NABIH YOUSSEF ASSOCIATES
STRUCTURAL ENGINEERS

December 3, 2012

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

Re: University of California Seismic Rating for 23530 Hawthorne Boulevard, Torrance

Dear Matt:

Nabih Youssef & Associates (NYA) have performed an Independent Review of the 2-story office building located at 23530 Hawthorne Boulevard 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. Structural drawings were not available for review.

Description:

The building is 2-stories tall and is irregular shaped in-plan. The building was constructed in 1984 and likely designed to the 1979 edition of the Uniform Building Code. An enclosed pedestrian bridge provides access to the 2nd floor of 23550 Hawthorne. The bridge is structurally and seismically independent of 23530 Hawthorne.

The floor and roof appear to be constructed of plywood sheathing supported by open web steel joists or wood I-joists spanning to wide flange steel beams. The steel beams are likely supported by wide-flange steel columns.

The foundation system appears to consist of isolated concrete spread footings supporting the steel columns, and a concrete slab-on-grade.

The lateral-force-resisting system appears to consist of the plywood sheathed roof and floor acting as structural diaphragms to transfer seismic inertial forces to welded steel moment frames that are continuous to the foundation.

Observation:

A site visit was performed by Owen Hata of NYA on November 30, 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 building exterior consists of brick veneer and storefront glass system with little ornamentation. 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 sand and sand that is susceptible to liquefaction. Therefore, 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 a complete load path to transfer seismic forces to the foundations. The roof and floor diaphragms appear to have adequate strength. There are 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 12%. The report generated by SeismiCat is attached.

Conclusion:

Based on our review of the structural drawings, prior engineering reports, 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 12445.00