

April 9th, 2024

Michele Lorilla City of Mercer Island 9611 SE 36th Street Mercer Island, WA 98040

Subject: Fused Elements Residence

Building Permit

Second Round Issues and Comments

Dear Ms Lorilla:

We have reviewed your peer review comments on the submitted Fused Elements Residence building permit from March, 2024. Please refer to R2 drawings dated April 9th, 2024, for corrections referenced in our responses. Changes to the structural drawings related to these comments have been clouded for your convenience.

Several drawings have been revised since the 9/8 submission due to coordination efforts with the contractor and design updates, mainly due to a revision in the garage deck framing. Associated changes have also been clouded in the R2 drawings set and included in the Supplemental Structural Calculations.

Please see our responses to comments below.

PERMIT COMMENT RESPONSES

 Comment: SH0.01 – In reviewing the structural calculations for the permanent soldier pile wall, no seismic loading was noted. The geotechnical engineer recommended 5H psf for active wall conditions and 10H for restrained wall conditions under seismic loading.

Response: Please see attached Supplemental Structural Calculations for analysis of shoring walls with seismic surcharge load included. These walls are considered unrestrained and therefore the 5H pressure is applicable. No change to the pile design is required, but a slightly larger tieback design load is required at the 21' wall. This revision is shown in schedule 19/SH4.01.

If there are any further comments or questions, please feel free to call me at (206) 622-5822.

Sincerely,

John Shapley Project Engineer Amie Sullivan Principal

Amie Suldwan

JRS:AES

Enclosures

[Revised Permit Drawings]

[Supplemental Permit Calculations]

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