



May 3, 2022

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

Re: 1612 SW 27<sup>th</sup> Street, Lee's Summit, MO (Lot 46, Whispering Woods, 2<sup>nd</sup> Plat)

Vista Structural Engineering, LLC, was asked to address the following city inspection comments for the house being built at 1612 SW 27<sup>th</sup> St., in Lee's Summit, MO:

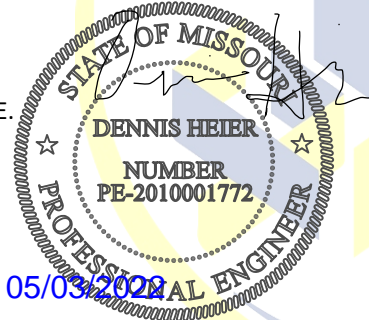
- **Address notched hip rafter above master bedroom.** *The hip was notched as shown in the picture on the following page of this report. A plan view of the roof above the master bedroom is attached on the third page of this report. Per the calculations on the fourth page of this report, we recommend approval of the current framing, assuming the depth of the notched hip above the double 2x12 is at least five inches.*

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



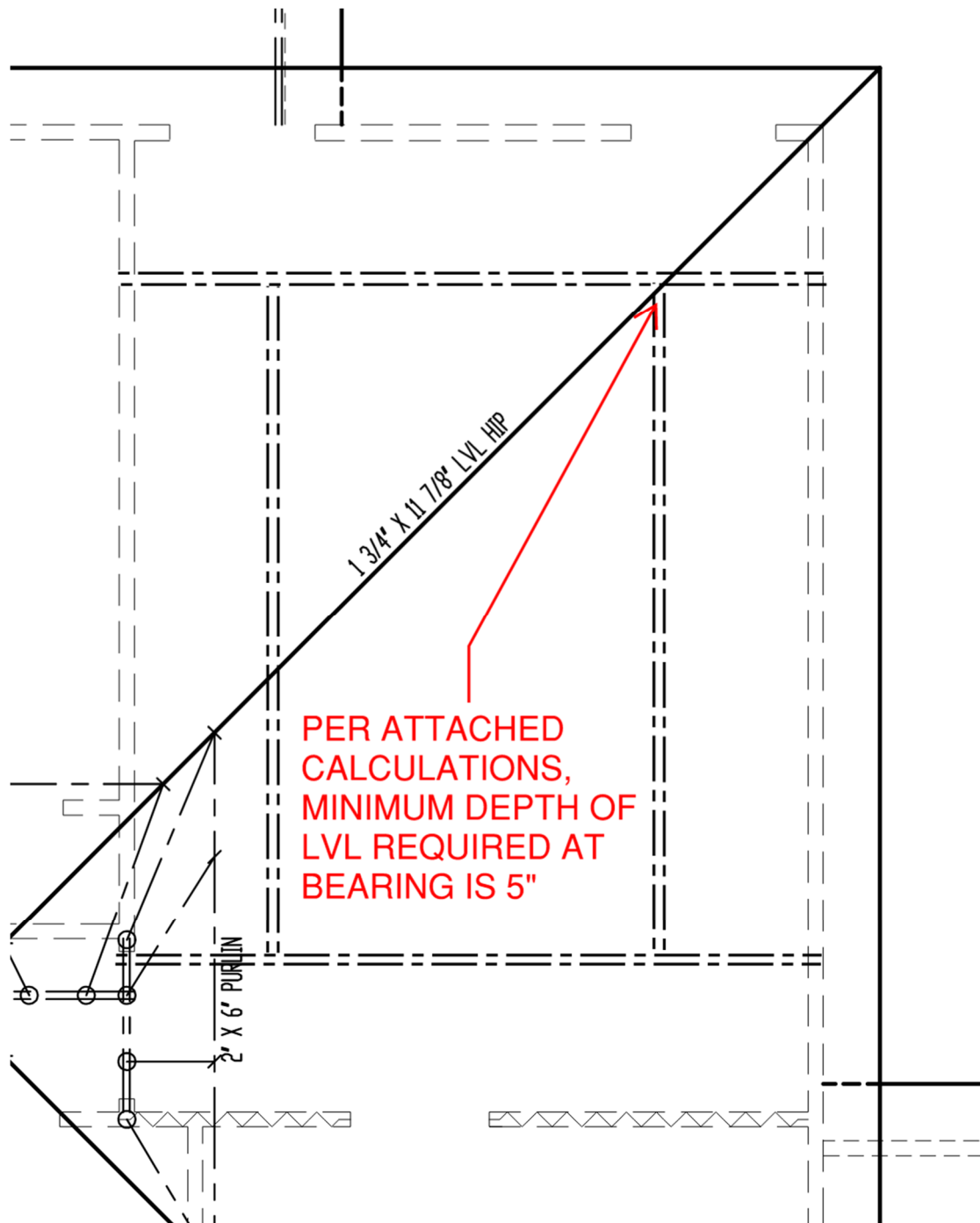
*1612 SW 27<sup>th</sup> Street – Roof framing above master bedroom*

# VISTA STRUCTURAL ENGINEERING, LLC

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PORTLAND, OREGON 97229

- 2 -

PHONE: 971.233.6099  
VISTASTRUCTURAL.COM



1612 SW 27<sup>th</sup> Street - Partial roof plan

# VISTA STRUCTURAL ENGINEERING, LLC

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PORTLAND, OREGON 97229

PROJ:

1612 SW 27<sup>th</sup> ST.

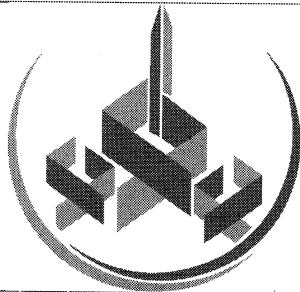
DATE:

5/3/2022

PROJ#:

ENGR:

DMH

**VISTA**  
—STRUCTURAL—  
ENGINEERING, LLC

DETERMINE LOAD AT NOTCHED END OF LVL HIP IN QUESTION

$$R = \frac{12' \times 12'}{6} \times 30 \text{ psf} = 1080 \#$$

$$F'_v = C_b F_v = (1.15)(285 \text{ psi})$$
$$= 328 \text{ psi}$$

DETERMINE MIN. DEPTH REQ'D AT BEARING

$$f_v = \frac{1.5R}{bd} \quad R = 1080 \# \quad f_v \leq 328 \text{ psi} \quad b = 1.75 \text{ in}$$

$$d \geq \frac{1.5R}{bf_v}$$

$$\geq 2.82 \text{ in} \rightarrow \text{USE MIN. 5" DEPTH}$$