
Guideline for Alternative Materials & Methods Requests

Purpose

This guideline is intended to provide direction for submitting requests for use of alternative materials and methods (AM&M) in accordance with the 2001 California Fire Code (CFC), Section 103.1.2.

Scope

Requests for AM&M shall be prepared by a third party Fire Protection Engineer to ensure the proposed design, use or operation satisfactorily complies with the intent of the CFC and that the method of work performed or operation is, for the purpose intended, at least equivalent to that prescribed in the CFC in quality, strength, effectiveness, fire resistance, durability, and safety.

Submittal Requirements

1. General Requirements

The applicant shall provide the following information in writing with those plans necessary to evaluate the project.

A. Identify relevant project information:

- 1) The project name, address, contact person, and phone number.
- 2) The owner's name, address, and phone number.
- 3) Other specific information required to identify the project (e.g., APN #, permit type applied for).

B. Identify the code section or reference the specific requirement for which the modification is requested (e.g., CFC 903.2, LBMC 21.12.250).

C. Detail the alternative fire protection measures that will comprise the AM&M proposal and how they establish equivalency to those prescribed in the code.

The report shall address the City of Laguna Beach's concerns and the issues as identified above. Refer to the sample AM&M proposal letter provided at the end of this document for guidance.

2. Engineering Evaluation

An engineering evaluation shall be performed and reported by a firm or individual that has been approved by the City of Laguna Beach. All costs associated with the preparation of the AM&M shall be borne by the applicant.

3. Submittal Process

- A. Submit three copies of both the AM&M request letter and other supporting information to the Building Department.
- B. AM&M requests will be evaluated by the City of Laguna Beach Staff for equivalency to the Municipal Code, adopted codes, and standards. All such requests are evaluated on a case-by-case basis.
- C. If the AM&M proposal provides an equivalent level of protection considering all related conditions pertaining to the project, the City of Laguna Beach Fire Department will issue a response letter granting approval. Such approval may be conditional upon implementation of additional requirements listed in the AM&M response letter that were not part of the original AM&M proposal. Approval is granted only for the specific project under review and the conditions for approval shall not be construed as applicable to any other project.
- D. In the event that the AM&M proposal does not provide an equivalent level of protection, the request will be denied and a response letter will be issued stating such. Should the applicant submit a different AM&M request for this project or choose to revise and resubmit the previously denied request, additional AM&M fees shall apply. To facilitate the evaluation process, submit any previously denied AM&M proposals when submitting a revised AM&M request.
- E. Upon completion of the evaluation, the AM&M response letter and a copy of the applicant's AM&M proposal will be available to be picked up at the Building Department. Should evaluation of the AM&M proposal require time and resources beyond the standard allocation, additional fees may be applied. Any additional fees shall be paid when the applicant picks up the AM&M response letter.
- F. The approved AM&M request and response must be bluelined on the plans prior to plan approval. Retain a copy of the AM&M proposal and response at the project site at all times. This documentation may be required for review by the City of Laguna Beach inspection staff.

SAMPLE AM&M PRPOSAL LETTER

March 9, 2005

Will B. Certain, Fire Marshal
City of Laguna Beach
Fire Department
505 Forest Avenue
Laguna Beach, CA 92651

Subject: AM&M Proposal for 1234 Interface Drive

Dear Mr. Certain,

In accordance with section 103.1.2 of the 2001 California Fire Code, we are requesting an alternate method of fire protection for the proposed project detailed below. This is in response to items 1, 2, and 3 on the January 25, 2005 correction letter for the conceptual plan submitted to the Fire Department.

PROJECT INFORMATION

Site Address:	Smith Residence 1234 Interface Drive Laguna Beach, CA 92651 APN# 345-065-00	Owner:	Robert T. Smith 909 Inland Riverside, CA 99999 909-555-1212
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Contact: John Q. Wilson, PE
714-555-1234

PROPOSAL

The proposed residence is located on Interface Drive in the Fuego Hills area. The building site is located on top of a graded hilltop approximately 115 feet above the street access to Interface Drive. The maximum driveway grade is 20.1% and the driveway length is 210 feet. This property is located within 300 feet of wildland area and must comply with the City of Laguna Beach Landscape/Fuel Modification Guidelines. Per the L.B.M.C. the residence shall be sprinklered according to 1999 NFPA 13D requirements.

The existing topography of the project site precludes compliance with CFC section 902.2 and L.B.M.C. section 21.12.250 minimum roadway width of 20 feet and maximum roadway grade of 15%. Use of the driveway grade limit would require proposed hilltop building pad to be lowered approximately 85 feet.

Widening the road to 20 feet would require retaining walls 30 feet in height.

I would like to propose the following alternative materials and methods:

1. Construct an 18' wide driveway from Interface Drive to the residence with a 20foot wide by 60' long turnout and provide an approved fire apparatus turn around at the driveway terminus. Paved with an all-weather surface and capable of supporting 68,000 pounds.
2. Extend the width of the fuel modification Zone "A" from 20 feet to 50 feet and extend width of the irrigated Zone "B" to 100 feet. The "C" and "D" Zones would be maintained at 50 feet and 75 feet respectively.
3. Install automatic fire sprinklers in all bathrooms and closet regardless of size; open attached porches, balconies, corridors and stairs; attics penthouse equipment rooms, crawl spaces, floor ceiling spaces, elevator shafts, and other concealed spaces.
4. Provide an approved fire alarm system to include monitoring of water flow for the automatic fire sprinkler system.

JUSTIFICATION

The turnout on the road will allow fire trucks to pass each other safely and facilitate the evacuation of the residents by providing a clear path to and from Interface Drive. The turnaround shall serve as a staging area for fire equipment and provide a place for fire apparatus to turn around and drive forward up the driveway. Extension of the fuel modification areas past the minimum widths would impede the advance of a wildland fire and further enhance protection of the structure beyond those design elements required by local and CBC code requirements. The sprinkler system shall comply with the CBC standard 9-3 (with modifications) and provide the equivalency of a one hour rating for a Type V single family residence per the City of Laguna Beach Building Official. The monitoring system, while not normally required will improve the time to notification thus reducing the response time of emergency personnel and assist in offsetting the delay that the driveway grade causes.

ADDITIONAL COMMENTS

We appreciate your consideration of this proposal. Should you determine that this proposal provides an equivalent level of protection to that prescribed by the 2001 CFC, we shall submit revised plans reflecting such changes. If you have any questions regarding the AM&M proposal or about the project in general, please contact me at 714-555-1234.

Sincerely

John Q. Wilson, PE
Fire Protection Engineer
JQW Fire Protection, Inc.

