ARCHITECTURAL BUILDING ASSESSMENT

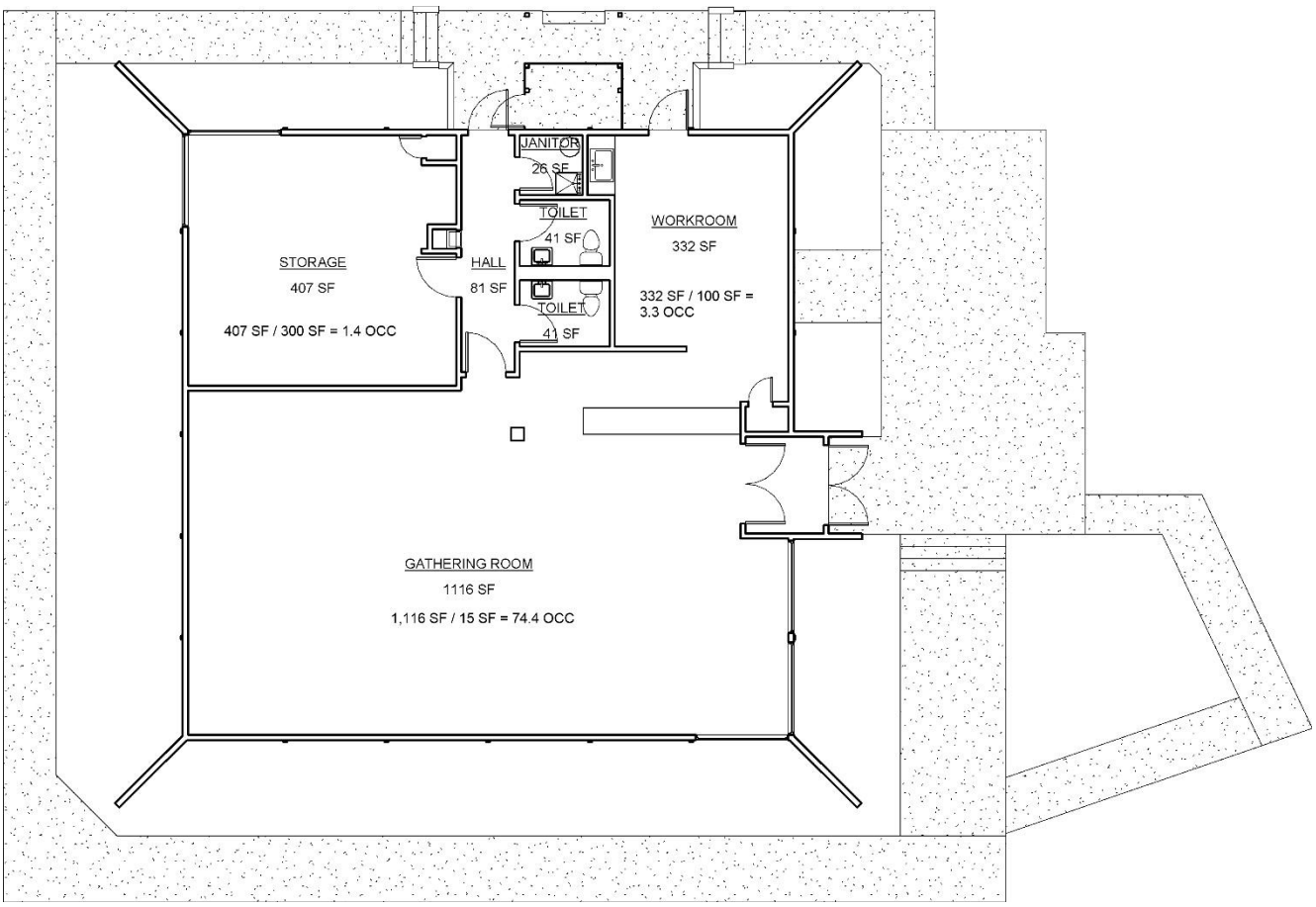
LIFE SAFETY

OCCUPANCY LOAD / USE OF ROOMS

Current Condition: The building is broken up into 3 main spaces, with 2 toilet rooms and a janitor closet. The 3 main spaces function as an assembly room, work room and storage room. The assembly room is 1,116 SF, the work room is 332 SF, and the storage room is 407 SF. Overall building is 2,148 SF.

Code Requirement: An assembly space such as this will be calculated at 1 person per 15 square feet, the work room would be 1 person per 100 square feet, and the storage room is 1 person per 300 square feet. This results in an overall occupant load of 80 people.

Solution/Recommendation: N/A



EXITING (NUMBER AND DISTANCE)

Current Condition: The building has 3 exterior exit doors. One exit in the assembly room, one exit in the hallway, and one exit in the workroom.

The maximum travel distance required to reach an exit is 46'.

The diagonal dimension of the building is 64'-1". The maximum separation of exits is 33'-0".
The diagonal dimension of the assembly room is 52'-2". The distance between the entrance door and the door to the hallway is 21'-2".

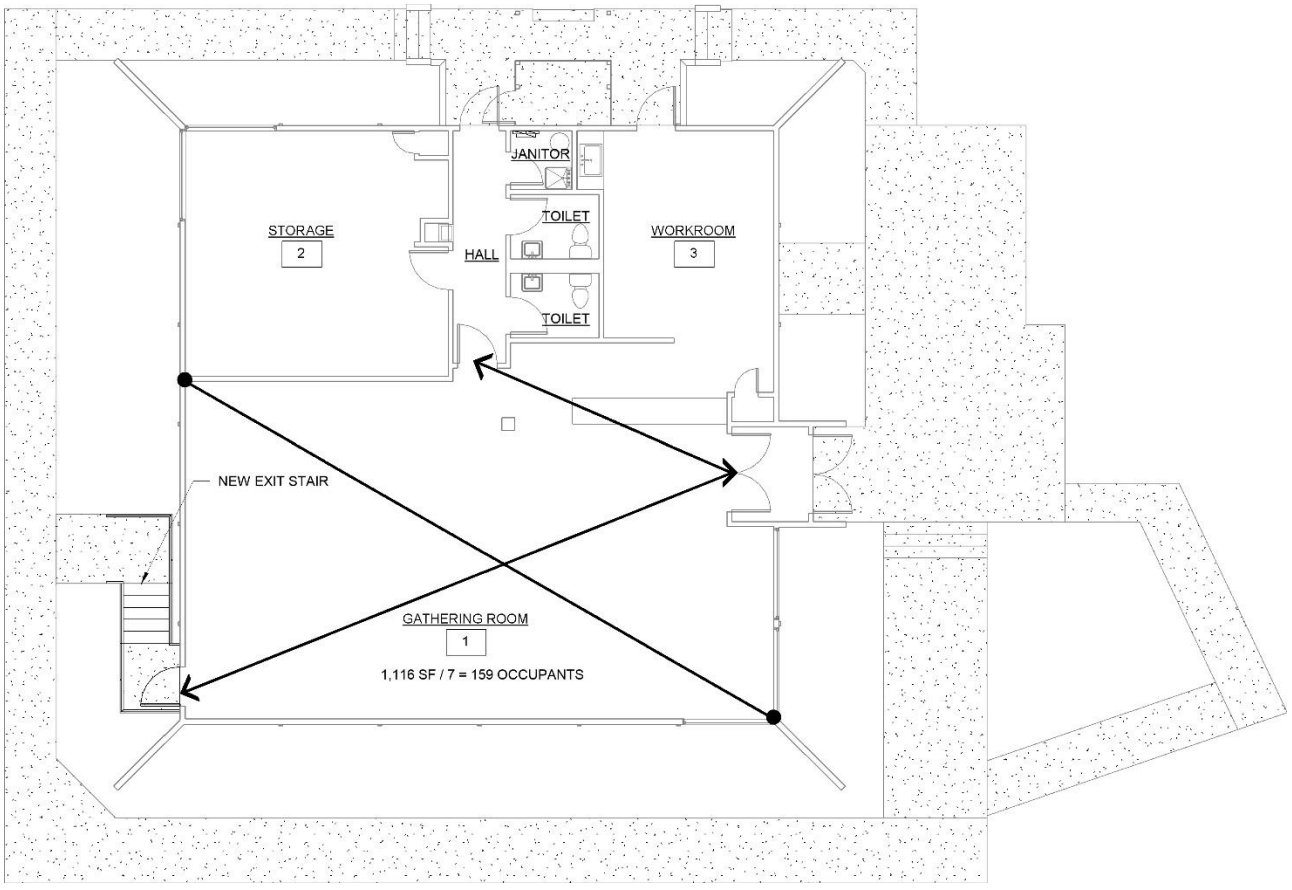
Code Requirement:
Number of exits- For any building or space with an occupant load 50 or greater, two exits are required. (IBC 1006.2.1)

Maximum distance traveled- 75 feet

Exit separation- Where two or more exits are required, exits must be separated by at least ½ the diagonal dimension of the building/space. (IBC 1007.1.1)

Solution/Recommendation:
Building meets code for number of exits and travel distance.

However, the separation of exits for the assembly room does not meet code. The likely solution is to add a new exit on the west side of the room that goes directly outside. A staircase or ramp would be provided to the sidewalk.

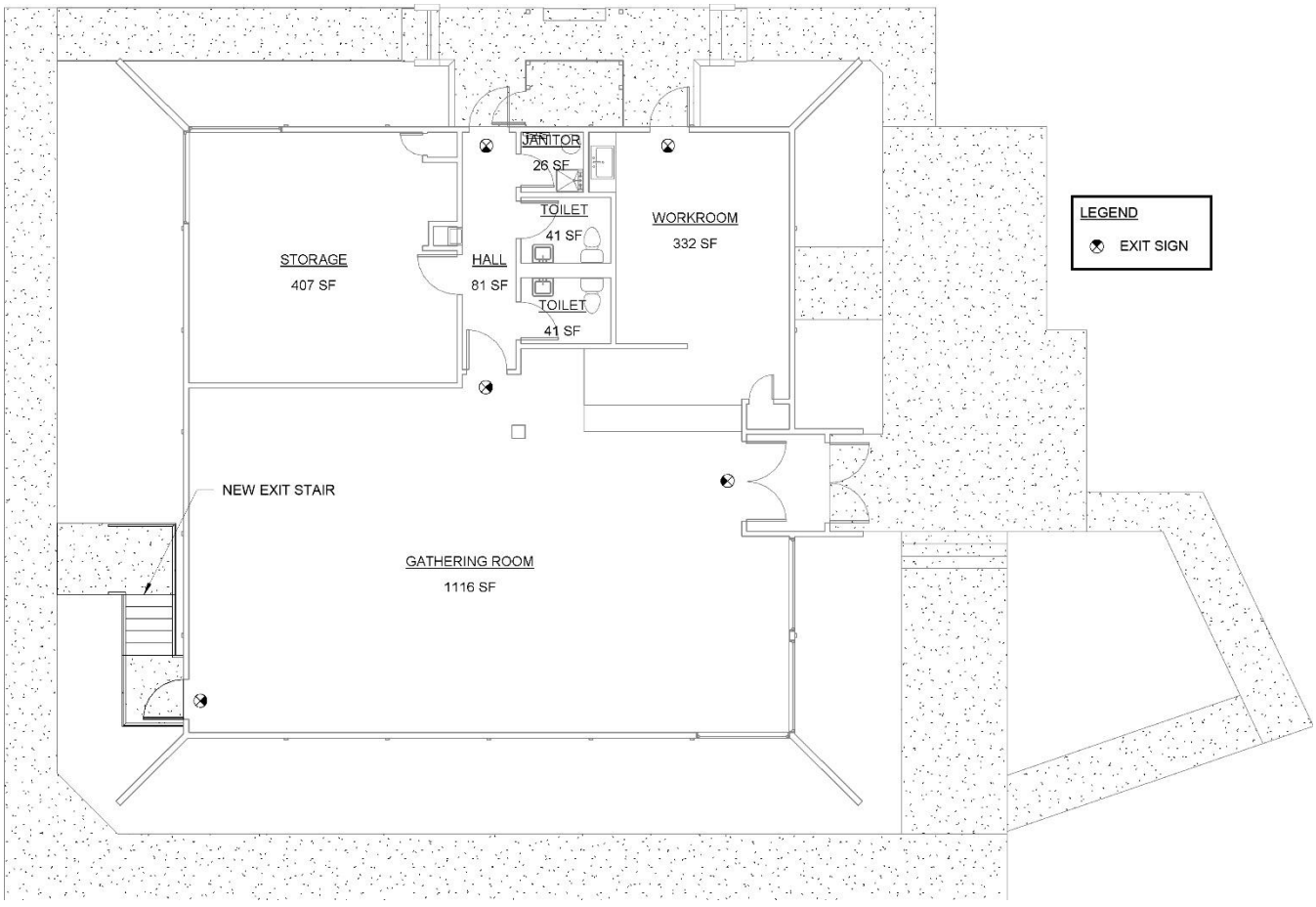


EXIT SIGNS

Current Condition: There are no exit signs located in the building.

Code Requirement: Exit signs need to be provided at exits, hallways and in large rooms. (IBC 1013.1)

Solution/Recommendation: Provide exits signs at locations shown on below floor plan. An exit sign should also be provided above any new exit in the assembly room.



LOCATION OF FIRE EXTINGUISHERS

Current Condition: There are 2 fire extinguishers in the building. One near the back door in the hallway, and one on the column in the assembly room.

Code Requirement: The building is required to have portable fire extinguishers and the maximum distance of travel allowed to an extinguisher is 75'. An extinguisher must be within 30' of commercial cooking equipment. (IBC 906)

Solution/Recommendation: Leave existing extinguishers in current/similar locations. If a kitchen is constructed, add a new extinguisher. However, the fire extinguishers should be recessed into the walls so that they do not protrude into walkways, which does not meet ADA.

HALLWAY WIDTH

Current Condition: The hallway is currently 3'-11 ¾" wide. There is a door located at each end.

Code Requirement: Code requires hallways to be 3'-8" Wide

Solution/Recommendation: Hallway currently meets code for hallway clearances, however see DOOR – CLEARANCES section for door clearance requirements that will affect the hallway width.

EMERGENCY LIGHTS

Current Condition: There is no emergency lighting in the building.

Code Requirement: Per section 1008.3.1 of the IBC "In the event of power supply failure in rooms and spaces that require two or more means of egress, an emergency system shall automatically illuminate all of the following areas: 1. Aisles, 2. Corridors, 3. Exit access stairways and ramps."

Solution/Recommendation: Install new exit signs with built in emergency lights. Emergency lights should also be installed on the exterior side of exit doors.

EXTERIOR LIGHTING AT EXITS

Current Condition: The building currently has recessed cans in the soffits above each of the exterior doors.

Code Requirement: Per section 1008.2.1 of the IBC "The means of egress illumination level shall be not less than 1 footcandle at the walking surface."

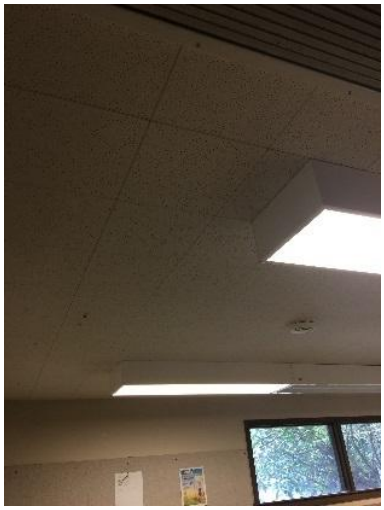
Solution/Recommendation: The building was not analyzed at night so it is not known if the existing lighting is adequate. This should be verified.

SMOKE DETECTORS

Current Condition: There is one smoke detector located in the workroom. Likely because this is where popcorn is cooked.

Code Requirement: Per 15.06.030 of the Snoqualmie Municipal Code – buildings under 3,000 SF do not require Smoke Detectors. It was determined from a phone conversation with the Fire Marshal that the City does not require smoke detectors for this type and size of facility.

Solution/Recommendation: No action required.



FIRE ALARM

Current Condition: There is no fire alarm.

Code Requirement: Per Chapter 9 of the IBC, Buildings with an A occupancy of less than 300 occupants and a fire area smaller than 12,000 SF do not require a fire alarm system. It was determined from a phone conversation with the Fire Marshal that the City does not require a fire alarm for this type and size of facility.

Solution/Recommendation: No action required.

SPRINKLERS

Current Condition: There are no sprinklers.

Code Requirement: Per Chapter 9 of the IBC, Buildings with an A occupancy of less than 300 occupants and a fire area smaller than 12,000 SF do not require an automatic sprinkler system. It was determined from a phone conversation with the Fire Marshal that the City does not require a fire sprinklers for this type and size of facility.

Solution/Recommendation: No action required.

DOOR HARDWARE

Current Condition: The double doors at the main entrance have deadbolt locks.

The back exits are operated by knobs.

Code Requirement: Per section 1010.1.9.3 of the IBC "Locks and latches shall be permitted to prevent operation of doors where any of the following exist: 2. In buildings in occupancy group A having an occupant load of 300 or less...the main door or doors are permitted to be equipped with key-operated locking devices from the egress side provided: 2.1 The locking device is readily distinguishable as locked. 2.2. A readily visible durable sign is posted on the egress side on or adjacent to the door stating: THIS DOOR TO REMAIN UNLOCKED WHEN THE SPACE IS OCCUPIED."

Per section 1010.1.9.1 of the IBC "Door handles, pulls, latches, locks and other operating devices on doors required to be accessible by Chapter 11 shall not require tight grasping, tight pinching or twisting of the wrist to operate."

Solution/Recommendation: Add sign at entrance door stating that the door is to remain unlocked when the space is occupied. Also install locking devices that are readily distinguishable as locked.

Switch door knobs out for levers.

ADA

ENTRANCE STAIRS

Current Condition: There is a set of concrete stairs leading from the sidewalk to the front door. There are 4 steps from the grade level up to the patio/front door. The steps are 5 ¾" high x 14" deep.

Code Requirement: Per section 504 of ICC A117.1-2017 "504.2 All steps on a flight of stairs shall have uniform riser heights and uniform tread depth. Risers shall be 4" min. and 7" max. in height. Treads shall be 11" min. in depth.

Solution/Recommendation: No changes required to the current steps. If patio is raised, stairs will need to be rebuilt. (See Doors - Hardware - Thresholds)

BACK STAIRS

Current Condition: There are 2 sets of concrete stairs leading from the exterior exit doors down to the walkways. These stairs have 2 steps each. Each step is 7" and 1'-0" deep. On one tread, the concrete has broken where the railing was attached.

Code Requirement: Per section 504 of ICC A117.1-2017 "504.2 All steps on a flight of stairs shall have uniform riser heights and uniform tread depth. Risers shall be 4" min. and 7" max. I height. Treads shall be 11" min. in depth.

Solution/Recommendation: No change to the stairs is required other than patching the broken concrete.

RAILINGS

Current Condition: Railing at all three stairs are in poor condition. One of the railings on the stairs by the hallway exit has broken off of the concrete stairs. None of the railings meet code. There is no railing provided at the ramp.

Code Requirement: Per section 505 of ICC A117.1-2017 "505.2: Handrails shall be provided on both sides of stairs and ramps."

Solution/Recommendation: Install new railing and handrails on each side of front stairs and ramp that meet code.

RAMP

Current Condition: The ramp leading up to the front entrance is 45'-3" in length and rises 26 ½" inches. There are no railings along the ramp and no landings at the directional changes. The tree in the middle of the ramp has moved the concrete and creating uneven transitions between concrete sections.

Code Requirement: See railing requirements above.
Per section 405 of the ICC A117.1-2017:

- Slopes shall be greater than 1:20 and not steeper than 1:12.
- Max rise without a landing shall be 30".
- Landings shall be provided at directional changes and be 60" in length.

Solution/Recommendation: Current ramp does not conform to ADA standards and needs to be rebuilt. While the existing location could be reused to create an ADA compliant ramp, it would be beneficial to construct a much shorter ramp closer to the bridge in the City Hall plaza. This would also greatly reduce the distance from the ADA parking stalls to the main entrance. Additionally, rebuilding the existing ramp to code could impact the root system of the adjacent tree.

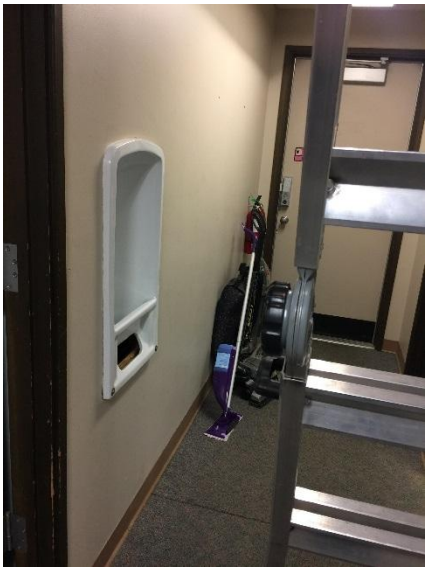
DRINKING FOUNTAIN

Current Condition: There is currently only a single drinking fountain and it does not allow for a front approach by a wheelchair.

Code Requirement: Per section 602 of the ICC A117.1-2017:

- A drinking fountain needs to be provided for standing individuals with a minimum spout height of 38".
- A drinking fountain needs to be provided of wheel chairs with a front approach (knee space under fountain) with a maximum spout height of 36".

Solution/Recommendation: Provide an alcove for a new dual height drinking fountain.

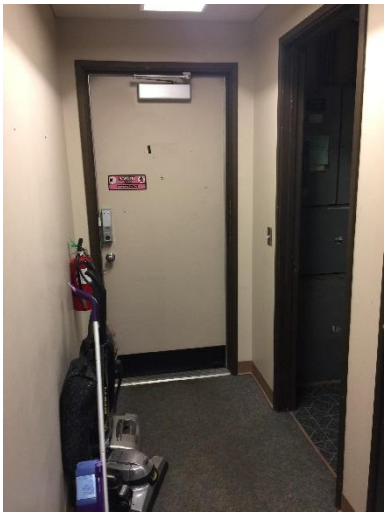


DOORS - WIDTHS

Current Condition: All doors are 3'-0" or 2"-10" except the janitor's closet which is 2'-6".

Code Requirement: Per section 1010.1.1 of the IBC "The required capacity of each door opening shall be sufficient for the occupant load thereof and shall provide a minimum clear width of 32 inches."

Solution/Recommendation: Often building officials will allow unoccupied spaces like janitor's closets to have doors smaller than the minimum width. The space may be able to accommodate a 2'-10" door, but the utility sink would be impacted.



DOORS - CLEARANCES

Current Condition: The hallway does not provide the required clearances for the exit door and the door between the hallway and the assembly room.

The required clearance between the main entrance and the vestibule doors is not provided.

Code Requirement: Per section 404 of the ICC A117.1-2017:

- 18" must be provided on the pull side of a door between the door and the adjacent wall.
- 12" must be provided on the push side of a door between the door and the adjacent wall.
- For the current arrangement of the main entrance and vestibule doors, 48" minimum must be provided between the fully opened vestibule door and the closed main entrance door.

Solution/Recommendation:

- Hall to Exit-Enlarge the hallway by taking space out of the storage room.
- Hall to assembly- enlarge hallway towards storage room and relocate door, or remove door.
- Main entrance- Relocate vestibule wall 12" towards the assembly room.

DOORS – FLAT LANDINGS IN FRONT

Current Condition: All doors have a flat landing in front of them except for the main entrance which has a slope greater than 2% leading to the patio. Paving drops 8" over a 5'-6" span. If the 2" threshold is added, this increases to 10".

Code Requirement: Per section 405 of the ICC A117.1-2017:

- Landings shall have a slope of not steeper than 1:48
- Landing need to have a depth of at least 60" for front approach from the exterior.

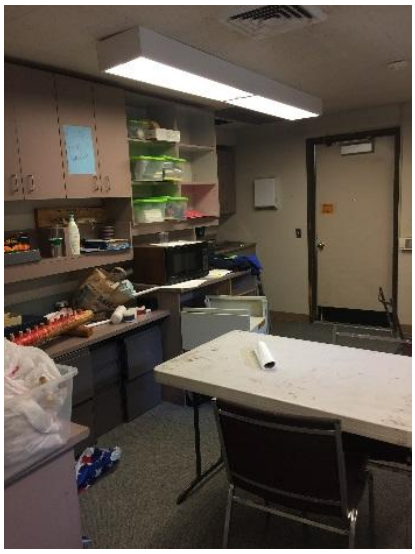
Solution/Recommendation: Raise the concrete pad on the exterior side of the door to bring the landing up to door level. Due to the adjacent stairs, this will likely result in a large portion of the patio being raised.

DOORS - HARDWARE - OPERATION

Current Condition: All interior and single exit doors have knobs that require twisting to open. The main entrance doors have a deadbolt lock and handles to push/pull when unlocked.

Code Requirement: Per section 1010.1.9.1 of the IBC "Door handles, pulls, latches, locks and other operating devices on doors required to be accessible by Chapter 11 shall not require tight grasping, tight pinching or twisting of the wrist to operate."

Solution/Recommendation: Provide new lever handles, automatic doors or panic hardware at doors.



DOORS - HARDWARE - THRESHOLDS

Current Condition: All door thresholds appear to be ADA compliant except main entrance which is 2" high.

Code Requirement: Per section 303 of the ICC A117.1-2017 "Changes in level of ¼" max. in height shall be permitted to be vertical. Changes in level greater than ¼" in height and not more than ½" max. in height shall be beveled with a slope not steeper than 1:2."

Solution/Recommendation: Raise the patio elevation to bring main entrance into code compliance, or create a ramp in the patio.

DOORS - HARDWARE - CLOSING SPEEDS

Current Condition: All door closers close the doors in faster than 5 seconds.

Code Requirment: Per section 404.2.7.1 of the ICC A117.1-2017 "Door and gate closers shall be adjusted so that from an open position of 90 degrees, the time required to move the door or gate to an open positon of 12 degrees shall be 5 seconds minimum."

Solution/Recommendation: Adjust automatic closer speeds or provide new closers.

DOORS – ADA BUTTONS

Current Condition: The main entrance doors have ADA push buttons that are not currently functional.

Code Requirement: Buttons are not required by code.

Solution/Recommendation: Although not required, they should be fixed or removed as to not confuse people.

LIGHT SWITH AND OUTLET HEIGHTS

Current Condition: Power outlets on walls are typically mounted 23" above the finished floor. Light switches are mounted below 48".

Code Requirements: Per section 308 of the ICC A117.1-2017, light switches and outlets shall be located between 15" and 48" above finished floors.

Solution/Recommendation: No action required.

COUNTERS

Current Condition: The front service counter is 39” high and the counter with a sink in the work room is at 38”.

Code Requirement: Per section 902 and 904 of the ICC A117.1-2017:

- Work counters shall have a height between 28" and 34".
- Service counters shall have a 30"/36" minimum width portion of the counter with a maximum height of 36", depending on parallel/front approach.

Solution/Recommendation: Lower existing countertop in work room to be at a max. height of 34”. At the front service counter, provide a new countertop with lower section for ADA access. The rest of the counter could remain higher.

OBJECTS ON WALLS PROJECTING PAST 4”

Current Condition: The fire extinguisher near the back exit door is protruding 5” into the clear access way.

Code Requirement: Per section 307.2 of the ICC A117.1-2017 “Objects with leading edges more than 27 inches and not more than 80 inches above the floor shall protrude 4 inches max. horizontally into a circulation path.

Solution/Recommendation: Install the fire extinguisher to be recessed into the wall.

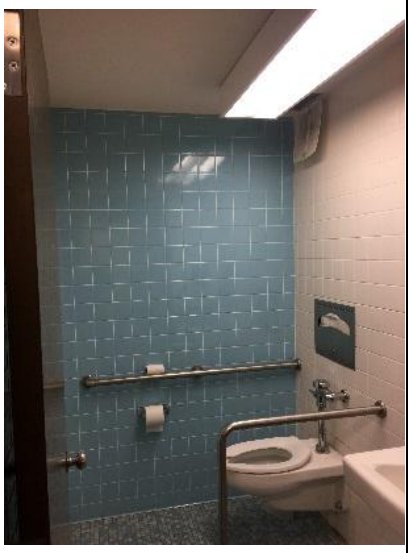
TOILET ROOMS

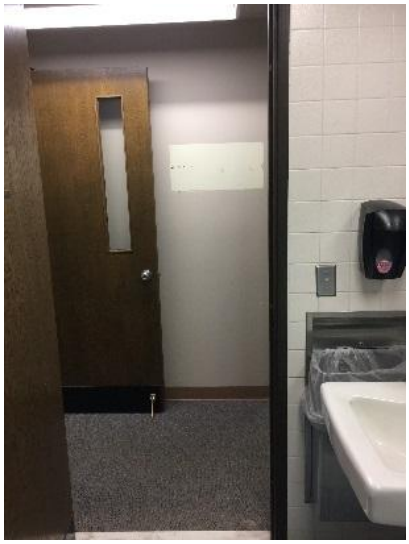
Current Condition/Code Requirements:

- Clearance Around Toilets – there is not the required 60” clearance from the wall adjacent to toilets to the edge of the sinks. Currently at 52” to the sink.
- Sink Height- sinks are mounted at 34 ½”. Should be at a max of 34”.
- Mirror height- mounted at 52” inches to bottom of mirror. Should be at a max of 40” to bottom of mirror.
- Faucet Controls (no grip required) – The sinks currently have lever handles that appear to be ADA compliant.
- Distance of toilet from wall – 19” to center. Requirement is 16-18".
- Toilet height – 19” to top edge. Requirement is 17-19".
- Grab bars – mounted at 33” high. Requirement is 33-36". Missing required vertical grab bar and grab bar behind toilet.
- Accessories heights – soap and paper towel dispensers are mounted too high.
- Hot water and waste pipes are insulated and appear to meet code.

Solution/Recommendation: The current toilet rooms are too small and cannot be altered to meet code without relocating walls. A complete rebuild of the toilet rooms is needed. It appears the sinks, toilets, toilet paper holders, waste receptacles, sanitary napkin receptacle and soap dispensers could be reused, if desired.

Enlarging the toilet rooms will greatly impact the other spaces. Widening the rooms will eliminate the janitor closet or move into the assembly room. Lengthening the rooms will move the east wall roughly 12" into the work room.





SIGNAGE

Current Condition:

- Tactile exit sign – none
- Tactile toilet room signs – none
- Sign at non-accessible entrances pointing to nearest accessible entrance – none
- Accessible entrance sign at accessible entrance – none (however, there is no accessible entrance currently)

Code Requirement: Per IBC 1011.3, section 703 of the ICC A117.1-2017 and section 216 of the ADA Standards for Accessible Design:

- Tactile exit signs, toilet room signs, and directional signs are required.

Solution/Recommendation: Provide tactile exit signs and tactile toilet room signs. On the exterior back stairs/doors, provide signs pointing towards accessible entrance at the front. Once main entrance become accessible, provide accessible entrance sign.

PARKING - ADA

Current Condition:

Number of stalls in parking lot– 30
Number of ADA stalls – 2, with an 8' aisle

The ADA parking stalls appear to have been built w/ the construction of City Hall and appear to meet ADA.

Code Requirement: 26-50 spaces require 2 ADA parking spaces, 1 of which must be Van accessible. (ADA Standards 208.2)

Solution/Recommendation: No action necessary.

GENERAL

FLOODPLAIN

Current Condition: The building is in the river's floodplain and does not have any floodproofing construction.

Solution/Recommendation: Depending on the level of work included in a remodel, floodproofing construction could be required by FEMA.

TOILET COUNT

Current Condition: There is one, single use female toilet room and one, single use male toilet room. Our calculations show an occupant load of 80 occupants.

Code Requirement: For libraries or assembly spaces, one toilet is required for every 125 males and every 65 females. This mean 2 total toilets are required.

Solution/Recommendation: No action required.

PARKING

Current Condition: There are 30 stalls in the parking lot shared with City Hall and some street parking available.

While on site, the parking lot was full and many of the street parking stalls were being utilized.

Code Requirement: 1/300 G.S.F.
-City Hall is 15,460 SF (Gross) / 300 SF G.S.F. = 51.53 required spaces.
-Library is 2,148 SF (Gross)/300 G.S.F. = 7.16 required spaces.
This totals 59 spaces, and therefore, would require 3 ADA parking spaces. It is not known how on-street parking was calculated into the required parking for the facilities.

Solution/Recommendation: It appears additional parking is needed, especially if the Old Library is remodeled and brings more vehicles to the site.

WOOD SIDING

Current Condition: The vertical and horizontal wood siding is in poor condition in locations exposed to the elements. Construction has severely deteriorated at the wing walls.

Solution/Recommendation: At a minimum, damaged areas of siding should be replaced. It is recommended that all wood siding be removed so that the extent of water intrusion and rot can be addressed and proper flashing installed.

AGGREGATE PANEL SIDING

Current Condition: Panels appear to be in good condition and there are no signs of water intrusion.

Solution/Recommendation: Panel can be left in place. However, the panels date the building and replacing them will give a more current appearance to the building.

FLASHING

Current Condition: The top of the exterior walls have metal flashing, but flashing is not provided at the bottom of the wing walls where the siding transitions from vertical to horizontal. This likely has created/added to the deterioration of the framing in the wing walls.

Solution/Recommendation: Metal flashing should be provided at material transitions that are exposed to the elements.

ROOFING

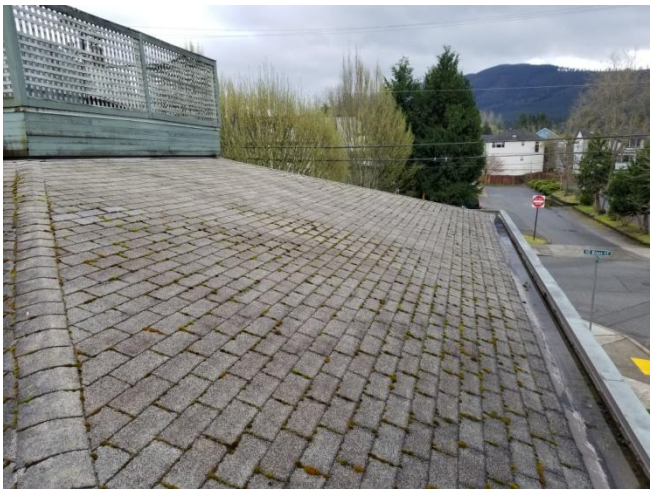
Current Condition: The main roof is asphalt shingles that look to be original. During sampling, they were easily torn manually.

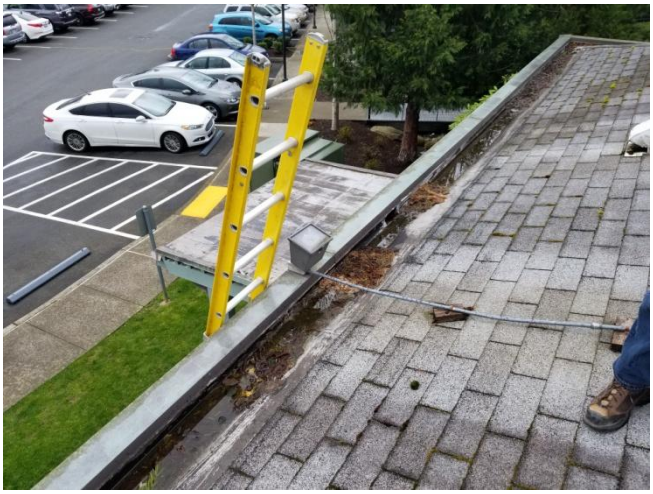
The HVAC roof, the gutters around the main roof and the shed roof by the back exits are a mop down product with silver paint on the top.

A few years ago, an inspector looked at the roof and determined there were no leaks at the time.

There is a fair amount of moss growing on the roofing.

Solution/Recommendation: Roofing appears to be at the end of its useful life and should be replaced. At a minimum, it needs to be cleaned.





HVAC PENETRATIONS

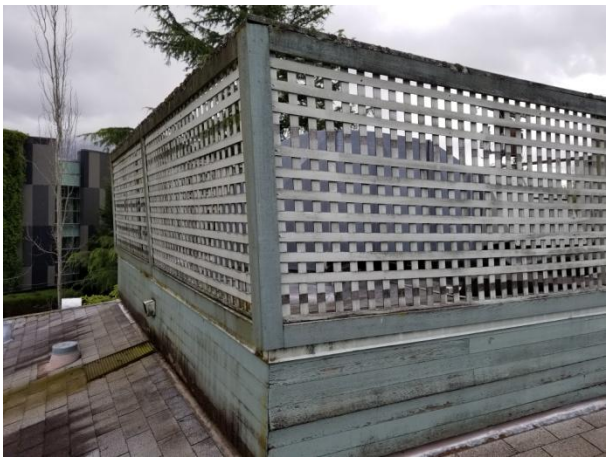
Current Condition: There is water damage on the plywood flooring of the mechanical mezzanine and light can be seen through the opening for the HVAC ducting. It is not known if this water came from condensation in the ducts or if rain water entered the building through the small gaps in the ducting penetration.

Solution/Recommendation: The HVAC ducting penetrations should be resealed and then verify if any new water damage occurs.

HVAC SCREENING

Current Condition: The HVAC screening is in poor condition. It is leaning and is easily shifted by pushing it lightly. It appears the screening could collapse in a strong storm.

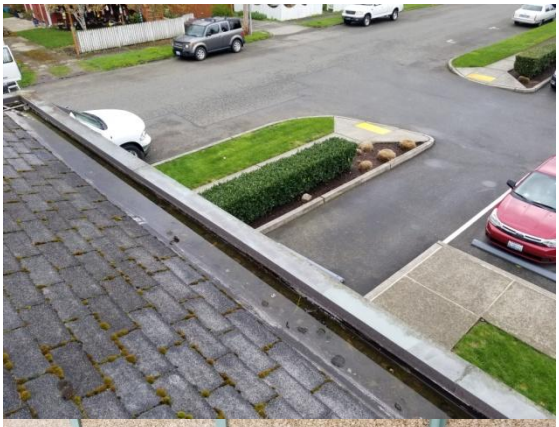
Solution/Recommendation: The screening needs to be immediately replaced or removed.



DOWNSPOUTS

Current Condition: There are 4 downspouts on the main roof, one on each side. They appear to tie into a below grade stormwater system. There are no wire baskets, which has caused all of the openings of the downspouts to clog. Due to the clogs, water leaves the roof via the overflows and has washed away soil below. The down spout on the south side has become detached from the scupper. The shed roof has a downspout that opens directly onto the grass.

Solution/Recommendation: The roof needs to be cleaned and wire baskets installed. The south downspout should be reconnected to the scupper.



PAVING CRACKS & TRIP HAZARDS

Current Condition: There are a number of locations in the paving around the building where cracks and expansion joints have become trip hazards. Some are due to wear and others due to tree roots.

Solution/Recommendation: Paving should be patched to eliminate the gaps and level the paving.

CRAWL SPACE

Current Condition: The crawl space appears to be dry and in fair condition. There are two vents on each side of the building. The vapor barrier on the ground has been shifted in places. The floor insulation is batt and is 9" thick.

Solution/Recommendation: Reposition the vapor barrier.

WALL INSULATION

Current Condition: The exterior wall studs are wood 2x4's with batt insulation. The insulation does not meet current code.

Solution/Recommendation: Upgrades are not required. Providing insulation with a higher R value would improve the energy efficiency of the building, but the payback would not likely be cost efficient.

ROOF INSULATION

Current Condition: Paper faced, batt insulation is installed between the joists that create the roof structure. In a number of locations, the insulation has been damaged and has fallen on top of the ceiling joists. The insulation is 9" thick.

There were signs of mold in the insulation in the exterior soffits.

While the exterior soffits are vented, it does not appear the roof insulation has airspace above it.

Solution/Recommendation: Upgrading to current code R-values for insulation is not required but providing insulation with a higher R value would improve the energy efficiency of the building. If not entirely replaced, the damaged insulation should be fixed. Replacing the batt insulation with spray foam could correct any issues caused by the lack of an airspace above the insulation.

Any material with mold present should be replaced and the mold remediated.

WINDOWS

Current Condition: Existing windows are wood and single paned.

Solution/Recommendation: While upgrades are not required, replacing the windows will improve the energy efficiency of the building.