

CONCEPT PLAN REPORT

BAINBRIDGE ISLAND SAKAI PARK

DECEMBER 2017



Project Team Acknowledgments



<u>Park Board</u> Ken Dewitt Jay Kinney Kirk Robinson Tom Swolgaard Lee Cross

Park Staff Terry Lande, Executive Director Perry Barrett Dan Hamlin David Harry Elizabeth Shepherd Mark Benishek Bryan Garoutte

Special thanks to Robert Linz for his facilitation of the community workshops to determine recommended Sakai Park uses

Cover Image: Sakai Park, looking North

Introduction	3
Site & Context History	4
Sakai Park Project History	6
Adjacent Projects	8
Site Analysis	9
Bainbridge Island Codes	16
Sakai Park Concept Plan	18
Cost Estimation	34
Next Steps	35
Appendix - Separate Volume	



View of Sakai Pond from Proposed Pond Overlook (Source: BIMPRD)

The purpose of the Sakai Park Concept Plan is to provide passive and active recreational opportunities to the citizens of Bainbridge Island. Island citizens voted to purchase this 22.87 acre property, the last large undeveloped parcel within the Winslow area across from the high school and within easy walking distance (just under a mile) south to Winslow on Madison Avenue.

Sakai Park Concept Plan Process:

- Historical materials have been collected, city planning criteria collated, and site analysis work carried out.
- Wetland delineations determined the wetland edges, wetland quality, and recommended setbacks to protect the wetlands.
- Geotechnical explorations and subsequent stormwater study refined the developable potential of the property.
- The recommended uses for the park were laid out and options were presented to the public and the Park Board for comments and input in three sessions over the summer of 2017.

The goal of the Sakai Park Concept Plan is to develop a series of recommendations that meet as many of the community-requested uses as possible while respecting the development limitations imposed by wetlands, steep slopes, and stormwater requirements.



Sakai Park Workshop (Source: Jones & Jones)



Public Meeting with Robert Linz (Source: BIMPRD)

SITE & CONTEXT HISTORY

Geologic & Environmental History

Ravine Creek watershed begins about a half-mile north of Sakai Park and extends down to Eagle Harbor, running parallel to Highway 305. The creek channel passes through a remnant ice-age groove. Over the past 10,000 years, evergreen forests and peat bogs grew within this glacially grooved area until it was logged in the 1860's. Ravine Creek rebounded quickly with a mix of alder and bigleaf maple trees as well as some Douglas firs and Western red cedars.

Sakai Property History

A 1940 property map shows Toshio Sakai owned parcels on both sides of Madison; the parcel to the north owned by J.W. Finch eventually became part of the Sakai Park property. The Sakai Farm focused on strawberry production from the 1930's though the 1970's. The Sakai family built a home on the site in 1966. There also is evidence in the rows of Douglas fir trees that there was once a small Christmas tree farm. The main feature of the property, Sakai Pond, was formed by harvesting the peat bog between 1978 and 1984. The pond is approximately 22 feet in depth. During geotechnical explorations, portions of a clay tile drainage system were encountered. The Sakai family placed these clay drain tiles to improve the drainage for the strawberry fields.



Sakai Peat Bog Excavation, ca 1980



1940 Map of Bainbridge Island (Source: Kroll Maps)



Sakai Strawberry Fields

Bainbridge Island High School & Sakai Property, ca 1972 Source: Bainbridge Island Historical Museum



Sakai Property

Bainbridge Island Ravine Creek Watershed, ca 1970 Source: Bainbridge Island Historical Museum

The Sakai Park Property was purchased after approval of a bond issue in February 2014. The bond approved up to \$5,900,000 for the Bainbridge Island Metropolitan Parks and Recreation District (BIMPRD) to use toward purchasing approximately 23 acres of land from the Sakai family, with the intention of accommodating a variety of passive and active recreational uses in the Winslow area.

Following the approval of the bond measure, BIMPRD engaged facilitator Robert Linz to begin community outreach. This process involved stakeholders from across the community and identified upwards of 75 potential uses and needs of the community and more than 200 values that the community would like to see embodied in the park. Robert Linz led three public meetings (January 23, 2016, April 23, 2016, and July 16, 2016) which resulted in a community vision of 10 recommended uses for Sakai Park. Mr. Linz noted that these ten uses, in no particular order, are:

- Trails
- Picnic shelters
- Multi-use Outdoor Complex with lighting
- Community Recreation Center
- Multi-Use Indoor Complex
- Fifty Meter Pool
- Mountain Bike Park/Trails
- Tennis Court(s)
- Playground, and
- Passive Uses

The community of Bainbridge Island has been deeply and continuously involved throughout the design process, and their dedication to the goals of the Bainbridge Island Metropolitan Parks and Recreation District have made the progress to-date possible. The Parks District sought a team of consultants in 2016 to provide planning services for Sakai Park. The team selected to complete the conceptual planning services was led by Jones and Jones Architects and Landscape Architects with consultants:

- KPFF, Civil Engineering
- Tilghman Group, Transportation Analysis
- PanGeo, Geotechnical Engineering

The design team coordinated with the Parks District to identify priority uses on the site given the complex opportunities and constraints. Findings and site options were presented to the Parks District Board at public meetings held June 1, 2017, July 6, 2017 and September 21, 2017.



Public Meeting with Robert Linz (Source: BIMPRD)

Park Bond on February 10th Ballot

The Park District is proposing a \$5.9 million dollar bond issue to fund the purchase of approximately 23 acres in the Winslow area from the Sakai family. The former farm property sits across Madison Avenue from the Aquatic Center and Ordway School and extends all the way to Highway 305. There is a 2.2 acre lake in the lower part of the property. The bond measure will require a 60% (supermajority) voter approval to enable this purchase.



Aerial View of 23 acre Sakai parcel

Why has the Park Board decided to purchase this land?

The District's Comprehensive Plan and a report from the Winslow Parks Task Force indicate a shortage of park land in the Winslow area. The Park Board noted that the Sakai property purchase will provide an opportunity to accommodate a variety of future passive and active recreational uses desired by the community as expressed in surveys and public meetings. Nature trails, trail connections including the Sound to Olympics Trail, sports fields and courts, and indoor community recreation facilities are a few options to be considered.

Why Now?

This time sensitive opportunity only recently became available to the Park District. The Park Board acknowledged that recent high density developments have resulted in this being the last large parcel of undeveloped land in the area. If they are not able to secure funds for the purchase, the property may also go for development thus limiting future potential for a park of this size in Winslow.

How was the purchase price determined?

The appraisal prepared by Gibbons & Riely PLLC established the agreed to purchase price for the property.

How much more will this cost me in property taxes?

Rates will <u>not</u> go up from last year. The projected cost will be 8 cents/\$1,000 assessed value--about \$36 per year for a \$450,000 home. However, low interest rates combined with retirement of the Grand Forest and Gazzam Lake bonds in 2014 and retirement of the Aquatic Center bonds in 2018 have enabled the proposed bonds to be structured so tax payers would see no net increase in their payments for Park bonds.

What does the Park District plan to do with the property?

The zoning and terrain indicate that the property will accommodate a wide variety of passive and active uses from nature trails to recreation facilities. Although the District has been approached with ideas from a number of community interest groups, the Board has committed to no specific plan for the future park site. The Park District intend to host a public planning process following the purchase to plan the future park with the community.



Bainbridge Island Bond Issue, 2014

Adjacent Projects

Members of the BIMPRD Board have commented on the value of the Park District's partnerships with the Bainbridge Island Parks Foundation and the Bainbridge Island Land Trust, as well as the School District, Fire District, and the City. Coordination between these entities is ongoing, with conversations specific to Sakai Park involving a 50-meter pool, school district campus improvements, the Sound to Olympics Trail, Madison Avenue streetscape, and Highway 305 Expansion.

50 Meter Pool

The Parks Board, in addressing the communityrequest for a 50-meter pool at Sakai Park as well as the current conditions of the existing pool at the High School, commissioned a study from a pool consultant seeking recommendations regarding potential pool locations and upgrades. The study looked at three options: a 50-meter pool at Sakai Park, renovation/conversion of the existing 25yard pool into a 25-meter pool, and conversion of the existing pool into a 50-meter pool. The Board decided that any new pool facility or pool renovation will be co- located at the current site of the High School, and not be placed at Sakai Park.

School District Campus Improvements & Potential Madison Avenue Streetscape

There are discussions about future High School campus improvements and possible improvements that will be needed along Madison Avenue for traffic, stormwater, and the streetscape. There is potential to create a local improvement district that would focus on traffic and parking upgrades along Madison Avenue as well as how to manage stormwater to minimize downstream impacts on Ravine Creek.

Sound to Olympics Trail (STO)

The STO is currently under construction on the east side of Highway 305 from the ferry terminal to the intersection of High School Road. The continued alignment of the STO Trail north of High School Road is currently being considered on the west side of the Highway 305 Right-of-Way and adjacent to the Sakai Park Pond. This may impact existing trees and affect the view quality from within Sakai Park.

Highway 305 Expansion

There have been plans for future expansion of Highway 305 dating back to the late 1980's. The current plan does show some width expansion of Highway 305 north of High School Road but is unclear at this time if this has been designengineered or even funded.



Forest to Sky Trail (Source: BIMPRD)

Site Context

Sakai Park is located within a mile of downtown Winslow, bound to the east by Madison Avenue North and to the west by Highway 305. Westward across Madison Avenue are Bainbridge Island High School and the Bainbridge Island Aquatics Center. To the south of the Park across NE High School Road is the Public Library. The northern property line is abutted by a five-acre parcel owned by the Sakai Family, and the southern edge of the property shares boundary lines with various entities, including St. Cecilia Catholic Church and the City of Bainbridge Island. This setting enables Sakai Park to become an active contributor to the civic center of north Winslow. Furthermore, the Park's location near the headwaters of Ravine Creek positions it as a vital ecological resource, contributing to stormwater patterns and continuing the watershed corridor that extends from Eagle Harbor north toward the heart of the Island.



Site Context Map

Level of Service

Based on the recommended uses for Sakai Park derived from the community process led by Robert Linz, an analysis of comparable recreational resources was conducted to evaluate how well the recommended uses were represented across Bainbridge Island. Uses that occurred in a number of places throughout the island included trails, picnic shelters, and playgrounds. Passive uses are also very well represented on the island, and occur with greater frequency than could be demonstrated in the table below. Out of the ten recommended uses, a multi-use indoor complex, a 50-meter pool, mountain bike trails, and tennis courts were the most under-represented uses. At approximately 23 acres, Sakai Park is also wellpositioned to serve as a significant nature preserve in close proximity to downtown Winslow. While this is not an explicitly recommended use, it is compatible with many of the recommended uses, including: nature trails, picnic shelters, playground, and passive uses.



		USES	Map Source: B	Recreation Connection, Summer 2017				
TRAILS	PICNIC SHELTERS	MULTI-USE OUTDOOR COMPLEX	MULTI-USE	COMMUNITY HALLS				
Battle Point Park	Battle Point Park	Battle Point Park (soccer fields (2), softball fields (3), basketball courts (2), rink)	Camp Yeomalt Cabin (25ppl)					
Forest to Sky Trail	Blakely Harbor Park	Eagledale Park (sand volleyball court (1))	Eagledale Park Woodward Middle Islam (sand volleyball court (1)) (gym)					
Camp Yeomalt	Eagledale Park	Hidden Cove Ballfields (baseball fields (2), soc- cer practice field (1))	Blakely Elemen. (gym)	emen. Pru's House (40)				
Close Property	Fay Bainbridge Park	Rotary Park (baseball fields (2))	Ordway Elemen. (gym)	Seabold Hall (80ppl)				
Fairy Dell Park	Strawberry Hill Park	Sands Avenue Ballfield (baseball fields (2), soc- cer field (1))	Wilkes Elementary (gym)	Strawberry Hill Center (50ppl)				
Fay Bainbridge Park	West Pt. Madison Nature Preserve	Strawberry Hill Park (baseball fields (3), volley- ball court (1), basketball court (1), skate bowl)						
Fort Ward Park		High School (soccer fields (2), football field (1))						
Gazzam Lake Park								
Grand Forest								
Manzanita Park								
Meigs Park								
Pritchard Park								
Ted Olson Nature Preserve								
West Pt. Madison								
Nature Preserve		USES						
50 METER POOL	MTN BIKE TRAILS	PLAYGROUND	PASSIVE USE(S)	TENNIS COURT(S)				
Aquatic Center (25 yd)	Battle Point Park	Aaron Tot Lot	All Parks	Battle Point Park (2)*				
	Grand Forest Trails	Battle Point Park		Eagledale Park (1)				
	Hilltop Trail	Eagledale Park		Strawberry Hill Park (1)*				
		Fay Bainbridge Park		High School (6)				
		Fort Ward Park		Bainbridge Ath. Club				
		Gideon Park						
		Madison Avenue Tot Lot						
		Owen's Playground @ Rotary Park						
		Schel Chelb						

Red text: non-park property; *Potential location for additional courts

Photo Inventory

The Sakai property is a diverse landscape of emergent alder tree groves, remnant Christmas tree farm, historic orchard, grassy slopes, wetlands, and pond. The mostly-naturalized landscape still bears evidence of its past as a strawberry farm and landform manipulation with man-made berms and excavated pond. The following photo inventory tells the story of steep slopes, an abandoned bunker, the adjacent vacant city parcel, and filtered views to the pond.



Sakai Property Boundary & Photo Inventory Key Map

Watershed Discussion

Sakai Park is within the North Eagle Harbor Watershed, one of the twelve watersheds on Bainbridge Island. This watershed flows to Eagle Harbor, a body of water essential to Winslow's present ecological and economic well being. Ravine Creek, one of the seven streams in this watershed, begins just north of the Park, and draws overflow from the Sakai Pond on its way south. A significant hydrological and wildlife corridor, Ravine Creek forms a vital habitat connection within the greater matrix of Bainbridge Island. Furthermore, activity on and adjacent to the Park has potential to greatly affect the water quality and flow through this watershed, and, ultimately Eagle Harbor.



Bainbridge Island Watersheds (Source: City of Bainbridge Island)

Cultural Resources Discussion

Sonoji Sakai (1884-1953) emigrated from Japan to the United States arriving on Bainbridge Island in 1915. A review of historical maps indicate that sometime between 1935 and 1940 Sonoji and his wife Yoshiko (1897- 1994) purchased the land where the Ordway School is today, as well as the property located on the east side of High School Rd. (Kroll 1935 and 1940).

During the 1941-1945 internment, the family rented the house to "surrogates" who cared for the farm in their absence. In 1948, the Sakais sold a large portion of their farm to the school district for the same price they had purchased it for over a decade before. In 1998, the school district named the new intermediate school built after Sonoji Sakai. The Sakai family retained the property east of High School Road and in 1966 built their house.

The house is located on a hill overlooking the pond. The house has a crossed-shaped floor plan with a main north south body crossed by a secondary wing, which has a slight projection on the east and an open carport drop off on the west. The simple cross gable roof plan reflects the floor plan and is covered in wood shakes. The one-story house encloses 2100 square feet and has an identical full basement which opens onto sloping fields on the west side of the house. The house has poured 8 inch wide concrete footings and is clad with vertical painted wood boards.

The architectural design of this house reflects the mid-twentieth century Japanese aesthetic. It is now more than 50 years old and may meet the criteria for exceptional importance for historic register consideration.

Note: Sakai Property history (above) provided by Bainbridge Island Historical Museum



Wetland Boundary Delineation Figure (Source: Ecological Land Services Critical Areas Report, January 2017)

Wetlands Delineation Discussion Ecological Land Services (ELS) conducted a wetland boundary delineation and provided a delineation report for the Sakai Park property. ELS followed the Routine Determination Method to examine vegetation, soils, and hydrology that would indicate the presence of a wetland. Two wetlands were delineated on the property from a site visit on December 8, 2016; both wetlands A and B are depressional systems (See Wetlands Boundary Delineation Figure).

Wetland A, delineated only along its western boundary, extends offsite to the north and south and is a large, forested complex with areas of permanent and seasonal ponding; it is categorized as a Type II wetland. Wetland B, delineated entirely within the Park property, is a narrow, forested system with a seasonally flooded hydroperiod; it is categorized as a Type III wetland. Critical Area Regulations impose buffers for wetlands that pertain to both water quality and habitat function; the final buffer width for each wetland is 150', accommodating the 100' Water Quality Buffer and 50' Habitat Buffer for high intensity land uses.

Geotechnical Report Discussion PanGeo conducted a geotechnical report for the Sakai Park property, evaluating subsurface conditions, infiltration considerations, and geologically hazardous areas consideration. Seventeen test pits were excavated on March 14, 2017 along the upper bench of the property, revealing a perched groundwater table and underlying till with low permeability (See Site Exploration Plan). Infiltration rates of 0.001 to 0.002 inches per hour are associated with the subsurface profiles found on the site; these rates limit the opportunities to use infiltration as a stormwater management tool.

There were three test pits that showed evidence of fill ranging from 2 to 8 feet, and three other test pits that showed evidence of a historic strawberry field clay tile drain system. The report includes seismic design and building foundation parameters for future engineering needs; however, there was no evidence of historical slope instability.

Soils Summary

- Till underlying the site is characteristic of having low permeability
- Perched groundwater table
- Infiltration rates are very low (0.001 to 0.002 inches/hour)
- Encountered areas with fill ranging from 2 to 8 feet
- Encountered strawberry field clay tile drain system
- No evidence of historical slope instability
- Spring at toe of slope is "emergent" perched groundwater
- Seismic design and building foundation parameters for future engineering needs were provided



Site Exploration Plan (Source: PanGeo Geotechnical Report, April 2017)

Site Utilities

The graphics below demonstrate that the Sakai Property is located within the Winslow Water Service Area and the Sewer Service Area as designated by the City of Bainbridge Island. The site's power is provided by Puget Sound Energy, and phone/data service is provided by either CenturyLink or Comcast.



Water Service Area Map (Source: City of Bainbridge Island)



Sewer Service Area Map (Source: City of Bainbridge Island)

Zoning

The Sakai Park property is zoned R-8 and subject to permitted and conditional use restrictions as identified in the City of Bainbridge Island (COBI) Municipal Code Chapter (MCC) 18.09. According to MCC 18.09.020 Permitted Use Table, permitted public and institutional uses in an area zoned R-8 include community garden and passive park recreation. Conditional uses include active park recreation, indoor recreation activity, and outdoor recreation activity. Conditional use facilities permitted in district R-8 include educational, governmental, religious, day care, health care, club, or cultural facilities. Being that the Sakai Park project will likely include all five proposed use categories, it is probable that the project will require a major conditional use permit, per MCC 2.16.110 Major conditional use permit, since it does not meet the criteria for a minor conditional use permit noted in 2.16.050. The permitted uses table also refers to MCC 16.12.040 for additional requirements - this section is for the Shoreline Master Program and is not applicable to this project.

Dimensional Standards

According the COBI MCC 18.12 (Table 18.12.020-2 Standard Lot Dimensional Standards for Residential Zone Districts), parcels in zoning district R-8 are allowed maximum lot coverage of 25% of the total property.

Also identified in MCC 18.12 are minimum setbacks, which include:

- Front/Street setback: 25 feet + 4 feet for each story over 2 stories
- Side setback: 5 feet minimum, 15 feet total + 5 feet on each side and 10 feet to total setback for each story over 2 stories
- Rear setback: 15 feet

Maximum building height for uses in R-8 district is 35 feet, with a possible bonus of 40 feet for nonresidential uses if conditional use permit conditions are met. A possible exemption for alternative height limits may apply if additional conditional use permit provisions of MCC Title 2 are met.

Critical Area Setbacks

Critical Area development standards found in the MCC 16.20.160.D impose buffers for wetlands that pertain to both water quality and habitat function; the final buffer width for each wetland is 150 feet, accommodating the 100-foot Water Quality Buffer and 50-foot Habitat Buffer for high intensity land uses. See Appendix: Wetland Delineation Report for further details.

According to the 2017 Geotechnical Report conducted by PanGeo, there was insufficient evidence to prove that erosion or landslide hazards exist on the site, and therefore critical area setbacks imposed by the City of Bainbridge Island are limited to those from the wetland delineation report/MCC 16.20.160.

The steep slope setback was set to minimize slope disturbance and erosion, with the knowledge that this area was to be used for storm water dispersal.

Stormwater

Stormwater treatment and management will follow guidelines from the Department of Ecology's 2014 Stormwater Management Manual for Western Washington (SMMWW). Stormwater runoff will be treated, detained, and then discharged according to the hydraulic thresholds of the wetlands on site. These thresholds dictate a maximum impermeable site coverage of 93,000 square feet. Additional impermeable development would result in stormwater runoff in excess of the thresholds outlined in the SMMWW and will require a separate drainage and discharge system.

Site Access

Per a meeting with the City planning department, changes to site access were requested to shift the site driveway to align with the High School and Aquatics Center driveway. This is consistent with the Bainbridge Island 2016 Comprehensive Plan, Transportation Element, Policy TR 6.5: "Develop access management programs to control the location and number of curb cuts. Control the location and spacing of commercial driveway entrances and the design of parking lots to avoid congestion near intersections, line of sight obstructions, and

confusing circulation patterns. Design to prevent pedestrian and vehicular accidents."

The COBI MCC, Title 20 Fire Code states that:

- Section 503.1.1: a fire access road must extend to within 150 feet of all portions of the facility
- Section 503.2.1: fire access roads shall have an unobstructed width of at least 20 feet and an unobstructed vertical clearance of at least 13.5 feet

Parking

For recreational facilities not included as part of an elementary, middle, junior high, or high school or a religious institution, the total required off-street parking spaces should be adequate to accommodate the peak shift as determined by the planning director (COBI MCC 18.15.020-1).

Islandwide Transportation Plan (IWTP)

The Bainbridge Island IWTP designates Madison Avenue North as a secondary arterial with a Level of Service D standard. At the time of this report, the

portion of Madison Avenue North along the Sakai Park property is not served by either a sidewalk or a bike lane.

Land Clearing According to COBI MCC 16.18.040.A, clearing of up to six significant trees in any 12-month period is allowed without a permit, except within critical areas or protected vegetated areas. A significant tree is an evergreen tree 10" in diameter or greater or a deciduous tree 12" in diameter or greater.



Design Process Overview

The conceptual development options generated for Sakai Park are the result of multiple workshops with the BIMPRD team and public meetings held in conjunction with the BIMPRD board meetings. The process began by evaluating each of the ten uses outlined in the community planning process with Robert Linz and determining how each of these uses fit on the site within the constraints identified above. The ultimate goal during the design process was to organize as many uses as possible on the site that would serve the maximum number of users while preserving and enhancing the ecological value and hydrologic function of the site.

Major large-scale uses that were evaluated in the early phases included an outdoor turf field, an indoor turf field, a 50-meter pool, and a full-size gymnastics facility. Based on preliminary parking studies for each of these uses and the total square footage of their footprints, it became evident that developing Sakai Park with these large-scale programs would be prohibitive to developing additional uses that could serve more users.

The Parks District solicited an independent Pool Study to evaluate the condition of the existing aquatics facilities on the island as well as propose various alternatives to meet the growing needs of this user group. Based on the findings in this study, the 50-meter pool was removed as a potential use at Sakai Park.

The following civil design discussion concerning stormwater resulted in the recommendation to limit impermeable development on the site to 93,000 square feet in order to stay within the thresholds set forth by the Department of Ecology's Stormwater Management Manual for Western Washington, as well as avoid additional stormwater costs. Site Studies & Presentations to the BIMPRD Board The design team explored various arrangements of site features throughout the process, and presented these studies to the public at three different public meetings. The following graphics show the studies that ultimately led to the development of the preferred site development scenario discussed in this report.



Study 1: Indoor Turf Field, June 1, 2017



Study 2: Outdoor Field, June 1, 2017



Study 3: 50 Meter Pool, June 1, 2017



SAKAI PARK CONCEPT PLAN Baisbridge Island OPTION 1A IMPERMEABLE AREA ARGET 93,000 SF BUILDINGS: 52,080 SF PARKING: 33,210 SF ROAD: 24,138 SF OVERAGE: 16,428 SF NOTE 10 parking spaces Irking shown (205 Ires not meet minin Emoving 100 parki sults in no overag (205 + 30) POOL STUDY GROUP NEEDS CHECKLIST: VAn 8-lane 50 meter x 25 yard pool with perimeter apron. with perimet ity to hold mo es, higher leve ZAb meets/ iple its simuna ide 20+ la es for lap ning ertified therapy pool f up and cool down spa 89% OPEN SPACE ---- (D 6

Option 1A - Pool Study 1 of 3, July 6, 2017



Option 2 - Maximum Site Uses, July 6, 2017



Study 5, June 1, 2017

19



Option 3 - Community Campus, July 6, 2017

Concept Plan

BAINBRIDGE ISLAND SAKAI PARK Concept Plan Report

Site Constraints

As part of the Park District's purchase of the Sakai property, an agreement was made for a member of the Sakai family to continue to reside in the home as part of a life tenancy. As defined, a life tenant has all rights associated with ownership of real property, except the right to sell the property, until his/her death or if they should choose to vacate the property earlier. Upon the death or vacation of the life tenant, the property reverts back to the owner, in this case, the BIMPRD. Currently, the existing house does not count towards the impervious surface calculation as it predates the park's development. The Sakai Park Concept Plan does anticipate that in the future the existing footprint of the house could be used as a gathering area or office space. Any development that expands the footprint of the house would need to account for the steep slope setbacks, wetland setback, additional impervious surface, as well as new stormwater regulations in the future.



Sakai Residence (Source: RE-SOLVE Appraisal, 2014)



Sakai Bunker (Source: Jones & Jones)

Prioritizing Uses

The ten community-recommended uses were prioritized by Jones & Jones in the order below based on three criteria specifically keyed to the findings of the level of service and site analysis:

- a. Accommodates the greatest number of users
- b. Minimizes stormwater impact upon the site
- c. Minimizes parking impact and related impervious surfaces

1. Multi-Use Indoor Recreation Complex – There is currently no indoor recreation complex in the Park system. This building will be set into the site's slope: three large spaces housing an indoor turf field, dedicated gymnastics space, and basketball/ pickleball courts open year-round.

2. Trails – this ranks highest based on the three criteria as it is within walking distance of Winslow, will be connected to a number of other trails (STO, Cross-Island) as well as internal trails along the slopes and wetland buffers.

3. Playground – a nature playground sized for up to 60 children with soft wood chip surfacing is proposed to minimize stormwater impacts

4. Passive Use(s) – this is in addition to trails. The lawn and meadow areas will be a gathering place for sun, play, bird watching, and relaxation.

5. Picnic Shelters – two shelters are proposed

6. Community Center Campus (Community Recreation Center) (CCC) – a number of smaller buildings are proposed to create flexible multigenerational spaces that can hold a large number of users/uses and can be phased in over time.

7. Outdoor Court – this court will require some retaining walls in order to fit onto the sloped site as well as a swale leading to the stormwater dispersion area.



Nature Play at Oregon Zoo Education Center (Source: Jones & Jones)



Overlook & Benches at Tennant Lake (Jones & Jones)



Picnic Shelter at Island Center Forest on Vashon Island



Bird Blind at Pennypack Park, Pennsylvania (Source: National Audubon Society)

8. Mountain Bike Park/Trails – this proposed use includes a pump track and flow trails. We cannot place the pump track in the stormwater dispersion area, nor would we recommend placing a 'flow trail' under the large Douglas fir trees growing on the steep slope leading to the wetland. We believe the city-owned parcel to the south offers a better location with minimal stormwater and environmental impacts, as well as minimal noise impacts to Sakai Park and thus recommend its acquisition for this use.

9. Multi-Use Outdoor Complex, with Lighting – this use has an outsized stormwater impact as significant site re-grading and retaining walls would be required to provide the type of large all-weather turf surface suitable for year-round play. This field would require stormwater capture and treatment prior to release into the wetland/Sakai Pond/ Ravine Creek watershed. Night lighting and light pollution, while not a specific criteria focus, would not be beneficial to the native wildlife and would run counter to meeting the Dark Skies Initiative mentioned during the community outreach phase.

10. Fifty Meter Pool – as noted earlier in this report, the Park Board decided that any new pool facility or pool renovation will be co- located at the current site of the High School.



Forest Trail

Civil Design Discussion

Water Distribution

Water will be looped on the site and connect to the water main under Madison Avenue. The site is in the high pressure zone of the City of Bainbridge Island's water system with the High School Reservoirs just to the west of the site. The onsite loop will serve both domestic and fire service water needs. The water main is anticipated to be 8-inch. Fire hydrants will be spaced to meet the fire protection requirements in terms of building coverage.

Sanitary Sewer

The sanitary sewer will most likely need to be pumped to discharge to the City of Bainbridge Island sanitary sewer main under Madison Avenue, a 4-inch forcemain made of high density polyethylene pipe. The onsite sanitary sewer system would connect the various buildings to a gravity system that flowed to a sanitary sewer lift station and then connect to the 4-inch line using a forcemain.

It may be possible to get the sanitary sewer to gravity flow to a system south of the property but that would require crossing property that is not owned by the Parks Department. If a forcemain is used it would most likely be 4-inch. If a gravity system is determine to be viable the main would be 8-inch.

Storm Water Management

Stormwater runoff from the site will be discharged to a wetland east of the site, the wetlands are excluded as a potential source of flow control or water quality treatment, therefore flow control and water quality treatment will be provided prior to discharge.

The impervious surfaces of the Picnic Shelter and the CCC will receive flow control and treatment for water quality utilizing full dispersion on the eastern slope down to the wetland. Runoff from the road and parking areas will be treated by filter strips along the outer edge of the impervious area (excluding the portion of the parking area running North/South between the indoor recreation complex and the CCC). Once runoff has been treated by filter strips, the stormwater will need to be collected and routed to one of the two detention vaults to provide flow control prior to discharge to the wetland. Storm runoff from the gymnasium and the north/south parking adjacent to the gymnasium will be routed to a detention vault for quantity control and then flow through a water quality feature prior to discharge to the wetland. The most likely water quality system would be some form of canister system. The remaining stormwater from the indoor recreation complex (the basketball and indoor tennis court) will be collected and pumped to a level spreader to disperse down the vegetated slope to the wetland.

Detention is estimated to require two 27,500 cubic feet detention vaults to maintain hydraulic thresholds for the wetland in accordance to the Department of Ecology's 2014 Stormwater Management Manual for Western Washington (SMMWW).

Baseline runoff calculations were done excluding the multi-purpose room and the outdoor court. Due to wetland thresholds outlined in the SMMWW, the additional stormwater runoff from these surfaces would surpass the maximum allowable discharge into the wetland. These areas would need to have a separate drainage system that avoided discharge to the wetland. One possible option would be pumping to a discharge point downstream of the wetland after treating the water and detaining it for flow control. Possible options to achieving additional impervious surface for park development could include:

- Pumping to a discharge point downstream of the wetland after treating the water and detaining it for flow control. As with the sanitary sewer, this would require crossing property that is not owned by the Park District.
- Acquisition of the City-owned parcel to the south, allowing an additional 6,500 SF. of impervious surface to be constructed within the Sakai Park boundaries.
- Seek shared-use agreements with St. Cecilia's Parish and the School District that would consent to off-site parking acceptable to COBI. This would allow for parking reductions within the Park boundaries and thus reduce the impervious surface impact and allow for additional development.

During the public process there was discussion about stormwater methods that might increase the amount of allowable impervious surface on the site. One technique discussed was rainwater harvesting and reuse, to use the stormwater for irrigation purposes or flushing toilets. There was also a question asked about trying to get a variance to release more water to the wetland. Both ideas were reviewed by consultants. In the case of the rainwater harvesting it was determined this would not resolve the issue of excess water entering the wetland during the rainy season. Rainwater harvesting typically has an overflow mechanism to allow the stormwater to discharge during the rainy season. As for the variance concept, the design team checked with the City regarding some possible variance and was told that the City would not be open to a variance related to the wetland primarily because it would violate the Washington State Department of Ecology stormwater requirements.

Transportation Discussion

Population by Hour

Estimating travel demands for the park begins with determining the number of people likely to use the new recreation facilities at Sakai Park. The number of users and their travel patterns has been estimated for each facility following discussions with Parks staff. Those discussions reviewed the schedule for classes and open activity periods, the number of staff and instructors needed to run them, as well as trends in carpooling, drop-off, walking and biking.

Figure 1 illustrates the assumed attendance by facility across the day for the concept plan, and Figure 1a shows the total hourly population.

The busiest time of day would be the early evening between 6:00 p.m. and 7:00 p.m. with almost 300 persons present. Late morning and the early afternoon would see from 220 to 240 persons present. That level of use could be expected during periods of fair weather when outdoor activities such as the outdoor courts, outdoor education, nature play and picnic facilities are in use. Those outdoor uses account for almost 15% of people at the 6:00 p.m. peak, and nearly 35% during the late morning.



Parking Lot at Gene Coulon Park (Jones & Jones)

-																
Figure 1. Population by Time of Day and Activity - Weekday (Wednesday)																
	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00
Indoor Recreation Field			32	12	32	12				32	12	32	12			
Gymnasium with Courts	30	0	38	8				38	8	0	0	38	38			
Gymnastics										30	42	64	79	80	20	
Outdoor Courts				10	10	10		10	10	10						
Day Care	5	30	45	48	48	45	36	41	41	38	26	5	2			
Multi-Purpose Room				- 25	5	8	43	- 14	- 25	5	5	5	55	55	10	
Teen Center/Computer Lab						10	20	35	40	40	40	15	10	5		
Studio Senior Space				45	45	45	60	60	45	0	0	8	52	52	8	
Parks Dept. Office		- 24	26	28	26	24	15	25	25	25	- 22	2	2			
Nature Play			- 3	- 3	6	9	10	- 5	- 3	- 3	- 5	- 3	3	3	- 3	
Outdoor Education			1	3	- 33	33	8									
Picnic Shelters					4	23	23	11	0	0	11	38	38	4	4	
Total Persons	35	54	145	182	209	219	215	239	197	183	163	210	291	199	45	0

Projected Park Population by Time of Day & Activity (Source: Tilghman Group)





Modes of Travel

The way people get to the park will vary depending on their age and the time of their visits. For example, young children will be driven to the park while older children may be dropped off and later picked up by parents driving. Various afternoon activities will attract kids from the high school who will walk to the park and may later be picked up. Table 2 provides assumptions for the mode of travel for visitors to each facility within the park.

Walking and cycling would be expected to increase in fair weather, particularly during the summer. The range of increase in walking and cycling could be from 10% to 30% over the assumptions shown above. That would reduce driving and drop-off trips by roughly 1% to 1.5%. Pedestrian and Bicycle Improvements Development of Sakai Park would provide new walkways and crossings for pedestrians, including:

- New 5-7 foot wide sidewalks along the length of the park's frontage on the east side of Madison Avenue
- A new marked crosswalk on the south side of the driveway's intersection with Madison Avenue to facilitate walking between the high school, the aquatic complex and Sakai Park.

For cyclists, Sakai Park would:

- Allow for a connection to the regional Sound to Olympics shared-use trail
- Allow for the addition of a 4-5 foot wide bike lane on Madison Avenue

Table 2 - Assumed Modes of Travel

Assumed Mode of Travel by Visitors								
Use	Drive	Person/Veh	Drop Off	No Veh.	Total			
Indoor Rec. Field	45%	1.30	50%	5%	100%			
Gym Courts	30%	1.40	65%	5%	100%			
Gymnastics	20%	1.30	75%	5%	100%			
Outdoor Courts	95%	1.35	0%	5%	100%			
Day Care	5%	1.10	95%	0%	100%			
Multi-Purpose Room	90%	1.30	5%	5%	100%			
Teen Ctr/Comp. Lab	20%	1.20	70%	10%	100%			
Multi-generational	85%	1.20	5%	10%	100%			
Parks Department	95%	1.00	0%	5%	100%			
Nature Play	95%	2.00	0%	5%	100%			
Outdoor Education	45%	1.20	50%	5%	100%			
Picnic Shelters	95%	3.10	0%	5%	100%			

(Source: Tilghman Group)

Traffic Volumes

The park's new recreation facilities would generate a total of 2,075 daily vehicle trips, half arriving and half departing. The busiest hour would occur between 5:00 p.m. and 6:00 p.m. with a total of 260 vehicle trips (135 arrivals and 125 departures). Noon hour traffic would have 210 vehicle trips, equally split between arrivals and departures.

The driveway would provide three lanes at its intersection with Madison Avenue, consisting of one lane inbound and two outbound. That would allow a left-turn lane for outbound traffic plus a combined through and right-turn lane. In order to minimize conflicts on Madison Avenue, the driveway would be located opposite the high-school driveway as requested by COBI.



Hourly Traffic Volumes (Source: Tilghman Group)

Parking Demand & Supply

Figure 2 shows parking demand by hour of the day for a weekday (Wednesday). It is based on the number of people present by hour and their mode of travel. It also includes five Parks Department vehicles that would be based at the new Parks office.

Parking demand peaks at noon with a total of 120 vehicles at the park for the concept plan. The parking peak occurs at noon, even though the population peak occurs at 6:00 p.m., due to the greater number of adults present midday who mainly drive and park. During seasons when outdoor activities are not held, midday parking demand would decrease by approximately 25 vehicles. Removing the outdoor sports court from the concept plan would result in a reduction of 5 vehicles each hour through the morning and afternoon. The site plan provides parking for 70 vehicles on the site, and 30 vehicles along a new curb-frontage on Madison Avenue. At the busiest times, up to 20 vehicles will need to park elsewhere. Additional parking on Madison Avenue south of the site accommodates 16 vehicles. Actual availability depends on how many other vehicles occupy those spaces. The few additional spillover vehicles will seek parking in other nearby areas, including St. Cecilia's Parish and Bainbridge Island High School. It is recommended that the Parks Department seek a shared-use agreement with the Parish and the High School to accommodate parking demand so that park users can be clearly directed to appropriate parking locations when necessary.

Possible shared-use agreements with St. Cecilia's Parish and the School District could reduce on-site parking demand if such agreements were acceptable to COBI.



Figure 2. Sakai Park Estimated Weekday (Wednesday) Parking Demand -- Option 2

BAINBRIDGE ISLAND SAKAI PARK Concept Plan Report

²⁷ Concept Plan

Sakai Park Concept Plan

Concept Plan Potential Variances: Inclusion of the Multi-purpose room adjacent to the Outdoor Education structure is proposed within an area of steep slopes. A typical foundation-on-grade structure would also exceed the site's maximum allowable impervious surface. The multi-purpose room could be built over the hillside on small pin foundations and stilts. Such construction has minimal impact on the slope and would allow the surface runoff to naturally flow beneath the building's undisturbed soil. Roof runoff would be placed on the uphill side of the structure for dispersal.

Inclusion of the outdoor sports court would exceed the impervious surface square footage. Possible options to achieving additional impervious surface for park development could include:

- Pumping to a discharge point downstream of the wetland after treating the water and detaining it for flow control. As with the sanitary sewer, this would require crossing property that is not owned by the Park District.
- Acquisition of the City-owned parcel to the south, allowing an additional 6,500 SF. of impervious surface to be constructed within the Sakai Park boundaries.
- Seek shared-use agreements with St. Cecilia's Parish and the School District that would consent to off-site parking acceptable to COBI. This would allow for parking reductions within the Park boundaries and thus reduce the impervious surface impact and allow for additional development.



Mercer Slough Environmental Education Center (Source: Jones & Jones)









Sakai Park Concept Plan - Nature Park



BAINBRIDGE ISLAND SAKAI PARK Concept Plan Report

The estimates below represent a range of construction costs based on current market conditions. Any combination of these elements can be used to create Sakai Park as long as the impervious surface does not exceed 93,000SF (or 99,000SF if the adjacent City Parcel is acquired). Note that the Parking & Road line item must be included in any combination of elements selected for Sakai Park and that all items under Fixed Costs are to be included in the final build-out.

				Unit Cost -	Unit Cost -					
Schematic Design	Impervious	Unit	Qty (SF)	low	high	Тс	otal Cost-low	Total	Cost - high	Comments
Indoor Rec Field	Х	SF	26,180	\$ 180	\$ 220	\$	4,712,400	\$	5,759,600	conc slab floor w/fieldturf
Indoor Sports Court	х	SF	7,980	\$ 200	\$ 240	\$	1,596,000	\$	1,915,200	wood floor lined for basketball, pickleball, tennis
Gymnastics Gym	х	SF	7,140	\$ 200	\$ 240	\$	1,428,000	\$	1,713,600	conc slab floor, equipment excluded
Atrium	х	SF	6,550	\$ 170	\$ 200	\$	1,113,500	\$	1,310,000	includes mechanicals for gyms and rec field, and equipment storage
Community Center Campus	х	SF	14,875	\$ 250	\$ 310	\$	3,718,750	\$	4,611,250	incl. variance for 3675 sf bldg. over steep slope
Community Center covered walk	х	SF	1,650	\$ 80	\$ 110	\$	132,000	\$	181,500	
Outdoor Education (Bunker)		SF	3,675	\$ 300	\$ 350	\$	1,102,500	\$	1,286,250	does not count toward new impermeable surface
Picnic Shelters	х	SF	800	\$ 80	\$ 150	\$	64,000	\$	120,000	
Trails		LF	2,600	\$ 12	\$ 18	\$	31,200	\$	46,800	
Nature Play		SF	10,000	\$ 30	\$ 60	\$	300,000	\$	600,000	
Boardwalk		SF	13,600	\$85	\$ 125	\$	1,156,000	\$	1,700,000	
Outdoor Sports Court	Х	SF	7,200	\$ 50	\$ 75	\$	360,000	\$	540,000	incl. fencing, requires impervious surface variance
Outdoor All-Weather Field	х	SF	44,000	\$ 35	\$ 70	\$	1,540,000	\$	3,080,000	max square footage to meet stormwater limitation of 93,000sf
Fixed Costs										
Parking & Road	х	SF	31,500	\$ 4	\$7	\$	126,000	\$	220,500	
Sidewalks	х	SF	2,350	\$7	\$ 10	\$	16,450	\$	23,500	permeable ADA-gravel walks over geogrid
Stormwater - base		LS	1	\$ 600,000	\$ 750,000	\$	600,000	\$	750,000	
Sitework		SF	265,838	\$2	\$ 4	\$	531,676	\$	1,063,352	

- 1. Present the Concept Plan to the Park Board and general public for review and comment
- 2. Park Board to approve Concept Plan this should include comments and to be addressed in the next phase of work
- 3. Commence next phase of design work. Design to include floor plans for buildings, building materials palette, preliminary layout and sizing of utilities and stormwater, construction cost estimates, and potential Phasing Plan
- 4. Park Board to review Design and Phasing Plan, make recommendations on direction to proceed.
- 5. Bond Issue
- 6. Commence Design Development/Construction Documents/Bid Set/Cost Estimates based on Park Board recommendations
- 7. Construction and opening



Mercer Slough Nature Park (Source: Jones & Jones)

JONES ARCHITECTS & LANDSCAPE ARCHITECTS

Johnpaul Jones Duane Dietz Rachael Kitagawa Janelle Lotzgesell



David Schwartz Alex Sundell



• Ross Tilghman



Siew L. Tan