

April 28, 2016

Mr. Matt Ceragioli
UCLA Real Estate
10920 Wilshire Boulevard, Suite 810
Los Angeles, California 90024-6502

Subject: 10 Congress Street, Pasadena, CA
Seismic Screening Report
JLA Job no. 16130-05

Dear Mr. Ceragioli,

Per your request, John Labib + Associates Structural Engineers (JLA) performed a seismic screening of the subject existing building structure. Our services included a review of the available record drawings and a general evaluation of the structural systems of the building.

The structural drawings were not available; however the steel shop drawings and some architectural drawings were available and viewed at the building. See below for photo of the northeast elevation of the subject existing building.



Northeast elevation, 10 Congress Street, Pasadena, CA

Building Structure

The building is currently occupied and utilized as an office and medical office building. The site is relatively level. The building consists of one (1) partial level below grade and five (5) floors, a partial penthouse floor, and a roof above grade. The building perimeter consists of non-load bearing architectural brick tile and stucco steel stud and window walls.

According to the date the building was designed (1972 per architectural drawings) the structural design should be based on the 1967 Uniform Building Code. The below is a description of the structure.

Partial basement level slab on grade and foundations

The partial basement level slab on grade consists of a reinforced concrete slab supported on grade. The foundations below are reinforced concrete spread footings at the columns and reinforced concrete continuous footings at the reinforced concrete perimeter walls below grade.

First floor

The first floor slab on grade consists of a reinforced concrete slab supported on grade. The foundations below are reinforced concrete spread footings at the columns. The first floor over the partial basement could not be determined because drawings were not available; however, the floor likely consists of a steel deck and concrete slab supported by steel wide flange beams and columns.

Second through fifth floors, penthouse floor, and roof

The second through fifth floors and roof consist of a steel deck and concrete slab supported by steel wide flange beams and columns.

Lateral load resisting systems

The first floor to roof lateral system consists of the steel deck and concrete slabs acting as horizontal diaphragms from the second floor to the roof which transfer seismic inertial loads to the vertical lateral elements which consist of pre-Northridge welded steel moment frames located at four (4) perimeter sides of the structure. The steel moment frames consist of steel wide flange columns connected to steel wide flange beams.

Seismic Evaluation Criteria

The structure was generally evaluated based on the University of California Seismic Safety Policy dated September 15, 2014. The seismic policy provides 7 seismic performance ratings: I thru VII. Please refer to attached Appendix A for the information on Seismic Safety Policy & Rating.

Seismic Evaluation

- The structure has a complete load path to transfer seismic forces to the foundations.
- The roof and floor diaphragms are continuous without major openings.
- Based on our review of the existing structural drawings and our conceptual evaluation of the lateral-load-resisting system, the lateral system is adequate for the size, configuration, and age of the building. A major seismic disturbance is likely to result in structural and non-structural damage that would represent low life hazards.

Seismic Rating

IV


Limitations

This limited seismic screening was based on the review of the plans. Services were performed by JLA in a manner consistent with the level of care and skill ordinarily exercised by members of the profession currently practicing under similar conditions. The results of the structural evaluation represent our opinion and are not intended to preempt the responsibility of the original design consultants in any way. No other warranty, expressed or implied, is made.

If you have any questions, please do not hesitate to call us.

Yours truly,

John Labib & Associates



John Labib, S.E.
Principal



APPENDIX A

Earthquake Performance Levels For Existing Buildings

This series of definitions was developed by the California State University, the University of California, the California Department of General Services, and the Administrative Office of the Courts from 1995 through 2009.

Table A.1. Determination of Expected Seismic Performance Based on Structural Compliance with the 2010 Edition, California Code of Regulations, Part 2, California Building Code (CBC)

Definitions based upon California Building Code (CBC) requirements for seismic evaluation of buildings using Occupancy Categories of CBC Table 1604A.5, depending on which applies, and performance criteria in CBC Table 3417.5 ²	Rating Level ¹	
	No Peer Review ⁵	Peer Review ⁵
A building evaluated as meeting or exceeding the requirements of CBC Chapter 34 for Occupancy Category IV performance criteria with BSE-1 and BSE-2 hazard levels replacing BSE-R and BSE-C as given in Chapter 34.	I	I
A building evaluated as meeting or exceeding the requirements of CBC Chapter 34 for Occupancy Category IV performance criteria.	II	II
A building evaluated as meeting or exceeding the requirements of CBC Chapter 34 for Occupancy Category I-III performance criteria with BSE-1 and BSE-2 hazard levels replacing BSE-R and BSE-C respectively as given in Chapter 34; alternatively, a building meeting CBC requirements for a new building.	III	II^b
A building evaluated as meeting or exceeding the requirements of CBC Chapter 34 for Occupancy Category I-III performance criteria.	IV	III^b
A building evaluated as meeting or exceeding the requirements of CBC Chapter 34 for Occupancy Category I-III performance criteria only if the BSE-R and BSE-C values are reduced to 2/3 of those specified for the site.	V	IV^b
A building evaluated as not meeting the minimum requirements for Level V designation and not requiring a Level VII designation.	VI	VI
A building evaluated as posing an immediate life-safety hazard to its occupants under gravity loads. The building should be evacuated and posted as dangerous until remedial actions are taken to assure the building can support CBC prescribed dead and live loads.	VII	VII

For Notes, see page 14

Table A.2. Indications of Implied Risk to Life and Implied Seismic Damageability

Rating Level ^{1,5}	Historic Risk Ratings of ^{6,7}		Implied Risk to Life ³	Implied Seismic Damageability ⁴
	DSA/SSC ⁷	UC ⁶		
I	I		Negligible	0% to 10%
II	II		Insignificant	0% to 15%
III	III	Good	Slight	5% to 20%
IV	IV	Fair	Small	10% to 30%
V	V	Poor	Serious	20% to 50%
VI	VI	Very Poor	Severe	40% to 100%
VII	VII	Very Poor	Dangerous	100%

Notes:

1. Earthquake damageability levels are indicated by Roman numerals I through VII. Assignments are to be made following a professional assessment of the building's expected seismic performance as measured by the referenced technical standard and earthquake ground motions. Equivalent Arabic numerals, fractional values, or plus or minus values are not to be used. These assignments were prepared by a task force of state agency technical personnel, including the California State University, the University of California, the California Department of General Services, the Division of the State Architect, and the Administrative Office of the Courts. The ratings apply to structural and non-structural elements of the building as contained in Chapter 34, CBC requirements. These definitions replace those previously used by these agencies.

2. Chapter 34 of the California Building Code, current edition, regulates existing buildings. It uses and references the American Society of Civil Engineers Standard *Seismic Rehabilitation of Existing Buildings, ASCE-41*. All earthquake ground motion criteria are specific to the site of the evaluated building. The CBC definitions for earthquake ground motions to be assessed are paraphrased below for convenience:

BSE-2, the 2,475-year return period earthquake ground motion, or 150% of the Maximum Considered Earthquake ground motion for the site.

BSE-C, the 975-year return period earthquake ground motion.

BSE-1, two-thirds of the BSE-2, nominally, the 475-year return period earthquake ground motion.

BSE-R, the 225-year return period earthquake ground motion.

Occupancy Category is defined in the CBC Table 1604A.5. The occupancy category sets the level of required seismic building performance under the CBC. Occupancy Category IV includes acute care hospitals, fire, rescue and police stations and emergency vehicle garages, designated emergency shelters, emergency operations centers, and structures containing highly toxic materials where the quantities exceed the maximum allowed quantities, among others. Occupancy categories I-III includes all other building uses that include most state owned buildings.

3. Implied Risk to Life is a subjective measure of the threat of a life threatening injury or death that is expected to occur in an average building in each rank following the indicated technical requirements. The terms negligible through dangerous are not specifically defined, but are linguistic indications of the relative degree of hazard posed to an individual occupant.

4. Implied Damageability is the level of damage expected to the average building in each rank following the indicated technical requirements when a BSE-1 level earthquake occurs. The damage includes both the structural and non-structural systems, but does not consider furnishing and tenant contents. Damage is measured as the ratio of the cost to repair the building divided by the current cost to reconstruct the building from scratch. Such assessments are to be completed to the requirements of ASTM E-2026 at ASTM Level 1 or higher in order to be considered appropriate, where the damage ratio is the Scenario Expected Loss (SEL) in the BSE-1 earthquake ground motion evaluated. ASTM E2026 is the standard for evaluating the seismic damageability of buildings for financial transactions.

5. In those cases where the engineer making the assessment using the requirements for a given Rating Level concludes that the expected seismic performance is consistent with a one-level higher or lower rating, this alternative Rating Level may be assigned if and only if an independent technical peer reviewer concurs in the evaluation. The peer review must be completed consistent with the requirements of Chapter 34 of the CBC. It is

anticipated that most projects that are independently peer reviewed from the initiation of the evaluation and/or design process will qualify for a higher Rating than those buildings, which have not been so reviewed at all. The second column under Peer Review the Ratings have been assigned when this occurs. Note that peer review is unlikely to improve buildings rated as VI or VII because they have fundamental seismic system flaws. The ratings for I and II are not changed because the performance increment between levels is so large.

6. Historically the University of California has used the terms good, fair, poor and very poor to distinguish the relative seismic performance of buildings. The concordance of values in the table above is approximate. The former rating procedures did not provide specific performance levels as is done herein, but were sentence fragments for qualitative performance and are recalled below for historical purposes only:

A *Good* seismic performance rating would apply to buildings and other structures whose performance during a major seismic disturbance is anticipated to result in some structural and/or nonstructural damage and/or falling hazards that would not /significantly/ jeopardize life. Buildings and other structures with a *Good* rating would have a level of seismic resistance such that funds need not be spent to improve their seismic resistance to gain greater life safety, and would represent an acceptable level of earthquake safety.

A *Fair* seismic performance rating would apply to buildings and other structures whose performance during a major seismic disturbance is anticipated to result in structural and nonstructural damage and/or falling hazards that would represent /low/ life hazards. Buildings and other structures with a *Fair* seismic performance rating would be given a low priority for expenditures to improve their seismic resistance and/or to reduce falling hazards so that the building could be reclassified *Good*.

A *Poor* seismic performance rating would apply to buildings and other structures whose performance during a major seismic disturbance is anticipated to result in significant structural and nonstructural damage and/or falling hazards that would represent appreciable life hazards. Such buildings or structures either would be given a high priority for expenditures to improve their seismic resistance and/or to reduce falling hazards so that the building could be reclassified as *Good*, or would be considered for other abatement programs, such as reduction of occupancy.

A *Very Poor* seismic performance rating would apply to buildings and other structures whose performance during a major seismic disturbance is anticipated to result in /extensive/ structural and nonstructural damage, potential structural collapse, and/or falling hazards that would represent /high/ life hazards. Such buildings or structures either would be given the highest priority for expenditures to improve their seismic resistance and/or to reduce falling hazards so that the building could be reclassified *Good*, or would be considered for other abatement programs such as reduction of occupancy.

7. For reference, the historically used Division of the State Architect and Seismic Safety Commission levels corresponds approximately to the new Performance Level numerical values in this table.