TECHNICAL MEMORANDUM

Date:	March 7, 2019
To:	Steve and Sophie Yang
From:	Ryan Kahlo, PWS, Senior Ecologist
Project Name:	Yang Residence, Watercourse Buffer Modification
Project Number:	180605

Subject: 6660 East Mercer Way Buffer Modification Approach Narrative

The proposed project includes the removal and reconstruction of an existing single-family residence at 6660 East Mercer Way (Parcel #2396000050). The property contains one piped watercourse (Watercourse A) with a standard 25-foot standard buffer and the Lake Washington shoreline with its standard 25-foot buffer. The existing residence is located substantially within the Watercourse A buffer. Much of the new residence will be located within the footprint of the existing residence. Those parts of the new residence not located within the existing footprint will be located farther from the critical area buffers than the existing structure. However, due to the extent of buffer encumbrances on the property, the proposed residence cannot be constructed entirely outside of the standard Watercourse A buffer. Therefore, the project will incorporate buffer averaging in accordance with the Mercer Island City Code (MICC) critical areas regulations, reducing the standard buffer to 10.75 feet at its narrowest point.

In order to achieve the purpose of the project and protect the shoreline, watercourse, and buffer areas located on the property, the new residence will be located farther from Watercourse A and the Lake Washington OHWM. The proposal will also incorporate enhancement of the averaged watercourse buffer areas. The proposed buffer averaging will result in a significant improvement in buffer functions by replacing areas of impervious and otherwise degraded buffer with a dense, native shrub and groundcover community. The proposed project will result in a net decrease of impervious area within the watercourse buffer.

To comply with the applicable sections of MICC, 374 square feet of Watercourse A buffer will be reduced, and an equivalent area will be added to maintain an equivalent total buffer area. Approximately 3,531 square feet of degraded Watercourse A buffer and 1,350 SF of partially overlapping shoreline buffer will be enhanced with a native small tree, shrub, and groundcover plant community. The averaged buffer will result in significantly improved buffer functions as compared to the standard buffer.

For additional details regarding the scope of the project, existing conditions, proposed buffer modifications, and compliance with MICC, please reference *Critical Areas Study, Yang Residence: Watercourse Buffer Modification* (The Watershed Company. November 2018).