The following text consists of amendments to Resolution #4786 the locally adopted version of the City of Kirkland’s Shoreline Master Program. These amendments have been determined by the Department of Ecology to be included as part of the final approval of the City’s Shoreline Master Program as described in Attachment B (Findings/Conclusions).

Section 83.190 Lot Size or Density, Shoreline Setback, Lot Coverage and Height [page 44-45 of 138, R-4786 – Attachment 6A]

2. Shoreline Setback –
   
   b. Measurement of Shoreline Setback –
      
      1) The shoreline setback shall be measured landward from the OHWM on the horizontal plane and in the direction that results in the greatest dimension from the OHWM (see Plate XX. 41).

   d. Structures and Improvements – The following improvements or structures may be located in the shoreline setback, except within the Natural shoreline environment, provided that they are constructed and maintained in a manner that meets KZC 83.360 for avoiding or at least minimizing adverse impacts to shoreline ecological functions:
      
      1) For public pedestrian access required under KZC 83.420, walkways, benches, and similar features, as approved by the Planning Official.

      2) For private pedestrian access to the shoreline, walkways within the shoreline setback are permitted, subject to the following standards:

      a) The maximum width of the walkway corridor area shall be no more than 25 percent of the property’s shoreline frontage, except in no case shall the corridor area required be less than 15 feet in width (see Plate XX. 42).

Section 83.270 Piers, Docks, Moorage Buoys and Piles, Boatlifts and Canopies Serving a Detached Dwelling Unit Use (Single-family) [page 57-58 of 138, R-4786 – Attachment 6A]

4. New Pier or Dock Dimensional Standards –
   
   a. New piers or docks may be permitted, subject to the following regulations:

<table>
<thead>
<tr>
<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>Maximum Area: surface coverage, including all attached float decking, ramps, ells and fingers</td>
<td>480 sq. ft. for single property owner</td>
</tr>
<tr>
<td></td>
<td>700 sq. ft. for joint-use facility used by 2 residential property owners</td>
</tr>
<tr>
<td></td>
<td>1000 sq. ft. for joint-use facility used by 3 or more residential property owners</td>
</tr>
<tr>
<td></td>
<td>These area limitations shall include platform lifts.</td>
</tr>
<tr>
<td></td>
<td>Where a pier cannot reasonably be constructed under the area limitation above to obtain a moorage depth of 10 ft. measured</td>
</tr>
</tbody>
</table>
above below ordinary high water, an additional 4 sq. ft. of area may be added for each additional foot of pier length needed to reach 10 ft. of water depth at the landward end of the pier, provided that all other area dimensions, such as maximum width and length, have been minimized.

| Pilings, Moorage Piles, and Buoys | Piles shall not be treated with pentachlorophenol, creosote, chromated copper arsenate (CCA) or comparably toxic compounds. First set of piles pilings for piers or docks located no closer than 18 ft from OHWM. Moorage piles or buoys shall not be closer than 30 ft from OHWM or any farther waterward than the end of the pier or dock. Maximum 2 moorage piles or buoys per detached dwelling unit, including existing piles Maximum 4 moorage piles or buoys for joint use piers or docks, including existing piles |

83.280 Piers, Docks, Boat lifts and Canopies Serving Detached, Attached or Stacked Dwelling Units (Multi-family) [page 65-66 of 138, R-4786 – Attachment 6A]

5) New Pier or Dock Dimensional Standards –

b. Piers and docks shall be the minimum size necessary to meet the needs of the proposed water-dependent use and shall observe the following standards:

<table>
<thead>
<tr>
<th>New Pier, Dock or Moorage Piles for Detached, Attached or Stacked Dwelling Units (multi-family)</th>
<th>Dimensional and Design Standards</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pilings and Moorage Piles</td>
<td>First set of piles pilings for piers or docks located no closer than 18 ft from OHWM. Moorage piles shall not be closer than 30 ft from OHWM or any farther waterward than the end of the pier or dock. Piles shall not be treated with pentachlorophenol, creosote, chromated copper arsenate (CCA) or comparably toxic compounds.</td>
</tr>
</tbody>
</table>

83.300: Submittal Requirements for New or Enlarged Structural Stabilization Measures [page 77-78 of 138, R-4786 - Attachment 6A]

3. Submittal Requirements for New or Enlarged Structural Stabilization Measures -

In addition to the requirements described in KZC 83.300.2 above, the following shall be submitted to the City for an existing primary structure more than 10 feet from the OHWM or for a new primary structure:

**NOTE:** *Strike-out text* indicates existing text/sections that need to be removed from the SMP. *Underlined text indicates text/sections that need to be inserted into the SMP.*
a. For a hard structural shoreline stabilization measure, a geotechnical report prepared by a qualified professional with an engineering degree. The report shall include the following:

1) An assessment of the necessity for hard structural stabilization by estimating time frames and rates of erosion and documenting the urgency associated with the specific situation.

2) An assessment of the cause of erosion, looking at processes occurring both waterward and landward of the OHWM including on-site drainage.

b. An assessment prepared by a qualified professional (e.g., shoreline designer or other consultant familiar with lakeshore processes and shore stabilization), containing the following:

1) For a hard structural shoreline stabilization measure, an evaluation of the feasibility of using nonstructural or soft shoreline stabilization measures in lieu of hard structural shoreline stabilization measures. The evaluation shall address the feasibility of implementing options presented in Plate XX.43 based on an assessment of the subject property’s characteristics.

5. Submittal Requirements for Major Repairs or Replacements of Hard Stabilization Measures -

The following shall be submitted to the City when the primary structure is located more than 10 feet landward of the OHWM or for a use with no primary structure:

a. Written narrative that provides a demonstration of need shall be submitted. A qualified professional (e.g., shoreline designer or other consultant familiar with lakeshore processes and shore stabilization), but not necessarily a licensed geotechnical engineer shall prepare a written narrative. The written narrative shall consist of the following:

1) An assessment of the necessity for hard structural stabilization, considering site-specific conditions such as water depth, orientation of the shoreline, wave fetch, and location of the nearest structure. The evaluation shall address the feasibility of implementing options presented in Plate XX.43, given an assessment of the subject property’s characteristics.

83.550 Nonconformances [page 134-135 of 138, R-4786 - Attachment 6A]

(5.) Certain Nonconformances Specifically Regulated

(b.) Non-conforming structures –

5) Non-conforming structures that are expanded or enlarged within the shoreline setback must obtain a shoreline variance; provided that, a non-conforming detached dwelling unit use may be enlarged without a shoreline variance where the following provisions apply:

5) The enlargement shall not extend further waterward than the existing primary residential structure. For purposes of this subsection, the improvements allowed within the shoreline setback as established in KZC 83.180, such as bay windows, chimneys, greenhouse windows, eaves, cornices, awnings and canopies shall not be used in determining the most waterward location of the building (see Plate XX.44).

6) A nonconforming detached dwelling unit that is located on a lot that has less than 3,000 square feet of building area lying landward of the required shoreline setback and upland of required wetland or stream buffers, may be rebuilt or otherwise replaced within the

**NOTE:** *Strike-out text* indicates existing text/sections that need to be removed from the SMP. *Underlined text indicates text/sections that need to be inserted into the SMP.*
shoreline setback and required wetland or stream buffer without a shoreline variance, provided the following standards are met:

2) The size of the building footprint shall not be increased and the reconstructed structure shall not extend further waterward than the existing primary residential structure. For purposes of this subsection, the improvements allowed within the shoreline setback as established in KZC 83.180, such as bay windows, chimneys, greenhouse windows, eaves, cornices, awnings and canopies shall not be used in determining the most waterward location of the building (see Plate XX 44).

7) A primary structure that does not conform to the required shoreline setback and is located on a lot that has less than 3,000 square feet of building area lying landward of the shoreline setback, not including the area located within the required side yard setbacks and up to 10 feet of a required front yard, may be rebuilt or otherwise replaced in its current location within the shoreline setback, provided the following standards are met:

2) The size of the building footprint shall not be increased and the reconstructed structure shall not extend further waterward than the existing primary structure. For purposes of this subsection, the improvements allowed within the shoreline setback as established in KZC 83.180, such as bay windows, chimneys, greenhouse windows, eaves, cornices, awnings and canopies shall not be used in determining the most waterward location of the building (see Plate XX 43).
Attachment Plates (Attachment D – R-4786)

The following new plates should be considered part of the approved SMP:

- **Plate 19 - Average Parcel Depth** referenced in 83.80.7 definition of average parcel depth.
- **Plate 41 - Measuring Shoreline Setback** referenced in 83.190.2.b in shoreline setback section.
- **Plate 42 - Maximum Shoreline Walkway Corridor** referenced in Section 83.190.2.d.2 in shoreline setback section.
- **Plate 43 - Options for Shoreline Stabilization Measures** referenced in Section 83.300.5 for submittal of major repair of hard stabilization measures.
- **Plate 44 - Addition to Nonconforming Detached Dwelling Unit** referenced in Section 83.550.5.b.5 in nonconformance section.

**Plate 19 – Average Parcel Depth**

Plate XX

Calculating Average Parcel Depth

\[
\text{Average Parcel Depth} = \frac{P_L_1 + Q_1 + H_1 + Q_1 + P_L_2}{5}
\]

![Diagram of Average Parcel Depth Calculation](attachment:6_C)

**NOTE:** *Strike-out text* indicates existing text/sections that need to be removed from the SMP. *Underlined text* indicates text/sections that need to be inserted into the SMP.
Plate 41 – Measuring Shoreline Setback

Plate XX
Measuring Shoreline Setback

NOTE: Strike-out text indicates existing text/sections that need to be removed from the SMP. Underlined text indicates text/sections that need to be inserted into the SMP.
Plate 42 – Maximum Shoreline Walkway Corridor

Plate XX
Maximum Shoreline Walkway Corridor

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Plate 43 – Options for Shoreline Stabilization Measures

Plate XXA
Options for Shoreline Stabilization Measures
Building Setback 10′ - 30′

Typical Options:
A. Full beach, beach cove, pullback, bioengineering, enhancement, gradient improvement
B. Beach cove, pullback, bioengineering, enhancement, gradient improvement
C. Pullback, bioengineering, enhancement, gradient improvement
D. Bioengineering, enhancement, gradient improvement

Definitions: (In Order of Restoration Preference)
Full beach: hard stabilization removal and beach restoration
Beach cove: partial hard stabilization removal and pullback to create beach cove
Hard stabilization pullback: repositioning of hard stabilization landward of existing location to improve shoreline gradient and possibly form a beach
Slope bioengineering: shoreline stabilization using plant material and other biodegradable materials to hold upland soils in place
Hard stabilization enhancement: hard stabilization may stay in same general location, but modifications may include sloping back existing hard structure and/or modifying material type and layout to create potential beach cove areas
Nearshore gradient improvement: installation of gravel/cobble substrate wedge for the purposes of improving nearshore gradients

Notes: Sites with less than a 10′ shoreline setback are not included with this decision tree as those sites will likely require some form of hard stabilization. However, those sites may still benefit from the addition of an in-water gravel/cobble wedge to improve shoreline gradient along with a native plant buffer.

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Plate 43 – Options for Shoreline Stabilization Measures (pages 2 of 2)

Plate X XB
Options for Shoreline Stabilization Measures
Building Setback > 30’

- Setback: Shoreline setback as measured from the ordinary high water mark (OHWM).
- Bulkhead Height: As measured vertically from the low to top elevation of earth behind hard stabilization.
- Depth at Bulkhead: Depth of water at the hard stabilization as measured from the OHWM.
- Nearshore SlopE: Average in-water slope of substrate as measured for the first 30 feet seaward of the OHWM. Ratio is horizontal distance/vertical distance.
- Yard Slope: Average slope of upland area as measured for the first 30 feet landward of the OHWM. Ratio is horizontal distance/vertical distance.

<table>
<thead>
<tr>
<th>&gt; 30’</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt; 2</td>
</tr>
<tr>
<td>≥ 2</td>
</tr>
</tbody>
</table>

Typical Options:
A. Full beach, beach cove, pullback, bioengineering, enhancement, gradient improvement
B. Beach cove, pullback, bioengineering, enhancement, gradient improvement
C. Pullback, bioengineering, enhancement, gradient improvement
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Hard stabilization enhancement: hard stabilization may stay in same general location, but modifications may include sloping back existing hard structure and/or modifying material type and layout to create potential beach cove areas
Nearshore Gradient Improvement: installation of gravel/cobble substrate wedge for the purposes of improving nearshore gradients

Notes: Sites with less than a 10’ shoreline setback are not included with this decision tree as those sites will likely require some form of hard stabilization. However, those sites may still benefit from the addition of an in-water gravel/cobble wedge to improve shoreline gradient along with a native plant buffer.

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NOTE: Strike-out text indicates existing text/sections that need to be removed from the SMP. Underlined text indicates text/sections that need to be inserted into the SMP.
Plate 22 — WD 11 North Property Line Yard and Height of Structure.

Plate 27A, 27B, 27C — Shoreline View Corridor.

Plate 28 — North Property Line — Waterfront District (WD) Zones.

NOTE: Strike-out text indicates existing text/sections that need to be removed from the SMP. Underlined text indicates text/sections that need to be inserted into the SMP.
141.40: Exemption from Permit Requirements [page 1 of 6, R-4786 - Attachment 6B]

2. Special Provisions – The following provides additional clarification on the application of the exemptions listed in WAC 173-27-040:

b. Residential Appurtenances - ,

1) Normal appurtenances to a single-family residence, referred to in Chapter 83 KZC as a detached dwelling unit on one lot, are included in the permit exemption provided in WAC 173-27-040(2)(g). For the purposes of interpreting this provision, normal appurtenances shall include those listed under WAC 173-14-040(2)(g) as well as tool sheds, greenhouses, swimming pools, spas, accessory dwelling units and other accessory structures common to a single family residence located landward of the OHWM and the perimeter of a wetland.

2) Normal appurtenant structures to a single-family residence, referred to in Chapter 83 KZC as a detached dwelling unit on one lot, are included in the permit exemption provided in WAC 173-27-040(2)(b)(c) for structural and non structural shoreline stabilization measures. For the purposes of interpreting this provision, normal appurtenant shall be limited to the following structures listed under WAC 173-14-040(2)(g): a garage; deck; driveway; and utilities.

141.70: Procedures [page 3 of 6, R-4786 - Attachment 6B]

1. Substantial development permits.

   d. Decision -

   1) At the time of a final decision, the Planning Official shall mail a copy of the decision, staff advisory report, transmittal sheet and shoreline checklist to the applicant, Department of Ecology, and the Washington State Attorney General’s Office, pursuant to RCW 90.58.140 and WAC 173-27-130. The permit shall state that construction pursuant to a permit shall not begin or be authorized until twenty-one (21) days from the date the permit decision was filed is received by the permit applicant as provided in RCW 90.58.140(6); or until all review proceedings are terminated if the proceedings were initiated within twenty-one days from the date of filing receipt as defined in RCW 90.58.140(5) and (6). “Date of Filing Receipt” is that date that the permit applicant receives written notice from the Department of Ecology received a copy of the decision notifying the applicant of receipt of the decision.

   2) 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 receipt of the City’s decision by the Department of Ecology’s permit action letter as set forth in RCW 90.58.180.

   e. Effect of Decision – 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 notice of the final action taken by the City is filed received by the permit applicant from the Department of Ecology.

2. Conditional use permits.

   e. Decision -

   1) Once the City has approved a conditional use permit it will be forwarded to the State Department of Ecology for its review and approval/disapproval jurisdiction under WAC 173-27-200.
2) At the time of a final decision by the State Department of Ecology for a shoreline conditional use permit, the Planning Official shall, pursuant to RCW 90.58.140 and WAC 173-27-130, mail a copy of the decision, staff advisory report, transmittal sheet, and Shoreline Checklist to the applicant, Department of Ecology, and the State of Washington’s Office of the Attorney General. The permit shall state that construction pursuant to a permit shall not begin or be authorized until twenty-one (21) days from the date the permit decision was filed is received as provided in RCW 90.58.140(6); or until all review proceedings are terminated if the proceedings were initiated within twenty-one days from the date of filing receipt as defined in RCW 90.58.140(5) and (6). “Date of Filing” is that date that the Department of Ecology received a copy of the decision.

3) Appeals of a shoreline conditional use permit or shall be to the State Shoreline Hearings Board and shall be filed within twenty-one (21) days of the receipt of the City’s decision by the Department of Ecology’s permit action letter, as set forth in RCW 90.58.180.

3. Variances.

   e. Decision -

1) Approval by Department of Ecology. Once the City has approved a variance permit it will be forwarded to the State Department of Ecology for its review and approval/disapproval jurisdiction under WAC 173-27-200.

2) At the time of a final decision for a shoreline variance permit, the Planning Official shall, pursuant to RCW 90.58.140 and WAC 173-27-130, mail a copy of the decision, staff advisory report, transmittal sheet, and Shoreline Checklist to the applicant, Department of Ecology, and the State of Washington’s Office of the Attorney General. The permit shall state that construction pursuant to a permit shall not begin or be authorized until twenty-one (21) days from the date the permit decision was filed is received as provided in RCW 90.58.140(6); or until all review proceedings are terminated if the proceedings were initiated within twenty-one days from the date of filing receipt as defined in RCW 90.58.140(5) and (6). “Date of Filing” is that date that the Department of Ecology received a copy of the decision.

3) Appeals of a Shoreline Variance Permit shall be to the State Shoreline Hearings Board and shall be filed within twenty-one (21) days of the receipt of the City’s decision by the Department of Ecology’s permit action letter, as set forth in RCW 90.58.180.