City of Bellevue
Development Services Department
Land Use Staff Report

Proposal Name:	**Strong Residence**
Proposal Address:	**1604 W Lake Sammamish Pkwy NE**
Proposal Description:	Administrative Variance and Critical Areas Land Use Permit to redevelop an existing site with a new single-family residence on a constrained lot along the shoreline of Lake Sammamish
File Number:	**14-141759-LO & 14-143029-LS**
Applicant:	**John Strong**
Decisions Included:	Critical Areas Land Use Permit (Process II. LUC 20.30P) Variance from the Land Use Code (Process II. LUC 20.30G)
Planner:	**David Wong**, Planner
State Environmental Policy Act Threshold Determination:	**Exempt per WAC 197-11-800**
Director's Decision:	**Approval with Conditions**

Carol V. Helland, Land Use Director
Development Services Department

Application Date:	September 25, 2014 & October 21, 2014
Notice of Application Publication Date:	November 6, 2014
Decision Publication Date:	March 26, 2015
Project/SEPA Appeal Deadline:	April 9, 2015

For information on how to appeal a proposal, visit Development Services Center at City Hall or call (425) 452-6800. Comments on State Environmental Policy Act (SEPA) Determinations can be made with or without appealing the proposal within the noted comment period for a SEPA Determination. Appeal of the Decision must be received in the City's Clerk's Office by 5 PM on the date noted for appeal of the decision.

CONTENTS

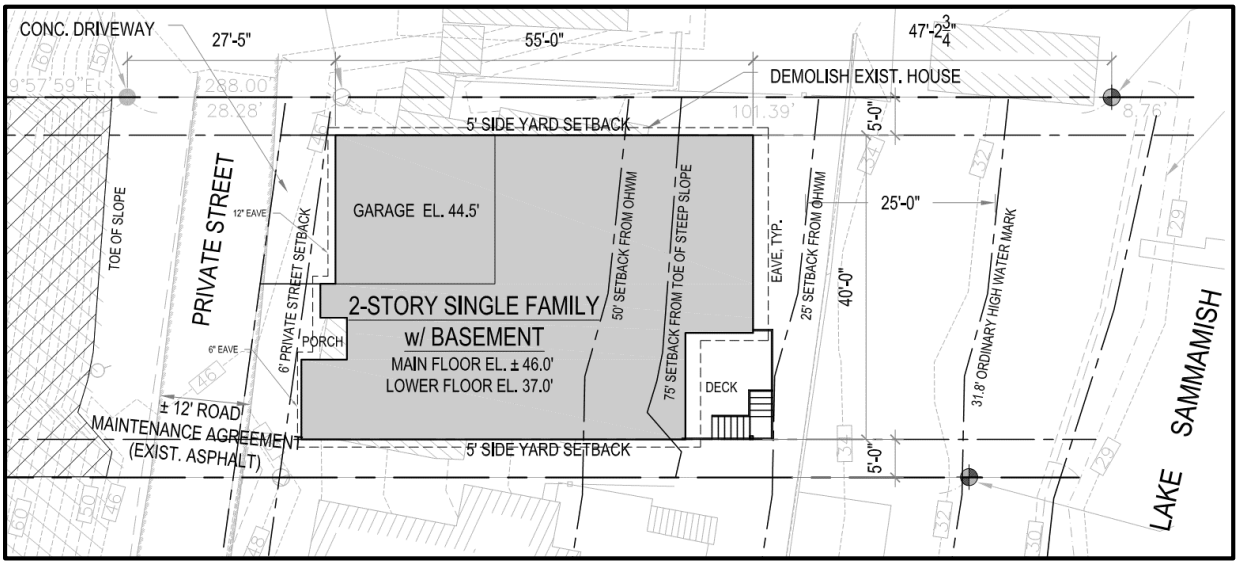
Attachments

1. Site Plan
2. Geotechnical Report (in file)
3. Critical Areas Report
4. Variance Narrative

I. Proposal Description

The applicant is proposing to construct a new single-family residence on property located at 1604 West Lake Sammamish Pkwy NE. The site is currently developed with an older single-family residence. The project includes demolition of the existing residence and installation of site landscape as mitigation for current proposed action.

Figure 1



Redevelopment of the site requires deviation from the prescriptive requirements that apply to the site. The following is a list of action approved with this permit.

Actions approved in compliance with prescriptive Land Use Code allowances:

- Reduction of the site's side yard setbacks to five (5) feet as allowed under LUC 20.25H.040.B. Compliance with the minimum setback is required. No building elements may protrude into the reduced setback.

Actions approved through the project Critical Areas Land Use Permit:

- Construction of a new home as depicted in the project site plans included as Attachment 1. Construction permits are required.

- Reduction/elimination of the shoreline structure setback from 25 feet to a variable dimension necessary to accommodate the footprint of the new home as depicted in the project site plans (Attachment 1). Shoreline mitigation plantings are required. No reduction in the required 25-foot shoreline buffer is proposed or authorized. No building elements may extend into the required 25-foot shoreline buffer.

    - Reduction of the toe of slope structure setback from 75 feet to a variable dimension necessary to accommodate the footprint of the new home as depicted in the

project site plans (Attachment 1). Compliance with geotechnical engineer recommendations (Attachment 2) is required.

- Removal of the existing planter box, rockery, and all fill below the existing bulkhead in accordance with the project mitigation plan found in the project critical areas report (Attachment 3). This mitigation action is a required component of the project.

- Planting native shoreline vegetation as mitigation in accordance with the project mitigation plan found in the project critical areas report (Attachment 3). This mitigation action is a required component of the project

Actions approved through the project Variance from the Land Use Code:

- Reduction of the front yard setback from the North Rosemont Beach Drive access easement from ten (10) feet to five (5) feet. Compliance with the minimum setback of five (5) feet is required. No building elements may protrude into the reduced setback.

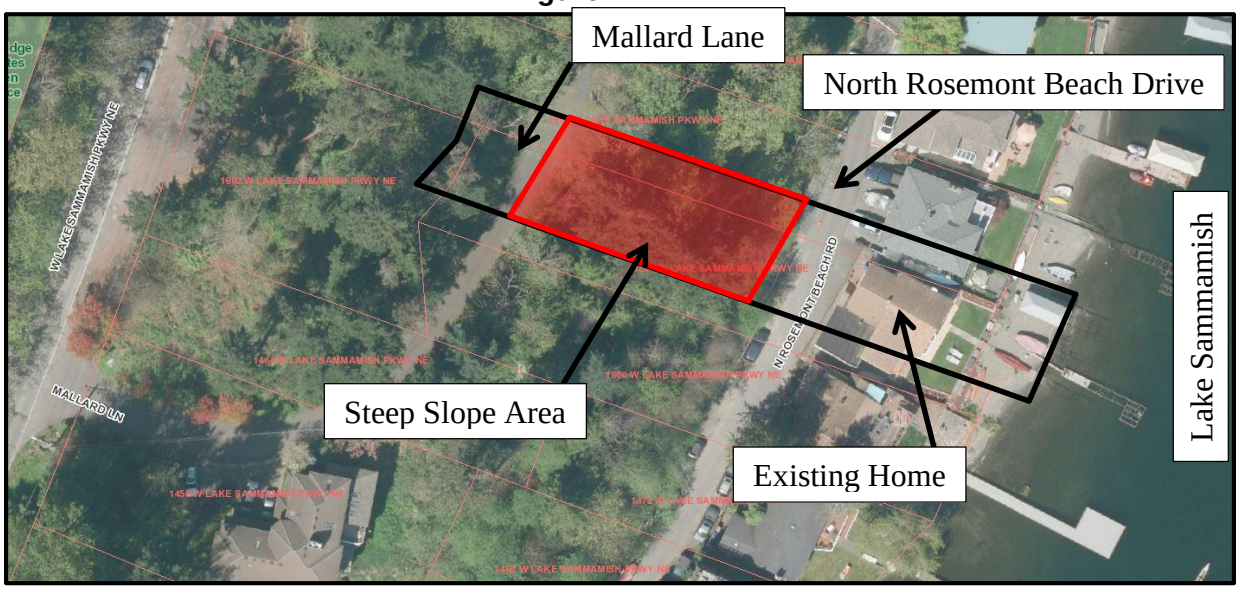
II. Site Description, Zoning, Land Use and Critical Areas

A. Site Description

The subject site is located at 1604 West Lake Sammamish Parkway North East. The property slopes down to the east with significant grade change from the uphill portion near West Lake Sammamish Parkway NE. A large portion of the site is characterized by protected steep slope geologic hazard critical areas. At the toe (bottom) of the steep slope areas, the site takes access from West Lake Sammamish Parkway via North Rosemont Beach Road, a private access road of varying widths that services dozens of homes along the shoreline of Lake Sammamish. North Rosemont Beach Drive originates at the grade level of West Lake Sammamish Parkway dropping in elevation to lake level where the subject property is situated.

A second private access driveway, Mallard Lane, transitions the upper portion of the lot, crossing an un-buildable portion of the property encumbered with a large steep slope area. The site is also fronted by the shoreline of Lake Sammamish and is restricted by the Lake Sammamish shoreline buffer, shoreline structure setback, and FEMA floodplain (Area of Special Flood Hazard). Due to the location of the access driveways, the presence of steep slopes, proximity to Lake Sammamish, and the regulated floodplain the 14,400 square foot (sf) site is restricted in available building area. The property owner is proposing redevelopment of the property and is requesting approval to build a new larger single family home in the place of the current home between the access driveway, and the shoreline of Lake Sammamish. See Figure 2 below.

Figure 1



Design Constraints: Several constraints were encountered in design of the proposed residence that prompted the applications for Critical Areas Land Use Permit and Variance from the Land Use Code. Constraints were as follows:

- Steep slopes along the western end of the site
- Shoreline frontage along the eastern edge of the site
- Narrow lot
- Access easement/driveway through the center of the site

These restrictions have limited site planning options in redevelopment of the property. As a result, the applicant has designed a home to occupy a specific area. The proposed site design represents a balancing of development restrictions with current site conditions and context and includes the following:

- The footprint of the home is proposed to be outside of the required 25-foot shoreline buffer. No building elements are allowed within the required 25-foot buffer.

- The footprint of the home is proposed to be constructed within a previously impacted portion of the 25-foot shoreline setback (allowed through Critical Areas Land Use Permit – see section VII below).

- The footprint of the home is proposed to be constructed within the 75-foot toe of slope structure setback (allowed through Critical Areas Land Use Permit – see section VII below).

- The footprint of the home is proposed to be outside of the Lake Sammamish Floodplain – defined as elevation 36.1’ NAVD (area of special flood hazard).

- The footprint of the home will retain 5 foot setbacks along both of the site's side yards (allowed by LUC 20.25H.040.B). Compliance with the minimum setback of 5 feet is required. No building elements may protrude into the reduced setback.

- The footprint of the home will maintain a minimum of 6 feet of setback from the North Rosemont Beach Drive access easement (allowed through Variance from the Land Use Code – see section VII below). Compliance with the minimum setback of 6 feet is required. No building elements may protrude into the reduced setback.

B. Zoning

The property is zoned R-2.5. The property is also within the Critical Areas Overlay District and Shoreline Overlay District.

C. Critical Areas Functions and Values

i. Geologic Hazard Areas

Geologic hazards pose a threat to the health and safety of citizens when commercial, residential, or industrial development is inappropriately sited in areas of significant hazard. Some geologic hazards can be reduced or mitigated by engineering, design, or modified construction practices. When technology cannot reduce risks to acceptable levels, building in geologically hazardous areas is best avoided (WAC 365-190).

Steep slopes may serve several other functions and possess other values for the City and its residents. Several of Bellevue's remaining large blocks of forest are located in steep slope areas, providing habitat for a variety of wildlife species and important linkages between habitat areas in the City. These steep slope areas also act as conduits for groundwater, which drains from hillsides to provides a water source for the City's wetlands and stream systems. Vegetated steep slopes also provide a visual amenity in the City, providing a "green" backdrop for urbanized areas enhancing property values and buffering urban development.

1604 West Lake Sammamish Parkway is characterized by a large geologic hazard steep slope critical area. The slope area is located between the front of the lot in the vicinity of Lake Sammamish Parkway NE, and the site's access driveway, North Rosemont Beach Drive. The slope area is forested although it has been historically cleared. The top of the slope is developed with a private access driveway (Mallard Lane) that services homes to the north of the site. The toe of the slope has been historically cut and the area along the shoreline graded to establish North Rosemont Beach Drive and provide building pads along this section of driveway. The site does not contain any structures within the protected slope or top of slope buffer area. Development activity proposed with this application is limited to construction at the toe of slope and incudes a widening of the paved area of

North Rosemont Beach Drive (up to the toe of the slope), demolition of the existing and construction of a new home, and establishment of new site landscaping.

No impacts are proposed within the regulated slope area or top of slope buffer and no impacts or modifications are proposed to the toe of the slope. All impacts will occur within the 75 foot toe of slope structure setback required under LUC 20.25H.120.C. In response to restrictions on development in this area, the applicant has consulted with a qualified geotechnical engineer and has provided a geotechnical report as part of the application package supporting the proposal. The report recommends a reduction to the toe of slope structure setback from 75 feet to a setback matching the edge of the existing access easement driveway. The applicant has designed the new home in compliance with this recommended setback. See project geotechnical report included as Attachment 2.

ii. Shorelines

Shorelines provide a variety of functions including shade, temperature control, water purification, woody debris recruitment, channel, bank and beach erosion, sediment delivery, and terrestrial-based food supply (Gregory et al. 1991; Naiman et al. 1993; Spence et al.1996).

The subject site has frontage along the shoreline of Lake Sammamish. In accordance with LUC 20.25H.115, sites developed with an existing residence are subject to a 25-foot shoreline buffer with an additive 25-foot structure setback measured from the Ordinary High Water Mark of Lake Washington of from elevation 31.8 NAVD. The current site development consists of a single family home and deck. The shoreline buffer and structure setback are considered to be in a developed and degraded condition. See Figure 3 below. In response, the applicant has submitted a Critical Areas Report documenting the site's condition. Due to site constraints, the applicant is proposing to redevelop the site with a new single family home in the location of the existing residence and deck. The new home is proposed to be located within the shoreline setback and the applicant has requested a modification of the shoreline structure setback. See approved project plans included as Attachment 1. To compensate for the elimination of the shoreline structure setback and location of the home at the edge of the shoreline buffer the applicant has prepared a mitigation plan that includes planting and maintenance of vegetation along the shoreline of Lake Sammamish. See project Critical Areas report included as Attachment 4. Compliance with the 25 foot buffer is required. No building elements may protrude into the required shoreline buffer.

Figure 3

III. Consistency with Land Use Code Requirements:

A. Zoning District Dimensional Requirements:

The site is located in the R-2.5 zoning district. The following table summarizes the dimensional standards (does not include critical area shoreline standards) that apply compared with the dimensions proposed under the requested variance:

Table 1: Dimensional Requirements (LUC 20.20.010)

STANDARD	REQUIRED	PROPOSED
Front yard structure setback	20 feet	20 feet
*Setback from an Access Easement	10 feet	6 feet
Rear yard structure setback	25 feet	25 feet
Side yard structure setback	5 feet	5 feet
**2 side yards structure setback	15 feet	10 feet
Maximum building height	35 feet	35 feet
Maximum lot coverage	35%	< 35%
Maximum impervious surface	50%	< 50%
Minimum greenscape percentage of front yard setback	50%	< 50%
Footnote (43): Floor Area Ratio (FAR) Threshold	0.50	< 0.50

** = Variance requested. See discussion below for details.*
*** =Modified by Critical Areas Land Use Permit.*

Figure 4: Development patter of North Rosemont Drive Neighborhood

Table 2: Comparison of Neighborhood Development

West Lake Sammamish Parkway Address	Setback From Easement (feet)	Building Envelope (square feet)
1610	15	Approximately 1,600
1614	12	Approximately 1,800
1472	7	Approximately 1,625
1462	2	Approximately 1,300
1460	20	Approximately 1,333
1450	13	Approximately 1,800

B. Front yard/Access Easement Structure Setback

Due to the relative shallow depth of the developable portion of the property, coupled with the required 25-foot shoreline critical area shoreline buffer, the only feasible location to site the proposed structure is between the shared access road (North Rosemont Beach Drive) and Lake Sammamish, requiring a reduction from the standard 10 foot structure setback measured from shared access driveways. The critical areas overlay section of the Land Use Code (LUC 20.25H) encourages this sort of adjustment in order to protect the functions and values of the shoreline critical area.

The majority of the homes in this section of North Rosemont Beach Drive were constructed prior to annexation into the City of Bellevue with existing are setback ranging from 5 to 10 feet measured either from the edge of the private access easement. Due to the shallow depth of the buildable portion of this lot and the context of the surrounding neighborhood, a 6 foot setback for the Strong property is appropriate.

As demonstrated in Table 2 above, the requested variance would not be a granting of special privilege. A number of the properties in the vicinity already enjoy a reduced front yard setback due to the constraint of the lakeshore, the access easement and uphill slopes. Not granting the requested variance would render an undesirable building footprint compared to the surrounding properties and would constitute a significant hardship to the property owner as the standard buildable area allowed without variance would result in an un-marketable home.

The variance has met the approval of the Bellevue Transportation Department as the site is located at the end of and adjacent to a private shared access driveway. No impact to the access easement is expected.

C. Critical Areas Requirements LUC 20.25H:

i. General

a. Critical Areas Report LUC 20.25H.230

The applicant supplied a complete critical areas report supported by project narrative, shoreline planting plans, and geotechnical report. The report meets the minimum requirements in LUC 20.25H.250.

ii. Geologic Hazards

a. Performance Standards LUC 20.25H.125

The applicant is not proposing any development or construction within the critical area or critical area buffer. The applicant's geotechnical engineer has evaluated the slope and the proposed construction and recommends that the structure can safely be located within the toe of the steep slope without risk (See Project Geotechnical Report – Attachment 2). No modification to the

slope, toe of slope, or top of slope buffer is proposed or allowed as part of this permit.

iii. Shorelines

a. Shoreline Buffer and Structure Setback LUC 20.25H.115

The applicant has provided information necessary to reduce the shoreline structure setback from the required 25-foot standard dimension for developed sites to accommodate the new proposed residence. This reduction is allowed through Critical Areas permit process. No reduction of the required 25-foot buffer is proposed. To improve site conditions over the current existing degraded condition in compliance with LUC 20.25H.230, the applicant is proposing installation of native vegetation within the shoreline buffer (See Project Critical Areas Report - Attachment 3). Compliance with the 25 foot buffer is required. No building elements may protrude into the required shoreline buffer.

b. Performance Standards for Residential Development

The residential development regulations of the shoreline overlay district are being met. The home as proposed is under the 35-foot maximum height as measured from average existing grade. The proposal includes a request modify the vegetation along the shoreline through installation of native vegetation as mitigation (See Project Critical Areas Report - Attachment 3). The 25-foot buffer will be maintained. No other structures or ancillary facilities are proposed.

IV. Public Notice and Comment

Application Date:	September 25, 2014 & October 21, 2014
Public Notice (500 feet):	November 6, 2014
Minimum Comment Period:	November 20, 2014

The Notice of Application for this project was published in the City of Bellevue weekly permit bulletin on November 6, 2014. It was mailed to property owners within 500 feet of the project site. No comments have been received from the public as of the writing of this staff report.

V. Summary of Technical Reviews

Clearing and Grading:

The Clearing and Grading Division of the Development Services Department has reviewed the proposed development for compliance with Clearing and Grading codes and standards. The Clearing and Grading staff found no issues with the proposed development.

Utilities

The Utilities Department's Development Review Division has reviewed the proposed development for compliance with Bellevue Utilities' codes and standards. The Utilities Development Review staff found no issues with the proposed development.

Transportation
The Transportation Department's Development Review Division has reviewed the proposed development for compliance with Bellevue's Transportation codes and standards. The Transportation Development Review staff found no issues with the proposed development.

VI. State Environmental Policy Act (SEPA)

The proposal is categorically exempt from SEPA review per WAC 197-11-800 for minor new construction of a single-family residence.

VII. Decision Criteria

A. Variance from the Land Use Code – General Decision Criteria LUC 20.30G.140.A
The Director may approve, or approve with modifications an application for a variance from the Land Use Code if:

1. The variance will not constitute a grant of special privilege inconsistent with the limitation upon uses of other properties in the vicinity and land use district of the subject property; and

Finding: Approval of a variance to the required front yard setback will not constitute a grant of special privilege to the applicant. The requested variance will result in a building pad which is consistent with the surrounding neighborhood. Houses in the vicinity have footprints which range in size from 1,200 square feet to 2,000 square feet with building depths ranging from 45 feet to 80 feet. The City has previously approved a variance for the neighboring property and has issued construction permits to homes retaining their non-conforming status through restricted valuation.

The proposed variance will result in increasing the potential building area outside of setbacks by an additional 4 feet for a total depth. The proposal does not include a modification to the maximum allowed lot coverage (35% of the total lot area)) which is consistent with the footprints of neighboring structures.

2. The variance is necessary because of special circumstances relating to the size, shape, topography, location or surroundings of the subject property to provide it with use rights and privileges permitted to other properties in the vicinity and in the land use district of the subject property; and

Finding: The variance is necessary because of the size and shape of the property. Development potential on property is constrained by the proximity of the sensitive

natural features both to the west (steep slope) and to the east (Lake Sammamish). Future development will be required to conform to side yard setbacks, lot coverage maximums, impervious surface maximums, height maximums, floor area ratio and all other applicable dimensional requirements.

Approval of this variance would allow the applicant to achieve the developable area that is afforded to other similarly zoned and sized lots in the area while keeping with the character of the residential development in the vicinity.

3. The granting of the variance will not be materially detrimental to property or improvements in the immediate vicinity of the subject property; and

Finding: The variance will not be materially detrimental to property or improvements in the vicinity. The home to the north is built to approximately 3 feet from property line and the home to the south is proposed to be developed at 5 feet from the property line. The requested variance will not negatively impact the development potential of the properties in the vicinity. The granting of a variance to the front yard setback will not be materially detrimental to property or improvements within the vicinity. The majority of homes within the immediate vicinity are built to a depth of 45 feet or greater with footprint of a similar size to what could potentially be built with the approved variance on the subject property. Approval of the variance will be consistent with the built environment of the land use district in which the subject property is located. Granting of a variance to reduce the setbacks to construct a new structure would have less of an impact than an addition to the existing structure along a line of non-conformity

4. The variance is not inconsistent with the Comprehensive Plan; and

Finding: The Comprehensive Plan has identified the area under review as single-family low-density residential. The requested variance is consistent with this designation.

POLICY SH-10. Encourage development to keep the water's edge free of buildings.

POLICY LU-9. Maintain compatible use and design with the surrounding built environment when considering new development or redevelopment within an already developed area.

POLICY LU-21. Develop land use strategies to encourage the maintenance and updating of the city's older housing stock, so that neighborhoods are well-maintained and existing housing is preserved, updated, or modified to meet the evolving needs of residents.

B. Critical Areas Report Decision Criteria-General Criterial LUC 20.25H.255.

The Director may approve, or approve with modifications, the proposed modification

where the applicant demonstrates:

1. The modifications and performance standards included in the proposal lead to levels of protection of critical area functions and values at least as protective as application of the regulations and standards of this code;

Finding: The modification of the steep slope critical area structure setback and shoreline setback is at least as protective of the critical area functions and values. The shared private driveway crosses the proposed development site between the slope and the proposed home location isolating the slope area from the development area. The area of shoreline setback is currently developed with hardscape and non-native grasses. Reduction of the shoreline setback will not affect the current condition of the setback area. Further, the applicant has included a shoreline planting plan and a proposal to remove an existing rockery, brick patio, and planter box is included. With the proposed mitigation, the development will likely result in an improvement of condition along the shoreline within the 25 foot shoreline buffer.

2. Adequate resources to ensure completion of any required mitigation and monitoring efforts;

Finding: This is a proposal to reduce an area of previously developed shoreline structure setback and a steep slope structure setback. The applicant is proposing mitigation proportional to the anticipated impact and has included a mitigation plan with the proposal. To ensure installation and appropriate maintenance of the proposed and required mitigation the applicant is required to submit a financial security device meeting the requirements of LUC 20.40.490. Mitigation measures must be installed before occupancy is granted and maintenance of required plantings is required for a period of five years.

3. The modifications and performance standards included in the proposal are not detrimental to the functions and values of critical area and critical area buffers off-site; and

Finding: The applicant is proposing mitigation proportional to the anticipated impact and has included a mitigation plan with the proposal.

4. The resulting development is compatible with other uses and development in the same land use district;

Finding: The resulting development of a single-family residential structure on the property is compatible with the other single-family residential structures in the neighborhood surrounding the subject property.

C. Critical Areas Land Use Permit Decision Criteria 20.30P

The Director may approve or approve with modifications an application for a critical

areas land use permit if:

1. The proposal obtains all other permits required by the Land Use Code;

Finding: The applicant is required to obtain a single-family residential building permit for the construction of the proposed residence.

2. The proposal utilizes to the maximum extent possible the best available construction, design and development techniques which result in the least impact on the critical area and critical area buffer;

Finding: Several constraints were encountered in design of the proposed residence that prompted the applications for Critical Areas Land Use Permit and Variance from the Land Use Code. Constraints include steep slopes along the western end of the site, shoreline frontage along the eastern edge of the site, a narrow lot, and the presence of an access easement/driveway through the center of the site. These restrictions have limited site planning options in redevelopment of the property. As a result, the applicant has designed a home to occupy a specific area. The proposed site design represents a balancing of development restrictions with current site conditions and context.

3. The proposal incorporates the performance standards of Part 20.25H to the maximum extent applicable, and ;

Finding: The proposed site design represents a balancing of development restrictions with current site conditions and context. The proposal incorporates the Land Use Code performance standards to the maximum extent feasible.

4. The proposal will be served by adequate public facilities including street, fire protection, and utilities; and;

Finding: The property is currently served by adequate public facilities. Nothing in the proposal will increase the need for public facilities on the property.

5. The proposal includes a mitigation or restoration plan consistent with the requirements of LUC Section 20.25H.210; and

Finding: The applicant supplied a complete critical areas report supported by project narrative, shoreline planting plans, and geotechnical report. The report meets the minimum requirements in LUC 20.25H.210 and LUC 20.25H.250.

6. The proposal complies with other applicable requirements of this code.

Finding: As discussed in the sections above, the proposal complies with all other applicable requirements of the Land Use Code.

VIII. Conclusion and Decision

After conducting the various administrative reviews associated with this proposal, including Land Use Code consistency, SEPA, City Code and Standard compliance reviews, the Director of the Development Services Department does hereby **approve with conditions the Variance from the Land Use Code and Critical Areas Land Use Permit to construct a new house**.

Note- Expiration of Approval: In accordance with LUC 20.30P.150 a Critical Areas Land Use Permit automatically expires and is void if the applicant fails to file for a Clearing and Grading Permit or other necessary development permits within one year of the effective date of the approval.

Note – Recording of Variance Required: In accordance with LUC 20.40.500.B.1.a the variance must be recorded with King County Department of Records and Elections within 60 days of final City approval. The variance expires if not recoded within 60 days of final approval (expiration of appeal period).

IX. Conditions of Approval

The applicant shall comply with all applicable Bellevue City Codes and Ordinances including but not limited to:

Applicable Ordinances	Contact Person
Clearing and Grading Code- BCC 23.76	Reviewer, 425-452-XXXX
Land Use Code- BCC 20.25H	Planner, 425-452-XXXX
Noise Control- BCC 9.18	Planner, 425-452-XXX

The following conditions are imposed under the Bellevue City Code or SEPA authority referenced:

1. **Easement Setback:** The required setback from North Rosemont Beach Drive is reduced to a minimum of 6 feet. This setback shall be confirmed through completion of a site survey executed by a licensed surveyor verifying the location of foundation concrete forms before the foundation is poured as part of the required building permit. No additional intrusions, including minor building elements and eaves are permitted within the reduced setback.

   Authority: Land Use Code 20.30G.115
   Reviewer: David Wong, Land Use

2. **Side Yard Setbacks:** The side yard setbacks on the north and south side of the property are reduced to a minimum of 5 feet (total of 10 feet). The side yard setback shall be confirmed through completion of a site survey executed by a licensed surveyor verifying the location of foundation concrete forms before the foundation is poured as part of the required building permit. No additional

intrusions, including minor building elements and eaves are permitted within the reduced setback.

Authority: Land Use Code 20.25H.040.B
Reviewer: David Wong, Land Use

3. **Building Permit Required:** Approval of this Variance and Critical Areas Land Use Permit does not constitute an approval of a building permit. Review of the proposed site development was focused on the issues presented in this staff report and does not constitute approval of the proposed building. A building permit with construction plans is required to be issued along with any other associated development permits. Plans submitted as part of any subsequent permit application shall be consistent with the activity permitted under this approval.

   Authority: Land Use Code 20.30P.140
   Reviewer: David Wong, Land Use

4. **Noise Control:** Noise related to construction is exempt from the provisions of BCC 9.18 between the hours of 7 am to 6 pm Monday through Friday and 9 am to 6 pm on Saturdays, except for Federal holidays and as further defined by the Bellevue City Code. Noise emanating from construction is prohibited on Sundays or legal holidays unless expanded hours of operation are specifically authorized in advance. Requests for construction hour extension must be done in advance with submittal of a construction noise expanded exempt hours permit.

   Authority: Bellevue City Code 9.18
   Reviewer: David Wong, Land Use

5. **25-foot Shoreline Buffer:** No activity, landscaping, or improvements shall be made within the 25-foot shoreline buffer as part of this site redevelopment project outside of those allowed through the approved project plans or as routine maintenance through LUC 20.25H.055.C.3.h.

   Authority: Land Use Code 20.25H
   Reviewer: David Wong, Land Use

6. **Approved Modification:** This decision approves the shoreline and slope modifications as identified in the project site plans (Attachment 1) to construct an expanded single family residence with mitigation. This approval does not allow future structures or improvements to be located without future review and approval of a Critical Areas Land Use Permit. Geotechnical evaluation may be required for any future development on the property.

   Authority: Land Use Code 20.30P.140
   Reviewer: David Wong, Land Use

7. **Hold Harmless Agreement:** The applicant shall submit a hold harmless agreement in a form approved by the City Attorney which releases the City from liability for any damage arising from the location of improvements within a critical area buffer in accordance with LUC 20.30P.170. The hold harmless agreement is

required to be recorded with King County prior to building permit issuance. Staff will provide the applicant with the hold harmless form.

Authority: Land Use Code 20.30P.170
Reviewer: David Wong, Land Use

8. **Final Mitigation Plan:** As part of the application for Construction Permit, the applicant shall submit a final mitigation plan prepared by a qualified consultant that meets the requirements of LUC 20.25H.220 and is consistent with the preliminary mitigation plan included in Attachment 3.

   Authority: Land Use Code 20.30P.140; 20.25H.220
   Reviewer: David Wong, Land Use

9. **Mitigation Planting Area:** The reduced slope buffer, slope modifications, and shoreline structure setback requires replanting to mitigate the approved buffer reduction in accordance with the project mitigation plan included in Attachment 3. The applicant shall submit a final planting plan as part of the building permit which is consistent with the requirements in the approved mitigation plan.

   Authority: Land Use Code 20.30P.140; 20.25H.220
   Reviewer: David Wong, Land Use

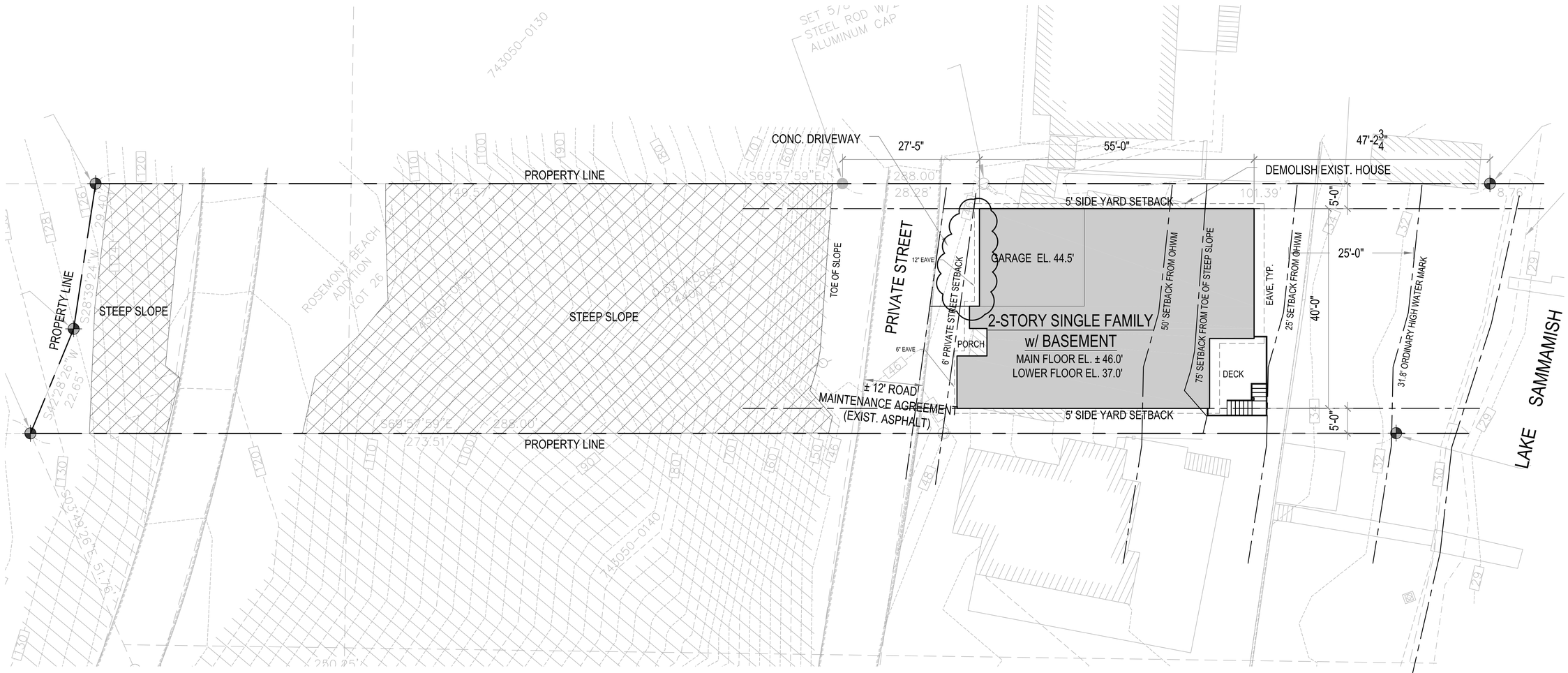
10. **Maintenance and Monitoring:** The planting area shall be maintained and monitored for 5 years as required by LUC 20.25H.220. Annual monitoring reports are to be submitted to Land Use each of the five years. Photos from selected photo points will be included in the monitoring reports to document the planting. The schedule and performance standards included in the project mitigation plan included in Attachment 3 apply and are evaluated in the report for each year. Annual monitoring reports are to be submitted to the Development Services Department Land Use Division at the end of the growing season by no later than November 30 for each year monitored. The reports, along with a copy of the planting plan, can be sent to David Wong at dwong@bellevuewa.gov or to the address below:

    Environmental Planning Manager
    Development Services Department
    City of Bellevue
    PO Box 90012
    Bellevue, WA 98009-9012

    Authority: Land Use Code 20.30P.140; 20.25H.220
    Reviewer: David Wong, Land Use

11. **Installation Device:** To ensure the required mitigation and restoration of areas of temporary disturbance is completed, the applicant shall post an Installation Assurance Device prior to the building permit or clearing and grading permit issuance. The device shall be equal to 150% of the value of the installed cost of the approved mitigation. The device will be released when the applicant demonstrates required mitigation has successfully been installed.

Authority: Land Use Code 20.25H.125.J, 20.25H.220, and 20.40.490
Reviewer: David Wong, Land Use



SITE PLAN
SCALE: 1" = 10'-0"

LEGAL DESCRIPTION

THE SOUTHEASTERLY 288 FEET OF TRACT 26, ROSEMONT BEACH, ACCORDING TO THE PLAT THEREOF RECORDED IN VOLUME 24 OF PLATS, PAGE 28, RECORDS OF KING COUNTY, WASHINGTON; TOGETHER WITH SECOND CLASS SHORE LANDS ADJACENT.

PROJECT INFORMATION

ZONING DTSTRICT	R-2.5
PROPERTY OWNER	JOHN STRONG
PARCEL NUMBER	743050-0135
LOT AREA	14,400 S.F.
STEEP SLOPE AREA	5,425 S.F.
NET LOT AREA	8,975 S.F.
OCCUPANCY CLASSIFICATION	R-3 / U
CONSTRUCTION TYPE	V-B

STRUCTURAL LOT COVERAGE

MAX. LOT COVERAGE FOR STRUCTURE	35%
BUILDING FOOTPRINT	2,142 S.F.
FRONT PORCH	50 S.F.
REAR DECK	178 S.F.
TOTAL STRUCTURAL AREA	2,370 S.F.
STRUCTURAL LOT COVERAGE	26.4 % (OK!)

IMPERVIOUS SURFACE COVERAGE

MAX. IMPERVIOUS SURFACE AREA	50%
STRUCTURAL AREA	2,370 S.F.
EAVES OVER PERVIOUS AREA	321 S.F.
PRIVATE STREET	608 S.F.
CONC. DRIVEWAY	104 S.F.
TOTAL IMPERVIOUS AREA	3,403 S.F.
IMPERVIOUS SURFACE COVERAGE	23.6 % (OK!)

CHC ARCHITECTS
12220 108th CT NE A111
KIRKLAND WA 98034
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cchang03@yahoo.com

STRONG RESIDENCE

1604 WEST LAKE SAMMAMISH PKWY NE BELLEVUE WA 98008

NUMBER	DATE	DESCRIPTION OF REVISIONS
	10-20-2014	CRITICAL AREA LAND USE PERMIT
	11-13-2014	RESPONSE TO REVIEW COMMENT

SHEET TITLE
SITE PLAN

JOB NUMBER

SHEET NUMBER
A1

CRITICAL AREAS REPORT
SHORELINE FUNCTIONS EVALUATION
FLOODPLAIN FUNCTIONS EVALUATION

Strong Residential Property Redevelopment

1604 West Lake Sammamish Parkway NE
Bellevue, Washington

Prepared by:
Cedarock Consultants, Inc.
19609 244th Avenue NE
Woodinville, Washington 98077

Prepared for:
John and Yan Strong
1604 W Lake Sammamish Pkwy NE
Bellevue, Washington 98006

Revision #2
March 2, 2015

TABLE OF CONTENTS

Page

LIST OF TABLES

LIST OF FIGURES

APPENDICES

1.0 INTRODUCTION

This report provides revisions to earlier documents as needed to respond to comments received from the City. Changes involve a correction in the floodplain elevation to 36.1 feet from the 36.6 feet assumed in the previous version and additional mitigation.

1.1 Project Description

An existing home located at 1604 West Lake Sammamish Parkway NE (Figure 1) will be razed and replaced with an all new structure. The new structure will be located outside of the 25-foot Lake Sammamish buffer, and landward of an existing, legally established retaining wall. The base of the retaining wall is situated at and above the 34-foot elevation level. The top of the retaining wall is slightly above 36 feet. All proposed work will be approximately 5-feet and higher above the ordinary high water mark (OHWM) of 31.8 feet elevation used by the City of Bellevue as a regulatory line from which to measure buffers for Lake Sammamish. Disturbance due to excavation for the new foundation will temporarily affect 150 square feet (sq.ft.) of land within the Lake Sammamish buffer, but there will be no permanent change in buffer quality. No work is proposed within the Lake Sammamish floodplain (elevation 36.1 feet). Both the existing and new homes are located entirely within the Shoreline Management Area (SMA). There is no developable land on the lot that is not within the SMA. No native vegetation will be disturbed and no other critical areas or habitat will be affected by the proposed action.

Under the proposed action, there will be no net change in the developed area footprint on the site. The house footprint will be somewhat larger but will occur at the expense of existing impervious surfaces such as concrete walkways, lawn, and plastic-lined planter boxes. The area of natural vegetation within the Lake Sammamish buffer and Shoreline Area will increase by 14 percent and by 3 percent respectively due to new mitigation plantings that are proposed.

Temporary grading impacts during construction will affect 150 sq.ft. of land within the Lake Sammamish buffer. This area currently consists of lawn and concrete patio. The house will impact 839 sq.ft. of set-back area. Temporal and permanent effects will be mitigated by removing existing impervious surface and planting new native plants along the shoreline. A total of 943 sq.ft. of impervious surface will be removed from the set-back area and buffer, and 177 sq.ft. of new native shrubs and groundcovers will be added within the buffer. Altogether, new mitigation will total 133 percent of proposed impacts including much improved natural habitat in the Lake Sammamish buffer.

1.2 Purpose of this Report

This report was prepared for following purposes:

1. To evaluate environmental effects of the proposed redevelopment on environmental functions within the Lake Sammamish Shoreline environment;

2. To evaluate environmental effects of the proposed redevelopment on Critical Areas, and;
3. To evaluate environmental effects of the proposed redevelopment on floodplain habitat.

1.3 Report Author

This report was prepared by Carl Hadley, a professional fisheries biologist with over 25 years of experience in western Washington.

Figure 1. Strong property on Lake Sammamish.

2.0 EXISTING CONDITIONS

This section provides a description of shoreline habitat and critical areas on the affected site under existing conditions. Critical areas within 300-feet of the work area include Lake Sammamish, the lake's riparian buffer, steep slopes in excess of 40 percent, and habitat associated with species of local importance (Figure 1). Adjoining properties also include similar critical areas including Lake Sammamish and continuation of the steep slopes.

2.1 Lake Sammamish

A survey of Lake Sammamish in the vicinity of the work area survey was conducted on the morning of August 25, 2014 by a professional biologist. The Strong property and adjoining properties are highly modified including houses, retaining walls, docks, slope modifications and landscaping. A dock, two steel rails, and the end of a concrete walkway extend waterward of the OHWM on the Strong property.

Lake Sammamish is a shoreline of the state (classified as a Type S water under the Bellevue land use code LUC 20.25H.075.B.1). The lake in this area consists of open water that continues uninterrupted offshore for a half mile and more. The gravel dominated substrate drops off slowly to about 8 feet within 50 feet from shore. The property is located in an area subject to high wave action during storm events. The southeast facing shoreline of Lake Sammamish on which the property is located has a fetch of between 3 and 4 miles of open water to the south. Because prevailing storm winds come from the south and southeast, the waves that build up during peak events can exceed 3-feet, with a 2-foot wave not unusual. In addition to the waves, storm surges (seiches) sometimes occur when strong winds cause water to pile up at the north end of the lake. This can raise the water surface elevation by a foot or more.

A concrete retaining wall located two or more feet in elevation above the OHWM extends across the property and ranges from two to three feet in height above the beach (Figure 2). The landscape below the retaining wall consists primarily of a gravel beach sloped gently down into the water. There are no plants within this area with the exception of some weedy grasses and small forbs located below OHW. An elevated lava rock-covered terrace exists on the south side adjacent to the wall and is protected by small river rocks. A 3-foot wide concrete path leads from a staircase, across the beach, and down into the water. An older wooden dock and two steel rails provide boat access to the lake.

Figure 2. Shoreline conditions below (left) and above (right) retaining wall (August 2014).

The remainder of the Lake Sammamish buffer upland of the retaining wall consists of a small lawn (Figure 2) and a three foot-wide at-grade concrete walkway. The area landward of the retaining wall is above the floodplain elevation of 36.1 feet. The existing house extends from the lawn/patio back about 50 feet to the access road. A well-vegetated steep slope extends from the road past the limits of the Shoreline Management Area (Figure 1).

Lake Sammamish has documented fall Chinook, coho, sockeye, and winter steelhead presence. Resident cutthroat trout and various warmwater fish species are also known to use Lake Sammamish year-round. No spawning has been observed within or near the project site but adult salmon migrate through Lake Sammamish to spawning habitat in Issaquah Creek and other tributaries feeding the lake. Juvenile salmon migrate past the site on their journey to Puget Sound. Chinook and steelhead are protected under the federal Endangered Species Act.

2.2 Streams

No watercourses were observed on or near the property. Local and state databases indicate a few minor non-fish-bearing watercourses are somewhere nearby but were probably incorporated into underground conveyances at sometime in the past.

2.3 Wetlands

A cursory examination of the property and a review of public records found no evidence of wetlands on the site. No seeps or wetland plants were noted.

2.4 Geologic Hazard Areas

The property is located on a southeast facing slope immediately adjacent to Lake Sammamish. Starting at OHW, the ground has an average 12 percent slope for the first 120-feet. It is on this part of the property in which the house and access road are located. The toe of a much steeper slope starts at the access road and continues approximately 100-feet to the west. The steep slope averages about 60 percent but has one short segment of about 12 feet that rises about 20 feet (170 percent).

2.5 Species of Local Importance

The wildlife habitat review consisted of a site-specific survey and consultation with the Washington Department of Fish and Wildlife database[1]. The site and surrounding lands have been developed mostly as high-density single-unit residential housing. Although some suitable wildlife habitat for terrestrial and avian species is found in the area, it has all been significantly modified by past clearing, fragmentation, and introduction of non-native landscaping species (e.g. English ivy). Species that may be expected to be found intermittently on this site are deer, coyote, Douglas and eastern grey squirrels, other assorted rodent species, raptors, woodpeckers, and song birds. There are many moderate to large conifer and deciduous trees suitable for red-tailed hawk or owl perching on the property. All of these trees are located on

[1] Washington Department of Fish and Wildlife. 2014. Priority habitat and species map.

the steep slope portion of the property. No nesting activity by sensitive species is known to have occurred in the recent past. Larger trees in the area may provide short-term perching sites for bald eagles, but none of these are known to be critical nesting or roosting habitat sites (WDFW 2014). No terrestrial wildlife species listed by the U.S. Fish and Wildlife Service, Washington Department of Fish and Wildlife, King County, or City of Bellevue as threatened, endangered, sensitive, critical, or candidate are expected to utilize habitats found on this property.

Chinook and coho salmon are found in Lake Sammamish. Additional description of aquatic species and habitat is provided in Section 2.1.

2.6 Flood Hazard Areas

Land subject to a one-hundred-year flood is present on the property below elevation 36.1 feet. The floodplain area currently consists of the sand/gravel beach below (waterward of) the retaining wall (Figure 2).

3.0 EFFECTS OF THE PROPOSED ACTION ON SHORELINE FUNCTIONS

The effect of the proposed action on shoreline ecological functions is discussed in this section. Standard shoreline ecological functions include water quality improvements, bank protection, organic material source, and wildlife habitat. Each of these functions is reviewed below for both the pre- and post-redevelopment condition.

In shoreline areas the standard for protection is "no net loss". No net loss means that, following an action, shoreline ecological functions necessary to sustain shoreline natural resources are equivalent to or greater than ecological functions immediately prior to the action. As noted in Ecology guidelines for the Shoreline Management Act, the "no net loss" standard focuses on shoreline ecological functions "as they currently exist"[2]. In this case "as they currently exist" refers to the conditions with the existing house, landscaped yard, patio, dock, retaining wall, and lack of native vegetation anywhere within 120 feet of Lake Sammamish. No net loss does not compare to theoretical, perfect, or undisturbed conditions as may have occurred before the area was developed.

Shoreline habitat in its natural condition performs many functions essential to fish survival and productivity. Vegetation in riparian areas can provide shade and helps maintain cool water temperatures needed by most fish native to the Pacific Northwest. Plant roots stabilize banks, help control erosion and sedimentation, and can offer refuge habitat for juvenile fish. Vegetation creates overhanging cover for fish. Where present, trees and shrubs contribute leaves, twigs, and insects to waterbodies, thereby providing basic food and nutrients that support fish and aquatic wildlife. Large trees that fall can create refuge habitat needed by small

[2] *See* WAC 173-26-201(2)(c) (no net loss focuses on sustaining "existing shoreline natural resources" and protecting shoreline resources "as they currently exist").

fish for cover and protection from predators. Riparian vegetation, litter layers, and soils filter incoming sediments and pollutants, thereby assisting in the maintenance of high water quality needed for healthy fish populations[3].

Primary ecological functions provided within the Lake Sammamish shoreline on the project site are described below along with an evaluation of the project impact. Shoreline functions and values are based on WDFW guidelines[4] and other best available science[5]. The discussion is summarized in Table 1.

Existing conditions on the subject property consists of a moderately sloped gravel beach (Figure 2), a moderately sloped terrace on which the existing house, residential landscaping, and access road are located, and a steep slope which has been left in a relatively natural forested condition. There are large trees on the site, all of which are located on the steep slope greater than 120 feet from the lake. No native trees or shrubs are present within 50 feet of the lake on the project site. Vegetation near the shoreline consists of exotic annual and perennial grasses and forbs, the extent of which varies from year to year.

The Lake Sammamish shoreline area is currently developed with a primary structure, deck, carport, access road, concrete retaining wall, sidewalk, raised gravel seating area, and lawn. The rest consists of graveled beach and forestland. The replacement structure will lie entirely within previously developed areas of the lot and will not affect any of the graveled beach or forestland. No vegetation with the exception of managed lawn and areas currently maintained as residential landscaping will be eliminated with expansion of the house. Proposed mitigation will add 177 sq.ft. of new native landscaping within the shoreline area near OHW. This will have a beneficial effect on habitat quality in the area.

[3] Knutson, K. L. and V. L. Naef. 1997. Management recommendations for Washington's priority habitats: riparian. Washington Department of Fish and Wildlife, Olympia, WA. 181p.

[4] Ibid.

[5] For example, see Citations of Recommended Sources of Best Available Science for Designating and Protecting Critical Areas. 2002. Washington State Office of Community Development, Olympia, WA. and City of Bellevue's 2005 Best Available Science (BAS) Review (Herrera 2005).

Table 1. Standard Lake Shoreline Buffer Functions and Analysis of Change

Buffer Function	Description of Function	Current Buffer Function	Buffer Function After Re-Development
Shade	The ability to help maintain low water temperatures and create a cool and humid microclimate.	**Non-existent** for the project site due to a lack of vegetation (trees and shrubs) overhanging or adjacent to Lake Sammamish.	**No change**
Beneficial Nutrient Sources	The ability to provide food resources to the Lake in the form of leaf litter, vegetative matter, and terrestrial insects.	**Low to non-existent** for the project site due to a scarcity of native vegetation within more than 120-feet of Lake Sammamish.	**Beneficial Effect** - 177-square feet of new native landscaping waterward of the retaining wall will increase nutrients.
Woody Debris Recruitment	The ability to provide large woody debris to Lake Sammamish.	**Non-existent** for the project site due to a lack of potential recruitment trees near the lake.	**Beneficial Effect** –one new tree will be planted near OHW as part of the mitigation proposal.
Sediment and Pollutant Control	The ability to physically filter sediments, chemicals, and nutrients.	**Low due** to a lack of native vegetation and little surface water running off of, or across the site.	**No change**
Bank Stability and Sediment Recruitment	The ability to maintain bank stability and prevent increased erosion along the shoreline of Lake Sammamish.	**Low** due to entirely developed shoreline with armoring needed to protect residences from wave action.	**No change**
Human Access Control	The ability to reduce or eliminate human disturbance along a sensitive shoreline.	**None.** Access control is not an issue for this private property.	**No change**
Wildlife Habitat Suitability	The ability to provide habitat for upland mammals and avian species within the riparian corridor.	**Low to moderate** for the project site. Poor habitat near lake, but northwest half of property is natural forest with moderate wildlife function.	**Beneficial Effect** - 177-square feet of new native landscaping waterward of the retaining wall will increase wildlife forage habitat

Shoreline Buffer Function: The physical, chemical, and biological processes or attributes of the buffer.

3.1 Water Quality

Vegetation adjacent to a waterbody can improve water quality by filtering pollutants, removing nutrients, and preventing sediment introduction. The water quality function of the existing shoreline area is generally absent. While the beach area periodically contains grasses and forbs, vegetation for the most part is absent or sparse. The beach consists primarily of gravels and sands. These soils absorb some rainfall and surface water runoff coming from nearby slopes but wave action and rapid infiltration means that most water landing on the beach ends up in Lake Sammamish relatively quickly. Any foreign material such as silts and landscaping or roadway chemicals receive minor filtering action by the soils before water reaches the lake.

Re-developing the site will result in the removal of some of the managed lawn located near the lake. Replacement of the lawn with impervious surface may slightly improve the quality of runoff from the site assuming chemicals such as fertilizer or herbicides are used on the non-native grasses. Because the new impervious surface will consist of non-motorized traffic areas, future runoff is assumed to be clean. However, the overall effects are minor given the absence of significant runoff in the area.

3.2 Water Quantity

The project will result in a slight increase of impervious surface and no change in land use. Runoff volume from the site will be about the same. Water from the site drains directly to Lake Sammamish, a very large waterbody. The effect on water surface elevation and flow rate will be discountable.

3.3 Beneficial Nutrients

Native riparian buffers can be important to aquatic habitat productivity being the primary source of leaf litter and insects delivered to fish habitat. When present, overhanging vegetation contributes leaves, vegetative litter, and small woody debris directly to the waterbody.

No trees or shrubs will be removed under the proposed action. The applicant has proposed a native species revegetation effort for the lakefront area as mitigation for temporal impacts to the lake buffer. Native plants will be placed in the beach area between the retaining wall and OHW. A small increase in nutrient delivery will be provided in this area.

3.4 Microclimate

Riparian vegetation has the ability to protect waterbodies from climate changes caused by widespread development away from the water, including soil and air temperature, humidity, and wind. There is no direct link between microclimate and the condition of salmonid habitat, however, it has been suggested that microclimate needs protection to maintain desirable assemblages of plants and animal species, including insects, beneficial to fish.

Upon finishing the new structure, approximately 62 percent of the property will consist of pervious open space most of which will be naturally vegetated. The area is roughly the same as

under existing conditions. No native vegetation will be removed under the proposed action and additional planting will occur along the waterfront. The net effect will be to slightly increase the overall vegetative community on the property.

3.5 Temperature & Shade

No overhanging vegetation will be removed during re-development of the property. The amount of shade is not expected to decrease. No effect on water temperature in Lake Sammamish will occur.

3.6 Human Access Control

One function of buffers in populated areas can be reducing the direct encroachment of humans on the watercourse. This project will be conducted on private property where access control is not an issue.

3.7 Woody Debris

Large and small woody debris consists of downed tree stems and branches and is a functionally important structural component of watercourses and lakes in the Pacific Northwest.

No vegetation capable of supplying woody debris will be removed during re-development of the property. One new tree will be planted near OHW and will, over time, slightly increase woody debris contribution to the lake.

3.8 Bank Stability

Roots from vegetation growing along waterbodies can help stabilize soils and reduce erosion. The sand and gravel found along the subject shoreline naturally aggrades and erodes with minimal influence of any native plants along the shoreline. A retaining wall currently located above OHW provides some stability along the upper shoreline area and prevents erosion from around the existing structure. No change is proposed to the retaining wall. Some planting waterward of the retaining wall will take place but will be above OHW. Bank stability will not be affected to any significant degree by the proposed re-development.

3.9 Shoreline Function Conclusion

The site is currently developed with an existing residence. Redevelopment consists primarily of replacing the old structure with some minor expansion of the new residence into areas currently utilized as walkways, patio, or landscaping. There is currently no structural development within the Lake Sammamish buffer and this will not change with redevelopment. The developed square footage within the Lake Sammamish shoreline area will increase by about 40 percent. The entire area of increase will take place within areas of existing disturbance including pathways, patios, and decks. No disturbance of natural habitat will occur. With the exception of some temporary grading within currently developed areas of the lake buffer, no work is proposed in sensitive areas. No natural vegetation will be disturbed. Under

the Shoreline Management Act, this level of protection will provide "no net loss" of shoreline ecological functions necessary to sustain shoreline natural resources.

4.0 PROJECT EFFECTS ON CRITICAL AREAS

Critical areas are defined in the City of Bellevue under BCC LUC 20.25H.025. They include streams, wetlands, shorelines, geologic hazards, habitat and species of local importance, flood hazard areas, and buffers. Existing conditions of each critical area on or near the site are described in Section 2.0 of this report. This section describes any actions that will be taken within or near the critical area and any proposed changes that will occur.

4.1 Streams and Lakes

There are no streams located on or near the site. Lake Sammamish borders the east side of the property. The proposed redevelopment includes no inwater work, no work below the OHWM, and no permanent changes to the buffer or floodplain with the exception of the addition of 177 sq.ft. of new native plants in the buffer area. All temporary impacts to the buffer due to grading will occur in areas currently underlying concrete or lawn. So the only impact will be temporary increases in noise and visual disturbances. Mitigation is proposed for these temporal effects.

4.2 Wetlands

No wetlands, seeps or springs were noted on the site or reported in sensitive areas portfolios.

4.3 Shorelines

Lake Sammamish is a shoreline of the state. Changes to shoreline functions are described in Section 3.0 of this report.

4.4 Steep Slopes

No work will be completed on the steep slopes found on this site. The steep slope is located on the west side of the access road to the house. The house and all proposed work are located east of the access road.

4.5 Species of Local Importance

No habitat that may have provided urban wildlife habitat for species of local importance will be affected by redevelopment of the property. The large patch of vegetation on the steep slope will be left untouched. No native vegetation will be disturbed.

Sensitive fish species are found in Lake Sammamish. However, no spawning or other habitat critical to salmon life history is located on the site. With the exception of temporary impacts to the lawn at the upper end of the floodplain area (discussed below in Section 5.0) no aquatic habitat will be disturbed as a result of the project.

4.6 Flood Hazard Areas

A flood hazard area is located on the site waterward of the existing retaining wall. No work is proposed within the Lake Sammamish floodplain with the exception of adding new native plants. This work is described further in Section 5.0.

4.7 Critical Areas Effects Summary

The proposed action will take place within a footprint that was already entirely modified for the existing use as a residence (Table 2). No permanent adverse changes to natural habitat will occur. Grading for the new foundation will temporarily affect 150 sq.ft. of the Lake Sammamish buffer. No grading in the floodplain is proposed. All impacts will be small and temporary, and will occur in areas of existing lawn and patio. No significant adverse effects on critical areas are expected. Minor impacts are being mitigated with new native plantings in the buffer.

Table 2. Critical Area Impacts

Location of Impact	Area of Permanent Disturbance		
	Existing	Future	Change
Streams	0	0	0
Stream Buffers	0	0	0
Wetland	0	0	0
Wetland Buffer	0	0	0
Shoreline (within 200 feet of el. 31.8)	5,796 sq.ft.	5,619 sq.ft.	-177 sq.ft. (-3%)
Lake Sammamish Buffer (within 25 feet of OHWM)	1,270 sq.ft.	1,093 sq.ft.	-177 sq.ft. (-14%)
Building setback (25-50 feet from OHWM)	1,275 sq.ft.	1,275 sq.ft.	0
Steep Slope	0 sq.ft.	0 sq.ft.	0
Steep Slope Buffer	--[1]	--[1]	0
Flood Hazard Area Volume	--	--	0 cu.ft

[1] There is no buffer required at the toe of steep slopes and no work is proposed within the buffer at the top of the slope. No calculations were completed for this area.

5.0 EFFECTS OF THE PROPOSED ACTION ON FLOODPLAIN HABITAT

The area below 36.1 feet in elevation has been designated by the City of Bellevue as the Lake Sammamish floodplain. The top of the existing vertical concrete retaining wall is at approximately elevation 36.0 - 36.1 feet. No grading is proposed in the area below 36.1 feet. The only change proposed in the floodplain is the installation of new native plants for mitigation.

6.0 MITIGATION

Under the proposed action the building will expand into an area that already lacks any significant natural biological function being comprised entirely of existing building, plastic-lined lava rock seating areas, pavement, and lawn. No significant adverse environmental effects of the project on sensitive areas or shoreline ecological functions are expected.

Mitigation for the project is being provided primarily by avoiding and/or minimizing sensitive areas that are present on the site. Temporary impacts that may occur during construction, along with additional intrusion into the building set-back area are being mitigated by restoring an area of the shoreline buffer to natural beach, and planting an area of the buffer with native shrubs, emergents, and groundcovers.

6.1 Impact Avoidance

The following actions are proposed to avoid impacts:

- No work is proposed below the ordinary high water mark of Lake Sammamish.
- No work is proposed waterward of the existing retaining wall (with the exception of old fill removal and the addition of native plants).
- No work is proposed in wetlands, streams, or geologic hazard areas, or their buffers.
- No grading (cut or fill) is proposed within the floodplain.
- No native vegetation within the shoreline area or any buffer will be disturbed.

6.2 Impact Minimization

The following actions are proposed to minimize impacts:

- Work within the Lake Sammamish shoreline buffer will be temporary and limited only to areas of existing disturbance (lawn, plastic-lined rockery, and pavement).

6.3 Compensatory Mitigation

The following actions are proposed to mitigate for impacts:

- 266 sq.ft. of existing house will be removed from the building set-back area.
- 465 sq.ft. of existing concrete walkway and patio, chimney, plastic-lined lava rock areas, and pavers will be removed from the building setback area and shoreline buffer area
- 212 sq.ft. of plastic-lined lava rock area will be removed from the Lake Sammamish buffer and restored to natural sand/gravel beach habitat and native planting area.
- 177 sq.ft. of new native plantings will be added to the Lake Sammamish buffer (see Planting Plan in Appendix).

Most of the compensatory mitigation planting will take place in an elevated terrace located waterward of the retaining wall and currently used as a sitting area. All fill and rockery material will be removed from this area using a backhoe operating from behind the bulkhead. A portion of the area will be restored to native beach using WDFW approved gravels. The rest will be converted to a native planting area using upland plants native to Lake Sammamish.

Some additional planting will occur in the buffer upland of the retaining wall where additional native species will be installed.

6.4 Mitigation Summary

Table 3. Impact and Mitigation Areas

Impact (sq.ft.)	Mitigation (sq.ft.)	Description
839		Construction of new Single Family Residence (SFR) in building setback area
	266	Removal of existing SFR from building setback area
	465	Removal of existing concrete walkway and patio, chimney, plastic-lined lava rock areas, and pavers from building setback area and shoreline buffer area (replaced with lawn and native planting beds)
	212	Removal of existing plastic-lined lava rock area and rockery from building setback area (replaced with beach and native planting beds)
	177	Addition of new native planting area to shoreline buffer
839	**1,120**	**Conclusion: Mitigation exceeds impacts by 33%**

7.0 MAINTENANCE

Controlling any non-native species and re-establishing native vegetation are the primary goals of this maintenance plan. Activities required to maintain new plantings include initial watering of the new plants, and periodic removal of non-native vegetation (weeding) within the buffer area.

New plantings shall be watered from May through mid-October during the first season. A temporary irrigation system is allowed. A potable water source is available for this use.

Due to the aggressively invasive habit of non-native species and the existence of nearby seed sources, control efforts shall be completed for five years following initial plant installation. Establishment of native plantings over the five year time period will create a well established native habitat lessening the chance for non-native vegetation invasion. The control of invasive weeds (competing grasses and herbs) shall be mechanically provided at the base of each plant at a minimum of twice per year, or more, should additional weeding be deemed necessary. The optimal season for weed control occurs in April thru September. The use of herbicides and pesticides after new planting operations is strictly prohibited unless given written permission by the City of Bellevue. All work shall be performed by hand with the lightest possible equipment.

8.0 MONITORING

Due to the small size and lack of critical areas being impacted, the planting area shall be self-maintained and self-monitored by the homeowner for five years. Vegetation monitoring shall consist of plant inspection to determine the health and vigor of each plant. All planted material in the buffer shall be inspected once a year for five years to determine the health of each specimen. Dead or dying material shall be replaced the following fall unless plant crowding is believed to be a problem. Plant species substitutions may be made if site conditions are believed responsible for plant mortality. Replacement species must be approved by the City.

Annual monitoring reports shall be submitted to the City of Bellevue, Attn: Environmental Planning Manager in each of the five years by October 31st. Photos of the mitigation planting will be included in the monitoring reports to document the planting. The following schedule and performance standards apply and are evaluated in the report for each year:
Year 1 (from date of plant installation)

- 100% survival of all installed plants and/or replanting in following dormant season to reestablish 100% of original plantings
- Less than 10% coverage of invasive plants in planting area.

Year 2 (from date of plant installation)

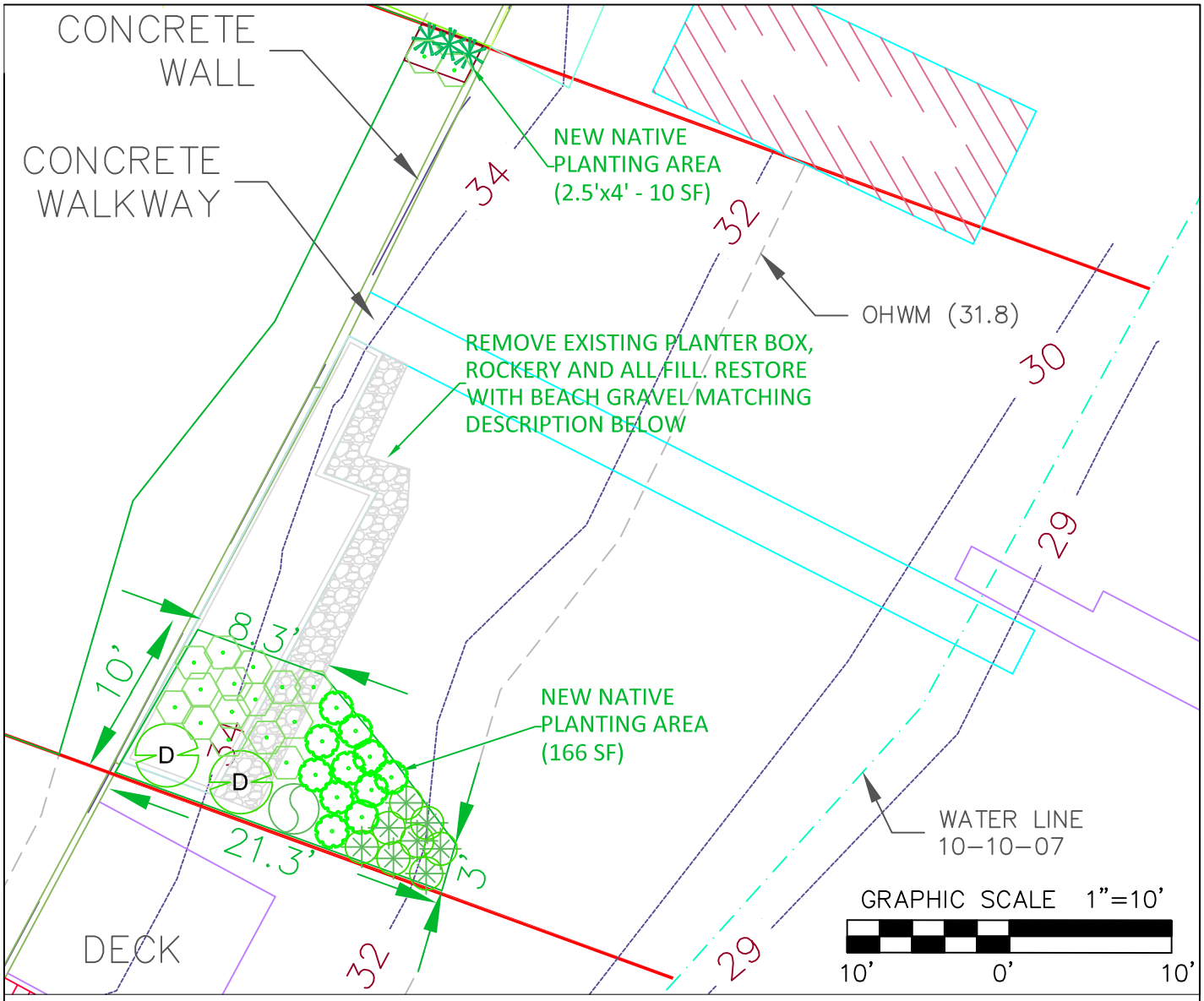
- At least 90% survival of all installed material
- Less than 10% coverage of planting area by invasive species or non-native/ornamental vegetation.

Year 3, 4, & 5 (from date of plant installation)

- At least 85% survival of all installed material
- At least 35% (Yr3), 50% (Yr4), 70% (Yr5) coverage of the planting area by native plants in each year respectively.
- Less than 10% coverage by invasive species or non-native/ornamental vegetation.

APPENDICES

Mitigation Planting Plan



PLANT NAME AND SPECIES	SIZE	NUMBER
D RED TWIG DOGWOOD (Cornus sericea)	2-GAL	2
SNOWBERRY (Symphoricarpos albus)	2-GAL	1
KINNIKINNICK (Arctostaphylos uva-ursi)	1-GAL	17
BEACH STRAWBERRY (Fragaria chiloensis)	1-GAL	11
SWORDLEAF RUSH (Juncus ensifolius)	4" or Plugs	8
OREGON IRIS (Iris tenax)	1-GAL	3

BEACH GRAVEL
Beach gravel shall consist of 5 CY of clean, round, river rock between 1/4" – 3/4" in size spread evenly across disturbed areas of the beach to a depth of 4".

A total of 177 square feet of area to be planted. 167 square feet is located along the south property boundary between OHWM and the existing retaining wall. The area is 10 feet wide at the top, then tapers to 3-feet wide at the OHWM. It is 21 feet long. A separate 10 sq.ft. area is located along the north property line as shown.

A total of three shrubs and 39 groundcovers (1 plants/4 square feet) shall be planted. See Sheet 2 for planting details.

STRONG RESIDENCE PLANTING PLAN

CEDAROCK CONSULTANTS, INC.
19609 244th Avenue NE
Woodinville, WA 98077
(425) 788-0961

1604 W. Lk. Sammamish Pkwy
Bellevue, WA 98008

1" = 10' | SHEET 1 OF 2

PLANT INSTALLATION

1. Plant materials shall be nursery grown in the Puget Sound area. Plants shall be normal in pattern of growth, healthy, well–branched, vigorous, with well–developed root systems, and free of pests and diseases. Damaged, diseased, pest–infested, scraped, bruised, dried out, burned, broken, or defective plants will be rejected.
2. If selected species are not available, then similar species may be substituted with approval from owner and City of Bellevue.
3. Planting shall occur during the cool season (September 15 through March 15).
4. Landscaper shall examine soils in the area to determine suitability for selected plants. New topsoil or compost amendment shall be added to a depth of 12" where necessary to support plants.
5. Plant all groundcover plants approximately 18–inches on center.
6. Immediately after planting, plants shall be watered to saturation.
7. Actual planting locations shall be field determined at time of planting by landscape architect or biologist.
8. Provide good quality landscape mulch around all trees and shrubs.

LANDSCAPING MAINTENANCE

1. Controlling any non–native species and re–establishing native vegetation are the primary goals of this maintenance plan. Activities required to maintain new plantings include initial watering of the new plants, and periodic removal of non–native vegetation (weeding) within the planting area.
2. New plantings shall be watered from May through mid–October during the first season. A temporary irrigation system is allowed. A potable water source is available for this use.
3. Due to the aggressively invasive habit of many non–native species around Lake Sammamish, and the existence of nearby seed sources, control efforts shall be completed for five years following initial plant installation. Establishment of native plantings over the five year time period will create a well established native habitat lessening the chance for non–native vegetation invasion.
4. The control of invasive weeds (competing grasses and herbs) shall be mechanically provided throughout the planting area at a minimum of twice per year, or more should additional weeding be deemed necessary. The optimal season for weed control occurs in April thru September. The use of herbicides and pesticides after new planting operations is strictly prohibited unless given written permission by the City of Bellevue. All work shall be performed by hand with the lightest possible equipment.

MONITORING

1) Compliance monitoring consists of evaluating the plants and shoreline planting area immediately after plant installation. The objective is to verify that all design features, as agreed to in the plans, have been correctly and fully implemented, and that any changes made in the field are consistent with the intent of the design. Evaluation of the planting areas after restoration will be done by the homeowner. A brief compliance report will be prepared describing final plant counts and noting any substitutions or movement of plants when compared to the design. Rationale for changes shall be provided. Three photo points will be established giving complete coverage of the buffer area.

2) Long Term Monitoring – New plantings will be monitored in the summer once a year for a five year period. Monitoring will be conducted by the homeowner to quantify the survival, relative health and growth of plant material. An annual monitoring report submitted to the City following each years monitoring visit will describe and quantify the status of the mitigation and provide the three photos from the same locations as the compliance report.

Vegetation monitoring will consist of plant inspection to determine the health and vigor of the installation. All planted material in the buffer will be inspected during each monitoring visit to determine the level of survival of the installation. Each shrub and tree will be rated either as dead, dying, or healthy. Dead or dying material will be replaced the following fall unless plant crowding is believed to be a problem. Plant species substitutions may be made if site conditions are believed responsible for plant mortality. Replacement plants must be approved by the City. Volunteer native, non–invasive species will be included as acceptable components of the mitigation project. Ground covers will be rated as percent ground coverage for each of the major areas covered with these species.

At least three photo points will be established giving complete coverage of the buffer area. Photos will be taken at each point during every monitoring visit and submitted as part of the annual monitoring report.

PERFORMANCE STANDARDS

Year 1 (from date of plant installation)

- 100% survival of all installed plants and/or replanting in following dormant season to reestablish 100% of original plantings
- Less than 10% coverage of invasive plants in planting area.

Year 2 (from date of plant installation)

- At least 90% survival of all installed material
- Less than 10% coverage of planting area by invasive species or non–native/ornamental vegetation.

Year 3, 4, & 5 (from date of plant installation)

- At least 85% survival of all installed material
- At least 35% (Yr3), 50% (Yr4), 70% (Yr5) coverage of the planting area by native plants in each year respectively.
- Less than 10% coverage by invasive species or non–native/ornamental vegetation.

STRONG RESIDENCE PLANTING DETAILS	CEDAROCK CONSULTANTS, INC. 19609 244th Avenue NE Woodinville, WA 98077 (425) 788-0961	*1604 W. Lk. Sammamish Pkwy* *Bellevue, WA 98008* *NTS* | *SHEET 2 OF 2*

Narrative for Access Easement Setback Variance

A variance for the setback from the private road (access easement) serving a proposed tear down and newly built house is being requested for 1604 W Lake Sammamish Pkwy NE. The normal structure setback dimension from an access easement is 10 feet. The amount of space available for building a suitable house for this valuable waterfront land is limited (special circumstance relating to size, topography and location). The nature of traffic on this dead end road (there are 3 houses past ours) is such that traffic will not be impeded by the requested 6 foot setback. Thus this variance request is not materially detrimental to the public welfare or injurious to the property or improvements in the vicinity. See photo below where the arrow points at a painted orange dot representing the location of the proposed NW corner of the house. Note the parking arrangements in the adjacent house to the North, which lacks a garage, with daily parking extending to the edge of the road. The house to the South (1600 W Lake Sammamish Pkwy NE) recently received a variance for their proposed house with a 5 foot setback. Thus, granting of the variance will not constitute a grant of special privilege inconsistent with the limitation upon uses of other properties in the vicinity.

John R. Strong, PE

Property owner