

Appendix F: Alternative Materials and Methods of Construction Design Report

Interface Management Services

2561 Northshore Lane
Thousand Oaks, CA 91361

Phone: 805-217-4263
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March 24, 2022

City of Laguna Beach
505 Forest Avenue
Laguna Beach, CA 92651

SUBJECT: Revised Alternate Materials & Methods Proposal for 820 Gainsborough Drive

In accordance with the California Fire Code (CFC), we are requesting an alternative method of fire protection for the proposed project detailed below.

This letter will also serve as certification by Interface Management Services that the project described below does meet an equivalent level of protection from wildland fires in lieu of strict compliance with the full details of the City of Laguna Beach Landscape/Fuel Modification Guidelines and Maintenance Program.

Project Information

Project: 820 Gainsborough
Laguna Beach, CA 92651

Owner: Laguna 3 Land LLC
1485 Pomona Road, Suite G
Corona, CA 92882

Architect: Leigh Snow Architects
2280 South Coast Highway
Laguna Beach, CA 92651

Fire Protection Plan: Interface Management Services
2561 Northshore Lane
Thousand Oaks, CA 91361

Project Description. The proposed project involves the construction of a single family dwelling in the City of Laguna Beach. The property is located in the Very High Fire Hazard Severity Zone (FM Designation).

Fire Risk. A potential threat from wildland fire is located northeast of the project due to the surrounding terrain and periodic Santa Ana wind events. The lot has an average slope gradient of 70%. The risk from a worst-case scenario wind event is 2.0 foot flame length in the irrigated landscaping (see Fire Protection Plan).

Fuel Management. The project will include irrigated fuel modification landscaping that is less than 35 feet wide. The fuel modification zone is less than the City’s required 195-foot wide fuel modification zone; surrounding the property are residential lots.

Fire Mitigation/Justification. In order to reduce the risk from wildland fire, the landscaping, exterior structure design and building materials have been designed to minimize the threat as identified in the Fire Protection Plan. The FPP identified only one area of concern that requires mitigation. The combination of the following mitigation features will provide adequate protection from the predicted worst-case scenario BEHAVE fire behavior calculations during a wind driven fire (see the Fire Protection Plan for detailed scenario analysis) to compensate for the reduced width fuel modification area.

Site/Project Design issues subject to mitigation

Requirement	Design	Proposed mitigation features
Water supply - fire flow of 850 gpm.	1060 gpm provided.	• Code compliant - none required
Hydrant spacing – one required	Hydrant located at 803 Gainsborough Dr.	• Code compliant - none required
Hydrant proximity - within 250 feet; 200 feet for a dead end street.	Hydrant located within 70 feet.	• Code compliant - none required
Fire department response within five minutes.	Project within 0.7 mile of fire station.	• Code compliant - none required
Access road with 20 foot width.	Road width 30 feet.	• Code compliant - none required
Apparatus turn around for dead-end road in excess of 150 feet.	Bulb at end of roadway is 68 feet in diameter, less than the required 96 feet.	• Because of the configuration of the turnaround and the paved, dedicated right-of-way roads on either side of the bulb, fire apparatus would be able to use the bulb as a turnaround.
Access road within 150 feet of all first story walls.	Hose pull access is between 100 and 110 feet around either side of the structure.	• Code compliant - none required
Firefighter access around structure – minimum width 36”.	Year round access pathway provided.	• Code compliant - none required
Fuel modification	Fuel modification zone	• Enhanced fire sprinkler head design (four head flow)

zone 195 feet wide.	is less than 35 feet wide.	including sprinkler heads in small spaces, and water flow monitoring (interconnected with smoke detectors). <ul style="list-style-type: none">• Testing of sprinkler (five years) and water flow (annually) monitoring system.• Central station monitoring.• Irrigated landscaping throughout the site.• Concrete retaining walls separating structure from vegetation behind structure.• Elevation of structure is 20 feet below grade of vegetation behind structure.
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Certification. We certify this Alternative Materials and Methods request meets the intent of the requirements for the protection of life and property in a Very High Fire Hazard Severity Zone. We strongly encourage your approval in lieu of compliance with the full 195-foot fuel modification area. We believe that we have met the intent of the California Fire Code with the City of Laguna Beach amendments and the Landscape/Fuel Modification Guidelines and Maintenance Program.

Furthermore, IMS certifies that we have reviewed the architectural and landscape/fuel modification plans and find them to be in compliance with all mitigation features outlined in this AM&M request letter and the accompanying Fire Protection Plan.

Summary. We appreciate your consideration of this proposal to reach an understanding on how to make this property as fire safe as possible. If you have any questions regarding this request, please contact me via phone or email.

Regards,



Douglas V. Nickles, RPF

Attachment: Fire Protection Plan



CITY OF Laguna Beach
 COMMUNITY DEVELOPMENT DEPARTMENT
 BUILDING DIVISION
 505 Forest Ave., Laguna Beach, CA 92651

FIRE CODE ALTERNATE MATERIALS, DESIGN & METHODS REQUEST

SECTIONS A, B & C TO BE COMPLETED BY OWNER OR AUTHORIZED REPRESENTATIVE

A. APPLICANT INFORMATION		B. PROJECT INFORMATION	
OWNER'S NAME Yousel Audi	PROJECT NAME 820 Gainsborough Dr		
APPLICANT'S NAME Yousel Audi / Doug Nickles	PROJECT ADDRESS 820 Gainsborough Dr		
APPLICANT'S PHONE NUMBER 949.872.5601 / 805.217.4263	OCCUPANCY CLASSIFICATION R-3	CONSTRUCTION TYPE V-B	
APPLICANT'S EMAIL yaudi@joudconstruction.com / dnickles.ims@gmail.com	NUMBER OF STORIES 3	TOTAL FLOOR AREA 2559 + 458	

C. PROJECT REQUIREMENTS & PROPOSALS – Attach supporting documents, if any

CODE REQUIREMENT (identify code section and corresponding code language)
 A typical landscape/fuel modification installation consists of a 20-foot setback zone (Zone A), a minimum 50-foot zone typically irrigated (Zone B), with an additional 125-foot minimum of vegetation thinning zones (Zones C and D). (Defensible Space Guideline; LBMC 4907.1.1)

CODE DEFICIENCY (provide brief description)
 The proposed fuel modification is less than the code requirement, approximately 35 feet

ALTERNATIVE PROPOSAL (provide brief description)
 1. Fire sprinklers throughout house and garage including bathrooms, closets and attic spaces; garage shall not exceed 130 sf per sprinkler. 2. Exterior vents will be fire and ember resistant. 3. Decks, patio covers and outbuildings to be of non-combustible materials. 4. All interior walls and ceilings to be covered with 5/8" Type X gyp board. 5. Class A Roof Assembly. 6. Exterior siding materials shall be non-combustible. 7. Heat deflecting masonry garden walls installed at rear of structure.

JUSTIFICATION (explain how the alternative is equal to or exceeds code requirements)
 The alternative proposal described above will incorporate code exceeding measures to enhance the sprinkler system to better extinguish an interior fire, reduce the potential for embers igniting the structure, reduce the potential of radiant heat from igniting the structure, and minimize room-to-room communication of fire should the structure become involved, thereby providing additional time for occupants to escape and for responding resources to attack a potential fire, and the heat deflecting walls will reduce convective heat from an approaching wildland fire on the slope above the structure.

The above project does not fully conform to the 2019 California Fire Code. Pursuant to 2019 CFC Chapter 1, Section 104.9, I am requesting approval of an alternative material and/or method of construction to achieve the intent of the provisions of the code and provide at least an equivalent level of protection to that prescribed therein. I understand that approval of this request applies only to this project and shall not be construed as establishing a precedent for other projects. If approved, a copy of this AM&M request form shall be provided on all subsequent plan submittals of this project to Laguna Beach Building Department.

 SIGNATURE

for Benjamin Stevens Architect /
 Interface Management Services

 TITLE & COMPANY DATE

 DATE

THIS SECTION TO BE COMPLETED BY LAGUNA BEACH

Fire Review

PERMIT #	PLAN TYPE
<input type="checkbox"/> APPROVED	<input type="checkbox"/> NOT APPROVED
COMMENTS:	
_____ AUTHORIZED DESIGNEE NAME	_____ SIGNATURE
_____ DATE	

OTHER AHJ CONCURRENCE: REQUIRED NOT REQUIRED

APPROVED NOT APPROVED

COMMENTS:

EVALUATED BY:

BUILDING OFFICIAL

OTHER: _____
 TITLE

 NAME

 SIGNATURE

 DATE