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February 18, 2021

Scott McMillen

ARCHITECTURAL INNOVATIONS, P.S.

14311 SE 16th St. Bellevue, WA 98007

7233 80th Ave SE — Pratt Plat - Lot 4

Mercer Island, WA

PLAN REVIEW COMMENTS

M+K Project #: 203-20001

Reference

Structural Plans, Prepared by Architectural Innovations, Designed by Mulhern + Kulp Plan Review Comments, received 2/17/2021 Calculation Package, prepared by Mulhern + Kulp

Scott:

Pursuant to your request, we are providing this letter to address the structural items resulting from the above referenced plan review comments for the above referenced new construction in the City of Mercer Island, WA. Below, please find the review comment, followed by our response.

PLAN REVIEW COMMENTS

- Comment: If the short retaining wall at the northeast corner of the garage is to be constructed without drainage behind it, it must be designed for the buildup of hydrostatic pressures. Provide calculations considering this.
 Response: See updated plans for addition of drainage behind retaining wall.
- Comment: Sheet A2.0 references detail 15/SD-02 at the short retaining wall at the northeast corner of the garage. This Detail has the reinforcement on the wrong side of the wall. Provide supporting calculations for this wall design.
 Response: Detail 15/SD-02 was previously void and the retaining wall at northeast corner of garage was labeled to be deigned by others. Please see the updated plans and details to include a detail 15 at this location, which does not require a design per IRC R404.1.1. as the maximum unbalanced fill does not exceed 48". Detail 17/SD-02 does have reinforcement matching your description, but is in the correct location as the wall was idealized as a beam spanning side-to-side, requiring reinforcement at the face away from the retained soil per the calculation that was provided in the calculation package.
- Comment: Please correct the date of the geotechnical report to 4/28/2016 on Sheet S-0.0.
 Response: See update sheet for corrected date.

• Comment: Please Specify the minimum dowel length into the retaining walls in details 10,11 & 12/SD-01 and 13,14 & 16/SD-02. It seems the length into the footing is specified, but the lap length vertically into the wall is not. Please clarify if we are missing a call-out.

Response: See footing specifications in the details provided for minimum dowel length into the foundation stem walls. In all details in question the vertical dowel extension was specified as 48".

• Comment: Details 80/LB-2 is cut at the east wall of the covered patio, Sheet A2.2. The detail refers to the plans for the ledger. It is unclear what exactly is intended by this reference. Please clarify the detail to eliminate confusion. If it is intended to use the same ledger call-out at the perpendicular wall, please specifically reference that note at this location as well as on Sheet A2.2.

Response: See updated plans for clarified ledger specification on plan.

Please feel free to call if you have any questions.

Respectfully,

MULHERN & KULP STRUCTURAL ENGINEERING, INC.

Riley J. Denis, E.I.T. Staff Engineer

Nicholas J Martignetti, P.E. Associate Owner + San Diego Office Director



ARCHITECTURAL INNOVATIONS, P.S.

Forward Thinking Design Solutions For Your Environment

March 15, 2021

City of Mercer Island
Attn: Development Services Group
9611 SE 36th Street
Mercer Island, WA 98040

RE: AI Job #19037

Project Address: 7233 80th Ave SE

Attn: Crystal Kolke

Subject: Permit No. 2008-182

Nonstructural

- 1. Flattened the PDF's.
- 2. Added a footing drain on sheet C4.4.
- 3. Added keynote FP-4 reference at the garage on sheet A2.0.

Geotechnical

- 1. Added a footing drain on sheet C4.4.
- 2. Added keynote FP-4 reference at the garage on sheet A2.0.

Structural

Please see the attached response letter from Mulhern+Kulp.

Respectfully,

Scott McMillen, Project Manager Architectural Innovations, P.S.