

August 8, 2022

New Mark Homes

Re: 2804 SW Hearthstone Place
Lot 55, Hook Farms
Lee's Summit, MO 64082

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 north.

1. *The beam splice is located above the column at the bottom of the stairs. Is this okay? Plans show it floating approx. 3' off bedroom wall in front of the bar area.*
 - After computations, our firm has determined that the splice is in an acceptable location.
2. *There is an over-notched joist above the basement bath entry.*
 - Two (2) 3.5"x8.5" square notches were observed on the top edge of a doubled joist and located approximately 2'0" from steel beam support. The observed notches are **not** acceptable. The joist shall be repaired per the following:
 - (2) 36"x5.75"x0.25" steel plates (Gr.A36) shall be installed and bolted per figure 1.0.
 - One plate shall be installed on each side of the notched joist.

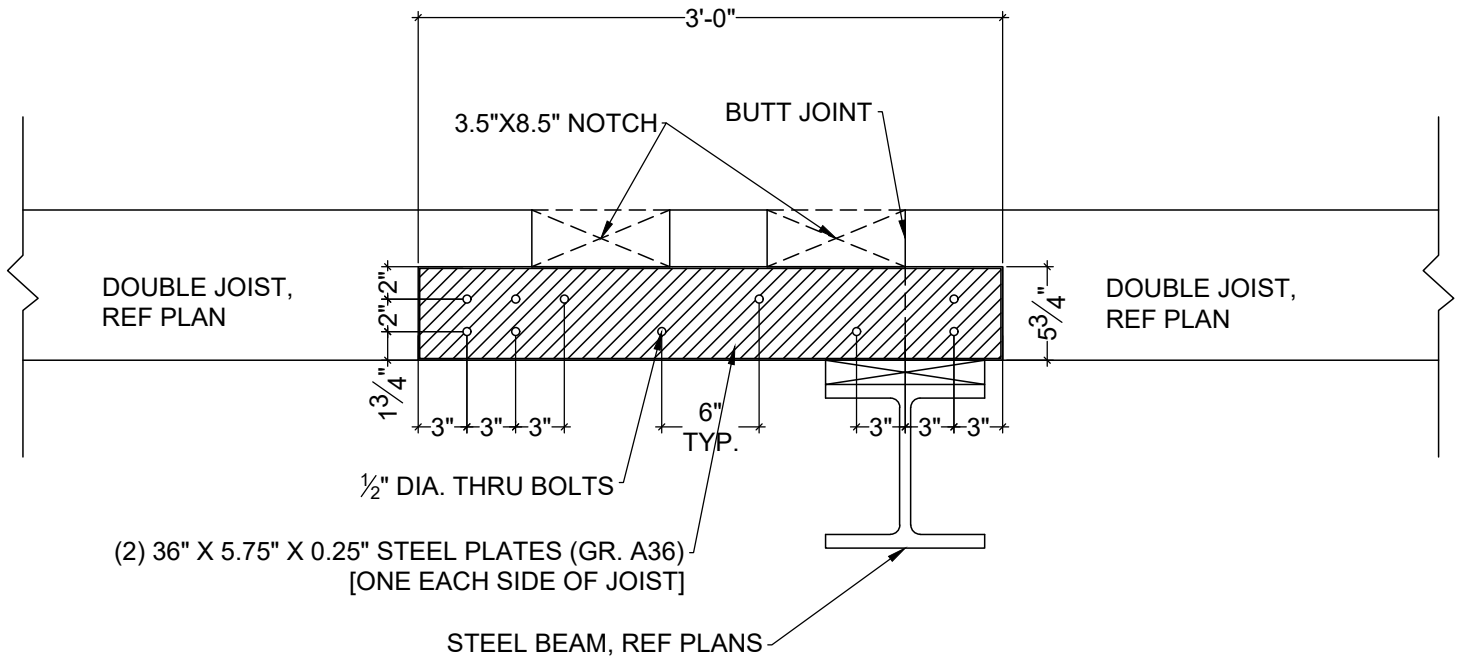


Figure 1.0 – Notched Joist Plate Repair

3. *Holes drilled in joists too close to each other at the electrical service panel.*
 - Drilled holes were observed too close to the bottom edge of the joist, taking the effective depth of the joist to 7". After computations, our firm recommends installing an additional full-length ply with the maximum possible depth without interfering with electrical (#2-2x4 DFL or #2-2x6 DFL) and fastened per the beam fastening schedule per detail 10/S3.1 of city-approved plans.
4. *Holes drilled in joist above the entry to bedrooms from rec room too close to the edge.*
 - Vertical 1" diameter holes were observed in triple #2-2x10 joists.
 - After computations, our firm has determined that the holes are acceptable.
5. *Hole too close to the bottom – near basement door and bedroom hall entry.*
 - 12" long Simpson CS16 strap shall be installed centered under the hole. Reference figure 2.0.

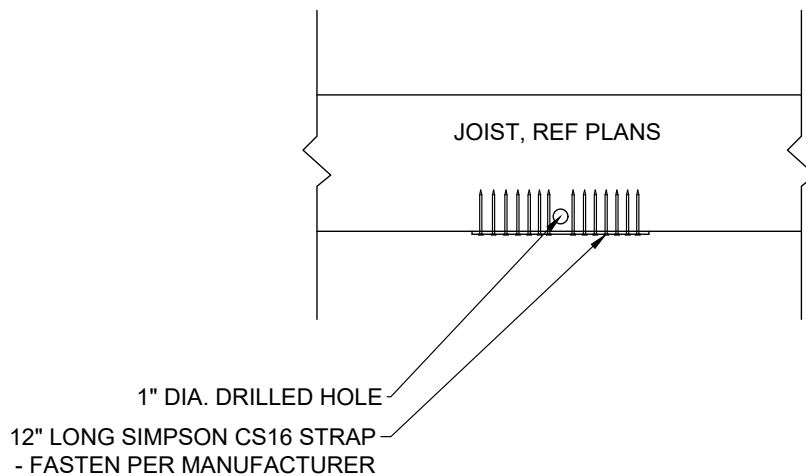


Figure 2.0 – Notch Repair with CS Strap

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 of 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, and appropriate codes, and, for repairing defects, deficiencies or omissions, 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

Clayton J. Hess
 Principal

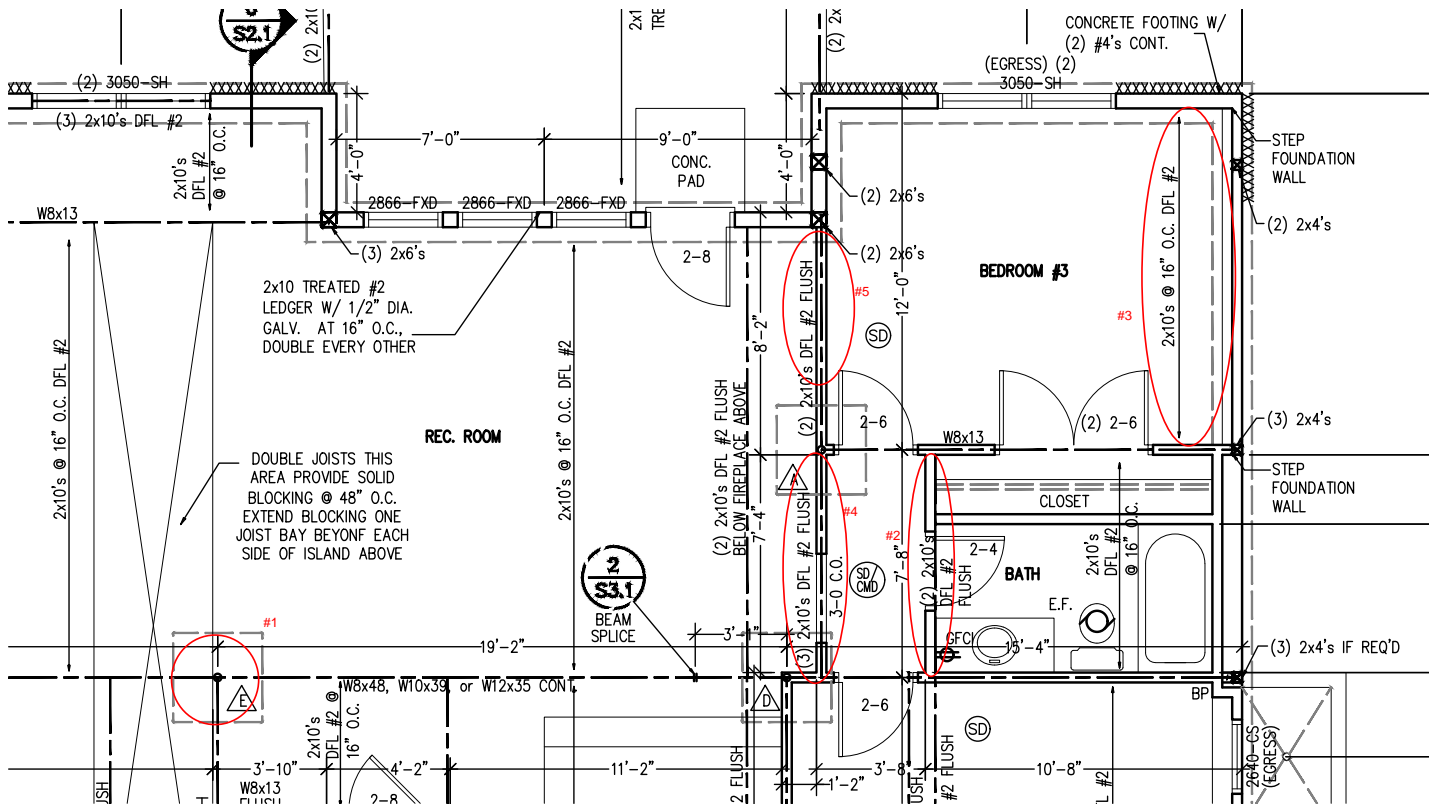
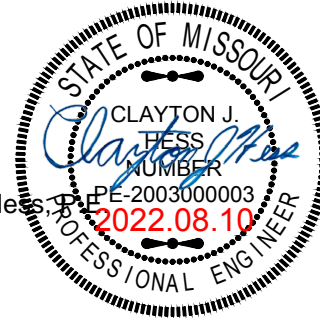


Figure 3.0 – Locations of City Comments Addressed in Report