Labib Funk + Associates Structural [Givil Engineers] Burnett + Young Shoring Engineers

November 5, 2020

Bruce Geller UCLA Real Estate Senior Leasing Specialist 10920 Wilshire Boulevard, Suite 810 Los Angeles, CA 90024

Subject:

Parcel 65R Boathouse 14001 Fiji Way, Marina Del Rey, CA 90292 Seismic Screening Report JLA Job no. 19001-15

Dear Mr. Geller,

Per your request, Labib Funk + Associates (LFA) performed a seismic screening of the subject existing building structure. Our services included a review of the site conditions, and a general evaluation of the existing structural systems of the building. Note, there were no structural as-built drawings provided for review.

Building Description

The existing single-story building consists of around 5,500 square feet of occupiable space. The building footprint measures approximately 110 feet by 50 feet. The structure consists of wood stick framing and CMU partial height walls over conventional concrete footings. See Figure 1 below for an overall image of the subject existing building site.

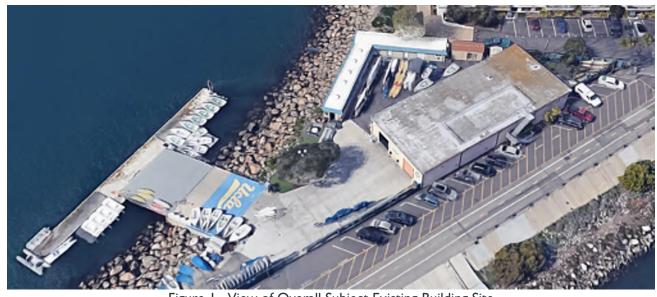


Figure 1. View of Overall Subject Existing Building Site



Building Structure

Below is a description of the structure based on the site assessment.

Gravity Construction:

The roof consists of plywood sheathing supported on wood joists bearing on wood stud walls or header beams on wood columns.

Lateral-Force-Resisting-System:

The horizontal lateral load resisting system (diaphragm) at the roof consists of plywood sheathing (flexible diaphragm). The diaphragm transfers the seismic forces to the vertical lateral load resisting system, which consist of wood shear walls that are sheathed with stucco and a partial height CMU wall (clerestory) along one long side with steel diagonal straps that crisscross the clerestory above to transfer loads from the roof diaphragm. The lateral loads are then transferred to the foundation system.

Foundation System:

The structural gravity and lateral-force-resisting framing are most likely founded on shallow concrete continuous footings; all below a conventional slab-on-grade.

Seismic Evaluation Criteria

The UC seismic safety policy provides 7 seismic performance ratings: I thru VII. Please refer to attached Appendix A for info on the UC Seismic Safety Policy & expected seismic performance rating.

Seismic Evaluation of Current Structure

- 1. The structure has a complete load path but vertical lateral force resisting elements have inadequate strength for transferring seismic inertial forces to the foundations
 - a. The wood walls on 3 sides are sheathed with stucco and do not have proper connections to the roof diaphragm. Therefore, a major seismic disturbance will likely result in structural damage that would represent appreciable life safety hazards. This condition is most evident at the short end with the large roll up door openings.
 - b. The CMU Wall on I side stops short of the roof diaphragm and the steel transfer straps are not adequate for transferring seismic loads
- 2. Due to the partial height configuration of the CMU walls, they are not properly braced out of plane
- 3. The roof diaphragm is regular and continuous without major openings.
- 4. Based on our review of the existing structural site conditions and our evaluation of the lateral load resisting system, it appears that the lateral system is inadequate for the size, configuration and usage of the building. A major seismic disturbance is likely to result in some structural and/or nonstructural damage that could represent a life safety hazard.



Proposed Retrofit

To mitigate the deficiencies indicated above for the subject building, LFA proposes the following retrofit shown in Appendix B and as briefly outlined below:

- 1. Provide for new plywood-sheathed shear walls on 3 sides that account for 100% of current code loads
- 2. Provide for new Moment frames along the CMU wall side that account for 100% current code loads
- 3. Provide for adequate out-of-plane bracing of the existing CMU wall in accordance with current code

Seismic Evaluation of Structure with Proposed Retrofit

- I. The structure would have a complete load path to transfer seismic inertial forces to the foundations
- 2. The CMU walls would be properly braced out-of-plane
- 3. The roof diaphragm remains regular and continuous without major openings
- 4. Based on the proposed structural retrofit and our review of the existing site conditions, the structure would be adequate. A major seismic disturbance would likely result in some structural and/or nonstructural damage that would represent low life hazards.

Seismic	Rating	for	Current	Structure

V

Seismic Rating with Proposed Retrofit

IV

Limitations

This limited seismic screening was based solely on the review of site conditions. Services were performed by LFA in a manner consistent with the level of care and skill ordinarily exercised by members of the profession currently practicing under similar conditions. The results of the structural evaluation 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,

Labib Funk & Associates

FOIN ASIS

John Labib, S.E. Principal



319 Main Street El Segundo, California 90245 (213) 239 9700 info@labibse.com | www.labibse.com