NABIH YOUSSEF ASSOCIATES
STRUCTURAL ENGINEERS

February 8, 2016

Ms. Joanne Williams
Senior Leasing Specialist
UCLA Real Estate
10920 Wilshire Boulevard, Suite 810
Los Angeles, CA 90024

Re: University of California Seismic Rating for 21650 Oxnard Street, Woodland Hills

Dear Joanne:

Nabih Youssef Associates (NYA) have performed an Independent Review of the Warner Center Tower 3, a 25-story office building located at 21650 Oxnard Street in Woodland Hills. 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, a review of structural drawings including steel frame repair drawings and an ASCE 41-13 Tier 1 evaluation.

Description:

The tower is irregular-shaped in-plan with 25 stories above grade and a partial basement. The building was constructed in 1991 and designed to the 1984 edition of the Uniform Building Code.

The roof and typical floors are constructed of 3" metal deck with 2½" hardrock concrete fill spanning to wide flange steel beams and girders. The steel beams and girders are supported by wide flange steel columns that are spliced at every other floor and are continuous to the foundation. The foundation system consists of concrete piles, pile caps and grade beams.

The lateral-force-resisting system consists of the metal deck and concrete fill roof and floors acting as structural diaphragms to transfer seismic inertial forces to the distributed welded steel moment frames. The typical moment frame connection consists of field-welded full-penetration joints of the frame beam flanges to the columns flanges. This connection detail is the typical "pre-Northridge" type connection that was standard practice at the time of construction.

The building was subjected to strong ground motion during the 1994 Northridge Earthquake. Recorded ground motion near the site indicates peak ground acceleration greater than 0.2g. The welded moment connections were inspected after the earthquake. The inspection discovered weld defects and damage to a limit number of connections. The defective welds and damaged connections were repaired in 1995.

Observation:

A site visit was performed by Owen Hata of NYA on January 29, 2016, to observe the condition and characteristics of the building. Observations were limited to visible areas of the structure. The building structure appeared to be in general conformance with the original structural drawings, no significant structural alteration was observed. The building generally appeared to be in good condition and there were no obvious signs of structural distress.

Mechanical and electrical equipment were observed to be generally anchored and piping systems generally braced. The curtain wall system of the building consists of stone veneer at the lower four floors and an aluminum mullion system with laminated glass above. There is a skylight over the main building entrance. No falling hazards were observed on the exterior of the building.

Evaluation:

The building is located on a flat site and is not susceptible to landslide. The site is not located within an Alquist-Priolo Earthquake fault zone – a geologic zone where surface rupture may occur. The site is located in an area recognized by the State of California where historic occurrence of liquefaction, or local geological, geotechnical and groundwater conditions indicate a potential for permanent ground displacement. In addition, USGS regional liquefaction hazard maps indicate that the site is located in a region of moderate susceptibility to liquefaction. Potential adverse effects of liquefaction are partially mitigated by the deep (pile) foundation system.

An ASCE 41-13 Tier 1 assessment was performed assuming a site soil classification D, and design spectral acceleration at short period and one second period for BSE-1E, 0.923g and 0.514g, respectively.

The building has the following noncompliant characteristics:

- Soft Story – The ground floor appears to be a soft story due to its greater story height. This is common for office towers of this vintage.
- Axial Stress – Quick checks indicate that axial stresses in columns due to gravity and seismic loads are greater than 0.1Fy and 0.3Fy, respectively. The calculated axial stresses for gravity and seismic loads are 0.13Fy and 0.34Fy.
- Moment Resisting Connections – Moment connections do not develop the strength of adjoining members. This is common for pre-Northridge connections. The moment connections were inspected after the 1994 Northridge Earthquake and damaged/defective connections were repaired.
- Compact Members – Not all frame members satisfy desirable compact section requirements. This is common for buildings of this vintage, as compactness was not a design requirement.
- Liquefaction – The liquefaction susceptibility at the site is considered to be moderate. The adverse effects of this hazard are partially mitigated by the deep foundation system.

The building has a complete load path to transfer seismic forces to the foundations. In addition, the seismic system is redundant and the moment frames have the desirable strong-column/week-beam property.

Conclusion:

Based on observations made during our site visit and the results of the ASCE 41-13 Tier 1 assessment, the expected earthquake performance of the building corresponds to the University of California seismic rating of "IV" ("Fair").

Sincerely,

NABIH YOUSSEF & ASSOCIATES

Nabih Youssef, S.E.
Principal

Enclosure

References:

Structural drawings for Warner Center Plaza - Three, Robert Englekirk Consulting Structural Engineers, June 3, 1987.

Structural drawings for Steel Frame Repairs at 21650 Oxnard Street, Robert Englekirk Consulting Structural Engineers (94-041), April 9, 1996.

Seismic Hazard Zone Report for the Canoga Park 7.5-Minute Quadrangle, Los Angeles County, CA, prepared by State of California, Department of Conservation Division of Mines and Geology, Report No. 7, 1997.

State of California Seismic Hazard Zone, Canoga Park Quadrangle, February 1, 1998.

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

Photo 1 – Northwest Elevation

Photo 2 – Northeast Elevation

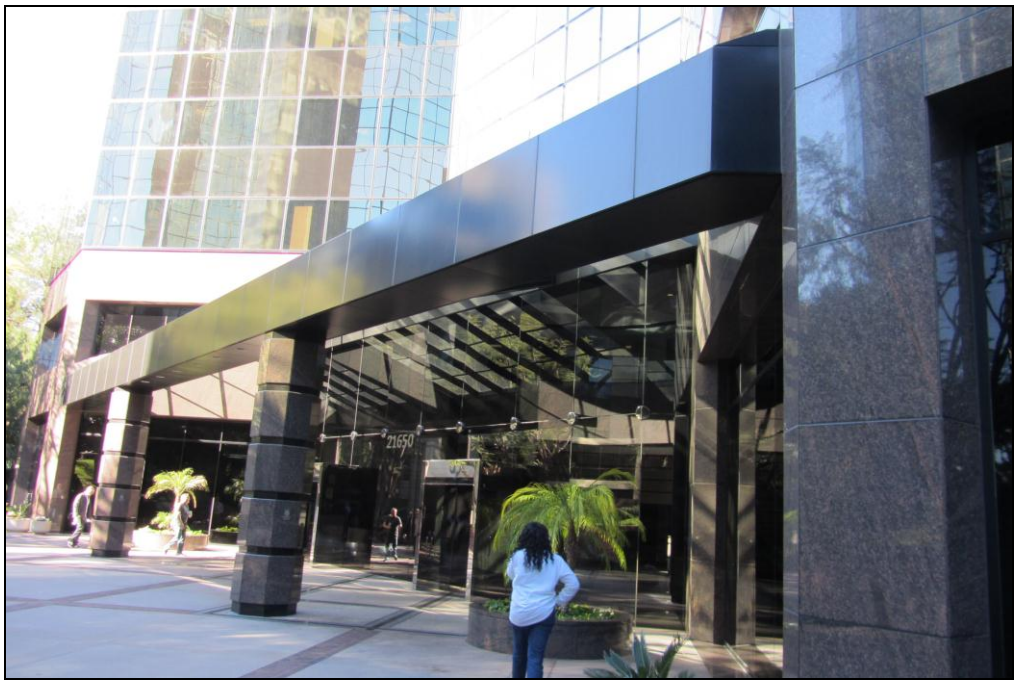

Photo 3 – Main Entrance

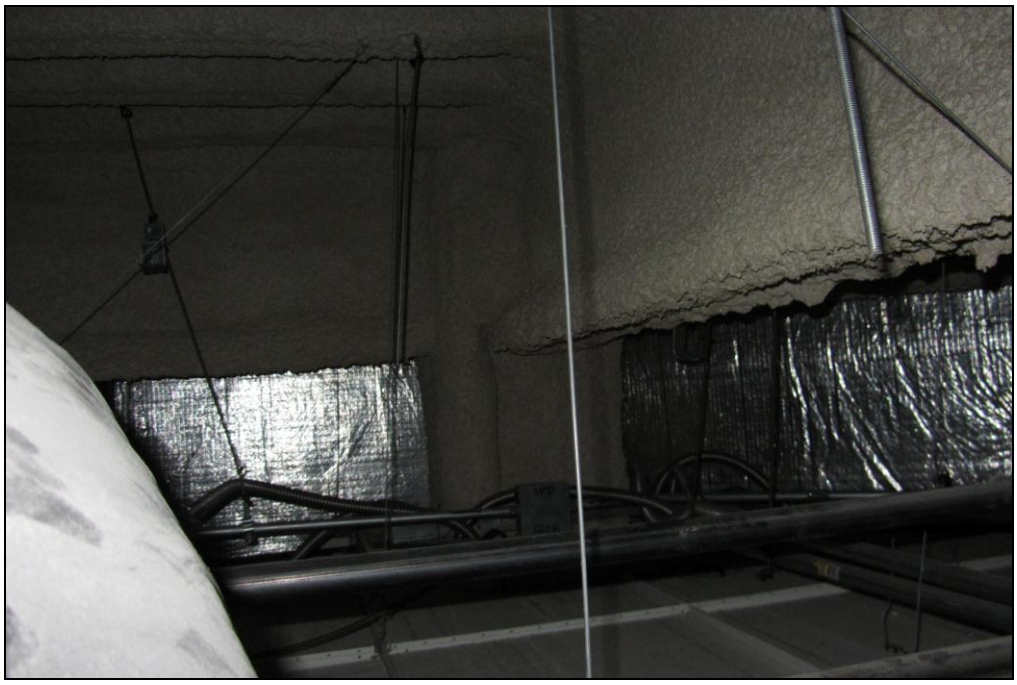

Photo 4 – Typical Beam to Column Connection

Photo 5 – Typical Beam to Column Connection

Photo 6 – Anchorage of Mechanical Equipment

Photo 7 – Anchorage of Emergency Generator

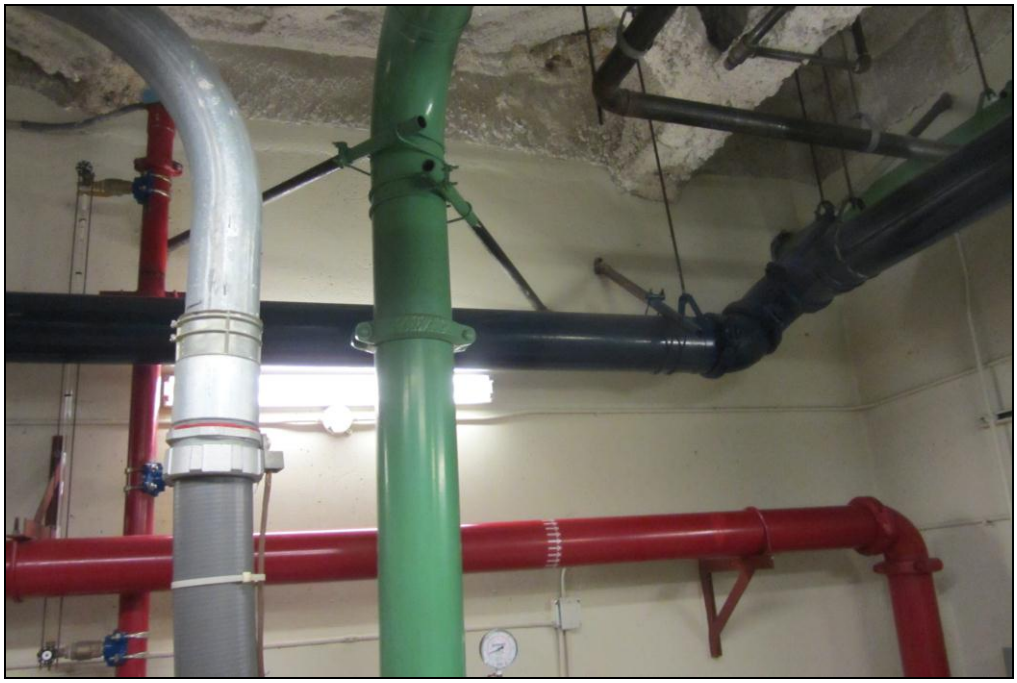

Photo 8 – Bracing of Piping Systems