THE WATERSHED COMPANY

SCIENCE & DESIGN

September 13, 2017

Collin and Jillian Hagstrom
c/o Brad Sturman
Sturman Architects
9 – 103rd Avenue NE, Suite 203
Bellevue, WA 98004

Re: Hagstrom Residence Critical Areas Report, Response to 2nd Peer Review Comments
The Watershed Company Reference Number: 160735

Dear Collin:

This letter represents our responses to the concerns and recommendations provided by the City's Peer Reviewer related to the recently revised mitigation plan and Critical Areas Report for your property located at 7428 SE 71st Street in Mercer Island, Washington. The comments were provided in an August 21, 2017, letter from Environmental Science Associates (ESA) (*Hagstrom Review CAO17-004, Resubmittal*). ESA's comments and recommendations are listed in italics below. Our response to the comments follow in standard font.

Recommendation 2

Discussion in the Comment Response memo provides adequate explanation and justification for not including Watercourse A impact area quantities. However, we recommend that some of the explanation from the memo be added to the CAS to better clarify proposed mitigation, such as '…the applicant is utilizing this provision [MICC 19.07.030.A.10] for the entire Watercourse A buffer for simplicity." Also, we recommend that an asterisk be added to 'N/A' under reduction area for Watercourse A, and Shoreline Buffer, in Table 1 of the CAS that explains why there is no reduction area for those features for clarification purposes.

In addition, the Comment Response memo provides different quantities from those provided in the CAS for both the net decrease in impervious surface (173 sf), and enhancement area (1,643) within the Watercourse A buffer. It appears the mitigation plan has been updated to reflect these new quantities; we recommend that the CAS be updated to reflect these changes as well.

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The additional discussions requested have been added to the CAS in Section 4.1 and Table 1. The CAS and Mitigation Plans both depict the same decrease in impervious surface (173 sf) and enhancement area (1,643 sf) within the Watercourse A buffer.

Supplemental Comment

In addition to the recommendations above, we also recommend that the CAS be revised to include a discussion of the proposed storm drain catch basins and conveyance located within the reduced piped watercourse buffers and discharging to the piped segment of Watercourse A immediately above Lake Washington (per Engineering Drainage Plan [Eastside Consulting Inc., June 2017] provided by the City). While new utility facilities (including drainage conveyance and outfalls) may be allowed by MICC 19.07.030(7) (New Utility Facilities), the City requires mitigation and use of best management practices to the greatest extent reasonably feasible so there is no net loss in critical area functions. We recommend that the applicant be required to address potential impacts from proposed drainage facilities, and to provide mitigation consistent with MICC 19.07.030(7). Based on our review of submittal materials, we recommend options focused on reducing the amount of runoff from pollution generating impervious surfaces (the driveway), and/or providing basic water quality treatment for runoff. Potential options include the use of pervious materials for the driveway, or providing a vegetated bioswale in the conveyance flow path.

The purpose, necessity, functionality, and code compliance regarding the proposed conveyance feature have been addressed in the revised CAS. A vegetated bioswale has been added to the mitigation plan. The bioswale has been designed to treat 99% of the runoff volume from the adjacent roof and driveway. Design and specifications are provided in the CAS and Mitigation Plan.

Please call if you have any questions or if we can provide you with any additional information.

Sincerely,

Ryan Kahlo, PWS
Senior Ecologist