

November 30, 2012

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

Re: University of California Seismic Rating for 12400 Wilshire Boulevard, Los Angeles

Dear Matt:

Nabih Youssef & Associates (NYA) have performed an Independent Review of the 14-story office building located at 12400 Wilshire Boulevard in Los Angeles. The review consisted of a site visit to observe the existing condition of the exposed structural elements, review of the structural drawings at the site, 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 14-story steel frame with 6-levels of below-grade parking. The building irregular shaped inplan. The structural drawings were prepared by Robert Englekirk and dated May 4, 1983. The building was constructed in 1985 and designed to the 1980 edition of the City of Los Angeles Building Code.

The floors and roof are typically constructed of 3" metal deck with 31/4" light weight concrete fill spanning to wide flange steel beams. The steel beams are supported by wide-flange steel girders and columns. The below-grade floors are typically constructed of 3" metal deck with 21/2" hardrock concrete fill spanning to wide flange steel beams. The steel beams are supported by wide-flange steel girders and columns, and perimeter reinforced concrete walls.

The foundation system consists of isolated concrete spread footings supporting the interior columns, continuous concrete strip footings beneath the concrete walls and a 4"concrete slab-on-grade.

The lateral-force-resisting system consists of the metal deck with concrete fill roof and floors acting as structural diaphragms to transfer seismic inertial forces to welded steel moment frames that are continuous to the ground floor. At the ground floor, the seismic forces are transferred through the metal deck with concrete fill to the reinforced concrete walls below.

# Observation:

A site visit was performed by Maurizio Trevellin of NYA on November 29, 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.

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 older alluvium that consists of loose to medium dense clay, silt, sand and gravel that is not susceptible to liquefaction. Therefore, the potential for earthquake induced site failure is very low.

The welded steel moment frame connections are 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 with no major openings. There are no significant strength or stiffness irregularities in the vertical elements of the lateral system.



## Seismic Risk Assessment:

Based on the review of the structural drawings and 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 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:

Set of structural drawings for the Wilshire Brentwood Plaza, as prepared by Robert Englekirk, Consulting Structural Engineers, Inc., dated May 4, 1983.

Seismic Hazard Zone Report for the Beverly Hills 7.5-Minute Quadrangle, Los Angeles County, CA, prepared by State of California, Department of Conservation Division of Mines and Geology, Report No. 023, 1998. State of California Seismic Hazard Zone, Beverly Hills 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 12447.00