

TO: JAMES L. APP, CITY MANAGER  
FROM: BOB LATA, COMMUNITY DEVELOPMENT DIRECTOR  
SUBJECT: DRAFT OUTLINE OF SEISMIC SAFETY ORDINANCE UPDATE  
DATE: MARCH 16, 2004

Needs: For the City Council to consider first steps toward updating the City's Seismic Safety Ordinance.

Facts:

1. The earthquake of December 22, 2003 demonstrated the value of seismic retrofit of unreinforced masonry buildings and, at the same time, also confirmed the community's vulnerability to damage.
2. In 1992 the City adopted its current seismic safety ordinance. That ordinance was based on building standards adopted in 1987.
3. The deadlines for compliance with the 1992 ordinance were extended in 1997, at the request of property owners who were concerned about the cost of retrofit.
4. The current deadlines for compliance with the City's seismic retrofit requirements are 2008 for "high occupancy" buildings and 2018 for the balance of the buildings.
5. Prior to and since adoption of the current seismic safety code, eight (8) unreinforced masonry buildings were retrofitted.
6. At this time, forty (40) unreinforced masonry buildings remain to be retrofitted.
7. In light of the public safety concerns regarding the remaining buildings, a proposal is being made to require retrofit of all remaining unreinforced masonry buildings.
8. The proposal is based on compliance with the latest adopted code for building conservation (1997) and provides a two (2) year time frame for achieving full compliance with those code standards.
9. Attached is an outline that describes the components of the proposed update of the City's adopted Seismic Safety Code. A copy of the DRAFT Code Amendment is also attached.

Analysis  
and

Conclusion:

The December 22, 2003 earthquake provided tangible demonstration of the need to require seismic retrofit of all unreinforced masonry structures.

The current City code requirements are based on 1994 codes and are therefore outdated in terms of providing the maximum feasible protection for building occupants. (Please note that the codes are designed to insure the safety of the occupants; the codes are not designed to guarantee that the building will not be significantly damaged in the case of a major earthquake.)

The current City seismic safety ordinance delays retrofit of most structures to 2018.

In light of the safety hazard to the public, it is suggested that the City Council consider adoption of a retrofit standard that is based on the most recent adopted codes and has a maximum of two (2) years for all unreinforced masonry buildings to be retrofitted.

In order to provide an opportunity for public review and comment, including owners of unreinforced masonry buildings and design professionals, it is proposed that the City Council direct staff to circulate copies of the attached outline and DRAFT Code Amendment and conduct a public workshop on this topic before seeking Council action on the Code Amendment.

A thirty (30) day review period is suggested, with the intent of presenting the Code Amendment for Council consideration on May 18, 2004. The public workshop would be scheduled within the 30 day review period. Copies of the DRAFT Code Amendment would be mailed to owners of unreinforced masonry buildings.

It should be noted that the City paid for seismic safety retrofit plans for a number of unreinforced masonry buildings under the existing code. Those plans would need to be updated to the new code standards. A proposal is pending to make Community Development Block Grant funds available for preparation of the required plans, thereby assisting property owners to meet the code requirements.

Policy

Reference:

Municipal Code Requirements; International Existing Building Code / Uniform Code for Building Conservation

Fiscal

Impact:

Adoption of new standards would create a fiscal impact on owners of unreinforced masonry buildings but would address public safety concerns that cannot be easily quantified

Options:

- a.** Authorize staff to circulate the outline and DRAFT Code Amendment for public review and comment, including mailing copies to the owners of unreinforced masonry buildings and setting a 30 day period for public review. During that 30 day period, a public workshop would be scheduled to discuss the DRAFT Code Amendment. Council consideration of a Code Amendment would be tentatively scheduled for May 18, 2004.
- b.** Amend, modify, or reject the above option.

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Discussion Outline  
Suggested amendments to existing Seismic Safety Ordinance

Purpose:

To summarize possible parameters for an up-date of the City's Seismic Safety Ordinance.

The following topics are proposed to be incorporated into a Draft Amendment to the City's Seismic Safety Ordinance. Following public review and comment, a Draft Amendment would be presented to the City Council for formal consideration.

Noticing:

- All buildings not currently retrofitted shall be re-noticed informing property owners of any changes contained in a revised Seismic Safety Ordinance.
- Notices will be sent to individuals listed on the most recent tax roles as the property owner.

The Retrofit Code \*

- Designs for retrofit of unreinforced masonry buildings shall use the 1997 Edition of the Uniform Code for Building Conservation, published by the International Code Council.
- Any values for materials provided for by the tables contained in the Uniform Code For Building Conservations applicable to any building in the City of Paso Robles shall be substantiated by actual testing.

\* **Please note: There is no code to "save the buildings." The design criteria does not exist, not even for new buildings. We can only make them seismic resistant based on the information available at the time of their construction or repair.**

**The stated intent of the Model Seismic Ordinance, is to promote the public safety and welfare by reducing the risk of death or injury that may result from the effects of earthquakes on existing unreinforced masonry bearing wall buildings. IE: retrofit buildings to perform well in a moderate seismic event, in the hope of preventing loss of life, knowing that the building will ultimately need some degree of repair.**

Time frame for full strengthening:

Three different circumstances would trigger a requirement for retrofit:

- Full strengthening of all unreinforced masonry structures, including all parapets, regardless of the intensity of use within two (2) years of the date noted on the re-notifications.
- Any change or conversion of an unreinforced masonry structure changed from its existing use to a more intensive use prior to the two (2) year date shall be retrofitted prior to a Certificate of Occupancy being issued for the new use.
- The remodel of a unreinforced masonry structure covered in an amount equal to fifty (50) percent of the structure's value shall result in a retrofit being required prior to a Certificate of Occupancy being issued.

Buildings with brick veneers:

- Owners of buildings with brick veneers constructed prior to 1975 shall be noticed and required to have those veneers examined to determine if they are anchored to the building structure consistent with the anchorage requirements contained in the 1997 Uniform Code for Building Conservation. Section A113.7.
- Owners of buildings where brick veneers, cornice work and/or parapets were removed as a result of the December 22, 2003 earthquake shall be noticed of their responsibility to replace cornices and/or parapets. The notice shall inform building owners that veneers, cornice work and/or parapets shall be replaced with materials providing the same architectural/historical features originally removed. All replacement work shall be completed within two (2) years of receipt of the notice.

ORDINANCE NO. \_\_\_\_ N.S.

AN ORDINANCE OF THE CITY OF EL PASO DE ROBLES  
REPEALING AND REPLACING CHAPTER 17.18 REGARDING  
SEISMIC STRENGTHENING PROVISIONS FOR  
UNREINFORCED MASONRY BEARING WALL BUILDINGS

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WHEREAS, the City desires to promote public safety and welfare by reducing the risk of death or injury that may result from the effects of earthquakes on existing unreinforced masonry bearing wall buildings; and

WHEREAS, the establishment of minimum standards for structural seismic resistance may reduce the risk of such life loss or injury;

NOW, THEREFORE, THE CITY COUNCIL OF THE CITY OF EL PASO DE ROBLES DOES HEREBY ORDAIN AS FOLLOWS:

SECTION 1: Chapter 17.18 of the City of El Paso de Robles Municipal Code as adopted by Ordinance 646, N.S. and as amended by Ordinances 699 N.S. and 740 N.S. is hereby repealed and replaced to read as shown on the attached Exhibit A of this ordinance.

SECTION 2. Publication. The City Clerk shall cause this ordinance to be published once within fifteen (15) days after its passage in a newspaper of general circulation, printed, published and circulated in the City in accordance with Section 36933 of the Government Code.

SECTION 3. Severability. If any section, subsection, sentence, clause, or phrase of the Ordinance is, for any reason, found to be invalid or unconstitutional, such finding shall not affect the remaining portions of this Ordinance.

The City Council hereby declares that it would have passed this ordinance by section, subsection, sentence, clause, or phrase irrespective of the fact that any one or more sections, subsections, sentences, clauses, or phrases are declared unconstitutional.

SECTION 4. Inconsistency. To the extent that the terms of provisions of this Ordinance may be inconsistent or in conflict with the terms or conditions of any prior City ordinance(s), motion, resolution, rule, or regulation governing the same subject matter thereof and such inconsistent and conflicting provisions of prior ordinances, motions, resolutions, rules, and regulations are hereby repealed.

SECTION 5. Effective Date. This Ordinance shall go into effect and be in full force and effect at 12:01 a.m. on the 31st day after its passage.

Introduced at a regular meeting of the City Council held on March 16, 2004, and passed and adopted by the City Council of the City of El Paso de Robles on the 6<sup>th</sup> day of April 2004 by the following roll call vote, to wit:

AYES:  
NOES:  
ABSTAIN:  
ABSENT:

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Mayor Frank R. Mecham

ATTEST:

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Sharilyn M. Ryan, Deputy City Clerk

## EXHIBIT A

### Chapter 17.18

#### AMENDMENTS TO THE INTERNATIONAL EXISTING BUILDINGS CODE

##### **17.18.010 Purpose.**

- A. The purpose of this chapter is to promote public safety and welfare by reducing the risk of death or injury that may result from the effects of earthquakes on existing unreinforced masonry bearing wall buildings.
- B. The provisions of this chapter are intended as minimum standards for structural seismic resistance and established primarily to reduce the risk of life loss or injury. Compliance with these provisions will not necessarily prevent loss of life or injury, or prevent earthquake damage to rehabilitated buildings.

##### **17.18.020 International Existing Building Code.**

The 2003 Edition and subsequent editions of the International Existing Building Code, Appendix A, Chapter A1, entitled Seismic Strengthening Provisions for Unreinforced Masonry Bearing Wall Buildings, with the amendments set forth in this Chapter, is adopted.

##### **17.18.030 Scope.**

- A. The provisions of this Chapter shall apply to all existing buildings having at least one unreinforced masonry bearing wall. Except as provided herein, all other provisions of the California Building Code shall apply.
- B. Exceptions. Detached one- or two-family dwellings and detached apartment houses containing less than five dwelling units and used solely for residential purposes.

##### **17.18.040 Definitions.**

For the purpose of this chapter, the following applicable definitions shall be in addition to those contained in the International Existing Buildings **Code Section A103** as adopted and modified by the City of El Paso de Robles:

- A. **“Qualified historical building” means any structure included on the National Register of Historic Buildings, the state list of Significant Historic Buildings.**

B. "Seismic zone(s)" means that zone or geographic area referenced under the State Building Code establishing the potential earthquake hazard of a given area.

C. "Seismic Retrofit" means all work necessary to comply with the requirements of this chapter.

#### **17.18.050 Compliance Requirements.**

- A. The owner of each building within the scope of this chapter shall, upon service of an order and within the time limits set forth in this Chapter, cause a structural analysis to be made of the building by an engineer or architect licensed by the state to practice as such and, if the building does not comply with earthquake standards specified in this chapter, the owner shall cause it to be structurally altered to conform to such standards or shall cause the building to be demolished.
- B. *Within one year of the date of service of the order*, the owner of a building within the scope of this chapter shall comply with the requirements set forth above by submitting to the Building Official for review:
1. A structural analysis, which is subject to approval by the Building Official and which shall demonstrate that the building meets the minimum requirements of this Chapter; or
  2. Structural analysis and plans for structural alteration of the building to comply with this Chapter; or
  3. Application and plans for the demolition of the building. Issuance of a permit for demolition of a building shall be subject to compliance with the provisions of Chapter 17.16 (Demolition of Buildings and Structures) of this Title.
- C. *Within two years of the date of service of the order*, the owner of a building within the scope of this Chapter shall complete construction of structural alterations or complete demolition of the building, as applicable.

#### **17.18.060 Historical Buildings.**

Alterations or repairs to qualified historical buildings shall comply with the State Historical Building Code (Title 24, Building Standards, Part 8), in addition to this Chapter.

#### **17.18.070 Order - Service.**

The building official shall issue an order as provided in this section to the owner of each building within the scope of this Chapter.

**17.18.080 Order - Contents.**

The order shall be in writing and shall be served either personally or by certified or registered mail upon the owner as shown on the last equalized assessment roll, and upon the person, if any, in apparent charge or control of the building. The order shall specify that the building has been determined by the Building Official to be within the scope of this Chapter and, therefore, is required to meet the minimum seismic standards of this Chapter. The order shall be accompanied by a copy of Section 17.18.050, which sets forth time limits for compliance.

**17.18.090 Appeal from Order.**

The owner of the building may appeal the Building Official's initial determination that the building is within the scope of this Chapter to the Board of Appeals established by Section 17.04.020(C) of this Title. Such appeal shall be filed with the board within sixty (60) days from the service date of the order described in Section 17.18.090. Any such appeal shall be decided by the board no later than ninety (90) days after writing and the grounds thereof shall be stated clearly and concisely. Appeals or requests for modifications from any other determinations, orders or actions by the Building Official pursuant to this Chapter shall be made in accordance with the procedures established in Sections 105.1 and 105.2 of the California Building Code.

**17.18.100 Recordation.**

At the time that the Building Official serves the aforementioned order, the Building Official shall also file with the San Luis Obispo County Clerk-Recorder's Office a certificate stating that the subject building is within the scope of this chapter and is a potentially earthquake hazardous building. The certificate shall also state that the owner thereof has been ordered to structurally analyze the building and to structurally alter or demolish it where compliance with this Chapter has not been demonstrated.

If the building is either demolished, found not be within the scope of this Chapter or is structurally capable of resisting minimum seismic forces required by this Chapter as a result of structural alterations or an analysis, the Building Official shall file with the San Luis Obispo County Clerk-Recorder's Office a form terminating the status of the subject building as being classified within the scope of this Chapter.

**17.18.110 Enforcement.**

- A. If the owner in charge or control of the subject building fails to comply with any order issued by the Building Official pursuant to this Chapter within the time limits set forth in Section 17.18.050, the Building Official shall verify that the recorded owner of this building has been properly served.

- B. If the order has been served on the record owner, then the Building Official shall order that the entire building be vacated and that the building remain vacated until such order has been complied with.
- C. If compliance with such order has not been accomplished within ninety (90) days after the date the building has been ordered vacated or such additional time as may have been granted by the Board of Appeals, the Building Official may order its demolition in accordance with the provisions of Section 102 of the California Building Code. Any demolition would be subject to those conditions set forth in the Chapter 17.16 (Demolition of Buildings and Structures) of this Title.

**17.18.120 Full strengthening required prior to time frames provided for under Section 17.18.050.**

The Building Official shall require full compliance with the minimum seismic standards contained within this Chapter and the **International Existing Building Code** before the time frames set forth under Section 17.18.050, subject to the following conditions:

- A. Any change or conversion of an unreinforced masonry structure from its existing use to that of a more intensive use.
- B. The remodel of a structure covered by this Chapter, in an amount equaling fifty percent of the structure's replacement value as determined using the latest edition of the Building Standards Valuation, published by the International Conference of Building Officials.
- C. The Building Official may, upon receipt of a written request from the owner, order such owner to bring his building into compliance with this code prior to the normal service date for such building set forth in this chapter.

**17.18.130 Certificate of compliance.**

- A. In accordance with Chapter 3, Section 70(d)(3) of the Revenue and Taxation Code, the Building Division shall, upon the completion of a seismic retrofit, file a certificate of compliance with the County Assessor's Office on or before the following April 15th.
- B. The certificate of compliance shall establish that the work associated with the seismic retrofit was the result of a local ordinance related to seismic safety, and therefore shall not add value to the assessment role.

**17.18.140 Requirements for plans-- Structural engineering.**

The following construction information shall be included in the plans required by this Chapter:

1. Dimensioned floor and roof plans showing existing walls and the size and spacing of floor and roof framing member and sheathing materials. The plans shall indicate all existing and new crosswalls and their materials of construction. The location of the crosswalls and their openings shall be fully dimensioned or drawn to scale on the plans;
2. Dimensioned wall elevations showing openings, thicknesses, heights, the type of veneer, its thickness and its bonding and/or ties to the structural wall masonry shall also be reported;
3. The extent and type of existing wall anchorage to floors and roof when used in the design;
4. The extent and type of parapet corrections which were previously performed, if any;
5. Repair details, if any, of cracked or damaged unreinforced masonry walls.

**17.18.150 Material requirements.**

- A. General. All materials permitted by this Chapter, including their appropriate allowable design values substantiated by testing may be utilized to meet the requirements of this chapter.
- B. Existing Materials. All existing materials utilized as part of the required vertical load-carrying or lateral force-resisting system shall be tested or shall be repaired or removed and replaced with new materials.

**17.18.160 Upgrade design--Requirements for expanded or continued use of a structure.**

- A. Except as modified herein, the analysis and design relating to the alteration of, or addition to, an existing building shall be in accordance with the California Building Code.
- B. Contractors providing structural upgrades shall be licensed by the State of California in the trade(s) being performed to accomplish the upgrade.
- C. Design documents and specifications pertaining to structural upgrades shall be prepared by an architect, structural engineer or civil engineer specializing in structural work, licensed by the State of California to practice as such.

- D. Design documents and specifications shall comply with the International Existing Building Code, Appendix A, Chapter A1.

**17.18.170 Special requirements for qualified historical buildings.**

- A. Plans for seismic upgrading of qualified historical buildings shall be reviewed by the Development Review Committee. The basis of review shall be the design guidelines established by the City and the Secretary of the Interior's Standards for Rehabilitation and Guidelines for Rehabilitation of Historic Properties, with the following special requirements:
1. Features of architectural or historical significance shall be retained and reattached, braced or stabilized, as required by applicable codes and/or the Building Official.
  2. In-wall anchors shall be used on qualified historical buildings instead of through-wall anchors, especially on the principal facade.
  3. Through-wall anchors on other facades may be permitted, provided that their locations and treatment are approved by the Development Review Committee.
  4. Closure of historic openings on the principal facade shall not be permitted and shall be discouraged on secondary facades. If closure of such openings on secondary facades is unavoidable, the materials used shall be compatible with the existing exterior materials of the secondary facade wall.
  5. Historic parapets shall be braced rather than removed.
  6. Historic architectural veneer posing a safety hazard shall be stabilized and re-anchored to the building.
- B. The purpose and intent of the plan review and guidelines shall be to minimize the effects of seismic strengthening on the exterior appearance of the building.
- C. 1. In order to minimize the effect on the exterior appearance of a qualified historical building, plans showing proposed shear-test locations shall be submitted for review and approval by the Community Development Director or his/her designee, prior to any testing of the structure taking place.
2. Repairs after testing shall match the original adjacent existing building facade materials.

**17.18.180 Buildings with brick veneers, cornice work and/or parapets.**

- A. 1. The owner of each building constructed prior to 1972 with a brick veneer shall, upon service of an order and within the time limits set forth in this Chapter, cause an analysis to be made of the veneer by an engineer or architect licensed by the state to practice as

such have such veneer examined to determine if it is anchored to the building structure in a manner consistent with the anchorage requirements contained in **the International Existing Building Code** Section A113.7.

2. ***Within one year of the date of service of the order***, the owner of a building within the scope of this Subsection shall submit a report of said veneer examination to the Building Official for review.
  3. ***Within two years of the date of service of the order***, the owner of a building within the scope of this Subsection shall obtain a building permit and complete anchoring of the brick veneer if indicated by said report.
- B.
1. Each owner of a building from which brick veneers, cornice work and/or parapets were removed as a result of the December 22, 2003 earthquake shall replace said veneers, cornices, and/or parapets.
  2. The owners of buildings within the scope of this Subsection shall be served written orders informing them of the requirement to replace said veneers, cornices, and/or parapets in the manner set forth in Sections 17.18.070 and 17.18.080. Said order shall inform building owners that veneers, cornice work and/or parapets shall be replaced with materials providing the same architectural/historical features originally removed.
  3. ***Within one year of the date of service of the order***, the owner of a building within the scope of this Subsection shall submit plans for the replacement of veneers, cornice work and/or parapets to the Building Official for review.
  4. ***Within two years of the date of service of the order***, the owner of a building within the scope of this Subsection shall obtain a building permit and complete all replacement work.
- C. The owners of buildings within the scope of this Section shall be served written orders in the manner set forth in Sections 17.18.070 and 17.18.080.
- D. Appeals of orders specified in this Section shall be handled in the manner set forth in Section 17.18.090.