INTER-DEPARTMENTAL CORRESPONDENCE

Date: March 28, 2024

To: Municipal Facilities Committee

From: Steven Fierce, AIA

Municipal Facilities Program Manager

Bureau of Engineering

Ohaji K. Abdallah, Asst. Div Mngr.

Ohazi K. Abdallah, R.A.

Subject: PROJECT ESTABLISHMENT AND FUNDING REQUEST - NON-DUCTILE

CONCRETE STRUCTURAL RETROFIT PROJECT FOR MULTIPLE CITY

OWNED BUILDINGS – W.O E1908738

RECOMMENDATIONS

That the Municipal Facilities Committee (MFC):

- 1. Approve the establishment of the project due to Ordinance 183983.
- 2. Approve a design budget of \$1,600,000 to produce feasibility studies, cost estimates, and construction drawings for the structural retrofit or demolition of eight (8) non-ductile concrete buildings owned by the City, as applied for in the Fiscal Year 2024-25 CTIEP Budget.
- 3. Approve the proposed phased scheduling to either retrofit or demolish Non-Ductile Concrete Buildings as detailed in this report.
- 4. Approve the Bureau of Engineering (BOE) to move forward with soliciting consultants from the BOE Pre-Qualified On-Call (PQOC) Consultant list to conduct feasibility studies, develop permitted designs, and construction estimates to either retrofit or demolish eight (8) non-ductile concrete buildings owned by the City.





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BACKGROUND

The City of Los Angeles passed Ordinance 183893 (Transmittal No.1) in response to the Northridge, Mexico City, and Christchurch New Zealand earthquakes. These earthquakes revealed the inability of older concrete buildings to perform during earthquakes and sustain gravity loads, resulting in poor seismic performance and building collapse. Ordinance 183893 was passed in 2015, establishing mandatory standards for earthquake hazard reduction in existing wood frame buildings and existing non-ductile concrete buildings. All existing buildings would need to comply with or be retrofitted to meet the performance requirements of Ordinance 183893.

Ordinance 183893 established the following compliance requirements for non-ductile concrete buildings:

- 1. Step 1: Within three (3) years of the Order-To-Comply (OTC) notification, the building owner shall submit a completed non-ductile concrete building checklist to LADBS for approval
- 2. Step 2: If the building is deemed to be a non-ductile concrete building, then within ten (10) years of notification, the building owner shall submit documentation showing that the building was previously retrofitted to perform beyond the requirements set forth in Ordinance 183893; or building plans showing a proposed alteration that complies with the performance requirements outlined in Ordinance 183983; or plans for demolition of the building as outlined in Ordinance 183983
- 3. Step 3: Within twenty-five (25) years of notification, the building owner shall complete all necessary demolition or retrofit work for the building.

In 2019, the Los Angeles Building Department (LADBS) identified twenty-one (21) City-owned buildings that possibly could be categorized as a non-ductile concrete building. OTC's were provided to BOE who was tasked with managing the project and soliciting consultants through a Task Order Solicitation to address Step 1 of Ordinance 183983. BOE distributed a Task Order Solicitation in 2019 but no consultants responded with a proposal for the work. Subsequently, the BOE performed Step 1 internally by utilizing its Structural Engineering Division. Checklists for these buildings were submitted to LADBS intermittently and were completed for review by 2023.

Of the twenty-one (21) buildings, fourteen (14) City-owned buildings qualified as non-ductile concrete buildings. These buildings are listed in the table below.

No.	BUILDING ADDRESS	COUNCIL	ORDER TO COMPLY (OTC) DATE	STEP 1 DUE	STEP 2 DUE	STEP 3 DUE
140.	DOILDING ADDICESS	DISTRICT	DAIL	DAIL	DAIL	DAIL
1	2800 E OBSERVATORY RD	4	12/4/2017	12/4/2020	12/4/2027	12/4/2042
		_				
2	401 N AVE 19	1	12/11/2017	12/11/2020	12/11/2027	12/11/2042
3	411 N VERMONT AVE	13	12/26/2017	12/26/2020	12/26/2027	12/26/2042
4	703 BANNING ST	14	12/26/2017	12/26/2020	12/26/2027	12/26/2042

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5	402 S OLIVE ST	14	1/4/2018	5/8/2021	1/4/2028	1/4/2043
	3910 W MARTIN LUTHER					
6	KING JR BLVD	10	1/4/2018	1/4/2021	1/4/2028	1/4/2043
7	3341 W 43RD PL	10	1/4/2018	1/3/2021	1/4/2028	1/4/2043
8	460 W 6TH ST	15	1/30/2018	5/8/2021	1/30/2028	1/30/2043
9	2701 N VERMONT AVE	4	10/15/2018	10/15/2021	10/15/2028	10/15/2043
10	501 S BIXEL STREET	1	10/15/2018	10/15/2021	10/15/2028	10/15/2043
	310 N NORTH MAIN					
11	STREET	14	11/28/2018	11/28/2021	11/28/2028	11/28/2043
12	200 N MAIN STREET	14	11/28/2018	11/28/2021	11/28/2028	11/28/2043
13	200 N MAIN STREET	14	11/28/2018	11/28/2021	11/28/2028	11/28/2043
14	111 E 1ST STREET	14	11/28/2018	11/28/2021	11/28/2028	11/28/2043

DISCUSSION

Per Ordinance No. 183983, BOE will need to prepare retrofit plans or demolition plans for each of these non-ductile concrete buildings. In consultation with BOE's Structural Engineering Division, it was revealed that seismic retrofit costs for each of the non-ductile concrete buildings vary significantly because of the unique build of each structure and historic status.

Due to the variation in building design and construction costs for each seismic retrofit, BOE proposes a two-phased approach.

- Phase 1: Conduct a feasibility study, complete design for either retrofit or demolition, and develop cost estimates.
- Phase 2: Complete construction of either retrofit or demolition

Feasibility studies would address what kind of retrofit is needed in each building and inform the City on whether demolition of the building or retrofit design plans would be needed. The hired consultant's scope for each building will be to conduct a feasibility study, complete designs for either demolition or retrofit, and develop cost estimates. BOE estimates that Phase 1 would cost no more than \$200,000 per building. There will be a variance in cost for Phase 1 depending on whether a building is demolished or retrofitted. BOE may need to request additional funding to complete Phase 1 if retrofit design or demolition design costs exceed the anticipated proposed budget.

Each non-ductile concrete building has a different completion timeline to abide to Ordinance 183983's requirements. To address the requirements, BOE will issue Task Order Solicitations to produce schematic designs by chronological order based on the time the OTC for each building was issued. Eight (8) of the buildings will require retrofit or demolition plans to be permitted no later than December 2027. These eight (8) buildings have been grouped into Group 1 and Group

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2. The remaining six (6) buildings require retrofit or demolition plans to be permitted by October 2028, which are grouped into Group 3. BOE has requested \$1,600,000 in the 2024-25 CTIEP and seeks approval for the use of funding to address the initial eight (8) non-ductile concrete buildings in both Group 1 and Group 2.

No.	BUILDING ADDRESS	BUILDING NAME	COUNCIL DISTRICT		
	GROUP 1				
1	2800 E OBSERVATORY RD	GRIFFITH OBSERVATORY	4		
2	401 N AVE 19	LINCOLN HEIGHTS JAIL	1		
3	411 N VERMONT AVE	DEPARTMENT OF TRANSPORTATION	13		
4	703 BANNING ST	PERSONNEL BUILDING	14		
		GROUP 2			
5	402 S OLIVE ST	DEPARTMENT OF TRANSPORTATION	14		
	3910 W MARTIN LUTHER KING JR	FOUNDERS BANK			
6	BLVD		10		
7	3341 W 43RD PL	VISION THEATRE	10		
8	460 W 6TH ST	PERSHING SQUARE	15		
		GROUP 3			
9	2701 N VERMONT AVE	GREEK THEATRE	4		
		CITY FACILITY LEASED TO NON-PROFIT			
10	501 S BIXEL STREET	ENTITIES	1		
11	310 N NORTH MAIN STREET	LA MALL	14		
12	200 N MAIN STREET	CITY HALL	14		
13	200 N MAIN STREET	CITY HALL EAST	14		
14	111 E 1ST STREET	CITY HALL SOUTH	14		

PROPOSED FUNDING

\$1.6 Million dollars was requested in the FY 24-25 City Budget to fund the Pre- Design and Design activities for the eight (8) prioritized projects previously noted. Due to the uncertainty of the design deliverable scope for each project, an allowance of \$200,000 per project is recommended at this time. The feasibility study will inform the design approach for each project and the design fees will be negotiated at that time.

A CTIEP request to fund the pre-design and design costs for the remaining six (6) buildings will be made in fiscal year 2025-26.

SCHEDULE

The fourteen (14) projects have been grouped according to Ordinance requirements. Group 1 and Group 2 (8 buildings total) will initiate Phase 1 once funding is appropriated per the FY 24-25 CTIEP request. It is anticipated that upon completion of Phase 1 for Group 1 and Group 2, another

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CTIEP request will be submitted to initiate the construction, Phase 2, of either the structural retrofit construction or demolition of both Group 1 and Group 2 buildings. Simultaneously, BOE anticipates initiating Phase 1 for Group 3 (6 buildings total) in Fiscal Year 2025-2026.

No.	BUILDING ADDRESS	COUNCIL DISTRICT	PHASE 1 START DATE	PHASE 1 END DATE	PHASE 2 START	PHASE 2 END
GROUP 1						
1	2800 E OBSERVATORY RD	4	7/01/2024	7/31/2026	7/31/2026	5/04/2029
2	401 N AVE 19	1	7/01/2024	7/31/2026	7/31/2026	5/04/2029
3	411 N VERMONT AVE	13	7/01/2024	7/31/2026	7/31/2026	5/04/2029
4	703 BANNING ST	14	7/01/2024	7/31/2026	7/31/2026	5/04/2029
			GROUP 2			
5	402 S OLIVE ST	14	7/01/2024	7/31/2026	7/31/2026	5/04/2029
6	3910 W MARTIN LUTHER KING JR BLVD	10	7/01/2024	7/31/2026	7/31/2026	5/04/2029
7	3341 W 43RD PL	10	7/01/2024	7/31/2026	7/31/2026	5/04/2029
8	460 W 6TH ST	15	7/01/2024	7/31/2026	7/31/2026	5/04/2029
GROUP 3						
9	2701 N VERMONT AVE	4	3/07/2025	4/07/2027	4/07/2027	1/08/30
10	501 S BIXEL STREET	1	3/07/2025	4/07/2027	4/07/2027	1/08/30
11	310 N NORTH MAIN STREET	14	3/07/2025	4/07/2027	4/07/2027	1/08/30
12	200 N MAIN STREET	14	3/07/2025	4/07/2027	4/07/2027	1/08/30
13	200 N MAIN STREET	14	3/07/2025	4/07/2027	4/07/2027	1/08/30
14	111 E 1ST STREET	14	3/07/2025	4/07/2027	4/07/2027	1/08/30

A detailed project schedule is attached herein as Transmittal No. 2

KEY ISSUE

Based on Ordinance 183983 and the City's need to comply, BOE recommends that the MFC Committee approve the project budget for design of \$1,600,000 to initiate Phase 1 for eight (8) buildings.

The BOE will present to the MFC an update to the design approach, estimated construction costs, and proposed project schedule, upon completion of the feasibility studies.

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Attachments:

Transmittal 1: Ordinance 183983

Transmittal 2: 2024.03.14_Project Schedule for CTIEP 2024-2025 v5

CC:

Bernyce Hollins, Mayors Office
Albert Griego, City Administrator's Office
Elis Lee, City Administrator's Office
Ted Allen, City Engineer Bureau of Engineering
Deborah Weintraub, Bureau of Engineering
Marina Quiñonez, Bureau of Engineering
Ohaji K. Abdallah, Bureau of Engineering
Adrian Hwang, Bureau of Engineering
Melvin Agagas, Bureau of Engineering

ORDINANCE NO.	183893

An ordinance amending Divisions 93 and 95 of Article I of Chapter IX of the Los Angeles Municipal Code to establish mandatory standards for earthquake hazard reduction in existing wood-frame buildings with soft, weak, or open-front walls and existing non-ductile concrete buildings, and amending Sections 152.02, 152.04, 152.05 and 152.08 of Article 2 of Chapter XV of the Los Angeles Municipal Code to grant authority to the Rental Adjustment Commission to modify Tenant Habitability Program requirements for purposes of implementing seismic retrofit mandates.

THE PEOPLE OF THE CITY OF LOS ANGELES DO ORDAIN AS FOLLOWS:

Section 1. Division 93 of Article 1 of Chapter IX of the Los Angeles Municipal Code is amended in its entirety to read as follows:

ARTICLE 1, DIVISION 93

MANDATORY EARTHQUAKE HAZARD REDUCTION IN EXISTING WOOD-FRAME BUILDINGS WITH SOFT, WEAK OR OPEN-FRONT WALLS

SEC. 91.9301. PURPOSE.

The purpose of this division is to promote public welfare and safety by reducing the risk of death or injury that may result from the effects of earthquakes on existing wood-frame multi-story buildings with soft, weak or open front walls. In the Northridge Earthquake, many multi-story wood-frame buildings with tuck-under parking performed poorly and collapsed, causing the loss of human life, personal injury and property damage. It has been determined that the structural vulnerability of this building type is typically due to soft, weak or open front walls. This division creates minimum standards to mitigate hazards from these deficiencies. Adherence to these minimum standards will improve the performance of these buildings during earthquakes and reduce, but not necessarily prevent, the loss of life, injury or earthquake-related damage.

SEC. 91.9302. SCOPE.

The provisions of this division shall apply to all existing buildings of wood-frame construction, or wood-frame portions thereof, where:

1. A permit for construction of a new building was applied for before January 1, 1978, or, if no permit can be located, the structure is determined by the Department to have been built under building code standards enacted before January 1, 1978; and

2. The ground floor portion of the structure contains parking or other similar open floor space that causes soft, weak or open-front wall lines, and there exists one or more stories above.

EXCEPTIONS: This division shall not apply to any building containing three dwelling units or less if the building is used solely for residential purposes. Moreover, notwithstanding any provision of this Code, compliance with this division shall not require existing electrical, plumbing, mechanical or fire-safety systems to be altered to comply with existing code unless they constitute a hazard to life or property.

SEC. 91.9303. DEFINITIONS.

The following words and phrases, whenever used in this division, shall be construed as defined in this section. Words and phrases not defined here shall be construed as defined in Division 2 of this Code.

CRIPPLE WALL is a wood-framed stud wall extending from the top of the foundation wall to the underside of the lowest floor framing of the building.

DWELLING UNIT shall include any individual residential unit within either an R-1 or R-2 occupancy building, including a mixed-occupancy building when part of it is either an R-1 or R-2 occupancy. A dwelling unit shall include the area of a building that is occupied as a dwelling unit, whether the building is approved or unapproved for residential use.

GROUND FLOOR is any floor within the wood-frame portion of a building whose elevation is immediately accessible from an adjacent grade by vehicles or pedestrians. The ground floor portion of the structure does not include any floor that is completely below adjacent grades.

OPEN-FRONT WALL LINE is an exterior wall line, without vertical elements of the lateral force-resisting system, which requires tributary seismic forces to be resisted by diaphragm rotation or excessive cantilever beyond parallel lines of shear walls. Diaphragms that cantilever more than 25 percent of the distance between lines of lateral force resisting elements from which the diaphragm cantilevers shall be considered excessive. Exterior exit balconies of six feet or less in width shall not be considered excessive cantilevers.

QUALIFIED HISTORICAL BUILDING is any building designated or currently in the process of being designated as a "qualified historical building" as defined in Part 8, Title 24 of the California Code of Regulations.

RETROFIT is an improvement of the lateral force-resisting system by alteration of existing structural elements or addition of new structural elements.

SOFT WALL LINE is a wall line, the lateral stiffness of which is less than what is required by story drift limitations or deformation compatibility requirements of this division. In lieu of the engineering analysis required by this division to determine whether a wall line's lateral stiffness is less than the aforementioned story drift limitations or deformation compatibility requirements, a soft wall line may be defined as a wall line in a story where the wall stiffness is less than 70 percent of the stiffness of the exterior wall above for the direction under consideration.

STORY is as defined in this Code, but includes any basement or underfloor space of a building with cripple walls exceeding four feet in height.

STORY STRENGTH is the total strength of all seismic-resisting elements sharing the same story shear in the direction under consideration.

WALL LINE is any length of a wall along a principal axis of the building used to provide resistance to lateral loads.

WEAK WALL LINE is a wall line at the ground floor where the wall strength is less than 80 percent of the strength of the wall above in the direction under consideration.

SEC. 91.9304. PRIORITY DESIGNATIONS.

The Department shall prioritize its enforcement of this division as follows:

Priority I. Buildings containing 16 or more dwelling units.

Priority II. Buildings with three stories or more, containing fewer than 16

dwelling units.

Priority III. Buildings not falling within the definition of Priority I or II.

SEC. 91.9305. COMPLIANCE REQUIREMENTS.

91.9305.1. General. The owner of each building within the scope of this division shall cause a structural analysis to be made of the building by a civil or structural engineer or architect licensed by the state of California, and if the building does not meet the minimum earthquake standards specified in this division, the owner shall cause the building to be structurally altered to conform to such standards or, at the owner's option, cause it to be demolished within the time limits stated in Section 91.9305.2.

- **91.9305.2.** Time Limits for Compliance. The owner of a building within the scope of this division shall comply with its requirements within the following time limits:
 - 1. Within one (1) year after service of the order described in Section 91.9306, submit to the Department for review and approval:

- a. A structural analysis and plans which shall demonstrate the building, as is, meets or exceeds the requirements set forth in Section 91.9309; or
- b. A structural analysis and plans which shall demonstrate that the proposed structural alteration of the building meets or exceeds the requirements set forth in Section 91.9309; or
 - c. Plans for the demolition of the building.
- 2. Within two (2) years after service of the order, obtain all necessary permits for rehabilitation or demolition.
- 3. Within seven (7) years after service of the order, complete construction or demolition work under all necessary permits.

Time limits for compliance shall be based on the service date of the original order from the Department. Transfer of title shall not change compliance dates.

SEC. 91.9306. ADMINISTRATION.

- **91.9306.1.** Issuance of Order. When the Department determines that a building is within the scope of this division, the Department shall issue an order as described in Section 91.9306.4 to the owner of the building.
- **91.9306.2. Service of Order.** The Department shall serve the order in writing, either personally or by certified or registered mail, upon the owner as shown on the last equalized assessment roll. Service by mail shall be deemed complete at the time of deposit in the post office. Proof of giving notice may be made by an affidavit of an employee of the City that shows service in conformity with this division.
- **91.9306.3.** Failure to Receive Order. Failure of the owner to receive an order shall not relieve the owner of any obligation to comply with this division.
- **91.9306.4.** Contents of Order. The order shall specify that the building has been determined by the Department to be within the scope of this division and, therefore, is required to meet the minimum seismic standards described in Section 91.9309. The order shall specify the priority designation of the building and shall be accompanied by a copy of Section 91.9305, which sets forth the owner's alternatives and time limits for compliance.
- **91.9306.5. Appeal from Order.** The owner of any building subject to this division may appeal the Department's initial determination that the building is within the scope of this division to the Board of Building and Safety Commissioners. Such appeal shall be filed with the Board within 60 days from the service date of the order. Any such appeal shall be decided by the Board no later than 60 days after the date that the appeal is

filed. Such appeal shall be made in writing upon appropriate forms provided by the Department, and the grounds of the appeal shall be stated clearly and concisely. Each appeal shall be accompanied by a filing fee as set forth in Table No. 4-A of Division 4 of Article 8 of Chapter IX of the Los Angeles Municipal Code.

Requests for slight modifications from any other determinations, orders or actions by the Department pursuant to this division shall be made in accordance with the procedures established in Section 98.0403.2 of the Los Angeles Municipal Code.

91.9306.6. Recordation. At the time that the Department serves the order described in this section, the Department shall file with the Office of the County Recorder a certificate stating that the subject building has been determined to be within the scope of this division, and that it has been ordered to be structurally analyzed and structurally altered or demolished (if the owner so decides), pursuant to Section 91.9305.2, if the Department determines that it does not conform to the minimum design standards of this division.

The Department shall file with the Office of the County Recorder a certificate terminating the above recorded status of the subject building if the building is thereafter demolished by owner pursuant to Section 91.9305.2, found not to be within the scope of this division, or is determined to be structurally capable of resisting minimum seismic forces as a result of structural alterations or analysis required by this division.

SEC. 91.9307. OCCUPANT AND TENANT ADVISORY.

91.9307.1. Notification to Tenants and Occupants. When the Department determines that a building falls within the scope of this division, the owner shall advise all current and prospective residential and non-residential tenants, subtenants, lessees, sublessees, or any other person(s) entitled to the use and/or occupancy of the building of such determination. With respect to current and prospective residential tenants, subtenants, lessees, sublessees, or other person(s) entitled to the use and/or occupancy of the building, the property owner shall advise such persons of the Department's determination in a method and written format approved and promulgated by the Los Angeles Housing and Community Investment Department. With respect to current and prospective non-residential tenants, subtenants, lessees, sublessees, or other person(s) entitled to the use and/or occupancy of the building, the owner shall advise such persons of the Department's determination in a method and written format approved and promulgated by the Department.

91.9307.2. Tenant Habitability Plan. If required by the Rent Stabilization Ordinance, the property owner shall be required to submit to the Los Angeles Housing and Community Investment Department a Tenant Habitability Plan pursuant to Article 2, Chapter XV of the Los Angeles Municipal Code (L.A.M.C. Section 152.03B). If, upon review of the Tenant Habitability Plan, it is determined by the Los Angeles Housing and Community Investment Department that work required under this division affects the tenantability of any building or residential unit as defined in California Civil Code Section

1941.1, the owner shall be required to pay relocation benefits pursuant to Article 1, Chapter XV of the Los Angeles Municipal Code (L.A.M.C. Section 151.09G) to any tenant, subtenant, lessee, sublessee, or other person(s) entitled to the use and/or occupancy of the building that is affected by the untenantable conditions or displaced from the residential unit. However, the mere undertaking and completion of work performed by the owner pursuant to this division shall not, in and of itself, result in any building or residential unit being deemed untenantable or uninhabitable as defined in California Civil Code Section 1941.1.

SEC. 91,9308. HISTORICAL BULDINGS.

Qualified historical buildings shall comply with requirements of the California Historical Building Code established under Part 8, Title 24 of the California Code of Regulations.

SEC. 91.9309. ENGINEERING ANALYSIS.

- **91.9309.1.** Scope of Analysis. This division requires the alteration, repair, replacement or addition of structural elements and their connections to meet the strength and stiffness in conformance with this Code except as modified herein. The lateral-load-path analysis shall include the resisting elements and connections from the wood diaphragm immediately above any soft, weak or open wall lines to the foundation. Stories above the weak wall line shall be considered in the analysis but need not be modified.
- **91.9309.2. Design Base Shear and Design Parameters.** The design force in a given direction shall be 75% of the design base shear specified in the seismic provision of ASCE 7.
- **91.9309.3.** Lateral Vertical Systems. Strengthening systems with concrete walls or masonry walls, or steel braced frames shall be not be permitted.
- **91.9309.4.** Horizontal Structural Irregularities in Buildings with Three or More Stories. Structures with three or more stories having horizontal structural irregularities of either type 2, 3, 4, or 5 listed in ASCE 7, "Horizontal Structural Irregularities" Table, shall be altered to meet the additional requirements of those sections referenced in the table for the entire story with weak or open wall lines.
- **91.9309.5.** Alternate Analysis, Base Shear and Design Parameters. Pursuant to Section 91.104.2.6, the Department may approve alternate design methodologies that improve the whole first story seismic performance that are at least equivalent to those prescribed by this division and that achieve the life safety objectives established by this division.
- **91.9309.6.** Additional Anchorage Requirements for Buildings on Hillsides. Where any portion of a building within the scope of this division is constructed on or into a

slope steeper than one unit vertical in three units horizontal (33-percent slope), the lateral-force-resisting system, at and below the base level diaphragm, shall also be analyzed for the effects of concentrated lateral loads caused at the building base from the hillside conditions and comply with the provisions of Chapter 94 of the Los Angeles Building Code.

- **91.9309.7. Story Drift Limitations.** The calculated story drift for each retrofitted story shall not exceed the allowable deformation compatible with all vertical load-resisting elements and 0.025 times the story height. The calculated story drift shall not be reduced by the effects of horizontal diaphragm stiffness, but shall be increased when these effects produce rotation. Drift calculations shall be in accordance with ASCE 7 requirements.
- **91.9309.8.** Pole Structures. The effects of rotation and soil stiffness shall be included in the calculated story drift where lateral loads are resisted by vertical elements whose required depth of embedment is determined by pole formulas. The coefficient of subgrade reaction used in deflection calculations shall be based on an approved geotechnical investigation conducted in accordance with approved geotechnical engineering reports.
- **91.9309.9. P-Delta Effect.** The requirements of the Los Angeles Building Code shall apply, except as modified herein. All structural framing elements and their connections not required by the design to be part of the lateral force resisting system shall be designed and detailed to be adequate to maintain support of design dead plus live loads when subject to the expected deformations caused by seismic forces. The stress analysis of cantilever columns shall use an effective length factor of 2.1 for the direction normal to the axis of the beam.
- **91.9309.10.** Ties, Continuity and Collectors. All parts of the structure included in the scope of analysis shall be interconnected and the connection shall be capable of resisting the seismic force created by the parts being connected as required per the Los Angeles Building Code.

SEC. 91.9310. INFORMATION REQUIRED ON PLANS.

- **91.9310.1.** General. For existing and new construction, the plans and specifications shall be of sufficient clarity to indicate the nature, design methodology, and extent of the proposed work and to show in detail that it will conform to the provisions of this division and the Los Angeles Building Code.
- **91.9310.2.** Engineer's or Architect's Statement. The responsible engineer or architect shall provide the following statements on the approved plans:
 - 1. I am responsible for designing this building's seismic strengthening in compliance with the minimum standards of the Mandatory Earthquake Hazard

Reduction In Existing	Wood-Frame	Buildings w	vith Soft,	Weak or	Open-Front
Walls (Ordinance No.					

SEC. 91.9311. VIOLATION/PENALTY.

Notwithstanding any other provision of this Code to the contrary, it shall be unlawful for any person, firm or corporation to maintain, use or occupy any building within the scope of this division that fails to meet the minimum earthquake standards specified in this division after receiving an order described in Section 91.9306.

Any person who violates or causes or permits another person to violate this division is guilty of a misdemeanor, and shall be subject to prosecution and/or administrative enforcement under the Los Angeles Municipal Code. For purposes of this paragraph, "any person" includes an owner, lessor, sublessor, manager or person in control of a building subject to this division. This term shall not include any person who is merely a tenant or other individual occupying any dwelling unit, efficiency dwelling unit, guest room or suite in a building. The legal owner of a building is that person, firm, corporation, partnership or other entity whose name or title appears on the record with the Office of the County Recorder, as well as all successors or assignees of these persons.

EXCEPTION: This section shall not apply to any building on which work is proceeding in compliance with the time limits set forth in this division, or in compliance with any extensions of time granted by the Department or the Board; or any action, order or determination made by the Department or the Board in the implementation of this division.

SEC. 91.9312. SEVERABILITY.

If any subsection, sentence, clause or phrase of this article is for any reason held to be invalid or unconstitutional by a court of competent jurisdiction or by reason of any preemptive legislation, such decision or legislation shall not affect the validity of the remaining portions of this ordinance. The City Council hereby declares that it would have adopted this section, and each and every subsection, sentence, clause and phrase thereof not declared invalid or unconstitutional, without regard to whether any portion of the ordinance would be subsequently declared invalid or unconstitutional.

Sec. 2. Division 95 of Article 1 of Chapter IX of the Los Angeles Municipal Code is amended in its entirety to read as follows:

ARTICLE 1, DIVISION 95

MANDATORY EARTHQUAKE HAZARD REDUCTION IN EXISTING NON-DUCTILE CONCRETE BUILDINGS

SEC. 91.9501. PURPOSE.

The purpose of this division is to promote the public welfare and safety by reducing the risk of death or injury that may result from the effects of earthquakes on existing concrete buildings. In the Northridge Earthquake, many concrete buildings constructed prior to the 1976 Los Angeles City Building Code provisions performed poorly and collapsed, causing loss of human life, personal injury and property damage. Similar loss of life, injury and property damage occurred in the Great Hanshin Earthquake, Mexico City Earthquake, and Christchurch New Zealand Earthquake due to the outdated building codes in those communities. The poor performance of these older concrete buildings is typically due to deficiencies in the lateral force resisting system (beams, columns and joints) that render the building incapable of sustaining gravity loads when the building is subjected to earthquake-induced lateral displacements. This division creates minimum standards to mitigate hazards from these structural deficiencies. Adherence to these minimum standards will improve the performance of these buildings during earthquakes and reduce, but not necessarily prevent, the loss of life, injury or earthquake-related damage.

SEC. 91.9502. SCOPE.

The provisions of this division shall apply to any existing concrete building built pursuant to a permit application for a new building that was submitted before January 13, 1977, or, if no permit can be located, the structure is determined by the Department to have been built under building code standards enacted before January 13, 1977.

EXCEPTIONS: This division shall not apply to detached single-family dwellings or detached duplexes. Moreover, notwithstanding any provision of this Code, compliance with this division shall not require existing electrical, plumbing, mechanical or fire-safety systems to be altered to comply with existing code unless they constitute a hazard to life or property.

SEC. 91.9503. DEFINITIONS.

The following words and phrases, whenever used in this division, shall be construed as defined in this section. Words and phrases not defined here shall be construed as defined in Division 2 of this Code.

CONCRETE BUILDING is a building having concrete floors and/or roofs, either with or without beams, supported by concrete walls and/or concrete columns, and/or concrete frames with or without masonry infills, or any combination thereof.

DUPLEX is a building containing only two single-family dwelling units.

DWELLING UNIT shall include any individual residential unit within either an R-1 or R-2 occupancy building, including a mixed-occupancy building when part of it is either an R-1 or R-2 occupancy. A dwelling unit shall include the area of a building that is occupied as a dwelling unit, whether the building is approved or unapproved for residential use.

QUALIFIED HISTORICAL BUILDING is any building designated or currently in the process of being designated as a "qualified historical building" as defined in Part 8, Title 24 of the California Code of Regulations.

MASONRY INFILL is the unreinforced or reinforced masonry wall construction within a reinforced concrete frame.

RETROFIT is an improvement of the lateral force-resisting system by alteration of existing structural elements or addition of new structural elements.

SINGLE-FAMILY DWELLING is any building with one dwelling unit which contains living facilities, including provisions for sleeping, eating, cooking and sanitation, as required by this Code.

SEC. 91.9504. COMPLIANCE REQUIREMENTS.

91.9504.1. General. The owner of each building within the scope of this division shall cause a structural analysis to be made of the building by a civil or structural engineer or architect licensed by the state of California, and if the building does not meet the minimum engineering standards specified in this division, the owner shall cause the building to be structurally altered to conform to such standards or, at the owner's option, cause it to be demolished within the time limits stated in Section 91.9504.2.

91.9504.2. Time Limits for Compliance. The owner of a building within the scope of this division shall comply with its requirements by completing the following actions within the time limits stated below:

- 1. Within three (3) years after service of the order described in Section 91.9505, submit on the form provided by the Department a completed checklist for the Department to review and approve.
- 2. If the building is determined to be a non-ductile concrete building pursuant to Subdivision (1), within ten (10) years after service of the order,

submit a detailed evaluation of the building documenting whether the building meets or exceeds the requirements set forth in Section 91.9508. The evaluation shall include one of the following:

- (a) Proof that the building was previously retrofitted in conformity with the provisions in either Chapter 85 or former Chapter 95 (Ordinance No. 171,260; No. 179,324; No. 172,592; and No. 182,850) of the Los Angeles Building Code; or
- (b) Proof that the building was previously retrofitted in conformity with the engineering requirements of this division; or
- (c) A report consisting of a structural analysis that shows the building meets the engineering requirements of this division; or
- (d) A report consisting of a structural analysis and plans for the proposed structural alteration of the building to comply with the engineering requirements of this division; or
 - (e) Plans for demolition of the building.
- 3. Within twenty-five (25) years after service of the order, complete all necessary demolition or retrofit work on the building.

Time limits for compliance shall be based on the service date of the original order from the Department. Transfer of title shall not change compliance dates.

SEC. 91.9505. ADMINISTRATION.

- **91.9505.1.** Issuance of Order. When the Department determines that a building is within the scope of this division, the Department shall issue an order to the owner as described in Sections 91.9505.2 and 91.9505.4.
- **91.9505.2. Service of Order.** The Department shall serve the order in writing, either personally or by certified or registered mail, upon the owner as shown on the last equalized assessment roll. Service by mail shall be deemed complete at the time of deposit in the post office. Proof of giving notice may be made by an affidavit of an employee of the City that shows service in conformity with this division.
- **91.9505.3.** Failure to Receive Order. Failure of the owner to receive an order shall not relieve the owner of any obligation to comply with the provisions of this division.
- **91.9505.4.** Contents of Order. The order shall specify that the building has been determined by the Department to be within the scope of this division and, therefore, is required to meet the minimum seismic standards described in Section 91.9508. The

order shall be accompanied by a copy of Section 91.9504, which sets forth the owner's alternatives and time limits for compliance.

91.9505.5. Appeal from Order. The owner of any building subject to this division may appeal the Department's initial determination that the building is within the scope of this division to the Board of Building and Safety Commissioners. Such appeal shall be filed with the Board within 60 days from the service date of the order. Any such appeal shall be decided by the Board no later than 60 days after the date that the appeal is filed. Such appeal shall be made in writing upon appropriate forms provided by the Department, and the grounds of the appeal shall be stated clearly and concisely. Each appeal shall be accompanied by a filing fee as set forth in Table No. 4-A of Division 4 of Article 8 of Chapter IX of the Los Angeles Municipal Code.

Requests for slight modifications from any other determinations, orders or actions by the Department pursuant to this division shall be made in accordance with the procedures established in Section 98.0403.2 of the Los Angeles Municipal Code.

91.9505.6. Recordation. At the time that the Department serves the order described in Section 91.9505.1, the Department shall file with the Office of the County Recorder a certificate stating that the subject building has been determined to be within the scope of this division, and that it has been ordered to be structurally analyzed and structurally altered or demolished (if the owner so decides), pursuant to Section 91.9504.2, if the Department determines that it does not conform to the minimum design standards of this division.

The Department shall file with the Office of the County Recorder a certificate terminating the above recorded status of the subject building if the building is thereafter demolished by owner pursuant to Section 91.9504.2, found not to be within the scope of this division, or is determined to be structurally capable of resisting minimum seismic forces as a result of structural alterations or analysis required by this division.

SEC. 91.9506. OCCUPANT AND TENANT ADVISORY.

91.9506.1. Notification to Tenants and Occupants. When the Department determines that a building falls within the scope of this division, the owner shall advise all current and prospective residential and non-residential tenants, subtenants, lessees, sublessees, or any other person(s) entitled to the use and/or occupancy of the building of such determination. With respect to current and prospective residential tenants, subtenants, lessees, sublessees, or other person(s) entitled to the use and/or occupancy of the building, the property owner shall advise such persons of the Department's determination in a method and written format approved and promulgated by the Los Angeles Housing and Community Investment Department. With respect to current and prospective non-residential tenants, subtenants, lessees, sublessees, or other person(s) entitled to the use and/or occupancy of the building, the owner shall

advise such persons of the Department's determination in a method and written format approved and promulgated by the Department.

91.9506.2. Tenant Habitability Plan. If required by the Rent Stabilization Ordinance, the property owner shall be required to submit to the Los Angeles Housing and Community Investment Department a Tenant Habitability Plan pursuant to Article 2, Chapter XV of the Los Angeles Municipal Code (L.A.M.C. Section 152.03B). If, upon review of the Tenant Habitability Plan, it is determined by the Los Angeles Housing and Community Investment Department that work required under this division affects the tenantability of any building or residential unit as defined in California Civil Code Section 1941.1, the owner shall be required to pay relocation benefits pursuant to Article 1, Chapter XV of the Los Angeles Municipal Code (L.A.M.C. Section 151.09G) to any tenant, subtenant, lessee, sublessee, or other person(s) entitled to the use and/or occupancy of the building that is affected by the untenantable conditions or displaced from the residential unit. However, the mere undertaking and completion of work performed by the owner pursuant to this division shall not, in and of itself, result in any building or residential unit being deemed untenantable or uninhabitable as defined in California Civil Code Section 1941.1.

SEC. 91.9507. HISTORICAL BUILDINGS.

Qualified historical buildings shall comply with requirements of the California Historical Building Code established under Part 8, Title 24 of the California Code of Regulations.

SEC. 91.9508. ENGINEERING ANALYSIS.

91.9508.1. Scope of Analysis. This division requires the alteration, repair, replacement or addition of structural elements and their connections to meet the following requirements in this section.

91.9508.2. Building Structural Analysis, Design and Evaluation. The building shall meet one of the following criteria:

- 1. Strength of the lateral-force resisting system shall meet or exceed seventy-five percent (75%) of the base shear specified in the current Los Angeles Building Code seismic provisions. Elements not designated to be part of the lateral-force resisting system shall be adequate for gravity load effects and seismic displacement due to the full (100%) of the design story drift specified in the current Los Angeles Building Code seismic provisions.
- 2. Meet or exceed the requirements specified for "Basic Safety Objectives" using ground motions and procedures established by the Department based on ASCE 41.

3. Pursuant to Section 91.104.2.6, other methods approved by the Department deemed to be equivalent to the standards set forth in Subdivisions 1 and 2 of this subsection.

SEC. 91.9509. INFORMATION REQUIRED ON PLANS.

- **91.9509.1.** General. For existing and new construction, the plans and specifications shall be of sufficient clarity to indicate the nature and extent of the proposed work and to show in detail that it will conform to the provisions of this division and the Los Angeles Building Code.
- **91.9509.2.** Engineer's or Architect's Statement. The responsible engineer or architect shall provide the following statements on the approved plans:
 - 1. "I am responsible for designing this building's seismic strengthening in compliance with the minimum standards of Chapter 95 of the Los Angeles Building Code using the design criteria of (75% of ASCE 7 or ASCE 41)."

and when applicable:

- 2. "The Registered Deputy Inspector, required as a condition of the use of structural design stresses requiring continuous inspection, will be responsible to me as required by Section 1704 of the Los Angeles Building Code."
- 3. "Structural Observation will be performed in accordance with the current Los Angeles Building Code."

SEC. 91.9510. VIOLATION/PENALTY.

Notwithstanding any other provision of this Code to the contrary, it shall be unlawful for any person, firm, or corporation to maintain, use, or occupy any building within the scope of this division that fails to meet the minimum earthquake standards specified in this division after receiving an order described in Section 91.9505.

Any person who violates or causes or permits another person to violate this division is guilty of a misdemeanor, and shall be subject to prosecution and/or administrative enforcement under the Los Angeles Municipal Code. For purposes of this paragraph, "any person" includes an owner, lessor, sublessor, manager or person in control of a building subject to this division. This term shall not include any person who is merely a tenant or other individual occupying any dwelling unit, efficiency dwelling unit, guest room or suite in a building. The legal owner of a building is that person, firm, corporation, partnership or other entity whose name or title appears on the record with the Office of the County Recorder, as well as all successors or assignees of these persons.

EXCEPTION: This section shall not apply to any building on which work is proceeding in compliance with the time limits set forth in this division, or in compliance with any extensions of time granted by the Department or the Board; or any action, order or determination made by the Department or the Board in the implementation of this division.

SEC. 91.9511. SEVERABILITY.

If any subsection, sentence, clause or phrase of this article is for any reason held to be invalid or unconstitutional by a court of competent jurisdiction or by reason of any preemptive legislation, such decision or legislation shall not affect the validity of the remaining portions of this ordinance. The City Council hereby declares that it would have adopted this section, and each and every subsection, sentence, clause and phrase thereof not declared invalid or unconstitutional, without regard to whether any portion of the ordinance would be subsequently declared invalid or unconstitutional.

Sec. 3. Section 152.02 of Article 2 of Chapter XV of the Los Angeles Municipal Code is amended to read as follows:

SEC. 152.02. DEFINITIONS.

Notice of Primary Renovation Work. Written notice, served by the landlord upon a tenant or tenant household at least 60 days, or as otherwise modified pursuant to Section 152.04, prior to the commencement of any Primary Renovation Work or Related Work and using a form established by the Department, advising the tenant of forthcoming Primary Renovation Work and Related Work, the impact of such work on the tenant, and measures the landlord will take to mitigate the impact on the tenant.

Sec. 4. A second paragraph is added to Section 152.04 of Article 2 of Chapter XV of the Los Angeles Municipal Code to read as follows:

For purposes of the Mandatory Earthquake Reduction requirements in LAMC Sections 91.9301, et seq., and 91.9501, et seq., and as authorized by Section 152.08 of this article, the Commission shall have the authority by regulation to modify the service and notice requirements.

- Sec. 5. Subsection A to Section 152.05 of Article 2 of Chapter XV of the Los Angeles Municipal Code is amended and Subsection D is added to read as follows:
- A. If the Primary Renovation Work and any Related Work will impact the **tenantability** of a rental unit for 30 days or more, any tenant affected by the Primary Renovation Work and Related Work shall have the option to voluntarily terminate the tenancy in exchange for permanent relocation assistance pursuant to Section 151.09G of this Code and the return of any security deposit that cannot be retained by the landlord under applicable law. If the Primary Renovation Work and Related Work continues for 30 days longer than the projected completion date set forth in the later of

either the Tenant Habitability Plan or any modifications thereto accepted by the Department, the tenant's option to accept permanent relocation assistance shall be renewed.

- **D.** For purposes of the Mandatory Earthquake Reduction requirements in LAMC Sections 91.9301, et seq., and 91.9501, et seq., and as authorized by Section 152.08 of this article, the Commission shall have the authority by regulation to extend the time provisions by up to the maximum of an additional 180 days.
- Sec. 6. Section 152.08 of Article 2 of Chapter XV of the Los Angeles Municipal Code is amended to read as follows:

SEC. 152.08. AUTHORITY OF COMMISSION TO REGULATE.

- A. The Commission shall be responsible for carrying out the provisions of this article and shall have the authority to issue orders and promulgate policies, rules and regulations to effectuate the purposes of this article. All such rules and regulations shall be published once in a daily newspaper of general circulation in the City of Los Angeles, and shall take effect upon such publication. The Commission may make such studies and investigations, conduct such hearings, and obtain such information as it deems necessary to promulgate, administer and enforce any regulation, rule or order adopted pursuant to this article.
- B. In order to provide sufficient time for owners to comply with the Mandatory Earthquake Hazard Reduction requirements in LAMC Sections 91.9301, et seq., and 91.9501, et seq., the Commission may do the following:
 - 1. Modify the service and notice requirements set forth in Section 152.04 this article; and/or
 - 2. Grant, upon request by owner, an extension of up to 180 days beyond the original project completion date without triggering the permanent relocation assistance requirements set forth at Section 151.09G of this Code. Prior to granting an owner's request to extend project completion dates, the Commission shall notify the Department of Building and Safety of the request. If work performed pursuant to Mandatory Earthquake Hazard Reduction Requirements is not completed by the original project completion date or by a subsequent date authorized by RAC, any tenant, subtenant, lessee, sublessee, or other person(s) entitled to use and/or occupy the building or residential unit affected by such work shall have the option to voluntarily terminate the tenancy in exchange for permanent relocation assistance, pursuant to Section 151.09G, and the return of any security deposit that cannot be retained by the owner under applicable law.

C. Before modifying service and notice requirements and/or granting time extensions under its authority in subparagraph B of this section, the Commission shall find that the modifications and/or time extensions are necessary to carry out the purpose of the Mandatory Earthquake Hazard Reduction requirements of this Code.

Sec. 7. The City Clerk shall certify to the passage of this ordinance and have it published in accordance with Council policy, either in a daily newspaper circulated in the City of Los Angeles or by posting for ten days in three public places in the City of Los Angeles: one copy on the bulletin board located at the Main Street entrance to the Los Angeles City Hall; one copy on the bulletin board located at the Main Street entrance to the Los Angeles City Hall East; and one copy on the bulletin board located at the Temple Street entrance to the Los Angeles County Hall of Records.

at the Temple Street entrance to the Los Angeles County Hall of Records.			
I hereby certify that this ordinance was passed by the Council of the City of Los Angeles, at its meeting of			
	By Deputy		
Approved 09 007 2015	E.G. Mayor		
Approved as to Form and Legality			
MICHAEL N. FEUER, City Attorney By MONICA D. CASTILLO Deputy City Attorney			
Date			
File No. <u>CF 14-1697-S1</u>			

DECLARATION OF POSTING ORDINANCE

I, VERONICA COLEMAN-WARNER, state as follows: I am, and was at all times hereinafter

mentioned, a resident of the State of California, over the age of eighteen years, and a Deputy City

Clerk of the City of Los Angeles, California.

Ordinance No.183893 - Amending Division 93 and 95 of Article I of Chapter IX of the LAMC to

establish mandatory standards for earthquake hazard reduction in existing wood-frame

buildings with soft, weak, or open-front walls and existing non-ductile concrete buildings,

and amending Sections 152.02, 152.04, 152.05 and 152.08 of Article 2 of Chapter XV of the

LAMC to grant authority to the Rental Adjustment Commission to modify Tenant Habitability

Program requirements for purposes of implementing seismic retrofit mandates - a copy of

which is hereto attached, was finally adopted by the Los Angeles City Council on October 9, 2015,

and under the direction of said City Council and the City Clerk, pursuant to Section 251 of the Charter

of the City of Los Angeles and Ordinance No. 172959, on October 13, 2015 I posted a true copy of

said ordinance at each of the three public places located in the City of Los Angeles, California, as

follows: 1) one copy on the bulletin board located at the Main Street entrance to the Los Angeles City

Hall; 2) one copy on the bulletin board located at the Main Street entrance to the Los Angeles City

Hall East; 3) one copy on the bulletin board located at the Temple Street entrance to the Los Angeles

County Hall of Records.

Copies of said ordinance were posted conspicuously beginning on October 13, 2015 and will

be continuously posted for ten or more days.

I declare under penalty of perjury that the foregoing is true and correct.

Signed this 13th day of October, 2015 at Los Angeles, California.

/eronica Coleman-Warner, Deputy City Clerk

Ordinance Effective Date: November 22, 2015 Council File No. 14-1697-S1

TRANSMITTAL NO.2



