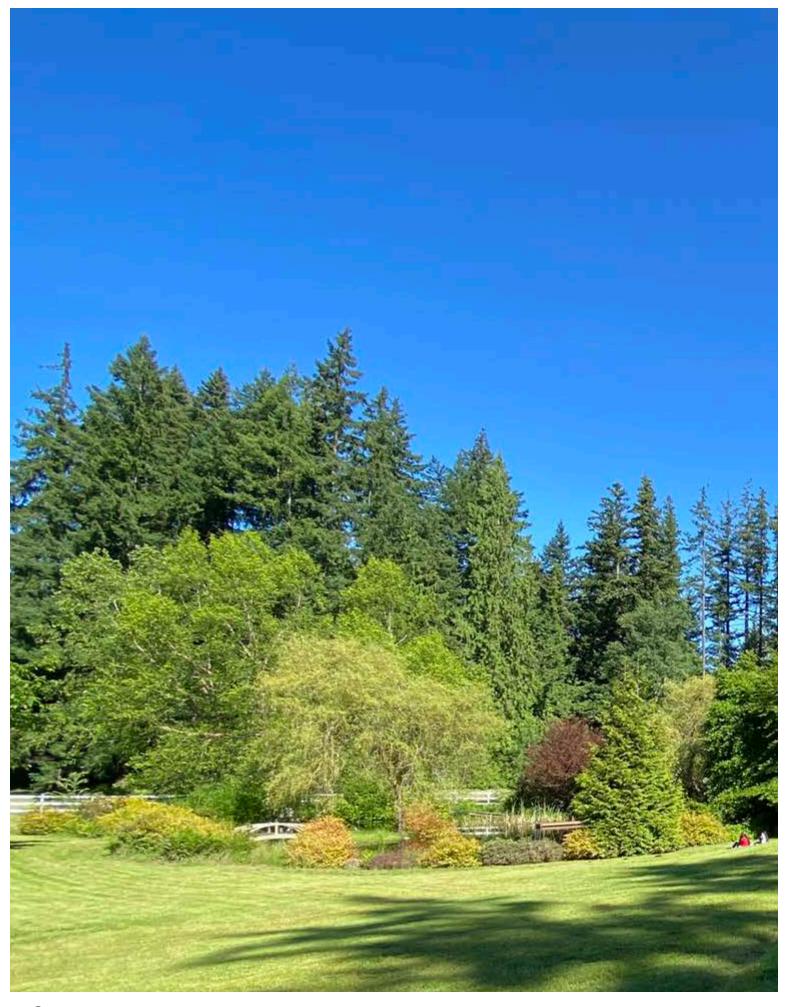
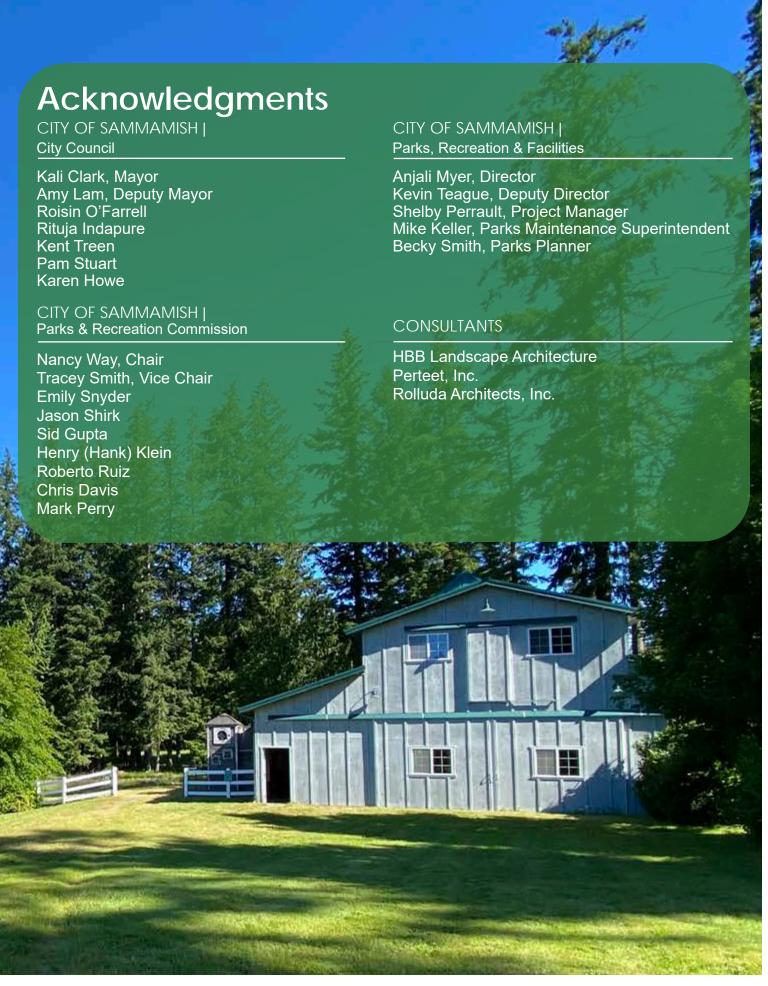




Big Rock Park South Master Plan | September 13, 2023







Executive Summary

Big Rock Park South is centrally located within the City's core. The master planning for the park was held concurrent with the master planning for Beaton Hill Park. One of the goals for the joint planning process was to prepare plans that integrate with Big Rock Park North and Central for the purpose of providing a cohesive overall park system. The purpose of this Master Plan is to establish proposed programming, activities, and improvements to Big Rock Park South, the third and final property in the Big Rock Park corridor with 15 acres of new park land. These properties will expand the overall Big Rock / Beaton Hill Parks corridor by adding 24 acres of new park land to the existing park system.

The City's Master Plan process was conducted from February 2022 - March 2023 to arrive at a preferred master plan for Big Rock Park South. Community input was obtained through three web-based surveys, three public workshops, and four pop-up events. Check-in meetings were also held with the Parks & Recreation Commission and the City Council at each stage of the process. A State Environmental Protection Agency (SEPA) review of the master plan was completed, and a determination of non-significance was issued in May 2023. The master plan for Big Rock Park South was adopted by City Council at a Regular Meeting held on October 17, 2023.

The final master plan is designed to reinforce the passive, natural environment of the existing property while allowing more flexible uses for all ages and abilities. The proposed improvements include a new universal play area; adaptive re-use of the existing structures; a large picnic pavilion and picnic shelters; gathering and plaza areas; a new restroom; paved and soft surface trails; a parking lot; garden areas with a variety of interpretive and educational opportunities throughout the site; and an optional disc golf course.

Interpretive signage would be included in key areas along the trail, within a series of overlooks to the wetland/stream system, and/or in other gathering areas to highlight the natural environment and/or history of the site.

Whimsical elements are integrated along the trail and open space areas to add a playful and interactive experience to the park, and are intended to eventually continue through the main trail connecting all of the Big Rock Parks to Beaton Hill Park as a defining element of the parks system.



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Project Background

Introduction
Site History
Site Context

Introduction

The Big Rock Parks system consists of 51 acres of parkland donated to the City through a phased land donation agreement. The first two parcels, Big Rock Park North and Big Rock Park Central, underwent a combined master planning process from 2012-2014 and opened to the public in 2016 and 2021. Big Rock Park North and Big Rock Park Central boast an extensive trail system, open space, picnic areas, a natural play area and zip line, Heritage Garden, the Tree house, and Reard House. Big Rock Park South, located on SE 20th Street, is the third and final property that was transferred to the City in November 2021. Understanding that a master plan would be needed before opening the park to the public, funding was initially allocated in the 2021-2022 Parks Capital Improvement Plan (Parks CIP) to develop a master plan for the park.

The master planning process was held jointly with the master planning of Beaton Hill Park and a Request for Qualifications (RFQ) was published for both parks to be completed concurrently. A total of \$275,000 was allocated in the Parks Capital Improvement Plan (Parks CIP) to develop a master plan for Beaton Hill Park and Big Rock Park South. A Request for Qualifications (RFQ) was published in July 2021 for consultant services to complete the master plans for Beaton Hill Park and Big Rock Park South. A total of eight firms responded. Staff evaluated the statements of qualifications received, based on criteria outlined in the RFQ and invited two firms to interview. HBB Landscape Architecture was selected for the project.

Project Goals

The Big Rock Park South Master Plan is the result of a multi-step process led by the Consultant team and City staff. With input and direction from the public, the City Council and the Parks & Recreation Commission, the goals of this master plan were developed and are as follows:

- 1. Continue to be the **place of respite**, contemplation, and exploration of the natural environment it is today, protected for future generations.
- 2. **Connect, educate, and inspire** people of all ages and abilities to discover more about each other and our surroundings.
- 3. Provide **safe access to everyone** of all abilities to the amazing places and experiences throughout the park.
- 4. Allow everyone the **flexibility** to be active or passive in how they choose to recreate, providing opportunities for both in a way that respects and fits into the context of the site.

2018 Parks, Recreation & Open Space (PRO) Plan

The 2018 Park, Recreation & Open Space Plan is a long-term planning document used to guide the development of the City's overall park system, including Big Rock Park South. The Big Rock Park South master planning process builds on this previous planning effort and furthers the vision and goals outlined in this document. The overall vision is to see parks as an integral part of the City's healthy and sustainable community by connecting people to nature, play, and culture. The goals set forth in the PROS Plan include the conservation of natural resources, opportunities to improve health and wellness, and to create social equity in access to parks and recreation for all residents.

The master plan for Big Rock Park South meets these goals with the conservation and enhancement of the wetlands, buffers, and forested areas within the park; the recreation opportunities and programming proposed; the balance of passive activities that reinforce the unique character of the site; and the gathering places where residents can come together as a community.

Site History

Big Rock Park South is the third and final property of a 51-acre phased land donation agreement that began in 2010 with the donation of Big Rock Park North followed by Big Rock Park Central in 2016. Big Rock Park North and Big Rock Park Central opened to the public in 2016 and 2021 respectively. The Big Rock Park South property was transferred to the City in November 2021. Like the conditions placed on the previous two parcels, this park will facilitate a variety of low impact active and passive activities that may include nature trails, open space, and passive sports meadows. There are a few existing structures on this parcel. Restrictions were put in place with the donation to the City to preclude development of new structures exceeding 2,500 square feet to support the development of the park in a manner that preserves the site's natural beauty. The 15 acres that make up this property include dense forest cover, meandering trails that navigate relatively unvarying topography, sensitive areas, open meadows, a single-family home, pool house, two detached garages, and a barn.

Stories from the Property

In the early 1970's, the park was surrounded by rural areas and properties with chicken farms and agricultural lands. By the late 1970s, SE 20th Street was now a paved road, schools were being built, and planned communities like Klahanie were just starting to be developed. The plateau was still a much different place, but with the increase in housing, development and urban density slowly started changing the character and pace of life in Sammamish. However, when reflecting on the character and history of the neighborhood by the family that donated the park, what stands out is the quality of its people, "It's a community that welcomes a range [of individuals]....Not everybody looked like or thought like everybody else up here on the plateau. There was room for different opinions."

The property was originally called Frog Pond Farm, the name coined from the family who donated the property. Many frogs found homes in the ponds on the property and their sounds were heard in spring when their sounds are loudest after coming out of their hibernation. As recalled by the family that previously lived on the property, the sound of the frogs in spring could rival that of Aurora Avenue in Seattle, keeping you awake at night if you weren't used to the sounds of nature around you.



"Welcome - Frog Pond Farm" sign

The house was built in 1923 and rumored to be built by bootleggers catering to the old resort that used to sit along the shores of Pine Lake, called French's Pine Lake Resort. Many old glass bottles have been found over the years, imagined as part of an original distillery selling spirits to vacationers to the Resort trying to get away from their busy lives in the city.

Site Context



Vicinity Map - City of Sammamish

Big Rock Park South is a 14.86-acre site located in central Sammamish. The majority of the site is a forested natural area with six wetlands and a network of trails that extends into Big Rock Central and Big Rock North Parks. The park is surrounded by residences to the west and east and a mosque to the south. Big Rock Park Central is located immediately north and borders the park.

While much of the neighborhood remains more rural in its residential character, different types of housing, greater density, and more development in general is close by. The Sammamish Commons is located less than 2 miles from the park. The park is accessed off SE 20th Street, a major collector with existing sidewalks on the north, park-side, of the roadway.



Context Map

Planning Process

Planning Phases Site Inventory & Analysis

Critical Areas

Restrictive Covenant

Structures

Trails

Public Outreach

Hopes, Dreams, & Concerns

Park Program

Preferred Master Plan

Planning Phases

The park master planning process began with a detailed analysis of existing site conditions. This included an environmental assessment of the ponds and wetlands on the site, a structural and architectural evaluation of the existing buildings, and an analysis of stormwater, accessibility, and available utilities for the property. Relevant planning documents for the neighborhood, transportation system, municipal code, and other city requirements were also identified. Recreation and programming needs within the city were identified based on previous community outreach and planning projects, including any existing programming already developed nearby. Existing trails were documented and the overall condition of the property assessed for potential future improvements. This analysis formed the basis of the master planning process and continued community outreach specific to this park site.

An extensive public outreach process was developed to occur jointly with the master planning of the newly acquired Beaton Hill Park, located immediately north of the Big Rock Parks system, forming a contiguous network of parks within the community. Public meetings and a variety of community events were held at each phase of the master planning process, in addition to regular meetings with the Parks & Recreation Commission and updates to City Council. The phases for public outreach used for this project followed the City's defined Master Planning Process and include:

PHASE 1 | Hopes, Dreams, & Concerns (February 2022 - May 2022)

This phase began with a detailed analysis of existing site conditions, park programming, and establishing overall project goals for the park to determine the hopes, dreams, and concerns of the community related to the park.

PHASE 2 | Park Program (May 2022 - September 2022)

Master plan alternatives for the park were developed based on the results of Phase 1 and presented back to the community, the Parks and Recreation Commission, and City Council to voice their preferences, likes, and dislikes for each alternative presented.

PHASE 3 | Preferred Master Plan (September 2022 - March 2023)

Comments from Phase 2 were reviewed and a preferred master plan developed, keeping what people liked most about the concepts presented, and changing what they didn't like to create a single preferred master plan concept.

PHASE 4 | Final Master Plan & Report (March 2023 - October 2023)

The final phase of the project incorporated feedback received on the preferred master plan from the community, Parks & Recreation Commission, and City Council. Comments received during the SEPA process, and all other comments received on the park master plan were also reviewed. The final master plan and a summary of the planning process was documented in this report and presented for final adoption by the City Council.

Site Inventory & Analysis

12

















(4) Central Pond / Gardens





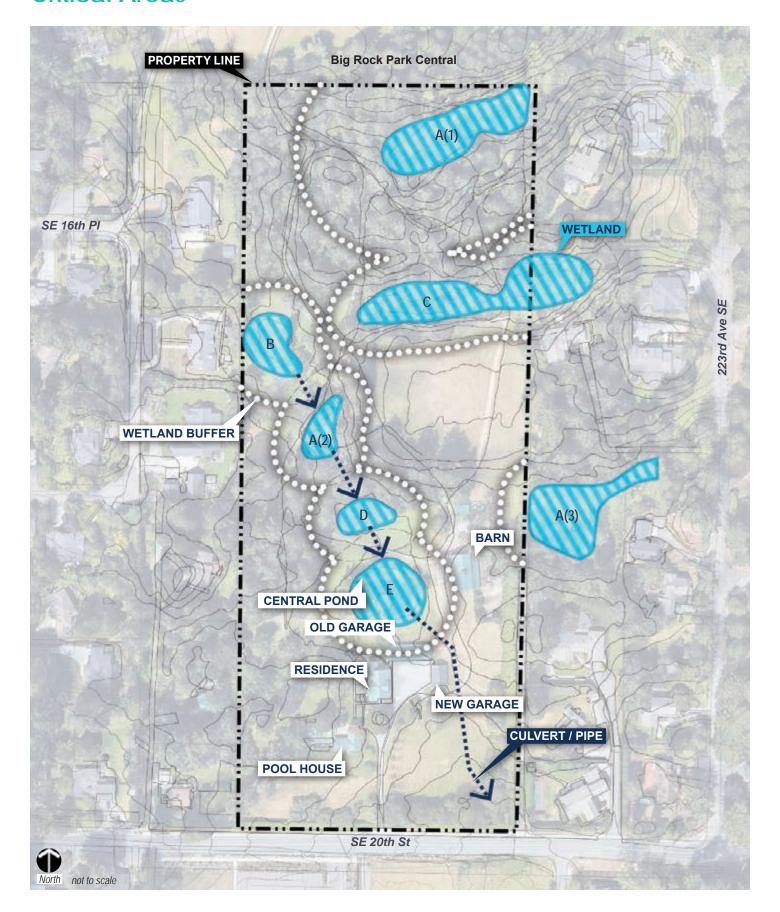


6 Entry Drive

Big Rock Park South consists of open meadows, lawn, orchards, and gardens surrounded by a natural forest that provides an evergreen backdrop and buffer between the park and its adjacent properties. Entering into the park off SE 20th Street leads to the central improved area of the property with the existing buildings enclosing a gravel courtyard. The existing Barn and its attached chicken coop are just off this main courtyard with informal access through the open lawn. A large open field / meadow is located north of the Barn. A small apple orchard and large evergreen hedge line the property boundary adjacent to SE 20th Street, precluding views into the property.

A series of wetlands and open ponds are interspersed through the forested area with the "central pond" developed as a garden space closest to the Residence and Old Garage on the site. A series of intertwining trails developed by the original property owner currently meander throughout the park.

Critical Areas





Wetland A(1)



Wetland C



Wetland E / Central Pond

Wetlands

Big Rock Park South lies within the East Lake Sammamish Basin. There are seven wetlands identified within the Big Rock Park South study area, all of which are depressional wetlands.

Six of the identified wetlands (Wetlands A[1], A[2], B, C, D, and E) occur on the park property. These wetlands range from approximately 0.07 - 0.4 acres. Wetlands A(1), A(2), B, and D are all palustrine emergent, scrubshrub wetlands. Wetland C is a palustrine emergent, forested, scrub-shrub wetland. Wetland E, also known as the Central Pond, is a palustrine emergent wetland.

Wetlands A(2), B, D, and E are connected by culverts and pipes, flowing to the southeast. From Wetland E, water flows toward the southeast corner of the site and connects to the stormwater system in the SE 20th Street right-of-way, eventually connecting to Pine Lake.

Wetland A(3) is located on the adjacent residential property. This wetland is approximately 0.4 acres, and is a palustrine emergent, scrub-shrub, forested wetland.

Further information on the wetlands identified in the study area is included in Appendix A of this document.

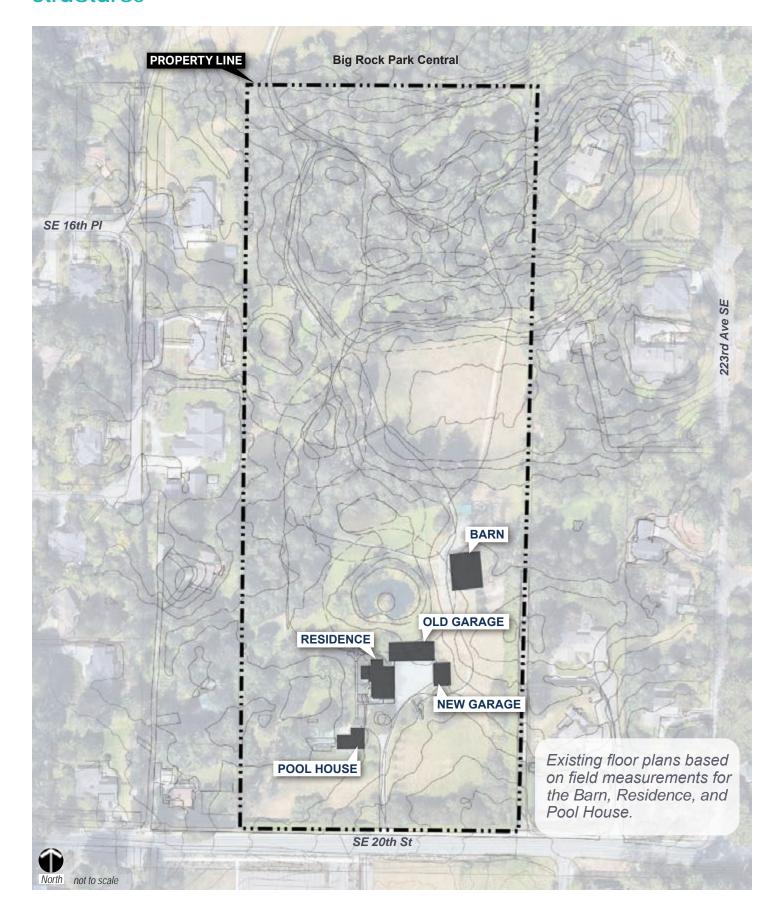
Wetland Buffers

There is a 150-foot buffer around Wetland A(1), and 50-foot buffers around Wetlands A(2), A(3), B, C, D, and E. These buffers are mostly contained within the forested and meadow areas of the property, although the buffer for Wetland E overlaps the edge of the existing Barn and Old Garage.

Restrictive Covenant

In 2021, Mary Pigott generously gifted Big Rock Park South to the City as part of a phased land donation agreement. The agreement states that the property will be used as a park for the benefit of the community. A restrictive covenant was placed on the agreement, which states that the property must accommodate a variety of low-impact active and passive uses such as nature trails, open space, passive sports meadows, and restrooms. Should sports meadows be included, they must be designed to accommodate more than one activity and may not exceed 2-acres. The agreement specifies that the property shall be developed in a manner that preserves the natural beauty. To help achieve this, restrictions were put in place to preclude residential, commercial, and industrial development; mining; or construction of new buildings over 2,500 square feet.

Structures





Residence - View looking northwest

BEDROOM BEDROOM BEDROOM DINNING ROOM KITCHEN 9-7-8-8 PORCH PORCH

Residence

The Residence is a 2-story craftsman-style home built in 1923 and renovated in 1991. It is 4,000 square feet. The basement currently floods during major storm events, controlled with multiple small sump pumps. There are no significant observable signs of structural distress or differential settlement. The roof is newer and generally in good condition. The basement has concrete walls and a slab on grade. Refer to the Structural Evaluation in Appendix H for more information.



Residence - Interior View



Residence - Interior View



Residence - Floor Plan - 1st Floor

Old Garage - View looking northeast



New Garage - View looking east

Old Garage

North

not to scale

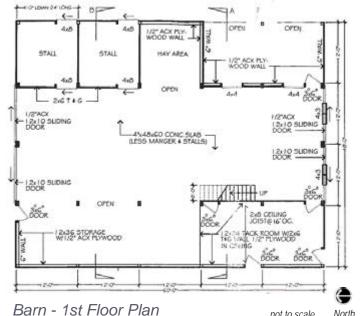
The Old Garage includes an enclosed work/shop space and an area used for fitness in the west half of the structure that was built around 1940. The east half is a covered open area with a dirt floor. While the roof appears newer, most of the structure is only minimally improved and appears to be in generally poor condition. The building is partially located within the wetland buffer.

New Garage

The New Garage is a newer three-car garage located east of the Residence on the opposite side of the central gravel courtyard and was built in 2000. It has a metal roof with active solar panels connected to a fully functional solar system. The Garage sits on a slab foundation and appears to be in good condition.

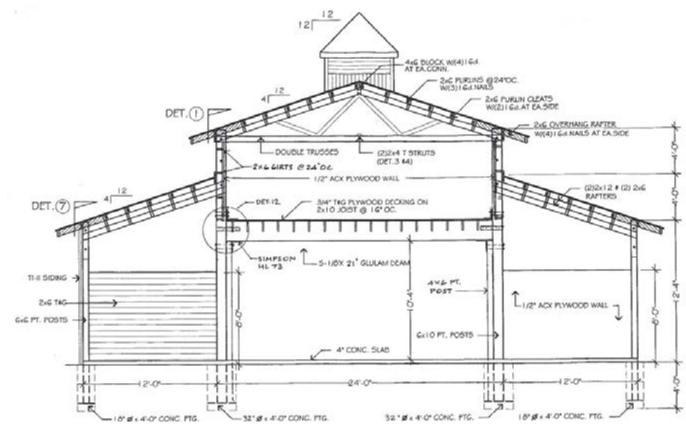
Barn

The Barn is located northeast of the Residence and was built in 2005. The first floor is 2,880 square feet, including a covered outdoor area on the southeast side and two stalls along the northeast side. The upper loft is 1,440 square feet and is accessed from a stairway just off the main entry. The Barn has a concrete slab on grade foundation and a metal roof with active solar panels covering the western portion of the roof. The solar panels connect to service panels inside the Barn. There is a chicken coop with stained glass windows on the west side of the Barn.



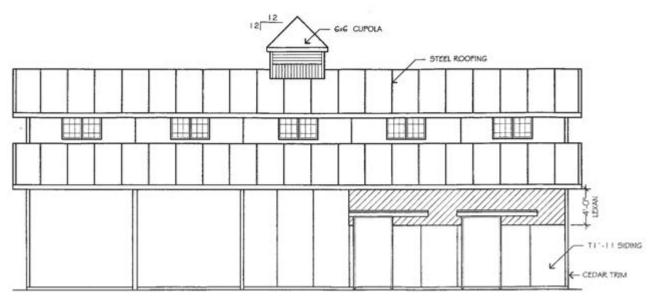


Barn - View looking north



North

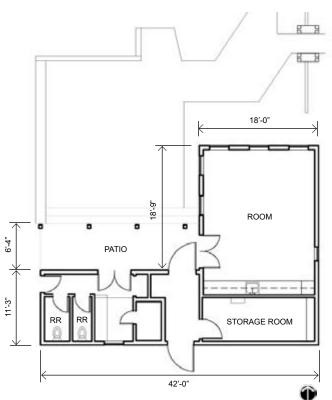
Barn - Building Section



Barn - East Elevation



Pool House - View looking south



Pool House - Floor Plan

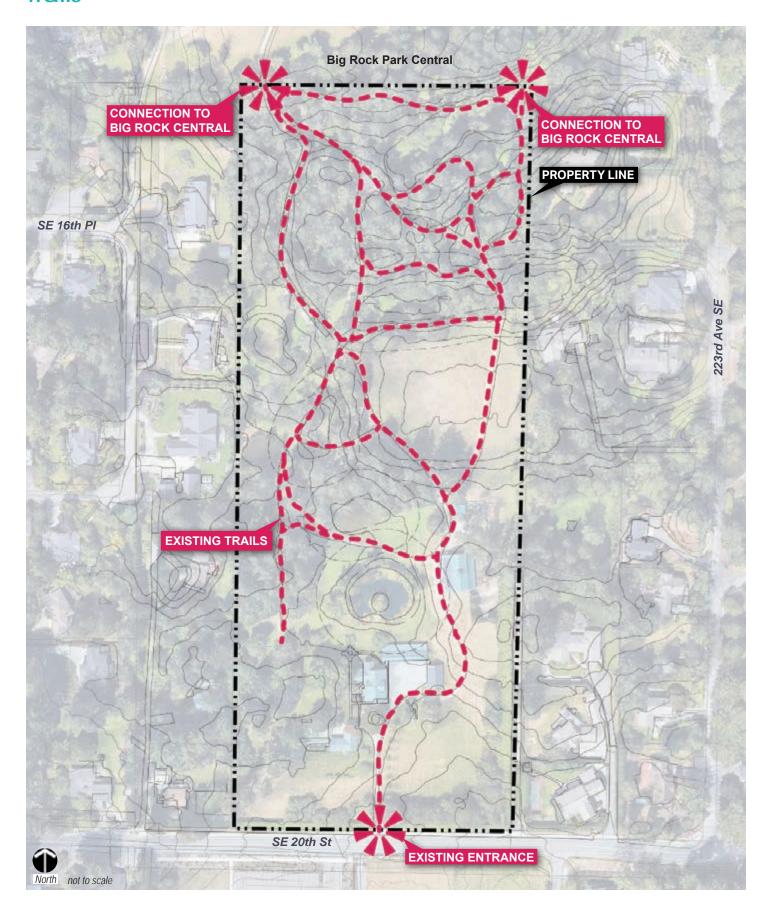
Pool House

The Pool House was built around 1989 and is located southwest of the Residence; it was originally used as a restroom, changing area and living space associated with a built-in pool. The pool has since been filled in and a sport court used for basketball and pickleball was built in its place. There is an adjacent arbor and patio area between the Pool House and sport court. It also appears to be a concrete slab on grade foundation with a new metal roof. Solar panels cover the south facing side of the roof and connect to service panels inside the storage room.



Pool House - View with sport court and arbor

Trails





Forested Trails



Connection to Big Rock Central



Trail Signage



Meadow Trails

The site has approximately one mile of established, soft surface trails leading through wetlands, forest, and the open space / prairie. A small bridge crosses Wetland A1, and an existing deck extends from the shoreline into the Central Pond (Wetland E). There is one gravel trail, named 'Main Street Trail' that extends from Big Rock Park South to Big Rock Park North. The existing trails vary in width and have trail name markers. There are two gated connections to Big Rock Park Central's trail system: one in the northwest corner of the site and one on the northeast corner of the site.

OPPORTUNITIES & CONSTRAINTS

Following the site inventory and analysis phase of the master plan, several opportunities and constraints were identified and are noted below. These items were further explored with stakeholders and the community during the visioning phase.

Opportunities

- Connections
- Site history
- Re-use of existing buildings
- Existing pond/gardens
- Existing trails

Constraints

- Wetland buffers
- Visibility from street/sidewalk
- Site hydrology/seasonal flooding
- Mature tree canopy

Public Outreach Overview

An extensive public outreach process was implemented to ensure the park master plan represented community hopes, dreams, and concerns for the park. The outreach process included opportunities for public comment and feedback in every phase of the project and through a variety of formats. This section describes each outreach event with a summary of the comments and feedback heard for each phase of the outreach process.

The public outreach process included the following meetings or events for each phase of work:

PHASE 1 | Hopes, Dreams, & Concerns (February - April 2022)

- Parks & Recreation Commission Meeting #1: April 6, 2022
- City Council Meeting #1: April 19, 2022
- Earth Day Booth & Open House at Big Rock Park South: April 23, 2022
- Public Meeting #1: April 28, 2022
- Community Survey #1: April 22, 2022 May 13, 2022

PHASE 2 | Park Program (April - September 2022)

- Parks & Recreation Commission Meeting #2: July 20, 2022
- Public Meeting #2: July 27, 2022
- Concert in the Park: July 28, 2022
- Joint City Council Meeting #2 with the Parks & Recreation Commission: September 13, 2022
- Community Survey #2: July 27, 2022 August 29, 2022

PHASE 3 | Master Plan Development (September 2022 - March 2023)

- Lunar New Year Celebration: January 21, 2023
- Public Meeting #3: January 26, 2023
- Parks & Recreation Commission Meeting #4: February 1, 2023
- Joint City Council Meeting #3 with the Parks & Recreation Commission: March 14th, 2023 (SEPA Authorization by City Council)
- Community Survey #3: January 21, 2023 March 13, 2023

PHASE 4 | SEPA Review & Final Master Plan Adoption (March - October 2023)

- Non-Project SEPA Application Submitted: April 12, 2023
- Non-Project SEPA Determination of Non-Significance Issued: May 23, 2023
- Parks & Recreation Commission Meeting #6: October 4, 2023 (Recommendation to City Council)
- City Council Meeting #4: October 17, 2023 (Final Master Plan Adoption)

Hopes, Dreams, & Concerns

The first phase of the master planning process establishes the overall vision for the park, focusing on the hopes, dreams, and concerns of the community as they consider proposed improvements for Big Rock Park South. This process included an overview of the existing site conditions and analysis, identified potential park programming needs, and asked the community about their hopes, dreams and concerns for future park improvements.

This process included a public workshop at City Hall, an informational booth at the City's Earth Day event, and a pop-up event at the future Big Rock Park South. Similar information was available at each event. Participants at the pop-up could also tour the site and buildings, hosted by City staff. An online community survey was also available for residents and others interested in the park to review the materials presented at the public events and offer additional feedback.

The results of this first phase of the park master planning process were used to establish the overall park goals and guide the development of different master plan alternatives for park improvements.



Pop-up tents provided information on the park master planning process in support of the outreach process



Community members share hopes, dreams, and concerns for the park during the Earth Day event

Public Workshop & Pop-Up #1

What type of character fits best at Big Rock Park?









NATURA

Blue dots were placed on preferred images by responders

Rank your park priorities from most to least important

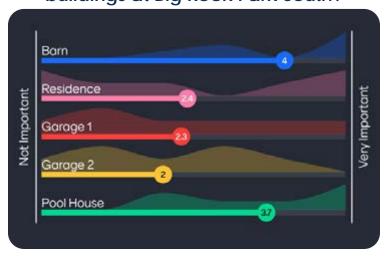


What activities could you image in the park?

botanical gardens
pitch and putt golf
disc golf community fundraising
plant nursery

botanical gardena
childrens wilderness educ
pickle ball peapatches
zip lines climbing walls
emtal for small gatherin

How important is it to preserve existing buildings at Big Rock Park South?



If buildings are preserved, what is your vision for activities that could occur?



WHAT WE HEARD

Based on the community input shared at the Open House, Earth Day event, pop-up, and survey comments, the highest priorities for the design of Big Rock Park South were preserving the natural character, conservation and restoration of natural areas, integration of passive activities, and accessible trails.

Park programming elements mentioned the most included trails; P-patch; botanical gardens; environmental education opportunities; a variety of play opportunities; covered space and gathering space for community groups; picnic areas; pickleball; disc golf; tennis; and an off-leash dog park. There were both desires and concerns for formal sports and other active recreation elements. The main concerns expressed by the community were environmental impacts; access to and through the park system; losing passive space and trails to structured programmatic elements; disturbances to the neighbors; and traffic impacts to the surrounding neighborhood.

In general, the community was most interested in preserving the buildings if they could be reused for the community. Many community groups expressed interest in using the buildings for meeting and gathering places; building re-use ideas included a senior center, youth center, art/maker space, boy and girl scouts, and local gardening groups. Additionally, there was interest in the buildings being reused for special community events or private event rentals. The community expressed the greatest interest in preserving the Barn for larger community or private events, followed by the Pool House for smaller events or meeting space. People saw opportunity for the Residence to be used as meeting space, formal event space, class/workshop space, or educational space. There was a lower priority to retain the two Garages, but suggested uses were for maintenance or uses like those mentioned for the Pool House and Residence.

Hopes and Dreams:

- · Continuous walking or hiking trails
- Preserve and restore native ecology
- Building reuse
- Event space
- Educational events
- Engagement with community groups
- Community meeting and gather spaces
- Covered picnic areas
- Passive/natural
- Playgrounds
- Variety of activities across the park system
- Disc golf
- Pickle ball
- Community farm/ P-patch
- Restrooms
- Tennis

Concerns:

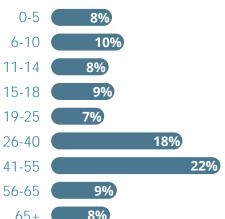
- Formal sports fields
- Access to and from parks
- Parking to meet the needs of the park
- Traffic impacts to the surrounding neighborhood
- Disruption to the neighborhood due to large events
- Adequate park maintenance
- Cost and functionality of the existing buildings

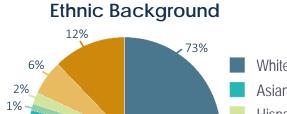
Community Survey #1

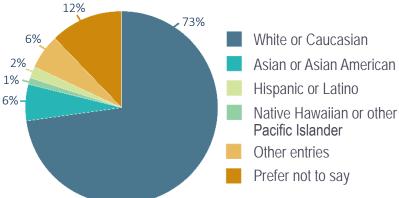


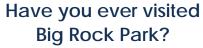
of the parks

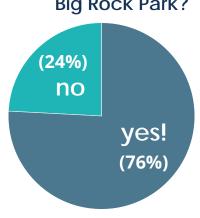
Age Range









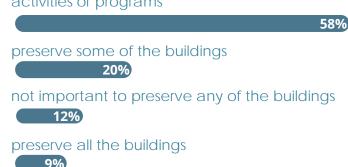


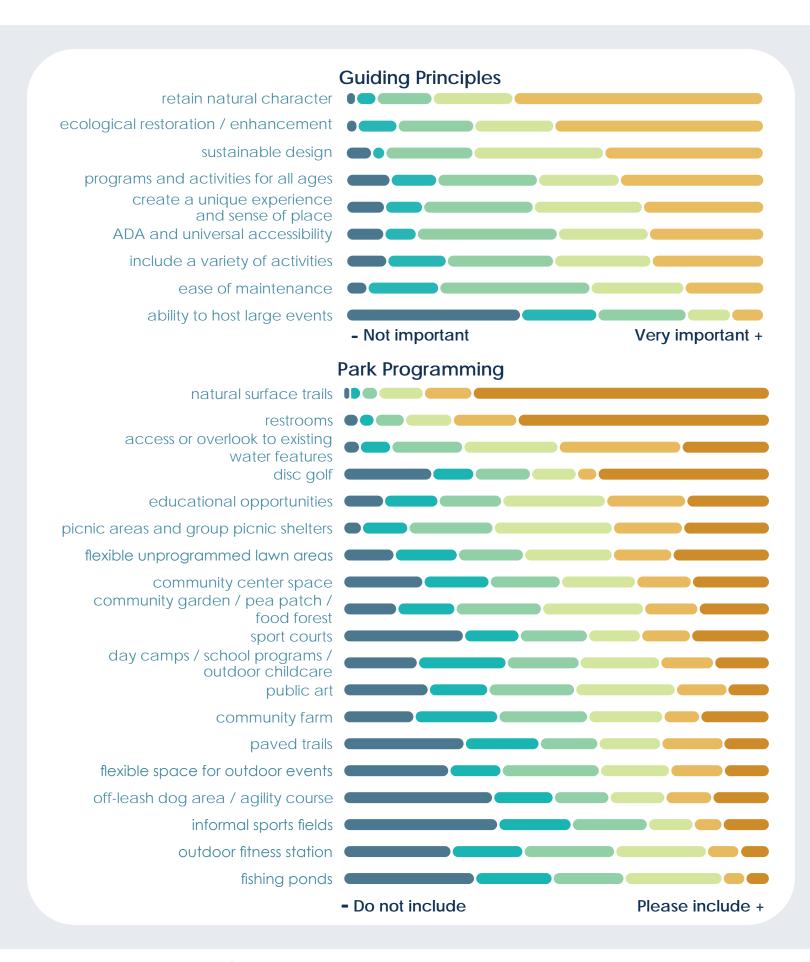
What do you like most about the existing Big Rock Parks?



Preserving Existing Buildings at BRP South

only preserve if they can be used for other activities or programs





Park Program

Three master plan alternatives were developed for Big Rock Park South based on the site analysis, environmental documentation, and the results of the Hopes, Dreams, and Concerns portion of the planning process. The alternatives developed during this phase of the design are shown below and included in Appendix E.

The master plan alternatives are also based on overall project goals for park improvements developed from the feedback provided during Phase 1 of the outreach process. These goals include:

- 1. Continue to be the **place of respite**, contemplation, and exploration of the natural environment it is today, protected for future generations.
- 2. **Connect, educate, and inspire** people of all ages and abilities to discover more about each other and our surroundings.
- 3. Provide **safe access to everyone** of all abilities to the amazing places and experiences throughout the parks.
- 4. Allow everyone the **flexibility** to be active or passive in how they choose to recreate, providing opportunities for both in a way that respects and fits into the context of the site.

All of the concepts developed for the park include the following:

- An extensive trail system connecting to the Big Rock Central and Big Rock North Parks.
- Parking off the main entry drive at SE 20th Street with related stormwater improvements utilizing natural drainage and other low-impact development techniques.
- Landscaped garden space, open lawn areas, benches, picnic areas, and educational or interpretive elements.

The concepts differ in the type of activities and recreation programming included in each concept. This includes the extent and layout of parking, the amount of plaza / gathering space, and the re-use of existing buildings.

The master plan alternatives were presented at a public workshop at City Hall with a pop-up stand at the adjacent Farmer's Market in the Sammamish Commons Plaza. Additionally, City staff hosted an informational booth at a summer Concert in the Park. An on-line community survey was also available for additional feedback on the concepts presented.

The concepts, along with the results of the community feedback from the workshop, pop-up event, and community survey were also presented at a City Council Joint Meeting with the Parks & Recreation Commission to solicit input and direction for developing the preferred master plan.

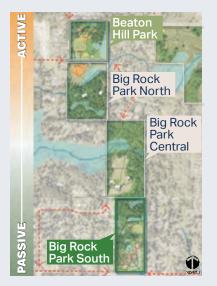


Community members review and provide feedback on concept alternatives



Community members review and provide feedback on concept alternatives

Overall Concepts



Concept 1: Gradient of Activities

The Gradient of Activities concept establishes an interconnected passive to active framework across the Big Rock/Beaton Hill Park system. Calm and passive engagement with nature through garden walks, trails, and picnic areas is the focus of Big Rock Park South. This continues through the existing Big Rock Park system leading up to the more active nature play in Big Rock Park North.

Beaton Hill Park anchors the active end of the gradient with a flexible open field and hillside play area, while still providing for more passive activities and trails.

Educational elements are integrated throughout the trails focusing on ecological features of the site, park history, and/or cultural interest.



Concept 2: Whimsy and Discovery

This concept weaves elements of whimsy and discovery throughout the Big Rock/Beaton Hill Park system. Playscapes and art are used as whimsical elements to celebrate nature and the distinct legacy of each park. These elements appeal to visitors of all ages and are arranged in a way that evokes the same whimsy and discovery that exists in many of the features of the site today.

Elements and activities are more dispersed throughout the system with the trails as the connecting thread between all the different elements of the parks.

Educational elements are integrated throughout the trails with stories, interpretive signs for natural areas, and as part of natural gardens.

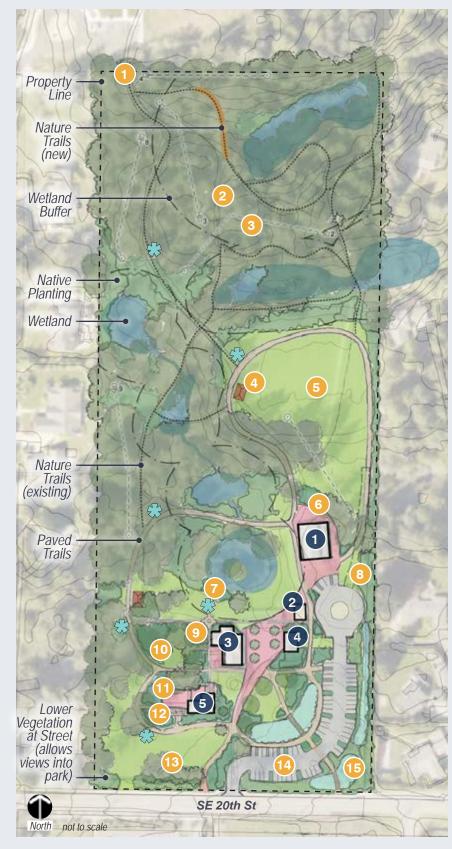


Concept 3: Playful Space for Everyone

This concept explores opportunities for playful spaces for everyone including all ages, abilities, and interests. Each park has its own program that adds to the variety of play throughout the park system. Play extends to the four-legged family members with an optional dog park in this concept.

Education is integrated along trails and provides passive recreation, focusing on wildlife viewing and habitat features throughout the park (where nature's creatures play), as well as historical or cultural interests.

Concept 1: Gradient of Activities



- 1 Primary Connection to Big Rock Central (entire boundary fence removed along north property line)
- 2 Existing Nature Trail Removed (to avoid disc golf conflict)
- 3 Disc Golf
- 4 Picnic Shelter
- 5 Open Lawn
- 6 Plaza (with accent paving)
- 7 Native Garden
- 8 Overflow Parking Access
- 9 Sensory Garden
- 10 Event Lawn
- 11 Pollinator Garden
- 12 Trellis
- 13 Apple Orchard (existing)
- 14 Parking and Drop-Off (+/- 50 stalls)
- 15 Stormwater
- Play areas
- 1 Barn Events and Meetings
- 2 Restroom New Structure
- 3 Residence Events and Meetings
- 4 New Garage Park Maintenance
- 5 Pool House Events and Meetings

Opportunities for quiet and calm engagement are integrated with nature in all the concepts shown, but this concept maximizes the passive nature of the park. Trails allow visitors to wander through gardens and wetlands, learning about the site's history and natural ecology. Plazas provide a clear entrance into the park, create a central gathering space, and take advantage of open views to the pond and garden areas. Parking in this concept showed the fewest number of total stalls, but also the least amount of development.

Play areas and a disc golf course are integrated along the trails creating interest for all ages to engage more directly with the surrounding natural systems. Disc golf continues into Big Rock Central to provide a full 9-hole course without impacting wetlands and their associated buffers.

The Old Garage is removed in this concept, reducing the impact to the wetland and allowing greater variation in the site grading to accommodate and channel stormwater naturally. All of the remaining structures would be improved for community or park maintenance use.

WHAT WE HEARD

People were happy that this concept kept much of the site passive and enhanced the existing conditions and natural character. There was interest expressed for garden spaces, passive trails, and event rentals. Others felt that this concept did not have enough activity or play opportunities. The smaller parking lot was preferred, but there were concerns about whether the parking lot capacity would be sufficient for larger events.

Likes:

- Preservation of nature
- Gardens
- Barn and residence used for event space
- Open space
- Parking layout
- Potential for formal events

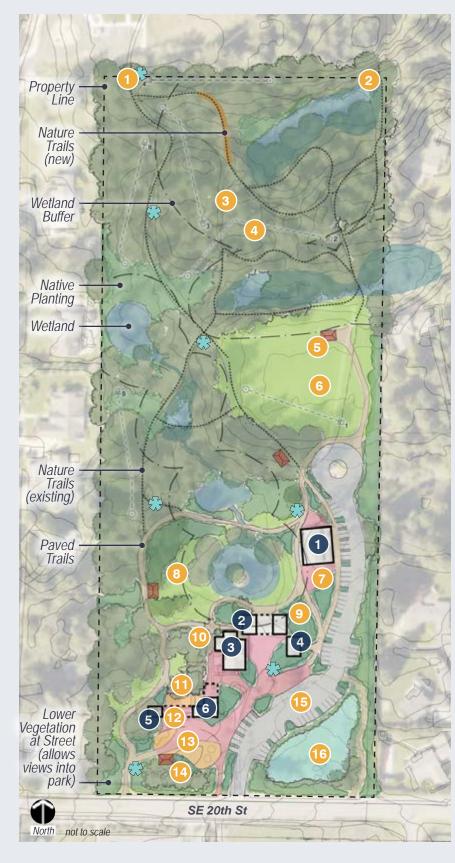
Dislikes:

- Too much open space/ not enough activity
- Potential impacts from event space
- Missing dog park
- Missing p-patch

How well does this concept meet your hopes and dreams for park improvements?



Concept 2: Whimsy and Discovery



- 1 Primary Connection to Big Rock Central (entire boundary fence removed along north property line)
- 2 Secondary Connection to Big Rock Central
- 3 Existing Nature Trail Removed (to avoid disc golf conflict)
- 4 Disc Golf
- 5 Picnic Shelter
- 6 Open Lawn (overflow event parking)
- Plaza (with accent paving)
- 8 Event Lawn
- 9 Native Garden
- 10 Pollinator Garden
- Sport Court (existing)
- 12 Trellis
- 13 Playscape / Sensory Garden
- 14 Apple Orchard (existing)
- Parking and Drop-Off (+/- 55 stalls)
- 16 Stormwater
- Whimsical Element (playful elements along trails; visual only in buffer)
- 1 Barn Events and Meetings
- 2 Old Garage Picnic Shelter
- 3 Residence Events and Meetings
- 4 New Garage Park Maintenance
- 5 Restroom New Structure
- 6 Pool House Events and Meetings

The design for Big Rock Park South in this concept focuses on enhancing the existing features and integrating elements of discovery that lead people of all ages through the park. Whimsical sculptures, natural features, and playful elements are woven into the gardens and trails and continue through the existing Big Rock Park Central and North as a defining feature connecting all the parks in this system. Parking in this concept is integrated into the site in a curvilinear form, extending past the barn and including a designated drop-off area.

All of the structures remain and are re-purposed for a variety of programs, opportunities and events. The Old Garage is largely reconstructed to transform it into an open picnic area. The Pool House, Barn, and Residence would be used for community events. The New Garage would be turned into a space for parks operations and maintenance.

Disc golf is incorporated along the trails, continuing into Big Rock Central to provide a full 9-hole course without impacting wetlands and their associated buffers.

WHAT WE HEARD

People were most exited about the play areas and whimsical elements shown in this concept. However, there was concern about the design and longevity of the whimsical elements. Other items that people liked were the reuse of the buildings and conversion of the old garage into a picnic shelter. People who wanted a passive feel to the park liked this concept, but others wished for more varied activities. Feelings on the parking were mixed as some liked the layout and others felt it was too large.

Likes:

- Play areas
- · Nature inspired whimsical elements
- Covered picnic areas
- Preserving the buildings
- Open space
- Accessibility
- Parking layout

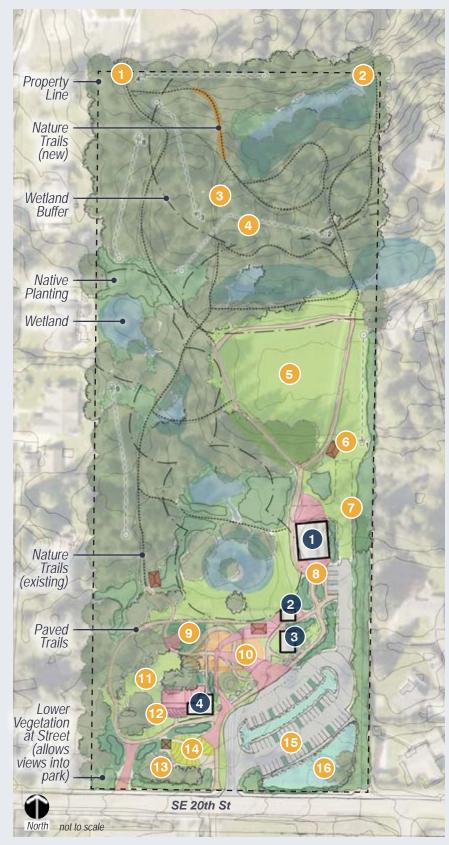
Dislikes:

- Missing p-patch
- Would like more activity
- Amount of paved area

How well does this concept meet your hopes and dreams for park improvements?



Concept 3: Playful Space for Everyone



- 1 Primary Connection to Big Rock Central (entire boundary fence removed along north property line)
- 2 Secondary Connection to Big Rock Central
- 3 Existing Nature Trail Removed (to avoid disc golf conflict)
- 4 Disc Golf
- 5 Open Lawn (overflow event parking)
- 6 Picnic Shelter
- 7 Emergency Vehicle Access
- 8 Plaza (with accent paving)
- 9 Pollinator / Native Garden
- 10 Universal Play / Sensory Garden
- 11 Event Lawn
- 12 Trellis
- 13 Apple Orchard (existing)
- P-Patch (fenced, with tool shed)
- Parking and Drop-Off (+/- 60 stalls)
- 16 Stormwater
- Barn Events and Meetings
- 2 Restroom New Structure
- 3 New Garage Park Maintenance
- 4 Pool House Events and Meetings

One of the main features of this concept is an extensive universal play area that considers all abilities and ages. The universal play spills into and integrates with picnic areas, sensory gardens, and small gathering spaces for a more holistic and multi-use character. This ensures the overall character doesn't feel like a single dedicated use of the space. The p-patch allows an additional opportunity for the community to actively engage in the park. Parking shown in this concept provides the largest number of stalls, primarily clustered in the southeast corner with a separate access drive for accessible parking by the Barn.

The existing Old Garage and Residence are removed to accommodate the universal play and integrated open space areas. The Barn and Pool House would be renovated to support community use. The New Garage would be used for park maintenance activities.

Disc golf is incorporated along the trails, continuing into Big Rock Central to provide a full 9-hole course without impacting wetlands and their associated buffers.

WHAT WE HEARD

In this concept, the community liked the universal play component and providing play opportunities for all ages and abilities, along with the addition of a P-patch. However, there was mixed feedback about removing the Residence for a universal play area. People preferred the Residence be removed if it was not feasible to adapt for community space. Lastly, the parking layout in this concept was the least preferred because it dominated the southern portion of the park.

Likes:

- Universal play
- P-patch
- Reuse of barn
- Open space
- Something for everyone

Dislikes:

- Removal of the residence
- Traffic impacts
- Size and layout of parking

How well does this concept meet your hopes and dreams for park improvements?



Community Survey #2

Outreach Results



Ethnic Background

14%

3%

2%

5%

20%-

38% live within 1 mile of the parks

88% live in Sammamish

White or Caucasian

Hispanic or Latino

Pacific Islander

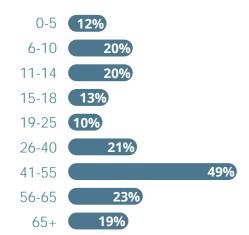
Other entries

Prefer not to say

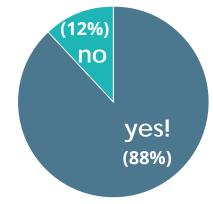
Asian or Asian American

Native Hawaiian or other

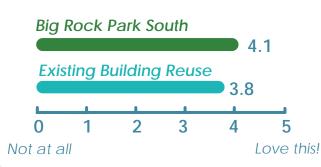
Age Range



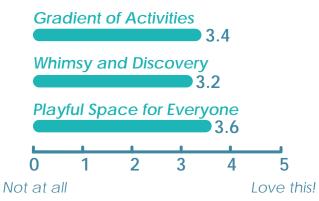
Have you ever visited Big Rock Park?



How well does the park program shown meet your hopes and dreams for park improvements?



How well does this concept meet your hopes and dreams for park improvements?



Survey Comments

Support for:

- · Connected trails and open space
- Passive engagement
- Preservation of natural areas
- Whimsical elements with some concern for maintenance
- Integrating educational and interpretive elements
- Considering all ages and abilities
- Disc golf (slightly more supported than opposed)
- Additional gardens (native, pollinator, educational, etc.)
- · Reuse of buildings except for Old Garage
- Indoor spaces for community groups
- Universal play

Concerns for:

- Environmental impacts and loss of habitat
- Noise and traffic impacts to surrounding neighbors
- · Cost and maintenance of reusing buildings
- Adequate parking vs. too much pavement
- · Pedestrian safety with disc golf course

Beaton Hill and Big Rock Park system are the true "green spine" of Sammamish. Please keep it green and passive use.

I'd really like to make sure that all trails are handicap accessible. Can a child in a wheelchair get around?

Open House Comments

Support for:

- Nature trails and trail connections
- P-patch with slightly more support for Beaton Hill location
- Plazas and gathering with additional support for covered gathering spaces
- Disc golf (evenly supported and opposed)
- Open space
- Nature preservation
- Universal play
- Retaining all buildings except Old Garage
- Building use for community events, indoor recreation, and event rental

Concerns for:

- Environmental impacts and the amount of paved areas
- Adequate parking
- Impacts to or loss of trails
- Pedestrian safety with disc golf course



Preferred Master Plan

A preferred master plan was developed based on the feedback received during the previous public outreach process, including comments received from the Parks & Recreation Commission and City Council. The preferred master plan, along with supporting graphics and potential phasing, was presented at a public workshop, at an information booth during the Lunar New Year celebration, and at a pop-up event at Big Rock Park South. An on-line community survey was also available for additional feedback on the preferred master plan.

The preferred master plan, along with the results of the community feedback from the workshop, popup event, and community survey were presented at a joint meeting of City Council and the Parks & Recreation Commission to solicit input and reach consensus on the preferred master plan in order to begin the non-project SEPA process and develop the final master plan.

Concept Overview

The preferred master plan for Big Rock Park South is designed to reinforce the passive, natural environment of the existing property while allowing more flexible uses for all ages and abilities. The proposed improvements include:

- Parking lot (55 stalls total)
- Universal play areas (accessible and inclusive play elements)
- Picnic shelters and tables
- Seating and gathering areas
- Open meadow for flexible events, lawn games, etc.
- Optional space for 9-hole disc golf course (with 3 holes integrated into Big Rock Park Central)
- Garden areas to highlight botanical names and plant characteristics (pollinators, natives, etc.)

Interpretive signage would be included in key areas along the trail and/or in gathering areas to highlight the natural environment, gardens, and/or history of the site. Whimsical elements are also integrated along the trail and open space areas to add a playful and interactive experience to park.

The central pond nearest to the existing structures would remain largely as-is with gardens and open space around the south and east sides. Native planting would buffer the north and west sides of the pond. The remaining wetlands and their associated buffers would be restored to support the natural processes and habitat of these areas. Grading and overflow improvements are proposed for the central pond to help control flooding that currently occurs during major storm events.

Trails

Trails that directly impact existing wetlands will be removed, and these areas will be restored with native plantings to enhance wetland functions and improve habitat. There is also one trail that would conflict with the proposed disc golf fairways that would be removed with the future development of a disc golf course. The remainder of the trails would be left in-place. The existing 'main street' trail connecting Big Rock South to Big Rock Central is proposed to be widened to up to 10 feet wide. This is currently proposed as a crushed rock trail but could be paved to improve accessibility between the Big Rock Parks system in the future. Paved accessible trails are included in the design to provide access to all major park features and create a series of interconnected loops, including a loop trail around the open meadow. Informal woodland trails, similar in scale to the existing trails, are proposed through the forested areas to integrate new park improvements into the existing trail system.

Preferred Master Plan



- 1 Primary Connection to Big Rock Central (entire boundary fence removed along north)
- 2 Disc Golf (optional)
- 3 Existing Nature Trail Removed (to avoid disc golf conflict)
- 4 Nature Trails (existing)
- Nature Trails (new)
- 6 Picnic Shelter
- Open Meadow
- 8 Paved Trails
- 9 Event Lawn
- 10 Universal Play Areas
- Parking Lot (55 stalls total)
- Stormwater
- 13 Native Planting
- Whimsical Element

Plan Enlargement



- 1 Barn
- 2 Picnic Shelter
- Open Lawn
- 4 Ornamental Gardens (existing)
- 5 Residence

- 6 Picnic Pavilion
- 7 Restroom
- 8 Maintenance Garage
- 9 Garden Areas (pollinator, native, etc.)
- 10 Plaza (with accent paving)

- 11 Pool House
- 12 Universal Play Areas
- 13 Apple Orchard (existing)
- 14 Maintenance Access
- Whimsical Element

Structures

Of the existing structures, only the Old Garage is removed. The Old Garage is in generally poor condition and currently encroaches on the wetland buffer for the Central Pond. The remaining buildings are renovated for new uses with the Residence, Barn, and Pool House used for community meetings and events supporting a variety of sizes. The New Garage is re-purposed into a parks maintenance building. The Old Garage is replaced with a central Picnic Pavilion to support larger outdoor group gatherings and frames the view of the Central Pond from the main entry courtyard and plaza space.

The maximum occupancy for all of the buildings combined exceeds the available parking, so limitations on scheduling and programming the buildings will need to be put in place in order to avoid multiple events at any given time that would exceed the parking lot capacity. Larger events will also need to consider overflow parking and other measures to support access to the event without disrupting general park use. The open meadow is located just north of the parking lot turnaround in part to allow the potential of overflow parking in this area, if needed.

A series of smaller picnic shelters are located around the trails and in the open meadow.

Universal Play Areas

Universal play includes a combination of natural elements, site furnishings and play features to appeal to all ages and abilities. Elements are accessible and fully integrated seamlessly into the play space. The overall character and design of a fully inclusive universal play area often includes a combination of plazas, play features, nature, and tactile elements focusing on the full spectrum of senses. They include more active areas, as well as passive and imaginative areas.

Whimsical Elements

These are intended to be art elements in the landscape, plazas, trails, and open space areas. They are playful, imaginative features that create a strong sense of place, a unique experience, and inspire a sense of natural wonder. They should fit within the natural character of the park and can occur in tandem with other park features or be a stand-alone element in the landscape.

Garden Areas

One of the most defining features of Big Rock Park South as it exists today is the variety of gardens and open space throughout the park. The proposed master plan would enhance these garden spaces with educational signage to highlight the function and benefit of the gardens to the ecology of the site, such as pollinator gardens, wetland plants, native gardens, and drought-tolerant species. Plant identification and information on use and care could also be expanded on in the garden areas.

Community Survey #3



Ethnic Background

5%

5%

1%

10%-

36% live within 1 mile of the parks

73% live in Sammamish

White or Caucasian

Hispanic or Latino

Pacific Islander

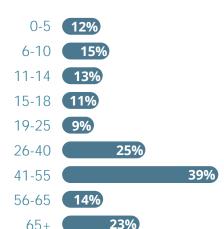
Other entries

Prefer not to say

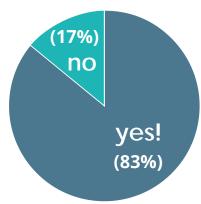
Asian or Asian American

Native Hawaiian or other

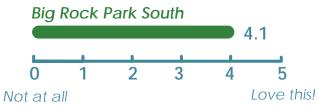
Age Range



Have you ever visited Big Rock Park?



How well does the concept for Big Rock Park South represent your hopes and dreams?



Please rank the phases in order of highest priority to least priority.

#1 Trails and Restoration

#2 Central Park Improvements

#3 Meeting and Event Areas

#4 Universal Play

Outreach Results

Comments

Continued support for:

- Open space and passive activities
- Universal play
- Garden areas
- Disc golf
- Preserving natural areas and trails
- Trails (accessible and soft surface)
- Picnic Pavilion
- Reuse of existing buildings
- Trails and restoration preferred as initial phase, followed by the central park improvements, meeting and event areas, and the universal play area (in that order)

Disc golf is definitely an interest, it's great exercise for teens/adults.

Love the whimsical elements.

Love it! It's got things for everyone...
love the picnic pavilion, open
meadows, universal play..., garden
area and native plants...

Comments

Items to consider in final design:

- Design and integration of disc golf in relation to other programmatic uses and trail locations
- Design and visual impact of stormwater systems
- Design and maintenance of whimsical elements
- Lighting impacts
- Collaboration with community groups for building use and garden areas

I can see having lighting here for evening building use as long as there is limited spill over to the areas left wild

I like how the natural areas and trails are largely preserved. However, any installation of disc golf will need to be isolated so it does not interfere with walkers, event guests, and other passive park users...

> I hope there's plenty of play area and equipment for kids of all abilities.

Final Master Plan

Process Overview Final Master Plan

Plan Elements

Enlargement Plan

Enlargement Plan Elements

Structures

Process Overview

The final Master Plan was developed based on feedback received during the public outreach process. The estimated cost of construction was refined, and the implementation plan updated to reflect the final Master Plan. A draft of the Master Plan, with implementation phases and cost estimates, was presented to the Parks & Recreation Commission on February 1, 2023, and again at a joint meeting with the City Council on March 14, 2023.

Comments from the Parks & Recreation Commission were integrated into the plan, and the final Master Plan was recommended for action to the City Council. The Commission recommended the plan be approved to proceed through the State Environmental Protection Act (SEPA) with the preparation of a Non-Project SEPA Checklist. On March 14, 2023, the City Council authorized City staff to proceed through the SEPA process with the preferred master plan design as it was presented.

A SEPA Checklist was developed based on the preferred Master Plan for the park. Upon careful review and an open public comment period, a determination of non-significance was issued by the City of Sammamish on May 23, 2023 (see Appendix D).



Final Master Plan



- Primary Connection to Big Rock Central (entire boundary fence removed along north)
- 2 Disc Golf (optional)
- 3 Existing Nature Trail Removed (to avoid disc golf conflict)
- 4 Existing Nature Trail to Remain
- Nature Trails (new)
- 6 Wetlands
- Wetland Buffers
- 8 Open Meadow
- 9 Paved Trails
- 10 Picnic Shelters
- Parking Lot (55 stalls total)
- Whimsical Element

Plan Elements

- 1 Primary Connection to Big Rock Central. The primary trail connection to Big Rock Park Central remains in its current location, with the boundary fence between Big Rock Park Central and South removed. The northeast trail connection is decommissioned.
- 2 Disc Golf (optional). The disc golf course is expected to occur along the edges of the forested areas, open meadows, and lawn areas. It will need to be carefully planned to avoid conflicts with adjacent uses, including people on the trails. As such, it is indicated as an optional programming element with the understanding that a full 9-hole course may not be possible. Currently, 5 holes are planned for Big Rock Park South, with the remaining 4 holes to occur along the trails and open space areas on Big Rock Park Central.
- 3 Existing Nature Trail Removed. Trails that directly impact existing wetlands will be removed and restored to protect wetland functions and habitat. There is also one trail that would conflict with the proposed disc golf fairways that would be removed for future development of a disc golf course.
- 4 Existing Nature Trail to Remain. The remainder of the existing trails, outside of the trails identified for removal shown above, would be left in-place. Trails within the existing wetland buffers can be maintained in their current form (surfacing, use and width). Minor vegetation management may be needed over time to ensure appropriate sight-lines are maintained along all trails throughout the park system.
- 5 Nature Trails (new). New nature trails are proposed to connect existing trails to new park features and replace connections from trails that needed to be removed (see above). These trails are anticipated to be soft surface (such as mulch) or crushed rock.
- Wetlands. All existing wetlands will remain and be enhanced where needed to support wildlife habitat and ecological systems already in place. Any impact from removal of existing trails within wetlands will be restored per current City and other agency requirements. The north side of the Central Pond will be restored with native planting, but the south side will remain in its more maintained garden character.
- Wetland Buffers. Wetland buffers will be restored with native planting, except along the southern portion of the Central Pond as indicated above. Trails within wetland buffers will remain in the outer 25% of the buffer as allowed per the City's requirements to the extent feasible. Any portions of the disc golf course that fall within the wetland buffer, or any portion of the trail system that extends beyond the 25% outer limit, will need to be mitigated for with buffer averaging or buffer creation in other areas. A fence may be placed around wetland buffer areas where pedestrian access is not intended.
- Open Meadow. The open meadow will remain in place with minor improvements to facilitate community use for family gatherings and informal recreation. Per the restrictive covenants on the property, the open meadow will not be striped or improved for any specific single sport or programmed use. The meadow may be used as overflow parking for larger organized events pending future considerations and improvements to support its occasional use for this purpose.
- Paved Trails. Accessible trails will be provided throughout the park, connecting the parking to all the major programmatic spaces and buildings on the site. Street frontage improvements will include a new sidewalk and a planter strip along SE 20th Street.

Final Master Plan Enlargement



- 9 Paved Trails
- 10 Picnic Shelter
- Parking Lot (55 stalls total)
- 12 Plaza (accent paving)

48

- 13 Event Lawn
- Garden Areas
 (pollinator, native, etc.)
- 15 Universal Play Areas
- 16 Apple Orchard (existing)
- awn
- Lower Vegetation
 (at street for views into park)
- 18 Stormwater Pond
- 19 Buildings (see next section)
- Whimsical Element

Enlargement Plan Elements

- Picnic Shelters. These structures are open picnic shelters, large enough for approximately 4 picnic tables. They are intended to allow greater flexibility for use by smaller groups, such as birthday parties or other similar gatherings of family and friends.
- Parking Lot (55 stalls total). The proposed parking on the site includes 55 total parking stalls, 10 of which are accessible. There are two drop-off areas; the first is adjacent to the park's central plaza space, and the second is located near the Barn. At the north end of the parking lot, there is a large turn-around to allow for emergency vehicle and fire access and includes parallel parking adjacent to the open meadow.

- Plaza (accent paving). Plazas reinforce the sense of entry into the park and create a place for gathering and community engagement. These would be enhanced with seating, picnic tables, and special paving to support the overall character of the site.
- Event Lawn. Open lawns are proposed around the buildings and central open space areas to allow for flexible informal use in the form of picnicking or lawn games, as well as some spill-over use during community events or with the use of the adjacent buildings. These lawn areas would be the only irrigation lawn anticipated in the park.
- Garden Areas. One of the most defining features of Big Rock Park South as it exists today is the variety of gardens and open space throughout the park. The final master plan will enhance and add to these garden spaces with educational signage to highlight the ecological benefit of the gardens or their unique functions, such as pollinator gardens, wetland plants, native gardens, and drought-tolerant species. Plant identification and information on use and care could also be expanded on through signage in the garden areas.
- Universal Play Areas. Universal play includes a combination of natural elements, site furnishings, and play features to appeal to all ages and abilities. Elements are accessible and fully integrated seamlessly into the play space. The overall character and design of a fully inclusive universal play area often includes a combination of plazas, play features, nature, and tactile elements focusing on the full spectrum of senses. They include more active areas as well as passive and imaginative areas.
- **Apple Orchard (existing).** The existing apple orchard would remain with open lawn around the apple trees. This area will retain much of the existing character and create a gradual transition from the street into the park.
- Lower Vegetation (at street for views into park). The large hedge that currently lines SE 20th Street will be reduced or replaced with lower growing vegetation in order to establish clear sight lines into the park for the safety and security of park users.
- Stormwater. Stormwater will include a combination of low-impact development and natural drainage techniques to direct and infiltrate stormwater to the extent practical. A large stormwater pond will be used to treat and detain the majority of the stormwater before it is released into the City's stormwater system in the SE 20th Street right-of-way. Replacement of the manual valve that currently controls flows off the site, in addition to some regrading of the site around the residence, is proposed to help control seasonal flooding that currently occurs in these areas. See Appendix G for additional detail on the proposed stormwater design.
- Buildings. With the exception of the Old Garage, all other existing buildings will remain and be improved for community and/or park maintenance use. The Old Garage is replaced with a central Picnic Pavilion. A new public restroom is proposed as an exterior addition to the Maintenance Garage. See the next section for more details on the proposed building use.
- Whimsical Element. These are intended to be sculptural and sometimes interactive art elements in the landscape, plazas, trails, and open space areas. They are playful, imaginative features that create a strong sense of place, a unique experience, and inspire a sense of natural wonder. They should fit within the natural character of the park; be durable, vandal resistant, and easy to maintain; and can occur in tandem with other park features or be a stand-alone element in the landscape.

Structures



- 1 Barn
- 2 Residence
- Maintenance Garage / Restroom
- 4 Picnic Pavilion
- 5 Pool House

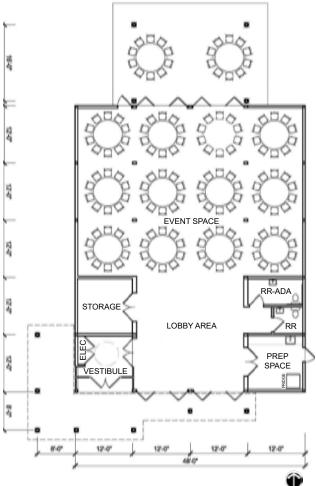
Many of the buildings have added outdoor plazas and open space to maximize the flexibility and use of these areas for a variety of events.

- The Barn has a new trellis on the south end to help define the entry, and a covered outdoor space on the north to allow larger outdoor gathering areas and the ability to expand events.
- The Pool House has a courtyard, an expanded arbor, and an event lawn located just to the north and west of the building.
- The walkways and paths leading to the Residence are widened and allow space for an accessible ramp to the main entry and front porch area. Access to the porch is maintained adjacent to the interior meeting space to also allow flexible indoor / outdoor use.

of events with an approximate occupancy of up to 100 – 150 people. The existing chicken coop will be removed, but elements of the stained-glass windows in the current chicken coop may be re-purposed as one of the whimsical elements for passive play in the universal play area. The second floor area is removed in the proposed plan to allow for a grander, open entry and greater flexibility for future uses. A restroom, event prep space, and storage areas are also added. New sliding barn doors and windows create a more inviting space and improve the indoor / outdoor use.



Barn - Architectural rendering looking south



Barn - Proposed Floor Plan not to scale

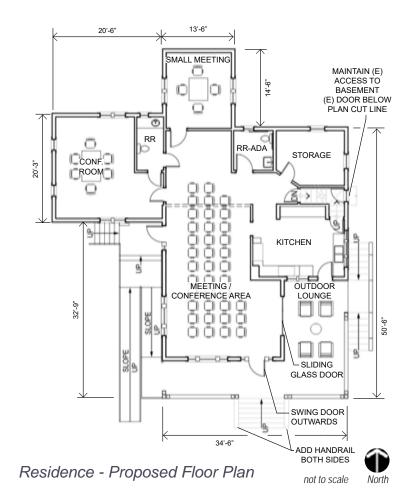




Barn - Architectural rendering looking northeast

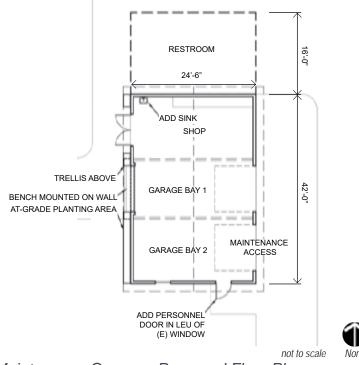
50

Residence. A structural analysis was conducted on the existing Residence to help determine the viability of keeping this structure for future use. The analysis supports the feasibility of re-using this building and providing accessibility and seismic upgrades needed for the intended use. The proposed improvements will allow for community meetings and events with an anticipated capacity of 50 - 100 people. The second level of the Residence will not be accessible and used as a storage area only. The kitchen will be used as a catering kitchen and is not intended to meet the requirements of a full commercial kitchen. A new sliding door will provide better access to the porch for indoor / outdoor events. Site improvements should help reduce the amount of flooding that currently occurs in the basement of the Residence, but some flooding during larger storm events may still occur.



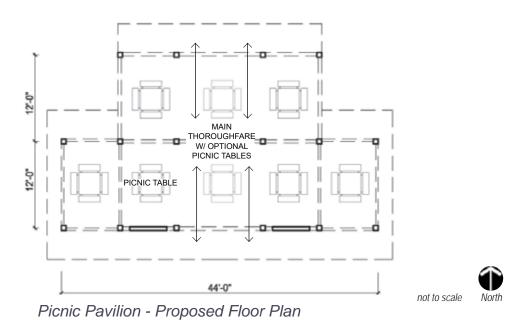
MaintenanceGarage/Restroom.

The existing New Garage will be improved to create a parks maintenance storage and shop area. A new public restroom is proposed on the north end of the existing structure accessible from the exterior trail system. The new restroom will be designed to be integrated into the overall character of the park's existing buildings.

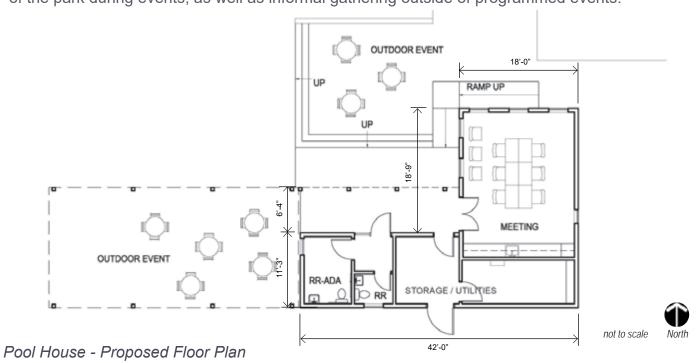


Maintenance Garage - Proposed Floor Plan

Picnic Pavilion. A new large Picnic Pavilion is located where the old garage was originally located. The new structure will be entirely outside the wetland buffer. The Pavilion is sized to support group picnic with up to 8 picnic tables, still allowing for clear access and views through the Pavilion. A small plaza is designed between the Pavilion and the pond to create an overlook area.



Pool House. The Pool House improvements will create one small meeting room with two restrooms (one accessible) and a separate storage / utility room. A new trellis or covered arbor is proposed to the west of the Pool House to create a larger outdoor gathering area and the ability to expand events or meetings beyond the interior capacity of 15 – 20 people. A secondary outdoor plaza space is also adjacent to the trellis and Pool House and replaces the existing sport court. This allows for maximum flexibility, capacity, and use of this area of the park during events, as well as informal gathering outside of programmed events.



Implementation

Phasing Plan Cost Estimates

Estimated Cost of Construction

Operations & Maintenance Costs

Permitting
Grant Funding

Phasing Plan

This diagram shows the overall phased development plan with four different phases of construction. The cost estimate for each phase of construction is included in the following pages.



Central Park Improvements

- Parking lot and stormwater
- SE 20th Street frontage improvements
- Picnic Pavilion
- Maintenance Garage
- Open meadow
- Walkways and trails

Trails and Restoration

- Flooding improvements
- Walkways and trails
- Picnic shelters
- · Trail removal in wetlands
- Optional disc golf

Meeting and Event Areas

- Residence
- · Gardens and event lawn
- Barn and plaza space
- Pool House and plaza space

Universal Play

- Universal play areas
- Walkways and trails
- Whimsical elements

Cost Estimates

Estimated Cost of Construction

The estimated cost of construction is shown below. The first table shown below represents the total project construction cost if the entire Final Master Plan were developed as a single phase. The second table breaks down the estimated cost of construction into the potential phases previously described (shown in no particular order). All costs are shown in 2023 dollars without any escalation included. Detailed documentation of estimated costs for construction are included in Appendix J.

| Overall / Single Phase | | | |
|---|---------------|--|--|
| ITEM | TOTAL | | |
| Demolition & Site Preparation | \$ 120,900 | | |
| Earthwork | \$ 125,600 | | |
| Site Civil & ROW | \$ 1,353,900 | | |
| Paving & Walls | \$ 818,500 | | |
| Site Improvements | \$ 2,383,800 | | |
| Buildings | \$ 2,861,500 | | |
| Planting | \$ 1,582,800 | | |
| Subtotal | \$ 9,247,000 | | |
| Construction Total with Sales Tax, Contingency, and Contractor Mark-ups | \$ 14,341,700 | | |
| Total Project Cost with Design and Permitting | \$ 17,210,000 | | |

| Phased Implementation* | | | |
|---------------------------------------|---------------|--|--|
| ITEM | TOTAL | | |
| Central Park Phase Total Cost | \$ 9,165,700 | | |
| Trails & Restoration Phase Total Cost | \$ 1,533,700 | | |
| Meetings & Events Phase Total Cost | \$ 3,293,900 | | |
| Universal Play Phase Total Cost | \$ 3,763,700 | | |
| Total Project Cost for all Phases | \$ 17,757,000 | | |

^{*}Totals for each phase are inclusive of sales tax, contingency, contractor mark-ups, design, and permitting.

Operations & Maintenance Costs

The estimated full time equivalent (FTE) hours shown below are based on level of effort for maintaining similar types of parks and facilities in the City of Sammamish. Maintenance of these facilities is based on regular maintenance activities such as cleaning, trash/recycle collection, vegetation management, and light repair of park improvements. Specific building maintenance activities will also be needed, unique to this park site. Occasional resurfacing of trails and materials used for the play areas is also included. Maintenance of the garden areas will also be needed with potential partnership opportunities that may be considered to support regular garden maintenance.

Please note that contracted and purchased services, including but not limited to, janitorial, landscaping, plumbing, and electrical, are not included in the costs. Major repair and/or replacement of park features, like replacing playground structures, major building repair or improvements, and repair/replacement of picnic shelters, is not included.

| | FTE Hours Per Year (2,080 total hours/year) | |
|-------------------|--|--|
| Nature Trails | 750 hours (0.4 FTE) | |
| Park Improvements | 1,600 hours (0.8 FTE) | |
| Buildings | 550 hours (0.3 FTE) | |

Nature Trails

Nature trails maintenance includes the non-paved trails and the optional 9-hole disc golf course, recognizing some of the disc golf holes would be located in Big Rock Park Central.

Park Improvements

Maintenance for park improvements includes paved trails, plazas, play areas, open meadow, planting areas, restored wetlands, stormwater features, event lawn, and ornamental gardens. The ornamental gardens and event lawn provide opportunities for public, private, and formal event rentals requiring additional maintenance.

Buildings

The buildings proposed for the site include the Barn, Residence, Pool House, Maintenance Garage, Picnic Pavilion, picnic shelters, and restroom. The Barn, Residence, Pool House, Picnic Pavilion, and picnic shelters provide opportunities for community, public, and private events to supplement or cover maintenance and operations costs.

Permitting

The following matrix summarizes potential permits needed for project development including permitting agencies, requirements, and triggers for the master plan including state, federal and local permitting requirements.

| Permitting Matrix | | | |
|--|--|--|--|
| Potential Permit | Improvement | | |
| Critical Areas Study | Trails or boardwalks within the outer 25% of the wetland buffers | | |
| Site Development Permit - Department of Community Development | Play area, trails, parking, etc general new construction | | |
| Building Permit - Department of Community Development | Buildings (new and renovations), picnic structures, retaining walls, ramps/stairs, handrails | | |
| Plumbing / Mechanical Permit - Department of Community Development | Buildings (new and renovations) | | |
| Electrical Permit - Department of Community Development | Buildings (new and renovations) | | |
| Sign Permit - Department of Community Development | Park standard monument sign at entrance | | |
| Demolition Permit - Department of Community Development | Existing Old Garage | | |
| SEPA Review Process | Any new development | | |
| Utility Permits / Approvals - PSE and Sammamish Plateau Water | Obtained through each utility company | | |
| Hydraulic Project Approval (HPA) | Dock and any removal in wetlands | | |

The final Master Plan was reviewed with the utility and easement agencies with no concerns raised and general agreement with the improvements shown in the Master Plan. Comments from the relevant agencies are included in Appendix F.

Grant Funding

Below is a matrix listing a selection of grant opportunities available to this park development. This is not a list of all of the options, as there are many grants for smaller items such as the playground equipment, but this shows some of the larger grants that could help fund the major components of the park improvements.

| Grant Matrix | | | | |
|--|--|--|--|--|
| Grant / Agency Land & Water Conservation Fund / Washington State Recreation & Conservation Office | Funding Grant Limit: \$2,000,000 (state projects) Match: 50% | Schedule Available in even years / approximate 18-month evaluation process | Funded Element Develop or renovate recreation areas and support facilities | |
| Local Parks / Washington State Recreation and Conservation Office (WWRP) | Grant Limit: \$500,000 (development) Match: 50% | Available in even years / approximate 18-month evaluation process | Develop or renovate recreation areas and support facilities | |
| Community Development Block Grant / Washington State Department of Commerce (not currently available to City of Sammamish) | Grant Limit: \$ 750,000 (development) Match: none required | Available annually | Projects must principally benefit low- and moderate-income persons | |
| Land & Water Conservation Fund / Washington State Recreation & Conservation Office / Legacy Program | Grant Limit: \$9,580,000 Match: 50% | Available in even years / approximate 18-month evaluation process | Develop recreation areas in urban areas with over 50,000 population | |

Appendices

Appendix A: Wetland Study Reports

Appendix B: Critical Areas Memo

Appendix C: Restrictive

Covenant Documentation

Appendix D: SEPA

Appendix E: Master Plan
Alternatives

Appendix F: Permitting
Comments from
Sammamish Plateau
Water

Appendix G: Stormwater & Utilities Memo

Appendix H: Structural Evaluation Memo

Appendix I: Existing and Proposed Building Layouts

Appendix J: Cost Estimates

Appendix K: Presentation

Meeting Agendas & Notes

Appendix L: Resolution
Adopting the Big Rock
Park South Master Plan

Appendix A: Wetland Study Reports

- A.1 Wetland Delineation Report, Parcel C (2018)
- A.2 Wetland Reconnaissance Report (2021)
- A.3 Off-Site Wetland and Stream Reconnaissance Report (2022)



March 28, 2018

Shelby Perrault
Parks Project Manager
City of Sammamish
801 228th Avenue SE
Sammamish, WA 98075
Via email: SPerrault@sammamish.us

Re: Big Rock Park, Parcel C, Wetland Delineation Report

The Watershed Company Reference Number: 161134.5

Dear Shelby:

On March 19, 2018, Senior Ecologist Ryan Kahlo, PWS, and Ecologist, Logan Dougherty, visited the northern portion of Parcel C in Big Rock Park (Parcel 0424069153) to screen for jurisdictional wetland and streams within a defined study area. This letter summarizes the findings of the study and details applicable federal, state, and local regulations. The following documents are enclosed:

- Wetland Delineation Sketch
- Wetland Determination Data Forms
- Ecology Rating Form and Figures

Methods

Public-domain information on the subject properties was reviewed for this delineation study and include the following:

- USDA Natural Resources Conservation Service, Web Soil Survey (WSS) application
- U.S. Fish and Wildlife Service National Wetland Inventory (NWI) maps
- Washington Department of Fish and Wildlife interactive mapping programs (PHS on the Web, SalmonScape)
- Washington Department of Natural Resources, Forest Practices Application Mapping Tool (FPARS)

- Washington Department of Natural Resources, Wetlands of High Conservation Value Map Viewer
- King County's GIS mapping website (iMAP)

Characterization of climatic conditions for precipitation was determined using the WETS table methodology from the *USDA NRCS document Part 650 Engineering Field Handbook, National Engineering Handbook, Hydrology Tools for Wetland Identification and Analysis, Chapter 19* (September 2015). The Seattle-Tacoma International AP station as recorded by NOAA from 1981-2010 (http://agacis.rcc-acis.org/) was used as a source for precipitation data. The WETS table methodology uses climate data from the three months prior to the site visit month to determine if normal conditions are present.

Wetlands

The study area was evaluated for wetlands using methodology from the *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Western Mountains, Valleys, and Coast Region Version 2.0* (Regional Supplement) (US Army Corps of Engineers [Corps] May 2010). Wetland boundaries were determined on the basis of an examination of vegetation, soils, and hydrology. Areas meeting the criteria set forth in the Regional Supplement were determined to be wetland. Soil, vegetation, and hydrologic parameters were sampled at several locations along the wetland boundary to make the determination.

Identified wetlands within the property were classified using the 2014 *Update to the Western Washington Wetland Rating System* (Publication #14-06-029) (Rating System).

Streams

The study area was evaluated for streams based on the definition defined under the Sammamish Municipal Code (SMC) 21A.15.1240.

Findings

The subject property is a historic farm property that is generally undeveloped within the limited study area. The study area is located within Section 04, Township 24 North, Range 04 East; East Lake Sammamish Drainage Basin; Cedar-Sammamish Water Resource Inventory Area (WRIA 8). The study area is dominated by second- and third-growth Douglas-fir and bigleaf maple trees, with a relatively sparse understory that includes mowed grasses, sword fern, salal, and bracken fern. A series of foot trails meanders through the property.

Public-domain information on the subject properties was reviewed for this study and include the following, as summarized in Table 1.

Table 1. Summary of online mapping and inventory resources.

| Resource | Summary |
|--|---|
| USDA Natural Resources Conservation Service, Web Soil Survey (WSS) application | Alderwood gravelly sandy loam, 8 to 15 percent slopes and Alderwood gravelly sandy loam, 15 to 30 percent slopes |
| U.S. Fish and Wildlife Service National Wetland Inventory (NWI) maps | No wetlands or streams mapped |
| Washington Department of Fish and Wildlife, Priority Habitats and Species (PHS on the Web) | No priority habitat or species |
| Washington Department of Fish and Wildlife, SalmonScape | No salmonids mapped within project site. Documented kokanee salmon presence in Ebright Creek, approximately one mile downstream. |
| Washington Department of Natural Resources, Forest Practices Application Mapping Tool (FPARS) | No streams mapped |
| King County's GIS mapping website (iMAP) | No wetlands or streams mapped |
| WETS weather conditions based on precipitation from the prior three months | Normal |

Wetland A

Wetland A is a depressional wetland located in the northeast corner of the study area. Wetland A supports palustrine scrub-shrub and emergent vegetation communities. Substantial open water areas are also present. Prevalent vegetation includes spirea, water parsley, and creeping buttercup. The soil in Wetland A is a greyish brown (2.5Y 5/2) silty loam with redoximorphic features present. The soil satisfies the criteria for the hydric soil indicator, Depleted Matrix (F6). The water table along the wetland edge was five inches below the soil surface, but nearly the entire wetland was inundated at the time of the inspection. Wetland A drains via a culvert beneath a footpath onto the

adjacent property to the east (Parcel # 0424069230), where it develops more stream-like characteristics.



Figure 1. Wetland A, facing southeast

Streams

No streams are located within the study area. No evidence of erosive flows, channels, ditches, or rills were observed in the study area. As discussed above, Wetland A discharges onto the adjacent property to the east. While access was not granted to enter adjacent private properties, visual observations from the subject property suggest that below the culvert outfall, flow from Wetland A becomes stream-like. It is presumed, although not confirmed, that a stream channel continues towards the north, eventually discharging into the Ebright Creek headwater wetland system, approximately 800 feet to the north.

Local Regulations

Wetlands in Sammamish are classified as one of four categories based on the Rating System. Under the Rating System, Wetland A received seven points for water quality functions, five points for hydrology functions, and eight points for habitat functions, for a total of 20 points. This score qualifies Wetland A as a Category II wetland. Wetland buffers are based on a combination of the wetland category and the habitat score. A

Category II wetland with a habitat score of eight points or greater requires a 150-foot buffer (SMC 21A.50.290[2]). An additional 15-foot building setback is required beyond the edge of the buffer. Impervious ground surfaces are allowed in the setback, although such improvements may be subjected to special drainage provisions (SMC 21A.50.210[4]).

Table 2. Summary of wetland rating scores, classification, and standard buffer widths per SMC 21A.50.290(2).

| | Water Quality | Hydrologic | Habitat | Total | Category | Standard Buffer Width |
|-----------|------------------|------------|---------|-------|----------|-----------------------------|
| Wetland A | 5 | 7 | 8 | 20 | II | 150 feet |

The potential off-site stream could not be evaluated in a manner sufficient to determine presence/absence of fish habitat, and no public inventory information is available. However, the largest stream buffer under SMC 21A.50.330(1) is 150 feet. Given the configuration of Wetland A and the potential off-site stream, the buffer from Wetland A would be more encumbering to the southwestern portions of Parcel B, where the planned site improvements are proposed, regardless of stream classification.

Wetland buffers may be averaged in accordance with SMC 21A.50.290.7, provided the following criteria are satisfied:

- (a) It will provide additional protection to wetlands or enhance their functions, as long as the total area contained in the buffer on the development proposal site does not decrease (see also SMC <u>21A.30.210(5)</u> for buffer compensation requirements for trails);
- (b) The wetland contains variations in sensitivity due to existing physical characteristics or the character of the buffer varies in slope, soils, or vegetation, and the wetland would benefit from a wider buffer in places and would not be adversely impacted by a narrower buffer in other places;
- (c) The buffer width is not reduced to less than 50 percent of the standard buffer width at any location;
- (d) The buffer width is decreased on one part of a wetland and increased on another part of the same wetland feature; and
- (e) The buffer is associated with a development proposal and it will not further encumber a neighboring property not owned by the applicant.

(f) Buffer averaging may be used in conjunction with buffer reduction options in this section, provided the total combined reduction does not reduce the buffer to less than 50 percent of standard buffer width at any location.

Buffers in Sammamish may be reduced in accordance with SMC 21A.50.290(9) as follows:

- (a) Up to 20 percent reduction in the standard buffer width may be allowed if water quality is improved in excess of the requirements of the adopted surface water design manual and SMC Title 13, Surface Water Management, through the use of created and/or enhanced wetlands, or ponds supplemental to existing storm drainage and water quality requirements.
- (b) Removal of existing impervious surfaces:
 - (i) Up to 10 percent reduction in standard buffer width if impervious surfaces within the to-be-remaining buffer area are reduced by at least 50 percent; or
 - (ii) Up to 20 percent reduction in standard buffer width if the to-be-remaining buffer area is presently more than 50 percent impervious and all of it is to be removed.
- (c) Removal of invasive, nonnative vegetation: up to 10 percent reduction in standard buffer width for the removal and extended (minimum five-year) monitoring and continued-removal maintenance of relatively dense stands of invasive, nonnative vegetation from significant portions of the remaining buffer area.
- (d) Restoration, preservation and maintenance of the existing wetland and buffer vegetation if the following conditions are present and/or attainable as a result of action:
 - (i) An undisturbed vegetated buffer is preserved in the remaining buffer width; and
 - (ii) Existing buffer conditions are degraded such that more than 40 percent of the buffer is covered by nonnative/invasive plant species and the buffer is restored according to a City-approved restoration plan to improve wetland buffer functions; and
 - (iii) Native tree or shrub vegetation covers less than 25 percent of the total buffer area and the area will be revegetated according to a City-approved restoration plan with native trees and shrubs; and
 - (iv) The wetland buffer has slopes of less than 25 percent; and

- (v) The buffer reduction determination and percentage shall be on a site-by-site basis based on the applicant's plan and demonstration of improvement to water quality and habitat functions.
- (e) If not already required under an existing development proposal, installation of oil/water separators for storm water quality control: up to 10 percent reduction in standard buffer width.
- (f) Use of pervious material for driveway/road construction: up to 10 percent reduction in standard buffer width.
- (g) Restoration of on-site buffer and wetland areas, or restoration of off-site buffer and wetland areas within the same sub-basin of the impacted wetland if no on-site restoration is possible:
 - (i) Up to 10 percent reduction in standard buffer width if restoration area is at a 2:1 ratio or greater; or
 - (ii) Up to 20 percent reduction in standard buffer width if restoration area is at a 4:1 ratio or greater.
- (h) Removal of significant refuse or sources of toxic material: up to 10 percent reduction in standard buffer width.
- (i) Percentages listed above may be added together to create a total buffer reduction; provided, that the total reduction does not exceed 50 percent of the standard buffer width.

State and Federal Regulations

Wetlands are regulated by the Corps under Section 404 of the Clean Water Act. Any proposed filling or other direct impacts to Waters of the U.S., including wetlands (except isolated wetlands), would require notification and permits from the Corps. Unavoidable impacts are typically required to be compensated through implementation of an approved mitigation plan.

Federally permitted actions that could affect endangered species may also require a biological assessment study and consultation with the U.S. Fish and Wildlife Service and/or the National Marine Fisheries Service. Compliance with the Endangered Species Act must be demonstrated for activities within jurisdictional wetlands and the 100-year floodplain. Application for Corps permits may also require an individual 401 Water Quality Certification and Coastal Zone Management Consistency determination from Ecology and a cultural resource study in accordance with Section 106 of the National Historic Preservation Act.

Wetland Delineation Report Shelby Perrault March 28, 2018 Page 8

Washington Department of Ecology

Similar to the Corps, Ecology, under Section 401 of the Clean Water Act and the Water Pollution and Control Act, is charged with reviewing, conditioning, and approving or denying certain actions that result in discharges to state waters. However, Ecology review would only become necessary if direct wetland fill is proposed. Therefore, if filling activities are avoided, authorization from Ecology would not be needed.

If filling is proposed, a JARPA could be submitted to Ecology in order to obtain a Section 401 Water Quality Certification (WQC) and Coastal Zone Management Consistency Determination. Ecology permits are either issued concurrently with the Corps permit or within 90 days following the Corps permit.

Washington Department of Fish and Wildlife (WDFW)

Chapter 77.55 RCW (the Hydraulic Code) gives WDFW the authority to review, condition, and approve or deny "any construction activity that will use, divert, obstruct, or change the bed or flow of state waters." This provision includes any in-water work, the crossing or bridging of any state waters and can sometimes include stormwater discharge to state waters. If a project meets regulatory requirements, WDFW will issue a Hydraulic Project Approval (HPA).

Through issuance of an HPA, WDFW can also restrict activities to a particular timeframe. Work is typically restricted to late summer and early fall. However, WDFW has in the past allowed crossings that don't involve in-stream work to occur at any time during the year.

In general, the Corps, Ecology, and WDFW do not regulate wetland and stream buffers, unless direct impacts are proposed. When direct impacts are proposed, mitigated wetlands and streams may be required to employ buffers based on Corps and Ecology joint regulatory guidance.

Disclaimer

The information contained in this report is based on the application of technical guidelines currently accepted as the best available science and in conjunction with the manuals and criteria outlined in the methods section. All discussions, conclusions and recommendations reflect the best professional judgment of the author and are based upon information available at the time the study was conducted. All work was completed within the constraints of budget, scope, and timing. The findings of this report are subject to verification and agreement by the appropriate local, state and federal regulatory authorities. No other warranty, expressed or implied, is made.

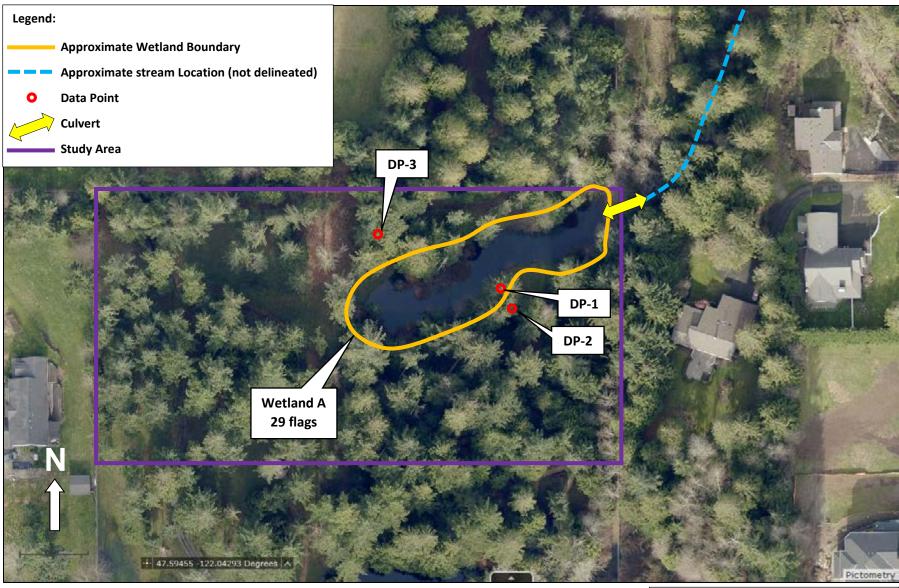
Wetland Delineation Report Shelby Perrault March 28, 2018 Page 9

Please call if you have any questions or if we can provide you with any additional information.

Sincerely,

Ryan Kahlo, PWS Senior Ecologist

Enclosures



Areas depicted have not been surveyed. All locations are approximate and not to scale. Wetland Delineation Sketch
Big Rock Park, Parcel C (Parcel #0424069153)
Sammamish, Washington
Prepared for Shelby Perrault, Parks Project Manager
March 19, 2018
TWC Project #161134.5

Wetland boundaries are marked with pink- and black-striped flags. Data points are marked with yellow- and black-striped flags.





WETLAND DETERMINATION DATA FORM

Western Mountains, Valleys, and Coast Supplement to the 1987 COE Wetlands Delineation Manual

DP- 1

750 Sixth Street South Kirkland, Washington 98033 (425) 822-5242 watershedco.com

| 5 | | | | | | | | |
|--|---------------------------------------|---------------------------------|--------------|----------------------|---|---|--|----------|
| Project Site: | Big Rock Park | | | | Sampling Date: | 3/19/2018 | | |
| Applicant/Owner: | City of Sammamish | Sampling Point: City/County: | DP- 1 | | | | | |
| Investigator: | <u> </u> | | | | | | / King Co. | |
| Sect., Township, Range: | S 04 T 24N | State: | WA | | | | | |
| Landform (hillslope, terrace, | etc): Depression | | | Slope (%): 2 | Local relief (concav | re, convex, none): | Concave | |
| Subregion (LRR): A | <u> </u> | | | Lat: | Long: | | Datum: | |
| | | | | Lat. | | | Datum. | |
| Soil Map Unit Name: Alder | rwood gravelly sandy | Ioam, 8-15° | % | | NWI classification: | None | | |
| Are climatic/hydrologic condit | tions on the site typical for | this time of ye | ear? | 🛚 Yes 🗌 No | (If no, explain in rer | narks.) | | |
| Are "Normal Circumstances" | present on the site? | | | ☑ Yes □ No | | | | |
| Are Vegetation□, Soil □, or | Hvdrology ☐ significantly | | | | | | | |
| Are Vegetation□, Soil □, or | Hydrology ☐ naturally pro | blematic | | | (If needed, explain | any answers in Ren | narks.) | |
| <u> </u> | <u> </u> | | | | 1 | | | |
| SUMMARY OF FINDING | S - Attach site map s | howing san | npling po | int locations, trans | sects, important fe | eatures, etc. | | |
| | | ₩ . | | | | | | |
| Hydrophytic Vegetation Pres | sent? Yes | | 10 □ | | | | | |
| Hydric Soils Present? | Yes | s 🗵 N | 1o 🗆 | Is the Sampling Poi | int within a Wetland? | Yes 🔀 | l No | |
| Wetland Hydrology Present? | Yes | s 🖂 N | 1o 🗆 | | | | | ш |
| , 0, | | | | | | | | |
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| | | | | | | | | |
| VECETATION LISS SS | iantifia namaa af nlan(| | | | | | | |
| VEGETATION – Use sci | enunc names or plant | .S. | | | | | | |
| | | | | | | | | |
| Tree Stratum (Plot size: 5m | diam.) | Absolute % | Domina | | Dominance Tes | st Worksheet | | |
| | | Cover | Species | | | | | |
| 1. Alnus rubra | | 75 | Y | es FAC | Number of Domina | | 2 | |
| 2. | | | | | that are OBL, FAC | | | (A) |
| 3. | | | | | Total Number of D | | 2 | |
| 4. | | | | | Species Across All | Strata: | 2 | (B) |
| | | | = Total (| Cover | Percent of Domina | nt Species | 400 | |
| | - | | _ | | that are ODL EAC | M EAO. | 100 | |
| | | | | | that are OBL, FAC | W, or FAC: | | (A/R) |
| Sapling/Shrub Stratum (Plo | ot size: 3m diam.) | | | | that are OBL, FAC | W, or FAC: | | (A/B) |
| Sapling/Shrub Stratum (Plo | ot size: 3m diam.) | | | | | | | _ (A/B) |
| 1. | ot size: 3m diam.) | | | | Prevalence Ind | ex Worksheet | | _ ` , |
| 1. 2. | ot size: 3m diam.) | | | | Prevalence Ind | | Multiply | _ ` , |
| 1. 2. 3. | ot size: 3m diam.) | | | | Prevalence Ind Total % OBL species | ex Worksheet | Multiply | _ ` , |
| 1. 2. 3. 4. | ot size: 3m diam.) | | | | Prevalence Ind Total % OBL species FACW species | ex Worksheet | Multiply x 1 = x 2 = | _ ` , |
| 1. 2. 3. | ot size: 3m diam.) | | | | Prevalence Ind Total % OBL species FACW species FAC species | ex Worksheet | Multiply x 1 = x 2 = x 3 = | _ ` , |
| 1. 2. 3. 4. | ot size: 3m diam.) | | = Total (| Cover | Prevalence Ind Total % OBL species FACW species FAC species FACU species | ex Worksheet | Multiply x 1 = x 2 = | _ ` , |
| 1. 2. 3. 4. | ot size: 3m diam.) | | = Total C | Cover | Prevalence Ind Total % OBL species FACW species FAC species | ex Worksheet | Multiply x 1 = x 2 = x 3 = | _ ` , |
| 1. 2. 3. 4. | · · · · · · · · · · · · · · · · · · · | | = Total C | Cover | Prevalence Ind Total % OBL species FACW species FAC species FACU species | ex Worksheet | x 1 = x 2 = x 3 = x 4 = | _ ` , |
| 1. 2. 3. 4. 5. | - diam.) | 70 | | Cover es FAC | Prevalence Ind Total % OBL species FACW species FAC species FACU species UPL species | ex Worksheet Cover of | Multiply x 1 = x 2 = x 3 = x 4 = x 5 = | _ ` , |
| 1. 2. 3. 4. 5. Herb Stratum (Plot size: 1m | - diam.) | 70 Trace | | es FAC | Prevalence Ind Total % OBL species FACW species FAC species FACU species UPL species Column totals | ex Worksheet Cover of | Multiply x 1 = x 2 = x 3 = x 4 = x 5 = | _ ` , |
| 1. 2. 3. 4. 5. Herb Stratum (Plot size: 1m 1. Ranunculus reper | - diam.) | | | es FAC | Prevalence Ind Total % OBL species FACW species FAC species FACU species UPL species Column totals | ex Worksheet Cover of (A) | Multiply x 1 = x 2 = x 3 = x 4 = x 5 = | _ ` , |
| 1. 2. 3. 4. 5. Herb Stratum (Plot size: 1m 1. Ranunculus reper 2. Poa sp. 3. | - diam.) | | | es FAC | Prevalence Ind Total % OBL species FACW species FAC species FACU species UPL species Column totals | ex Worksheet Cover of (A) ndex = B / A = | Multiply x 1 = x 2 = x 3 = x 4 = x 5 = (B) | _ ` , |
| 1. 2. 3. 4. 5. Herb Stratum (Plot size: 1m 1. Ranunculus reper 2. Poa sp. 3. 4. | - diam.) | | | es FAC | Prevalence Ind Total % OBL species FACW species FAC species FACU species UPL species Column totals Prevalence In | ex Worksheet Cover of (A) (A) Index = B / A = Egetation Indicate | Multiply x 1 = x 2 = x 3 = x 4 = x 5 = (B) | _ ` , |
| 1. 2. 3. 4. 5. Herb Stratum (Plot size: 1m 1. Ranunculus reper 2. Poa sp. 3. 4. 5. | - diam.) | | | es FAC | Prevalence Ind Total % OBL species FACW species FAC species UPL species Column totals Prevalence II Hydrophytic Ve | ex Worksheet Cover of (A) (A) mdex = B / A = egetation Indicat test is > 50% | Multiply x 1 = x 2 = x 3 = x 4 = x 5 = (B) | _ ` , |
| 1. 2. 3. 4. 5. Herb Stratum (Plot size: 1m 1. Ranunculus reper 2. Poa sp. 3. 4. 5. 6. | - diam.) | | | es FAC | Prevalence Ind Total % OBL species FACW species FAC species UPL species Column totals Prevalence II Hydrophytic Ve | ex Worksheet Cover of (A) (A) ndex = B / A = egetation Indicatest is > 50% test is ≤ 3.0 * | Multiply x 1 = x 2 = x 3 = x 4 = x 5 = (B) | by |
| 1. 2. 3. 4. 5. Herb Stratum (Plot size: 1m 1. Ranunculus reper 2. Poa sp. 3. 4. 5. 6. 7. | - diam.) | | | es FAC | Prevalence Ind Total % OBL species FACW species FAC species UPL species Column totals Prevalence II Hydrophytic Ve | ex Worksheet Cover of (A) (A) (A) (B) (B) (A) (C) (A) (C) (A) (A) (C) (A) (C) (A) (A | Multiply x 1 = x 2 = x 3 = x 4 = x 5 = (B) ors | by |
| 1. 2. 3. 4. 5. Herb Stratum (Plot size: 1m 1. Ranunculus reper 2. Poa sp. 3. 4. 5. 6. | - diam.) | | | es FAC | Prevalence Ind Total % OBL species FACW species FAC species UPL species Column totals Prevalence II Hydrophytic Ve Dominance Prevalence Morphologic data in rema | ex Worksheet Cover of (A) (A) (A) (A) (B) (A) (A) (A) | Multiply x 1 = x 2 = x 3 = x 4 = x 5 = (B) ors | by |
| 1. 2. 3. 4. 5. Herb Stratum (Plot size: 1m 1. Ranunculus reper 2. Poa sp. 3. 4. 5. 6. 7. | - diam.) | | | es FAC | Prevalence Ind Total % OBL species FACW species FAC species UPL species Column totals Prevalence II Hydrophytic Ve Dominance Prevalence Morphologic data in rema | ex Worksheet Cover of (A) (A) (A) (B) (B) (A) (C) (A) (C) (A) (A) (C) (A) (C) (A) (A | Multiply x 1 = x 2 = x 3 = x 4 = x 5 = (B) ors | by |
| 1. 2. 3. 4. 5. Herb Stratum (Plot size: 1m 1. Ranunculus reper 2. Poa sp. 3. 4. 5. 6. 7. 8. 9. | - diam.) | | | es FAC | Prevalence Ind Total % OBL species FACW species FAC species UPL species Column totals Prevalence II Hydrophytic Ve Dominance Morphologic data in rema Wetland No | ex Worksheet Cover of (A) (A) (A) (A) (B) (A) (A) (A) | Multiply x 1 = x 2 = x 3 = x 4 = x 5 = (B) Ors | by |
| 1. 2. 3. 4. 5. Herb Stratum (Plot size: 1m 1. Ranunculus reper 2. Poa sp. 3. 4. 5. 6. 7. 8. 9. | - diam.) | | | es FAC | Prevalence Ind Total % OBL species FACW species FAC species UPL species Column totals Prevalence II Hydrophytic Ve Dominance Morphologic data in rema Wetland No | ex Worksheet Cover of (A) (A) Index = B / A = Regetation Indicate test is > 50% test is < 3.0 * Inal Adaptations * (prarks or on a separate in-Vascular Plants * | Multiply x 1 = x 2 = x 3 = x 4 = x 5 = (B) Ors | by |
| 1. 2. 3. 4. 5. Herb Stratum (Plot size: 1m 1. Ranunculus reper 2. Poa sp. 3. 4. 5. 6. 7. 8. 9. | - diam.) | | Y | es FAC lo FAC* | Prevalence Ind Total % OBL species FACW species FAC species UPL species Column totals Prevalence II Hydrophytic Ve Dominance Morphologic data in rema Wetland No Problematic | ex Worksheet Cover of (A) (A) ndex = B / A = egetation Indicatest is > 50% test is < 3.0 * al Adaptations * (prarks or on a separate in-Vascular Plants * Hydrophytic Vegeta | Multiply x 1 = x 2 = x 3 = x 4 = x 5 = (B) Ors ovide supporting e sheet) | by |
| 1. 2. 3. 4. 5. Herb Stratum (Plot size: 1m 1. Ranunculus reper 2. Poa sp. 3. 4. 5. 6. 7. 8. 9. | - diam.) | | | es FAC lo FAC* | Prevalence Ind Total % OBL species FACW species FAC species FACU species UPL species Column totals Prevalence In Hydrophytic Ve Dominance Prevalence Morphologic data in rema Wetland No Problematic * Indicators of hydro | ex Worksheet Cover of (A) (A) (A) (A) (B) (A) (A) (A) | Multiply x 1 = x 2 = x 3 = x 4 = x 5 = (B) Ors ovide supporting e sheet) ation * (explain) hydrology must b | by |
| 1. 2. 3. 4. 5. Herb Stratum (Plot size: 1m 1. Ranunculus reper 2. Poa sp. 3. 4. 5. 6. 7. 8. 9. 10. | a diam.) ns | | Y | es FAC lo FAC* | Prevalence Ind Total % OBL species FACW species FAC species FACU species UPL species Column totals Prevalence In Hydrophytic Ve Dominance Prevalence Morphologic data in rema Wetland No Problematic * Indicators of hydro | ex Worksheet Cover of (A) (A) ndex = B / A = egetation Indicatest is > 50% test is < 3.0 * al Adaptations * (prarks or on a separate in-Vascular Plants * Hydrophytic Vegeta | Multiply x 1 = x 2 = x 3 = x 4 = x 5 = (B) Ors ovide supporting e sheet) ation * (explain) hydrology must b | by |
| 1. 2. 3. 4. 5. Herb Stratum (Plot size: 1m 1. Ranunculus reper 2. Poa sp. 3. 4. 5. 6. 7. 8. 9. 10. 11. Woody Vine Stratum (Plot s | a diam.) ns | | Y | es FAC lo FAC* | Prevalence Ind Total % OBL species FACW species FAC species FACU species UPL species Column totals Prevalence In Hydrophytic Ve Dominance Prevalence Morphologic data in rema Wetland No Problematic * Indicators of hydro | ex Worksheet Cover of (A) (A) (A) (A) (B) (A) (A) (A) | Multiply x 1 = x 2 = x 3 = x 4 = x 5 = (B) Ors ovide supporting e sheet) ation * (explain) hydrology must b | by |
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| 1. 2. 3. 4. 5. Herb Stratum (Plot size: 1m 1. Ranunculus reper 2. Poa sp. 3. 4. 5. 6. 7. 8. 9. 10. 11. Woody Vine Stratum (Plot s | a diam.) ns | | - Y. N | es FAC lo FAC* | Prevalence Ind Total % OBL species FACW species FAC species FACU species UPL species Column totals Prevalence II Hydrophytic Ve Dominance Prevalence Morphologic data in rema Wetland No Problematic * Indicators of hydrophytic Ve the Morphytic Ve Indicators of hydrophytic Ve Hydrophytic Ve | ex Worksheet Cover of (A) (A) (A) (A) (A) (A) (A) (A | Multiply x 1 = x 2 = x 3 = x 4 = x 5 = (B) ors ovide supporting e sheet) ation * (explain) hydrology must be tice | by De |
| 1. 2. 3. 4. 5. Herb Stratum (Plot size: 1m 1. Ranunculus reper 2. Poa sp. 3. 4. 5. 6. 7. 8. 9. 10. 11. Woody Vine Stratum (Plot size: 1m | a diam.) ns | | Y | es FAC lo FAC* | Prevalence Ind Total % OBL species FACW species FAC species UPL species Column totals Prevalence In Hydrophytic Ve Dominance Prevalence Morphologic data in rema Wetland No Problematic * Indicators of hydropresent, unless dis | ex Worksheet Cover of (A) (A) (A) (A) (A) (A) (A) (A | Multiply x 1 = x 2 = x 3 = x 4 = x 5 = (B) ors ovide supporting e sheet) ation * (explain) hydrology must be tice | by De |
| 1. 2. 3. 4. 5. Herb Stratum (Plot size: 1m 1. Ranunculus reper 2. Poa sp. 3. 4. 5. 6. 7. 8. 9. 10. 11. Woody Vine Stratum (Plot size: 1m 1. Woody Vine Stratum (Plot size: 1m 2. | a diam.) ns | | - Y. N | es FAC lo FAC* | Prevalence Ind Total % OBL species FACW species FAC species FACU species UPL species Column totals Prevalence II Hydrophytic Ve Dominance Prevalence Morphologic data in rema Wetland No Problematic * Indicators of hydrophytic Ve the Morphytic Ve Indicators of hydrophytic Ve Hydrophytic Ve | ex Worksheet Cover of (A) (A) (A) (A) (A) (A) (A) (A | Multiply x 1 = x 2 = x 3 = x 4 = x 5 = (B) ors ovide supporting e sheet) ation * (explain) hydrology must be tice | by De |
| 1. 2. 3. 4. 5. Herb Stratum (Plot size: 1m 1. Ranunculus reper 2. Poa sp. 3. 4. 5. 6. 7. 8. 9. 10. 11. Woody Vine Stratum (Plot size: 1m | a diam.) ns | | - Y. N | es FAC lo FAC* | Prevalence Ind Total % OBL species FACW species FAC species FACU species UPL species Column totals Prevalence II Hydrophytic Ve Dominance Prevalence Morphologic data in rema Wetland No Problematic * Indicators of hydrophytic Ve the Morphytic Ve Indicators of hydrophytic Ve Hydrophytic Ve | ex Worksheet Cover of (A) (A) (A) (A) (A) (A) (A) (A | Multiply x 1 = x 2 = x 3 = x 4 = x 5 = (B) ors ovide supporting e sheet) ation * (explain) hydrology must be tice | by De |
| 1. 2. 3. 4. 5. Herb Stratum (Plot size: 1m 1. Ranunculus reper 2. Poa sp. 3. 4. 5. 6. 7. 8. 9. 10. 11. Woody Vine Stratum (Plot size: 1m 1. Woody Vine Stratum (Plot size: 1m 2. | a diam.) ns - size: - tum: | | - Y. N | es FAC lo FAC* | Prevalence Ind Total % OBL species FACW species FAC species FACU species UPL species Column totals Prevalence II Hydrophytic Ve Dominance Prevalence Morphologic data in rema Wetland No Problematic * Indicators of hydrophytic Ve the Morphytic Ve Indicators of hydrophytic Ve Hydrophytic Ve | ex Worksheet Cover of (A) (A) (A) (A) (A) (A) (A) (A | Multiply x 1 = x 2 = x 3 = x 4 = x 5 = (B) ors ovide supporting e sheet) ation * (explain) hydrology must be tice | by De |
| 1. 2. 3. 4. 5. Herb Stratum (Plot size: 1m 1. Ranunculus reper 2. Poa sp. 3. 4. 5. 6. 7. 8. 9. 10. 11. Woody Vine Stratum (Plot size: 1m 1. Ranunculus reper 2. Poa sp. 3. 4. 5. 6. 7. 8. 9. 10. 11. | a diam.) ns - size: - tum: | | - Y. N | es FAC lo FAC* | Prevalence Ind Total % OBL species FACW species FAC species FACU species UPL species Column totals Prevalence II Hydrophytic Ve Dominance Prevalence Morphologic data in rema Wetland No Problematic * Indicators of hydrophytic Ve the Morphytic Ve Indicators of hydrophytic Ve Hydrophytic Ve | ex Worksheet Cover of (A) (A) (A) (A) (A) (A) (A) (A | Multiply x 1 = x 2 = x 3 = x 4 = x 5 = (B) ors ovide supporting e sheet) ation * (explain) hydrology must be tice | by De |

| SOIL | OIL Sampling Point – DP-1 | | | | | | | |
|---|---|----------------------------|--|-----------------------|-----------------------|---|---|---|
| Profile Descri | ption: (Describe to the | depth neede | d to document the indicate | or or confi | rm the absence of | findicators | | |
| Depth | Matrix | • | | Redox Feat | | | Ī | |
| (inches) | Color (moist) | % | Color (moist) | % | Type ¹ | Loc ² | Texture | Remarks |
| 0-3 | 10YR 3/2 | 90 | 10YR 4/2 | 10 | D | M | Sandy clay loam | |
| 3-8 | 2.5Y 5/2 | 60 | 10YR 4/6 | 40 | С | M | Silty loam | |
| 8-14 | 10YR 2/2 | 85 | 10YR 3/6 | 15 | С | М | Gravelly sandy loam | |
| ¹ Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains ² Loc: PL=Pore Lining, M=Matrix | | | | | | | | |
| Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.) ☐ Histosol (A1) ☐ Sandy Redox (S5) ☐ Jem Muck (A10) | | | | | | | | |
| ☐ Histic Epip | pedon (A2) | ☐ St | tripped Matrix (S6) | | | Parent Mat | | |
| ☐ Black Hist | ic (A3) | | oamy Mucky Mineral (F1) (ex | xcept MLR | A 1) | er (explain ir | remarks) | |
| ☐ Hydrogen | Sulfide (A4) | | oamy Gleyed Matrix (F2) | | | | | |
| | Below Dark Surface (A11 | | epleted Matrix (F3) | | | | | |
| • | Surface (A12) | • | edox Dark Surface (F6) | | ³ Indicato | ors of hydrop | ohytic vegetation and wetlan | d hydrology mu |
| | cky Mineral (S1) | | epleted Dark Surface (F7) | | | | isturbed or problematic | , 5, |
| = | eyed Matrix (S4) | | edox Depressions (F8) | | | | • | |
| _ | | L 11 | edox Depressions (i o) | | | | | |
| _ | ver (if present): | | | | | | <u>_</u> | |
| Type: | | | | | Hydric soil | present? | Yes 🔀 | No 🗌 |
| Depth (inches) |): | | | | | - | _ | |
| Remarks: | | | | | | | | |
| Primary Indice Surface w High Wate Saturation Water Ma Sediment Drift Depo | ology Indicators: ators (minimum of one revater (A1) er Table (A2) n (A3) rks (B1) Deposits (B2) osits (B3) or Crust (B4) | Sp W Sa Ad Hy O: | k all that apply): parsely Vegetated Concave s'ater-Stained Leaves (excep alt Crust (B11) quatic Invertebrates (B13) ydrogen Sulfide Odor (C1) xidized Rhizospheres along resence of Reduced Iron (C4 ecent Iron Reduction in Tiller | t MLRA 1, Living Root | 2, 4A & 4B) (B9) | □ Wate □ Drain □ Dry- □ Satu □ Geo □ Shal □ FAC | Indicators (2 or more require er-Stained Leaves (B9) (MLi nage Patterns (B10) Season Water Table (C2) Irration Visible on Aerial Image morphic Position (D2) Illow Aquitard (D3) E-Neutral Test (D5) Sed Ant Mounds (D6) (LRR A | RÁ 1, 2, 4A & 4 gery (C9) |
| 1 | | | tunted or Stressed Plants (D | , , | | | st-Heave Hummocks | •) |
| | oil Cracks (B6) n Visible on Aerial Image | | ther (explain in remarks) | 1) (LKK A) | | ∐ FIUS | I-Heave mullilliocks | |
| Field Observa | ntions | | | | | | | |
| Surface Water | Present? Yes | No ⊠ | Depth (in): | | | | | |
| Water Table P | | No 🗆 | | | Martin and Liveline | · Dunna | V V | NIS 🗆 |
| Saturation Pre | 103 | No 🗆 | | | Wetland Hydro | logy Prese | nt? Yes 🔀 | No |
| (includes capil | 103 🖂 | INU L | Deput (111 <i>)</i> | | | | | |
| Describe Reco | orded Data (stream gaug | e, monitoring | well, aerial photos, previous | inspections | s), if available: | | | |
| Remarks: | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |



WETLAND DETERMINATION DATA FORM

Western Mountains, Valleys, and Coast Supplement to the 1987 COE Wetlands Delineation Manual

DP-2

750 Sixth Street South Kirkland, Washington 98033 (425) 822-5242 watershedco.com

| Duning t Oite | Dia Da ala Da ala | | | | | O B - t | 0/40/0046 | , | | | |
|---------------------------------------|--------------------------|-----------------------|----------------------|----------|----------------|--------------------------|-------------------|---------|--------------------|-----------|-------------|
| Project Site: | Big Rock Park | | | | | Sampling Date: | 3/19/2018 | 3 | | | |
| Applicant/Owner: | City of Sammami | | | | | Sampling Point: | DP- 2 | | | | |
| Investigator: | Kahlo, R; Dough | | _ | | | City/County: | Samman | nisn / | King Co | <u>).</u> | |
| Sect., Township, Range: | | 24N R 6E | <u> </u> | | | State: | WA | | | | |
| Landform (hillslope, terrace, | etc): Hillslope | | | Slope (% | 6): 10 | Local relief (concar | ve, convex, non | | oncave | | |
| Subregion (LRR): A | | | | Lat: | | Long: | | Da | atum: | | |
| Soil Map Unit Name: Alde | rwood gravelly sar | ndy loam, 8-15% | 6 | | | NWI classification: | None | | | | |
| Are climatic/hydrologic condi | tions on the site typica | I for this time of ye | ar? ⊠ | Yes | ☐ No | (If no, explain in re | marks.) | | | | |
| Are "Normal Circumstances" | present on the site? | | \boxtimes | Yes | ☐ No | | | | | | |
| Are Vegetation□, Soil □, or | Hydrology □ significa | intly disturbed? | | | | | | | | | |
| Are Vegetation□, Soil □, or | | (If needed, explain | any answers in | n Rema | rks.) | | | | | | |
| SUMMARY OF FINDING | S – Attach site ma | ap showing sam | pling po | int loca | tions, trans | ects, important f | eatures, etc. | | | | |
| Hydrophytic Vegetation Pres | ent? | Yes N | o 🗵 | | | | | | | | |
| Hydric Soils Present? | | Yes □ N | | 1. 11. 0 | | | o V | | | NI. | |
| · · | | Yes □ N | | is the 5 | ampling Poli | nt within a Wetland | ? Yes | Ш | | No | \triangle |
| Wetland Hydrology Present? | | res 🔲 IN | 0 🛆 | | | | | | | | |
| Remarks: | | | | | | | | | | | |
| Nomano. | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| VEGETATION – Use sci | entific names of p | lants. | | | | | | | | | |
| | | | | | | | | | | | |
| Tree Stratum (Plot size: 5m | diam.) | Absolute % | Domina | | Indicator | Dominance Te | st Workshee | t | | | |
| 1. Tsuga heterophyl | llo. | Cover 60 | Species Ye | | Status FACU | Number of Domin | ant Species | | | | |
| 1. Tsuga heterophyl 2. Alnus rubra | ıa | 40 | Ye | | FAC | that are OBL, FAC | | | 1 | | (4) |
| 3. | | 40 | 16 | #5 | FAC | Total Number of D | | | | | (A) |
| 4. | | | | | | Species Across A | | | 4 | | (D) |
| 4. | | | = Total C | over | | Percent of Domina | | | | | (B) |
| | | | _ | .0101 | | that are OBL, FAC | | | 25 | | |
| Sanling/Shrub Stratum (Di | at aiza. Oma diama \ | | | | | | - | | | | (A/B) |
| Sapling/Shrub Stratum (Plo | ot size. Sili diaili.) | | | | | | | | | | |
| 1. Thuja plicata | | 5 | N ₁ | | FAC | Prevalence Ind | | et | | | |
| 2. Rubus parviflorus | 3 | 5 | N ₁ | | FACU | | Cover of | 1 | | ultiply b | <u>Y</u> |
| 3. Alnus rubra | I | 5 | N ₁ | | FAC | OBL species | | - | x 1 = | | |
| 4. Gaultherium shal | ion | 60 | Ye | 98 | FACU | FACW species FAC species | | | x 2 = | | |
| 5. | | | = Total C | over | | FAC species FACU species | | | x 4 = | | |
| | | | _ Total O | OVCI | | UPL species | | | x 5 = | | |
| Herb Stratum (Plot size: 1m | diam) | | | | | Column totals | (A) | | (B) | | |
| Pteridium aquilini | | 25 | Ye | 26 | FACU | Columnitotals | (A) | | (D) | | |
| 2 Rubus ursinus | um | 10 | N ₁ | | FACU | Prevalence I | ndex = B / A : | = | | | |
| 3. | | | .,, | | 1,700 | 1 Tevalence i | ndex – b / A | | | | |
| 4. | | | | | | Hydrophytic V | egetation Ind | licato | rs | | |
| 5. | | | | | | | test is > 50% | | | | |
| 6. | | | | | | 4 — | test is ≤ 3.0 * | | | | |
| 7. | | | | | | 4 | cal Adaptations | * (prov | ide supr | ortina | |
| 8. | | | | | | | arks or on a se | (1 | | | |
| 9. | | | | | | 4 — | n-Vascular Pla | | , | | |
| | | | | | | _ | : Hydrophytic V | | on * (evr | lain) | |
| 10. | | | | | | i iobicinatio | o riyaropiiyilo v | cgctati | оп (схр | | |
| 11. | | | = Total C | over | | * Indicators of hyd | ric soil and wet | land hy | /drology | must ha | |
| | | - | _ | | | present, unless di | | | | nual DE | • |
| Woody Vine Stratum (Plot s | size:) | | | | | , | <u>'</u> | | | | |
| 1. | , | | | | | | | | | | |
| 2. | | | | | | Hydrophytic V | egetation | ., | | | |
| | | | = Total C | over | | Presen | | Yes | Ш | No | \boxtimes |
| | | | _ | | | | | | | | |
| % Bare Ground in Herb Stra | tum: | | | | | | | | | | |
| Remarks: | | | | | | | | | | | |
| | | | | | | | | | | | |
| Ĭ | | | | | | | | | | | |

| OIL | | | | | | | Sampling Point – | DP-2 | |
|--|--|--------------------|--|-------------------------|---|---|----------------------------------|------------------|-------------|
| Profile Descri | otion: (Describe to the d | lepth need | led to document the indicator o | or confirm t | the absence of | indicators | .) | | |
| Depth | Matrix | | • | lox Features | | | <u>,</u> | | |
| (inches) | Color (moist) | % | Color (moist) | % | Type ¹ | Loc ² | Texture | Re | marks |
| 0-3 | 10YR 2/2 | 100 | | | | | Sandy Ioam | | |
| 3-5 | 10YR 2/2 10 YR 5/6 | 50 50 | | | | | Sandy loam | Mixe matr | |
| 5-14 | 10YR 3/6 | 100 | | | | l | Gravelly sandy loar | m | |
| ¹Type: C=Conc | entration, D=Depletion, F | RM=Reduc | ed Matrix, CS=Covered or Coated | d Sand Grai | ins ² Loc: PL | =Pore Lining | g, M=Matrix | | |
| Hydric Soil Inc Histosol (A Histic Epipe | 1) | | unless otherwise noted.) Sandy Redox (S5) Stripped Matrix (S6) | | ☐ 2cm | rs for Probl Muck (A10) Parent Mate | • | | |
| | | | Stripped Matrix (S6) | - 4 MI DA 1 | | | ` , | | |
| ☐ Black Histic | ` ' | | Loamy Mucky Mineral (F1) (exce | pt MLKA 1) | - | er (explain ir | ı remarks) | | |
| ☐ Hydrogen S | | | Loamy Gleyed Matrix (F2) | | | | | | |
| | elow Dark Surface (A11) | | Depleted Matrix (F3) | | 2 | | | | |
| ☐ Thick Dark | Surface (A12) | | Redox Dark Surface (F6) | | | | ohytic vegetation and wetla | and hydrolog | gy must |
| ☐ Sandy Muc | ky Mineral (S1) | | Depleted Dark Surface (F7) | | be presei | nt, unless di | isturbed or problematic | | |
| ☐ Sandy Gley | yed Matrix (S4) | | Redox Depressions (F8) | | | | | | |
| Restrictive Lay | er (if present): | | | | | | | | |
| Type: | | | | ļ | Hydric soil | present? | Yes | No | \boxtimes |
| Depth (inches): | | | | ļ | | | | | |
| Remarks: | | | | | J | | | | |
| Primary Indica | ology Indicators: ators (minimum of one red | | | | | | Indicators (2 or more requ | , | |
| ☐ Surface wa | ` ' | | Sparsely Vegetated Concave Sur | | | | er-Stained Leaves (B9) (N | ILRA 1, 2, 4 | A & 4B |
| • | r Table (A2) | □ V | Water-Stained Leaves (except M | ILRA 1, 2, 4 | A & 4B) (B9) | ☐ Draiı | nage Patterns (B10) | | |
| ☐ Saturation | (A3) | | Salt Crust (B11) | | | ☐ Dry- | Season Water Table (C2) |) | |
| ☐ Water Mar | ks (B1) | | Aquatic Invertebrates (B13) | | ☐ Saturation Visible on Aerial Imagery (C9) | | | | |
| ☐ Sediment | Deposits (B2) | | Hydrogen Sulfide Odor (C1) | | Geomorphic Position (D2) | | | | |
| ☐ Drift Depos | , | | Oxidized Rhizospheres along Livi | ing Roots (C | 23) | | llow Aquitard (D3) | | |
| - | or Crust (B4) | | Presence of Reduced Iron (C4) | | , | | C-Neutral Test (D5) | | |
| ☐ Iron Depos | | | Recent Iron Reduction in Tilled So | oils (C6) | | | sed Ant Mounds (D6) (LRF | R A) | |
| - | oil Cracks (B6) | _ | Stunted or Stressed Plants (D1) (| ` ' | | | st-Heave Hummocks | (A _j | |
| | Visible on Aerial Imagery | | Other (explain in remarks) | LKK A) | | □ 1103 | il-Heave Hullilliocks | | |
| ☐ Inundation (B7) | VISIDIE OII AGIIAI IIIIAGGI | / 🗆 🕆 | Julei (exhiairi ili remains) | | | | | | |
| Field Observa | tions | | | | | | | | |
| Surface Water | Present? Yes □ | No 2 | ⊠ Depth (in): | | | | | | |
| Water Table Pr | | | ☐ Depth (in): | | Matienal Undre | Inere Droop | | Na | \boxtimes |
| Saturation Pres | 103 🗀 | No 2 | | ٧ | Netland Hydro | logy Prese | nt? Yes | No | |
| (includes capilla | 103 🗀 | INO 2 | Δ Βορίπ (). | | | | | | |
| Describe Reco | rdad Data (etream gauge | monitorin | g well, aerial photos, previous ins | enactions) if | f available: | | | | |
| Describe Neco | ded Data (Stream gauge, | , IIIOI IIIO III i | J Well, actial pilotos, previous ins | ,peciion <i>a)</i> , ii | dvallable. | | | | |
| Remarks: | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |



WETLAND DETERMINATION DATA FORM

Western Mountains, Valleys, and Coast Supplement to the 1987 COE Wetlands Delineation Manual

DP- 3

750 Sixth Street South Kirkland, Washington 98033 (425) 822-5242 watershedco.com

| Drainet Cite | Dia Dook Dook | | | | Camp | ling Data | 2/40/2049 | | |
|-----------------------------------|---|---------------------|------------------|---------------------|-------------|---------------------------|--------------------|----------------------|-------|
| Project Site: Applicant/Owner: | Big Rock Park City of Sammamish | | | | | ling Date: ling Point: | 3/19/2018 DP- 3 | | |
| Investigator: | Kahlo, R; Dougherty | , 1 | | | | ounty: | | sh / King Co. | |
| Sect., Township, Range: | S 04 T 24N | | E | | State: | • | WA | on riving co. | |
| Landform (hillslope, terrace, | | | _ | Slope (%): 2 | | | e, convex, none |): Concave | |
| Subregion (LRR): A | oto). Timolopo | | | Lat: | Locaii | • | e, convex, none | Datum: | |
| , , , | | January 0 45 | 0/ | Lat. | | Long: | Nana | Datum. | |
| Soil Map Unit Name: Alde | | | | | | assification: | | | |
| Are climatic/hydrologic cond | • | this time of y | | ⊠ Yes ☐ No | , , | explain in rer | marks.) | | |
| Are "Normal Circumstances" | • | | | ⊠ Yes □ No |) | | | | |
| Are Vegetation ☐, Soil ☐, or | | | | | (If need | ded explain | any answers in F | Remarks) | |
| Are Vegetation□, Soil □, or | nydrology □ naturally pro | blematic | | | (| | , | 10 | |
| SUMMARY OF FINDING | SS – Attach site map s | howing sar | npling po | oint locations, tra | ansects, in | nportant fe | eatures, etc. | | |
| Hydrophytic Vegetation Pres | ent? Ye | s 🗆 N | No 🗵 | | | | | | |
| Hydric Soils Present? | Ye | | vo ⊠ | | | | | <u> </u> | |
| Wetland Hydrology Present? | | | vo ⊠ | Is the Sampling I | oint within | a Wetland? | Yes | No | X |
| Welland Hydrology Fresent | re | s 🗀 i | NO | | | | | | |
| Remarks: | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| VEGETATION | | | | | | | | | |
| VEGETATION – Use sc | ientific names of plan | ts. | | | 1 | | | | |
| T 044 (DI-4-i 5 | -II \ | A l l t - 0/ | D i | | | . | . 4 VA/l l 4 | | |
| Tree Stratum (Plot size: 5m | diam.) | Absolute % Cover | Domina Specie | | Dom | inance les | st Worksheet | | |
| Pseudotsuga mei | nziesii | 70 | | es FACL | J Numb | er of Domina | ant Species | | |
| 2. | 12.00.11 | | - | | | re OBL, FAC | | 1 | (A) |
| 3. | | | | | Total I | Number of D | ominant | | (,, |
| 4. | | | | | Specie | es Across All | l Strata: | 2 | (B) |
| | | | = Total (| Cover | | nt of Domina | | 50 | _ ` ′ |
| | • | | | | that ar | re OBL, FAC | W, or FAC: | 50 | (A/B) |
| Sapling/Shrub Stratum (Plo | ot size: 3m diam.) | | | | | | | | _ ` ′ |
| 1. Poa sp. | | 95 | Υ | es FAC* | Preva | alence Ind | ex Worksheet | 1 | |
| 2. Hypochaerus rad | icata | 5 | N | lo FACL | J | Total % | Cover of | Multipl | y by |
| 3. Ranunculus repe | ns | 15 | N | lo FAC | OBL s | pecies | | x 1 = | |
| 4. | | | | | | / species | | x 2 = | |
| 5. | | | | _ | | pecies | | x 3 = | |
| | - | | = Total (| Cover | | species | | x 4 = | |
| Herb Stratum (Plot size: 1m | diam \ | | | | | pecies | (4) | x 5 = | |
| | i ulaili.) | | | | Coluit | nn totals | (A) | (B) | |
| 1. 2. | | | | | Dr | ovalence li | ndex = B / A = | | |
| 3. | | | | | - '' | evalence n | ildex - D/A - | | |
| 4. | | | | | Hvdr | ophytic Ve | getation Indi | cators | |
| 5. | | | | | | | test is > 50% | | |
| 6. | | | | | | Prevalence | test is ≤ 3.0 * | | |
| 7. | | | | | | Morphologic | al Adaptations * | (provide supportin | g |
| 8. | | | | | | data in rema | arks or on a sepa | arate sheet) | • |
| 9. | | | | | | Wetland No | n-Vascular Plant | s * | |
| 10. | | | | | | Problematic | Hydrophytic Veg | getation * (explain) | |
| 11. | | | | | | | | | |
| | | | = Total (| Cover | * Indic | ators of hydi | ric soil and wetla | nd hydrology must | be |
| | | | | | | | sturbed or proble | | |
| Woody Vine Stratum (Plot : | size:) | | | | | | | | |
| 1. | | | | | _ | | | | |
| 2. | | | | | Hyd | drophytic Ve | | Yes N | o 🛛 |
| | - | | = Total (| Cover | | Present | ır | | |
| 0/ P C | . | | | | | | | | |
| % Bare Ground in Herb Stra | | | | | | | | | |
| Remarks: *Presumed | FAC | | | | | | | | |
| | | | | | | | | | |

| OIL | | | | | | Sampling Point – DP | -3 |
|--------------------------------|---|---------------|---|-----------------------------|------------------|--|------------------|
| Profile Descri | ption: (Describe to the | depth need | ed to document the indicator or co | nfirm the absence | of indicators | s.) | |
| Depth | Matrix | | Redox Fe | | | , | |
| (inches) | Color (moist) | % | Color (moist) % | Type ¹ | Loc ² | Texture | Remarks |
| 0-3 | 10YR 2/2 | 100 | Cara (mana) | - 7,5- | | Sandy loam | |
| | | | | | | + | |
| 3-14 | 10YR 3/6 | 100 | | | | Gravelly sandy loam | |
| | | | | | | | |
| ¹ Type: C=Con | centration, D=Depletion, | RM=Reduce | ed Matrix, CS=Covered or Coated San | nd Grains ² Loc: | PL=Pore Linin | ng, M=Matrix | |
| Hydric Soil In | dicators: (Applicable to | all LRRs, ι | ınless otherwise noted.) | Indica | ators for Prob | lematic Hydric Soils³ | |
| ☐ Histosol (A | A1) | | Sandy Redox (S5) | □ 2 | cm Muck (A10 |)) | |
| ☐ Histic Epip | pedon (A2) | | Stripped Matrix (S6) | | Red Parent Ma | terial (TF2) | |
| ☐ Black Hist | ic (A3) | □ I | oamy Mucky Mineral (F1) (except MI | LRA 1) 🔲 C | Other (explain i | n remarks) | |
| ☐ Hydrogen | Sulfide (A4) | □ I | oamy Gleyed Matrix (F2) | | | | |
| | Below Dark Surface (A11) | | Depleted Matrix (F3) | | | | |
| • | Surface (A12) | • | Redox Dark Surface (F6) | 3 India | ators of hydro | phytic vegetation and wetland | hydrology must |
| | cky Mineral (S1) | | Depleted Dark Surface (F7) | | | listurbed or problematic | , a. 5.59, a5 |
| = | eyed Matrix (S4) | | Redox Depressions (F8) | • | | • | |
| | · | | Redux Depressions (Fo) | | | | |
| Type: | ver (if present): | | | | | v | |
| | | | | Hydric s | oil present? | Yes | No 🔀 |
| Depth (inches) | : | | | | | | |
| | cology Indicators: cators (minimum of one re | | ck all that apply): Sparsely Vegetated Concave Surface | (B8) | | r Indicators (2 or more required ter-Stained Leaves (B9) (MLR . | • |
| | er Table (A2) | | Vater-Stained Leaves (except MLRA | ` ' | | inage Patterns (B10) | A 1, 2, 4A & 4D) |
| - | | | • • | 1, 2, 4A & 4D) (DS | - | - : : | |
| ☐ Saturation | ` ' | | Salt Crust (B11) | | • | -Season Water Table (C2) | (00) |
| ☐ Water Ma | | | Aquatic Invertebrates (B13) | | | uration Visible on Aerial Image | ery (C9) |
| | Deposits (B2) | | Hydrogen Sulfide Odor (C1) | | | omorphic Position (D2) | |
| ☐ Drift Depo | ` ' | | Oxidized Rhizospheres along Living Ro | oots (C3) | | allow Aquitard (D3) | |
| - | or Crust (B4) | | Presence of Reduced Iron (C4) | | | C-Neutral Test (D5) | |
| ☐ Iron Depo | ` ' | | Recent Iron Reduction in Tilled Soils (0 | , | | sed Ant Mounds (D6) (LRR A) | |
| | oil Cracks (B6) n Visible on Aerial Imager | | Stunted or Stressed Plants (D1) (LRR Other (explain in remarks) | A) | ☐ Fros | st-Heave Hummocks | |
| (B7) | | | | | | | |
| Field Observa | | | | | | | |
| Surface Water | Present? Yes | No 🛭 | ☑ Depth (in): | | | | |
| Water Table P | resent? Yes | No 🛭 | Depth (in): | Wetland Hvo | drology Prese | ent? Yes | No 🔀 |
| Saturation Pre (includes capil | | No 🏻 | Depth (in): | , | 3, | | |
| Describe Reco | orded Data (stream gauge | e, monitoring | y well, aerial photos, previous inspection | ons), if available: | | | |
| Remarks: | | | | | | | |
| riomarks. | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |

RATING SUMMARY – Western Washington

Name of wetland (or ID #): <u>Big Rock Park Wetland A</u> Date of site visit: <u>3/19/2018</u>

Rated by: <u>Kahlo, R; Dougherty, L</u> Trained by Ecology? ⊠Y □N Date of training: 9/2014 **HGM Class used for rating:** <u>Depressional</u> Wetland has multiple HGM classes? □Y ⊠N

NOTE: Form is not complete without the figures requested (figures can be combined).

Source of base aerial photo/map: Google Earth, King Co iMAP

OVERALL WETLAND CATEGORY (based on functions ⊠ or special characteristics □)

1. Category of wetland based on FUNCTIONS

Category I − Total score = 23 - 27
 Category II − Total score = 20 - 22
 Category III − Total score = 16 - 19
 Category IV − Total score = 9 - 15

| FUNCTION | Improving Water Quality | | | Hy | ydrolo | gic | | Habitat | | |
|------------------------|----------------------------|---|----------|----------|----------|--------|----------|---------|-------|-------|
| | | | | | Circle t | the ap | oropr | iate ra | tings | |
| Site Potential | Н | М | <u>L</u> | Н | M | L | Н | M | L | |
| Landscape Potential | Н | M | L | Н | M | L | <u>H</u> | М | L | |
| Value | Н | M | L | <u>H</u> | М | L | <u>H</u> | М | L | TOTAL |
| Score Based on Ratings | | 5 | | | 7 | | | 8 | | 20 |

Score for each function based on three ratings (order of ratings is not *important)* 9 = H,H,H8 = H,H,M7 = H,H,L7 = H, M, M6 = H,M,L6 = M,M,M5 = H,L,L5 = M,M,L4 = M, L, L3 = L,L,L

2. Category based on SPECIAL CHARACTERISTICS of wetland

| CHARACTERISTIC | CAT | EGORY |
|------------------------------------|------|-------------|
| Estuarine | I | II |
| Wetland of High Conservation Value | | I |
| Bog | | I |
| Mature Forest | | I |
| Old Growth Forest | | I |
| Coastal Lagoon | I | II |
| Interdunal | I II | III IV |
| None of the above | | \boxtimes |

Maps and figures required to answer questions correctly for Western Washington

<u>Depressional Wetlands</u>

| Map of: | To answer questions: | Figure # |
|---|----------------------|----------|
| Cowardin plant classes | D 1.3, H 1.1, H 1.4 | 1 |
| Hydroperiods | D 1.4, H 1.2 | 2 |
| Location of outlet (can be added to map of hydroperiods) | D 1.1, D 4.1 | 2 |
| Boundary of area within 150 ft of the wetland (can be added to another figure) | D 2.2, D 5.2 | 3 |
| Map of the contributing basin | D 4.3, D 5.3 | 4 |
| 1 km Polygon: Area that extends 1 km from entire wetland edge - including polygons for accessible habitat and undisturbed habitat | H 2.1, H 2.2, H 2.3 | 5 |
| Screen capture of map of 303(d) listed waters in basin (from Ecology website) | D 3.1, D 3.2 | 6 |
| Screen capture of list of TMDLs for WRIA in which unit is found (from web) | D 3.3 | 7 |

HGM Classification of Wetlands in Western Washington

For questions 1-7, the criteria described must apply to the entire unit being rated.

If the hydrologic criteria listed in each question do not apply to the entire unit being rated, you probably have a unit with multiple HGM classes. In this case, identify which hydrologic criteria in questions 1-7 apply, and go to Question 8.

| 1. | Are the water levels in the entire unit usually controlled by tides except during floods? | | | | | | |
|----|---|--|--|--|--|--|--|
| | ⊠N0 – go to 2 | \square YES – the wetland class is Tidal Fringe – go to 1.1 | | | | | |
| 1 | 1.1 Is the salinity of the water | during periods of annual low flow below 0.5 ppt (parts per thousand)? | | | | | |
| | | sified as a Freshwater Tidal Fringe use the forms for Riverine wetlands. If it is an Estuarine wetland and is not scored. This method cannot be used to | | | | | |
| 2. | | at and precipitation is the only source (>90%) of water to it. Groundwater NOT sources of water to the unit. | | | | | |
| | \boxtimes NO – go to 3 If your wetland can be classif | \Box YES – The wetland class is Flats ied as a Flats wetland, use the form for Depressional wetlands. | | | | | |
| 3. | Does the entire wetland unit meet all of the following criteria? □ The vegetated part of the wetland is on the shores of a body of permanent open water (without any plants on the surface at any time of the year) at least 20 ac (8 ha) in size; □ At least 30% of the open water area is deeper than 6.6 ft (2 m). | | | | | | |
| | ⊠N0 – go to 4 | \square YES – The wetland class is Lake Fringe (Lacustrine Fringe) | | | | | |
| 4. | ☐ The wetland is on a slope☐ The water flows through to seeps. It may flow subsur | (slope can be very gradual), he wetland in one direction (unidirectional) and usually comes from rface, as sheetflow, or in a swale without distinct banks, and without being impounded. | | | | | |
| | \boxtimes NO – go to 5 | \square YES – The wetland class is Slope | | | | | |
| | | not pond in these type of wetlands except occasionally in very small and nd hummocks (depressions are usually <3 ft diameter and less than 1 ft | | | | | |
| 5. | ☐ The unit is in a valley, or s stream or river, | tream channel, where it gets inundated by overbank flooding from that curs at least once every 2 years. | | | | | |

| Wetland name or number: Big Rock Park Wetland A |
|---|
|---|

| | NO – go to 6NOTE: The Riverine unit can contain depressions flooding | ☐ YES – The wetland class is Riverine that are filled with water when the river is not |
|----|--|---|
| 5. | Is the entire wetland unit in a topographic depressurface, at some time during the year? <i>This mean of the wetland.</i> | sion in which water ponds, or is saturated to the as that any outlet, if present, is higher than the interior |
| | □NO – go to 7 | $oxtimes \mathbf{YES}$ – The wetland class is Depressional |
| 7. | Is the entire wetland unit located in a very flat are flooding? The unit does not pond surface water maintained by high groundwater in the area. The outlet. | <u>*</u> |
| | □NO – go to 8 | \square YES – The wetland class is Depressional |

8. Your wetland unit seems to be difficult to classify and probably contains several different HGM classes. For example, seeps at the base of a slope may grade into a riverine floodplain, or a small stream within a Depressional wetland has a zone of flooding along its sides. GO BACK AND IDENTIFY WHICH OF THE HYDROLOGIC REGIMES DESCRIBED IN QUESTIONS 1-7 APPLY TO DIFFERENT AREAS IN THE UNIT (make a rough sketch to help you decide). Use the following table to identify the appropriate class to use for the rating system if you have several HGM classes present within the wetland unit being scored.

NOTE: Use this table only if the class that is recommended in the second column represents 10% or more of the total area of the wetland unit being rated. If the area of the HGM class listed in column 2 is less than 10% of the unit; classify the wetland using the class that represents more than 90% of the total area.

| HGM classes within the wetland unit | HGM class to | | | |
|---------------------------------------|---------------|--|--|--|
| being rated | use in rating | | | |
| Slope + Riverine | Riverine | | | |
| Slope + Depressional | Depressional | | | |
| Slope + Lake Fringe | Lake Fringe | | | |
| Depressional + Riverine along stream | Depressional | | | |
| within boundary of depression | | | | |
| Depressional + Lake Fringe | Depressional | | | |
| Riverine + Lake Fringe | Riverine | | | |
| Salt Water Tidal Fringe and any other | Treat as | | | |
| class of freshwater wetland | ESTUARINE | | | |

If you are still unable to determine which of the above criteria apply to your wetland, or if you have **more than 2 HGM classes** within a wetland boundary, classify the wetland as Depressional for the rating.

| DEPRESSIONAL AND FLATS WETLANDS | | | | | | | | |
|--|------------------|----------|--|--|--|--|--|--|
| Water Quality Functions - Indicators that the site functions to improve water quality | | | | | | | | |
| D 1.0. Does the site have the potential to improve water quality? | | | | | | | | |
| D 1.1. Characteristics of surface water outflows from the wetland: | | | | | | | | |
| \square Wetland is a depression or flat depression (QUESTION 7 on key) with no surface water leaving it (no | | | | | | | | |
| ☑ Wetland has an intermittently flowing stream or ditch, OR highly constricted permanently flowing | points = 3 | 2 | | | | | | |
| wetiand has an intermittently nowing stream of ditch, Ok nightly constricted permanently nowing | points = 2 | 2 | | | | | | |
| ☐ Wetland has an unconstricted, or slightly constricted, surface outlet that is permanently flowing. | points = 1 | | | | | | | |
| \square Wetland is a flat depression (QUESTION 7 on key), whose outlet is a permanently flowing ditch. | points = 1 | | | | | | | |
| D 1.2. The soil 2 in below the surface (or duff layer) is true clay or true organic (use NRCS definitions). \(\subseteq Yes = | = 4 ⊠ No = 0 | 0 | | | | | | |
| D 1.3. Characteristics and distribution of persistent plants (Emergent, Scrub-shrub, and/or Forested Cowardin | n classes): | | | | | | | |
| ☐ Wetland has persistent, ungrazed, plants > 95% of area | points = 5 | | | | | | | |
| ☐ Wetland has persistent, ungrazed, plants > 1/2 of area | points = 3 | 1 | | | | | | |
| ☑ Wetland has persistent, ungrazed plants > 1/10 of area | points = 1 | | | | | | | |
| ☐ Wetland has persistent, ungrazed plants < 1/10 of area | points = 0 | | | | | | | |
| D 1.4. Characteristics of seasonal ponding or inundation: | | | | | | | | |
| This is the area that is ponded for at least 2 months. See description in manual. | | | | | | | | |
| ☐ Area seasonally ponded is > ½ total area of wetland | points = 4 | 2 | | | | | | |
| ☑ Area seasonally ponded is > ¼ total area of wetland | points = 2 | | | | | | | |
| ☐ Area seasonally ponded is < ¼ total area of wetland | points = 0 | | | | | | | |
| Total for D 1 Add the points in the boxe | es above | 5 | | | | | | |
| Rating of Site Potential If score is: \Box 12-16 = H \Box 6-11 = M \boxtimes 0-5 = L Record the re- | ating on the fi | rst page | | | | | | |
| D 2.0. Does the landscape have the potential to support the water quality function of the site? | | | | | | | | |
| D 2.1. Does the wetland unit receive stormwater discharges? \Box Yes = 1 | ⊠ No = 0 | 0 | | | | | | |
| D 2.2. Is > 10% of the area within 150 ft of the wetland in land uses that generate pollutants? \Box Yes = 1 | ⊠ No = 0 | 0 | | | | | | |
| D 2.3. Are there septic systems within 250 ft of the wetland? $	extstyle 	e$ | □ No = 0 | 1 | | | | | | |
| D 2.4. Are there other sources of pollutants coming into the wetland that are not listed in | | 1 | | | | | | |
| | □ No = 0 | | | | | | | |
| Total for D 2 Add the points in the boxe | es above | 2 | | | | | | |
| Rating of Landscape Potential If score is: \square 3 or 4 = H \boxtimes 1 or 2 = M \square 0 = L Record the rational score is: | ting on the firs | t page | | | | | | |
| D 3.0. Is the water quality improvement provided by the site valuable to society? | | | | | | | | |
| D 3.1. Does the wetland discharge directly (i.e., within 1 mi) to a stream, river, lake, or marine | | 0 | | | | | | |
| water that is on the 303(d) list? (≥ 1 mile) | ⊠ No = 0 | 0 | | | | | | |
| D 3.2. Is the wetland in a basin or sub-basin where an aquatic resource is on the 303(d) list? | □ No = 0 | 1 | | | | | | |
| D 3.3. Has the site been identified in a watershed or local plan as important for maintaining water quality | | | | | | | | |
| (answer YES if there is a TMDL for the basin in which the unit is found)? \Box Yes = 2 | ⊠ No = 0 | 0 | | | | | | |
| Total for D 3 Add the points in the boxe | es above | 1 | | | | | | |
| Rating of Value If score is: $\square 2-4 = H \square 1 = M \square 0 = L$ Record the re- | ating on the fi | rst page | | | | | | |

| DEPRESSIONAL AND FLATS WETLANDS | | | | | | | |
|---|---------------------|--|--|--|--|--|--|
| Hydrologic Functions - Indicators that the site functions to reduce flooding and stream degrada | ition | | | | | | |
| D 4.0. Does the site have the potential to reduce flooding and erosion? | | | | | | | |
| D 4.1. Characteristics of surface water outflows from the wetland: | | | | | | | |
| ☐ Wetland is a depression or flat depression with no surface water leaving it (no outlet). points = 4 | | | | | | | |
| ☑ Wetland has an intermittently flowing stream or ditch, OR highly constricted permanently | | | | | | | |
| flowing outlet. points = 2 | 2 | | | | | | |
| ☐ Wetland is a flat depression (QUESTION 7 on key), whose outlet is a permanently flowing ditch. points = 1 | | | | | | | |
| \square Wetland has an unconstricted, or slightly constricted, surface outlet that is permanently flowing. points = 0 | | | | | | | |
| D 4.2. <u>Depth of storage during wet periods:</u> <i>Estimate the height of ponding above the bottom of the outlet. For wetlands</i> | | | | | | | |
| with no outlet, measure from the surface of permanent water or if dry, the deepest part. | | | | | | | |
| ☐ Marks of ponding are 3 ft or more above the surface or bottom of outlet. points = 7 | | | | | | | |
| ☐ Marks of ponding between 2 ft to < 3 ft from surface or bottom of outlet. points = 5 | 3 | | | | | | |
| ☐ Marks are at least 0.5 ft to < 2 ft from surface or bottom of outlet. | | | | | | | |
| ☐ The wetland is a "headwater" wetland. points = 3 | | | | | | | |
| ☐ Wetland is flat but has small depressions on the surface that trap water. points = 1 | | | | | | | |
| \square Marks of ponding less than 0.5 ft (6 in). points = 0 | | | | | | | |
| D 4.3. Contribution of the wetland to storage in the watershed: Estimate the ratio of the area of upstream basin | | | | | | | |
| contributing surface water to the wetland to the area of the wetland unit itself. | | | | | | | |
| \square The area of the basin is less than 10 times the area of the unit. points = 5 | 5 | | | | | | |
| \Box The area of the basin is 10 to 100 times the area of the unit. points = 3 | | | | | | | |
| \Box The area of the basin is more than 100 times the area of the unit. points = 0 | | | | | | | |
| \Box Entire wetland is in the Flats class. points = 5 | | | | | | | |
| Total for D 4 Add the points in the boxes above | 10 | | | | | | |
| Rating of Site Potential If score is: \Box 12-16 = H \boxtimes 6-11 = M \Box 0-5 = L Record the rating on the score is: | ne first page | | | | | | |
| | | | | | | | |
| D 5.0. Does the landscape have the potential to support hydrologic functions of the site? | | | | | | | |
| D 5.0. Does the landscape have the potential to support hydrologic functions of the site? D 5.1. Does the wetland receive stormwater discharges? □Yes = 1 ☒ No = 0 | 0 | | | | | | |
| | _ | | | | | | |
| D 5.1. Does the wetland receive stormwater discharges? \Box Yes = 1 \boxtimes No = 0 D 5.2. Is >10% of the area within 150 ft of the wetland in land uses that generate excess runoff? \boxtimes Yes = 1 \Box No = 0 | 1 | | | | | | |
| D 5.1. Does the wetland receive stormwater discharges? □Yes = 1 ☒ No = 0 | _ | | | | | | |
| D 5.1. Does the wetland receive stormwater discharges? \square Yes = 1 \square No = 0 D 5.2. Is >10% of the area within 150 ft of the wetland in land uses that generate excess runoff? \square Yes = 1 \square No = 0 D 5.3. Is more than 25% of the contributing basin of the wetland covered with intensive human land uses (residential at | 1 | | | | | | |
| D 5.1. Does the wetland receive stormwater discharges? □ Yes = 1 □ No = 0 □ Yes = 1 □ No = 0 □ Solution Sol | 1 0 1 | | | | | | |
| D 5.1. Does the wetland receive stormwater discharges? D 5.2. Is >10% of the area within 150 ft of the wetland in land uses that generate excess runoff? D 5.3. Is more than 25% of the contributing basin of the wetland covered with intensive human land uses (residential at >1 residence/ac, urban, commercial, agriculture, etc.)? Total for D 5 Add the points in the boxes above Rating of Landscape Potential If score is: □3 = H □1 or 2 = M □0 = L Record the rating on the score is: □3 = H □1 or 2 = M □0 = L | 1 0 1 | | | | | | |
| D 5.1. Does the wetland receive stormwater discharges? D 5.2. Is >10% of the area within 150 ft of the wetland in land uses that generate excess runoff? D 5.3. Is more than 25% of the contributing basin of the wetland covered with intensive human land uses (residential at >1 residence/ac, urban, commercial, agriculture, etc.)? Total for D 5 Add the points in the boxes above Rating of Landscape Potential If score is: □3 = H □1 or 2 = M □0 = L Record the rating on the points in the boxes above | 1 0 1 | | | | | | |
| D 5.1. Does the wetland receive stormwater discharges? D 5.2. Is >10% of the area within 150 ft of the wetland in land uses that generate excess runoff? D 5.3. Is more than 25% of the contributing basin of the wetland covered with intensive human land uses (residential at >1 residence/ac, urban, commercial, agriculture, etc.)? Total for D 5 Add the points in the boxes above Rating of Landscape Potential If score is: □3 = H □1 or 2 = M □0 = L D 6.0. Are the hydrologic functions provided by the site valuable to society? D 6.1. The unit is in a landscape that has flooding problems. Choose the description that best matches conditions around the standard problems. | 1 0 1 | | | | | | |
| D 5.1. Does the wetland receive stormwater discharges? D 5.2. Is >10% of the area within 150 ft of the wetland in land uses that generate excess runoff? | 1 0 1 | | | | | | |
| D 5.1. Does the wetland receive stormwater discharges? D 5.2. Is >10% of the area within 150 ft of the wetland in land uses that generate excess runoff? | 1 0 1 | | | | | | |
| D 5.1. Does the wetland receive stormwater discharges? D 5.2. Is >10% of the area within 150 ft of the wetland in land uses that generate excess runoff? | 1 0 1 | | | | | | |
| D 5.1. Does the wetland receive stormwater discharges? D 5.2. Is >10% of the area within 150 ft of the wetland in land uses that generate excess runoff? | 1 0 1 ne first page | | | | | | |
| D 5.1. Does the wetland receive stormwater discharges? D 5.2. Is >10% of the area within 150 ft of the wetland in land uses that generate excess runoff? | 1 0 1 | | | | | | |
| D 5.1. Does the wetland receive stormwater discharges? D 5.2. Is >10% of the area within 150 ft of the wetland in land uses that generate excess runoff? D 5.3. Is more than 25% of the contributing basin of the wetland covered with intensive human land uses (residential at >1 residence/ac, urban, commercial, agriculture, etc.)? Total for D 5 Add the points in the boxes above Rating of Landscape Potential If score is: □3 = H □1 or 2 = M □0 = L D 6.0. Are the hydrologic functions provided by the site valuable to society? D 6.1. The unit is in a landscape that has flooding problems. Choose the description that best matches conditions around the wetland unit being rated. Do not add points. Choose the highest score if more than one condition is met. The wetland captures surface water that would otherwise flow down-gradient into areas where flooding has damaged human or natural resources (e.g., houses or salmon redds): ■ □ Surface flooding problems are in a sub-basin farther down-gradient. □ Flooding from groundwater is an issue in the sub-basin. D oints = 1 □ Flooding from groundwater is an issue in the sub-basin. | 1 0 1 ne first page | | | | | | |
| D 5.1. Does the wetland receive stormwater discharges? D 5.2. Is >10% of the area within 150 ft of the wetland in land uses that generate excess runoff? | 1 0 1 ne first page | | | | | | |
| D 5.1. Does the wetland receive stormwater discharges? D 5.2. Is >10% of the area within 150 ft of the wetland in land uses that generate excess runoff? | 1 0 1 ne first page | | | | | | |
| D 5.1. Does the wetland receive stormwater discharges? □ 5.2. Is >10% of the area within 150 ft of the wetland in land uses that generate excess runoff? □ 5.3. Is more than 25% of the contributing basin of the wetland covered with intensive human land uses (residential at >1 residence/ac, urban, commercial, agriculture, etc.)? □ 5.3. Is more than 25% of the contributing basin of the wetland covered with intensive human land uses (residential at >1 residence/ac, urban, commercial, agriculture, etc.)? □ 5.3. Is more than 25% of the contributing basin of the wetland covered with intensive human land uses (residential at >1 residence/ac, urban, commercial, agriculture, etc.)? □ 6.1. Total for D 5 □ 6.1. The unit is in a landscape that has flooding problems. Choose the description that best matches conditions around the wetland unit being rated. Do not add points. Choose the description that best matches conditions around the wetland unit being rated. Do not add points. Choose the highest score if more than one condition is met. □ The wetland captures surface water that would otherwise flow down-gradient into areas where flooding has damaged human or natural resources (e.g., houses or salmon redds): □ □ Flooding occurs in a sub-basin that is immediately down-gradient of unit. □ □ Surface flooding problems are in a sub-basin farther down-gradient. □ Flooding from groundwater is an issue in the sub-basin. □ The existing or potential outflow from the wetland is so constrained by human or natural conditions that the water stored by the wetland cannot reach areas that flood. | 1 0 1 ne first page | | | | | | |
| D 5.1. Does the wetland receive stormwater discharges? D 5.2. Is >10% of the area within 150 ft of the wetland in land uses that generate excess runoff? D 5.3. Is more than 25% of the contributing basin of the wetland covered with intensive human land uses (residential at >1 residence/ac, urban, commercial, agriculture, etc.)? Total for D 5 Add the points in the boxes above Rating of Landscape Potential If score is: □3 = H □1 or 2 = M □0 = L D 6.0. Are the hydrologic functions provided by the site valuable to society? D 6.1. The unit is in a landscape that has flooding problems. Choose the description that best matches conditions around the wetland unit being rated. Do not add points. Choose the highest score if more than one condition is met. The wetland captures surface water that would otherwise flow down-gradient into areas where flooding has damaged human or natural resources (e.g., houses or salmon redds): ■ □ Flooding occurs in a sub-basin that is immediately down-gradient of unit. □ Surface flooding problems are in a sub-basin farther down-gradient. □ Flooding from groundwater is an issue in the sub-basin. □ The existing or potential outflow from the wetland is so constrained by human or natural conditions that the water stored by the wetland cannot reach areas that flood. Explain why: □ There are no problems with flooding downstream of the wetland. D 6.2. Has the site been identified as important for flood storage or flood conveyance in a regional flood control plan? | 1 0 1 ne first page | | | | | | |
| D 5.1. Does the wetland receive stormwater discharges? D 5.2. Is >10% of the area within 150 ft of the wetland in land uses that generate excess runoff? D 5.3. Is more than 25% of the contributing basin of the wetland covered with intensive human land uses (residential at >1 residence/ac, urban, commercial, agriculture, etc.)? Total for D 5 Add the points in the boxes above Rating of Landscape Potential If score is: □3 = H □1 or 2 = M □0 = L Record the rating on the wetland unit is in a landscape that has flooding problems. Choose the description that best matches conditions around the wetland unit being rated. Do not add points. Choose the highest score if more than one condition is met. The wetland captures surface water that would otherwise flow down-gradient into areas where flooding has damaged human or natural resources (e.g., houses or salmon redds): • □ Surface flooding problems are in a sub-basin farther down-gradient of unit. □ Flooding from groundwater is an issue in the sub-basin. □ Flooding from groundwater is an issue in the sub-basin. □ The existing or potential outflow from the wetland is so constrained by human or natural conditions that the water stored by the wetland cannot reach areas that flood. Explain why: points = 0 □ There are no problems with flooding downstream of the wetland. □ Flooding problems with flooding downstream of the wetland. | 1 0 1 ne first page | | | | | | |

Rating of Value If score is: $\boxtimes 2-4 = H \square 1 = M \square 0 = L$

Record the rating on the first page

| These questions apply to wetlands of all HGM classes. | | | | | | | | |
|--|---|--|--|--|--|--|--|--|
| HABITAT FUNCTIONS - Indicators that site functions to provide important habitat | | | | | | | | |
| H 1.0. Does the site have the potential to provide habitat? | | | | | | | | |
| H 1.1. Structure of plant community: Indicators are Cowardin classes and strata within the Forested class. Check the Cowardin plant classes in the wetland. Up to 10 patches may be combined for each class to meet the threshold of ¼ ac or more than 10% of the unit if it is smaller than 2.5 ac. Add the number of structures checked. □ Aquatic bed □ Aquatic bed □ Scrub-shrub (areas where shrubs have > 30% cover) □ Scrub-shrub (areas where shrubs have > 30% cover) □ Forested (areas where trees have > 30% cover) □ If the unit has a Forested class, check if: □ The Forested class has 3 out of 5 strata (canopy, sub-canopy, shrubs, herbaceous, moss/ground-cover) that each cover 20% within the Forested polygon | 1 | | | | | | | |
| H 1.2. Hydroperiods Check the types of water regimes (hydroperiods) present within the wetland. The water regime has to cover more than 10% of the wetland or ¼ ac to count (see text for descriptions of hydroperiods). ☑ Permanently flooded or inundated 4 or more types present: points = 3 ☑ Seasonally flooded or inundated 3 types present: points = 2 ☑ Occasionally flooded or inundated 2 types present: points = 1 ☐ Saturated only 1 type present: points = 0 ☐ Permanently flowing stream or river in, or adjacent to, the wetland ☐ Seasonally flowing stream in, or adjacent to, the wetland ☐ Lake Fringe wetland 2 points ☐ Freshwater tidal wetland 2 points | 2 | | | | | | | |
| H 1.3. Richness of plant species Count the number of plant species in the wetland that cover at least 10 ft². Different patches of the same species can be combined to meet the size threshold and you do not have to name the species. Do not include Eurasian milfoil, reed canarygrass, purple loosestrife, Canadian thistle If you counted: > 19 species points = 2 points = 1 < 5 species points = 0 | 2 | | | | | | | |
| H 1.4. Interspersion of habitats Decide from the diagrams below whether interspersion among Cowardin plants classes (described in H 1.1), or the classes and unvegetated areas (can include open water or mudflats) is high, moderate, low, or none. If you have four or more plant classes or three classes and open water, the rating is always high. None = 0 points Low = 1 point Moderate = 2 points All three diagrams in this row are HIGH = 3points | 3 | | | | | | | |

| H 1.5. Special habitat features: | | |
|--|---------------|---------------|
| Check the habitat features that are present in the wetland. The number of checks is the number of poir | its. | |
| oxtimes Large, downed, woody debris within the wetland (> 4 in diameter and 6 ft long). | | |
| oxtimes Standing snags (dbh > 4 in) within the wetland. | | |
| Undercut banks are present for at least 6.6 ft (2 m) AND/OR overhanging plants extends at least 3.3 over a stream (or ditch) in, or contiguous with the wetland, for at least 33 ft (10 m). | 3 ft (1 m) | |
| \Box Stable steep banks of fine material that might be used by beaver or muskrat for denning (> 30 denotes the contract of the | egree | 3 |
| slope) OR signs of recent beaver activity are present (cut shrubs or trees that have not yet weath where wood is exposed). | _ | |
| ☐ At least ¼ ac of thin-stemmed persistent plants or woody branches are present in areas that are | | |
| permanently or seasonally inundated (structures for egg-laying by amphibians). | | |
| Invasive plants cover less than 25% of the wetland area in every stratum of plants (see H 1.1 for list) | of | |
| strata). | o, | |
| Total for H 1 Add the points in the boxe | s above | 11 |
| · | | |
| Rating of Site Potential If score is: \Box 15-18 = H \boxtimes 7-14 = M \Box 0-6 = L Record the | e rating on t | he first page |
| H 2.0. Does the landscape have the potential to support the habitat functions of the site? | | |
| H 2.1. Accessible habitat (include only habitat that directly abuts wetland unit). | | |
| Calculate: 0% undisturbed habitat + [(21% moderate and low intensity land uses)/2] = 0% + (21%/2) = | 10.5% | |
| If total accessible habitat is: | | |
| $\square > 1/3$ (33.3%) of 1 km Polygon points = 3 | | 1 |
| | oints = 2 | |
| · · | oints = 1 | |
| · · | oints = 0 | |
| H 2.2. Undisturbed habitat in 1 km Polygon around the wetland. | 0111113 | |
| Calculate: 36% undisturbed habitat + [(55.6% moderate and low intensity land uses)/2 = $\%$ + (##%/2) = | 63.8% | |
| □ Undisturbed habitat > 50% of Polygon □ Undisturbed ha | oints = 3 | 2 |
| ☐ Undisturbed habitat 10-50% and in 1-3 patches po | oints = 2 | 3 |
| ☐ Undisturbed habitat 10-50% and > 3 patches po | oints = 1 | |
| ☐ Undisturbed habitat < 10% of 1 km Polygon polygon | oints = 0 | |
| H 2.3. Land use intensity in 1 km Polygon: If | | |
| | oints = (- 2) | 0 |
| | oints = 0 | |
| Total for H 2 Add the points in the boxe | | 4 |
| · | rating on th | e first page |
| | | |
| H 3.0. Is the habitat provided by the site valuable to society? | | |
| H 3.1. Does the site provide habitat for species valued in laws, regulations, or policies? Choose only the highest | st score | |
| that applies to the wetland being rated. | | |
| · | oints = 2 | |
| ☑ It has 3 or more priority habitats within 100 m (see next page) | | |
| ☐ It provides habitat for Threatened or Endangered species (any plant or animal on the state or fo | ederal lists) | _ |
| ☐ It is mapped as a location for an individual WDFW priority species | | 2 |
| ☐ It is a Wetland of High Conservation Value as determined by the Department of Natural Resour | ces | |
| ☐ It has been categorized as an important habitat site in a local or regional comprehensive plan, | | |
| in a Shoreline Master Plan, or in a watershed plan | a:ata 4 | |
| | oints = 1 | |
| ☐ Site does not meet any of the criteria above p | oints = 0 | |

Rating of Value If score is: $\square 2 = H \square 1 = M \square 0 = L$

Record the rating on the first page

WDFW Priority Habitats

<u>Priority habitats listed by WDFW</u> (see complete descriptions of WDFW priority habitats, and the counties in which they can be found, in: Washington Department of Fish and Wildlife. 2008. Priority Habitat and Species List. Olympia, Washington. 177 pp. http://wdfw.wa.gov/publications/00165/wdfw00165.pdf or access the list from here: http://wdfw.wa.gov/conservation/phs/list/)

Count how many of the following priority habitats are within 330 ft (100 m) of the wetland unit: **NOTE:** This question is independent of the land use between the wetland unit and the priority habitat.

| \square Aspen Stands: Pure or mixed stands of aspen greater than 1 ac (0.4 ha). |
|---|
| ☐ Biodiversity Areas and Corridors : Areas of habitat that are relatively important to various species of native fish and wildlife (<i>full descriptions in WDFW PHS report</i>). |
| \square Herbaceous Balds: Variable size patches of grass and forbs on shallow soils over bedrock. |
| □ Old-growth/Mature forests: Old-growth west of Cascade crest – Stands of at least 2 tree species, forming a multi- layered canopy with occasional small openings; with at least 8 trees/ac (20 trees/ha) > 32 in (81 cm) dbh or > 200 years of age. Mature forests – Stands with average diameters exceeding 21 in (53 cm) dbh; crown cover may be less than 100%; decay, decadence, numbers of snags, and quantity of large downed material is generally less than that found in old-growth; 80-200 years old west of the Cascade crest. |
| □ Oregon White Oak: Woodland stands of pure oak or oak/conifer associations where canopy coverage of the oak component is important (<i>full descriptions in WDFW PHS report p. 158 – see web link above</i>). |
| ☑ Riparian : The area adjacent to aquatic systems with flowing water that contains elements of both aquatic and terrestrial ecosystems which mutually influence each other. |
| □ Westside Prairies: Herbaceous, non-forested plant communities that can either take the form of a dry prairie or a wet prairie (<i>full descriptions in WDFW PHS report p. 161 – see web link above</i>). |
| ☑ Instream: The combination of physical, biological, and chemical processes and conditions that interact to provide functional life history requirements for instream fish and wildlife resources. |
| □ Nearshore : Relatively undisturbed nearshore habitats. These include Coastal Nearshore, Open Coast Nearshore, and Puget Sound Nearshore. (<i>full descriptions of habitats and the definition of relatively undisturbed are in WDFW report – see web link on previous page</i>). |
| □ Caves: A naturally occurring cavity, recess, void, or system of interconnected passages under the earth in soils, rock, ice, or other geological formations and is large enough to contain a human. |
| \Box Cliffs: Greater than 25 ft (7.6 m) high and occurring below 5000 ft elevation. |
| \Box Talus: Homogenous areas of rock rubble ranging in average size 0.5 - 6.5 ft (0.15 - 2.0 m), composed of basalt, andesite, and/or sedimentary rock, including riprap slides and mine tailings. May be associated with cliffs. |
| Snags and Logs: Trees are considered snags if they are dead or dying and exhibit sufficient decay characteristics to enable cavity excavation/use by wildlife. Priority snags have a diameter at breast height of > 20 in (51 cm) in western Washington and are > 6.5 ft (2 m) in height. Priority logs are > 12 in (30 cm) in diameter at the largest end, and > 20 ft (6 m) long. |

Note: All vegetated wetlands are by definition a priority habitat but are not included in this list because they are addressed

elsewhere.

CATEGORIZATION BASED ON SPECIAL CHARACTERISTICS

| Wetland Type | Category |
|--|----------|
| Check off any criteria that apply to the wetland. Circle the category when the appropriate criteria are met. | |
| SC 1.0. Estuarine wetlands | |
| Does the wetland meet the following criteria for Estuarine wetlands? | |
| ☐ The dominant water regime is tidal, | |
| ☐ Vegetated, and | |
| ☐ With a salinity greater than 0.5 ppt ☐ Yes –Go to SC 1.1 ☐ No= Not an estuarine wetland | |
| SC 1.1. Is the wetland within a National Wildlife Refuge, National Park, National Estuary Reserve, Natural Area | |
| Preserve, State Park or Educational, Environmental, or Scientific Reserve designated under WAC 332-30-151? | Cat. I |
| \Box Yes = Category I \Box No - Go to SC 1.2 | |
| SC 1.2. Is the wetland unit at least 1 ac in size and meets at least two of the following three conditions? | |
| ☐ The wetland is relatively undisturbed (has no diking, ditching, filling, cultivation, grazing, and has | Cat. I |
| less than 10% cover of non-native plant species. (If non-native species are <i>Spartina</i> , see page 25) | |
| ☐ At least ¾ of the landward edge of the wetland has a 100 ft buffer of shrub, forest, or un-grazed or | |
| un- mowed grassland. | Cat. II |
| \Box The wetland has at least two of the following features: tidal channels, depressions with open water, | |
| or contiguous freshwater wetlands. | |
| | |
| SC 2.0. Wetlands of High Conservation Value (WHCV) | |
| SC 2.1. Has the WA Department of Natural Resources updated their website to include the list of Wetlands of High | |
| Conservation Value? $	extstyle 	ext$ | |
| SC 2.2. Is the wetland listed on the WDNR database as a Wetland of High Conservation Value? | |
| <u>http://www.dnr.wa.gov/NHPwetlandviewer</u> □ Yes = Category I No = Not a WHCV | Cat. I |
| SC 2.3. Is the wetland in a Section/Township/Range that contains a Natural Heritage wetland? | |
| http://file.dnr.wa.gov/publications/amp_nh_wetlands_trs.pdf | |
| \Box Yes – Contact WNHP/WDNR and go to SC 2.4 \Box No = Not a WHCV SC 2.4. Has WDNR identified the wetland within the S/T/R as a Wetland of High Conservation Value and listed it on | |
| their website? \Box Yes = Category I \Box No = Not a WHCV | |
| their website: | |
| SC 3.0. Bogs | |
| Does the wetland (or any part of the unit) meet both the criteria for soils and vegetation in bogs? Use the key | |
| below. If you answer YES you will still need to rate the wetland based on its functions. | |
| SC 3.1. Does an area within the wetland unit have organic soil horizons, either peats or mucks, that compose 16 in or | |
| more of the first 32 in of the soil profile? \Box Yes – Go to SC 3.3 \boxtimes No – Go to SC 3.2 | |
| SC 3.2. Does an area within the wetland unit have organic soils, either peats or mucks, that are less than 16 in deep | |
| over bedrock, or an impermeable hardpan such as clay or volcanic ash, or that are floating on top of a lake or | |
| pond? \square Yes – Go to SC 3.3 \boxtimes No = Is not a bog | l |
| SC 3.3. Does an area with peats or mucks have more than 70% cover of mosses at ground level, AND at least a 30% | Cat. I |
| cover of plant species listed in Table 4? | |
| NOTE: If you are uncertain about the extent of mosses in the understory, you may substitute that criterion by | |
| measuring the pH of the water that seeps into a hole dug at least 16 in deep. If the pH is less than 5.0 and the | |
| plant species in Table 4 are present, the wetland is a bog. | |
| SC 3.4. Is an area with peats or mucks forested (> 30% cover) with Sitka spruce, subalpine fir, western red cedar, | |
| western hemlock, lodgepole pine, quaking aspen, Engelmann spruce, or western white pine, AND any of the species (or combination of species) listed in Table 4 provide more than 30% of the cover under the canopy? | |
| Yes = Is a Category I bog \text{No = Is not a} | |

| SC 4.0. Forested Wetlands | |
|---|----------|
| Does the wetland have at least 1 contiguous acre of forest that meets one of these criteria for the WA Department of Fish and Wildlife's forests as priority habitats? <i>If you answer YES you will still need to rate the wetland based on its functions.</i> □ Old-growth forests (west of Cascade crest): Stands of at least two tree species, forming a multi-layered canopy with occasional small openings; with at least 8 trees/ac (20 trees/ha) that are at least 200 years of age OR have a diameter at breast height (dbh) of 32 in (81 cm) or more. □ Mature forests (west of the Cascade Crest): Stands where the largest trees are 80- 200 years old OR the species that make up the canopy have an average diameter (dbh) exceeding 21 in (53 cm). | Cat. I |
| ☐Yes = Category I ☐ No = Not a forested wetland for this section | |
| SC 5.0. Wetlands in Coastal Lagoons Does the wetland meet all of the following criteria of a wetland in a coastal lagoon? ☐ The wetland lies in a depression adjacent to marine waters that is wholly or partially separated from marine waters by sandbanks, gravel banks, shingle, or, less frequently, rocks ☐ The lagoon in which the wetland is located contains ponded water that is saline or brackish (> 0.5 ppt) during most of the year in at least a portion of the lagoon (needs to be measured near the bottom) ☐ Yes - Go to SC 5.1 ☑ No = Not a wetland in a coastal lagoon SC 5.1. Does the wetland meet all of the following three conditions? ☐ The wetland is relatively undisturbed (has no diking, ditching, filling, cultivation, grazing), and has less than 20% cover of aggressive, opportunistic plant species (see list of species on p. 100). ☐ At least ¾ of the landward edge of the wetland has a 100 ft buffer of shrub, forest, or un-grazed or un-mowed grassland. ☐ The wetland is larger than ¹/₁₀ ac (4350 ft²) ☐ Yes = Category I ☐ No = Category II | Cat. II |
| SC 6.0. Interdunal Wetlands | |
| Is the wetland west of the 1889 line (also called the Western Boundary of Upland Ownership or WBUO)? If you answer yes you will still need to rate the wetland based on its habitat functions. In practical terms that means the following geographic areas: Long Beach Peninsula: Lands west of SR 103 Grayland-Westport: Lands west of SR 105 | Cat I |
| ☐ Ocean Shores-Copalis: Lands west of SR 115 and SR 109 ☐ Yes — Go to SC 6.1 ☑ No = not an interdunal wetland for rating | Cat. II |
| SC 6.1. Is the wetland 1 ac or larger and scores an 8 or 9 for the habitat functions on the form (rates H,H,H or H,H,M for the three aspects of function)? SC 6.2. Is the wetland 1 ac or larger, or is it in a mosaic of wetlands that is 1 ac or larger? Yes = Category I No – Go to SC 6.3 | Cat. III |
| SC 6.3. Is the unit between 0.1 and 1 ac, or is it in a mosaic of wetlands that is between 0.1 and 1 ac? \[\textstyle \text{Yes} = \textbf{Category III} \text{No} = \text{Category IV} \] | Cat. IV |
| Category of wetland based on Special Characteristics If you answered No for all types, enter "Not Applicable" on Summary Form | NA |

Wetland name or number: Click here to enter text.

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Figure 1



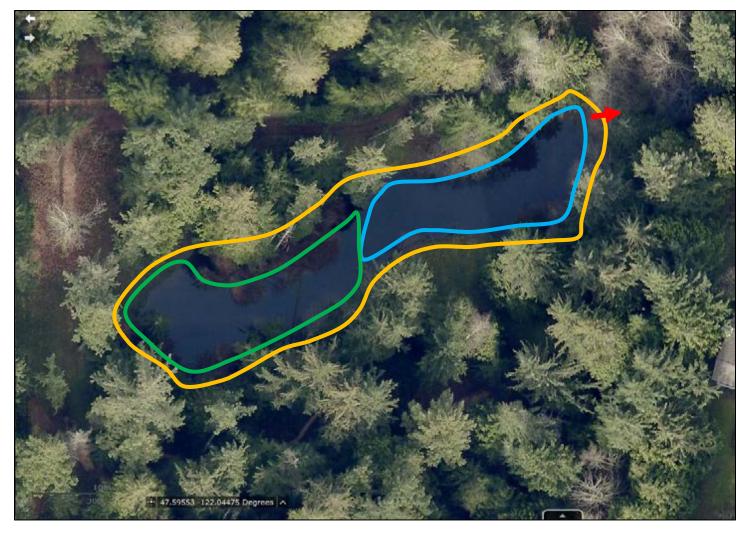


Figure 2





Figure 3



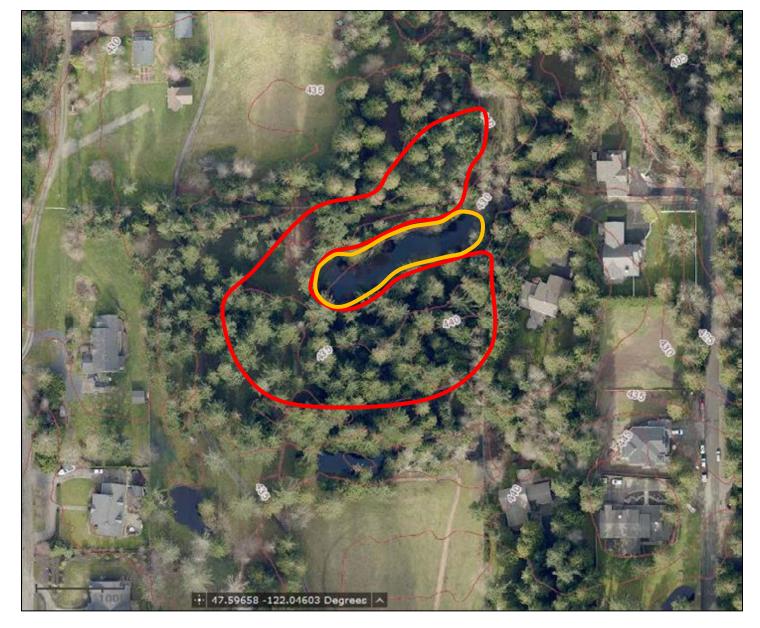
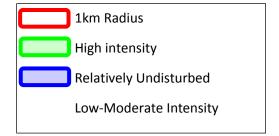


Figure 4





Figure 5



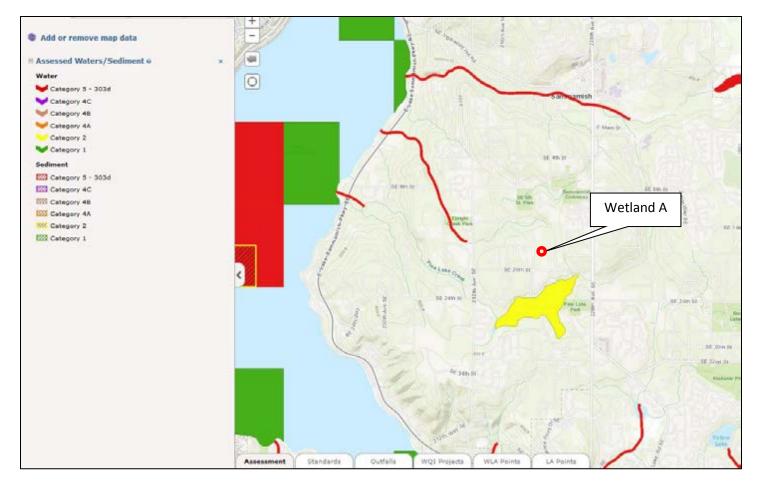


Figure 6

- 7. WRIA 8 Swamp Creek
- 8. WRIA 8 Bear-Evans Creek
- 9. WRIA 8 Cottage Lake
- 10. WRIA 8 Issaquah Creek Basin
- 11. WRIA 8 Little Bear Creek
- 12. WRIA 10 Puyallup River



November 24, 2021

Shelby Perrault Project Manager, Parks & Recreation City of Sammamish 801 228th Avenue SE Sammamish, WA 98075 Via email: sperrault@sammamish.us

Big Rock Park South, Wetland Reconnaissance Report

The Watershed Company Reference Number: 191106.10

Summary

This report presents the findings of a wetland and stream reconnaissance study located at the future Big Rock Park South property, located at 22104 SE 20th Street in Sammamish, Washington (parcel # 0424069153). In addition to the information and findings presented in this report, the following documents are enclosed:

- Site Photos
- Reconnaisance Sketch
- Water Connection Diagram (City of Sammamish)

Five wetlands (Wetland A-E) are located within the subject property. They are estimated Category III wetlands with either four or five habitat points (Table 1). Based on the rating and habitat score, The City of Sammamish would require standard 50-foot buffers for Wetlands A-E.

Table 1. Summary of wetlands, streams, and required buffers.

| Feature Name | Category/Type | Habitat Score | Buffer (ft) |
|--------------|---------------|---------------|-------------|
| Wetland A | Category III | 4 | 50 |
| Wetland B | Category III | 5 | 50 |
| Wetland C | Category III | 5 | 50 |
| Wetland D | Category III | 4 | 50 |
| Wetland E | Category III | 5 | 50 |

Study Area

The study area is defined as most of parcel 0424069153, excluding the northern portion of the site that was previously delineated. The subject parcel is approximately 14.87 acres in size (Figure 1). Adjacent public or private property within 200 feet was screened from the edge of parcel or nearest publicly accessible land; no private property was accessed without permission. It is situated within Section 04 of Township 24 North, Range 06 East of the Public Land Survey System.



Figure 1. Study area map. Study area outlined in purple.

Methods

Field investigations for the delineation study were conducted on September 23, 2021 by The Watershed Company ecologists: Grace Brennan and Sage Presster.

The study area was evaluated for wetlands using methodology from the *Corps of Engineers* Wetland Delineation Manual (Environmental Laboratory 1987) and the *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Western Mountains, Valleys, and Coast Region*

Version 2.0 (U.S. Army Corps of Engineers 2010). Presence or absence of wetlands was determined on the basis of an examination of vegetation, soils and hydrology. These parameters were sampled at several locations along the wetland boundary to determine the approximate wetland edge. Wetlands were classified using the Department of Ecology's 2014 rating system (Hruby 2014).

Characterization of climatic conditions for precipitation in the Wetland Determination Data Forms were determined using the WETS table methodology (USDA, NRCS 2015). The "Seattle Tacoma Intl AP" station from 1991-2020 was used as a source for precipitation data (http://agacis.rcc-acis.org/). The WETS table methodology uses climate data from the three months prior to the site visit month to determine if normal conditions are present in the study area region.

The study area was evaluated for streams based on the presence or absence of an ordinary high water mark (OHWM) as defined by Section 404 of the Clean Water Act, the Washington Administrative Code (WAC) 220-660-030, and the Revised Code of Washington (RCW) 90.58.030 and guidance documents including *Determining the Ordinary High Water Mark for Shoreline Management Act Compliance in Washington State* (Anderson 2016) and *A Guide to Ordinate High Water Mark (OHWM) Delineation for Non-Perennial Streams in the Western Mountains, Valleys, and Coast Region of the United States* (Mersel 2016).

Public-domain information on the subject properties was reviewed for this reconnaissance study. Resources and review findings are presented in Table 2 of the "Environmental Setting" section of this letter.

Environmental Setting

The study area is within in the East Lake Sammamish sub-basin of the Cedar – Sammamish watershed (WRIA 8). It is located just north of Pine Lake, within the Big Rock Park corridor that extends north of the subject parcel. The site is relatively flat, sloping down very slightly to the south. The wetlands are separated by flat terraces across the parcel.

The subject property is approximately 14.87 acres in size and is developed with a large single-family home, associated outbuildings, paths, and other amenities. Much of the property is maintained as lawn and yard area. A mix of native and ornamental plants are present throughout this area. Douglas-fir (*Pseudotsuga menziesii*) dominates the sparse tree canopy, while maintained lawn grass makes up a majority of the understory (Photo 1). Some non-mowed areas in the northern portion of the site have an understory of bracken fern (*Pteridium*

aquilinum var. pubescens), salal (Gaultheria shallon), and trailing blackberry (Rubus ursinus). Soils outside of wetland areas are bright and were very dry at the time of the site visit.

One area in the southeastern corner of the subject parcel meets criteria for hydric soils; however, it appears to be a constructed but informal stormwater feature. There are multiple pipes coming into the feature, a large valve to control water flow, and evenly constructed banks (Photo 2). Additionally, the area is unvegetated and all areas surrounding the feature do not meet wetland criteria.

Reviewed public-domain information for the site is summarized below (Table 2).

Table 2. Summary of online mapping and inventory resources.

| Resource | Summary |
|---|---|
| USDA NRCS: Web Soil Survey | Entirety of the property mapped as Alderwood gravelly sandy loam, 8 to 15 percent slopes. |
| USFWS: NWI Wetland Mapper | No features mapped within the subject parcel. |
| WDFW: PHS on the Web | No features mapped within the subject parcel. |
| WDFW: SalmonScape | No features mapped within the subject parcel. |
| WA-DNR: Forest Practices Activity Mapping Tool | No features mapped within the subject parcel. |
| King County iMap | No features mapped within the subject parcel. |
| City of Sammamish maps | No features mapped within the subject parcel. |
| WETS Climatic Condition | Drier than normal. |

Findings

Wetlands

Five wetlands (Wetland A-E) were identified within the study area. Wetlands A through E are summarized in Tables 3, 4, 5, 6, and 7, below. Wetlands A through E are hydrologically connected through a series of pipes, with all of the wetlands contained in a similar topographic depression / swale that runs intermittently through the subject area. Water appears to flow through pipes from the north to the south, with water conveyance pipes that connect each wetland (See Water Connection Diagram). Despite past manipulation, it appears the high water table would have supported historic wetland conditions prior to pond excavations.

Table 3. Wetland A assessment summary.

| THE Wate Comi | rshed Pany |) | | WETL | AND A | – Asse | ssment | Sumn | nary | | | |
|--|---------------|-------------|--------|---|------------|------------------------------------|-----------------------------|----------|--------------|---|----------|-----------------|
| Location: | W | Vester | n side | of subject p | parcel, be | etween \ | Wetland: | s D and | B. | | | |
| WRIA / Sub-basi | n: C | edar - | – Samr | namish wat | ershed (\ | NRIA 8) | / East La | ike Sam | mamis | h sub-ba | sin | |
| Share and the same of the same | | | | | | 2014 Western WA Ecology Rating: | | | Category III | | | |
| | | | | | C.A. | | ffer Wid back: | th and E | Buffer | 50-foot buffer, 15-foot setback | | |
| | | | | | | We | etland Si | ze: | | Approx | 3,500 | ft ² |
| | | | | olugia. | | | Cowardin Classification(s): | | | Palustrine emergent, palustrine scrub-shrub | | |
| | | | | | | HG | HGM Classification(s): | | | Depressional | | |
| | | | | | į. | | | | | | | |
| | Tree str | atum | : | Western re | ed cedar (| Thuja p | licata) | | | | | |
| Vegetation | Shrub st | ub stratum: | | Black cottonwood (<i>Populus balsamifera</i>) saplings, Douglas' spirea douglasii) | | | | | | (Spirea | | |
| | Herb str | ratum | ı: | Soft rush (<i>Juncus effusus</i>), marsh bedstraw (<i>Galium palustre</i>), commo water plantain (<i>Alisma plantago-aquatica</i>) | | | | | | | nmon | |
| Soils | Soil surv | vey: | | Alderwood | gravelly | sandy lo | am, 8 to | 15 per | cent sl | opes | | |
| Hydrology | Source: | | | High groun | dwater t | able, co | nnectivit | y to We | tland | В | | |
| | | | | Estimate | d Wetla | and Fu | nctions | 5 | | | | |
| | | | , | Improving Water Qual | | F | lydrologi | ic | | Habitat | | |
| Site Potential | | | Н | <u>M</u> | L | Н | M | L | Н | М | <u>L</u> | |
| Landscape Poter | ntial | | Н | <u>M</u> | L | Н | <u>M</u> | L | Н | М | <u>L</u> | |
| Value | | | Н | <u>M</u> | L | <u>H</u> | М | L | Н | <u>M</u> | L | TOTAL |
| Score Based on Ratings | | | | 6 | | | 7 | | | 4 | | 17 |
| | | | | Descrip | tion an | d Com | ments | | | | | |
| Wetland A is a | small de | press | ional | wetland w | ith a ver | y divers | se emer | gent pl | ant co | mmunit | y. The | re are |

both inlets and outlets in the form of a pipe present in this wetland.

Table 4. Wetland B assessment summary.

| THE WATERSHED WETLAND B – Assessment Summary COMPANY | | | | | | | | | | | |
|--|--------------|-----|--|-----------|-----------|-----------------------|----------|----------|----------------------|----------|-------|
| Location: Northwestern corner of study area, between Wetlands A and C. | | | | | | | | | | | |
| WRIA / Sub-basin: Cedar – Sammamish watershed (WRIA 8) / East Lake Sammamish sub-basin | | | | | | | | | | | |
| | | | | | 55 W. T | 14 Weste ology Rat | | | Categor | y III | |
| C 105 A | | | | * | | ıffer Widt tback: | th and B | Buffer | 50-foot setback | 15-foot | |
| TANKS OF STREET | | | 100 | | W | etland Siz | ze: | | Approx. | 4,500 1 | t² |
| | | | | | | wardin assificatio | on(s): | | Palustri Palustri | | |
| Tar. | | | | HC | GM Classi | fication | (s): | Depress | sional | | |
| | Tree stratu | m: | Red alder (| Alnus rub | ora), we | estern red | l cedar | | | | |
| Vagatation | Shrub strat | um: | Douglas' spirea | | | | | | | | |
| Vegetation | Herb stratu | m: | Common water plantain, reed canarygrass (<i>Phalaris arundinacea</i>), mannagrass (<i>Glyceria occidentalis</i>) | | | | | | | | |
| Soils | Soil survey: | | Alderwood | gravelly | sandy l | oam, 8 to | 15 per | cent sl | opes | | |
| Hydrology | Source: | | High groun | dwater t | able, co | nnectivit | y to We | tland | С | | |
| | | | Estimate | d Wetla | and Fu | unctions | 6 | | | | |
| | | | Improving Water Qual | • | ŀ | Hydrologi | С | | Habitat | | |
| Site Potential H <u>M</u> L H | | | | Н | <u>M</u> | L | Н | <u>M</u> | L | | |
| Landscape Poten | tial | Н | <u>M</u> | L | Н | <u>M</u> | L | Н | М | <u>L</u> | |
| Value | | Н | <u>M</u> | L | <u>H</u> | М | L | Н | <u>M</u> | L | TOTAL |
| Score Based on R | atings | | 6 | | | 7 | | | 5 | | 11 |
| Description and Comments | | | | | | | | | | | |

Wetland B is a depressional wetland that has a very diverse emergent plant community. An outlet pipe was located; no inlet pipe was clearly present.

Table 5. Wetland C assessment summary.

| THE WATERSHED WETLAND C – Assessment Summary COMPANY | | | | | | | | | | | | | |
|--|--------------|--|--|---|--|-----------------------|-----------|------------|----------|---|--------|--|--|
| Location: Northern portion of study area, on eastern side. Wetland exter and is crossed over by a path. | | | | | | | extend | ds off-sit | e to th | e east | | | |
| WRIA / Sub-basin: Cedar – Sammamish watershed (WRIA 8) / East Lake Sammamish sub-basin | | | | | | | | | | | | | |
| | | | | 1 | 100 | 2014 Wes Ecology R | | 'A | Catego | ory III | | | |
| A TOP OF THE PARTY | | (T) | | Buffer Width and 50-foot buffer, Buffer Setback: foot setback | | | | | | | r, 15- | | |
| | All The | 2 | | | T. | Wetland S | Size: | | Appro | x. 0.4 a | cres | | |
| | | | | 1000 | Classification(s): Palustr | | | | | strine emergent, strine forested, strine scrub- | | | |
| | | | | | S. S | HGM Clas | sificatio | on(s): | Depre | ssional | | | |
| | Tree stratum | 1: | Western red | d cedar, b | lack c | ottonwoo | od | | | | | | |
| Vegetation | Shrub stratu | m: | Douglas' spirea, salmonberry (Rubus spectabilis) | | | | | | | | | | |
| vegetation | n: | Devil's beggartick (<i>Bidens frondosa</i>), American speedwell (<i>Veronica americanus</i>), American bur-reed (<i>Sparganium americanum</i>) | | | | | | | | | | | |
| Soils | Soil survey: | ey: Alderwood gravelly sandy loam, 8 to 15 percent slopes | | | | | | | | | | | |
| Hydrology | Source: | High groundwater table, runoff, precipitation | | | | | | | | | | | |
| Estimated Wetland Functions | | | | | | | | | | | | | |
| | | | Improving Water Qualit | ty | | Hydrolog | ic | | Habitat | | | | |
| Site Potential | | Н | <u>M</u> | L | Н | <u>M</u> | L | Н | <u>M</u> | L | | | |
| Landscape Potenti | al | Н | <u>M</u> | L | Н | <u>M</u> | L | Н | М | <u>L</u> | | | |
| Value | | Н | <u>M</u> | L | <u>H</u> | М | L | Н | <u>M</u> | L | TOTAL | | |
| Score Based on Ra | tings | | 6 | | | 7 | | | 5 | | 18 | | |
| Description and Comments | | | | | | | | | | | | | |

Description and Comments

Wetland C is a large, long wetland complex that extends off-site to the east. A culvert runs beneath a constructed trail; areas on both side of this culvert are considered the Wetland C unit because there presumably is bi-directional flow.

Table 6. Wetland D assessment summary.

| | RSHED Pany |) | | WETL | AND D | – Asse | ssment | Sumn | nary | | | |
|--|---------------------|---------------------------------|--------------------------|--|-----------|--------------------|-----------------------|-------------------------------|---------|----------------------|----------|---------------------|
| Location: | Ir | n cent | er of s | tudy area, s | outh of V | Vetland | A and no | orth of \ | Vetlan | id E. | | |
| WRIA / Sub-basin: Cedar – Sammamish watershed (WRIA 8) / East Lake Sammamish sub-basin | | | | | | | | | | | | |
| | A | 2014 Western WA Ecology Rating: | | | | | Category III | | | | | |
| | * | | Buffer Width a Setback: | | | | | Buffer 50-foot buffer setback | | | | |
| | | 0.007 | 1000 | | | W | etland Siz | œ: | | Approx | . 3,2001 | ft ² |
| 100 | 1966 | | | | | and the second | wardin assificatio | on(s): | | Palustri Palustri | | ıb-shrub, ergent |
| | | | | | | HC | GM Classi | fication | (s): | Depress | sional | |
| | Tree str | atum | : | Red alder, | black cot | tonwoo | d | | | | | |
| Vegetation | Shrub s | tratur | n: | n/a | | | | | | | | |
| | Herb sti | ratum | ı: | Marsh seedbox (Ludwigia palustris), marsh bedstraw, devil's beggartick | | | | | | | | |
| Soils | Soil surv | vey: | | Alderwood | gravelly | sandy l | oam, 8 to | 15 per | cent sl | opes | | |
| Hydrology | Source: | | | High groundwater table, connection to Wetland A | | | | | | | | |
| Estimated Wetland Functions | | | | | | | | | | | | |
| | | | Improving Water Quali | | ŀ | Hydrologic Habitat | | | | | | |
| Site Potential | | Н | <u>M</u> | L | Н | <u>M</u> | L | Н | М | <u>L</u> | | |
| Landscape Poter | Landscape Potential | | Н | <u>M</u> | L | Н | <u>M</u> | L | Н | М | <u>L</u> | |
| Value H | | | Н | <u>M</u> | L | <u>H</u> | М | L | Н | <u>M</u> | L | TOTAL |
| Score Based on Ratings 6 7 4 17 | | | | | | | | | | | | |
| | | | | Descrip | tion an | d Com | ments | | | | | |
| Wetland D is a Evidence of gra | | • | | | | | | | | | | |

Table 7. Wetland E assessment summary.

| THE WATERSHED COMPANY WETLAND E – Assessment Summary | | | | | | | | | | | | | |
|--|--------------|---------|--|--|-----------|----------|------------------------------------|----------|----------|-------------------------------|----------|---------|--|
| Location: | of Wetla | ınd D. | | | | | | | | | | | |
| WRIA / Sub-basir | າ: | Cedar | – Samı | mamish wat | ershed (V | VRIA 8) | / East La | ke Sam | mamis | sh sub-ba | asin | | |
| | | | | | | | 2014 Western WA Ecology Rating: | | | Catego | ry III | | |
| | | | | | 1 | | fer Widt back: | th and E | Buffer | 50-foot setback | | 15-foot | |
| | | | | | | We | tland Siz | ze: | | Approx. 8,000 ft ² | | | |
| | | | | | | | Cowardin Classification(s): | | | Palustr | ergent | | |
| | k | | | | | HG | M Classi | fication | (s): | Depres | sional | | |
| | Tree | stratun | ratum: Pacific willow (<i>Salix lucida</i>) | | | | | | | | | | |
| Vegetation | Shrub strati | | m: | Douglas' spirea | | | | | | | | | |
| Herb stratu | | | n: | Smartweed (<i>Polygonum hydropiperoides</i>), soft rush, common cattail (<i>Typha latifolia</i>) | | | | | | | | | |
| Soils | Soil su | urvey: | vey: Alderwood gravelly sandy loam, 8 to 15 percent slopes | | | | | | | | | | |
| Hydrology | Sourc | e: | : Runoff from other wetlands, high wa | | | | | ater tab | le | | | | |
| Estimated Wetland Functions | | | | | | | | | | | | | |
| | | | Improving Hydrologic Habitat | | | | t | | | | | | |
| Site Potential | | Н | <u>M</u> | L | <u>H</u> | М | L | Н | <u>M</u> | L | | | |
| Landscape Poten | tial | | Н | <u>M</u> | L | Н | <u>M</u> | L | Н | М | <u>L</u> | | |
| Value | | | Н | <u>M</u> | L | <u>H</u> | М | L | Н | <u>M</u> | L | TOTAL | |
| Score Based on F | atings | | | 6 | | | 8 | | | 5 | | 19 | |

Description and Comments

Wetland E is highly modified with multiple constructed aspects, including a black fabric liner, a water pump, and an aerator (Photo 3). A constructed, non-wetland island in the center connected by a bridge. A path circumnavigates the wetland. Despite these clear constructed aspects, the wetland is in a similar topographic location as the other four wetlands and was likely present prior to construction and will therefore be regulated as a wetland.

Streams

No streams were identified within the study area. No bed and bank characteristics, scour, sorted sediments, drainage patterns or other OHWM indicators were observed.

Local Regulations

Critical areas in the City of Sammamish are regulated by the City's Environmentally Critical Areas Regulations [Sammamish Municipal Code (SMC) Chapter 21A.50].

According to the code, wetlands are rated as one of four categories based on the Rating System. Under the Rating System, Wetlands A through E received an estimated Category III wetland rating with either four or five points for habitat function (Table 1). Wetland buffer widths in Sammamish are based on a combination of the wetland category and habitat score. Since all wetlands received less than eight habitat points, Sammamish requires 50-foot buffers for all identified wetlands.

Sammamish requires a 15-foot building setback from the edges of all critical area buffers. Building setbacks may contain landscaping, uncovered decks, building overhangs (if no more than 18 inches into the setback area), impervious ground surfaces with specified drainage provisions, and utility service connections (SMC 21A.50.210).

Allowed Uses within Critical Area Buffers

Sammamish allows specific alterations to occur within critical area buffers, including wetlands. Specifically, pursuant to 21A.50.050, maintenance, operation, and repair of parks, trails, and publicly improved recreation areas provided any such alteration does not involve the expansion of improvements into previously unimproved areas or new clearing of vegetation may be allowed. Additionally, some allowances with limitations may also be allowed within the critical area buffer including the maintenance of existing improvements, revisions to legally established landscaping, and conservation, preservation, restoration, and/or enhancement. These allowances require meeting additional requirements and approval from the City of Sammamish.

Mitigation requirements would also apply (SMC 21A.50.310), including but not limited to providing equivalent or greater critical area functions, an adequate mitigation ratio to compensate for adverse impacts, and adherence to a comprehensive mitigation monitoring program.

State and Federal Regulations

Federal Agencies

Most wetlands and streams are regulated by the Corps under Section 404 of the Clean Water Act. Any proposed filling or other direct impacts to Waters of the U.S., including wetlands (except isolated wetlands), would require notification and permits from the Corps. Wetlands A through E appear to be isolated; a Jurisdictional Determination from the Corps would be required to confirm the wetland's jurisdictional status. Unavoidable impacts to jurisdictional wetlands are typically required to be compensated through implementation of an approved mitigation plan. If activities requiring a Corps permits are proposed, a Joint Aquatic Resource Permit Application (JARPA) could be submitted to obtain authorization.

Federally permitted actions that could affect endangered species may also require a biological assessment study and consultation with the U.S. Fish and Wildlife Service and/or the National Marine Fisheries Service. Compliance with the Endangered Species Act must be demonstrated for activities within jurisdictional wetlands and the 100-year floodplain. Application for Corps permits may also require an individual 401 Water Quality Certification and Coastal Zone Management Consistency determination from Ecology and a cultural resource study in accordance with Section 106 of the National Historic Preservation Act.

Washington Department of Ecology (Ecology)

Similar to the Corps, Ecology, under Section 401 of the Clean Water Act, is charged with reviewing, conditioning, and approving or denying certain federally permitted actions that result in discharges to state waters. However, Ecology review under the Clean Water Act would only become necessary if a Section 404 permit from the Corps was issued. However, Ecology also regulates wetlands, including isolated wetlands, under the Washington Pollution Prevention and Control Act, but only if direct wetland impacts are proposed. Therefore, if filling activities are avoided, authorization from Ecology would not be needed.

If filling is proposed, a JARPA may be also be submitted to Ecology in order to obtain a Section 401 Water Quality Certification and Coastal Zone Management Consistency Determination. Ecology permits are either issued concurrently with the Corps permit or within 90 days following the Corps permit. Ecology now requires a Pre-Filing Meeting Request for Clean Water Act Section 401 Water Quality Certification.

In general, neither the Corps nor Ecology regulates wetland and stream buffers, unless direct impacts are proposed. When direct impacts are proposed, mitigated wetlands and streams may be required to employ buffers based on Corps and Ecology joint regulatory guidance.

Washington Department of Fish and Wildlife (WDFW)

Chapter 77.55 of the RCW (the Hydraulic Code) gives WDFW the authority to review, condition, and approve or deny "any construction activity that will use, divert, obstruct, or change the bed or flow of state waters." This provision includes any in-water work, the crossing or bridging of any state waters and can sometimes include stormwater discharge to state waters. If a project meets regulatory requirements, WDFW will issue a Hydraulic Project Approval (HPA).

Through issuance of an HPA, WDFW can also restrict activities to a particular timeframe. Work is typically restricted to late summer and early fall. However, WDFW has in the past allowed crossings that don't involve in-stream work to occur at any time during the year.

Disclaimer

The information contained in this letter is based on the application of technical guidelines currently accepted as the best available science and in conjunction with the manuals and criteria referenced above. All discussions, conclusions and recommendations reflect the best professional judgment of the author(s) and are based upon information available at the time the study was conducted. All work was completed within the constraints of budget, scope, and timing. The findings of this report are subject to verification and agreement by the appropriate local, state and federal regulatory authorities. No other warranty, expressed or implied, is made.

Please call if you have any questions or if we can provide you with any additional information.

Sincerely,

Grace Brennan Ecologist

References

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- Department of Ecology (Ecology). 2018. July 2018 Modifications for Habitat Score Ranges.

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- Mersel, M.K. and Lichvar, R.W. 2014. A Guide to Ordinary High Water Mark (OHWM) Delineation for Non-Perennial Streams in the Western Mountains, Valleys, and Coast Region of the United States. ERDC/CRREL TR-14-13.
- U.S. Army Corps of Engineers. 2010. Regional Supplement to the Corps of Engineers WetlandDelineation Manual: Western Mountains, Valleys, and Coast Region (Version 2.0). ed. J.S. Wakely, R. W. Lichvar, and C. V. Noble. ERDC/EL TR-10-3. Vicksburg, MS: U.S. ArmyEngineer Research and Development Center.
- U.S. Department of Agriculture (USDA), Natural Resources Conservation Service (NRCS). 2015.
 National Engineering Handbook, Part 650 Engineering Field Handbook, Chapter 19
 Hydrology Tools for Wetland Identification and Analysis. ed. R. A. Weber. 210-VI-NEH,
 Amend. 75. Washington, DC.

Site Photos



Photo 1. Upland area in northern portion of the subject parcel.



Photo 2. Stormwater retention feature in SW corner.



Photo 3. Constructed features in Wetland E.



Wetland Reconnaissance Sketch - Big Rock Park South

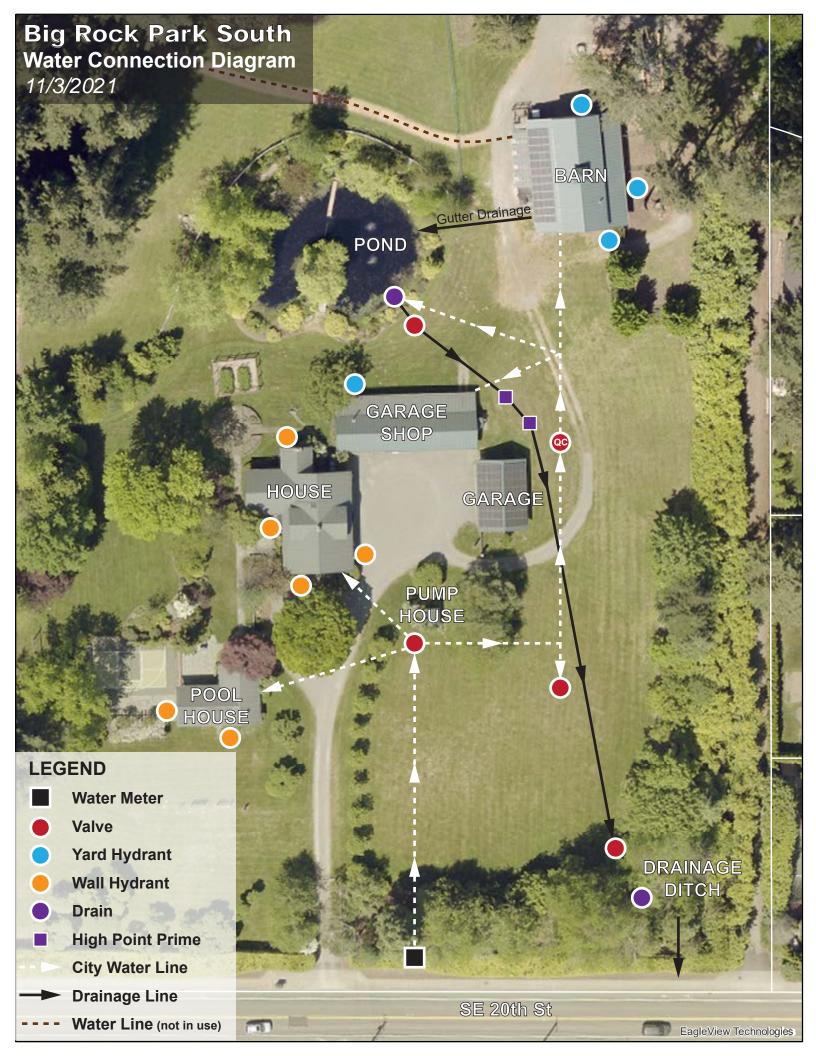
Site Address: 22104 SE 20th Street, Sammamish Prepared for: Shelby Perrault

Parcel Number: 0424069153 TWC Ref. No.: 191106.8

Site Visit Date: 9/23/2021



Note: Field sketch only. Features depicted are approximate and not to scale. All observations were made from within the study area; adjoining private properties were not entered.





October 12, 2022

Shelby Perrault
Project Manager, Parks & Recreation
City of Sammamish
801 228th Avenue SE
Sammamish, WA 98075
Via email: sperrault@sammamish.us

Big Rock Park South, Off-Site Wetland and Stream Reconnaissance Report

The Watershed Company Reference Number: 191106.10

Summary

This report presents the findings of a wetland and stream reconnaissance study located on parcel # 042406TRCT. In addition to the information and findings presented in this report, the following documents are enclosed:

- Site Photos
- Reconnaisance Sketch

One wetland (Wetland A) is located within the subject property. It is an estimated Category III wetland with six habitat points (Table 1). Based on the rating and habitat score, The City of Sammamish would require a standard 50-foot buffer for Wetland A.

Table 1. Summary of wetlands, streams, and required buffers.

| Feature Name | Category/Type | Habitat Score | Buffer (ft) |
|--------------|---------------|---------------|-------------|
| Wetland A | Category III | 6 | 50 |

Study Area

The study area is defined as parcel 042406TRCT, which is immediately west of the Big Rock Park South property located at 22104 SE 20th Street in Sammamish, WA. The subject parcel is approximately 0.8 acre in size (Figure 1). Adjacent private properties to the east and north were

screened from the edge of parcel or nearest publicly accessible land; no private property was accessed without permission. It is situated within Section 04 of Township 24 North, Range 06 East of the Public Land Survey System. Prior wetland reconnaissance work took place on the Big Rock Park South Property (The Watershed Company 2021).

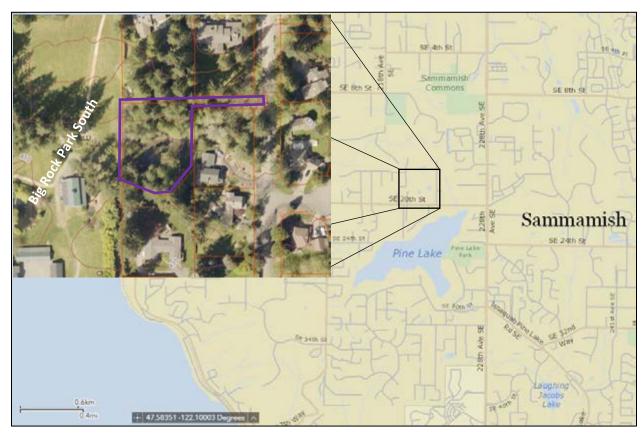


Figure 1. Study area map. Study area outlined in purple.

Methods

Field investigation for the reconnaissance study was conducted on October 4, 2022 by Ecologist Peter Heltzel of The Watershed Company.

The study area was evaluated for wetlands using methodology from the *Corps of Engineers* Wetland Delineation Manual (Environmental Laboratory 1987) and the Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Western Mountains, Valleys, and Coast Region Version 2.0 (U.S. Army Corps of Engineers 2010). Presence or absence of wetlands was determined on the basis of an examination of vegetation, soils and hydrology. These parameters were sampled at several locations along the wetland boundary to determine the approximate

wetland edge. Wetlands were classified using the Department of Ecology's 2014 rating system (Hruby 2014).

Characterization of climatic conditions for precipitation in the Wetland Determination Data Forms were determined using the WETS table methodology (USDA, NRCS 2015). The "Seattle Tacoma Intl AP" station from 1991-2020 was used as a source for precipitation data (http://agacis.rcc-acis.org/). The WETS table methodology uses climate data from the three months prior to the site visit month to determine if normal conditions are present in the study area region.

The study area was evaluated for streams based on the presence or absence of an ordinary high water mark (OHWM) as defined by Section 404 of the Clean Water Act, the Washington Administrative Code (WAC) 220-660-030, and the Revised Code of Washington (RCW) 90.58.030 and guidance documents including *Determining the Ordinary High Water Mark for Shoreline Management Act Compliance in Washington State* (Anderson 2016) and *A Guide to Ordinate High Water Mark (OHWM) Delineation for Non-Perennial Streams in the Western Mountains, Valleys, and Coast Region of the United States* (Mersel 2016).

Public-domain information on the subject properties was reviewed for this reconnaissance study. Resources and review findings are presented in Table 2 of the "Environmental Setting" section of this letter.

Environmental Setting

The study area is in the East Lake Sammamish sub-basin of the Cedar – Sammamish watershed (WRIA 8). It is located just north of Pine Lake, adjacent to Big Rock Park South. The site is relatively flat, sloping slightly down to the north. The wetland is located on the subject parcel and appears to extend to the parcels to the north and east.

The subject property is undeveloped with open emergent habitat surrounded by forest and shrubs. Native vegetation dominates the parcel with forested areas containing western red cedar (*Thuja plicata*) and Oregon ash (*Fraxinus latifolia*). The shrub community is dominated by hardhack (*Spirea douglasii*) and Sitka willow (*Salix sitchensis*). The emergent area contains reed canary grass (*Phalaris arundinacea*) and smart weed (*Persicaria* sp.). Non-wetland areas consist of Douglas-fir (*Pseudotsuga menziesii*), salal (*Gaultheria shallon*), and sword fern (*Polystitchum munitum*).

Reviewed public-domain information for the site is summarized below (Table 2).

Table 2. Summary of online mapping and inventory resources.

| Resource | Summary |
|---|--|
| USDA NRCS: Web Soil Survey | Entirety of the property mapped as Alderwood gravelly sandy loam, 8 to 15 percent slopes. |
| USFWS: NWI Wetland Mapper | No features mapped within the subject parcel. |
| WDFW: PHS on the Web | Big brown bat, little brown bat, Townsend's Big-eared bat, Yuma myotis all mapped within the parcel. |
| WDFW: SalmonScape | No features mapped within the subject parcel. |
| WA-DNR: Forest Practices Activity Mapping Tool | No features mapped within the subject parcel. |
| King County iMap | No features mapped within the subject parcel. |
| City of Sammamish maps | No features mapped within the subject parcel. |
| WETS Climatic Condition | Drier than normal. |

Findings

Wetlands

One wetland (Wetland A) was identified within the study area. Wetland A is summarized in Table 3, below. Wetland A is a depressional wetland that is seasonally inundated by groundwater, surface runoff, and rainfall. It consists of emergent, scrub-shrub, and forested habitats. Hydrology in Wetland A fills the wetland which continues to the northeast, through a short culvert (under a walkway) and into small depression, also part of Wetland A (see attached sketch). Water levels between the large emergent area on the subject property and the small depressional area to the northeast appear to be equal with no directional flow.

Table 3. Wetland A assessment summary.

| Location: Center of subject parcel WRIA / Sub-basin: Cedar – Sammamish watershed (WRIA 8) / East Lake Sammamish sub-basin 2014 Western WA Ecology Rating: Buffer Width and Buffer Setback: Wetland Size: Cowardin Classification(s): Palustrine emergent, palustrine forested HGM Classification(s): Depressional Tree stratum: Vegetation Tree stratum: Western red cedar (Thuja plicata), Oregon ash (Fraxinus latifolia) Douglas' spirea (Spirea douglasii), Sitka willow (Salix sitchensis) Herb stratum: Reed canary grass (Phalaris arundinacea), smart weed (Persicaria sp.) Soils Soil survey: Alderwood gravelly sandy loam, 8 to 15 percent slopes Hydrology Festimated Wetland Functions | THE WATERSHED WETLAND A – Assessment Summary COMPANY | | | | | | | | | | | |
|---|--|----------------------|---|--|-----------|----------|-----------------------------|----------|---------|-------------------------|---------|---------|
| Douglas' spirea (Spirea douglasii), Sitka willow (Salix sitchensis) Herb stratum: Reed canary grass (Phalaris arundinacea), smart weed (Persicaria sp.) | Location: Center of subject parcel | | | | | | | | | | | |
| Ecology Rating: Buffer Width and Buffer So-foot buffer, 15-foot setback: Wetland Size: Approx. 0.4 acre Cowardin Classification(s): Palustrine emergent, palustrine scrub-shrub, palustrine forested HGM Classification(s): Depressional Tree stratum: Western red cedar (Thuja plicata), Oregon ash (Fraxinus latifolia) Shrub stratum: Douglas' spirea (Spirea douglasii), Sitka willow (Salix sitchensis) Herb stratum: Reed canary grass (Phalaris arundinacea), smart weed (Persicaria sp.) Soils Soil survey: Alderwood gravelly sandy loam, 8 to 15 percent slopes Hydrology Source: High groundwater table, surface runoff, precipitation | WRIA / Sub-basi | n: Ceda | ır – Sar | nmamish w | atershe | d (WRIA | 8) / East | Lake Sar | nmami | sh sub-basi | in | |
| Setback: setback Wetland Size: Approx. 0.4 acre Cowardin Classification(s): Palustrine emergent, palustrine scrub-shrub, palustrine forested HGM Classification(s): Depressional Tree stratum: Western red cedar (Thuja plicata), Oregon ash (Fraxinus latifolia) Shrub stratum: Douglas' spirea (Spirea douglasii), Sitka willow (Salix sitchensis) Herb stratum: Reed canary grass (Phalaris arundinacea), smart weed (Persicaria sp.) Soils Soil survey: Alderwood gravelly sandy loam, 8 to 15 percent slopes Hydrology Source: High groundwater table, surface runoff, precipitation | | | | | | - C | 9 , | | | | | ory III |
| Cowardin Classification(s): Palustrine emergent, palustrine scrub-shrub, palustrine forested HGM Classification(s): Depressional Vegetation Vegetation Shrub stratum: Douglas' spirea (Spirea douglasii), Sitka willow (Salix sitchensis) Herb stratum: Reed canary grass (Phalaris arundinacea), smart weed (Persicaria sp.) Soils Soil survey: Alderwood gravelly sandy loam, 8 to 15 percent slopes Hydrology Source: High groundwater table, surface runoff, precipitation | MX | | | | | -50 | , | | | | | 5-foot |
| Palustrine scrub-shrub, palustrine forested HGM Classification(s): Depressional Vegetation Vegetation Shrub stratum: Herb stratum: Reed canary grass (Phalaris arundinacea), smart weed (Persicaria sp.) Soils Soil survey: Alderwood gravelly sandy loam, 8 to 15 percent slopes Hydrology Source: High groundwater table, surface runoff, precipitation | | | | AP 3 | | Wet | tland Size | <u>:</u> | | Approx. 0 | .4 acre | |
| Tree stratum: Western red cedar (<i>Thuja plicata</i>), Oregon ash (<i>Fraxinus latifolia</i>) Vegetation Shrub stratum: Douglas' spirea (<i>Spirea douglasii</i>), Sitka willow (<i>Salix sitchensis</i>) Herb stratum: Reed canary grass (<i>Phalaris arundinacea</i>), smart weed (<i>Persicaria</i> sp.) Soils Soil survey: Alderwood gravelly sandy loam, 8 to 15 percent slopes Hydrology Source: High groundwater table, surface runoff, precipitation | | | | | | | Cowardin Classification(s): | | | palustrine scrub-shrub, | | |
| VegetationShrub stratum:Douglas' spirea (Spirea douglasii), Sitka willow (Salix sitchensis)Herb stratum:Reed canary grass (Phalaris arundinacea), smart weed (Persicaria sp.)SoilsSoil survey:Alderwood gravelly sandy loam, 8 to 15 percent slopesHydrologySource:High groundwater table, surface runoff, precipitation | | | | | | HGI | HGM Classification(s): | | | Depressional | | |
| Herb stratum: Reed canary grass (<i>Phalaris arundinacea</i>), smart weed (<i>Persicaria</i> sp.) Soils Soil survey: Alderwood gravelly sandy loam, 8 to 15 percent slopes Hydrology Source: High groundwater table, surface runoff, precipitation | | Tree stratu | e stratum: Western red cedar (<i>Thuja plicata</i>), Oregon ash (<i>Fraxinus latifolia</i>) | | | | | | | | | |
| Soils Soil survey: Alderwood gravelly sandy loam, 8 to 15 percent slopes Hydrology Source: High groundwater table, surface runoff, precipitation | Vegetation | stion Shrub stratum: | | Douglas' spirea (Spirea douglasii), Sitka willow (Salix sitchensis) | | | | | | | | |
| Hydrology Source: High groundwater table, surface runoff, precipitation | | Herb stratum: | | Reed canary grass (<i>Phalaris arundinacea</i>), smart weed (<i>Persicaria</i> sp.) | | | | | | | | |
| , , , , | Soils | Soil survey | <i>r</i> : | Alderwood | d gravell | ly sandy | loam, 8 t | o 15 per | cent sl | opes | | |
| Estimated Wetland Functions | Hydrology | Source: | High groundwater table, surface runoff, precipitation | | | | | | | | | |
| Estimated Tresiding I directors | | | | | | | | | | | | |
| Improving Hydrologic Habitat Water Quality | | | ŀ | Hydrologic | | Habitat | | | | | | |
| Site Potential H <u>M</u> L H <u>M</u> L | Site Potential F | | Н | <u>M</u> | L | Н | <u>M</u> | L | Н | <u>M</u> | L | |
| Landscape Potential <u>H</u> M L H <u>M</u> L H <u>M</u> L | Landscape Poter | ntial | <u>H</u> | М | L | Н | <u>M</u> | L | Н | <u>M</u> | L | |
| Value H <u>M</u> L H <u>M</u> L T OTAL | | | Н | <u>M</u> | L | Н | <u>M</u> | L | Н | <u>M</u> | L | TOTAL |
| Score Based on Ratings 7 6 6 19 | Score Based on | Ratings | | 7 | | | 6 | | | 6 | | 19 |

Description and Comments

Wetland A is a depressional wetland with seasonal inundation. It contains emergent, scrub-shrub, and forested habitats. Hydrology is supported by groundwater, surface runoff, and precipitation. Water from Wetland A fills the wetland which continues to the northeast through a short culvert and into a small depression, also part of Wetland A.

Streams

No streams were identified within the study area. No bed and bank characteristics, scour, sorted sediments, drainage patterns or other OHWM indicators were observed.

Local Regulations

Critical areas in the City of Sammamish are regulated by the City's Environmentally Critical Areas Regulations [Sammamish Municipal Code (SMC) Chapter 21A.50].

According to the code, wetlands are rated as one of four categories based on the Rating System. Under the Rating System, Wetland A received an estimated Category III wetland rating with six points for habitat function (Table 1). Wetland buffer widths in Sammamish are based on a combination of the wetland category and habitat score. Since Wetland A received less than eight habitat points, the City requires a 50-foot buffer.

The City requires a 15-foot building setback from the edges of all critical area buffers. Building setbacks may contain landscaping, uncovered decks, building overhangs (if no more than 18 inches into the setback area), impervious ground surfaces with specified drainage provisions, and utility service connections (SMC 21A.50.210).

Allowed Uses within Critical Area Buffers

Sammamish allows specific alterations to occur within critical area buffers, including wetlands. Specifically, pursuant to 21A.50.050, maintenance, operation, and repair of parks, trails, and publicly improved recreation areas provided any such alteration does not involve the expansion of improvements into previously unimproved areas or new clearing of vegetation may be allowed. Additionally, some allowances with limitations may also be allowed within the critical area buffer including the maintenance of existing improvements, revisions to legally established landscaping, and conservation, preservation, restoration, and/or enhancement. These allowances require meeting additional requirements and approval from the City of Sammamish.

Mitigation requirements would also apply (SMC 21A.50.310), including but not limited to providing equivalent or greater critical area functions, an adequate mitigation ratio to compensate for adverse impacts, and adherence to a comprehensive mitigation monitoring program.

State and Federal Regulations

Federal Agencies

Most wetlands and streams are regulated by the Corps under Section 404 of the Clean Water Act. Any proposed filling or other direct impacts to Waters of the U.S., including wetlands (except isolated wetlands), would require notification and permits from the Corps. Wetland A does not appear to be isolated; a Jurisdictional Determination from the Corps would be required to confirm the wetland's jurisdictional status. Unavoidable impacts to jurisdictional wetlands are typically required to be compensated through implementation of an approved mitigation plan. If activities requiring a Corps permits are proposed, a Joint Aquatic Resource Permit Application (JARPA) could be submitted to obtain authorization.

Federally permitted actions that could affect endangered species may also require a biological assessment study and consultation with the U.S. Fish and Wildlife Service and/or the National Marine Fisheries Service. Compliance with the Endangered Species Act must be demonstrated for activities within jurisdictional wetlands and the 100-year floodplain. Application for Corps permits may also require an individual 401 Water Quality Certification and Coastal Zone Management Consistency determination from Ecology and a cultural resource study in accordance with Section 106 of the National Historic Preservation Act.

Washington Department of Ecology (Ecology)

Similar to the Corps, Ecology, under Section 401 of the Clean Water Act, is charged with reviewing, conditioning, and approving or denying certain federally permitted actions that result in discharges to state waters. However, Ecology review under the Clean Water Act would only become necessary if a Section 404 permit from the Corps was issued. However, Ecology also regulates wetlands, including isolated wetlands, under the Washington Pollution Prevention and Control Act, but only if direct wetland impacts are proposed. Therefore, if filling activities are avoided, authorization from Ecology would not be needed.

If filling is proposed, a JARPA may be also be submitted to Ecology in order to obtain a Section 401 Water Quality Certification and Coastal Zone Management Consistency Determination. Ecology permits are either issued concurrently with the Corps permit or within 90 days following the Corps permit. Ecology now requires a Pre-Filing Meeting Request for Clean Water Act Section 401 Water Quality Certification.

In general, neither the Corps nor Ecology regulates wetland and stream buffers, unless direct impacts are proposed. When direct impacts are proposed, mitigated wetlands and streams may be required to employ buffers based on Corps and Ecology joint regulatory guidance.

Disclaimer

The information contained in this letter is based on the application of technical guidelines currently accepted as the best available science and in conjunction with the manuals and criteria referenced above. All discussions, conclusions and recommendations reflect the best professional judgment of the author(s) and are based upon information available at the time the study was conducted. All work was completed within the constraints of budget, scope, and timing. The findings of this report are subject to verification and agreement by the appropriate local, state and federal regulatory authorities. No other warranty, expressed or implied, is made.

Please call if you have any questions or if we can provide you with any additional information.

Sincerely,

Peter Heltzel, MSc, CFP

Pete Helfer

Fisheries Biologist / Wetland Ecologist

References

- Anderson, P.S. et al. 2016. Determining the Ordinary High Water Mark for Shoreline Management Act Compliance in Washington State. (Publication #16-06-029). Olympia, WA: Shorelands and Environmental Assistance Program, Washington Department of Ecology.
- Department of Ecology (Ecology). 2018. July 2018 Modifications for Habitat Score Ranges.

 Modified from Wetland Guidance for CAO Updates, Western Washington Version.

 (Publication #16-06-001). Accessed 8/16/18:

 https://fortress.wa.gov/ecy/publications/parts/1606001part1.pdf.
- Environmental Laboratory. 1987. "Corps of Engineers Wetlands Delineation Manual," Technical Report Y-87-1, U.S. Army Engineer Waterways Experiment Station, Vicksburg, MS.
- Hruby, T. 2014. Washington State Wetland Rating System for Western Washington: 2014 Update. (Publication #14-06-029). Olympia, WA: Washington Department of Ecology.
- Mersel, M.K. and Lichvar, R.W. 2014. A Guide to Ordinary High Water Mark (OHWM)

 Delineation for Non-Perennial Streams in the Western Mountains, Valleys, and Coast
 Region of the United States. ERDC/CRREL TR-14-13.
- U.S. Army Corps of Engineers. 2010. Regional Supplement to the Corps of Engineers WetlandDelineation Manual: Western Mountains, Valleys, and Coast Region (Version 2.0). ed. J.S. Wakely, R. W. Lichvar, and C. V. Noble. ERDC/EL TR-10-3. Vicksburg, MS: U.S. ArmyEngineer Research and Development Center.
- U.S. Department of Agriculture (USDA), Natural Resources Conservation Service (NRCS). 2015.
 National Engineering Handbook, Part 650 Engineering Field Handbook, Chapter 19
 Hydrology Tools for Wetland Identification and Analysis. ed. R. A. Weber. 210-VI-NEH,
 Amend. 75. Washington, DC.

Site Photos



Photo 1. Open emergent area in center portion of the subject parcel.



Photo 2. Forested area in northern portion of the subject parcel.



Photo 3. Culvert in northeast corner of property, leading to small depression; also part of Wetland A.

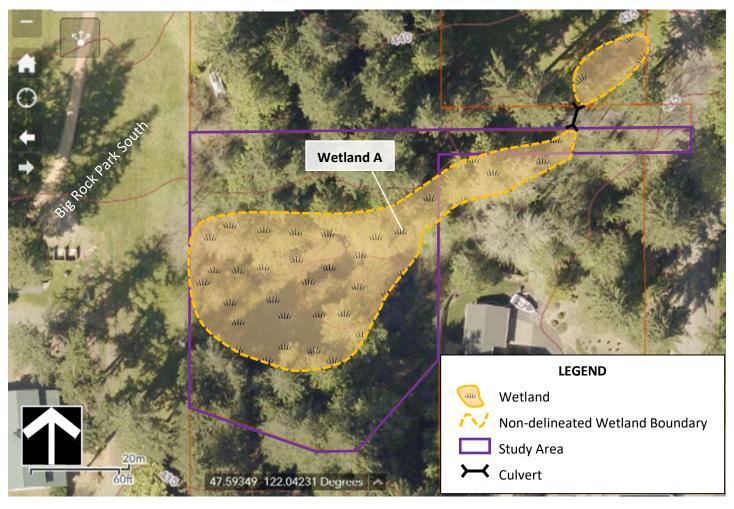


Wetland Reconnaissance Sketch - Off-site Big Rock Park South

Site Address: Parcel directly north of 22220 SE 20th Street, Sammamish Prepared for: Shelby Perault – City of Sammamish

Parcel Number: 042406TRCT TWC Ref. No.: 191106.10

Site Visit Date: October 4, 2022



Note: Field sketch only. Features depicted are approximate and not to scale. All observations were made from within the study area; adjoining private properties were not entered.

Appendix B: Critical Areas Memo



CRITICAL AREAS MEMORANDUM - BIG ROCK PARK SOUTH

2707 Colby Avenue, Suite 900, Everett, WA 98201 P 425.252.7700

To: Juliet Vong, ASLA, LEED AP, HBB Landscape Architecture

From: Jason Walker, PLA, PWS, Environmental Planning Manager, Perteet

Date: May 31, 2023

Subject: Big Rock Master Plan Critical Areas Memorandum

Perteet prepared a critical area permitting evaluation based on the preferred site plan design concept (Attachment A) in consideration of delineated and rated wetland and stream critical areas mapped by others for this planning level project.

For future permit planning, the following provides a summary of existing site conditions and proposed project elements in comparison to regulated wetland and stream critical areas occurring at the future Big Rock Park South property, located at 22104 SE 20th Street in Sammamish, Washington (Parcel 0424069153) 14.87 acres in size and prior developed as residential estate.

The site is partially developed with existing residential structures, outbuildings, vehicular access areas, trails, and landscaping. Much of the property is maintained as lawn and yard area. A mix of native and ornamental plants are present throughout this area. Douglas-fir dominates the sparse tree canopy, while maintained lawn grass makes up a majority of the understory. Some non-mowed areas in the northern portion of the site have an understory of bracken fern, salal, and trailing blackberry.

Environmental Considerations Summary

- Five wetlands (Wetland A-E) are located within the subject property. On-site wetlands are rated as
 Category III wetlands with either four or five habitat points. Based on the rating and habitat score,
 Sammamish requires standard 50-foot buffers for Wetlands A-E per Sammamish Municipal Code
 (SMC) 21A.50.290(2). Critical area buffers also can require a building setback of 15 feet per SMC
 21A.50.210.
- Off-site wetlands were identified to the east and north of the subject property. Wetland A to the north on Parcel 0424069153 (Category II, 150-foot standard buffer) and another separate Wetland A (Category III, 50-foot standard buffer) o the east on Parcel 042406TRCT.
- Site occurs in Pine Lake Watershed, phosphorus sensitive (requires additional construction and operational considerations).
- Opportunities for improvement of wetland ecological functions exist through wetland/buffer restoration/enhancement (native revegetation for ecological/public benefit). No grading or earthwork in wetland areas assumed for restoration or enhancement.
- Opportunities exist for low impact stormwater demonstration/educational features and for interpretive explanation of ecological and watershed processes occurring on the site and in the vicinity.

Prior Wetland Reports

Three wetland reports were prepared to inventory wetlands on and adjacent to the subject property:

- Big Rock Park, Parcel C, Wetland Delineation Report. Prepared by The Watershed Company on March 28, 2018. This report identifies one wetland "Wetland A" to the north on Parcel 0424069153. Wetland identified as Category II, 150-foot standard buffer (Appendix A.1).
- Big Rock Park South, Off-Site Wetland and Stream Reconnaissance Report. Prepared by The Watershed Company on October 12, 2022. This report identifies one wetland "Wetland A" to the east on Parcel 042406TRCT Wetland identified as Category III, 50-foot standard buffer (Appendix A.2).
- Big Rock Park South, Wetland Reconnaissance Report. Prepared by The Watershed Company on November 24, 2021. This report identifies five wetlands (A, B, C, D, and E). All wetlands rated Category III with 50-foot standard buffer on the subject property, Parcel 0424069153 (Appendix A.3).

Critical Areas Impact Considerations

- Limited buffer encroachments based on regulatory buffer distances and occurring to existing vegetation
 are necessary to improve public access and may be defined as impacts under the Sammamish Municipal
 Code.
- It is understood the City will allow continuation of maintenance of the central wetland pond feature and all wetland areas without mitigation. The pond overflow will continue to be maintained.
- Continuation of existing site used and expansion, reconstruction or revision of existing building(s) or other structures may be allowable in critical areas buffers to limitations under SMC 21.03.020.
- New trails in critical areas buffers could be considered impacts depending on construction methods; however, low-impact methods and materials may be selected to minimize or eliminate impacts.
- Potential exists for human/pet use impacts if wetland areas are used for recreation (examples pet waste water quality contamination to sensitive waters, off-leash pets, off-trail intrusions, vegetation damage).
 Pet waste bags and educational materials to keep park users on trails can be part of the Sammamish Municipal NPDES program.

Restoration/Mitigation Opportunities

- Some trails in existing wetland buffers may be eliminated, vegetation restored, and consolidated to avoid and minimize new trail impacts.
- Buffer restoration/enhancement and buffer averaging opportunities also exist to offset trail new trail
 impacts due to low vegetation structural and species diversity in the lawn areas and lack of habitat
 features.
- Wetland and buffer restoration can result in improved ecological functions and watershed health if
 designed and implemented and established according to current best practices for Puget Sound area
 urban streams and wetland restorations are contained in Ecology Best Available Science and King
 County publications.

Other Benefits

 Public access and involvement in ecological restoration and explanation, volunteerism, education opportunities.

Future Permit Documents and Approvals Assumed

- City of Sammamish critical areas evaluation under Washington State Environmental Policy Act (SEPA) and related development permits are assumed.
- A critical areas mitigation/restoration report prepared by a qualified professional will be needed to describe the approach and meeting City requirements.
- Detailed restoration/mitigation planting plans are needed for permitting.
- Wetland and buffer restoration may not be required as mitigation and can be done for other ecological and public benefit as "restoration". Non-compensatory restoration (wetland or stream or buffer enhancement that is not intended to serve as mitigation for specific impacts) is allowed under Sammamish Code. According to code, wetland enhancement or restoration not associated with any other development proposal may be allowed if accomplished according to a plan for its design, implementation, maintenance and monitoring prepared by and carried out under the direction of a qualified professional. Non-compensatory restoration may also not require performance monitoring.
- If phased, each phase of construction will need to be evaluated address related impacts. Mitigation for those impacts would need to occur in that phase of construction.
- Green Stormwater Infrastructure (GSI) is allowable within buffer based on critical areas report and mitigation within the threshold of allowable buffer reductions and averaging. This would be determined at the development review phase with City.
- The Sammamish code section for wetland crossings is 21A.50.300 10 (Page 305) One of the allowed crossing is when the crossing is part of a corridor shown in a trails plan, other code requirements are dependent on a critical areas study.
- Timing for permitting: City advises to expect about 3 months for permitting with the City (pre app conference needs to be scheduled about a month out) and about a 1-2 months for third party review prior to final design.
- No work in wetlands or US Army Corps 404 Permit assumed.

END OF MEMO

ATTACHMENT A

Preferred Big Rock Park South Site Plan Concept

Final Master Plan



- 1 Primary Connection to Big Rock Central (entire boundary fence removed along north)
- 2 Disc Golf (optional)
- 3 Existing Nature Trail Removed (to avoid disc golf conflict)
- 4 Existing Nature Trail to Remain
- Nature Trails (new)
- 6 Wetlands
- Wetland Buffers
- 8 Open Meadow
- 9 Paved Trails
- 10 Picnic Shelters
- Parking Lot (55 stalls total)
- Whimsical Element

Appendix C: Restrictive Covenant Documentation

After recording, return to:

City of Sammamish Attn: Director of Parks and Recreation 801 – 228th Avenue SE Sammamish, WA 98075

WASHINGTON STATE RECORDER'S Cover Sheet (RCW 65.04)

| DOCUMENT TITLE(S) (or transactions contained therein): |
|--|
| QUITCLAIM DEED WITH RESTRICTIVE COVENANT |
| REFERENCE NUMBER(S) OF DOCUMENTS ASSIGNED OR RELEASED: |
| REFERENCE NUMBER(5) OF DOCUMENTS ASSIGNED ON RELEASED. |
| |
| n/a |
| ☐ Additional reference #s on page of document(s) |
| GRANTOR(S) (Last name first, then first name and initials) |
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| TP! |
| Pigott, Mary, an individual |
| |
| ☐ Additional names on page of document |
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| 701 C14 CC 11 TV 11 4 11 1 |
| The City of Sammamish, a Washington municipal corporation |
| |
| ☐ Additional names on page of document |
| LEGAL DESCRIPTION (abbreviated: i.e., lot, block, plat or section, township, range) |
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| 701 TV (1.10 Cd N. d. (1/4 Cd O. d. (1/4 CO. d. 4.77 d) |
| The West half of the Northwest 1/4 of the Southeast 1/4 of Section 4, Township 24 North, |
| Range 6 East, W.M., City of Sammamish, King County, Washington, lying Easterly of the |
| West 5 acres, less County road. |
| , and the second se |
| ☑ Additional legal is on page 5 of document |
| |
| ASSESSOR'S PROPERTY TAX PARCEL/ACCOUNT NUMBER |
| 042406-9153 |
| ☐ Assessor Tax # not yet assigned |

QUITCLAIM DEED WITH RESTRICTIVE COVENANT

Mary Pigott, an individual ("Grantor"), for good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, does hereby convey and quitclaim to **The City of Sammamish**, a Washington municipal corporation ("Grantee"), the real estate, situated in County of King, State of Washington, more particularly described on Exhibit A hereto (the "Property"), subject to the following covenants and restrictions:

- 1. As a condition of the conveyance of the Property, the Grantee shall (a) operate the Property as a city park, (b) maintain the Property to accommodate multiple low impact active and passive uses, including but not limited to nature trails, open space, and up to two sports meadows (neither more than two (2) contiguous acres in size) consisting of open level natural grass area available for passive sports use and adjacent restrooms, and (c) ensure that any sports meadows are designed to accommodate more than one activity (for example, the sports meadows shall not be developed with fields designed for use only for baseball or only for football). In addition, Grantee shall be permitted to improve wetlands in existence on the Property as of the date hereof in order to help the Grantee meet regional stormwater detention needs.
- 2. Without limiting the generality of the foregoing, the following activities and uses of or pertaining to the Property are expressly prohibited:
 - (a) Any residential, commercial or industrial development of any kind;
- (b) Any exploration for, or development or extraction of, minerals and hydrocarbons by surface mining or any other method;
- (c) Development of any building exceeding twenty-five hundred (2,500) square feet on the Property, such as a Community Center, as described in the City Comprehensive Plan (developments such as the community centers at Pine Lake and Beaver Lake, and modest modifications of the existing buildings on the Property for community use without significant modifications to the footprint of the existing buildings, such as the redevelopment of Tibbetts Manor, are not precluded by this constraint);
- (d) Any use of the Property that will disturb the use or enjoyment of real property of Grantor subject to the Donation Agreement, dated April 20, 2010, by and between Grantor and Grantee (the "Donation Agreement").
- 3. Grantee shall grant to Grantor a Special Use Permit pursuant to Sammamish Municipal Code § 7.12.050 allowing Grantor to access the Property at all times, with no exceptions, in perpetuity, upon reasonable advance notice to Grantee.
- 4. Grantee shall grant to Grantor storage space for personal property on the Property and within structures of the Property until the end of the year that the Property is conveyed to the

Grantee.

- 5. Grantor may enforce, and Grantee shall comply with, Grantor's other obligations under the Donation Agreement.
- 6. The foregoing covenants and restrictions are intended to and shall run with the Property as covenants and restrictions running with the land in perpetuity and shall be binding upon the Grantee, as owner of the Property, its successors in interest, and any future owners and occupants of the Property.

DATED 27 OCT, 2021.

Mary Pigott

Accepted and approved as of the $\frac{9^{\text{Th}}}{2}$ day of November, 2021.

THE CITY OF SAMMAMISH, a Washington municipal corporation

Bv

Name: South MacColl

Title: Deputy City Manager

| STATE OF WASHINGTON |) 55 |
|---------------------|------------|
| COUNTY OF KING |) ss.) |

On this 27th day of October, 2021, before me, the undersigned, a Notary Public in and for the State of Washington, duly commissioned and sworn, personally appeared Mary Pigott, to me known to be the person who executed the within and foregoing instrument, and acknowledged said instrument to be her free and voluntary act and deed for the uses and purposes therein mentioned.

IN WITNESS WHEREOF I have hereunto set my hand and official seal the day and year first above written.



NOTARY PUBLIC in and for the State of Washington, residing at 80mmom5h, WA My appointment expires: 03-09-22.

EXHIBIT A

LEGAL DESCRIPTION

Tax Parcel No. 042406-9153:

The West half of the Northwest 1/4 of the Southeast 1/4 of Section 4, Township 24 North, Range 6 East, W.M., city of Sammamish, King County, Washington, lying Easterly of the West 5 acres, less County road.

Appendix D: SEPA

- D.1 SEPA Checklist
- D.2 SEPA Determination of Non-Significance



Sammamish, WA 98075 425-295-0500 | www.sammamish.us

ABOUT THE SEPA CHECKLIST

The City of Sammamish uses the information provided in the SEPA (State Environmental Policy Act) Checklist to help determine whether the environmental impacts of a proposal are significant.

The information is also helpful to determine if there are mitigation measures that will address the probable significant impacts or if an environmental impact statement will be needed to further analyze the proposal.

Complete and accurate answers often avoid delays with the SEPA process as well as later in the decision-making process.

INSTRUCTIONS FOR APPLICANTS

The checklist questions apply to <u>all parts of your project/proposal</u>, even if you plan to do them over a period of time or on different parcels of land.

- Please answer each question accurately and carefully, to the best of your knowledge.
- You may need to consult with an agency specialist or private consultant for some questions.
- If you run out of space on the form, please attach additional pages.
- Use "not applicable/does not apply" only when you can explain why
 it does not apply and not when the answer is unknown.
- Attach any additional information that will help describe your project/proposal or its environmental effects including additional studies and reports.

The City may ask you to explain your answers or provide additional information reasonably related to determining if there may be significant adverse impact.

Submittal Instructions

Complete & save this form before uploading it to MyBuildingPermit.com in the "File Upload" section along with the rest of the submittal documents.

Code Reference

SEPA Procedures Chapter 20.15 SMC

Questions?

Submit Project Guidance Visit the Permit Center

> City of Sammamish 801 228th Ave SE Sammamish, WA 98075 www.sammamish.us

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| A. BACKGROUND [help] | | | | |
|----------------------|--|---------------------------------------|--|--------------------------------|
| a. I | Name of proposed project (if applicable) | Big Rock Park Sou | uth Master Plan | |
| API | PLICANT INFORMATION | | | |
| b. <i>i</i> | Applicant Name: | Shelby Perrault | | |
| C. / | Address: | 801 228th Avenue Sl | E, Sammamish, WA 9 | 8075 |
| ١ | Phone: | 425-295-0589 | E-Mail: | sperrault@sammamish.u |
| COI | NTACT INFORMATION (IF | DIFFERENT FROM ABOVE |) | |
| | Contact Name: | | | |
| , | Address: | | | |
| I | Phone: | | E-Mail: | |
| API | PLICATION INFORMATION | N | | |
| d. I | Date checklist prepared: | 4/10/2023 e. Age | ency requesting checklist: | City of Sammamish |
| f. | Proposed timing or sche – Include phasing, if applic | | | |
| | will likely be impleme | ented over several yea | identifies a series of pa ars as funding allows. and upgrades to existi | |
| | A phasing plan has b | peen drafted to show o | development of the site | e over time. The phasing |
| g. | Do you have any plans for proposal? If yes, explain. | · · · · · · · · · · · · · · · · · · · | sion, or further activity rela | ated to or connected with this |
| | No. | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| Bac | ckground Section continu | ed on next page | | |

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A. BACKGROUND - CONTINUED [help]

h. List any environmental information you know about that has been prepared, or will be prepared, directly related to this proposal.

Big Rock Park South Wetland Reconnaissance prepared by the Watershed Company on November 24, 2021.

Big Rock Park South Offsite Wetland Reconnaissance prepared by the Watershed Company on October 12, 2022.

Dia Dalai Dali Ostik Entinamaankal Analitaia maanahal ki Dawaak an Jantan 40, 0000

i. Do you know whether applications are pending for governmental approvals of other proposals directly affecting the property covered by your proposal? If yes, explain.

There are no known applications for any other projects affecting this site.

j. List any government approvals or permits that will be needed for your proposal, if known.

City Permits: Demolition, Site Development, Building, Plumbing/Mechanical, Electrical

City Reviews: Drainage Review, Traffic Concurrency

Wa. DOE: Construction Stormwater General Permit

WDFW: Hydraulic Project Approval (HPA)

- k. Give a brief, complete description of your proposal, including the proposed uses and the size of the project and site.
 - There are several questions later in this checklist that ask you to describe certain aspects of your proposal. You do
 not need to repeat those answers on this page.

Big Rock Park South is a 15-acre site centrally located in the City. The majority of development is concentrated in the south half of the site. The proposed Big Rock Park South Master Plan layout and design includes a parking lot; universal play area; ornamental gardens; upgrades to existing facilities; restrooms; picnic shelters; portion of

- I. Location of the proposal.
 - Give sufficient information for a person to understand the precise location of your proposed project, including a street address, if any, and section, township, and range, if known.
 - If a proposal would occur over a range of area, provide the range or boundaries of the site(s).
 - Provide a legal description, site plan, vicinity map, and topographic map, if reasonably available.
 - While you should submit any plans required by the agency, you are not required to duplicate maps or detailed plans submitted with any permit applications related to this checklist.

PARCEL: 042406-9153 ADDRESS: 22104 SE 20th St, Sammamish, WA

LEGAL DESCRIPTION: The West half of the Northwest 1/4 of the Southeast 1/4 of Section 4, Township 24 North, Range 6 East, W.M., city of Sammamish, King County, Washington, Iving Easterly of the West 5 acres, less County road.

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| B. ENVIRONMENTAL ELEMENTS [help] | | |
|--|---|--|
| 1. EARTH [help] | | |
| a. General description of the site (check one below): | | |
| ■ Flat Rolling | | |
| Hilly Steep | slopes | |
| Mountainous Other: | | |
| b. What is the steepest slope on the site (approximate percent slo | ope)? Approximately 20% | |
| c. What general types of soils are found on the site (for example, If you know the classification of agricultural soils, specify them and any of these soils. Note any agricultural land of long-term commercial significance. | | |
| USDA Soils mapping lists the following soil type for the loam (AgC) 8 to 15 percent slopes: 100% | he site - Alderwood gravelly sandy | |
| d. Are there surface indications or history of unstable soils in the | immediate vicinity? If so, describe. | |
| There are no indications of any unstable soils. | | |
| | | |
| | | |
| e. Describe the purpose, type, total area, and approximate quanti excavation, and grading proposed. – Indicate source of fill. | ities and total affected area of any filling, | |
| Non-project action. Any future land use actions will be applicable grading regulations in SMC Title 21. Howe generally balance cut and fill on site with grading to distribute the majority of grading is associated with the parameters of the province of th | ever, site grading is proposed to occur mostly in the south half of the arking lot, pedestrian circulation, | |
| Earth sub-section continued on next page Environmental Elements Section continued on next page | | |

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B. ENVIRONMENTAL ELEMENTS - CONTINUED [help]

1. EARTH (CONTINUED) [help]

f. Could erosion occur as a result of clearing, construction, or use? If so, describe.

Non-project action. Any future land use actions that could result in erosion must comply with the SMC Title 21. That being said, erosion could occur from construction due to the slight sloping character of the site. The erosion will not extend outside project limits. Best management practices (BMPs) will be used to minimize the extent of any temporary disturbance and replanting will be done as needed for long term soil stabilization.

g. About what percent of the site will be covered with impervious surfaces after project construction (for example, asphalt or buildings)?

Non-project action. Preliminary estimates indicate that approximately 2.56 acres of the 15-acre site (17%) will be covered with impervious surfaces after construction of all phases of the master plan. This calculation includes concrete and asphalt paths and plazas, gravel paths, roofs, structures, driveways, parking lot, and play areas.

h. Proposed measures to reduce or control erosion, or other impacts to the earth, if any:

Non-project action. Any future land use actions that could result in erosion must comply with the SMC Title 21. Additionally, all clearing and grading would be in accordance with the City's development standards, permit conditions, and all other applicable codes and ordinances. Clearing and grading shall comply with erosion and sediment control measures detailed in the current King County Surface Water Design Manual, Standard

2. AIR [help]

- a. What types of emissions to the air would result from the proposal during construction, operation, and maintenance when the project is completed?
 - If any, generally describe and give approximate quantities if known.

Non-project action. Any future land use actions that could result in emissions must comply with the SMC Title 21. Nonetheless, the project could result in localized increases in air quality emissions from construction activity. Primary emissions would be construction dust & carbon monoxide from increased vehicle traffic during construction.

b. Are there any off-site sources of emissions or odor that may affect your proposal? If so, generally describe.

There are no off-site sources of emissions that will affect the project.

Air sub-section continued on next page

Environmental Elements Section continued on next page

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B. ENVIRONMENTAL ELEMENTS - CONTINUED [help]

2. AIR (CONTINUED) [help]

c. Proposed measures to reduce or control emissions or other impacts to air, if any:

Non-project action. Any future land use actions that could result in emissions must comply with the SMC Title 21. Additionally, standard methods of reducing impacts to air would be utilized, and include keeping all equipment in good operating condition; managing disturbed soils within 1 hour; avoiding prolonged periods of vehicle idling; spraying areas of exposed soils with water or other dust suppressants; reducing quantity

3. WATER [help]

a. Surface Water

- 1) Is there any surface water body on or in the immediate vicinity of the site (including year-round and seasonal streams, saltwater, lakes, ponds, wetlands)?
 - If yes, describe type and provide names.
 - If appropriate, state what stream or river it flows into.

Yes, one wetland was delineated and flagged in the study area, (Wetland A1) The wetland category was identified in the Wetland Delineation Report (The Watershed Company, March 2018).

Five wetlands (Wetlands A - E) were identified at a reconnaissance level within the

2) Will the project require any work over, in, or adjacent to (within 200 feet) the described waters?

— If yes, please describe and attach available plans.

Non-project action. Any future land use actions must comply with critical area regulations of the SMC Title 21, which are self mitigating. Additionally, one existing trail and residential-scale pedestrian bridge structure currently within a wetland on the site would be removed. No other direct discharge work (fill or digging) is assumed to occur in wetland areas. A detailed restoration and enhancement plan for the wetland system will

- 3) Estimate the amount of fill and dredge material that would be placed in or removed from surface water or wetlands and indicate the area of the site that would be affected.
 - Indicate the source of fill material.

Non-project action. That said, some minor localized regrading would occur with the removal of one trail and pedestrian bridge currently in the wetland limits. Quantities would be determined at the time of final design and construction. No other fill or dredge material will be placed in or removed from wetlands.

Water sub-section continued on next page

Environmental Elements Section continued on next page

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B. ENVIRONMENTAL ELEMENTS - CONTINUED [help]

3. WATER (CONTINUED) [help]

- a. Surface Water (continued)
- 4) Will the proposal require surface water withdrawals or diversions?
 - Give general a description, purpose, and approximate quantities if known.

Non-project action. However, the proposed development does not require withdrawals or diversions of surface water.

- 5) Does the proposal lie within a 100-year floodplain?
 - If so, note location on the site plan.

The project does not lie within a mapped 100-year floodplain.

- 6) Does the proposal involve any discharges of waste materials to surface waters?
 - If so, describe the type of waste and anticipated volume of discharge.

Non-project action. That said, the proposed project would not involve the discharge of waste materials to any surface waters.

b. Ground Water

- 1) Will groundwater be withdrawn from a well for drinking water or other purposes?
 - If so, give a general description of the well, proposed uses, and approximate quantities withdrawn from the well.
 - Will water be discharged to groundwater? Give description, purpose, and approximate quantities if known.

Non-project action. However, no groundwater will be withdrawn as part of the proposed project.

Water sub-section continued on next page

Environmental Elements Section continued on next page

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B. ENVIRONMENTAL ELEMENTS - CONTINUED [help]

3. WATER (CONTINUED) [help]

- **b. Ground Water** (continued)
- 2) Describe waste material that will be discharged into the ground from septic tanks or other sources, if any (e.g. Domestic sewage; industrial, containing the following chemicals. . . ; agricultural; etc.).
 - Describe the general size of the system, the number of such systems, the number of houses to be served (if applicable), or the number of animals or humans the system(s) are expected to serve.

Non-project action. Additionally, no waste materials will be discharged into the ground during construction or as a result of this project.

c. Water Runoff (including stormwater)

- 1) Describe the source of runoff (including storm water) and method of collection and disposal, if any.
 - Include quantities, if known.
 - Where will this water flow?
 - Will this water flow into other waters? If so, describe.

Non-project action. Any future land use actions must comply with stormwater and source control regulations of the SMC Title 21. That said, the primary source of runoff is stormwater. There will be runoff from both pollution and non-pollution generating surfaces. Stormwater from pollution generating surfaces (i.e. the parking lot and vehicular

2) Could waste materials enter ground or surface waters? If so, generally describe.

Non-project action. Any future land use actions must comply with stormwater and source control regulations of the SMC Title 21. Additionally, no waste materials are anticipated to enter ground or surface waters pre- or post-construction. BMPs will be used to protect surface waters during construction and spill cleanup equipment would be present on site

3) Does the proposal alter or otherwise affect drainage patterns in the vicinity of the site? If so, describe.

This proposal is not expected to alter or otherwise affect drainage patterns in the vicinity of the site.

d. Proposed measures to reduce or control surface, ground, and runoff water, and drainage pattern impacts, if any:

The project will comply with applicable requirements of the City of Sammamish relating to stormwater runoff control and treatment. The proposed project will require City approval of a Drainage control plan, with Construction BMPs, and Erosion and Sediment Control Plan as part of the Clearing and Grading Permit.

Environmental Elements Section continued on next page

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| B. | B. ENVIRONMENTAL ELEMENTS - CONTINUED [help] | | | | |
|------------------|--|-------|--|--|--|
| 4. PLANTS [help] | | | | | |
| a. | Check the types of vegetation found on the site: Deciduous tree: Alder, Maple, Aspen, other | | Evergreen tree: Fir, Cedar, Pine, other | | |
| | Shrubs | | Grass | | |
| | Pasture | | Crop or grain | | |
| | Orchards, vineyards, other permanent crops | | Wet soil plants: Cattail, Buttercup, Bullrush, Skunk Cabbage, other | | |
| | Water plants: Water Lily, Eelgrass, Milfoil, other | | Other types of vegetation: Refer to Reconnaissance Report | | |
| | What his dood are contact, a cotation will be upon | | or oldovod? | | |
| D. | Non-project action. That said, the proposed project will remove some existing vegetation to create trails and park amenities. The majority of proposed vegetation removal includes invasive species, grass and native under-story vegetation where trail improvements will occur. The construction of the parking lot and driveway may require the removal of trees. | | | | |
| c. | List threatened and endangered species known to be on or near the site. | | | | |
| | There are no threatened and/or endangered species known to be on or near the site. | | | | |
| d. | Proposed landscaping, use of native plants, or oth site, if any: | ner m | neasures to preserve or enhance vegetation on the | | |
| | Non-project action. However, the proposed project will add native and adapted low water use plants to the site to enhance the ecological and visual presence of the park. Additional native trees, shrubs, and groundcover will be planted around the park improvements. Lastly, native species will be planted in the wetland buffers as part of the mitigation for buffer impacts. Subsequent permits for site work will include conditions. | | | | |
| e. | List all noxious weeds and invasive species known to be on or near the site. | | | | |
| | Noxious and invasive species known to occur on the site include Himalayan blackberry and tansy ragwort. | | | | |
| | | | | | |
| En | Environmental Elements Section continued on next page | | | | |

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B. ENVIRONMENTAL ELEMENTS - CONTINUED [help]

5. ANIMALS [help]

a. List any birds and other animals which have been observed on or near the site or are known to be on or near the site. For example:

Birds: hawk, heron, eagle, songbirds, other (please specify) Mammals: deer, bear, elk, beaver, other (please specify)

Fish: bass, salmon, trout, herring, shellfish, other (please specify)

Birds: hawk, eagle, songbirds

Mammals: deer, bobcat, bear, bat, squirrel, rabbit, raccoon, coyote

No fish were observed onsite.

b. List any threatened and endangered species known to be on or near the site.

The U.S. Fish and Wildlife Service (USFWS) Environmental Conservation Online System (ECOS) Information for Planning and Consultation (IPaC) online tool designates the following endangered species that may potentially be affected by activities in this location: north American wolverine, marbled murrelet, yellow-billed cuckoo, and monarch butterfly; the online tool does not designate critical habitats at the site. However, suitable habitat for

c. Is the site part of a migration route? If so, explain.

The Puget Sound area is located within the Pacific Flyway, which is a flight corridor for migrating waterfowl and other avian fauna. The Pacific Flyway extends south from Alaska to Mexico and South America. No portion of the proposed project would interfere with or alter the Pacific Flyway.

d. Proposed measures to preserve or enhance wildlife, if any:

Non-project action. Any future land use actions must comply with regulations outlined with SMC Title 21. That said, planting native trees, shrubs, and groundcover throughout this site will improve habitat on site by increasing nesting, foraging, and cover opportunities. Existing forested areas of the site will be maintained and preserved, including wetlands and wetland buffer areas.

e. List any invasive animal species known to be on or near the site.

Invasive animal species likely to be in the area include Norway rat and other rodents, raccoon, opossum that are typically found in urban areas.

Environmental Elements Section continued on next page

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B. ENVIRONMENTAL ELEMENTS - CONTINUED [help]

6. ENERGY & NATURAL RESOURCES [help]

a. What kinds of energy (electric, natural gas, oil, wood stove, solar) will be used to meet the completed project's energy needs? Describe whether it will be used for heating, manufacturing, etc.

Non-project action. However, energy usage is anticipated to be for electricity necessary to maintain the active use of park structures, restroom, lighting, and the irrigation system, including heating and/or cooling of the park structures. The site currently has solar panels on 3 of the existing structures, which may be used to help meet the energy needs of the

b. Would your project affect the potential use of solar energy by adjacent properties? If so, describe.
 Non-project action. Additionally, the project will not shade or impact adjacent properties.

c. What kinds of energy conservation features are included in the plans of this proposal?
List other proposed measures to reduce or control energy impacts, if any.

Non-project action. That said pedestrian scale lights are planned for the parking lot and path lights are planned along primary circulation routes to the restroom and to park structures that may be used for community events in the evening. The lighting will utilize LED efficient fixtures and may be set on timers or use photocells to minimize energy

7. ENVIRONMENTAL HEALTH [help]

a. Are there any environmental health hazards, including exposure to toxic chemicals, risk of fire and explosion, spill, or hazardous waste, that could occur as a result of this proposal? If so, describe.

There are no known environmental health hazards on site.

1) Describe any known or possible contamination at the site from present or past uses.

There is no known or possible contamination at the site from present or past uses.

Environmental Health sub-section continued on next page

Environmental Elements Section continued on next page

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B. ENVIRONMENTAL ELEMENTS - CONTINUED [help]

7. ENVIRONMENTAL HEALTH (CONTINUED) [help]

- 2) Describe existing hazardous chemicals/conditions that might affect project development and design.
 - This includes underground hazardous liquid and gas transmission pipelines located within the project area and in the vicinity.

Non-project action. That said, there are no known hazardous chemicals/conditions that might affect the primary design and development of the site.

- 3) Describe any toxic or hazardous chemicals that might be stored, used, or produced during the project's development or construction, or at any time during the operating life of the project.
 - Non-project action. However, there will be no toxic or hazardous chemicals used during construction or at any time during the operation of the park.
- 4) Describe special emergency services that might be required.

Non-project action. However, none required beyond those serving the existing park.

5) Proposed measures to reduce or control environmental health hazards, if any.

Non-project action. That said, standard precautions would be taken to ensure the safety of the work crew during construction if a spill occurred. The construction manager would ensure the spill is cleaned up in the manner dictated by the chemical use instructions and would contact the appropriate authorities.

b. Noise

1) What types of noise exist in the area which may affect your project (for example: traffic, equipment, operation, other)?

There is existing noise from traffic along SE 20th Street.

Environmental Health sub-section continued on next page

Environmental Elements Section continued on next page

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B. ENVIRONMENTAL ELEMENTS - CONTINUED [help]

7. ENVIRONMENTAL HEALTH (CONTINUED) [help]

- 2) What types and levels of noise would be created by or associated with the project on a short-term or a long-term basis (for example: traffic, construction, operation, other)?
 - Indicate what hours noise would come from the site.

Non-project action. However, short-term noise from construction equipment would occur during set hours, as defined in the Sammamish Municipal Code. The increased noise generated during construction of the project would be temporary in nature. Long-term noise would result from use of the park by the public, generally taking place from dawn to dusk. However, some noise past dusk will occur when the buildings may be used for

3) Proposed measures to reduce or control noise impacts, if any:

Non-project action. Nevertheless, the proposed action will comply with City of Sammamish ordinances related to noise. Mitigation measures during construction and maintenance activities could include: limiting construction activity to the hours regulated by Sammamish Municipal Code; use electric rather than diesel or gas powered machines where practical; schedule particularly noisy operations to avoid disturbing residential

8. LAND & SHORELINE USE [help]

a. What is the current use of the site and adjacent properties? Will the proposal affect current land uses on nearby or adjacent properties? If so, describe.

The site is currently used as a public park, but is not yet open to public access. Surrounding properties include single-family residential, a religious organization and Big Rock Park Central.

- b. Has the project site been used as working farmlands or working forest lands? If so, describe.
 - How much agricultural or forest land of long-term commercial significance will be converted to other uses as a result of the proposal, if any?
 - If resource lands have not been designated, how many acres in farmland or forest land tax status will be converted to nonfarm or non-forest use?

No, the site has not been used as working farmland or forest lands.

Land & Shoreline Use sub-section continued on next page

Environmental Elements Section continued on next page

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B. ENVIRONMENTAL ELEMENTS - CONTINUED [help]

8. LAND & SHORELINE USE (CONTINUED) [help]

Will the proposal affect or be affected by surrounding working farm or forest land normal business operations, such as oversize equipment access, the application of pesticides, tilling, and harvesting? – If so, how?

Non-project action. No, this proposal will not affect or be affected by surrounding working farm or forest land normal business operations.

c. Describe any structures on the site.

Residence (4,000 SF), built 1923 Cabana/Pool House (985 SF), built approx 1989 Garage 1(2500 SF), built approx 1940 Garage 2 (907 SF), built 2000 Barn (4.320 SF), built approx 2005

d. Will any structures be demolished? If so, what?

Non-project action. Yes, an older garage (garage 1) will be demolished and a picnic pavilion will be built in its place. The new picnic pavilion will be located outside the wetland buffer limit.

e. What is the current zoning classification of the site?

R-6

f. What is the current comprehensive plan designation of the site?

Designated as R-6 zone (parcel was donated to city for use as a public park in 2021). A park is a permitted use in the R-6 zone provided the applicable Development Conditions (1). SDC 21.05.010(N).

Land & Shoreline Use sub-section continued on next page

Environmental Elements Section continued on next page

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B. ENVIRONMENTAL ELEMENTS - CONTINUED [help]

| 8. LAND & SHORELINE USE | (CONTINUED) | [help] |
|-------------------------|-------------|--------|
|-------------------------|-------------|--------|

| 8.1 | LAND & SHOKELINE USE (CONTINUED) ITEIDI | | |
|-----|--|--|--|
| g. | If applicable, what is the current shoreline master program designation of the site? Not applicable. No shorelines of the state are present on site. | | |
| | | | |
| h. | Has any part of the site been classified as a critical area by the city or county? If so, specify. | | |
| | Yes, one wetland was delineated in the study area (Wetland A1). Five additional wetlands (Wetlands A-E) were also identified within the parcels. (The Watershed Company, March 2018 and November 2021) | | |
| i. | Approximately how many people would reside or work in the completed project? 0 | | |
| j. | Approximately how many people would the completed project displace? 0 | | |
| k. | Proposed measures to avoid or reduce displacement impacts, if any. | | |
| | Not applicable, no displacement will occur. | | |
| | | | |
| l. | Proposed measures to ensure the proposal is compatible with existing and projected land uses and plans, if any. | | |
| | Non-project action. Nevertheless, proposed use as a park is a permitted use in the R-6 zone provided the applicable Development Conditions (1). SDC 21.05.010(N) | | |
| m. | Proposed measures to ensure the proposal is compatible with nearby agricultural and forest lands of long-term commercial significance, if any. | | |
| | Not applicable, there is no nearby agricultural or forest lands of long-term commercial significance. | | |
| | Land & Shoreline Use sub-section continued on next page | | |
| Env | Environmental Elements Section continued on next page | | |

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| В. | B. ENVIRONMENTAL ELEMENTS - CONTINUED [help] | | | | |
|----|--|--|--|--|--|
| 9. | 9. HOUSING [help] | | | | |
| a. | Approximately how many units would be provided, if any: 0 | | | | |
| | Indicate the housing type provided by checking the appropriate box(es) below. High-income housing Middle-income housing Low-income housing | | | | |
| b. | Approximately how many units would be eliminated, if any: 0 | | | | |
| | Indicate the housing type provided by checking the appropriate box(es) below. High-income housing Middle-income housing Low-income housing | | | | |
| c. | Proposed measures to reduce or control housing impacts, if any. | | | | |
| | Non-project action. Albeit, no measures necessary. | | | | |
| | | | | | |
| 10 | . AESTHETICS [help] | | | | |
| a. | What is the tallest height of any proposed structure(s), not including antennas; what is the principal exterior building material(s) proposed? | | | | |
| | The tallest structure proposed is a restroom at a height of approximately 15 feet tall. Materials for proposed structures will consist primarily of wood and other natural materials, with either composite shingle or metal roofing. There are existing structures on-site that will be re-purposed, the tallest existing building is approximately 25 feet tall. | | | | |
| b. | What views in the immediate vicinity would be altered or obstructed? | | | | |
| | Non-project action. Additionally, no views will be obstructed. | | | | |
| | | | | | |
| C. | Proposed measures to reduce or control aesthetic impacts, if any. | | | | |
| | Non-project action. However, the existing wooded perimeters along property lines will be maintained; property lines without screening will be enhanced with vegetation to provide additional buffer between the park and the adjacent use; and any existing vegetation along property lines that needs to be removed will be replanted, where feasible, to | | | | |
| En | Environmental Elements Section continued on next page | | | | |

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B. ENVIRONMENTAL ELEMENTS - CONTINUED [help]

11. LIGHT & GLARE [help]

a. What type of light or glare will the proposal produce? What time of day would it mainly occur?

Non-project action. Any future land use actions must comply with lighting regulations of SMC Title 21.05.010. The project will provide lighting in the parking lot, along main circulation paths to buildings, and on the park structures. This lighting would be controlled by photocells to reduce overall use of electricity. Lighting for facilities would occur after

b. Could light or glare from the finished project be a safety hazard or interfere with views?

Non-project action. Any future land use actions must comply with lighting regulations of SMC Title 21.05.010. That said, light or glare from the finished project will be fully shielded as to not interfere with views or be a safety hazard.

c. What existing off-site sources of light or glare may affect your proposal?

Non-project action. Any future land use actions must comply with lighting regulations of SMC Title 21.05.010. Sources of off-site light would come from the following: vehicular traffic along SE 20th Street; residential light from surrounding singly-family homes; and adjacent mosque. However, these sources of light are not anticipated to impact the

d. Proposed measures to reduce or control light and glare impacts, if any.

Non-project action. Any future land use actions must comply with lighting regulations of SMC Title 21.05.010. Additionally, retaining the majority of existing vegetation, in addition to enhancing the site with additional vegetation, will help to reduce and control light and glare impact.

12. RECREATION [help]

a. What designated and informal recreational opportunities are in the immediate vicinity?

Big Rock Park Central is directly north of the project site, Ebright Creek Park is approximately 1 mile northwest of the project site, Big Rock Park North and Beaton Hill Park are approximately 1.7 miles north of the project site (under 1 mile walking), and Pine Lake Park is approximately 1 mile south of the project site.

Recreation sub-section continued on next page

Environmental Elements Section continued on next page

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B. ENVIRONMENTAL ELEMENTS - CONTINUED [help]

12. RECREATION (CONTINUED) [help]

b. Would the proposed project displace any existing recreational uses? If so, describe.

Non-project action. That said, this project provides additional recreational uses.

c. Proposed measures to reduce or control impacts on recreation, including recreation opportunities to be provided by the project or applicant, if any.

Non-project action. However, no significant adverse recreational impacts are anticipated and no mitigation measures are necessary. This project will add new amenities to the park system that are not currently offered.

13. HISTORIC & CULTURAL PRESERVATION [help]

a. Are there any buildings, structures, or sites, located on or near the site that are over 45 years old listed in or eligible for listing in national, state, or local preservation registers located on or near the site? If so, specifically describe.

Non-project action. The residence was originally built in the early 1920's and is named the Hedwig Wick's house on the Washington Information System for Architectural and Archaeological Records Data (WISAARD). The residence is listed on WISAARD with no determination given. However, the residence has undergone a significant addition and

b. Are there any landmarks, features, or other evidence of Indian or historic use or occupation? This may include human burials or old cemeteries. Are there any material evidence, artifacts, or areas of cultural importance on or near the site? Please list any professional studies conducted at the site to identify such resources.

Non-project action. The site occurs in an area the Snoqualmie Tribe considers culturally significant and has a high probability to have unknown archaeological deposits. The Snoqualmie Tribe recommended an archaeological review performed prior to land disturbance. Additionally, any future land use or development approval will include

Historic & Cultural Preservation sub-section continued on next page

Environmental Elements Section continued on next page

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B. ENVIRONMENTAL ELEMENTS - CONTINUED [help]

13. HISTORIC & CULTURAL PRESERVATION (CONTINUED) [help]

c. Describe the methods used to assess the potential impacts to cultural and historic resources on or near the project site. Examples include consultation with tribes and the department of archeology and historic preservation, archaeological surveys, historic maps, GIS data, etc.

Non-project action. Methods used to assess the potential impacts to cultural and historic resources on or near the project site include review of the City of Sammamish Comprehensive Plan, Volume II Land Use, Figure LU-4 Historic Resources, and Washington Information System for Architectural and Archaeological Records Data

d. Proposed measures to avoid, minimize, or compensate for loss, changes to, and disturbance to resources.
 Please include plans for the above and any permits that may be required.

Non-project action. However, no impacts to landmarks, historic, archaeological, scientific, or cultural buildings or objects are proposed. An archaeological review will be performed in compliance with the Department of Archaeology and Historic Preservation (DAHP), with notification to Snoqualmie Tribe, prior to land disturbance. Additionally, any future

14. TRANSPORTATION [help]

- a. Identify public streets and highways serving the site or affected geographic area and describe proposed access to the existing street system.
 - Show on site plans, if any.

The project site's existing vehicular access is via SE 20th Street. The proposal will maintain this vehicular access.

- b. Is the site or affected geographic area currently served by public transit?
 - If so, generally describe.
 - If not, what is the approximate distance to the nearest transit stop?

The site is not currently served by public transit. The nearest transit stop is approximately 0.5 mile east on 220th Ave SE near the intersection of SE 20th Street.

Transportation sub-section continued on next page

Environmental Elements Section continued on next page

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B. ENVIRONMENTAL ELEMENTS - CONTINUED [help]

14. TRANSPORTATION (CONTINUED) [help]

c. How many additional parking spaces would the completed project or non-project proposal have?How many would the project or proposal eliminate?

Non-project action. However, after completion of all phases of the master plan, the project will add 55 new parking spaces to the project site. No existing parking would be eliminated.

- d. Will the proposal require any new or improvements to existing roads, streets, pedestrian, bicycle or state transportation facilities, not including driveways?
 - If so, describe (indicate whether public or private).

Non-project action. Nevertheless, frontage improvements along SE 20th Street may be included as part of the project. No other roadway improvements are anticipated.

e. Will the project or proposal use (or occur in the immediate vicinity of) water, rail, or air transportation? If so, describe.

No.

- f. How many vehicular trips per day would be generated by the completed project or proposal?
 - If known, indicate when peak volumes would occur and what percentage of the volume would be trucks (such as commercial and no passenger vehicles).
 - What data or transportation models were used to make these estimates?

Non-project action. Trip generation determination may require a traffic study if required by the City. According to the Institute Of Transportation Engineers Common Trip Generation Rates (PM Peak Hour) (Trip Generation Manual, 9th Edition) - one trip is estimated per 0.19 City Park Acres. Site is 15 acres in size. Therefore, 79 peak PM trips roughly estimated

Transportation sub-section continued on next page

Environmental Elements Section continued on next page

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B. ENVIRONMENTAL ELEMENTS CONTINUED [help]

14. TRANSPORTATION (CONTINUED) [help]

| h. | Will the proposal interfere with, affect or be affected by the movement of agricultural and forest products |
|----|---|
| | on roads or streets in the area? If so, describe. |

i. Proposed measures to reduce or control transportation impacts, if any.

Non-project action. Programming the site to limit concurrent activities will aid in reducing/c

15. PUBLIC SERVICE [help]

No.

a. Would the project result in an increased need for public services (for example: fire protection, police protection, public transit, health care, schools, other)? If so, describe.

Non-project action. That said, no increased need for public services will result from this project.

b. Proposed measures to reduce or control direct impacts on public services, if any.

No such measures are necessary.

Environmental Elements Section continued on next page



B. ENVIRONMENTAL ELEMENTS CONTINUED [help]

| | | THOIPI | |
|---------------------|--|------------------------|-----------------------------------|
| 16 | . UTILITIES [help] | | |
| a. | Utilities currently available at the site: (check all that apply) | | |
| | ■ Electricity | ☐ Natural gas | |
| | ■ Water | Refuse service | |
| | ■ Telephone | ■ Sanitary sewer | |
| | Septic system | Other: | |
| b. | Describe the utilities that are proposed for the proconstruction activities on the site or in the immedia Electrical Power: Puget Sound Energy Water: Sammamish Plateau Water & Sew Sewer: Sammamish Plateau Water & Sew Telecommunications: Comcast | ate vicinity which mig | |
| C. SIGNATURE [help] | | | |
| | e above answers are true and complete to the best or ying on them to make its decision. | of my knowledge. I ur | nderstand that the lead agency is |
| Sign | nature: Shelby Perrault | Name of Signee: | Shelby Perrault |
| Pos | ition/Title: Project Manager | Agency/Organization: | City of Sammamish |
| | | Date Submitted: | 04/12/2023 |

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D. SUPPLEMENTAL SHEET FOR NON-PROJECT ACTIONS [help]

Because these questions are very general, it may be helpful to read them together with the list of the elements of the environment. When answering these questions, be aware of the extent the proposal, or the types of activities likely to result from the proposal, would affect the item at a greater intensity or at a faster rate than if the proposal were not implemented. Keep responses brief and use non-technical language.

1. How would the proposal be likely to increase discharge to water; emissions to air; production, storage, or release of toxic or hazardous substances; or production of noise?

The proposal is not likely to significantly increase discharge to water; emissions to air; production, storage, or release of toxic or hazardous substances; or production of noise. Any future land use actions must comply with stormwater and source control regulations of the SMC Title 21.

Proposed measures to avoid or reduce such increases are:

Discharge to Water: New subsurface drainage will be added to direct runoff to proposed stormwater facilities for storage and treatment as necessary prior to outfalling to any stream or wetland.

Emissions to Air: Using well-maintained equipment and avoiding prolonged periods of

2. How would the proposal be likely to affect plants, animals, fish, or marine life?

Construction activities may disturb some animals during construction. However, the majority of the development is concentrated on the south portion of the site. Some plants may be removed or displaced for the construction of the parking lot, trails, or park amenities. Fish and marine life will not be affected by this project. Additionally, any future land use actions must comply with regulations of the SMC Title 21

Proposed measures to avoid or reduce such increases are:

As noted in the SEPA checklist, plant disturbances resulting from any future improvements would be restored and permanent impacts would be mitigated in accordance with an approved mitigation plan. The City also plans to improve the park's natural areas through invasive plant removal and the installation of native plants, which

Supplemental Sheet for Non-Project Actions continued on next page



D. SUPPLEMENTAL SHEET FOR NON-PROJECT ACTIONS CONTINUED [help]

3. How would the proposal be likely to deplete energy or natural resources?

The proposed design features do not require significant quantities of construction materials

Proposed measures to avoid or reduce such increases are:

The proposed project will avoid development to the greatest extent feasible in areas of the site containing natural resources such as trees and wetlands; use recycled or other, more sustainable construction materials where feasible; use energy efficient fixtures; utilize electricity from existing solar panels; incorporate timers, sensors and other

4. How would the proposal be likely to use or affect environmentally sensitive areas or areas designated (or eligible or under study) for governmental protection; such as parks, wilderness, wild and scenic rivers, threatened or endangered species habitat, historic or cultural sites, wetlands, floodplains, or prime farmlands?

This proposal aims to provide an overall benefit to the environmentally sensitive areas on site by restoring, enhancing, and protecting them to the greatest extent possible while providing adequate public open space to serve the City of Sammamish. That said, any future land use actions must comply with critical area regulations of the SMC Title 21, which are self mitigating.

Proposed measures to avoid or reduce such increases are:

Impacts to wetlands are limited to removal of a small portion of trail and pedestrian bridge currently within one of the wetlands on the site. No wetland impacts are anticipated from new improvements and development within wetland buffers have been minimized to the greatest extent feasible. Vegetation enhancements will offset any unavoidable development with the wetland buffers while providing vegetative buffers to wetlands.

Supplemental Sheet for Non-Project Actions continued on next page

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D. SUPPLEMENTAL SHEET FOR NON-PROJECT ACTIONS CONTINUED [help]

5. How would the proposal be likely to affect land and shoreline use, including whether it would allow or encourage land or shoreline uses incompatible with existing plans?

The project is currently zoned R-6. The proposed park would not conflict with this zoning. There are no shorelines on the subject properties. Additionally, any future land use actions must comply with regulations of the SMC Title 21.

Proposed measures to avoid or reduce such increases are:

No measures are necessary.

6. How would the proposal be likely to increase demands on transportation or public services and utilities?

Traffic: improvements to the park may result in a modest increase in traffic volumes on SE 20th Street. No metro transit routes currently service this area.

Public Services: emergency vehicles will respond to an injury or fire incidence at the park but an increase in demand is not anticipated.

Utilities: utilities are necessary to operate the lighting, buildings, restrooms, and to power

Proposed measures to avoid or reduce such increases are:

Anticipated traffic volumes and services that the park will require are within the range of the city thresholds for zoning at the site. Therefore, no reduction measures are necessary.

7. Identify, if possible, whether the proposal may conflict with local, state, or federal laws or requirements for the protection of the environment.

There are no conflicts with local, state, or federal laws or requirements for the protection of the environment.

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ADDITIONAL PAGE FOR OVERFLOW RESPONSES

| SECTION: Environmental Elements: Energy & Natur | ral Resources |
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| SECTION: Environmental Elements: Energy & Natur | ral Resources |

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ADDITIONAL PAGE FOR OVERFLOW RESPONSES

| SECTION: | Environmental Elements: Energy & Natural Resources | | |
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| SECTION: | Environmental Elements: Energy & Natu | ral Resources |

Continuation from Question Number:

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Department of Community Development

801 228th Avenue SE ■ Sammamish, WA 98075 ■ phone: 425-295-0500 ■ fax: 295-295-0600 ■ web: www.sammamish.us

STATE ENVIRONMENTAL POLICY ACT (SEPA) DETERMINATION OF NON-SIGNIFICANCE (DNS)

SDT2023-00289 Big Rock Park South Master Plan

Date of Issuance: May 24, 2023

Project Description: Master Plan for Big Rock Park South, the third and final phase of a 51-acre land donation

agreement located in the center of the City of Sammamish. The programming of this 15-acre section includes future parking lot, universal play areas, picnic shelters, passive open space, garden areas, interpretative signage, and optional 9-hole disc golf course.

Applicant/Proponent: Shelby Perrault, Project Manager, c/o Parks, Recreation, & Facilities

Project Location: Parcel: 0424069153, 22104 SE 20TH ST

Lead Agency: City of Sammamish, Department of Community Development

Online Documents: https://spaces.hightail.com/space/GSjFS7TKFy

The lead agency for this proposal has determined that it does not have a probable significant adverse impact on the environment, in that the Big Rock Park South Master Plan by itself does not authorize projects to move forward, nor does it provide funding for any specific projects within its scope. Funding occurs for individual projects and programs that are approved and funded through the City's biennial budget process. An Environmental Impact Statement (EIS) is not required under RCW 43.21C.030(2)(c). This decision was made after review of the completed environmental checklist on file with the lead agency. This information is available at the website listed above, as well as upon request.

The DNS is issued in accordance with WAC 197-11-340(2). The lead agency will not act on this propose for 14 days from the date listed below. Comments must be submitted in writing and received by the deadline described below. Pursuant to SDC 21.09.030(L)(1)(d), there is no administrative appeal process for this action.

SEPA Responsible official 5/24/2023
Date

City Contact Person:

Shelby Perrault, Project Manager
Department of Parks, Recreation, & Facilities
801 228th Avenue SE
Sammamish, WA 98075
sperrault@sammamish.us

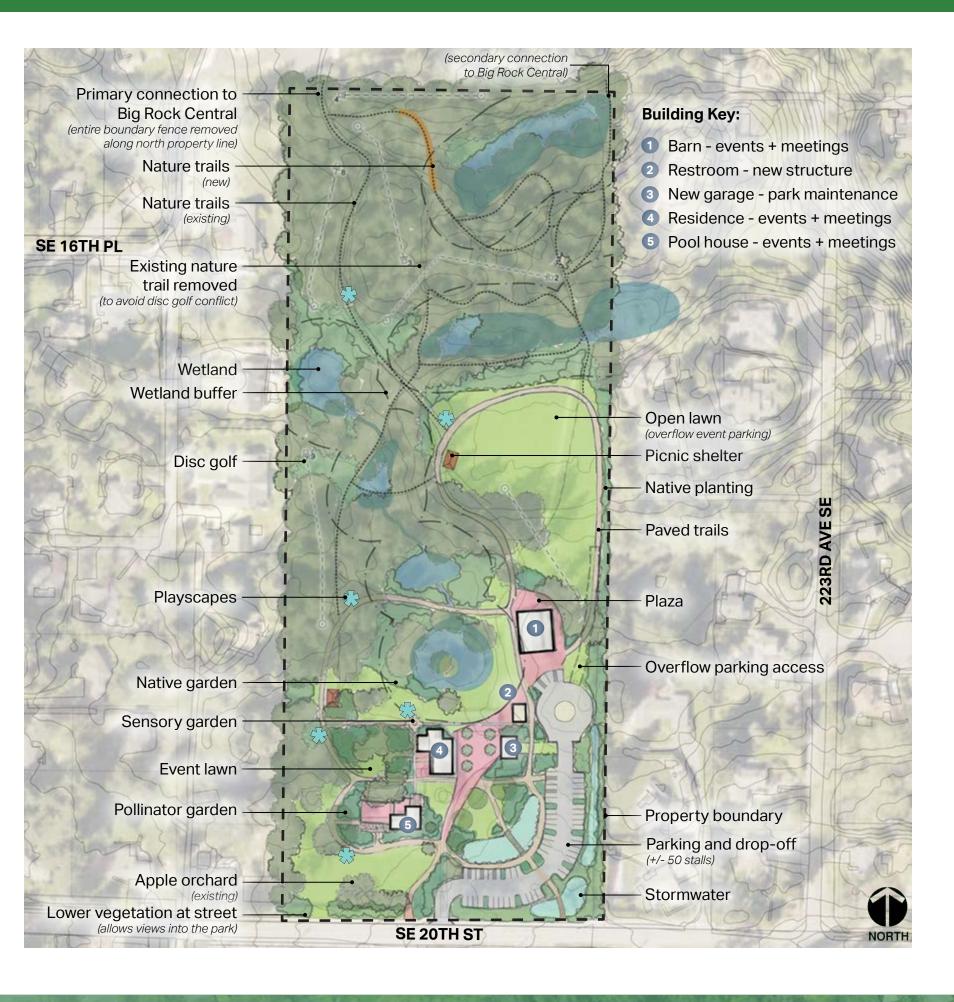
SEPA Responsible Official:

Avril Baty, Current Planning & Permit Center Manager Department of Community Development 801 228th Avenue SE Sammamish, WA 98075 abaty@sammamish.us

Appendix E: Master Plan Alternatives

CONCEPT 1 BIG ROCK PARK SOUTH





Gradient of Activities

- Opportunities for quiet and calm engagement are integrated with nature. Trails allow visitors to wander through gardens and wetlands, learning about the site's history and natural ecology.
- Plazas provide a clear entrance into the park, create a central gathering space, and take advantage of open views to the pond and garden areas.
- Playscapes and a disc golf course are integrated along the trails creating interest for all ages to engage more directly with the surrounding natural systems.
- Disc golf continues into Big Rock Central to provide a full 9-hole course without impacting wetlands and their associated buffers.
- The old garage is removed in this concept, reducing the impact to the wetland and allowing greater variation in the site grading to accommodate and channel stormwater naturally.



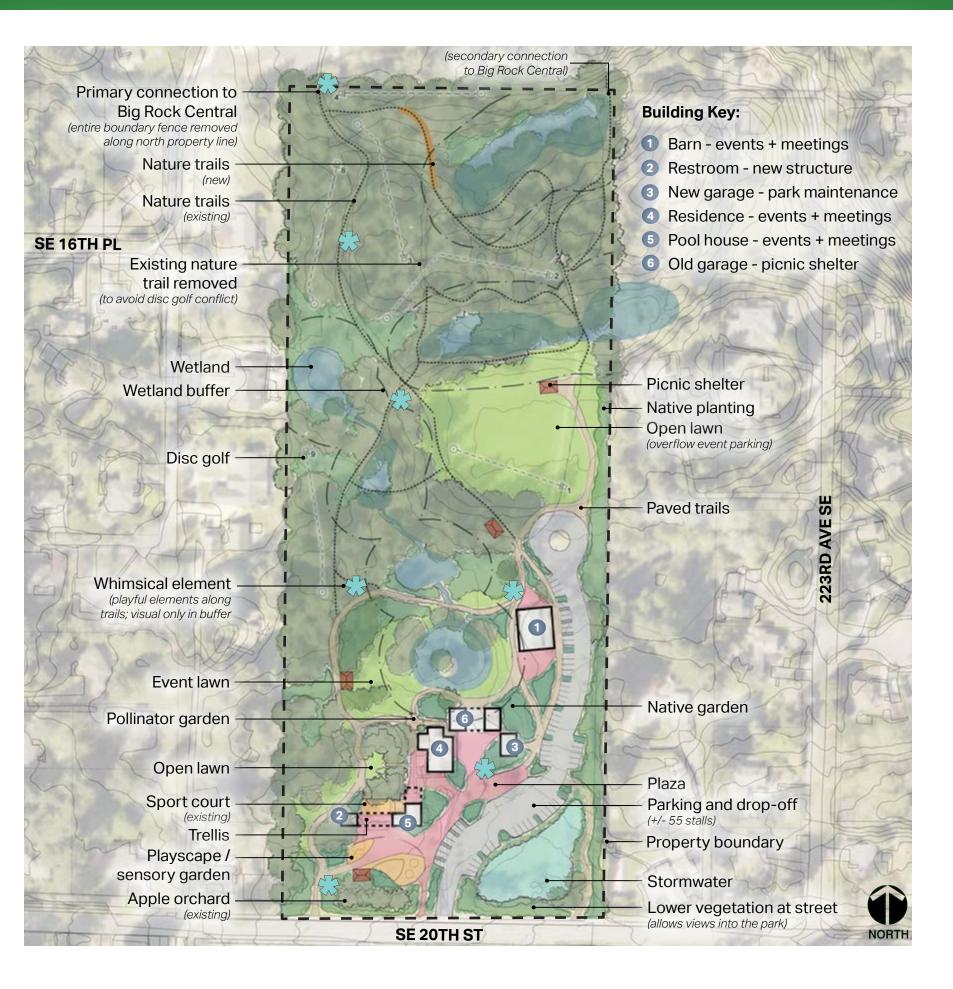






CONCEPT 2 | BIG ROCK PARK SOUTH





Whimsy and Discovery

- The design for Big Rock Park South focuses on enhancing the existing features and integrating elements of discovery that lead people of all ages through the park.
- Whimsical sculptures, natural features, and playful elements are woven into the gardens and trails and continue through the existing Big Rock Park Central and North as a defining feature connecting all the parks in this system.
- All of the structures remain and are repurposed for a variety of programs. The old garage is largely reconstructed to transform it into an open picnic area.
- Disc golf is incorporated along the trails, continuing into Big Rock Central to provide a full 9-hole course without impacting wetlands and their associated buffers.



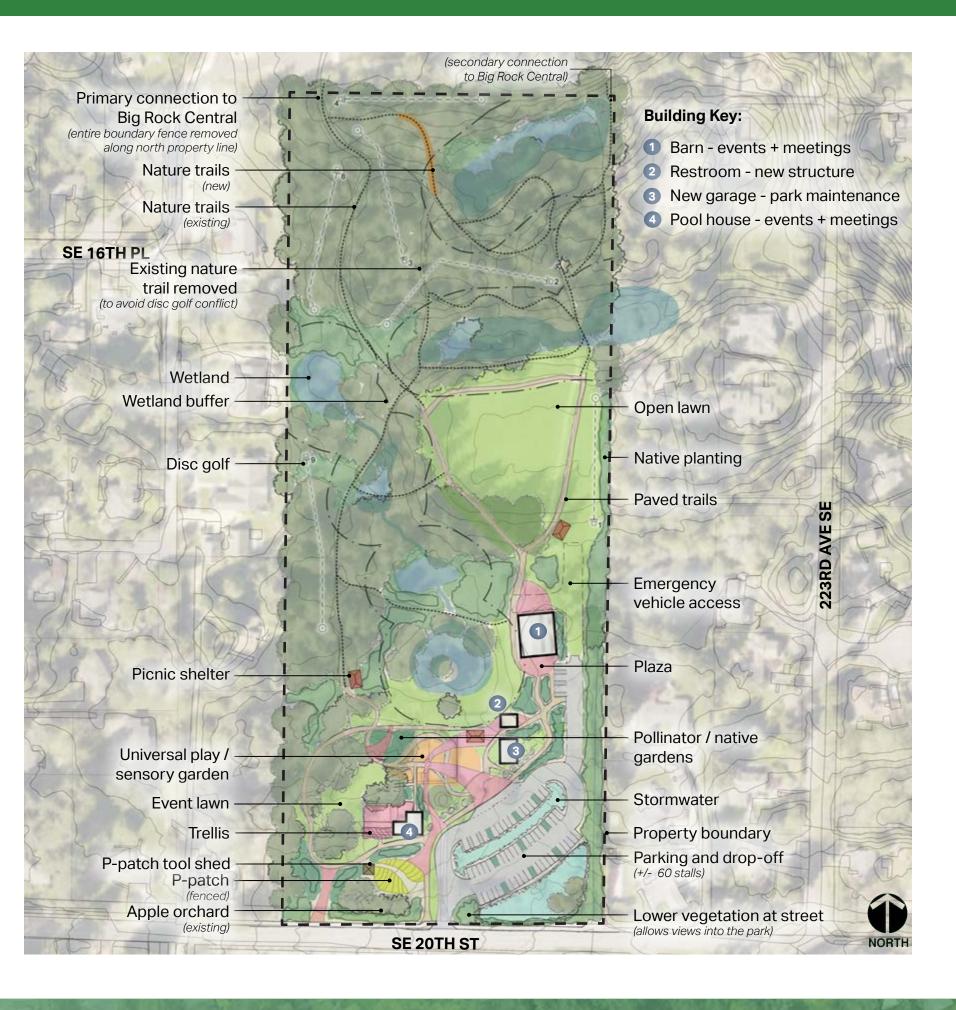






CONCEPT 3 | BIG ROCK PARK SOUTH





Playful Space for Everyone

- The design for Big Rock Park South includes a universal play area that considers all abilities and ages. The universal play spills into and integrates with picnic areas, sensory gardens, and small gathering spaces for a more holistic and multi-use character. This ensures the overall character doesn't feel like a single dedicated use of the space.
- The P-Patch allows an additional opportunity for the community to actively engage in the park.
- The existing old garage and residence are removed to accommodate the universal play and integrated open space areas.
- Disc golf is incorporated along the trails, continuing into Big Rock Central to provide a full 9-hole course without impacting wetlands and their associated buffers.







Appendix F: Permitting Comments from Sammamish Plateau Water

Big Rock Park South - Draft Master Plan Layout Tax Parcels 0424069153 Comments from Sammamish Plateau Water - December 21, 2022



Preliminary Comments

Water -

Tax Parcel 0424069153 is an existing water customer with a 3/4-inch meter.

There is a 12-inch water main in SE 20th on the south side of Tax Parcel 0424069153.

Sewer -

Tax Parcel 0424069153 is an existing sewer customer based on a 3/4-inch meter.

There is an 8-inch sewer main in SE 20th on the south side of Tax Parcel 0424069153, and a manhole extended to the north side of the road at a location adjacent to the southeast corner of the parcel.

There is a storm drainage system proposed in the southeast corner of the property that must be considered in design and location of the sewer facilities.

If Infiltration is proposed, provide the Critical Aquifer Recharge Area (CARA) map as part of your critical areas study.

The following comments are general in nature due to the conceptual nature of the proposal. Additional requirements may apply once the scope of the project is further refined.

General Water Requirements:

- If a fire hydrant installation is required on the property, a water main extension will be required.
- Existing domestic meter location may be retained for use.
 - o If frontage improvements are required, relocate or extend the meter to be out of any paved improvements, or to reach an extended right-of-way.
 - o If the existing meter setter location is not used, abandon the existing setter to the main.
 - o As a municipal agency the water meter may provide service to multiple structures.
 - Obtain a plumbing fixture count to verify the domestic meter size requirement, counting plumbing fixtures for all structures to be connected to the domestic meter.
 - o If a meter larger than 3/4-inch is required, installation of a larger setter will be required or additional individual single services may be added.
 - O Backflow prevention devices must be installed for all non-single-family residential buildings. The domestic backflow prevention device will be determined based on the hazard level of the facility provided service.
- Irrigation meters, separate from domestic meters are required.
 - o Install a separate meter for irrigation. Single services are required.
 - o Determine the maximum flow rate for the normal designed irrigation use to verify the meter size standards based on design flow rates for the meter.
 - o Each irrigation meter must have a double check valve assembly (DCVA) backflow prevention device directly behind the meter.

- Fire Sprinkler inspection, if fire sprinklers are required.
- Easements will be required for all water mains and appurtenances located outside of public right-of-ways. District standard easement forms will be used. The minimum easement width considered will be 15-feet, and joint water/sewer easements will be wider. Easements for water and/or sewer facilities in access tract or rights-of-way will be required to match the full width of the tract or right-of-way, and to extend to any adjacent property lines.
- Any wells on the properties must be abandoned in accordance with the Department of Ecology requirements, and a copy of the abandonment paperwork must be provided to the District.
- Any proposal for infiltration or injection of stormwater to be reviewed by the District for potential to degrade the aquifers used for District drinking water.

General Sewer Requirements:

- Gravity sewer service to all structures is required if feasible.
- Sewer using Preferred Route
 - o Construct 8-inch gravity sewer main:
 - From existing manhole on the north side of SE 20th near the southeast corner of Tax Parcel 0424069153, north along the east edge of the property to a location near the midpoint of Tax Parcel 0424069162 (to the east).
 - The planned sewer extension in this area was to be in the existing access road. The purpose was provision of service further north on the property, and also to the Tax Parcels located immediately east of the access road (0424069162 and 0424069168).
 - If plans include replacing this road with a vegetated buffer, and the road cannot be retained for the sewer use, the sewer route will need to be shifted slightly to the west.
 - The manhole at the north end of the sewer will need to be accessible for maintenance.
 - o Extend side sewers to structures within the park development.
 - The existing side sewer may be considered for continued use with the primary house and pool house.
 - Determine whether a gravity connection to the side sewer from the pool house is feasible. (The pool house sewer currently connects to the sewer using a pump system connected to and through the primary house plumbing.)
 - o Extend side sewers to Tax Parcels 0424069162 and 0424069168.
- Sewer using Alternate Route
 - Construct 8-inch gravity sewer main:
 From the existing manhole in SE 20th, west of the proposed park entrance, crossing SE 20th perpendicular to the existing SE 20th main, and then following the proposed park access route to a location near the midpoint of Tax Parcel 0424069162 (to the east).
 - o Abandon the existing side sewer to the main.
 - o Extend side sewers to structures within the park development.
 - o Extend side sewer to Tax Parcel 0424069162
 - o Note that the use of the Alternate Route will require a separate main extension for service to Tax Parcel 0424069168, or a short extension in the existing access road on the east side of 0424069153 to reach Tax Parcel 0424069168.
- A Reimbursement Agreement may be requested for installation of a sewer main that provides service to adjacent properties. Tax Parcels 0424069168 and 0424069162 both are subject to an

- Agreement for Future Connection to Sewer (Recording No. 9502280739) that requires connection to the sewer within 5 years of being notified that sewer service is available.
- Manhole Access Roads Wherever possible, access to manholes shall be provided on public or private accesses to which the district has access.
 - A dead end access road less than 100' in length may be acceptable, provided that the dead end does not intersect with an arterial road. In these cases the access road requirements should be a minimum of 15' width and HMA surfacing to aid in reversing maintenance vehicles.
- Grease Interceptors are required for all commercial buildings that have food service potential, including, but not limited to, commercial kitchens.
- Easements will be required for all sewer mains and appurtenances located outside of public right-of-ways. District standard easement forms will be used. The minimum easement width considered will be 15-feet, and joint water/sewer easements will be wider. Easements for water and/or sewer facilities in access tract or rights-of-way will be required to match the full width of the tract or right-of-way and to extend to any adjacent property lines.
- Once the Developer Extension Agreement is complete and granted Final Acceptance by the District, the builder or property owner is responsible for hiring a side sewer contractor (from the District's list of side sewer contractors registered with the District) and for paying for all the costs associated with installing the side sewers.

General Development Requirements:

- Enter into a Developer Extension Agreement (DEA) with the District. The application is available on the District's website www.spwater.org. Select Builders/Developers and Water and/or Sewer Service for a Development for the page with the link and also the DEA process.
- Pay applicable District fees to be determined, fees are subject to change at any time without prior notification, and depend on the scope of the project. Fees are based on a 3/4" meter; larger meters cost more.

| DEA Fees | | | |
|-------------------------------------|---|------------------------------|--|
| Application Fee | \$1,500 – Paid with Application for DEA | | |
| Development Services Fees | \$10,000 deposit – Paid upon provision of DEA signed by the | | |
| _ | Developer to the District. | | |
| | [Deposit will be refunded upor | successful completion of the | |
| | project including payment of a | ll other fees.] | |
| | | | |
| | Monthly Invoices for work done the preceding month (time | | |
| | and materials) to be paid within | n 30 days. | |
| Connection Charges – Paid du | | | |
| | Water | Sewer | |
| GFC per ERU ¹ | \$6,704.00 | \$3.064.00 | |
| Existing customers | Credit 1 ERU | Credit 1 ERU | |
| GFC 1.75% excise tax/ERU | \$117.32 | \$53.62 | |
| LFC ² | | SE 20th Special LFC | |
| SE 20th | Assessed in ULID 2 | Paid with prior service | |
| Meter Installation Fee, | As required | | |
| 3/4" (1 ERU) | \$5,250.00 | | |
| 1" (2.5 ERUs) | \$5,410.00 | | |
| 1-1/2" (5 ERUs) | \$6,810.00 | | |
| RCFC, per ERU ⁴ | \$7,201.00 | | |
| Existing customers | Credit 1 ERU | | |
| RCFC 1.75% excise tax/ERU | \$128.26 | | |
| Non-Single Family Side | | Each Side Sewer \$450.00 | |
| Sewer Permit | Chause hand as 3/" mater | Lacii Side Sewei \$430.00 | |

¹GFC = General Facility Charges, based on ³/₄" meter.

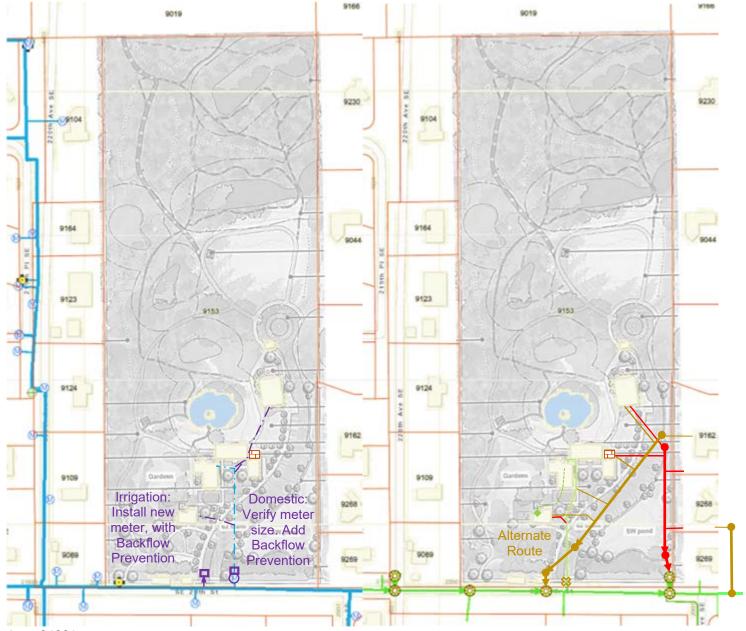
The developer or builder is responsible for paying the sewer King County Capacity Charge directly to King County for each lot beginning at the time of side sewer connection.

² LFC = Local Facility Charges

³ Not available for purchase until completion of the DEA and its acceptance by the District.

⁴ RCFC = Regional Capital Facility Charges, based on ³/₄" meter.

0424069153 Layout



Acct. 24081

Water App 160, Sewer App 10244

Proposed services to:

Houses – currently retained

Pool house – preserved with restroom.

Barn – rental space – will need restrooms

New restroom building

8 restroom stalls total, kitchen in house, maintenance sink in garage south of restroom.

Separate domestic & irrigation use

Multiple Public Institutional buildings may get water service from 1 meter per Resolution 4375

Appendix G: Stormwater and Utilities Memo

MEMORANDUM



2707 Colby Avenue, Suite 900, Everett, WA 98201 P 425.252.7700

To: HBB Landscape Architecture

Juliet Vong, ASLA, LEED AP

From: Perteet

Jason Walker, PLA, PWS

Steven Keith, PE

Date: February 8, 2023

Subject: Big Rock Master Plan

Conceptual Design Memorandum – Transportation, Site Design, Stormwater, and Utilities

Over the course of this planning level project, Perteet has provided design feedback to HBB for the Big Rock Park Master Plan on the following disciplines: Transportation, Site Design, Stormwater, and Utilities (Sewer and Water). The Big Rock Park site (Big Rock) is located on the north side of SE 20th Street (20th Street) between 220th Avenue SE and 222nd Avenue SE.

The following summarizes the major elements discussed, decisions made, and design decisions that require further effort during the design phases of the project.

Transportation

The roadway design considers City standards for longitudinal distance from proposed driveways to existing driveways (75 feet). Frontage improvements at Big Rock includes a 6-foot landscape buffer and a 6-foot sidewalk along the northerly portion of 20th St., see Attachment A.

Site Design

The conceptual site design utilizes the existing topography to the maximum extent feasible to minimize earthwork and thus minimize cost and impact. The existing site at Big Rock is partially developed and relatively flat. The primary influences on the conceptual site design are aesthetic, park function, and the stormwater design. Existing buildings are utilized to the maximum extent feasible. At this stage in the project, the available elevation drop for a gravity storm sewer system is not known without survey, thus a significant portion of the site is dedicated to a detention pond in the southeast corner.

Stormwater

Runoff treatment will primarily be accomplished with a vault style General Use Level Designation BMP such as a Biopod, Modular Wetland, or Filterra system in order to minimize the elevation drop required to drain compared to LID BMPs. The cost estimate includes additional bioretention cells that may or may not be feasible as the sole treatment option. Bioretention was included as a potential option and would add to the park's aesthetic with minimal cost. The designer will need to assess where bioretention is feasible and adjust sizing of the treatment facilities as necessary.

PERTEET

MEMORANDUM

As mentioned above, the existing stormwater system was not surveyed, and thus downstream point of connection is not known. Therefore, the available depth for detention and conveyance was conservatively assumed. The conceptual pond is designed with a maximum storage depth of 3-feet and a bottom area of 13,200 square feet. Cost and footprint of the pond may be reduced during design when the available drop in elevation is known.

The existing onsite ponds/wetlands reportedly cause localized onsite flooding. It is presumed that this flooding is primarily a result of an existing valved "drain" system that must be manually operated before, during, or after storm events. This valve must also be closed to prevent emptying these upstream systems. This project proposes to install an overflow system. This overflow system would consist of a standpipe riser and birdcage style debris grate installed at a design elevation within the ponds/wetland nearest to the existing structures. If the existing pipe is adequately sized, Perteet recommends removing the valve to prevent potential issues in the future. If the conveyance pipe is undersized, a new storm system main would be installed from the overflow system to the existing stormwater main on 20th St. The cost estimate includes the installation of a new storm main for the overflow system to the existing main. Additional measures such as french drains were not considered and ideally are not required if the root cause of flooding is remediated. If additional measures are desired, specific information such as the location and extent of the flooding would be required by the designer to make appropriate recommendations and design.

Utilities

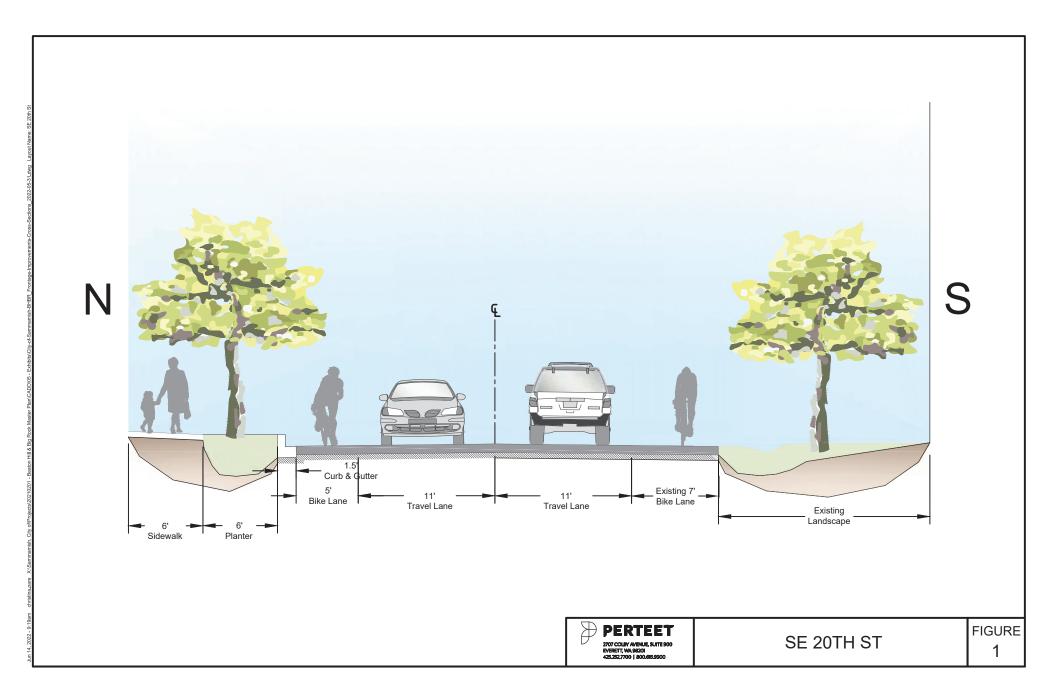
A new standard 1-inch water service was estimated and assumed to serve the park. The design phase will require further consideration of onsite water demand from each building and irrigation systems and the design and estimate will be further refined at that time.

A new standard 6-inch sewer was estimated and assumed to serve the park. The design phase will require further consideration of onsite sewer system demand of the proposed facilities and the design and estimate will be further refined at that time.

Comments from the Sammamish Plateau Water District (included in Appendix F) were not fully incorporated into the proposed concept and estimate. A majority of the comments are mid to final stage design comments and should not have a significant cost impact, if any. The cost estimate contingency accounts for items not estimated, items from the Sammamish Plateau Water District comments not addressed, and the uncertainty of sizing. Significant impacts to the design and cost of the project are not anticipated.

ATTACHMENT A

Frontage Improvements Cross Section



Appendix H: Structural Evaluation Memo



Seattle Tacoma Portland 1011 Western Avenue, Suite 810 | Seattle, WA 98104 | 206.292.5076 1250 Pacific Avenue, Suite 701 | Tacoma, WA 98402 | 253.383.2797 101 SW Main Street, Suite 280 | Portland, OR 97204 | 503.232.3746

www.pcs-structural.com

November 7, 2022

MEMO

TO: MENG Analysis

ATTN: Sarah Partap

FROM: August Braun – PCS Structural Solutions

RE: 23079 City of Sammamish – Structural Evaluation

22104 SE 20th Street, Sammamish, WA

COMMENTS:

SUMMARY

A walk-through assessment of the City of Sammamish Building 1 was performed on November 1, 2022. The goal of this walk-through was to identify the existing structural systems, bearing wall locations, and foundation configurations. As well as observe the overall condition of those structural elements. Destructive testing/exploration was not performed. Because of this, the location and orientation of framing hidden behind finishes was estimated based on previous experience with similar structures.

The building is a two-story single-family residential home built in 1923. The building was renovated in 1991 with the addition of (2) single story bump outs at the north and west end of the building. The house has a 950 SF basement, 1,850 SF main level, and 1,200 SF upper level for a total of 4,000 SF. The roof, main level, and upper level of the building is wood framed with wood framed shear walls and flexible wood diaphragms. The ground level has concrete walls and a slab on grade.

Overall, the structural concerns noted for the building are common for its age and type of construction. From a gravity load standpoint, the building appears to have performed well over the years. We did not observe significant signs of structural distress or differential settlement. Most of the structural concerns identified relate to the buildings' global lateral resisting systems, details of construction not consistent with current seismic detailing, and the general deterioration of the structural elements due to age and environmental factors. Building codes and construction methods have changed over the years, incorporating lessons learned from past experiences in relation to vertical and lateral (wind and seismic) design. The recommendations provided in this memo are intended to preserve the safety of the building occupants and limit the potential for loss of life due to structural failure.

MENG Analysis Sarah Partap 23079 City of Sammamish – Structural Evaluation 22104 SE 20th Street, Sammamish, WA

STRUCTURAL SYSTEM OVERVIEW

The description below outlines the primary structural systems for the facility.

| System | Description | |
|----------------|--|--|
| Roof | Skip sheathing over custom built 2x framed wood trusses at 24" O.C. (Assumed based on attic crawlspace). | |
| Floors | Floor sheathing unknown (covered by finishes). 2x8 joists with 4x12 girders at the main level. 2x8 joists at upper level (assumed for portions of the upper level). | |
| Gravity System | The primary gravity system is wood stud walls and columns supporting wood framing and sheathing. | |
| Foundation | Typical continuous concrete wall footings (assumed) with concrete stem walls. | |
| Lateral System | The building utilizes wood-framed shear walls consisting of 2x4 studs @ 16" O.C. sheathed with shiplap as the vertical elements in the seismic force-resisting system. The Lateral Load Path is as follows: At the roof: Wood skip sheathing acts as a flexible diaphragm that transfers lateral seismic/wind forces to wood-framed shear walls. At the floors: Wood skip sheathing acts as a flexible diaphragm that transfers lateral seismic/wind forces to wood-framed shear walls. The wood-framed shear walls transfer load down to the concrete stem walls and foundations. | |

OBSERVATIONS AND RECOMMENDATIONS

Lateral System

• This is an older home which utilizes shiplap sheathed stud walls as the primary lateral force resisting system. Shiplap sheathed stud walls were commonly used in buildings of this age and type of construction. However, when compared to modern wood shear walls constructed with rated sheathing, they do not perform well under seismic/wind lateral loading. Because of this, it is most likely that the building is utilizing most of the interior and exterior stud walls to resist seismic/wind lateral loads. Additionally, many of the interior stud walls do not align from floor to floor, which makes the lateral load path unclear.

MENG Analysis Sarah Partap 23079 City of Sammamish – Structural Evaluation 22104 SE 20th Street, Sammamish, WA

• It is likely that seismic retrofit would be needed to meet the requirements of the existing building code. These retrofits may include additional anchorage of walls to floors and foundations, adding additional sheathing to existing walls, or adding additional vertical lateral elements. It is also likely that the local jurisdiction will require a structural upgrade if any interior walls are removed, since they're currently providing lateral load resistance.

Gravity System

- Main Level:
 - Most of the main level framing was visible from the basement and determining the load path from these elements to the foundations was straightforward.
- Upper Level:
 - A significant amount of the upper level framing was hidden behind finishes.
 What was visible was used along with structural experience to estimate the remainder of the upper level framing. We have assumed that the primary framing is 2x8 joists at 16" O.C. spanning to main level wood stud walls.
- Roof:
 - The only roof framing that was visible was in the upper level crawl spaces. 2x4 at 24" O.C. spanned from exterior main level walls to upper level interior walls. We assumed that this framing continued and there was some sort of truss system that makes up the ridge of the roof. We assumed the pop-ups at the east and west rooms were supported in a similar fashion, with wood roof trusses supported by upper level stud walls.
- Stud Walls:
 - As explained in the Lateral System observations, many of the walls do not stack from floor to floor. Also, many of the discontinuous walls are supported by floor joists instead of wood beams or girders. This creates a complex gravity load path that makes determining which walls are bearing difficult.
- To consider removing interior walls, further investigation into identifying the gravity load path would be required. This investigation would require removing wall and floor finishes and a more advanced analysis of the gravity system.
- Also, If the use of the building is altered, the existing framing will have to meet the more stringent live load requirements between the two uses.
- Even after further investigation, it is likely that the gravity elements would need to be reinforced. Some quick checks were performed on the framing that was visible. Under the current loading and geometry, the existing floor members were found to not meet current code. Therefore, any changes to the loading would require reinforcement of those floor members.

MENG Analysis Sarah Partap 23079 City of Sammamish – Structural Evaluation 22104 SE 20th Street, Sammamish, WA

Structural Recommendations

Even if no modifications to the existing framing occur, it is recommended that the connection of the wood floor framing to the foundation is improved. This is a common deficiency for homes of this age, and without adequate connections the home may slide off the basement walls in a seismic event. This work would involve installing brackets and anchor bolts around the foundation perimeter. We estimate this to cost approximately \$10,000.

A full seismic upgrade to the building would require an extensive investment, likely in the range of \$50 per square foot, as nearly all wall and floor finishes would require removal and replacement in order to install new plywood shear elements, and to strengthen joists and beams.

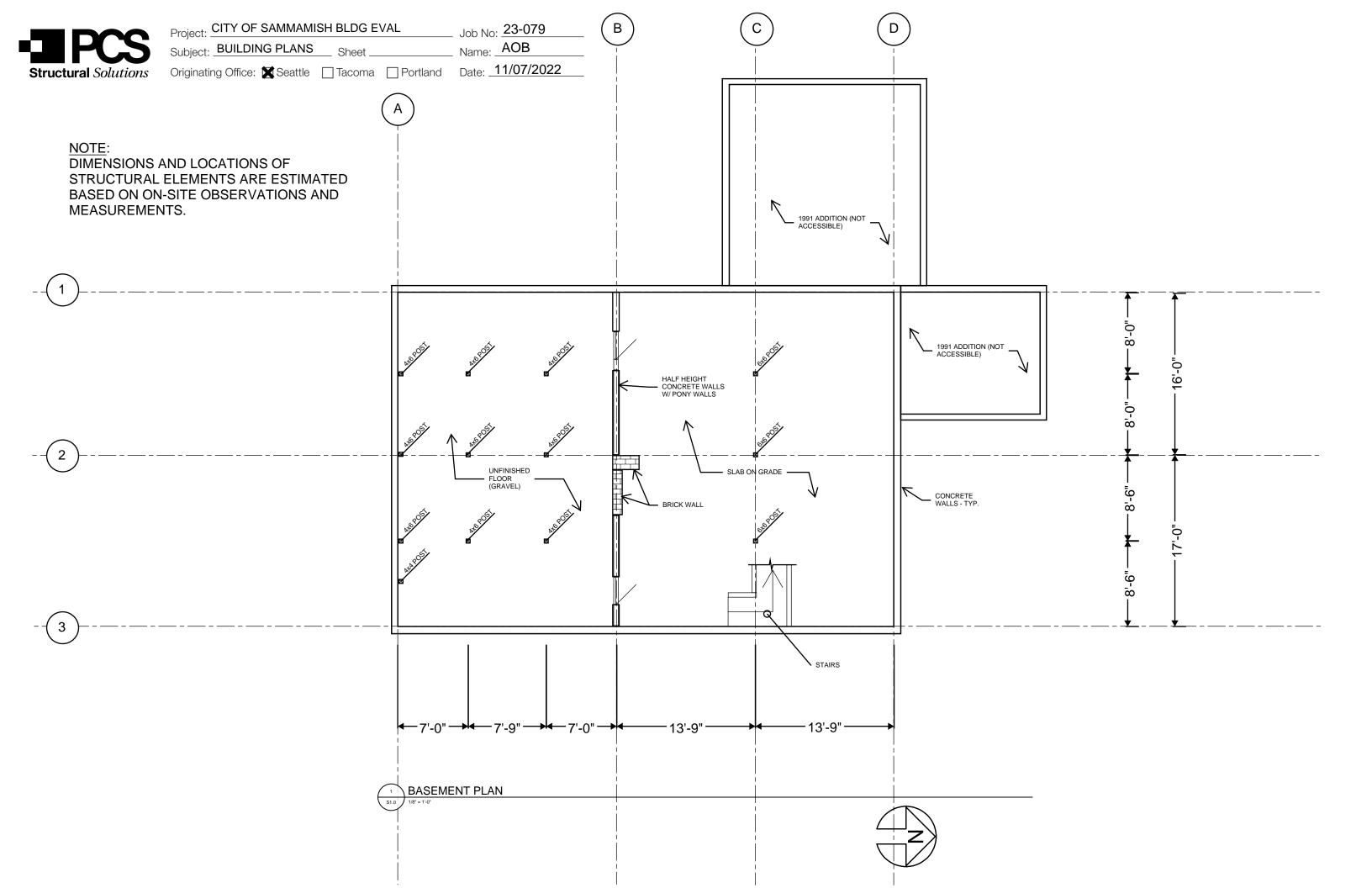
CONCLUSION

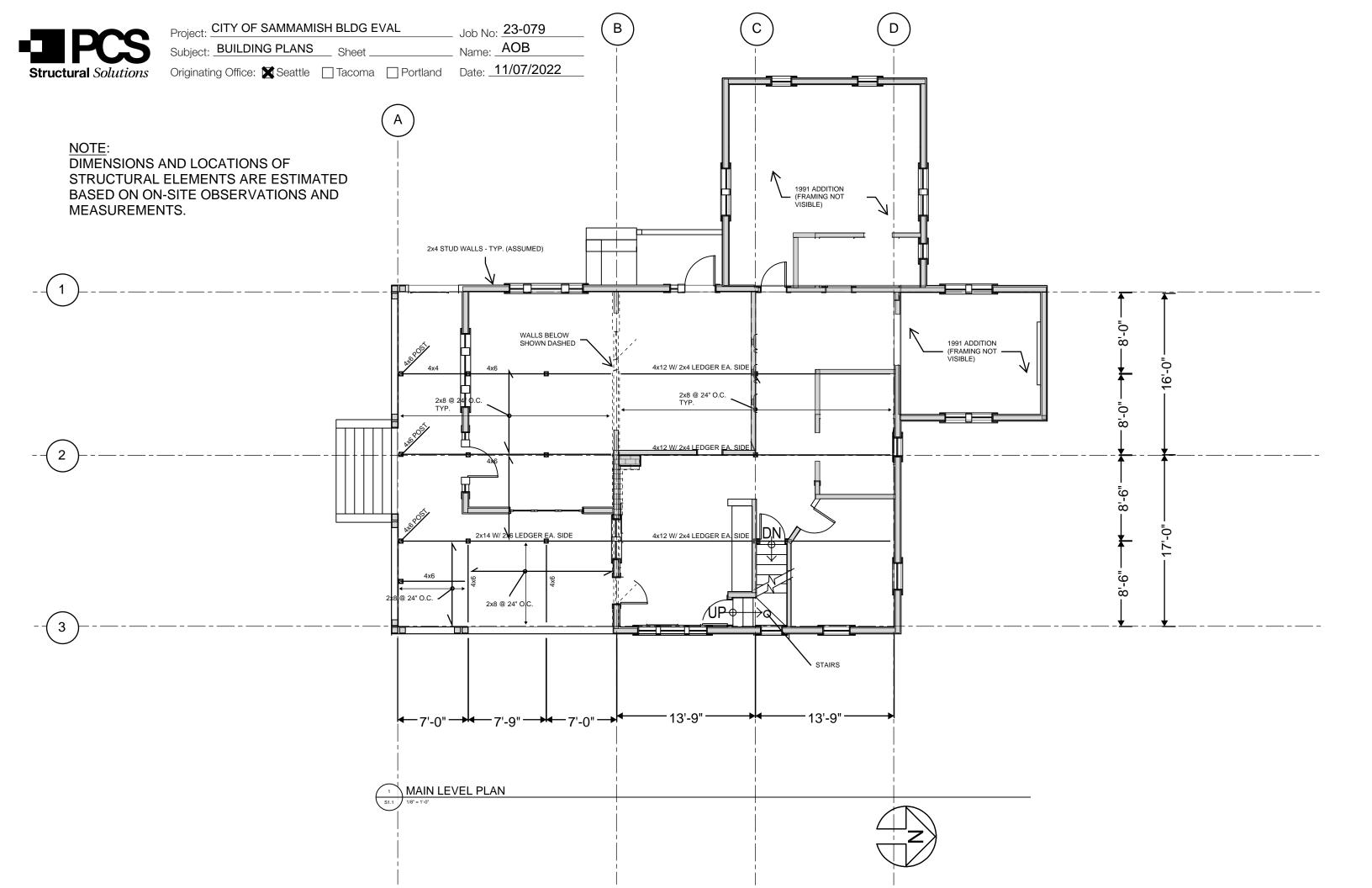
The lateral and gravity concerns noted are common for buildings of the given age and type of construction. While some of the existing structural systems and bearing wall locations were identified during the investigation, there are still many structural elements that are unknown. Based on our initial observations and quick analysis, we estimate that the building would require structural improvements to both the gravity and lateral system if alterations to the existing wall locations were performed.

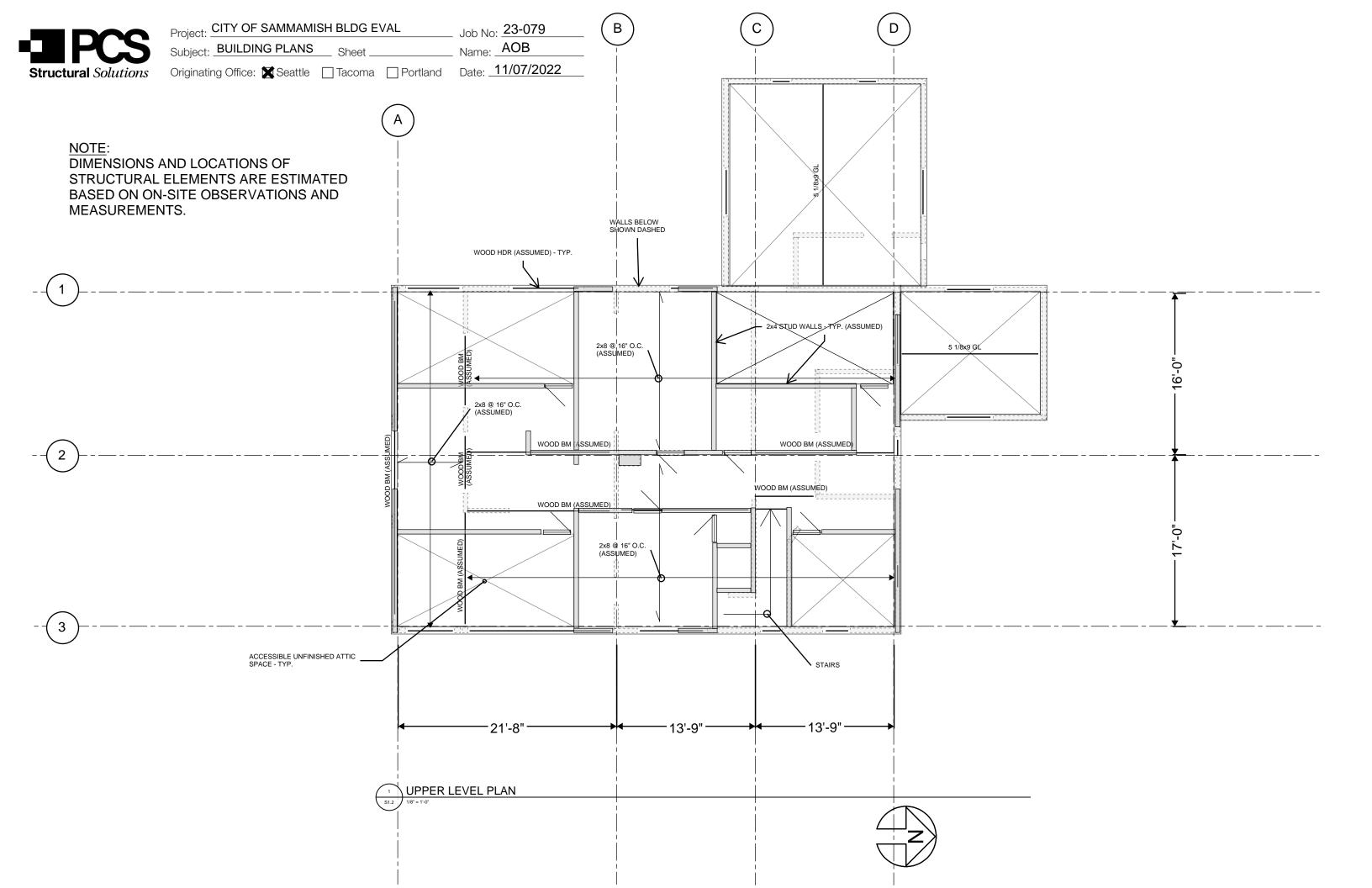
AOBeml 23-079

Enclosures: Building Plans





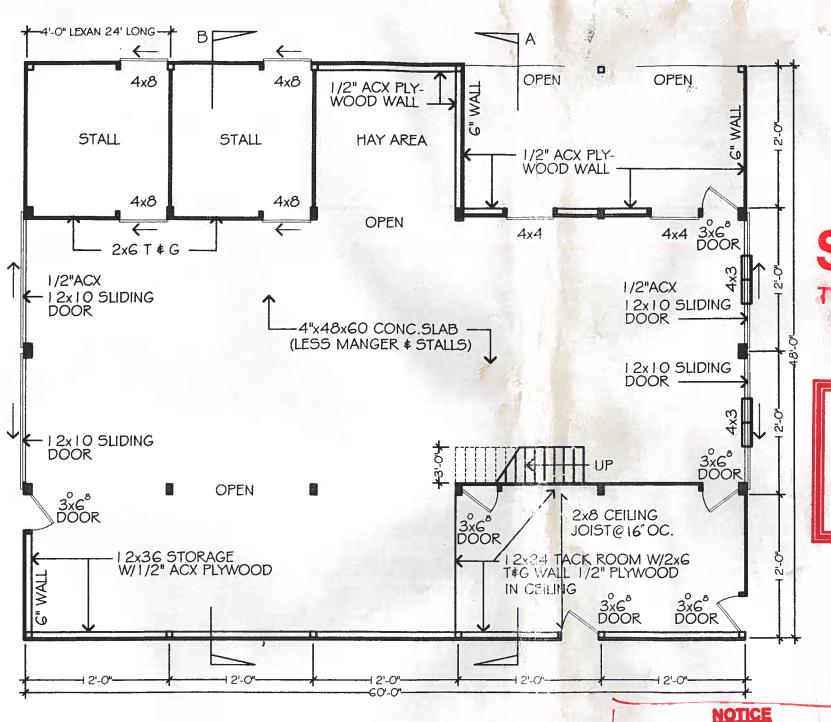




Appendix I: Existing and Proposed Building Layouts

- I.1 Barn Building Permit Drawings
- I.2 Existing and Proposed Building Layouts





FLOOF PLAN SCALE 1/8" - 1' - 0" THE ATTACHED DOCUMENT SHA BECOME A PART OF THE APPROV CALCULATIONS

- 6 "x 10" ROUGH SAWN PRESSURE TREATED POST W/ 32"Øx 4' 0" CONC. FTG.
- G "x 6" ROUGH SAWN PRESSURE TREATED POST W/ 18" \(\varphi \) 4' 0" CONC. FTG.
- 4 "x 6" ROUGH-SAWN PRESSURE TREATED DOOR POST W/ 18" Øx 2' 6" CONC. FTG.

ARCHITECT

THAN SUTAN STATE OF WASHINGTON

4/21/05/17/06 example 4/17/06

INSPECTOR SHALL MAKE ANY FIELD

MODIFICATIONS DEEMED NECESSARY

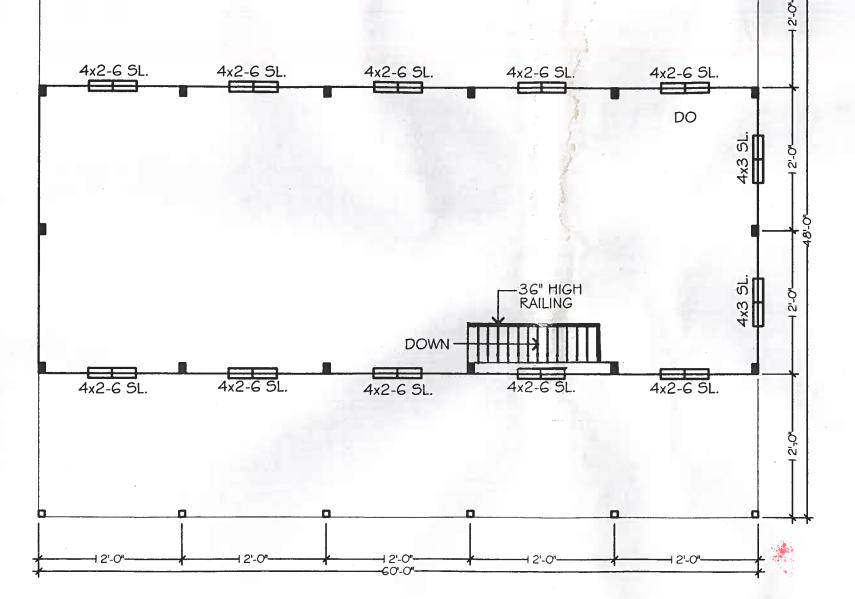
IN ORDER OT MEET MINIMUM BUILDING

CODE REQUIREMENTS.

6192

REGISTERED ARCHITECT

THAN SUTAN STATE OF WASHINGTON



SCALE

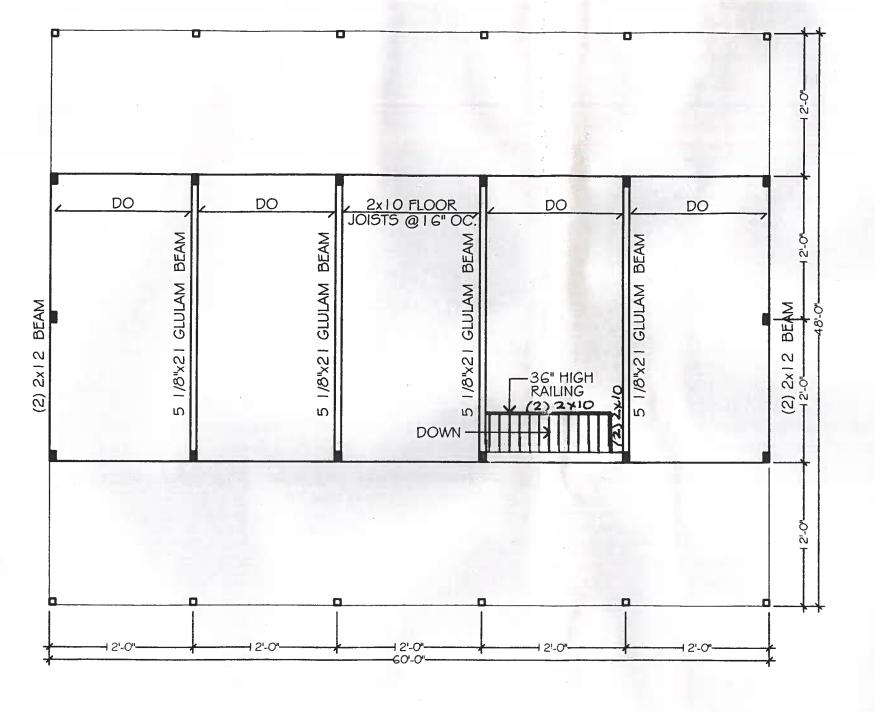
LOFT PLAN

SCALE 1/8" - 1' - 0"

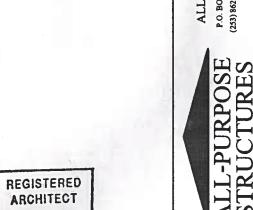


REGISTERED ARCHITECT

THAN SUTAN STATE OF WASHINGTON

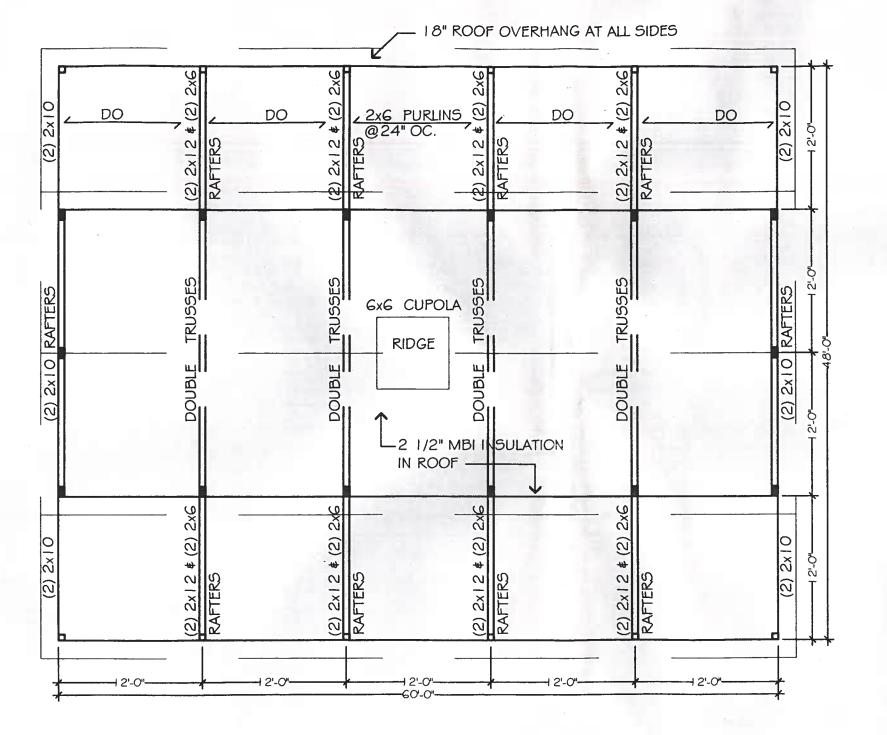


LOFT FRAMING PLAN 1/8" - 1' - 0" SCALE



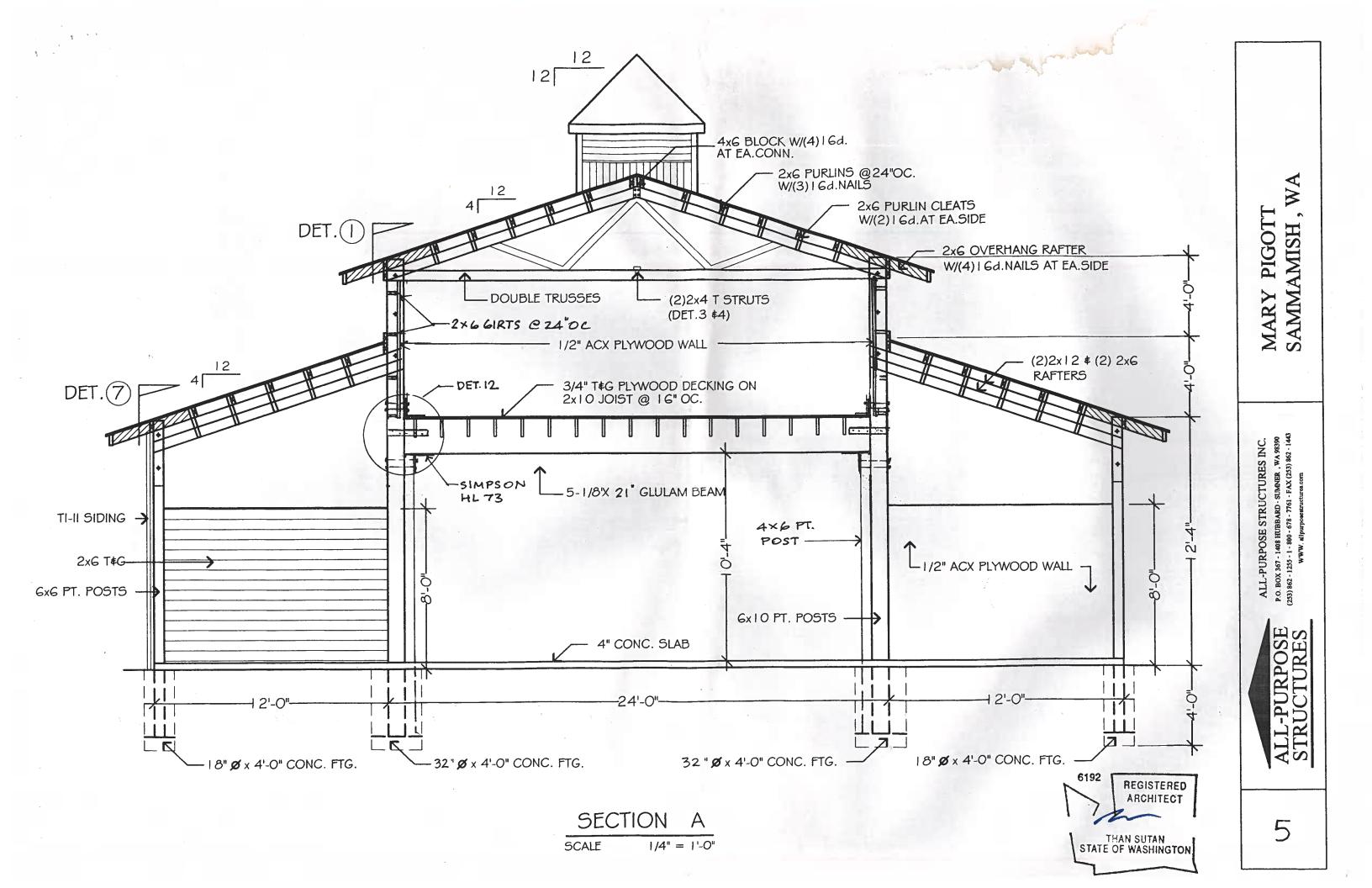
6192

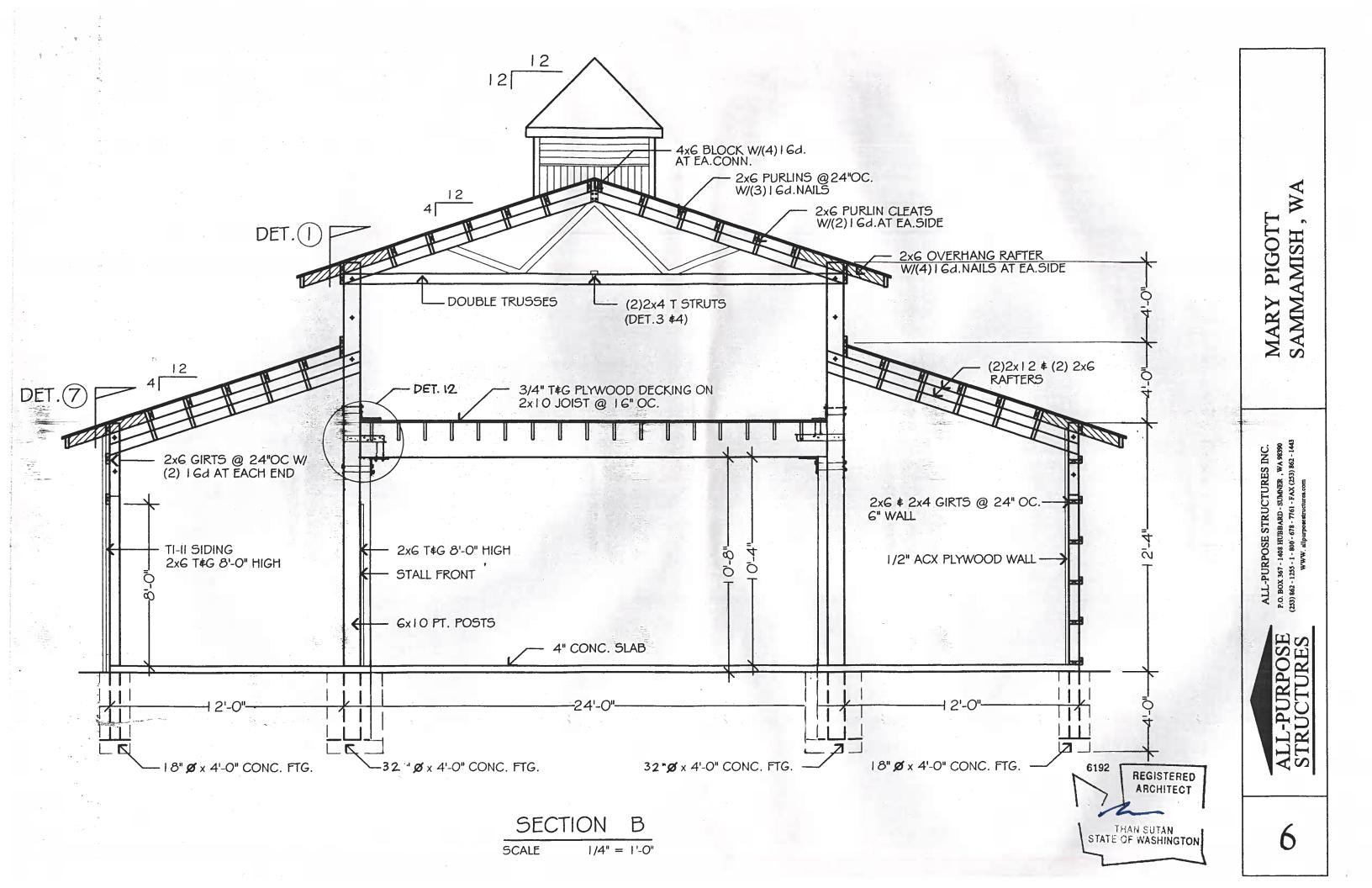
THAN SUTAN STATE OF WASHINGTON



ROOF PLAN & FRAMING PLAN

SCALE 1/8" - 1' - 0" SCALE



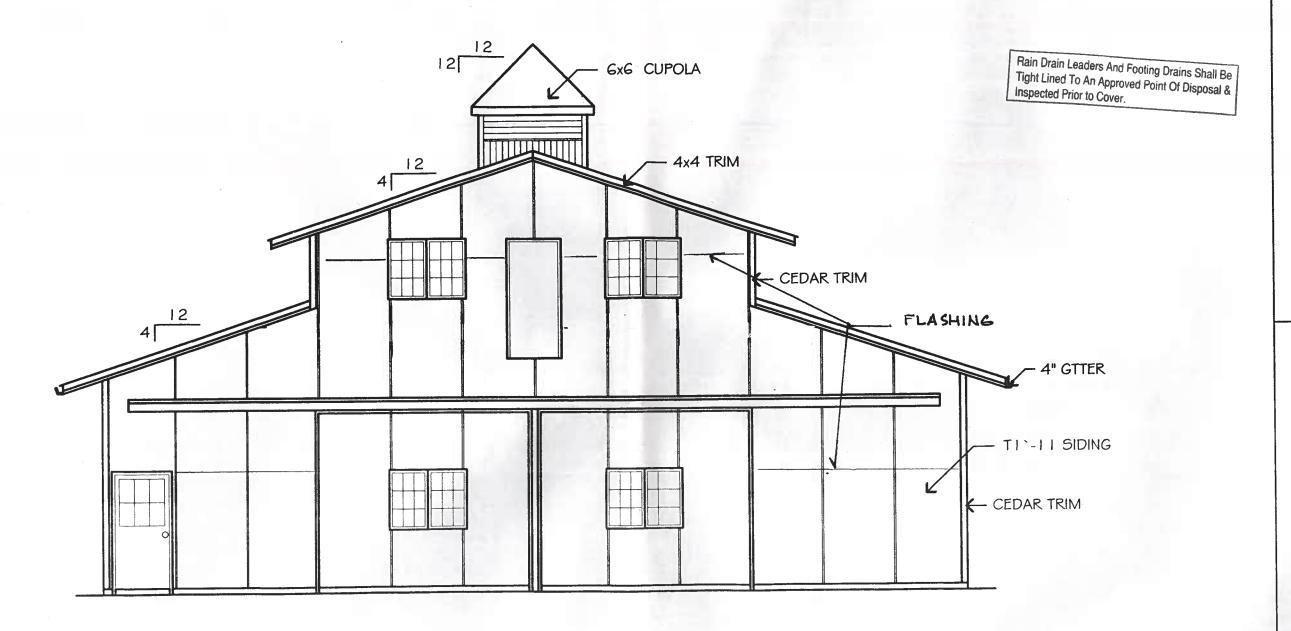


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REGISTERED ARCHITECT

THAN SUTAN STATE OF WASHINGTON

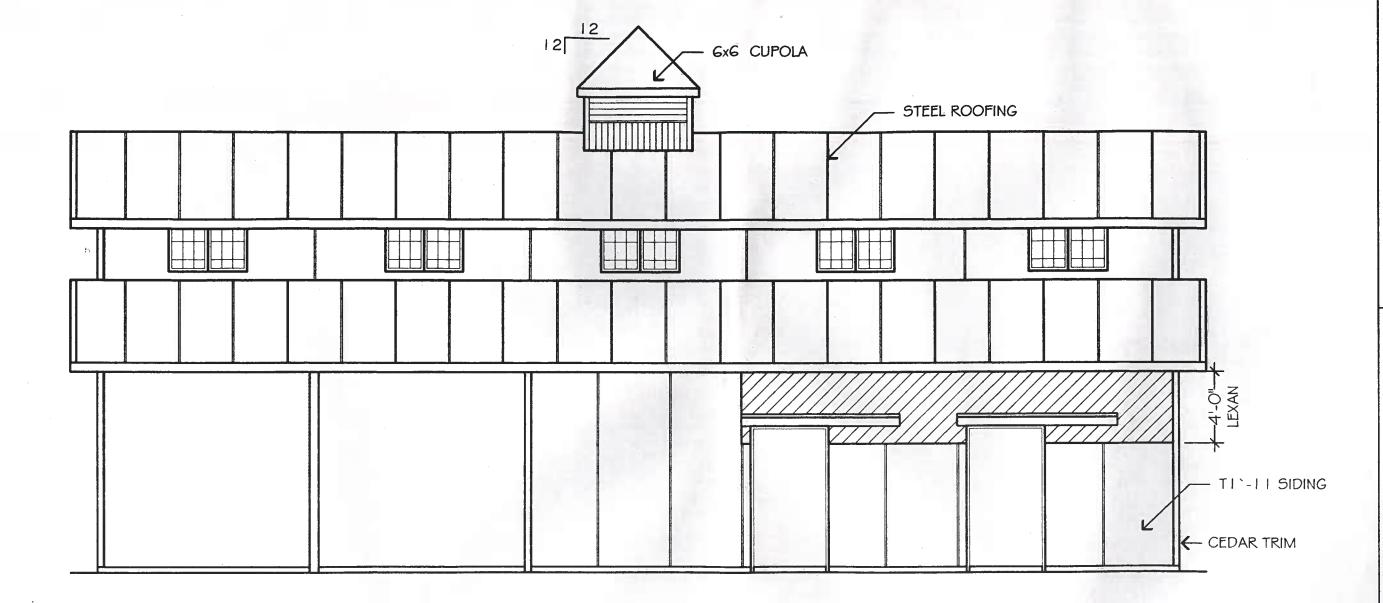






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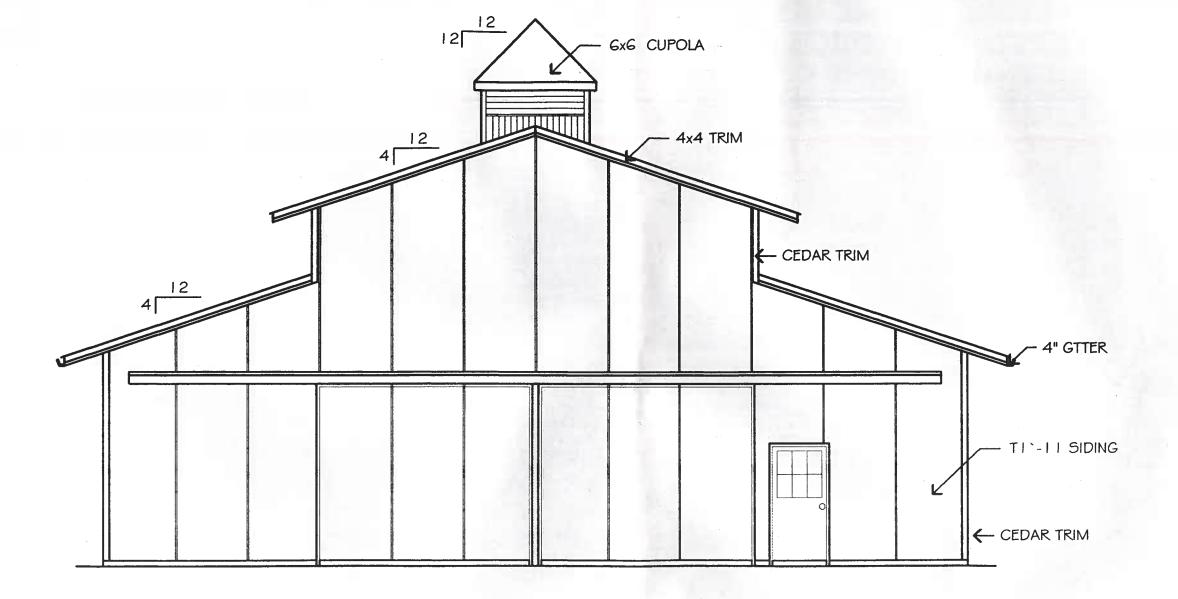


SIDE ELEVATION

SCALE 3/16" = 1'-0" SCALE

REGISTERED ARCHITECT

THAN SUTAN STATE OF WASHINGTON



END ELEVATION

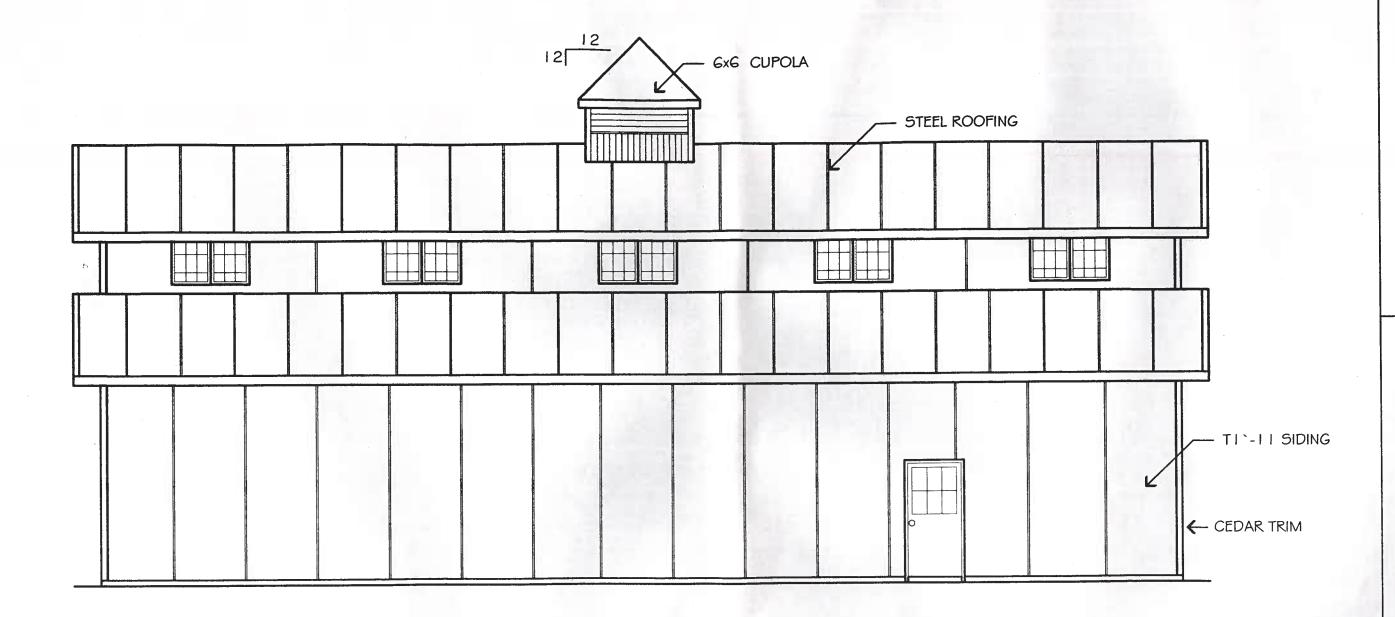
SCALE 3/16" = 1'-0" SCALE



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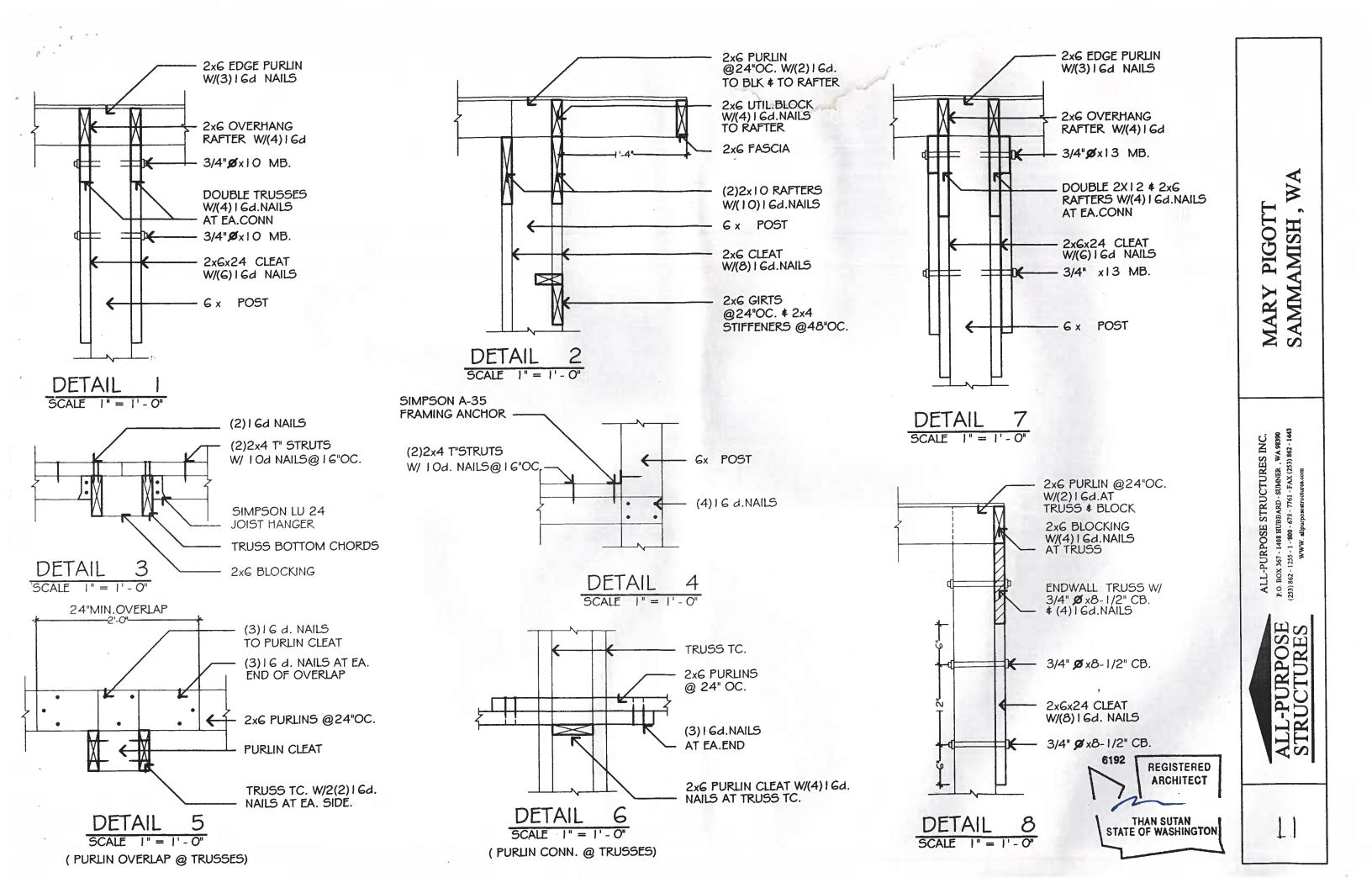
REGISTERED ARCHITECT

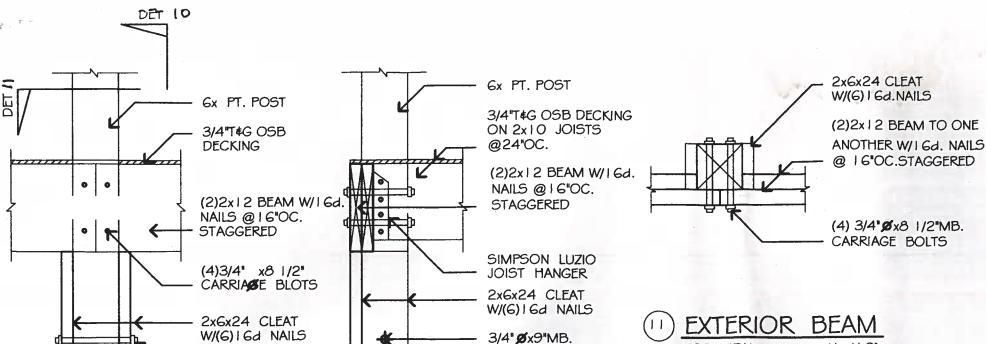
THAN SUTAN STATE OF WASHINGTON



SIDE ELEVATION

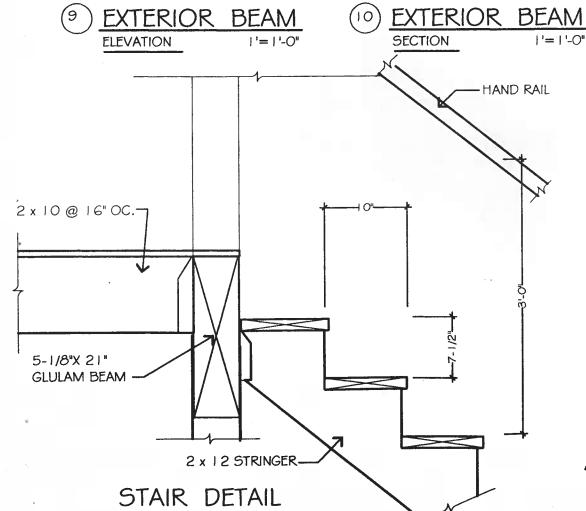
SCALE 3/16" = 1'-0"





3/4" **ø**x8 1/2"

CARRIAGE BOLTS

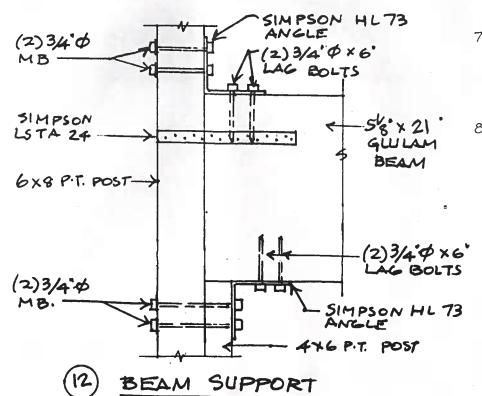


SCALE 1/1" - 1' - 0"

3/4" Øx8 1/2"MB.

CARRIAGE BOLTS

3/4" Øx8 1/2"



TOP VIEW

1'=1'-0"

NOTES

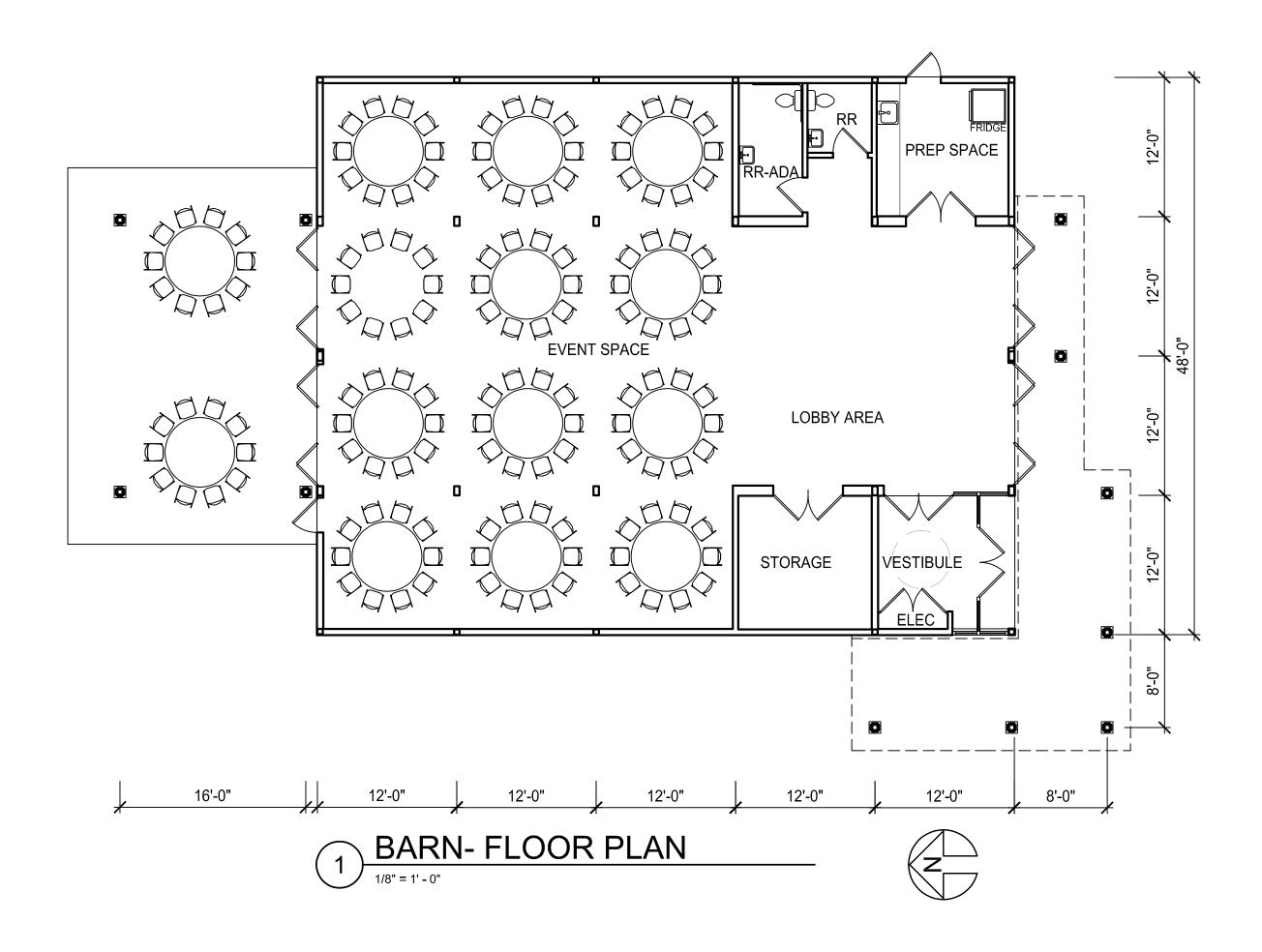
- 1. <u>CODES</u>; 2003 IBC
- 2. <u>DESIGN LOAD</u>; LOFT LIVE LOAD = G5 PSF
 ROOF LIVE LOAD (SNOW) = 25 PSF
 WIND SPEED (EXP B) = 85 MPH
 SOIL BEARING PRESSURE = 2000 PSF
 SEISMIC = D2
- 3. LUMBER;

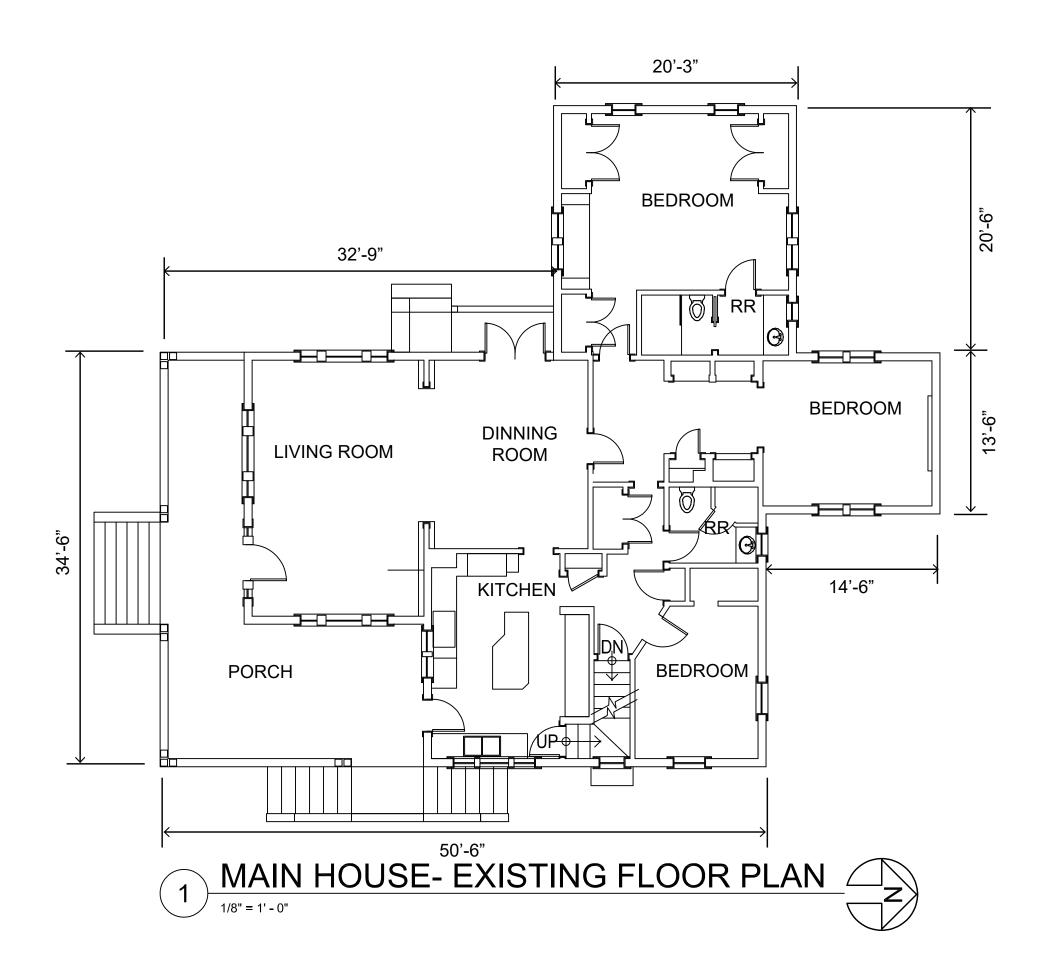
G X POST :HEM-FIR # 1
4 X G POST :HEM-FIR # 2
PURLINS & GIRTS :DOUG-FIR # 2
RAFTERS :DOUG-FIR # 2

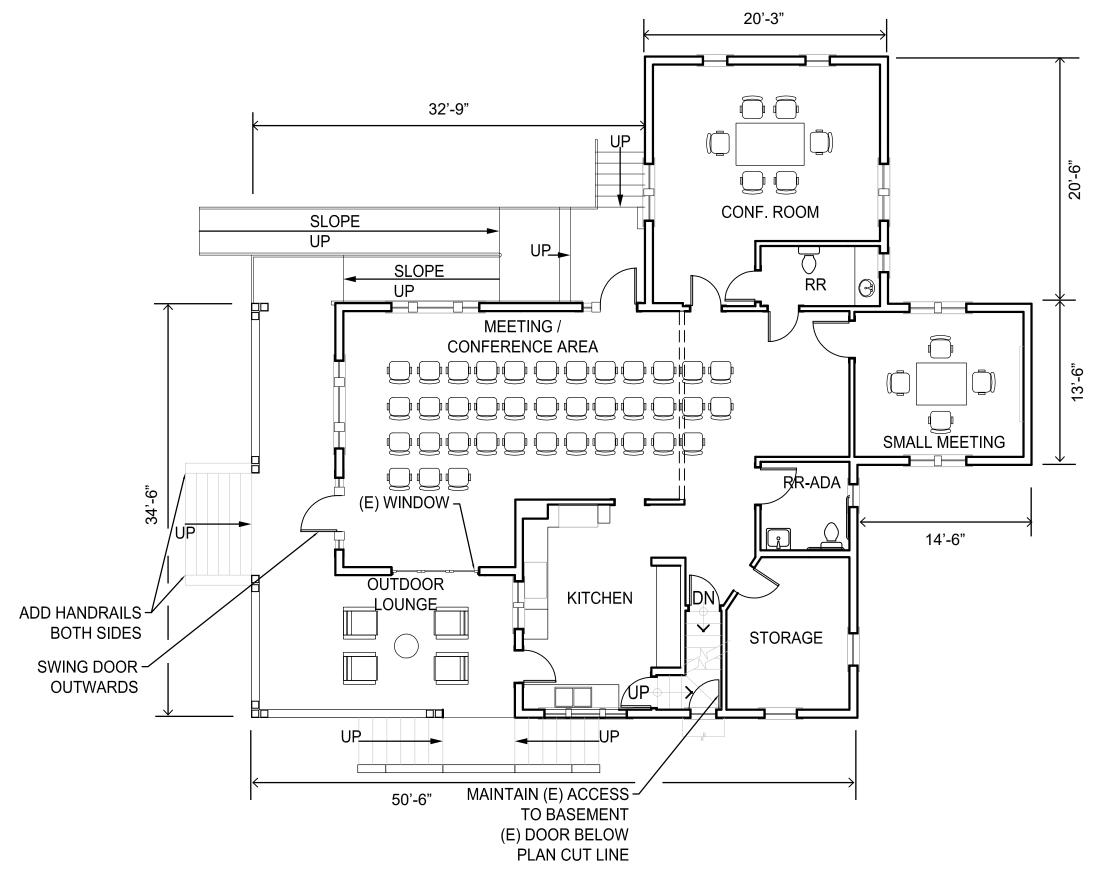
- 4. TREATED LUMBER; ALL LUMBER WITH GROUND CONTACT SHALL BE PRESSURE TREATED POST: .GO PCF RETENTION

 SKIRTBOARDS: .40 PCF RETENTION
- 5. <u>CONCRETE</u>; F'C = 2500 PSI @ 28 DAYS.
- 6. ALL FOOTINGS SHALL BEAR ON UNDISTURBED
 NATIVE FIRM SOIL WITH MIN. BEARING CAPACITY
 OF 2000 PSF AND LATERAL BEARING CAPACITY
 OF 200 PCF. BUILDER TO VERIFY SOIL CONDITION
 PRIOR TO CONSTRUCTION
- 7. ROOFING; 29 ga CORRUGATED STEEL
 WITH 5/8" HIGH RIBS @ 9" OC WITH # 10 X 1 1/2"
 SCREWS @ 9" OC.
 SIDING: T1-11 OSB SIDING W/ 3"BATTEN
 - TRUSSES SHALL BE DESIGNED BY THE ENGINEER LICENSED IN THE STATE OF WASHINGTON.



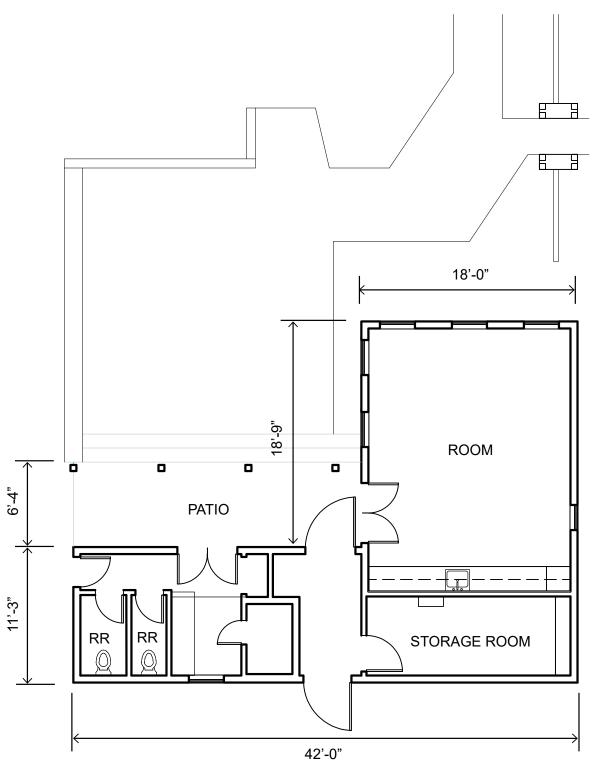








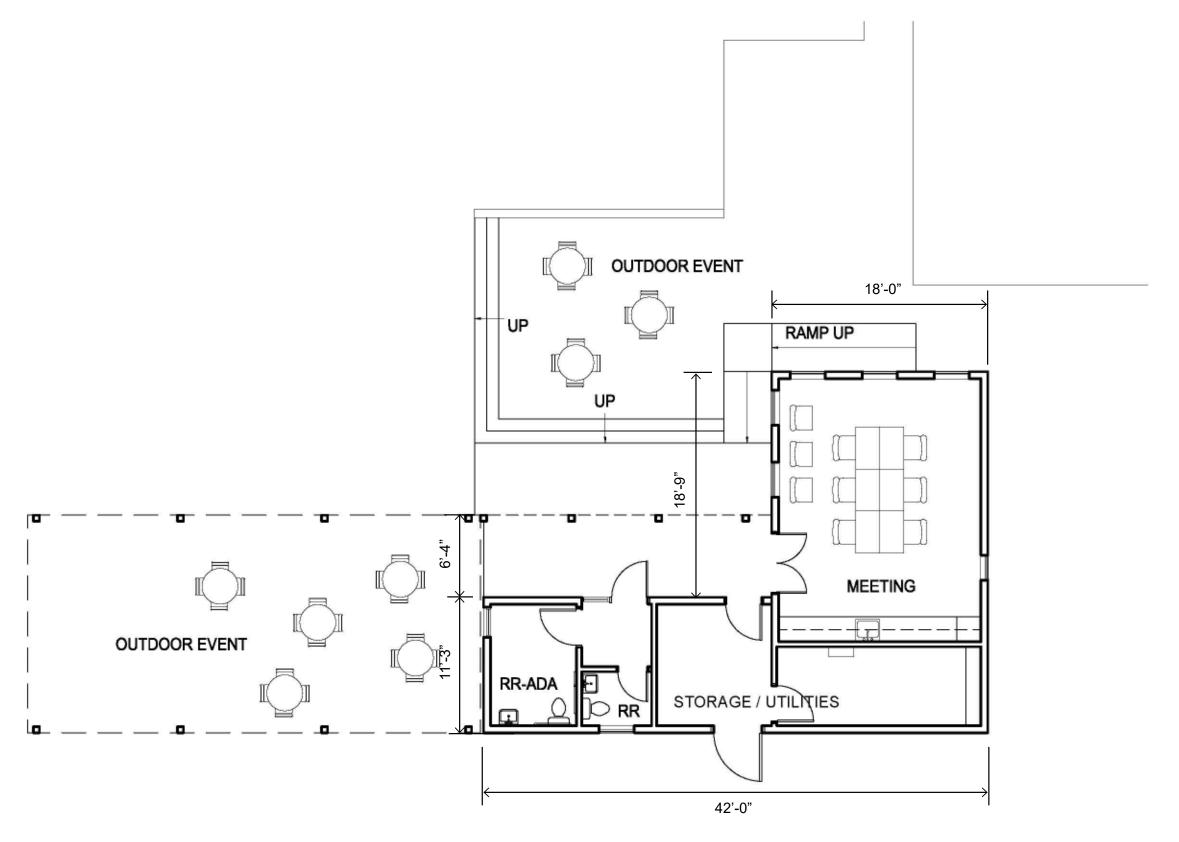




POOL HOUSE- EXISTING FLOOR PLAN

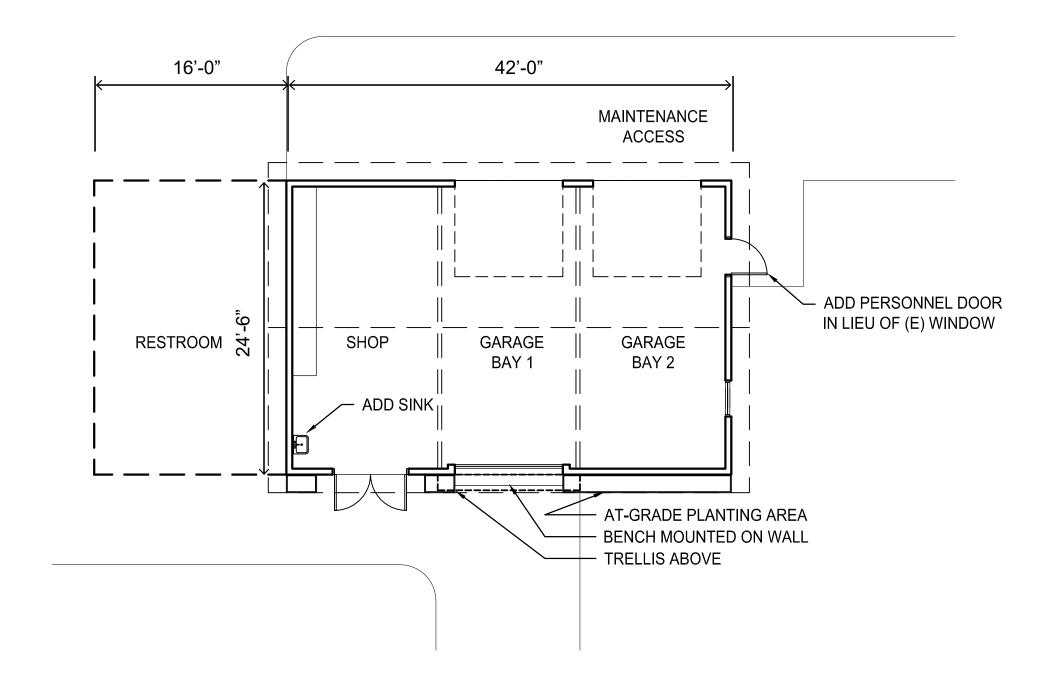
1/8" = 1' - 0"

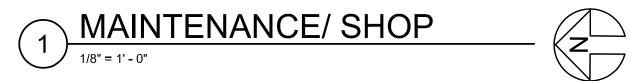


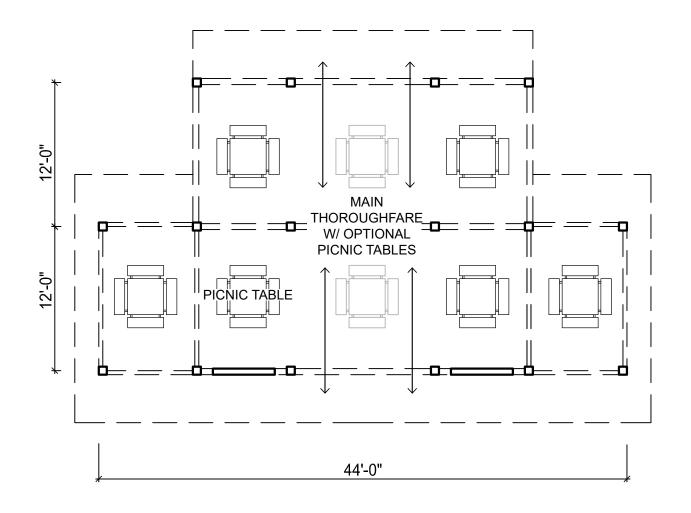














BIG ROCK PARK SOUTH - SAMMAMISH

Appendix J: Cost Estimates

- J.1 Overall Estimate of Probable Cost of Construction
- J.2 Civil Planning Level Opinion of Cost Summary
- J.3 Barn Renovation Cost Esimtate
- J.4 Residence Renovation Cost Estimate
- J.5 Residence Renovation Ramp Cost Estimate
- J.6 Poolhouse Renovation Cost Estimate
- J.7 Maintenance Garage Renovation Cost Estimate

Estimate of

Probable Cost of Construction

HBB Landscape Architecture

Project Name: Big Rock South Project Number: 2021-38

Project Phase: Preferred Master Plan
Prepared By: M. LaFerrier / J. Bakke

Checked By: J. Vong

Overall / Single Phase Total:

Date:

January 23, 2023

\$17,209,960.83

Phase 1 - description

| Item | Description | Qty | Unit | Unit Cost | Item Total |
|------|---|--------|------|----------------|----------------|
| 1.00 | Demolition/Site Preparation | | | | |
| 1.01 | . Tree Protection Fence and Signage | 2,640 | LF | \$4.50 | \$11,880.00 |
| 1.02 | Site Clearing and Grubbing (6" depth) | 5.8 | AC | \$12,000.00 | \$34,440.00 |
| 1.03 | Clear Brush and Sapling | 0.3 | AC | \$10,500.00 | \$3,045.00 |
| 1.04 | Existing Tree Removal | 20 | EA | \$500.00 | \$10,000.00 |
| 1.05 | Construction Fence (6' chainlink) | 3,582 | LF | \$6.00 | \$21,492.00 |
| 1.06 | Existing Building Removal (Old Garage) | 1 | LS | \$40,000.00 | \$40,000.00 |
| 2.00 |) Earthwork | | | | _ |
| 2.01 | . Balance Cut/Fill on Site (6" average depth) | 4,679 | CY | \$7.00 | \$32,753.00 |
| 2.02 | Rough Grading | 5.8 | AC | \$6,000.00 | \$34,800.00 |
| 2.03 | Finish Grading | 5.8 | AC | \$10,000.00 | \$58,000.00 |
| 3.00 | Site Civil and ROW (see attached) | 1 | LS | \$1,353,900.00 | \$1,353,900.00 |
| 4.00 | Paving & Walls | | | | |
| 4.01 | . Pedestrian Concrete Paving (4" depth with 4" base) | 29,867 | SF | \$13.00 | \$388,271.00 |
| 4.02 | Plaza Paving (Color, unit paver, texture, etc.; approx. half of area) | 9,765 | SF | \$20.00 | \$195,300.00 |
| 4.03 | Soft surface trails (4" depth mulch) | 139 | CY | \$55.00 | \$7,645.00 |
| 4.04 | Crushed Stone Surfacing (3" depth with 4" depth base) | 6,925 | SF | \$10.00 | \$69,250.00 |
| 4.05 | Seat wall | 395 | LF | \$400.00 | \$158,000.00 |

| 6.00 Site Improvements | | | | |
|--|----------------|-------|--------------|--------------|
| 6.01 Trash/Recycle Receptacle | 12 | EA | \$1,500.00 | \$18,000.00 |
| 6.02 Drinking Fountain (with, ADA and anti-freeze valves) | Included in Re | stroo | m Building | |
| 6.03 Bench | 36 | EA | \$2,000.00 | \$72,000.00 |
| 6.04 Picnic Table | 8 | EA | \$2,500.00 | \$20,000.00 |
| 6.05 Bike Rack | 2 | EA | \$1,000.00 | \$2,000.00 |
| 6.06 Signage (Wayfinding, Rules, Etc.) | 13 | EA | \$1,000.00 | \$13,000.00 |
| 6.07 Entry Monument Signage | 1 | EA | \$5,000.00 | \$5,000.00 |
| 6.08 Play Area Large | 1 | LS | \$750,000.00 | \$750,000.00 |
| 6.09 Play Area small | 2 | LS | \$300,000.00 | \$600,000.00 |
| 6.10 Play nodes | 2 | LS | \$100,000.00 | \$100,000.00 |
| 6.11 Whimsical elements | 9 | EA | \$10,000.00 | \$90,000.00 |
| 6.12 Wood Split-Rail Fence | 4,230 | LF | \$61.00 | \$258,030.00 |
| 6.13 Bollard (removable, metal) | 12 | EA | \$1,500.00 | \$18,000.00 |
| 6.14 Vehicular Entry Gates (Manual) | 1 | EA | \$8,500.00 | \$8,500.00 |
| 6.15 Disc Golf (with clear and grub, tree protection, restoration planting) | 6 | EA | \$5,000.00 | \$30,000.00 |
| 6.16 Parking Lot Lighting | 20 | EA | \$9,000.00 | \$180,000.00 |
| 6.17 Pedestrian Lighting | 16 | EA | \$6,000.00 | \$96,000.00 |
| 6.18 Conduit, Wire and Junction Boxes | 1,450 | LF | \$85.00 | \$123,250.00 |
| 7.00 Buildings | | | | |
| 7.01 Restroom Building | 1 | EA | \$500,000.00 | \$500,000.00 |
| 7.02 Central Picnic Shelter | 1 | EA | \$500,000.00 | \$500,000.00 |
| 7.03 Picnic Shelter | 2 | EA | \$150,000.00 | \$300,000.00 |
| 7.04 Residence Renovation | 1 | EA | \$541,576.00 | \$541,576.00 |
| 7.05 New Garage Renovation | 1 | EA | \$154,603.00 | \$154,603.00 |
| 7.06 Barn Renovation | 1 | EA | \$649,566.00 | \$649,566.00 |
| 7.07 Poolhouse Renovation | 1 | EA | \$215,681.00 | \$215,681.00 |
| 8.00 Planting | | | | |
| 8.01 Trees | 93 | EA | \$400.00 | \$37,200.00 |
| 8.02 Accent Planting (with soil prep and irrigation) | 9,872 | SF | \$20.00 | \$197,440.00 |
| 8.03 Native Buffer Planting (with soil prep and irrigation) | 39,488 | SF | \$12.00 | \$473,856.00 |
| 8.04 Stormwater Pond Seed (no soil prep or irrigation) | 6,768 | SF | \$1.50 | \$10,152.00 |
| 8.05 Light Restoration Planting (no soil prep or irrigation) | 65,066 | SF | \$2.00 | \$130,132.00 |
| 8.06 Bioretention Planting (with soil prep and irrigation) | 16,709 | SF | \$18.00 | \$300,762.00 |
| 8.07 Seed Lawn (with soil prep and irrigation) | 18,021 | SF | \$4.00 | \$72,084.00 |
| 8.08 Seed Lawn (with soil prep and no irrigation) | 46,809 | SF | \$1.50 | \$70,213.50 |
| 8.09 Wetland & Stream Buffer Restoration (with soil prep and temp. irrigation) | 72,720 | SF | \$4.00 | \$290,880.00 |

| Subtotal | \$9,246,701.50 |
|--|-----------------------------------|
| Contractor Mobilization & Overhead (20%) | \$1,849,340.30 |
| Contingency (25%) | \$2,311,675.38 |
| Sales Tax (10.1%) | \$933,916.85 |
| Park Improvements Total | \$14,341,634.03 |
| - 4 - 4 | ¢2.000.220.01 |
| Soft Costs (20%) | \$2,868,326.81 |
| Soft Costs (20%) Total Project Cost | \$2,868,326.81 \$17,209,960.83 |



2707 Colby Avenue, Suite 900, Everett, WA 98201 | P 425.252.7700

PLANNING LEVEL OPINION OF COST SUMMARY

| Project Description: | Big Rock Master Plan | Client: City of Sammamish |
|----------------------|------------------------|-------------------------------|
| Corridor Section: | SE 8th St & SE 20th St | Date: 12/14/2022 |
| Location: | City of Sammamish | Date of Cost Index: 2022 |
| | | Calculated By/Entered By: GRD |
| | | Checked By: STK |

Big Rock

| | | ITEM | UNIT | ESTIMATED UNIT | QTY | COST |
|-----|-----|--|-----------------|------------------|--------------------|--------------------|
| ı. | | RIGHT OF WAY | | | | |
| | | RIGHT OF WAY (urban developed) | SF | \$120 | - | \$0 |
| | | RIGHT OF WAY (urban undeveloped) | SF | \$70 | - | \$0 |
| | | TEMPORARY CONSTRUCTION EASEMENTS (urban developed) | SF | \$12 | - | \$0 |
| | | TEMPORARY CONSTRUCTION EASEMENTS (urban undeveloped) | SF | \$7 | - | \$0 |
| | | RELOCATIONS: BUSINESSES | EA | \$400,000 | - | \$0 |
| | | RELOCATIONS: RESIDENCES | EA | \$300,000 | - | \$0 |
| | | CONDEMNATION PROCEDURE | EA | \$100,000 | - | \$0 |
| | | ADMINISTRATION (titles, appraisals, negotiations consultant, etc.) RIGHT OF WAY TOTAL | EA | \$15,000 | - | \$0 \$0 |
| | | FUTURE ROW COST BASED ON INFLATION RATE | Inflation 2% | ROW Year 2023 | Cost Index 2022 | Future Cost \$0 |
| | | CONSTRUCTION | | | | |
| II. | | CONSTRUCTION | | | | |
| 1 | 1.1 | PREPARATION/GRADING/DRAINAGE PREPARATION | | | | |
| | | CLEAR & GRUB, DEMO | ACRE | \$5,000 | 1.2 | \$6,000 |
| | | REMOVING EXISTING PAVEMENT | SY | \$10 | 500 | \$5,000 |
| | | REMOVAL STRUCTURES & OBSTRUCTIONS | LS | \$30,000 | 1 | \$30,000 |
| | 1.2 | EARTHWORK | | | | |
| | | ROADWAY EXCAVATION INCL. HAUL | CY | \$60 | 1,200 | \$72,000 |
| | | STRUCTURE EX. CL. A INCL. HAUL | CY | \$45 | - | \$0 |
| | | STRUCTURE EX. CL. B INCL. HAUL | CY | \$45 | 1,300 | \$58,500 |
| | 1.3 | STORMWATER MITIGATION | | | | |
| | | WATER QUALITY VAULT | EA | \$180,000 | 1 | \$180,000 |
| | | BIORETENTION | CY | \$150 | 150 | \$22,500 |
| | | STORMWATER POND | LS | \$117,000 | 1 | \$117,000 |
| | 1.4 | STORM SEWER | | | | |
| | | CATCH BASIN TYPE 1 | EA | \$2,500 | 16 | \$40,000 |
| | | CATCH BASIN TYPE 2 | EA | \$5,000 | 5 | \$25,000 |
| | | SCHEDULE A STORM SEWER PIPE 12 IN. DIAM. | LF | \$65 | 1,500 | \$97,500 |

2 STRUCTURE



2707 Colby Avenue, Suite 900, Everett, WA 98201 | P 425.252.7700

PLANNING LEVEL OPINION OF COST SUMMARY

| Project Description: Big Rock Master Plan | | Client: City of Sammamish | |
|---|------------------------|-------------------------------|--|
| Corridor Section: | SE 8th St & SE 20th St | Date: 12/14/2022 | |
| Location: | City of Sammamish | Date of Cost Index: 2022 | |
| | | Calculated By/Entered By: GRD | |
| | | Checked By: STK | |

Big Rock

| | | | ESTIMATED UNIT | | |
|----|--|------|----------------|-------|-------------|
| | ITEM | UNIT | COST | QTY | COST |
| 3 | SURFACING | | | | |
| | HOT MIX ASPHALT | TON | \$160 | 900 | \$144,000 |
| | CRUSHED SURFACING | TON | \$80 | 1,300 | \$104,000 |
| 4 | ROADSIDE DEVELOPMENT | | | | |
| | TEMP. WATER POLLUTION & EROSION CONTROL (2%) | LS | \$26,000 | 1 | \$26,000 |
| 5 | TRAFFIC | | | | |
| _ | ILLUMINATION | LS | \$220,000 | 1 | \$220,000 |
| | SIGNING | LS | \$5,000 | 1 | \$5,000 |
| | STRIPING | LF | \$2 | 1,200 | \$2,400 |
| | CURBS | LF | \$50 | 1,700 | \$85,000 |
| | CURB RAMP | EA | \$8,000 | 7 | \$56,000 |
| | SIDEWALKS | SY | \$90 | 100 | \$9,000 |
| | ADJUST UTILITY LID | EA | \$800 | - | \$0 |
| | TRAFFIC CONTROL (1%) | LS | \$13,000 | 1 | \$13,000 |
| 6 | OTHER ITEMS | | | | |
| | SURVEYING (3%) (ONLY INCLUDES COST ESTIMATED BY PERTEET) | LS | \$39,000 | 1 | \$39,000 |
| | WATER SERVICE CONNECTION 1 IN. DIAMETER | EA | \$10,000 | 1 | \$10,000 |
| | SANITARY SEWER CONNECTION 6 IN. DIAMETER | LF | \$75 | 400 | \$30,000 |
| | POWER UTILITIES SERVICE TO NEW BUILDING | LS | \$30,000 | 1 | \$30,000 |
| 7 | SUBTOTAL (ITEMS 1 THRU 6) | | | | \$1,426,900 |
| 8 | MOBILIZATION (10%) | | | | |
| | 10% OF ITEM 7 | EST | \$142,700 | 1 | \$142,700 |
| 9 | CONSTRUCTION SUBTOTAL (ITEMS 7 & 8) | | | | \$1,569,600 |
| 10 | SALES TAX | | | | |
| | 9.8% FOR NEW UTILITIES | EST | \$6,900 | 1 | \$6,900 |
| 11 | AGREEMENTS (Utilities, WSP, etc.) | EST | \$0 | 1 | \$0 |
| 12 | SUBTOTAL (ITEMS 9 THRU 11) | | | | \$1,576,500 |
| 13 | CONTINGENCY (30% OF ITEM 12) | EST | \$473,000 | 1 | \$473,000 |



\$3,194,000

2707 Colby Avenue, Suite 900, Everett, WA 98201 | P 425.252.7700

| PLANNING LEVEL OPINION OF COST SUMMA | RV |
|--------------------------------------|----|

| Project Description: | Big Rock Master Plan | Client: City of Sammamish |
|----------------------|------------------------|-------------------------------|
| Corridor Section: | SE 8th St & SE 20th St | Date: 12/14/2022 |
| Location: | City of Sammamish | Date of Cost Index: 2022 |
| | | Calculated By/Entered By: GRD |
| | | Checked By: STK |

Big Rock

| 14 | ITEM CONSTRUCTION SUBTOTAL (ITEMS 12 & 13) | UNIT | ESTIMATED UNIT COST | QTY | COST \$2,049,500 |
|------|---|------------------|------------------------|--------------------|--------------------------|
| 45 | FUTURE ON COST RASER ON INFLATION RATE | Inflation | Const. Year | Cost Index | Future Cost |
| 15 | FUTURE CN COST BASED ON INFLATION RATE | 10% | 2023 | 2022 | \$2,255,000 |
| 16 | CONSTRUCTION ADMINISTRATION | | | | |
| | CONSTRUCTION ENGINEERING (15% OF ITEM 14) | EST | \$307,500 | 1 | \$307,500 |
| | CITY ENGINEERING & ADMINISTRATION (5% OF ITEM 14) | EST | \$102,500 | 1 | \$102,500 |
| 17 | FUTURE CN ADMIN COST BASED ON INFLATION RATE | Inflation 10% | Const. Year 2023 | Cost Index 2022 | Future Cost \$451,000 |
| III. | PRELIMINARY WORK | | | | |
| | PRELIMINARY ENGINEERING (15.0% OF ITEM 14) | EST | \$307,500 | 1 | \$307,500 |
| | CITY ENGINEERING & ADMINISTRATION (5% OF ITEM 14) | EST | \$102,500 | 1 | \$102,500 |
| | ENVIRONMENTAL PERMITS/DOCUMENTS | EST | \$33,000 | 1 | \$33,000 |
| | | Inflation | Design Year | Cost Index | Future Cost |
| | FUTURE PE COST BASED ON INFLATION RATE | 10% | 2023 | 2022 | \$488,000 |
| IV. | TOTAL ESTIMATED COST (ITEMS I, 15, 17, & III) | | | | |

| SUMMARY (Including inflation) | |
|---|------------------|
| Right of Way | \$0 \$488,000 |
| Design Engineering, Administration, Environmental Permitting (Item III) | \$488,000 |
| Construction Contract (Incl. Administration) | \$2,706,000 |

The above opinion of cost is a planning level estimate only. It is based on best available information and scope at the time, not on the results of a detailed engineering study, and is supplied as a budgeting guide only. Perteet Inc. does not guarantee or warrant the accuracy of this planning level estimate.

TOTAL PROJECT COST (BASED ON INFLATION RATE)

Project: BARN RENOVATION - BEATON HILL BIG ROCK PARK

Sammamish, WA

Architect: Rolluda Architects
Prepared by: J B Iringan Consulting
Design Phase: Budgetary Estimate
Date: January 10, 2023

SUMMARY

| CSI DIVISIONS | | | TOTAL |
|--|----------|------------------|-----------|
| Division 2 - Selective Building Demo & Preparation | | | 18,040 |
| Division 3 - Concrete | | | 25,340 |
| Division 4&5 - | | | 2,100 |
| Division 6 - Wood and Plastics | | | 46,434 |
| Division 7 - Thermal & Moisture Protection | | | 26,906 |
| Division 8 - Openings | | | 125,920 |
| Division 9 - Finishes | | | 60,253 |
| Division 10 - Specialties | | | 9,195 |
| Division 11 & 12 - Appliances & Furnishings | | | 2,500 |
| Division 21-23 - Mechanical | | | 164,160 |
| Division 25-27 - Electrical | | | 63,360 |
| Division 31-33 - Sitework | | | 47,694 |
| TOTAL DIRECT COST | | | \$591,902 |
| General Conditions Including Site Overhead | | 20% | 118,380 |
| GC's Overhead and Profit incl B&O Tax & Insurance | | 15% | 106,542 |
| Design/Estimating Contingency | | 15% | 122,524 |
| TOTAL COST @ TODAY'S BID | 2,880 SF | | \$939,300 |
| | (| Unit Cost per SF | \$326.15 |
| ADD NEW TRELLIS | 552 SF | \$165.78 | \$91,513 |

Notes:

This estimate is based on State Prevailing Wage rate and public bid W/ at least 5 qualified GC bidders

Does not include HazMat abatement, WSST, Covid-19 Effect nor Change Orders

ESTIMATE DETAIL

| DESCRIPTION | Quantity Unit | Unit Cost | Sub-Total | TOTAL |
|--|---------------|-----------|-----------|--------|
| Division 2 - Demolition & Preparation | 2,880 SF | 6.26 | | 18,040 |
| Sawcut/Demo exist 12 L F exterior wall (for new vestibule entry) | 1 LS | 1,040.00 | 1,040 | |
| Sawcut/Demo exist 24 LF ext wall (to reconfigure RR & prep rooms)) | 1 LS | 1,200.00 | 1,200 | |
| Demo exist exterior & interior doors/frame | 5 EA | 100.00 | 500 | |
| Demo exist barn doors/frames | 4 EA | 250.00 | 1,000 | |
| Demo exist windows & doors at North & south upper level | 5 EA | 150.00 | 750 | |
| Saw/cut widen opening for new windows at upper level | 2 EA | 200.00 | 400 | |
| Saw/cut ext wall for for new windows opening at upper level | 2 EA | 200.00 | 400 | |
| Demo exist exterior window to reconfigure RR & Prep rooms | 2 EA | 150.00 | 300 | |
| Demo interior wall to create new vestibule | 12 LF | 30.00 | 360 | |
| Demo interior wall to clear event space | 36 LF | 30.00 | 1,080 | |
| Demo interior staircase/wall to clear event space | 1 LS | 1,190.00 | 1,190 | |
| Demo exist plywood deck & 2x10 floor joist | 1,440 SF | 5.00 | 7,200 | |
| Demo exist sink | 1 EA | 100.00 | 100 | |
| Load, haul & dump debris | 21 CY | 120.00 | 2,520 | |
| HazMat abatement: | NIC | 0.00 | 0 | |
| Division 3 - Concrete | | | | 25,340 |
| New conc footing for covered porch | 4 EA | 900.00 | 3,600 | |
| Add for 2' high conc plinth | 4 EA | 400.00 | 1,600 | |
| New conc floor slab on grade to new Rest room & prep room | 288 SF | 20.00 | 5,760 | |
| New thin leveling compound (to receive new sealer) | 2876 SF | 5.00 | 14,380 | |
| Division 5 - Metals | | | | 2,100 |
| Embeded metal plate to anchor wood columns for covered porch | 4 EA | 400.00 | 1,600 | |
| Other Misc metals - allow | 1 LS | 500.00 | 500 | |
| Division 6 - Wood and Plastics | | | | 46,434 |
| Wood framing to covered roof: Cols, beams & ridge beam | 550 BF | 12.00 | 6,600 | |
| (2)2x8 purlins @ 4' OC | 530 BF | 10.00 | 5,300 | |
| 2" thick wood decking | 693 SF | 20.00 | 13,860 | |
| 1/2" plywood sheathing | 693 SF | 4.50 | 3,119 | |
| Carpentry rough hardware | 693 SF | 2.50 | 1,733 | |
| 1-1/8 Plywood sheathing to the mechanical | 288 SF | 6.50 | 1,872 | |
| Infill the demo'd exterior door at upper level | 1 EA | 420.00 | 420 | |
| New ext wall frmg to enclosed the new Rest Rooms & prep room | 240 SF | 10.00 | 2,400 | |
| New wall frmg for new partitions | 580 SF | 5.50 | 3,190 | |
| New kitchen cab w/ p-lam counters | 12 LF | 350.00 | 4,200 | |
| New kitchen upper cab | 40 I F | 245.00 | 0.040 | |
| Now Michail appor cab | 12 LF | 245.00 | 2,940 | |

| DESCRIPTION | Quantity Unit | Unit Cost | Sub-Total | TOTAL |
|--|---------------|-----------|-----------|---------|
| Division 7 - Thermal & Moisture Protection | | | | 26,906 |
| Metal roofing to new covered roof | 693 SF | 25.00 | 17,325 | |
| Gutter & downspouts | 66 LF | 18.00 | 1,188 | |
| Flashing - allow | 693 SF | 2.50 | 1,733 | |
| Sound batt insulation to exterior wall | 580 SF | 2.00 | 1,160 | |
| T1-11 Siding & R-21 thermal insulation to new exterior wall | 240 SF | 12.50 | 3,000 | |
| T1-11 Siding/R-21 thermal insul - infill door opening at upper level | 1 EA | 500.00 | 500 | |
| Sealant & caulking - allow | 1 LS | 2,000.00 | 2,000 | |
| Roofing - existing to remain | NIC | | | |
| Division 8 - Openings | | | | 125,920 |
| New interior SCW door, frame & hw | 2 EA | 3,500.00 | 7,000 | |
| New interior SCW door, frame & hw | 3 PR | 6,740.00 | 20,220 | |
| New alum storefront door & hardware to vestibule | 2 PR | 10,000.00 | 20,000 | |
| New exterior alum folding doors 10.5' x 9.5' | 4 EA | 12,500.00 | 50,000 | |
| New exterior alum windows at upper level - 8' x 6' | 4 EA | 4,800.00 | 19,200 | |
| Add for auto door operator | 2 EA | 4,000.00 | 8,000 | |
| Add for door closer | 6 EA | 250.00 | 1,500 | |
| Division 9 - Finishes | | | | 60,253 |
| New 5/8" GWB to new wall | 1,421 SF | 6.50 | 9,237 | |
| New 5/8" GWB over exist wall | 1,644 SF | 6.50 | 10,686 | |
| Sealer to concrete floor | 2,880 SF | 3.50 | 10,080 | |
| Wood wainscot to exist wall - 4' high | 620 SF | 15.00 | 9,300 | |
| Rb base to new wall | 58 LF | 4.50 | 261 | |
| Rb base to exist wall | 125 LF | 4.50 | 563 | |
| Paint new 5/8" GWB to new & existing walls | 3,065 SF | 2.00 | 6,130 | |
| Stain/varnish finish covered roof exposed wd deck, cols & beams | 693 SF | 3.50 | 2,426 | |
| Stain/varnish finish wood wainscot | 620 SF | 2.50 | 1,550 | |
| Paint new doors & frames | 8 LVS | 200.00 | 1,600 | |
| Paint existing exterior wall face - T1-11 | 2,210 SF | 2.00 | 4,420 | |
| Misc repair, painting & touch-up - allow | 1 LS | 4,000.00 | 4,000 | |
| Division 10 - Specialties | | | | 9,195 |
| Window blinds - allow | 591 SF | 5.00 | 2,955 | |
| Toilet access: Grab bar, morror, soap disp, Tissue holder, etc | 2 SETS | 2,000.00 | 4,000 | |
| New electrical dryer | 2 EA | 800.00 | 1,600 | |
| Fire extinguisher & cabinet - allow | 2 EA | 320.00 | 640 | |
| Division 11 & 12 - Appliances & Furnishings | | | | 2,500 |
| New refrigerator | 1 EA | 2,500.00 | 2,500 | |
| New range/oven | 0 NIC | | 0 | |
| New Dishwasher | 0 NIC | | 0 | |
| Events tables & chairs | 0 NIC | | 0 | |
| Division 21-25 - Mechanical (allowances) | | | | 164,160 |

| DESCRIPTION | Quantity Unit | Unit Cost | Sub-Total | TOTAL |
|--|---------------|-----------|-----------|-----------|
| Plumbing: fixtures & piping, showers, Hose bib | 2,880 SF | 12.50 | 36,000 | |
| Fire Protection | 2,880 SF | 6.50 | 18,720 | |
| HVAC | 2,880 SF | 38.00 | 109,440 | |
| Division 25-27 - Electrical (Allowances) | | | | 63,360 |
| Electric Power Work | 2,880 SF | 8.00 | 23,040 | |
| Lighting and Receptacle Work | 2,880 SF | 10.00 | 28,800 | |
| Tel, comm, security | 2,880 SF | 4.00 | 11,520 | |
| Division 31-33 - Sitework | | | | 47,694 |
| Footing drainage around the new covered roof | 92 LF | 32.00 | 2,944 | |
| Reroute dometice water to serve new Restrooms & Prep space | 100 LF | 65.00 | 6,500 | |
| New 4"dia Fire Line incl trenching/backfill -serves new fire sprinkler sys | 450 LF | 85.00 | 38,250 | |
| Drainage system | NIC | | 0 | |
| Sewer syetm | NIC | | 0 | |
| TOTAL DIRECT COST | | | 591,902 | \$591,902 |

| DESCRIPTION | Quantity Unit | Unit Cost | Sub-Total | TOTAL |
|--|---------------|-----------|-----------|--------|
| | | | | |
| | | | | |
| TRELLIS | | | | |
| New conc footing for Trellis | 7 EA | 600.00 | 4,200 | |
| Add for 2' high conc plinth | 7 EA | 350.00 | 2,450 | |
| Embeded metal plate to anchor wood columns for Trellis | 7 EA | 250.00 | 1,750 | |
| Wood framing: Cols, beams & wd ledger | 650 BF | 12.00 | 7,800 | |
| 2x6 Trellis @ 6" OC | 1000 BF | 10.00 | 10,000 | |
| Carpentry rough hardware | 552 SF | 2.50 | 1,380 | |
| Tranluscent roofing | 552 SF | 54.50 | 30,084 | |
| TOTAL TRELLISC DIRECT COST | | | 57,664 | 57,664 |

Project: BEATON HILL BIG ROCK RARK RESIDENSE RENOVATION

Sammamish, WA

Architect: Rolluda Architects
Prepared by: J B Iringan Consulting
Design Phase: Master Plan Estimate
Date: January 10, 2023

SUMMARY

| CSI DIVISIONS | | | TOTAL |
|--|----------|------------------|-----------|
| Division 2 - Selective Building Demo & Preparation | | | 34,681 |
| Division 3 - Concrete | | | 0 |
| Division 4&5 - | | | 0 |
| Division 6 - Wood and Plastics (includes Sismic upgrade per PCS) | | | 205,320 |
| Division 7 - Thermal & Moisture Protection | | | 1,880 |
| Division 8 - Openings | | | 17,550 |
| Division 9 - Finishes | | | 51,755 |
| Division 10 - Specialties | | | 10,240 |
| Division 11 & 12 - Appliances & Furnishings | | | 22,280 |
| Division 21-23 - Mechanical | | | 124,300 |
| Division 25-27 - Electrical | | | 42,680 |
| Division 31-33 - Sitework | | | 0 |
| TOTAL DIRECT COST | | | \$510,686 |
| General Conditions Including Site Overhead | | 25% | 127,672 |
| GC's Overhead and Profit incl B&O Tax & Insurance | | 15% | 95,754 |
| Design/Estimating Contingency | | 15% | 110,117 |
| TOTAL COST @ TODAY'S BID | 4,000 SF | | \$844,200 |
| | | Unit Cost per SF | \$211.05 |
| OPTIONAL COST | | | |
| OPTION #1 Demo the whole existing House | w/ MU's | | \$77,600 |
| OPTION #2 New Lift - 500 # capacity | w/ MU's | | \$44,600 |
| OPTION #3 New Exterior Rear Deck | w/ MU's | | \$53,600 |
| ADD ALT #1 Fire Sprinklering (5,490 SF) | w/ MU's | | \$59,000 |
| ADD ALT #2 Kitechen Appliances (Stove, Ref & Dishwasher) | w/ MU's | | \$4,100 |

Notes:

This estimate is based on State Prevailing Wage rate and public bid W/ at least 5 qualified GC bidders

Does not include HazMat abatement, WSST, Covid-19 Effect nor Change Orders

ESTIMATE DETAIL

| DESCRIPTION | Quantity Unit | Unit Cost | Sub-Total | TOTAL |
|---|----------------|-----------|-----------|---------|
| Division 2 - Demolition & Preparation | 1,940 SF | 17.88 | | 34,681 |
| Demo exist doors & frame | 13 EA | 100.00 | 1,300 | |
| Demo wall | 140 LF | 15.00 | 2,100 | |
| Demo storages | 70 LF | 25.00 | 1,750 | |
| Sawcut wall for new door | 1 EA | 200.00 | 200 | |
| Sawcut half-wall for access to outdor deck | 1 EA | 150.00 | 150 | |
| Demo window wall - 7 LF | 1 EA | 200.00 | 200 | |
| Demo toilet accessories | 1 LS | 100.00 | 100 | |
| Demo toilet plumbing fixtures & piping | 2 EA | 150.00 | 300 | |
| Demo casework: island & counters | 40 LF | 15.00 | 600 | |
| Demo exist rear deck | 1 LS | 1400.00 | 1,400 | |
| Demo exist front entry staircase & landing | 1 LS | 2000.00 | 2,000 | |
| Demo exist half wall at lounge front entry | 1 LS | 200.00 | 200 | |
| Sawcut demo floor framing assoc with lift pit | incl in option | | 0 | |
| Demo exist floor finishes | 1,940 SF | 5.00 | 9,700 | |
| Demo exist ceiling finishes | 1,940 SF | 5.00 | 9,700 | |
| Clean & prepare floor substrate to receive new finishes | 1,940 SF | 0.65 | 1,261 | |
| Load, haul & dump debris | 31 CY | 120.00 | 3,720 | |
| HazMat abatement: | NIC | 0.00 | 0 | |
| Division 6 - Wood and Plastics | | | | 205,320 |
| 2x4 interior wall framing @ 16" OC | 540 SF | 8.00 | 4,320 | |
| Seismic upgrade per PCS cost & suggestions | 4,000 SF | 50.00 | 200,000 | |
| Misc wood blocking - allow | 1 LS | 1,000.00 | 1,000 | |
| Division 7 - Thermal & Moisture Protection | | | | 1,880 |
| Sound batt insulation | 540 SF | 2.00 | 1,080 | |
| Sealant & caulking - allow | 1 LS | 800.00 | 800 | |
| Roofing | NIC | | | |
| Division 8 - Openings | | | | 17,550 |
| New interior SCW door, frame & hw | 3 EA | 3,600.00 | 10,800 | |
| New exterior sliding door 7' x 7' | 1 EA | 6,000.00 | 6,000 | |
| Add for door closer | 3 EA | 250.00 | 750 | |
| Division 9 - Finishes | | | | 51,755 |
| 5/8" GWB to new wall | 1,080 SF | 6.50 | 7,020 | |
| New SV floor finishes to kitchen | 235 SF | 10.00 | 2,350 | |
| CT tile floor to new restrooms | 106 SF | 25.00 | 2,650 | |
| CT tile to new restroom walls - FH | 480 SF | 28.00 | 13,440 | |
| New floor finishes to most areas | 1,599 SF | 8.00 | 12,792 | |
| Rb base | 545 LF | 4.50 | 2,453 | |
| Paint new 5/8" GWB | 1,080 SF | 2.00 | 2,160 | |
| | | | | |

| DESCRIPTION | Quantity Unit | Unit Cost | Sub-Total | TOTAL |
|--|--------------------|-----------|-----------|-----------|
| Paint exist GWB walls - allow | 2,345 SF | 2.00 | 4,690 | |
| Paint new doors & frames | 4 LVS | 200.00 | 800 | |
| Repaint exist doors & frames | 7 LVS | 200.00 | 1,400 | |
| Misc painting & touch-up - allow | 1 LS | 2,000.00 | 2,000 | |
| Division 10 - Specialties | <u></u> | | | 10,240 |
| Window blinds - allow | 1 LS | 4,000.00 | 4,000 | |
| Toilet access: Grab bar, morror, soap disp, Tissue holder, etc | 2 SETS | 2,000.00 | 4,000 | |
| New electrical dryer | 2 EA | 800.00 | 1,600 | |
| Fire extinguisher & cabinet - allow | 2 EA | 320.00 | 640 | |
| Division 11 & 12 - Appliances & Furnishings | <u></u> | | | 22,280 |
| New kitchen cab w/ p-lam counters | 34 LF | 350.00 | 11,900 | |
| New kitchen upper cab | 24 LF | 245.00 | 5,880 | |
| New vanity cabinets | 12 LF | 350.00 | 4,200 | |
| New Kitchen garbage disposal | 1 EA | 300.00 | 300 | |
| New range/oven | pls see add altern | ate #2 | 0 | |
| New Dishwasher | <do></do> | | 0 | |
| New refrigerator | <do></do> | | 0 | |
| Division 21-25 - Mechanical (allowances) | <u> </u> | | | 124,300 |
| Plumbing: fixtures & piping, showers, Hose bib | 2,500 SF | 15.00 | 37,500 | |
| Fire Protection | pls see add altern | ate #1 | 0 | |
| HVAC | 3,472 SF | 25.00 | 86,800 | |
| Division 25-27 - Electrical (Allowances) | | | | 42,680 |
| Electric Power Work | 1,940 SF | 8.00 | 15,520 | |
| Lighting and Receptacle Work | 1,940 SF | 10.00 | 19,400 | |
| Tel, comm | 1,940 SF | 4.00 | 7,760 | |
| Division 31-33 - Sitework | • | | | 0 |
| No work | _ | | 0 | |
| TOTAL DIRECT COST | | | 510,686 | \$510,686 |

| CRIPTION | | Quantity Unit | Unit Cost | Sub-Total | TOTAL |
|-----------|--|---------------|-----------|-----------|----------|
| | OPTIONAL COST | | | | |
| Option #1 | Demo the whole existing House | | | | 51,429 |
| | Demo & dispose the existing house incl basement | 40,576 CF | 0.45 | 18,259 | |
| | Demo dispose footing & slab on grade | 2340 SF | 3.50 | 8,190 | |
| | Import Infill to cover the basement hole | 748 CY | 28.00 | 20,944 | |
| | Hydroseeding/topsoil & fertilzer | 2018 SF | 2.00 | 4,036 | |
| | SUB-TOTAL DIRECT COST | | | 51,429 | \$51,429 |
| | | | | | |
| Option #2 | New Lift | | | | 27,000 |
| | Sawcut demo floor framing assoc with lift pit | 1 LS | 2,000.00 | 2,000 | |
| | New conc lift pit | 1 LS | 5,000.00 | 5,000 | |
| | New lift - 500 # capacity | 1 LS | 20,000.00 | 20,000 | |
| | SUB-TOTAL DIRECT COST | | | 27,000 | \$27,000 |
| | | | | | |
| Option #3 | Exterior Rear Deck (500 SF) | | | | 32,425 |
| | Footing - premanufactured concrete | 6 EA | 150.00 | 900 | |
| | Wood post, beams & joist frmg (incl ramps & landing) | 500 SF | 15.00 | 7,500 | |
| | Dex trex decking (incl ramps & landing) | 500 SF | 20.00 | 10,000 | |
| | Railings | 85 LF | 165.00 | 14,025 | |
| | SUB-TOTAL DIRECT COST | | | 32,425 | \$32,425 |

Project: BEATON HILL BIG ROCK RARK RESIDENSE RENOVATION

Sammamish, WA
Architect: Rolluda Architects
Prepared by: J B Iringan Consulting
Design Phase: Master Plan Estimate
Date: November 18, 2022

| DESCRIPTION | Quantity Unit | Unit Cost | Sub-Total | TOTAL |
|---|---------------|-----------|-----------|----------|
| | _ | | | |
| EXTERIOR RAMP | | | | |
| Demolition & Preparation | <u></u> | | | 2,720 |
| Demo/dispose exist deck w/ railing | 1 LS | 1,350.00 | 1,350 | |
| Demo/dispose exist stairs | 1 LS | 250.00 | 250 | |
| Clean/Clear/grading area | 280 SF | 4.00 | 1,120 | |
| Ramps & landing | | | | 28,170 |
| Footing - premanufactured concrete | 280 SF | 6.00 | 1,680 | |
| PT Wood post, beams & joist frmg (ramps/landing) | 280 SF | 20.00 | 5,600 | |
| Ramps & landing - Dex trex decking | 280 SF | 28.00 | 7,840 | |
| Stair - Steps & Risers incl stringers | 20 LFT | 65.00 | 1,300 | |
| Railings | 94 LF | 125.00 | 11,750 | |
| TOTAL DIRECT COST | | | 30,890 | \$30,890 |
| General Conditions Including Site Overhead | | 25% | | 7,723 |
| GC's Overhead and Profit incl B&O Tax & Insurance | | 15% | | 5,792 |
| Design/Estimating Contingency | | 10% | | 4,441 |
| TOTAL COST @ TODAY'S BID | | | | \$48,800 |

Project: BEATON HILL BIG ROCK RARK RESIDENSE RENOVATION - RAMP

Sammamish, WA
Architect: Rolluda Architects
Prepared by: J B Iringan Consulting
Design Phase: Master Plan Estimate

November 18, 2022

Date:

| DESCRIPTION | Quantity Unit | Unit Cost | Sub-Total | TOTAL |
|---|---------------|-----------|-----------|----------|
| | 7 | | | |
| EXTERIOR RAMP | | | | |
| Demolition & Preparation | _ | | | 2,720 |
| Demo/dispose exist deck w/ railing | 1 LS | 1,350.00 | 1,350 | |
| Demo/dispose exist stairs | 1 LS | 250.00 | 250 | |
| Clean/Clear/grading area | 280 SF | 4.00 | 1,120 | |
| Ramps & landing | _ | | | 28,170 |
| Footing - premanufactured concrete | 280 SF | 6.00 | 1,680 | |
| PT Wood post, beams & joist frmg (ramps/landing) | 280 SF | 20.00 | 5,600 | |
| Ramps & landing - Dex trex decking | 280 SF | 28.00 | 7,840 | |
| Stair - Steps & Risers incl stringers | 20 LFT | 65.00 | 1,300 | |
| Railings | 94 LF | 125.00 | 11,750 | |
| TOTAL DIRECT COST | | | 30,890 | \$30,890 |
| General Conditions Including Site Overhead | | 25% | | 7,723 |
| GC's Overhead and Profit incl B&O Tax & Insurance | | 15% | | 5,792 |
| Design/Estimating Contingency | | 10% | | 4,441 |
| TOTAL COST @ TODAY'S BID | | | | \$48,800 |

Project: POOL HOUSE - BEATON HILL BIG ROCK RARK

Sammamish, WA

Architect: Rolluda Architects
Prepared by: J B Iringan Consulting
Design Phase: Budgetary Estimate
Date: January 20, 2023

SUMMARY

| CSI DIVISIONS | | | TOTAL |
|--|--------|------------------|-----------|
| Division 2 - Selective Building Demo & Preparation | | | 10,615 |
| Division 3 - Concrete | | | 8,465 |
| Division 5 - Metals | | | 3,900 |
| Division 6 - Wood and Plastics (includes Sismic upgrade per PCS) | | | 2,350 |
| Division 7 - Thermal & Moisture Protection | | | 1,020 |
| Division 8 - Openings | | | 16,550 |
| Division 9 - Finishes | | | 24,429 |
| Division 10 - Specialties | | | 4,320 |
| Division 11 & 12 - Appliances & Furnishings | | | 0 |
| Division 21-23 - Mechanical | | | 34,850 |
| Division 25-27 - Electrical | | | 23,640 |
| Division 31-33 - Sitework | | | 0 |
| TOTAL DIRECT COST | | | \$130,139 |
| General Conditions Including Site Overhead | | 25% | 32,535 |
| GC's Overhead and Profit incl B&O Tax & Insurance | | 15% | 24,401 |
| Design/Estimating Contingency | | 15% | 28,061 |
| TOTAL RENOVATION COST @ TODAY'S BID | 985 SF | | \$215,100 |
| | | Unit Cost per SF | \$218.38 |
| ADD NEW COVERED STRUCTURE | 666 SF | \$212.33 | \$141,412 |

Notes:

This estimate is based on State Prevailing Wage rate and public bid W/ at least 5 qualified GC bidders

Does not include HazMat abatement, WSST, Covid-19 Effect nor Change Orders

ESTIMATE DETAIL

| DESCRIPTION | Quantity Unit | Unit Cost | Sub-Total | TOTAL |
|--|---------------|-----------|-----------|--------|
| Division 2 - Demolition & Preparation | _ 985 SF | 10.78 | | 10,615 |
| Demo exist door/frame | 7 LVS | 150.00 | 1,050 | |
| Demo exist walls | 62 LF | 50.00 | 3,100 | |
| Demo existing floor finishes | 230 SF | 1.50 | 345 | |
| Demo exist water closet | 2 EA | 100.00 | 200 | |
| Demo exist conc steps | 50 LFT | 25.00 | 1,250 | |
| Demo exist partial high conc wall | 25 LF | 50.00 | 1,250 | |
| Prepare surface for new ramp | 100 SF | 5.00 | 500 | |
| Other misc demo - allow | 1 LS | 1000.00 | 1,000 | |
| Load, haul & dump debris | 16 CY | 120.00 | 1,920 | |
| HazMat abatement: | NIC | 0.00 | 0 | |
| Division 3 - Concrete | | | | 8,465 |
| New conc ramp & landings | 235 SF | 15.00 | 3,525 | |
| Conc steps on grade | 76 LFT | 65.00 | 4,940 | |
| Division 5 - Metals | _ | | | 3,900 |
| Metal pipe Guardrailing to ramp | 26 LF | 150.00 | 3,900 | |
| Division 6 - Wood and Plastics | | | | 2,350 |
| Studs wall framing for new partitions | 300 SF | 6.50 | 1,950 | |
| Infill ext wall at demo'd door opening: wd studs/plywd shtg | 1 EA | 400.00 | 400 | |
| Division 7 - Thermal & Moisture Protection | _ | | | 1,020 |
| Siding (to match existing) to infilled demo'd door/window openings | 21 SF | 20.00 | 420 | |
| Sealant & caulking - allow | 1 LS | 600.00 | 600 | |
| Division 8 - Openings | _ | | | 16,550 |
| New interior door, frame & hw | 4 EA | 3,600.00 | 14,400 | |
| New door sidelite 2' x 7' | 1 EA | 1,400.00 | 1,400 | |
| Add for door closer | 2 EA | 250.00 | 500 | |
| New exterior window 2.5' x 4' | 1 EA | 250.00 | 250 | |
| Division 9 - Finishes | _ | | | 24,429 |
| 5/8" GWB to new walls | 600 SF | 5.00 | 3,000 | |
| New ceramic tile floor finishes | 135 SF | 22.00 | 2,970 | |
| New Ceramic tile Wall finishes - 4' high | 276 SF | 23.00 | 6,348 | |
| CT base | 69 SF | 19.00 | 1,311 | |
| New GWB ceiling | 240 SF | 8.00 | 1,920 | |
| Paint new GWB walls & Ceiling | 840 SF | 2.00 | 1,680 | |
| Paint new & exist doors & frames | 8 LVS | 200.00 | 1,600 | |
| Repaint new & existing exterior siding | 1,800 SF | 2.00 | 3,600 | |
| | | | | |

| DESCRIPTION | Quantity Unit | Unit Cost | Sub-Total | TOTAL |
|---|---|--|---|-----------|
| Division 10 - Specialties | | | | 4,320 |
| Fire extinguisher & cabinet - allow | 1 EA | 320.00 | 320 | |
| Toilet specialties: GB, PTD, TPD, etc | 2 SETS | 2,000.00 | 4,000 | |
| Division 11 & 12 - Appliances & Furnishings | | | | 0 |
| No work | LF | 350.00 | 0 | |
| Division 21-25 - Mechanical (allowances) | | | | 34,850 |
| Plumbing: New WC, Lav & hose bib | 5 EA | 5,000.00 | 25,000 | |
| Fire Protection | 985 SF | 10.00 | 9,850 | |
| HVAC | NIC | 0.00 | 0 | |
| Division 25-27 - Electrical (Allowances) | | | | 23,640 |
| Electric Power Work | 985 SF | 8.00 | 7,880 | |
| Lighting and Receptacle Work | 985 SF | 10.00 | 9,850 | |
| Tel, comm & fire alarm | 985 SF | 6.00 | 5,910 | |
| Division 31-33 - Sitework | | | | 0 |
| No work | | | 0 | |
| | | | | |
| TOTAL RENOVATION DIRECT COST | | | 130,139 | \$130,139 |
| | | | 130,139 | \$130,139 |
| | | | 130,139 | \$130,139 |
| TOTAL RENOVATION DIRECT COST NEW COVERED STRUCTURE | 8 EA | 900.00 | 7,200 | \$130,139 |
| NEW COVERED STRUCTURE New conc footing | 8 EA 8 EA | 900.00 400.00 | | \$130,139 |
| NEW COVERED STRUCTURE New conc footing Add for 2' high conc plinth | | | 7,200 | \$130,139 |
| NEW COVERED STRUCTURE New conc footing | 8 EA | 400.00 | 7,200 3,200 | \$130,139 |
| NEW COVERED STRUCTURE New conc footing Add for 2' high conc plinth Embedded metal plate to anchor wood columns for Trellis | 8 EA 8 EA | 400.00 400.00 | 7,200 3,200 3,200 | \$130,139 |
| NEW COVERED STRUCTURE New conc footing Add for 2' high conc plinth Embedded metal plate to anchor wood columns for Trellis Slab on grade | 8 EA 8 EA 666 SF | 400.00 400.00 15.00 | 7,200 3,200 3,200 9,990 | \$130,139 |
| NEW COVERED STRUCTURE New conc footing Add for 2' high conc plinth Embedded metal plate to anchor wood columns for Trellis Slab on grade Wood framing to covered roof: Cols, beams & ridge beam | 8 EA 8 EA 666 SF 550 BF | 400.00 400.00 15.00 12.00 | 7,200 3,200 3,200 9,990 6,600 | \$130,139 |
| NEW COVERED STRUCTURE New conc footing Add for 2' high conc plinth Embedded metal plate to anchor wood columns for Trellis Slab on grade Wood framing to covered roof: Cols, beams & ridge beam (2)2x8 purlins @ 4' OC | 8 EA 8 EA 666 SF 550 BF 530 BF | 400.00 400.00 15.00 12.00 10.00 | 7,200 3,200 3,200 9,990 6,600 5,300 | \$130,139 |
| NEW COVERED STRUCTURE New conc footing Add for 2' high conc plinth Embedded metal plate to anchor wood columns for Trellis Slab on grade Wood framing to covered roof: Cols, beams & ridge beam (2)2x8 purlins @ 4' OC 2" thick wood decking | 8 EA 8 EA 666 SF 550 BF 530 BF 840 SF | 400.00 400.00 15.00 12.00 10.00 20.00 | 7,200 3,200 3,200 9,990 6,600 5,300 16,800 | \$130,139 |
| NEW COVERED STRUCTURE New conc footing Add for 2' high conc plinth Embedded metal plate to anchor wood columns for Trellis Slab on grade Wood framing to covered roof: Cols, beams & ridge beam (2)2x8 purlins @ 4' OC 2" thick wood decking 1/2" plywood sheathing | 8 EA 8 EA 666 SF 550 BF 530 BF 840 SF 840 SF | 400.00 400.00 15.00 12.00 10.00 20.00 4.50 | 7,200 3,200 3,200 9,990 6,600 5,300 16,800 3,780 | \$130,139 |
| NEW COVERED STRUCTURE New conc footing Add for 2' high conc plinth Embedded metal plate to anchor wood columns for Trellis Slab on grade Wood framing to covered roof: Cols, beams & ridge beam (2)2x8 purlins @ 4' OC 2" thick wood decking 1/2" plywood sheathing Carpentry rough hardware | 8 EA 8 EA 666 SF 550 BF 530 BF 840 SF 840 SF 840 SF | 400.00 400.00 15.00 12.00 10.00 20.00 4.50 2.50 | 7,200 3,200 3,200 9,990 6,600 5,300 16,800 3,780 2,100 | \$130,139 |
| NEW COVERED STRUCTURE New conc footing Add for 2' high conc plinth Embedded metal plate to anchor wood columns for Trellis Slab on grade Wood framing to covered roof: Cols, beams & ridge beam (2)2x8 purlins @ 4' OC 2" thick wood decking 1/2" plywood sheathing Carpentry rough hardware Metal roofing to new covered roof | 8 EA 8 EA 666 SF 550 BF 530 BF 840 SF 840 SF 840 SF 840 SF | 400.00 400.00 15.00 12.00 10.00 20.00 4.50 2.50 25.00 | 7,200 3,200 3,200 9,990 6,600 5,300 16,800 3,780 2,100 21,000 | \$130,139 |
| NEW COVERED STRUCTURE New conc footing Add for 2' high conc plinth Embedded metal plate to anchor wood columns for Trellis Slab on grade Wood framing to covered roof: Cols, beams & ridge beam (2)2x8 purlins @ 4' OC 2" thick wood decking 1/2" plywood sheathing Carpentry rough hardware Metal roofing to new covered roof Gutter & downspouts | 8 EA 8 EA 666 SF 550 BF 530 BF 840 SF 840 SF 840 SF 840 SF 74 LF | 400.00 400.00 15.00 12.00 10.00 20.00 4.50 2.50 25.00 18.00 | 7,200 3,200 3,200 9,990 6,600 5,300 16,800 3,780 2,100 21,000 1,332 | \$130,139 |

Project: MAINTENANCE SHOP - BEATON HILL BIG ROCK RARK

Sammamish, WA

Architect: Rolluda Architects
Prepared by: J B Iringan Consulting
Design Phase: Master Plan Estimate
Date: January 23, 2023

| SI | I٨ | ΛN | ΛΔ | P | ٧ |
|-----|------|-----|-------|----|---|
| .71 | J 11 | /11 | V A | M. | 1 |

| CSI DIVISIONS | | | TOTAL |
|--|---------|-----------------|-----------|
| Division 2 - Selective Building Demo & Preparation | | | 5,270 |
| Division 3 - Concrete | | | 0 |
| Division 4&5 - | | | 0 |
| Division 6 - Wood and Plastics | | | 8,780 |
| Division 7 - Thermal & Moisture Protection | | | 9,600 |
| Division 8 - Openings | | | 27,615 |
| Division 9 - Finishes | | | 5,140 |
| Division 10 - Specialties | | | 1,540 |
| Division 11 & 12 - Appliances & Furnishings | no work | | 0 |
| Division 21-23 - Mechanical | | | 19,070 |
| Division 25-27 - Electrical | | | 30,838 |
| Division 31-33 - Sitework/Site Utilities | | | 46,750 |
| TOTAL DIRECT COST | | | \$154,603 |
| General Conditions Including Site Overhead | | 25% | 38,651 |
| GC's Overhead and Profit incl B&O Tax & Insurance | | 15% | 28,988 |
| Design/Estimating Contingency | | 15% | 33,336 |
| TOTAL COST @ TODAY'S BID | 907 SF | | \$255,600 |
| | U | nit Cost per SF | \$281.81 |

Notes:

This estimate is based on State Prevailing Wage rate and public bid W/ at least 5 qualified GC bidders

Does not include HazMat abatement, WSST, Covid-19 Effect nor Change Orders

ESTIMATE DETAIL

| DESCRIPTION | Quantity Unit | Unit Cost | Sub-Total | TOTAL |
|--|---------------|-----------|-----------|--------|
| Division 2 - Demolition & Preparation | 907 SF | 5.81 | | 5,270 |
| Demo exist garage doors & frame | 3 EA | 500.00 | 1,500 | |
| Demo exist door/frame | 1 EA | 150.00 | 150 | |
| Demo exist windows | 3 EA | 150.00 | 450 | |
| Sawcut exist ext wall for new garage door opening | 2 EA | 500.00 | 1,000 | |
| Sawcut/expand existing window opening for new door | 1 EA | 250.00 | 250 | |
| Load, haul & dump debris | 16 CY | 120.00 | 1,920 | |
| HazMat abatement: | NIC | 0.00 | 0 | |
| Division 6 - Wood and Plastics | | | | 8,780 |
| Infill demo'd garage door opening: wd studs/plywd shtg | _ 3 EA | 1,950.00 | 5,850 | · |
| Infill demo'd door opening : wd studs/plywd shtg | 1 EA | 720.00 | 720 | |
| Infill demo'd window opening: wd studs/plywd shtg | 2 EA | 355.00 | 710 | |
| Wood trellis | 10 LF | 150.00 | 1,500 | |
| Division 7 - Thermal & Moisture Protection | | | | 9,600 |
| Siding (to match existing) to infilled demo'd door/window openings | 450 SF | 20.00 | 9,000 | |
| Sealant & caulking - allow | 1 LS | 600.00 | 600 | |
| Roofing | NIC | | | |
| Division 8 - Openings | _ | | | 27,615 |
| 3x7 New entry door, frame & hw | 1 EA | 3,600.00 | 3,600 | |
| 6x7 New entry door, frame & hw | 1 PR | 6,915.00 | 6,915 | |
| New garage door 9' x 7' | 2 EA | 6,000.00 | 12,000 | |
| Add for door closer | 3 EA | 350.00 | 1,050 | |
| New window - 9' x 6' | 1 EA | 4,050.00 | 4,050 | |
| Division 9 - Finishes | _ | | | 5,140 |
| Floor finishes | NIC | 6.50 | 0 | |
| Wall finishes | NIC | 10.00 | 0 | |
| Ceiling finishes | NIC | 25.00 | 0 | |
| Paint new garage doors | 2 EA | 300.00 | 600 | |
| Paint new doors & frames | 1 EA | 200.00 | 200 | |
| Repaint new & existing siding | 1,170 SF | 2.00 | 2,340 | |
| Misc painting & touch-up - allow | 1 LS | 2,000.00 | 2,000 | |
| Division 10 - Specialties | _ | | | 1,540 |
| Fire extinguisher & cabinet - allow | 2 EA | 320.00 | 640 | |
| Bench - mounted at exterior wall | 9 LF | 100.00 | 900 | |
| Division 11 & 12 - Appliances & Furnishings | _ | | | 0 |
| No work | LF | 350.00 | 0 | |
| Division 21-25 - Mechanical (allowances) | _ | | | 19,070 |
| Plumbing: 1 new sink & hose bib | 2 EA | 5,000.00 | 10,000 | |
| Fire Protection | 907 SF | 10.00 | 9,070 | |

| DESCRIPTION | Quantity Unit | Unit Cost | Sub-Total | TOTAL |
|---|---------------|-----------|-----------|-----------|
| HVAC | 0 NIC | 0.00 | 0 | |
| Division 25-27 - Electrical (Allowances) | | | | 30,838 |
| Electric Power Work | 907 SF | 10.00 | 9,070 | |
| Lighting and Receptacle Work | 907 SF | 16.00 | 14,512 | |
| Tel, comm & fire alarm | 907 SF | 8.00 | 7,256 | |
| Division 31-33 - Sitework | | | | 46,750 |
| Water: | | | | |
| New 4"dia Fire Line incl trenching/backfill -serves new fire sprinkler syst | 290 LF | 85.00 | 24,650 | |
| Connect to existing | 1 EA | 1,500.00 | 1,500 | |
| Sanitary Water | | | | |
| New sewer line | 290 LF | 65.00 | 18,850 | |
| Connect to existing | 1 EA | 1,500.00 | 1,500 | |
| Clean-out | 1 EA | 250.00 | 250 | |
| TOTAL DIRECT COST | | | 154,603 | \$154,603 |

Appendix K: Presentations Meeting Agendas and Notes

- K.1 Parks and Recreation Commission Regular Meeting Agenda Bill:Hopes, Dreams, and Concerns (April 6, 2022)
- K.2 Parks and Recreation Commission Regular Meeting Notes:Hopes, Dreams, and Concerns (April 6, 2022)
- K.3 City Council Regular Meeting Agenda Bill:Hopes, Dreams, and Concerns (April 19, 2022)
- K.4 City Council Regular Meeting Notes:Hopes, Dreams, and Concerns (April 19, 2022)
- K.5 Parks and Recreation Commission Regular Meeting Agenda Bill:Programming and Concept Alternatives (July 20, 2022)
- K.6 Parks and Recreation Commission Regular Meeting Notes:Programming and Concept Alternatives (July 20, 2022)
- K.7 City Council Joint Meeting with Parks and RecreationCommission Agenda Bill:Programming and Concept Alternatives (Sept. 13, 2022)
- K.8 City Council Joint Meeting with Parks and RecreationCommission Notes:Programming and Concept Alternatives (Sept. 13, 2022)
- K.9 Parks and Recreation Commission Regular Meeting Agenda Bill:Preferred Master Plan (Feb. 1, 2023)
- K.10 City Council Joint Meeting Agenda Bill: Preferred Master PlanConsensus and SEPA Authorization (March 14, 2023)

Agenda Bill

Parks and Recreation Commission Regular Meeting

April 06, 2022



| SUBJECT: | _ | Big Rock Park South & Beaton Hill Park Master Plan Discussion - Hopes, Dreams, and Concerns | | | |
|-------------------------|-------------------------------|---|--|--|--|
| DATE SUBMITTED: | April 01, 2022 | April 01, 2022 | | | |
| DEPARTMENT: | Parks, Recreation & Fac | Parks, Recreation & Facilities | | | |
| NEEDED FROM COMMISSION: | ☐ Action ☑ Direction | tion Informational | | | |
| RECOMMENDATION: | uses at both park sites; | Review background information, an analysis of existing conditions and uses at both park sites; discuss hopes, dreams, and concerns related to the master plans for both park sites. | | | |
| EXHIBITS: | 1. Exhibit 1 - PowerPoi | 1. Exhibit 1 - PowerPoint Presentation | | | |
| BUDGET: | | | | | |
| Total dollar amount \$2 | 275,000 | Approved in budget | | | |
| Fund(s) Pa | irks Capital Improvement Fund | | | | |
| | | ☐ No budgetary impact | | | |
| WORK PLAN FOCUS AREA | AS: | | | | |
| Transportati | on | Community Safety | | | |
| ✓ Communicat | tion & Engagement | ☐ | | | |
| ☐ i High Perform | ning Government | Culture & Recreation | | | |
| □ ♀ Environmen | tal Health & Protection | ☐ Š Financial Sustainability | | | |

NEEDED FROM COMMISSION:

Big Rock Park South & Beaton Hill Park Master Plan Discussion - Hopes, Dreams, and Concerns

KEY FACTS AND INFORMATION SUMMARY:

The purpose of this discussion is to review park background information, an analysis of existing conditions and uses at both park sites, and discuss hopes, dreams, and concerns related to the master plans for both park sites.

Summary

Beaton Hill Park and Big Rock Park South are centrally located within the City's core. The City acquired Beaton Hill Park in fall 2018. Since then, the only work done at this site has been the demolition of the family residence and accessory structures. Beaton Hill Park is located directly north of the three Big Rock Park properties (North, Central, and South) and is currently closed to the public. Big Rock Park South

(Site C) was transferred to the City in November 2021 and is the final property of a phased land donation agreement.

Prior to commencing extensive development or improvement on City parkland, a master plan is completed by following the City adopted master plan process. The intent in following this process is to look at the parkland in a comprehensive manner, utilizing a process that involves the entire community. A goal of the consolidated master planning process for Beaton Hill Park and Big Rock Park South is to prepare plans that integrate with Big Rock Park North and Central for the purpose of providing a cohesive group of parks within the City's core.

A representative from the consultant team, HBB, will present background information, an analysis of existing conditions and uses at both park sites in the further detail at the April 6, 2022 Parks & Recreation Commission meeting. At that time, the Parks & Recreation Commission will be asked to discuss their hopes, dreams, and concerns related to the master plan for both park sites. This information will be used, in conjunction with input received from the City Council, City staff, and the public, to assist with the development of an overall vision with supporting goals and design criteria for each park.

Master Plan Process:

A twelve to eighteen-month effort is anticipated for the master plan process which will include public involvement, with participation from the community at large, City staff, Parks & Recreation Commission, City Council, and community stakeholders. The intent of a consolidated approach for the master plans is to undergo a collective kick-off and public engagement effort to facilitate community introductions and discussions, as well as a collective department and city review. That said, individual master plan reports will be prepared for each park. The master plan process will consist of three phases as described below:

Phase 1 Site Investigation and Analysis

Evaluate existing site conditions, identify sensitive areas, complete site studies, and develop an overall understanding of the site. During this initial phase, a community survey will be prepared to assist with the development of initial park concepts.

Phase 2 Park Program

The first public meeting will be held to present site analysis and provide the community an opportunity to share their hopes, dreams and concerns for the park. Following the first public meeting, a community survey will be published. Based upon the results of site analysis, community survey, City staff input, technical input and initial public input, a preliminary park design program will be developed that details proposed uses, design character and criteria.

Phase 3 Master Plan Development

Two to three Master Plan alternatives will be prepared for each park, based upon the approved design program. This will include a narrative that summarizes the existing conditions, design alternatives, cost implications and regulatory criteria, and identifies issues which will require further study at the next stage of project development.

Based upon feedback from the community, Parks & Recreation Commission, and City Council, the alternatives will be revised in to one preferred Master Plan alternative with a cost estimate. The final deliverable will be a Master Plan Report for each park, with final project drawings and narrative, project process, project phasing scenarios, and phase costs.

Timeline:

- Parks & Recreation Commission Meeting #1: April 6, 2022
- City Council Meeting #1: April 19, 2022
- Public Meeting #1: April 28, 2022
- Public Meeting #2: July / August 2022
- Joint City Council/Parks & Recreation Commission Meeting #2: September 13, 2022
- Parks & Recreation Commission Meeting #3: November / December 2022
- City Council Meeting #3: January 2023

Project Background

<u>Beaton Hill Park</u> is located approximately half a mile west of Sammamish City Hall in the heart of the City and just south of the future Town Center. The park is comprised of two parcels that were purchased by the City in fall 2018 in an effort to preserve open space in a rapidly densely developing area in the City; it is named for the family that owned the farmstead for over 80 years. The vacant land totals 9.36 acres and has mature trees, rolling topography, open meadows, three wetlands, and a seasonal stream. The City was awarded a King County Conservation Futures Grant as a reimbursement for approximately 4 acres of the site, which will be designated for permanent conservation.

Big Rock Park South is the third and final property of a 51-acre phased land donation agreement located in the center of the City. The first two parcels, Big Rock Park North and Central, opened to the public in 2016 and 2021. The property was transferred to the City in November 2021. Like the conditions placed on the previous two parcels, this park will facilitate a variety of low impact active and passive activities that may include nature trails, open space, and passive sports meadows. There are a few existing structures on this parcel. Restrictions were put in place to preclude development of new structures exceeding 2,500 square feet to support the development of the park in a manner that preserves the site's natural beauty. The 15 acres that make up this property include dense forest cover, meandering trails that navigate relatively unvarying topography, sensitive areas, open meadows, a single-family home, detached garages, and a barn.

Next Steps

Review the site analysis and background information with City Council and the public, then develop an overall vision with supporting goals and design criteria for each park. Initial concepts will be developed based on feedback received and brought back in front of the City Council, Parks & Recreation Commission, and the public.

FINANCIAL IMPACT:

N/A

OTHER ALTERNATIVES CONSIDERED:

N/A

RELATED CITY GOALS, POLICIES, AND MASTER PLANS:

2018 Parks, Recreation & Den Space (PRO) Plan



Purpose (What We Need From You)

Beaton Hill Park

- Hopes, Dreams, Concerns
- Vision

Big Rock Park (BRP) South

- Hopes, Dreams, Concerns
- Vision

Overview: What We Will Be Discussing

- 1. Introduction
- 2. Timeline & Project Background
- 3. Existing Conditions
 - Beaton Hill Park
 - Big Rock Park (BRP) South
- 4. Discussion
 - Hopes, Dreams, Concerns
 - Vision
- 5. Next Steps

Introduction

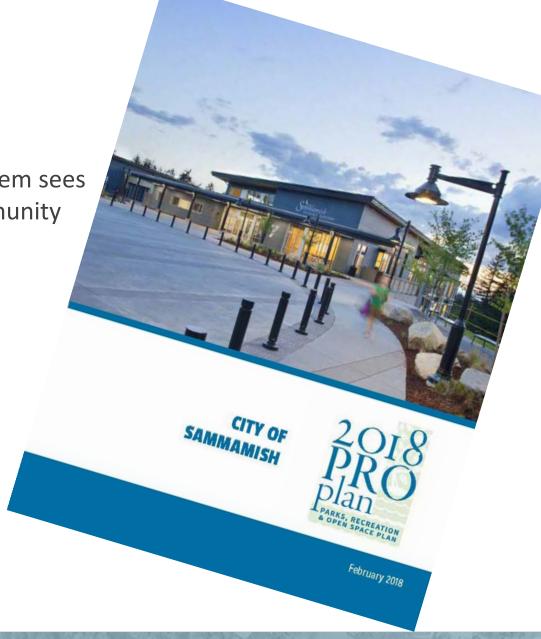
Introduction

2018 PRO Plan Overview

The overall vision for Sammamish's Parks and Recreation system sees parks as an integral part of our healthy and sustainable community by connecting people to nature, play, and culture.

Sammamish Parks & Recreation Goals

- Conservation of natural resources
- Opportunities to improve health and wellness
- Create social equity in access to parks and recreation for all residents



Introduction Context Map

Beaton Hill Park

Sammamish Commons BRP North

Ebright Creek Park

BRP Central

BRP South

Pine Lake Park



Timeline & Project Background

Timeline & Project Background

Master Plan Process

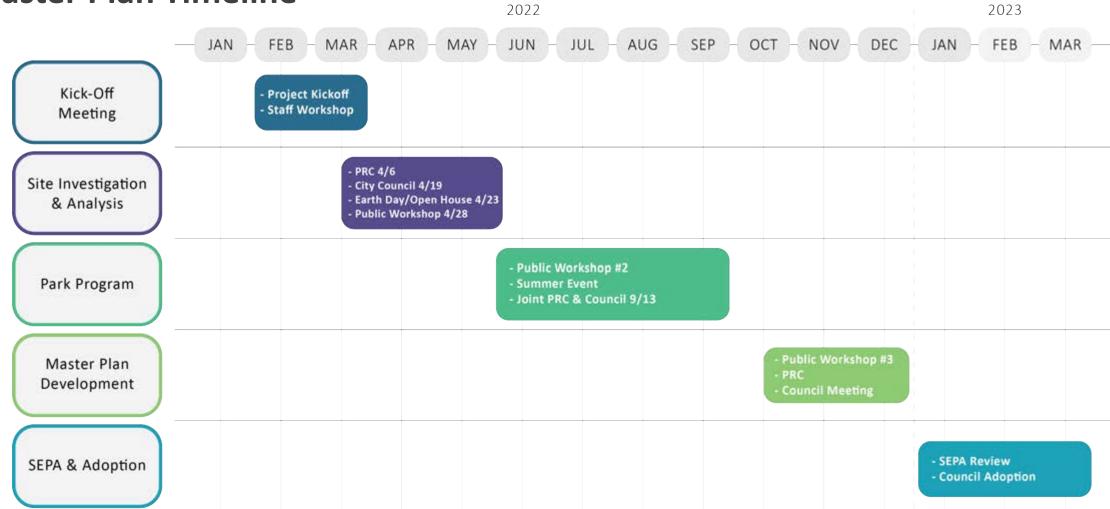
- 1. Site Analysis & Project Scoping
 - ☑ Evaluate Existing Conditions
 - ☑ Complete Site Studies
 - **☑** Park Classification
 - **☑** Case Studies
- 2. Community Survey
- 3. Public Meeting #1
 - ☐ Hopes, Dreams, & Concerns
 - ☐ Opportunities & Constraints

- 4. Public Meeting #2 & #3
 - ☐ Schematic Concepts
 - ☐ Project Goals & Objectives
 - ☐ Design Alternatives
 - ☐ City Council & Parks Commission Updates
 - ☐ Parks & Recreation Commission
- 5. State Environmental Polity Act (SEPA)
- 6. Master Plan Adoption





Master Plan Timeline



Timeline & Project Background History

Beaton Hill Park (9.32 Acres)

- Fall 2018 acquired by the City
- Summer 2019 house demolition completed
- Fall 2019 City awarded King County CFT funds

Big Rock Park South (15 Acres)

• Fall 2021 – transferred to City



Existing Conditions Beaton Hill Park

Beaton Hill Park

Existing Features

- Sensitive Areas
- Mature Tree Canopy
- Vacant



Beaton Hill Park Site Character













Beaton Hill Park

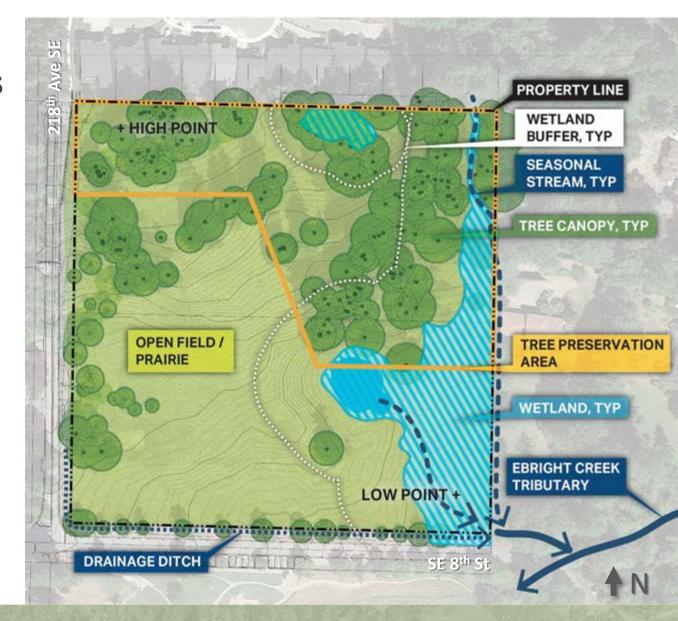
General Opportunities & Constraints

Opportunities

- Site history
- Ecology
- View corridors
- Connections
- topography

Constraints

- Accessibility
- Stream / wetland buffers
- Tree preservation area



Existing ConditionsBRP South

BRP South Existing Features

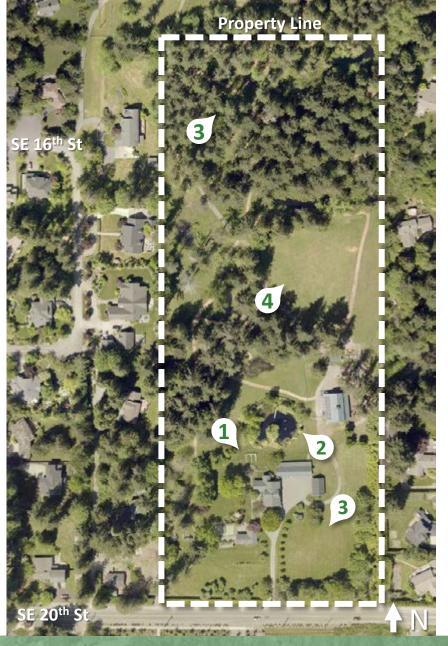
- Sensitive Areas
- Mature Tree Canopy
- Trails
- Structures (5)



BRP SouthSite Character













BRP SouthSite Structures













BRP South

General Opportunities & Constraints

Opportunities

- Connections
- Site history
- Re-use of existing buildings
- Existing pond/gardens
- Existing trails

Constraints

- Wetland buffers
- Visibility from street / sidewalk
- Site hydrology / seasonal flooding
- Mature tree canopy



Discussion

Discussion

What are your hopes, dreams, and concerns for Beaton Hill Park?

What are your hopes, dreams, and concerns for Big Rock Park South?

Discussion

• What is one word or phrase to describe your **vision** for the future of **Beaton Hill Park**?

What is one word or phrase to describe your vision for the future of Big Rock Park South?

Next Steps

Next Steps

Hopes, Dreams, and Concerns

- City Council Meeting (April 19)
- Online Community Survey (April 22 May 13)
- Earth Day Booth & Open House at BRP South (April 23)
- Virtual Public Workshop (April 28)

Park Program (Design Alternatives)

- Online Community Survey (July / August)
- Public Workshop (July / August)
- Joint City Council & PRC Meeting (September 13)









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Beaton Hill Park & Big Rock Park South Master Plan

Parks & Recreation Commission Meeting Minutes Meeting #1 Hopes, Dreams & Concerns Wednesday, April 6, 2022

BEATON HILL PARK

Hopes & Dreams

- Variety of uses x3
- use of terrain with sensitive areas
- Filling in gaps in park system, additional amenities to complement park system
- Off-leash dog park x4
- Disc golf x2
- Connectivity between park parcels x2
- Access along NW corner of property
- Safe pedestrian access along 218th x3
- Weeping willow preserved
- Active recreation use
- Picnic shelter
- Multi-use field x2
- Pea patch
- Edible plantings/Food forest
- Natural play elements

Concerns

- Safe access along SE 8th St x2
- Safe pedestrian access along 218th x3 (hope & concern)
- Parking x2
- Adjacent neighborhood response to designs x2
- Lighting (street and ball field)
- Intense active recreation use not appropriate with adjacent natural character
- Accessibility

Site Specific Vision

- Natural playground expansion
- Expanded active use
- Integrating food growing and consumption / access to food
- Play, nature, Sammamish culture (reflections on community roots and realization of our future)
- Biodiversity & Understanding



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BIG ROCK PARK SOUTH

Hopes & Dreams

- Community garden space x4
- Parking to accommodate all BRP parcels x5
 - Opportunities to explore parking with adjacent mosque
- 2-tier parking that blends in to landscape
- Bare minimum parking on-site
- Greenhouse x4
- Senior programming x5
- Community meeting space @ poolhouse x6
- Use of existing structures x6
- Barn for youth community groups
- No animal farm x3
- Removal of fence between BRP Central and South to allow animal crossing x3
- Botanical garden
- Interpretive signage
- Retain trail network x2
- 4H use at Barn
- Sections of fence openings along BRP to allow access, but not property length
- Integrate landscaping along SE 20th rather than remove, makes park feel like sanctuary
- Barn 2nd story
 - Artist open studio space, Art & craft classes, Youth, Bunk beds
- Highlighting pond north of garage
- Nighttime use lights at nighttime x2
- Keep solar and utilize for education x2
- Balance between maintaining natural beauty while adding accessibility
- Bio bags for pet waste stations

Concerns

- Too much parking
- Landscaping along SE 20th St (lack of visibility) x2
- Privacy buffers for adjacent neighbors (west & east)
- Structures
- maintenance requirements for staff
 - Safety
 - Security
 - o Restrooms
 - o Flooding

Site Specific Vision

- Gathering / community



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BEATON HILL PARK / BIG ROCK PARK SOUTH

Shared Vision

- Connectivity /continuity
- Uniqueness between each park
- Reflect on past Sammamish and future (looking back and ahead)
- Maintaining the natural character
- Art & Education (history/culture)
- Community access (to and within each park)
- Green parking

Agenda Bill

City Council Regular Meeting

April 19, 2022



| SUBJECT: | Big Rock Park South & Beaton Hill Park Master Plan Discussion - Hopes, Dreams, and Concerns | | | |
|-----------------------------|---|----------|----------|------------------------------|
| DATE SUBMITTED: | April 01, 2022 | | | |
| DEPARTMENT: | Parks, Recreation & Facilities | | | |
| NEEDED FROM COUNCIL: | ☐ Action ☑ Direction | n [|] Inf | formational |
| RECOMMENDATION: | Review background information, an analysis of existing conditions and uses at both park sites; discuss hopes, dreams, and concerns related to the master plans for both park sites. | | | |
| EXHIBITS: | 1. Exhibit 1 - PowerPoint Presentation | | | |
| BUDGET: | | | | |
| Total dollar amount \$275,0 | 000 | | √ | Approved in budget |
| Fund(s) Parks | Capital Improvement Fund | | | Budget reallocation required |
| | | | | No budgetary impact |
| WORK PLAN FOCUS AREAS: | | | | |
| ☐ ☐ Transportation | | | • | Community Safety |
| Communication & Engagement | | | Ĩ | Community Livability |
| High Performing Government | | √ | 1 | Culture & Recreation |
| ☑ ♀ Environmental F | Health & Protection | | | Financial Sustainability |

NEEDED FROM COUNCIL:

Big Rock Park South & Beaton Hill Park Master Plan Discussion - Hopes, Dreams, and Concerns

KEY FACTS AND INFORMATION SUMMARY:

The purpose of this discussion is to review park background information, an analysis of existing conditions and uses at both park sites, and discuss hopes, dreams, and concerns related to the master plans for both park sites.

Summary

Beaton Hill Park and Big Rock Park South are centrally located within the City's core. The City acquired Beaton Hill Park in fall 2018. Since then, the only work done at this site has been the demolition of the family residence and accessory structures. Beaton Hill Park is located directly north of the three Big Rock Park properties (North, Central, and South) and is currently closed to the public. Big Rock Park South

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Master Plan Process:

A twelve to eighteen-month effort is anticipated for the master plan process which will include public involvement, with participation from the community at large, City staff, Parks & Recreation Commission, City Council, and community stakeholders. The intent of a consolidated approach for the master plans is to undergo a collective kick-off and public engagement effort to facilitate community introductions and discussions, as well as a collective department and city review. That said, individual master plan reports will be prepared for each park. The master plan process will consist of three phases as described below:

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FINANCIAL IMPACT:

N/A

OTHER ALTERNATIVES CONSIDERED:

N/A

RELATED CITY GOALS, POLICIES, AND MASTER PLANS:

2018 Parks, Recreation & Den Space (PRO) Plan



Purpose (What We Need From You)

Beaton Hill Park

- Hopes, Dreams, Concerns
- Vision

Big Rock Park (BRP) South

- Hopes, Dreams, Concerns
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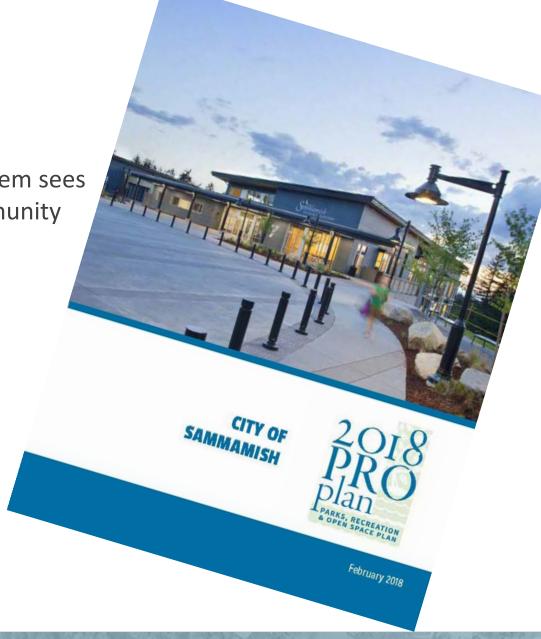
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- Create social equity in access to parks and recreation for all residents



Introduction Context Map

Beaton Hill Park

Sammamish Commons BRP North

Ebright Creek Park

BRP Central

BRP South

Pine Lake Park



Master Plan Process

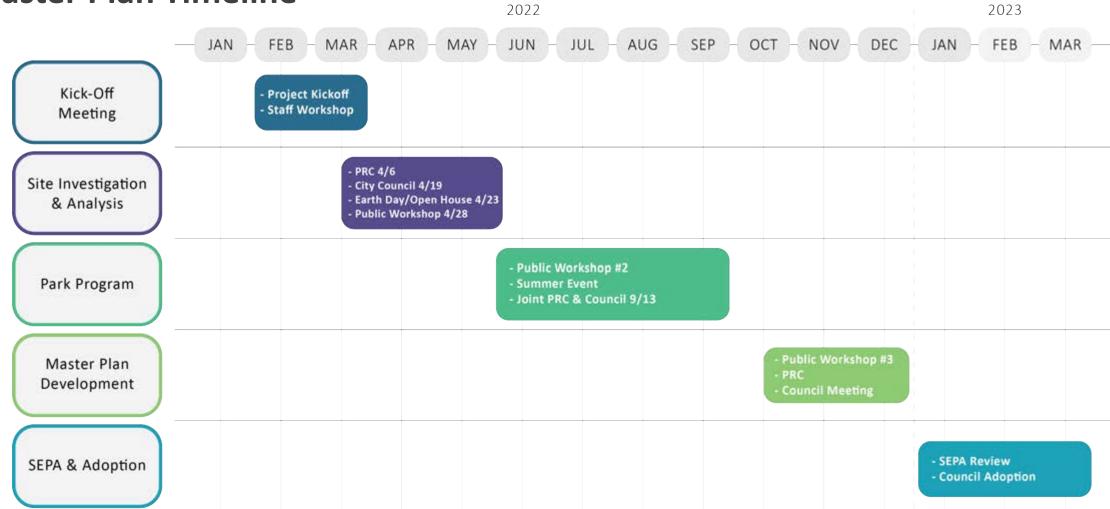
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 - ☐ Opportunities & Constraints

- 4. Public Meeting #2 & #3
 - ☐ Schematic Concepts
 - ☐ Project Goals & Objectives
 - ☐ Design Alternatives
 - ☐ City Council & Parks Commission Updates
 - ☐ Parks & Recreation Commission
- 5. State Environmental Polity Act (SEPA)
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Master Plan Timeline



Timeline & Project Background History

Beaton Hill Park (9.32 Acres)

- Fall 2018 acquired by the City
- Summer 2019 house demolition completed
- Fall 2019 City awarded King County CFT funds

Big Rock Park South (15 Acres)

• Fall 2021 – transferred to City



Existing Conditions Beaton Hill Park

Beaton Hill Park

Existing Features

- Sensitive Areas
- Mature Tree Canopy
- Vacant



Beaton Hill Park Site Character













Beaton Hill Park

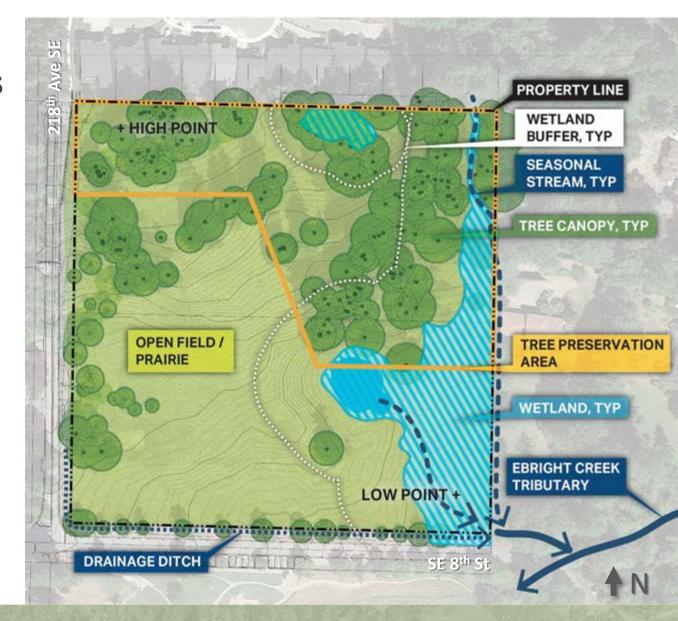
General Opportunities & Constraints

Opportunities

- Site history
- Ecology
- View corridors
- Connections
- topography

Constraints

- Accessibility
- Stream / wetland buffers
- Tree preservation area



Existing ConditionsBRP South

BRP South Existing Features

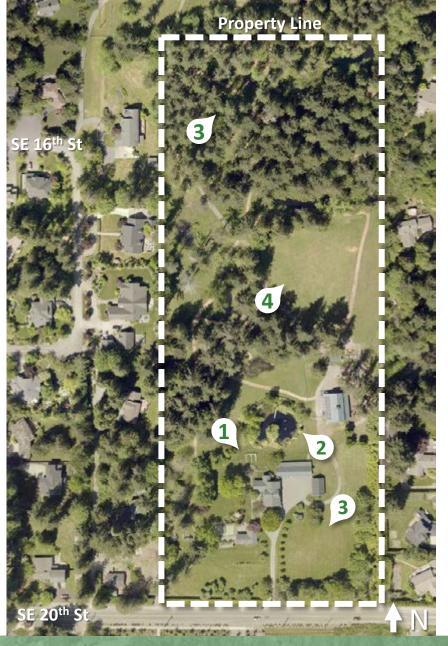
- Sensitive Areas
- Mature Tree Canopy
- Trails
- Structures (5)



BRP SouthSite Character













BRP SouthSite Structures













BRP South

General Opportunities & Constraints

Opportunities

- Connections
- Site history
- Re-use of existing buildings
- Existing pond/gardens
- Existing trails

Constraints

- Wetland buffers
- Visibility from street / sidewalk
- Site hydrology / seasonal flooding
- Mature tree canopy



Discussion

Discussion

What are your hopes, dreams, and concerns for Beaton Hill Park?

What are your hopes, dreams, and concerns for Big Rock Park South?

Discussion

• What is one word or phrase to describe your **vision** for the future of **Beaton Hill Park**?

• What is one word or phrase to describe your **vision** for the future of **Big Rock Park South**?

Next Steps

Next Steps

Hopes, Dreams, and Concerns

- Online Community Survey (April 22 May 13)
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- Virtual Public Workshop (April 28)

Park Program (Design Alternatives)

- Online Community Survey (July / August)
- Public Workshop (July / August)
- Joint City Council & PRC Meeting (September 13)









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Beaton Hill Park & Big Rock Park South Master Plan

City Council Meeting Minutes
Meeting #1 Hopes, Dreams & Concerns
Tuesday, April 19, 2022

BEATON HILL PARK

Hopes & Dreams

- Walking access along 218th
- Walking trails
- Passive use in northern half x3
- Natural amphitheaterx4
- Sports field x2
 - Soccer field, practice field, modified layouts
- Sensitivity to critical areas and associated buffers
- Off-leash dog area x2
- Unique identity or feature
- Welcoming x2
- Preserve wild/natural character
- Trout pons
- Play structure
 - "where the wild things are"

Concerns

- Parking x2
- Water
- Tree retention

Site Specific Vision

- Pastoral
- Wild
- Welcoming
- Connectedness/connectivity
- String of jewels
- Gateway
- Surprise around the corner



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BIG ROCK PARK SOUTH

Hopes & Dreams

- Inclusivity
- Access
- Passive
- Educational x2
- Greenhouse x2
- Botanical garden
- Maintain as many trails as possible
 - Trail features
- Off-leash dog area
- Story recordings/audio or Donor's history on-site
- Exploratory
- Re-use structures x2
 - Community use (meeting spaces)
 - Storage
 - House as a venue (like Beaver Lake Lodge)
- Preserve chicken coop
- Structures (groundskeeper)
- Preserve character/feeling of property

Concerns

- Don't want to lose amenities because of parking
- Safe access to the site (pedestrians)
- House
 - Unique element, how character changes
 - ADA retrofits
 - Basement flooding
 - Operational maintenance
- Cost of maintenance/development/retrofit

Site Specific Vision

- Continuity/expansion of BRP parcels
- Multigenerational, buzzing with activity, use of spaces
- Exchange
- Traverse
- Flow x2
- Magnet (home base, starting point)
- Educational
- fun

Agenda Bill

Parks and Recreation Commission Regular Meeting

July 20, 2022



| SUBJECT: | Beaton Hill Park & Big F Programming and Cond | Rock Park South Master Plan Discussion - cept Alternatives |
|-------------------------|---|--|
| DATE SUBMITTED: | July 08, 2022 | |
| DEPARTMENT: | Parks, Recreation & Fac | icilities |
| NEEDED FROM COMMISSION: | ☐ Action ☑ Direction | ion Informational |
| RECOMMENDATION: | Review and provide inp for the master plan dev | put on programming and concept alternatives evelopment. |
| EXHIBITS: | | |
| BUDGET: | | |
| Total dollar amount | \$275,000 | Approved in budget |
| Fund(s) | Parks Capital Improvement Fund | |
| | | ☐ No budgetary impact |
| WORK PLAN FOCUS AREAS: | | |
| □ 🖬 Transpor | tation | □ Community Safety |
| ☑ 🎁 Commun | ication & Engagement | Community Livability |
| □ i High Perf | orming Government | Culture & Recreation |
| 🗹 🌳 Environm | nental Health & Protection | ☐ ⑤ Financial Sustainability |

NEEDED FROM COMMISSION:

Beaton Hill Park & Big Rock Park South Master Plan Discussion - Programming and Concept Alternatives

KEY FACTS AND INFORMATION SUMMARY:

The purpose of this discussion is to review and provide input on park programming and concept alternatives for the master plan development of Beaton Hill Park and Big Rock Park South.

Summary

Beaton Hill Park and Big Rock Park South are centrally located within the City's core. The City acquired Beaton Hill Park in fall 2018. Since then, the only work done at this site has been the demolition of the family residence and accessory structures. Beaton Hill Park is located directly north of the three Big Rock Park properties (North, Central, and South) and is currently closed to the public. Big Rock Park South (Site C) was transferred to the City in November 2021 and is the final property of a phased land donation agreement.

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Master Plan Phase I:

The first set of meetings were held in April 2022 with the City Council, Parks & Recreation Commission, and the community, to solicit input on hopes, dreams, and concerns related to the master plans. One survey was prepared for the public as part of this first phase. Please note that the survey was not statistically valid. The vision and programming survey for the public had 184 participants.

A total of six concept alternatives have been prepared, three concepts for each park. Park planning staff will present a summary of the first virtual public workshop, online public survey results, project goals, and discuss programming and concept alternatives in further detail at the July 20, 2022 Parks & Recreation Commission Meeting. At that time, the Parks & Recreation Commission will be asked to provide input on programming and concept alternatives for the master plan development. This information will be used, in conjunction with input received from City Council, City staff and the public, to assist with the development of a preferred master plan alternative.

Master Plan Process:

A twelve to eighteen-month effort is anticipated for the master plan process which will include public involvement, with participation from the community at large, City staff, Parks & Recreation Commission, City Council, and community stakeholders. The intent of a consolidated approach for the master plans is to undergo a collective kick-off and public engagement effort to facilitate community introductions and discussions, as well as a collective department and city review. That said, individual master plan reports will be prepared for each park. The master plan process will consist of three phases as described below:

Phase 1 Site Investigation and Analysis (Complete)

Evaluate existing site conditions, identify sensitive areas, complete site studies, and develop an overall understanding of the site. During this initial phase, a community survey will be prepared to assist with the development of initial park concepts.

Phase 2 Park Program

The first public meeting will be held to present site analysis and provide the community an opportunity to share their hopes, dreams and concerns for the park. Following the first public meeting, a community survey will be published. Based upon the results of site analysis, community survey, City staff input, technical input and initial public input, a preliminary park design program will be developed that details proposed uses, design character and criteria.

Phase 3 Master Plan Development

Two to three Master Plan alternatives will be prepared for each park, based upon the approved design program. This will include a narrative that summarizes the existing conditions, design alternatives, cost implications and regulatory criteria, and identifies issues which will require further study at the next stage of project development.

Based upon feedback from the community, Parks & Recreation Commission, and City Council, the alternatives will be revised in to one preferred Master Plan alternative with a cost estimate. The final deliverable will be a Master Plan Report for each park, with final project drawings and narrative, project process, project phasing scenarios, and phase costs.

Timeline:

- Parks & Recreation Commission Meeting #1: April 6, 2022 (Complete)
- City Council Meeting #1: April 19, 2022 (Complete)
- Public Meeting #1: April 28, 2022 (Complete)
- Public Meeting #2: July 27, 2022
- Joint City Council/Parks & Recreation Commission Meeting #2: September 20, 2022
- Parks & Recreation Commission Meeting #3: November / December 2022
- City Council Meeting #3: January 2023

Project Background

<u>Beaton Hill Park</u> is located approximately half a mile west of Sammamish City Hall in the heart of the City and just south of the future Town Center. The park is comprised of two parcels that were purchased by the City in fall 2018 in an effort to preserve open space in a rapidly densely developing area in the City; it is named for the family that owned the farmstead for over 80 years. The vacant land totals 9.36 acres and has mature trees, rolling topography, open meadows, three wetlands, and a seasonal stream. The City was awarded a King County Conservation Futures Grant as a reimbursement for approximately 4 acres of the site, which will be designated for permanent conservation.

<u>Big Rock Park South</u> is the third and final property of a 51-acre phased land donation agreement located in the center of the City. The first two parcels, Big Rock Park North and Central, opened to the public in 2016 and 2021. The property was transferred to the City in November 2021. Like the conditions placed on the previous two parcels, this park will facilitate a variety of low impact active and passive activities that may include nature trails, open space, and passive sports meadows. There are a few existing structures on this parcel. Restrictions were put in place to preclude development of new structures exceeding 2,500 square feet to support the development of the park in a manner that preserves the site's natural beauty. The 15 acres that make up this property include dense forest cover, meandering trails that navigate relatively unvarying topography, sensitive areas, open meadows, a single-family home, detached garages, and a barn.

Next Steps

Review the programming and concept alternatives with the public, publish the second community survey, and present the programming and concept alternatives with preliminary community survey results at the September 20, 2022 City Council and Parks & Recreation Commission Joint Meeting. A preferred master plan alternative will be developed for each park over the fall, based on feedback received from the community, Parks & Recreation Commission, and City Council.

FINANCIAL IMPACT:

N/A

OTHER ALTERNATIVES CONSIDERED:

N/A

RELATED CITY GOALS, POLICIES, AND MASTER PLANS:



Purpose (What We Need From You)

Input on Programming and Concept Alternatives

- Beaton Hill Park
- Big Rock Park (BRP) South

Overview: What We Will Be Discussing

- 1. Introduction
- 2. Timeline & Project Background
- 3. Existing Conditions
- 4. Outreach Summary
- 5. Project Goals
- 6. Programming & Concept Alternatives
- 7. Discussion
- 8. Next Steps

Introduction

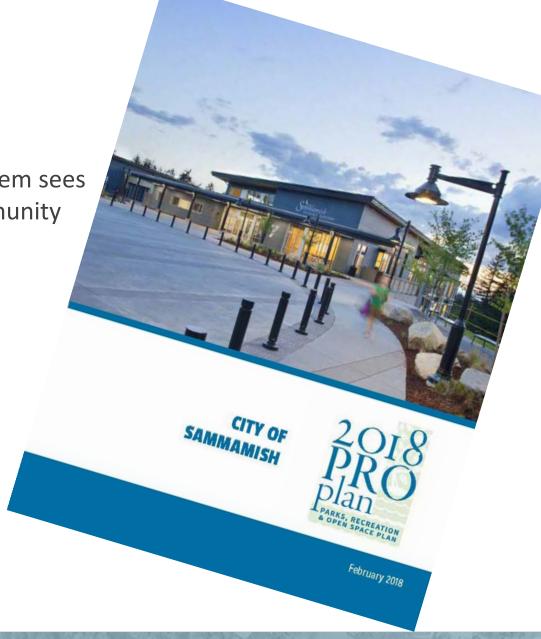
Introduction

2018 PRO Plan Overview

The overall vision for Sammamish's Parks and Recreation system sees parks as an integral part of our healthy and sustainable community by connecting people to nature, play, and culture.

Sammamish Parks & Recreation Goals

- Conservation of natural resources
- Opportunities to improve health and wellness
- Create social equity in access to parks and recreation for all residents



Introduction Context Map

Beaton Hill Park

Sammamish Commons BRP North

Ebright Creek Park

BRP Central

BRP South

Pine Lake Park



Timeline & Project Background

Timeline & Project Background

Master Plan Process

- 1. Site Analysis & Project Scoping
 - **☑** Evaluate Existing Conditions
 - ☑ Complete Site Studies
 - **☑** Park Classification
 - ☑ Case Studies
- 2. Community Survey
- 3. Public Meeting #1
 - ☑ Hopes, Dreams, & Concerns
 - ☑ Opportunities & Constraints

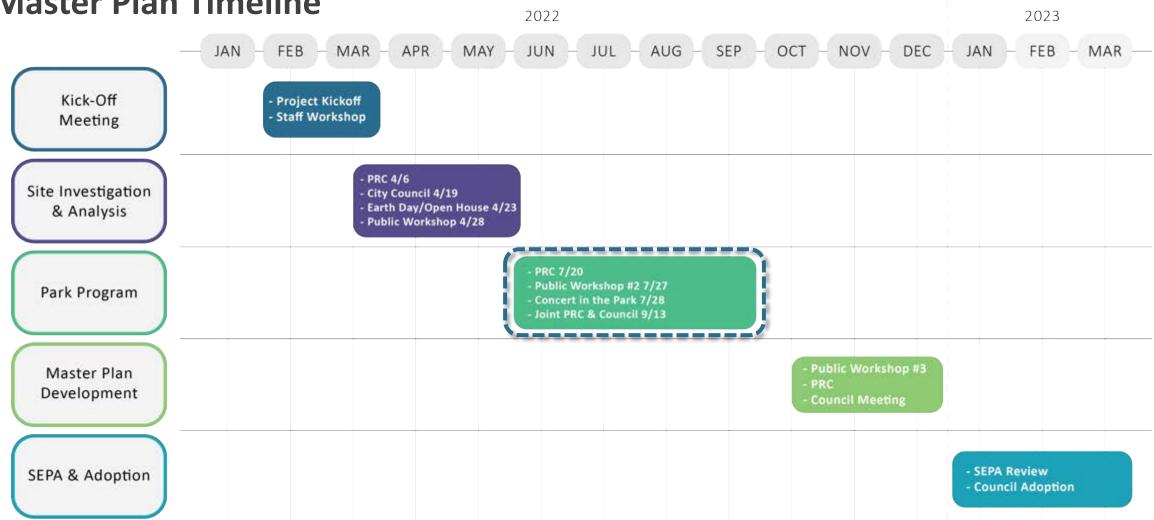
- 4. Public Meeting #2 & #3
 - **☑** Schematic Concepts
 - ✓ Project Goals & Objectives
 - ☐ Design Alternatives
 - ☐ City Council and Parks & Recreation Commission Updates
- 5. State Environmental Polity Act (SEPA)
- 6. Master Plan Adoption





Timeline & Project Background

Master Plan Timeline



Timeline & Project Background History

Beaton Hill Park (9.32 Acres)

- Fall 2018 acquired by the City
- Summer 2019 house demolition completed
- Fall 2019 City awarded King County CFT funds

Big Rock Park South (15 Acres)

• Fall 2021 – transferred to City



Existing Conditions Beaton Hill Park

Beaton Hill Park Site Character













Beaton Hill Park

General Opportunities & Constraints

Opportunities

- Site history
- Ecology
- View corridors
- Connections
- topography

Constraints

- Accessibility
- Stream / wetland buffers
- Tree preservation area

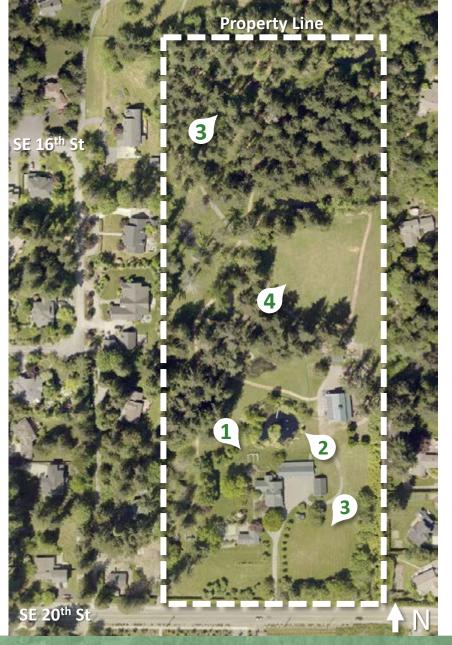


Existing ConditionsBRP South

BRP SouthSite Character













BRP SouthSite Structures













BRP South

General Opportunities & Constraints

Opportunities

- Connections
- Site history
- Re-use of existing buildings
- Existing pond/gardens
- Existing trails

Constraints

- Wetland buffers
- Visibility from street / sidewalk
- Site hydrology / seasonal flooding
- Mature tree canopy



Outreach Summary

Outreach Summary

Earth Day, Open House & Virtual Workshop

- Earth Day Event & Open House April 23, 2022
- Virtual Public Workshop April 28, 2022

Hopes & Dreams

- Gardens (native, pollinator, edibles)
- Play (playgrounds, natural play, outdoor exercise)
- Outdoor education & signage
- Trails & connections to other parks/neighborhoods
- Gathering space (senior, youth, event)
- Active recreation (pickleball, disc golf, tennis, fishing)
- Passive recreation (respite, natural beauty)
- Off-leash dog park



Virtual Workshop Live Poll

disc golf

botanical gardens pitch and putt golf community fundraising plant nursery

botanical gardena

childrens wilderness educ pickle ball peapatches

zip lines climbing walls remtal for small gatherin

Outreach Summary Community Survey #1

184

Survey Participants

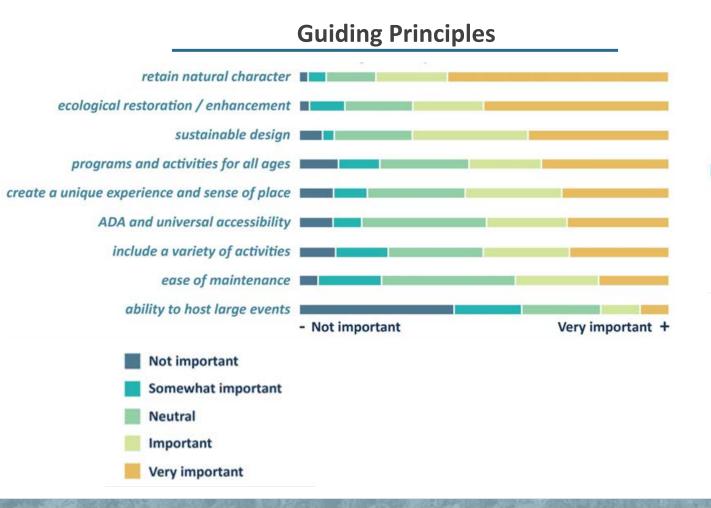
20% live within ½ mile of the parks68% live in Sammamish

What do you like most about the existing Big Rock Parks?



Outreach Summary

Community Survey #1 – Guiding Principles

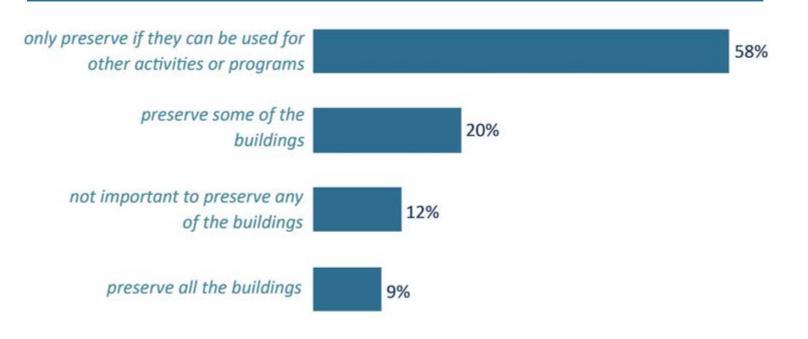


What other guiding principles are important?



Outreach Summary Community Survey #1 – Building Preservation

Should we preserve the existing buildings at BRP South?







If only some are preserved, the **BARN** and **POOL HOUSE** ranked as highest priority for preservation

Project Goals

Project Goals

The **Beaton Hill Park** and **Big Rock Park** system serves as an oasis of nature in the city. The master plans for each park should:

- Continue to be the **place of respite**, contemplation, and exploration of the natural environment it is today, protected for future generations.
- **Connect, educate, and inspire** people of all ages and abilities to discover more about each other and our surroundings.
- Provide **safe access to everyone** of all abilities to the amazing places and experiences throughout the parks.
- Allow everyone the **flexibility** to be active or passive in how they choose to recreate, providing opportunities for both in a way that respects and fits into the context of the site.

Programming Alternatives

Programming Alternatives – Play

Universal Play

Features for all ages and abilities – often combination of plazas, play, nature & art elements





Hillside Play

Play integrated into hillside terrain – natural & traditional elements





Programming Alternatives – Play

Whimsical Play

Play that creates sense of place, natural wonder & unique experience – natural or traditional features





Play Nodes

Explorative play for all age groups along trails – natural, sculptural or traditional features





Programming Alternatives – Site

Picnic Shelters





Amphitheater





Open Lawn





Programming Alternatives – Site

Disc Golf





Pickleball Courts





Off-leash Dog Area





Programming Alternatives – Site

Native Gardens





Sensory Gardens





Pollinator Gardens





P-Patch





Programming Alternatives – BRPS Buildings

Pool House





Barn – Events





Barn - Recreation





Programming Alternatives – BRPS Buildings

Residence – Main Floor

Small comm. gatherings, meetings, classes & events





Old Garage

Re-use / re-build for use as picnic shelter





Concept Alternative 1 Gradient of Activities

Concept Alternative 1 Gradient of Activities

Beaton Hill Park

- More active with flexible open lawn & hillside play
- Provides passive activities through natural trails
 & picnicking
- Educational elements throughout trails focusing on ecological features, park history

Big Rock Park South

- Passive engagement with nature
- Garden walks, nature trails & picnicking
- Educational elements throughout trails focusing on ecological features, park history



Beaton Hill Park

Gradient of Activities

- Flexible open lawn
- Hillside play
- P-Patch
- Picnic shelters & gathering areas
- Natural drainage approach to stormwater
- Wetland enhancements
- 2 parking areas



BRP SouthGradient of Activities

- Expanded trail network
- Native, pollinator & sensory gardens
- Playscapes along trail system
- Disc golf course
- Old garage removed
- Picnic shelters & gathering areas
- Open lawn for variety of activities
- Wetland enhancements



BRP SouthGradient of Activities

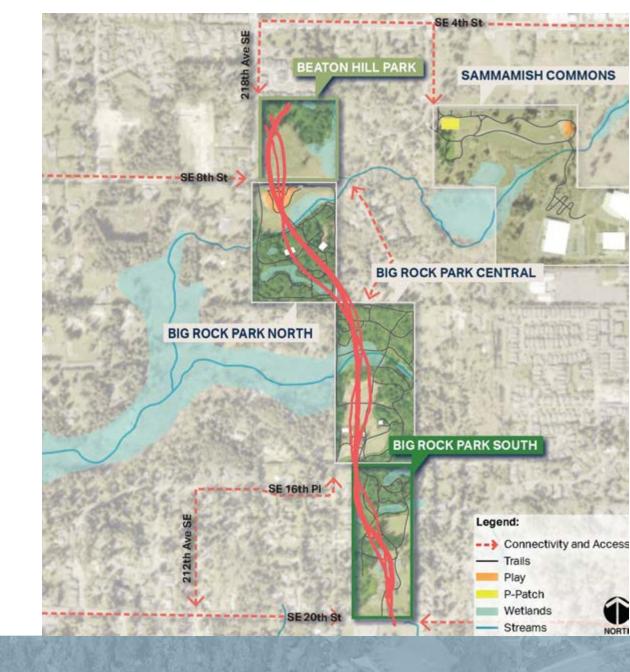
- 1. Barn events & meetings
- 2. Restroom new structure
- 3. New Garage park maintenance
- 4. Residence events & meetings
- 5. Pool House events & meetings



Concept Alternative 2 Whimsy & Discovery

Concept Alternative 2 Whimsy & Discovery

- Elements whimsy & discover woven throughout
 Beaton Hill Park & Big Rock Park system
 - Play nodes, art, natural elements
- Trails act as connecting thread between elements in the parks
- Educational elements throughout trails focusing on ecological & natural features



Beaton Hill Park

Whimsy & Discovery

- Universal play area
- Whimsical elements along trails (play, art, etc.)
- Amphitheater
- Pickleball courts (2)
- Picnic shelters & gathering areas
- Wetland enhancements
- 3 parking areas



BRP South

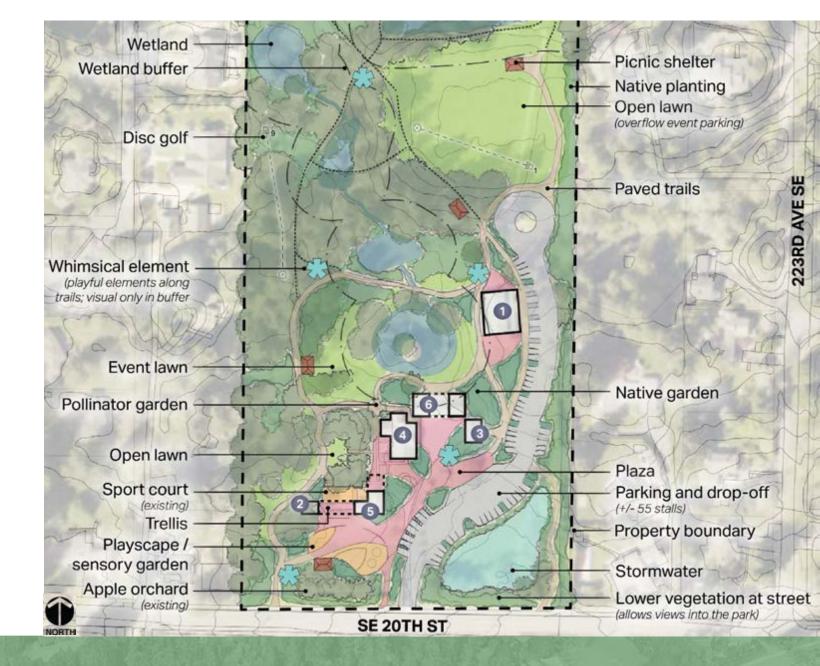
Whimsy & Discovery

- Expanded trail network
- Native, pollinator & sensory gardens
- Whimsical elements along trails (play, art, etc.)
- Disc golf course
- Existing sports court repurposed
- All structures remain/repurposed
- Open lawn for variety of activities
- Wetland enhancements



BRP SouthWhimsy & Discovery

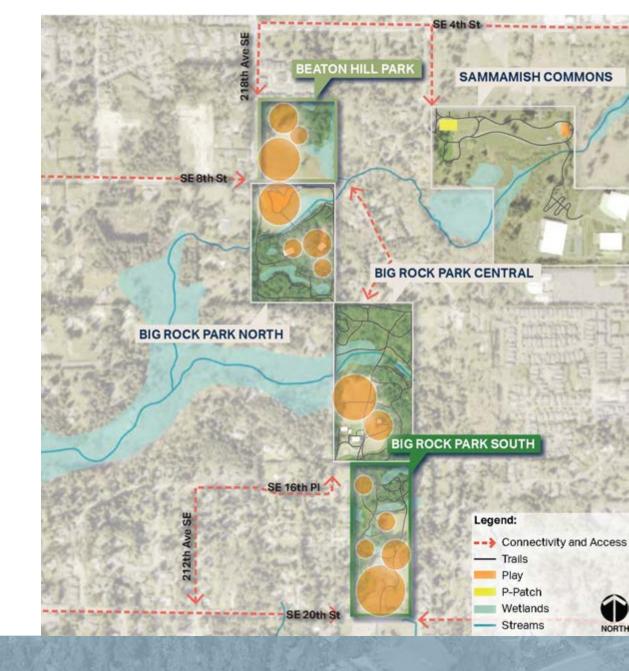
- 1. Barn events & meetings
- 2. Restroom new structure
- 3. New Garage park maintenance
- 4. Residence events & meetings
- 5. Pool House events & meetings
- 6. Old Garage picnic shelter



Concept Alternative 3 Playful Space for Everyone

Concept Alternative 3Playful Space for Everyone

- Variety of play added to each park through different programming
 - Play for all ages, even our four-legged friends
- Educational elements throughout trails focusing on habitat features, wildlife viewing, local history, cultural interests



Beaton Hill Park

Playful Space for Everyone

- Off-leash dog area
- Pickleball courts (4)
- Open lawn
- Play nodes along trails
- Picnic shelters & gathering areas
- Wetland enhancements
- 2 parking areas



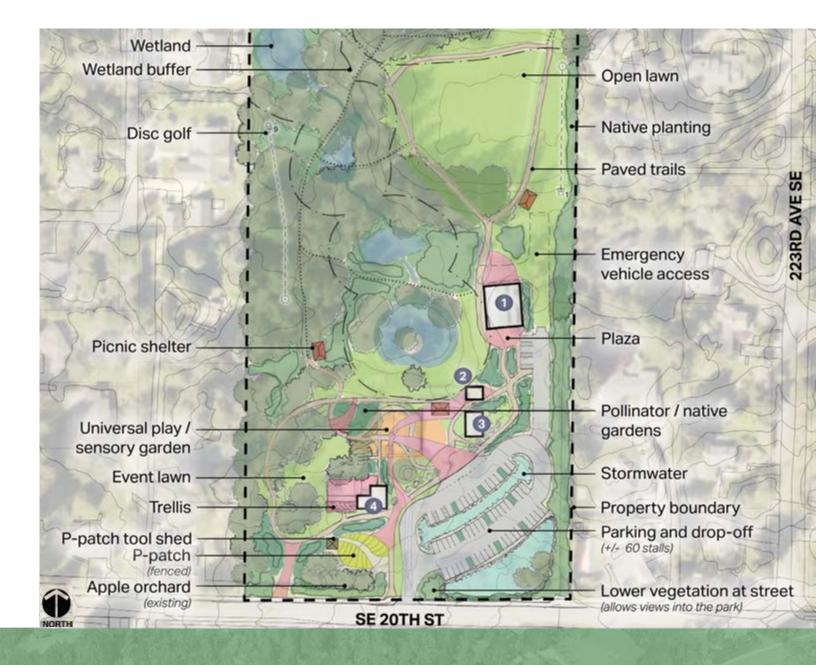
BRP SouthPlayful Space for Everyone

- Expansive universal play area
- Expanded trail network
- Native, pollinator & sensory gardens
- Disc golf course
- P-patch
- Residence and old garage removed
- Picnic shelters & gathering areas
- Open lawn for variety of activities
- Wetland enhancements



BRP SouthPlayful Space for Everyone

- 1. Barn events & meetings
- 2. Restroom new structure
- 3. New Garage park maintenance
- 4. Pool House events & meetings





Discussion

Input on Programming and Concept Alternatives

- Beaton Hill Park
- Big Rock Park (BRP) South



Next Steps

Park Program (Design Alternatives)

- Online Community Survey (July 27 August 15)
- Public Workshop @ Farmers Market (July 27)
- Concert in the Park Booth (July 28)
- Joint City Council & PRC Meeting (September 13)

Master Plan Development (Preferred Plans)

- Online Community Survey (Nov/Dec)
- Public Workshop (Nov/Dec)
- Parks & Recreation Commission Meeting (Nov/Dec)
- City Council Meeting (January 2023)





Thank You!



801 228th Avenue SE ■ Sammamish, WA 98075 ■ phone: 425-295-0500 ■ fax: 425-295-0600 ■ web: www.sammamish.us

Beaton Hill Park & Big Rock Park South Master Plan

Parks & Recreation Commission Meeting Minutes Meeting #2 Concept Alternatives Wednesday, July 20, 2022

Concept 1 – Gradient of Activities

Beaton Hill Park

Liked Most

- Something for everyone
- Nice size P-Patch x3
- Less parking, less is more x2
 - Parking on SE 8th St
- Appears to have smaller financial impact

Liked Least

- Boardwalk through critical areas
- Turn-around in BRP North
- No dog park x2

Big Rock Park South

Liked Most

- Old garage removed x2
- Less parking
- Residence repurposed

Liked Least

- Disc golf x3
- No p-patch x2
- Residence repurposed x2

Concept Comments/Questions

- Where would a greenhouse be located?
- Beaton Hill Park feels more suitable for an off-leash dog area, whereas BRP South is more suited for a P-patch



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Concept 2 – Whimsy and Discovery

Beaton Hill Park

Liked Most

- Amphitheater x3
- Pickleball courts x2
- Additional parking

Liked Least

- No p-patch x2 (could be located on south portion of open lawn)
- Amphitheater
- Missing access in southern portion of site x2 (no boardwalks)
- Restroom location
- # of pickleball courts (would like 4 courts to allow for leagues)

Big Rock Park South

Liked Most

- Opening old garage to look out on to site
- Parking
 - o Driving lane is narrower
 - O Size makes sense with uses, particularly if P-Patch added to open lawn in center of site

Liked Least

- Disc golf
- Parking design and size
- Residence use will be challenging
- Barn used for meeting space

Concept Comments/Questions

- What can be done to mitigate parking at Beaton Hill Park and BRP North?



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Concept 3 – Playful Space for Everyone

Beaton Hill Park

Liked Most

- Parking doesn't negatively impact space based on site program
- Voted favorite option of 3 concepts x4

Liked Least

- No p-patch x2
- Parking (takes space where p-patch could be located)
- Missing access in southern portion of site (no boardwalks)
- Restroom location

Big Rock Park South

Liked Most

- Restroom location
- Old garage and residence removal
- Voted favorite option of 3 concepts x2

Liked Least

- No space for outdoor meetings (need larger footprint picnic shelters)

Concept Comments/Questions

- Beaton Hill Park: Parking
 - Like having off-street parking and keeping within park limits. Would like to build only what is needed.
- BRP South: Informal vote for support of residence removal
 - o 6 Yay
 - o 1 Nay

Agenda Bill

City Council Joint Meeting September 13, 2022



| SUBJECT: | Beaton Hill Park & Big Programming and Con | Rock Park South Master Plan Discussion - ncept Alternatives |
|--|---|--|
| DATE SUBMITTED: | September 01, 2022 | |
| DEPARTMENT: | Parks, Recreation & Fa | acilities |
| NEEDED FROM COUNC | CIL: □ Action ☑ Directi | ion 🗆 Informational |
| RECOMMENDATION: | Review and provide in for the master plan de | put on programming and concept alternatives evelopment. |
| EXHIBITS: | 1. Exhibit 1 - PowerPo | int Presentation |
| BUDGET: | | |
| Total dollar amount | \$275,000 | Approved in budget |
| Fund(s) | Parks Capital Improvement Fund | d □ Budget reallocation required □ No budgetary impact |
| WORK PLAN FOCUS AREAS: | | |
| ☐ ☐ Transport | ation | □ ⊘ Community Safety |
| ☑ **** Communication & Engagement | | □ 🏠 Community Livability |
| ☐ High Performing Government | | Culture & Recreation |
| Environme | ental Health & Protection | ☐ ⑤ Financial Sustainability |

NEEDED FROM COUNCIL:

Beaton Hill Park & Big Rock Park South Master Plan Discussion - Programming and Concept Alternatives

KEY FACTS AND INFORMATION SUMMARY:

The purpose of this discussion is to review and provide input on park programming and concept alternatives for the master plan development of Beaton Hill Park and Big Rock Park South.

Summary

Beaton Hill Park and Big Rock Park South are centrally located within the City's core. The City acquired Beaton Hill Park in fall 2018. Since then, the only work done at this site has been the demolition of the family residence and accessory structures. Beaton Hill Park is located directly north of the three Big Rock Park properties (North, Central, and South) and is currently closed to the public. Big Rock Park South (Site C) was transferred to the City in November 2021 and is the final property of a phased land donation agreement.

Prior to commencing extensive development or improvement on City parkland, a master plan is completed by following the City adopted master plan process. The intent in following this process is to look at the parkland in a comprehensive manner, utilizing a process that involves the entire community. A goal of the consolidated master planning process for Beaton Hill Park and Big Rock Park South is to prepare plans that integrate with Big Rock Park North and Central for the purpose of providing a cohesive group of parks within the City's core.

The first set of meetings were held in April 2022 with the City Council, Parks & Recreation Commission, and the community, to solicit input on hopes, dreams, and concerns related to the master plans. One survey was prepared for the public as part of this first phase. Please note that the survey was not statistically valid. The vision and programming survey for the public had 184 participants.

A total of six concept alternatives have been prepared, three concepts for each park. Park planning staff will present a summary of the first and second round of community outreach, project goals, and discuss programming and concept alternatives in further detail at the September 13, 2022 City Council Joint Meeting with the Parks & Recreation Commission. At that time, City Council and the Parks & Recreation Commission will be asked to provide input on programming and concept alternatives for the master plan development. This information will be used, in conjunction with input received from City staff and the public, to assist with the development of a preferred master plan alternative for each park.

Master Plan Process:

A twelve to eighteen-month effort is anticipated for the master plan process which will include public involvement, with participation from the community at large, City staff, Parks & Recreation Commission, City Council, and community stakeholders. The intent of a consolidated approach for the master plans is to undergo a collective kick-off and public engagement effort to facilitate community introductions and discussions, as well as a collective department and city review. That said, individual master plan reports will be prepared for each park. The master plan process will consist of three phases as described below:

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The first public meeting will be held to present site analysis and provide the community an opportunity to share their hopes, dreams and concerns for the park. Following the first public meeting, a community survey will be published. Based upon the results of site analysis, community survey, City staff input, technical input and initial public input, a preliminary park design program will be developed that details proposed uses, design character and criteria.

Phase 3 Master Plan Development

Two to three Master Plan alternatives will be prepared for each park, based upon the approved design program. This will include a narrative that summarizes the existing conditions, design alternatives, cost implications and regulatory criteria, and identifies issues which will require further study at the next stage of project development.

Based upon feedback from the community, Parks & Recreation Commission, and City Council, the alternatives will be revised in to one preferred Master Plan alternative with a cost estimate. The final deliverable will be a Master Plan Report for each park, with final project drawings and narrative, project process, project phasing scenarios, and phase costs.

Timeline:

- Parks & Recreation Commission Meeting #1: April 6, 2022 (Complete)
- City Council Meeting #1: April 19, 2022 (Complete)
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Next Steps

A preferred master plan alternative will be developed for each park over the fall, based on feedback received from the community, Parks & Recreation Commission, and City Council.

FINANCIAL IMPACT:

N/A

OTHER ALTERNATIVES CONSIDERED:

N/A

RELATED CITY GOALS, POLICIES, AND MASTER PLANS:

2018 Parks, Recreation and Open Space (PRO) Plan



Purpose (What We Need From You)

Input on Programming and Concept Alternatives

- Beaton Hill Park
- Big Rock Park (BRP) South

Overview: What We Will Be Discussing

- 1. Introduction
- 2. Existing Conditions
- 3. Outreach Summary #1
- 4. Project Goals
- 5. Programming & Concept Alternatives
- 6. Outreach Summary #2
- 7. Discussion
- 8. Next Steps

Introduction

Introduction Context Map

Beaton Hill Park

Sammamish Commons BRP North

Ebright Creek Park

BRP Central

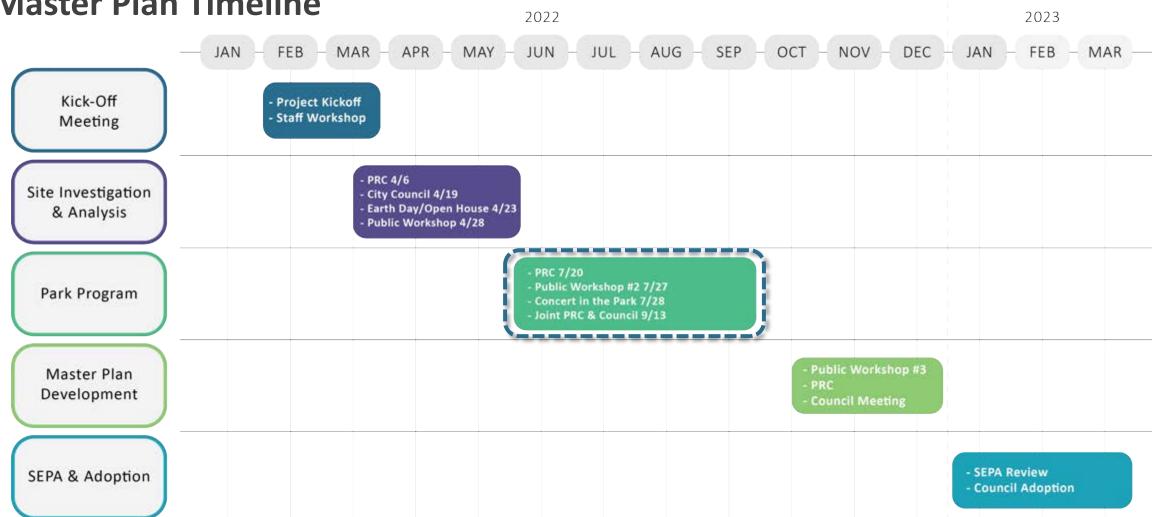
BRP South

Pine Lake Park



Introduction

Master Plan Timeline



Existing Conditions

Beaton Hill Park Site Character









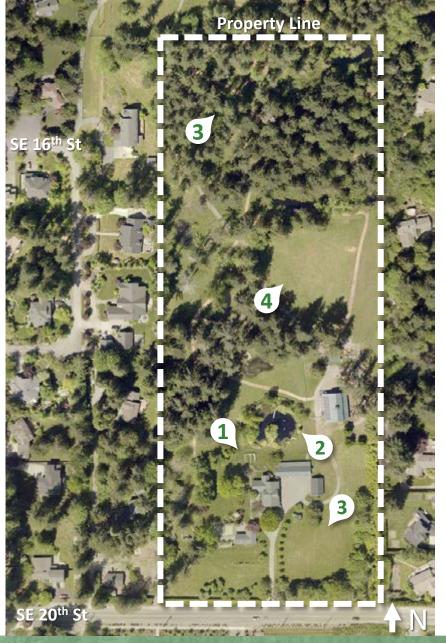




BRP SouthSite Character













BRP SouthSite Structures













Outreach Summary #1 Hopes, Dreams & Concerns

Outreach Summary

Earth Day, Open House & Virtual Workshop

- Earth Day Event & Open House April 23, 2022
- Virtual Public Workshop April 28, 2022

Hopes & Dreams

- Gardens (native, pollinator, edibles)
- Play (playgrounds, natural play, outdoor exercise)
- Outdoor education & signage
- Trails & connections to other parks/neighborhoods
- Gathering space (senior, youth, event)
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Virtual Workshop Live Poll

disc golf

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botanical gardena

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zip lines climbing walls remtal for small gatherin

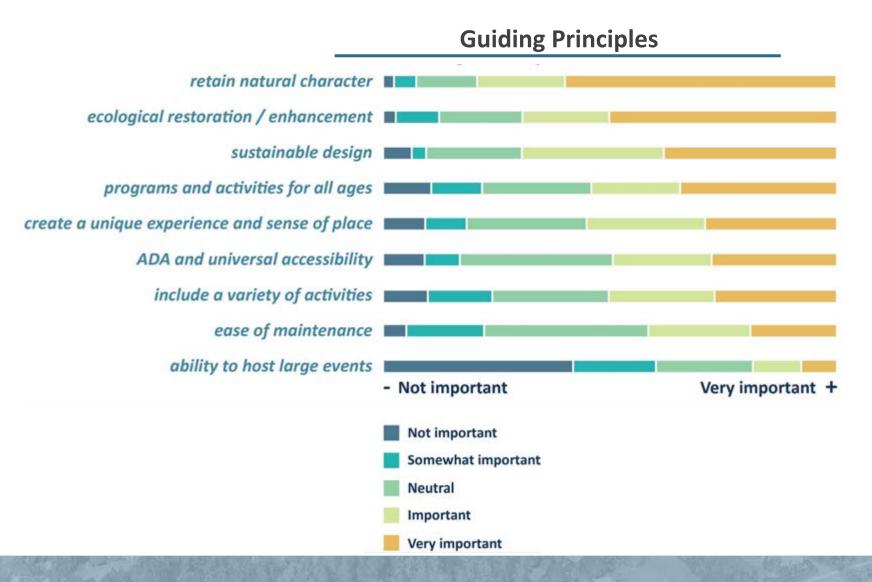
Outreach Summary

Community Survey #1

184

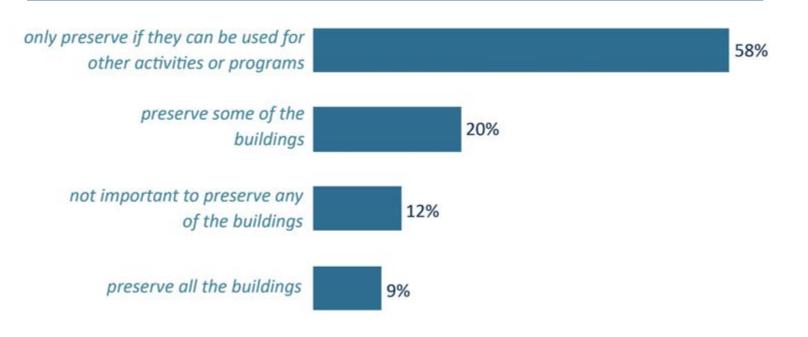
Survey Participants

20% live within ½ mile of the parks
68% live in Sammamish



Outreach Summary Community Survey #1 – Building Preservation

Should we preserve the existing buildings at BRP South?







If only some are preserved, the **BARN** and **POOL HOUSE** ranked as highest priority for preservation

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The **Beaton Hill Park** and **Big Rock Park** system serves as an oasis of nature in the city. The master plans for each park should:

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Programming Alternatives

Programming Alternatives – Play

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Features for all ages and abilities – often combination of plazas, play, nature & art elements





Hillside Play

Play integrated into hillside terrain – natural & traditional elements





Programming Alternatives – Play

Whimsical Play

Play that creates sense of place, natural wonder & unique experience – natural or traditional features





Play Nodes

Explorative play for all age groups along trails – natural, sculptural or traditional features





Programming Alternatives – Site

Picnic Shelters





Amphitheater





Open Lawn





Programming Alternatives – Site

Disc Golf





Pickleball Courts





Off-leash Dog Area





Programming Alternatives – Site

Native Gardens





Sensory Gardens





Pollinator Gardens





P-Patch





Programming Alternatives – BRPS Buildings

Pool House





Barn – Events





Barn – Recreation





Programming Alternatives – BRPS Buildings

Residence – Main Floor

Small comm. gatherings, meetings, classes & events





Old Garage

Re-use / re-build for use as picnic shelter





Concept Alternative 1 Gradient of Activities

Concept Alternative 1 Gradient of Activities

Beaton Hill Park

- More active with flexible open lawn & hillside play
- Provides passive activities through natural trails
 & picnicking
- Educational elements throughout trails focusing on ecological features, park history

Big Rock Park South

- Passive engagement with nature
- Garden walks, nature trails & picnicking
- Educational elements throughout trails focusing on ecological features, park history



Beaton Hill Park

Gradient of Activities

- Flexible open lawn
- Hillside play
- P-Patch
- Picnic shelters & gathering areas
- Natural drainage approach to stormwater
- Wetland enhancements
- 2 parking areas



BRP SouthGradient of Activities

- Expanded trail network
- Native, pollinator & sensory gardens
- Playscapes along trail system
- Disc golf course
- Old garage removed
- Picnic shelters & gathering areas
- Open lawn for variety of activities
- Wetland enhancements



BRP SouthGradient of Activities

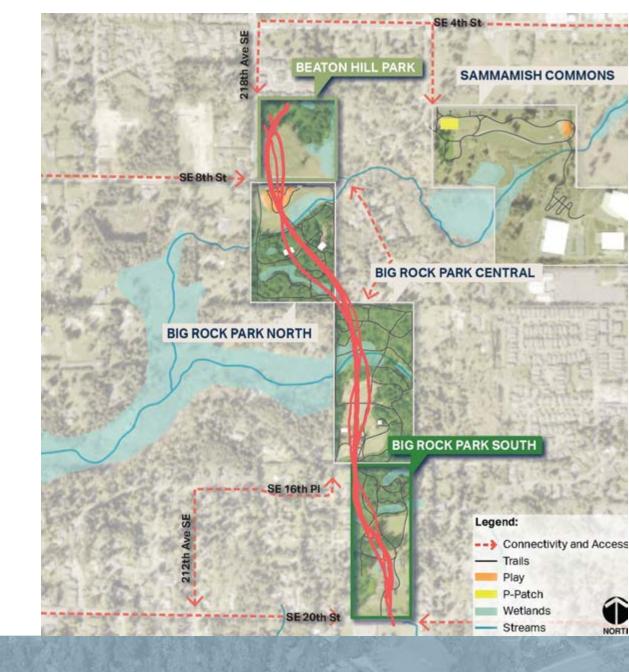
- 1. Barn events & meetings
- 2. Restroom new structure
- 3. New Garage park maintenance
- 4. Residence events & meetings
- 5. Pool House events & meetings



Concept Alternative 2 Whimsy & Discovery

Concept Alternative 2Whimsy & Discovery

- Elements whimsy & discover woven throughout
 Beaton Hill Park & Big Rock Park system
 - Play nodes, art, natural elements
- Trails act as connecting thread between elements in the parks
- Educational elements throughout trails focusing on ecological & natural features



Beaton Hill Park

Whimsy & Discovery

- Universal play area
- Whimsical elements along trails (play, art, etc.)
- Amphitheater
- Pickleball courts (2)
- Picnic shelters & gathering areas
- Wetland enhancements
- 3 parking areas



BRP South

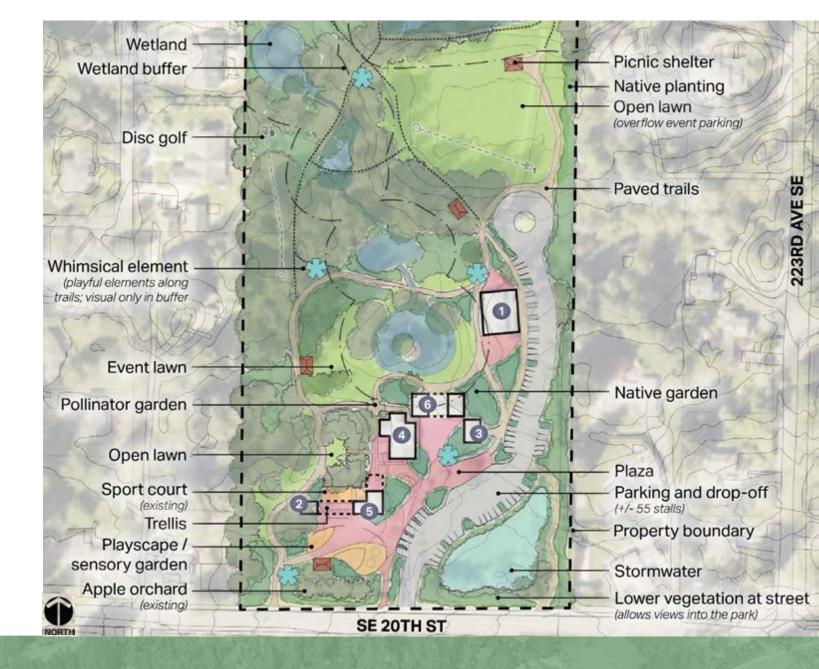
Whimsy & Discovery

- Expanded trail network
- Native, pollinator & sensory gardens
- Whimsical elements along trails (play, art, etc.)
- Disc golf course
- Existing sports court repurposed
- All structures remain/repurposed
- Open lawn for variety of activities
- Wetland enhancements



BRP SouthWhimsy & Discovery

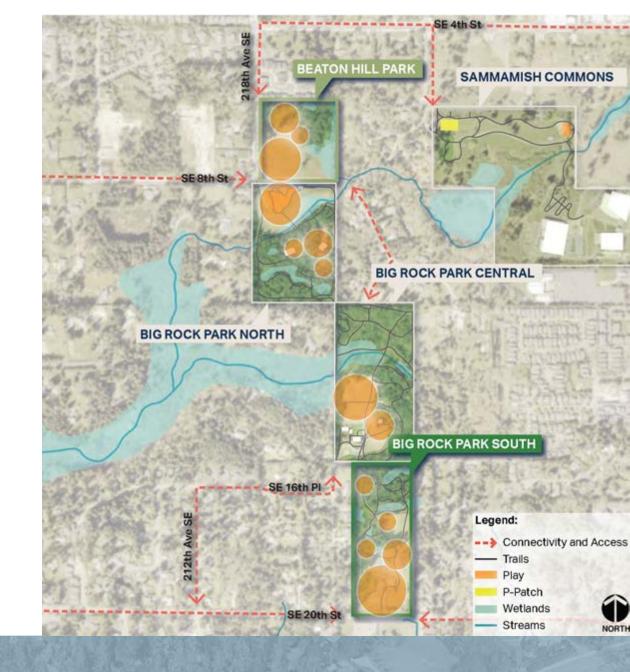
- 1. Barn events & meetings
- 2. Restroom new structure
- 3. New Garage park maintenance
- 4. Residence events & meetings
- 5. Pool House events & meetings
- 6. Old Garage picnic shelter



Concept Alternative 3 Playful Space for Everyone

Concept Alternative 3Playful Space for Everyone

- Variety of play added to each park through different programming
 - Play for all ages, even our four-legged friends
- Educational elements throughout trails focusing on habitat features, wildlife viewing, local history, cultural interests



Beaton Hill Park

Playful Space for Everyone

- Off-leash dog area
- Pickleball courts (4)
- Open lawn
- Play nodes along trails
- Picnic shelters & gathering areas
- Wetland enhancements
- 2 parking areas



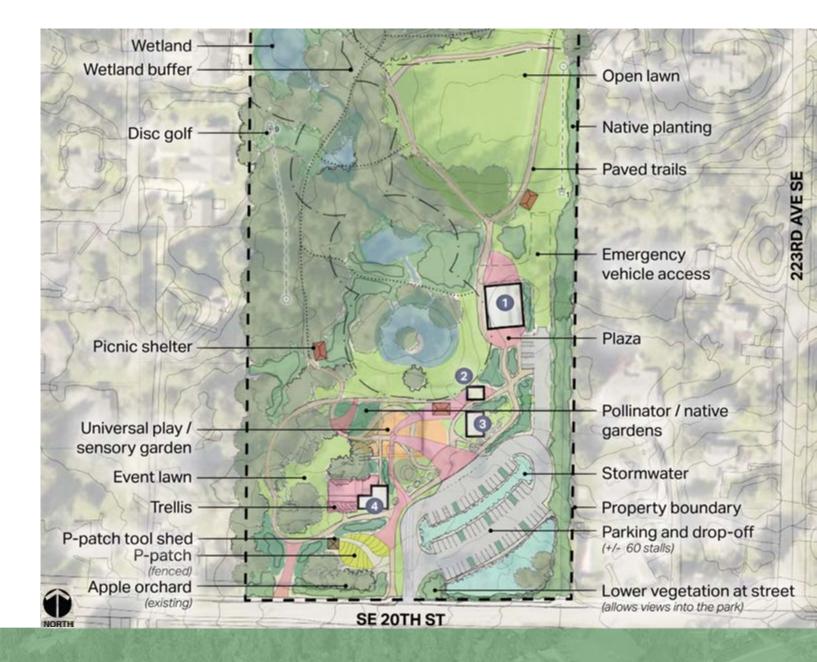
BRP SouthPlayful Space for Everyone

- Expansive universal play area
- Expanded trail network
- Native, pollinator & sensory gardens
- Disc golf course
- P-patch
- Residence and old garage removed
- Picnic shelters & gathering areas
- Open lawn for variety of activities
- Wetland enhancements



BRP SouthPlayful Space for Everyone

- 1. Barn events & meetings
- 2. Restroom new structure
- 3. New Garage park maintenance
- 4. Pool House events & meetings



Outreach Summary #2 Programming & Concept Alternatives

Outreach Summary

Public Workshop #2

- Farmer's Market July 27, 2022
- Concert in the Park July 28, 2022

Overall Summary

- Nature trails, trail connections, preservation & open space heavily supported.
- P-patch heavily supported at both parks slight preference for BHP.
- Plazas & gathering space supported additional support for covered gathering spaces.
- Play heavily supported at both parks strong interest in universal & hillside play opportunities.





Outreach Summary

Public Workshop #2 – Written Comments

| Program Element | # Comments Support | # Comments Opposed | |
|-----------------------------|--------------------|--------------------|--|
| Dog Park | 28 | 6 | |
| Amphitheater | 17 | 0 | |
| Play Areas | 13 | 0 | |
| Trails | 11 | 0 | |
| Gardens (pollinator/native) | 10 | 4 | |
| P-Patch | 9 | 0 | |
| Pickleball (2 or 4 courts) | 8 | 0 | |
| Disc Golf | 6 | 5 | |
| Gathering Areas | 6 | 0 | |
| Traffic/Parking Concerns | 6 | 0 | |
| Art/Maker Space/Sculpture | 5 | 0 | |
| Outdoor Fitness | 5 | 0 | |
| Covered Space | 4 | 0 | |

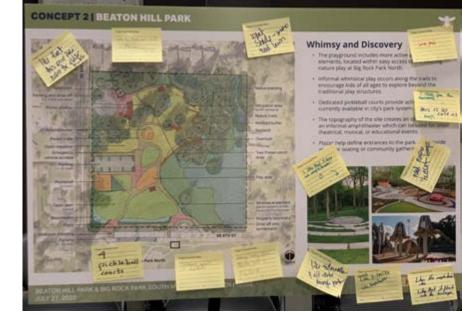


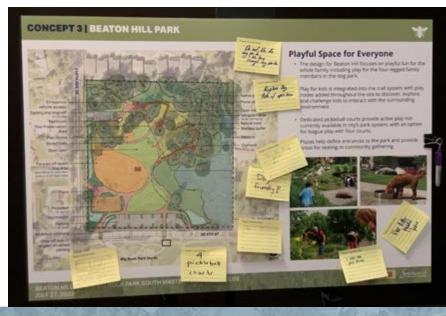


Outreach Summary Public Workshop #2

Beaton Hill Park – Site Specific Feedback

- Pickleball courts supported additional support for 4 courts.
- Photos of hillside play were supported.
- Off-leash dog area both supported & opposed concerns with noise from dogs; some support for open lawn instead.
- General support of wetland boardwalk concern about impact.
- Hillside amphitheater heavily supported concern with additional traffic from events.
- Parking on-site generally supported; no strong support for removing on-street parking or location preference.
- Concerns with safe pedestrian crossing on SE 8th St.

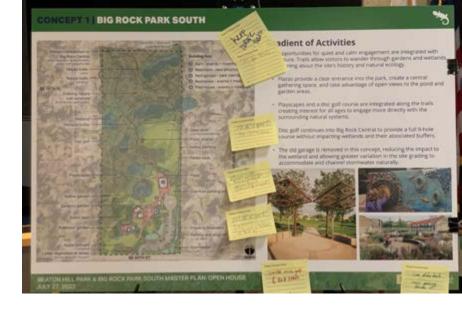




Outreach Summary Public Workshop #2

BRP South – Site Specific Feedback

- Universal play heavily supported, noted for all play areas.
- Support for removing the old garage & replacing with pavilion for picnic or other use.
- General support of sensory, native & pollinator gardens.
- Support for on-site parking with concerns about traffic & parking during events.
- Disc golf both supported & opposed concerns with trail user conflicts & native plant disturbance.





Outreach Summary Community Survey #2

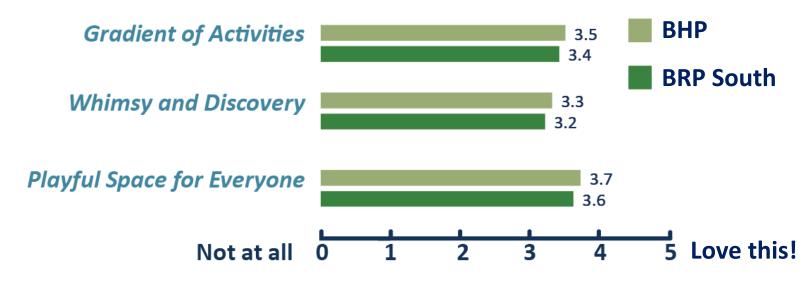
392

Survey Participants

38% live within ½ mile of the parks
53% live in Sammamish

Concept Preferences

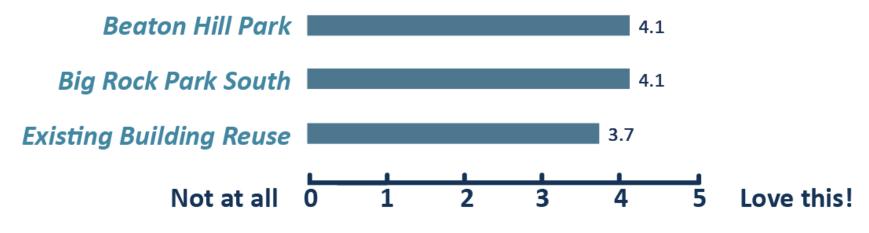
How well do the concept alternatives represent your hopes and dreams for proposed improvements?



Outreach Summary Community Survey #2

Program Examples

How well do the program examples represent your hopes and dreams for proposed improvements?







Outreach Summary

Community Survey #2 – Written Comments

| Program Element | # Comments Support | # Comments Opposed |
|-----------------------------|--------------------|-----------------------|
| Play Areas | 71 | 16 |
| Trails | 60 | 0 |
| Pickleball | 58 | 9 |
| Dog Park | 57 | 21 |
| Natural Areas | 45 | 0 |
| Gardens (pollinator/native) | 35 | 1 |
| Calm/Passive | 31 | 3 |
| Disc Golf | 31 | 24 |
| Whimsical Elements | 29 | 20 |
| Amphitheater | 23 | 6 |
| P-patch | 22 | 2 |

| Program Element | # Comments Support | # Comments Opposed |
|----------------------------------|--------------------|-----------------------|
| Active Recreation | 16 | 2 |
| All Ages & Abilities | 15 | 1 |
| Picnic Areas/Shelters | 12 | 0 |
| Open Play Field | 10 | 2 |
| Educational Elements | 7 | 0 |
| Budget & Maintenance | 7 | 0 |
| Keep Buildings | 6 | 0 |
| Keep Residence | 5 | 3 |
| Buildings for Events/Maintenance | 5 | 2 |
| Plaza/Gathering Areas | 4 | 7 |
| Keep Old Garage | 2 | 7 |



Discussion

Input on Programming and Concept Alternatives

- Beaton Hill Park
- Big Rock Park (BRP) South

Discussion

Generally Supported:

- Trails / Open space
- Passive / Natural areas
- Dog park
- Amphitheater
- Play areas at both parks (universal and hillside)
- P-patch
- Gardens
- Picnic areas
- Barn, pool house & new garage re-use

Needs Direction:

- P-patch location
- Disc golf
- Whimsical elements
- Dog park vs Open lawn
- Wetland boardwalk
- Preferred parking location(s)
- Residence re-use



Next Steps

Master Plan Development (Preferred Plans)

- Public Workshop (Nov/Dec)
- Online Community Survey (Nov/Dec)
- Parks & Recreation Commission Meeting (Nov/Dec)
- City Council Meeting (January 2023)









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Beaton Hill Park & Big Rock Park South Master Plan

City Council Joint Meeting with Parks & Recreation Commission Meeting #2 Concept Alternatives Tuesday, September 13, 2022

Overall:

- 'Whimsy & Discovery for Everyone' (concepts 2 and 3) received a lot of support
- Lots of support for the P-patches
 - Slightly more for Beaton hill, but consider both locations
- Focus on nature exploration and education.
- Universal play, ADA accessible play features are highly desired.

Beaton Hill Summary:

- Whimsy & Discovery preferred, but still want to preserve natural character of the site and provide educational opportunities
- More against than for the boardwalk, but not totally against
 - Concerns related to cost implications
- Ensure there is still a natural feel
- Support for pickleball, but not a strong preference between 2 or 4 courts
 - Would be okay with larger footprint if space doesn't become crowded with other programming and if there is sufficient parking for 4 courts
- Support for play areas
 - universal play greatest priority
 - hillside play
 - whimsical play
- Prefer on-site parking
 - Concerns about parking on the North end of the site and visibility on 218th
 - Concerns about street parking on 8th and agreed it needs to change. Not totally opposed to on-street if done in a safer way
- Back and forth on the Amphitheater, but more votes against
 - o Prioritize Town Center location instead
 - Concerned about parking needs for an amphitheater.
- Provide more gathering spaces, consider gathering spaces that can be built into hillside (using amphitheater as inspiration)
- More for the dog park than against
 - Consider how much space can be given and if there is a small dog/big dog area

Big Rock Park South Summary:

• Liked Whimsy & Discovery/Playful Space for Everyone concepts

Parks, Recreation & Facilities



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- Consider using aspects of the chicken coup or other artful existing elements.
- Support for universal play
- Support for p-patch
- Disc golf not supported
- Parking layout extending into the site (concept 2) for accessibility and maximizing parking is preferred
- Mixed feelings about keeping the residence (50/50 split)
 - City needs meeting space and the building has a fun history and character
 - Concerned about basement flooding
 - Cost to renovate and maintain will likely be the deciding factor
 - Explore preserving the patio or reusing materials on site
- Support for preserving the barn, pool house, and newer garage and using first two for community meeting spaces and events
- Consider educational elements for the solar panels
- Pollinator, sensory, and native gardens supported

Beaton Hill Individual Comments:

- Whimsy & discovery x6
 - Keeps character of natural feeling of site (amphitheater)
 - Address concerns for maintenance
- Preservation, conservation of wildlife area with educational opportunities restore to more natural environment x4
- Gradient of activities
- No sport courts/pickleball courts
- Universal play x4
- Hillside play x2
- P-patch (best served on BHP, though more fitting with setting on BRPS) x6
 - P-patch layout on whimsy plan
 - Would like more community interaction with p-patch, not closed off
- Pick option with most parking, like on-street to serve both sites
- Parking contained onsite x6
 - On-street not completely precluded so long as it can be done in a safer way
- Parking in 2 areas x2
- · Parking in 1 area
- Concerns with sightlines
- Need to provide other modes of connections to park for people to walk or bike x2
- Dog park x6
 - If we don't have them, people may leave their dogs off-leash to run through the park
- No dog park/dog park concerns x2
 - Concerns with degradation of wetland

Parks, Recreation & Facilities



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- Nice to have covered areas by playgrounds
- No boardwalk in wetland
- Pickleball courts x3
 - No real pull for 2 vs 4. Would be okay with 4 if the space does not get too crowded and provided there is sufficient parking to support the additional courts.
 - 2 pickleball courts x1
 - 4 may feel like too much with all the other amenities
 - 4 pickleball courts (opportunities for competitions) x1
- Multi-sensory space and activities for all ages and abilities
- Amphitheater x3
- No amphitheater (better fit next to Town Center) x4
- More gathering spaces x2
 - Make seating/spaces built into hillside (better photos for preferred plan)
- Like whimsical elements, each park should have unique character
 - Arts Commission long-term plan, could oversee this in parks

Big Rock Park South Individual Comments:

- · Retain natural character of the site
- Do we have to have disc golf?
- No disc golf x6
 - Encourage people to get out, less maintenance with outdoor fitness
 - o concerns of overlap but could also be unique amenity for city to offer
 - Feels too cramped
- Consider working with SBGS/groups in the gardens
- Meeting spaces
- Structures
 - Keep pool house, barn, new garage x7
 - Concerns with keeping buildings, residence specifically and costs to renovate and maintain x2
 - Remove residence x5
 - Can portions of the house/materials be repurposed?
 - Keep residence x5
 - if the renovation costs aren't too much; there is significant demand for meeting space x2
 - provides unique character, residence grounds park
 - could residence be used for caretaker?
 - If basement is filled, will this solve flooding issue?
 - Repurpose older garage
 - Preserve chicken coup, essence of whimsy & discovery
 - Need meeting space in most cost-effective manner





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- Gardens x3
 - o Pollinator, sensory, native and provide ID
- Prioritize trail connections and maintain as many trails as possible
- Whimsy & Discovery x4
- Playful space for everyone, with elements of whimsy & discovery x2
- Open to any parking options
- Universal play x2
- P-patch x2
- Would like greenhouse with p-patch
- Consider p-patch at both sites
- Sustainability demonstrations
- Parking
 - Pick layout with largest number of stalls
 - o Concept 3 smaller footprint, consolidated
 - Concept 2 feels more accessible to park x4
- Long-term maintenance

Agenda Bill

Parks and Recreation Commission Regular Meeting

February 01, 2023



| SUBJE | СТ: | Beaton Hill Park & Big Preferred Master Plan | Beaton Hill Park & Big Rock Park South Master Plan Discussion - Preferred Master Plan | | |
|------------|--------------------|---|--|--|--|
| DATE S | SUBMITTED: | January 26, 2023 | January 26, 2023 | | |
| DEPAR | RTMENT: | Parks, Recreation & Fa | Parks, Recreation & Facilities | | |
| | D FROM MISSION: | ☐ Action ☑ Directi | Pirection Informational | | |
| RECON | MMENDATION: | • | Review and provide input on the preferred master plans; discuss phasing priorities for potential park development. | | |
| EXHIBI | ITS: | | 1. Exhibit 1 - Beaton Hill Park and Big Rock Park South Preferred | | |
| | | <u>Master Plans</u> 2. Exhibit 2 - PowerPoi | int Presentation | | |
| BUDGE | ET. | Z. EXHIBIT Z - FOWEIFOR | int Presentation | | |
| | dollar amount | \$275,000 | ☑ Approved in budget | | |
| | | Parks Capital Improvement Fund | | | |
| , | -, | , | □ No budgetary impact | | |
| | | | _ | | |
| | | | | | |
| WORK | PLAN FOCUS A | REAS: | | | |
| WORK | Transport | | □ Community Safety | | |
| WORK □ ☑ | Transport | | □ Community Safety □ Community Livability | | |
| | Transport | tation | | | |

NEEDED FROM COMMISSION:

Beaton Hill Park & Big Rock Park South Master Plan Discussion - Preferred Master Plan

KEY FACTS AND INFORMATION SUMMARY:

The purpose of this discussion is to review and provide input on the preferred plans for Beaton Hill Park and Big Rock Park South, as well as discuss phasing priorities for potential park development.

Summary:

The public process for the Beaton Hill Park and Big Rock Park South Master Plan is nearly complete. The preferred master plan for each park was developed based on feedback received from the outreach process from community members, City staff, the Parks & Recreation Commission, and City Council.

The components of the preferred master plan for each park are summarized below. A representative from the consultant team, HBB, will present a summary of the second public workshop, online survey results, feedback received at the third public workshop, and discuss the preferred master plans and preliminary phasing sequences further detail at the February 1, 2023 Parks & Recreation Commission meeting.

The Big Rock Parks and Beaton Hill Park system serves as an oasis of nature in the city. Based on the feedback received from previous public engagement events, the goals the master plans of each park should:

- Continue to be the place of respite, contemplation, and exploration of the natural environment it is today, protected for future generations.
- Connect, educate, and inspire people of all ages and abilities to discover more about each other and our surroundings.
- Provide safe access to everyone of all abilities to the amazing places and experiences throughout the parks.
- Allow everyone the flexibility to be active or passive in how they choose to recreate, providing
 opportunities for both in a way that respects and fits into the context of the site.

Beaton Hill Park Preferred Master Plan:

The preferred master plan for Beaton Hill Park is designed to highlight the expansive view from the north end of the park and create a unique and accessible experience moving through the park. The proposed improvements include:

- Parking lots on site (44 stalls total)
- P-patch with seating and tool shed (40 plots)
- Pickleball (4 courts with lighting)
- Off-leash dog park (separate areas for small & large dogs)
- Accessible hillside play area
- Picnic shelters and tables
- Seating and gathering areas
- Wetland boardwalks and overlooks
- Interpretive signage to highlight the natural environment and/or history of the site

As part of the master planning process, parking within the right-of-way on SE 8th Street would be reconfigured to back-in angled parking to create safer traffic flow and allow the parking lot at Beaton Hill Park to serve as the natural turn-around for vehicles coming to and from the parks.

Trails

_With the significant topography of the site, accessible trails are limited to one main route through the park, connecting the lower parking lot off SE 8th Street and winding through the meadows to connect to the upper parking lot off 218th Ave SE and the existing sidewalk that continues to the north. Street frontage improvements are included in the master plan along 218th Ave SE and SE 8th Street through the limit of the park property.

A fully accessible hillside play area is integrated into the main trail, taking advantage of the slope to create slides, climbing areas and other features all connected by the accessible trails. Picnic and seating areas are also included along the trails throughout the park. A hillside overlook is incorporated in the preferred plan to provide expansive views over the park and to create additional seating and small group gathering areas.

Informal nature trails connect to the accessible trails and meander through the tree preservation area in the north and eastern portion of the park. This area is also the focus of the existing environmentally sensitive areas with wetlands and an existing stream corridor, which encompasses much of the open space on the eastern half of the site. These environmental features would be enhanced to function as a more formal stream corridor and reconnect to the improved wetlands and buffer areas to create an integrated and complete ecosystem on the site. Boardwalks and overlooks would provide pedestrian access while still protecting the new ecosystem and allow for education and interpretive signage related to the restoration efforts.

Big Rock Park South Preferred Master Plan:

The preferred master plan for Big Rock Park South is designed to reinforce the passive, natural environment of the existing property while allowing more flexible uses for all ages and abilities. Proposed improvements include:

- Parking lot (55 stalls total)
- Universal play areas (accessible and inclusive play elements)
- Picnic shelters and tables
- Seating and gathering areas
- Open meadow for flexible events, lawn games, etc.
- Optional space for 9-hole disc golf course (with 3 holes integrated into Big Rock Park Central)
- Garden areas to highlight botanical names and plant characteristics (pollinators, natives, etc.)
- Interpretive signage to highlight the natural environment, gardens, and/or history of the site.

The central pond nearest to the existing structures would remain largely as-is with gardens and open space around the south and east sides. Native planting would buffer the north and west sides of the pond. The remaining wetlands and their associated buffers would be restored to support the natural processes and habitat of these areas. Grading and overflow improvements are proposed for the central pond to help control flooding that currently occurs during major storm events.

<u>Trails</u>Trails that directly impact existing wetlands will be removed and restored to protect wetland functions and habitat. There is also one trail that would conflict with the proposed disc golf fairways that would be removed with the future development of a disc golf course. The remainder of the trails would be left in-place. One main trail, 10' wide, is proposed to connect Big Rock South to Big Rock Central. This is currently proposed as a crushed rock trail but could be paved to improve accessibility between the Big Rock Parks in the future. Paved accessible trails are included in the design to provide access to all major park features and create a series of interconnected loops, including a loop trail around the open meadow. Informal woodland trails, similar in scale to the existing trails, are proposed through the forested areas to integrate new park improvements into the existing trail system.

Structures

Adaptive re-use of the existing buildings is a major component of preferred master plan. The Barn, Residence, and Pool House are all proposed to remain with improvements to support community use. These buildings may be used for meetings, community organizations, and a variety of events. Please note that programming some of the below structures to their full capacity may require a partnership with nearby off-site parking to provide overflow parking.

The Barn in particular can host a variety of events with an approximate occupancy of up to 100 - 150 people. A new trellis on the south and a covered outdoor space on the north are proposed to allow larger outdoor gathering areas and the ability to expand events. The existing chicken coop would need to be

removed, but elements of the stained-glass windows integrated into the current chicken coop would be re-purposed as one of the whimsical elements in the universal play area.

The old garage is the only existing structure that is proposed to be removed. In its place, the plan includes a new large Central Picnic Pavilion that helps anchor the entry and frame the view to the pond beyond. The Pavilion is sized to support group picnic with up to 6 picnic tables, still allowing for clear access and views through the Pavilion. A small plaza is designed between the Pavilion and the pond to create an overlook area that can be used as informal gathering and/or interpretive signage around the wetlands or history of the site.

The Pool House improvements will create one small meeting room with an accessible restroom and separate storage / utility room. A new trellis or covered arbor is proposed to the west of the Pool House to create a larger outdoor gathering area and the ability to expand events or meetings beyond the interior capacity of 15 – 20 people. A secondary outdoor plaza space is also adjacent to the trellis and Pool House for maximum flexibility and use of this area of the park.

A structural analysis was conducted on the existing Residence to help determine the viability of keeping this structure for future use. At the present time, the analysis supports the feasibility of re-using this building and providing accessibility and seismic upgrades needed for the intended. The proposed improvements will allow for community meetings and smaller events with an anticipated capacity of 50 – 100 people. The second level of the Residence will not be accessible and used as a storage area only. Site improvements should help reduce the amount of flooding that currently occurs in the basement of the Residence, but some flooding during larger storm events may still occur.

The existing newer garage on the site will be improved to create a parks maintenance storage and shop area. A new restroom is proposed on the north end of the existing structure, designed to be integrated into the overall character of the park's existing buildings.

Master Plan Process:

A twelve to eighteen-month effort is anticipated for the master plan process which includes public involvement, with participation from the community at large, City staff, Parks & Recreation Commission, City Council, and community stakeholders. The intent of a consolidated approach for the master plans is to undergo a collective kick-off and public engagement effort to facilitate community introductions and discussions, as well as a collective department and city review. That said, individual master plan reports will be prepared for each park. The master plan process consists of three phases as described below:

<u>Phase 1 Site Investigation and Analysis (Complete)</u>

Evaluate existing site conditions, identify sensitive areas, complete site studies, and develop an overall understanding of the site. During this initial phase, a community survey will be prepared to assist with the development of initial park concepts.

Phase 2 Park Program (Complete)

The first public meeting will be held to present site analysis and provide the community an opportunity to share their hopes, dreams and concerns for the park. Following the first public meeting, a community survey will be published. Based upon the results of site analysis, community survey, City staff input, technical input and initial public input, a preliminary park design program will be developed that details proposed uses, design character and criteria.

Phase 3 Master Plan Development

Two to three Master Plan alternatives will be prepared for each park, based upon the approved design program. This will include a narrative that summarizes the existing conditions, design alternatives, cost implications and regulatory criteria, and identifies issues which will require further study at the next stage of project development.

Based upon feedback from the community, Parks & Recreation Commission, and City Council, the alternatives will be revised in to one preferred Master Plan alternative with a cost estimate. The final deliverable will be a Master Plan Report for each park, with final project drawings and narrative, project process, project phasing scenarios, and phase costs.

Timeline:

Hopes, Dreams, and Concerns

- Parks & Recreation Commission Meeting #1: April 6, 2022 (Complete)
- City Council Meeting #1: April 19, 2022 (Complete)
- Information Booth at Earth Day and Open House at BRP South: April 23, 2022 (Complete)
- Public Workshop #1: April 28, 2022 (Complete)

Master Plan Alternatives

- Public Workshop #2: July 27, 2022 (Complete)
- Information Booth at Pine Lake Park Summer Concert: July 28, 2022 (Complete)
- Joint City Council/Parks & Recreation Commission Meeting #2: September 13, 2022 (Complete)

Preferred Plan

- Information Booth at Lunar New Year Celebration: January 21, 2023 (Complete)
- Public Workshop #3: January 26, 2023 (Complete)
- Parks & Recreation Commission Meeting #3: February 1, 2023
- Joint City Council/Parks & Recreation Commission Meeting #3: March 14, 2023

Final Master Plan

- SEPA Review: Spring Summer 2023
- City Council Adoption of Master Plan: Summer 2023

Project Background

<u>Beaton Hill Park</u> is located approximately half a mile west of Sammamish City Hall in the heart of the City and just south of the future Town Center. The park is comprised of two parcels that were purchased by the City in fall 2018 in an effort to preserve open space in a rapidly densely developing area in the City; it is named for the family that owned the farmstead for over 80 years. The vacant land totals 9.36 acres and has mature trees, rolling topography, open meadows, three wetlands, and a seasonal stream. The City was awarded a King County Conservation Futures Grant as a reimbursement for approximately 4 acres of the site, which will be designated for permanent conservation.

<u>Big Rock Park South</u> is the third and final property of a 51-acre phased land donation agreement located in the center of the City. The first two parcels, Big Rock Park North and Central, opened to the public in 2016 and 2021. The property was transferred to the City in November 2021. Like the conditions placed on the previous two parcels, this park will facilitate a variety of low impact active and passive activities that may include nature trails, open space, and passive sports meadows. There are a few existing structures on this parcel. Restrictions were put in place to preclude development of new structures exceeding 2,500 square feet to support the development of the park in a manner that preserves the

site's natural beauty. The 15 acres that make up this property include dense forest cover, meandering trails that navigate relatively unvarying topography, sensitive areas, open meadows, a single-family home, detached garages, and a barn.

Next Steps

The project consultant team will present the preferred master plan, discuss phasing priorities of park development, and provide feedback received from the community at the March 14, 2023, City Council and Parks & Recreation Commission Joint Meeting. The preferred plan will then be refined in to the final master plan and City staff will begin the SEPA process.

FINANCIAL IMPACT:

Regarding the costs of the different phases of the preferred master plan, there is no financial impact at this time. Funds for implementing the master plan may be budgeted and improvements completed in phases from the Parks Capital Improvement Plan (CIP).

OTHER ALTERNATIVES CONSIDERED:

If there are considerable objections to components of the preferred plans, City staff and the consultant team may revise the preferred plans. A revised plan at each park would require an additional round of public meetings with the community, Parks & Recreation Commission, and City Council.

RELATED CITY GOALS, POLICIES, AND MASTER PLANS:

2018 Parks, Recreation and Open Space (PRO) Plan

Preferred Master Plan | BEATON HILL PARK





The preferred master plan for **Beaton Hill Park** is designed to highlight the expansive view from the north end of the park and create a unique and accessible experience moving through the park. In addition to trails, picnic areas and gathering areas, proposed park improvements include:

- Parking lots on site (44 stalls total)
- P-patch with seating and tool shed (40 plots)
- Pickleball (4 courts with lighting)
- Off-leash dog park (separate areas for small & large dogs)
- Accessible hillside play area
- Interpretive signage to highlight the natural environment and/or history of the site
- Wetland boardwalk and overlooks

Parking on SE 8th Street would be reconfigured to back-in angled parking to create safer traffic flow and allow the parking lot at Beaton Hill Park to serve as the natural turn-around for vehicles coming to and from the parks.

Preferred Master Plan | BEATON HILL PARK



Hillside Play

Integrates plays features into the hillside with a combination of natural and structured elements.







Whimsical Elements

Sculptural elements that provide a sense of discovery throughout the parks; may be along trails or set apart in the landscape.





Dog Park

Separate areas for large dogs and small (or shy) dogs. Drinking water, seating areas, accessible path and a covered picnic area are also included.



P-Patch

Enclosed garden plots and shared garden areas for the community to use, learn from and connect with each other.



Wetland Boardwalk

Provides connection and overlooks into the restored wetland with informational signage for education and discovery.



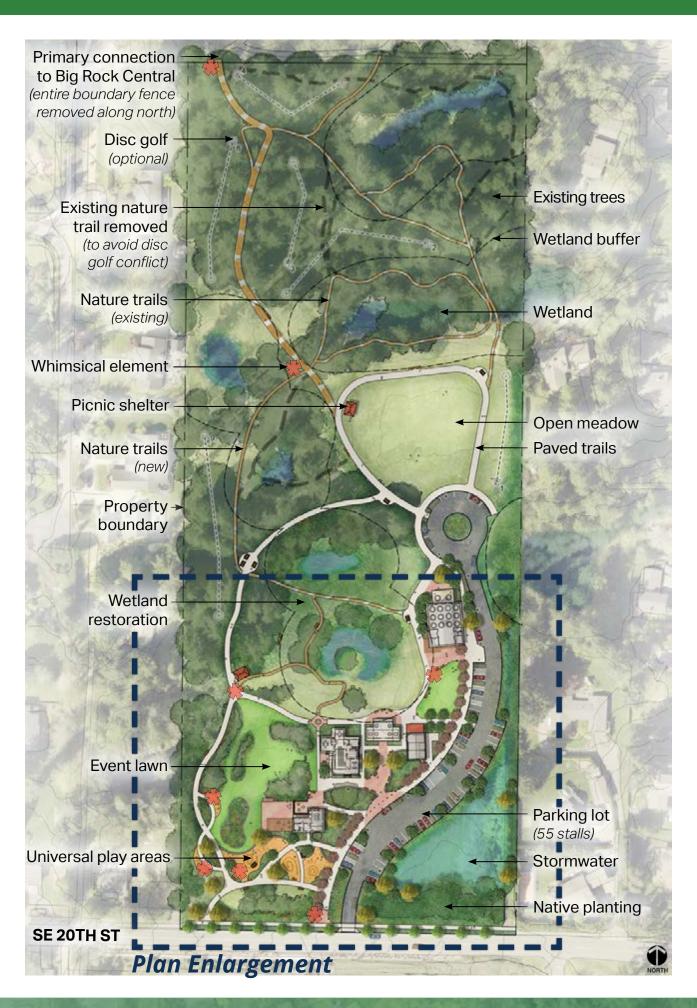
Pickleball

Four pickleball courts with lighting and benches on both sides for those who are resting or waiting for a court.



Preferred Master Plan | BIG ROCK PARK SOUTH







The preferred master plan for **Big Rock Park South** is designed to reinforce the passive, natural environment of the existing property while allowing more flexible uses for all ages and abilities. In addition to trails, picnic areas and gathering areas, proposed park improvements include:

- Parking lot (55 stalls)
- Universal play areas (accessible and inclusive play elements)
- Open meadow for flexible events, lawn games, etc.
- Optional space for a 9-hole disc golf course (with 3 holes integrated into Big Rock Park Central)
- Garden areas to highlight botanical names and plant characteristics (pollinators, natives, etc.)
- Adaptive re-use of existing buildings and unique site features (i.e. chicken coop as whimsical element)
- Central picnic pavilion (old garage removed)
- Interpretive signage to highlight the natural environment and/or history of the site



Preferred Master Plan | BIG ROCK PARK SOUTH



Universal Play

Includes a combination of natural elements, site furnishings and play features to appeal to all ages and abilities; often a combination of plazas, play, nature, and art elements.







Garden Areas

Engage all the senses through fragrance, movement, textures, and wildlife attractants. Could include sensory gardens, pollinators, native plants, education, etc.







Whimsical Elements

Sculptural elements that provide a sense of discovery throughout the parks; may be along trails or set apart in the landscape.





Disc Golf (optional)

9-hole course, developed with fairways away from trails to avoid user conflicts. Potential layout to be studied further prior to any improvements.



Picnic Pavilion

The old garage, currently in the wetland buffer, will be removed. A new picnic pavilion will overlook the central pond and be developed to allow for larger group gatherings and events.





Purpose (What We Need From You)

Input on preferred plan & phasing sequence

- Beaton Hill Park (BHP)
- Big Rock Park (BRP) South

Overview: What We Will Be Discussing

- 1. Introduction
- 2. Existing Conditions
- 3. Project Goals
- 4. Outreach Summary
- 5. Preferred Master Plan
- 6. Preliminary Phasing
- 7. Preliminary Cost Estimates
- 8. Discussion
- 9. Next Steps

Introduction

Introduction

What is a Master Plan?

- City adopted process that looks at park comprehensively and involves entire community
- Establishes design program that provides framework for addressing park improvements
- Report is end product of process

3 Primary Phases:

- 1. Site Investigation & Analysis
- Park Program*
- 3. Master Plan Development*



^{*} Includes engagement with community at large, City staff, Parks & Recreation Commission, and City Council

Introduction Context Map

Beaton Hill Park

Sammamish Commons BRP North

Ebright Creek Park

BRP Central

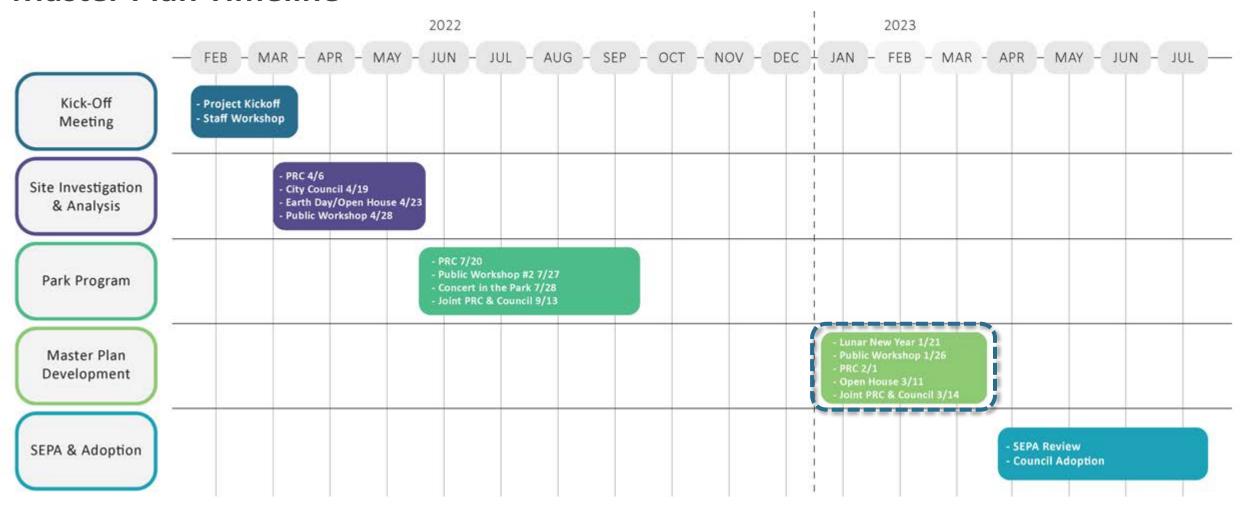
BRP South

Pine Lake Park



Introduction

Master Plan Timeline



Existing Conditions

Beaton Hill Park Site Character













BRP SouthSite Character













BRP SouthSite Structures













Project Goals

Project Goals

The **Beaton Hill Park** and **Big Rock Park** system serves as an oasis of nature in the city. The master plans for each park should:

- Continue to be the **place of respite**, contemplation, and exploration of the natural environment it is today, protected for future generations.
- **Connect, educate, and inspire** people of all ages and abilities to discover more about each other and our surroundings.
- Provide **safe access to everyone** of all abilities to the amazing places and experiences throughout the parks.
- Allow everyone the **flexibility** to be active or passive in how they choose to recreate, providing opportunities for both in a way that respects and fits into the context of the site.

Outreach Summary #2 Programming & Concept Alternatives

Programming & Concept Alternatives

Concept 1 **Gradient of Activities**



Concept 2 Whimsy & Discovery



Concept 3 **Playful Space for Everyone**

- Accessible play
- 2 Pickleball courts
- Open lawn
- Amphitheater
- Small parking lot



- Hillside play
- 4 Pickleball courts
- Dog park
- Open lawn
- Large parking lot



- Old garage removed
- Small parking lot

Hillside play

Open lawn

On-street

parking

P-patch

- Gardens
- Disc golf



- All buildings stay
- Large parking lot
- Universal play
- Disc golf



- Old garage & residence removed
- Large parking lot
- Universal play
- P-patch
- Disc golf

0

Outreach Summary

Public Workshop #2

- Farmer's Market July 27, 2022
- Concert in the Park July 28, 2022

Overall Summary

- Support for:
 - Nature trails, trail connections, preservation & open space.
 - P-patch slight preference for BHP.
 - Plazas & gathering spaces additional support for covered gathering spaces.
 - Play areas strong interest in universal & hillside play opportunities.



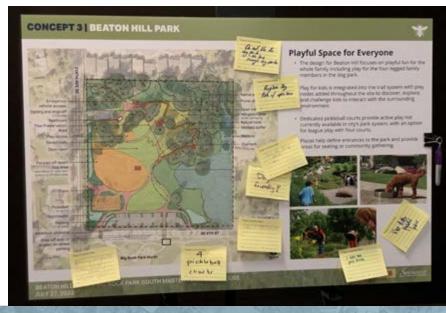


Outreach Summary Public Workshop #2

Beaton Hill Park – Site Specific Feedback

- Support for:
 - o Pickleball courts additional support for 4 courts.
 - Hillside play
 - Wetland boardwalk concern about impact.
 - Parking on-site no strong support for removing on-street parking or location preference.
 - o Hillside amphitheater concern with traffic & noise from events.
- Off-leash dog area both supported & opposed concerns with noise from dogs; some support for open lawn instead.
- Concerns with safe pedestrian crossing on SE 8th St.

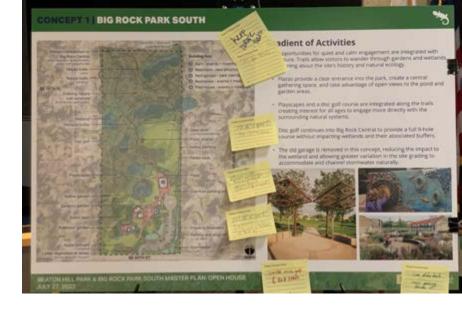




Outreach Summary Public Workshop #2

BRP South – Site Specific Feedback

- Support for:
 - Universal play, noted for all play areas.
 - o Removing the old garage & replacing with pavilion for picnic or other use.
 - Sensory, native & pollinator gardens.
 - On-site parking with concerns about traffic & parking during events.
- Disc golf both supported & opposed concerns with trail user conflicts & native plant disturbance.





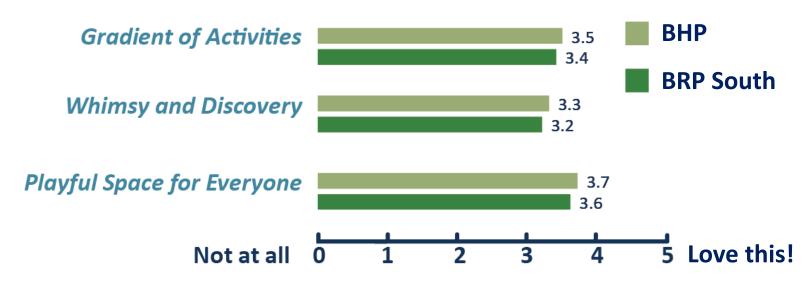
Outreach Summary Community Survey #2

475
Survey
Participants

38% live within 1 mile of the parks88% live in Sammamish

Concept Preferences

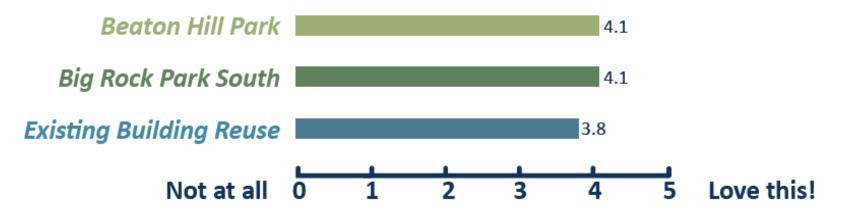
How well does each concept meet your hopes and dreams for park improvements?



Outreach Summary Community Survey #2

Program Examples

How well does the park program meet your hopes and dreams for park improvements?







Preferred Master Plan Beaton Hill Park

Beaton Hill Park

Preferred Plan

- 2 parking lots on site (44 stalls)
- P-patch with seating and tool shed (40 plots)
- 4 pickleball courts with lighting
- Off-leash dog park (separate area for small/large dogs)
- Accessible and soft surface trails
- Accessible hillside play area
- Wetland boardwalk and overlooks
- Re-configured parking on SE 8th St



Beaton Hill Park - Site

Hillside Play





Whimsical Features





Dog Park



Pickleball



P-Patch



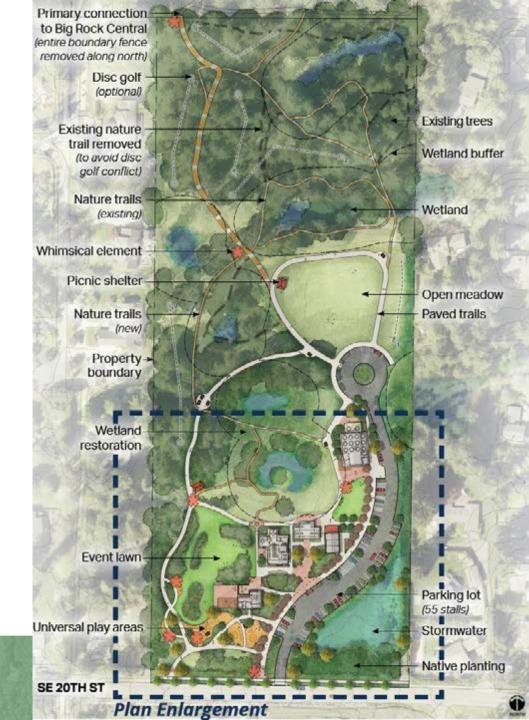
Boardwalk



Preferred Master Plan BRP South

BRP SouthPreferred Plan

- Parking lot (55 stalls)
- Universal play areas (accessible and inclusive elements)
- Open meadow for flexible events
- Adaptive re-use of buildings
- Accessible and soft surface trails
- Garden areas (pollinators, native, etc.)
- Optional 9-hole disc golf (3 holes at BRP Central)



BRP South

Preferred Plan

- Parking lot (55 stalls)
- Universal play areas (accessible and inclusive elements)
- Open meadow for flexible events
- Adaptive re-use of buildings
 - Replace old garage with Picnic Pavilion
- Accessible and soft surface trails
- Garden areas (pollinators, native, etc.)
- Optional 9-hole disc golf (3 holes at BRP Central)



BRP South - Site

Universal Play





Whimsical Features





Garden Areas





Picnic Pavilion



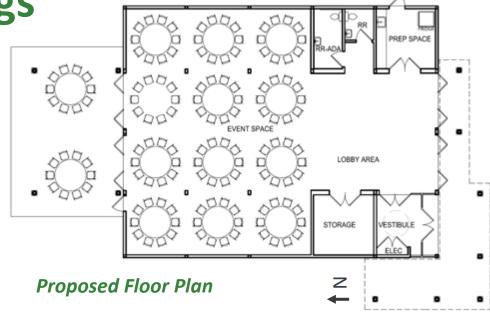
Disc Golf (optional)



BRP South - Buildings

Barn

- Small or large public gatherings, weddings, classes, or events.
- Overflow or partnership with nearby off-site parking needed for larger events.





Concept Rendering (Looking North)







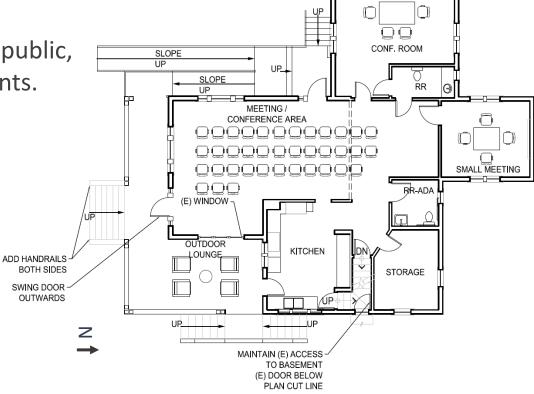
Example Images

BRP South - Buildings

Residence

 Small public gatherings, meetings, classes, or events.

 Second floor closed to public, storage to support events.



Proposed Floor Plan





Example Images

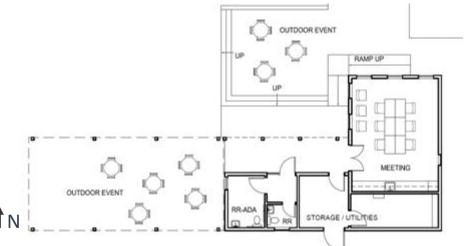
BRP South - Buildings

Pool house

Small public gatherings, meetings, classes & events.



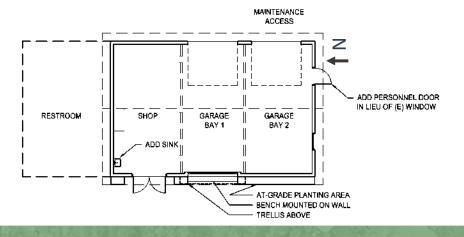




New Garage

Maintenance storage, new restroom next to garage.





Preliminary Phasing

Beaton Hill Park – Phasing

South Park Improvements

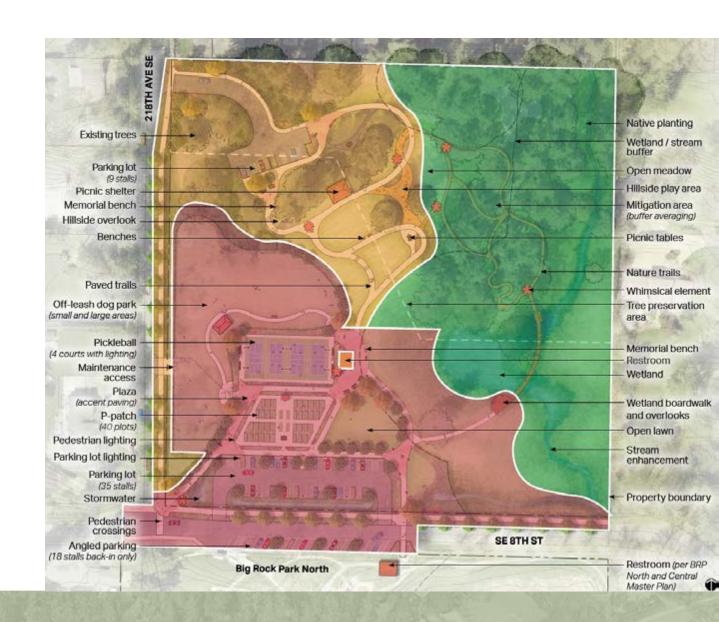
- South parking lot & stormwater
- SE 8th St frontage improvements
- Off-leash dog park
- Pickleball
- P-patch
- Wetland overlook & restoration

North Park Improvements

- North parking lot & stormwater
- 218th St frontage improvements
- Picnic shelter & hillside overlook
- Restroom
- Hillside play

Nature Trails

- Soft surface trails
- Wetland boardwalk & overlook
- Stream & wetland restoration



BRP South – Phasing

Central Park Improvements

- Parking lot & stormwater
- SE 20th St frontage improvements
- Picnic pavilion
- Maintenance building & restroom
- Open meadow

Meeting & Event Areas

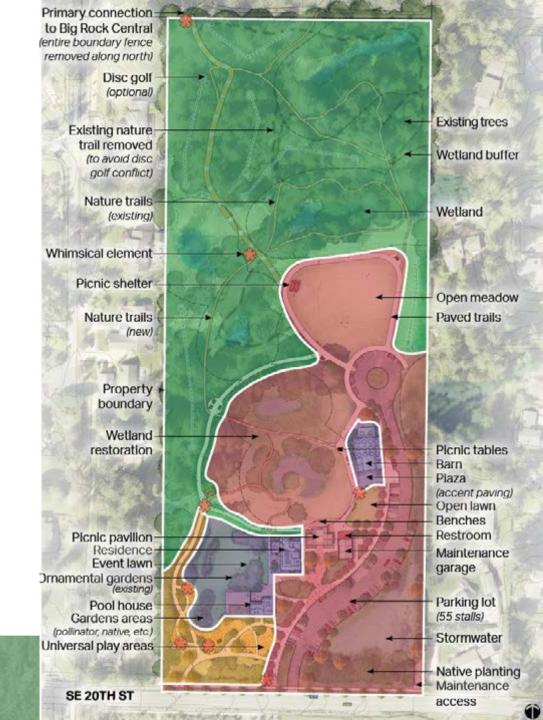
- Residence
- Barn & plaza space
- Pool house and plaza space

Universal Play

- Universal play
- Whimsical elements

Trails & Restoration

- Trail removal in wetlands
- Flooding improvements
- Disc golf



Preliminary Cost Estimates

Beaton Hill Park

Preliminary Cost Estimates

Preferred Plan – Consolidated Approach

| Preliminary Project Estimate | \$ 14,401,437 |
|--|------------------|
| Soft Costs (20%)* | \$ 2,400,000 |
| Contingency (25%) | \$ 1,935,000 |
| Washington State Sales Tax (10.1%) | \$ 781,437 |
| Contractor Mobilization & Overhead (20%) | \$ 1,548,000 |
| Anticipated Construction Costs | \$ 7,737,000 |

^{*}Soft Costs inclusive of design, engineering, construction administration, preliminary studies, and special inspections





BRP South

Preliminary Cost Estimates

Preferred Plan – Consolidated Approach

| Preliminary Project Estimate | \$ 17,211,947 |
|--|------------------|
| Soft Costs (20%)* | \$ 2,869,000 |
| Contingency (25%) | \$ 2,312,000 |
| Washington State Sales Tax (10.1%) | \$ 933,947 |
| Contractor Mobilization & Overhead (20%) | \$ 1,850,000 |
| Anticipated Construction Costs | \$ 9,247,000 |

^{*}Soft Costs inclusive of design, engineering, construction administration, preliminary studies, and special inspections







Discussion

Input on preferred plan & phasing sequence

- Beaton Hill Park
- Big Rock Park (BRP) South



Next Steps

Master Plan Development

- Open House at BRP South March 11, 2023
- Present Preferred Master Plan at City Council Joint Meeting
 w/ Parks & Recreation Commission March 14, 2023
- Develop Final Master Plan
- SEPA Checklist Submittal & Approval
- Present Final Master Plan to City Council for Adoption summer 2023





Thank You!

Agenda Bill

City Council Joint Meeting March 14, 2023



| SUBJECT: | Beaton Hill Park & Big Rock Park South Master Plan - Preferred Master Plan Consensus and SEPA Authorization | | |
|------------------------------|---|--------------|------------------------------|
| DATE SUBMITTED: | February 24, 2023 | | |
| DEPARTMENT: | Parks, Recreation & Facilities | | |
| NEEDED FROM COUNCIL: | ☑ Action □ Direction □ Informational | | |
| RECOMMENDATION: | Review and reach consensus on the preferred master plans, discuss phasing priorities for potential park development, and authorize staff to proceed with the SEPA review process. | | |
| EXHIBITS: | 1. Exhibit 1 - Beaton Hill Park & Big Rock Park South Preferred Master Plans 2. Exhibit 2 - PowerPoint Presentation | | |
| BUDGET: | | | |
| Total dollar amount \$275 | ,000 | \checkmark | Approved in budget |
| Fund(s) Parks | Capital Improvement Fund | | Budget reallocation required |
| | | | No budgetary impact |
| WORK PLAN FOCUS AREAS: | | | |
| ☐ ☐ Transportation | ☐ ☐ Transportation | | Community Safety |
| ☑ Communication & Engagement | | | Community Livability |
| High Performing Government | | ✓ 1 | Culture & Recreation |
| Environmental | Health & Protection | | Financial Sustainability |

NEEDED FROM COUNCIL:

Shall the City Council reach consensus on the master plans for Beaton Hill Park & Big Rock Park South and authorize staff to proceed with the SEPA review process?

KEY FACTS AND INFORMATION SUMMARY:

The purpose of this discussion is to review the preferred plans and phasing sequences for Beaton Hill Park and Big Rock Park South and reach consensus on whether or not to proceed with the SEPA review process.

Summary:

The public process for the Beaton Hill Park and Big Rock Park South Master Plan is complete. The preferred master plan for each park was developed based on feedback received from the outreach process from community members, City staff, the Parks & Recreation Commission, and City Council.

The components of the preferred master plan for each park are summarized below. A representative from the consultant team, HBB, will present a summary of the second public workshop, online survey results, feedback received at the third public workshop, and discuss the preferred master plans and preliminary phasing sequences in further detail at the March 14, 2023 City Council Joint Meeting with the Parks & Recreation Commission.

The Big Rock Parks and Beaton Hill Park system serves as an oasis of nature in the city. Based on the feedback received from previous public engagement events, the goals the master plans of each park should:

- Continue to be the place of respite, contemplation, and exploration of the natural environment it is today, protected for future generations.
- Connect, educate, and inspire people of all ages and abilities to discover more about each other and our surroundings.
- Provide safe access to everyone of all abilities to the amazing places and experiences throughout the parks.
- Allow everyone the flexibility to be active or passive in how they choose to recreate, providing
 opportunities for both in a way that respects and fits into the context of the site.

Beaton Hill Park Preferred Master Plan:

The preferred master plan for Beaton Hill Park is designed to highlight the expansive view from the north end of the park and create a unique and accessible experience moving through the park. The proposed improvements include:

- Parking lots on site (44 stalls total)
- P-patch with seating and tool shed (40 plots)
- Pickleball (4 courts with lighting)
- Off-leash dog park (separate areas for small & large dogs)
- Accessible hillside play area
- Picnic shelters and tables
- Seating and gathering areas
- Wetland boardwalks and overlooks
- Interpretive signage to highlight the natural environment and/or history of the site

As part of the master planning process, parking within the right-of-way on SE 8th Street would be reconfigured to back-in angled parking to create safer traffic flow and allow the parking lot at Beaton Hill Park to serve as the natural turn-around for vehicles coming to and from the parks.

Trails

With the significant topography of the site, accessible trails are limited to one main route through the park, connecting the lower parking lot off SE 8th Street and winding through the meadows to connect to the upper parking lot off 218th Ave SE and the existing sidewalk that continues to the north. Street frontage improvements are included in the master plan along 218th Ave SE and SE 8th Street through the limit of the park property.

A fully accessible hillside play area is integrated into the main trail, taking advantage of the slope to create slides, climbing areas and other features all connected by the accessible trails. Picnic and seating

areas are also included along the trails throughout the park. A hillside overlook is incorporated in the preferred plan to provide expansive views over the park and to create additional seating and small group gathering areas.

Informal nature trails connect to the accessible trails and meander through the tree preservation area in the north and eastern portion of the park. This area is also the focus of the existing environmentally sensitive areas with wetlands and an existing stream corridor, which encompasses much of the open space on the eastern half of the site. These environmental features would be enhanced to function as a more formal stream corridor and reconnect to the improved wetlands and buffer areas to create an integrated and complete ecosystem on the site. Boardwalks and overlooks would provide pedestrian access while still protecting the new ecosystem and allow for education and interpretive signage related to the restoration efforts.

Big Rock Park South Preferred Master Plan:

The preferred master plan for Big Rock Park South is designed to reinforce the passive, natural environment of the existing property while allowing more flexible uses for all ages and abilities. Proposed improvements include:

- Parking lot (55 stalls total)
- Universal play areas (accessible and inclusive play elements)
- Picnic shelters and tables
- Seating and gathering areas
- Open meadow for flexible events, lawn games, etc.
- Optional space for 9-hole disc golf course (with 3 holes integrated into Big Rock Park Central)
- Garden areas to highlight botanical names and plant characteristics (pollinators, natives, etc.)
- Interpretive signage to highlight the natural environment, gardens, and/or history of the site.

The central pond nearest to the existing structures would remain largely as-is with gardens and open space around the south and east sides. Native planting would buffer the north and west sides of the pond. The remaining wetlands and their associated buffers would be restored to support the natural processes and habitat of these areas. Grading and overflow improvements are proposed for the central pond to help control flooding that currently occurs during major storm events.

<u>Trails</u>

Trails that directly impact existing wetlands will be removed and restored to protect wetland functions and habitat. There is also one trail that would conflict with the proposed disc golf fairways that would be removed with the future development of a disc golf course. The remainder of the trails would be left in-place. One main trail, 10' wide, is proposed to connect Big Rock South to Big Rock Central. This is currently proposed as a crushed rock trail but could be paved to improve accessibility between the Big Rock Parks in the future. Paved accessible trails are included in the design to provide access to all major park features and create a series of interconnected loops, including a loop trail around the open meadow. Informal woodland trails, similar in scale to the existing trails, are proposed through the forested areas to integrate new park improvements into the existing trail system.

Structures

Adaptive re-use of the existing buildings is a major component of preferred master plan. The Barn, Residence, and Pool House are all proposed to remain with improvements to support community use. These buildings may be used for meetings, community organizations, and a variety of events. Please note that programming some of the below structures to their full capacity may require a partnership with

nearby off-site parking to provide overflow parking. Additional studies or analyses during future phases of design might result in different findings and proposed uses.

The Barn in particular can host a variety of events with an approximate occupancy of up to 100 - 150 people. A new trellis on the south and a covered outdoor space on the north are proposed to allow larger outdoor gathering areas and the ability to expand events. The existing chicken coop would need to be removed, but elements of the stained-glass windows integrated into the current chicken coop would be re-purposed as one of the whimsical elements in the universal play area.

The old garage is the only existing structure that is proposed to be removed. In its place, the plan includes a new large Central Picnic Pavilion that helps anchor the entry and frame the view to the pond beyond. The Pavilion is sized to support group picnic with up to 6 picnic tables, still allowing for clear access and views through the Pavilion. A small plaza is designed between the Pavilion and the pond to create an overlook area that can be used as informal gathering and/or interpretive signage around the wetlands or history of the site.

The Pool House improvements will create one small meeting room with an accessible restroom and separate storage / utility room. A new trellis or covered arbor is proposed to the west of the Pool House to create a larger outdoor gathering area and the ability to expand events or meetings beyond the interior capacity of 15 - 20 people. A secondary outdoor plaza space is also adjacent to the trellis and Pool House for maximum flexibility and use of this area of the park.

A structural analysis was conducted on the existing Residence to help determine the viability of keeping this structure for future use. At the present time, the analysis supports the feasibility of re-using this building and providing accessibility and seismic upgrades needed for the intended use. The proposed improvements will allow for community meetings and smaller events with an anticipated capacity of 50 – 100 people. The second level of the Residence will not be accessible and used as a storage area only. Site improvements should help reduce the amount of flooding that currently occurs in the basement of the Residence, but some flooding during larger storm events may still occur.

The existing newer garage on the site will be improved to create a parks maintenance storage and shop area. A new restroom is proposed on the north end of the existing structure, designed to be integrated into the overall character of the park's existing buildings.

Master Plan Process:

A twelve to eighteen-month effort is anticipated for the master plan process which includes public involvement, with participation from the community at large, City staff, Parks & Recreation Commission, City Council, and community stakeholders. The intent of a consolidated approach for the master plans is to undergo a collective kick-off and public engagement effort to facilitate community introductions and discussions, as well as a collective department and city review. That said, individual master plan reports will be prepared for each park. The master plan process consists of three phases as described below:

Phase 1 Site Investigation and Analysis (Complete)

Evaluate existing site conditions, identify sensitive areas, complete site studies, and develop an overall understanding of the site. During this initial phase, a community survey will be prepared to assist with the development of initial park concepts.

Phase 2 Park Program (Complete)

The first public meeting will be held to present site analysis and provide the community an opportunity to share their hopes, dreams and concerns for the park. Following the first public meeting, a community survey will be published. Based upon the results of site analysis, community survey, City staff input, technical input and initial public input, a preliminary park design program will be developed that details proposed uses, design character and criteria.

Phase 3 Master Plan Development

Two to three Master Plan alternatives will be prepared for each park, based upon the approved design program. This will include a narrative that summarizes the existing conditions, design alternatives, cost implications and regulatory criteria, and identifies issues which will require further study at the next stage of project development.

Based upon feedback from the community, Parks & Recreation Commission, and City Council, the alternatives will be revised in to one preferred Master Plan alternative with a cost estimate. The final deliverable will be a Master Plan Report for each park, with final project drawings and narrative, project process, project phasing scenarios, and phase costs.

Timeline:

Hopes, Dreams, and Concerns

- Parks & Recreation Commission Meeting #1: April 6, 2022 (Complete)
- City Council Meeting #1: April 19, 2022 (Complete)
- Information Booth at Earth Day and Open House at BRP South: April 23, 2022 (Complete)
- Public Workshop #1: April 28, 2022 (Complete)

Master Plan Alternatives

- Public Workshop #2: July 27, 2022 (Complete)
- Information Booth at Pine Lake Park Summer Concert: July 28, 2022 (Complete)
- Joint City Council/Parks & Recreation Commission Meeting #2: September 13, 2022 (Complete)

Preferred Plan

- Information Booth at Lunar New Year Celebration: January 21, 2023 (Complete)
- Public Workshop #3: January 26, 2023 (Complete)
- Parks & Recreation Commission Meeting #3: February 1, 2023 (Complete)
- Open House at BRP South: March 11, 2023 (Complete)
- Joint City Council/Parks & Recreation Commission Meeting #3: March 14, 2023

Final Master Plan

- SEPA Review: Spring Summer 2023
- City Council Adoption of Master Plan: Summer 2023

Project Background

<u>Beaton Hill Park</u> is located approximately half a mile west of Sammamish City Hall in the heart of the City and just south of the future Town Center. The park is comprised of two parcels that were purchased by the City in fall 2018 in an effort to preserve open space in a rapidly densely developing area in the City; it is named for the family that owned the farmstead for over 80 years. The vacant land totals 9.36 acres and has mature trees, rolling topography, open meadows, three wetlands, and a seasonal stream. The City was awarded a King County Conservation Futures Grant as a reimbursement for approximately 4 acres of the site, which will be designated for permanent conservation.

<u>Big Rock Park South</u> is the third and final property of a 51-acre phased land donation agreement located in the center of the City. The first two parcels, Big Rock Park North and Central, opened to the public in 2016 and 2021. The property was transferred to the City in November 2021. Like the conditions placed on the previous two parcels, this park will facilitate a variety of low impact active and passive activities that may include nature trails, open space, and passive sports meadows. There are a few existing structures on this parcel. Restrictions were put in place to preclude development of new structures exceeding 2,500 square feet to support the development of the park in a manner that preserves the site's natural beauty. The 15 acres that make up this property include dense forest cover, meandering trails that navigate relatively unvarying topography, sensitive areas, open meadows, a single-family home, detached garages, and a barn.

Next Steps

Following the March 14, 2023 City Council Meeting, the project consultant will refine the preferred master plans in to the final master plans and City staff will begin the SEPA review process. Once the SEPA review is complete, staff will return to City Council for adoption of the final master plans.

FINANCIAL IMPACT:

Regarding the costs of the different phases of the preferred master plan, there is no financial impact at this time. Funds for implementing the master plan may be budgeted and improvements completed in phases from the Parks Capital Improvement Plan (CIP).

OTHER ALTERNATIVES CONSIDERED:

If there are considerable objections to components of the preferred plans, City staff and the consultant team may revise the preferred plans for an additional fee. A revised plan at each park might require an additional round of public meetings with the community, Parks & Recreation Commission, and City Council.

RELATED CITY GOALS, POLICIES, AND MASTER PLANS:

2018 Parks, Recreation and Open Space (PRO) Plan

Preferred Master Plan | BEATON HILL PARK





The preferred master plan for **Beaton Hill Park** is designed to highlight the expansive view from the north end of the park and create a unique and accessible experience moving through the park. In addition to trails, picnic areas and gathering areas, proposed park improvements include:

- Parking lots on site (44 stalls total)
- P-patch with seating and tool shed (40 plots)
- Pickleball (4 courts with lighting)
- Off-leash dog park (separate areas for small & large dogs)
- Accessible hillside play area
- Interpretive signage to highlight the natural environment and/or history of the site
- Wetland boardwalk and overlooks

Parking on SE 8th Street would be reconfigured to back-in angled parking to create safer traffic flow and allow the parking lot at Beaton Hill Park to serve as the natural turn-around for vehicles coming to and from the parks.

Preferred Master Plan | BEATON HILL PARK



Hillside Play

Integrates plays features into the hillside with a combination of natural and structured elements.







Whimsical Elements

Sculptural elements that provide a sense of discovery throughout the parks; may be along trails or set apart in the landscape.





Dog Park

Separate areas for large dogs and small (or shy) dogs. Drinking water, seating areas, accessible path and a covered picnic area are also included.



P-Patch

Enclosed garden plots and shared garden areas for the community to use, learn from and connect with each other.



Wetland Boardwalk

Provides connection and overlooks into the restored wetland with informational signage for education and discovery.



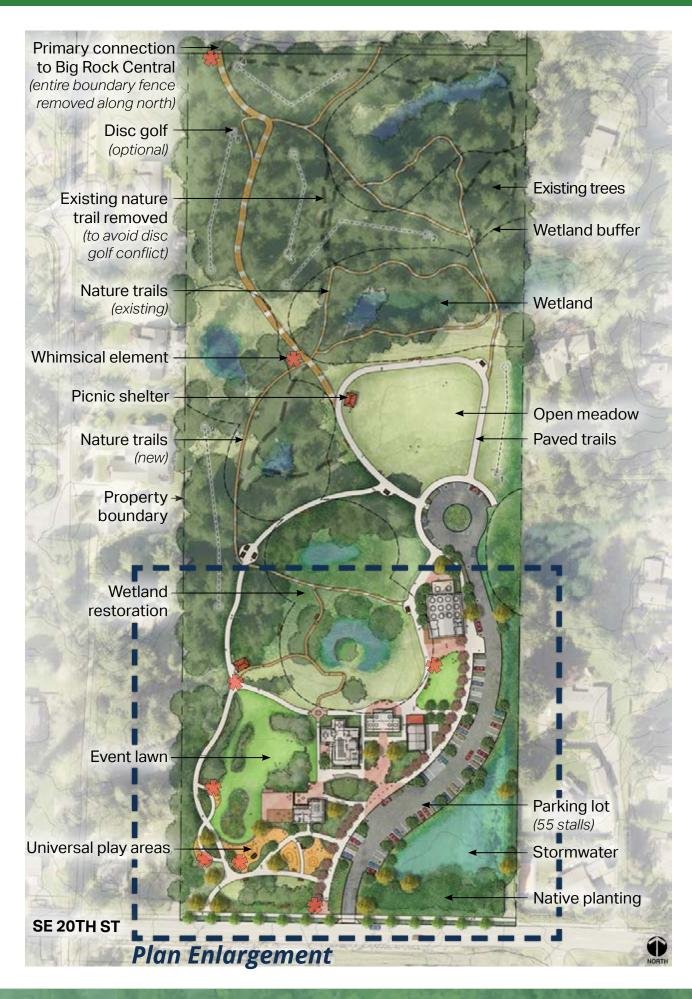
Pickleball

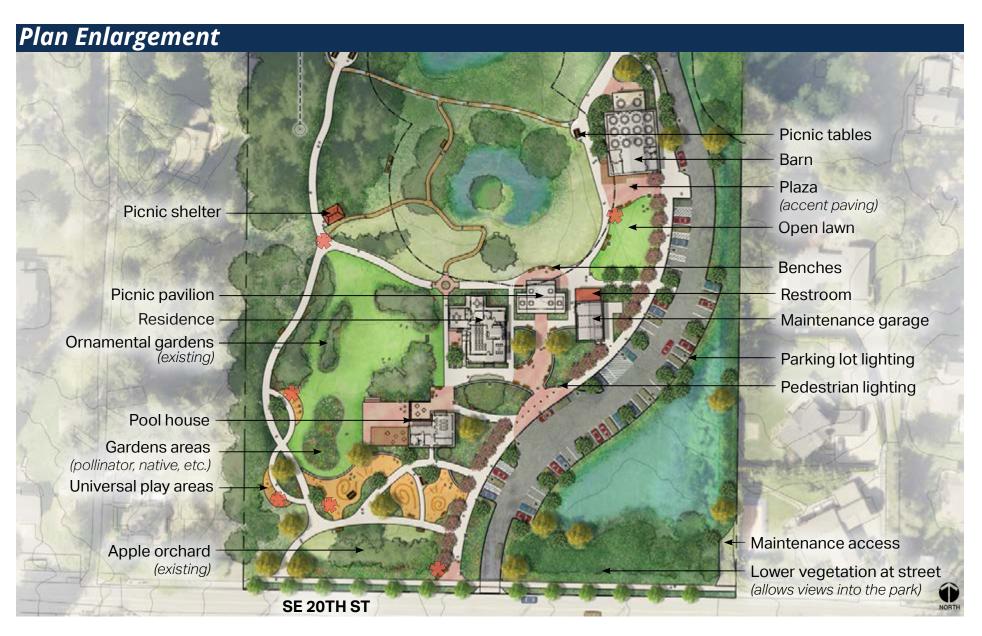
Four pickleball courts with lighting and benches on both sides for those who are resting or waiting for a court.



Preferred Master Plan | BIG ROCK PARK SOUTH







The preferred master plan for **Big Rock Park South** is designed to reinforce the passive, natural environment of the existing property while allowing more flexible uses for all ages and abilities. In addition to trails, picnic areas and gathering areas, proposed park improvements include:

- Parking lot (55 stalls)
- Universal play areas (accessible and inclusive play elements)
- Open meadow for flexible events, lawn games, etc.
- Optional space for a 9-hole disc golf course (with 3 holes integrated into Big Rock Park Central)
- Garden areas to highlight botanical names and plant characteristics (pollinators, natives, etc.)
- Adaptive re-use of existing buildings and unique site features (i.e. chicken coop as whimsical element)
- Central picnic pavilion (old garage removed)
- Interpretive signage to highlight the natural environment and/or history of the site

Preferred Master Plan | BIG ROCK PARK SOUTH



Universal Play

Includes a combination of natural elements, site furnishings and play features to appeal to all ages and abilities; often a combination of plazas, play, nature, and art elements.







Garden Areas

Engage all the senses through fragrance, movement, textures, and wildlife attractants. Could include sensory gardens, pollinators, native plants, education, etc.







Whimsical Elements

Sculptural elements that provide a sense of discovery throughout the parks; may be along trails or set apart in the landscape.





Disc Golf (optional)

9-hole course, developed with fairways away from trails to avoid user conflicts. Potential layout to be studied further prior to any improvements.



Picnic Pavilion

The old garage, currently in the wetland buffer, will be removed. A new picnic pavilion will overlook the central pond and be developed to allow for larger group gatherings and events.





Purpose (What We Need From You)

Beaton Hill Park (BHP) & Big Rock Park (BRP) South:

- Consensus on preferred plan & phasing sequence.
- Authorization to proceed with SEPA review process.

Overview: What We Will Be Discussing

- 1. Introduction
- 2. Existing Conditions
- 3. Project Goals
- 4. Outreach Summary
- 5. Preferred Master Plan
- 6. Preliminary Phasing
- 7. Preliminary Cost Estimates
- 8. Discussion
- 9. Next Steps

Introduction

Introduction

What is a Master Plan?

- City adopted process that looks at park comprehensively and involves entire community
- Establishes design program that provides framework for addressing park improvements
- Report is end product of process

3 Primary Phases:

- 1. Site Investigation & Analysis
- Park Program*
- 3. Master Plan Development*



^{*} Includes engagement with community at large, City staff, Parks & Recreation Commission, and City Council

Introduction Context Map

Beaton Hill Park

Sammamish Commons
BRP North

Ebright Creek Park

BRP Central

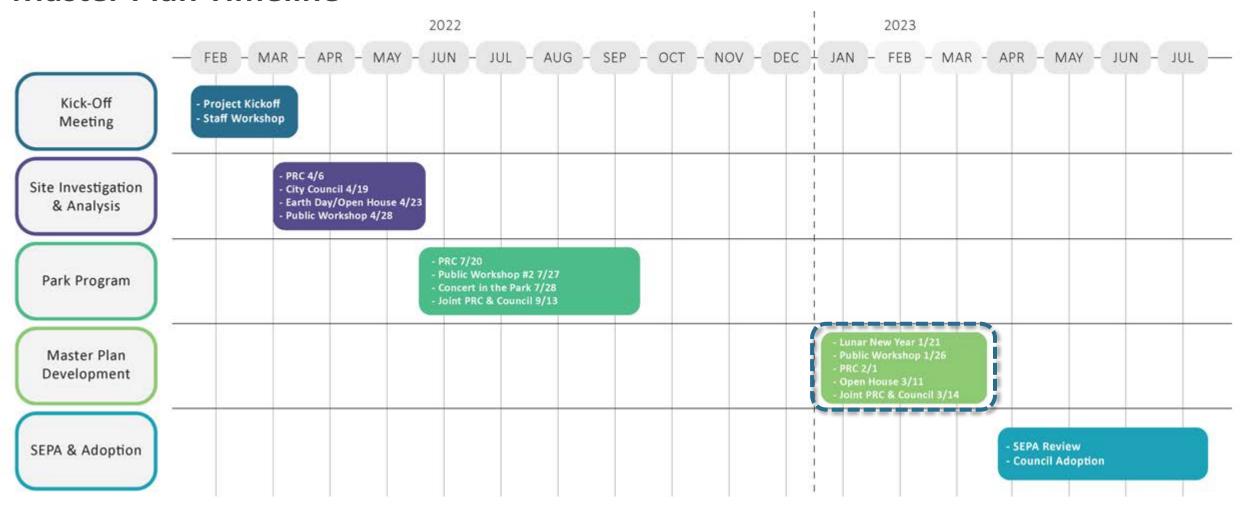
BRP South

Pine Lake Park



Introduction

Master Plan Timeline



Existing Conditions

Beaton Hill Park Site Character









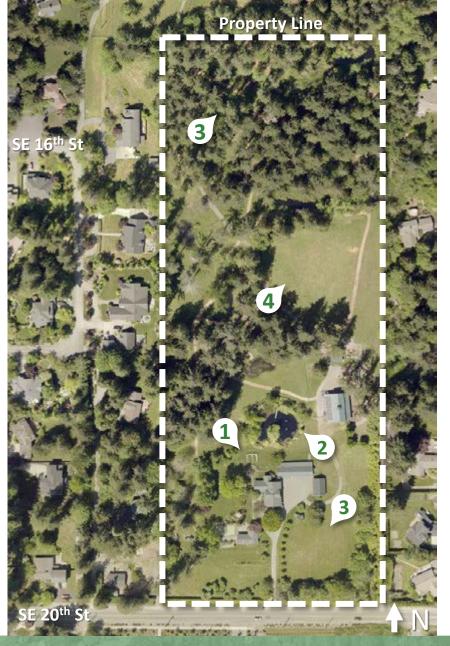




BRP SouthSite Character













BRP SouthSite Structures













Project Goals

Project Goals

The **Beaton Hill Park** and **Big Rock Park** system serves as an oasis of nature in the city. The master plans for each park should:

- Continue to be the **place of respite**, contemplation, and exploration of the natural environment it is today, protected for future generations.
- **Connect, educate, and inspire** people of all ages and abilities to discover more about each other and our surroundings.
- Provide **safe access to everyone** of all abilities to the amazing places and experiences throughout the parks.
- Allow everyone the **flexibility** to be active or passive in how they choose to recreate, providing opportunities for both in a way that respects and fits into the context of the site.

Outreach Summary #2 Programming & Concept Alternatives

Programming & Concept Alternatives

Concept 1
Gradient of Activities



0

Concept 2
Whimsy & Discovery



Concept 3
Playful Space for Everyone

- Accessible play
- 2 Pickleball courts
- Open lawn
- Amphitheater
- Small parking lot



- Hillside play
- 4 Pickleball courts
- Dog park
- Open lawn
- Large parking lot



- Old garage removed
- Small parking lot

Hillside play

Open lawn

On-street

parking

P-patch

- Gardens
- Disc golf



- All buildings stay
- Large parking lot
- Universal play
- Disc golf



- Old garage & residence removed
- Large parking lot
- Universal play
- P-patch
- Disc golf

Outreach Summary

Public Workshop #2

- Farmer's Market July 27, 2022
- Concert in the Park July 28, 2022

Overall Summary

- Support for:
 - Nature trails, trail connections, preservation & open space.
 - P-patch slight preference for BHP.
 - Plazas & gathering spaces additional support for covered gathering spaces.
 - Play areas strong interest in universal & hillside play opportunities.

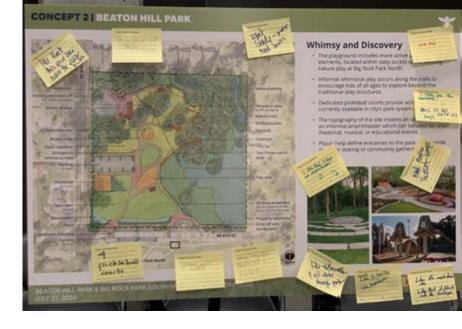


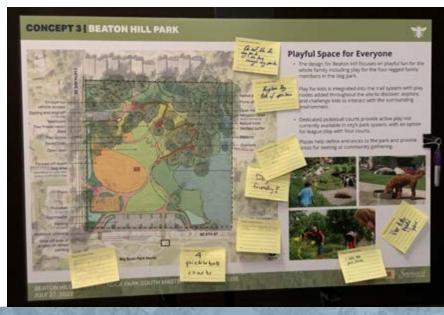


Outreach Summary Public Workshop #2

Beaton Hill Park – Site Specific Feedback

- Support for:
 - o Pickleball courts additional support for 4 courts.
 - Hillside play
 - Wetland boardwalk concern about impact.
 - Parking on-site no strong support for removing on-street parking or location preference.
 - Hillside amphitheater concern with traffic & noise from events.
- Off-leash dog area both supported & opposed concerns with noise from dogs; some support for open lawn instead.
- Concerns with safe pedestrian crossing on SE 8th St.

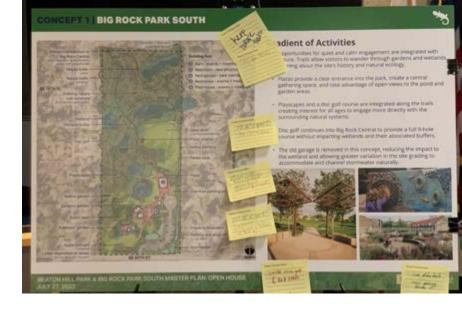


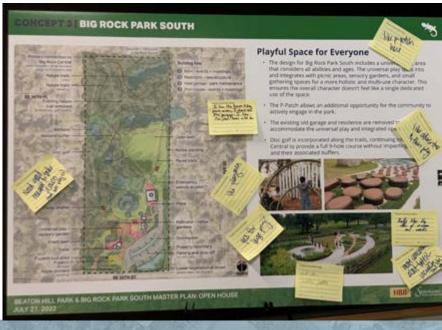


Outreach Summary Public Workshop #2

BRP South – Site Specific Feedback

- Support for:
 - Universal play, noted for all play areas.
 - Removing the old garage & replacing with pavilion for picnic or other use.
 - Sensory, native & pollinator gardens.
 - On-site parking with concerns about traffic & parking during events.
- Disc golf both supported & opposed concerns with trail user conflicts & native plant disturbance.





Outreach Summary Community Survey #2

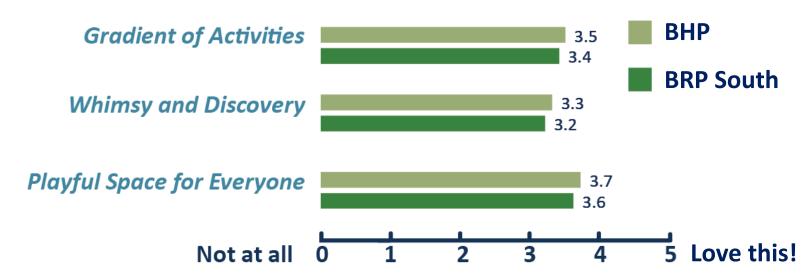
475 Survey

38% live within 1 mile of the parks
88% live in Sammamish

Participants

Concept Preferences

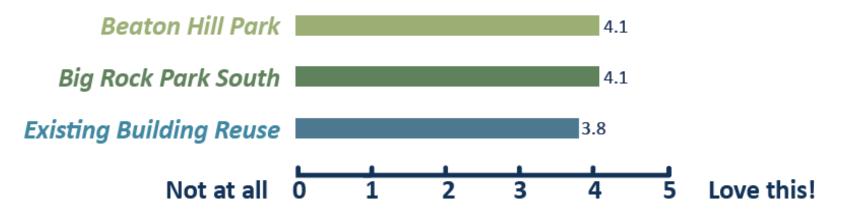
How well does each concept meet your hopes and dreams for park improvements?



Outreach Summary Community Survey #2

Program Examples

How well does the park program meet your hopes and dreams for park improvements?







Preferred Master Plan Beaton Hill Park

Beaton Hill Park

Preferred Plan

- 2 parking lots on site (44 stalls)
- P-patch with seating and tool shed (40 plots)
- 4 pickleball courts with lighting
- Off-leash dog park (separate area for small/large dogs)
- Accessible and soft surface trails
- Accessible hillside play area
- Wetland boardwalk and overlooks
- Re-configured parking on SE 8th St



Beaton Hill Park - Site

Hillside Play





Whimsical Features





Dog Park



Pickleball



P-Patch



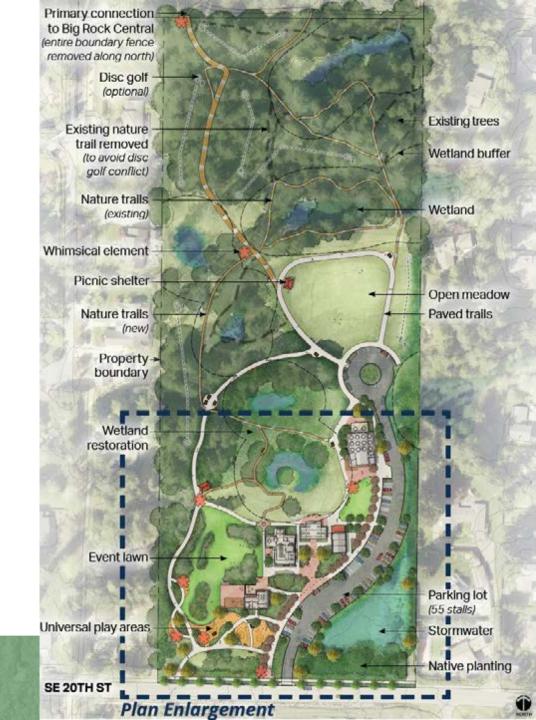
Boardwalk



Preferred Master Plan BRP South

BRP SouthPreferred Plan

- Parking lot (55 stalls)
- Universal play areas (accessible and inclusive elements)
- Open meadow for flexible events
- Adaptive re-use of buildings
- Accessible and soft surface trails
- Garden areas (pollinators, native, etc.)
- Optional 9-hole disc golf (3 holes at BRP Central)



BRP South

Preferred Plan

- Parking lot (55 stalls)
- Universal play areas (accessible and inclusive elements)
- Open meadow for flexible events
- Adaptive re-use of buildings
 - Replace old garage with Picnic Pavilion
- Accessible and soft surface trails
- Garden areas (pollinators, native, etc.)
- Optional 9-hole disc golf (3 holes at BRP Central)



BRP South - Site

Universal Play





Whimsical Features





Garden Areas





Picnic Pavilion



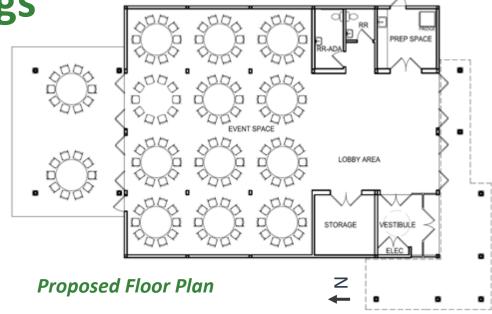
Disc Golf (optional)



BRP South - Buildings

Barn

- Small or large public gatherings, weddings, classes, or events.
- Overflow or partnership with nearby off-site parking needed for larger events.





Concept Rendering (Looking North)







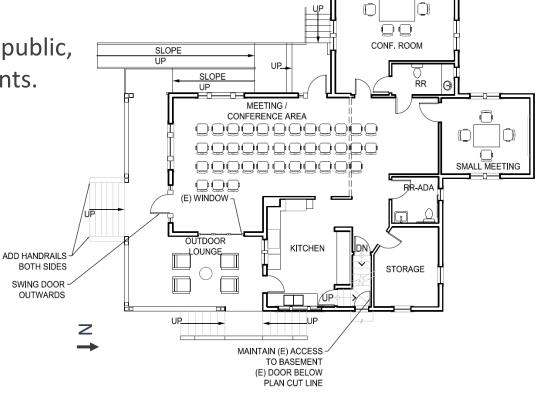
Example Images

BRP South - Buildings

Residence

 Small public gatherings, meetings, classes, or events.

 Second floor closed to public, storage to support events.



Proposed Floor Plan





Example Images

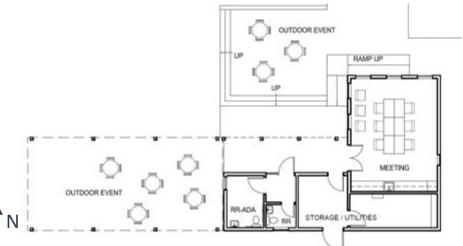
BRP South - Buildings

Pool house

Small public gatherings, meetings, classes & events.



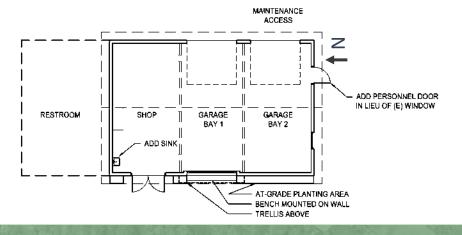




New Garage

Maintenance storage, new restroom next to garage.





Preliminary Phasing

Beaton Hill Park – Phasing

South Park Improvements

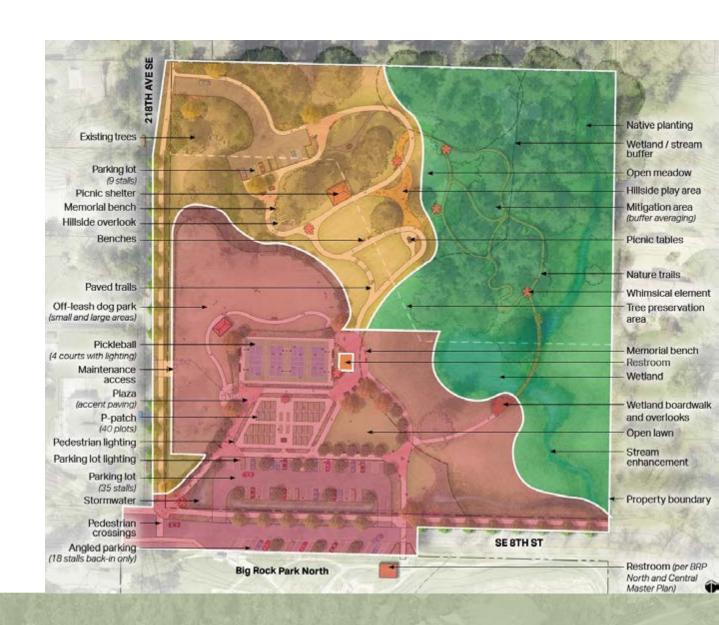
- South parking lot & stormwater
- SE 8th St frontage improvements
- Off-leash dog park
- Pickleball
- P-patch
- Wetland overlook & restoration

North Park Improvements

- North parking lot & stormwater
- 218th St frontage improvements
- Picnic shelter & hillside overlook
- Restroom
- Hillside play

Nature Trails

- Soft surface trails
- Wetland boardwalk & overlook
- Stream & wetland restoration



BRP South – Phasing

Central Park Improvements

- Parking lot & stormwater
- SE 20th St frontage improvements
- Picnic pavilion
- Maintenance building & restroom
- Open meadow

Meeting & Event Areas

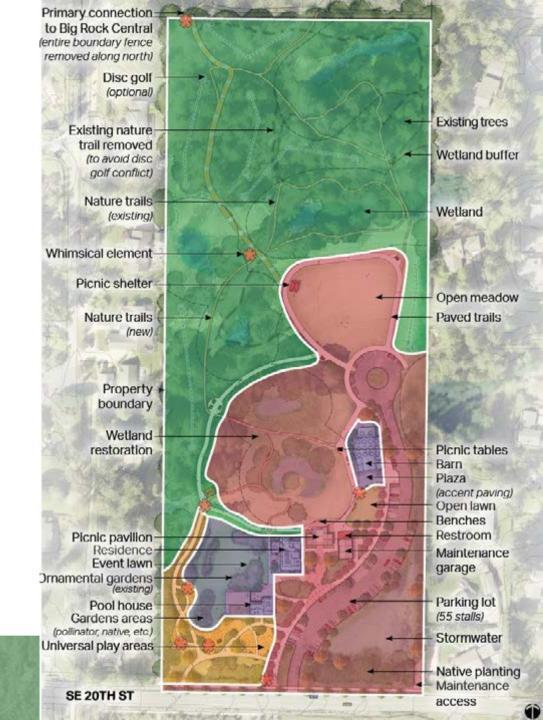
- Residence
- Barn & plaza space
- Pool house and plaza space

Universal Play

- Universal play
- Whimsical elements

Trails & Restoration

- Trail removal in wetlands
- Flooding improvements
- Disc golf



Preliminary Cost Estimates

Beaton Hill Park

Preliminary Cost Estimates

Preferred Plan – Consolidated Approach

| Preliminary Project Estimate | \$ 14,401,437 |
|--|------------------|
| Soft Costs (20%)* | \$ 2,400,000 |
| Contingency (25%) | \$ 1,935,000 |
| Washington State Sales Tax (10.1%) | \$ 781,437 |
| Contractor Mobilization & Overhead (20%) | \$ 1,548,000 |
| Anticipated Construction Costs | \$ 7,737,000 |

^{*}Soft Costs inclusive of design, engineering, construction administration, preliminary studies, and special inspections





BRP South

Preliminary Cost Estimates

Preferred Plan – Consolidated Approach

| Preliminary Project Estimate | \$ 17,211,947 |
|--|------------------|
| Soft Costs (20%)* | \$ 2,869,000 |
| Contingency (25%) | \$ 2,312,000 |
| Washington State Sales Tax (10.1%) | \$ 933,947 |
| Contractor Mobilization & Overhead (20%) | \$ 1,850,000 |
| Anticipated Construction Costs | \$ 9,247,000 |

^{*}Soft Costs inclusive of design, engineering, construction administration, preliminary studies, and special inspections





Discussion

Discussion

Beaton Hill Park (BHP) & Big Rock Park (BRP) South:

- Consensus on preferred plan & phasing sequence.
- Authorization to proceed with SEPA review process.



Next Steps

Master Plan Development

- Develop Final Master Plan
- SEPA Checklist Submittal & Approval
- Present Final Master Plan to City Council for Adoption –
 summer 2023





Thank You!

Appendix L: Resolution Adopting the Big Rock Park South Master Plan

