

October 11, 2012

Mr. Matt Ceragioli  
Senior Leasing Specialist  
UCLA Real Estate  
10920 Wilshire Boulevard, Suite 810  
Los Angeles, CA 90024

**Re: *University of California Seismic Rating for 3445 Pacific Coast Highway, Torrance***

Dear Matt:

Nabih Youssef & Associates (NYA) have performed an Independent Review of the 3-story office building located at 3445 Pacific Coast Highway in Torrance. The review consisted of a site visit to observe the existing condition of the exposed structural elements, identification of potential falling hazards that pose a significant life or safety risk to occupants, and a seismic risk assessment. No structural or architectural drawings were available for review.

**Description:**

The building is a 3-story steel frame office building that is irregular shaped in-plan with re-entrant corners and a setback at the third floor. The building is reported to have been constructed in 1989-90 and likely was designed to the 1985 edition of the Uniform Building Code.

The roof and floors appear to be constructed of plywood sheathing supported by wood joists that span to wide flange steel beams. The steel beams are supported by wide-flange steel columns.

Based on buildings of similar size and construction, the foundation system likely consists of isolated concrete spread footings supporting the columns and a concrete slab-on-grade.

The lateral-force-resisting system appears to consist of the plywood roof and floors acting as structural diaphragms to transfer seismic inertial forces to welded steel moment frames.

**Observation:**

A site visit was performed by Alejandro Pena of NYA on October 11, 2012, to observe the condition and characteristics of the building. Observations were limited to visible areas of the structure. The building appeared to be in good condition and there were no obvious signs of distress.

The exterior of the building consists of plastered finish with laminated glass window system. There is very little ornamentation and no appendages. The roofing consists of ceramic tiles on a sloped roof. No significant potential falling hazards were observed.

**Evaluation:**

The site is not subject to the jurisdiction of the Alquist-Priolo Special Studies Zone Act. The building is founded on younger alluvium that consists of soft to moderately dense silty clay and silty sand that has a moderate susceptibility to liquefaction. Thus, the potential for earthquake induced site failure is moderate.

The welded steel moment frame connections are likely pre-Northridge connections, which were standard practice at the time of construction. These connections are no longer allowed by current building codes. The building has not been subjected to strong ground motion (approximately 0.20g or greater) since construction.

The building appears to have a complete load path to transfer seismic forces to the foundations. The roof and floor diaphragms appear to have adequate strength with no major openings. There appears to be no significant strength or stiffness irregularities in the vertical elements of the lateral system.

**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 13%. The report generated by SeismiCat is attached.

**Conclusion:**

Based on observations made during our site visit, 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:**

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 12341.00