

September 14, 2017

Mr. Matt Ceragioli  
UCLA Real Estate  
10920 Wilshire Boulevard, Suite 810  
Los Angeles, California 90024

Subject: 28291 Geneva Lane, Lake Arrowhead, CA  
Seismic Screening Report  
JLA Job no. 17101-06

Dear Mr. Ceragioli,

Per your request, John Labib + Associates Structural Engineers (JLA) performed a seismic screening of the existing building at the above noted address. Our services included a site visit performed on September 11<sup>th</sup>, 2017 and a general evaluation of the structural systems of the building. No record drawings were made available.



Figure I: Birds Eye View of Building

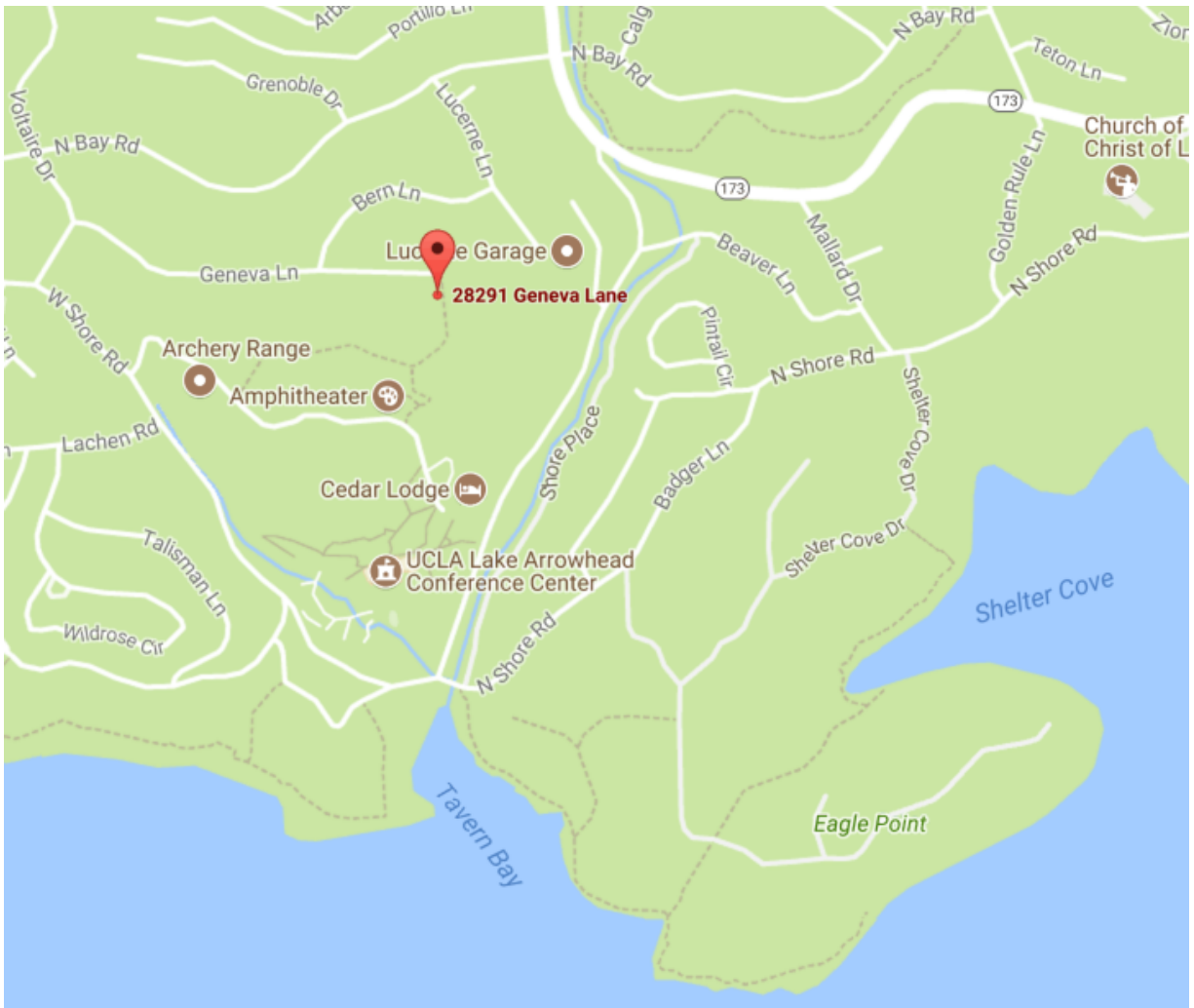


Figure 2: Site Map



Figure 3: View at Entrance

### Building Description

No architectural or structural drawings were made available, as such our evaluation is based on visual observation of exposed elements of the building. We estimate that the structure was originally built as a single family residence in the mid-1960's and is approximately 1150 square foot and is two stories with a partial basement on a quarter of an acre site.

The building is situated near Lake Arrowhead in the City of Lake Arrowhead on a site with mild slopes at the back of the property. The building was built using conventional timber framed construction. All roofs are heavily pitched to alleviate snow loads and exterior walls are conventional timber construction.

### Building Structure

The building was likely constructed in mid to late 1960's likely based on the Uniform Building Code. The below is a description of the structure.

#### *Gravity Load Resisting System:*

Existing drawings were not made available, however, we can infer from observations and knowledge of construction practices of the time the methods and materials of construction. This two-story structure is timber framed and most likely, as evidence by some observations in the basement, founded on shallow concrete foundations. Floor framing likely consists of straight or diagonal sheathing supported by 2x (10 or 12) joist framing at 16" – 24" on center. The roof is pitched and is supported by a larger sawn ridge beam and joists as shown in the photo below. Most walls are likely bearing and likely a single layer of plywood was used to resist lateral loads.

#### *Lateral Load Resisting Systems:*

Existing drawings were not made available, however, based on the architecture, vintage, and materials used we expect and can infer from our observations that the lateral system consists of conventional plywood shear walls distributed throughout the building. The wall is anchored to a concrete foundation as observed in the basement. The walls bottom plate is anchored to strip footings using anchors at incremental spacing. The plywood walls extend from the foundation up to tie to the roof. Plywood sheathing transfers floor loads to the shear walls. In general the design and detailing resembles typical timber construction still used today.



Figure 4: Rear Balcony / Deck



Figure 5: Underside of Rear Balcony / Deck



Figure 6: Brick Chimney



Figure 7: Roof Framing / Ridge Beam



Figure 8: Basement





Figure 9: Basement Cripple Walls



Figure 10: Wall Anchorage

### Non-structural

In general construction of non-structural elements do not pose any risk to safety. Two issues were identified, however, that require attention and repair. Figure 5 shows the underside of the exterior balcony / deck. Note the main girder running at the edge parallel to the length of the deck. This element appears to be twisted and has a horizontal crack running longitudinal to its main axis. This element needs to be replaced (or repaired with strapping). Figure 6 shows a brick chimney. Anchorage of this chimney at the floor and the roof is required to ensure life safety. These could be added and/or the Chimney could be replaced with a conventionally framed chimney.

### Seismic Evaluation Criteria

The structure was generally evaluated based on the latest University of California Seismic Safety Policy dated May 19<sup>th</sup>, 2017. The seismic policy provides 7 seismic performance ratings: I thru VII. Please refer to attached Appendix A for info on Seismic Safety Policy & rating.

### Seismic Evaluation

- The main building structure has a complete load path to transfer seismic forces to the foundations.
- The roof and floor diaphragms are continuous without major openings.

- Based on our observations and our conceptual evaluation of the lateral-load-resisting system, the lateral system is adequate for the size, configuration, and age of the building. A major seismic disturbance is likely to result in structural and non-structural damage that would represent low life hazards. Improvements to the rear deck and chimney should be pursued to further enhance building performance.

Seismic Rating

IV

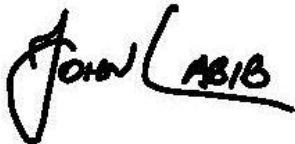
Limitations

This limited seismic screening was based on our review of the plans. Services were performed by JLA in a manner consistent with the level of care and skill ordinarily exercised by members of the profession currently practicing under similar conditions. The structural observations and recommendations represent our opinion and are not intended to preempt the responsibility of the original design consultants in any way. No other warranty, expressed or implied, is made.

If you have any questions, please do not hesitate to call us.

Yours truly,

John Labib & Associates



John Labib, S.E.  
Principal

