

April 8, 2022

Walker Custom Homes, LLC
Attn: Jason Walker & Pete Pine

Re: 1604 SW 27th Street, Lee's Summit, MO (Lot 48, Whispering Woods, 2nd Plat)

Vista Structural Engineering, LLC, was asked to address the following city rough-in inspection comments for the house being built at 1604 SW 27th St., in Lee's Summit, MO:

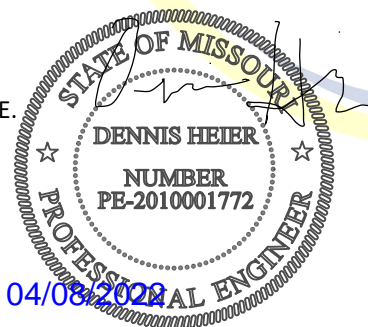
- **Address the rafters landing on blocks and rafters on connected to ceiling joists at top plate.** *Because the roof framing members were designed with gravity support at both ends, including purlins, struts, and hip/valley/ridge posts at the upper ends, there is no need to connect the rafters to the ceiling joists. The blocking between ceiling joists provides an adequate bearing point for the rafters and the struts at the purlins, hips, valleys, and ridges provide the vertical support needed to avoid an outward thrust at the exterior wall plates. If there were no vertical support at the higher elevations of the roof framing (i.e. only collar-ties), then resistance to outward thrust would have been required. However, in this case, the existing framing is adequate. Pictures of the framing have been attached to this report, for reference.*
- **Address roof supports landing above pocket door (non-load bearing wall).** *This wall was not labeled as load-bearing; however, there is a steel beam below it that is sized to support the roof load that has been imposed upon it. We recommend approval of the current framing. Partial plan views of the main floor and basement have been attached for reference.*

Our firm appreciates the opportunity to serve you. If you have any questions or if you need anything further, please feel free to contact us.

Sincerely,

Vista Structural Engineering, LLC

Dennis Heier, P.E.



VISTA STRUCTURAL ENGINEERING, LLC

14718 NW DELIA STREET
PORTLAND, OREGON 97229

- 1 -

PHONE: 971.233.6099
VISTASTRUCTURAL.COM



Figure 1 – Rafter framing on blocking between ceiling joists (item 1)



Figure 2 – Rafter framing on blocking between ceiling joists (item 1)

VISTA STRUCTURAL ENGINEERING, LLC

14718 NW DELIA STREET
PORTLAND, OREGON 97229

- 2 -

PHONE: 971.233.6099
VISTASTRUCTURAL.COM

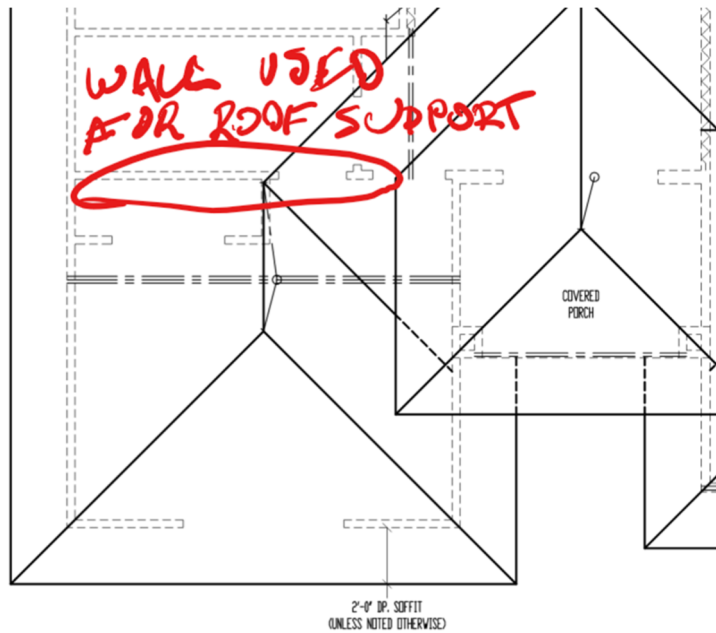


Figure 3 – Roof plan showing support wall used (item 2)

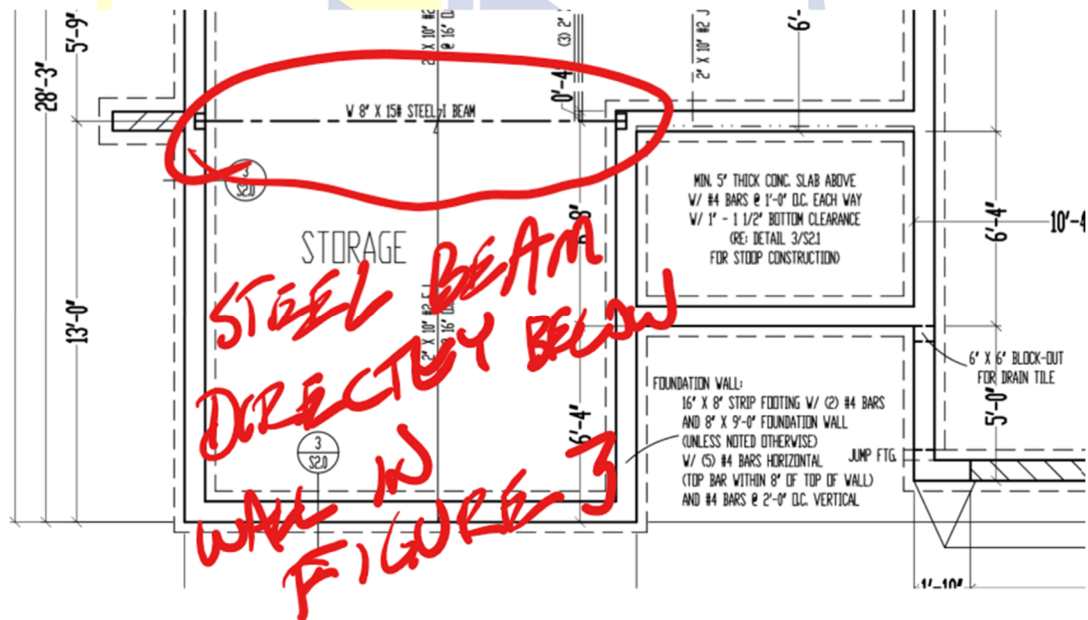


Figure 4 – Partial foundation plan showing steel beam directly below wall used for bearing

VISTA STRUCTURAL ENGINEERING, LLC

14718 NW DELIA STREET
 PORTLAND, OREGON 97229

PHONE: 971.233.6099
 VISTASTRUCTURAL.COM