May 8, 2017

Mr. Geno St. John III  
Senior Leasing Specialist  
UCLA Real Estate  
10920 Wilshire Boulevard, Suite 810  
Los Angeles, CA 90024

Re: University of California Seismic Rating for 1801 Wilshire Boulevard, Santa Monica

Dear Geno:

Nabih Youssef Associates (NYA) have performed an Independent Review of the two-story office building located at 1801 Wilshire Boulevard in Santa Monica. 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 an ASCE 41-13 Tier 1 evaluation.

Description:

The building is located on the northeast corner of the intersection of 18th Street and Wilshire Boulevard in Santa Monica. The building is part of a 5-building office complex that share a common subterranean parking level. The building is generally rectangular-shaped in-plan with overall dimensions of approximately 94 feet by 50 feet. The building was originally constructed in 1978 and likely designed to the 1976 edition of the Uniform Building Code.

The roof and second floor is constructed of structural plywood supported by 2x wood joists that span to steel beams. The steel beams are supported by steel girders and columns. The steel columns are supported at the first floor by reinforced concrete columns that are continuous to the foundation. The first floor is constructed of two-way concrete joists supported by 14” diameter interior concrete columns and 8” thick perimeter reinforced masonry walls. The foundation system consists of shallow isolated concrete spread footings under columns, continuous concrete strip footings supporting the masonry walls and a 4” reinforced concrete slab on grade.

The lateral-force-resisting system consists of the plywood roof and floor acting as structural diaphragms to transfer seismic inertial forces to distributed steel moment frames. There are two single-bay moment frames in each principal direction of the building. The moment frames utilize “pre-Northridge” welded moment connections. At the first floor, seismic shear forces are transferred through the concrete slab to the perimeter reinforced masonry walls below. Seismic overturning forces are transferred to the reinforced concrete columns directly below.

Observation:

A site visit was performed by Owen Hata of NYA on May 4, 2017, to observe the condition and characteristics of the building. The interior spaces were built-out and structural members were concealed by architectural finishes. Observations were limited to visible areas of the structure. 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 building exterior consists of stucco finish with windows. No significant 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 not 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. USGS maps indicate that the liquefaction hazard at the site is low.

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, 0.886g and 0.493g, respectively.

The building has the following noncompliant characteristics:

- Redundancy – There are two lines of single-bay, not multi-bay, moment frames in each direction. The results of the flexural stress quick check indicates that the frames provide adequate strength.
- Moment Resisting Connections – The connections are not able to develop the strength of the adjoining members or panel zones. This is common for pre-Northridge connections.
- Panel Zones – Panel zones have inadequate shear capacity to develop the flexural strength of the girders framing into the column. This is common for buildings of this vintage, as panel zone shear strength was not a design requirement.
- Strong Column/Weak Beam – Calculations indicate that the moment frames do not meet the strong column/weak beam condition. This is common for buildings of this vintage, as strong column/weak beam was not a design requirement.
- Compact Members – Not all members meet compact section requirements. This is common for buildings of this vintage, as compactness was not a design requirement.

The building has a very regular configuration with a complete load path to transfer seismic forces to the foundations. The building does not have a soft or weak story and is constructed using relatively light materials, quick checks indicate the frames have adequate strength.

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:


University of California Seismic Safety Policy, January 9, 2017.
Photo 1 – Southeast Elevation

Photo 2 – West Elevation