ADVISORY REPORT
FINDINGS, CONCLUSIONS, AND RECOMMENDATIONS

To: 

From: Project Planner

Date: June 1st, 2011

File: Pier and Shoreline Enhancement

I. INTRODUCTION

A. APPLICATION

1. Applicant:

2. Site Location:

3. Request: Remove an existing solid cement breakwater and install a 467 square foot new fully grated pier, native plantings, together with shoreline habitat enhancement features. There is an existing shed and deteriorated boat rail system. The boat rails will be removed, but the shed will remain (see Attachment 2).

4. Review Process: Process I, Planning Director decision. The Kirkland Zoning Code (KZC) Chapter 83 sets forth the circumstances under which a Substantial Development Permit (SDP) is required. KZC section 83.170 indicates that within the RL Shoreline Designation, new piers require an SDP.

B. RECOMMENDATIONS

Based on Statements of Fact and Conclusions (Section II), and Attachments in this report, approval of this application is recommended subject to the following conditions:

1. This application is subject to the applicable requirements contained in the Kirkland Municipal Code, Zoning Code, and Building and Fire Code. It is the responsibility of the applicant to ensure compliance with the various provisions contained in these ordinances. Attachment 3, Development Standards, is provided in this report to familiarize the applicant with some of the additional development regulations. This attachment does not include all of the additional regulations. When a condition of approval conflicts with a development regulation in Attachment 3, the condition of approval shall be followed (see Conclusion II.H.2).

2. As part of the building permit submittal:

   a. Show on the planting plan, one additional tree together with the two proposed trees; show that the root wads are placed in the water far enough so that they can provide adequate habitat for fish, but not far enough to be a hazard to watercraft (See Conclusions II.E.2.a and II.F.2).

   b. Provide documentation that the US Army Corp of Engineers and the Washington Department of Fish and Wildlife have approved the alternative proposal to have
the pier be 6 feet in width for the most waterward section that is 56' long (see Conclusion II.E.2.b).

3. Prior to final inspection of the pier, the applicant shall submit an as-built planting plan and a 5 year vegetation maintenance and monitoring plan to the City. The maintenance and monitoring plan must meet the following standards (See Conclusion II. E.2):
   
a. Preparation of as-built drawings after installation of the mitigation plantings;
   
b. Annual monitoring reports for 5 years that include written and photographic documentation on tree and shrub mortality, subject to the following success criteria:
      
      (1) One-hundred (100) percent survival of all planted native trees and shrubs during the first two (2) years after planting; and
      
      (2) One hundred (100) percent survival of trees and eighty (80) percent survival of remaining native plants in years three (3) through five (5).
   
c. Copies of reports that are submitted to state or federal agencies in compliance with permit approvals may be submitted in lieu of a separate report to the City, provided that the reports address a 5-year maintenance and monitoring plan.

II. FINDINGS OF FACT AND CONCLUSIONS

A. SITE DESCRIPTION

1. Site Development and Zoning:
   
a. Facts:
      
      (1) **Property Size:** Approximately 15,526 square feet landward of the Ordinary High Water Mark (OHWM)
      
      (2) **Land Use:** Single Family
      
      (3) **Zoning:** WDII (Waterfront District II)
      
      (4) **Shoreline Designation:** RL (Residential Low Density)
      
      (5) **Terrain and Vegetation:** The site is mostly flat except for the southeast corner where the easement road is steep and leads up to another single family home and then to 10th Street West. The area of placement of the pier and enhancement plantings and features is flat at the water's edge. There are no existing significant trees on site near the water, but neighboring properties have trees that will be unaffected by the proposal.
   
b. Conclusions: Existing site development and zoning are not factors in this application.

2. Neighboring Development and Zoning:
   
a. Facts: The site is surrounded by single family homes in the WDII zone.
   
b. Conclusion: Surrounding development is not a factor in this proposal.

B. PUBLIC COMMENT

No public comments were received for this application.
C. STATE ENVIRONMENTAL POLICY ACT (SEPA)

A Determination of Nonsignificance (DNS) was issued on May 17th, 2011. The Environmental Checklist, Determination, and additional environmental information are included as Attachment 4.

D. APPROVAL CRITERIA

1. SHORELINE SUBSTANTIAL DEVELOPMENT

   a. Fact: WAC 173-27-150 establishes that a Substantial Development Permit may only be granted when the proposed development is consistent with all of the following:

      (1) The policies and procedures of the Shoreline Management Act.

      (2) The provisions of WAC Chapter 173-27.

      (3) Chapter 83 of the Kirkland Zoning Code.

   b. Conclusion: The proposal complies with WAC 173-27-150. It is consistent with the policies and procedures of the Shoreline Management Act because it preserves the natural character and protects the resources and ecology of the shoreline while still providing recreational opportunities for the property owner. It is consistent with the provisions of WAC 173-27 because a complete application for a Substantial Development Permit has been submitted by the proponent and appropriate notice of the application has been given. As discussed in section II.E, it is consistent with Chapter 83 of the Kirkland Zoning Code.

2. GENERAL ZONING CODE CRITERIA

   a. Fact: Zoning Code section 145.45.2 application may be approved if:

      a. It is consistent with all applicable development regulations and, to the extent there is no applicable development regulation, the Comprehensive Plan; and

      b. It is consistent with the public health, safety, and welfare.

   b. Conclusion: The proposal complies with the criteria in section 145.45.2 It is consistent with all applicable development regulations (see Sections II.E) and the Comprehensive Plan (see Section II.G). In addition, it is consistent with the public health, safety, and welfare because it allows use of the waterfront property for recreation while also preserving and improving the habitat functions of Lake Washington for fish and other wildlife.

E. KZC 83.270–PIERS, DOCKS, MOORAGE BUOYS, BOATLIFTS AND BOAT CANOPIES SERVING SINGLE FAMILY DWELLING UNITS

1. Facts:

   a. Piers, docks, moorage buoys, boatlifts and boat canopies can only be developed and used accessory to existing dwelling units on waterfront lots or upland lots with waterfront access rights. Use of these structures is limited to the residents and guests of the waterfront lots to which the moorage is accessory. Moorage space shall not be leased, rented, or sold. The following sections II.E.1.b through g are required as part of a new pier proposal.
b. **Setbacks:** All piers, docks, boatlifts, and moorage piles shall comply with the following location standards:

<table>
<thead>
<tr>
<th>Staff response:</th>
<th>Setback Requirements</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="https://via.placeholder.com/150" alt="Table" /></td>
<td><img src="https://via.placeholder.com/150" alt="Table" /></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Complies</th>
<th>Complies as conditioned</th>
<th>New Pier, Dock, Boatlift, and Moorage Pile for Detached Dwelling Unit</th>
<th>Minimum setback standard</th>
</tr>
</thead>
<tbody>
<tr>
<td>X Plans show 18' from south property line and 65' from the north</td>
<td>Side property lines</td>
<td>5ft. for moorage pile; otherwise 10 ft.</td>
<td></td>
</tr>
<tr>
<td>X Plans show piers to the north and south are at least 80’ away</td>
<td>Another moorage structure not on the subject property, excluding adjacent moorage structure that does not comply with required side property line setback</td>
<td>25 ft., except that this standard shall not apply to moorage piles</td>
<td></td>
</tr>
<tr>
<td>X (85’ away)</td>
<td>Public Park</td>
<td>25 ft.</td>
<td></td>
</tr>
</tbody>
</table>

c. **Dimensional Standards:** New piers or docks may be permitted, subject to the regulations shown in the chart below:

d. **Staff review:**  

| ![Table](https://via.placeholder.com/150) | ![Table](https://via.placeholder.com/150) |

<table>
<thead>
<tr>
<th>Complies</th>
<th>Complies as conditioned</th>
<th>New Pier, Dock or Moorage Piles for Detached Dwelling Unit (single-family)</th>
<th>Dimensional and Design Standards</th>
</tr>
</thead>
<tbody>
<tr>
<td>X 467 square foot pier</td>
<td>Maximum Area: surface coverage, including all attached float decking, ramps, ells and fingers</td>
<td>480 sq. ft. for single property owner</td>
<td></td>
</tr>
<tr>
<td>X 92 feet</td>
<td>Maximum Length for piers, docks, ells,</td>
<td>150 ft, but piers or docks extending further waterward than adjacent piers or docks must demonstrate</td>
<td></td>
</tr>
<tr>
<td>Long</td>
<td>fingers and attached floats</td>
<td>that they will not have an adverse impact on navigation</td>
<td></td>
</tr>
<tr>
<td>---------------</td>
<td>-----------------------------</td>
<td>--------------------------------------------------------</td>
<td></td>
</tr>
<tr>
<td>X*</td>
<td>Maximum Width</td>
<td>4 ft. for pier or dock walkway or ramp</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>For piers or docks with no ells or fingers, the most waterward 26 ft. section of the walkway may be 6 ft. wide</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>*Pier modifications: The City shall approve modifications to a new pier proposal that deviates from the dimensional standards of KZC 83.270.4, subject to both US Army Corps of Engineers and Washington Department of Fish and Wildlife approval to an alternate project design.</td>
<td></td>
</tr>
<tr>
<td>X</td>
<td>Height of piers and diving boards</td>
<td>Minimum of 1.5 ft. above ordinary high water to bottom of pier stringers, except the floating section of a dock and float decking attached to a pier</td>
<td></td>
</tr>
<tr>
<td>X</td>
<td>Decking for piers, docks walkways, platform lifts, ells and fingers</td>
<td>Piers, docks, and platform lifts must be fully grated or contain other materials that allow a minimum of 40% light transmittance through the material</td>
<td></td>
</tr>
<tr>
<td>X</td>
<td>Pilings and Moorage Piles</td>
<td>Piling or moorage piles shall not be treated with pentachlorophenol, creosole, chromated copper arsenate (CCA) or comparably toxic compounds.</td>
<td></td>
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<td></td>
<td></td>
<td>First set of pilings for a pier or dock shall be located no closer than 18 ft from OHWM.</td>
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<tr>
<td></td>
<td></td>
<td>Moorage piles shall be located no closer than 30 ft. from the OHWM or any farther waterward than the end of the pier or dock.</td>
<td></td>
</tr>
<tr>
<td>X</td>
<td>Mitigation</td>
<td>Plantings or other mitigation as described in KZC 83.270.5</td>
<td></td>
</tr>
</tbody>
</table>
Boatlifts—Boatlifts may be permitted as an accessory to piers and docks, subject to the following regulations shown in the chart below:

<table>
<thead>
<tr>
<th>Staff Response:</th>
<th>Boat Lift/Canopy Requirements</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Complies</strong></td>
<td><strong>Complies as condition</strong></td>
</tr>
<tr>
<td>X</td>
<td>Location</td>
</tr>
<tr>
<td>Plans indicate compliance</td>
<td>Maximum Number</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>X</td>
<td>Fill for Boatlift</td>
</tr>
<tr>
<td>Plans show no fill is proposed. Boatlift will be anchored to the lake bed and sit on top of it</td>
<td></td>
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</tbody>
</table>
f. **Mitigation:** All proposals involving new piers or docks are subject to the following mitigation requirements. Following each requirement, staff comments are in italics:

   (1) Any existing in-water and overwater structures shall be removed if they are associated with either a moorage structure or other recreational use that is located within 30 feet of the OHWM.

   **The applicant is proposing to remove the existing breakwater, which is in the water.**

   (2) Emergent vegetation shall be planted waterward of the OHWM, unless the City determines that it is not appropriate or feasible.

   **The applicant’s plans show that emergent vegetation will be planted waterward of the OHWM.**

   (3) Native riparian vegetation shall be planted in at least 75 percent of the nearshore riparian area located along the water’s edge. The vegetated portion of the nearshore riparian area shall average ten (10) feet in depth from the OHWM, but may be a minimum of five (5) feet wide to allow for variation in landscape bed shape and plant placement. Total square feet of landscaped area shall be equal to a continuous 10-foot wide area.

   **The applicant’s plans show that all native riparian vegetation will be planted in 75 percent of the nearshore riparian area at a 10 foot depth except where the pier walkway meets the shore, where the plantings taper down to a 5 foot width. Additionally, there is an existing shed within the nearshore area that will remain. Plantings will be placd in front of it, but a 10 foot depth cannot be attained where the shed sits.**

g. Mitigation plantings shall be subject to the following requirements:

   (1) Restoration of native vegetation shall consist of a mixture of trees, shrubs and groundcover and be designed to improve habitat functions. At least three (3) trees per 100 linear feet of shoreline and 60% shrubs must be included in the plan. Plant materials must be native and selected from the Kirkland Native Plant List, or other native or shoreline appropriate species approved by the Planning Official or Urban Forester. Plant density and spacing shall be appropriate for the site and commensurate with spacing recommended for each individual species proposed. An alternative planting plan or mitigation measure in lieu of meeting these requirements shall be allowed if approved by other state and federal agencies.

   **The applicant’s plans show that native vegetation plantings comply with the mitigation requirements with the exception of the number of trees. The applicant has roughly 119 lineal feet of shoreline, and is proposing only 2 trees. One additional tree should be planted.**

h. In addition to a native planting plan, KZC 83.270.5.e requires a 5-year vegetation maintenance and monitoring plan is required to be submitted to the City for approval. The monitoring plan includes the following performance standards:

   (1) Preparation of as-built drawings after installation of the mitigation plantings;

      a. Annual monitoring reports for 5 years that include written and photographic documentation on tree and shrub mortality, subject to
the following success criteria:

b. One-hundred (100) percent survival of all planted native trees and shrubs during the first two (2) years after planting; and

c. One hundred (100) percent survival of trees and eighty (80) percent survival of remaining native plants in years three (3) through five (5)

Copies of reports that are submitted to state or federal agencies in compliance with permit approvals may be submitted in lieu of a separate report to the City, provided that the reports address a 5-year maintenance and monitoring plan.

2. Conclusion: The applicant’s plans indicate that the new pier complies with setbacks, and dimensional and design standards with the exception of the width of pier and the need for an additional tree. The following conditions should be met for compliance with Chapter 83:

As part of a building permit submittal:

a. One additional tree should be added to the planting plan that was submitted for this proposal.

b. The applicant should provide documentation that the US Army Corp of Engineers and the Washington Department of Fish and Wildlife have approved the alternative proposal to have the pier be 6 feet in width for the waterward section that is 56’ long.

Prior to final inspection of the pier:

c. The applicant should submit an as built planting plan and a 5 year vegetation maintenance and monitoring plan to the City. The monitoring plan must meet the standards of KZC 83.270.5.e.

B. 83.350 Shoreline Habitat Enhancement Projects

1. Facts:

a. Shoreline habitat and natural systems enhancement projects include those activities proposed and conducted specifically for the purpose of establishing, restoring, or enhancing habitat for priority species in shorelines.

b. Activities that are allowed under 83.350 include the conversion of hard structural shoreline to soft shoreline stabilization, including associated clearing, dredging, and filling necessary to implement the conversion, provided that the primary purpose of such actions is clearly restoration of the natural character and ecological functions of the shoreline.

c. The subject property has a solid cement breakwater that has likely been functioning as shoreline stabilization for this property and has caused an accumulation of rock/cobble mixture along this property that may currently serve as a spawning area. Once the breakwater is removed, that material will likely wash out of the shoreline, reducing habitat value.

d. The applicant is proposing to reclaim that cobble mixture and add to it. Additional habitat features will be added such as root wads that will be anchored to the shore and extend in to the water for small fish to use as habitat. Some smaller 2-5 man rocks will be scattered around the root wads, providing yet more habitat value to the subject property shoreline.

2. Conclusions: The applicant meets the requirements for habitat enhancement and should install the root wads, rocks and plantings in a manner that will best create habitat along
the shoreline. The existing spawning gravel should be saved and added to as necessary to achieve the best results for habitat value.

C. COMPREHENSIVE PLAN

1. **Fact**: The subject property is located within the Market neighborhood. Figure M-4 on page XV.K-11 designates the subject property for Low Density Residential. Additionally, Policy NE-2.6 within the Natural Environment section of the Comprehensive Plan states the following in relation to development along Lake Washington:

   Preserve the resources and ecology of the water and shorelines; avoid natural hazards; promote visual and physical access to the water; preserve navigation rights; and minimize the creation of armored shorelines, and explore incentives and opportunities to restore natural shoreline features and habitat.

2. **Conclusion**: The pier proposal is consistent with the Comprehensive Plan.

D. DEVELOPMENT STANDARDS

1. **Fact**: Additional comments and requirements placed on the project are found on the Development Standards, Attachment 3.

2. **Conclusion**: The applicant should follow the requirements set forth in Attachment 3.

III. SUBSEQUENT MODIFICATIONS

Modifications to the approval may be requested and reviewed pursuant to the applicable modification procedures and criteria in effect at the time of the requested modification.

IV. APPEALS

The following is a summary of the deadlines and procedures for appeals. Any person wishing to file or respond to an appeal should contact the Planning Department for further procedural information.

**Appeal to Shoreline Hearings Board**:

An appeal of a shoreline substantial development permit shall be to the State Shorelines Hearings Board and shall be filed within twenty-one (21) days of the date of filing of the City's permit decision to the Department of Ecology as set forth in RCW 90.58.180.

For shoreline substantial development permits, no final action or construction shall be taken until the termination of all review proceedings initiated within twenty-one (21) days after the filing date which is the date that the Department of Ecology received the permit decision from the City or unless otherwise noted in this section.

V. LAPSE OF APPROVAL

Construction and activities authorized by a shoreline substantial development permit are subject to the time limitations of WAC 173-27-090.

VI. APPENDICES

Attachments 1 through 4 are attached.
1. Vicinity Map and Overhead view of the subject Property
2. Applicant’s plans
3. Development Standards
4. SEPA materials (with Enclosures 1-3)
VII. PARTIES OF RECORD

Applicant,
Department of Planning and Community Development
Department of Public Works
Department of Building and Fire Services

Review by Planning Director:

I concur [x]  I do not concur [ ]

Comments: ________________________________________________________________

________________________________________    6/1/11
Eric R. Shields              Date
OWNER:

SITE ADDRESS:

PARCEL NUMBER:

BODY OF WATER:
Lake Washington

LEGAL DESCRIPTION:
LOT A, CITY OF KIRKLAND SHORT PLAT
NUMBER       ACCORDING TO THE PLAT
THEREOF RECORDED UNDER KING COUNTY
AUDITOR'S FILE NUMBER
TOGETHER WITH AN EASEMENT FOR INGRESS
AND EGRESS AS SET FORTH UNDER
RECORDING NUMBER         IN KING
COUNTY, WASHINGTON.

PROJECT DESCRIPTION:
Remove the existing solid concrete pier/breakwater
(307sf). Install a new fully grated pier on steel
piles(467sf). Remove the existing mooring pile, the
existing boat rail system as well as (2) existing
cement blocks at the site.

A ground base boatlift will be installed and (2) side
mount jet ski lifts will be installed.

Due to the existing solid concrete pier acting as a
breakwater there has been an accumulation of rock/
gravel/ cobble mixture on the northeast inlet side
behind the pier. Once the breakwater is removed
that mixture is subject to migrate away from the site
due to the distance away from the shoreline. This
proposal would allow for moving that material back
along the shoreline at the OHW mark prior to
removing the concrete pier to allow for
approximately 90 cubic yards of shoreline spawning
mixture. The existing gravel/cobble mixture will be
enhanced with additional spawning mixture.

The shoreline will also have the following habitat
enhancements to allow for an improved ecological
function of the shoreline and fish habitat:
A) (4) root wad installations
B) Installation of 2-3 man rock in misc. locations
along the shoreline perimeter
C) A full shoreline planting plan will be
implemented along the length of the shoreline.

PURPOSE: Boat Moorage

DATUM: 21.8' EST. By
Corp of Engineers, 1919.

ADJACENT PROPERTY
OWNERS:
1. 
2. 

NAME:

REFERENCE #:

SITE LOCATION ADDRESS:
KIRKLAND WA 98033

PROPOSED: Pier & Shore
IN: Lake Washington
AT:
COUNTY: King     STATE: WA

SHEET 1 of 10

DATE: 2/29/2011
GENERAL PLAN NOTES:
1. NO MOORING PILES WILL BE INSTALLED AS PART OF THIS PROJECT.
2. NO SAFETY RAILING WILL BE INSTALLED AS PART OF THIS PROJECT.
3. CONTINUOUS SHORELINE MONITORING WILL OCCUR FOR A MINIMUM PERIOD OF 5 YEARS TO ALLOW FOR CORRECTIVE MAINTENANCE ACTIONS OF THE PLANTS AND HABITAT ENHANCEMENTS. MAINTENANCE WOULD INCLUDE THE REPOSITIONING/REPLACING OF LARGE WOODY DEBRIS AND/OR THE ADDITIONAL PLACEMENT OF SHORELINE GRAVELS TO SUPPLEMENT ANY MATERIAL THAT ESCAPED AWAY.

DUE TO THE EXISTING SOLID CONCRETE PIER ACTING AS A BREAKWATER THERE HAS BEEN AN ACCUMULATION OF SOIL/GRANULAR COBBLE MIXTURE ON THE NORTH EAST SIDE INLET BEHIND THE PIER. ONCE THE BREAKWATER IS REMOVED THAT MATERIAL IS SUBJECT TO MIGRATE AWAY FROM THE SITE. THIS PROPOSAL WOULD ALLOW FOR MOVING THAT MATERIAL BACK ALONG THE SHORELINE AT THE SHORE MARK TO ALLOW FOR APPROPRIATELY 50 CURVE YARDS OF SHORELINE SHAPING MIXTURE. THE EXISTING GRAVEL/COBBLE MIXTURE WILL BE ENHANCE WITH AN ADDITIONAL SHAPING MIXTURE.

INSTALL NEW GPS FULLY GRATED PIER - 10 PILE (TOTAL OVER WATER COVERAGE 40SF PAIL). NOTE: ALL GRATING WILL ALLOW FOR A MINIMUM AIR LIGHT TRANSMITTANCE.

INSTALL TWO ROCK MOUNT BASED JET SKI LIFTS

INSTALL ONE GROUND BASED BOATLIFT

SHORELINE PLANTINGS BY OWNERS - SEE ATTACHED PLANTING PLAN FOR DETAILS

INSTALL 2) ROOF WAGS AND VARIOUS 2-3 MAN ROCK FOR SHORELINE HABITAT AND NATURAL SYSTEMS ENHANCEMENT PER ERC 83.135.1, NOTE - ROOF WAGS TO BE DOUGLAS FIR OR WESTERN RED CEDAR. WAGS TO BE 24" O.A. AND 2'-8" ABOVE FINISH GRADE. ROCK POSITIONS MAY VARY FROM PLAN SHEET. ALL BOLTS BALL TO BE SECURED WITH MANTA-AYE 3"3 ANCHORS OR APPROVED EQUIVALENT.

APPROX EDGE OF EXIST. GROUNDS

APPROX EDGE OF EXIST. HOUSE STRUCTURE

APPROX EDGE OF EXIST. GROUNDS

APPROX EDGE OF EXIST. HOUSE STRUCTURE

NEW PIER & SHORELINE HABITAT ENHANCEMENT PLAN

SCALE: 1" = 20'-0"
PIER FRAMING PLAN

PROPOSED: Pier & Shore
IN: Lake Washington
AT:
COUNTY: King
STATE: WA

SHEET 4 of 10

DATE: 2/29/2011
INSTALL ONE GROUND BASED BOATLIFT. LIFT TO BE SECURED WITH MANTA RAY ANCHORS - NO FILL WILL BE NECESSARY. NOTE: BOATLIFT IS BEING INSTALLED AS FAR WATERWARD AS POSSIBLE FROM OHWW AS IS FEASIBLE AND SAFE FOR ITS USERS. SEE DETAIL E

NOTE: NO SAFETY RAILING WILL BE INSTALLED AS PART OF THIS PROJECT

NOTE: DEPTHS BASED ON DIVE PERFORMED ON 1/13/2011

PIER ELEVATION
SCALE: 3/32" = 1'-0"
GRATED DECKING WITH MINIMUM 40% LIGHT TRANSMITTAL - FASTENED W/ S.S. SCREWS

2x6 BLOCKING

5 1/8" x 12" G.L.B.

2x6 NAILED W/ 16d @ 4" O.C. STAGGERED

5"x5"x3/8"x6" GALV. STEEL ANGLE

4x6 FASTENED W/ 3/8" DIA. THRUBOLT

W6x15 GALV. STEEL CAP

BOLT PLATE TO CAP W/ 3/4" DIA. STEEL BOLTS

WELD ANGLE AND PLATE TO PILE

EPOXY COATED STEEL PILE

**B-B PILE CAP SECTION**

**SCALE 1/2" = 1'-0"**

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GRATED DECKING WITH MINIMUM 40% LIGHT TRANSMITTAL - FASTENED W/ S.S. SCREWS

2x6 BLOCKING

5 1/8" x 12" G.L.B.

2x6 NAILED W/ 16d @ 4" O.C. STAGGERED

5"x5"x3/8"x6" GALV. STEEL ANGLE

4x6 FASTENED W/ TWO 3/8" DIA. LAG SCREWS

4x6 FASTENED W/ 3/8" DIA. CARRIAGE BOLT

4x6 FASTENED W/ 3/8" CARRIAGE BOLT

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**C-C MIDSPAN SECTION**

**SCALE 1/2" = 1'-0"**

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PROPOSED: Pier & Shore
IN: Lake Washington
AT:
COUNTY: King    STATE: WA

SHEET 6 of 10

DATE: 2/29/2011
ELEVATION C - ADDRESS PLATE DETAIL
SCALE 1/2" = 1'-0"

PROPOSED: Pier & Shore
IN: Lake Washington
AT:
COUNTY: King    STATE: WA

SHEET 7 of 10
DATE: 2/29/2011
SIDE MOUNT JET SKI LIFT DETAIL - D
NO SCALE

INSTALL ONE BOAT LIFT AS INDICATED ON THE PLAN

BOAT LIFT WILL BE A FREE STANDING UNIT. LIFT TO BE SECURED WITH MANTA RAY ANCHORS - NO FILL WILL BE REQUIRED. UNIT WILL REST ON LAKEBED ON MANUFACTURERS PROVIDED (4) FOUR PADS

GROUND BASED BOATLIFT DETAIL - E
NO SCALE

PROPOSED: Pier & Shore
IN: Lake Washington
AT:
COUNTY: King    STATE: WA

SHEET 8 of 10

DATE: 2/29/2011
PROPOSED SHORELINE HABITAT ENHANCEMENT LANDSCAPE PLAN

NOTE: ALL PLANTS ARE LISTED ON THE ARMY CORP OF ENGINEERS APPROVED NATIVE PLANTING LIST. ALTERNATE PLANTS CAN BE USED AS LONG AS THEY ARE LISTED AS NATIVE SPECIES AND ARE APPROXIMATELY THE SAME SIZE AS LISTED.
# SHORELINE PLANTINGS

**SYMBOL**

<table>
<thead>
<tr>
<th>SYMBOL</th>
<th>PLANTS</th>
<th>TREES</th>
</tr>
</thead>
<tbody>
<tr>
<td>+</td>
<td>PINUS CONTORTA (SHORE PINE)</td>
<td>1.5&quot; CAL. CONTAINER 1 WELL BRANCHED</td>
</tr>
<tr>
<td>◆</td>
<td>BETULA PAPYRIFERA (PAPER BIRCH)</td>
<td>1.7&quot; CAL. CONTAINER 1 WELL BRANCHED</td>
</tr>
</tbody>
</table>

**SHRUBS**

<table>
<thead>
<tr>
<th>SYMBOL</th>
<th>PLANTS</th>
<th>TREES</th>
</tr>
</thead>
<tbody>
<tr>
<td>◼</td>
<td>RIBES SANGUINEUM (RED FLOWERING Currant)</td>
<td>2 GAL. 13 ALL SHRUBS FULL &amp; WELL BRANCHED</td>
</tr>
<tr>
<td>◼</td>
<td>HODILOCUS DISCOLOR (OCEANSPRAY)</td>
<td>2 GAL. 15</td>
</tr>
<tr>
<td>◽</td>
<td>SYMPHORICARPOS ALBUS (SNOWBERRY)</td>
<td>2 GAL. 4</td>
</tr>
</tbody>
</table>

**PERENNIALS & PERNS**

<table>
<thead>
<tr>
<th>SYMBOL</th>
<th>PLANTS</th>
<th>TREES</th>
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<tbody>
<tr>
<td>◼</td>
<td>PENSTEMON SERULATUS (COAST PENSTEMON)</td>
<td>1 GAL. 4 ALL PERENNIALS FULL</td>
</tr>
<tr>
<td>◼</td>
<td>DELphinium MENGIESHI (MENGIESI LARKSPUR)</td>
<td>1 GAL. 17</td>
</tr>
<tr>
<td>◼</td>
<td>ACERLEGIA FORMOSA (RED COLUMBINE)</td>
<td>1 GAL. 10</td>
</tr>
<tr>
<td>◼</td>
<td>SIDALCea HENDERSONII (HENDERSONS MALLOW)</td>
<td>1 GAL. 19</td>
</tr>
<tr>
<td>◼</td>
<td>POLYSTICHUM MUNITUM (SWORD FERN)</td>
<td>1 GAL. 8</td>
</tr>
</tbody>
</table>

**GROUND COVER**

<table>
<thead>
<tr>
<th>SYMBOL</th>
<th>PLANTS</th>
<th>TREES</th>
</tr>
</thead>
<tbody>
<tr>
<td>◼</td>
<td>FRAGARIA CHLOENSIS (BEACH STRAWBERRY)</td>
<td>4&quot; POTS 20</td>
</tr>
<tr>
<td>◼</td>
<td>ARCTOSTAPHYLOS UVA-URSI (KINKINNICK)</td>
<td>4&quot; POTS 105 (F.V.)</td>
</tr>
</tbody>
</table>

**EMERGENTS**

<table>
<thead>
<tr>
<th>SYMBOL</th>
<th>PLANTS</th>
<th>TREES</th>
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</thead>
<tbody>
<tr>
<td>◼</td>
<td>SMALL FRUITED BULRUSH</td>
<td>2 GAL. 15</td>
</tr>
<tr>
<td>◼</td>
<td>SALIX SITCHENSIS (SITKA WILLOW)</td>
<td>1 GAL. 16</td>
</tr>
<tr>
<td>◼</td>
<td>SCIRPUS ACUTUS (HARDSTEM BULRUSH)</td>
<td>10 CU. IN. POTS 25 12&quot; O.C.</td>
</tr>
</tbody>
</table>

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**NATIVE LANDSCAPE SCHEDULE**

**NO SCALE**

PROPOSED: Pier & Shore  
IN: Lake Washington  
AT:  
COUNTY: King  STATE: WA  
SHEET 10 of 10  
DATE: 2/29/2011
DEVELOPMENT STANDARDS LIST

File: PIER AND SHORELINE ENHANCEMENT

SHORELINE MASTER PROGRAM STANDARDS

WAC173-27-190 Substantial Development, Conditional Use, or Variance Permits. Construction pursuant to a substantial development, conditional use, or variance permit shall not begin and is not authorized until 21 days from the date of filing, or until all review proceedings initiated within 20 days from the date of filing have been terminated, except as provided in RCW90.58.140(5)(a) & (b).

CHAPTER 83 SHORELINE MANAGEMENT Kirkland Zoning Code:

83.430: In Water Construction: The following standards shall apply to in-water work, including, but not limited to, installation of new structures, repair of existing structures, restoration projects, and aquatic vegetation removal:

a. In-water structures and activities shall be sited and designed to avoid the need for future shoreline stabilization activities and dredging, giving due consideration to watershed functions and processes, with special emphasis on protecting and restoring priority habitat and species.

b. In-water structures and activities are not subject to the shoreline setbacks established in KZC 83.180.

c. See KZC 83.370 for federal and state approval and timing restrictions.

d. Removal of existing structures shall be accomplished so the structure and associated material does not re-enter the lake.

e. Waste material and unauthorized fill, such as construction debris, silt or excess dirt resulting from in-water structure installation, concrete blocks or pieces, bricks, asphalt, metal, treated wood, glass, paper and any other similar material upland of or below the OHWM shall be removed.

f. Measurements shall be taken in advance and during construction to ensure that no petroleum products, hydraulic fluid, cement, sediments, sediment-laden water, chemicals, or any other toxic or deleterious materials are allowed to enter or leach into the lake during in-water activities. Appropriate spill clean-up materials must be on-site at all times, and any spills must be contained and cleaned immediately after discovery.

g. In-water work shall be conducted in a manner that causes little or no siltation to adjacent areas. A sediment control curtain shall be used in those instances where siltation is expected. The curtain shall be maintained in a functional manner that contains suspended sediments during project installation.
h. Any trenches, depressions, or holes created below the OHWM shall be backfilled prior to inundation by high water or wave action.

i. Fresh concrete or concrete by-products shall not be allowed to enter the lake at any time during in-water installation. All forms used for concrete shall be completely sealed to prevent the possibility of fresh concrete from entering the lake.

j. Alteration or disturbance of the bank and bank vegetation shall be limited to that necessary to perform the in-water work. All disturbed areas shall be protected from erosion using vegetation or other means.

k. If at any time, as a result of in-water work, water quality problems develop, immediate notification shall be made to the Washington State Department of Ecology.

83.270 General Standards for PIERS, DOCKS, MOORAGE BUOYS, BOATLIFTS AND BOAT CANOPIES

A pier is allowed only as an accessory use to the single family dwelling unit and shall not be leased, rented, or sold. The pier shall be used only by the residents and guests of the subject property to which the moorage is accessory, and woody debris shall not be removed from the site that is installed as part of the mitigation requirements.

Only one (1) pier or dock may be located on a subject property.

a. Proposed piers and docks that do not comply with the dimensional standards contained in this section or cannot be permitted through the Administrative Approval for Alternative Design process in this section may only be approved if they obtain a shoreline variance under the provisions of Chapter 141 KZC.

b. All piers and docks and other developments regulated by this section shall be constructed and maintained in a safe and sound condition. Abandoned or unsafe structures shall be removed or repaired promptly by the owner.

c. Temporary moorages shall be permitted for vessels used in the construction of shoreline facilities. The design and construction of temporary moorages shall be such that upon termination of the project, the aquatic habitat in the affected area can be returned to its original (pre-construction) condition.

d. The following structures and improvements are not permitted:

- Covered moorage, boathouses, or other walled covered moorage, except boat canopies that comply with the standards in this subsection.
- Skirting on any structure
- Aircraft moorage

e. See KZC 83.470 concerning lighting standards for required lighting.

f. Piers and docks must display the street address of the subject property. The address must be oriented to the lake with letters and numbers at least 4 inches high.

g. Piers and docks shall be marked with reflectors, or otherwise identified to prevent unnecessarily hazardous conditions for water surface users during the day or night. Exterior finish of all structures and windows shall be generally non-reflective.

h. Must provide at least one (1) covered and secured waste receptacle.
i. All utility and service lines located waterward of the OHWM must be below the pier deck.

j. All utility and service lines located upland of the OHWM shall be underground, where feasible. A mooring buoy may be used to provide moorage space in lieu of a pier. No more than one (1) mooring buoy is permitted per detached dwelling unit.

k. Moorage buoys shall be in water depths of 9 feet or greater based on ordinary high water, unless the U.S. Army Corps of Engineers, and the Washington Department of Fish and Wildlife have approved an alternate proposal.

Prior to issuance of a grading or building permit:

CHAPTER 83 SHORELINE MANAGEMENT Kirkland Zoning Code:

83.370: Federal and State Approval: Documentation verifying necessary state and federal agency approvals must be submitted to the City prior to the submittal of a Building or Land Surface Modification Permit.

ADDITIONAL ZONING CODE STANDARDS

95.52 Prohibited Vegetation. Plants listed as prohibited in the Kirkland Plant List shall not be planted in the City.

115.25 Work Hours. It is a violation of this Code to engage in any development activity or to operate any heavy equipment before 7:00 am. or after 8:00 pm Monday through Friday, or before 9:00 am or after 6:00 pm Saturday. No development activity or use of heavy equipment may occur on Sundays or on the following holidays: New Year’s Day, Memorial Day, Independence Day, Labor Day, Thanksgiving, and Christmas Day. The applicant will be required to comply with these regulations and any violation of this section will result in enforcement action, unless written permission is obtained from the Planning official.

115.40 Fence Location. No fence of any height may be placed waterward of the shoreline setback required in Chapter 83 KKC or within any portion of a side yard that coincides with the shoreline setback.

145.22.2 Public Notice Signs. Within seven (7) calendar days after the end of the 21-day period following the City's final decision on the permit, the applicant shall remove all public notice signs.

95.30(4) Tree Protection Techniques. A description and location of tree protection measures during construction for trees to be retained must be shown on demolition and grading plans.

95.34 Tree Protection. Prior to development activity or initiating tree removal on the site, vegetated areas and individual trees to be preserved shall be protected from potentially damaging activities. Protection measures for trees to be retained shall include (1) placing no construction material or equipment within the protected area of any tree to be retained; (2) providing a visible temporary protective chain link fence at least 6 feet in height around the protected area of retained trees or groups of trees until the Planning Official authorizes their removal; (3) installing visible signs spaced no further apart than 15 feet along the protective fence stating “Tree Protection Area, Entrance Prohibited” with the City code enforcement phone number; (4) prohibiting excavation or compaction of earth or other damaging activities within the barriers unless approved by the Planning Official and supervised by a qualified professional; and (5) ensuring that approved landscaping in a protected zone shall be done with light machinery or by hand.
PUBLIC WORKS CONDITIONS:
A public sewer main crosses this property in the north/south direction approximately 75 ft west of the existing home. The sewer was not show on the permit application.

The contractor(s) conducting the project shall take care when working on and around the sewer main and will be responsible for any damage to the sewer main caused by them or their equipment.

***Building Department Comments***

Building permits must comply with the 2009 editions of the International Building, Residential and Mechanical Codes and the Uniform Plumbing Code as adopted and amended by the State of Washington and the City of Kirkland and not the 2006 SBC as stated on sheet A1.0.

Structures must be designed for seismic zone D2, wind speed of 80 miles per hour and Exposure C.

Dock construction must comply with Kirkland Municipal Ordinance 21.08.220 titled "Overwater Structures Piers, Wharves, and Buildings".

Prior to issuance of Building, Demolition or Landsurface Modification permit applicant must submit a proposed rat baiting program for review and approval. Kirkland Municipal Ordinance 9.04.050

A building permit is required for the construction of the proposed pier. Provide structural calculations that account for the loads due to the side mounted jet ski lifts.
DETERMINATION OF NONSIGNIFICANCE (DNS)

CASE #: 

DATE ISSUED: 5/17/2011

DESCRIPTION OF PROPOSAL

Remove a solid cement breakwater (307 sf) and install a 467 sq. ft. fully grated pier 92 feet long. This property has an existing soft shoreline and the Kirkland Zoning Code requires shoreline plantings as mitigation. Additionally, the applicant is installing root wads and smaller shoreline rocks as shoreline habitat enhancement for salmon spawning.

PROPOSED:

LOCATION OF PROPOSAL

LEAD AGENCY is The City of Kirkland

The lead agency for this proposal has determined that it does not have a probable significant adverse impact on the environment. An environmental impact statement (EIS) is not required under RCW 43.21.030 (2) (c). This decision was made after review of a completed environmental checklist and other information on file with the lead agency. This information is available to the public upon request.

There is no comment period for this DNS.

Responsible official: ____________________________________  Date: 5/17/11

Eric Shields, Director
Department of Planning and Community Development
425-587-3225

Address: City of Kirkland
123 Fifth Avenue
Kirkland, WA 98033-6189

You may appeal this determination to the Planning Department at Kirkland City Hall, 123 Fifth Avenue, Kirkland, WA 98033 no later than 5:00 p.m., Tuesday, May 31, 2011 by WRITTEN NOTICE OF APPEAL.

You should be prepared to make specific factual objections. Contact the Planning Department at 425-587-3225 to read or ask about the procedures for SEPA appeals.

Please reference case #

cc: Case #

Distributed By: __________________________  Date: 5/18/2011

SEPA A, rev: 5/18/2011
Department of Fish and Wildlife (for shorelines and Lake Wa. - with drawings)
Lake Washington Tributaries Area Habitat Biologist
C/O DOE
3160 160th Avenue SE, Bellevue, WA 98008

Seattle District, U.S. Army Corps of Engineers,
P.O. Box C-3755
Seattle, WA 98124

Attn: Lynn Best, Acting Director, Environmental Division, Seattle City Light
700 5th Avenue, Suite 3316
P.O. Box 34023
Seattle, WA 98125-4023

Attn: Environmental Reviewer
Muckleshoot Indian Tribe Fisheries Division
39015 172nd Avenue SE
Auburn, WA 98002

Northshore Utility District
P.O. Box 82489
Kirkland, WA 98026-0489

Ken Howe, PE, General Manager
Woodinville Water District
17238 NE Woodinville-Duvall Rd.
PO Box 1390
Woodinville, WA 98072-1390

Shirley Marroquin
Environmental Planning Supervisor
King County Wastewater Treatment Division
201 South Jackson Street, MS KSC-TR-0431
Seattle, WA 98104-3856

Gary Kriedt
King County Metro Transit Environmental Planning
201 South Jackson Street, MS KSC-TR-0431
Seattle, WA 98104-3856

Director of Support Services Center
Lake Washington School District No. 414
P.O. Box 97039
Redmond, WA 98073-9739

David B. Johnson and Lillian Cruz (for projects consisting of more than 9 residential units)
Livangood, Fitzgerald and Alskog PLLC
P.O. Box 908
Kirkland WA 98083-0908

John Sutherland, Developer Services
Washington State Department of Transportation
15700 Dayton Ave. N. MS 240
P.O. Box 330310
Seattle, WA 98133-9710

Jan McBruder, Executive Director
East Lake Washington Audubon Society
PO Box 3115
Kirkland, WA 98033

Environmental Review Section, Department of Ecology,
P.O. Box 47703, Olympia, WA 98504-7703

Department of Fish and Wildlife (for streams and wetlands - with drawings)
North Lake Washington Tributaries Area Habitat Biologist
16018 Mill Creek Boulevard, Mill Creek, WA 98012