

March 17, 2021

Summit Homes 120 SE 30<sup>th</sup> St. Lee's Summit, MO 64082

RE: Field Issue of cut double floor joist and hole in studs by fireplace for Lot # 6 Hawthorne Ridge – 2926 SW Arboridge Dr. Lee's Summit, MO 64082 – Permit # PRRES20203936

This letter addresses the cut double joist under bath #2 and hole in studs by fireplace.

- It is structurally acceptable to have 1-1/2" diameter hole in 6 studs between dining room window and great room fireplace. Hole is located 3/4" from the back of the studs and about 1-1/2" from the front of studs.
- Studs are approximately 9' tall with 16' tributary width of roof loads of D=20 psf and Snow=25 psf.

The repair to cut double floor joist under bath #2 shall be as follows:

- Sister (2) 24" lengths of Douglas Fir Larch #2 2x10 to cut floor joist centered under cut.
- Attach 4 fasteners per linear ft in "W" pattern.
- Floor joists are Douglas Fir Larch #2 2x10 double every other spanning approximately 17'-6" with standard Dead=10 psf and Live = 40 psf loads.

Sincerely,

Bradley Huxol, PE