

## *Structural Peer Review*

### **PURPOSE**

This policy identifies a method that can be used to expedite the code review/building permit application process and what services the County requires that the Structural Peer Reviewer perform.

### **GENERAL**

Independent structural peer review is an objective technical review by knowledgeable reviewer(s) experienced in the structural design, analysis, and performance issues involved. The reviewer(s) shall examine the available information on the proposed or existing building, the basic engineering concepts employed, and the recommendations for action.

The use of a Structural Peer Review must be identified at the time of application. The report (see FORMS below) prepared by the Structural Peer Reviewer must be submitted with the building permit application. Due to the work performed by the Structural Peer Reviewer, the County reduces the amount of fees and staff plan review (calculated plan check fees will be reduced by 25%).

The Structural Peer Review process may not be appropriate if the building design requires approval by the Building Official as an “Alternate materials, alternate design and methods of construction” per California Building Code (CBC) section 104.2.8. Please contact the Permit and Resource Management Department (PRMD) Plan Check Section Supervisor before going beyond conceptual design if you intend to use Structural Peer Review and request approval per section 104.2.8.

### **AUTHORITY**

The Building Official implemented the first Peer Review policy on April 22, 1992. This is an update and clarification to the existing policy, not a new policy. The fee for Structural Peer Review applications is per County Code Section 7-13(a)(6).

### **FORMS**

The Structural Peer Reviewer shall prepare a written report (in letter form) for the owner and PRMD that covers all aspects of the review performed, including conclusions reached by the reviewer. The report should include, at the minimum, statements of the following:

1. Scope of engineering design peer review with limitations defined.
2. The project documents reviewed; identified by title, preparer's name and date of document (including any revision dates).
3. Ability of selected materials and framing systems to meet performance criteria and comply with Sonoma County building codes and the California Building Code.

## **PROCEDURE**

### **A. Owner, Engineer of Record, and Structural Peer Reviewer**

1. **Timing of Independent Review** - The Structural Peer Reviewer(s) should be selected prior to initiation of substantial portions of the design and/or analysis work that is to be reviewed, and review shall start as soon as practical and sufficient information defining the project is available.
2. **Qualifications and Terms of Employment** - The reviewer shall be independent from the design and construction team.
  - a. The reviewer shall have no other involvement in the project before, during or after the review, except in a review capacity.
  - b. The reviewer shall be selected and paid by the owner and shall have technical expertise in buildings similar to the one being reviewed.
  - c. The reviewer shall be a California-licensed structural engineer or a pre-approved Third Party Plan Check Approved Consultant who is familiar with the technical issues and regulations governing the work to be reviewed.
  - d. The reviewer should serve through completion of the project and shall not be terminated except for failure to perform the duties specified herein. Such termination shall be in writing with copies to PRMD, the owner, and the engineer of record. When a reviewer is terminated or resigns, a qualified replacement shall be appointed within 10 working days or PRMD will terminate the Structural Peer Review process.
3. **Scope of Review** - Review activities shall include, where appropriate, available construction documents, observations of the condition of the structure, all inspection and testing reports (including methods of sampling), analyses prepared by the engineer of record and consultants, and the retrofit or repair design. Review shall include consideration of the proposed design approach, methods, materials, and details.

4. Responses and Corrective Actions - The engineer of record shall review the response from the Structural Peer Reviewer and shall revise the plans, prior to permit application, as appropriate.
5. Design Professional of Record - The design professional of record shall retain full responsibility for the decisions and design as outlined in the California Business and Professional Code, Chapter 3, Division 3, and Chapter 7, Division 3.
6. Reports - The Structural Peer Reviewer shall prepare a written report (in letter form) to the owner and PRMD that covers all aspects of the review performed, including conclusions reached by the reviewer. See FORMS for the minimum report requirements
7. Structural Observation - The design engineer may provide Structural Observation Services during construction but cannot provide Special Inspection Services (an exception may be made based on the engineer demonstrating that they have qualifying inspection experience and the scope of the required Special Inspection). The Structural Peer Reviewer does not provide Structural Observation or Special Inspection.

**B. Permit and Resource Management Department**

1. Goal for review time - PRMD's goal is to begin the building plan review within two weeks after completion of site review (two weeks sooner than a normal application).
2. Plan checker action - The PRMD plan checker reviews the plans for compliance with code (life/safety aspects, fire safe standards, and energy criteria) but not for structural adequacy. The plan checker relies on the Structural Peer Reviewer and Designer for structural adequacy code compliance. If the plan checker observes an inadvertent omission from the structural design, that will be brought to the attention of the designer. The plan checker may review and confirm that structural elements identified in the design calculations are identified on the plans.
3. Changes to design - If there are any changes to the structural design, either through corrections requested by PRMD or changes to the plans, the Structural Peer Reviewer must acknowledge the changes to the design with a supplemental report. The supplemental report must be submitted with the revised drawings and calculations submitted by the Engineer of Record. This section also applies to any changes made during construction.
4. Inspection - Permits approved under the Structural Peer Review method have the same inspection requirements as other issued building permits.

**Approved by:**

/s/ Pete Parkinson

**Pete Parkinson, Director**

Lead Author: Michael Enright, Plan Check Section Supervisor

04/22/92 (previously 9-4-1)

07/05/00

07/07/05

Intranet       Intranet and Internet