APPENDIX A

MASTER PLAN & PHASING PLAN

Final Master Plan

Options:

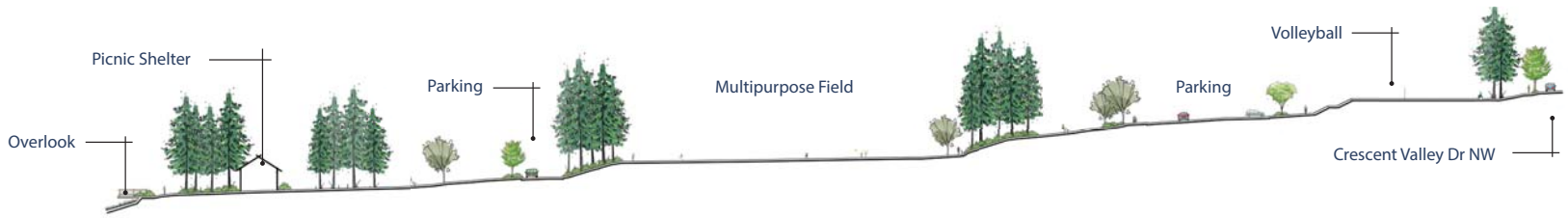
Large Picnic Shelter
(footprint of original building)

Adaptive Reuse of Lodge
(for small community events)

Additional Considerations:

- Minimize disturbance to the existing native garden to the extent feasible.
- Additional right-of-way improvements and potential traffic calming to be determined in final design.
- New vegetation to be designed to support wildlife habitat.

Critical Area Buffers
Picnic Shelter *(proposed)*
Play Area *(expanded)*
Crescent Creek
Primary Trail *(proposed - paved)*
Restroom *(proposed - portable or permanent)*
Nature Trail *(proposed-soft surface)*
Maintenance Garage *(existing)*
nature play
age 5-12
age 2-5; with existing boat
Open Lawn (sloped)
Overlooks *(existing)*
Parking *(proposed - 54 stalls)*
Section *(see below)*
Multipurpose Field (improved, natural grass)
Section *(see below)*
Picnic Shelter *(rennovated)*
Seat Wall
Restroom *(rennovated per separate city project)*
Open Lawn *(existing)*
See Options
Native Forest *(existing and proposed)*
Retaining Wall
Pump Station *(separate city project)*
Pedestrian Crossing *(proposed)*
Trees *(proposed)*
Basketball *(existing)*
Native Garden *(existing)*
Vernhardson St
Historic Entry Marker *(existing)*
Parking *(existing - 29 stalls)*
Tennis / Pickleball *(existing)*
Volleyball *(expanded)*
On-Street Parking *(proposed - 7 stalls)*
Crescent Valley Dr NW



SITE SECTION

Preliminary Phasing & Construction Budget

PHASE 1: Upper Terrace

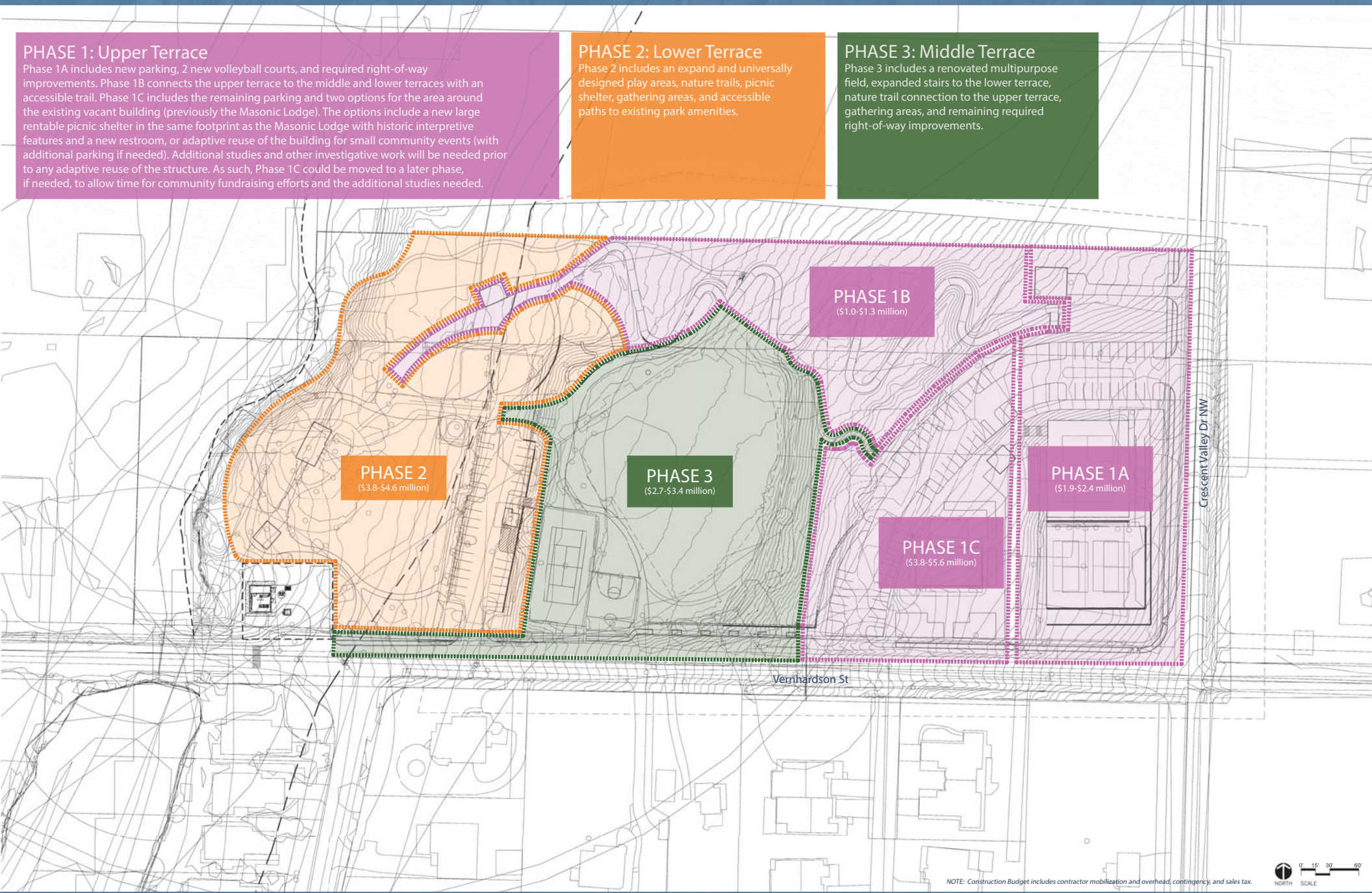
Phase 1A includes new parking, 2 new volleyball courts, and required right-of-way improvements. Phase 1B connects the upper terrace to the middle and lower terraces with an accessible trail. Phase 1C includes the remaining parking and two options for the area around the existing vacant building (previously the Masonic Lodge). The options include a new large rentable picnic shelter in the same footprint as the Masonic Lodge with historic interpretive features and a new restroom, or adaptive reuse of the building for small community events (with additional parking if needed). Additional studies and other investigative work will be needed prior to any adaptive reuse of the structure. As such, Phase 1C could be moved to a later phase, if needed, to allow time for community fundraising efforts and the additional studies needed.

PHASE 2: Lower Terrace

Phase 2 includes an expand and universally designed play areas, nature trails, picnic shelter, gathering areas, and accessible paths to existing park amenities.

PHASE 3: Middle Terrace

Phase 3 includes a renovated multipurpose field, expanded stairs to the lower terrace, nature trail connection to the upper terrace, gathering areas, and remaining required right-of-way improvements.



NOTE: Construction Budget includes contractor mobilization and overhead, contingency, and sales tax.

APPENDIX B

MASTER PLAN TIMELINE

City of Gig Harbor
Crescent Creek Park Master Plan Timeline

2017 – City purchased land adjacent to Crescent Creek Park, originally called City Park, to incorporate the vacant land and crumbling structure into an expanded and upgraded park space.

2019 – City receives a complaint from the U.S. Department of Justice regarding lack of ADA access at the park.

Aug. 3, 2022 – Parks Commission, "Crescent Creek Master Plan Update"
Discussion: Public Works Director Jeff Langhelm reported that the city is working on a contract for consultant services to begin the Crescent Creek Master Plan.

Nov. 14, 2022 – City Council Meeting, "Professional Services Contract with HBB Landscape Architects for the Crescent Creek Park Master Plan"
Business: Public Works Director Jeff Langhelm introduced the agreement and recommended that Council approve the agreement with the optional addition of track 11.
Motion to approve and authorize the mayor to execute Professional Services Contract Amendment #2 with BCRA to include optional track 11 (Barber/Woock). Unanimously approved.

Dec. 1, 2022 – Study session, "Joint Meeting with Parks Commission"
Discussion: Parks Commission 2023-24 Work Plan. **"**Crescent Creek Park – Master Plan and Phase 1A Conceptual Design, and Construction," is listed fourth on parks development goals for 2023-24. Parks Commission Chair Ben Coronado also addressed council and answered questions.

Feb. 1, 2023 – Parks Commission, "Crescent Creek Park Master Plan"
Discussion: Parks Manager Jennifer Haro reviewed the upcoming master planning process. Louise Tieman was selected as the Parks Commission's representative on the community advisory committee.

Feb. 28, 2023 – HBB Landscape Architecture and architectural and engineer sub-consultants Rolluda Architects building condition assessments.
Recommendations: Hazardous Building Materials are suspected. The building has been modified extensively, with the removal of the 2nd story of the original schoolhouse, the doubling of the building's footprint, the infilling of the main floor windows, the replacement of siding with vinyl siding, and the replacement of the roofing with standing seam metal roofing. Because there is little remaining of the original building fabric, the report concluded the building would not qualify for historic status. These reports were presented to council on May 11, 2023.

March 21, 2023 – Park community advisory committee

Community Advisory Committee shared what they value about the park and what they would like to see changed.

March 31, 2023 – PND Engineers building renovation assessment.
Construction cost estimate based preliminary structural plans from architectural design. The foundation reinforcement and the building connection to the foundation are not known. No geotechnical investigation has been conducted to confirm the building would meet current codes for soils bearing strength or liquefaction. The report estimated $1.75 million for a minimal remodel of the building to enable it to be open to the public. These reports were presented to council on May 11, 2023.

April 2023 – Public survey #1
Feedback summary: Public feedback showed a strong support for the master plan to maintain the site's natural character and preserve ecological integrity. The next two identified priorities were sustainable and accessible design, and cost considerations.

April 19, 2023 – public open house
Feedback summary: Top priority, by a significant margin, expressed through public comment was for the master plan to "Maintain natural character/ecology," followed by two closely-ranked priorities of "Sustainable design" and "Add capacity or more variety of activities."

April 20, 2023 – Study session, "Proposed Crescent Creek Annexation"
Recommendations: Public Works Director Jeff Langhelm asked for council guidance on whether to pursue the annexation of all or just some of the right-of-way. Council consensus was to annex the entire right-of-way.

May 11, 2023, **– Study session,** "Masonic Lodge Discussion"
Recommendation: Council was supportive of demolishing the building and directed staff to prepare a resolution for consideration at the regular city council meeting on May 22. They also wanted to see the options and associated cost estimates for salvaging and reusing some materials from the existing building.

May 22, 2023 – City Council Meeting, "Resolution 1278 Stating the City Council's Determination to Demolish the Masonic Lodge Building and Include the Property in the Crescent Creek Park Master Planning Process"
Business item: Parks Manager Jennifer Haro presented the resolution. Josie Emmons Turner, Tamara Smilanich, John McMillan, Mary Manning, Stephanie Lile, and Steve Paris provided public comment on preserving the building. **No action was taken on the resolution.**

June 7, 2023 – Parks Commission, "Crescent Creek Park Master Plan Update"
Discussion: The project should be put on hold while determining the costs associated with saving the building on the site.

July 13, 2023 – Study session, “Crescent Creek Park Master Plan / Masonic Lodge”

Recommendation: Council consensus was to put the master planning process on hold for one year to allow a community group, known as the Museum Group, to develop a design, with a financial and management plan, for repurposing the building with a Memorandum of Understanding in place to establish expectations. Council asked that the group come up with a plan by July 2024.

August 2, 2023 – Parks Commission, “Crescent Creek Park Project Update”

Sept. 21, 2025 – Study session, “Masonic Lodge MOU with Harbor History Museum”

Recommendation: Haro reviewed the draft MOU and asked for council feedback and proposed amendments.

Oct. 23, 2023 – City Council Meeting, “Memorandum of Understanding with Harbor History Museum for Masonic Lodge Concept Planning”

Business item: Parks Manager Jennifer Haro introduced the MOU.
Motion to authorize the mayor to sign the memorandum of understanding with the Harbor History Museum (Woock/Barber). Unanimously approved.

Feb 2024 – Museum Group survey #1, “Masonic Lodge Community Use Survey”

Feedback summary: A majority opinion did not emerge from the 3 options proposed for the building, which did not include demolition as an option. Key trends in public comment provided were a focus on fiscal responsibility and desire to incorporate the building into park space.

June 2024 – Museum Group survey #2, “Masonic Lodge Community Survey 2”

Feedback summary: Concepts presented were: new addition (avg rank. 72/100), schoolhouse style (71), WPA style (35), basic lodge (33). Priorities identified were keeping a budget below $4 million (68%), and restrooms. 55% of respondents answered they use the park once a year or less.

April 29, 2024 – WA Patriot Construction building estimate: $4,583,077
Conceptual pricing includes construction costs only, **does not include**:

1. Design fees, permit fees, utility connection fees, special inspection and testing, Commissioning. (estimate 12-15% of construction costs)
2. Owner move-in, furniture, fixtures & equipment. (estimate 10-12% of construction costs)

May 2024 – Gig Harbor Cooperative Preschool moves out after decades due to condition of the building.

May 1, 2024 – Parks Commission, “Masonic Lodge Update”

July 11, 2024 – Study session, “Masonic Lodge Proposal”

Recommendation: Stephanie Lile from the Museum Group presented the findings of the Museum Group, survey results, a proposed site plan, proposed building layout, rough cost estimates, proposed funding plan and proposed management plan. Council expressed interest in the proposal and directed the building be incorporated into the long-range plans for the park.

August 7, 2024 – Parks Commission, "Masonic Lodge/Crescent Creek Park Master Plan Update"

Oct. 28, 2024 - City Council Meeting, "Professional Services Contract Amendment #1 for Crescent Creek Park Master Plan"

Business item: Parks Manager Jennifer Haro introduced the amendment, Stephanie Lile provided public comment.
Motion to authorize the mayor to execute Amendment 1 to the professional services contract for HBB Landscape Architecture for the master plan for Crescent Creek Park (Barber/Coronado). Unanimously approved.

Jan. 30, 2025 – Park community advisory committee

March 3, 2025 – Park community advisory committee

April 9, 2025 – Public open house

Feedback summary: The city and HBB presented three design alternates. The top-ranked program element was expanded parking; The second-most comments received were opposed to improving the vacant building.

May 7, 2025 – Parks Commission, "Crescent Creek Master Plan Update"

May 2025 – Public survey #2

Feedback summary: 72% of responses from the community were negative or indifferent about keeping the vacant building on the site.

May 29, 2025 – Study session, "Crescent Creek Park Master Plan Update"

Recommendations: Parks Manager Jennifer Haro reviewed the three layout options for the park and asked for council feedback. Council was supportive of Option 1. Council also wanted to see an option with the old building removed and a new building in its place.

July 23, 2025 – Park community advisory committee

July 31, 2025 - Study session, "Crescent Creek Park - Preferred Concept Options"

Recommendation: Parks Manager Jennifer Haro and the city's consultant from HBB Landscaping Architects presented new concepts to council based on previous conversations. Council was supportive of concept 2A with the remodeled building as an alternative if funding to remodel the building can be found.

Aug. 6, 2025 – Parks Commission, “Crescent Creek Master Plan”

Sept. 3, 2025 – Parks Commission, “Masonic Lodge recommendation”

Recommendation: remove the old building and replace it with a new shelter and gardens designed to honor the site’s history as a former school.

Sept. 11, 2025 – Study session, “Parks Commission's Masonic Lodge Recommendation”

Recommendations: Parks Manager Jennifer Haro presented the parks commission’s recommendation to demolish the vacant building. John McMillan, Stace Gordon, Kit Kuhn, Steve Paris, Lita Dawn Stanton, and John Holmaas provided public comment.

Sept. 18, 2025 – Public open house, “Phasing”

Feedback summary: Public comment supported keeping natural character, parking expansion, and playground expansion such as nature play, sandbox, existing boat structure, athletic fields, trails, picnic shelters, open lawn. Cost and maintenance of a remodeled or new building was a top concern.

Oct. 6, 2025 – Public survey #3

Feedback summary: A majority (over 56%) ranked removing the vacant building as their **preferred option**. The majority (over 59%) ranked replacing the building with an appropriate gathering space as their **second choice**.

Oct. 27, 2025 – City Council Meeting, “Report from Gig Harbor Youth Council”

Presentation: Gig Harbor Youth Council Secretary Madaline Harding reported on the group’s initial meetings. The group held an advisory vote to show their support of the Crescent Creek Master Plan preferred option as presented by Parks Manager Jennifer Haro. The group also held an advisory vote to express their opposition to including the building in the final plan that has yet to be determined by city council. Both votes passed unanimously.

Nov. 3, 2025 – Park community advisory committee

Nov. 5, 2025 – Parks Commission, “Crescent Creek Park Master Plan – Final Recommendation”

Recommendation: The commission voted to recommend approval of the preferred master plan option removing the existing vacant building and replacing it with a shelter for community gatherings. Additional recommendations included adding additional right-of-way improvements, traffic calming measures, vegetation to support wildlife habitat, and minimize disturbances to the native garden.

Nov. 10, 2025 – Historic preservation commission

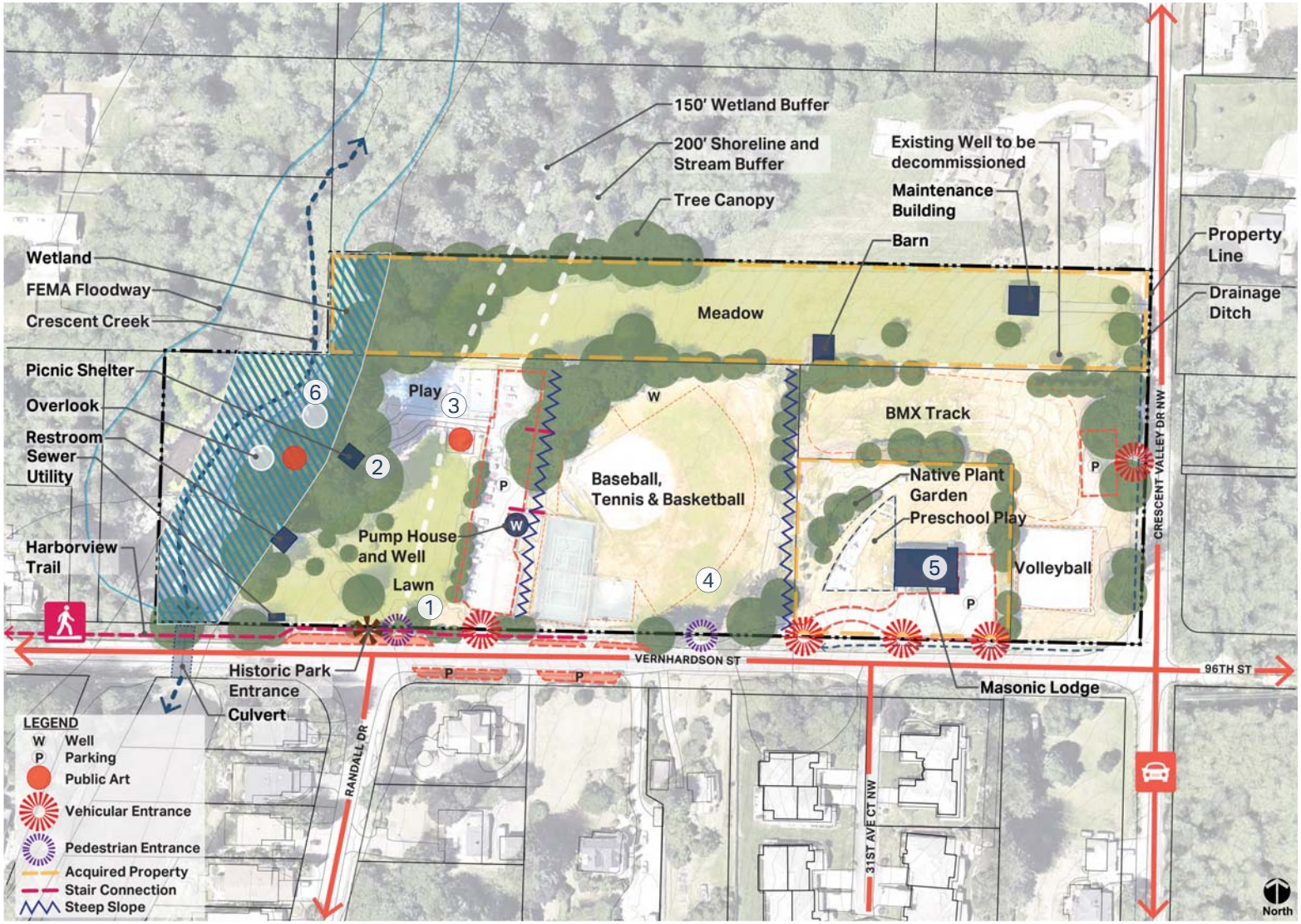
Recommendation: The commission voted to engage a consultant to conduct a historic building review.

Nov. 20, 2025 – Study session, Council recommended adoption of the final master plan, with the plan for the vacant building to be decided after a historic building report is completed.

APPENDIX C

SITE ANALYSIS

Site Analysis



GIG HARBOR The Maritime City

APPENDIX D

ARCHITECTURAL MEMO

rolludaarchitects
architecture planning interior design
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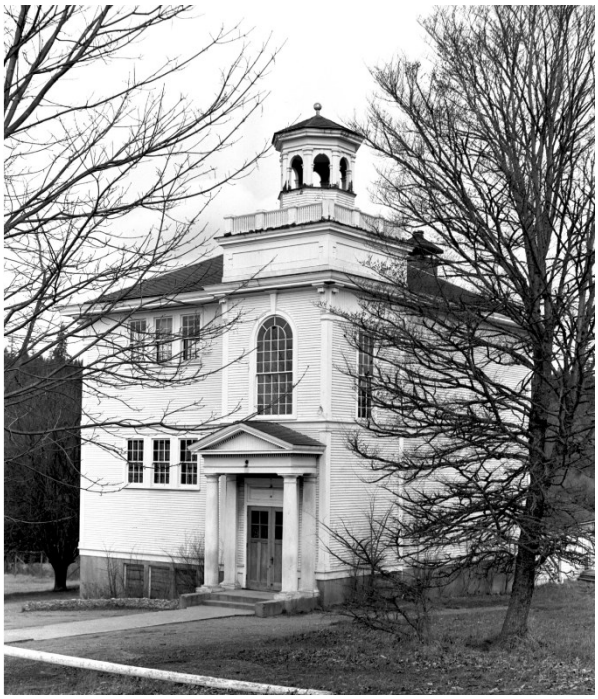
TECHNICAL MEMORANDUM

		Date:	February 24, 2023
To:	Juliet Vong HBB Landscape Architecture	From:	Rolluda Architects
Project:	Crescent Creek Park Master Plan	Project #:	
Re:	Masonic Lodge		



Harbor History Museum Collection, Catalog Numbers GH-152, E-03.2, FS72-5, Sch-183-CV
2020 Photos: Kellys on Pioneer, Harborview Drive, and Crescent Valley School Now by Stephanie Lile

1. PROECT OVERVIEW

This memo evaluates the existing conditions and uses of the Masonic Lodge and determines potential improvements. Features that would help create continuity between the different park elements will be considered, along with protecting the natural environment and the existing park character.

2. HISTORY

a. Crescent Valley School was built in 1915 located on the corner (Vernhardson / 96th and Crescent Valley Road) where the old Masonic Temple structure still stands. The building was decommissioned as a school in 1942 and was purchased in 1949 when it became the Masonic Temple (John Paul Jones Lodge #217) and remodeled by the Masonic Temple Association. The original schoolhouse was extensively remodeled and expanded

at some point, believed to be in the late 1940s. There was an addition to the west that doubled the building's footprint, and the schoolhouse's second floor and tower element were removed. The main floor windows were infilled at some point during its history.

b. Historical Significance

i. Criteria for evaluation of whether a property is eligible for being listed on the National Register of Historic Places:

1. Be associated with important events that have contributed significantly to the broad pattern of our history, or
2. Be associated with the lives of persons significant in our past, or
3. Embody the distinctive characteristics of a type, period or method of construction; or represent the work of a master; or possess high artistic values; or represent a significant and distinguishable entity whose components may lack individual distinction, or
4. Have yielded, or may be likely to yield, information important in prehistory or history.

ii. Because the building has been modified extensively over the past 100+ years, with the removal of the 2nd story of the original school house, the doubling of the building's footprint, the infilling of the main floor windows, the replacement of siding with vinyl siding, and the replacement of the roofing with standing seam metal roofing, it would appear that there is little remaining of the original building fabric to have the structure considered for nomination under criteria 3 above.

3. GENERAL DESCRIPTION

a. The Masonic Lodge is on a 1.1-acre parcel in unincorporated Pierce County. It borders the City of Gig Harbor on 3 of its sides. The structure has a concrete foundation with a concrete slab on grade at the basement level. The concrete foundation walls seem to extend to the main floor framing. From that point, the building is constructed of wood studs and clad with vinyl siding. The siding on the north side of the building appears to have mildew growth on the surface. The hipped roof is clad with a standing seam metal roof. The finish of the roof appears to be chalking and the age of the roof is unknown. We understand anecdotally that the basement has experience moisture intrusion, believed to be caused by ground water moving across the site from east to west.

b. A Phase 1 Environmental Site Assessment was performed in 2017. This assessment revealed no evidence of recognized environmental conditions, except for the following:

i. Heating Oil Tank located in the northeast corner of the building, which may not have been properly decommissioned.

ii. The property is located within the Tacoma Smelter Plume.

iii. Hazardous Building Materials are suspected, given the age of the building.

c. Structural Analysis: An analysis of the building's structure was performed and is included under separate cover.

4. CODE REVIEW (IBC 2018)

a. Zoning

i. Overview

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1. The Masonic site is located in unincorporated Pierce County and is zoned Single Family (SF). The parcel directly adjacent to the site's western boundary is within the City of Gig Harbor and is zoned Public Institutional District (PI) and is listed on the Historic Register. The parcel to the north and east is also within the City of Gig Harbor and is zoned PI. The parcel to the south, across 96th St NW is within unincorporated Pierce County and is zoned SF.

ii. SF Zone

1. Civic Use, Public Park Facilities, Levels 1, 2, and 4 are permitted.

a. Level 1 - Local Parks. Local Parks such as playfields, neighborhood parks, and small community parks have limited facilities and typically include a playground, sports field, tennis or basketball courts, internal pathway, and supporting amenities.

b. Level 2 - County Parks and rest areas associated with a major transportation route. County Parks are large community parks that support a wide range of recreation interests, attract residents from nearby communities, provide active and passive recreation opportunities and may also incorporate natural open space.

c. Level 4 - Linear Parks/Trails and Resource Conservancy Parks. Linear Parks/ Trails and Resource Conservancy Parks include built or natural corridors which provide recreation or non-motorized transportation linkages within the county or green buffers between communities. Recreational use is generally passive and trail-related and may include supporting facilities, such as viewing areas, play areas, picnic tables, or trailheads.

d. Day Care Centers are not listed as a permitted use in SF zones.

iii. Development Standards

1. Setbacks - Front - 12 ft for porches, 15 ft for other portions of building; Interior/Side - 10 ft; Rear – 10 ft

2. Building Height Limits – 35 ft

iv. Adjacent Zoning:

1. West: Public-Institutional District, Historic Register (City of Gig Harbor)

2. North and East: Single-Family Residential (City of Gig Harbor)

3. South: Single-Family (Pierce County)

v. Parking Requirements - TBD

b. Building

i. Occupancy (Chapter 3)

1. Existing

The Masonic Lodge main level falls under Assembly **Group A - 3** occupancy, per 2018 IBC, Sec 303.1 and Sec 303.4. Group A occupancy includes, among others, the use of a building or structure, or a portion thereof, for the gathering of persons for purposes such as civic, social, or religious functions; recreation, food or drink consumption or awaiting

transportation. Group A-3 occupancy includes assembly uses intended for worship, recreation or amusement and other assembly uses not classified elsewhere in Group A including Community halls.

The Masonic Lodge basement-level falls under **Group E** Day Care facilities, per 2018 IBC 305.2. This group includes buildings and structures or portions thereof occupied by more than five children older than 21/2 years of age who receive educational, supervision or personal care services for fewer than 24 hours per day.

ii. Construction Type: Type V-B

iii. Allowable Area (Chapter 5): Assumption – Building is 1-story, non/sprinkled, with basement.

1. A-3 Occupancy: 6,000 sf
2. E-1 Occupancy: 9,500 sf

iv. Means of Egress (Chapter 10)

MAXIMUM FLOOR AREA ALLOWANCES PER OCCUPANT (Table – 1004.5)

DESCRIPTION	AREA SQ FT	AREA SQ FT	OCCUPANT LOAD FACTOR	OCCUPANT
01-LEVEL 1 - A3				
Assembly area		1864	7	266.285714
Entry	115			
Corridor	302			
Room	120			
Store	10			
Store/ Utility	65			
Store	41			
00-BASEMENT - E				
Day Care		1739	35	49.6857143
Kitchen		172	200	0.86
Restroom	102			
Restroom	36			
Mechanical Equipment	54			
Corridor	166			
				316.831429
TOTAL OCCUPANCY				**317**

1. Exit width

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a. Main Floor:
    i. Required: Doorways - 54 in; Stairs – 80.1 in
    ii. Provided: Doorways – 64 in: Stairs – 144 in
b. Basement:
    i. Required: 10 in
    ii. Provided: 66 in

v. Accessibility (Chapter 11): up to 20% of the construction budget will be required to be allocated to address accessibility deficiencies.

1. Interior:
    a. Restrooms do not comply with accessibility requirements (maneuvering/turning space, fixture heights)
    b. Kitchen does not comply with accessibility requirements (knee space, workspace height)
    c. Stairs
        i. Stair nosing projection: underside of projects does not have curved or beveled underside
        ii. Handrail lack extensions at top and bottom, and do not return to the wall.
        iii. Guards spaced greater than 4 in apart.
    d. Assembly space on the main floor is not wheelchair accessible, only accessible from the main entry by stairs.
    e. The exit door at the northwest corner of the assembly space is ~12 in higher than main floor level, accessible only by stairs.
    f. The only restroom facilities in the building are at the basement level, which are not wheelchair accessible from the main level.
    g. The stairs to the attic does not have a handrail on both sides of the stairs, spacing of guards are greater than 4”, handrail does not have extensions at top and bottom.
2. Exterior
    a. Main entry is not wheelchair accessible.
    b. Main entry stair has only 1 handrail.
    c. North exit stairs have open risers and noncompliant handrails.

vi. Plumbing Fixtures (Chapter 29)

MINIMUM NUMBER OF REQUIRED PLUMBING FIXTURES (See Sections 2902.2 and 2902.3)

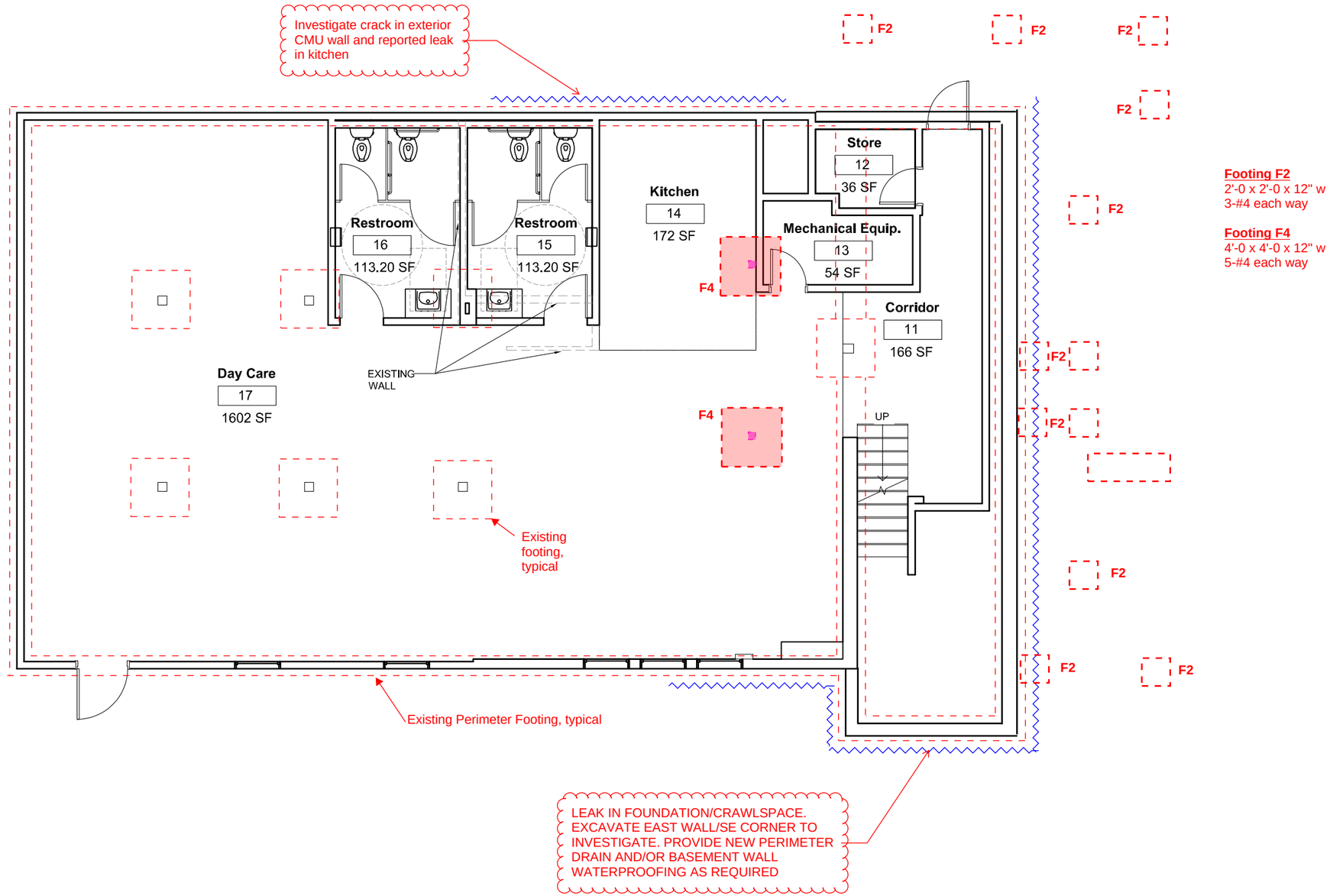
Occupants: 317

NO	CLASSIFICA-TION	OCCUPANCY	WATER CLOSET / URINAL			LAVATORIES			BATHTUBS / SHOWERS	DRINKING FOUNTAINS
			MALE	FEMALE	UNISEX	MALE	FEMALE	UNISEX		

			1 PER 125	1 PER 65	--	1 PER 200			--	1 PER 500
1	Assembly	A-3*	1.268	2.438462	--	0.7925	0.7925	--	--	0.634

* Auditoriums without permanent seating, art galleries, exhibition halls, museums, lecture halls, libraries, arcades and gymnasiums.

5. CONCEPT ALTERNATIVES - TBD



Footing F2
2'-0 x 2'-0 x 12" w
3-#4 each way

Footing F4
4'-0 x 4'-0 x 12" w
5-#4 each way

FOUNDATION PLAN

Existing structural framing components to remain, unless noted otherwise.

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f: 206-624-4226

MASONIC LODGE

3025 96TH ST, GIG HARBOR, WA 98335

OWNER:
CITY OF GIG HARBOR CRESCENT CREEK PARK

REVISION	DATE

Design:
Drawn:
Checked:
Project No.

Issuance
.

Date: 03/03/2023

Drawing Title
FLOOR PLAN

Drawing Number
A101

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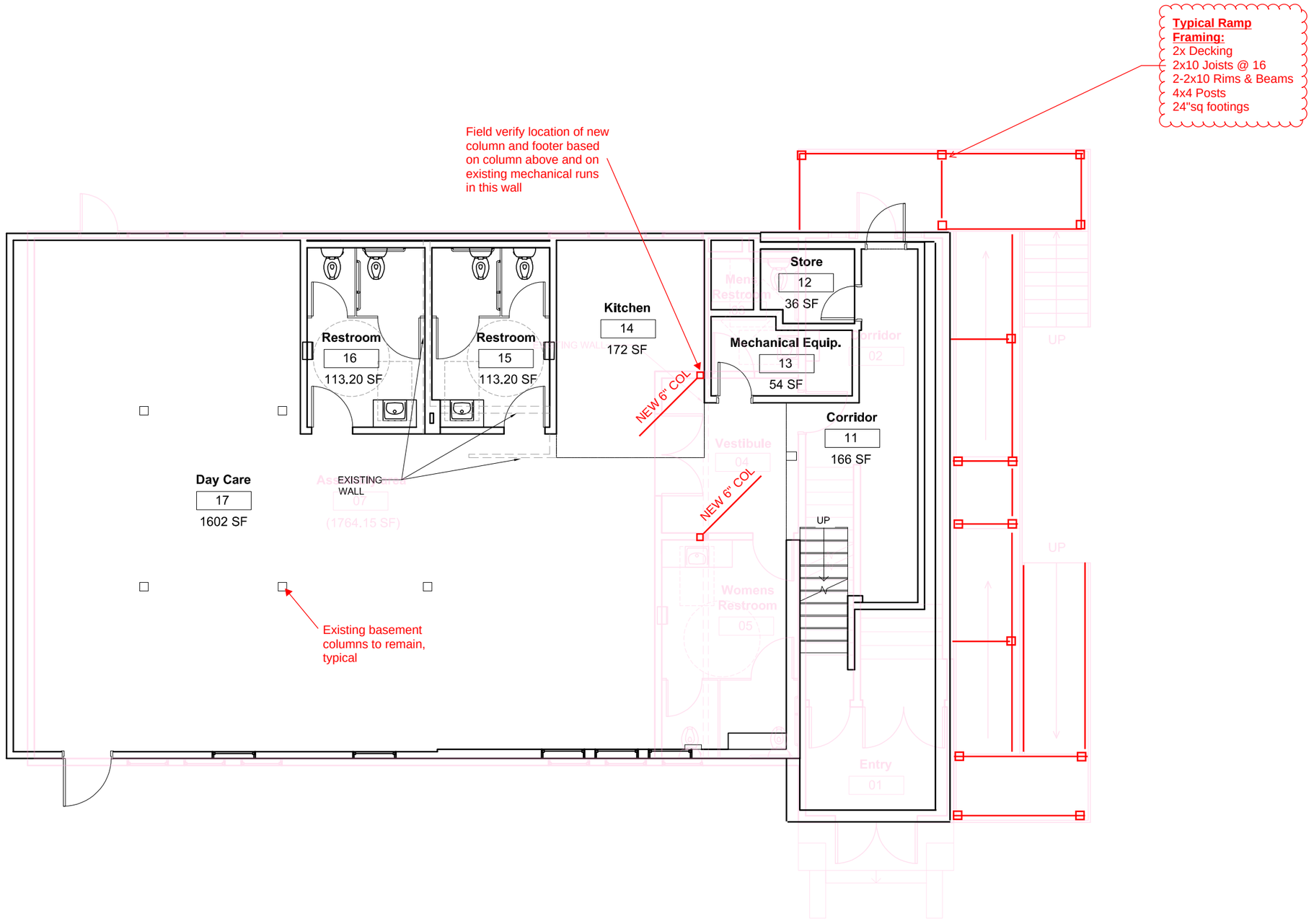

MAIN FLOOR FRAMING PLAN

Existing structural framing components to remain, unless noted otherwise.

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MASONIC LODGE

3025 96TH ST, GIG HARBOR, WA 98335

OWNER:
CITY OF GIG HARBOR CRESCENT CREEK PARK

REVISION	DATE

Design:
Drawn:
Checked:
Project No.

Issuance
.

Date: 03/03/2023

Drawing Title

FLOOR PLAN

Drawing Number

A101

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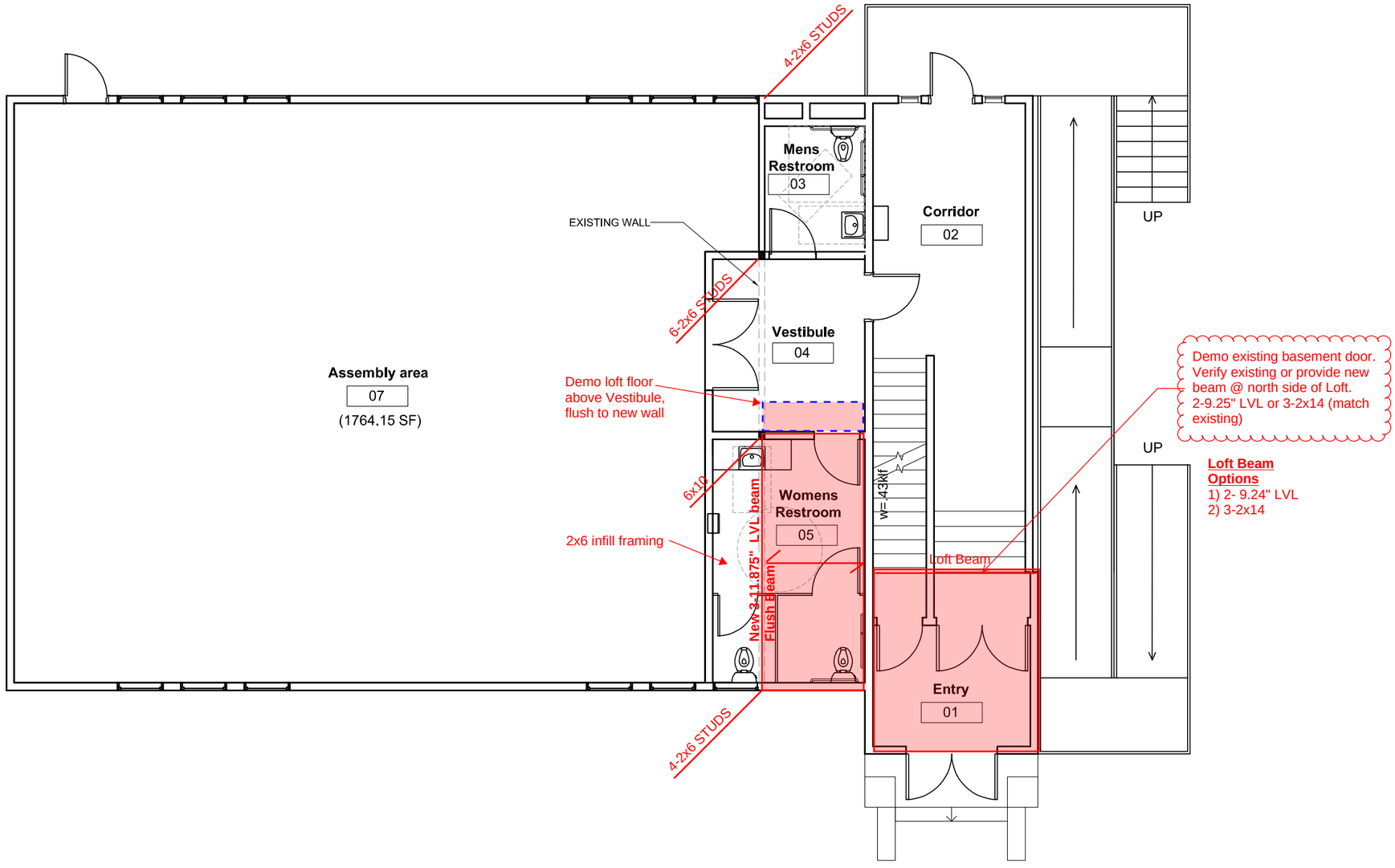

LOFT FLOOR FRAMING PLAN

Existing structural framing components to remain, unless noted otherwise.

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MASONIC LODGE

3025 96TH ST, GIG HARBOR, WA 98335

OWNER: CITY OF GIG HARBOR CRESCENT CREEK PARK

REVISION	DATE

Design:
Drawn:
Checked:
Project No.

Issuance

.

Date: 27/02/2023

Drawing Title

FLOOR PLAN

Drawing Number

A102

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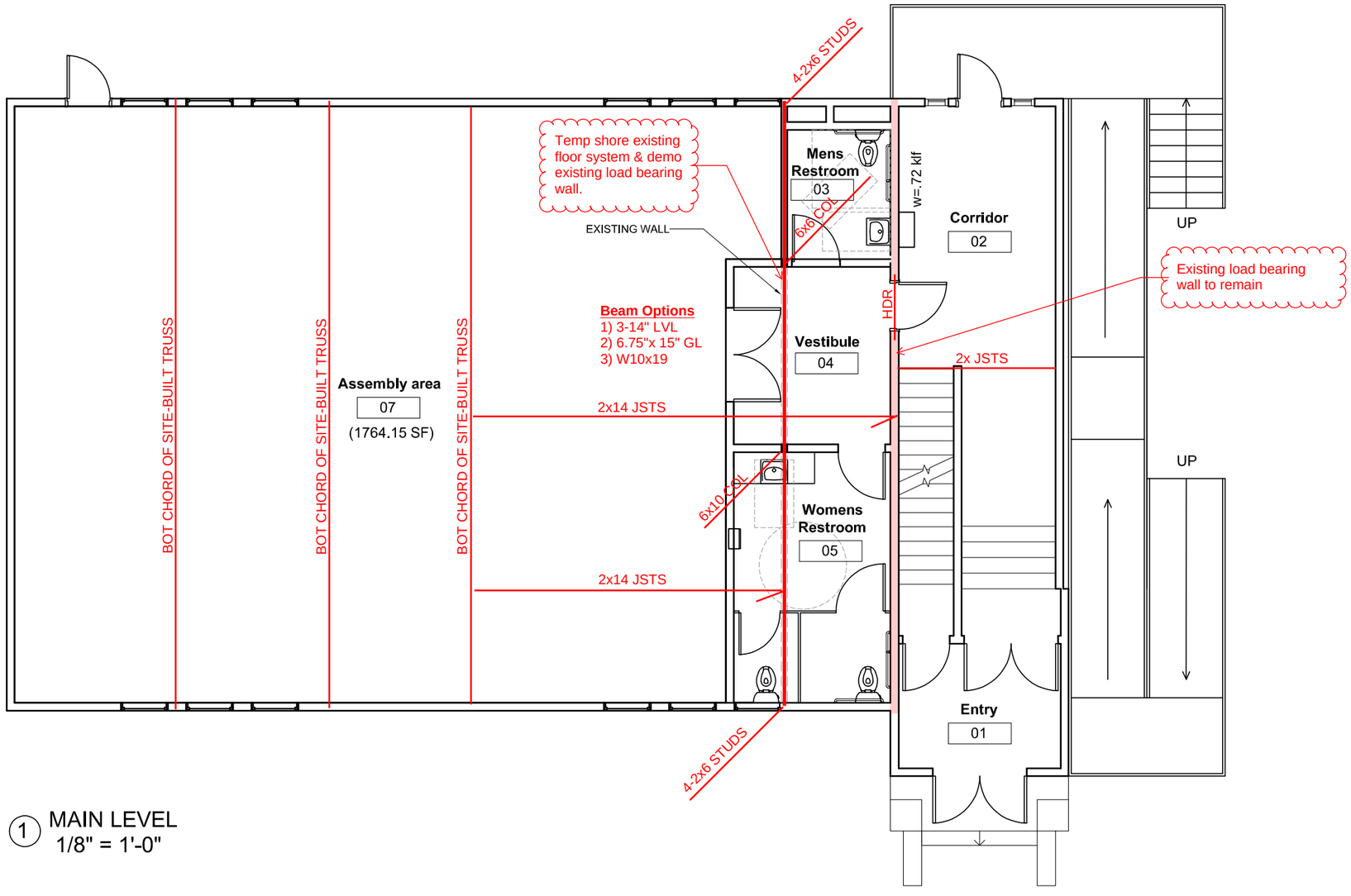

1 MAIN LEVEL
1/8" = 1'-0"

SECOND FLOOR FRAMING PLAN

Existing structural framing components to remain, unless noted otherwise.

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MASONIC LODGE

3025 96TH ST, GIG HARBOR, WA 98335

OWNER:
CITY OF GIG HARBOR
CREEK PARK

REVISION	DATE

Design:
Drawn:
Checked:
Project No.

Issuance
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Date: 27/02/2023

Drawing Title
FLOOR PLAN

Drawing Number
A102

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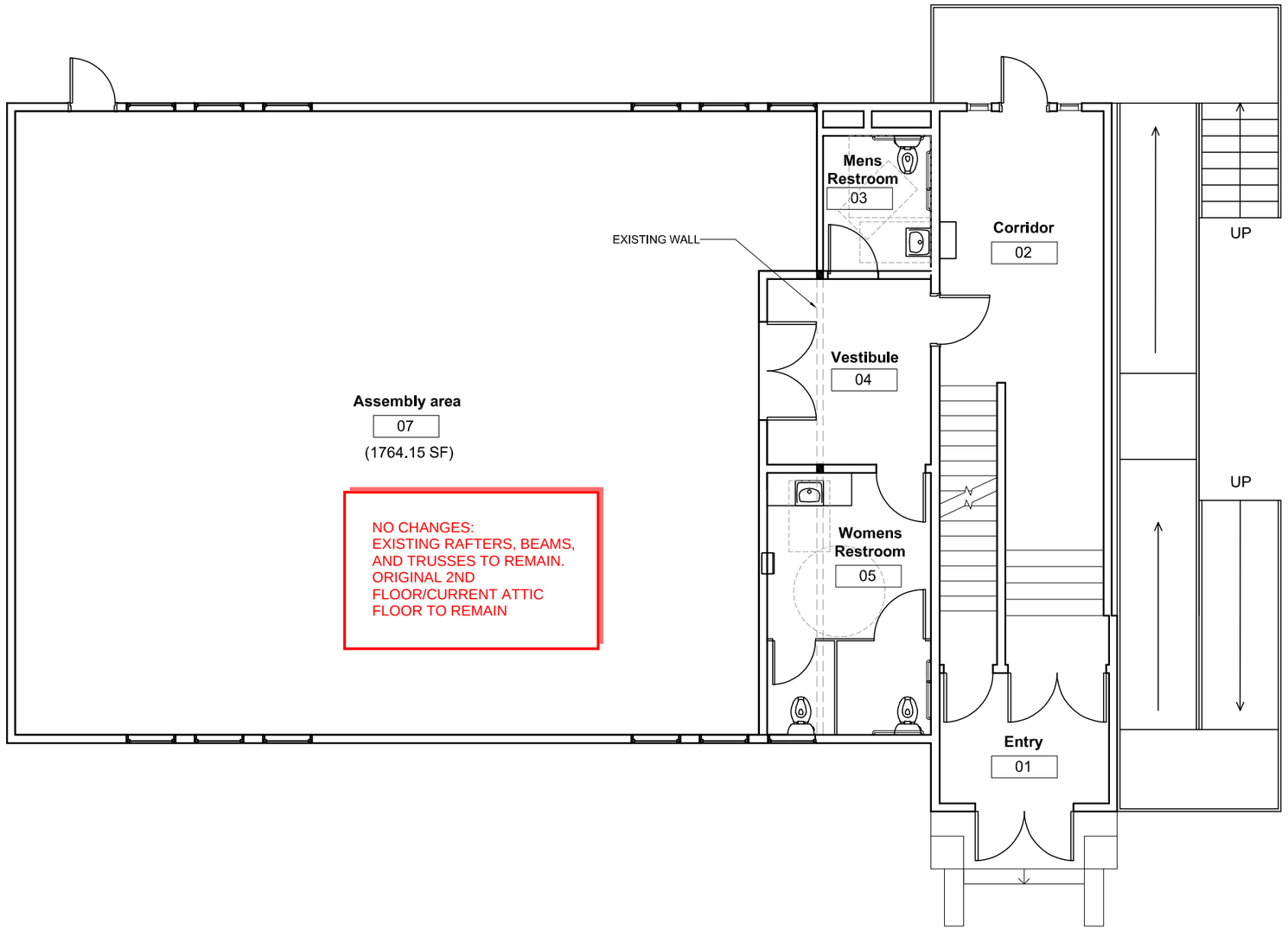

ROOF FRAMING PLAN

Existing structural framing components to remain, unless noted otherwise.

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MASONIC LODGE

3025 96TH ST, GIG HARBOR, WA 98335

OWNER:
CITY OF GIG HARBOR
CREEK PARK

REVISION	DATE

Design:
Drawn:
Checked:
Project No.

Issuance

.

Date: 27/02/2023

Drawing Title

FLOOR PLAN

Drawing Number

A102

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Project : **Crescent Creek Park Master Plan - Masonic Lodge**
Gig Harbor WA
Architect: Rolluda Architects Inc.
Design Phase: Concept Draft
Date: March 31, 2023

SUMMARY

ITEMS/DESCRIPTION			TOTAL
Slab on Grade			$4,521
Superstructure			$246,500
Exterior Closure			$60,364
Roofing			$2,600
Interior Partitions & Doors			$67,625
Interior Finishes			$107,200
Specialties			$19,535
Mechanical			$167,100
Electrical			$115,000
Selective Building Demolition			$11,487
HazMat Abatement			$20,000
Total Direct Cost			**$821,932**
General Conditions including Site Supervision	12.5%		102,742
GC's Overhead and Profit including B&O Tax & Insurance	7.0%		64,727
Contingency - Design	25.0%		247,350
TOTAL COST @ TODAY'S BID	5,200 SF	$237.84	**$1,236,751**
WSST	8.80%		**$108,834**
A/E Fees (WA ST A/E Fee Schedule - 2023 dollars)	15.00%		**$185,513**
Other Soft Costs	18.00%		**$222,615**
TOTAL			**$1,753,713**

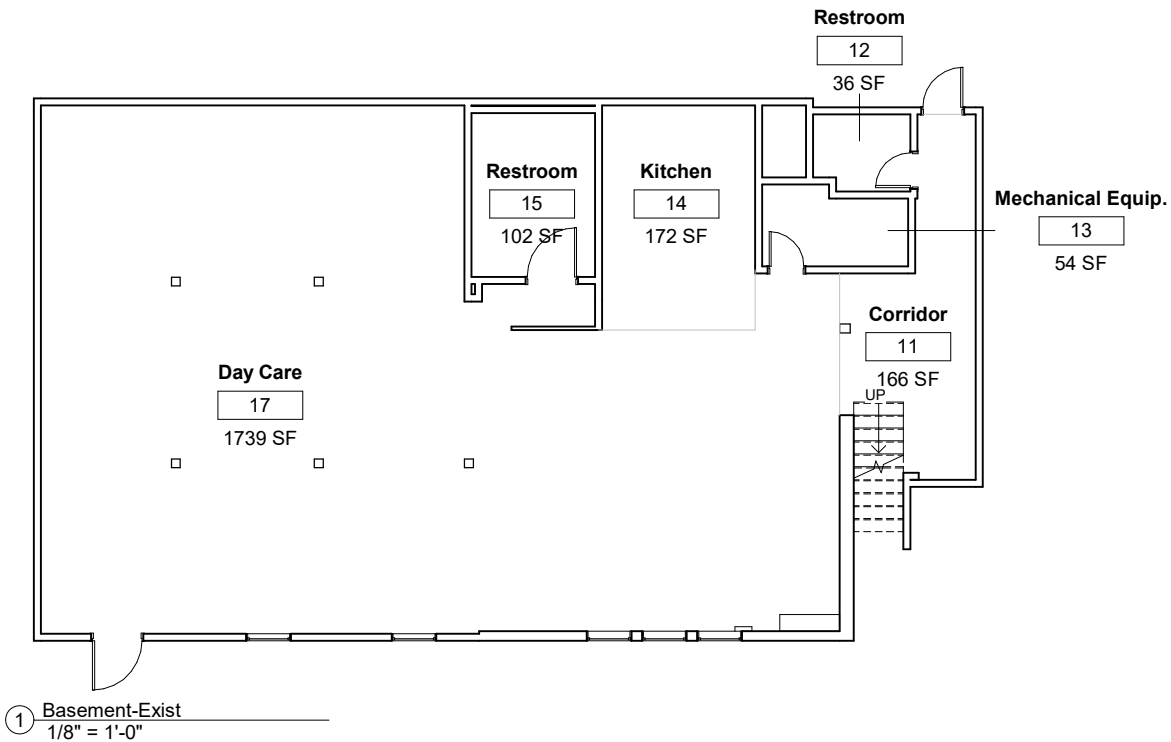
Notes/Assumptions:
This estimate is based on prevailing union wage rate and public bid. It is assumed that the existing sanitary sewer line is adequately sized and its depth can accommodate the new restroom layout. Exterior work is limited to the ADA ramp and window replacement in main assembly space on main floor. Existing

2023 dollars

ESTIMATE DETAIL

DESCRIPTION	Quantity	Unit	Unit Cost	Sub-Total	TOTAL
Standard Foundation					**0**
	0	LF	84.00	0	
Slab on Grade					**4,521**
4" thick conc	4	CY	500.00	2,000	
W1.4xW1.4 6x6 WWF mesh	328	SF	1.00	328	
4' capillary break - gravel fill	4	CY	65.00	260	
Vapor retarder	328	SF	0.95	312	
Drill, epxy grout, dowell connect new to exist slab per det 6/S0.05	50	LF	25.00	1,250	
Slab const/control joints	328	SF	1.13	371	
Superstructure					**246,500**
Structural Renovation Costs (incld fdn and ADA ramp) frm PND	1	EA	246,500.00	246,500	
Exterior Closure					**60,364**
Mtl Clad Wood Windows	300	SF	175.00	52,500	
Trim/Flashing New Windows	1	LS	4,000.00	4,000	
Misc Patch/Repair	1	LS	3,000.00	3,000	
Cont metal drip flashing to window head/pan & wall	48	LF	18.00	864	
Roofing					**2,600**
Flashing pipe penetrations	4	EA	650.00	2,600	
Interior Partitions & Doors					**67,625**
Wood stud wall framing	2,000	SF	6.50	13,000	
5/8" GWB to interior walls	4,000	SF	4.85	19,400	
Sound batt insulation	500	SF	1.25	625	
New SCW Door/Frame/Hdwr	6	EA	3,500.00	21,000	
New SCW Door/Frame/Hdwr	2	PR	6,800.00	13,600	
Finishes					**107,200**
New CT Floor Finish	500	SF	22.00	11,000	
New CT Wainscot	700	SF	15.00	10,500	
New LVT	3,500	SF	12.00	42,000	
New Cpt	600	SF	6.50	3,900	
RB base - 6"	600	LF	5.50	3,300	
Paint GWB walls/clgs	6,500	SF	2.00	13,000	
Sealant, caulking & fire penetration ptrotection	1	LS	3,500.00	3,500	
Other misc patch & repair - allow	1	LS	20,000.00	20,000	
Specialties					**19,535**
Toilet partitions & doors - HC	6	EA	1,600.00	9,600	
Corner guards - metal	6	EA	110.00	660	

DESCRIPTION	Quantity	Unit	Unit Cost	Sub-Total	TOTAL
ADA signage 6" x 9"	4	EA	300.00	1,200	
Toilet grab bar	4	SETS	350.00	1,400	
Mirror	4	EA	225.00	900	
Soap dispenser	4	EA	95.00	380	
Seat cover disp	6	EA	285.00	1,710	
San Napkin disposal	4	EA	125.00	500	
Paper towel disp	4	EA	250.00	1,000	
Toilet tissue disp	7	EA	75.00	525	
Insulate waste pipes	4	EA	65.00	260	
Fire extinguisher	4	EA	350.00	1,400	
Mechanical					**167,100**
HVAC	450	SF	38.00	17,100	
Plumbing	5,000	SF	13.50	67,500	
Fire Protection	7,500	SF	10.00	75,000	
Mechanical demo	1	LS		7,500	
Electrical					**115,000**
Electrical Power Work	5,000	SF	12.50	62,500	
Lighting and Receptacle Work	5,000	SF	6.50	32,500	
Telecom/Security	5,000	SF	4.00	20,000	
Selective Building Demolition					**$11,487**
Demo exist interior studs wall	92	LF	15.00	1,380	
Demo exist wd doors & frame	3	EA	125.00	375	
Demo raised floor	300	SF	5.00	1,500	
Demo exist VCT flooring	400	SF	0.85	340	
Demo exist carpet floor finishes	3,000	SF	0.75	2,250	
Demo Windows/Siding and Dispose	300	SF	12.00	3,600	
Sawcut/demo exist slab on grade	328	SF	1.50	492	
Demo exist ceiling/wall - 12" wide	10	LF	25.00	250	
Demo exist casework	4	LF	25.00	100	
Demo exist plumbing fixture	6	EA	200.00	1,200	
Load, haul & dump debris	included above		0.00	0	
Site Preparation					**$0**
				0	
HazMat					**$20,000**
HazMat Abatement - from PND	1	LS	20,000.00	20,000	
				0	
TOTAL DIRECT COST				821,932	**$821,932**



1 Basement-Exist
1/8" = 1'-0"

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105 S. Main St. Seattle, WA 98104
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www.rolludaarchitects.com

MASONIC LODGE
3025 96TH ST,
GIG HARBOR, WA 98335
OWNER:
CITY OF GIG HARBOR CRESCENT CREEK PARK

REVISION	DATE
	2/10/2023

Design: RM
Drawn: SP
Checked: RM
Project No.: Project Number

Issuance
PRE-DESIGN
Date: 3/8/2023

Drawing Title
FLOOR PLAN - BASEMENT - EXISTING

Drawing Number
.

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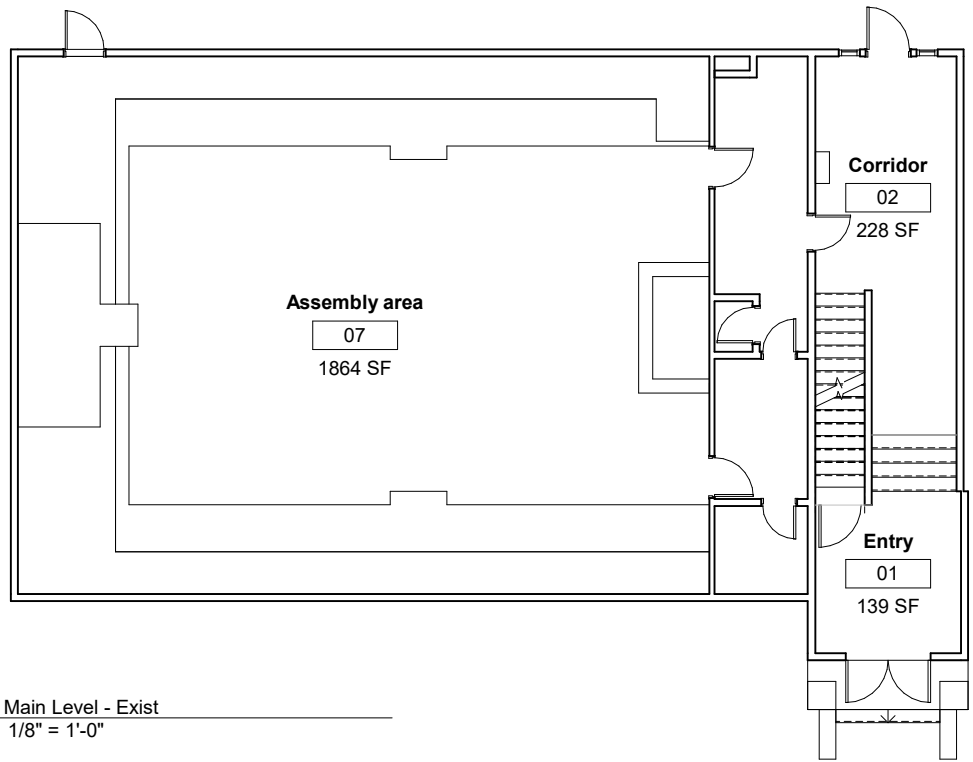

1 Main Level - Exist
1/8" = 1'-0"

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MASONIC LODGE
3025 96TH ST,
GIG HARBOR, WA 98335

OWNER:
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REVISION	DATE

Design: RM
Drawn: SP
Checked: RM
Project No.: Project Number

Issuance
PRE-DESIGN
Date: 3/8/2023

Drawing Title
FLOOR PLAN - MAIN LEVEL - EXISTING

Drawing Number
A1

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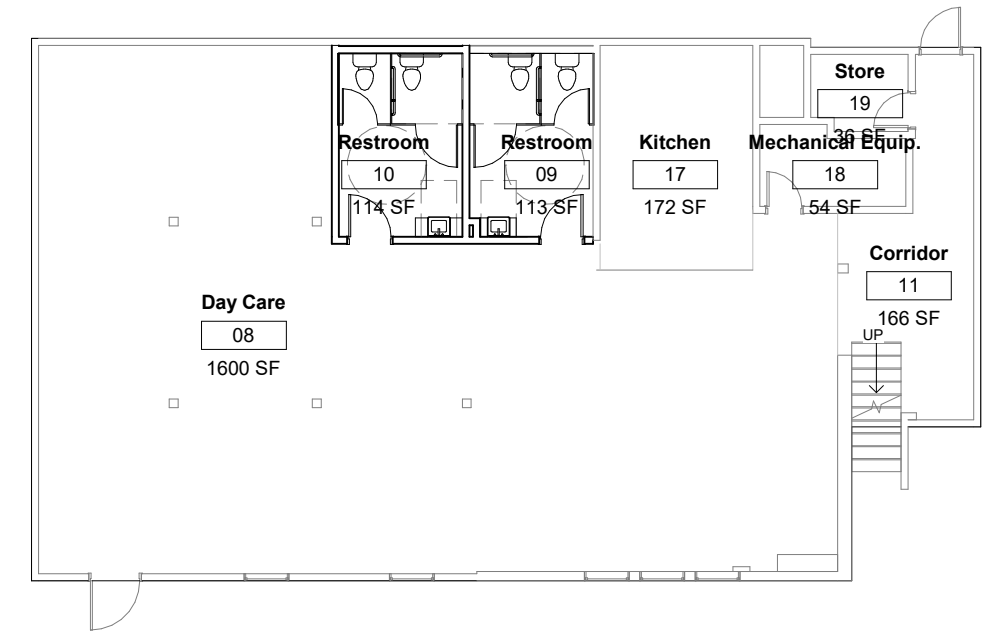

1 Basement-New
1/8" = 1'-0"

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MASONIC LODGE
3025 96TH ST,
GIG HARBOR, WA 98335

OWNER:
CITY OF GIG HARBOR CRESCENT CREEK PARK

REVISION	DATE

Design: Designer
Drawn: Author
Checked: Checker
Project No.: Project Number

Issuance
PRE-DESIGN
Date: 3/8/2023

Drawing Title
FLOOR PLAN - BASEMENT

Drawing Number
A-101

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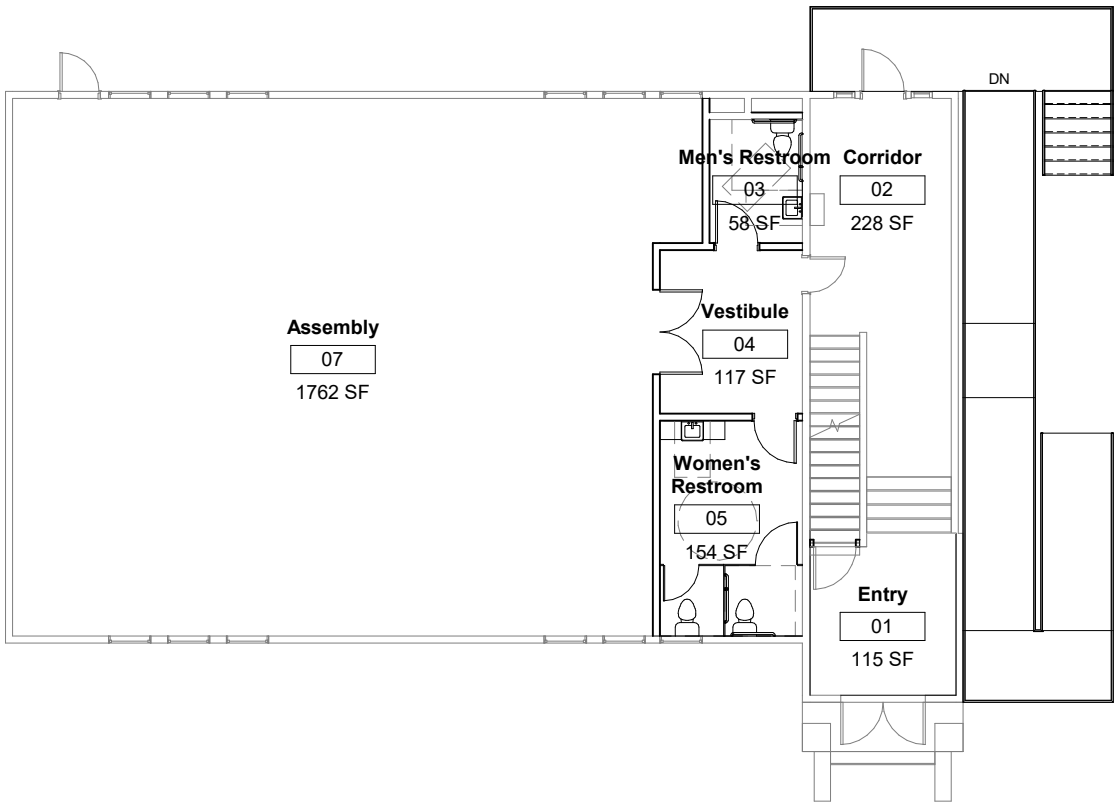

1 Main Level-New
1/8" = 1'-0"

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MASONIC LODGE
3025 96TH ST,
GIG HARBOR, WA 98335

OWNER:
CITY OF GIG HARBOR CRESCENT
CREEK PARK

REVISION	DATE

Design: Designer
Drawn: Author
Checked: Checker
Project No.: Project Number

Issuance
PRE-DESIGN
Date: 3/8/2023

Drawing Title
FLOOR PLAN -
MAIN LEVEL

Drawing Number
A-102

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APPENDIX E

STRUCTURAL EVALUATION MEMO

PND ENGINEERS, INC.

February 28, 2023 PND No. 224063

HBB Landscape Architecture
Attn: Juliet Vong
2101 4th Ave Unit 1800
Seattle WA, 98121

CC: Sheenam Arora, HBB
Rich Murakami, Rolluda Architects

Subject: City of Gig Harbor Crescent Creek Park

1. INTRODUCTION

PND has completed the condition assessment on the visible superstructure of the Crecent Valley School House/Masonic Lodge (Masonic Lodge) located at City of Gig Harbor's Crescent Creek Park. The purpose of this condition assessment is to provide an inspection report; documenting the existing conditions of the Masonic Lodge. Specifically, the condition assessment focused on documenting the existing building structural design elements including; exterior condition, roof and floor flaming elements, load bearing walls and columns, and visible foundation elements. PND performed an initial site inspection on February 10, 2023, in conjunction representatives of Rolluda Architects and City staff, the observation and inspection findings are described in the following sections of this document.

The report contains two appendices:

- **Appendix A – Framing and Floor Plan Field Notes**
- **Appendix B – Field Photographs**

2. BACKGROUND

As noted in the "Phase 1 Environmental Site Assessment – Masonic Lodge Property" (Aspect 2017), the original Crescent Valley School building was constructed in 1915 and was operated as a school until 1941. The property was then purchased in 1949 by the Masonic Temple Association of Gig Harbor (MTA), after which the building underwent significant remodeling which included an addition to the west side of the building, and removal existing second floor of the school building, see photograph 2.1 and 2.2.

Photograph 2-1. Crecent Valley School Building – South and West Exterior prior to MTA remodel (Circa 1948). Photograph from Harbor History Museum website (www.harborhistorymuseum.org)

Photograph 2-2. Masonic Lodge – South and West Exterior current condition, post MTA remodel (2023). Photograph from google maps street view (maps.google.com)

3. SPECIAL REPORTS AND STUDIES

The following reports have been utilized in the development of this document. Each report is within the project file and can be provided upon request.

- "Phase 1 Environmental Site Assessment - Masonic Lodge Property", City of Gig Harbor, prepared by Aspect Consulting June 2017.
- "Masonic Lodge" Draft - Technical Memorandum – prepared by Rolluda Architects, February 2023

4. INSPECTION METHODOLOGY AND LIMITATIONS

The purpose of the inspection of the existing structure was to observe the condition of the wood framing, the sizing and capacity of the existing members in regard to repurposing the structure, observation of the concrete foundation for any deficiencies, and a general assessment of the overall condition of the structure. Only the members already exposed were examined; no destructive testing was performed.

5. SUMMARY OF EVALUATION AND ASSESSMENT

5.1 BUILDING EXTERIOR

The historic structure exterior wall is built with diagonal 2x planking on 2x studs @ 16" oc. (Photo No. 18) The exterior wall of the addition was not immediately available but appeared to be similar. The historic foundation is built with poured concrete walls, the addition is built with CMU. (Photo No. 1) The concrete has various cracks and chips. There is evidence of a leak in the southeast corner, as observed in the crawlspace. The CMU foundation has several cracks; reinforcement is undetermined. (Photo No. 8)

5.2 ROOF ELEMENTS

A hip roof is constructed with T&G planking on 2x rafters, hip and ridge boards to cover the entirety of the building. (Photo No. 13) Site-built trusses span north-to-south across the full width of the addition part of the building and support an east-west beam that carries the rafters at mid-span. The roof over the historic portion of the building is constructed over the existing second floor framing, forming an attic space. (Photo No. 11) The rafters, trusses and beams appeared generally to be sized appropriately and in acceptable condition.

5.3 2ND FLOOR ELEMENTS

The 2nd floor framing of the historic structure is comprised of 2x14 joists @ 12" oc, generally in good condition. (Photo No. 17) The floor sheathing and joists did not extend to the exterior walls of the historic structure. At the historic side, the area between the 2nd floor and the exterior wall is generally built with smaller 2x ceiling joists above the entry area. On the new side, no floor exists, and the ceiling below is supported by the site-built trusses.

5.4 1ST FLOOR ELEMENTS

The first floor, both the historic portion and the added portion, were not exposed, but appeared to be similarly sized to the 2nd floor. (Photo No. 18) The joists spanned between beams, which were in turn supported on posts. The floor appeared sturdy, with no apparent sags, bounce, or soft spots. The floor plan in Appendix A outlines the location and sizes of the posts and beams.

6. IMPACTS OF PROPOSED ALTERNATIVES

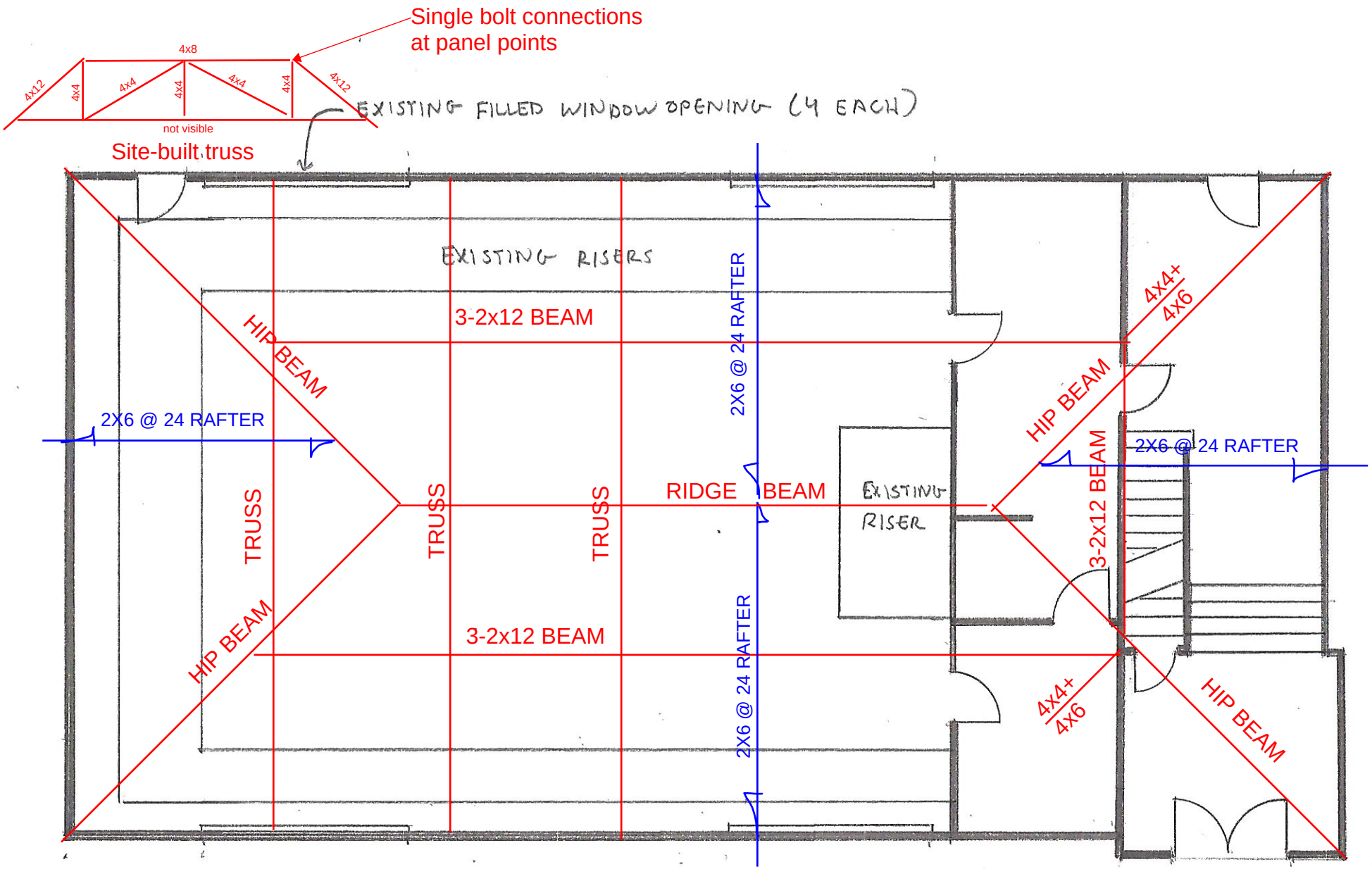
This section is to up updated as part of a later phase of the project once initial concepts for proposed future uses of the facility are considered.

7. RECOMMENDATIONS

This section is to up be updated as part of a later phase of the project once initial concepts for proposed future uses of the facility are considered.

Appendix A. Framing and Floor Plan Field Notes.

See attached.

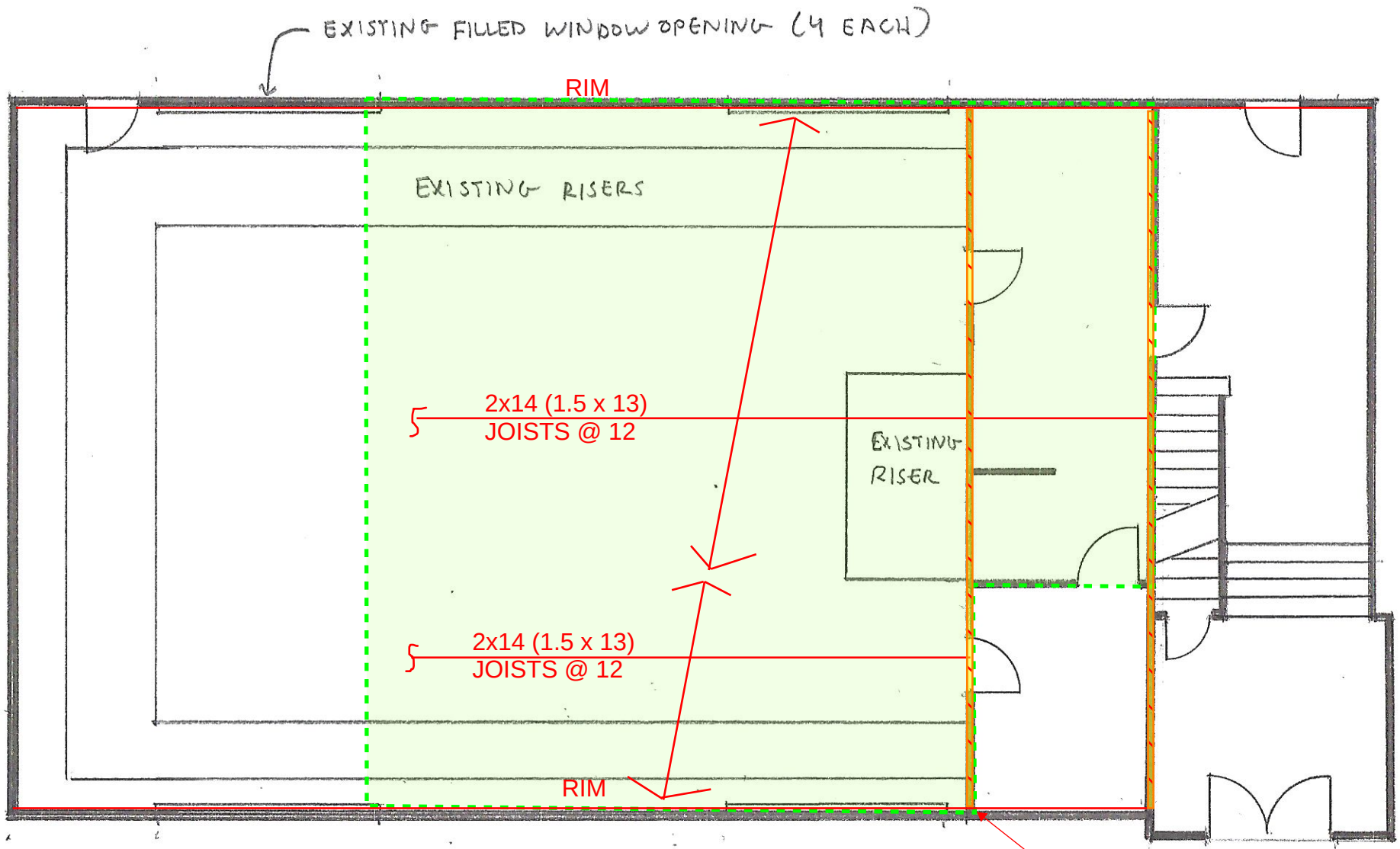


MASONIC LODGE

EXISTING MAIN FLOOR PLAN

0' 8' 16'

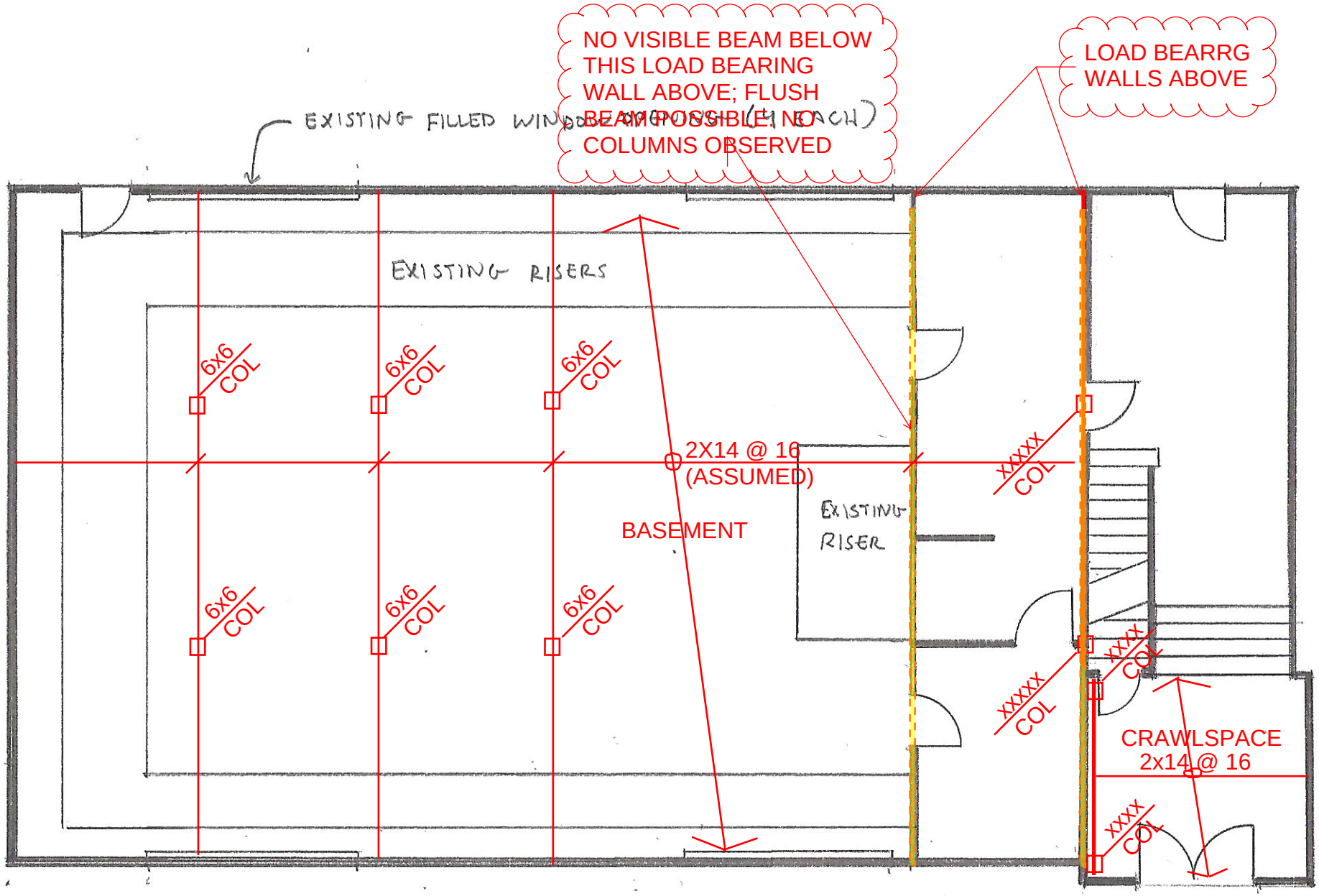
ROOF PLAN



MASONIC LODGE

EXISTING MAIN FLOOR PLAN

2nd FLOOR FRAMING PLAN



MAIN FLOOR FRAMING PLAN

Appendix B. Field Photographs.

See attached.

FIELD PHOTOGRAPHS, FEBRUARY 2023

	**Photograph No. 1** Exterior, north wall, looking south. **Notes:** Wall with historic (left) and addition (right). Crack developed at block/concrete interface.
	**Photograph No. 2** Exterior, north wall, looking east **Notes:** Typical condition of historic foundation. Block infill at existing opening.
	**Photograph No. 3** Exterior, north wall, looking east **Notes:** Basement access in historic foundation.

	**Photograph No. 4** Exterior, northeast corner, looking south. **Notes:** Concrete damage. Possible rebar exposure.
	**Photograph No. 5** Exterior, north wall, looking south. **Notes:** Exterior exist & stairway from main floor
	**Photograph No. 6** Exterior, north wall, looking south. **Notes:** Water infiltration risk at interface of historic foundation and addition.

	**Photograph No. 7** Exterior, west wall, looking east **Notes:** Overview of south end of west addition basement wall
	**Photograph No. 8** Exterior, west wall, looking east **Notes:** Overview of south end of west addition basement wall. Note cracks near center
	**Photograph No. 9** Exterior, west wall, looking east **Notes:** Top of concrete footing visible, depth undetermined.

Photograph No. 10

Exterior, west wall, looking east

Notes:

A close up of one of the cracks. The crap begins at the top of a 2x buck that has remained within the CMU wall.

Photograph No. 11

Interior, attic, looking SE

Notes:

Overview of 2x rafters, beam, and historic 2nd floor

Photograph No. 12

Interior, attic, looking SW

Notes:

Close up of 2x rafters bearing on exterior wall.

Photograph No. 13

Interior, attic, looking west

Notes:

Site built truss. 4x members, stitch plates, and rafter beam visible

Photograph No. 14

Interior, attic, looking west

Notes:

Site built truss. 4x members, stitch plates, and rafter beam visible. Note possible water on floor.

Photograph No. 15

Interior, attic, looking east

Notes:

General condition of roof and 2nd floor over historic portion of structure.

Photograph No. 16

Interior, attic, looking north

Notes:

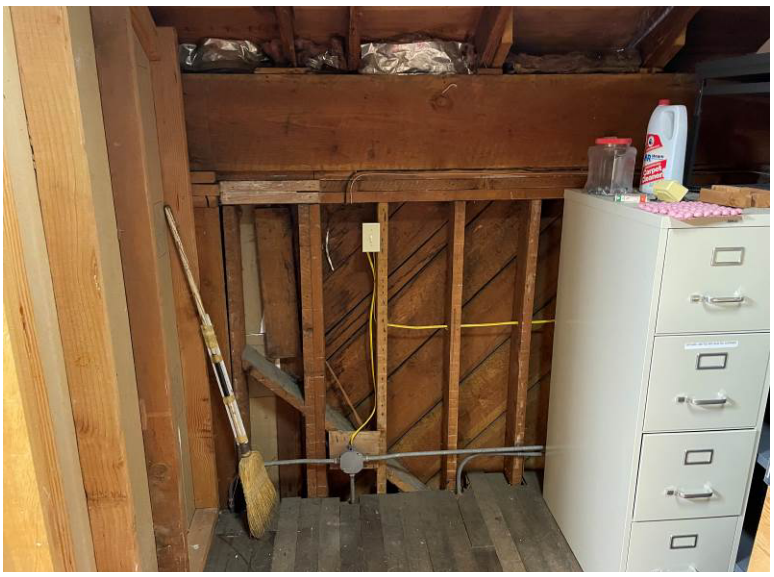
Existing brick chimney

Photograph No. 17

Interior, attic, looking west

Notes:

Typical 1x T&G decking on 2x14 2x14 floor joists at 12" oc. Interior 2x bearing wall below.

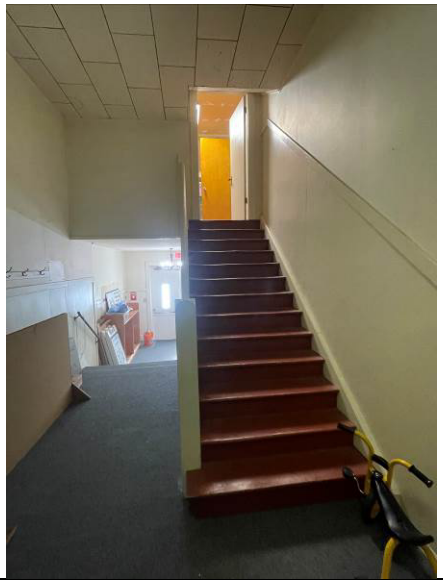


Photograph No. 18

Interior, attic, looking south

Notes:

Rafters bearing on 14" continuous rim beam. Exterior diagonal sheathing visible on typical 2x studs. 14" x continuous rim.

	**Photograph No. 18** Interior, entrance to attic, looking west **Notes:** Typical interior condition
	**Photograph No. 18** Interior, entrance to attic, looking south **Notes:** Typical interior condition
	**Photograph No. 18** Interior, from main entrance, looking north **Notes:** Basement access on left, stairs to main floor on left. Crawlspace is located under this entrance/foyer floor.

	**Photograph No. 18** Interior, main floor, looking south **Notes:** Typical interior condition
	**Photograph No. 18** Interior, main floor, looking south **Notes:** Typical interior condition
	**Photograph No. 18** Interior, main floor, looking west **Notes:** Typical interior condition

PND ENGINEERS, INC.

MEMORANDUM

PROJECT NO. 224063 **DATE:** March 31, 2023

PROJECT: Crescent Creek Park Master Plan

TO: Juliet Vong, HBB Landscape Architecture

CC: Rich Murakami, Rolluda Architects

FROM: Adam Tyner, PND Engineers

SUBJECT: Crescent Creek Park – Masonic Lodge Renovation

PND has completed a construction cost estimate for the renovation of the existing Masonic Lodge structure at Crescent Creek Park in the City of Gig Harbor. The following construction cost estimation is based on the current applicable building codes, construction standard practices, and preliminary structural plans based on the architectural design. The preliminary structural plans are attached. Any changes to the design or scope of the project may affect the construction cost estimate.

The city of Gig Harbor has adopted the 2018 International Building Code. The loads used for the new construction can be referenced in IBC 2018 Table 1607.1. The pertinent loads used in design of the new structural elements are listed below.

Category	Dead	Live	Snow
Roof	15 psf	20 psf	15 psf
2nd Floor	15 psf	100 psf	NA
Main Floor	15 psf	100 psf	NA

Category	Value
Wind Speed	97 mph
Risk Category	II
Exposure	B

Category	Value
Seismic Design Cat	D
Site Class	D-
Sds	1.195

PND performed calculations to estimate beam sizes, post requirements, and foundation sizes based on the assumed loading information above. These are rough checks for the gravity capacity of the new structural elements, and rough checks for the lateral capacity of the existing structure. The foundation reinforcement and the building connection to the foundation are not known. No geotechnical investigation has been conducted to confirm the building would meet current codes for soils bearing strength or liquefaction. The following summarizes the construction costs, broken down into broad construction categories.

Renovation Cost Estimate				
Category	Area (SF/LF)	SF/LF	Cost/SF(LF)	Cost
Foundation (New)	1600	SF	$55	$88,000
Foundation (Repair)	100	LF	$130	$13,000
Main Floor Framing	1600	SF	$40	$64,000
Second Floor Framing	1600	SF	$40	$64,000
New ADA Ramp	500	SF	$35	$17,500
Sum				$246,500

Hazard Mitigation		
Category		Cost
Asbestos	Lump Sum	$10,000
Lead Paint	Lump Sum	$10,000
Sum		$20,000

The basement has had instances of flooding and water infiltration. The cost estimate includes considerations the cost to excavate the perimeter, investigate potential water intrusion locations, address drainage, waterproof as required, and backfill. The foundation estimate also includes the shoring and the construction of new isolated footings and filling existing cracks in the concrete or CMU basement walls, but does not include the ADA ramp footings.

The main floor estimate includes shoring and demolition of the existing structure as required, and the framing of new structural members.

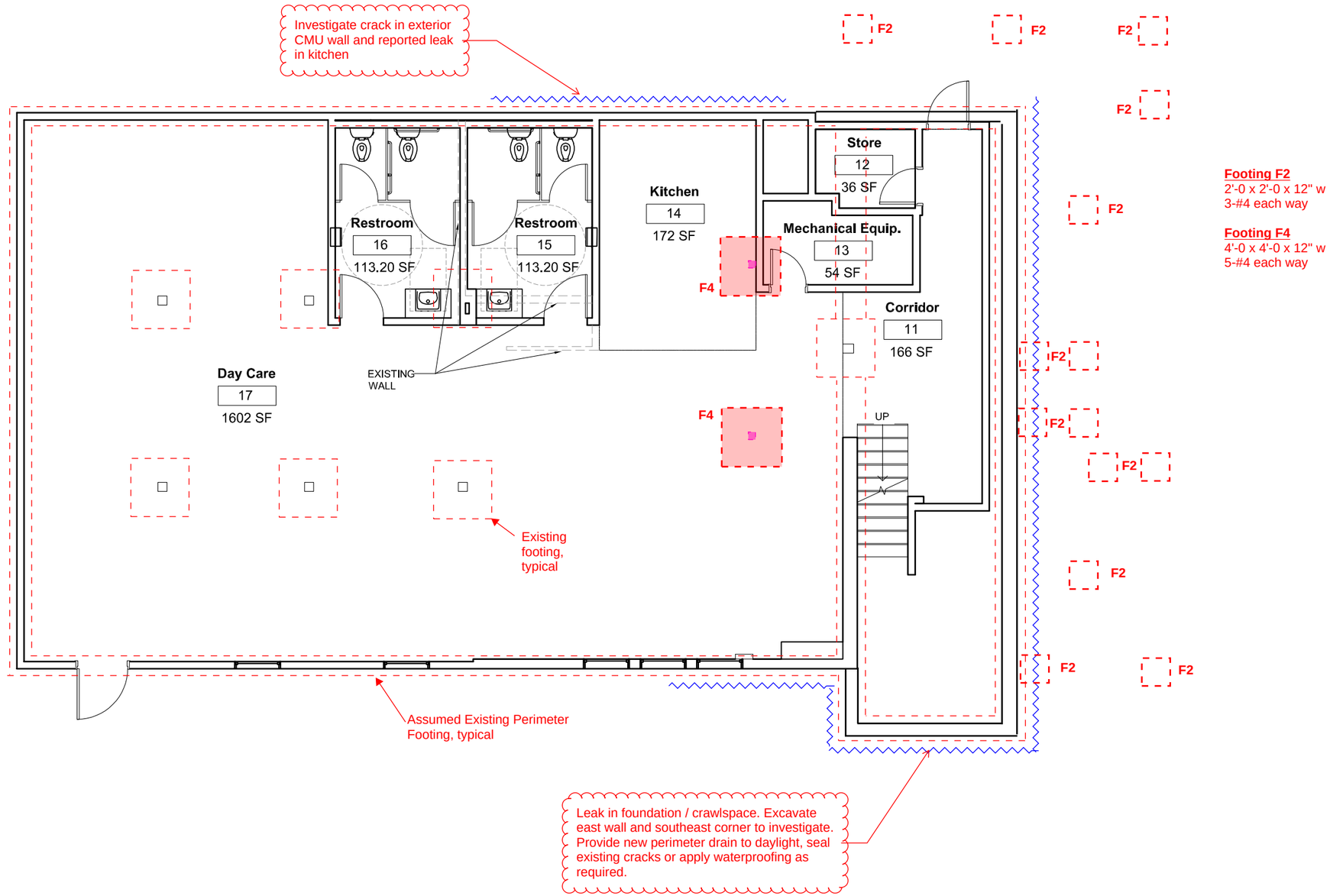
The second-floor estimate includes the shoring and demolition of the existing walls, the installation of the new structural beams and columns, and placing the new interior non-load bearing walls. It also includes shoring and adding structure to the floor area above the Entry.

The ramp estimate includes the footings, posts, ramp framing, and guard rails.

The Hazardous Building Material Assessment report by DH Environmental indicated locations requiring mitigation of asbestos and lead. The asbestos estimate is based on the square footage of the discovered asbestos. The lead estimation is based on the amount of confirmed lead specimens compared to the amount sampled. These estimates are subject to change if additional hazardous material is discovered. These do not include replacement costs, refer to the architectural estimates for new materials.

For the hazardous materials, and for all other associated costs, the estimated costs above are subject to change based on local variances in material and labor costs.

The estimate above does not include structural design fees, taxes, permitting, construction administration or contingency costs. Refer to the architectural estimate for the compiled estimate of these and other additional costs.



Footing F2
2'-0 x 2'-0 x 12" w
3-#4 each way

Footing F4
4'-0 x 4'-0 x 12" w
5-#4 each way

FOUNDATION PLAN

Existing structural framing components to remain, unless noted otherwise.

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architecture planning interior design

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MASONIC LODGE

3025 96TH ST, GIG HARBOR, WA 98335

OWNER:
CITY OF GIG HARBOR CRESCENT CREEK PARK

REVISION	DATE

Design:
Drawn:
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Project No.

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Date: 03/03/2023

Drawing Title
FLOOR PLAN

Drawing Number
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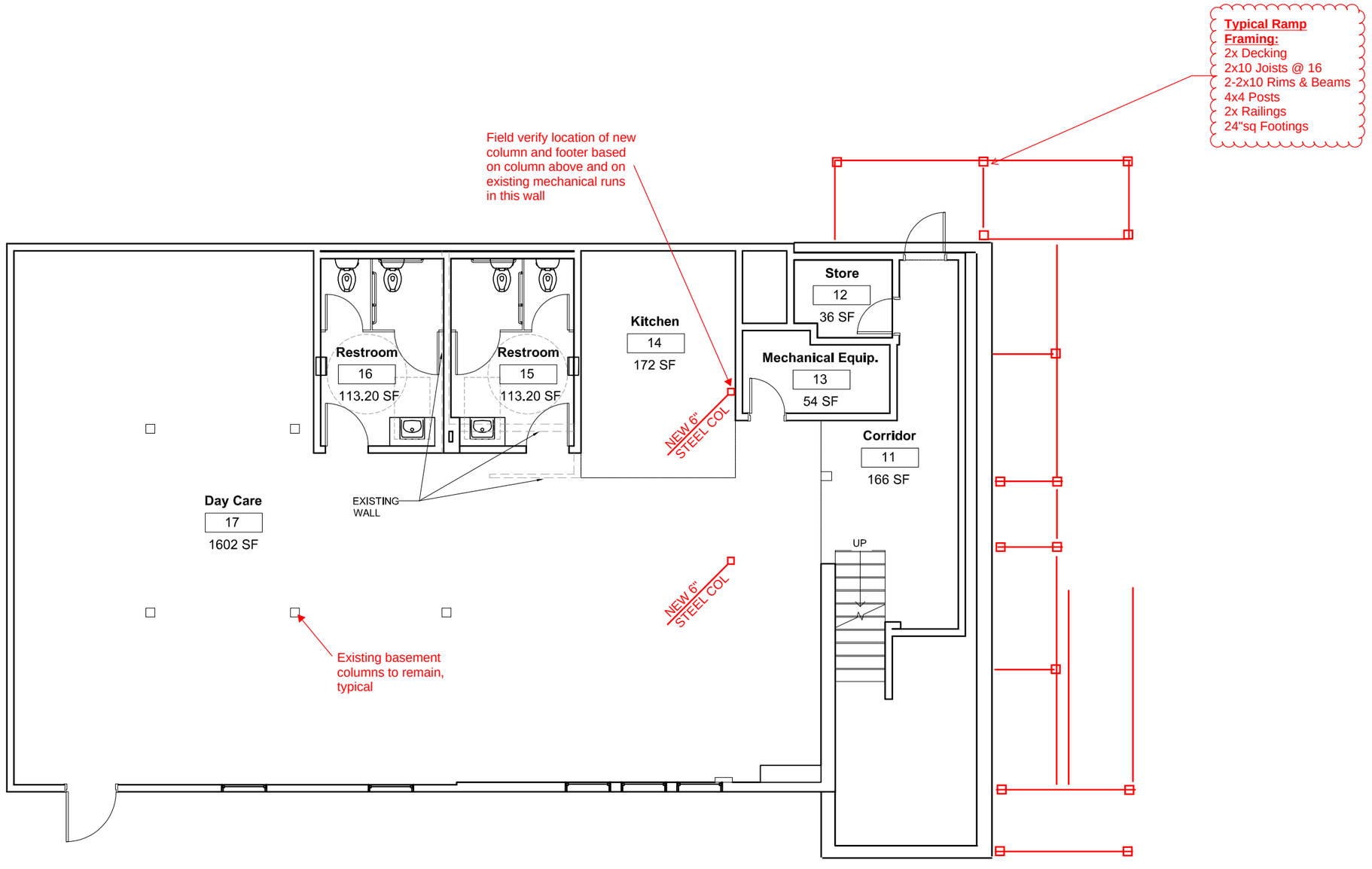

MAIN FLOOR FRAMING PLAN

Existing structural framing components to remain, unless noted otherwise.

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MASONIC LODGE

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OWNER: CITY OF GIG HARBOR CRESCENT CREEK PARK

REVISION	DATE

Design:
Drawn:
Checked:
Project No.

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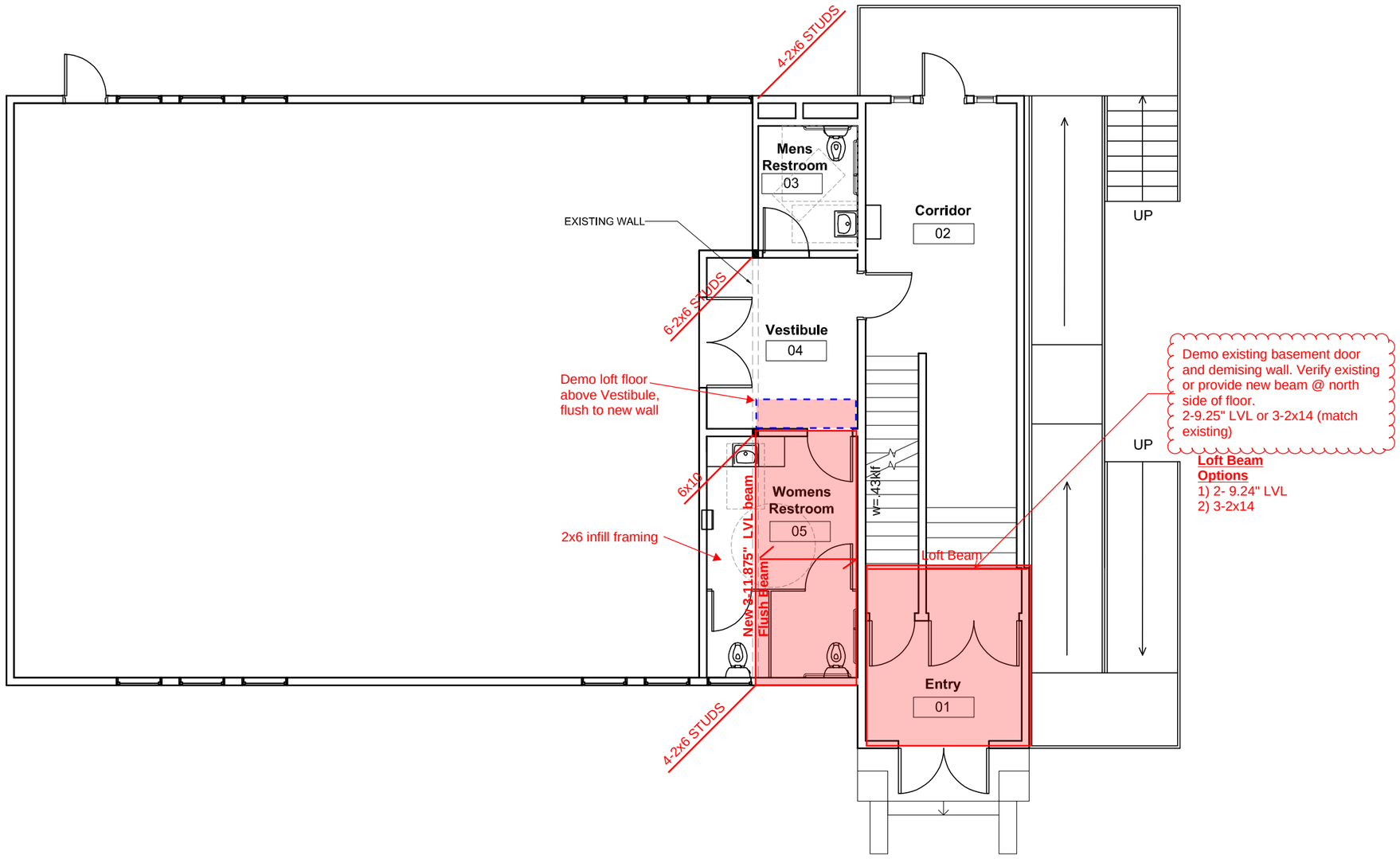

SECOND FLOOR FRAMING PLAN (INSET)

Existing structural framing components to remain, unless noted otherwise.

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architecture planning interior design

105 S. Main Street Suite 323
Seattle, WA 98104
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f: 206-624-4226

MASONIC LODGE
3025 96TH ST, GIG HARBOR, WA 98335
OWNER: CITY OF GIG HARBOR CRESCENT CREEK PARK

REVISION	DATE

Design:
Drawn:
Checked:
Project No.

Issuance
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Date: 27/02/2023

Drawing Title
FLOOR PLAN

Drawing Number
A102

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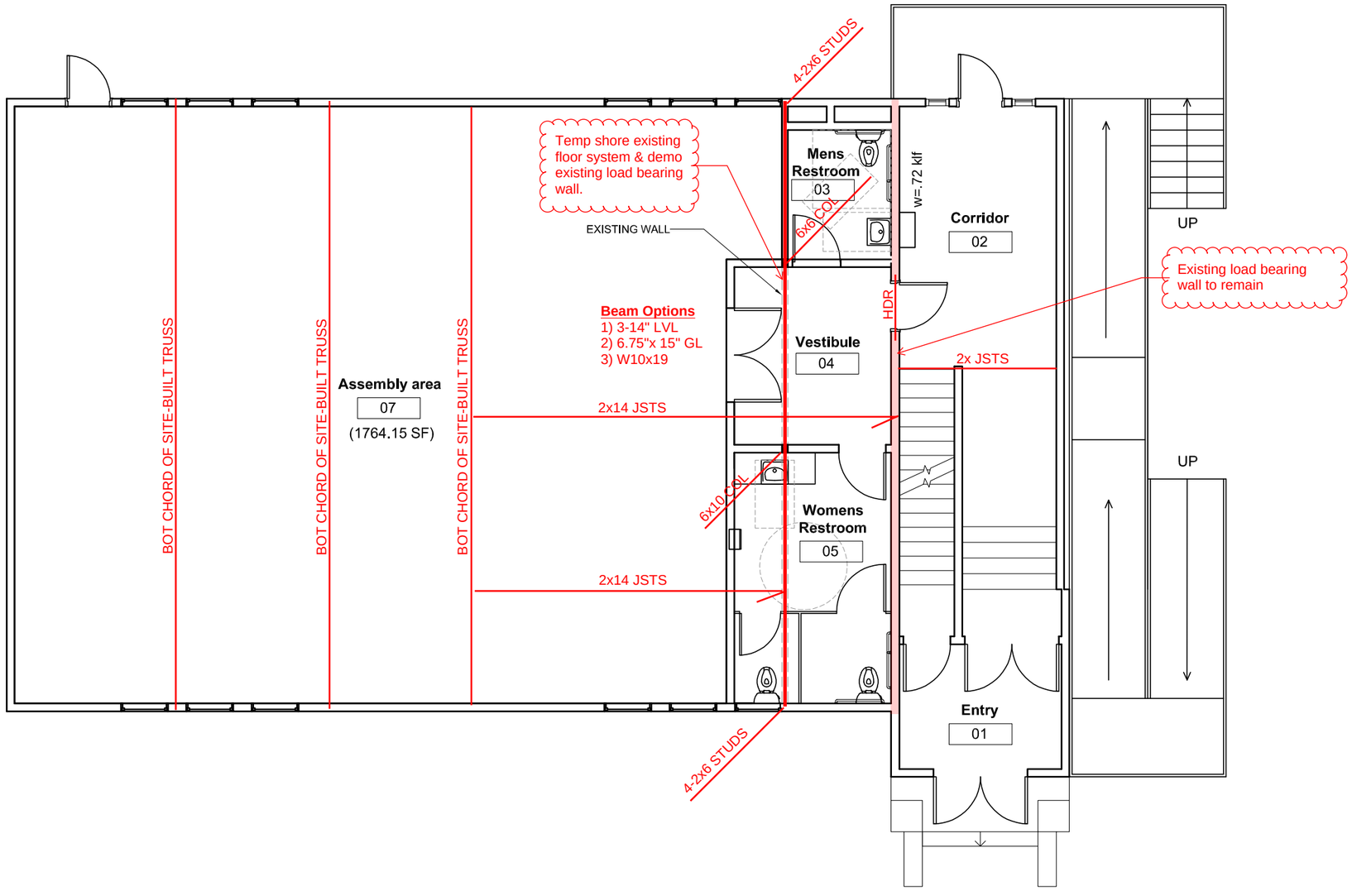

SECOND FLOOR FRAMING PLAN

Existing structural framing components to remain, unless noted otherwise.

rolluda architects
architecture planning interior design

105 S. Main Street Suite 323
Seattle, WA 98104
t: 206-624-4222
f: 206-624-4226

MASONIC LODGE

3025 96TH ST, GIG HARBOR, WA 98335

OWNER: CITY OF GIG HARBOR CRESCENT CREEK PARK

REVISION	DATE

Design:
Drawn:
Checked:
Project No.

Issuance

.

Date: 27/02/2023

Drawing Title

FLOOR PLAN

Drawing Number

A102

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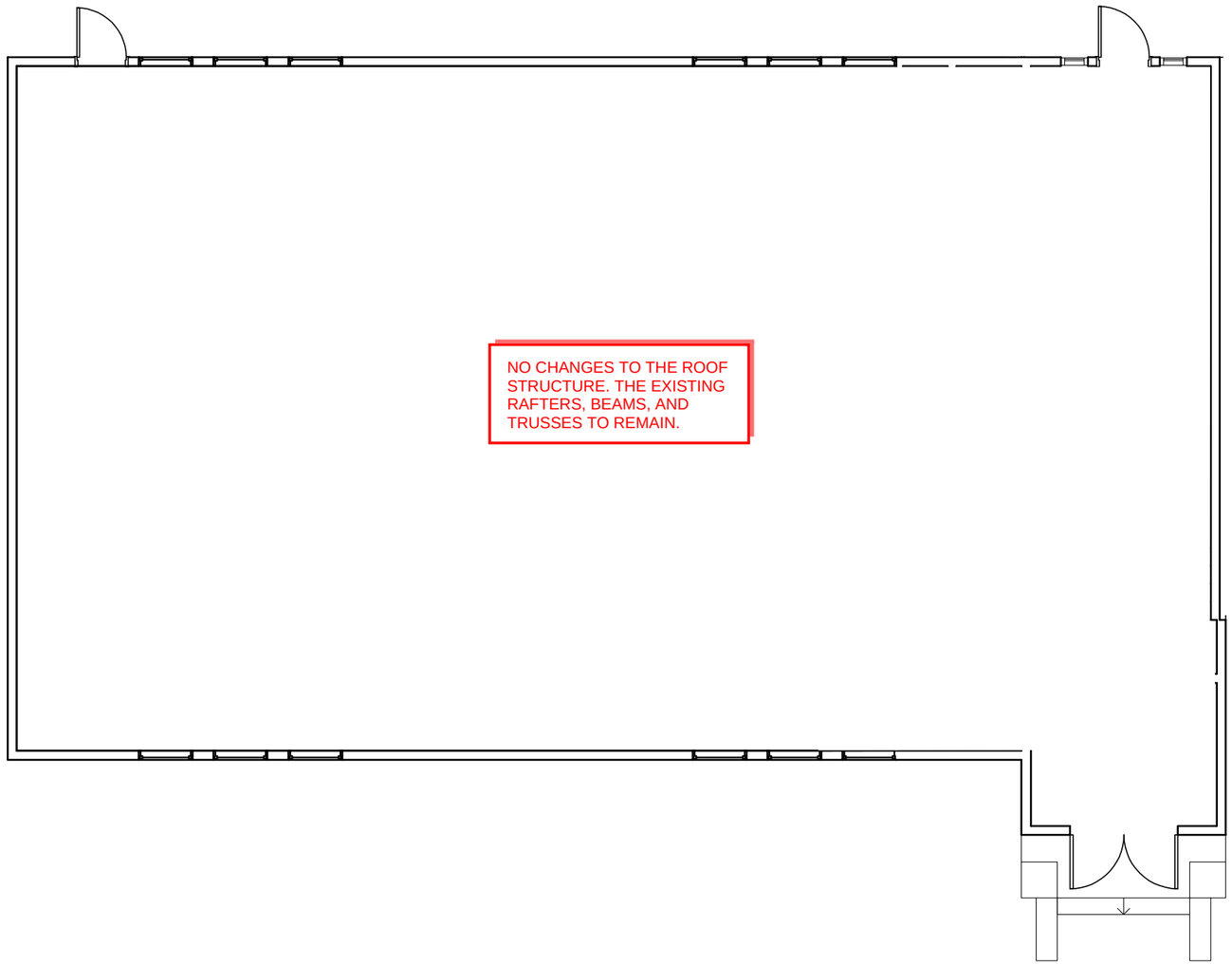

ROOF FRAMING PLAN

Existing structural framing components to remain, unless noted otherwise.

rolluda architects
architecture planning interior design

105 S. Main Street Suite 323
Seattle, WA 98104
t: 206-624-4222
f: 206-624-4226

MASONIC LODGE

3025 96TH ST, GIG HARBOR, WA 98335

OWNER:
CITY OF GIG HARBOR CRESCENT CREEK PARK

REVISION	DATE

Design:
Drawn:
Checked:
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Issuance

.

Date: 27/02/2023

Drawing Title

FLOOR PLAN

Drawing Number

A102

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APPENDIX F

HAZARDOUS MATERIALS ASSESSMENT

Hazardous Building Materials Assessment

3025 96th Street
Gig Harbor, WA 98332

03 March 2023

Prepared for:
City of Gig Harbor
3510 Grandview Street
Gig Harbor, WA 98335

Prepared by:
DH Environmental, Inc.
1011 SW Klickitat Way,
Suite 107
Seattle, WA 98134

Professional Services Contract
Project Number: CPP-1925

EXECUTIVE SUMMARY

The City of Gig Harbor retained DH Environmental, Inc. (DH Environmental) to conduct a hazardous building materials assessment for the building located at 3025 96th Street in Gig Harbor, WA. DH Environmental provided one AHERA accredited building inspector to conduct the assessment on March 3rd, 2023. The scope of the services included assessing the building for hazardous building materials in anticipation of the forthcoming renovation.

DH Environmental assessed the building for the following hazardous building materials:

- Asbestos-containing materials (ACM);
- Lead-based paints (LBP)
- Polychlorinated Biphenyls (PCBs)
- Other hazardous building materials (universal waste, refrigerant gases, propane cylinders and smoke detectors)

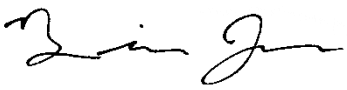
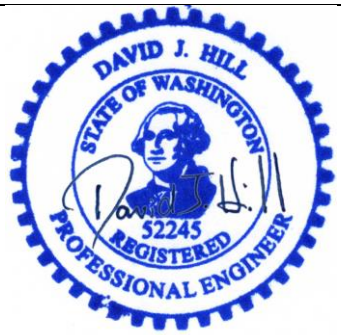
Twenty-five (25) bulk samples of suspect asbestos-containing materials were collected and analyzed using polarized light microscopy (PLM). **Two (2) of the samples were found to contain asbestos greater than 1%. Building materials that contain greater than 1% asbestos are considered "Asbestos Containing Materials" by regulatory definition.**

Seventy-eight (78) locations in the building were analyzed using an X-ray fluorescence analyzer (XRF). **Thirteen (13) of the locations were found to contain lead above the Federal lead-based paint concentration criteria of 1 mg/cm².**

Other hazardous materials such as fluorescent lamps, light ballasts, fire extinguishers, and emergency exit signs were identified during the inspection and are inventoried in the report.

One sample of suspected PCB containing paint were collected and analyzed for PCBs by EPA Method 8082. The sample was below the regulatory limit of 50 mg/kg for PCBs.

PROJECT INFORMATION

Project Title	3025 96th Street, Gig Harbor, WA Hazardous Building Materials Assessment
Assessment Conducted by	DH Environmental, Inc. 1011 SW Klickitat Way, Suite 107 Seattle, WA 98134
Project Owner	City of Gig Harbor
Contract Vehicle	City of Gig Harbor Professional Services Contract Project Number: CPP-1925
Owner's Representative	Jennifer Haro Parks Manager
Assessment Personnel	Brian Johnson, OHST, CET AHERA Accredited Building Inspector Certified Lead Risk Assessor Lacee Ostbye, CHMM Sr. Environmental Specialist
Survey Date(s)	03 March 2023
Report Delivery Date	23 March 2023
Report Prepared by	 Brian Johnson, OHST, CIT AHERA Accredited Building Inspector Certified Lead Risk Assessor EHS Program Manager
Report Reviewed by	 Expires 12/01/2023 David Hill, PE, CHMM, CPEA Principal DH Environmental, Inc.

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1.0 INTRODUCTION

The city of Gig Harbor retained DH Environmental, Inc. (DH Environmental) to conduct a hazardous building materials assessment of the building located at 3025 96th Street in Gig Harbor, WA. DH Environmental provided one AHERA accredited building inspector to conduct the assessment on March 3rd, 2023.

1.1 Scope of Services

The scope of the services included assessing parts of the building for hazardous building materials in anticipation of forthcoming renovation in accordance with 40 CFR 763, Puget Sound Clean Air Agency Regulation III, Article 4.02(a), and the Washington State Dangerous Waste Regulations (WAC 173-303).

DH Environmental assessed the building for the following hazardous building materials:

- Asbestos-containing materials (ACM);
- Lead-based paints (LBP)
- Polychlorinated Biphenyls (PCBs)
- Other hazardous building materials:
    - refrigerant gases (CFCs)
    - smoke detectors
    - Fluorescent lamps

1.2 Assessment Objective

The objective of this hazardous building materials assessment is to assist the City of Gig Harbor with communicating the presence of hazardous building materials and the presence, location, and quantity of ACM to employees, vendors, and contractors working in the project area. In addition, this assessment is meant to satisfy the requirements for an asbestos survey for the Puget Sound Clean Air Agency (PSCAA) and a good faith inspection as required by Washington State Department of Labor and Industries' Division of Occupational Safety and Health (DOSH) regulations prior to building demolition or renovation. Regulations require that a complete copy of this assessment be kept in a conspicuous location on-site at all times during activities that may impact known and suspect ACM.

2.0 SITE DESCRIPTION

The building located at 3025 96th Street in Gig Harbor was built in 1915 and is approximately 2,272 sq ft. The building was initially constructed to serve as a school for the growing community. Throughout its long history the building has also served as a Masonic Temple, storage for the City of Gig Harbor, and is currently an active co-op pre-school.

3.0 ASBESTOS CONTAINING MATERIALS ASSESSMENT

3.1 Applicable ACM Regulations

The Washington State Department of Labor and Industries' Division of Occupational Safety and Health (DOSH) and the Puget Sound Clean Air Agency regulate building materials that contain more than 1 percent asbestos as ACM for protection of human health and the environment.

DOSH regulates worker exposure to airborne asbestos fibers during general work activities and construction and demolition activities (WAC 296-62-077). Worker exposure to airborne asbestos fibers must be below the Permissible Exposure Level (PEL) of an 8-hour time-weighted average (8-hr TWA) of 0.1 fiber per cubic centimeter (f/cc) of air. DOSH regulations establish engineering controls and work practices that are designed to mitigate workers exposure to asbestos in the workplace.

The Puget Sound Clean Air Agency (PSCAA) regulates the release of airborne asbestos fibers in King County and surrounding areas. Specifically, PSCAA under Article IV, Regulation Ill regulates emissions of asbestos during building renovation and demolition projects. This regulation requires that an asbestos survey be conducted prior to demolition, that PSCAA be notified prior to commencing with demolition activities, that ACM be removed prior to demolition, and that asbestos-containing waste materials be properly removed and disposed of in a manner that prevents the release of airborne asbestos fibers. In addition, the United States Environmental Protection Agency (USEPA) requires asbestos abatement workers and supervisors to be trained and certified in accordance with 40 CFR 763 Subpart E, Appendix C. DOSH has analogous training requirements for abatement workers in WAC 296-65. The EPA and DOSH training and certification requirements apply to abatement work for buildings at the subject property.

3.2 Sampling Methodology

The ACM sampling methodology conducted for this assessment was conducted in accordance with Puget Sound Clean Air Agency Guidance Document 66-149, Asbestos Survey Guidance Rev. 2., as well as related AHERA Protocols. A site walk was conducted with the Owner's Project Engineer prior to conducting the assessment.

All areas of the interior and exterior were investigated thoroughly looking for suspected ACM. Destructive sampling was needed in some areas to help identify building material components (e.g., insulation that was found behind the walls). Where appropriate, suspect ACM was grouped as homogenous if the materials were similar in appearance.

Samples were collected, containerized, and delivered to NVL Environmental Laboratories in Seattle, WA following standard chain of custody procedures. Suspect ACM samples were analyzed per EPA Method 600/R93/116 by Polarized Light Microscopy (PLM) analysis. NVL is a National Voluntary Laboratory Accreditation Program (NVLAP) – certified laboratory, certification number 102063-0 (see attachment 4).

3.3 Sampling Results

Twenty-five (25) bulk samples of suspect asbestos-containing materials were collected and analyzed using

polarized light microscopy (PLM). **Two (2) of the samples were found to contain asbestos greater than 1%. Building materials that contain greater than 1% asbestos are considered "Asbestos Containing Materials" by regulatory definition.**

Sample ID	Material Description	Sample Location	Concentration	Material Quantity Estimate (if applicable)
COGH-3025-ACM-01	**Layer 1:** Green and tan fibrous material **Layer 2:** Black asphaltic fibrous backing with brown mastic	Interior	ACM (%): ND	NA
COGH-3025-ACM-02	**Layer 1:** Red fibrous material with gray/white plastic mesh **Layer 2:** Tan brittle mastic with tan/white fibrous mesh	Interior	ACM (%): ND	NA
COGH-3025-ACM-03	**Layer 1:** Tan fibrous material with adhesive and paint	Interior	ACM (%): ND	NA
COGH-3025-ACM-04	**Layer 1:** Tan fibrous material with adhesive	Interior	ACM (%): ND	NA
COGH-3025-ACM-05	**Layer 1:** Green, tan, and red fibrous material with adhesive	Interior	ACM (%): ND	NA
COGH-3025-ACM-06	**Layer 1:** Tan compressed fibrous material with paint	Interior	ACM (%): ND	NA
COGH-3025-ACM-07	**Layer 1:** Tan compressed fibrous material with paint	Interior	ACM (%): ND	NA
COGH-3025-ACM-08	**Layer 1:** Tan compressed fibrous material with paint	Interior	ACM (%): ND	NA
COGH-3025-ACM-09	**Layer 1:** Gray and burnt cementitious material	Interior	ACM (%): ND	NA
COGH-3025-ACM-10	**Layer 1:** Tan fibrous material with multi-colored paper pieces and wood chips	Interior	ACM (%): ND	NA
COGH-3025-ACM-11	**Layer 1:** Yellow fibrous material with sand dust	Interior	ACM (%): ND	NA
COGH-3025-ACM-12	**Layer 1:** Pink fibrous material with asphalt dust	Interior	ACM (%): ND	NA
COGH-3025-ACM-13	**Layer 1:** Gray sandy/brittle material with white/yellow paint	Interior	ACM (%): ND	NA
COGH-3025-ACM-14	**Layer 1:** White compacted powdery crumbly material with fibrous mesh **Layer 2:** Crumbly white chalky material with paper	Interior	ACM (%): ND	NA
COGH-3025-ACM-15	**Layer 1:** Red fibrous material with tan mastic, tan adhesive, and black foamy material	Interior	ACM (%): ND	NA

COGH-3025-ACM-16	**Layer 1:** Multi-colored fibrous material with plastic/fibrous mesh, gray sandy material, and tan mastic	Interior	ACM (%): ND	NA
COGH-3025-ACM-17	**Layer 1:** Tan compressed fibrous material with paint	Interior	ACM (%): ND	NA
COGH-3025-ACM-18	**Layer 1:** Tan/white sheet vinyl with fiber debris **Layer 2:** Beige paper backing with soaked in beige mastic	Basement Kitchen	ACM (%): Layer 2 44% Chrysotile	Approximately 200 square feet
COGH-3025-ACM-19	**Layer 1:** Tan fibrous material with paint	Interior	ACM (%): ND	NA
COGH-3025-ACM-20	**Layer 1:** Tan fibrous material with paint	Interior	ACM (%): ND	NA
COGH-3025-ACM-21	**Layer 1:** Beige sheet vinyl **Layer 2:** White paper backing with soaked in white mastic **Layer 3:** Gray sandy material with tan adhesive	Interior	ACM (%): ND	NA
COGH-3025-ACM-22	**Layer 1:** Multi-colored fibrous material with plastic/fibrous mesh, tan mastic, and gray sandy material **Layer 2:** Black foamy material	Interior	ACM (%): ND	NA
COGH-3025-ACM-23	**Layer 1:** Off-white sheet vinyl in stone pattern **Layer 2:** Beige paper backing with soaked in tan mastic **Layer 3:** Brown brittle mastic with white rubbery material and wood flakes	Interior	ACM (%): Layer 2 44% Chrysotile	Approximately 80 square feet
COGH-3025-ACM-24	**Layer 1:** Light gray/tan fibrous felt **Layer 2:** White brittle material with gray dust **Layer 3:** Transparent soft material	Exterior	ACM (%): ND	NA
COGH-3025-ACM-25	**Layer 1:** Transparent soft material with tan/white paper, silver foil, adhesive, and gray dust **Layer 2:** White brittle material with wood piece	Exterior	ACM (%): ND	NA

Table 1: ACM Sample Results
ND: Not Detected at Reporting Limit
NA: Not Applicable
ACM: Asbestos Containing Material

4.0 LEAD BASED PAINT (LBP) ASSESSMENT

4.1 Applicable LBP Regulations

DOSH regulates exposure of workers in general industry (WAC 96-62-07521) and construction workers (WAC 296-155-176) to lead in the workplace. The regulations provide engineering controls and work practices to minimize worker exposures. These regulations are applicable to renovation/demolition activities that have the potential to expose workers to airborne concentrations of lead at or above the 8-hr time weighted average (TWA) action level of 30 micrograms per cubic meter (ug/m^3) of air. Workers must not be exposed to lead at concentrations greater than the permissible exposure limit (PEL) of 50 ug/m^3 for an 8-hr TWA. Employers are responsible for determining whether their employees will be exposed to lead. A negative exposure assessment is required, consisting of modeling or air monitoring to verify that workers are not being exposed above the action level. If an exposure assessment cannot be conducted for demolition activities, workers coming into contact with deteriorated paint and paint dust should wear a half-face respirator with a particulate cartridge, coveralls or similar full-body work clothing, gloves, safety glasses, and shoes or disposable shoe coverlets. If the negative exposure assessment reveals that workers are exposed to lead dust above the PEL, the requirements of WAC 296-62-07521 must be implemented, including training, air monitoring, and medical surveillance.

The USEPA regulates LBP activities in residential target housing (40 CFR 745, Subpart L). These regulations include both training and certification requirements for persons involved in LBP activities in target housing, as well as work practice standards for conducting LBP inspections, risk assessments, and abatement activities. The regulations under 40 CFR 745, Subpart L do not apply to LBP activities to be conducted on the subject property.

The USEPA and Washington State requires generators of solid waste to determine whether their waste is a dangerous waste for proper accumulation, transportation, and disposal. For demolition debris-related waste that potentially contains lead or other heavy metals, a representative sample(s) of the debris must be analyzed by the Toxicity Characteristic Leachate Procedure (TCLP) in accordance with WAC 173-303-090. Solid wastes containing leachable lead detected at a concentration of 5 mg/L or greater must be accumulated, stored, transported and disposed of as dangerous waste. Scrap metal that will be recycled is exempt from regulation as a Dangerous Waste in accordance with WAC 173-303-071(ff).

4.2 LBP Sampling Methodology

The testing of suspected lead painted surfaces was conducted by portable XRF lead-based paint analyzer. XRF instruments expose a building component to electromagnetic radiation in the form of X-rays or gamma radiation. In response to radiation, each element, including lead, emits energy at a fixed and characteristic level. Emission of characteristic x-rays is called “X-Ray Fluorescence,” or XRF. The energy released is measured by the instrument’s fluorescence detector and displayed, all of the inconclusive ranges and/or thresholds are based on 1.0 mg/cm^2. The lead-based paint inspection is in accordance with the methodologies set forth by the U.S. Department of Housing and Urban Development (HUD), and manufacturer’s guidelines.

Locations of the areas tested are shown in Figure 2.

4.3 LBP Sampling Results

Seventy-eight (78) locations in the building were analyzed using an X-ray fluorescence analyzer (XRF). **Thirteen (13) of the locations were found to contain lead above the Federal lead-based paint concentration criteria of 1 mg/cm².** The table below represents the tests that were confirmed positive for lead concentrations exceeding the threshold of 1 mg/cm².

A complete list of test locations and findings can be found in Attachment 3.

Sample ID	Space Name	Component	Substrate	Color	Condition	Concentration	Notes
Pb-10	Interior	Door Jamb	Wood	Beige	Intact	Lead Concentration: 5 mg/cm²	
Pb-25	Interior	Door	Wood	White	Intact	Lead Concentration: 1.3 mg/cm²	
Pb-35	Interior	Door	Wood	White	Intact	Lead Concentration: 1.7 mg/cm²	
Pb-40	Interior	Stair Post	Wood	White	Intact	Lead Concentration: 1.3 mg/cm²	
Pb-41	Interior	Stair Rail	Wood	White	Intact	Lead Concentration: 1.5 mg/cm²	
Pb-46	Interior	Wall/Shiplap	Wood	White	Intact	Lead Concentration: 1.1 mg/cm²	
Pb-51	Interior	Door	Wood	White	Intact	Lead Concentration: 1.4 mg/cm²	
Pb-54	Interior	Restroom Stall Door	Wood	White	Intact	Lead Concentration: 2.3 mg/cm²	
Pb-57	Interior	Restroom Stall Door	Wood	White	Intact	Lead Concentration: 1.8 mg/cm²	
Pb-66	Exterior	Door	Wood	Beige	Intact	Lead Concentration: 5 mg/cm²	
Pb-71	Exterior	Door	Wood	Beige	Deteriorated	Lead Concentration: 1.4 mg/cm²	
Pb-73	Exterior	Window Cover	Wood	Blue	Intact	Lead Concentration: 1.1 mg/cm²	
Pb-76	Exterior	Exhaust Panel	Wood	Blue	Intact	Lead Concentration: 1.5 mg/cm²	

Table 2: LBP Sample Results
mg/cm²: milligrams per Square Centimeter
LBP: Lead Based Paint

5.0 POLYCHLORINATED BIPHENYLS (PCBs) ASSESSMENT

5.1 Applicable PCB Regulations

Common PCB building materials include caulking, paint and adhesives. Current regulations require the removal of building materials containing PCBs if found with concentrations of 50 parts per million (ppm) or greater. Reinforcing this regulatory interpretation, EPA's current policy is clearly stated on the agency's website under a page titled *Current Best Practices for PCBs in Caulk Fact Sheet - Removal and Clean-Up of PCBs in Caulk and PCB-Contaminated Soil and Building Material*[1]. The website states the following: "Caulk containing PCBs at concentrations ≥ 50 ppm is not authorized for use and must be removed and properly disposed. When disposed, the caulk must be managed as *PCB bulk product waste*, defined at 40 CFR §761.3. Regulations governing the cleanup and disposal of *PCB bulk product waste* are provided at 40 CFR §761.62. PCB-containing caulk or caulk coated building material containing PCBs at concentrations ≥ 50 ppm must be removed unless otherwise approved by EPA under a risk-based disposal approval issued under 40 CFR § 761.62(c)."

PCBs are also contained within the fluorescent lamp capacitors and interior potting material of old, magnetic lighting fixtures. The capacitor regulates the amount of electricity flowing into the lighting fixture, and the potting material insulates the FLB and reduces the "humming" noise. Because all PCB-containing fluorescent light ballasts currently in use have exceeded their designated life span, they are susceptible to leaking or rupturing. This may lead to increased exposure to building occupants. Residues from these sources are difficult and costly to clean up. Additionally, intact PCB-containing fluorescent light ballasts may emit small amounts of PCBs into the air during normal use of the lighting fixtures.

EPA recommends all PCB-containing fluorescent light ballasts be removed from lighting fixtures. The fluorescent light ballasts and capacitors are regulated in concentrations greater than 50 mg/kg by the USEPA, and at concentrations greater than 2 mg/kg by the Washington State Department of Ecology. In accordance with 40 CFR 761.2, "any person must assume that a capacitor manufactured prior to July 2, 1979, whose PCB concentration is not established contains ≥500 ppm PCBs. Any person may assume that a capacitor manufactured after July 2, 1979, is non-PCB (i.e., <50 ppm PCBs). If the date of manufacture is unknown, any person must assume the capacitor contains ≥500 ppm PCBs. Any person may assume that a capacitor marked at the time of manufacture with the statement "No PCBs" in accordance with § 761.40(g) is non-PCB."

5.2 PCB Sampling Methodology / Findings

Fluorescent lights were observed during the assessment but were not able to be accessed to verify that light ballasts say, "no PCBs". Careful inspection of each ballast in the building should be conducted upon removal to ensure proper management of the ballasts. If any of the ballasts do not contain the words "no PCBs" and were

[1] http://www.epa.gov/pcbsincaulk/caulkremoval.htm

manufactured before July 2, 1979, they must be assumed to contain PCBs unless sampling confirms they do not. In addition, employers must inform their employees of PCB hazards in accordance with WAC 296-800-170.

5.3 PCB Sampling Results

One sample of suspected PCB containing caulking was collected and analyzed for PCBs by EPA Method 8082. The sample was below the regulatory limit of 50 mg/kg for classification as PCB Bulk Product Waste. The location of the sample collection is shown in Figure 2. Table 3 below shows the results of the PCB sample.

Sample ID	Material Description	Sample Location	Concentration	Material Quantity Estimate (if applicable)
COGH-3025-PCB-01	Caulking	Basement HVAC Closet	PCBs (mg/kg): ND	NA

Table 3: PCB Sample Results
mg/kg: milligrams per kilogram (parts per million)
PCB: Polychlorinated Biphenyls

6.0 OTHER HAZARDOUS BUILDING MATERIALS ASSESSMENT

A visual inspection was conducted to inventory other hazardous building materials. Other hazardous building materials assessed included universal waste, refrigerant gases, propane cylinders, and fire extinguishers.

6.1 Universal Waste

Universal waste is a category of dangerous waste that allows all businesses to handle several common types of dangerous waste under simplified rules. Managing these materials as universal waste means that they are not counted toward your generator status or reported on your Dangerous Waste Annual Report. In Washington State, five categories of waste can be managed as universal waste:

- Batteries;
- Lights, lamps, light bulbs, and light tubes;
- Mercury-containing thermometers;
- Mercury-containing thermostats;
- Mercury-containing switches and relays.

If any of these materials are identified for disposal for the demolition or renovation project, the materials should be removed, packaged, and recycled as universal waste.

6.2 Refrigerant Gases

Section 608 of the Federal Clean Air Act prohibits individuals from intentionally venting refrigerants into the atmosphere while disposing of refrigeration/AC equipment. “De minimis” quantities of refrigerant released in the course of making good faith attempts to recapture and recycle or safely dispose of refrigerant are not subject to this prohibition (40 CFR 82.154[a][2]). To implement the venting prohibition, Section 608 specifies evacuation level requirements (40 CFR 82.156) and refrigerant recovery equipment requirements (40 CFR 82.158) for both small appliances and other refrigeration/AC equipment. When demolishing or renovating a structure, the following equipment should be assessed to determine the need for evacuation, recovery, or disposal by a licensed technician:

<u>Small Appliances</u>

A small appliance is defined as any appliance that is fully manufactured, charged, and hermetically sealed in a factory with five pounds or less of a CFC or HCFC refrigerant, including the following:

- Refrigerators and freezers (designed for home, commercial, or consumer use);
- Medical or industrial research refrigeration equipment;
- Room air conditioners (including window air conditioners and packaged terminal air heat pumps);
- Under-the-counter ice makers;
- Vending machines; and
- Drinking water coolers.

All Other Equipment

All other equipment refers to all appliances except for small appliances, motor vehicle air conditioners (MVACs), and MVAC-like appliances. Specifically, this equipment includes:

- Chillers;
- Industrial refrigeration equipment (not including research equipment);
- Refrigerant fire suppression systems;
- Commercial refrigeration equipment; and
- Cold storage equipment.

6.3 Fire Extinguishers

Dry chemical and liquid fire extinguishers may designate as dangerous waste if they are disposed of as solid waste. Fire extinguishers should be removed from service prior to demolishing or renovating the area where the fire extinguishers are mounted or stored. If the fire extinguishers cannot be recycled or reused, they must be designated and disposed of accordingly.

6.4 Radioactive Exit Signs and Smoke Alarms

Many exit signs and smoke alarms contain low-level radioactive sources that should be managed in accordance with Nuclear Regulatory Commission Regulations. Accredited mail-in programs are available to recycle these materials. Radioactive exit signs and smoke alarms should be identified for removal and recycling or disposal prior to renovation or demolition of the building or affected area.

6.5 Summary of Other Hazardous Building Materials

This hazardous building materials assessment identified fluorescent light tubes, high intensity discharge lamps, refrigerant gases, mercury thermostats, propane tanks, and fire extinguishers that should be removed and reused, recycled, or disposed of prior to the renovation project. No radioactive exit signs or smoke alarms were identified.

Other Hazardous Building Materials	Total
Florescent Light Tubes	50
Florescent Light Ballast	30-40
HVAC Systems	1
Refrigerator	1
Battery Operated Smoke Detectors	5-10
Exit Signs	5-10
Fire Extinguishers	5-10

7.0 CONCLUSIONS AND RECOMMENDATIONS

7.1 Asbestos Containing Materials

ACM was detected in some of the areas where the work was understood to be conducted. Therefore, we recommend that this work should be considered an "Asbestos Project" as defined in the Puget Sound Clean Air Agency Regulation 3, or WAC 296-62-07701.

7.2 Lead Based Paint

Lead paint was detected in some of the building materials sampled. Therefore, we recommend implementation of engineering and work practice controls to reduce and maintain employee exposure to lead to or below the permissible exposure limit[2] to the extent that such controls are feasible in accordance with WAC 296-155-17611.

7.3 Polychlorinated Biphenyls

One (1) sample of suspected PCB containing caulking was collected and analyzed for PCBs by EPA Method 8082. The sample was below the regulatory limit of 50 mg/kg for PCBs.

Fluorescent lights were observed during the assessment but were not able to be accessed to verify that light ballasts say, "no PCBs". Careful inspection of each ballast in the building should be conducted upon removal to ensure proper management of the ballasts. If any of the ballasts do not contain the words "no PCBs" and were manufactured before July 2, 1979, they must be assumed to contain PCBs unless sampling confirms they do not. In addition, employers must inform their employees of PCB hazards in accordance with WAC 296-800-170.7.4 .

[2] WAC 296-155-17607 (1): You must ensure that no employee is exposed to lead at concentrations greater than 50 micrograms per cubic meter of air (50 µg/m^3) averaged over an 8-hour period.

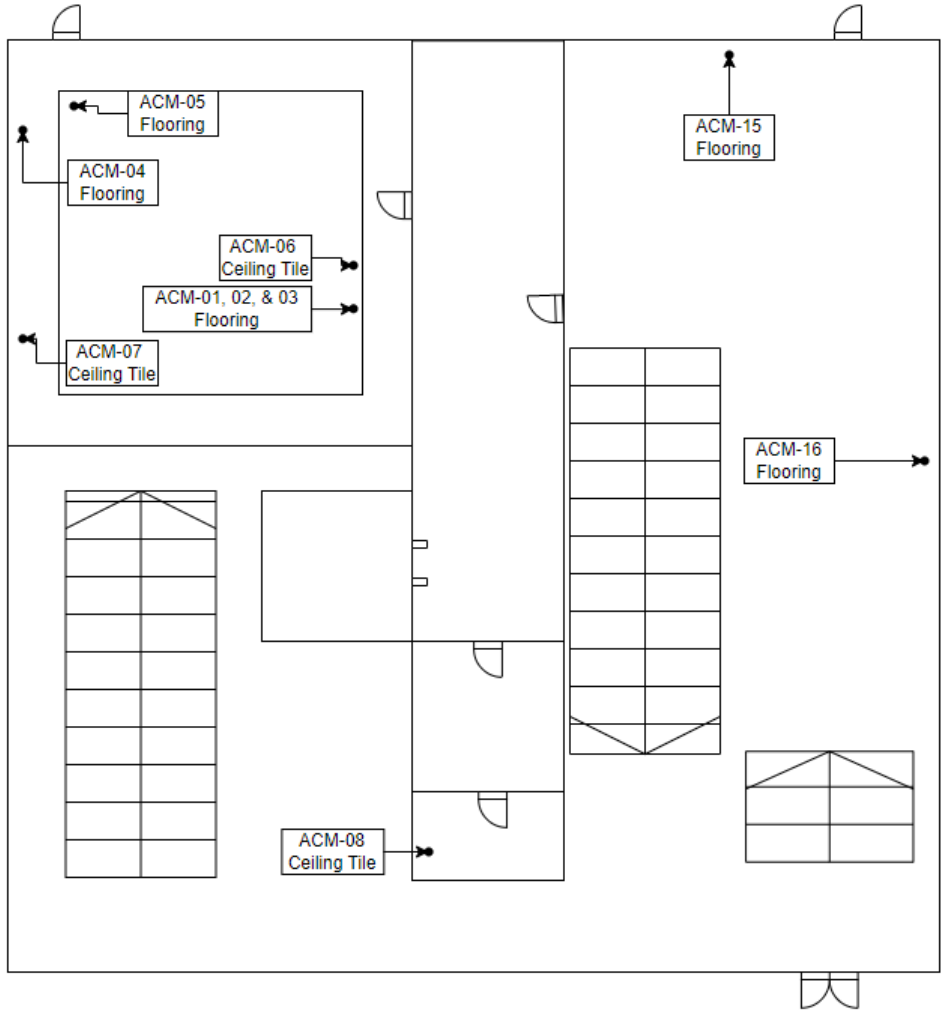
8.0 LIMITATIONS

This report presents the results of the hazardous building materials assessment conducted for the City of Gig Harbor at 3025 96th Street in Gig Harbor, WA. The assessment was conducted with the objective of identifying hazardous building materials in anticipation of demolition in accordance with certain regulations requiring such identification. For example, 40 CFR 763, along with Puget Sound Clean Air Agency Regulation III, Article 4.02(a), requires an "Asbestos Survey" before the renovation or demolition of a building. In addition, the Washington State Dangerous Waste Regulations (WAC 173-303) requires identification and designation of solid waste prior to disposal. This includes suspect lead-based paint and building materials.

Our assessment has considered risks pertaining to asbestos, lead in paint, polychlorinated biphenyls universal waste, and other hazardous building materials discussed in Section 6 of this document. Our assessment is limited to only those locations and materials assessed. This assessment was not designed to identify all potential concerns or to eliminate all risks associated with renovation, demolition, construction, waste disposal, or transferring of property title. Evaluation of other risks not specifically described in the Scope of Work have not been included. For example, the following risks were not assessed: structural integrity, engineering loads, electrical, mechanical, radon gas, slope stability, building settlement, and evaluation of toxic and hazardous substances in, or in contact with, soil and groundwater. No warranty, expressed or implied, is made. DH Environmental has performed the services set forth in the Scope of Work in accordance with generally accepted practices in the same or similar localities, related to the nature of the work accomplished, at the time the services were performed.

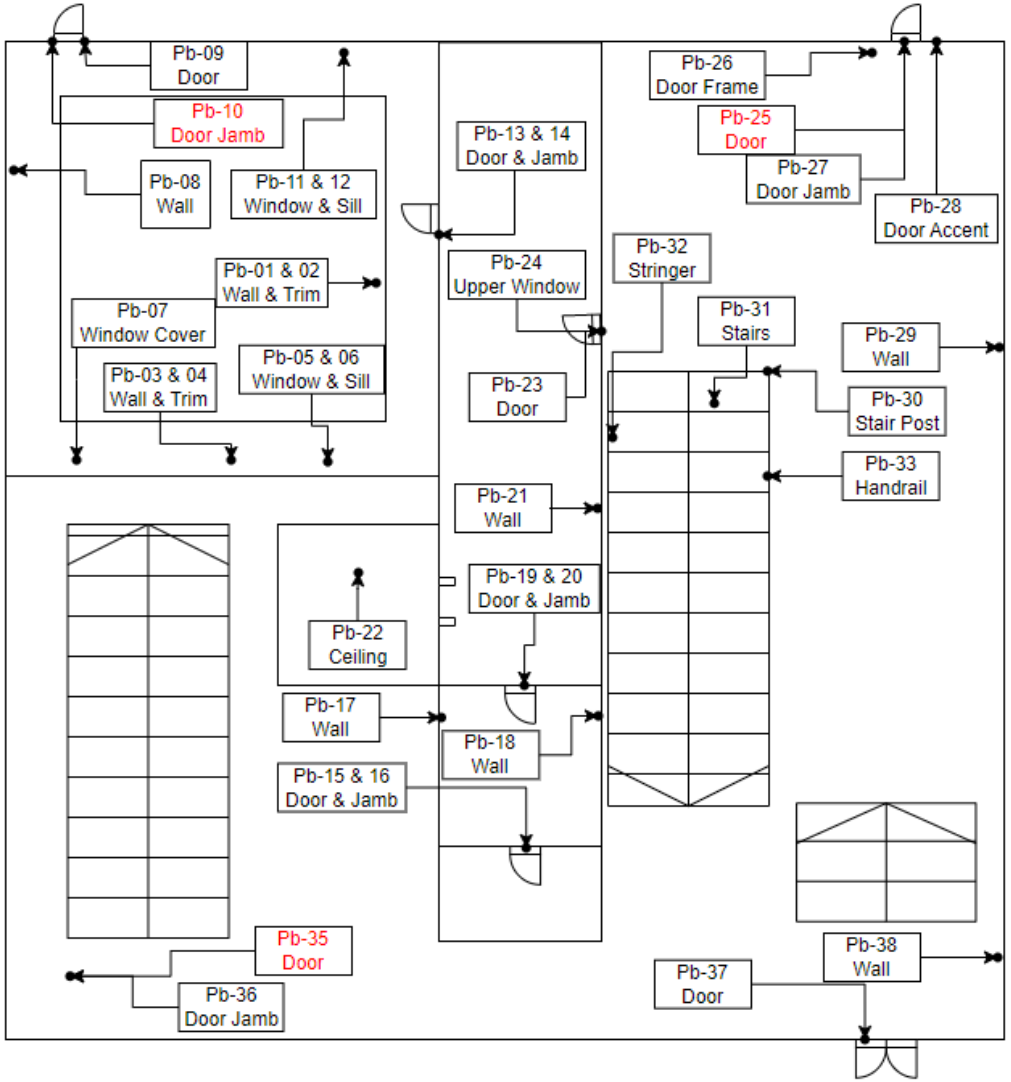
The hazardous building materials assessment presented in this report represents the conditions and materials observed on the dates we conducted the sampling and visually inspected the building. This assessment report is intended for the exclusive use of the City of Gig Harbor for specific application to the referenced property. This assessment does not replace or should be used in lieu of professionally developed construction or demolition plans, specifications, or bidding documents. This report is not a legal opinion.

Figure 1 Sample Locations: Main Floor Asbestos Assessment



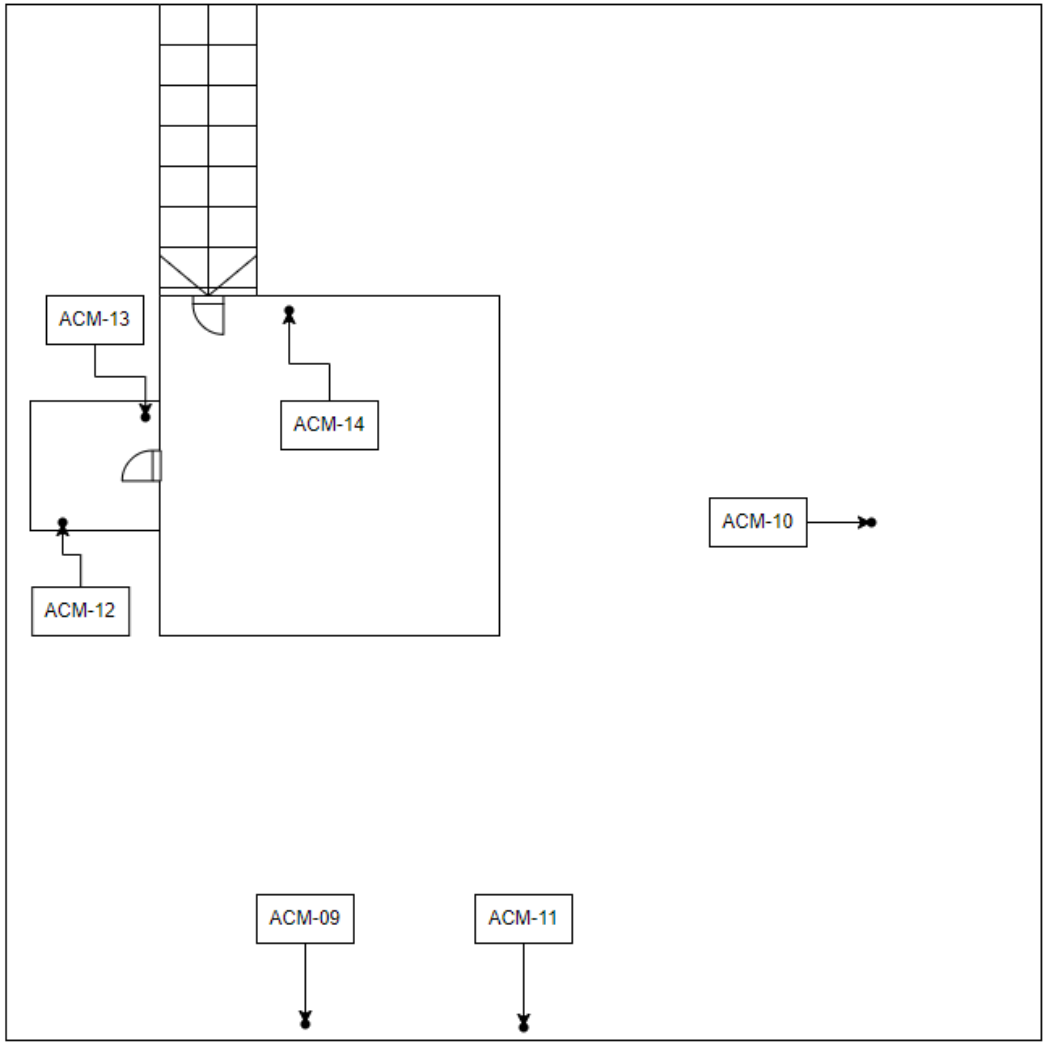
Date: 03-03-2023	DH Environmental Inc	**Asbestos Assessment** **Main Floor**	Figure 1 Sample Locations	Key: • Sample Locations Red = Positive Test Result *Not to scale
By: Brian Johnson AHERA Building Inspector	Site Address: 3025 96th Street Gig Harbor, WA 98332			

Figure 2 Sample Locations: Main Floor Lead Paint Assessment



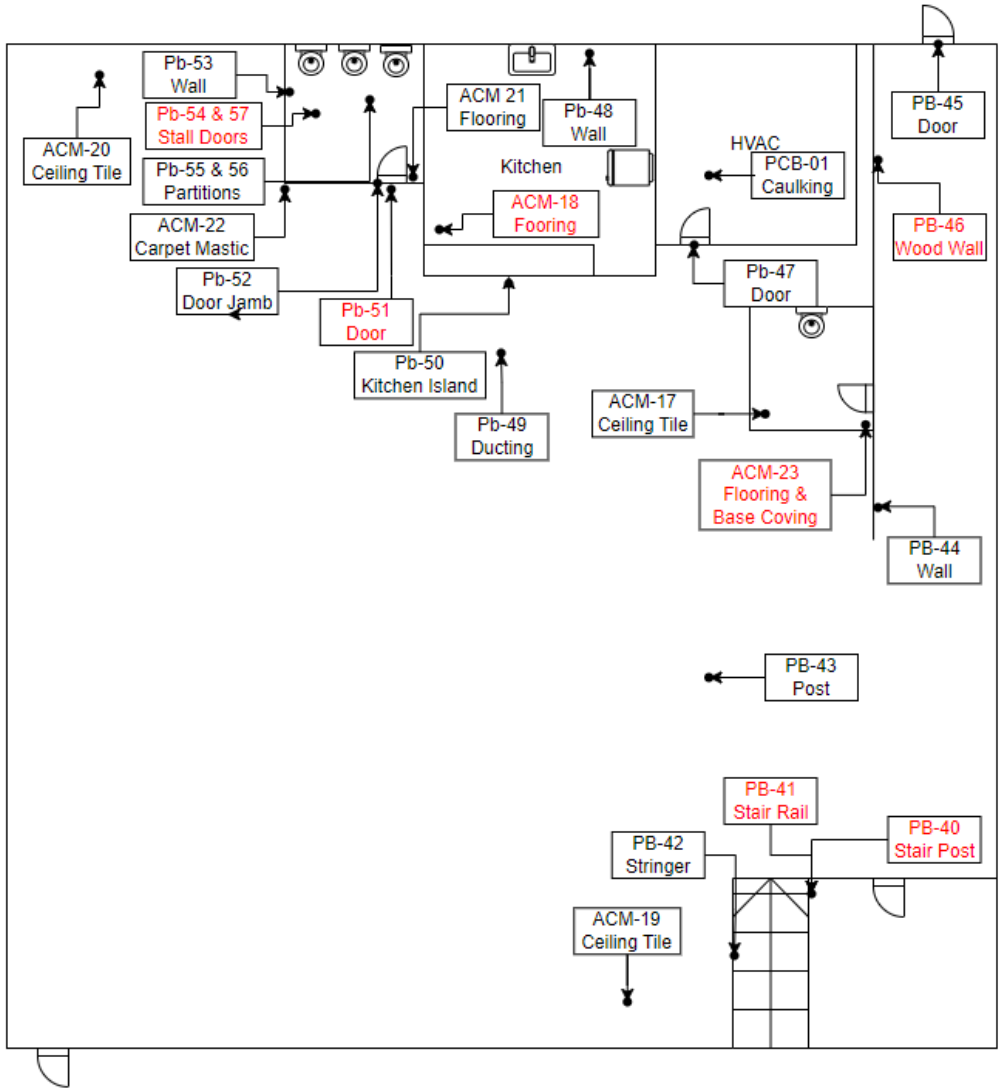
Date: 03-03-2023	DH Environmental Inc	**Lead Paint Assessment** **Main Floor**	Figure 2 Sample Locations	Key: • Sample Locations Red = Positive Test Result *Not to scale
By: Brian Johnson AHERA Building Inspector	Site Address: 3025 96th Street Gig Harbor, WA 98332			

Figure 3 Sample Locations: Attic Lead Paint & Asbestos Assessment



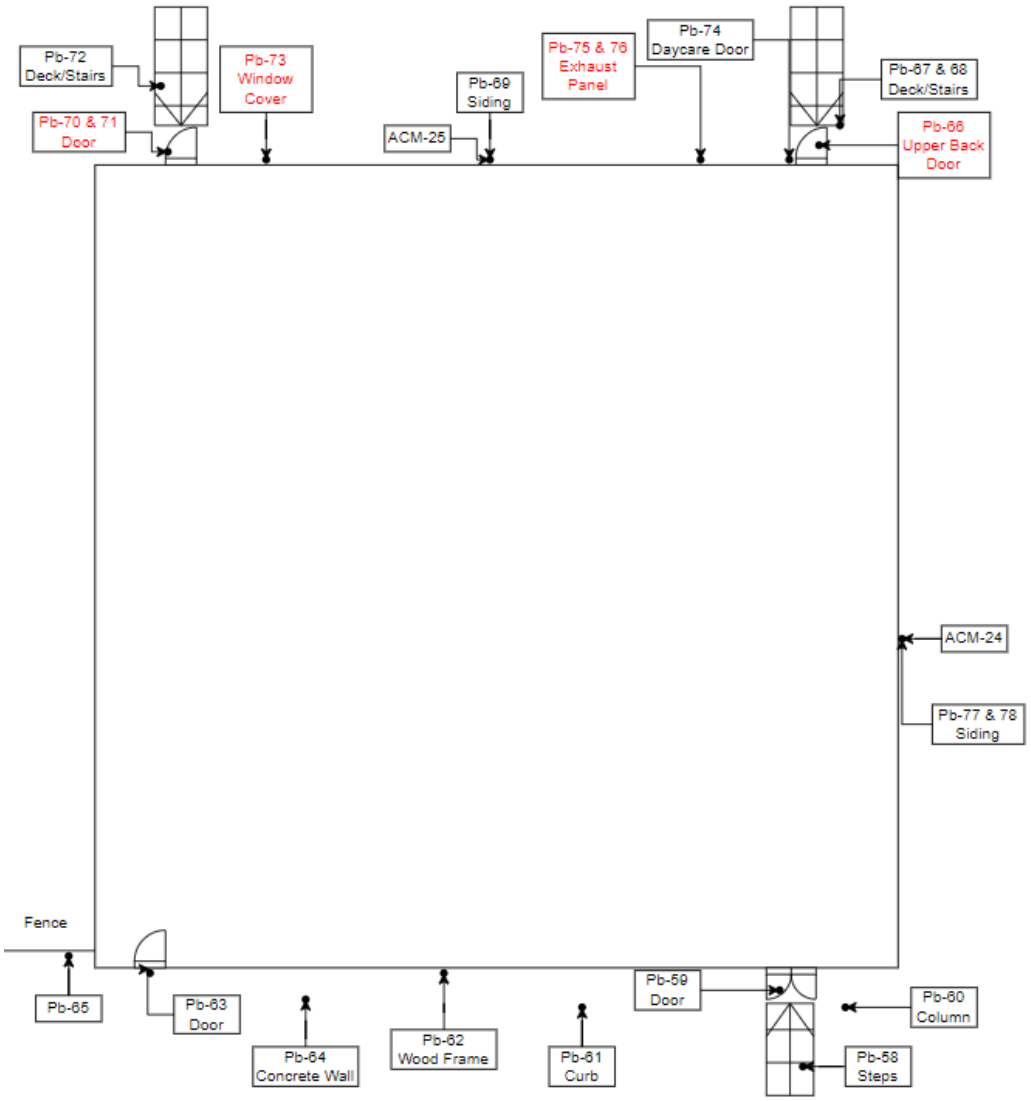
Date: 03-03-2023	DH Environmental Inc	**Asbestos Assessment** **Attic**	Figure 3 Sample Locations	Key: • Sample Locations Red = Positive Test Result *Not to scale
By: Brian Johnson AHERA Building Inspector	Site Address: 3025 96th Street Gig Harbor, WA 98332			

Figure 4 Sample Locations: Basement Lead Paint & Asbestos Assessment



Date: 03-03-2023	DH Environmental Inc	**Lead Paint & Asbestos Assessment Basement**	Figure 4 Sample Locations	Key: • Sample Locations Red = Positive Test Result *Not to scale
By: Brian Johnson AHERA Building Inspector	Site Address: 3025 96th Street Gig Harbor, WA 98332			

Figure 5 Sample Locations: Exterior Lead Paint & Asbestos Assessment



Date: 03-03-2023	DH Environmental Inc	**Lead Paint & Asbestos Assessment** **Exterior**	Figure 5 Sample Locations	Key: • Sample Locations Red = Positive Test Result *Not to scale
By: Brian Johnson AHERA Building Inspector	Site Address: 3025 96th Street Gig Harbor, WA 98332			

Attachment 1 Site Photos

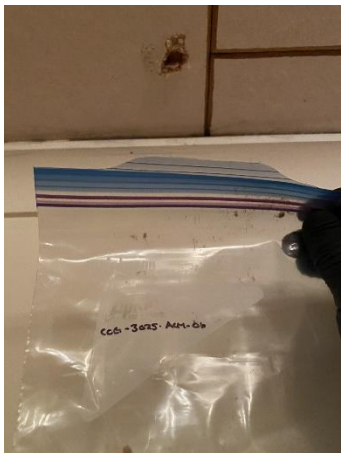
Sample ID: COGH-3025-ACM-01

Sample ID: COGH-3025-ACM-02

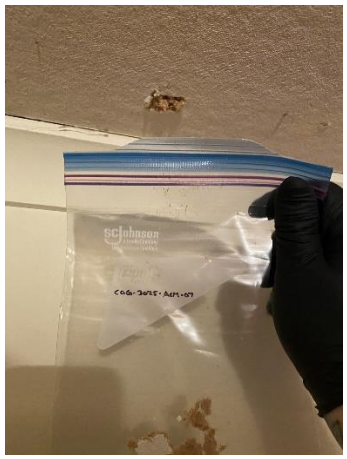
Sample ID: COGH-3025-ACM-03

Sample ID: COGH-3025-ACM-04

Sample ID: COGH-3025-ACM-05



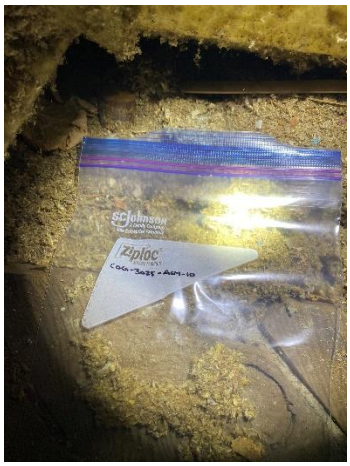
Sample ID: COGH-3025-ACM-06



Sample ID: COGH-3025-ACM-07

Sample ID: COGH-3025-ACM-08

Sample ID: COGH-3025-ACM-09



Sample ID: COGH-3025-ACM-10

Sample ID: COGH-3025-ACM-11

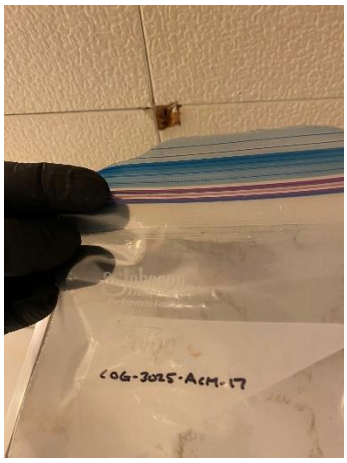
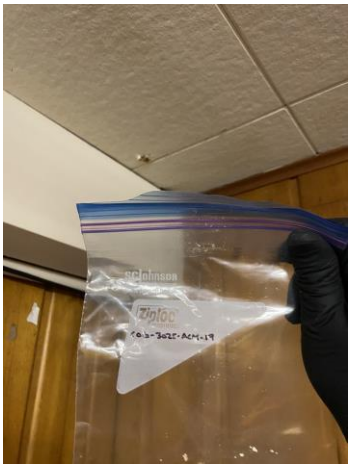
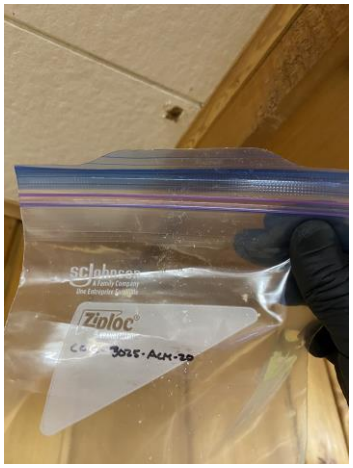
Sample ID: COGH-3025-ACM-12

Sample ID: COGH-3025-ACM-13


Sample ID: COGH-3025-ACM-14

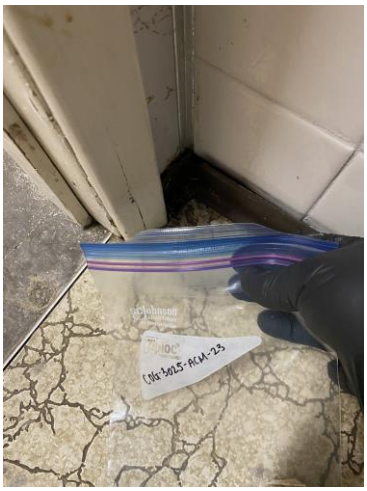
Sample ID: COGH-3025-ACM-15

Sample ID: COGH-3025-ACM-16

 Sample ID: COGH-3025-ACM-17	 COGH-3025-ACM-18
 COGH-3025-ACM-19	 COGH-3025-ACM-20

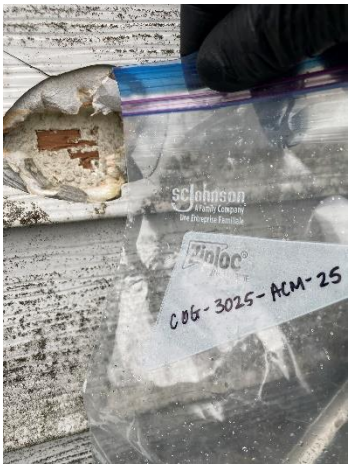
Sample ID: COGH-3025-ACM-21

COGH-3025-ACM-22



COGH-3025-ACM-23

COGH-3025-ACM-24



Sample ID: COGH-3025-ACM-25

Attachment 2 Laboratory Analytical Reports

March 13, 2023

INDUSTRIAL HYGIENE SERVICES
LABORATORY + MANAGEMENT + TRAINING

Brian Johnson
DH Environmental
1011 SW Klickitat Way Suite 107
Seattle, WA 98134

RE: Bulk Asbestos Fiber Analysis; NVL Batch # 2303563.00

Client Project: 3025 96th St
Location: Gig Harbor, WA

Dear Mr. Johnson,

Enclosed please find test results for the 25 sample(s) submitted to our laboratory for analysis on 3/3/2023.

Examination of these samples was conducted for the presence of identifiable asbestos fibers using polarized light microscopy (PLM) with dispersion staining in accordance with **U. S. EPA 40 CFR Appendix E to Subpart E of Part 763**, Interim Method for the Determination of Asbestos in Bulk Insulation Samples and **EPA 600/R-93/116**, Method for the Determination of Asbestos in Bulk Building Materials.

For samples containing more than one separable layer of materials, the report will include findings for each layer (labeled Layer 1 and Layer 2, etc. for each individual layer). The asbestos concentration in the sample is determined by calibrated visual estimation.

For those samples with asbestos concentrations between 1 and 10 percent based on visual estimation, the EPA recommends a procedure known as point counting (NESHAPS, 40 CFR Part 61). Point counting is a statistically more accurate means of quantification for samples with low concentrations of asbestos.

The detection limit for the calibrated visual estimation is <1%, 400 point counts is 0.25% and 1000 point counts is 0.1%

Samples are archived for two weeks following analysis. Samples that are not retrieved by the client are discarded after two weeks.

Thank you for using our laboratory services. Please do not hesitate to call if there is anything further we can assist you with.

Sincerely,

Kunga Woser

Kunga Woser, Senior Laboratory Analyst

NVLAP
Testing
Lab Code: 102063-0

Enc.: Sample Results

Phone: 206 547.0100 | Fax: 206 634.1936 | Toll Free: 1.888.NVL.LABS (685.5227)
4708 Aurora Avenue North | Seattle, WA 98103-6516

Bulk Asbestos Fibers Analysis

By Polarized Light Microscopy

Client: DH Environmental
Address: 1011 SW Klickitat Way Suite 107
Seattle, WA 98134

Attention: Mr. Brian Johnson
Project Location: Gig Harbor, WA

Batch #: 2303563.00
Client Project #: 3025 96th St
Date Received: 3/3/2023
Samples Received: 25
Samples Analyzed: 25
Method: EPA/600/R-93/116

Lab ID: 23022513 **Client Sample #: COG-3025-ACM-01**
Location: Gig Harbor, WA

Layer 1 of 2	**Description:** Green and tan fibrous material			
	Non-Fibrous Materials:	Other Fibrous Materials:%		**Asbestos Type: %**
	Binder/Filler, Fine particles	Synthetic fibers	65%	**None Detected ND**
		Cellulose	18%	
Layer 2 of 2	**Description:** Black asphaltic fibrous backing with brown mastic			
	Non-Fibrous Materials:	Other Fibrous Materials:%		**Asbestos Type: %**
	Asphaltic Particles, Mastic/Binder	Cellulose	45%	**None Detected ND**

Lab ID: 23022514 **Client Sample #: COG-3025-ACM-02**
Location: Gig Harbor, WA

Layer 1 of 2	**Description:** Red fibrous material with gray/white plastic mesh			
	Non-Fibrous Materials:	Other Fibrous Materials:%		**Asbestos Type: %**
	Binder/Filler, Fine particles, Plastic	Synthetic fibers	73%	**None Detected ND**
Layer 2 of 2	**Description:** Tan brittle mastic with tan/white fibrous mesh			
	Non-Fibrous Materials:	Other Fibrous Materials:%		**Asbestos Type: %**
	Fine particles, Mastic/Binder	Cellulose	65%	**None Detected ND**

Lab ID: 23022515 **Client Sample #: COG-3025-ACM-03**
Location: Gig Harbor, WA

Layer 1 of 1	**Description:** Tan fibrous material with adhesive and paint			
	Non-Fibrous Materials:	Other Fibrous Materials:%		**Asbestos Type: %**
	Paint, Fine particles, Adhesive/Binder	Cellulose	72%	**None Detected ND**

Lab ID: 23022516 **Client Sample #: COG-3025-ACM-04**
Location: Gig Harbor, WA

Sampled by: Client
Analyzed by: Muhammad Yousuf **Date:** 03/10/2023
Reviewed by: Kunga Woser **Date:** 03/13/2023

Kunga Woser

Kunga Woser, Senior Laboratory Analyst

Note: If samples are not homogeneous, then subsamples of the components were analyzed separately. All bulk samples are analyzed using both EPA 600/R-93/116 and EPA 40 CFR Appendix E to Subpart E of Part 763 with the following measurement uncertainties for the reported % Asbestos (1%=0-3%, 5%=1-9%, 10%=5-15%, 20%=10-30%, 50%=40-60%). This report relates only to the items tested. If sample was not collected by NVL personnel, then the accuracy of the results is limited by the methodology and acuity of the sample collector. This report shall not be reproduced except in full, without written approval of NVL Laboratories, Inc. It shall not be used to claim product endorsement by NVLAP or any other agency of the US Government

Bulk Asbestos Fibers Analysis

By Polarized Light Microscopy

Client: DH Environmental
Address: 1011 SW Klickitat Way Suite 107
Seattle, WA 98134

Attention: Mr. Brian Johnson
Project Location: Gig Harbor, WA

Batch #: 2303563.00
Client Project #: 3025 96th St
Date Received: 3/3/2023
Samples Received: 25
Samples Analyzed: 25
Method: EPA/600/R-93/116

Layer 1 of 1 **Description:** Tan fibrous material with adhesive

Non-Fibrous Materials:	Other Fibrous Materials:%	**Asbestos Type: %**
Fine particles, Adhesive/Binder	Cellulose 76%	**None Detected ND**

Lab ID: 23022517 **Client Sample #: COG-3025-ACM-05**
Location: Gig Harbor, WA

Layer 1 of 1 **Description:** Green,tan and red fibrous material with adhesive

Non-Fibrous Materials:	Other Fibrous Materials:%	**Asbestos Type: %**
Fine particles, Adhesive/Binder	Synthetic fibers 60%	**None Detected ND**
	Cellulose 16%	

Lab ID: 23022518 **Client Sample #: COG-3025-ACM-06**
Location: Gig Harbor, WA

Layer 1 of 1 **Description:** Tan compressed fibrous material with paint

Non-Fibrous Materials:	Other Fibrous Materials:%	**Asbestos Type: %**
Paint, Binder/Filler, Fine particles	Cellulose 73%	**None Detected ND**
Wood chips		

Lab ID: 23022519 **Client Sample #: COG-3025-ACM-07**
Location: Gig Harbor, WA

Layer 1 of 1 **Description:** Tan compressed fibrous material with paint

Non-Fibrous Materials:	Other Fibrous Materials:%	**Asbestos Type: %**
Paint, Binder/Filler, Fine particles	Cellulose 71%	**None Detected ND**
Wood chips		

Lab ID: 23022520 **Client Sample #: COG-3025-ACM-08**
Location: Gig Harbor, WA

Sampled by: Client
Analyzed by: Muhammad Yousuf **Date:** 03/10/2023
Reviewed by: Kunga Woser **Date:** 03/13/2023

Kunga Woser

Kunga Woser, Senior Laboratory Analyst

Note: If samples are not homogeneous, then subsamples of the components were analyzed separately. All bulk samples are analyzed using both EPA 600/R-93/116 and EPA 40 CFR Appendix E to Subpart E of Part 763 with the following measurement uncertainties for the reported % Asbestos (1%=0-3%, 5%=1-9%, 10%=5-15%, 20%=10-30%, 50%=40-60%). This report relates only to the items tested. If sample was not collected by NVL personnel, then the accuracy of the results is limited by the methodology and acuity of the sample collector. This report shall not be reproduced except in full, without written approval of NVL Laboratories, Inc. It shall not be used to claim product endorsement by NVLAP or any other agency of the US Government

ASB-02

Bulk Asbestos Fibers Analysis

By Polarized Light Microscopy

Client: DH Environmental
Address: 1011 SW Klickitat Way Suite 107
Seattle, WA 98134

Attention: Mr. Brian Johnson
Project Location: Gig Harbor, WA

Batch #: 2303563.00
Client Project #: 3025 96th St
Date Received: 3/3/2023
Samples Received: 25
Samples Analyzed: 25
Method: EPA/600/R-93/116

Layer 1 of 1 **Description:** Tan compressed fibrous material with paint

Non-Fibrous Materials:	Other Fibrous Materials:%	**Asbestos Type: %**
Paint, Binder/Filler, Fine particles	Cellulose 72%	**None Detected ND**
Wood chips		

Lab ID: 23022521 **Client Sample #: COG-3025-ACM-09**
Location: Gig Harbor, WA

Layer 1 of 1 **Description:** Gray and burnt cementitious material

Non-Fibrous Materials:	Other Fibrous Materials:%	**Asbestos Type: %**
Binder/Filler, Fine particles, Mineral grains	Wollastonite 5%	**None Detected ND**
Gravel	Cellulose 3%	

Lab ID: 23022522 **Client Sample #: COG-3025-ACM-10**
Location: Gig Harbor, WA

Layer 1 of 1 **Description:** Tan fibrous material with multi- colored paper pieces and wood chips

Non-Fibrous Materials:	Other Fibrous Materials:%	**Asbestos Type: %**
Binder/Filler, Fine particles, Wood chips	Cellulose 88%	**None Detected ND**

Lab ID: 23022523 **Client Sample #: COG-3025-ACM-11**
Location: Gig Harbor, WA

Layer 1 of 1 **Description:** Yellow fibrous material with sand dust

Non-Fibrous Materials:	Other Fibrous Materials:%	**Asbestos Type: %**
Fine particles, Glass shots & debris	Glass fibers 78%	**None Detected ND**
	Cellulose 3%	

Lab ID: 23022524 **Client Sample #: COG-3025-ACM-12**
Location: Gig Harbor, WA

Sampled by: Client
Analyzed by: Muhammad Yousuf **Date:** 03/10/2023
Reviewed by: Kunga Woser **Date:** 03/13/2023

Kunga Woser

Kunga Woser, Senior Laboratory Analyst

Note: If samples are not homogeneous, then subsamples of the components were analyzed separately. All bulk samples are analyzed using both EPA 600/R-93/116 and EPA 40 CFR Appendix E to Subpart E of Part 763 with the following measurement uncertainties for the reported % Asbestos (1%=0-3%, 5%=1-9%, 10%=5-15%, 20%=10-30%, 50%=40-60%). This report relates only to the items tested. If sample was not collected by NVL personnel, then the accuracy of the results is limited by the methodology and acuity of the sample collector. This report shall not be reproduced except in full, without written approval of NVL Laboratories, Inc. It shall not be used to claim product endorsement by NVLAP or any other agency of the US Government

Bulk Asbestos Fibers Analysis

By Polarized Light Microscopy

Client: DH Environmental
Address: 1011 SW Klickitat Way Suite 107
Seattle, WA 98134

Attention: Mr. Brian Johnson
Project Location: Gig Harbor, WA

Batch #: 2303563.00
Client Project #: 3025 96th St
Date Received: 3/3/2023
Samples Received: 25
Samples Analyzed: 25
Method: EPA/600/R-93/116

Layer 1 of 1 **Description:** Pink fibrous material with asphalt dust

Non-Fibrous Materials:	Other Fibrous Materials:	%	**Asbestos Type: %**
Asphaltic Particles, Glass shots & debris, Mineral grains	Glass fibers	76%	**None Detected ND**
	Cellulose	4%	

Lab ID: 23022525 **Client Sample #: COG-3025-ACM-13**

Location: Gig Harbor, WA

Layer 1 of 1 **Description:** Gray sandy/brittle material with white/yellow paint

Non-Fibrous Materials:	Other Fibrous Materials:	%	**Asbestos Type: %**
Paint, Talc/Binder, Fine particles	Cellulose	7%	**None Detected ND**
Mineral grains, Gravel, Wood fibers	Wollastonite	1%	

Lab ID: 23022526 **Client Sample #: COG-3025-ACM-14**

Location: Gig Harbor, WA

Layer 1 of 2 **Description:** White compacted powdery crumbly material with fibrous mesh

Non-Fibrous Materials:	Other Fibrous Materials:	%	**Asbestos Type: %**
Calcareous binder, Fine particles, Perlite	Glass fibers	22%	**None Detected ND**
	Cellulose	1%	

Layer 2 of 2 **Description:** Crumbly white chalky material with paper

Non-Fibrous Materials:	Other Fibrous Materials:	%	**Asbestos Type: %**
Fine particles, Gypsum/Binder	Cellulose	14%	**None Detected ND**

Lab ID: 23022527 **Client Sample #: COG-3025-ACM-15**

Location: Gig Harbor, WA

Layer 1 of 1 **Description:** Red fibrous material with tan mastic,tan adhesive and black foamy material

Non-Fibrous Materials:	Other Fibrous Materials:	%	**Asbestos Type: %**
Fine particles, Mastic/Binder, Adhesive/Binder	Synthetic fibers	9%	**None Detected ND**

Sampled by: Client
Analyzed by: Muhammad Yousuf **Date:** 03/10/2023
Reviewed by: Kunga Woser **Date:** 03/13/2023

Kunga Woser

Kunga Woser, Senior Laboratory Analyst

Note: If samples are not homogeneous, then subsamples of the components were analyzed separately. All bulk samples are analyzed using both EPA 600/R-93/116 and EPA 40 CFR Appendix E to Subpart E of Part 763 with the following measurement uncertainties for the reported % Asbestos (1%=0-3%, 5%=1-9%, 10%=5-15%, 20%=10-30%, 50%=40-60%). This report relates only to the items tested. If sample was not collected by NVL personnel, then the accuracy of the results is limited by the methodology and acuity of the sample collector. This report shall not be reproduced except in full, without written approval of NVL Laboratories, Inc. It shall not be used to claim product endorsement by NVLAP or any other agency of the US Government

Bulk Asbestos Fibers Analysis

By Polarized Light Microscopy

Client: DH Environmental
Address: 1011 SW Klickitat Way Suite 107
Seattle, WA 98134

Attention: Mr. Brian Johnson
Project Location: Gig Harbor, WA

Batch #: 2303563.00
Client Project #: 3025 96th St
Date Received: 3/3/2023
Samples Received: 25
Samples Analyzed: 25
Method: EPA/600/R-93/116

Foamy material, Mineral grains		Cellulose 5%	

Lab ID: 23022528 **Client Sample #: COG-3025-ACM-16**
Location: Gig Harbor, WA

Layer 1 of 1 **Description:** Multi-colored fibrous material with plastic/fibrous mesh ,gray sandy material and tan mastic

Non-Fibrous Materials:	Other Fibrous Materials:%	**Asbestos Type: %**
Fine particles, Mastic/Binder, Mineral grains	Synthetic fibers 55%	**None Detected ND**
Plastic	Cellulose 5%	

Lab ID: 23022529 **Client Sample #: COG-3025-ACM-17**
Location: Gig Harbor, WA

Layer 1 of 1 **Description:** Tan compressed fibrous material with paint

Non-Fibrous Materials:	Other Fibrous Materials:%	**Asbestos Type: %**
Paint, Fine particles, Mastic/Binder	Cellulose 69%	**None Detected ND**

Lab ID: 23022530 **Client Sample #: COG-3025-ACM-18**
Location: Gig Harbor, WA

Layer 1 of 2 **Description:** Tan/white sheet vinyl with fibers debris

Non-Fibrous Materials:	Other Fibrous Materials:%	**Asbestos Type: %**
Vinyl/Binder, Fine particles	Cellulose 4%	**None Detected ND**

Layer 2 of 2 **Description:** Beige paper backing with soaked in beige mastic

Non-Fibrous Materials:	Other Fibrous Materials:%	**Asbestos Type: %**
Fine particles, Mastic/Binder	Cellulose 29%	**Chrysotile 44%**

Lab ID: 23022531 **Client Sample #: COG-3025-ACM-19**
Location: Gig Harbor, WA

Sampled by: Client
Analyzed by: Muhammad Yousuf **Date:** 03/10/2023
Reviewed by: Kunga Woser **Date:** 03/13/2023

Kunga Woser

Kunga Woser, Senior Laboratory Analyst

Note: If samples are not homogeneous, then subsamples of the components were analyzed separately. All bulk samples are analyzed using both EPA 600/R-93/116 and EPA 40 CFR Appendix E to Subpart E of Part 763 with the following measurement uncertainties for the reported % Asbestos (1%=0-3%, 5%=1-9%, 10%=5-15%, 20%=10-30%, 50%=40-60%). This report relates only to the items tested. If sample was not collected by NVL personnel, then the accuracy of the results is limited by the methodology and acuity of the sample collector. This report shall not be reproduced except in full, without written approval of NVL Laboratories, Inc. It shall not be used to claim product endorsement by NVLAP or any other agency of the US Government

Bulk Asbestos Fibers Analysis

By Polarized Light Microscopy

Client: DH Environmental
Address: 1011 SW Klickitat Way Suite 107
Seattle, WA 98134

Attention: Mr. Brian Johnson
Project Location: Gig Harbor, WA

Batch #: 2303563.00
Client Project #: 3025 96th St
Date Received: 3/3/2023
Samples Received: 25
Samples Analyzed: 25
Method: EPA/600/R-93/116

Layer 1 of 1 **Description:** Tan fibrous material with paint

Non-Fibrous Materials:	Other Fibrous Materials:%	**Asbestos Type: %**
Paint, Binder/Filler, Fine particles	Cellulose 72%	**None Detected ND**
Wood chips		

Lab ID: 23022532 **Client Sample #: COG-3025-ACM-20**

Location: Gig Harbor, WA

Layer 1 of 1 **Description:** Tan fibrous material with paint

Non-Fibrous Materials:	Other Fibrous Materials:%	**Asbestos Type: %**
Paint, Binder/Filler, Fine particles	Cellulose 71%	**None Detected ND**
Wood chips		

Lab ID: 23022533 **Client Sample #: COG-3025-ACM-21**

Location: Gig Harbor, WA

Layer 1 of 3 **Description:** Beige sheet vinyl

Non-Fibrous Materials:	Other Fibrous Materials:%	**Asbestos Type: %**
Vinyl/Binder, Fine particles	None Detected ND	**None Detected ND**

Layer 2 of 3 **Description:** White paper backing with soaked in white mastic

Non-Fibrous Materials:	Other Fibrous Materials:%	**Asbestos Type: %**
Fine particles, Mastic/Binder	Cellulose 51%	**None Detected ND**
	Glass fibers 13%	

Layer 3 of 3 **Description:** Gray sandy material with tan adhesive

Non-Fibrous Materials:	Other Fibrous Materials:%	**Asbestos Type: %**
Fine particles, Adhesive/Binder, Mineral grains	Cellulose 4%	**None Detected ND**

Lab ID: 23022534 **Client Sample #: COG-3025-ACM-22**

Location: Gig Harbor, WA

Sampled by: Client
Analyzed by: Muhammad Yousuf **Date:** 03/10/2023
Reviewed by: Kunga Woser **Date:** 03/13/2023

Kunga Woser

Kunga Woser, Senior Laboratory Analyst

Note: If samples are not homogeneous, then subsamples of the components were analyzed separately. All bulk samples are analyzed using both EPA 600/R-93/116 and EPA 40 CFR Appendix E to Subpart E of Part 763 with the following measurement uncertainties for the reported % Asbestos (1%=0-3%, 5%=1-9%, 10%=5-15%, 20%=10-30%, 50%=40-60%). This report relates only to the items tested. If sample was not collected by NVL personnel, then the accuracy of the results is limited by the methodology and acuity of the sample collector. This report shall not be reproduced except in full, without written approval of NVL Laboratories, Inc. It shall not be used to claim product endorsement by NVLAP or any other agency of the US Government

Bulk Asbestos Fibers Analysis

By Polarized Light Microscopy

Client: DH Environmental
Address: 1011 SW Klickitat Way Suite 107
Seattle, WA 98134

Attention: Mr. Brian Johnson
Project Location: Gig Harbor, WA

Batch #: 2303563.00
Client Project #: 3025 96th St
Date Received: 3/3/2023
Samples Received: 25
Samples Analyzed: 25
Method: EPA/600/R-93/116

Layer 1 of 2	**Description:** Multi-colored fibrous material with plastic/fibrous mesh,tan mastic and gray sandy material			
	Non-Fibrous Materials:	Other Fibrous Materials:	%	**Asbestos Type: %**
	Fine particles, Mastic/Binder, Plastic	Synthetic fibers	57%	**None Detected ND**
	Mineral grains	Cellulose	6%	
Layer 2 of 2	**Description:** Black foamy material			
	Non-Fibrous Materials:	Other Fibrous Materials:	%	**Asbestos Type: %**
	Binder/Filler, Fine particles, Foamy material	Cellulose	1%	**None Detected ND**

Lab ID: 23022535 **Client Sample #: COG-3025-ACM-23**
Location: Gig Harbor, WA

Layer 1 of 3	**Description:** Off-white sheet vinyl in stone pattern			
	Non-Fibrous Materials:	Other Fibrous Materials:	%	**Asbestos Type: %**
	Vinyl/Binder, Fine particles	None Detected	ND	**None Detected ND**
Layer 2 of 3	**Description:** Beige paper backing with soaked in tan mastic			
	Non-Fibrous Materials:	Other Fibrous Materials:	%	**Asbestos Type: %**
	Fine particles, Mastic/Binder	Cellulose	26%	**Chrysotile 47%**
Layer 3 of 3	**Description:** Brown brittle mastic with white rubbery material and wood flakes			
	Non-Fibrous Materials:	Other Fibrous Materials:	%	**Asbestos Type: %**
	Fine particles, Mastic/Binder, Rubber/Binder	Cellulose	16%	**None Detected ND**
	Fine grains, Wood flakes	Wollastonite	3%	

Lab ID: 23022536 **Client Sample #: COG-3025-ACM-24**
Location: Gig Harbor, WA

Layer 1 of 3	**Description:** Light gray/tan fibrous felt			
	Non-Fibrous Materials:	Other Fibrous Materials:	%	**Asbestos Type: %**
	Binder/Filler, Fine particles	Cellulose	85%	**None Detected ND**

Sampled by: Client
Analyzed by: Muhammad Yousuf **Date:** 03/10/2023
Reviewed by: Kunga Woser **Date:** 03/13/2023

Kunga Woser

Kunga Woser, Senior Laboratory Analyst

Note: If samples are not homogeneous, then subsamples of the components were analyzed separately. All bulk samples are analyzed using both EPA 600/R-93/116 and EPA 40 CFR Appendix E to Subpart E of Part 763 with the following measurement uncertainties for the reported % Asbestos (1%=0-3%, 5%=1-9%, 10%=5-15%, 20%=10-30%, 50%=40-60%). This report relates only to the items tested. If sample was not collected by NVL personnel, then the accuracy of the results is limited by the methodology and acuity of the sample collector. This report shall not be reproduced except in full, without written approval of NVL Laboratories, Inc. It shall not be used to claim product endorsement by NVLAP or any other agency of the US Government

Bulk Asbestos Fibers Analysis

By Polarized Light Microscopy

Client: DH Environmental
Address: 1011 SW Klickitat Way Suite 107
Seattle, WA 98134

Attention: Mr. Brian Johnson
Project Location: Gig Harbor, WA

Batch #: 2303563.00
Client Project #: 3025 96th St
Date Received: 3/3/2023
Samples Received: 25
Samples Analyzed: 25
Method: EPA/600/R-93/116

Layer 2 of 3	**Description:** White brittle material with gray dust		
	Non-Fibrous Materials:	Other Fibrous Materials:%	**Asbestos Type: %**
	Binder/Filler, Fine particles, Wood flakes	Cellulose 18%	**None Detected ND**
Layer 3 of 3	**Description:** Transparent soft material		
	Non-Fibrous Materials:	Other Fibrous Materials:%	**Asbestos Type: %**
	Binder/Filler, Fine particles, Styrofoam	Cellulose 1%	**None Detected ND**

Lab ID: 23022537 **Client Sample #: COG-3025-ACM-25**

Location: Gig Harbor, WA

Layer 1 of 2	**Description:** Transparent soft material with tan/white paper,silver foil,adhesive and gray dust		
	Non-Fibrous Materials:	Other Fibrous Materials:%	**Asbestos Type: %**
	Fine particles, Adhesive/Binder, Metal foil Styrofoam	Cellulose 33%	**None Detected ND**
Layer 2 of 2	**Description:** White brittle material with wood piece		
	Non-Fibrous Materials:	Other Fibrous Materials:%	**Asbestos Type: %**
	Binder/Filler, Fine particles, Wood flakes	Cellulose 24%	**None Detected ND**

Sampled by: Client
Analyzed by: Muhammad Yousuf **Date:** 03/10/2023
Reviewed by: Kunga Woser **Date:** 03/13/2023

Kunga Woser

Kunga Woser, Senior Laboratory Analyst

Note: If samples are not homogeneous, then subsamples of the components were analyzed separately. All bulk samples are analyzed using both EPA 600/R-93/116 and EPA 40 CFR Appendix E to Subpart E of Part 763 with the following measurement uncertainties for the reported % Asbestos (1%=0-3%, 5%=1-9%, 10%=5-15%, 20%=10-30%, 50%=40-60%). This report relates only to the items tested. If sample was not collected by NVL personnel, then the accuracy of the results is limited by the methodology and acuity of the sample collector. This report shall not be reproduced except in full, without written approval of NVL Laboratories, Inc. It shall not be used to claim product endorsement by NVLAP or any other agency of the US Government

ASBESTOS LABORATORY SERVICES

Company	DH Environmental	**NVL Batch Number**	**2303563.00**
Address	1011 SW Klickitat Way Suite 107 Seattle, WA 98134	**TAT** 5 Days	**AH** No
		Rush TAT	
Project Manager	Mr. Brian Johnson	**Due Date** 3/10/2023	**Time** 3:35 PM
Phone	(206) 934-4043	**Email**	brian.johnson@dhenviro.com
		Fax	(206) 930-4043

Project Name/Number: 3025 96th St **Project Location:** Gig Harbor, WA

Subcategory PLM Bulk

Item Code ASB-02 EPA 600/R-93-116 Asbestos by PLM <bulk>

Total Number of Samples 25 Rush Samples

	Lab ID	Sample ID	Description	A/R
1	23022513	COG-3025-ACM-01		A
2	23022514	COG-3025-ACM-02		A
3	23022515	COG-3025-ACM-03		A
4	23022516	COG-3025-ACM-04		A
5	23022517	COG-3025-ACM-05		A
6	23022518	COG-3025-ACM-06		A
7	23022519	COG-3025-ACM-07		A
8	23022520	COG-3025-ACM-08		A
9	23022521	COG-3025-ACM-09		A
10	23022522	COG-3025-ACM-10		A
11	23022523	COG-3025-ACM-11		A
12	23022524	COG-3025-ACM-12		A
13	23022525	COG-3025-ACM-13		A
14	23022526	COG-3025-ACM-14		A
15	23022527	COG-3025-ACM-15		A
16	23022528	COG-3025-ACM-16		A
17	23022529	COG-3025-ACM-17		A
18	23022530	COG-3025-ACM-18		A

	Print Name	Signature	Company	Date	Time
Sampled by	Client				
Relinquished by	Client				

Office Use Only	Print Name	Signature	Company	Date	Time
Received by	Kelly AuVu		NVL	3/3/23	1535
Analyzed by	Muhammad Yousuf		NVL	3/10/23	
Results Called by					
☐ **Faxed** ☐ **Emailed**					

Special Instructions:

Date: 3/3/2023
Time: 3:57 PM
Entered By: Kelly AuVu

ASBESTOS LABORATORY SERVICES

Company DH Environmental
Address 1011 SW Klickitat Way Suite 107
Seattle, WA 98134
Project Manager Mr. Brian Johnson
Phone (206) 934-4043

NVL Batch Number **2303563.00**
TAT 5 Days **AH** No
Rush TAT
Due Date 3/10/2023 **Time** 3:35 PM
Email brian.johnson@dhenviro.com
Fax (206) 930-4043

Project Name/Number: 3025 96th St **Project Location:** Gig Harbor, WA

Subcategory PLM Bulk
Item Code ASB-02 EPA 600/R-93-116 Asbestos by PLM <bulk>

Total Number of Samples 25 Rush Samples

	Lab ID	Sample ID	Description	A/R
19	23022531	COG-3025-ACM-19		A
20	23022532	COG-3025-ACM-20		A
21	23022533	COG-3025-ACM-21		A
22	23022534	COG-3025-ACM-22		A
23	23022535	COG-3025-ACM-23		A
24	23022536	COG-3025-ACM-24		A
25	23022537	COG-3025-ACM-25		A

	Print Name	Signature	Company	Date	Time
Sampled by	Client				
Relinquished by	Client				

Office Use Only	Print Name	Signature	Company	Date	Time
Received by	Kelly AuVu		NVL	3/3/23	1535
Analyzed by	Muhammad Yousuf		NVL	3/10/23	
Results Called by					
☐ **Faxed** ☐ **Emailed**					

Special Instructions:

Date: 3/3/2023
Time: 3:57 PM
Entered By: Kelly AuVu

2303563

NVL
INDUSTRIAL HYGIENE SERVICES
LABORATORY + MANAGEMENT + TRAINING

ASBESTOS CHAIN OF CUSTODY

- ☐ 1 Hour
- ☐ 2 Hours
- ☐ 4 Hours
- ☐ 24 Hours
- ☐ 2 Days
- ☐ 3 Days
- ☐ 4 Days
- ☒ 5 Days
- ☐ 10 Days

Please call for TAT less than 24 Hours

Company: OH Environmental
Address: 1011 SW Klickitat Way, Seattle, WA 98134
Phone:
Project Manager: Brian Johnson
Cell: (206) 930-4043
Email:
Fax: ( ) -

Project Name/Number: 3025 96th St.
Project Location: Gig Harbor, WA

- ☐ PCM Air (NIOSH 7400)
- ☒ PLM (EPA 600/R-93-116)
- ☐ PLM Gravimetry (600/R-93-116)
- ☐ Asbestos Friable/Non-Friable (EPA 600/R-93/116)
- ☐ TEM (NIOSH 7402)
- ☐ EPA 400 Points (600/R-93-116)
- ☐ Asbestos in Vermiculite (EPA 600/R-04/004)
- ☐ TEM (AHERA)
- ☐ Other
- ☐ TEM (EPA Level II Modified)
- ☐ EPA 1000Points (600/R-93-116)
- ☐ Asbestos in Sediment (EPA 1900 Points)

Reporting Instructions: Please send results to Brian Johnson
☐ Call ( ) - ☐ Fax ( ) - ☒ Email brian.johnson@dhenviro.com

Total Number of Samples 25

	Sample ID	Description	A/R
1	COG-3025-ACM-01	carpet & mastic	
2	COG-3025-ACM-02	carpet & mastic	
3	COG-3025-ACM-03	carpet & mastic	
4	COG-3025-ACM-04	carpet & mastic	
5	COG-3025-ACM-05	carpet & mastic	
6	COG-3025-ACM-06	ceiling tile	
7	COG-3025-ACM-07	ceiling tile	
8	COG-3025-ACM-08	ceiling tile	
9	COG-3025-ACM-09	fire place concrete	
10	COG-3025-ACM-10	insulation	
11	COG-3025-ACM-11	insulation	
12	COG-3025-ACM-12	insulation	
13	COG-3025-ACM-13	concrete wall	
14	COG-3025-ACM-14	dry wall & joint compound	
15	COG-3025-ACM-15	carpet & mastic	

	Print Name	Signature	Company	Date	Time
Sampled by	Brian Johnson		OH Env.	3-3-23	0930
Relinquish by	Brian Johnson		OH Env.	3-3-23	1535

Office Use Only

	Print Name	Signature	Company	Date	Time
Received by	[illegible]		NVL	3/3/23	1535
Analyzed by					
Called by					
Faxed/Email by					

Page 2 of 2

2303563

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ASBESTOS CHAIN OF CUSTODY

❑ 1 Hour ❑ 24 Hours ❑ 4 Days
❑ 2 Hours ❑ 2 Days ☒ 5 Days
❑ 4 Hours ❑ 3 Days ❑ 10 Days
Please call for TAT less than 24 Hours

Company ______ Project Manager ______
Address ______ Cell ( ) - ______
Email ______
Phone ______ Fax ( ) - ______

Project Name/Number	Project Location

❑ PCM Air (NIOSH 7400) ❑ TEM (NIOSH 7402) ❑ TEM (AHERA) ❑ TEM (EPA Level II Modified)
☒ PLM (EPA 600/R-93-116) ❑ EPA 400 Points (600/R-93-116) ❑ EPA 1000Points (600/R-93-116)
❑ PLM Gravimetry (600/R-93-116) ❑ Asbestos in Vermiculite (EPA 600/R-04/004) ❑ Asbestos in Sediment (EPA 1900 Points)
❑ Asbestos Friable/Non-Friable (EPA 600/R-93/116) ❑ Other ______

Reporting Instructions ______
❑ Call ( ) - ______ ❑ Fax ( ) - ______ ❑ Email ______

Total Number of Samples 25

	Sample ID	Description	A/R
1	COG-3025-ACM-16	carpet & mastic	
2	COG-3025-ACM-17	ceiling tile	
3	COG-3025-ACM-18	flooring & mastic	
4	COG-3025-ACM-19	ceiling tile	
5	COG-3025-ACM-20	ceiling tile	
6	COG-3025-ACM-21	flooring & mastic	
7	COG-3025-ACM-22	carpet & mastic	
8	COG-3025-ACM-23	flooring & mastic	
9	COG-3025-ACM-24	exterior siding coating	
10	COG-3025-ACM-25	insulation & exterior siding coating	
11			
12			
13			
14			
15			

	Print Name	Signature	Company	Date	Time
Sampled by					
Relinquish by					

Office Use Only

	Print Name	Signature	Company	Date	Time
Received by	Kumazen	[signature]	NVL	8/3/23	1535
Analyzed by					
Called by					
Faxed/Email by					

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March 10, 2023

Mr. Brian Johnson

DH Environmental
1011 SW Klickitat Way. Suite 107
Seattle, WA 98134

Re: **NVL Batch 2303564.00**

Project Name/Number: 3025 96th St

Project location: Gig Harbor, WA

Dear Mr. Johnson,

Enclosed please find test results for samples submitted to our laboratory for analysis. Preparation and analysis of these samples were conducted in accordance with published industry standards and methods specified on the attached analytical report.

The content of this package consists of the following:

-Case Narrative & Definition of Data Qualifiers
-Analytical Test Results
-Applicable QC Summary
-Client Chain-of-Custody (CoC)
-NVL Receiving Record

The report is considered highly confidential and will not be released without your approval. Samples are archived for two weeks following analysis. Samples that are not retrieved by the client will be discarded after two weeks.

Thank you for using our laboratory services. If you need further assistance, please contact us at 206-547-0100 or 1-888-NVLLABS.

Sincerely,

Nick Ly, Technical Director

Enclosure: Sample Results

Case Narrative:

The following summarizes samples received on date as shown on the accompanied Chain of custody by NVL Laboratories, Inc. from DH Environmental for Project Number 3025 96th St. Samples were logged in for PCB analysis per client request using both customer sample ID's and laboratory assigned ID's as listed on the Chain-of-Custody (CoC). All samples as received were processed and analyzed within specified turnaround time without any abnormalities and deviations that may affect the analytical results. All quality control requirements were acceptable unless stated otherwise. The conditions of all samples were acceptable at time of receipt and all samples submitted with this batch were analyzed unless stated otherwise on the CoC.

Test Results are reported in milligram per kilogram (mg/kg) for PCB samples as shown on the analytical reports.

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Definition Appendix

Terms

% Rec	Percent recovery.
<	Below Reporting Limit(RL) or Limit of Quantitation(LoQ) of the instrument.
B	Blank contamination. The recorded results is associated with a contaminated blank.
DF	Dilution Factor
J	The reported concentration is an estimated value because something may be present in the sample that interfered with the analysis.
J1	The reported concentration is an estimated value because the laboratory control sample (LCS) is out of control limits.
J2	The reported concentration is an estimated value because the percent recovery for matrix spike is out of control limits.
J3	The reported concentration is an estimated value because the relative percent difference(RPD) for duplicate analysis is out of control limits.
J4	Percent recovery is outside of established control limits.
LCS	Laboratory Control Sample.
LFS	Laboratory Fortified Spike
Limits	The upper and lower control limits for spike recoveries.
LN	Quality control sample is outside of control limits. This analyte was not detected in the sample.
LOQ	Limit of quantitation(same as RL)
mg/kg	Milligrams per kilogram.
ND	Analyte not detected or below the reporting limit of the instrument or methodology

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Definition Appendix

Terms

PPM	Parts per Million.
QC Batch Group	Quality Control Batch Group. The entity that links analytical results and supporting quality control results.
R	The data are not reliable due to possible contamination or loss of material during preparation or analysis. Re-sampling and reanalysis are necessary for verification.
RL	Reporting Limit. The minimum concentration that can be quantified under routine operating conditions.
RPD	Relative Percent Difference. The relative difference between duplicate results(matrix spike, blank spike, or samples duplicate) expressed as a percentage.
RPD Limit	The maximum RPD allowed for a set of duplicate measurements(see RPD).
SMI	Surrogate has matrix interference.
Spike Conc.	The measured concentration, in sample basis units, of a spiked sample.
SURR-ND	Surrogate was not detected due to matrix interference or dilution.
ug/m3	Micrograms per cubic meter.
ug/mL	Micrograms per milliliter
mg/Kg	milligram per kilogram

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ANALYSIS REPORT

Polychlorinated Biphenyls by Gas Chromatography

Client	**DH Environmental**	Samples Received*	**1**
SDG Number	**2303564.00**	Analyzed By	**Evelyn Ahulu**
Date Reported	**03/10/2023**	Samples Analyzed*	**1**
Project Number	**3025 96th St**	Analysis Method	**8082A**
Location	**Gig Harbor, WA**	Preparation Method	**3546PR (PCB)**

* for this test only

Sample Number	**COG-3025-PCB-01**	Received	03/03/2023
Lab Sample ID	23022538	Matrix	Material
Initial Sample Size	2.2669 gm	Units of Result	mg/Kg, as received

Analyte	RL	Final Result	Analysis Date
Aroclor-1016	0.88	< 0.88	03/08/2023
Aroclor-1221	0.88	< 0.88	03/08/2023
Aroclor-1232	0.88	< 0.88	03/08/2023
Aroclor-1242	0.88	< 0.88	03/08/2023
Aroclor-1248	0.88	< 0.88	03/08/2023
Aroclor-1254	0.88	< 0.88	03/08/2023
Aroclor-1260	0.88	< 0.88	03/08/2023
PCBs, Total	**0.88**	**<0.88**	

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Quality Control Results

Project Number:	**3025 96th St**	**SDG Number:**	**2303564**
		Project Manager:	**Brian Johnson**
QC Batch(es):	**Q1907**	Analysis Method:	**8082A**
QC Batch Method:	3546PR (PCB)	Analysis Description:	Polychlorinated Biphenyls by Gas Chromatography
Preparation Date:	03/06/2023		

Blank: MBLK-2303564

Analyte	Blank Result	Units	DF	RL	Control Limit	Qualifiers
Aroclor-1016	ND	mg/Kg	1	1	1.0	
Aroclor-1221	ND	mg/Kg	1	1	1.0	
Aroclor-1232	ND	mg/Kg	1	1	1.0	
Aroclor-1242	ND	mg/Kg	1	1	1.0	
Aroclor-1248	ND	mg/Kg	1	1	1.0	
Aroclor-1254	ND	mg/Kg	1	1	1.0	
Aroclor-1260	ND	mg/Kg	1	1	1.0	
Aroclor-1262	ND	mg/Kg	1	1	1.0	
Aroclor-1268	ND	mg/Kg	1	1	1.0	
PCBs, Total	ND	mg/Kg	1	1	1.0	
Surrogates:				% Rec		
Tetrachloro-m-xylene			1	92	40-140	
Decachlorobiphenyl			1	113	40-140	

Lab Control Sample: LCS-1254-2303564

Analyte	Blank Spike Result	Units	DF	Spike Conc.	% Rec	% Rec Limits	Qualifiers
Aroclor-1254	18.4	mg/Kg	1	20.0	92	40-140	
Surrogates:							
Tetrachloro-m-xylene			1		87	40-140	
Decachlorobiphenyl			1		101	40-140	

Lab Control Sample: LCS-1016+1260-2303564
Lab Control Sample Duplicate: LCS Dup-1016+1260-2303564

Analyte	Blank Spike Result	Units	DF	Spike Conc.	% Rec	Limits	RPD	RPD Limit	Qualifiers
Aroclor-1016	15.8	mg/Kg	1	20.0	79	40-140			
	12.1			20.0	61	40-140	26.4	50	
Aroclor-1260	19.6	mg/Kg	1	20.0	98	40-140			
	20.7			20.0	104	40-140	5.5	50	
Surrogates:									
Tetrachloro-m-xylene			1		63	40-140			
					46	40-140			
Decachlorobiphenyl			1		108	40-140			
					120	40-140			

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Surrogate Recovery Summary Report

Client DH Environmental **SDG Number** 2303564

Project 3025 96th St

Customer Sample ID	Lab Sample ID	Analyte	Recovery	Limits
COG-3025-PCB-01	23022538	Decachlorobiphenyl	80%	40-140
COG-3025-PCB-01	23022538	Tetrachloro-m-xylene	56%	40-140
LCS Dup-1016+1260-2303564	LCS Dup-1016+1260-2303564	Decachlorobiphenyl	120%	40-140
LCS Dup-1016+1260-2303564	LCS Dup-1016+1260-2303564	Tetrachloro-m-xylene	46%	40-140
LCS-1016+1260-2303564	LCS-1016+1260-2303564	Decachlorobiphenyl	108%	40-140
LCS-1016+1260-2303564	LCS-1016+1260-2303564	Tetrachloro-m-xylene	63%	40-140
LCS-1254-2303564	LCS-1254-2303564	Decachlorobiphenyl	101%	40-140
LCS-1254-2303564	LCS-1254-2303564	Tetrachloro-m-xylene	87%	40-140
MBLK-2303564	MBLK-2303564	Decachlorobiphenyl	113%	40-140
MBLK-2303564	MBLK-2303564	Tetrachloro-m-xylene	92%	40-140

* Recovery outside limits

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INITIAL AND CONTINUING CALIBRATION VERIFICATION

SDG No: **2303564** Contract: **N/A**

Determination: **8082 PCB Aroclors <Material>**

Run	Sample	Source	Analyzed	Analyte	True	Found	Unit	% Rec	Limits
R001902	CCV1 1016-1260	PCB_2022-1-2	03/08/2023	Aroclor-1016	5	5.102	ug/mL	102	80-120
		PCB_2022-1-2	03/08/2023	Aroclor-1260	5	5.339	ug/mL	107	80-120
	CCV1 1254	PCB_2022-1-3	03/08/2023	Aroclor-1254	5	5.016	ug/mL	100	80-120
	ICV 1016-1254-1260	PCB_2022-1-4	03/08/2023	Aroclor-1016	5	5.702	ug/mL	114	85-115
		PCB_2022-1-4	03/08/2023	Aroclor-1254	5	5.017	ug/mL	100	85-115
		PCB_2022-1-4	03/08/2023	Aroclor-1260	5	5.768	ug/mL	115	85-115
	CCV2 1016-1260	PCB_2022-1-2	03/08/2023	Aroclor-1016	5	5.432	ug/mL	109	80-120
		PCB_2022-1-2	03/08/2023	Aroclor-1260	5	5.993	ug/mL	120	80-120
	CCV2 1254	PCB_2022-1-3	03/08/2023	Aroclor-1254	5	5.069	ug/mL	101	80-120

% Rec = Percent recovery

* = Percent recovery not within control limits

ORGANICS LABORATORY SERVICES

Company	DH Environmental	**NVL Batch Number**	**2303564.00**
Address	1011 SW Klickitat Way Suite 107	**TAT**	5 Days **AH** No
	Seattle, WA 98134	**Rush TAT**	
Project Manager	Mr. Brian Johnson	**Due Date**	3/10/2023 **Time** 3:35 PM
Phone	(206) 934-4043	**Email**	brian.johnson@dhenviro.com
		Fax	(206) 930-4043

Project Name/Number: 3025 96th St **Project Location:** Gig Harbor, WA

Subcategory Quantitative analysis

Item Code ORG-05 **Method** 8082 PCB Aroclors <Bulk>

Total Number of Samples 1 Rush Samples

	Lab ID	Sample ID	Description	A/R
1	23022538	COG-3025-PCB-01		A

	Print Name	Signature	Company	Date	Time
Sampled by	Client				
Relinquished by	Client				

Office Use Only	Print Name	Signature	Company	Date	Time
Received by	Kelly AuVu		NVL	3/3/23	1535
Analyzed by	Evelyn Ahulu		NVL	3/8/23	
Results Called by					
☐ **Faxed** ☐ **Emailed**					

Special Instructions:

Entered By: Kelly AuVu Date: 3/3/2023 Time: 4:01 PM

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CHAIN of CUSTODY SAMPLE LOG

2303564

LABORATORY • MANAGEMENT • TRAINING

Client DH Environmental
Street 1011 SW Klickitat Way Suite 107
Seattle, WA 98134

Project Manager Mr. Brian Johnson
Project Location

Phone: (206) 934-4043 Fax: (206) 930-4043

NVL Batch Number
Client Job Number
Total Samples
Turn Around Time ☐ 1 Hr ☐ 6 Hrs ☐ 3 Days ☐ 10 Days ☐ 2 Hrs ☐ 1 Day ☐ 4 Days ☐ 4 Hrs ☐ 2 Days ☒ 5 Days
Please call for TAT less than 24 Hrs
Email address brian.johnson@dhenviro.com

☐ Asbestos Air	☐ PCM (NIOSH 7400)	☐ TEM (NIOSH 7402)	☐ TEM (AHERA)	☐ TEM (EPA Level II)	☐ Other			
☐ Asbestos Bulk	☐ PLM (EPA/600/R-93/116)	☐ PLM (EPA Point Count)	☐ PLM (EPA Gravimetry)	☐ TEM BULK				
☐ Mold/Fungus	☐ Mold Air	☐ Mold Bulk	☐ Rotometer Calibration					

METALS	Det. Limit	Matrix		RCRA Metals	☐ All 8	Other Metals
☐ Total Metals	☐ FAA (ppm)	☐ Air Filter	☐ Paint Chips in %	☐ Arsenic (As)	☐ Lead (Pb)	☐ All 3
☐ TCLP	☐ ICP (ppm)	☐ Drinking water	☐ Paint Chips in cm2	☐ Barium (Ba)	☐ Mercury (Hg)	☐ Copper (Cu)
☐ Cr 6	☐ GFAA (ppb)	☐ Dust/wipe (Area)	☐ Waste Water	☐ Cadmium (Cd)	☐ Selenium (Se)	☐ Nickel (Ni)
	☐ CVAA (ppb)	☐ Soil	☐ Other	☐ Chromium (Cr)	☐ Silver (Ag)	☐ Zinc (Zn)

☐ Other Types of Analysis ☐ Fiberglass ☐ Nuisance Dust ☒ Other (Specify) PCB ☐ Silica ☐ Respirable Dust

Condition of Package: ☐ Good ☐ Damaged (no spillage) ☐ Severe damage (spillage)

Seq. #	Lab ID	Client Sample Number	Comments (e.g Sample are, Sample Volume, etc)	A/R
1		COG-3025-PCB-01	caulking	
2				
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				

	Print Below	Sign Below	Company	Date	Time
Sampled by	Brian Johnson		DH Env.	3-3-23	1030
Relinquished by	Brian Johnson		DH Env.	3-3-23	1535
Received by	Kelly Acu		NVL	3/3/23	1535
Analyzed by					
Results Called by					
Results Faxed by					

Special Instructions: Unless requested in writing, all samples will be disposed of two (2) weeks after analysis.

Phone: 206 547.0100 | Fax: 206 634.1936 | Toll Free: 1.888.NVL.LABS (685.5227)
4708 Aurora Avenue North | Seattle, WA 98103-6516

Attachment 3 XRF Data

XRF Data - 3025 96th Street, Gig Harbor, WA

Instrument Serial Number	Sample ID	Date	Location	Color	Component	Substrate	Action Level	Units	Concentration	Pass/Fail
821477	1	3/3/2023	3025 - Interior	Beige/White	Wall & Trim	Wood	1	mg/cm2	0.03003	Pass
821477	2	3/3/2023	3025 - Interior	Beige/White	Wall & Trim	Wood	1	mg/cm2	0.0266	Pass
821477	3	3/3/2023	3025 - Interior	Beige/White	Wall & Trim	Wood	1	mg/cm2	0.02274	Pass
821477	4	3/3/2023	3025 - Interior	Beige/White	Wall & Trim	Wood	1	mg/cm2	0.04775	Pass
821477	5	3/3/2023	3025 - Interior	Beige/White	Window & Sill	Wood	1	mg/cm2	0.02487	Pass
821477	6	3/3/2023	3025 - Interior	Beige/White	Window & Sill	Wood	1	mg/cm2	0.06601	Pass
821477	7	3/3/2023	3025 - Interior	Beige/White	Window Cover	Wood	1	mg/cm2	<LOD	Pass
821477	8	3/3/2023	3025 - Interior	Beige/White	Wall	Wood	1	mg/cm2	0.02512	Pass
821477	9	3/3/2023	3025 - Interior	Beige/White	Door	Wood	1	mg/cm2	0.70085	Pass
821477	10	3/3/2023	3025 - Interior	Beige/White	Door Jamb	Wood	1	mg/cm2	5	Fail
821477	11	3/3/2023	3025 - Interior	Beige/White	Window & Sill	Wood	1	mg/cm2	0.03923	Pass
821477	12	3/3/2023	3025 - Interior	Beige/White	Window & Sill	Wood	1	mg/cm2	0.05045	Pass
821477	13	3/3/2023	3025 - Interior	Beige/White	Door	Wood	1	mg/cm2	0.06311	Pass
821477	14	3/3/2023	3025 - Interior	Beige/White	Door Jamb	Wood	1	mg/cm2	0.07503	Pass
821477	15	3/3/2023	3025 - Interior	Beige/White	Door	Wood	1	mg/cm2	0.03536	Pass
821477	16	3/3/2023	3025 - Interior	Beige/White	Door Jamb	Wood	1	mg/cm2	0.07061	Pass
821477	17	3/3/2023	3025 - Interior	White	Wall	Wood	1	mg/cm2	0.03462	Pass
821477	18	3/3/2023	3025 - Interior	White	Wall	Wood	1	mg/cm2	0.05568	Pass
821477	19	3/3/2023	3025 - Interior	Beige/White	Door	Wood	1	mg/cm2	0.02368	Pass
821477	20	3/3/2023	3025 - Interior	Beige/White	Door Jamb	Wood	1	mg/cm2	0.09023	Pass
821477	21	3/3/2023	3025 - Interior	White	Wall	Wood	1	mg/cm2	0.00631	Pass
821477	22	3/3/2023	3025 - Interior	White	Ceiling	Wood	1	mg/cm2	0.10654	Pass
821477	23	3/3/2023	3025 - Interior	Beige/White	Door	Wood	1	mg/cm2	0.06723	Pass
821477	24	3/3/2023	3025 - Interior	White	Window Frame	Wood	1	mg/cm2	0.08904	Pass
821477	25	3/3/2023	3025 - Interior	White	Door	Wood	1	mg/cm2	1.29784	Fail
821477	26	3/3/2023	3025 - Interior	White	Door Frame	Wood	1	mg/cm2	0.00388	Pass
821477	27	3/3/2023	3025 - Interior	White	Door Jamb	Wood	1	mg/cm2	0.30454	Pass
821477	28	3/3/2023	3025 - Interior	White	Door Accent	Wood	1	mg/cm2	<LOD	Pass
821477	29	3/3/2023	3025 - Interior	White	Wall	Wood	1	mg/cm2	0.01158	Pass
821477	30	3/3/2023	3025 - Interior	White	Stair Post	Wood	1	mg/cm2	0.0779	Pass
821477	31	3/3/2023	3025 - Interior	Red	Stairs	Wood	1	mg/cm2	0.07667	Pass
821477	32	3/3/2023	3025 - Interior	White	Stringer	Wood	1	mg/cm2	0.01569	Pass
821477	33	3/3/2023	3025 - Interior	White	Handrail	Wood	1	mg/cm2	0.05861	Pass
Op. Error	34	Op. Error	Op. Error	Op. Error	Op. Error	Op. Error	Op. Error	Op. Error	Op. Error	Op. Error
821477	35	3/3/2023	3025 - Interior	White	Door	Wood	1	mg/cm2	1.72166	Fail

Instrument Serial Number	Sample ID	Date	Location	Color	Component	Substrate	Action Level	Units	Concentration	Pass/Fail
821477	36	3/3/2023	3025 - Interior	White	Door Jamb	Wood	1	mg/cm2	0.04234	Pass
821477	37	3/3/2023	3025 - Interior	White	Door	Wood	1	mg/cm2	0.72438	Pass
821477	38	3/3/2023	3025 - Interior	White	Wall	Wood	1	mg/cm2	<LOD	Pass
Op. Error	39	Op. Error	Op. Error	Op. Error	Op. Error	Op. Error	Op. Error	Op. Error	Op. Error	Op. Error
821477	40	3/3/2023	3025 - Interior	White	Stair Post	Wood	1	mg/cm2	1.34326	Fail
821477	41	3/3/2023	3025 - Interior	White	Stair Rail	Wood	1	mg/cm2	1.55025	Fail
821477	42	3/3/2023	3025 - Interior	White	Stringer	Wood	1	mg/cm2	0.11992	Pass
821477	43	3/3/2023	3025 - Interior	White	Post	Wood	1	mg/cm2	0.29431	Pass
821477	44	3/3/2023	3025 - Interior	White	Wall	Drywall	1	mg/cm2	<LOD	Pass
821477	45	3/3/2023	3025 - Interior	Beige/White	Door	Wood	1	mg/cm2	0.00583	Pass
821477	46	3/3/2023	3025 - Interior	White	Wall	Wood	1	mg/cm2	1.13235	Fail
821477	47	3/3/2023	3025 - Interior	White	Door	Wood	1	mg/cm2	<LOD	Pass
821477	48	3/3/2023	3025 - Interior	White	Wall	Drywall	1	mg/cm2	0.00194	Pass
821477	49	3/3/2023	3025 - Interior	Beige/White	Ducting	Metal	1	mg/cm2	0.1391	Pass
821477	50	3/3/2023	3025 - Interior	White	Island	Wood	1	mg/cm2	0.00819	Pass
821477	51	3/3/2023	3025 - Interior	White	Door	Wood	1	mg/cm2	1.41304	Fail
821477	52	3/3/2023	3025 - Interior	White	Door Jamb	Wood	1	mg/cm2	0.29809	Pass
821477	53	3/3/2023	3025 - Interior	White	Wall	Wood	1	mg/cm2	<LOD	Pass
821477	54	3/3/2023	3025 - Interior	White	Stall Doors	Wood	1	mg/cm2	2.3231	Fail
821477	55	3/3/2023	3025 - Interior	White	Partitions	Wood	1	mg/cm2	0.04777	Pass
821477	56	3/3/2023	3025 - Interior	White	Partitions	Wood	1	mg/cm2	0.07442	Pass
821477	57	3/3/2023	3025 - Interior	White	Stall Doors	Wood	1	mg/cm2	1.815	Fail
821477	58	3/3/2023	3025 - Exterior	Blue	Stairs	Concrete	1	mg/cm2	0.00495	Pass
821477	59	3/3/2023	3025 - Exterior	White	Door	Wood	1	mg/cm2	0.61761	Pass
821477	60	3/3/2023	3025 - Exterior	White	Column	Metal	1	mg/cm2	0.10583	Pass
821477	61	3/3/2023	3025 - Exterior	Blue	Curb	Concrete	1	mg/cm2	<LOD	Pass
821477	62	3/3/2023	3025 - Exterior	Blue	Window Frame	Wood	1	mg/cm2	<LOD	Pass
821477	63	3/3/2023	3025 - Exterior	Blue	Door	Wood	1	mg/cm2	<LOD	Pass
821477	64	3/3/2023	3025 - Exterior	Blue	Wall	Concrete	1	mg/cm2	0.00316	Pass
821477	65	3/3/2023	3025 - Exterior	White	Fence	Wood	1	mg/cm2	<LOD	Pass
821477	66	3/3/2023	3025 - Exterior	Beige/White	Upper Door	Wood	1	mg/cm2	5	Fail
821477	67	3/3/2023	3025 - Exterior	Blue	Deck	Wood	1	mg/cm2	<LOD	Pass
821477	68	3/3/2023	3025 - Exterior	Blue	Deck Stairs	Wood	1	mg/cm2	<LOD	Pass
821477	69	3/3/2023	3025 - Exterior	Beige/White	Siding	Wood	1	mg/cm2	0.04575	Pass
821477	70	3/3/2023	3025 - Exterior	Beige/White	Door	Wood	1	mg/cm2	0.26203	Pass
821477	71	3/3/2023	3025 - Exterior	Beige/White	Door	Wood	1	mg/cm2	1.36283	Fail
821477	72	3/3/2023	3025 - Exterior	Blue	Deck Stairs	Wood	1	mg/cm2	<LOD	Pass

Instrument Serial Number	Sample ID	Date	Location	Color	Component	Substrate	Action Level	Units	Concentration	Pass/Fail
821477	73	3/3/2023	3025 - Exterior	Blue	Window Cover	Wood	1	mg/cm2	1.09854	Fail
821477	74	3/3/2023	3025 - Exterior	Beige/White	Lower Door	Wood	1	mg/cm2	0.00547	Pass
821477	75	3/3/2023	3025 - Exterior	Blue	Exhaust Panel	Wood	1	mg/cm2	<LOD	Pass
821477	76	3/3/2023	3025 - Exterior	Blue	Exhaust Panel	Wood	1	mg/cm2	1.5092	Fail
821477	77	3/3/2023	3025 - Exterior	Beige/White	Siding	Wood	1	mg/cm2	0.36584	Pass
821477	78	3/3/2023	3025 - Exterior	Beige/White	Siding	Wood	1	mg/cm2	0.41911	Pass

Attachment 4 Laboratory Certifications

United States Department of Commerce
National Institute of Standards and Technology

Certificate of Accreditation to ISO/IEC 17025:2017

NVLAP LAB CODE: 102063-0

NVL Laboratories, Inc.

Seattle, WA

is accredited by the National Voluntary Laboratory Accreditation Program for specific services, listed on the Scope of Accreditation, for:

Asbestos Fiber Analysis

This laboratory is accredited in accordance with the recognized International Standard ISO/IEC 17025:2017. This accreditation demonstrates technical competence for a defined scope and the operation of a laboratory quality management system (refer to joint ISO-ILAC-IAF Communique dated January 2009).

2022-10-01 through 2023-09-30

Effective Dates

For the National Voluntary Laboratory Accreditation Program

National Voluntary Laboratory Accreditation Program

SCOPE OF ACCREDITATION TO ISO/IEC 17025:2017

NVL Laboratories, Inc.
4708 Aurora Avenue N.
Seattle, WA 98103
Mr. Nghiep Vi Ly
Phone: 206-547-0100 Fax: 206-634-1936
Email: nick.l@nvllabs.com
http://www.nvllabs.com

ASBESTOS FIBER ANALYSIS **NVLAP LAB CODE 102063-0**

Bulk Asbestos Analysis

Code	*Description*
18/A01	EPA -- 40 CFR Appendix E to Subpart E of Part 763, Interim Method of the Determination of Asbestos in Bulk Insulation Samples
18/A03	EPA 600/R-93/116: Method for the Determination of Asbestos in Bulk Building Materials

For the National Voluntary Laboratory Accreditation Program

Attachment 5 Inspector Certifications

STATE OF WASHINGTON

Department of Commerce

Lead-Based Paint Abatement Program

Brian Gary Johnson

Has fulfilled the certification requirements of WAC 365-230 and has been certified to conduct lead-based paint activities as a

Risk Assessor

Certification #	Issuance Date	Expiration Date
7170	02/23/2021	03/27/2024

THE ASBESTOS INSTITUTE

Certifies that

Brian Johnson

has attended and received instruction in the EPA approved course

AHERA Building Inspector Refresher

on

June 30, 2022

and successfully completed and passed the competency exam.

Certificate:
ON-4644-2900-063022

Date of Examination:
30-Jun-2022
Date of Expiration:
30-Jun-2023

William T. Cavness
Director

Approved Instructor

THE ASBESTOS INSTITUTE
20033 N. 19th Ave, Building 6, Phoenix, AZ 85027
602-864-6564 – www.theasbestosinstitute.com

This training meets all requirements for asbestos certification under Toxic Substance Control Act Title II.

APPENDIX G

STORMWATER & UTILITIES MEMO

PND ENGINEERS, INC.

STORMWATER EXECUTIVE SUMMARY

PROJECT NO. 224063 **DATE:** January 2026

PROJECT: Crescent Creek Park Master Plan

TO: HBB Landscape Architecture

CC: Project File

FROM: Chase Castona, PE., Chris Wiest, PE.

SUBJECT: Crescent Creek Master Plan – Stormwater Assessment Executive Summary

EXECUTIVE SUMMARY

The purpose of this memorandum is to summarize the results of our stormwater analysis for the Crescent Creek Master Plan.

REQUIREMENTS

- This project is anticipated to trigger all 10 Minimum Requirements per the Gig Harbor Stormwater Management Manual

MAJOR CONSTRAINTS

- **Wetlands and Natural Watercourses**:

  The site is adjacent to Crescent Creek and its associated wetlands. ***Required buffers will limit the extent and location of development and stormwater facilities.***

- **Steep Slopes:**

  The site contains many steep slope areas. Infiltrating stormwater facilities are not permissible near steep slopes. ***Additional geotechnical analysis will be required to evaluate slope stability, erosion potential, and landslide hazards.***

- **Soil and Groundwater:**
  Existing groundwater and subsurface conditions have not been fully evaluated. ***Additional subsurface investigations will be required to evaluate the feasibility of infiltration-based stormwater BMPs.***

- **Previous Development:**

  Previously developed structures and utilities exist throughout the site. ***These features may constrain stormwater conveyance routing and BMP placement.***

- **Right of Way Improvements:**

  The proposed development will trigger stormwater conveyance improvements within the adjacent Right of Way. ***These improvements may include the addition of sidewalks, street***

frontage improvement, the replacement of open conveyance with a closed stormwater conveyance system, and upsizing or replacement of the existing conveyance system.

IMPLEMENTATION STRATEGY

It is recommended that detailed site assessments and investigations are conducted prior to the final design of stormwater infrastructure. These site investigations and assessments will ultimately determine the optimal placement for stormwater BMPs and LID facilities.

For planning purposes, the following strategies were implemented for the proposed stormwater facilities in the master plan:

- A minimum 50-foot setback from the top of steep slopes (>15%) is maintained for all infiltrating stormwater facilities.
- Infiltrating BMPs intended to treat parking lot runoff are located at the base of steep slope areas, rather than within or immediately adjacent to parking areas at the top of slope.
- To the extent feasible, concentrated runoff from non–pollution-generating surfaces is avoided through grading design and strategic placement of flow dispersion areas.
- Placement of new stormwater BMPs avoids proximity to existing structures to the greatest extent practicable.
- Infiltrating BMPs are avoided within mapped or potential wetland boundaries.

For additional information, including a full discussion on the potential site hazards, constraints, and recommendations, see ***Attachment 1 – Stormwater Feasibility Memorandum***. For planned locations of stormwater BMPs and associated conveyance infrastructure, see ***Attachment 2 – Stormwater Concept Figure***.

ATTACHMENTS:

Attachment 1 – Stormwater Feasibility Memorandum

Attachment 2 – Stormwater Concept Figure

ATTACHMENT 1

STORMWATER FEASIBILITY MEMORANDUM

ENGINEERS, INC.

STORMWATER FEASIBILITY MEMORANDUM

PROJECT NO. 224063 **DATE:** January 2026

PROJECT: Crescent Creek Park Master Plan

TO: HBB Landscape Architecture

CC: Project File

FROM: Will Thompson, PE. Chase Castona, PE.

SUBJECT: Stormwater Green Infrastructure Analysis

1. INTRODUCTION

This memorandum documents the evaluation of existing stormwater conditions and the potential for green stormwater infrastructure (GSI) applications at Crescent Creek Park in Gig Harbor, WA.

Stormwater improvements are intended to facilitate proposed park enhancements by supporting site development, improving drainage performance, and ensuring compliance with regulatory requirements. The assessment considers both GSI opportunities and other upgrades needed to accommodate future improvements identified in the master plan. This memo documents how low impact development (LID) strategies can be used within the redevelopment.

Stormwater requirements will be based on the *City of Gig Harbor Stormwater Management and Site Development Manual* (GHSWMM), which is adapted from the Stormwater Management Manual for Western Washington (SWMMWW). The manual identifies the minimum requirements for stormwater management for development and redevelopment in the city of Gig Harbor and provides guidance on implementation of BMPs to meet these requirements.

2. EXISTING CONDITIONS AND PROPOSED IMPROVEMENTS

Crescent Creek Park is an approximately 7-acre park in the northeast of Gig Harbor. The park is located on a hillside and is bounded to the West by Crescent Creek, to the South and East by 96th St. and Crescent Creek Dr. respectively, and private property to the north. Existing conditions include parking lots, grass fields, sports facilities, playgrounds, and vegetation. Existing structures on the site include: a former masonic lodge, restroom buildings, and a sewer pump station.

Figure 2-1 Vicinity Map

The receiving waterbody for the project's stormwater drainage is Crescent Creek just above its outlet to Gig Harbor. Stormwater will be directed to the creek either directly through the existing stormwater conveyance system and outfall along 96th St. or indirectly via dispersion and infiltration.

The current concept for the park improvements includes additional parking, sport court areas, landscaping, paths, and other general park improvements and furnishings. To support this redevelopment, stormwater will be managed using BMPs to meet the requirements of the GHSWMM.

3. STORMWATER REQUIREMENTS

It is anticipated that all ten of the minimum requirements (MR) in the *GHSWMM* will be required. Steps taken to meet MRs 5-7 present opportunities to implement GSI.

Minimum Requirements:

1. **Preparation of Stormwater Site Plans**
2. **Construction Stormwater Pollution Prevention**
3. **Source Control of Pollution**
4. **Preservation of Natural Drainage Systems and Outfalls**
5. **Onsite Stormwater Management**
6. **Runoff Treatment**
7. **Flow Control**
8. **Wetlands Protection**
9. **Operations and Maintenance**
10. **Financial Liability**

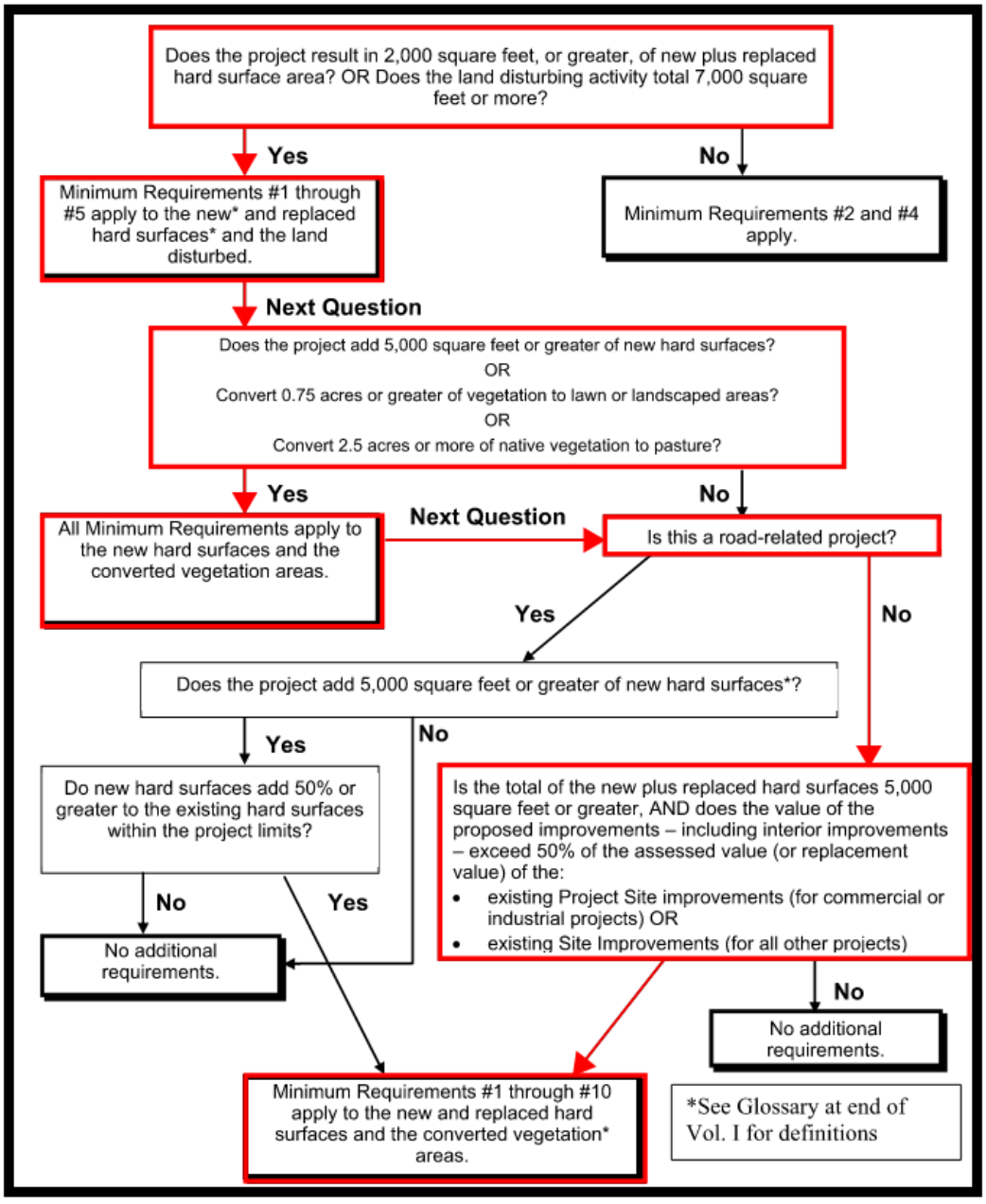


Figure 2.2. Flow Chart for Determining Requirements for Redevelopment.

Figure 3-1 GHSWMM Minimum Requirement Flow Chart

3.2 MR #5 ONSITE STORMWATER MANAGEMENT

Recommended BMPs to meet **MR #5** include:

- Soil Preservation and Amendment: Lawn and landscape areas should have the native vegetation and soil retained or be amended with compost. Natural or amended soils help promote infiltration and control pollutants.
- Dispersion: Dispersion is anticipated for many of the new impervious surfaces. It is anticipated runoff from majority of paths, small structure roofs, and sport areas will be dispersed. The dispersion areas will need to meet the Soil Preservation and Amendment requirements and contain well established vegetation.
- Bioretention Swales and Planters: Use of bioretention swales and planters is anticipated for some proposed pollution generating impervious surfaces, e.g. parking lots.

3.3 MR #6 RUNOFF TREATMENT

The current proposed uses within the project site are anticipated to trigger basic treatment requirements per MR 6. Enhanced treatments, oil control, and phosphorous control are not anticipated to be required.

3.3.1 LID STORMWATER TREATMENT OPTIONS:

Recommended BMPs to meet **MR #6** include:

- Bioretention Swales and Planters: use of bioretention swales and planters is anticipated for pollution generating impervious surfaces where treatment will be required. Where constraints limit the use of bioretention, alternatives including non-infiltrating bioretention, biofiltration swales, and proprietary treatment devices should be considered.

3.4 MR #7 FLOW CONTROL

The best option to minimize impacts to water quantity (peak flows) will be through planning to reduce the amount of new impervious surfaces and maximize surfaces with lower runoff rates.

An initial review of the site suitability criteria for infiltration indicates that portions of the site are suitable for infiltration BMPs. Areas of the site where infiltration BMPs may not be placed include in the setback areas from wetlands and steep slopes (>15%), see Attachments A and B. A full investigation of these criteria should be undertaken early in the design process to determine where infiltration BMPs may be placed.

The majority of surfaces for the park will be non-pollution generating and will control flow through dispersion BMPs. Flow control can also be provided by bioretention for surfaces where treatment is required. Implementation of soil quality BMPs in lawn and landscaped areas can also provide reduction in runoff volumes. Permeable pavement may be considered for some areas of the site, however the topography of the site will likely preclude the use of permeable pavement in many areas.

3.5 CONVEYANCE IMPROVEMENTS

3.5.1 RIGHT OF WAY (ROW)

Improvements to the existing municipal stormwater system adjacent to the park may be required in addition to the park improvements. All improvements in the ROW should be constructed to the City of

Gig Harbor Public Works Standards. Criteria for sizing conveyance systems is included in the Public Works Standards and the existing system should be evaluated for capacity. Work in the ROW may include the addition of sidewalk, street frontage improvement, and replacement of open conveyance with a closed stormwater conveyance system, and upsizing or replacement of the existing conveyance system.

4. CONSTRAINTS

Potential constraints that may limit GSI improvements include environmental critical areas, site physical conditions, hazard areas, maintenance requirements, and safety.

4.1 ENVIRONMENTAL AND SITE CONSTRAINTS

Potential environmental constraints identified on or near the project site include the following items:

- **Wetlands and Natural Watercourses:** The site is bounded to the West by Crescent Creek and associated wetlands. These areas will require a natural buffer per the Gig Harbor Municipal Code. The existing native vegetation in this area will remain untouched. The wetland at the western edge of the site will require implementation of MR #8; and wetlands are not allowed to be used as dispersion areas. Wetlands and potential wetland areas from Pierce County are shown in Attachment A.

- **Steep Slopes:** Infiltration and dispersion BMPs require setbacks from the steep slopes present on site. Evaluation of the steep slopes for erosion and landslide hazards should be conducted. The natural slope of the site will determine where runoff is conveyed. Steep slope areas greater than 20% are shown on Attachment B as potential landslide areas.

    - **Retaining Walls:** To account for the existing slopes, site grading may include retaining walls. Management of surface and groundwater around retaining walls will be required. The presence of infiltrating facilities upslope of retaining walls is not recommended. Drains placed behind the walls may need to be connected to the stormwater system.

- **Soil and Groundwater:** The groundwater and soil conditions at the site are not fully analyzed as part of this evaluation. The presence of shallow groundwater, hillside seeps, or impermeable soil layers may impact the feasibility of the proposed BMPs. Compaction of soil through previous development may also impact BMP placement and construction.

- **Previous Development:** Records of existing or past wells, septic drainfields, or utility easements were reviewed. Existing buildings and utilities on the site include small structures, stormwater catch basins and pipes, and a sewer lift station. The existing Masonic Lodge building has utility connections for water, sewer, and electricity. A decommissioned septic tank is abandoned directly north of the building. Utilities along the adjacent ROWs include storm, water, sewer, electrical, telecom, and natural gas.

4.2 POTENTIAL HAZARD AREAS

A cursory review of potential environmental hazards with the potential to impact stormwater infrastructure was performed. Potential hazards were identified on GIS maps from Pierce Co. and the Washinton Geological Survey. Landslide hazards are shown in Attachment A from the Washington Geological Information Portal. Flood Hazards are shown in Attachment C.

4.2.1 DETAILS OF HAZARDS

Landslide Hazard: Areas of the park are mapped by the Washington Geological Survey as susceptible to landslides due to the presence of slopes over 20% with a relief of over 20-feet. It appears that these slopes were created as part of past development activity when developing the park. Geological assessment of the project may likely indicate that the areas are stable due to lack of other landslide hazard indicators as set forth in PCC 18E.80.020 A. A geological and geotechnical assessment of the site by a licensed professional should be undertaken as part of the design process.

Erosion Hazard: The lower portion of the park is mapped as part of the potential Puget Sound Marine Water Erosion Hazard Area by Pierce County. Because this portion of the area is located behind 96th Dr. the area is protected from wave erosion and actively eroding bluffs are not present on the site. A geological assessment of the site by a licensed professional should be undertaken as part of the design process.

FEMA Flood Hazard: The site is adjacent to a FEMA flood risk area, no construction within the flood risk area is proposed and impacts to the stormwater system from the flood hazard area are not anticipated.

4.3 OTHER CONSTRAINTS

City Parks Department Requirements: Maintenance of new stormwater infrastructure will be by the City Parks department or Public works in the case of ROW improvements, coordination with the client to ensure long term maintenance can be met will be required.

Safety: For sports surfaces, safety and durability will likely preclude permeable pavement as a GSI option.

5. CONCLUSIONS AND RECOMMENDATIONS

Overall, implementation of GSI on this site is feasible. The site constraints described in Section 4 may limit the location and use of some BMPs. GSI improvement is possible though the implementation of LID BMPs. Recommended BMPs include bioretention, dispersion, permeable surfaces, and soil retention and amendment.

The following additional steps are recommended for the next phase of planning:

1) **Site Assessment and Investigation**: the following items should be conducted prior to beginning design of stormwater infrastructure.

    a. A geophysical assessment of the site to rule out constraints from potential landslide and erosion hazard areas.

    b. Detailed engineering analysis to determine site suitability for infiltration and dispersion BMPs.

    c. Environmental assessment and delineation of critical areas and wetland.

    d. Topographic survey to locate utilities, existing development, or other potential constraints.

2) **Coordination:** Coordinate overall design efforts with stormwater planning early in the design process to allow for optimal layout. Planning location of impervious surfaces, grading, and other site work has as much impact as the design of the accompanying stormwater infrastructure.

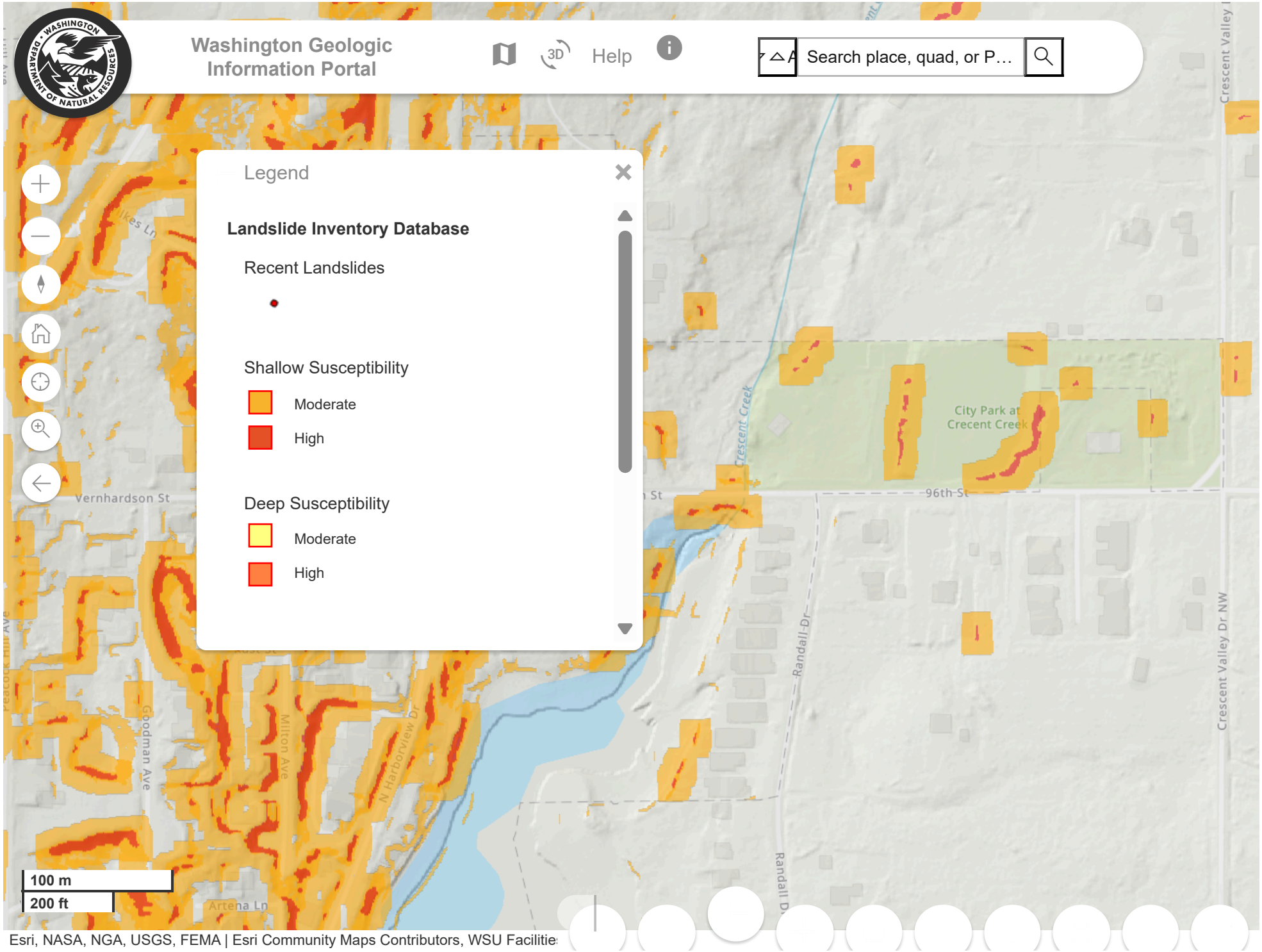
ATTACHMENTS:

Attachment A – Landslide Hazards/Susceptibility

Attachment B – Wetlands and Potential Wetlands

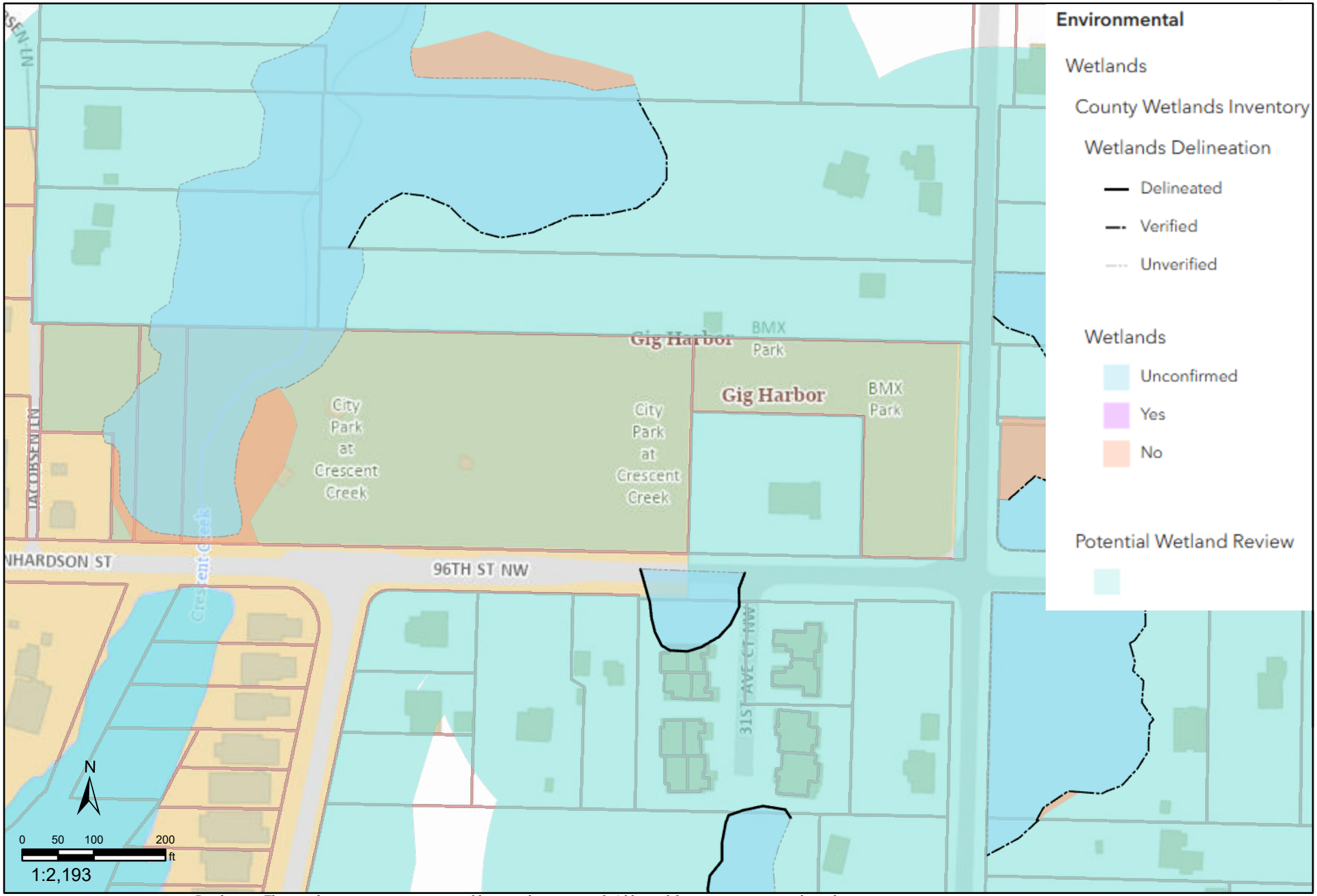
Attachment C – Flood Hazards

ATTACHMENT A - LANDSLIDE HAZARDS/ SUSCEPTIBILITY



ATTACHMENT B - WETLANDS AND POTENTIAL WETLANDS

PublicGIS



Disclaimer: The map features are approximate and have not been surveyed. Additional features not yet mapped may be present. Pierce County assumes no liability for variations ascertained by formal survey.

Date: 8/11/2025 04:02 PM

ATTACHMENT C - FLOOD HAZARDS

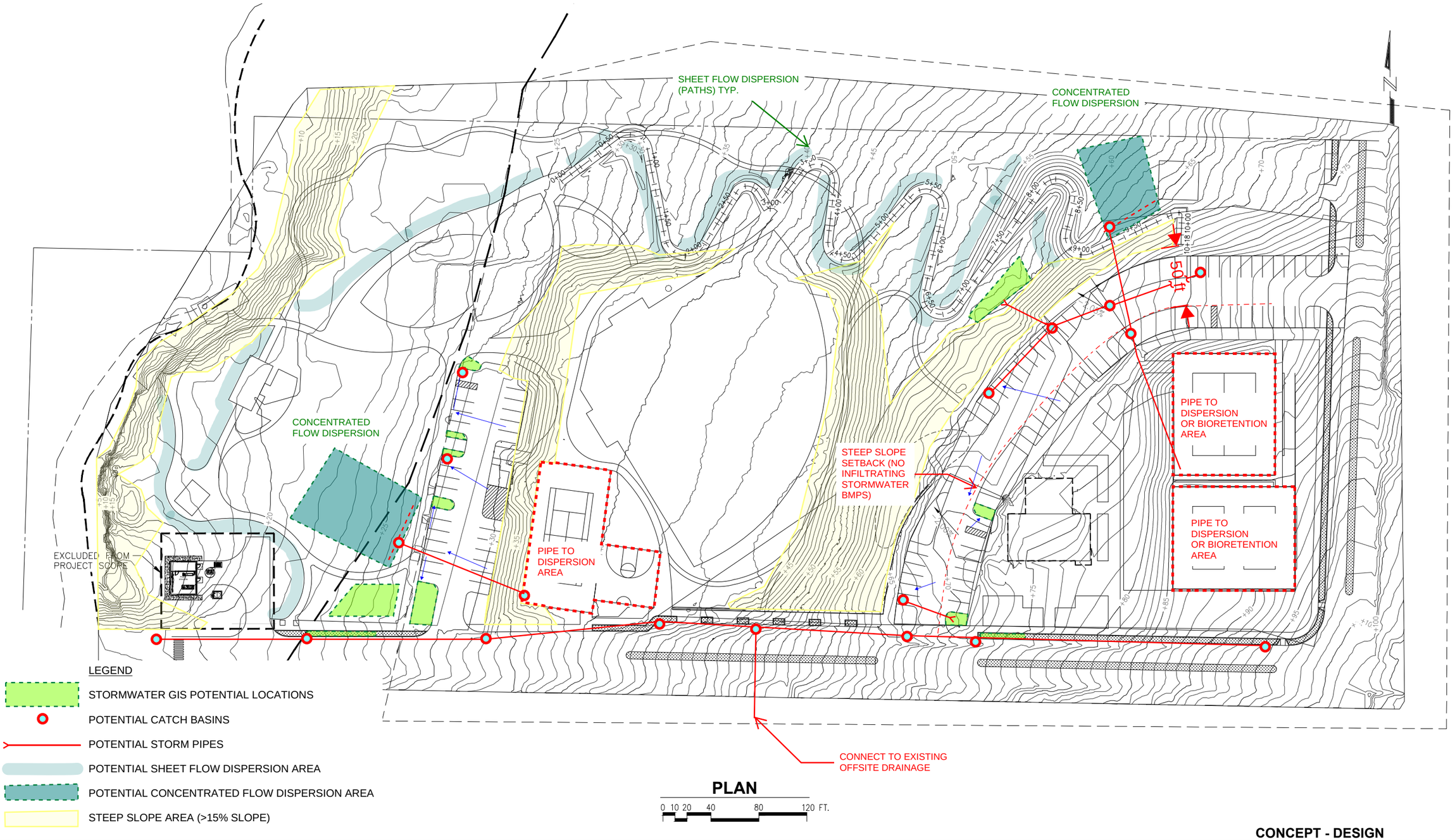
PublicGIS

Disclaimer: The map features are approximate and have not been surveyed. Additional features not yet mapped may be present. Pierce County assumes no liability for variations ascertained by formal survey.

Date: 8/11/2025 04:06 PM

ATTACHMENT 2

STORMWATER CONCEPT FIGURE



PLAN

0 10 20 40 80 120 FT.

CONCEPT - DESIGN

PND ENGINEERS, INC.
3240 Eastlake Avenue E
Seattle, Washington 98102
P: 206.624.1387
www.pndengineers.com

PND ENGINEERS, INC. IS NOT RESPONSIBLE FOR SAFETY PROGRAMS, METHODS OR PROCEDURES OF OPERATION, OR THE CONSTRUCTION OF THE DESIGN SHOWN ON THESE DRAWINGS. WHERE SPECIFICATIONS ARE GENERAL OR NOT CALLED OUT, THE SPECIFICATIONS SHALL CONFORM TO STANDARDS OF INDUSTRY. DRAWINGS ARE FOR USE ON THIS PROJECT ONLY AND ARE NOT INTENDED FOR REUSE WITHOUT WRITTEN APPROVAL FROM PND. DRAWINGS ARE ALSO NOT TO BE USED IN ANY MANNER THAT WOULD CONSTITUTE A DETRIMENT DIRECTLY OR INDIRECTLY TO PND.

REVISIONS

REV	DATE	DESCRIPTION

PROJECT:
CITY OF GIG HARBOR
CRESCENT CREEK PARK MASTER PLAN

TITLE:
STORMWATER CONCEPT

DESIGNED BY:	WT	PROJECT NO:	224063
DRAWN BY:	WT	DATE:	AUGUST 2025
CHECKED BY:		SCALE:	NOTED

SHEET NO: 2

1/31/25
Drawings\2024\244028 Snohomish Conservation District On-Call\44th Street\60% Submittal\244028-C1.01-C1.02.dwg

APPENDIX H

ADA ACCESSIBILITY MEMO

PND ENGINEERS, INC.

ADA ACCESSIBILITY SUMMARY

PROJECT NO. 224063 **DATE:** January 2026

PROJECT: Crescent Creek Park Master Plan

TO: HBB Landscape Architecture

CC: Project File

FROM: Chase Castona, PE., Chris Wiest, PE., Dylan Monzon, EIT.

SUBJECT: Crescent Creek Master Plan – ADA Accessibility Summary

PURPOSE

The purpose of this memorandum is to summarize ADA accessibility challenges at the existing project site and discuss the planned improvements to provide accessibility to all areas within Crescent Creek Park (Park).

EXISTING ACCESSIBILITY CHALLENGES

The Park is situated between Crescent Valley Drive and Vernhardson Street in Gig Harbor, WA. The existing park contains a few amenities and buildings including volleyball courts, a basketball and tennis court, the Masonic Lodge, a small restroom building, some park shelters, and a small playground. See Figure 1 below showing the existing site.

Figure 1: Existing Site Plan

EXISTING PARKING

The existing parking lot on the western side of the park includes two marked ADA parking stalls; however, neither stall is designated as van-accessible. An access aisle is provided only adjacent to the southernmost ADA stall, while the northernmost ADA stall lacks a required access aisle. At least one of the ADA stalls should be designated as van-accessible to meet accessibility standards. Figure 2 illustrates the existing ADA parking configuration within this parking lot.

Figure 2: ADA Parking Stalls

The existing parking lot around the Masonic Lodge is not striped, nor does it provide any ADA stalls and access pathways.

EXISTING SITE ACCESS

The existing park contains limited walkways, trails, or sidewalks connecting visitors to amenities throughout the site. There are currently no ADA-compliant pathways providing access to the existing sport courts, including the volleyball and basketball courts. As a result, visitors must use stairs or traverse unimproved grass areas to reach these facilities.

Pedestrian access along adjacent streets is also limited. A short segment of sidewalk exists along Vernhardson Street, extending from the park's westernmost parking lot to the basketball courts. However, there are no formal sidewalks or pedestrian facilities along the remaining frontage of Vernhardson Street or Crescent Valley Drive.

MASTER PLAN - PROPOSED ADA IMPROVEMENTS

The site plan layout proposed in the master plan development includes multiple provisions to provide ADA access to all facilities within the park.

PROPOSED PARKING

Two parking lots are proposed within the park. The footprint of the existing westernmost parking lot will be retained, with improvements to provide two ADA-compliant parking stalls, including access aisles, curb ramps, and accessible pathways connecting the stalls to park amenities.

A new parking lot is proposed on the eastern side of the park and will also include ADA-compliant parking stalls. From these stalls, new sidewalks and marked pedestrian crossings will provide accessible routes throughout the park. See figures 3 – 5 for a summary of the proposed stalls and ADA-compliant stall count criteria.

On-street parking is also proposed along Vernhardson Street, along with new sidewalks and ADA-compliant curb ramps where required to improve pedestrian connectivity. A new marked pedestrian crosswalk is also planned at the western end of the park to enhance safe access across Vernhardson Street.

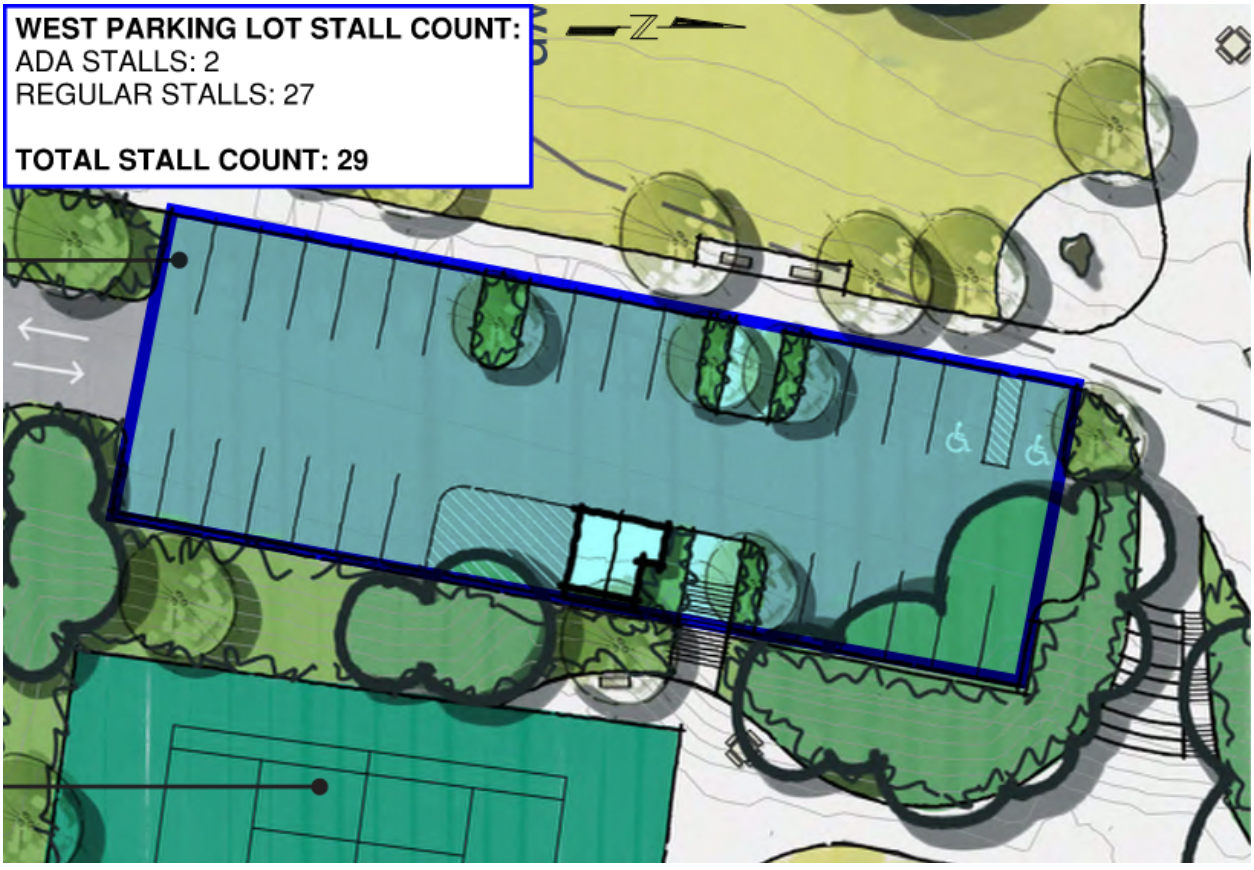


Figure 3: West Parking Lot Stall Count

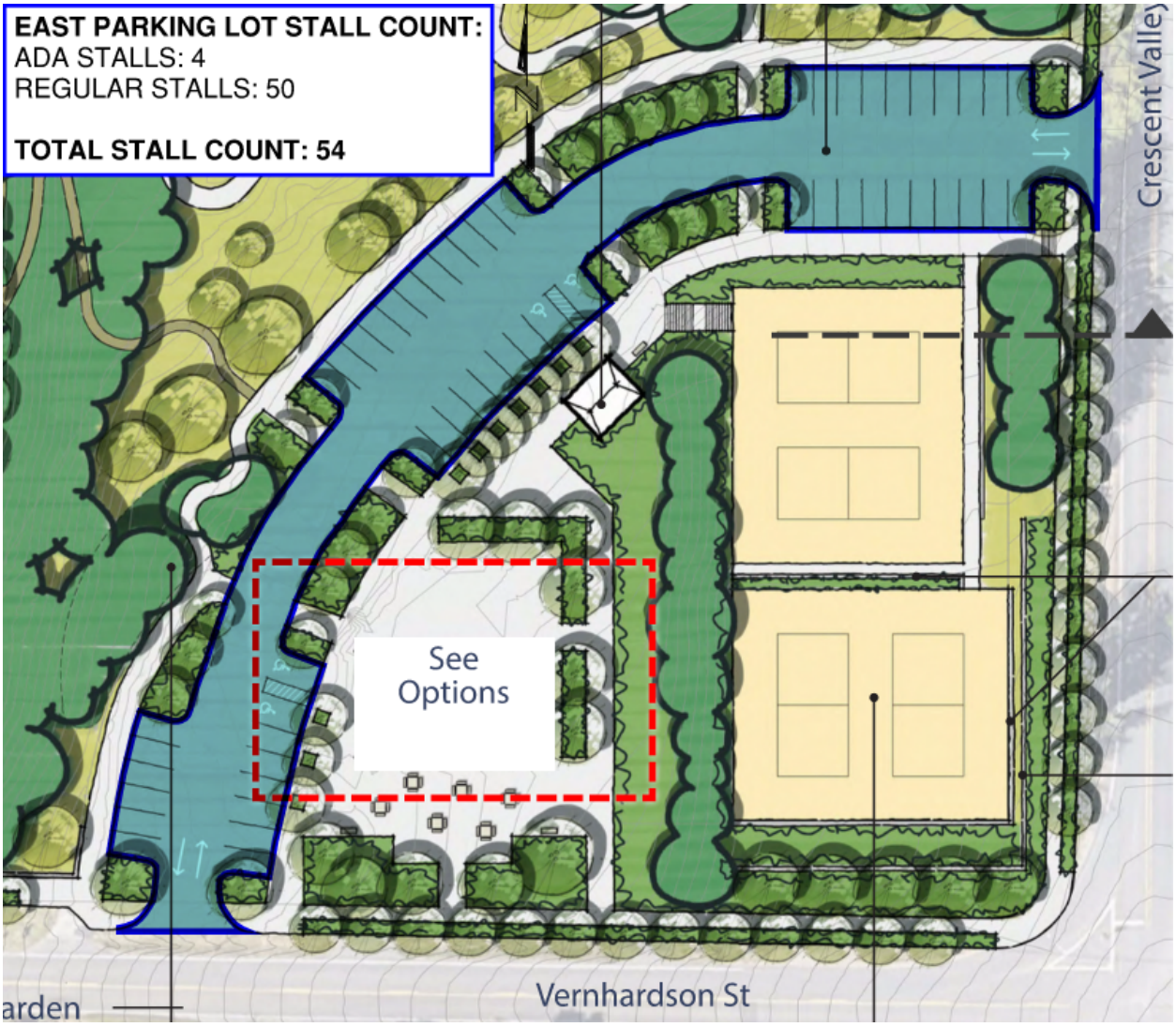


Figure 4: East Parking Lot Stall Count

Total Number of Parking Spaces Provided in a Parking Lot or Facility	Minimum Number of Accessible Parking Spaces Permitted
1 to 25	1
26 to 50	2
51 to 75	3
76 to 100	4
101 to 150	5
151 to 200	6
201 to 300	7
301 to 400	8
401 to 500	9
501 to 1000	2 percent of total
1001 and over	20, plus 1 for each 100, or fraction thereof, over 1000
At least one of every six spaces must be van accessible.	

Figure 5: ADA Accessible Stall Count Table

PROPOSED SITE ACCESS

A network of new sidewalks and trails is proposed throughout the site. The Primary Trail is located along the northern edge of the park and follows a gently sloping alignment that traverses the existing topography. This alignment was selected to minimize grading and the need for extensive ramping while maintaining ADA-compliant slopes. The Primary Trail provides accessible connections from the eastern parking lot to the multipurpose field, basketball courts, tennis and pickleball courts, play areas, and the western parking lot. See figure 6 for a summary of the proposed accessible walkways.

Frontage improvements along Verhardson Street and Crescent Valley Drive include new sidewalks and landscaping. Based on analysis of the existing grades along the eastern (Crescent Valley Drive) and southern (Vernhardson Street) edges of the park, slopes for the proposed sidewalk would exceed allowable ADA slopes for both ADA compliant sidewalks (5%) and ramps (8.33%). Due to the steep slopes, an ADA variance will be needed to construct the sidewalks along the southern and eastern edges of Crescent Creek Park.

Figure 6: Proposed Site Walkways

APPENDIX I

OPEN HOUSE MATERIALS

Welcome

Welcome to the Crescent Creek Park Master Plan Public Workshop!

The purpose of this meeting is to understand how you use the park today and how you would like to use it in the future.

Please place a pin where you live or work.

Planning Process

What is a Master Plan?

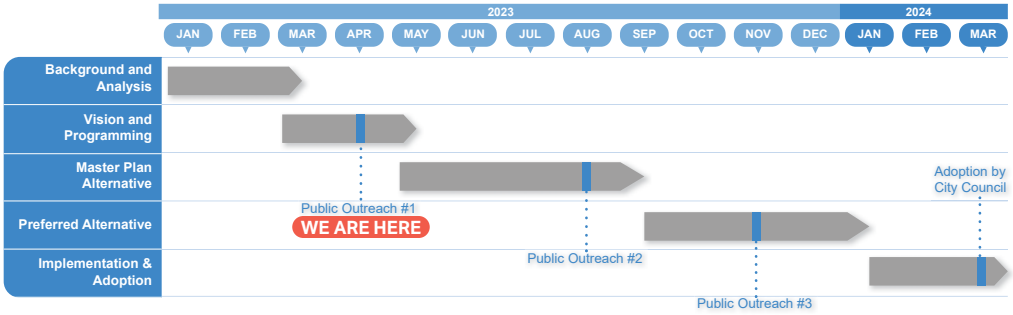
Master plans are about **expressing a long-term vision** for your parks. Features shown in a master plan include the type of activities you might want to experience.

A master plan also includes the infrastructure and circulation needed to support those activities like walkways, parking, lighting, and restrooms. Ultimately, a master plan is intended to **guide future implementation**, with more detailed design and funding to follow at a later date.

It's important that your **vision, ideas, and opportunities** are reflected in the master plan of your park.

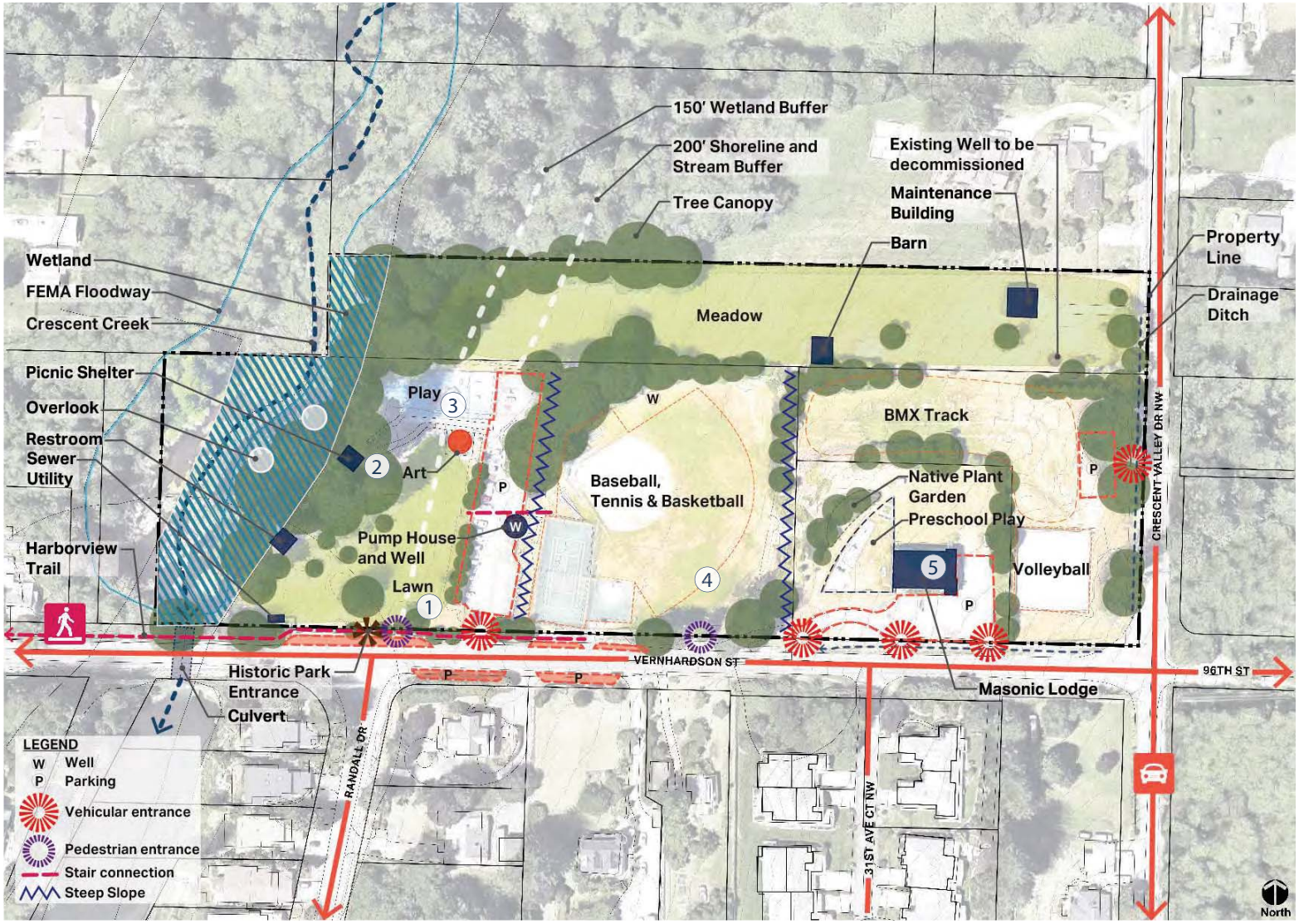
Example master planning process, from public input during a community meeting, to a park programming diagram, to a final master plan.

Timeline



Context Map

Site Analysis



What do you like most about the park?

SURVEY LINK:
https://www.
surveymonkey....

Park Activities

Place a dot on the activities you would like to see in the park.

Passive Recreation


Nature Trails


Open Lawn


Picnic Shelters


Interpretive Elements


Native Plant Gardens


P-Patch


Outdoor Event Space


Public Art


Plazas/ Gathering Areas


Accessible Trails


Wellness


Wildlife Gardens

Active Recreation


Natural Athletic Fields


Sport Courts


Multi-Use Courts


Play


Fitness


Basketball


Adventure Elements


Zip Line


Climbing Wall


Spray Park


Volleyball

SURVEY LINK:
https://www.
surveymonkey....

What's your vision?

Tell us your hopes, ideas, and opportunities for the park.

Describe (or draw) your ideas here!

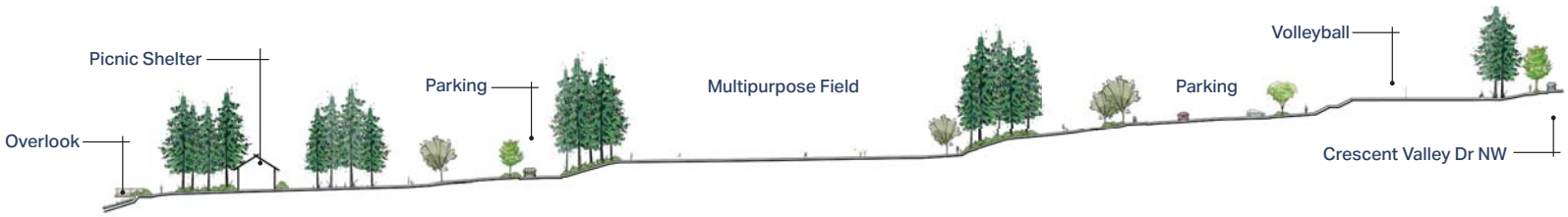
SURVEY LINK:
https://www.
surveymonkey....

Concept Alternative 1

Concept Alternative 2

Concept Alternative 3

Preferred Master Plan



SITE SECTION

Preliminary Phasing & Construction Budget

PHASE 1: Upper Terrace

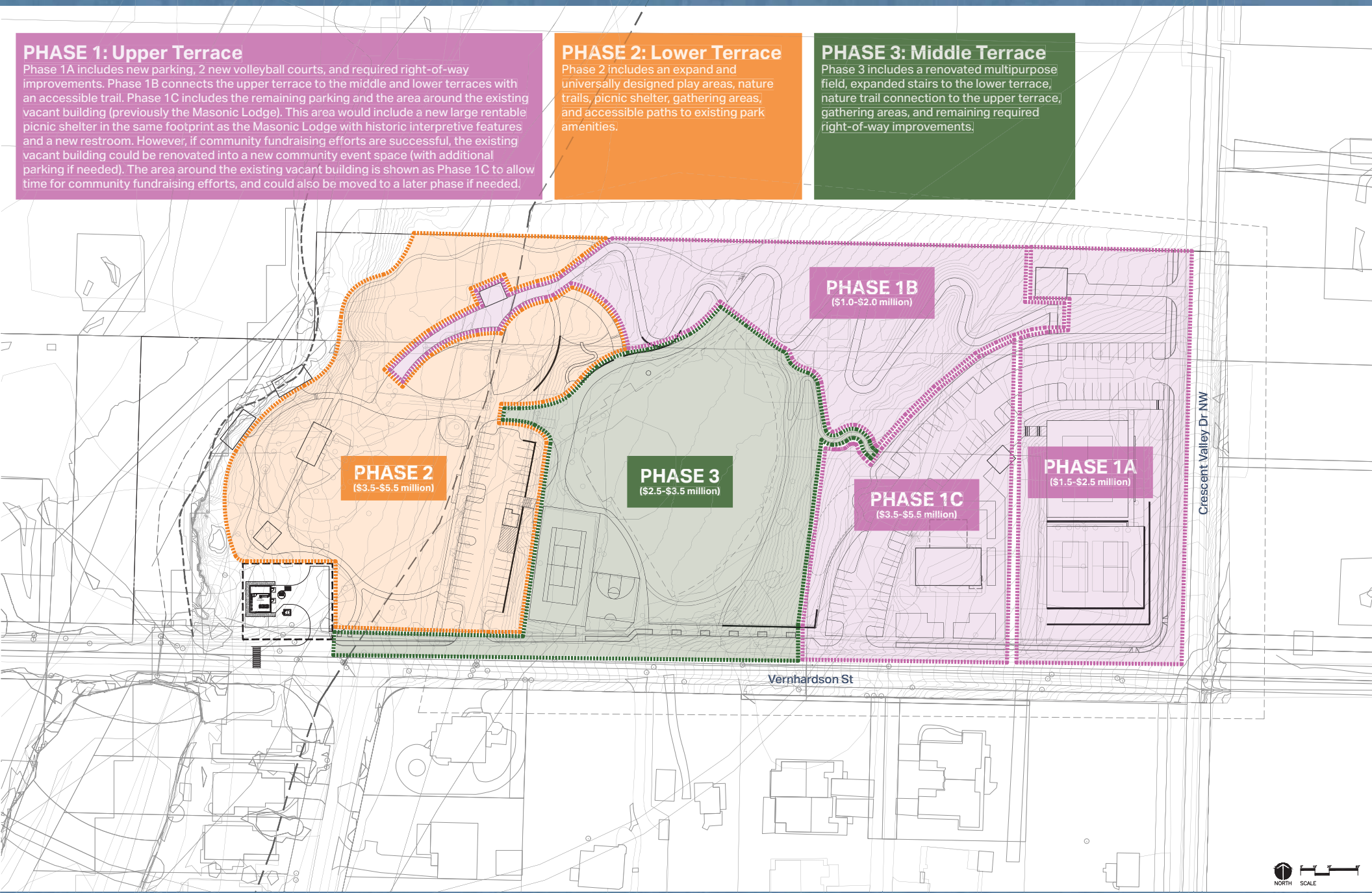
Phase 1A includes new parking, 2 new volleyball courts, and required right-of-way improvements. Phase 1B connects the upper terrace to the middle and lower terraces with an accessible trail. Phase 1C includes the remaining parking and the area around the existing vacant building (previously the Masonic Lodge). This area would include a new large rentable picnic shelter in the same footprint as the Masonic Lodge with historic interpretive features and a new restroom. However, if community fundraising efforts are successful, the existing vacant building could be renovated into a new community event space (with additional parking if needed). The area around the existing vacant building is shown as Phase 1C to allow time for community fundraising efforts, and could also be moved to a later phase if needed.

PHASE 2: Lower Terrace

Phase 2 includes an expand and universally designed play areas, nature trails, picnic shelter, gathering areas, and accessible paths to existing park amenities.

PHASE 3: Middle Terrace

Phase 3 includes a renovated multipurpose field, expanded stairs to the lower terrace, nature trail connection to the upper terrace, gathering areas, and remaining required right-of-way improvements.



Park Amenities

Nature Trails

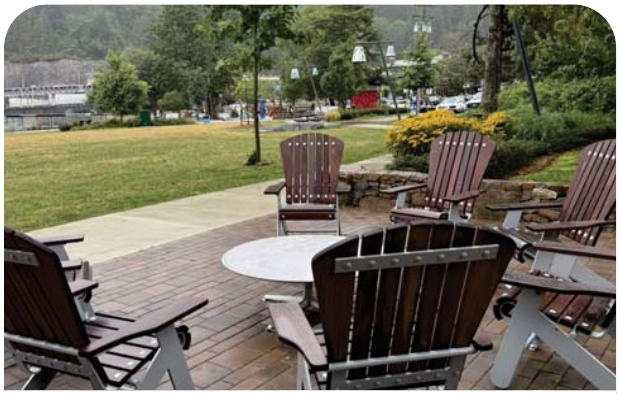
Accessible Trails

Hillside Seating

Expanded Play Areas (all ages / abilities)

Picnic Shelters

Gathering Areas



APPENDIX J

PUBLIC SURVEYS

Crescent Creek Park Master Plan – Survey #1

Welcome to the Crescent Creek Park Master Planning project. The purpose of this project is to create a long-term vision for Crescent Creek Park, including types of activities and the infrastructure that supports these activities. The master plan is intended to guide future implementation, with more detailed design and funding to follow at a later date. It is important that your vision, ideas, and opportunities for Crescent Creek Park are reflected in the master plan.

Crescent Creek Park is located at the intersection of Crescent Valley Dr NW and Vernhardson St. The 9.82-acre park contains a stream, wetland, forested area, sloped topography, several existing structures, a playground, and other active and passive recreation opportunities.

The City of Gig Harbor is seeking your vision, ideas, and opportunities for future park improvements. Opportunities could include improving or expanding existing activities like ballfields, playgrounds and picnic shelters; or adding new opportunities like gathering spaces, a place for community events, different types of sports or play areas, and connections to the adjacent neighborhood.

If you need assistance completing the survey, please contact Jennifer Haro at jharo@gigharborwa.gov.

- This survey should take approximately 5 minutes to complete.
- More information on the Crescent Creek Park project is on the City's website https://www.gigharborwa.gov/788/Crescent-Creek-Master-Plan
- Progress, updates, and future outreach opportunities will be posted on the website, so check back often!

Your Community and Experience

1. Where do you live?
    - o I can walk or bike to the park
    - o I live or work nearby, but would drive to the park
    - o I live or work elsewhere in the City Limits
    - o I do not live in the City Limits but I am a frequent visitor or live/work in the greater Gig Harbor area
    - o Other: _____

2. Have you ever visited Crescent Creek Park?
    - o Yes
    - o No

3. If yes, what one word or phrase would you use to describe the existing park?

    (Comment box)

4. What do you enjoy most, or least, about Crescent Creek Park? If you have never been to the park, what do you enjoy most, or least, about parks in general in Gig Harbor?

    (Comment box)

Guiding Principles

5. Master plans often involve **guiding principles** that help shape, inform, and sometimes prioritize design ideas. How important do you think each of the following principles are as we develop a new master plan for Crescent Creek Park? On a scale of 1 to 5, where 1 means **"Not important"** and 5 means **"Very important".**

    - o Ability to host or attend community events

- Ease of maintenance
- Sustainable design
- Maintain natural character/ecology
- Add capacity or more variety of activities
- Create a unique experience and sense of place
- Programming or activities for different ages
- ADA and universal accessibility
- Other (specify): _____

Park Programs and Activities

6. How important is it to ***improve existing programs and activities*** in the park? On a scale of 1 to 5, where 1 means **"Do not improve, its great as it is"** and 5 means **"Yes, please improve"**. Note that questions about the existing Masonic lodge are addressed separately below.
    - Native plant gardens
    - Playground
    - Trails (paved)
    - Trails (soft surface)
    - Stream overlook
    - Picnic area and shelter
    - Public art
    - Open lawn
    - Baseball field
    - Tennis/pickleball court
    - Basketball court
    - Sand volleyball court
    - Restrooms
    - Educational opportunities
    - Parking
    - BMX Track

7. Should any of these existing programs and activities be ***expanded***? If so, which ones?

(Comment box)

8. How important is it to include the following ***new programs and activities*** in the master plan for Crescent Creek Park? On a scale of 1 to 5, where 1 means **"Do not include"** and 5 means **"Yes, please include"**.
    - Playgrounds – traditional structures
    - Playgrounds – natural play elements
    - Playgrounds – spray park
    - Educational opportunities (environment/history/agricultural)
    - Safe access (improved sidewalks and sightlines)
    - Public art (such as murals or sculptures)
    - Flexible space for outdoor events (concerts, festivals, ceremonies, amphitheater, etc.)
    - Community gardens (sensory garden, botanical, pollinator, arboretum, etc.)
    - P-patch, orchards, food forest
    - Athletic fields (soccer, lacrosse, baseball, softball, etc.)
    - Flexible, unprogrammed open lawn areas

- Outdoor fitness
- Climbing walls, zip-line, or other active individual sports
- Reflexology path, labyrinth, or other passive wellness features
- Pump track and adventure trails
- Day camps, outdoor-based childcare / school programs, etc.
- Community center space (seniors, teens, classes, etc.)
- Nothing, keep the park as-is
- Other: _____

Masonic Lodge

The Masonic lodge was built in 1915, and expanded in the 1940s. It is not eligible for historic designation due to the previous additions to the building, but it does have historic value to the community. The 2-story building is now owned by the City, and a preschool operates out of the basement level while the top level remains vacant. (insert photos of the building – historic and today)

9. If it is feasible and cost effective to retain the Masonic lodge, what kind of uses should be considered? (select all that apply)
   - Space for meeting and events (weddings, organizations, family events, etc.)
   - Retain the existing preschool
   - Indoor public recreation or community center
   - Arts, exhibition space
   - Music space (practice and/or small concert space)
   - Flexible workspace for community non-profits or organizations
   - Makerspace
   - Other (specify):

10. If the Masonic lodge cannot be preserved due to feasibility or cost to adapt the structure for a new use, how important is it to have a new building at Crescent Creek Park to serve the types of activities indicated above? On a scale of 1 to 5, where 1 means **"Not important"** and 5 means **"Important, please include"**.

Additional Comments

11. Do you have any other comments or ideas for the park that you would like to share?

(Comment box)

12. Thinking back on the ideas, comments and opportunities you shared in this survey, is there another park (either local or national) that you would like us to use as inspiration for Crescent Creek Park?

(Comment box)

Tell us about yourself and your household

13. How old are you and the other members of your household? (Select all that apply)
    - o 0-5
    - o 6-12
    - o 13-17
    - o 18-25
    - o 26-40
    - o 41-55
    - o 56-65
    - o 65+
    - o Prefer not to say

14. How would you best describe your ethnicity and the ethnicity of those in your household? (Select all that apply)
    - o Hispanic or Latino
    - o White
    - o Asian or Asian American
    - o American Indian or Alaskan Native
    - o Black or African American
    - o Native Hawaiian or other Pacific Islander
    - o Another race
    - o Prefer not to say
    - o Other (specify):

15. If you or any members of your household require special accommodations or have limitations when participating in recreation activities and programs, what types of improvements would help improve your experience or ability to participate?

(Comment box)

Future Communication

Please provide your name and email address if you would like to receive information about future opportunities to participate in the Crescent Creek Park Master Plan project:

Name: _____

Email Address: _____

Thank you for participating! You can find out more information on the Crescent Creek Park project on the City's website [https://www.gigharborwa.gov/788/Crescent-Creek-Master-Plan]

We will continue to post progress and updates on the website, so check back often.

Crescent Creek Park Master Plan – Survey #2

Welcome to the Crescent Creek Park Master Plan project. The purpose of this project is to create a long-term vision for Crescent Creek Park, including types of activities and the infrastructure that supports these activities. The master plan is intended to guide future implementation, with more detailed design and funding to follow at a later date. It is important that your vision, ideas, and opportunities for Crescent Creek Park are reflected in the master plan.

Crescent Creek Park is located at the intersection of Crescent Valley Dr NW and Vernhardson St. The 9.82-acre park contains a stream, wetland, forested area, sloped topography, several existing structures, a playground, and other active and passive recreation opportunities.

The City of Gig Harbor is seeking your input on initial concepts for the park. These concepts were developed based on the community's overall vision and ideas for park improvements received at the first open house for the project held in April 2023. Ideas shared by the community during the first open house included increasing trails and parking, increasing ADA accessibility throughout the site, and providing added capacity or a greater variety of activities. It was also important to protect the uniqueness of this park by continuing to highlight it's natural character.

If you need assistance completing the survey, please contact Jennifer Haro at jharo@gigharborwa.gov.

- This survey should take approximately 5 minutes to complete.
- More information on the Crescent Creek Park project is on the City's website https://www.gigharborwa.gov/788/Crescent-Creek-Master-Plan
- Progress, updates, and future outreach opportunities will be posted on the website, so check back often!

Your Community and Experience

1. Where do you live?
    - o I can walk or bike to the park
    - o I live or work nearby, but would drive to the park
    - o I live or work elsewhere in the City Limits
    - o I do not live in the City Limits but I am a frequent visitor or live/work in the greater Gig Harbor area
    - o Other: _____

2. Have you ever visited Crescent Creek Park?
    - o Yes
    - o No

CONCEPT ALTERNATIVES:

The three Concept Alternatives shown in this section of the survey were developed to incorporate the ideas shared by the community during the first open house held in April 2023. Each concept represents similar programmatic elements, but in a different layout or location within the park. Each concept also shows the Masonic Lodge renovated for community events and activities as directed by the City Council. All concepts include ADA accessibility to all park features, expanded trails, and enhanced forested areas to provide wildlife corridors through the park.

The concept alternatives are intended to show a range of options and are not exclusive of each other. We want your opinion of each concept, so we can ultimately mix-and-match the best features to meet the community's vision for this park.

Please review the concept alternatives below and answer the questions that follow.

CONCEPT ALTERNATIVE 1

Concept Alternative 1 primarily enhances or expands the existing park features. This concept expands the playground to include nature and hillside play features. A terraced, expanded pedestrian connection is created between the ballfield area and the lower lawn to provide opportunities for community gathering or small events. Concept Alternative 1 has more new parking stalls compared to Concept Alternative 2, but less than Concept Alternative 3. The cost for construction is likely less for this concept as compared to other alternatives.

a) What do you like **best** about Concept Alternative 1 and why? (blank box)

b) What do you like **least**, or are concerned with, in Concept Alternative 1 and why? (blank box)

c) How well does this concept follow the guiding principles? (On a scale of 1 to 5 where 1 means this concept does not support this goal at all and 5 means the concept absolutely supports this goal)

- Natural character (enhancing natural forest/wildlife corridors) (Scale 1-5)
- Sustainable design (reducing paved impervious surfaces, encroachments into critical area buffers, opportunity for natural drainage) (Scale 1-5)
- Add capacity / variety of activities (expanded or new activities) (Scale 1-5)
- ADA access (proximity of parking and access to all activities) (Scale 1-5)
- Unique sense of place (opportunity for gathering, public art, unique features) (Scale 1-5)

CONCEPT ALTERNATIVE 2

Concept Alternative 2 relocates the existing ballfield to the east and consolidates the tennis court, pickleball courts and a full-size basketball court in the central area of the park. A series of ramps and stairs will be needed to ensure ADA access to all areas of the park. The playground is expanded to include nature and hillside play features with a small gathering space connecting the new court area to the lower lawn, similar to Concept Alternative 1. This concept has the least number of new parking stalls and least number of trails compared to other concepts. Significant grading and new walls would be needed on the east half of the park, increasing the likely cost of construction for this concept over Concept Alternative 1.

a) What do you like **best** about Concept Alternative 2 and why? (blank box)

b) What do you like **least**, or are concerned with, in Concept Alternative 2 and why? (blank box)

c) How well does this concept follow the guiding principles? (On a scale of 1 to 5 where 1 means this concept does not support this goal at all and 5 means the concept absolutely supports this goal)

- Natural character (enhancing natural forest/wildlife corridors) (Scale 1-5)
- Sustainable design (reducing paved impervious surfaces, encroachments into critical area buffers, opportunity for natural drainage) (Scale 1-5)
- Add capacity / variety of activities (expanded or new activities) (Scale 1-5)
- ADA access (proximity of parking and access to all activities) (Scale 1-5)
- Unique sense of place (opportunity for gathering, public art, unique features) (Scale 1-5)

CONCEPT ALTERNATIVE 3

Concept Alternative 3 relocates the existing ballfield to the east. The playground is expanded to include nature and hillside play features. A new covered basketball court is also included. This concept has the most new parking stalls, the most new trails, and the largest playground also adding nature and hillside play features. Significant grading and new walls would be needed on the east half of the park with the likely cost of construction comparable to Concept Alternative 2.

a) What do you like **best** about Concept Alternative 3 and why? (blank box)

b) What do you like **least**, or are concerned with, in Concept Alternative 3 and why? (blank box)

c) How well does this concept follow the guiding principles? (On a scale of 1 to 5 where 1 means this concept does not support this goal at all and 5 means the concept absolutely supports this goal)

- Natural character (enhancing natural forest/wildlife corridors) (Scale 1-5)
- Sustainable design (reducing paved impervious surfaces, encroachments into critical area buffers, opportunity for natural drainage) (Scale 1-5)
- Add capacity / variety of activities (expanded or new activities) (Scale 1-5)
- ADA access (proximity of parking and access to all activities) (Scale 1-5)
- Unique sense of place (opportunity for gathering, public art, unique features) (Scale 1-5)

Masonic Lodge

3. A group of local residents created a plan to remodel the Masonic Lodge into a community events space, with museum storage in the basement. This plan is estimated to cost $4.5 million. Specific funding sources have not yet been identified. What are your thoughts?

(Comment box)

Additional Comments

4. Now that you have reviewed all three Concept Alternatives, is there anything else you would like us to know or have any other ideas for the park that you would like to share?

(Comment box)

Tell us about yourself and your household

5. How old are you and the other members of your household? (Select all that apply)
    - o 0-5
    - o 6-12
    - o 13-17
    - o 18-25
    - o 26-40
    - o 41-55
    - o 56-65
    - o 65+
    - o Prefer not to say

6. How would you best describe your ethnicity and the ethnicity of those in your household? (Select all that apply)
    - o Hispanic or Latino
    - o White
    - o Asian or Asian American
    - o American Indian or Alaskan Native
    - o Black or African American
    - o Native Hawaiian or other Pacific Islander
    - o Another race
    - o Prefer not to say
    - o Other (specify):

Future Communication

Please provide your name and email address if you would like to receive information about future opportunities to participate in the Crescent Creek Park Master Plan project:

Name: _____

Email Address: _____

Thank you for participating! You can find out more information on the Crescent Creek Park project on the City's website [https://www.gigharborwa.gov/788/Crescent-Creek-Master-Plan]

We will continue to post progress and updates on the website, so check back often.

Crescent Creek Park Master Plan – Survey #3

Welcome to the Crescent Creek Park Master Plan project. The purpose of this project is to create a long-term vision for Crescent Creek Park, including types of activities and the infrastructure that supports these activities. The master plan is intended to guide future implementation, with more detailed design and funding to follow at a later date. It is important that your vision, ideas, and opportunities for Crescent Creek Park are reflected in the master plan.

Crescent Creek Park is located at the intersection of Crescent Valley Dr NW and Vernhardson St. The 9.82-acre park contains a stream, wetland, forested area, sloped topography, several existing structures, a playground, and other active and passive recreation opportunities.

The City of Gig Harbor is seeking your input on the **preferred master plan** for the park. This plan was developed based on the community's overall vision and ideas for park improvements and feedback on the initial three concepts presented during previous public outreach events.

If you need assistance completing the survey, please contact Jennifer Haro at jharo@gigharborwa.gov.

- This survey should take approximately 5 minutes to complete.
- More information on the Crescent Creek Park project is on the City's website https://www.gigharborwa.gov/788/Crescent-Creek-Master-Plan
- Progress, updates, and future outreach opportunities will be posted on the website, so check back often!

Your Community and Experience

1. Where do you live?
    - o I can walk or bike to the park
    - o I live or work nearby, but would drive to the park
    - o I live or work elsewhere in the City Limits
    - o I do not live in the City Limits but I am a frequent visitor or live/work in the greater Gig Harbor area
    - o Other: _____

2. Have you ever visited Crescent Creek Park?
    - o Yes
    - o No

PREFERRED MASTER PLAN:

Based on the feedback received during the last outreach event in April 2025, the majority of people who provided feedback supported the following park improvements:

- increasing trails and parking
- increasing ADA accessibility throughout the site
- keeping the existing field and courts (with some improvements)
- protecting the park's natural character

The majority of feedback received did not support renovating the Masonic Lodge into a community space, with concerns for the cost and dedicating city funding to the Lodge listed most often in the comments received.

Park Amenities

Nature Trails

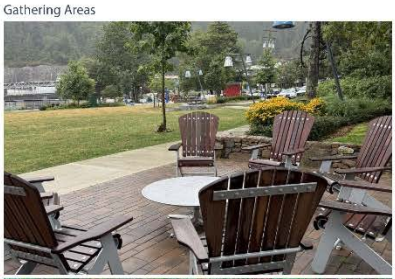
Accessible Trails

Hillside Seating

Expanded Play Areas (all ages / abilities

Picnic Shelters

Gathering Areas



Based on this feedback, the following Preferred Master Plan was developed. Please review the plan shown below and ***let us know what you think!***

The Preferred Master Plan keeps the existing ballfield and courts in their current location and does not change the existing lower lawn area except to provide ADA access to the existing restroom, overlooks, and picnic shelter. The play area is expanded for all ages and abilities, including a nature play area, with the existing boat play structure to remain. A terraced, expanded pedestrian connection is created between the ballfield area and the lower lawn to provide opportunities for community gathering or small events. The upper terrace is improved with expanded parking, two additional volleyball courts, a second restroom, and an accessible trail connecting through all the various park amenities. Improvements in the Masonic Lodge Area shown in the plan below include removing the Lodge and adding a new open covered shelter in the same footprint as the Masonic Lodge, with interpretive features to convey the unique history of the original structure. If community fundraising efforts are successful, the Masonic Lodge could still be renovated into a community center space instead of the covered shelter. The proposed phasing for park improvements is developed in a way to allow time for community fundraising efforts so this option is not precluded while other park improvements are implemented.

1. What do you **like** about the Preferred Master Plan and why? (blank box)

2. What **concerns or questions** do you have with the Preferred Master Plan? (blank box)

Proposed Phasing & Construction Budget

The park improvements have been phased to allow greater flexibility for grant funding and early park improvements. The diagram below shows the proposed phasing of park improvements.

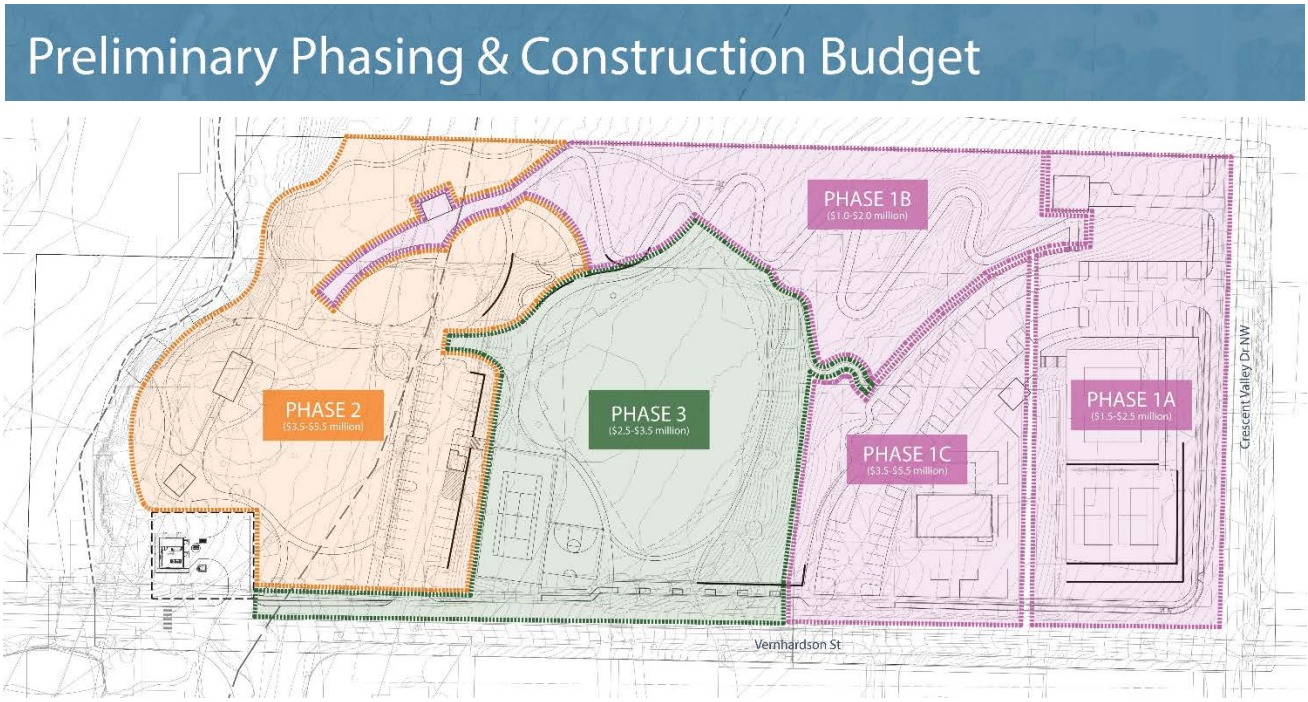
Phase 1A includes new parking, 2 new volleyball courts, and required right-of-way improvements.

Phase 1B connects the upper terrace to the middle and lower terraces with an accessible trail.

Phase 1C includes the remaining parking and the Masonic Lodge Area. This area would include either a new large picnic shelter in the same footprint as the Masonic Lodge with historic interpretive features and a new restroom. However, if community fundraising efforts are successful, the Masonic Lodge could be renovated into a new community center space (with additional parking if needed). The Masonic Lodge Area is shown as Phase 1A to allow time for community fundraising efforts and could also be moved to a later phase if needed.

Phase 2 includes an expanded and universally designed play areas, nature trails, picnic shelter, gathering areas, and accessible paths to existing park amenities.

Phase 3 includes a renovated multipurpose field, expanded stairs to the lower terrace, nature trail connection to the upper terrace, gathering areas, and remaining required right-of-way improvements.



3. Do you have any comments or questions about the proposed phasing? (blank box)

Additional Comments

4. Is there anything else you would like us to know or have any other comments on the proposed park improvements that you would like to share? (blank box)

Tell us about yourself and your household

5. How old are you and the other members of your household? (Select all that apply)
    - o 0-5
    - o 6-12
    - o 13-17
    - o 18-25
    - o 26-40
    - o 41-55
    - o 56-65
    - o 65+
    - o Prefer not to say

6. How would you best describe your ethnicity and the ethnicity of those in your household? (Select all that apply)
    - o Hispanic or Latino
    - o White
    - o Asian or Asian American
    - o American Indian or Alaskan Native
    - o Black or African American
    - o Native Hawaiian or other Pacific Islander
    - o Another race
    - o Prefer not to say
    - o Other (specify):

Future Communication

Please provide your name and email address if you would like to receive information about future opportunities to participate in the Crescent Creek Park Master Plan project:

Name: _____

Email Address: _____

Thank you for participating! You can find out more information on the Crescent Creek Park project on the City's website [https://www.gigharborwa.gov/788/Crescent-Creek-Master-Plan]

We will continue to post progress and updates on the website, so check back often.

APPENDIX K

MASTER PLAN ALTERNATIVES

Concept Alternative 1

Concept Alternative 2

Concept Alternative 3

APPENDIX L

MUSEUM GROUP RECOMENDATION

CRESCENT LODGE

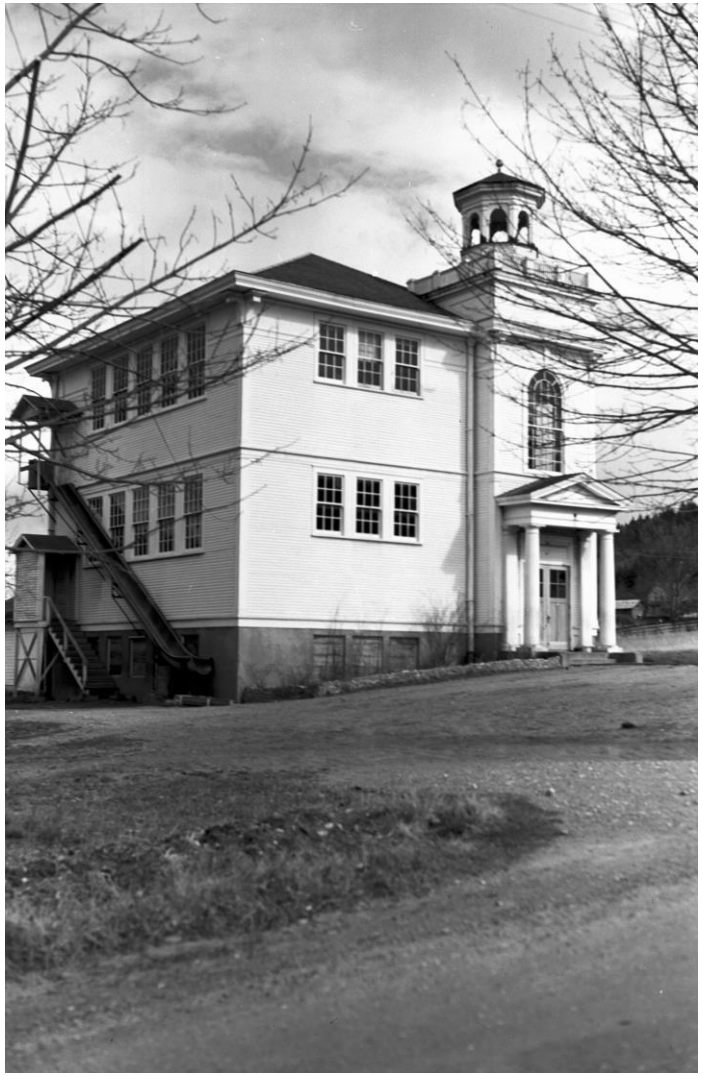
Crescent Valley School ~ Masonic Lodge

A Vision for the Future

CRESCENT LODGE
COMMUNITY ADVOCACY COMMITTEE

Assembled with the goal to create a community-centered adaptive reuse plan for the Crescent Valley School/Masonic Lodge building.

Guy & Ann Hoppen
Josie Turner
Steve Paris
Eryca Anson
John McMillian
Mary Manning
Jennifer Leaf
Riley Hall
Stephanie Lile
Mark Hoppen
Rory & Laurel Turner
Erica Williams
John Holmaas
Rex Davidson
Will Foley

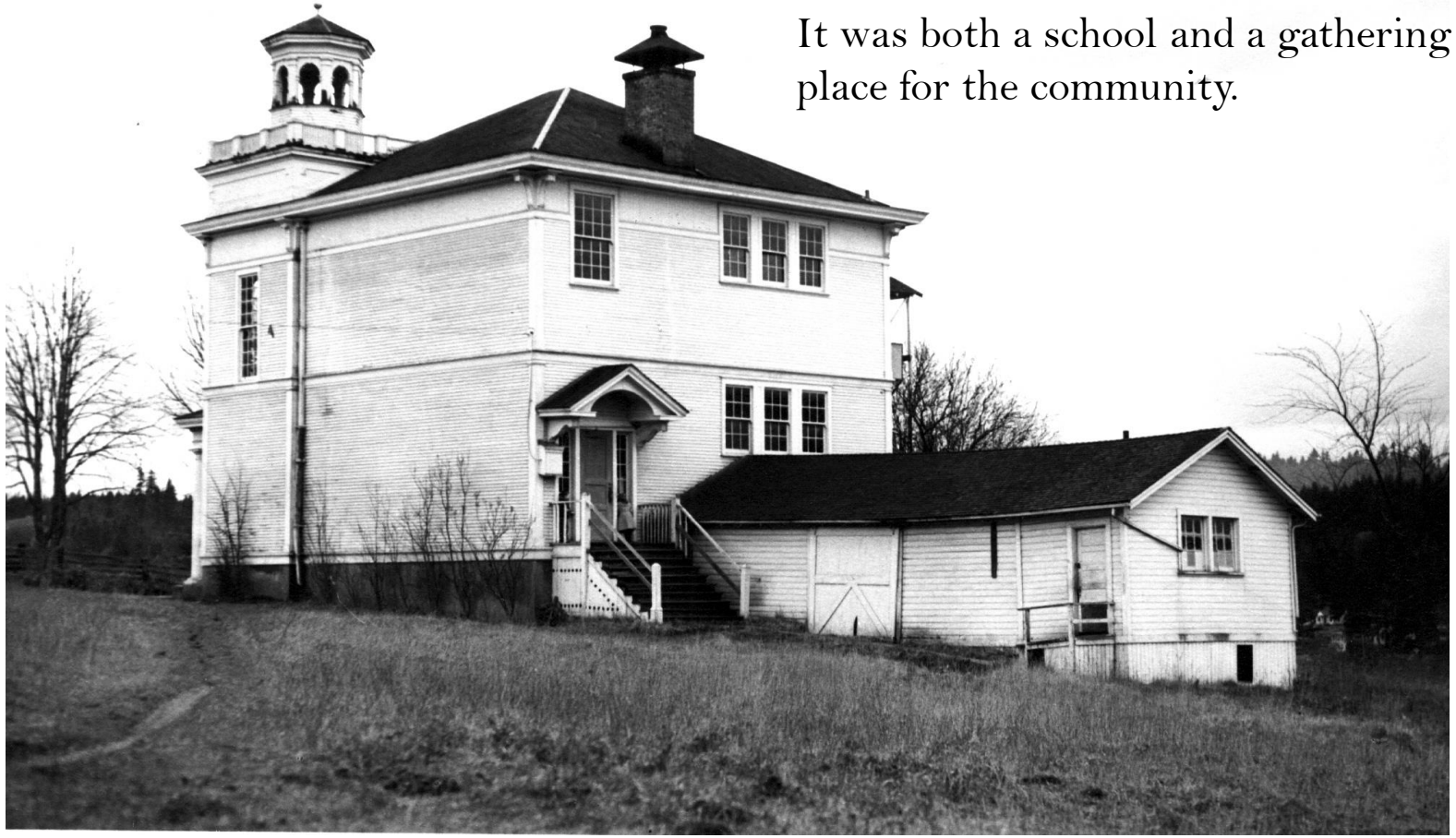


Front view of the school, c. 1920s.

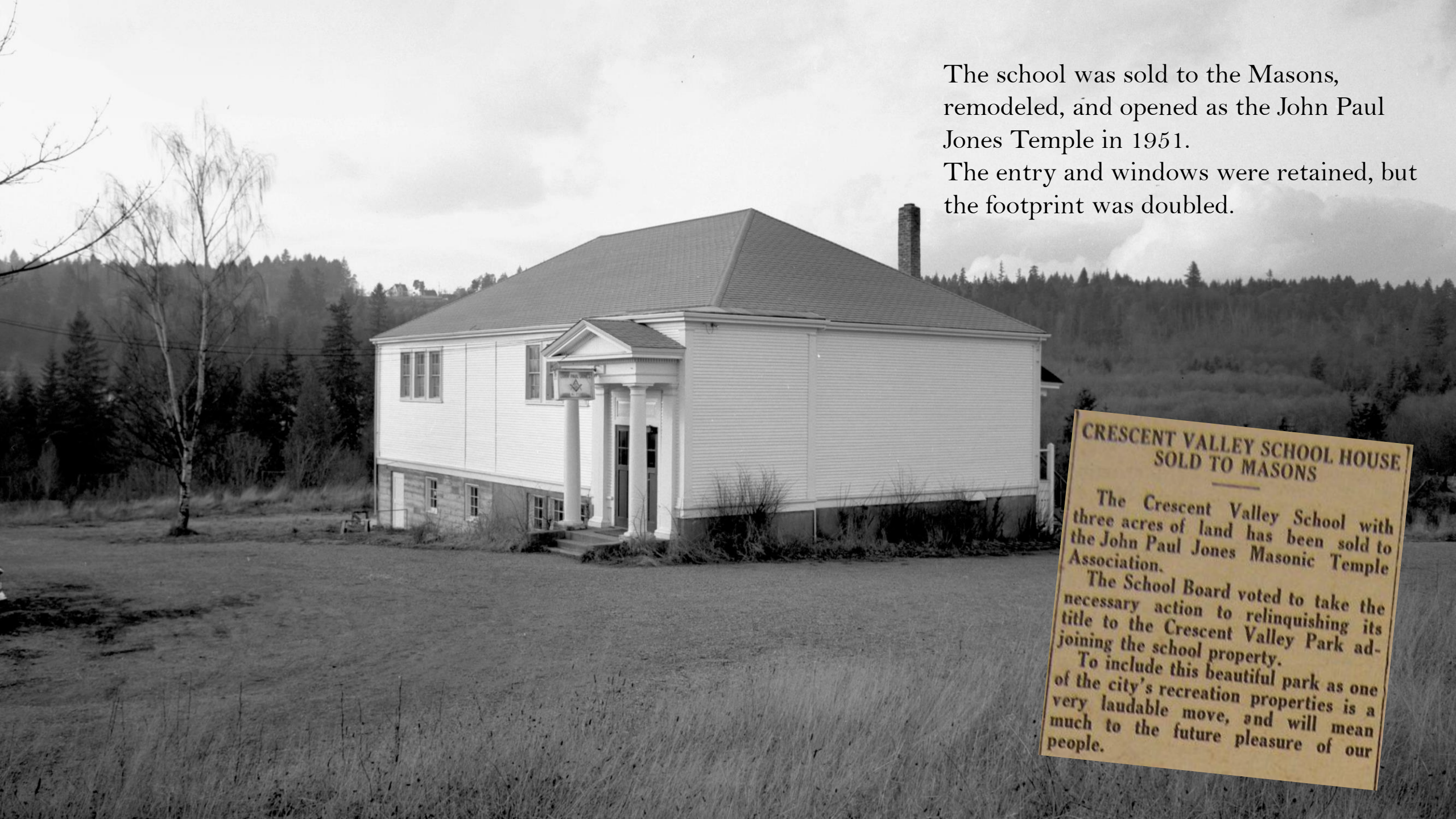
The building began as the Crescent Valley School opened in 1915.

An addition was built at the back of the school not long after it opened.

It was both a school and a gathering place for the community.



The school was sold to the Masons, remodeled, and opened as the John Paul Jones Temple in 1951.
The entry and windows were retained, but the footprint was doubled.



CRESCENT VALLEY SCHOOL HOUSE SOLD TO MASONS

The Crescent Valley School with three acres of land has been sold to the John Paul Jones Masonic Temple Association.

The School Board voted to take the necessary action to relinquishing its title to the Crescent Valley Park adjoining the school property.

To include this beautiful park as one of the city's recreation properties is a very laudable move, and will mean much to the future pleasure of our people.

Imagine an adaptive reuse that honors our community history…

A PLACE TO GATHER, LEARN AND GROW

Imagine a place where everyone is welcome.

Imagine a place where arts, heritage, and environmental science merge to create extraordinary learning experiences.

Imagine a year-round gathering space that provides a community balance between investments in arts/culture and sports.

Imagine saving a signature historic structure for use by all.

PROJECT PROCESS

- Open Meetings held for Community Review & Input
- Identified community & park needs
- Conducted two community surveys
- Sought professional input for construction estimates and feasibility
- Met with specific groups to review need
- Museum or Theater Management
- Cost Estimate: $4.5 million
- Recommended for City Historic Register

nt Lodge, Gig Harbor, WA
(NW view)

SURVEY FINDINGS

1010 Reponses in Survey #1 ~ 232 Responses in Survey #2

Primary uses requested:

- Community Theater
- **Community Recreation Hall** (allowed in current zoning)
- **Top Conceptual Style** – Schoolhouse with new addition for restrooms and kitchen
  - 63.64% In favor of renovation with the addition for restrooms and kitchen
  - 16.82% In favor of very basic restoration with no addition
  - 10.91% In favor of demolishing building for parking or sport courts
  - 8.64% In favor of tear down and new build

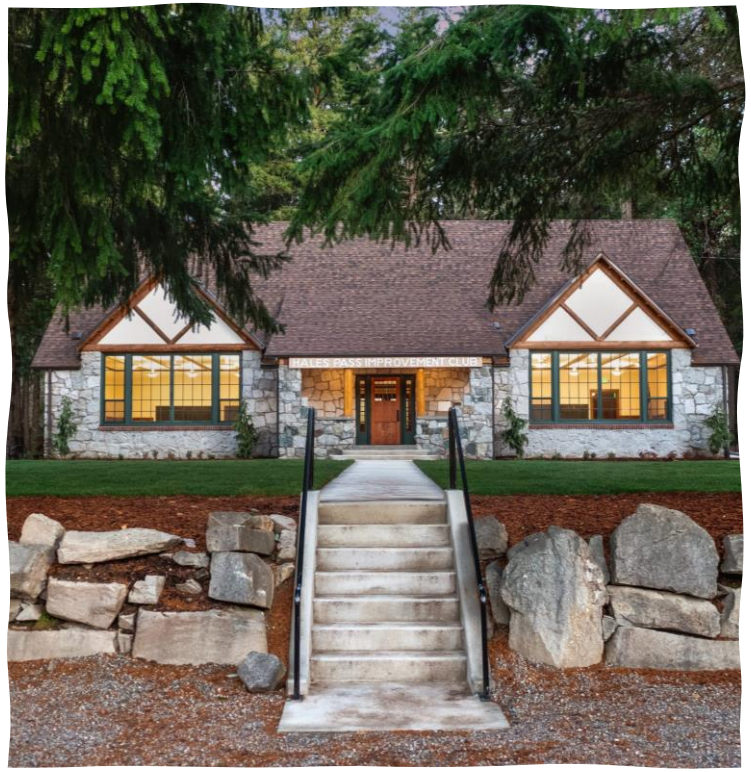

Lodge footprint in red (below)
All Park Restrooms
Maritime PlayZone
Crescent Creek Overlook
Crescent Creek Park
Tranquil site with a playground & art
BMX Park and Beach Volleyball Courts
Gig Harbor Cooperative Preschool
Gig Harbor Lodge B & B
Crescent Valley Dr NW
Jacobsen Ln
Harmony Ln
96th St
Vernhardson St
Randall Dr
Wheeler Ave
31st Ave Ct NW
Crescent Valley

The only restrooms in the park were built by the WPA in the 1930s.

Note:

Crescent Creek Park is Gig Harbor’s first and oldest city park!

There is precedent for preserving community halls in our local parks.

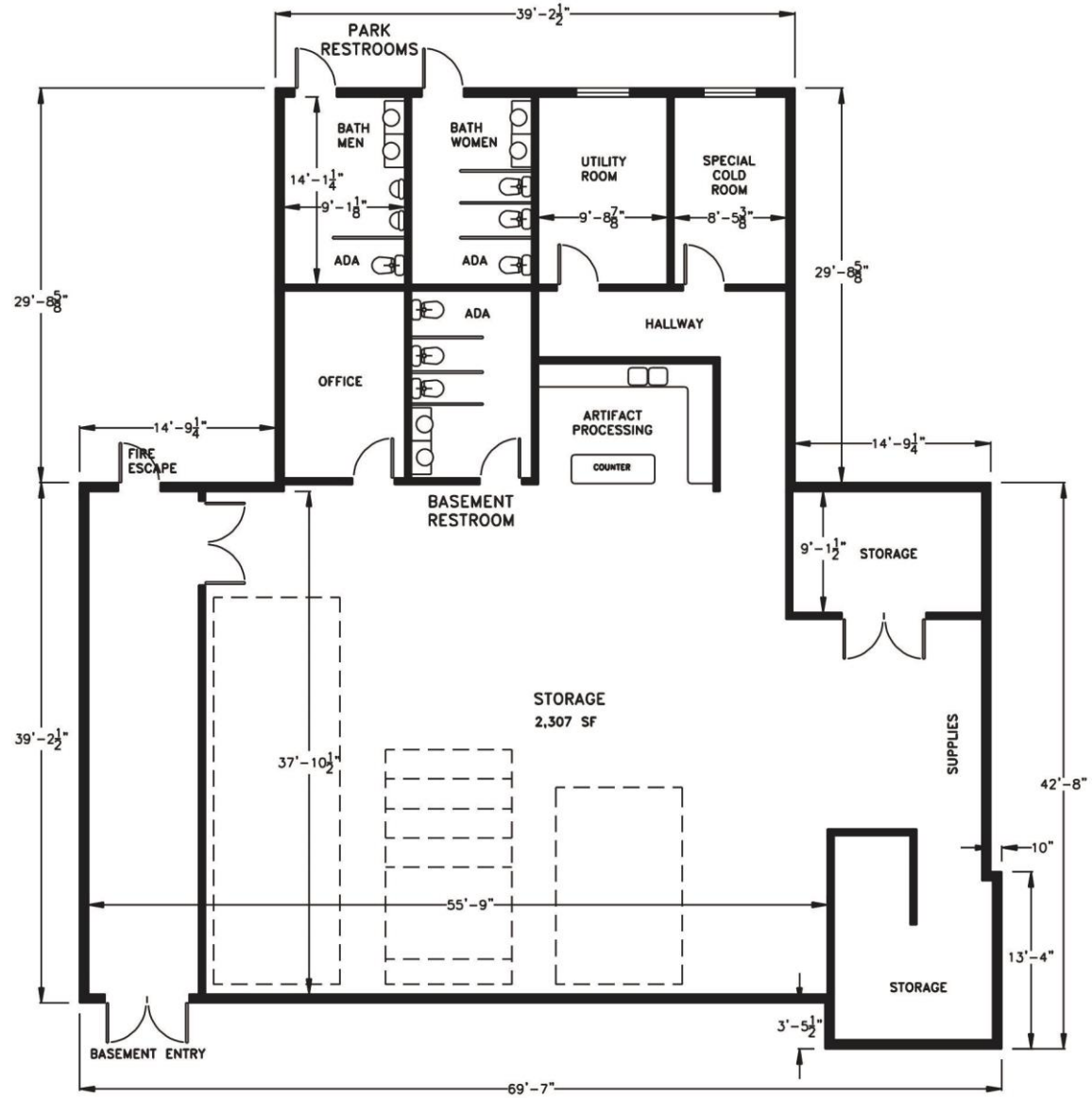


The Main Hall of the Lodge would have the capacity to hold as many as 200 people based on square footage. The space can transform from this to…

From this…

The exterior would pay tribute to both Crescent Valley School and the Masonic Lodge. ADA access addressed via new ramp.


PARK RESTROOMS
CATERING KITCHEN ENTRY
ADA/ KITCHEN RAMP
MAIN ENTRY
DAY CARE ENTRY
PLAN VIEW
Park Restrooms included and independently accessible to park visitors.
Schoolhouse
Crescent Lodge, Gig Harbor, WA
Exterior (SW view)
Photo illustration by John McMillan 6-2023



BASEMENT: PLAN VIEW

3,727 SF OVERALL

Schoolhouse v.7

McMillan DESIGN, INC.
9816 Jacobsen Lane
Gig Harbor, WA 98332 USA
253-279-0325

SCALE: NTS

DRAWN BY JHM

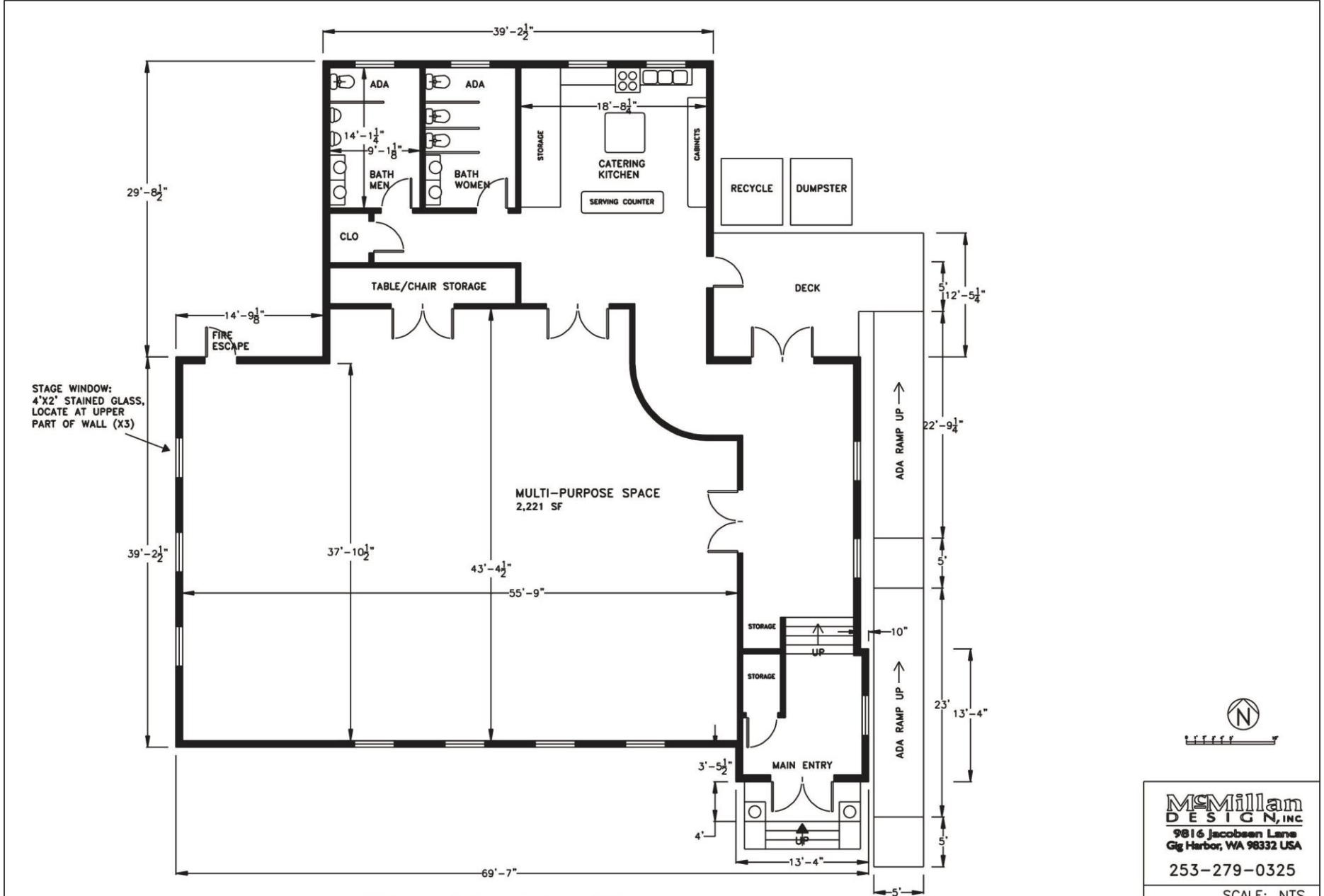
DATE: 01-27-24

REVISED: 01-27-24

DRAWING NO. 012724B

CRESCENT LODGE	CONCEPTUAL FLOOR PLAN	GIG HARBOR, WA

An addition for kitchen and bathrooms is an excellent solution to addressing these needs.



FIRST FLOOR: PLAN VIEW
3,727 SF OVERALL

Schoolhouse v.7

McMillan DESIGN, INC
9816 Jacobsen Lane
Gig Harbor, WA 98332 USA
253-279-0325

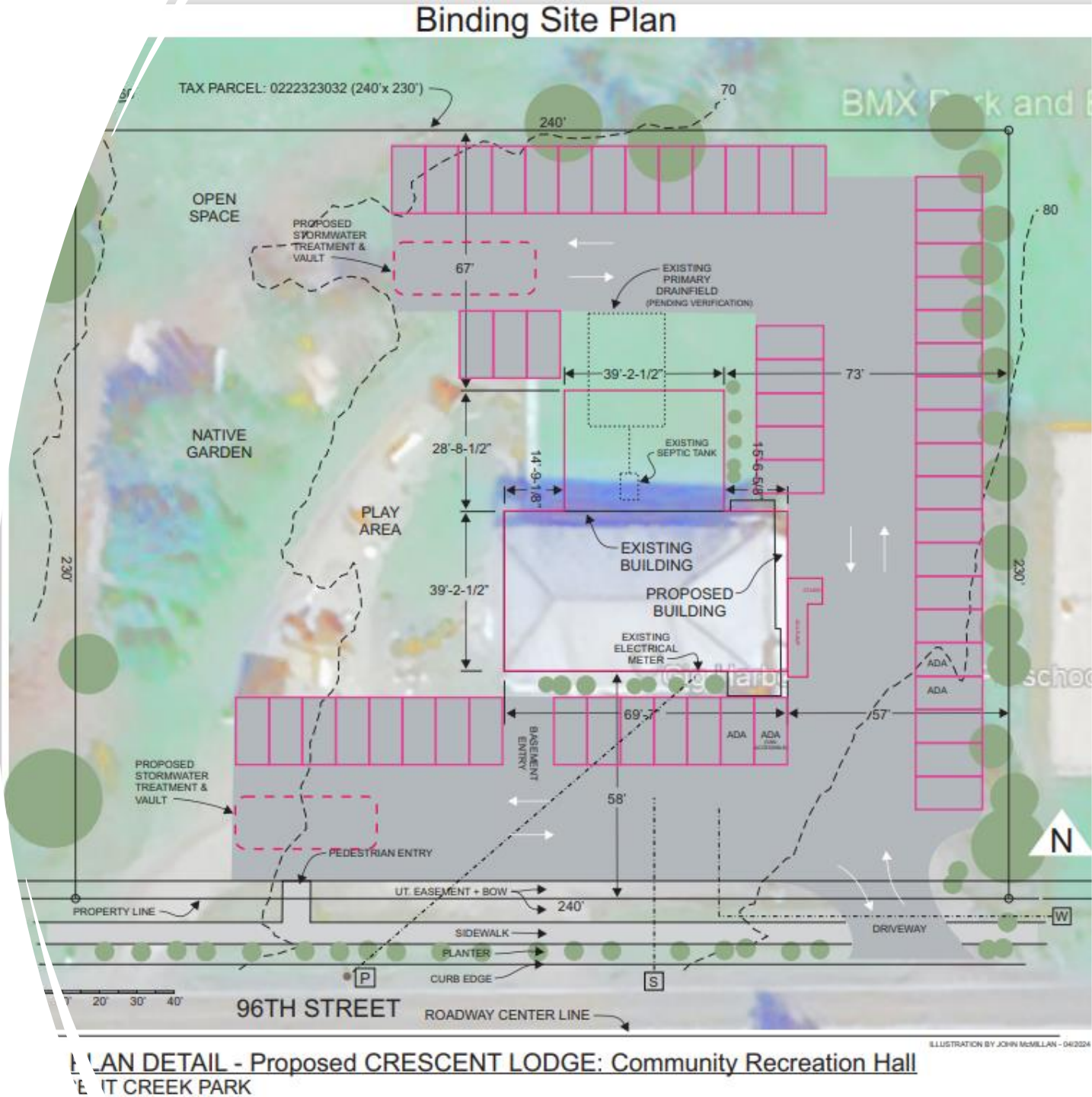
SCALE:	NTS
DRAWN BY	JHM
DATE:	01-27-24
REVISED:	01-27-24
DRAWING NO.	012724A

CRESCENT LODGE	CONCEPTUAL FLOOR PLAN	GIG HARBOR, WA

Site Plan – Parcel Only

53 Parking Spaces

Building Occupancy: 217



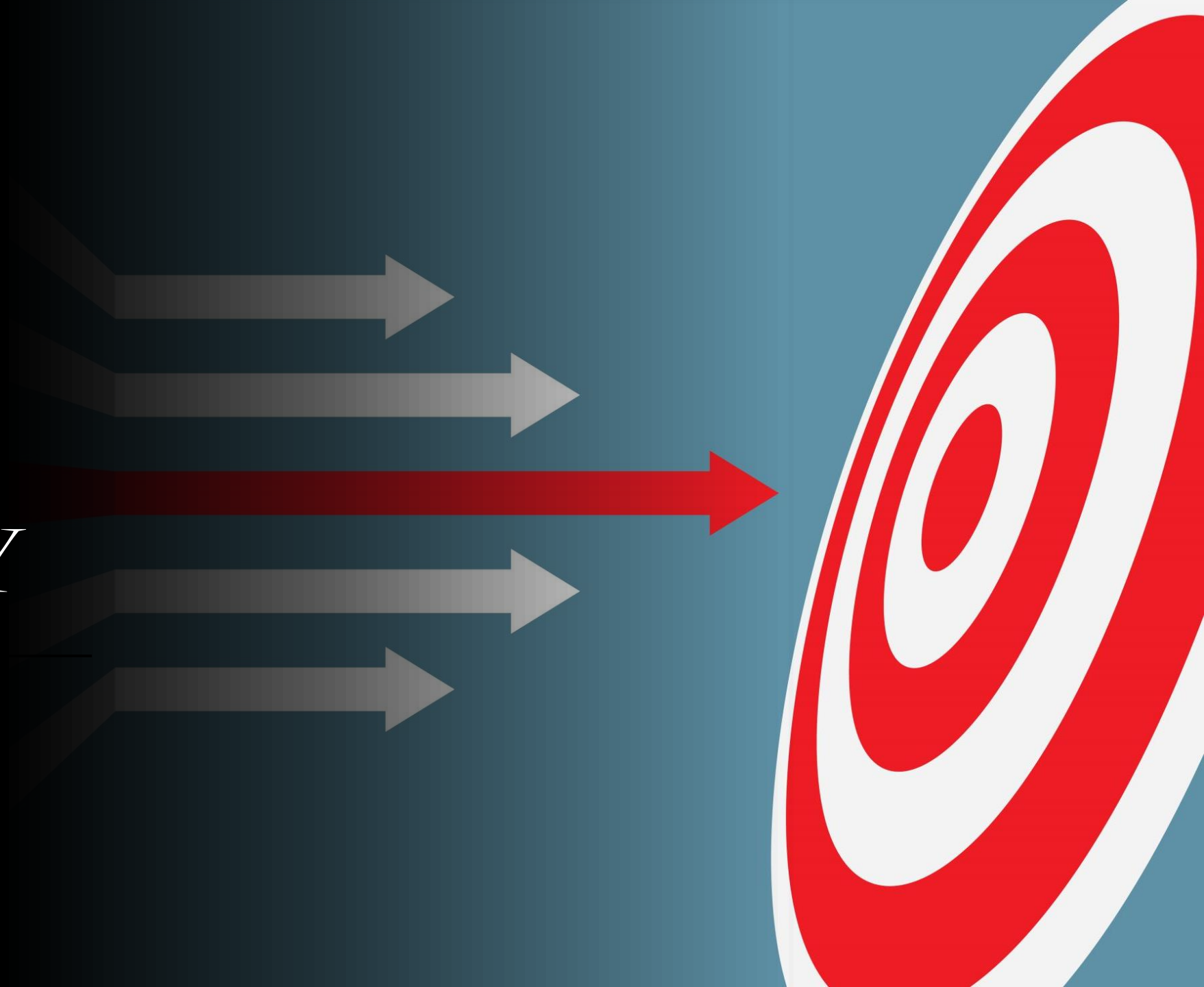
- **Alternate Option** for integrated parking reduces impact on Lodge surround and provides more parking for other use areas.

d CRESCENT LODGE: Community Recreation Hall

T CREEK PARK

Shared Parking Plan

FUNDING STRATEGY



FUNDING = THREE KEY INGREDIENTS

1. Community Support ✔
2. Ground Floor Commitment – City Priority
3. Strategic Plan of Action for Implementation of Fund Raising
    a. Full-on Commitment by Owner
    b. 50/50 Approach (Invest/Raise)
    c. One Third, One Third, One Third
        i. Grant sources include county, state, and federal sources
        i. Private donors ($44k committed)

FUNDING SOURCES

"At Home" Commitment Options:

- Hospital Benefit Zone – Crescent Creek Park is already listed
- Capital or Operations Project Fund
- Parks Bond

"Big Bite" Grant Sources:

-Building for the Arts Fund (up to $2M)

-Heritage Capital Projects Fund (up to $1M)

-National Park Service – Historic Preservation Programs

-IMLS, NEA, and NEH, National Trust


Historic Register Structures can open doors to county, state and federal funding for preservation and “third place” community uses.

MANAGEMENT MODEL

If managed/leased by cultural-arts non-profit:

- Lower level is sole occupancy; upper level is managed Community Space
- Lease occupant is responsible for scheduling and general upkeep; building & grounds care by city
- Rental fees help support maintenance and upkeep; capital improvements in partnership
- Could include a fund-raising pre-management contract

cent Lodge, Gig Harbor, WA
ior (NW view)

Schoolhouse

PROJECT TAKE AWAYS

- There is a need for a Community Hall in Gig Harbor
- Concept plan addresses park needs for public restrooms and parking
- Addresses need for secure museum storage
- Arts groups need rehearsal and performance space
- A Community Hall opens the door to Leisure Tourism funding
- Project showed strong support for renovation of Lodge for many community uses
- **The Lobby becomes a place where everyone is welcome**

cent Lodge, Gig Harbor, WA
ior (NW view)

Schoolhouse

WA PATRIOT CONSTRUCTION

CRESCENT LODGE
GIG HARBOR MASONIC TEMPLE

WA Patriot Budget

April 29, 2024

LEAD | BUILD | SERVE | LIVE

Conceptual Pricing

Crescent Lodge - GH Masonic Temple

WA Patriot Concept Estimate Summary

BASE BID ESTIMATE TOTAL	4,208,519

Washington State Sales Tax (WSST at 8.9%)	374,558
Grand total with Sales Tax	**4,583,077**

Conceptual pricing includes construction costs only, does not include

1. Design/Permitting Fees (estimate 12-15% of construction costs)
2. Owner Move & Furniture, Fixtures, Equipment (estimate 10-12% of construction costs)

Crescent Lodge - GH Masonic Temple

WA Patriot Concept Estimate Detail

THE CURRENT GRAND TOTAL = $ 4,208,519

CSI / Spec	Description	Sub Name or Unit Price	Labor	Material	Sub	Equip/ Other	TOTAL	Comments
01 1000	General Conditions	estimated	520,000	X	X	X	520,000	8 months at $65k per month allow for GCs
01 1010	Utility Hook-up Fees	By Owner	X	X	X	X	0	Excludes City Fees for Sewer / Water Connections
02 4000	G.C. Sitework	estimated	2,280	750	X	1,500	4,530	Allow for misc TESC support
02 4100	Demolition	estimated	X	X	60,000	X	60,000	Select Interior Demolition + Remove Siding + Openings in Wall for new building tie-in
02 0000	Asbestos Removal	estimated	X	X	12,500	X	12,500	allow for select ACM abatement - extents unknown
03 0000	Foundation Repairs	estimated	X	X	30,000	X	30,000	Allow for potential structural foundation repairs, extents TBD based on cracking
03 3000	Concrete Footings	estimated	X	X	15,000	X	15,000	120 LF of Footings for New Building
03 3000	Concrete SOG	estimated	X	X	11,000	X	11,000	$10/SF SOG
03 3000	Concrete Walls	estimated	X	X	58,800	X	58,800	120 LF of 10' high concrete wall at basement perimeter (42 CY at $1400/CY)
05 1000	Structural Steel - FOB	estimated	X	15,000	X	X	15,000	Steel Columns Support - 4 to 6 columns assumed
05 5000	Misc. Metal - Labor	estimated	9,120	1,300	X	2,500	12,920	Erect Steel Columns
05 5000	Misc. Metal - FOB	estimated	X	22,750	X	X	22,750	85 LF railing at $150/LF + $10k for Metal Canopy at Basement Entry
06 1000	Rough Carpentry	estimated	X	X	99,000	X	99,000	2200 SF at $45/SF New Wood Framed Structure
06 8000	Finish Carpentry	estimated	15,200	15,000	X	X	30,200	Allow for select trim / features througut first floor spaces
07 1111	Bituminous Waterproofg	estimated	X	X	20,000	X	20,000	Below grade waterproofing at basement walls
07 1500	Weather Barriers	estimated	X	X	11,970	X	11,970	$3/SF for Tyvek + Furring for rainscreen
07 2100	Building Insulation	estimated	X	X	35,000	X	35,000	Insulate Exterior Walls New Building + Roof
07 4113	Metal Roof	estimated	X	X	120,000	X	120,000	4,000 SF New Metal Roof at $30/SF
07 4213	Siding	estimated	X	X	79,800	X	79,800	$20/SF metal or fiber cement siding
07 6200	Sheet Metal	estimated	X	X	15,000	X	15,000	Allow for misc window and door opening flashings
07 9005	Caulking & Sealants	estimated	3,800	1,500	X	X	5,300	Misc siding / trim caulking at exterior of building
08 0000	Doors & Windows Labor	estimated	20,900	1,500	X	X	22,400	Labor for install 22 new door openings
08 1113	Steel Doors & Frames	estimated	X	26,550	X	X	26,550	HM Frames & Doors Supply
08 2000	Wood Doors	estimated	X	19,500	X	X	19,500	Feature Entry Doors at $6k + $1500 for wood door/jamb on first floor interior doors
08 7000	Door Hardware - FOB	estimated	X	27,500	X	X	27,500	$1250 per opening allow for door hardware
08 8000	Glass & Glazing	estimated	X	X	46,080	X	46,080	$90/SF allowance for storefront or wood windows
09 2116	Gypsum Wallboard	estimated	X	X	50,000	X	50,000	Hang/Tape/Finish GWB Walls and Celings
09 3000	Ceramic Tile	estimated	X	X	44,130	X	44,130	Floor Tile at Restrooms + Wall tile to 6' high at wet walls
09 9500	Acoustical Ceilings	estimated	X	X	5,300	X	5,300	$10/SF for Grid & Tile at Select Basement Rooms. Assume remianing OTS
09 9500	Acoustic Panels	estimated	X	X	19,800	X	19,800	1100 SF at $18/SF for Felt or other acoutiscs at Multi-Purpose Space First Floor
09 6000	Resilient Flooring	estimated	X	X	42,000	X	42,000	3500 SF at $12/SF for Resilient LVT Flooring at First Floor or Refnish Wood Floor or other
09 6500	Carpet	estimated	X	X	4,000	X	4,000	$8/SF allow for select carpet tile at basement office / misc spaces
09 7000	Polished Concrete	estimated	X	X	24,500	X	24,500	2600 SF at $7/SF allow for basement concrete finish
09 9000	Painting	estimated	X	X	45,000	X	45,000	Paint Exterior Siding + Paint Interior Partitons / HM Doors/Frames
10 1000	Specialty Labor	estimated	7,600	X	X	X	7,600	Install Toilet Accessories + Misc
10 1010	Toilet Partitions	estimated	X	X	13,500	X	13,500	9 Partitions at $1500 each - high abuse resistant
10 1101	Visual Display Boards	No Scope	X	X	X	X	0	Assume none in scope
10 10260	Wall & Corner Protection	estimated	1,140	1,500	X	X	2,640	Allow for stainless steel corner guards at outside corners
10 10440	Signage	estimated	X	X	15,000	X	15,000	Allow for exterior / interior signage + signage at road
10 10520	Fire Extinguishers & Stuff	estimated	760	3,000	X	X	3,760	4 fire extinguishers and recessed cabinets
10 10800	Toilet Accessories	estimated	X	9,450	X	X	9,450	63 accessories at $150 each average (soap disp, PT disp, mirrors, TP, etc.)
12 12000	Kitchen Equipment	estimated	X	X	35,000	X	35,000	Range/3 Comp Sink/Dish Washer/Hood/Free Standing Cooler/Freezer at Catering
12 12400	Casework	estimated	X	X	48,750	X	48,750	65 LF Plam casework w/ SS at $750 per LF
12 12540	Window Blinds	estimated	X	X	7,680	X	7,680	512 SF at $15/SF Allow for roller shades
21 0000	Fire Protection	Not Included	X	X	X	X	0	Assume Fire Sprinkler not required for building size / site access
22 0000	Plumbing	estimated	X	X	202,500	X	202,500	27 new fixtures waste/supply/vent at $7500 per fixture
23 0000	HVAC	estimated	X	X	237,000	X	237,000	$30/SF for new electrical HVAC Systems
26 0000	Electrical	estimated	X	X	474,000	X	474,000	$60/SF allow for electrical primary power / lighitng / added service / EV
26 0000	Solar Array	estimated	X	X	25,000	X	25,000	Allow for code compliant PV array for energy credit compliance
28 0000	Communications	estimated	X	X	50,000	X	50,000	Data and Camera / Security / Low Voltage Systems
28 0000	Fire Alarm	estimated	X	X	62,608	X	62,608	$8/SF Allow for fire alarm
31 0000	Earthwork	estimated	X	X	350,000	X	350,000	Storm Tanks, Ex for Foundation, Sewer Connection, Electrical Trench etc.
31 1000	-ROW Bond	estimated	X	X	X	5,000	5,000	Required for any public ROW work
32 1216	Asphalt	estimated	X	X	167,200	X	167,200	20,900 SF Asphalt Pavement at $8/SF
32 1313	Site Concrete	estimated	X	X	78,700	X	78,700	80 LF Concrete Ramp + 240 LF Sidewalk + 240 LF Curb/Gutter + 1 Approach
32 1723	Pavement Markings	estimated	X	X	10,000	X	10,000	Allow for parking lot striping + ADA Signage + wheelstops
32 2000	Site Fencing	estimated	X	X	17,500	X	17,500	Allow for select site fencing - none shown on prints currently
32 8000	Landscaping	estimated	X	X	150,000	X	150,000	7500 SF at $20/SF landscaping at ROW + adjacent to building only
99 0000	Const Contingency	Allowance	X	X	X	352,842	352,842	10% Allow for design development, potential cost escalation, scope gaps
	SUB-TOTAL		580,800	145,300	2,793,318	361,842	3,881,260	
	Mark-up on Labor & Materials @ 7.0		40,656	10,171		25,329	76,156	
	Mark-up on Sub-Contractors @ 7.0				195,532		195,532	
						SUB-TOTAL	4,152,948	
						BOND	Excluded	
						INSURANCE (G/L)	26,994	
						INSURANCE (BUILDERS B/R)	8,306	
						PERMIT	By Owner	
						PLAN CHECK FEE	By Owner	
						B & O TAX	20,271	
						GRAND TOTAL	**4,208,519**	

Washington Patriot Clarifications	
1	Base Bid detail pricing does not include sales tax. Bid Summary includes sales tax as add item.
2	Pricing includes builder's risk insurance by WA Patriot
3	Conceptual pricing provided based on renderings, floor plan and site plan conceptual plans dated 04/02/2024 and job walk of existing building held on April 15, 2024.
4	Pricing assumes entire building will need to comply with current energy code standards - including provisions for all electric mechanical systems, EV Charging and Solar Array to meet efficiency requirements.
5	Reference conceptual estimate detail notes for specific assumptions on individual line items for finishes and scope of work.
6	Pricing includes allowance for hazardous materials (asbestos / lead paint)
7	Pricing excludes design fees, permit fees, utility connection fees, special inspection and testing, commissioning, owner move-in, furniture, fixtures & equipment. See estimated percentage mark-ups on estimate summary for potential costs to be carried in owner budget for these items.
8	Pricing assumes work will take place in late 2025 or early 2026.
9	Pricing includes a construction contingency for material cost escalation and design development.

APPENDIX N

MASTER PLAN COST ESTIMATES

Estimate of
Probable Cost of Construction

HBB Landscape Architecture

Date: January 6, 2026

Project Name: Crescent Creek Park Master Plan
Project Number: 2022-18
Project Phase: Preferred Master Plan
Prepared By: J.Li
Checked By: J.Vong

Summary

		Construction Costs Only	Contractor Mark-Up (60%)	Soft Costs (20%)	**Total Project Cost**
Phase 1A	**Upper Terrace - Volleyball and Parking**	$ 1,200,000 - $ 1,500,000	$ 720,000 - $ 900,000	$ 144,000 - $ 180,000	**$ 2,070,000 - $ 2,580,000**
Phase 1B	**Upper Terrace - ADA Trail**	$ 600,000 - $ 800,000	$ 360,000 - $ 480,000	$ 72,000 - $ 96,000	**$ 1,040,000 - $ 1,380,000**
Phase 1C	**Upper Terrace - Vacant Lodge Building and Parking**	$ 2,400,000 - $ 3,500,000	$ 1,440,000 - $ 2,100,000	$ 288,000 - $ 420,000	**$ 4,130,000 - $ 6,020,000**
Phase 2	**Lower Terrace - Play Areas, Plazas and Trails**	$ 2,400,000 - $ 2,900,000	$ 1,440,000 - $ 1,740,000	$ 288,000 - $ 348,000	**$ 4,130,000 - $ 4,990,000**
Phase 3	**Middle Terrace - Fields and Courts**	$ 1,700,000 - $ 2,100,000	$ 1,020,000 - $ 1,260,000	$ 204,000 - $ 252,000	**$ 2,930,000 - $ 3,620,000**
	Total	**$ 8,300,000 - $ 10,800,000**	**$ 4,980,000 - $ 6,480,000**	**$ 996,000 - $ 1,296,000**	**$ 14,300,000 - $ 18,590,000**

NOTE: Cost are based on 2025 estimated cost of construction. Escallation is not include. High cost range includes an additional 20% contingency. See detail sheets for breakdown of Contractor Mark-Up and Soft Costs. High cost range for Phase 1C construction cost only is based on Museum Group cost estimate without any additonal contengency added.

Estimate of
Probable Cost of Construction

HBB Landscape Architecture

Date: January 6, 2026

Project Name: Crescent Creek Park Master Plan
Project Number: 2022-18
Project Phase: Preferred Master Plan
Prepared By: J.Li
Checked By: J.Vong

Phase 1A - Upper Terrace (Low Cost Range)

Item	Description	Qty	Unit	Unit Cost	Item Total
1.00	**Demolition/Site Preparation**				
1.01	Tree Protection Fence and Signage	785	LF	$5.50	$4,400.00
1.02	Site Clearing and Grubbing (6" depth)	0.4	AC	$15,000.00	$6,200.00
1.03	Clear Brush and Sapling	1.00	LS	$2,000.00	$2,000.00
1.04	Existing Tree Removal	6	EA	$500.00	$3,000.00
1.05	Construction Fence (6' chainlink; temporary)	1,363	LF	$12.00	$16,400.00
1.06	Parking Lot Demo	0	SY	$20.00	$0.00
2.00	**Earthwork**				
2.01	Balance Cut/Fill on Site (6" average depth)	854	CY	$10.00	$8,600.00
2.02	Export Cut (12" average depth)	188	CY	$22.00	$4,200.00
2.03	Mass Grading (civil)	5,163	CY	$25.00	$129,100.00
2.04	Finish Grading (civil)	7,200	SY	$2.00	$14,400.00
4.00	**Paving, Walls & Stormwater**				
4.01	Asphalt Path - 6' wide (2" depth with 4" base)	0	SF	$7.00	$0.00
4.02	Pedestrian Concrete Paving - 6' wide (4" depth with 4" base)	4,542	SF	$15.00	$68,200.00
4.03	Pedestrian Staircase / Ramp with Handrails	473	SF	$150.00	$71,000.00
4.04	Plaza Paving (Color, unit paver, texture, etc.; approx. 1/4 of area)	0	SF	$35.00	$0.00
4.05	Soft Surface Trails (4" depth mulch)	0	CY	$60.00	$0.00
4.06	Planter Walls	0	LF	$450.00	$0.00
4.07	Seat Walls	105	LF	$400.00	$42,200.00
4.08	Parking / Driveway (civil)	7,087	SF	$10.00	$70,900.00
4.09	Parking Reseal / Striping	0	SF	$3.00	$0.00
4.10	Retaining Walls (civil)	1	LS	$118,000.00	$118,000.00
4.11	Stormwater Conveyance (civil)	1	LS	$50,000.00	$50,000.00
4.12	Stormwater Treatment (civil)	1	LS	$50,000.00	$50,000.00
4.13	Right-of-Way Improvements (civil) (NIC: lighting, median, ROW dedication)	1	LS	$145,375.00	$145,400.00
5.00	**Site Improvements**				
5.01	Bench	3	EA	$2,000.00	$6,000.00
5.02	Bike Rack	1	EA	$1,200.00	$1,200.00
5.03	Picnic Tables (NIC shelter area)	0	EA	$3,500.00	$0.00
5.04	Signage	1	LS	$7,500.00	$7,500.00
5.05	Play Area	0	EA	$500,000.00	$0.00
5.06	Nature / Hillside Play	0	EA	$150,000.00	$0.00
5.07	Seating / Gathering Area	0	EA	$50,000.00	$0.00
5.08	Wood Split-Rail Fence	0	LF	$80.00	$0.00
5.09	Volleyball Court (outdoor, subdrainage)	2	EA	$50,000.00	$100,000.00

5.10	Field Redevelopment (no lighting, natural turf, w/ subdrainage)	0	EA	$875,000.00		$0.00
5.10	Parking Lot Lighting	0	EA	$12,000.00		$0.00
5.11	Pedestrian Lighting	0	EA	$7,000.00		$0.00
5.12	Vehicular Entry Gates (manual)	1	EA	$8,500.00		$8,500.00

6.00	**Planting**					
6.01	Trees	12	EA	$400.00		$4,800.00
6.02	Low Shrubs and Groundcovers (with soil prep and irrigation)	5,378	SF	$20.00		$107,600.00
6.03	Native Buffer Planting (with soil prep and irrigation)	2,557	SF	$12.00		$30,700.00
6.04	Seed Lawn (with soil prep, no irrigation)	5,000	SF	$1.50		$7,500.00
6.05	Shoreline Mitigation (restoration / buffer enhancement)	0	SF	$12.00		$0.00
6.06	Right-of-Way Low Shrubs & Groundcover (w/ soil prep and irr, NIC median)	2,142	SF	$20.00		$42,900.00
6.07	Right-of-Way Trees (NIC median)	17	EA	$400.00		$6,800.00

7.00	**Structures**					
7.01	Masonic Lodge Demo	0	LS	$280,000.00		$0.00
7.02	Restroom (2 stall)	0	EA	$350,000.00		$0.00
7.03	Large Picnic Shelter (including tables, interepretive features, etc.)	0	EA	$750,000.00		$0.00
7.04	Small Picnic Shelter	0	EA	$150,000.00		$0.00
7.05	Existing Shelter Renovation	0	LS	$50,000.00		$0.00
7.06	Existing Restroom Renovation			(by City under separate contract)		
7.07	Masonic Lodge Renovation	1	LS	$4,500,000.00		(NIC in Low Esitmate)

Subtotal	$1,128,000.00
Contractor Mobilization & Overhead (20%)	$226,000.00
Contingency (30%)	$339,000.00
Sales Tax (9.1%)	$103,000.00
Phase 1A Construction Total	**$1,796,000.00**
Soft Costs (20%)	$360,000.00
Phase 1A Total Project Cost	**$2,200,000.00**

Estimate of
Probable Cost of Construction

HBB Landscape Architecture

Date: January 6, 2026

Project Name: Crescent Creek Park Master Plan
Project Number: 2022-18
Project Phase: Preferred Master Plan
Prepared By: J.Li
Checked By: J.Vong

Phase 1B - Upper Terrace (Low Cost Range)

Item	Description	Qty	Unit	Unit Cost		Item Total
1.00	**Demolition/Site Preparation**					
1.01	Tree Protection Fence and Signage	785	LF	$5.50		$4,400.00
1.02	Site Clearing and Grubbing (6" depth)	0.4	AC	$15,000.00		$6,200.00
1.03	Clear Brush and Sapling	1.00	LS	$2,000.00		$2,000.00
1.04	Existing Tree Removal	2	EA	$500.00		$1,000.00
1.05	Construction Fence (6' chainlink; temporary)	1,363	LF	$12.00		$16,400.00
1.06	Parking Lot Demo	0	SY	$20.00		$0.00
2.00	**Earthwork**					
2.01	Balance Cut/Fill on Site (6" average depth)	854	CY	$10.00		$8,600.00
2.02	Export Cut (12" average depth)	0	CY	$22.00		$0.00
2.03	Mass Grading (civil)	5,500	CY	$25.00		$137,500.00
2.04	Finish Grading (civil)	4,600	SY	$2.00		$9,200.00
4.00	**Paving, Walls & Stormwater**					
4.01	Asphalt Path - 6' wide (2" depth with 4" base)	950	SF	$7.00		$6,700.00
4.02	Pedestrian Concrete Paving - 6' wide (4" depth with 4" base)	0	SF	$15.00		$0.00
4.03	Pedestrian Staircase / Ramp with Handrails	237	SF	$150.00		$35,500.00
4.04	Plaza Paving (Color, unit paver, texture, etc.; approx. 1/4 of area)	0	SF	$35.00		$0.00
4.05	Soft Surface Trails (4" depth mulch)	0	CY	$60.00		$0.00
4.06	Planter Walls	0	LF	$450.00		$0.00
4.07	Seat Walls	0	LF	$400.00		$0.00
4.08	Parking / Driveway (civil)	0	SF	$10.00		$0.00
4.09	Parking Reseal / Striping	0	SF	$3.00		$0.00
4.10	Retaining Walls (civil)	1	LS	$0.00		$0.00
4.11	Stormwater Conveyance (civil)	1	LS	$35,000.00		$35,000.00
4.12	Stormwater Treatment (civil)	1	LS	$0.00		$0.00
4.13	Right-of-Way Improvements (civil) (NIC: lighting, median, ROW dedication)	1	LS	$0.00		$0.00
5.00	**Site Improvements**					
5.01	Bench	2	EA	$2,000.00		$4,000.00
5.02	Bike Rack	0	EA	$1,200.00		$0.00
5.03	Picnic Tables (NIC shelter area)	0	EA	$3,500.00		$0.00
5.04	Signage	1	LS	$5,000.00		$5,000.00
5.05	Play Area	0	EA	$500,000.00		$0.00
5.06	Nature / Hillside Play	0	EA	$150,000.00		$0.00
5.07	Seating / Gathering Area	0	EA	$50,000.00		$0.00
5.08	Wood Split-Rail Fence	0	LF	$80.00		$0.00

5.09	Volleyball Court (outdoor, subdrainage)	0	EA	$50,000.00		$0.00
5.10	Field Redevelopment (no lighting, natural turf, w/ subdrainage)	0	EA	$875,000.00		$0.00
5.10	Parking Lot Lighting	0	EA	$12,000.00		$0.00
5.11	Pedestrian Lighting	0	EA	$7,000.00		$0.00
5.12	Vehicular Entry Gates (manual)	0	EA	$8,500.00		$0.00

6.00	**Planting**					
6.01	Trees	6	EA	$400.00		$2,400.00
6.02	Low Shrubs and Groundcovers (with soil prep and irrigation)	1,000	SF	$20.00		$20,000.00
6.03	Native Buffer Planting (with soil prep and irrigation)	5,113	SF	$12.00		$61,400.00
6.04	Seed Lawn (with soil prep, no irrigation)	10,000	SF	$1.50		$15,000.00
6.05	Shoreline Mitigation (restoration / buffer enhancement)	0	SF	$12.00		$0.00
6.06	Right-of-Way Low Shrubs & Groundcover (w/ soil prep and irr, NIC median)	0	SF	$20.00		$0.00
6.07	Right-of-Way Trees (NIC median)	0	EA	$400.00		$0.00

7.00	**Structures**					
7.01	Masonic Lodge Demo	0	LS	$280,000.00		$0.00
7.02	Restroom (2 stall)	0	EA	$350,000.00		$0.00
7.03	Large Picnic Shelter (including tables, interepretive features, etc.)	0	EA	$750,000.00		$0.00
7.04	Small Picnic Shelter	1	EA	$150,000.00		$150,000.00
7.05	Existing Shelter Renovation (arch)	0	LS	$50,000.00		$0.00
7.06	Existing Restroom Renovation (arch)			(by City under separate contract)		
7.07	Masonic Lodge Renovation	1	LS	$4,500,000.00		(NIC in Low Esitmate)

Subtotal	$521,000.00
Contractor Mobilization & Overhead (20%)	$105,000.00
Contingency (30%)	$157,000.00
Sales Tax (9.1%)	$48,000.00
Phase 1B Construction Total	**$831,000.00**
Soft Costs (20%)	$167,000.00
Phase 1B Total Project Cost	**$1,000,000.00**

Estimate of
Probable Cost of Construction

HBB Landscape Architecture

Date: January 6, 2026

Project Name: Crescent Creek Park Master Plan
Project Number: 2022-18
Project Phase: Preferred Master Plan
Prepared By: J.Li
Checked By: J.Vong

Phase 1C - Upper Terrace (Low Cost Range)

Item	Description	Qty	Unit	Unit Cost		Item Total
1.00	**Demolition/Site Preparation**					
1.01	Tree Protection Fence and Signage	785	LF	$5.50		$4,400.00
1.02	Site Clearing and Grubbing (6" depth)	0.4	AC	$15,000.00		$6,200.00
1.03	Clear Brush and Sapling	1.00	LS			$0.00
1.04	Existing Tree Removal	2	EA	$500.00		$1,000.00
1.05	Construction Fence (6' chainlink; temporary)	1,363	LF	$12.00		$16,400.00
1.06	Parking Lot Demo	906	SY	$20.00		$18,200.00
2.00	**Earthwork**					
2.01	Balance Cut/Fill on Site (6" average depth)	854	CY	$10.00		$8,600.00
2.02	Export Cut (12" average depth)	188	CY	$22.00		$4,200.00
2.03	Mass Grading (civil)	3,500	CY	$25.00		$87,500.00
2.04	Finish Grading (civil)	5,500	SY	$2.00		$11,000.00
4.00	**Paving, Walls & Stormwater**					
4.01	Asphalt Path - 6' wide (2" depth with 4" base)	0	SF	$7.00		$0.00
4.02	Pedestrian Concrete Paving - 6' wide (4" depth with 4" base)	4,542	SF	$15.00		$68,200.00
4.03	Pedestrian Staircase / Ramp with Handrails	0	SF	$150.00		$0.00
4.04	Plaza Paving (Color, unit paver, texture, etc.; approx. 1/4 of area)	3,985	SF	$35.00		$139,500.00
4.05	Soft Surface Trails (4" depth mulch)	0	CY	$60.00		$0.00
4.06	Planter Walls	0	LF	$450.00		$0.00
4.07	Seat Walls	0	LF	$400.00		$0.00
4.08	Parking / Driveway (civil)	14,173	SF	$10.00		$141,800.00
4.09	Parking Reseal / Striping	0	SF	$3.00		$0.00
4.10	Retaining Walls (civil)	1	LS	$15,000.00		$15,000.00
4.11	Stormwater Conveyance (civil)	1	LS	$70,000.00		$70,000.00
4.12	Stormwater Treatment (civil)	1	LS	$55,000.00		$55,000.00
4.13	Right-of-Way Improvements (civil) (NIC: lighting, median, ROW dedication)	1	LS	$145,375.00		$145,400.00
5.00	**Site Improvements**					
5.01	Bench	2	EA	$2,000.00		$4,000.00
5.02	Bike Rack	1	EA	$1,200.00		$1,200.00
5.03	Picnic Tables (NIC shelter area)	4	EA	$3,500.00		$14,000.00
5.04	Signage	1	LS	$7,500.00		$7,500.00
5.05	Play Area	0	EA	$500,000.00		$0.00
5.06	Nature / Hillside Play	0	EA	$150,000.00		$0.00
5.07	Seating / Gathering Area	0	EA	$50,000.00		$0.00
5.08	Wood Split-Rail Fence	0	LF	$80.00		$0.00

5.09	Volleyball Court (outdoor, subdrainage)	0	EA	$50,000.00		$0.00
5.10	Field Redevelopment (no lighting, natural turf, w/ subdrainage)	0	EA	$875,000.00		$0.00
5.10	Parking Lot Lighting	0	EA	$12,000.00		$0.00
5.11	Pedestrian Lighting	0	EA	$7,000.00		$0.00
5.12	Vehicular Entry Gates (manual)	1	EA	$8,500.00		$8,500.00

6.00	**Planting**					
6.01	Trees	15	EA	$400.00		$6,000.00
6.02	Low Shrubs and Groundcovers (with soil prep and irrigation)	5,378	SF	$20.00		$107,600.00
6.03	Native Buffer Planting (with soil prep and irrigation)	1,000	SF	$12.00		$12,000.00
6.04	Seed Lawn (with soil prep, no irrigation)	2,500	SF	$1.50		$3,800.00
6.05	Shoreline Mitigation (restoration / buffer enhancement)	0	SF	$12.00		$0.00
6.06	Right-of-Way Low Shrubs & Groundcover (w/ soil prep and irr, NIC median)	2,142	SF	$20.00		$42,900.00
6.07	Right-of-Way Trees (NIC median)	17	EA	$400.00		$6,800.00

7.00	**Structures**					
7.01	Masonic Lodge Demo	1	LS	$280,000.00		$280,000.00
7.02	Restroom (2 stall)	1	EA	$350,000.00		$350,000.00
7.03	Large Picnic Shelter (including tables, interepretive features, etc.)	1	EA	$750,000.00		$750,000.00
7.04	Small Picnic Shelter	0	EA	$150,000.00		$0.00
7.05	Existing Shelter Renovation	0	LS	$50,000.00		$0.00
7.06	Existing Restroom Renovation			(by City under separate contract)		
7.07	Masonic Lodge Renovation	1	LS	$3,500,000.00		(NIC in Low Esitmate)

Subtotal	$2,387,000.00
Contractor Mobilization & Overhead (20%)	$478,000.00
Contingency (30%)	$717,000.00
Sales Tax (9.1%)	$218,000.00
Phase 1C Construction Total	**$3,800,000.00**
Soft Costs (20%)	$760,000.00
Phase 1C Total Project Cost	**$4,600,000.00**

Estimate of
Probable Cost of Construction

HBB Landscape Architecture

Date: January 6, 2026

Project Name: Crescent Creek Park Master Plan
Project Number: 2022-18
Project Phase: Preferred Master Plan
Prepared By: J.Li
Checked By: J.Vong

Phase 2 - Lower Terrace (Low Cost Range)

Item	Description	Qty	Unit	Unit Cost	Item Total
1.00	**Demolition/Site Preparation**				
1.01	Tree Protection Fence and Signage	3,071	LF	$5.50	$16,900.00
1.02	Site Clearing and Grubbing (6" depth)	0.9	AC	$15,000.00	$13,500.00
1.03	Clear Brush and Sapling	1.00	LS	$4,000.00	$4,000.00
1.04	Existing Tree Removal	10	EA	$500.00	$5,000.00
1.05	Construction Fence (6' chainlink, temporary)	1,700	LF	$12.00	$20,400.00
1.06	Parking Lot Demo (civil)	1,372	SY	$20.00	$27,500.00
2.00	**Earthwork**				
2.01	Balance Cut/Fill on Site (6" average depth)	2,081	CY	$10.00	$20,900.00
2.02	Export Cut (24" average depth)	531	CY	$22.00	$11,700.00
2.03	Mass Grading (civil)	7,695	CY	$25.00	$192,400.00
2.04	Finish Grading (civil)	14,584	SY	$2.00	$29,200.00
4.00	**Paving, Walls & Stormwater**				
4.01	Asphalt Path - 6' wide (2" depth with 4" base)	0	SF	$7.00	$0.00
4.02	Pedestrian Concrete Paving - 6' wide (4" depth with 4" base)	6,514	SF	$15.00	$97,800.00
4.03	Pedestrian Staircase / Ramp with Handrails	236	SF	$150.00	$35,400.00
4.04	Plaza Paving (Color, unit paver, texture, etc.; approx. 1/4 of area)	0	SF	$35.00	$0.00
4.05	Soft Surface Trails (4" depth mulch)	44	CY	$60.00	$2,700.00
4.06	Planter Walls	0	LF	$450.00	$0.00
4.07	Seat Walls	0	LF	$400.00	$0.00
4.08	Parking / Driveway (civil)	1,743	SF	$10.00	$17,500.00
4.09	Parking Reseal / Striping	9,040	SF	$3.00	$27,200.00
4.10	Retaining Walls (civil)	1	LS	$52,000.00	$52,000.00
4.11	Stormwater Conveyance (civil)	1	LS	$38,000.00	$38,000.00
4.12	Stormwater Treatment (civil)	1	LS	$42,500.00	$42,500.00
4.13	Right-of-Way Improvements (civil) (NIC: lighting, median, ROW dedication)	0	LS	$0.00	$0.00
5.00	**Site Improvements**				
5.01	Bench	5	EA	$2,000.00	$10,000.00
5.02	Bike Rack	2	EA	$1,500.00	$3,000.00
5.03	Picnic Tables (NIC shelter area)	5	EA	$3,500.00	$17,500.00
5.04	Signage	1	LS	$20,000.00	$20,000.00
5.05	Play Area	2	EA	$500,000.00	$1,000,000.00
5.06	Nature / Hillside Play	1	EA	$150,000.00	$150,000.00
5.07	Seating / Gathering Area	0	EA	$50,000.00	$0.00
5.08	Wood Split-Rail Fence	0	LF	$80.00	$0.00

5.09	Volleyball Court (outdoor, subdrainage)	0	EA	$50,000.00		$0.00
5.10	Field Redevelopment (no lighting, natural turf, w/ subdrainage)	0	EA	$875,000.00		$0.00
5.10	Parking Lot Lighting	0	EA	$12,000.00		$0.00
5.11	Pedestrian Lighting	0	EA	$7,000.00		$0.00
5.12	Vehicular Entry Gates (Manual)	0	EA	$8,500.00		$0.00

6.00	**Planting**					
6.01	Trees	23	EA	$400.00		$9,200.00
6.02	Low Shrubs and Groundcovers (with soil prep and irrigation)	10,308	SF	$20.00		$206,200.00
6.03	Native Buffer Planting (with soil prep and irrigation)	8,317	SF	$12.00		$99,900.00
6.04	Seed Lawn (with soil prep, no irrigation)	50,339	SF	$1.50		$75,600.00
6.05	Shoreline Mitigation (restoration / buffer enhancement)	6,022	SF	$12.00		$72,300.00
6.06	Right-of-Way Low Shrubs & Groundcover (w/ soil prep and irr, NIC median)	0	SF	$20.00		$0.00
6.07	Right-of-Way Trees (NIC median)	0	EA	$400.00		$0.00

7.00	**Buildings**					
7.01	Masonic Lodge Demo	0	LS	$280,000.00		$0.00
7.02	Restroom (2 stall)	0	EA	$350,000.00		$0.00
7.03	Large Picnic Shelter (including tables, interepretive features, etc.)	0	EA	$750,000.00		$0.00
7.04	Small Picnic Shelter (inlcuding tables)	0	EA	$150,000.00		$0.00
7.05	Existing Shelter Renovation (arch)	1	LS	$50,000.00		$50,000.00
7.06	Existing Restroom Renovation (arch)			(by City under separate contract)		
7.07	Masonic Lodge Renovation	1	LS	$4,500,000.00		(NIC in Low Esitmate)

Subtotal	$2,369,000.00
Contractor Mobilization & Overhead (20%)	$474,000.00
Contingency (30%)	$711,000.00
Sales Tax (9.1%)	$216,000.00
Phase 2 Construction Total	**$3,770,000.00**
Soft Costs (20%)	$754,000.00
Phase 2 Total Project Cost	**$4,600,000.00**

Estimate of
Probable Cost of Construction

HBB Landscape Architecture

Date: January 6, 2026

Project Name: Crescent Creek Park Master Plan
Project Number: 2022-18
Project Phase: Preferred Master Plan
Prepared By: J.Li
Checked By: J.Vong

Phase 3 - Middle Terrace (Low Cost Range)

Item	Description	Qty	Unit	Unit Cost		Item Total
1.00	**Demolition/Site Preparation**					
1.01	Tree Protection Fence and Signage	1,600	LF	$5.50		$8,900.00
1.02	Site Clearing and Grubbing (6" depth)	0.2	AC	$15,000.00		$3,000.00
1.03	Clear Brush and Sapling	1.00	LS	$4,000.00		$4,000.00
1.04	Existing Tree Removal	12	EA	$500.00		$6,000.00
1.05	Construction Fence (6' chainlink, temporary)	1,642	LF	$12.00		$19,700.00
1.06	Parking Lot Demo	0	SY	$20.00		$0.00
2.00	**Earthwork**					
2.01	Balance Cut/Fill on Site (6" average depth)	1,543	CY	$10.00		$15,500.00
2.02	Export Cut (12" average depth)	1,345	CY	$22.00		$29,600.00
2.03	Mass Grading (civil)	3465	CY	$25.00		$86,700.00
2.04	Finish Grading (civil)	9696	SY	$2.00		$19,400.00
4.00	**Paving, Walls & Stormwater**					
4.01	Asphalt Path - 6' wide (2" depth with 4" base)	0	SF	$7.00		$0.00
4.02	Pedestrian Concrete Paving - 6' wide (4" depth with 4" base)	2,457	SF	$15.00		$36,900.00
4.03	Pedestrian Staircase / Ramp with Handrails	1,190	SF	$150.00		$178,600.00
4.04	Plaza Paving (Color, unit paver, texture, etc.; approx. 1/4 of area)	0	SF	$20.00		$0.00
4.05	Soft Surface Trails (4" depth mulch)	30	CY	$55.00		$1,700.00
4.06	Planter Walls	0	LF	$268.00		$0.00
4.07	Seat Walls	0	LF	$400.00		$0.00
4.08	Parking / Driveway (civil)	0	SF	$10.00		$0.00
4.09	Parking Reseal / Striping	0	SF	$3.00		$0.00
4.10	Retaining Walls (civil)	0	LS	$0.00		$0.00
4.11	Stormwater Conveyance (civil)	1	LS	$20,000.00		$20,000.00
4.12	Stormwater Treatment (civil)	1	LS	$8,000.00		$8,000.00
4.13	Right-of-Way Improvements (civil) (NIC: lighting, median, ROW dedication)	0	LS	$0.00		$0.00
5.00	**Site Improvements**					
5.01	Bench	2	EA	$2,000.00		$4,000.00
5.02	Bike Rack	0	EA	$1,500.00		$0.00
5.03	Picnic Tables (NIC shelter area)	1	EA	$3,500.00		$3,500.00
5.04	Signage	1	LS	$5,000.00		$5,000.00
5.05	Play Area	0	EA	$500,000.00		$0.00
5.06	Nature / Hillside Play	0	EA	$150,000.00		$0.00
5.07	Seating / Gathering Area	0	EA	$50,000.00		$0.00
5.08	Wood Split-Rail Fence	0	LF	$80.00		$0.00

5.09	Volleyball Court (outdoor, subdrainage)	0	EA	$50,000.00		$0.00
5.10	Field Redevelopment (no lighting, natural turf, w/ subdrainage, no irr)	1	EA	$875,000.00		$875,000.00
5.11	Parking Lot Lighting	0	EA	$12,000.00		$0.00
5.12	Pedestrian Lighting	0	EA	$7,000.00		$0.00
5.13	Vehicular Entry Gates (Manual)	0	EA	$8,500.00		$0.00

6.00	**Planting**					
6.01	Trees	23	EA	$400.00		$9,200.00
6.02	Low Shrubs and Groundcovers (with soil prep and irrigation)	3,018	SF	$20.00		$60,400.00
6.03	Native Buffer Planting (with soil prep and irrigation)	4,857	SF	$12.00		$58,300.00
6.04	Seed Lawn (with soil prep, no irrigation)	56,853	SF	$1.50		$85,300.00
6.05	Shoreline Mitigation (restoration / buffer enhancement)	0	SF	$12.00		$0.00
6.06	Right-of-Way Low Shrubs & Groundcover (w/ soil prep and irr, NIC median)	0	SF	$20.00		$0.00
6.07	Right-of-Way Trees (NIC median)	0	EA	$400.00		$0.00

7.00	**Buildings**					
7.01	Masonic Lodge Demo	0	LS	$280,000.00		$0.00
7.02	Restroom (2 stall)	0	EA	$350,000.00		$0.00
7.03	Large Picnic Shelter (including tables, interepretive features, etc.)	0	EA	$750,000.00		$0.00
7.04	Small Picnic Shelter (inlcuding tables)	1	EA	$150,000.00		$150,000.00
7.05	Existing Shelter Renovation (arch)	0	LS	$50,000.00		$0.00
7.06	Existing Restroom Renovation (arch)			(by City under separate contract)		
7.07	Masonic Lodge Renovation	1	LS	$4,500,000.00		(NIC in Low Esitmate)

Subtotal	$1,689,000.00
Contractor Mobilization & Overhead (20%)	$338,000.00
Contingency (30%)	$507,000.00
Sales Tax (9.1%)	$154,000.00
Phase 3 Construction Total	**$2,688,000.00**
Soft Costs (20%)	$538,000.00
Phase 3 Total Project Cost	**$3,300,000.00**

APPENDIX N

MASTER PLAN ADOPTION RESOLUTION