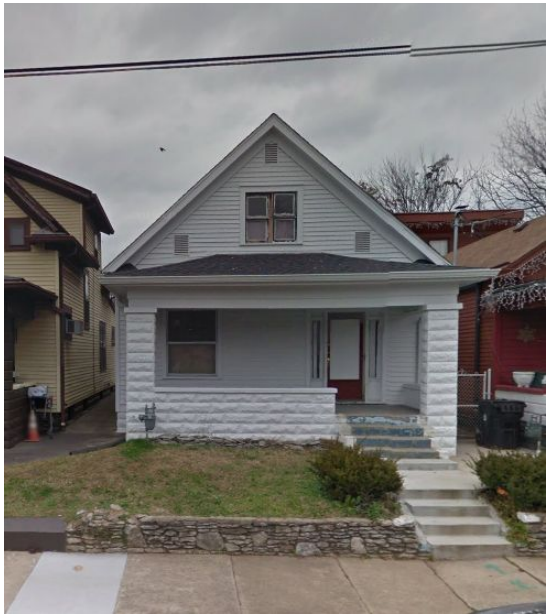
Backyard Deck
715 Shelby Parkway

Special Considerations:

- Variance needed for placement of decking over 2’ setback

Property

715 Shelby Parkway Louisville, KY 40203



715 Shelby

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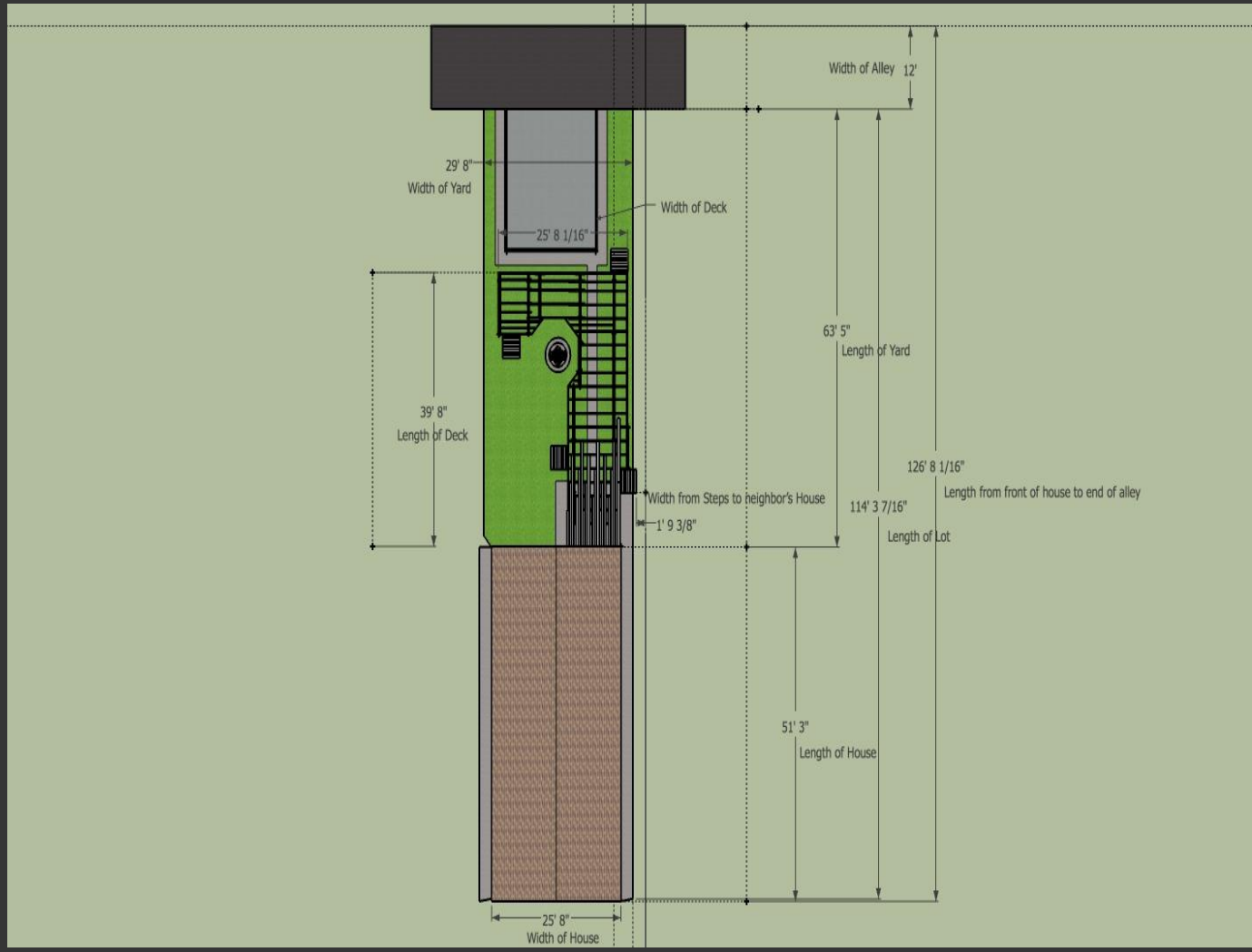
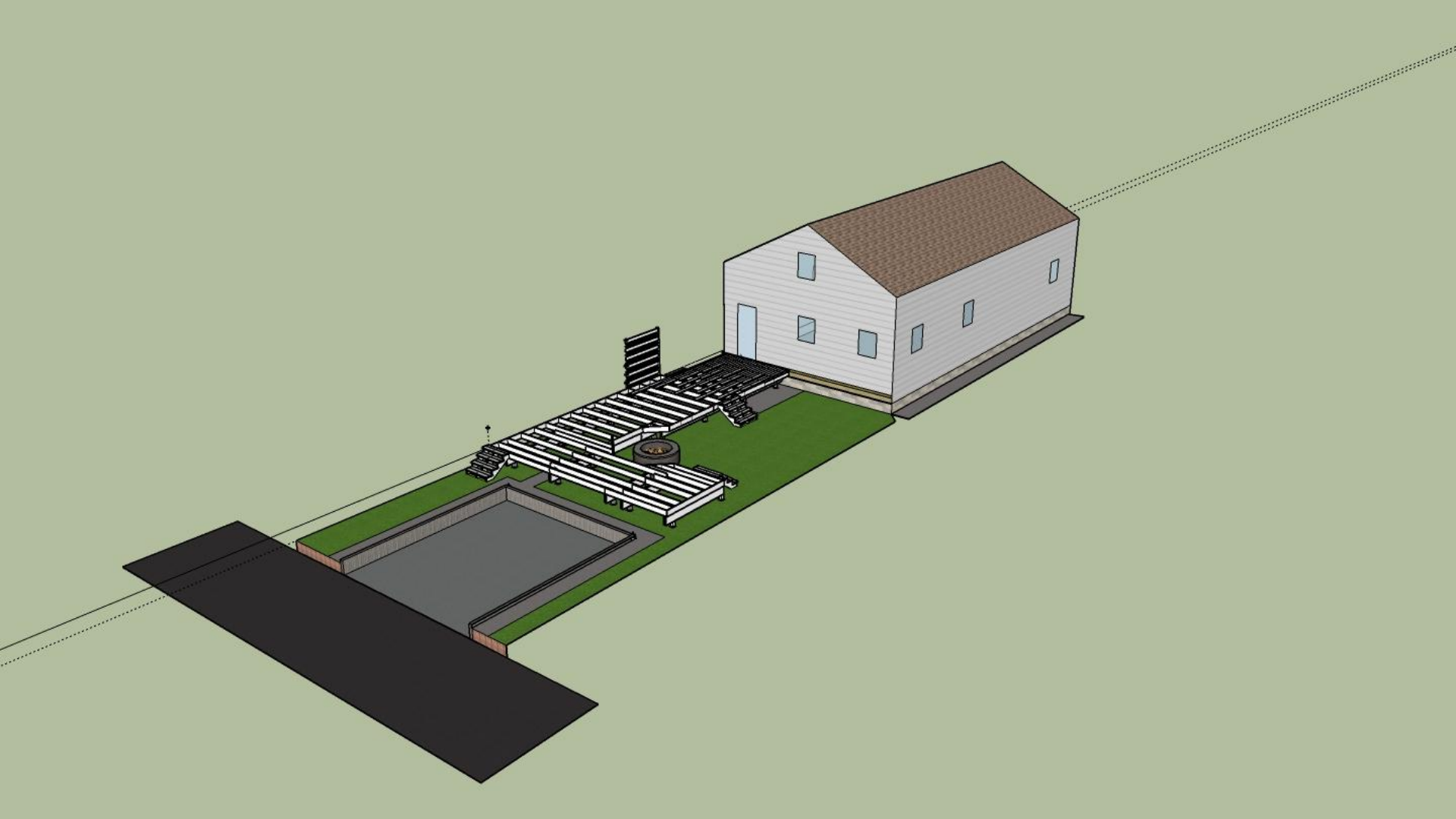
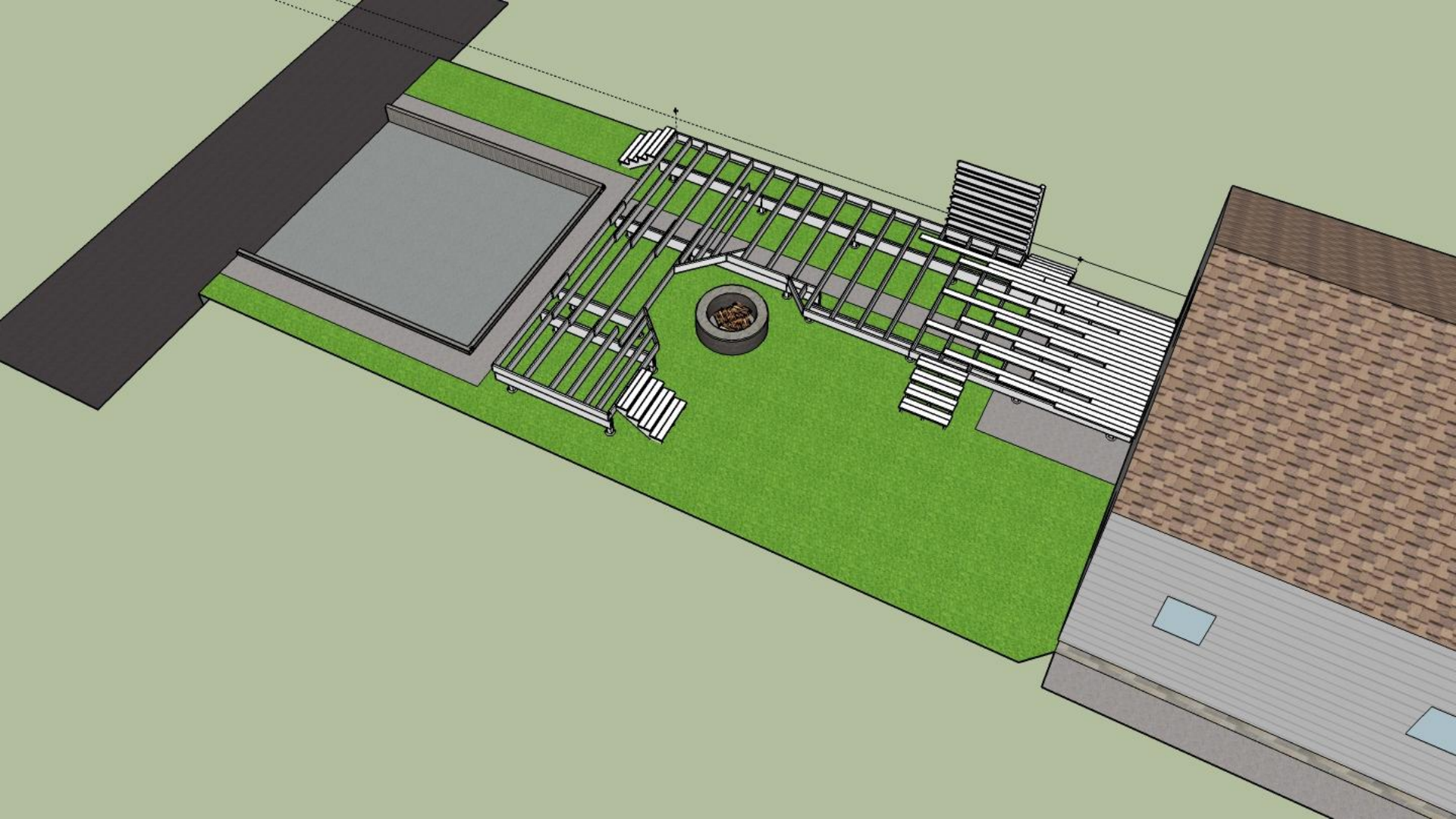
Free Standing Deck

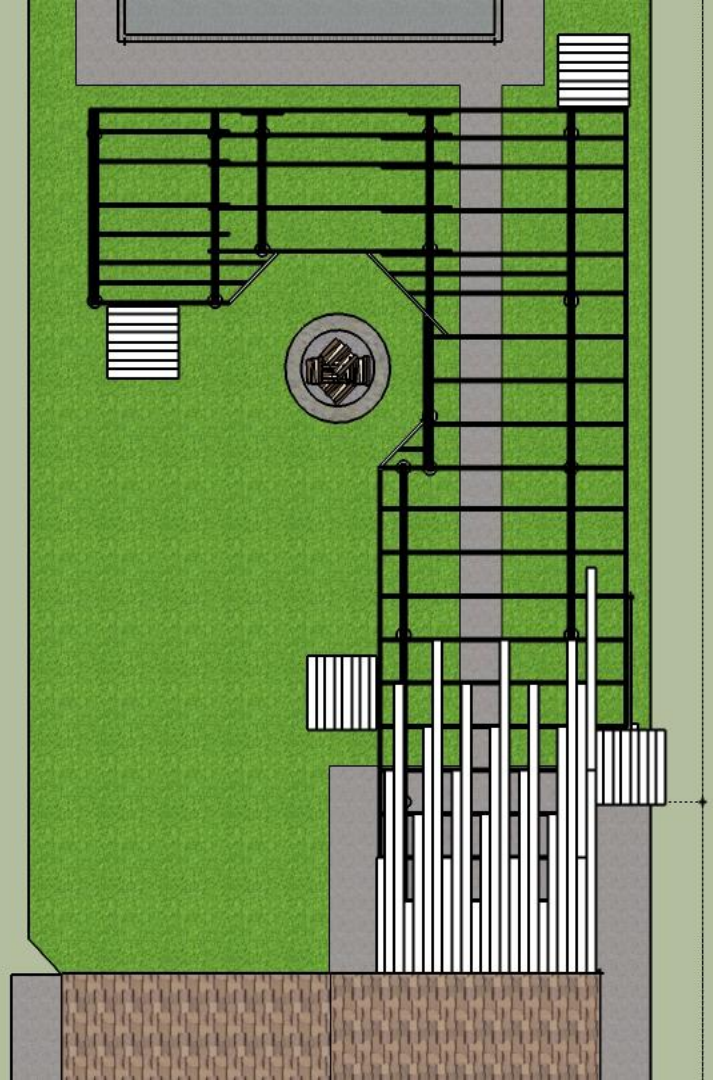
- **Wood Deck:Southern Yellow Pine**
- **24" Deep Footer/Pier Combo**
  Connected Using #4 Rebar with L Bend
- **Pier - J-Bolt - Steel Post Base - 4x4 Post Connection**
- **2-2x12 Beams spliced with ½" Plywood - Steel Post Cap - 2x8 Joist Connections**
- **5/4x6 Decking Boards**

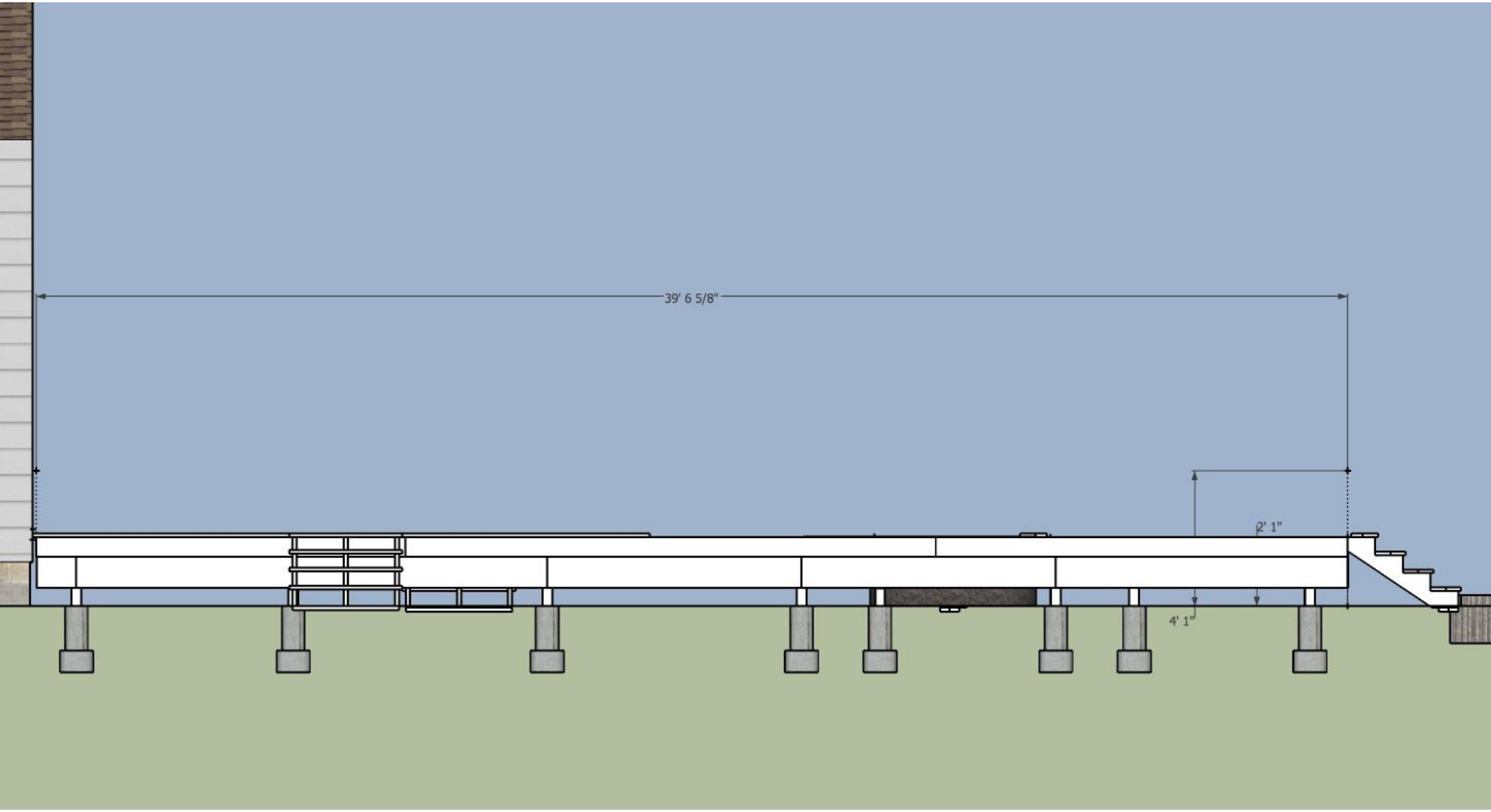
Design Layout

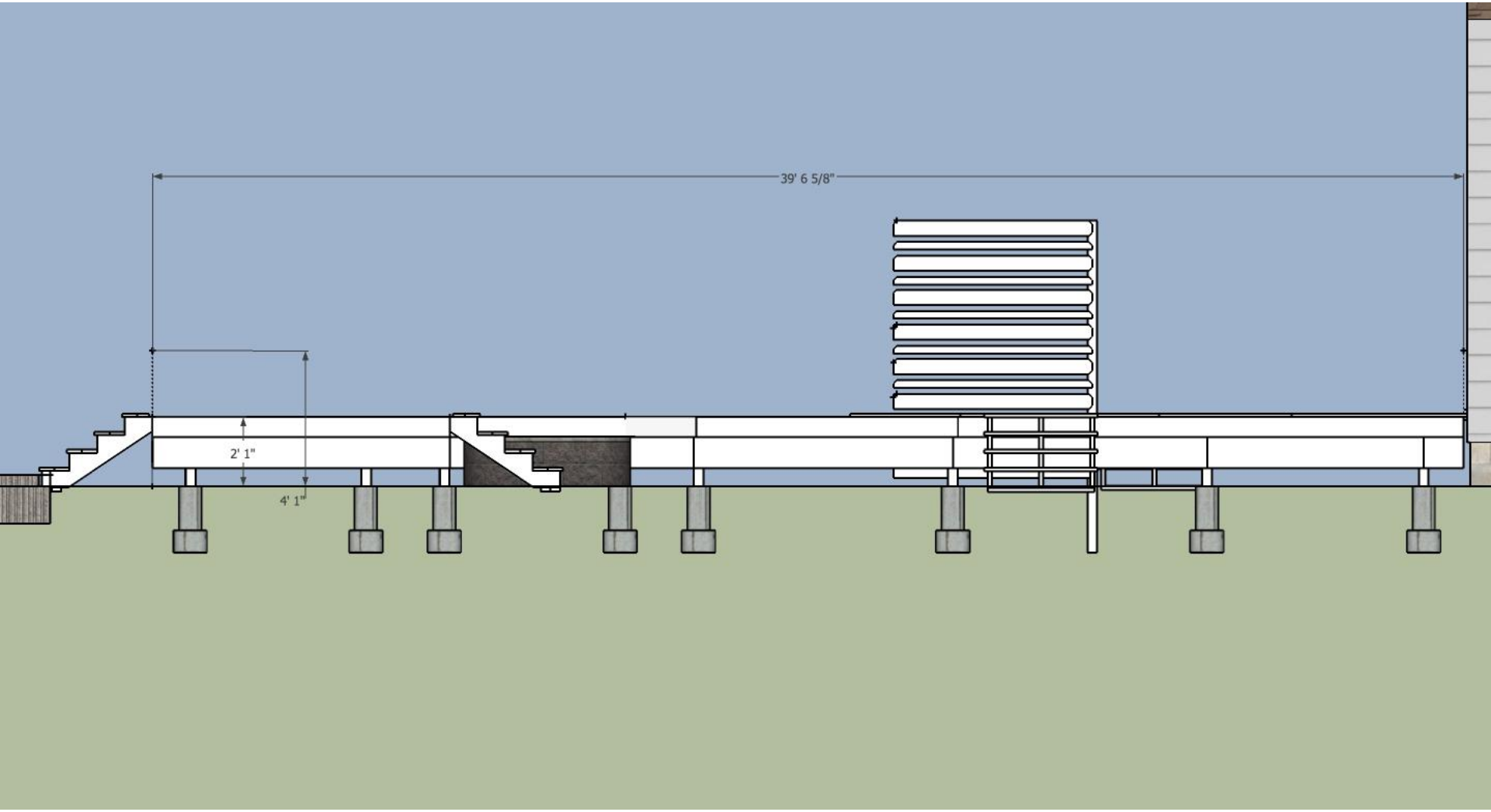


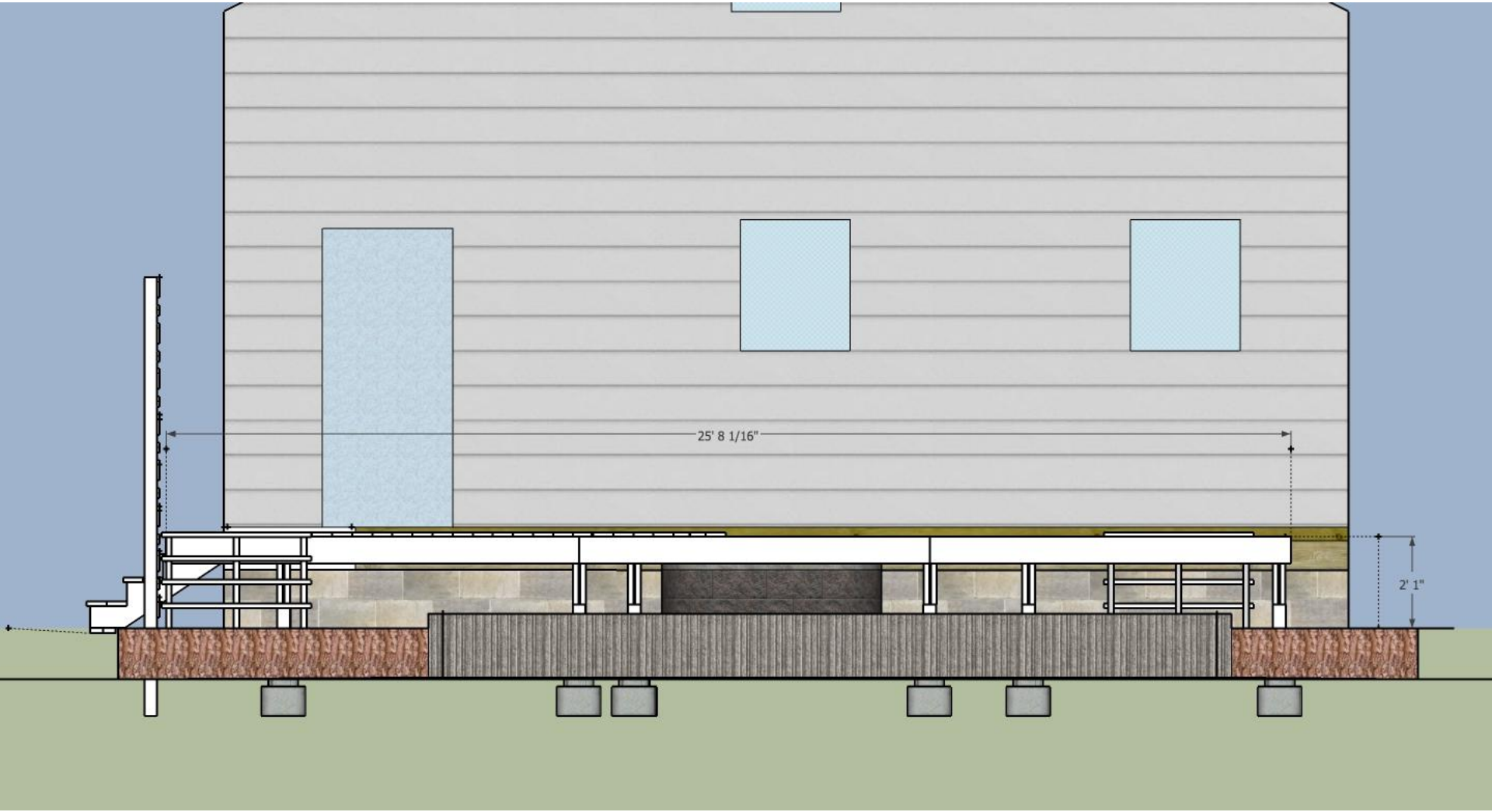


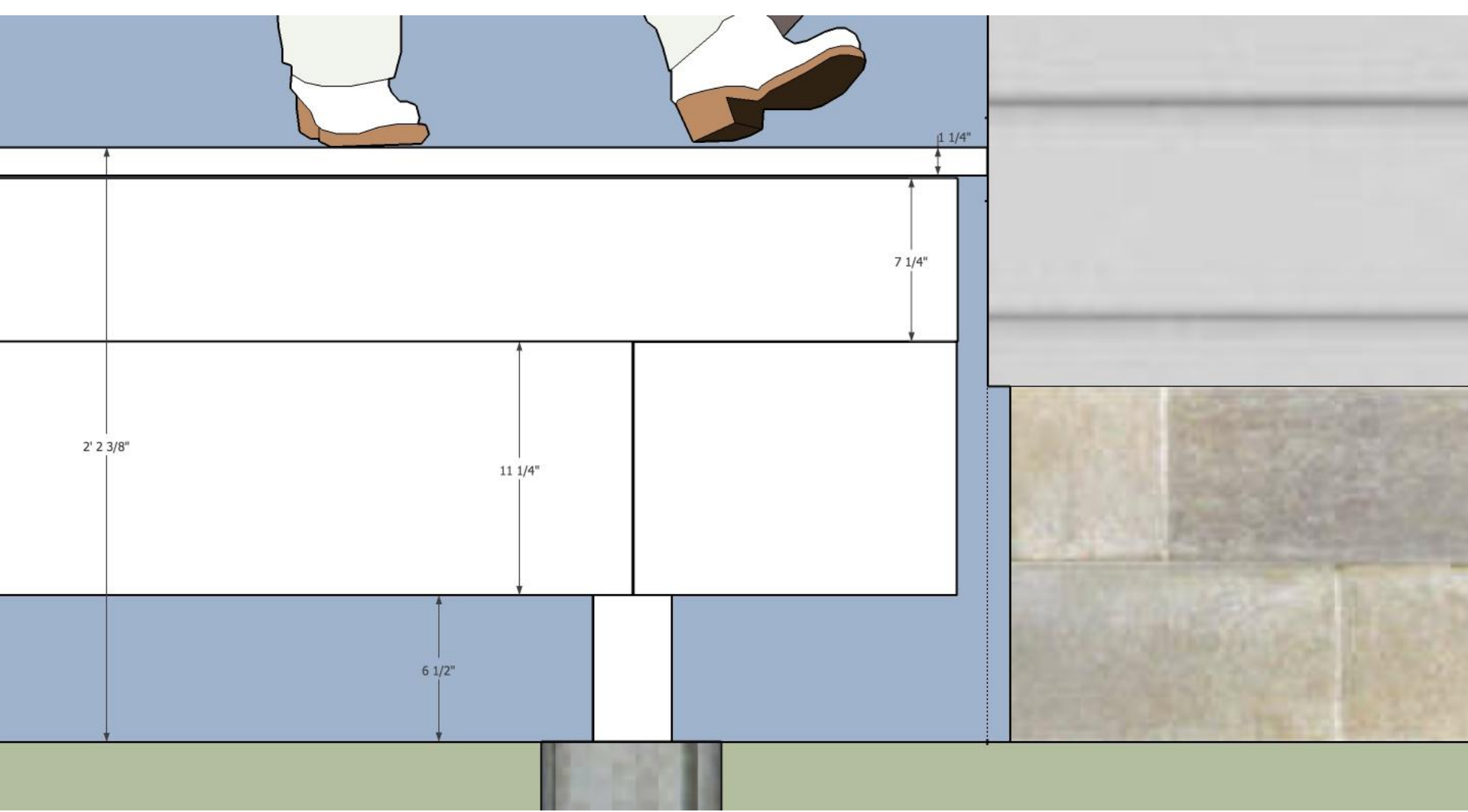





39' 6 5/8"
2' 1"
4' 1"


39' 6 5/8"
2' 1"
4' 1"


25' 8 1/16"
2' 1"


1 1/4"
7 1/4"
2' 2 3/8"
11 1/4"
6 1/2"

1. Foundation

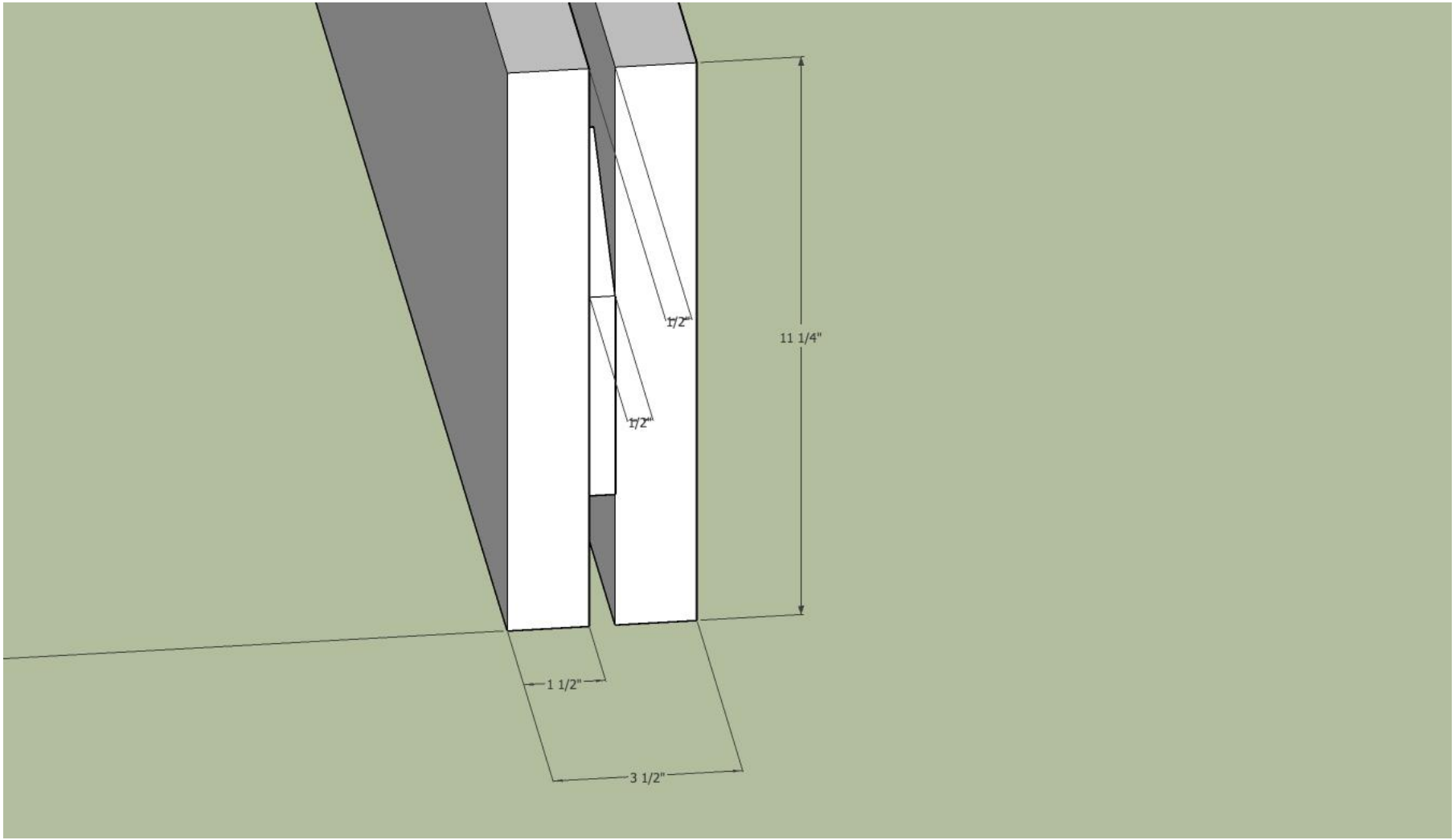
- **8” Thick Footers with 12” Diameter**
  Set 24” Deep with 6” Long pieces of #4 Rebar in an X pattern within.
- **16” Thick Piers with 8” Diameter**
  Set directly on top of footers and tied together using #4 Rebar with L-Bend; shaped using pier forms tubes secured to batter boards
- **Total Design Load of 70PSF**

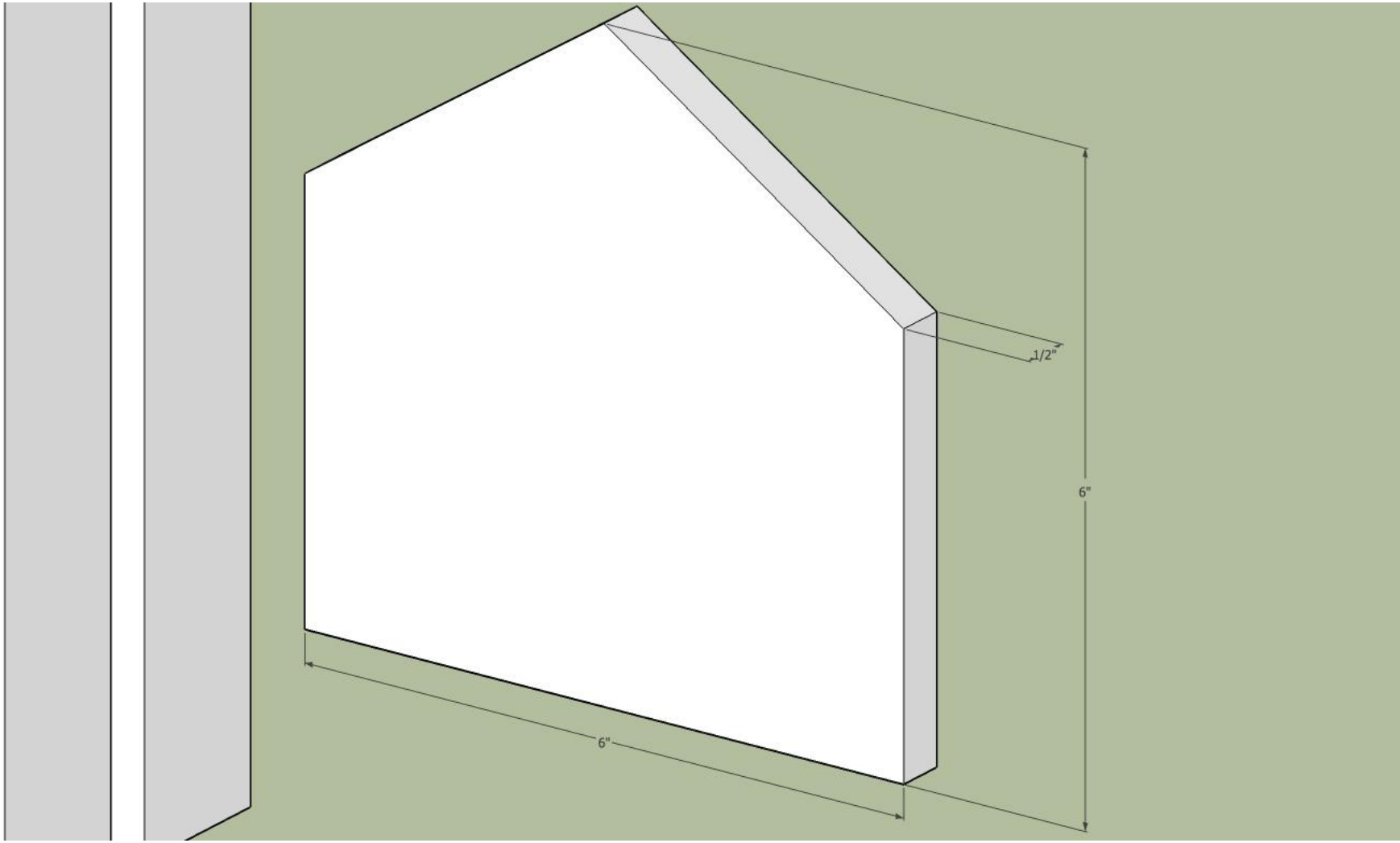
  60 PSF Live Load and 10 PSF Dead Load.

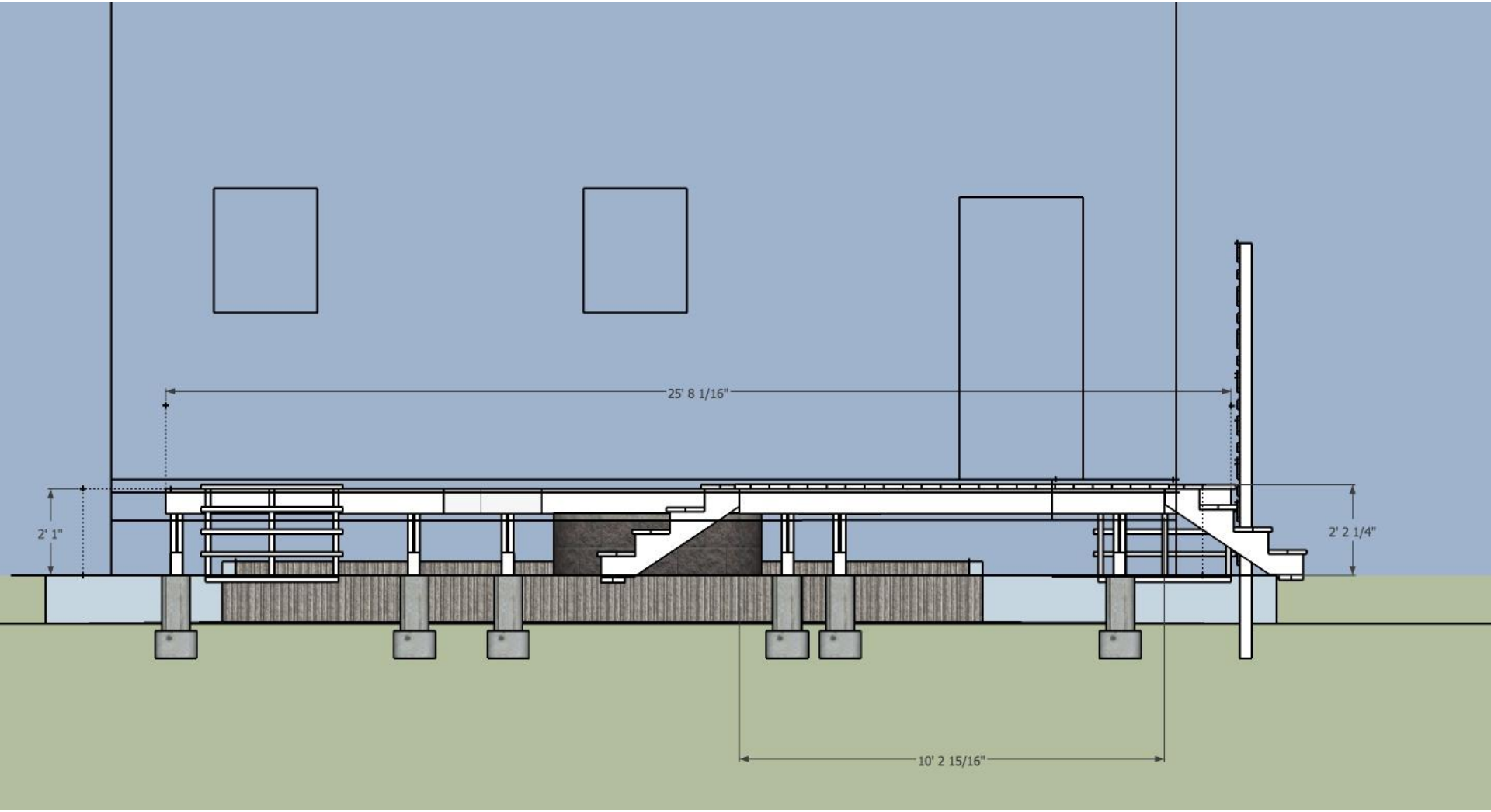
2. Beam System

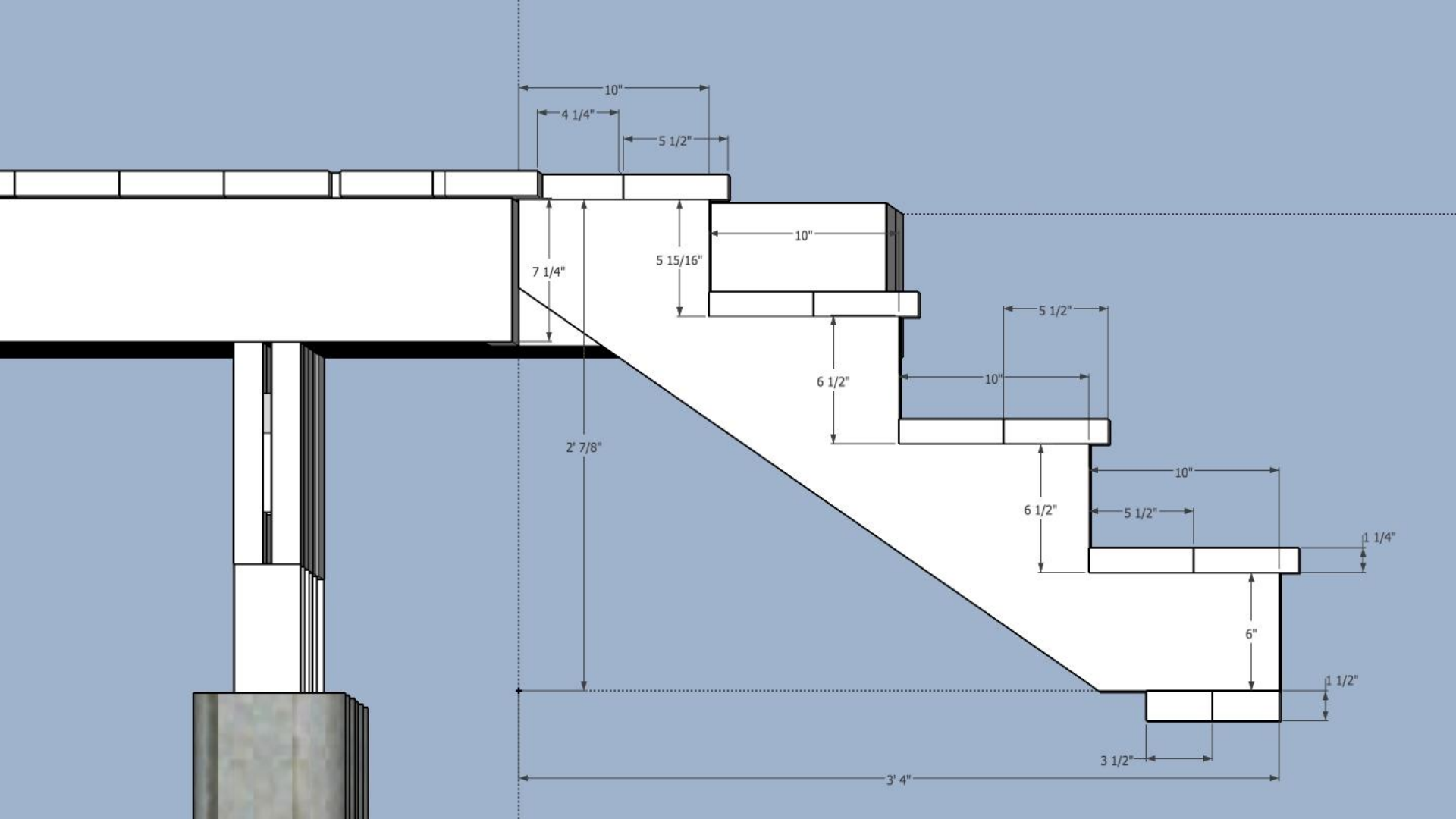
I plan on creating built-up beams consisting of 2-2x12 spliced together using ½" plywood spacers set every 24". I also plan on connecting beams where necessary using the ½" piece of plywood as a tongue for a slip-joint application with connected beams breaking over posts and secured using post caps. Beams will be fastened together using 12 D hot dip galvanized nails.

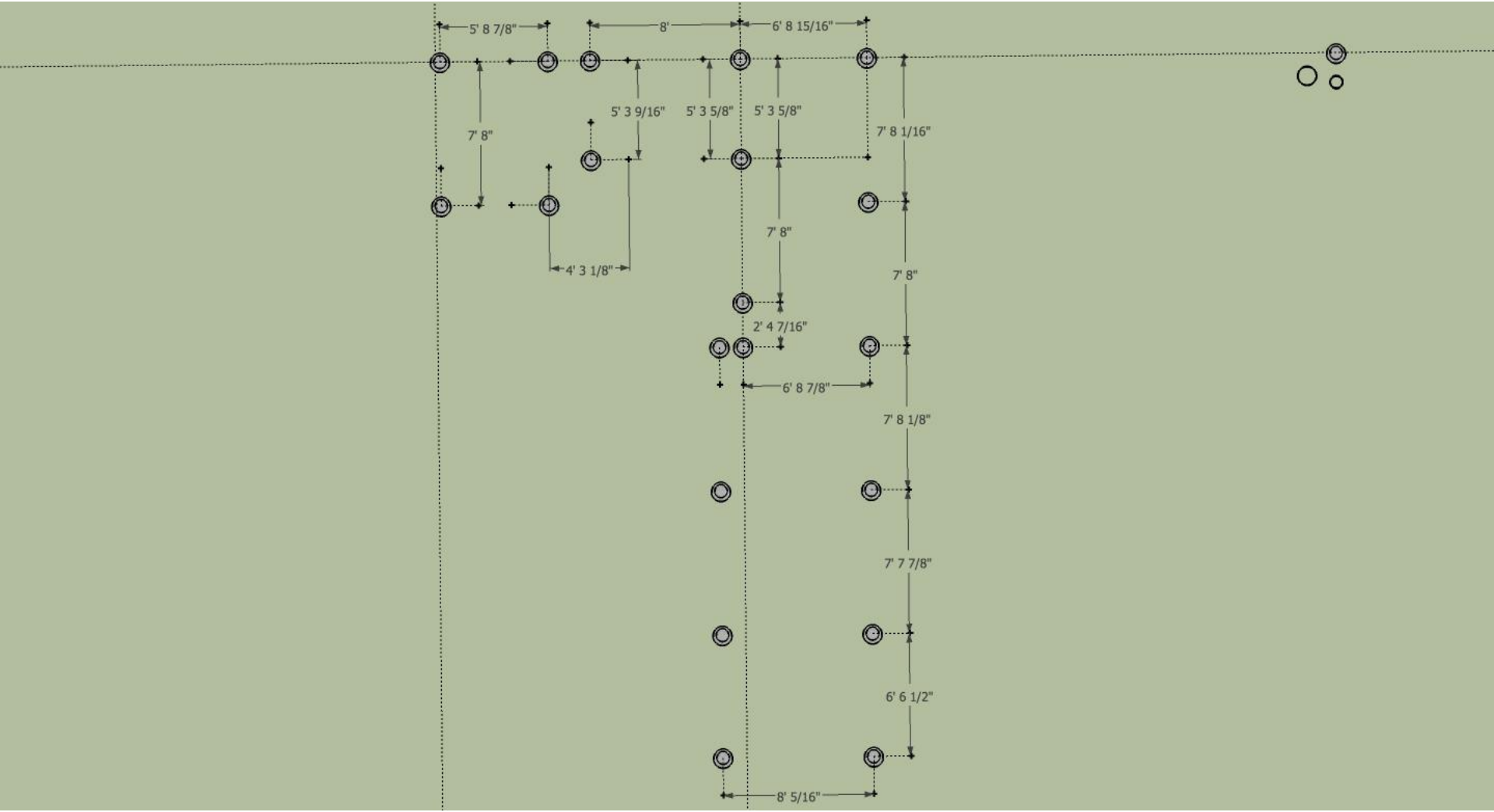
Posts will be spaced so that beams will span will be 7'8" between posts anticipating a maximum joist span of 6' using 2x8 lumber,

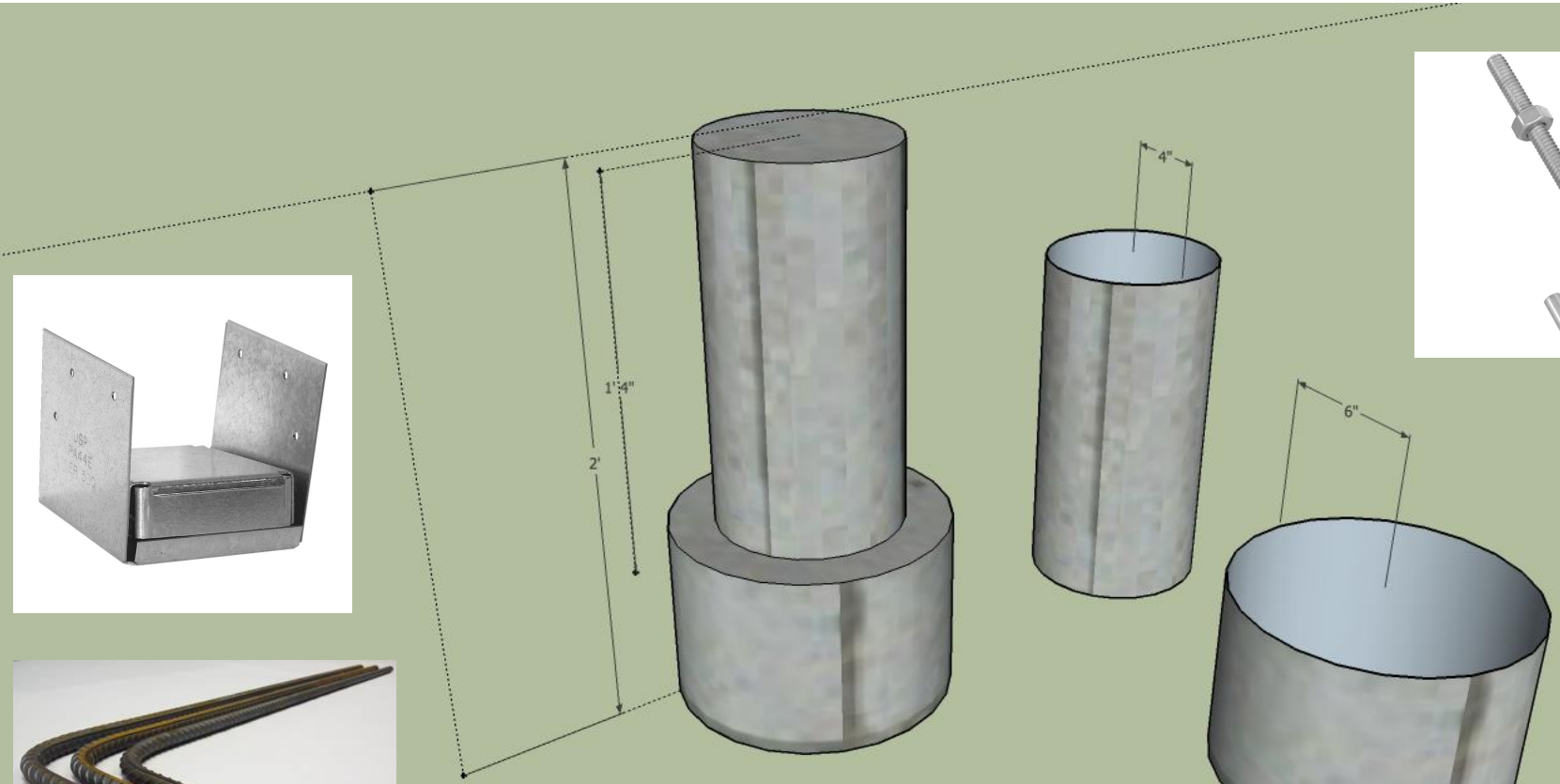

1/2"
1/2"
11 1/4"
1 1/2"
3 1/2"


1/2"
6"
6"

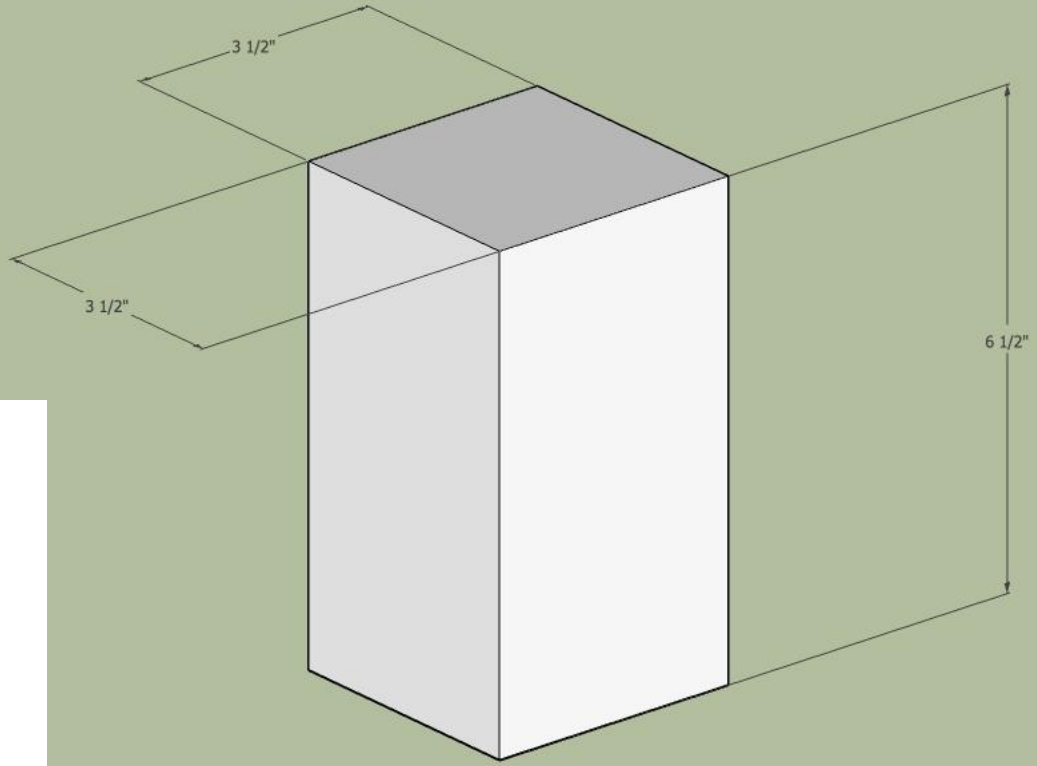

25' 8 1/16"
2' 1"
2' 2 1/4"
10' 2 15/16"

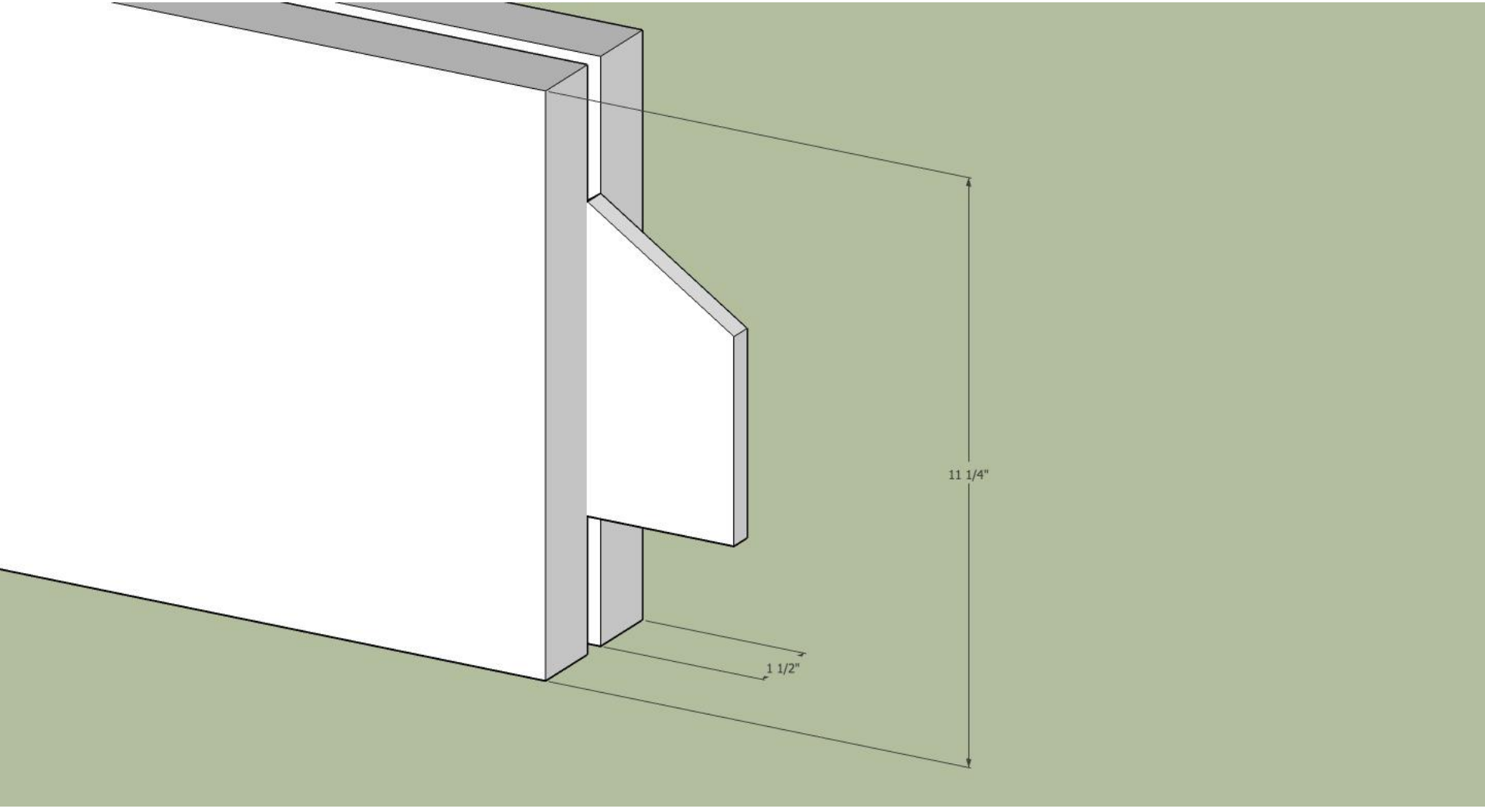

10"
4 1/4"
5 1/2"
7 1/4"
5 15/16"
10"
5 1/2"
6 1/2"
10"
2' 7/8"
10"
6 1/2"
5 1/2"
1 1/4"
6"
1 1/2"
3 1/2"
3' 4"

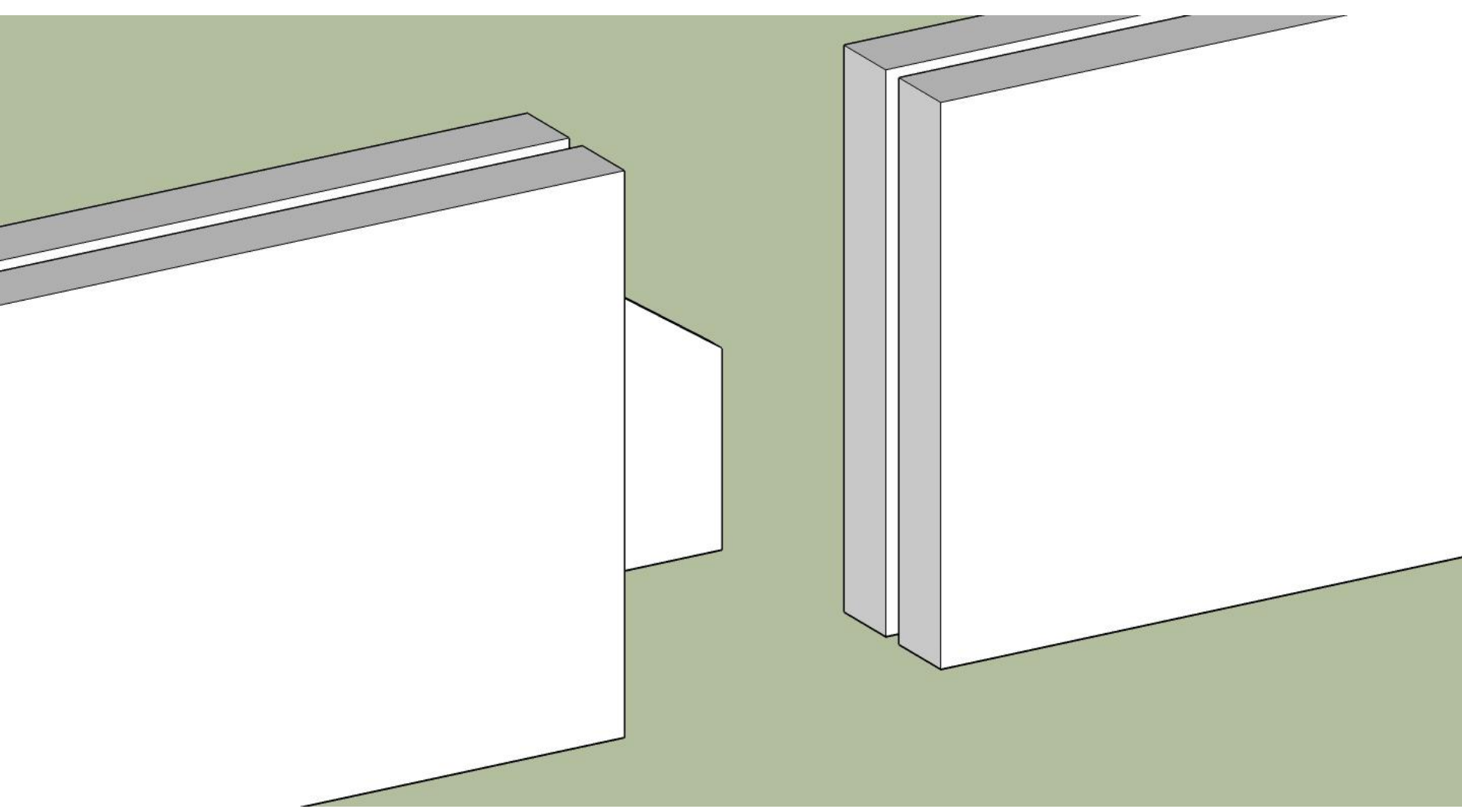

5' 8 7/8"
8'
6' 8 15/16"
5' 3 9/16"
5' 3 5/8"
5' 3 5/8"
7' 8 1/16"
7' 8"
7' 8"
4' 3 1/8"
7' 8"
2' 4 7/16"
6' 8 7/8"
7' 8 1/8"
7' 7 7/8"
6' 6 1/2"
8' 5/16"

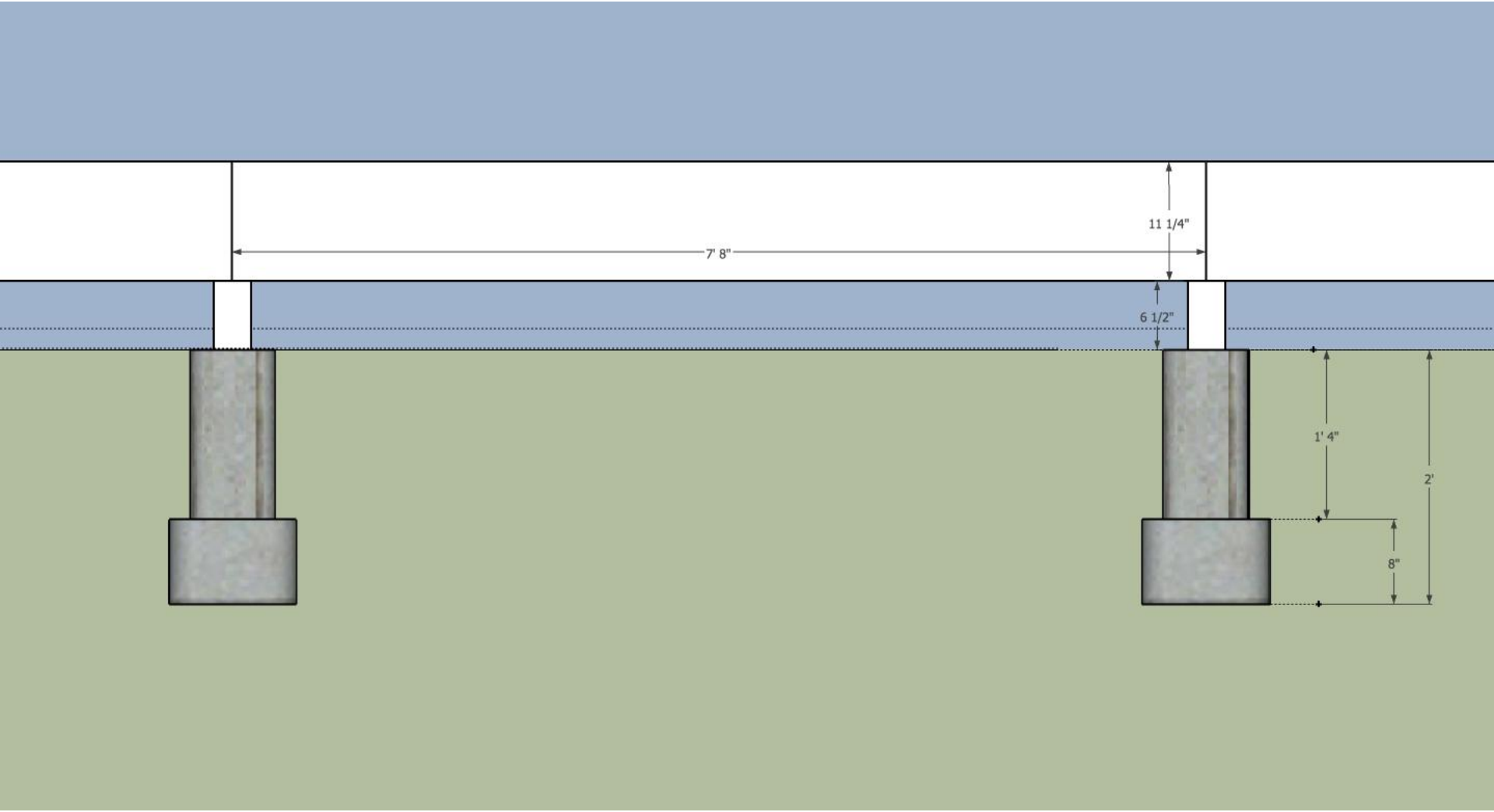

1' 4"
2'
4"
6"

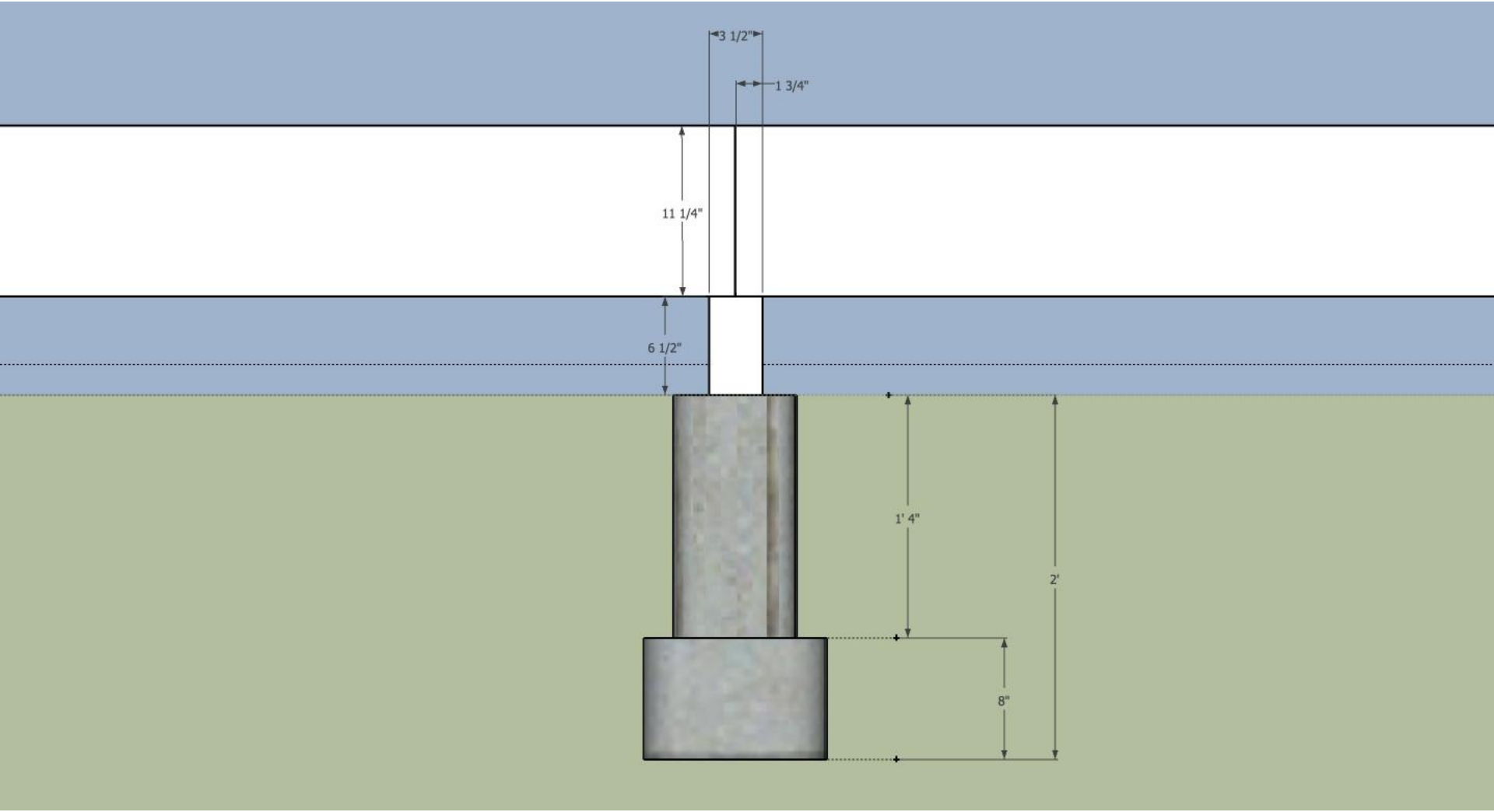
Using fasteners as prescribed by post cap manufacturer

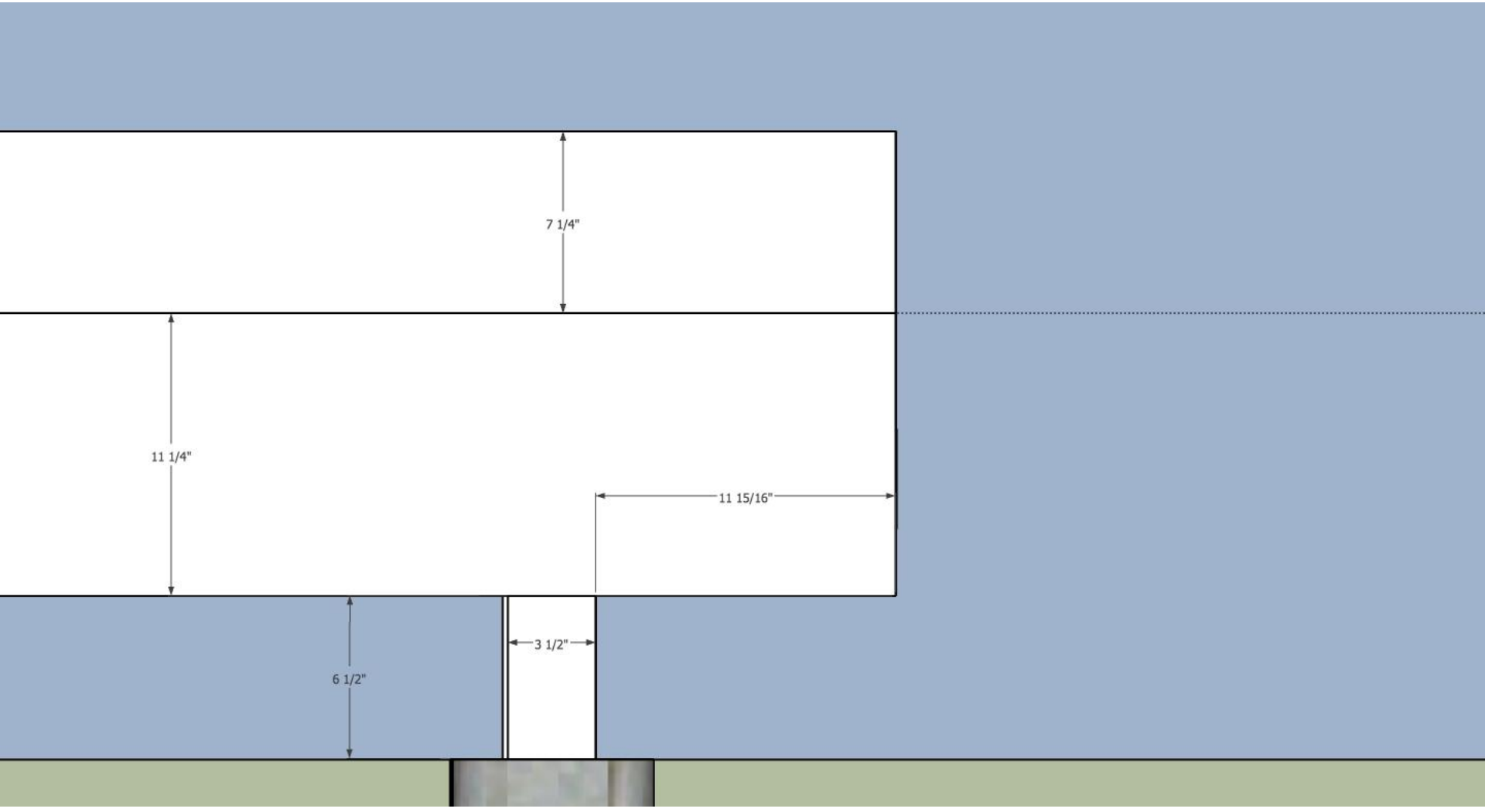


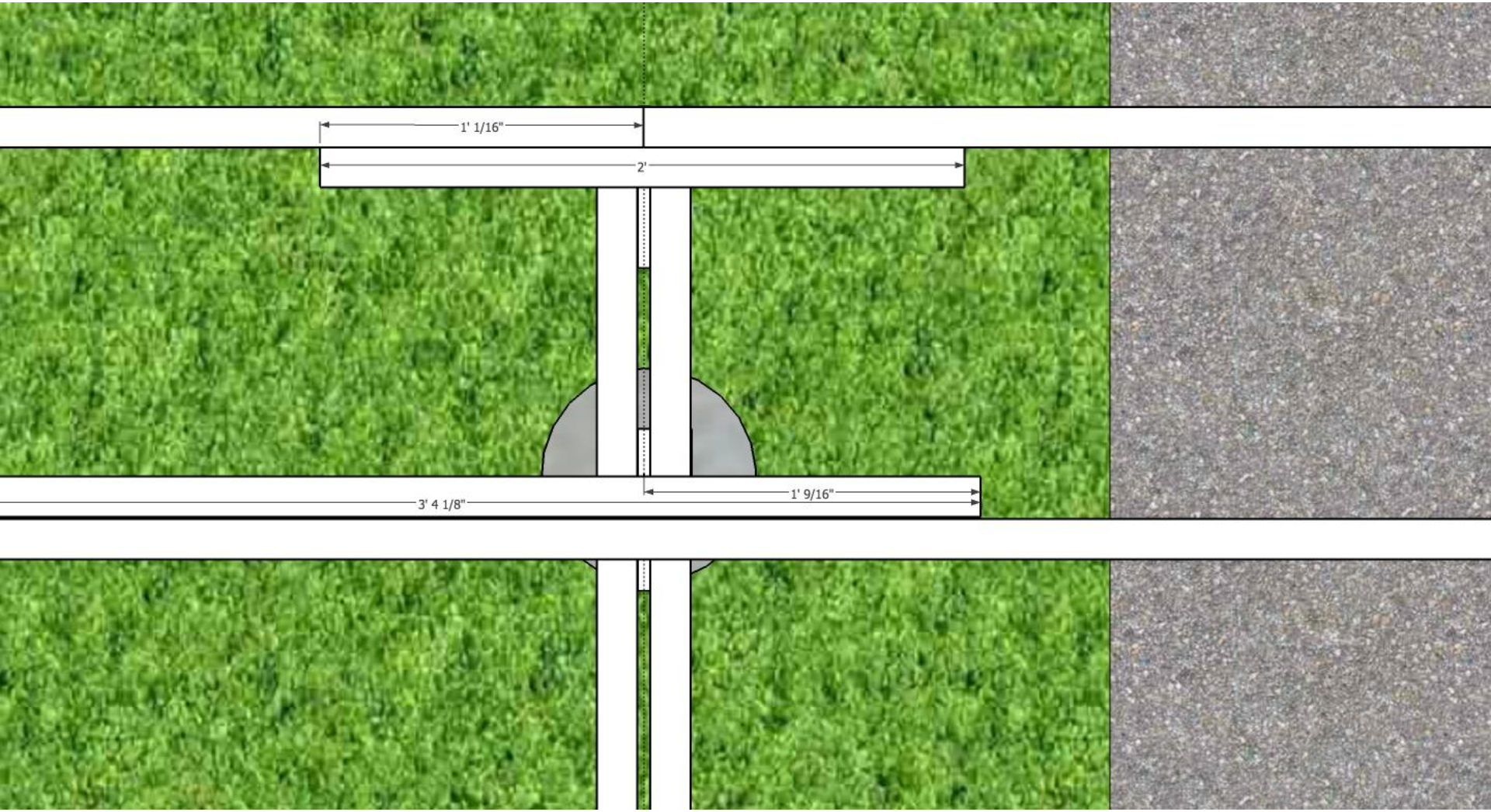

11 1/4"
1 1/2"




11 1/4"
7' 8"
6 1/2"
1' 4"
2'
8"


3 1/2"
1 3/4"
11 1/4"
6 1/2"
1' 4"
2'
8"

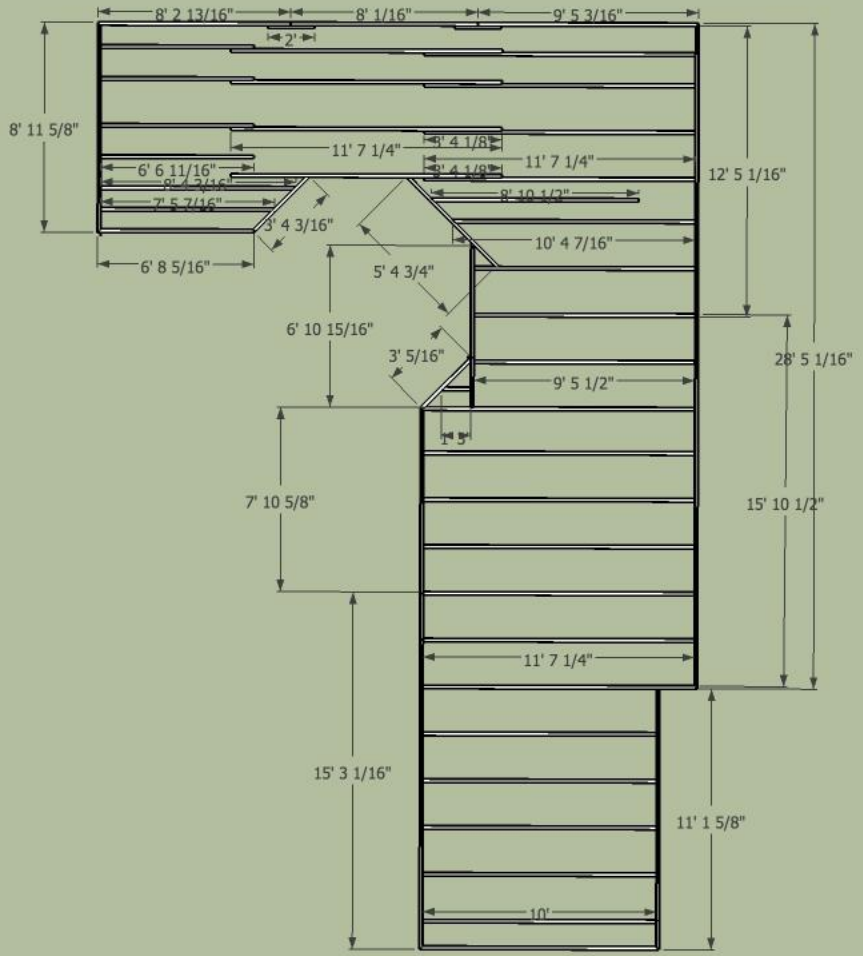

7 1/4"
11 1/4"
11 15/16"
3 1/2"
6 1/2"

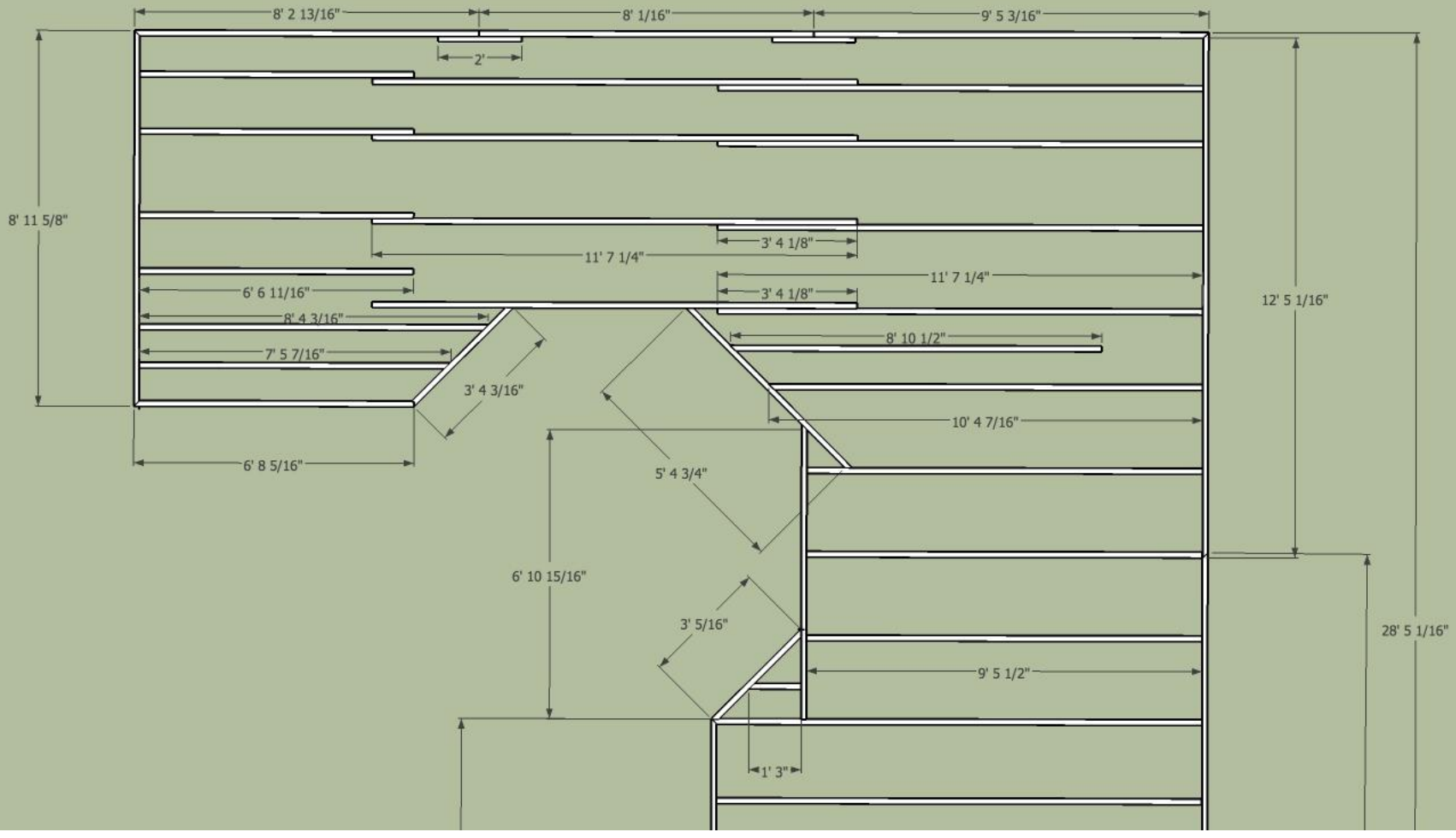

1' 1/16"
2'
1' 9/16"
3' 4 1/8"

3. Joist System

Joists consist of 2x8 boards of varying lengths fastened using 1 ½" hot dipped galvanized nails and betal ties/straps.

- ➔ **Max Joist Span: 6'; spaced 24"OC**
- ➔ **Connecting Joists overlap min. Of 12" and break over post.**
- ➔ **Butt joints break over post and are tied together using a 24" scrap piece of 2x8 centered over post.**
- ➔ **Joists cantilever max. Of 29"**


8' 2 13/16"
8' 1/16"
9' 5 3/16"
2'
8' 11 5/8"
11' 7 1/4"
6' 6 11/16"
11' 7 1/4"
12' 5 1/16"
8' 10 1/2"
3' 4 3/16"
10' 4 7/16"
6' 8 5/16"
5' 4 3/4"
6' 10 15/16"
3' 5/16"
28' 5 1/16"
9' 5 1/2"
7' 10 5/8"
15' 10 1/2"
11' 7 1/4"
15' 3 1/16"
11' 1 5/8"
10'


8' 2 13/16"
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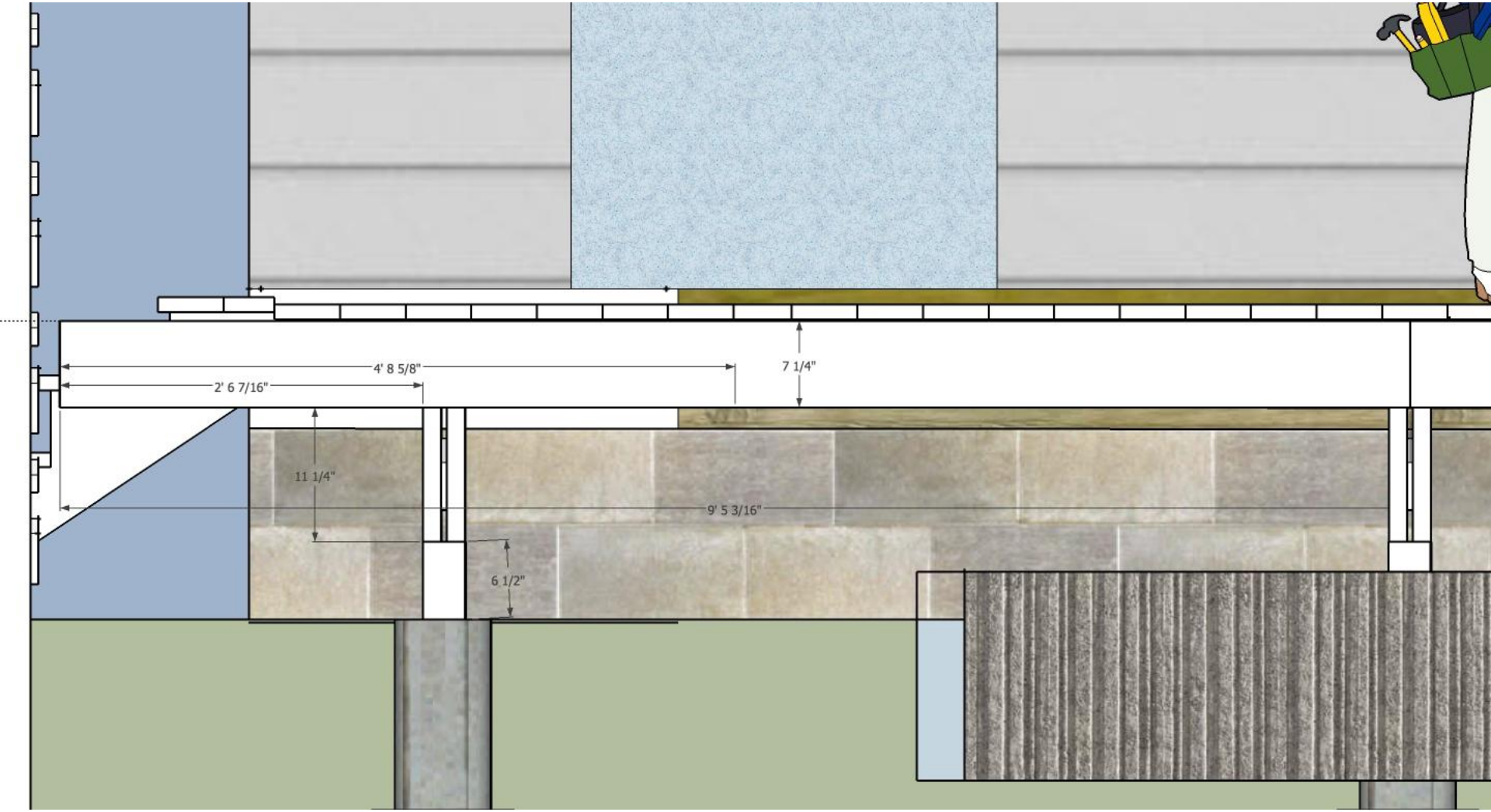
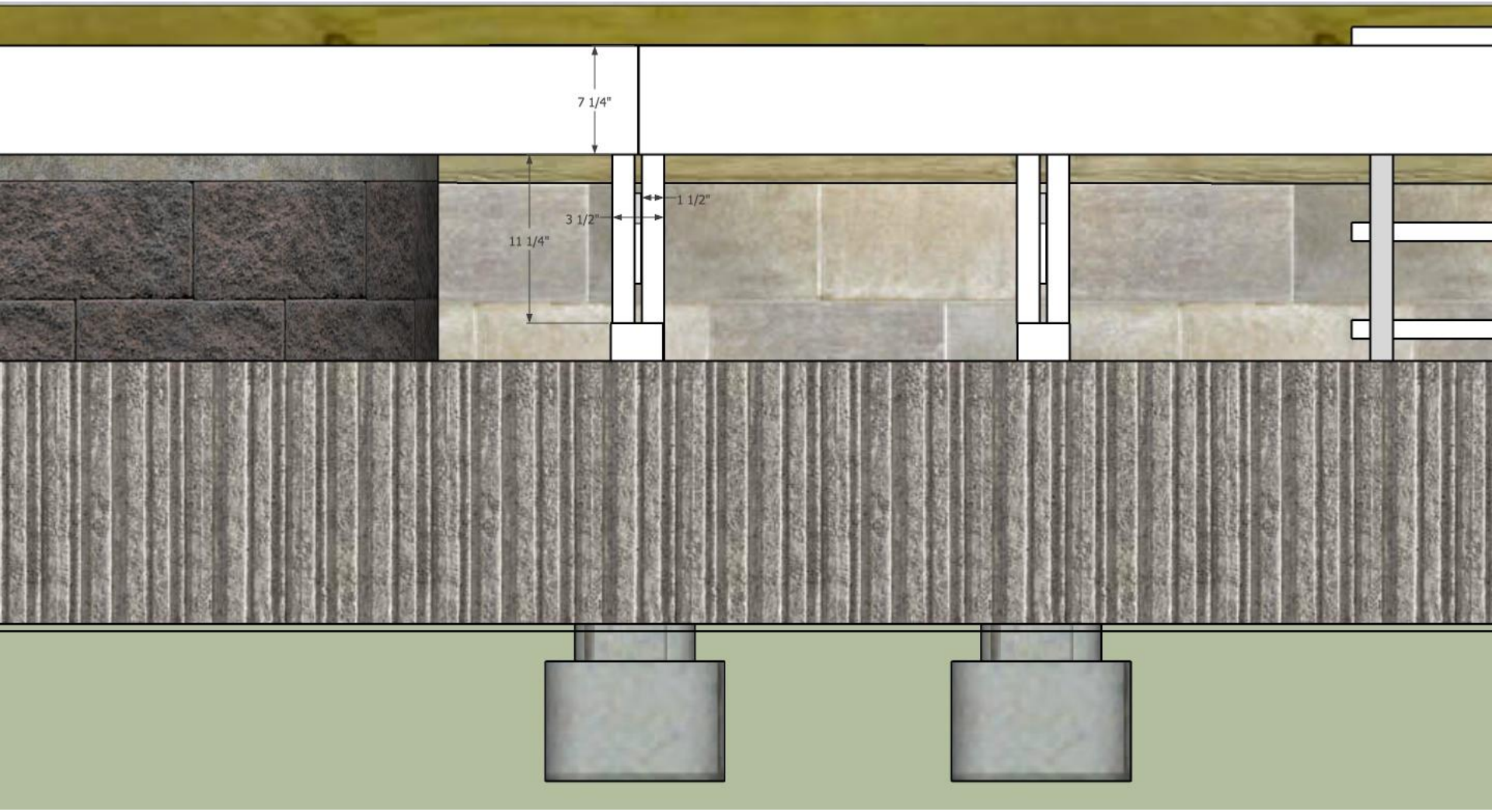
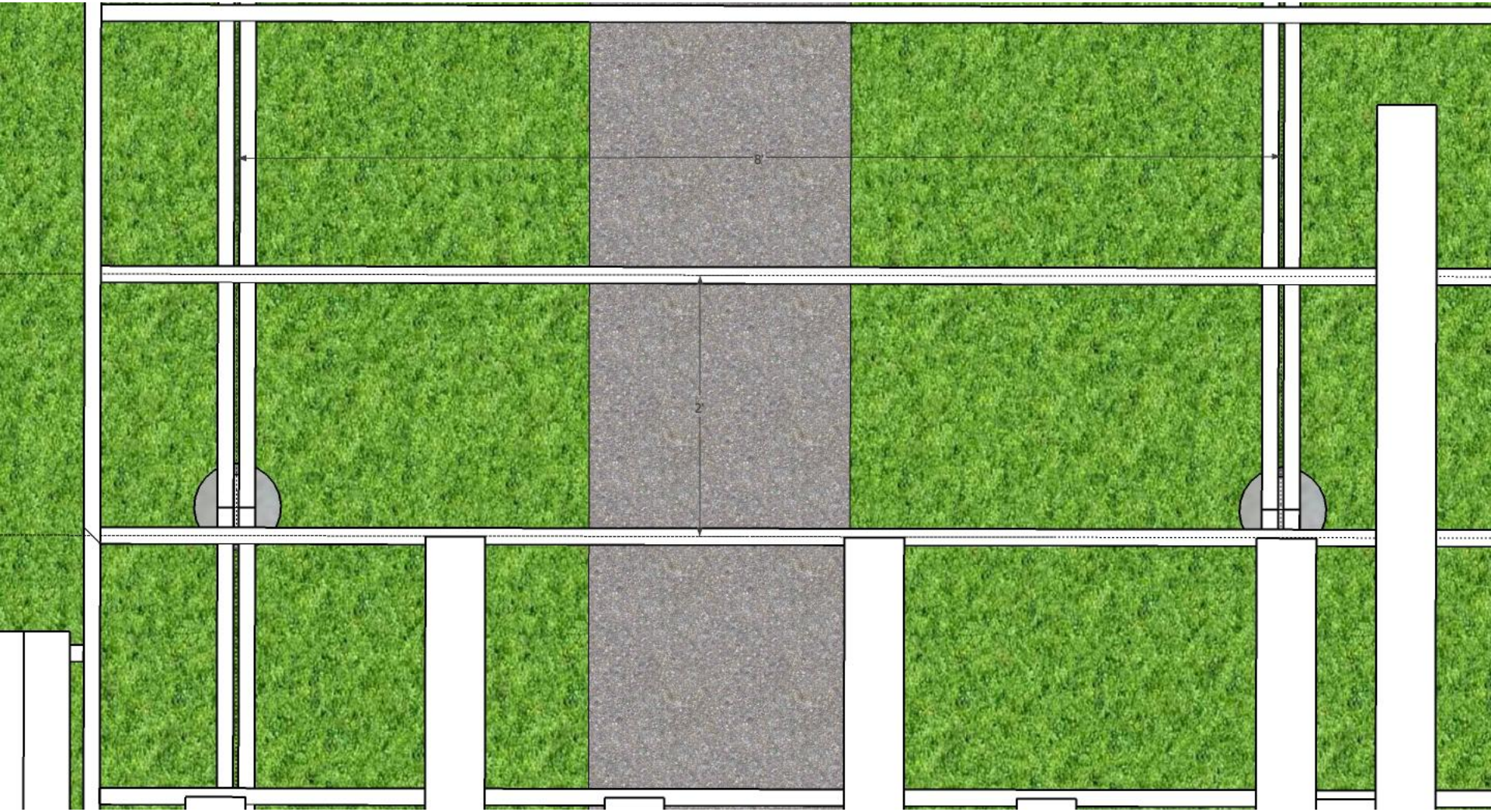
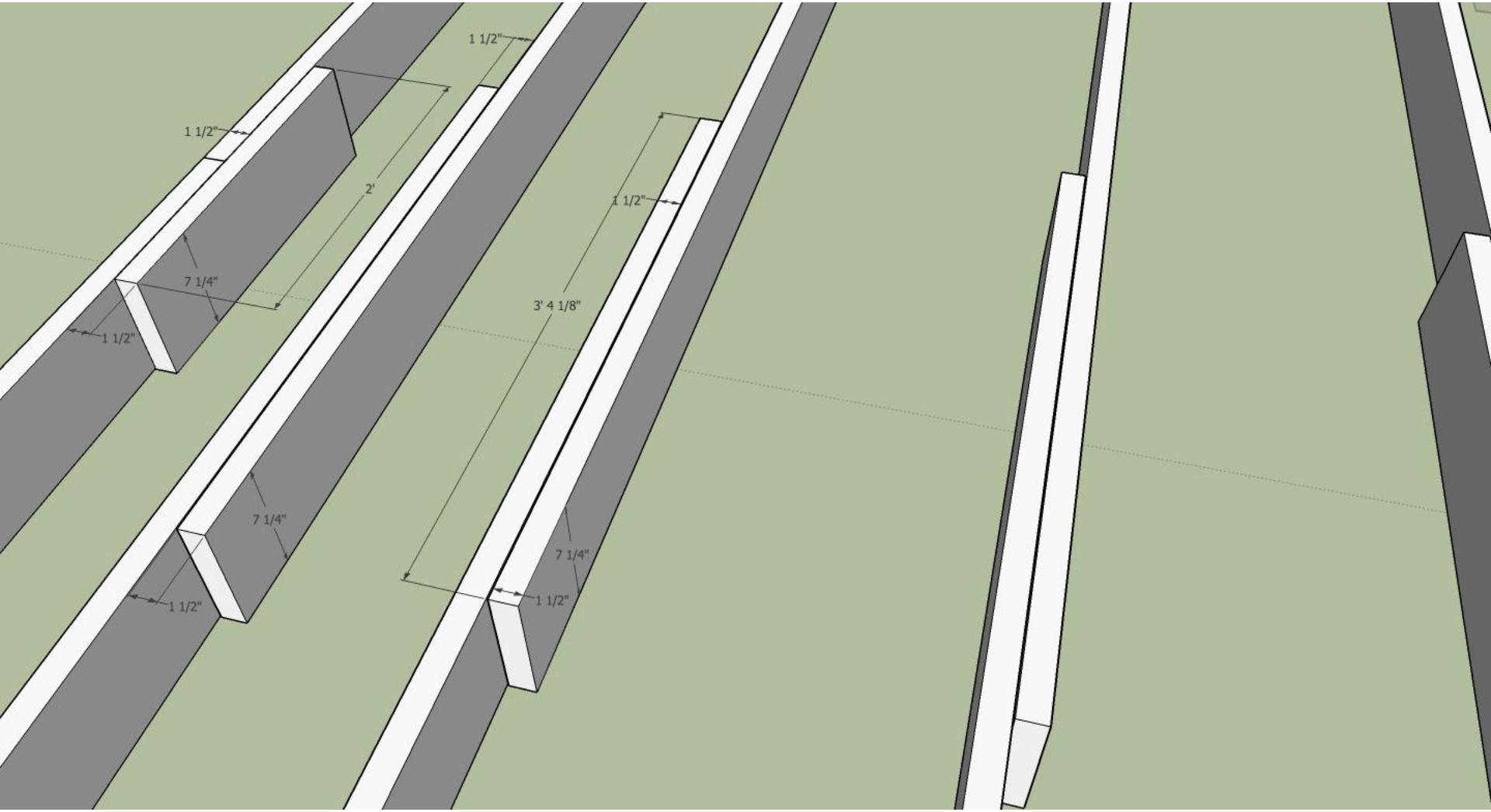
2'
8' 11 5/8"
3' 4 1/8"
11' 7 1/4"
11' 7 1/4"
3' 4 1/8"
6' 6 11/16"
8' 4 3/16"
7' 5 7/16"
12' 5 1/16"
8' 10 1/2"
3' 4 3/16"
10' 4 7/16"
6' 8 5/16"
5' 4 3/4"
6' 10 15/16"
3' 5/16"
28' 5 1/16"
9' 5 1/2"
1' 3"


4' 8 5/8"
2' 6 7/16"
7 1/4"
11 1/4"
9' 5 3/16"
6 1/2"


7 1/4"
11 1/4"
3 1/2"
1 1/2"

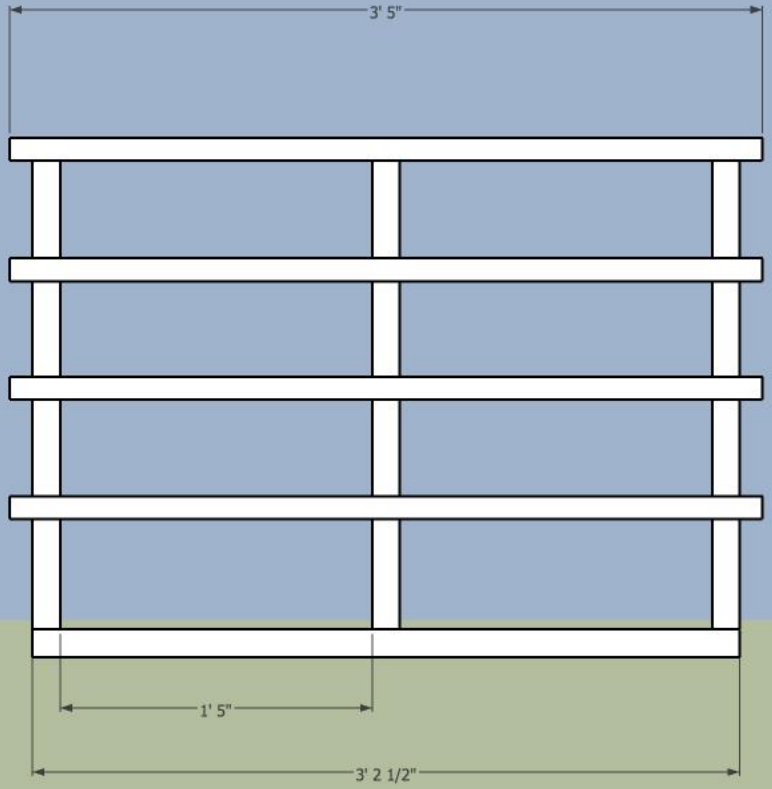

8'
2'

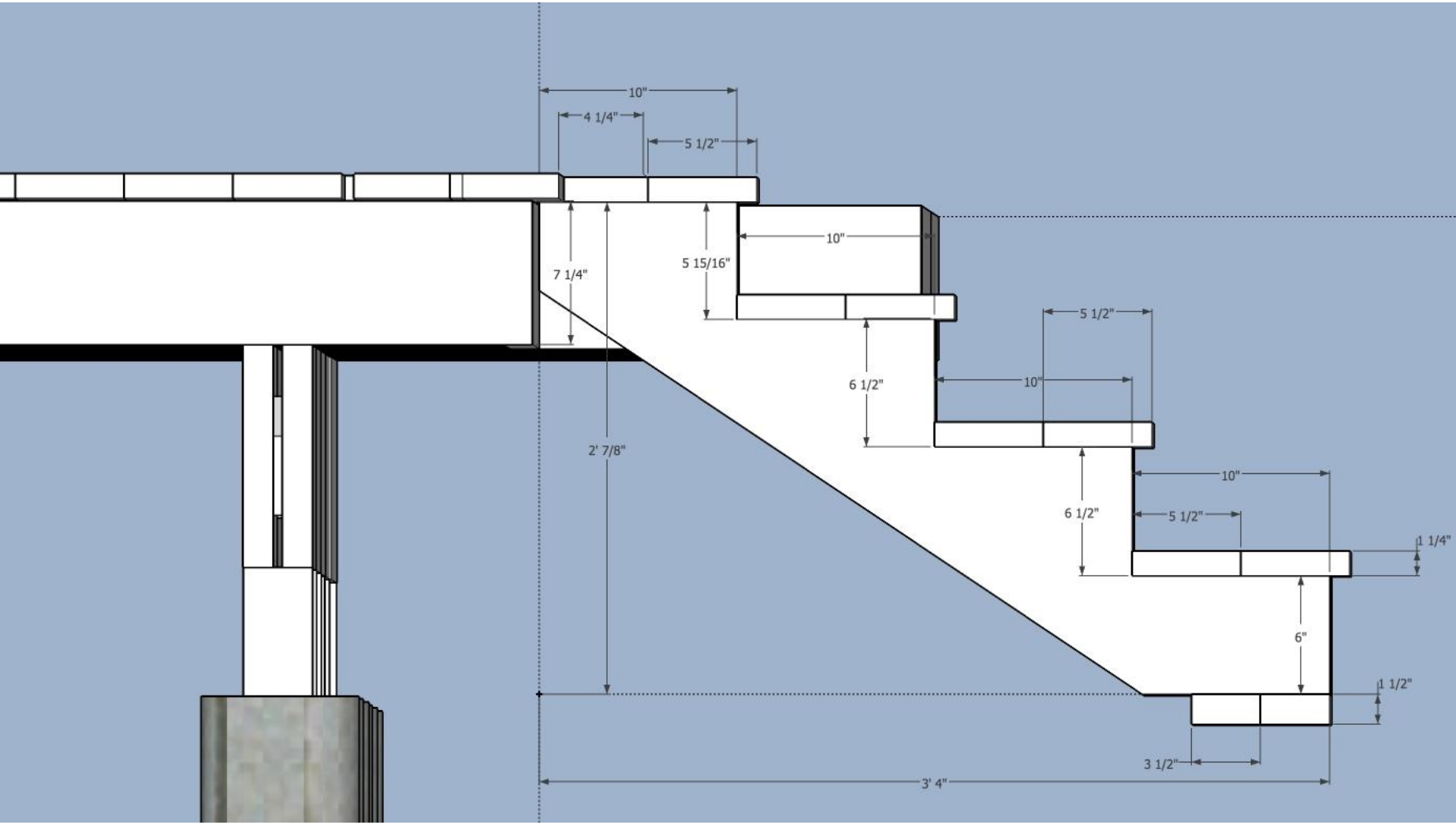

1 1/2"
1 1/2"
2'
7 1/4"
1 1/2"
7 1/4"
1 1/2"
1 1/2"
3' 4 1/8"
7 1/4"
1 1/2"

4. Stairs

Using 3 pre-fabricated 4-Step Stringers designed for steps that are 3’5” wide.

- ➔ **Attached to rim joist using joist hangers and fastened according to manufacturer specifications.**
- ➔ **Steps composed of 5/4x 6 decking boards fastened using 2 ½” exterior rated screws.**

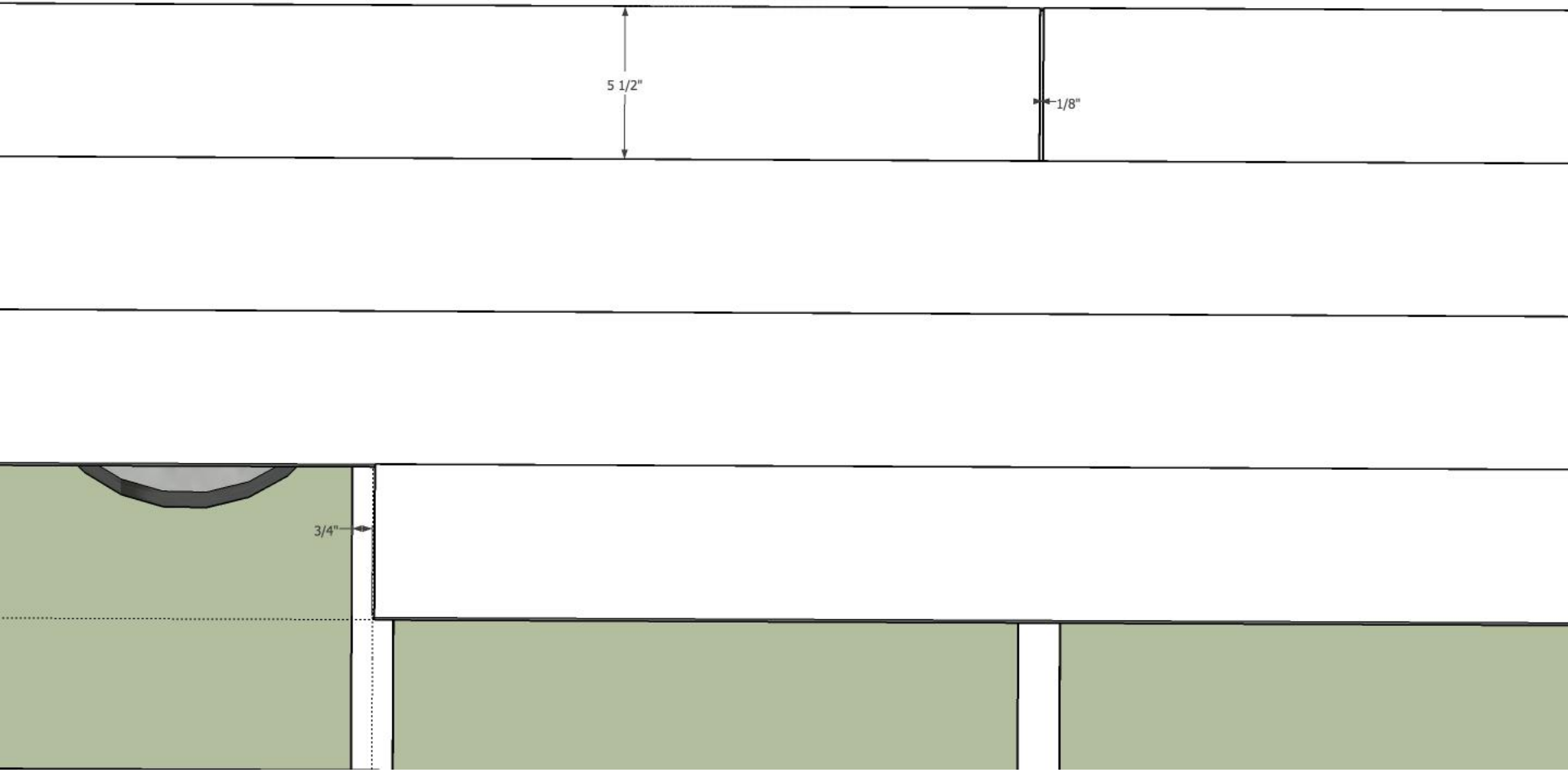

3' 5"
1' 5"
3' 2 1/2"

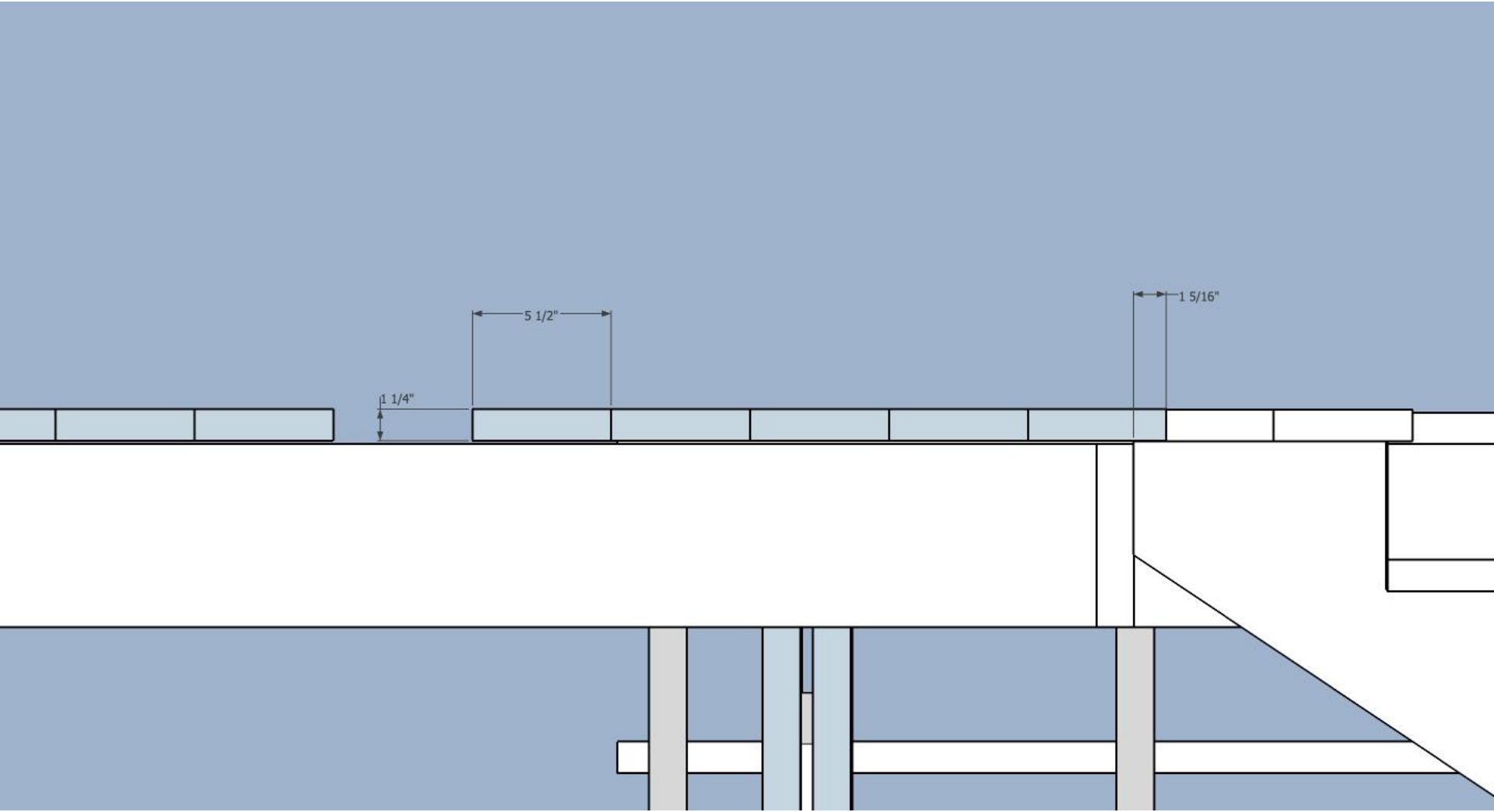

10"
4 1/4"
5 1/2"
7 1/4"
5 15/16"
10"
5 1/2"
6 1/2"
10"
2' 7/8"
10"
6 1/2"
5 1/2"
1 1/4"
6"
1 1/2"
3 1/2"
3' 4"

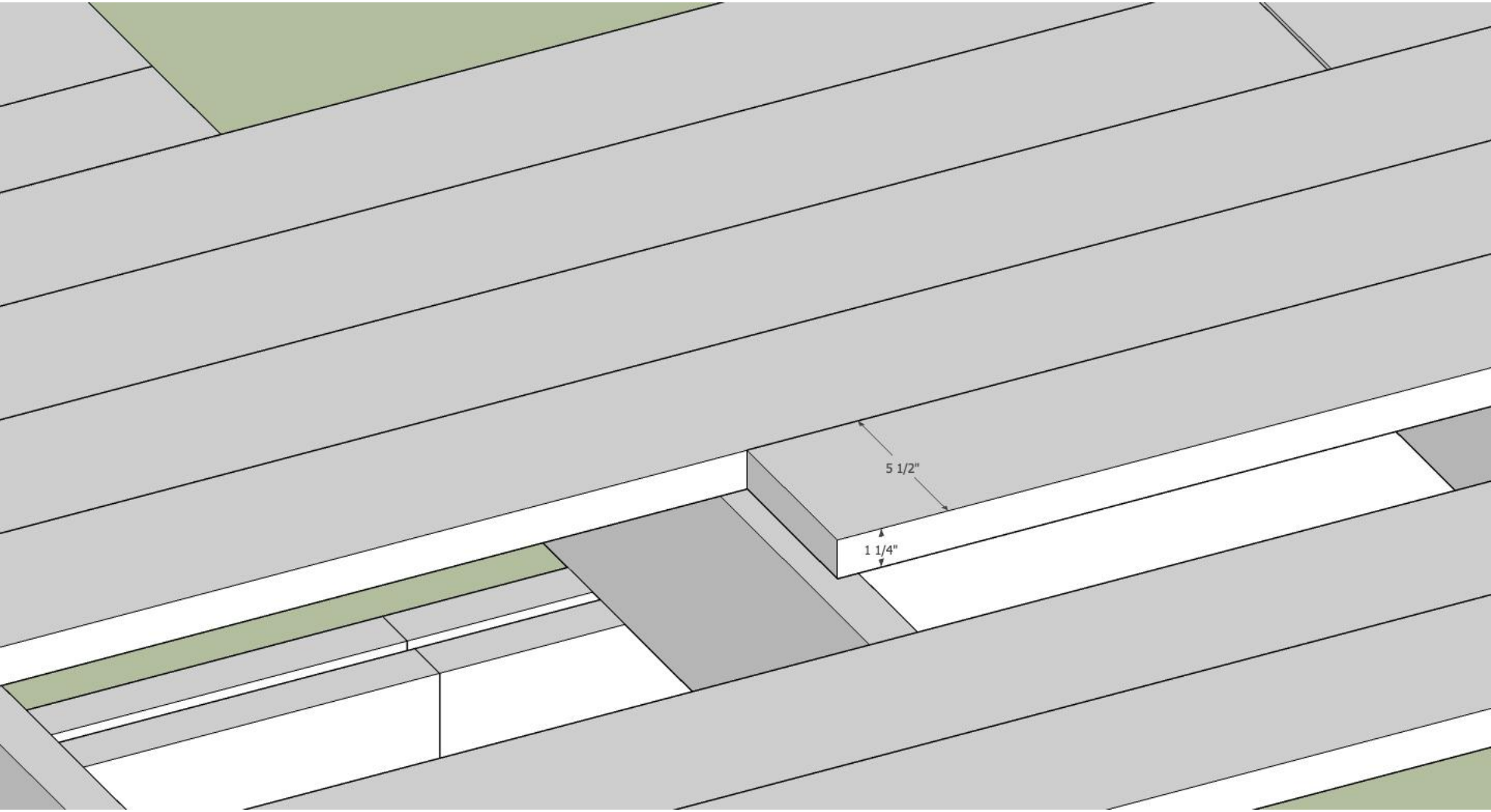
5. Decking

Using 5/4 x 6 pressure treated southern pine decking fastened using 2 ½" long exterior rated decking screws.

- ➔ **Decking fastened every 24"**
- ➔ **Butt joints are spaced ⅛" and break over joists.**
- ➔ **Decking will over hang rim joist by 1 ¼"**


5 1/2"
1/8"
3/4"


5 1/2"
1 5/16"
1 1/4"


5 1/2"
1 1/4"

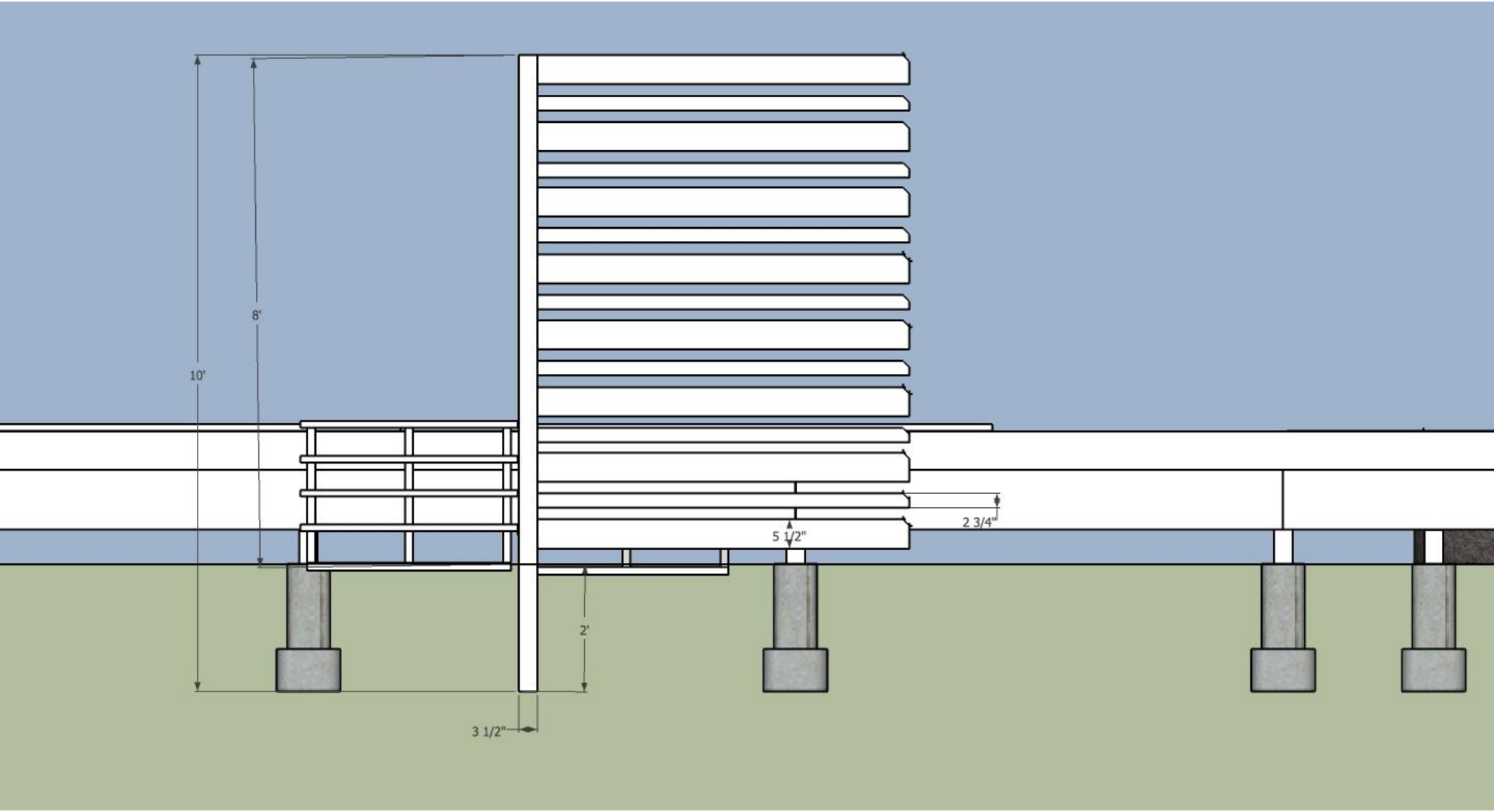
5. Fencing

Desire to extending decking to fencing crossing over 2' setback and also desiring to extend fence height from 6' to 8'.

➔ **4x4 Fence Posts and 6x6 posts for gate posts.**

Fence Posts will be sunk 24" below grade on top of compacted drain gravel and backfilled with 75lbs of concrete.

➔ **Pickets will be set Horizontally fastened using exterior rated screws.**


10'
8'
2'
3 1/2"
5 1/2"
2 3/4"

Jordan Smith
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Louisville, KY 40203
619-961-3731 - higherup@gmail.com

Thank You.