

## LIMITED STRUCTURAL INSPECTION

206 Olde Ferry Lane  
Dunn, NC

September 15, 2025

OWNER  
Phyllis Godwin

### SCOPE AND BACKGROUND

At your request, a limited structural inspection of the above property was performed on August 29, 2025. The report that follows has been prepared based on that inspection. The inspection was performed by Sean Casady, PE of Built Up Engineers, PLLC.

No tests, measurements, or calculations have been made except as described in this report. We have not investigated for toxic materials or wastes, or examined public records regarding this property. The scope of the inspection does not assure that the property conforms to any regulations, restrictions, or building codes that may be in effect at its location.

The scope of this project was limited to modifications to the floor framing in order to accommodate a new elevator, to extend from the garage to the first floor craft room. The report is intended to cover only those premises that may be examined visually without excavation, removing surface materials, and disassembling components.

### DESCRIPTION

The two-story, wood-framed home is constructed on a masonry foundation. The home was built in 2012 according to Harnett County Real Estate Tax Records. For purposes of this report, all directions (left, right, rear, etc.) are taken from the viewpoint of an observer standing in front of the home and facing it.

Upon our arrival, access to the interior was provided. The items pertaining to the above-mentioned scope were subsequently inspected.

Note that the original builder was not interviewed and no plans for the construction of this home were provided. The information presented in this report is gathered from the conditions visible at the site as they existed at the time of the inspection. A photo log is enclosed with this report.

Should there be any questions or concerns regarding this report, contact us at [sean@builtupengineers.com](mailto:sean@builtupengineers.com) or 919-817-9915. Our mailing address is 7283 Veterans Parkway STE 102-148, Raleigh, NC, 27603. Our website is [Builtupengineers.com](http://Builtupengineers.com)

## OBSERVATIONS

1. The subject elevator was to be located in the front left corner of the front garage.
2. The first floor framing was comprised of 18 inch deep open web wood trusses, spanning left to right.
3. The ceiling and roof framing above appeared to be comprised of attic roof trusses.
4. Per review of literature provided for the elevator to be installed, a new traction style elevator with the counterweight system was to be installed. The elevator pit was to be designed to support a 5100 pound impact load per our understanding.

## DISCUSSION

We have provided recommendations below to perform the required modifications. If further concerns are identified during installation or construction, the engineer should be consulted for further guidance.

No areas of the structure were reviewed other than those explicitly described in this report. The review used a standard of care consistent with other local design professionals limited by the scope and budget. This report was at a flat rate and has a liability limitation of 10 times the fees collected. It represents the best judgment of the staff of Built Up Engineers, PLLC given the information available at the time of writing. No review of organic growth, mildew, or any other building science issue was performed except as noted. All opinions are subject to revision based on new or additional information. No responsibility will be taken for conditions that could not be easily seen or are outside the scope of this review. Any use that a third party makes of this report, or any reliance upon, decisions made in response to or in any way influenced by this report are the responsibility of the such third party. Recommendations are provided to address structural-related issues, and may not rectify cosmetic issues.

## RECOMMENDATIONS

*If there are any questions or concerns about the specified recommendations, contact the engineer prior to construction.*

1. We recommend saw cutting the existing concrete slab to install a new 8 inch thick concrete slab for the elevator pit.
  - a) Per our understanding, the elevator pit is to be placed approximately 10 inches below the top surface of the slab.
  - b) The slab should be undermined, on the interior sides to install a new minimum 8 inch thick concrete or grouted CMU stem wall.
  - c) Provide number four bars, spaced 16 inches on center each way, in the base of the elevator pit.
2. We recommend a waterproofing/vapor barrier system being installed on the inside of the elevator pit to help prevent water infiltration. Note that due to the elevator pit being a low point in the grade, the installation of a drain may not be effective.
3. The existing web trusses shall be temporarily shored, and cut off at the penetration through the floor. Provide 2x blocking at the end of the trusses install 7/16 inch OSB gussets on each side of the trusses extending back into the truss span a minimum 24 inches.
4. The modified trusses shall bear on a new minimum 2 x 4 wall with a single 2x4 bottom plate and 2 – 2 x 4 top plates. Provide vertical two – 2 x 12 studs for the elevator tracks for the



manufacturer's guidance.

5. Provide a new 2 – 2 x 10 header at the elevator door opening.

See enclosed details for further guidance.

#### General Notes:

- Wood 2x pressure treated blocking utilized shall be sufficiently dried out to help reduce shrinkage due to evaporation of excess moisture over time. Alternatively, kiln dried pressure treated lumber may be utilized.
- The contractor should verify all dimensions prior to ordering materials.
- If the contractor has any questions or concerns regarding the method of construction or if conditions vary from what is described below, the engineer should be consulted.
- Likewise, if any changes to sizes or modifications to the structure are desired other than what is explicitly described below, the engineer should be consulted.
- All construction and workmanship shall adhere to the 2018 NC Building Code, Residential Code.
- All new lumber should be SPF or SYP No.2 or equivalent. All lumber exposed to concrete/masonry or weather must be pressure treated.
- All new LVL members are to be E2.0, Fb=3100 PSI (or equivalent), and plies are to be attached per manufacturer specifications. LVL members exposed to weather should be wrapped per manufacturer specifications.
- Contractor to confirm minimum soil-bearing capacity of 2000 psf. All footings shall be installed a minimum of 12" below grade and in no case less than the frost depth.
- All new concrete is to have a minimum 28-day strength of 3000 psi.
- All new metal hangers/ties/clips are to be installed per manufacturer specifications.
- All fasteners/connections are to be installed per table R602.3 of the 2018 NC Building Code, Residential Code.
- With any structural changes, finish material cracks and minor movements are typical and expected. These are associated with settlement generally observed after the construction of an addition or significant remodel.

#### CONCLUSION

We trust that this report provides the information you require. Please contact us at 919-817-9915 if you have any questions. Thank you for the opportunity to be of assistance to you.

Sincerely,

Sean Casady, PE  
Project Engineer  
Built Up Engineers PLLC  
NC Lic. No. P-2664

Enclosed: sketch, photo log



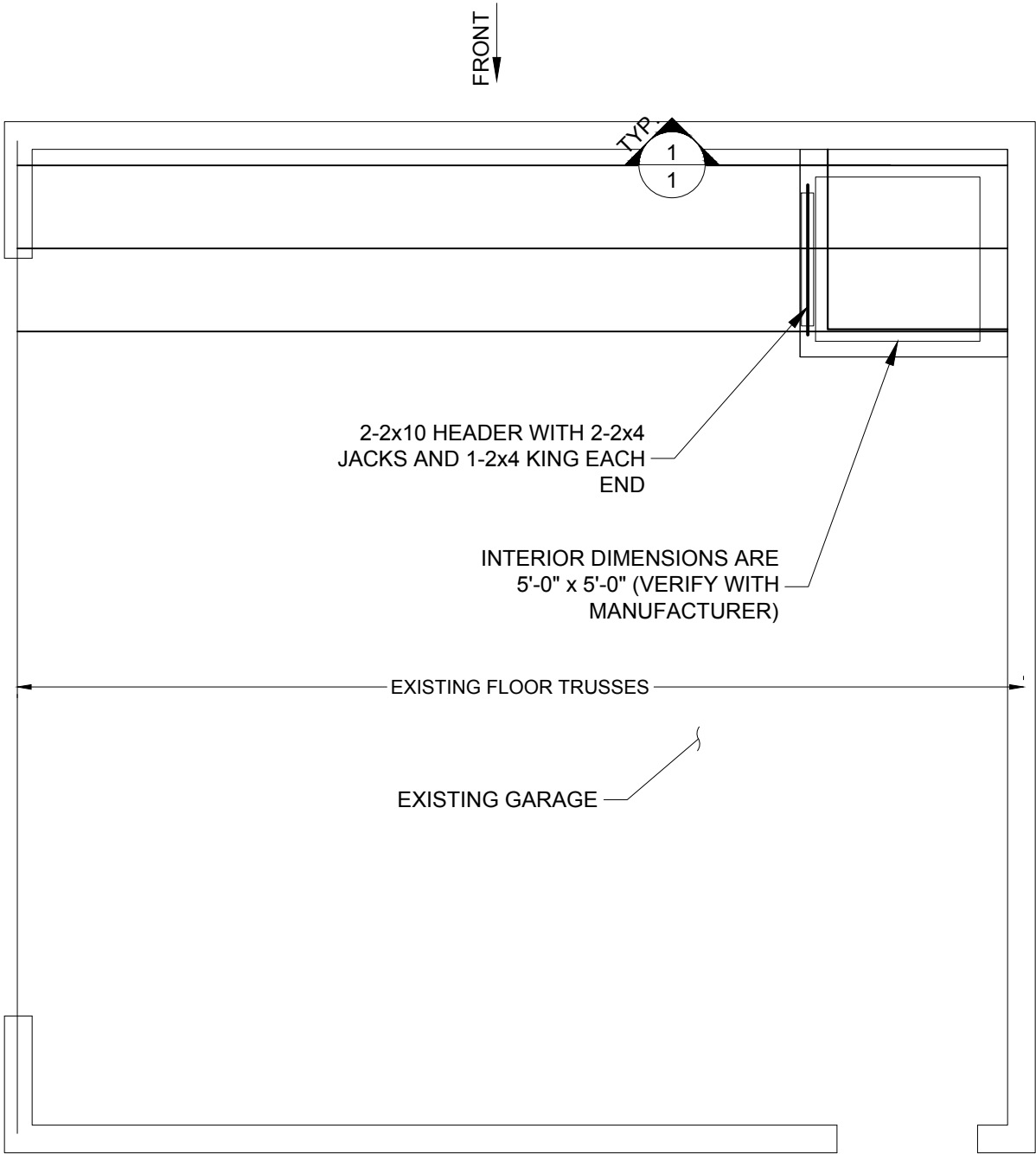


7283 VETERANS PARKWAY  
STE: 102-148  
RALEIGH, NC 27604,  
P: 919-817-9915  
NC LICENSE NO. P-2664

NEW ELEVATOR - STRUCTURAL  
MODIFICATIONS

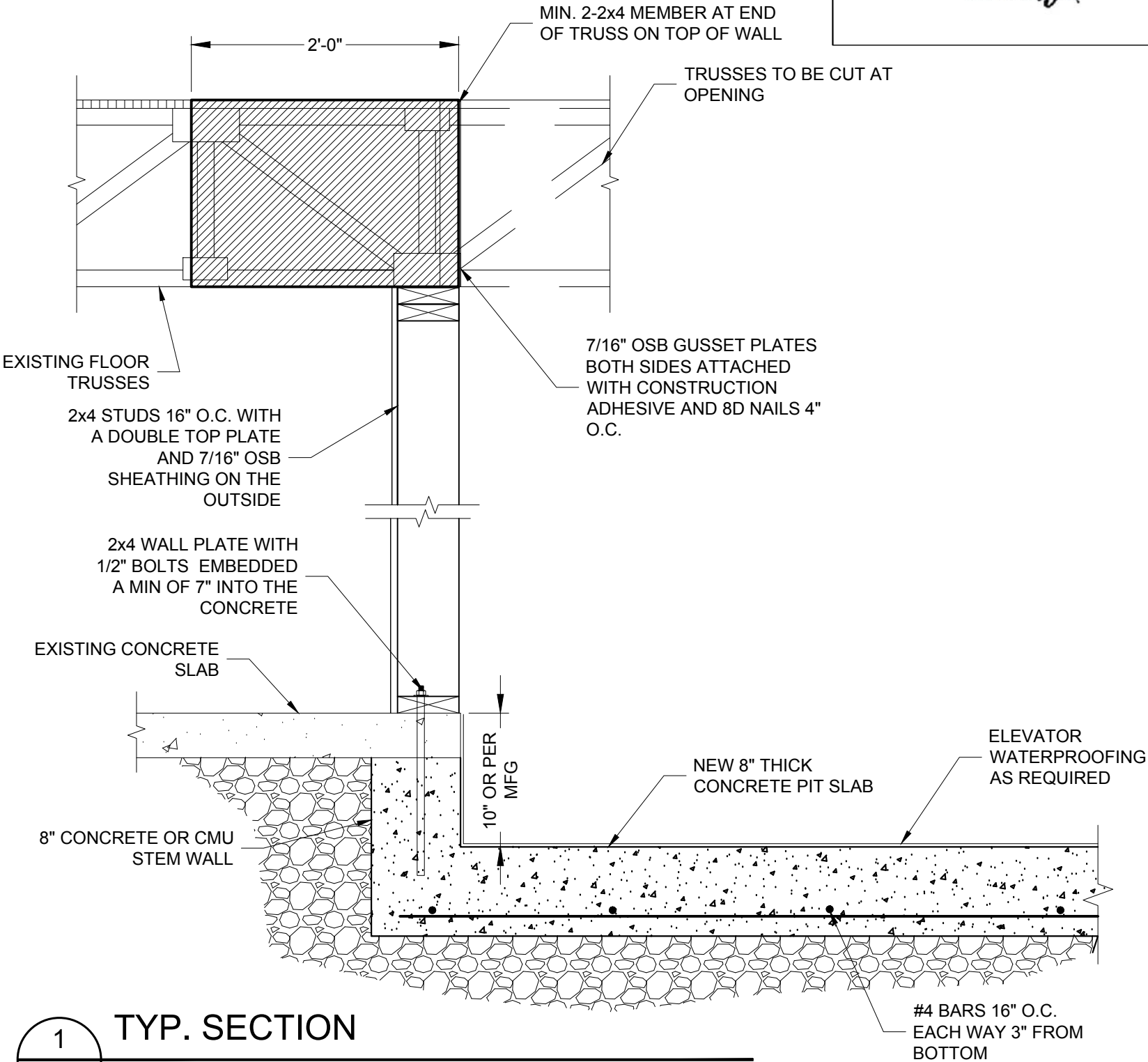
DATE: 09/15/2025  
SHEET: \_\_\_\_\_  
SCALE: \_\_\_\_\_

206 OLD FERRY RD DUNN, NC



PLAN VIEW OF GARAGE

SCALE: 1/4" = 1'-0"



TYP. SECTION

SCALE: N.T.S.



### Description

Typical view of the home.

**Photo No.**  
**1**



### Description

View of the subject room.

**Photo No.**  
**2**



### Description

View of the subject room where the elevator is to be installed.



Photo No.  
3

### Description

View of the basement/garage.

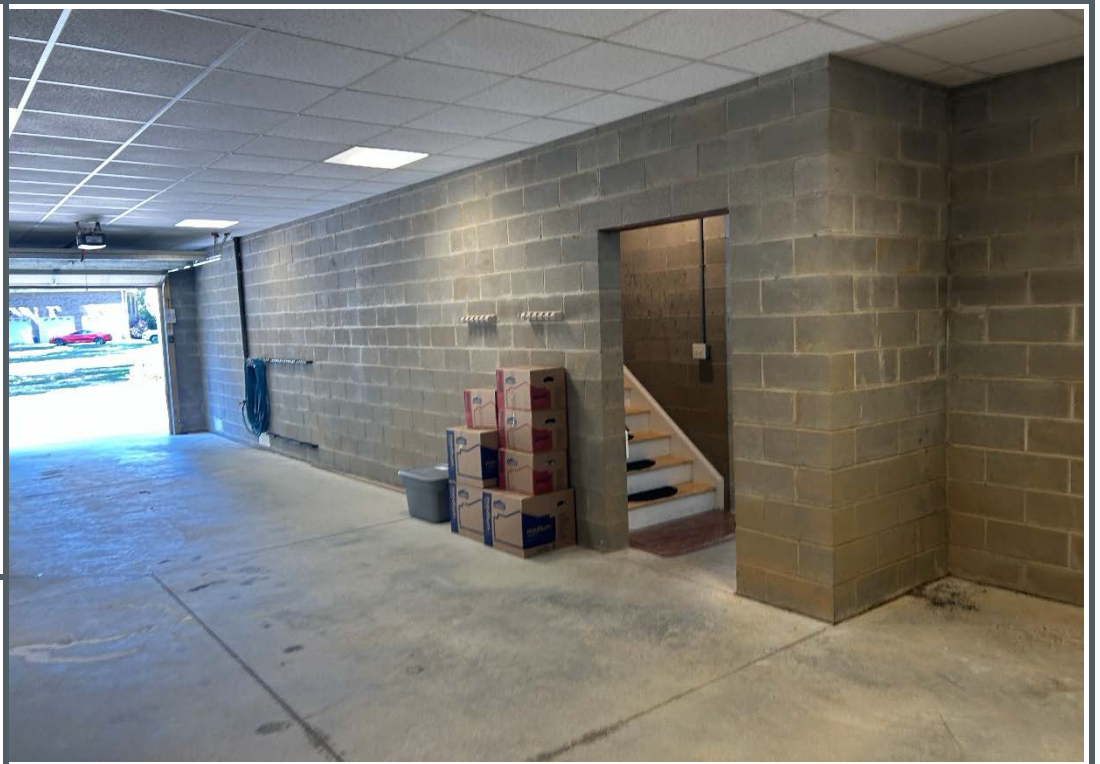


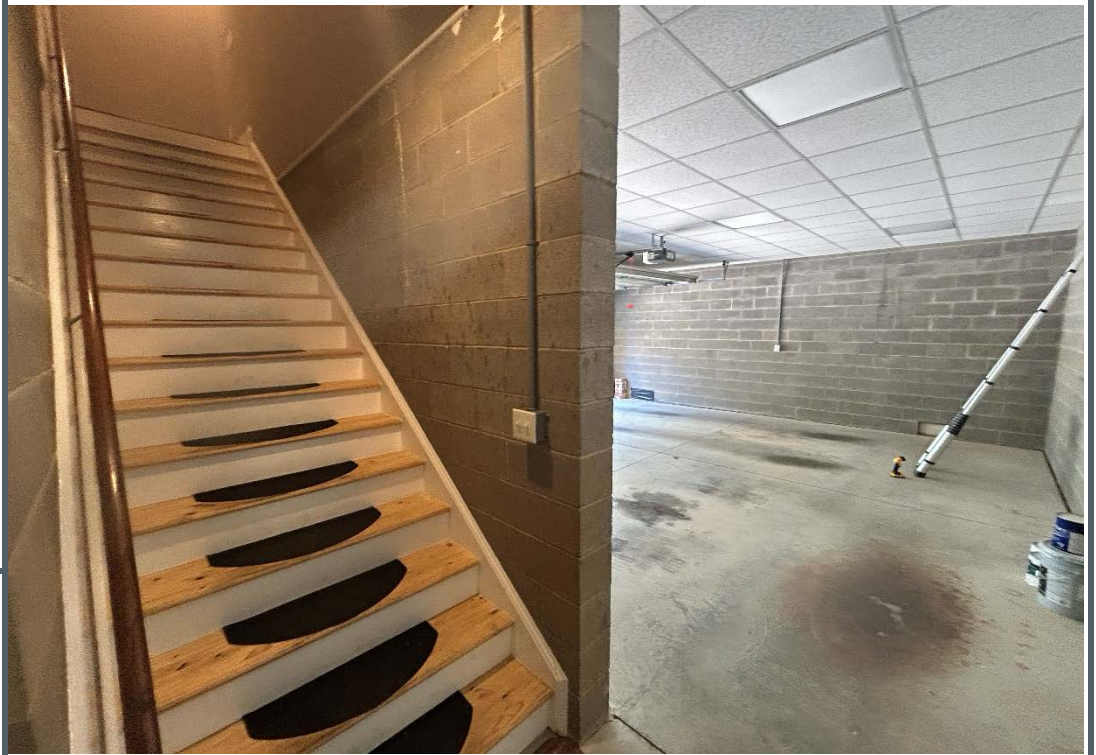
Photo No.  
4



### Description

View of the garage  
and stairs into home.

Photo No.  
5



### Description

View of the garage.

Photo No.  
6



### Description

View of the floor trusses to be cut for the new elevator opening.

Photo No.  
7



### Description

Additional view of the floor trusses.

Photo No.  
8





### Description

View of the attic roof trusses above.

Photo No.  
9



### Description

View of the attic roof trusses above.

Photo No.  
10

