

September 12, 2025

City of Mercer Island

RE: 2403-073-SUB2-PLANS_review
File Nos. Architect's Project No: 20-0501

Dear City of Mercer Island Officials,

On behalf of our client, we are submitting the following response to the comments received August 8th 2025.

COMMENTS & RESPONSE:

A001 – Cover Sheet:

1. Submit new updated site development worksheet to be consistent with these calculations.

Response: A new worksheet has been prepared, please see document Ramaiyah Subramanian - Site Development Worksheet.pdf.

2. No additional subsurface information was provided in the referenced geotechnical report. In a letter dated September 5, 2024, the geotechnical engineer indicated that a deeper exploration would be performed as soon as logistically possible. Please provide requested information discussed in SUB 1 Comment above. Given the inherent variable nature of landslide deposits, it is our opinion that more than one deeper exploration would better characterize the soil and groundwater conditions at the site. With the additional subsurface information the impact of the landslide deposits on the foundation design should be assessed. This assessment would include static and seismic slope stability analyses as well as liquefaction potential. Please provide calculation package showing the results of the stability and liquefaction analyses. Please include cross sections showing soil layers, ground water levels, soil strengths used in the analyses and failure surfaces. If it is determined that soil liquefaction is possible under the MCE loading (having a 2% probability of exceedance in 50 years), please conduct the stability analyses with residual strengths to reflect post-liquefaction soil conditions as required by IBC. Please indicate the basis of the residual strength values used in the analyses.

Response: Revised soil samples will be taken on September 25th and a new soils report will be written.

3. It is our opinion that there is currently insufficient subsurface information to support current conclusions made by the geotechnical engineer of record and therefore the report does not meet the requirements of MICC 19.07.160. We therefore also disagree with the statement of risk provided on page 8 of the geotechnical report that states "...it appears the residence replacement will mitigate impacts to the geologically hazardous area consistent with best

available science to the maximum extent reasonably possible such that the site is determined to be safe." The SUB 1 Comment is reiterated and provided as a placeholder for the requirement.

SUB 1 Comment repeated below: Once the plan set has received final approval, please have the geotechnical engineer of record review and verify that the design is in accordance with their recommendations provided in their report. Please include in this PE stamped letter a minimum risk statement in accordance with MICC 19.07.160.B.3. No response is required until final plan set approval. Comment is provided as a placeholder until then.

Response: Revised soil samples will be taken on September 25th and a new soils report will be written to address these concerns.

4. In the Ages Engineering report dated September 4, 2024, it appears that the recommended foundation design consists of shallow foundations on top of mass wastage deposits. The report text indicates unsuitable soils to a 5-ft depth, but the hand augers indicate mass wastage deposits below that depth.

The use of shallow foundations on mass wastage or landslide deposits is not in accordance with local geotechnical engineering practice. In addition, since there is a lack of sufficient subsurface information, in the opinion of the reviewer, the use of shallow foundations is not appropriate. Based on our differing opinions on the appropriate foundation design, the applicant can have an independent 3rd party review this project. Please contact Gareth Reece (gareth.reece@mercergov.org) for information on the process for this

Response: Revised soil samples will be taken on September 25th and a new soils report will be written to address these concerns.

A002 – Site Plan:

5. Please have the geotechnical engineer of record review the proposed cuts for Sections B and C. Please assess ability of onsite soils to support the 4-ft vertical cut at the base of the open cut. Include slope stability analyses for the temporary open cuts to verify that sufficient factor of safety against slope instability is anticipated. Please provide slope stability sections with subsurface characterization included on the sections along with the results showing the critical failure surface. (Please note that response to a SUB 1 comment originally on Civil grading plan requesting slope stability analyses indicated that the stability analyses were included in the geotechnical report. No analyses were provided.) Please verify that the proposed cut catches existing grade (e.g. Section C on the north property line). Please provide recommendations on how to achieve the proposed excavation within the limits of the property. If temporary shoring is recommended, please provide shoring design recommendations, details, section and design calculations for review.

Response: This will be addressed in the revised soils report released after new soils samples are taken on September 25th.

A003 – Site Improvements:

6. Label height of retaining wall and fence for conformance with MICC 19.02.050(E)(1)(a): the combined height of a fence and retaining wall or rockery for a fill slope authorized pursuant to subsection (D)(5) of this section shall not exceed a total height of 72 inches.

It appears the fence needs to be lowered.

Response: The fence height has been lowered.

Civil – SH3

7. The easement needs to be recorded prior to issue the permit.

Response: Per Civil response, “The easement has been prepared and agreed to and will be signed . Unfortunately the neighbors wife is currently stuck in China on a VISA issue that will hopefully be worked out very soon. We are hoping this can be made a condition of occupancy and not hold up the Permit.”

8. An onsite detention system is not required if the new storm pipe is directly discharging into the lake. I would suggest to upsize the pipe size to 8" in case the neighbor wants to connect to this pipe in the future with eliminating the detention system.

Response: Per Civil response, “Per the Easement agreement we agreed to install Detention.”

Civil – SH5

9. A sewer backflow valve is required if the side sewer is a shared side sewer.

Response: Per Civil response, “A sewer backflow valve was added.”

10. Show new meter location here. The water service line from the water main to the meter will be 2", the meter will be 1.5", and the supply line from the meter to the house will be 2".

Response: Per Civil response, “The new water meter location was moved and changed to a 1.5" meter and the service and supply lines were changed to 2"

Civil – SH6

11. Add protection fencing and measures at dripline to protect off site exceptional tree.

Response: Per Civil response, “Protection fencing was added.”

12. Add tree protection diagram to plan set:

https://www.mercerisland.gov/sites/default/files/fileattachments/community_planning_amp_development/page/2091/tree_protection_area_signage_chain_link_update.pdf

Response: Per Civil response, "The detail was added to sheet 16."

Structural – S101

33 Please update geotechnical report reference date.

Response: This reference will be updated once the new report has been written after the September 25th drilling date.

Please feel free to call me at (425) 454-0566 if you require further clarification.

Sincerely,

BAYLIS ARCHITECTS, INC.

A handwritten signature in black ink that reads "Andrew DeFlorio". The signature is fluid and cursive, with the first name "Andrew" and last name "DeFlorio" clearly legible.

Andrew DeFlorio | AIA | LEED AP
Intern Architect

Attachments:

PLANS - Ramaiyah Subramanian - Permit Set - Revision 2 - Combined.pdf
RESPONSE LETTER - 2403-073-SUB2-PLANS.pdf
RAMAIYAH SUBRAMANIAN - SITE DEVELOPMENT WORKSHEET.pdf