

May 30, 2014

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

Subject: 4201 Torrance Blvd, Torrance, CA  
Seismic Screening Report  
JLA Job no. 14110-12

Dear Mr. Ceragioli,

Per your request, we performed a seismic screening of the existing building located at 4201 Torrance Boulevard in Torrance, California. Our services included a review of the available record drawings and a general evaluation of the structural systems of the building.

Building Description

The structural drawings available and the basis of the review included S-1 to S-8, dated 02/11/1974, and prepared by Steinbrugge and Thomas, Inc., Structural Engineering.



*Figure 1 – Southeast Elevation of 4201 Torrance Blvd in Torrance, CA.*

The building site is relatively level. The building consists of one level at grade (first floor), and eight levels above grade (second to seventh floors, roof/penthouse floor, and partial level penthouse roof). The building perimeter above grade consists of a combination of non-load bearing glass curtain wall and steel stud supported walls with architectural finish. Canopies occur at the second floor beyond the footprint of the building over the east and west entrances to the building.

### Building Structure

The building was constructed in the mid 1970s with a structural design based on the 1970 Uniform Building Code, according to the structural drawings.

#### *Second Floor to Penthouse Roof:*

The second to seventh floors and the penthouse floor area at the roof level consist of reinforced concrete over steel deck and the roof and penthouse roof consist of insulating concrete over metal deck supported by steel wide flange beams, girders and columns. The exterior second floor canopies consist of insulating concrete over metal deck supported by steel channels and wide flange beams and tube columns

#### *First Floor and Foundations:*

The first floor is a reinforced concrete slab supported on grade. The foundations below are reinforced concrete spread footings with reinforced concrete piers below the steel columns and reinforced concrete tie beams between the reinforced concrete piers. The perimeter steel columns from the first to second floor are encased in concrete with minimal reinforcing steel that appears to be architectural and not structural.

#### *Seismic and Wind Lateral Load Resisting-Systems:*

The seismic and wind lateral load resisting system consists of the horizontal concrete over steel deck diaphragms at the second to seventh floors and insulating concrete over metal deck diaphragms at the roof that transfer seismic and wind forces to the perimeter vertical Pre-Northridge Earthquake special welded steel moment frames. The frames consist of wide flange columns connected to wide flange beams from the third to roof and moment truss at the second floor.

### Seismic Evaluation Criteria

The structure was generally evaluated based on the University of California Seismic Safety Policy dated August 25, 2011. The seismic policy provides 7 seismic performance ratings: I thru VII. Please refer to attached Appendix A for info 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

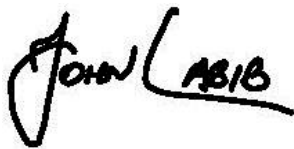
### Limitations

This limited seismic screening was based on our 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 structural observations and recommendations 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.  
President



## 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 <sup>2</sup>	Rating Level <sup>1</sup>	
	No Peer Review <sup>5</sup>	Peer Review <sup>5</sup>
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 <sup>b</sup>
A building evaluated as meeting or exceeding the requirements of CBC Chapter 34 for Occupancy Category I-III performance criteria.	IV	III <sup>b</sup>
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 <sup>b</sup>
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 <sup>1,5</sup>	Historic Risk Ratings of <sup>6,7</sup>		Implied Risk to Life <sup>3</sup>	Implied Seismic Damageability <sup>4</sup>
	DSA/SSC <sup>7</sup>	UC <sup>6</sup>		
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.