Stuart Silk Architects

March 18, 2022

Community Planning & Development City of Mercer Island 9611 - SE 36th Street Mercer Island, WA 98040

RF.

Fire Code Alternative Request

Permit No. 2203-116

To Whom It May Concern:

The above-referenced permit number is for the construction of a new one-story single-family residence, with an attached garage, on a previously undeveloped lot (parcel no. 320600-0050). The lot has not yet been assigned an address, but is located between 7808 - 79th Ave. SE and 7814 - 79th Ave. SE.

In its review of the proposed plans, the Mercer Island Fire Marshal's Office identified four aspects of the subject property which are deficient from the standpoint of the Fire Code. These are as follows:

- 1. Fire hydrant flow is 386 g.p.m., less than the 1125 g.p.m. required;
- 2. Fire access roadway is 14.02' wide, less than the 26' required;
- 3. Turn-around at the end of 79th Ave. SE is sub-standard; and
- 4. Distance from the access roadway to the rear of the residence exceeds 150'.

The following measures, which are specified in the Fire Protection Data on drawing sheet A-1.0, are proposed as a means of mitigating the above deficiencies:

- 1. <u>An NFPA 13R sprinkler system</u>. Sheet A-1.0 specifies that "an approved 13R sprinkler system will be installed (deferred submittal)."
- 2. <u>A monitored fire alarm system</u>. Sheet A-1.0 specifies that "an approved fire alarm system will be installed (deferred submittal). Fire alarm system will comply with Mercer Island Fire Marshal's Office 'Household Fire Alarm Standards."
- 3. Solid core doors and type 'X' GWB in exit pathways. Sheet A-1.0 specifies that "pending approval from Fire Marshal, type 'X' drywall and solid core doors will be used in exit pathways to mitigate deficiencies in existing access road." Additionally, the Fire Protection Notes on the floor plan (drawing 1/A-2.1) specify that "all doors to be solid core. All GWB in exit pathways (foyer, mud room, and halls) to be type 'X'."

We believe the measures proposed above are equal to or better than the code requirement. If you have any questions or would like additional information, please do not hesitate to contact me at eric@stuartsilk.com.

Very truly yours.

Eric Henyey, AIA Project Manager