

October 16, 2013

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

Re: *University of California Seismic Rating for 3500 Lomita Boulevard, Torrance*

Dear Matt:

Nabih Youssef & Associates (NYA) have performed an Independent Review of the 3-story medical office building located at 3500 Lomita Boulevard in Torrance. The review consisted of a site visit to observe the existing condition of the exposed structural elements, review of prior engineering reports, identification of potential falling hazards that pose a significant life or safety risk to occupants and a seismic risk assessment.

Description:

The building is a 3-story steel frame structure with mezzanine level and mechanical penthouse. The building is rectangular-shaped in-plan with overall dimensions of 99' by 104'. The floor plan of the upper levels of the building increases at each level similar to an inverted pyramid. The building is reported to have been designed to the 1976 edition of the Uniform Building Code. Structural drawings were not available for review.

The roof and floor are constructed of plywood sheathing supported by open-web truss joists spanning to steel wide flange beams. The steel beams are supported by steel wide-flange columns that appear to be continuous to the foundation. The foundation was not observed, however, buildings of similar construction and vintage typically have concrete spread footings under columns connected by concrete grade beams.

The lateral-force-resisting system consists of the wood roof and floor acting as structural diaphragms to transfer seismic inertial forces to perimeter welded steel moment frames.

Observation:

A site visit was performed by Owen Hata of NYA on October 7, 2013, to observe the condition and characteristics of the building. The majority of the structure was covered and was not visually observable. Observations were limited to visible areas of the structure. The building appeared to be in good condition and there were no signs of deterioration or distress.

The exterior of the building consists of aluminum cladding with ribbon windows. There is a canopy over the main entrance of the building. The framing of the canopy is welded to the mullions of the storefront framing. There were no potential falling hazards that pose a significant life or safety risk to occupants.

Evaluation:

The site is located on a flat site and is not subject to the jurisdiction of the Alquist-Priolo Special Studies Zone Act. The building is founded on Quaternary deposits of alluvium that consists of soft silt clay with some loose to moderately dense silty sand that has a low susceptibility to liquefaction. Thus, the potential for earthquake induced site failure is low.

The building has a complete load path to transfer seismic forces to the foundations. There are no significant strength or stiffness discontinuities in the steel moment frame. A limited number of welded moment connections were ultrasonically inspected in August 1996, after the 1994 Northridge Earthquake. A total of 12 (out of a total of 160) welded connections were inspected. No damage or defects were reported in any of the connections.

Seismic Risk Assessment:

Based on visual observations, a seismic risk assessment considering building stability, site stability, seismic ground motion hazard and building damageability was performed. The on-line seismic risk assessment tool *SeismiCat*, developed by ImageCat, Inc., for screening of buildings for seismic risk, was used. The assessment was performed to the Level 1 requirements of ASTM E-2026.

The Scenario Expected Loss (SEL) for ground shaking hazards having 10% probability of exceedance within a 50-year exposure period (BSE-1) was calculated. The SEL corresponds to the Implied Seismic Damageability, as defined by the 2011 UC Seismic Safety Policy. The SEL for the building is 10%. The report generated by SeismiCat is attached.

Conclusion:

Based on observations made during our site visit, review of prior engineering reports and the results of the seismic risk assessment, the expected earthquake performance of the building corresponds to the University of California seismic rating of "IV" ("Fair").

References:

Structural Evaluation & Loss Estimate of 3500 Lomita Boulevard, Nabih Youssef & Associates (96616.20), December 18, 2007.

Structural engineering Seismic Evaluation of 3500 Lomita Boulevard, Nabih Youssef & Associates (07379.00), September 30, 1996.

Seismic Hazard Zone Report for the Torrance 7.5-Minute Quadrangle, Los Angeles County, CA, prepared by State of California, Department of Conservation Division of Mines and Geology, Report No. 035, 1998.

State of California Seismic Hazard Zone, Torrance Quadrangle, March 25, 1999.

University of California Seismic Safety Policy, August 25, 2011.

Sincerely,

NABIH YOUSSEF & ASSOCIATES



Nabih Youssef, S.E.
Principal

Enclosure

cc: N. Youssef; O. Hata; File 13374.00



Photo 1 – Southeast Elevation



Photo 2 – Northwest Elevation



Photo 3 – Typical Steel Framing



Photo 4 – Canopy at Building Entrance