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March 23, 2018

Frank Sbisa Sbisa Homes 29710 E Windmill Ridge Ln Lee's Summit, MO 64088

Re: Building Inspection Report dated 3/22/18 for 1349 NE Brandywine Rd Lee's Summit, MO Brooks Residence Permit No. PRRES20173427

Dear Mr. Sbisa:

On March 23, 2018, I inspected the above referenced property to address issues raised by the Building Inspector in his 3/22/18 Inspection Report.

- 1. "plan shows no footing under stair" The existing 4" thick concrete floor slab with #4 reinforcing bars @ 24" centers each way is capable of supporting the minimal loads imposed by the load bearing walls around the stair.
- 2. "Have engineer address support for the LVL beam. Also header LVL is not supported to the longer LVL with hanger" The LVL beam is supported by the stud wall below and no hanger is required. The existing 4" thick concrete floor slab with #4 reinforcing bars @ 24" centers each way is capable of supporting the minimal loads imposed by the load bearing walls around the stair.
- 3. "have engineer address undersized I beams installed. Plan shows 10" I beams, not 8" There are three beams in the basement that are not installed per the approved plans:
 - (a) Beam at left (east) side is called out as W10x39 and the beam installed is a W8x15. I recommend that a second W8x15 beam be installed from the outside wall to the wall between the REC ROOM and STORAGE. The beam should be supported at the exterior wall by solid 2x4 blocking down to the window header and should be supported at the STORAGE wall by a second 3" SCH 40 steel col bearing on the existing pad.

- (b) Beam at the center is called out as W10x22 and the beam installed is a W8x18. Because the header on the First floor carries ceiling and roof load the only load on this beam is First floor live and dead loads. The existing W8x18 beam is capable of supporting the imposed loads.
- (c) The beam at the right side of the basement is called out as a W10x26 and the beam installed is a W8x21. There is minimal roof and ceiling load on this beam. In addition, there is a continuous 2x6 framed wall from the basement floor slab to the underside of the beam. The existing 4" thick concrete floor slab with #4 reinforcing bars @ 24" centers each way is capable of supporting considerable load even though there is no thickened footing beneath the 2x6 wall. The W8x21 beam with the added support of the 2x6 framed wall beneath it is capable of supporting the imposed loads.

Cordially,

David P. Ainsworth, P.E.

3-23-18