

CIVIL ENGINEERING CONSULTANTS

1805 WATERS ROAD · HARRISONVILLE FACSIMILE: 816-884-3250

MISSOURI 64701 816-380-5150 EMAIL: MAIL@REOENGINEERING.COM

December 10, 2021

Attn: Brian Higginbotham Kevin Higdon Construction P.O. Box 847 Lee's Summit, MO 64063

RE: R.E.O. Project 21-002-34 1813 SW Sage Canyon Lee's Summit, MO

## Dear Mr. Higginbotham,

We are providing herewith statement regarding field modifications to, and inspection comments for, the residential construction at the above referenced address. In the miscellaneous section, rafter ties, provide straps at 48 inches on center where rafters are constructed on blocking greater than three net top plates (including areas where ceiling joists are constructed as an energy heel). Straps shall be 1-1/4"x22 gauge and extend from the top of the rafter to 8 inches below the base of the top plate aligned with a stud in the wall construction. Seven (7) ~ 8d fasteners shall be connected to the stud with an additional seven (7) ~ 8d distributed between the rafter, blocking plates, and top plates. We consider the blocked-up rafters at the master bedroom tied with lookouts extending from the box-up ceiling to the top plate with the above described straps as adequately tied.

In lieu of the specified continuously sheathed portal frame (CS-PF) at the rear breakfast slider, the sections on either side of the door may be considered as continuously sheathed wood structural panels. For this, additional 8d fasteners are required at the perimeter of the panels for a minimum spacing of six inches on center. The interior of the panels are fastened to meet the minimum 12 inches on center spacing. This provides an adequate equivalent bracing method. At the interior face of the framing in this location, several full-length studs are partially cut, in these locations provide Simpson Strong Tie CS22 straps approximately 18 inches in length centered at the cut.

At the second floor bath where method CS-PF is denoted, the structural sheathing and lap siding is adequately attached to meet the requirements of continuously sheathed wood structural panel method in lieu of CS-PF. No modifications are required in this location.

If there are any questions regarding this analysis, please contact our Offices

Very Truly Yours,

R.E.O. ENGINEERING, P.C.

, President By:~ Aaron D. Obermiller, P.E.

