



Review Response

Date: 3/23/23

Project Name: Helms Retaining Wall

Response To: Helms Ret Wall (SHL22-026)

To Grace Manahan,

This letter is in response to the corrections for shoreline exemption SHL22-026. Below are our responses to the questions/comments from 1/12/23.

Description of how this proposed new structure meets 19.13.050(B) is needed.

- 1. An existing shoreline stabilization structure may be replaced with a similar structure if there is a demonstrated need to protect principal uses or structures from erosion caused by currents or waves, and the following conditions shall apply:
- i. The replacement structure should be designed, located, sized, and constructed to assure no net loss of ecological functions.

See submitted NNL report.

ii. Replacement walls or bulkheads shall not encroach waterward of the ordinary high water mark or existing structure unless the primary structure was occupied prior to January 1, 1992, and there are overriding safety or environmental concerns. In such cases, the replacement structure shall abut the existing shoreline stabilization structure. Soft shoreline stabilization measures that provide restoration of shoreline ecological functions may be permitted waterward of the ordinary high water mark.

Bulkhead's location in relation to the OHWM will not be changing.

iii. For purposes of this section standards on shoreline stabilization measures, "replacement" means the construction of a new structure to perform a shoreline stabilization function of an existing structure which can no longer adequately serve its purpose. Additions to or increases in size of existing shoreline stabilization measures shall be considered new structures.

Understood.

iv. Construction and maintenance of normal protective bulkhead common to single-family dwellings requires only a shoreline exemption permit, unless a report is required by the code official to ensure compliance with the above conditions; however, if the construction of the bulkhead is undertaken wholly or in part on lands covered by water, such construction shall comply with SEPA mitigation.

Understood.

2. New structures for existing primary structures. New or enlarged structural shoreline stabilization measures for an existing primary structure, including residences, are not allowed unless there is conclusive evidence, documented by a geotechnical analysis, that the structure is in danger from shoreline erosion caused by currents or waves. Normal sloughing, erosion of steep bluffs, or shoreline erosion itself, without a scientific or geotechnical analysis, is not demonstration of need. The geotechnical analysis should evaluate on-site drainage issues and address drainage problems away from the shoreline edge before considering structural shoreline stabilization. New or enlarged erosion control structure shall not result in a net loss of shoreline ecological functions.

See submitted NNL report & geotechnical report.



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3. New development on steep slopes or bluffs shall be set back sufficiently to ensure that shoreline stabilization is unlikely to be necessary during the life of the structure, as demonstrated by a geotechnical analysis, in compliance with subsection (B)(7) of this section and building and construction codes.

See submitted geotechnical report.

- 4. New structural stabilization measures in support of water-dependent development shall only be allowed when all of the conditions below apply:
- i. The erosion is not being caused by upland conditions, such as the loss of vegetation and drainage.

See submitted geotechnical report.

ii. Nonstructural measures, planting vegetation, or installing on-site drainage improvements, are not feasible or not sufficient.

Nonstructural measures are not sufficient for long-term stabilization of the steep slope.

iii. The need to protect primary structures from damage due to erosion is demonstrated through a geotechnical report, in compliance with subsection (B)(7) of this section and building and construction codes.

See submitted geotechnical report.

iv. The erosion control structure will not result in a net loss of shoreline ecological functions.

See submitted NNL report.

- 5. New structural stabilization measures to protect projects for the restoration of ecological functions or hazardous substance remediation projects pursuant to RCW Chapter 70.105D shall only be allowed when all of the conditions below apply:
- i. Nonstructural measures, planting vegetation, or installing on-site drainage improvements, are not feasible or not sufficient.

Nonstructural measures are not sufficient for long-term stabilization of the steep slope.

ii. The erosion control structure will not result in a net loss of shoreline ecological functions.

See submitted NNL report.

6. Bulkheads shall be located generally parallel to the natural shoreline. No filling may be allowed waterward of the ordinary high water mark, unless there has been severe and unusual erosion within two years immediately preceding the application for the bulkhead. In this event the city may allow the placement of the bulkhead to recover the dry land area lost by erosion.

No fill will be placed waterward of OHWM, and wall will be located approximately parallel to existing shoreline.

7. Geotechnical reports pursuant to this section that address the need to prevent potential damage to a primary structure shall address the necessity for shoreline stabilization by estimating time frames and rates of erosion and report on the urgency associated with the specific situation. As a general matter, hard armoring solutions should not be authorized except when a report confirms that there is a significant possibility that such a structure will be damaged within three years as a result of shoreline erosion in the absence of such hard armoring measures, or where waiting until the need is that immediate would foreclose the opportunity to use measures that avoid impacts on ecological functions. Thus, where the geotechnical report confirms a need to prevent potential damage to a primary structure, but the need is not as immediate as the three years, that report may still be used to justify more immediate authorization to protect against erosion using soft measures.



See submitted geotechnical report.

8. When any structural shoreline stabilization measures are demonstrated to be necessary, pursuant to above provisions, the following shall apply:

i. Limit the size of stabilization measures to the minimum necessary. Use measures designed to assure no net loss of shoreline ecological functions. Soft approaches shall be used unless demonstrated not to be sufficient to protect primary structures, dwellings, and businesses.

Size of wall is minimum necessary. See submitted NNL report.

ii. Ensure that publicly financed or subsidized shoreline erosion control measures do not permanently restrict appropriate public access to the shoreline except where such access is determined to be infeasible because of incompatible uses, safety, security, or harm to ecological functions. See public access provisions: WAC 173-26-221(4). Where feasible, incorporate ecological restoration and public access improvements into the project.

N/A – project is privately financed.

iii. Mitigate new erosion control measures, including replacement structures, on feeder bluffs or other actions that affect beach sediment-producing areas to avoid and, if that is not possible, to minimize adverse impacts to sediment conveyance systems. Where sediment conveyance systems cross jurisdictional boundaries, local governments should coordinate shoreline management efforts. If beach erosion is threatening existing development, local governments should adopt master program provisions for a beach management district or other institutional mechanism to provide comprehensive mitigation for the adverse impacts of erosion control measures.

N/A – project site doesn't include feeder bluff or sediment producing area.

The proposed retaining wall is an increase in size of existing shoreline stabilization measures therefore considered a new structure and not a replacement of the existing structure.

Understood. See analysis above for how project meets code requirements for new shoreline stabilization.

Description of how this project meets the criteria of a shoreline exemption permit is needed.

WAC 173-27-040(2)(c) states that this scope is exempt from an SSDP: "Construction of the normal protective bulkhead common to single-family residences. A "normal protective" bulkhead includes those structural and nonstructural developments installed at or near, and parallel to, the ordinary high water mark for the sole purpose of protecting an existing single-family residence and appurtenant structures from loss or damage by erosion." The proposed structure is approximately parallel to the OHWM & serves the purpose of protecting the appurtenant structures on the single-family property from erosion damage, and therefore meets the qualifications of this exemption.

Thank you for your time,

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