u>	<u>\$/Unit</u>	<u>Total</u>
14 - Replace interior doors				
Remove door & frame (per leaf)	40	EA	90.00	3,600
Wood door frame - single, prefinished	40	EA	300.00	12,000
Solid core wood door, prefinished (by leaf)	40	EA	600.00	24,000
Add for vision panel or louver	10	EA	120.00	1,200
Door hardware	40	EA	800.00	32,000
Door signage	10	EA	100.00	1,000
				\$73,800
			25%	\$18,450
				\$92,250
			50.00%	\$46,125
				\$139,000

<u>Item Description</u>	<u>Qty.</u>	<u>Unit</u>	<u>\$/Unit</u>	<u>Total</u>
15 - Replace electric ranges with propane				

See Mechanical HVAC item 9

<u>Item Description</u>	<u>Qty.</u>	<u>Unit</u>	<u>\$/Unit</u>	<u>Total</u>
16 - Add privacy stalls to toilets located at classrooms				
Modify ductwork and balance (RA grilles near toilets)	1	LS	1,850.00	1,850
Low child sized toilet partition around toilet areas	4	EA	800.00	3,200
Cut & patch floor at RA grille mods	4	EA	600.00	2,400
				\$7,450
			25%	\$1,863
				\$9,313
			50.00%	\$4,656
				\$14,000

Building Interiors	SUBTOTAL	\$541,000
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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 - Adjust thermostat and clear blocked supply and return grilles in storage areas</u>				
		Maintenance Item		

<u>Item Description</u>	<u>Qty.</u>	<u>Unit</u>	<u>\$/Unit</u>	<u>Total</u>
<u>2 - Clean supply and return air grilles</u>				
		Maintenance Item		

<u>Item Description</u>	<u>Qty.</u>	<u>Unit</u>	<u>\$/Unit</u>	<u>Total</u>
<u>3 - Separate return grilles from toilets at classrooms</u>				
		See Building Interiors item 16		

<u>Item Description</u>	<u>Qty.</u>	<u>Unit</u>	<u>\$/Unit</u>	<u>Total</u>
<u>4 - Remove or abandon the AC-1 unit</u>				
Remove AC-1 unit - make safe	1	EA	890.00	890
Electrical connections	1	EA	490.00	490
		SUBTOTAL		\$1,380
		SUBCONTRACTOR OH&P	25%	\$345
		TOTAL SUBCONTRACTED		\$1,725
		GENERAL MARKUPS	50.00%	\$863
4 - Remove or abandon the AC-1 unit		TOTAL		\$3,000

<u>Item Description</u>	<u>Qty.</u>	<u>Unit</u>	<u>\$/Unit</u>	<u>Total</u>
<u>5 - Replace deformed grilles</u>				
Remove and replace grilles	5	EA	190.00	950
		SUBTOTAL		\$950
		SUBCONTRACTOR OH&P	25%	\$238
		TOTAL SUBCONTRACTED		\$1,188
		GENERAL MARKUPS	50.00%	\$594
5 - Replace deformed grilles		TOTAL		\$2,000

<u>Item Description</u>	<u>Qty.</u>	<u>Unit</u>	<u>\$/Unit</u>	<u>Total</u>
<u>6 - Replace H&V units with a VRF heat pump system</u>				
Misc cut & patch	1	EA	1,500.00	1,500
Remove/replace with VRF unit	1	EA	7,200.00	7,200
Fan Coil Units	2	EA	1,650.00	3,300
DOAS	300	CFM	20.00	6,000
Condensate piping	45	LF	25.00	1,125
Equipment connections	1	EA	1,200.00	1,200
		SUBTOTAL		\$20,325
		SUBCONTRACTOR OH&P	25%	\$5,081
		TOTAL SUBCONTRACTED		\$25,406
		GENERAL MARKUPS	50.00%	\$12,703
6 - Replace H&V units with a VRF heat pump system		TOTAL		\$39,000

MECHANICAL SCOPE ITEMS

<u>Item Description</u>	<u>Qty.</u>	<u>Unit</u>	<u>\$/Unit</u>	<u>Total</u>
<u>7a - Replace Kitchen MAU and hood exhaust fan with equipment similar to existing</u>				
Misc cut & patch	1	EA	1,500.00	1,500
Remove/replace Make up unit and hood system	1	EA	7,890.00	7,890
Equipment connections	1	EA	650.00	650
		SUBTOTAL		\$10,040
		SUBCONTRACTOR OH&P	25%	\$2,510
		TOTAL SUBCONTRACTED		\$12,550
		GENERAL MARKUPS	50.00%	\$6,275
7a - Replace Kitchen MAU and hood exhaust fan with equipment similar to existing	TOTAL			\$19,000

<u>Item Description</u>	<u>Qty.</u>	<u>Unit</u>	<u>\$/Unit</u>	<u>Total</u>
<u>7b - Provide VFD on Kitchen MAU and hood exhaust fan</u>				
Variable Frequency Drive (VFD) 25 hp	1	EA	3,220.00	3,220
		SUBTOTAL		\$3,220
		SUBCONTRACTOR OH&P	25%	\$805
		TOTAL SUBCONTRACTED		\$4,025
		GENERAL MARKUPS	50.00%	\$2,013
7b - Provide VFD on Kitchen MAU and hood exhaust fan	TOTAL			\$7,000

<u>Item Description</u>	<u>Qty.</u>	<u>Unit</u>	<u>\$/Unit</u>	<u>Total</u>
<u>7c - If VRF system (item 6 above), provide a DX coil in the MAU and connect to the building VRF system.</u>				
DX Coil (cased) and connections	1	EA	4,850.00	4,850
		SUBTOTAL		\$4,850
		SUBCONTRACTOR OH&P	25%	\$1,213
		TOTAL SUBCONTRACTED		\$6,063
		GENERAL MARKUPS	50.00%	\$3,031
7c - If VRF system (item 6 above), provide a DX coil in the MAU and connect to the building VRF system.	TOTAL			\$10,000

<u>Item Description</u>	<u>Qty.</u>	<u>Unit</u>	<u>\$/Unit</u>	<u>Total</u>
<u>8a - Replace all unit ventilators with similar to existing</u>				
Replace enclosures to match existing	120	LF	300.00	36,000
Replace unit ventilators- match existing	8	EA	633.00	5,064
Equipment connections	8	EA	150.00	1,200
		SUBTOTAL		\$42,264
		SUBCONTRACTOR OH&P	25%	\$10,566
		TOTAL SUBCONTRACTED		\$52,830
		GENERAL MARKUPS	50.00%	\$26,415
8a - Replace all unit ventilators with similar to existing	TOTAL			\$80,000

MECHANICAL SCOPE ITEMS

<u>Item Description</u>	<u>Qty.</u>	<u>Unit</u>	<u>\$/Unit</u>	<u>Total</u>
8b - If the VRF system is used (item 6 above), replace all unit ventilators with VRF indoor fan coil units				
Replace enclosures to match existing	120	LF	300.00	36,000
Replace with VRF FCU	8	EA	2,490.00	19,920
Equipment connections	8	EA	150.00	1,200
		SUBTOTAL		\$57,120
		SUBCONTRACTOR OH&P	25%	\$14,280
		TOTAL SUBCONTRACTED		\$71,400
		GENERAL MARKUPS	50.00%	\$35,700
8b - If the VRF system is used (item 6 above), replace all unit ventilators with VRF indoor fan coil units		TOTAL		\$108,000

9 - If a propane tank is brought to the site, the following could be considered to reduce energy costs.***Replace electric stoves in kitchen with propane stoves.*****Use propane fired MAUs instead of electric.*****Replace H&V units w/ high-efficiency propane fired furnaces.*****Replace unit ventilators w/ high-efficiency propane fired unit ventilators.**

Propane service to building & site surfacing restoration	150	LF	56.00	8,400
Cut & patch walls & ceilings at piping	480	LF	3.00	1,440
Replace electric stoves	2	EA	3,000.00	6,000
Replace H&V units w/HE furnaces	4	EA	4,840.00	19,360
Replace unit ventilators w/gas units	8	EA	1,290.00	10,320
Piping and connections	480	LF	21.00	10,080
Equipment connections	12	EA	500.00	6,000
		SUBTOTAL		\$61,600
		SUBCONTRACTOR OH&P	25%	\$15,400
		TOTAL SUBCONTRACTED		\$77,000
		GENERAL MARKUPS	50.00%	\$38,500
9 - If a propane tank is brought to the site, the following could be considered to reduce energy costs.		TOTAL		\$116,000

Replace electric stoves in kitchen with propane stoves.**Use propane fired MAUs instead of electric.*****Replace H&V units w/ high-efficiency propane fired furnaces.*****Replace unit ventilators w/ high-efficiency propane fired unit ventilators.**

Mechanical - HVAC	SUBTOTAL	\$384,000
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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 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 - Inspect restroom floor drains</u>		By Owner		

<u>Item Description</u>	<u>Qty.</u>	<u>Unit</u>	<u>\$/Unit</u>	<u>Total</u>
<u>3 - Upgrade Toilets and Urinals to low-flow types</u>				
Remove/ replace with low flow toilets	10	EA	760.00	7,600
Remove/ replace with low flow urinals	2	EA	590.00	1,180
		SUBTOTAL		\$8,780
		SUBCONTRACTOR OH&P	25%	\$2,195
		TOTAL SUBCONTRACTED		\$10,975
		GENERAL MARKUPS	50.00%	\$5,488
3 - Upgrade Toilets and Urinals to low-flow types	TOTAL			\$17,000

<u>Item Description</u>	<u>Qty.</u>	<u>Unit</u>	<u>\$/Unit</u>	<u>Total</u>
<u>4 - Replace sink faucets with low flow models</u>				
Remove/replace Sink faucets w/sensors	8	EA	720.00	5,760
		SUBTOTAL		\$5,760
		SUBCONTRACTOR OH&P	25%	\$1,440
		TOTAL SUBCONTRACTED		\$7,200
		GENERAL MARKUPS	50.00%	\$3,600
4 - Replace sink faucets with low flow models	TOTAL			\$11,000

<u>Item Description</u>	<u>Qty.</u>	<u>Unit</u>	<u>\$/Unit</u>	<u>Total</u>
<u>5 - Add trap primers based on Item 2</u>				
Add trap primers where necessary to protect water seal.	3	EA	1,500.00	4,500
Cut & patch walls & floors	3	EA	1,500.00	4,500
		SUBTOTAL		\$4,500
		SUBCONTRACTOR OH&P	25%	\$1,125
		TOTAL SUBCONTRACTED		\$5,625
		GENERAL MARKUPS	50.00%	\$2,813
5 - Add trap primers based on Item 2	TOTAL			\$9,000

<u>Item Description</u>	<u>Qty.</u>	<u>Unit</u>	<u>\$/Unit</u>	<u>Total</u>
<u>6 - Insulate exposed sink and lavatory waste and stops</u>				
Molded waste and stop covers	8	EA	176.00	1,408
		SUBTOTAL		\$1,408
		SUBCONTRACTOR OH&P	25%	\$352
		TOTAL SUBCONTRACTED		\$1,760
		GENERAL MARKUPS	50.00%	\$880
6 - Insulate exposed sink and lavatory waste and stops	TOTAL			\$3,000

<u>Item Description</u>	<u>Qty.</u>	<u>Unit</u>	<u>\$/Unit</u>	<u>Total</u>
<u>7 - Install under sink grease trap at 3-compartment sink</u>				
Grease trap	1	EA	4,500.00	4,500
		SUBTOTAL		\$4,500
		SUBCONTRACTOR OH&P	25%	\$1,125
		TOTAL SUBCONTRACTED		\$5,625
		GENERAL MARKUPS	50.00%	\$2,813
7 - Install under sink grease trap at 3-compartment sink	TOTAL			\$9,000

PLUMBING SCOPE ITEMS

<u>Item Description</u>	<u>Qty.</u>	<u>Unit</u>	<u>\$/Unit</u>	<u>Total</u>
<u>8 - Install propane distribution piping</u>			See Mechanical HVAC Item 9	

<u>Item Description</u>	<u>Qty.</u>	<u>Unit</u>	<u>\$/Unit</u>	<u>Total</u>
<u>9 - Change out Drinking Fountain for dual type - ADA</u>				
Cut & patch wall for piping modification access	1	EA	300.00	300
Install drinking fountain -bi-level	1	EA	3,170.00	3,170
Piping and connections	10	LF	21.00	210
		SUBTOTAL		\$3,680
		SUBCONTRACTOR OH&P	25%	\$920
		TOTAL SUBCONTRACTED		\$4,600
		GENERAL MARKUPS	50.00%	\$2,300
9 - Change out Drinking Fountain for dual type - ADA		TOTAL		\$7,000

<u>Item Description</u>	<u>Qty.</u>	<u>Unit</u>	<u>\$/Unit</u>	<u>Total</u>
<u>10 - Fire Protection: Drain, flush & test system</u>			Included in Item 11	

<u>Item Description</u>	<u>Qty.</u>	<u>Unit</u>	<u>\$/Unit</u>	<u>Total</u>
<u>11 - Fire Protection: Replace sprinkler heads</u>				
Remove/replace sprinkler heads	117	EA	68.00	7,979
Testing	8	HRs	125.00	1,000
		SUBTOTAL		\$8,979
		SUBCONTRACTOR OH&P	25%	\$2,245
		TOTAL SUBCONTRACTED		\$11,223
		GENERAL MARKUPS	50.00%	\$5,612
11 - Fire Protection: Replace sprinkler heads		TOTAL		\$17,000

Mechanical - Plumbing	SUBTOTAL	\$73,000
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ELECTRICAL SCOPE ITEMS

Electrical (E)

<u>Item Description</u>	<u>Qty.</u>	<u>Unit</u>	<u>\$/Unit</u>	<u>Total</u>
<u>1 - Replace all receptacles in rooms designated as daycare facility with tamper-resistant receptacles</u>				
Remove/replace receptacles	30	EA	38.00	1,140
		SUBTOTAL		\$1,140
		SUBCONTRACTOR OH&P	25%	\$285
		TOTAL SUBCONTRACTED		\$1,425
		GENERAL MARKUPS	50.00%	\$713
1 - Replace all receptacles in rooms designated as daycare facility with tamper-resistant receptacles		TOTAL		\$3,000

<u>Item Description</u>	<u>Qty.</u>	<u>Unit</u>	<u>\$/Unit</u>	<u>Total</u>
<u>2 - Review egress path lighting for the entire building</u>				
Upgrade egress lighting	20	EA	690.00	13,800
		SUBTOTAL		\$13,800
		SUBCONTRACTOR OH&P	25%	\$3,450
		TOTAL SUBCONTRACTED		\$17,250
		GENERAL MARKUPS	50.00%	\$8,625
2 - Review egress path lighting for the entire building		TOTAL		\$26,000

<u>Item Description</u>	<u>Qty.</u>	<u>Unit</u>	<u>\$/Unit</u>	<u>Total</u>
<u>3a - Relocate electrical panels/equipment in room 109 to a code compliant space</u>				Not feasible - See Item 3b

<u>Item Description</u>	<u>Qty.</u>	<u>Unit</u>	<u>\$/Unit</u>	<u>Total</u>
<u>3b - Provide access door to Mechanical room 109</u>				
Wall cut & patch	1	EA	400.00	400
Door, frame & hardware complete	1	EA	1,770.00	1,770
		SUBTOTAL		\$2,170
		SUBCONTRACTOR OH&P	25%	\$543
		TOTAL SUBCONTRACTED		\$2,713
		GENERAL MARKUPS	50.00%	\$1,356
3b - Provide access door to Mechanical room 109		TOTAL		\$5,000

<u>Item Description</u>	<u>Qty.</u>	<u>Unit</u>	<u>\$/Unit</u>	<u>Total</u>
<u>4 - Relocate FACP</u>				
Misc cut & patch	1	EA	500.00	500
Relocate FA panel	1	LS	1,500.00	1,500
		SUBTOTAL		\$2,000
		SUBCONTRACTOR OH&P	25%	\$500
		TOTAL SUBCONTRACTED		\$2,500
		GENERAL MARKUPS	50.00%	\$1,250
4 - Relocate FACP		TOTAL		\$4,000

<u>Item Description</u>	<u>Qty.</u>	<u>Unit</u>	<u>\$/Unit</u>	<u>Total</u>
<u>5 - Recommend replacement of electrical distribution system if major renovations are planned</u>				
Misc cut & patch	1	EA	1,500.00	1,500
Demolition to existing	1	LS	40,000.00	40,000
Replace electrical panels and distribution during renovation	1	LS	150,000.00	150,000
		SUBTOTAL		\$191,500
		SUBCONTRACTOR OH&P	25%	\$47,875
		TOTAL SUBCONTRACTED		\$239,375
		GENERAL MARKUPS	50.00%	\$119,688
5 - Recommend replacement of electrical distribution system if major renovations are planned		TOTAL		\$360,000

ELECTRICAL SCOPE ITEMS

<u>Item Description</u>	<u>Qty.</u>	<u>Unit</u>	<u>\$/Unit</u>	<u>Total</u>
<u>6 - Replace fire alarm detection system</u>				
Remove/Replace fire alarm and include annunciators	1	LS	36,500.00	36,500
Testing	8	HRs	125.00	1,000
		SUBTOTAL		\$37,500
		SUBCONTRACTOR OH&P	25%	\$9,375
		TOTAL SUBCONTRACTED		\$46,875
		GENERAL MARKUPS	50.00%	\$23,438
6 - Replace fire alarm detection system		TOTAL		\$71,000

<u>Item Description</u>	<u>Qty.</u>	<u>Unit</u>	<u>\$/Unit</u>	<u>Total</u>
<u>7 - Provide a central lighting control system</u>				
Remove gang switches/ provide lighting control w/occ sensors	1	LS	32,000.00	32,000
		SUBTOTAL		\$32,000
		SUBCONTRACTOR OH&P	25%	\$8,000
		TOTAL SUBCONTRACTED		\$40,000
		GENERAL MARKUPS	50.00%	\$20,000
7 - Provide a central lighting control system		TOTAL		\$60,000

	Electrical (E)	SUBTOTAL	\$529,000
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SITE / CIVIL SCOPE ITEMS

<u>Item Description</u>	<u>Qty.</u>	<u>Unit</u>	<u>\$/Unit</u>	<u>Total</u>
<u>1 - Clean catch basins and trench drains, "TV" existing drain lines</u>				
Clean out area drains and catch basins	15	EA	200.00	3,000
"TV" existing drain lines	300	LF	5.00	1,500
		SUBTOTAL		\$4,500
		SUBCONTRACTOR OH&P	25%	\$1,125
		TOTAL SUBCONTRACTED		\$5,625
		GENERAL MARKUPS	50.00%	\$2,813
1 - Clean catch basins and trench drains, "TV" existing drain lines		TOTAL		\$9,000

<u>Item Description</u>	<u>Qty.</u>	<u>Unit</u>	<u>\$/Unit</u>	<u>Total</u>
<u>2 - Grind root heave areas & repave cracked walkways</u>				
Grind root heave	600	SF	4.00	2,400
Repave asphalt walkways	600	SF	8.00	4,800
		SUBTOTAL		\$7,200
		SUBCONTRACTOR OH&P	25%	\$1,800
		TOTAL SUBCONTRACTED		\$9,000
		GENERAL MARKUPS	50.00%	\$4,500
2 - Grind root heave areas & repave cracked walkways		TOTAL		\$14,000

<u>Item Description</u>	<u>Qty.</u>	<u>Unit</u>	<u>\$/Unit</u>	<u>Total</u>
<u>3 - Clean and rechannel biofiltration swale at northwest entrance</u>				
Clean biofiltration swale of debris and rechannel	4	CY	300.00	1,200
Place new biofiltration soil mix	4	CY	250.00	925
		SUBTOTAL		\$2,125
		SUBCONTRACTOR OH&P	25%	\$531
		TOTAL SUBCONTRACTED		\$2,656
		GENERAL MARKUPS	50.00%	\$1,328
3 - Clean and rechannel biofiltration swale at northwest entrance		TOTAL		\$4,000

<u>Item Description</u>	<u>Qty.</u>	<u>Unit</u>	<u>\$/Unit</u>	<u>Total</u>
<u>4 - Restripe and paint parking lot and two handicapped parking stalls</u>				
Gind and remove existing paint from lot	360	SF	4.00	1,440
Restripe and paint parking stalls	700	LF	2.50	1,750
Restripe and paint handicapped parking stall	2	EA	250.00	500
		SUBTOTAL		\$3,690
		SUBCONTRACTOR OH&P	25%	\$923
		TOTAL SUBCONTRACTED		\$4,613
		GENERAL MARKUPS	50.00%	\$2,306
4 - Restripe and paint parking lot and two handicapped parking stalls		TOTAL		\$7,000

<u>Item Description</u>	<u>Qty.</u>	<u>Unit</u>	<u>\$/Unit</u>	<u>Total</u>
<u>5 - Install Handicapped parking signs in front of stalls</u>				
Install handicapped parking signs in front of stalls	2	EA	300.00	600
		SUBTOTAL		\$600
		SUBCONTRACTOR OH&P	25%	\$150
		TOTAL SUBCONTRACTED		\$750
		GENERAL MARKUPS	50.00%	\$375
5 - Install Handicapped parking signs in front of stalls		TOTAL		\$2,000

<u>Item Description</u>	<u>Qty.</u>	<u>Unit</u>	<u>\$/Unit</u>	<u>Total</u>
<u>6 - Add fall protection to 9' wall at southwest entrance</u>				
Guardrail	40	LF	60.00	2,400
Core drill & grout in rail posts	8	EA	140.00	1,120
		SUBTOTAL		\$3,520
		SUBCONTRACTOR OH&P	25%	\$880
		TOTAL SUBCONTRACTED		\$4,400
		GENERAL MARKUPS	50.00%	\$2,200
6 - Add fall protection to 9' wall at southwest entrance		TOTAL		\$7,000

<u>Item Description</u>	<u>Qty.</u>	<u>Unit</u>	<u>\$/Unit</u>	<u>Total</u>
<u>7 - Fix and reconnect downspout on the north side</u>				
Repair sheet metal	1	ALLOW	200.00	200
		SUBTOTAL		\$200
		SUBCONTRACTOR OH&P	25%	\$50
		TOTAL SUBCONTRACTED		\$250
		GENERAL MARKUPS	50.00%	\$125
7 - Fix and reconnect downspout on the north side		TOTAL		\$1,000

<u>Item Description</u>	<u>Qty.</u>	<u>Unit</u>	<u>\$/Unit</u>	<u>Total</u>
<u>8 - Remove and reconstruct ramp and pedestrian walk to east entrance</u>				
Remove asphalt walk	50	SF	6.00	300
Remove concrete ramp	200	SF	6.00	1,200
Excavate 1' of unsuitable material	1	ALLOW	2,000.00	2,000
Recompact to ADA standards	1	ALLOW	500.00	500
Reconstruct asphalt walk	50	SF	8.00	400
Reconstruct concrete ramp	200	SF	8.00	1,600
		SUBTOTAL		\$6,000
		SUBCONTRACTOR OH&P	25%	\$1,500
		TOTAL SUBCONTRACTED		\$7,500
		GENERAL MARKUPS	50.00%	\$3,750
8 - Remove and reconstruct ramp and pedestrian walk to east entrance		TOTAL		\$12,000

<u>9 - Add handrails and patch concrete nosings at east stair</u>				
Handrails	60	LF	60.00	3,600
Core drill & grout in rail posts	14	EA	140.00	1,960
Repair concrete nosings	1	ALLOW	600.00	600
		SUBTOTAL		\$6,160
		SUBCONTRACTOR OH&P	25%	\$1,540
		TOTAL SUBCONTRACTED		\$7,700
		GENERAL MARKUPS	50.00%	\$3,850
9 - Add handrails and patch concrete nosings at east stair		TOTAL		\$12,000

<u>Item Description</u>	<u>Qty.</u>	<u>Unit</u>	<u>\$/Unit</u>	<u>Total</u>
<u>10 - External roof beam splashblocks</u>				
Splash block	8	EA	25.00	200
<i>See Building Enclosure item 5 for drip flash</i>				
		SUBTOTAL		\$200
		SUBCONTRACTOR OH&P	25%	\$50
		TOTAL SUBCONTRACTED		\$250
		GENERAL MARKUPS	50.00%	\$125
10 - External roof beam splashblocks		TOTAL		\$1,000

<u>Item Description</u>	<u>Qty.</u>	<u>Unit</u>	<u>\$/Unit</u>	<u>Total</u>
<u>11 - Add fall protection to 6' wall at northwest entrance</u>				
Guardrail	30	LF	60.00	1,800
Core drill & grout in rail posts	6	EA	140.00	840
		SUBTOTAL		\$2,640
		SUBCONTRACTOR OH&P	25%	\$660
		TOTAL SUBCONTRACTED		\$3,300
		GENERAL MARKUPS	50.00%	\$1,650
11 - Add fall protection to 6' wall at northwest entrance		TOTAL		\$5,000

<u>Item Description</u>	<u>Qty.</u>	<u>Unit</u>	<u>\$/Unit</u>	<u>Total</u>
<u>12 - Excavate around fire hydrant to provide 2' min clearance. Remove curb stops and provide bollards to protect hydrant</u>				
Excavate around hydrant to provide min clearance	1	ALLOW	500.00	500
Relandscape around hydrant	1	ALLOW	500.00	500
Install bollards to protect hydrant	2	EA	100.00	200
		SUBTOTAL		\$1,200
		SUBCONTRACTOR OH&P	25%	\$300
		TOTAL SUBCONTRACTED		\$1,500
		GENERAL MARKUPS	50.00%	\$750
12 - Excavate around fire hydrant to provide 2' min clearance. Remove curb stops and provide bollards to protect hydrant		TOTAL		\$3,000

<u>Item Description</u>	<u>Qty.</u>	<u>Unit</u>	<u>\$/Unit</u>	<u>Total</u>
<u>13 - Lower and/or landscape around catchbasin so that the rim matches the surrounding grades</u>				
Remove catch basin riser and adjust rim to match surrounding grades	1	ALLOW	800.00	800
Relandscape around structure	1	ALLOW	500.00	500
		SUBTOTAL		\$1,300
		SUBCONTRACTOR OH&P	25%	\$325
		TOTAL SUBCONTRACTED		\$1,625
		GENERAL MARKUPS	50.00%	\$813
13 - Lower and/or landscape around catchbasin so that the rim matches the surrounding grades		TOTAL		\$3,000

<u>Item Description</u>	<u>Qty.</u>	<u>Unit</u>	<u>\$/Unit</u>	<u>Total</u>
<u>14 - Reconstruct curb adjacent to the parking area, 5'-0" clear required</u>				
Demolish extruded curb	200	LF	8.00	1,600
Reconstruct extruded curb	200	LF	20.00	4,000
		SUBTOTAL		\$5,600
		SUBCONTRACTOR OH&P	25%	\$1,400
		TOTAL SUBCONTRACTED		\$7,000
		GENERAL MARKUPS	50.00%	\$3,500
14 - Reconstruct curb adjacent to the parking area, 5'-0" clear required		TOTAL		\$11,000

<u>Item Description</u>	<u>Qty.</u>	<u>Unit</u>	<u>\$/Unit</u>	<u>Total</u>
<u>15 - Remove and replace concrete at north entrance, stripe as handicapped parking stalls</u>				
Demolish existing concrete	300	SF	6.00	1,800
Place new concrete: 6" crushed surfacing 4" concrete	300	SF	8.00	2,400
Stripe ADA stalls and place appropriate signage	2	EA	250.00	500
		SUBTOTAL		\$4,700
		SUBCONTRACTOR OH&P	25%	\$1,175
		TOTAL SUBCONTRACTED		\$5,875
		GENERAL MARKUPS	50.00%	\$2,938
15 - Remove and replace concrete at north entrance, stripe as handicapped parking stalls		TOTAL		\$9,000

SITE / CIVIL SCOPE ITEMS	SUBTOTAL	\$100,000
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H. ASSET MANAGEMENT DATA

Seattle Parks & Recreation

Daybreak Star Indian Cultural Center

Facility Components

Systems	Original System Date	Last Major System Renewal	Condition Scores (Low 0 to High 5)	Remaining Useful Life - Years	Surveyor & Date	Comments
A. Substructure			5.0			
Foundations						
Conc. Foundation Walls	1977		5	40	4/5/2017	The ground floor is conventional concrete slab on grade.
Framing						
Roof Construction	1977		3	10	4/5/2017	The roof is wood construction with large glulam beams. Some are showing signs of rot where the rainwater runs down them.
B. Shell			3.3			
Superstructure						
Exterior Closure						
Exterior Walls - Concrete	1977		5	40	4/5/2017	Cast-in-place concrete
Exterior Walls - Wood	1977		1	5	4/5/2017	Rough-sawn plywood, T&G installed horizontally (holds water).
Exterior Windows/Clerestory Original	1977		1	5	4/5/2017	Where the original windows/clerestories still remain, they in poor condition.
Exterior Windows/Clerestory New	1977	2014-17	5	20	4/5/2017	About 25% of the windows/clerestories have been replaced with new insulated type.
Exterior Doors	1977		3	10 to 15	4/5/2017	The doors themselves are in fair condition, but the hardware should be maintained or replaced.
Roofing						
Roof Coverings	1977	2014	5	20	4/5/2017	The slopes roofs are wood shingles. The flat roof area appears to be a modified bitumen roof

Seattle Parks & Recreation

Daybreak Star Indian Cultural Center

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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C. Interiors

3.0

Interior Construction

Interior Doors

1977

3

5

4/5/2017

The original doors and frames throughout are wood with wood frames. Some of the wood veneers have chipped/delaminated. Hardware is old and non-compliant

Interior Finishes

Wall Finishes

1977

4

10

4/5/2017

Walls are painted drywall. There are also large exposed timbers, and wood paneling

Floor Finishes - Wood

1977

2

5

4/5/2017

The common areas have a wood parquet floor. They are heavily worn and patched areas can be observed. Some areas are in need of repair.

Floor Finishes - Vinyl

1977

2

5

4/5/2017

Vinyl is used in office areas and the kitchen. Seems need to be re-welded and much should be replaced.

Ceiling Finishes

1977

4

5 to 10

4/5/2017

Drywall ceilings are in good condition. ACT dropped ceilings need some tile replacement.

D. Services

2.6

Plumbing

Plumbing Fixtures

1977

3

5

4/5/2017

Plumbing fixtures are functional, but should be updated to meet ADA and current standards for water efficiency and lead content.

Domestic Water Distribution

1977

3

20

4/5/2017

Domestic water piping is in good condition and has adequate capacity. Testing for lead content is recommended since installation pre-dates current standards.

Sanitary Waste

1977

4

40

4/5/2017

Sanitary waste lines are original construction cast iron and have adequate capacity.

Facility Components	Original System Date	Last Major System Renewal	Condition Scores (Low 0 to High 5)	Remaining Useful Life - Years	Surveyor & Date	Comments
Systems						
Natural Gas	-	-	0	-	4/5/2017	The site does not currently have natural gas service. A tank based liquid propane system would be the most cost effective way to add service if required.
HVAC						
Heating and Ventilation H&V UNIT NO.1, 2,3,4	1977	2013	2	10 to 15	4/5/2017	Four (4) electrically powered draw thru heating and ventilation H&V units with electric resistance heaters appear to be original (c. 1997) installed. Each H&V unit includes a supply fan, electric resistance heater, FPR-7 (MERV-8+) filter bank and a mixing box that mixes return air with outdoor air that provides ventilation. There are four (4) steps of control for each electrical resistance heater. All the fan motor appear to have been replaced recently (c. 2013) with new ABB Variable Frequency Drive (VFD). It is recommended that Energy Efficiency Measure (EEM) be considered to reduce the cost of operation.
AC-1	1977		2	1 to 5	4/5/2017	This system is water cooled using a direct connection to domestic water, a code violation today. The system uses refrigerant R-22 and the unit appears to be original (c. 1977). This unit appears to be seldom put into operation given the change in use of the space. Consider either removing or abandoning (decommissioning) this unit.
Make-up Air Unit MAU-1	c. 1996		4	1 to 5	4/5/2017	One Make-up Air Unit (MAU) is mounted on roof to serve the commercial kitchen hoods. Ventilation is provided via the make-up air unit, which is 100% outside air. There are two commercial kitchen hoods. The exhaust of both kitchen hoods is via an exhaust fan on roof. The make-up air unit and hood exhaust fan for kitchen have also reached their end of life, replacement of the kitchen ventilation system is recommended.
Exhaust Fan No.2	c. 1996		4	1 to 5	4/5/2017	Each unit ventilator (1800 CFM) includes supply fan, a 36KW electric resistance heater filters and an outside air base connection for outside air intake. The unit ventilators appear to be original and operate with a noise level exceeding recommended levels for the served spaces and have reached their end of life. Either replacing them or implementing Energy Efficiency Measure (EEM).
Unit Ventilators	1977		2	1 to 5	4/5/2017	
Exhaust Fan No.1	1977		2	1 to 5	4/5/2017	This exhaust fan is used for exhaust of men's and women's restroom.

Facility Components	Original System Date	Last Major System Renewal	Condition Scores (Low 0 to High 5)	Remaining Useful Life - Years	Surveyor & Date	Comments
Systems						
Electrical						
Electrical Distribution	1977		2	10	4/5/2017	Main and sub panels located in Mechanical room #109, the panelboards are in fairly condition, we expect it will last 10 years.
Lighting Systems	1977	1989	3	20	4/5/2017	Lighting fixtures are not all original installed, some of them have been upgraded after 1989, date can't be identified, we estimate the fixtures can last 20 years, the existing custom lighting control system is old, and maybe fail in 10 years.
Control panel	1977		2	10	4/5/2017	
Fire Alarm	1977		2	10	4/5/2017	Fire alarm appears original to the facility and is tested yearly, it appears to be in fair working condition, but since the model was discontinued by manufacturer, and it is at least 25 years old system, it may fail within 10 years short term.
Telephone & Data	1977		3	20	4/5/2017	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	1977		3	10	4/5/2017	Sprinkler heads are nearing the end of their expected life span and should be tested and replaced as necessary
End Of Summary						

APPENDIX I: ADA DOJ REPORT



Transition Plan Database Facilities

Entity Name
Department/Division
City, State

Record Number	Facility	Facility Description	Area	Room/Space	Element	Element Description	Attribute	On-Site Value	Compliant	Finding	Priority	Recommendation	Recomm Value	Citation	Mitigation Difficulty
12142	Discovery Park	Daybreak Cultural Center	Exterior	Parking Facility	Parking Space	1	Access aisle provided?	No	NO	None provided	1-Entry	Provide an access aisle adjacent to the accessible parking space.	60" minimum	502	3-Low
12143	Discovery Park	Daybreak Cultural Center	Exterior	Parking Facility	Parking Space	1	Dim, width	96	NO	Too narrow	1-Entry	Restripe parking space. Van spaces shall be permitted to be 96" wide minimum where the access aisle is 96" minimum.	132" minimum	502	3-Low
12144	Discovery Park	Daybreak Cultural Center	Exterior	Parking Facility	Parking Space	1	ISA symbol provided on sign?	No	NO		1-Entry			502	
12145	Discovery Park	Daybreak Cultural Center	Exterior	Parking Facility	Parking Space	1	Sign provided?	No	NO	None provided	1-Entry	Install sign with ISA symbol.	60" minimum AFF	502	3-Low
12146	Discovery Park	Daybreak Cultural Center	Exterior	Parking Facility	Parking Space	1	Slope, running	3.6	NO	Excessive slope.	1-Entry	Regrade/replace paved surface.	2.08" maximum	502	1-High
12149	Discovery Park	Daybreak Cultural Center	Exterior	Parking Facility	Parking Space	1	Van sign provided?	No	NO	Van signage is not provided	1-Entry	Install van accessible signage.		502	3-Low
12151	Discovery Park	Daybreak Cultural Center	Exterior	Parking Facility	Access Aisle	1&2	Slope, running	3.2	NO	Excessive slope.	1-Entry	Regrade access aisle or relocate accessible parking to a level area of the parking facility.	Recommended Value 2.08% maximum	502.3	1-High
12152	Discovery Park	Daybreak Cultural Center	Exterior	Parking Facility	Access Aisle	1&2	Surface marking?	No	NO	No surface marking is provided.	1-Entry	Paint the parking lot.		502.3	3-Low
12154	Discovery Park	Daybreak Cultural Center	Exterior	Parking Facility	Parking Space	2	Sign provided?	No	NO	None provided	1-Entry	Install sign with ISA symbol.	60" minimum AFF	502	3-Low
12155	Discovery Park	Daybreak Cultural Center	Exterior	Parking Facility	Parking Space	2	Slope, running	4.6	NO	Excessive slope.	1-Entry	Regrade/replace paved surface.	2.08" maximum	502	1-High

