



June 28, 2021

New Mark Homes

Re: 1916 SW River Run Dr
Lot 4, Whispering Woods
Lee's Summit, MO

Apex Engineers Inc. observed the house under construction at the above referenced address. Our firm has been retained to address comments from the city rough-in inspection. For the purposes of this report the house will be referred to as facing south.

1. *Joists under first floor kitchen observed to have bore holes approximately 3" in diameter and located 5'-0" from the main basement steel beam.*
 - (6) 2x10 floor joists were observed to have bore holes varying in locations within the depth of the member. The joists in question have been labeled and shown in figure 1.0
 - J1: Joists J1 falls within code allowable limitations for bored holes per IRC R502.8.1. No repair is required.
 - J2-J6: Joists 2 through 6 do not fall within code allowable limitations for bored holes per IRC R502.8.1. A repair is required.
 - Option 1: install an additional full-length 2x10 ply adjacent to damaged joist. Bore the new holes a minimum 6" away from previously bored holes and per IRC R502.8.1. (Bored holes shall have a maximum diameter of 1/3 the depth of member and shall maintain 2" of edge distance from top and bottom faces of beam and 2" of edge distance to any holes and notches in the beam.)
 - Option 2: re-route plumbing to avoid boring of floor joists. Install a min 2'-6" long ply of #2-2x6 centered over the bored hole and tight to subfloor. Glue and face nail with (25) 10d common nails each side of hole (arrange nails in 5x5 grid pattern). Provide min 1/2" of spacing between rows and edge distances.

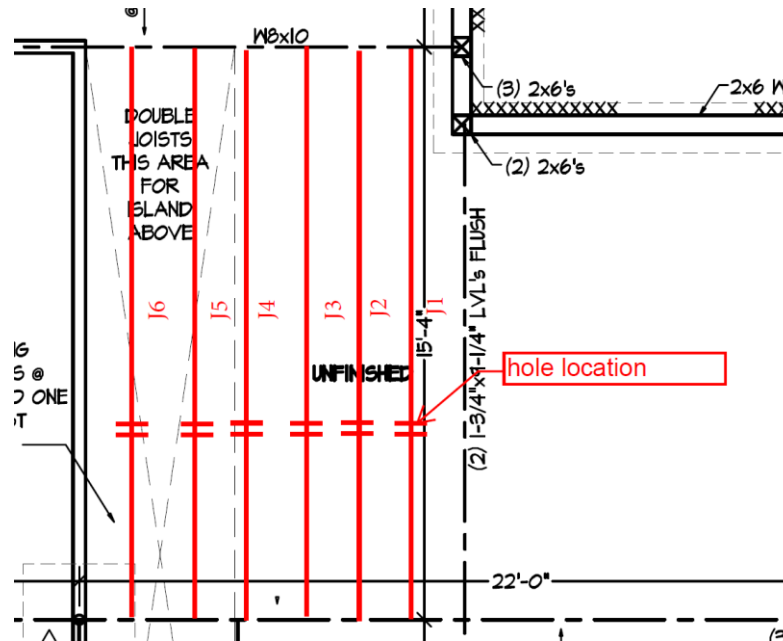


Figure 1.0 – Bored Joists

Contingent upon the repairs outline above, our firm recommends approval of these items.

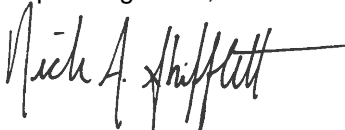
Please call if our firm can of further assistance.

LIMITATIONS

The scope of our services includes only those items specifically addressed herein. All other items are outside the scope of this inspection; including any environmental assessment (such as, but not limited to mold, mildew, or presence of any other toxic substance or environmental risks).

In addition, the scope our services does not include any evaluation of the building or site for job-site safety and/or hazardous conditions. All construction shall be performed in compliance with IRC and OSHA standards at all times. Our firm has not been retained to examine the site or building for any of these conditions. In addition, the contractor shall retain sole responsibility for the quality of work, for adhering to plans, specifications, appropriate codes, and, for repairing defects, deficiencies or omission, regardless of when they are found. By the use of this report it is understood the above conditions are agreed to.

Best Regards,
Apex Engineers, Inc.



Nick A. Shifflett
Project Engineer

